AIRBORNE ELECTROMAGNETIC SURVEY

GRANGES EXPLORATION CANADA AB

ENGLISH TOWNSHIP AREA

FILE NO: 15027

Questor Surveys Limited, 20 Canso Rd., Rexdale, Ontario, Canada.

INTRODUCTION

This report contains our interpretation of the results of an airborne electromagnetic survey flown in the English Township Area, Ontario, on September 11, 12, 13, 14, 16 and 17, 1973. A brief description of the survey procedure together with recommendations for ground follow-up is included.

The survey totalled 2195 line miles and was performed by Questor Surveys Limited. The survey aircraft was a Shorts Skyvan, CF-QSL and the operating base was Timmins, Ontario.

The area outline is shown on the 1:250,000 N.T.S. maps 42A and 41P at the end of this report.

MAP COMPILATION

The base maps are uncontrolled mosaics constructed from Ontario Department of Lands and Forests 1" = 1/4 mile photographs. The mosaics were reproduced at a scale of 1" equals 1320 feet on stable transparent film from which white prints can be made.

Flight path recovery was accomplished by comparison of the prints of the 35mm film with the mosaic in order to locate the fiducial points. These points are approximately one mile apart.

SURVEY PROCEDURE

Terrain clearance was maintained as close to 400 feet as possible, with the E.M. Bird at approximately 150 feet above the ground. A normal S-pattern flight path using approximately one mile turns was used. The equipment operator logged the flight details and monitored the instruments.

A line spacing of 1/8 mile was used.

INTERPRETATION AND RECOMMENDATIONS

References: Aeromagnetic Sheets 41 P/14 & 42 A/3.
Ontario Preliminary Geology Map No.P 151.
Ontario Preliminary Geology Map No.P 141.
Ontario Preliminary Geology Map No.P 490 Semple T.P.
Ontario Preliminary Geology Map No.P 454 English T.P.
Ontario Preliminary Geology Map No.P 455 Zavitz T.P.
Ontario Preliminary Geology Map No.P 491 Hutt T.P.

A considerable amount of work has been done in these survey areas and a great many of the conductors that have been outlined have been drilled in the past. However, from the references listed above, it would appear that there are still some good targets that have not been tested. The apparent weak anomalies may also be significant and should be given some attention whether they have been discussed or not. It is felt that most of the INPUT anomalies that have been plotted have their source in bedrock.

The area is underlain by interstratified metavolcanic sequences and in Hutt Township, rhyolite interbeds are often associated with narrow lenses and zones of graphitic schists

and slate containing disseminated to massive pyrite with minor pyrrhotite and chalcopyrite. Discontinuous narrow lenses of low-grade iron formation, also occur within the area and these respond electromagnetically in some areas.

Serpentinized peridotite is also prevalent, especially in Zavitz Township and in places this peridotite is a fair INPUT conductor. However, it would not respond well to conventional ground E.M. systems unless there are discrete sulphide lenses present.

Even though conductor Zones 6, 7, 9, 10, 11 and 14 in Area 2 appear to be discrete conductors, they are on strike and are apparently associated with an iron formation which trends north-south through the area. Similarly, Zones 8, 12 and 13 are on strike and are associated with a minor iron formation again tending north-south.

The following is a discussion of various conductor systems, some of which have apparently been explained by previous work but are left in for the sake of completeness. An investigation of the assessment files should be made to ensure that these conductors have been explained with confidence and they can also be used as a guide to explaining the other zones.

It is difficult to rank these zones with regard to priority selection in the ground follow-up, but Zones 10 and 14 in Area 3, do stand out as top priority targets, provided that they have not been previously explained.

AREA 1.

Zone 1

The two anomalies (1G and 2D) which make up this conductor are weak but appear to have their source in bedrock. Since they are bedrock anomalies and in an area of felsic volcanic rocks, ground work is suggested. There is no evidence of previous work.

Zone 2

This conductor which lies on the border between Halliday and Midlothian Townships is weak but appears to have its source in bedrock. Ground work is recommended. Felsic volcanics have been mapped in the area.

Zone 3

Anomaly intercept 6A appears isolated but the adjacent lines do not extend far enough south to intersect the anticipated conductor axis. A value of 9mhos has been calculated for this anomaly. Ground work is suggested.

Zone 4

This short conductor which parallels zone 5 to the north, exhibits moderate conductivity and has some magnetic correlation. Since this zone does not appear to have been worked on and it is a short discrete conductor, it should be investigated.

Zone 5

Good conductivity-thickness anomalies characterize this long conductor and sulphides are suspected to be a cause. There is some magnetic correlation at the east end of this zone. The two anomaly responses on the south lines and one on

the north indicate a dip to the north. It is recommended that both ends of the conductor be investigated.

Zone 6

A horizontal loop survey is suggested to be carried out over this cluster of anomalies in an effort to resolve and further evaluate the zone. Moderate to good conductivity-thickness values are shown by the anomalies and there is magnetic correlation with some of the anomalies. Sulphides are expected to be present.

Zone 7

The poor definition of anomaly 43A probably resulted from striking the conductor at a poor coupling angle. Possibly a fold exists in the conductor at this location. An orientation survey is suggested prior to line cutting to ensure the optimum coupling angle in a ground survey. There is some small indirect magnetic association with the zone suggesting that minor sulphides are a cause. Ground work is recommended.

Zone 8

This zone is discussed under Zone 50; Area 3. Better definition resulted in the other direction.

Zone 9

Discussed under Zone 53; Area 3.

AREA 2.

Zone 1

Diamond drilling by Spirit Lake Mines on this cluster of good conductivity-thickness anomalies indicate that pyrite and some chalcopyrite is the cause of the conductivity. This zone within the mafic and felsic metavolcanics has been intruded by a diabase dike; hence the discontinuity in the middle of the conductive zone. Since this zone has obviously been explained, no further work is recommended.

Zone 2

This single line conductor lying to the east of the zone is weak but appears to have its source in bedrock. The weakness of this anomaly may be due to a poor coupling angle, ie., the strike of the conductor axis is in question. Since the conductor does not appear to have been worked on and lies within a good geologic environment, ground work is recommended.

Zone 3

Considerable diamond drilling by Daniel Mining Company in 1967, intersected some pyrite and nickel mineralization. The poor conductivity-thickness anomalies indicate that massive sulphides do not exist and the E.M. responses are probably due to disseminated sulphides within the peridotite. No further work is recommended.

Zone 4

Discussed under Zone 22; Area 3, this anomaly is poorly defined in this direction.

Zone 5

The anomalies in this zone are weak but apparently of bedrock origin. Minor sulphides could be the cause. Ground work is recommended on a low priority basis.

Zone 6

This strong good conductivity-thickness conductor is associated with a high magnetic linear. Sulphides associated with an iron formation is the probable cause of the conductivity. Ground work is recommended at the southern end of this zone where the conductivity-thicknesses are the highest.

Zone 7

Hollinger Gold Mines has done work in the vicinity of this conductor, but the evidence indicates that only the northern portion has been investigated, so it is therefore recommended, that the southern portion be checked. The zone is made up of moderately strong anomalies with magnetic correlation similar to those that result from sulphides. A diamond drill hole in the northern part intersected magnetite, pyrite and chalcopyrite.

Zone 8

The strong influence of the nearby hydro line has distorted the anomaly shape and has masked out any possible extension of the conductor to the north. However, this anomaly is obviously a bedrock one and the direct magnetic correlation adds interest. A horizontal loop survey utilizing a system such as the Geonics E.M. 17, which minimizes the hydro effects should be used to check this conductor.

Zone 9

The regional magnetics indicate that this conductor is on the same horizon as Zones 6, 7, 10 and 11 all of which are associated with an iron formation. No further work is suggested on this section.

Zone 10

Conigo Mines Ltd., has worked on this portion of the iron formation and magnetite, pyrrhotite and pyrite have been found in trenches. These sulphides are obviously the cause of the conductivity. The conductive zone does not correspond to the peak of the high magnetic anomaly suggesting that the conductor is caused by sulphides on the flank of the iron formation.

Zone 11

This is a further extension of the iron formation. Possibly intercepts 138A and B should be included in ground work.

Zone 12

This conductor is apparently associated with an iron formation and on strike with Zones 8 and 13. The anomalies are somewhat distorted due to the proximity of the strong hydro line. Ground work on a low priority is recommended.

Zone 13

Similar to Zone 12, this conductor is associated with the iron formation. Ground work is recommended to cover anomalies 165A and 166A which are strong, good conductivity-thickness anomalies.

Zone 14

This conductive zone is an extension of Zone 11 and ground work should be carried out to include anomaly 164A.

Zone 15

Vertical diamond drill holes have intersected magnetite, pyrrhotite and pyrite in the vicinity of this conductor but apparently no work has been done on intercepts 140A and 141B which are moderate conductivity-thickness anomalies. Ground work is therefore suggested to cover these intercepts. Massive and porphyritic dacite have been mapped in the area.

The weak intermittent zone within the confines of Muskasenda Lake are poor conductivity-thickness anomalies reflecting lake bottom conductivity.

AREA 3.

Zone 1 Same as Zone 1; Area 2.

Zone 2 Same as Zone 6; Area 2.

Zone 3 Same as Zone 7; Area 2.

Zone 4 Same as Zone 9; Area 2.

Zone 5

This is the same as Zone 8; Area 2, however, more anomalies have been intersected and it would appear that there are two conductors present striking east-west. The anomalies are well defined in this direction because there is poor coupling with the hydro line.

Zone 6

This zone may be connected to Zone 5 but the hydro line has masked any possible anomalies which may exist between the two zones. The anomalies are distorted but they are definate bedrock responses. Similar to Zone 5, it has to be regarded highly in a ground program.

Zone 7 Same as Zone 14; Area 2.

Zone 8 Same as Zone 15; Area 2.

Zone 9

The shape of this single intercept is severely distorted from the hydro influence but it appears to have a genuine bedrock source. Similar to Zones 5 and 6, this conductor will be difficult to assess on the ground because of the proximity of the hydro line, however, an attempt should be made. Felsic metavolcanics and an iron formation has been mapped immediately to the east of the anomaly.

Zone 10

The conductor has to be regarded as a high priority target because it is isolated, has good conductivity-thickness values and it is in a good geologic environment, ie., intermediate to felsic volcanics. Apparently no previous work has been done on the conductor.

Zone 11

Some work has been done in the past by Phelps Dodge in this area but the diamond drill holes do not plot on the same location as the E.M. anomalies. For this reason, a further investigation is required. Moderate conductivity-thickness values have been calculated for the anomalies and there is some magnetic association with the intercepts.

Intermediate metavolcanics have been mapped in the area.

Zone 12

Diamond drilling by Hollinger on the western portion of this zone revealed pyrite and graphite; however, there is no indication that the eastern part, which appears to be discontinuous with the western part has been investigated. As a result, an investigation is warranted. The zone appears to be made up of at least two parallel conductors of varying strength. Intermediate to felsic metavolcanics have been mapped in the vicinity.

Zone 13

The conductivity-thickness product is consistent along the strike of this curved conductor lying within the intermediate and felsic metavolcanics. Considerable diamond drilling by Hollinger has intersected pyrite, graphite and some chalcopyrite and it would appear that sufficient work has been done to adequately explain the conductor.

Zone 14

This conductor which is lying near the contact of the massive andesite and rhyolitic flows exhibits excellent conductivity-thickness values. Since the conductor is isolated and is similar to those that result from massive sulphides, it has to be regarded as an excellent target.

Zones 15 and 16

These two zones are probably connected but the hydro line has masked out any possible bedrock conductor indications between the two zones. The conductor is caused by sulphides within the peridotite rather than the serpentinized peridotite

itself.

Diamond drilling has been done on the western portion and some pyrite has been intersected but apparently no work has been done on the eastern and longer portion (Zone 16).

The double anomaly response on some of the south lines indicates a dip to the north rather than two separate conductors. Ground work on a medium priority basis is suggested on Zone 16.

Zone 17

Apparently no previous work has been done on this conductive zone which parallels Zone 16 and which lies within the intermediate metavolcanics. Ground work is recommended.

Zone 18

Minor sulphides near the contact of the felsic and intermediate metavolcanics are possibly the cause of the conductor. There is some magnetic association with the conductor.

Zone 19

These anomalies are weak poor conductivity-thickness value responses, however, they appear to indicate a bedrock conductor. Possibly minor sulphides along a fault zone are the source. Ground work on a low priority is suggested.

Zone 20 Same as Zone 5; Area 2.

Zone 21

This single intercept conductor is weak and exhibits a poor conductivity-thickness value. A low priority is given to the conductor.

Zone 22

Apparently no previous work has been done on this conductor which lies within the intermediate metavolcanics but close to the contact with the serpentinized peridotite. A good conductivity-thickness value has been calculated for intercept 204H. Ground work is definately warranted.

Zone 23 Discussed under Zone 3; Area 2.

Zone 24

The poor conductivity anomalies in this zone are probably caused by serpentinized peridotite, or minor sulphides within the peridotite. Diamond drilling in the area has revealed nickel mineralization. No further work is recommended.

Zone 25

Amax has apparently drilled this conductor and intersected pyrite and pyrrhotite within the felsic volcanics. The conductivity-thickness values which have been approximated for the anomalies are representative of a sulphide zone, but since the conductor has apparently been explained, no further work is suggested.

Zone 26

Mineralization has been noted in trenches in the vicinity of this weak INPUT conductor, but from the responses it is apparent that this zone is quite small and the mineralization is disseminated. The conductor lies in complex geology of intermediate and felsic metavolcanics and serpentinized ultrabasic rocks.

Zones 27 and 28

The anomaly intercepts of these two zones exhibit poor to moderate conductivity-width values with some erratic magnetic correlation. Pyrite has been trenched in the vicinity of conductor 28, however, Zone 27 does not appear to have been investigated. Intermediate and felsic metavolcanics have been mapped in the area.

Zone 29

Intercept 216C is a reasonably strong fair conductivity-thickness value anomaly with no magnetic correlation; whereas the adjacent anomalies are of a poorer quality. Ground work is recommended.

Zones 30 and 31

These two zones are probably the same conductor, but the hydro line has obliterated any intercepts between the two. Amax Exploration has drilled some holes and has obviously explained the conductor. Pyrite, pyrrhotite with some copper mineralization has been encountered. The anomalies are strong and are representative of massive sulphides. No further work is recommended.

Zone 32

Graphite may be the cause of this strong multiple conducting zone within the sediments. However, a horizontal loop E.M. survey is suggested to further define and evaluate the zone for massive sulphide possibilities.

Zone 33

Ground work is recommended on a medium priority basis on this arcuate conductor.

Zones 34 and 35

These moderate conductivity-thickness anomalies which are associated with high magnetics are probably caused by serpentinized peridotite which has been mapped in the area.

Zones 36 and 37

Ground work is recommended on a medium priority basis on these two zones.

Zone 38

This large mass of anomalies lies within the acid metavolcanics and graphitic schists and slates containing massive pyrite and pyrrhotite is the obvious explanation of the conduction. It is recommended that the higher conductivity-width anomalies be investigated.

Zones 39 and 40

These two zones are in a similar environment to Zone 38 and graphite and massive sulphides are probably the cause. Zone 39 should be investigated.

Zone 41

This zone is a marginal bedrock conductor but it should be considered in a ground program. Minor sulphides beneath the overburden could be the cause.

Zone 42

Voyager Exploration has encountered disseminated to massive pyrite and pyrrhotite in a bed of cherty rhyolite breccia which also contains copper. The anomalies are not strong but are obviously bedrock and the coincident magnetic

anomalies are probably due to pyrrhotite. Since the conductor has been explained, no further work is recommended.

Zone 43

The conductivity-width values vary from poor to good along the strike of this long conductor. Portions of this horizon have been investigated and copper and silver have been encountered; however, pyrite and pyrrhotite would appear to be the main constituents of the conductor. Possibly the west end of the conductor should be investigated where it appears that no previous work has been done.

Zone 44

There is no evidence that any previous work has been done on this strong multiple conducting zone within the felsic volcanics. The anomalies are strong and similar to those that result from massive sulphides. Ground work is definately warranted on the entire zone.

Zone 45

This zone should be regarded as a high priority target. Good conductivity-thickness values have been calculated for the responses and are similar to what would be expected from massive sulphides. Chalcopyrite has been encountered directly to the south in association with Zone 43, therefore, if this zone has not been tested, it is a good target.

Zone 46

Since this zone is not part of a long conductor, exhibits good conductivity and has some magnetic association, it is a good sulphide target. Pyrrhotite and pyrite have been noted in the felsic metavolcanics nearby.

Zones 47 and 48

Apparently diamond drilling has explained these moderately strong conductors. Pyrite and graphite have been observed in the drill core.

Zone 49

Pyrite and graphite have been encountered in a diamond drill hole on this conductor. Therefore, no further work is recommended.

Zone 50

Sulphides could be the cause of this bedrock conductor with some flanking magnetic correlation. Ground work is recommended.

Zone 51

No further work is suggested on this zone because it has obviously been explained. Pyrite and graphite have been encountered in the diamond drill holes.

Zone 52

This good conductivity-thickness response does not appear to have been explained in previous work. Ground work is warranted.

Zone 53

Ground work is suggested on a medium to low priority basis on this double conductor zone. Interbedded mafic, intermediate and felsic metavolcanics have been mapped in the vicinity.

Zone 54

A horizontal loop survey is suggested on this multiple conducting zone within the rhyolite. Massive sulphides are expected to be the cause.

D. Watson

Qualifications 63.2836

APPENDIX

EQUIPMENT

The aircraft are equipped with Mark VI INPUT (R) airborne E.M. systems and Barringer AM-104 or AM-101A proton precession magnetometers. Radar altimeters are used for vertical control. The outputs of these instruments together with fiducial timing marks are recorded by means of galvanometer type recorders using light sensitive paper. Thirty-five millimeter continuous strip cameras are used to record the actual flight path.

(I) BARRINGER/QUESTOR MARK VI INPUT (R) SYSTEM

The Induced Pulse Transient (INPUT) system is particularly well suited to the problems of overburden penetration. Currents are induced into the ground by means of a pulsed primary electromagnetic field which is generated in a transmitting loop around the aircraft. By using half sine wave current pulses and a loop of large turns-area, the high output power needed for deep penetration is achieved.

The induced current in a conductor produces a secondary electromagnetic field which is detected and measured after the termination of each primary pulse. Detection is accomplished by means of a receiving coil towed behind the aircraft on four hundred feet of cable,

and the received signal is processed and recorded by equipment in the aircraft. Since the measurements are in the time domain rather than the frequency domain common to continuous wave systems, interference effects of the primary transmitted field are eliminated. The secondary field is in the form of a decaying voltage transient originating in time at the termination of the transmitted pulse. The amplitude of the transient is, of course, proportional to the amount of current induced into the conductor and, in turn, this current is proportional to the dimensions, the conductivity and the depth beneath the aircraft.

The rate of decay of the transient is inversely proportional to conductivity. By sampling the decay curve at six different time intervals, and recording the amplitude of each sample, an estimate of the relative conductivity can be obtained. By this means, it is possible to discriminate between the effects due to conductive near-surface materials such as swamps and lake bottom silts, and those due to genuine bedrock sources. The transients due to strong conductors such as sulphides exhibit long decay curves and are therefore commonly recorded on all six channels. Sheet-like surface materials, on the other hand, have short decay curves and will normally only show a response in the first two or three channels.

The samples, or gates, are positioned at 260, 480, 755, 1100, 1575 and 2100 micro-seconds after the cessation of the pulse. The widths of the gates are 225, 225, 320, 410, 500 and 540 micro-seconds respectively.

For homogeneous conditions, the transient decay will be exponential and the time constant of decay is equal to the time difference at two successive sampling points divided by the log ratio of the amplitudes at these points.

(II) BARRINGER AM-104 OR AM-101A PROTON PRECESSION MAGNETOMETER

The magnetometers which measure the total magnetic field have a sensitivity of 5 gammas and a range from 20,000 gammas to 100,000 gammas.

Because of the high intensity field produced by the INPUT transmitter, the magnetometer results are recorded on a time-sharing basis. The magnetometer head is energized while the transmitter is on, but the read-out is obtained during a short period when the transmitter is off. Using this technique, the head is energized for 1.15 seconds and then the transmitter is switched off for 0.15 seconds while the precession frequency is being recorded and converted to gammas. Thus a magnetic reading is taken every 1.3 seconds.

DATA PRESENTATION

The symbols used to designate the anomalies are shown in the legend on each map sheet, and the anomalies on each line are lettered in alphabetical order in the direction of flight. Their locations are plotted with reference to the fiducial numbers on the analog record.

A sample record is included to indicate the method used for correcting the position of the E.M. Bird and to identify the parameters that are recorded.

All the anomaly locations, magnetic correlations, conductivity-thickness values and the amplitudes of channel number 2 are listed on the data sheets accompanying the final maps.

GENERAL INTERPRETATION

The INPUT system will respond to conductive overburden and near-surface horizontal conducting layers in addition to bedrock conductors. Differentiation is based on the rate of transient decay, magnetic correlation and the anomaly shape together with the conductor pattern and topography.

Power lines sometimes produce spurious anomalies but these can be identified by reference to the monitor channel.

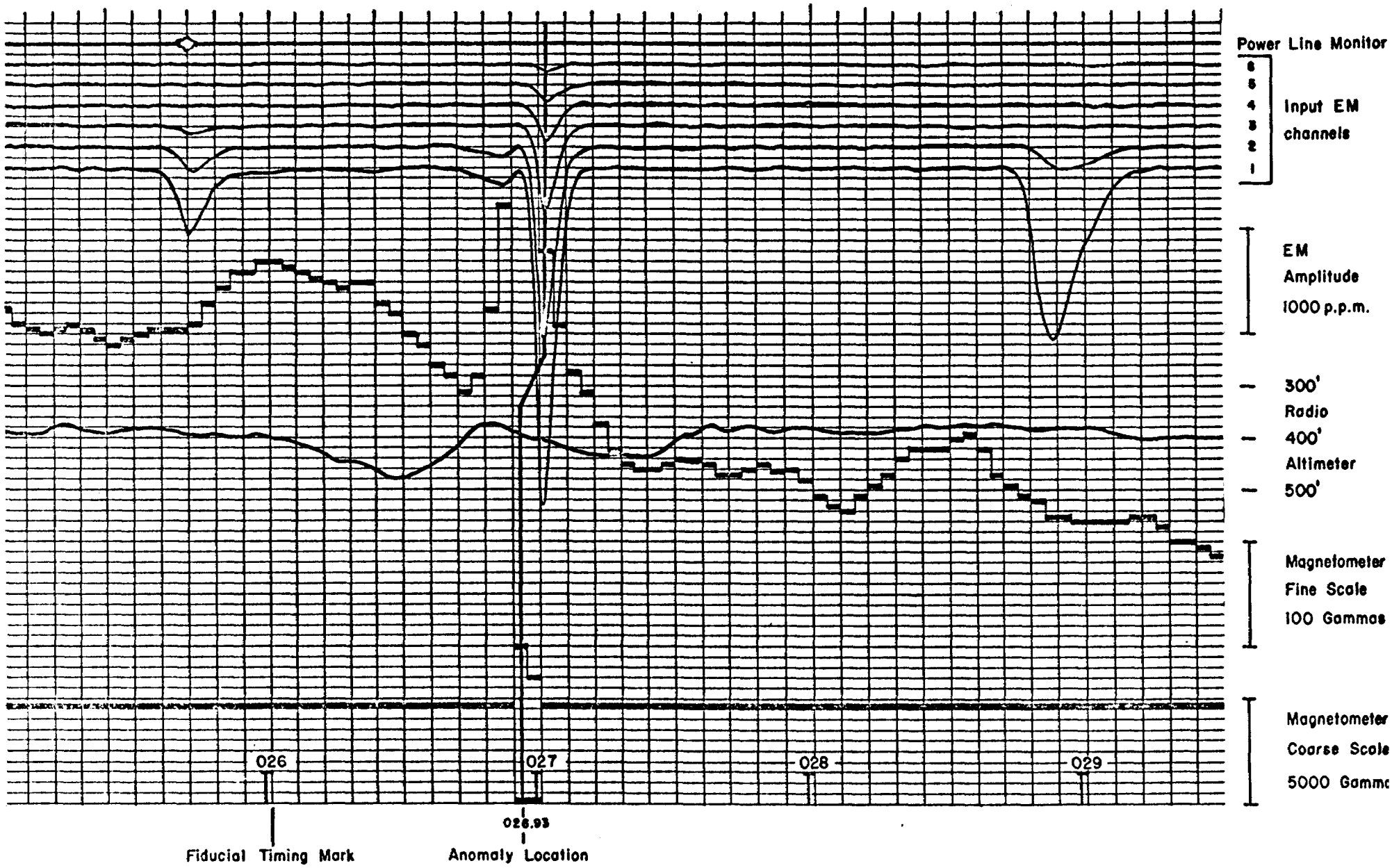
Railroad and pipeline responses are recognized by studying the film strips.

Graphite or carbonaceous material exhibits a wide range of conductivity. When long conductors without magnetic correlation are located on or parallel to known faults or photographic linears, graphite is most likely the cause.

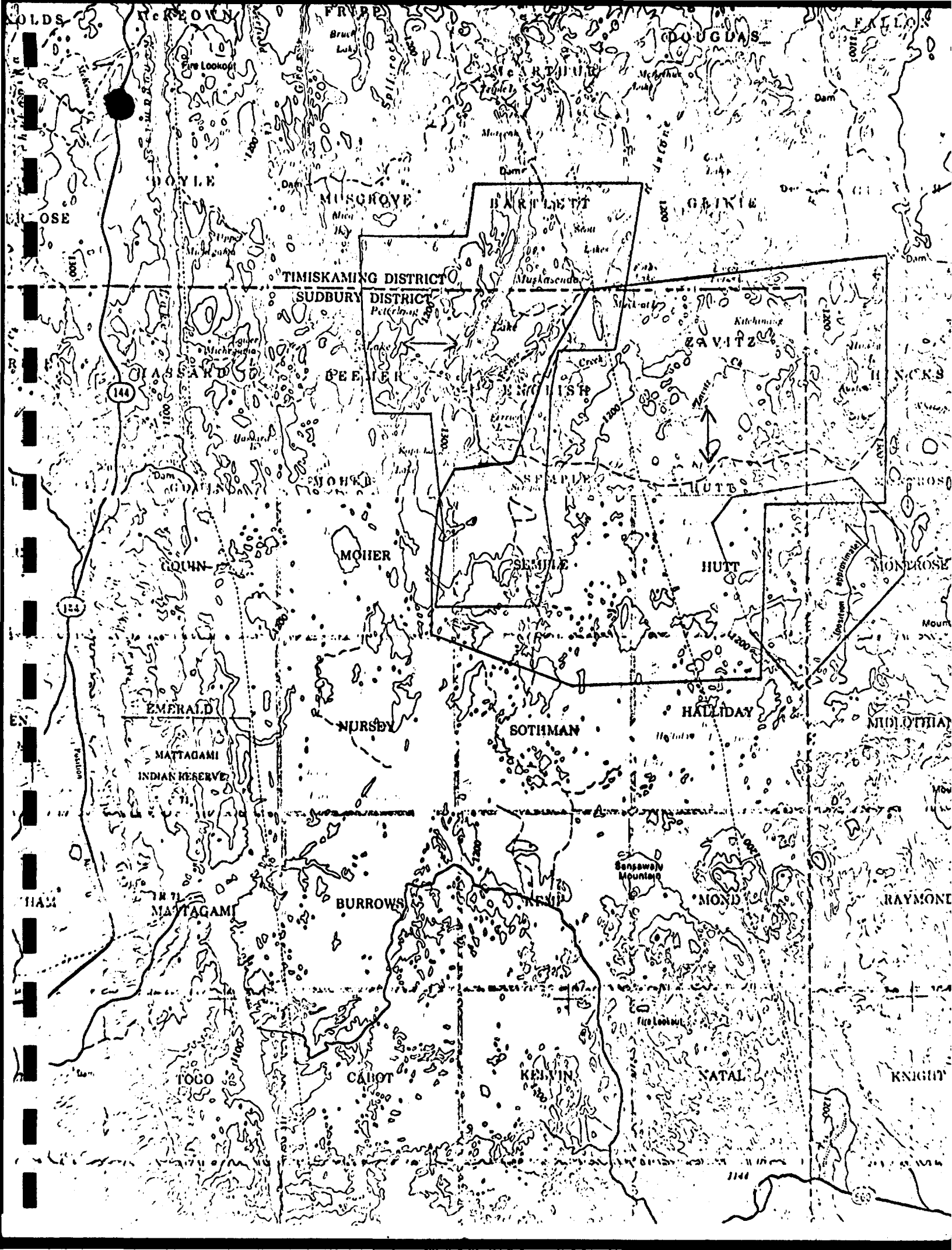
Contact zones can often be predicted when anomaly trends coincide with the lines of maximum gradient along a flanking magnetic anomaly. It is unfortunate that graphite can also occur as relatively short conductors and produce attractive looking anomalies. With no other information than the airborne results, these must be examined on the ground.

Serpentinized peridotites often produce anomalies with a character that is fairly easy to recognize. The conductivity which is probably caused in part by magnetite, is fairly low so that the anomalies often have a fairly large response on channel #1; they decay rapidly, and they have strong magnetic correlation. INPUT E.M. anomalies over massive magnetites show a relationship to the total Fe content. Below 25 - 30%, very little or no response at all is obtained, but as the percentage increases the anomalies become quite strong with a characteristic rate of decay which is usually greater than that produced by massive sulphides.

Commercial sulphide ore bodies are rare, and those that respond to airborne survey methods usually have medium to high conductivity. Limited lateral dimensions are to be expected and many have magnetic correlation caused by magnetite or pyrrhotite. Provided that the ore bodies do not occur within formational conductive zones as mentioned above, the anomalies caused by them will usually be recognized on an E.M. map as priority targets.



Representative INPUT, Magnetometer and Altimeter Recording


DOUGLAS
DOYLE
MUSGROVE
BARRETT
GAKIE
TIMISKAMING DISTRICT
SUDBURY DISTRICT
ZAVITZ
HASSARD
BEEMER
MOHR
MOIER
HUTT
EMERALD
NURSEY
SOTHMAN
HALLIDAY
MATTAGAMI
INDIAN RESERVE
BURROWS
MATTAGAMI
TOCO
CAIOT
KELVIN
NATAL
Sensaweta Mountain
144
124

This Airborne (Electromagnetic) Survey covers the following work:

Ground

Geophysical

63·266
63·1176
63·1202
63·1638
63·1649
63·1650
63·1766
63·1847
63·1848

2·163
2·261
2·927
2·933
2·937
2·938
2·939

Geological

63A·114
63A·349
63A·351

Geophysical + Geological

63·367
63·1187
63·1255

LD

File 2.1514

GEOPHYSICAL – GEOLOGICAL – GEOCHEMICAL TECHNICAL DATA STATEMENT

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 Airborne Electromagnetic

Township or Area English Twp. Area

Claim holder(s) SEE ATTACHED LIST

Author of Report D. Watson

Address 20 Canso Road, Rexdale, Ontario

Covering Dates of Survey _____ (linecutting to office)

Total Miles of Line cut _____

SPECIAL PROVISIONS CREDITS REQUESTED		DAYS per claim
ENTER 40 days (includes line cutting) for first survey.	Geophysical	
	–Electromagnetic	
	–Magnetometer	
	–Radiometric	
ENTER 20 days for each additional survey using same grid.	–Other	
	Geological	
	Geochemical	

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

Magnetometer _____ Electromagnetic 40 Radiometric _____ (enter days per claim)

DATE: July 4, 1974 SIGNATURE: George W Watson
Author of Report (Agent)

PROJECTS SECTION

Res. Geol. _____ Qualifications ?

Previous Surveys _____

Checked by _____ date _____

GEOLOGICAL BRANCH

Approved by _____ date _____

GEOLOGICAL BRANCH

Approved by _____ date _____

MINING CLAIMS TRAVERSED
List numerically

(prefix) (number)

SEE ATTACHED LIST

TOTAL CLAIMS _____

If space insufficient, attach list

CLAIM HOLDERS LIST

Simon Ouellet
Roger Laramee
Adrien Cote
Luc Proulx
Irenee Cyr
Pierre Proulx
Georges Lacoursieres
Roland Sevigny
Roland LeBlanc
Jos Mowatt
Edouard Morrissette
Fernand Dicaire

AIRBORNE SURVEYS

Type of survey(s) Airborne Electromagnetic

Instrument(s) Induced Pulse Transient System.

Accuracy

Aircraft used Shorts Skyvan

Sensor altitude 150 feet above ground.

Navigation and flight path recovery method Radar altimeters, Fiducial Timing by galvanometer type recorders and 35 mm continuous strip cameras.

Aircraft altitude 400 feet Line spacing 1/8 mile.

Miles flown over total area 2195 Over claims only 234.5

1/

Granges Exploration A.B.

Mining Claims Transferred listed numerically.

Township legend:

English	E	Hutt	Hu	Bartlett	B.
Semple	Se	Hincks	Hi	Geikie	G.
Zavitz	Z	Montrose	M	Halliday	Ha
		Sothman	So		

(P)360120	B	L387055	Se	L387081	Z	L387107	M
P360121	B	L387056	Se	L387082	Z	L387108	M
P360122	B	L387057	Se	L387083	Z	L387109	M
P360123	B	L387058	Se	L387084	Z	L387110	M
P360124	B	L387059	Se	L387085	Z	L387111	M
P360125	B+G	L387060	Z	L387086	Z	L387112	M
P360126	B+G	L387061	Z	L387087	M	L387113	M
P360127	B	L387062	Z	L387088	M	L387114	M
P360128	B	L387063	Z	L387089	M	L387115	M
P360129	B	L387064	Z	L387090	M	L387116	M
P360130	B	L387065	Z	L387091	M	L387117	M
(L)360165	M	L387066	Se	L387092	M	L387118	Z
L360166	M	L387067	Se	L387093	M	L387119	Z
L360167	M	L387068	Se	L387094	M	L387120	Z
L360168	M	L387069	Se	L387095	M	L387121	Z
L360169	M	L387070	Se	L387096	M	L387122	Z
L374680	Hu	L387071	Se	L387097	M	L387123	Z
L374681	Hu	L387072	Se	L387098	M	L387124	M
L387047	Se	L387073	Ha	L387099	M	L387125	M
L387048	Se	L387074	Hu	L387100	M	L387126	M
L387049	Se	L387075	Hu	L387101	M	L387127	M
L387050	Se	L387076	Hu	L387102	M	L387128	M
L387051	Se	L387077	Hu	L387103	M	L387129	M
L387052	Se	L387078	Ha	L387104	M	L387130	M
L387053	Se	L387079	Z	L387105	M	L387131	M
L387054	Se	L387080	Z	L387106	M	L387132	M

L 387133	M	P 387170	B	(P) 387207	B	L 387244	E
L 387134	M	P 387171	B	P 387208	B	L 387245	E
L 387135	M	P 387172	B	P 387209	B	L 387246	E
L 387136	M	P 387173	B	P 387210	B	L 387247	Hu
L 387137	M	P 387174	B	P 387211	B	L 387248	Hu
L 387138	M	P 387175	B	P 387212	B	L 387249	Hu
L 387139	M	P 387176	B	P 387213	B	L 387250	Hu
L 387140	M	P 387177	B	P 387214	B	L 387251	Hu
L 387141	M	P 387178	B	P 387215	B	L 387252	Hu
L 387142	M	P 387179	B	P 387216	B	L 387253	Hu
L 387143	M	P 387180	B	P 387217	B	L 387254	Hu
L 387144	M	P 387181	B	P 387218	B	L 387255	Hu
L 387145	M	P 387182	B	P 387219	B	L 387256	Hu
L 387146	M	P 387183	B	(L) 387220	E	L 387257	Hu
L 387147	M	(L) 387184	E	L 387221	E	L 387258	Hu
L 387148	M	L 387185	E	L 387222	E	L 387259	Hu
L 387149	M	L 387186	E	L 387223	E	L 387260	Hu
L 387150	M	L 387187	E	L 387224	E	L 387261	Hu
L 387151	M	L 387188	E	L 387225	E	L 387262	Hu
L 387152	M	L 387189	E	L 387226	E	L 387263	Hu
L 387153	M	L 387190	E	L 387227	E	L 387264	Hu
L 387154	M	L 387191	E	L 387228	E	L 387265	Hu
L 387155	M	L 387192	E	L 387229	E	L 387266	Hu
L 387156	M	L 387193	E	L 387230	E	L 387267	Hu
L 387157	M	L 387194	E	(P) 387231	B	L 387268	Hu
L 387158	M	L 387195	E	P 387232	B	L 387269	Hu
L 387159	M	L 387196	E	P 387233	B	L 387270	Hu
L 387160	M	L 387197	E	P 387234	B	L 387271	Hu
L 387161	M	L 387198	E	P 387235	B	L 387272	Hu
L 387162	Hi	L 387199	E	(L) 387236	E	L 387273	Hu
L 387163	Hi	L 387200	E	L 387237	E	L 387274	Hu
L 387164	Hi	L 387201	E	L 387238	E	L 387275	Hu
L 387165	Hi	L 387202	E	L 387239	E	L 387276	Hu
L 387166	Hi	L 387203	E	L 387240	E	L 387277	Hu
L 387167	E	L 387204	E	L 387241	E	L 387278	Hu
(P) 387168	B	L 387205	E	L 387242	E	L 387279	Hu
P 387169	B	L 387206	E	L 387243	E	L 387280	Hu

L 387281	Hu	L 387318	Hi	L 387355	Hu Se	L 387391	Hu
L 387282	Hu	L 387319	Hi	L 387356	Hu	L 387392	Hu
L 387283	Hu	L 387320	Hi	L 387357	Hu	L 387393	Hu
L 387284	Hu	L 387321	Hi	L 387358	Hu	L 387394	E
L 387285	Hi	L 387322	Hi	L 387359	Hu	L 387395	E
L 387286	Hi	L 387323	Hi	L 387360	Hu	L 387396	E
L 387287	Hi	L 387324	Hi	L 387361	Hu	L 387397	E
L 387288	Hi	L 387325	Hi	L 387362	Hu	L 387398	E
L 387289	Hi	L 387326	Hi	L 387363	Hu	L 387399	E
L 387290	Hi	L 387327	Se	L 387364	Hu	L 387400	E
L 387291	Hi	L 387328	Se	L 387365	Hu	L 387401	E
L 387292	Hi	L 387329	Se	L 387366	Hu	L 387402	E
L 387293	Hi	L 387330	Se	L 387367	Hu	L 387403	E
L 387294	Hi	L 387331	Se	L 387368	Hu	L 387404	E
L 387295	Hi	L 387332	Se	L 387369	Hu	L 387405	E
L 387296	Hi	L 387333	Se	L 387370	Hu	L 387406	E
L 387297	Hi	L 387334	Se	L 387371	Hu	(P) 387456	E
L 387298	Hi	L 387335	Hu Se	L 387372	Hu	P 387457	E
L 387299	Hi	L 387336	Hu	L 387373	Se	P 387458	E
L 387300	Hi	L 387337	Hu	L 387374	Se	P 387459	E
L 387301	Hi	L 387338	Hu	L 387375	Se	P 387460	E
L 387302	Hi	L 387339	Hu	L 387376	Se	(L) 387461	E
L 387303	Hi	L 387340	Hu	L 387377	Se	L 387462	E
L 387304	Hi	L 387341	Hu	L 387378	Se	L 387463	E
L 387305	Hi	L 387342	Hu	L 367379	Se	L 387464	E
L 387306	Hi	L 387343	Hu	~~L 387379~~	Se	L 387465	E
L 387307	Hi	L 387344	Hu Se	L 387380	Se	L 387466	E
L 387308	Hi	L 387345	Hu Se	L 387381	Se	L 387467	E
L 387309	Hi	L 387346	Hu	L 387382	Se	L 387468	E
L 387310	Hi	L 387347	Hu	L 387383	E	L 387469	E
L 387311	Hi	L 387348	Hu	L 387384	E	L 387470	E
L 387312	Hi	L 387349	Hu	L 387385	E	L 387471	E
L 387313	Hi	L 387350	Hu	L 387386	E	L 387472	E
L 387314	Hi	L 387351	Hu	L 387387	E	L 387473	E
L 387315	Hi	L 387352	Hu	L 387388	Hu	L 387474	E
L 387316	Hi	L 387353	Hu	L 387389	Hu	L 387475	E
L 387317	Hi	L 387354	Hu Se	L 387390	Hu	L 387476	E

L 387477	E	L 387514	E	
L 387478	E	L 388784	H:	→ 388783
L 387479	E	L 388785	H:	
L 387480	E	L 388786	H:	
L 387481	E	L 388787	H:	
L 387482	E	L 388788	Se	
L 387483	E	L 388789	So	
L 387484	E	L 388790	So	
L 387485	E	L 388791	Se	
L 387486	E	L 388792	Se	
L 387487	E	L 388793	So	
L 387488	E	L 388794	So	
L 387489	E	L 388795	So	
L 387490	E	L 388796	So	
L 387491	E	L 388797	So	
L 387492	E	L 388798	So	
L 387493	E	L 388799	So.	
L 387494	E			
L 387495	E			
L 387496	E			
L 387497	E			
L 387498	E			
L 387499	E			
L 387500	E			
L 387501	E			
L 387502	E			
L 387503	E			
L 387504	E			
L 387505	E			
L 387506	E			
L 387507	E			
L 387508	E			
L 387509	E			
L 387510	E			
L 387511	E			
L 387512	E			
L 387513	E			

454 claims

* Claims underlined in red (5) not covered in this survey.

ANOM	FID	CHS	CH2•AMP	MHOS	MAG	VALUE
001A	898.45	3	6	2	0.00	0
001B	898.57	3	5	1	0.00	0
001C	898.80	3	5	2	0.00	0
001D	898.90	4	8	2	0.00	0
001E	899.23	4	9	2	0.00	0
001F	899.53	3	3	1	0.00	0
001G	899.87	3	4	2	0.00	0
001H	900.40	4	8	4	900.40	10
002A	910.29	3	2	2	910.25	10
002B	910.52	4	9	2	910.45	10
002C	911.03	2	1	NC	0.00	0
002D	911.28	4	4	9	0.00	0
002E	911.98	3	6	3	911.80	20
003A	891.12	3	3	7	0.00	0
004A	925.34	2	1	NC	0.00	0
005A	947.03	3	5	2	947.05	10
006A	901.03	5	12	9	0.00	0
006B	901.50	3	3	1	0.00	0
013A	15.39	2	1	NC	0.00	0
017A	42.92	2	1	NC	0.00	0
020A	24.23	4	5	3	24.30	25
021A	79.16	2	2	NC	78.95	25
021B	79.34	3	4	1	0.00	0
022A	41.52	4	11	3	0.00	0
023A	98.24	3	3	4	0.00	0
023B	98.36	2	3	NC	0.00	0
024A	54.33	3	4	3	0.00	0
024B	58.70	4	6	5	0.00	0
024C	58.77	4	6	2	58.80	10
025A	121.80	4	7	5	0.00	0
025B	121.50	3	4	2	0.00	0
025C	125.27	6	18	14	0.00	0
026A	71.90	6	38	19	0.00	0
026B	76.23	4	5	6	0.00	0
026C	76.36	4	9	7	0.00	0
027A	143.19	4	9	3	143.10	10
027B	143.39	4	7	2	0.00	0
027C	147.40	6	26	11	0.00	0
027D	147.60	5	8	12	0.00	0
028A	88.70	6	39	20	0.00	0
028B	93.05	5	15	7	93.05	10
029A	159.05	4	10	3	0.00	0
029B	159.30	4	9	3	159.25	15
029C	163.25	5	20	6	0.00	0
029D	163.46	5	15	7	0.00	0
029E	163.82	4	6	6	0.00	0
030A	106.90	5	29	6	106.95	50
030B	107.43	6	44	15	107.50	15
030C	111.69	5	38	5	111.70	25
030D	111.79	5	40	5	0.00	0
030E	112.90	2	2	NC	113.10	60
031A	174.23	5	7	8	174.15	15
031B	174.40	6	56	6	0.00	0
031C	178.69	6	35	10	0.00	0
031D	178.82	6	23	11	0.00	0
031E	179.05	5	31	5	179.00	80
031F	179.20	4	12	4	0.00	0

ANOM	FID	CHS	CH2.AMP	MHOS	MAG	VALUE
032A	129.73	6	78	13	129.65	70
032B	134.48	4	3	5	134.50	45
033A	188.64	4	7	2	188.70	130
033B	188.88	5	10	10	0.00	0
033C	189.46	4	10	2	189.30	30
033D	189.93	2	1	NC	189.85	15
033E	194.58	6	42	9	194.65	100
033F	194.70	6	28	9	0.00	0
034A	150.77	6	86	8	150.75	40
034B	151.12	5	13	5	0.00	0
034C	151.32	4	8	9	151.35	100
034D	151.43	6	15	10	0.00	0
034E	156.20	3	6	2	156.05	25
034F	156.50	3	7	1	0.00	0
035A	203.30	5	13	12	0.00	0
035B	203.52	5	14	8	0.00	0
035C	204.02	4	10	2	203.85	20
035D	208.94	5	39	6	208.85	50
035E	209.05	5	34	6	0.00	0
035F	209.50	5	21	8	0.00	0
035G	209.67	5	10	6	209.60	20
036A	166.40	6	17	15	166.50	20
036B	166.90	6	18	14	0.00	0
036C	171.58	3	7	2	171.50	200
036D	172.00	6	32	8	0.00	0
037A	217.47	4	11	3	217.60	30
037B	218.00	4	13	1	0.00	0
037C	218.27	4	9	3	218.40	380
037D	222.88	4	8	4	222.65	40
037E	223.09	5	24	8	223.00	25
037F	223.70	3	2	2	223.80	40
038A	182.21	3	5	1	182.15	30
038B	182.46	5	33	4	0.00	0
038C	182.56	6	38	6	0.00	0
038D	187.23	2	2	NC	0.00	0
038E	187.50	3	6	2	187.50	135
038F	188.00	5	17	4	0.00	0
039A	233.32	3	4	2	233.40	160
039B	233.50	4	4	4	0.00	0
039C	237.90	5	38	4	0.00	0
040A	197.63	4	13	3	197.50	30
040B	197.90	4	16	4	0.00	0
040C	202.75	3	5	1	202.60	60
040D	202.93	3	6	1	0.00	0
041A	211.50	4	34	2	0.00	0
041B	211.90	4	15	4	211.75	35
041C	216.60	4	16	4	216.65	180
042A	246.84	3	2	2	246.85	40
042B	247.15	4	6	3	247.05	200
042C	251.73	4	15	3	251.70	30
043A	225.73	5	10	10	0.00	0
043B	230.40	3	3	4	0.00	0
043C	230.62	5	20	6	230.70	520
043D	231.05	4	6	5	0.00	0
044A	259.70	4	6	6	0.00	0
044B	259.87	4	9	3	0.00	0
044C	260.03	3	4	1	260.05	1050
044D	260.17	3	3	1	0.00	0
044E	260.43	3	3	4	260.50	260

ANOM	FID	CHS	CH2•AMP	MHOS	MAG	VALUE
044F	260.62	2	2	NC	0.00	0
045A	245.28	3	4	2	0.00	0
045B	245.68	4	8	4	245.75	250
046A	258.40	3	8	2	258.45	250
046B	258.90	3	5	3	258.95	200
047A	271.19	3	3	3	271.05	210
047B	271.64	3	3	3	271.45	340
048A	269.80	4	6	2	269.70	270
048B	269.97	4	3	6	0.00	0
049A	279.35	6	55	12	279.20	240
049B	279.88	4	7	2	279.60	500
053A	837.60	3	7	2	0.00	0
053B	837.87	2	9	NC	837.90	3000
059A	861.16	3	2	7	0.00	0
068A	921.03	2	2	NC	921.05	80
068B	924.86	3	2	2	924.90	190
069A	984.20	6	16	12	984.20	300
069B	984.36	5	8	7	0.00	0
069C	988.23	4	7	4	988.30	25
070A	933.21	3	3	4	0.00	0
070B	933.50	2	1	NC	933.55	75
070C	937.88	6	29	12	0.00	0
070D	937.97	6	25	14	937.95	650
070E	938.20	6	13	12	0.00	0
071A	996.33	5	9	11	0.00	0
071B	996.47	5	5	11	996.55	1000
072A	945.90	3	4	2	0.00	0
072B	946.09	2	2	NC	946.10	40
072C	949.90	3	2	7	950.20	1500
072D	951.34	6	32	12	951.35	750
072E	951.44	6	23	18	0.00	0
073A	9.00	5	8	13	0.00	0
073B	9.28	2	1	NC	9.35	1500
074A	960.65	2	1	NC	960.65	70
074B	965.69	2	2	NC	965.55	240
075A	21.48	3	4	3	21.50	20
096A	100.73	4	7	7	0.00	0
096B	100.82	4	7	7	100.85	1100
097A	166.52	5	8	21	166.55	1000
098A	113.28	5	10	11	113.35	860
099A	181.95	4	8	9	182.00	560
100A	125.48	3	3	7	125.50	430
101A	199.20	2	2	NC	199.20	400
102A	137.32	3	3	4	137.45	500
103A	216.90	3	3	7	216.90	250
104A	152.98	6	14	14	153.05	300
105A	234.57	4	3	5	234.35	250
105B	234.65	4	6	10	234.65	120
106A	169.93	2	2	NC	169.95	330
107A	252.53	3	3	4	252.55	490
111A	288.90	4	4	9	288.90	460
112A	219.37	4	9	5	219.40	520
112B	219.43	5	12	13	0.00	0
113A	307.68	3	3	7	307.75	130
114A	237.04	2	1	NC	237.10	40
116A	254.84	3	8	3	254.90	1270
117A	354.66	4	7	7	354.65	800

ANOM	FID	CHS	CH2•AMP	MHOS	MAG	VALUE
118A	272.98	3	3	13	273.05	110
121A	399.62	4	4	9	399.65	1200
129A	495.87	5	8	6	495.70	3000
130A	407.29	5	9	12	0.00	0
130B	407.40	5	11	9	407.60	3500
131A	521.28	4	7	4	521.10	2370
131B	522.57	5	6	9	522.60	320
132A	431.26	4	6	6	0.00	0
132B	431.40	5	10	11	431.60	1000
133A	546.10	3	3	7	546.00	1100
133B	547.11	2	2	NC	547.30	90
133C	548.80	4	8	4	548.80	40
134A	451.42	2	2	NC	451.60	40
134B	454.50	2	2	NC	454.65	2000
135A	573.32	2	3	NC	573.20	20
136A	478.95	2	2	NC	478.90	340
136B	481.50	2	1	NC	481.60	230
137A	595.30	4	4	9	595.25	380
137B	598.02	5	8	7	598.05	30
138A	503.43	5	9	18	0.00	0
138B	503.52	5	7	14	503.50	260
139A	620.16	4	5	7	620.20	250
140A	525.44	4	6	9	525.25	140
140B	528.52	3	4	7	528.55	300
141A	645.50	5	10	10	645.55	360
141B	648.30	4	4	9	648.50	400
142A	552.89	3	4	2	0.00	0
142B	552.99	3	4	3	553.00	400
142C	555.32	2	2	NC	555.45	100
143A	670.85	2	2	NC	670.95	280
144A	576.07	4	15	4	0.00	0
144B	579.85	3	3	1	579.95	100
144C	586.49	2	2	NC	586.50	30
145A	691.90	2	2	NC	691.90	300
145B	693.20	3	8	2	0.00	0
146A	601.13	4	11	8	0.00	0
146B	602.62	6	14	10	602.60	390
147A	712.70	4	4	11	0.00	0
147B	712.80	5	12	9	712.85	220
147C	714.14	4	6	5	0.00	0
148A	625.33	4	7	5	625.20	1200
148B	626.88	3	4	7	626.85	70
148C	627.04	3	4	4	0.00	0
148D	629.20	2	2	NC	629.20	110
149A	731.40	2	2	NC	731.25	150
149B	733.03	2	2	NC	733.05	30
149C	734.60	4	4	18	734.90	1250
150A	651.10	3	6	4	650.80	1080
150B	654.96	2	2	NC	655.05	170
153A	765.48	2	2	NC	765.40	95
156A	722.00	2	1	NC	722.10	90
160A	772.53	3	5	5	772.45	130
161A	823.39	3	3	3	823.50	180
162A	791.89	4	19	5	791.80	180
163A	809.34	3	6	3	809.25	140
163B	810.90	3	4	3	0.00	0
163C	811.00	5	14	10	811.00	1170
163D	812.53	2	2	NC	0.00	0

ANOM	FID	CHS	CH2•AMP	MHOS	MAG	VALUE
164A	838.88	6	16	15	838.90	1150
164B	840.40	3	3	4	840.55	220
165A	826.78	6	21	14	826.75	500
165B	828.51	4	4	11	828.50	730
166A	843.50	6	32	12	843.50	850
166B	845.22	4	5	3	845.25	750
166C	845.32	4	7	5	0.00	0
166RA	856.49	3	4	7	856.55	560
166RB	858.09	5	17	9	858.10	1000
167A	316.07	2	1	NC	316.10	110
171A	362.40	3	2	7	362.45	380
172A	376.43	2	1	NC	376.45	180
173A	323.13	6	25	16	323.15	700
174A	394.63	6	24	12	0.00	0
174B	394.70	6	19	11	394.75	1700
175A	412.51	4	5	3	0.00	0
175B	413.00	5	10	6	413.05	1500
176A	336.63	6	21	12	336.65	70
177A	431.66	6	12	9	431.75	1200
177B	431.90	6	22	11	0.00	0
178A	347.76	5	9	11	347.95	100
178B	353.47	6	74	18	353.85	1400
179A	450.57	4	3	14	450.40	2500
179B	450.70	4	3	6	0.00	0
180A	364.70	5	5	10	0.00	0
180B	364.88	6	12	18	365.10	80
181A	475.53	6	24	10	475.25	90
182A	382.53	5	10	15	0.00	0
182B	382.69	6	18	11	0.00	0
182C	382.83	5	14	7	382.80	20
182D	383.26	3	3	4	383.30	80
183A	496.12	5	20	6	496.00	100
183B	496.43	6	18	11	496.30	90
184A	400.96	3	2	7	0.00	0
184B	401.23	4	5	3	401.25	200
184C	401.40	5	10	6	0.00	0
184D	401.54	5	9	7	0.00	0
185A	517.49	4	14	3	517.70	140
186A	419.60	2	5	NC	419.55	170
186B	419.73	3	6	1	0.00	0
187A	540.97	3	3	1	541.10	270
190A	456.60	3	10	1	456.65	1050
190B	457.60	2	4	NC	457.75	370
190C	465.70	2	2	NC	465.75	280
191A	590.70	4	4	9	0.00	0
191B	591.06	3	5	1	0.00	0
191C	591.50	6	67	5	0.00	0
192A	475.95	5	24	5	475.90	2000
192B	476.47	2	2	NC	0.00	0
192C	476.74	3	3	4	0.00	0
192D	476.88	4	4	8	0.00	0
192E	485.99	5	7	7	0.00	0
192F	486.16	5	10	11	486.20	1200
192G	486.24	5	11	9	0.00	0
192H	486.34	5	12	13	0.00	0
192J	486.64	4	3	6	486.65	50
193A	608.41	6	18	8	608.50	700
193B	608.77	4	5	3	608.75	50
193C	618.30	2	2	NC	618.20	170

ANOM	FID	CHS	CH2•AMP	MHOS	MAG	VALUE
194A	496•75	4	15	4	496•75	2500
194B	497•00	4	15	4	0•00	0
194C	498•55	2	2	NC	498•50	80
194D	508•25	3	3	4	0•00	0
194E	508•44	3	2	7	508•50	170
195A	648•04	2	2	NC	648•05	160
195B	649•33	5	53	5	0•00	0
196A	518•40	5	15	4	0•00	0
196B	519•80	2	3	NC	519•85	280
196C	530•69	3	2	7	530•70	150
196D	530•82	5	6	8	0•00	0
197A	667•29	4	3	14	667•50	470
197B	668•05	4	7	4	0•00	0
197C	668•14	5	9	6	668•10	900
197D	668•62	5	9	6	668•70	410
197E	668•72	6	12	12	0•00	0
197F	677•30	2	2	NC	677•20	1500
197G	677•80	2	2	NC	0•00	0
197H	679•83	2	5	NC	679•70	300
197J	680•87	3	2	7	680•95	130
197K	681•07	2	3	NC	0•00	0
198A	542•39	3	3	4	542•25	200
198B	543•06	3	3	1	542•95	460
198C	555•07	5	12	9	555•05	440
198D	555•24	6	12	12	555•25	100
199A	707•83	3	3	4	707•65	55
199B	713•39	5	10	11	713•40	800
200A	565•70	5	9	6	0•00	0
200B	566•16	5	11	6	566•10	410
200C	566•59	2	2	NC	0•00	0
200D	568•60	3	4	2	0•00	0
200E	568•93	3	13	2	568•85	2500
200F	569•63	2	2	NC	569•55	2000
201A	745•32	3	2	7	745•10	25
201B	746•10	3	11	1	746•10	3000
201C	746•49	3	8	1	0•00	0
201D	746•79	3	4	2	746•70	3000
201E	749•10	3	2	2	748•90	700
201F	749•38	4	8	4	0•00	0
201G	749•73	5	14	7	749•75	1000
202A	591•84	3	3	4	591•80	200
202B	592•44	5	12	9	592•40	1200
202C	592•90	4	9	3	592•85	160
202D	593•23	3	4	3	593•25	30
202E	594•40	3	3	4	594•20	40
202F	595•70	4	20	3	595•65	3500
203A	779•31	2	2	NC	0•00	0
203B	780•10	3	9	1	0•00	0
203C	780•50	3	3	7	780•35	4000
203D	781•78	3	4	7	0•00	0
203E	781•91	5	11	9	0•00	0
203F	783•50	3	4	7	0•00	0
203G	783•90	3	4	7	784•10	1800
204A	620•33	4	3	6	0•00	0
204B	620•70	3	4	2	620•65	900
204C	621•04	4	5	3	0•00	0
204D	622•47	4	10	3	622•30	130
204E	622•66	5	7	7	0•00	0
204F	624•14	4	8	2	624•10	2000

ANOM	FID	CHS	CH2.AMP	MHOS	MAG	VALUE
204G	624.93	4	4	9	0.00	0
204H	625.05	5	8	12	625.10	110
204J	625.58	3	3	4	625.55	520
205A	813.97	3	2	2	813.95	270
205B	816.51	3	4	7	0.00	0
205C	816.80	3	4	1	816.90	550
205D	818.50	4	6	5	818.70	200
206A	650.40	3	4	2	0.00	0
206B	650.64	3	2	7	0.00	0
206C	650.72	3	2	3	0.00	0
206D	650.96	4	7	2	0.00	0
206E	652.52	4	9	5	652.35	630
206F	656.80	3	6	3	656.70	150
206G	657.10	3	6	1	0.00	0
207A	838.33	4	4	4	838.35	290
207B	847.00	3	4	2	847.00	200
207C	847.10	3	3	1	0.00	0
207D	848.33	3	3	3	848.15	300
207E	852.70	2	2	NC	852.80	60
207F	852.90	3	3	4	0.00	0
207G	854.20	2	2	NC	0.00	0
207H	854.60	3	6	3	0.00	0
207J	855.18	3	3	1	0.00	0
208A	682.10	3	7	2	682.05	10
208B	682.60	4	6	5	0.00	0
208C	682.70	5	8	7	682.70	20
208D	682.94	3	2	7	0.00	0
208E	684.15	4	10	4	684.20	70
208F	689.43	3	3	1	0.00	0
208G	689.60	4	12	4	689.80	180
208H	697.64	5	9	11	697.70	310
208J	697.80	5	5	10	697.85	50
209A	884.01	2	2	NC	0.00	0
209B	886.78	2	2	NC	886.65	60
209C	886.90	2	2	NC	886.90	50
209D	889.47	2	2	NC	889.50	150
209E	889.65	3	2	2	889.85	450
209F	890.96	6	26	10	891.05	80
210A	715.02	5	18	8	715.20	60
210B	716.60	3	3	4	716.30	470
210C	721.92	3	9	1	722.30	260
211A	911.03	5	23	9	0.00	0
211B	911.16	5	12	8	911.35	500
211C	912.20	4	7	2	0.00	0
211D	912.45	6	16	12	912.50	70
211E	918.49	4	4	9	0.00	0
211F	921.80	2	1	NC	921.95	30
211G	924.50	2	3	NC	924.45	55
211H	924.67	2	2	NC	0.00	0
211J	928.82	3	10	2	928.80	40
212A	751.30	3	3	3	751.40	25
212B	755.16	3	3	4	755.30	90
212C	755.80	3	4	1	0.00	0
212D	760.70	6	15	13	0.00	0
213A	950.80	4	14	4	950.90	160
213B	955.24	3	2	3	0.00	0
213C	957.94	3	4	1	957.90	50
213D	958.18	3	3	4	0.00	0
213E	958.33	2	2	NC	0.00	0

ANOM	FID	CHS	CH2•AMP	MHOS	MAG	VALUE
213F	960.58	3	3	1	0.00	0
213G	960.72	3	3	1	0.00	0
213H	961.40	2	2	NC	961.50	200
214A	785.45	2	2	NC	785.60	15
214B	786.97	2	2	NC	786.65	800
214C	789.38	3	2	7	789.35	90
214D	792.60	3	2	2	792.70	20
214E	792.87	2	3	NC	0.00	0
214F	795.99	2	2	NC	795.85	1030
215A	994.50	2	2	NC	994.65	10
215B	995.29	5	16	7	0.00	0
215C	999.09	2	2	NC	999.05	1300
215D	999.20	2	2	NC	0.00	0
215E	0.73	3	10	2	0.00	0
215F	2.49	3	17	1	2.45	30
215G	2.73	5	17	9	0.00	0
216A	820.00	6	13	5	0.00	0
216B	820.15	4	23	3	820.30	45
216C	821.82	5	18	8	0.00	0
216D	826.30	3	2	7	0.00	0
216E	827.02	6	41	10	0.00	0
216F	827.90	2	1	NC	828.00	35
217A	32.30	2	2	NC	0.00	0
217B	33.28	6	38	10	33.50	50
217C	33.93	5	8	21	0.00	0
217D	34.09	6	16	16	34.30	160
217E	36.28	4	6	5	36.50	130
217F	38.79	4	8	4	0.00	0
217G	39.05	3	3	3	0.00	0
217H	40.58	4	29	3	40.55	40
217J	40.90	6	90	6	0.00	0
218A	855.73	6	71	9	0.00	0
218B	856.93	6	24	5	0.00	0
218C	856.13	4	15	3	856.10	55
218D	857.60	4	9	3	0.00	0
218E	860.00	3	4	7	0.00	0
218F	860.09	4	10	4	0.00	0
218G	862.21	5	7	7	862.00	530
218H	863.00	6	40	9	863.40	310
218J	864.00	3	4	1	0.00	0
218K	870.88	2	2	NC	871.05	120
219A	60.88	4	5	7	60.95	25
219B	61.24	4	4	4	61.35	100
219C	61.46	4	3	6	0.00	0
219D	61.57	4	4	8	0.00	0
219E	68.82	2	3	NC	68.60	350
219F	69.09	3	4	2	0.00	0
219G	69.92	5	10	10	0.00	0
219H	70.09	5	14	11	0.00	0
219J	77.26	6	24	11	0.00	0
219K	77.50	6	23	11	77.55	50
219L	77.60	6	21	10	0.00	0
219M	77.80	5	20	6	0.00	0
219N	77.98	6	17	12	0.00	0
220A	892.71	6	59	5	0.00	0
220B	893.11	6	41	20	893.05	80
220C	893.44	6	13	11	0.00	0
220D	894.06	2	1	NC	894.10	80
220E	897.13	3	7	2	897.15	40

ANOM	FID	CHS	CH2•AMP	MHOS	MAG	VALUE
220F	900.13	6	32	11	0.00	0
220G	900.27	4	9	3	0.00	0
220H	901.02	4	22	3	0.00	0
220J	907.90	2	1	NC	907.90	20
220K	909.10	2	1	NC	0.00	0
221A	96.90	3	2	2	0.00	0
221B	97.09	2	2	NC	0.00	0
221C	105.53	4	7	2	0.00	0
221D	105.73	4	7	2	0.00	0
221E	106.22	4	3	6	106.05	65
221F	106.40	5	9	6	0.00	0
221G	106.50	4	11	4	0.00	0
221H	106.67	6	19	10	0.00	0
221J	109.78	4	8	9	109.90	70
221K	113.69	3	3	4	113.70	210
221L	113.92	6	26	10	0.00	0
221M	114.13	6	63	18	0.00	0
221N	114.50	5	23	3	114.40	60
221P	114.63	6	26	10	0.00	0
222A	930.53	6	17	12	0.00	0
222B	930.70	6	43	9	0.00	0
222C	931.07	6	62	16	930.95	55
222D	931.39	5	14	8	931.60	520
222E	935.08	2	2	NC	935.15	30
222F	935.23	5	17	12	0.00	0
222G	937.80	3	2	2	937.85	50
222H	938.20	6	32	9	0.00	0
222J	938.70	3	2	2	938.65	20
222K	938.80	5	7	7	938.85	40
222L	939.12	4	7	7	0.00	0
223A	143.30	4	16	2	0.00	0
223B	143.63	4	9	2	143.70	20
223C	143.83	4	12	3	143.95	20
223D	150.38	3	8	2	150.35	1250
223E	150.60	4	10	3	0.00	0
223F	150.87	6	23	19	0.00	0
224A	967.07	6	83	12	0.00	0
224B	967.58	6	31	13	967.40	30
224C	968.03	4	19	2	968.00	2250
224D	971.70	2	2	NC	0.00	0
224E	972.80	2	1	NC	0.00	0
224F	974.33	5	30	3	974.25	130
224G	974.80	5	16	4	0.00	0
225A	178.22	2	4	NC	0.00	0
225B	180.13	5	12	8	180.25	450
225C	186.50	3	6	0	186.80	1320
225D	187.20	6	27	22	0.00	0
226A	3.87	6	26	10	3.95	30
226B	4.18	6	27	17	0.00	0
226C	4.48	6	32	18	0.00	0
226D	4.88	2	4	NC	4.95	720
227A	214.88	4	6	2	0.00	0
227B	215.08	4	11	3	215.05	10
227C	215.28	4	8	2	0.00	0
227D	218.53	2	1	NC	0.00	0
227E	223.32	4	11	4	223.40	60
227F	223.53	4	26	1	0.00	0
227G	223.80	6	36	27	0.00	0
227H	223.94	6	61	15	0.00	0

ANOM	FID	CHS	CH2.AMP	MHOS	MAG	VALUE
228A	41.73	5	16	7	41.80	40
228B	42.05	6	12	8	0.00	0
228C	42.38	6	94	15	0.00	0
228D	42.60	6	33	15	0.00	0
228E	42.79	6	24	10	0.00	0
228F	43.00	6	30	6	0.00	0
228G	43.39	4	11	3	0.00	0
228H	47.80	2	2	NC	0.00	0
228J	50.84	5	14	8	0.00	0
228K	51.00	5	25	8	0.00	0
229A	251.03	5	30	4	250.95	20
229B	251.18	4	12	2	0.00	0
229C	252.14	3	4	2	252.05	30
229D	252.48	5	6	9	0.00	0
229E	252.63	6	20	10	252.80	530
229F	259.06	4	8	4	0.00	0
229G	259.28	5	12	8	259.20	20
229H	259.48	5	12	9	259.50	10
229J	259.80	4	9	3	0.00	0
230A	79.09	3	8	1	79.05	25
230B	79.40	5	19	6	0.00	0
230C	85.83	6	34	7	85.75	500
230D	87.33	5	25	8	0.00	0
231A	286.40	6	18	11	0.00	0
231B	286.48	6	20	12	286.55	50
231C	286.80	3	4	7	0.00	0
231D	287.98	3	3	3	0.00	0
231E	288.27	5	11	5	288.40	600
231F	293.57	2	3	NC	0.00	0
231G	293.82	3	4	2	0.00	0
231H	294.87	3	8	2	294.95	50
231J	295.08	4	10	5	0.00	0
232A	115.98	4	35	2	116.15	35
232B	117.29	5	20	8	0.00	0
232C	120.69	4	9	3	0.00	0
232D	122.53	6	30	13	122.35	750
232E	123.98	4	4	4	0.00	0
232F	124.11	5	12	9	0.00	0
232G	124.22	6	12	13	124.25	30
233A	322.60	3	3	1	0.00	0
233B	323.58	4	6	5	323.35	90
233C	323.70	4	5	7	0.00	0
233D	324.05	5	16	6	0.00	0
233E	324.29	6	24	8	324.55	720
233F	326.33	3	7	1	0.00	0
233G	329.80	5	13	8	0.00	0
233H	331.22	3	4	2	331.15	30
234A	152.76	3	3	1	152.75	20
234B	154.22	3	3	3	154.20	20
234C	157.56	3	6	2	157.80	180
234D	159.49	6	55	6	159.25	640
234E	159.72	4	8	2	0.00	0
234F	160.00	4	15	4	0.00	0
234G	160.78	3	8	1	0.00	0
234H	160.90	5	14	5	160.90	30
234J	161.60	2	1	NC	161.65	100
235A	358.43	3	2	2	358.40	20
235B	359.63	4	7	5	0.00	0
235C	360.62	6	44	11	360.60	90

ANOM	FID	CHS	CH2.AMP	MHOS	MAG	VALUE
235D	362.84	2	3	NC	0.00	0
236A	188.49	5	15	7	188.45	20
236B	196.19	4	14	2	196.25	250
236C	197.00	3	4	2	196.90	60
236D	197.33	3	3	3	0.00	0
236E	198.16	4	8	4	198.00	70
237A	396.73	3	4	2	396.65	30
237B	396.92	3	8	1	397.05	55
237C	405.10	6	37	12	0.00	0
238A	224.70	6	47	17	224.85	30
238B	232.58	3	12	1	232.50	150
238C	232.92	3	4	2	233.00	30
239A	432.56	5	10	6	432.50	30
239B	433.03	2	2	NC	433.10	190
239C	438.75	5	19	13	0.00	0
239D	440.98	5	12	5	440.95	120
240A	260.32	4	7	5	0.00	0
240B	260.49	5	16	7	260.75	100
240C	262.64	5	20	6	0.00	0
240D	262.80	6	15	21	0.00	0
240E	268.43	3	2	2	0.00	0
241A	481.97	6	15	13	0.00	0
242A	298.70	6	34	14	0.00	0
243A	523.40	5	19	6	523.15	200
243B	523.56	5	12	8	0.00	0
244A	333.22	3	5	2	332.90	90
244B	335.00	6	93	12	0.00	0
245A	557.38	2	2	NC	0.00	0
245B	561.00	6	37	25	0.00	0
245C	561.17	5	9	12	0.00	0
245D	563.03	4	10	3	0.00	0
245E	563.33	4	10	4	563.25	75
246A	368.95	6	31	13	0.00	0
246B	369.40	4	23	1	369.25	70
246C	371.30	6	26	12	0.00	0
246D	379.40	4	19	5	379.40	30
247A	590.30	6	18	10	590.25	50
247B	590.42	5	12	8	0.00	0
247C	592.26	2	1	NC	592.30	570
247D	600.21	3	8	1	0.00	0
247E	600.46	3	10	1	0.00	0
247F	600.62	6	8	13	600.65	100
247G	600.83	6	40	10	0.00	0
247H	600.96	4	21	3	601.05	15
248A	405.20	5	10	6	0.00	0
248B	405.42	5	15	7	405.45	20
248C	405.90	6	47	12	405.75	50
248D	406.00	5	26	6	0.00	0
248E	414.20	2	2	NC	414.05	840
248F	415.90	4	16	4	0.00	0
249A	620.30	2	2	NC	620.45	60
249B	622.55	4	4	9	622.55	200
249C	622.68	4	9	7	622.80	370
249D	629.88	6	44	12	0.00	0
249E	630.60	5	13	5	0.00	0
249F	630.90	6	31	7	630.80	15
250A	442.49	4	7	4	0.00	0
250B	442.73	4	10	3	0.00	0
250C	443.33	4	62	2	0.00	0

ANOM	FID	CHS	CH2.AMP	MHOS	MAG	VALUE
250D	443.49	6	91	23	0.00	0
250E	443.83	4	11	3	0.00	0
250F	443.92	4	11	3	0.00	0
250G	448.30	2	1	NC	448.30	30
250H	448.80	3	3	1	0.00	0
250J	449.27	3	3	4	449.30	15
250K	450.80	6	23	17	450.70	330
250L	451.86	2	2	NC	0.00	0
250M	453.27	3	8	2	0.00	0
251A	650.72	3	7	2	0.00	0
251B	650.90	3	5	2	0.00	0
251C	651.60	3	2	3	0.00	0
251D	652.23	3	5	3	652.50	500
251E	653.08	5	5	10	652.90	660
251F	653.18	5	14	5	653.40	90
251G	654.57	3	6	2	0.00	0
251H	654.80	3	4	2	0.00	0
251J	655.08	3	2	2	655.05	10
251K	660.18	6	50	7	0.00	0
251L	660.33	6	98	6	660.25	20
252A	491.90	6	87	7	0.00	0
252B	492.10	5	25	5	0.00	0
252C	492.27	4	14	2	0.00	0
252D	498.30	4	10	5	498.30	20
252E	500.10	5	10	10	499.90	90
252F	501.13	3	6	1	0.00	0
252G	501.97	4	7	7	502.25	50
252H	502.77	4	11	3	0.00	0
252J	503.16	2	1	NC	0.00	0
253A	680.88	2	2	NC	0.00	0
253B	681.43	3	3	4	681.40	60
253C	681.67	3	3	4	0.00	0
253D	683.38	2	2	NC	683.50	110
253E	684.74	3	4	4	0.00	0
253F	684.93	4	10	5	0.00	0
253G	690.23	5	15	10	0.00	0
253H	690.38	5	22	7	0.00	0
254A	528.62	6	42	10	0.00	0
254B	534.50	5	10	10	0.00	0
254C	536.18	3	4	2	536.05	65
254D	537.65	2	3	NC	537.50	150
254E	537.93	3	4	7	537.80	80
255A	712.79	3	3	1	712.85	50
255B	713.16	2	1	NC	713.10	180
255C	713.53	2	3	NC	713.70	900
255D	715.80	2	2	NC	0.00	0
255E	716.03	3	5	5	0.00	0
255F	721.10	4	11	3	0.00	0
255G	721.22	5	19	8	0.00	0
256A	566.28	4	12	3	0.00	0
256B	566.38	4	9	8	0.00	0
256C	572.18	5	20	10	0.00	0
256D	574.56	3	6	2	574.60	600
256E	575.30	2	3	NC	575.15	20
256F	575.76	4	4	4	0.00	0
257A	742.68	3	3	7	742.70	20
257B	742.93	4	6	6	743.05	75
257C	743.60	3	3	3	743.35	500
257D	745.37	2	2	NC	745.25	250

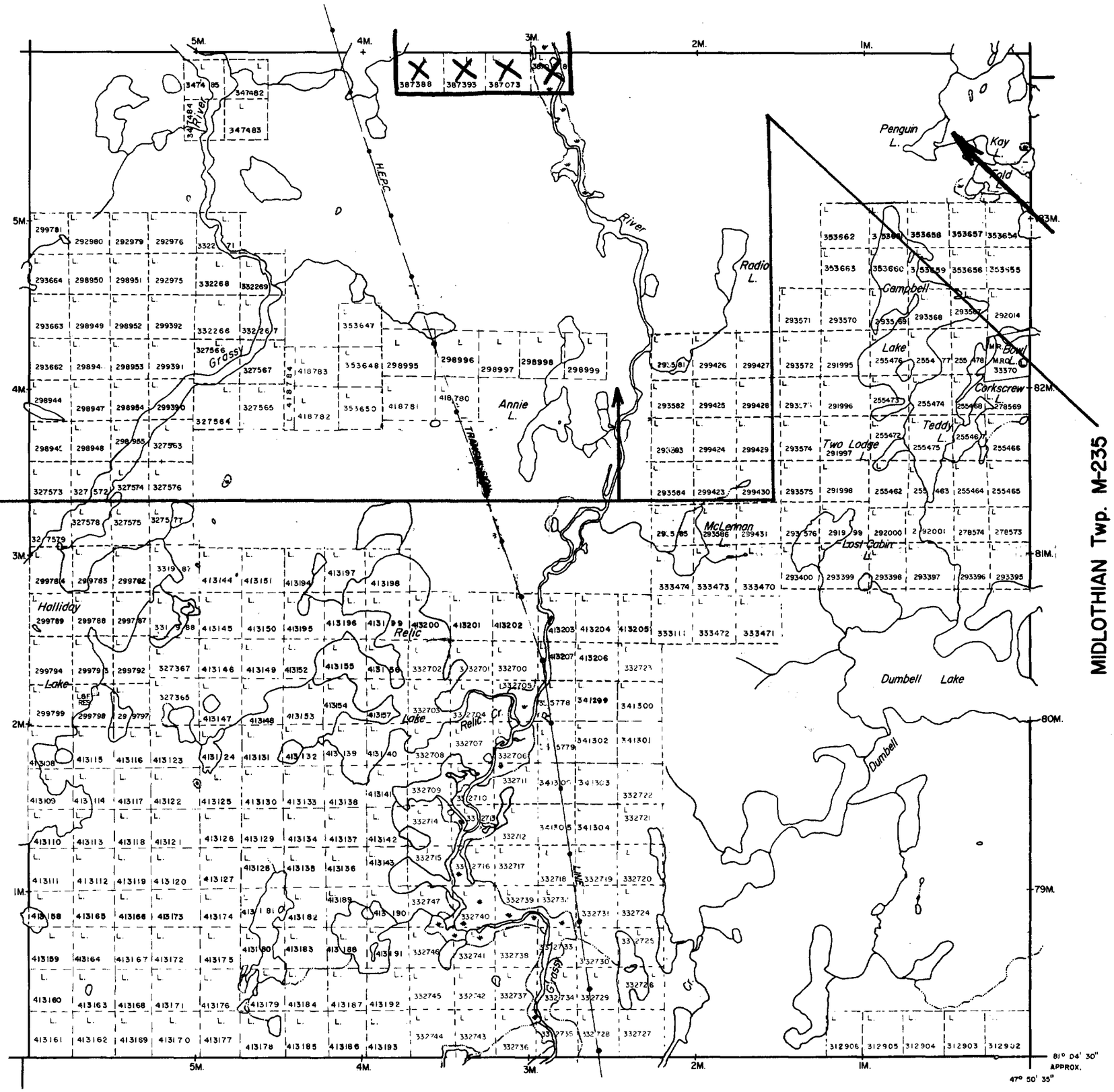
ANOM	FID	CHS	CH2.AMP	MHOS	MAG	VALUE
257E	745.93	4	6	5	0.00	0
257F	746.10	4	9	5	0.00	0
257G	751.39	4	10	2	0.00	0
257H	751.51	4	16	5	0.00	0
258A	602.33	5	17	12	0.00	0
258B	603.28	2	2	NC	603.40	40
258C	604.01	5	13	8	0.00	0
258D	604.39	4	6	5	604.35	280
258E	605.97	6	15	10	605.85	70
258F	606.53	3	2	7	606.80	90
259A	773.10	4	4	9	0.00	0
259B	773.20	4	4	9	773.25	65
259C	773.83	3	4	3	774.05	1100
259D	775.15	5	16	10	0.00	0
259E	775.27	6	37	8	775.25	190
259F	775.42	6	14	11	775.50	280
259G	775.60	6	20	10	0.00	0
260A	632.33	3	2	7	0.00	0
260B	632.57	5	36	7	0.00	0
260C	633.90	4	5	3	0.00	0
260D	634.10	6	47	10	634.25	80
260E	634.49	6	24	16	634.55	200
260F	636.25	3	8	3	636.00	1050
261A	796.73	3	2	2	796.65	120
261B	796.99	3	4	3	0.00	0
261C	798.36	4	9	3	798.15	65
261D	798.48	5	22	5	798.45	75
261E	798.80	3	8	2	798.95	90
262A	662.33	5	16	4	662.35	20
262B	662.46	5	13	8	0.00	0
262C	663.37	3	6	1	663.15	130
262D	663.57	3	7	1	663.55	40
262E	663.78	4	19	3	0.00	0
262F	664.05	6	55	8	663.95	30
262G	665.33	6	11	14	0.00	0
262H	665.67	3	2	2	665.55	1100
262J	665.98	6	11	13	666.20	175
263A	819.84	4	3	5	819.75	110
263B	820.00	6	11	9	0.00	0
263C	820.43	4	4	9	820.45	1050
263D	821.60	4	14	4	0.00	0
263E	821.70	4	20	3	0.00	0
263F	821.90	4	12	4	821.85	60
263G	822.00	4	9	3	0.00	0
263H	823.06	4	28	3	822.80	50
264A	693.28	5	40	5	0.00	0
264B	693.43	5	14	7	693.65	130
264C	694.18	3	9	2	694.10	20
264D	694.52	5	16	7	0.00	0
264E	694.92	4	5	12	694.85	35
264F	696.56	3	3	1	696.65	130
264G	696.80	6	25	14	697.10	125
265A	843.60	4	6	5	843.75	330
265B	843.96	3	3	3	0.00	0
265C	844.11	5	6	16	844.20	1100
265D	845.60	4	10	4	845.55	30
266A	724.84	4	9	3	724.90	200
266B	725.12	5	11	5	0.00	0
266C	725.30	5	17	4	0.00	0

ANOM	FID	CHS	CH2.AMP	MHOS	MAG	VALUE
266D	727.06	2	3	NC	727.15	230
266E	727.50	3	5	3	0.00	0
266F	728.22	3	5	4	728.30	30
267A	865.70	6	22	17	865.75	80
267B	866.00	3	4	4	0.00	0
267C	866.62	2	2	NC	866.55	20
267D	866.84	3	6	3	0.00	0
267E	868.99	3	6	3	0.00	0
267F	869.15	4	8	4	869.10	410
268A	755.77	3	7	2	755.55	160
268B	757.68	4	6	5	757.70	190
268C	758.08	5	39	4	0.00	0
268D	759.27	6	74	24	0.00	0
268E	759.40	6	52	16	759.45	110
269A	890.07	6	47	11	0.00	0
269B	890.14	6	46	12	890.15	130
269C	891.23	5	15	4	0.00	0
269D	891.35	5	23	7	0.00	0
269E	891.75	3	7	2	891.95	1070
269F	892.80	5	14	11	892.75	600
269G	892.90	5	19	11	892.90	60
269H	893.40	3	4	3	0.00	0
269J	893.52	4	10	3	893.50	190
270A	778.58	6	11	13	778.45	55
270B	778.88	4	14	1	778.85	55
270C	779.30	4	4	9	0.00	0
270D	779.52	6	23	9	779.45	1250
270E	780.74	4	13	1	780.75	100
270F	781.13	6	45	12	0.00	0
270G	782.58	6	76	10	782.60	50
270H	782.72	6	12	8	0.00	0
270J	787.17	3	2	2	787.30	80
271A	909.69	3	3	1	909.60	80
271B	913.73	3	4	1	913.80	15
271C	913.93	3	4	2	0.00	0
271D	914.90	5	4	12	914.75	630
271E	915.02	5	7	16	0.00	0
271F	915.20	5	12	8	0.00	0
271G	915.30	5	18	11	0.00	0
271H	916.52	4	8	9	0.00	0
271J	916.70	5	32	5	916.75	1100
271K	917.23	4	6	2	0.00	0
272A	801.66	5	12	9	801.75	260
272B	801.89	4	4	4	0.00	0
272C	802.22	5	23	5	802.15	800
272D	803.29	3	5	2	803.30	190
272E	803.63	6	19	13	0.00	0
272F	803.98	5	9	11	804.25	600
272G	805.23	4	10	3	0.00	0
273A	938.50	3	3	1	0.00	0
273B	938.80	3	4	2	0.00	0
273C	940.00	6	9	11	940.00	110
273D	940.10	6	13	11	0.00	0
273E	940.50	3	3	1	940.35	540
273F	941.38	3	9	1	941.45	160
273G	941.65	4	7	7	941.70	180
273H	941.77	6	18	9	0.00	0
274A	825.04	3	4	2	0.00	0
274B	825.23	3	5	3	0.00	0

ANOM	FID	CHS	CH2.AMP	MHOS	MAG	VALUE	
274C	825.50	3	2	2	825.40	250	
274D	825.80	3	4	1	825.90	190	
274E	826.53	2	2	NC	0.00	0	
274F	826.70	2	3	NC	826.75	730	
274G	827.03	6	58	12	827.25	120	
274H	828.56	6	14	15	0.00	0	
275A	962.90	2	1	NC	963.00	25	
275B	963.22	4	7	7	0.00	0	
275C	964.38	4	9	7	964.30	40	
275D	964.54	4	10	7	0.00	0	
275E	964.89	4	8	4	964.80	530	
275F	965.88	3	4	2	965.75	75	
276A	848.92	4	13	2	849.00	420	
276B	849.37	3	3	1	849.45	140	
276C	849.99	4	14	3	850.00	450	
276D	850.35	5	10	10	0.00	0	
276E	851.72	6	35	10	852.00	60	
277A	986.78	5	8	7	0.00	0	
277B	986.90	6	19	8	986.90	30	
277C	987.05	6	18	11	0.00	0	
277D	988.05	3	3	4	0.00	0	
277E	988.30	3	4	2	0.00	0	
277F	988.60	2	2	NC	988.55	350	
277G	989.15	3	4	2	989.05	170	
277H	989.55	3	6	2	989.45	410	
278A	873.60	4	8	2	873.60	330	
278B	873.94	4	20	2	874.05	110	
278C	874.50	2	1	NC	874.55	400	
278D	874.83	5	12	5	0.00	0	
278E	876.10	6	51	18	0.00	0	
279A	10.40	5	10	10	0.00	0	
279B	10.54	5	10	10	0.00	0	
279C	12.43	3	3	3	0.00	0	
279D	12.60	3	3	3	12.75	540	
280A	896.87	4	9	3	896.70	200	
280B	899.19	6	23	11	0.00	0	
281A	225.72	4	4	9	225.70	70	
281B	225.92	4	8	6	0.00	0	
281C	226.13	4	5	6	226.10	570	
281D	226.30	4	6	6	226.35	60	
282A	921.12	6	68	13	921.00	120	
282B	921.57	6	17	9	921.80	90	
283A	945.36	6	37	6	945.25	350	
283B	945.80	4	24	4	945.75	190	
283C	947.87	2	2	NC	947.80	10	
284A	249.95	2	1	NC	250.15	470	
284B	250.58	3	3	3	0.00	0	
284C	250.75	3	4	2	250.85	300	
284D	251.08	5	10	6	251.10	80	
284E	251.24	2	2	NC	251.30	90	
285A	969.30	3	3	1	969.20	240	
285B	969.80	2	2	NC	969.70	50	
285C	971.00	3	4	3	971.10	30	
285D	971.60	3	10	1	971.55	20	
286A	995.11	2	4	NC	995.15	15	
293A	288.82	2	2	NC	288.80	135	Same as 253F

ANOM	FID	CHS	CH2.AMP	MHOS	MAG	VALUE
7A	962.84	2	1	NC	0.00	0
23C	098.62	3	3	7	0.00	0
29F	164.00	3	2	7	164.25	50
37DX	218.45	2	2	NC	0.00	0
37FX	223.31	4	7	4	0.00	0
41D	216.90	3	4	2	217.29	100
47BX	271.40	3	3	1	0.00	0
55A	896.36	2	2	NC	896.35	150
97AX	166.43	4	3	14	0.00	0
102B	137.50	3	2	7	0.00	0
104B	153.09	6	9	11	0.00	0
115A	333.56	2	1	NC	333.50	230
122A	316.74	2	2	NC	316.85	580
128A	382.40	2	2	NC	0.00	0
128B	382.54	2	2	NC	0.00	0
136AX	475.80	2	2	NC	475.90	20
155A	785.45	2	2	NC	785.40	90
162B	793.50	4	10	4	793.45	920
198CX	545.89	2	2	NC	545.85	1600
199BX	709.82	2	4	NC	709.80	1700
202G	596.79	3	2	7	0.00	0
207BX	838.60	2	2	NC	0.00	0
209AX	875.16	2	2	NC	875.20	140
209AY	875.28	2	2	NC	0.00	0
213J	965.75	2	2	NC	0.00	0
214DX	792.05	3	2	7	0.00	0
216CX	820.39	3	6	3	0.00	0
231K	295.25	4	3	5	0.00	0
232EX	123.18	2	2	NC	0.00	0
233BX	322.93	2	2	NC	322.75	15
235CX	360.36	3	6	3	0.00	0
243C	525.39	3	6	3	0.00	0
243D	525.56	3	7	2	525.60	60
245AX	553.00	2	1	NC	553.00	65
246DX	629.63	4	7	4	0.00	0
256AX	566.00	3	3	4	0.00	0
261CX	797.18	2	2	NC	797.25	800
263J	823.24	4	8	4	823.20	15
265E	846.60	3	2	7	846.50	110
265F	846.76	3	2	7	846.75	70
267EX	867.14	2	2	NC	867.35	1500
268AX	755.54	4	4	4	0.00	0
268BX	756.32	2	2	NC	756.45	550
269EX	891.60	3	3	3	0.00	0

HUTT Twp. M-943



NOTES

400' surface rights reservation along the shores of all lakes and rivers.

- MINING LANDS -
DATE OF ISSUE
SEP - 3 1974
MINISTRY
OF NATURAL RESOURCES

LEGEND

PATENTED LAND	Ⓟ or ●
PATENTED FOR SURFACE RIGHTS ONLY	◒
LEASE	Ⓛ
LICENSE OF OCCUPATION	L.O.
CROWN LAND SALES	C.S.
LOCATED LAND	Loc.
CANCELLED	C.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
HIGHWAY & ROUTE NO.	17
ROADS	
TRAILS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	

*used only with summer resort locations or when space is limited

TOWNSHIP OF 2.1514

HALLIDAY

DISTRICT OF
SUDBURY

LARDER LAKE
MINING DIVISION

SCALE : 1 INCH = 40 CHAINS (1/2 MILE)

DR. R.W.N
DATE FEB. 2, 71.

PLAN NO. **M-910**

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

41P14NE0216 2.1514 HALLIDAY

McArthur Tp. - M. 298

Musgrove Tp. - M. 304

Geikie Tp. - M. 320

English Tp. - M. 787

THE TOWNSHIP
2.1514 OF

BARTLETT

DISTRICT OF
TIMISKAMING

PORCUPINE
MINING DIVISION

SCALE: 1-INCH=40 CHAINS

LEGEND

PATENTED LAND	● or (P)
CROWN LAND SALE	C.S.
LEASES	(L)
LOCATED LAND	Loc.
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	
IMPROVED ROADS	
KING'S HIGHWAYS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	
CANCELLED	C.
PATENTED S.R.O.	

NOTES

400' Surface Rights Reservation along the shores of all lakes and rivers.

PLAN NO.- M-262

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

2.1514

THE TOWNSHIP OF BEEMER

DISTRICT OF SUDBURY

LARDER LAKE MINING DIVISION

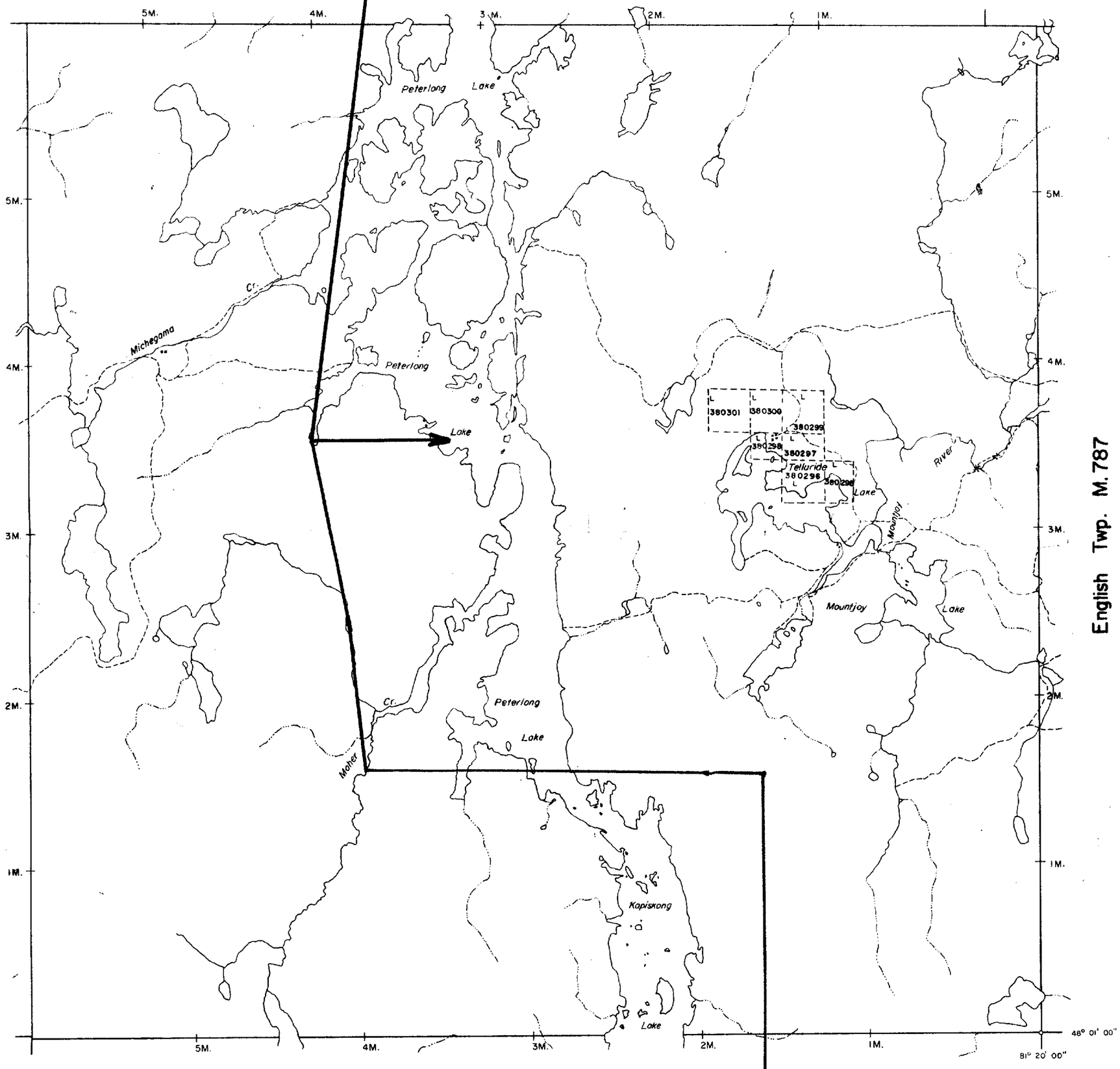
SCALE: 1-INCH = 40 CHAINS

Musgrove Twp. M.304

Hassard Twp. M.921

English Twp. M.787

Moher Twp. M.868



LEGEND

PATENTED LAND	Ⓟ
CROWN LAND SALE	C.S.
LEASES	Ⓛ
LOCATED LAND	Loc.
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	
IMPROVED ROADS	
KING'S HIGHWAYS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	
CANCELLED	C.

NOTES

400' Surface Rights Reservation around all lakes and rivers.

Flooding Rights in Peterlong & Kapiskong lakes assigned to H.E.P.C. LC 7191 File. No.1162 Vol.4.

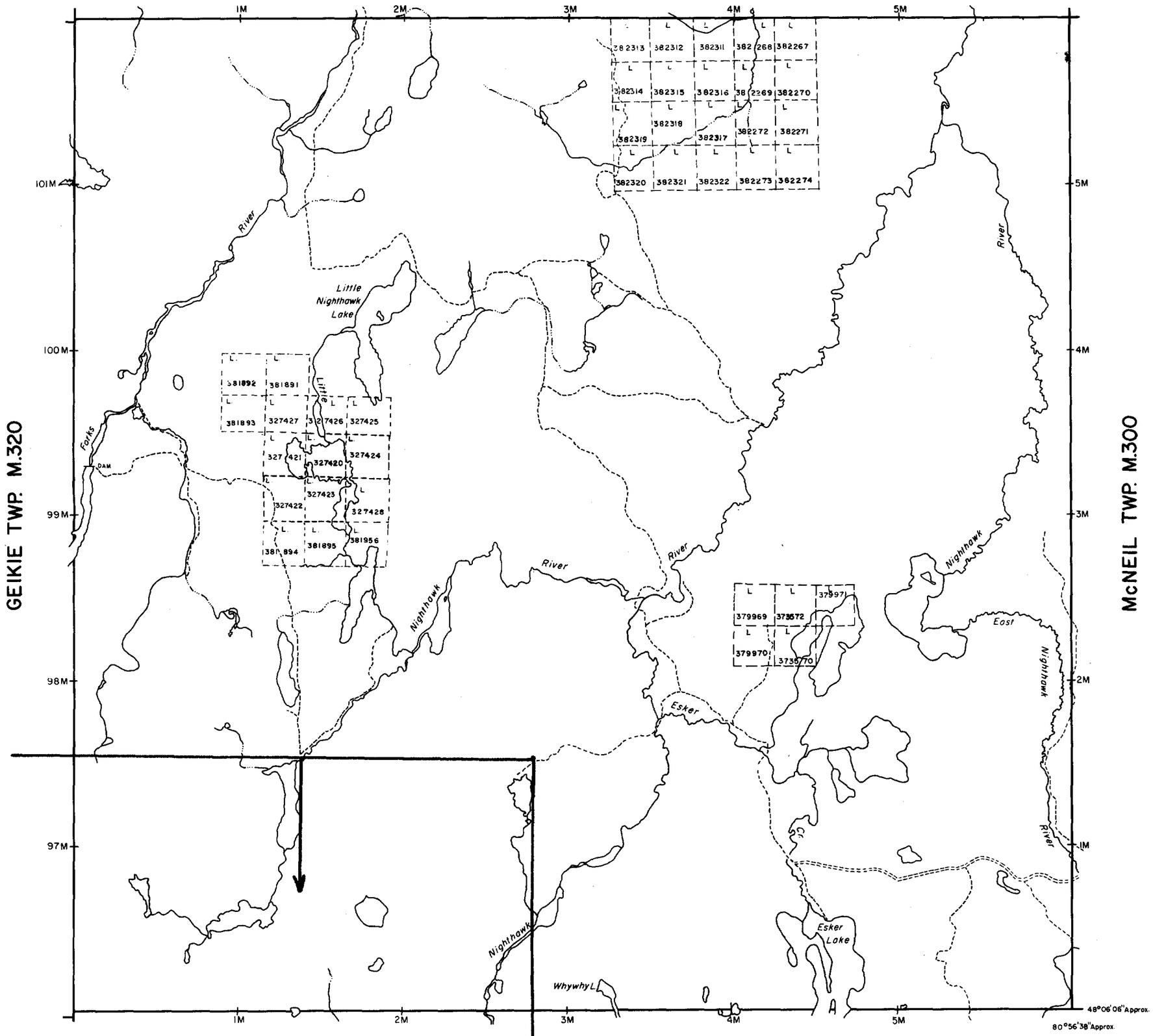
PLAN NO. M.656

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

220

P.F.K.

FALLON TWP. M.278



GEIKIE TWP. M.320

McNEIL TWP. M.300

HINCKS TWP. M.223

NOTES

400' surface rights reservation along the shores of all lakes and rivers.

2.1514

- MINING LANDS -
DATE OF ISSUE
AUG 30 1974
MINISTRY
OF NATURAL RESOURCES

LEGEND

PATENTED LAND	P or
PATENTED FOR SURFACE RIGHTS ONLY	
LEASE	L
LICENSE OF OCCUPATION	L.O.
CROWN LAND SALES	C.S.
LOCATED LAND	Loc.
CANCELLED	C.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
HIGHWAY & ROUTE NO.	17
ROADS	
TRAILS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	

*used only with summer resort locations or when space is limited

TOWNSHIP OF

CLEAVER

DISTRICT OF
TIMISKAMING

LARDER LAKE
MINING DIVISION

SCALE : 1 INCH = 40 CHAINS (1/2 MILE)

DR.	D.KAVANAGH	PLAN NO. M.269
DATE	29/1/71	

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

Bartlett Twp. – M.262

Beemer Twp. – M.656

Zavitz Twp. – M.1189

Semple Twp. – M.1100

THE TOWNSHIP OF 2·1514

ENGLISH

DISTRICT OF SUDBURY

LARDER LAKE MINING DIVISION

SCALE: 1-INCH=40 CHAINS

LEGEND

PATENTED LAND	(P)
CROWN LAND SALE	C.S.
LEASES	(L)
LOCATED LAND	Loc.
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	
IMPROVED ROADS	
KING'S HIGHWAYS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	
CANCELLED	C.

NOTES

This township lies within the TEMAGAMI PROVINCIAL FOREST

400' Surface Rights Reservation around all lakes and rivers.

MINING LANDS
DATE OF ISSUE
SEP - 3 1974
MINISTRY OF NATURAL RESOURCES

PLAN NO.- M.787

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

41P14NE0216 2.1514 HALLIDAY

Douglas Twp. (M.274)

THE TOWNSHIP
OF 2.1514

GEIKIE

DISTRICT OF
TIMISKAMING

PORCUPINE
MINING DIVISION

SCALE: 1 INCH = 40 CHAINS

LEGEND

PATENTED LAND	
CROWN LAND SALE	C.S.
LEASES	
LOCATED LAND	
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	
IMPROVED ROADS	
KING'S HIGHWAYS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	
CANCELLED	

NOTES

400 Surface Rights Reservation around all lakes and rivers

MINING LANDS
DATE OF ISSUE
SEP - 3 19??
MINISTRY
OF NATURAL RESOURCES

PLAN NO. M-320

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

Zavitz Twp. (M.1189)

Cleaver Twp. (M.692)

41P14NE0216 2.1514 HALLIDAY

250

2.1514

THE TOWNSHIP OF HINCKS

DISTRICT OF TIMISKAMING

LARDER LAKE MINING DIVISION

SCALE: 1-INCH = 40 CHAINS

Cleaver Twp.

McNeil Twp.

Zavitz Twp.

Argyle Twp.

Montrose Twp.

1M 2M 3M 4M 5M 6M

95M 94M 93M 92M 91M 90M

Nighthawk R.

Hincks L.

McWilliams L.

Esker Cr.

Austen L.

Davis L.

Whitefish R.

Little Esker L.

LEGEND

PATENTED LAND	(P)
CROWN LAND SALE	C.S.
LEASES	(L)
LOCATED LAND	Loc.
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	
IMPROVED ROADS	
KING'S HIGHWAYS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	

NOTES

400' Surface rights reservation around all lakes and rivers.

• MINING LANDS •
DATE OF ISSUE
JUL 11 1974
MINISTRY OF NATURAL RESOURCES

PLAN NO - M.223

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

41P14NE0216 2.1514 HALLIDAY

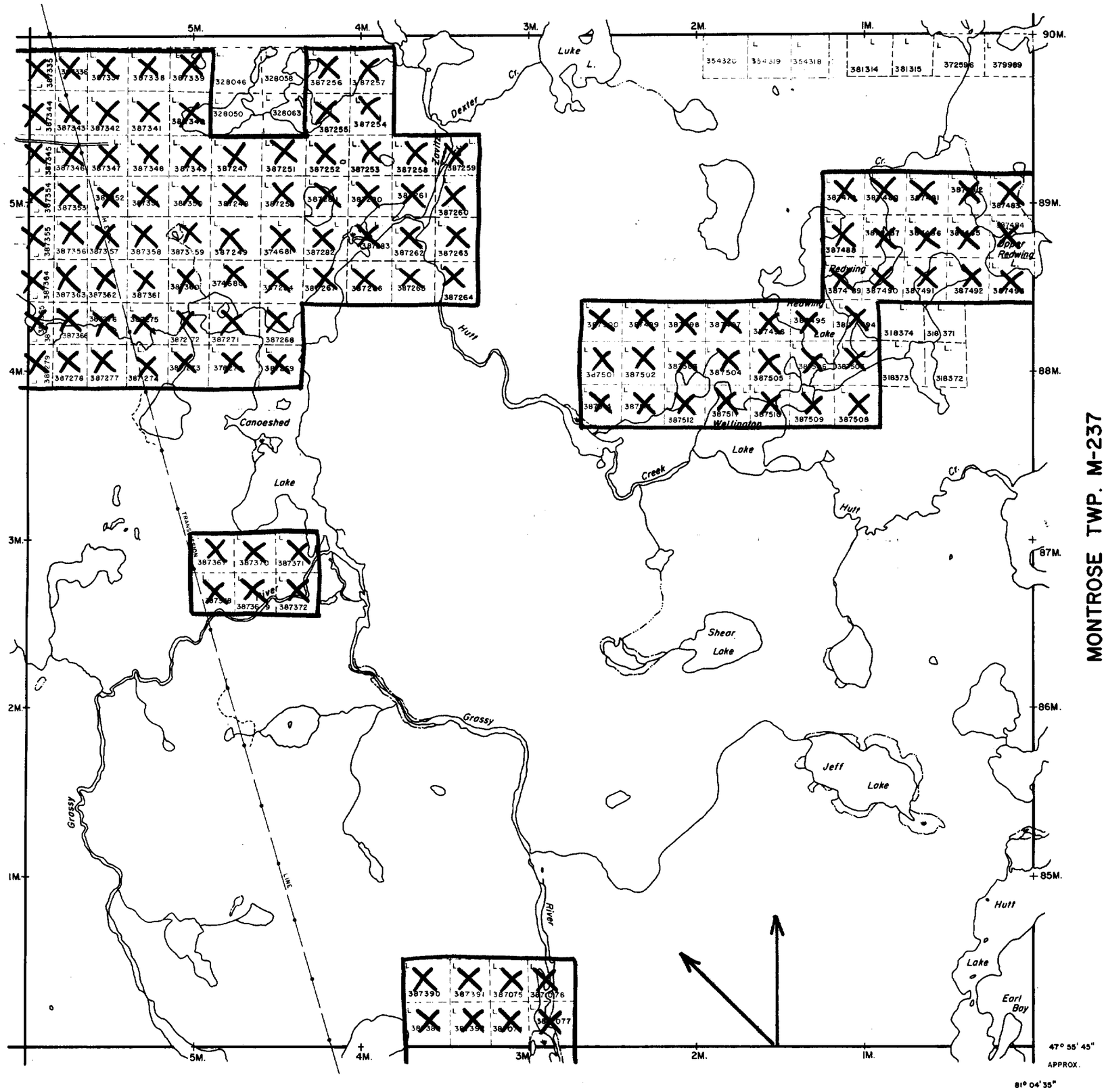
260

ZAVITZ TWP. M-1189

SEMPLE TWP. M-1100

MONTROSE TWP. M-237

HALLIDAY TWP. M-910



NOTES

400' surface rights reservation along the shores of all lakes and rivers.

MINING LANDS
DATE OF ISSUE
SEP - 3 1974
MINISTRY
OF NATURAL RESOURCES

LEGEND

PATENTED LAND	Ⓟ or ●
PATENTED FOR SURFACE RIGHTS ONLY	◒
LEASE	Ⓛ
LICENSE OF OCCUPATION	L.O.
CROWN LAND SALES	C.S.
LOCATED LAND	Loc.
CANCELLED	C.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
HIGHWAY & ROUTE NO.	17
ROADS	
TRAILS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	

*used only with summer resort locations or when space is limited

TOWNSHIP OF 2.1514

HUTT

DISTRICT OF
SUDBURY

LARDER LAKE
MINING DIVISION

SCALE : 1 INCH — 40 CHAINS (1/2 MILE)

DR. R. NOBLE	PLAN NO. M-943
DATE MAY 5, 71.	

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

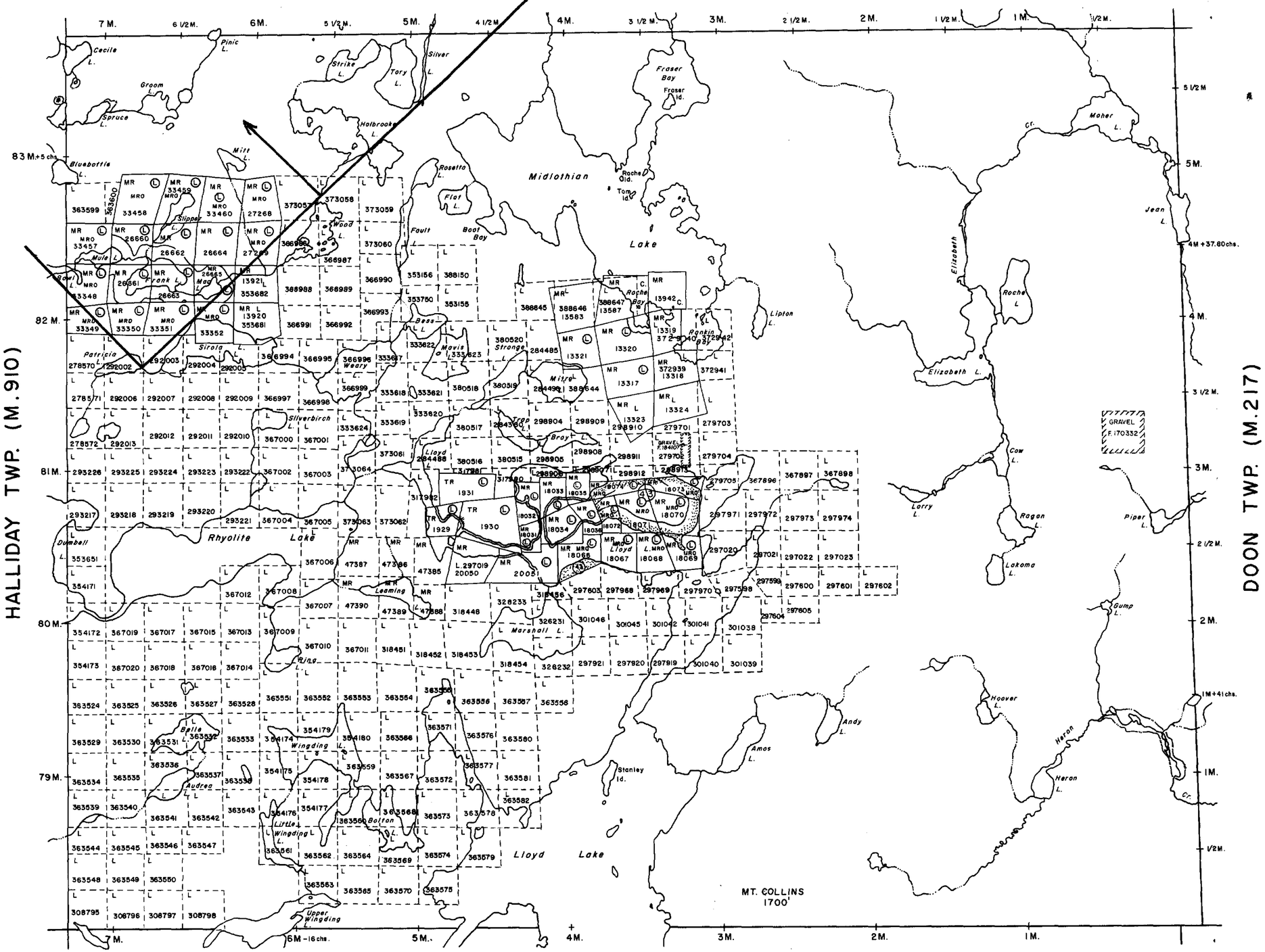
41P14NE0216 2.1514 HALLIDAY

MONTROSE TWP. (M.237)

HALLIDAY TWP. (M.910)

DOON TWP. (M.217)

RAYMOND TWP. (M.244)



THE TOWNSHIP OF 2.1514

MIDLOTHIAN

DISTRICT OF TIMISKAMING

LARDER LAKE MINING DIVISION

SCALE: 1-INCH = 40 CHAINS

LEGEND

PATENTED LAND	(P)
CROWN LAND SALE	C.S.
LEASES	(L)
LOCATED LAND	Loc.
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	
IMPROVED ROADS	
KING'S HIGHWAYS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES CANCELLED	C.

NOTES

400' surface rights reservation along the shores of all lakes and rivers.

Areas withdrawn from staking under Section 43 of the Mining Act (R.S.O. 1970).

Order No.	File	Date	Disposition
(43)	W.44/74	143762	8/8/74	S.R.O.

MINING LANDS
DATE OF ISSUE
AUG 28 1974
MINISTRY OF NATURAL RESOURCES

PLAN NO. M.235

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

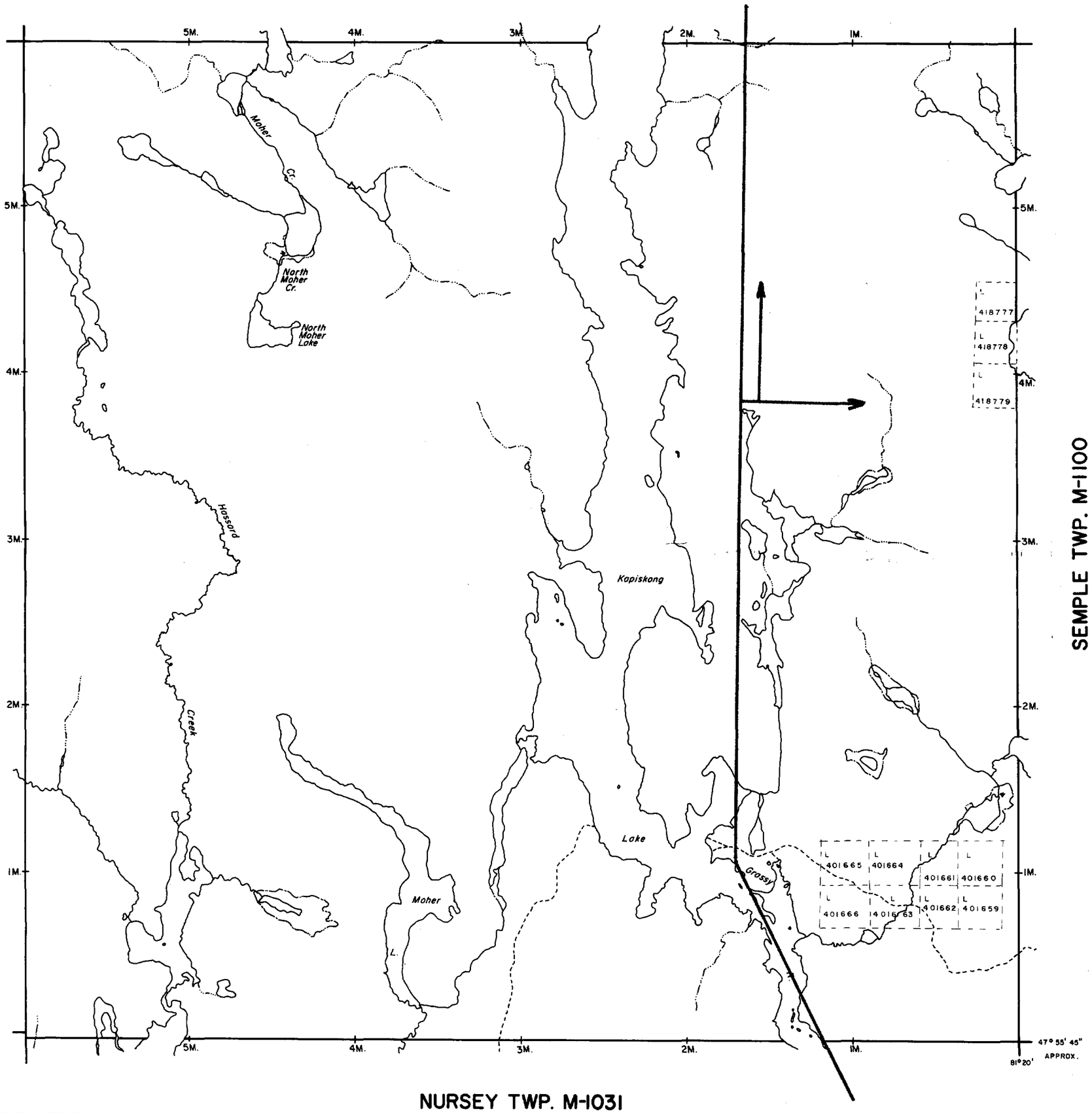
41P14NE0216 2.1514 HALLIDAY

BEEMER TWP. M-656

GOUIN TWP. M-891

SEMPLE TWP. M-1100

NURSEY TWP. M-1031



NOTES

400' surface rights reservation along the shores of all lakes and rivers.

Flooding rights to H.E.P.C. on Kapiskong Lake to contour elevation 113'

L.O. 7191 File-1162, Vol.4

LEGEND

PATENTED LAND	Ⓟ or ● *
PATENTED FOR SURFACE RIGHTS ONLY	◐ *
LEASE	Ⓛ
LICENSE OF OCCUPATION	L.O.
CROWN LAND SALES	C.S.
LOCATED LAND	Loc.
CANCELLED	C.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
HIGHWAY & ROUTE NO.	(17)
ROADS	
TRAILS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	

*used only with summer resort locations or when space is limited

TOWNSHIP OF 2.1514

MOHER

DISTRICT OF
SUDBURY

LARDER LAKE
MINING DIVISION

SCALE : 1 INCH - 40 CHAINS (1/2 MILE)

DR. R.W. NOBLE	PLAN NO. M-868
DATE MAR. 31, 71.	

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

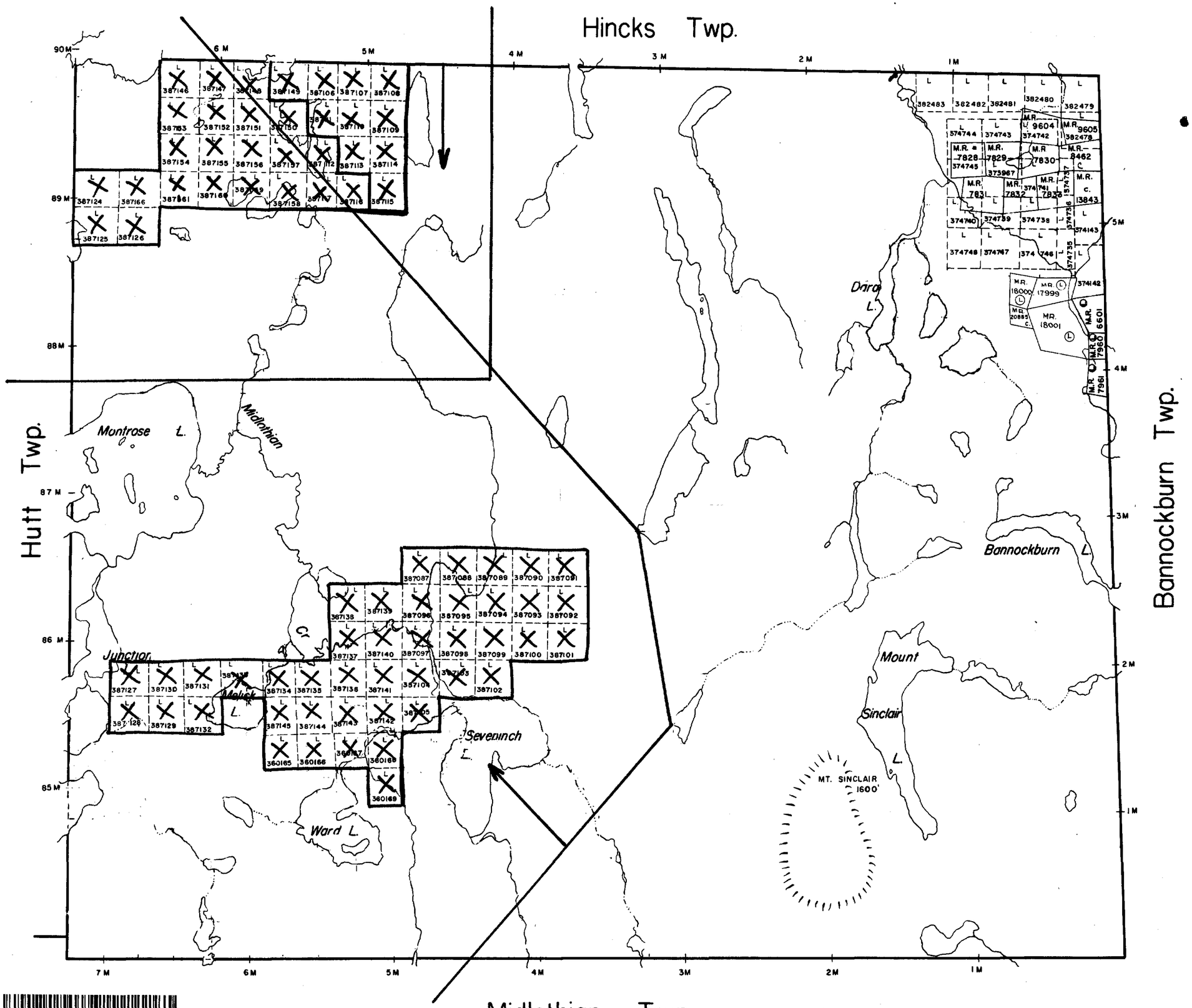
THE TOWNSHIP OF MONTROSE

2.1514

DISTRICT OF TIMISKAMING

LARDER LAKE MINING DIVISION

SCALE: 1-INCH = 40 CHAINS



LEGEND

PATENTED LAND	P
CROWN LAND SALE	C.S.
LEASES	L
LOCATED LAND	Loc.
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	
IMPROVED ROADS	
KING'S HIGHWAYS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	

NOTES

400' Surface rights reservation around all lakes and rivers.

- MINING LANDS -
DATE OF ISSUE
JUL 11 1974
MINISTRY OF NATURAL RESOURCES

PLAN NO.- M. 237

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

41P14NE0216 2.1514 HALLIDAY

300

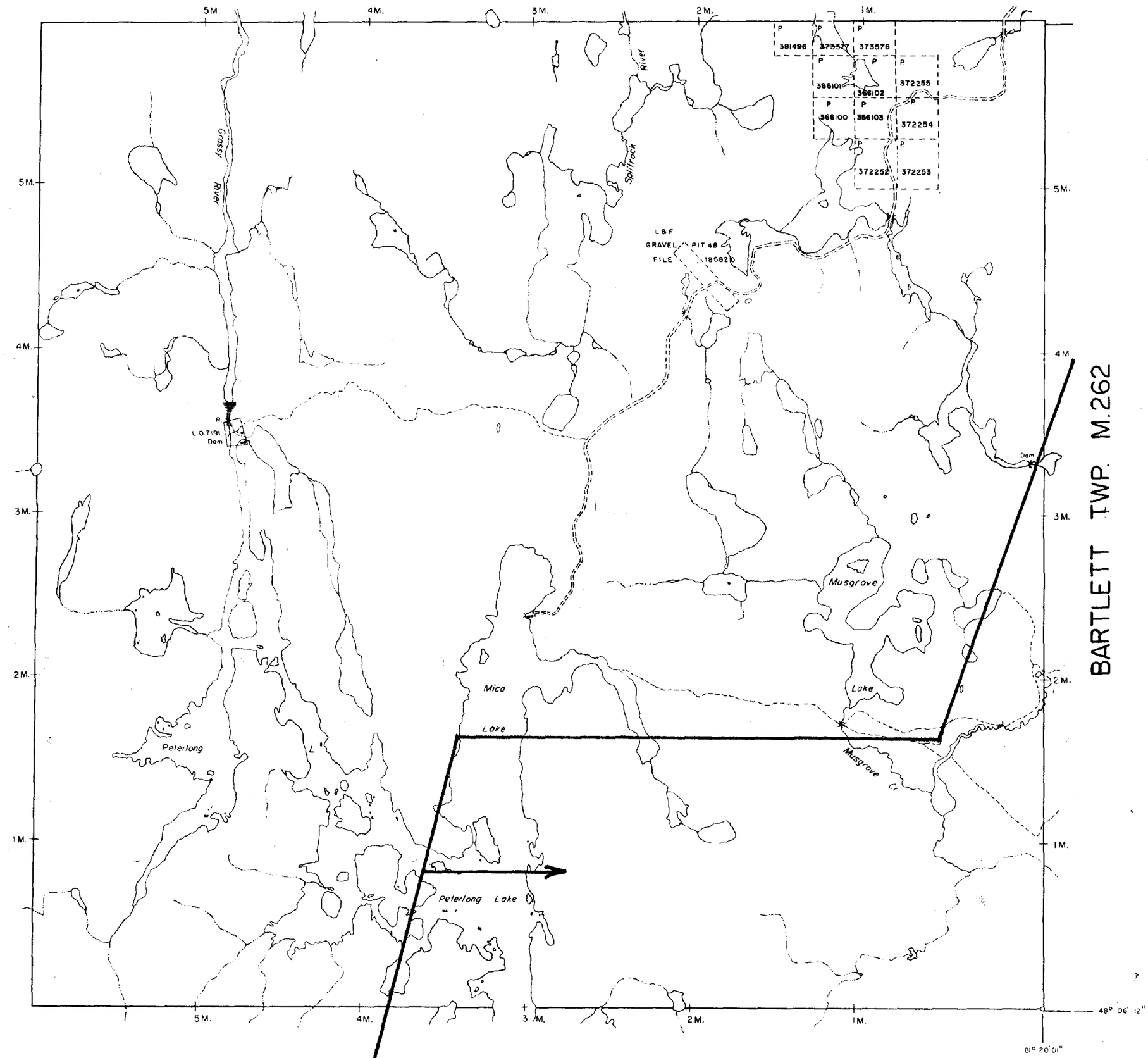
M.Z.

FRIPP TWP. M.281

DOYLE TWP. M.275

BARTLETT TWP. M.262

BEEMER TWP. M.656



THE TOWNSHIP
OF
2.1514

MUSGROVE

DISTRICT OF
TIMISKAMING

PORCUPINE
MINING DIVISION

SCALE: 1-INCH 40 CHAINS

LEGEND

PATENTED LAND	(P)
CROWN LAND SALE	C.S.
LEASES	(L)
LOCATED LAND	Loc.
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	
IMPROVED ROADS	
KING'S HIGHWAYS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	
CANCELLED	C.

NOTES

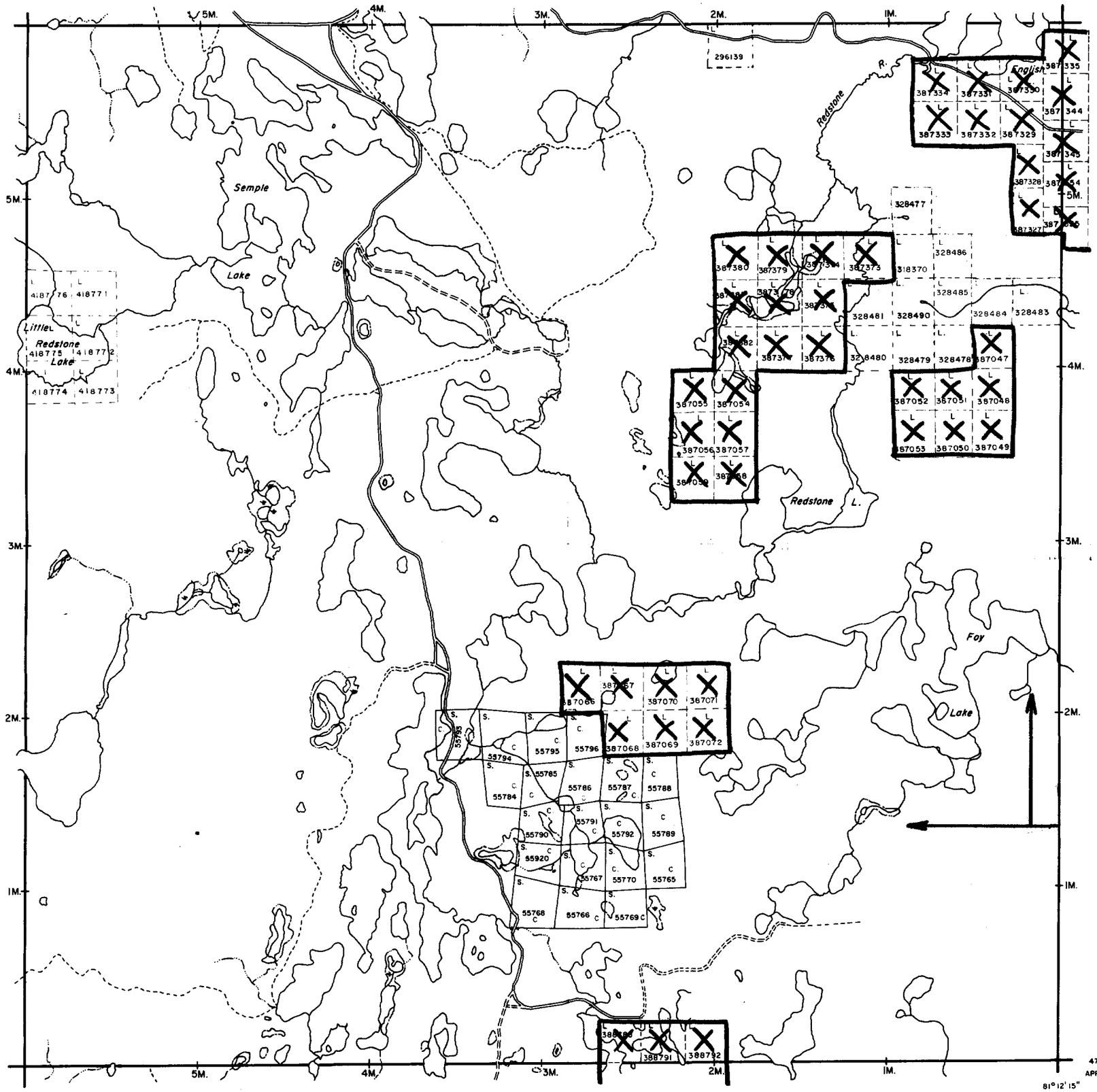
400' Surface Rights Reservation around all lakes and rivers.

Flooding Rights in Peterlong & Mica lakes assigned to H E P C L O 7191 File 1162 Vol 4

PLAN NO. M.304

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

ENGLISH TWP. M-787



MOHER TWP. M-868

HUTT TWP. M-943

SOTHMAN TWP. M-1121

NOTES

400' surface rights reservation along the shores of all lakes and rivers.

- MINING LANDS -
DATE OF ISSUE
SEP - 3 1974
MINISTRY
OF NATURAL RESOURCES

LEGEND

PATENTED LAND	Ⓟ or ● *
PATENTED FOR SURFACE RIGHTS ONLY	◒ *
LEASE	Ⓛ
LICENSE OF OCCUPATION	L.O.
CROWN LAND SALES	C.S.
LOCATED LAND	Loc.
CANCELLED	C.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
HIGHWAY & ROUTE NO.	17
ROADS	
TRAILS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	

*used only with summer resort locations or when space is limited

TOWNSHIP OF 2.1514

SEMPLE

DISTRICT OF
SUDBURY

LARDER LAKE
MINING DIVISION

SCALE : 1 INCH 40 CHAINS (1/2 MILE)

DR. R.W. NOBLE	PLAN NO. M-1100
DATE APR. 22, 71	

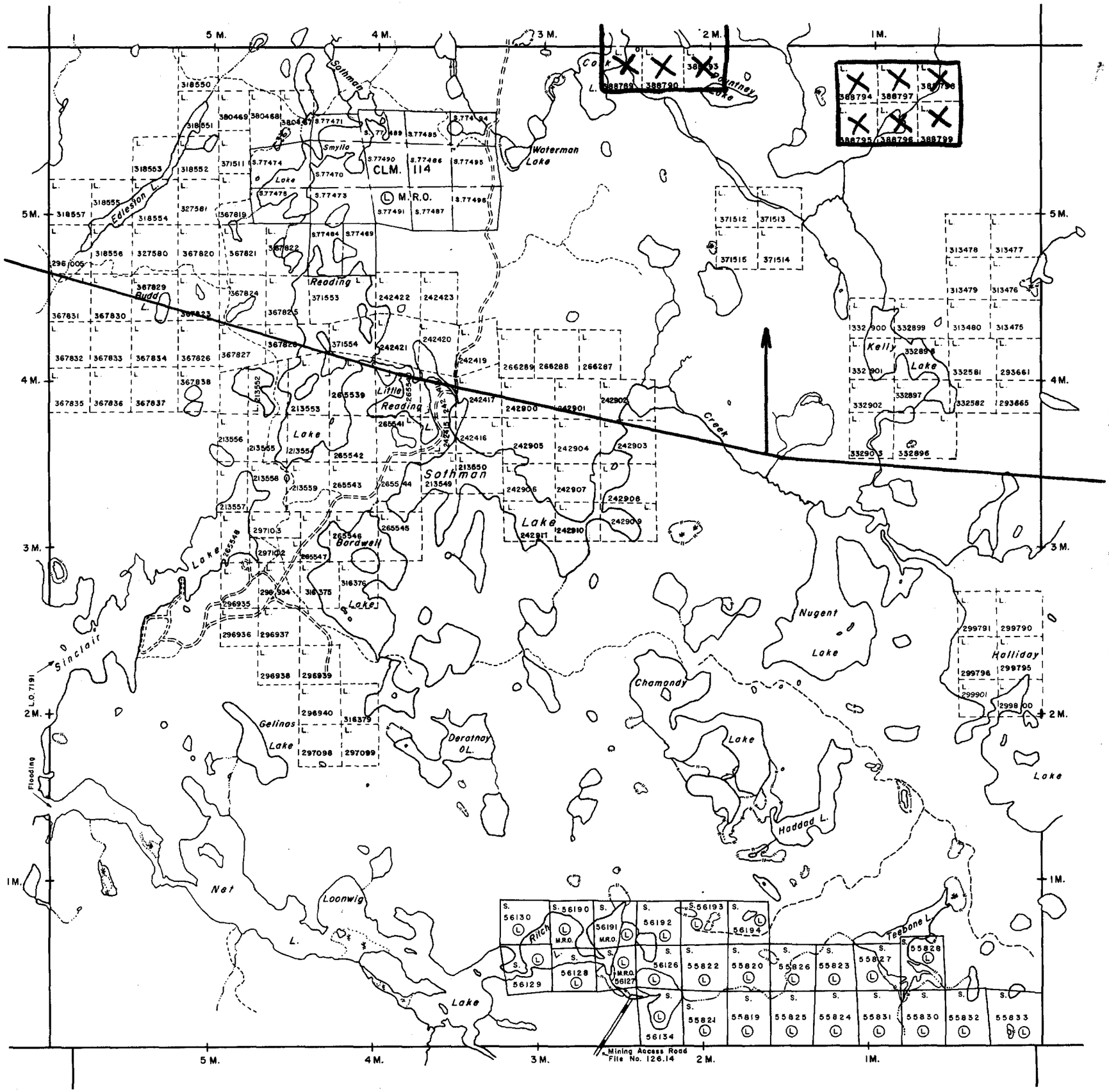
ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

Semple Twp.- M.1100

Nursey Twp.- M.1031

Halliday Twp.- M.910

Kemp Twp.- M.966



330

41P14NE0216 2.1514 HALLIDAY

K. Kal

THE TOWNSHIP OF 2.1514

SOTHMAN

DISTRICT OF SUDBURY

LARDER LAKE MINING DIVISION

SCALE: 1-INCH=40 CHAINS

LEGEND

PATENTED LAND	(P)
CROWN LAND SALE	C.S.
LEASES	(L)
LOCATED LAND	Loc.
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	
IMPROVED ROADS	
KING'S HIGHWAYS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	
CANCELLED	C.

NOTES

400' surface rights reservation along the shores of all lakes and rivers.

Flooding Rights– L.O. 7191 File Nº 1162 vol. 4.

MINING LANDS
DATE OF ISSUE
JUL 11 1974
MINISTRY OF NATURAL RESOURCES

PLAN NO. M-1121

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

Geikie Twp.(M.320)

English Twp.(M.787)

Hincks Twp.(M.223)

Hutt Twp.(M.943)

THE TOWNSHIP
OF 2.1514

ZAVITZ

DISTRICT OF
SUDBURY

LARDER LAKE
MINING DIVISION

SCALE: 1 INCH 40 CHAINS

LEGEND

- PATENTED LAND
- CROWN LAND SALE
- LEASES
- LOCATED LAND
- LICENSE OF OCCUPATION
- MINING RIGHTS ONLY
- SURFACE RIGHTS ONLY
- ROADS
- IMPROVED ROADS
- KING'S HIGHWAYS
- RAILWAYS
- POWER LINES
- MARSH OR MUSKEG
- MINES
- CANCELLED

NOTES

400' SURFACE RIGHTS RESERVATION AROUND ALL LAKES AND RIVERS.

MINING LANDS
DATE OF ISSUE
SEP - 3 1974
MINISTRY
OF NATURAL RESOURCES

PLAN NO. M. 1189

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

41P14NE0215 2.1514 HALLIDAY

ZAVITZ TP
HUTT TP
HINKS TP
MONTROSE TP
HUTT TP
HALLIDAY TP
MONTROSE TP
MIDLOTHIAN TR

CLAIMS 387146-387161
CLAIMS 387106-387117
CLAIMS 387087-387105
CLAIMS 387127-387145
CLAIMS 360165-360169
10 CLAIMS 387162-387166

1
2
3
4
5
6
7
8
9

GRANGES EXPLORATION LTD
CANADIAN DIVISION

HUTT JOINT VENTURE

claims staked 1973

claims held by others

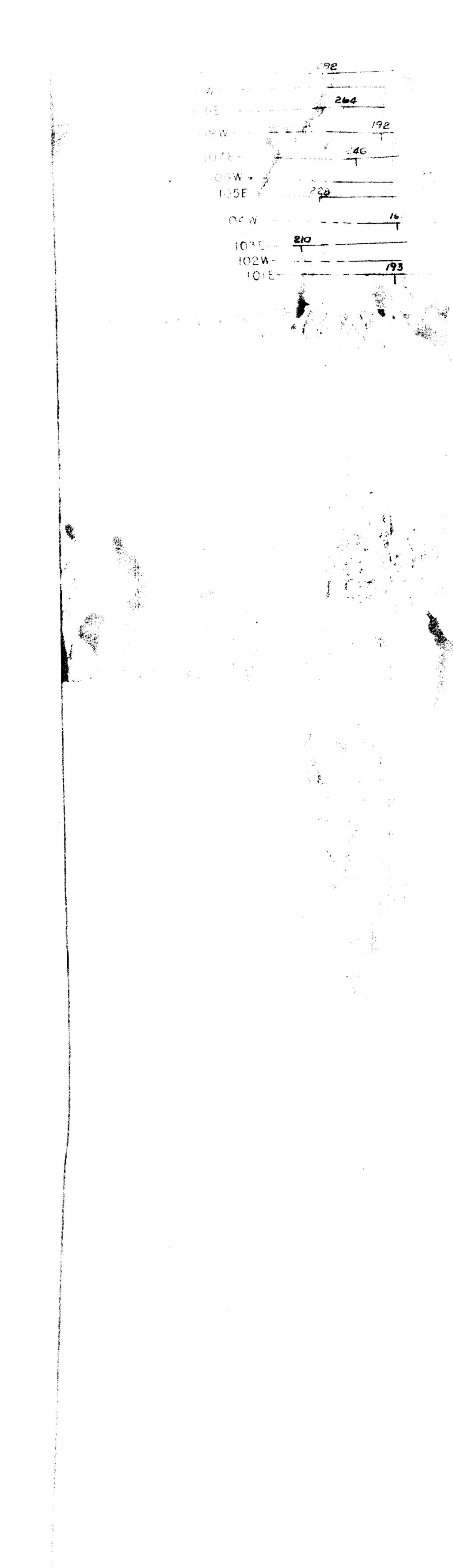
O.D.M. 2.1514

MUSGROVE TP

BEEMER TP

BARTLETT TP

ENGLISH TP



BARTLETT TP

ENGLISH TP

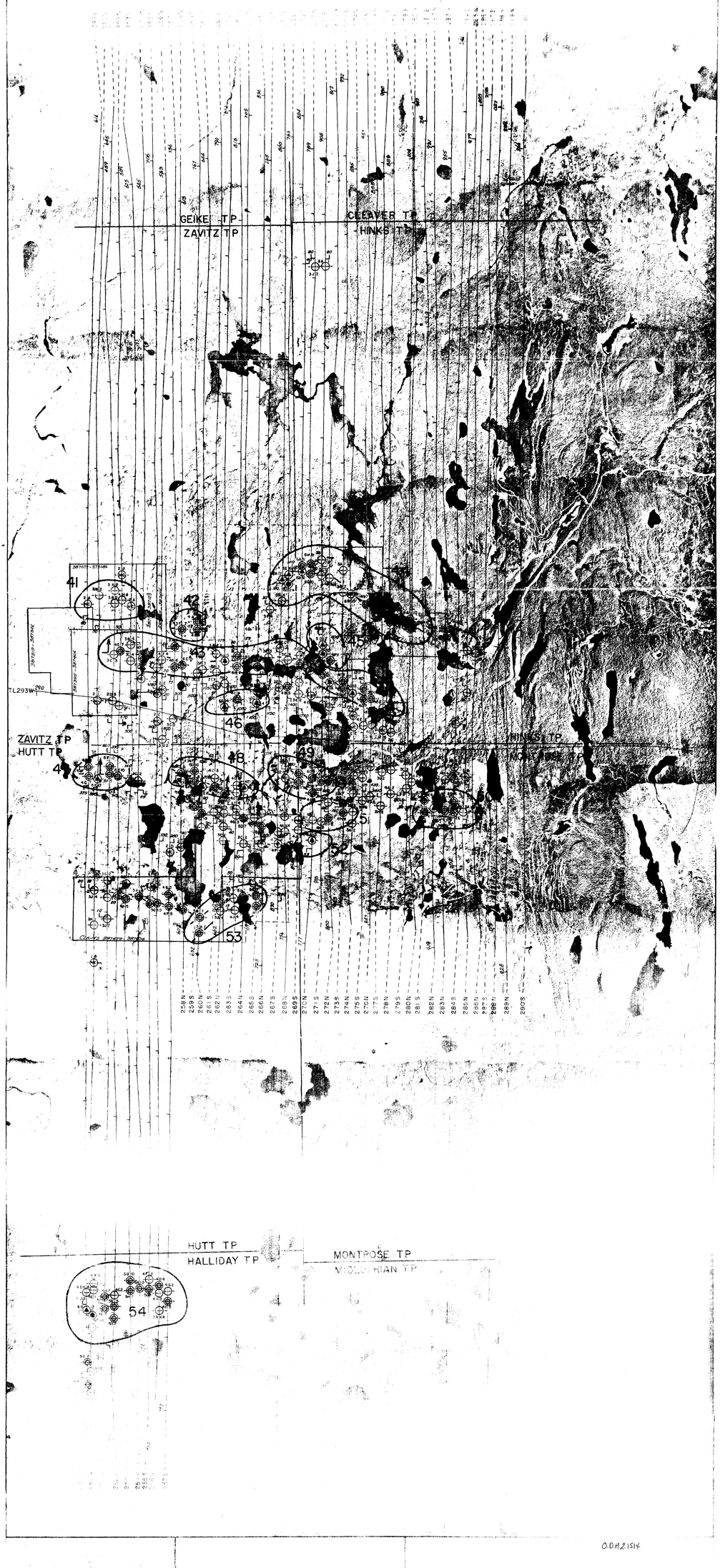
SEMPLE TP

2.1514

Apparent conductivity width_inches

41P14NE0216 2.1514 HALLIDAY

390



O.D.A.21514

GRANGES EXPLORATION AG
CANADIAN DIVISION

HUTT JOINT VENTURE

claims staked 1973

claims held by others

AREA 2

T.L. 2025

360120-360129

387173-387175

387207-387224

387229-387230

387234-387244

387245-387246

387247-387248

387466

387467-387470

387477-387478

RILETT TP

ENGLISH TP

GEIKIE TP

ZAVITZ TP

O.D.M. 2.1514

ENGLISH TP
SEMPLE TP

CLAIMS 387167-387206

CLAIMS 387238-387244

CLAIMS 387477-387484

CLAIMS 387873-387882

CLAIMS 387054-387055

CLAIMS 387676-387677

1

2

3

4

5

6

T.L. 292S

O.D.M.2.1514

ENGLISH TWP AREA

AREA 2

ETT TP

SH TP

387220-
387224

CLAIMS
387225-
387228

CLAIMS
387461-
387466

CLAIMS 387467-

CLAIMS
387231-
387235

387234

CLAIMS 387383-387407

CLAIMS 387369-387365

ZAVITZ TP

HUTT TP

MPLE TP

CLAIMS 387329-387349

387247

CLAIMS
387251-
387259

O.D.M. 2.1514

CLAIMS 387350-387359

CLAIMS 387360 - 387366

CLAIMS 387280-387283

CLAIMS 387260-387267

387327-387328

387248-387250

374681

374680

387284

CLAIMS 387053-387077

CLAIMS 387268-387279

CLAIMS 387367-387372

CLAIMS 387373-387382

CLAIMS 387388-387393

CLAIMS 387073-387078

CLAIMS 387394-387399

HUTT TP

HALLIDAY TP

13

14

25

26

29

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31

36

37

38

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40

O.D.M. 21514

ENGLISH TWP. APPR.

AREA