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DORION

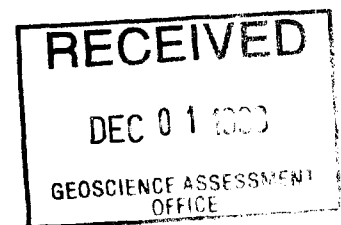
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**2.19068**

REPORT OF SURFACE WORK  
COMPLETED ON THE  
DORION TOWNSHIP PROPERTY  
BY / FOR  
DAVID F. PETRUNKA  
OPAP 1998

Thunder Bay, November 25<sup>th</sup>, 1998

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## INTRODUCTION

The following report summarizes the results of surface work completed by David F Petrunka, prospector of Thunder Bay, Ontario on his claims staked in Dorion Township. The author did not visit the property but described the samples which were collected during the sampling before they were sent for assaying. The conclusions of the present report are based on the author knowledge of the general area and on numerous discussions with Dave Petrunka.

The exploration work was financed through an OPAP grant to Dave Petrunka, for the summer of 1998. The work was also conducted to satisfy the requirements of assessment work on the claims.

The area is fairly well known for its numerous but narrow fractures hosting high grade zinc-lead values and the present study was oriented to locate possible areas where these structures would be wide enough to justify bulk sampling and small scale mining.

Some articles have been written and published on this type of mineralization in the Dorion area and the reader is referred to the following article for a better understanding of the regional geology, structure and mineralization:

Franklin, J.M.; Mitchell, R.H. (1977)  
Lead-zinc-barite veins of the Dorion Area,  
Thunder Bay District, Ontario  
in Canadian Journal of Earth Sciences  
Volume 14, Number 9, September 1977, pages 1963 to 1979

## LOCATION AND ACCESS

The group of claims is located within the north central portion of Dorion township (claim map # G-651), Thunder Bay Mining District, Northwestern Ontario (Figure 1:Location map). The Dorion-Wolf Lake area is approximately 40 miles (64 kilometers) northeast of the city of Thunder Bay.

The area is easily accessible via a good system of bush roads branching from highway 11-17. These roads were used for hauling timber many years ago. The main gravel road links Dorion to the Spruce River Road.

## **CLAIMS**

The present mining property is comprised of one claim: TB-1216289 including 12 units of 16-hectares each, for total superficies of approximately 480 acres (192 hectares). Figure 2 presents a sketch of the claims.

The claims were recorded with the Ministry of Northern Development and Mines, under the name of:

David F. Petrunka  
#207 540 Oliver Road  
Thunder Bay, Ontario, Canada  
P7B 5T8  
Prospector license # E-25944  
Client number # 181703

## **PREVIOUS WORK**

Very little exploration work has been completed over the years, within the area of interest. The presence of lead-zinc-barite veins in the Dorion and Nipigon areas of Thunder Bay District was first noted in 1866 (Tanton 1931) and by Silver (1906), Collins (1909) and Uglow (1916). Hawley (1930) and Tanton (1931) recorded the detailed surface and underground descriptions which provide the best data on gross morphology of the veins. Although at least 30 separate occurrences are recorded by Tanton (1931), only the Dorion, Entreprise, and Omega deposits were mined (Figure 1).

The deposits are small but constitute a distinct metallogenic entity, as they are spatially confined to the region of deposition of the Sibley Group redbed basin, and have a consistently simple mineralogy and structure.

In the past, on the claims under study, very limited trenching and sampling has been reported by Andowan Mines Limited. Further to the north west, a few miles away, Noranda Exploration and prospector D. Petrunka completed surface work a few years back, on a similar structure.

## GEOLOGY

The following geological and structural description has been taken from McIlwaine (1975).

General Geology: Bedrock in the map-area ranges in age from Early to Late Precambrian.

A "greenstone" belt approximately two miles (3 km) wide is exposed in the southwestern corner of Dorion township. Rocks within the belt are mainly fine-grained, biotite gneisses and schists. These are, in part, intercalated and intimately intermixed with hornblende gneisses and schists. East-west-trending lenses of migmatites and biotite and hornblende gneisses occur in the vicinity of Innes and Wolf Lake. The presence of the minerals almandine, staurolite, andalusite, and sillimanite infers a sedimentary origin for the biotite gneiss of the "greenstone" belt and a metamorphic grade of middle amphibolite facies.

The older rocks are intruded by weakly foliated, leucocratic quartz monzonite. This is predominantly a medium-grained biotite-bearing rock with local muscovite; the biotite has locally been altered to chlorite.

Middle Precambrian rocks are represented by one outcrop of black, hematitic argillite in contact with diabase on the shore of Lake Superior at Dorion Landing. This rock has been assigned to the Gunflint Formation by McIlwaine (1975).

Late Precambrian, Sibley Group sedimentary rocks, underlie much of the eastern and northwestern parts of the map-area. Here, as in McTavish Township (McIlwaine 1971) two formational units can be defined. Basal conglomerate and fine- to medium-grained buff sandstone underlie the western part of the area. This is overlain to the east by fine-grained red sandstones and red, grey and green limey mudstones. Thickness determinations are hindered by poor exposure.

All of the aforementioned rocks have been intruded by medium-grained diabase. Where it intrudes the flat-lying sedimentary rocks, the diabase forms sills whereas in the Early Precambrian rocks it occurs as dykes and irregularly shaped "collars" around topographically higher areas of the intruded rocks. Apophyses of narrow, short, irregular diabase dikes are common in the granitic rocks within about 20 feet (6 m) of the diabase-granite contact.

Structural Geology      The migmatites are characterized by extreme contrast of deformational style even within a single outcrop. It is common to find a fractured band of gneiss forming angular blocks within flow-deformed leucocratic pegmatite (mobilizate).

Primary igneous structures were not found and primary sedimentary structures were only occasionally observed in the "greenstone" belt. Clear examples of bedding are generally quite rare occurring sporadically in the northern part of the belt. Cataclastic textures are quite common with some brecciated rocks observed. A wide, east-west-trending zone of intense shearing has been mapped (but not shown on the map) in the northern part of the belt. This zone coincides with a pronounced lineament visible on aerial photographs. Small quartz veinlets are common throughout the "greenstone" belt and are invariably folded in parasitic "S" - and "Z" - folds (not shown on the map) plunging N 80 degrees E at approximately 25 degrees. Although apparent graded bedding was found in a number of places top determinations from graded bedding must be considered unreliable because of the recrystallized nature of these rocks.

The Furcate Lake Fault traverses much of the western part of the map-area in a north-south direction and is indicated by a strong lineament as well as much brecciation and silicification. In many locations, along the length of the fault, outcrops can be found of a diabase dike which occupies the fault and is itself brecciated and silicified.

The Sibley Group rocks are essentially flat lying with little or no evidence of secondary deformation.

Economic Geology      The lead-zinc mineralization is similar to that found in McTavish Township. Quartz-carbonate veins mineralized with galena, sphalerite, and pyrite are associated with the Sibley Group-Early Precambrian (Archean) non-conformity. Franklin (1970) suggested that the mineralization is the result of precipitation from circulating ground waters along the non-conformity.

These lead-zinc veins have usually been described as coarse grained, and mineralogically zoned with galena-calcite in the central zone, sphalerite-quartz surrounding the central zone, and barite (+/- chalcopyrite) in the extremities.

## RECENT WORK

During the period of July 03<sup>rd</sup>, 1998 to September 15<sup>th</sup>, 1998, a total of 46 days have been spent by Dave Petrunka, prospector of Thunder Bay, Ontario, to locate the previous old workings (old trenches) reported to have been completed by Andowan Mines Limited, on his staked claims located in Dorion township. High values in zinc (Zn) and lead (Pb) are reported and the present investigation was aimed principally toward the determination of the width and grade of the structure after it has been located in the field. If widths and grades permitting small-scale mining with today's technologies were encountered along these high grade zinc-lead fractures, a bulk sample would be considered.

After a few days of field work, some old pits were located within the central southwest portion of the claim and this area and the areas along strike became the main target of the exploration programme. Stripping and trenching were proposed in the original recommendations but due to the rugged topography, it was decided not to mobilize a backhoe and to proceed with the hand stripping along the favourable structure. A helper (Jim Martin, prospector of Thunder Bay, Ontario) was hired for a total of 16 days during the period of August 11<sup>th</sup>, 1998 to September 15<sup>th</sup>, 1998.

Three trenches were opened along with one pit ( Map 1: Location of trenches). From the west southwest toward the east northeast, trenches were numbered 1, 2 and 3 with pit # 1 located between trench # 1 and trench # 2. The general topography is incline to the northwest toward the creek located immediately to the northwest of the trenches. This creek possibly represents a regional fault and is usually dry in the summer.

Trench # 1 has been opened up over a length of 11.0 meters to an inclined depth of 8.5 meters (top to bottom) along the side of the hill, still much muck is piled up at the bottom of the trench to the northwest. This trench is oriented roughly at 320 degrees. The main mineralized zone is exposed for a length of > 5.0 meters within the area stripped and is oriented at 90 degrees. Approximately 3.0 meters to the northeast a small pit 1.5 m X 3.0 m, has been exposed on top of the hill. Here, the main mineralization zone is oriented at 055 degrees which indicates a bend in the structure from the previous trench. A further 13.0 meters to the northeast at 050 degrees, trench # 2 was cleaned over an area of 2.5 m X 15 m. This trench is also oriented at 320 degrees. Finally, trench # 3 was completed 24 meters further to the northeast of trench # 2 (Map 2: location of trenches along the mineralized zone). Trench # 3 has been opened up for a width of 3.0 m X 28 m and is oriented at 310 degrees.

A total of 26 samples have been collected from the mineralized zone within the trenched areas. These samples have been described by the author before they were sent to Accurrassay Laboratories in Thunder Bay for assaying (Appendix 1: description of samples + copy of assay certificates).

The sample are also located along with geological and structural information, on a series of maps accompanying the present report.

The zinc mineralization is fairly massive to massive within the central portion of the structure which is very narrow. Values of up to 61.39% zinc were returned from this structure which varies in width from 0.02 meter to 0.2 meter (1 inch to 8 inches) and dips steeply to the north to subvertical. A larger "brecciated" zone with irregular mineralization principally galena, surrounds this main core rich in sphalerite. The brecciated zone varies from 0.5 meter to 5.0 meters and occurs on both side of the zinc mineralization. There is no direct correlation between the higher zinc values and the high lead values, furthermore the high lead values (up to 7.81%) have no significant zinc association which confirms the zonation described above.

A few samples (# 30551, 30554, 30561, 30570 and 30572) were also assayed for silver (Ag). The concentration of silver is fairly low (5 to 14 ppm).

One sample (#30570) was assayed for gold (Au) with negative results.

Whole rock analysis was completed on two samples numbered #30570 and #30572. The analysis shows that concentration in cadmium (Cd) , phosphate (P) and tungsten (W) are fairly elevated.

## **CONCLUSIONS AND RECOMMENDATIONS**

The main mineralized zone is oriented roughly at 050 degrees except at the west end, in trench # 1 where it turns to an east-west direction. The mineralized zone is fairly narrow and subvertical. The center of the zone is very rich in sphaletite (Zn) and the margins of the zone are richer in galena (Pb). The zinc-lead values are most impressive but the narrow width of the structure makes it difficult to recommend further detailed exploration work on this property. A structural analysis and photo-interpretation of the region may indicate a few areas of intersecting structures which may create larger opening for lead-zinc mineralization of economic interest.



## REFERENCES

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Lead-zinc-barite veins of the Dorion Area, Thunder Bay District, Ontario: in  
Canadian Journal of Earth Sciences; Volume 14, number 9, September 1977, pp  
1963 - 1979
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Lead and zinc deposits in Ontario and eastern Canada. Ontario Bureau of Mines, Vol.  
XXV, Part 2

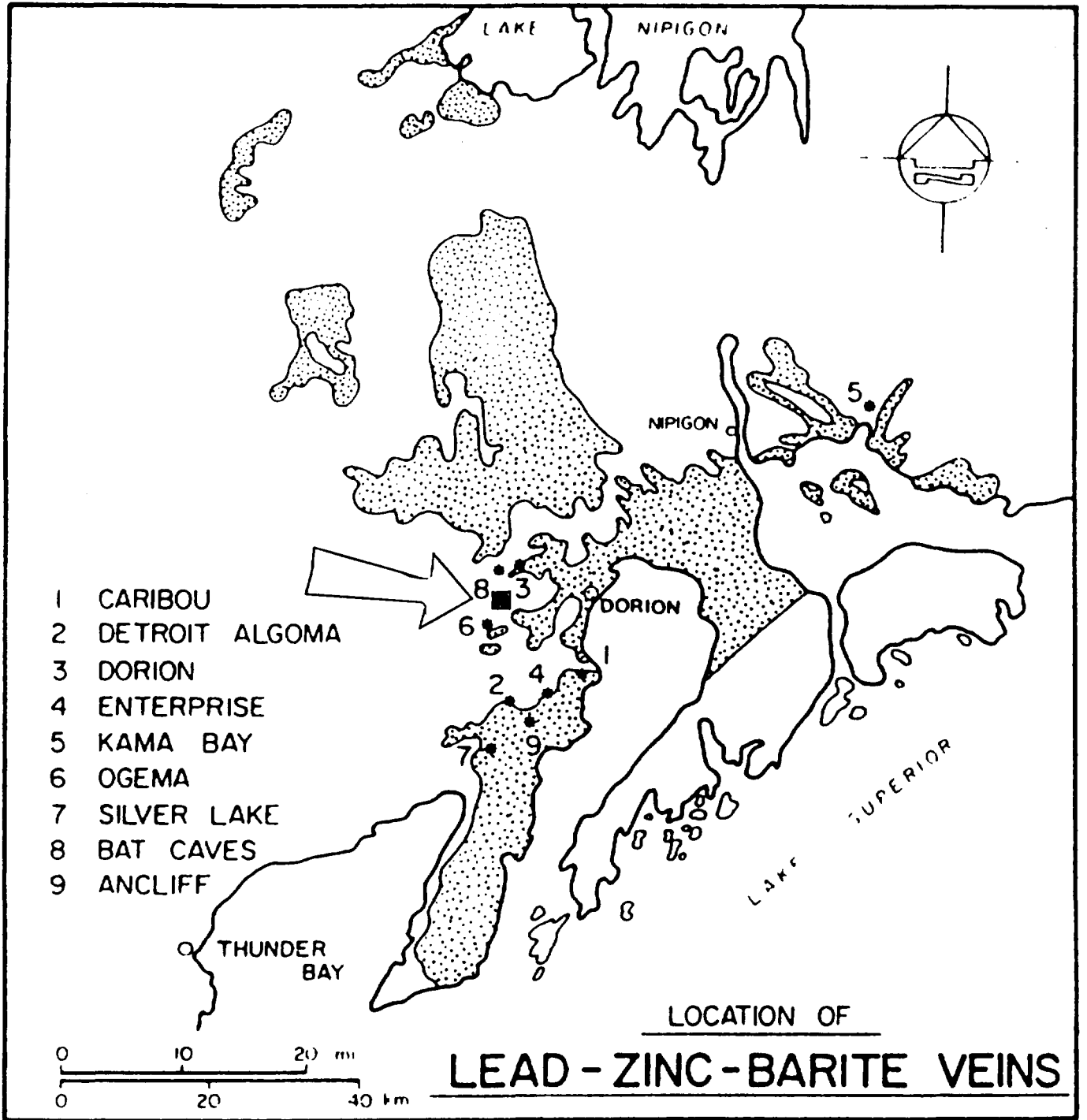
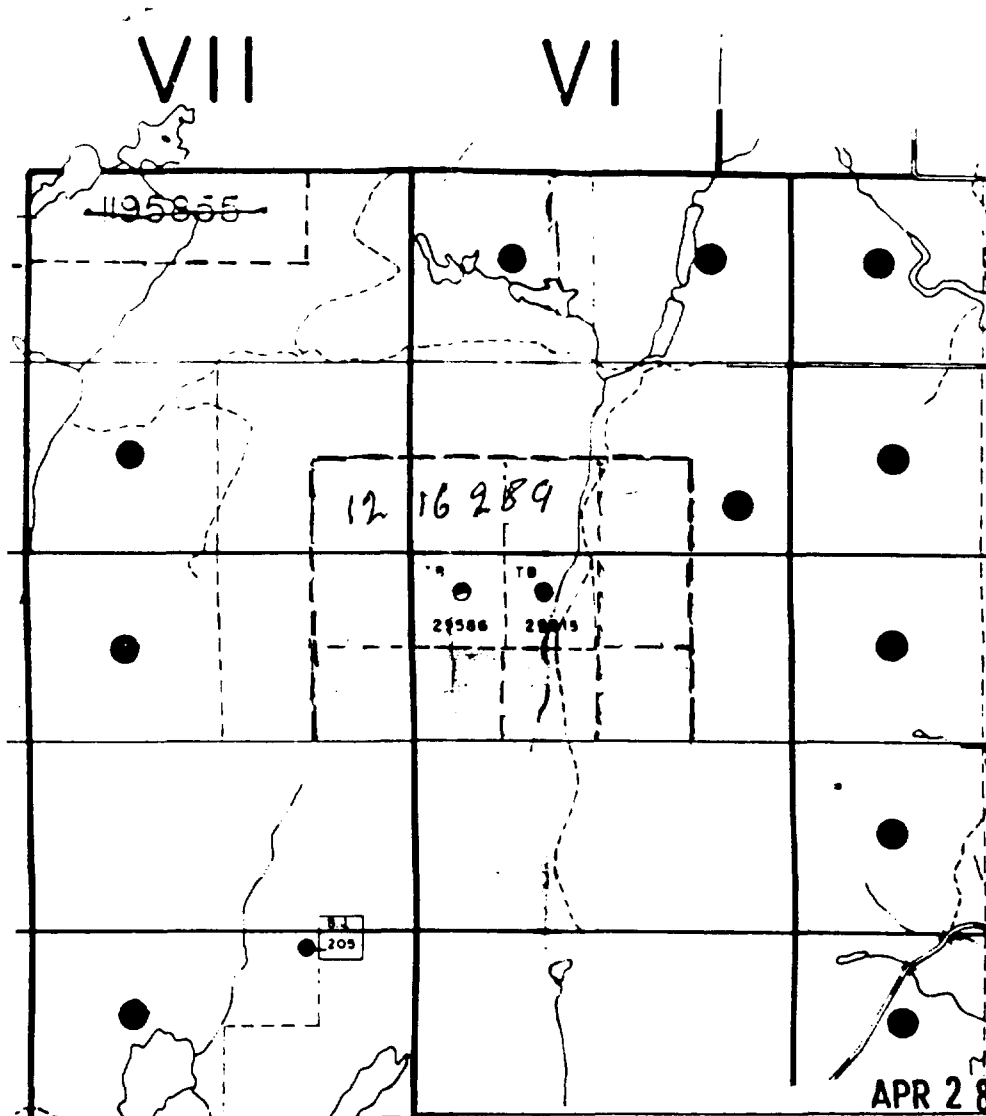


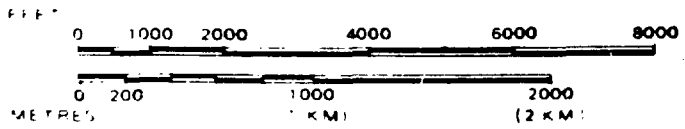
Figure 1: Location Map



APR 28 1998

SCALE: 1 INCH = 40 CHAINS

RECEIVED  
OPAP.



TOWNSHIP

**DORION TWP.**

M.N.R. ADMINISTRATIVE DISTRICT

**THUNDER BAY**

MINING DIVISION

**THUNDER BAY**

LAND TITLES / REGISTRY DIVISION

**THUNDER BAY**

**G-651**

Figure 2: Sketch of claims

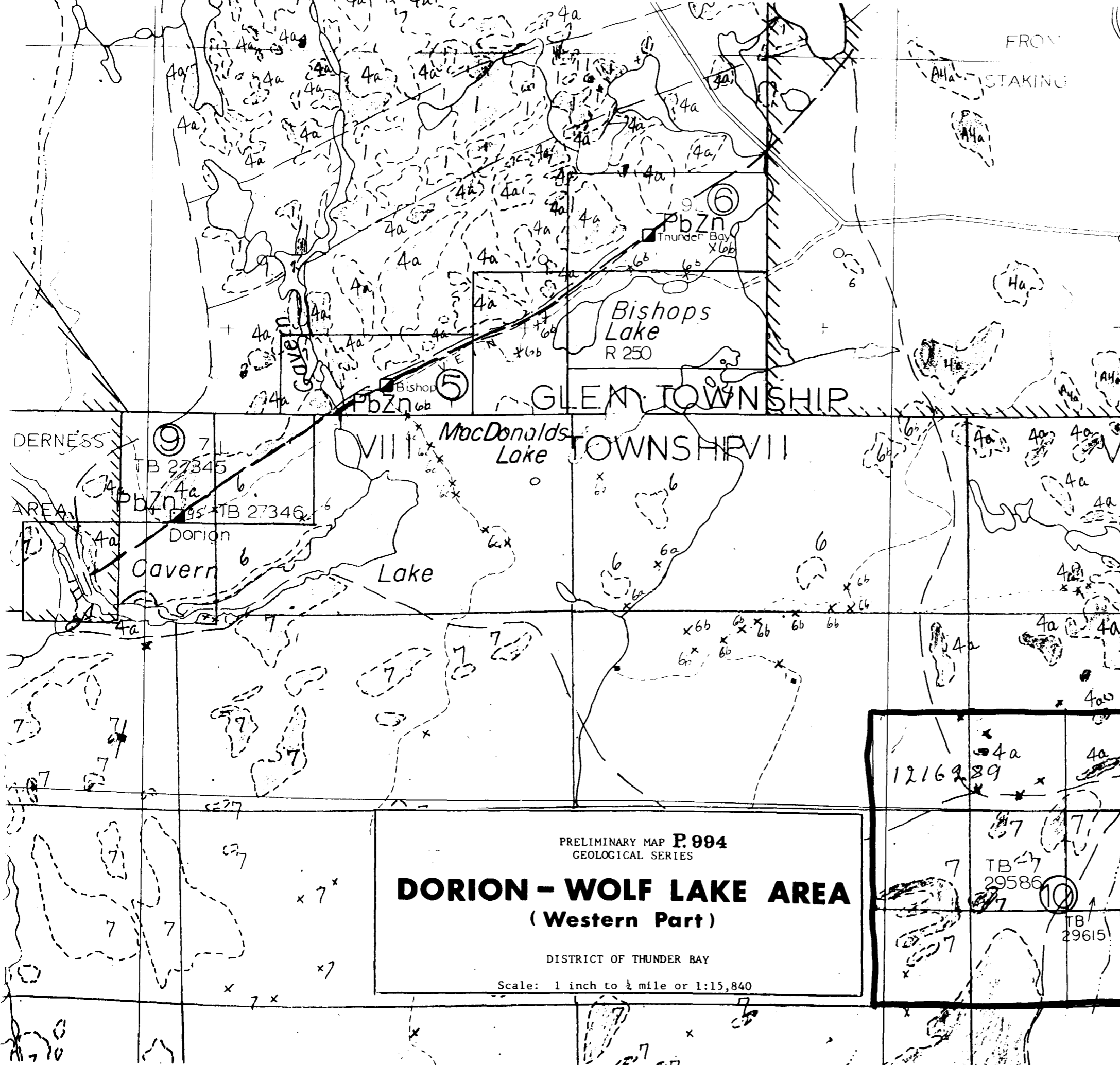


Figure 3: Geology

LEGEND 1,3

- CENOZOIC  
QUATERNARY  
RECENT  
Swamp, lake, and stream deposits
- PLEISTOCENE  
Glacial deposits  
Unconformity
- PRECAMBRIAN  
LATE PRECAMBRIAN  
MAFIC INTRUSIVE ROCKS  
7 Diabase (Logan Diabase)
- KEWEENAWAN  
SIBLEY GROUP (2)  
6 Unsubdivided  
6c Calcareous red mudstone  
6b Quartz arenite, quartzose arenite  
6a Conglomerate, polymictic  
Disconformity
- MIDDLE PRECAMBRIAN  
ANIMIKIE  
Gunflint Formation  
5 Argillite  
Unconformity
- EARLY PRECAMBRIAN (ARCHEAN)  
FELSIC INTRUSIVE ROCKS  
4a Quartz monzonite  
4b Felsite, pegmatite
- METAVOLCANICS AND METASEDIMENTS  
MAFIC METAVOLCANICS  
3 Hornblende gneiss
- METASEDIMENTS  
2 Biotite schist and gneiss, garnet, staurolite andalusite  
1 Migmatitic rocks

1. This is basically a Field Legend and may be changed as a result of laboratory investigations.
2. The rocks in this group are arranged stratigraphically.
3. The letter "A" preceding a rock unit number e.g. "A6" indicates interpretation from air photographs.

GEOLOGICAL AND MINING SYMBOLS

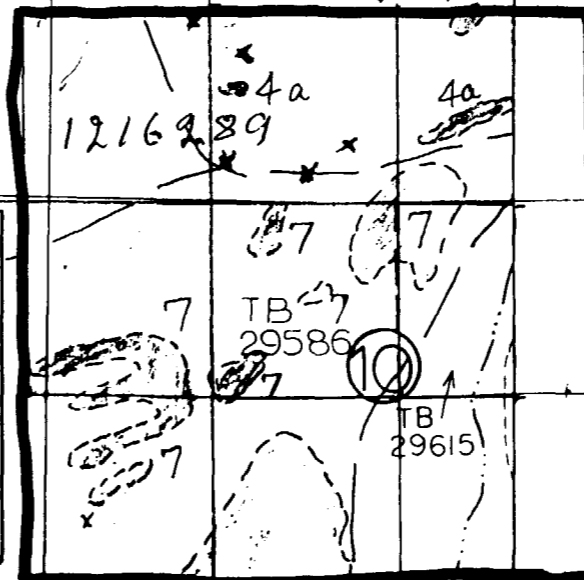
- |  |   |  |                     |
|--|---|--|---------------------|
|  | Glacial striae  |  | Linaeation          |
|  | Small bedrock outcrop                                   |  | Geological position |
|  | Area of bedrock outcrop                                 |  | Lineament           |
|  | Bedding, top unknown; (inclined)                        |  | Jointing; vertical  |
|  | Bedding, top indicated by arrow; (vertical, overturned) |  | Anticline           |
|  | Schistosity; (inclined, vertical)                       |  | Shaft               |
|  | Foliation; (inclined, vertical)                         |  |                     |

PRELIMINARY MAP P. 994  
GEOLOGICAL SERIES

**DORION - WOLF LAKE AREA**  
(Western Part)

DISTRICT OF THUNDER BAY

Scale: 1 inch to 1/2 mile or 1:15,840



**APPENDIX 1**

**Description of samples + copy of assay certificates**

Dave Petrunka Dorion OPAP 1998	
D-98-05 30555	Grab Sample Quartz vein with 35% sphalerite Vein appears to be 3 cm wide, sphalerite is grey metallic to honey-coloured Host rock is fine to medium grained, reddish monzonite which is also slightly fractured with few barren quartz-carb? veins Sphalerite also appears to have been fractured by the quartz <b>Zn: 35.16%, Pb: 536 ppm</b>
D-98-03 30553	Grab Sample Vein approximately 5 cm of fairly massive sphalerite and galena Small cavities are also present within sphalerite Host rock is reddish to green dolomite highly brecciated with qtz-carb-stringers <b>Zn: 46.78%, Pb: 3.79%</b>
D-98-04 30554	Grab Sample Vein 7 cm wide, fairly massive galena with 10% sphalerite and quartz within brecciated reddish green dolomite <b>Zn: 4.98%, Pb: 7.77%, Ag: 11 ppm</b>
D-98-02 30552	Grab Sample Vein 2.5 cm wide of 10% galena and 35% sphalerite within brecciated monzonite? <b>Zn: 26.35%, Pb: 1.6%</b>
D-98-01 30551	Grab Sample Mineralized vein > 7 cm wide, massive sphalerite and minor galena Minor quartz matrix <b>Zn: 61.39%, Pb: 2.96%, Ag: 14 ppm</b>
D-98-06 30556	Grab Sample Brecciated dolomite and monzonite with fractures (1 cm) loaded with large (up to 1 cm) crystals of galena, minor sphalerite Carbonate locally abundant within vein <b>Zn: 6146 ppm, Pb: 6.79%</b>
D-98-08 30558	Grab Sample Narrow vein (2-3 cm) within brecciated dolomite, rich in sphalerite (50%) and galena <b>Zn: 36.43%, Pb: 2.00%</b>

<p>D-98-12 30562</p>	<p>Grab Sample Brecciated monzonite with quartz vein (2.5 cm wide) carrying 15% sphalerite and minor galena Few quartz carb. stringers are also branching from the main vein into the monzonite but are barren <b>Zn: 6.44%, Pb: 4949 ppm</b></p>
<p>D-98-09 30559</p>	<p>Grab Sample Highly brecciated monzonite with narrow stringer (1 cm) of fairly massive galena with minor sphalerite Galena appears to be later than sphalerite and zoning is possible (galena center of vein, sphalerite closer to walls) Galena is also locally present within quartz carb fractures branching from main vein <b>Zn: 6.72%, Pb: 1.74%</b></p>
<p>D-98-07 30557</p>	<p>Grab Sample Brecciated monzonite? with narrow vein (1.5 cm) rich in galena and minor sphalerite Monzonite is fairly well brecciated, and mineralization appears to be limited to one major fracture <b>Zn: 8997 ppm, Pb: 4990 ppm</b></p>
<p>D-98-11 30561</p>	<p>Grab Sample (15 cm X 5 cm) massive mineralization of sphalerite and galena Minor fragments of wall rock are present within mineralization and are generally well coated with quartz <b>Zn: 39.25%, Pb: 2.06%, Ag: 9 ppm</b></p>
<p>D-98-10 30560</p>	<p>Grab Sample (7 cm X 4 cm) massive sphalerite and galena, minor quartz <b>Zn: 57.26%, Pb: 2.21%</b></p>
<p>D-98-17 30567</p>	<p>Grab Sample Vein (locally large cavities 2 cm) of fairly massive galena with lesser amount of sphalerite Monzonite? is brecciated with minor quartz and minor mineralization along fractures <b>Zn: 8.65%, Pb: 3.84%</b></p>
<p>D-98-13 30563</p>	<p>Grab Sample Quartz-carbonate vien with 25% sphalerite (honey-coloured) and 7% galena and 25% fragments of dolomite <b>Zn: 19.78%, Pb: 4.65%</b></p>

D-98-14 30564	Grab Sample Quartz-brecciated zone (> 6 cm wide) with 50% galena, minor sphalerite and 20% fragments of monzonite? <b>Zn: 1094 ppm, Pb: 7.81%</b>
D-98-15 30565	Grab Sample Brecciated monzonite (reddish) and dolomite-mudstone (greenish) fragments with quartz-carbonate matrix Irregular mineralization of sphalerite and galena locally up to 25% Barite? <b>Zn: 2.7%, Pb: 5.22%</b>
D-98-18 30568	Grab Sample Brecciated monzonite, quartz carb. cement with minor sphalerite (10%) and galena <b>Zn: 4.55%, Pb: 2.03%</b>
D-98-23 30573	Grab Sample Brecciated reddish monzonite with abundant fractures filled with quartz and minor carb. Locally opening at junction of fractures with large crystals (1.5 cm) of "honey" sphalerite <b>Zn: 4480 ppm, Pb: 130 ppm</b>
D-98-19 30569	Grab Sample Brecciated monzonite, narrow stringers rich in galena + 20% sphalerite <b>Zn: 14.10%, Pb: 5.28%</b>
D-98-26 30576	Grab Sample Brecciated monzonite Numerous fractures filled with quartz Minor fine mineralization One vein (2.5 cm wide) rich ( 50%) galena Minor sphalerite (10%) <b>Zn: 4.48%, Pb: 2.59%</b>
D-98-24 30574	Grab Sample Breccia (monzonite?) Mineralization (galena) along some fractures + 15% sphalerite <b>Zn: 6.12%, Pb: 335 ppm</b>



<p>D-98-25 30575</p>	<p>Grab Sample Brecciated monzonite with quartz-carb. matrix, trace of fine galena Abundant greenish (epidote) within vein <b>Zn: 602 ppm, Pb: 27 ppm</b></p>
<p>D-98-22 30572</p>	<p>Grab Sample Mineralized vein (10 cm wide) within brecciated monzonite Sphalerite (50%) and galena Stringers of carbonate along quartz vein Fragments of mudstone, minor "geodes" <b>Zn: 37.71%, Pb: 7262 ppm, Ag: 5ppm &amp; whole rock analysis</b></p>
<p>D-98-21 30571</p>	<p>Grab Sample Brecciated monzonite with quartz-carb matrix Stringer 2 cm mineralized with heavy sphalerite and minor galena <b>Zn: 19.36%, Pb: 971 ppm</b></p>
<p>D-98-16 30566</p>	<p>Grab Sample Brecciated monzonite 20% sphalerite fair galena <b>Zn: 12.32% Pb: 4.16%</b></p>
<p>D-98-20 30570</p>	<p>Grab Sample Mineralized vein (&gt; 6 cm wide) Massive sphalerite (70%), minor galena, possibly pyrite <b>Zn: 56.83%, Pb: 5026 ppm, Ag: 9ppm, Au: &lt;5ppb</b></p>



# ACCURASSAY LABORATORIES

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Thunder Bay, Ontario  
P7B 5T8

Oct 6, 1998

Job# 9840751

Accurassay	SAMPLE # Customer	Lead %	Zinc %
1	30551	2.96%	61.39%
2	30552	1.60%	26.35%
3	30553		46.78%
4	30554	7.77%	4.98%
5	30555		35.16%
6	30556	6.79%	
7	30558	2.00%	36.43%
8	30559	1.74%	6.72%
9	30560	2.21%	57.26%
10	30561	2.06%	39.25%
11	30562		6.44%
12	30563		19.78%
13	30564	7.81%	
14	30565		2.70%
15	30566		12.32%
16	30567	3.84%	8.65%
17	30568	2.03%	4.55%
18	30569		14.10%
19	30570		56.83%
20	30571		19.36%
21	30572		37.71%
22	30574		6.12%
23	30576	2.59%	4.48%

Certified By: \_\_\_\_\_



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Sep 24, 1998

Job# 9840706

Accurassay	SAMPLE # Customer	Lead ppm	Zinc ppm	Silver ppm
1	30551	>10,000	>10,000	14
2	30552	>10,000	>10,000	
3	30553	>10,000	>10,000	
4	30554	>10,000	>10,000	11
5	30555	536	>10,000	
6	30556	>10,000	6146	
7	30557	4990	8997	
8	30558	>10,000	>10,000	
9	30559	>10,000	>10,000	
10	30560	>10,000	>10,000	
11	30561	>10,000	>10,000	9
12	30562	4949	>10,000	
13	30563	>10,000	>10,000	
14	30564	>10,000	1094	
15	30565	>10,000	7808	
16	30566	>10,000	>10,000	
17	30567	>10,000	>10,000	
18	30568	>10,000	>10,000	
19	30569	>10,000	>10,000	
20	30570	5026	>10,000	9
21	30571	971	>10,000	
22	30572	7262	>10,000	5
23	30573	130	4480	
24	30574	335	>10,000	
25	30575	27	602	
26	30576	>10,000	>10,000	

Certified By:



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540 Oliver Rd., Apt. 207  
Thunder Bay, Ontario  
P7B 5T8

Sep 24, 1998

Job# 9840706

SAMPLE #		Gold	Gold
Accurassay	Customer	ppb	Oz/t
1	30570	<5	<0.001
2 check	30570	<5	<0.001

Certified By:

1070 LITHIUM DRIVE, UNIT 2  
 THUNDER BAY, ONTARIO P7B 6G3  
 PHONE (807) 623-6448  
 FAX (807) 623-6820

Dave Petrunka  
 540 Oliver Rd., Apt. 207  
 Thunder Bay, Ontario  
 P7B 5T8

Page 1

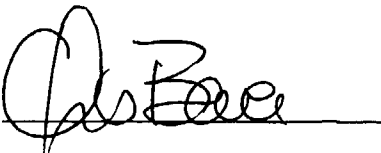
Oct 7, 1998

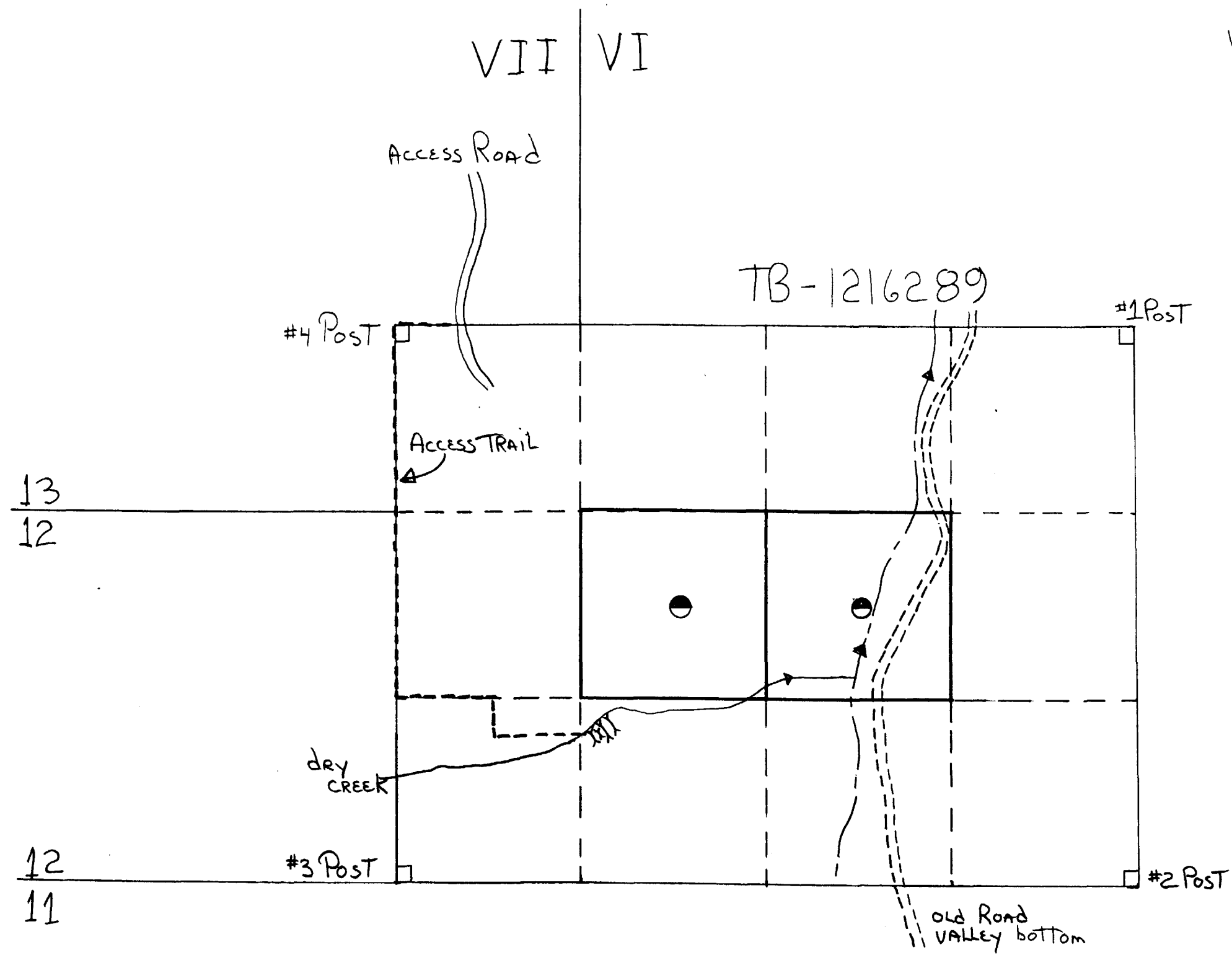
Job #9840706

SAMPLE #	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm
30570	10.7	0.07	101	23	8	<.1	46	0.02	>1000	64	55	339	0.49	<.01	4
30572	5.5	0.18	80	21	13	0.1	36	0.06	>1000	45	106	95	0.53	0.02	4

	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Se ppm	Si %	Sn ppm	Sr ppm	Ti %	V ppm	W ppm	Zn ppm
30570	0.07	37	205	<.01	102	14773	4323	631	<5	0.01	<5	2	<.01	<1	>1000	>100000
30572	0.27	65	161	0.02	18	12431	8049	450	<5	0.01	<5	2	<.01	15	>1000	>100000

Certified By: 



VI V

VII VI

TB-1216289

#4 Post

#1 Post

13

12

ACCESS TRAIL

#3 Post

#2 Post

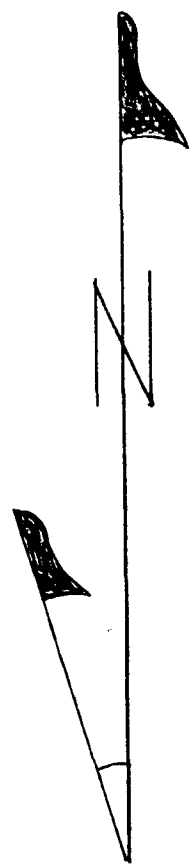
12

11

dry CREEK

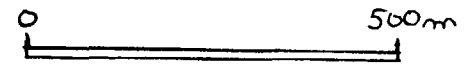
old Road VALLEY bottom

DORION Twp  
G-651



LOCATION OF TRENCHES

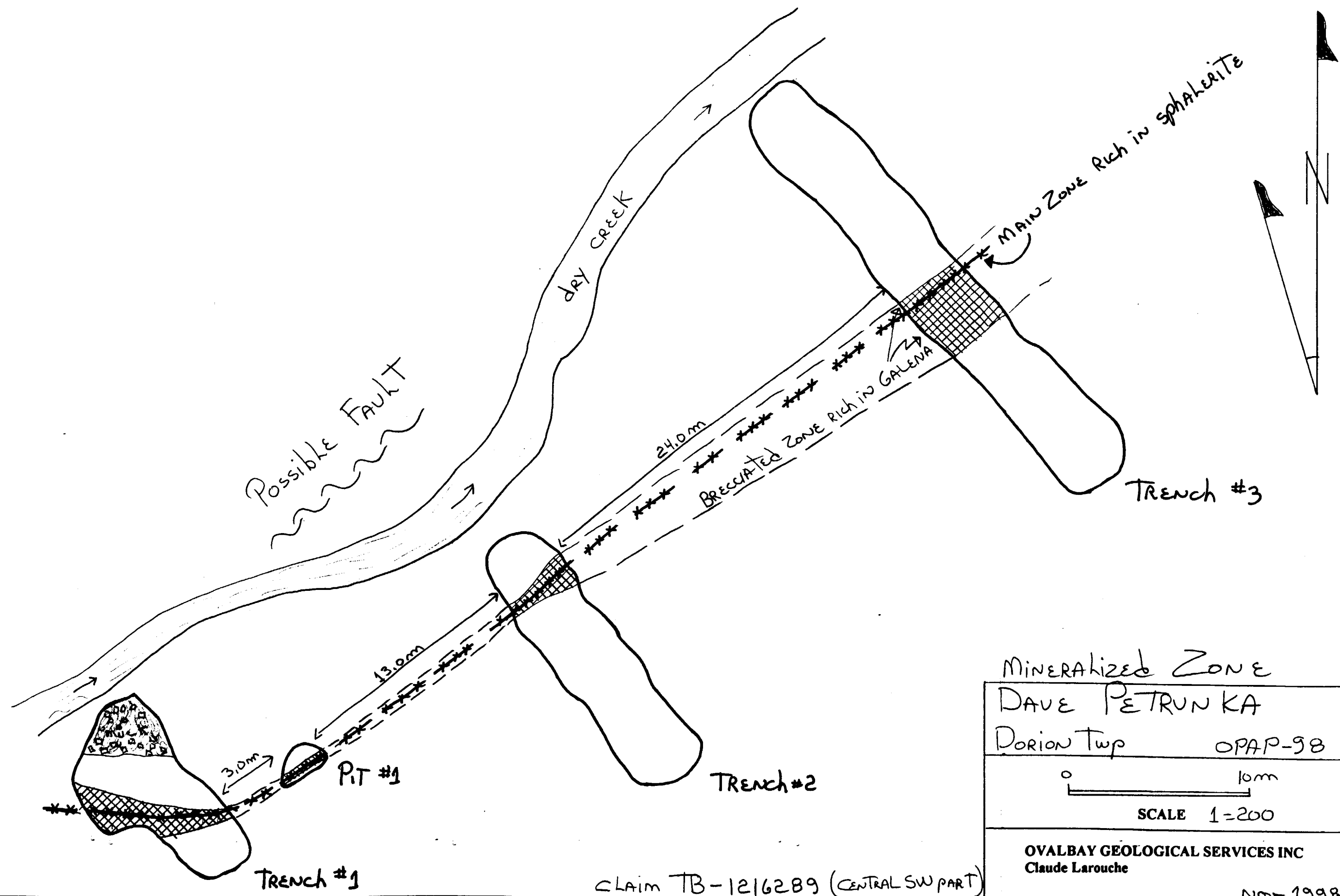
DAVE PETRUNKA  
DORION Twp OPAP-98



SCALE 1:10,000

OVALBAY GEOLOGICAL SERVICES INC  
Claude Larouche

Nov 1998



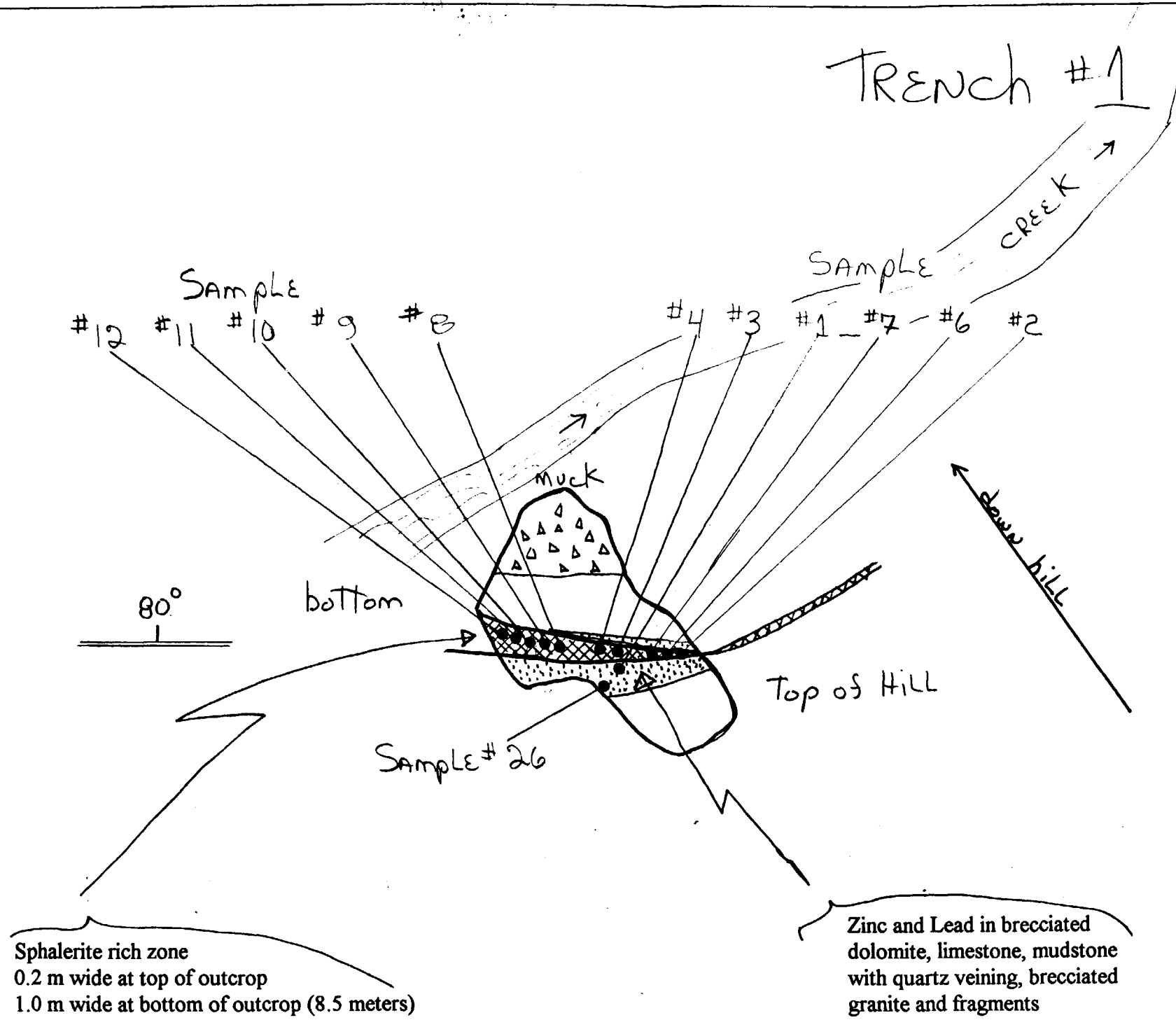
MINERALIZED ZONE  
 DAVE PETRUNKA  
 DORION Twp OPAP-98

0 10m  
 SCALE 1=200

OVALBAY GEOLOGICAL SERVICES INC  
 Claude Larouche

NOV 1998

CLAIM TB-1216289 (CENTRAL SW PART)



CLAIM TB-1216289  
TRENCH #1

DAVE PETRUNKA  
DORION Twp OPAP-98

0 10m  
SCALE 1=200

OVALBAY GEOLOGICAL SERVICES INC  
Claude Larouche

Nov. 1998

### ASSAY RESULTS

SAMPLE#	LAB #	ZN %	PB %	SAMPLE #	LAB #	ZN %	PB %	SAMPLE#	LAB #	ZN %	PB %
1	30551	61.39	2.96	6	30556	6146 PPM	6.79	10	30560	57.26	2.21
2	30552	26.35	1.6	7	30557	8997 PPM	4990 PPM	11	30561	39.25	2.06
3	30553	46.78	3.79	8	30558	36.43	2.00	12	30562	6.44	4949 PPM
4	30554	4.98	7.77	9	30559	6.72	1.74	26	30576	4.48	2.59









Ministry of Northern Development and Mines

### Declaration of Assessment Work Performed on Mining Land

Mining Act, Subsection 65(2) and 66(3), R.S.O. 1990

Transaction Number (office use) W9840.00665
Assessment Files Research Imaging



52A15SE2001 2.19068 DORION 900

4 subsections 65(2) and 66(3) of the Mining Act. Under section 8 of the Act, you must review the assessment work and correspond with the mining land holder. Recorder, Ministry of Northern Development and Mines, 6th Floor.

Instructions: - For work performed on Crown Lands before recording a claim, use form 0240.  
- Please type or print in ink.

Thunder Bay Mining Division  
NOV 30 1998

2.19068 RECEIVED

1. Recorded holder(s) (Attach a list if necessary)

Name DAVID F. PETRUNKA	Client Number 181703
Address #207 540 OLIVER ROAD THUNDER BAY ONTARIO P7B 5T8	Telephone Number 807-344-8233
	Fax Number -
Name	Client Number
Address	Telephone Number
	Fax Number

2. Type of work performed: Check (✓) and report on only ONE of the following groups for this declaration.

- Geotechnical: prospecting, surveys, assays and work under section 18 (regs)       Physical: drilling, stripping, trenching and associated assays       Rehabilitation

Work Type STRIPPING TRENCHING SAMPLING	Office Use
Dates Work Performed From 03 07 98 To 25 11 98	Commodity
Global Positioning System Data (if available) -	Total \$ Value of Work Claimed 10,188
Township/Area DORION Twp	NTS Reference
M or G-Plan Number G-651	Mining Division Thunder Bay
	Resident Geologist District RECEIVED

Please remember to: - obtain a work permit from the Ministry of Natural Resources as required;  
- provide proper notice to surface rights holders before starting work;  
- complete and attach a Statement of Costs, form 0212;  
- provide a map showing contiguous mining lands that are linked to the assessment work;  
- include two copies of your technical report.

DEC 01 1998  
4.55  
ASSESSMENT OFFICE

3. Person or companies who prepared the technical report (Attach a list if necessary)

Name OVALBAY GEOLOGICAL SERVICES INC	Telephone Number 807-623-3770
Address 1070 LITHIUM DR UNIT #3 THUNDER BAY ON P7B 6G3	Fax Number 807-623-2335
Name	Telephone Number
Address	Fax Number
Name	Telephone Number
Address	Fax Number

4. Certification by Recorded Holder or Agent

I, DAVID F. PETRUNKA (Print Name), do hereby certify that I have personal knowledge of the facts set forth in this Declaration of Assessment Work having caused the work to be performed or witnessed the same during or after its completion and, to the best of my knowledge, the annexed report is true.

Signature of Recorded Holder or Agent <i>D.F. Petrunka</i>	Date Nov 25 1998
Agent's Address 207 540 OLIVER RD T-BAY ON P7B 5T8	Fax Number -
Telephone Number 807-344-8233	

5. Work to be recorded and distributed. Work can only be assigned to claims that are contiguous (adjoining) to the mining land where work was performed, at the time work was performed. A map showing the contiguous link must accompany this form.

Mining Claim Number. Or if work was done on other eligible mining land, show in this column the location number indicated on the claim map.	Number of Claim Units. For other mining land, list hectares.	Value of work performed on this claim or other mining land.	Value of work applied to this claim.	Value of work assigned to other mining claims.	Bank. Value of work to be distributed at a future date.
eg TB 7827	16 ha	\$26,825	N/A	\$24,000	\$2,825
eg 1234567	12	0	\$24,000	0	0
eg 1234568	2	\$8,892	\$4,000	0	\$4,892
1 TB-1216289	12	10188	10188	-	-
2					
3					
4					
5	2.19088				
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
Column Totals		10188	10188	-	-

I, David F. Petrunka, do hereby certify that the above work credits are eligible under subsection 7 (1) of the Assessment Work Regulation 6/96 for assignment to contiguous claims or for application to the claim where the work was done.

Signature of Recorded Holder or Agent Authorized in Writing: DA Petrunka Date: Nov 25th 98

6. Instructions for cutting back credits that are not approved.

Some of the credits claimed in this declaration may be cut back. Please check (✓) in the boxes below to show how you wish to prioritize the deletion of credits:

- 1. Credits are to be cut back from the Bank first, followed by option 2 or 3 or 4 as indicated.
- 2. Credits are to be cut back starting with the claims listed last, working backwards; or
- 3. Credits are to be cut back equally over all claims listed in this declaration; or
- 4. Credits are to be cut back as prioritized on the attached appendix or as follows (describe):

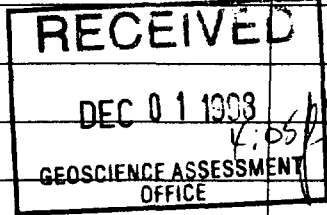
Note: If you have not indicated how your credits are to be deleted, credits will be cut back from the Bank first, followed by option number 2 if necessary.

For Office Use Only

Received Stamp	Deemed Approved Date	Date Notification Sent
	Date Approved	Total Value of Credit Approved
Approved for Recording by Mining Recorder (Signature)		

Personal information collected on this form is obtained under the authority of subsection 6(1) of the Assessment Work Regulation 6/96. Under section 8 of the Mining Act, the information is a public record. This information will be used to review the assessment work and correspond with the mining land holder. Questions about this collection should be directed to the Chief Mining Recorder, Ministry of Northern Development and Mines, 6th Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 6B5.

Work Type	Units of Work <small>Depending on the type of work, list the number of hours/days worked, metres of drilling, kilometres of grid line, number of samples, etc.</small>	Cost Per Unit of work	Total Cost
Stripping - Trenching <sup>SAMPLING</sup>	46 days	\$ 100/day	4600
" " "	16 days	\$ 100/day	1600
ASSAYS	26 samples		601
Report			936
<b>2.19008</b>			
<b>Associated Costs (e.g. supplies, mobilization and demobilization).</b>			
Dynamite			395
Photocopies & Repro			69
<b>Transportation Costs</b>			
Road 94km X 46			
<b>Food and Lodging Costs</b>			
46 X \$15			690
<b>Total Value of Assessment Work</b>			<b>10188</b>



**Calculations of Filing Discounts:**

1. Work filed within two years of performance is claimed at 100% of the above Total Value of Assessment Work.
2. If work is filed after two years and up to five years after performance, it can only be claimed at 50% of the Total Value of Assessment Work. If this situation applies to your claims, use the calculation below:

TOTAL VALUE OF ASSESSMENT WORK                      x 0.50 =                      Total \$ value of worked claimed.

**Note:**

- Work older than 5 years is not eligible for credit.
- A recorded holder may be required to verify expenditures claimed in this statement of costs within 45 days of a request for verification and/or correction/clarification. If verification and/or correction/clarification is not made, the Minister may reject all or part of the assessment work submitted.

**Certification verifying costs:**

I, David F Petrunka (please print full name), do hereby certify, that the amounts shown are as accurate as may reasonably be determined and the costs were incurred while conducting assessment work on the lands indicated on the accompanying Declaration of Work form as Recorded holder I am authorized (recorded holder, agent, or state company position with signing authority) to make this certification.

Signature: P. F. Petrunka Date: Nov 25/98

Geoscience Assessment Office  
933 Ramsey Lake Road  
6th Floor  
Sudbury, Ontario  
P3E 6B5

Telephone: (888) 415-9846  
Fax: (877) 670-1555

February 25, 1999

DAVID FRANKLIN PETRUNKA  
540 OLIVER ROAD,  
APT.# 207  
THUNDER BAY, Ontario  
P7B-5T8

Visit our website at:  
[www.gov.on.ca/MNDM/MINES/LANDS/mlsmnpge.htm](http://www.gov.on.ca/MNDM/MINES/LANDS/mlsmnpge.htm)

Dear Sir or Madam:

**Submission Number: 2.19068**

**Status**

**Subject: Transaction Number(s):** W9840.00665 Approval

---

We have reviewed your Assessment Work submission with the above noted Transaction Number(s). The attached summary page(s) indicate the results of the review. **WE RECOMMEND YOU READ THIS SUMMARY FOR THE DETAILS PERTAINING TO YOUR ASSESSMENT WORK.**

If the status for a transaction is a 45 Day Notice, the summary will outline the reasons for the notice, and any steps you can take to remedy deficiencies. The 90-day deemed approval provision, subsection 6(7) of the Assessment Work Regulation, will no longer be in effect for assessment work which has received a 45 Day Notice. Allowable changes to your credit distribution can be made by contacting the Geoscience Assessment Office within this 45 Day period, otherwise assessment credit will be cut back and distributed as outlined in Section #6 of the Declaration of Assessment work form.

Please note any revisions must be submitted in **DUPLICATE** to the Geoscience Assessment Office, by the response date on the summary.

If you have any questions regarding this correspondence, please contact Lucille Jerome by e-mail at [lucille.jerome@ndm.gov.on.ca](mailto:lucille.jerome@ndm.gov.on.ca) or by telephone at (705) 670-5858.

Yours sincerely,



ORIGINAL SIGNED BY  
Blair Kite  
Supervisor, Geoscience Assessment Office  
Mining Lands Section

# Work Report Assessment Results

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**Submission Number:** 2.19068

**Date Correspondence Sent:** February 25, 1999

**Assessor:** Lucille Jerome

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<b>Transaction Number</b>	<b>First Claim Number</b>	<b>Township(s) / Area(s)</b>	<b>Status</b>	<b>Approval Date</b>
W9840.00665	1216289	DORION	Approval	February 25, 1999

**Section:**  
10 Physical PSTRIIP

**Correspondence to:**  
Resident Geologist  
Thunder Bay, ON

**Recorded Holder(s) and/or Agent(s):**  
DAVID FRANKLIN PETRUNKA  
THUNDER BAY, Ontario

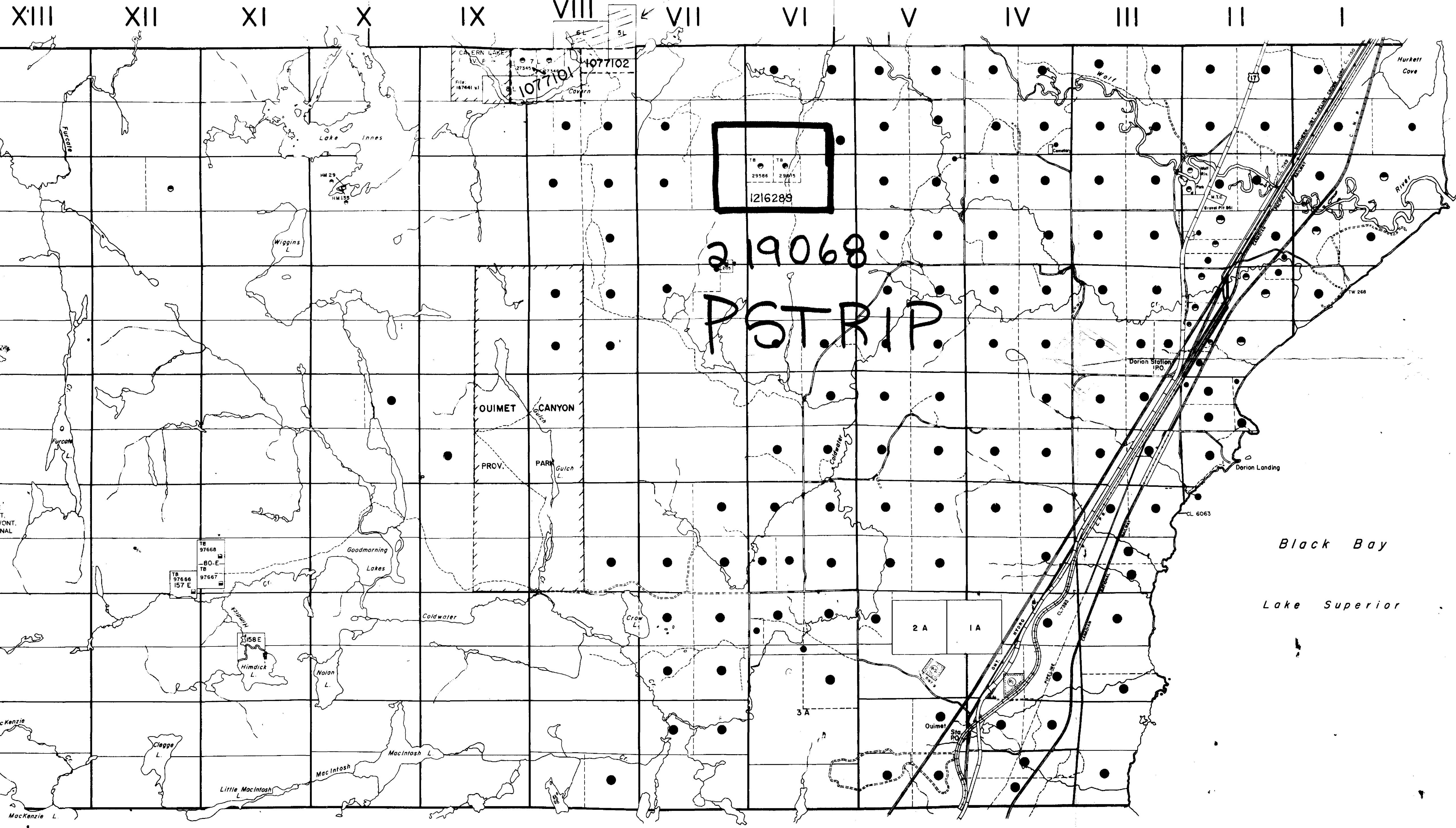
Assessment Files Library  
Sudbury, ON

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GREENWICH LAKE G-2705

TARTAN LAKE G-2706

GLEN TWP. G-160 STIRLING TWP. G-175



THE SURFACE RIGHTS LYING WITHIN 10.25 m OF THE CENTER LINE OF THE TRANS CANADA PIPELINE RIGHT OF WAY ARE WITHDRAWN FROM STAKING OUT, PROSPECTING, SALE OR LEASE BY ORDER W-0/91/ONT. DATED SEPT. 20, 1991. SECTION 112 OF THE NATIONAL ENERGY ACT APPLIES TO THIS AREA.

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

**AREAS WITHDRAWN FROM STAKING**

Description	Order No.	Date	Disposition	File
S.R. - SURFACE RIGHTS	M.R. - MINING RIGHTS			
Sec 36/80	WNCR 1/81	Jan/85	S.A.M.R.	
Sec 36/80	W. 23/87/NCR	Feb./87	S.R.O.	188753

**DATE OF ISSUE**  
**APR 06 1998**  
**PROVINCIAL RECORDING OFFICE - SUDBURY**  
 LAND UNDER WATERS OF LAKE SUPERIOR WITHDRAWN FROM STAKING BY ORDER IN COUNCIL DATED APRIL 30, 1992

**LEGEND**

HIGHWAY AND ROUTE NO.	
OTHER ROADS	
TRAILS	
SURVEYED LINES	
TOWNSHIPS, BASE LINES, ETC.	
LOTS, MINING CLAIMS, PARCELS, ETC.	
UNSURVEYED LINES	
LOT LINES	
PARCEL BOUNDARY	
MINING CLAIMS ETC.	
RAILWAY AND RIGHT OF WAY	
UTILITY LINES	
NON PERENNIAL STREAM	
FLOODING OR FLOODING RIGHTS	
SUBDIVISION OR COMPOSITE PLAN RESERVATIONS	
ORIGINAL SHORELINE	
MARSH OR MUSKIEG	
MINES	
TRAVERSE MONUMENT	

**DISPOSITION OF CROWN LANDS**

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	
" SURFACE RIGHTS ONLY	
" MINING RIGHTS ONLY	
LEASE, SURFACE & MINING RIGHTS	
" SURFACE RIGHTS ONLY	
" MINING RIGHTS ONLY	
LICENCE OF OCCUPATION	
ORDER IN COUNCIL	
RESERVATION	
CANCELLED	
SAND & GRAVEL	
LAND USE PERMITS FOR COMMERCIAL TOURISM/OUTPOST CAMPS	

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1912 VESTED IN ORIGINAL PATENTEES BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 62, SUBSEC. 1.

SCALE: 1 INCH = 40 CHAINS

**TOWNSHIP**  
**DORION TWP.**  
 M.N.R. ADMINISTRATIVE DISTRICT  
**THUNDER BAY**  
 MINING DIVISION  
**THUNDER BAY**  
 LAND TITLES / REGISTRY DIVISION  
**THUNDER BAY**

Ministry of Natural Resources  
 Land Management Branch  
 Ontario  
 MARCH 3, 1987

Date: MARCH 1982  
 Number: **G-651**

McTAVISH TWP. G-675

