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A RECONNAISSANCE INVESTIGATION OF CERTAIN GEOLOGICAL & GEOPHYSICAL ASPECTS OF THE GERVAIS GROUP PROPERTY ULSTER TOWNSHIP, ONTARIO

Report # OP90-386

Jan. 15, 1991.

FOR:

The Gervais Group

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REPORT Jan. 15, 1991.

"THE GERVAIS GROUP PROPERTY"

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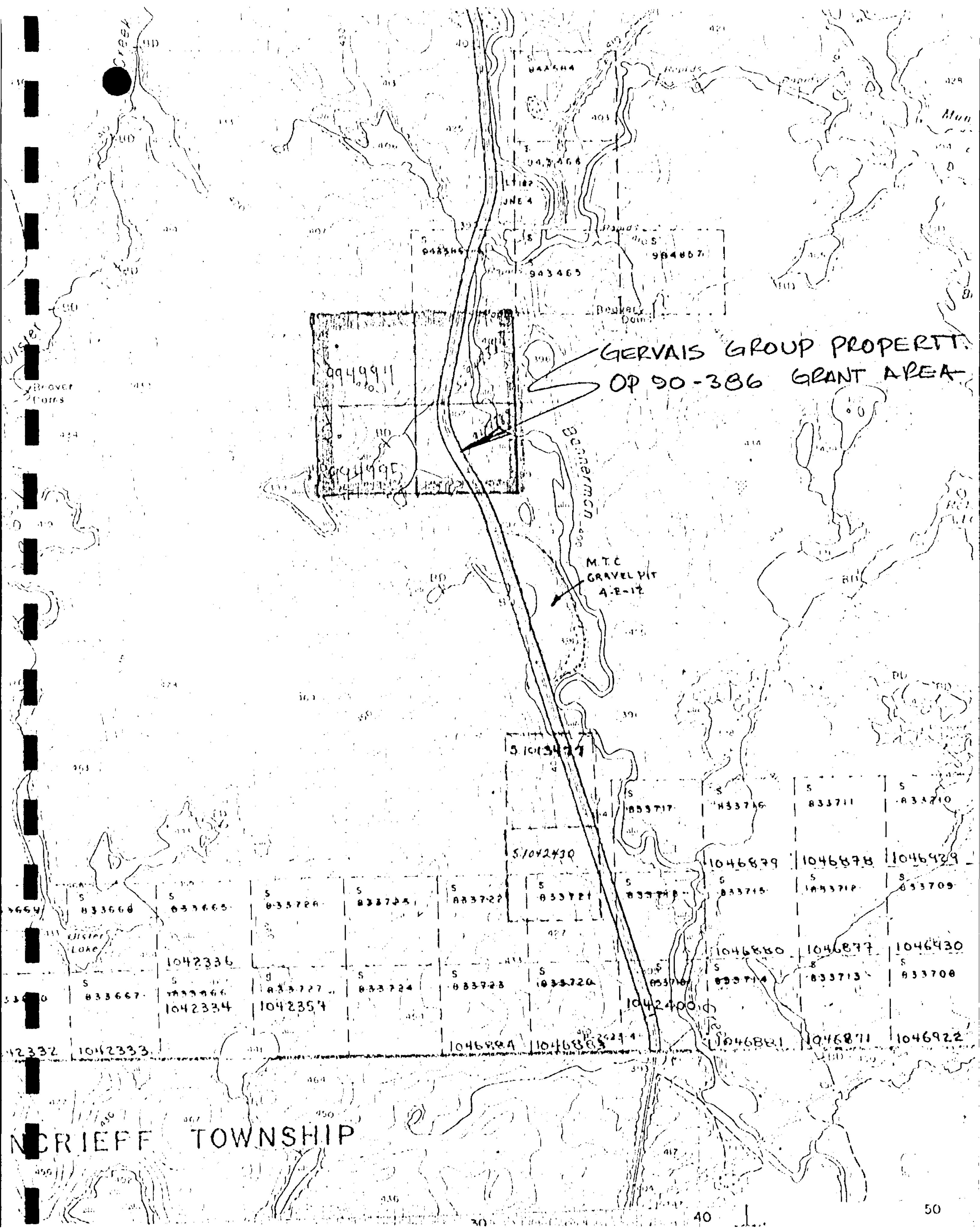
PROPERTY LOCATION MAP


GERVAIS GROUP PROPERTY
OP 90-386 GRANT AREA
M.T.C
GRAVEL PIT
A-E-17
Bannerman
Creek
Ulster
Beaver Pond
Ulster Lake
Beaver Dam
NCRIEFF TOWNSHIP
944584
943466
943465
984867
994994
994995
S 1013477
S 1042430
833717
833716
833711
833710
1046879
1046878
1046929
833668
833665
833726
833725
833722
833721
833715
833712
833709
1042336
1046880
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833708
1042334
1042357
1042400
1042332
1042333
1046884
1046883
1046881
1046871
1046922

The Gervais Group., Ulster Township Property

PROPERTY LOCATION:

The six mining claims of the present Gervais Group Property, are situated in the Southern Section of Ulster Township, about 45 miles northwest of Sudbury, Ont.

The mining property is underlain by a granitoid terrain which parallels the meta-volcanogenic rock assemblages north of the Benny Greenstone Belt. The Benny Belt is known to host a number of sulphide deposits, while the Benny Gneissic Belt has been found to host structurally controlled endogenetic vein systems, which carry gold-silver and copper mineralization.

The location of this property may prove to be strategically important in the future, in the event that further metal bearing environments are uncovered along an identified splay of the Benny North Fault, which is believed to pass directly through the Gervais Group Property.

MEANS OF ACCESS:

The Gervais Group Property can be easily accessed by travelling approx. 45 miles Northwest of Sudbury, Ont. via Highway 144 North, which passes directly throught the largest portion of the property. In addition, the Onaping Lake Road, off of Highway 144, traverses across the eastern claims of the property. A series of walking and ATV trails, including the well established lines of two previously cut grid systems, generally allows for the effective access to most reaches of the claims.

The grid system established in 1987 by New Trails Explorations on mining claims S-943465 and S-943466, allows for generally good access to the claims in which the property glacial gravel deposits were originally evaluated for their placer gold potential.

The approx. 7 mile grid system recently established during the summer of 1990 by Brian Keen and Associates of Sudbury Ont., allows for good access to most reaches of mining claims S-944388, S-944389, S-994994, and S-994995. In the northern portion of the grid system the terrain is quite moderate, which can make travelling by foot through the area tricky at certain times.

In addition a half mile ATV trail was established running west-southwest from Highway 144 North, in the early fall of 1990 by the Gervais brothers in order that various drilling and blasting equipment could be readily hauled into the newly uncovered Eldorado Showing in the southwest corner of S-994995. More access trials into the outer reaches of the claims could be established pending the discovery, and the necessity to access and work future mineral bearing showings.

PROPERTY ESTABLISHMENT:

The six, 40-acre +/- mining claims making up The Gervais Group, Ulster Township property, were established due to the actual discovery of specific minerals in place, either in glacial deposits, or in the in-situ vein bearing rocks.

Fine placer-flour gold was discovered in the water-worked gravels of the south-flowing Moncrieff Creek, by John Claude & Charles Gervais in the early spring of 1987. Due to the apparently encouraging results of their preliminary work, mining claims S-943465, S-943466, S-943584, & S-943586 were established by John Claude Gervais (Lic.# C-36010). Mining claims S-943584, & S-943585 were allowed to lapse due to the apparent lack of sufficient assessment work to keep the claims in good standing. Sometime later, in the summer of 1987, John C. Gervais obtained some significant gold assays from a quartz-carbonate vein system on the west side of Highway 144, about 1/4 of a mile south of the established claims previously described.

These gold bearing veins, (although not known by J.C. Gervais at the time) had been previously examined in some detail as early as 1985 by H.J. Tracanelli. Upon the acknowledgment of the assay data; aside from any greater knowledge of the geological setting, etc.; it was recommended that at least 2 mining claims be established to cover the known vein system. John C. Gervais established mining claims S-944388, & S-944389 in mid-July of 1987.

In early 1988, two additional mining claims numbered S-994994, & S-994995 were staked to the west of S-944388 & S-944389 by John C. Gervais, as a result of some encouraging results from test-pitting on the vein system in the southwest corner of S-944389.

Currently the mining property consists of the following 40 acre mining claims: S-943465, S-943466, S-944388, S-944389, S-994994, and S-994995. All of the above mentioned mining claims have been staked and recorded by John Claude Gervais, 26 Serpentine Street, Box 831, Copper Cliff, Ont. P0M 1N0. (Lic.# C-36010)

This report's author (H.J. Tracanelli), has in no way been responsible for, (and has had no participation in) the physical establishment of the above said mining claims or recordings, and can only speculate on the accuracy, placement, etc. of the existing claims. No official post-to-post inspection of these claims has ever been requested or initiated. Specific details about the establishment/positioning of these claims, etc. may be best obtained by contacting J.C. Gervais.

BRIEF REGIONAL AND LOCAL GEOLOGICAL ASPECTS:

The Gervais Group Claim Block in southern Ulster Township is situated over a rather new and potentially valuable copper and gold prospect, in some rather unusual rock types just north of the Benny Greenstone Belt.

A series of quartz-carbonate-sulphide mineral bearing vein networks, believed in part to be associated with a previously unidentified regional structure, has been found to occur within the east-west trending belt-like, foliated gneissic to migmatitic rocks known to this writer as the Benny Gneissic Belt. The Benny Gneissic rocks include foliated trondhjemite and granodiorite as well as variably composed orthogneiss and paragneiss, some of which appear to be moderately syenitic. Melanocratic gneissic rocks, rich in iron silicate minerals are also common in the region.

Proterozoic Huronian Cobalt Group, Gowganda Formation clastic sedimentary sequences, rest unconformably upon a former precambrian erosional-regolithic surface, to form embayment-like features, most of which have been eroded leaving minor remnants behind. Locally, quartz-carbonate metal bearing vein networks have intruded both the granitoid and sedimentary rocks, and are believed to be related to a north-east trending regional structure.

Locally, within the sediments, and possibly exclusive of the basement rocks, narrow discrete quartz veins, with or without sulphides, can be observed. Commonly, the sedimantary rocks contain disseminations, and or inclusions of magnetite-hematite or pyrite. On one occasion, a thin vein of Enargite (Cu_3AsS_4) was discovered within the sedimentary rocks in the S-944388, and the S-943585 claims area. The vein was said to have been traced for only a short distance, and had no appreciable surface expression. The existence of arsenic bearing minerals in the general geological vicinity should be considered significant, and might be worthy of follow-up investigations.

BRIEF REGIONAL AND LOCAL GEOLOGICAL ASPECTS: Continued

Late precambrian metagabbro dikes, possibly related to the Nippising Diabase period, and late olivine diabase dikes commonly crosscut most geology and structures within the current area of interest. The various rock assemblages, with the probable exception of the intrusive diabase, are believed to have been formed as plutonic intrusive rocks, and or have been derived from pre-existing archean metavolvanic-metasedimentary rocks, which may have been in part the original rocks of the Benny Greenstone Belt.

The Benny Gneissic Belt is known to straddle the northern-most fringes of the Benny Belt along its length, for at least 25 miles, and possibly beyond in the eastward and westward directions. Overall, the gneissic terrain may be in excess of ten miles wide, which represents a large volume of rock, which shows some very good indications of having strong metal bearing potential.

The major problem is that over the past years, the area has received little or no exploration attention, therefore leading to no documented metal discoveries. Most of the exploration endeavors were restricted to the Benny Greenstone Belt, immediately to the south. The belt is well known in the Sudbury region for several notable deposits, like the past producing Geneva Lake Mine, which produced about 80,000 tons +/- of (Pb, Zn, Cu, Ag, and Au); and the Stralak Resources Ltd. Stralak Prospect (Pb, Zn, Cu, Ag, and Au). The belt is also noteworthy for its many sulphide bearing metasedimentary horizons, which on occasion have yielded minor base metals.

On the Gervais Group property, extensive field work over the past few field seasons has clearly identified a strong series or network of fault segmented northeast trending quartz-carbonate sulphide bearing veins. Certain veins have yielded values as high as 0.21 ounces of gold per ton, including anomalous values of up to 0.960% copper and 0.11 ounces silver per ton.

BRIEF REGIONAL AND LOCAL GEOLOGICAL ASPECTS: Continued

From the bottom of a 17 foot deep shaft like excavation about 300 feet west of the highway, along the strike of the main vein network, a visual estimate has shown that one of the strongest veins uncovered so far contains approx. 25% chalcopyrite with appreciable pyrite-magnetite-calcite and chlorite, over a width of three feet.

Generally the metal bearing veins strike in a northeast direction, range in thickness from a fraction of an inch to over three feet wide, and dip at variable angles to the north and south. The prominant dip of the veins within the network would appear to be steeply south.

These networks of veins occur within both the foliated felsic gneiss, as well as cross-cutting the angular like conglomeritic/breccia clastic rocks of the lower Gowganda sequences close to the basement unconformity. The vein network has been measured to a true width thickness ranging from 16 feet to up to 25 feet, and can be traced along strike for approx. 1000 feet.

Many of the veins within the network have been well mineralized with disseminated, nearly massive to stringer like features of pyrite-chalcopyrite-bornite-magnetite and hematite. Where open fractures occur within the mineralized veins, alteration minerals such as limonite, and malachite, can be found. The primary gangue minerals are quartz-calcite, chlorite, and rarely, tourmaline. Commonly the cores of veins have been replaced or void filled with very coarse rhombic calcite. The quartz appears to be the primary host of the chalcopyrite mineralization. Although the veins appear to be the primary host of the sulphides, the sulphides are not restricted to the veins, but have also been observed within the host rocks parallel to the veins. The sulphides probably migrated outwards from the veins into the wall rocks as a result of metal fuming. The primary sulphides found in the adjacent host rock are believed to be pyrite and chalcopyrite. It is believed that the strongest veins carry mineralization along much of their known strike length, portions of which are covered with overburden.

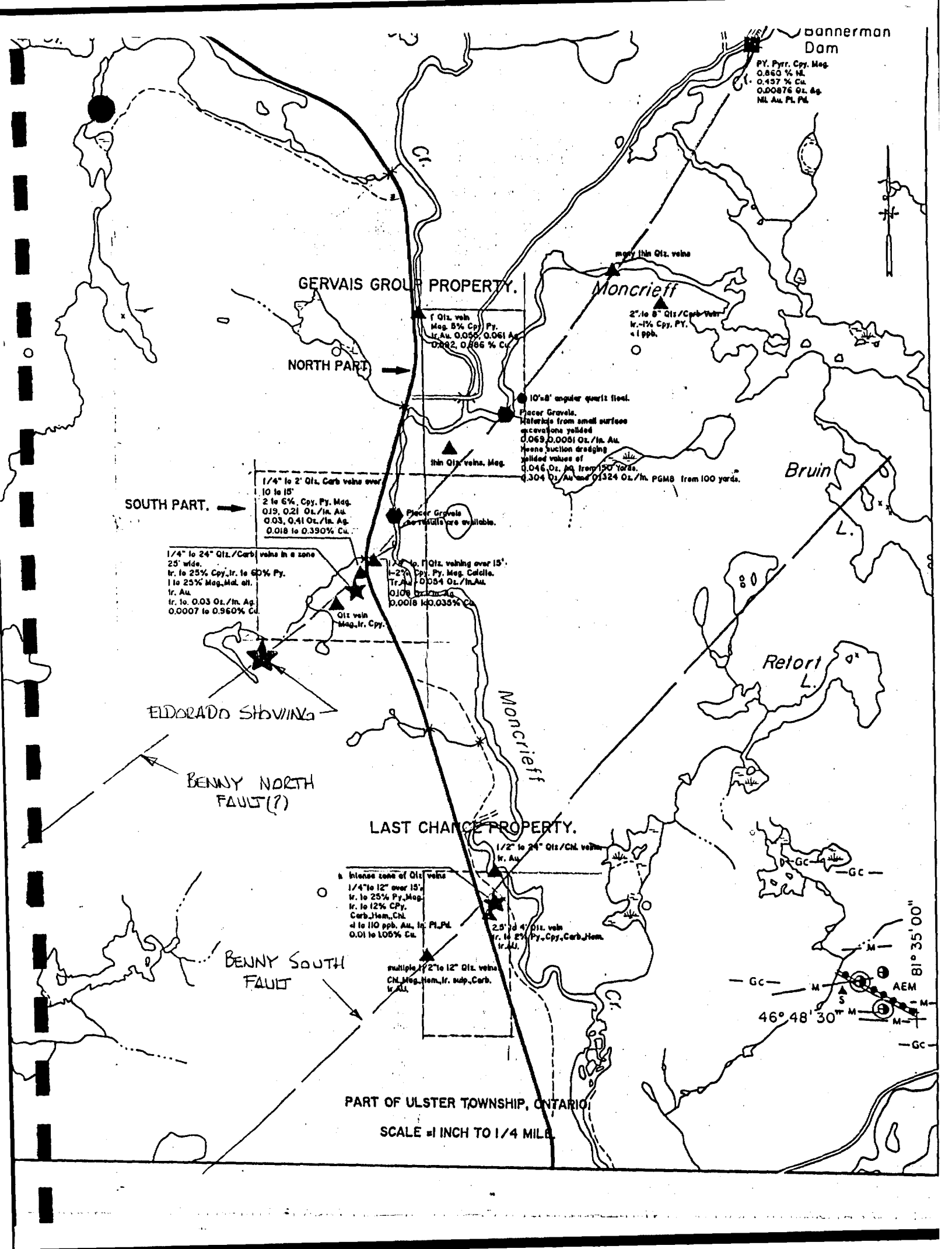
BRIEF REGIONAL AND LOCAL GEOLOGICAL ASPECTS: Continued

In the early spring of 1990, the Eldorado Showing, located approx. 1700 feet south-west of the Gervais Shaft, effectively increases the known length of the metal bearing vein network to about 3000 feet +/-.

Along the projected north-east strike extent of the veins, gold values of 2380 ppb, (0.069 ounces per ton) were obtained during a reconnaissance sampling program of the glacial sand and gravel deposits located in the eastern portion of the property. The south-flowing Moncrieff Creek has cut the gold bearing gravel deposits in this area.

It is possible that the gold observed in the gravels may have been primarily derived from hidden sulphide rich gold bearing veins presently below, or in the vicinity of Moncrieff Creek.

Further, more detailed exploration endeavors to follow up the ground geophysical surveys just recently completed will most certainly have to be carried out in an attempt to further evaluate the metal bearing potential of the Benny Gneissic Belt, and more specifically the Gervais Group property.


Bannerman Dam
PY. Pyrr. Cpy. Mag.
0.860 % Ni.
0.457 % Cu.
0.00876 Oz. &g.
Ni. Au. Pt. Pd.
Cr.
many thin Qtz. veins
GERVAIS GROUP PROPERTY.
Moncrieff
2"-to 8" Qtz/Carb Vein
Ir.-1% Cpy. PY.
< 1 ppb.
NORTH PART
1' Qtz. vein
Mag. 5% Cpy. Py.
Ir. Au. 0.055, 0.061 Au
0.882, 0.886 % Cu
10'x8' angular quartz float.
Placer Gravels.
Materials from small surface
excavations yielded
0.069, 0.0081 Oz./In. Au.
Keene suction dredging
yielded values of
0.046 Oz. Au from 150 Yards.
0.304 Oz. Au and 0.1324 Oz./In. PGMS from 100 yards.
thin Qtz veins, Mag.
Bruin
L.
1/4" to 2' Qtz. Carb veins over
10 to 15'
2 to 6% Cpy. Py. Mag.
0.19, 0.21 Oz./In. Au
0.03, 0.41 Oz./In. Ag.
0.018 to 0.390% Cu.
SOUTH PART.
Placer Gravels
Test Pits are available.
1/4" to 24" Qtz./Carb veins in a zone
25' wide.
Ir. to 25% Cpy., Ir. to 50% Py.
1 to 25% Mag., Mal. alt.
Ir. Au.
Ir. to 0.03 Oz./In. Ag.
0.0007 to 0.960% Cu.
1/4" to 1" Qtz. veining over 15'.
1-2% Cpy. Py. Mag. Calcite.
Tr. Au - 0.084 Oz./In. Au.
0.109 Oz./In. Ag.
0.0018 to 0.035% Cu.
Qtz vein
Mag., Ir. Cpy.
Retort
L.
ELDORADO SHOWING
Moncrieff
BENNY NORTH
FAULT(?)
LAST CHANCE PROPERTY.
1/2" to 24" Qtz./Chl. veins
Ir. Au
Intense zone of Qtz veins
1/4" to 12" over 15'.
Ir. to 25% Py., Mag.
Ir. to 12% CPy.
Carb., Hem., Chl.
4 to 110 ppb. Au., Ir. Pt., Pd.
0.01 to 1.05% Cu.
2.5' to 4' Qtz. vein
Ir. to 2% Py., Cpy., Carb., Hem.
Ir. Au.
BENNY SOUTH
FAULT
multiple 1/2" to 12" Qtz. veins
Chl., Mag., Hem., Ir. sulp., Carb.
Ir. Au.
Gc
M
S
AEM
81° 35' 00"
46° 48' 30"
PART OF ULSTER TOWNSHIP, ONTARIO
SCALE = 1 INCH TO 1/4 MILE

EXPLORATION HISTORY:

Very little exploration work of any consequence was ever known to have been conducted in the general area around the current Gervais Group property. A recent search through the limited available documentation has shown that only two mining claims were staked in the Gervais property area.

In August of 1927, H.J. Paul of Chapleau Ontario, staked one claim S-8873, at Coumat Lake, about 3/4 of a mile north of the Gervais Property. H.J. Paul conducted work on the property up until August 1931, when the claim was allowed to lapse. There is no record of what type of work was carried out. Prospecting efforts in this area may have been spurred on due to the discovery of the Geneva Lake base metal deposit, by John Collins in 1924, and the subsequent exploration and development of the prospect by Towagmac Exploration company Ltd., in 1927 and 1928.

In April 1940 Paul Doyon of Benny Ontario, staked mining claim S-34999 on a large bend in Moncrieff Creek, just south of the Bannerman Dam, at Onaping Lake. The claim was held in good standing until May 1943. Again no record of what type of work was carried out can be found. Occasionally a limited few mining claims were established in the southern fringes of Ulster Township, over the northern Benny Belt rocks, well outside the current area of interest.

It was not until early April of 1984, when H.J. Tracanelli began to take an active interest in the Huronian rocks in the Moncrieff Creek area. The easily accessible sedimentary rocks along the creek were examined and described with some interest. The granitic basement/sediment angular unconformity, and the metagabbro dikes intruding the granite gneiss were looked at, and samples collected for further review and discussion. Claim staking in the area was considered at the time but was never initiated.

In the early spring of 1985, various granite gneiss and some Sudbury breccias were examined while exploring the area on the hard spring crust south of Coumat Lake. In mid August of 1985, a detailed examination of the gneissic granodiorites and quartz-carbonate-chalcopyrite veins, in what is now the central part of the Gervais Property, was carried out and documented. The findings at the time did not look overly optimistic as to the strength of any mineral bearing potential of the vein system. Further work in the area more than two years later gave a sure indication that the veins were quite long and wide, and were appreciably metal bearing.

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EXPLORATION HISTORY: Continued

In September of 1985, strong pyrrhotite-chalcopyrite and pentlandite mineralization within gabbroic rocks, apparently intruding a gneissic rock just below the Bannerman Dam was assayed and found to contain Ø.4570% Copper, Ø.8600% Nickel, and Ø.ØØ9 ounces per ton of Silver, with no Gold, Platinum, or Palladium present.

Little work was carried out in the primary area of interest, until early spring of 1987, by John Claude Gervais of Copper Cliff, and Charles Gervais of Sudbury. They conducted prospecting in the gravel deposits of Moncrieff Creek, at which time values of up to Ø.Ø69 ounces of gold per ton were obtained.

To the east of Moncrieff Creek, a large angular massive quartz float 8 to 1Ø feet across, by approximately 4 feet high, was discovered about 2ØØ feet east from the creek, and said to contain fine gold. H.J. Tracanelli examined the large quartz float which probably had its origin very close by, but did not appear to contain any visible gold. Various attempts were made unsuccessfully to trace the source of the float. The overall dimensions, and the sharp angularity of the float, certainly suggest that it was probably derived from a very large vein, which could be very close by.

In May of 1987, New Trails Explorations of Chelmsford, Ont. was commissioned to conduct line cutting, and to initiate a ground geophysical program, and to report on the findings. The line cutting and subsequent surveys were conducted over claims S-943465 and S-943466. The results of the work were found to be somewhat inconclusive.

Subsequent to the geophysical survey, John Claude Gervais sampled the quartz-carbonate veins cross-cutting the highway, which when assayed, yielded Ø.19 to Ø.21 ounces of Gold per ton, and Ø.Ø3 to Ø.41 ounces of Silver per ton, from the vein on the west side of the road. Next, from the seperated continuation of the vein on the east side of the road: Ø.Ø54 ounces of Gold per ton, Ø.ØØ2 ounces of Platinum per ton, and Ø.ØØ5 ounces of Palladium per ton were detected.

From early May to early August of 1987, exploration efforts by the Gervais brothers were limited to the bulk sampling and testing of the glacial sands and gravels on claim S-943465, along the banks of Moncrieff Creek. The procedures and results of their work are as follows:

EXPLORATION HISTORY: Continued

(I quote verbatim from a report prepared July 31, 1987; by Mr. John Claude Gervais) ...

"The original equipment uses a system of sluice boxes equipped with Hungarian riffles over carpets. This system is very efficient in metals of 100 mesh or bigger, but only recovers about 30 to 35% of very fine gold flakes. Since in this portion of Northern Ontario, gold occurs in dust and small flakes, and the probability of finding nuggets is so remote, a modification has been effectuated on the dredge, permitting a rate of recovery of 85% in fine flakes and dust. First, using the dredge in its original state, it was operated at site 1 of claim 943465 (see map). A total of 100 cubic yards was processed through the sluice boxes, and after screening to 200 mesh, the result was 100 lbs of concentrate which has been assayed at .304 oz per ton. The net result was that approximately 65 tons of gravel would have to be processed in order to recover one ounce of gold, and then the machine had to be cleaned every 10 minutes in order to recover that amount. This was abandoned as impractical and unfeasible economically.

Several days of testing were needed before deciding on a modification to the basic principle of the dredge. The Hungarian riffles were removed, and only a mesh screen on top of a carpet was used. This system has since yielded positive results. The dredge has a capacity of 15 tons per hour and was operated for 6.5 hours therefore processing a volume of near 100 tons in gravel that had previously been assayed at .046 oz per ton. The concentrate obtained was almalgamated with mercury weighted before and after the amalgamation. A net gain of 13 grams was shown, and therefore set the rate of recovery at 85%, and cleaning the dredge only every two hours. Work remains to be done in assaying this concentrate for platinum elements. In one location, the assay showed a value of .1324 oz per ton of combined platinum group elements. Supposing the same rate of recovery remains true for platinum as for gold, the operation could prove to be lucrative. Further testing will be conducted following the recommendation contained in the geophysical survey."

EXPLORATION HISTORY: Continued

A sampling of gravels from mining claim S-943466 was found to yield Ø.Ø7 ounces of Gold per ton. Suction dredge sampling results from a large sand bar in the middle of Moncrieff Creek, on what would later become mining claim S-944388, were said to have been encouraging and many fine colors were observed.

While work was being carried out on the gravel deposits during the mid summer of 1987, H.J. Tracanelli was engaged in prospecting endeavors on the crown lands south-west of the sluicing operations. The existing veins were carefully examined, which ultimately lead to the discovery of additional veins to the south-west. Within a small round outcropping west of the highway, a coarse grained Gowganda Conglomerate, under several inches of moss was uncovered, and a series of narrow quartz veins were observed. A number of pieces were broken to reveal primarily quartz, with some leached-out pyrite.

Some discussions took place, and it was decided that a couple of claims should be established to cover the main outcroppings in which the quartz veins were known to occur. John Claude Gervais staked the claims, and the newly uncovered veins were opened up by drilling and blasting a few shallow holes. The freshly blasted materials revealed the unexpected. On the surface, the veins generally measured about 1 inch across, but quickly expanded to about 6 inches across with the slight increase in depth of about one foot. The vein materials were found to consist of quartz, with coarse rhombic calcite, with large fresh inclusions, disseminations, and stringers of chalcopyrite-pyrite and magnetite. There was little question that the freshly blasted veins were a continuation of the gold-copper bearing veins earlier sampled on the highway. No further work was carried out in 1987, primarily due to the lack of funds.

EXPLORATION HISTORY: Continued

In May of 1988, Gold Fields Canadian Mining Ltd. conducted a limited reconnaissance rock and soil sampling program, over a number of the mineralized veins on the claims. Dissapointingly, the gold values ranged from <5 ppb. to as high as 40 ppb.; but the copper values were more encouraging, and were found to range from 7 ppm. to 9600 ppm. in grab samples. In early June of 1988, Noranda Exploration Company Ltd. sampled the property and obtained poor results for gold of 0.001 ounces per ton, with copper ranging from 0.042 to 0.682%, and Silver ranging from 0.06 to 0.11 ounces per ton.

There appears to be little correlation between the results obtained from John Claude Gervais, and those obtained by Gold Fields Noranda, and H.J. Tracanelli. If gold does indeed exist within this unique network of veins, it would certainly appear to be very erratic. Also, vein systems with a high nugget effect can be most difficult to sample and evaluate, which presents the explorationist with a multitude of problems.

During the mid-summer of 1988, a test pit was sunk to a depth of approximately 7 feet, on the small discovery outcropping west of the highway. Within the freshly excavated walls, a series of highly mineralized quartz-carbonate veins across 1.2 to 1.7 feet, within a moderately strongly-veined zone of about 3.7 feet wide were found. All of the veins within the 3.7 foot wide section were found to carry from mere traces to an estimated 30% chalcopyrite-pyrite and magnetite. Thin minor quartz veins adjacent to the main veins were clearly observed across the 7 foot face of the pit and on the 4.5 foot wide pit floor. The veins generally carried from trace to 1% sulphides.

In the fall of 1988, the pit was deepened an additional 3 feet. At a depth of approx. 10 feet, the primary metal bearing veins appeared to increase in overall intensity. No further work was carried out due to an early freeze up, and an inflow of runoff water.

EXPLORATION HISTORY: Continued

In the winter of 1989, a magnetometer and electromagnetic orientation survey was conducted over a set of closely-spaced grid lines, run perpendicular to the known strike of the mineralized network of veins. A number of magnetometer anomalies were detected at locations where the vein network had been traced. The magnetometer data had clearly shown that the veins contained a high proportion of magnetic minerals, that the vein network has been broken into N/S faulted segments, and that the vein network has a strong along-strike component. The results of the VLF Electromagnetic survey appeared to be somewhat inconclusive. No significant detection of conductive sulphide mineralization was indicated, which probably resulted from the possible masking effect of the sulphides, by the non-conductive quartz-calcite rich, zoned nature of the veins themselves.

In the fall of 1989, the pit was deepened to 17 feet. At the pit bottom, the primary vein was found to measure up to 3 feet wide, with good indication of widening with continued depth. The vein materials consisted of quartz-calcite and chlorite, with 25% chalcopyrite, 35% pyrite, and magnetite. Numerous veins parallel to the to the primary vein were found to carry pyrite and chalcopyrite across the bottom of the pit. Upon the completion of the excavating, a 200 to 250 pound bulk sample across the 3 foot wide mineralized vein was collected, which was originally, destined for assaying to determine the copper, silver, and gold content. When this work was finished, the Gervais pit (shaft) was capped with heavy timbers, and has remained capped since 1989. Work was planned to re-open the shaft in 1990, but due to the lack of committment, and/or availability of certain parties, this work was not initiated.

In 1990, a limited amount of prospecting was carried out to the south-west and north-east of the Gervais Shaft, where a number of new veins were discovered and evaluated. Prospecting towards the north-east, along the projected strike of the Benny North Fault, has clearly shown that various styles of quartz-sulphide mineralization have occured along much of the length of this regional structure, which can be traced for approx. 4 miles beyond the known northern termination point in northern Moncrieff Township.

EXPLORATION HISTORY: Continued

Prospecting to the south-west of the Gervais Shaft lead to the significant discovery of a wide network of quartz-carbonate veins which were found to carry appreciable amounts of pyrite-pyrrhotite and magnetite. The Eldorado Showing is located approx. 1700 feet south-west of the Gervais Shaft, in the south-west portion S-994995.

A brief description of the Eldorado Showing follows:

The Eldorado Showing was discovered as a result of prospecting on the east side of a swampy marsh on claim S-994995. A numerous series of thin quartz-chlorite bearing veins were found to intrude a chlorite-rich, somewhat sheared greywacke to siltstone host rock. The numerous veins and the shear-zone, strike at approx. 094 degrees Azimuth, and dip towards the south-west at 65 degrees. The main quartz bearing zone has been crosscut by a diabase dike, which itself appears to be weakly mineralized. The mineralization within the veins and host rock consists of traces to 50% pyrite-pyrrhotite, and traces of chalcopyrite. Initial surface assays taken for gold were found to range from as low as <5 ppb to 35 ppb, in both grab and chip samples.

In mid-September, a 10 foot deep pit was blasted on the Eldorado Showing. The mineralization appears to be intensifying with depth, with a slight increase in chalcopyrite, as well as coarse grey rhombic calcite. Also, numerous black Tourmaline needles could be clearly observed. The significant increase in the carbonate content, in conjunction with the introduction of boron minerals, could be a very good indication of precious metals, which might occur at depths within the vein bearing shear below the showing.

It is strongly suspected that the Eldorado Showing is situated along the same regional structure as that which is believed to host the mineralization observed in the Gervais Shaft, and further along-strike to the north-east. A number of samples were collected from the freshly blasted Eldorado Pit, but have yet to be submitted for assaying.

EXPLORATION HISTORY: Continued

The last significant exploration functions to be conducted on the Gervais Group Property, was the establishment of a system of north-west to south-west cross-lines at 200 foot spacings, turned 90 degrees off of a north-east trending base line. The grid system was cut over claims S-944388, S-944389, S-994994, and S-994995. Subsequent to the establishment of the grid lines, an EDA Omni Plus multi-unit EM and Mag instrument was systematically deployed over the grid lines, along stations spaced at 50 foot intervals. The survey findings are to be discussed further-on in this paper. The results of the various exploration endeavors in the property area have clearly shown that a series of showings containing varying amounts of sulphides, with or without strong quartz-calcite-chloride-tourmaline veining, can be easily traced from 1700 feet west of the Gervais Shaft, north-east to the very south end of Onaping Lake.

Various mineralized occurrences can be found along a distinctive, north-east trending, lineament-like feature, which is believed to be the north-east extension of the Benny North Fault. The past exploration has been valuable in detecting the structurally controlled, potential metal bearing areas, which could be extended over several miles. Much of the area remains unexplored. The strengths of the mineralized showings, in a structurally significant setting, may prove to be very valuable in the future, provided more detailed studies can be carried out. Detailed geology-geophysics-base and precious metal geochemistry, followed by diamond drilling, would most certainly be required to more thoroughly test the potential of this significant mineral bearing structure.

At this present time, there is much uncertainty as to what type of further exploration program, if any, could be executed during the 1991 field season. Recently there appeared to be some indication that the property principal, John Claude Gervais, may be loosing interest, having second thoughts with respect to available time which he could committ to spend on working the property. John Claude Gervais may wish to divest himself, and relinquish the property rights to a third party, some time in the future, after ensuring that complete fulfillment of the terms of this O.P.A.P. Grant Project, have been completed to the satisfaction of the grant-providing provincial government agency.

LINE CUTTING PROCEDURES:

A series of north-west, south-west trending cross-lines, turned perpendicular off of a north-east trending base line, was established over the mining claims numbered S-944388, S-944389, S-994994, and S-994995, in an attempt that a detailed geophysical survey could, by systematically initiated, over the property geology.

A base line which strikes Ø55 degrees Azimuth, was cut for 12ØØ feet, then adjusted to Ø6Ø degrees Azimuth for 2ØØØ feet towards the south-west. The base-line is believed to have been well cut for a distance of 32ØØ feet +/-. Perpendicular cross-lines have been established at 2ØØ foot intervals along the base-line.

The various cross-lines range in length from as short as 25Ø feet north, on line 14W to as long as 175Ø feet north, on line 2W. Picket stations were established along each of the cross-lines, at 5Ø foot +/- intervals.

Ideally, the grid lines were designed in such a fashion as to have equally lengthed north and south cross-lines, across the claims. This could not be fully accomplished due to the unpredictable rise and fall of the water in Moncrieff Creek. During the time the lines were being established, the Ministry of Natural Resources had pulled out most of the timbers from the Bannerman Dam, allowing a large volume of water to flow directly down Moncrieff Creek. The water level in the creek remained quite high throughout much of the summer.

Upon the completion of the line-cutting procedures, a total of 34,975 feet, or 6.62 miles of lines had been cut and chained.

A totalof $2,152.82 was paid to Mr. Brian Keen, 1Ø8 Shappert Street, Sudbury Ont. (524-Ø362) for the establishment of the Gervais Group Property grid system. The summarization - field notes and grid-sketch have been included for future reference.

GROUND GEOPHYSICAL SURVEYS:

In October 1990, David G.B. Trivett completed a ground Mag. and VLF-EM geophysical survey over the completed grid on the Gervais Group Property, using the combined EDA OMNI PLUS Geophysical Equipment. The transmitter station used in this survey was Cutler Maine 17.0 Hz.

A complete set of the diurnally corrected magnetometer data generated was drafted onto the grid plan, at a horizontal scale of 1 inch = 200 feet, and a profile scale of 1 inch = 1000 gammas.

A complete set of the raw Very Low Frequency-Electromagnetic Field generated data was provided in full, upon completion of the survey.

The VLF-EM In-phase data was subsequenty reduced and smoothed using Fraser Filtering Techniques before plotting and profiling could be done.

The VLF-EM I/P and O/P data was plotted on the grid plan at a horizontal scale of 1 inch = 200 feet. The resultant I/P and O/P data was profiled at a scale of 1 inch = 50%.

The field procedures followed out during the Omni Plus Geophysical survey have been most effectively described by David G.B. Trivett, from whom I quote (verbatim) as follows:

> " The Contracted work carried out last October on the gervais property was completed with the OMNI Plus. This instrument reads both Magnetic Field and VLF or Very Low Frequenct readings and stores them in memory to be dumped into a computer software package called Cross Talk.
>
> The Magnetometer readings are corrected from the base station memory. The base station was set up for readings every 30 seconds. This gave the correct background averages for the field unit to correct Mag. readings accordingly during the dump mode (to computer).

GROUND GEOPHYSICAL SURVEYS: Continued

(David G.B. Trivett Quotation, Continued)

The base station was set up on line Ø + ØØ, station Ø + 5Ø North Northwest. At the beginning of each day the instruments are synchronized for time, Mode, Date and given their location within the grid system at this position. The base station sensor pole was tied to a tree, standing straight with the North (N) on the sensor head facing in the compass aligned Northern direction.

The field unit was taken to the first station and set up for line, station and spacing. This would align with each reading as progress was made across the grid. At the beginning of each line the survey would continue. During the survey the sensor pole was held arms length from the body and again the sensor head faced in the Northern direction for each reading."

In general, the geophysical survey appears to have been valuable in determining the various geophysical characteristics of the rocks commonly observed on the Gervais Group Property. The primary rock types such as gneissic, metasedimentary, and metagabbroic rock, and the mineral bearing structures such as the extended trace of the Benny North Fault, should each have a distinctive character, which may or may not be easily distinguishable.

It is this detection of the specific characteristics of the particular rock or mineral of interest which could ultimately lead to a substantially valuable discovery. An overview of the corrected and filtered results appears to indicate that there is little direct or obvious correlation between the magnetic or electromagnetic characteristics of the rocks on the property.

Certain rocks appear to be distinctly identifiable by their magnetic or electromagnetic responces. There can be no question that conductive sulphides and magnetic minerals, to name two of the geophysical target features, exist on the ground, but it would appear that little if any conductive or magnetic minerals occur together in this instance. Based on geological field observations, it is known that the mineralized quartz-carbonate brecciated veins with pyrite-chalcopyrite and magnetite clearly observed in the walls of the Gervais Shaft (Pit), shows a high magnetic responce, with little or no electromagnetic responce.

GROUND GEOPHYSICAL SURVEYS: Continued

It is known that the mineralized veins carry up to 60% sulphides, which would be expected to show a moderate electromagnetic responce, even if limited in its overall dimensions. It is also known from the geological studies that the mineralization commonly occurs within the cores of the veins, and in so doing becomes effectively masked from the primary current, as a result of being surrounded by the gangue minerals such as quartz and carbonates.

A thorough knowledge of the area geology would be required to assess the specific importance of a particular anomaly or group of anomalies. A good example might be that if a specific rock, such as diabase or barron magnetite veins in a homegeneous rock; which has been observed in the field, and is known to carry no appreciable values, but shows a strong magnetic response, with no electromagnetic responce, would in most cases not be worth investigating.

On the other hand, those magnetic and electromagnetic anomalies, even though they may occur independently of each other, should be more thoroughly examined, particularly if they are known to occur over areas which have high mineral potential, even though little of the geology can be observed.

DISCUSSIONS OF THE VLF-EM RESULTS:

An examination of the data, reveals that there were no appreciable VLF-EM responces detected which would appear to be related to sulphide bearing mineralization in massive or vein associated forms. A number of high, negative, in-phase readings; with little or no corresponding out-of-phase readings, were detected throughout the grid area.

Good examples of the above were detected at locations: L12W 2+ØØ S, L2W 4+5Ø S, L2E 3+5Ø S, and L6E 1+5Ø S, and are believed to have been formed as a result of conductive overburden in close proximity to highway 144. A number of more discrete in-phase responses with little or no out-of-phase responses may be found throughout the grid area. At this time, there would appear to be no discernable conventional EM cross-overs, which would suggest sulphide or wet fault or shear zone type settings.

Very weak conductors, with minor negative in-phase responses and slight increases in out-of-phase responses at locations: L16W 2+5Ø S, and L14W 5+ØØ S, may be related to weakly conductive zones within the rocks below.

No VLF-EM responces were detected in the known mineralized areas around the Gervais Shaft, nor along the known or extrapolated strike of the network of mineralized veins towards the north-east.

A visual comparisom of the EM data with Mag data has shown that there is no direct correlation between the two sets of data generated.

In general, the application of the VLF-EM methods were not very useful in detecting the known mineralized systems, nor any other undetected conductive zones throughout the property.

Additional EM work using HLEM and VLEM methods may be more applicable to the quartz vein, magnetite-sulphide mineralization environments found on the Gervais Property.

DISCUSSIONS ON THE MAGNETOMETER RESULTS:

An examination of the magnetometer data collected from the field, on the Gervais Group Property, has been shown to be far more responsive than the VLF-EM methods.

Owing that there is an appreciable magnetite constituant within many of the veins, which sometimes carries important amounts of basemetal sulphides, and since magnetite is known to occur within the sedimentary rocks within the grid system area, magnetometer survey methods may be the most applicable geophysical reconnaissance method to be employed over the Gervais Property.

There are number of strong anomalies above the 57900 to 58000 gamma datum levels, some of which are believed to be directly related to in-situ magnetite and or pyrrhotite mineralization, which in a number of cases is known to be associated with pyrite and chalcopyrite mineralization. Erratic gold is thought to be associated with pyrite and chalcopyrite in a number of quartz carbonate veins to the north-east of the Gervais Shaft.

A large north-west trending metagabbro dike has shown up with a strong magnetic responce. In addition, the intrusion of a number of narrow olivine diabase dikes within the Huronian Sediments has responded well to magnetic surveying.

The recent magnetometer survey which has covered a good portion of the north-east strike extent of the Gervais vein system, was found to be somewhat valuable in detecting a couple of moderate responces believed to be directly associated with the magnetite bearing vein network.

Directly over the Gervais Shaft on L6W at 11+50S, a magnetic peak of 1171 gammas above datum was recorded. The magnetic values gradually drop off towards the north and south within 100 feet on either side of the peak value. No significant magnetic values were detected on the adjacent lines 8W nor 4W, suggesting a somewhat limited strike length. The width of the source would not likely exceed 50 feet +/-, as can be substantiated in the field observations.

DISCUSSIONS ON THE MAGNETOMETER RESULTS: Continued

Because the area has been subject to an intensive number of transverse north north-west trending normal faults, it is believed that the vein mineralization has been segmented into distinctive blocks. The faults are clearly observable within the Gervais Shaft, and as well at a number of locations towards the north-east. The laterally separated veins and pre-existing geology, structures, etc. can also be followed towards the north-east.

The present grid lines did not effectively cross over the south-west extension of the Gervais veins, and so little is known about this area's geophysical characteristics at this time.

The detailed Mag-VLF-EM geophysical orientational work carried out a short distance to the east and west of the Gervais Shaft, would appear to suggest that the vein network can be traced to the south-west; but as is the case to the north-east, the south-west strike extents have probably been well segmented. It would appear quite likely that there could be an interconnection between the Gervais Shaft and the Eldorado Showing. The problem arises when attempting to trace segmented vein networks in areas which respond poorly to geophysics, and are buried under the glacial debris and swamps.

Towards the north-east, along the apparent strike of the Gervais vein network, a north-east trending anomaly has been detected on at least three grid lines extending over a distance of about 600 feet +/-.

The major portion of the anomaly occurs on L8E, where values of 1781 gammas followed by 1548 and 984 occur from 5+00 S to 6+00 S, strongly suggesting that the source at this location may exceed 50 feet in thickness. To the east on L10E the values drop somewhat substantially to 778 gammas at 2 +50 S and 671 gammas at 4+50 S, and should be considered weakly anomalous. These values may represent splays or locally segmented portions of the magnetic source. Further towards the east the anomaly appears to be weakly discernable on L12 E and L14 E.

DISCUSSIONS ON THE MAGNETOMETER RESULTS: Continued

It is strongly suspected that the source of this anomaly is caused by strong magnetite-pyrrhotite mineralization, possibly associated with quartz carbonate veins within a regional structural setting. As is the case towards the south-west, segmented blocks in the L8E anomaly area are believed to have been responsible for the present orientation of the responsive source.

The highest peak value on L8E is known to occur under a swampy area on the south east shore of Moncrieff Creek, and is located 100 to 200 feet north, and upstream from the former gravel suction-dredging bulk-sampling operations, as carried out by John Claude Gervais in 1987.

The suction dredging has taken place within the gravel deposits, directly below the projected strike of the mineralized vein network. A large number of very fine gold colours were recovered in the dredge. It is possible that the gold found within the gravels could have easily been derived from the in-situ rock below. Further, more detailed investigative work, would most certainly be warranted in the near future. Diamond drilling of this anomaly would be highly recommended.

Near the center of the grid system, a large metagabbro dike is known to have intruded towards the north-west, cross-cutting most of the rocks in the area. The metagabbro dike has cross-cut the Gervais vein network, and may be responsible in part for separating the rocks towards the north. The magnetic responce for the metagabbro was found to range from 600 to 1200 gammas +/-.

In the north-east portion of the grid system, where the Huronian sedimentary rocks are known to occur, the magnetic responces were found to range from slightly below background, to 100 to 300 gammas above the background datum.

Strong anomalies of 1232 gammas on the L8E at 4+00 N, 2703 gammas on the L10E at 5+50 N, and 730 gammas on the L10E at 7+00 N, are known to be caused by a pronounced visible olivine diabase dike, intruding the sediments and the granite rocks north of the sedimentary unconformity.

DISCUSSIONS ON THE MAGNETOMETER RESULTS: Continued

A lengthy anomaly which strikes north-east across lines L1ØE, L12E, and L14E, having a magnetic responce ranging from 359 to 741 gammas is believed to be associated with magnetic mineralization within the metasediments.

The granitic rocks to the west and north-west are generally magnetically non-responsive, and would not appear to indicate any significant geological changes.

In conclusion, the magnetometer survey has been useful in detecting areas believed to be well mineralized with magnetite, which could possibly be associated with base metal sulphide minerals.

There would appear to be good indications that the metal bearing vein network observed in the Gervais Shaft, and that which is cross-cutting the highway, would appear to continue to strike north-east, and may be base or precious metal bearing. The strength of this potential metal bearing network should be more thoroughly tested, by means of more advanced geophysical techniques, including soil geochemistry and diamond drilling in the Gervais Shaft area, including the strong creek-side anomaly location.

CONCLUSIONS:

The recent ground work carried out on the Gervais Group Moncrieff Creek Property, in the southern central part of Ulster Township, which included some detailed prospecting and geophysics, has been shown to be very usefull in evaluating the apparent strength of the mineralized vein network which is believed to be strongly associated with the prominent northern extension of the Benny North Fault. This suspected regional structure, which is thought to pass directly through the Gervais Group Property, is believed to hold a very strong potential to host base or precious metal mineral deposits. Until now, the various networks of veins along the projected north extent of the Benny North Fault, from the Benny Greenstone Belt to the Bannerman Dam, at the south end of Onaping Lake, has not been effectively evaluated to determine its full potential.

In the spring of 1990, John Claude Gervais received an Ontario Government funded, Ontario Prospectors Assistance Program (O.P.A.P.) Grant (# OP90-386), which was applied towards an extensive program of exploration endeavors, which were systematically applied by the applicant and his colleagues.

Prospecting, linecutting, and geophysics were carried out over the property. The resultant data generated from the above types of work, was compiled, reviewed, and evaluated, and subsequently incorporated into this report by Harold J. Tracanelli (of Chelmsford, Ont.).

Certain portions of the proposed exploration program requirements, such as the opening and deepening of the Gervais Pit (Shaft), and the geochemical follow up work, were not completely initiated, due to a number of unforeseen circumstances. Due to an inability to commit sufficient time and efforts to the proposed program, within the limited time-frame delineated by the terms of the OPAP Grant, certain portions of the proposed program were not completed in as much detail as the parties to this project would have desired.

CONCLUSIONS: Continued

Upon completion of the field work, H.J. Tracanelli (this writer, whose duties were to supervise/conduct some of the geological work, and to prepare this report), was informed by the Applicant, John Claude Gervais, that due to a variety of circumstances beyond anyone's control, (as noted above), the program could not be completed as originally intended.

I, (H.J. Tracanelli) was not responsible for the administrative functions such as accounts payable, etc. My responsibility and capacity was to initiate certain physical parts of the program, and to collect-review, and report on the various data generated as a result of the work which was carried out on the property during the summer months. This report you are now reading, is the result of this extensive ground-work in the summer of 1990.

The work that was fully completed produced somewhat favorable results. Prospecting endeavors approximately 1700 feet south-west of the Gervais Shaft (Pit) lead to the discovery of the Eldorado Showing. The discovery of this new exciting looking showing, effectively increases the known length of the mineralized zone on the property to an estimated 3000 feet.

Subsequent to the prospecting work, a grid system was established, and a Mag. and VLF-EM survey was initiated. The results of the VLF-EM survey showed that the expected and known mineral bearing settings were generally none conductive. Fortunately the results of the Mag. survey detected a number of strong responses towards the north-east of the Gervais Shaft, which could be related to strong magnetite meneralization, which could carry base or precious metal mineralization. The magnetometer data will be very useful in the future, in determining potential exploration targets.

CONCLUSIONS: Continued

In general, there is still a lot to be learned about the various geological-mineralogical, ect aspects of the Gervais Group Property. Future plans will hopefully include a detailed geochemical survey, and more excavating work to expose existing or new surface showings, particularly at the site of the Gervais Shaft (Pit), and at the Eldorado Showing. Additional work will hopefully someday include detailed mineralogical studies and diamond drilling, etc.

Three dimensional work, such as limited test-pitting, appears to have indicated a strong mineral potential in the area. Since there has never been any drilling done in the area around known or potential new showing areas, very little is known about the strength of the strongly suspected structure which is believed to have been in some way responsible for the present mineralization observed on surface. Probing below the surface by diamond drilling could ultimately lead to the discovery of a potentially valuable mineral deposit or deposits.

One thing that is known for certain, is that ore-gradeassays in copper, gold and silver, although sometimes erratic in nature, have been obtained in sampling, on the well mineralized areas of the property. The old saying "Where there's smoke, there's fire..." could prove to be very true here. The encouragement and endorsement of future exploration endeavors by all parties concerned, including the possibility of future desireable additional government assistance, has the high potential of making a valuable natural resources discovery on the Gervais Group Property, or on the immediately surrounding areas.

RECOMMENDATIONS:

To properly continue a logical exploration program on the Gervais Group Property, a committment by the owners to undertake the following work is required. My recommendations include:

1) Completing a detailed soil/rock geochemistry survey to complement the existing geological/geophysical investigative work recently completed.

2) The Gervais Shaft (Pit) should be expanded by further excavating to a more significant depth, in an attempt to further evaluate the overall strength of the mineralization within the vein network/framework of any possibly occuring copper, gold, and/or silver mineral-rich deposit at the Gervais Shaft (Pit) site.

3) Additional work of the same nature as discussed in #2 above should be carried out at the Eldorado Showing on the Gervais Group Property.

4) Next, test-pitting might be carried out by excavating any promissing looking sites along the length of the suspected mineral bearing structures thought to occur between the Benny Greenstone Belt and the south end of Onaping Lake.

5) Diamond Drilling should be carried out at carefully selected points on the Gervais Group Property, to test the third dimensional (depth) characteristics of any potential mineral bearing geological structures/environments which may lie at depth on the Gervais Group Property. The location of the drilling sites will be determined with the help of previously completed walk-over prospecting work results, VLF-EM results, Magnetometer results, as well as the results of work carried out in recommendations (1-4) listed above.

The initiation of the above five point program could yield to the discovery of, and a rough definition of the limits of, any valuable mineral deposits which are hoped to exist in the area on, or nearby to, the Gervais Group Property.

REPORT APPENDICES

PROPERTY PROSPECTING RECORD:

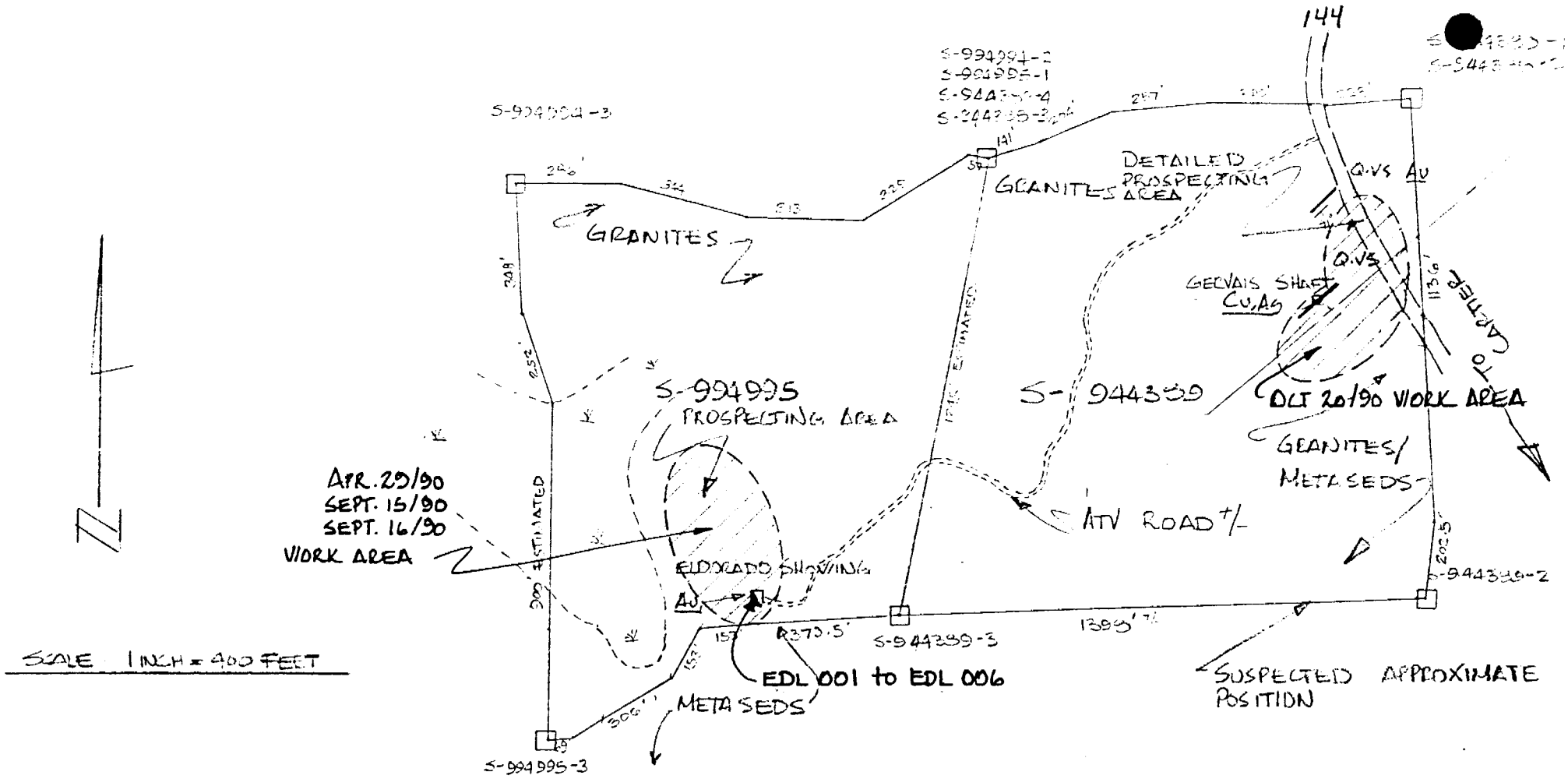
The following is a descriptive table, outlining the various types of prospecting endeavors carried out during the 1990 O.P.A.P. program.

PERSONS INVOLVED	DATE(S)	LOCATION	EXPLORATION FUNCTION
John Claude Gervais Charles Gervais Harold J. Tracanelli Each Worked 10 Hours	April 29/90	S.W. S-994995	Eldorado Showing - Prospecting in area - Sampling - EDL 001 Diss. py. in q.v's. intruding chl. alt. sheared metased. 20 ppb. Au. over 2.5 feet. - EDL 002 Diss py. within metaseds. cut by irregular qtz. v's <5 ppb. Au. over 9 inches. - EDL 003 Metased with py. adj. to qtz. v's. sampled in EDL 001 15 ppb. Au. in grab sample. - EDL 004 10% to 50% Diss. gran. py. to mass. py. in metased. 20 ppb. Au. in grab sample. - EDL 005 qtz. incl. and qtz. v's. with 5% to 25% diss. py. some leached limonite alt. 35 ppb. Au. in grab sample. - EDL 006 Metased. with 1% to 3% fine diss. py. 1/2% cpy. some shearing, incl. of coarse rhombic calcite to veinlets throughout. <5 ppb. Au. in grab sample.

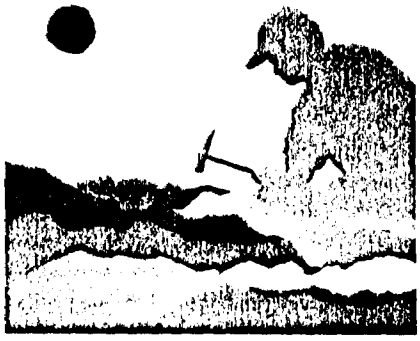
PROPERTY PROSPECTING RECORD: Continued

PERSONS INVOLVED	DATE(S)	LOCATION	EXPLORATION FUNCTION
John Claude Gervais Terry Gervais Ron Gervais Harold J. Tracanelli Each Worked 12 Hours	Sept.15/90	S.W. S-994995	Eldorado Showing - Drilling test pit with gasoline Punjar plugger Drill machine to a depth of 5 feet +/- Forcite 40 explsves electric delay caps used. Noted increase in veining and mineralization.
John Claude Gervais Ron Gervais Harold J. Tracanelli each worked 12 hours	Sept.16/90	S.W. S-994995	Eldorado Showing Continued to drill and blast test pit down to 10 feet +/- Noted significant increase in qtz.--carb. veining. Noted black tourmaline needles in coarse calcite.
John Claude Gervais Ron Gervais Harold J. Tracanelli	Sept.16/90	S.W. S-994995	Drilled and blasted second test pit to 4 feet deep at the intrusive contact between the meta-seds and diabase, approx. 200 Feet W. of Eldorado Showing.
John Claude Gervais Harold J. Tracanelli 10 hrs.	Oct.20/90	S-994389	Prospecting -hand trenching. South and East of the Gervais Shaft, some samples were collected but not assayed.

PROSPECTING LOCATION MAP.



PART OF THE
GERVAIS GROUP PROPERTY
ULSTER TOWNSHIP.



ONTARIO PROSPECTORS ASSISTANCE PROGRAM (OPAP) FINAL SUBMISSION FORM

(This shall serve as the prospecting report as required under Section 4(1) of the OPAP Regulations)

INSTRUCTIONS:

Please type or Print

Submit completed form to:

Incentives Office
Ministry of Northern Development & Mines
3rd Floor, 880 Bay St., Toronto, Ontario M5S 1Z8

TO BE COMPLETED BY SUCCESSFUL GRANTEES AFTER PROJECT COMPLETION AND ACCOMPANIED BY WRITTEN REPORTS, MAPS, ETC.

Name JOHN CLAUDE (JEAN) GERVAIS File Number OP90-386

Proposed Project Areas(s) (Twp. or Claim Map Name), Completed?

1. GERVAIS GROUP PROPERTY ULSTER TP. (G-4117). Yes ☑ No ☐ +/-
2. S-944308, S-994309, S994994 & S-994995 Yes ☐ No ☐

Changes to proposed project(s) (if any)
MOST OF THE PROJECT HAS BEEN COMPLETED WITH THE EXCEPTION OF THE SOIL GEOCHEM SURVEY, AND GERVAIS PIT WORK.

List of Other Co-owners of the Property that Worked on Project
APPLICANT WAS ASSISTED BY CHARLES GERVAIS, RON GERVAIS, TERRY GERVAIS, HAROLD TRACANELLI. NO FORMAL AGGREEMENT EXISTS BETWEEN THE ABOVE PARTIES.

I. WORK PERFORMED BY APPLICANT (Summary of Section IV)

1. Project area/name GERVAIS GROUP PROPERTY ULSTER TP. (G-4117)

		No. Days Worked By Applicant
Traditional Prospecting	no. of samples 6	
Geological surveys	scale Ø	
Geophysical surveys	type MAG | VLF-EM miles/km 6.62 Miles Contracted Out	
Geochemical surveys	type Ø no. of samples Ø	
Drilling	type Ø ft/m Ø	
Stripping/Trenching	method HAND TRENCHING. DRILL & BLAST 4	
Other	type LOGISTICAL-PROSPECTING WORK 15 BY ASSISTANTS OF APPLICANT TOTAL 19	

I. WORK PERFORMED BY APPLICANT (Continued)

2. Project area/name GERVAIS GROUP PROPERTY ULSTER TP. (G-4117)

		No. Days Worked By Applicant
Traditional Prospecting	no. of samples 6	
Geological surveys	scale Ø	
Geophysical surveys	type MAG/VLF-EM miles/km 6.62 MILES	CONTRACTED OUT
Geochemical surveys	type Ø no. of samples Ø	
Drilling	type Ø ft/m Ø	
Stripping/Trenching	method HAND TRENCHING - DRILL & BLAST	4
Other	type LOGISTICAL - PROSPECTING WORK BY ASSISTANTS OF APPLICANT.	15
	TOTAL	19
TOTAL DAYS (ALL PROJECTS) (Attach additional sheets for additional project areas as required)	A.	19

II. DETAILED LIST OF EXPENDITURES (Summarize in Section III)

Date	Recipient of Payment	Explanation	Amount
PLEASE SEE THE ATTACHED INFORMATION.		EXPENDITURE	
	H. TRACANELLI		7301.69
Mileage rate claimed 870	km at 30¢/km.		261.00
(Attach additional sheets as required)		TOTAL	7562.69

III. EXPENDITURES (total of all projects) - Summary of I and II

1. Number of Working Days (A) x $100/day 19 days GROUND WORK	$ 1900.00
2. Analyses/Assay Costs Ø	$ Ø
3. Equipment Rentals/Supplies DRILL MACHINE - EXPLOSIVES	$ 312.87
4. Contract Services (State Type) LINE CUTTING / GEOPHYSICS / GEO CONSULT REPORT PREP. / W.P	$ 5038.82
5. Travel (state method: road, air, etc.) ROAD 870 KM	$ 261.00
6. Food and Accommodation Ø	$ Ø
7. Other Expenses (Specify) SUPPLIES	$ 50.00
TOTAL EXPENDITURES	$ 7562.69

IV. DAILY REPORTS (Summarize Work Activity in Section I)

Day	Project Area	Date	Work Performed
1	PLEASE REFER TO THE ATTACHED		
2	APPENDIX DATA FOR FURTHER DETAILS.		
3			
4			H. TRACANELLI
5			
6			
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41			

Attach additional sheets as required.

V. SIGNIFICANT RESULTS (if any)

Project Area	New Showings and/or Anomalies	Commodity	Best Analyses
GERVAIS GROUP PROPERTY	ELDORADO SHOWING	GOLD	35 ppb Au

MORE ASSAY TO BE DONE.
PLEASE REFER TO THE GEOPHYSICAL MAPS ETC FOR FURTHER DETAILS.

VI. CLAIMS STAKED DURING/AFTER PROSPECTING ACTIVITY

Project Area	Claim Numbers	Number of Claims
NONE		

VII. OPTION AGREEMENTS RESULTING FROM OPAP PROJECT

Optionee	Property/Claims	Dollar Value of Work Commitment
NONE		

The Ministry of Northern Development and Mines may verify all statements related to and made herein this application.

1. I am the person named in the Application for Grant under the Ontario Prospectors Assistance Program.
2. I have complied with all the requirements of the said program.
3. I understand that it is an offence under the Ontario Mineral Exploration Act, 1989, to make a false or misleading statement and that all statements and all other information submitted in support of the said application are true and correct.
4. I am not actively engaged in mineral production anywhere in the world, nor am I a representative of a person who is actively engaged in mineral production anywhere in the world.
5. I am not an associate of, nor do I represent an affiliated corporation or an associate of any person actively engaged in mineral production anywhere in the world.
6. The mineral exploration project that is the subject of the said application will not receive Federal Government or other Ontario Government financial assistance.

It is an Offence under subsection 8(1)(A) of the Ontario Mineral Exploration Act, 1989 to knowingly furnish false or misleading information.

Personal information on this form is obtained under the authority of the Ontario Mineral Exploration Act, 1989, sections 2, 3 and 4 and the Ontario Prospectos Assistance Program Regulation, sections 4, 5 and 6. The financial and technical information will be used for the purpose of determining the eligibility of the applicant to have a program designated for financial assistance and the amount of such assistance. Other information, such as statistical information about the individual projects will be used for the purpose of determining the overall effectiveness of the program. It may be disclosed for those purposes and I consent to its disclosure for such purposes. Questions about this collection should be directed to Supervisor, Incentives Office, Mineral Development and Lands Branch, Ministry of Northern Development and Mines, 3rd Floor, 800 Bay Street, Toronto, Ontario M5S 1Z8, telephone (416) 965-1062.

Signature of Applicant J. Claude Gervais Date 25 Jan 91

Name (print) Jean Claude GERVAIS
(John)

O.P.A.P. OP90-386
EXPENDITURE INFORMATION
GERVAIS GROUP PROPERTY

ITEM #	FUNCTION	PERSON(S) EMPLOYED	DATES	VALUE OF WORK OR EQUIPMENT RENTED	RESULTS OF THE WORK
1	PROSPECTING	JOHN CLAUDE GERVAIS	APRIL 29/90	100.00/dy	discovered the ELDORADO SHOWING ON S-994995
		CHARLES GERVAIS	"	100.00/dy	
		HAROLD TRACANELLI	"	100.00/dy.	
2.	LOGISTICAL WORK A.T.V ROAD EST. TO ELDORADO SHOWING AREA	JOHN CLAUDE GERVAIS	JUNE 15/90	100.00/day	ATV ROAD SPOTTED PRELIM CUTTING BEGAN.
		CHARLES GERVAIS	"	100.00/day	
		RON GERVAIS	"	100.00/day	
		TERRY GERVAIS	"	100.00/day	
		HAROLD TRACANELLI	"	100.00/day	
3.	LOGISTICAL WORK A.T.V ROAD ESTABLISHMENT TO ELDORADO SHOWING.	RON GERVAIS	JUNE 20/90	100.00/day	Completed CUTTING OUT OF THE A.T.V ROAD.
		TERRY GERVAIS	JUNE 20/90	100.00/day	
TOTAL				$1000,00	

O.P.A.P. OP90-386
EXPENDITURE INFORMATION
GERVAIS GROUP PROPERTY

ITEM #	FUNCTION	PERSON(S) EMPLOYED	DATES	VALUE OF WORK OR EQUIPMENT RENTED	RESULTS OF THE WORK
4.	DRILLING AND BLASTING ON THE ELDORADO SHOWING S-994995	JOHN CLAUDE GERVAIS RON GERVAIS TERRY GERVAIS HAROLD TRACANELLI	SEPT 15/90 " " "	100.00/day 100.00/day 100.00/day 100.00/day	5 FOOT DEEP TEST PIT ON SHOWING. INCREASE IN MINERALIZATION.
5.	COMPLETED DRILLING AND BLASTING ON THE ELDORADO SHOWING ON S-994995	JOHN CLAUDE GERVAIS RON GERVAIS HAROLD TRACANELLI	SEPT 16/90 " "	100.00/day 100.00/day 100.00/day	PIT DOWN TO 10 FEET +/- SIGNIFICANT INCREASE IN MINERALIZATION TOURMALINE FOUND.
6.	RENTAL OF DRILLING EQUIPMENT.	PRO RENTALS PARRY SOUND ONT GASOLINE PLUGGER DRILL & STEEL.	Sept 15/90 SEPT 16/90	$ 156.00	FOR DRILLING ON THE ELDORADO SHOWING.
TOTAL				$ 856.00	

O.P.A.P. OP90-386
EXPENDITURE INFORMATION
GERVAIS GROUP PROPERTY

ITEM #	FUNCTION	PERSON(S) EMPLOYED	DATES	VALUE OF WORK OR EQUIPMENT RENTED	RESULTS OF THE WORK
7.	PURCHASE OF BLASTING AGENTS.	BOYES EXPLOSIVES SUDBURY, ONT	Sept 14/90	$156.87	FOR BLASTING OF THE ELDORADO SHOWING.
8.	GRID SYSTEM LINE CUTTING 6.62 MILES +/-	BRIAN KEEN AND ASSOCIATES OF SUDBURY, ONT.	JULY 04 to JULY 13/90	$2152.82	CUT OUT 92% of THE ORIGINALY PLANNED GRID. LAYOUT
9	GEOPHYSICAL SURVEY OMNI PLUS MAG/ VLF-EM UNIT.	DAVID G. BTRUETT SUDBURY, ONT.	OCT 25/90 OCT 24/90 OCT 27/90	$1300.00	SURVETED 100% OF THE CUT GRID SYSTEM.
10.	DETAILED PROSPECTING	JOHN CLAUDE GERVAIS HAROLD TRACANELLI	Oct 20/90 " "	100.00/day 100.00/day	PROSPECTIN SOUTH OF GERVAIS SH
TOTAL				$4309.69	

O.P.A.P. OP90-386
EXPENDITURE INFORMATION
GERVAIS GROUP PROPERTY

ITEM #	FUNCTION	PERSON(S) EMPLOYED	DATES	VALUE OF WORK OR EQUIPMENT RENTED	RESULTS OF THE WORK
11	TRANSPORTATION TO AND FROM THE GERVAIS GROUP PROPERTY	JOHN CLAUDE GERVAIS VEHICLE. 145 ROUND TRIP FROM SUD.	APR. 29/90 JUNE 15/90 JUNE 20/90 SEPT 15/90 SEPT 16/90 Oct 20/90	$43.50 $43.50 $43.50 $43.50 $43.50 $43.50	TRANSPORTATION OF MEN AND EQUIPMENT ONTO WORK SITES.
12.	REPORT PREPARATION	HAROLD TRACANELLI EXP GEOLOGIST. Consultant.	JAN 14/91 JAN 15/91 JAN 16/91 JAN 17/91 JAN 21/91 JAN 29/91	8hrs = $160.00 8hrs = $160.00 6hrs = $120.00 8hrs. = $160.00 8hrs. = 160.00 10hrs 200.00	COMPILATION OF ALL DATA PREP OF FINAL REPORT.
13.	WORD PROCESSING.	PIERRE M. LABERGE COMPUTER CONSULTANT W.P.	JAN 28/91	$126.00	
TOTAL				$1347.00	

O.P.A.P. OP90-386
EXPENDITURE INFORMATION
GERVAIS GROUP PROPERTY

ITEM #	FUNCTION	PERSON(S) EMPLOYED	DATES	VALUE OF WORK OR EQUIPMENT RENTED	RESULTS OF THE WORK
14.	REPORT PREP SUPPLIES ETC.	BHARTI ENGINEERING ASSOC. INC SUDBURY, ONT.	JAN 14/91 to JAN 29/91	50.00	BLUE PRINTS PHOTOCOPIES ETC.
	RECIEPTS ETC	ARE ATTACHED.			
				$50.00	
(SUM) TOTAL →				$7,562.69	

SUMMERIZATION OF EXPENDITURE INFORMATION BY ITEM

ITEM #	FUNCTION	TOTAL OF ITEM	RUNNING TOTAL OF ITEMS
1.	PROSPECTING AND MANPOWER ASSIST.	$ 300.00	$ 300.00
2.	LOGISTICAL MANPOWER ASSIST.	$ 500.00	$ 800.00
3.	LOGISTICAL MANPOWER ASSIST.	$ 200.00	$ 1000.00
4.	DRILLING AND BLASTING MANPOWER ASSIST.	$ 400.00	$ 1400.00
5.	DRILLING AND BLASTING MANPOWER ASSIST.	$ 300.00	$ 1700.00
6	EQUIPMENT RENTALS	$ 156.00	$ 1856.00
7.	Supply PURCHASES	$ 156.87	$ 2012.87
8	LINECUTTING CONTRACT	$ 2152.82	$ 4165.69

SUMMERIZATION OF EXPENDITURE INFORMATION BY ITEM

ITEM #	FUNCTION	TOTAL OF ITEM	RUNNING TOTAL OF ITEMS
9.	GEOPHYSICAL SURVEYS. CONTRACT.	$ 1800.00	$ 5965.69
10	DETAILED PROSPECTING MANPOWER ASSIST.	$ 200.00	$ 6165 69
11.	TRANSPORTATION	$ 261.00	$ 6426.69
12	REPORT PREP GEO CONSULTANT.	$ 960.00	$ 7396.69
13.	WORD PROCESSING CONSULTANT	$ 126.00	$ 7512.69
14	REPORT PREP SUPPLIES	$ 50.00	$ 7562.69

GERVAIS GROUP July 4/90
PROPERTY

No. .....

Date ULSTER TWP. Page July 13/90

BL0	16E - 16W	3200'
16E	475N - 300N ; 200N - BL0	375'
14E	600N - 200N ; 100N - 300S	800'
12E	750N - 600S	150'
10E	900N - BL0 ; 350S - 750S	1300'
8E	1050N - 200S ; 1475S - 1150S	1925'
6E	1200N - 250S	1450'
4E	1350N - 500S	1850'
2E	1475N - 1100S	2575'
0	1600N - 400S	3000'
2W	1750N - 1500S	3250'
4W	1700N - 1400S	3100'
6W	1450N - 1200S	2650'
8W	1150N - 1150S	2300'
10W	850N - 950S	1800'
12W	600N - 800S	1400'
14W	250N - 700S	950'
16W	BL - 500S	500'
TL 4N	10E - 16E	600'
TL 6S	6E - 12E	600'
	TOTAL	34,975

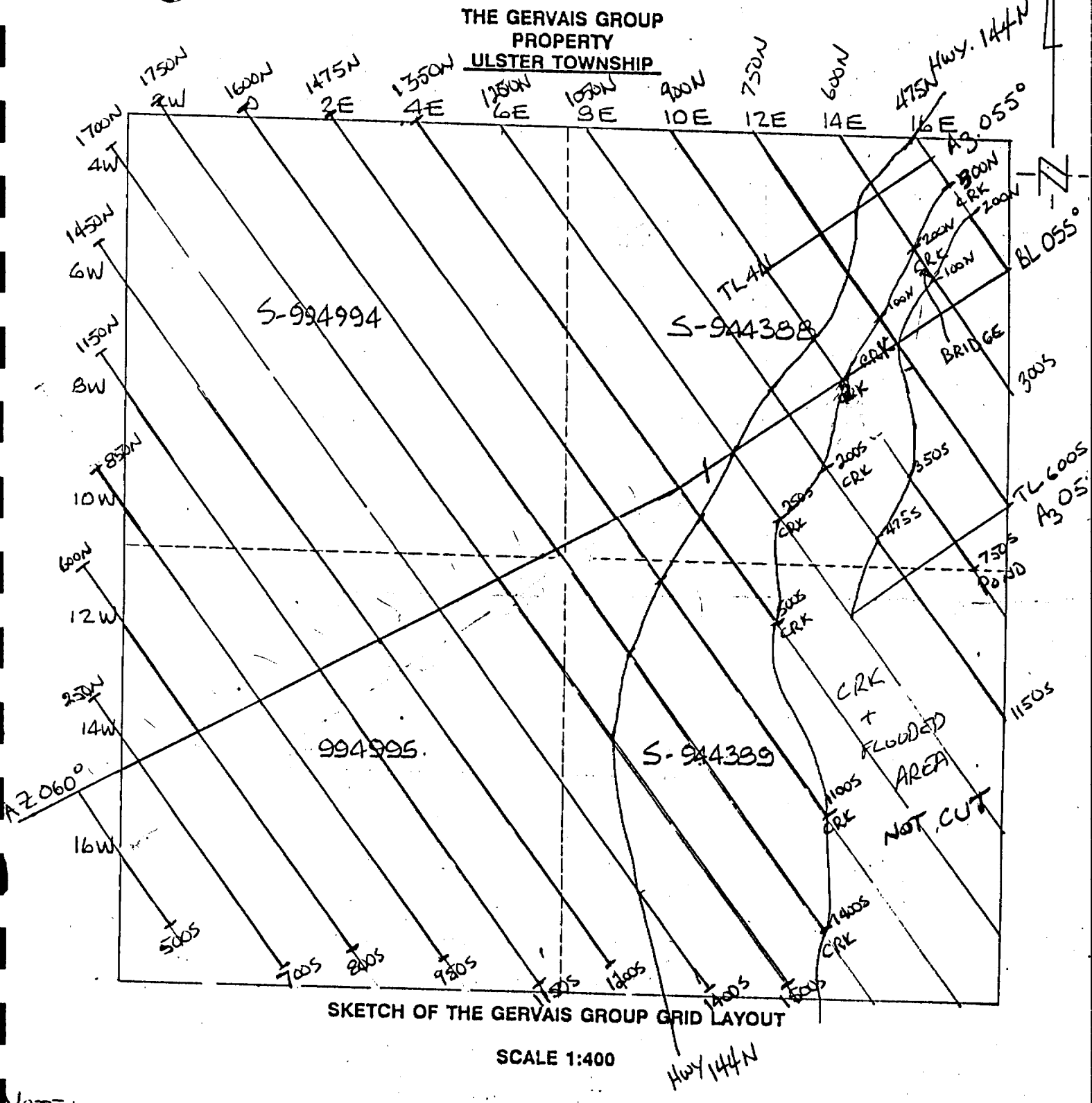
Paid by John Gervais

TOTAL Paid $2103.57 $ 2103.57

OUTSTANDING $49.25

DEBT.

LINE CUTTERS NOTES



SKETCH OF THE GERVAIS GROUP GRID LAYOUT

SCALE 1:400

NOTE:

BL 0 FR. 16W - 4E @ Az. 060°

FR. 4E - 16E @ Az. 055°

XL @ 145°

TL 4N @ Az. 055°

LINE CUTTING SKETCH

TOTAL 34,975' / 6.6

J.C. ENTERPRISES
CLAUDE J. GERVAIS
BOX 831 TEL: 682-0254
COPPER CLIFF, ONTARIO P0M 1N0

80109

132

July 13 19 90

PAY TO THE ORDER OF Brian Keen $ 2103 57/100

- two thousand - one hundred and three — 57/100 DOLLARS

SUDBURY REGIONAL CREDIT UNION LIMITED
1 GRIBBLE STREET
COPPER CLIFF, ONTARIO P0M 1N0

Final Line Cutting

Suzanne Gervais

⑈132⑈ ⑆06022⑉828⑆ 0080109⑉211⑈ ⑈0000210357⑈

LINE CUTTING

DEPOSITED BY

TO BRANCH

2017437Z

C.C.C.S. TORONTO, ONT
C.U.C.D. DATA CENTRE
50002-828 07/17/90 3-1

TORONTO DOMINION BANK
TORONTO DATA CENTRE
TORONTO, ONTARIO
JY 90 17

37162-004
THE TORONTO-DOMINION BANK
SUDBURY
JUL 16 90
17 37162-004

4520-569
#05575

Brian Keen
#3105346

567866 ONTARIO
OPERATING AS

PRO RENTALS

BOX 484, 82 JOSEPH ST.
PARRY SOUND, ONTARIO
P2A 2X5
TEL: (705) 746-4525

TIME OUT '90 SEP 14 P4:29	TIME IN '90 SEP 17 A8:11
RENTAL / SALES AGREEMENT	29554

AGREEMENT OF LEASE MADE AT ABOVE, LOCATION BY AND BETWEEN PRO RENTALS' HEREINAFTER CALLED THE "LESSOR" AND

NAME CLAUDE GERVAIS (HEREINAFTER CALLED THE "LESSEE")

ADDRESS 26 SERPENTINE Bx 831
COPPER CLIFFE ONT POM1NO

IDENTIFICATION 62783-12803-90318

JOB LOCATION

ORDERED BY

CUSTOMER ORDER NO.

INVOICE STARTED BY

EXTENDED BY

RENTAL PERIOD

DAY	WEEK	MONTH

DATE & TIME DUE IN
SEPT 15/90
AM 5:00 PM

QTY. Shipped	RENTAL ITEM	UNIT	RENTAL RATES DAY	WEEK	MONTH	EXTENDED
1	PIONJAR		35			142
1	2' STEEL		5			
1	4' STEEL		7			14
	RENTAL CHARGES ARE FOR TIME OUT NOT TIME USED					

CHECKED OUT BY
CHECKED IN BY

☐ ACCEPT
☐ DECLINE

DAMAGE WAIVER: When initialed customer agrees to pay 8% of total invoice as waiver of damage on equipment. Damage waiver does not cover abuse, misuse, theft or unexplained loss.

QTY. Shipped	MERCHANDISE ITEM	QTY. returned	QTY. balance	UNIT PRICE	EXTENDED
	Drilling EQUIPMENT ELDorado Showing.				

CLEANING CHARGES WILL APPLY FOR ALL ITEMS RETURNED IN UNCLEAN CONDITION

IT IS UNDERSTOOD AND AGREED THAT THE TERMS AND CONDITIONS ON THE REVERSE SIDE HEREOF CONSTITUTE AND FORM PART OF THIS AGREEMENT AND THE LESSEE ACKNOWLEDGES THAT HE HAS READ AND UNDERSTANDS SAID TERMS AND CONDITIONS & ACKNOWLEDGES RECEIPT OF GOODS LISTED ABOVE.

RENTAL AGREEMENT Claude Gervais
CUSTOMER SIGNATURE (LESSEE)

DEPOSIT	DELIVERY	
	SUB TOTAL	156
DELIVERY	P.S.T.	
	P.S.T.	13776436
PICK-UP	TOTAL CHARGE	156
	LESS DEPOSIT	
BALANCE		156

4510 214 340 774

DO NOT WRITE ABOVE THIS LINE - NE RIEN ÉCRIRE AU-DESSUS DE CETTE LIGNE

06/92 CV

AUTHORIZATION NO. / NO D'AUTORISATION 44860

CLAUDE GERVAIS

EXPIRY DATE CHECKED / DATE D'EXPIRATION VÉRIFIÉE

DATE 9 12 90

TAKEN EMPORTÉ

CLERK COMM.

DEPT. RAYON

DELIVERED LIVRÉ

Drilling Equipment

Eldorado Showing

C115535

PRO RENTALS

BOX 484

PARRY SOUND, ONT.

5 290

DESCRIPTION	AMOUNT · MONTANT
	156

SALES DRAFT CHARGEX FACTURE

TAX TAXE

CDN CAN $ 156

X Claude Gervais

CARDHOLDER'S SIGNATURE · SIGNATURE DU TITULAIRE

PLEASE RETAIN THIS COPY AS A RECORD OF YOUR TRANSACTION

VISA

CONSERVEZ CETTE COPIE COMME PREUVE DE VOTRE TRANSACTION

CARDHOLDER WILL PAY TO THE ISSUER OF THE CHARGE CARD PRESENTED HEREWITH THE AMOUNT STATED HEREON IN ACCORDANCE WITH THE ISSUER'S AGREEMENT WITH THE CARDHOLDER.

LE DÉTENTEUR DE LA CARTE CI-HAUT MENTIONNÉ PAIERA À L'ÉMETTEUR DE LA CARTE LE MONTANT CI-INDIQUÉ CONFORMÉMENT AUX CONDITIONS DE LA CONVENTION ENTRE L'ÉMETTEUR ET LE DÉTENTEUR DE LA CARTE.

CUSTOMER COPY
COPIE DU CLIENT

J.C. GERVAIS
BV 831
Copper Cliff 682-0254

Sept 14 19 90

PAY TO THE ORDER OF Boyes Explosives $ 156 87/100

one hundred fifty-six 87/100 DOLLARS

THE ROYAL BANK OF CANADA ACCT. NO.
LIVELY, ONT.
P0M 2E0

MEMO Explosives

Suzanne Gervais

⑈0271⑈003⑈ 507⑈319⑈2⑈ ⑈00001568⑈

EXPLOSIVES

CK 0271 DATE 17/09/90

BOYES EXPLOSIVES LIMITED
DEPOSIT ONLY
A/C No. 101-709-4

THE ROYAL BANK
Sudbury & Hazel
Sudbury, Ontario
05002-003

05002-003

SE '90 17

ROYAL BANK
ONTARIO PC

Energy, Mines and Resources Canada | Énergie, Mines et Ressources Canada

EXPLOSIVES PURCHASE AND POSSESSION PERMIT
PERMIS D'ACHAT ET DE POSSESSION D'EXPLOSIFS

PURCHASER (Name and Address) — ACHETEUR (Nom et adresse)
HAROLD TRACANELLI
582 Vera Labelle
Chelmsford ONT

Magazine Licence No. (if applicable) — Nº de licence de la poudrière (si applicable)
[redacted]

PURPOSE OF EXPLOSIVES — EMPLOI DES EXPLOSIFS

- [ ] Mine
- [ ] Construction
- [ ] Road Building / Travaux de voirie
- [ ] Seismic Prospecting / Prospection sismique
- [ ] Other Lawful Activity (specify) / Autre activité licite (spécifier)
- [ ] Quarry / Carrière
- [ ] Demolition / Démolition
- [ ] Dredging / Dragage
- [ ] Agricultural / Agriculture
- [x] Prospector / Prospecteur
- [ ] Trenching / Fossé
- [ ] Well Drilling / Forage de puits
- [ ] Forestry / Forestier

Where explosives are to be used — Où les esplosifs doivent servir: Unstedtownship

Place of storage when not in use — Endroit où ils sont emmagasinés lorsqu'ils ne servent pas: Mag.

Method of Transport (Vehicle Licence No. if applicable) — Mode de transport (Nº d'immatriculation du véhicule si applicable): 326 FKK

Quantity / Quantité	EXACT DESCRIPTION OF EXPLOSIVES (See instruction sheet for details of required information) — DESCRIPTION EXACTE DES EXPLOSIFS (Voir en détail, les renseignements requis)
1	Forcite 40 25Kg

VALID FOR 90 DAYS FROM DATE ISSUED
VALIDE PENDANT 90 JOURS À COMPTER DE LA DATE D'ÉMISSION

Person receiving explosives — Personne recevant les explosifs
Signature (In presence of Issuer) (En présence de l'émetteur)

Printed Name and Residential Address — Nom et adresse résidentielle (en lettres moulées): Same As Above

Identification document presented — Description du document présenté: T7125 31556 00222

Signature of Vendor — Signature du vendeur

Vendor's Magazine Licence No. — Nº de la licence de la poudrière du vendeur: F-300

Date Issued — Émis le: Sept 14 98

- **THIS PERMIT MUST BE RETAINED BY THE PERSON HAVING POSSESSION OF THE EXPLOSIVES.**
- **CE PERMIS DOIT ÊTRE CONSERVÉ PAR LA PERSONNE AYANT LES EXPLOSIFS EN SA POSSESSION.**

If the quantity of explosive exceeds that permitted by Subsection 140 (1) of the Explosives Regulations, the following certificate is to be signed in the presence of the Issuer:
I hereby certify that I will use the quantity of explosives detailed above which is in excess of 75kg of blasting explosives and 100 detonators within 24 h[illegible] and that I will safeguard them during this period.

Si la quantité d'explosifs est supérieure à celle permise au paragraphe 140 (1) des Règlements sur les explosifs, l'affirmation suivante doit être signée en présence de l'émetteur:
Par les présentes, j'affirme que j'utiliserai la quantité d'explosifs décrite ci-haut qui est supérieure à 75kg d'explosifs de sautage et 100 détonateurs dans les 24 heures et que je la garderai en toute sécurité durant cette période.

Form / Formule 20

Signature (For J.C. GERVAIS)

Nº 143335

IMPORTANT INFORMATION ON REVERSE — RENSEIGNEMENTS IMPORTANTS AU VERSO

NUMERICAL COPY

26867

BOYES EXPLOSIVES LIMITED

EXPLOSIFS ((BOYES)) EXPLOSIVES

1350 MAPLE ST., FENWICK, ONTARIO L0S 1C0 416-892-5725 FAX: 416-892-8185
P.O. BOX 219, GREELY, ONTARIO K0A 1Z0 613-821-3222 FAX: 613-821-3910
1151 LORNE ST., SUDBURY, ONTARIO P3C 4T1 705-674-1913 FAX: 705-674-5165

OTHER LOCATIONS TO SERVE YOU
BANCROFT, KINGSTON, LANARK, MADOC, NORTH BAY, PARRY SOUND

BILL OF LADING / FACTURE - CONNAISSEMENT

SHIPPED FROM: POINT D'EXPEDITION: CONISTON

SHIPPERS MAG. LICENSE EXPEDITEUR LIC. D'ENTREPOT: F-300

VEHICLE NO. NO. CAMION: 0

STRIBUTORS:
- I - L EXPLOSIVES & SUPPLIES
)ART DRILL SUPPLIES

)LD
'O
NDU
A

AACASHXXS
CASH SALE
SUDBURY

SHIP TO
EXPÉDIER À

J.C. ENTERPRISES
J.C. GERVAIS
C/O BHARTI EN.ATT:HAROLD
SUDBURY, ONTARIO

ATE ORDERED / DE COMMANDE	DATE REQ'D / DATE REQUISE	TIME REQ'D / HEURE REQUISE	CUST. REF. NO. / NO. DE REF DU CLIENT	CUST. MAG. LIC. NO. / NO. DE MAG. DU CLIENT	SHIP VIA / EXPÉDIER VIA	DATE SHIPPED / DATE D'EXPÉDITION
28/11/92	28/11/92	1500	VERBAL		CUST TRUCK	

DANGEROUS GOODS INFORMATION/INFORMATION MARCHANDISES DANGEREUSES						DESCRIPTION	CUST. CODE / CODE CLIENT	QTY. SHIPPED / QTÉ. LIVRÉ
DESCRIPTION	CLASS	GROUP / GROUPE	UN# CODE	P.G.	# OF PKGS			
(PLOSIVE, BLASTING TYPE A	1.1	D	0081	II	1	FORCITE 40% 25mmX200mm		25KG

OF PACKAGES
DE COLIS 1
GROSS WEIGHT DANG. GOODS
MASSE TOTAL DE MARCH. DANG. 25.0000
NET QTY. DANG. GOODS
QTÉ. NETTE DE MARCH. DANG. 25.0000

SUMMARY OF EMERGENCY RESPONSE PLAN / RÉSUMÉ DE PLAN D'URGENCE

ERP2 - 0077

EMERGENCY RESPONSE TELEPHONE NUMBERS / NUMÉROS DE TÉLÉPHONE EN CAS D'URGENCE

1-514-932-0194

PLACARDS OFFERED / OFFRE DE PANCARTES
YES/OUI [ ] NO/NON [X]

CLASS:

QUANTITY/QUANTITÉ

SPECIAL INSTRUCTIONS/INSTRUCTIONS SPÉCIALES

CHEQUE REQUIRED FOR $156.87

SHIPPER/EXPEDITEUR: BOYES EXPLOSIVES
PER/PAR:

CARRIER/TRANSPORTEUR: CUST TRUCK
PER/PAR:

CONSIGNEE/DESTINAIRE: CASH SALE (For J.C. GERVAIS)
PER/PAR:

Claude Gervais 682-0254
Bx 831
Copper Cliff POM 1N0

Oct 29 1990

PAY TO THE ORDER OF David Trott $ 500 00

five hundred 00/100 DOLLARS

THE ROYAL BANK OF CANADA
LIVELY, ONT.
POM 2E0

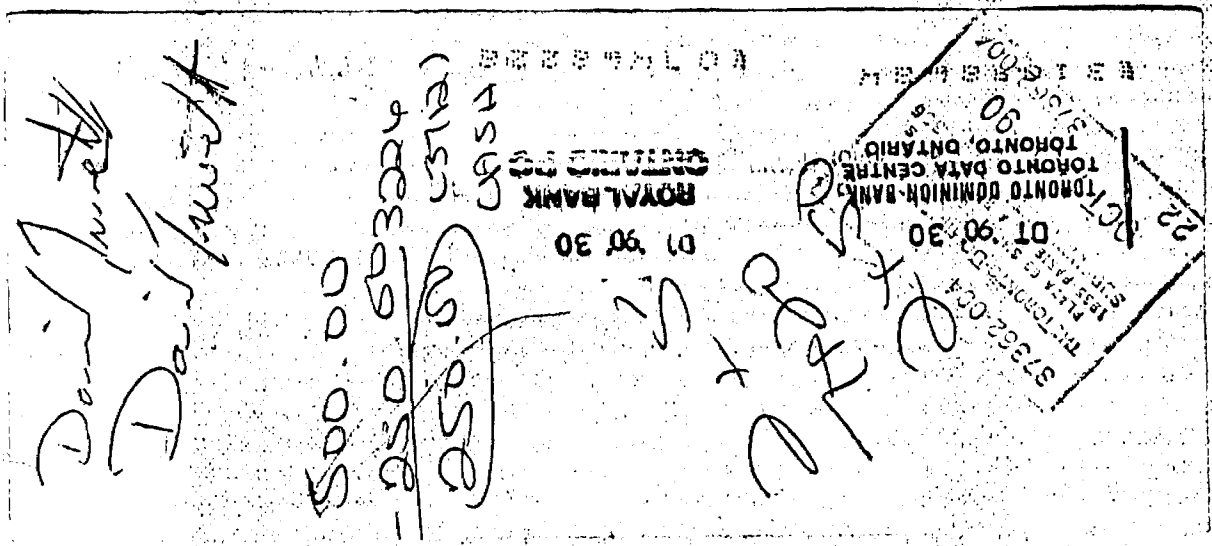
ACCT. NO.

MEMO advances for ger physical mag.

Suzanne Gervais

⑈02712⑈003⑈ 507⑈319⑈2⑈ ⑈0000050000⑈

GEOPHYSICAL SURVEYS



Received Cash $400

Dan Twomey

Towards 1344 owed

500.00	
400.00	
900.00	
1800.00	

GEOPHYSICAL SURVEYS

PURCHASER'S COPY/COPIE DE L'ACHETEUR

RETAIN FOR YOUR RECORDS—SEE AGREEMENT BELOW
À CO[illegible]ERVER DANS VOS ARCHIVES—VOIR CONTRAT CI-DESSOUS

NOT NEGOTIABLE
NON NÉGOCIABLE

58-900223064

Nov 30 90

PAY EXACTLY
PAYEZ LA SOMME EXACTE
NOT VALID OVER FIVE THOUSAND CANADIAN DOLLARS—NON VALABLE AU DESSUS DE CINQ MILLE DOLLARS CANADIENS 900.00

David Frisett

900.00

J. C. Gervais

PURCHASE AGREEMENT: By using American Express Money Orders you agree to everything written here; American Express will replace or refund your lost or stolen money order only if: (1) You fill in the face of the Money Order completely, (2) You do not give the Money Order away voluntarily, (3) You notify American Express immediately of the loss or theft. Copies of Money Orders will only be provided for 2 years from date of purchase. American Express does not have to stop payment on Money Orders.

CONTRAT D'ACHAT: L'utilisation de mandats American Express vaut acceptation de votre part des termes du présent contrat. American Express ne remplacera ou ne remboursera un mandat perdu que si: 1) vous remplissez correctement le recto du mandat, 2) vous ne cédez pas le mandat volontairement, 3) vous avisez immédiatement American Express en cas de perte ou de vol. Des duplicata de mandats ne seront délivrés que pendant 2 ans à compter de la date d'achat. American Express n'a pas à suspendre les paiements sur mandats.

GEOPHYSICAL SURVEYS

Canadian Dollar Money Order Tracing/Refund Request
Suivi des Mandats en Dollars Canadiens/Demande de remboursement

[illegible]

Money Order # / Mandat n° | CAD Amount / Montant | Date Purchased / Date de l'achat

Purchaser's Name/Nom de l'acheteur | Money Order Was Payable To/Le mandat était à l'ordre de

Address/Rue | Apt. #/App. | Phone Number/Numéro de téléphone

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PURCHASER SIGN HERE / SIGNATURE DE L'ACHETEUR: X | DATE

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Pierre M. Labergé
Computer Consulting + Word Processing
401 York St. PO Box Sudbury
671-1314

DATE JAN 28 19 91

NAME John Claude Gervais

ADDRESS Box 837 Copper Cliff

SOLD BY	C.O.D.	CHARGE	ON ACCT.	ACCT. FWD.
PML			V	

	Materials & Cost		Tax
2			
3	Word Processing 33 pp	99	00
4	Draft Paper + Cartridge	7	00
5	Misc. Supplies	3	00
6	Ribbons	9	00
7	Diskettes + Storage	8	00
8			
9	Total	126	00
10			
11	Picked Up By H.J. Trocmellen		
12		TAX	
34	SIGNATURE Pierre M Labergé		

3CL-2

RETAIN THIS COPY FOR FOLLOW-UP

Bharti Engineering Associates Inc.
1009 Lasalle Blvd.
P O Box 2336 Sudbury Ont P3A 4S8 705-566-6612

FROM: Harold I. Tracanelli Exp Geo. DEPARTMENT: Exploration

SEND TO:
John Claude Gervais
Box 831 Copper Cliff, Ont
POM-1N0 705 682 0254

DATE: Jan 29/91
SUBJECT: Geo. Consultant Report Prep

MESSAGE

Gervais Group Property Report Prep OP90-396 Ulster Twp, Ont. $960.00

Supplies. $50.00

$1010.00

Amount owing for the above stated work $1010.00

REPLY FROM DATE

A 10-E or D 5905 (250 pkg.) D 4905 (50 pkg.)

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TO REPLY: RETAIN WHITE ORIGINAL — RETURN PINK

Features

OMNI-PLUS Tie-line MAG/VLF R22K Ser #428150
TOTAL FIELD DATA (uncorrected)
& GRADIENT

Reference field: 56000.0
Datum subtracted: 0.0Date 13 DEC 88
Operator: 5000
Records: 10
Bat: 17.5 Volt Lithium: 3.48 Volt
Last time update: 12/13 9:50:00
Start of print: 12/13 14:34:01

Line 0+00 E Date 13 DEC 88					#2		
POSITION	FIELD	ERR	DRIFT	TIME	DS	CULT	GRADIENT
0+80 N	56779.9	.04	0.0	11:38:55	88		1.1
0+90 N	56769.6	.04	0.0	11:39:33	99		1.2
1+00 N	56747.1	.05	0.0	11:40:10	88		2.1
1+10 N	56627.4	.05	0.0	11:41:47	88		1.7
1+20 N	56418.6	.08	0.0	11:42:30	88	PIPE	-13.8
1+30 N	56616.1	.07	0.0	11:43:26	88		-41.0
1+40 N	56733.7	.05	0.0	11:44:28	88		6.2
1+50 N	56765.6	.04	0.0	11:45:08	88		1.9
1+60 N	56764.9	.05	0.0	11:45:47	88		1.1
1+70 N	56767.2	.04	0.0	11:46:26	88		0.7

OMNI-PLUS Tie-line MAG/VLF R22K Ser #428150
VLF TOTAL FIELD DATA (uncorrected)

Date 13 DEC 88
Operator: 5000
Records: 10
Bat: 17.5 Volt Lithium: 3.48 Volt

Last time update: 12/13 9:50:00
Start of print: 12/13 14:35:51

Line 0+00 E Date 13 DEC 88 24.0								#2			
POSITION		I/P	QUAD	T.FLD	TILT	TIME		CULT	S	DIR	4-FRA	5-FRA
0+80 N		20.2	-5.4	71.14	61.0	11:38:55		55		7.0		
0+90 N		28.2	-7.6	73.45	67.6	11:39:33		44		11.7		
1+00 N		41.6	-10.2	78.82	79.2	11:40:10		43		0.6		
1+10 N		68.2	-13.7	98.68	85.3	11:41:47		43		-16.4	-36.0	
1+20 N		86.9	-6.8	202.4	84.3	11:42:30	PIPE	52		-14.4	-22.7	-29.4
1+30 N		-101.3	12.2	202.0	84.3	11:43:26		59		-9.5	-4.0	-13.4
1+40 N		-81.1	21.7	95.17	81.7	11:44:28		59		-14.2	3.6	-0.2
1+50 N		-53.6	15.8	77.03	76.9	11:45:08		59		-22.2	10.0	6.8
1+60 N		-40.7	13.4	68.07	74.7	11:45:47		49		-24.3	14.4	12.2
1+70 N		-34.6	11.7	63.02	71.4	11:46:26		49		-16.9	12.5	13.4

Typical sample of data output from the OMNI system

Sealed, User Friendly Keypad

Protects your Omni System from water and dust and allows for easy operation and reliability.

Digital Display

Distinctly shows data which can sometimes be unclear with analog or audio-nulled systems.

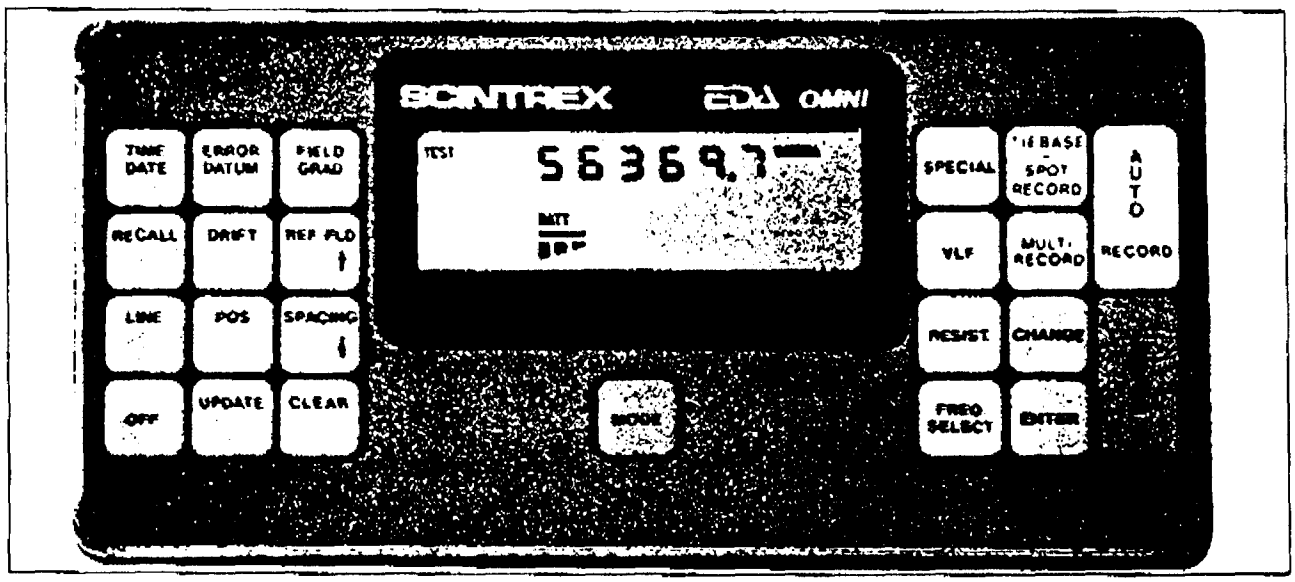
Display Descriptors

Monitor the signal strength and decay rate of the magnetic total field and/or the quality of all three VLF transmitter signals being measured.

Power Supply Options

You can choose from the following power supply options:

- Non-magnetic rechargeable sealed lead acid battery
- Non-magnetic rechargeable sealed lead acid battery belt
- Alkaline battery belt
- 12V DC power source for base station operation



Omni System Benefits

Only One Instrument Needed for Magnetometer, Gradiometer, VLF and VLF Resistivity Surveying

The Omni incorporates the capabilities of a "Tie-Line" magnetometer and simultaneous Gradiometer system with the ability to measure VLF magnetic and electric fields.

Only one complete Omni System is needed to record all of the following geophysical parameters:

1. The total magnetic field
2. The simultaneous gradient of the total magnetic field.
3. The VLF magnetic field including:
   - the vertical in-phase
   - the vertical quadrature
   - the total field strength
   - the total dip
4. The VLF electric field, including:
   - the phase angle
   - apparent resistivity

A complete Omni System can, at each location, calculate and record in less than 8 seconds, four VLF magnetic field parameters from three different transmitters, a magnetic total field reading and a simultaneous magnetic gradient reading. In addition, it can also measure and record two VLF electric field parameters from three different transmitters.

Upgrade your Unit at any Time

Since the Omni System is based on a modular design, you can upgrade your system at any time. This built-in flexibility allows you to purchase an Omni System with only the surveying equipment that you need for now but does not limit you to one application. When your surveying needs grow, so can your Omni System.

Saves you Time

The Omni System with the unique 3-coil VLF Sensor does not require orientation of the VLF Sensor head toward the transmitter station. This simplifies VLF field procedures and saves considerable survey time. The operator does not need to orient the sensor head toward the first, selected transmitting station and then re-orient towards the second or third transmitting station.

The non-orientation technique is the first of its kind, and this provides the Omni System with many additional benefits. These benefits include:

- When you use the Omni System as both a magnetometer and VLF base station, you only need one instrument instead of three, to record data automatically from 3 VLF transmitting stations.

- When you use the Omni System with the Non-orientation VLF-Resistivity option, you can record automatically from 3 different stations the phase angle and apparent resistivity without having to re-orient any of the three electrodes. You can also use the Omni System with the conventional, two electrode method.

The Omni System quickly responds with a one-key operation. For example, if you must complete a magnetometer/gradiometer and three frequency VLF survey using the Omni System, you automatically measure the magnetometer, simultaneous gradiometer and three VLF frequency data by pressing only one key. Using another combined system, up to 5 different steps may be required. Such as, the operator would have to take one magnetic reading; then another sequential magnetic reading to calculate the gradient; orient the VLF sensor to the first VLF transmitter and then take a reading; orient the VLF sensor to the second transmitter, take a new reading and then repeat the same procedure for the third frequency. The Omni System one-key operation takes less than 8 seconds; a significantly shorter time period than the 5 step operation of other combined systems.

Since the Omni System saves all of the field data in memory and has many output capabilities, the elimination of the field notebook and also the transciption errors that can occur saves you a considerable amount of time.

Diurnal corrections, using the time saving "tie-line" method, can be done automatically by the Omni System eliminating hours of manual and tedious calculations. You can then directly transfer the corrected data to a computer for further data processing.

Higher Productivity System

Combined Magnetometer/VLF systems are inherently faster than conventional methods whereby two different operators collected magnetometer and VLF data from separate instruments.

Because of its unique user-friendly design, the Omni System provides higher field productivity for the user. The increased productivity originates from its two-microprocessor approach which significantly reduces calculation time and also from the non-orientation VLF technique.

Sensitive to Weak VLF Signals

The Omni System's ability to obtain repeatable readings from weak signals offers a number of benefits:

- It extends the use of VLF on to countries where its use was previously marginal.
- It enables you to increase the number of frequencies with which you can operate.
- It reduces your need for portable VLF transmitters
- It improves the quality of your readings in rugged terrains, such as the deep valleys of the North American Rockies.

The Omni System's digital signal processing removes the modulation in the received signals. This technique helps stabilize too weak signals much greater than the conventional phase-locked loop method.

Ability to receive weaker signals (20nA/m) and a background noise reduction algorithm are among the reasons why the Omni System can obtain repeatable readings from signals which had previously been too weak to record.

Omni System Benefits

Excellent Data Quality and Repeatability

The Omni System provides users with unparalleled data quality and repeatability. The 3-orthogonal coil sensor that the Omni System uses improves the data reliability over the conventional two-coil method as it provides a more complete calculation of both the in-phase and out-of-phase parameters. This difference becomes even more important in measuring large anomalies.

The 3-coil sensor method provides consistently high data quality unrelated to the operator's ability to orient the sensor for optimum coupling with the transmitting station. The higher data quality that the Omni System obtains with weak signals is enhanced even further when signals are stronger. Additional features, such as greater channel selectivity, atmospheric noise reduction and better immunity to spikes, improve even more the Omni System's capability to obtain repeatable data.

No Need to Take Multiple Readings

The Omni System's magnetic component uses four leading-edge design features to eliminate the need to take multiple readings, these are:

- Signal Processing Technique
- Constant Energy Polarization that maintains equal energy to the sensor
- Processing Sensitivity to ± 0.02 gamma
- Automatic Fine Tuning which uses the previous reading as the base for the next reading.

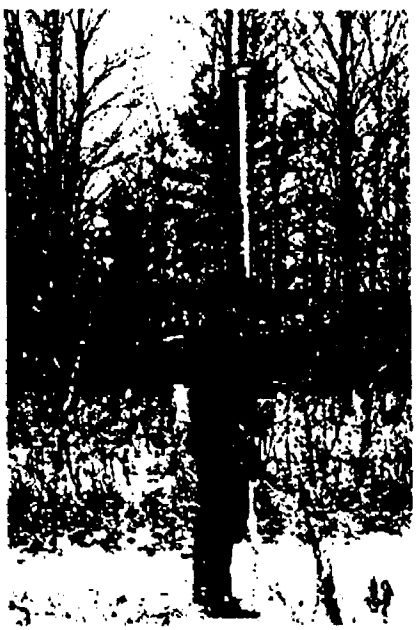
The "Tie-Line" Advantage

Not only does the Omni System eliminate hours of manual correction of data, it also gives you the flexibility of choosing the most appropriate tie-line method best suited for the survey, depending on the size and character of the grid. You can choose from:

- a single base point,
- a single tie-line,
- multiple tie-lines, or
- a random scattering of tie-points.

The self-correcting "Tie-Line" feature can remove base station requirements from some surveys. The "Tie-Line" data can be recalled even if it was stored on different days.

You can program the Omni System to automatically remove a designated datum from field data and by removing this coarse, background value, plotting and interpreting the magnetic field data is made easier. The Omni System can also automatically calculate the desired diurnal drift measured between consecutive tie-point readings.



Environmentally sealed design of the OMNI permits use in all weather conditions

Operate Your Omni System in any Environment

The Omni System is completely water proof and dust proof. The fully sealed housing console ensures that you can perform your surveying needs during adverse weather conditions.

A Variety of Software Programs Available

Although the Omni System can transfer data directly to a serial printer, most computers require some initial handshaking prior to actual data transfer. Scintrex provides such handshaking programs for many computers including IBM PS-2/ IBM PC (AT and XT), Compaq, Macintosh and compatible systems.

In addition to handshaking software, we can provide you with plotting, profiling, contouring and modelling programs available from certain software houses. Packages for use with the Omni System include:

- Mapping systems that allow you to post and plot many of the geophysical parameters available, in a plan-profile or contoured format.
- Cartographic quality large-scale and real-location plan maps, complete with custom map surrounds, legends, scale bars, etc., that can be produced in a matter of minutes on most dot-matrix printers or small and larger-scale plotters. Standard graphics screen previewing is available prior to plotting.
- Software that allows you to present the data in 2 or 3-D perspective plots, through a full menu and/or command driven system interface in which you can select different colours, sizes, scales, angles etc. For example, you can create shaded relief maps and colour image plotting on common high resolution printers, including grey-scale support on laser printers.
- Interactive filtering and modelling programs that are used to determine the possible geometry and physical characteristics of the sources of magnetic anomalies, such as the MAGMOD program.
- Autocad and image-processing capabilities.

Through new software interface programs, you can use the Omni System as a field unit together with other integrated magnetometer/VLF systems (such as the Scintrex IGS-2) or with other microprocessor based base station magnetometers.

Omni System Benefits

More System Benefits

- Display descriptors monitor the status of the primary battery source used.
- Output of grid co-ordinates with the designated compass bearing, using N, S, E, W descriptors.
- Audio feedback to confirm every keystroke
- Decimal spacing of 12.5 (metres or feet) for intermediate station intervals
- The ability to clear an unwanted last reading
- Two keystrokes to record data in memory - the first verifies the grid co-ordinate; the second puts it into memory.

The Omni Magnetometer unit measures and stores in memory the Earth's magnetic field at the touch of a key. This precise instrument is able to do the following:

- identify and store the location and the time of each measurement
- compute the statistical error of the reading
- store the decay and strength of the signal that you are measuring

Provides Data-Protected Readings

The Omni Magnetometer is packaged in a compact, lightweight and rugged housing and is able to measure and store the following set of information:

- total field magnitude
- time of measurement
- grid co-ordinates
- direction of travel
- statistical error of readings
- signal strength and rate of decay

Increases Productivity

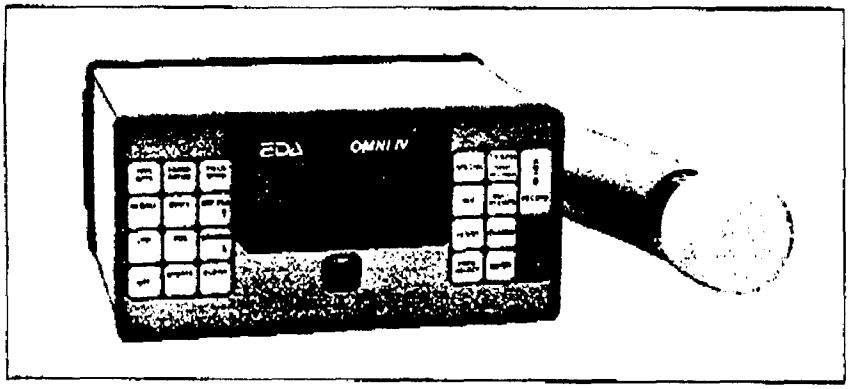
The Omni Magnetometer significantly increases survey productivity as:

- it can read and store a measurement in only 3 seconds.
- data is highly repeatable so a second measurement is usually not required.
- it calculates statistical error for each measurement which indicates whether an additional reading is required.

All of these benefits permit you to cover more ground and gather more data than would be otherwise possible.

OMNI MAG configuration used for measurement of total field magnetics

The Omni System as a Portable Field Magnetometer



OMNI MAG electronics console with total field magnetic sensor

Simplifies Fieldwork

The Omni makes surveys easier to conduct because:

- the electronic notepad eliminates the need to write down field data. The Omni simultaneously stores time, field measurements, grid co-ordinates when you press any one of the three record keys.
- you are able to clear the unwanted last reading.
- the Omni automatically calculates the difference between the current reading and previous one.
- you can remove the coarse magnetic field value or data from the field data to simplify plotting of the field results.
- the Omni automatically calculates diurnal corrections.

The flexibility of the Omni System offers the following choices:

- if you use the Omni as a field magnetometer or as a gradiometer, the total field data can be corrected using the unique "Tie-Line" or "Looping" method.
- if you use one Omni as a base station, it will correct the total field magnetic data in:
  - an Omni set-up as a field magnetometer
  - an Omni set-up as a gradiometer

Unparalled Repeatability of Data

The Omni provides you with unparallelled data repeatability. This is a result of four leading edge design features that eliminates the need for taking multiple readings:

- Signal Processing Technique
- Constant Energy Polarization that maintains equal energy to the sensor
- Processing senstivity to ± 0.02 gamma
- Automatic Fine Tuning which uses the previous reading as the base for the next

Saves You Time

The error analysis feature is a great time saver as the calculation of the statistical error of each reading lets you make an on-the-spot decision whether or not you should store the reading.

The Omni System also saves you time-consuming steps as it can:

- automatically assign a record number which you can also use to identify readings measured off of the grid.
- take more than one reading at one point without updating the current station number.
- according to the programmed station interval, automatically update your station position without having to program each station coordinate. The Omni magnetometer also provides a decimal digit for intermediate station intervals of 12.5 metres.
- rapidly recall readings either by record number or in sequence.

Tolerates Higher Gradients

The ability to tolerate local higher gradients of up to 6000 gammas per metre (field proven), is possible due to a sophisticated signal processing method and to a miniature sensor design using a highly optimized sensor geometry.

A Variety of Power Supply Options

You can choose from the following power supply options:

- non-magnetic rechargeable sealed lead-acid battery or belt
- heavy duty rechargeable battery
- alkaline battery belt
- 12V DC power source

The Omni System as a Base Station Magnetometer

The Omni Base Station Magnetometer effectively measures and stores in its memory the daily fluctuations of the Earth's magnetic field. The Omni can automatically correct total field data of other Omni units in just a few minutes.

Records Magnetic Field Activity

The magnetic field activity is recorded in the following format:

- time of measurement
- magnitude of total field
- difference from the reference field value
- difference from the previous reading
- sequential record number

Automatically Corrects Data

The Omni in the base station mode can automatically correct magnetic field data for both diurnal variations and reference field values. It can also correct total field data stored in:

- another Omni System used as a field magnetometer
- another Omni System used as a field gradiometer

This is ideal when you want to remove diurnal errors sufficiently to make use of the full 0.1 gamma resolution of the Omni System.

Automatic Drift Calculations

The Omni automatically calculates the difference between each reading and its programmed reference field. If at the end of the survey day you find that the reference field is incorrect, you can re-select a new one and the Omni System can instantly re-calculate the drift. The drift calculation can be presented in either digital and/or profile plot format. It can also be simultaneously output to a compatible printer so you can visually verify the activity of the field.

Calculates Differential Field Variations

The Omni calculates the difference between the current reading and the previous one to a resolution of 0.1 gamma. This features assists you in ascertaining the degree of activity that is occurring such as a magnetic storm or active conditions.

Stores Approximately 55 Hours Of Continuous Unattended Monitoring

The Base Station mode enables you to store up to 20,000 sets of readings which is the equivalent to approximately 55 hours of unattended monitoring at a 10 second sampling interval. You can program the cycling time at any interval between 5 seconds and 60 minutes in 1 second increments.

Outputs and Stores Data At the Same Time

The Omni can simultaneously output data in digital or ASCII format to your choice of data collection units at the same time it stores the data in memory.

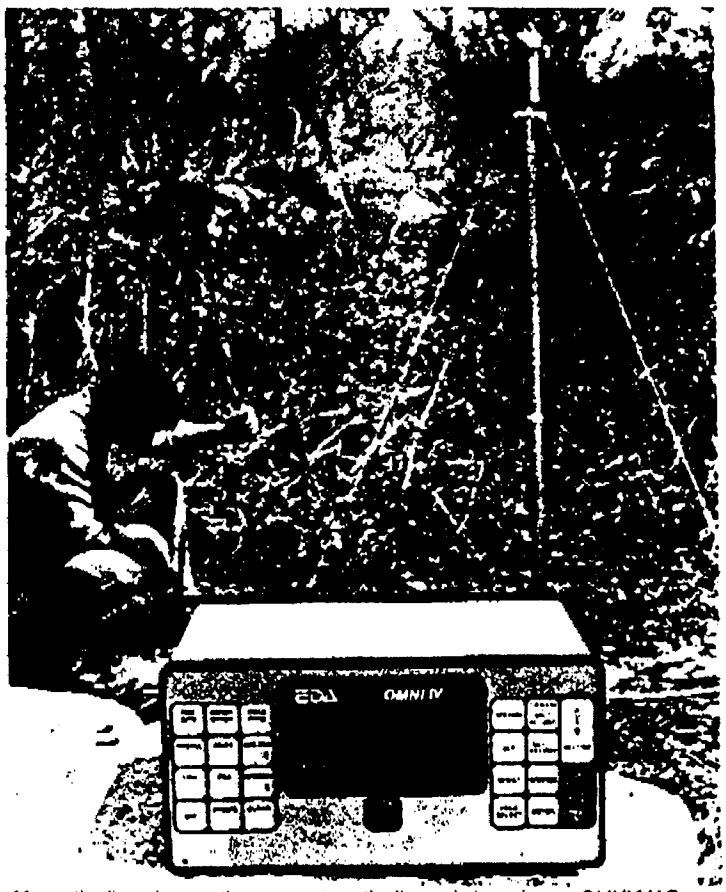
Synchronize Real Time Clocks

The Omni System real time clocks can be synchronized to the nearest second.

Magnetic Base Station Accessories Kit

Sensor Extension Cable - This 30 metre cable enables you to place the Omni in a sheltered environment such as a tent, and position the magnetic sensor up to 30 meters away. This capability aids in eliminating possible cultural interference.

Rope Joiner - The rope joiner enables the sensor staff to be supported by ropes when it is being used as a base station sensor.



Magnetic diurnal corrections are automatically made by using an OMNI MAG as a base station magnetometer

Omni System as a True Gradiometer

The Omni System provides you with an accurate means of measuring both the total field and the gradient of the total field. It reads and stores the measurements of both sensors simultaneously to calculate the true gradient measurement.

Displays and Stores Fully Protected Data

The Omni System provides the following information on screen and in memory:

- the gradient of the total magnetic field
- the total magnetic field magnitude of the upper sensor
- the time of measurement
- the grid co-ordinates where the measurement is taken
- the statistical error of total field reading of lower gradient sensor
- the signal strength and decay rate measurement of lower gradient sensor

No Lost Survey Time

The Omni enables you to conduct gradient surveys during magnetic storms resulting in no lost survey time. This is another benefit of the simultaneous measurement of both sensors.

Cancels the Effects of Diurnal Magnetic Variations

The technique of simultaneously measuring the two sensors cancels the effects of diurnal magnetic variations. The total field measurement of the top sensor can be self-corrected by the Omni when you use the "Tie-Line" feature or with another Omni System in the base station mode.

Increases Resolution of Total Field Anomalies

The Omni in the gradient mode more sharply defines the magnetic responses determined by total field data. It individually delineates closely spaced anomalies rather than collectively identifying them under one broad magnetic response.

Directly Delineates Vertical Contacts

The Omni is an ideal contact mapping tool especially in vertical to near-vertical contact or fault zones. These vertical contacts are expressed at the zero line of gradient contour or profile values. Vertical dyke-like bodies can also be mapped effectively.

Simultaneous vertical magnetic gradient measurements using the OMNI GRAD configuration

Provides On-The-Spot Approximate Depth of Anomalies

Shallow, near-surface sources (higher frequency anomalies) are emphasized relative to deeper responses (lower frequency anomalies). This can provide an on-the-spot approximation of the depth of the anomalous source.

Automatically Removes Regional Gradient

The gradient measurements ability to differentiate between higher and lower frequency responses effectively removes background regional gradients from anomalous residual responses.

Offers a Unique Alternative in the Interpretation of Magnetic Field Data

The Omni enhances data by simultaneously recording in memory both the gradient and total field measurements as well as the statistical error. Both types of data offer a unique alternative in interpreting the magnetic field data such as gradient vector diagrams, dip and strike length of body, etc.

Gradient-Base Station Operation

The Gradient Mode of the Omni System can cycle automatically every 5 seconds. This option can be used in stationary or mobile applications.

Emphasizes or Diminishes Near Surface Effects

The gradient sensor of the Omni is mounted onto a sectional aluminum staff in which you can add or subtract sections to achieve the desired height of sensors from the ground. This enables you to adapt the Omni to local ground noise conditions, terrain effects and survey logistics. In doing so, you can selectively emphasize or diminish near surface effects depending upon the survey target.

Choice of Sensor Separation

The choice of sensor separation provides unique interpretative information especially useful in near surface anomalous conditions such as determining if the field has curvature or if it is linear. You can choose the following sensor lengths and configurations:

- standard 0.5 metre sensor separation mounted on staff
- optional one metre sensor separation mounted on staff

The Omni System as a Portable VLF Unit

The Omni VLF unit allows you to do all of your surveying completely hands free and provides you with the ability to measure and record in a fully protected memory for each field reading the following information:

- vertical in-phase
- vertical quadrature (out-of-phase)
- total field strength
- dip angle
- primary field direction
- apparent resistivity
- phase angle
- time
- grid co-ordinates
- direction of travel along grid lines
- natural and cultural features

The field data is compensated for 180 degree difference in direction of travel up and down survey lines.

The unique 3 coil design of the OMNI VLF allows reading of up to 3 separate frequencies without having to orient to each of the transmitting VLF stations

Requires No Orientation

The Omni does not require you to orient the VLF sensor head toward the VLF transmitter station. This simplifies field procedures as well as saves you considerable survey time. When you measure three VLF transmitters, the benefits of this time-saving feature automatically triple. You do not have to orient yourself and the sensor head toward the first selected transmitting station and then re-orient towards the second or third transmitting station.

The ability to obtain data from as many as three VLF transmitting stations provides complete coverage of an anomaly regardless of the orientation of the survey grid or of the anomaly itself.

Saves You Time

The Omni can measure up to three VLF frequencies (transmitter stations) simultaneously, in as little as 8 seconds, or one VLF frequency in only 3 seconds, depending on the transmitter strength.

The Omni automatically tunes to the preprogrammed frequency(s) for each reading. Display descriptors indicating signal-to-noise ratio provide you with an immediate indication of how usable a frequency is. Using up to three frequencies optimizes conductor coupling, even in the most complex geologic environments.

Receives Very Weak or Too Strong Signals

Being able to select a transmitter station(s) best suited for the survey target and orientation is not always possible with conventional VLF systems. The ideal station(s) may be too weak or overwhelmed by the signal strength of a transmitter that is close in frequency proximity. Through digital signal processing, the Omni can receive signals as low as 20 nA/m from very weak stations, by removing the modulation in the received signal. Analog filtering of the Omni System offers an unparalleled 80 dB for a 600 Hz channel separation. In other words, the Omni can isolate and measure a 1000 times weaker signal from a distant station in lieu

The Omni System as a Portable VLF Unit

of the closer and subsequently more stronger station that is only 600 Hz apart in frequency.

Reduced Atmospheric Noise

Atmospherics such as thunderstorm activity, as well as the resultant interaction between the sun's rays and the ionosphere can drastically alter the wave guide in which the VLF wave travels from the transmitter station.

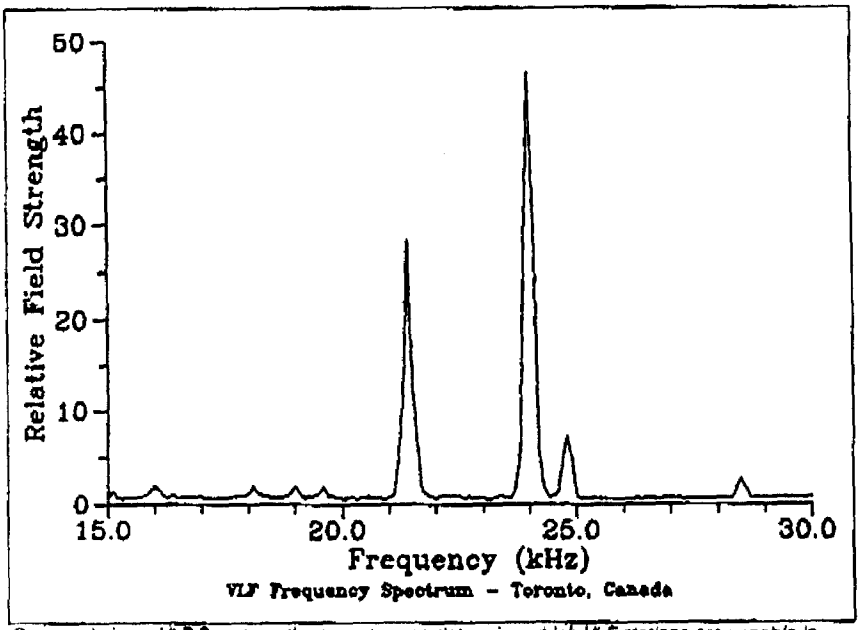
Through signal enhancement, the Omni is able to suppress the effects of these atmospheric and ionospheric phenomena, which are more predominant in the summer months, in order to pick up the weakest of transmitter stations. For example, Omni Systems used in Southern Africa have demonstrated the unparalleled ability to pick up 7 transmitter stations.

Provides More Complete, 3-Dimensional Description of Survey Area

The Omni can measure the total tilt or dip of the polarization ellipse from the vertical axis. Unlike conventional systems, where only the tilt of the major axis of the polarization ellipse is measured, the Omni is most sensitive to the horizontal components perpendicular to the primary field which can detect anomalies off to the side. This provides a more complete, three dimensional description of the survey area that can lead to the detection of anomalies between grid lines. The Omni's tilt transducers compensate for both tilt and roll position of the VLF sensors.

Scan For The Most Usable Station

The Omni enables you to automatically scan the entire VLF spectrum for the most usable stations between 15.0 kHz to 30.0 kHz in increments of 100 Hz. This is most desirable if you do not know first hand what stations are readable or what stations are available from your location. Unpublished or unknown stations now become accessible. You can then determine if a known station has changed frequency simply by the direction of transmission.



By completing a VLF Spectrum the operator can determine which VLF stations are useable in the survey area

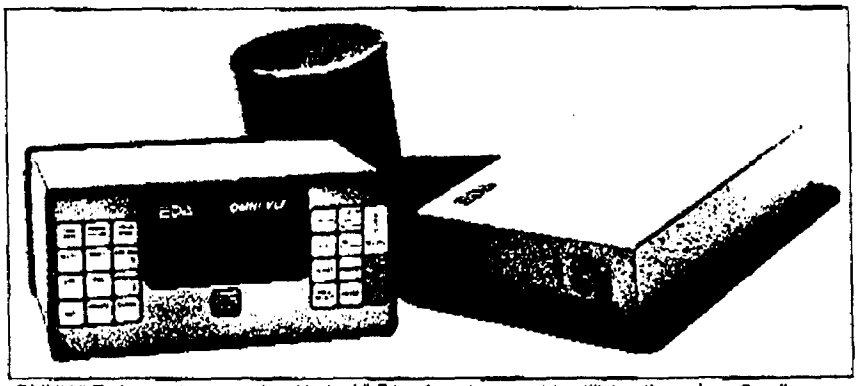
Automatically Calculates the Fraser Filter

The Omni automatically calculates the Fraser Filter from the dip angle data, regardless of the interval between the stations along the grid lines. You no longer have to manually perform this mathematical calculation thereby reducing the possibility of human error. The Fraser Filter algorithm follows established conventions.

The Fraser filtered data is output using both the 4 point and 5 point filter method. The latter method allows filtered data to be plotted easier, such as at the station interval instead of in-between stations.

Calculation of Ellipticity

As an option, the Omni can calculate the true ellipticity of the VLF magnetic field from the measurement of the in-phase and quadrature of all three components. The ellipticity provides more interpretive information about the anomaly than the dip angle and is less influenced by overburden shielding.



OMNI VLF electronics console with the VLF backpack assembly utilizing the unique 3 coil VLF sensor

The Omni System as a VLF Base Station

The Omni VLF Base Station monitors and records in protected memory, variations in the primary field strengths that can originate from the VLF transmitter itself or from atmospheric/ionospheric changes.

You Only Need One Omni System VLF Base Station for 3 Simultaneous Measurements

Like the Omni VLF Field unit, you only need one Omni VLF Base Station to simultaneously monitor up to 3 VLF transmitter stations, regardless of their field direction.

Conventional, "oriented" systems may require as many as 3 separate base stations for the same coverage offered by one Omni VLF Base Station.

In addition, the Omni Mag/VLF Base Station also monitors the Earth's magnetic field for diurnal variations, eliminating the need for a separate base station magnetometer.

The simultaneous measuring capability reduces the length of time the Omni System needs to be turned on. This, in turn, reduces the power consumption needed by the Omni System and lengthens the battery life. By being able to take three measurements in approximately the same amount of time as conventional sequential systems take one measurement, you can shorten the programmable sampling interval to attain better monitoring coverage of the field strengths from each of the VLF transmitters.

Both VLF and Magnetometer Base Stations In One Instrument

The Omni System eliminates the need to have two separate instruments to monitor the primary field strength of selected VLF transmitter(s) and the variations in magnitude of the Earth's magnetic field — one Omni Base Station does both. By combining both of these capabilities into one unit, it significantly reduces the cost of the survey. The Omni measures and stores these variations in protected memory.

Automatically Corrects VLF and Magnetic Field Data

The Omni base station can automatically correct the Omni System field units for the measured field strength variations from the VLF transmitter(s) and the Earth's magnetic field. Through linear interpolation, these corrections are applied at the time of data transfer. Unlike other integrated systems, the Omni does not alter the original field data during the correction process. The Omni base station correction and "Tie-Line" correction capabilities are applied at the time of each data transfer, therefore securing the integrity of the data collected during the survey.

Diurnal corrections for fluxuations of the VLF primary field are possible by using an OMNI VLF as a VLF base station

Obtain a Reading at the same time as the Base Station

The Omni has a unique countdown feature which can be activated in the field unit upon synchronization with the base station. The field unit then displays and decrements the remaining time, in seconds, until the base station is scheduled to take a measurement. You can obtain a field reading at exactly the same time as the base station. The simultaneous field and base station measurements significantly improves the accuracy of the automatic correction.

Synchronize the Real Time Clocks

Real time clocks among any number of Omni units can be synchronized to the second unit when using the Omni Base Station with another Omni portable field unit.

Monitor Rapid Variations of Primary Field

You can program your Omni base station to cycle at any interval, in one second increments, from 5 seconds to 60 minutes, to montior rapid variations of the primary field. The minimum cycling time for VLF Base Station use depends on the VLF Transmitter strength that the Omni receives.

Compatibility with Airborne Systems

The Omni is compatible with airborne VLF systems which also use 3 component sensors.

VLF Base Station Accessories Kit

VLF Sensor Extension Cable - This is a 10 metre cable which allows you to put the Omni console in a sheltered environment while placing the VLF sensor up to 10 meters away.

Rope Joiner - The rope joiner enables the sensor staff to be supported by ropes when it is being used as a base station sensor.

Mounting Bracket - This bracket is for mounting the VLF sensor to the staff.

The Omni System as a Portable VLF Resistivity System

The Omni VLF Resistivity unit can calculate and record the apparent resistivity and phase angle from the measurement of the VLF electric and magnetic fields.

Non-Orientation Resistivity Option

In addition to the standard resistivity option that uses 2 electrodes, the Omni also offers a non-orientation VLF resistivity option which includes a third electrode. This third electrode, with the standard resistivity unit, eliminates the need for you to orient toward the selected transmitter station(s).

This significantly improves survey production and reduces the time consuming logistics often associated with resistivity surveys.

Calculates the Vector Resistivity

The optional third electode in the Omni VLF Resistivity unit offers not only a non-orientation capability of the VLF electric field, but also measures the elements of tensor impedance necessary for the Omni to compute the two components of the apparent resistivity, or the vector resistivity.

This provides you with additional interpretive information of the survey target.

Select Your Own Type of Electrode

Survey conditions largely dictate the type of electrode you should use. The standard Omni resistivity electrode includes both capacitive plates and resistive probes so you can select the type of electrode that offers the best coupling capability for the survey conditions.

The unique threaded design permits you to easily exchange the choice of electrode in the field.

Flexible Probe Spacing

The Omni resistivity options offer a standard 10m cable assembly. However, you can program the console for a 5 or 10 metre separation.

The acquisition of VLF resistivity data using the 2 probe or the unique 3 Probe VLF resistivity option allows the operator to collect valuable additional information from the VLF method

Possible Configurations of the Omni Geophysical System

	Mag	Grad	VLF	Mag/VLF	Grad/VLF
System Control Console	*	*	*	*	*
Total Field and Base Station Mag Option	*	*		*	*
Magnetic Gradiometer Option		*			*
Magnetic Total Field Sensor	*	O		*	O
0.5m Magnetic Gradient Sensor		A			A
1.0m Magnetic Gradient Sensor		A			A
128K RAM extended Memory Option	O	O	(included in VLF configurations)		
VLF Electromagnetic Sensor Option			*	*	*
2 Probe VLF Resistivity Option			O	O	O
"Non-Orientation" VLF Resistivity Option			O	O	O
Non-Rechargeable Battery Belt	B	N/A	B	B	N/A
Rechargeable Battery Belt	B	B	B	B	B
Standard Rechargeable Battery Cartridge	B	B	B	B	B
Heavy Duty Rechargeable Batt. Cartridge	B	B	B	B	B
Battery Charger	C	C	C	C	C
RS-232C Kit	O	O	O	O	O
Mag Base Station Accessories Option	O	O		O	O
VLF Base Station Accessories Option			O	O	O
Transit Case (#1)	O	O	O	O	O
Transit Case (#2)	O	O	N/A	N/A	N/A
Transit Case (#3)	O	O	O	O	O
Magnetics Spare Parts Kit	O	O			
VLF Spare Parts Kit			O		
Magnetics/VLF Spare Parts Kit				O	O
Data Transfer Program	O	O	O	O	O

* Required in the configuration

A Selection of *one of* the A options required to complete configuration

B Selection of one of the B options required to complete configuration

C If a rechargeable battery option is required then the charger must also be included in the configuration

O Optional for configuration, see a sales representative for more details

N/A Not available for this configuration

Specifications

OMNI System Specifications

Operating Environment -40C to +55C; 0-100% relative humidity; weatherproof

Power Supply Non-magnetic rechargeable sealed lead-acid battery or belt; alkaline battery belt; or 12V DC power source option for base station operation.

Battery Life 1,700 to 5,000 readings, for sealed lead acid power supply, depending upon ambient temperature and rate of readings.

Weights and Dimensions

Instrument Console
3.8 kg, 122 x 246 x 210 mm

VLF Sensor Head
0.9 kg, 140 dia. x 130 mm

VLF Electronics Module
1.7 kg, 200 x 190 x 75 mm

Standard Rechargeable Battery
1.8 kg, 138 x 95 x 75 mm

Standard Rechargeable Battery Belt
1.8 kg, 540 x 100 x 40 mm

Heavy Duty Rechargeable Battery
2.0 kg, 138 x 115 x 75 mm

Alkaline Battery Belt
1.2 kg, 540 x 100 x 40 mm

Magnetometer Sensor
1.2 kg, 56mm dia. x 200mm

Gradient Sensor
(0.5m separation - standard)
2.1 kg, 56mm dia. x 790mm

Gradient Sensor
(1.0m separation - optional)
2.2 kg, 56mm dia. x 1300mm

Display
Custom designed, rugged liquid crystal display with an operating temperature range from -40C to +55C. The display contains six numeric digits, decimal point, battery status monitor, signal decay rate and signal amplitude monitor and function descriptors.

Magnetometer Component 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 using a specially developed tuning algorithm.

Automatic Fine Tuning ±15% relative to ambient field strength of last stored value

Display Resolution 0.1 gamma

Statistical Error Resolution
0.01 gamma

Absolute Accuracy ± 1 gamma at 50,000 gammas at 23C • ±2 gamma over total temperature range

Memory Capacity

Standard Memory Capacity 1300 data blocks (48K) or 5200 data blocks (128K)

Total Field or Gradient 100 data blocks

Base Station 4000 data blocks (48K) or 16,000 data blocks (128K)

RS-232C Serial I/O Interface Variable baud rate from 300 to 9600 baud, 8 data bits, 2 stop bits, no parity

Gradient Tolerance 6,000 gammas per metre (field proven)

Test Mode A. Diagnostic testing (data and programmable memory)
B. Self Test (hardware)

Sensor Optimized miniature design. Magnetic cleanliness is consistent with the specified absolute accuracy.

Gradient Sensors 0.5 metre sensor separation (standard) normalized to gammas/metre. Optional 1.0 metre sensor separation available.

Sensor Cable Remains flexible in temperature range specified including strain relief connector

Cycling Time (Base Station)
Programmable from 5 seconds up to 60 minutes in 1 second increments.

VLF Component Specifications

Frequency Tuning Range 15 to 30 kHz in 100 Hz increments with bandwidth of 150 Hz; tuning range accommodates new Puerto Rico station at 28.5 kHz.

Transmitting Stations Up to 3 stations can be automatically measured at any given grid location within frequency tuning range.

Recorded VLF Magnetic Parameters
Vertical in-phase, vertical quadrature (out-of-phase), total field strength (or optional horizontal amplitude), dip angle

Channel Separation 80 dB at 600 Hz frequency separation

Standard Memory Capacity 1300 combined VLF magnetic and VLF electric measurements as well as gradiometer and magnetometer readings

SCINTREX

222 Snidercroft Road
Concord,Ontario,Canada
L4K 1B5

Telephone: (416) 669-2280
Telex: 06-964570
Telefax: (416) 669-6403
(416) 669-5132

ATTN: Mr. Harold Iracanilli FAX # 01504? - 5470

SCINTREX

EDA Omni Geophysical System

Brief Description

When you require more flexible geophysical techniques in order to find the increasingly more elusive anomalous targets, Scintrex offers you the EDA Omni System. This system enables you to design your own unique instrument whether it is for complete Magnetic surveys, VLF Electromagnetic surveys or a combination of these techniques.

At the heart of the Omni System is the Omni System Control Console which is common to all Omni System applications. This customized approach gives you the ability to select the following options for your instrument:

- Portable Field and Base Station Magnetometer
- True Simultaneous Gradiometer
- Portable Field and Base Station VLF Electromagnetic Receiver
- Two Probe, VLF Resistivity
- Non-Orientation, VLF Resistivity

Applications

Since the Omni System capabilities are so versatile, the data collected and recorded by the instrument can be applied to a variety of earth sciences including:

- mineral exploration
- geological mapping
- groundwater exploration
- groundwater contamination
- civil engineering
- geotechnical studies
- archaeology

Features

Omni System Features

Each Omni System incorporates the following features:

Flexibility of the Omni System

You can select your own options to customize your unit to suit your specific geophysical needs.

Microprocessor Controlled

Gives you a choice of three fully protected data storage modes:

- spot record, for readings without grid co-ordinates (random samples)
- multi-record, for multiple readings at one station
- auto-record, for automatic update of station position

Complete Data Protection

The internal lithium battery assures you of complete data protection for up to 5 years.

Measures and Records in Memory

Measurement and recording in memory of the following magnetic field data for each reading:

- total field magnitude
- true gradient of the total field
- applied base station value
- statistical error
- signal strength
- decay rate

Measurement and recording in memory of the following VLF data for each field reading:

- vertical in-phase
- vertical quadrature (out-of-phase)
- total field strength
- total dip angle
- primary field direction
- apparent resistivity
- phase angle
- signal-to-noise ratio
- operator quality

The OMNI system configured as a MAG/VLF simplifies geophysical surveys by combining Magnetic and VLF EM techniques.

Records Survey Data

Records the following survey data for each magnetic and/or VLF reading:

- time of measurement and date
- grid co-ordinates
- direction of travel along grid lines
- natural and cultural features

Measures up to 3 VLF Transmitting Stations

The Omni System can measure up to 3 VLF transmitting stations and provides more complete coverage of an anomaly regardless of the orientation of the transmitter with respect to the survey grid or the anomaly itself.

Electronic Notebook

The internal Electronic Notebook enables you to record natural and cultural features that are unique to each grid location. This feature eliminates the need for a field notebook and provides additional information that can assist in interpreting recorded data.

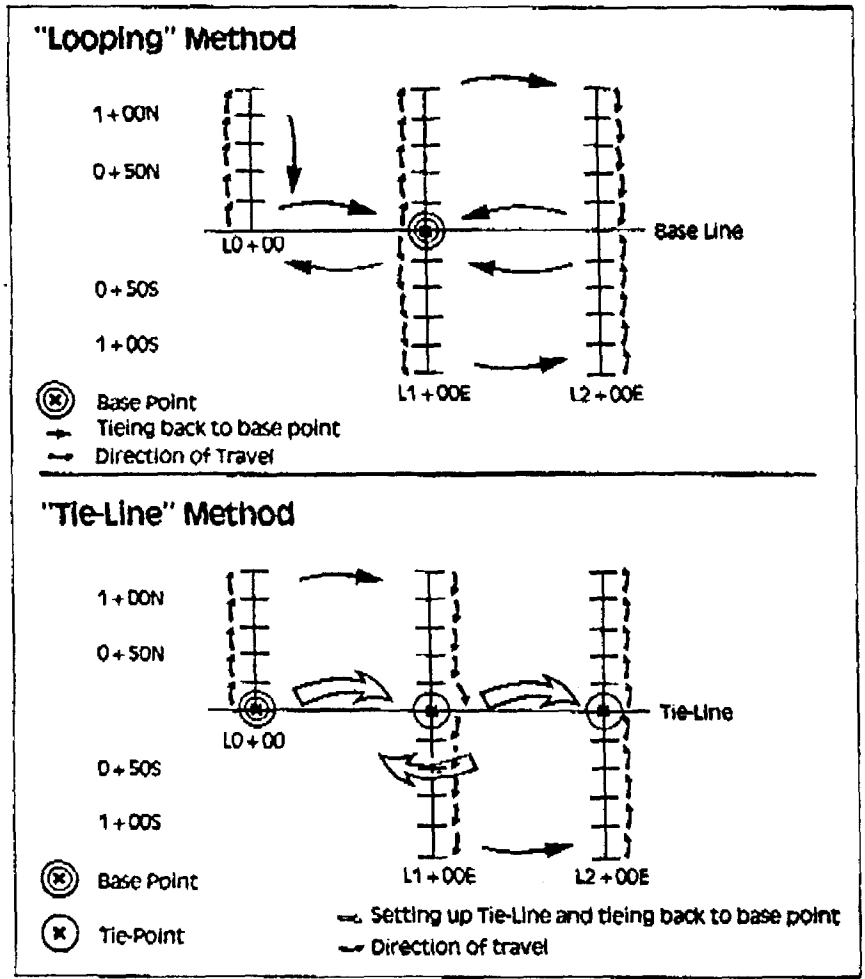
Automatic Correction Using The Omni System's Unique "Tie-Line" Technique

The "Tie-Line" algorithm used exclusively by the Omni System allows for the self correction of atmospheric magnetic variations and variations in the primary field from the VLF transmitter(s). The instrument is able to store 'looping' or 'tie line' data in a separate memory at the beginning of each survey and then subsequently stores total field readings in a second memory along with the field readings of the tie point(s). At the end of each survey day the Omni System will then merge these two memories to automatically correct the total field data for diurnal variations.

The Omni System in the "Tie-Line" mode can:

- Store looping or tie line data, 3 ways:
  1. Using one looping base point
  2. Using one "Tie-Line" comprising a number of tie points, or
  3. Using multiple tie lines.
- Store up to 100 tie points in one survey area or divide these points into extensions of survey areas as needed.
- Store tie points or tie lines for the duration of the survey.
- Calculate the drift between established tie points, to readily see variations in the Earth's magnetic field.

Features



The "Tie-Line" feature available in all OMNI configurations provides a significant cost savings by allowing diurnal corrections to be made internally by one instrument without the need of a dedicated base station instrument

Rapid Data Recall

With a few keystrokes, you can instantly recall data from memory to the digital display by record number or in sequence. Scanning through the memory of a particular parameter is also possible.

Wide Range of Data Output Capabilities

The ability to efficiently transfer and present data in an interpretable format is important to the success of any survey or project.

The Omni System accomodates a wide selection of data output options, from simple listings of data and profile plots on a printer, to integrated software programs for computer plotting and modelling. The Omni System can transfer uncorrected, corrected or filtered magnetic and VLF data to most computers and printers with a RS-232C serial port.

Two Types of Formats available - data can be output from the Omni System in two format types. For ready to use data, the columnarized data dump format is the most suitable for direct hard copy printer outputs. For data which is to be further used with computer plotting or analysis software packages, you can select the fixed ASCII CPU dump format.

Profile Plot Outputs - Since VLF as well as magnetic data is often easier to interpret as a profile plot, data that the Omni System collects, can be presented in this analog format at a vertical scale best suited for data presentation. You can selectively output in analog and/or digital format the following:

- the magnetic total field strength
- the magnetic vertical gradient
- the VLF in-phase
- the VLF out-of-phase (quadrature)
- the VLF total field strength

Data Presentation - The grid co-ordinates under which the Omni System collects the data can be output in the standard Cartesian format (using positive and negative signs) or with the more familiar N,S,E,W compass descriptors.

Editing Capabilities - Prior to data transfer, you can program your Omni System to transfer a designated block of data, denoted by start and end points. Data can be separated into files that are best suited for survey or plotting conditions.

Pause Feature - You may stop the transfer of data at any time and resume where it left off, when it is more convenient. The Omni System will continue to pause until you press any one of keys on the keypad.

Choice of Data Outputs - The Omni System outputs data in a choice of formats, depending on the operating mode:

- corrected magnetic total field data
- uncorrected magnetic total field data
- magnetic base station data
- magnetic gradient field data
- corrected VLF field strength data
- uncorrected VLF field strength data
- VLF base station data
- corrected "Tie-Line" data
- uncorrected "Tie-Line" data

The Omni System can also transfer VLF data from all 3 VLF frequencies simultaneously or sequentially.

Ministry of Northern Development and Mines

Ontario

Report of Work

Mining Act

Instructions – Supply required data on a separate form for each type of work to be recorded (see table below).
– For Geo-technical work use form no. 1362 "Report of Work (Geological, Geophysical, Geochemical and Expenditures)".

Name and Postal Address of Recorded Holder

John Claude Gervais

Box 831 Copper Cliff, Ontario P0M 1N0 705 6920254

Prospector's Licence No. C-36010

Summary of Work Performance and Distribution of Credits

Total Work Days Cr. claimed 8.0

for Performance of the following work. (Check one only)

- ☐ Manual Work
- ☐ Shaft Sinking Drifting or other Lateral Work.
- ☑ Compressed Air, other Power driven or mechanical equip.
- ☐ Power Stripping
- ☐ Diamond or other Core drilling
- ☐ Land Survey

Mining Claim Prefix	Mining Claim Number	Work Days Cr.	Mining Claim Prefix	Mining Claim Number	Work Days Cr.	Mining Claim Prefix	Mining Claim Number	Work Days Cr.
S	944388	2.0						
	944389	2.0						
	994994	2.0						
	994995	2.0						

All the work was performed on Mining Claim(s): S-994995

Required Information eg: type of equipment, Names, Addresses, etc. (See Table Below)

Gasoline plugger drill and steels. Eldorado Showing.

Persons Employed	Date	Hours
John Claude Gervais	Sept 15/90	6 HJT
Ron Gervais	11	6
John Claude Gervais	Sept 16/90	6
Ron Gervais	11	6

24 hours

$\frac{24}{3}$ = 8 days credit.

Date of Report: Jan 29/91

Recorded Holder or Agent (Signature): [signature]

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying

Harold J. Tracanelli 1009 Lasalle Blvd, Box 2336 Sudbury, Ontario P3A-4S9

Date Certified: Jan 29/91

Certified by (Signature): [signature]

Table of Information/Attachments Required by the Mining Recorder

Type of Work	Specific information per type	Other information (Common to 2 or more types)	Attachments
Manual Work	Nil	Names and addresses of men who performed manual work/operated equipment, together with dates and hours of employment.	Work Sketch: these are required to show the location and extent of work in relation to the nearest claim post.
Shaft Sinking, Drifting or other Lateral Work			
Compressed air, other power driven or mechanical equip.	Type of equipment		
Power Stripping	Type of equipment and amount expended. Note: Proof of actual cost must be submitted within 30 days of recording.	Names and addresses of owner or operator together with dates when drilling/stripping done.	
Diamond or other core drilling	Signed core log showing; footage, diameter of core, number and angles of holes.		Work Sketch (as above) in duplicate
Land Survey	Name and address of Ontario land surveyer.	Nil	Nil

768 (85/12)

Ministry of Northern Development and Mines

Ontario

Report of Work

Mining Act

Instructions – Supply required data on a separate form for each type of work to be recorded (see table below).
– For Geo-technical work use form no. 1362 "Report of Work (Geological, Geophysical, Geochemical and Expenditures)".

Name and Postal Address of Recorded Holder: John Claude Gervais

Prospector's Licence No.: C-36010

BOX 831 Copper Cliff Ontario POM 1NO (705) 682-0254

Summary of Work Performance and Distribution of Credits

Total Work Days Cr. claimed: 14.0

for Performance of the following work. (Check one only)

- [x] Manual Work
- [ ] Shaft Sinking Drifting or other Lateral Work.
- [ ] Compressed Air, other Power driven or mechanical equip.
- [ ] Power Stripping
- [ ] Diamond or other Core drilling
- [ ] Land Survey

Mining Claim Prefix	Mining Claim Number	Work Days Cr.	Mining Claim Prefix	Mining Claim Number	Work Days Cr.	Mining Claim Prefix	Mining Claim Number	Work Days Cr.
S	944398	3.5						
	944389	3.5						
	994994	3.5						
	994995	3.5						

All the work was performed on Mining Claim(s): S-994995

Required Information eg: type of equipment, Names, Addresses, etc. (See Table Below)

Drilling and Blasting on the Eldorado Showing S-994995
hand mucking-digging pick & shovel work.

persons employed	Dates	hours worked
John Claude Gervais	Sept 15/90	12
Ron Gervais	"	12
Terry Gervais	"	12
Harold Tracanelli	"	12
John Claude Gervais	Sept 16/90	12
Ron Gervais	"	12
Harold Tracanelli	"	12

84 hrs / 6 = 14 days credit

84 hours

Date of Report: Jan 29/91

Recorded Holder or Agent (Signature): [signature]

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying

Harold Tracanelli 1009 Lasalle BLVD, Box 2336
Sudbury, Ontario P3A-4S8

Date Certified: Jan 29/91

Certified by (Signature): [signature]

Table of Information/Attachments Required by the Mining Recorder

Type of Work	Specific information per type	Other information (Common to 2 or more types)	Attachments
→ Manual Work	Nil	Names and addresses of men who performed manual work/operated equipment, together with dates and hours of employment.	Work Sketch: these are required to show the location and extent of work in relation to the nearest claim post.
Shaft Sinking, Drifting or other Lateral Work			
Compressed air, other power driven or mechanical equip.	Type of equipment		
Power Stripping	Type of equipment and amount expended. Note: Proof of actual cost must be submitted within 30 days of recording.	Names and addresses of owner or operator together with dates when drilling/stripping done.	
Diamond or other core drilling	Signed core log showing: footage, diameter of core, number and angles of holes.		Work Sketch (as above) in duplicate
Land Survey	Name and address of Ontario land surveyer.	Nil	Nil

768 (85/12)

Ministry of Northern Development and Mines
Ontario

Report of Work

Mining Act

Instructions – Supply required data on a separate form for each type of work to be recorded (see table below).
– For Geo-technical work use form no. 1362 "Report of Work (Geological, Geophysical, Geochemical and Expenditures)".

Name and Postal Address of Recorded Holder: John Claude Gervais
Box 831 Copper Cliff, Ontario P0M-1N0 705 682-0254

Prospector's Licence No.: C-36010

Summary of Work Performance and Distribution of Credit

Total Work Days Cr. claimed	Mining Claim Prefix	Mining Claim Number	Work Days Cr.	Mining Claim Prefix	Mining Claim Number	Work Days Cr.	Mining Claim Prefix	Mining Claim Number	Work Days Cr.
15.60	S	944388	3.90						
for Performance of the following work. (Check one only)		944389	3.90						
☐ Manual Work		994994	3.90						
☐ Shaft Sinking Drifting or other Lateral Work.		994995	3.90						
☐ Compressed Air, other Power driven or mechanical equip.									
☑ Power Stripping									
☐ Diamond or other Core drilling									
☐ Land Survey									

All the work was performed on Mining Claim(s): S-994995

Required Information eg: type of equipment, Names, Addresses, etc. (See Table Below)

GASOLINE PLUGGER DRILL and STEELS.
PRO RENTALS → PARRY SOUND, ONTARIO (705) 746-4525

PERSONS EMPLOYED	DATES WORKED	HOURS
John CLAUDE GERVAIS	Sept 15 & 16	12 each
RON GERVAIS		
TERRY GERVAIS		
HAROLD TRACANELLI		

Cost of Drilling EQUIPMENT. = $\frac{156.00}{10}$ = 15.60 days credit.

Date of Report: Jan 29/91
Recorded Holder or Agent (Signature): [signature]

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying: Harold Tracanelli, 1009 Lasalle BWd, Box 2336 Sudbury, Ontario P3A-459.

Date Certified: Jan 29/91
Certified by (Signature): [signature]

Table of Information/Attachments Required by the Mining Recorder

Type of Work	Specific Information per type	Other Information (Common to 2 or more types)	Attachments
Manual Work	Nil	Names and addresses of men who performed manual work/operated equipment, together with dates and hours of employment.	Work Sketch: these are required to show the location and extent of work in relation to the nearest claim post.
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Diamond or other core drilling	Signed core log showing; footage, diameter of core, number and angles of holes.		Work Sketch (as above) in duplicate
Land Survey	Name and address of Ontario land surveyer.	Nil	Nil

768 (85/12)

J.C. GERVAIS
BR 831
Copper Cliff 682-0254

Sept 14 19 90

PAY TO THE ORDER OF Bayes Explosives $ 156.87

one hundred fifty-six 87/100 DOLLARS

THE ROYAL BANK OF CANADA
LIVELY, ONT.
P0M 2E0

ACCT. NO.

MEMO Explosives

Suzanne Gervais

⑆027120031⑆ 507 319 2⑈ ⑈00000156 87⑈

EXPLOSIVES

CN 0871 DATE 17/09/90

05002-003
THE ROYAL BANK
Sudbury, Ontario
05002-003

DEPOSIT ONLY
BOYES EXPLOSIVES LIMITED
ACCT. NO. 101-709-4

SE 90 17

ROYAL BANK
ONTARIO PC

Energy, Mines and Resources Canada | Énergie, Mines et Ressources Canada

EXPLOSIVES PURCHASE AND POSSESSION PERMIT — PERMIS D'ACHAT ET DE POSSESSION D'EXPLOSIFS

PURCHASER (Name and Address) — ACHETEUR (Nom et adresse)
HAROLD TRACANELLI
1582 Vera Lake Rd
Chelmsford ONT

Magazine Licence No. (If applicable) — Nº de licence de la poudrière (si applicable)
—

PURPOSE OF EXPLOSIVES — EMPLOI DES EXPLOSIFS

- [ ] Mine
- [ ] Construction
- [ ] Road Building / Travaux de voirie
- [ ] Seismic Prospecting / Prospection sismique
- [ ] Other Lawful Activity (specify) / Autre activité licite (spécifier)
- [ ] Quarry / Carrière
- [ ] Demolition / Démolition
- [ ] Dredging / Dragage
- [ ] Agricultural / Agriculture
- [x] Prospector / Prospecteur
- [ ] Trenching / Fossé
- [ ] Well Drilling / Forage de puits
- [ ] Forestry / Forestier

Where explosives are to be used. — Où les explosifs doivent servir
Ustectownship

Quantity / Quantité	EXACT DESCRIPTION OF EXPLOSIVES — DESCRIPTION EXACTE DES EXPLOSIFS (See instruction sheet for details of required information — Voir en détail, les renseignements requis)
1	Forcite 40 25KG's

VALID FOR 90 DAYS FROM DATE ISSUED
VALIDE PENDANT 90 JOURS À COMPTER DE LA DATE D'ÉMISSION

Place of storage when not in use — Endroit où ils sont emmagasinés lorsqu'ils ne servent pas
Mag

Method of Transport (Vehicle Licence No. if applicable) — Mode de transport (Nº d'immatriculation du véhicule si applicable)
326 FKK

Person receiving explosives — Personne recevant les explosifs
Signature (In presence of Issuer) (En présence de l'émetteur): [signature]

Printed Name and Residential Address — Nom et adresse résidentielle (en lettres moulées)
Same As Above

Identification document presented — Description du document présenté
T7125 31556 00222

Signature of Vendor — Signature du vendeur: [signature]

Vendor's Magazine Licence No. — Nº de la licence de la poudrière du vendeur
F-300

Date Issued — Émis le
Sept 14 98

- THIS PERMIT MUST BE RETAINED BY THE PERSON HAVING POSSESSION OF THE EXPLOSIVES.
- CE PERMIS DOIT ÊTRE CONSERVÉ PAR LA PERSONNE AYANT LES EXPLOSIFS EN SA POSSESSION.

If the quantity of explosive exceeds that permitted by Subsection 140 (1) of the Explosives Regulations, the following certificate is to be signed in the presence of the Issuer:
I hereby certify that I will use the quantity of explosives detailed above which is in excess of 75kg of blasting explosives and 100 detonators within 24 hours and that I will safeguard them during this period.

Si la quantité d'explosifs est supérieure à celle permise au paragraphe 140 (1) des Règlements sur les explosifs, l'affirmation suivante doit être signée en présence de l'émetteur:
Par les présentes, j'affirme que j'utiliserai la quantité d'explosifs décrite ci-haut qui est supérieure à 75kg d'explosifs de sautage et 100 détonateurs dans les 24 heures et que je la garderai en toute sécurité durant cette période.

Form / Formule 20

[signature] (For J.C. GERVAIS)
Signature

Nº 143335

IMPORTANT INFORMATION ON REVERSE — RENSEIGNEMENTS IMPORTANTS AU VERSO

NUMERICAL COPY

26867

BOYES EXPLOSIVES LIMITED

EXPLOSIFS BOYES EXPLOSIVES

1350 MAPLE ST., FENWICK, ONTARIO L0S 1C0 416-892-5725 FAX: 416-892-8185
P.O. BOX 219, GREELY, ONTARIO K0A 1Z0 613-821-3222 FAX: 613-821-3910
1151 LORNE ST., SUDBURY, ONTARIO P3C 4T1 705-674-1913 FAX: 705-674-5165

OTHER LOCATIONS TO SERVE YOU
BANCROFT MADOC
KINGSTON NORTH BAY
LANARK PARRY SOUND

BILL OF LADING / FACTURE - CONNAISSEMENT

SHIPPED FROM/ POINT D'EXPÉDITION: CONISTON

SHIPPERS MAG. LICENSE / EXPÉDITEUR LIC. D'ENTREPOT: F-300

VEHICLE NO. / NO. CAMION: 0

STRIBUTORS:
-I-L EXPLOSIVES & SUPPLIES
)ART DRILL SUPPLIES

SOLD TO / VENDU À: AACASHXXS
CASH SALE
SUDBURY

SHIP TO / EXPÉDIER À: J.C. ENTERPRISES
J.C. GERVAIS
C/O BHARTI EN.ATT:HAROLD
SUDBURY, ONTARIO

ITE ORDERED / E DE COMMANDE	DATE REQ'D / DATE REQUISE	TIME REQ'D / HEURE REQUISE	CUST. REF. NO. / NO. DE REF DU CLIENT	CUST. MAG. LIC. NO. / NO. DE MAG. DU CLIENT	SHIP VIA / EXPÉDIER VIA	DATE SHIPPED / DATE D'EXPÉDITION	
28/11/92	28/11/92	1500	HERRAL		CUST TRUCK		

DANGEROUS GOODS INFORMATION/INFORMATION MARCHANDISES DANGEREUSES

PROPER SHIPPING DESCRIPTION	CLASS	SUB GROUP	U.N. CODE	P.G.	# OF PKGS	DESCRIPTION	CUST. CODE / CODE CLIENT	QTY. SHIPPED / QTÉ. LIVRÉ
EXPLOSIVE, BLASTING TYPE A	1.1	D	0081	II	1	FORCITE 40% 25mmX200mm		25KG

OF PACKAGES
DE COLIS 1
GROSS WEIGHT DANG. GOODS
MASSE TOTAL DE MARCH. DANG. 25.0000
NET QTY. DANG. GOODS
QTÉ. NETTE DE MARCH. DANG. 25.0000

SUMMARY OF EMERGENCY RESPONSE PLAN / RÉSUMÉ DE PLAN D'URGENCE

ERP2 - 0077

EMERGENCY TELEPHONE NUMBERS / NUMÉROS DE TÉLÉPHONE EN CAS D'URGENCE

1-514-932-0194

PLACARDS OFFERED / OFFRE DE PANCARTES: YES/OUI [ ] NO/NON [X]

CLASS:

QUANTITY/QUANTITÉ

SPECIAL INSTRUCTIONS/INSTRUCTIONS SPÉCIALES

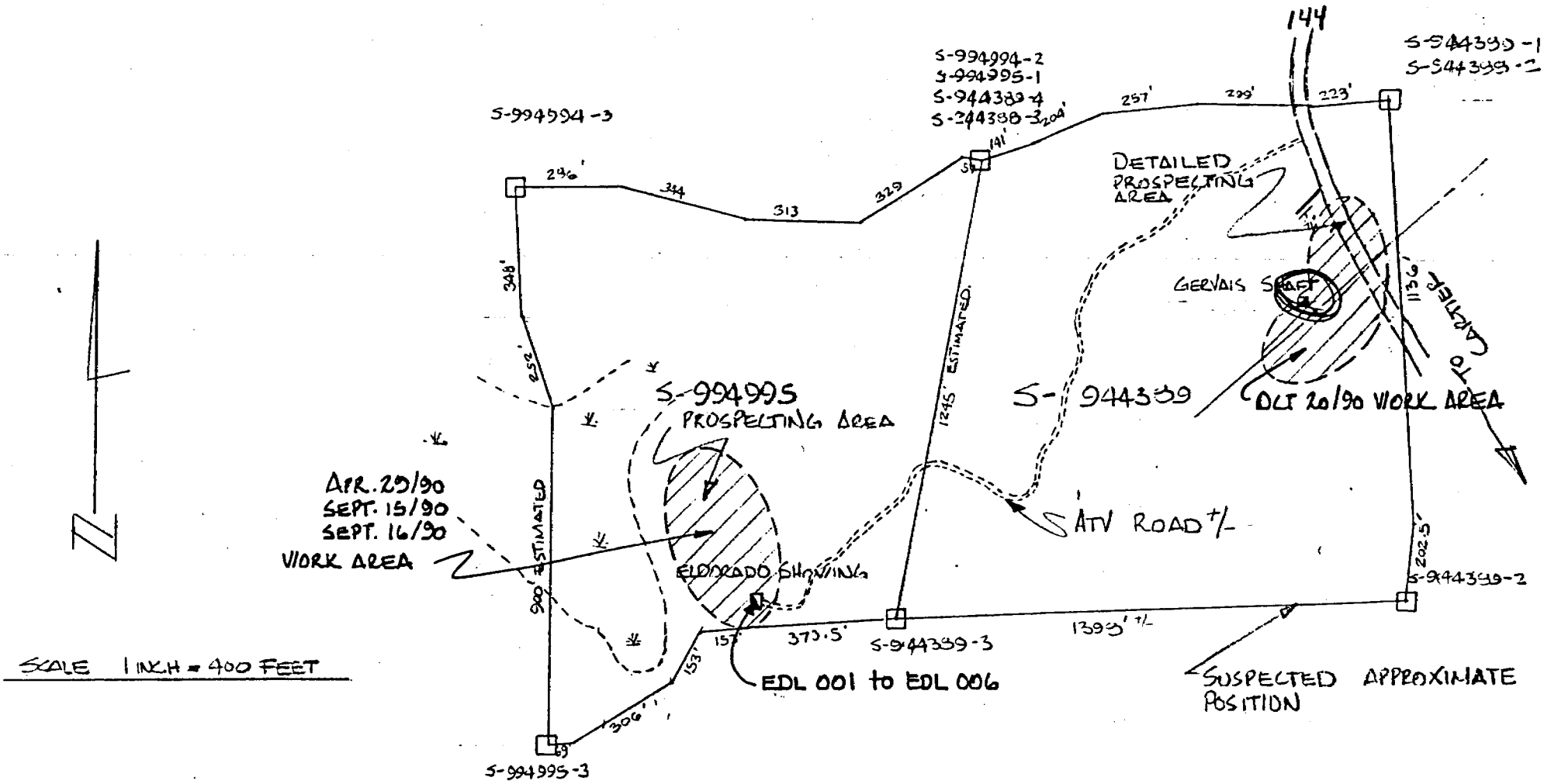
CHEQUE REQUIRED FOR $156.87

SHIPPER/EXPEDITEUR: BOYES EXPLOSIVES
PER/PAR

CARRIER/TRANSPORTEUR: CUST TRUCK
PER/PAR

CONSIGNEE/DESTINAIRE: CASA SALE
PER/PAR (FOR J.C. GERVAIS)

PROSPECTING LOCATION MAP.



PART OF THE
GERVAIS GROUP PROPERTY
ULSTER TOWNSHIP.

Ministry of Northern Development and Mines
Ontario

W 9170.00048

41113SE0017 2.13881 ULSTER

900

Mining Act

Report of Work
(Expenditures, Subsection 77(19))

Type of Work Performed	Mining Division	Township or Area
Blasting to obtain samplings.	Sudbury	Ulster Township (G-4117)

Recorded Holder: John Claude Gervais **2.13881**
Prospector's Licence No: C-36010
Address: Box 831 Copper Cliff, Ont. P0M-1N0
Telephone No.: 705 692-0254
Work Performed By: John Claude Gervais, Ron Gervais, Terry Gervais, H. Tracanelli
Name and Address of Author (of Submission): Harold Tracanelli Sudbury, Ontario
Date When Work was Performed From: Sept To: 14/90 (Day / Mo. / Yr. / Day / Mo. / Yr.)

All the work was performed on Mining Claim(s): Indicate no. of days performed on each claim. *See Note No. 1 on reverse side

Mining Claim	No. of Days
S-994995	10.458

Instructions
Total days credits may be distributed at claim holder's choice. Enter number of days credits per claim in the expenditure days credit column (below).

Calculation of Expenditure Days Credits
Total Expenditures $ 156.87 ÷ 15 = Total Days Credits 10.458

Total Number of Mining Claims Covered by this Report of Work: ~~4~~ 2 MH

Mining Claims (List in numerical sequence). If space is insufficient, attach schedules with required information

Prefix	Number	Expend. Days Cr.
~~S-~~	~~944388~~	~~2.614~~ HJT
~~S~~	~~944389~~	~~2.614~~ HJT
S-	994994	~~2.614~~ 5.229 HJT
S-	994995	~~2.614~~ 5.229 HJT

Total Number of Days Performed	Total Number of Days Claimed	Total Number of Days to be Claimed at a Future Date
10.458	10.458	0

Certification of Beneficial Interest *See Note No. 2 on reverse side

I hereby certify that, at the time the work was performed, the claims covered in this report of work were recorded in the current recorded holder's name or held under a beneficial interest by the current recorded holder.
Date: Jan 29/91 Recorded Holder or Agent (Signature): [signature]

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Address of Person Certifying: Harold J. Tracanelli 1009 Lasalle Blvd, Box 2336 Sudbury, Ont P3A 4S8
Telephone No.: 705 566 6612
Date: Jan 29/91
Certified By (Signature): [signature]

Received Stamp: SUDBURY MINING DIV. RECEIVED JAN 30 1991 A.M. 7|8|9|10|11|12|1|2|3|4|5|6 P.M. 1:35 PM

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
10.4	Jan 30/91	[signature]
	Date Approved as Recorded	Provincial Manager, Mining Lands
	June 18 1991	[signature]

Ontario

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

Mining Lands Section
159 Cedar Street, 4th Floor
Sudbury, Ontario
P3E 6A5

Telephone: (705) 670-7264
Fax: (705) 670-7262

Your File: W.9170.00047
Our File: 2.13881

June 10, 1991

Mining Recorder
Ministry of Northern Development
and Mines
159 Cedar Street
2nd Floor
Sudbury, Ontario
P3E 6A5

Dear Sir/Madam:

Re: Notice of Intent dated May 10, 1991 for Geological and Geophysical (Electromagnetic and Magnetometer) Surveys on mining claims S.994994 et al. in the Township of Ulster.

No assessment work credits will be approved for this report as of the above date.

Please inform the recorded holder of these mining claims and so indicate on your records.

Yours sincerely,

Ron C. Gashinski
Provincial Manager, Mining Lands
Mines & Minerals Division

CDS/jl
Encl.

cc: Mr. John Claude Gervais
Copper Cliff, Ontario

Assessment Files Office
Toronto, Ontario

Mr. Harold Tracanelli
Sudbury, Ontario

Resident Geologist
Sudbury, Ontario

Ministry of Northern Development and Mines

Ontario

Technical Assessment Work Credits

File: 2.13881

Date: May 10/91

Mining Recorder's Report of Work No.: W.9170.00047

Recorded Holder: John Claude Gervais

Township or Area: Ulster Township

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic 0.0 days	
Magnetometer 0.0 days	
Radiometric ____ days	
Induced polarization ____ days	
Other ____ days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological 0.0 days	
Geochemical ____ days	
Man days [X] Airborne [ ]	
Special provision [ ] Ground [X]	
[ ] Credits have been reduced because of partial coverage of claims.	
[ ] Credits have been reduced because of corrections to work dates and figures of applicant.	

Special credits under section 77 (16) for the following mining claims

No credits have been allowed for the following mining claims

[ ] not sufficiently covered by the survey [X] insufficient technical data filed

S.994994
994995

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical - 80; Geological - 40; Geochemical - 40; Section 77(19) - 80.

Ministry of Northern Development and Mines
Ontario

W 9190.00047

Instructions
- Please type or print
- Refer to Section 77, the Mining Act for assessment work requirements and maximum credits allowed per survey type
- If number of mining claims traversed exceeds space on this form attach a list
- Technical Reports and maps in duplicate should be submitted to Mining Lands Section, Mineral Development and Lands Branch

Mining Act

Report of Work
(Geophysical, Geological and Geochemical Surveys)

Type of Survey(s): Mag-VLF EM/Geological Studies
Mining Division: Sudbury
Township or Area: Ulster (G-4117)
Recorded Holder(s): John Claude Gervais 2.13881
Prospector's Licence No: C-36010
Address: Box 831, Copper Cliff, Ontario P0M-1N0
Telephone No: 705-692-0254
Survey Company: Bharti Engineering Associates Inc, Sudbury Ont.
Name and Address of Author (of Geo-Technical Report): Bharti Engineering Associates Inc c/o Harold Tracanelli 1009 LaSalle BLVD, Box 2336 Sudbury, Ontario P3A-4S8
Date of Survey (from & to): 29 04 90 29 01 91 (Day Mo Yr / Day Mo Yr)

Credits Requested per Each Claim in Columns at right

Special Provisions

For first survey:
Enter 40 days (This includes line cutting)

For each additional survey using the same grid:
Enter 20 days (for each)

	Days per Claim
Geophysical	
- Electromagnetic	
- Magnetometer	
- Other	
Geological	
Geochemical	

Man Days

Complete reverse side and enter total(s) here

	Days per Claim
Geophysical	HJT 5.06 + 50.12 ~~55.18~~ HJT 40 max
- Electromagnetic	~~55.18~~ HJT 40 max
- Magnetometer	HJT 5.06 + 50.12 ~~25.063~~ HJT
- Other	
Geological	40.0 ~~25.063~~ HJT
Geochemical	HJT

Airborne Credits

Note: Special provisions credits do not apply to Airborne Surveys

	Days per Claim
Electromagnetic	
Magnetometer	
Other	

Total miles flown over claim(s):

Date: Recorded Holder or Agent (Signature):

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Mining Claim Prefix	Mining Claim Number	Mining Claim Prefix	Mining Claim Number
~~S~~	~~944388~~ HJT				
~~S~~	~~944389~~ HJT				
S	994994				
S	994995				

Total number of mining claims covered by this report of work: 4 2 HJT

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in this Report of Work, having performed the work or witnessed same during and/or after its completion and annexed report is true

Name and Address of Person Certifying: Harold Tracanelli 1009 Lasalle BLVd, Box 2336 Sudbury Ont. P3A-4S8
Telephone No: 705 566-6612
Date: Jan 29/91
Certified By (Signature):

For Office Use Only

Total Days Cr. Recorded: 240
Date Recorded: Jan. 30/91
Mining Recorder: U.C. Mills
Date Approved as Recorded:
Provincial Manager, Mining Lands: "SEE REVISED WORK STATEMENT"

Received Stamp:
SUDBURY MINING DIV.
RECEIVED
JAN 30 1991
A.M. 7 8 9 10 11 12 1 2 3 4 5 6 P.M.
1:45 pm

0662 (89/06)

Assessment Work Breakdown

Man Days are based on eight (8) hour Technical or Line-cutting days. Technical days include work performed by consultants, draftsmen, etc.

Type of Survey: Mag - VLF EM, Geological Studies

Technical Days				Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim
39.75	X	7	=	278.25	+	22.50	=	300.75	÷	4	=	75.1875

Type of Survey

Technical Days				Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim
	X	7	=		+		=		÷		=	

Type of Survey

Technical Days				Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim
	X	7	=		+		=		÷		=	

Type of Survey

Technical Days				Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim
	X	7	=		+		=		÷		=	

Ministry of Northern Development and Mines

Ontario

Geophysical-Geological-Geochemical Technical Data Statement

File 2.13881

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey(s) Ground Mag/VLF-EM
Township or Area Ulster Tp (G-4117)
Claim Holder(s) John Claude Gervais
BOX 831 Copper Cliff, Ont. P0M-1N0
Survey Company Bharti Engineering Assoc Inc
Author of Report Harold J Tracanelli
Address of Author Sudbury, Ontario P3A-4S8
Covering Dates of Survey Apr 1/29/90 to Jan 29/91
(linecutting to office)
Total Miles of Line Cut 6.62 miles.

SPECIAL PROVISIONS CREDITS REQUESTED

ENTER 40 days (includes line cutting) for first survey.

ENTER 20 days for each additional survey using same grid.

DAYS per claim

Geophysical
--Electromagnetic
--Magnetometer
--Radiometric
--Other
Geological
Geochemical

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer ____ Electromagnetic ____ Radiometric ____
(enter days per claim)

DATE: Jan 29/91 SIGNATURE: Harold Tracanelli
Author of Report or Agent

Res. Geol. ____ Qualifications 2.10324.

Previous Surveys

File No.	Type	Date	Claim Holder
		2.13881	

MINING CLAIMS TRAVERSED
List numerically

(prefix) (number)
S-944388
S-944389
S-994995
S-994994

If space insufficient, attach list

SUDBURY MINING DIV. RECEIVED JAN 30 1991 A.M. 7|8|9|10|11|12|1|2|3|4|5|6 P.M. 11:45pm

TOTAL CLAIMS 4

OFFICE USE ONLY

837 (85/12)

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS – If more than one survey, specify data for each type of survey

Number of Stations 635 @ 50 foot ℄ Number of Readings 635 +/-

Station interval 50 feet Line spacing 200 feet +/-

Profile scale Magnetometer 1 inch = 1000 gammas / VLF-EM 1 inch = 50%.

Contour interval Magnetometer = 100 gammas / VLF-EM 50%.

MAGNETIC

Instrument EDA OMNI PLUS Combined Mag-EM Unit.

Accuracy – Scale constant please see attached specs.

Diurnal correction method Diurnal correction mode in computer.

Base Station check-in interval (hours) Automatic Base station check every 30 sec.

Base Station location and value L 0+00 0+50N 246 T (datum 57900 to 58000 gammas)

ELECTROMAGNETIC

Instrument EDA OMNI PLUS Combined Mag-EM Unit.

Coil configuration please see the attached specs

Coil separation " " " " "

Accuracy " " " " "

Method: ☒ Fixed transmitter ☐ Shoot back ☐ In line ☐ Parallel line

Frequency Cutler Maine U.S.A. 17.8 Hz
(specify V.L.F. station)

Parameters measured Secondary fields.

GRAVITY

Instrument

Scale constant

Corrections made

Base station value and location

Elevation accuracy

INDUCED POLARIZATION
RESISTIVITY

Instrument

Method ☐ Time Domain ☐ Frequency Domain

Parameters – On time Frequency

– Off time Range

– Delay time

– Integration time

Power

Electrode array

Electrode spacing

Type of electrode

SELF POTENTIAL

Instrument _____ Range _____

Survey Method _____

_____

Corrections made _____

_____

RADIOMETRIC

Instrument _____

Values measured _____

Energy windows (levels) _____

Height of instrument _____ Background Count _____

Size of detector _____

Overburden _____

(type, depth – include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey _____

Instrument _____

Accuracy _____

Parameters measured _____

_____

Additional information (for understanding results) _____

_____

_____

AIRBORNE SURVEYS

Type of survey(s) _____

Instrument(s) _____

(specify for each type of survey)

Accuracy _____

(specify for each type of survey)

Aircraft used _____

Sensor altitude _____

Navigation and flight path recovery method _____

_____

Aircraft altitude _____ Line Spacing _____

Miles flown over total area _____ Over claims only _____

GEOCHEMICAL SURVEY – PROCEDURE RECORD

Numbers of claims from which samples taken _____

_____

_____

Total Number of Samples _____

Type of Sample _____
(Nature of Material)

Average Sample Weight _____

Method of Collection _____

_____

Soil Horizon Sampled _____

Horizon Development _____

Sample Depth _____

Terrain _____

_____

Drainage Development _____

Estimated Range of Overburden Thickness _____

_____

_____

SAMPLE PREPARATION
(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis _____

_____

_____

_____

General _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

ANALYTICAL METHODS

Values expressed in: per cent ☐
p. p. m. ☐
p. p. b. ☐

Cu, Pb, Zn, Ni, Co, Ag, Mo, As,-(circle)

Others _____

Field Analysis (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Field Laboratory Analysis

No. (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Commercial Laboratory (_____ tests)

Name of Laboratory _____

Extraction Method _____

Analytical Method _____

Reagents Used _____

General _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Ministry of Northern Development and Mines

Ontario

Assessment Work Breakdown

1. Type of Survey Mag and VLF-EM Survey-Geological Studies.
2. Township or Area Olster Township, (G-4117) Ontario. c rept.
3. Numbers of Mining Claims Traversed by Survey S-944388, S-944389, S-994994 and S-994995 Sudbury, Mining Division.

4. Number of Miles of Line Cut 6.62 miles Flown 0
*5. Number of Stations Established 635 +/- Stations @ 50 foot centers.
*6. Make and type of Instrument Used EDA Omni Plus Em and Mag Unit.
*7. Scale Constant or Sensitivity please see the attached specs.
*8. Frequency Used and Power Output Cutler Maine U.S.A 17.8 Hz.

9. Summary of Assessment Credits (details on reverse side)

Total 8 hour Technical Days (Include Consultants, Draughting etc.) 39.75

Total 8 hour Line-Cutting Days 22.5

Calculation

39.75 (Technical) x 7 = 278.25 + 22.50 (Line-cutting) = 300.75 ÷ 4 (Number of claims) = 75.1875 (Assessment credits per claim)

The dates listed on this form represent working time spent entirely within the limits of the above listed claims ☑ Check
If otherwise, please explain

Dated: January 29/91

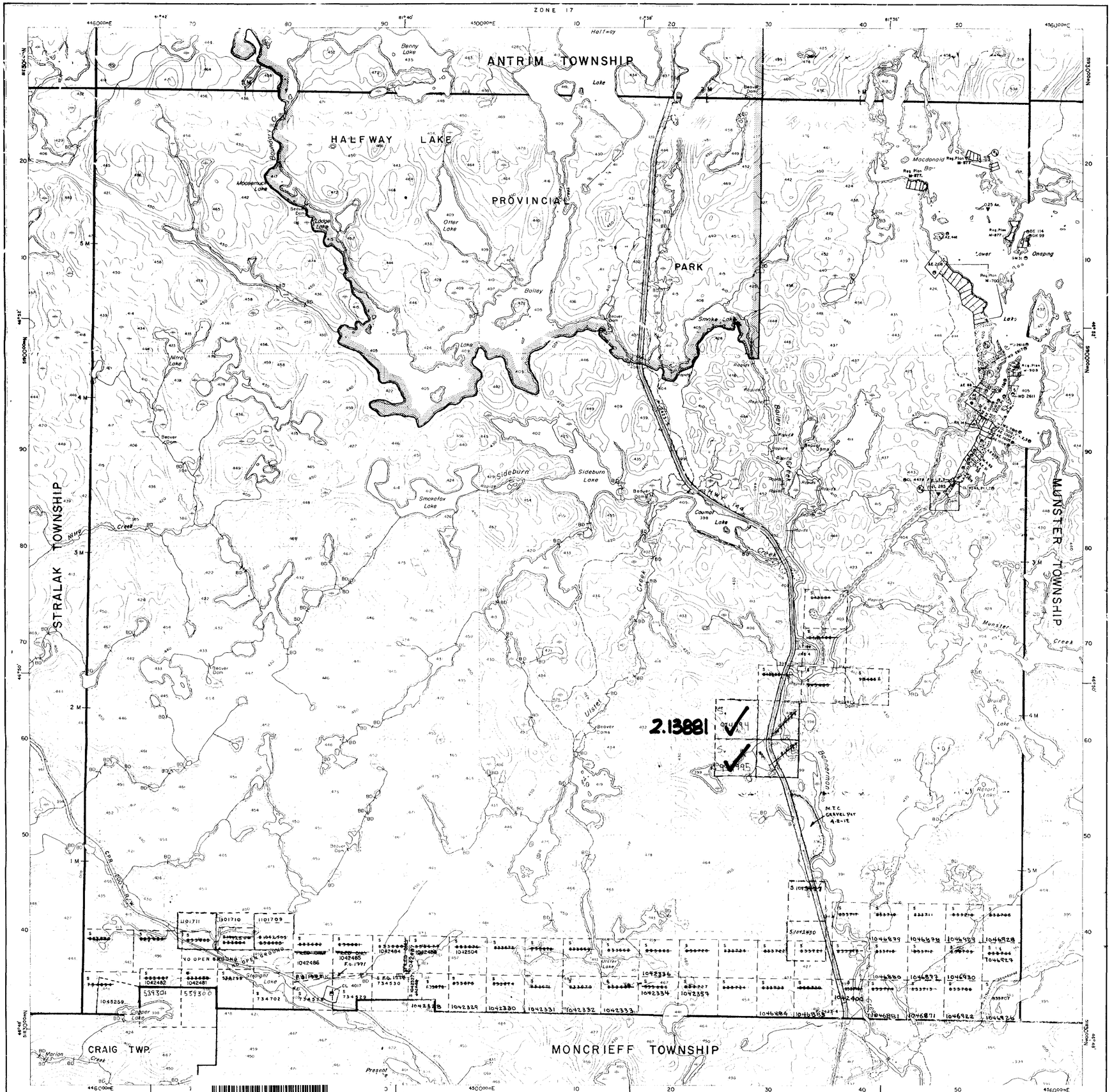
Signed: [signature]
Agent for J.G Gervais

SUDBURY MINING DIV. RECEIVED JAN 30 1991 A.M. 7|8|9|10|11|12|1|2|3|4|5|6 P.M. 1:45 pm

Note: (A) * Complete only if applicable.
(B) Complete list of names, addresses and dates on reverse side.
(C) Submit separate breakdown for each type of survey.
(D) Submit in duplicate.

2.13881

827 (85/12)



Ministry of Natural Resources
Ministry of Northern Development and Mines
Ontario

INDEX TO LAND DISPOSITION

PLAN
G-4117

TOWNSHIP
ULSTER

M.N.R. ADMINISTRATIVE DISTRICT
SUDBURY

MINING DIVISION
SUDBURY

LAND TITLES/REGISTRY DIVISION
SUDBURY

Scale 1:20 000

1000 Metres 0 1000 2000 Metres

1000 Feet 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000 Feet

Contour Interval 10 Metres

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
  - 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

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 (R)
- Sand & Gravel (S)

AREAS WITHDRAWN FROM DISPOSITION

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

Description	Order No.	Date	Disposition	File
(S)	W 63/75	5/11/75	SRO	127351
(R)	M.N.R. RESERVE	4/10/63	S.R.O.	163005
(R)	M.N.R. RESERVE		S.R.O.	77094 Vol. 1
(R)	CROWN RESERVE		S.R.O.	160706

TOWNSHIP SUBJECT TO FORESTRY OPERATIONS

NOTES

Flooding on Onaping Lake to contour elevation 111' - L.O. 9113

DATE OF ISSUE
JUN 10 1981
SUDBURY
MINING RECORDER'S OFFICE

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

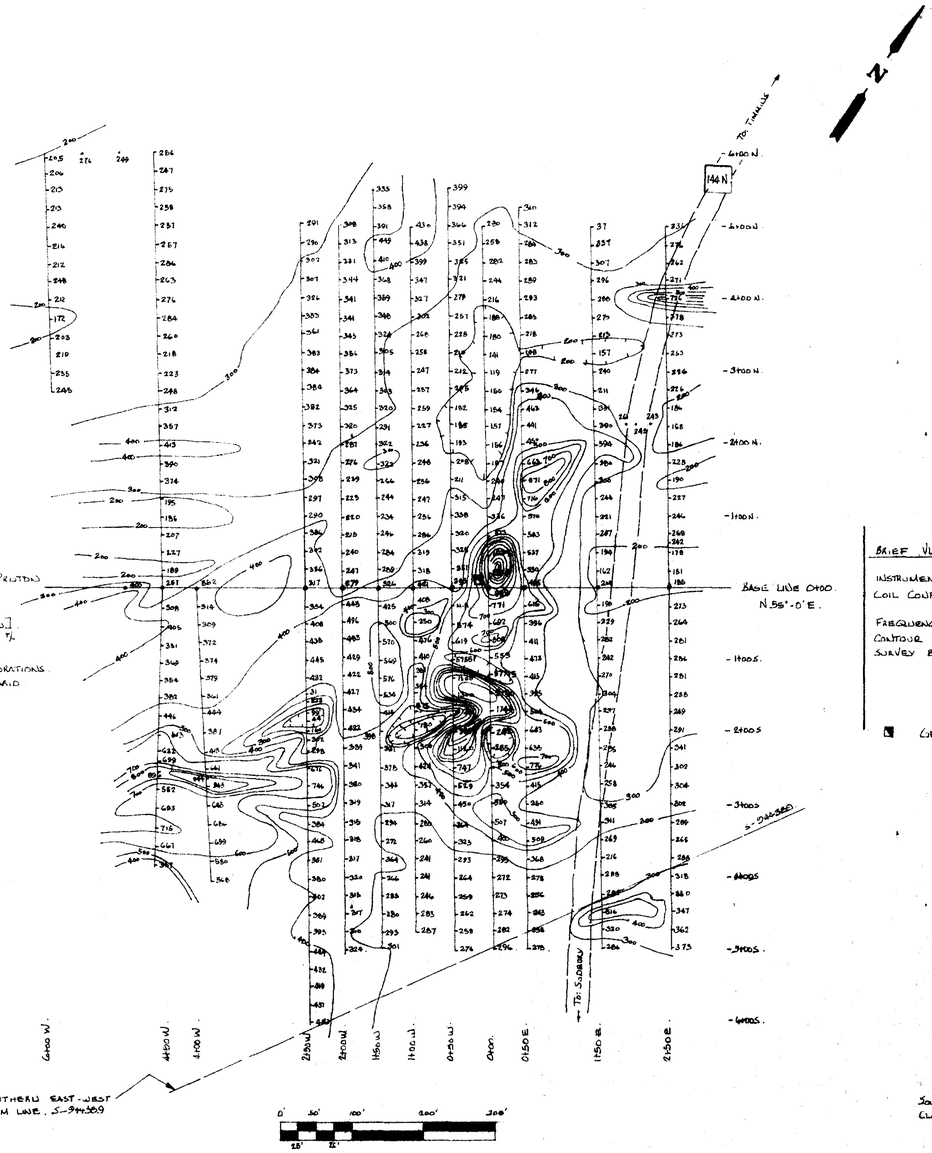
Map base and land disposition drafting by Surveys and Mapping Branch, Ministry of Natural Resources.

The disposition of land, location of lot fabric and parcel boundaries on this index was compiled for administrative purposes only.

411135E0017 2.13881 ULSTER

200

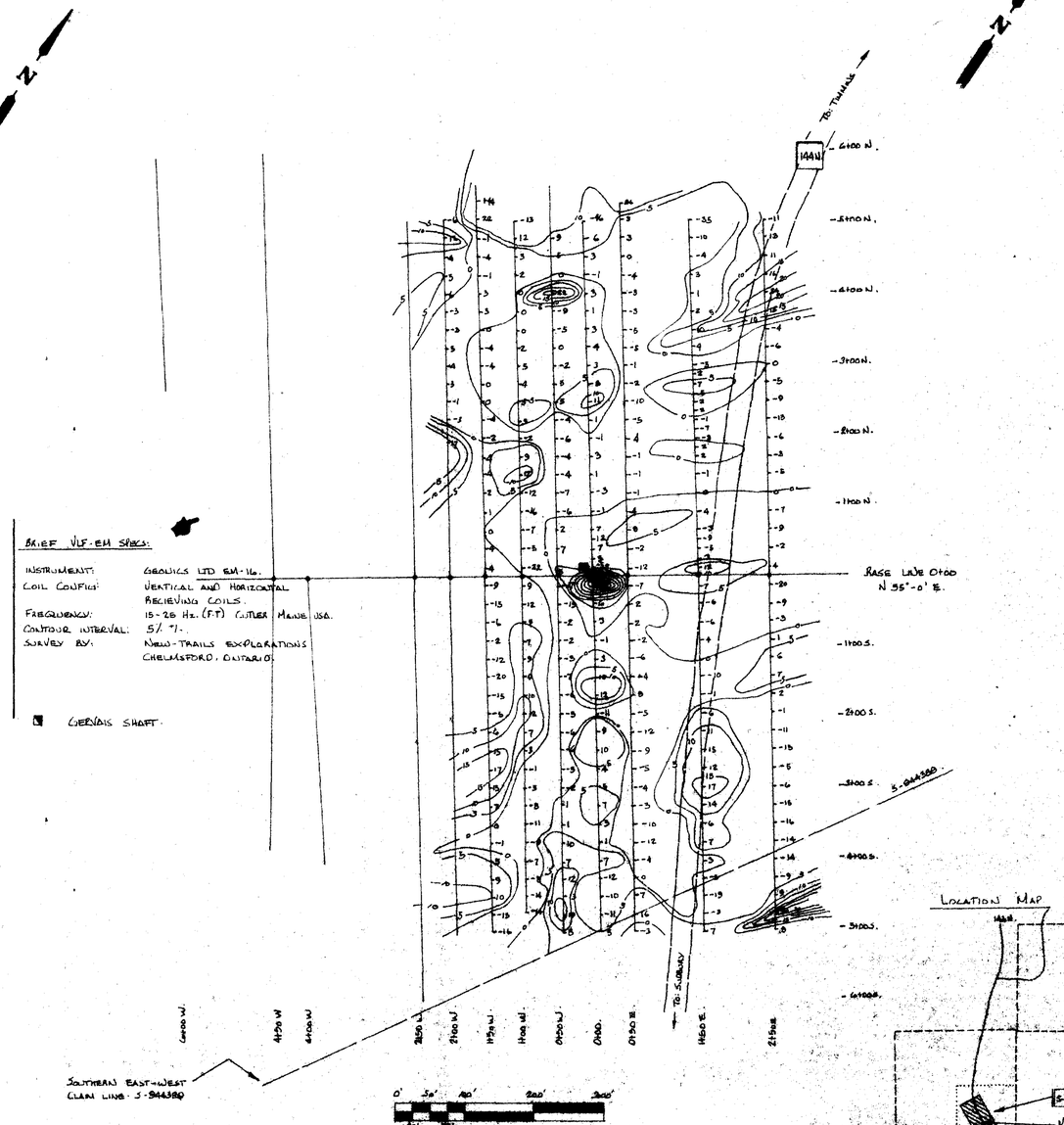
88-02



BRIEF MAG SPECS:

INSTRUMENT: SCINTREX MP-2 PROTON MAGNETOMETER.
FIELD: TOTAL.
DATUM: 58,000 NT [GAMMAS]
CONTOUR INTERVAL: 100 NT [GAMMAS] +/-
SURVEY BY: NEW-TRAILS EXPLORATIONS CHELMSFORD, ONTARIO

★ GROUND MAGNETOMETER DATA CONTOUR MAP.



BRIEF VLF-EM SPECS:

INSTRUMENT: GEOPHYSICS LTD EM-16.
COIL CONFIG: VERTICAL AND HORIZONTAL RECIEVING COILS.
FREQUENCY: 15-26 Hz. (F.T) CUTLER MAINE USA.
CONTOUR INTERVAL: 5/ +/-.
SURVEY BY: NEW-TRAILS EXPLORATIONS CHELMSFORD, ONTARIO.

GERVAIS SHAFT.

★ GROUND VLF-ELECTROMAGNETIC FRASER FILTERED DATA CONTOUR MAP.

LOCATION MAP

THE GERVAIS GROUP PROPERTY.
ULSTER TOWNSHIP.
SCALE: 1:20,000.

2.13881

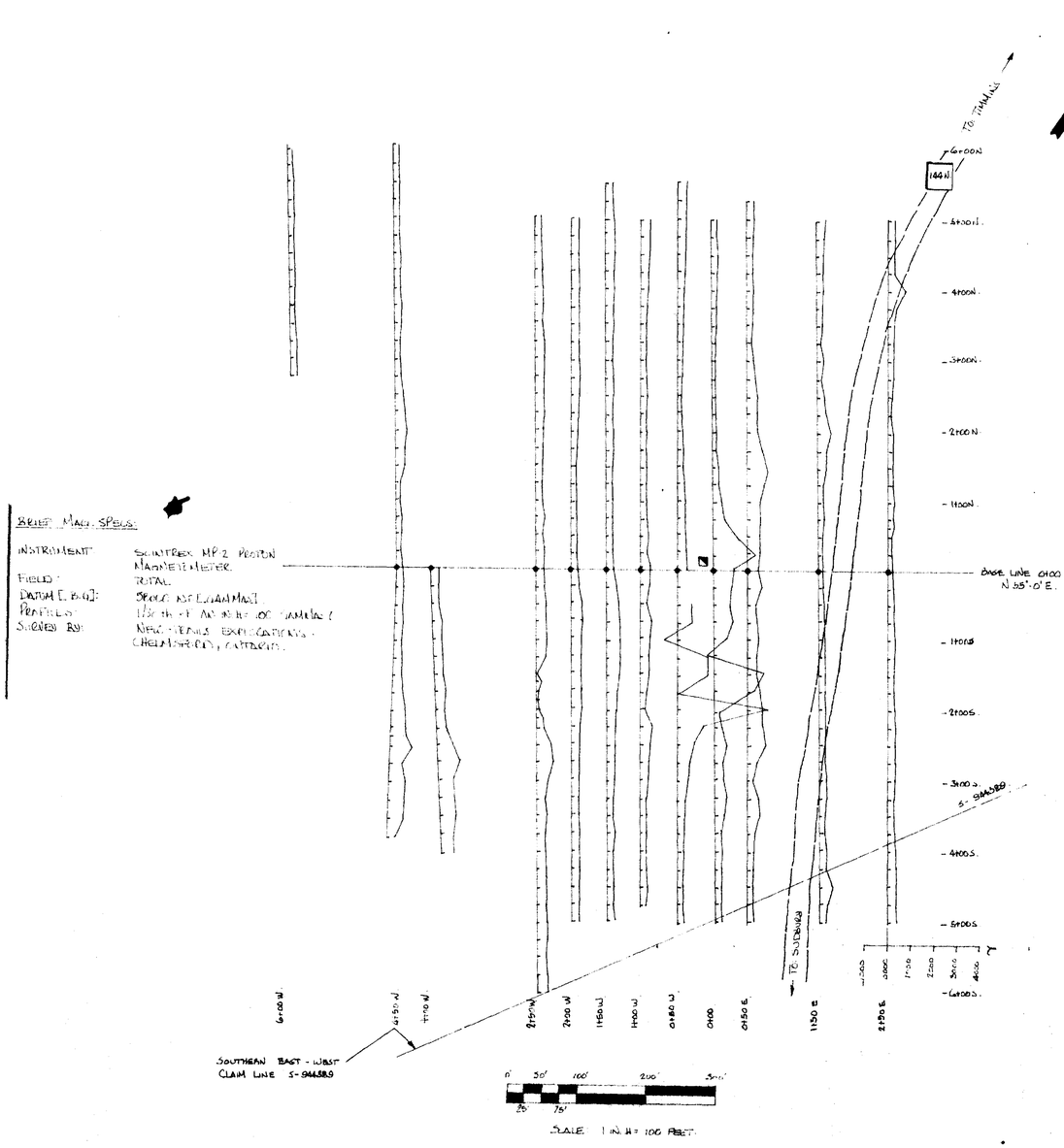
NO.	REVISION	BY	DATE

THE GERVAIS GROUP PROPERTY.
ULSTER TOWNSHIP, ONTARIO.

TITLE OF DRAWING: GROUND MAGNETOMETER DATA CONTOUR MAP AND GROUND VLF-ELECTROMAGNETIC FRASER FILTERED DATA CONTOUR MAP

DRAWN BY: [illegible]	DATE: MARCH 88/89	DRAWING NO. MAP NO. 1.
CHECKED BY:	DATE: MARCH 25/89	
APPROVED BY:	SCALE: 1" = 100 FEET	REF. NO. GVS.

1989 ORIENTATION SURVEY.
GERVAIS SHAFT AREA



BRIEF MAG. SPECS:

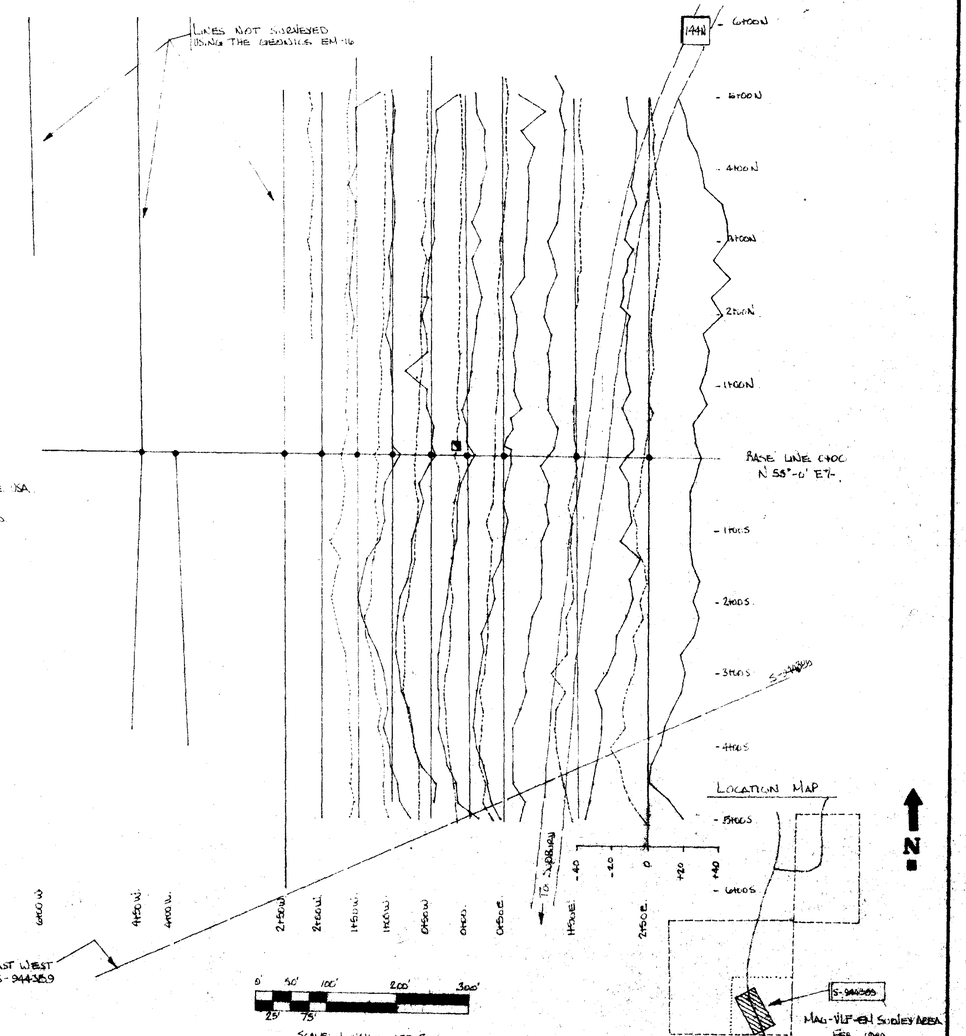
INSTRUMENT: SCINTREX MP 2 PROTON MAGNETOMETER.
FIELD: TOTAL
DATUM [B.G.]: SPOOG ASSUMED MAG.
PROFILES: 1/10th of an inch = 100 gammas.
SURVEY BY: NEW-TRAILS EXPLORATIONS - CHELMSFORD, ONTARIO.

BRIEF VLF EM. SPECS:

INSTRUMENT: GEONICS LTD. EM-16.
COIL CONFIG.: VERTICAL AND HORIZONTAL RECEIVING COILS
FREQUENCIES: 15-25 Hz (F.T.) CUTLER MAINE USA.
PROFILE SCALE: 1/40th of an inch = 1
SURVEY BY: NEW-TRAILS EXPLORATIONS CHELMSFORD, ONTARIO

NOTE:
— INPHASE
····· OUTPHASE
GERVAIS SHAFT

★ GROUND MAGNETOMETER DATA PROFILE MAP



★ GROUND VLF - ELECTROMAGNETIC UNFILTERED FIELD DATA PROFILE MAP.

2.13881

THE GERVAIS GROUP PROPERTY
ULSTER TWP.
SCALE 1:20,000.

NTS 69

NO.	REVISION	BY	DATE

THE GERVAIS GROUP PROPERTY
ULSTER TOWNSHIP, ONTARIO.

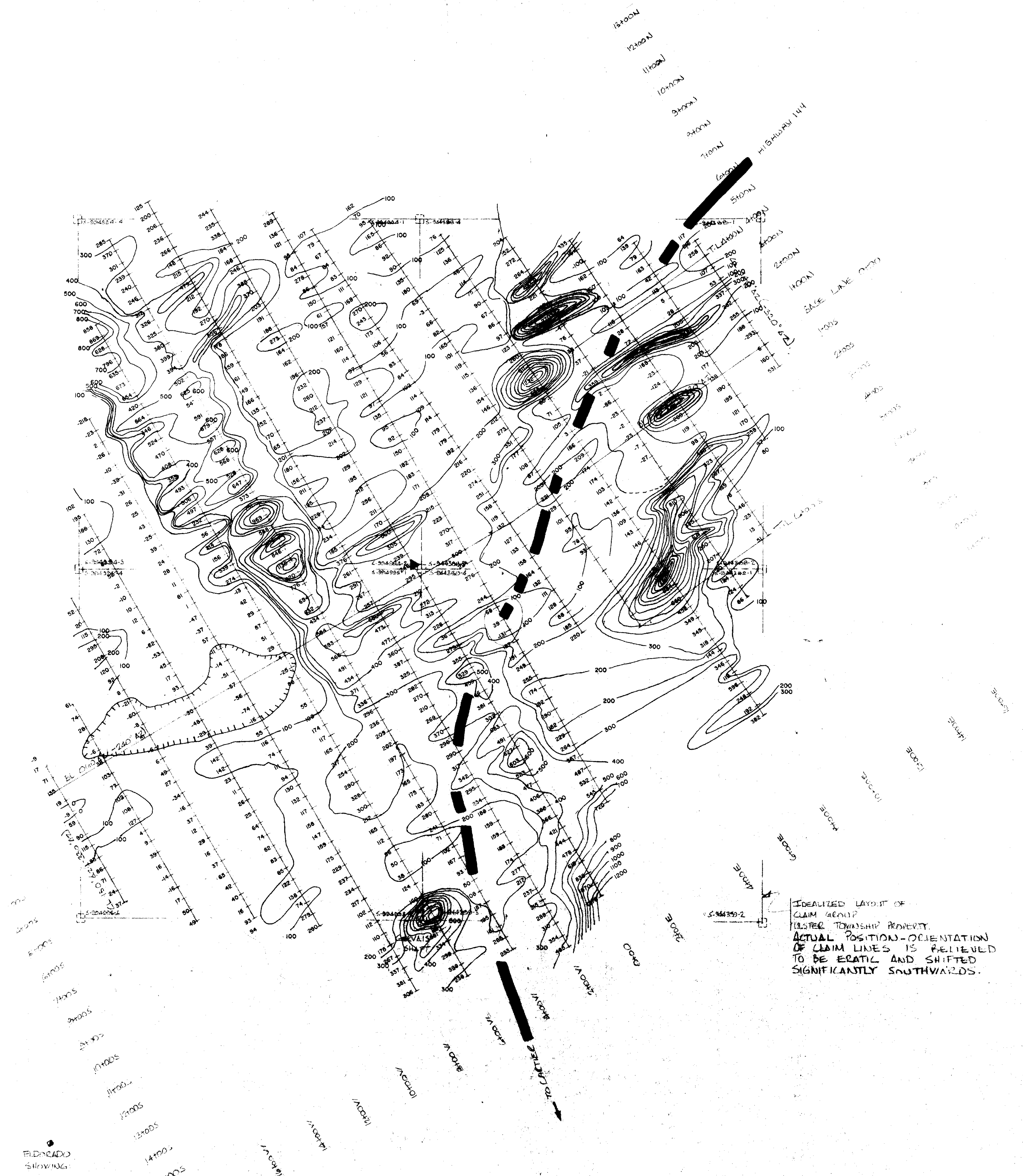
TITLE: A COMBINED: GROUND MAGNETOMETER DATA PROFILE MAP, AND A GROUND VLF-ELECTROMAGNETIC UNFILTERED DATA PROFILE MAP.

DRWN: H. TRAMONTELLI	DATE: SEPTEMBER 01/89	DRAWING NO: MAP N° 2
CHECKED: H.T.	DATE: SEPTEMBER 01/89	
APPR'D: H.T.	SCALE: 1" = 100 FEET	DWG. NO: TU10

41113SE0017 2.13881 ULSTER

220

1989 ORIENTATION SURVEY
GERVAIS SHAFT AREA



2.13881

▲ = MAGNETOMETER BASE STATION.

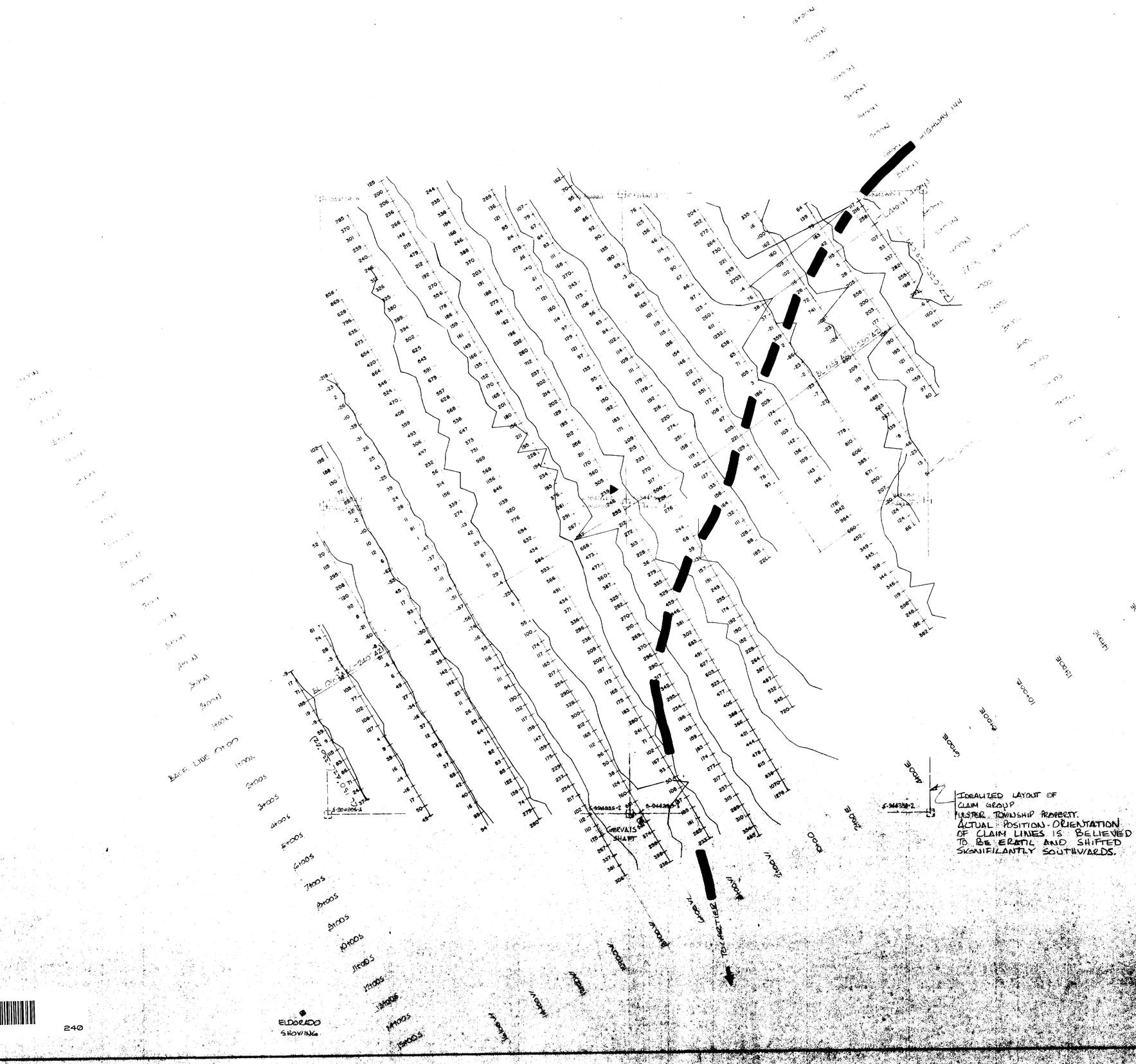
CONTOUR INTERVAL: 100 GAMMAS.

NO	REVISION	BY	DATE

GERVAIS GROUP, MONCRIEFF GENERAL PROPERTY, ULSTER TOWNSHIP, ONTARIO.

TITLE EDA OMNI PLUS MAGNETOMETER DATA CONTOURS

DRW: H. TRAZAMELLI	DATE: OCTOBER 17/80	DRAWING NO
CHECK'D: HJT	DATE: JAN 17/81	
APPR'D:	SCALE: 1 in. = 200 FT.	SHT. NO.

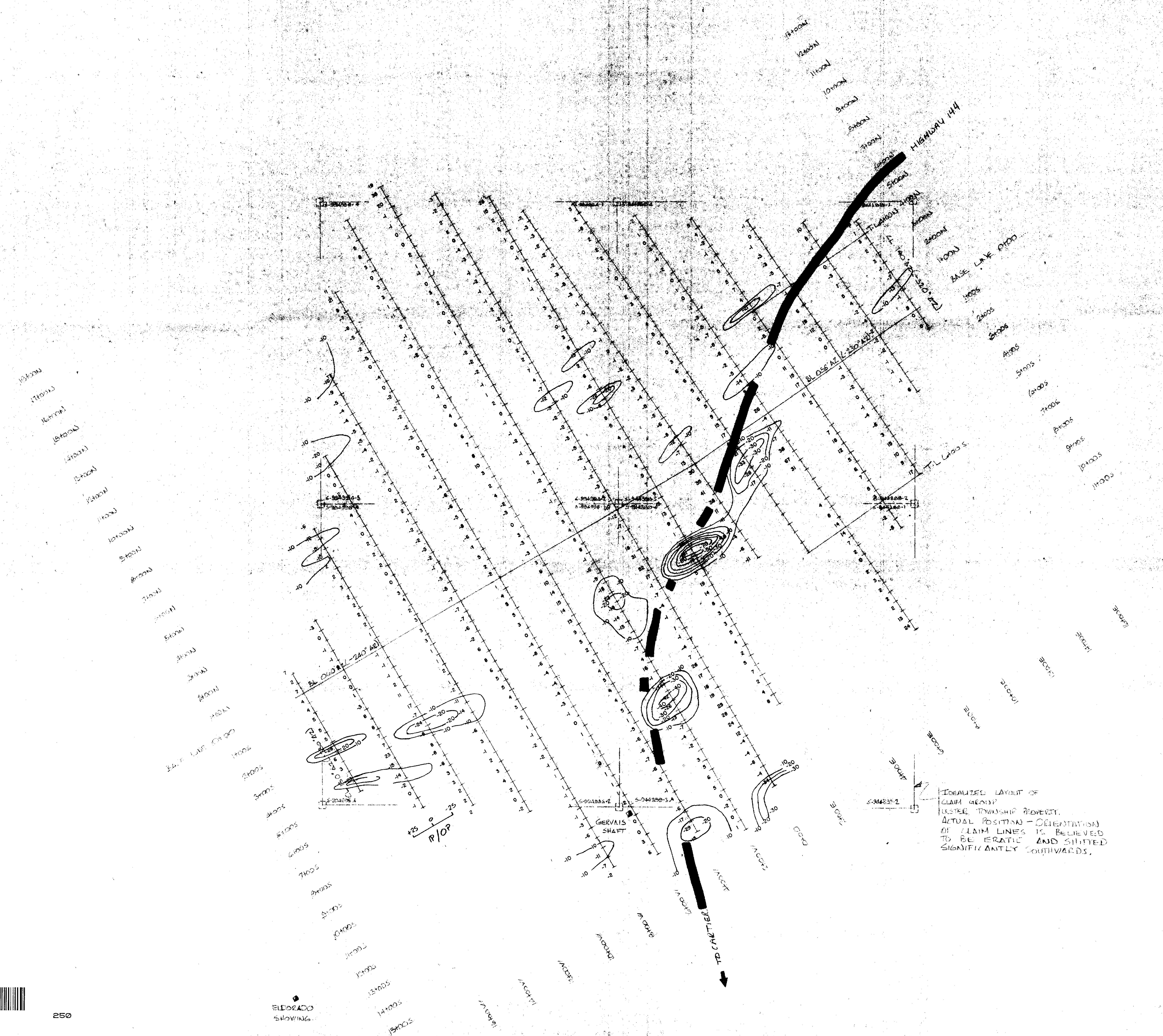


Z-12881

▲ = MAGNETOMETER BASE STATION.

PROFILE SCALE: 1 INCH = 1000 FEET

240



2.13881

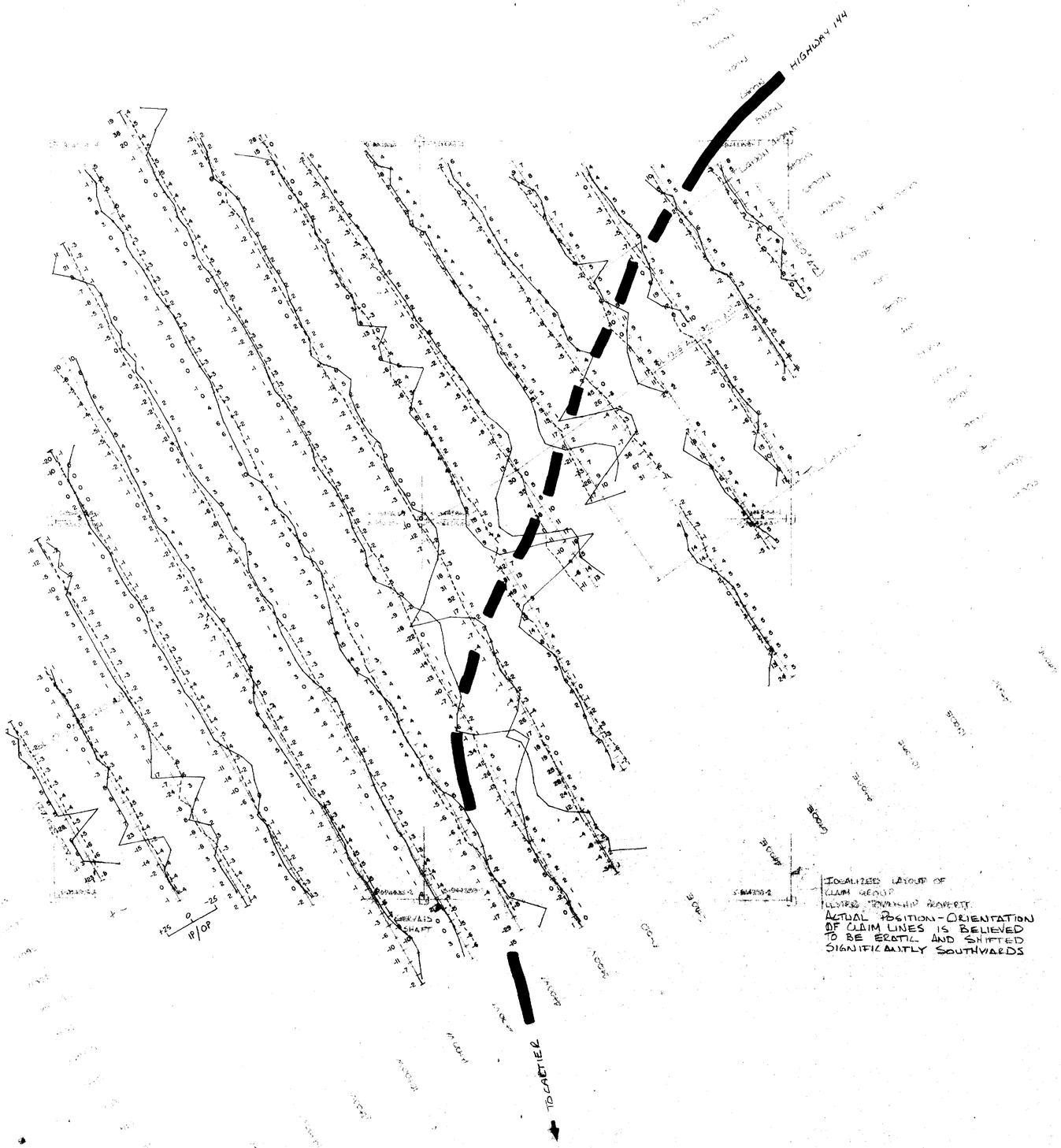
TRANSMITTING STATION: CUTLER MAINE 17.0 Hz
FRASER FILTERED DATA PROFILE SCALE:
1 INCH = 50%

NO	REVISION

TITLE EDA OMNI PLUS VLF-EM FRASER FILTERED CONTOURED DATA.

DRW:	DATE:	DRAWING NO:
CHECK'D: HJT	DATE: JAN 17/81	
APPR'D:	SCALE:	SHT. NO:

250



IDEALIZED LAYOUT OF CLAIM GROUP
(LISTED TOWNSHIP PROPERTY)
ACTUAL POSITION-ORIENTATION OF CLAIM LINES IS BELIEVED TO BE ERATIC AND SHIFTED SIGNIFICANTLY SOUTHWARDS

2.13881

TRANSMITTER STATION: CUTLER MAINE 17.0 kHz
PROFILE SCALE: I/P & O/P 1 INCH = 50 m.

NO	REVISION

TITLE EDA OMNI PLUS VLF-EM/MAG DATA PROFILES

DRAWN HJT DATE JAN 17/31