

SPECIFIC CLAIMS INVOLVED : Ironhorse 1
Ironhorse 2

MINING DIVISION : Clinton

SPECIFIC N.T.S. LOCATION : 92P/15W

LATITUDE AND LONGITUDE : 51° 57' North,
120° 51' West

OWNER OF CLAIMS : J.W. Morton

OPERATOR : J.W. Morton

AUTHOR OF REPORT : J.W. Morton

DATE : April 5, 1984

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

11,088

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Method of Interpretation:

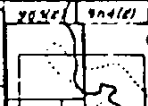
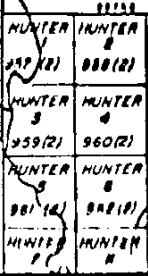
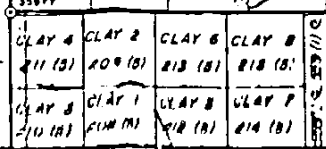
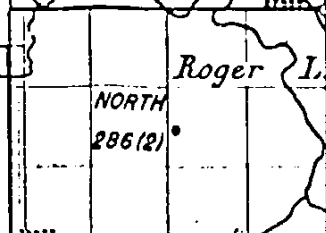
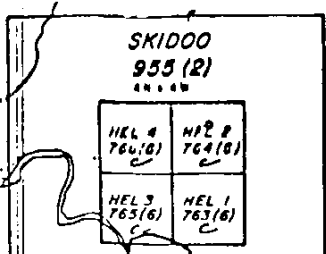
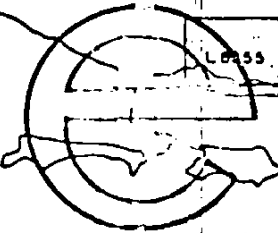
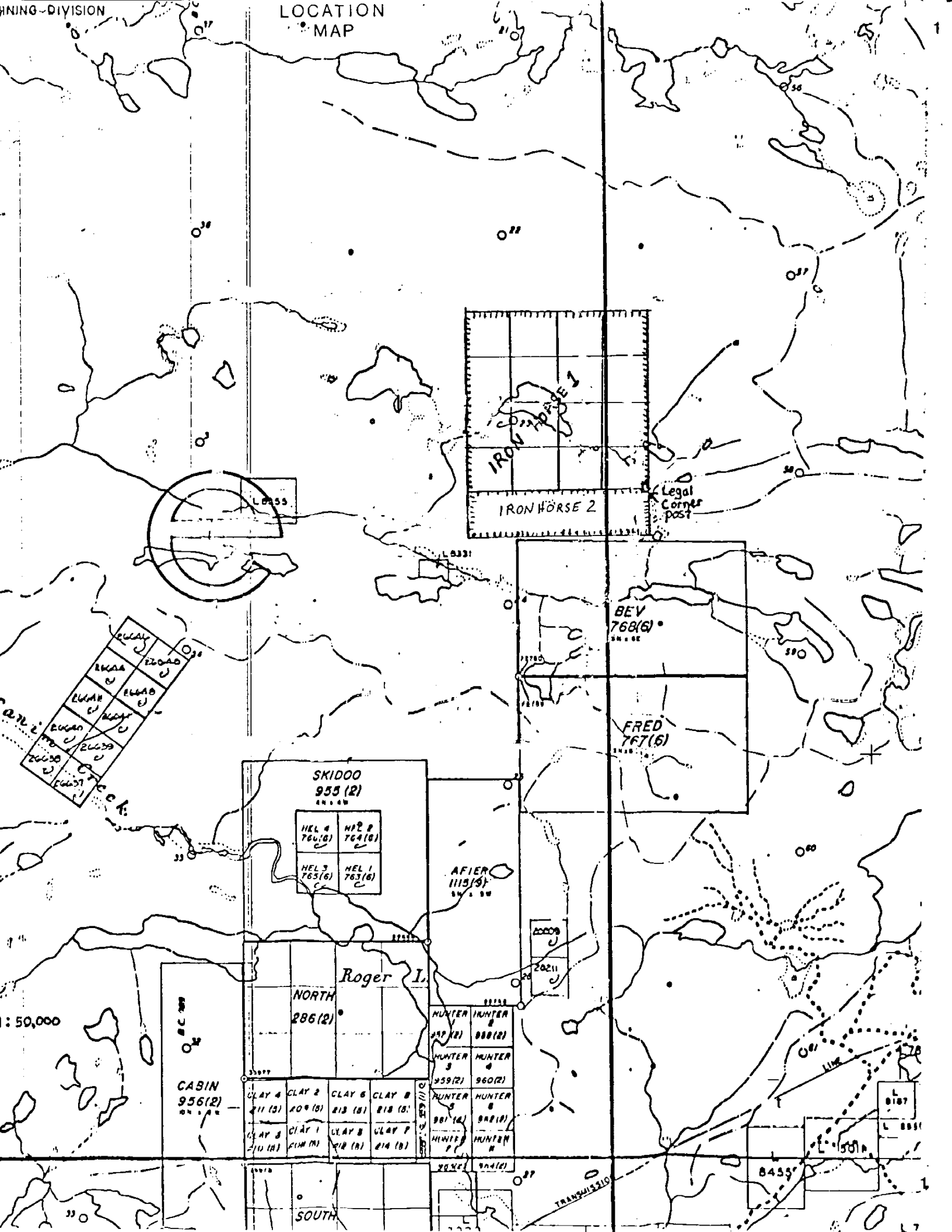
Scintrex has completed an interpretation manual for the S.E. 88 Genie system. The manual consists of tables of theoretical response profiles for variations in conductor geometry. To use the manual, a comparison of field results to theoretically derived profiles is made. In general, dipping conductors produce a negative frequency ratio anomaly.

Results:

In general the results of the reconnaissance profiles are relatively nondescript. A moderate negative anomaly occurs at a 100 meter separation at stations EM-1 and EM-2. A slight negative signal occurs at a 50 meter separation halfway between stations EM-32 and EM-33.

Conclusions:

Stations EM-1 and EM-2 occur approximately in a line connecting two diamond drill holes completed on the property at an earlier date. (Pickands Mather & Co. - 1974.) Diamond drill holes #5 and #6 both intersected shear zones containing quartz and pyrite within ultramafic rocks. The negative anomaly occurring at stations EM-1 and EM-2 may reflect this shear zone.



1:50,000

CABIN 956(2)

SKIDOO 955(2)

HEL 4 764(6)	HEL 2 764(6)
HEL 3 765(6)	HEL 1 763(6)

NORTH 286(2)

Roger I.

AFIER 1115(6)

IRON HORSE 2

BEV 768(6)

FRED 767(6)

Legal Corner post

8455

L 8187

L 8351

L 8511

TRANSMISSION

Introduction

General Geographic and Physiographic Position

The Ironhorse Claim is located approximately 45 kilometers north-east of the town of 100 Mile House, B.C. The Claims occur within a hilly terrain in what is physiographically referred to as the Quesnel Highland. Elevations on the claim vary between 1000 meters (3300 feet) and 1535 meters (5065 feet). The claim is accessible from 100 Mile House by paved road to Eagle Creek, then by 5 kilometers of the all weather Hendrix Lake gravel road and then by nine kilometers of the Canim Lake Sawmills forest access road.

Property Definition

The Ironhorse claim covers a magnetite rich basic to ultra basic multiple intrusive phase of the Takomkane batholith. Intrusive rocks include pyroxene diorite, pyroxenite, hornblende pegmatite and monzonite. Major shear systems cut these rocks in an east-west direction. Copper rich sections of pyroxenite occur in which chalcopyrite occurs with magnetite crystals. Within the shear systems, quartz and carbonate injection material contain bands of massive pyrite. Results of several samples collected from the shear system material indicate anomalous gold and cobalt concentration.

Summary of Work Completed

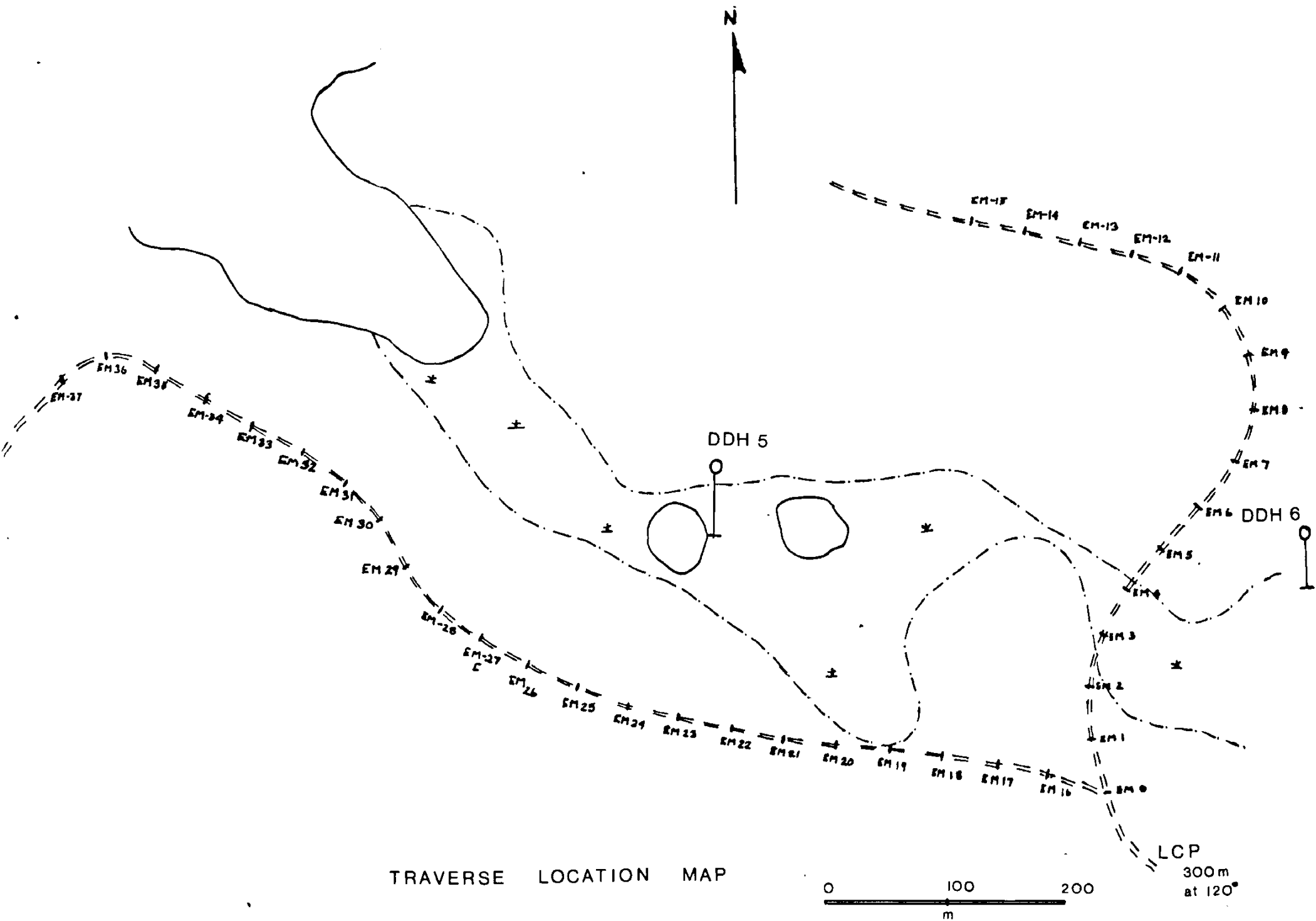
- 3.7 kilometers of reconnaissance electromagnetic survey* completed on a line separation of 50 meters and with receiver to transmitter spacings of 50 and 100 meters.
- All work was completed on the Ironhorse #1 claim.

Detailed Technical Data and Interpretations

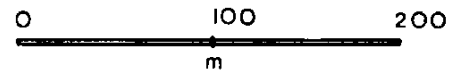
Theory of the S.E. 88 'Genie' Electromagnetic System:

Scintrex Geophysical Instrumentation has recently developed the new S.E. Genie electromagnetic system. 'Genie' is an acronym for geometry normalized inphase electromagnetic system. The Genie system was designed for rapid two person operation. The system minimizes geometrically derived errors that pose a major problem with other in-and-out of phase, tilt angle or amplitude measurement systems commonly used. The measurement is based on the simultaneous transmission of two pre-selected, well-separated frequencies and the comparison of amplitudes of the two signals at the receiver. The two transmitted frequencies are picked up by a single receiving coil, amplified and noise filtered. A proportional D.C. voltage (V signal for the higher frequency, V reference for the lower frequency) is obtained from each signal averaged over a selectable time period and the then computed result $(V \text{ signal}/V \text{ reference} - 1) \times 100$ is displayed in percent and is recorded. Resolutions of 0.1% are possible, depending on atmospheric noise, and amplitude ratio changes of 0.5% can be significantly differentiated.

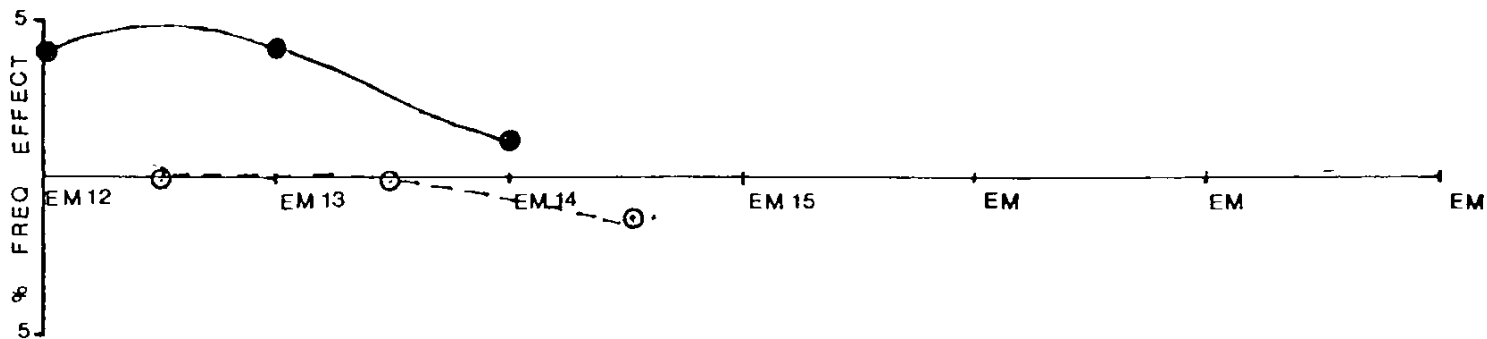
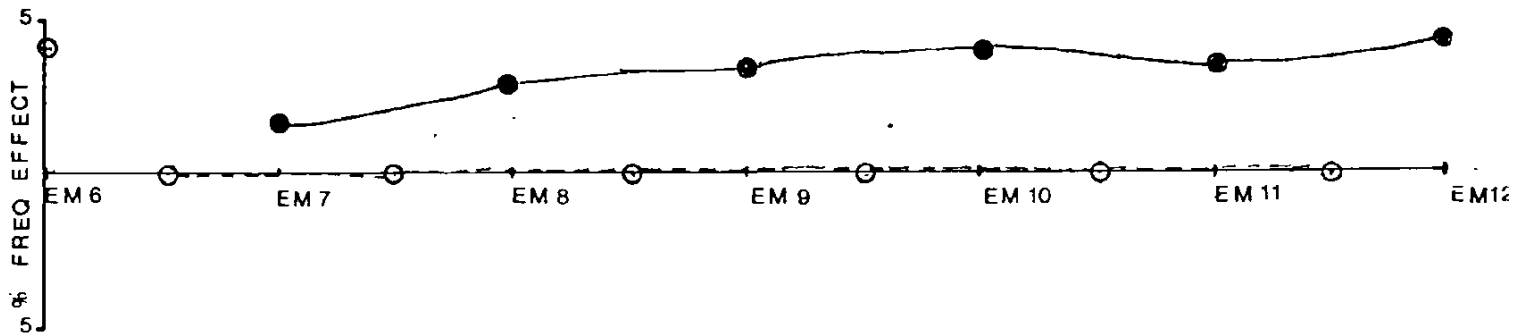
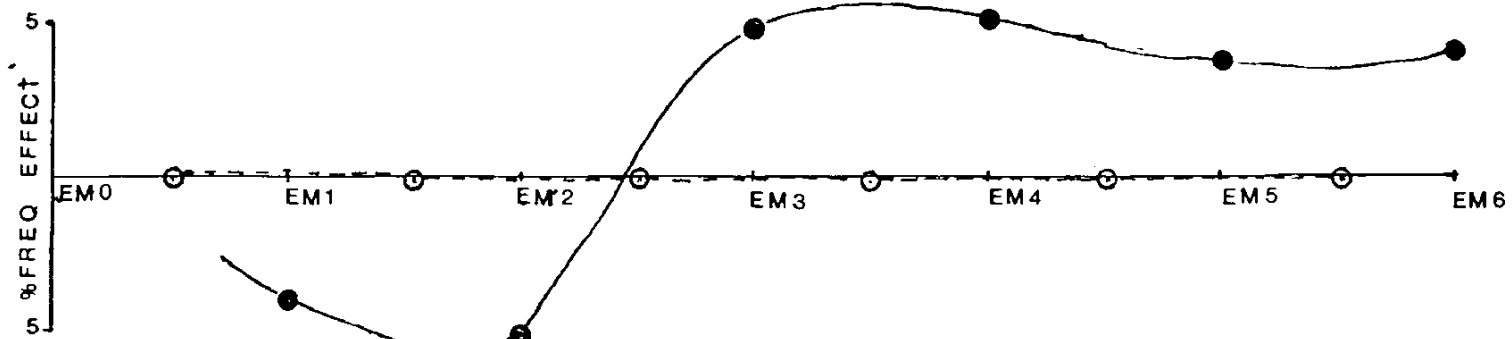
* Scintrex S.E. 88 Genie Electromagnetic System.



TRAVERSE LOCATION MAP



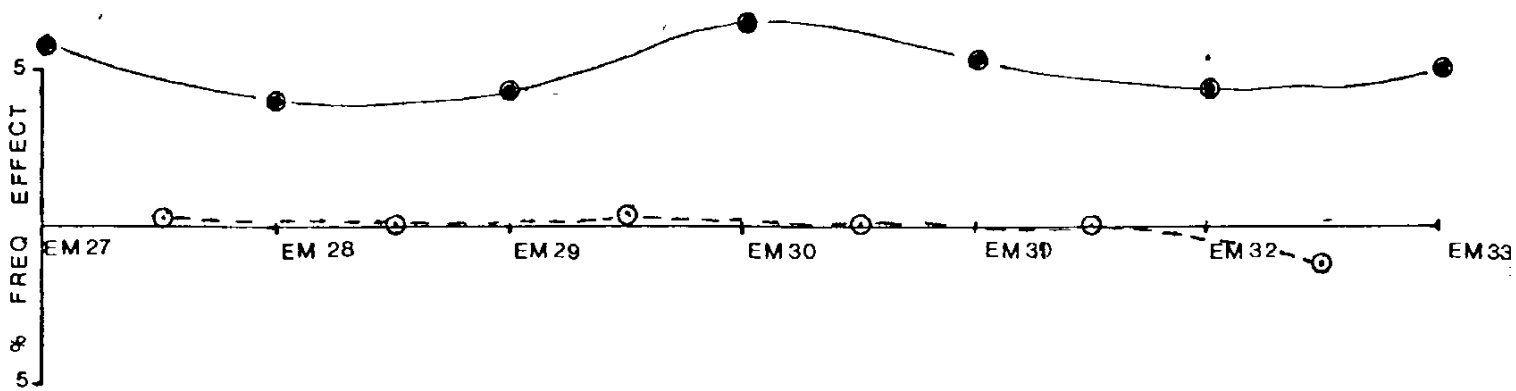
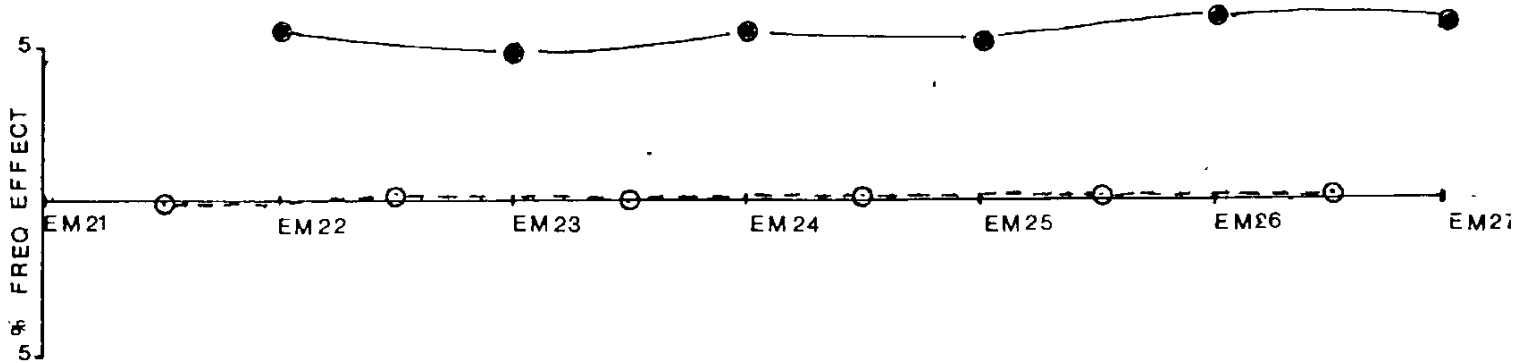
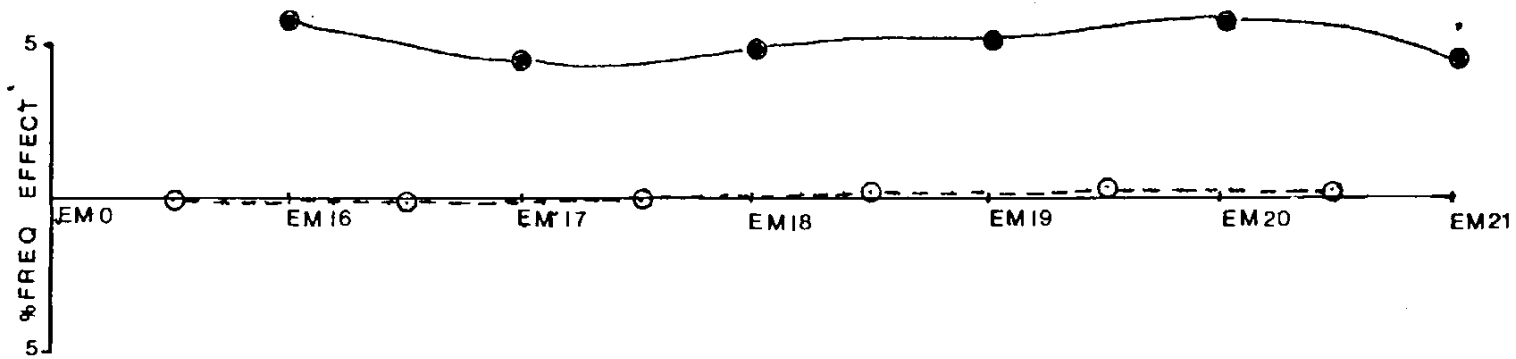
LCP
300m
at 120°



3037.5 / 112.5 FREQ. RATIO

○ - ○ 50 m SEPARATION

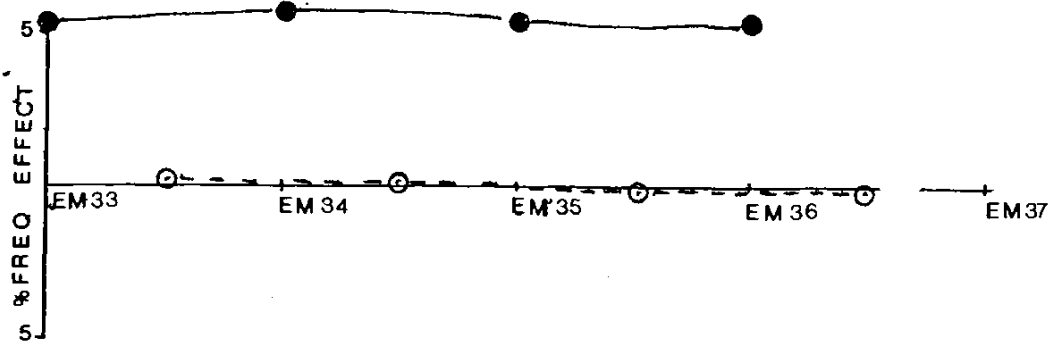
● - ● 100 m SEPARATION



3037.5 / 112.5 FREQ. RATIO

○ --- ○ 50 m SEPARATION

● ——— ● 100 m SEPARATION



3037.5 / 112.5 FREQ. RATIO

○--○ 50 m SEPARATION

●---● 100 m SEPARATION

ITEMIZED COST STATEMENT

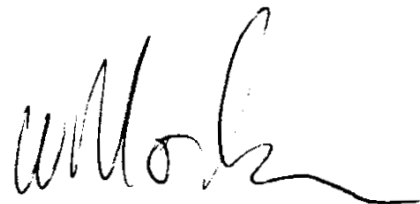
Field Work Completed June 17 and June 18, 1983:

Morton	2 days @ \$200/day	\$400.00
Dunlop	2 days @ \$75/day	\$150.00
Vehicle costs	384 km @ 25¢/km	\$ 96.00
Equipment costs	2 days @ \$73/day	\$146.00
Report preparation and drafting		\$200.00
<u>TOTAL COSTS</u>		<u>\$992.00</u>

AUTHOR'S QUALIFICATIONS

I, JAMES W. MORTON, CERTIFY THE FOLLOWING:

1. I graduated from Carleton University in 1971 with a Bachelor of Science in Geology.
2. I graduated from the University of British Columbia in 1976 with a Master of Science in Soil Science.
3. I have worked for various mining and exploration companies since 1968.
4. I supervised all of the work described in this report.



J.W. Morton,
Geologist

Receiver Station	Separation Meters	Reading #1	Reading #2	Reading #3	Reading Avg.	Notes
EM-1	50	-0.2	-0.1	0.0	-0.1	receiver north
EM-2	100	-4.6	-3.6	-4.2	-4.1	
EM-2	50	-0.1	0.0	0.0	0.0	
EM-3	100	-5.3	-5.7	-4.7	-5.2	Strongest locm sign
EM-3	50	0.0	0.0	0.1	0.0	
EM-4	100	4.3	4.5	4.7	+4.5	
EM-4	50	0.2	0.2	0.3	0.2	
EM-5	100	4.2	5.7	5.3	+5.1	
EM-5	50	0.1	0.1	-0.1	0.0	
EM-6	100	3.0	4.3	3.9	+3.7	
EM-6	50	0.1	0.3	0.1	0.2	
EM-7	100	4.0	3.4	4.6	+4.0	
EM-7	50	0.4	0.4	0.2	0.3	
EM-8	100	2.0	1.7	1.4	+1.7	
EM-8	50	-0.5	-0.5	-0.6	-0.5	
EM-9	100	2.5	3.3	2.7	+2.8	
EM-9	50	-0.1	-0.1	-0.1	-0.1	
EM-10	100	2.7	3.7	3.2	+3.2	
EM-10	50	0.1	0.2	0.0	0.1	
EM-11	100	3.5	4.1	3.3	+3.6	
EM-11	50	0.2	0.2	0.0	0.1	
EM-12	100	2.5	3.3	3.6	+3.1	
EM-12	50	0.1	0.2	0.2	0.2	
EM-13	100	4.0	4.4	4.1	+4.2	
EM-13	50	0.3	0.3	0.4	0.3	
EM-14	100	5.6	4.5	3.7	+4.6	
EM-14	50	0.1	0.0	0.2	0.1	
EM-15	100	1.3	1.2	0.8	1.1	
EM-15	50	-0.6	-0.9	-0.7	-0.7	
EM-16	50	-0.3	-0.3	-0.3	-0.3	receiver west
EM-17	100	5.2	5.0	6.8	+5.7	
EM-17	50	0.2	0.3	0.3	0.3	
EM-18	100	4.4	4.7	4.5	+4.5	
EM-18	50	0.1	0.2	0.4	0.2	
EM-19	100	4.9	4.7	4.9	4.8	
EM-19	50	0.5	0.6	0.5	0.5	

Receiver Station	Separation Meters	Reading #1	Reading #2	Reading #3	Reading Avg.	Notes
EM-20	100	4.6	5.8	5.3	5.2	received w/pt
EM-20	50	0.5	0.6	0.5	0.5	
EM-21	100	5.5	5.1	6.8	5.8	
EM-21	50	0.4	0.4	0.3	0.4	
EM-22	100	3.6	5.0	4.6	4.4	
EM-22	50	0.2	0.1	0.1	0.1	
EM-23	100	4.9	6.0	5.8	5.6	
EM-23	50	0.5	0.3	0.7	0.5	
EM-24	100	4.6	4.2	5.2	4.7	
EM-24	50	0.3	0.1	0.0	0.1	
EM-25	100	5.0	5.6	5.4	5.3	
EM-25	50	0.3	0.2	0.4	0.3	
EM-26	100	5.2	5.7	4.6	5.2	
EM-26	50	0.1	0.2	0.2	0.2	
EM-27	100	6.3	5.7	6.0	6.0	
EM-27	50	0.2	0.3	0.3	0.3	
EM-28	100	5.6	5.5	6.2	5.8	
EM-28	50	0.5	0.6	0.4	0.5	
EM-29	100	4.8	4.7	3.8	4.4	
EM-29	50	0.2	0.1	0.2	0.1	
EM-30	100	4.4	5.6	3.6	4.5	
EM-30	50	0.6	0.8	0.5	0.6	
EM-31	100	5.4	7.9	7.0	6.8	
EM-31	50	0.1	0.1	0.1	0.1	
EM-32	100	5.5	5.2	6.8	5.8	
EM-32	50	0.1	0.1	0.0	0.0	
EM-33	100	4.5	4.5	3.8	4.3	
EM-33	50	-1.0	-1.1	-1.0	-1.0	Strangest 50 m signal.
EM-34	100	4.7	4.6	6.2	5.2	
EM-34	50	0.1	0.3	0.2	0.2	
EM-35	100	6.9	4.9	5.6	5.7	
EM-35	50	0.1	0.1	0.2	0.1	
EM-36	100	5.3	5.1	5.3	5.3	
EM-36	50	-0.2	-0.1	-0.2	-0.2	
EM-37	100	4.9	5.7	5.3	5.3	
EM-37	50	-0.2	-0.2	-0.4	-0.3	