EXPLORATION ACTIVITIES ON LANDS GRANTED UNDER LICENCE OF OCCUPATION NO. 14888 (1981 - 1982)

An interim report
Prepared by:
Harish M. Verma, Ph. D.,
Consulting Geologist,
for
SELCO INC.

May, 1982

A REPORT ON
EXPLORATION ACTIVITIES
ON LANDS
GRANTED UNDER
LICENCE OF OCCUPATION NO 14888

Introduction:

This report describes the exploration and related activities on lands granted under Licence of Occupation No. 14888. Under this exploration program, drilling was carried out by Selco Inc.

Objectives:

The objectives of the exploration program were:

i) to determine the continuity of the silica sand - kaolin deposits eastwards and northwards from the claims held by Mr. Bruce Douglas.

ii) to determine the thickness of overburden in the area of Licence of Occupation; and

iii) to obtain uncontaminated and undisturbed samples of silica sand kaolin deposits in order to determine their commercial qualities.

Location of Drillholes:

Two drillholes located roughly in a north south line in the middle third of the area east of the patented claims, were drilled during the winter of 1981-82. The location of the drillholes is shown on Figure 1. The location may be more properly described as follows:

DRILLHOLE NO. SDT-1: About 3 kilometres NNE of Kipling Dam, Kipling Township.

Longitude: 82^{o} 10' 30" West

Latitude: 50^{o} 09' 15" North

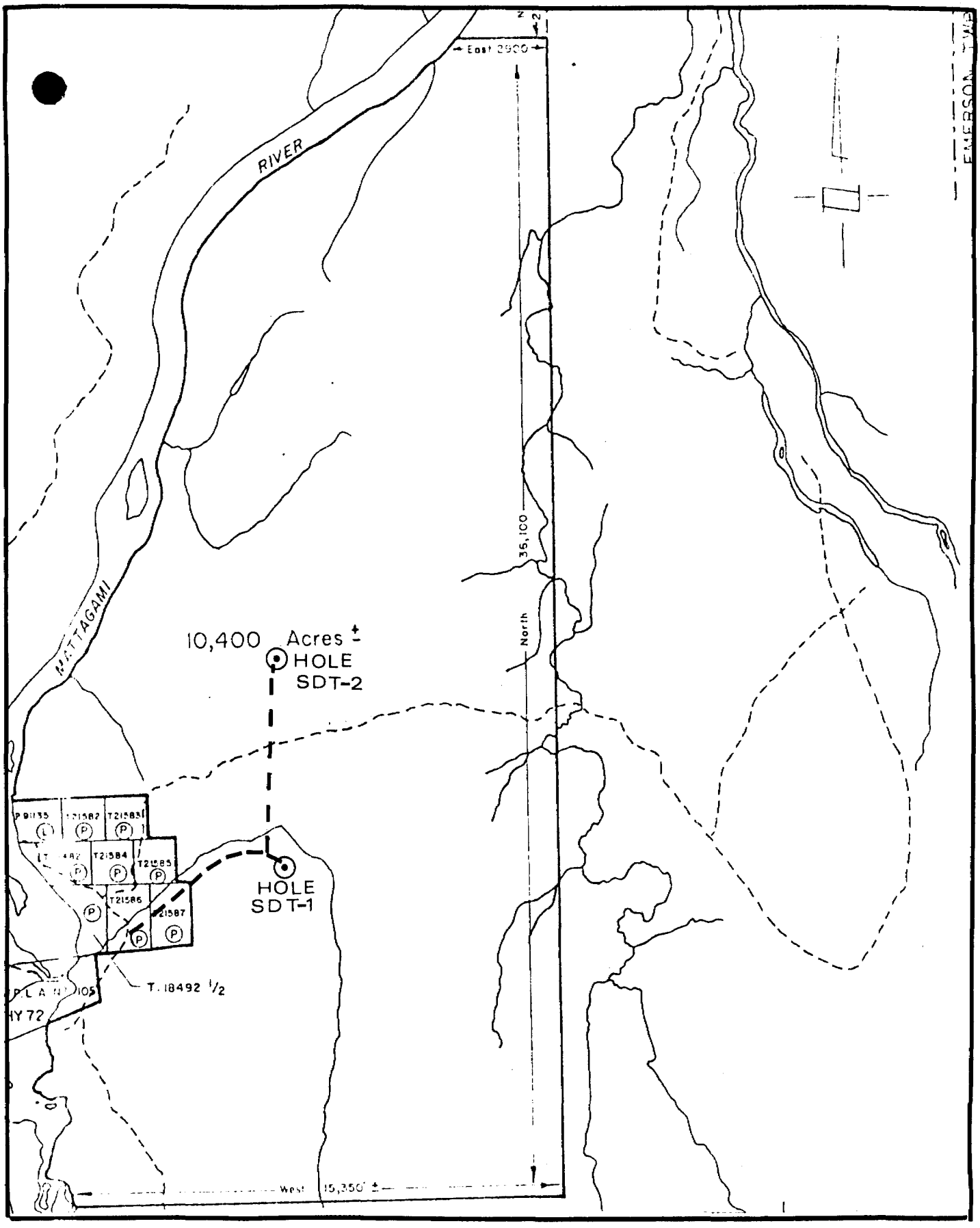


Fig. 1: Map showing the location of Drillholes SDT-1 and SDT-2 in the area of Licence of Occupation No. 14888. Scale 1: 100,000

DRILLHOLE NO. SDT-2: About 5 kilometres NE of Kipling Dam, Kipling Township.

Longitude: 82° 10' 30" West

Latitude: 50° 10' 30" North

Drilling Technique:

Drilling was carried out by Midwest Drilling by using a new drilling technique called Resonant Drilling or Sonic Drilling. In this technique, the rotatory motion of the drill rods is accompanied by a vibratory motion imparted to the drillhead by a pair of rotating drums. This new technique, although somewhat more expensive than conventional techniques, has the advantage of providing an uncontaminated and relatively undisturbed sample of unconsolidated sediments. It is the first time that this technique has been used in the investigation of silica sand-kaolin deposits of the James Bay Lowland.

The drill rig is mounted on a Nodwell. The sonic drill rig is equipped with a RDU 150 drillhead (called "the tub") and hydraulic power is provided by a Deutz 240 HP motor. The tower is 20' long, pull down type. The down hole tooling consists of 4¼" outer diameter AOH rods with PW casing. Since the depth of penetration of the sonic drill is limited to about 330 feet (100 metres) an improvisation was made to accomplish deeper penetration. This improvisation consisted ot attaching a HC 150 Longyear diamond drill head to the sonic head. After the required penetration was achieved with the sonic technique, the Longyear drill head was moved into place and drilling continued with NQ wire line system using the sonic rods as the casing for the diamond drill rods. It was the first time that this dual system was tested and, with some minor modifications, has also proved to be quite successful.

Logistics and Access:

Base camp was established in an open area on the west side of the road about 9 kilometres north of the Hydro Community of Smoky Falls. Originally, it was planned to move the drill rig along an old east-west winter road running through the area. However, this road was found to be unserviceable because of absence of frost on the ground prior to heavy accumulation of snow during November and December, 1981. New winter roads, therefore, had to be made along ground away from the muskeg terrain. The drill crew were ferried to and from the site by Helicopter. Drilling was carried out on a 24 hour, 2 shift basis. For emergencies during the night, snowmobiles were available as means of transport. Road work commenced on February 24, 1982 and drilling was carried out between February 28 and March 15, 1982.

GEOLOGY AND DRILLING RESULTS:

The area is covered by a thick sequence of quaternary deposits consisting mainly of tills underlain by clays and interbedded till and intertill sediments. Underneath the Quaternary deposits, the most prominent feature of the area is a Precambrian Escarpment (? Fault Scarp) running in an east-west direction about 1.5 to 2 kms from the southern boundary of the area of the Licence. North of this escarpment, underneath the Quaternary deposits, are the Cretaceous deposits consisting of sands, clays and lignite. These Cretaceous deposits, known as the Mattagami Formation were the main focus of interest in the present program.

Drill logs of the two holes are given in Appendix 1. The following is a summary of the drill logs of the two holes:

Drillhole SDT-1: This hole was drilled to a depth of 373 feet (113 m). Quaternary deposits were encountered from 0 to 35.75 metres. These consist

of the Adam and the Kipling Tills, underlain by greyish green clays of the Quaternary Missinaibi Formation. Below the Quaternary-Cretaceous Contact (35.75 m), the sediments are non-calcareous and consist of (from the top) silica sand - kaolin matrix, with minor interbeds of grey and brown fireclays, followed by black to brown dense carbonaceous clays. The commercially attractive silica sand - kaolin deposits occur from 35.75 metres to 93 metres. The black clays occur from 93 m to 105 m. From 105 m to the bottom of the hole are fine grained grey sands.

DRILLHOLE SDT-2: This hole, located about 3 km north of hole SDT-1, was drilled to a depth of 86 metres. Only quaternary sediments occur to the bottom of this hole. These consist of the Kipling and Adam Tills to a depth of 33 m. From 33 m to the bottom of the hole is a continuous succession of greyish green plastic calcareous lacustrine clays. In view of the fact that this hole went down to 68 metres without reaching the Cretaceous deposits, drilling was terminated at this depth. It appears that, in the vicinity of drillhole SDT-2, the Cretaceous deposits lie much deeper and are covered by a vast thickness of Quaternary deposits.

Conclusions and Recommendations:

Pending a detailed laboratory examination and analysis of the samples obtained from the drillholes, the following conclusions and recommendations emerge from the exploration program:

1. Sonic drilling is an excellent technique for obtaining large, uncontaminated and undisturbed samples of unconsolidated sediments. Core recovery is 100%. Any future exploration program dealing with unconsolidated sediments should give serious consideration to using this technique. The weight of the drill rig (17 tons excluding the weight of the Nodwell) lends itself to drilling only in the winter. The drill rig has to be moved along specially prepared winter roads. The rig can also be moved on skids, pulled by a small tractor.

2. Considerable planning is required ahead of time to prepare the roads so that the rig can be moved in and out quickly.

3. The Quaternary overburden continues to be thick eastwards from the boundary of the Douglas Claims. Thicker overburden lies in the area of the drillhole SDT-2.

4. In order to fully assess the potential of the entire area of the Licence, it is necessary to carry out further exploratory drilling in the northern part of the area as well in the area to the east of drillhole SDT-2.

5. The silica sand-kaolin samples obtained from drillhole SDT-1 are the best samples of this material obtained so far and should be carefully analysed for their commercial qualities.

Harish M. Verma, Ph. D.,
Consulting Geologist
2394, Rushbury Court,
Burlington, Ontario L7P 3V8

Encl: Appendix 1 -
Drill Logs of
Drillholes SDT-1 and SDT-2

SELCO INC. -DOUGLAS TAYLOR PERMIT
1982 joint Venture DrillingProgramme
James Bay Lowland
Drilling - Midwest Drilling
Geology - Harish M. Verma

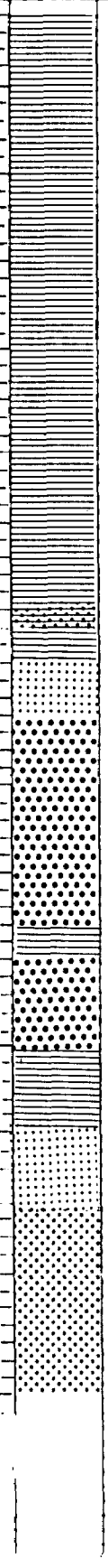
DRILL LOG. DRILLHOLE NO: SDT- 1
LOCATION: Kipling Township, about 3 km NE of Kipling Dam
Long. 82°10'30" W; Lat. 50°09' 15" N.
Started Feb. 28, Finished March 5,1982
Sheet 1 of 5 .

Depth (Ft.)	Lith. Log	Sample	Field Description and Remarks
0		SONIC CORE	0'-8' Muskeg with some clay at the bottom
10			8'-16' Alluvial sand
20			16'-16.5' Clay 16.5'-20.5' Soft clay till with a few pebbles 20.5'-25' Same as above with more clasts
30			25'-29.5' Dense, grey to brown silty clay 29.5'-40' Dense brownish clay till with very few clasts
40			40'-42.5' Fine grained grey calcareous clay with more clasts 42.5'-50' Same as above with increasing clasts towards the top of the section.
50			50'-60' Same as above grey calcareous clay with slightly more silt content
60			60'-65' Same as above with lesser number of clasts 65'-70' Same as above with brownish tinge
70			70'-77.5' Same as above- no obvious clasts
80			77.5'-81' Dense, grey, clay till. A few small clasts, some grit. More clasts in the bottom 1' interval.

DRILL LOG

SILCO INC. - DOUGLAS TAYLOR PERMIT
1982 Joint Venture Drilling Programme
JAMES BAY LOWLAND

DRILLHOLE NO. SDT - 1.
Sheet 2 of 5.



Depth (ft.)	Lith. Log	Sample	Field Description and Remarks
81		Sonic Core	81'-89' Dense, grey clay with brownish tinge, no obvious clasts.
90			89'-100' Dense grey brown calcareous clay with a few very small clasts. At 100 feet, patches of lenses of grey clay in grey, brownish clay.
100			100'-118' Same grey calcareous clay as above, few clasts. At 116', more sandy
110			
			----------QUATERNARY-CRETACEOUS CONTACT AT 118'----------
120			118'-121' Fine grained, white to grey white, non-calcareous, silica sand-kaolin matrix, coarsening at 120'.
			121'-132' Coarse, white to greyish white silica sand.
130			132'-134' Transition zone- mixture of fine sand and brown clay.
			134'-135' Light to dark brown, dense, non calcareous fireclay.
			135'-138' Pure white quartzitic sand - appears to be very little kaolin.
140			138'-139' Quartz sand with dark heavy minerals (about 10%). Magnet picked up crystals of magnetite and/or ilmenite.
			139'-140.5' Brownish sand with a little kaolin.
			140.5'-144.5' Dark brown clay
			144.5'-145' Fine, brownish sand
150			145'-150' Highly kaolinitic, very white quartz sand.
			150'-151' Coarser grained kaolinitic quartz sand
			151'-155' Same as above but getting coarser
			155'-160' Same as above, very highly kaolinized, getting finer.
160			

DRILL LOG

SELCO INC. - DOUGLAS-TAYLOR PERMIT
82 Joint Venture Drilling Programme
JAMES BAY LOWLAND

DRILLHOLE NO. SDT-1
Sheet 3 of 5

Depth (Ft.)	Lith. Log	Sample	Field Description and Remarks
160		Sonic Core	160'-165' Finer grained kaolinitic quartz sand
			165'-170' Pure white, medium grained, highly kaolinitic quartz sand
170			170'-172.5' Grey, medium grained quartz sand with reduced kaolin and increased heavy minerals
			172,5'-180' Medium grained white quartz sand with high kaolin content
180			180'-185' Medium grained quarts sand with grey rim around the edge of the sonic core. The grey rim is probably clay contamination from above or leaching of quartz sand around the rim of the core.
			185'-191' Same as above
190			191'-193' Greyish white silica sand-kaolin matrix
			193'-198.5' Quartz sand with varying amounts of kaolin.
			198.5'-204' Fine grained greyish white quartz sand with kaolin
200			204'-206' Brown fireclay
			206'-211' Medium to fine grained white silica sand-kaolin matrix
210			211'-222' Brown fireclay
220			222'-224' Grey sand with very little kaolin
			224'-230' Grey to whitish grey silica sand-kaolin matrix getting coarser towards the bottom, with large subangular quartz grains
230			230'-231' Fine grained grey silica sand-kaolin matrix
			231'-233.5' Coarse grained white silica sand-kaolin matrix
			233.5'-238' Fine grained silica sand kaolin matrix with grey edges around the rim of the core
240			238'-240' Same as above but getting coarser grained

DRILL LOG

SELCO INC. - DOUGLAS-TAYLOR PERMIT
1982 Joint Venture Drilling Programme
JAMES BAY LOWLAND

DRILLHOLE NO. SDT-1.
Sheet 4 of 5.

Depth (Ft.)	Lith. Log	Sample	Field Description and Remarks
240		Sonic Core	240'-241' Very coarse, angular grey sand with minor amounts of kaolin. Abundant black heavy minerals
			241'-258' Very fine grey sand with abundant kaolin
250			
			258'-260' Same as above grading into more sandy section and then to fine to medium grained white sand
260			260'-262' Same as above but getting coarser
			262'-265' Yellowish grey sand with kaolin
			265'-266.5' Medium to coarse grained greyish white silica sand kaolin matrix
270			266.5-267.5' Same as above but getting coarser with pebbles upto 2.5 cm across
			267.5'-275' Medium to coarse grained greyish white kaolinitic sand.
			275'-300' Medium to coarse grained grey white kaolinitic sand
280			
290			
300			300'-310' Medium to coarse grained silica sand-kaolin matrix with large (upto 1 cm) rounded pebbles. Probably high kaolin content.
			310'-310.5' Transition zone mixture of grey silica sand kaolin matrix and black carbonaceous clay.
310			310.5-320' Very dense, black carbonaceous clay with some brownish inclusions. No lamination. slight smell of organics.
320			

DRILL LOG

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[redacted]2 Joint Venture Drilling Programme
JAMES BAY LOWLAND

DRILLHOLE NO. SDT-1.
Sheet 5 of 5.

Depth (Ft.)	Lith. Log	Sample	Field Description and Remarks
320		SONIC	320'-330' Dense, black, carbonaceous clay.
330		NQ	330-335' Same clay as above
			335'-339' Less dense light brown to grey carbonaceous clay.
			339'-341' Light brown to grey, more sandy plastic clay
340			341'-346' Only one foot of core recovered - same as above. Note: The NQ drilling rods, owing to excessive vibration and the play between the NQ rods and the sonic rods, broke at 3 placed while going through the above dense clay.
350			346'-358' Only 4 feet recovered- grey fine sand
			358'-373' No core recovery. Return water indicated same material as above.
360			Drilling terminated at 373' PVC Pipe inserted to a depth of 250'.
370			
375			

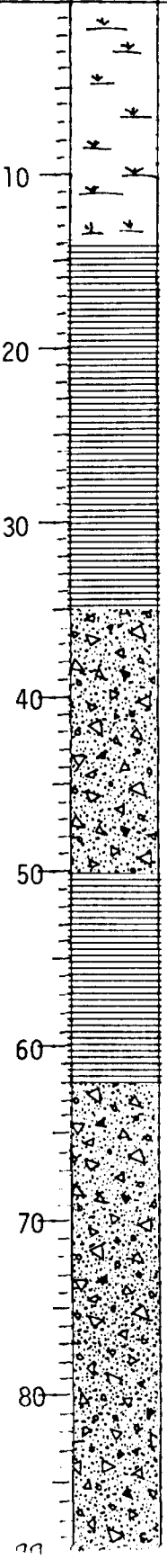
SELCO INC.- DOUGLAS TAYLOR PERMIT
1982 Joint Venture Drilling Programme
James Bay Lowland

Drilling: Midwest Drilling

Geology: Harish M. Verma

DRILL LOG. DRILL HOLE NO. SDT-2
Location: Kipling Township, about 5 km NE of Kipling Dam.
Long. 82°10' 30" W; Lat. 50°10'30" N

Started: March 13 Finished March 15, 1982
Sheet 1 of 3

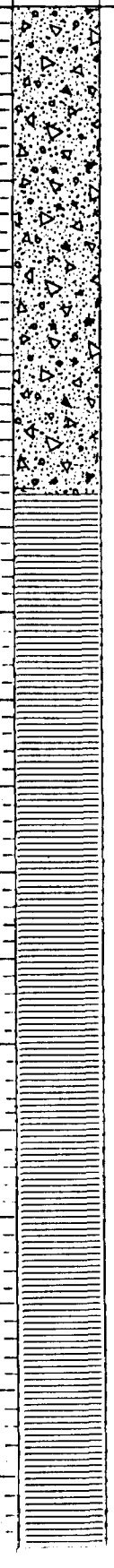


Depth (Ft.)	Lith. Log	Sample	Field Description and Remarks
		Sonic Core	0-14' Muskeg
			14'-20' Calcareous grey plastic clay - no clasts
			20'-30' Grey clay with occasional pebbles
			30'-35' Grey clay with large (2"-3") pebble at 34'
			35'-40' Greyish brown highly calcareous clay till
			40'-45' Grey to greyish brown hgihly calcareous clay till- gritty with small clasts. harder and drier.
			45'-50' Calcareous grey gritty till with small clasts. Less clasts in the bottom 2 ft.
			50'-60' Grey calcareous clay with some silt and occasional pebbles
			60'-62' Same as above. Pebble at 60'.
			62'-67' Coarse, hard grey till with small clasts
			67'-74' Grey, coarse calcareous till with numerous clasts.
			74'-80' Grey, dense, highly calcareous clay till with many clasts. Very hard from 74'-77'.
			80'-83.5' Same till as above, sandy, harder and with more clasts.
			83.5'-87' Grey, dense,highly calcareous sandy clay till.
			87'-90' Grey, dense calcareous clay till.

DRILL LOG

SELCO INC. - DOUGLAS TAYLOR PERMIT
[redacted]2 Joint Venture Drilling Programme
JAMES BAY LOWLAND

DRILLHOLE NO. SDT-2 .
Sheet 2 of 3 .



Depth (Ft.)	Lith. Log	Sample	Field Description and Remarks
		Sonic Core	90'-92' Greenish grey, highly calcareous clay till dense, somewhat plastic, a few clasts.
			92'-96' Same as above, harder, more gritty and more clasts.
			96'-118' Greenish grey, highly calcareous dense clay till with clasts - plastic in places.
			118'-125' Greenish grey plastic clay, few clasts, very calcareous to 121'. Decrease in calcareous nature from 121'-125'
			125'-128' Greyish green, plastic, mildly calcareous clay
			128'-133' Dark brown, less calcareous clay, hard, less plastic.
			133'-135' Greyish green, plastic calcareous clay - few clasts.
			135'-180' Greenish grey calcareous plastic clay uniform lithology

DRILL LOG

SE[illegible]O INC. - Douglas, Taylor Permit
[illegible] Joint Venture Drilling Programme
JAMES BAY LOWLAND

DRILLHOLE NO. SDT-2.
Sheet 3 of 3.

Depth (Ft.)	Lith. Log	Sample	Field Description and Remarks
180		Sonic Core	180'- 224' Same as above, greenish grey calcareous plastic clay. No change in lithology.
			Drilling terminated at 224'. No PVC pipe in the hole.
224			

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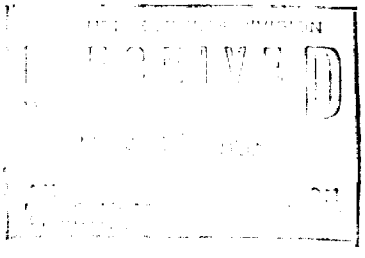
EXPLORATION ACTIVITIES ON LANDS GRANTED UNDER LICENCE OF OCCUPATION NO. 14888

APRIL 1, 1982 TO MARCH 31, 1983



J.A. Gribben

March 23, 1983

INTRODUCTION

During the period February 28th to March 15th, 1982 two holes totalling 182 metres were drilled on Licence of Occupation No. 14888. Results of this drilling were covered in a report by Dr. Harish Verma, Consulting Geologist, submitted in May, 1982.

In his report, Dr. Verma recommended that the silica-kaolin samples obtained from drill hole SDT-1 should be analysed for their commercial qualities. Under his direction and in conjunction with I.M.D. Laboratories a programme of testing was carried out. The section of Dr. Verma's final report that covers these tests forms the body of this report.

GEOPHYSICAL SURVEY

An airborne magnetometer survey was carried out in June 1981 by Selco as part of a regional programme searching for kimberlite structures. A weak anomaly was detected near the south boundary of Licence of Occupation No. 14888. Subsequently a small grid J1-3 was cut and a ground magnetometer survey completed. The northern portion of this grid lies within Licence of Occupation No. 14888. The readings were obtained using a Geometrics G-816 total field proton magnetometer. The contoured results are shown on the accompanying plan ST-3383. There were no anomalies of interest located on the northern portion of grid J1-3.

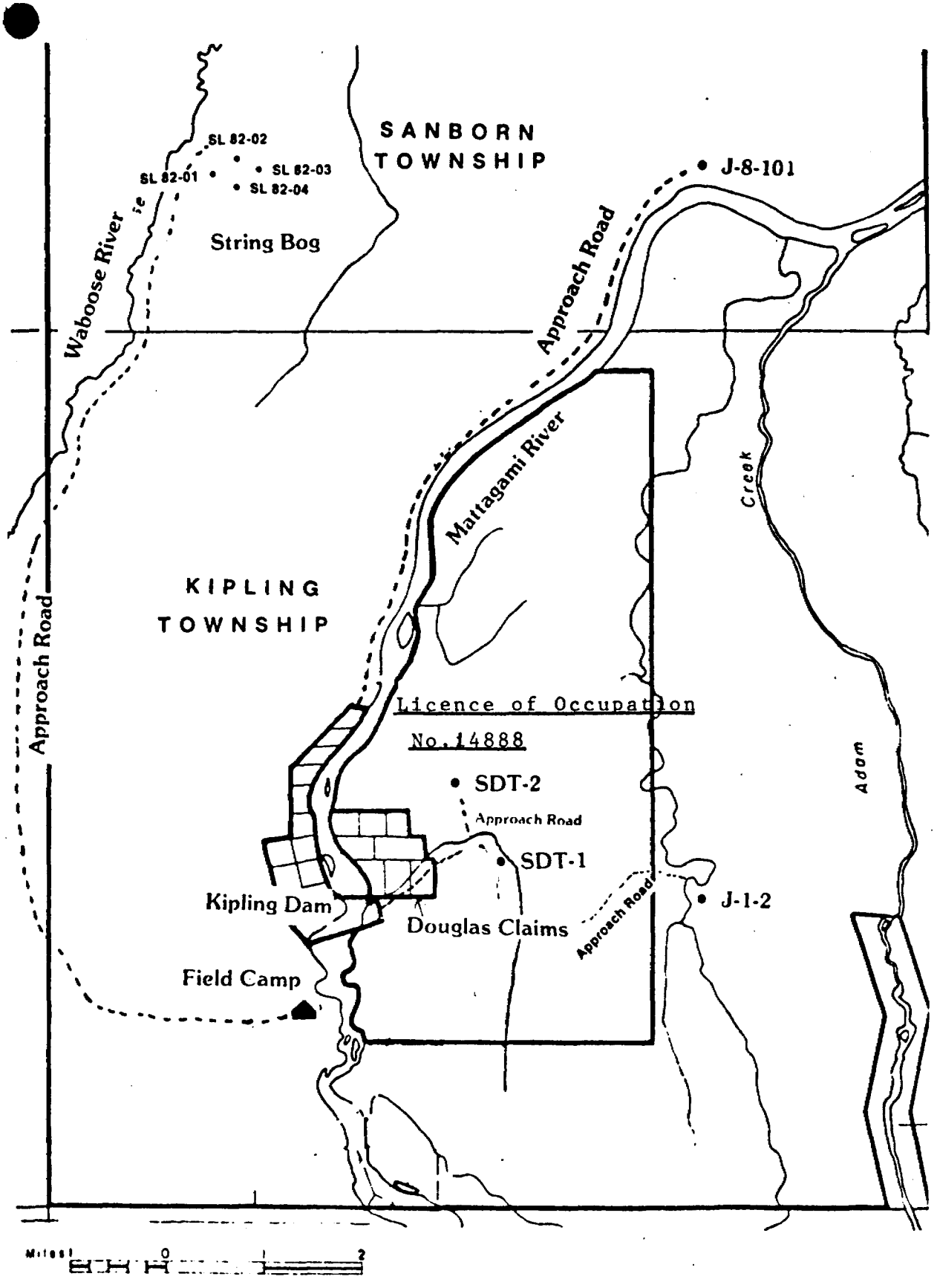


Figure 2. Map of parts of Kipling and Sanborn Townships showing the location of drillholes and the approach roads built.

ANALYTICAL RESULTS

4.1 INTRODUCTION

The present drilling has provided us with excellent quality samples of silica sand-kaolin mixtures from the upper Mattagami Formation in the following drillholes:

SDT-1, J-1-2, S1 82-01, SL 82-02, S1 82-03 and S1 82-04

The above holes have also provided us with excellent samples of high purity refractory clays (fireclays).

From an economic point of view Silica sand , kaolin and fireclays are attractive commercial targets. At present all of Canada's requirements of Kaolin are imported from the USA.

It was therefore proposed that some analytical work should be carried out on some of these samples in order to determine the commercial qualities of these products. Owing to time constraints and costs of such work, only a limited number of such samples could be subjected to this type of testing. Attention was focussed on drillhole SDT-1 which yielded an almost continuous 61 metre core of various grades of silica sand kaolin mixtures. It was therefore decided that a few samples from this hole be analysed.

4.2 OBJECTIVES

The objectives of the proposed analytical work were:

a) to determine the proportions of silica sand and kaolin in the silica sand-kaolin mixtures in different parts of the sampled section.

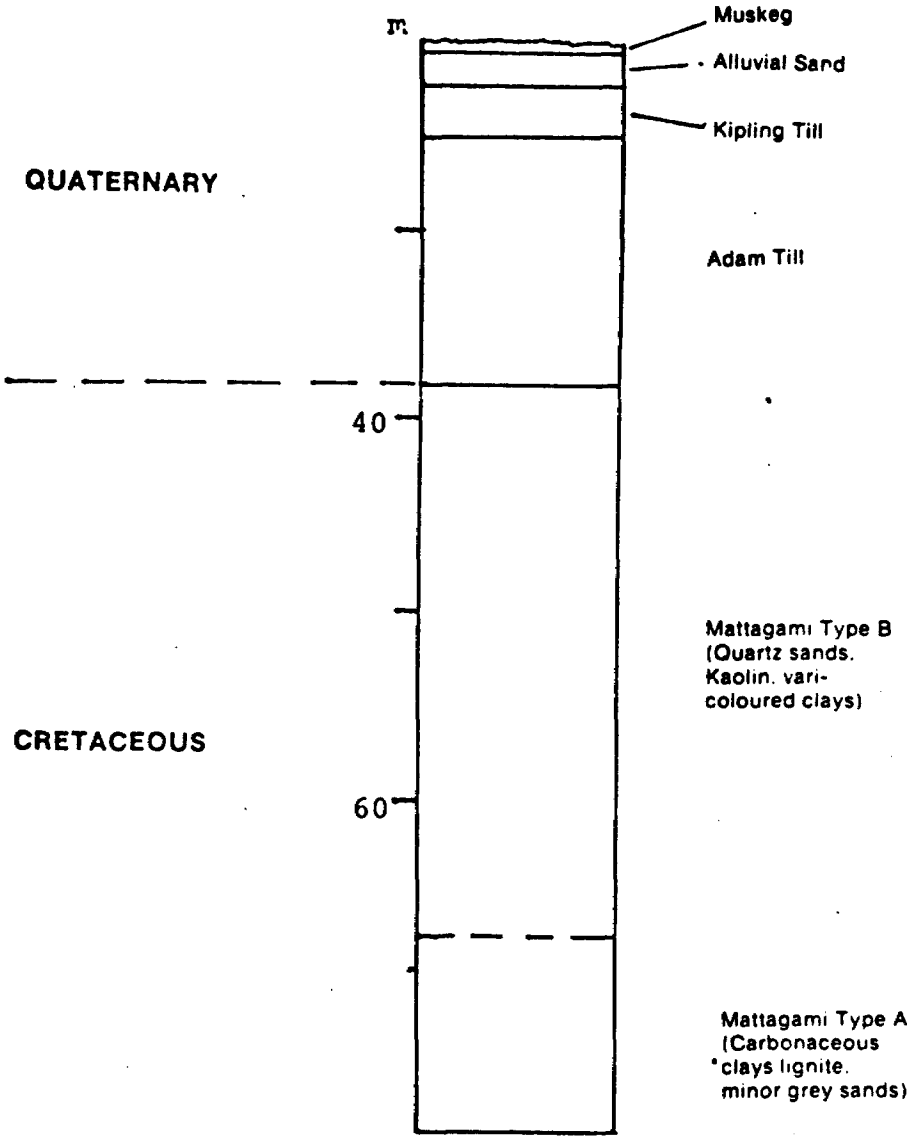


Figure 4. Generalized cross section of drillhole SDT-1.

b) to determine the amounts of different size fractions in both the silica sand and the kaolin components of the samples.

c) to determine the chemical composition, mineralogy and physical characteristics of the silica sand as well and the kaolin particularly in relation to their commercial usage.

In order to achieve the above objectives, it was proposed to make the following determinations:

1. The amounts of minor constituents (Iron, Chromium, Titanium and Cobalt minerals) in the silica sands.
2. The chemical composition of the clay fraction as well as its free silica content.
3. The mineralogical composition of the clay fraction
4. The particle size distribution of the sand as well as the clay fraction and
5. The brightness of the clay fraction.

If the above determinations appear encouraging for commercial usage, the following additional determinations are warranted:

6. Fractionation of the clay fraction to 10 microns to determine what proportions are suitable for paper coating and filling applications.
7. Bleaching tests, if required.
8. Determine whether the free silica is distributed in all size ranges or only in the clay size fraction.
9. Determine the solution rheology (flow characteristics) of the clay fraction.
10. Determine the particle shape of the clay minerals.
11. Carry out paper coating and paper filling tests on the clay fraction

As the analytical work progressed, it became apparent that all the determinations could not be carried out without resolving problems posed

by some of the earlier determinations.(see below). In practice items 1, 2, 4, 6, and 8 could be given attention.as the other items depended on these.

Laboratories

All the industrial mineral laboratories that could perform the type of work desired by us were contacted. Finally the choice fell on I.M.D. Laboratories on account of this firm's extensive previous experience with this type of material. I.M.D Laboratories was made responsible for doing the initial separations as well as for subcontracting the chemical and analytical work to other specialty labs. Chemical determinations were carried out by X-RAY ASSAY LABS. Particle size distribution and free silica content determinations were carried out by INDUSMIN Ltd. All the laboratories were advised to incorporate suitable standards in all analytical work. In the final stages of the work, when it appeared that the free silica content in a composite sample was beyond tolerable levels I. M. D Labs undertook limited work aimed at investigating ways in which the free silica levels in the Kaolin can be reduced.

4.3. SAMPLE SELECTION

Fourteen samples of various grades of silica sand-kaolin mixtures were selected from the material of hole SDT-1. Sample numbers, the depth from which they were obtained, and their lithological characteristics are given in Table 3.

Photo 1c Frozen core of Silica Sand-Kaolin matrix.

TABLE 3. LIST OF SAMPLES SELECTED FOR ANALYTICAL WORK

Sample No.		Lithological Description
SDT-1-3	36.89 - 37.80	Coarse grained greyish white silica sand-kaolin mixture (SSK)
SDT-1-4	38.41 - 39.02	- Same as above -
SDT-1-6	44.51 - 45.73	Fine grained, white, highly kaolinitic SSK
SDT-1-7	48.17 - 48.78	Same as above, somewhat finer.
SDT-1-8	49.69 - 50.30	Fine grained white SSK
SDT-1-9	50.60 - 50.91	Pure white medium grained SSK
SDT-1-10	56.70 - 57.31	Medium grained SSK
SDT-1-11	60.51 - 60.97	Fine grained greyish white SSK
SDT-1-13	69.51 - 70.12	Grey to whitish grey SSK getting coarser towards the bottom with subangular quartz grains.
SDT-1-14	71.64 - 71.95	Fine grained SSK
SDT-1-15	74.39 -76-69	Very fine grained SSK with abundant Kaolin.
SDT-1-16	83.23 -83.84	Medium to coarse grained greyish white SSK
SDT-1-17	88.41 - 89.02	Same as above
SDT-1-18	92.07 - 92.68	Medium to coarse grained SSK with large pebbles.

4.4 TEST RESULTS

The following is a concise account of the testing procedures and results:

SAMPLE DISPERSION AND DETERMINATION OF MOISTURE CONTENT

A small portion was weighed, dried and weighed again. This gave an estimate of moisture content. Results are given in table 4.

TABLE 4

MOISTURE CONTENT OF SILICA + KAOLIN SAMPLES

	$\%H_2O$
STD - 3	9.4
STD - 4	9.8
STD - 6	15.8
STD - 7	13.2
STD - 8	13.8
STD - 9	11.4
STD - 10	10.6
STD - 11	16.3
STD - 13	8.2
STD - 14	10.0
STD - 15	15.8
STD - 16	9.2
STD - 17	10.8
STD - 18	9.5

STD - 5 and STD - 12 were sections of dark gray plastic ball or fire clay and were not sampled.

The moisture content varies from 8.2% to 16.3 %. The mean value is 11.7%.

INITIAL SEPARATIONS

Using 8, 30, 200 and 325 mesh screens the samples were separated into the following size fractions:

	Components		
	Major		Minor
+ 8 mesh	Silica		
-8 + 30 mesh	Silica		
-30+ 200 mesh	Silica	+	Mica
-200+ 325 mesh	Silica	+	Mica
-325 mesh	Kaolin	+	Silica

Table 5 gives the results of the above separation.

From a commercial point of view the more important fractions are:

- 30 + 200 mesh - Glass Grade Fraction
- 325 mesh - Kaolin sized fraction

In our samples the glass grade fraction varies from 25% to 87%, with a mean value of 53%.

The kaolin sized sample (- 325 mesh) is mixed with very fine silica and varies from a minimum of 6% to a maximum of 37%. The mean value is 13%.

SILICA DETERMINATIONS

-8 +30 mesh silica fraction of 11 samples (untreated) was subjected to chemical analyses as follow:

Whole Rock Major	%	XRF
Whole Rock Minor	ppm	XRF
Fe_2O_3	ppm	AAA

TABLE 5

PERCENTAGE OF INDIVIDUAL SIZE FRACTIONS IN EACH SAMPLE

	% + 8 Mesh	% -8 + 30	% -30 + 200	% -200 + 325	% -325
STD - 3	4	50	39	2	5
4	6	55	30	1	8
6	3	38	47	1	11
7	1	5	79	1	14
8	0	4	87	1	8
9	1	46	45	1	7
10	1	50	36	0	13
11	0	1	78	1	20
13	11	34	48	1	6
14	0	1	79	0	20
15	0	0	55	8	37
16	8	34	46	1	11
17	7	29	52	1	11
18	27	36	25	1	11

All fractions from 8 mesh to 200 mesh are silica. The -200 + 325 mesh is a mixture of mica and silica while the -325 mesh is kaolin, containing fine silica.

Table 6 gives the results of whole rock major analyses of -8 + 30 mesh fraction.

Whole rock minor elements for the above fraction are as follows:

Sample	CR	RB	SR	Zr
SDT-1-3	30	0	0	20
SDT-1-4	30	0	0	10
SDT-1-6	30	0	0	40
SDT-1-7	30	0	0	20
SDT-1-8	30	0	0	20
SDT-1-9	30	0	0	20
SDT-1-10	30	0	0	10
SDT-1-13	30	0	0	10
SDT-1-16	30	0	0	20
SDT-1-17	30	0	0	30
SDT-1-18	30	10	0	10

Fe_2O_3 (ppm) results with AAA technique are as follows:

Sample	Fe_2O_3 ppm
SDT-1-3	150
SDT-1-4	150
SDT-1-6	130
SDT-1-7	170
SDT-1-8	320
SDT-1-9	120
SDT-1-10	170
SDT-1-13	200
SDT-1-16	170
SDT-1-17	140
SDT-1-18	230

TABLE . 6

CHEMICAL ANALYSIS OF 8 + 30 MESH SILICA FRACTION

SAMPLE	SiO_2	AL_2O_3	CaO	MgO	Na_2O	K_2O	Fe_2O_3	MnO	TiO_2	P_2O_5	L.O.I.	SUM
SDT-1-3	99.3	0.09	0.01	0.00	0.00	0.01	0.04	0.00	0.02	0.01	0.16	99.6
SDT-1-4	99.3	0.09	0.01	0.00	0.00	0.01	0.06	0.00	0.01	0.01	0.31	99.8
SDT-1-6	99.1	0.07	0.01	0.00	0.00	0.01	0.04	0.00	0.02	0.01	0.08	99.3
SDT-1-7	99.6	0.09	0.02	0.00	0.00	0.01	0.07	0.00	0.01	0.01	0.08	99.8
SDT-1-8	99.5	0.17	0.02	0.01	0.00	0.01	0.05	0.00	0.02	0.01	0.08	99.9
SDT-1-9	99.5	0.10	0.02	0.00	0.00	0.01	0.04	0.00	0.01	0.01	0.16	99.9
SDT-1-10	99.5	0.10	0.02	0.00	0.00	0.01	0.02	0.00	0.02	0.01	0.16	99.8
SDT-1-13	99.3	0.08	0.02	0.00	0.00	0.01	0.03	0.00	0.01	0.01	0.16	99.6
SDT-1-16	99.2	0.15	0.02	0.01	0.00	0.01	0.02	0.00	0.02	0.01	0.16	99.6
SDT-1-17	99.5	0.11	0.02	0.00	0.00	0.01	0.03	0.00	0.01	0.01	0.08	99.8
SDT-1-18	99.2	0.16	0.02	0.00	0.02	0.01	0.02	0.00	0.02	0.01	0.15	99.6

These analysis are for the washed, but otherwise untreated silica sand.

Thus the results on this untreated -8 + 30 mesh fraction show silica concentrations from 99.1% to 99.5%. Fe_2O_3 concentrations in the same samples with XRF techniques varied from 0.02% to 0.07%. With the AAA techniques the concentrations were 140 ppm (0.014%) to 320 ppm (0.032%).

The - 30 + 150 mesh fraction was subjected to high intensity magnetic separation. The magnetic components of this fraction varied from 0.06% to 2.6% (Table 7).

The non-magnetic components of the above fraction were subjected to the following analyses:

Whole Rock	Major	%	XRF
Whole Rock	Minor	ppm	XRF
Fe_2O_3		ppm	AAA
Co		ppm	DCP
Cr		ppm	DCP

Whole rock major analyses of -30 + 150 faction are given in table 8. The Fe_2O_3 content of this non-magnetic fraction varies from 0.013% to 0.032%.The Fe_2O_3 value for the British Ceramic Standard (Glass Grade Sand) is 0.027%

The Cobalt and the Chromium values for this fraction are given below.(following table 8)

TABLE 7

-30 + 200 MESH SILICA - RECOVERY AFTER MAGNETIC SEPARATION

	Sample	Total Wt. (g)	Wt. Mag. (g)	%	Wt. Non-Mag. (g)	%
SDT-1 -	3	1000	11	1.1	989	98.9
	4	1000	23	2.3	977	97.7
	6	1000	10	1.0	990	99
	7	1000	8	0.8	992	99.2
	8	1000	8	0.8	992	99.2
	9	1000	18	1.8	982	98.2
	10	1000	16	1.6	984	98.4
	11	1000	24	2.4	976	97.6
	13	1000	19	1.9	981	98.1
	14	1000	26	2.6	974	97.4
	15	1000	22	2.2	978	97.8
	16	1000	18	1.8	982	98.2
	17	1000	16	1.6	984	98.4
	18	1061	9	0.8	1052	99.2

TABLE 8.

CHEMICAL ANALYSIS OF THE -30 + 150 MESH SILICA SAND AFTER HIGH INTENSITY MAGNETIC SEPARATION

SAMPLE	SiO_2	AL_2O_3	CaO	MgO	Na_2O	K_2O	Fe_2O_3	MnO	TiO_2	P_2O_5	L.O.I.	SUM
SDT-1-3	99.5	0.18	0.02	0.02	0.00	0.11	0.025	0.00	0.02	0.01	0.08	100.0
SDT-1-4	98.8	0.16	0.02	0.02	0.00	0.10	0.017	0.00	0.01	0.01	0.08	99.2
SDT-1-6	99.4	0.11	0.02	0.01	0.00	0.10	0.014	0.00	0.02	0.01	0.08	99.8
SDT-1-7	99.6	0.14	0.02	0.00	0.00	0.00	0.013	0.00	0.02	0.01	0.08	99.9
SDT-1-8	98.6	0.18	0.02	0.01	0.00	0.01	0.013	0.00	0.02	0.01	0.23	99.1
SDT-1-9	99.0	0.19	0.02	0.01	0.00	0.00	0.018	0.00	0.03	0.01	0.31	99.6
SDT-1-10	99.4	0.14	0.02	0.01	0.00	0.00	0.017	0.00	0.02	0.01	0.16	99.8
SDT-1-11	99.3	0.31	0.02	0.02	0.00	0.01	0.023	0.00	0.03	0.01	0.16	99.9
SDT-1-13	98.8	0.11	0.02	0.02	0.00	0.01	0.019	0.00	0.03	0.01	0.23	99.3
SDT-1-14	99.3	0.35	0.02	0.02	0.00	0.03	0.027	0.00	0.06	0.01	0.23	100.1
SDT-1-15	98.8	0.48	0.02	0.01	0.00	0.02	0.032	0.00	0.08	0.01	0.23	99.8
SDT-1-16	99.8	0.19	0.02	0.01	0.00	0.02	0.017	0.00	0.03	0.01	0.08	100.2
SDT-1-17	99.3	0.19	0.02	0.01	0.00	0.02	0.014	0.00	0.03	0.01	0.08	99.7
SDT-1-18	99.4	0.26	0.02	0.01	0.00	0.08	0.024	0.00	0.03	0.01	0.08	99.9
BCS-313	99.5	0.15	0.02	0.00	0.00	0.04	0.027	0.00	0.02	0.01	0.16	99.9

All results in percent (%) except for cobalt and chromium which are in parts per million.

Cobalt and Chromium in non-magnetic fraction of -30 + 150 fraction

Sample	Co ppm	Cr ppm
SDT-1-3	1	3
SDT-1-4	less than 0.5	4
SDT-1-6	less than 0.5	2
SDT-1-7	1.0	3.
SDT-1-8	0.5	2
SDT-1-9	0.5	5
SDT-1-10	0.5	2
SDT-1-11	0.5	4
SDT-1-13	0.5	3
SDT-1-14	1.5	7
SDT-1-15	1.5	7
SDT-1-16	0.5	3
SDT-1-17	1.0	3
SDT-1-18	1.0	6
BCS 313	Less than 0.5	2

Thus Cobalt varies from less than 0.05 ppm to 1.0 ppm. Chromium caries from 2 ppm to 8 ppm.

KAOLIN CHEMICAL ANALYSES

The -325 mesh fraction dried and submitted for chemical analysis. Chemical analyses of the samples are given in table 9.

The same samples were also submitted for particle size distribution analyses. This was carried out by the Sedigraph Method. The Sedigraph

TABLE 9

CHEMICAL ANALYSIS OF CRUDE, UNPROCESSED -325 MESH KAOLIN - SILICA MIXTURES

The control sample is a commercial quality coating clay.

SAMPLE	SiO_2	AL_2O_3	CaO	MgO	Na_2O	K_2O	Fe_2O_3	MnO	TiO_2	P_2O_5	L.O.I.	SUM
SDT-1-3	64.4	24.8	0.30	0.08	0.00	0.12	0.59	0.00	0.30	0.03	9.15	99.9
SDT-1-4	63.3	26.3	0.11	0.02	0.00	0.10	0.37	0.00	0.25	0.03	9.54	100.1
SDT-1-6	73.6	18.2	0.09	0.01	0.00	0.10	0.37	0.00	0.35	0.04	6.93	99.8
SDT-1-7	52.7	32.0	0.14	0.07	0.02	0.23	0.81	0.00	0.86	0.04	12.5	99.4
SDT-1-8	52.5	33.4	0.12	0.06	0.01	0.24	0.56	0.00	0.44	0.04	12.4	99.8
SDT-1-9	54.2	32.2	0.13	0.06	0.02	0.23	0.55	0.00	0.42	0.04	12.1	100.0
SDT-1-10	57.5	29.1	0.16	0.09	0.00	0.30	0.84	0.00	0.62	0.04	11.0	99.8
SDT-1-11	52.1	32.5	0.12	0.09	0.02	0.30	1.05	0.00	1.18	0.03	12.2	99.8
SDT-1-13	68.6	20.5	0.16	0.05	0.01	0.18	1.15	0.01	1.03	0.04	8.08	99.9
SDT-1-14	56.6	29.4	0.15	0.12	0.04	0.34	0.95	0.00	1.37	0.05	11.0	100.1
SDT-1-15	56.1	28.7	0.17	0.17	0.02	0.45	1.16	0.00	1.39	0.05	11.3	99.6
SDT-1-16	52.8	32.5	0.12	0.08	0.03	0.34	0.90	0.00	0.88	0.05	12.2	99.8
SDT-1-17	57.5	29.1	0.10	0.06	0.02	0.61	0.84	0.00	0.75	0.04	10.8	99.9
SDT-1-18	57.0	30.1	0.11	0.07	0.04	1.07	0.69	0.00	0.36	0.04	10.5	100.1
NBS-97A	43.7	38.9	0.10	0.16	0.04	0.50	0.47	0.00	1.90	0.36	13.5	100.0
CONTROL SAMP	45.9	39.0	0.01	0.07	0.21	0.21	0.70	0.00	0.51	0.10	13.7	100.4

particle size distribution curves are given in Appendix.

Percentage of free silica present in kaolin samples were determined by XRD techniques. Results are given in table 10. The free silica values obtained were very high. Attention was therefore focussed on further treatment of kaolin in order to determine in what size fraction the silica is concentrated and what would be the best way to reduce it.

KAOLIN FRACTIONATION

A composite was prepared for preliminary fractionation test, by the sedimentation technique. The objective was two fold. The first was to determine if the silica level could be reduced to less than 1% by conducting separations at 10 micron and 5 micron. The second was to determine if the free silica, contained in the kaolin was coarser than 10 micron. It was hoped that by fractionating the kaolin at 10 micron size, the silica would be retained in the coarse, plus 10 micron fraction.

These tests were carried out by standard sedimentation techniques, whereby kaolin slurry is allowed to settle in a tall cylinder and the settling time for particles coarser than 10 micron was calculated using Stoke's Law. At the prescribed time, the supernatant slurry was withdrawn, filtered and dried. The dried kaolin was analyzed for free silica and particle size distribution. Four separate tests were conducted. None of these tests were successful in reducing the free silica content to the desired level. As shown in table 11, the best result obtained was on a sample fractionated at 5 micron whereby the free silica content was reduced to 5.2 % - still unacceptably high.

Since Kaolin and silica have nearly identical specific gravities, both appear to behave similarly in a fluid medium. Sedimentation techiques

TABLE 10

PERCENT "FREE SILICA" IN -325 MESH FRACTION

Sample ID	% Free -Quartz
SDT-1-3	35
-4	33
-6	55
-7	12
-8	12
-9	15
-10	19
-11	9
-13	38
-14	19
-15	15
-16	12
-17	18
-18	16
SDT-1-20 (Control)	0

TABLE 11

PERCENTAGE OF "FREE SILICA" IN SIZED FRACTIONS

	Separation	% Free Silica
STD-15-2	10 m	12.2
15-3	10 m	7.0
15-4	5 m	5.2

The free silica was determined using x-ray diffraction technique, comparing the samples against prepared samples of a commercial quality paper kaolin (containing no free silica) to which known quantities of -325 mesh ground quartz were added. A series of standards containing from 5 to 35% silica by weight were prepared.

are therefore not very effective unless there is a significant difference in the particle size of the two minerals. Other techniques such as differential flocculation or microfloatation have been developed but are not commonly used in commercial kaolin processing.

It should be noted that the limited test work carried out was based upon a composite sample. Work on individual samples might have given different results.

SUMMARY OF ANALYTICAL STUDIES

The samples obtained from drillhole SDT-1 consist of silica, kaolin and other minor minerals such as chlorite, mica and some iron bearing minerals.

The silica fraction can be readily beneficiated to a quality consistent with the quality of silica sand used in the manufacture of flat, container or fiberglass. The silica is also suitable for blasting sand, filteration sand and as smelter flux.

Owing to the angularity of the silica grains, it is not suitable for foundary applications since foundary applications require a rounded sand.

Kaolin: Owing to contamination of kaolin with very fine silica, the quality of kaolin that can be extracted from the sample material is not up to the standards required for paper coating applications.

The kaolin may be suitable as a "paper filling" grade kaolin since higher levels of free silica can be tolerated in paper filling.

CONCLUSIONS & RECOMMENTATIONS

The following conclusions and recommendations emerge regarding the technical, geological and analytical aspects of the project:

TECHNICAL ASPECTS

1. Sonic drilling combined with NQ wire line drilling is a viable combination of techniques for obtaining high quality samples from unconsolidated sediments overlying bedrock. With the presently available equipment sonic drilling can be easily carried out upto a depth of about 100 metres. Probing any deeper is uneconomical and poses technical problems. Development of a wire line system may make it economical to drill deeper than 100 metres with the sonic drill.

2. The weight of the equipment imposes limitations on the mobility of the rig especially in muskeg terrain. Advance reconnaissance of the area and suitable preparation of access routes is recommended.

3. The alternation of highly compact clays and loose sands presents drilling problems in the subsurface. Such type of drilling requires great caution and skill.

GEOLOGICAL ASPECTS

Remarks about the geological aspects can be separated into those that apply to the area of drillholes J-1-2, SDT-1, and SDT-2 and those that apply to the area of holes SL 82-01 to 82-04.

Area of drillholes J-1-2, SDT-1 and SDT-2

1. Area in the vicinity of drillholes SDT-1 and J-1-2 has a thick sequence of the upper Mattagami type B sediments containing impressive thicknesses of silica sand kaolin mixtures. These deposits are an almost unlimited source of silica sand and kaolin.

2. Quaternary overburden in the area of drillhole J-1-2 is only 17 metres offering encouraging possibilities for low cost open-pit mining of the silica sand and kaolin. The lateral extent of the shallow overburden in the vicinity of this hole may be determined by carrying out exploratory drilling on a small (100 m) grid.

3. Quaternary overburden in the central part of the area of licence of Occupation No. 14888 appears to be very thick. Northern portions of this area have not been investigated. Area to the noth of hole SDT-2 may require some drilling.

4. Lignite seams encountered in hole J-1-2 combined with similar beds found in earlier drilling near the banks of Adam Creek warrant further exploratory work to determine if lignite in sufficient quantities occurs near the surface.

Area of drillholes SL 82-01, 82-02, 82-03, and 82-04

1. Within the Mattagami Formation, the occurrence of a lower, black clay-lignite association (type A lithology) and an upper, silica sand-clay association (type B lithology) is confirmed. Lignite can only be expected to occur where the lower association is well developed.

2. Thick lignite seams encountered earlier in drillhole 78-06 do not extend southeastwards from this hole. This may be partly due to the thinning of the Cretaceous sediments to the southeast or the lesser development of lignite bearing type A Mattagami sediments.

3. Any future efforts to find the continuity of lignite found in hole 78-06 should be directed to the north, west and northwest of hole 78-06. It is not necessary to carry out an expensive grid drilling program for this purpose - only one hole in each direction may suffice.

4. The Cretaceous sediments of the Mattagami Formation do not persist laterally to any great distances. Any future drilling program should be planned bearing this in mind.

ANALYTICAL ASPECTS

Analysis of selected samples of silica sand-kaolin mixtures from a thick sequence of these deposits found in hole SDT-1 has revealed that:

1. The silica sand is of high quality and purity. Glass sand grade fraction is present in good proportion. The glass sand can be easily beneficiated with magnetic means.

2. The average percentage of kaolin in these mixtures is about 13 %. Values as high as 20 percent were recorded.

3. The kaolin recovered from the samples may be suitable for paper filling applications.

4. The kaolin recovered from the samples has unacceptably high concentrations of fine free silica. For this reason it is not upto standards required for paper coating.

Limited separation tests on a composite sample employing conventional sedimentation techniques have failed to reduce the level of free silica to acceptable levels.

5. Further work is recommended to determine if the free silica can be effectively separated from the kaolin fraction. This work should utilize individual samples, not composites.

6. Depending upon the success of the above work efforts should be made to determine the optimum techniques for bleaching and for defining the rhelogical properties of the kaolin.

900

Ontario

Ministry of
Natural
Resources

60 Wilson Avenue
Timmins, Ontario
P4N 2S7

Our file number

Your file number

Memorandum to:

Assessment Files Research Office
77 Grenville Street
Room 802
Toronto, Ontario

Date: July 21, 1982

Subject: Geotechnical Report entitled:
Exploration Activities
on Lands Granted Under
Licence of Occupation No. 14888 (1981-1982)

The geotechnical report(s) attached hereto have been submitted by Selco Inc. persuant to the terms of Exploratory Licence of Occupation Number 14888 . We have reviewed the report and approved it as a portion of the annual exploration obligation for the first term of this licence.

It is understood by the licencee that this assessment work, when approved, is to form part of the public record, and accordingly, may now be placed on file.

Resident Geologist
Sub-Regional Office, Nothern Region
Timmins, Ontario

c.c. Mining Recorders Office - Timmins

600mW 500mW 400mW 300mW 200mW 100mW 0E 100mE 200mE 300mE 400mE 500mE 600mE 700mE 800mE 900mE 1000mE

400mN
300mN
200mN
100mN
BASE LINE
100mS
200mS
300mS
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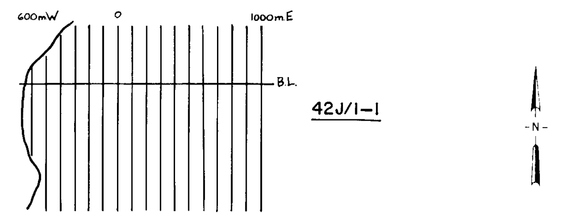
600mS
700mS
800mS
900mS

ADAM CREEK

BASE LINE AZ.90°



42J/1-1

-N-

LOCATION PLAN
CLAIM MAP M.522 — ONT.
Scale 1:25,000

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Readings in Gammas: 1030 / 1025
Base: 59,000
Profile:
Contour Interval: Every 20 Gammas

-N-

Scale 1:2500
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SELCO INC. EXPLORATION

SMOKY FALLS PROJECT

N.T.S. 42J/1 — GRID 1 — MAG. SURVEY

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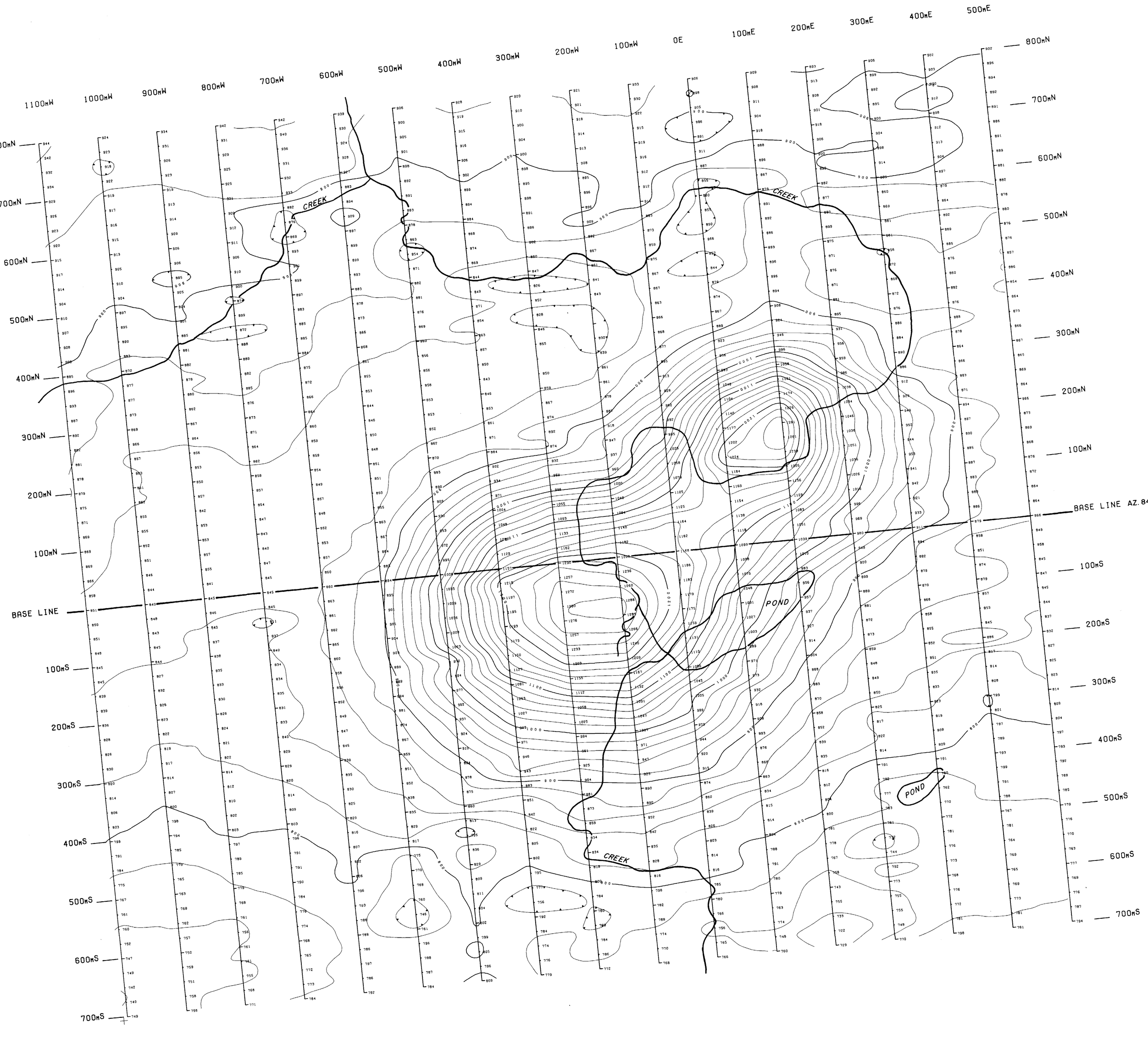
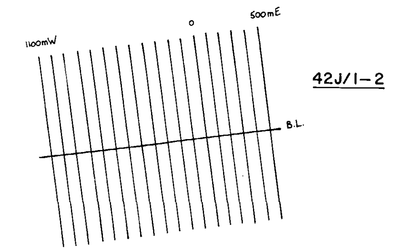
TRACED BY Dataplot F.S.	DATE February, 1982		SF. 3381

42J1NE0899 L014888 MAPLINE

200

LO 14888





42J/1-2

LOCATION PLAN

CLAIM MAP M.522 ONT.

Scale 1 : 25,000

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Readings in Gammas: 770 / 765

Base: 59,000

Profile:

Contour Interval: Every 20 Gammas

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Scale 1:2500

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SELCO INC. EXPLORATION

SMOKY FALLS PROJECT

N.T.S. 42J/1 — GRID 2 — MAG. SURVEY

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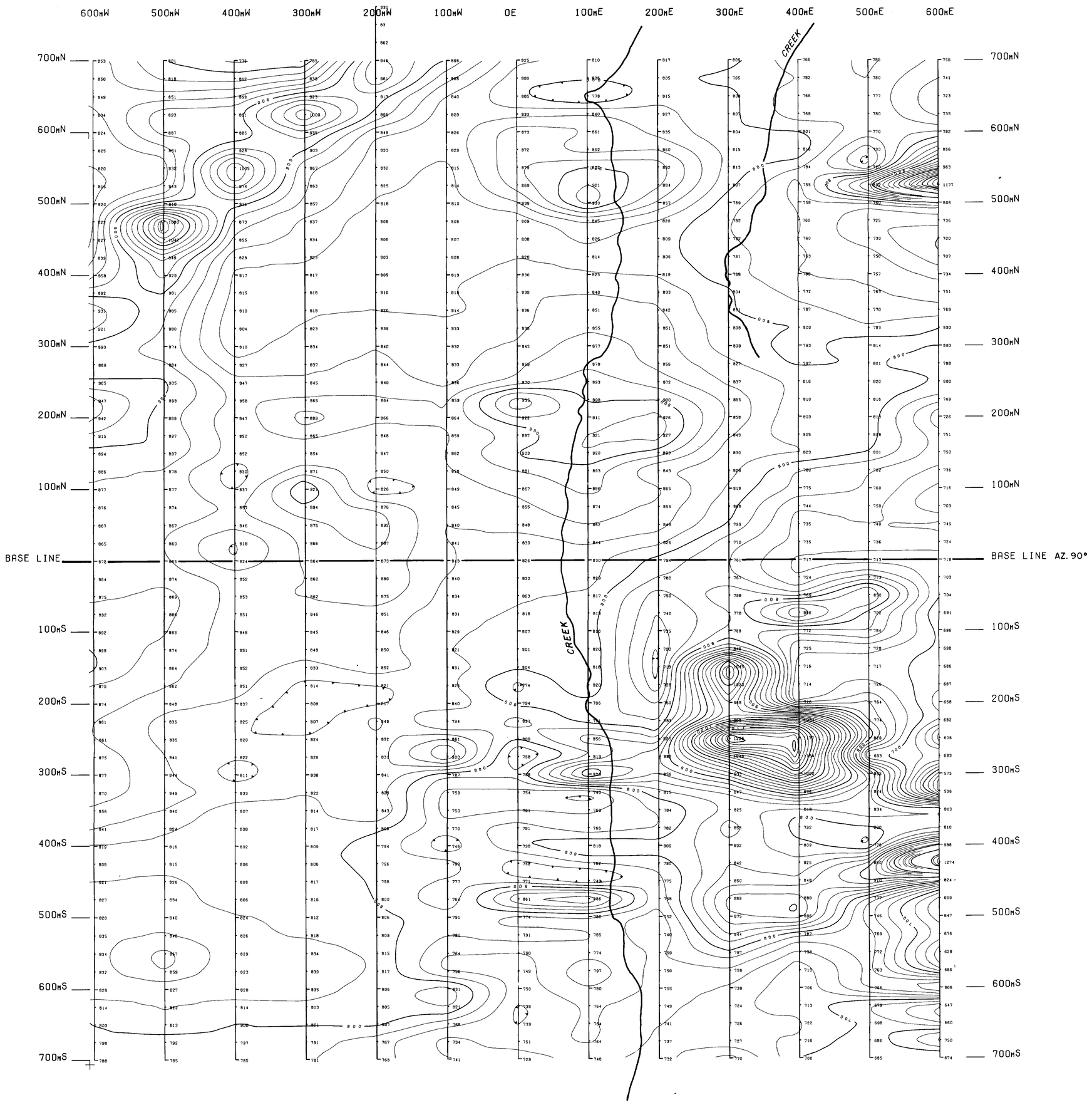
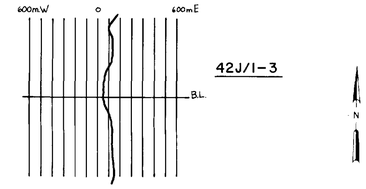
TRACED BY Dataplot FS.	DATE February, 1982		SF. 3382





LOCATION PLAN

CLAIM MAP M.522 — ONT.

Scale 1 : 25,000

MAGNETOMETER INSTRUMENT

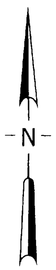
TYPE: GEOMETRICS G-816

Readings in Gammas: 625 / 666

Base: 59,000

Profile:

Contour Interval: Every 20 Gammas



Scale 1:2500

0 50 100 150m

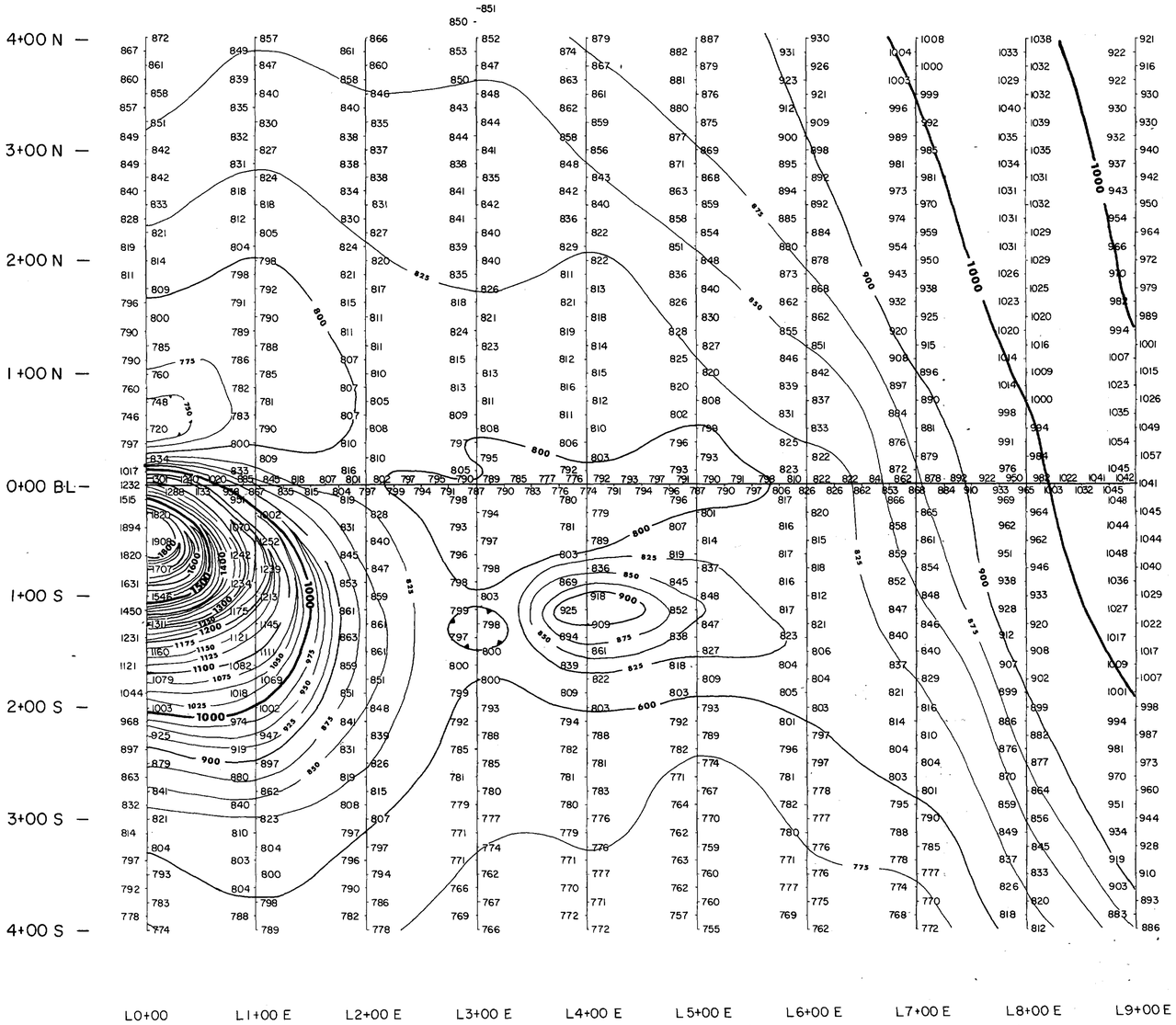
SELCO INC. EXPLORATION

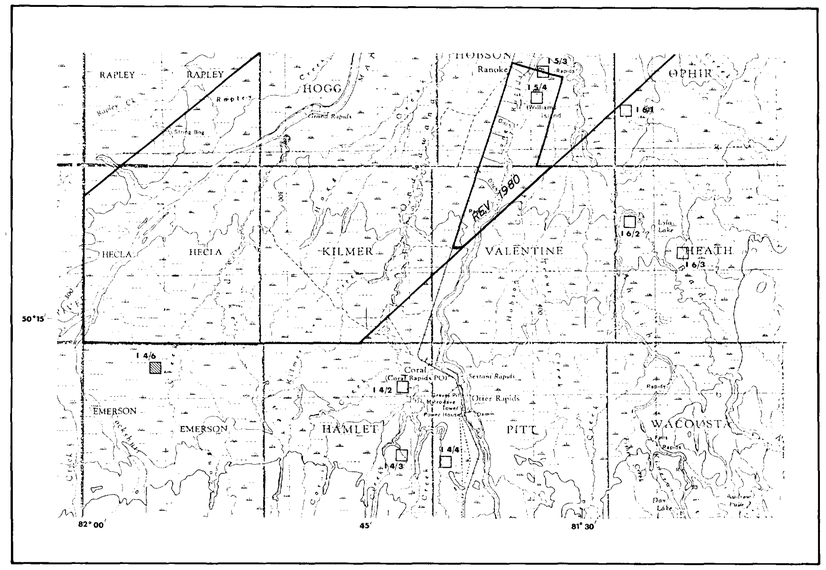
SMOKY FALLS PROJECT

N.T.S. 42J/1 — GRID 3 — MAG. SURVEY

DRAWN BY	DATE	N.T.S.	PLAN
TRACED BY Dataplot F.S.	DATE February, 1982		ST. 3383

LO 14858





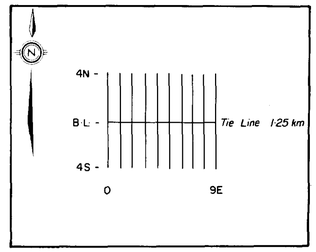
INDEX MAP
SCALE 1:250,000

LEGEND

- HELICOPTER PAD
- LAKE or POND
- RIVER, STREAM or BROOK
- OBSERVED CLAIM POST
- ASSUMED CLAIM POST

CONTOUR INTERVAL

- 25 nT.
- 100 nT.
- 500 nT.



LOCATION MAP
SCALE 1:25,000

BAR SCALE (METERS)
0 50 100 150 200 250 300

BACKGROUND
59,000 nT.

BASE STATION: 59,600 nT.

SELCO MINING CORPORATION LIMITED

REGISTERED PROFESSIONAL ENGINEERS PROVINCE OF ONTARIO

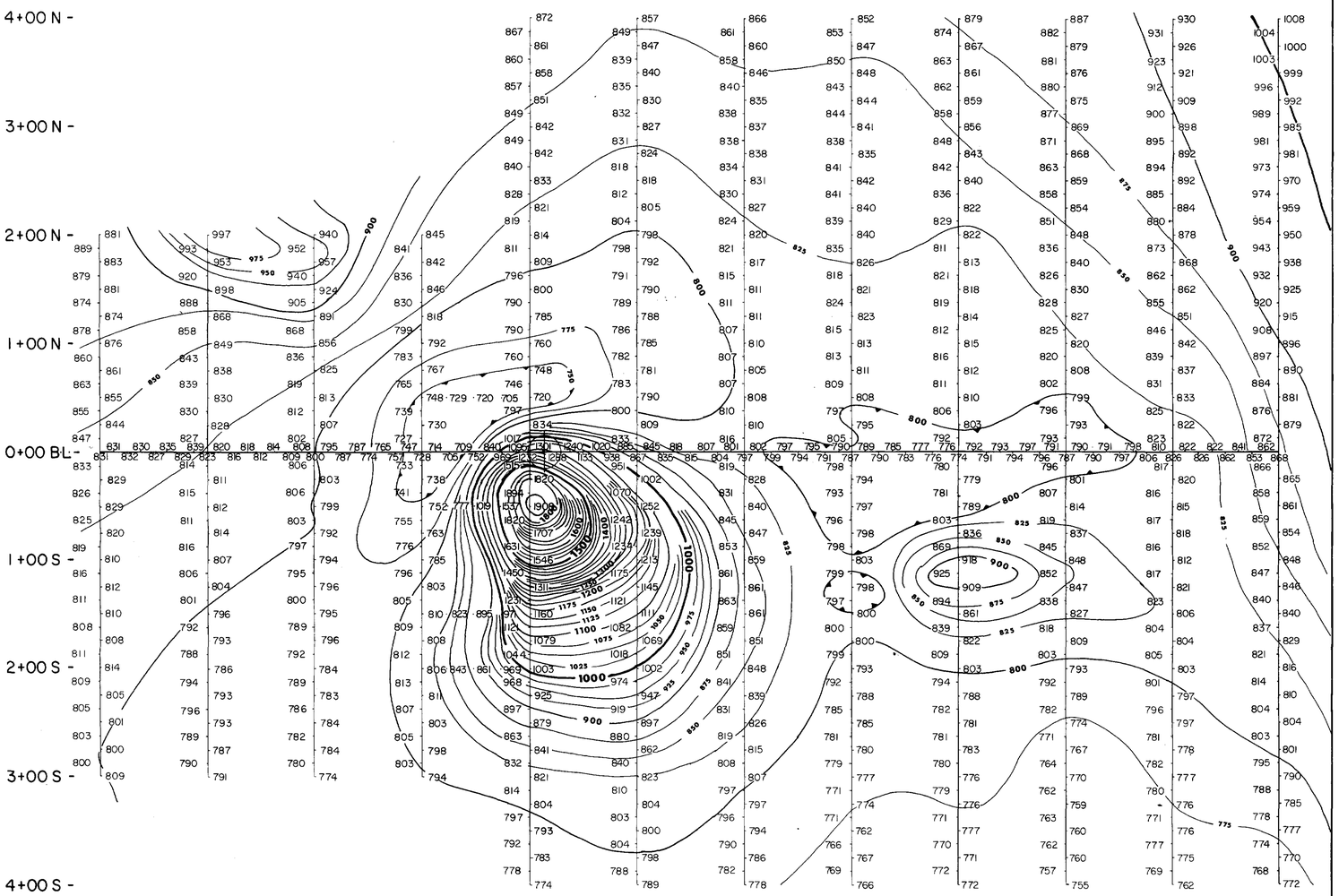
SMOKY FALLS PROJECT

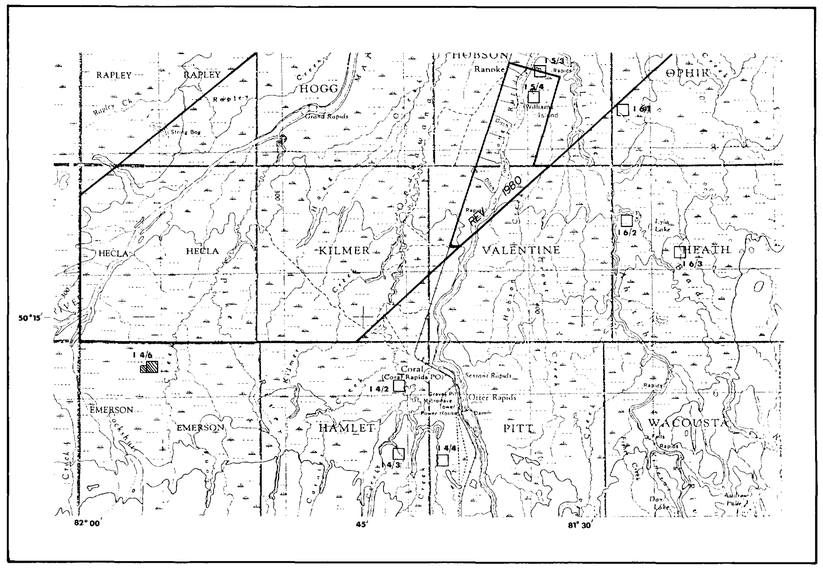
MAGNETOMETER SURVEY
GRID L0+00 To L9+00E
I 4-6

DRAWN BY J.P.P.	REV. OCT. 1980
TRACED BY J.P.P.	REV.
APPROVED	REV.
N.T.S. 42-I/4	REV.

W.G. WAHL LIMITED — SCALE: 1:2,500 — DWG. NO. SF. 3088

LO 14888



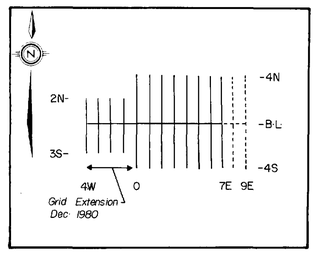


INDEX MAP
SCALE 1:250,000

LEGEND

- HELICOPTER PAD
- LAKE or POND
- RIVER, STREAM or BROOK
- OBSERVED CLAIM POST
- ASSUMED CLAIM POST

CONTOUR INTERVAL
- 25 nT.
- 100 nT.
- 500 nT.



LOCATION MAP
SCALE 1:25,000

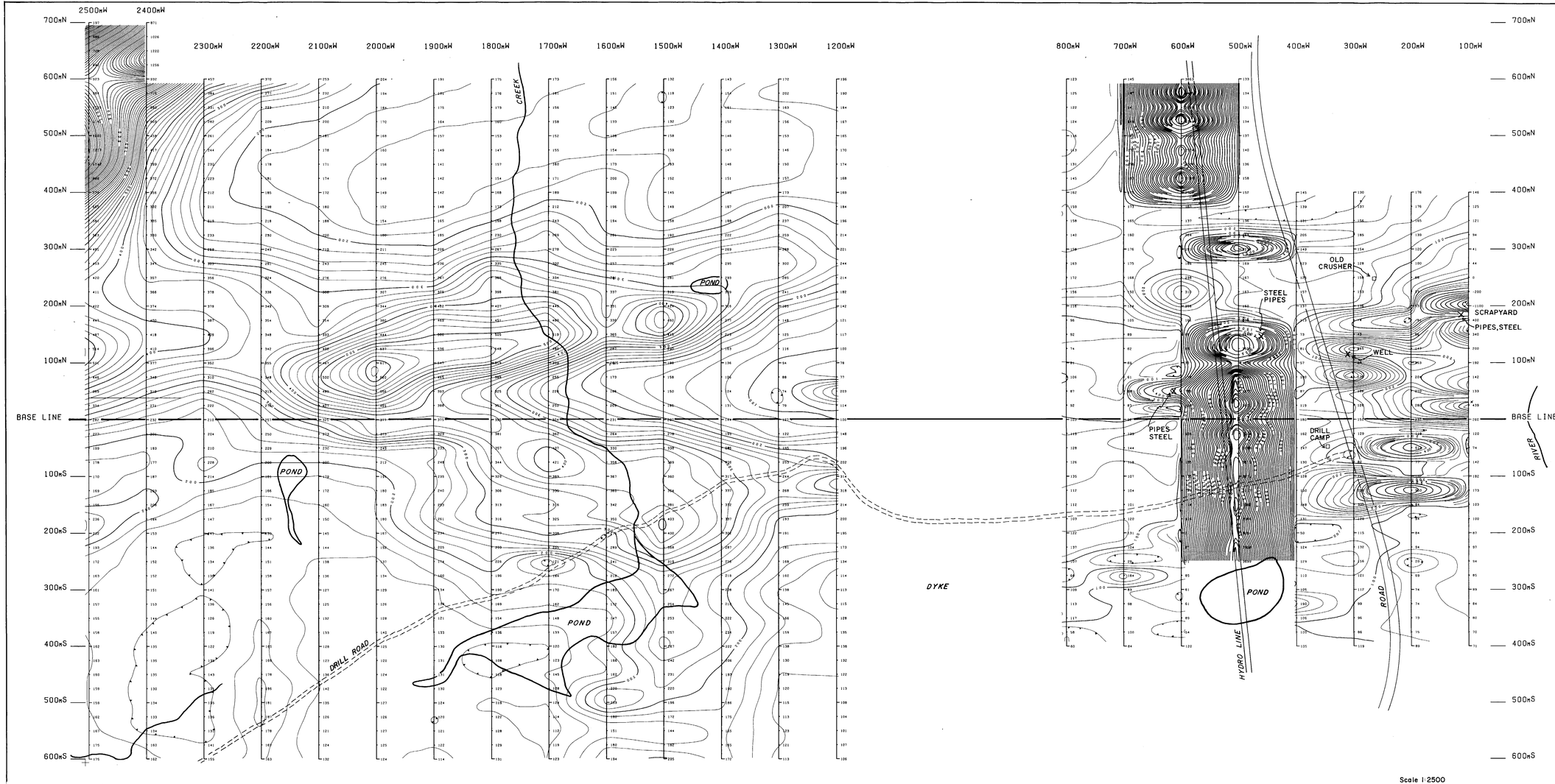
BAR SCALE (METERS)
0 50 100 150 200 250 300

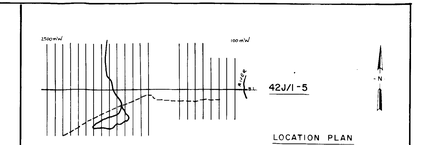
NOTE: REFER TO MS.3088 — MAG.

BACKGROUND
59,000 nT.

BASE STATION: 59,600 nT.

SELCO MINING CORPORATION LIMITED			
	SMOKY FALLS PROJECT	DRAWN BY J.P.P.	REV. OCT. 1980
	MAGNETOMETER SURVEY	TRACED BY J.P.P.	REV. DEC. 1980
	GRID 14-6 L4+00W TO L7+00E	APPROVED	REV.
		N.T.S. 42-1/4	REV.
	W.G. WAHL LIMITED	SCALE: 1:2,500	DWG. NO. SF.3109





LOCATION PLAN
CLAIM MAP M.522 — ONT.
Scale 1:25,000

MAGNETOMETER INSTRUMENT
TYPE: GEOMETRICS G-816
Readings in Gammas: 56 / 36
Base: 59,000
Profile:
Contour Interval: Every 20 Gammas

-N-

SELCO INC. EXPLORATION

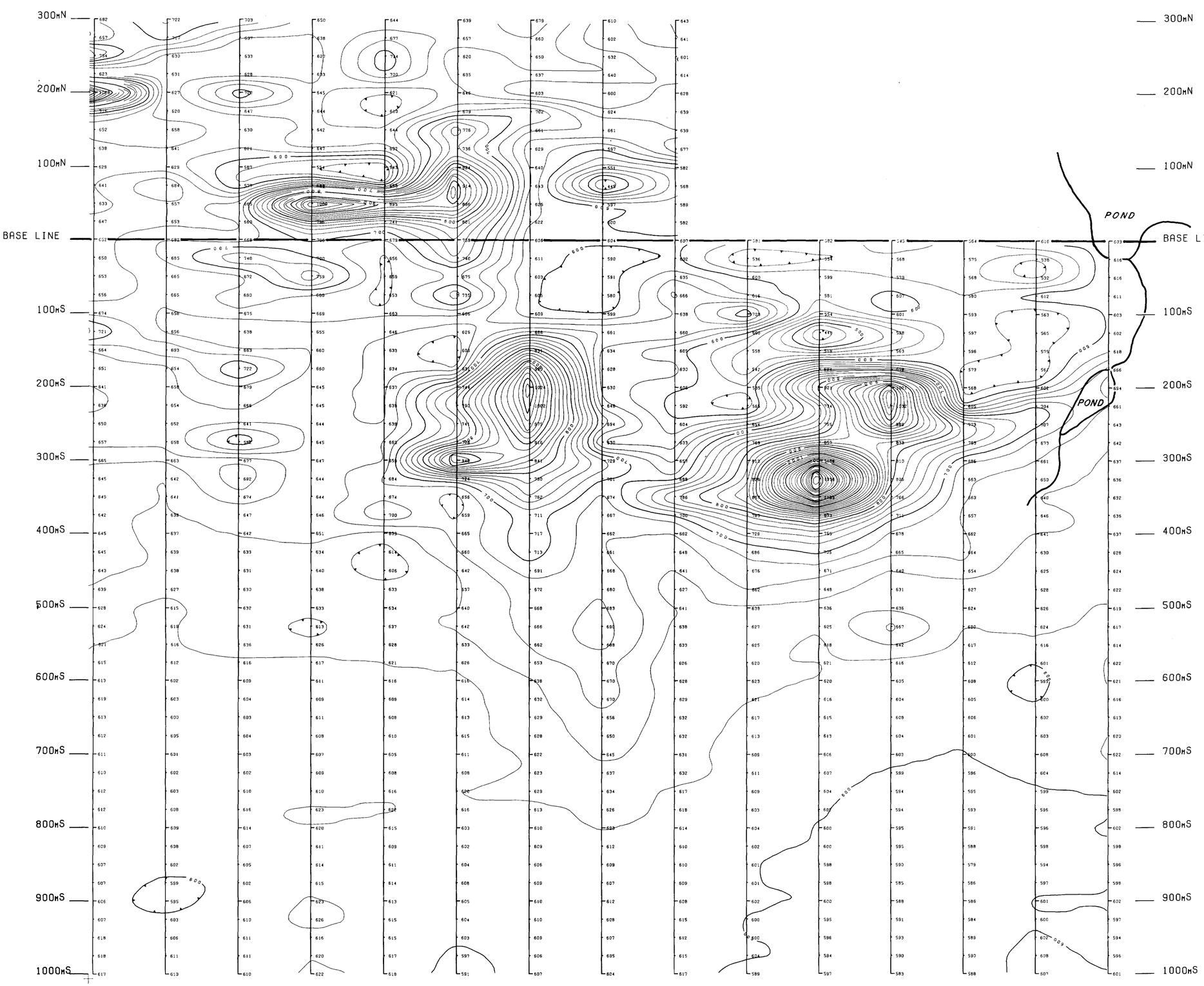
SMOKY FALLS PROJECT

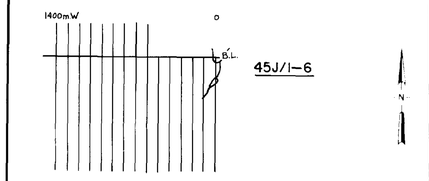
N.T.S. 42J/1 — GRID 5 — MAG. SURVEY

DRAWN BY:	DATE:	SCALE:	PLAN:
TRACED BY: Datsplot PS	DATE: March 1982		SF. 3374

AG 14888

250





LOCATION PLAN

CLAIM MAP M.522 — ONT.

Scale 1:25,000

MAGNETOMETER INSTRUMENT

TYPE: GEOMETRICS G-816

Readings in Gammas: 598 / 601

Base: 59,000

Profile:

Contour Interval: Every 20 Gammas

N

Scale 1:2500

0 50 100 150m

SELCO INC. EXPLORATION

SMOKY FALLS PROJECT

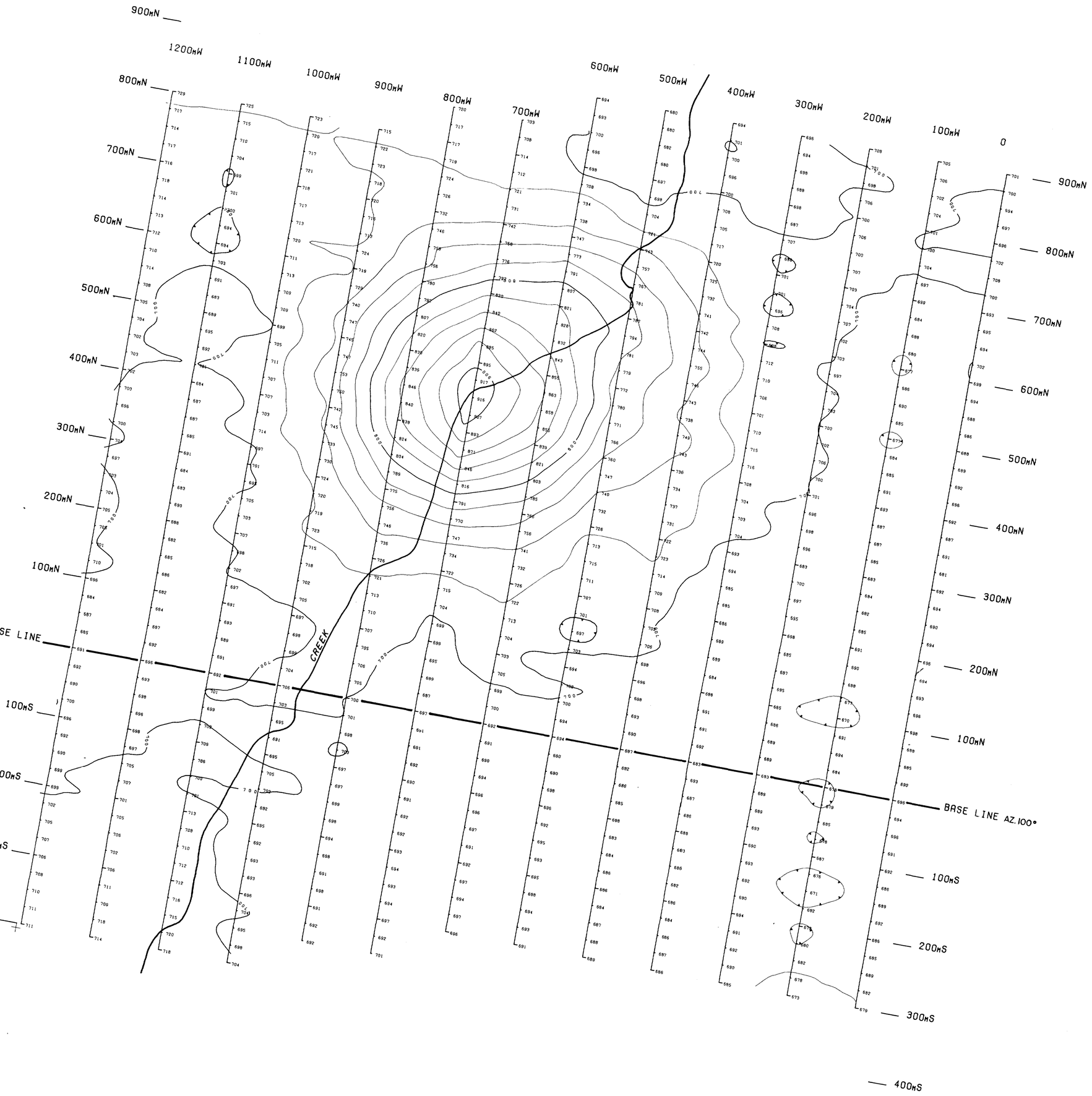
N.T.S. 42J/1 — GRID 6 — MAG. SURVEY

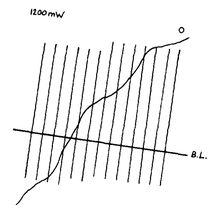
Dataplot F.S.	February, 1982		SF. 3384

42J01NE0009 L0146B8 KIPLING

260

40/6888





LOCATION PLAN

CLAIM MAP M.1088—ONT.

Scale 1 : 25,000

MAGNETOMETER INSTRUMENT

TYPE: GEOMETRICS G-816

Readings in Gammas: 692 / 686

Base: 59,000

Profile:

Contour Interval: Every 20 Gammas

N

Scale 1:2500

0 50 100 150m

SELCO INC. EXPLORATION

SMOKY FALLS PROJECT

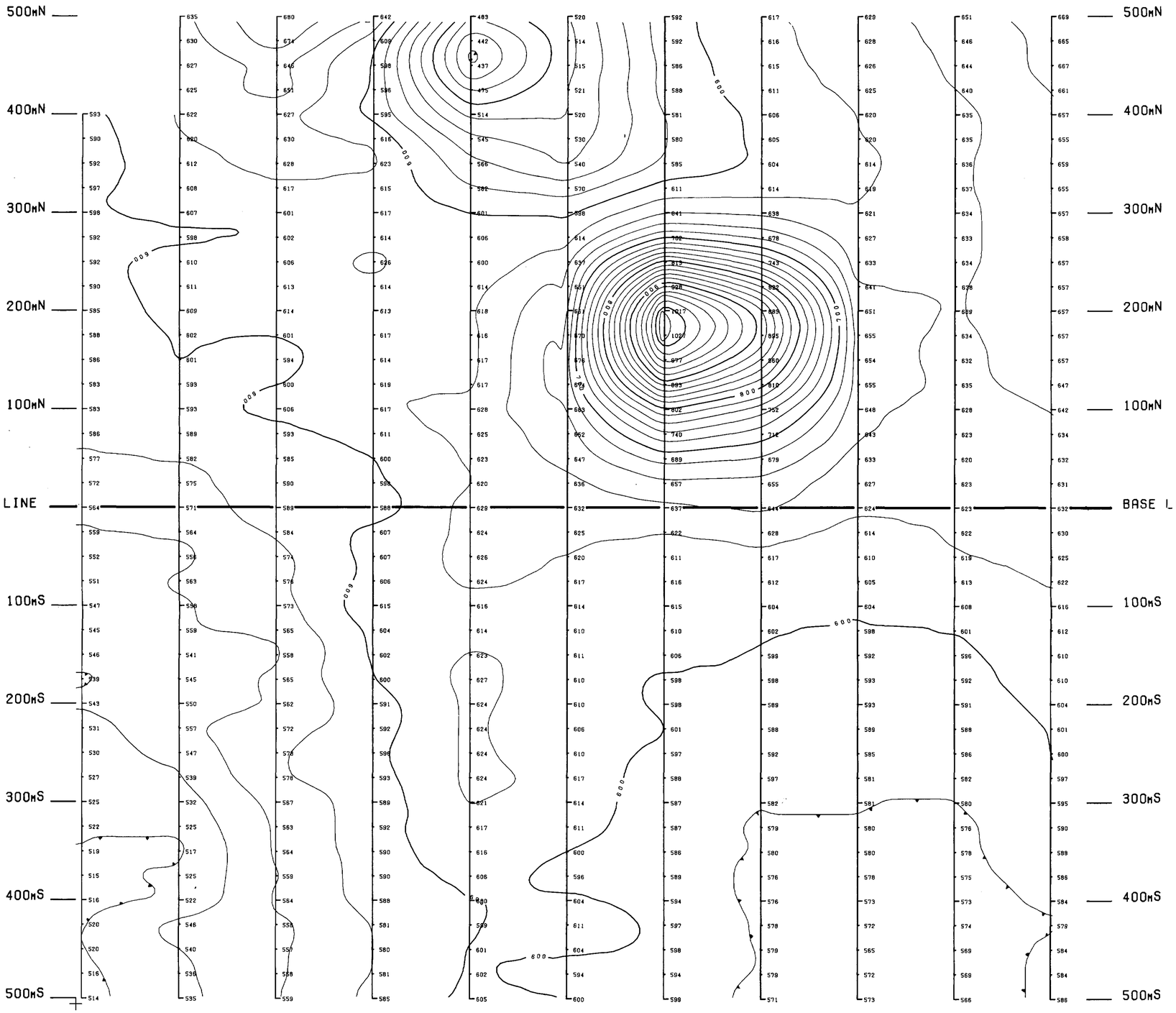
N.T.S. 42J/8 — GRID 100—MAG. SURVEY

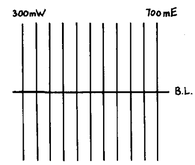
DRAWN BY	DATE	PLAN Nº SF. 3370
TRACED BY DATAPLOT F.S.	DATE MARCH 1982	

42J81NE8899 L014888 KIPLING

270

LO 14888





42J/8-101

-N-

LOCATION PLAN

CLAIM MAP M.1088—ONT.

Scale 1 : 25,000

MAGNETOMETER INSTRUMENT

TYPE: GEOMETRICS G-816

Readings in Gammas: 579 — 584

Base: 59,000

Profile:

Contour Interval: Every 20 Gammas

-N-

Scale 1:2500

0 50 100 150m

SELCO INC. EXPLORATION

SMOKY FALLS PROJECT

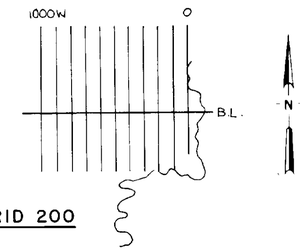
N.T.S. 42J/8 — GRID 101 — MAG. SURVEY

DRAWN BY	DATE	PLAN Nº SF. 3371
TRACED BY DATAPLOT FS.	DATE MARCH 1982	

42J01NE0099 L014888 KIPLING

280

L0 14 888



421/4 - GRID 200

LOCATION PLAN
CLAIM MAP M.417- ONTARIO
Scale 1:25,000

1000mW 900mW 800mW 700mW 600mW 500mW 400mW 300mW 200mW 100mW 0

600mN 500mN 400mN 300mN 200mN 100mN HELICOPTER PAD BASE LINE 100mS 200mS 300mS 400mS

BASE LINE AZ. 90°

CREEK

MAGNETOMETER INSTRUMENT
TYPE: GEOMETRICS G.816/826
Readings in Gammas: [705 / 685]
Base: 59,000
Profile:
Contour Interval: Every 20 Gammas

N

Scale 1:2500
0 50 100 150m

SELCO INC. EXPLORATION

SMOKY FALLS PROJECT

421/4 - GRID 200 — MAG. SURVEY

DRAWN BY S.R.B.	DATE March 1982	N.T.S. 421/4	PLAN SF.3404
TRACED BY Data Plot	DATE April 1982		

LO 14888