



41115NW9290 2.14961 FRALECK

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REPORT
ON THE
1992 EXPLORATION PROGRAM
FRALECK TOWNSHIP PROPERTY
SUDBURY MINING DIVISION
ONTARIO
FOR
JOHN G. BRADY

2.14961

Qual 2.1503
Norwin Geological Ltd.
December 16, 1992

RECEIVED

MAR 29 1993

MINING LANDS BRANCH

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1. INTRODUCTION

The Fraleck township property consists of 9 claims containing 14 units of 16 hectares, in the southeastern quadrant of Fraleck township, approximately 22 kilometres north-northeast of Capreol, Ontario in the Sudbury Mining Division (Figure 1).

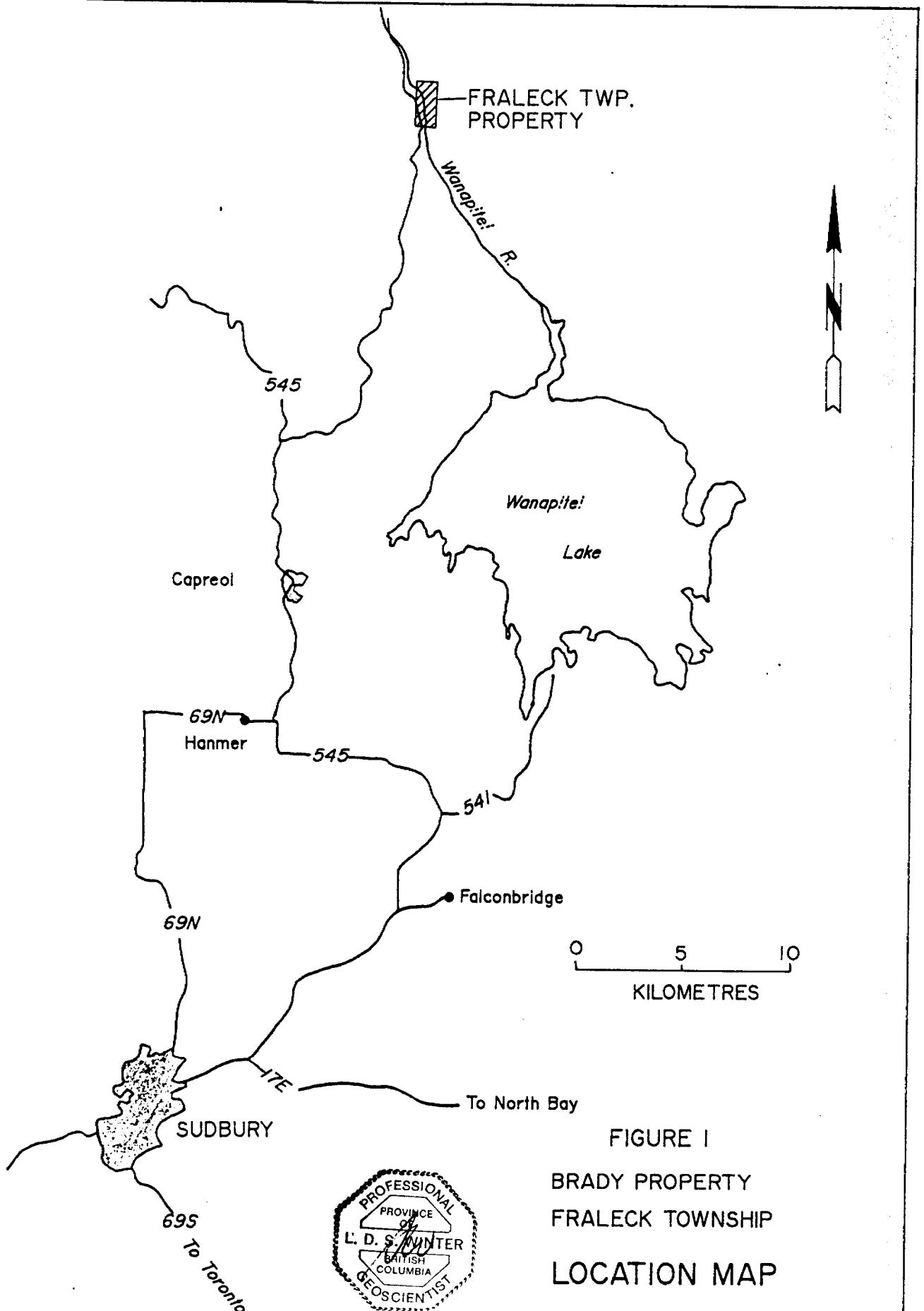
The subject claim group was acquired for its potential for copper, nickel, platinum, palladium, gold, ^{and} silver mineralization associated with a north to north-northwest trending mafic intrusive. Immediately south of the property, mineralized boulders in the Wanapitei River yielded anomalous values in platinum and palladium (pers. comm., John Brady).

Norwin Geological Ltd. was requested by Mr. Brady to carry out a program of line-cutting, magnetometer and EM surveys and geological mapping. The work was carried out between November 15 and December 15, 1992. The following report outlines the work carried out, the results obtained and presents recommendations for additional work.

2. SUMMARY AND RECOMMENDATIONS

A grid consisting of 10.1 line-km was laid out covering six, 16 hectare units with the baseline running north-south and crosslines east-west at 100 metre intervals. The grid was covered by a magnetometer survey, a VLF-EM survey and the area was geologically mapped.

The geological mapping confirmed the geology as reported by Meyn (1971) in which a Nipissing-type diabase of late Proterozoic age and approximately 200 to 250 metres wide occurs as a sill-like body trending north-south through the central and western part of the property. The sill intrudes the Huronian Supergroup sediments close to the upper contact of the Bruce



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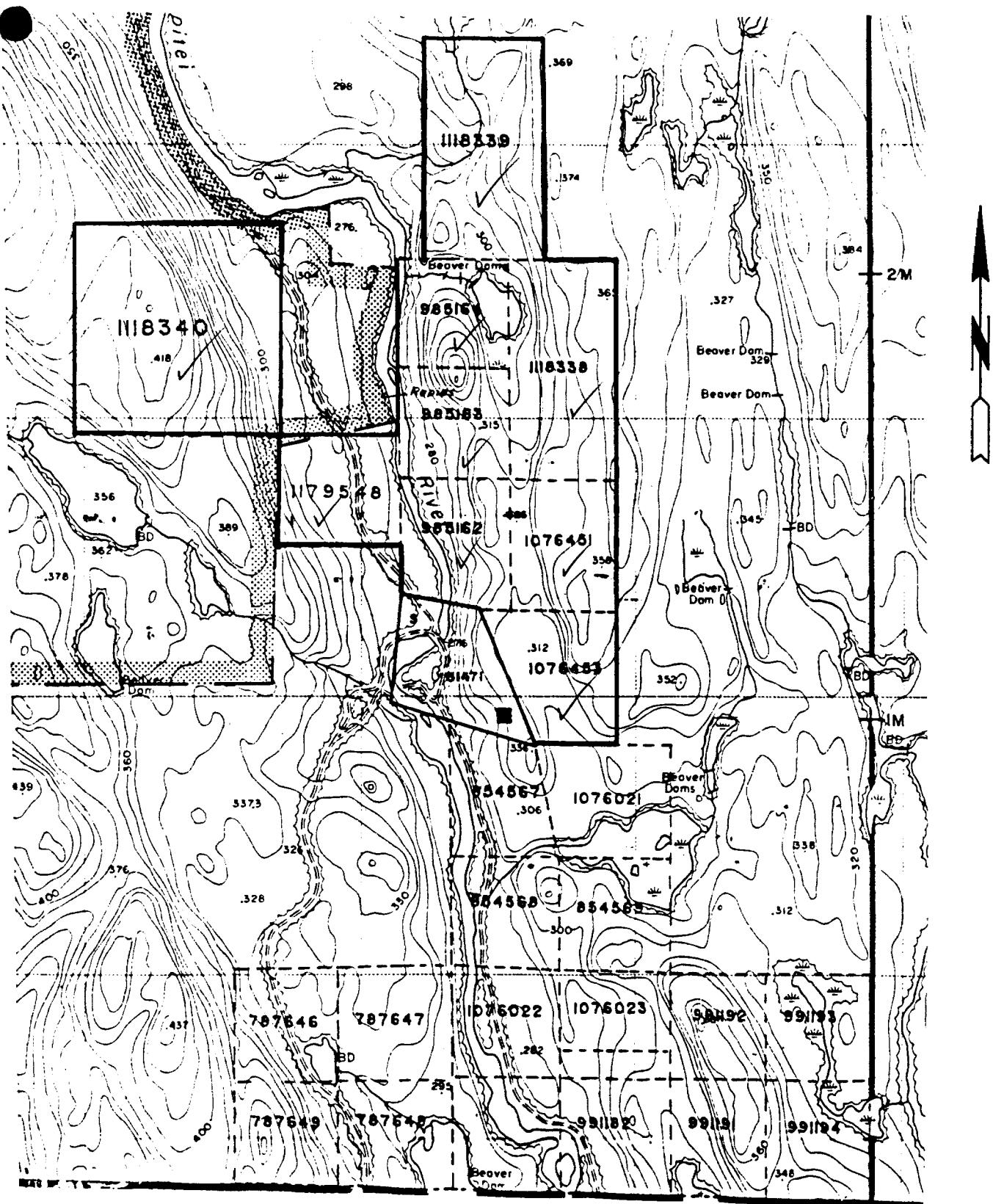
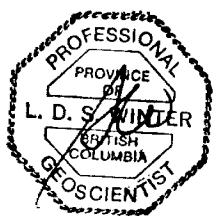


FIGURE 2
CLAIM MAP - BRADY PROPERTY
FRALECK TWP.

SCALE: 1 : 20,000

DEC., 1992



formation which underlies the sill. The Serpent formation overlies the Bruce formation and the sill to the east. All units dip moderately to steeply to the east. Major faulting is interpreted to be north-south with subsidiary north-northeast to northeast trending structures.

The magnetometer survey indicated four areas of magnetic lows adjacent to the diabase contact, two of which are associated with chalcopyrite and pyrrhotite mineralization. One of these lows immediately east of the Wanapitei River between lines 8N and 7N may be the source of the platinum-palladium bearing boulders located in the Wanapitei River. This in conjunction with the observed mineralization and the magnetic lows which appear to correspond to sulphide mineralization indicate that additional work is warranted to further evaluate the property.

An IP survey is proposed to fully define areas of disseminated mineralization prior to stripping and sampling and/or diamond drilling. In addition, it is recommended that the remainder of the property be mapped and covered by geophysical surveys as a means of locating additional areas of potential mineralization.

3. PROPERTY

3.1 CLAIM DESCRIPTION

The property consists of 9 contiguous, unpatented mining claims covering approximately 225 hectares which are listed below and which are shown in Figure 2 after claim Map G-4050, Fraleck Township, Ministries of Natural Resources and Northern Development and Mines. The claims are in good standing and are held in the name of Mr. John Brady, 1227 Holland Road, Sudbury, Ontario.

Table 1
Fraleck Township Claims

<u>CLAIM NUMBERS</u>	<u>NUMBER OF CLAIMS</u>
985162 to 985164 inclusive	3
1076451 and 1076453	2
1179548	1
1118338 and 1118339 (total of 4 units)	4
1118340 (4 units)	<u>4</u>
 TOTAL OF 9 CLAIMS AND	
	14 UNITS

3.2 LOCATION AND ACCESS

The Fraleck township property is located at 46° 54'N latitude, 80° 50'W longitude in Fraleck township, District of Sudbury, Sudbury Mining Division approximately 22 kilometres north of Capreol and 60 kilometres north of Sudbury, Ontario.

Access to the property is by road. Provincial Hwy. 69N leads to Hanmer from which Hwy. 545 proceeds north through

Capreol and an additional 6 kilometres at which point a forest access road leads east and north, a distance of approximately 18 kilometres to the property. The property is immediately adjacent to the intersection of this forest access road, the Poupore Lumber Road and the Wanapitei River.

3.3 TOPOGRAPHY AND VEGETATION

The property has a very rugged topography of north-northwest trending ridges and valleys. On the western side of the property is the Wanapitei River. To the east, a steep hill rises approximately 80 metres and then descends again into the central part of the property. On the eastern edge of the property is a steep cliff leading to a second ridge to the east.

The ridges are thinly covered with soil which support jackpine and spruce. Cedars, alders and spruce are common in the low-lying swampy areas.

4. PREVIOUS WORK IN THE AREA

Immediately south of the property H. Barry and L. Towers in 1949 held a group of claims containing leased claim S-51471. At that time they carried out a limited amount of prospecting, pitting and a limited amount of diamond drilling on a vein striking N 20°W with a 65°E dip. It was traced on surface for 100 metres and had a maximum width of 0.3 metres and generally was 5 to 15 cm wide. The vein which is mainly quartz, is mineralized with galena, chalcopyrite and contains appreciable values in gold and silver. A sample taken by Thomson of the Ontario Department of Mines in 1950 assayed 12.93% lead, 1.50% copper, 1.49 ounces/t of silver and 0.91 ounces/t gold (Meyn, 1971).

In 1981, R. Larson carried out some power stripping on claims immediately to the east. In 1970, E.J. Rivers also carried out stripping in the area of the subject property. In 1987, H.V. Barry trenched in the area and reported diabase dykes and a mineralized gossan with pyrrhotite and chalcopyrite. The assay results reported are for silver only. In 1983, E. Leschishin did some backhoe stripping on the same location (Assessment Files, Sudbury).

5. REGIONAL GEOLOGY

Fraleck township is underlain by Archean granites and metavolcanics which in turn are unconformably overlain by Proterozoic sediments of the Huronian Supergroup.

In the northwestern part of the township, Archean granites are the predominant rock type. Unconformably overlying them to the south are units of the Gowganda and Lorraine formations of the Cobalt group which occur in a west-northwest trending synclinal structure. In the eastern part of the township, east of the Wanapitei River, the Missassagi, Bruce, Espanola and Serpent formations of the Bruce group trend north-northwest and dip at moderate to steep angles to the east. The Gowganda formation of the Cobalt group overlies these formations to the east.

Major structures in the area trend north-northwest, northwest and east-west. The dominant structural feature is the north-northwest trending fault structure occupied by the Wanapitei River valley.

The Archean and Proterozoic units have been intruded by Nipissing type quartz diabase of late Proterozoic age.

The Fraleck township property of John Brady occurs adjacent to the Wanapitei River and is underlain by units of the Bruce and Serpent formations as well as Nipissing-type quartz diabase.

6. 1992 EXPLORATION PROGRAM

6.1 WORK DONE

A grid consisting of 10.1 line-km was laid out with lines trending east-west from a north-south baseline covering claims 985162, 985163, 985164, 1076451 and 1118338. The grid was laid out to cover the north-south trending Nipissing-type diabase and its contacts with the adjacent Bruce and Serpent formations.

Following line-cutting, the grid was covered by a magnetometer and VLF-EM survey on lines spaced at 100 metres and with readings taken at 25 metre intervals. In addition, the property was geologically mapped using the grid as a control.

The work was carried out between November 15 and December 15, 1992 under the field supervision of the writer and by personnel of Norwin Geological Ltd.

The magnetometer survey was done using an EDA-Omni Plus instrument with the total magnetic field being measured. Simultaneously, a base station magnetometer monitored the magnetic field. The VLF-EM in-phase and quadrature measurements were taken with the EDA-Omni Plus using the transmitter at Cutler, Maine, U.S.A. transmitting at a frequency of 24.0 KHz. Readings were taken every 25 metres along lines spaced at 100 metres using standard industry practices. A total of 357 stations were occupied.

6.2 MAGNETOMETER SURVEY RESULTS

The results of the total field magnetometer survey are shown in Map 1. The general magnetic field in the area is 58,000 nT with variations up to 214 nT below and 331 nT above this value. As shown in Map 1, the values show a north-south trend particularly in the west-central part of the property which is interpreted to be related to the Nipissing-type quartz diabase and the general trend of the sediments.

The magnetic readings generally divide the map into two areas; that east of 1+00E to 1+25E and that west of this line. To the east the magnetic values generally range between 58030 nT and 58080 nT and show a very flat relief. In a north-south trend lying within 100 m east and west of the baseline magnetic values show considerable variation and range between 58331 nT and 57759 nT. The values generally define north-south trends and appear to be associated with the eastern contact of the gabbro-diabase intrusive.

Prominent magnetic depressions are present within the area at;

- A) 0+75E: L3N to L5N
- B) 2+00W: L7N to 1+25W: L8N
- C) 0+50E: L8N to L10N
- D) 1+00W: L12N and 1+75W: L12N

Depressions A & B are associated with observed chalcopyrite-pyrrhotite mineralization and their significance will be discussed in more detail in Section 7 - Interpretation.

6.3 VLF-EM SURVEY RESULTS

In Map 2, the VLF-EM results are plotted using the Fraser-filter values as calculated using 4 adjacent values. The observed quadrature and in-phase results are provided in Appendix 2. There are no strongly conductive areas indicated by the survey. Increased conductivity is indicated on L8N: 0+75E and between L10N: 0+25E and L12N: 0+25W. This coincides with the interpreted eastern contact of the gabbro-diabase and in part a magnetic low. It parallels the axis of a magnetic ridge approximately 50 metres to the west. The 0 contour line running approximately north-south in the centre of the property very closely follows the eastern contact of the gabbro-diabase intrusive.

6.4 GEOLOGICAL MAPPING

The geological mapping was carried out along the east-west lines spaced at 100 metres with all of the lines as well as the intervening areas being mapped. During the mapping program, the rock types and any areas of alteration and mineralization were noted. In addition, structural features such as the attitude of bedding surfaces, joints, faulting and shearing were recorded.

The mapping indicated a sequence of east-dipping sediments of the Bruce and Serpent formations trending approximately north-south. These have been intruded by a Nipissing-type quartz diabase to gabbro whose eastern contact is parallel to and up to 100 m east of the baseline (Map 3).

The gabbro-diabase is a dark green to black rock of medium grain size. There are variations from this with some areas approaching a fine grain size while other areas become

coarse grained. The dominant minerals as observed in hand specimen are plagioclase, amphibole, chlorite and quartz often showing diabasic texture. Patches of granophyre were also observed within the intrusive. Based on the contact attitude the intrusive is interpreted to be a sill emplaced at the top of the Bruce formation.

In the western part of the property, only two outcrops of Bruce formation greywacke to conglomerate were observed. In outcrop, the rock is a massive, grey, fine grained greywacke containing occasional pebbles up to 2 cm in diameter. The rock generally appears to be unstratified and poorly sorted. The bedding surfaces dip at approximately 25° to the east.

Parallel to the baseline and up to 200 metres to the east, a fine-grained, grey greywacke occasionally containing fragments and pebbles up to 2 cm in diameter was observed. As one traverses to the east, the greywacke loses the pebble content and becomes more quartz-rich. By approximately 2+00E which is the location of the abrupt cliff in the eastern part of the property, the composition of the sediments has become more quartz-rich and they are considered to be arkosic to sub-arkosic in composition. Here the rock type is light grey, fine grained and can be observed to contain an appreciable quartz content. The greywacke-conglomerate is considered to be the Bruce formation with the more quartz-rich sediments to the east being the Serpent formation.

In the eastern part of the property, the general trend of the sediments is north-south with a dip varying between 20° and 75° to the east. The dips appear to steepen to the west as the Nipissing-type diabase intrusive is approached.

From the topographic features, it is considered that a fault structure is present along the western edge of the property coincident with the Wanapitei River. The abrupt valley ranging from 0+00 to 1+50E may be a parallel fault lying east of the Nipissing-type diabase eastern contact or it may represent the Bruce - Serpent formation contact.

On L9+00N: 1+50W, faulting and shearing trending 050° to 070° and dipping vertically was observed. In the northeastern part of the property, there is fracturing, linear valleys and shearing which trend north-northeast along the face of the cliff. If the valley immediately to the west is a fault these may represent subsidiary structures from the main structure.

On L8+00N: 1+50W the Nipissing-type diabase/gabbro is mineralized with up to 5% disseminated chalcopyrite and pyrrhotite. The mineralization appears to be controlled by joints trending at 065° and 160° with mineralization visible over an area of approximately 10 metres x 4 to 5 metres. This mineralization corresponds to a magnetic low approximately 150 metres long trending 045°. Granophyric material is associated with this mineralization.

Pyrite and chalcopyrite mineralization was also observed on L4N: 0+75E in an old trench in diabase close to the sediment contact. This mineralization also coincides with a magnetic low trending north-south to north-northeast and with a strike length of 200 metres.

7. INTERPRETATION

The geological mapping and the geophysical work have confirmed the general geological picture as described by Meyn (1971). The eastern contact of a Nipissing-type diabase-gabbro intrusive runs approximately coincident with and parallel to the baseline. The western contact is approximately 100 metres east of the Wanapitei River. This diabase has been intruded as a sill-like body into the Bruce formation which dips at a moderate to steep angle to the east. Overlying the diabase sill and the Bruce formation to the east are the Serpent formation of the Bruce group.

A north to north-south trending fault structure is interpreted along the Wanapitei River and there may be a parallel fault structure along or immediately adjacent to the eastern contact of the diabase. Observed cross-faulting trends approximately 060° and interpreted faulting and shearing as well as some of the magnetic patterns suggest faults or shears trending north-northeast. These may be subsidiary splays off the main north-south structures.

Four prominent magnetic lows were indicated by the magnetic survey; two along the eastern diabase contact, one between L7+00N and 8+00N adjacent to the western edge of the diabase and one at L12N; 1+00W and 1+75W. The magnetic low at lines 7N and 8N adjacent to the western contact and the magnetic low at 5+00N along the eastern contact both have chalcopyrite and pyrrhotite mineralization associated with them. The third magnetic low on L9N: 0+25E has no surface mineralization or outcrop associated with it. However, the possibility remains that this magnetic low may also indicate sulphide mineralization and associated alteration. Two magnetic lows are present on L12N immediately west of the baseline.

The VLF-EM survey did not indicate any significant areas of conductivity apart from a weak conductor along the eastern contact of the diabase at L8+00N to 12+00N.

In summary, the combined geological and geophysical program has indicated two magnetic lows with associated chalcopyrite - pyrrhotite mineralization and two additional magnetic lows that may be due to sulphide mineralization. The mineralization appears to be structurally controlled by the diabase contact and/or northeast trending structures.

8. RECOMMENDATIONS

The 1992 exploration program has successfully identified two and possibly four areas of mineralization associated with the Nipissing-type gabbro-diabase within the area covered. It is recommended that these indications be followed up with more detailed work and that the balance of the property be evaluated for additional areas of mineralization. A recommended program is as follows.

1. Line-cutting, magnetometer survey and geological mapping of the balance of the property.
2. Detailed IP over areas of known and potential mineralization to outline the limits of the zones.
3. Stripping, trenching, washing, sampling, assaying and mapping in appropriate areas to evaluate geophysical / geological anomalies.
4. Diamond drilling of appropriate targets.

The objective of this work is to outline a mineralized body(s) of the appropriate size and grade that can be successfully mined.

Signed,

LDS Winter



L.D.S. Winter

B.A.Sc., M.Sc., P.Geo. (B.C.)

December 16, 1992

REFERENCES

1. Meyn, H.D., 1971

Geology of Roberts, Crellman and Fraleck Townships,
District of Sudbury, Geol. Report 91, Ontario Dept. of
Mines, 48 p.

2. Ministry of Northern Development and Mines

Geological Data Inventory Folio GDIF 545, Fraleck
Township.

3. Ministry of Northern Development and Mines

Assessment Files, Sudbury

CERTIFICATE OF QUALIFICATION

I, Lionel Donald Stewart Winter do hereby certify:

1. that I am a geologist and reside at 1849 Oriole Drive, Sudbury, Ontario, P3E 2W5,
2. that I am a registered geoscientist in the Association of Professional Engineers and Geoscientists of British Columbia,
3. that I am a Fellow of the Geological Association of Canada,
4. that I graduated from University of Toronto in Mining Engineering in 1957 with a Bachelor of Applied Science and from McGill University, Montreal in 1961 with a Master of Science (Applied) in Geology,
5. that I have practised my profession continuously since 1957,
6. that my report on the 1992 Exploration Program, Sudbury Mining Division, Ontario is based on my personal knowledge of the geology of the area, and on a review of information on the property and surrounding area, and supervision of the 1992 exploration program,
7. that I have no personal, direct or indirect interest in the Fraleck Township Property, Sudbury Mining Division, Ontario, or any adjacent properties, and I have written this report as a totally independent consultant.

LDS Winter



L.D.S. Winter
B.A.Sc., M.Sc., P.Geo.(B.C.)
December 16, 1992

APPENDIX 1

LIST OF PERSONNEL

1. Dan Patrie
P.O. Box 45
Massey, Ontario
P0P 1P0

2. Bryan Patrie
P.O. Box 45
Massey, Ontario
P0P 1P0

3. David Pilkey
Yves Clement
Stewart Winter
c/o Norwin Geological Ltd.
560 Notre Dame Avenue
Sudbury, Ontario
P3C 5L2

APPENDIX 2

GEOPHYSICAL DATA

OMNI PLUS

VLF/Magnetometer System

EDDA



Major Benefits of the OMNI PLUS

- Combined VLF/Magnetometer/Gradiometer System
- No Orientation Required
- Three VLF Magnetic Parameters Recorded
- Automatic Calculation of Fraser Filter
- Calculation of Ellipticity
- Automatic Correction of Primary Field Variations
- Measurement of VLF Electric Field

EDA

Specifications

Dynamic Range	18,000 to 110,000 gammas. Roll-over display feature suppresses first significant digit upon exceeding 100,000 gammas.
Tuning Method	Tuning value is calculated accurately utilizing a specially developed tuning algorithm
Automatic Fine Tuning	± 15% relative to ambient field strength of last stored value
Display Resolution	0.1 gamma
Processing Sensitivity	± 0.02 gamma
Statistical Error Resolution	0.01 gamma
Absolute Accuracy	± 1 gamma at 50,000 gammas at 23°C ± 2 gamma over total temperature range
Standard Memory Capacity	1,200 data blocks or sets of readings
Total Field or Gradient	100 data blocks or sets of readings
Tie-Line Points	5,000 data blocks or sets of readings
Base Station	Custom-designed, ruggedized liquid crystal display with an operating temperature range from -40°C to +55°C. The display contains six numeric digits, decimal point, battery status monitor, signal decay rate and signal amplitude monitor and function descriptors.
Display	2400 baud, 8 data bits, 2 stop bits, no parity
RS 232 Serial I/O Interface	6,000 gammas per meter (field proven)
Gradient Tolerance	A. Diagnostic testing (data and programmable memory) B. Self Test (hardware)
Test Mode	Optimized miniature design. Magnetic cleanliness is consistent with the specified absolute accuracy.
Sensor	0.5 meter sensor separation (standard), normalized to gammas/meter. Optional 1.0 meter sensor separation available. Horizontal sensors optional.
Gradient Sensors	Remains flexible in temperature range specified, includes strain-relief connector
Sensor Cable	Programmable from 5 seconds up to 60 minutes in 1 second increments
Cycling Time (Base Station Mode)	-40°C to +55°C; 0-100% relative humidity; weatherproof Non-magnetic rechargeable sealed lead-acid battery cartridge or belt; rechargeable NiCad or Disposable battery cartridge or belt; or 12V DC power source option for base station operation.
Operating Environmental Range	2,000 to 5,000 readings, for sealed lead acid power supply, depending upon ambient temperature and rate of readings
Power Supply	
Battery Cartridge/Belt Life	
Weights and Dimensions	
Instrument Console Only	2.8 kg, 238 x 150 x 250mm
NiCad or Alkaline Battery Cartridge	1.2 kg, 235 x 105 x 90mm
NiCad or Alkaline Battery Belt	1.2 kg, 540 x 100 x 40mm
Lead-Acid Battery Cartridge	1.8 kg, 235 x 105 x 90mm
Lead-Acid Battery Belt	1.8 kg, 540 x 100 x 40mm
Sensor	1.2 kg, 56mm diameter x 200mm
Gradient Sensor (0.5 m separation - standard)	2.1 kg, 56mm diameter x 790mm
Gradient Sensor (1.0 m separation - optional)	2.2 kg, 56mm diameter x 1300mm
Standard System Complement	Instrument console; sensor; 3-meter cable, aluminum sectional sensor staff, power supply, harness assembly, operations manual.
Base Station Option	Standard system plus 30 meter cable
Gradimeter Option	Standard system plus 0.5 meter sensor

EDA Instruments Inc
4 Thorncliffe Park Drive
Toronto Ontario
Canada M4H 1H1
Telex 0G 23222 EDA TOR
Cable Instruments Toronto
(416) 425 7800

In U.S.A.
EDA Instruments Inc
5151 W. 11th Road
Wheat Ridge, Colorado
U.S.A. 80033
(303) 422 9112

Printed in Canada

OMNI-PLUS Tie-line MAG/VLF V12L Ser #18080
 VLF TOTAL FIELD DATA (Tieline corrected)
 Date 15 DEC 92
 Operator: 3000
 Records: 127
 Bat: 17.9 Volt Lithium: 3.48 Volt
 Last time update: 12/15 12:10:00
 Start of print: 12/15 21:56:02

Line	0	Date	15 DEC 92	21.4	#1						
POSITION	I/P	QUAD	T.FLD	TILT	TIME	CULT	S	DIR	4-FRA	T	
0	70.3	0.2	3803.	16.0	12:56:04	99	0.0	!			
Line 1200		Date	15 DEC 92	24.0	#4						
POSITION	I/P	QUAD	T.FLD	TILT	TIME	CULT	S	DIR	4-FRA	T	
0	-25.4	-6.5	56.43	-14.2	13:37:48	54	-83.4				
25	-6.5	0.6	58.59	-3.7	13:38:50	49	-79.1				
50	9.0	1.5	56.30	5.1	13:39:27	49	-81.6				
75	12.6	2.1	55.01	7.1	13:40:00	59	-84.7	-30.1			
100	18.6	5.5	55.71	10.5	13:40:30	39	-86.6	-16.2			
125	15.5	5.0	54.98	8.8	13:41:02	39	86.2	-7.1			
150	13.8	6.3	50.73	7.8	13:41:37	49	-88.6	1.0			
175	8.1	3.0	48.62	4.6	13:42:33	39	89.5	6.9			
200	4.7	0.7	48.94	2.7	13:44:54	39	87.6	9.3			
225	2.3	-0.1	48.89	1.3	13:50:12	39	86.4	8.4			
250	0.7	-0.5	48.81	0.4	13:52:30	49	77.6	5.6			
275	1.3	-0.8	48.16	0.7	13:54:23	39	89.0	2.9			
300	-0.5	-1.4	48.75	-0.3	13:55:15	59	-89.3	1.3			
325	0.4	-0.3	48.38	0.2	13:56:04	59	85.0	1.2			
350	1.3	-0.2	47.84	0.7	13:57:12	29	87.4	-0.5			
375	2.4	0.3	48.05	1.4	13:58:04	49	88.0	-2.2			
Line 1100		Date	15 DEC 92	24.0	#20						
POSITION	I/P	QUAD	T.FLD	TILT	TIME	CULT	S	DIR	4-FRA	T	
375	-1.3	-2.7	47.45	-0.7	14:01:05	39	89.6				
350	-1.7	-3.0	47.84	-1.0	14:02:20	39	89.7				
325	-4.0	-3.4	48.36	-2.2	14:02:58	39	89.9				
300	-4.1	-3.8	47.59	-2.3	14:04:14	49	86.6	-2.8			
275	-4.2	-3.7	47.75	-2.4	14:05:02	49	82.8	-1.5			
250	-4.4	-3.2	46.96	-2.5	14:05:48	49	87.9	-0.4			
Line 1000		Date	15 DEC 92	24.0	#26						
POSITION	I/P	QUAD	T.FLD	TILT	TIME	CULT	S	DIR	4-FRA	T	
200	-1.5	-0.6	45.96	-0.9	14:09:19	49	-85.3				
225	-1.2	-0.9	46.03	-0.7	14:09:58	69	-80.1				
250	-1.4	-0.7	46.97	-0.8	14:10:47	69	-87.0				
275	-1.4	-1.0	46.55	-0.8	14:11:47	59	-88.6	0.0			
300	-1.2	-1.1	46.88	-0.6	14:12:56	69	-87.9	-0.1			
325	-1.4	-1.1	46.62	-0.8	14:13:57	59	86.4	-0.2			
350	-0.4	-0.8	46.93	-0.2	14:15:02	49	-86.2	-0.4			
375	0.0	-0.6	46.33	0.0	14:16:02	59	-89.5	-1.2			
400	0.0	-0.5	47.08	0.0	14:16:31	59	84.0	-1.0			

Line	900	Date	15 DEC 92	24.0	#35						
POSITION	I/P	QUAD	T.FLD	TILT	TIME	CULT	S	DIR	4-FRA	T	
400	-4.5	-3.1	46.89	-2.5	14:19:27	29	-68.0				
375	-3.7	-3.7	46.79	-2.1	14:20:59	49	87.6				
350	-5.0	-4.1	46.66	-2.9	14:21:56	69	82.6				
325	-5.5	-4.3	46.60	-3.1	14:22:57	49	88.1	-1.4			
300	-5.3	-3.9	46.59	-3.0	14:23:48	29	87.3	-1.1			
275	-4.5	-3.0	46.42	-2.6	14:24:43	59	-84.9	0.4			
250	-3.5	-2.8	46.42	-2.0	14:25:28	49	83.4	1.5			
Line	800	Date	15 DEC 92	24.0	#42						
POSITION	I/P	QUAD	T.FLD	TILT	TIME	CULT	S	DIR	4-FRA	T	
250	-1.2	-0.4	46.47	-0.6	14:27:10	59	-87.0				
275	-1.6	-0.4	46.37	-0.9	14:27:48	59	-89.2				
300	-2.4	-0.5	45.98	-1.3	14:28:44	59	81.4				
325	-2.3	-0.7	46.16	-1.3	14:29:42	69	83.3	1.1			
350	-3.5	-0.6	46.82	-2.0	14:32:08	69	65.3	1.1			
375	-2.0	-0.7	46.98	-1.1	14:34:11	59	81.7	0.5			
400	-1.2	-0.7	46.97	-0.7	14:35:15	49	78.4	-1.5			
425	-1.9	-1.3	47.03	-1.0	14:36:19	49	88.2	-1.4			
Line	700	Date	15 DEC 92	24.0	#50						
POSITION	I/P	QUAD	T.FLD	TILT	TIME	CULT	S	DIR	4-FRA	T	
450	-2.7	-2.8	46.61	-1.5	14:39:53	59	-83.0				
425	-3.0	-2.5	46.55	-1.7	14:41:06	59	-88.2				
400	-3.4	-2.7	46.62	-1.9	14:42:59	59	87.8				
375	-3.8	-2.9	46.59	-2.2	14:43:15	49	86.5	-0.9			
350	-4.5	-3.1	46.34	-2.5	14:44:09	59	86.1	-1.1			
325	-4.7	-2.5	46.20	-2.7	14:44:57	49	-87.0	-1.1			
300	-4.6	-2.4	46.65	-2.6	14:45:44	59	-86.6	-0.6			
275	-5.2	-2.2	46.91	-3.0	14:46:33	59	-89.8	-0.4			
250	-5.3	-2.5	47.33	-3.0	14:47:00	69	-87.7	-0.7			
Line	600	Date	15 DEC 92	24.0	#59						
POSITION	I/P	QUAD	T.FLD	TILT	TIME	CULT	S	DIR	4-FRA	T	
250	-1.8	0.5	46.35	-1.0	14:51:10	49	85.4				
275	-1.3	0.4	46.71	-0.7	14:52:25	59	89.6				
300	-1.3	0.3	46.22	-0.7	14:53:10	59	-87.3				
325	-1.7	0.3	47.12	-1.0	14:54:00	59	86.4	0.0			
350	-0.6	0.2	46.21	-0.3	14:54:41	69	-81.4	-0.1			
375	-0.7	0.3	46.45	-0.4	14:55:41	59	85.4	-1.0			
400	0.0	0.4	46.93	0.0	14:57:06	69	-88.7	-0.9			
425	0.7	0.3	47.65	0.4	14:58:14	69	-79.6	-1.1			
450	2.2	2.0	48.37	1.2	14:59:02	49	-88.2	-2.0			
Line	500	Date	15 DEC 92	24.0	#68						
POSITION	I/P	QUAD	T.FLD	TILT	TIME	CULT	S	DIR	4-FRA	T	
450	-3.1	-3.3	47.64	-1.8	15:02:14	49	89.2				
425	-3.3	-3.0	48.17	-1.9	15:04:26	59	-86.5				
400	-2.7	-2.6	48.03	-1.5	15:05:11	69	-88.7				
375	-2.5	-1.9	47.94	-1.4	15:06:07	59	-79.0	0.8			
350	-1.1	-0.5	48.22	-0.6	15:08:27	59	89.1	1.4			
325	1.9	2.1	47.83	1.1	15:09:55	39	84.5	3.4			
300	-0.2	-0.1	47.10	-0.1	15:11:46	49	79.3	3.0			
275	-2.6	-1.9	47.47	-1.5	15:12:31	59	-84.0	-2.1			

250	-3.3	-2.4	47.13	-1.8	15:13:18	69	87.3	-4.3
225	-3.2	-3.0	47.06	-1.8	15:14:18	49	77.5	-2.0
200	-2.8	-3.3	47.23	-1.6	15:14:45	39	72.9	-0.1

Line 400 Date 15 DEC 92 24.0 #79

POSITION	I/P	QUAD	T.FLD	TILT	TIME	CULT	S	DIR	4-FRA T
150	0.4	-1.7	46.62	0.2	15:18:10	49		-86.4	
175	-0.3	-1.3	46.69	-0.2	15:19:08	59		86.4	
200	-0.6	-1.1	46.68	-0.3	15:19:48	49		77.5	
225	-1.3	-2.2	46.80	-0.7	15:20:36	69		-89.8	1.0
250	-1.1	-1.9	47.94	-0.6	15:21:49	69		-87.9	0.8
275	0.5	-0.3	47.36	0.3	15:22:59	79		-85.2	-0.7
300	-1.0	-0.8	47.45	-0.5	15:23:57	49		83.6	-1.1
325	-0.3	-0.9	47.64	-0.1	15:24:49	49		-76.4	0.3
350	0.9	-0.8	47.25	0.5	15:25:33	65		-72.3	-0.6
375	0.6	-0.3	46.92	0.3	15:26:22	55		-88.6	-1.4
400	0.2	-1.1	47.16	0.1	15:27:09	39		-77.3	0.0

Line 300 Date 15 DEC 92 24.0 #90

POSITION	I/P	QUAD	T.FLD	TILT	TIME	CULT	S	DIR	4-FRA T
400	-2.2	-3.2	47.90	-1.2	15:29:00	65	49	-80.3	
375	-2.5	-3.0	47.05	-1.4	15:30:12	55	59	-75.2	
350	-2.4	-3.4	47.05	-1.4	15:31:03	65	69	-86.8	
325	-2.5	-3.5	46.86	-1.4	15:31:53	55	59	-81.8	-0.2
300	-2.8	-3.4	46.72	-1.6	15:32:55		59	-74.9	-0.2
275	-2.7	-3.5	46.76	-1.5	15:33:46		59	-80.1	-0.3
250	-4.9	-5.6	46.10	-2.8	15:34:51		79	-82.7	-1.3
225	-2.9	-4.2	45.91	-1.6	15:35:55		69	-86.0	-1.3
200	-3.1	-4.3	46.03	-1.8	15:36:50		49	-79.8	0.9
175	-3.0	-5.1	46.27	-1.7	15:37:49		59	-74.3	0.9

Line 200 Date 15 DEC 92 24.0 #100

POSITION	I/P	QUAD	T.FLD	TILT	TIME	CULT	S	DIR	4-FRA T
175	1.6	-2.9	46.89	0.9	15:40:23	49		-78.3	
200	1.1	-1.9	46.71	0.6	15:41:42	65	59	89.8	
225	2.1	-1.3	46.41	1.2	15:42:39	55	69	-75.6	
250	1.8	-0.5	47.16	1.0	15:43:46		59	-78.2	-0.7
275	1.0	0.0	46.48	0.6	15:44:45		49	80.5	0.2
300	2.0	-0.1	46.42	1.1	15:45:38		49	-77.4	0.5
325	1.2	-0.1	47.22	0.7	15:46:59	65	49	-82.5	-0.2
350	0.5	-0.3	47.25	0.2	15:47:40	55	49	88.8	0.8
375	0.7	-0.6	47.07	0.4	15:48:21	65	59	-82.6	1.2
400	-0.3	-1.2	46.72	-0.2	15:49:14	55	49	-89.5	0.7

Line 100 Date 15 DEC 92 24.0 #110

POSITION	I/P	QUAD	T.FLD	TILT	TIME	CULT	S	DIR	4-FRA T
400	-2.9	-4.1	47.17	-1.7	15:51:55		59	-81.4	
375	-2.3	-3.8	47.35	-1.3	15:53:05		59	-85.5	
350	-2.6	-3.7	47.02	-1.5	15:53:59		59	-87.4	
325	-2.0	-3.5	47.00	-1.1	15:54:53		49	-89.2	0.4
300	-1.4	-3.4	47.07	-0.8	15:55:45		49	88.0	0.9
275	-1.2	-3.3	46.78	-0.6	15:56:35	65	79	86.7	1.2
250	-1.1	-4.4	47.54	-0.6	15:57:27	55	59	84.1	0.7
225	-1.1	-5.1	47.14	-0.6	15:58:26		59	80.6	0.2
200	-1.9	-5.9	47.13	-1.1	15:59:00	65	59	-80.9	-0.5

Line 0 Date 15 DEC 92 24.0 #119
 POSITION I/P QUAD T.FLD TILT TIME CULT S DIR 4-FRA T
 225 -0.1 -5.1 47.04 0.0 16:02:00 55 49 -68.0
 250 0.0 -3.6 46.88 0.0 16:03:24 69 87.3
 275 0.8 -2.4 47.20 0.5 16:04:12 49 -84.0
 300 0.5 -1.7 46.87 0.3 16:05:01 65 59 85.2 -0.8
 325 0.6 -1.5 46.45 0.3 16:05:59 55 49 -80.8 -0.1
 350 -0.3 -1.5 46.52 -0.2 16:06:45 65 59 86.8 0.7
 375 0.2 -1.8 46.33 0.1 16:07:27 49 -81.8 0.7
 400 -0.1 -2.5 46.62 0.0 16:07:59 55 49 -69.3 0.0
 175 -3.1 -9.6 46.07 -1.8 16:16:52 49 -76.2 -1.9
 -200 14.3 -8.9 50.52 8.1 13:04:54 59 -76.7
 -175 13.0 -8.7 50.19 7.4 13:08:06 49 -73.5
 -150 9.8 -8.5 49.40 5.6 13:10:08 69 -86.8
 -125 9.5 -7.9 48.74 5.4 13:11:19 49 -84.5 4.5
 -100 8.7 -7.5 48.84 4.9 13:13:29 59 89.6 2.7
 -75 8.3 -7.2 48.47 4.7 13:14:13 49 -85.8 1.4
 -50 8.6 -7.0 48.15 4.9 13:14:59 59 -80.8 0.7
 -25 8.1 -7.2 47.41 4.6 13:15:58 59 -84.9 0.1
 0 8.5 -7.3 47.28 4.8 13:17:09 49 -76.3 0.2
 25 7.1 -7.1 46.91 4.0 13:18:01 59 -83.7 0.7
 50 6.6 -7.8 46.74 3.8 13:18:44 59 -77.8 1.6
 75 5.8 -7.5 47.06 3.3 13:19:33 59 -77.4 1.7
 100 2.8 -8.1 46.90 1.6 13:20:29 69 -75.8 2.9
 125 1.9 -8.4 46.46 1.1 13:21:15 59 -81.1 4.4
 150 0.5 -9.1 46.75 0.3 13:22:09 59 -78.5 3.5
 175 -0.4 -9.7 48.17 -0.2 13:22:55 59 -75.6 2.6

Line 200 Date 15 DEC 92 24.0 #19
 POSITION I/P QUAD T.FLD TILT TIME CULT S DIR 4-FRA T
 150 -1.6 -5.6 47.13 -0.9 13:29:58 49 -85.2
 125 -2.2 -7.7 46.70 -1.2 13:32:04 69 -82.4
 100 -2.0 -7.4 46.71 -1.1 13:33:00 69 -89.5
 75 -2.1 -8.2 46.30 -1.2 13:33:38 69 -83.6 -0.2
 50 -1.8 -8.7 46.35 -1.0 13:34:20 69 87.1 0.1
 25 1.7 -7.6 46.70 0.9 13:35:06 59 73.9 2.2
 0 2.0 -7.4 47.30 1.1 13:36:17 69 84.2 4.2
 -25 2.3 -7.6 46.96 1.3 13:37:28 59 -84.7 2.5
 -50 3.3 -6.8 46.69 1.9 13:38:20 59 -77.7 1.2
 -75 6.2 -5.9 46.90 3.5 13:39:03 69 -83.3 3.0
 -100 7.3 -5.2 47.55 4.1 13:39:48 69 -78.4 4.4
 -125 8.9 -5.2 47.39 5.1 13:40:33 69 89.2 3.8
 -150 10.1 -4.6 48.37 5.7 13:41:15 59 -88.1 3.2
 -175 12.2 -3.8 48.13 6.9 13:42:03 58 -89.4 3.4

Line 400 Date 15 DEC 92 24.0 #33
 POSITION I/P QUAD T.FLD TILT TIME CULT S DIR 4-FRA T
 -250 16.4 -0.2 47.90 9.3 13:48:38 59 -76.5
 -225 14.9 -0.1 47.37 8.4 13:50:07 59 -80.2
 -200 12.6 -0.8 46.65 7.1 13:51:42 59 89.5
 -175 9.6 -2.7 45.75 5.5 13:52:56 59 86.6 5.1
 -150 9.3 -3.2 45.37 5.3 13:53:59 59 -78.3 4.7
 -125 8.1 -2.6 45.60 4.6 13:55:30 49 -82.2 2.7
 -100 4.8 -3.5 45.41 2.7 13:56:47 59 -83.2 3.5

-50	2.1	-4.9	45.64	1.2	13:59:26	39	87.7	4.6
-25	1.7	-4.8	45.86	0.9	14:00:43	69	-70.5	2.1
0	1.3	-4.2	46.04	0.7	14:02:05	69	-85.5	1.1
25	1.2	-3.9	45.97	0.6	14:02:45	59	-85.8	0.8
50	-0.1	-3.6	46.14	0.0	14:03:57	59	83.5	1.0
75	0.0	-3.5	46.08	0.0	14:04:42	59	87.2	1.3
100	-2.2	-4.0	45.94	-1.3	14:06:15	39	70.5	1.9
125	-3.3	-4.8	46.30	-1.9	14:06:58	59	81.6	3.2
150	-5.7	-5.4	46.21	-3.2	14:07:36	59	75.6	3.8

Line 600 Date 15 DEC 92 24.0 #50

POSITION	I/P	QUAD	T.FLD	TILT	TIME	CULT	S	DIR	4-FRA T
225	-3.4	-0.5	45.56	-1.9	14:14:01	59	83.3		
200	-5.8	-1.6	45.63	-3.3	14:15:37	59	-81.1		
175	-5.7	-2.0	45.79	-3.2	14:16:33	59	-89.8		
150	-6.7	-2.8	45.64	-3.8	14:18:01	59	-78.7	-1.8	
125	-5.4	-2.3	45.98	-3.1	14:18:38	59	-84.3	-0.4	
100	-4.1	-2.3	45.36	-2.3	14:19:18	59	-89.6	1.6	
75	-3.8	-2.6	45.33	-2.2	14:19:52	69	-79.3	2.4	
50	-3.0	-3.2	45.26	-1.7	14:20:35	69	82.1	1.5	
25	-2.8	-3.2	45.51	-1.6	14:21:12	69	84.7	1.2	
0	-3.3	-3.6	44.95	-1.9	14:22:01	59	-81.0	0.4	
-25	-2.8	-3.8	40.99	-1.6	14:23:19	59	-85.3	-0.2	
-50	-1.4	-4.6	40.79	-0.8	14:24:36	69	-83.0	1.1	
-75	-1.7	-5.1	45.42	-1.0	14:25:58	59	83.5	1.7	
-100	-1.6	-4.7	45.64	-0.9	14:26:44	69	86.3	0.5	
-125	-1.2	-4.6	45.20	-0.6	14:27:28	39	-87.0	0.3	
-150	-0.6	-5.3	45.32	-0.3	14:28:22	59	85.4	1.0	
-175	0.3	-5.0	44.81	0.2	14:29:02	59	-81.3	1.4	
-200	1.7	-4.6	45.79	1.0	14:29:40	59	-85.6	2.1	
-225	6.5	-2.0	44.45	3.7	14:30:23	59	-89.0	4.8	
-250	8.3	-1.4	44.91	4.7	14:31:07	49	82.0	7.2	
-275	8.2	-2.0	44.83	4.7	14:31:34	59	84.9	4.7	

Line 800 Date 15 DEC 92 24.0 #71

POSITION	I/P	QUAD	T.FLD	TILT	TIME	CULT	S	DIR	4-FRA T
-300	5.5	-2.3	44.34	3.1	14:42:20	49	-82.8		
-275	2.9	-3.6	44.74	1.6	14:43:48	59	-85.6		
-250	0.9	-4.4	45.52	0.5	14:44:34	69	-89.9		
-225	2.1	-3.9	45.36	1.2	14:45:24	59	-85.0	3.0	
-200	0.6	-4.1	45.24	0.3	14:46:00	59	80.6	0.6	
-175	-0.3	-4.7	46.25	-0.1	14:47:02	59	71.5	1.5	
-150	-0.6	-4.7	46.11	-0.3	14:48:01	49	79.3	1.9	
-125	-0.8	-4.7	46.43	-0.4	14:48:30	59	81.6	0.9	
-100	-3.7	-5.1	46.55	-2.1	14:49:48	49	86.3	2.1	
-75	-3.7	-5.5	46.65	-2.1	14:50:56	59	-84.1	3.5	
-50	-3.5	-5.2	47.13	-2.0	14:51:56	29	88.3	1.6	
-25	-4.5	-5.1	46.89	-2.6	14:52:34	59	-89.0	0.4	
0	-6.0	-4.9	47.01	-3.4	14:53:25	59	83.0	1.9	
25	-5.7	-4.2	47.65	-3.3	14:54:37	69	-79.9	2.1	
50	-5.7	-3.2	47.34	-3.3	14:55:25	59	-81.0	0.6	
75	-8.4	-3.3	47.18	-4.8	14:56:19	59	-85.6	1.4	
100	-12.1	-5.4	46.94	-6.9	14:57:01	68	-85.5	5.1	
125	-15.7	-7.7	50.71	-8.9	14:57:43	46	-86.7	7.7	
150	-6.4	-2.3	53.93	-3.7	14:58:47	59	-80.4	0.9	
175	-8.0	-2.6	58.51	-4.5	15:00:02	69	-84.2	-7.6	

200	1.7	1.0	53.67	1.0	15:01:04	49	-87.6	-9.1
225	2.0	1.2	51.20	1.1	15:01:39	59	84.9	-10.3

Line	1000	Date	15 DEC 92	24.0	#93				
POSITION	I/P	QUAD	T.FLD	TILT	TIME	CULT	S	DIR	4-FRA T
225	-5.0	-2.6	49.50	-2.8	15:21:20	29	-86.0		
200	-3.3	-2.1	49.09	-1.9	15:22:43	59	81.4		
175	-4.8	-2.7	49.09	-2.7	15:23:29	59	77.2		
150	-3.6	-2.6	48.36	-2.1	15:24:22	59	82.8	-0.1	
125	-5.6	-3.2	47.97	-3.2	15:25:03	39	77.3	-0.7	
100	0.0	-0.5	47.06	0.0	15:26:18	59	-78.6	1.6	
75	-14.2	-5.2	52.86	-8.1	15:27:10	59	-77.6	-2.8	
50	-18.8	-8.0	49.43	-10.6	15:28:15	49	-85.6	-15.5	
25	-11.3	-4.5	48.90	-6.4	15:31:35	19	72.6	-8.9	
0	-7.8	-3.2	47.97	-4.4	15:33:42	9	82.8	7.9	
-25	-9.1	-3.0	47.91	-5.1	15:37:29	29	-71.3	7.5	
-50	-8.1	-3.0	48.49	-4.6	15:39:16	19	88.6	1.1	
-75	-6.7	-2.7	48.63	-3.8	15:40:05	69	-82.7	1.1	
-100	-6.2	-2.7	48.05	-3.5	15:41:28	49	-88.6	2.4	
-125	-5.9	-3.2	48.12	-3.3	15:42:22	49	-88.6	1.6	
-150	-4.9	-3.4	48.23	-2.8	15:43:25	59	-87.3	1.2	
-175	-5.9	-4.4	48.54	-3.3	15:44:33	49	84.8	0.7	
-200	-6.0	-5.3	48.10	-3.4	15:45:19	39	-82.6	-0.6	
-225	-6.6	-5.6	47.64	-3.8	15:45:55	49	-77.0	-1.1	
-250	-6.0	-5.6	48.14	-3.4	15:46:31	59	-74.5	-0.5	
-275	-9.2	-7.7	48.03	-5.2	15:48:20	59	-77.2	-1.4	
-300	-8.4	-8.6	48.04	-4.8	15:49:14	29	88.5	-2.8	
-325	-10.7	-10.0	49.58	-6.1	15:50:10	49	89.6	-2.3	
-350	-13.7	-10.4	49.67	-7.8	15:50:40	49	78.2	-3.9	

Line	100	Date	15 DEC 92	24.0	#3				
POSITION	I/P	QUAD	T.FLD	TILT	TIME	CULT	S	DIR	4-FRA T
175	10.2	-8.4	52.96	5.8	13:10:27	55	69	85.6	
-150	10.2	-7.5	51.37	5.8	13:12:31	49	78.3		
-150	8.6	-7.1	50.13	4.9	13:14:39	59	70.0	#	
-100	8.1	-6.6	49.22	4.6	13:17:02	59	68.0		
-125	-10.0	6.7	48.72	-5.7	13:18:38	59	-88.7	1.3	
-50	8.6	-6.5	48.90	4.9	13:20:04	59	83.5	-0.2	
-25	8.5	-6.5	47.84	4.8	13:21:44	59	-86.6	0.6	
0	6.8	-6.5	48.38	3.9	13:22:36	49	86.6	1.9	
25	8.7	-6.6	46.90	4.9	13:23:20	69	-61.1	0.9	
50	4.8	-7.4	47.87	2.7	13:24:04	69	-89.2	1.1	
75	1.9	-7.6	48.77	1.1	13:24:45	59	-84.0	5.0	
100	2.0	-7.3	48.77	1.1	13:25:32	49	88.6	5.4	
125	2.2	-6.9	49.06	1.2	13:26:21	49	88.8	1.5	
150	-0.2	-8.3	48.71	-0.1	13:27:09	59	89.7	1.1	
175	2.9	-5.7	48.57	1.7	13:27:49	59	-74.1	0.7	

Line	300	Date	15 DEC 92	24.0	#18				
POSITION	I/P	QUAD	T.FLD	TILT	TIME	CULT	S	DIR	4-FRA T
175	-4.9	-6.1	48.16	-2.8	13:34:17	69	86.8		
150	-6.5	-6.9	47.38	-3.7	13:35:33	69	-87.5		
125	-4.9	-5.8	46.90	-2.8	13:36:14	59	-87.4		
100	-3.7	-5.4	47.31	-2.1	13:37:03	59	-81.6	1.6	
75	-1.8	-4.0	47.25	-1.0	13:37:54	49	-89.0	3.4	
50	-1.0	-4.3	47.03	-0.6	13:38:37	49	-89.1	3.3	

25	-0.9	-4.6	47.02	-0.5	13:39:14	59	-82.5	2.0
0	2.1	-4.3	46.79	1.2	13:39:46	69	87.3	2.3
-25	1.1	-4.7	45.77	0.6	13:40:18	49	-80.3	2.9
-50	1.7	-4.6	46.41	1.0	13:40:46	59	-82.1	0.9
-75	2.0	-3.9	47.92	1.1	13:41:40	49	-82.6	0.3
-100	3.9	-3.9	47.85	2.2	13:42:35	69	86.3	1.7
-125	4.9	-3.6	47.55	2.8	13:43:22	59	83.5	2.9
-150	5.0	-3.5	47.36	2.9	13:44:35	59	-89.1	2.4
-175	9.5	-2.1	48.88	5.4	13:45:32	69	-86.1	3.3
-200	12.0	0.0	49.67	6.8	13:46:17	39	-77.6	6.5

Line 500 Date 15 DEC 92 24.0 #34

POSITION	I/P	QUAD	T.FLD	TIILT	TIME	CULT	S	DIR	4-FRA T
-275	9.9	-4.1	46.49	5.6	13:53:38	39	82.8		
-250	7.6	-4.3	45.63	4.3	13:54:34	79	89.9		
-225	4.4	-4.6	45.26	2.5	13:55:15	59	81.4		
-200	5.5	-4.6	45.36	3.1	13:55:55	39	87.3	4.3	
-175	4.0	-4.8	46.06	2.2	13:56:37	59	83.9	1.5	
-150	4.9	-5.1	45.83	2.8	13:57:29	59	-84.0	0.6	
-125	1.3	-4.5	46.09	0.7	13:58:36	69	76.7	1.8	
-100	2.0	-4.4	46.47	1.1	13:59:26	59	83.9	3.2	
-75	-1.3	-4.7	46.82	-0.7	14:01:22	9	71.4	3.1	
-50	0.4	-4.8	47.22	0.2	14:03:59	59	84.3	2.3	
-25	2.0	-4.2	47.51	1.1	14:05:18	59	-81.6	-0.9	
0	0.8	-3.5	46.74	0.5	14:06:00	69	-83.9	-2.1	
25	-0.7	-3.7	48.86	-0.4	14:07:02	59	82.2	1.2	
50	-0.8	-4.0	49.03	-0.4	14:07:35	49	80.4	2.4	
75	-1.1	-3.0	46.86	-0.6	14:08:23	59	80.4	1.1	
100	-3.0	-3.3	47.19	-1.7	14:08:58	49	74.5	1.5	
125	-6.5	-5.4	47.34	-3.7	14:09:35	49	68.3	4.4	
150	-4.8	-3.0	47.35	-2.7	14:10:19	59	77.3	4.1	
175	-3.1	-2.3	47.19	-1.7	14:10:54	49	82.6	-1.0	

Line 700 Date 15 DEC 92 24.0 #53

POSITION	I/P	QUAD	T.FLD	TIILT	TIME	CULT	S	DIR	4-FRA T
225	-6.0	0.1	44.02	-3.4	14:19:20	59	-80.9		
200	-8.4	-1.5	45.67	-4.8	14:20:29	59	-87.8		
175	-7.0	-1.1	46.26	-4.0	14:21:14	59	86.7		
150	-6.6	-0.9	45.97	-3.7	14:21:58	49	-85.5	0.5	
125	-7.5	-0.7	46.14	-4.3	14:22:55	59	-71.6	0.8	
100	-6.0	-1.3	46.94	-3.4	14:23:44	59	-85.3	0.0	
75	-5.9	-2.2	41.56	-3.4	14:24:35	59	-89.4	1.2	
50	-6.0	-2.4	45.06	-3.4	14:25:23	69	84.5	0.9	
25	-4.4	-2.6	44.98	-2.5	14:26:24	59	-87.9	0.9	
0	-2.8	-2.5	44.95	-1.6	14:27:55	59	83.0	2.7	
-25	-4.0	-3.1	45.24	-2.3	14:33:10	49	-86.7	2.0	
-50	-1.5	-2.5	45.81	-0.8	14:33:53	49	77.6	1.0	
-75	-1.3	-2.0	46.35	-0.7	14:34:39	59	-85.6	2.4	
-100	-3.5	-4.2	45.37	-2.0	14:35:23	59	-81.8	0.4	
-125	-1.5	-3.6	45.83	-0.8	14:36:29	49	-84.5	-1.3	
-150	0.0	-3.3	45.30	0.0	14:37:11	69	-88.1	1.9	
-175	1.4	-3.3	45.21	0.8	14:37:46	49	89.7	3.6	
-200	-0.3	-3.2	44.36	-0.2	14:38:20	59	-75.3	1.4	
-225	4.8	-1.7	44.36	2.8	14:38:57	59	77.8	1.8	
-250	4.8	-2.0	44.60	2.7	14:39:25	59	79.3	4.9	

Line 900 Date 15 DEC 92 24.0 #73

POSITION	I/P	QUAD	T.FLD	TIILT	TIME	CULT S	DIR	4-FRA T
-325	-1.4	-6.2	44.97	-0.8	14:44:56	59	82.7	
-300	-0.7	-6.4	44.93	-0.4	14:45:50	69	-88.3	
-275	0.1	-6.3	46.68	0.0	14:47:23	69	-78.1	
-250	0.7	-6.2	46.21	0.4	14:48:53	49	-73.7	-1.6
-225	-2.9	-6.0	47.74	-1.6	14:51:29	29	-85.5	0.8
-200	-0.4	-5.9	48.31	-0.2	14:53:35	29	-79.9	2.2
-175	-1.1	-4.6	51.31	-0.6	14:58:28	39	-83.3	-0.4
-150	-4.9	-4.0	49.83	-2.8	14:59:56	49	75.9	1.6
-125	-0.2	-3.5	51.25	-0.1	15:00:58	49	-76.3	2.1
-100	-7.1	-3.2	49.77	-4.0	15:02:06	39	56.7	0.7
-75	-4.6	-3.6	51.20	-2.6	15:05:31	59	81.8	3.7
-50	-5.4	-3.8	50.38	-3.1	15:07:18	29	76.4	1.6
-25	-6.7	-3.4	49.44	-3.8	15:08:32	39	80.4	0.3
0	-6.6	-3.3	49.38	-3.8	15:09:43	69	-89.8	1.9
25	-8.4	-3.9	50.00	-4.8	15:10:59	69	83.6	1.7
50	-10.7	-4.5	50.41	-6.1	15:11:56	69	73.6	3.3
75	-11.8	-4.7	55.63	-6.7	15:13:35	58	85.1	4.2
100	-5.3	-2.8	54.66	-3.0	15:14:17	59	-89.7	-1.2
125	7.6	1.3	52.26	4.3	15:14:57	69	86.2	-14.1
150	0.8	0.7	51.92	0.4	15:16:00	39	62.7	-14.4
175	3.4	1.4	50.40	1.9	15:17:02	39	81.8	-1.0
200	2.3	0.0	49.23	1.3	15:17:56	59	-88.3	1.5
225	2.2	-0.2	49.53	1.2	15:18:46	59	-89.8	-0.2

Line 1100 Date 15 DEC 92 24.0 #96

POSITION	I/P	QUAD	T.FLD	TIILT	TIME	CULT S	DIR	4-FRA T
225	-4.1	-2.1	53.58	-2.3	15:25:54	59	78.5	
200	-1.6	-1.8	53.77	-0.9	15:27:12	69	70.3	
175	-4.8	-3.0	55.02	-2.7	15:27:48	49	75.5	
150	-12.4	-6.9	56.04	-7.0	15:28:42	39	82.0	-6.5
125	-9.5	-3.9	56.71	-5.4	15:29:23	49	82.8	-8.8
100	-14.6	-4.3	57.12	-8.3	15:29:57	29	82.9	-4.0
75	-16.6	-4.3	57.28	-9.4	15:30:36	29	85.0	-5.3
50	-32.4	-12.3	54.44	-17.9	15:31:05	39	82.2	-13.6
25	-23.7	-10.6	49.58	-13.3	15:31:40	39	69.0	-13.5
0	-15.5	-5.4	49.36	-8.8	15:33:23	59	82.7	5.2
-25	-10.7	-2.8	48.74	-6.1	15:35:33	49	82.9	16.3
-50	-5.0	-2.1	48.17	-2.9	15:37:07	49	66.3	13.1
-75	-3.6	-2.1	48.57	-2.0	15:38:08	59	60.7	10.0
-100	-4.9	-1.6	48.33	-2.8	15:38:56	59	88.8	4.2
-125	-6.2	-1.7	48.74	-3.5	15:39:35	49	-85.6	-1.4
-150	-3.3	-1.6	48.40	-1.8	15:40:28	49	82.4	-0.5
-175	-1.1	-1.8	48.85	-0.6	15:41:35	49	72.6	3.9
-200	-1.8	-2.4	49.36	-1.0	15:42:35	19	77.4	3.7
-225	1.0	-1.4	49.26	0.5	15:43:21	49	62.1	1.9
-250	-0.2	-4.0	49.02	-0.1	15:44:12	49	79.3	2.0
-275	-2.9	-5.3	49.83	-1.6	15:44:56	69	76.4	-1.2

Line 1200 Date 15 DEC 92 24.0 #117

POSITION	I/P	QUAD	T.FLD	TIILT	TIME	CULT S	DIR	4-FRA T
-275	5.3	-4.7	53.32	3.0	15:48:44	19	68.7	
-250	5.0	-3.7	51.12	2.9	15:49:56	69	-83.0	
-225	3.5	-3.8	49.86	2.0	15:50:46	49	-77.3	
-200	-1.6	-3.2	49.90	-0.9	15:51:53	39	70.4	4.8

-175	0.5	-2.5	50.74	0.3	15:52:47	59	80.0	5.5
-150	-4.7	-2.4	51.62	-2.7	15:54:01	59	52.8	3.5
-125	-7.5	-2.4	50.06	-4.2	15:55:54	36	41.6	6.3
-100	-8.3	-2.9	51.51	-4.7	15:57:24	49	50.1	6.5
-75	-9.1	-3.5	52.12	-5.2	15:59:13	69	78.8	3.0
-50	-10.8	-5.8	53.83	-6.1	16:00:32	59	-65.0	2.4
-25	-14.3	-6.0	56.00	-8.1	16:01:16	68	-88.8	4.3
0	-23.3	-8.4	59.24	-13.1	16:01:55	46	-89.7	9.9
25	-4.6	-0.8	61.80	-2.6	16:02:24	49	-85.7	1.5
50	9.9	0.7	59.36	5.6	16:02:55	49	-88.8	-24.2
75	12.8	1.3	57.95	7.3	16:03:25	59	88.8	-28.6
100	16.4	4.5	59.38	9.3	16:03:55	69	77.6	-13.6

EOF

OMNI-IV Tie-line MAG Ser #18081
TOTAL FIELD DATA (Base stn. corrected)

Reference field: 58000.0
Datum subtracted: 58000.0 Date 15 DEC 92
Operator: 3000
Records: 132
Bat: 17.8 Volt Lithium: 3.50 Volt
Last time update: 12/15 12:10:00
Start of print: 12/15 21:51:51

Line 100 Date 15 DEC 92 #3
POSITION FIELD ERR DRIFT TIME DS CULT
175 23.0 .04 5.7 13:10:27 88
-150 51.2 .04 5.8 13:12:31 88
-150 49.8 .04 6.6 13:14:39 88
-100 45.2 .04 6.9 13:17:02 88
-125 41.0 .04 7.5 13:18:38 88
-50 72.5 .04 7.0 13:20:04 88
-25 64.9 .04 5.8 13:21:44 88
0 103.5 .04 5.6 13:22:36 88
25 92.5 .04 5.8 13:23:20 88
50 116.1 .04 5.8 13:24:04 88
75 100.0 .04 5.8 13:24:45 88
100 135.9 .04 5.9 13:25:32 88
125 133.5 .05 5.8 13:26:21 88
150 109.5 .04 5.6 13:27:09 88
175 85.1 .05 5.8 13:27:49 88

Line 300 Date 15 DEC 92 #18
POSITION FIELD ERR DRIFT TIME DS CULT
175 92.4 .04 4.8 13:34:17 88
150 108.2 .05 4.7 13:35:33 88
125 104.7 .04 4.7 13:36:14 88
100 84.4 .05 4.3 13:37:03 88

75	105.7	.04	4.5	13:37:54	88
50	59.0	.04	4.4	13:38:37	88
25	121.8	.05	4.3	13:39:14	88
0	90.9	.05	4.5	13:39:46	88
-25	75.4	.04	4.7	13:40:18	88
-50	87.5	.04	4.6	13:40:46	88
-75	25.2	.04	4.7	13:41:40	88
-100	46.6	.04	4.5	13:42:35	88
-125	54.3	.04	4.1	13:43:22	88
-150	45.1	.04	3.8	13:44:35	88
-175	323.5	.06	3.4	13:45:32	88
-200	18.4	.04	3.5	13:46:17	88

Line 500 Date 15 DEC 92 #34

POSITION	FIELD	ERR	DRIFT	TIME	DS CULT
-275	18.2	.05	4.0	13:53:38	88
-250	4.0	.04	4.9	13:54:34	88
-225	-5.6	.04	5.3	13:55:15	88
-200	-12.8	.06	4.2	13:55:55	88
-175	19.8	.06	4.6	13:56:37	88
-150	4.2	.04	4.3	13:57:29	88
-125	48.0	.05	3.0	13:58:36	88
-100	67.7	.04	3.0	13:59:26	88
-75	62.0	.05	3.0	14:01:22	88
-50	76.7	.05	3.5	14:03:59	88
-25	89.2	.04	3.4	14:05:18	88
0	91.5	.05	4.1	14:06:00	88
25	136.5	.05	3.4	14:07:02	88
50	102.1	.04	3.3	14:07:35	88
75	-41.3	.05	3.3	14:08:23	88
100	67.3	.06	3.5	14:08:58	88
125	-20.0	.04	3.8	14:09:35	88
150	77.2	.06	4.0	14:10:19	88
175	107.9	.05	4.1	14:10:54	88

Line 700 Date 15 DEC 92 #53

POSITION	FIELD	ERR	DRIFT	TIME	DS CULT
225	-11.0	.06	4.8	14:19:20	88
200	27.3	.06	4.3	14:20:29	88
175	73.1	.05	4.0	14:21:14	88
150	33.5	.05	4.1	14:21:58	88
125	58.9	.05	4.3	14:22:55	88
100	85.7	.05	4.4	14:23:44	88
75	189.2	.05	4.5	14:24:35	88
50	72.0	.04	4.8	14:25:23	88
25	100.4	.05	5.4	14:26:24	88
0	101.2	.05	4.9	14:27:55	88
-25	49.7	.04	5.4	14:33:10	88
-50	96.5	.04	5.3	14:33:53	88
-75	53.1	.05	5.7	14:34:39	88
-100	80.8	.04	5.8	14:35:23	88
-125	104.5	.04	5.4	14:36:29	88
-150	59.7	.04	5.8	14:37:11	88
-175	-146.4	.04	6.1	14:37:46	88
-200	-117.8	.06	6.3	14:38:20	88
-225	-61.3	.06	6.2	14:38:57	88

-250 -30.0 .06 5.9 14:39:25 88

Line 900 Date 15 DEC 92 #73
POSITION FIELD ERR DRIFT TIME DS CULT
-325 24.0 .07 5.5 14:44:56 88
-300 29.9 .05 5.1 14:45:50 88
-275 1.2 .05 5.5 14:47:23 88
-250 21.2 .05 5.7 14:48:53 88
-225 36.7 .05 5.9 14:51:29 88
-200 25.3 .04 6.0 14:53:35 88
-175 71.6 .04 5.2 14:58:28 88
-150 47.4 .05 4.7 14:59:56 88
-125 73.4 .05 4.8 15:00:58 88
-100 64.1 .04 5.3 15:02:06 88
-75 78.1 .05 7.0 15:05:31 88
-50 117.4 .05 7.3 15:07:18 88
-25 167.7 .05 7.2 15:08:32 88
0 -173.0 .04 7.5 15:09:43 88
25 -213.9 .06 7.0 15:10:59 88
50 -148.6 .05 6.7 15:11:56 88
75 23.4 .07 6.9 15:13:35 88
100 18.7 .05 7.4 15:14:17 88
125 6.0 .05 7.9 15:14:57 88
150 39.7 .05 7.9 15:16:00 88
175 59.6 .04 9.0 15:17:02 88
200 -56.3 .05 9.8 15:17:56 88
225 33.3 .07 9.9 15:18:46 88

Line 1100 Date 15 DEC 92 #96
POSITION FIELD ERR DRIFT TIME DS CULT
225 72.2 .04 11.6 15:25:54 88
200 70.4 .05 12.4 15:27:12 88
175 56.7 .04 12.4 15:27:48 88
150 33.4 .05 12.8 15:28:42 88
125 45.6 .05 12.8 15:29:23 88
100 36.6 .05 12.3 15:29:57 88
75 26.3 .04 12.0 15:30:36 88
50 16.2 .05 11.8 15:31:05 88
25 24.6 .05 12.0 15:31:40 88
0 18.2 .05 12.3 15:33:23 88
-25 157.6 .06 12.8 15:35:33 88
-50 183.1 .06 13.3 15:37:07 88
-75 106.6 .05 14.0 15:38:08 88
-100 19.9 .05 14.5 15:38:56 88
-125 32.7 .05 14.9 15:39:35 88
-150 43.5 .04 15.5 15:40:28 88
-175 35.1 .05 16.0 15:41:35 88
-200 35.8 .05 16.5 15:42:35 88
-225 35.3 .05 17.0 15:43:21 88
-250 12.7 .05 17.6 15:44:12 88
-275 6.6 .05 18.0 15:44:56 88

Line 1200 Date 15 DEC 92 #117
POSITION FIELD ERR DRIFT TIME DS CULT
-275 18.9 .05 19.3 15:48:44 88
-250 84.5 .05 18.9 15:49:56 88

-225	92.4	.05	18.7	15:50:46	88
-200	-19.0	.05	18.6	15:51:53	88
-175	-95.9	.06	18.9	15:52:47	88
-150	12.4	.07	19.4	15:54:01	88
-125	67.4	.06	19.4	15:55:54	88
-100	-40.8	.05	19.2	15:57:24	88
-75	168.7	.06	19.2	15:59:13	88
-50	97.0	.05	18.5	16:00:32	88
-25	96.3	.05	18.3	16:01:16	88
0	60.6	.05	18.4	16:01:55	88
25	35.5	.05	18.5	16:02:24	88
50	36.2	.05	18.6	16:02:55	88
75	36.7	.04	18.7	16:03:25	88
100	42.4	.05	18.7	16:03:55	88

Line 0 Date 15 DEC 92 #1

POSITION	FIELD	ERR	DRIFT	TIME	DS CULT
-200	-17.7	.07	5.3	13:04:54	88
-175	42.1	.08	8.6	13:08:06	88
-150	39.1	.07	5.8	13:10:08	88
-125	69.5	.08	5.4	13:11:19	88
-100	77.8	.09	6.3	13:13:29	88
-75	19.0	.08	6.6	13:14:13	88
-50	100.5	.08	6.6	13:14:59	88
-25	59.3	.08	6.5	13:15:58	88
0	188.5	.07	6.9	13:17:09	88
25	98.0	.08	7.4	13:18:01	88
50	108.3	.08	7.5	13:18:44	88
75	126.0	.08	7.3	13:19:33	88
100	114.7	.08	6.9	13:20:29	88
125	100.5	.08	6.4	13:21:15	88
150	115.3	.08	5.5	13:22:09	88
175	93.8	.08	5.7	13:22:55	88

Line 200 Date 15 DEC 92 #19

POSITION	FIELD	ERR	DRIFT	TIME	DS CULT
150	83.2	.08	3.8	13:29:58	88
125	107.1	.08	4.5	13:32:04	88
100	84.2	.09	4.4	13:33:00	88
75	126.6	.08	4.6	13:33:38	88
50	121.6	.08	4.8	13:34:20	88
25	82.5	.08	4.7	13:35:06	88
0	81.1	.08	4.6	13:36:17	88
-25	67.7	.09	4.4	13:37:28	88
-50	62.8	.08	4.5	13:38:20	88
-75	34.8	.08	4.2	13:39:03	88
-100	76.9	.08	4.6	13:39:48	88
-125	56.8	.08	4.6	13:40:33	88
-150	51.8	.08	4.5	13:41:15	88
-175	0.7	.08	4.8	13:42:03	88

Line 400 Date 15 DEC 92 #33

POSITION	FIELD	ERR	DRIFT	TIME	DS CULT
-250	-1.7	.09	4.4	13:48:38	88
-225	3.9	.09	4.6	13:50:07	88
-200	17.7	.08	3.8	13:51:42	88

-175	33.4	.08	3.8	13:52:56	88
-150	37.9	.07	4.0	13:53:59	88
-125	70.5	.09	4.8	13:55:30	88
-100	62.9	.08	4.7	13:56:47	88
-75	10.1	.09	3.7	13:57:46	88
-50	42.8	.09	3.0	13:59:26	88
-25	138.9	.08	3.1	14:00:43	88
0	110.6	.08	2.9	14:02:05	88
25	184.5	.08	2.4	14:02:45	88
50	185.1	.09	3.5	14:03:57	88
75	-66.6	.08	3.3	14:04:42	88
100	90.0	.06	4.0	14:06:15	88
125	123.7	.08	3.5	14:06:58	88
150	95.9	.09	3.3	14:07:36	88

Line 600 Date 15 DEC 92 #50

POSITION	FIELD	ERR	DRIFT	TIME	DS	CULT
225	79.8	.09	3.4	14:14:01	88	
200	51.3	.09	4.2	14:15:37	88	
175	60.6	.08	4.6	14:16:33	88	
150	70.6	.09	5.1	14:18:01	88	
125	104.7	.08	5.0	14:18:38	88	
100	93.6	.08	4.8	14:19:18	88	
75	135.7	.09	4.5	14:19:52	88	
50	119.2	.08	4.2	14:20:35	88	
25	85.3	.09	4.0	14:21:12	88	
0	83.9	.08	4.2	14:22:01	88	
-25	90.7	.08	4.4	14:23:19	88	
-50	88.2	.08	4.5	14:24:36	88	
-75	33.7	.09	5.3	14:25:58	88	
-100	108.8	.08	5.4	14:26:44	88	
-125	116.8	.09	5.2	14:27:28	88	
-150	71.1	.09	4.8	14:28:22	88	
-175	55.6	.09	4.9	14:29:02	88	
-200	24.9	.09	4.7	14:29:40	88	
-225	18.4	.08	4.7	14:30:23	88	
-250	17.5	.09	4.9	14:31:07	88	
-275	35.5	.09	4.9	14:31:34	88	

Line 800 Date 15 DEC 92 #71

POSITION	FIELD	ERR	DRIFT	TIME	DS	CULT
-300	-8.7	.08	5.2	14:42:20	88	
-275	24.5	.07	5.5	14:43:48	88	
-250	13.5	.09	5.5	14:44:34	88	
-225	58.3	.09	5.3	14:45:24	88	
-200	26.3	.09	5.0	14:46:00	88	
-175	42.3	.09	5.4	14:47:02	88	
-150	-7.3	.09	5.7	14:48:01	88	
-125	-160.6	.08	5.7	14:48:30	88	
-100	59.5	.08	5.7	14:49:48	88	
-75	55.0	.09	5.6	14:50:56	88	
-50	116.2	.09	6.1	14:51:56	88	
-25	74.7	.09	6.0	14:52:34	88	
0	135.2	.10	5.9	14:53:25	88	
25	102.3	.08	6.0	14:54:37	88	
50	-158.7	.08	5.9	14:55:25	88	

75	-65.0	.06	6.2	14:56:19	88
100	-1.1	.07	5.9	14:57:01	88
125	44.9	.09	5.7	14:57:43	88
150	13.0	.09	5.0	14:58:47	88
175	38.2	.09	4.8	15:00:02	88
200	48.6	.09	4.7	15:01:04	88
225	28.8	.09	5.0	15:01:39	88

Line 1000 Date 15 DEC 92 #93

POSITION	FIELD	ERR	DRIFT	TIME	DS CULT
225	38.1	.09	9.7	15:21:20	88
200	58.7	.08	9.7	15:22:43	88
175	67.1	.09	9.8	15:23:29	88
150	23.3	.08	10.1	15:24:22	88
125	97.4	.09	10.7	15:25:03	88
100	-34.5	.09	11.9	15:26:18	88
75	19.0	.06	12.4	15:27:10	88
50	38.2	.09	12.5	15:28:15	88
25	30.6	.09	11.9	15:31:35	88
0	29.4	.09	12.3	15:33:42	88
-25	331.4	.07	13.6	15:37:29	88
-50	66.2	.09	14.7	15:39:16	88
-75	61.7	.09	15.3	15:40:05	88
-100	45.4	.10	16.0	15:41:28	88
-125	42.1	.09	16.4	15:42:22	88
-150	62.9	.09	17.0	15:43:25	88
-175	39.6	.09	17.8	15:44:33	88
-200	48.5	.09	18.1	15:45:19	88
-225	57.7	.09	18.3	15:45:55	88
-250	75.4	.08	18.6	15:46:31	88
-275	15.8	.09	19.4	15:48:20	88
-300	18.2	.09	19.2	15:49:14	88
-325	1.2	.09	18.8	15:50:10	88
-350	-3.7	.09	18.7	15:50:40	88

Line 1200 Date 15 DEC 92 #4

POSITION	FIELD	ERR	DRIFT	TIME	DS CULT
0	63.7	.04	4.5	13:37:48	88
25	34.8	.03	4.3	13:38:50	88
50	33.7	.04	4.4	13:39:27	88
75	35.5	.03	4.7	13:40:00	88
100	40.3	.04	4.6	13:40:30	88
125	36.4	.03	4.5	13:41:02	88
150	40.6	.03	4.6	13:41:37	88
175	32.5	.04	4.5	13:42:33	88
200	44.7	.04	3.7	13:44:54	88
225	36.1	.03	4.5	13:50:12	88
250	28.3	.04	3.7	13:52:30	88
275	48.3	.04	4.6	13:54:23	88
300	34.1	.04	5.3	13:55:15	88
325	31.2	.04	4.0	13:56:04	88
350	37.1	.04	4.7	13:57:12	88
375	39.2	.04	3.3	13:58:04	88

Line 1100 Date 15 DEC 92 #20

POSITION	FIELD	ERR	DRIFT	TIME	DS	CULT
375	43.4	.04	3.0	14:01:05	88	
350	43.2	.04	2.7	14:02:20	88	
325	43.3	.04	2.2	14:02:58	88	
300	38.1	.03	3.5	14:04:14	88	
275	38.2	.03	3.1	14:05:02	88	
250	37.0	.04	3.9	14:05:48	88	

Line 1000 Date 15 DEC 92 #26

POSITION	FIELD	ERR	DRIFT	TIME	DS	CULT
200	44.1	.03	3.7	14:09:19	88	
225	44.3	.04	3.9	14:09:58	88	
250	43.6	.04	4.1	14:10:47	88	
275	40.7	.03	3.6	14:11:47	88	
300	40.3	.04	4.1	14:12:56	88	
325	42.4	.04	3.5	14:13:57	88	
350	42.0	.04	4.4	14:15:02	88	
375	48.3	.04	4.0	14:16:02	88	
400	46.9	.04	4.6	14:16:31	88	

Line 900 Date 15 DEC 92 #35

POSITION	FIELD	ERR	DRIFT	TIME	DS	CULT
400	51.3	.04	4.7	14:19:27	88	
375	48.7	.04	4.1	14:20:59	88	
350	44.0	.04	4.1	14:21:56	88	
325	44.2	.04	4.3	14:22:57	88	
300	43.0	.04	4.4	14:23:48	88	
275	55.7	.03	4.5	14:24:43	88	
250	45.0	.04	4.9	14:25:28	88	

Line 800 Date 15 DEC 92 #42

POSITION	FIELD	ERR	DRIFT	TIME	DS	CULT
250	49.9	.04	5.4	14:27:10	88	
275	49.4	.04	5.0	14:27:48	88	
300	46.2	.04	4.8	14:28:44	88	
325	44.4	.04	4.7	14:29:42	88	
350	45.7	.04	5.0	14:32:08	88	
375	46.1	.04	5.3	14:34:11	88	
400	48.5	.04	5.9	14:35:15	88	
425	49.9	.04	5.3	14:36:19	88	

Line 700 Date 15 DEC 92 #50

POSITION	FIELD	ERR	DRIFT	TIME	DS	CULT
450	69.7	.04	5.7	14:39:53	88	
425	64.2	.03	5.8	14:41:06	88	
400	54.9	.04	5.3	14:42:59	88	
375	54.1	.04	5.4	14:43:15	88	
350	51.7	.03	5.6	14:44:09	88	
325	48.6	.04	5.5	14:44:57	88	
300	51.9	.04	5.2	14:45:44	88	
275	50.2	.04	5.2	14:46:33	88	
250	51.9	.04	5.4	14:47:00	88	

Line 600 Date 15 DEC 92 #59

POSITION	FIELD	ERR	DRIFT	TIME	DS	CULT
250	61.0	.04	5.7	14:51:10	88	

275	60.7	.03	6.1	14:52:25	88
300	56.7	.04	5.8	14:53:10	88
325	58.7	.03	6.2	14:54:00	88
350	62.1	.04	6.0	14:54:41	88
375	60.2	.04	6.0	14:55:41	88
400	67.3	.04	5.9	14:57:06	88
425	58.8	.04	5.4	14:58:14	88
450	55.0	.04	4.7	14:59:02	88

Line 500 Date 15 DEC 92 #68

POSITION	FIELD	ERR	DRIFT	TIME	DS CULT
450	58.9	.04	5.3	15:02:14	88
425	62.6	.04	6.1	15:04:26	88
400	64.1	.04	6.8	15:05:11	88
375	68.1	.03	7.2	15:06:07	88
350	53.9	.03	7.2	15:08:27	88
325	59.5	.04	7.5	15:09:55	88
300	61.3	.04	6.7	15:11:46	88
275	65.8	.04	6.6	15:12:31	88
250	78.4	.03	6.8	15:13:18	88
225	66.9	.03	7.4	15:14:18	88
200	70.3	.04	7.7	15:14:45	88

Line 400 Date 15 DEC 92 #79

POSITION	FIELD	ERR	DRIFT	TIME	DS CULT
150	77.8	.04	9.9	15:18:10	88
175	74.9	.04	10.0	15:19:08	88
200	72.3	.04	10.2	15:19:48	88
225	74.4	.04	10.0	15:20:36	88
250	69.9	.04	9.6	15:21:49	88
275	68.9	.04	9.7	15:22:59	88
300	70.4	.04	9.8	15:23:57	88
325	70.1	.04	10.5	15:24:49	88
350	66.4	.04	11.2	15:25:33	88
375	68.0	.03	11.9	15:26:22	88
400	62.4	.04	12.4	15:27:09	88

Line 300 Date 15 DEC 92 #90

POSITION	FIELD	ERR	DRIFT	TIME	DS CULT
400	67.1	.04	13.1	15:29:00	88
375	68.9	.03	12.2	15:30:12	88
350	68.4	.03	11.8	15:31:03	88
325	71.3	.04	12.0	15:31:53	88
300	66.0	.03	12.2	15:32:55	88
275	62.2	.03	12.3	15:33:46	88
250	71.9	.03	12.9	15:34:51	88
225	70.9	.04	12.7	15:35:55	88
200	77.5	.03	13.1	15:36:50	88
175	79.0	.03	13.8	15:37:49	88

Line 200 Date 15 DEC 92 #100

POSITION	FIELD	ERR	DRIFT	TIME	DS CULT
175	76.2	.04	15.4	15:40:23	88
200	82.0	.03	16.1	15:41:42	88
225	80.7	.04	16.6	15:42:39	88
250	75.6	.04	17.3	15:43:46	88

275	72.6	.04	17.9	15:44:45	88
300	63.2	.04	18.2	15:45:38	88
325	73.9	.04	18.7	15:46:59	88
350	72.3	.04	19.2	15:47:40	88
375	71.7	.03	19.4	15:48:21	88
400	69.5	.04	19.2	15:49:14	88

Line 100 Date 15 DEC 92 #110

POSITION	FIELD	ERR	DRIFT	TIME	DS CULT
400	76.7	.03	18.6	15:51:55	88
375	74.2	.04	19.1	15:53:05	88
350	73.9	.04	19.3	15:53:59	88
325	75.9	.04	19.4	15:54:53	88
300	75.4	.03	19.4	15:55:45	88
275	76.2	.03	19.4	15:56:35	88
250	79.5	.04	19.2	15:57:27	88
225	85.3	.04	19.1	15:58:26	88
200	87.8	.04	19.3	15:59:00	88

Line 0 Date 15 DEC 92 #119

POSITION	FIELD	ERR	DRIFT	TIME	DS CULT
225	93.0	.03	18.5	16:02:00	88
250	87.2	.04	18.7	16:03:24	88
275	85.4	.04	18.8	16:04:12	88
300	86.6	.04	19.0	16:05:01	88
325	80.0	.04	18.5	16:05:59	88
350	49.0	.04	18.6	16:06:45	88
375	80.4	.04	18.5	16:07:27	88
400	78.1	.04	18.3	16:07:59	88
175	93.0	.04	20.7	16:16:52	88

EOF



Ontario



41115NW9290 2.14961 FRALECK

900

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

Geoscience Approvals Section
Mining and Land
Management Branch
Willet Green Miller Centre
933 Ramsey Lake Road
6th Floor
Sudbury, Ontario
P3E 6B5

Telephone: (705) 670-5853
Fax: (705) 670-5863

Our File: 2.14961
Transaction #: W9370.00012

JULY 13, 1993

Mining Recorder
Ministry of Northern Development
and Mines
933 Ramsey Lake Road
3rd Floor
Sudbury, Ontario
P3E 6B5

Dear Sir:

**RE: APPROVAL OF ASSESSMENT WORK ON MINING CLAIMS S 985162 ET. AL. IN
FRALECK TOWNSHIP.**

**The Assessment Credits for GEOLOGY and GEOPHYSICS, sections 12 and 14
of the Mining Act Regulations, as listed on the attached assessment
work credit form, have been approved as of JULY 5, 1993.**

Please indicate this approval on the claim record sheets.

If you have any questions please call Clive Stephenson at
(705) 670-5856.

Yours sincerely,

D Ron C. Gashinski
Senior Manager, Mining and Land
Management Branch
Mines and Minerals Division

CM
CDS/jl

Enclosures:

cc: Assessment Files Office
Toronto, Ontario

Resident Geologist
Sudbury, Ontario

ASSESSMENT WORK CREDIT FORM

FILE NUMBER: 2.14961
DATE: JULY 05, 1993
TRANSACTION NUMBER: W9370.00012

RECORDED HOLDER: JOHN BRADY
CLIENT NUMBER: 111562
TOWNSHIP: FRALECK

CLAIM NUMBER	VALUE OF ASSESSMENT WORK DONE ON THIS CLAIM	VALUE APPLIED TO THIS CLAIM	VALUE ASSIGNED FROM THIS CLAIM
S 985162	\$ 1 432.00	\$ 920.00	\$ 512.00
S 985163	\$ 1 432.00	\$ 920.00	\$ 512.00
S 985164	\$ 1 432.00	\$ 780.00	\$ 652.00
S 1076451	\$ 1 432.00	\$ 903.00	\$ 529.00
S 1118338	\$ 2 862.00	\$ 1 600.00	\$ 1 262.00
S 1118339	\$ 0.00	\$ 1 600.00	\$ 0.00
S 1179548	\$ 0.00	\$ 400.00	\$ 0.00
S 1118340	\$ 0.00	\$ 1 467.00	\$ 0.00
S 1076453	\$ 0.00	\$ 0.00	\$ 0.00
TOTALS	\$ 8 590.00	\$ 8 590.00	\$ 3 467.00



Ministry of
Northern Development
and Mines
Ontario

Report of Work Conducted After Recording Claim

W17
Transaction Number

W9370.00012

Mining Act

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used for correspondence. Questions about this collection should be directed to the Provincial Manager, Mining Lands, Ministry of Northern Development and Mines, Fourth Floor, 159 Cedar Street, Sudbury, Ontario, P3E 6A5, telephone (705) 670-7264.

- Instructions:**
- Please type or print and submit in duplicate.
 - Refer to the Mining Act and Regulations for requirements of filing assessment work or consult the Mining Recorder.
 - A separate copy of this form must be completed for each Work Group.
 - Technical reports and maps must accompany this form in duplicate.
 - A sketch, showing the claims the work is assigned to, must accompany this form.

2. 14961

Recorded Holder(s)	John Brady	Client No.	111562
Address	1227 Holland Rd. Sudbury, ONT. P3A 3R1	Telephone No.	5254129
Mining Division	Sudbury	Township/Area	FRAZER
Dates Work Performed	From: Nov 15/92	To: Dec 15/92	

Work Performed (Check One Work Group Only)

Work Group	Type
Geotechnical Survey	MAGNETOTELLURIC AND ELECTRO-MAGNETIC (ULF-EM) RECEIVED
Physical Work, Including Drilling	Geophysical & Geological
Rehabilitation	MAR 29 1993
Other Authorized Work	MINING LANDS BRANCH
Assays	
Assignment from Reserve	

Total Assessment Work Claimed on the Attached Statement of Costs \$ 11,403.00

Note: The Minister may reject for assessment work credit all or part of the assessment work submitted if the recorded holder cannot verify expenditures claimed in the statement of costs within 30 days of a request for verification.

Persons and Survey Company Who Performed the Work (Give Name and Address of Author of Report)

Name	Address
Norwin Geological	560 Notre Dame Ave. Sudbury, ONT
	RECORDED
	FEB 16 1993

(attach a schedule if necessary)

Receipt 272H

Certification of Beneficial Interest * See Note No. 1 on reverse side

I certify that at the time the work was performed, the claims covered in this work report were recorded in the current holder's name or held under a beneficial interest by the current recorded holder.	Date	Recorded Holder or Agent (Signature)
	Feb 12/93	Brady

Certification of Work Report

I certify that I have a personal knowledge of the facts set forth in this Work report, having performed the work or witnessed same during and/or after its completion and annexed report is true.		
Name and Address of Person Certifying		
Telephone No.	Date	Certified By (Signature)

J. Brady 1227 Holland Rd. Sudbury, ONT.
5254129 Feb 12/93 Brady

For Office Use Only

Total Value Cr. Recorded	Date Recorded	Mining Recorder	Received Stamp
811,403	February 16/93	<i>[Signature]</i>	RECEIVED
Deemed Approval Date	Date Approved		FEB 16 1993
MAY 24, 1993			A.M. 7 8 10 11 12 11 2 3 4 5 6 P.M.
Date Notice for Amendments Sent			11:35 Kd

Work Report Number for Applying Reserve	Claim Number (see Note 2)	Number of Claim Units	Value of Assessment Work Done on this Claim	Value Applied to this Claim	Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date
	985162	1				
	985163	1				
	985164	1				
	1076451	1				
	1118338	2				
	1118339	2				
	1179548	1				
	1118340	4				
	1076453	1				

MING LANDS BRANCH
MAR 29 1993

RECEIVED

Total Number of Claims	5	Total Value Work Done	11,440.3	Total Value Work Applied	11,440.3	Total Assigned From	6,280	Total Reserve	7,378

Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such deletions, please indicate from which claims you wish to prioritize the deletion of credits. Please mark (✓) one of the following:

- Credits are to be cut back starting with the claim listed last, working backwards.
- Credits are to be cut back equally over all claims contained in this report of work.
- Credits are to be cut back as prioritized on the attached appendix.

In the event that you have not specified your choice of priority, option one will be implemented.

Note 1: Examples of beneficial interest are unrecorded transfers, option agreements, memorandum of agreements, etc., with respect to the mining claims.

Note 2: If work has been performed on patented or leased land, please complete the following:

I certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was performed.	Signature	Date
---	-----------	------

Statement of Costs for Assessment Credit

État des coûts aux fins du crédit d'évaluation

Mining Act/Loi sur les mines

Transaction No./N° de transaction

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used to maintain a record and ongoing status of the mining claim(s). Questions about this collection should be directed to the Provincial Manager, Minings Lands, Ministry of Northern Development and Mines, 4th Floor, 159 Cedar Street, Sudbury, Ontario P3E 6A5, telephone (705) 670-7264.

Les renseignements personnels contenus dans la présente formule sont recueillis en vertu de la Loi sur les mines et serviront à tenir à jour un registre des concessions minières. Adresser toute question sur la collecte de ces renseignements au chef provincial des terrains miniers, ministère du Développement du Nord et des Mines, 159, rue Cedar, 4^e étage, Sudbury (Ontario) P3E 6A5, téléphone (705) 670-7264.

1. Direct Costs/Coûts directs

Type	Description	Amount Montant	Totals Total global
Wages Salaires	Labour Main-d'œuvre		
	Field Supervision Supervision sur le terrain		
Contractor's and Consultant's Fees Droits de l'entrepreneur et de l'expert- conseil	Type <i>Geophysical</i>		
	Type <i>Geological</i>	11,403.50	11,403.50
Supplies Used Fournitures utilisées	Type		
Equipment Rental Location de matériel	Type		
Total Direct Costs Total des coûts directs		11,403.50	

2. Indirect Costs/Coûts indirects

** Note: When claiming Rehabilitation work Indirect costs are not allowable as assessment work.
Pour le remboursement des travaux de réhabilitation, les coûts indirects ne sont pas admissibles en tant que travaux d'évaluation.

Type	Description	Amount Montant	Totals Total global
Transportation Transport	Type		
Food and Lodging Nourriture et hébergement			
Mobilization and Demobilization Mobilisation et démobilisation			
Sub Total of Indirect Costs Total partiel des coûts indirects			
Amount Allowable (not greater than 20% of Direct Costs) Montant admissible (n'excédant pas 20 % des coûts directs)			
Total Value of Assessment Credit (Total of Direct and Allowable Indirect costs)	Valeur totale du crédit d'évaluation (Total des coûts directs et indirects admissibles)		11,403.50

RECEIVED

Note: The recorded holder will be required to verify expenditures claimed in this statement of costs within 30 days of a request for verification. If verification is not made, the Minister may reject for assessment work all or part of the assessment work submitted.

Note : Le titulaire enregistré sera tenu de vérifier les dépenses demandées dans le présent état des coûts dans les 30 jours suivant une demande à cet effet. Si la vérification n'est pas effectuée, le ministre peut rejeter tout ou une partie des travaux d'évaluation présentés.

Filing Discounts

MINING LANDS BRANCH

Réductions pour dépôt

1. Work filed within two years of completion is claimed at 100% of the above Total Value of Assessment Credit.
2. Work filed three, four or five years after completion is claimed at 50% of the above Total Value of Assessment Credit. See calculations below:

Total Value of Assessment Credit	Total Assessment Claimed
x 0.50 =	

Valeur totale du crédit d'évaluation	Évaluation totale demandée
x 0.50 =	

Certification Verifying Statement of Costs

I hereby certify:
that the amounts shown are as accurate as possible and these costs were incurred while conducting assessment work on the lands shown on the accompanying Report of Work form.

that as Recorded Holder I am authorized
(Recorded Holder, Agent, Position in Company)

to make this certification

Attestation de l'état des coûts

J'atteste par la présente :
que les montants indiqués sont le plus exact possible et que ces dépenses ont été engagées pour effectuer les travaux d'évaluation sur les terrains indiqués dans la formule de rapport de travail ci-joint.

Et qu'à titre de _____ je suis autorisé
(titulaire enregistré, représentant, poste occupé dans la compagnie)

à faire cette attestation.

Signature	Date
<i>J. Brady</i>	Feb 12/93



Ministry of
Natural
Resources
Ontario

Ministr. of
Northern Development
and Mines

INDEX TO LAND DISPOSITION

PLAN

G-4050

TOWNSHIP

FRALECK

M.N.R. ADMINISTRATIVE DISTRICT
SUDSBURY
MINING DIVISION
SUDSBURY
LAND TITLES/REGISTRY DIVISION
SUDSBURY

Scale 1:20 000
Metres 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000
Foot 1000 8 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
Contour Interval 10 Metres

AREAS WITHDRAWN FROM DISPOSITION

MRO - Mining Rights Only
SRO - Surface Rights Only
M + S - Mining and Surface Rights

Description Order No. Date Disposition File
Sec. 32/80 W.E.82 14/12/82 S.R.O. 193389

SYMBOLS

Boundary	Township, Meridian, Baseline
Road allowance; surveyed	shoreline
Lot/Concession; surveyed	unsurveyed
Parcel; surveyed	unsurveyed
Right-of-way; road	railway utility
Reservation	
Cliff, Pit, Pile	
Contour	20
Interpolated	
Approximate	
Depression	
Control point (horizontal)	△
Flooded land	
Mine head frame	
Pipeline (above ground)	
Railway; single track	double track abandoned
Road; highway, county, township access	trail, bush
Shoreline (original)	
Transmission line	
Wooded area	

DATE OF ISSUE
MAR 1 1993
SUDSBURY
MINING RECORDER'S OFFICE

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES. ANNOTATIONS ARE NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NATURAL RESOURCES, DEVELOPMENT AND MINES. ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

DISPOSITION OF CROWN LANDS

Patent	
Surface & Mining Rights	●
Surface Rights Only	□
Mining Rights Only	○
Lease	
Surface & Mining Rights	■
Surface Rights Only	□
Mining Rights Only	○
Licence of Occupation	▼
Order-in-Council	OC
Cancelled	
Reservation	
Can J & Gravel	◎

IN SERVICE AUG 17, 1992

