

Report on a geological, geochemical sampling, and V.L.F - E.M  
geophysical survey on the Forrester Lake Claims

CROLL TOWNSHIP  
THUNDER BAY MINING DIVISION

NORTHWESTERN ONTARIO  
N.T.S 42 E 10  
U.T.M ZONE 16  
LAT. 49° 41'30"N LONG. 86° 50'15"W

NOV 25/2014

Author: Rand Hodgson

## Table of Contents

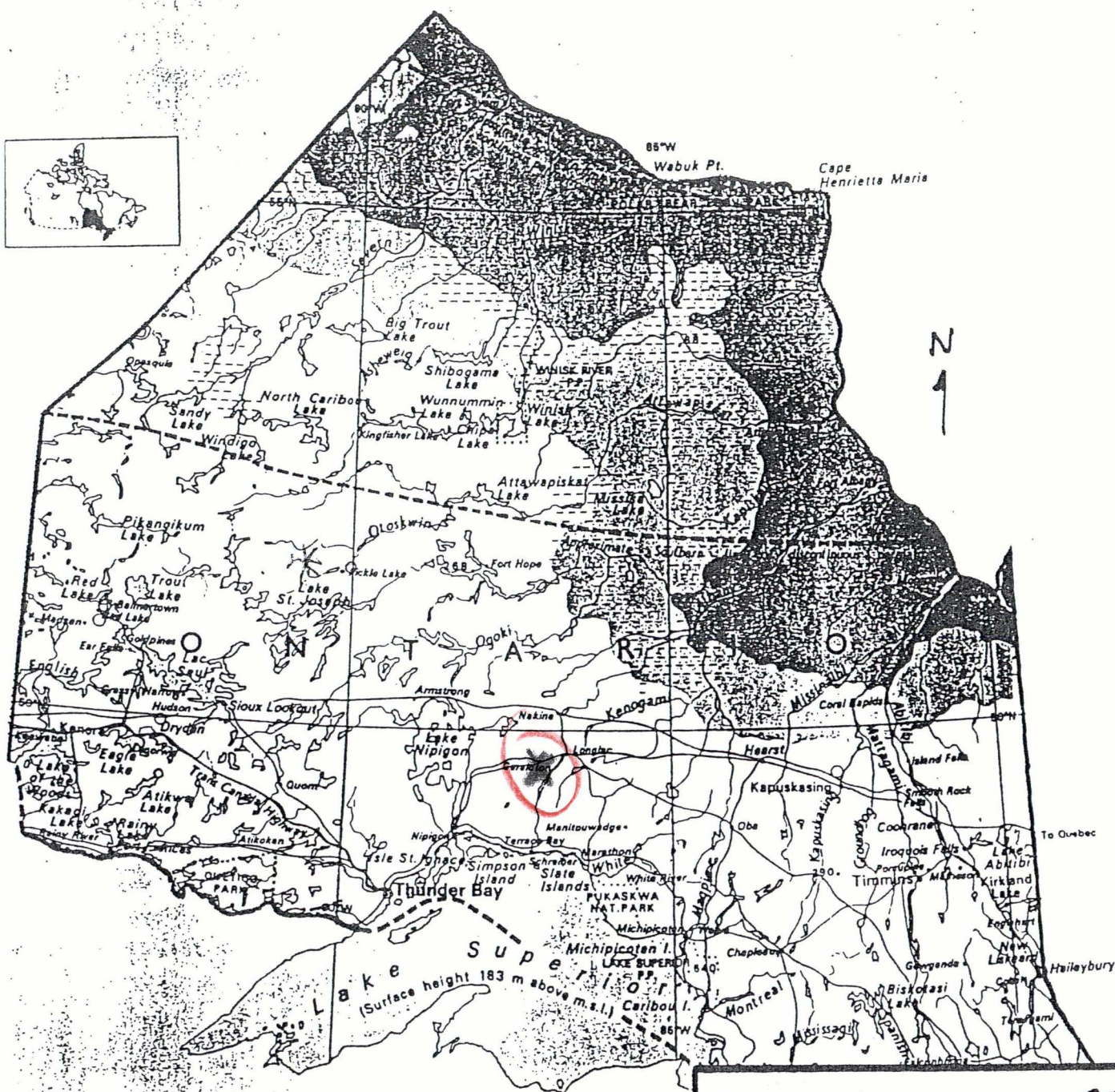
<u>Section</u>	<u>Page #</u>
Introduction .....	3
Property Description, Location and Access .....	3
Topography and Drainage .....	4
Summary of previous exploration and development .....	4
Regional Geology .....	5
Property Geology .....	6
Mineralization .....	6
V.L.F EM Survey .....	7
Conclusions and Recommendations .....	8
References .....	8
Statement of Qualifications .....	9
Appendix I Sample Descriptions	
Appendix II Assay Certificate	
Appendix III Table of Lithological units	
Appendix IV Daily Log	

## Figures

- 1) Location Map
- 2) Detailed Location Map
- 3) Claim Map

## Maps

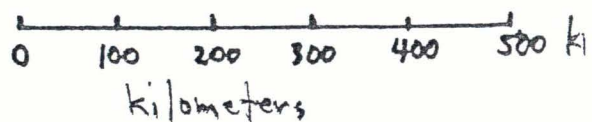
- 1) Geology and Sample Locations 1:4000
- 2) V.L.F-EM survey 1:4000



## PROPERTY LOCATION MAP

(Figure 1)

SCALE 1 : 8,000,000





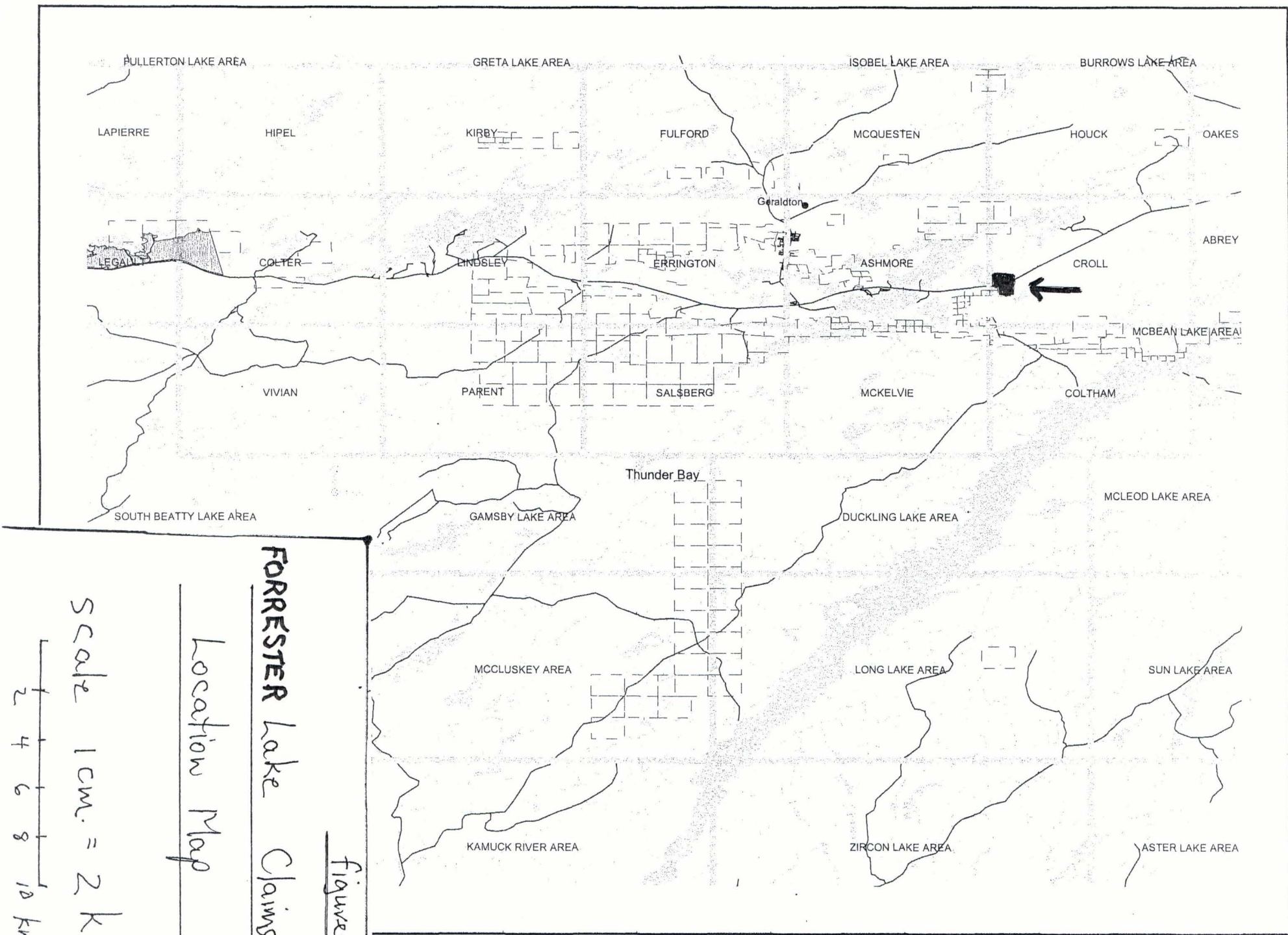
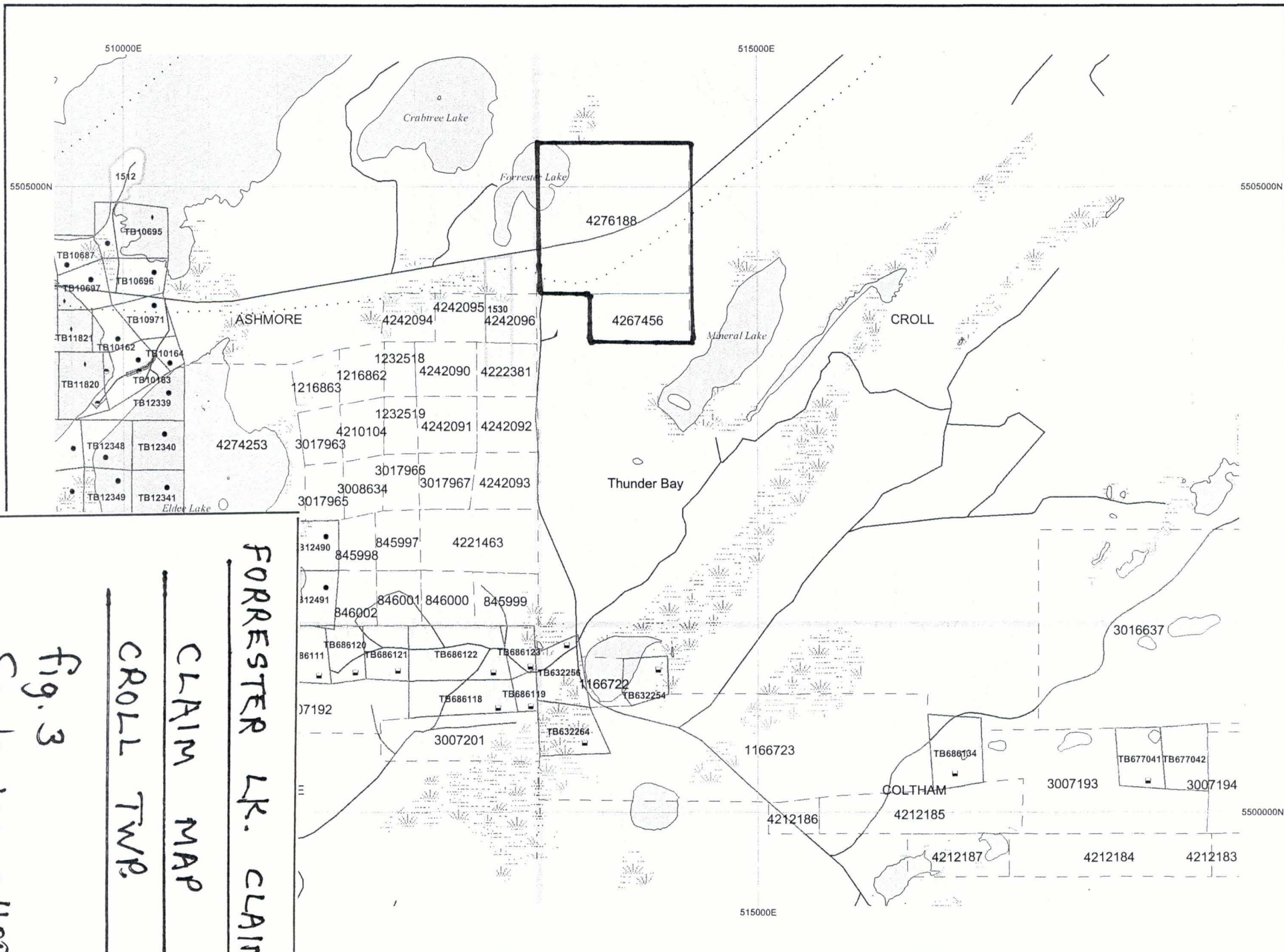


figure 2





FORRESTER LK. CLAIMS  
 CLAIM MAP  
 CROLL TWP.  
 fig. 3  
 Scale 1cm = 400 m

## Introduction

This report describes a geological, geochemical, and geophysical survey carried out as an eleven unit claim group - 4276188 (9 units); 4267456 (2 units) - located in Croll Township, Thunder Bay Mining Division. The survey was conducted by Rand Hodgson of 32 Fire Route 45, Buckhorn, Ontario, and Steven Crowder of 121 Sumcott Dr., Buckhorn, Ontario, during the period Aug 20-31, 2014. It was carried out on compass flagged lines oriented to N.35° W with locations confirmed with G.P.S. The lines were spaced 100 meters apart. Thirty-nine rock and soil samples were analysed for gold using routine fire-assay methodology. All results are recorded on two separate base maps (scale 1:4000); one for geophysical profile; one for geology and sample locations.

## Property Description, Location, Access

The Forrester Lake property consists of an 11 unit unpatented mining claim group located 10 kilometers east- south-east of Geraldton, Ontario, in west Croll Township. Centred approximately at latitude 49°41'30", longitude 86°50'15" W. (U.T.M Zone 16, 5505000N, 514000 E), the claim group was staked by Rand Hodgson on Sept 6, 7, 2013. The claims are 100% owned by Hodgson, subject to 1% royalty interest in favor of the Ontario Exploration Corporation.

Access is by way of Highway 11 which crosses the property in an east-west direction. The claims are situated between Forrester Lake and Mineral Lake and are bounded on the west by the Ashmore - Croll Township Line.



## Topography and Drainage

The claim group is moderately undulating with maximum relief in the order of 10-15 meters. The north-west and south-east quadrants of the property - in the vicinity of Forrester and Mineral lakes - are low, swampy with deep overburden. The central part, on both sides of Highway 11, exposes moderate amounts of rock outcrop in the amount of 10-20%. There is a high hill at the western edge of the property on the north side of Highway 11, south of Forrester Lk. It is overburden covered, with no outcrop exposed.

## Summary of Previous Exploration and Development

Gold was discovered in the Geraldton area in 1931. The Geraldton gold camp, centered around the western end of Ashmore Township, produced over 3 million ounces of gold and 24,000 ounces of silver between 1934 and 18970. There are hundreds of high-grade gold occurrences in the Beardmore-Geraldton belt mostly associated with sulphide mineralized quartz veins within shear zones and sulphide iron formation units. There are numerous gold occurrences located within 1000 meters or less of the property - including the old Roche Long Lac Mine shaft on the north-east shore of Eldee lake - approximately 900 meters west along the same geological contact. Sampling by Kodiak Exploration in 2010 on adjoining claims to the west located numerous gold occurrences up to 292 grams per tonne (gpt).

There are numerous trenches and blast pits east of Forrester Lake which confirm the intensity of historical exploration on these claims. Several gold and copper occurrences are known and located on O.G.S Map 2539 (from Report 273 - the Geology of Northern Long Lake Area). The Beardmore - Geraldton Research Project (ref. 2) mentions two local occurrences for which no information can be found - the Central Long Lac and the Dunlop Consolidated - both considered pre-1950's era.

Several regional airborne electromagnetic + magnetic surveys have been flown over the Geraldton East area, including an Aerodat survey commissioned by the M.N.D.M in 1988 (map M-81327). No discernable conductors or magnetic trends were identified in any of these surveys. During the current prospecting program, a drill collar was located at U.T.M 513715 E, 5504157 N. The casing was oriented 45° to the north. Recent work on these claims was carried out by Kodiak Exploration Ltd. Their regional mapping and sampling program confirmed several copper/gold occurrences as well as a narrow well-defined quartz-tourmaline - gold vein structure up to 500 meters in length referred to in their report as the "Rubber Tire Zone" (4). The highest assay from this occurrence reported by Kodiak was 14.2 g.p.t Au.

### Regional Geology

The Beardmore-Geraldton greenstone belt is an Archean supracrustal sequence of metamorphosed volcanic and sedimentary rocks which are intruded by several granitic stocks. The belt is part of Wabigoon and Quetico subprovince.

The volcanic assemblage consists of mafic pillowed and massive flows, felsic porphyritic flows with minor interbedded lapilli tuffs and tuff breccias. The sedimentary assemblage consists of well-stratified beds of sandstone, wacke, siltstone, mudstone, and associated magnetite iron formation. These assemblages are commonly altered to chlorite, sericite, and amphibolite shists.

Two major east-west trending deformation zones dominate the structure of the belt- the Burrows River Deformation zone to the north and the Barton Bay Deformation Zone to the south. (see figure 2 OGS Report 273), The deformation in these zones is characterized by a "pervasive layer-parallel foliation and a series of shear zone systems that are associated with regional east-trending faults. The economic potential of



the area pertains mostly to gold which has been found associated with east-trending regional deformation zones, specific lithological units, and iron formation”(1)

### Property Geology

Within the Beardmore-Geraldton volcanic assemblage, the claims lie over top of the so-called “central volcanic unit” as described in O.G.S report 273 - the Geology of the Northern Long Lake Area. This unit consists of massive mafic flows and mafic lapilli tuffs. East of Forrester Lake, a large part of the claim group is underlain by mafic intrusive diorites and gabbros with interbedded mafic volcanic units. The south-east quadrant of the claims consist of mafic pillow lava and a small quartz porphyry intrusive unit probably associated with the adjacent Croll Lake pluton.

### Mineralization

Four significant gold occurrences have been identified on the claims. The most significant mineralization occurs in a chlorite-carbonate shear zone with massive mafic flows. It strikes in an east-northeasterly direction and transects the south boundary of the property just east of post number 3. Referred to as the “Wodian-Holm Occurrence” or the “Rubber Tire Zone” by Kodiak Exploration, this shear zone varies in thickness from 2-5 meters and is exposed for a strike length of 120 meters. Most of the exposure is on the property, with a south-west extension onto claim 4242007 to the south. Within this shear zone is a quartz-carbonate-tourmaline vein stockwork containing lenses up to 50cm in width. Mineralization consists of pyrite, chalcopyrite, and molybdenite. Grab samples yielded up to 1.76 g.p.t but results are erratic. Channel samples by Kodiak Exploration yielded no significant results.

A similar vein stockwork occurs at U.T.M 51330 E 5504191 N, approximately 150 meters to the north-west, on the opposite side of the Eldee road. This occurrence is similar in width and is exposed for a strike length of about 10 meters. The highest assay here was 0.86 g.p.t.

North of Highway 11, copper/gold mineralization occurs in a network of trenches centered on U.T.M 514125 E 5504950 N. These trenches extend for a minimum length of 50 meters in both directions and expose a N-S trending quartz vein - thickness 20cm, containing pyrite, chalcopyrite, bornite, native copper, and gold assays up to 0.38 g.p.t. The host rock is diorite.

Another extensive zone of trenching occurs centered on U.T.M 513922 E 5505210 N, also in diorite. Numerous quartz veins from these trenches assayed less than 0.02 g.p.t but are reported up to 2.3 g.p.t in Kodiak Exploration's Hutchison Lake assay report (sample # G25865).

#### VLF. - EM Summary

A total of 13 kilometers of line was surveyed using pace and compass method, lines tied in with G.P.S using Highway 11 as a base line.

Instrument: Crone Geophysics Radem

Station: Annapolis Maryland

Frequency: 21.4 Khz.

Line spacing: 100 meters.

Parameters read: In phase dip angles.

Data representation: Raw dip angles - scale 1cm = 20° dip

Map scale: 1:4000

Survey carried out by R.Hodgson - 250 readings taken at 50 meter stations.

Conductor associated with cultural influence (power line). Weak conductor south of power line associated with underlying swamp.



## Conclusions + Recommendations

These claims were staked for the purpose of confirming and expanding several known/reported gold occurrences from historical literature. Sampling of these occurrences confirms the presence of gold in low-medium concentrations up to 1.76 g.p.t. The highest value obtained by Kodiak Exploration in 2009 was 14.2 g.p.t Au, 77.5 g.p.t Ag, 6% Cu in grab sample only- taken from the "Rubber Tire" occurrence. No significant results were obtained from channel sampling. The negative electromagnetic response - even over the shear zones - confirms the sporadic nature of the mineralization.

The numerous gold occurrences located and their proximity to the higher concentration deposits to the west means that the claim group remains prospective with good potential for expansion. The pit located at U.T.M 513300 E 5504191 N (West side of Eldee road) is poorly exposed, and would benefit from a stripping and trenching program.

## References

- 1) D.U Kresz and B. Zayachivsky- OGS Report 273- Precambrian Geology of Northern Long Lac area., 1991
- 2) A.A.Speed and S.Craig-OFR 5823-Beardmore-Geraldton Historical Research Project, 1992.
- 3) John Mason and Gerry White-OFR 5630- Gold Occurrences of Beardmore-Geraldton Area, 1986
- 4) Kodiak Exploration - Hutchison/Goldfield Lake project, Surface Exploration Program - 2009 - Afri file # 20000005341
- 5) M.N.D.M Map 81327 - Airborne EM/mag Survey

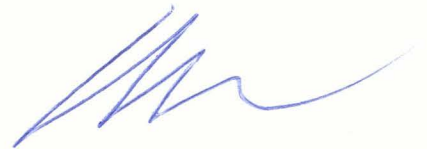
Statement of Qualifications

I, Rand Hodgson, of 32 F.R 45 Buckhorn, Ontario, do hereby certify that:

1)I hold a Bachelor of Science degree in Geology from the University of Waterloo, Waterloo, Ontario.

2)I have based conclusions and recommendations contained in this report on knowledge gained from thirty years experience in Northern Ontario gold exploration, and on results of field work on the property.

Signed,



Rand Hodgson

B.Sc.

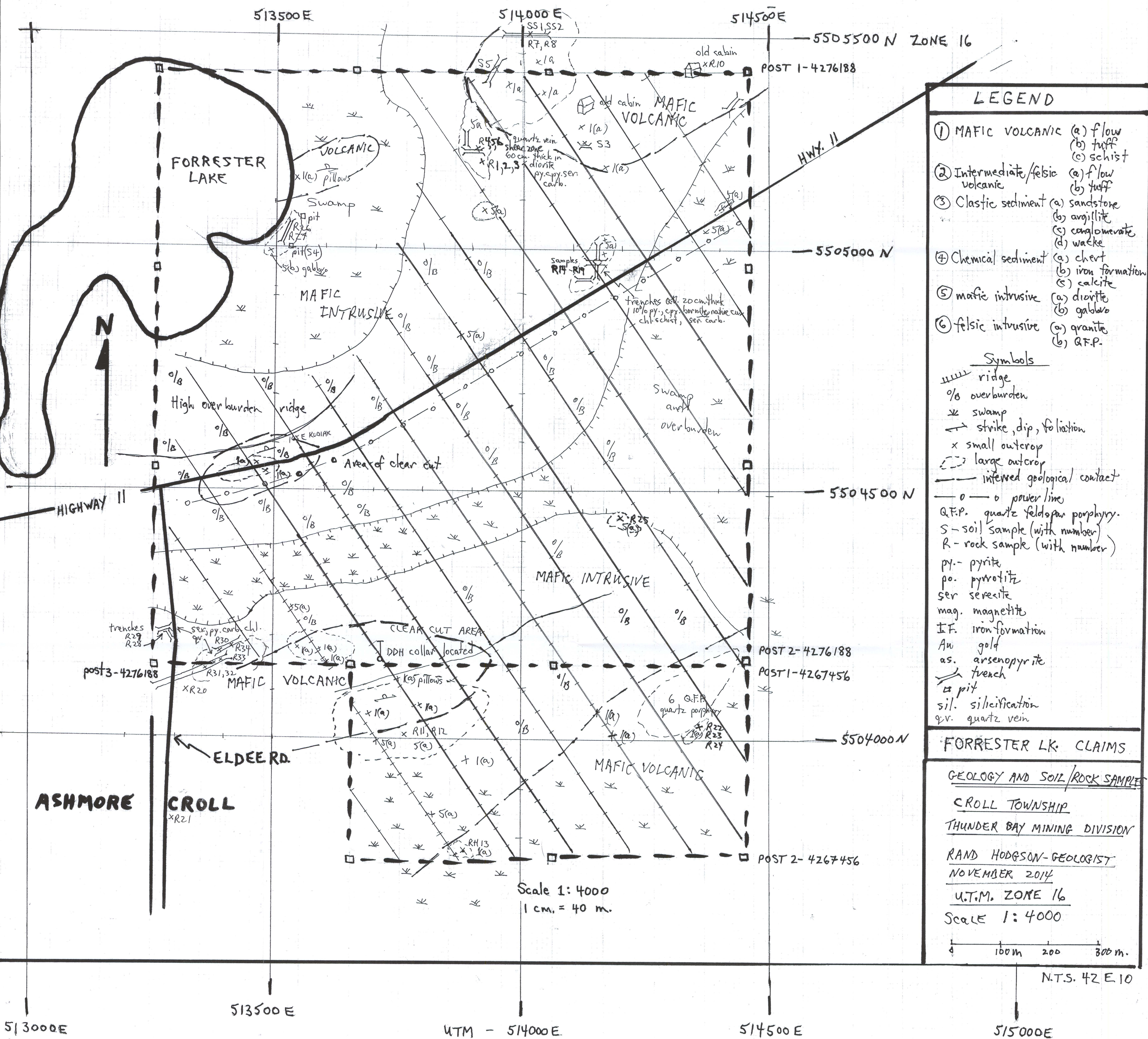
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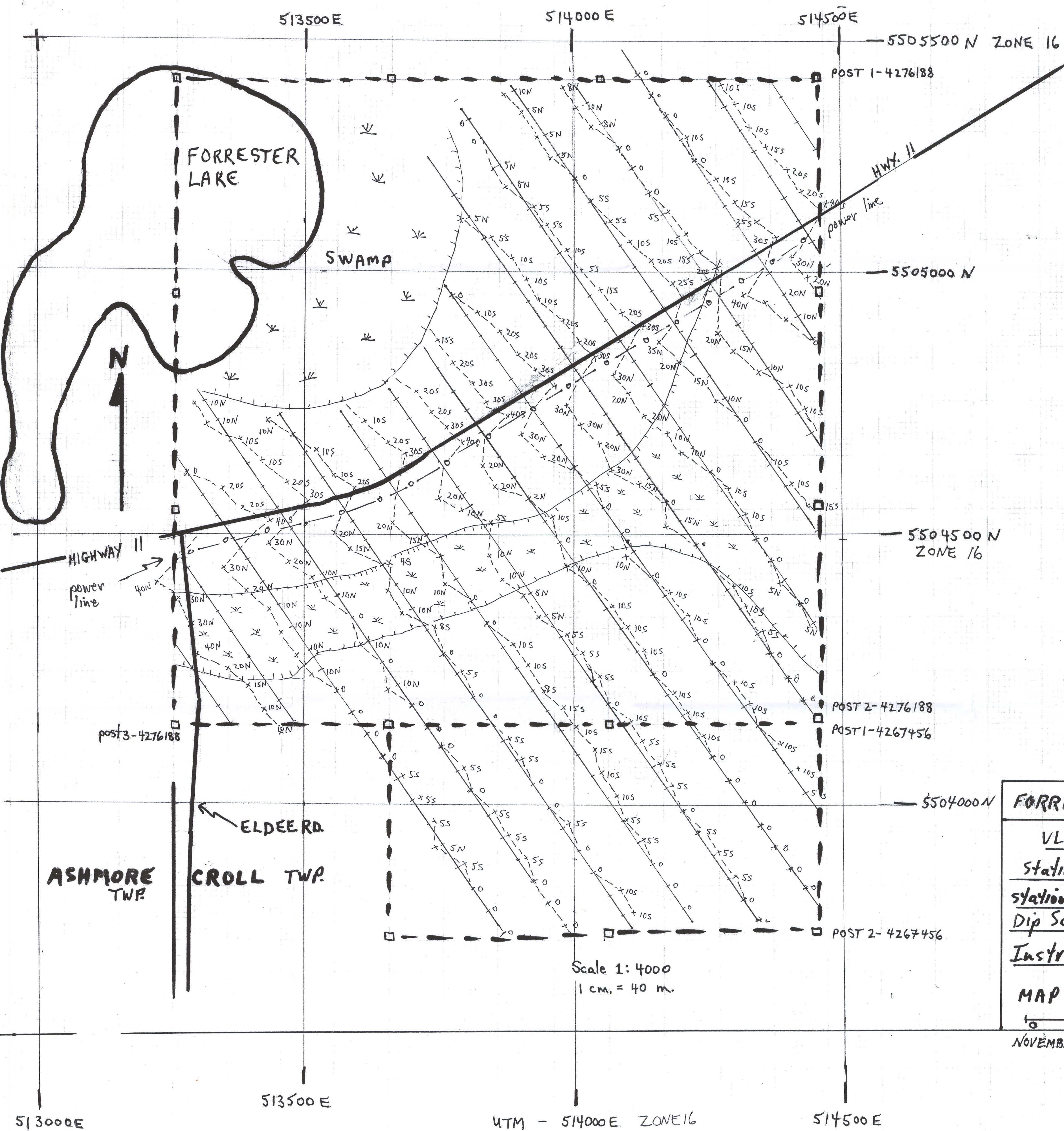
## Appendix I - Rock sample descriptions

<u>Sample #</u>	<u>U.T.M location</u>	<u>Description</u>
R1	513919 E 5505180 N	Quartz vein (q.v)- width - 2 cm - minor sulfide in diorite
R2	513922 E 5505209 N	q.v - width - 2 cm - minor pyrite
R3	513922 E 5505209 N	diorite
R4	513922 E 5505209 N	q.v - width - 50cm - trace py., cpy., sericite, carbonate
R5	513922 E 5505209 N	q.v - width - 50cm - trace py., cpy., sericite, carbonate
R6	513922 E 5505209 N	diorite with pyrite veinlets
R7	514000 E 5505502 N	q.v - width 30cm - minor pyrite
R8	514000 E 5505502 N	mafic volcanic host rock minor pyrite.
R9	514000 E 5505332 N	mafic volcanic 10% py stringers
R10	514340 E 5505308 N	flow from trench beside cabin
R11	513784 E 5504004 N	diorite - less than 5% py
R12	513784 E 5504004 N	q.v - width 3cm - less than 5% py.
R13	513892 E 5503755 N	narrow q.v - minor py., ser. in basalt
R14	514133 E 5504928 N	diorite with minor py., cpy.
R15	514133 E 5504928 N	q.v - width 20cm - massive cpy., native cu, bornite, chl., carb., ser.
R16	514133 E 5504928 N	q.v - width 20cm - massive cpy., native cu, bornite, chl., carb., ser.
R17	514166 E 5505020 N	q.v - width 20cm - py., cpy.,
R18	514166 E 5505020 N	Same as R17
R19	514166 E 5505020 N	Same as R17
R20	513336 E 5504081 N	q.v - width 20cm
R21	514335 E 5503888 N	q.v no sulfide
R22	514340 E 5504029 N	q.v minor sulfide
R23	514341 E 5504024 N	q.v minor sulfide
R24	514341 E 5504024 N	q.v minor sulfide
R25	514205 E 5504449 N	q.v in diorite - minor py.
R26	513515 E 5505005 N	q.v - width 10cm - py., bornite - gabbro wallrock
R27	513517 E 5505015 N	q.v - width 10cm - py., bornite - gabbro wallrock
R28	513300 E 5504191 N	q.v with py., and cpy.
R29	513300 E 5504191 N	q.v with py., and cpy.
R30	513400 E 5504175 N	q.v with py., and cpy.
R31	513375 E 5504144 N	q.v with py., and cpy.
R32	513375 E 5504144 N	q.v with py., and cpy.
R33	513400 E 5504150 N	q.v with py., and cpy.
R34	513410 E 5504185 N	q.v with py., and cpy.









# FORRESTER LK. CLAIMS

## VLF-EM SURVEY

Station - Annapolis 21.4 kHz

Station separation - 50 m.

Dip Scale 1 cm. = 20° dip

Instrument - CRONE RADEN

MAP SCALE 1: 4000

0 100m 200 300m

NOVEMBER/14

N.T.S. 42 E 10  
U.T.M. ZONE 16