Regional Manager
MAY 1 1 1984
WHITEHORSE
Yukon Territory
Mining Rights Office
RECEIVED
9 MAY 1984
MINING RECORDER
MAYO, Y.T.
L.A. & N.D.

REPORT ON THE GEOLOGY, GEOCHEMISTRY AND GEOPHYSICS

CONDUCTED ON THE

J.K. 1-160 CLAIMS

July 3, 1983 to August 30, 1983

Mayo Mining Division

Yukon Territory

NTS 105/0/1 Niddery Lake Map Sheet

63° 08' and 63° 11' North Latitude
130° 20' and 130° 27' West Longitude

Owned and Operated by
Aberford Resources Ltd.

Report Date: April, 1984
Report No.: 4-84

J. D. Kapusta
Aberford Resources Ltd.

This report has been examined by the Geological Evaluation Unit under Section 53 (4) Yukon Quartz Mining Act and is allowed as representation work in the amount of $ 66,600.00.

K. Grapes

for Regional Manager, Exploration and Geological Services for Commissioner of Yukon Territory.

RECEIVED
~~DEC 1983~~
3 JAN 1984
MINING RECORDER
MAYO, Y.T.
L.A. & N.D.

This is Exhibit "B" attached to and forming part of that certain Application for a Certificate of Work of John D. Kapusta, dated the 13th day of December 1983. The following is a detailed Statement of Work for the period of July 3, 1983 to August 30, 1983.

RECEIVED
~~30 DEC 1983~~
3 JAN 1984
MINING RECORDER
MAYO, Y.T.
I.A. & N.D.

EXHIBIT B

JK PROJECT

SUMMARY OF EXPENDITURES

Salaries		$18,865.00
Room & Board		5,430.00
Linecutting		6,930.00
Helicopter Expense		13,620.60
Geochemistry		6,123.60
Commercial Transport - Freight	$1,065.85	
- Personnel	2,906.40	3,972.25
Technical Information		90.78
Field Equipment		1,486.77
Fuel		911.71
Expediting		634.63
Administration Overhead		2,828.27
Report Costs		5,800.00
TOTAL EXPENDITURES		$66,693.61

EXHIBIT "B"

List of Expenditures
J.K. 1-160 Mineral Claims

RECEIVED
~~8 DEC 1983~~
3 JAN 1984
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MAYO, Y.T.
I.A. & N.D.

Salaries

J. D. Kapusta - Project Geologist July 4, 1983 - August 30, 1983; 59 man days at $125.00/day	$7,375.00
B. Girling - Geological Assistant July 7, 1983 - August 16, 1983; 45 man days at $76.00/day	3,420.00
A. Cole - Geological Assistant July 7, 1983 - August 16, 1983; 45 man days at $64.00/day	2,880.00
P. T. Coyle - Geologist July 7 - 21, 1983, August 1 - 6, 1983; 21 man days at $90.00/day	1,890.00
R. J. Bailes - Exploration Supervisor July 3 - 8, August 8 - 16, 1983; 11 man days at $300.00/day	3,300.00
	$18,865.00

Room and Board

Exploration Crew, 181 man days at $30.00/day	$5,430.00

Linecutting

Ketza Enterprises Ltd. 22 kilometres at $315.00/kilometre	$6,930.00

Helicopter Expense

Northern Mountain Helicopters Inc. 23 hours at $592.20/hour (including fuel charges)	$13,620.60

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MINING RECORDER
MAYO, Y.T.
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Technical Information

Riley's Reproduction and Printing Ltd.	$ 28.28
Petro-Tech Printing Ltd.	35.60
Yukon Government	26.90
TOTAL	$ 90.78

Field Equipment

Northern Metalic Sales	$ 350.40
Neville Crosby Inc.	735.68
Exploranium	200.00
Various Companies	200.69
TOTAL	$1,486.77

Fuel

Gas	$ 911.71

Expediting Services

Frontier Expediters	$ 634.63

Exploration Administration - Administrative Overhead	$2,828.27

Project and Report Preparation	$5,800.00

Includes - wages, drafting, reproduction and typing

GRAND TOTAL	$66,693.61

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A) SUMMARY

This report summarizes the results of exploration activities conducted on the J.K. 1-160 Mineral Claims, located in the Yukon Territory (Figure 1), by Aberford Resources Ltd. during the period from July 3 to August 30, 1983.

The object of the 1983 program was to examine the entire claim group in order to test its potential to host stratiform lead-zinc-silver mineralization. Work during the 1983 program included the extension of the cut line grid on which VLF-EM, magnetometer, and soil geochemical surveys were carried out in conjunction with geological mapping.

The total expenditure for the J.K. 1-160 Mineral claims during the 1983 program was $66,693.61.

B) CONCLUSIONS

The 1983 exploration program conducted on the J.K. claims has oulined four anomalous geochemical trends that due to their stratigraphic positioning have potential to host stratiform lead-zinc-silver mineralization. Three of these geochemical trends also contain bedrock conductors that were outlined by the VLF-EM survey.

C) RECOMMENDATIONS

In order to better define the four anomalous trends that have been outlined during the 1983 program, the following program is proposed:

1) Establishment of 100 metre intermediate lines at 3+00W between 16+00S and 22+00S, 5+00W between 14+00S and 22+00S, 7+00W between 16+00S and 22+00W, 9+00W between 17+00S and 22+00S, 17+00W between 20+00S and 27+00S, 19+00W between 20+00S and 27+00S, 21+00W between 20+00S and 27+00S, 52+00W between B.L. and 10+00S, 54+00W between B.L. and 10+00S, 56+00W between B.L. and 10+00S, 58+00W between B.L. 8+00S, 60+00W between B.L. and 8+00S, 61+00W between B.L. and 8+00S, 64+00W between B.L. and 5+00S, 65+00W between B.L. and 5+00S.

2) Soil sampling at 25 metre stations on the new lines and on the established grid to better define the amonalous trend; the samples to be taken from the maximum depth using conventional sampling techniques.

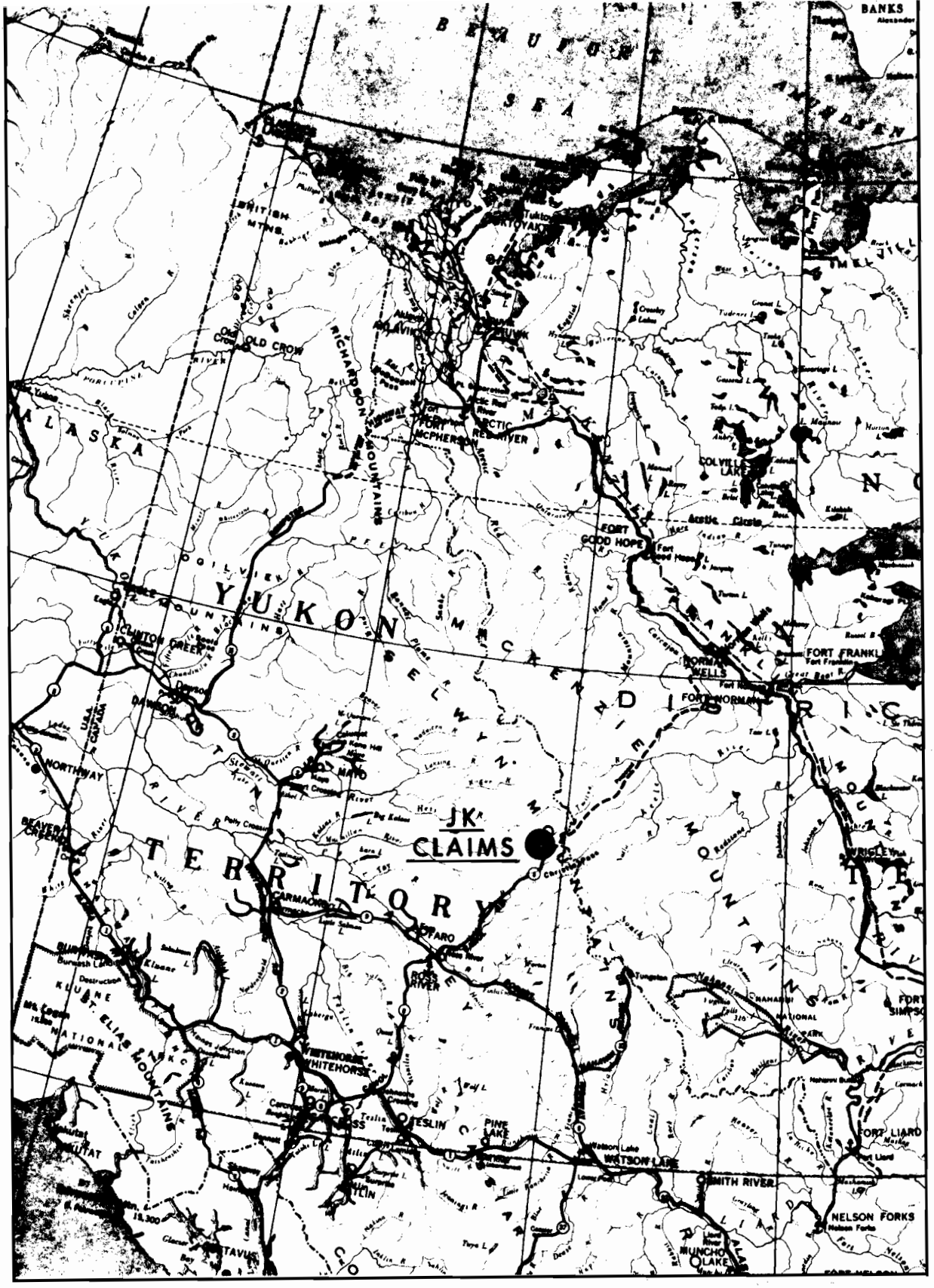


Figure 1

ABERFORD RESOURCES LTD.

PROPERTY LOCATION

JK CLAIMS

JK PROJECT, 1983

DATE	SCALE	NTS	DRAWING NO.
DEC., 1981	1: 1,584,000	—	A-1478

JCC

3) The VLF-EM Survey be extended over the new grid lines.
4) VLEM and Gravity geophysical surveys be carried out over the anomalous trends.
5) A detailed geological map be compiled.

D) INTRODUCTION

I Property Status

The J.K. property comprises 160 full claims staked and recorded in June of 1981, in the Mayo Mining District, Yukon Territory (Figure 2). The J.K. 1-160 claim tag numbers are YA62639 to YA62798 inclusive (Figure 3, Table 1). The J.K. 1-160 mineral claims are held and operated by Aberford Resources Ltd. of Calgary. The expiry date for the J.K. 1-160 mineral claims is December 31, 1988, excluding claims J.K. 45, J.K. 47, J.K. 49, J.K. 51, J.K. 67, J.K. 68, J.K. 86 and J.K. 87 which expire on December 31, 1984.

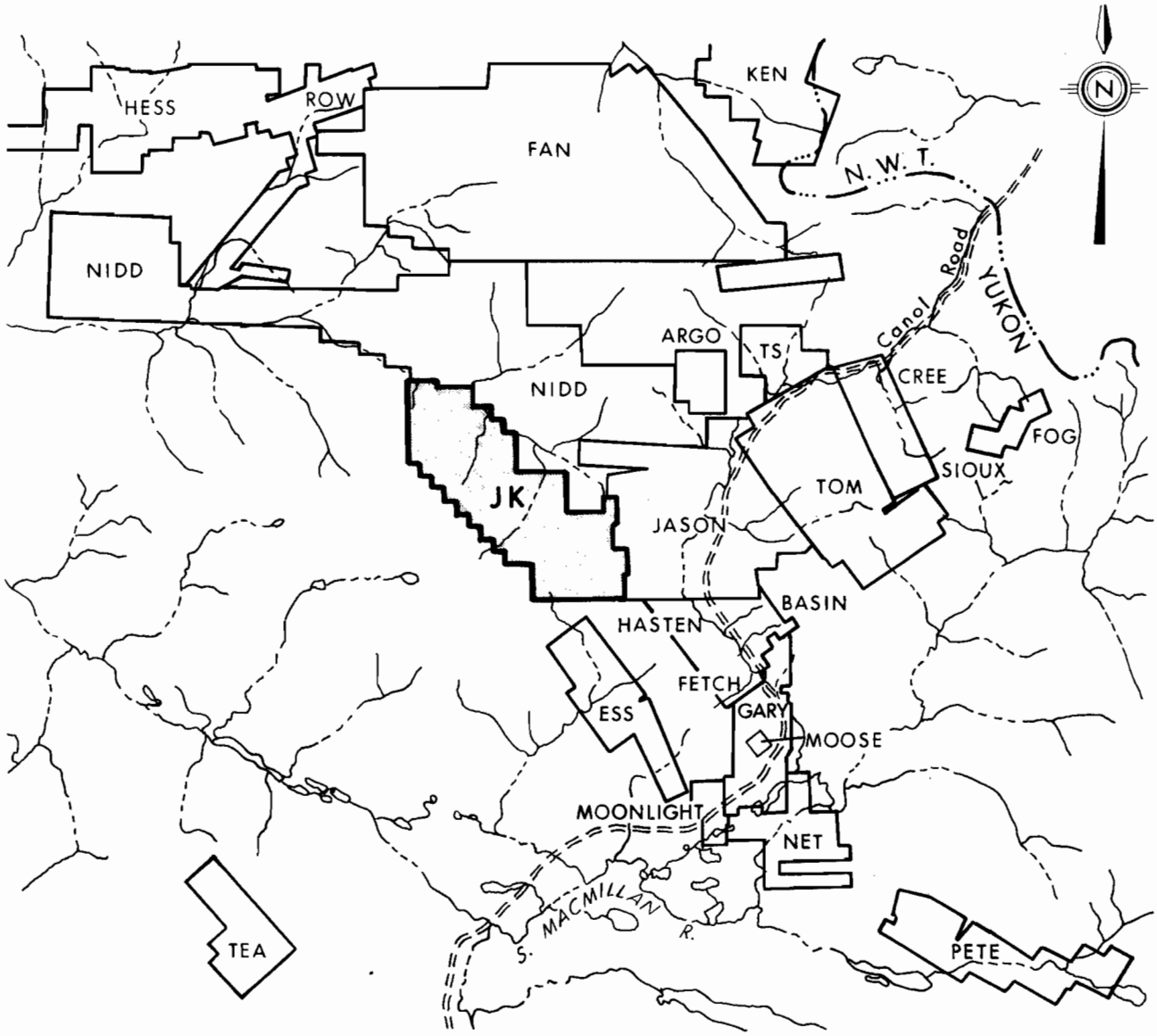
II Location and Accessibility

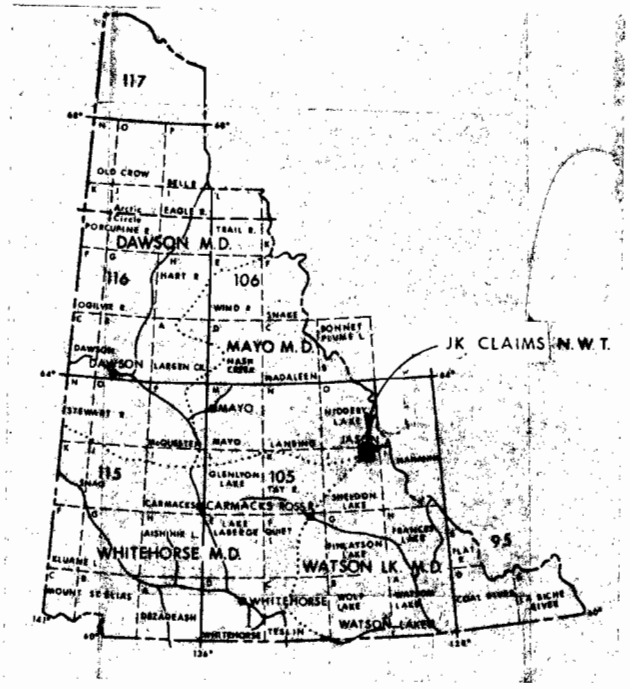
The J.K. property is located nine kilometres northwest of Macmillan Pass, in the Yukon Territory between 63° 08' to 63° 11' North Latitude and 130° 20' to 130° 27' West Longitude on topographic map sheet NTS 105/0/1, Niddery Lake (Figure 1).

Access to the property is via the North Canol Road to Macmillan Pass and then by helicopter to the claim group. There is also a gravel runway located at Macmillan Pass for fixed wing aircraft.

III Topography and Vegetation

Elevation on the property varies between 610 metres along Nidd Creek and 1,829 metres at the top of Hoshi Mountain. Vegetation consists of alpine fir in the valley bottoms, dwarf birch and stunted alpine fir upslope, cariboo moss and barren talus slopes within 150 metres above the valley floors.





km 5 2.5 0 5 10 km

Figure 2

ABERFORD RESOURCES LTD.

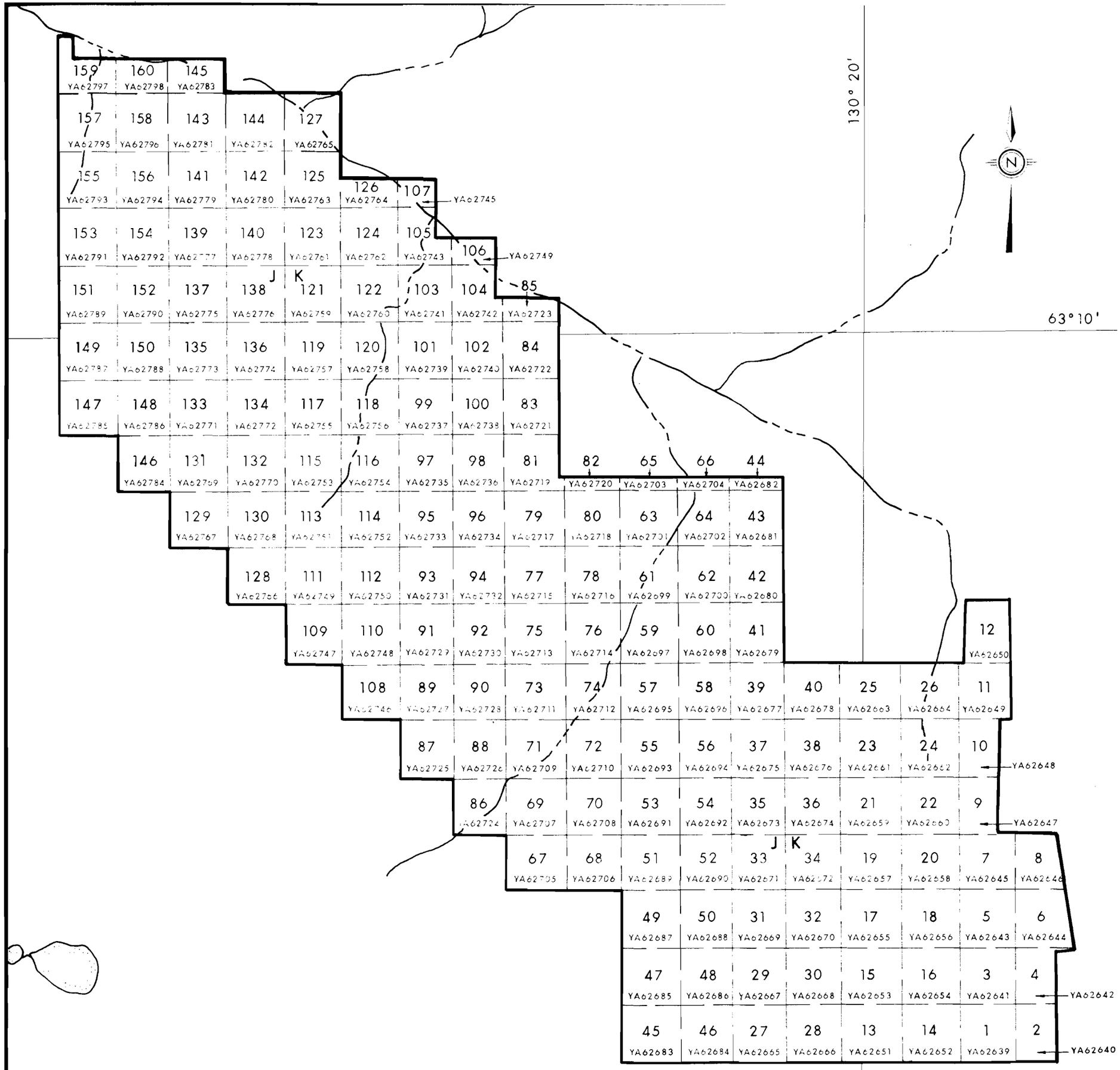
MACMILLAN PASS CLAIM STATUS

JK PROJECT, 1982

DATE	SCALE	NTS	DRAWING NO.
DEC., 1981	1:250,000	105 J,O	A-1479

JCC

Revised: MARCH, 1984 by R.H.



m 317 158 0 317 634 952 m

Figure 3

ABERFORD RESOURCES LTD.

MINERAL CLAIMS

JK PROJECT, 1982

DATE	SCALE	NTS	DRAWING NO.
DEC., 1981	1 : 31680	105 O/1	B-1480

JCC

Revised : MARCH, 1984 by R.H.

TABLE 1

LIST OF MINERAL CLAIMS

Name	Recording Date	Mining Division	Tag No.	Expiry Date
J.K. 1	June 13	Mayo	YA 62639	December 31, 1988
J.K. 2	"	Mayo	YA 62640	December 31, 1988
J.K. 3	"	Mayo	YA 62641	December 31, 1988
J.K. 4	"	Mayo	TA 62642	December 31, 1988
J.K. 5	"	Mayo	YA 62643	December 31, 1988
J.K. 6	"	Mayo	YA 62644	December 31, 1988
J.K. 7	"	Mayo	YA 62645	December 31, 1988
J.K. 8	"	Mayo	YA 62646	December 31, 1988
J.K. 9	"	Mayo	YA 62647	December 31, 1988
J.K. 10	"	Mayo	YA 62648	December 31, 1988
J.K. 11	"	Mayo	YA 62649	December 31, 1988
J.K. 12	"	Mayo	YA 62650	December 31, 1988
J.K. 13	"	Mayo	YA 62651	December 31, 1988
J.K. 14	"	Mayo	YA 62652	December 31, 1988
J.K. 15	"	Mayo	YA 62653	December 31, 1988
J.K. 16	"	Mayo	YA 62654	December 31, 1988
J.K. 17	"	Mayo	YA 62655	December 31, 1988
J.K. 18	"	Mayo	YA 62656	December 31, 1988
J.K. 19	"	Mayo	YA 62657	December 31, 1988
J.K. 20	"	Mayo	YA 62658	December 31, 1988
J.K. 21	"	Mayo	YA 62659	December 31, 1988
J.K. 22	"	Mayo	YA 62660	December 31, 1988
J.K. 23	"	Mayo	YA 62661	December 31, 1988
J.K. 24	"	Mayo	YA 62662	December 31, 1988
J.K. 25	"	Mayo	YA 62663	December 31, 1988
J.K. 26	"	Mayo	YA 62664	December 31, 1988
J.K. 27	"	Mayo	YA 62665	December 31, 1988
J.K. 28	"	Mayo	YA 62666	December 31, 1988
J.K. 29	"	Mayo	YA 62667	December 31, 1988
J.K. 30	"	Mayo	YA 62668	December 31, 1988

Table 1 (Continued)

Name	Recording Date	Mining Division	Tag No.	Expiry Date
J.K. 31	June 13	Mayo	YA 62669	December 31, 1988
J.K. 32	"	Mayo	YA 62670	December 31, 1988
J.K. 33	"	Mayo	YA 62671	December 31, 1988
J.K. 34	"	Mayo	YA 62672	December 31, 1988
J.K. 35	"	Mayo	YA 62673	December 31, 1988
J.K. 36	"	Mayo	YA 62674	December 31, 1988
J.K. 37	"	Mayo	YA 62675	December 31, 1988
J.K. 38	"	Mayo	YA 62676	December 31, 1988
J.K. 39	"	Mayo	YA 62677	December 31, 1988
J.K. 40	"	Mayo	YA 62678	December 31, 1988
J.K. 41	"	Mayo	YA 62679	December 31, 1988
J.K. 42	"	Mayo	YA 62680	December 31, 1988
J.K. 43	"	Mayo	YA 62681	December 31, 1988
J.K. 44	"	Mayo	YA 62682	December 31, 1988
J.K. 45	"	Mayo	YA 62683	December 31, 1984
J.K. 46	"	Mayo	YA 62684	December 31, 1988
J.K. 47	"	Mayo	YA 62685	December 31, 1984
J.K. 48	"	Mayo	YA 62686	December 31, 1988
J.K. 49	"	Mayo	YA 62687	December 31, 1984
J.K. 50	"	Mayo	YA 62688	December 31, 1988
J.K. 51	"	Mayo	YA 62689	December 31, 1984
J.K. 52	"	Mayo	YA 62690	December 31, 1988
J.K. 53	"	Mayo	YA 62691	December 31, 1988
J.K. 54	"	Mayo	YA 62692	December 31, 1988
J.K. 55	"	Mayo	YA 62693	December 31, 1988
J.K. 56	"	Mayo	YA 62694	December 31, 1988
J.K. 57	"	Mayo	YA 62695	December 31, 1988
J.K. 58	"	Mayo	YA 62696	December 31, 1988
J.K. 59	"	Mayo	YA 62697	December 31, 1988
J.K. 60	"	Mayo	YA 62698	December 31, 1988
J.K. 61	"	Mayo	YA 62699	December 31, 1988

Table 1 (Continued)

Name	Recording Date	Mining Division	Tag No.	Expiry Date
J.K. 62	June 13	Mayo	YA 62700	December 31, 1988
J.K. 63	"	Mayo	YA 62701	December 31, 1988
J.K. 64	"	Mayo	YA 62702	December 31, 1988
J.K. 65	"	Mayo	YA 62703	December 31, 1988
J.K. 66	"	Mayo	YA 62704	December 31, 1988
J.K. 67	June 14	Mayo	YA 62705	December 31, 1984
J.K. 68	"	Mayo	YA 62706	December 31, 1984
J.K. 69	"	Mayo	YA 62707	December 31, 1988
J.K. 70	"	Mayo	YA 62708	December 31, 1988
J.K. 71	"	Mayo	YA 62709	December 31, 1988
J.K. 72	"	Mayo	YA 62710	December 31, 1988
J.K. 73	"	Mayo	YA 62711	December 31, 1988
J.K. 74	"	Mayo	YA 62712	December 31, 1988
J.K. 75	"	Mayo	YA 62713	December 31, 1988
J.K. 76	"	Mayo	YA 62714	December 31, 1988
J.K. 77	"	Mayo	YA 62715	December 31, 1988
J.K. 78	"	Mayo	YA 62716	December 31, 1988
J.K. 79	"	Mayo	YA 62717	December 31, 1988
J.K. 80	"	Mayo	YA 62718	December 31, 1988
J.K. 81	"	Mayo	YA 62719	December 31, 1988
J.K. 82	"	Mayo	YA 62720	December 31, 1988
J.K. 83	"	Mayo	YA 62721	December 31, 1988
J.K. 84	"	Mayo	YA 62722	December 31, 1988
J.K. 85	"	Mayo	YA 62723	December 31, 1988
J.K. 86	June 15	Mayo	YA 62724	December 31, 1984
J.K. 87	"	Mayo	YA 62725	December 31, 1984
J.K. 88	"	Mayo	YA 62726	December 31, 1988
J.K. 89	"	Mayo	YA 62727	December 31, 1988
J.K. 90	"	Mayo	YA 62728	December 31, 1988
J.K. 91	"	Mayo	YA 62729	December 31, 1988
J.K. 92	"	Mayo	YA 62730	December 31, 1988
J.K. 93	"	Mayo	YA 62731	December 31, 1988
J.K. 94	"	Mayo	YA 62732	December 31, 1988

Table 1 (Continued)

Name	Recording Date	Mining Division	Tag No.	Expiry Date
J.K. 95	June 15	Mayo	YA 62733	December 31, 1988
J.K. 96	"	Mayo	YA 62734	December 31, 1988
J.K. 97	"	Mayo	YA 62735	December 31, 1988
J.K. 98	"	Mayo	YA 62736	December 31, 1988
J.K. 99	"	Mayo	YA 62737	December 31, 1988
J.K. 100	"	Mayo	YA 62738	December 31, 1988
J.K. 101	"	Mayo	YA 62739	December 31, 1988
J.K. 102	"	Mayo	YA 62740	December 31, 1988
J.K. 103	"	Mayo	YA 62741	December 31, 1988
J.K. 104	"	Mayo	YA 62742	December 31, 1988
J.K. 105	"	Mayo	YA 62743	December 31, 1988
J.K. 106	"	Mayo	YA 62744	December 31, 1988
J.K. 107	"	Mayo	YA 62745	December 31, 1988
J.K. 108	"	Mayo	YA 62746	December 31, 1988
J.K. 109	"	Mayo	YA 62747	December 31, 1988
J.K. 110	"	Mayo	YA 62748	December 31, 1988
J.K. 111	"	Mayo	YA 62749	December 31, 1988
J.K. 112	"	Mayo	YA 62750	December 31, 1988
J.K. 113	"	Mayo	YA 62751	December 31, 1988
J.K. 114	"	Mayo	YA 62752	December 31, 1988
J.K. 115	"	Mayo	YA 62753	December 31, 1988
J.K. 116	"	Mayo	YA 62754	December 31, 1988
J.K. 117	"	Mayo	YA 62755	December 31, 1988
J.K. 118	"	Mayo	YA 62756	December 31, 1988
J.K. 119	"	Mayo	YA 62757	December 31, 1988
J.K. 120	"	Mayo	YA 62758	December 31, 1988
J.K. 121	"	Mayo	YA 62759	December 31, 1988
J.K. 122	"	Mayo	YA 62760	December 31, 1988
J.K. 123	"	Mayo	YA 62761	December 31, 1988
J.K. 124	"	Mayo	YA 62762	December 31, 1988
J.K. 125	"	Mayo	YA 62763	December 31, 1988
J.K. 126	"	Mayo	YA 62764	December 31, 1988
J.K. 127	"	Mayo	YA 62765	December 31, 1988

Table 1 (Continued)

Name	Recording Date	Mining Division	Tag No.	Expiry Date
J.K. 128	June 16	Mayo	YA 62766	December 31, 1988
J.K. 129	"	Mayo	YA 62767	December 31, 1988
J.K. 130	"	Mayo	YA 62768	December 31, 1988
J.K. 131	"	Mayo	YA 62769	December 31, 1988
J.K. 132	"	Mayo	YA 62770	December 31, 1988
J.K. 133	"	Mayo	YA 62771	December 31, 1988
J.K. 134	"	Mayo	YA 62772	December 31, 1988
J.K. 135	"	Mayo	YA 62773	December 31, 1988
J.K. 136	"	Mayo	YA 62774	December 31, 1988
J.K. 137	"	Mayo	YA 62775	December 31, 1988
J.K. 138	"	Mayo	YA 62776	December 31, 1988
J.K. 139	"	Mayo	YA 62777	December 31, 1988
J.K. 140	"	Mayo	YA 62778	December 31, 1988
J.K. 141	"	Mayo	YA 62779	December 31, 1988
J.K. 142	"	Mayo	YA 62780	December 31, 1988
J.K. 143	"	Mayo	YA 62781	December 31, 1988
J.K. 144	"	Mayo	YA 62782	December 31, 1988
J.K. 145	"	Mayo	YA 62783	December 31, 1988
J.K. 146	"	Mayo	YA 62784	December 31, 1988
J.K. 147	"	Mayo	YA 62785	December 31, 1988
J.K. 148	"	Mayo	YA 62786	December 31, 1988
J.K. 149	"	Mayo	YA 62787	December 31, 1988
J.K. 150	"	Mayo	YA 62788	December 31, 1988
J.K. 151	"	Mayo	YA 62789	December 31, 1988
J.K. 152	"	Mayo	YA 62790	December 31, 1988
J.K. 153	"	Mayo	YA 62791	December 31, 1988
J.K. 154	"	Mayo	YA 62792	December 31, 1988
J.K. 155	"	Mayo	YA 62793	December 31, 1988
J.K. 156	"	Mayo	YA 62794	December 31, 1988
J.K. 157	"	Mayo	YA 62795	December 31, 1988
J.K. 158	"	Mayo	YA 62796	December 31, 1988
J.K. 159	"	Mayo	YA 62797	December 31, 1988
J.K. 160	"	Mayo	YA 62798	December 31, 1988

IV Summary of Work Completed

The 1983 program commenced on July 3 and continued until August 30, 1983 utilizing a field crew of four persons. The project was supported by a Bell 206 helicopter based at Macmillan Pass by Northern Mountain Helicopters Ltd. of Prince George, British Columbia.

Prior to the commencment of the 1983 program an additional 22.30 kilometres of line was cut bringing the total amount of cut line on the property up to 44.50 kilometres (1.85 km in 1982 and 20.35 km in 1981, Plate 22). During 1983, 616 soil samples were collected at 50 metre intervals along the cut lines and analyzed for lead, zinc, copper and barium (Plates 4, 5, 6, 7) by Bondar-Clegg Ltd. of Vancouver, British Columbia. By the end of the 1983 program a total of 1011 soil samples had been collected. In addition to the soil sampling 16 rock samples were collected during 1983 (Plate 8) and analyzed for copper, lead, zinc, tungsten, silver, gold and arsenic by Bondar-Clegg Ltd. During 1982, 15 rock samples were collected and analyzed for copper lead, zinc, molybdenum, silver, tungsten, gold and barium. In 1981, 10 rock samples were collected and analyzed for copper, lead, zinc, silver, gold and strontium. Three stratigraphic sections were measured during 1982 and continuous two metre chip samples were taken on each and analyzed for lead, zinc, silver and barium. In 1981, 4 heavy mineral stream samples were collected and analyzed for copper, lead, zinc, molybdenum, cobalt, gold, silver, antimony, tungsten and barium.

During 1983, 43.90 line kilometres of VLF-EM (EM-16) survey (Plate 2) and 43.70 line kilometres of ground magnetics (Portable Proton Magnetometer) were carried out (Plate 3).

In 1982, four trenches were blasted to a depth of one metre each and a maximum length of three metres. Three of these were blasted over the outcropping barite horizon and the fourth was blasted along strike in an area of overburden. A total of 13 rock or chip samples were collected from the trenches.

Geological mapping and prospecting were conducted during 1983, 1982 and 1981.

V Previous Geological Work and Exploration Activity

The first recorded work in the Macmillan Pass region was conducted by E.D. Kindle of the Geological Survey of Canada who carried out a reconnaissance survey of the Canol Road between 1944 and 1945. Regional mapping by S.L. Blusson on map sheet 105-O was released in Open File 205 by the Geological Survey of Canada in 1974. During 1982, S.P. Gordy, J.G. Abbott and M.J. Orchard released a paper through the Department of Indian and Northern Affairs dealing with the redesignation of geologic units within the Macmillan Pass region.

Through the use of conodont dating, what were previously known as the Canol and Imperial Formations, have been redesignated as the Lower and Upper Earn Group respectively. A 1982 release by J.G. Abbott, through the Department of Indian and Northern Affairs, deals with structure and stratigraphy within the Macmillan Pass region.

The Tom property located in Macmillan Pass was discovered in 1951 by prospectors for Hudson Bay Exploration and Development, and consists of 144 claims and fractions. Between the years 1951-1953, work on the Tom claims consisted of 5,436 metres of diamond drilling in 39 holes, with exploration activity centered upon the West Zone. The drilling project outlined estimated reserves of 10,470,000 tons with an average grade of 5% zinc and minor lead. No further work was carried out until 1966 when additional geologic mapping, prospecting, geochemical soil sampling, and a magnetometer survey were undertaken. In 1967, Hudson Bay completed and additional 1,675 metres of diamond drilling, the results of which encouraged them to drill an additional 3,271 metres in 1968 which outlined the Tom East Zone. At the completion of drilling in these two zones, estimated reserves were 5.1 million tons with an average grade of 8% zinc, and 8% lead and 2.7 ounces per ton silver. These results prompted Hudson Bay to drive an adit downslope and to the west of the two mineralized zones in 1970. During 1970 and 1971, 887 metres of underground development was completed with 2,363 metres of underground diamond drilling also being carried out. By 1972, 11,853 metres of diamond drilling had been completed with reserves quoted to be 9,000,000

tons with an average grade of 8.4% zinc, 8.6% lead, and 2.8 ounces of silver per ton. In 1977, additional soil sampling, trenching and geophysical surveys were carried out. Hudson Bay in 1981, decided to resume underground work with the start of a decline for future mining purposes. This work was terminated in 1982.

The Pete property is also located within the Macmillan Pass region, and consists of 94 claims. This claim group was staked in 1975 by the Ogilvie Joint Venture, and lies within a section of Devono-Mississippian black shales that are similar to the Tom deposit. In 1978, 589.49 metres of diamond drilling was completed in 5 holes, and 364.7 metres of overburden drilling in 55 holes.

E) PROPERTY GEOLOGY

I Stratigraphy and General Geology

The J.K. Claims lie within the eastern margin of the Selwyn Basin tectonic province, located in the southern Selwyn Mountains, and appear to be on the western margin of a synsedimentry graben structure. This graben structure was formed during Lower Earn time, and is referred to as the Macmillan Pass Graben.

Stratigraphy on the property is primarily comprised of a middle Paleozoic package of clastic sediments known as the Earn Group and the Road River Group (Figure 4, Plate 1). The oldest rocks exposed on the property belong to the transitional facies of the Road River Group, which in turn are overlain by the Earn Group.

The Road River Group on a regional basis (OSDpt) is comprised of a thick sequence of black, carbonaceous graphitic shales, black limey shales, black to tan limestone and bedded chert. On the J.K. claims the Road River Group is represented by the SIDI unit, and is comprised of buff to tan weathering platey, silty limestone, and calcareous black shale. Deposition of the Road River Group is interpreted to have taken place gradually within a widespread, quiescent, deep marine basin.

Within the uppermost part of the Road River Group is a sequence of noncalcareous argillites and siltstones. It is the appearance of these coarser clastics that may be the first real evidence of any tectonic instability related to the formation of the Macmillan Pass Graben. This change in sedimentation marks the lower boundry of the Earn Group. At the Road River Group-Earn Group boundry the occurrence of a hydrothermal event is represented by a bedded barite deposit. Actual contact relatinships between the Road River Group and the Earn Group are diachronous, due to facies changes and local unconformities.

The Earn Group is characterized by well defined units composed of shale, chert, quartz sandstone, grit and chert pebble conglomerate. The Earn Group is divided into the Upper Earn Group (Mississippian) and Lower Earn Group (Lower to Upper Devonian). The Lower Earn Group is regionally characterized by its predominate gun-blue weathering shale and chert.

On the J.K. claims the Lower Earn Group is characterized by the muDps and the uDpt units. The muDps unit is a clastic facies of the Lower Earn Group and may represent the finer size fractions (mid fan facies) of a turbidite fan complex originating from a westerly source area. The muDps unit contains dark grey "pinstriped" shale and silty shale that weathers a brown colour. Chert quartz sandstone and grit are minor constituents concentrated in the upper section of the unit. The sandstone and grit are locally graded and display flute and groove casts. An exhalative bedded barite horizon is believed to occur in either the upper section of the muDps unit or in a transitional facies between the muDps and the uDpt unit. This barite horizon is thought to host the lead-zinc-silver mineralization of the Tom West and East Zones and the Jason, Main and South Zones.

The uDpt unit is a siliceous or cherty facies of the Lower Earn Group, it includes rocks that are older, time equivalent, and younger than the clastic facies. The lower section of the unit consists of light brown to silvery brown weathering black graphitic siliceous shale and silty shale. The upper section consists of silver to blue weathering black graphitic siliceous shale and includes four black weathering, dark,

grey, fetid limestone beds 2-5cm thick. Barite also occurs near the top of the unit in beds less than one metre thick or as a thin "spotted" horizon.

Sedimentological evidence indicates that the upper contact of the Lower Earn Group is unconformable.

On the J.K. claims the Upper Earn Group (Mps) is characterized by a resistant dark brown weathering, thin to medium bedded ripple cross laminated and plane parallel laminated sandstone and siltstone with silty slate. An unconformity is indicated at the top of the Upper Earn Group by regional evidence.

The entire Middle Paleozoic sedimentry succession on the J.K. claims has been intruded by a porphyritic to equigranular, biotite, quartz monzonite pluton, during the Cretaceous. This has resulted in thermal alteration and skarn development in sediments that are in proximity to the intrusion. At the top of lines 45+00W, 47+00W and 49+00W the Road River Group, unit SIDI, displays development of a pyrrhotite skarn.

A recent iron rich conglomerate (ferricrete) is found in most stream bottoms on the claim group. This ferrogenous conglomerate can also be found on hill sides at elevations up to 1,800 metres. Thickness of this conglomerate ranges from a thin veneer to several metres. A recent calcrete, or calcium-rich cold spring deposit occurs locally on the claims as well.

II Structure

The Macmillan Pass area is located within a broad belt of northwesterly trending open to isoclinally folded Paleozoic sediments, that is referred to as the MacMillan Fold Belt. The MacMillan Fold Belt consists of three parallel, elongate sections known as the North, Central and Southern Blocks. It is believed these blocks are representative of Devonian faulting events. The J.K. claims are located in the Southern Block that is characterized by open upright folds and few faults.

FIGURE 4

STRATIGRAPHIC COLUMN

PLEISTOCENE TO RECENT	Ferricrete conglomerate, calcrete, and unconsolidated glacial and alluvial deposits.
CRETACEOUS Kg	Resistant, blocky, grey weathering porphyritic to equigranular, biotite quartz monzonite.
MISSISSIPPIAN UPPER EARN GROUP Msp	Resistant, brown weathering, thick bedded, parallel laminated and ripple cross laminated sandstone, siltstone and shale.
----------	UNCONFORMITY ----------
MIDDLE DEVONIAN - UPPER DEVONIAN LOWER EARN GROUP uDpt	Talus forming, silver-blue weathering, platey siliceous shale, minor chert and thin 2-5 cm thick beds of coarse grained limestone and platey grey weathering barite in beds less than one metre thick.
muDps	Brown weathering thinly laminated grey shale and siltstone with lesser chert quartz sandstone and grit and rare chert conglomerate.
----------	UNCONFORMITY ----------
ORDOBICIAN, SILURIAN AND EARLY DEVONIAN ROAD RIVER GROUP SIDI	Buff to tan weathering platey, silty limestone, and calcareous black shale.

Folds on the J.K. claims are found to plunge 10°-30° to the northwest, with axial trends of approximately 300°. Some of the folds are asymmetrical, and even overturned in a few cases. Centrally located on the claim group is a large anticlinal structure that has produced secondary parasitic folds on each limb, some of which are overturned. A quartz monzonite pluton in the southern sections of the claim group is responsible for isoclinal folding, and faulting in the abbuting sedimentry package.

At three locations on the claim group it was observed that two sets of folds are superposed. The best developed set are those which trend approximately 300° azimuth, the second set trends approximately 200° azimuth. The second set appears to be the younger of the two sets. Both sets of folds include rocks as young as Mississippian, and display no evidence indicating that they represent separate, unrelated periods of deformation.

Faulting on the J.K. claims tends to be near parallel to the axial planes of both anticlines and synclines. In a few cases faults are perpendicular to the axial planes of folds. The faults are younger than, and unrelated to the folding event (Abbott, 1982). The fault structure that separates the Central and Southern Blocks has been outlined in the northwest section of the claims by the VLF-EM survey.

Most or all of the structures in the Macmillan Fold Belt are related to the regional Jura-Cretaceous deformation event, but the marked contrast in structural style in each of the blocks and the coincident changes in Devonian stratigraphy indicate that deformation was influenced by Devonian faulting. Faulting is considered rather than folding, because there is no local or regional evidence for Devonian folding, and the strata within the Road River Group and the Lower Earn Group are representative of stratigraphy found in a rift, or block faulted environment.

III Mineralization

Visable mineralization found to date consists of laminated and nodular baritic sediments in the uDpt unit (Lower Earn Group), sphalerite along minor fractures in a skarnified section of the SlDl unit (Road River Group), and tetrahedrite may be present in a large quartz vein located in one area of the claim group. Arsenopyrite is present in several quartz-feldspar porphyry dykes.

The laminated barite (Plate 1) has an approximate strike length of two kilometres, and varying thickness up to three metres, folding has caused local thickening and thining. This horizon is in the uDpt unit of the Lower Earn Group, its exact location in the unit has yet to be determined, as to whether it may be analogous to the barite horizon that occurs between the muDps and uDpt units known to host the mineralization on the Jason and Tom deposits. The barite horizon contains local accumulations of disseminated and laminated pyrite, these are more abundant in the southeastern extent of the horizon. Varying amounts of lead (<.01% - .02%), zinc (<.01% - .05%) and silver (<.02 oz/ton - .13 oz.ton) occur in the horizon.

In one location (Plate 1, Table 2) sphalerite occurs along minor fractures in a skarnified section of the SIDI unit (Road River Group). this skarn unit is locally pyrrhotized and contains varying amounts of copper (trace -.01%), lead (trace), zinc (trace -2.15%), tungsten (.01% - .03%), silver (.3ppm - 1.5ppm), gold (trace - 10ppb) and arsenic (3ppm - 320ppm). Assay results from rock and chip samples taken from this unit are listed in Table 2.

Two rock samples from quartz-feldspar porphyry dykes (Plate 8, Table 2) containing arsenopyrite were assayed. One sample (R55035) contained 0.50% lead, 31ppm silver and 90ppb gold.

Two rock samples from quartz veins were also assayed (Plate 8, Table 2). One quartz vein that may contain tetrahedrite ran .16% copper, 16.65 oz/ton silver and 186 ppb gold. The other quartz vein contained arsenopyrite.

TABLE 2

ROCK GEOCHEMISTRY

Sample No.	Cu %	Pb %	Zn %	W %	As ppm	Ag ppm	Au ppb	Description
R55026	0.01	<0.01	<0.01	0.01	23.0	0.40	5.0	SIDI Unit, Skarn
R55027	0.01	<0.01	<0.01	0.01	3.00	0.30	<5.0	SIDI Unit, Skarn
R55029	0.01	<0.01	<0.01	0.01	3.00	0.50	<5.0	SIDI Unit, Skarn
R55030	<0.01	<0.01	<0.01	0.03	140	0.30	5.0	SIDI Unit, Skarn
R55031	0.01	<0.01	<0.01	0.01	7.00	0.40	5.0	SIDI Unit, Skarn
R55032	<0.01	<0.01	<0.01	0.02	7.00	0.40	10.0	SIDI Unit, Skarn
R55033	0.01	<0.01	<0.01	0.02	3.00	0.60	5.0	SIDI Unit, Skarn
R55034	<0.01	<0.01	0.21	0.03	11.0	0.70	<5.0	SIDI Unit, Skarn
R55038	0.01	<0.01	2.15	0.02	13.0	0.50	<5.0	SIDI Unit, Skarn
Chip Sample 1	<0.01	<0.01	0.01	0.02	290	0.90	<5.0	SIDI Unit, Skarn 2.0 metre wide
Chip Sample 2	<0.01	<0.01	<0.01	0.02	320	1.50	<5.0	SIDI Unit, Skarn 4.7 metre wide
Chip Sample 3	0.01	<0.01	<0.01	0.02	280	0.40	10.0	SIDI Unit, Skarn 5.0 metre wide
R55035	<0.01	0.50	<0.01	0.02	>1000	31.0	90.0	Quartz, feldspar porphyry dyke with arsenopyrite
R55037	<0.01	0.02	<0.01	<0.01	>1000	1.30	15.0	Quartz, feldspar porphyry dyke with arsenopyrite
R55039	0.16	<0.01	<0.01	<0.01	>1000	16.65 oz/ton	185.0	Quartz vein with tetrahedrite
R55036	<0.01	0.01	<0.01	<0.01	150.0	<0.20	<5.0	Quartz vein with arsenopyrite

F) GEOCHEMISTRY

I Soil Sampling

A total of 616 soil samples (42 Humus, 6 'A' Horizon, 85 'B' Horizon and 483 'C' Horizon) were collected at 50 metre stations on the established grid. A mattock was used to collect 462 samples, and a hand auger was used to collect 154 samples. Each sample was placed in a high wet-strength kraft envelope, then dried at the base camp. Field observations and sample locations were recorded on an 80 column computer card. Samples were analysed for copper, lead, zinc and barium by Bondar-Clegg and Co. Ltd. of Vancouver, using a HNO_3-HCL hot extraction followed by Atomic Absorption (for copper, lead, zinc) and X-Ray Fluorescence (for barium). the lower analytical detection limits are: 1 ppm for copper, 2 ppm for lead, 1 ppm for zinc and 20 ppm for barium.

Analytical results for copper, lead, zinc, barium and silver are plotted in contour form on Plates 4, 5, 6, 7 respectively, and line plots in conjunction with VLF-EM and magnetic data on Plates 9-12. Field sample descriptions and analytical results have been merged and are in Appendix A. Assay certificates from Bondar-Clegg are also in Appendix A.

Soil samples were obtained from the 'H', 'A', 'B' or 'C' soil horizons, with the 'B' Horizon being an immature soil developed over a volcanic ash layer.

Surface soil sampling on the J.K. claims posed several possible problems that could be related to erroneous sampling techniques or surface environmental conditions that can adversely affect geochemical dispersion in soils.

Soil geochemical values are affected by the mobilities of the different elements, mobility increases from barium through to lead, silver, copper and finally zinc. Thus the lithogeochemistries of the Road River Group versus the Earn Group would cause interpretive problems since the Road River Group contains higher background metal values than the Earn Group. Also, the Road River Group has a composition that is high in carbonate and generally low in pyrite, whereas the Earn Group's

composition is very low in carbonate and high in pyrite. Groundwaters draining from the Earn Group would tend to be acidic (due to leaching of pyrite), whereas those draining from the Road River Group would tend to be neutralized by carbonate. Acid groundwaters would leach the more mobile elements from soils, and thus the more mobile elements would be expected to have lower background values in soils underlain by the Earn Group than in soils underlain by the Road River Group.

Besides the interpretive problems caused by variations in the lithogeochemistry of the underlying rock units the property physiography must also be considered. Physiography on the claims includes steep talus slopes, outcrop areas, thick glacial overburden, boulder rubble and areas of flat swampy ground. Each of the elements analysed will react differently under the various physiographic conditions.

II Results of Soil Geochemistry

Fourteen anomalous linear trends consisting of either high copper and/or lead, and/or zinc and/or barium were outlined by the soil survey (Plates 4, 5, 6, 7). Each of these trends will be discussed below.

Trend Number 1

Trend Number 1 is bounded by the following lines and stations: Line 52+00W at 4+50S, Line 53+00W between 2+00S and 4+50S, Line 55+00W between 1+75S and 3+50S, Line 57+00W between 1+00S and 1+75S, Line 59+00W between 0+75S and 2+25S, Line 63+00W at 1+00S. The central to southern section of this trend contains a coincident zinc, copper, barium anomaly and a coincident lead, barium anomaly. The northern section of the trend contains a coincident copper, barium anomaly. this trend is believed to represent the high level of mineralization found in the underlying Road River Group.

Trend Number 2

Trend Number 2 is bounded by the following lines and stations: Line 51+00W at 7+25S, Line 53+00W between 5+25S and 6+50S, Line 55+00W between

4+25S and 6+00S, Line 57+00W between 3+30S and 5+75S, Line 59+00W between 2+50S and 5+00S, Line 63+00W between 1+35S and 2+50S, Line 65+00W at 1+50S. The southern section of this trend contains a coincident zinc, copper, lead and barium anomaly. The central section of the trend contains a copper anomaly and a coincident copper, zinc anomaly with the zinc anomnaly extending into the norther section of the trend. This anomaly overlies an area of favourable geology for hosting stratiform lead-zinc-silver mineralization.

Trend Number 3

Trend Number 3 is bounded by the following lines and stations: Line 61+00W at 4+75S, Line 63+00W between 3+00S and 5+00S, Line 66+00W at 2+25S. The central section of this trend contains a coincident zinc, copper, barium anomaly. Along the northwestern edge of the trend is a barium anomaly. This anomaly overlies an area of favourable geology for hosting stratiform mineralization.

Trend Number 4

Trend Number 4 is bounded by the following lines and stations: Line 55+00W at 6+75S, Line 57+00W between 6+50S and 9+00S, Line 59+00W between 6+50S and 8+75S, Line 63+00W between 6+50S and 8+00S, Line 67+00W between 5+00S and 6+00S, Line 68+00W at 5+50S. The southeastern section of this trend contains a lead anomaly and a barium anomaly. The barium anomaly may be an extension of the anomaly in Trend Number 3. The north and central sections of this trend contains a coincident zinc, copper anomaly. This trend is not rated highly as it occurs over geology too high in the stratigraphic section to contain significant mineralization.

Trend Number 5

Trend Number 5 is bounded by the following lines and stations: Line 64+50W at 8+25S, Line 67+00W between 8+00S and 9+25S, Line 71+00W between 8+75S and 10+50S, Line 73+50W at 9+75S. The northeastern section of this trend contains a lead anomaly and the northwestern section contains a coincident zinc, copper anomaly. This trend is not rated highly as it occurs over geology too high in the stratigraphic section to contain significant mineralization.

Trend Number 6

Trend Number 6 is bounded by the following lines and stations: Line 73+00W at 5+50S, Line 75+00W between 4+50S and 6+50S, and open to the west. This trend contains a coincident zinc, copper, lead anomaly. This trend occurs at a break in slope, but is also in an area of favourable geology.

Trend Number 7

Trend Number 7 is bounded by the following lines and stations: Line 45+00W between 22+00S and open to the south, Line 47+00W between 21+75S and open to the south, Line 49+00W at 22+50S, the trend is open to the east. This trend contains a coincident zinc, copper, lead, barium anomaly. The trend includes a skarned section of the S1D1 unit of the Road River Group, and is downslope from the barite horizon (resulting in the barium anomaly).

Trend Number 8

Trend Number 8 consists of two components. One is bounded by the following lines and stations: Line 16+00W between 23+25S and open to the south, Line 18+00W between 22+75S and 24+75S, Line 20+00W between 22+25S and 25+00S, Line 22+00W between 22+75S and 24+00S, the trend is open to the east and the west. The second component is bounded by the following lines and stations: Line 6+00W between 36+50S and open to the south, Line 8+00W between 35+75S and open to the south, Line 10+00W between 34+50S and open to the south, Line 12+00W between 34+00S and open to the south. The first component contains a coincident barium, copper, zinc anomlay which is flanked by a zinc anomaly and a coincident copper, lead anomaly along the northwest edge of the trend. This component contains the laminated barite horizon. Where the trend is open to the west, it joins Trend Number 7, that is open to the east. This component is open to the east where it joins the second component that is open to the west. The second component contains a coincident barium, copper, zinc anomaly. It is thought that the source of this anomaly originates uphill from the sample sights. This component is open to the west. This anomaly (Component 1 and 2) overlies an area of favourable geology for hosting stratiform lead-zinc-silver mineralization.

Trend Number 9

Trend Number 9 is bounded by the following lines and stations: Line 16+00W between 10+75S and 15+50S, Line 18+00W between 10+25S and 15+00S, Line 20+00W between 9+50S and 14+00S, Line 22+00W between 9+25S and 12+50S. The trend is open to both the east and the west. This trend contains a coincident barium, zinc, lead anomaly and a coincident barium, zinc anomaly. It is thought that the barium anomalies represent a spotted barite horizon. This anomaly overlies an area of favourable geology.

Trend Number 10

Trend Number 10 is bounded by the following lines and stations: Line 16+00W between 1+25S and 3+00S, Line 18+00W between 1+75S and 2+75S. This trend is open to both the east and the west. The trend contains a barium anomaly. The source of the anomaly is a spotted barite horizon that occurs upslope from the anomaly.

Trend Number 11

Trend Number 11 is bounded by the following lines and stations: Line 3+00W at 19+00S, Line 4+00W between 18+75S and 19+75S, Line 6+00W between 19+00S and 20+50S, Line 8+00W between 19+25S and 20+75S, Line 10+00W at 20+75S. This trend contains a coincident zinc, copper anomaly and a lead anomaly. This anomaly overlies an area of favourable geology for hosting stratiform lead, zinc, silver mineralization.

Trend Number 12

Trend Number 12 is bounded by the following lines and stations: Line 16+00W between 7+00S and 8+25S, Line 18+00W between 6+25S and 7+50S, Line 20+00W between 5+60S and 7+00S, Line 22+00W at 6+00W. The trend is open to the east and contains a linear lead anomaly. This anomaly occurs in an area of favourable geology.

Trend Number 13

Trend Number 13 is bounded by the following lines and stations: Line 45+00W between 20+25S and 20+75S, Line 47+00W between 19+75S and 21+00S, Line 49+00W between 20+00S and 21+50S. The trend is open to the west. It contains a linear lead anomaly and a copper anomaly. The copper anomaly is centered downhill from where rock sample R55039 was collected, this sample contained .16% copper. The lead anomaly lies in an area of favourable geology.

Trend Number 14

Trend Number 14 is bounded by the following lines and stations: Line 45+00W between 7+60S and 10+25S, Line 47+00W between 7+75S and 9+50S, Line 49+00W between 8+20S and 9+00S, Line 49+50W at 8+50S. The trend contains both a lead and a copper anomaly. The anomalies are in an area of favourable geology.

III Conclusions and Recommendations

Out of the fourteen geochemical trends that were outlined, the following four trends: Trend Number 2, Trend Number 3, Trend Number 8 and Trend Number 11 are considered to be the most significant, due to the strength and coincident nature of their geochemical responses and their stratigraphic position.

To better evaluate these trends, it is recommended that 100 metre intermediate lines be put in over each of the trends and additional soil sampling at 25 metre spacings be carried out on the intermediate and preivously sampled lines, and that the depth from which the samples are collected be increased to the maximum allowable by conventional sampling techniques.

The 100 metre intermediate lines and their stations that would be needed are: Line 3+00W between 16+00S and 22+00S, Line 5+00W between 14+00S and 22+00S, Line 7+00W between 16+00S and 22+00S, Line 9+00W between 17+00S and 22+00S, Line 17+00W between 20+00S and 27+00S, Line 19+00W between 20+00S and 27+00S, Line 21+00W between 20+00S and 27+00S,

Line 52+00W between B.L. and 10+00S, Line 54+00W between B.L. and 10+00S, Line 56+00W between B.L. and 10+00S, Line 58+00W between B.L. and 8+00S, Line 60+00W between B.L. and 8+00S, Line 61+00W between B.L. and 8+00S, Line 62+00W between B.L. and 8+00S, Line 64+00W between B.L. and 5+00S, Line 65+00W between B.L. and 5+00S.

G) GEOPHYSICS

I VLF-EM Survey

During the 1983 program a total of 43.90 line kilometres of VLF-EM was run over the J.K. grid. The instruments used were two Geonics EM-16's utilizing transmissions from the NAA station in Cutler, Maine, at a frequency of 17.8 kHz.

The geologic formations in the grid area are known to be striking at approximately 120° azimuth and, as such, the grid lines were placed as close as possible to being perpendicular to strike (topography allowing). The VLF source station most favourable to this strike is Cutler, Maine, which gives the best coupling between the primary field and the conductors.

The VLF raw data has been filtered using the Standard Fraser Filter operation as outlined in Appendix B. The VLF Fraser Filter values are presented in contour form on Plate 2, and line profiles in conjunction with magnetic and geochemical data on Plates 9-21. Both the raw and Fraser Filtered VLF data can be found in Appendix B.

The Fraser Filtered data, as shown on the contour map, has delineated several anomalous trends in the grid area. A number of anomalies were outlined during the survey and have been considered as first order anomalies. The first order anomalies are numbered 1 - 18 inclusive on Plate 2, and are discussed below.

Anomaly Number 1 has a very strong filtered data response and is associated with a fault structure that occurs to the south of the barite horizon outlined in both components of geochemical trend number 8. Locally along the fault structure there are visable zones of gauge that contain graphite. No mineralization is associated with this structure.

Anomaly Number 2 has a strong filtered data response and is directly associated with the laminated barite horizon. The barite horizon contains laminated and disseminated pyrite. This anomaly occurs in geochemical Trend Number 8, and contains a coincident barium, zinc, copper anomaly.

Anomaly Number 3 has a strong filtered data response and is thought to represent a formational conductor. The anomaly also occurs in geochemical Trend Number 8, and is associated with a copper anomaly over the strongest part of the response, and a zinc anomaly over the weaker sections of the response.

Anomaly Number 4 has a strong filtered data response and is thought to represent a fault structure. There is no geochemical trend associated with this anomaly.

Anomaly Number 5 has a weak filtered data response and is thought to represent a formational conductor. This anomaly occurs in geochemcal Trend Number 9 and is associated with a coincident zinc, barium, lead anomaly.

Anomaly Number 6 has a weak filtered data response and is thought to represent a formational conductor. This anomaly also occurs in geochemical Trend Number 9 and is associated with a coincident barium, zinc anomaly, the barium occurs over the strongest part of the response and zinc over the weaker parts of the response.

Anomaly Number 7 has a strong filtered data response and is thought to represent a formational conductor. This anomaly is associated with linear lead anomalies in geochemical Trend Number 12.

Anomaly Number 8 has a strong filtered data response and is thought to represent a formational conductor. This anomaly occurs in geochemical Trend Number 10, and is offset from the barium anomaly found there. Downslope dispersion of the barium from its source area is believed responsible for the offsetting nature of the anomalies.

Anomaly Number 9 has a strong filtered data response and is thought to represent a formational conductor. This anomaly occurs in geochemical Trend Number 7. The lead anomaly in Trend Number 7 occurs over the strongest part of the response. The anomaly occurs over the skarn unit found there.

Anomaly Number 10 consists of a broad conductor that contains two strong conductors. These are believed to represent formational responses, one occurs in geochemical Trend Number 13, it is overlain by a linear lead anomaly. The other conductor occurs along the northern edge of geochemical Trend Number 7.

Anomaly Number 11 has a strong filtered data response and is thought to represent a formational conductor. The strongest part of this conductor is centred in geochemical Trend Number 14, it is flanked to the north by a lead anomaly and to the south by a copper anomaly.

Anomaly Number 12 is a strong conductor that occurs in a broad weakly conductive zone. This anomaly may be a formational conductor. The anomaly cuts through the southeastern tip of geochemical Trend Number 4 near Line 57+00W and directly downslope from the conductor is a coincident lead, barium anomaly. The eastern tip of the conductor lies to the south (upslope) of geochemical Trend Number 2 near line 53+00W. Geochemical Trend Number 2, in this area, has a coincident zinc, copper, lead, barium anomaly.

Anomaly Number 13 is a strong conductor that is located in a long linear weakly conductive zone that also includes VLF Anomaly Number 15. This is believed to be a formational conductor. The anomaly is centered above (upslope) a section of geochemical Trend Number 2, that contains a coincident zinc, copper, lead, barium anomaly.

Anomaly Number 14 has a weak filter data response and is believed to be a formational conductor. The strongest part of the conductor is centred under geochemical Trend Number 6, a coincident lead, copper, zinc anomaly. A weaker part of the conductor lies directly to the south, or upslope from a section of geochemical Trend Number 4 that contains a coincident copper, zinc anomaly.

Anomaly Number 15 is a strong conductor that is located in a long linear, weakly conductive zone that also includes VLF Anomaly Number 13. This is believed to be a formational conductor. The strongest section of this conductor is centred on Line 63+00W and is directly upslope from a section of geochemical Trend Number 3, that contains a coincident zinc, copper, barium anomaly.

Anomaly Number 16 has a strong filtered data response, and is thought to be a formational conductor, that may outline the contact between the Road River Group and the Earn Group. The western section of the anomaly underlies a barium anomaly found in geochemical Trend Number 3. Another section of this anomaly occurs to the south (uphill) from part of geochemcial Trend Number 2, where it contains a coincident copper, zinc anomaly. This anomaly then cuts across geochemical Trend Number 2 and enters geochemical Trend Number 1 where it underlies a coincident copper, zinc, barium anomaly.

Anomaly Number 17 and 18 have a strong filtered data response and are believed to represent fault structures. This may be the fault structure that separates the Southern and Central Blocks of the Macmillan Fold Belt.

II Conclusions and Recommendations

The following six VLF-EM anomalies are considered to be the most important for outlining areas that may contain stratiform lead-zinc-silver mineralization: Anomaly Numbers 2, 3, 12, 13, 15, and 16. These six anomalies better define the source areas for mineralization that may occur in three of the significant geochemical trends that have been outlined.

VLF-EM Anomalies 2 and 3 are associated with geochemical Trend Number 8. Anomaly Number 2 is outlining the barite horizon. Anomaly 3 contains a copper anomaly and a zinc anomaly.

VLF-EM Anomalies Numbers 12, 13, and 16 are associated with geochemical Trend Number 2. Anomaly Numbers 12 and 13 may contain mineralization that results in a coincident zinc, copper, lead, barium

anomaly. Anomaly Number 16 may contain mineralization that results in a coincident copper, zinc anomaly.

VLF-EM Anomaly Numbers 15 and 16 are associated with geochemical Trend Number 3. Anomaly Number 15 may contain mineralization that results in a coincident zinc, copper, barium anomnaly. Anomaly Numer 16 contains a barium anomaly.

To better define these VLF-EM anomalies it is recommended that VLF be run on 100 metre intermediate lines.

III Proton Magnetometer Survey

During the 1983 program a total of 43.70 line kilometres of magnetics was run over the J.K. grid. The instruments used were two G-836 UniMag Portable Proton Magnetometers in conjunction with a Model G-826A Portable Base Station Proton Magnetometer, to measure diurnal variations. The Base Station Magnetometer was set up at the base camp.

The magnetic raw data has been corrected for diurnal time variations and can be found in Appendix B. The magnetic resultants are presented in contour form on Plate 3, and line profiles in conjunction with VLF and geochemical data on Plates 9-21.

The magnetic survey was useful as a reconnaissance tool to delineate areas of varying magnetic concentrations, as in the detection of pyrrhotite, that led to the discovery of a skarn. Generally the magnetic amplitudes over the grid were fairly consistant with only a few magnetic trends ranging between 100 to 400 gammas, and one anomalous zone in excess of 1000 gammas. In the eastern region of the grid on lines 2+00E, 0+00, 4+00W, 6+00W, 8+00W, 10+00W and 12+00W a pronounced magnetic low occurs, with few and sporadic positive values. This pronounced low is believed to be a topographic affect caused by the proximity of the surrounding rock walls in this area. Magnetic lows may also be the affect from overburden cover. The overburden cover affects the magnetic measurement by either masking the response from the bedrock unit at the surface and/or acting as a distance barrier. Where the greater the thickness of the cover, the greater the distance the sensor is from the prominent magnetic source.

Resulting in attentuating the magnetic response. Five anomalous positive areas were outlined during the survey, these are numbered 1-5 inclusive on Plate 3, and are discussed below.

Anomaly Number 1 has a strong magnetic response. It is slightly offset to the south of VLF Anomaly Number 1, and is not associated with any geochemical trends.

Anomaly Number 2 has a moderate magnetic response. It is associated with VLF Anomaly Number 4 and has no associations with geochemical trends.

Anomaly Number 3 has a very strong magnetic response. It is associated with a pyrrhotite skarn and geochemical Trend Number 7.

Anomaly Number 4 has a moderate magnetic response. It is associated with the central section of geochemical Trend Number 4, that contains a coincident zinc, copper anomaly.

Anomaly Number 5 has a moderate magnetic response. It is associated with geochemical Trend Number 13, that contains a lead anomaly and VLF Anomaly Number 10.

IV Conclusions and Recommendations

None of the magnetic anomalies outlined during the survey are associated with the more significant geochemical trends or VLF anomalies.

Further magnetics to detail any area is not justified since the magnetic values are fairly monotonous over the entire grid.

REFERENCES

Abbott, J.G.
Structure and Stratigraphy of the MacMillan Fold Belt: Evidence for Devonian Faulting, Department of Indian and Northern Development, Open File, May 1982.

Blusson, S.L.
Regional Geologic Setting of Lead-Zinc Deposits in Selwyn Basin, Yukon, Geol. Survey of Canada Paper, 1978 - 1A.

Carne, R.C.
Stratabound barite and lead-zinc barite deposits in the Eastern Selwyn Basin, Yukon Territory: Dept. of Indian and Northern Affairs, Open File Report, EGS 1976 - 16, 41p.

Geological Setting and Stratiform Mineralization Tom Claims, Yukon Territory: Dept. of Indian and Northern Affairs, EGS 1979-4.

Dawson, K.M.
1977: Regional Metallogeny of the Northern Cordillera: Geol. Survey of Canada, Paper 1977 - 1A.

Gabrielse, H.; Blusson, S.L.; Roddick, J.A.
Geology of Flat River, Glacier Lake, and Wrigley Lake Map Areas, District of MacKenzie and Yukon Territory; Partl: General Geology, Structural Geology and Economic Geology; G.S.C. Memoir 366, 1977.

Gordey, S.P.; Wood, D.; Anderson, R.G.
Stratigraphic Framework of Southeastern Selwyn Baisn, Nahanni Map Area, Yukon Territory and District of MacKenzie, Geology Survey of Canada, Paper 1981 - 1A.

Gordey, S.P.; Abbott, J.G.; Orchard, M.J.
Devono-Mississippian (Earn Group) and Younger Strata In East-Central Yukon, Geological Survey of Canada, Paper 82-1B.

Lydon, J.W.; Lancaster, R.D.; Karkkainen, P.
Genetic Controls of Selwyn Basin Stratiform Barite/Sphalerite/Galena Deposits: An Investigation of the Dominant Barium Mineralogy of the Tea Deposit, Yukon; Yukon Geology Survey of Canada, Paper 1979-1B.

Morganti, J.M.
Ore Deposit Models - 4. Sedimentry Type Stratiform Ore Deposits, Some Models and a New Classification; Geoscience Canada; Volume 8, Number 2.

Ogilvie Joint Venture
Jason Property, 1980 Results for Pan Ocean Oil Ltd. unpublished report.

Winn, R.D. Jr.; Bailes, R.J.; Lu, K.I
Debris flows, Turbidites and Lead-Zinc Sulphides along a Devonian Submarine Fault SCARP, Jason Prospect Yukon Territory; 1979 Exploration results for Pan Ocean Oil Ltd, unpublished report.

STATEMENT OF QUALIFICATIONS

I, Gerald F. McArthur of Calgary, Alberta, hereby certify that I supervised the author of this report, which is based on the results of an exploration program conducted on the J.K. 1 - 160 Claims during July 3 to August 30, 1983. Field work for this program was conducted under my supervision by a field crew employed by Aberford Resources Ltd.

1) I am a geologist residing at 111 Chelsea Street, N.W., Calgary, Alberta and am currently employed by Aberford Resources Ltd., of 300 - 5th Avenue, S.W., Calgary, Alberta.

2) I graduated from the University of British Columbia in 1973 with a B.Sc. degree in Geology and have practised my profession since that time.

3) I am a professional geologist registered in the province of Alberta.

Date: May 4, 1984

Signature: Gerald F. McArthur

Gerald F. McArthur

STATEMENT OF QUALIFICATIONS

I, John D. Kapusta of Calgary, Alberta, hereby certify that:

1) I am a geologist presently residing at 4108 A - 18 Street, S.W., Calgary, Alberta and am currently employed by Aberford Resources Ltd., of 300 - 5th Avenue, S.W., Calgary, Alberta.

2) I graduated from the University of Manitoba in 1981 with a B.Sc. degree in Geology.

3) The entire program was conducted under the supervision of G. F. McArthur, Senior Geologist for Aberford Resources Ltd., Minerals Division.

Date: May 4, 1984

Signature: _____
John D. Kapusta

A P P E N D I X "A"

ANALYSIS CERTIFICATES

FOR

SOIL SAMPLES

AND

GEOCHEMICAL DATA

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Geochemical Lab Report

REPORT: 122-2305 PROJECT: JK

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Ba PPM	NOTES
S L400E 14+50S		36	14	102	2470	
S L400E 15+00S		21	15	63	1130	
S L400E 15+50S		34	20	135	1140	
S L400E 16+00S		45	14	132	960	
S L400E 16+50S		14	8	38	970	
S L400E 17+00S		43	39	123	1330	
S L400E 17+50S		11	4	29	950	
S L400E 18+00S		42	25	126	1220	
S L400E 18+50S		29	15	91	1010	3%
S L400E 19+00S		29	29	88	1350	
S L600W 35+00S		71	23	216	1820	
S L600W 35+50S		76	25	208	1660	
S L600W 36+00S		75	25	207	1590	
S L600W 36+50S		33	11	79	1090	
S L600W 37+00S		46	16	123	1440	
J0W 37+50S		19	6	38	1030	
S L600W 38+00S		13	7	55	1210	
S L600W 38+50S		15	15	94	1450	
S L600W 39+00S		11	13	88	1220	
S L600W 39+50S		11	12	34	810	
S L600W 40+00S		9	7	49	830	
S L600W 40+50S		11	12	43	920	
S L600W 41+00S		13	10	33	710	
S L600W 41+50S		11	11	47	710	
S L600W 42+00S		13	12	43	740	
S L600W 42+50S		15	15	28	850	
S L800W 34+00S		41	18	138	4360	
S L800W 34+50S		37	20	182	2700	
S L800W 35+00S		21	9	61	1540	3%
S L800W 35+50S		18	7	71	1690	
S L800W 36+00S		26	16	112	1930	
S L800W 36+50S		19	6	48	1030	
S L800W 37+00S		25	16	97	1430	
S L800W 37+50S		30	19	144	2230	
S L800W 38+00S		11	5	39	1090	
S L800W 38+50S		23	11	89	1500	
J0W 39+00S		24	7	58	910	
S L800W 39+50S		7	10	49	790	
S L800W 40+00S		27	12	65	1360	
S L800W 40+50S		20	15	51	960	

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Ba PPM	NOTES
S L800W 41+00S		3	9	37	740	
S L800W 41+50S		12	9	35	580	
S L800W 42+00S		9	8	31	660	
S L800W 42+50S		8	6	27	810	
S L800W 43+00S		18	19	66	800	
S L1000W 24+50S		83	22	197	12000	3%
S L1000W 25+50S		6	4	13	1050	
S L1000W 26+00S		19	9	45	1080	
S L1000W 26+50S		13	9	25	1000	
S L2000W 13+00S		37	55	83	1640	
S L2000W 13+50S		29	34	56	950	
S L2000W 14+00S		14	19	31	950	
S L2000W 14+50S		12	18	20	1020	
S L2000W 15+00S		32	30	77	2100	
S L2000W 15+50S		43	30	101	1920	
S L2000W 16+00S		38	35	99	1780	
S L2000W 16+50S		10	6	14	940	
S L2000W 17+00S		9	6	25	970	
S L2000W 17+50S		4	2	10	840	
S L2000W 18+00S		7	4	19	950	
S L2000W 18+50S		9	5	22	940	
S L2000W 19+00S		7	4	27	920	
S L2000W 19+50S		30	41	31	1470	
S L2000W 20+00S		11	11	29	930	
S L2000W 20+50S		10	44	25	2020	
S L2000W 21+00S		23	34	70	1700	3%
S L2000W 21+50S		26	20	46	2420	
S L2000W 22+00S		11	11	32	1880	
S L2000W 22+50S		25	24	53	3330	
S L2000W 23+00S		54	39	151	2110	
S L2000W 23+50S		16	7	25	1380	
S L2000W 24+00S		23	16	41	2120	
S L2000W 24+50S		18	14	44	1300	
S L2000W 25+00S		13	5	30	740	
S L2000W 25+50S		21	18	42	1250	
S L2000W 26+00S		18	9	21	1620	
S L2000W 26+50S		15	14	26	4240	
S L2000W 27+00S		23	14	25	900	
S L2000W 32+00S		12	48	63	3660	
S L2000W 22+50S		35	34	64	3410	

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Geochemical Lab Report

REPORT: 123-2305 PROJECT: JK

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Ba PPM	NOTES
S L2200W 23+00S		25	46	33	4010	
S L2200W 23+50S		33	25	46	4160	
S L2200W 24+00S		34	12	71	1620	3%
S L2200W 24+50S		8	6	9	1110	
S L2200W 25+00S		23	33	27	2450	
S L2200W 25+50S		29	27	42	1940	
S L2200W 26+00S		41	20	60	2060	
S L2200W 26+50S		40	19	65	1450	
S L2200W 27+00S		74	14	69	1000	
S L3900W 0+00		30	23	56	1210	
S L3900W 0+50S		28	18	27	1080	
S L3900W 1+00S		90	11	7	470	
S L3900W 1+50S		73	18	13	1020	
S L4100W 3+00N		40	18	62	1210	
S L4100W 2+50N		43	27	196	1520	
100W 2+00N		163	10	214	650	
S L4100W 1+50N		23	29	30	1200	
S L4100W 1+00N		15	17	12	1140	
S L4100W 0+50N		12	35	22	1030	
S L4100W 0+00		24	19	62	1240	
S L4100W 0+50S		16	15	45	950	
S L4100W 1+00S		16	23	41	1080	
S L4100W 1+50S		117	8	84	370	3%
S L4300W 2+00N		43	17	131	1700	
S L4300W 1+50N		13	7	37	1090	
S L4300W 1+00N		59	19	288	1720	
S L4300W 0+50N		29	17	88	1320	
S L4300W 0+00		14	15	59	1360	
S L4300W 0+50S		37	22	50	1090	
S L4300W 1+00S		5	6	10	890	
S L4300W 1+50S		19	20	50	1030	
S L5700W 3+00N		67	39	309	1840	
S L5700W 5+50N		36	29	185	2300	
S L5700W 5+00N		52	16	263	2240	
S L5700W 4+50N		66	16	721	2520	
S L5700W 4+00N		35	13	690	2940	
700W 3+50N		49	14	580	2870	
700W 3+00N		51	13	580	2010	
S L5700W 2+50N		53	14	573	2090	
S L5700W 2+00N		26	14	670	2150	3%

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Ba PPM	NOTES
S L5700W 1+50N		55	13	730	2390	
S L5700W 1+00N		50	14	245	1560	
S L5700W 0+50N		50	13	300	1600	
S L5700W 0+00		36	20	440	1930	
S L5700W 0+50S		47	13	420	1930	
S L5700W 1+00S		83	16	730	2310	
S L5700W 1+50S		61	15	610	2120	
S L5700W 2+00S		90	15	600	2020	
S L5900W 4+00N		24	14	54	1190	
S L5900W 3+50N		70	26	308	3100	
S L5900W 3+00N		55	17	249	2140	
S L5900W 2+50N		64	17	237	2540	
S L5900W 2+00N		77	17	405	3030	
S L5900W 1+50N		36	17	281	1530	
S L5900W 1+00N		22	14	264	1330	
S L5900W 0+50N		34	14	357	1550	
S L5900W 0+00		43	9	131	1290	
S L5900W 0+50S		34	14	143	1490	
S L5900W 1+00S		55	50	350	3010	
S L6300W 2+00N		75	31	361	9690	3%
S L6300W 1+50N		29	7	83	810	
S L6300W 1+00N		67	13	336	1420	
S L6300W 0+50N		57	14	420	1550	
S L6300W 0+00		36	14	720	1730	
S L6300W 0+50S		34	10	307	1510	
S L6300W 1+00S		121	23	780	2770	
S L6300W 1+50S		32	13	1840	2140	
S L6300W 2+00S		37	13	1750	1430	
S L6700W 3+00N		52	12	221	1760	
S L6700W 2+50N		31	17	346	2190	
S L6700W 2+00N		30	13	253	1510	
S L6700W 1+50N		22	15	400	1750	
S L6700W 1+00N		12	9	100	1200	
S L6700W 0+50N		26	13	130	1490	
S L6700W 0+00		32	17	276	1780	
S L6700W 0+50S		41	21	335	2040	
S L6700W 1+00S		47	15	300	1670	3%
S L6700W 1+50S		33	18	294	1780	
S L6700W 2+00S		45	13	253	1550	
S L7100W 3+00N		35	11	314	1380	

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REPORT: 123-2305 PROJECT: JK

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Ba PPM	NOTES
S L7100W 2+50N		34	15	259	1330	
S L7100W 2+00N		40	14	279	1270	
S L7100W 1+50N		28	15	280	1360	
S L7100W 1+00N		28	12	297	1270	
S L7100W 0+50N		36	17	270	1250	
S L7100W 0+00		47	19	379	1150	
S L7100W 0+50S		56	20	391	990	
S L7100W 1+00S		36	20	186	1150	
S L7100W 1+50S		29	18	99	980	
S L7500W 4+00N		23	17	218	1460	
S L7500W 3+50N		32	19	262	1730	
S L7500W 3+00N		30	17	250	1630	
S L7500W 2+50N		26	14	222	1360	
S L7500W 2+00N		33	13	192	1530	
S L7500W 1+50N		29	15	223	1650	
500W 1+00N		25	14	212	1780	
S L7500W 0+50N		28	14	227	1660	3%
S L7500W 0+00		35	14	219	1790	
S L7500W 0+50S		22	11	167	1450	
S L7500W 1+00S		32	14	275	1640	
S L7500W 1+50S		24	12	203	1450	

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Geochemical Lab Report

AUG 2 - 1985

MINERALS DIVISION

REPORT: 123-1595 PROJECT: JK

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Ba PPM	NOTES
LINE 0+00W						
S 20+50S		25	35	123	1440	
S 21+00S		14	30	175	1560	
S 21+50S		27	40	133	1330	
S 22+00S		91	33	1020	750	
LINE 2+00E						
S 10+00S		30	24	104	1390	
S 10+50S		19	30	103	1560	
S 11+00S		18	26	105	1480	
S 11+50S		26	36	127	1420	
S 12+00S		19	34	227	1480	
S 12+50S		22	21	190	1440	
S 13+00S		13	20	80	1290	
S 13+50S		21	28	107	1500	
S 14+00S		30	35	127	1700	
4+50S		15	36	93	1620	
15+00S		21	24	101	1970	
S 15+50S		20	16	76	1440	
S 16+00S		47	20	213	1150	
S 16+50S		32	23	87	1720	
S 17+00S		22	43	114	2310	
S 17+50S		29	35	125	2310	
S 18+00S		97	20	169	1320	
S 18+50S		33	26	189	2270	
S 19+00S		33	34	283	2510	
S 19+50S		20	12	73	1290	
LINE 2+00W						
S 19+50S		14	23	117	1630	
S 20+00S		19	40	138	1980	
S 20+50S		23	30	147	1860	
S 21+00S		19	24	111	1510	
LINE 4+00W						
S 14+50S		19	22	79	2290	
S 15+00S		21	18	77	1540	
S 15+50S		19	15	68	1520	
S 16+00S		19	24	93	2220	
4+50S		23	37	95	1920	
7+00S		23	32	89	1890	
S 17+50S		25	28	97	1460	
S 18+00S		28	36	143	1560	
S 18+50S		13	12	67	950	
S 19+00S		20	50	52	1820	
S 19+50S		19	35	73	1460	
S 20+00S		21	30	112	1950	
S 20+50S		16	26	88	2540	
S 21+00S		15	22	85	2440	
S 21+50S		21	27	102	2120	
S 22+00S		83	48	174	1450	
LINE 6+00W						
S 16+50S		62	26	72	1340	
S 17+00S		24	32	132	1530	
S 17+50S		17	29	127	2060	
S 18+00S		17	72	85	2000	
S 18+50S		17	19	39	1150	
S 19+00S		27	32	145	1510	
S 19+50S		54	26	715	1280	
S 20+00S		26	10	316	630	
S 20+50S		28	20	65	1040	
S 21+00S		32	15	154	1320	
S 21+50S		31	70	390	1320	
S 22+00S		15	16	37	1010	
S 22+50S		9	7	12	1000	
S 23+00S		77	36	213	1530	
LINE 8+00W						
S 17+50S		31	28	280	1540	
S 18+00S		21	18	151	1520	
S 18+50S		23	35	93	1390	
S 19+00S		30	16	49	1260	
S 19+50S		28	30	85	2210	
S 20+00S		28	7	2530	650	
S 20+50S		13	7	197	1740	
S 21+00S		34	30	67	2670	
S 21+50S		26	23	59	2130	
S 22+00S		30	35	77	2390	
S 22+50S		36	17	53	1070	
LINE 10+00W						
S 20+00S		18	35	115	1800	
S 20+50S		13	33	45	1940	
S 21+00S		10	24	41	2610	
S 21+50S		28	35	94	1890	

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Geochemical Lab Report

REPORT: 123-1595 PROJECT: JK

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Ba PPM	NOTES
S 22+00S		25	29	93	3520	
S 22+50S		17	24	76	2420	
S 23+00S		37	29	94	2080	
S 23+50S		52	66	221	1570	
S 24+00S		29	16	54	1810	
S 34+50S		27	10	80	1290	
S 35+00S		41	20	125	1430	
S 35+50S		54	24	111	1210	
S 36+00S		50	18	180	1340	
S 36+50S		33	16	112	1490	
S 37+00S		46	18	143	1290	
S 37+50S		24	7	31	910	
S 38+00S		25	14	54	1300	
S 38+50S		23	16	79	900	
S 39+00S		22	11	59	780	
9+50S		12	7	26	910	
S 40+00S		22	13	55	780	
S 40+50S		15	13	50	760	
S 41+00S		21	20	59	720	
S 41+50S		10	11	47	710	
S 42+00S		12	12	36	740	
LINE 12+00W						
S 32+00S		39	16	169	1740	
S 32+50S		52	18	234	2020	
S 33+00S		38	12	141	5640	
S 33+50S		14	4	22	1080	
S 34+00S		23	9	81	1620	
S 34+50S		38	16	132	2090	
S 35+00S		42	14	160	1620	
S 35+50S		25	12	89	1570	
S 36+00S		23	11	53	980	
S 36+50S		27	8	57	940	
S 37+00S		33	12	134	1050	
S 37+50S		39	15	92	1110	
S 38+00S		28	12	98	920	
S 38+50S		51	11	135	980	
9+00S		23	12	80	700	
NE 39+00W						
S 2+00S		22	20	41	1250	
S 2+50S		20	4	12	200	

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Ba PPM	NOTES
S 3+50S		18	5	14	4300	
S 4+00S		29	54	39	1240	
S 4+50S		18	20	28	1050	
S 5+00S		48	69	36	1030	
S 5+50S		17	31	46	1290	
S 6+00S		19	19	47	1180	
LINE 41+00W						
S 2+00S		4	16	20	1320	
S 3+00S		9	27	33	1330	
S 3+50S		25	26	63	1480	
S 4+00S		15	16	38	920	
S 4+50S		18	20	57	1190	
S 5+00S		32	22	56	1310	
S 5+50S		26	23	73	1290	
S 6+00S		24	24	70	1210	
S 6+50S		8	7	16	1010	
S 7+00S		21	20	60	1090	
S 7+50S		22	19	66	1020	
S 8+00S		19	13	53	940	
LINE 43+00W						
S 2+00S		34	27	64	1010	
S 3+00S		21	20	58	1140	
S 3+50S		17	9	27	970	
S 4+00S		16	16	43	1010	
S 4+50S		20	22	61	1020	
S 5+00S		20	20	52	640	
S 6+00S		28	32	41	1110	
S 6+50S		19	14	20	1000	
S 7+00S		19	20	57	1000	
S 7+50S		31	19	125	930	
S 8+00S		23	17	75	1000	
LINE 47+00W						
S 4+00S		25	16	56	1210	
S 4+50S		16	10	23	1030	
S 5+00S		18	15	34	990	
S 5+50S		33	17	96	1060	
S 6+00S		28	13	57	1510	
S 6+50S		19	13	33	1430	
S 7+00S		22	12	52	1100	
S 7+50S		26	16	61	1630	

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REPORT: 123-1595 PROJECT: JK

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Ba PPM	NOTES
S 8+00S		33	32	73	1680	
S 8+50S		31	30	76	1590	
S 9+00S		60	9	37	1180	
S 9+50S		31	14	69	3000	
S 10+00S		22	11	61	1870	
S 10+50S		21	14	39	1780	
S 11+00S		31	15	64	2970	
S 11+50S		43	16	84	8090	
S 12+00S		38	24	79	1810	
S 12+50S		19	8	19	1070	
S 13+00S		23	11	41	1730	
S 13+50S		36	15	82	2440	
S 14+00S		21	7	36	1510	
S 14+50S		28	14	67	2730	
S 15+00S		14	10	27	1330	
5+50S		15	7	29	940	
S 16+00S		25	6	19	890	
S 16+50S		18	8	38	1210	
S 17+00S		21	10	30	1320	
S 17+50S		15	8	17	970	
S 18+00S		29	15	52	1900	
S 18+50S		22	13	25	1620	
S 19+00S		23	4	37	770	
S 19+50S		21	13	24	1270	
S 20+00S		11	44	12	1120	
S 20+50S		38	35	55	1990	
S 21+00S		27	34	56	2170	
S 22+00S		54	45	46	2390	
S 22+50S		62	41	52	5460	
S 23+00S		54	21	98	14230	
S 23+50S		44	12	42	1520	
S 24+00S		10	8	14	1400	
LINE 49+00W						
S 0+00N		27	19	295	960	
S 0+50N		15	20	79	1310	
S 1+00N		37	12	440	1000	
+50N		30	15	765	1080	
2+00N		18	16	118	1290	
S 2+50N		23	16	105	1090	
S 0+50S		11	15	61	1160	

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Ba PPM	NOTES
S 1+00S		24	16	94	1150	
S 1+50S		28	12	133	1080	
S 2+00S		19	14	33	1070	
S 2+50S		29	12	130	1100	
S 3+00S		26	15	62	1690	
S 3+50S		28	12	276	1030	
S 4+00S		24	14	121	1730	
S 4+50S		21	12	353	1330	
S 5+00S		22	14	258	1470	
S 5+50S		21	15	130	1300	
S 6+00S		23	16	224	970	
S 6+50S		23	11	194	1280	
S 7+00S		32	19	99	1790	
S 7+50S		23	13	359	1150	
S 8+00S		22	11	117	2390	
S 8+50S		32	23	66	1710	
S 9+00S		20	17	81	1680	
S 9+50S		11	12	188	110	
S 10+00S		20	14	236	1360	
S 10+50S		10	10	288	990	
S 11+00S		18	12	131	1030	
S 11+50S		18	8	64	950	
S 12+00S		8	7	20	970	
S 13+00S		36	14	134	1030	
S 13+50S		30	12	134	1040	
S 14+00S		12	4	19	950	
S 14+50S		13	10	55	970	
S 15+00S		21	12	94	1010	
S 15+50S		27	15	112	1060	
S 16+00S		33	12	121	1050	
S 16+50S		4	4	8	850	
S 17+00S		8	7	30	800	
S 17+50S		24	15	98	1030	
S 18+00S		16	11	112	980	
S 18+50S		24	21	111	1040	
S 19+00S		27	24	143	1890	
S 19+50S		36	26	186	2050	
S 20+00S		46	26	263	1150	
S 20+50S		72	30	189	1300	
S 21+00S		86	34	237	1550	

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REPORT: 123-1595 PROJECT: JK

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Ba PPM	NOTES
S 21+50S		16	4	25	910	
S 22+00S		49	19	211	1190	
S 22+50S		20	10	112	1060	
S 23+00S		40	16	220	1200	
S 23+50S		21	12	135	2290	
S 24+00S		10	12	53	950	
LINE 51+00W						
S 0+00N		22	19	68	1250	
S 0+50N		20	14	44	1010	
S 1+00N		21	14	57	1070	
S 1+50N		14	11	51	980	
S 2+00N		38	17	298	1640	
S 2+50N		22	20	91	1020	
S 3+00N		27	14	231	1650	
S 0+50S		30	16	297	1380	
[illegible]+00S		26	15	65	1210	
[illegible] 1+50S		34	17	71	1340	
S 2+00S		29	17	146	1270	
S 2+50S		32	16	370	1650	
S 3+00S		25	8	255	1130	
S 3+50S		25	14	172	1280	
S 4+00S		17	13	46	1190	
S 4+50S		13	11	23	1120	
S 5+00S		15	12	41	1440	
S 5+50S		44	12	344	1760	
S 6+00S		25	18	156	1570	
S 6+50S		13	17	34	1030	
S 7+00S		23	7	23	990	
S 7+50S		17	7	35	830	
S 8+00S		10	11	101	850	
S 8+50S		24	11	164	910	
S 9+00S		9	5	10	870	
S 9+50S		7	9	37	870	
S 10+00S		3	2	8	940	
S 10+50S		19	10	46	880	
S 11+00S		26	9	75	940	
[illegible]1+50S		16	14	63	930	
[illegible]2+00S		22	16	77	900	
S 12+50S		33	20	117	1010	
S 13+00S		23	14	52	790	

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Ba PPM	NOTES
S 14+00S		14	11	60	940	
S 14+50S		53	20	199	1110	
S 15+00S		18	10	32	860	
S 15+50S		23	14	91	940	
S 16+00S		37	18	190	1010	
S 16+50S		39	18	146	940	
S 17+00S		11	5	22	830	
S 17+50S		10	9	59	900	
S 18+00S		56	16	200	1140	
S 18+50S		17	9	39	930	
S 19+00S		50	19	182	1050	
S 19+50S		10	5	18	900	
S 20+00S		21	13	67	1000	
LINE 53+00W						
S 0+00N		22	11	1320	1400	
S 0+50N		24	19	112	1120	
S 1+00N		23	14	81	1100	
S 1+50N		31	17	120	1600	
S 2+00N		32	13	214	1510	
S 2+50N		24	11	158	1510	
S 3+00N		41	14	400	1360	
S 3+50N		27	13	327	1660	
S 4+00N		24	10	59	1120	
S 0+50S		32	19	112	1400	
S 1+00S		55	17	495	2040	
S 1+50S		35	11	170	2010	
S 2+00S		63	10	505	1380	
S 2+00SA		67	15	925	1670	
S 2+50S		31	10	565	1330	
S 3+00S		36	16	470	1710	
S 3+50S		152	16	815	2730	
S 4+00S		37	44	169	1410	
S 4+50S		11	7	20	1100	
S 5+00S		39	23	83	1190	
S 5+50S		9	4	25	1030	
S 6+00S		126	28	1020	2060	
S 6+50S		12	10	63	1410	
S 7+00S		16	10	25	930	
S 7+50S		8	13	16	1140	
S 8+00S		29	28	78	1240	

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REPORT: 123-1595 PROJECT: JK

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Ba PPM	NOTES
S 8+50S		8	10	16	910	
S 9+00S		45	30	125	850	
S 9+50S		17	15	48	1100	
S 10+00S		13	10	30	960	
S 10+50S		8	5	18	950	
S 11+00S		13	7	39	900	
S 11+50S		34	14	124	1130	
S 12+00S		22	14	83	1120	
LINE 55+00W						
S 0+00N		41	17	445	2270	
S 0+50N		35	29	104	1570	
S 1+00N		27	21	495	1330	
S 1+50N		29	16	140	1300	
S 2+00N		38	20	176	1340	
S 2+50N		52	20	297	1950	
[illegible]+00N		28	16	220	1810	
S 3+50N		44	38	276	2520	
S 4+00N		28	26	206	1540	
S 4+50N		25	22	189	1460	
S 5+00N		35	38	505	2120	
S 5+50N		35	27	218	1390	
S 6+00N		40	30	337	3060	
S 0+50S		45	15	530	2400	
S 1+00S		44	16	445	1970	
S 1+50S		60	16	480	1790	
S 2+00S		99	16	1030	1830	
S 2+50S		166	12	1015	1270	
S 3+00S		30	12	183	1850	
S 3+50S		35	19	410	1900	
S 4+00S		5	4	16	920	
S 4+50S		46	18	920	1070	
S 5+00S		133	9	600	700	
S 5+50S		94	42	359	1540	
S 6+00S		28	17	233	980	
S 6+50S		37	17	60	1000	
S 7+00S		13	22	39	1050	
[illegible]+50S		9	7	11	810	
[illegible] 8+00S		10	5	10	820	
S 8+50S		30	17	37	760	
S 9+00S		14	6	15	810	

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Ba PPM	NOTES
S 9+50S		10	4	15	850	
S 10+00S		20	29	35	740	
LINE 57+00W						
S 2+50S		46	14	635	2250	
S 3+00S		31	15	295	1760	
S 3+50S		68	12	277	1600	
S 4+00S		176	16	340	980	
S 4+50S		21	7	30	1060	
S 5+00S		22	3	7	900	
S 5+50S		214	17	29	540	
S 6+00S		11	4	12	840	
S 6+50S		71	37	71	1110	
S 7+00S		20	12	36	9700	
S 7+50S		28	76	34	2030	
S 8+00S		22	36	25	1240	
S 8+50S		47	59	82	1120	
S 9+00S		28	16	62	980	
S 9+50S		25	13	83	920	
S 10+00S		67	22	273	820	
LINE 59+00W						
S 1+50S		35	16	201	4790	
S 2+00S		19	6	101	6530	
S 2+50S		150	7	1820	1280	
S 3+00S		490	12	1270	1260	
S 3+50S		180	10	550	2160	
S 4+00S		123	9	54	810	
S 4+50S		26	14	144	1100	
S 5+00S		72	20	73	1170	
S 5+50S		22	19	51	990	
S 6+00S		40	13	67	950	
S 6+50S		39	18	119	1170	
S 7+00S		30	27	69	1160	
S 7+50S		11	5	14	940	
S 8+00S		13	66	19	1480	
LINE 63+00W						
S 2+50S		23	7	217	1340	
S 3+00S		33	15	410	2380	
S 3+50S		40	11	361	1700	
S 4+00S		59	36	525	2150	
S 4+50S		65	20	905	1800	

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SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Ba PPM	NOTES
S 5+00S		14	25	41	950	
S 5+50S		16	31	94	1110	
S 6+00S		22	37	65	1010	
S 6+50S		23	22	70	1110	
S 7+00S		102	29	630	1550	
S 7+50S		38	29	106	1270	
S 8+00S		21	27	83	1150	
LINE 67+00W						
S 2+50S		44	16	242	1620	
S 3+00S		49	16	239	1930	
S 3+50S		45	15	218	1720	
S 4+00S		52	17	230	1700	
S 4+50S		27	19	109	1050	
S 5+00S		29	24	75	1060	
S 5+50S		49	16	425	1560	
+00S		36	22	81	1060	
6+50S		22	18	29	1070	
S 7+00S		18	28	33	1190	
S 7+50S		29	16	59	900	
S 8+00S		35	46	54	1390	
S 8+50S		34	83	60	1360	
S 9+00S		18	16	67	950	
S 9+50S		34	27	115	1010	
S 10+00S		21	22	54	1000	
LINE 71+00W						
S 2+00S		29	25	86	1010	
S 2+50S		18	10	49	970	
S 3+00S		83	22	685	1090	
S 3+50S		47	24	226	1130	
S 4+00S		23	10	71	930	
S 4+50S		22	12	57	990	
S 5+00S		7	11	25	1100	
S 5+50S		6	11	15	1230	
S 6+00S		9	12	27	1110	
S 6+50S		10	12	28	1070	
S 7+00S		31	19	212	1120	
7+50S		42	13	95	890	
+00S		18	11	41	620	
S 8+50S		29	34	96	1020	
S 9+00S		32	36	119	1120	

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Ba PPM	NOTES
S 9+50S		73	65	245	1130	
S 10+00S		54	34	166	1050	
LINE 75+00W						
S 2+00S		34	21	222	1480	
S 2+50S		34	20	213	1520	
S 3+00S		23	18	122	1100	
S 3+50S		11	10	64	910	
S 4+00S		33	27	138	1120	
S 4+50S		22	12	103	990	
S 5+00S		72	28	815	1550	
S 5+50S		36	21	455	1210	
S 6+00S		106	105	965	1740	
S 6+50S		18	10	40	980	
S 7+00S		13	9	39	1050	
S 7+50S		18	25	83	1450	
S 8+00S		20	18	64	1270	
S 8+50S		11	6	20	920	

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Certificate of Analysis

REPORT: 423-2316 PROJECT: JK

SAMPLE NUMBER	ELEMENT UNITS	Cu PCT	Pb PCT	Zn PCT	W PCT	NOTES
R 55026		0.01	<0.01	<0.01	0.01	
R 55027		0.01	<0.01	<0.01	0.01	
R 55029		0.01	<0.01	<0.01	0.01	
R 55030		<0.01	<0.01	<0.01	0.03	
R 55031		0.01	<0.01	<0.01	0.01	
R 55032		<0.01	<0.01	<0.01	0.02	
R 55033		0.01	<0.01	<0.01	0.02	
R 55034		<0.01	<0.01	0.21	0.03	
R 55035		<0.01	0.50	<0.01	0.02	
R 55036		<0.01	0.01	<0.01	<0.01	
R 55037		<0.01	0.02	<0.01	<0.01	
R 55038		0.01	<0.01	2.15	0.02	
R 55039		0.16	<0.01	<0.01	<0.01	
R #1		<0.01	<0.01	0.01	0.02	
R #2		<0.01	<0.01	<0.01	0.02	
3		0.01	<0.01	<0.01	0.02	

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Geochemical Lab Report

REPORT: 123-2316 PROJECT: JK

SAMPLE NUMBER	ELEMENT UNITS	As PPM	As PPM	Au PPB	NOTES
R 1		0.9	290	<5	
R 2		1.5	320	<5	
R 3		0.4	220	10	
R 55026		0.4	23	5	
R 55027		0.3	3	<5	
R 55029		0.5	3	<5	
R 55030		0.3	140	5	
R 55031		0.4	7	5	
R 55032		0.4	7	10	
R 55033		0.2	3	5	
R 55034		0.7	11	<5	
R 55035		31.0 >	1000	50	
R 55036		<0.2	150	<5	
R 55037		1.3 >	1000	15	
R 55039		0.5	13	<5	
F 3%		> 50.0 >	1000	165	

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BONDAR-CLEGG

Certificate of Analysis

REPORT: 623-2316 PROJECT: JK

SAMPLE NUMBER	ELEMENT UNITS	As OPT	NOTES
R 55039		16.65	

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Ag PPM	Ba PPM	
B.L.	35+50W	N	05		A	0.3	SAND	GRAY	DRY	GOOD	3482	12	25	0.2	1300	Ferrocrete
	36+25W				A	0.3	SAND	ORNG	DRY	GOOD	3482	30	42	0.3	1180	Ferrocrete
	36+50W				A	0.3	SAND	GRAY	DRY	GOOD	3482	7	12	0.2	1050	
	37+00W				A	0.3	GRVL	GRAY	WET	POOR	3482	20	70	0.7	1240	
	37+25W			LOW	A	0.4	GRVL	BRWN	DAMP	GOOD	3482	12	32	2.2	1030	
	37+50W			LOW	A	0.5	SILT	GRAY			3482	15	30	7.0	1140	
	38+00W	E	05	LOW	A	0.3	GRVL	ORGN	DAMP	GOOD	3482	23	42	0.6	1160	
	38+25W	N	03	LOW	A	0.3	SAND	GRAY	DAMP	GOOD	3482	24	40	0.2	1230	
	38+50W	N	03	LOW	A	0.4	GRVL	GRAY	DAMP	GOOD	3482	12	23	0.9	1120	
	38+75W	N	05	LOW	A	0.4	SILT	GRAY	DAMP	GOOD	3482	20	63	0.2	1230	
	39+00W	N	05	LOW	A	0.3	SILT	GRAY	DAMP	GOOD	3482	26	62	0.4	1350	
	39+25W			LOW	A	0.3	SILT	GRAY	DAMP	GOOD	3482	14	30	0.2	1420	
	39+75W	N	05	LOW	A	0.4	SILT	GRAY			3482	21	60	0.2	1200	
	40+00W			LOW	A	0.4	SILT	GRAY			3482	18	60	0.2	1140	
	40+25W	N	05	LOW	A	0.3	SILT	GRAY	DAMP	GOOD	3482	5	22	0.2	1170	
	40+50W	N	10	LOW	A	0.3	SILT	GRAY	DAMP	GOOD	3482	15	28	0.2	1140	
	40+75W	N	05	LOW	A	0.3	SILT	GRAY	DAMP	GOOD	3482	32	45	0.2	1020	
	41+00W	N	05	LOW	A	0.3	SILT	BRWN	DAMP	GOOD	3482	5	16	0.2	940	
	41+25W	W	05	LOW	A	0.4	SAND	GRAY	DAMP	GOOD	3482	25	40	0.6	1150	
	41+50W				A	0.5	SAND	GRAY			3482	10	25	0.3	1120	
	41+75W	N	05	LOW	A	0.4	SAND	GRAY			3482	14	25	0.3	1050	
	42+00W	NW	05	LOW	A	0.3	SAND	GRAY			3482	18	30	1.0	880	
	42+25W	NW	10	LOW	A	0.3	SAND	GRAY	DAMP	GOOD	3482	8	10	0.7	1030	
	42+50W	N	05	LOW	A	0.3	SAND	ORNG	DAMP	GOOD	3482	30	32	0.6	1010	
	42+75W			LOW	A	0.3	SILT	ORNG			3482	20	40	0.2	1150	Ash
	43+25W			LOW	A	0.2	SILT	ORNG	DAMP	GOOD	3482	24	50	0.9	1230	Organic
	43+50W			LOW	A	0.3	SILT	BRWN-	DAMP	GOOD	3482	25	65	0.9	1180	Organic

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Ag PPM	Ba PPM	
B.L.	43+75W	N	10	LOW	A	0.3	SILT	BRWN	DAMP	GOOD	3482	12	12	0.5	950	
	44+00W	N	10	LOW	A	0.3		ORNG	DAMP	GOOD	3482	13	35	0.2	1040	Ferrocrete
	44+25W			LOW	A	0.3	GRVL	BRWN	DAMP	GOOD	3482	20	65	1.0	1190	
	44+50W			LOW	A	0.3	SAND	BLCK	DAMP	GOOD	3482	6	32	0.2	1230	Trail
	44+75W			LOW	A	0.2	SILT	BRWN	DAMP	GOOD	3482	19	75	0.8	1190	Hallow
	45+25W			LOW	A	0.3	SILT	GRAY	DAMP	GOOD	3482	12	30	0.2	1270	
	45+50W	W	05	LOW	A	0.4	SAND	BLCK	DAMP	GOOD	3482	6	39	0.2	1330	
	45+75W			LOW	A	0.4	SILT	BRWN	DAMP	GOOD	3482	24	40	0.2	1160	
	46+00W	N	05	LOW	A	0.3	SILT	GRAY	DAMP	GOOD	3482	30	50	0.2	1300	
	46+25W	N	05	LOW	A	0.3	SAND	BLCK	DAMP	GOOD	3482	4	22	0.2	1110	Slope Base
	47+00W			LOW	A	0.3	SAND	BRWN	DAMP	GOOD	3482	8	32	0.2	1000	
	49+25W			LOW	A	0.3	SAND	BRWN	DAMP	GOOD	3482	12	22	0.4	940	
	49+50W			LOW	A	0.3	SILT	GRAY	DAMP	GOOD	3482	14	85	0.8	1310	
	50+00W			LOW	A	0.3	SILT	BRWN	DAMP	GOOD	3482	14	115	0.4	1340	
	50+25W			LOW	A	0.3	SILT	BRWN	DAMP	GOOD	3482	15	150	0.3	1480	Stream
	50+50W			LOW	A	0.3	SILT	GRAY	DAMP	GOOD	3482	18	210	0.7	1490	Stream
	50+75W			LOW	A	0.3	SAND	BRWN	DAMP	GOOD	3482	20	42	0.4	1130	
	51+00W			LOW	A	0.2	SAND	BRWN	DAMP	GOOD	3482	20	42	0.4	1110	
	51+25W			LOW	A	0.4	SAND	BRWN	DAMP	GOOD	3482	19	32	0.3	1070	
	51+50W			LOW	A	0.3	SAND	BRWN	DAMP	GOOD	3482	17	48	0.6	1090	
	51+75W			LOW	A	0.4	SILT	GRAY	WET	POOR	3482	12	21	0.2	1120	
	52+00W	NE	20	MEDM	A	0.4	GRVL	BRWN	DAMP	GOOD	3482	19	50	0.4	1150	Boulder Till
	52+50W	NE	20	MEDM	A	0.4	GRVL	BRWN	DAMP	GOOD	3482	24	50	0.3	1140	Boulder Till
	52+75W	NE	10	MEDM	A	0.3	GRVL	BRWN	DAMP	GOOD	3482	25	80	0.3	1080	
	56+75W	NE	20	MEDM	A	0.4	GRVL	BLCK	DAMP	POOR	3482	12	510	0.3	2180	Swamp

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Cu	Ba PPM	
4+00E	14+50S	W	15	HIGH	C	.30	SAND	BRWN	DAMP	GOOD	123-2305	14	102	36	2470	
	15+00S	W	20	HIGH	C	.40	SAND	BRWN	DAMP	GOOD	123-2305	15	63	21	1130	
	15+50S	W	19	HIGH	C	.30	SAND	BRWN	DAMP	GOOD	123-2305	20	135	34	1140	
	16+00S	W	20	HIGH	B	.20	SAND	BRWN	DAMP	GOOD	123-2305	14	132	45	960	
	16+50S	W	21	HIGH	C	.20	GRVL	BRWN	DAMP	GOOD	123-2305	8	38	14	970	
	17+00S	W	26	HIGH	C	.30	GRVL	BRWN	DAMP	GOOD	123-2305	39	133	43	1330	
	17+50S	W	25	HIGH	C	.20	GRVL	BRWN	DAMP	GOOD	123-2305	4	29	11	990	
	18+00S	W	28	HIGH	B	.20	GRVL	BRWN	DAMP	GOOD	123-2305	25	126	42	1220	
	18+50S	W	25	HIGH	C	.30	GRVL	BRWN	DAMP	GOOD	123-2305	15	91	29	1010	
	19+00S	W	25	HIGH	C	.20	GRVL	BRWN	DAMP	GOOD	123-2305	29	88	29	1350	Talus

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Cu PPM	Ba PPM	
2+00E	10+00S	W	15	LOW	C	.25	SAND	BRWN	WET	POOR	123-1595	24	104	30	1390	
	10+50S	W	15	LOW	C	.20	SILT	BRWN	WET	POOR	123-1595	30	103	19	1560	Swampy
	11+00S	W	15	MEDM	C	.25	SAND	BRWN	WET	GOOD	123-1595	26	105	18	1480	
	11+50S	W	15	MEDM	C	.20	SAND	BRWN	WET	GOOD	123-1595	36	127	26	1420	
	12+00S	W	15	MEDM	C	.35	SAND	BRWN	WET	GOOD	123-1595	34	227	19	1480	
	12+50S	W	15	MEDM	C	.30	GRAV	GRAY	DAMP	GOOD	123-1595	21	190	22	1440	Gossan @ 12+75S
	13+00S	W	15	MEDM	C	.35	GRAV	BROR	WET	GOOD	123-1595	20	80	13	1290	
	13+50S	W	15	MEDM	C	.30	SILT	BRWN	DAMP	GOOD	123-1595	28	107	21	1500	
	14+00S	W	15	MEDM	C	.25	SILT	BRWN	DAMP	GOOD	123-1595	35	127	30	1700	
	14+50S	W	15	MEDM	C	.30	SILT	BRWN	DAMP	GOOD	123-1595	36	93	15	1620	
	15+00S	W	15	MEDM	C	.30	SAND	GRAY	DAMP	GOOD	123-1595	24	101	21	1970	
	15+50S	W	15	MEDM	C	.20	SAND	BRWN	DAMP	GOOD	123-1595	16	76	20	1440	
	16+00S	W	15	MEDM	C	.25	SAND	BRWN	DAMP	GOOD	123-1595	20	213	47	1150	
	16+50S	W	15	MEDM	C	.15	GRAV	BRWN	DAMP	GOOD	123-1595	23	87	32	1720	
	17+00S	W	15	MEDM	C	.20	GRAV	GRAY	DAMP	GOOD	123-1595	43	114	22	2310	
	17+50S	W	20	MEDM	C	.15	SAND	GRAY	DAMP	GOOD	123-1595	35	125	29	2310	
	18+00S	W	15	LOW	C	.15	GRAV	GRAY	DAMP	GOOD	123-1595	20	169	97	1320	
	18+50S	W	20	MEDM	C	.20	SAND	BRWN	DAMP	GOOD	123-1595	26	189	33	2270	
	19+00S	W	25	MEDM	C	.35	GRAV	GRAY	DAMP	GOOD	123-1595	34	283	33	2510	
	19+50S	W	30	MEDM	C	.20	GRAV	BRWN	DAMP	GOOD	123-1595	12	73	20	1290	Base of Talus Slope

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Ag PPM	Ba PPM	
0+00W	10+00S	W	5	MEDM	A	0.2	SILT	GRAY	DAMP	GOOD	3692	6	28	0.2	1940	
	10+25S	NW	5	MEDM	A	0.3	SILT	BRWN	DAMP	GOOD	3692	11	118	0.3	1820	
	10+50S	NW	5	MEDM	A	0.5	SILT	GRAY	DAMP	GOOD	3692	11	127	0.6	1650	
	10+75S	W	5	MEDM	A	0.4	SILT	BRWN	DAMP	GOOD	3692	20	108	0.2	1590	
	11+00S				A	0.3	SILT	GRAY	DAMP	GOOD	3692	18	94	0.6	1590	
	11+25S	W	10		A	0.3	SILT	GRAY			3692	18	79	0.3	1610	
	11+50S	W	5		A	0.3	SILT	GRAY	DAMP	GOOD	3692	7	51	0.2	1480	
	11+75S	W	5		A	0.3	SILT	GRAY			3692	13	92	0.9	1690	
	12+00S	W	10		A	0.3	SILT	BRWN			3692	9	85	0.2	1940	
	12+25S	W	10		A	0.4	SILT	BRWN			3692	26	115	0.7	1660	
	12+50S	W	10		A	0.3	SILT	ORNG	DAMP	GOOD	3692	21	95	1.6	1490	
	12+75S	W	10		A	0.3	SILT	GRAY	WET	GOOD	3692	25	135	0.8	1930	
	13+00S	W	10		A	0.4	SILT	BRWN			3692	34	115	2.6	1550	
	13+25S	W	5		A	0.3	SILT	BRWN			3692	15	100	0.2	1600	
	13+50S	W	5		A	0.3	SILT	BRWN	DAMP	GOOD	3692	12	360	1.3	1580	
	13+75S	W	5		A	0.3		GRAY	WET	POOR	3692	14	145	0.2	1850	
	14+00S	W	5		A	0.3		GRAY	WET	POOR	3692	15	109	0.2	1770	
	14+25S	W	5		A	0.3		GRAY			3692	12	42	1.2	1470	
	14+50S	W	5		A	0.3		GRAY			3692	16	72	0.4	1720	
	15+00S	W	5		A	0.3		GRAY			3692	13	32	0.7	1530	Organic
	15+75S	W	5		A	0.3		GRAY			3692	8	42	0.4	1360	
	16+00S	W	5		A	0.3		GRAY			3692	10	68	0.6	1920	
	16+25S	W	5		A	0.3		GRAY	WET		3692	18	73	1.0	1640	
	16+50S	W	5		A	0.4		GRAY	WET		3692	17	90	0.4	1690	
	16+75S	W	5		A	0.2		BRWN			3692	28	225	0.6	1960	Organic
	17+00S	W	5		A	0.3		GRAY			3692	32	182	0.9	1610	
	17+25S	W			A	0.3		GRAY			3692	19	142	0.4	1640	

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Ag PPM	Ba PPM	
0+00W	17+50S				A	0.3		GRAY			3692	24	130	0.5	1580	
	18+50S				A	0.3		GRAY			3692	30	185	0.7	1380	
	19+00S				A	0.1		ORNG			3692	25	129	1.8	1450	Ferrocrete
	19+25S	N	5	MEDM	A	0.3	SILT	GRAY	DAMP	GOOD	3692	19	120	0.5	1240	Ferrocrete
	19+50S					0.4	SILT	GRAY			3692	16	83	0.6	1190	Ferrocrete

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Cu PPM	Ba PPM
0+00W	20+50S	N	10	MEDM	C	.20	GRAV	GRAY	DAMP	GOOD	123-1595	35	123	25	1440
	21+00S	N	15	MEDM	C	.25	GRAV	BLCK	DAMP	GOOD	123-1595	30	175	14	1560
	21+50S	N	15	MEDM	C	.25	GRAV	BLCK	DAMP	GOOD	123-1595	40	133	27	1330
	22+00S	N	20	MEDM	C	.15	GRAV	BRWN	DAMP	GOOD	123-1595	33	1020	91	750

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Ag PPM	Ba PPM
2+00W	10+00S	E	05	LOW	A	.20	SILT	BRWN	DRY	GOOD	3692	3	13	0.2	990
	10+25S	E	05	LOW	A	.20	SILT	BLCK	DAMP	GOOD	3692	2	15	1.2	970
	10+50S	E	05	LOW	A	.10	ORGN	BLCK	WET	MEDM	3692	16	45	0.6	1400
	10+75S	E	05	LOW	A	.20	ORGN	BRWN	DAMP	MEDM	3692	4	7	0.3	920
	11+00S	E	05	LOW	A	.10	CLAY	GRAY	DRY	GOOD	3692	9	25	0.2	1770
	11+25S	E	05	LOW	A	.10	ORGN	GRAY	DAMP	GOOD	3692	10	2	0.2	890
	11+50S	E	05	LOW	A	.10	ORGN	BRWN	DAMP	GOOD	3692	18	22	0.2	1140
	11+75S	E	05	LOW	A	.20	ORGN	BRWN	DAMP	GOOD	3692	11	3	0.2	830
	12+00S	E	05	LOW	A	.10	ORGN	BRWN	DAMP	GOOD	3692	16	17	0.5	1170
	12+25S	E	05	LOW	A	.20	SILT	BRWN	DAMP	MEDM	3692	26	92	1.4	1150
	12+50S	E	10	LOW	A	.20	GRVL	BLCK	DRY	GOOD	3692	23	270	0.7	1770
	12+75S	E	10	MEDM	A	.10	GRVL	BLCK	DRY	GOOD	3692	22	170	0.7	1850
	13+00S	E	10	MEDM	A	.20	GRVL	BLCK	DRY	GOOD	3692	20	230	0.8	1740
	13+25S	E	10	MEDM	A	.10	GRVL	BLCK	DRY	GOOD	3692	22	145	0.9	1660
	13+50S	E	10	MEDM	A	.10	GRVL	BLCK	DRY	GOOD	3692	22	160	0.9	1790
	13+75S	E	15	MEDM	A	.10	SAND	BLCK	DRY	GOOD	3692	22	170	0.9	1920
	14+00S	E	15	MEDM	A	.10	SAND	GRAY	DRY	GOOD	3692	17	80	2.0	1700
	14+25	E	15	MEDM	A	.20	SAND	GRAY	DRY	GOOD	3692	20	118	1.4	1560
	14+50	E	30	HIGH	A	.20	SILT	GRAY	DRY	GOOD	3692	9	30	0.2	1010
	14+75	E	35	HIGH	A	.20	ORGN	BRWN	DRY	GOOD	3692	10	58	0.2	1200
	15+00	E	30	HIGH	A	.20	ORGN	BRWN	DRY	GOOD	3692	26	92	0.2	1430
	15+25	E	30	HIGH	A	.20	ORGN	BRWN	DRY	GOOD	3692	10	38	0.2	1040
	15+50	E	30	HIGH	A	.20	ORGN	BRWN	DRY	GOOD	3692	9	38	0.2	1060
	15+75	E	35	HIGH	A	.20	ORGN	BRWN	DRY	GOOD	3692	16	98	0.4	1460
	16+00	E	30	HIGH	A	.20	ORGN	BRWN	DRY	GOOD	3692	11	55	0.2	1280
	16+25	E	35	HIGH	A	.20	SAND	BRWN	DRY	GOOD	3692	19	150	0.4	1510
	16+50	E	30	HIGH	A	.10	SAND	BRWN	DRY	GOOD	3692	3	22	0.2	1070

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Ag PPM	Ba PPM	Cu PPM
2+00W	16+75S	E	30	HIGH	A	.20	GRVL	GRAY	DRY	GOOD	3692	19	65	0.6	1470	
	17+00S	E	35	HIGH	A	.10	SAND	BRWN	DRY	GOOD	3692	39	104	1.2	1630	
	17+25S	E	35	HIGH	A	.20	GRVL	BRWN	DRY	GOOD	3692	26	100	0.8	1600	
	17+50S	E	35	HIGH	B	.30	GRVL	BRWN	DRY	GOOD	3692	15	90	0.2	1570	
	17+75S	E	35	HIGH	B	.30	GRVL	BRWN	DRY	GOOD	3692	14	118	0.4	1550	
	18+00S	E	40	HIGH	A	.20	GRVL	BRWN	DRY	GOOD	3692	31	153	1.00	1730	
	18+25S	E	40	HIGH	A	.20	SAND	GRAY	DAMP	GOOD	3692	16	92	0.5	2100	
	18+50S	E	40	HIGH	B	.30	SAND	BRWN	DAMP	GOOD	3692	21	93	0.9	1610	
	18+75S	E	45	HIGH	B	.30	GRVL	GRAY	DRY	GOOD	3692	44	115	4.0	1940	
	19+00S	E	40	HIGH	A	.20	GRVL	BLCK	DAMP	GOOD	3692	22	118	0.7	2440	
	19+50	E	30	HIGH	C	.30	SAND	GRAY	WET	POOR	123-1595	23	117		1630	14
	20+00	E	31	HIGH	C	.50	GRVL	BLCK	WET	MEDM	123-1595	40	138		1980	19
	20+50	NE	24	HIGH	C	.30	GRVL	BLCK	WET	POOR	123-1595	30	147		1860	23
	21+00	NE	23	HIGH	C	.40	GRVL	BRWN	DAMP	GOOD	123-1595	24	111		1510	19

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Cu PPM	Ba PPM
4+00W	14+50	NE	27	MEDM	C	0.4	SAND	BLCK	DAMP	GOOD	123-1595	22	79	19	2290
	15+00	E	30	MEDM	C	0.5	SAND	BRWN	DAMP	GOOD	123-1595	18	77	21	1540
	15+50	E	28	MEDM	C	0.4	SAND	BRWN	DAMP	GOOD	123-1595	15	68	19	1520
	16+00	NE	28	MEDM	B	0.5	GRVL	BLCK	WET	MEDM	123-1595	24	93	19	2220
	16+50	NE	23	HIGH	C	0.4	GRVL	GRAY	DAMP	GOOD	123-1595	37	95	23	1920
	17+00	NE	21	HIGH	C	0.3	GRVL	BLCK	DAMP	GOOD	123-1595	32	89	23	1890
	17+50	NE	24	HIGH	C	0.3	SAND	BRWN	DAMP	GOOD	123-1595	28	97	25	1460
	18+00	E	21	HIGH	C	0.4	SAND	BRWN	DAMP	MEDM	123-1595	36	143	28	1560
	18+50	E	20	HIGH	C	0.4	GRVL	BRWN	DAMP	GOOD	123-1595	12	67	13	950
	19+00	SE	22	HIGH	C	0.4	GRVL	GRAY	DAMP	MEDM	123-1595	50	52	20	1820
	19+50	E	16	HIGH	C	0.4	GRVL	BRWN	DAMP	MEDM	123-1595	35	73	19	1460
	20+00	E	10	HIGH	C	0.6	GRVL	GRAY	DAMP	MEDM	123-1595	30	112	21	1950
	20+50	E	14	HIGH	B	0.6	GRVL	GRAY	DAMP	MEDM	123-1595	26	88	16	2540
	21+00	E	12	HIGH	C	0.4	GRVL	GRAY	WET	POOR	123-1595	22	85	15	2440
	21+50	SE	21	HIGH	C	0.4	GRVL	BRWN	DAMP	GOOD	123-1595	27	102	21	2120
	22+00	NE	20	HIGH	B	0.2	GRVL	BRWN	DAMP	GOOD	123-1595	48	174	83	1450

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Cu PPM	Ba PPM
›+00W	16+50S	N	12	MEDM	B	.10	SAND	BRWN	WET	GOOD	123-1595	26	72	62	1340
	17+00S	N	21	HIGH	C	.30	SAND	BLCK	DAMP	GOOD	123-1595	32	132	24	1530
	17+50S	N	28	HIGH	C	.30	SAND	BLCK	DAMP	MEDM	123-1595	29	127	17	2060
	18+00S	N	16	HIGH	C	.20	SAND	BLCK	DAMP	GOOD	123-1595	72	85	17	2000
	18+50S	N	05	HIGH	C	.20	CLAY	BRWN	DAMP	GOOD	123-1595	19	39	17	1150
	19+00S	N	08	HIGH	C	.20	CLAY	BRWN	DAMP	GOOD	123-1595	32	145	27	1510
	19+50S	S	20	HIGH	C	.40	CLAY	BRWN	WET	GOOD	123-1595	26	715	54	1280
	20+00S	S	10	HIGH	C	.30	CLAY	BRWN	DAMP	GOOD	123-1595	10	316	26	630
	20+50S	S	20	HIGH	C	.30	GRAV	BRWN	DAMP	GOOD	123-1595	20	65	28	1040
	21+00S	SE	18	HIGH	C	.10	SAND	BRWN	DAMP	GOOD	123-1595	15	154	32	1320
	21+50S	E	10	HIGH	C	.20	SAND	BLCK	DAMP	MEDM	123-1595	70	390	31	1320
	22+00S	E	14	HIGH	C	.30	GRAV	BRWN	DAMP	GOOD	123-1595	16	37	15	1010
	22+50S	E	10	HIGH	C	.30	GRAV	GRAY	DAMP	GOOD	123-1595	7	12	9	1000
	23+00S	E	10	HIGH	C	.20	SAND	BRWN	DAMP	GOOD	123-1595	36	213	77	1530

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Cu PPM	Ba PPM	
6+00W	35+00S	S	45	HIGH	C	.30	SAND	BRWN	DRY	GOOD	123-1595	23	216	71	1820	Talus Slope
	35+50S	S	40	HIGH	C	.20	GRAV	BRWN	DRY	GOOD	123-1595	25	208	76	1660	Talus Slope
	36+00S	S	40	HIGH	C	.35	GRAV	BRWN	DAMP	GOOD	123-1595	25	207	75	1590	Talus Slope
	36+50S	S	30	HIGH	C	.30	GRAV	BRWN	DAMP	GOOD	123-1595	11	79	33	1090	Talus Slope
	37+00S	S	30	HIGH	C	.30	GRAV	GRAY	DAMP	GOOD	123-1595	16	123	46	1440	
	37+50S	S	25	MEDM	C	.30	SAND	GRAY	DAMP	GOOD	123-1595	6	38	19	1030	
	38+00S	S	25	MEDM	C	.30	SAND	BRWN	DAMP	GOOD	123-1595	7	55	13	1210	
	38+50S	S	15	MEDM	C	.30	SAND	BRWN	DAMP	GOOD	123-1595	15	94	15	1450	
	39+00S	S	10	LOW	C	.25	SAND	BRWN	DAMP	POOR	123-1595	13	88	11	1220	
	39+50S	S	05	LOW	C	.25	SAND	BRWN	DAMP	POOR	123-1595	12	54	11	810	
	40+00S	S	03	LOW	C	.20	SAND	BRWN	DRY	POOR	123-1595	7	49	9	830	
	40+50S	S	05	MEDM	C	.20	SAND	RED	DRY	GOOD	123-1595	12	43	11	920	
	41+00S	S	10	LOW	C	.30	GRAV	BRWN	DRY	POOR	123-1595	10	33	13	710	
	41+50S	S	10	MEDM	C	.25	GRAV	RED	DRY	GOOD	123-1595	11	47	11	710	
	42+00S	S	10	MEDM	C	.30	SAND	BRWN	DAMP	GOOD	123-1595	12	45	15	740	
	42+50S	S	10	MEDM	C	.20	GRAV	BRWN	DAMP	GOOD	123-1595	15	28	15	850	

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Cu PPM	Ba PPM
3+00W	17+50S	E	27	HIGH	B	.20	SILT	BRWN	DAMP	GOOD	123-1595	28	280	31	1540
	18+00S	N	30	HIGH	C	.30	SAND	BLCK	DAMP	GOOD	123-1595	18	151	21	1520
	18+50S	NE	20	HIGH	C	.30	SAND	BRWN	DAMP	GOOD	123-1595	35	93	23	1390
	19+00S	S	02	HIGH	C	.30	GRAV	GRAY	DAMP	MEDM	123-1595	16	49	30	1260
	19+50S	S	10	HIGH	C	.30	GRAV	BLCK	DAMP	MEDM	123-1595	30	85	28	2210
	20+00S	SE	16	HIGH	C	.40	SAND	RED	WET	MEDM	123-1595	7	2530	28	650
	20+50S	E	10	HIGH	C	.20	SILT	BLCK	WET	GOOD	123-1595	7	197	13	1740
	21+00S	N	24	HIGH	C	.20	SAND	BLCK	DAMP	GOOD	123-1595	30	67	34	2670
	21+50S	NE	25	HIGH	C	.40	SAND	BLCK	DAMP	GOOD	123-1595	23	59	26	2130
	22+00S	E	31	HIGH	C	.40	SAND	BLCK	DAMP	GOOD	123-1595	35	77	30	2390
	22+50S	NE	27	HIGH	C	.20	GRAV	BRWN	DAMP	GOOD	123-1595	17	53	36	1070

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Cu PPM	Ba PPM	
8+00W	34+00S	S	50	HIGH	C	.30	GRAV	BLCK	DAMP	GOOD	123-1595	18	138	41	4360	Talus Slope
	34+50S	S	40	HIGH	C	.25	GRAV	BLCK	DAMP	GOOD	123-1595	20	182	57	2700	Talus Slope
	35+00S	S	30	HIGH	C	.20	GRAV	BLCK	DAMP	GOOD	123-1595	9	61	21	1540	Talus Slope
	35+50S	S	25	MEDM	C	.20	GRAV	BLCK	DAMP	GOOD	123-1595	7	71	18	1690	Talus Slope
	36+00S	S	20	MEDM	C	.20	GRAV	BLCK	DAMP	GOOD	123-1595	16	112	26	1930	Talus Slope
	36+50S	S	30	MEDM	C	.15	GRAV	BLCK	DRY	GOOD	123-1595	6	48	19	1080	Talus Slope
	37+00S	S	20	MEDM	C	.15	GRAV	BLCK	DRY	GOOD	123-1595	16	97	25	1430	Talus Slope
	37+50S	S	15	MEDM	C	.30	SILT	BLCK	DAMP	GOOD	123-1595	19	144	30	2250	
	38+00S	S	10	MEDM	C	.30	SAND	BRWN	DAMP	GOOD	123-1595	5	39	11	1090	
	38+50S	S	05	MEDM	C	.20	SAND	BRWN	DAMP	GOOD	123-1595	11	89	23	1500	
	39+00S	S	05	LOW	C	.25	SAND	BRWN	DAMP	GOOD	123-1595	7	58	24	910	
	39+50S	S	03	LOW	C	.25	SAND	BRWN	DAMP	GOOD	123-1595	10	49	7	790	
	40+00S	S	05	LOW	C	.25	GRAV	BRWN	DAMP	GOOD	123-1595	12	65	27	1360	
	40+50S	S	05	MEDM	C	.15	SAND	BRWN	DAMP	GOOD	123-1595	15	51	20	900	
	41+00S	S	05	LOW	C	.20	GRAV	BRWN	DAMP	POOR	123-1595	9	37	8	740	
	41+50S	S	05	LOW	C	.30	SAND	BRWN	DAMP	POOR	123-1595	9	35	12	580	
	42+00S	S	10	LOW	C	.20	GRAV	BRWN	DAMP	POOR	123-1595	8	31	9	660	
	42+50S	S	10	LOW	C	.15	GRAV	BRWN	DAMP	POOR	123-1595	6	27	8	810	
	43+00S	S	15	MEDM	C	.20	GRAV	BRWN	DAMP	GOOD	123-1595	19	66	18	800	

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Cu PPM	Ba PPM
10+00W	20+00S	E	10	HIGH	C	.30	GRAV	BLCK	DAMP	GOOD	123-1595	35	115	18	1800
	20+50S	E	13	HIGH	B	.40	SAND	BLCK	DAMP	GOOD	123-1595	33	45	13	1940
	21+00S	E	14	HIGH	B	.40	SAND	BLCK	DAMP	GOOD	123-1595	24	41	10	2610
	21+50S	E	26	HIGH	C	.30	SAND	BLCK	DAMP	GOOD	123-1595	35	94	28	1890
	22+00S	E	17	HIGH	C	.40	SAND	BLCK	DAMP	GOOD	123-1595	29	93	25	3520
	22+50S	E	14	HIGH	C	.20	SAND	BLCK	DAMP	GOOD	123-1595	24	76	17	2420
	23+00S	E	11	HIGH	C	.20	GRAV	GRAY	DAMP	GOOD	123-1595	29	94	37	2080
	23+50S	E	10	HIGH	C	.20	GRAV	BRWN	DAMP	GOOD	123-1595	66	221	52	1570
	24+00S	E	10	HIGH	B	.10	GRAV	BRWN	DAMP	GOOD	123-1595	16	54	29	1810

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Cu PPM	Ba PPM	
10+00W	34+50	S	30	HIGH	C	.25	GRAV	GRAY	DAMP	GOOD	123-1595	10	80	27	1290	Talus Slope
	35+00	S	30	HIGH	C	.30	GRAV	GRAY	DAMP	GOOD	123-1595	20	125	41	1430	Talus Slope
	35+50	S	25	MEDM	C	.20	GRAV	BRWN	DAMP	GOOD	123-1595	24	111	54	1210	
	36+00	S	20	MEDM	C	.15	GRAV	BRWN	DAMP	GOOD	123-1595	18	180	50	1340	
	36+50	S	15	MEDM	C	.20	SAND	BRWN	DAMP	GOOD	123-1595	16	112	33	1490	
	37+00	S	10	MEDM	C	.30	CLAY	BRWN	DAMP	GOOD	123-1595	18	143	46	1290	
	37+50	S	03	LOW	C	.15	SAND	BRWN	DAMP	GOOD	123-1595	7	31	24	910	
	38+00	S	05	LOW	C	.25	SAND	BRWN	DAMP	GOOD	123-1595	14	54	25	1300	
	38+50	S	05	LOW	C	.20	SAND	BRWN	DAMP	GOOD	123-1595	16	79	23	900	
	39+00	S	05	LOW	C	.20	GRAV	BRWN	DAMP	GOOD	123-1595	11	59	22	780	
	39+50	S	05	LOW	C	.15	SAND	BRWN	DAMP	GOOD	123-1595	7	26	12	910	
	40+00	N	05	LOW	C	.20	SAND	BRWN	DAMP	GOOD	123-1595	13	55	22	780	
	40+50	N	05	MEDM	C	.20	GRAV	BRWN	DAMP	GOOD	123-1595	13	50	15	760	
	41+00	N	10	MEDM	C	.25	SAND	BRWN	DAMP	GOOD	123-1595	20	59	21	720	
	41+50	N	10	MEDM	C	.30	SAND	BRWN	DAMP	GOOD	123-1595	11	47	10	710	
	42+00	N	10	MEDM	C	.30	SAND	BRWN	DAMP	GOOD	123-1595	12	36	12	740	

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Cu PPM	Ba PPM	
12+00W	32+00S	S	40	HIGH	C	.15	SAND	BRWN	DAMP	GOOD	123-1595	16	169	39	1740	Talus Slope
	32+50S	S	40	HIGH	C	.15	SAND	BRWN	DAMP	GOOD	123-1595	18	234	52	2020	Talus Slope
	33+00S	S	35	HIGH	C	.15	SAND	BRWN	DAMP	GOOD	123-1595	12	141	38	5640	Talus Slope
	33+50S	S	35	HIGH	C	.10	SAND	BRWN	DAMP	GOOD	123-1595	4	22	14	1080	Talus Slope
	34+00S	S	20	MEDM	C	.15	SAND	BRWN	DAMP	GOOD	123-1595	9	81	23	1620	Talus Slope
	34+50S	S	15	MEDM	C	.20	SAND	BRWN	DAMP	GOOD	123-1595	16	132	38	2090	
	35+00S	S	05	LOW	C	.20	SAND	BRWN	DAMP	GOOD	123-1595	14	160	42	1620	
	35+50S	S	05	LOW	C	.20	SAND	BRWN	DAMP	GOOD	123-1595	12	89	25	1570	
	36+00S	S	05	LOW	C	.25	SAND	BRWN	DAMP	GOOD	123-1595	11	53	23	980	Talus Slope
	36+50S	N	10	MEDM	C	.20	SAND	BRWN	DAMP	GOOD	123-1595	8	57	27	940	Talus Slope
	37+00S	N	15	MEDM	C	.20	SAND	BRWN	DAMP	GOOD	123-1595	12	134	33	1050	Talus Slope
	37+50S	N	10	MEDM	C	.15	SAND	BRWN	DAMP	GOOD	123-1595	15	92	39	1110	Talus Slope
	38+00S	N	10	MEDM	C	.20	SAND	BRWN	DAMP	GOOD	123-1595	12	98	28	920	Talus Slope
	38+50S	N	05	MEDM	C	.20	SAND	BRWN	DAMP	GOOD	123-1595	11	135	51	980	Talus Slope
	39+00S	N	05	MEDM	C	.20	SAND	BRWN	DAMP	GOOD	123-1595	12	80	23	700	Talus Slope

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Ag PPM	Ba PPM	
16+00W	0+00S	W	10	LOW	C	0.2	SILT	BRWN	DAMP	MEDM	3336	28	51	1.0	20000	
	0+25S	W	15	LOW	C	0.2	CLAY	BLCK	DAMP	MEDM	3336	34	6	0.8	2750	
	0+50S	W	05	LOW	C	0.2	CLAY	BLCK	DAMP	MEDM	3336	27	54	0.7	2460	
	0+75S	W	05	LOW	C	0.3	CLAY	BLCK	DAMP	MEDM	3336	25	88	1.8	2870	
	1+00S	W	05	LOW	C	0.2	CLAY	BRWN	DAMP	MEDM	3336	24	59	0.8	1940	
	1+25S	W	05	LOW	C	0.2	CLAY	BRWN	DAMP	MEDM	3336	20	48	1.0	1840	
	1+50S	W	05	LOW	C	0.3	CLAY	BRWN	DAMP	MEDM	3336	17	63	0.6	6130	
	1+75S	W	10	LOW	C	0.3	CLAY	BLCK	DAMP	MEDM	3336	20	83	0.7	20000	
	2+00S	W	10	LOW	C	0.2	CLAY	BLCK	DAMP	MEDM	3336	18	54	1.4	5170	
	2+25S	W	10	LOW	C	0.3	CLAY	BLCK	DAMP	MEDM	3336	22	87	0.7	14680	
	2+50S	W	10	LOW	C	0.2	CLAY	BLCK	DAMP	MEDM	3336	25	78	1.0	18360	
	2+75S	W	10	LOW	C	0.2	CLAY	BLCK	DAMP	MEDM	3336	27	48	1.2	2530	
	3+00S	W	10	LOW	B	0.2	CLAY	ORNG	DAMP	MEDM	3336	15	36	0.5	1060	
	3+25S	W	10	LOW	A	0.3	CLAY	BRWN	DAMP	MEDM	3336	27	39	1.5	1370	Creek
	3+50S	W	15	MEDM	C	0.3	CLAY	BRWN	DAMP	MEDM	3336	35	65	0.6	1400	
	3+75S	W	15	MEDM	C	0.3	CLAY	BRWN	DAMP	MEDM	3336	32	57	0.6	1440	
	4+00S	W	15	MEDM	C	0.3	GRVL	BLCK	DAMP	MEDM	3336	32	59	1.4	1390	
	4+25S	W	20	MEDM	C	0.3	CLAY	BRWN	DAMP	MEDM	3336	33	26	2.4	1710	
	4+50S	W	25	MEDM	C	0.3	GRVL	BLCK	DAMP	MEDM	3336	41	21	2.6	1570	Talus
	4+75S	W	30	MEDM	C	0.2	GRVL	BLCK	DAMP	MEDM	3336	41	23	2.0	1440	Talus
	5+00S	W	30	MEDM	C	0.3	GRVL	BLCK	DAMP	MEDM	3336	29	39	1.4	2170	Talus
	5+25S	W	30	MEDM	C	0.3	GRVL	BRWN	DAMP	MEDM	3336	45	14	3.3	1460	Talus
	5+50S	W	35	MEDM	C	0.3	GRVL	BRWN	DAMP	MEDM	3336	53	17	3.0	1480	Talus
	5+75S	W	35	MEDM	C	0.3	GRVL	BRWN	DAMP	MEDM	3336	47	26	3.4	1440	Talus
	6+00S	W	35	MEDM	C	0.2	GRVL	BLCK	DAMP	MEDM	3336	44	55	2.8	1320	Talus
	6+25S	W	35	MEDM	C	0.3	GRVL	BRWN	DAMP	MEDM	3336	44	51	2.0	1320	O/C Talus
	6+50S	W	35	MEDM	C	0.3	GRVL	BLCK	DAMP	MEDM	3336	77	30	1.4	1220	Gully Talus

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Ag PPM	Ba PPM	
16+00W	6+75S	W	35	MEDM	C	.30	GRVL	BRWN	DAMP	MEDM	3336	28	83	0.5	1090	Talus
	7+00S	W	40	MEDM	C	.30	GRVL	BRWN	DAMP	MEDM	3336	35	81	1.4	1190	Talus
	7+25S	W	40	MEDM	C	.30	GRVL	BRWN	DAMP	MEDM	3336	32	68	2.2	1330	Slide
	7+50S	W	40	MEDM	C	.30	GRVL	BRWN	DAMP	MEDM	3336	82	68	3.8	1520	Slide
	7+75S	W	40	MEDM	C	.30	GRVL	BRWN	DAMP	MEDM	3336	80	78	3.0	1440	Slide
	8+00S	W	40	MEDM	C	.30	GRVL	BRWN	DAMP	MEDM	3336	29	92	0.8	1120	Slide
	8+25S	W	40	MEDM	C	.30	GRVL	BRWN	DAMP	MEDM	3336	18	48	0.2	1220	
	8+50S	W	40	MEDM	C	.30	GRVL	BRWN	DAMP	MEDM	3336	16	12	1.4	1070	
	9+25S	W	40	MEDM	C	.30	GRVL	BRWN	DAMP	MEDM	3336	20	70	0.4	1350	Slide
	9+50S	W	40	MEDM	C	.30	GRVL	BRWN	DAMP	MEDM	3336	79	62	3.6	1530	Talus Slide
	9+75S	W	40	MEDM	C	.30	GRVL	BRWN	DAMP	MEDM	3336	127	42	2.4	1400	
	10+50S	W	40	MEDM	C	.30	GRVL	BRWN	DAMP	MEDM	3336	13	22	0.3	1100	
	10+75S	W	40	MEDM	C	.30	GRVL	BRWN	DAMP	MEDM	3336	27	83	0.2	2270	
	11+00S	W	35	MEDM	C	.20	GRVL	BRWN	DAMP	MEDM	3336	30	122	0.2	1760	Gully
	11+25S	W	30	MEDM	C	.20	GRVL	BLCK	DAMP	MEDM	3336	22	114	0.2	2810	Clay
	11+50S	W	30	MEDM	C	.30	CLAY	BRWN	DAMP	MEDM	3336	14	43	0.2	2000	
	11+75S	W	30	MEDM	C	.30	CLAY	BLCK	DAMP	MEDM	3336	28	99	0.2	2090	
	12+00S	W	30	MEDM	C	.30	CLAY	BRWN	DAMP	MEDM	3336	33	133	0.2	1670	Gully
	12+25S	W	30	MEDM	C	.30	CLAY	BLCK	DAMP	MEDM	3336	30	106	0.4	6980	Gully
	12+50S	W	30	MEDM	C	.30	CLAY	BLCK	DAMP	MEDM	3336	18	54	0.2	1850	
	12+75S	W	30	MEDM	C	.30	GRVL	BLCK	DAMP	MEDM	3336	32	115	0.2	1990	
	13+00S	W	30	MEDM	C	.30	GRVL	BLCK	DAMP	MEDM	3336	33	136	0.3	1740	
	13+25S	W	30	MEDM	C	.30	GRVL	BLCK	DAMP	MEDM	3336	36	139	0.3	2050	
	13+50S	W	30	MEDM	C	.30	GRVL	BLCK	DAMP	MEDM	3336	31	97	0.4	2760	
	13+75S	W	30	MEDM	C	.30	GRVL	BLCK	DAMP	MEDM	3336	31	83	0.5	8090	
	14+00S	W	30	MEDM	C	.30	GRVL	BRWN	DAMP	MEDM	3336	27	80	0.9	7500	
	14+25S	W	30	MEDM	C	.30	GRVL	BRWN	DAMP	MEDM	3336	31	105	0.2	2440	O/C Creek

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Ag PPM	Ba PPM	
16+00W	14+50S	W	30	MEDM	C	0.3	GRVL	BRWN	DAMP	MEDM	3336	29	159	0.2	1910	
	14+75S	W	30	MEDM	C	0.3	GRVL	BRWN	DAMP	MEDM	3336	17	46	0.2	1390	
	15+00S	W	30	MEDM	C	0.3	GRVL	BRWN	DAMP	MEDM	3336	28	143	0.5	640	Talus
	15+25S	W	35	MEDM	A	0.3	GRVL	BLCK	DAMP	GOOD	3482	24	68	0.6	2210	
	15+50S	W	35	MEDM	A	0.3	GRVL	BLCK	DAMP	GOOD	3482	22	43	1.0	1660	
	15+75S	W	35	MEDM	A	0.3	GRVL	BLCK	DAMP	MEDM	3482	30	52	2.6	3020	O/C JMP 35
	16+00S	W	35	MEDM	A	0.3	GRVL	BLCK	DAMP	GOOD	3482	22	31	2.0	1810	
	16+25S	W	35	MEDM	A	0.4	GRVL	BLCK	DAMP	GOOD	3482	20	25	1.9	1830	
	16+75S	W	35	MEDM	A	0.3	GRVL	BLCK	DAMP	GOOD	3482	25	56	1.3	2430	Slide
	17+00S	W	35	MEDM	A	0.3	GRVL	BLCK	DAMP	GOOD	3482	49	90	0.5	2800	
	17+25S	W	35	MEDM	A	0.3	GRVL	BLCK	DAMP	GOOD	3482	23	62	0.8	2310	CLM Post
	17+50S	W	35	MEDM	A	0.3	GRVL	BLCK	DAMP	GOOD	3482	18	63	0.9	2170	
	17+75S	W	35	MEDM	A	0.3	GRVL	BLCK	DAMP	GOOD	3482	24	61	1.0	2610	
	18+00S	W	35	MEDM	A	0.3	GRVL	BLCK	DAMP	GOOD	3482	33	60	3.7	2660	
	18+25S	W	35	MEDM	A	0.3	GRVL	BLCK	DAMP	GOOD	3482	40	56	1.7	2910	
	19+00S	W	35	MEDM	A	0.3	GRVL	BLCK	DAMP	GOOD	3482	40	142	3.6	2020	Talus Slide
	19+50S	W	35	MEDM	A	0.3	GRVL	BLCK	DAMP	GOOD	3482	35	185	2.6	2490	
	19+75S	W	35	MEDM	A	0.3	GRVL	BLCK	DAMP	GOOD	3482	22	128	0.6	2770	
	20+00	W	35	MEDM	A	0.3	GRVL	BLCK	DAMP	GOOD	3482	21	148	0.5	2490	Gully
	20+75	W	35	MEDM	A	0.3	GRVL	BLCK	DAMP	GOOD	3482	23	112	1.3	2490	
	21+00	W	35	MEDM	A	0.3	GRVL	BLCK	DAMP	GOOD	3482	34	150	1.0	3180	
	21+25	W	35	MEDM	A	0.3	GRVL	BLCK	DAMP	GOOD	3482	34	160	0.7	2540	
	21+50	W	35	MEDM	A	0.3	GRVL	BLCK	DAMP	GOOD	3482	30	210	1.3	5140	
	22+00	W	35	MEDM	A	0.3	GRVL	BLCK	DAMP	GOOD	3482	34	250	1.1	5110	O/C Creek
	22+50	W	35	MEDM	A	0.3	GRVL	BLCK	DAMP	GOOD	3482	23	118	0.6	4530	
	22+75	W	35	MEDM	A	0.3	GRVL	BLCK	DAMP	GOOD	3482	25	138	0.8	3020	
	23+00	W	35	MEDM	A	0.3	GRVL	BLCK	DAMP	GOOD	3482	26	120	0.7	3620	

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Ag PPM	Ba PPM
16+00W	23+25	W	35	MEDM	A	0.3	GRVL	BLCK	DAMP	GOOD	3482	22	98	0.5	3620
	23+50	W	35	MEDM	A	0.4	GRVL	BLCK	DAMP	GOOD	3482	24	60	0.6	2890
	23+75	W	35	MEDM	A	0.3	GRVL	BLCK	DAMP	GOOD	3482	24	100	0.4	3620
	24+00	W	35	MEDM	A	0.3	GRVL	BLCK	DAMP	GOOD	3482	40	80	1.0	3040
	24+25	W	35	MEDM	A	0.3	GRVL	BLCK	DAMP	GOOD	3482	23	80	0.7	20000
	24+75	W	35	MEDM	A	0.4	GRVL	BLCK	DAMP	GOOD	3482	18	40	0.5	5220
	25+00	W	35	MEDM	A	0.3	GRVL	BLCK	DAMP	GOOD	3482	25	50	1.4	20000

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Ag PPM	Ba PPM	
18+00W	0+00S		20	MEDM	A	0.4	SILT	BRWN	DAMP	GOOD	3336	14	49	1.2	980	
	0+25S		25	MEDM	A	0.3	SILT	GRAY	DAMP	GOOD	3336	22	107	1.4	1380	Claim Boundary
	0+50S		30	MEDM	A	0.3		GRAY	DAMP	GOOD	3336	15	36	0.3	1320	Ash A/B
	0+75S		20	MEDM	A	0.3		BRWN	DAMP	GOOD	3336	18	48	0.5	1620	Ash A/B
	1+00S		15	MEDM	A	0.4	GRVL	BRWN		GOOD	3336	31	54	1.0	1560	
	1+25S		15		A	0.3	SILT	BRWN	DAMP	GOOD	3336	17	69	0.5	1440	
	1+50S		10	MEDM	A	0.3	GRVL	GRAY			3336	22	64	0.8	1790	
	1+75S		15		A	0.2	GRVL	BRWN	DAMP	GOOD	3336	24	50	1.4	1890	Ash A/B
	2+00S		15	MEDM	A	0.3	SILT	GRAY			3336	12	33	0.6	1860	
	2+25S		10	MEDM	A	0.2	SILT	GRAY			3336	15	46	1.0	5850	Some Organics
	2+50S		8	MEDM	A	0.5		GRAY			3336	10	34	0.2	1370	
	2+75S		20	MEDM	A	0.3	TILL	GRAY			3336	8	25	0.4	1300	Some Organics
	3+00S		20		A	0.3	GRVL	GRAY			3336	22	72	0.8	1330	Organic
	3+25S		10		A	0.2		BRWN			3336	9	28	0.8	1060	
	3+50S		15		A	0.3		GRAY			3336	13	32	0.3	1220	
	4+00S		15		A	0.3		GRAY			3336	8	21	1.1	1440	Organic
	4+25S				A	0.5		GRAY			3336	39	44	2.0	1450	Organic
	4+75S				A	0.4	GRVL	GRAY			3336	36	53	0.8	1140	Organic
	5+00S	W	5		A	0.3		GRAY	DAMP	GOOD	3336	28	58	1.0	1120	
	5+25S	W	10		A	0.5		GRAY	DAMP	GOOD	3336	18	41	1.2	1260	Organic
	5+50S	W	10		A	0.2		GRAY	DAMP	GOOD	3336	27	53	0.8	1290	
	6+00S	W	10		A	0.3		GRAY	WET	GOOD	3336	31	64	1.0	1430	
	6+75S	W	10		A	0.2		GRAY	DAMP	GOOD	3336	31	74	1.0	1280	Organic
	8+25S	W	5		A	0.2		ORNG	DAMP	GOOD	3336	8	16	0.3	940	
	8+50S	W	5		A	0.2		GRAY	DAMP	GOOD	3336	34	113	0.8	1590	
	9+25S	W			A	0.3		GRAY	DAMP	GOOD	3336	27	106	1.0	1500	
	10+00S	W	5	MEDM	A	0.2	SILT	GRAY	DAMP	GOOD	3336	30	94	1.5	1680	Above Ash

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Ag PPM	Ba PPM	
18+00W	10+25S	W	5	MEDM	A	0.3	ORGN	GRAY	DAMP	GOOD	3336	25	79	0.8	1470	
	10+50S	W	5	MEDM	A	0.3	ORGN	GRAY	DAMP	GOOD	3336	24	101	0.6	1310	
	10+75S	W	5	MEDM	A	0.2	ORGN	GRAY	DAMP	GOOD	3336	29	111	0.8	750	
	11+00S	W	5	MEDM	A	0.4		GRAY	DAMP	GOOD	3336	2	13	1.2	960	
	11+25S	W	5	MEDM	A	0.2	ORGN	GRAY	DAMP	GOOD	3336	22	101	0.2	1340	
	11+50S	W	5	MEDM	A	0.3	ORGN	GRAY	DAMP	GOOD	3336	30	102	0.3	1840	
	11+75S	W	5	MEDM	A	0.2	SILT	GRAY	DAMP	GOOD	3336	29	111	0.4	2030	
	12+00S	W	5		A	0.4	GRVL	GRAY	DAMP	GOOD	3336	27	117	0.6	1760	
	12+25S	W	5	MEDM	A	0.3	GRVL	GRAY	DAMP	GOOD	3336	28	115	0.4	1760	
	12+50S	W	5		A	0.4		GRAY			3336	15	41	2.4	1410	
	12+75S	W		MEDM	A	0.3		GRAY			3336	24	136	0.6	2160	
	13+00S	W	10	MEDM	A	0.3	GRVL	GRAY	DAMP	GOOD	3336	22	142	0.4	2070	
	13+25S	W	5	MEDM	A	0.3	SILT	GRAY	DAMP	GOOD	3336	27	110	0.4	2170	
	13+50S	W	5	MEDM	A	0.5	GRVL	GRAY	DAMP	GOOD	3336	24	117	0.6	2840	Dry Stream
	13+75S	W	5	MEDM	A	0.4	GRVL	GRAY	DAMP	GOOD	3336	26	120	0.4	3940	
	14+00S	W	5	MEDM	A	0.3	ORGN	GRAY	DAMP	GOOD	3336	29	116	0.2	4610	
	14+25S	W	5	MEDM	A	0.3	GRVL	GRAY	DAMP	GOOD	3336	25	139	0.2	11740	
	14+50S	W	5	MEDM	A	0.4	SILT	GRAY	DAMP	GOOD	3336	17	50	0.6	1640	
	14+75S	W	5	MEDM	A	0.3	SILT	GRAY	DAMP	GOOD	3336	19	72	0.2	1880	
	15+00S	W	5	MEDM	A	0.3	SILT	GRAY	DAMP	GOOD	3336	19	53	0.6	1810	
	15+25S	W	5	MEDM	A	0.3	GRVL	GRAY			3336	20	77	0.7	2190	
	15+75S	W	5	MEDM	A	0.3	GRVL	GRAY	DAMP	GOOD	3336	9	51	0.4	1120	Ferrocrete
	16+25S	W	5	MEDM	A	0.3	SILT	GRAY	DAMP	GOOD						
	16+50S	W	0	MEDM	A	0.2	SAND	GRAY	DAMP	GOOD	3336	23	63	0.6	2050	
	16+75S	W	0	MEDM	A	0.2	SAND	GRAY	DAMP	GOOD	3336	22	55	1.0	1300	
	17+00S	W	0	MEDM	A	0.3	ORGN	GRAY	DAMP	GOOD	3336	8	35	3.0	2950	
	17+25S	W	0	MEDM	A	0.2	SAND	GRAY			3336	19	83	0.7	3270	

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Ag PPM	Ba PPM
18+00W	17+50S	W	0	MEDM	A	0.3	GRVL	GRAY			3336	20	87	1.3	2900
	18+00S	W	0	MEDM	A	0.3	ORGN	GRAY			3336	27	105	2.1	2330
	18+50S	W	5	MEDM	A	0.3	GRVL	GRAY	DAMP	GOOD	3336	28	140	1.6	2450
														Cu PPM	
	24+80	W	3	MEDM	C	1.8	GRVL	GRAY	DAMP	GOOD	123-2305	22	197	83	12000
	25+50	W	3	MEDM	C	0.3	GRVL	GRAY	DAMP	GOOD	123-2305	4	13	6	1050
	26+00	W	5	MEDM	C	0.3	GRVL	GRAY	DAMP	GOOD	123-2305	9	45	19	1080
	26+50	W	3	MEDM	C	0.3	GRVL	GRAY	DAMP	GOOD	123-2305	9	25	13	1000

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Ag PPM	Ba PPM	
20+00W	1+50S	N	20	MEDM	A	0.2	CLAY	BRWN	DAMP	MEDM	3336	3	4	0.8	970	
	1+75S	N	12	MEDM	H	0.3	ORGN	BLCK	DAMP	MEDM	3336	5	16	1.2	1270	
	2+00S	N	13	MEDM	H	0.2	ORGN	BLCK	DRY	GOOD	3336	2	11	1.5	980	
	2+22S	N	16	MEDM	C	0.2	SAND	BRWN	DRY	GOOD	3336	23	52	0.4	1370	
	2+50S	N	10	MEDM	A	0.1	SAND	BRWN	DRY	GOOD	3336	11	28	0.8	1070	
	2+75S	N	20	MEDM	A	0.2	CLAY	GRAY	DRY	GOOD	3336	6	11	1.0	1060	
	3+00S	N	10	MEDM	A	0.2	CLAY	BROWN	DAMP	MEDM	3336	4	18	1.6	1100	
	3+25S	N	10	MEDM	H	0.1	ORGN	BLCK	DAMP	MEDM	3336	2	14	0.8	840	
	3+50S	N	05	MEDM	H	0.1	ORGN	BRWN	DAMP	GOOD	3336	21	43	2.8	1200	Old Drain
	3+75S	N	05	MEDM	H	0.1	ORGN	BRWN	DAMP	GOOD	3336	21	26	1.8	1100	
	4+00S	N	05	LOW	H	0.1	ORGN	BRWN	DAMP	MEDM	3336	13	19	2.1	1100	
	4+25S	NE	03	LOW	H	0.2	ORGN	GRAY	DAMP	MEDM	3336	4	9	2.6	860	
	4+50S	NE	02	LOW	H	0.1	ORGN	BRWN	DAMP	MEDM	3336	7	10	3.8	1010	
	4+75S		00	LOW	H	0.2	ORGN	BLCK	DAMP	MEDM	3336	18	20	5.2	560	
	5+00S		00	LOW	H	0.2	ORGN	BRWN	WET	POOR	3336	9	13	8.5	870	
	5+25S		00	LOW	H	0.3	ORGN	GRAY	WET	POOR	3336	19	43	2.3	1210	
	5+50S		00	LOW	A	0.3	SILT	BRWN	WET	POOR	3336	34	74	1.0	1390	
	5+75S		00	LOW	A	0.1	SILT	GRAY	DAMP	POOR	3336	32	65	1.2	1240	
	6+00S		00	LOW	A	0.2	SILT	GRAY	DAMP	POOR	3336	55	41	1.8	1230	
	6+25S		00	LOW	A	0.5	SILT	GRAY	WET	POOR	3336	65	33	3.5	1350	4m East
	6+50S		00	LOW	A	0.1	GRVL	BRWN	WET	POOR	3336	46	38	1.4	1100	
	6+75S		00	LOW	H	0.1	ORGN	BLCK	WET	POOR	3336	8	11	0.5	170	FR. Roots
	10+25S		00	LOW	H	0.3	SILT	GRAY	WET	POOR	3336	25	85	0.5	4780	Clayey
	10+50S		00	LOW	A	0.2	SAND	ORNG	WET	POOR	3336	15	59	0.2	2190	
	10+75S		00	LOW	A	0.1	SILT	GRAY	WET	POOR	3336	21	81	0.6	8040	
	11+00S		00	LOW	A	0.1	SILT	GRAY	WET	POOR	3336	19	84	0.6	7860	
	11+25S		00	LOW	A	0.2	SILT	BRWN	WET	POOR	3336	21	106	0.7	5950	

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Ag PPM	Ba PPM	
20+00W	11+50S		00	LOW	A	0.2	CLAY	ORNG	DAMP	MEDM	3336	2	4	0.5	920	4m East
	11+75S		00	LOW	A	0.3	ORGN	BLCK	DAMP	MEDM	3336	22	12	3.0	1160	3m East
	12+00S	E	02	LOW	A	0.1	ORGN	GRAY	DAMP	MEDM	3336	26	24	1.7	1150	
	12+25S	E	02	LOW	A	0.2	ORGN	BLCK	DRY	MEDM	3336	43	48	1.6	1470	
	12+50S	E	03	LOW	A	0.1	ORGN	BLCK	DAMP	MEDM	3336	28	59	2.4	990	

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Cu PPM	Ba PPM	
20+00W	13+00S	E	05	MEDM	C	.45	GRAV	BLCK	DAMP	GOOD	123-2305	55	83	37	1640	Talus Slope
	13+50S	E	05	MEDM	C	.50	GRAV	BLCK	DAMP	GOOD	123-2305	34	56	29	950	Talus Slope
	14+00S	E	05	MEDM	C	.50	GRAV	BLCK	DAMP	GOOD	123-2305	19	31	14	950	Talus Slope
	14+50S	E	10	MEDM	C	.40	GRAV	BLCK	DAMP	GOOD	123-2305	18	20	12	1020	Talus Slope
	15+00S	E	10	MEDM	C	.50	GRAV	BLCK	DAMP	GOOD	123-2305	30	77	32	2000	Talus Slope
	15+50S	E	10	MEDM	C	.30	GRAV	BLCK	DAMP	GOOD	123-2305	30	101	43	1920	Talus Slope
	16+00S	E	10	MEDM	C	.30	GRAV	BLCK	DAMP	GOOD	123-2305	35	99	38	1780	Talus Slope
	16+50S	E	10	MEDM	C	.35	GRAV	BLCK	DAMP	GOOD	123-2305	6	14	10	940	Talus Slope
	17+00S	E	15	MEDM	C	.40	GRAV	BLCK	DAMP	GOOD	123-2305	6	25	9	970	Talus Slope
	17+50S	E	15	MEDM	C	.45	GRAV	BRWN	DAMP	GOOD	123-2305	2	10	4	840	Talus Slope
	18+00S	E	15	MEDM	C	.35	GRAV	BRWN	DAMP	GOOD	123-2305	4	19	7	950	Talus Slope
	18+50S	E	10	MEDM	C	.30	GRAV	BRWN	DAMP	GOOD	123-2305	5	22	9	940	Talus Slope
	19+00S	E	15	MEDM	C	.25	GRAV	BRWN	DAMP	GOOD	123-2305	4	27	7	920	Talus Slope Some Organics
	19+50S	E	20	MEDM	C	.20	GRAV	BRWN	DAMP	GOOD	123-2305	41	31	30	1470	Talus Slope Some Organics
	20+00S	E	20	MEDM	C	.25	GRAV	BRWN	DAMP	GOOD	123-2305	11	29	11	930	Talus Slope
	20+50S	E	25	MEDM	C	.30	GRAV	BLCK	DAMP	GOOD	123-2305	44	25	10	2020	Talus Slope
	21+00S	E	20	HIGH	C	.10	SAND	BLCK	DAMP	GOOD	123-2305	34	70	35	1700	Talus Slope
	21+50S	E	20	HIGH	C	.10	SAND	BLCK	DRY	GOOD	123-2305	20	46	26	2420	Talus Slope
	22+00S	E	15	HIGH	C	.25	GRAV	BLCK	DRY	GOOD	123-2305	11	32	11	1880	Talus Slope
	22+50S	E	20	HIGH	C	.95	GRAV	BLCK	DRY	GOOD	123-2305	24	53	29	3330	Talus Slope
	23+00S	E	20	HIGH	C	.20	GRAV	BLCK	DRY	GOOD	123-2305	59	151	84	2110	Talus Slope
	23+50S	E	20	HIGH	C	.25	GRAV	BLCK	DAMP	GOOD	123-2305	7	25	16	1380	Talus Slope
	24+00S	E	20	HIGH	C	.25	GRAV	BLCK	DAMP	GOOD	123-2305	16	41	26	2120	Talus Slope
	24+50S	E	20	HIGH	C	.25	GRAV	BRWN	DRY	GOOD	123-2305	14	44	18	1300	Talus Slope
	25+00S	E	20	HIGH	C	.25	GRAV	BRWN	DRY	GOOD	123-2305	9	30	15	740	Talus Slope

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Cu PPM	Ba PPM	
20+00W	25+50S	E	25	HIGH	C	.30	GRAV	BRWN	DRY	GOOD	123-2305	16	42	21	1250	Talus Slope
	26+00S	E	25	HIGH	C	.30	GRAV	BRWN	DRY	GOOD	123-2305	9	21	18	1620	Talus Slope
	26+50S	E	25	HIGH	C	.30	GRAV	BRWN	DAMP	GOOD	123-2305	14	26	15	4240	Talus Slope
	27+00S	E	25	HIGH	C	.25	GRAV	BRWN	DAMP	GOOD	123-2305	14	66	23	900	Talus Slope
22+00W	22+00S	E	20	HIGH	C	.30	GRAV	BRWN	DAMP	GOOD	123-2305	48	68	12	6660	Talus Slope
	22+50S	E	20	HIGH	C	.30	GRAV	BRWN	DAMP	GOOD	123-2305	34	64	39	5410	Talus Slope
	23+00S	E	25	HIGH	C	.20	GRAV	BRWN	DAMP	GOOD	123-2305	46	33	25	4010	Talus Slope
	23+50S	E	25	HIGH	C	.25	GRAV	BRWN	DAMP	GOOD	123-2305	25	46	33	4160	Talus Slope
	24+00S	E	25	HIGH	C	.30	GRAV	BRWN	DRY	GOOD	123-2305	12	71	34	1620	Talus Slope
	24+50S	E	25	HIGH	C	.35	GRAV	BRWN	DRY	GOOD	123-2305	6	9	8	1110	Talus Slope
	25+00S	E	25	HIGH	C	.20	GRAV	BRWN	DAMP	GOOD	123-2305	33	27	23	2450	Talus Slope
	25+50S	E	20	HIGH	C	.25	GRAV	BRWN	DAMP	GOOD	123-2305	27	42	29	1940	Talus Slope
	26+00S	E	25	HIGH	C	.25	GRAV	BRWN	DAMP	GOOD	123-2305	20	60	41	2060	Talus Slope
	26+50S	E	25	HIGH	C	.30	GRAV	BRWN	DAMP	GOOD	123-2305	19	65	40	1450	Talus Slope
	27+00S	E	25	HIGH	C	.30	GRAV	BRWN	DAMP	GOOD	123-2305	14	69	74	1000	Talus Slope

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Cu PPM	Ba PPM	
39+00W	0+00	N	05	LOW	C	.30	GRAV	BRWN	DAMP	POOR	123-2305	23	56	30	1210	Augered
	0+50S	N	05	LOW	C	.30	SAND	BRWN	DAMP	POOR	123-2305	18	27	28	1080	Augered
	1+00S	N	05	LOW	A	.25	ORGN	BRWN	WET	POOR	123-2305	11	7	90	470	Permafrost, Augered
	1+50S	N	10	LOW	C	.65	SAND	BRWN	WET	POOR	123-2305	18	15	78	1020	Augered
	2+00S	N	26	LOW	C	.30	SILT	GRAY	DAMP	GOOD	123-1595	20	41	22	1250	
	2+50S	N	26	MEDM	B	.30	SAND	BRWN	DAMP	GOOD	123-1595	4	12	20	200	
	3+00S	N	34	-	-	-	-	-	-	-	-	-	-	-	-	No Sample
	3+50S	N	34	HIGH	C	.50	GRAV	BRWN	DAMP	GOOD	123-1595	5	14	18	4300	
	4+00S	N	46	HIGH	C	.40	GRAV	BRWN	DAMP	GOOD	123-1595	54	39	29	1240	Talus
	4+50S	N	64	HIGH	B	.30	CLAY	BRWN	DAMP	GOOD	123-1595	20	28	18	1050	
	5+00S	N	58	HIGH	B	.30	GRAV	BRWN	DAMP	GOOD	123-1595	69	36	48	1030	
	5+50S	N	20	HIGH	C	.30	GRAV	BRWN	DAMP	GOOD	123-1595	31	46	17	1290	
	6+00S	N	18	HIGH	C	.20	GRAV	BRWN	DAMP	GOOD	123-1595	19	47	19	1180	

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Cu PPM	Ba PPM	
41+00W	3+00N	N	10	LOW	C	.60	CLAY	BLCK	WET	POOR	123-2305	18	62	40	1210	Augered
	2+50N	N	10	LOW	C	1.20	GRAV	GRAY	WET	POOR	123-2305	27	196	43	1520	Augered
	2+00N	N	05	LOW	C	1.20	ORGN	BRWN	WET	POOR	123-2305	10	214	163	680	Augered
	1+50N	N	05	LOW	C	.50	GRAV	BRWN	DAMP	POOR	123-2305	29	30	23	1200	Augered
	1+00N	N	10	LOW	C	.65	SAND	BRWN	DAMP	POOR	123-2305	17	12	15	1140	Augered
	0+50N	N	10	LOW	C	.70	SAND	BRWN	DAMP	POOR	123-2305	35	23	12	1030	Augered
	0+00	N	05	LOW	C	.40	GRAV	GRAY	WET	POOR	123-2305	19	62	24	1240	Augered
	0+50S	N	10	MEDM	C	.40	GRAV	GRAY	DRY	POOR	123-2305	15	45	16	950	Augered
	1+00S	N	10	MEDM	C	.50	GRAV	BRWN	DRY	POOR	123-2305	23	41	16	1080	Augered
	1+50S	N	10	MEDM	C	.50	GRAV	RED	DRY	POOR	123-2305	8	84	117	370	Ferrocrete, Augered
	2+00S	N	34	MEDM	C	.30	CLAY	GRAY	DAMP	POOR	123-1595	16	20	4	1320	Permafrost
	2+50S	N	05	-	-	-	-	-	-	-	-	-	-	-	-	No Sample
	3+00S	N	18	MEDM	C	.30	SAND	BRWN	DRY	GOOD	123-1595	27	33	9	1330	
	3+50S	N	24	MEDM	C	.30	SAND	BRWN	DAMP	GOOD	123-1595	26	63	25	1480	
	4+00S	N	34	MEDM	C	.30	SAND	BRWN	DAMP	GOOD	123-1595	16	38	15	920	
	4+50S	N	30	HIGH	C	.40	CLAY	GRAY	DAMP	MEDM	123-1595	20	57	18	1190	
	5+00S	N	44	HIGH	C	.30	SAND	BRWN	DAMP	GOOD	123-1595	22	56	32	1310	
	5+50S	N	20	HIGH	B	.30	CLAY	GRAY	DAMP	GOOD	123-1595	23	73	26	1290	Small Crk Bed
	6+00S	N	43	HIGH	C	.40	CLAY	GRAY	DAMP	MEDM	123-1595	24	70	24	1210	
	6+50S	N	24	HIGH	C	.30	SAND	BRWN	DRY	GOOD	123-1595	7	16	8	1010	
	7+00S	N	48	HIGH	C	.50	SAND	BRWN	DAMP	GOOD	123-1595	20	60	21	1090	
	7+50S	N	46	HIGH	C	.60	SAND	BRWN	DAMP	GOOD	123-1595	19	66	22	1020	
	8+00S	N	48	HIGH	C	.50	GRVL	BRWN	DAMP	GOOD	123-1595	13	53	19	940	

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Cu PPM	Ba PPM	
43+00S	2+00N	N	10	LOW	C	.35	GRAV	GRAY	DRY	GOOD	123-2305	17	131	43	1700	Augered
	1+50N	N	15	LOW	C	.40	GRAV	GRAY	DRY	GOOD	123-2305	7	37	13	1090	Augered
	1+00N	N	10	LOW	C	.60	GRAV	GRAY	DRY	GOOD	123-2305	18	288	59	1720	Augered
	0+50N	N	05	LOW	C	.80	GRAV	BLCK	DRY	GOOD	123-2305	17	88	29	1320	Augered
	0+00	N	05	LOW	C	.70	SAND	BRWN	DRY	GOOD	123-2305	15	59	14	1060	Augered
	0+50S	N	10	MEDM	C	.30	GRAV	GRAY	DAMP	GOOD	123-2305	23	80	37	1090	Augered
	1+00S	N	15	MEDM	C	.50	GRAV	BRWN	DAMP	GOOD	123-2305	6	10	5	890	Some Organics, Augered
	1+50S	N	15	MEDM	C	.50	GRAV	BRWN	DAMP	GOOD	123-2305	20	50	19	1030	Some Organics, Augered
	2+00S	N	17	MEDM	C	.40	SAND	BRWN	DAMP	MEDM	123-1595	27	64	34	1010	
	2+50S	N	20	-	-	-	-	-	-	-	-	-	-	-	-	No Sample
	3+00S	N	28	MEDM	C	.50	SAND	BRWN	DAMP	MEDM	123-1595	20	58	21	1140	
	3+50S	N	20	MEDM	C	.40	SAND	BRWN	DAMP	GOOD	123-1595	9	27	17	970	
	4+00S	N	24	MEDM	C	.40	GRAV	BRWN	DRY	GOOD	123-1595	16	43	16	1010	
	4+50S	N	16	MEDM	C	.30	SAND	BRWN	DAMP	GOOD	123-1595	22	61	20	1020	
	5+00S	N	29	HIGH	C	.30	SAND	BRWN	DRY	GOOD	123-1595	20	52	20	640	
	5+50S	N	35	-	-	-	-	-	-	-	-	-	-	-	-	No Sample
	6+00S	N	52	HIGH	C	.30	GRAV	BRWN	DAMP	GOOD	123-1595	32	41	28	1110	
	6+50S	N	64	HIGH	B	.20	GRAV	BRWN	DAMP	GOOD	123-1595	14	20	19	1000	
	7+00S	N	10	HIGH	C	.30	CLAY	BRWN	DAMP	MEDM	123-1595	20	57	19	1000	
	7+50S	N	32	HIGH	C	.40	SAND	BRWN	DAMP	GOOD	123-1595	19	125	31	930	
	8+00S	N	49	HIGH	C	.20	GRAV	BRWN	DAMP	GOOD	123-1595	17	75	23	1000	

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Ag PPM	Ba PPM	
45+00W	0+25S	N	0	LOW	H	0.3	ORGN	BRWN	DAMP	GOOD	3482	15	61	0.6	920	
	0+50S	N	0	LOW	C	0.1	GRVL	GRAY	DAMP	GOOD	3482	20	100	0.6	1150	
	0+75S	N	05	MEDM	H	0.3	ORGN	BRWN	DAMP	GOOD	3482	6	55	0.7	1010	
	1+00S	N	05	MEDM	A	0.2	SILT	BRWN	DAMP	GOOD	3482	17	400	1.2	1380	
	1+25S	N	05	MEDM	A	0.4	SILT	GRAY	DAMP	GOOD	3482	2	5	0.2	1010	Some Ash
	1+50S	N	05	MEDM	B	0.3	SILT	BRWN	DAMP	GOOD	3482	17	31	0.2	1050	
	1+75S	N	05	MEDM	B	0.3	SILT	BRWN	DAMP	GOOD	3482	8	46	0.2	1110	
	2+00S	N	05	MEDM	B	0.2	SILT	GRAY	DAMP	GOOD	3482	17	235	0.3	2560	
	2+25S	N	05	MEDM	B	0.2	SILT	GRAY	DAMP	GOOD	3482	16	28	0.2	1060	
	2+50S	N	05	MEDM	B	0.3	SILT	BRWN	DAMP	GOOD	3482	6	18	0.4	620	
	2+75S	N	05	MEDM	B	0.4	GRVL	GRAY	DAMP	GOOD	3482	10	25	0.2	830	
	3+00S	N	05	MEDM	B	0.3	SILT	GRAY	DAMP	GOOD	3482	13	28	0.2	790	
	3+25S	N	05	MEDM	B	0.3	SILT	GRAY	DAMP	GOOD	3482	14	28	0.4	1220	
	3+50S	N	05	MEDM	B	0.2	GRVL	GRAY	DAMP	GOOD	3482	12	25	0.2	1540	
	3+75S	N	05	MEDM	B	0.1	SILT	BRWN	DAMP	GOOD	3482	20	32	0.2	1490	
	4+00S	NW	05	MEDM	B	0.3	SILT	BRWN	DAMP	GOOD	3482	17	60	0.2	1640	
	4+25S	NW	0	LOW	B	0.2	SILT	GRAY	DAMP	GOOD	3482	10	22	0.2	1420	
	4+50S	NW	03	LOW	B	0.4	SILT	GRAY	DAMP	GOOD	3482	7	6	0.2	1190	
	4+75S	NW	05	MEDM	B	0.3	SILT	GRAY	DAMP	GOOD	3482	5	9	0.2	1110	
	5+00S	NW	05	MEDM	B	0.2	SILT	BRWN	DAMP	GOOD	3482	16	48	0.2	1280	
	5+25S	NW	05	MEDM	B	0.2	SILT	BRWN	DAMP	GOOD	3482	16	46	0.2	1280	
	5+50S	NW	05	MEDM	B	0.2	SILT	BRWN	DAMP	GOOD	3482	23	47	0.3	1300	
	5+75S	NW	05	MEDM	B	0.2	SILT	BRWN	DAMP	GOOD	3482	8	28	0.2	1140	
	6+00S	NW	05	MEDM	B	0.3	SILT	BRWN	DAMP	GOOD	3482	12	30	0.2	1250	
	6+25S	W	05	MEDM	B	0.3	SILT	BRWN	DAMP	GOOD	3482	4	8	0.2	920	
	6+50S	W	10	MEDM	B	0.2	GRVL	BRWN	DAMP	GOOD	3482	18	60	0.2	1030	
	6+75S	W	10	MEDM	A	0.3	GRVL	BRWN	DAMP	GOOD	3482	7	28	0.2	1080	

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Ag PPM	Ba PPM	
45+00W	7+00S	W	10	MEDM	B	0.3	SILT	BRWN	DAMP	GOOD	3482	10	30	0.2	990	
	7+25S	W	10	MEDM	B	0.3	SILT	BRWN	DAMP	GOOD	3482	14	31	0.2	1090	
	7+50S	W	10	MEDM	B	0.3	SILT	BRWN	DAMP	GOOD	3482	15	52	0.2	1030	
	7+75S	W	10	MEDM	B	0.3	SILT	BRWN	DAMP	GOOD	3482	20	60	0.2	1270	
	8+00S	W	10	MEDM	B	0.3	SILT	BRWN	DAMP	GOOD	3482	25	48	1.6	1120	
	8+25S	W	10	MEDM	B	0.3	SILT	BRWN	DAMP	GOOD	3482	10	28	0.2	1120	
	8+50S	W	10	MEDM	B	0.3	SILT	BRWN	DAMP	GOOD	3482	21	48	0.2	1190	
	8+75S	W	10	MEDM	B	0.2	GRVL	BRWN	DAMP	GOOD	3482	17	70	0.9	1220	
	9+00S	W	10	MEDM	B	0.3	GRVL	BRWN	DAMP	GOOD	3482	8	32	1.6	1050	
	9+25S	W	10	MEDM	B	0.2	GRVL	BRWN	DAMP	GOOD	3482	7	31	0.4	1270	Creek Side
	10+00S	W	10	MEDM	H	0.3	ORGN	BRWN	DAMP	GOOD	3482	10	33	0.3	1740	Till Base
	10+25S	W	10	MEDM	H	0.2	ORGN	BRWN	DAMP	GOOD	3482	6	28	0.2	1480	Till Base
	10+50S	W	10	MEDM	B	0.2	SILT	BRWN	DAMP	GOOD	3482	4	17	0.2	1430	Till Base
	10+75S	W	10	MEDM	B	0.2	SILT	BRWN	DAMP	GOOD	3482	13	40	0.2	1520	
	11+00S	W	05	MEDM	B	0.3	SILT	BRWN	DAMP	GOOD	3482	5	14	0.2	1240	
	11+25S	W	05	MEDM	B	0.3	SILT	BRWN	DAMP	GOOD	3482	12	25	0.2	1330	
	11+50S	W	05	MEDM	B	0.3	SILT	BRWN	DAMP	GOOD	3482	13	33	0.2	1380	
	11+75S	W	05	MEDM	B	0.3	SILT	BRWN	DAMP	GOOD	3482	10	30	0.2	1520	Some Ash
	12+00S	W	05	MEDM	B	0.2	SILT	BRWN	DAMP	GOOD	3482	5	14	0.2	1170	
	12+25S	W	10	MEDM	B	0.3	SILT	GRAY	DAMP	GOOD	3482	2	9	0.2	1210	Some Ash
	12+50S	W	10	MEDM	H	0.4	ORGN	BRWN	DAMP	GOOD	3482	4	15	0.2	1080	
	12+75S	W	10	MEDM	B	0.3	SILT	BRWN	DAMP	GOOD	3482	17	40	0.2	1310	
	13+00S	W	10	MEDM	H	0.4	ORGN	BRWN	DAMP	GOOD	3482	5	10	0.2	1270	Some Ash
	13+25S	W	10	MEDM	B	0.3	SILT	BRWN	DAMP	GOOD	3482	17	62	0.2	1550	
	13+50S	W	15	MEDM	B	0.3	SILT	BRWN	DAMP	GOOD	3482	18	41	0.2	1400	
	13+75S	W	15	MEDM	B	0.3	SILT	BRWN	DAMP	GOOD	3482	12	42	0.2	1460	
	14+00S	W	15	MEDM	C	0.1	SILT	BRWN	DAMP	GOOD	3482	15	138	0.2	1860	

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Ag PPM	Ba PPM	
45+00W	14+25S	W	15	MEDM	B	0.2	SILT	BRWN	DAMP	GOOD	3482	13	52	0.2	1530	
	14+50S	W	15	MEDM	B	0.2	SILT	BRWN	DAMP	GOOD	3482	16	59	0.3	1750	
	14+75S	W	15	MEDM	C	0.1	SILT	BRWN	DAMP	GOOD	3482	18	148	0.4	1830	
	15+00S	W	15	MEDM	C	0.2	SILT	BRWN	DAMP	GOOD	3482	8	62	0.2	1230	
	15+25S	W	10	MEDM	C	0.1	SILT	BRWN	DAMP	GOOD	3482	27	80	0.3	1700	
	15+50S	W	10	MEDM	C	0.3	SILT	BRWN	DAMP	GOOD	3482	17	103	0.2	2000	
	15+75S	W	10	MEDM	C	0.1	SILT	BRWN	DAMP	GOOD	3482	12	70	0.2	1630	
	16+00S	W	15	MEDM	C	0.1	SILT	BRWN	DAMP	GOOD	3482	17	131	0.3	2350	
	16+25S	W	20	MEDM	C	0.1	SILT	BRWN	DAMP	GOOD	3482	23	62	0.6	1130	
	16+50S	W	20	MEDM	C	0.2	SILT	BRWN	DAMP	GOOD	3482	16	100	0.2	1320	
	16+75S	W	20	MEDM	C	0.2	SILT	BRWN	DAMP	GOOD	3482	15	40	0.2	1480	
	17+00S	W	20	MEDM	B	0.2	SILT	BRWN	DAMP	GOOD	3482	14	60	0.2	1560	
	17+25S	W	20	MEDM	B	0.3	SILT	BRWN	DAMP	GOOD	3482	22	68	0.2	1530	
	17+50S	W	20	MEDM	C	0.2	SILT	BRWN	DAMP	GOOD	3482	17	112	0.2	1690	
	17+75S	W	20	MEDM	C	0.1	SILT	BRWN	DAMP	GOOD	3482	23	108	0.3	1520	
	18+00S	W	20	MEDM	C	0.2	SILT	BRWN	DAMP	GOOD	3482	15	41	0.3	1300	
	18+25S	W	20	MEDM	A	0.3	SILT	BRWN	DAMP	GOOD	3482	2	6	0.2	960	Some Ash
	18+50S	W	20	MEDM	B	0.3	GRVL	BRWN	DAMP	GOOD	3482	8	31	0.2	1540	
	18+75S	W	20	MEDM	C	0.2	SILT	BRWN	DAMP	GOOD	3482	14	63	0.2	2230	
	19+00S	W	20	MEDM	C	0.3	SILT	BRWN	DAMP	GOOD	3482	11	63	0.2	2060	
	19+25S	W	20	MEDM	C	0.3	GRVL	GRAY	DAMP	GOOD	3482	30	25	1.4	2050	
	19+50S	W	20	MEDM	C	0.1	SILT	BRWN	DAMP	GOOD	3482	18	65	0.8	2140	
	19+75S	W	20	MEDM	C	0.2	SILT	BRWN	DAMP	GOOD	3482	21	42	0.5	1710	
	20+00S	W	20	MEDM	B	0.3	SILT	BRWN	DAMP	GOOD	3482	19	45	0.2	1580	
	20+25S	W	20	MEDM	C	0.2	SILT	BRWN	DAMP	GOOD	3482	18	41	0.3	1510	
	20+50S	W	20	MEDM	C	0.1	SILT	BRWN	DRY	GOOD	3482	58	66	1.0	2270	
	20+75S	W	20	MEDM	C	0.1	SILT	BRWN	DRY	GOOD	3482	26	82	0.9	2220	

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Ag PPM	Ba PPM
45+00W	21+00S	W	20	MEDM	C	0.1	SILT	BRWN	DAMP	GOOD	3482	12	62	0.2	2080
	21+25S	W	20	MEDM	C	0.2	SILT	BRWN	DRY	GOOD	3482	33	70	2.1	2610
	21+50S	W	20	MEDM	C	0.3	GRVL	BRWN	DAMP	GOOD	3482	5	10	0.4	980
	21+75S	W	15	MEDM	C	0.2	GRVL	BRWN	DAMP	GOOD	3482	47	55	2.2	2480
	22+00S	W	10	MEDM	B	0.2	SILT	BRWN	DAMP	GOOD	3482	16	15	0.8	1210
	22+25S	W	15	MEDM	C	0.2	GRVL	BRWN	DRY	GOOD	3482	35	51	1.6	1980
	22+50S	W	15	MEDM	C	0.2	SILT	BRWN	DAMP	GOOD	3482	53	62	1.2	3380
	22+75S	W	15	MEDM	C	0.2	SILT	BRWN	DAMP	GOOD	3482	51	62	1.1	3580
	23+00S	W	15	MEDM	C	0.1	SILT	BRWN	DAMP	GOOD	3482	46	54	0.9	4250
	23+25S	W	15	MEDM	C	0.2	SILT	BRWN	DAMP	GOOD	3482	52	66	1.0	3600
	23+50S	W	15	MEDM	A	0.3	ORGN	BRWN	DAMP	GOOD	3482	36	157	2.0	20000
	23+75S	W	15	MEDM	A	0.2	ORGN	BRWN	DAMP	GOOD	3482	30	91	1.4	20000
	24+00S	W	15	MEDM	C	0.2	SILT	BRWN	DAMP	GOOD	3482	37	108	1.9	20000
	24+25S	W	15	MEDM	C	0.2	SILT	BRWN	DAMP	GOOD	3482	34	130	1.5	20000
	24+50S	W	15	MEDM	H	0.3	ORGN	BRWN	DAMP	GOOD	3482	15	90	3.1	7040
	24+75S	W	15	MEDM	B	0.2	SILT	BRWN	DAMP	GOOD	3482	30	70	1.6	20000

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Cu PPM	Ba PPM
47+00W	4+00S	W	29	LOW	C	.60	SAND	BRWN	DAMP	MEDM	123-1595	16	56	25	1210
	4+50S	W	32	LOW	C	.40	SAND	BRWN	DAMP	MEDM	123-1595	10	23	16	1030
	5+00S	W	32	LOW	C	.30	GRAV	BRWN	DAMP	MEDM	123-1595	15	34	18	990
	5+50S	W	18	LOW	B	.20	GRAV	GRAY	DAMP	MEDM	123-1595	17	96	33	1060
	6+00S	W	24	LOW	C	.30	GRAV	BRWN	DAMP	MEDM	123-1595	13	57	28	1510
	6+50S	W	22	LOW	C	.40	CLAY	GRAY	DAMP	MEDM	123-1595	13	33	19	1430
	7+00S	W	22	LOW	C	.30	GRAV	BRWN	DAMP	MEDM	123-1595	12	52	22	1100
	7+50S	W	14	LOW	B	.40	GRAV	BRWN	DAMP	MEDM	123-1595	16	61	26	1630
	8+00S	W	05	LOW	B	.20	GRAV	GRAY	DRY	GOOD	123-1595	32	73	33	1680
	8+50S	W	05	LOW	B	.20	GRAV	GRAY	DAMP	GOOD	123-1595	30	76	31	1590
	9+00S	W	22	LOW	B	.50	ORGN	BRWN	DAMP	MEDM	123-1595	9	37	60	1180
	9+50S	W	18	LOW	C	.30	GRAV	BRWN	DAMP	MEDM	123-1595	14	69	31	3000
	10+00S	W	22	LOW	C	.20	GRAV	BRWN	DAMP	MEDM	123-1595	11	61	22	1870
	10+50S	W	20	LOW	C	.30	CLAY	BRWN	WET	POOR	123-1595	14	39	21	1780
	11+00S	W	18	LOW	B	.40	GRAV	BRWN	DAMP	MEDM	123-1595	15	64	31	2970
	11+50S	W	12	LOW	B	.30	GRAV	BRWN	WET	POOR	123-1595	16	84	43	8090
	12+00S	W	18	LOW	C	.30	GRAV	BRWN	DAMP	MEDM	123-1595	24	79	38	1810
	12+50S	W	20	LOW	C	.40	SAND	BRWN	DAMP	MEDM	123-1595	8	19	19	1070
	13+00S	W	16	LOW	C	.30	GRAV	BRWN	DAMP	MEDM	123-1595	11	41	23	1730
	13+50S	W	17	LOW	B	.40	GRAV	BRWN	DAMP	MEDM	123-1595	15	82	36	2440
	14+00S	W	17	LOW	C	.50	SAND	BRWN	DRY	GOOD	123-1595	7	36	21	1510
	14+50S	W	18	LOW	C	.30	SAND	BRWN	DRY	GOOD	123-1595	14	67	28	2730
	15+00S	W	18	LOW	C	.40	SAND	BRWN	DAMP	GOOD	123-1595	10	27	14	1330
	15+50S	W	18	LOW	C	.20	SAND	BRWN	DRY	GOOD	123-1595	7	29	15	940
	16+00S	W	18	LOW	C	.30	SAND	BRWN	DAMP	GOOD	123-1595	6	19	25	890
	16+50S	W	16	LOW	C	.40	CLAY	BRWN	WET	POOR	123-1595	8	38	18	1210
	17+00S	W	13	LOW	B	.30	SAND	BRWN	DRY	GOOD	123-1595	10	30	21	1320

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Cu PPM	Ba PPM	
47+00W	17+50S	W	14	LOW	C	.30	SAND	BRWN	DAMP	GOOD	123-1595	8	17	15	970	
	18+00S	W	14	LOW	C	.30	GRAV	BRWN	DAMP	MEDM	123-1595	15	52	29	1900	
	18+50S	W	16	LOW	C	.30	GRAV	BRWN	DAMP	MEDM	123-1595	13	25	22	1620	
	19+00S	W	12	LOW	B	.30	CLAY	BRWN	WET	POOR	123-1595	4	37	23	770	
	19+50S	W	11	LOW	C	.40	SAND	BRWN	DAMP	GOOD	123-1595	13	24	21	1270	
	20+00S	W	11	LOW	C	.30	GRAV	BRWN	DRY	GOOD	123-1595	44	12	11	1120	
	20+50S	W	12	LOW	B	.30	GRAV	BRWN	DAMP	MEDM	123-1595	35	55	38	1990	
	21+00S	W	19	LOW	B	.20	GRAV	BRWN	WET	POOR	123-1595	34	56	27	2170	
	21+50S	W	-	-	-	-	-	-	-	-	-	-	-	-	-	No Sample
	22+00S	W	20	LOW	C	.20	SAND	BRWN	DAMP	MEDM	123-1595	45	46	54	2390	
	22+50S	W	18	LOW	C	.40	CLAY	BRWN	WET	POOR	123-1595	41	52	62	5460	
	23+00S	W	22	LOW	B	.40	CLAY	BRWN	DAMP	POOR	123-1595	21	98	54	14230	
	23+50S	W	24	LOW	C	.30	SAND	BRWN	DAMP	MEDM	123-1595	12	42	44	1520	
	24+00S	W	18	LOW	C	.40	SAND	BRWN	DAMP	GOOD	123-1595	8	14	10	1400	

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Cu PPM	Ba PPM	
49+00W	2+50N	N	05	LOW	H	.50	ORGN	BLCK	WET	POOR	123-1595	16	105	23	1090	Augered
	2+00N	N	05	LOW	H	.30	SAND	BLCK	WET	POOR	123-1595	16	118	18	1290	Augered
	1+50N	N	10	LOW	H	.50	STCL	BLCK	WET	POOR	123-1595	15	765	30	1080	Augered
	1+00N	N	10	LOW	H	.60	CLAY	GRAY	WET	POOR	123-1595	12	440	37	1000	Augered
	0+50N	N	10	LOW	C	.70	GRAV	BLCK	WET	POOR	123-1595	20	79	15	1310	Augered
	0+00	N	05	LOW	H	.70	CLAY	BLCK	WET	POOR	123-1595	19	295	27	960	Augered
	0+50S	N	06	LOW	H	.60	SNCL	GRAY	WET	POOR	123-1595	15	61	11	1160	Augered
	1+00S	N	11	LOW	C	.70	GRAV	BRWN	DRY	GOOD	123-1595	16	94	24	1150	Augered
	1+50S	N	12	LOW	C	.70	GRAV	BRWN	DRY	GOOD	123-1595	12	133	28	1080	Augered
	2+00S	N	08	LOW	C	.30	GRAV	BRWN	DRY	GOOD	123-1595	14	33	19	1070	Augered
	2+50S	N	11	LOW	C	.70	SAND	BRWN	DRY	GOOD	123-1595	12	130	29	1100	Augered
	3+00S	N	20	LOW	C	.70	GRAV	BRWN	DRY	GOOD	123-1595	15	62	26	1690	Augered
	3+50S	N	01	LOW	H	1.30	ORGN	BRWN	WET	POOR	123-1595	12	276	28	1030	Augered
	4+00S	N	01	LOW	H	1.00	SILT	BLCK	WET	POOR	123-1595	14	121	24	1730	Augered
	4+50S	N	01	LOW	H	1.20	SAND	BLCK	WET	POOR	123-1595	12	353	21	1330	Augered
	5+00S	N	01	LOW	H	1.30	SILT	BLCK	WET	POOR	123-1595	14	258	22	1470	Augered
	5+50S	N	01	LOW	H	1.10	ORGN	BLCK	WET	POOR	123-1595	15	130	21	1300	Augered
	6+00S	N	01	LOW	H	.40	GRAV	BRWN	WET	POOR	123-1595	16	224	23	970	Augered
	6+50S	N	01	LOW	H	1.30	GRAV	BRWN	WET	POOR	123-1595	11	194	23	1280	Augered
	7+00S	N	01	LOW	B	.30	GRAV	BRWN	DAMP	MEDM	123-1595	19	99	32	1790	
	7+50S	N	01	LOW	B	.30	GRAV	BRWN	WET	GOOD	123-1595	13	359	23	1150	
	8+00S	N	01	LOW	C	.30	SAND	BRWN	DAMP	MEDM	123-1595	11	117	22	2390	
	8+50S	N	01	LOW	C	.40	SAND	BRWN	DRY	GOOD	123-1595	23	66	32	1710	
	9+00S	N	01	LOW	C	.30	GRAV	BRWN	DRY	GOOD	123-1595	17	81	20	1680	
	9+50S	N	01	LOW	B	.30	SILT	GRAY	WET	GOOD	123-1595	12	188	11	110	
	10+00S	N	01	LOW	B	.90	SILT	GRAY	WET	GOOD	123-1595	14	236	20	1360	
	10+50S	N	01	LOW	B	.30	GRAV	BRWN	DAMP	MEDM	123-1595	10	288	10	990	

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Cu PPM	Ba PPM	
49+00W	11+00S	N	01	LOW	B	.40	SILT	GRAY	WET	GOOD	123-1595	12	131	18	1030	
	11+50S	N	01	LOW	C	.50	SAND	BRWN	DAMP	GOOD	123-1595	8	64	18	950	
	12+00S	E	06	LOW	C	.40	SAND	BRWN	DRY	GOOD	123-1595	7	20	8	970	
	12+50S		-	-	-	-	-	-	-	-	-	-	-	-	-	No Sample
	13+00S	E	21	LOW	B	.30	GRAV	BRWN	DAMP	MEDM	123-1595	14	134	36	1030	
	13+50S	E	24	LOW	B	.40	GRVL	BRWN	DAMP	MEDM	123-1595	12	134	30	1040	
	14+00S	E	25	LOW	C	.40	SILT	BRWN	DAMP	GOOD	123-1595	4	19	12	950	
	14+50S	E	23	LOW	B	.40	GRAV	BRWN	WET	POOR	123-1595	10	55	13	970	
	15+00S	E	24	LOW	B	.30	SAND	BRWN	DRY	GOOD	123-1595	12	94	21	1010	
	15+50S	E	22	LOW	B	.70	SAND	BRWN	DAMP	MEDM	123-1595	15	112	27	1060	
	16+00S	E	24	LOW	B	.30	SAND	BRWN	DAMP	GOOD	123-1595	12	121	33	1050	
	16+50S	E	22	LOW	B	.10	SAND	BRWN	DRY	GOOD	123-1595	4	8	4	850	
	17+00S	E	16	LOW	C	.40	GRAV	BRWN	DAMP	MEDM	123-1595	7	30	8	800	
	17+50S	E	18	LOW	C	.30	GRAV	BRWN	DAMP	MEDM	123-1595	15	98	24	1030	
	18+00S	E	19	LOW	B	.20	GRAV	BRWN	DRY	GOOD	123-1595	11	112	16	980	
	18+50S	E	20	LOW	C	.30	GRAV	BRWN	DAMP	GOOD	123-1595	21	111	24	1040	
	19+00S	E	16	LOW	B	.20	SAND	BRWN	DRY	GOOD	123-1595	24	143	27	1890	
	19+50S	E	16	LOW	B	.20	GRAV	BRWN	DAMP	GOOD	123-1595	26	186	36	2050	
	20+00S	E	12	LOW	B	.30	SAND	BRWN	DAMP	GOOD	123-1595	26	263	46	1150	
	20+50S	E	18	LOW	B	.30	SAND	BRWN	DAMP	GOOD	123-1595	30	189	72	1300	
	21+00S	E	18	LOW	B	.40	SAND	BRWN	DAMP	GOOD	123-1595	34	237	86	1550	
	21+50S	E	16	LOW	C	.30	SILT	BRWN	DAMP	MEDM	123-1595	4	25	16	910	
	22+00S	E	14	LOW	B	.70	SAND	BRWN	DRY	GOOD	123-1595	19	211	49	1190	
	22+50S	E	06	LOW	C	.50	SAND	BRWN	DRY	GOOD	123-1595	10	112	20	1060	
	23+00S	E	11	LOW	B	.30	SAND	BRWN	DRY	GOOD	123-1595	16	220	40	1200	
	23+50S	E	14	LOW	B	.30	SAND	BRWN	DRY	GOOD	123-1595	12	135	21	2290	
	24+00S	E	11	LOW	C	.30	SAND	BRWN	DAMP	MEDM	123-1595	12	53	10	950	

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Cu PPM	Ba PPM	
51+00W	3+00N	N	24	LOW	C	.80	SAND	BRWN	DRY	GOOD	123-1595	14	231	27	1650	Augered
	2+50N	N	22	LOW	C	.90	GRAV	BRWN	DRY	GOOD	123-1595	20	91	22	1020	Augered
	2+00N	N	08	LOW	C	.50	SAND	BRWN	WET	GOOD	123-1595	17	298	38	1640	Augered
	1+50N	N	16	LOW	C	.70	GRAV	BRWN	DRY	GOOD	123-1595	11	51	14	980	Augered
	1+00N	N	18	LOW	C	.80	GRAV	BRWN	DRY	GOOD	123-1595	14	57	21	1070	Augered
	0+50N	N	12	LOW	C	.40	GRAV	BRWN	DRY	GOOD	123-1595	14	44	20	1010	Augered
	0+00	N	05	LOW	C	.60	SAND	BRWN	DRY	GOOD	123-1595	19	68	22	1250	Augered
	0+50S	N	01	LOW	C	1.10	SAND	BRWN	WET	GOOD	123-1595	16	297	30	1380	Augered
	1+00S	N	10	LOW	C	.70	SNCL	BRWN	DRY	GOOD	123-1595	15	65	26	1210	Augered
	1+50S	N	02	LOW	C	.70	CLAY	GRAY	WET	POOR	123-1595	17	71	34	1340	Augered
	2+00S	N	01	LOW	C	1.20	ORGN	BRWN	WET	POOR	123-1595	17	146	29	1270	Augered
	2+50S	N	01	LOW	C	1.30	CLAY	GRAY	WET	POOR	123-1595	16	370	32	1650	Augered
	3+00S	N	01	LOW	A	1.00	ORGN	BRWN	WET	POOR	123-1595	8	255	25	1130	Augered
	3+50S	N	10	LOW	C	1.00	GRAV	GRAY	WET	POOR	123-1595	14	172	25	1280	Augered
	4+00S	E	20	MEDM	B	.30	GRAV	BRWN	DAMP	GOOD	123-1595	13	46	17	1190	
	4+50S	E	08	LOW	B	.40	GRAV	BRWN	DAMP	GOOD	123-1595	11	23	13	1120	
	5+00S	E	20	LOW	C	.40	CLAY	BRWN	WET	POOR	123-1595	12	41	15	1440	
	5+50S	E	24	MEDM	B	.40	CLAY	BRWN	DAMP	MEDM	123-1595	12	344	44	1760	
	6+00S	E	28	MEDM	C	.50	SAND	BRWN	DAMP	MEDM	123-1595	18	156	25	1570	
	6+50S	E	26	MEDM	C	.30	GRVL	BRWN	DRY	GOOD	123-1595	17	34	13	1030	
	7+00S	E	28	MEDM	C	.70	CLAY	BRWN	DAMP	MEDM	123-1595	7	23	23	990	
	7+50S	E	32	MEDM	B	.50	CLAY	BRWN	WET	POOR	123-1595	7	35	17	830	
	8+00S	SE	26	MEDM	C	.40	SAND	BRWN	DAMP	MEDM	123-1595	11	101	10	850	
	8+50S	SE	29	MEDM	B	.70	CLAY	BRWN	WET	POOR	123-1595	11	164	24	910	
	9+00S	SE	36	MEDM	C	.40	CLAY	RED	DAMP	MEDM	123-1595	5	10	9	870	
	9+50S	SE	34	MEDM	C	.70	CLAY	BRWN	DAMP	MEDM	123-1595	9	37	7	870	
	10+00S	SE	12	MEDM	C	.60	CLAY	BRWN	WET	POOR	123-1595	2	8	3	940	

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Cu PPM	Ba PPM	
51+00W	10+50S	E	36	MEDM	B	.30	GRAV	BRWN	DRY	GOOD	123-1595	10	46	19	880	
	11+00S	E	32	MEDM	C	.40	SAND	BRWN	DRY	GOOD	123-1595	9	75	26	940	
	11+50S	E	32	MEDM	C	.50	SAND	BRWN	DRY	GOOD	123-1595	14	63	16	930	
	12+00S	E	38	MEDM	C	.40	GRAV	BRWN	DAMP	GOOD	123-1595	16	77	22	900	
	12+50S	E	36	MEDM	C	.50	SAND	BRWN	DRY	GOOD	123-1595	20	117	33	1010	
	13+00S	E	38	MEDM	B	.30	-	BRWN	DAMP	GOOD	123-1595	14	52	23	790	
	13+50S	E	-	-	-	-	-	-	-	-	-	-	-	-	-	No Sample
	14+00S	E	38	HIGH	B	.30	GRAV	BRWN	DAMP	GOOD	123-1595	11	60	14	940	
	14+50S	E	39	HIGH	B	.30	GRAV	BRWN	DAMP	GOOD	123-1595	20	199	53	1110	
	15+00S	E	42	HIGH	C	.40	GRAV	BRWN	DRY	GOOD	123-1595	10	32	18	860	
	15+50S	E	36	HIGH	B	.30	GRAV	BRWN	DRY	GOOD	123-1595	14	91	23	940	
	16+00S	E	38	HIGH	B	.30	GRAV	BRWN	DRY	GOOD	123-1595	18	190	37	1010	
	16+50S	E	36	HIGH	B	.30	GRAV	BRWN	DRY	GOOD	123-1595	18	146	39	940	
	17+00S	E	38	HIGH	C	.40	SAND	BRWN	DAMP	GOOD	123-1595	5	22	11	830	
	17+50S	E	40	HIGH	C	.40	GRAV	BRWN	DAMP	MEDM	123-1595	9	59	10	900	
	18+00S	E	41	HIGH	C	.30	GRAV	BRWN	DAMP	GOOD	123-1595	16	200	56	1140	
	18+50S	E	40	HIGH	C	.40	GRAV	BRWN	DRY	GOOD	123-1595	9	39	17	930	
	19+00S	E	40	HIGH	B	.40	GRAV	BRWN	DRY	GOOD	123-1595	19	182	50	1050	
	19+50S	E	38	HIGH	C	.30	GRAV	BRWN	DRY	GOOD	123-1595	5	18	10	900	
	20+00S	E	44	HIGH	C	.30	GRAV	BRWN	DAMP	GOOD	123-1595	13	67	21	1000	

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Cu PPM	Ba PPM	
53+00W	4+00N	N	10	LOW	H	.50	SAND	GRAY	WET	POOR	123-1595	10	59	24	1120	Augered
	3+50N	N	01	LOW	H	.70	SAND	GRAY	DRY	GOOD	123-1595	13	327	27	1660	Augered
	3+00N	N	05	LOW	H	.70	SAND	BLCK	WET	POOR	123-1595	14	400	41	1360	Augered
	2+50N	N	10	LOW	H	.70	SAND	GRAY	WET	POOR	123-1595	11	158	24	1510	Augered
	2+00N	N	10	LOW	H	.80	GRAV	GRAY	DRY	GOOD	123-1595	13	214	32	1510	Augered
	1+50N	N	10	LOW	H	.80	GRAV	GRAY	DRY	GOOD	123-1595	17	120	31	1600	Augered
	1+00N	N	05	LOW	H	.60	GRAV	GRAY	DRY	GOOD	123-1595	14	81	23	1100	Augered
	0+50N	N	05	LOW	H	.50	GRAV	GRAY	DRY	GOOD	123-1595	19	112	24	1120	Augered
	0+00	N	05	LOW	H	.75	CLAY	GRAY	DRY	GOOD	123-1595	11	1320	22	1400	Augered
	0+50S	N	05	LOW	H	.80	CLAY	GRAY	DAMP	POOR	123-1595	19	112	32	1400	Augered
	1+00S	N	05	LOW	H	.70	CLAY	GRAY	DAMP	POOR	123-1595	17	495	55	2040	Augered
	1+50S	N	10	MEDM	H	.80	CLAY	GRAY	DRY	GOOD	123-1595	11	170	35	2010	Augered
	2+00SA	N	15	MEDM	H	.60	SILT	BLCK	DRY	GOOD	123-1595	10	505	63	1380	Augered
	2+00S	N	15	MEDM	C	.25	CLAY	GRAY	DAMP	GOOD	123-1595	15	925	67	1670	
	2+50S	N	10	LOW	C	.50	CLAY	GRAY	DAMP	GOOD	123-1595	10	565	31	1330	
	3+00S	N	10	LOW	C	.30	CLAY	GRAY	DAMP	GOOD	123-1595	16	470	36	1710	
	3+50S	N	10	LOW	C	.25	CLAY	GRAY	DAMP	GOOD	123-1595	16	815	152	2730	
	4+00S	N	10	LOW	C	.35	GRAV	BRWN	DAMP	GOOD	123-1595	44	169	37	1410	
	4+50S	N	05	LOW	C	.40	GRAV	BRWN	DAMP	GOOD	123-1595	7	20	11	1100	
	5+00S	NE	10	LOW	C	.25	GRAV	BRWN	DAMP	GOOD	123-1595	23	83	39	1190	
	5+50S	NE	10	MEDM	C	.20	GRAV	GRAY	DAMP	GOOD	123-1595	4	25	9	1030	
	6+00S	NE	10	MEDM	C	.35	GRAV	GRAY	DAMP	GOOD	123-1595	28	1020	126	2060	
	6+50S	E	15	MEDM	C	.30	GRAV	BRWN	DAMP	GOOD	123-1595	10	63	12	1410	
	7+00S	E	30	MEDM	C	.40	GRAV	BRWN	DAMP	GOOD	123-1595	10	25	16	930	
	7+50S	E	30	MEDM	C	.20	GRAV	GRAY	DAMP	GOOD	123-1595	13	16	8	1140	
	8+00S	E	30	MEDM	C	.30	GRAV	BRWN	DAMP	GOOD	123-1595	28	78	29	1240	
	8+50S	E	40	MEDM	A	.35	GRAV	BRWN	DAMP	GOOD	123-1595	10	16	8	910	Some Organics

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Cu PPM	Ba PPM
53+00W	9+00S	E	50	MEDM	C	.20	SILT	BRWN	DRY	GOOD	123-1595	30	125	45	850
	9+50S	E	45	MEDM	C	.20	SILT	BRWN	DRY	GOOD	123-1595	15	48	17	1100
	10+00S	E	45	MEDM	C	.20	CLAY	GRAY	DAMP	GOOD	123-1595	10	30	13	960
	10+50S	E	40	MEDM	C	.30	GRAV	GRAY	DAMP	GOOD	123-1595	5	18	8	950
	11+00S	E	45	MEDM	C	.20	SILT	BRWN	DRY	GOOD	123-1595	7	39	13	900
	11+50S	E	45	MEDM	C	.20	SILT	BRWN	DRY	GOOD	123-1595	14	124	34	1130
	12+00S	E	45	MEDM	C	.20	SILT	BRWN	DRY	GOOD	123-1595	14	83	22	1120

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Cu PPM	Ba PPM	
55+00W	6+00N	N	05	LOW	H	.60	SAND	BRWN	WET	POOR	123-1595	30	337	40	3060	Augered
	5+50N	N	05	LOW	H	1.00	SAND	BRWN	DRY	GOOD	123-1595	27	218	35	1390	Augered
	5+00N	N	05	LOW	H	.30	SAND	GRAY	DRY	GOOD	123-1595	38	505	35	2120	Augered
	4+50N	N	05	LOW	H	.80	SAND	GRAY	DAMP	POOR	123-1595	22	189	25	1460	Augered
	4+00N	N	10	LOW	H	.80	SAND	GRAY	DAMP	POOR	123-1595	26	206	28	1540	Augered
	3+50N	N	10	MEDM	H	.70	SAND	GRAY	DAMP	POOR	123-1595	38	276	44	2520	Augered
	3+00N	N	05	MEDM	H	1.20	SAND	GRAY	WET	POOR	123-1595	16	220	28	1810	Augered
	2+50N	N	10	MEDM	H	.90	SAND	GRAY	DRY	GOOD	123-1595	20	297	52	1950	Augered
	2+00N	N	05	LOW	H	.60	SAND	GRAY	DRY	GOOD	123-1595	20	176	38	1340	Augered
	1+50N	N	05	LOW	H	.70	SAND	GRAY	WET	POOR	123-1595	16	140	29	1300	Augered
	1+00N	N	05	LOW	H	.80	SAND	GRAY	WET	POOR	123-1595	21	495	27	1330	Augered
	0+50N	N	05	LOW	H	.80	CLAY	GRAY	DAMP	POOR	123-1595	29	104	35	1570	Augered
	0+00	N	01	LOW	H	.90	CLAY	GRAY	WET	POOR	123-1595	17	445	41	2270	Augered
	0+50S	N	05	LOW	H	.90	CLAY	GRAY	WET	POOR	123-1595	15	530	45	2400	Augered
	1+00S	N	05	LOW	H	.70	CLAY	GRAY	WET	POOR	123-1595	16	445	44	1970	Augered
	1+50S	N	15	MEDM	H	.40	SAND	BLCK	WET	POOR	123-1595	16	480	60	1790	Augered
	2+00S	N	10	LOW	C	.30	CLAY	GRAY	DAMP	GOOD	123-1595	16	1030	99	1830	
	2+50S	N	15	MEDM	C	.45	SILT	BRWN	DAMP	GOOD	123-1595	12	1015	166	1270	
	3+00S	N	05	LOW	C	.30	CLAY	GRAY	DAMP	GOOD	123-1595	12	183	30	1850	
	3+50S	N	05	LOW	C	.20	CLAY	GRAY	DAMP	GOOD	123-1595	19	410	35	1900	
	4+00S	N	05	LOW	C	.35	CLAY	BRWN	DAMP	GOOD	123-1595	4	16	5	920	
	4+50S	N	05	LOW	C	.25	SILT	BRWN	DAMP	GOOD	123-1595	18	920	46	1070	
	5+00S	N	05	LOW	C	.50	SILT	BRWN	DAMP	GOOD	123-1595	9	600	133	700	Outcrop Pres.
	5+50S	N	30	MEDM	C	.05	GRAV	BRWN	DRY	GOOD	123-1595	42	359	94	1540	" " "
	6+00S	N	30	MEDM	C	.10	GRAV	BRWN	DAMP	GOOD	123-1595	17	233	28	980	" "
	6+50S	N	30	MEDM	C	.25	GRAV	BRWN	DAMP	GOOD	123-1595	17	60	37	1000	" "
	7+00S	N	30	MEDM	C	.30	GRAV	BRWN	DAMP	GOOD	123-1595	22	39	13	1050	" "

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Cu PPM	Ba PPM	
55+00W	7+50N	N	35	MEDM	C	.20	SILT	BRWN	DAMP	GOOD	123-1595	7	11	9	810	Talus
	8+00N	N	35	MEDM	C	.25	GRAV	BRWN	DAMP	GOOD	123-1595	5	10	10	820	Talus
	8+50N	N	35	MEDM	A	.15	ORGN	BRWN	DAMP	GOOD	123-1595	17	37	30	760	Talus
	9+00N	N	40	MEDM	C	.20	ORGN	BRWN	DRY	GOOD	123-1595	6	15	14	810	Outcrop Pres.
	9+50N	N	50	HIGH	C	.25	SILT	BRWN	DAMP	GOOD	123-1595	4	15	10	850	Outcrop Pres.
	10+00N	N	35	HIGH	C	.25	GRAV	BRWN	DAMP	GOOD	123-1595	29	35	20	740	Outcrop Pres.

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Cu PPM	Ba PPM	
57+00W	6+00N	N	08	LOW	C	.50	GRAV	BRWN	DAMP	GOOD	123-1595	39	309	67	1840	Augered
	5+50N	N	09	LOW	C	.60	CLAY	BRWN	DAMP	GOOD	123-1595	29	155	36	2700	Augered
	5+00N	N	15	LOW	C	.30	SILT	GRAY	DAMP	MEDM	123-1595	16	665	56	2240	Augered
	4+50N	N	14	LOW	C	.30	CLAY	GRAY	DAMP	POOR	123-1595	16	720	66	2520	Permafrost
	4+00N	N	16	LOW	C	.40	SILT	GRAY	DAMP	POOR	123-1595	15	690	55	2440	Augered
	3+50N	N	16	LOW	C	.50	GRAV	BRWN	DAMP	MEDM	123-1595	14	580	49	2570	Augered
	3+00N	N	16	LOW	C	.30	ORGN	BRWN	DAMP	MEDM	123-1595	13	580	51	2020	Augered
	2+50N	N	12	LOW	C	.20	GRAV	BRWN	WET	POOR	123-1595	14	575	53	2090	Augered
	2+00N	N	10	LOW	B	.30	SILT	BLCK	WET	POOR	123-1595	14	670	38	2150	Augered
	1+50N	N	08	LOW	B	.80	SILT	BLCK	WET	POOR	123-1595	13	730	55	2390	Augered
	1+00N	N	20	LOW	C	.30	SAND	BRWN	WET	POOR	123-1595	14	245	50	1560	Permafrost, Augered
	0+50N	N	15	LOW	C	.80	CLAY	GRAY	WET	POOR	123-1595	13	300	50	1600	Augered
	0+00	N	06	LOW	C	.50	CLAY	GRAY	DAMP	MEDM	123-1595	20	440	56	1930	Augered
	0+50S	N	10	LOW	C	.50	GRAV	GRAY	DAMP	MEDM	123-1595	13	420	47	1930	Augered
	1+00S	N	10	LOW	C	.40	CLAY	GRAY	WET	POOR	123-1595	16	750	83	2510	Augered
	1+50S	N	10	LOW	C	.30	GRAV	GRAY	DAMP	POOR	123-1595	15	610	61	2120	Augered
	2+00S	N	14	LOW	C	.30	GRAV	BRWN	DAMP	GOOD	123-1595	15	600	90	2020	Augered
	2+50S	N	35	MEDM	C	.30	GRAV	GRAY	DAMP	GOOD	123-1595	14	635	46	2250	
	3+00S	N	10	MEDM	C	.20	SILT	GRAY	DAMP	GOOD	123-1595	15	295	31	1760	
	3+50S	N	10	LOW	C	.25	SILT	GRAY	DAMP	GOOD	123-1595	12	277	68	1600	
	4+00S	N	05	LOW	C	.40	SILT	GRAY	DAMP	GOOD	123-1595	16	340	176	980	
	4+50S	N	05	MEDM	C	.20	GRAV	BRWN	DAMP	GOOD	123-1595	7	30	21	1060	
	5+00S	N	25	MEDM	C	.30	SILT	BRWN	DAMP	GOOD	123-1595	3	7	22	900	
	5+50S	N	15	LOW	C	.60	SILT	BRWN	DAMP	GOOD	123-1595	17	29	214	540	
	6+00S	N	30	MEDM	C	.25	GRAV	GRAY	DAMP	GOOD	123-1595	4	12	11	840	
	6+50S	N	35	MEDM	C	.40	GRAV	GRAY	DAMP	GOOD	123-1595	37	71	71	1110	Talus
	7+00S	N	40	MEDM	C	.35	GRAV	BRWN	DAMP	GOOD	123-1595	12	36	20	9700	Talus

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Cu PPM	Ba PPM	
57+00W	7+50N	N	45	HIGH	C	.30	GRAV	BRWN	DAMP	GOOD	123-1595	76	34	28	2030	Outcrop Pres.
	8+00N	N	45	HIGH	C	.30	GRAV	BRWN	DAMP	GOOD	123-1595	36	25	22	1240	Outcrop Pres.
	8+50N	N	50	HIGH	C	.20	GRAV	BRWN	DAMP	GOOD	123-1595	59	82	47	1120	Outcrop Pres.
	9+00N	N	50	HIGH	C	.30	GRAV	BRWN	DAMP	GOOD	123-1595	16	62	28	980	Talus
	9+50N	N	60	HIGH	C	.30	GRAV	GRAY	DAMP	GOOD	123-1595	13	83	25	920	Talus
	10+00N	N	60	HIGH	C	.30	GRAV	GRAY	DAMP	GOOD	123-1595	22	273	67	820	Talus

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Cu PPM	Ba PPM	
59+00W	4+00N	N	12	LOW	C	.80	GRAV	BLCK	DAMP	MEDM	123-2305	14	84	24	1190	Augered
	3+50N	N	16	LOW	C	.70	GRAV	BRWN	DAMP	POOR	123-2305	26	308	70	3100	Augered
	3+00N	N	16	LOW	C	.60	GRAV	BRWN	DAMP	MEDM	123-2305	17	249	55	2140	Augered
	2+50N	N	10	LOW	C	.70	GRAV	BRWN	WET	POOR	123-2305	17	297	64	2540	Augered
	2+00N	N	04	LOW	C	.30	CLAY	GRAY	DAMP	MEDM	123-2305	17	405	77	3030	Augered
	1+50N	N	10	LOW	C	.30	CLSN	BRWN	DAMP	MEDM	123-2305	17	281	36	1530	Augered
	1+00N	N	14	LOW	C	.70	SAND	BRWN	DAMP	MEDM	123-2305	14	264	22	1380	Augered
	0+50N	N	18	LOW	C	.30	GRAV	BRWN	WET	MEDM	123-2305	14	357	34	1550	Augered
	0+00	N	06	LOW	C	.30	CLAY	GRAY	WET	POOR	123-2305	9	131	43	1280	Augered
	0+50S	N	08	LOW	C	.50	SILT	GRAY	WET	POOR	123-2305	14	143	34	1490	Augered
	1+00S	N	10	LOW	C	.40	GRAV	BRWN	WET	POOR	123-2305	50	358	55	3010	Augered
	1+50S	N	10	MEDM	C	.25	GRAV	GRAY	DAMP	GOOD	123-1595	16	201	35	4790	
	2+00S	N	05	MEDM	C	.40	SAND	GRAY	DAMP	GOOD	123-1595	6	101	19	6530	
	2+50S	N	05	LOW	C	.30	SILT	GRAY	DAMP	POOR	123-1595	7	1820	150	1280	
	3+00S	N	15	MEDM	C	.45	SILT	GRAY	DAMP	GOOD	123-1595	12	1270	490	1260	
	3+50S	N	20	MEDM	C	.30	SILT	BRWN	DAMP	GOOD	123-1595	10	550	180	2160	
	4+00S	N	20	MEDM	C	.45	SILT	BRWN	DAMP	GOOD	123-1595	9	54	123	810	
	4+50S	N	30	MEDM	C	.40	SAND	BRWN	DAMP	GOOD	123-1595	14	144	26	1100	
	5+00S	N	40	MEDM	C	.50	SAND	GRAY	DAMP	GOOD	123-1595	20	73	72	1170	
	5+50S	N	50	HIGH	C	.30	SAND	BRWN	DAMP	GOOD	123-1595	19	51	22	990	
	6+00S	N	35	HIGH	C	.35	SAND	BRWN	DAMP	GOOD	123-1595	13	67	40	950	
	6+50S	N	35	HIGH	C	.30	SILT	GRAY	DAMP	GOOD	123-1595	18	119	39	1170	
	7+00S	N	30	MEDM	C	.35	SILT	BRWN	DAMP	GOOD	123-1595	27	69	30	1160	
	7+50S	N	25	MEDM	C	.40	GRAV	BRWN	DAMP	GOOD	123-1595	5	14	11	940	
	8+00S	N	20	MEDM	C	.30	GRAV	BLCK	DAMP	GOOD	123-1595	66	19	13	1480	

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Cu PPM	Ba PPM	
63+00W	2+00N	N	14	LOW	C	.80	GRVL	BRWN	DAMP	GOOD	123-2305	31	361	75	9690	Augered
	1+50N	N	16	LOW	B	.30	ORGN	BRWN	DAMP	MEDM	123-2305	7	83	29	810	Augered
	1+00N	N	12	LOW	B	.40	CLAY	BRWN	DAMP	POOR	123-2305	13	336	67	1420	Permafrost, Augered
	0+50N	N	09	LOW	C	.30	CLAY	BRWN	DAMP	POOR	123-2305	14	420	57	1550	Permafrost, Augered
	0+00	N	09	LOW	C	.80	SAND	BRWN	DAMP	POOR	123-2305	14	720	39	1750	Augered
	0+50S	N	10	LOW	C	.40	CLAY	GRAY	WET	POOR	123-2305	10	307	54	1510	Permafrost, Augered
	1+00S	N	08	LOW	C	.60	GRVL	GRAY	DRY	GOOD	123-2305	23	780	111	2770	Augered
	1+50S	N	10	LOW	C	.40	SAND	BRWN	WET	POOR	123-2305	13	1840	32	2140	Augered
	2+00S	N	10	LOW	C	.50	CLAY	GRAY	WET	POOR	123-2305	10	1750	37	1430	Augered
	2+50S	N	10	MEDM	C	.30	SILT	GRAY	DAMP	GOOD	123-1595	7	217	23	1340	Some Organics Slumping
	3+00S	N	35	MEDM	C	.30	SILT	GRAY	DAMP	GOOD	123-1595	15	410	33	2380	Slumping
	3+50S	N	30	MEDM	C	.40	SILT	GRAY	DAMP	GOOD	123-1595	11	361	40	1700	Slumping
	4+00S	N	45	HIGH	C	.50	SILT	GRAY	DAMP	GOOD	123-1595	36	525	59	2150	Talus, Slumping
	4+50S	N	50	HIGH	C	.30	GRAV	GRAY	DAMP	GOOD	123-1595	20	905	65	1800	Talus, Slumping
	5+00S	N	45	MEDM	C	.20	GRAV	GRAY	DAMP	GOOD	123-1595	25	41	14	950	
	5+50S	N	05	LOW	C	.20	GRAV	GRAY	DAMP	GOOD	123-1595	31	94	16	1110	
	6+00S	N	05	MEDM	C	.20	SAND	BRWN	DAMP	GOOD	123-1595	37	65	22	1010	
	6+50S	NW	-05	MEDM	C	.40	SAND	BRWN	DAMP	GOOD	123-1595	22	70	23	1110	Slumping
	7+00S	NW	-10	MEDM	C	.30	SAND	BRWN	DAMP	GOOD	123-1595	29	630	102	1550	Slumping
	7+50S	NW	-10	MEDM	C	.20	SAND	BRWN	DAMP	GOOD	123-1595	29	106	38	1270	Slumping
	8+00S	NW	-05	MEDM	C	.20	SAND	BRWN	DAMP	GOOD	123-1595	27	83	21	1150	Slumping

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Cu PPM	Ba PPM	
67+00W	3+00N	N	02	LOW	C	.60	SILT	BRWN	WET	POOR	123-2305	12	221	52	1760	Augered
	2+50N	N	02	LOW	C	.60	SILT	GRAY	WET	POOR	123-2305	17	348	31	2190	Augered
	2+00N	N	05	LOW	A	.20	CLAY	GRAY	WET	POOR	123-2305	13	253	30	1560	Permafrost, Augered
	1+50N	N	05	LOW	C	.45	SILT	GRAY	DAMP	POOR	123-2305	15	400	22	1750	Augered
	1+00N	N	10	MEDM	C	.60	SIOR	GRAY	DAMP	POOR	123-2305	8	100	12	1200	Augered
	0+50N	N	05	MEDM	C	.35	GRAV	GRAY	DAMP	GOOD	123-2305	13	134	26	1490	Augered
	0+00	N	05	MEDM	C	.60	SAND	GRAY	DAMP	GOOD	123-2305	17	276	32	1780	Augered
	0+50S	N	05	LOW	C	.50	SAND	BRWN	DAMP	POOR	123-2305	21	835	41	2240	Augered
	1+00S	N	05	LOW	C	.90	SILT	GRAY	WET	POOR	123-2305	15	300	47	1670	Augered
	1+50S	N	05	LOW	C	.40	SILT	GRAY	DAMP	GOOD	123-2305	16	294	53	1780	Augered
	2+00S	N	10	MEDM	C	.50	GRAV	GRAY	DAMP	GOOD	123-2305	13	253	45	1550	Augered
	2+50S	N	24	LOW	B	.80	GRAV	GRAY	WET	POOR	123-1595	16	242	44	1620	
	3+00S	N	25	LOW	C	.50	GRAV	GRAY	WET	POOR	123-1595	16	239	49	1930	
	3+50S	N	26	LOW	B	.50	CLAY	GRAY	WET	POOR	123-1595	15	218	45	1720	
	4+00S	N	26	LOW	C	.50	GRAV	GRAY	DAMP	MEDM	123-1595	17	230	52	1700	
	4+50S	W	12	LOW	C	.40	GRAV	BRWN	DAMP	MEDM	123-1595	19	109	27	1050	
	5+00S	W	10	LOW	C	.30	GRAV	BRWN	WET	POOR	123-1595	24	75	29	1060	
	5+50S	E	21	LOW	B	.40	GRAV	GRAY	WET	MEDM	123-1595	16	425	49	1560	
	6+00S	E	28	LOW	C	.50	GRAV	BRWN	DAMP	MEDM	123-1595	22	81	36	1060	
	6+50S	E	24	MEDM	C	.30	GRAV	BRWN	DAMP	MEDM	123-1595	18	29	22	1070	
	7+00S	E	22	MEDM	C	.60	GRAV	BRWN	DAMP	GOOD	123-1595	28	33	18	1190	
	7+50S	NE	34	MEDM	C	.50	GRAV	BRWN	DRY	GOOD	123-1595	16	59	29	900	
	8+00S	NE	42	HIGH	C	.70	GRAV	BLCK	DAMP	GOOD	123-1595	46	54	35	1390	
	8+50S	E	48	HIGH	C	.50	GRAV	GRAY	DAMP	GOOD	123-1595	83	60	34	1360	
	9+00S	E	49	HIGH	B	.30	GRAV	BRWN	DAMP	MEDM	123-1595	16	67	18	950	
	9+50S	E	50	HIGH	B	.30	GRAV	BRWN	DAMP	GOOD	123-1595	27	115	34	1010	
	10+00S	E	40	HIGH	B	.40	GRAV	BRWN	DAMP	GOOD	123-1595	22	54	21	1000	

Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Cu PPM	Ba PPM	
71+00W	3+00N	N	15	LOW	C	.25	GRAV	BLCK	DRY	GOOD	123-2305	11	314	28	1380	Augered
	2+50N	N	10	LOW	C	.60	CLAY	BRWN	DAMP	GOOD	123-2305	15	259	34	1330	Augered
	2+00N	N	05	LOW	C	.40	SILT	BLCK	WET	GOOD	123-2305	14	279	40	1370	Augered
	1+50N	N	05	LOW	C	.30	SILT	GRAY	DAMP	GOOD	123-2305	15	280	28	1360	Augered
	1+00N	N	05	LOW	C	.30	SILT	GRAY	DAMP	GOOD	123-2305	12	297	28	1270	Augered
	0+50N	N	05	LOW	C	.45	SILT	BRWN	WET	POOR	123-2305	17	270	36	1250	Augered
	0+00	N	05	LOW	C	.70	SILT	BRWN	WET	POOR	123-2305	19	379	47	1150	Organics Pres. Augered
	0+50S	N	10	LOW	A	.15	SILT	BRWN	WET	GOOD	123-2305	20	391	56	990	Organics Pres. Augered
	1+00S	N	10	LOW	C	.40	GRAV	BRWN	DAMP	GOOD	123-2305	20	186	38	1150	Augered
	1+50S	N	15	LOW	C	.35	SILT	BRWN	DRY	GOOD	123-2305	18	99	29	980	Augered
	2+00S	N	14	LOW	C	.40	SAND	BRWN	DAMP	MEDM	123-1595	25	86	29	1010	
	2+50S	N	12	LOW	C	.30	GRAV	BRWN	DAMP	GOOD	123-1595	10	49	18	970	
	3+00S	N	08	LOW	B	.20	SAND	BRWN	DAMP	GOOD	123-1595	22	685	83	1090	
	3+50S	N	12	LOW	B	.20	GRAV	GRAY	DAMP	GOOD	123-1595	24	226	47	1130	
	4+00S	N	17	LOW	C	.70	SAND	BRWN	DAMP	MEDM	123-1595	10	71	23	930	
	4+50S	N	17	LOW	C	.40	GRAV	GRAY	DAMP	MEDM	123-1595	12	57	22	990	
	5+00S	N	26	LOW	C	.40	GRAV	GRAY	DAMP	MEDM	123-1595	11	25	7	1100	
	5+50S	N	19	MEDM	C	.40	SAND	GRAY	DAMP	MEDM	123-1595	11	15	6	1230	
	6+00S	N	18	MEDM	C	.30	GRAV	GRAY	DAMP	MEDM	123-1595	12	27	9	1110	
	6+50S	N	18	MEDM	C	.30	SAND	GRAY	DAMP	MEDM	123-1595	12	28	10	1070	
	7+00S	N	22	MEDM	B	.30	SAND	BRWN	DAMP	MEDM	123-1595	19	212	31	1120	
	7+50S	NE	28	MEDM	B	.30	SAND	BRWN	DAMP	GOOD	123-1595	13	95	42	890	Talus
	8+00S	E	56	MEDM	B	.20	ORGN	BRWN	DAMP	GOOD	123-1595	11	41	18	620	Talus
	8+50S	E	58	MEDM	C	.40	GRAV	BRWN	DAMP	GOOD	123-1595	34	96	29	1020	
	9+00S	E	62	HIGH	B	.50	GRAV	BRWN	DAMP	GOOD	123-1595	36	119	32	1120	Talus
	9+50S	E	58	HIGH	B	.20	GRAV	BRWN	DAMP	GOOD	123-1595	65	245	73	1130	Talus
	10+00S	E	54	HIGH	B	.20	GRAV	BRWN	DAMP	GOOD	123-1595	34	166	54	1050	Talus

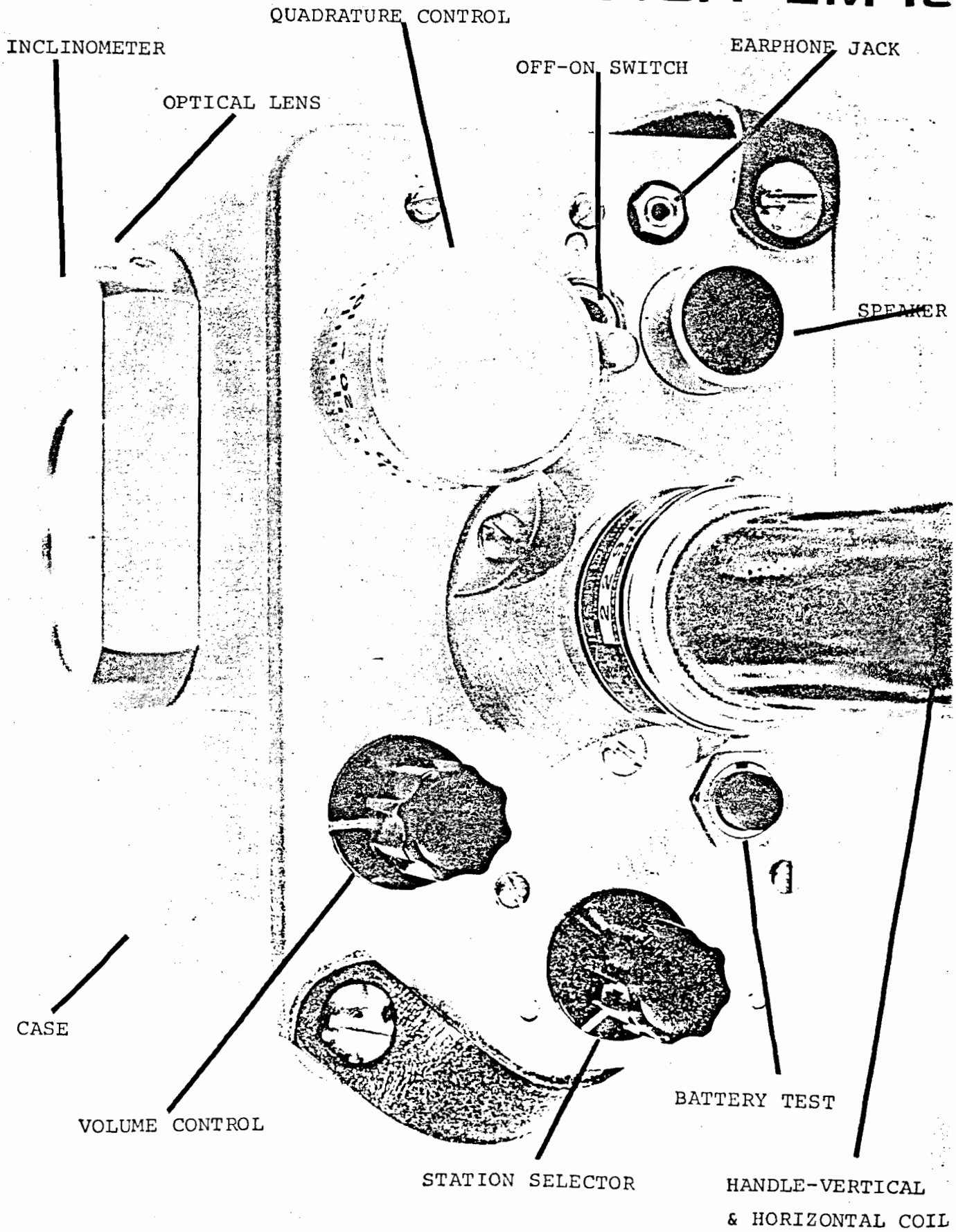
Line Number	Station Number	Slope Dir.	Slope Degree	Site Relief	Horizon Sampled	Sample Depth	Sample Texture	Sample Colour	Moisture Content	Site Drainage	Report Number	Pb PPM	Zn PPM	Cu PPM	Ba PPM	
75+00W	4+00N	N	10	LOW	C	.40	SAND	GRAY	WET	POOR	123-2305	17	218	23	1460	Augered
	3+50N	N	10	LOW	C	.35	SAND	GRAY	DAMP	POOR	123-2305	19	262	32	1730	Augered
	3+00N	N	10	LOW	C	.60	SAND	GRAY	WET	POOR	123-2305	17	250	30	1630	Augered
	2+50N	N	05	LOW	C	.40	SILT	GRAY	DAMP	POOR	123-2305	14	222	26	1560	Organics Pres. Augered
	2+00N	N	05	LOW	C	.65	SILT	GRAY	DAMP	POOR	123-2305	13	192	33	1530	Augered
	1+50N	N	05	LOW	C	.70	SILT	GRAY	WET	POOR	123-2305	15	223	29	1650	Augered
	1+00N	N	05	LOW	C	.40	SICL	GRAY	DAMP	POOR	123-2305	14	212	25	1780	Augered
	0+50N	N	03	LOW	C	.60	SAND	GRAY	DAMP	POOR	123-2305	14	227	28	1660	Augered
	0+00	N	06	LOW	C	.70	SILT	GRAY	WET	POOR	123-2305	14	215	35	1790	Augered
	0+50S	N	10	MEDM	C	.60	CLAY	GRAY	WET	POOR	123-2305	11	167	22	1450	Augered
	1+00S	N	18	MEDM	C	.50	SILT	GRAY	DAMP	POOR	123-2305	14	235	32	1640	Augered
	1+50S	N	22	MEDM	C	.40	SILT	GRAY	DAMP	GOOD	123-2305	12	203	24	1450	Augered
	2+00S	N	24	MEDM	B	.40	CLAY	GRAY	WET	POOR	123-1595	21	222	34	1480	
	2+50S	N	20	MEDM	B	.50	CLAY	GRAY	WET	POOR	123-1595	20	213	34	1520	
	3+00S	N	16	MEDM	B	.40	CLAY	GRAY	WET	POOR	123-1595	18	122	23	1100	
	3+50S	N	20	MEDM	B	.50	CLAY	GRAY	WET	POOR	123-1595	10	64	11	910	
	4+00S	N	18	MEDM	C	.40	CLAY	GRAY	DAMP	MEDM	123-1595	27	138	33	1120	
	4+50S	N	32	MEDM	C	.50	CLAY	GRAY	DAMP	MEDM	123-1595	12	103	22	990	
	5+00S	N	34	MEDM	C	.50	CLAY	GRAY	DAMP	MEDM	123-1595	28	815	72	1550	
	5+50S	N	36	MEDM	B	.30	CLAY	GRAY	DAMP	MEDM	123-1595	21	455	36	1210	
	6+00S	N	34	HIGH	C	.40	SAND	BRWN	DAMP	GOOD	123-1595	105	965	106	1740	
	6+50S	N	38	HIGH	C	.30	GRAV	BRWN	DAMP	GOOD	123-1595	10	40	18	980	
	7+00S	N	18	HIGH	C	.30	GRAV	BRWN	DRY	GOOD	123-1595	9	39	13	1050	
	7+50S	N	12	HIGH	C	.40	GRAV	BRWN	DRY	GOOD	123-1595	25	83	18	1450	
	8+00S	S	14	HIGH	C	.40	GRAV	BRWN	DAMP	GOOD	123-1595	18	64	20	1270	
	8+50S	S	34	HIGH	C	.40	GRAV	BRWN	DAMP	GOOD	123-1595	6	20	11	920	

A P P E N D I X "B"

VLF AND UNIMAG PORTABLE PROTON MAGNETOMETER

FIELD PROCEDURES AND RAW DATA

FIG. 1 EM 16


QUADRATURE CONTROL
INCLINOMETER
EARPHONE JACK
OFF-ON SWITCH
OPTICAL LENS
SPEAKER
CASE
VOLUME CONTROL
BATTERY TEST
STATION SELECTOR
HANDLE-VERTICAL
& HORIZONTAL COIL

FIELD PROCEDURE

Orientation & Taking a Reading

The direction of the survey lines should be selected approximately along the lines of the primary magnetic field, at right angles to the direction to the station being used. Before starting the survey, the instrument can be used to orient oneself in that respect. By turning the instrument sideways, the signal is minimum when the instrument is pointing towards the station, thus indicating that the magnetic field is at right angles to the receiving coil inside the handle.(Fig.11).

To take a reading, first orient the reference coil (in the lower end of the handle) along the magnetic lines.(Fig.12) Swing the instrument back and forth for minimum sound intensity in the speaker. Use the volume control to set the sound level for comfortable listening. Then use your left hand to adjust the quadrature component dial on the front left corner of the instrument to further minimize the sound. After finding the minimum signal strength on both adjustments, read the inclinometer by looking into the small lens. Also, mark down the quadrature reading.

While travelling to the next location you can, if you wish, keep the instrument in operating position. If fast changes in the readings occur, you might take extra stations to pinpoint accurately the details of anomaly.

The dials inside the inclinometer are calibrated in positive and negative percentages. If the instrument is facing 180° from the original direction of travel, the polarities of the readings will be reversed. Therefore, in the same area take the readings always facing in the same direction even when travelling in opposite way along the lines.

The lower end of the handle, will as a rule, point towards the conductor. (Figs.13 & 14) The instrument is so calibrated that when approaching the conductor, the angles are positive in the in-phase component. Turn always in the same direction for readings and mark all this on your notes, maps, etc.

THE INCLINOMETER DIALS

The right-hand scale is the in-phase percentage(ie. Hs/Hp as a percentage). This percentage is in fact the tangent of the dip angle. To compute the dip angle simply take the arc-tangent of the percentage reading divided by 100. See the conversion graph on the following page.

The left-hand scale is the secant of the slope of the ground surface. You can use it to "calculate" your distance to the next station along the slope of the terrain.

(1) Open both eyes.

(2) Aim the hairline along the slope to the next station to about your eye level height above ground.

(3) Read on the left scale directly the distance necessary to measure along the slope to advance 100 (ft) horizontally.

We feel that this will make your reconnaissance work easier. The outside scale on the inclinometer is calibrated in degrees just in case you have use for it.

PLOTTING THE RESULTS

For easy interpretation of the results, it is good practice to plot the actual curves directly on the survey line map using suitable scales for the percentage readings. (Fig.15) The horizontal scale should be the same as your other maps on the area for convenience.

A more convenient form of this data is easily achieved by transforming the zero-crossings into peaks by means of a simple numerical filtering technique. This technique is described by D.C. Fraser in his paper "Contouring of VLF-EM Data", Geophysics, Vol. 34, No. 6. (December 1969)pp958-967. A reprint of this paper is included in this manual for the convenience of the user.

This simple data manipulation procedure which can be implemented in the field produces VLF-EM data which can be contoured and as such provides a significant advantage in the evaluation of this data.

Contouring VLF-EM Data

List the dip angle data in tabular form, as follows:

a) list in the direction of north (top of paper) to south, or from west to east;
b) designate south or east dips as negative; and
c) perform calculations as shown in Table 1.

Thus, the filtered output or contourable quantity simply consists of the sum of the observations at two consecutive data stations subtracted from the sum at the next two consecutive data stations. The theoretical basis for this procedure will be described below.

The right-hand column (filtered data) is suitable for contouring. Normally, negative values are not contoured since, being caused by dip angle flanks, they do not aid interpretation but only confuse the picture. The positive values generally are contoured at 10-unit intervals, and the zero contour is shown only when it brackets an anomaly. In quiet areas, 5-unit contours may be meaningful.

Table 1. Example of calculations

Location	Measured dips	Apply sign and form the moving sum of pairs of entries		Take first differences of alternate entries	
3+00S	6S	-6			
			(-6)+(-7) = -13		
3+50S	7S	-7			
			(-7)+(-8) = -15	(-23)-(-13) =	-10
4+00S	8S	-8			
			-23	(-39)-(-15) =	-24
4+50S	15S	-15			
			-39		+ 7
5+00S	24S	-24			
			-16		+57
5+50S	8N	+8			
			+18		+38
6+00S	10N	+10			
			+22		+ 8
6+50S	12N	+12			
			+26		+ 6
7+00S	14N	+14			
			+28	(+34)-(+26) =	+ 8
7+50S	14N	+14			
			(14)+(20) = +34		
8+00S	20N	+20			

Note: Above example taken from "EM-16 Operating Manual"; Section on "Contouring of VLF-EM Data", by D.C. Fraser.

Field Operation and Applications

The E.M.-16 and other VLF ground E.M. instruments share the same advantages in field operations.

1. They are light (2 - 3 lbs.) and exceedingly portable.

2. They need no transmitter, further reducing complexity, cost and operating personnel (the instrument is normally operated by one man).

3. Readings are extremely rapid, as signals are strong and nulls clear and un-wavering within the recommended operating range of transmitters.

4. Power consumption is negligible (one set of "penlite" batteries generally lasts well over a month).

5. The operation is so simple that unskilled personnel can be trained as operators in a matter of hours.

From a geological point of view the following advantages are pertinent.

1. The method is capable of a large depth of exploration in non-conductive rocks

2. The relatively high frequency provides high response factors for bodies of quite small dimensions. Relatively "disconnected" sulphide ores have been found to produce measurable VLF signals.

3. For the same reason, poor conductors such as sheared contacts, breccia zones, narrow faults, alteration zones and porous flow tops normally produce VLF anomalies. The method can therefore be used effectively for geological mapping.

4. The method can be used without difficulty in mountainous terrain, though if the ground is conductive the profile will be distorted in the direction of the ground surface. This can often be recognized and/or removed semi-quantitatively.

There are relatively few disadvantages to the method, and none from an operating standpoint.

1. In conductive ground the depth of exploration is severely limited

2. Anomalies tend to be generated by conductivity changes in the overburden, or at the overburden/bedrock interface. These may be difficult to recognize from anomalies due to conductors within the bedrock.

3. Since the frequency is high, the response factor of many geological conductors (including orebodies) is above the range where appreciable quadrature effects are generated. Phase-shifts are more usually associated with the effects of conductive ground on the primary and secondary signals. Quadrature measurements cannot often be used to assist in discriminating between geological conductors of higher and lower conductivities.

Because of restrictions 2 and 3, it is often advisable to follow up the VLF survey with one or more profiles by the horizontal loop E.M. or other discriminatory method, before costly drilling is carried out.

The above is taken from the E.M. 16 Operating Manual.

PAN OCEAN OIL LTD.

VLF – EM SURVEY

PROJECT JK PAGE

GRID DATE July 30/83

LINE 2+00E OPERATOR P.T.C.

SOURCE STATION Cutler

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
10+00S	0	5S			
10+25	0	3S	-8		
10+50	0	10S	-13	-17	
10+75	+2	15S	-25	-14	
11+00	+1	12S	-27	+15	
11+25	-1	2N	-10	+11	
11+50	-2	18S	-16	-20	
11+75	-1	12S	-30	-4	
12+00	+2	8S	-20	+15	
12+25	-1	7S	-15	+3	
12+50	0	10S	-17	-10	
12+75	-5	15S	-25	-14	
13+00	-1	6S	-31	+4	
13+25	+7	15S	-21	+10	
13+50	-1	6S	-21	+3	
13+75	-3	12S	-18	-7	
14+00	-2	16S	-28	-4	
14+25	0	6S	-22	+14	
14+50	-3	8S	-14	+3	
		11S	-19	-13	
		16S	-27		

PAN OCEAN OIL LTD.

VLF – EM SURVEY

PROJECT J.K. PAGE

GRID DATE 30 July/83

LINE 4+00 E OPERATOR P.T.C.

SOURCE STATION Cutler

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
14+50	-1	2S			
14+75	-7	4N	+2		
15+00	-5	9S	-5	-18	
15+25	-10	7S	-16	-4	
15+50	0	2S	-9	+19	
15+75	-3	5N	+3	+11	
16+00	0	3S	+2	-11	
16+25	-8	5S	-8	-20	
16+50	-4	13S	-18	-7	
16+75	-4	2S	-15	+23	
17+00	-5	7N	+5	+17	
17+25	-1	5S	+2	-18	
17+50	-5	8S	-13	-30	
17+75	-7	20S	-28	-29	
18+00	-5	22S	-42	-19	
18+25	-4	25S	-47	-18	
18+50	+4	36S	-68	-23	
18+75	+2	35S	-70	-10	
19+00	+2	35S	-70	-5	
19+25	+3	40S	-75	-5	
19+50	-1	35S	-75		

PAN OCEAN OIL LTD.

VLF – EM SURVEY

PROJECT: JK.
PAGE:
GRID:
DATE: 30 July
LINE: 2+00E
OPERATOR: P.T.C
SOURCE STATION: Cutler

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
			-19		
14+75s	-1	11S	-27	-5	
15+00s	-1	16S	-24	+19	
15+25s	+3	8S	-8	+31	
15+50s	-4	0	+7	+20	
15+75s	-6	7N	+12	0	
16+00s	-5	5N	+7	-28	
16+25s	-9	2N	-16	-42	
16+50s	-8	18S	-35	-18	
16+75s	+2	17S	-34	+8	
17+00s	+5	17S	-27	+10	
17+25s	+14	10S	-24	+3	
17+50s	+3	14S	-24	+5	
17+75s	0	10S	-19	+5	
18+00s	0	9S	-19	-7	
18+25s	-3	10S	-26	-9	
18+50s	0	16S	-28	-8	
18+75s	+6	12S	-34	-19	
19+00s	-1	22S	-47	-16	
19+25s	-2	25S	-50		
19+50s	+2	25S			

PAN OCEAN OIL LTD.

VLF – EM SURVEY

PROJECT:
PAGE:
GRID:
DATE:
LINE:
OPERATOR:
SOURCE STATION:

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS

VLF – EM SURVEY

PROJECT: JK
PAGE: [illegible]
GRID: JK
DATE: [illegible]
LINE: L0+00W
OPERATOR: BG
SOURCE STATION: Cutler

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
15+00S	-4	4S	-11		
[illegible]	-4	7S	11	-3	
[illegible]	-2	7S	-14	+1	
15+75	-1	8S	-10	+9	
[illegible]	-1	2S	-5	+20	
16+25	-3	12N	+10	+30	
16+50	-3	13N	+25	+9	
[illegible]	+1	6N	+19	-16	
17+00	+2	3N	+9	-15	
17+25	+3	1N	+4	-24	
17+50	+12	16S	-15	-48	
17+75	+5	28S	-44	-17	Wdhm [illegible]
18+00	0	4S	-32	+34	
18+25	-2	6S	-10	+16	
18+50	-3	10S	-16	-9	
18+75	+2	9S	-19	-1	
19+00	-5	8S	-17	+3	18+75 [illegible] good
19+25	+2	8S	-16	-3	or [illegible]
19+50	+2	12S	-20	-10	
19+75	-2	14S	-26	-8	
	-5	14S	-28	0	
	+2	12S	-26		

VLF – EM SURVEY

PROJECT: JoKo
PAGE: 20 -1
GRID: JoKo
DATE: July 17
LINE: 0+00W
OPERATOR: WBG.
SOURCE STATION: Cutler NAA

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
10+00S	-2	2N	-4		
10+25	-3	6S	-14	-6	
10+50	0	8S	-10	+16	
10+75	-2	2S	+2	+6	
11+00	-4	4N	-4	-6	
11+25	+1	8S	-4	+12	
11+50	+1	4N	+8	+6	
11+75	+3	4N	+2	-7	
12+00	-1	2S	+1	+5	
12+25	-6	3N	+7	+11	
12+50	+2	4N	+12	0	
12+75	-3	8N	+7	-10	
13+00	0	1S	+2	0	
13+25	+1	3N	+7	-1	
13+50	-4	4N	+1	-6	
13+75	-8	3S	+1	0	
14+00	-4	4N	+1	-10	
14+25	-8	3S	-9	-14	
14+50	-3	6S	-13	-2	
14+75	+1	7S	-11	+2	
15+00		4S	-11		
		7S			

VLF – EM SURVEY

PROJECT J. K. PAGE L00W - 3

GRID J. K. DATE July 17

LINE L0+00 W OPERATOR BG

SOURCE STATION

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
20+00	-5	145	-28		
20+25	+2	125	-26	+3	
20+50	-1	135	-25	-4	
20+75	+2	175	-30	-8	
21+00	-3	165	-33	-3	
21+25	-2	175	-33	-3	
21+50	-3	195	-36	-3	
21+75	-1	175	-36	0	
22+00	+2	195	-36	-7	
22+25	-3	245	-43	-12	
22+50	+2	245	-48	-12	
22+75	+2	315	-55		

VLF – EM SURVEY

PROJECT PAGE

GRID DATE

LINE OPERATOR

SOURCE STATION

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS

VLF – EM SURVEY

PROJECT _____ PAGE 2-3

GRID _____ DATE July 17

LINE L 2+00W OPERATOR W.B.G.

SOURCE STATION Cutler

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
19+50	-4	1S	+1		
19+75	-4	7S	-8	-15	
20+00	0	7S	-14	-3	
20+25	+2	4S	-11	+5	
20+50	-2	5S	-9	0	
20+75	+6	6S	-11	-4	
21+00	+4	7S	-13		

VLF – EM SURVEY

PROJECT J.K. PAGE 2-1

GRID J.K. DATE July 17

LINE L 2+00W OPERATOR W.B.G.

SOURCE STATION Cutler, NAA

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
10+00	-3	14S	-6		
10+25	+4	8N	+20	+14	
10+50	-4	12N	+8	-30	
10+75	-9	4S	-10	0	
11+00	-3	6S	+8	+33	
11+25	+12	14N	+23	-3	
11+50	+5	9N	+5	-33	
11+75	+8	4S	-10	+2	
12+00	+3	6S	+7	+32	
12+25	-7	13N	+22	+11	
12+50	-2	9N	+18	+1	
12+75	-6	9N	+23	+2	
13+00	-8	14N	+20	-15	
13+25	-9	6N	+8	-15	
13+50	-5	2N	+5	-1	
13+75	+7	3N	+7	-3	
14+00	-2	4N	+2	-15	
14+25	+1	2S	-8	+9	
14+50	0	6S	+11	+44	
		17N	+36		

VLF – EM SURVEY

PROJECT _____ PAGE _____

GRID _____ DATE _____

LINE _____ OPERATOR _____

SOURCE STATION _____

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS

VLF – EM SURVEY

PROJECT J.K. PAGE 2-2

GRID J.K DATE July 17

LINE L 2+00W OPERATOR W.B.G.

SOURCE STATION _____

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
14+75	+4	17N	+11		
15+00	-3	19N	+36	+28	
15+25	-6	20N	+39	+1	
15+50	-3	17N	+37	-26	
15+75	+4	4S	+13	-70	
16+00	+9	29S	-33	-56	
16+25	+4	14S	-43	+5	
16+50	+2	14S	-28	+7	
16+75	+7	22S	-36	-5	
17+00	+2	11S	-33	+17	
17+25	+4	8S	-19	+15	
17+50	+2	10S	-18	+3	
17+75	-5	6S	-16	+5	
18+00	+3	7S	-13	+3	
18+25	+5	6S	-13	+4	
18+50	-2	3S	-9	+10	
18+75	0	0	-3	+12	
19+00	-3	3N	+3	+5	
19+25	0	2N	+2	-2	
		1S	+1	-10	
			0		

VLF – EM SURVEY

PROJECT: J.K.
PAGE:
GRID: J.K.
DATE: July 17, 83
LINE: 6+00W
OPERATOR: P.T.C.
SOURCE STATION: Cutler NAA

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
16+25S	0	5S			Creek
			-28		
16+50	+4	23S			
			-48	-22	
16+75	-2	25S			
			-50	-6	
17+00	+4	25S			
			-54	-9	
17+25	0	29S			
			-59	+10	
17+50	+1	30S			
			-44	+35	
17+75	+1	14S			
			-24	+24	
18+00	+2	10S			
			-20	+13	
18+25	-2	10S			
			-9	+21	
18+50	+1	1N			
			+1	+14	
18+75	+1	0			
			+5	+28	
19+00	+4	5N			
			+29	+40	
19+25	+5	24N			
			+45	+12	
19+50	+5	21N			
			+37	-14	
19+75	+6	16N			
			+31	-7	
20+00	-6	15N			
			+30	+16	
20+25	-6	15N			
			+47	+17	
20+50	-2	32N			
			+47	-28	
20+75	-7	15N			
			+19	-43	
		4N			
			+4		
		0			

VLF – EM SURVEY

PROJECT: J.K.
PAGE: 4-1
GRID: J.K.
DATE: July 17, 83
LINE: 4+00W
OPERATOR: P.T.C.
SOURCE STATION: Cutler NAA

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
14+50	0	8S			
			-13		
14+75	-4	5S			
			-10	-10	
15+00	+4	5S			
			-23	-17	
15+25	-4	18S			
			-27	+7	
15+50	+4	9S			
			-14	+11	
15+75	+8	5S			
			-16	-10	
16+00	+6	11S			
			-24	-12	
16+25	+8	13S			
			-28	-11	
16+50	+3	15S			
			-35	-12	
16+75	+7	20S			
			-40	-5	
17+00	+4	20S			
			-40	+3	
17+25	+4	20S			
			-37	+9	
17+50	0	17S			
			-31	+18	
17+75	+6	14S			
			-19	+24	
18+00	0	5S			
			-7	+15	
18+25	+2	2S			
			-4	+12	
18+50	+4	2S			
			+5	+29	
18+75	+2	7N			
			+25	+38	
19+00	+4	18N			
			+43	+15	
19+25	-1	25N			
			+40	-9	
19+50	+1	15N			
			+34		

VLF – EM SURVEY

PROJECT: J.K
PAGE:
GRID: J.K
DATE: July 17, 83
LINE: 6+00W
OPERATOR: P.T.C.
SOURCE STATION:

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
21+00	-4	4N	+19		
21+25	0	0	+4	-17	
21+50	+4	2N	+2	-20	
21+75	+4	18S	-16	-32	
22+00	+2	12S	-30	+1	
22+25	0	3S	-15	+23	
22+50	0	4S	-7	-9	Weak signal unchanged in position
22+75	-5	20S	-24	-19	
23+00	-3	6S	-26	-8	
23+25	+2	16S	-32		

VLF – EM SURVEY

PROJECT: J.K.
PAGE: 4-2
GRID: J.K.
DATE: July 17, 83
LINE: 4+00W
OPERATOR: P.T.C.
SOURCE STATION:

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
19+25	-1	25N	+25		
19+50	+1	15N	+40	-9	
19+75	+2	19N	+34	-23	
20+00	+6	2S	+17	-36	
20+25	-4	0	-2	-14	
20+50	-6	3N	+3	+12	
20+75	0	7N	+10	+8	
21+00	-2	4N	+11	-4	
21+25	+2	2N	+6	+1	
21+50	+4	16N	+18	+17	
21+75	+4	7N	+23	-13	
22+00	+8	2S	+5		

VLF – EM SURVEY

PROJECT: Jo Ko
PAGE: 1
GRID: Jo Ko
DATE: July 17/83
LINE: 8+00W
OPERATOR: P.T.C.
SOURCE STATION: Cutler NAA

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
17+34	+3	22S			Foot of Talus Slope
17+50	-4	9S	-31		Creek Bed by Talus Slope
17+75	+4	24S	-33	-14	
18+00	+8	21S	-45	+4	
18+25	-5	8S	-29	+29	
18+50	+3	8S	-16	+20	
18+75	-7	1S	-9	+15	
19+00	0	0	-1	+13	
19+25	-5	4N	+4	+15	
19+50	0	10N	+14	+21	
19+75	+5	15N	+25	+1	
20+00	0	0	+15	-25	
20+25	+6	0	0	-13	
20+50	+2	2N	+2	-8	
20+75	+2	10S	-8	-22	Difficult to focus Little Chance
21+00	+6	10S	-20	-12	
21+25	+8	10S	-20	0	
21+50	+6	10S	-20	+4	
21+75	+4	6S	-16	+10	
			-10	+7	
			-9		

PAN OCEAN OIL LTD.

VLF – EM SURVEY

PROJECT: JK
PAGE: 1
GRID:
DATE: July 29/83
LINE: 6+00 W
OPERATOR: P.T.C.
SOURCE STATION: Cutler

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
35+00S	+2	54 N			
35+25S	-11	40 N	+94		
35+50S	-8	38 N	+78	+14	
35+75S	-4	70 N	+108	+31	
36+00S	-1	39 N	+109	-44	
36+25S	+5	25 N	+64	-68	
36+50S	+1	16 N	+41	-27	
36+75S	+4	21 N	+37	-22	
37+00S	-1	42 N	+63	+40	
37+25S	-3	35 N	+77	0	
37+50S	0	28 N	+63	-29	
37+75S	+3	20 N	+48	-27	
38+00S	+5	16 N	+36	-22	
38+25S	-1	10 N	+26	-19	
38+50S	0	7 N	+17	-11	
38+75S	+1	8 N	+15	+4	
39+00S	-4	13 N	+21	+9	
39+25S	+3	13 N	+26	+7	
39+50S	0	16 N	+28	+7	
		18 N	+33	+10	
		20N	+38		

VLF – EM SURVEY

PROJECT: J.K. PAGE: 2

GRID: J.K. DATE: July 17, 83

LINE: 8+00W OPERATOR: P.T.C.

SOURCE STATION: Cutler NAA

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
22+00	-4	45	-10		
22+25	0	55	-9	0	
22+50	+3	55	-10	+2	
22+75	-1	25	-7		Foot of Moraine Gr - Fairly hom - Fairly silt st.

PAN OCEAN OIL LTD.

VLF – EM SURVEY

PROJECT: J.K. PAGE: 2

GRID: DATE: July 29/83

LINE: 6+00W OPERATOR:

SOURCE STATION: Cutler

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
39+75S	+3	15 18N	+33	+10	
40+00S	-3	20N	+38	+2	
40+25S	-1	15N	+35	-8	
40+50S	-2	15N	+30		

VLF – EM SURVEY

PROJECT: J.K. PAGE: 1.
GRID: J.K. DATE: July, 17/83
LINE: 10+00W OPERATOR: P.T.C.
SOURCE STATION: Cutler NAA

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
19+75	-5	1N			Difficult to centre
20+00	-4	1S	0		
[illegible]	-7	8S	-9	-16	
[illegible]	-4	8S	-16	+1	Last on Circuit
[illegible]	+1	0	-8	+17	Check -2 2N
[illegible]	+1	1N	+1	+10	
21+[illegible]	+1	1N	+2	+2	
[illegible]	-1	2N	+3	+3	
[illegible]	+1	3N	+5	+3	
22+00	-2	3N	+6	+2	
22+25	+3	0	+3	+4	
22+50	0	2N	+2	+10	
22+75	-6	11N	+13	+19	
23+00	+2	10N	+21	+7	
23+25	0	10N	+20	-11	
23+50	+1	0	+10	-16	
23+75	-1	5N	+5	+5	
24+00	0	10N	+15		Foot of Moraine Grey Shale Fissile 2-3m

PAN OCEAN OIL LTD.

VLF – EM SURVEY

PROJECT: JK PAGE: 1-2
GRID: DATE: July 28/83
LINE: 8+00 W OPERATOR: P.T.C.
SOURCE STATION: Cutler

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
34+00S	-2	5 N			
34+25S	-6	22 N	+27		
34+50S	-2	53 N	+75	+78	
34+75S	0	52 N	+105	+7	
35+00S	0	30 N	+82	-30	
35+25S	-3	45 N	+75	+30	
35+50S	-6	67 N	+112	+26	
35+75S	-15	34 N	+101	-54	
36+00S	-8	24 N	+58	-59	
36+25S	-7	18 N	+42	-20	
36+50S	-2	20 N	+38	-7	
36+75S	0	15 N	+35	-11	
37+00S	+2	12 N	+27	-9	
37+25S	0	14 N	+26	-4	
37+50S	-3	9 N	+23	-17	
37+75S	+14	0	+9	-25	
38+00S	+13	2 S	-2	-10	
38+25S	+10	1 N	-1	+6	
38+50S	+11	3 N	+4	+16	
		12 N	+15	+18	
		10 N	+22		

VLF – EM SURVEY

PROJECT _____ PAGE _____

GRID _____ DATE _____

LINE _____ OPERATOR _____

SOURCE STATION _____

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS

PAN OCEAN OIL LTD.

VLF – EM SURVEY

PROJECT J.K. PAGE 2-2

GRID _____ DATE July 28/83

LINE 8+00W OPERATOR _____

SOURCE STATION Cutler

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
			+15		
38+75s	+6	12N	+22	+6	
39+00s	+4	10N	+21	-5	
39+25s	-2	11N	+17	-9	
39+50s	+2	6N	+12	-8	
39+75s	0	6N	+9	-3	
40+00s	+1	3N	+9	+3	
40+25s	-1	6N	+12	+2	
40+50s	-1	6N	+11	+3	
40+75s	0	5N	+15	+7	
41+00s	+3	10N	+18	+5	
41+25s	+3	8N	+20	+5	
41+50s	+4	12N	+23	+1	
41+75s	+1	11N	+21	-3	
42+00s	+1	10N	+20	+3	
42+25s	+7	10N	+24	+8	
42+50s	+2	14N	+28	+4	
42+75s	+7	14N	+28		
43+00s	+4	14N			

PAN OCEAN OIL LTD.

VLF – EM SURVEY

PROJECT J.K. PAGE 1-2

GRID DATE July 29/83

LINE 12+00N OPERATOR P.T.C.

SOURCE STATION Cutler

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
32+00S	+5	20N			
			+32		
32+25S	+4	12N			
			+20	+36	
32+50S	-1	8N			
			+68	+116	
32+75S	-4	60N			
			+136	+55	
33+00S	-13	76N			
			+123	-63	
33+25S	-8	47N			
			+73	-75	
33+50S	-6	26N			
			+48	-44	
33+75S	-1	18N			
			+29	-32	
34+00S	+2	11N			
			+16	-15	
34+25S	-1	5N			
			+14	+3	
34+50S	-5	9N			
			+19	+7	
34+75S	-5	10N			
			+21	+4	
35+00S	0	11N			
			+23	+5	
35+25S	-2	12N			
			+26	+5	
35+50S	-6	14N			
			+28	+3	
35+75S	-2	14N			
			+29	+4	
36+00S	-5	15N			
			+32	+7	
36+25S	-6	17N			
			+36	+2	
36+50S	+2	19N			
			+34	-12	
		15N			
			+24		
		9N			

PAN OCEAN OIL LTD.

VLF – EM SURVEY

PROJECT J.K. PAGE 1-2

GRID DATE July 28/83

LINE 10+00W OPERATOR P.T.C.

SOURCE STATION Cutler

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
34+50S	-18	46N			
			+75		
34+75S	-20	29N			
			+54	-33	
35+00S	-21	25N			
			+42	-23	
35+25S	-11	17N			
			+31	-14	
35+50S	-14	14N			
			+28	+1	
35+75S	-14	14N			
			+32	+8	
36+00S	-4	18N			
			+36	+6	
36+25S	-2	18N			
			+38	-1	
36+50S	+3	20N			
			+35	-10	
36+75S	-2	15N			
			+28	-14	
37+00S	-3	13N			
			+21	-11	
37+25S	-2	8N			
			+17	0	
37+50S	-4	9N			
			+21	+9	
37+75S	+5	12N			
			+26	+7	
38+00S	-2	14N			
			+28	+3	
38+25S	-1	14N			
			+29	+1	
38+50S	+4	15N			
			+30	-3	
38+75S	0	15N			
			+26	-7	
39+00S	-3	11N			
			+23	0	
		12N			
			+26		
		14N			

PAN OCEAN OIL LTD.

VLF – EM SURVEY

PROJECT S.K. PAGE 2-2

GRID DATE July 29/83

LINE 12+00W OPERATOR P.T.C.

SOURCE STATION Cutler

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
36+75s	+5	15 N	+34		
37+00s	+1	9 N	+24	-17	
37+25s	-3	8 N	+17	-18	
37+50s	-2	2 S	+6	-24	
37+75s	-3	5 S	-7	-20	
38+00s	-2	9 S	-14	-9	
38+25s	-5	7 S	-16	+4	
38+50s	0	3 S	-10	+34	
38+75s	+5	21 N	+18	+82	
39+00s	+23	51 N	+72		

PAN OCEAN OIL LTD.

VLF – EM SURVEY

PROJECT S.K. PAGE 2-2

GRID DATE July 28/83

LINE 10+00W OPERATOR P.T.C.

SOURCE STATION Cutler

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
39+25s	-2	12 N	+23		
39+50s	-1	14 N	+26	-2	
39+75s	+5	11 N	+25	-1	
40+00s	+2	14 N	+25	+2	
40+25s	+2	13 N	+27	+2	
40+50s	+4	14 N	+27	+4	
40+75s	+3	17 N	+31	+7	
41+00s	+5	17 N	+34	+3	
41+25s	+8	17 N	+34	-2	
41+50s	+10	15 N	+32	0	
41+75s	+7	19 N	+34	+2	
42+00s	+10	15 N	+34		

VLF – EM SURVEY

PROJECT: J.K. PAGE: 16-3
GRID: J.K. DATE: July 20
LINE: L16+00 W OPERATOR: P.T.C.
SOURCE STATION: Cutler NAA

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
9+50	+1	15S	-33		
9+75	-4	17S	-32	+2	
10+00	-6	14S	-31	+3	
10+25	-2	15S	-29	+8	
10+50	-2	8S	-23	+3	
10+75	-4	18S	-26	-15	
11+00	-2	20S	-38	-10	
11+25	0	16S	-36	+7	
11+50	-5	15S	-31	+3	
11+75	0	18S	-33	-12	
12+00	0	25S	-43	-7	
12+25	-2	15S	-40	+13	
12+50	+1	15S	-30	+16	
12+75	-5	9S	-24	+19	
13+00	-6	2S	-11	+18	
13+25	-6	4S	-6	-8	
13+50	-4	15S	-19	-22	
13+75	-3	13S	-28	-9	
14+00	-10	15S	-28	+3	
		10S	-25	+8	
		10S	-20		

VLF – EM SURVEY

PROJECT: JK PAGE: 16-1
GRID: JK DATE: July 20
LINE: 16+00W OPERATOR: P.T.C.
SOURCE STATION: Cutler NAA

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
BL	+2	34S	-71		
0+25	0	37S	-67	+17	
0+50	0	30S	-54	+19	
0+75	+1	24S	-48	+5	
1+00	+4	24S	-49	+15	
1+25	+2	25S	-33	+26	
1+50	0	8S	-23	+9	
1+75	0	15S	-24	+6	
2+00	-2	9S	-17	+9	
2+25	-1	8S	-15	+2	
2+50	-4	7S	-15	-6	
2+75	+1	8S	-21	-11	
3+00	-1	13S	-26	-4	
3+25	-4	13S	-25	0	
3+50	-5	12S	-26	-3	
3+75	-4	14S	-28	-4	
4+00	-4	14S	-30	-2	
4+25	-5	16S	-30	-6	
4+50	-2	14S	-36	-14	
		22S	-44		
		22S			

VLF – EM SURVEY

PROJECT: J K
PAGE: 16-4
GRID: J.K
DATE: July 20
LINE: 16+00 W
OPERATOR: P.T.C.
SOURCE STATION: Cutler NSA

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
			-25		
14+25	-7	10S	-20	0	
14+50	-8	10S	-25	+4	
14+75	-4	15S	-16	+14	
15+00	-8	1S	-11	-2	
15+25	-8	10S	-18	-9	
15+50	-1	8S	-20	-13	
15+75	+7	12S	-31	-29	
16+00	+8	19S	-49	-31	
16+25	-6	30S	-62	-18	
16+50	-4	32S	-67	-1	
16+75	+6	35S	-63	+21	
17+00	-5	28S	-46	+33	
17+25	+2	18S	-30	+26	
17+50	-6	12S	-20	+10	
17+75	-2	8S	-20	-5	
18+00	0	12S	-25	-18	
18+25	-4	13S	-38	-25	
18+50	-7	25S	-50	-10	
18+75	-2	25S	-48	+4	
		23S	-46		
		23S			

VLF – EM SURVEY

PROJECT: JK
PAGE: 16-2
GRID: JK.
DATE: July 20
LINE: 16+00 W
OPERATOR: P.T.C.
SOURCE STATION: Cutler

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
			-36		
4+75	-5	22S	-44	-7	
5+00	-3	22S	-43	+10	
5+25	-3	21S	-34	+16	
5+50	+1	13S	-27	+5	
5+75	+1	14S	-29	-2	
6+00	0	15S	-29	0	
6+25	-3	14S	-29	-4	
6+50	-3	15S	-33	-7	
6+75	-1	18S	-36	-3	
7+00	-5	18S	-36	0	
7+25	-1	18S	-36	+1	
7+50	-2	18S	-35	+1	
7+75	-2	17S	-35	-1	
8+00	+3	18S	-36	+4	
8+25	-4	18S	-31	+3	
8+50	-2	13S	-33	-2	
8+75	-3	20S	-33	-2	
9+00	-1	13S	-31	0	
9+25	-1	18S	-33	-1	
		15S	-32		
		17S			

VLF – EM SURVEY

PROJECT: J K
PAGE: 18-1
GRID: J.K.
DATE: July 20
LINE: 18+00W
OPERATOR: P.T.C
SOURCE STATION: Cutler NAA

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
BL 0+00	-4	25S			
0+25	-3	26S	-51		
0+50	-2	20S	-46	+20	
0+75	-4	11S	-31	+35	
1+00	+2	1S	-11	+28	
1+25	-4	2S	-3	+11	
1+50	0	2N	0	+5	
1+75	0	0	+2	+1	
2+00	0	1N	+1	-5	
2+25	+4	4S	-3	-7	
2+50	+2	2S	-6	-2	
2+75	+5	3S	-5	-2	
3+00	+8	5S	-8	-6	
3+25	+3	6S	-11	-5	
3+50	-4	7S	-13	-1	
3+75	-1	5S	-12	0	
4+00	-10	8S	-13	-5	
4+25	-12	9S	-17	-4	
4+50	-3	8S	-17	-3	
		12S	-20	+5	
		0	-12		

VLF – EM SURVEY

PROJECT: J K
PAGE: 16-5
GRID: J K
DATE: July 20
LINE: 16+00W
OPERATOR: PTC
SOURCE STATION: Cutler NAA

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
19+00	-3	23S	-48		
19+25	-2	23S	-46	+15	
19+50	+5	10S	-33	+21	
19+75	-8	15S	-25	-10	
20+00	-6	25S	-43	-33	
20+25	-5	30S	-58	-7	
20+50	-4	20S	-50	-7	
20+75	-4	45S	-65	-43	
21+00	-2	48S	-93	-21	
21+25	0	38S	-86	+27	
21+50	-2	28S	-66	+42	
21+75	-6	16S	-44	+20	
22+00	-4	30S	-46	-13	
22+25	-8	27S	-57	-10	
22+50	-19	29S	-56	+2	
22+75	-8	26S	-55	+5	
23+00	-12	25S	-51	+7	
23+25	-8	23S	-48	0	
23+50	-4	28S	-51	-4	
		24S	-52	+9	
		18S	-42		

VLF – EM SURVEY

PROJECT: JK
PAGE: 18-2
GRID: JK
DATE: July 20/83
LINE: 18+00W
OPERATOR: P.T.C.
SOURCE STATION: Cutler NAA

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
4+75	-4	12S	-20		
5+00	-2	0	-12	+18	
5+25	+2	2S	-2	+4	
5+50	-4	6S	-8	-12	
5+75	-4	8S	-14	-4	
6+00	-4	4S	-12	-3	
6+25	-4	13S	-17	-16	
6+50	0	15S	-28	-4	
6+75	-2	6S	-21	+26	
7+00	+4	4N	-2	+18	
7+25	-1	1S	-3	-7	
7+50	+3	8S	-9	-6	
7+75	-3	1S	-9	+7	
8+00	+1	1S	-2	0	
8+25	+1	8S	-9	-13	
8+50	+2	7S	-15	+1	
8+75	0	1S	-8	+7	
9+00	-2	7S	-8	-6	
9+25	-1	7S	-14	-6	
		7S	-14	-1	
		8S	-15		

VLF – EM SURVEY

PROJECT: JK
PAGE: 16-6
GRID: JK
DATE: July 20
LINE: 16+00 W
OPERATOR: PTC
SOURCE STATION: Cutler

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
23+75	-10	24S	-52		
24+00	0	18S	-42	+16	
24+25	0	18S	-36	+14	
24+50	+5	20S	-38	-13	
24+75	+6	29S	-49	-14	
25+00	0	23S	-52		

VLF – EM SURVEY

PROJECT JK PAGE 18-5

GRID JK. DATE July 20/82

LINE L 18+00W OPERATOR PTC

SOURCE STATION

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER	
19+00	0	5S	-6	
19+25	-1	7S	-12	-9
19+50	+3	8S	-15	-1
19+75	-1	5S	-13	+11
20+00	+3	1N	-4	+1
20+25	-1	13S	-12	-14
20+50	-6	5S	-18	-10
20+75	+5	17S	-22	-19
21+00	0	20S	-37	-12
21+25	+1	14S	-34	+18
21+50	-1	5S	-19	+26
21+75	+1	3S	-8	+8
22+00	+1	8S	-11	-8
22+25	0	8S	-16	-3
22+50	2	6S	-14	+4
22+75	0	6S	-12	-1
23+00	+1	9S	-15	0
23+25	-3	3S	-12	+19
23+50	-6	7N	+4	+42
		23N	+30	+31
		12N	+35	

REMARKS

VLF – EM SURVEY

PROJECT JK PAGE 18-3

GRID JK DATE July 20

LINE OPERATOR P.T.C

SOURCE STATION L 18+00W

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER	
9+50	+2	7S	-14	
9+75	-4	8S	-15	-2
10+00	0	8S	-16	-1
10+25	-2	8S	-16	0
10+50	+1	8S	-16	+1
10+75	0	7S	-15	+1
11+00	0	8S	-15	-5
11+25	0	12S	-20	+1
11+50	0	2S	-14	+16
11+75	+1	2S	-4	+10
12+00	+1	2S	-4	0
12+25	-1	2S	-4	-3
12+50	0	5S	-7	-6
12+75	-1	5S	-10	-4
13+00	0	6S	-11	-3
13+25	+1	7S	-13	-2
13+50	-1	6S	-13	+2
13+75	0	5S	-11	+3
14+00	-5	5S	-10	0
		6S	-11	+2
		2S	-8	

REMARKS

VLF – EM SURVEY

PROJECT JK PAGE 18-6

GRID JK DATE July 20, 83

LINE 18+00W OPERATOR P.T.C.

SOURCE STATION

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
23+75	-8	23N	+30		
24+00	-8	12N	+35	-29	
24+25	-4	11S	+1	-67	
24+50	+3	21S	-32	-43	
24+75	+2	21S	-42	+16	
25+00	+10	5S	-26	+12	
[illegible]	[illegible]	[illegible]	[illegible]	-5	
[illegible]	-8	[illegible]	[illegible]	+74	
[illegible]	-9	[illegible]	144	+118	
[illegible]	-16	[illegible]	+87	+11	
[illegible]	-24	[illegible]	+55	-60	
[illegible]	-18	[illegible]	[illegible]	-44	
[illegible]	-16	[illegible]	+11		

VLF – EM SURVEY

PROJECT JK PAGE 18-4

GRID JK DATE July 20, 83

LINE 18+00W OPERATOR P.T.C.

SOURCE STATION

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
14+25	-3	6S	-11		
14+50	-5	2S	-8	+3	
14+75	0	6S	-8	-5	
15+00	+2	7S	-13	-8	
15+25	-2	9S	-16	-2	
15+50	-3	6S	-15	+5	
15+75	-4	5S	-11	+5	
16+00	0	5S	-10	+5	
16+25	-2	1S	-6	+5	
16+50	-4	4S	-5	-1	
16+75	-2	3S	-7	-5	
17+00	0	7S	-10	-3	
17+25	+2	3S	-10	+1	
17+50	-4	6S	-9	-5	
17+75	0	9S	-15	-9	
18+00	+1	9S	-18	0	
18+25	0	6S	-15	+6	
18+50	0	6S	-12	+8	
18+75	+3	1S	-7	+6	
		5S	-6	-5	
		7S	-12		

VLF – EM SURVEY

PROJECT: J.K. PAGE: 20-1

GRID: J.K. DATE: July 19

LINE: L 20+00W OPERATOR: BC

SOURCE STATION: Cutler NAA

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
00-B	0	2S	-4		→ 28+50 from form sheet
0+25	-4	2S	-4	-6	
0+50	-2	2S	-10	-8	
0+75	-2	8S	-12	+3	
1+00	-3	4S	-7	+8	
1+25	-8	3S	-4	+5	
1+50	-10	1S	-2	+5	
1+75	-8	1S	+1	+5	
2+00	-8	2N	13	+6	
2+25	-2	1N	+7	+7	
2+50	+3	6N	+10	-9	
2+75	-2	4N	-2	-23	
3+00	-1	6S	-13	-8	
3+25	-4	1S	-10	+12	
3+50	-12	3S	-1	+14	
3+25	-3	2N	+4	+4	
4+00	0	2N	+3	0	
4+25	0	1N	+4	+3	
4+50	+1	3N	16	0	
75		3N	+4	-2	
5+00		1N	+4		

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VLF – EM SURVEY

PROJECT: J.K. PAGE:

GRID: DATE: August 2/83

LINE: 18+00W OPERATOR: P.T.C.

SOURCE STATION:

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
25+00	+12	11S	-36		
25+25	+7	25S	-31		
25+50	-8	6S	+44		
25+75	-9	50N	+87		
26+00	-16	37N	+55		
26+25	-24	18N	+27		
26+50	-18	9N	+11		
26+75	-16	2N			

VLF – EM SURVEY

PROJECT _____ PAGE 20 – 2

GRID _____ DATE _____

LINE L20+00W OPERATOR _____

SOURCE STATION Cutler

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
4+75	-5	3N			
5+00	0	1N	+4		
5+25	+2	3N	+4	+5	
5+50	-3	6N	+9	+7	
5+75	+2	5N	+11	+3	
6+00	-1	7N	+12	0	
6+25	-3	4N	+11	-8	
6+50	+4	0	+4	-9	
6+75	-4	2N	+2	+4	
7+00	0	6N	+8	+5	
7+25	+1	1N	+7	-4	
7+50	+1	3N	+4	0	
7+75	+1	4N	+7	+4	
8+00	-3	4N	+8	+3	36+25 = 7+25
8+25	+1	6N	+10	+1	
8+50	-1	3N	+9	+1	
8+75	-2	8N	+11	+2	
9+00	0	8N	+16	+7	
9+25	-3	7N	+15	+4	37+50 = 9+50
9+50	-1	4N	+11	-3	
9+75	+4	6N	+12	+1	
			+12	-2	

PAN OCEAN OIL LTD.

VLF – EM SURVEY

PROJECT _____ PAGE _____

GRID _____ DATE _____

LINE _____ OPERATOR _____

SOURCE STATION _____

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS

VLF – EM SURVEY

PROJECT: Jo Ko — PAGE: 20-5
GRID: Jo Ko — DATE: July 19
LINE: L 20+00 W — OPERATOR: BG
SOURCE STATION: Cutler (NA)

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
19+50	-2	8N			
19+75	+4	14N	+22		
20+00	-4	18N	+32	+15	
20+25	-6	20N	+37	+4	
20+50	-4	19N	+36	-2	
20+75	+1	16N	+35	0	
21+00	-3	20N	+36	+11	
21+25	-6	23N	+46	+30	
21+50	-7	43N	+66	+23	E-W L @ 90° to L20+
21+75	-3	26N	+69	-46	intersects at 21+50
22+00	+9	8N	+20	-67	
22+25	-2	6S	+2	-17	
22+50	+3	9N	+3	+26	
22+75	+2	19N	+28	+14	Line runs @ SW 45
23+00	+4	2S	+17	+6	
23+25	0	36N	+34	+62	
23+50	+2	43N	+79	+40	Creek valley @ 23+25
23+75	-3	31N	+74	-41	
24+00	-6	7N	+38	-56	
		11N	+18	-9	
			+29	+29	
			+47		

VLF – EM SURVEY

PROJECT: Jo Ko — PAGE: 20-3
GRID: Jo Ko — DATE: July 19/8[illegible]
LINE: L 20+00 W — OPERATOR: BG
SOURCE STATION:

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
10+00	+4	4N	+12		
10+25	+2	6N	+10	-1	
10+50	+2	5N	+11	-1	
10+75	+2	4N	+9	-5	
11+00	+1	2N	+6	-4	
11+25	+6	3N	+5	+1	
11+50	+4	4N	+7	+6	
11+75	+6	7N	+11	+5	
12+00	-3	5N	+12	0	
12+25	-1	6N	+11	-4	
12+50	-1	2N	+8	-7	
12+75	+3	2N	+4	-2	
13+00	+4	6N	+6	+6	
13+25	+4	6N	+10	+4	
13+50	+5	4N	+10	-3	
13+75	+1	3N	+7	-1	
14+00	-1	6N	+9	+5	
14+25	+2	6N	+12	+3	
14+50	+1	1N	+12	+2	
75		8N	+14	+2	
1500		6N	+14	0	
			+14		

VLF – EM SURVEY

PROJECT: JK
PAGE: 20-6
GRID: JK
DATE: July 15
LINE: L20+00W
OPERATOR: BG
SOURCE STATION: Cutler

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
24+25	-4	11N			
24+50	-4	18N	+29	+29	large creek out
24+75	-9	29N	+47	+47	at ≈ 24+25
25+00	+4	47N	+76	+13	
25+25	+4	13N	+60	-65	
25+50	+6	25	+11	-40	
25+75	+6	22N	+20		

VLF – EM SURVEY

PROJECT: JK
PAGE: 20-4
GRID: JK
DATE: July 17
LINE: L20+00W
OPERATOR: BG
SOURCE STATION: Cutler NAA

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
15+75	-4	8N	+14		
15+00	+3	6N	+14	+2	Post 1 Post 1 77
15+25	-2	8N	+16	+2	78 P.P.
15+50	+4	9N	+16	-1	Post 2 Post 2
15+75	-8	8N	+15	+1	JK 75 76
16+00	-2	7N	+19	+6	P.P. @ 15+30 L20
16+25	+2	10N	+21	+8	
16+50	+5	11N	+25	+2	
16+75	+1	14N	+23	-5	
17+00	+4	9N	+20	-3	
17+25	-5	11N	+20	-3	45+75
17+50	-2	9N	+17	+1	
17+75	+1	8N	+21	+7	
18+00	-1	13N	+24	-16	
18+25	-2	11N	+5	-8	
18+50	0	4N	+16	+18	
18+75	-2	12N	+22	+12	
19+00	-2	11N	+28	+8	L20+00W 18+50 - L38+00
19+25	-1	17N	+31	-6	19+00W
[illegible]		[illegible]	[illegible]	+1	
[illegible]		[illegible]	+32		

VLF – EM SURVEY

PROJECT: J.K. PAGE: 22-1

GRID: J.K. DATE: July 20

LINE: L 2N 100W OPERATOR: BG

SOURCE STATION: Cutler NAA

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
BL	0	4N			
			+7		
0+25	+3	3N			
			+6	-1	
0+50	-2	3N			
			+6	+1	
0+75	-2	3N			
			+7	+4	
1+00	-2	4N			
			+10	+6	
1+25	-3	6N			
			+13	+8	
1+50	-2	7N			
			+18	+3	
1+75	-1	11N			
			+16	-8	
2+00	0	5N			
			+10	-7	
2+25	+2	5N			
			+9	-2	
2+50	+3	4N			
			+8	-2	
2+75	+2	4N			
			+7	0	
3+00	+2	3N			
			+8	+3	
3+25	+2	5N			
			+10	+1	
3+50	0	5N			
			+9	-2	
3+75	+3	4N			
			+8	0	
4+00	+2	4N			
			+9	+3	
4+25	+1	5N			
			+11	-1	
4+50	0	6N			
			+8	-7	
		2N			
			+4	-2	
		2N			
		4N	+6		

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VLF – EM SURVEY

PROJECT: J.K. PAGE:

GRID: DATE: Aug 2/83

LINE: 20+00W OPERATOR: P.T.C.

SOURCE STATION: Cutler

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
25+00S	+4	47N			
			+60	-65	
25+25S	+4	13N			
			+11	-40	
25+50S	+6	2S			
			+20	+86	
25+75S	+6	22N			
			+97	+120	
26+00S	-14	75N			
			+140	+24	
26+25S	-16	65N			
			+121	-51	
26+50S	-26	56N			
			+89	-63	
26+75S	-10	33N			
			+58		
27+00S	-14	25N			

VLF – EM SURVEY

PROJECT: JK
PAGE: 22-2
GRID:
DATE: July 20
LINE: 22
OPERATOR: BG
SOURCE STATION: Cutler

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
4+75	-4	2N			
5+00	+2	2N	+4		
5+25	-2	4N	+6	+6	64 m 110F 5+50
5+50	+1	6N	+10	+7	#1 JK 65-66 62704 62700 62702
5+75	+2	7N	+13	+3	# 2 63-64 62701
6+00	+2	6N	+13	-3	
6+25	+2	4N	+10	-2	
6+50	+2	7N	+11	+4	
6+75	+3	7N	+14	+3	
7+00	+4	7N	+14	+1	
7+25	+1	8N	+15	+1	
7+50	+3	7N	+15	+1	
7+75	+3	9N	+16	+1	
8+00	-1	7N	+16	0	
8+25	-1	9N	+16	+4	
8+50	+1	11N	+20	+6	
8+75	-1	11N	+22	-2	
9+00	+3	7N	+18	-8	
9+25	-1	7N	+14	-4	
+50		7N	+14	+1	
+75		8N	+15	+2	
		8N	+16		

PAN OCEAN OIL LTD.

VLF – EM SURVEY

PROJECT:
PAGE:
GRID:
DATE:
LINE:
OPERATOR:
SOURCE STATION:

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS

VLF – EM SURVEY

PROJECT: JK
PAGE: 22-5
GRID: JK
DATE: July 20, 83
LINE: L22+00W
OPERATOR: BG
SOURCE STATION: Cutler NAA

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
19+00	+5	8N			
19+25	-3	11N	+19		
19+50	+2	23N	+34	+30	
19+75	+3	26N	+49	+15	
20+00	+8	23N	+49	-14	
20+25	+6	12N	+35	-22	
20+50	+5	15N	+27	+9	
20+75	+5	29N	+44	+25	
21+00	0	23N	+52	+16	
21+25	+2	37N	+60	+24	
21+50	-3	39N	+76	+10	
			+70		

VLF – EM SURVEY

PROJECT: JK
PAGE: 22-3
GRID: JK
DATE: July 20
LINE: L22+00W
OPERATOR: BG
SOURCE STATION: Cutler NAA

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
9+50	-3	7N			
9+75	-5	8N	+15		
10+00	-2	8N	+16	+4	
10+26	-2	11N	+19	+9	
10+50	-2	14N	+25	+12	
10+75	-6	17N	+31	+4	
11+00	0	12N	+29	-10	
11+25	+2	11N	+21	-8	
11+50	+3	10N	+21	0	
11+75	+4	11N	+21	+5	
12+00	+4	13N	+26	+6	
12+25	+4	14N	+27	+4	
12+50	-4	16N	+30	+5	
12+75	-2	16N	+32	+3	
13+00	+2	17N	+33	+3	
13+25	-2	18N	+35	+5	
13+50	-6	20N	+38	+2	
13+75	-1	17N	+37	0	
14+00	-4	21N	+38	-9	
		7N	+28	-18	
		13N	+20	+6	
		21N	+34		

VLF – EM SURVEY

PROJECT _____ PAGE _____

GRID _____ DATE _____

LINE _____ OPERATOR _____

SOURCE STATION _____

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS

VLF – EM SURVEY

PROJECT _____ PAGE 22-4

GRID _____ DATE _____

LINE L22+00 W OPERATOR BG

SOURCE STATION Cutler NAA

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
14+25	-2	7N			
			+20	+6	
14+50	-3	13N			
			+34	+5	
14+75	+2	21N			
			+25	-15	
15+00	-3	4N			
			+19	-6	
15+25	+2	15N			
			+19	+16	
15+50	+3	4N			
			+35	+29	
15+75	+6	31N			
			+48	0	
16+00	+2	17N			
			+35	-22	
16+25	-1	18N			
			+26	-15	
16+50	+1	8N			
			+20	0	
16+75	-6	12N			
			+26	+9	
17+00	-4	14N			
			+29	+3	
17+25	0	15N			
			+29	-2	
17+50	+2	14N			
			+27	-2	
17+75	+3	13N			
			+27	0	
18+00	+4	14N			
			+27	-7	
18+25	0	13N			
			+20	-27	
18+50	+8	7N			
			0	-19	
18+75	+4	7S			
			+1	+19	
	+5	8N			
			+19	+33	
	-3	11N			
		23N	+34		

PAN OCEAN OIL LTD.

VLF – EM SURVEY

PROJECT: J.K. PAGE:
GRID: DATE: 30 July/83
LINE: 39+00 W OPERATOR: P.T.C
SOURCE STATION: Cutler

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
1+50 s	0	20s			
1+75 s	-1	28s	-48		
2+00 s	-5	30s	-58	-10	
2+25 s	-1	28s	-58	+10	
2+50 s	-5	20s	-48	+4	
2+75 s	+4	34s	-54	-25	
3+00 s	+2	39s	-73	-20	
3+25 s	-1	35s	-74	-7	
3+50 s	-2	45s	-80	-23	
3+75 s	-5	58s	-103	-35	
4+00 s	-3	57s	-115	0	
4+25 s	-3	46s	-103	-3	
4+50 s	-10	72s	-118	-24	
4+75 s	-2	55s	-127	+18	
5+00 s	+2	45s	-100	+47	
5+25 s	-17	34s	-80	+43	
5+50 s	+7	23s	-57	+31	
5+75 s	-3	26s	-49	0	
6+00 s	-2	31s	-57		

PAN OCEAN OIL LTD.

VLF – EM SURVEY

PROJECT: J.K. PAGE:
GRID: J.K DATE: August 2/83
LINE: 22+00 W OPERATOR: P.T.C
SOURCE STATION:

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
21+50 s	-3	35 N	+76		
21+75 s	+4	35 N	+70	-16	
22+00 s	+3	25 N	+60	-26	
22+25 s	+1	19 N	+44	+6	
22+50 s	+3	47 N	+66	+40	
22+75 s	-4	37 N	+84	+35	
23+00 s	-3	64 N	+101	+22	
23+25 s	-11	42 N	+106	-17	
23+50 s	-3	42 N	+84	-25	
23+75 s	+1	39 N	+81	-15	
24+00 s	+3	30 N	+69	-36	
24+25 s	+5	15 N	+45	-44	
24+50 s	-2	10 N	+25	-22	
24+75 s	+3	13 N	+23	+3	
25+00 s	-2	15 N	+28	+9	
25+25 s	-5	17 N	+32	+36	
25+50 s	+6	47 N	+64	+57	
25+75 s	-4	42 N	+89	0	
26+00 s	+8	22 N	+64	-57	
		10 N	+32	-34	
		20 N	+30	+53	

PAN OCEAN OIL LTD.

VLF – EM SURVEY

PROJECT _____ PAGE _____

GRID _____ DATE _____

LINE _____ OPERATOR _____

SOURCE STATION _____

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS

PAN OCEAN OIL LTD.

VLF – EM SURVEY

PROJECT J.K PAGE _____

GRID JK DATE August 2/83

LINE L 22+00W OPERATOR PTC

SOURCE STATION _____

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
			+32		
26+25s	+3	10N	+30	+53	
26+50s	-7	20N	+85	+49	
26+75s	-9	65N	+134		
27+00s	-12	69N			

PAN OCEAN OIL LTD.

VLF – EM SURVEY

PROJECT J.K. PAGE 2 of 2

GRID DATE 30 July/83

LINE 41+00W OPERATOR P.T.C

SOURCE STATION C

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
6+50S	+6	31S	-81	+21	
6+75S	-4	31S	-62	+20	
7+00S	-2	30S	-61	+10	
7+25S	-3	22S	-52	+32	
7+50S	-14	7S	-29	+38	
7+75S	-22	7S	-14	+19	
8+00S	-8	3S	-10		

PAN OCEAN OIL LTD.

VLF – EM SURVEY

PROJECT J.K. PAGE 1 of 2

GRID DATE 30 July/83

LINE 41+00W OPERATOR P.T.C

SOURCE STATION Cutler

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
3+00N	-7	13S	-28		
2+75N	-4	15S	-26	+11	
2+50N	-1	11S	-17	+14	
2+25N	+2	6S	-12	+3	
2+00N	+5	6S	-14	-6	
1+75N	+4	8S	-18	-11	
1+50N	-1	10S	-25	-17	
1+25N	+1	15S	-35	-17	
1+00N	+5	20S	-42	-6	
+75N	+1	22S	-41	+5	
+50N	+4	19S	-37	+8	
+25N	-1	18S	-33	+6	
B.L.	0	15S	-21	+5	
+25S	-1	16S	-28	+4	
+50S	-1	12S	-27	+1	
+75S	0	15S	-27	-16	
1+00S	-3	22S	-43	-17	
1+25S	-2	21S	-44	-3	
1+50S	+4	23S	-46	-4	
		23S	-48		
		25S			

PAN OCEAN OIL LTD.

VLF – EM SURVEY

PROJECT _____ PAGE _____

GRID _____ DATE _____

LINE _____ OPERATOR _____

SOURCE STATION _____

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS

PAN OCEAN OIL LTD.

VLF – EM SURVEY

PROJECT J.K PAGE _____

GRID _____ DATE 30 July/83

LINE 41+00 W OPERATOR P.J.C.

SOURCE STATION _____

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
			-46		
1+75s	+2	23s	-48	0	
2+00s	-1	25s	-46	+15	
2+25s	-3	21s	-33	+19	
2+50s	-5	12s	-27	-3	
2+75s	-2	15s	-36	-16	
3+00s	-5	21s	-43	-11	
3+25s	0	22s	-47	-12	
3+50s	-2	25s	-55	-21	
3+75s	-1	30s	-68	-18	
4+00s	+4	38s	-73	-8	
4+25s	-1	35s	-76	-13	
4+50s	+1	41s	-86	+1	
4+75s	-4	45s	-75	+29	
5+00s	+1	30s	-57	+15	
5+25s	+4	27s	-60	-15	
5+50s	0	33s	-72	-8	
5+75s	+1	39s	-72	-11	
6+00s	+9	33s	-83	-9	
6+25s	+10	50s	-81	+21	
		31s	-62		
		31			

PAN OCEAN OIL LTD.

VLF – EM SURVEY

PROJECT J.K. PAGE 2 of 2

GRID DATE 30 July/83

LINE 43+00W OPERATOR P.T.C.

SOURCE STATION Cutler

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
7+50S	+3	4S	-30	+61	
7+75S	0	7S	-11	+25	
8+00S	0	2N	-5		

PAN OCEAN OIL LTD.

VLF – EM SURVEY

PROJECT J.K. PAGE

GRID DATE 30 July/83

LINE 43+00W OPERATOR P.T.C.

SOURCE STATION Cutler

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
2+00N	-3	3S			
1+75N	+4	7S	-10		
1+50N	-7	11S	-18	-9	
1+25N	+3	8S	-19	-1	
1+00N	+3	11S	-19	-3	
+75N	-1	11S	-22	-2	
+50N	+4	10S	-21	-3	
+25N	+2	15S	-25	-4	
B.L.	+2	10S	-25	+2	
+25S	-3	13S	-23	-3	
+50S	-1	15S	-28	-4	
+75S	+1	12S	-27	+3	
1+00S	-2	13S	-25	0	
1+25S	-3	14S	-27	-5	
1+50S	+1	16S	-30	-4	
1+75S	+1	15S	-31	-2	
2+00S	-1	17S	-32	-2	
2+25S	-1	16S	-33	+4	
2+50S	-1	18S	-28	-8	
		23S	-41	-18	
		23S	-46		

PAN OCEAN OIL LTD.

VLF – EM SURVEY

PROJECT _____ PAGE _____

GRID _____ DATE _____

LINE _____ OPERATOR _____

SOURCE STATION _____

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS

PAN OCEAN OIL LTD.

VLF – EM SURVEY

PROJECT S.K. PAGE 1 of 2

GRID _____ DATE 30 July/83

LINE 43+00W OPERATOR P.T.C.

SOURCE STATION Cutler

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
			-41		
2+75 S	-1	23 S	-46	+12	
3+00 S	-6	23 S	-29	-10	
3+25 S	-5	26 S	-56	-27	
3+50 S	-2	30 S	-56	+2	
3+75 S	0	26 S	-54	+2	
4+00 S	-5	28 S	-54	+3	
4+25 S	0	26 S	-51	+8	
4+50 S	-2	25 S	-46	+3	
4+75 S	-4	21 S	-48	-11	
5+00 S	-10	27 S	-57	-15	
5+25 S	-5	30 S	-63	-14	
5+50 S	-10	33 S	-71	-14	
5+75 S	-9	38 S	-77	-3	
6+00 S	-5	39 S	-74	+10	
6+25 S	+2	35 S	-67	+5	
6+50 S	+2	32 S	-69	-16	
6+75 S	+4	37 S	-83	-3	
7+00 S	+6	46 S	-72	+53	
7+25 S	+3	26 S	-30	+61	
		4 S	-11		
		7 S			

VLF – EM SURVEY

PROJECT S.K. PAGE 2 of 4

GRID DATE July 23/83

LINE 45+00W OPERATOR P.T.C.

SOURCE STATION Cutler

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
			-42		
15+25s	-8	-15	-26	-17	
15+00s	0	-11	-25	+12	
+75s	0	-14	-38	+24	
+50s	-2	-24	-49	+17	
+25s	+3	-25	-55	+13	
14+00s	-2	-30	-62	+9	
+75s	+6	-32	-64	+3	
+50s	+2	-32	-65	-4	
+25s	+6	-33	-60	-18	
13+00s	+6	-27	-47	-19	
+75s	+2	-20	-41	-14	
+50s	0	-21	-33	-18	
+25s	-1	-12	-23	-8	
12+00s	0	-11	-25	+2	
+75s	-4	-14	-25	-1	
+50s	-4	-11	-24	+3	
+25s	-2	-13	-28	+5	
11+00s	-4	-15	-29	+2	
		-14	-30		
		-16			

VLF – EM SURVEY

PROJECT S.K. PAGE 1 of 4

GRID DATE July 23/83

LINE Line 45+00W OPERATOR P.T.C.

SOURCE STATION Cutler

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
25+00s	-13	+27	+52		
+75s	-12	+25	+37	+26	
+50s	-16	+12	+26	+5	
+25s	-20	+14	+32	-22	
24+00s	-20	+18	+48	-19	
+75s	-16	+30	+51	+24	
+50s	-14	+21	+24	+47	
+25s	-14	+3	+5	+28	
23+00s	-12	+2	-4	+6	
+75s	-8	-6	-1	-14	
+50s	-8	+5	+10	+16	
+25s	-1	+5	-17	+44	
22+00s	-9	-22	-34	+20	
+75s	-1	-12	-37	-5	
+50s	+4	-15	-29	-24	
+25s	0	-14	-13	-18	
21+00s	-1	+1	-11	+19	
+75s	-4	-12	-32	+48	
+50s	-4	-20	-59	+42	
+25s	-2	-39	-74	+1	
		-35	-60		
		-25			

VLF – EM SURVEY

PROJECT J.K. PAGE

GRID DATE July 23/83

LINE 45+00 W OPERATOR P.T.C.

SOURCE STATION

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
			-29		
10+75S	-2	-14	-30	+1	
+50S	-4	-16	-30	-9	
+25S	-5	-14	-21	-16	
10+00S	-2	-7	-14	-15	
+75S	-1	-7	-3	-16	
+50S	-7	+4	+2	+3	
+25S	-3	-2	-6	+19	
9+00S	+2	-4	-17	+14	
+75S	+3	-13	-20	+4	
+50S	-2	-7	-21	+11	
+25S	-1	-14	-31	+17	
8+00S	+5	-17	-39	+7	
+75S	+10	-22	-38	0	
+50S	+8	-16	-39	-1	
+25S	-1	-23	-37	-5	
7+00S	+2	-14	-34	+3	
+75S	-5	-20	-40	+6	
+50S	-3	-20	-40	+2	
+25S	-4	-20	-42	+31	
		-22	-71		
		-49			

VLF – EM SURVEY

PROJECT J.K. PAGE

GRID DATE July 23/83

LINE 45+00W OPERATOR P.T.C.

SOURCE STATION Cutler

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
			-74		
20+00S	+5	-35	-60	-27	
+75S	+3	-25	-47	-16	
+50S	-4	-22	-44	-9	
+25S	-1	-20	-38	-12	
19+00S	-1	-18	-32	-10	
+75S	-4	-13	-28	-4	
+50S	-4	-15	-28	-5	
+25S	-4	-13	-23	-19	
18+00S	-8	-10	-9	-19	
+75S	-6	+1	-4	+2	
+50S	-14	-5	-11	+8	
+25S	-12	-6	-12	+11	
17+00S	-8	-6	-22	+25	
+75S	-9	-16	-37	+24	
+50S	-3	-21	-48	+15	
+25S	0	-27	-52	-17	
16+00S	-9	-25	-31	-21	
+75S	-12	-7	-33	+11	
+50S	-4	-27	-42	-7	
		-15	-26		
		-11			

VLF – EM SURVEY

PROJECT JK PAGE

GRID DATE July 23

LINE L47+00W OPERATOR BG

SOURCE STATION Cutler NW

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
BL	+1	75			
0+25	0	125	-19		
0+50	+3	165	-28	-10	
0+75	+1	135	-29	+4	
1+00	+2	115	-24	+7	
1+25	-2	115	-22	+5	
1+50	-2	95	-19	+5	
1+75	-3	95	-17	+2	
2+00	0	85	-17	-3	
2+25	-1	125	-20	-3	
2+50	+1	85	-20	+4	
2+75	-1	85	-16	+6	
3+00	+2	65	-14	+7	
3+25	+5	35	-9	+10	
3+50	+6	15	-4	+7	
3+75	+7	15	-2	+4	
4+00	+4	IN	0	+3	
4+25	+2	0	+1	-2	
4+50	+2	25	+2	-5	
		25	-4	-3	
		35	-5	-2	
		35	-6		

VLF – EM SURVEY

PROJECT J.K. PAGE 3 of 4

GRID DATE July 23/83

LINE 45+00W OPERATOR P.T.C.

SOURCE STATION Cutler

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
6+00 S	-4	-22	-42	+31	
+75 S	0	-27	-49	+10	
+50 S	0	-25	-52	-5	
+25 S	-1	-19	-44	-15	
5+00 S	0	-18	-37	-10	
+75 S	-1	-16	-34	-8	
+50 S	0	-13	-29	-4	
+25 S	-1	-17	-30	0	
4+00 S	+2	-12	-29	-4	
+75 S	0	-14	-26	+6	
+50 S	-4	-21	-35	+15	
+25 S	+2	-20	-41	+1	
3+00 S	-2	-14	-34	-12	
+75 S	+1	-15	-29	-1	
+50 S	0	-18	-33	+6	
+25 S	0	-17	-35	+4	
2+00 S	+1	-20	-37	+8	
+75 S	-1	-23	-43	+2	
+50 S	+2	-16	-39	-4	
		-23	-39	+5	
		-21	-44		

VLF – EM SURVEY

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GRID _____ DATE July 23

LINE L 47+00 W OPERATOR BG

SOURCE STATION Cutler

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
4+75	+2	2S			
5+00	+2	3S	-5		
5+25	0	3S	-6	+3	
5+50	0	1N	-2	+1	
5+75	+3	6S	-5	-6	
6+00	-2	2S	-8	+1	
6+25	+2	2S	-4	+3	
6+50	+1	3S	-5	-3	
6+75	-5	4S	-7	-6	
7+00	-3	7S	-11	-3	
7+25	-5	3S	-10	+3	
7+50	0	5S	-8	-6	
7+75	0	11S	-16	-10	
8+00	+3	7S	-18	+1	
8+25	-1	8S	-15	+6	
8+50	-2	4S	-12	+24	
8+75	-8	13N	+9	+50	
9+00	-8	25N	+38	+29	
		13N	+38	-21	
		4N	+17	-41	
		7S	-3		

VLF – EM SURVEY

PROJECT J.K PAGE _____

GRID _____ DATE July 23/83

LINE 45+00 W OPERATOR P.J.C.

SOURCE STATION _____

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
1+25 S	-4	-23	-39	+5	
1+00 S	-2	-21	-44	+6	
+75 S	-2	-21	-45	0	
+50 S	0	-20	-44	-5	
+25 S	0	-20	-40	-8	
0+00	0	-16	-36		

VLF – EM SURVEY

PROJECT: JK
PAGE: 47-5
GRID:
DATE: July 23
LINE: 47+00 W
OPERATOR: BG
SOURCE STATION: Cutler

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
18+75	+1	13S			
19+00	-4	7S	-20		
19+25	-3	4N	-3	+28	
19+50	+5	4N	+8	-11	
19+75	+2	18S	-14	-42	
20+00	-5	16S	-34	-14	
20+25	-4	12S	-28	+6	
20+50	-1	16S	-28	+5	
20+75	-2	7S	-23	+19	
21+00	-4	2S	-9	+24	
21+25	-7	3N	+1	+15	
21+50	-7	3N	+6	+16	
21+75	-10	14N	+17	+21	
22+00	-5	13N	+27	-10	
22+25	-12	6S	+7	-39	
22+50	-10	6S	-12	-10	
22+75	-8	3N	-3	+18	
23+00	-12	3N	+6	+6	
		0	+3	+5	
		11N	+11	+19	
		11N	+22	+12	
		12N	+23		

VLF – EM SURVEY

PROJECT: JK
PAGE: 47+3
GRID:
DATE: July 23
LINE: 47+00 W
OPERATOR: BG
SOURCE STATION: Cutler MAP

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
9+25	-17	13N			
9+50	-6	4N	+17	-	
9+75	-2	7S	-3	-37	
10+00	+1	13S	-20	-22	
10+25	+4	12S	-25	-4	
10+50	-1	12S	-24	+5	
10+75	+3	8S	-20	+24	
11+00	0	8N	0	+22	
11+25	-5	6S	+2	-7	
11+50	+1	1S	-7	-6	
11+75	-2	3S	-4	-1	
12+00	0	5S	-8	+11	
12+25	+1	12N	+7	+30	
12+50	-3	10N	+22	-2	
12+75	-4	5S	+5	-35	
13+00	0	8S	-13	-25	
13+25	+6	12S	-20	-22	
13+50	-1	23S	-35	-3	
13+75	-2	0	-23	+15	
		10S	-10	+22	
		9N	-1	+46	
		27N	+36		

VLF – EM SURVEY

PROJECT _____ PAGE _____

GRID _____ DATE _____

LINE L 47+00 N & S OPERATOR _____

SOURCE STATION _____

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
23+25	-17	0			
23+50	-17	11N	+11		
23+75	-14	11N	+22	+12	
24+00	-12	12N	+23		
	-	0			
0+00		16S			
0+25		12S	-28		
8L		7S	-19	-17	
0+25	+3	4S	-11	-12	
0+50	0	3S	-7	-4	
0+75	+2	4S	-7	+3	
1+00	+2	6S	-10	+2	
1+25	+4	3S	-9	-1	
1+50	+5	6S	-9	+1	
1+75	+1	4S	-10	-2	
2+00	-4	3S	-7	-5	
2+25	-1	2S	-5	+1	
2+50	-5	6S	-8		

VLF – EM SURVEY

PROJECT TK PAGE 47-4

GRID _____ DATE July 23

LINE L47+00 W OPERATOR BG

SOURCE STATION Cutler VLF

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
14+00	-4	10S			
14+25	-4	9N	-1		
14+50	+2	27N	+36	+25	
14+75	+4	3S	+24	-9	
15+00	-4	24S	-27	-2	
15+25	-1	2S	-26	+18	
15+50	-7	7S	-9	+12	
15+75	-6	7S	-14	0	
16+00	+1	2S	-9	0	
16+25	+1	12S	-14	-20	
16+50	+1	17S	-29	-5	
16+75	-1	2S	-19	+30	
17+00	+1	3N	+1	+19	
17+25	0	3S	0	-11	
17+50	-7	7S	-10	-14	
17+75	-3	7S	-14	-6	
18+00	-6	9S	-16	-3	
18+25	-8	8S	-17	-9	
18+50	+2	15S	-23	-11	
		13S	-28	+3	
		7S	-20	+25	
		4N	-3	+28	

12N+

VLF – EM SURVEY

PROJECT: J.K
PAGE:
GRID: J.K
DATE: July 24/83
LINE: L 49+00W
OPERATOR: B.G
SOURCE STATION:

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
6+50	+6	4N	+17		
6+75	+3	7N	+11	+2	
7+00	+3	12N	+19	-10	
7+25	+3	6N	+18	-12	
7+50	-3	3N	+9	-4	
7+75	0	3N	+6	-2	
8+00	+2	2N	+5	-3	
8+25	+2	1N	+3	-2	
8+50	0	2N	+3	+9	
8+75	-1	10N	+12	+18	
9+00	-8	11N	+21	+15	
9+25	-6	16N	+27	+5	
9+50	-4	10N	+26	-11	
9+75	-1	6N	+16	-17	
10+00	-2	3N	+9	-9	
10+25	0	4N	+7	-12	
10+50	+6	7S	-3	-21	
10+75	+5	7S	-14	+2	
11+00	-1	6N	-1	+26	
		6N	+12	+11	
		4N	+10	0	
			+12		

VLF – EM SURVEY

PROJECT: J.K
PAGE:
GRID: J.K
DATE: July 24
LINE: 49+00W
OPERATOR: BG
SOURCE STATION: Cutler NAA

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
3+00N	+1	7N	+11	-	
2+75N	-2	4N	+6	-11	
2+50	-2	3N	0	-10	
2+25	-1	3S	-5	-6	
2+00	-2	3S	-10	-7	
1+75	0	7S	-13	-2	
1+50	?	6S	-12	+4	
1+25	+3	6S	-9	+5	
1+00	+2	3S	-7	-2	
0+75	[illegible]	4S	-11	-3	
0+50	+3	7S	-10	+4	
0+25N	0	3S	-7	+3	
BL	+2	4S	-7	-1	
0+25S	+5	3S	-8	-3	
0+50	-1	5S	-10	-1	
0+75	-2	5S	-9	+3	
1+00	-5	4S	-7	+1	
1+25	-2	3S	-8	+8	
1+50	-2	5S	+1	-2	
		6N	-10	-1	
		4N	-6		

VLF – EM SURVEY

PROJECT: J.K. PAGE:
GRID: J.K DATE: July 24
LINE: L49+00W OPERATOR: B.G.
SOURCE STATION:

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
11+75	-4	6N			
11+50	0	4N	+10		
11+75	-4	8N	+12	+9	
12+00	-4	11N	+19	+12	
12+25	-6	13N	+24	+7	
12+50	-6	13N	+26	+5	
12+75	+1	16N	+29	+4	
13+00	-2	14N	+30	-2	
13+25	-3	12N	+27	-11	
13+50	0	6N	+19	-26	
13+75	+2	5S	+1	-29	
14+00	-2	5S	-10	0	
14+25	+4	6N	+1	+20	
14+50	0	4N	+10	+19	
14+75	+2	16N	+20	+19	
15+00	-4	13N	+29	+3	
15+25	-4	10N	+23	-13	
15+50	-5	1N	+11	-20	
15+75	+4	2N	+3	-11	
		2S	0	-5	
		0	-2	+4	
			+4		

VLF – EM SURVEY

PROJECT: J.K PAGE:
GRID: J.K DATE: July 24
LINE: L49+00W OPERATOR: B.G
SOURCE STATION:

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
1+75	-2	6S			
2+00	0	4S	-10		
2+25	+1	2S	-6	+10	
2+50	+2	2N	0	+6	
2+75	+6	2S	0	-5	
3+00	+4	3S	-5	-6	
3+25	+6	3S	-6	-2	
3+50	+2	4S	-7	+5	
3+75	+1	3N	-1	+13	
4+00	0	3N	+6	+7	
4+25	+2	3N	+6	0	
4+50	0	3N	+6	+1	
4+75	0	4N	+7	+1	
5+00	0	3N	+7	+2	
5+25	+1	6N	+9	+8	
5+50	-4	9N	+15	+7	
5+75	+2	7N	+16	+11	
6+00	-2	12N	+19	+9	
6+25	+1	13N	+25	-2	
		4N	+17	-14	
		7N	+11	+2	
			+19		

VLF – EM SURVEY

PROJECT: Jo K | PAGE:
GRID: Jo K | DATE: July 23/83
LINE: 49+00W - Nov 82 | OPERATOR: [illegible]
SOURCE STATION: Cutler

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER	
BL	+3	4S		
0+25N	0	3S	-7	
0+50	+3	7S	-10	+4
0+75	+3	4S	-11	-3
1+00	+3	3S	-7	-2
[illegible]	+3	6S	-9	+5
[illegible]	-2	6S	-12	+4
[illegible]	0	7S	-13	-2
[illegible]	-2	3S	-10	-7
2+25	-1	2S	-5	-10
2+50	-2	2N	0	-11
2+75	-2	4N	+6	+11
3+00	+1	7N	+11	

VLF – EM SURVEY

PROJECT: JK | PAGE:
GRID: JK | DATE:
LINE: 49+00W | OPERATOR: BG
SOURCE STATION:

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER	
16+00	-3	2S		
16+25	0	0	-2	
16+50	-1	4N	+4	+13
16+75	-4	7N	+11	+11
17+00	-5	8N	+15	+4
17+25	-6	7N	+15	+6
17+50	-3	14N	+21	+5
17+75	-4	6N	+20	-2
18+00	[illegible]	13N	+19	-3
18+25	-4	4N	+17	-22
18+50	+5	7S	-3	-35
18+75	+3	11S	-18	-5
19+00	-3	3N	-8	+33
19+25	-4	12N	+15	+28
19+50	0	8N	+20	-3
19+75	-2	4N	+12	-9
20+00	-5	7N	+11	-3
20+25	-3	2N	+9	-10
20+50	-3	1S	+1	-10
		0	-1	+2
		3N	+3	+12
			+11	

VLF – EM SURVEY

PROJECT: Joko
PAGE:
GRID: Joko
DATE:
LINE: L 01+00W – N of B.L.
OPERATOR:
SOURCE STATION:

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
.50					
0+25					
0+50					
0+75					
1+00					
1+25					
1+50					
1+75					
2+00					
2+25					
2+50					
2+75					
3+00					

VLF – EM SURVEY

PROJECT: Joko
PAGE:
GRID:
DATE: July 24
LINE: 49+00W
OPERATOR: BG
SOURCE STATION: Cutler NAA

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
20+75	0	0			
21+00	-4	3N	+3		
21+25	-5	8N	+11	+11	
21+50	-5	6N	+14	-3	
21+75	-6	2N	+8	+1	
22+00	-6	23N	+25	+12	
22+25	-7	3S	+20	-36	
22+50	-3	8S	-11	-16	
22+75	-10	12N	+4	+47	
23+00	-8	24N	+36	+39	
23+25	-14	19N	+43	-4	
23+50	-12	13N	+32	-6	
23+75	-16	24N	+37	+15	
24+00	-12	22N	+47		

VLF – EM SURVEY

PROJECT: J.K.
PAGE:
GRID:
DATE: July 24
LINE: 5+00
OPERATOR: P.T.C
SOURCE STATION: Cutler NAA

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
6+50	-5	14N	+24		
6+75	-6	9N	+23	-10	
7+00	-2	25N	+34	+8	
7+25	-3	6N	+31	-32	
7+50	+2	4S	+2	-32	
7+75	+2	3N	-1	+6	
8+00	0	5N	+8	+11	
8+25	-4	5N	+10	+7	
8+50	-3	10N	+15	+9	
8+75	+2	9N	+19	-2	
9+00	+4	4N	+13	-5	
9+25	-2	10N	+14	+8	
9+50	-4	11N	+21	+18	
9+75	-7	21N	+32	+12	
10+00	-8	12N	+33	-14	
10+25	+4	6N	+18	-31	
10+50	0	4S	+2	-28	
10+75	+3	6S	-10	-11	
11+00	+7	3S	-9	+10	
		3N	0	+26	
		14N	+17	+17	
			+17		

VLF – EM SURVEY

PROJECT: J.K.
PAGE:
GRID: J.K.
DATE: July 24
LINE: L 5+00W
OPERATOR: P.T.C
SOURCE STATION: Cutler NAA

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
3+00N	-1	5S			
2+75N	+3	2S	-7		
2+50N	+1	4S	-6	+1	
2+25N	+2	2S	-6	0	
2+00N	+6	4S	-6	-1	
1+75N	0	3S	-7	+1	
1+50N	+2	2S	-5	+5	
1+25N	0	0	-2	+4	
1+00N	0	1S	-1	-3	
0+75N	-2	4S	-5	-6	
0+50N	-2	3S	-7	-1	
0+25N	-4	3S	-6	+5	
BL	-3	1N	-2	+7	
0+25	+4	0	+1	-1	
0+50	0	1S	-1	0	
0+75	+3	0	-1	+1	
1+00	0	0	0	+1	
1+25	-2	0	0	-3	
1+50	-1	3S	-3	-6	
		3S	-6	-6	
		6S	-9	-3	
			-9		

VLF – EM SURVEY

PROJECT JK PAGE

GRID JK DATE July 24

LINE L51+00W OPERATOR PTC

SOURCE STATION

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
11+25	+1	3N			
11+50	+3	14N	+17		
11+75	-4	3N	+17	-19	
12+00			-2	-21	
12+25	+1	5S		+4	
12+50	-1	1S	-4		
12+75	0	3N	+2	+22	
13+00	-8	15N	+18	+28	
13+25	-8	15N	+30	+15	
13+50	-4	18N	+33	-2	
13+75	-2	10N	+28	-14	
14+00	-5	9N	+19	-8	
14+25	+1	1N	+20	-7	
14+50	+1	1N	+12	-21	
14+75	0	2S	-1	+2	
15+00	+5	16N	+14	+34	
15+25	+3	17N	+33	+17	
15+50	-1	14N	+31	-6	
15+75	-1	13N	+27	-7	
		1N	+24	-10	
		6N	+17	-10	
			+14		

VLF – EM SURVEY

PROJECT JK PAGE

GRID JK DATE July 24

LINE L51+00W OPERATOR PTC

SOURCE STATION

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
1+75	-3	3S	-6		
2+00	+4	6S	-9	-3	
2+25	-1	3S	-9	+4	
2+50	+4	2S	-5	+3	
2+75	+1	4S	-6	+1	
3+00	-2	0	-4	+5	
3+25	+3	1S	-1	+1	
3+50	-2	2S	-3	-3	
3+75	+2	2S	-4	-3	
4+00	+1	4S	-6	0	
4+25	-2	0	-4	+7	
4+50	-2	1N	+1	+6	
4+75	-4	1N	+2	-3	
5+00	0	3S	-2	-5	
5+25	-4	0	-3	+6	
5+50	0	4N	+4	+8	
5+75	+1	1N	+5	+3	
6+00	-1	6N	+7	+11	
6+25	+1	10N	+16	+17	
		14N	+24	+7	
		9N	+23	-10	
			+34		

VLF – EM SURVEY

PROJECT: J.K.
PAGE:
GRID: J.K.
DATE:
LINE: 53+00W
OPERATOR:
SOURCE STATION: Cutler NAA

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
8L	-4	6S	-8	+3	
0+25	-2	14N	+8	+31	
0+50	0	9N	+23	+12	
0+75	0	11N	+20	-5	
1+00	-4	7N	+18	-10	
1+25	-1	3N	+10	-11	
1+50	-2	4N	+7	+6	
1+75	-2	12N	+16	+7	
2+00	-2	2N	+14	-14	
2+25	0	0	+2	-12	
2+50	0	2N	+2	+6	
2+75	+2	6N	+8	-3	
3+00	-2	7S	-1	-26	
3+25	-4	11S	-18	-16	
3+50	-1	6S	-17	+13	
3+75	-1	1N	-5	+19	
4+00	+3	1N	+2	+20	
4+25	-2	14N	+15	+24	
4+50	-6	12N	+26	-5	
		2S	+10	-31	
		3S	-5		

VLF – EM SURVEY

PROJECT: J.K.
PAGE:
GRID: J.K.
DATE: July 24/83
LINE: L 51+00 W
OPERATOR: PTC
SOURCE STATION: Cutler NAA

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
16+00	+5	11N	+17		
16+25	+3	6N	+14	+5	
16+50	-3	8N	+22	+15	
16+75	-2	14N	+29	+22	
17+00	-3	15N	+44	+42	
17+25	+1	29N	+71	+27	
17+50	-7	42N	+71	-28	
17+75	-2	29N	+43	-52	
18+00	-5	14N	+19	-28	
18+25	-1	5N	+15	-4	
18+50	+9	10N	+15	-10	
18+75	+8	5N	+5	-20	
19+00	+4	0	-5	-14	
19+25	-5	5S	-9	+20	
19+50	+6	4S	+15	+48	
19+75	+6	19N	+39		
20+00	+3	20N			

VLF – EM SURVEY

PROJECT _____ PAGE _____

GRID _____ DATE _____

LINE _____ OPERATOR _____

SOURCE STATION _____

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS

VLF – EM SURVEY

PROJECT JK PAGE _____

GRID JK DATE _____

LINE L53+00W OPERATOR _____

SOURCE STATION _____

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
4+75	12	1/5	-17		
5+00	+6	0	-14	+14	
5+25	+2	3S	-3	+9	
5+50	+4	2S	-5	+1	
5+75	+9	0	-2	+7	up to 5+75
6+00	+9	2N	+2	-3	signals very
6+25	+10	4S	-5	-21	[illegible] &
6+50	+7	2N	-19	-21	weak
6+75	+2	14S	-26	-16	[illegible]
7+00	+10	2S	-35	-2	[illegible]
7+25	+4	7S	-25	+30	OK 5+50
7+50	+2	2N	-5	+33	13:00
7+75	+2	3N	+5	+14	
8+00	+2	6N	+9	+18	
8+25	-10	17N	+23	+29	
8+50	-2	21N	+38	+20	
8+75	-10	22N	+43	-11	
9+00	-8	3N	+27	-32	
9+25	-10	6N	+11	-15	
		6N	+12	-1	
		4N	+10	-5	
			+7		

VLF – EM SURVEY

PROJECT _____ PAGE _____

GRID _____ DATE _____

LINE L 53+00W OPERATOR _____

SOURCE STATION _____

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
9+50	0	6N			
9+75	-8	4N	-10		
10+00	-1	3N	+7	-4	
10+25	+6	3N	+6	+1	
10+50	0	5N	+8	+1	
10+75	+5	2N	+7	-5	
11+00	+1	1N	+3	+1	
11+25	-4	7N	+8	+10	
11+50	+1	0N	+13	+2	
11+75	0	4N	+10	-6	picket was
12+00	0	2N	+7	+3	been removed
12+25	[illegible]	[illegible]	+13	+10	10+50 - 11+00
12+50	+6	10N	+21	+4	
12+75	-8	7N	+17	6	
13+00	-3	8N	+15	+4	
13+25	+1	14N	+22	+15	
13+50	+7	16N	+30	+2	
13+75	-4	8N	+24	-6	
14+00	0	16N	+24		

VLF – EM SURVEY

PROJECT JK PAGE _____

GRID _____ DATE July 25

LINE 53+00W OPERATOR BG

SOURCE STATION Cutler NAA

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
B.L.	0	9N	+23	+12	
0+25	0	14N	+20	-5	
0+50	-1	7N	+18	-13	
0+75	-1	3N	+10	-11	
1+00	-2	4N	+7	+6	
1+25	-2	12N	+16	+1	
1+50	-2	2N	+14	-14	
1+75	0	0	+2	-12	
2+00	0	2N	+7	+6	
2+25	+2	6N	+8	-3	
2+50	-2	[illegible]	-1	-20	
2+75	-4	11S	+18	-16	
3+00	-1	0S	-17	+13	
3+25	-1	1N	+5	+19	
3+50	+3	1N	+2	+20	
3+75	-2	14N	+15	+24	
4+00	-6	12N	+16	-6	
4+25	0	2S	+9	-31	
4+50	-2	3S	-5	-26	
		1S	-17	-9	
		0	-14	+14	
			-3		

PAN OCEAN OIL LTD.

VLF – EM SURVEY

PROJECT SK PAGE

GRID DATE July 26

LINE 55+00W OPERATOR P.T.C

SOURCE STATION Cutler

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
6+00N	+2	10 S	-20		
5+75N	0	10 S	-22	+6	
5+50N	+2	12 S	-14	+18	
5+25N	+2	2 S	-4	+27	
5+00N	-2	2 S	+13	+44	
4+75N	-1	15 N	+40	+4	
4+50N	+5	25 N	+17	-86	
4+25N	+4	8 S	-46	-110	
4+00N	+10	38 S	-93	-19	
3+75N	+6	55 S	-65	+45	
3+50N	+7	10 S	-48	-5	
3+25N	+6	38 S	-70	0	
3+00N	+9	32 S	-48	+50	
2+75N	+2	16 S	-20	+24	
2+50N	+3	4 S	-24	-10	
2+25N	0	20 S	-30	+5	
2+00N	+1	10 S	-19	+11	
1+75N	+4	9 S	-19	+1	
1+50N	+4	10 S	-18	+6	
1+25N		8 S	-13		
1+00N		5 S	-15		

VLF – EM SURVEY

PROJECT SK PAGE

GRID DATE July 24

LINE 53+00W OPERATOR P.T.C

SOURCE STATION Cutler

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
0+00N	+1	S12	-14	-	
+25N	+3	S2	-5	+8	
+50N	+1	S3	-6	-2	
+75N	-1	S3	-7	-1	
1+00N	+1	S4	-7	-3	
+25N	+3	S3	-10	-9	
+50N	+2	S7	-16	-11	
+75N	+2	S9	-21	-9	
2+00N	-1	S12	-25	-4	
+25N	+2	S13	-25	+3	
+50N	+2	S12	-22	+4	
+75N	+3	S10	-21	+13	
3+00N	+2	S11	-9	+21	
+25N	-4	N2	0	+2	
+50N	-2	S2	-7	-15	
+75N	-6	S5	-15		
4+00N	0	S10			

PAN OCEAN OIL LTD.

VLF – EM SURVEY

PROJECT J.K. PAGE

GRID DATE July 26/83

LINE 55+00W OPERATOR P.J.C.

SOURCE STATION Cutler

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
1+25	+2	8 S	-18		
1+00	0	5 S	-13	+3	
+75	+6	10 S	-15	-5	
+50	-2	8 S	-18	+1	
+25	0	6 S	-14	+15	
0+00	-2	2 N	-3	+21	
+25S	+1	4 N	+7	+9	
+50S	+4	2 N	+6		
+75S					

VLF – EM SURVEY

PROJECT PAGE

GRID DATE

LINE OPERATOR

SOURCE STATION

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS

PAN OCEAN OIL LTD.

VLF – EM SURVEY

PROJECT J.K. PAGE

GRID DATE July 26/83

LINE 57+00W OPERATOR P.T.C.

SOURCE STATION Cutler

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER	
6+00 N	-5	24 S		
			-44	
5+75 N	+2	20 S		
			-49	-24
5+50 N	+2	29 S		
			-68	-18
5+25 N	+6	39 S		
			-67	+30
5+00 N	+16	28 S		
			-38	+64
4+75 N	+9	10 S		
			-3	+33
4+50 N	+2	7 N		
			-5	-11
4+25 N	+2	2 S		
			-14	-21
4+00 N	+6	12 S		
			-26	-25
3+75 N	+5	14 S		
			-39	-24
3+50 N	+10	25 S		
			-50	-13
3+25 N	+14	26 S		
			-52	+13
3+00 N	+10	27 S		
			-37	+37
2+75 N	+2	10 S		
			-15	+22
2+50 N	+3	5 S		
			-15	+3
2+25 N	0	10 S		
			-12	+8
2+00 N	+7	2 S		
			-7	+2
1+75 N	+3	5 S		
			-10	-8
1+50 N	+5	5 S		
			-15	-11
		10 S		
			-21	
		11 S		

VLF – EM SURVEY

PROJECT ~~J.K.~~ PAGE

GRID J.O.K. DATE July 24

LINE 55+00W OPERATOR BG

SOURCE STATION Cutler 1000

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER	
BL	-2	3N		
			+7	
0+25	+1	4N		
			+6	-2
0+50	+4	2N		
			+5	-7
0+75	+4	3N		
			-1	-20
1+00	-4	4S		
			-15	-27
1+25	-5	11S		
			-28	-26
1+50	-2	17S		
			-41	-19
1+75	-6	24S		
			-47	-4
2+00	-1	23S		
			-45	+1
2+25	0	22S		
			-41	-1
2+50	-1	24S		
			-46	+9
2+75	+1	22S		
			-37	+25
3+00	+1	15S		
			-21	+22
3+25	-2	6S		
			-15	+4
3+50	-1	9S		
			-17	+6
3+75	-2	8S		
			0	+15
4+00	-2	1S		
			-2	+6
4+25	-3	1S		
			-3	-3
4+50	-1	2S		
			-10	-15
4+75	-5	8S		
			-19	-8
5+00	-4	10S		
			-18	
		10S		

PAN OCEAN OIL LTD.

VLF – EM SURVEY

PROJECT: J.K
PAGE:
GRID:
DATE: July 26/83
LINE: 57+00W
OPERATOR: P.T.C
SOURCE STATION: Cutler

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
1+25N	+4	10S			
1+00	+2	11S	-21	-6	
+75	0	10S	-21	+1	
+50	0	10S	-20	-1	
+25	-2	12S	-22	-5	
0+00	-2	13S	-25	-1	
	0	8S	-21		

VLF – EM SURVEY

PROJECT: JK
PAGE:
GRID: JK
DATE: July 24
LINE: 55+00W
OPERATOR: BG
SOURCE STATION:

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
5+25	0	18S	-13	-23	
5+50	-1	28S	-46	-28	
5+75	-4	18S	-46	+16	
6+00	0	12S	-30	+11	
6+25	-3	25S	-35	+3	
6+50	-10	4S	-27	+36	
6+75	-5	5N	+1	+25	
7+00	-3	7S	-2	-27	
7+25	+4	18S	-26	-53	
7+50	+2	36S	-55	-16	
7+75	0	6S	-42	+49	
8+00	+1	0	-6	+38	
8+25	-5	4S	-4	-1	
8+50	-2	3S	-7	-7	
8+75	-2	8S	-11	-5	
9+00	-9	4S	-12	+6	
9+25	-10	1S	-5	+15	
9+50	-10	1S	-2	+11	
9+75	-12	7N	+6	+20	
10+00	-8	11N	+13		

PAN OCEAN OIL LTD.

VLF – EM SURVEY

PROJECT: J.K
PAGE: 1 of 2
GRID:
DATE: July 26/83
LINE: 59+00W
OPERATOR: P.T.C
SOURCE STATION:

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
4+00N	-1	9 S			
3+75N	+4	15 S	-24		
3+50N	+10	27 S	-42	-13	
3+25N	+8	10 S	-37	-5	
3+00N	+5	37 S	-47	-22	
2+75N	+4	22 S	-59	+18	
2+50N	-1	7 S	-29	+47	
2+25N	0	5 S	-12	+19	
2+00N	0	5 S	-10	+3	
1+75N	0	4 S	-9	+3	
1+50N	-1	3 S	-7	-17	
1+25N	0	23 S	-26	-27	
1+00N	-1	11 S	-34	-1	
+75N	+2	16 S	-27	+4	
+50N	+1	14 S	-30	+1	
+25N	0	12 S	-26	+8	
0+00	0	10 S	-22	+9	
+25S	-1	7 S	-17	+8	
+50S	+1	7 S	-14	-31	
		7 S	-14	+2	
		5 S	-12	-3	

VLF – EM SURVEY

PROJECT: J.K.
PAGE:
GRID: 57+00W
DATE: July 25
LINE:
OPERATOR: BG
SOURCE STATION: Cutler NAA

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
BL	+2	8S	-16		
0+25	0	8S	-11	+8	
0+50	+1	3S	-8	+5	
0+75	+1	5S	-6	+13	
1+00	0	1S	+2	+7	
1+25	-2	3N	+1	-22	
1+50	-1	2S	-20	-26	
1+75	+4	18S	-25	+5	
2+00	-5	7S	-15	-9	
2+25	+1	8S	-34	-40	
2+50	-12	26S	-55	-17	
2+75	-2	29S	-51	+8	
3+00	0	22S	-47	-11	
3+25	+2	25S	-62	-2	
3+50	-5	37S	-49	+41	
3+75	0	12S	-21	+37	
4+00	0	9S	-12	+5	
4+25	-6	3S	-16	-12	
4+50	+1	13S	-24	-9	
4+75	-4	11S	-25	-3	
		14S	-27		

PAN OCEAN OIL LTD.

VLF – EM SURVEY

PROJECT JK PAGE

GRID DATE July 26/83

LINE 59+00W OPERATOR P.T.C

SOURCE STATION Cutler

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
75S	0	7 S			
1+00S	+2	5 S	-12	-3	
1+25S	+4	12 S	-17	-20	
1+50 S	-8	20 S	-32	-23	
1+75 S	-2	20 S	-40	+2	
2+00 S	0	10 S	-30	+25	
2+25 S	0	5 S	-15	+20	
2+50 S	-6	5 S	-10	+1	
2+75 S	+4	9 S	-14	-18	
3+00 S	-1	19 S	-28	-26	
3+25 S	+1	21 S	-40	-20	
3+50 S	-27	27 S	-48	-12	
3+75 S	-25	25 S	-52	-6	
4+00 S	-29	29 S	-54	0	
4+25 S	-23	23 S	-52	+9	
4+50 S	-22	22 S	-45	+10	
4+75 S	-20	20 S	-42	+12	
5+00 S	-13	13 S	-33	-1	
		30 S	-43	-29	
		32 S	-62	-19	

VLF – EM SURVEY

PROJECT JK PAGE

GRID JK DATE July 25

LINE 57+00W OPERATOR B.G

SOURCE STATION

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
5+00	-3	14S	-25	-3	
5+25	-6	23S	-27	-16	
5+50	-7	18S	-41	-4	
5+75	-1	13S	-31	+7	
6+00	-3	21S	-34	-9	
6+25	-4	19S	-40	-3	
6+50	+1	18S	-37	+4	
6+75	-4	18S	-36	+2	
7+00	-3	17S	-35	+2	
7+25	-1	17S	-34	-4	
7+50	+2	22S	-39	-27	
7+75	+4	39S	-61	-42	
8+00	0	42S	-81	-5	
8+25	-2	26S	-66	+45	
8+50	-4	10S	-36	+46	
8+75	-7	10S	-20	+34	
9+00	0	8N	-2	+43	
9+25	-4	15N	+23	+17	
9+50	-7	0	+15	-30	
9+75	-12	1S	-7	-34	
10+00	-10	12S	-19		

VLF – EM SURVEY

PROJECT: J.K.
PAGE:
GRID: J.K.
DATE: July 26
LINE: L63+00W
OPERATOR: BG
SOURCE STATION: Cutler NAA

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
2+00N	0	9S			
1+75N	0	10S	-19		
1+50N	-4	9S	-19	+2	
1+25N	-1	8S	-17	+4	
1+00N	+2	7S	-15	+1	
0+75N	+1	9S	-16	-7	
0+50N	+1	13S	-22	+2	
0+25N	+3	1S	-14	+17	
0-BL	+1	4S	-5	-5	
0+25S	+3	15S	-19	-14	
0+50S	-3	4S	-19	+1	
0+75	-2	14S	-18	+12	
1+00	-1	7N	-7	+28	
1+25	+3	3N	+10	+12	
1+50	+3	2N	+5	-16	
1+75	0	8S	-6	-34	
2+00	+1	21S	-29	-39	
2+25	-1	24S	-45	-15	
2+50	-1	21S	-44	+6	
2+75	+2	18S	-39	+12	
	-6	14S	-32	+4	
			-28		

PAN OCEAN OIL LTD.

VLF – EM SURVEY

PROJECT: JK
PAGE: 2 of 2
GRID:
DATE: July 26/83
LINE: 59+00W
OPERATOR: P.T.C.
SOURCE STATION: Cutler

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
5+25S	-6	30 S			
5+50S	-4	32 S	-62	-19	
5+75S	0	30 S	-62	+5	
6+00S	0	27 S	-57	+10	
6+25S	-2	25 S	-52	-1	
6+50S	0	33 S	-58	-9	
6+75S	-3	28 S	-61	-3	
7+00S	-5	33 S	-61	+2	
7+25S	0	26 S	-59	-3	
7+50S	-2	38 S	-64	-24	
7+75S	-4	46 S	-83	-38	
8+00S	+2	57 S	-102		

VLF – EM SURVEY

PROJECT: JK
PAGE:
GRID: JK
DATE: July 26
LINE: L63+00
OPERATOR: BG
SOURCE STATION:

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
3+00	-6	14	-32		
3+25	-6	14	-28	+11	
3+50	0	29	-43	-11	
3+75	-4	30	-59	-21	
4+00	-8	42	-72	-29	
4+25	-5	40	-82	-23	
4+50	-4	46	-86	-14	
4+75	+4	23	-69	+12	
5+00	0	12	-35	+51	
5+25	+4	10	-22	+47	
5+50	+2	11	-21	+14	
5+75	-2	6	-17	+5	
6+00	-10	8	-14	+7	
6+25	-4	6	-14	+3	
6+50	-2	12	-18	-4	
6+75	+4	8	-20	-6	
7+00	+6	21	-29	-11	
7+25	-6	13	-31	-14	
7+50	+4	8	-21	+8	
7+75	0	16	-24	+10	
8+00S	-1	10	-26	-5	

PAN OCEAN OIL LTD.

VLF – EM SURVEY

PROJECT:
PAGE:
GRID:
DATE:
LINE:
OPERATOR:
SOURCE STATION:

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS

VLF – EM SURVEY

PROJECT: J.K.
PAGE:
GRID: JoKo
DATE: July 26/83
LINE: L 67+00 W
OPERATOR: B.B.
SOURCE STATION: Cutler NAA

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
B.L.	+2	6N			
0+25S	-2	7N	+13		
0+50	-3	0	+7	-15	
0+75	-2	25	-2	-13	
1+00	+2	45	-6	-8	
1+25	0	65	-10	-13	
1+50	+1	135	-19	-17	
1+75	+3	145	-27	-12	
2+00	+2	175	-31	-8	
2+25	-3	185	-35	-4	
2+50	-2	175	-35	-4	
2+75	-4	225	-39	-8	
3+00	-10	215	-43	-5	
3+25	-9	235	-44	+2	
3+50	-7	185	-41	+8	
3+75	-6	185	-36	+11	
4+00	-2	125	-30	+13	
4+25	-2	115	-23	+17	
4+50	+6	25	-13	+24	
4+75	+4	3N	+1	+18	
		2N	+5	-3	
		45	-2		

VLF – EM SURVEY

PROJECT: JoKo
PAGE:
GRID: JoKo
DATE: July 26
LINE: L 67+00 W
OPERATOR: BG
SOURCE STATION:

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
6+00N	-2	95			
5+75	+2	125	-21		
5+50	-2	115	-23	+3	
5+25	-1	135	-24	+5	
5+00	-2	65	-18	+15	
4+75	-1	35	-9	+8	
4+50	-3	75	-10	-6	
4+25	-3	85	-15	-6	
4+00	+4	85	-16	-6	
3+75	+2	135	-21	-6	
3+50	-2	95	-22	+4	
3+25	-4	85	-17	+14	
3+00	0	0	-8	+20	
2+75				+12	
2+50	+4	3N	+3	-4	
2+25	0	2N	+4	+4 -5	
2+00	-3	2N	+7	+10 -23	
1+75	-4	5N	-1	-23 +10	
1+50	+1	65	-16	+10 +1	
750		105	-11	+1	
		15	-15		

VLF – EM SURVEY

PROJECT: JK
PAGE:
GRID: JK
DATE: July 26/83
LINE: L67+00W
OPERATOR: RG
SOURCE STATION:

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
5+00	+2	2N	+5		
5+25	-1	4S	-2	-15	
5+50	+3	6S	-10	-11	
5+75	-3	7S	-15	-4	
6+00	-4	7S	-14	+1	
6+25	-4	6S	-12	-1	
6+50	-5	10S	-15	-7	
6+75	+1	9S	-19	+1	
7+00	0	5S	-14	+9	
7+25	+5	5S	-10	-5	
7+50	+2	14S	-19	-14	
7+75	+4	10S	-24	-9	
8+00	+1	18S	-28	-5	
8+25	+1	11S	-29	+8	
8+50	-4	9S	-20	+19	
8+75	-4	1S	-10	+29	
9+00	-4	10N	+9	+27	
9+25	-10	7N	+17	-3	
9+50	-8	1S	+6	-20	
9+75	-8	7S	-3	-16	
10+00	-8	8S	-10		

VLF – EM SURVEY

PROJECT: JK
PAGE:
GRID: JK
DATE: July 26/83
LINE: L67+00W
OPERATOR: BG
SOURCE STATION:

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
	-3	10S	-11		
1+25	-2	1S	-15	-14	
1+00	-2	14S	-25	-10	
0+75	0	11S	-26	+3	
0+50	-4	14S	-22	+23	
0+25	-2	8S	-2	+35	
BL.	+2	6N	+13	+9	
		7N	+7		
		0			

VLF – EM SURVEY

PROJECT: JoKo
PAGE:
GRID:
DATE: July 28
LINE: L 75400W
OPERATOR: BG
SOURCE STATION: Cutler

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
4+00N	0	175			
3+75N	-1	135	-30		
3+50N	+1	185	-31	-6	
3+25N	+2	185	-36	0	
3+00	-2	135	-31	+5	
2+75	0	185	-31	+9	
2+50	0	45	-22	+27	
2+25	0	0	-4	+16	
2+00	-4	65	-6	-12	
1+75	0	105	-16	-15	
1+50	-2	115	-21	-3	
1+25	+2	85	-19	+4	
1+00	+1	95	-17	+4	
0+75N	-1	65	-15	+13	
0+50N	+1	21	-4	+5	
0+25N	-1	125	-10	-13	
BL	0	55	-17	-9	
0+25S	0	145	-19	-5	
0+50S	-1	85	-22	-6	
[illegible]	+1	95	-25	-6	
[illegible]	+1	75	-16		

VLF – EM SURVEY

PROJECT: JoKo
PAGE:
GRID:
DATE: July 30
LINE: 7+00W
OPERATOR: BG
SOURCE STATION:

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
BL	-3	135			
0+25	+2	0	-13		
0+50	+2	135	-13	-22	
0+75	0	225	-35	-22	
1+00	+3	135	-35	+15	
1+25	+2	75	-20	+15	
1+50	0	135	-20	-6	
1+75	0	135	-26	-6	
2+00	0	135	-26	+6	
2+25	+1	95	-22	+6	
2+50	-1	115	-20	-3	
2+75	0	145	-25	-2	
3+00	+2	85	-22	+11	
3+25	+3	65	-14	+13	
3+50	0	35	-9	+10	
3+75	+5	15	-4	+5	
4+00	+1	35	-4	-2	
4+25	-1	35	-6	-3	
4+50	-2	45	-7	-6	
4+75	-3	85	-12	-10	
		95	-17	-1	
		45	-13 -12	+5	

VLF – EM SURVEY

PROJECT JK

PAGE

GRID JK

DATE July 29/83

LINE 71+00W

OPERATOR B.C.

SOURCE STATION

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
3+00N	-1	25			
2+75N	-4	75	-9		
2+50N	-1	65	-13	+1	
2+25N	0	85	-8	0	
2+00	-1	55	-13	+2	
1+75N	+1	15	-6	+13	
1+50	-1	1N	0	+6	
1+25	-1	15	0	-8	
1+00	-1	75	-8	-14	
0+75N	0	75	-14	-7	
0+50N	0	85	-15	-2	
0+25	+4	85	-16	-1	
BL	+1	85	-16		

VLF – EM SURVEY

PROJECT JK PAGE

GRID JK DATE July 28

LINE L75+00W OPERATOR BG

SOURCE STATION

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
0+75S	+1	9S	-25		
1+00	+1	7S	-16	+14	
1+25	-2	4S	-11	+3	
1+50	+7	9S	-13	-11	
1+75	-1	13S	-22	-8	
2+00	0	8S	-21	+8	
2+25	+4	5S	-13	+8	
2+50	0	8S	-13	+2	
2+75	+1	3S	-11	+13	
3+00	-1	3N	0	+6	
3+25	0	8S	-5	-19	
3+50	+2	11S	-19	-19	
3+75	-1	13S	-24	-16	
4+00	-1	22S	-35	-14	
4+25	-1	16S	-38	0	
4+50	-2	19S	-35	-2	
4+75	0	21S	-40	-13	
5+00	+1	27S	-48	-11	
5+25	+1	24S	-51	-3	
		27S	-51	+7	
		17S	-44		

VLF – EM SURVEY

PROJECT JK PAGE

GRID JK DATE July 30

LINE L71+00W OPERATOR BG

SOURCE STATION

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
5+00	+1	9S	-13	+5	
5+25	-1	4S	-12	-4	
5+50	-1	8S	-17	-10	
5+75	0	9S	-22	-11	
6+00	0	13S	-28	-1	
6+25	+2	15S	-23	+16	
6+50	-4	8S	-12	-6	
6+75	-4	4S	-29	-49	
7+00	+6	25S	-61	-29	
7+25	+4	36S	-58	+26	
7+50	-1	22S	-35	+57	
7+75	-4	13S	-1	+60	
8+00	-12	12N	+25	+22	
8+25	-10	13N	+21	-8	
8+50	+1	8N	+17	+2	
8+75	+2	9N	+23	+5	
9+00	+1	14N	+22	-12	
9+25	-1	8N	+11	-17	
9+50	0	3N	+5	-5	
9+75	+1	2N	+6		
10+00	+1	4N			

VLF – EM SURVEY

PROJECT: JK

PAGE:

GRID:

DATE: July 28/83

LINE: 75

OPERATOR: B.G.

SOURCE STATION:

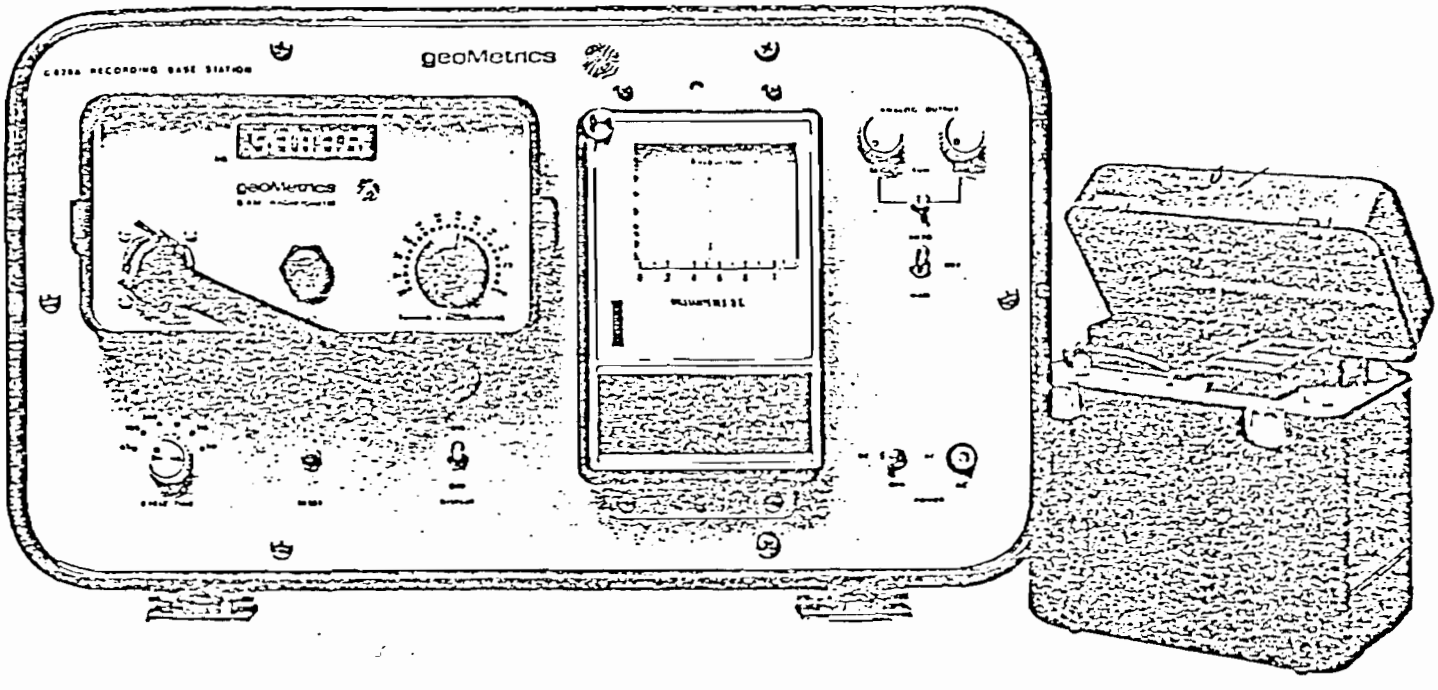
STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
5+50	0	275	-51		
5+75	0	175	-44	+10	
6+00	-2	245	-41	+10	
6+25	-2	85	-34	+29	
6+50	-6	185	-26	+12	
6+75	-8	185	-22	21 ~~-26~~	6+75 very poor rdg
7+00	-5	295	-41	-29	
7+25	-1	225	-51	+12	
7+50	+2	175	-39	+21	
7+75	+6	135	-30	+5	
8+00	+8	215	-34	-30	
8+25	+9	395	-60	-29	
8+50	-1	245	-63	+22	
8+75	-8	145	-38	+46	
9+00	-18	35	-17	+33	
9+25	-24	25	-5	+13	
9+50	-26	45	-6	-17	
9+75	-30	185	-22	-33	
10+00	-31	215	-39		

geometrics

PORTABLE/BASE STATION PROTON MAGNETOMETER

MODEL G-826A

Data Sheet
January 1976



- Unique Versatility—Both a recording *base station* and a *field portable* proton magnetometer system.
- Base Station System—Rugged, self-contained for remote, unattended monitoring from external AC or DC power.
- Timed automatic measurements with switch selectable range from 4 seconds to 5 minutes—pushbutton measurements for field portable operation.
- 1 gamma resolution and repeatability with visual, analog and digital outputs directly in gammas.
- Field Portable System—Removable magnetometer console with complete accessories for man-carry surveys—operation from replaceable "D" cell flashlight batteries.
- Precise total field measurements—no orientation, no calibration, no leveling, no temperature compensation required—world-wide operation.

Characterized by unique versatility, the Model G-826A is a high-sensitivity recording base station proton magnetometer system, and a complete man-carry field portable magnetometer for ground exploration. The base station configuration incorporates a Portable Field Magnetometer that measures the earth's total magnetic field including time variations and magnetic storms, and a special Converter/Timer console to record this data in analog or digital form at selectable timed sampling periods. A 5.1 cm (2 in.) galvanometric analog strip chart recorder is normally supplied as an integral part of the system; however, a variety of external analog recorders may also be utilized. For man-carry field surveys, the portable magnetometer can be easily removed from the Converter/Timer console for total field geologic mapping, archaeological exploration, fault analysis, search requirements, and follow-up to larger airborne reconnaissance surveys. As a proton system, the G-826A provides absolute drift-free measurements of the earth's total field directly in gammas with complete freedom from temperature drift, leveling and orientation adjustments. Operation is world-wide, controls are simplified and no previous operator experience or training is necessary. The G-826A is a complete ground magnetics system for all your monitoring and survey requirements.

For other field applications, consider GeoMetrics Models G-816 and G-836 (UniMag™) magnetometers.

TIME VARIATIONS

It is difficult to accurately interpret any magnetometer record without a valid, comparative record of the time variations in the magnetic field that have occurred throughout the survey area. Time variations primarily include daily or diurnal changes in the earth's magnetic field during the local daylight hours from mid-morning to late afternoon, and often exhibit anomalous variations as large as 100 gammas or more (Figure 1). Superimposed on these diurnal variations are more short period phenomena called micropulsations, which are random in behavior, occur at day or night, and vary in duration from 0.01 seconds up to several tens of minutes with amplitudes from a thousandth of a gamma to tens or even hundreds of gammas (Figure 2). Of greater concern are magnetic storms; a natural phenomena that can totally disrupt a magnetic survey for several hours or days without warning. (Figure 3). The effects of these time variations must be monitored by a fixed base station magnetometer located within the survey perimeter, and the measurements compared with survey data to accurately reveal anomalies of true geologic significance. The sensitivity and sampling rate of the base station magnetometer should be compatible with the survey system employed for synchronized operation and a valid comparison using elapsed recording time as a fiducial (reference) to the survey data.

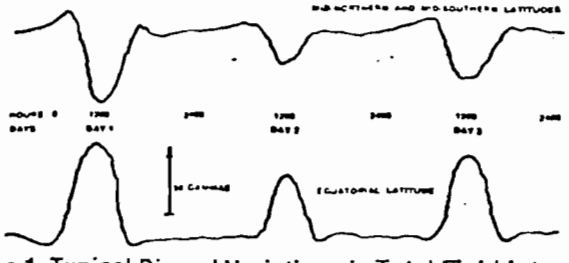


Figure 1. Typical Diurnal Variations in Total Field Intensity

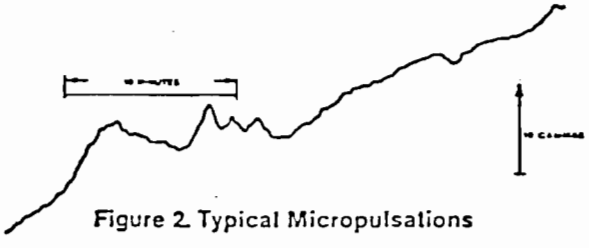


Figure 2. Typical Micropulsations

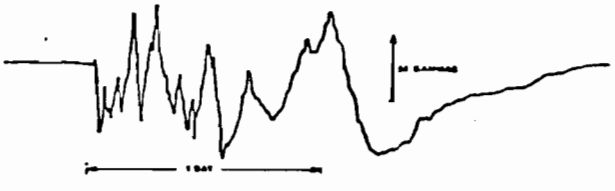


Figure 3. Typical Magnetic Storm

BASE STATION PROTON MAGNETOMETER

The Model G-826A Base Station Magnetometer system provides 1.0 gamma resolution (0.25 gamma resolution is optionally available) at selectable, timed sampling rates that are compatible with all airborne, land, and some marine survey requirements. It is a totally self-contained system designed for remote, unattended operation from external 115/220, 50/60 Hz AC or 24 V DC power. The G-826A system consists of a specially designed Converter/Timer that incorporates a Rustrak analog recorder and a removable G-826 Portable Field Magnetometer. At a preselected time interval (every 4, 10, or 30 seconds, or 1, 2, or 5 minutes) the earth's total magnetic field is measured and the data is recorded in analog form for direct comparison with survey records and subsequent removal of time variations. A timed fiducial event mark is inserted on the analog record automatically every 30 minutes. Data outputs are also provided for an optional, separate laboratory-quality analog recorder, as well as for digital recording. The G-826A system is housed in a rugged watertight container for protection against adverse environmental conditions. The entire system comes completely ready for operation anywhere in the world, and does not require leveling, calibration or temperature compensation. Controls are simple in design, and no previous operator experience is required.

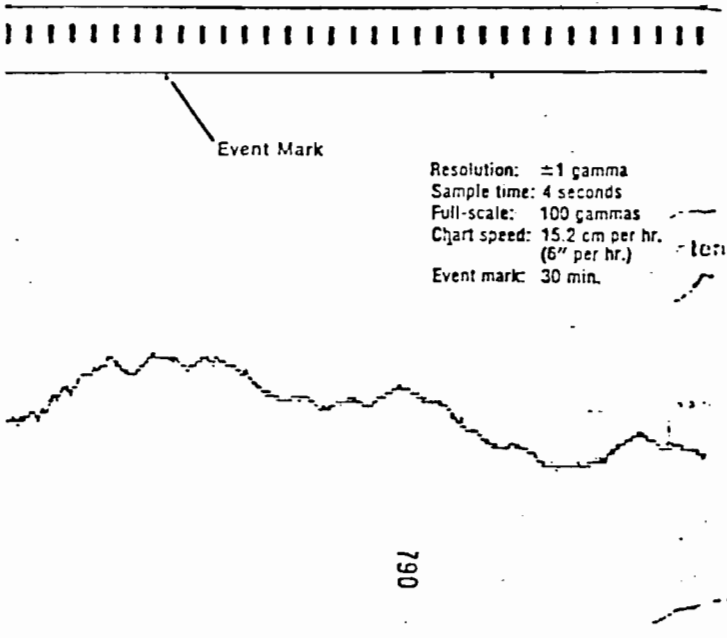


Chart record (55% of full size) from optional Model 7155B Hewlett-Packard potentiometric recorder with event marker.

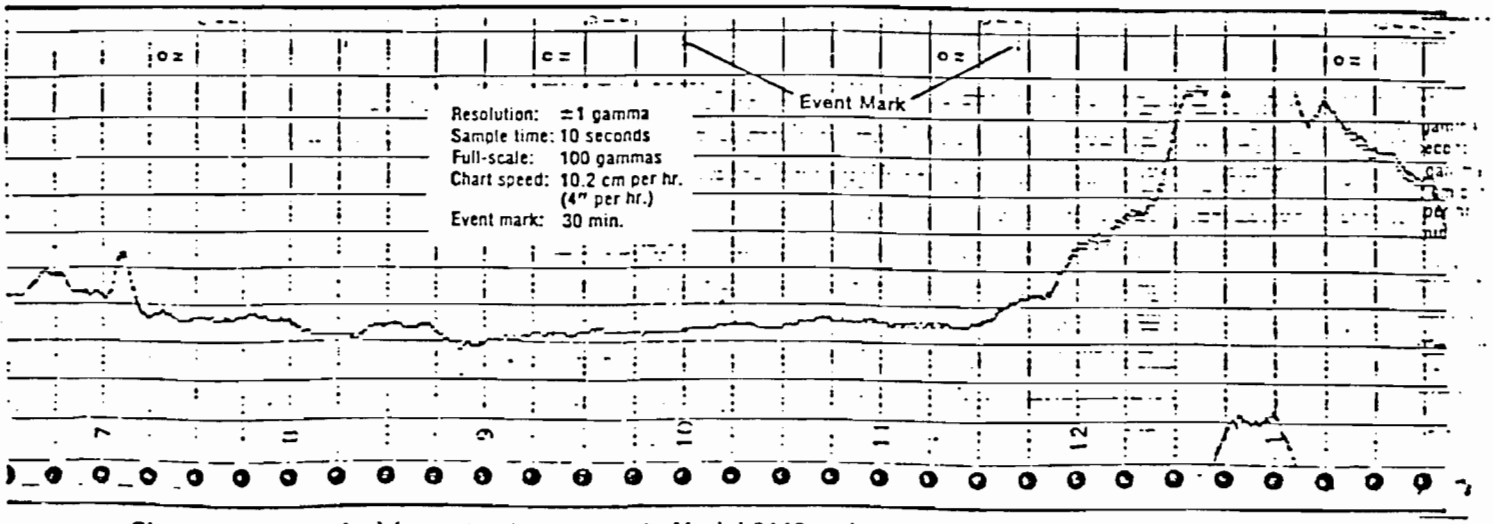


Chart record (full size) from standard Rustrak, Model 2146, galvanometric recorder with event marker.

geoMetrics

UNIMAG

PORTABLE

PROTON MAGNETOMETER

Model G-836

1.0 GENERAL INFORMATION

1.1 INTRODUCTION

The UniMag™ Portable Proton Magnetometer, Model G-836, is a complete system designed for general field applications requiring simple operation and stable measurements of the total intensity of the earth's magnetic field. UniMag provides 10 gamma resolution over a range from 20,000 to 100,000 gammas. Since the instrument measures total field intensity, the accuracy of each measurement is independent of sensor leveling. Furthermore, each measurement is based upon an atomic constant* and is independent of temperature, humidity, and battery conditions. The unified simplicity of UniMag allows rapid, accurate measurements to be obtained from a single, compact field instrument without the need for external batteries, cables or a sensor and staff. UniMag is a precision instrument and reasonable care should be exercised to avoid damage from unnecessary field abuse.

I-M-P-O-R-T-A-N-T

Read Chapter 3.0 Before Using UniMag on a Survey

1.2 MAGNETIC ENVIRONMENT

During survey operation, it is important that the earth's magnetic field is not biased or disturbed by allowing unwanted magnetic objects to come close to the sensor. Such objects include jewelry, keys, watches, belt buckles, pocket knives, mechanical pencils, zippers, some hats, notebooks, other survey equipment, etc. In normal use, UniMag is suspended from the adjustable shoulder strap, and held in front of the operator. This places the sensor approximately 2 ft. (61 cm) away from the operator, and typically 3 ft. (91 cm) above the ground. Under such conditions, 10 gamma surveys can be quickly and accurately performed.

Prior to survey use, however, objects that are suspected to be magnetic may be checked in the following manner:

1. Go to a magnetically clean area away from buildings, roads, automobiles, AC power-lines, etc.

2. Place the suspected object far away from UniMag, and take several readings by depressing the black pushbutton - releasing - and waiting for a digital readout to appear.

3. Observe the displayed readings. Each reading should repeat to within 10 gammas, i.e., the least significant digit (extreme right-hand number) should NOT change by more than one count.

* Proton Gyromagnetic Ratio: $(2.67513 \pm 0.00002) \cdot 10^4$ Radians/Gauss second.

4. Now place the suspected object at the distance from the sensor expected during actual survey operation. Take several more readings and note the measurements.

5. If the measurements made in Step 4 above differ by more than ± 1 count (extreme right-hand number) from those measurements made in Step 3, then the object is magnetic.

IF THE ARTICLE IS HIGHLY MAGNETIC, OR IF UniMag IS OPERATED INSIDE OR NEAR A BUILDING OR VEHICLE, THE SIGNAL WILL BE LOST, GIVING COMPLETELY ERRATIC READINGS AND LOSS OF ± 1 COUNT REPEATABILITY.

UniMag should not be operated in areas that are known sources of radio frequency energy, power line noise (transformers), or operated in buildings. UniMag will NOT operate properly if it is placed directly on the ground.

1.3 SPECIFICATIONS

Resolution:	10 gamma throughout tuning range
Tuning Range:	20,000 to 100,000 gammas (world-wide)
Tuning Mechanism:	Multi-position switch with twenty-four overlapping steps.
Sampling Rate:	Manual pushbutton, new reading every 4 seconds.
Output:	4 digit, illuminated display directly in gammas.
Power Requirements:	12V DC, 500 ma average
Power Source:	Two internally mounted and rechargeable 6 volt, 1 amp/hr non-spill gelled electrolyte batteries. Charge state or replacement signified by flashing readout display.
AC Battery Charger:	Input: 115/220V, 50/60 Hz AC Output: 14V DC
Temperature Range:	-40° to $+60^{\circ}$C Note: Battery capacity decreases with low temperature operation.
Accuracy (Total Field):	10 gamma through -20° to $+60^{\circ}$C temperature range

Sensor:	Noise cancelling, high signal. Internally mounted in console.
Console Size:	$22\frac{1}{2}$" l. × $3\frac{1}{4}$" w. × 5" h. (58 × 8.3 × 12.7 cm)
Console Weight:	7 lbs. (3.2 kg) Includes batteries, sensor and shoulder harness.

1.4 INVENTORY INSPECTION

When received from the manufacturer, the UniMag™ Proton Magnetometer should include the following items:

1.	UniMag Console including sensor	1 ea
2.	AC battery charger	1 ea
3.	Adjustable shoulder strap	1 ea
4.	Battery Pack	2 ea
5.	Operator's manual	1 ea
6.	Applications Manual	1 ea
7.	Attaché Case	1 ea
8.	Teflon pipe tape	1 strip

2.0 FIELD OPERATION

2.1 INTRODUCTION

UniMag is completely self-contained, and is ready for field survey operation. A few simple procedures should be observed to obtain optimum results, and it is recommended that the operator follow each step as outlined in this chapter to initially become familiar with the operation of the instrument. Refer to Figure 2-1 for identification of UniMag's controls and indicators.

2.2 CONSOLE OPERATION

PRELIMINARY CONSIDERATIONS: BEFORE USING UniMag, CHECK FOR:

1. Presence of sensor fluid:

   The sensor is located in the forward, cylindrical portion of the instrument as shown in Detail "A" of Figure 2-1. Shake the instrument GENTLY and listen for a "sloshing" sound. If fluid is not present, or cannot be heard, it is necessary to fill the sensor PRIOR to operation:

   a) Hold the UniMag console vertically with the sensor pointed up. Remove the slotted Fill Plug from the convex end of the sensor as shown in Detail "A" of Figure 2-1.

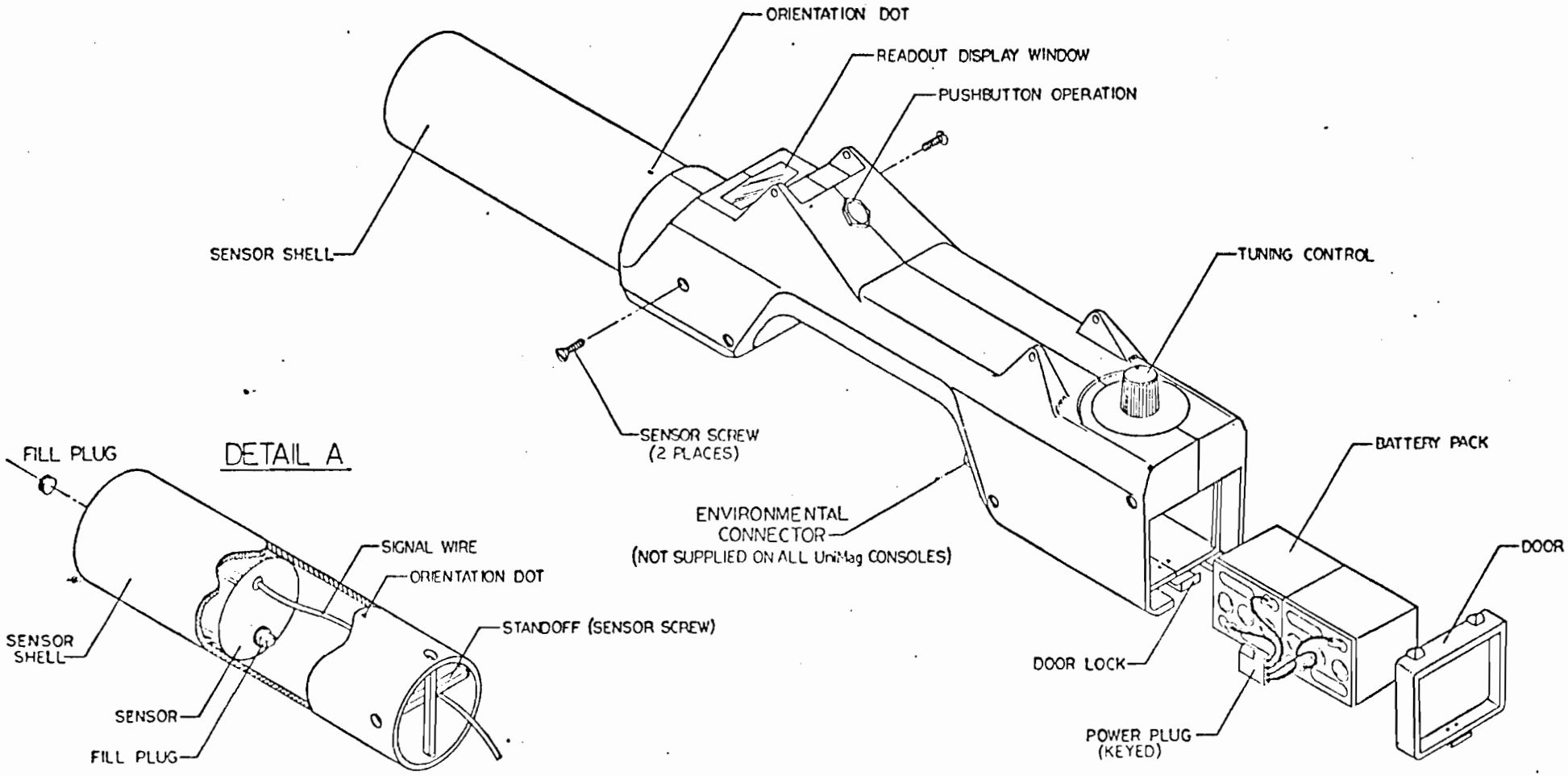
   b) Fill the sensor with STRAINED* kerosene or unleaded gasoline completely. Then REMOVE approximately 2 tablespoons of fluid.

      *Note: The fluid MUST be strained several times through paper filters, i.e., paper towels, coffee filters, etc. NEVER use kerosene or gasoline directly from a pump or storage can as it may be contaminated with metal particle

   c) Lightly wrap the Fill Plug with Teflon tape and replace in the sensor. Do NOT use excessive pressure to tighten the Fill Plug - a "snug" fit is sufficient.

2. Battery pack is fully charged:

   To check the battery voltage, simply press the black pushbutton and observe the readout - if it "flashes" on/off during the display period, the battery pack is NOT fully charged. Refer to Chapter 3.0 for instructions of recharging the battery PRIOR to survey operation.



SENSOR ASSEMBLY

		UNLESS OTHERWISE NOTED			RFQ	PART NUMBER		DESCRIPTION	ITEM
		1 PLC	3 PLC	ANGLE	SIGNATURE		DATE	geoMetrics Sunnyvale California	
		±	±	±	DFT	R. Brown	9-2-75		
					CHECK				
		REMOVE BURRS & SHARP EDGES			APP'D				
NEXT ASSEMBLY	USED ON	SURFACE FIN ✓			APP'D				
APPLICATION					DO NOT SCALE THIS DRAWING				
MATERIAL:					FINISH:				

CONTROLS & INDICATORS
UNIMAG, MODEL G-836
FIGURE 2-1

SIZE	CODE IDENT NO.	DRAWING NUMBER	REV.
C	G-836	18013	Ø

SCALE 1/2 30° ISO. SHEET 1 OF 1

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J. K. PAGE 1

GRID DATE August 5/83

LINE L 0+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
10+00S	1333	58830	58790	+40	
10+25S	1334	58810	58790	+20	
10+50S	1335	58800	58790	+10	
10+75S	1335	58800	58790	+10	
11+00S	1336	58780	58790	-10	
11+25S	1336	58790	58790	0	
11+50S	1336	58820	58790	+30	
11+75S	1337	58780	58790	-10	
12+00S	1337	58810	58790	+20	
12+25S	1338	58770	58780	-20	
12+50S	1338	58770	58790	-20	
12+75S	1339	58760	58790	-30	
13+00S	1339	58780	58790	-10	
13+25S	1340	58810	58790	+20	
13+50S	1341	58960	58790	+170	
13+75S	1342	58740	58790	-50	
14+00S	1342	58750	58790	-40	
14+25S	1343	58740	58790	-50	
14+50S	1343	58740	58790	-50	
14+75S	1344	58750	58790	-40	
15+00S	1344	58750	58790	-40	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J. K. PAGE 1

GRID DATE August 5/83

LINE L 2+00E OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
19+50S	1415	58820	58790	+30	
19+25S	1416	58810	58790	+20	
19+00S	1416	58810	58790	+20	
18+75S	1417	58810	58790	+20	
18+50S	1417	58800	58790	+10	
18+25S	1417	58780	58790	-10	
18+00S	1418	58770	58790	-20	
17+75S	1418	58740	58790	-50	
17+50S	1419	58740	58790	-50	
17+25S	1419	58780	58790	-10	
17+00S	1420	58810	58790	+20	
16+75S	1420	58790	58790	0	
16+50S	1421	58790	58790	0	
16+25S	1422	58800	58790	+10	
16+00S	1422	58790	58790	0	
15+75S	1423	58780	58790	-10	
15+50S	1423	58740	58790	-50	
15+25S	1424	58730	58790	-60	
15+00S	1424	58760	58790	-30	
14+75S	1425	58790	58790	0	
14+50S	1425	58780	58790	-10	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J. K. PAGE 2

GRID DATE August 5/83

LINE L0+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
15+25S	1345	58760	58790	-30	
15+50S	1345	58740	58790	-50	
15+75S	1347	58740	58790	-50	
16+00S	1347	58750	58790	-40	
16+25S	1348	58760	58790	-30	
16+50S	1349	58770	58790	-20	
16+75S	1350	58760	58790	-30	
17+00S	1350	58760	58790	-30	
17+25S	1351	58770	58790	-20	
17+50S	1351	58780	58790	-10	
17+75S	1352	58780	58790	-10	
18+00S	1352	58740	58790	-50	
18+25S	1353	58750	58790	-40	
18+50S	1353	58710	58790	-80	
18+75S	1354	58750	58790	-40	
19+00S	1354	58770	58790	-20	
19+25S	1355	58790	58790	0	
19+50S	1356	58780	58790	-10	
19+75S	1356	58780	58790	-10	
20+00S	1356	58780	58790	-10	
20+25S	1357	58780	58790	-10	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J. K. PAGE 2.

GRID DATE August 5/83

LINE L2+00E OPERATOR A. Cole.

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
14+25S	1426	58780	58790	-10	
14+00S	1426	58780	58790	-10	
13+75S	1427	58780	58790	-10	
13+50S	1427	58780	58790	-10	
13+25S	1428	58760	58790	-30	
13+00S	1428	58780	58790	-10	
12+75S	1429	58770	58790	-20	
12+50S	1429	58760	58790	-30	
12+25S	1429	58760	58790	-30	
12+00S	1430	58770	58790	-20	
11+75S	1430	58770	58790	-20	
11+50S	1431	58770	58790	-20	
11+25S	1431	58760	58790	-30	
11+00S	1432	58770	58790	-20	
10+75S	1432	58760	58790	-30	
10+50S	1433	58760	58790	-30	
10+25S	1434	58760	58790	-30	
10+00S	1435	58770	58790	-20	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K. PAGE 1

GRID DATE August 5/83

LINE L 2+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
21+00S	1233	58760	58790	-30	
20+75S	1234	58780	58790	-10	
20+50S	1235	58760	58790	-30	
20+25S	1235	58770	58790	-20	
20+00S	1236	58760	58790	-30	
19+75S	1236	58780	58790	-10	
19+50S	1237	58770	58790	-20	
19+25S	1237	58790	58790	0	
19+00S	1237	58800	58790	+10	
18+75S	1240	58810	58790	+20	
18+50S	1242	58800	58790	+10	
18+25S	1242	58780	58790	-10	
18+00S	1243	58800	58790	+10	
17+75S	1244	58770	58790	-20	
17+50S	1245	58780	58790	-10	
17+25S	1246	58770	58790	-20	
17+00S	1246	58770	58790	-20	
16+75S	1247	58790	58790	0	
16+50S	1248	58800	58790	+10	
16+25S	1249	58800	58790	+10	
16+00S	1250	58790	58790	0	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K. PAGE 3

GRID DATE August 5/83

LINE L 0+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
20+50S	1358	58790	58790	0	
20+75S	1359	58780	58790	-10	
21+00S	1400	58790	58790	0	
21+25S	1400	58780	58790	-10	
21+50S	1401	58810	58790	+20	
21+75S	1401	58790	58790	0	
22+00S	1402	58780	58790	-10	
22+25S	1403	58790	58790	0	
22+50S	1404	58790	58790	0	
22+75S	1405	58780	58790	-10	
23+00S	1405	58780	58790	-10	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K. PAGE 2.

GRID DATE August 5/83

LINE L 2+00 W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
15+75S	1251	58780	58790	-10	
15+50S	1252	58780	58790	-10	
15+25S	1254	58780	58790	-10	
15+00S	1255	58790	58790	0	
14+75S	1256	58780	58790	-10	
14+50S	1257	58780	58790	-10	
14+25S	1258	58790	58790	0	
14+00S	1259	58790	58790	0	
13+75S	1259	58790	58790	0	
13+50S	1300	58800	58790	+10	
13+25S	1313	58800	58790	+10	
13+00S	1314	58810	58790	+20	
12+75S	1314	58820	58790	+30	
12+50S	1315	58840	58790	+50	
12+25S	1316	58820	58790	+30	
12+00S	1316	58820	58790	+30	
11+75S	1317	58830	58790	+40	
11+50S	1318	58820	58790	+30	
11+25S	1318	58830	58790	+40	
11+00S	1320	58800	58790	+10	
10+75S	1320	58820	58790	+30	

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MAGNETIC SURVEY

PROJECT PAGE

GRID DATE

LINE OPERATOR

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K. PAGE 1

GRID DATE August 5/83

LINE L4+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
22+00S	1131	58750	58790	-40	
21+75S	1133	58750	58790	-40	
21+50S	1135	58760	58790	-30	
21+25S	1135	58750	58790	-40	
21+00S	1136	58760	58790	-30	
20+75S	1136	58750	58790	-40	
20+50S	1137	58760	58790	-30	
20+25S	1137	58760	58790	-30	
20+00S	1137	58780	58790	-10	
19+75S	1138	58770	58790	-20	
19+50S	1139	58770	58790	-20	
19+25S	1139	58770	58790	-20	
19+00S	1140	58770	58790	-20	
18+75S	1140	58770	58790	-20	
18+50S	1141	58770	58790	-20	
18+25S	1141	58770	58790	-20	
18+00S	1142	58790	58790	0	
17+75S	1142	58780	58790	-10	
17+50S	1143	58770	58790	-20	
17+25S	1143	58760	58790	-30	
17+00S	1144	58770	58790	-20	

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MAGNETIC SURVEY

PROJECT J.K. PAGE 3

GRID DATE August 5/83

LINE L 2+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
10+50S	1321	58820	58790	+30	
10+25S	1321	58810	58790	+20	
10+00S	1322	58810	58790	+20	

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MAGNETIC SURVEY

PROJECT J.K. PAGE 2.

GRID DATE August 5/83

LINE L 4+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
16+75S	1144	58770	58790	-20	
16+50S	1145	58760	58790	-30	
16+25S	1145	58770	58790	-20	
16+00S	1146	58780	58790	-10	
15+75S	1146	58760	58790	-30	
15+50S	1147	58760	58790	-30	
15+25S	1147	58790	58790	0	
15+00S	1148	58790	58790	0	
14+75S	1148	58780	58790	-10	
14+50S	1148	58760	58790	-30	
14+25S	1149	58750	58790	-40	

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MAGNETIC SURVEY

PROJECT PAGE

GRID DATE

LINE OPERATOR

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K. PAGE 1

GRID DATE Aug 6 /83

LINE L 6+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
34+75S	1129	58640	58760	-120	
35+00S	1133	58600	58760	-160	
35+25S	1134	58630	58760	-130	
35+50S	1134	58740	58760	-20	
35+75S	1135	58630	58760	-130	
36+00S	1136	58710	58760	-50	
36+25S	1137	58720	58760	-40	
36+50S	1137	58730	58760	-30	
36+75S	1138	58710	58760	-50	
37+00S	1138	58700	58760	-60	
37+25S	1139	58700	58760	-60	
37+50S	1140	58720	58760	-40	
37+75S	1141	58730	58760	-30	
38+00S	1142	58730	58760	-30	
38+25S	1142	58730	58760	-30	
38+50S	1143	58730	58760	-30	
38+75S	1144	58740	58760	-20	
39+00S	1145	58750	58750	0	
39+25S	1146	58750	58750	0	
39+50S	1146	58750	58750	0	
39+75S	1148	58750	58750	0	

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MAGNETIC SURVEY

PROJECT J.K. PAGE 1

GRID DATE August 5/83

LINE L 6+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
16+00S	1047	58770	58800	-30	
16+25S	1048	58790	58800	-10	
16+50S	1048	58770	58800	-30	
16+75S	1049	58790	58800	-10	
17+00S	1050	58780	58800	-20	
17+25S	1051	58760	58800	-40	
17+50S	1052	58760	58800	-40	
17+75S	1053	58780	58800	-20	
18+00S	1054	58770	58800	-30	
18+25S	1055	58760	58800	-40	
18+50S	1056	58770	58800	-30	
18+75S	1056	58760	58800	-40	
19+00S	1057	58790	58800	-10	
19+25S	1059	58790	58800	-10	
19+50S	1059	58790	58800	-10	
19+75S	1102	58770	58800	-30	
20+00S	1103	58780	58800	-20	
20+25S	1104	58860	58800	+60	
20+50S	1105	58770	58800	-30	
20+75S	1111	58760	58790	-30	
21+00S	1112	58750	58800	-50	

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MAGNETIC SURVEY

PROJECT J.K. PAGE 2

GRID DATE August 5/83

LINE L6+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
40+00S	1148	58760	58750	+10	
40+25S	1149	58750	58750	0	
40+50S	1150	58770	58750	+20	
40+75S	1150	58770	58750	+20	
41+00S	1151	58770	58750	+20	
41+25S	1152	58750	58750	0	
41+50S	1152	58760	58750	+10	
41+75S	1153	58780	58750	+30	
42+00S	1153	58790	58750	+40	
42+25S	1154	58790	58750	+40	
42+50S	1155	58780	58750	+30	

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MAGNETIC SURVEY

PROJECT J.K. PAGE 2

GRID DATE August 5/83

LINE L6+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
21+25S	1113	58760	58790	-30	
21+50S	1114	58750	58800	-50	
21+75S	1115	58760	58800	-40	
22+00S	1116	58750	58800	-50	
22+25S	1117	58750	58790	-40	
22+50S	1117	58750	58790	-40	
22+75S	1118	58760	58800	-40	
23+00S	1119	58750	58790	-40	

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MAGNETIC SURVEY

PROJECT J.K. PAGE 1

GRID DATE August 5/83

LINE L 8+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
22+75S	1019	58820	58800	+20	
22+50S	1020	58800	58800	0	
22+25S	1020	58830	58800	+30	
22+00S	1021	58830	58800	+30	
21+75S	1021	58830	58800	+30	
21+50S	1022	58820	58800	+20	
21+25S	1022	58810	58800	+10	
21+00S	1023	58820	58800	+20	
20+75S	1023	58820	58800	+20	
20+50S	1024	58830	58800	+30	
20+25S	1024	58810	58800	+10	
20+00S	1025	58820	58800	+20	
19+75S	1027	58820	58800	+20	
19+50S	1028	58830	58800	+30	
19+25S	1028	58810	58800	+10	
19+00S	1029	58810	58800	+10	
18+75S	1029	58800	58800	0	
18+50S	1030	58790	58800	-10	
18+25S	1030	58790	58800	-10	
18+00S	1031	58790	58800	-10	
17+75S	1032	58790	58800	-10	

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MAGNETIC SURVEY

PROJECT J.K. PAGE 1

GRID DATE August 6/83

LINE L 8+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
34+50S	1246	58700	58760	-60	
34+75S	1245	58700	58760	-60	
35+00S	1245	58710	58760	-50	
35+25S	1244	58720	58760	-40	
35+50S	1243	58720	58760	-40	
35+75S	1243	58710	58760	-50	
36+00S	1242	58720	58760	-40	
36+25S	1241	58730	58760	-30	
36+50S	1240	58750	58760	-10	
36+75S	1240	58740	58760	-20	
37+00S	1239	58730	58760	-30	
37+25S	1238	58730	58760	-30	
37+50S	1237	58740	58760	-20	
37+75S	1237	58740	58760	-20	
38+00S	1236	58740	58760	-20	
38+25S	1236	58750	58760	-10	
38+50S	1221	58720	58750	-30	
38+75S	1222	58750	58750	0	
39+00S	1222	58740	58750	-10	
39+25S	1223	58740	58750	-10	
39+50S	1223	58750	58750	0	

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MAGNETIC SURVEY

PROJECT J.K. PAGE 2

GRID DATE August 5/83

LINE L 8+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
17+50S	1032	58780	58800	-20	

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MAGNETIC SURVEY

PROJECT J.K. PAGE 2

GRID DATE August 6/83

LINE L 8+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
3/+75S	1224	58730	58750	-20	
4/0+00S	1224	58750	58750	0	
4/0+25S	1225	58760	58760	0	
4/0+50S	1225	58770	58760	+10	
4/0+75S	1226	58760	58760	0	
4/1+00S	1227	58750	58760	-10	
4/1+25S	1227	58780	58760	+20	
4/1+50S	1228	58750	58750	0	
4/1+75S	1229	58770	58750	+20	
4/2+00S	1229	58760	58750	+10	
4/2+25S	1230	58760	58750	+10	
4/2+50S	1231	58750	58760	-10	
4/2+75S	1231	58760	58760	0	
4/3+00S	1232	58750	58760	-10	
4/3+25S	1232	58740	58760	-20	
4/3+50S	1233	58760	58760	0	

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MAGNETIC SURVEY

PROJECT J.K. PAGE 1

GRID DATE August 6/83

LINE L 10+00W OPERATOR A. Cole.

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
42+00S	1315	58760	58760	0	
41+75S	1316	58760	58750	+10	
41+50S	1317	58770	58760	+10	
41+25S	1317	58770	58760	+10	
41+00S	1318	58790	58760	+30	
40+75S	1319	58860	58760	+40	
40+50S	1320	58800	58760	+40	
40+25S	1320	58780	58760	+20	
40+00S	1322	58840	58760	+80	
39+75S	1323	58840	58760	+80	
39+50S	1324	58750	58760	-10	
39+25S	1325	58790	58760	+30	
39+00S	1327	58790	58760	+30	
38+75S	1328	58780	58760	+20	
38+50S	1328	58780	58760	+20	
38+25S	1329	58760	58760	0	
38+00S	1329	58760	58760	0	
37+75S	1329	58760	58760	0	
37+50S	1330	58780	58760	+20	
37+25S	1331	58760	58760	0	
37+00S	1331	58780	58760	+20	

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MAGNETIC SURVEY

PROJECT J.K. PAGE 1

GRID DATE August 5/83

LINE L 10+00W OPERATOR A. Cole.

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
19+75S	947	58880	58800	0	
20+00S	947	58880	58800	0	
20+25S	951	58850	58800	+50	
20+50S	952	58840	58800	+40	
20+75S	953	58840	58800	+40	
21+00S	954	58830	58800	+30	
21+25S	955	58850	58800	+50	
21+50S	956	58830	58800	+30	
21+75S	956	58830	58800	+30	
22+00S	957	58810	58800	+10	
22+25S	957	58830	58800	+30	
22+50S	958	58810	58800	+10	
22+75S	959	58790	58800	-10	
23+00S	959	58790	58800	-10	
23+75S	1000	58770	58800	-30	
23+50S	1002	58760	58800	-40	

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MAGNETIC SURVEY

PROJECT J.K. PAGE 2

GRID DATE August 5/82

LINE L10+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
36+75S	1332	58770	58760	+10	
36+50S	1332	58760	58760	0	
36+25S	1333	58760	58760	0	
36+00S	1333	58760	58760	0	
35+75S	1334	58750	58760	-10	
35+50S	1335	58740	58760	-20	
35+25S	1336	58730	58760	-10	
35+00S	1336	58710	58760	-50	
34+75S	1337	58780	58760	+20	
34+50S	1337	58790	58760	+30	
34+25S	1338	58780	58760	+20	
34+00S	1339	58780	58760	+20	

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MAGNETIC SURVEY

PROJECT PAGE

GRID DATE

LINE OPERATOR

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS

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MAGNETIC SURVEY

PROJECT J.K. PAGE 1

GRID DATE August 7/83

LINE L 16+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
(BL) 0+00	1300	58840	58790	+50	
0+25 S	1300	58830	58790	+40	
0+50 S	1301	58840	58790	+50	
0+75 S	1301	58850	58790	+60	
1+00 S	1302	58840	58800	+40	
1+25 S	1302	58830	58800	+30	
1+50 S	1302	58850	58800	+50	
1+75 S	1303	58860	58800	+60	
2+00 S	1303	58830	58800	+30	
2+25 S	1304	58830	58800	+30	
2+50 S	1304	58840	58800	+40	
2+75 S	1305	58840	58800	+40	
3+00 S	1305	58840	58800	+40	
3+25 S	1306	58830	58800	+30	
3+50 S	1306	58840	58800	+40	
3+75 S	1307	58830	58790	+40	
4+00 S	1307	58830	58790	+40	
4+25 S	1307	58840	58790	+50	
4+50 S	1308	58850	58790	+60	
4+75 S	1308	58850	58790	+60	
5+00 S	1309	58830	58790	+40	

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MAGNETIC SURVEY

PROJECT J.K. PAGE 1

GRID DATE August 6/83

LINE L12+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
32+00 S	1400	58700	58760	-60	
32+25 S	1401	58720	58760	-40	
32+50 S	1401	58720	58760	-40	
32+75 S	1402	58720	58760	-40	
33+00 S	1403	58740	58760	-20	
33+25 S	1404	58750	58760	-10	
33+50 S	1404	58760	58760	0	
33+75 S	1405	58790	58760	+30	
34+00 S	1406	58740	58760	-20	
34+25 S	1406	58760	58760	0	
34+50 S	1407	58760	58760	0	
34+75 S	1407	58760	58760	0	
35+00 S	1407	58780	58760	+20	
35+25 S	1408	58770	58760	+10	
35+50 S	1408	58790	58760	+30	
35+75 S	1409	58780	58760	+20	
36+00 S	1409	58710	58760	-50	
36+25 S	1410	58740	58770	-30	
36+50 S	1411	58740	58770	-30	
36+75 S	1412	58920	58770	+150	
37+00 S	1413	58750	58770	-20	

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MAGNETIC SURVEY

PROJECT J.K. PAGE 2

GRID DATE Aug 7 /83.

LINE L 16+00W OPERATOR A. Cole.

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
5+25S	1309	58830	58790	+40	
5+50S	1310	58810	58790	+20	
5+75S	1310	58830	58790	+40	
6+00S	1311	58840	58790	+50	
6+25S	1311	58830	58790	+40	
6+50S	1311	58820	58790	+30	
6+75S	1312	58820	58790	+30	
7+00S	1313	58820	58790	+30	
7+25S	1313	58830	58790	+40	
7+50S	1314	58820	58790	+30	
7+75S	1314	58830	58790	+40	
8+00S	1314	58830	58790	+40	
8+25S	1315	58800	58790	+10	
8+50S	1316	58810	58780	+30	
8+75S	1316	58810	58780	+30	
9+00S	1317	58810	58780	+30	
9+25S	1317	58810	58780	+30	
9+50S	1318	58810	58780	+30	
9+75S	1318	58810	58780	+30	
10+00S	1319	58800	58780	+20	
10+25S	1319	58800	58780	+20	

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MAGNETIC SURVEY

PROJECT J.K. PAGE 2

GRID DATE August 6/83.

LINE L 12+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
37+25S	1413	58700	58770	-70	
37+50S	1414	58730	58770	-40	
37+75S	1415	58720	58770	-50	
38+00S	1416	58760	58770	-10	
38+25S	1417	58740	58770	-30	
38+50S	1418	58700	58770	-70	
38+75S	1418	58650	58770	-120	
39+00S	1419	58740	58770	-30	

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MAGNETIC SURVEY

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GRID DATE August 7/83

LINE L 16+00W OPERATOR A. Cole.

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
21+00S	1351	58800	58770	+30	
21+25S	1353	58800	58770	+30	
21+50S	1354	58780	58770	+10	
21+75S	1355	58760	58770	-10	
22+00S	1406	58750	58760	-10	
22+25S	1408	58810	58760	+50	
22+50S	1409	58850	58770	+80	
22+75S	1409	58840	58770	+70	
23+00S	1410	58830	58770	+60	
23+25S	1411	58800	58760	+40	
23+50S	1412	58660	58760	-100	
23+75S	1412	58740	58760	-20	
24+00S	1413	58730	58760	-30	
24+25S	1416	58720	58750	-30	
24+50S	1417	58910	58750	+160	
24+75S	1418	58830	58740	+90	
25+00S	1419	58790	58740	+50	

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MAGNETIC SURVEY

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GRID DATE August 7/83

LINE L 16+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
10+50S	1320	58810	58780	+30	
10+75S	1320	58810	58780	+30	
11+00S	1321	58800	58780	+20	
11+25S	1321	58790	58780	+10	
11+50S	1322	58800	58780	+20	
11+75S	1323	58790	58780	+10	
12+00S	1323	58790	58780	+10	
12+25S	1324	58800	58780	+20	
12+50S	1325	58790	58780	+10	
12+75S	1325	58800	58780	+20	
13+00S	1326	58800	58780	+20	
13+25S	1326	58800	58780	+20	
13+50S	1327	58790	58770	+20	
13+75S	1328	58790	58770	+20	
14+00S	1329	58790	58770	+20	
14+25S	1331	58790	58770	+20	
14+50S	1332	58790	58770	+20	
14+75S	1333	58780	58770	+10	
15+00S	1333	58780	58770	+10	
15+25S	1334	58780	58770	+10	
15+50S	1335	58770	58770	0	

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MAGNETIC SURVEY

PROJECT _____ PAGE _____

GRID _____ DATE _____

LINE _____ OPERATOR _____

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS

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MAGNETIC SURVEY

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GRID _____ DATE August 7/83

LINE L16+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
15+75S	1335	58780	58770	+10	
16+00S	1336	58790	58760	+30	
16+25S	1337	58800	58760	+40	
16+50S	1337	58780	58760	+20	
16+75S	1338	58790	58760	+30	
17+00S	1341	58770	58760	+10	
17+25S	1341	58780	58760	+20	
17+50S	1342	58780	58760	+20	
17+75S	1343	58800	58760	+40	
18+00S	1344	58800	58760	+40	
18+25S	1345	58780	58760	+20	
18+50S	1345	58790	58760	+30	
18+75S	1346	58790	58770	+20	
19+00S	1347	58800	58770	+30	
19+25S	1347	58800	58770	+30	
19+50S	1347	58800	58770	+30	
19+75S	1348	58810	58770	+40	
20+00S	1349	58810	58770	+40	
20+25S	1349	58800	58770	+30	
20+50S	1350	58790	58770	+20	
20+75S	1351	58800	58770	+30	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K. PAGE 3

GRID DATE 8/7/83

LINE L 18+00W OPERATOR A Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
16+50S	12:03	58770	58790	-20	
16+25S	12:04	58810	58790	+20	
16+00S	12:04	58790	58790	+00	
15+75S	12:05	58800	58780	+20	
15+50S	12:05	58790	58780	+10	
15+25S	12:06	58800	58780	+20	
15+00S	12:06	58800	58780	+20	
14+75S	12:07	58800	58780	+20	
14+50S	12:07	58790	58780	+10	
14+25S	12:08	58810	58780	+30	
14+00S	12:08	58800	58780	+20	
13+75S	12:09	58810	58780	+30	
13+50S	12:09	58800	58780	+20	
13+25S	12:10	58810	58780	+30	
13+00S	12:10	58810	58780	+30	
12+75S	12:11	58780	58780	+00	
12+50S	12:11	58800	58780	+20	
12+25S	12:12	58810	58780	+30	
12+00S	12:12	58810	58780	+30	
11+75S	12:13	58810	58790	+20	
11+50S	12:13	58800	58790	+10	

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MAGNETIC SURVEY

PROJECT J.K. PAGE 1

GRID DATE 8/7/83

LINE L 18+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
27+00S	11:26	58880	58790	+90	
26+75S	11:26	58890	58790	+100	
26+50S	11:28	58870	58790	+80	
26+25S	11:39	58910	58790	+120	
26+00S	11:41	59200	58780	+420	
25+75S	11:41	59070	58780	+290	
25+50S	11:42	58900	58780	+120	
25+25S	11:43	58900	58780	+120	
25+00S	11:44	58850	58780	+70	
24+75S	11:46	58890	58780	+110	
24+50S	11:46	58890	58780	+110	
24+25S	11:47	58870	58780	+90	
24+00S	11:48	58880	58780	+100	
23+75S	11:48	58870	58780	+90	
23+50S	11:49	58860	58780	+80	
23+25S	11:49	58860	58780	+80	
23+00S	11:50	58840	58780	+60	
22+75S	11:50	58840	58780	+60	
22+50S	11:51	58840	58780	+60	
22+25S	11:52	58840	58790	+50	
22+00S	11:52	58840	58790	+50	

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MAGNETIC SURVEY

PROJECT J.K. PAGE 4

GRID DATE 8/2/83

LINE L 18 +00 W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
11+25S	12:14	58790	58790	+00	
11+00S	12:14	58810	58790	+20	
10+75S	12:15	58810	58790	+20	
10+50S	12:15	58840	58790	+50	
10+25S	12:16	58820	58790	+30	
10+00S	12:16	58830	58790	+40	
9+75S	12:17	58820	58790	+30	
9+50S	12:17	58830	58790	+40	
9+25S	12:18	58810	58790	+20	
9+00S	12:19	58830	58800	+30	
8+75S	12:20	58830	58800	+30	
8+50S	12:20	58830	58800	+30	
8+25S	12:21	58830	58790	+40	
8+00S	12:21	58840	58790	+50	
7+75S	12:22	58840	58790	+50	
7+50S	12:23	58830	58790	+40	
7+25S	12:23	58830	58790	+40	
7+00S	12:24	58840	58790	+50	
6+75S	12:24	58820	58790	+30	
6+50S	12:25	58830	58790	+40	
6+25S	12:26	58830	50800	+30	

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MAGNETIC SURVEY

PROJECT J.K PAGE 2

GRID DATE 8/7

LINE L 18+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
21+75S	11:53	58830	58780	+50	
21+50S	11:53	58820	58790	+30	
21+25S	11:54	58840	58790	+50	
21+00S	11:54	58840	58790	+50	
20+75S	11:55	58850	58790	+60	
20+50S	11:55	58870	58790	+80	
20+25S	11:56	58840	58790	+50	
20+00S	11:56	58890	58790	+100	
19+75S	11:57	58870	58790	+80	
19+50S	11:57	58850	58790	+60	
19+25S	11:58	58830	58790	+40	
19+00S	11:58	58830	58790	+40	
18+75S	11:59	58820	58790	+30	
18+50S	11:59	58820	58790	+30	
18+25S	12:00	58800	58790	+10	
18+00S	12:00	58820	58790	+30	
17+75S	12:01	58830	58790	+40	
17+50S	12:01	58830	58790	+40	
17+25S	12:02	58840	58790	+50	
17+00S	12:02	58820	58790	+30	
16+75S	12:03	58790	58790	0	

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MAGNETIC SURVEY

PROJECT J.K. PAGE 1

GRID DATE August 3/83

LINE L20+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
(BL) 0+00	1252	58890	58810	+80	
0+25S	1253	58870	58810	+60	
0+50S	1253	58900	58810	+90	
0+75S	1254	58890	58810	+80	
1+00S	1254	58900	58810	+90	
1+25S	1255	58890	58810	+80	
1+50S	1255	58930	58810	+120	
1+75S	1256	58900	58810	+90	
2+00S	1257	58850	58800	+50	
2+25S	1257	58850	58800	+50	
2+50S	1258	58850	58800	+50	
2+75S	1259	58850	58800	+50	
3+00S	1259	58840	58800	+40	
3+25S	1300	58840	58800	+40	
3+50S	1300	58830	58800	+30	
3+75S	1301	58830	58800	+30	
4+00S	1301	58830	58800	+30	
4+25S	1302	58830	58800	+30	
4+50S	1303	58820	58800	+20	
4+75S	1303	58830	58800	+30	
5+00S	1304	58830	58800	+30	

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MAGNETIC SURVEY

PROJECT J.K. PAGE 5

GRID DATE 8/7/83

LINE L18+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
6+00S	12:26	58830	50800	+30	
5+75S	12:27	58820	58800	+20	
5+50S	12:27	58830	58800	+30	
5+25S	12:28	58840	58790	+50	
5+00S	12:29	58850	58790	+60	
4+75S	12:30	58840	58790	+50	
4+50S	12:31	58830	58800	+30	
4+25S	12:31	58830	58800	+30	
4+00S	12:32	58830	58790	+40	
3+75S	12:33	58840	58790	+50	
3+50S	12:33	58840	58790	+50	
3+25S	12:34	58820	58790	+30	
3+00S	12:34	58830	58790	+40	
2+75S	12:35	58820	58790	+30	
2+50S	12:36	58820	58790	+30	
2+25S	12:37	58840	58790	+50	
2+00S	12:38	58830	58790	+40	
1+75S	12:38	58840	58790	+50	
1+50S	12:39	58830	58790	+40	
1+25S	12:40	58840	58790	+50	
1+00S	12:42	58840	58790	+50	

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MAGNETIC SURVEY

PROJECT J.K. PAGE 2

GRID DATE August 3/83

LINE L20+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
5+25S	1304	58820	58800	+20	
5+50S	1305	58820	58800	+20	
5+75S	1305	58820	58800	+20	
6+00S	1306	58830	58800	+30	
6+25S	1306	58830	58800	+30	
6+50S	1307	58830	58800	+30	
6+75S	1307	58830	58800	+30	
7+00S	1308	58830	58800	+30	
7+25S	1308	58840	58800	+40	
7+50S	1309	58820	58800	+20	
7+75S	1310	58830	58800	+30	
8+00S	1310	58830	58800	+30	
8+25S	1311	58830	58800	+30	
8+50S	1312	58810	58800	+10	
8+75S	1312	58820	58800	+20	
9+00S	1313	58830	58800	+30	
9+25S	1314	58820	58800	+20	
9+50S	1314	58820	58800	+20	
9+75S	1315	58800	58800	0	
10+00S	1317	58810	58790	+20	
10+25S	1317	58800	58790	+10	

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MAGNETIC SURVEY

PROJECT J.K. PAGE 6

GRID DATE 8/7/83

LINE L18+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
0+75S	12:42	58840	58790	+50	
0+50S	12:43	58830	58790	+40	
0+25S	12:44	58820	58790	+30	
(B.L.) 0+00S	12:44	58860	58790	+70	
* 58910 @ 11:45				over	blast hole 24+85S

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MAGNETIC SURVEY

PROJECT J.K. PAGE 5

GRID DATE Aug 7/83

LINE L 20+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
16+00S	939	58840	58800	+40	Continuation of
16+25S	941	58850	58800	+50	Line 20+00W
16+50S	942	58840	58800	+40	
16+75S	943	58660	58800	-140	
17+00S	944	58680	58800	-120	
17+25S	944	58710	58800	-90	
17+50S	945	58720	58800	-80	
17+75S	946	58830	58800	+30	
18+00S	947	58840	58800	+40	
18+25S	948	58970	58800	+170	
18+50S	949	58970	58800	+170	
18+75S	951	58920	58800	+120	
19+00S	952	58900	58800	+100	
19+25S	954	58900	58800	+100	
19+50S	956	58880	58800	+80	
19+75S	958	58880	58800	+80	
20+00S	1000	58870	58800	+70	
20+25S	1002	58860	58800	+60	
20+50S	1004	58850	58800	+50	
20+75S	1007	58860	58800	+60	
21+00S	1008	58870	58790	+80	

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MAGNETIC SURVEY

PROJECT J.K. PAGE 3

GRID DATE August 3/83

LINE L 20+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
10+50S	1318	58800	58800	0	
10+75S	1319	58820	58800	+20	
11+00S	1320	58810	58790	+20	
11+25S	1320	58820	58790	+30	
11+50S	1321	58820	58790	+30	
11+75S	1321	58820	58790	+30	
12+00S	1322	58820	58790	+30	
12+25S	1322	58810	58790	+20	
12+50S	1323	58820	58790	+30	
12+75S	1324	58810	58790	+20	
13+00S	1324	58820	58790	+30	
13+25S	1325	58810	58790	+20	
13+50S	1325	58810	58790	+20	
13+75S	1325	58810	58790	+20	
14+00S	1326	58800	58790	+10	
14+25S	1327	58810	58790	+20	
14+50S	1328	58820	58790	+30	
14+75S	1328	58810	58790	+20	
15+00S	1329	58820	58790	+30	
15+25S	1329	58810	58790	+20	
15+50S	1330	58820	58790	+30	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K. PAGE 6

GRID DATE August 7/83

LINE L 20+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
21+25S	1010	58900	58790	+210	
21+50S	1011	58910	58790	+220	
21+75S	1013	58860	58790	+70	
22+00S	1014	58850	58790	+60	
22+25S	1015	58850	58790	+60	
22+50S	1017	58860	58790	+70	
22+75S	1018	58860	58790	+70	
23+00S	1019	58840	58790	+50	
23+25S	1020	58860	58790	+70	
23+50S	1021	58860	58780	+80	
23+75S	1022	58830	58780	+50	
24+00S	1023	58860	58780	+80	
24+25S	1025	58850	58780	+70	
24+50S	1027	58880	58750	+100	
24+75S	1028	58760	58780	-20	
25+00S	1029	58830	58780	+50	
25+25S	1030	58900	58780	+120	
25+50S	1032	58890	58780	+110	
25+75S	1034	59060	58780	+280	
26+00S	1036	59160	58790	+370	
26+25S	1038	58930	58780	+150	

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MAGNETIC SURVEY

PROJECT J.K. PAGE 4

GRID DATE August 3/83

LINE L 20+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
15+75S	1331	58820	58790	+30	remainder of Line
					done on Aug 7/83

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MAGNETIC SURVEY

PROJECT J.K. PAGE 1

GRID DATE August 3/83

LINE L 22+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
26+75S	1021	58620	58760	-140	
26+50S	1021	58610	58760	-150	
26+25S	1023	58780	58770	+10	
26+00S	1024	58660	58770	-110	
25+75S	1025	58730	58780	-50	
25+50S	1026	58780	58770	+10	
25+25S	1026	58810	58770	+40	
25+00S	1028	58780	58770	+10	
24+75S	1029	58780	58770	+10	
24+50S	1030	58790	58780	+10	
24+25S	1035	58790	58780	+10	
24+00S	1035	58720	58760	-40	
23+75S	1036	58820	58780	+40	
23+50S	1037	58760	58790	-30	
23+25S	1038	58730	58780	-50	
23+00S	1039	58800	58770	+30	
22+75S	1040	58800	58770	+30	
22+50S	1040	58790	58770	+20	
22+25S	1041	58800	58770	+30	
22+00S	1041	58800	58770	+30	
21+75S	1042	58780	58770	+10	

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MAGNETIC SURVEY

PROJECT J.K. PAGE 7

GRID DATE Aug 7/83

LINE L 20+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
26+50S	1040	58840	58790	+50	
26+75S	1044	58830	58780	+50	
27+00S	1046	58720	58780	-60	

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MAGNETIC SURVEY

PROJECT J. K. PAGE 2

GRID DATE August 3/83

LINE L22+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
21+50S	1043	58770	58760	+10	
21+25S	1044	58750	58750	0	
21+00S	1045	58710	58770	-60	
20+75S	1045	58710	58770	-60	
20+50S	1046	58920	58770	+150	
20+25S	1047	58820	58770	+50	
20+00S	1048	58800	58770	+30	
19+75S	1048	58800	58770	+30	
19+50S	1049	58840	58770	+70	
19+25S	1050	58790	58770	+20	
19+00S	1051	58780	58760	+20	
18+75S	1052	58790	58770	+20	
18+50S	1054	58800	58760	+40	
18+25S	1055	58790	58760	+30	
18+00S	1056	58840	58770	+70	
17+75S	1057	58810	58760	+50	
17+50S	1058	58800	58760	+40	
17+25S	1100	58780	58760	+20	
17+00S	1101	58780	58760	+20	
16+75S	1104	58780	58750	+30	
16+50S	1107	58780	58750	+30	

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MAGNETIC SURVEY

PROJECT PAGE

GRID DATE

LINE OPERATOR

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS

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MAGNETIC SURVEY

PROJECT J.K. PAGE 5

GRID DATE Aug 3 /83.

LINE L 22+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
5+75S	1145	58790	58760	+30	
5+50S	1145	58770	58760	+10	
5+25S	1146	58780	58760	+20	
5+00S	1146	58770	58760	+10	
4+75S	1148	58780	58750	+30	
4+50S	1149	58820	58760	+60	
4+25S	1149	58830	58760	+70	
4+00S	1150	58750	58750	0	
3+75S	1150	58760	58750	+10	
3+50S	1151	58770	58760	+10	
3+25S	1152	58770	58760	+10	
3+00S	1152	58790	58760	+30	
2+75S	1153	58780	58760	+20	
2+50S	1156	58770	58760	+10	
2+25S	1157	58810	58750	+60	
2+00S	1157	58800	58750	+50	
1+75S	1158	58800	58760	+40	
1+50S	1159	58800	58750	+50	
1+25S	1200	58790	58750	+40	
1+00S	1200	58770	58750	+20	
0+75S	1201	58810	58750	+60	

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MAGNETIC SURVEY

PROJECT J.K. PAGE 3

GRID DATE August 3/83

LINE L 22+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
16+25S	1111	58790	58750	+40	
16+00S	1111	58790	58760	+30	
15+75S	1116	58780	58760	+20	
15+50S	1119	58800	58750	+50	
15+25S	1119	58780	58750	+30	
15+00S	1120	58770	58760	+10	
14+75S	1120	58770	58760	+10	
14+50S	1121	58780	58750	+30	
14+25S	1121	58790	58750	+40	
14+00S	1122	58790	58750	+40	
13+75S	1123	58800	58750	+50	
13+50S	1124	58790	58750	+40	
13+25S	1124	58780	58750	+30	
13+00S	1125	58790	58760	+30	
12+75S	1125	58790	58760	+30	
12+50S	1126	58800	58750	+50	
12+25S	1129	58780	58750	+30	
12+00S	1129	58770	58750	+20	
11+75S	1130	58790	58760	+30	
11+50S	1130	58780	58760	+20	
11+25S	1131	58790	58750	+40	

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MAGNETIC SURVEY

PROJECT J.K. PAGE 6

GRID DATE August 3/83

LINE L 22+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
0+50S	1201	58810	58750	+60	
0+25S	1202	58790	58750	+40	
(B.L) 0+00	1203	58790	58760	+30	

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MAGNETIC SURVEY

PROJECT J.K. PAGE 4

GRID DATE August 3/83

LINE L 22+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
11+00S	1131	58790	58750	+40	
10+75S	1133	58790	58750	+40	
10+50S	1133	58790	58750	+40	
10+25S	1134	58790	58750	+40	
10+00S	1135	58790	58750	+40	
9+75S	1136	58810	58760	+50	
9+50S	1136	58780	58760	+20	
9+25S	1137	58780	58760	+20	
9+00S	1137	58790	58760	+30	
8+75S	1138	58790	58760	+30	
8+50S	1138	58780	58760	+20	
8+25S	1139	58790	58760	+30	
8+00S	1139	58780	58760	+20	
7+75S	1140	58780	58760	+20	
7+50S	1141	58780	58760	+20	
7+25S	1141	58800	58760	+40	
7+00S	1142	58780	58750	+30	
6+75S	1142	58780	58750	+30	
6+50S	1143	58770	58750	+20	
6+25S	1143	58780	58750	+30	
6+00S	1144	58790	58760	+30	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT T.K. PAGE 1

GRID DATE July 31/83

LINE L41+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
6+00S	14:37	5884	58790	50	
7+75S	14:37	5883	58790	40	
7+50S	14:37	5884	58790	50	
7+25S	34	5882	58790	30	
7+00S	34	5883	58790	40	
6+75S	35	5884	58790	50	
6+50S	35	5885	58790	60	
6+25S	36	5884	58790	50	
6+00S	36	5884	58790	50	
5+75S	37	5884	58790	50	
5+50S	37	5883	58790	40	
5+25S	38	5882	58790	30	
5+00S	39	5885	58790	60	
4+75S	40	5884	58790	50	
4+50S	40	5885	58790	60	
4+25S	41	5884	58800	40	
4+00S	41	5883	58800	30	
3+75S	41	5883	58800	30	
3+50S	42	5885	58790	60	
3+25S	42	5886	58790	70	
3+00S	42	5885	58790	60	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT T.K. PAGE 3 2

GRID DATE July 31/83

LINE L39+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
(0+24) 0+00	[illegible]	5886	58800	60	
0+25S	15:[illegible]	5888	58810	50	
0+50S	06	5886	58800	60	
0+75S	06	5888	58800	80	
1+00S	07	5886	58810	50	
1+25S	07	5885	58810	40	
1+50S	08	5887	58810	60	
1+75S	09	5887	58810	60	
2+00S	09	[illegible]	58810	60	
2+25S	10	5881	58810	60	
2+50S	11	[illegible]	58810	40	
2+75S	11	5887	58810	60	
3+00S	12	5888	58810	70	
3+25S	13	5881	58810	60	
3+50S	14	5880	58810	40	
3+75S	15	5886	58810	50	
4+00S	16	[illegible]	58800	60	
4+25S	21	5885	58800	50	
4+50S	22	[illegible]	58800	60	
4+75S	24	5886	58800	60	
5+00S	25	5885	58800	50	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K. PAGE 2

GRID DATE July 31/83

LINE L 41+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS		
[illegible]	[illegible]	[illegible]	58800 50	250N	[illegible]	[illegible]	58800 80
[illegible]	419	5885	58800 50	2+75N	55	[illegible]	58800 60
[illegible]	418	[illegible]	58800 70	3+00N	56	[illegible]	58800 60
[illegible]	418	5882	58800	60			
[illegible]	415	5883	58800	80			
[illegible]	416	5886	58800	60			
[illegible]	416	5886	58800	60			
1+00S	417	5887	58800	70			
[illegible]	417	5887	58800	70			
0+50S	418	5885	58800	50			
0+25S	418	5887	58800	70			
(BL) 0+00	419	5886	58800	60			
0+25N	419	5887	58800	70			
0+50N	50	5886	58800	60			
0+75N	50	5886	58800	60			
1+00N	51	5887	58800	70			
1+25N	52	5887	58800	70			
1+50N	52	5887	58800	70			
1+75N	53	5887	58800	70			
2+00N	53	5881	58800	70			
2+25N	54	5886	58800	60			

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K. PAGE 2

GRID DATE July 31/83

LINE L 39+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
5+25S	[illegible]	[illegible]	58800	60	
[illegible]	27	[illegible]	58800	70	
[illegible]	27	[illegible]	58800	60	
[illegible]	28	5885	58800	50	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K. PAGE 1

GRID DATE July 31/83

LINE L45+00W OPERATOR A. Cole.

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
25+00S	12:21	5887	58790	80	
24+75S	22	5874	58790	-50	
24+50S	22	5890	58780	120	
24+25S	23	5904	58780	230	
24+00S	24	5893	58790	140	
23+75S	25	5884	58790	50	
23+50S	26	5923	58800	430	
23+25S	27	5921	58790	420	
23+00S	28	5917	58790	380	
22+75S	29	[illegible]	58790	140	
22+50S	30	5880	58790	10	
22+25S	30	5892	58790	130	
22+00S	30	5887	58790	80	
21+75S	31	5889	58790	100	
21+50S	31	5887	58790	80	
21+25S	32	5890	58790	100	
21+00S	32	5894	58790	150	
20+75S	33	5917	58790	390	
20+50S	33	5917	58790	380	
20+25S	34	5910	58790	310	
20+00S	34	5891	58790	120	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K. PAGE 1

GRID DATE July 31/83

LINE L43+00W OPERATOR A. Cole.

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
2+00S	[illegible]	[illegible]	58790	30	
1+75S	49	5884	58780	60	
1+50S	50	5881	58780	60	
1+25S	50	5883	58780	50	
1+00S	51	5884	58790	50	
0+75S	52	5881	58780	60	
0+50S	52	5883	58780	50	
0+25S	53	[illegible]	58780	50	
(B.L) 0+00	54	5883	58780	50	
0+25S	54	[illegible]	58780	50	
0+50S	[illegible]	[illegible]	58780	60	
0+75S	56	[illegible]	58780	50	
1+00S	57	5883	58790	40	
1+25S	57	5884	58790	50	
1+50S	58	5883	58790	40	
1+75S	59	[illegible]	58790	70	←
2+00S	[illegible]	5886	58790	70	
2+25	[illegible]	5884	58790	50	
2+50S	01	5886	58790	70	
2+75S	02	5885	58790	60	
3+00S	03	[illegible]	58790	40	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K. PAGE 2

GRID DATE July 31/89

LINE L 45+00 W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
19+75S	12:35	5883	58790	40	
19+50S	36	5883	58790	40	
19+25S	37	5880	58790	10	
19+00S	37	5878	58790	-10	
18+75S	38	5880	58790	10	
18+50S	39	5879	58790	0	
18+25S	40	5878	58790	-10	
18+00S	40	5878	58790	-10	
17+75S	41	5879	58790	0	
17+50S	42	5879	58790	0	
17+25S	43	5878	58790	-10	
17+00S	43	5880	58790	10	
16+75S	44	5881	58790	20	
16+50S	45	5880	58790	10	
16+25S	46	5880	58790	10	
16+00S	46	5879	58790	0	
15+75S	47	5879	58790	0	
15+50S	48	5880	58790	10	
15+25S	48	5882	58790	30	
15+00S	49	5881	58790	20	
14+75S	49	5880	58790	10	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K. PAGE 3

GRID DATE July 31/89

LINE L 43+00 W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
3+25S	[illegible]	[illegible]	58790	40	
3+50S	04	[illegible]	58790	50	
3+75S	05	5884	58790	50	
4+00S	06	[illegible]	58790	40	
4+25S	06	5883	58790	40	
4+50S	07	5885	58790	60	
4+75S	08	5884	58790	50	
5+00S	08	5884	58790	50	
5+25S	09	5883	58790	40	
5+50S	10	[illegible]	58790	50	
5+75S	11	5884	58790	50	
6+00S	12	5883	58780	50	
6+25S	13	5884	58780	60	
6+50S	15	5885	58790	60	
6+75S	16	5887	58790	80	
7+00S	17	5886	58790	70	
7+25S	17	5884	58790	50	
7+50S	17	5884	58790	50	
7+75S	18	5889	58790	40	
8+00S	18	5889	58790	40	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J. K. PAGE 5

GRID DATE July 31/83

LINE L 4/5+00W OPERATOR A. Cole.

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
1+00S	13:19	5881	58780	30	
3+75S	20	5884	58780	60	
3+50S	20	5881	58780	30	
3+25S	21	5884	58780	60	
3+00S	21	5883	58780	50	
2+75S	22	5883	58780	50	
2+50S	22	5883	58780	50	
2+25S	24	5884	58780	50	
2+00S	24	5883	58780	50	
1+75S	24	5883	58780	50	
1+50S	24	5882	58780	40	
1+25S	25	5884	58780	60	
1+00S	25	5884	58780	60	
0+75S	26	5885	58780	70	
0+50S	27	5882	58780	40	
0+25S	27	5882	58780	40	
(BL) 0+00	28	5883	58780	50	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J. K. PAGE 3

GRID DATE July 31/83

LINE L 4/5+00W OPERATOR A. Cole.

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
14+50S	12:50	5850	58790	10	
14+25S	51	5881	58780	30	
14+00S	52	5881	58790	20	
13+75S	53	5881	58780	30	
13+50S	53	5883	58780	50	
13+25S	54	5884	58790	50	
13+00S	55	5883	58790	40	
12+75S	53	5882	58790	30	
12+50S	56	5883	58790	40	
12+25S	56	5851	58790	20	
12+00S	57	5884	58790	50	
11+75S	57	5882	58790	30	
11+50S	56	5664	58790	-150	
11+25S	59	5882	58790	30	
11+00S	59	5880	58790	10	
10+75S	13:00	5881	58790	20	
10+50S	13:00	5881	58790	20	
10+25S	01	5880	58790	10	
10+00S	01	5881	58790	20	
9+75S	02	5882	58790	30	Drop out 10m loop
9+50S	04	5883	58790	40	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT _____ PAGE _____

GRID _____ DATE _____

LINE _____ OPERATOR _____

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K. PAGE 4

GRID _____ DATE July 3 [illegible]

LINE L 45+00W OPERATOR A. Cole.

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
9+75S	13:[illegible]	5880	58780	20	
9+00S	[illegible]	[illegible]	58780	30	
8+75S	09	5881	58780	30	
8+50S	09	5881	58780	30	
8+25S	10	5829	58780	50	
8+00S	11	5831	58780	30	
7+75S	11	5821	58780	40	
7+50S	12	5829	58790	40	
7+25S	13	5832	58780	40	
7+00S	13	5833	58780	50	
6+75S	14	5833	58780	50	
6+50S	14	5833	58780	50	
6+25S	15	5829	58780	30	
6+00S	15	5822	58780	40	
5+75S	16	5870	58780	40	
5+50S	16	5860	58780	20	
5+25S	17	5879	58780	10	
5+00S	17	5832	58780	40	
4+75S	18	[illegible]	58780	40	
4+50S	18	5831	58780	30	
4+25S	19	5821	58780	40	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT _____ PAGE 3

GRID Supplemental DATE July 31/83

LINE L 47+00W OPERATOR _____

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
19+50S	10:58	5883	58800	30	
19+25S	10:57	5883	58800	30	
19+00S	10:57	5883	58800	30	
18+75S	10:56	5883	58810	20	
18+50S	10:56	5884	58810	30	
18+25S	10:55	5884	58810	30	
18+00S	10:55	5884	58810	30	
17+75S	10:54	5881	58810	0	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J. K. PAGE 1

GRID Supplemental. DATE July 31/83

LINE L 47+00W OPERATOR A. Cole.

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
24+00S	11:33	5880	58790	10	
23+75S	11:32	5885	58790	60	
23+50S	11:31	5894	58800	140	
23+25S	11:30	5938	58790	590	
23+00S	11:30	5929	58790	500	
22+75S	11:29	5883	58790	40	
22+50S	11:29	5888	58790	90	
22+25S	11:29	5902	58790	230	
22+00S	11:28	5901	58790	220	
21+75S	11:28	5884	58790	50	
21+50S	11:27	5878	58800	-20	
21+25S	11:27	5875	58800	-50	
21+00S	11:26	5873	58800	-70	
20+75S	[illegible]	5874	58800	-60	
20+50S	11:25	5893	58800	130	
20+25S	11:24	5940	58800	140	
20+00S	11:23	5874	58800	-60	
19+75S	11:21	5872	58800	-80	
19+50S	11:20	5871	58790	-80	
19+25S	11:19	5876	58800	-40	
19+00S	11:19	5880	58800	0	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT _____ PAGE _____

GRID _____ DATE _____

LINE _____ OPERATOR _____

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K. PAGE 2

GRID [illegible] DATE July 31 1[illegible]

LINE 4474000 OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
18+75S	11:18	5880	58800	0	
18+00S	11:18	5874	58800	-60	
18+25S	11:17	5877	58800	-30	
17+00S	11:16	5880	58800	0	
17+75S	11:16	5879	58800	-10	
17+50S	11:15	[illegible]	58800	10	
17+25S	11:14	5882	58800	20	
17+00S	11:14	5882	58800	20	
16+75S	11:15	5890	58800	100	
16+50S	11:14	5879	58800	-10	
16+25S	11:03	5881	58800	10	
16+00S	[illegible]	5883	58800	30	
15+75S	11:02	5883	58800	30	
15+50S	11:02	5883	58800	30	
15+25S	11:01	5883	58800	30	
15+00S	11:01	[illegible]	58810	10	
14+75S	11:00	5882	58800	20	
14+50S	11:00	5882	58800	20	
14+25S	10:59	5882	58800	20	
14+00S	10:59	5882	58800	20	
13+75S	10:58	5882	58800	20	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K. PAGE 6

GRID DATE July 30/83

LINE L47+00W OPERATOR A. Cole.

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
3+75S	16:37	5891	58880	30	
3+00S	16:37	5891	58880	30	
2+75S	39	5892	58880	40	
2+50S	39	5892	58880	40	
2+25S	40	5891	58880	30	
2+00S	40	5891	58880	30	
1+75S	40	5890	58880	20	
1+50S	41	5889	58880	10	
1+25S	41	5889	58880	10	
1+00S	42	5889	58880	10	
0+75S	42	5888	58880	0	
0+50S	42	5888	58880	0	
0+25S	43	5890	58880	20	
(04) 0+00	44	5889	58880	10	
0+25N	44	5890	58880	20	
0+50N	44	5890	58880	20	
0+75N	45	5890	58880	20	
1+00N	45	5889	58880	10	
1+25N	46	5888	58880	0	
1+50N	46	5890	58880	20	
1+75N	47	5890	58880	20	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K. PAGE 4

GRID DATE July 30/83

LINE L47+00W OPERATOR A Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
					Base station down
					↑ Con't July 31/83
11+50S	19	5887	58870	0	
11+25S	19	5890	58870	-30	
11+00S	20	5889	58870	20	
10+75S	20	5891	58870	40	
10+50S	21	5891	58870	40	
10+25S	21	5891	58870	40	
10+00S	22	5891	58870	40	
9+75S	22	5890	58870	30	
9+50S	23	5889	58870	20	
9+25S	23	5890	58870	20	
9+00S	24	5891	58880	30	
8+75S	25	5890	58880	20	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K. PAGE 7

GRID DATE July 30/83

LINE L47+00W OPERATOR A. Cole.

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
2+00N	16:42	5878	5880	0	
2+25N	42	5889	5880	10	
[illegible]	49	5888	5880	0	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K. PAGE 5

GRID DATE July 30/83

LINE L47+00W OPERATOR A. Cole.

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
[illegible]	16:20	5892	58880	20	
8+25S	26	5892	58880	40	
8+00S	26	5891	58880	30	
7+75S	27	5892	58880	40	
7+50S	27	5891	58880	30	
7+25S	29	5891	58870	40	
7+00S	29	5891	58880	30	
6+75S	30	5892	58880	40	
6+50S	30	5891	58880	30	
6+25S	31	5890	58880	20	
6+00S	32	5891	58880	30	
5+75S	32	5891	58880	30	
5+50S	32	5892	58880	40	
5+25S	32	5891	58880	30	
5+00S	33	5892	58880	40	
4+75S	34	5892	58880	40	
4+50S	34	5892	58880	40	
4+25S	35	5892	58880	40	
4+00S	35	5892	58880	40	
3+75S	36	5892	58880	40	
3+50S	36	5892	58880	40	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K PAGE 3

GRID Supplimental DATE July 31/83

LINE L49+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
6+00S	[illegible]	[illegible]	58810	30	
6+25S	[illegible]	58883	58810	20	
7+00S	[illegible]	[illegible]	58810	40	
7+25S	[illegible]	[illegible]	58810	60	
7+50S	[illegible]	58865	58810	40	
7+75S	[illegible]	[illegible]	58810	20	
8+00S	[illegible]	58884	58810	30	
8+25S	10:45	58881	58810	30	
8+50S	10:43	58873	58810	20	
8+75S	[illegible]	58875	58810	40	
9+00S	[illegible]	[illegible]	58810	80	
9+25S	[illegible]	58889	58810	80	
9+50S	10:39	58873	58810	20	
9+75S	10:33	58872	58810	10	
10+00S	10:37	58873	58810	20	
10+25S	[illegible]	[illegible]	58810	20	
10+50S	10:36	58873	58810	20	
10+75S	[illegible]	58872	58810	10	
11+00S	[illegible]	58884	58810	30	
11+25S	[illegible]	58875	58810	-60	
11+50S	10:32	58877	58810	-40	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K. PAGE 1

GRID DATE July 30/83

LINE L49+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
3+00N	1400	58870	58830	40	Watch [illegible] [illegible] @ 3+00N
2+75N	1404	[illegible]	58830	40	check time at last station upon return
2+50N	05	58889	58840	50	
2+25N	05	58889	58840	50	
2+00N	06	58880	58830	50	
1+75N	06	58888	58830	50	
1+50N	07	[illegible]	58830	50	
1+25N	07	58888	58830	50	
1+00N	08	[illegible]	58830	50	
0+75N	09	58890	58830	70	
0+50N	09	[illegible]	58830	50	
0+25N	10	58889	58830	60	
(B.L) 0+00	10	58889	58830	60	
0+25S	11	58888	58840	40	
0+50S	12	58877	58830	40	
0+75S	12	58889	58840	50	
1+00S	13	58889	58840	50	
1+25S	14	58887	58830	40	
1+50S	15	58890	58830	60	
1+75S	[illegible]	[illegible]	58830	60	
2+00S	16	58890	58840	60	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J. K. PAGE 4

GRID Symptomatical DATE July 31 83

LINE L 49+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
11+75S	10:31	5884	58810	30	
12+00S	10:31	5885	58810	40	
[illegible]	10:30	5883	58810	20	
12+50S	10:30	5883	58810	20	
12+75S	10:30	5883	58810	20	
[illegible]	10:30	5881	58810	0	
13+25S	10:26	5884	58810	30	
13+50S	10:26	5884	58810	30	
13+75S	10:25	5885	58810	40	
14+00S	10:24	5884	58810	30	
14+25S	10:24	[illegible]	58810	20	
14+50S	10:23	5882	58810	10	
14+75S	10:22	5880	58810	-10	
[illegible]	10:22	5882	58810	10	
[illegible]	10:21	5883	58810	20	
15+50S	10:20	5883	58810	20	
15+75S	10:20	5882	58810	10	
16+00S	10:19	5881	58810	0	
16+25S	10:19	5881	58810	0	
16+50S	10:19	5884	58810	30	
16+75S	10:19	5884	58810	30	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J. K. PAGE 2

GRID DATE July 31/83

LINE L 49+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
2+25S	14:17	[illegible]	58840	40	
2+50S	17	5889	58840	50	
[illegible]	18	5887	58840	30	
[illegible]	18	5887	58840	30	
[illegible]	19	5889	58840	50	
3+50S	19	5889	58840	50	
[illegible]	19	5890	58840	50	
4+00S	21	[illegible]	58850	50	
4+25S	22	5889	58850	50	
4+50S	22	5893	58850	80	
4+75S	23	5891	58850	60	
5+00S	23	5890	58850	50	
5+25S	24	5890	58850	50	
5+50S	24	5890	58850	50	
5+75S	24	[illegible]	58850	70	
			↓	Base station [illegible]	
				Con't on July 31/83	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K PAGE 1

GRID DATE July 30/87

LINE L51+00W OPERATOR A. Cole.

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
20+00S	12:13	5853	58800	30	
19+75S	12:17	5895	58800	150	
19+50S	12:19	5927	58800	470	
19+25S	12:20	5889	58800	90	
19+00S	12:22	5876	58800	-40	Slide gouge (fault)
18+75S	12:23	5890	58800	100	
18+50S	12:25	5887	58800	70	
18+25S	12:26	5891	58800	110	
18+00S	27	5895	58800	150	
17+75S	28	5893	58800	130	
17+50S	29	5892	58800	120	
17+25S	30	5886	58800	60	
17+00S	32	5882	58800	20	
16+75S	32	5881	58800	10	
16+50S	33	5880	58800	0	
16+25S	34	5878	58800	-20	
16+00S	12:35	5883	58800	20	
15+75S	36	5879	58800	-10	
15+50S	37	5880	58800	0	
15+25S	38	5881	58800	10	
15+00S	38	5870	58800	-20	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K PAGE 5

GRID Supplemental DATE July 31/87

LINE L19+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
17+00S	10:18	5874	58810	30	
17+25S	10:17	5876	58810	50	
17+50S	10:16	5889	58810	80	
17+75S	10:16	[illegible]	58810	60	
18+00S	10:15	5886	58810	50	
18+25S	10:15	5886	58810	50	
18+50S	10:14	5886	58810	50	
18+75S	10:13	[illegible]	58810	20	
19+00S	10:13	[illegible]	58810	40	
19+25S	10:12	[illegible]	58810	40	
19+50S	10:11	5886	58810	50	
19+75S	10:11	[illegible]	58810	30	
20+00S	10:10	5882	58810	10	
20+25S	10:09	[illegible]	58810	30	
20+50S	10:09	[illegible]	58810	80	
20+75S	[illegible]	[illegible]	58810	80	
21+00S	10:07	5891	58810	170	
21+25S	[illegible]	[illegible]	58810	260	
21+50S	10:06	[illegible]	58810	310	
21+75S	10:05	[illegible]	58810	370	
22+00S	[illegible]	[illegible]	58810	600	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K. PAGE 2

GRID DATE July 30/83

LINE L51+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
14+75S	12:39	5880	58800	0	
14+50S	12:41	5882	58800	20	
14+25S	42	5881	58800	10	
14+00S	43	5880	58800	0	
13+75S	43	5881	58800	10	
13+50S	44	5880	58800	0	
13+25S	45	5877	58800	-30	
13+00S	46	5878	58800	-20	
12+75S	46	5879	58800	-10	
12+50S	47	5881	58800	10	
12+25S	48	5880	58800	0	
12+00S	49	5880	58800	0	
11+75S	50	5875	58800	-50	
11+50S	51	5870	58800	-30	
11+25S	52	5877	58800	-30	
11+00S	52	5879	58800	-10	
10+75S	53	5882	58800	20	
10+50S	54	5884	58800	40	
10+25S	55	5884	58800	40	
10+00S	56	5884	58800	40	
9+75S	56	5889	58800	90	

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MAGNETIC SURVEY

PROJECT J.K PAGE 6

GRID Supplemental DATE July [illegible]

LINE 49+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
22+25S	10:04	59[illegible]5	58810	740	
22+50S	10:05	[illegible]	58810	630	
22+75S	10:08	5975	58810	940	
23+00S	[illegible]	[illegible]	58810	1040	
23+25S	10:51	58890	58810	80	
23+50S	[illegible]	[illegible]	58810	20	
23+75S	[illegible]	58690	58810	-120	
24+00S	[illegible]	59[illegible]2	58810	210	
End.					

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MAGNETIC SURVEY

PROJECT J.K. PAGE 5

GRID DATE July 30/83

LINE 51+00W OPERATOR A. Cole.

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
1+00N	37	5885	58810	40	
1+25N	39	5884	58810	30	
1+50N	39	5883	58810	20	
1+75N	40	5885	58810	40	
2+00N	40	5884	58810	30	
2+25N	41	5883	58810	20	
2+50N	42	5884	58820	20	
2+75N	43	5883	58820	0	
3+00N	13:14	5884	58810	30	

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MAGNETIC SURVEY

PROJECT J.K. PAGE 3

GRID DATE July 30/83

LINE L51+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
9+50S	12:57	5895	58810	140	
9+25S	58	5888	58800	80	
9+00S	13:00	5889	58810	80	
8+75S	01	5881	58800	40	
8+50S	01	5881	58800	10	
8+25S	02	5883	58800	30	
8+00S	03	5884	58810	30	
7+75S	04	5884	58810	30	
7+50S	04	5884	58810	30	
7+25S	05	5884	58810	30	
7+00S	05	5884	58810	30	
6+75S	06	5882	58810	10	
6+50S	07	5882	58800	20	
6+25S	07	5883	58800	30	
6+00S	08	5882	58800	20	
5+75S	09	5885	58810	40	
5+50S	09	5885	58810	40	
5+25S	10	5884	58810	30	
5+00S	11	5882	58810	10	
4+75S	11	5882	58810	10	
4+50S	12	5884	58810	30	

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MAGNETIC SURVEY

PROJECT _____ PAGE _____

GRID _____ DATE _____

LINE _____ OPERATOR _____

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K. PAGE 4

GRID _____ DATE July 10 1987

LINE L51+00W OPERATOR A Cole.

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
4+25S	13:12	5882	58810	10	
4+00S	13:13	5884	58810	30	
3+75S	14	5883	58810	20	
3+50S	14	5884	58810	30	
3+25S	15	5884	58810	30	
3+00S	15	5885	58810	40	
2+75S	17	5885	58810	40	
2+75S	18	5886	58810	50	
2+25S	13:25	5885	58800	50	
2+00S	13:26	5884	58800	40	
1+75S	13:28	5884	58800	40	
1+50S	28	5886	58800	60	
1+25S	29	5886	58800	60	
1+00S	29	5885	58800	50	
0+75S	30	5884	58800	40	
0+50S	31	5884	58800	40	
0+25S	32	5884	58800	40	
(BL) 0+00	13:34	5884	58800	40	
0+25N	35	5885	58800	50	
0+50N	36	5887	58810	60	
0+75N	36	5875	58810	40	

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MAGNETIC SURVEY

PROJECT J.K. PAGE 3

GRID DATE July 30/83

LINE L 53+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
6+50S	11:06	5881	58800	10	
6+75S	11:06	5882	58790	30	
7+00S	07	5883	58790	40	
7+25S	08	5882	58790	30	
7+50S	09	5881	58790	20	
7+75S	09	5883	58790	40	
8+00S	10	5883	58790	40	
8+25S	11	5881	58790	20	
8+50S	12	5880	58790	10	
8+75S	12	5880	58790	10	
9+00S	13	5876	58790	-30	
9+25S	17	5880	58790	10	
9+50S	18	5882	58790	30	
9+75S	19	5889	58780	110	
10+00S	20	5878	58780	0	
10+25S	21	5879	58790	0	
10+50S	22	5879	58790	0	
10+75S	23	5879	58790	0	
11+00S	24	5880	58790	10	
11+25S	25	5881	58790	20	
11+50S	26	5882	58790	30	

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MAGNETIC SURVEY

PROJECT J.K. PAGE 1

GRID DATE July 30/83

LINE L53+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
4+00 N	10:39	5882	58800	20	
3+75N	40	5882	58810	10	
3+50N	40	5882	58810	10	
3+25N	41	5883	58810	20	
3+00N	41	5882	58810	10	
2+75N	42	5882	58800	20	
2+50N	42	5883	58800	30	
2+25N	43	5883	58810	20	
2+00N	43	5884	58810	30	
1+75N	44	5885	58810	40	
1+50N	44	5884	58810	30	
1+25N	45	5884	58810	30	
1+00N	45	5884	58810	30	
0+75N	46	5883	58810	20	
0+50N	46	5884	58810	30	
0+25N	47	5884	58810	30	
(A.L) 0+00	47	5884	58810	30	
0+25S	48	5883	58800	30	
0+50S	48	5883	58800	30	
0+75S	49	5884	58810	30	
1+00S	49	5883	58810	20	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K. PAGE 4

GRID DATE July 30/83

LINE L53+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
11+75S	11:27	5879	58790	0	
12+00S	11:28	5881	58790	20	
12+25S	11:29	5879	58790	0	
12+50S	11:30	5882	58790	30	
12+75S	11:31	5881	58800	10	
13+00S	11:32	5882	58790	30	
13+25S	11:34	5884	58800	40	
13+50S	11:35	5880	58800	0	
13+75S	11:36	5881	58800	10	
14+00S	11:37	5880	58800	0	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K. PAGE 2

GRID DATE July 30/83

LINE L53+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
1+25S	10:48	58841	58800	40	
1+50S	50	5883	58800	30	
1+75S	51	5883	58810	20	
2+00S	51	5883	58810	20	
2+25S	52	5883	58810	20	
2+50S	53	5885	58810	40	
2+75S	54	5883	58810	20	
3+00S	55	5883	58800	30	
3+25S	55	5882	58800	20	
3+50S	56	5883	58800	30	
3+75S	57	5882	58800	20	
4+00S	58	5882	58800	20	
4+25S	59	5882	58800	20	
4+50S	11:00	5883	58800	30	
4+75S	11:00	5890	58800	100	
5+00S	01	5887	58800	70	
5+25S	02	5884	58800	40	
5+50S	03	5885	58800	50	
5+75S	03	5885	58800	50	
6+00S	04	5882	58800	20	
6+25S	05	5883	58800	30	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K. PAGE 1

GRID DATE July 30/83

LINE L 55 +00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
5+75S	9 57	58860	58820	+40	
5+50S	959	58850	58820	+30	
5+25S	1000	58830	58820	+10	
5+00S	1001	58830	58820	+10	
4+75S	1002	58840	58820	+20	
4+50S	1003	58850	58820	+30	
4+25S	1003	58860	58820	+40	
4+00S	1004	58840	58820	+20	
3+75S	1004	58840	58820	+20	
3+50S	1005	58850	58820	+30	
3+25S	1005	58850	58820	+30	
3+00S	1005	58850	58820	+30	
2+75S	1006	58840	58820	+20	
2+50S	1007	58870	58820	+50	
2+25S	1007	58870	58820	+50	
2+00S	1008	58850	58820	+30	
1+75S	1008	58870	58820	+50	
1+50S	1009	58850	58820	+30	
1+25S	1009	58860	58820	+40	
1+00S	1010	58840	58820	+20	
0+75S	1011	58830	58810	+20	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K. PAGE 1

GRID DATE July 29/83

LINE L 55+00W OPERATOR A. Cole.

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
10+00S	12:36	58800	58790	+10	
9+75S	12:37	58810	58790	+20	
9+50S	12:38	58770	58790	-20	
9+25S	12:39	58820	58790	+30	
9+00S	12:40	58790	58790	0	
8+75S	12:40	58800	58790	+10	
8+50S	12:41	58810	58790	+20	
8+25S	12:42	58850	58790	+60	
8+00S	12:42	58810	58790	+20	
7+75S	12:43	58830	58790	+40	
7+50S	12:44	58830	58780	+50	
7+25S	12:45	58830	58780	+50	
7+00S	12:45	58840	58780	+60	
6+75S	12:49	58820	58780	+40	
6+50S	12:50	58810	58780	+30	
6+25S	12:51	58830	58780	+50	
6+00S	12:52	58820	58780	+40	
5+75S					remainder of Line
5+50S					Completed on
5+25S					July 30/83
5+00S					

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J. K. PAGE 2

GRID DATE July 30/83

LINE L55+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
0+50S	10 11	58820	58810	+10	
0+25S	10 12	58810	58810	0	
(B.L) 0+00	10 12	58810	58810	0	
0+25N	10 13	58830	58820	+10	
0+50N	10 14	58840	58810	+30	
0+75N	10 14	58830	58810	+20	
1+00N	10 15	58820	58820	0	
1+25N	10 16	58830	58820	+10	
1+50N	10 16	58830	58810	+20	
1+75N	10 17	58840	58820	+20	
2+00N	10 17	58830	58820	+10	
2+25N	10 18	58820	58820	0	
2+50N	10 18	58830	58820	+10	
2+75N	10 19	58820	58810	+10	
3+00N	10 19	58810	58810	0	
3+25N	10 20	58820	58810	+10	
3+50N	10 20	58800	58810	-10	
3+75N	10 21	58780	58810	-30	
4+00N	10 21	58760	58810	-50	
4+25N	10 22	58760	58810	-50	
4+50N	1022	58820	58810	+10	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT PAGE

GRID DATE

LINE OPERATOR

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K. PAGE 1

GRID DATE July 29/83

LINE L 57+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
6+00N	10:54	58810	58780	+30	
5+75N	10:54	58810	58780	+30	
5+50N	10:55	58820	58780	+40	
5+25N	10:55	58850	58780	+70	
5+00N	10:56	58830	58780	+50	
4+75N	10:56	58830	58780	+50	
4+50N	10:57	58820	58780	+40	
4+25N	10:57	58820	58780	+40	
4+00N	10:58	58800	58780	+20	
3+75N	10:59	58880	58780	+20	
3+50N	11:00	58860	58780	+80	
3+25N	11:00	58820	58780	+40	
3+00N	11:01	58800	58780	+20	
2+75N	11:02	58790	58790	0	
2+50N	11:03	58790	58780	+10	
2+25N	11:03	58780	58780	0	
2+00N	11:04	58800	58780	+20	
1+75N	11:05	58810	58780	+30	
1+50N	11:05	58820	58780	+40	
1+25N	11:06	58790	58780	+10	
1+00N	11:07	58780	58780	0	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K. PAGE 3

GRID DATE July 30/83

LINE L 55+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
4+75N	10 23	58830	58810	+20	
5+00N	10 23	58830	58810	+20	
5+25N	10 24	58830	58810	+20	
5+50N	10 24	58830	58810	+20	
5+75N	10 25	58820	58810	+10	
6+00N	10 25	58850	58810	+40	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K. PAGE 2

GRID DATE July 29/83

LINE L57+00W OPERATOR A. Cole.

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
0+75N	11:07	58770	58780	-10	
0+50N	11:08	58780	58780	0	
0+25N	11:09	58790	58780	+10	
(BL) 0+00	11:10	58790	58780	+10	
0+25S	11:10	58780	58780	0	
0+50S	11:11	58790	58770	+20	
0+75S	11:12	58780	58770	+10	
1+00S	11:12	58790	58770	+20	
1+25S	11:13	58770	58770	0	
1+50S	11:14	58770	58770	0	
1+75S	11:15	58780	58770	+10	
2+00S	11:16	58780	58780	0	
2+25S	11:16	58780	58780	0	
2+50S	11:21	58810	58780	+30	
2+75S	11:22	58820	58780	+40	
3+00S	11:23	58830	58790	+40	
3+25S	11:25	58830	58780	+50	
3+50S	11:26	58840	58780	+60	
3+75S	11:27	58820	58790	+30	
4+00S	11:29	58810	58780	+30	
4+25S	11:30	58780	58780	0	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT PAGE

GRID DATE

LINE OPERATOR

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K. PAGE 1

GRID DATE July 29/83

LINE L59+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
8+00S	10:00	58880	58800	+ 80	
7+75S	10:00	58880	58800	+ 80	
7+50S	10:01	58880	58800	+ 80	
7+25S	10:01	58860	58800	+ 60	
7+00S	10:02	58840	58800	+ 40	
6+75S	10:03	58820	58800	+ 20	
6+50S	10:03	58820	58800	+ 20	
6+25S	10:04	58830	58800	+ 30	
6+00S	10:04	58830	58800	+ 30	
5+75S	10:05	58820	58800	+ 20	
5+50S	10:07	58800	58800	0	
5+25S	10:08	58810	58800	+ 10	
5+00S	10:08	58820	58800	+ 20	
4+75S	10:09	58810	58800	+ 10	
4+50S	10:09	58800	58800	0	
4+25S	10:10	58810	58790	+ 20	
4+00S	10:10	58810	58800	+ 10	
3+75S	10:11	58810	58800	+ 10	
3+50S	10:11	58810	58800	+ 10	
3+25S	10:12	58820	58800	+ 20	
3+00S	10:12	58800	58800	0	

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MAGNETIC SURVEY

PROJECT J.K. PAGE 3

GRID DATE July 29/83

LINE L57+00W OPERATOR A. Cole.

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
4+50S	11:31	58860	58790	+ 70	
4+75S	11:32	58830	58790	+ 40	
5+00S	11:33	58900	58780	+ 120	
5+25S	11:35	58840	58780	+ 60	
5+50S	11:36	58870	58780	+ 90	
5+75S	11:37	58850	58780	+ 70	
6+00S	11:42	58840	58780	+ 60	
6+25S	11:43	58840	58770	+ 70	
6+50S	11:44	58850	58780	+ 70	
6+75S	11:45	58820	58780	+ 40	
7+00S	11:46	58810	58780	+ 30	
7+25S	11:46	58830	58780	+ 50	
7+50S	11:47	58810	58780	+ 30	
7+75S	11:48	58800	58770	+ 30	
8+00S	11:50	58810	58780	+ 10	
8+25S	11:53	58780	58760	+ 20	
8+50S	11:54	58760	58770	- 10	
8+75S	11:55	58760	58770	- 10	
9+00S	11:56	58740	58770	- 30	
9+25S	11:57	58750	58780	- 30	
9+50S	11:58	58810	58770	+ 40	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K. PAGE 2

GRID DATE July 29/83

LINE L59+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
2+75S	10:13	58800	58800	0	
2+50S	10:13	58810	58800	+10	
2+25S	10:13	58800	58800	0	
2+00S	10:14	58800	58800	0	
1+75S	10:14	58820	58800	+20	
1+50S	10:15	58810	58800	+10	
1+25S	10:15	58810	58800	+10	
1+00S	10:15	58800	58800	0	
0+75S	10:16	58800	58790	+10	
0+50S	10:17	58780	58800	+20	
0+25S	10:17	58790	58800	-10	
(BL) 0+00	10:17	58800	58800	0	
0+25N	10:18	58800	58790	+10	
0+50N	10:18	58810	58790	+20	
0+75N	10:19	58850	58790	+60	
1+00N	10:19	58830	58790	+40	
1+25N	10:20	58770	58790	-20	Swamp
1+50N	10:20	58770	58790	-20	
1+75N	10:21	58780	58790	-10	
2+00N	10:21	58770	58790	-20	
2+25N	10:22	58770	58790	-20	

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MAGNETIC SURVEY

PROJECT J.K. PAGE 4

GRID DATE July 29/83

LINE L57+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
9+75S	12:00	58810	58770	+ 40	
10+00S	12:01	58800	58770	+ 30	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K. PAGE 1

GRID DATE August 8/83

LINE L63+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
8+00S	14 19	58990	58800	+190	
7+75S	14 19	58980	58800	+180	
7+50S	14 20	58990	58800	+190	
7+25S	14 21	59020	58800	+220	
7+00S	14 22	59040	58800	+240	
6+75S	14 23	58960	58800	+160	
6+50S	1423	59020	58800	+220	
6+25S	14 24	59040	58800	+240	
6+00S	14 25	58980	58800	+180	
5+75S	14 25	59030	58800	+230	
5+50S	14 26	58990	58800	+190	
5+25S	1427	58810	58800	+10.	
5+00S	14 30	58830	58800	+30	
4+75S	1431	58820	58800	+20	
4+50S	1432	58830	58800	+30	
4+25S	1432	58820	58800	+20	
4+00S	1433	58820	58800	+20	
3+75S	1434	58820	58800	+20	
3+50S	1435	58820	58800	+20	
3+25S	1436	58820	58800	+20	
3+00S	1437	58830	58800	+30	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K. PAGE 3

GRID DATE July 29/83

LINE L59+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
2+50N	10:23	58780	58790	-10	SWAMP
2+75N	10:24	58770	58790	-20	
3+00N	10:24	58790	58790	0	
3+25N	10:24	58790	58790	0	
3+50N	10:25	58830	58790	+40	
3+75N	10:26	58880	58790	+90	
4+00N	10:26	58900	58790	+110	
4+25N	10:28	58870	58790	+80	

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MAGNETIC SURVEY

PROJECT J.K. PAGE 2

GRID DATE August 8/13

LINE L 63+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
2+75S	1439	58810	58800	+10	
2+50S	1440	58810	58800	+10	
2+25S	1441	58820	58800	+20	
2+00S	1442	58820	58800	+20	
1+75S	1442	58810	58800	+10	
1+50S	1443	58830	58800	+30	
1+25S	1444	58810	58800	+10	
1+00S	1445	58790	58800	-10	
0+75S	1446	58790	58800	-10	
0+50S	1447	58790	58800	-10	
0+25S	1447	58770	58800	-30	
(BL) 0+00	1448	58760	58800	-40	
0+25N	1449	58800	58800	0	
0+50N	1449	58790	58800	-10	
0+75N	1450	58760	58800	-40	
1+00N	1450	58700	58800	-100	
1+25N	1451	58780	58800	-10	
1+50N	1451	58800	58800	0	
1+75N	1452	58790	58800	-10	
2+00N	1453	58800	58800	0	

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MAGNETIC SURVEY

PROJECT PAGE

GRID DATE

LINE OPERATOR

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K. PAGE 3

GRID DATE August 8/83

LINE L 67+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
4+50 S	1552	58860	58810	+50	
4+75 S	1552	58840	58810	+30	
5+00 S	1553	58840	58810	+30	
5+25 S	1553	58840	58810	+30	
5+50 S	1556	58840	58810	+30	
5+75 S	1558	58820	58810	+10	
6+00 S	1558	58820	58810	+10	
6+25 S	1559	58820	58820	0	
6+50 S	1600	58830	58820	+10	
6+75 S	1600	58830	58820	+10	
7+00 S	1601	58830	58810	+20	
7+25 S	1602	58820	58810	+10	
7+50 S	1603	58830	58810	+20	
7+75 S	1604	58830	58810	+20	
8+00 S	1605	58830	58810	+20	
8+25 S	1606	58820	58810	+10	
8+50 S	1607	58830	58820	+10	
8+75 S	1609	58830	58810	+20	
9+00 S	1612	58830	58820	+10	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K. PAGE 1

GRID DATE August 8/83

LINE L 67+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
6+00 N	1528	58810	58820	-10	
5+75 N	1528	58820	58820	0	
5+50 N	1529	58820	58820	0	
5+25 N	1529	58830	58820	+10	
5+00 N	1530	58850	58830	+20	
4+75 N	1530	58840	58830	+10	
4+50 N	1531	58860	58830	+30	
4+25 N	1531	58840	58830	+10	
4+00 N	1532	58830	58830	0	
3+75 N	1532	58830	58830	0	
3+50 N	1533	58830	58830	0	
3+25 N	1533	58830	58830	0	
3+00 N	1534	58830	58830	0	
2+75 N	1534	58830	58830	0	
2+50 N	1535	58830	58830	0	
2+25 N	1535	58830	58830	0	
2+00 N	1536	58810	58820	-10	
1+75 N	1536	58830	58820	+10	
1+50 N	1537	58810	58820	-10	
1+25 N	1537	58810	58820	-10	
1+00 N	1538	58780	58830	-50	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT _____ PAGE _____

GRID _____ DATE _____

LINE _____ OPERATOR _____

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K. PAGE 2

GRID _____ DATE August 8/83

LINE L 67+00W OPERATOR A. Cole

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
0+75N	1538	58800	58830	-30	
0+50N	1539	58790	58830	-40	
0+25N	1540	58800	58830	-30	
(Base) 0+00	1540	58800	58830	-30	
0+25S	1541	58810	58820	-10	
0+50S	1541	58800	58820	-10	
0+75S	1542	58800	58820	-20	
1+00S	1542	58810	58820	-10	
1+25S	1543	58820	58820	0	
1+50S	1543	58820	58820	0	
1+75S	1544	58830	58820	+10	
2+00S	1544	58840	58820	+20	
2+25S	1545	58830	58820	+10	
2+50S	1546	58830	58810	+20	
2+75S	1547	58830	58810	+20	
3+00S	1548	58830	58810	+20	
3+25S	1548	58830	58810	+20	
3+50S	1549	58830	58810	+20	
3+75S	1550	58840	58810	+30	
4+00S	1550	58860	58810	+50	
4+25S	1551	58870	58810	+60	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K. PAGE

GRID DATE 7/30/83

LINE L 71+00W OPERATOR B.G

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
3+00N	12:31	58820	58790	+30	
2+75N	12:33	58770	58790	-20	
2+50N	12:35	58760	58790	-30	
2+25N	12:38	58830	58790	+40	
2+00N	12:41	58820	58790	+30	
1+75N	12:43	58800	58780	+20	
1+50N	12:46	58820	58780	+40	
1+25N	12:49	58830	58780	+50	
1+00N	12:52	58810	58780	+30	
0+75N	12:55	58830	58780	+50	
0+50N	12:58	58850	58780	+70	
0+25N	1:00	58790	58780	+10	
BL	1:04	58810	58780	+30	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K. PAGE

GRID DATE 7/30/83

LINE L 71+00W OPERATOR B.G.

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
BL	12:28	58830	58800	+30	
0+25S	12:25	58830	58800	+30	
0+50S	12:21	58860	58800	+60	
0+75S	12:18	58820	58800	+20	
1+00S	12:15	58840	58800	+40	
1+25S	12:13	58830	58800	+30	
1+50S	12:11	58840	58790	+50	
1+75S	12:08	58840	58800	+40	
2+00S	12:05	58840	58790	+50	
2+25S	12:03	58840	58790	+50	
2+50S	12:01	58810	58780	+30	
2+75S	11:59	58810	58780	+30	
3+00S	11:57	58810	58780	+30	
3+25S	11:54	58810	58790	+20	
3+50S	11:51	58830	58790	+40	
3+75S	11:49	58830	58800	+30	
4+00S	11:46	58840	58800	+40	
4+25S	11:44	58850	58800	+50	
4+50S	11:42	58840	58800	+40	
4+75S	11:39	58850	58800	+50	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT _____ PAGE _____

GRID _____ DATE _____

LINE _____ OPERATOR _____

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT J.K PAGE _____

GRID _____ DATE 7/30/83

LINE L 71+00W OPERATOR B.G.

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
5+00S	11:36	58850	58800	+50	
5+25S	11:34	58840	58800	+40	
5+50S	11:32	58850	58800	+50	
5+75S	11:29	58840	58790	+50	
6+00S	11:27	58830	58790	+40	
6+25S	11:25	58830	58790	+40	
6+50S	11:21	58830	58790	+40	
6+75S	11:19	58810	58780	+30	
7+00S	11:15	58810	58790	+20	
7+25S	11:12	58790	58800	-10	
7+50S	11:09	58750	58790	-40	
7+75S	11:07	58740	58790	-50	
8+00S	11:04	58990	58800	+190	
8+25S	11:02	58910	58800	+110	
8+50S	10:59	58830	58800	+30	
8+75S	10:48	58870	58810	+60	
9+00S	10:45	58880	58810	+70	
9+25S	10:41	58810	58810	+00	
9+50S	10:38	58830	58800	+30	
9+75S	10:35	58810	58810	+00	
10+00S	10:32	58820	58810	+10	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT _____ PAGE _____

GRID _____ DATE July 29/83

LINE 71 OPERATOR B.G

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
3+00N	12:31	5882	58790	-30	
2+75N	12:33	5877	790	+20	
2+50N	12:35	5876	790	+30	
2+25N	12:38	5883	790	+40	
2+00	12:41	5882	790	+30	
1+75	12:43	5880	780	+20	
1+50	12:46	5882	780	+40	
1+25	12:49	5883	780	+50	
1+00	12:52	5881	780	+30	
0+75	12:55	5883	780	+50	
0+50	12:58	5885	780	+70	
0+25	1:00	5879	780	+10	
BL	1:04	5881	780	+30	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT Jo/Co. PAGE _____

GRID _____ DATE July 30

LINE L71+00W OPERATOR BG

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
BL	12:28	5883	58800	+30	
0+25S	12:25	5883	800	+30	
0+50	12:21	5886	800	+60	
0+75	12:19	5882	800	+20	
1+00	12:15	5884	800	+40	
1+25	12:13	5883	800	+30	
1+50	12:11	5884	790	+50	
1+75	12:08	5884	800	+40	
2+00	12:05	5884	790	+50	
2+25	12:03	5884	790	+50	
2+50	12:01	5881	780	+30	
2+75	11:59	5881	780	+30	
3+00	11:57	5881	780	+30	
3+25	11:54	5881	790	+20	
3+50	11:51	5883	790	+40	
3+75	11:49	5883	800	+30	
4+00	11:46	5884	800	+40	
4+25	11:44	5885	800	+50	
4+50	11:42	5884	800	+40	
4+75	11:39	5885	800	+50	

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT _____ PAGE _____

GRID _____ DATE _____

LINE _____ OPERATOR _____

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS

796
5880

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT _____ PAGE _____

GRID _____ DATE July 30

LINE 71+00W OPERATOR B.G.

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
5+00	11:36	5885	800	+50	
5+25	11:34	5884	800	+40	
5+50	11:32	5885	800	+50	
5+75	11:29	5884	790	+50	
6+00	11:27	5883	790	+40	
6+25	11:25	5883	790	+40	
6+50	11:21	5883	790	+40	
6+75	11:19	5881	780	+30	
7+00	11:15	5881	790	+20	
7+25	11:12	5879	800	−10	
7+50	11:09	5875	790	−60	
7+75	11:07	5874	790	−50	
8+00	11:04	5899	5800	+190	
8+25	11:02	5891	800	+110	
8+50	10:59	5883	800	+30	
8+75	10:48	5887	810	+60	
9+00	10:45	5888	810	+70	
9+25	10:41	5881	810	0	
9+50	10:38	5883	800	+30	
9+75	10:35	5881	810	0	
10+00	10:32	5882	810	+10	

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MAGNETIC SURVEY

PROJECT J. K. PAGE 3

GRID DATE July 29

LINE 75+00 W OPERATOR BG

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
5+50	10:25	58820	58790	30	
5+75	10:22	58830	58790	40	
6+00	10:16	58840	58790	50	
6+25	10:15	58830	58800	30	
6+50	10:14	58820	58800	20	
6+75	10:13	58830	58800	30	
7+00	10:12	58830	58800	30	
7+25	10:12	58830	58800	30	
7+50	10:11	58830	58800	30	
7+75	10:10	58810	58790	20	
8+00	10:09	58820	58800	20	
8+25	10:08	58820	58800	20	
8+50	10:07	58810	58800	10	
8+75	10:06	58810	58800	10	
9+00	10:05	58830	58800	30	
9+25	10:04	58890	58800	90	
9+50	10:03	58830	58800	30	
9+75	10:02	58890	58800	90	
10+00	10:01	58910	58810	100	

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MAGNETIC SURVEY

PROJECT J. K PAGE 1

GRID DATE July 29/83

LINE L 75+00 W OPERATOR BG.

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
4+00N	12:01	58780	58770	10	
3+75N	11:59	58770	58770	0	
3+50N	11:58	58780	58770	10	
3+25N	11:56	58800	58770	30	
3+00N	11:55	58810	58760	50	
2+75N	11:53	58800	58770	30	
2+50N	11:51	58840	58780	60	
2+25N	11:48	58810	58780	30	
2+00N	11:47	58820	58780	40	
1+75N	11:45	58820	58780	40	
1+50N	11:42	58810	58780	30	
1+25N	11:40	58800	58780	20	
1+00N	11:37	58820	58780	40	
0+75N	11:36	58850	58780	70	
0+50N	11:34	58810	58790	20	
0+25N	11:32	58730	58790	40	
BL	11:27	58820	58780	40	
0+25S	11:13	58820	58770	50	
0+50S	11:11	58860	58780	80	

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MAGNETIC SURVEY

PROJECT _____ PAGE _____

GRID _____ DATE _____

LINE _____ OPERATOR _____

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS

PAN OCEAN OIL LTD.

MAGNETIC SURVEY

PROJECT Jo Bay. K PAGE 2

GRID _____ DATE July 29/83

LINE L75 +00 W OPERATOR BG

STATION	TIME	γ	BASE γ	RESULTANT (γ - BASE)	REMARKS
0+75	11:09	58860	58780	80	
1+00	11:06	58850	58780	70	
1+25	11:04	58860	58780	80	
1+50	11:02	58850	58780	70	
1+75	10:59	58870	58780	90	
2+00	10:57	58900	58780	120	
2+25	10:55	58850	58780	70	
2+50	10:52	58850	58780	70	
2+75	10.50	58840	58780	60	
3+00	10:48	58870	58770	100	
3+25	10:45	58820	58770	50	
3+50	10:43	58810	58760	50	
3+75	10:40	58830	58770	60	
4+00	10:38	58840	58770	70	
4+25	10:36	58840	58780	60	
4+50	10:33	58860	58780	80	
4+75	10:31	58850	58780	70	
5+00	10:29	58860	58780	80	
5+25	10:26	58840	58790	50	

A P P E N D I X "C"

CERTIFICATE OF WORK

This is Exhibit "B" attached to and forming part of that certain Application for a Certificate of Work of John D. Kapusta, dated the _____ day of December 1983. The following is a detailed Statement of Work for the period of July 3, 1983 to August 30, 1983.

JK PROJECT

SUMMARY OF EXPENDITURES

Salaries		$18,865.00
Room & Board		5,430.00
Linecutting		6,930.00
Helicopter Expense		13,620.60
Geochemistry		6,123.60
Commercial Transport - Freight	$1,065.85	
- Personnel	2,906.40	3,972.25
Technical Information		90.78
Field Equipment		1,486.77
Fuel		911.71
Expediting		634.63
Administration Overhead		2,828.27
Report Costs		5,800.00
TOTAL EXPENDITURES		$66,693.61

EXHIBIT "B"

List of Expenditures
J.K. 1-160 Mineral Claims

Salaries

J. D. Kapusta - Project Geologist July 4, 1983 - August 30, 1983; 59 man days at $125.00/day	$7,375.00
B. Girling - Geological Assistant July 7, 1983 - August 16, 1983; 45 man days at $76.00/day	3,420.00
A. Cole - Geological Assistant July 7, 1983 - August 16, 1983; 45 man days at $64.00/day	2,880.00
P. T. Coyle - Geologist July 7 - 21, 1983, August 1 - 6, 1983; 21 man days at $90.00/day	1,890.00
R. J. Bailes - Exploration Supervisor July 3 - 8, August 8 - 16, 1983; 11 man days at $300.00/day	3,300.00
	$18,865.00

Room and Board

Exploration Crew, 181 man days at $30.00/day	$5,430.00

Linecutting

Ketza Enterprises Ltd. 22 kilometres at $315.00/kilometre	$6,930.00

Helicopter Expense

Northern Mountain Helicopters Inc. 23 hours at $592.20/hour (including fuel charges)	$13,620.60

Geochemical Analysis

Bondar-Clegg Ltd.

July 27, 1983	435 analysis of Cu, Pb Zn and Ba at $7.80/sample...	$3,393.00
	Sample preparation, at $1.00/sample.....	435.00
	Miscellaneous charges.....	46.00
		$3,874.00
August 31, 1983	16 analysis of Cu, Pb, Zn and W at $24.50/sample...	$ 392.00
	Sample preparation, at $3.00/sample.....	48.00
	Miscellaneous charges.....	4.10
		$ 444.10
September 1, 1983	181 analysis of Cu, Pb, Zn and Ba at $7.80/sample..	$1,411.80
	Sample preparation at $1.00/sample.....	181.00
	Miscellaneous charges.....	20.60
		$1,613.40
September 2, 1983	16 analysis of Au, Ag and As at $11.15/sample.....	$ 178.40
	Miscellaneous charges.....	4.10
		$ 182.50
September 9, 1983	1 assay of Ag at $7.00/sample.....	$ 7.00
	Miscellaneous charges.....	2.60
		$ 9.60
	TOTAL	$6,123.60

Commercial Transport - Freight

Canada Freightways Ltd.	$ 213.12
Trans North Turbo Air Ltd.	596.50
Air Canada Cargo.....	14.00
CP Air Cargo.....	205.33
Yukon Freight Line Ltd.	36.90
TOTAL	$1,065.85

Commercial Transport - Personnel

CP, PWA, T.N.T.A. $2,906.40

Technical Information

Riley's Reproduction and Printing Ltd.	$ 28.28
Petro-Tech Printing Ltd.	35.60
Yukon Government	26.90
TOTAL	$ 90.78

Field Equipment

Northern Metalic Sales	$ 350.40
Neville Crosby Inc.	735.68
Exploranium	200.00
Various Companies	200.69
TOTAL	$1,486.77

Fuel

Gas	$ 911.71

Expediting Services

Frontier Expediters	$ 634.63

Exploration Administration - Administrative Overhead	$2,828.27

Project and Report Preparation	$5,800.00

Includes - wages, drafting, reproduction and typing

GRAND TOTAL	$66,693.61

This is Exhibit "A" attached to and forming part of that certain Application for a Certificate of Work of John D. Kapusta, dated the _____ day of December 1983. The following is a detailed Statement of Work for the period of July 3, 1983 to August 30, 1983.

EXHIBIT A

LIST OF MINERAL CLAIMS J.K. 1-160

Tag No.	Claim Name	Renewal Period Requested	Expiry Date Requested
YA 62639	J.K. 1	4 years	December 31, 1988
YA 62640	J.K. 2	4 years	December 31, 1988
YA 62641	J.K. 3	4 years	December 31, 1988
YA 62642	J.K. 4	4 years	December 31, 1988
YA 62643	J.K. 5	4 years	December 31, 1988
YA 62644	J.K. 6	4 years	December 31, 1988
YA 62645	J.K. 7	4 years	December 31, 1988
YA 62646	J.K. 8	4 years	December 31, 1988
YA 62647	J.K. 9	4 years	December 31, 1988
YA 62648	J.K. 10	4 years	December 31, 1988
YA 62649	J.K. 11	4 years	December 31, 1988
YA 62650	J.K. 12	4 years	December 31, 1988
YA 62651	J.K. 13	4 years	December 31, 1988
YA 62652	J.K. 14	4 years	December 31, 1988
YA 62653	J.K. 15	4 years	December 31, 1988
YA 62654	J.K. 16	4 years	December 31, 1988
YA 62655	J.K. 17	4 years	December 31, 1988
YA 62656	J.K. 18	4 years	December 31, 1988
YA 62657	J.K. 19	4 years	December 31, 1988
YA 62658	J.K. 20	4 years	December 31, 1988
YA 62659	J.K. 21	4 years	December 31, 1988
YA 62660	J.K. 22	4 years	December 31, 1988
YA 62661	J.K. 23	4 years	December 31, 1988
YA 62662	J.K. 24	4 years	December 31, 1988
YA 62663	J.K. 25	4 years	December 31, 1988
YA 62664	J.K. 26	4 years	December 31, 1988
YA 62665	J.K. 27	4 years	December 31, 1988
YA 62666	J.K. 28	4 years	December 31, 1988
YA 62667	J.K. 29	4 years	December 31, 1988
YA 62668	J.K. 30	4 years	December 31, 1988

Tag No.	Claim Name	Renewal Period Requested	Expiry Date Requested
YA 62669	J.K. 31	4 years	December 31, 1988
YA 62670	J.K. 32	4 years	December 31, 1988
YA 62671	J.K. 33	4 years	December 31, 1988
YA 62672	J.K. 34	4 years	December 31, 1988
YA 62673	J.K. 35	4 years	December 31, 1988
YA 62674	J.K. 36	4 years	December 31, 1988
YA 62675	J.K. 37	4 years	December 31, 1988
YA 62676	J.K. 38	4 years	December 31, 1988
YA 62677	J.K. 39	4 years	December 31, 1988
YA 62678	J.K. 40	4 years	December 31, 1988
YA 62679	J.K. 41	4 years	December 31, 1988
YA 62680	J.K. 42	4 years	December 31, 1988
YA 62681	J.K. 43	4 years	December 31, 1988
YA 62682	J.K. 44	4 years	December 31, 1988
YA 62683	J.K. 45	No work applied	
YA 62684	J.K. 46	4 years	December 31, 1988
YA 62685	J.K. 47	No work applied	
YA 62686	J.K. 48	4 years	December 31, 1988
YA 62687	J.K. 49	No work applied	
YA 62688	J.K. 50	4 years	December 31, 1988
YA 62689	J.K. 51	No work applied	
YA 62690	J.K. 52	4 years	December 31, 1988
YA 62691	J.K. 53	4 years	December 31, 1988
YA 62692	J.K. 54	4 years	December 31, 1988
YA 62693	J.K. 55	4 years	December 31, 1988
YA 62694	J.K. 56	4 years	December 31, 1988
YA 62695	J.K. 57	4 years	December 31, 1988
YA 62696	J.K. 58	4 years	December 31, 1988
YA 62697	J.K. 59	4 years	December 31, 1988
YA 62698	J.K. 60	4 years	December 31, 1988
YA 62699	J.K. 61	4 years	December 31, 1988

Tag No.	Claim Name	Renewal Period Requested	Expiry Date Requested
YA 62700	J.K. 62	4 years	December 31, 1988
YA 62701	J.K. 63	4 years	December 31, 1988
YA 62702	J.K. 64	4 years	December 31, 1988
YA 62703	J.K. 65	4 years	December 31, 1988
YA 62704	J.K. 66	4 years	December 31, 1988
YA 62705	J.K. 67	No work applied	
YA 62706	J.K. 68	No work applied	
YA 62707	J.K. 69	4 years	December 31, 1988
YA 62708	J.K. 70	4 years	December 31, 1988
YA 62709	J.K. 71	4 years	December 31, 1988
YA 62710	J.K. 72	4 years	December 31, 1988
YA 62711	J.K. 73	4 years	December 31, 1988
YA 62712	J.K. 74	4 years	December 31, 1988
YA 62713	J.K. 75	4 years	December 31, 1988
YA 62714	J.K. 76	4 years	December 31, 1988
YA 62715	J.K. 77	4 years	December 31, 1988
YA 62716	J.K. 78	4 years	December 31, 1988
YA 62717	J.K. 79	4 years	December 31, 1988
YA 62718	J.K. 80	4 years	December 31, 1988
YA 62719	J.K. 81	4 years	December 31, 1988
YA 62720	J.K. 82	4 years	December 31, 1988
YA 62721	J.K. 83	4 years	December 31, 1988
YA 62722	J.K. 84	4 years	December 31, 1988
YA 62723	J.K. 85	4 years	December 31, 1988
YA 62724	J.K. 86	No work applied	
YA 62725	J.K. 87	No work applied	
YA 62726	J.K. 88	4 years	December 31, 1988
YA 62727	J.K. 89	4 years	December 31, 1988
YA 62728	J.K. 90	4 years	December 31, 1988
YA 62729	J.K. 91	4 years	December 31, 1988
YA 62730	J.K. 92	4 years	December 31, 1988
YA 62731	J.K. 93	4 years	December 31, 1988
YA 62732	J.K. 94	4 years	December 31, 1988

Tag No.	Claim Name	Renewal Period Requested	Expiry Date Requested
YA 62733	J.K. 95	4 years	December 31, 1988
YA 62734	J.K. 96	4 years	December 31, 1988
YA 62735	J.K. 97	4 years	December 31, 1988
YA 62736	J.K. 98	4 years	December 31, 1988
YA 62737	J.K. 99	4 years	December 31, 1988
YA 62738	J.K. 100	4 years	December 31, 1988
YA 62739	J.K. 101	4 years	December 31, 1988
YA 62740	J.K. 102	4 years	December 31, 1988
YA 62741	J.K. 103	5 years	December 31, 1988
YA 62742	J.K. 104	5 years	December 31, 1988
YA 62743	J.K. 105	5 years	December 31, 1988
YA 62744	J.K. 106	5 years	December 31, 1988
YA 62745	J.K. 107	5 years	December 31, 1988
YA 62746	J.K. 108	5 years	December 31, 1988
YA 62747	J.K. 109	5 years	December 31, 1988
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YA 62749	J.K. 111	5 years	December 31, 1988
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YA 62751	J.K. 113	5 years	December 31, 1988
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YA 62753	J.K. 115	5 years	December 31, 1988
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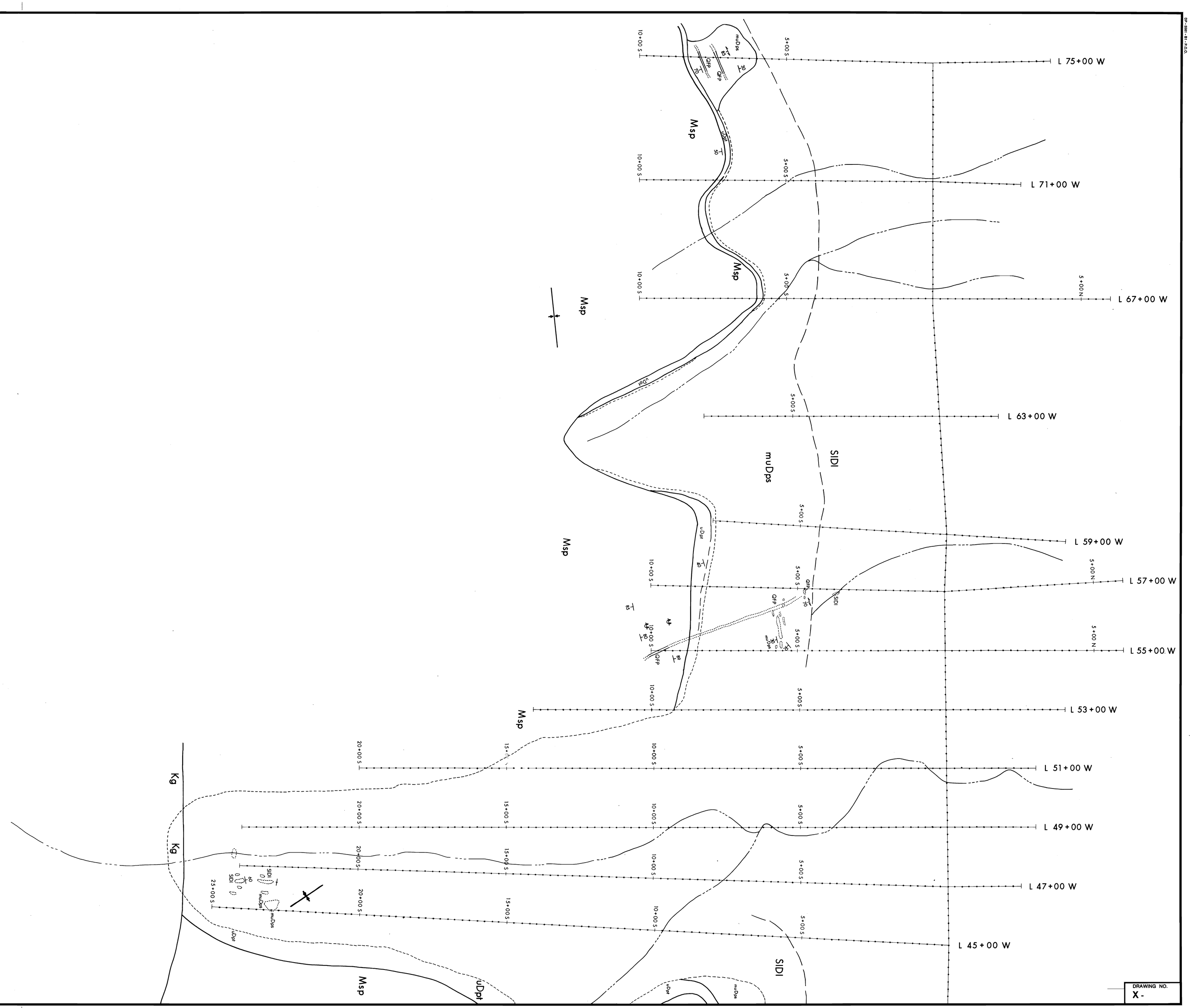
YA 62755	J.K. 117	5 years	December 31, 1988
YA 62756	J.K. 118	5 years	December 31, 1988
YA 62757	J.K. 119	5 years	December 31, 1988
YA 62758	J.K. 120	5 years	December 31, 1988
YA 62759	J.K. 121	5 years	December 31, 1988
YA 62760	J.K. 122	5 years	December 31, 1988
YA 62761	J.K. 123	5 years	December 31, 1988
YA 62762	J.K. 124	5 years	December 31, 1988
YA 62763	J.K. 125	5 years	December 31, 1988
YA 62764	J.K. 126	5 years	December 31, 1988
YA 62765	J.K. 127	5 years	December 31, 1988

Tag No.	Claim Name	Renewal Period Requested	Expiry Date Requested
YA 62766	J.K. 128	5 years	December 31, 1988
YA 62767	J.K. 129	5 years	December 31, 1988
YA 62768	J.K. 130	5 years	December 31, 1988
YA 62769	J.K. 131	5 years	December 31, 1988
YA 62770	J.K. 132	5 years	December 31, 1988
YA 62771	J.K. 133	5 years	December 31, 1988
YA 62772	J.K. 134	5 years	December 31, 1988
YA 62773	J.K. 135	5 years	December 31, 1988
YA 62774	J.K. 136	5 years	December 31, 1988
YA 62775	J.K. 137	5 years	December 31, 1988
YA 62776	J.K. 138	5 years	December 31, 1988
YA 62777	J.K. 139	5 years	December 31, 1988
YA 62778	J.K. 140	5 years	December 31, 1988
YA 62779	J.K. 141	5 years	December 31, 1988
YA 62780	J.K. 142	5 years	December 31, 1988
YA 62781	J.K. 143	5 years	December 31, 1988
YA 62782	J.K. 144	5 years	December 31, 1988
YA 62783	J.K. 145	5 years	December 31, 1988
YA 62784	J.K. 146	5 years	December 31, 1988
YA 62785	J.K. 147	5 years	December 31, 1988
YA 62786	J.K. 148	5 years	December 31, 1988
YA 62787	J.K. 149	5 years	December 31, 1988
YA 62788	J.K. 150	5 years	December 31, 1988
YA 62789	J.K. 151	5 years	December 31, 1988
YA 62790	J.K. 152	5 years	December 31, 1988
YA 62791	J.K. 153	5 years	December 31, 1988
YA 62792	J.K. 154	5 years	December 31, 1988
YA 62793	J.K. 155	5 years	December 31, 1988
YA 62794	J.K. 156	5 years	December 31, 1988
YA 62795	J.K. 157	5 years	December 31, 1988
YA 62796	J.K. 158	5 years	December 31, 1988
YA 62797	J.K. 159	5 years	December 31, 1988
YA 62798	J.K. 160	5 years	December 31, 1988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SIDI
muDps
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Kg
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091537

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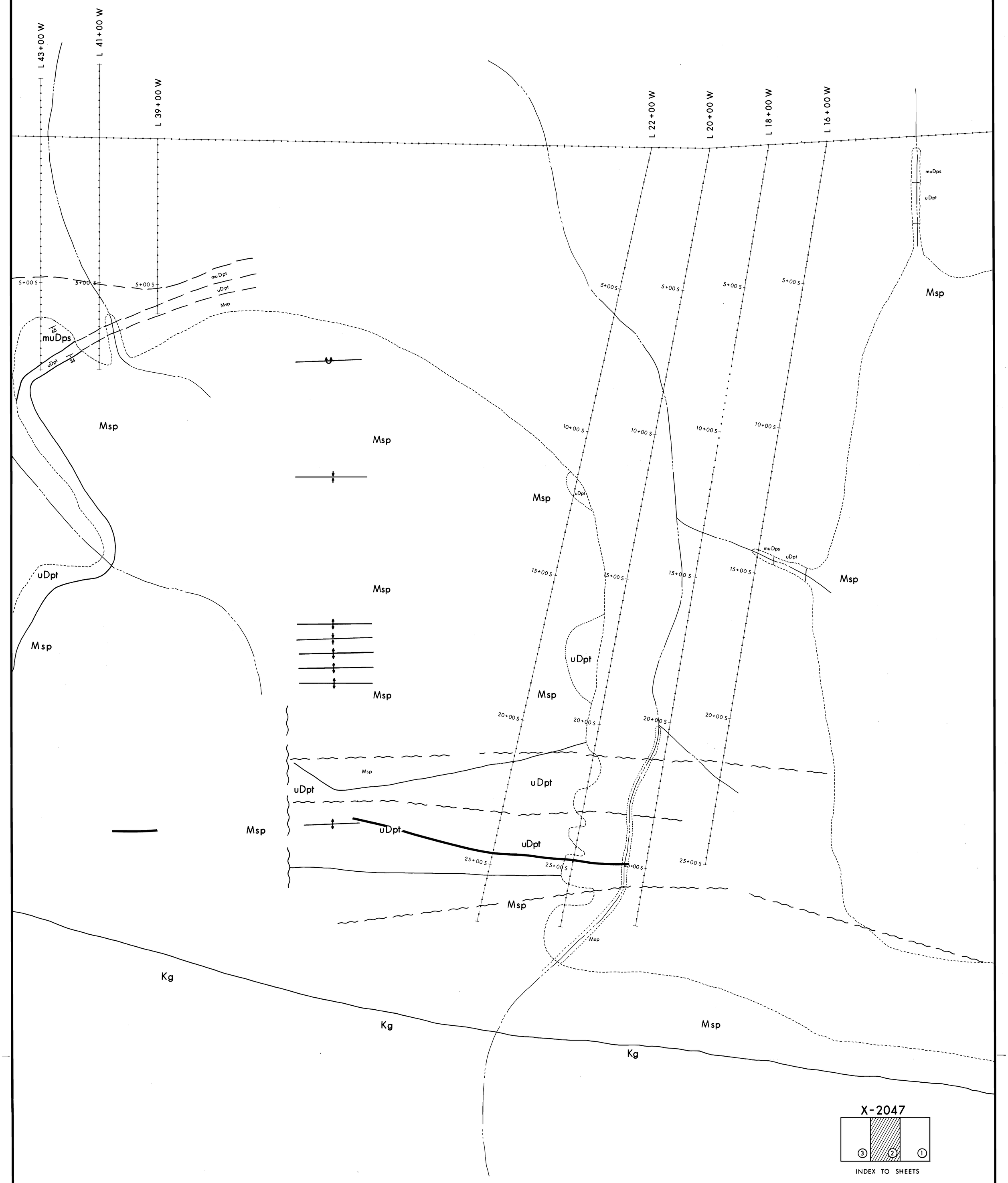

R. J. H.

.091539

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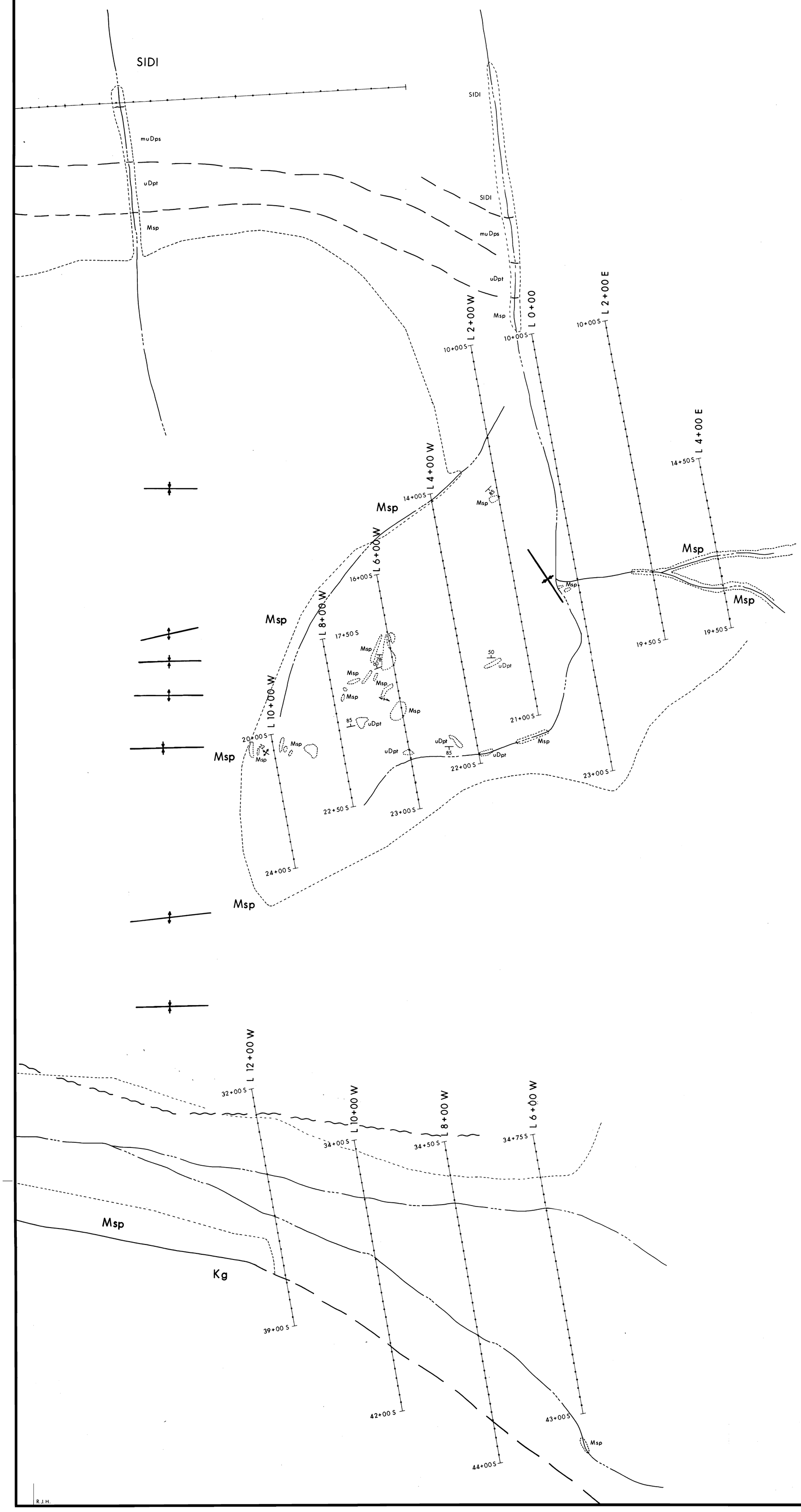


LEGEND

CRETACEOUS

Kg Resistant, blocky, grey weathering porphyritic to equigranular biotite quartz monzonite and biotite granite.

MISSISSIPPIAN

Msp UPPER EARN GROUP
Resistant, brown weathering, thick bedded, parallel laminated and ripple cross laminated sandstone, siltstone and shale; In southwest 105 O/1 and southwest and central 105 O/2, brown weathering shale, siltstone and minor sandstone.

(?) MIDDLE AND UPPER DEVONIAN

uDpt LOWER EARN GROUP (uDPT - emDPT)
Talus forming, silver blue weathering, platey siliceous shale, minor chert and rare thin 2-5cm thick beds of coarse grained limestone and platey grey weathering barite in beds less than 1m thick.

muDcg Resistant, grey weathering massive chert pebble conglomerate, lesser well bedded chert conglomerate with sandstone and grit interbeds and local, abundant sandstone and grit, occurs within unit muDps.

muDps Brown weathering thinly laminated grey shale and siltstone with lesser chert quartz sandstone and grit and rare chert conglomerate.

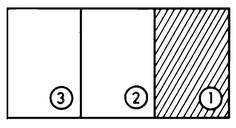
ORDOVICIAN, SILURIAN AND EARLY DEVONIAN

SIDI ROAD RIVER GROUP (SIDI, Sp, OSpt)
Buff to tan weathering platey, silty limestone, calcareous black shale. Locally includes lenses of massive grey limestone.

SYMBOLS

- geological contact, defined approximate, assumed
- limit of outcrop
- bedding; inclined, vertical, horizontal, overturned
- cleavage; inclined, vertical (includes more than one phase)
- trend of fold axis (includes more than one phase)
- anticline, defined, approximate
- overturned anticline, defined, approximate
- overturned syncline; defined, approximate
- bedded barite
- fault: defined

PLATE 1



INDEX TO SHEETS

metres 100 0 100 200 300 400 500 metres

TO ACCOMPANY REPORT NO 4-84 BY J.D.K.

ABERFORD RESOURCES LTD.

GEOLOGY

JK PROJECT, '83

DATE	SCALE	NTS	DRAWING NO.
JAN., 1984	1 : 5000	105 O/1	X-2047

inches 0 1 2
0 1 2 3 4 5 centimetres
YUKON GEOLOGICAL SURVEY
This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

R.J.H.

091539

DP - 5561 - B1 - P.O.O.

DRAWING NO. X -

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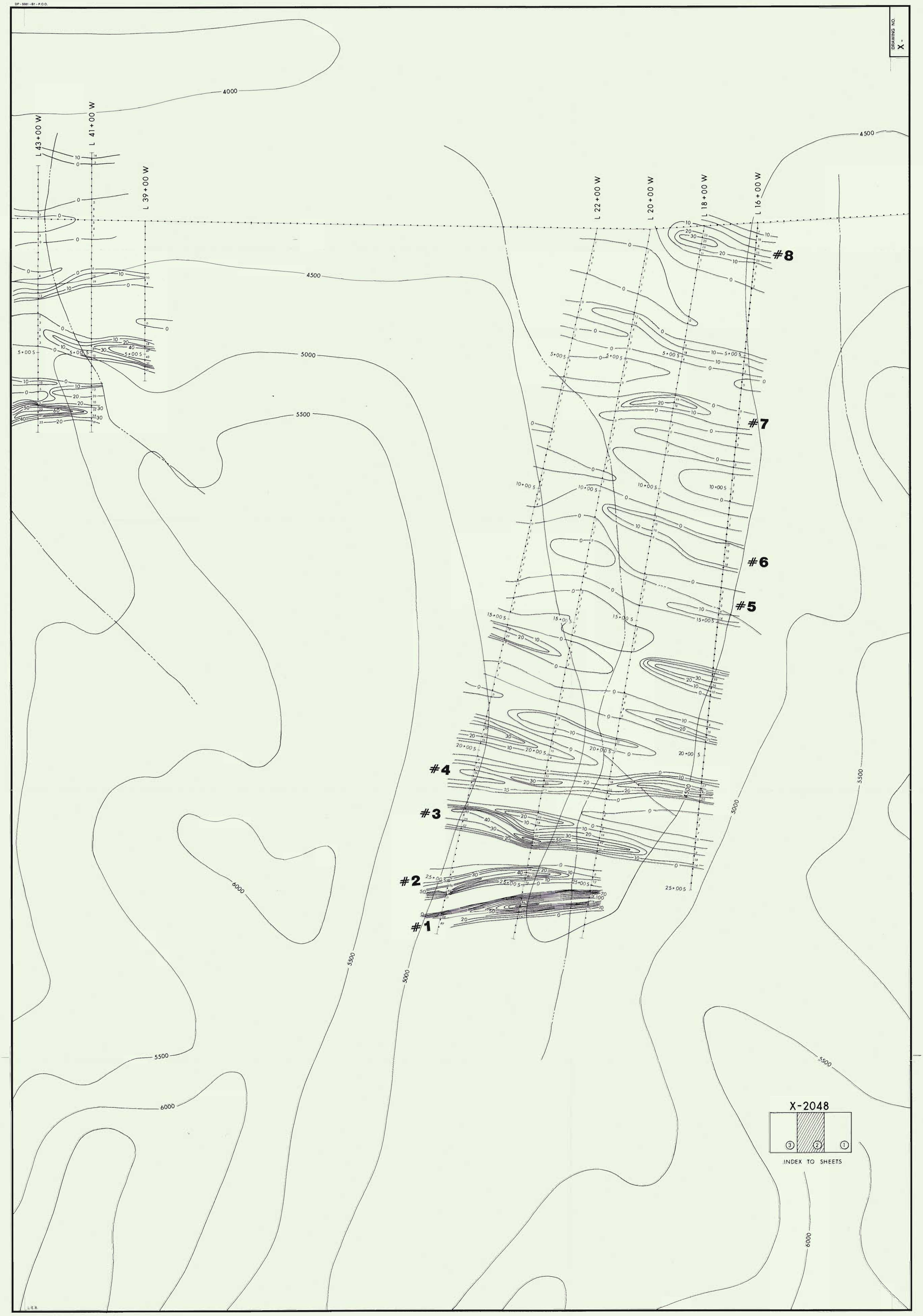

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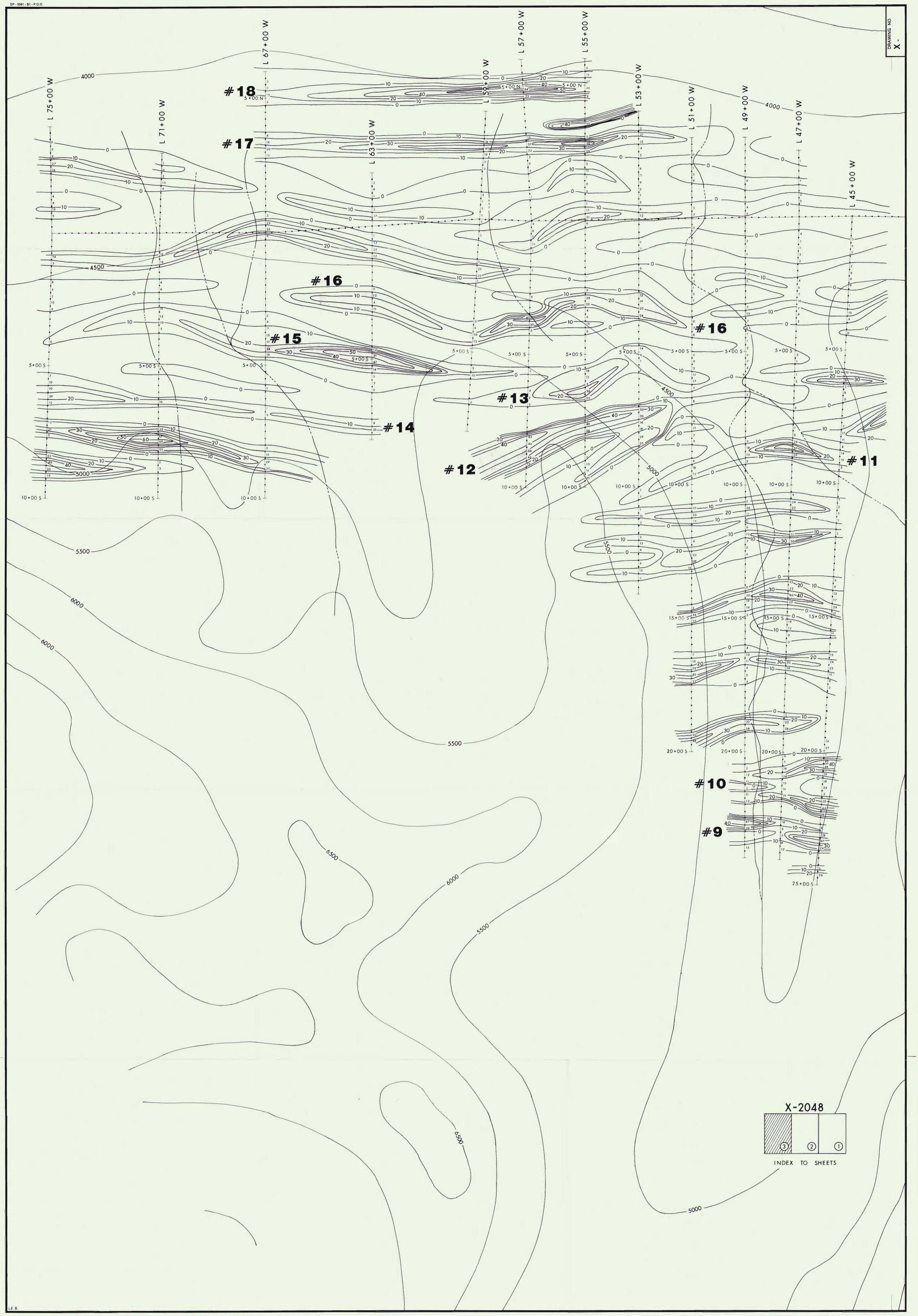

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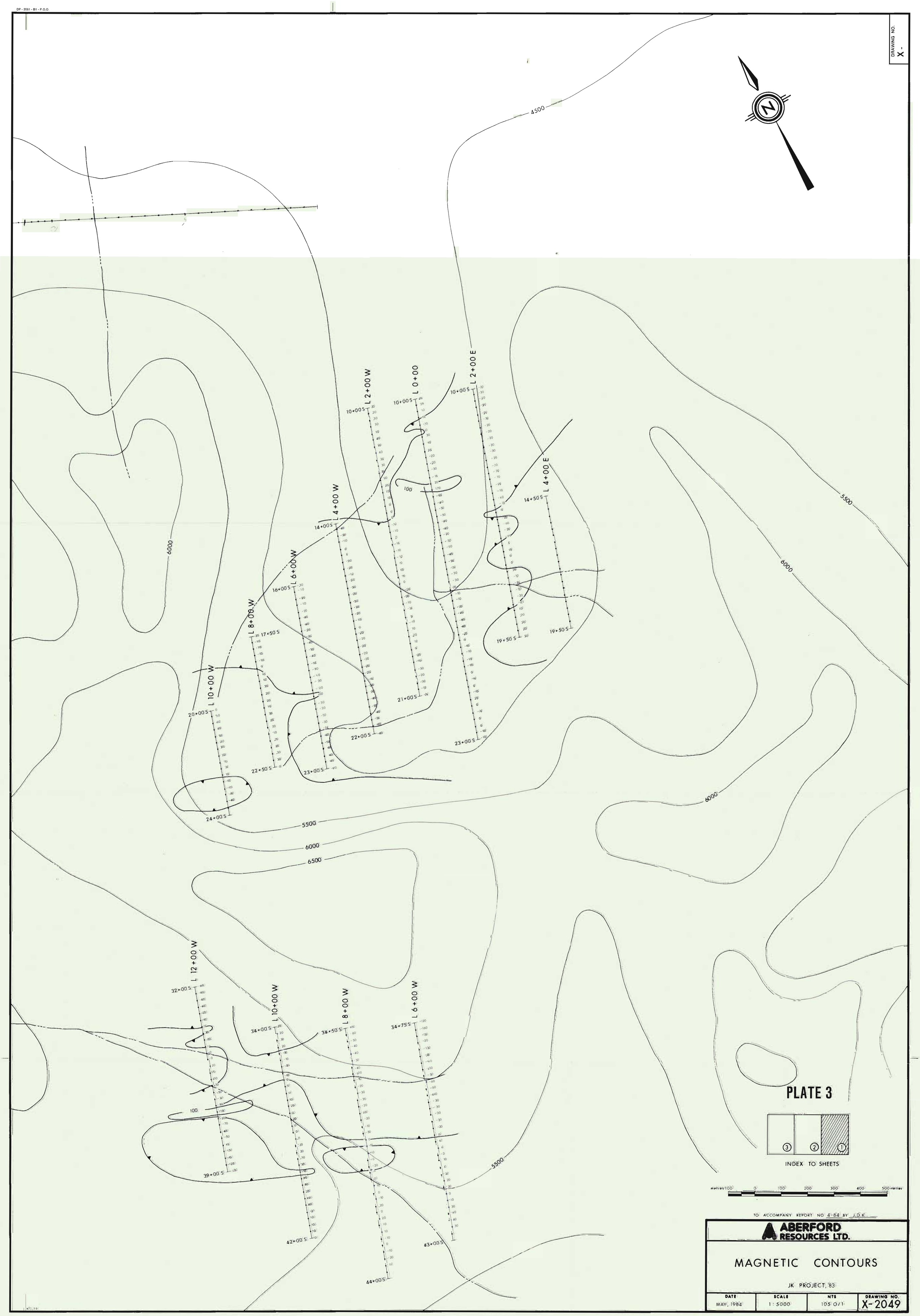

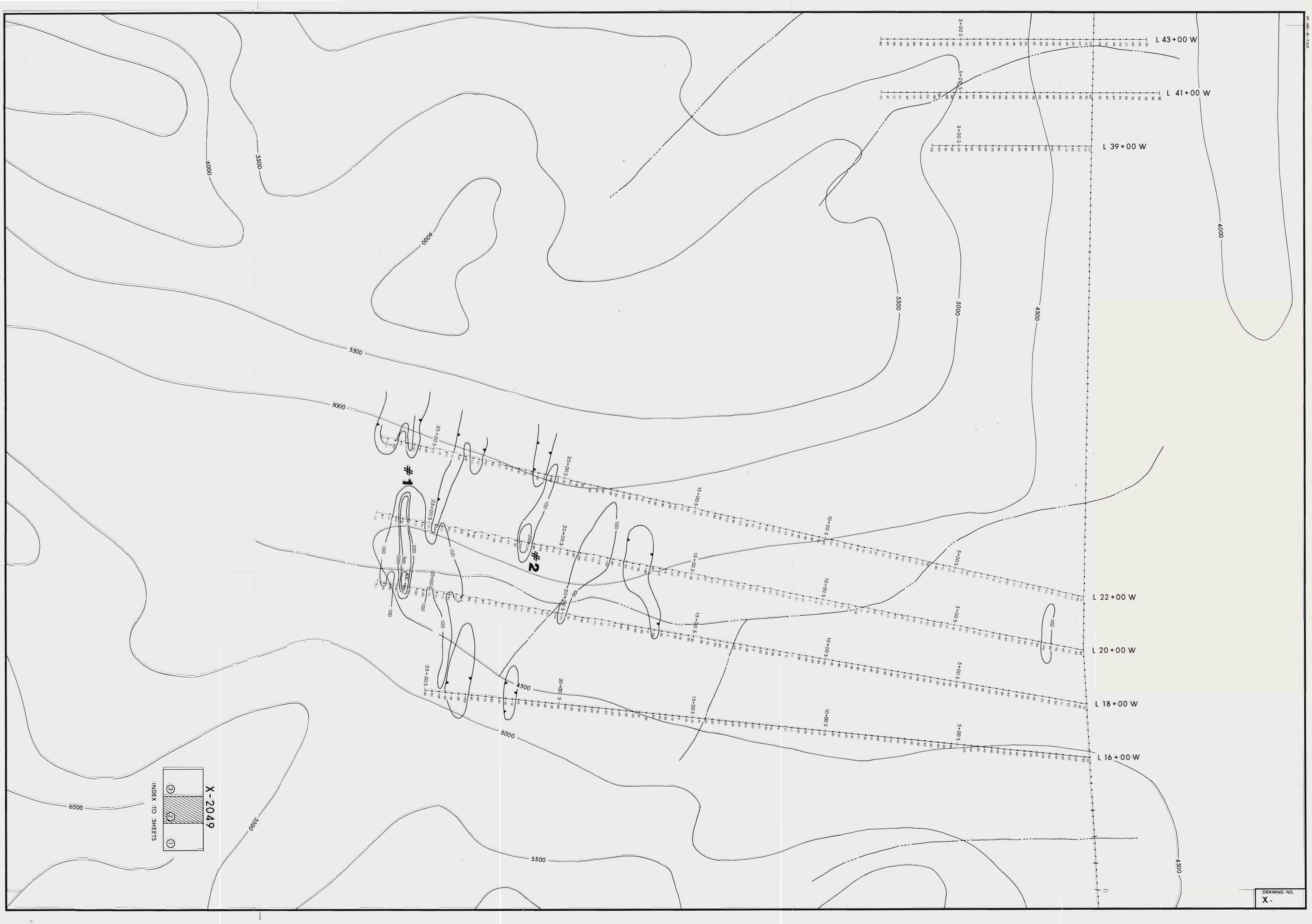
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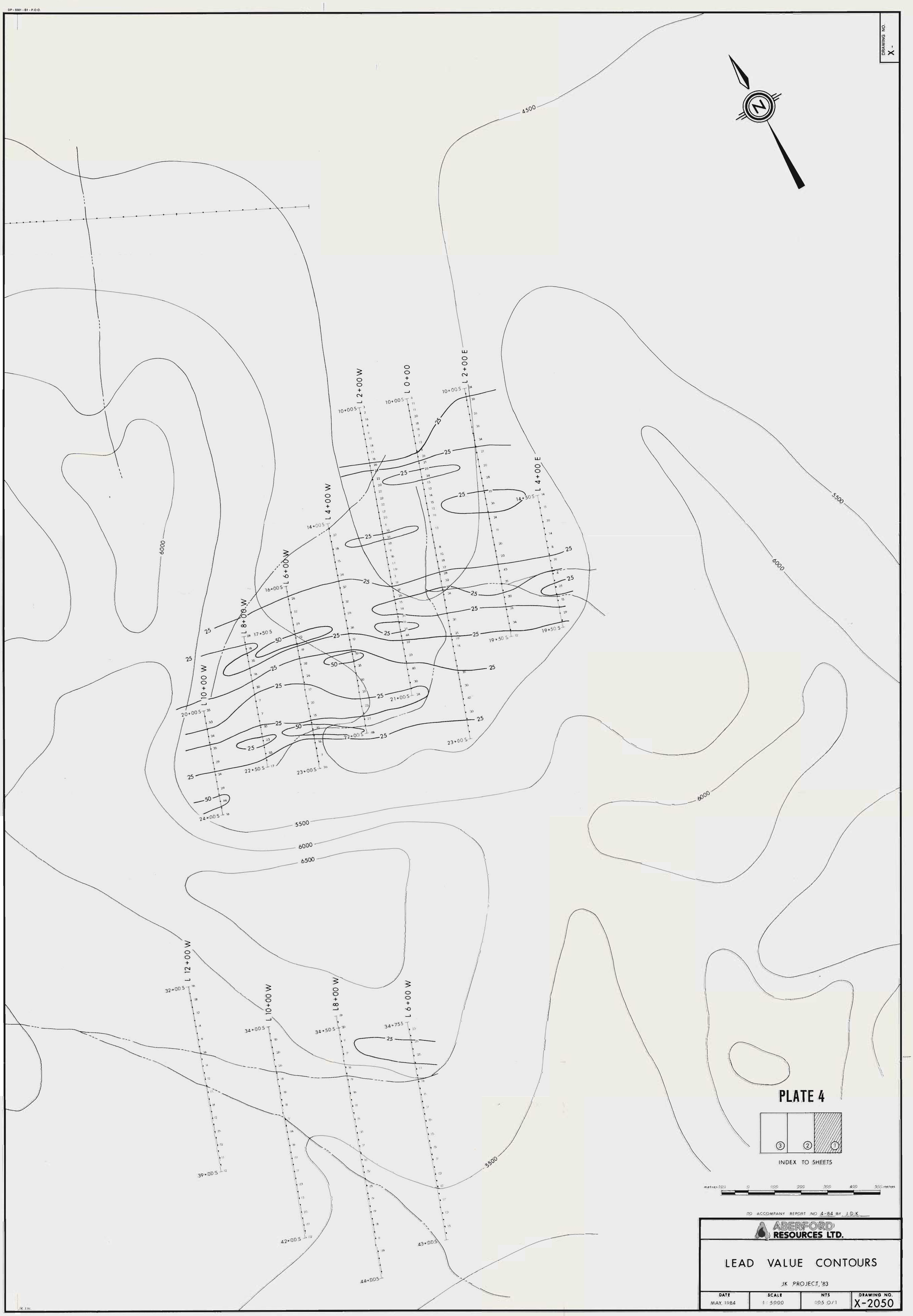

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X-

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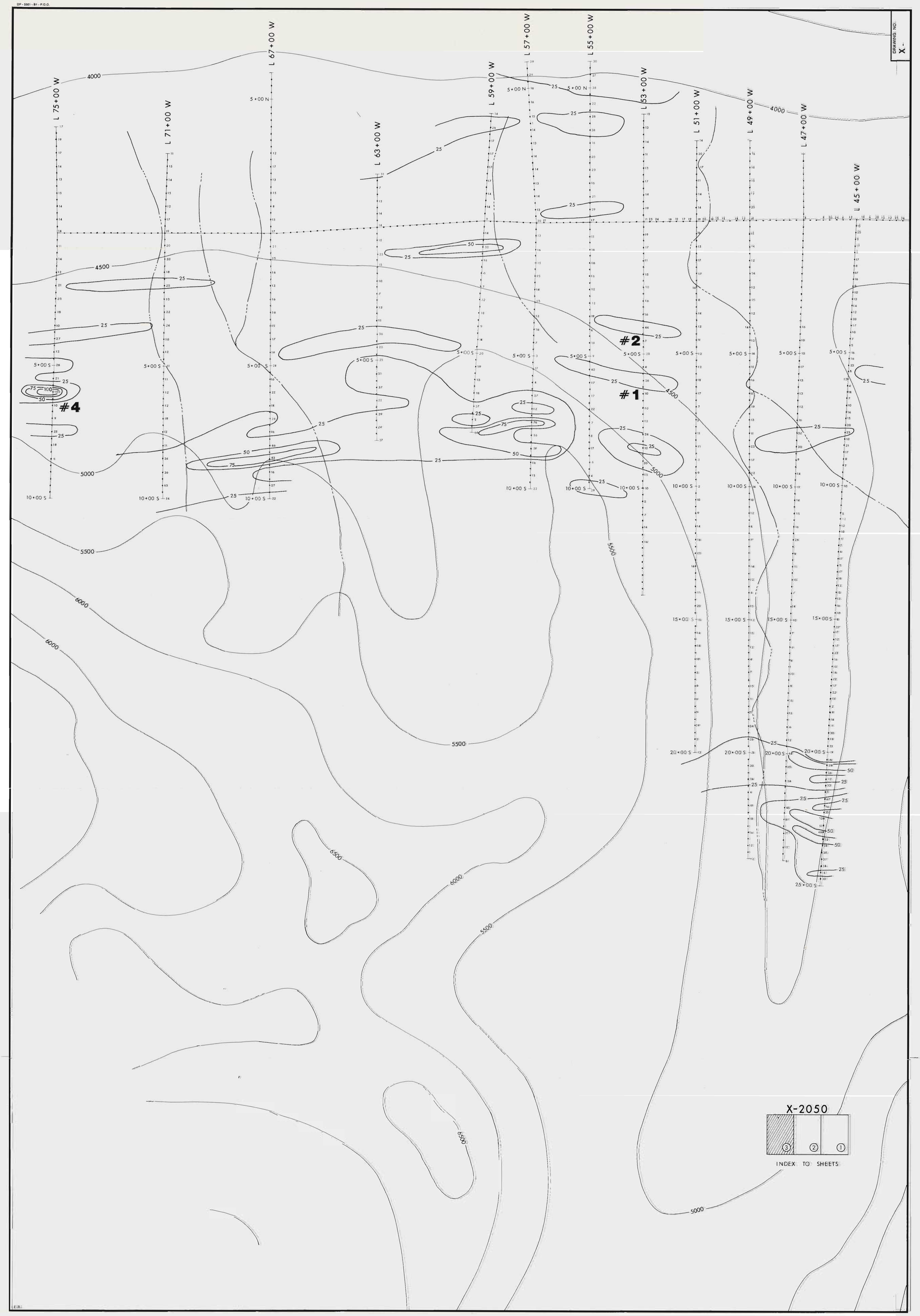

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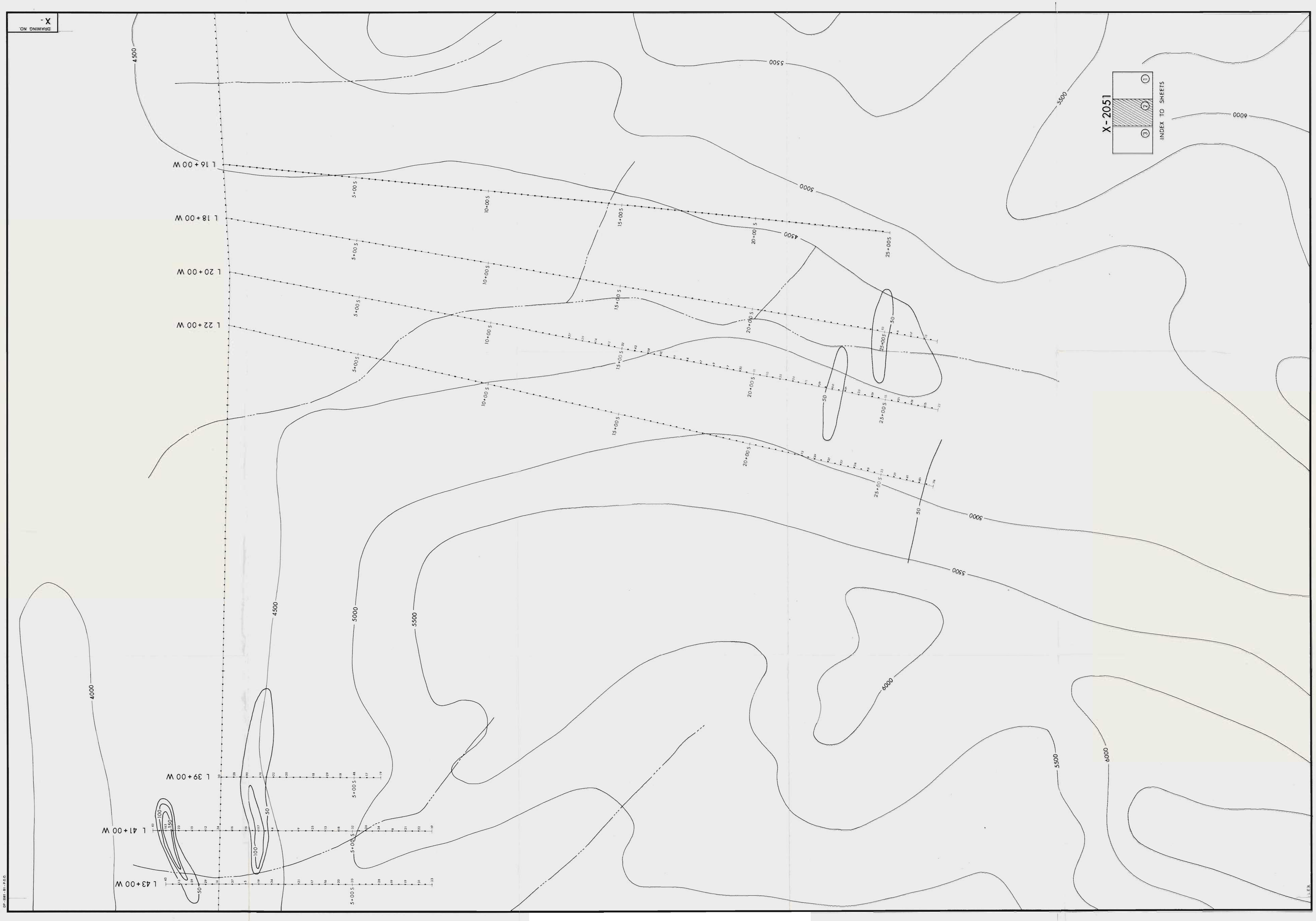
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DRAWING NO.
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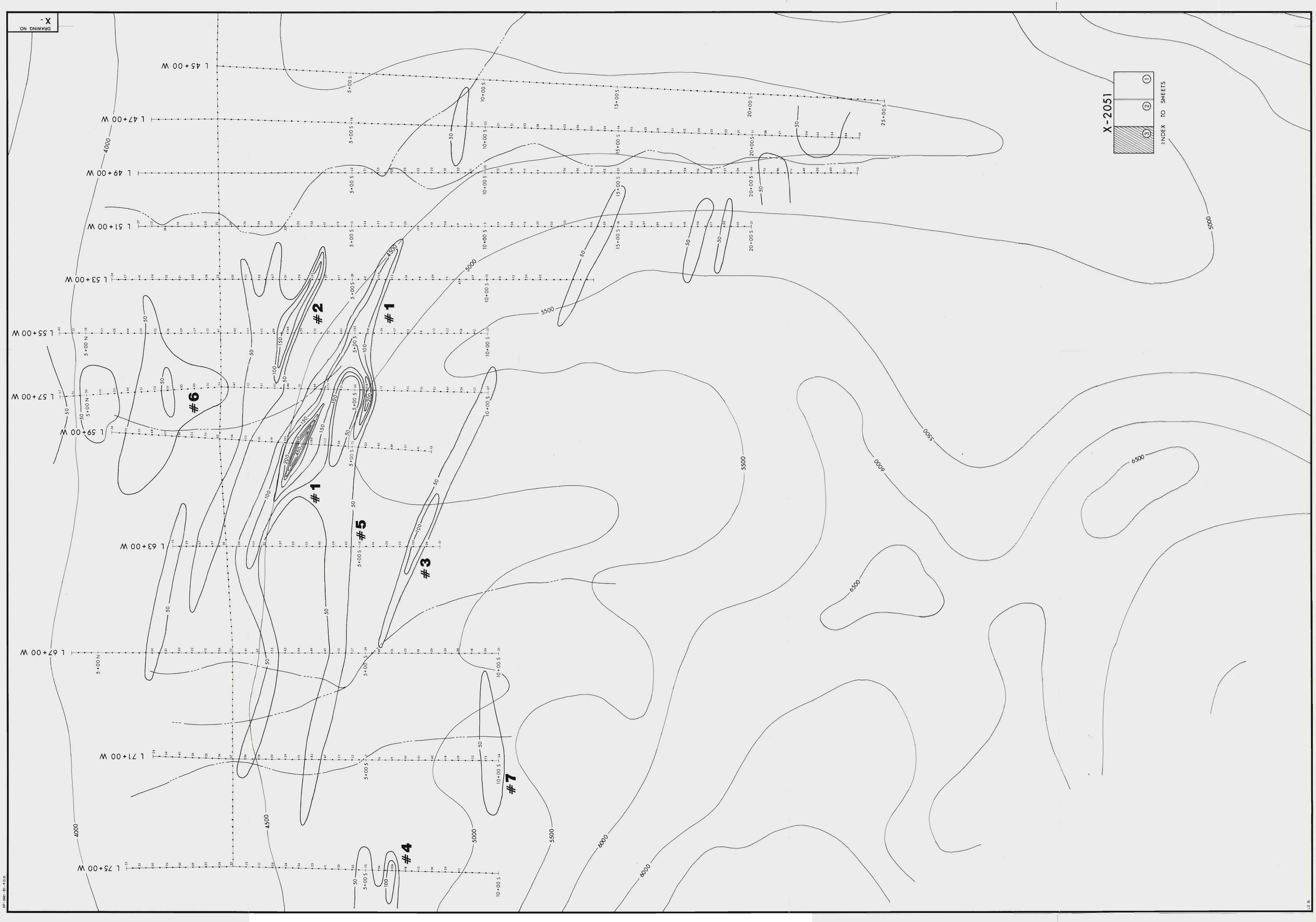
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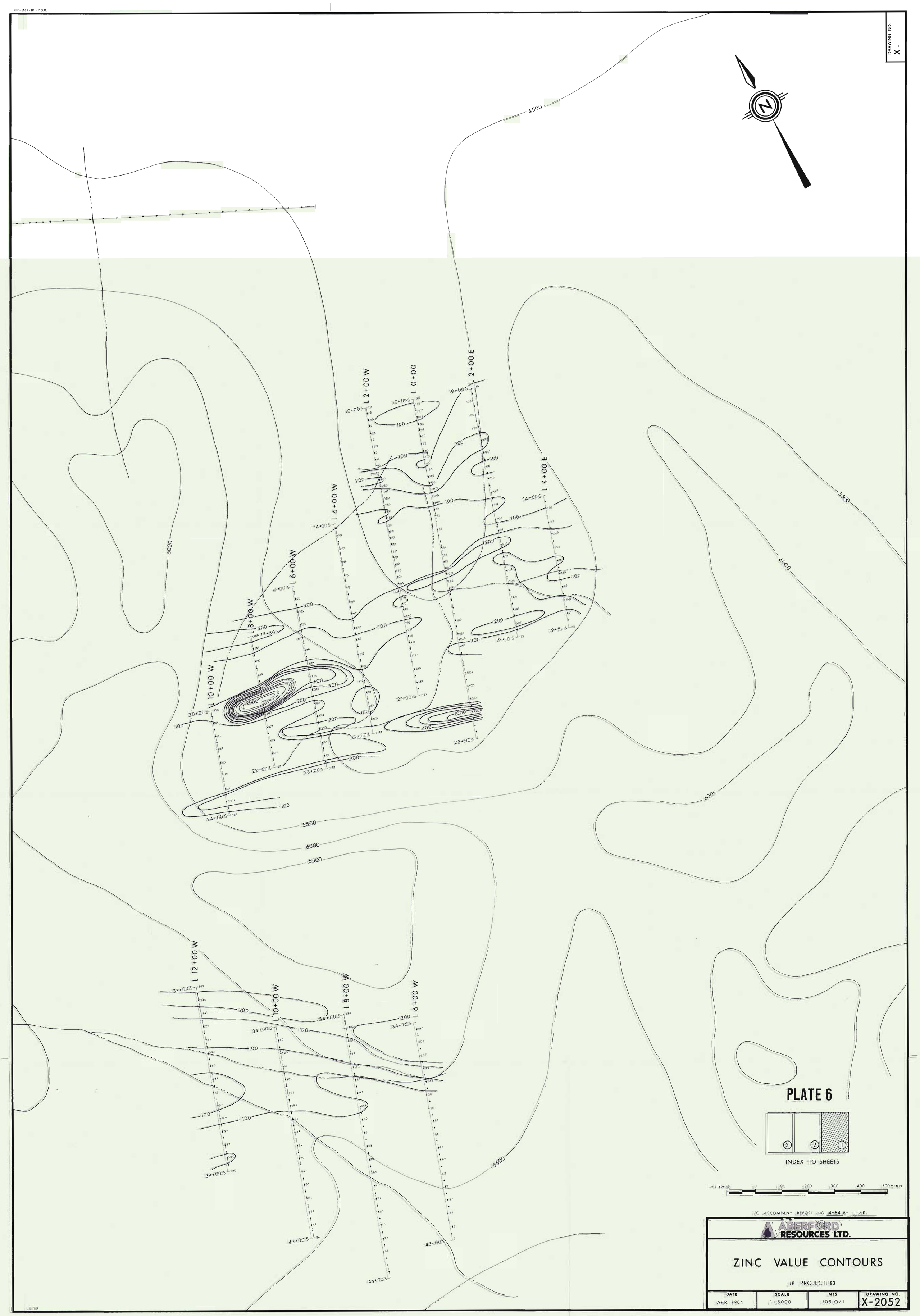
#6
#7
4000
4500
5000
5500
6000
6500
50
100
150
200
450
1000

DRAWING NO.
X-

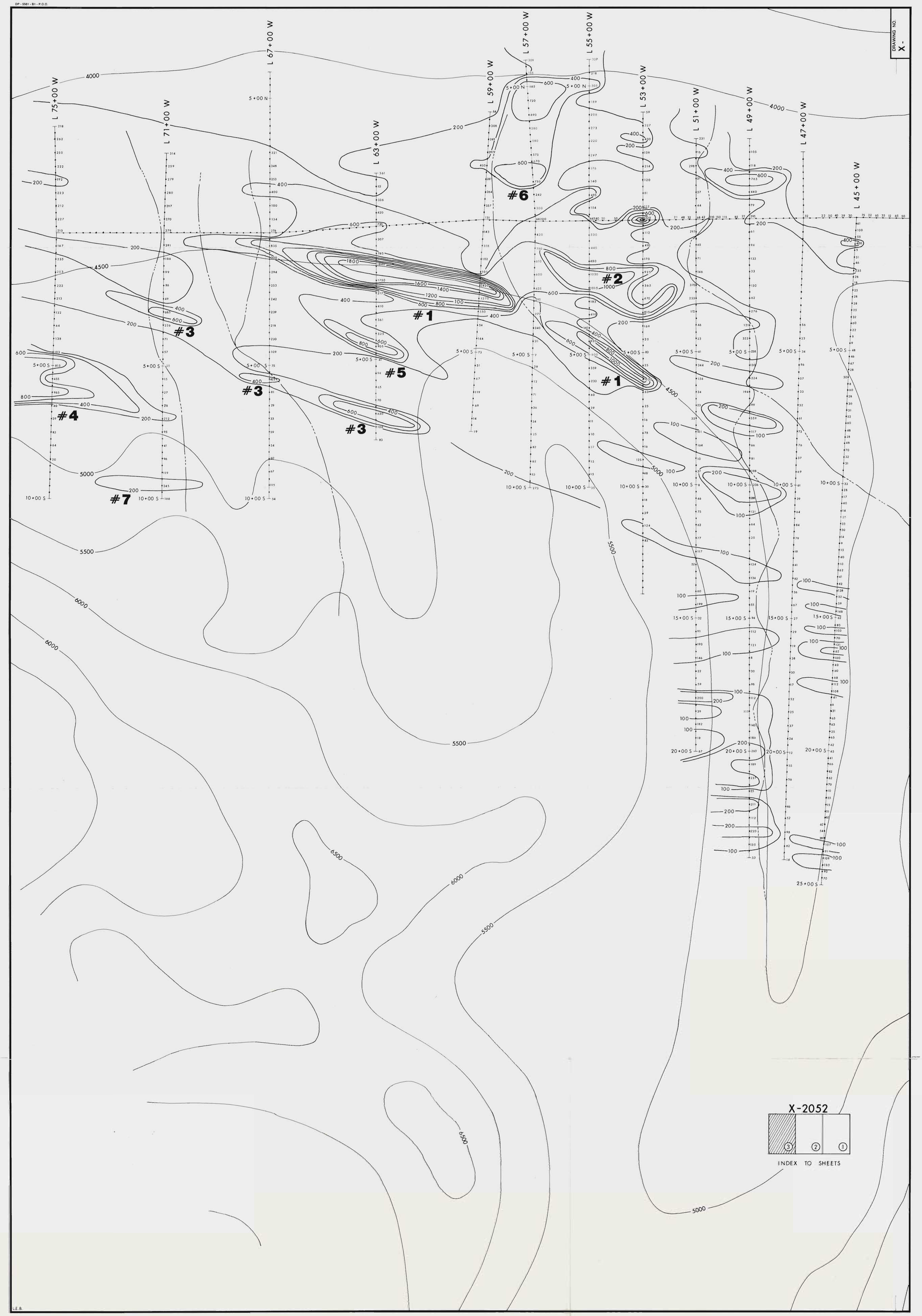
DP - 5561 - B1 - P.O.O.

DRAWING NO.
X -



DP - 5561 - B1 - P.O.D.

DP - 5561 - B1 - P.O.O.



DP - 5561 - B1 - P.O.O.

DRAWING NO. X -

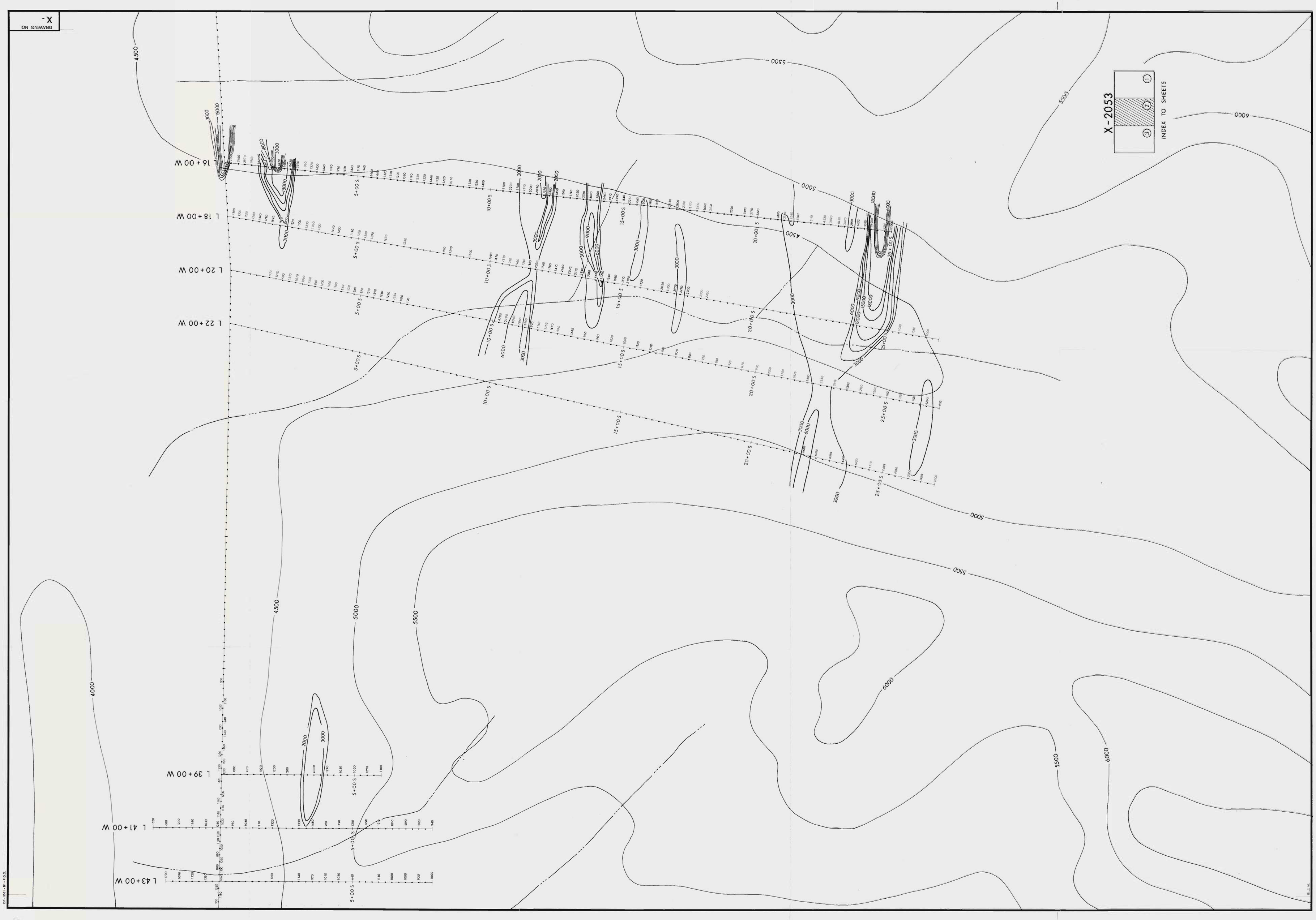
TO ACCOMPANY REPORT NO 4-84 BY J.D.K.

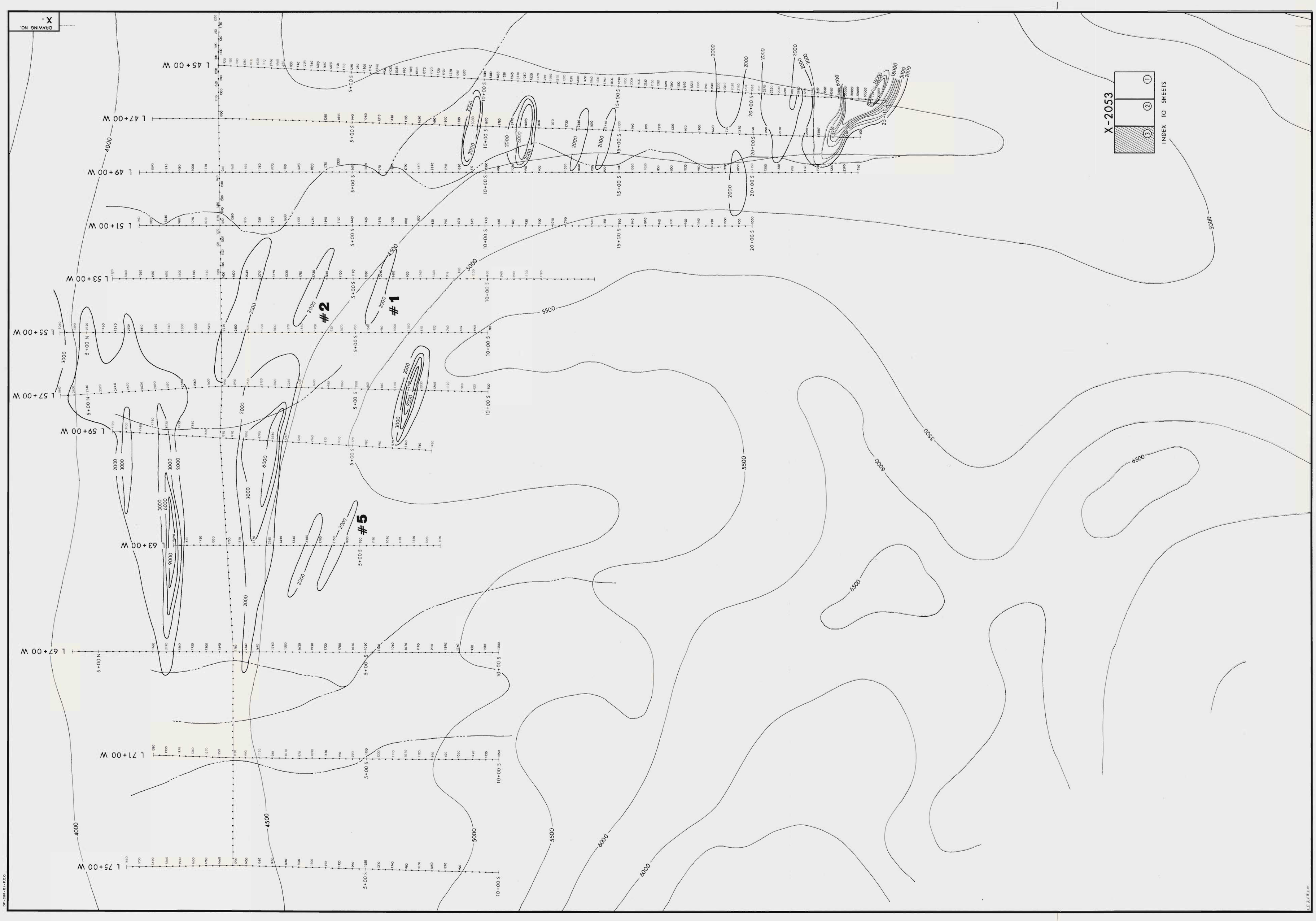
ABERFORD RESOURCES LTD.

BARIUM VALUE CONTOURS

JK PROJECT, '83

DATE	SCALE	NTS	DRAWING NO.
MAY, 1984	1 : 5000	105 O/1	X-2053


X-2053
INDEX TO SHEETS
1
2
3
L 16+00 W
L 18+00 W
L 20+00 W
L 22+00 W
L 39+00 W
L 41+00 W
L 43+00 W
5+00 S
10+00 S
15+00 S
20+00 S
25+00 S
4000
4500
5000
5500
6000
DRAWING NO.
X-


X-2053
1
2
3
INDEX TO SHEETS
#1
#2
#5
L 45+00 W
L 47+00 W
L 49+00 W
L 51+00 W
L 53+00 W
L 55+00 W
L 57+00 W
L 59+00 W
L 63+00 W
L 67+00 W
L 71+00 W
L 75+00 W
5+00 N
5+00 S
10+00 S
15+00 S
20+00 S
25+00 S
4000
4500
5000
5500
6000
6500
DRAWING NO.
X-

DP - 5561 - B1 - P.O.O.

DRAWING NO. X -

L 75+00 W
L 71+00 W
L 67+00 W
L 63+00 W
L 59+00 W
L 57+00 W
L 55+00 W
L 53+00 W
L 51+00 W
L 49+00 W
L 47+00 W
L 45+00 W

5+00 N
5+00 S
10+00 S
15+00 S
20+00 S
25+00 S

4000
4500
5000
5500
6000
6500

R55037
Cu <0.01%
Pb 0.02%
Zn <0.01%
W <0.01%
Ag 1.30 ppm
As >1000 ppm
Au 15 ppb

R55035
Cu <0.01%
Pb 0.50%
Zn <0.01%
W 0.02%
Ag 31 ppm
As >1000 ppm
Au 90 ppb

R55036
Cu <0.01%
Pb 0.01%
Zn <0.01%
W <0.01%
Ag <0.20 ppm
As 150 ppm
Au <5 ppb

R55039
Cu 0.16%
Pb <0.01%
Zn <0.01%
W <0.01%
Ag 16.65 opt
As >1000 ppm
Au 185 ppb

R55031
Cu 0.01%
Pb <0.01%
Zn <0.01%
W 0.01%
Ag 0.40 ppm
As 7.00 ppm
Au 0.01 ppb

	R55032	R55033
Cu	<0.01%	0.01%
Pb	<0.01%	<0.01%
Zn	<0.01%	<0.01%
W	0.02%	0.02%
Ag	0.40 ppm	0.60 ppm
As	7.00 ppm	3.00 ppm
Au	10.00 ppb	5.00 ppb

R55026
Cu 0.01%
Pb <0.01%
Zn <0.01%
W 0.01%
Ag 0.40 ppm
As 23.0 ppm
Au 5.00 ppb

R55038
Cu 0.01%
Pb <0.01%
Zn 2.15%
W 0.02%
Ag 0.50 ppm
As 13.00 ppm
Au <5.00 ppb

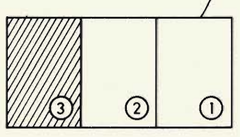
R55030
Cu <0.01%
Pb <0.01%
Zn <0.01%
W 0.03%
Ag 0.30 ppm
As 14.0 ppm
Au 5.00 ppb

R55034
Cu <0.01%
Pb <0.01%
Zn 0.21%
W 0.03%
Ag 0.70 ppm
As 11.00 ppm
Au <5.00 ppb

R1 R2 R3

	R1	R2	R3
Cu	<0.01%	<0.01%	0.01%
Pb	<0.01%	<0.01%	<0.01%
Zn	0.01%	<0.01%	<0.01%
W	0.02%	0.02%	0.02%
Ag	0.90 ppm	1.5 ppm	0.40 ppm
As	290 ppm	320 ppm	280 ppm
Au	<5.00 ppb	<5.00 ppb	10.00 ppb

PLATE 8



INDEX TO SHEETS

metres 100 50 0 100 200 300 400 500 metres

TO ACCOMPANY REPORT NO. 4-84 BY J.D.K.

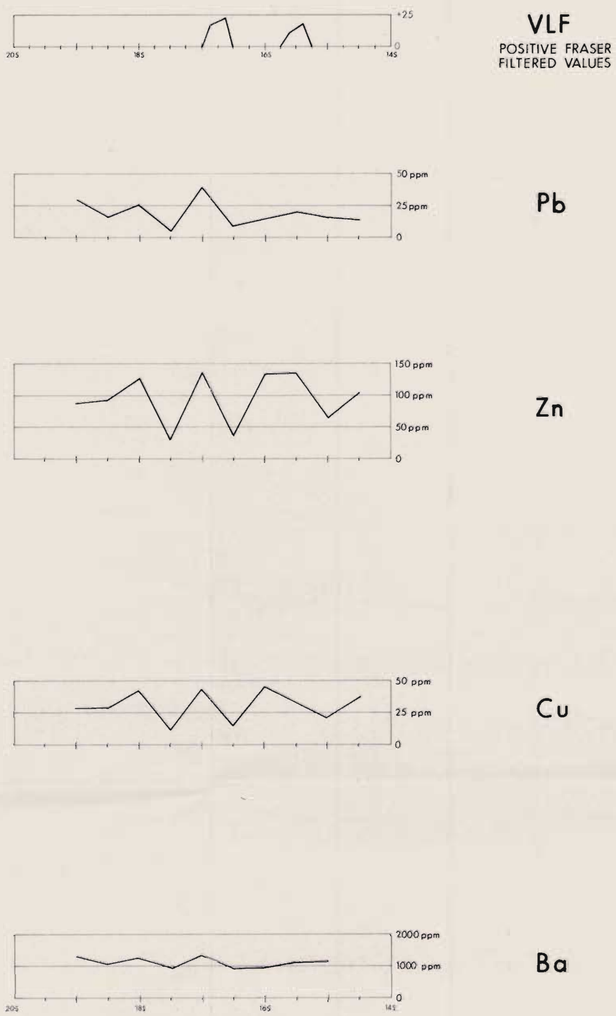
ABERFORD RESOURCES LTD.

ROCK SAMPLE LOCATIONS AND GEOCHEMISTRY

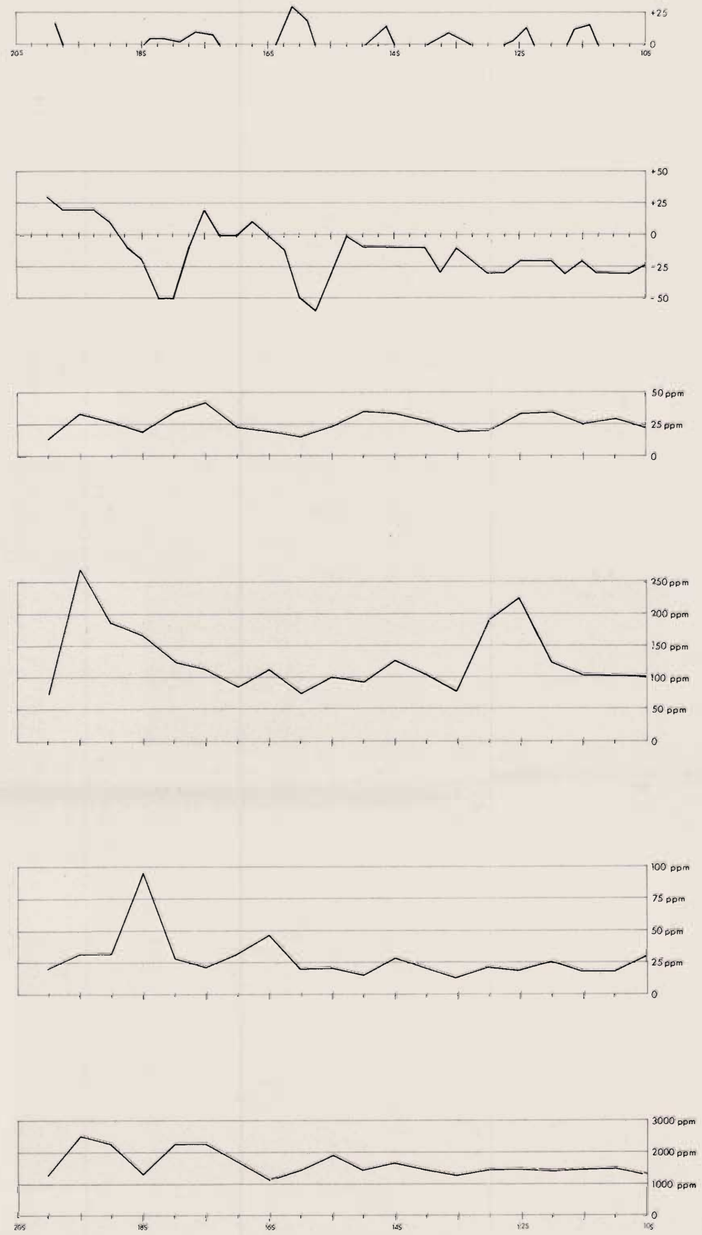
JK PROJECT, 83

DATE	SCALE	NTS	DRAWING NO.
MAY, 1984	1:5000	105 O/1	X-2054

L.E.B. / R.J.H.



LINE 4+00 E



LINE 2+00 E

PLATE 9

TO ACCOMPANY REPORT NO. 4-84 BY J.D.K.

ABERFORD RESOURCES LTD.

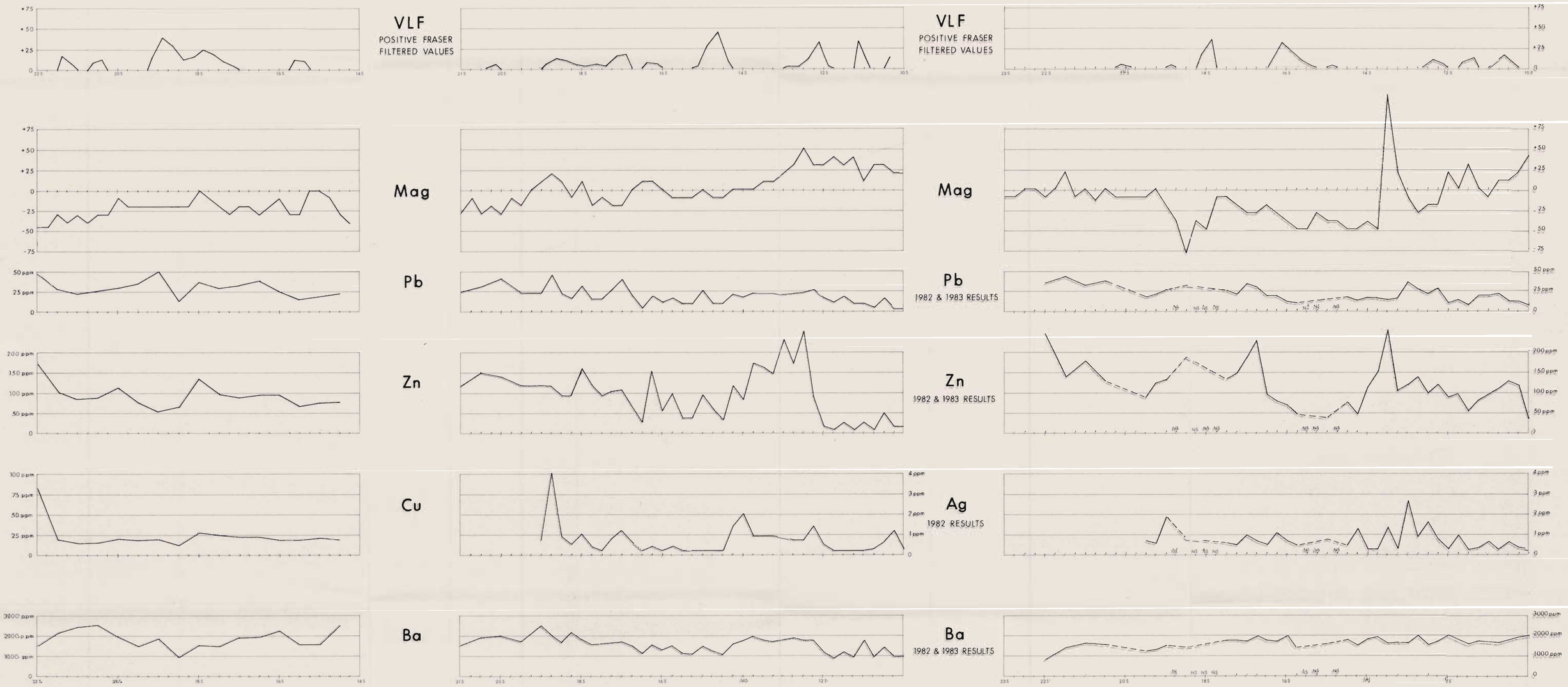
GEOCHEMICAL AND GEOPHYSICAL DATA

2E & 4E

J.K PROJECT,83

DATE	SCALE	NTS	DRAWING NO.
MAY, 1984	——	105 O/1	D-2055

DRAWING NO D-



LINE 4+00 W

LINE 2+00 W

LINE 0+00

PLATE 10

TO ACCOMPANY REPORT NO. 4-84 BY J.D.K.

ABERFORD RESOURCES LTD.

GEOCHEMICAL AND GEOPHYSICAL DATA

0+00, 2W & 4W

JK PROJECT, 83

DATE	SCALE	NTS	DRAWING NO.
MAY, 1984	—	105 O/1	D-2056

LINE 8+00 W

LINE 8+00 W

LINE 6+00 W

LINE 6+00 W

PLATE 11

TO ACCOMPANY REPORT NO. 4-84 BY JDK

ABERFORD RESOURCES LTD.

GEOCHEMICAL AND GEOPHYSICAL DATA

6W & 8W

JK PROJECT.83

DATE	SCALE	NTS	DRAWING NO.
MAY, 1984	—	105 O/1	D-2057

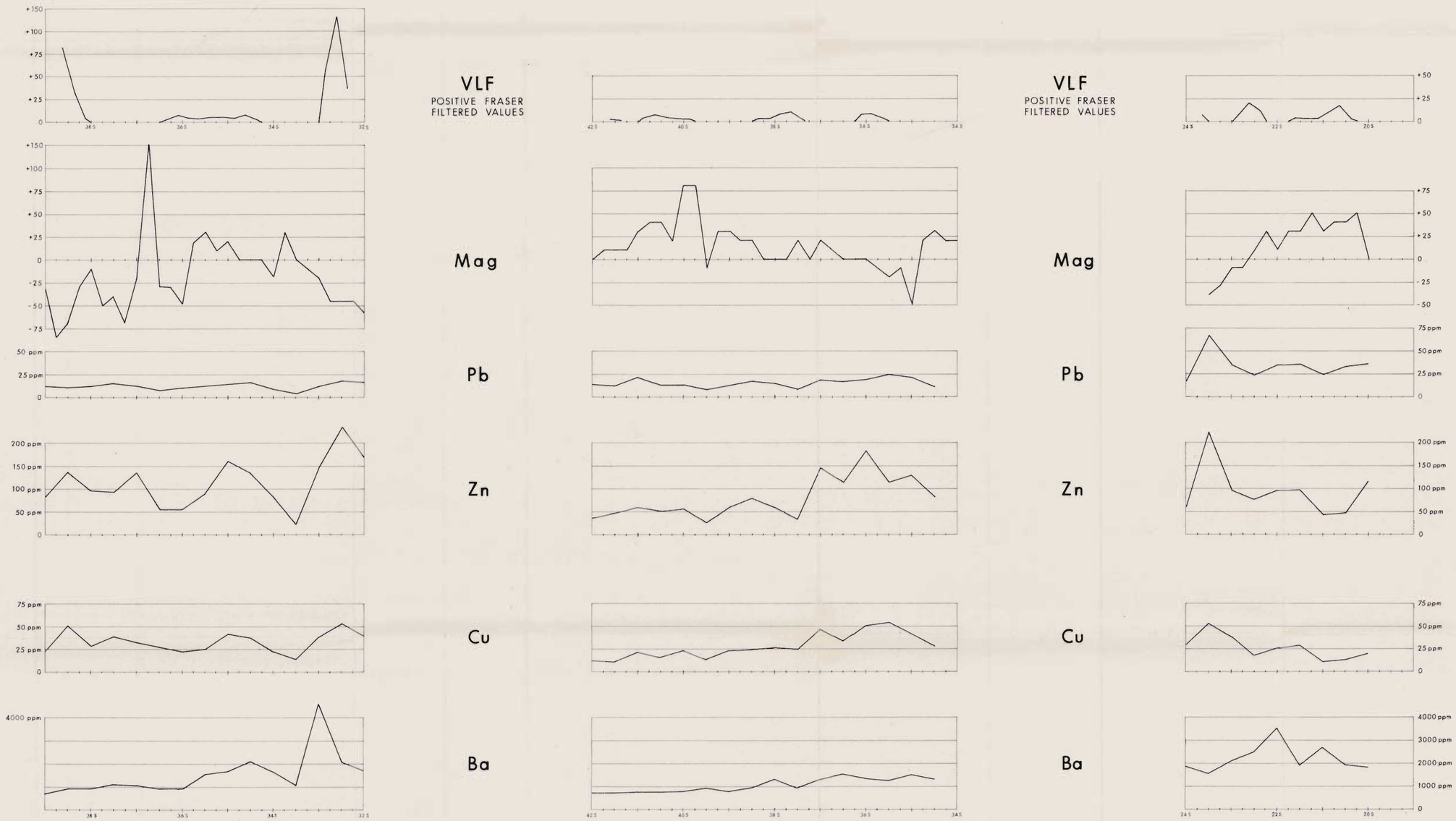


PLATE 12

TO ACCOMPANY REPORT NO. 4-84 BY J.D.K.

ABERFORD RESOURCES LTD.

GEOCHEMICAL AND GEOPHYSICAL DATA

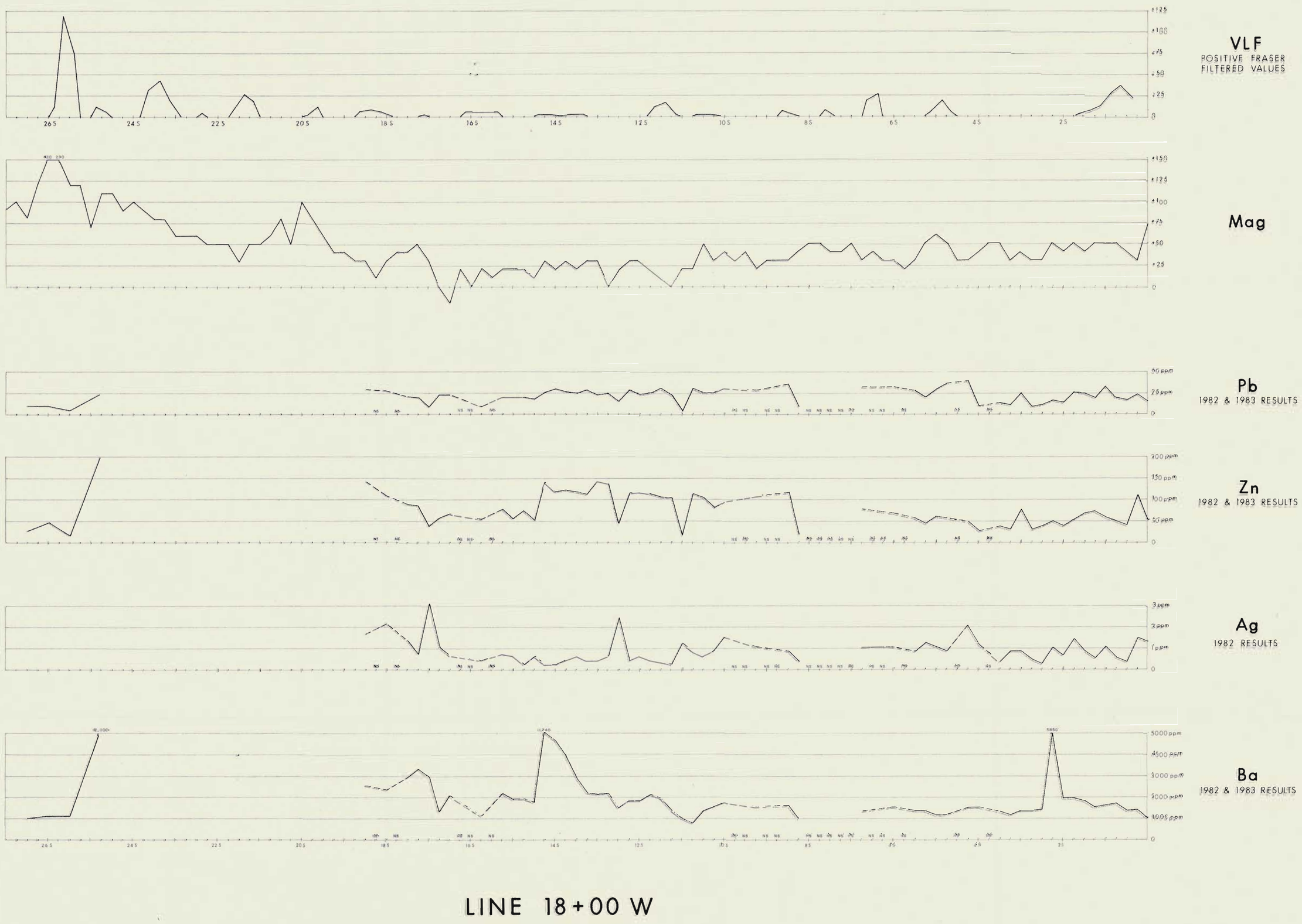
10W & 12W

JK PROJECT, 83

DATE	SCALE	NTS	DRAWING NO.
MAY, 1984	—	105 O/1	D-2058

DP - 5561 - B1 - P.O.O.

DRAWING NO. X -



LINE 18+00 W

LINE 16+00 W

PLATE 13

TO ACCOMPANY REPORT NO. 4-84 BY I.D.K.

ABERFORD RESOURCES LTD.

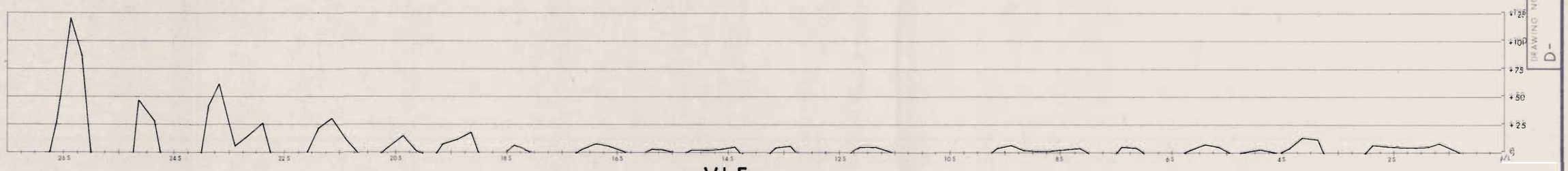
GEOCHEMICAL AND GEOPHYSICAL DATA

16W & 18W

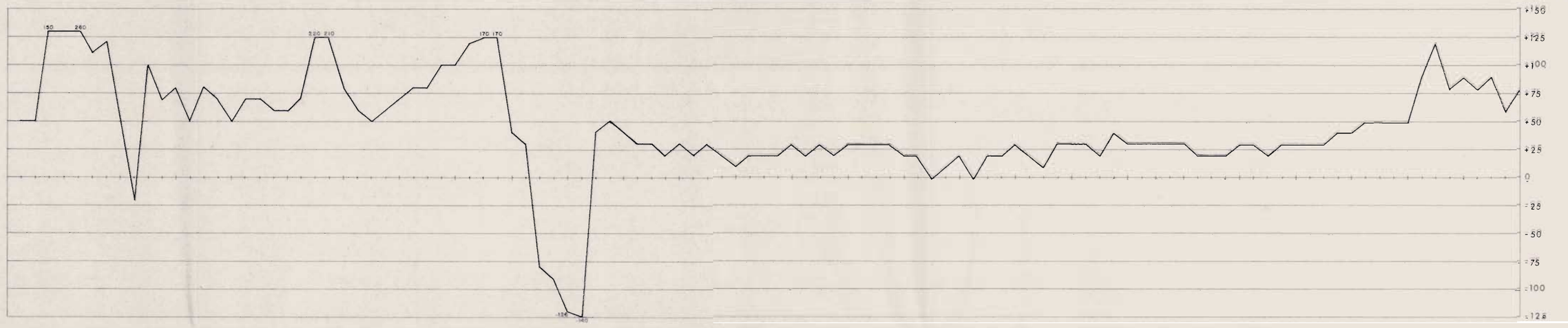
JK PROJECT 83

DATE	SCALE	NTS	DRAWING NO.
MAY, 1984	—	105 O/1	X-2059

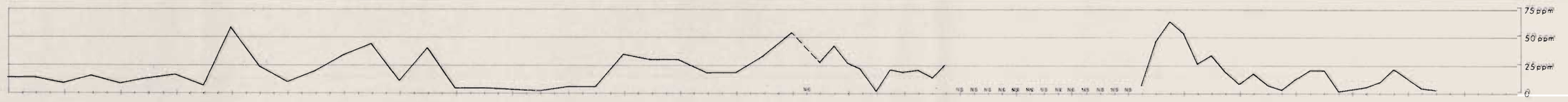
DP555 A1 P00



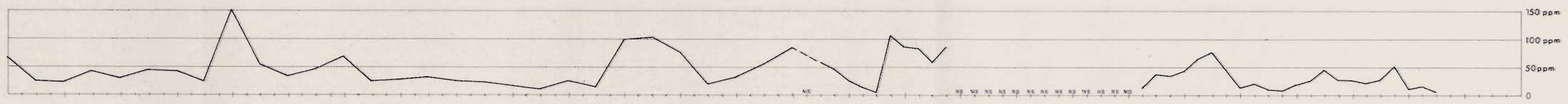
VLF
POSITIVE FRASER FILTERED VALUES



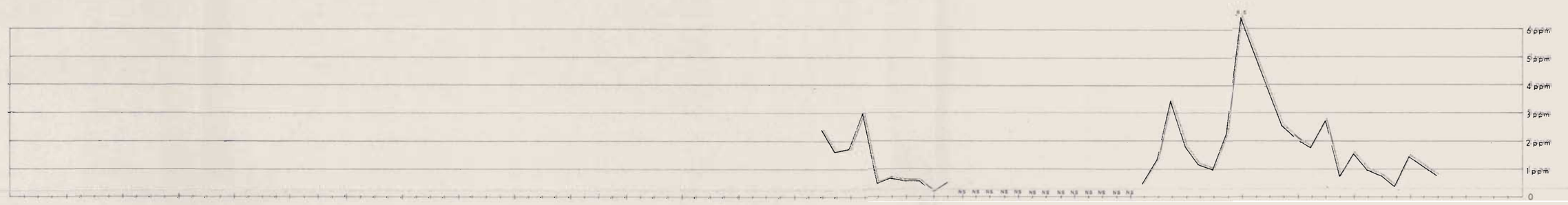
Mag



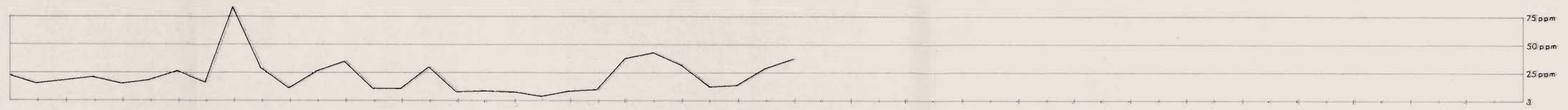
Pb
1982 & 1983 RESULTS



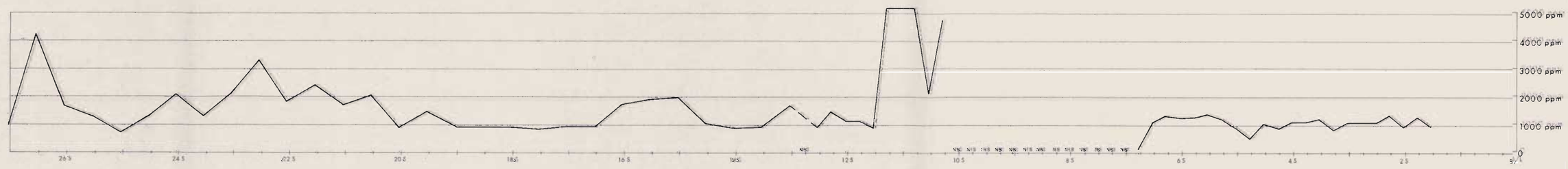
Zn
1982 & 1983 RESULTS



Ag
1982 RESULTS



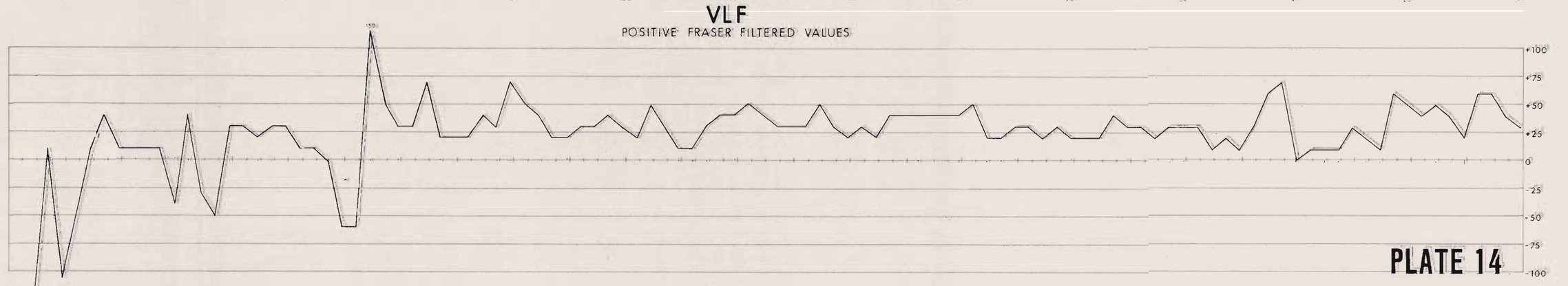
Cu
1983 RESULTS



Ba
1982 & 1983 RESULTS

LINE 20+00 W

VLF
POSITIVE FRASER FILTERED VALUES



Mag

LINE 22+00 W

PLATE 14

TO ACCOMPANY REPORT NO. 4-84 BY J.D.K.

ABERFORD RESOURCES LTD.

GEOCHEMICAL AND GEOPHYSICAL DATA

20W & 22W

JK PROJECT 83

DATE	SCALE	NTS	DRAWING NO.
MAY, 1984	—	105 O/1	D-2060

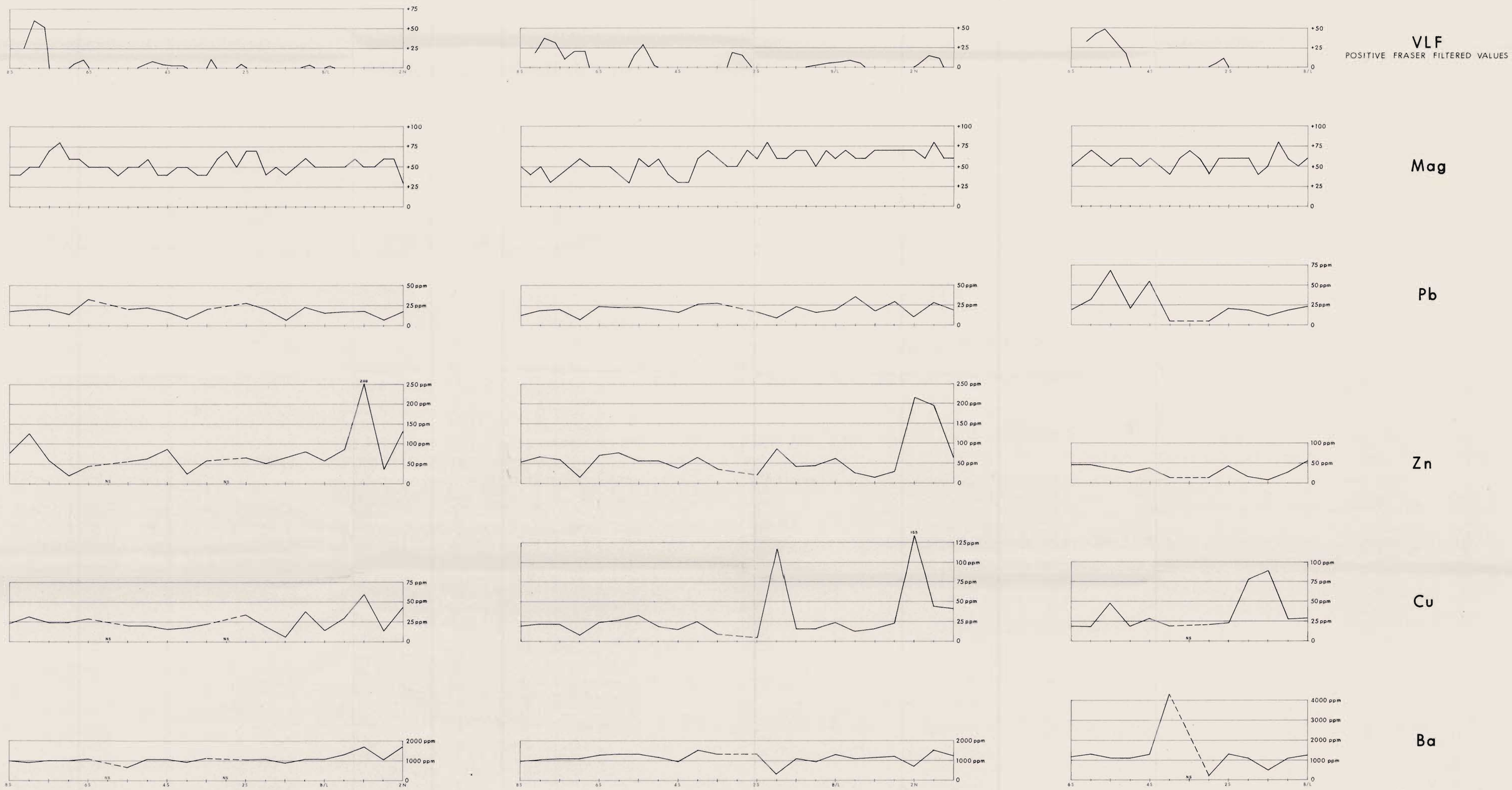


PLATE 15

TO ACCOMPANY REPORT NO 4-84 BY J.D.K.

ABERFORD RESOURCES LTD.

GEOCHEMICAL AND GEOPHYSICAL DATA

39W, 41W & 43W

JK PROJECT, 83

DATE	SCALE	NTS	DRAWING NO.
MAY, 1984	——	105 O/1	D-2061

DP555 A1 P00

TO ACCOMPANY REPORT NO. 4-84 BY J.D.K.

ABERFORD RESOURCES LTD.

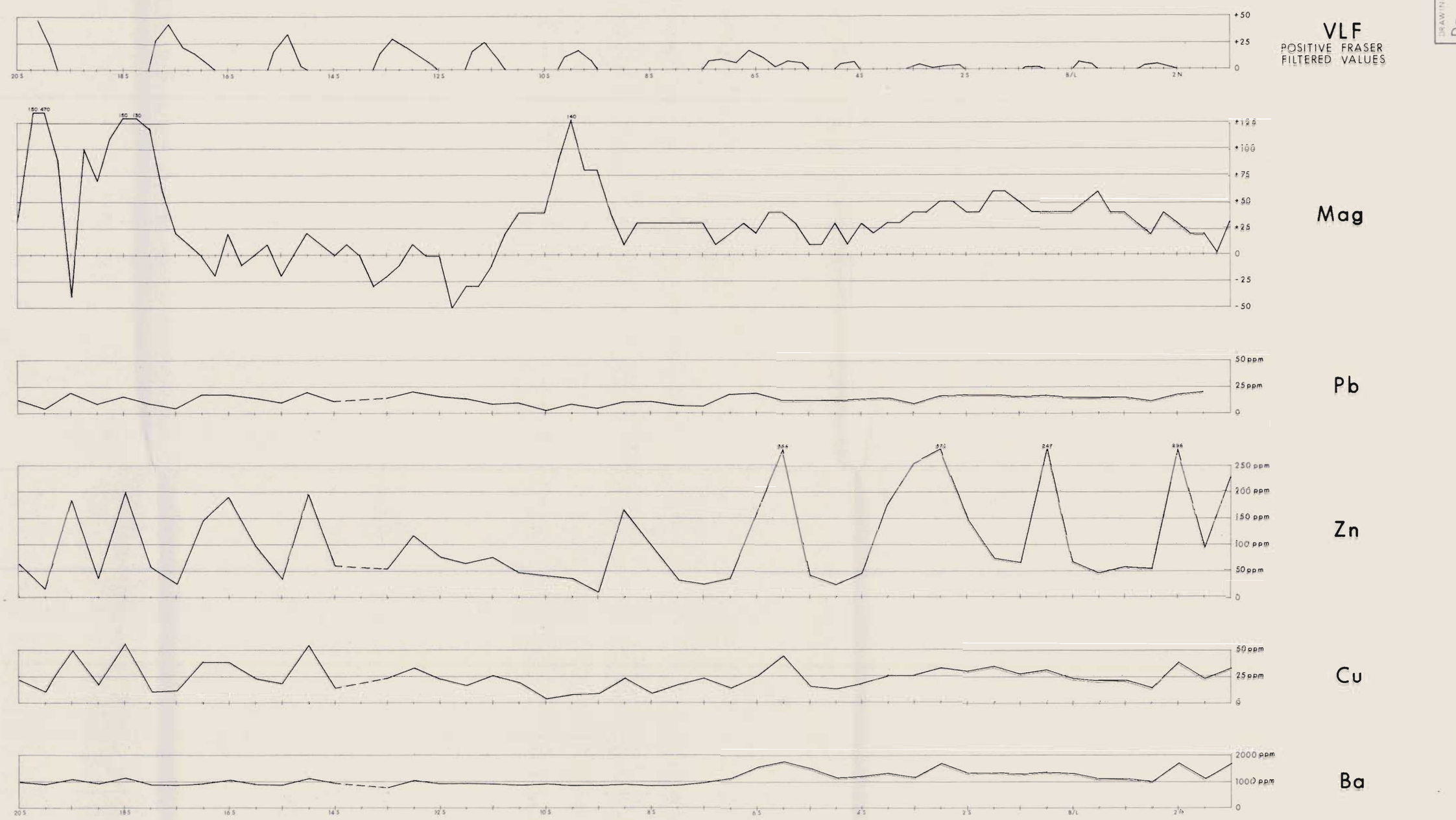
GEOCHEMICAL AND GEOPHYSICAL DATA

45W & 47W

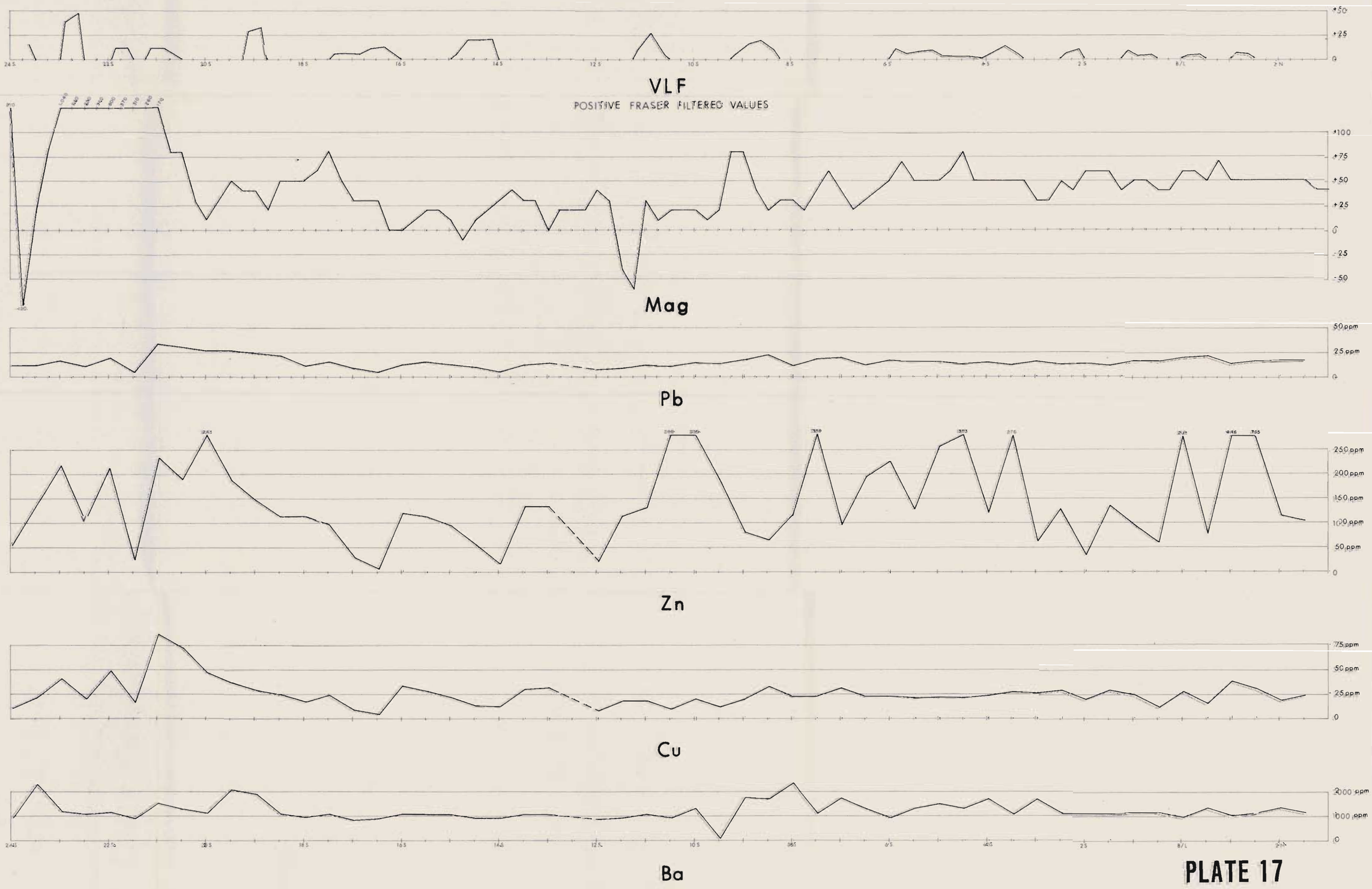
JK PROJECT,83

DATE	SCALE	NTS	DRAWING NO.
MAY, 1984	—	105 O/1	D-2062

DP555 A1 P00



LINE 51+00 W



LINE 49+00 W

PLATE 17

TO ACCOMPANY REPORT NO. 4-84 BY J.D.K

ABERFORD RESOURCES LTD.

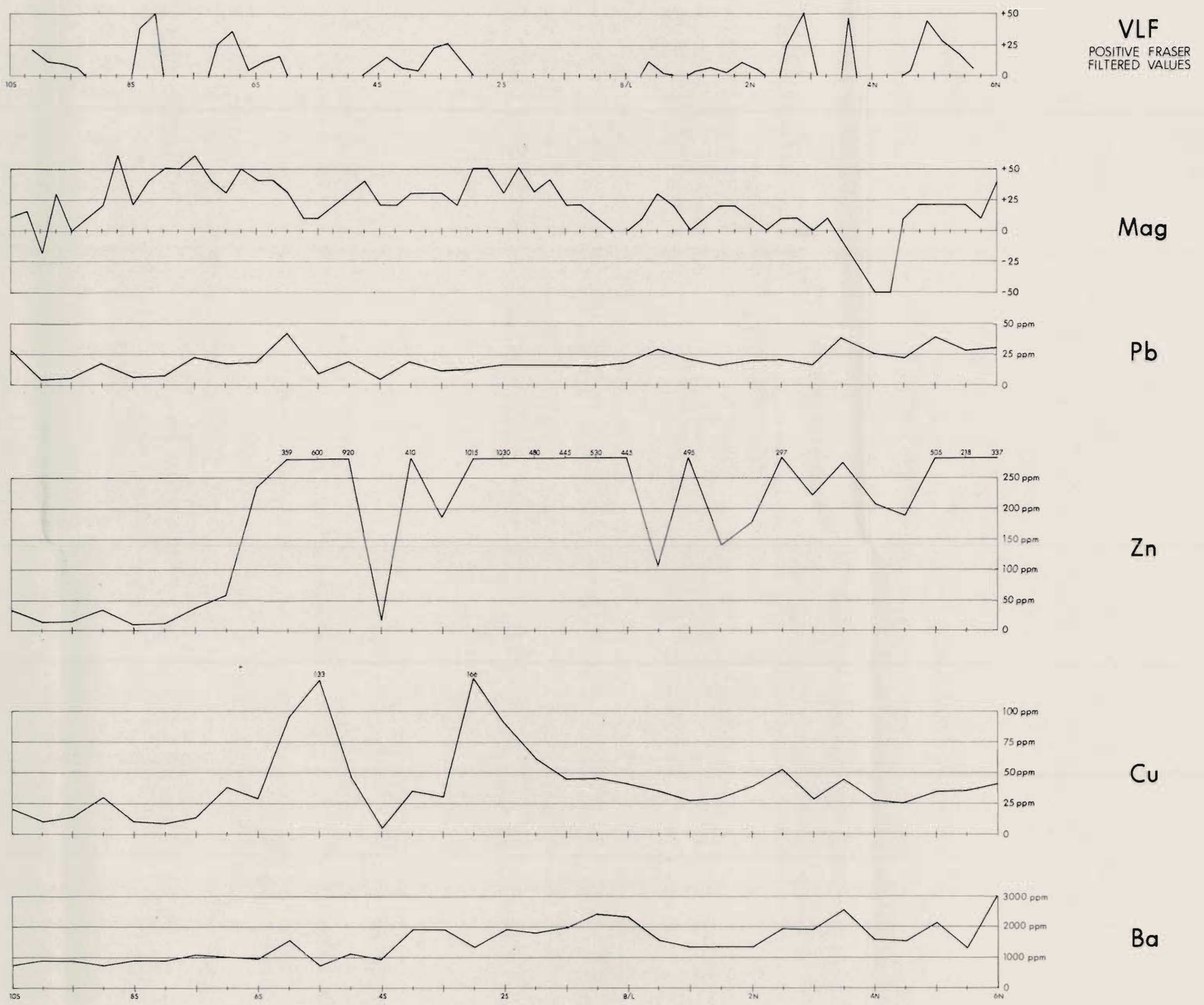
GEOCHEMICAL AND GEOPHYSICAL DATA

49W & 51W

J.K. PROJECT, 83

DATE	SCALE	NTS	DRAWING NO.
MAY, 1984	—	105 O/1	D-2063

DP555 A1 P00



LINE 55+00W

LINE 53+00W

PLATE 18

TO ACCOMPANY REPORT NO. 4-84 BY J.D.K.

ABERFORD RESOURCES LTD.

GEOCHEMICAL AND GEOPHYSICAL DATA

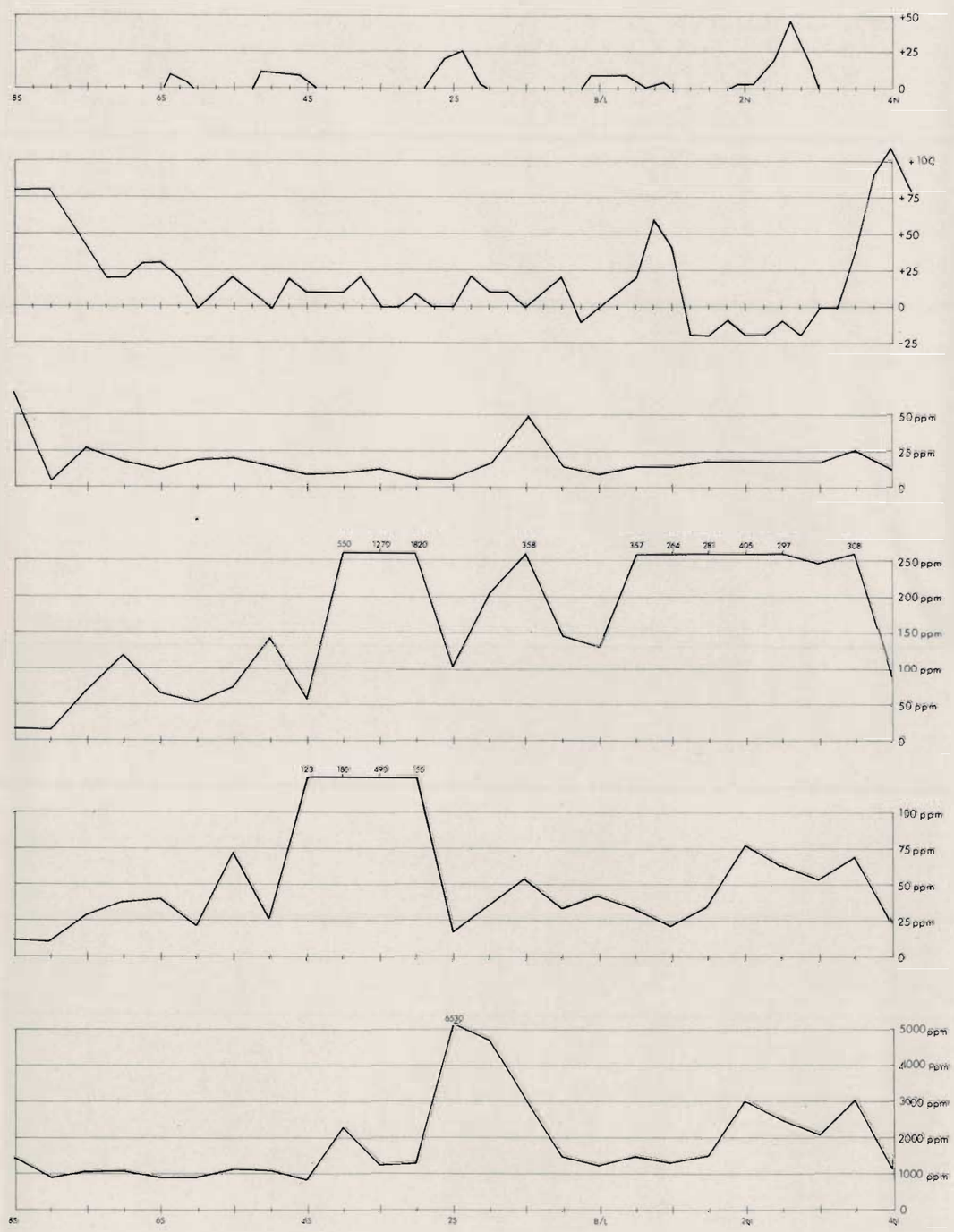
53W & 55W

JK PROJECT,83

DATE	SCALE	NTS	DRAWING NO.
MAY, 1984	———	105 O/1	D-2064

DRAWING NO. D-

DP555 A1 P00



LINE 59 + 00 W

LINE 57 + 00 W

DRAWING NO
D-

PLATE 19

TO ACCOMPANY REPORT NO. 4-84 BY J.D.K.

ABERFORD RESOURCES LTD.

GEOCHEMICAL AND GEOPHYSICAL DATA

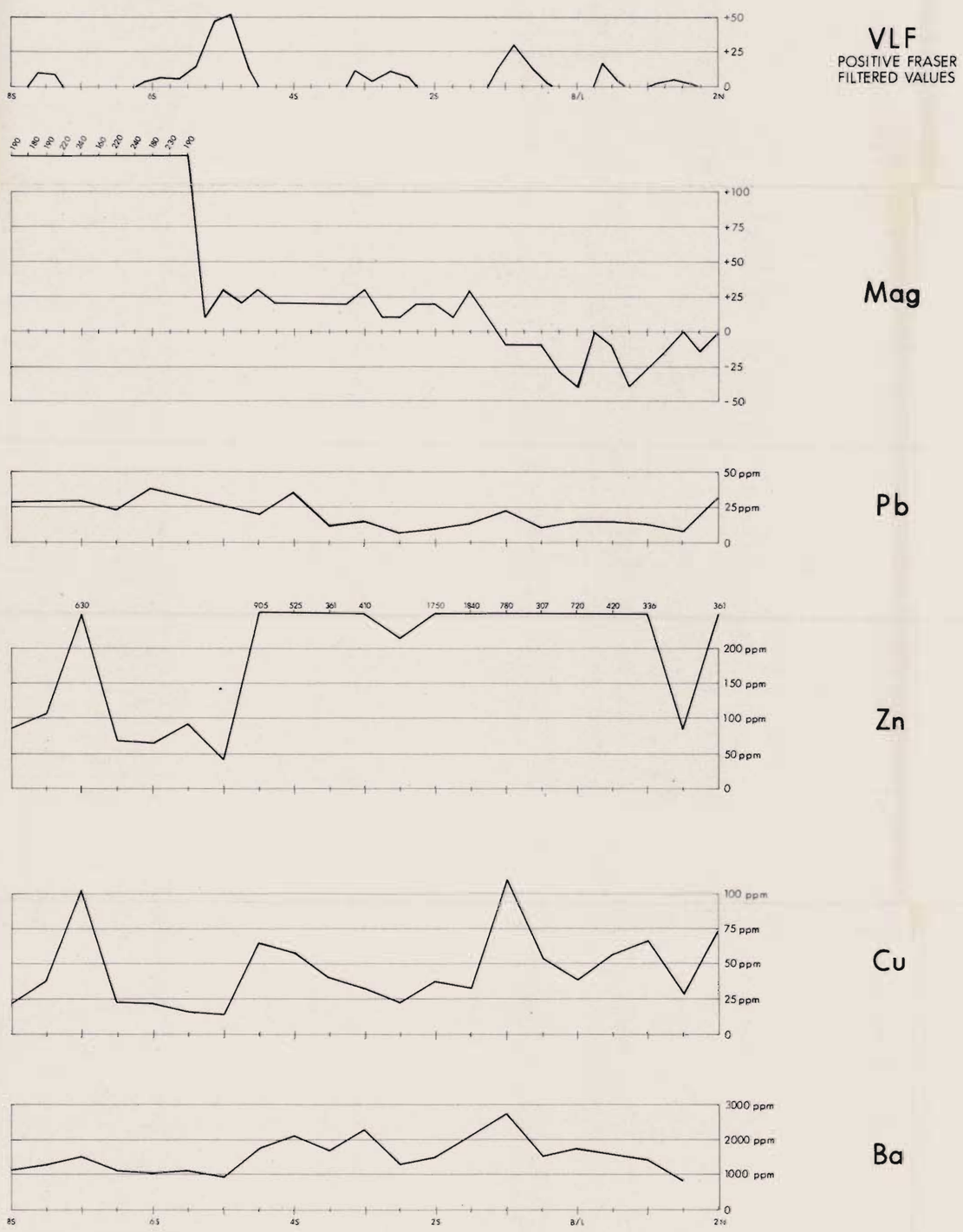
57W & 59W

J.K. PROJECT, 83

DATE	SCALE	NTS	DRAWING NO.
MAY, 1984	——	105 O/11	D - 2065

DP555 A1 P00

LINE 67+00 W



LINE 63+00 W

PLATE 20

TO ACCOMPANY REPORT NO. 4-84 BY J.D.K.

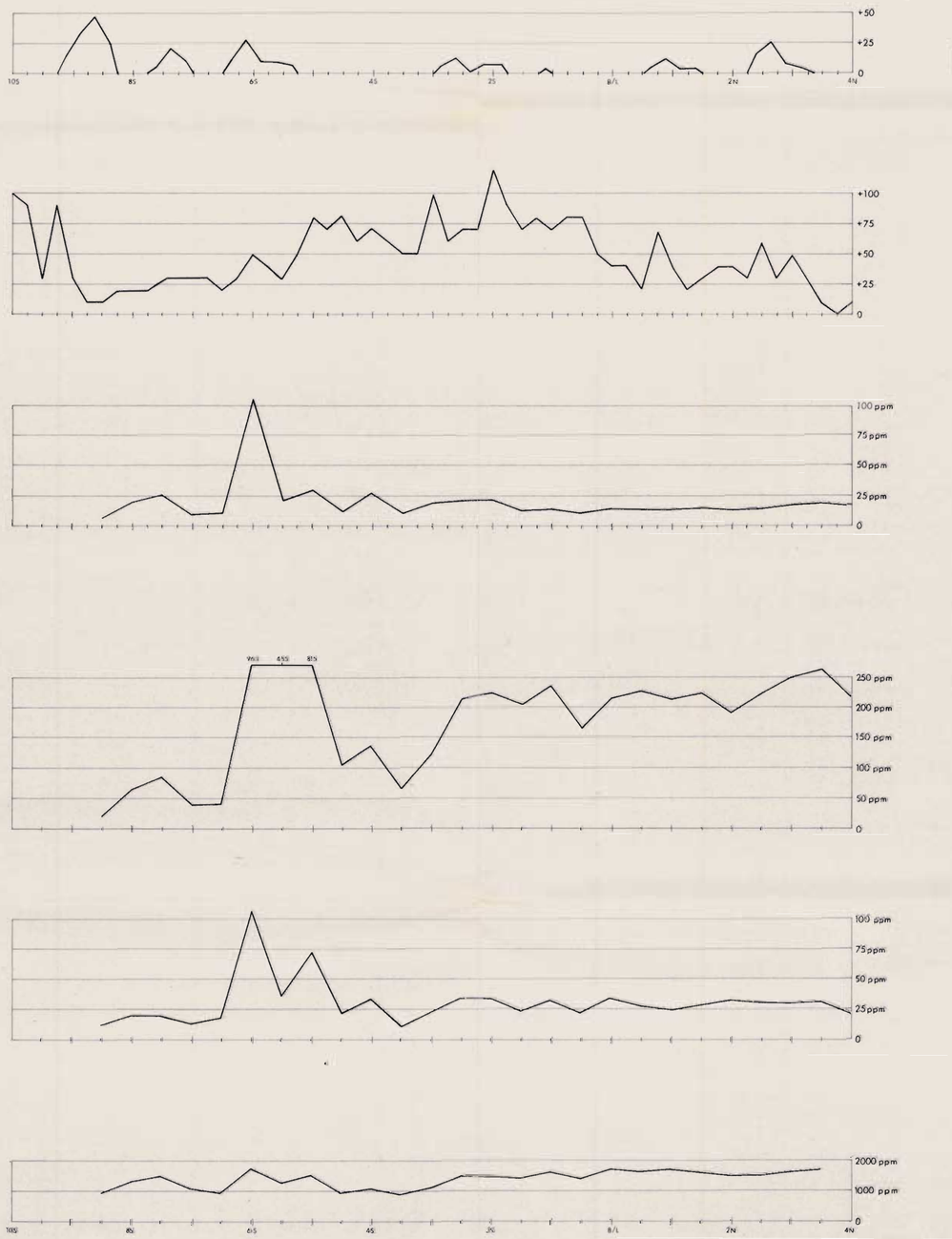
ABERFORD RESOURCES LTD.

GEOCHEMICAL AND GEOPHYSICAL DATA

63W & 67W

JK PROJECT, 83

DATE	SCALE	NTS	DRAWING NO.
MAY, 1984	———	105 O/1	D-2066



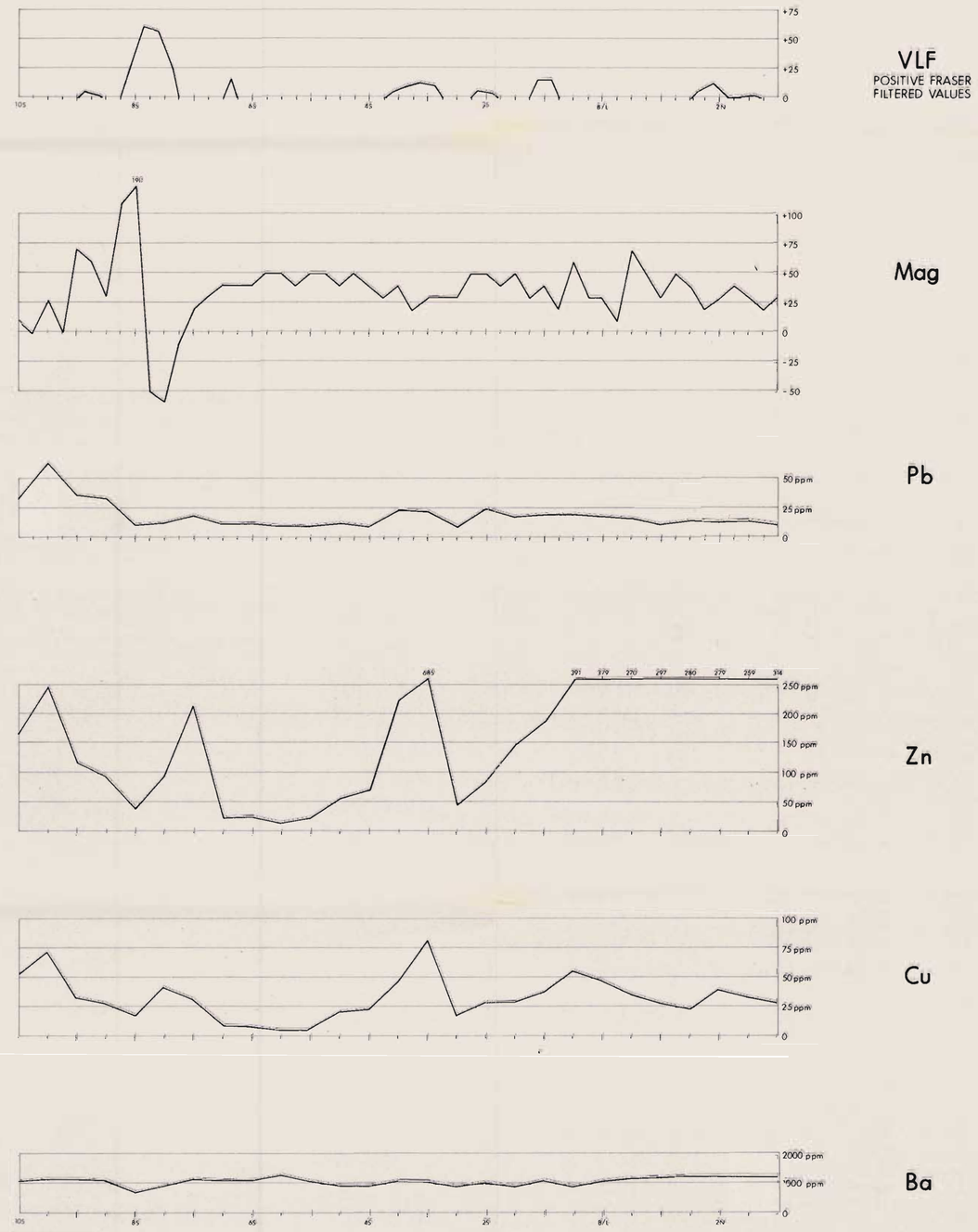


PLATE 21

TO ACCOMPANY REPORT NO. 4-84 BY J.D.K.

ABERFORD RESOURCES LTD.

GEOCHEMICAL AND GEOPHYSICAL DATA

71W & 75W

JK PROJECT 83

DATE	SCALE	NTS	DRAWING NO.
MAY, 1984	—	105 O/1	D-2067

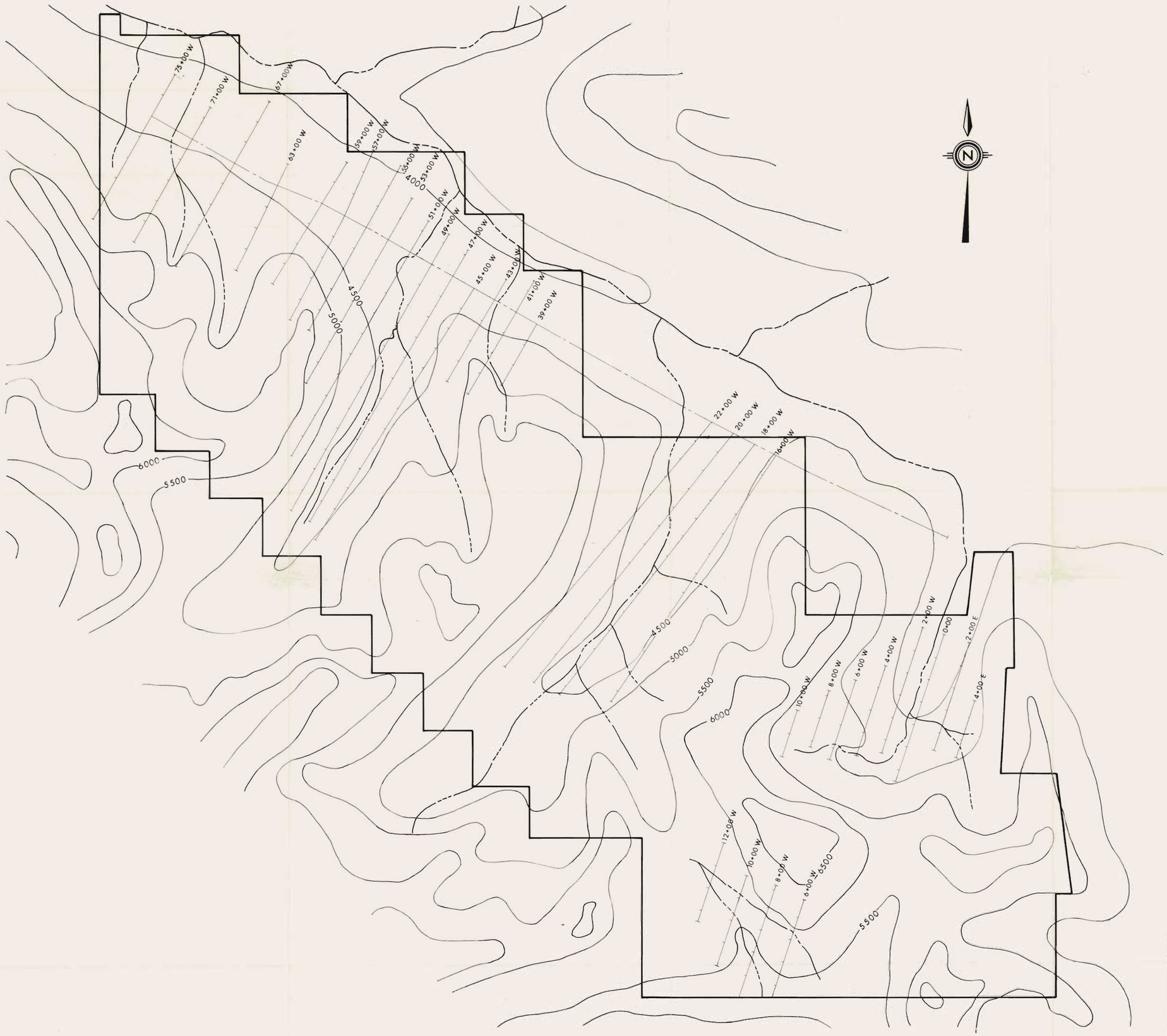


PLATE 22

mi 1/4 1/8 0 1/4 1/2 3/4 mi

TO ACCOMPANY REPORT NO. 4-84 BY J.D.K.

ABERFORD RESOURCES LTD.

GRID LINE LOCATIONS

J.K. CLAIMS, Y.T.

DATE	SCALE	NTS	DRAWING NO.
MAY, 1984	1" = 1/4 mi.	105 O	D- 2068

K.B.B./L.E.B.

DRAWING NO. D-

DB555 A1 P00