010

GEOPHYSICAL ENGINEERING & SURVEYS LTD.,

NORTH BAY, ONTARIO

REPORT ON THE

GEOLOGICAL & GEOPHYSICAL SURVEYS

ON THE

PASCAR/SAVILLE OPTION, JOB 933

VOGT TOWNSHIP ONTARIO

FOR

KEEVIL MINING GROUP LTD.,

REPORT NO. 401 N.B.

N.T.S 42 1/16

February 3, 1970

R.J.GRAHAM - P. Eng.

GEOPHYSICAL ENGINEERING & SURVEYS LTD.,

NORTH BAY, ONTARIO

REPORT ON THE

GEOLOGICAL & GEOPHYSICAL SURVEYS

ON THE

PASCAR/SAVILLE OPTION, JOB 933

VOGT TOWNSHIP ONTARIO

FOR

KEEVIL MINING GROUP LTD.,

REPORT NO. 401 N.B

N.T.S 42 1/16

February 3, 1970

R.J. GRAHAM -P. Eng.

SUMMARY, CONCLUSIONS & RECOMMENDATIONS

The Vogt Township claims of the Keevil Mining Group Ltd., were explored by geological mapping, magnetometer, electromagnetic and scintillometer surveys during the period November 10th to December 5, 1969.

The geologic mapping verified the presence of uraniferous Mississagi type conglomerate, folded into a well defined north plunging syncline.

The magnetometer survey outlined the Keewatin iron formations in the Archean basement where the Cobalt sediments were relatively thin, but failed to indicate any significant erosional pattern in the iron formation.

The Crone V.L.F. electromagnetic survey delineated several strong conductors which proved spurious on checking with a sharpe SE-200 E-M. These conductors probably represent water filled faults.

The scintillometer survey found no significant anomalies, but the thickness and highly leached nature of the uraniferous conglomerate suggests that economic concentrations of uranium values could possibly occur at or near the axial line of the syncline away from the influence of surface leaching.

At least two vertical holes aggregating 2600' are recommended to test the theory.

ACCOMPANYING MAPS

(1) Dwg. 3297 - "Magnetometer"
(2) Dwg. 3298 - "Geology"
(3) Dwg. 3299 - "Radem & SE 200"

SUMMARY, CONCLUSIONS & RECOMMENDATIONS

The Vogt Township claims of the Keevil Mining Group Ltd., were explored by geological mapping, magnetometer, electromagnetic and scintillometer surveys during the period November 10th to December 5, 1969.

The geologic mapping verified the presence of uraniferous Mississagi type conglomerate, folded into a well defined north plunging syncline.

The magnetometer survey outlined the Keewatin iron formations in the Archean basement where the Cobalt sediments were relatively thin, but failed to indicate any significant erosional pattern in the iron formation.

The Crone V.L.F electromagnetic survey delineated several strong conductors which proved spurious on checking with a sharpe SE-200 E-M. These conductors probably represent "water filled faults."

The scintillometer survey found no significant anomalies, but the thickness and highly leached nature of the uraniferous conglomerate suggests that economic concentrations of uranium values could possibly occur at or near the axial line of the syncline away from the influence of surface leaching.

At least two vertical holes aggregating 2600' are recommended to test this theory.

ACCOMPANYING MAPS

(1) Dwg. 3297 - "Magnetometer"

(2) Dwg. 3298 - "Geology"

(3) Dwg. 3299 - "Radem & SE 200"

INTRODUCTION

The property comprises 74 contiguous claims in the central part of Vogt Township, Larder Lake Mining Division. Details follow.

30 claims, L 104942-104956 recorded December 19, 1969; L213018-213032 recorded May 12, 1969 optioned from Pascar Mines and Oils and Thomas Saville, and presently held by R.H.Wright of the Keevil Mining Group.

9 claims, L 213928-213936 recorded October 1, 1969 purchased outright from Thomas Saville, and held by the Keevil Mining Group.

35 claims, L 209911-209926, L209781-209799 recorded October 7, 1969 staked by the Keevil Mining Group. and held by them.

Development work in the form of line cutting was carried out during the period September 22- October 31, 1969 by L.Savard, contractor.

Geological mapping and geophysical surveys were carried out during the period November 10- December 5, 1969.

The technical surveys were carroed pit by Geophysical Engineering & Surveys Ltd., 2189 Algonquin Avenue, North Bay, Ontario. The geology was done by R.Lashbrook, magnetometer by A. MacDonnell, E-M by G. Andrews, checked E-M by A. McClemans all of North Bay. All work was under the direct supervision of the writer.

LOCATION & ACCESS

The claims are located in the central part of Vogt Township, about 16 miles northwest of Martin River on Highway NO.11, and accessible by rough 22 miles bush road from that settlement, or on water via the Southwest Arm of Temagami Lake. Approximate coordinates are 46°48' north and 80°07' east.

INTRODUCTION

The property comprises 74 contiguous claims in the central part of Vogt Township, Larder Lake Mining Division. Details follow.

30 claims, L 104942-104956 recorded December 19, 1969; L 213018-213032 recorded May 12, 1969 optioned from Pascar Mines and Oils and Thomas Saville, and presently held by R.J. Wright of the Keevil Mining Group.

9 claims, L 213928-213936 recorded October 1, 1969 purchased outright from Thomas Saville, and held by the Keevil Mining Group.

35 claims, L 209911-209926, L 209781-209799 recorded October 7, 1969 staked by the Keevil Mining Group, and held by them.

Development work in the form of line cutting was carried out during the period September 22-October 31, 1969 by L. Savard, contractor.

Geological mapping and geophysical surveys were carried out during the period November 10-December 5, 1969.

The technical surveys were carried out by Geophysical Engineering & Surveys Ltd., 2189 Algonquin Avenue, North Bay, Ontario. The geology was done by R. Lashbrook, magnetometer by A. MacDonnell, E-M by G. Andrews, checked E-M by A. McClemens all of North Bay. All work was under the direct supervision of the writer.

LOCATION & ACCESS

The claims are located in the central part of Vogt Township, about 16 miles northwest of Martin River on Highway No. 11, and accessible by rough 22 mile bush road from that settlement, or on water via the Southwest Arm of Temagami Lake. Approximate co-ordinates are 46°48' north and 80°07' east.

SURVEY CONTROL AND METHODS USED

North-south lines were cut at 400' intervals with 100' pickets, using east-west base lines and tie lines for control, A total of 25 miles of line was established, effectively covering 34 claims, L209782, 209784-209787,209789,209791,209926,213018-213026,104942-104945,104946-104955,209798, 213928,213933, and 213934.
1400 geophysical readings were taken in each of the geophysical surveys.
Instruments used were Sharpe Fluxgate Magnetometer model M.Fl, Crone Radem V.L.F electromagnetic unit, and Sharpe SE 200 vertical loop E-M unit for checking radem anomalies. The detail method only described in the appendix was used. The normal transmitter-receiver interval was 400 feet. Also, complete coverage was given using a McPhar T.Vl scintillometer although this is not being applied for assessment purposes.

Geologic mapping was carried out using the cut lines for basic control, and running pace and compass traverses between lines locally to check for outcrops. All major rock areas were also examined by the undersigned.

RESULTS OF SURVEYS

1. MAGNETOMETER DWG. NO.3297

The Fluxgate Magnetometer survey was done using 2 instruments, and the surveys have been contoured separately. The only anomalies of significance were those representing the iron formation, north of the baseline on lines 56 + 00E - 64 + 00E, up to 50,000 gammas.

The increased thickness of sediments near the centre of the syncline obscured the magnetic effect so no effects of basement erosion could be delineated.

SURVEY CONTROL AND METHODS USED

North-south lines were cut at 400' intervals with 100' pickets, using east-west base lines and tie lines for control. A total of 25 miles of line was established, effectively covering 34 claims, L 209782, 209784-209787, 209789, 209791, 209926 213018-213026, 104942-104945, 104946-104955, 209798, 213928, 213933 and 213934. 1400 geophysical readings were taken in each of the geophysical surveys. Instruments used were Sharpe Fluxgate Magnetometer model M.F 1, Crone Radem V.L.F electromagnetic unit, and Sharpe SE 200 vertical loop E-M unit for checking radem anomalies. The detail method only described in the appendix was used. The normal transmitter-receiver interval was 400 feet. Also, complete coverage was given using a McPhar T.V 1 scintillometer although this is not being applied for assessment purposes.

Geologic mapping was carried out using the cut lines for basic control, and running pace and compass traverses between lines locally to check for outcrops. All major rock areas were also examined by the undersigned.

RESULTS OF SURVEYS

1. MAGNETOMETER DWG. NO. 3297

The Fluxgate Magnetometer survey was done using 2 instruments, and the surveys have been contoured separately. The only anomalies of significance were those representing the iron formation, north of the baseline on lines 56+00E - 64+00E, up to 50,000 gammas.

The increased thickness of sediments near the centre of the syncline obscured the magnetic effect so no effects of basement erosion could be delineated.

2. GEOLOGY DWG. NO. 3998

The claim group is underlain by east striking, steeply north dipping Keewatin metavolcanics and iron formation which are unconformably overlain by flat lying Huronian sediments folded into a syncline whose axial line probably plunges north at about 20°.

At the base of the Huronian, some 50-70 feet true thickness of Lower Mississagi uraniferous quartz pebble conglomerate occurs on the steep slopes of a northeast trending valley over a strike length of about one mile. The valley is part of a prominent photo-fault traceable for 3 miles, and in the vicinity of the fault, the dips of the Cobalt and Bruce sediments are locally variable and often steep.

On the south side of the valley, near a beaver dam, a small outcrop of pyritic Missigsagi quartz pebble conglomerate was found close to the nose of the syncline. South of theoutcrop, up slope, large blocks of Mississagi float occur. Limited blasting produced fresher material from the outcrop, and local scintillometer readings up to 30 x background were obtained. Significantly, this is near the top of the Mississagi. No exposures of the basement volcanics were found here, and it is expected that the better uranium values should occur at or near the unconformity. A 10 lb. sample, no. 8007 was cut across the 5' exposure, and assay by Correlation Laboratories returned U_3O_8 0.006%

THO_2 NIL

Swastika Laboratories returned AU 0.005

About 1500' northeast, up the valley, on the north side of the 60° slope, three 1' bands of rusty quartz pebble conglomerate separated by 1'-2' of barren grey quartzite strike N 50°E astronomic and dip 80° to the north. Scintillometer readings were spotty, the best being 30x background. The outcrop is 50' long and

15' wide and consists of the bottom of the Gowganda Conglomerate formation with local quartz pebbles, and the top to the Mississagi quartz pebble conglomerate beds. At the southeast edge of the outcrop, there is a 1' exposure of Mississagi, then overburden, with a small outcrop of Mississagi found by shovelling, 50' downhill.

The base of the uranium bearing beds is completely covered by scree, but a 50' true thickness is probable.

Four 10lb. samples were moiled from the outcrops.

	$\%U_3O_8$	$\%THO_2$	AU.oz/ton
8008	0.003	NIL	0.005
8009	0.007	0.01	0.01
8010	0.011	0.01	0.01
8011	0.004	NIL	0.06

Careful traverses on and between the cut lines provided extra proof that the axial plane of the syncline strikes about 10° west of north, but outcrops are generally very sparse. Differentiation of the various units within the Cobalt group was not made after preliminary traverses of the largest outcrops showed random variations in rock type, from quartzite and argillite to the granite pebble conglomerate of the Gowganda formation.

Detailed prospecting failed to find any exposures of Mississagi in the area where the west limb of the syncline should outcrop. That area is extensively covered by glacial drift.

It is the writer's opinion that there may be concentrations of uranium values near the axial line of the syncline in the Mississagi, especially near the base of the unit, because the syncline pattern probably reflects an old drainage system superimposed on the basement rocks, and there would be a good possibility of gravity concentration of the heavy minerals. Based on this theory, a Magnetometer survey was carried out to track the prominent east striking, 15' wide and consists of the bottom of the Gowganda Conglomerate formation with local quartz pebbles, and the top of the Mississagi quartz pebble conglomerate beds. At the southeast edge of the outcrop, there is a 1' exposure of Mississagi, then overburden, with a small outcrop of Mississagi found by shovelling, 50' downhill.

The base of the uranium bearing beds is completely covered by scree, but a 50' true thickness is probable.

Four 10 lb. samples were moiled from the outcrops.

	% U_3O_8	% THO_2	AU. oz/ton
8008	0.003	NIL	0.005
8009	0.007	0.01	0.01
8010	0.011	0.01	0.01
8011	0.004	NIL	0.06

Careful traverses on and between the cut lines provided extra proof that the axial plane of the syncline strikes about 10° west of north, but outcrops are generally very sparse. Differentiation of the various units within the Cobalt group was not made after preliminary traverses of the largest outcrops showed random variations in rock type, from quartzite and argillite to the granite pebble conglomerate of the Gowganda formation.

Detailed prospecting failed to find any exposures of Mississagi in the area where the west limb of the syncline should outcrop. That area is extensively covered by glacial drift.

It is the writer's opinion that there may be concentrations of uranium values near the axial line of the syncline in the Mississagi, especially near the base of the unit, because the synclinal pattern probably reflects an old drainage system north dipping iron formation bands, interbedded with the Keewatin metavolcanics. Unfortunately, the sediments near the centre of the syncline were too thick to enable magnetic delineation of the possible valley in the basement.

3. RADEM DWG. NO.3299

Several conductors were outlined by the Crone Radem V.L.F E-M survey, but on checking with Sharpe SE 200 Vertical Loop E-M these anomalies disappeared, This, and the local topography suggest that water filled faults are probably responsible for the spurious results.

The only valid conductor, which is shown on lines 59 + 00E to 64 + 00E at 24 + 50N represents the magnetic iron formation, and has no economic significance.

superimposed on the basement rocks, and there would be a good possibility of gravity concentration of the heavy minerals. Based on this theory, a Magnetometer survey was carried out to track the prominent east striking, north dipping iron formation bands, interbedded with the Keewatin metavolcanics. Unfortunately, the sediments near the centre of the syncline were too thick to enable magnetic delineation of the possible valley in the basement.

3. RADEM DWG. NO. 3299

Several conductors were outlined by the Crone Radem V.L.F E-M survey, but on checking with Sharpe SE 200 Vertical Loop E-M these anomalies disappeared. This, and the local topography suggest that water filled faults are probably responsible for the spurious results.

The only valid conductor, which is shown on lines 59+00E to 64+00E at 24+50N represents the magnetic iron formation, and has no economic significance.

2. GEOLOGY DWG. NO. 3998

The claim group is underlain by east striking, steeply north dipping Keewatin metavocanics and iron formation which are unconformably overlain by flat lying Huronian sediments folded into a syncline whose axial line probably plunges north at about 20°.

At the base of the Huronian, some 50-70 feet true thickness of Lower Mississagi uraniferous quartz pebble conglomerate occurs on the steep slopes of a northeast trending valley over a strike length of about one mile. The valley is part of a prominent photo-fault traceable for 3 miles, and in the vicinity of the fault, the dips of the Cobalt and Bruce sediments are locally variable and often steep.

On the south side of the valley, near a beaver dam, a small outcrop of pyritic Mississagi quartz pebble conglomerate was found close to the nose of the syncline. South of the outcrop, up slope, large blocks of Mississagi float occur. Limited blasting produced fresher material from the outcrop, and local scintillometer readings up to 30 x background were obtained. Significantly, this is near the top of the Mississagi. No exposures of the basement volcanics were found here, and it is expected that the better uranium values should occur at or near the unconformity. A 10lb. sample, no.8007 was cut across the 5' exposure, and assay by Correlation Laboratories returned U_3O_8 0.006%
THO_2 NIL

AU 0.005 Swastika Laboratories returned

About 1500' northeast, up the valley, on the north side of the 60° slope, three 1' bands of rusty quartz pebble conglomerate separated by 1' - 2' of barren grey quartzite strike N50°E astronomic and dip 80° to the north. Scintillometer readings were spotty, the best being 30 x background. The outcrop is 50' long and

I Robert James Graham of 872 Ski Club Road, North Bay, Ontario hereby certify that:

(1) I graduated from the Camborne School of Metalliferous Mining, Cornwall England in 1954.

(2) That I have actively practised my profession for 15 years.

(3) That I am a Senior Exploration Geologist for Geophysical Engineering and Surveys Limited, 2189 Algonquin Avenue, North Bay, Ontario.

(4) That I am a paid up member of the Professional Engineers of the Province of Ontario.

(5) That I directly planned and supervised the surveys described in this report.

Dated at North Bay, Ontario

February 3, 1970.

REGISTERED PROFESSIONAL ENGINEER
MINING
R.J. GRAHAM
PROVINCE OF ONTARIO

R.J. Graham - P. Eng.

APPENDIX TO REPORT

FIELD PROCEDURE FOR A MAGNETOMETER SURVEY

The magnetometer deflection depends on the total vertical intensity and is made up of

(a) A large part which does not vary with time or position on the property.
(b) A small part which varies with time, called the diurnal variation.
(c) A part which varies over the property, called the anomaly value.

It is necessary to eliminate (a) and (b) and to measure
(c) The first may be eliminated by subtracting a constant value from all the final calculated values in the survey.

The second may be eliminated by measuring diurnal changes and subtracting them from the results at each station. The residual after these corrections are made is known as the anomaly value.

SETTING UP BASE STATIONS

To obtain a graph showing the variation of the magnetic field during a day it is necessary to establish a series of stations over the property whose value is known. These base stations should be so placed that one or another may be conveniently read at least every hour. The base line across a property is useful for a line of such stations, as are tie lines which are not more than one half mile from the base line.

To set out the base stations the following procedure is suggested.

1. Read baseA, then B, then C, then D and return to A.
2. Read base D, E, F, G and return to D.
3. Continue until all base stations are covered.
4. Tabulate the results as in the example below

STATION	TIME	READING GAMMAS	DIURNAL CORRECTION	CORRECTED BASE VALUE
Base A	9.00	1190	0	1190
Base B	9.10	1060	1/4 x35 = 9	1051
Base C	9.20	828	2/4x35 = 18	810
Base D	9.30	1245	27	1228
Base A	9.40	1225	35	1190

Note that base A has increased from 1190 to 1225 in 40 minutes. To bring the value back to 1190 one must subtract 35 gammas. The assumption is made that the increase has been regular hence Base B must have 1/4 x 35 subtracted and so on. A continuation of the calculation is carried out for all base stations.

APPENDIX TO REPORT

THE VERTICAL LOOP E. M. METHOD

Description

The equipment consists of two light coils, one receiver with clinometer used in conjunction with amplifier and earphones and one transmitter with battery pack.

When taking readings the plane of the transmitting coils is vertical and the plane of the receiving coil is horizontal. It is important that the transmitter coil is oriented so that the long axis is pointing at the receiver coil. When no conductor is present the receiver coil should null close to zero degrees (i.e. horizontal), either side of a conductor dip angles greater than two degrees will be measured. When recording dip angles the dip is designated either north or south with N-S picket lines and east or west with E-W picket lines. The degree of dip angle depends on the size of the conductor, the length, the depth and the type of traverse being used. (see survey procedure) It should be noted that the farther the coils are apart the greater the depth penetration of the signal. Because the signal strength decreases rapidly with distance from the coil, the separation between coils is limited to 500 or 600 ft.

Survey Procedure

Two types of traverses are used, the parallel line method for reconnaissance, and the stationery transmitter setup for detailing the conductor.

For the parallel line traverse the transmitter and receiver move together on two adjacent lines usually 400 ft. apart. Readings are taken every 100 ft. After the whole property has been covered in this way, the transmitter is setup on a cross-over (see discussion below), and the receiver operator reads lines on either side of the transmitter with 50 ft. station interval. The transmitter is then set up on newly established crossover point (if any) and the receiver operator continues readings on the next line. This procedure continues until no crossovers are obtained.

It is important that all crossovers found by the parallel line method be detailed. That is if a parallel line crossover is on say line 12 W. and using this for trans. setup, detail on line 8 W., and line 12 W. should be reread so as to establish the exact position of the crossover.

What is a Crossover ?

A crossover is the station where the dip angle is zero degrees and the dip angles on either side of this point are such that imaginary axis perpendicular to the plane of the coil tilts will dip towards the position of zero degrees null.

When obtaining a null it will be found that a perfect null will not be obtainable. That is the lowest obtainable sound of the signal will be the same for several degrees of the dip of the coil. This is the null width and should be recorded. The dip is the average of this null width. The results are recorded as in table 1.

Vert'cal Loop Electromagnetic Survey

Station	Null Width		Dip	
	Transmitter on L4E, Receiver L8E			
0/ 00	2N	2S	0	
IS	6N	IS	3N	Parallel line or broadside method
2S	20N	16N	18 N	
3S	2S	6S	4S	
etc.				
	Transmitter on L8E at 2/90S, Receiver L4E			
0/00	6N 0		3N	
0/50S	15N	10N	13N	Detail method
1/00S	35N	25N	30N	
1/50S	40N	34N	37N	

ELECTROMAGNETIC SURVEY

The "RADEM" unit is essentially a specially designed radio receiver which receives very low frequency radio signals from transmitters located at various points throughout the world.

The receiving unit is used to measure the direction of the magnetic component of the transmitted field.

The normal VLF magnetic field is horizontal, however, the field is distorted by the presence of a conductive body. The presence of a conductive body can, therefore, be determined by measuring the dip angle of the resultant field at regular intervals.

The instrument is so designed that when in the position of minimum coupling, the arrow on in strument points towards the conductive body. The axis of the body will be located at the zero or "cross-over" point between sets of dip angles which point towards the zero point.

The magnitude of the dip angle and the direction in which the arrow points are recorded at each field station.

The direction of the magnetic component of the field from a VLF transmitting station is horizontal and perpendicular to the line between the operator and the transmitting station.

For best results, a station is selected so that the magnetic field is perpendicular to the suspected strike of possible conductive bodies.

The unit is turned on and the volume control knob adjusted so that the signal is clearly heard. The unit is then held in a horizontal position and rotated until an audio null is obtained. The unit is then aligned parallel to the field direction. The receiver is then rotated into the vertical position and rotated about a vertical axis until an audio null is heard. The dip angle is then noted as well as the direction in which the arrow points.

If, when reading a station to the south, a dip angle of 20 degrees is obtained and the arrow points to the east the conductor is located to the east.

AREA CODE — 416
TELEPHONE — 365-6918

ONTARIO

63.2642

WHITNEY BLOCK
QUEEN'S PARK.
TORONTO 182, ONT

DEPARTMENT OF MINES AND NORTHERN AFFAIRS
MINING LANDS BRANCH

November 13, 1970.

Mr. Pete Logee,
Mining Recorder,
P.O. Box 984,
Kirkland Lake, Ontario.

Dear Sir:

Re: L.104942 et al, Vogt Township

My Notice of Intent dated October 15th, and final letter of October 28th, were incorrect with respect to the numbers of the mining claims that were not entitled to any assessment work credits.

No Geological assessment work credits are being allowed for mining claims L.104955, 104956, 104946, 104947, 209798. Similarly, Geophysical assessment work credits will not be allowed for mining claims L.104946, 104947 and 104956.

In order to provide the recorded holder with an opportunity to obtain extensions, you may consider this letter as a Notice of Intent. A final letter confirming that these claims will not be allowed credits will be issued 15 days from the above date.

Yours very truly,

Fred W. Matthews
Supervisor
Projects Section

FWM:aw

cc. Keevil Mining Group Ltd.,
Suite 4900, Box 49,
Toronto 1, Ontario.

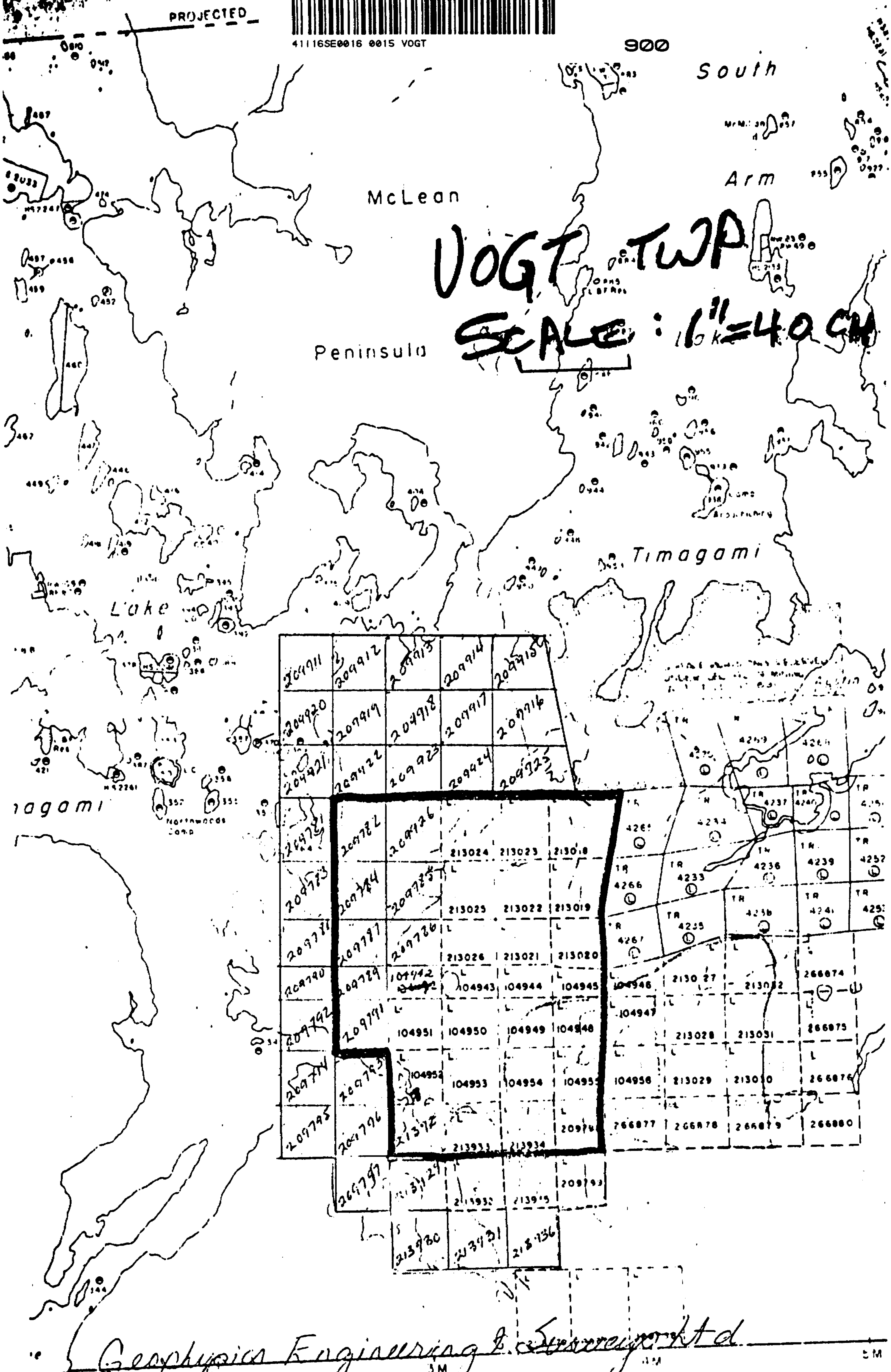
cc. Gunnex Ltd.,
1707-80 Richmond St.W.
Toronto 1, Ontario.

cc. Mr. H. L. Lovell,
Resident Geologist,
4 Government Road, E.
Kirkland Lake, Ontario.

Nov 19

41116SE0016 0015 VOGT

900



Geophysics Engineering & Surveys Ltd
for Wright, R.J.
Vogt Twp Hobbs Twp. - M.932

OBTAINING AND CALCULATING FIELD RESULTS

Choice of Station Interval

The distance between stations is determined by the width of the bodies which it is required to detect and by the depth of overburden. The normal station interval will usually be dictated by the field supervisor or by the head office but the operator is responsible for outlining the shape of anomalies by taking intermediate stations and for generally adjusting normal procedure to suit local conditions.

1. Read a base station.
2. Read field stations for approximately one hour.
3. Read the same or another base station.
4. Record the results as in the following table.

STATION	TIME	READING GAMMAS	DIURNAL CORRECTION	CORR.* VALUE	ANOMALY VALUE
Base A	8.00	1124	+66	1190	190
1	8.03	1347	+63	1410	410
2	8.06	615	+60	675	-375
3	8.09	-522	+58	-1380	-2380
18	8.57	1207	+18	1225	225
19	9.00	1246	+15	1261	261
20	9.03	1257	+13	1270	270
Base B	9.06	1040	+11	1051	51

Note the diurnal added is sufficient to bring the corrected value of the base stations to those established previously. The diurnal has decreased from 66 at 8.00 o'clock to 11 at 9.06, a change of 55 during 21 equal time intervals. Thus station 1 will be increased by 66 minus 1/21 x 55 which is approximately 63. Station 20 will be increased by 66 minus 20/21 x 55 which is 13 approximately.

After several days work have been done an inspection of the corrected values will indicate the proper constant value to subtract to reduce the majority of the values to as low a numerical value as possible. For the purpose of illustration it has been assumed that the constant value is 1000.

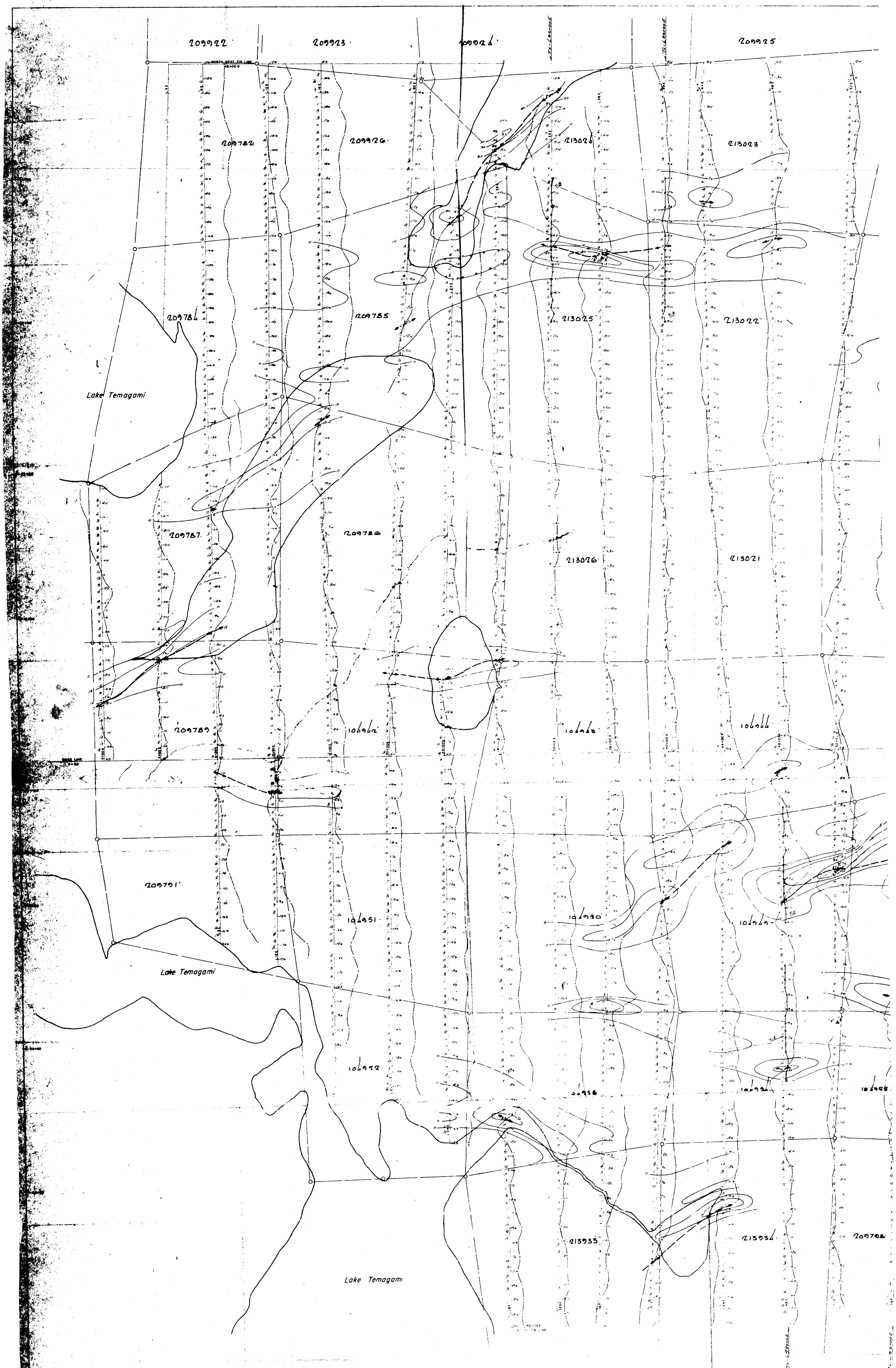
6. The anomaly value is next plotted on a map of the property, and contours drawn and interpretation made.

FOR ADDITIONAL INFORMATION SEE MAPS:

VOGT-0015 #1
#2
#3

209922
209923
209924
NORTH WEST TIE LINE
209784
209785
213025
Lake Temagami
KEEWATIN METAVOLCANICS
BASE LINE 0+00
104942
104943
104951
104950
104949
Lake Temagami
KEEWATIN METASEDIMENTARY METAGREYWACKE
213933
213934
Lake Temagami
SOUTH TIE LINE
JACKPINES, BALSAM
JACKPINE, SPRUCE
TAG ALDERS, SPRUCE
HAZEL TAG ALDERS POPLAR
POPLAR, TAG ALDERS
JACKPINE, BOULDERY OVERBURDEN
JACKPINE, SPRUCE
SMALL PINES, MAPLES
TAG ALDERS, POPLAR
JACKPINE + POPLAR
JACKPINE, BOULDERY OVERBURDEN
LARGE RED + WHITE PINE
SMALL BRUSH
BIG PINES
JACKPINE + POPLAR
POPLAR + JACKPINES
DENSE HAZEL BRUSH
WHITE PINE, JACKPINE
BALSAM, JACKPINE


NORTH WEST TIE LINE
209922
209923
209924
209925
209782
209926
213024
213023
209784
209785
213025
213022
Lake Temagami
209787
209786
213026
213021
213020
INDEPENDENT MAG. SURVEYS
209788
BASE LINE
0+00
104942
104943
104944
209791
104951
104950
04949
Lake Temagami
INDEPENDENT MAG. SURVEYS
104952
104953
104954
104955
213933
213934
209798
Lake Temagami
SOUTH TIE LINE


209922
209923
209925
209782
209926
213024
213023
209784
209785
213025
213022
Lake Temagami
209787
209786
213026
213021
209789
209791
Lake Temagami
213933
213934
Lake Temagami

220


HURONIAN SYSTEM
COBALT GROUP
GOWGANDA FORMATION
Greywacke with pebbles
Bedded conglomerate greywacke.
BRUCE GROUP
conglomerate Quartzite
METAVOLCANICS ROCKS
SYMBOLS
Boundary of rock outcrop
Assumed geological boundary.
Strike and dip
Strike and vertical dip
Muskeg or swamp with boundary
Creek
Trail, winter road
KEEWATIN METAVOLCANICS
KEEWATIN IRON FORMATION
104948
104949
104943
213934
BOULDERY DRIFT.
JACKPINE, SPRUCE
SECOND GROWTH SPRUCE
HAZEL BRUSH & TAG ALDERS
TAG ALDERS
SMALL MAPLE
DENSE HAZEL BRUSH
BALSAM SPRUCE (SECOND GROWTH)
WET TAG ALDERS
SMALL SPRUCE, JACKPINE.
40+00
30+00
20+00
10+00
GEOLOGY
OF
PASCAR OPTION
VOGT TOWNSHIP, ONTARIO
FOR
KEEVIL MINING GROUP LIMITED
BY
GEOPHYSICAL ENGINEERING AND SURVEYS LIMITED
SCALE 1 INCH = 200 FEET
REGISTERED PROFESSIONAL ENGINEER
MINING
R.J. GRAHAM
PROVINCE OF ONTARIO
63.2642
DRAWN BY
CHKD. BY
NTS 42I/16
DATE NOV 1969
JOB 933
DWG. 3298

VOGT-0015-#1

NORTH EAST TIE LINE
48+00 N
BASE LINE
0+00
40+00 N
30+00 N
20+00 N
10+00 N
10+00 S
20+00 S
30+00 S
40+00E
44+00E
48+00E
52+00E
56+00E
60+00E
64+00E
209925
213023
213016
213022
213019
213021
213020
213026
104943
104944
104945
104949
104948
104954
104955
213934
209798
ALL VALUES SHOWN IN GAMMAS
INSTRUMENT - SHARPES FLUXGATE MF-1 MAGNETOMETER
OPERATOR - A. MacDONNELL
MAGNETOMETER SURVEY
OF
PASCAR OPTION
VOGT TOWNSHIP, ONTARIO
FOR
KEEVIL MINING GROUP LIMITED
BY
GEOPHYSICAL ENGINEERING AND SURVEYS LIMITED
SCALE 1 INCH = 200 FEET
REGISTERED PROFESSIONAL ENGINEER
MINING
R. J. GRAHAM
PROVINCE OF ONTARIO
R.J. Graham.
63.2642
DRAWN BY
CHKD BY
N.T.S. 42I/16
DATE NOV 1969
JOB 933
DWG. 3297
VOGT-0015 #2
427


209925
NORTH EAST TIE LINE
213023
213018
213022
213019
213021
213020
213934
209702
Dip Profile
Dip Angle
North
South
Dip Profile
Transmitter set-up for detail VEM
Position of transmitter
Conductor
Receiver profile for detail traverse
A McClemens
ELECTROMAGNETIC SURVEY
OF
PASCAR OPTION
VOGT TOWNSHIP, ONTARIO
FOR
KEEVIL MINING GROUP LIMITED
BY
GEOPHYSICAL ENGINEERING AND SURVEYS LIMITED
REGISTERED PROFESSIONAL ENGINEER
MINING
R. J. GRAHAM
PROVINCE OF ONTARIO
63.2642
DWG. 3299

VOGT-0015-#3