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Report on Assessment Work
For Outcrop Exploration Ltd

By

Alan Kon

May 31, 2011

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Summary

An exploration program was undertaken on mining claims located in the Gillies Limits North township of Larder Lake Mining Division Ontario, from September 1 to November 15, 2010. The work was performed on behalf of Outcrop Exploration Ltd.

This report covers what work was done including; prospecting, geological mapping, trenching, a ground Magnetic survey and sampling. Assay results are also included.

Introduction

This work program and report on the Gillies Limit North properties, aka the Waldman South claims is on behalf of Outcrop Exploration Inc of Cobalt Ontario, Canada. These claims are # 1247791, 4255167, 1231083, and 1212231. All work was supervised by Alan Kon of North Cobalt Ontario, Canada. Ground geophysics was done by Larder Geophysics and the stripping was done using a 25 ton Caterpillar excavator from Lathem's Excavation Ltd. Helpers were mining students from Haileybury School of Mines. Assaying was done by Swastika Labs.

Property Location and Access

The Waldman South claims are located in the northern part of Gillies Limit North township, approximately 3.5 Km south of the historical silver mining town of Cobalt Ontario. These claims can be accessed easily by taking Coleman Rd east from Cobalt to Hound Chutes Rd then south for 2.0 km to a trail that leads west to the claims.

Topographical & Vegetation

The topographical setting for the property is much the same as elsewhere in the Cobalt camp. Rolling hills, steep but low cliffs, and an average amount of exposed rock. There are a few small hills in the area with one larger hill in the SW of the claims. Water is sparse in this area with only one small pond. Giroux Lake is approximately 1 km to the east and the Montreal River is 4 km to the west. Swamps and low wet areas are at a minimum also.

Vegetation is very heavy. Logging was done in the area but a very long time ago. Tree types are varied from small to medium sized cedar, birch and willow to medium and large poplar. There are also a few very large old white and red pine in the area. Undergrowth is thick with dogwood, scrub brush and other vegetation.

Historical Work

Four former silver mines are within close proximity to the claims.

- Wallingford Shaft - 1909 to 1913, production unknown
- Waldman Silver Mines - 1909 to 1920, 30,000 oz of Ag. Headframe still standing
- Wyandoh Silver Mines – 1909 to 1916, ~30,000 oz of Ag
- Cobalt A53 Silver Mining Co – 1920 to 1922, ~2251lbs of Co

There has been a considerable amount of work done in the area both in the past and present. But very little data exists on the claims prior to 1970.

There are several pits, trenches and shafts in the area including the Wallingford Shaft which operated from 1909 to 1913 and is said to be 70Ft deep with a 70ft cross-cut. Some of the trenches in the area are very deep and many have small pits in them. One long east-west trench near the south claim line on #1247791 intersects a large shaft. The depth of the shaft is unknown although appears to be fairly deep because of the amount of waste rock piled around it. No data on this shaft has been found. Another pit about 15ft deep sits directly behind an old tin prospecting shack near the middle of the claim. The shack is almost gone but some tin on the sides and part of the frame still exists. The floor of the shack is dirt and upon further inspection, a quartz/sulphide vein was uncovered.

There are old trails all over the area and one trail leading to the prospector shack had a small pile of BQ core on it. There is a report that a drill hole was put down nearby at some point but whether the core is from that hole is undetermined at this time.

Cabo Mining Enterprises Corp once held the option on these claims and had done extensive exploration in the area. In 2006 & 2007, two drill holes were put down directed at the Wallingford Shaft and another hole directed to the SE. None of these 3 holes produced any significant assay results. In the late fall of 2007, a large MMI survey and IP survey was done across the claims including the ground to the north where the Waldman mine is located. Many of the MMI results showed very high base metal values.

In the spring of 2008, a 9 hole drill program was done by Cabo Mining Enterprises. Three drill holes were put down on claim 1247791 to test the MMI anomalies. All 3 holes confirmed the presence of base metals although at the time not deemed as minable widths. Several larger former silver mines are to the north and east including Silverfields and the Cleopatra Silver Mines.

Regional Geology

Regionally, the rocks in the Cobalt are underlain by an N-S trending trough of Huronian metasedimentary rocks (Coleman Group - conglomerate) that cover a complex Archean mafic volcanic terrain. In the Cobalt area the Archean volcanic and overlying Huronian sediments have been intruded by extensive Nipissing aged diabase sills and dykes. There is a strong possibility that the Coleman sediments in this area are underlain by a Nipissing sill. The youngest known consolidated rocks in the area are kimberlite pipes.

A considerable amount of faulting occurs in the Cobalt area. There are 5 major NW/SE trending faults along with several smaller cross faults.

Property Geology

The rock in the immediate area of the claims is mostly Archean mafic volcanics, with small caps or remnants of the Nipissing diabase and Coleman conglomerate. There also small lamprophyre dykes and an unusual E/W felsic dyke that cross cuts the rock at near perpendicular to the strike of the volcanics.

Work Program

A considerable amount of work was performed on the claims including prospecting, mapping, ground geophysics, mechanical stripping and trenching, sampling and channel sampling. Most of the work was focused in the area near the Wallingford Shaft area. A Mobile Metal Ion (MMI) program was conducted across the Waldman north and south claims in 2007 by International Millennium Mining Corp (IMMC). Much of this work program was based on the results from that survey.

Upon reviewing the MMI results from 2007, a ground Magnetometer/VLF survey was conducted on claims #1247791 and #4206129 to test the MMI anomalies.

The geophysical survey showed a few very good anomalies mainly in the same areas as the high MMI anomalies. One large anomaly on the east half of the survey grid was quite unexpected. It was first thought that the large anomaly was from the old prospector shack located there but the anomaly is way too big and the shack covers a very small area. The other Mag anomalies which are quite smaller were mostly on or near the MMI anomalies and proved to be beneficial in determining trenching and stripping targets.

As mentioned before trenching and stripping was based on the MMI and Mag survey results. Access to some of the anomalies proved to be quite difficult at times because of the heavy bush and large trees. Even though the excavator can go pretty much where it wants to, it was decided to stay on the trails or as close to as possible. Several new veins and structure were uncovered including a very wide and long felsic dyke although total length is unknown at this time. Several more dykes and veins were also uncovered throughout the stripped and trenched areas including a lamprophyre dyke near the

Work Program Cont;

centre of the grid and a highly mineralized structure less than 100 metres east from the felsic dyke. Several small veins or blebs of sphalerite, chalcopyrite and galena were also uncovered including one mushy Ni/Cu (>10,000 ppb Ni&Cu) float rock which was under a 15 ton boulder.

After the trenching and stripping was completed, a high volume/pressure water pump was brought in to help clean off the exposed rock. Because of the limited amount of water in the area all the stripped areas could not be washed off. Most of the cleaning was done by the students using hand tools such as stable brooms, shovels, picks, etc.

Once all the exposed rock could be cleaned, hand and channel sampling commenced. There were 22 hand samples and 9 channel saw samples taken throughout the work program.

Prospecting and mapping was conducted continuously throughout the work program.

Future Work

Another exploration program should be considered for the Waldman south claims in the spring of 2011. The geophysical magnetic survey should be extended to the far east side of claim #1247791 and to the south on claim #1231083 to determine the size of the anomaly. The felsic dyke should be followed up with more stripping both to the east and west to determine the total length if possible. There seems to be an offset or possible a parallel structure ~50 metres east of the stripped felsic dyke beside the old prospector's shack. Once the magnetic survey and stripping is completed, more intense mapping and sampling should be done on the area.

The new trenches that were not thoroughly inspected on the far west side of claim #1247791 should be followed up as there were a few fairly good results from the sampling. A sulphide vein structure was uncovered by the trenching in the fall and is on strike with a large MMI silver sample taken in 2007. Sulphide mineralization was observed between the trenched near the top of the hill and a lamprophyre structure was uncovered at the bottom on the hill in the trench. Another area worth mentioning is on the east of the hill in a new trench. A small cobalt vein was observed although the ground cover had sloughed back and may need to be re-excavated.

Once all assay results have been returned and if the results are as good as or better than from sampling in the 2010, then a drilling program is well warranted. Three possible drill holes have already been identified. Two along the felsic dyke and another further to the south east near the old prospector shack.

VMS Deposit

Although all work completed to date on the Waldman South claims is still in the initial stages, there is some indications of a possible VMS deposit in the vicinity.

Further work is certainly warranted along with the re-sampling of previous sample sites and assayed using fusion Whole Rock analysis instead of ICP. By using this procedure this should help to determine the Na₂O content of the rock. If the rock shows to have a depleted Na content (< 1%) this could be a very good indicator of a VMS type deposit.

At this early stage on the Waldman South claims the mineralization appears to resemble a bimodal-mafic VMS type deposit, with Zn being the predominant metal followed by Pb, Cu, and Ni. VMS deposits associated with environments dominated by mafic or ultra mafic volcanic rocks, but with up to 25% felsic volcanic rocks.


Noranda, Flin Flon-Snow Lake and Kidd Creek are examples of bimodal-mafic VMS deposits.

For many years a large VMS type deposit has been thought to exist is the Cobalt silver mining camp but very little exploration has been undertaken on the subject.

VMS are a type of metal sulphide ore deposit, mainly Cu-Zn-Pb which is associated with volcanic-associated hydrothermal events in both ancient and modern submarine environments.

Conclusions

Although the gold and silver results from the sampling were less than hoped for, the base metal results were better than expected. Several new structures and mineralized areas were located and the unexpected large magnetic low anomaly on claim #1247791 only adds to the success of this past exploration project.

A handwritten signature in cursive script, appearing to read 'Alan Van', written in black ink.

References

Dr. James Franklin

Franklin, J. M., Gibson, H. L., Galley, A. G., and Johansson, I. R., 2005, Volcanogenic Massive Sulfide Deposits.

Gary Grabowski, Regional Resident Geologist, Ministry of Northern Development and Mines, Kirkland Lake Ontario.

Seymour Sears, SearsBarry and Associates.

Appendix I

Sampling & Assay Results

Sample #	Date & Description		Coordinates		Elavation
OC-10-01	06-SEP-10 Sulph in fracture Vn	17T	598870	5246724	344 m
OC-10-02	06-SEP-10 Sulph in fracture Vn	17T	598878	5246750	337 m
OC-10-03	06-SEP-10 Sulph in fracture Vn	17T	598859	5246698	332 m
OC-10-04	06-SEP-10 1:37 PRX BLDR	17T	598855	5246603	329 m
OC-10-05	08-SEP-10 Sulph in Sm Veinlettes-NEAR POND	17T	599078	5246651	345 m
OC-10-06	08-SEP-10 WALLINGFORD SHAFT Muck	17T	599151	5246733	327 m
OC-10-07	11-SEP-10 Sulph in Frac Vn	17T	598981	5246552	327 m
OC-10-08	11-SEP-10 Sulph in Frac Vn Near DDH	17T	598934	5246589	335 m
OC-10-09	13-SEP-10 Sulph in Pillows	17T	599123	5246561	322 m
OC-10-10	13-SEP-10 Sulph Veinlette	17T	599087	5246612	323 m
OC-10-12	17-SEP-10 Sulph Veinlette	17T	599089	5246579	320 m
OC-10-13	17-SEP-10 Sulph Veinlette POSS CONT	17T	599082	5246571	322 m
OC-10-14	28-SEP-10 Co/Ni float (mush)	17T	598855	5246617	346 m
OC-10-15	13-OCT-10 SULPH VN LOOSE	17T	599126	5246572	319 m
OC-10-16	13-OCT-10 SPHAL IN OC LOOSE	17T	599120	5246578	323 m
OC-10-17	13-OCT-10 SPHAL-PB ON OC	17T	598995	5246564	325 m
OC-10-18	14-OCT-10 SULPH IN OC NEAR TRL	17T	598986	5246555	335 m
OC-10-19	16-OCT-10 - TRC SULPH in Veinlettes on LRG OC	17T	599079	5246405	320 m
OC-10-20	16-OCT-10 Sulph in PROX BLDR	17T	599078	5246396	319 m
OC-10-22	12-NOV-10 FELSIC DYKE	17T	599127	5246569	321 m
OC-10-23CS	12-NOV-10 50CM CUT	17T	599128	5246571	322 m
OC-10-24CS	12-NOV-10 30CM CUT	17T	599135	5246574	326 m
OC-10-25CS	13-NOV-10 130CM CUT in FELSIC DYKE	17T	599107	5246583	328 m
OC-10-26CS	13-NOV-10 70CM IN SHEAR	17T	599111	5246576	338 m
OC-10-27CS	13-NOV-10 IN SHEAR	17T	599116	5246576	317 m
OC-10-28CS	15-NOV-10 47CM IN SHEAR	17T	599165	5246536	326 m
OC-10-29CS	15-NOV-10 62CM IN SHEAR	17T	599167	5246541	315 m
OC-10-30CS	15-NOV-10 80CM IN SHEAR	17T	599173	5246528	315 m
OC-10-31	15-NOV-10 SULPHIDE BLEB	17T	599173	5246531	315 m



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Assay Certificate

Certificate Number: 10-4034

Company: **Outcrop Exploration Ltd**


Project: Waldman South

Report Date: 26-Nov-10

Attn: Shirley Gilson

We hereby certify the following Assay of 31 rock samples submitted 17-Nov-10 by Shirley Gilson

Sample Number	Au	Au Chk
	FA-AAS ppb	FA-AAS ppb
OC-10-26	16	
OC-10-27	10	
OC-10-28	15	
OC-10-29	30	34
OC-10-30	12	
OC-10-31	22	
Blank Value	< 2	
OxF65	748	

Certified by 
Denis Chartre



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Page 1 of 2

Assay Certificate

Certificate Number: 10-4034

Company: **Outcrop Exploration Ltd**

Project: Waldman South

Report Date: 26-Nov-10

Attn: Shirley Gilson

We hereby certify the following Assay of 31 rock samples
submitted 17-Nov-10 by Shirley Gilson

Sample Number	Au	Au Chk
	FA-AAS ppb	FA-AAS ppb
OC-10-01	9	
OC-10-02	27	
OC-10-03	20	
OC-10-04	11	
OC-10-05	12	
OC-10-06	98	74
OC-10-07	8	
OC-10-08	19	
OC-10-09	12	
OC-10-10	< 2	< 2
OC-10-11	6	
OC-10-12	12	
OC-10-13	6	
OC-10-14	< 2	
OC-10-15	13	
OC-10-16	11	
OC-10-17	17	
OC-10-18	15	
OC-10-19	7	
OC-10-20	< 2	< 2
OC-10-21	7	
OC-10-22	8	7
OC-10-23	8	
OC-10-24	11	
OC-10-25	10	

Certified by

Denis Chartre



Established 1928

Swastika Laboratories Ltd
Assaying - Consulting - Representation

Multi-Element ICP-AES Analysis
Aqua Regia Digestion

OUTCROP EXPLORATION LTD
PROJECT: Waldman South
ATTN: Shirley Gilson

Report No : A10-4034 (i) ICP
Date : November 29, 2010
Sample Type : rock

Sample Number	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ta ppm	Tl %	V ppm	Zn ppm	W ppm	Y ppm	Zr ppm
OC-10-31	0.6	2.23	52	< 10	< 0.5	< 5	0.32	< 1	161	213	46	6.14	0.01	3.38	893	40	0.03	146	165	9	< 5	4	3	< 2	0.16	129	130	< 10	< 1	3

0.2 gram sample is digested with 5.7ml 2:1 HCl/HNO3 at 95°C for 30 minutes and then at boiling water bath for 90 minutes, and diluted to 15ml

CERTIFIED BY : Jig Lin



Established 1928

Swastika Laboratories Ltd
Assaying - Consulting - Representation
Multi-Element ICP-AES Analysis
Aqua Regia Digestion

OUTCROP EXPLORATION LTD
PROJECT: Waldman South
ATTN: Shirley Gilson

Report No : A10-4034 (i) ICP
Date : November 29, 2010
Sample Type : rock

Table with 30 columns (Ag to Zr) and 30 rows (OC-10-01 to OC-10-30) containing concentration data in ppm and %.

0.2 gram sample is digested with 5.7ml 2:1 HCl/HNO3 at 95°C for 30 minutes and then at boiling water bath for 90 minutes, and diluted to 15ml

CERTIFIED BY: Jig Lin

Appendix II

Geophysics



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P0K 1L0, Canada
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OUTCROP EXPLORATIONS LIMITED

Magnetometer and VLF Surveys Over the

WALDMAN PROPERTY

Gillies Limit Township, Ontario

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1. SURVEY DETAILS

1.1 PROJECT NAME

This project is known as the **Waldman Property**.

1.2 CLIENT

Outcrop Explorations Limited.

RR#1.
857921 Martin Drive
Coleman Township
Cobalt, Ontario
P0J 1C0

1.3 LOCATION

The Waldman Property is located approximately 3km south of Cobalt, Ontario. The survey grid is located in Gillies Limit Township and covers part of mining claims 1231083, 1247791 and a third mining claim which is not yet on the map within the Larder Lake Mining Division.



Figure 1: Location of Waldman Property

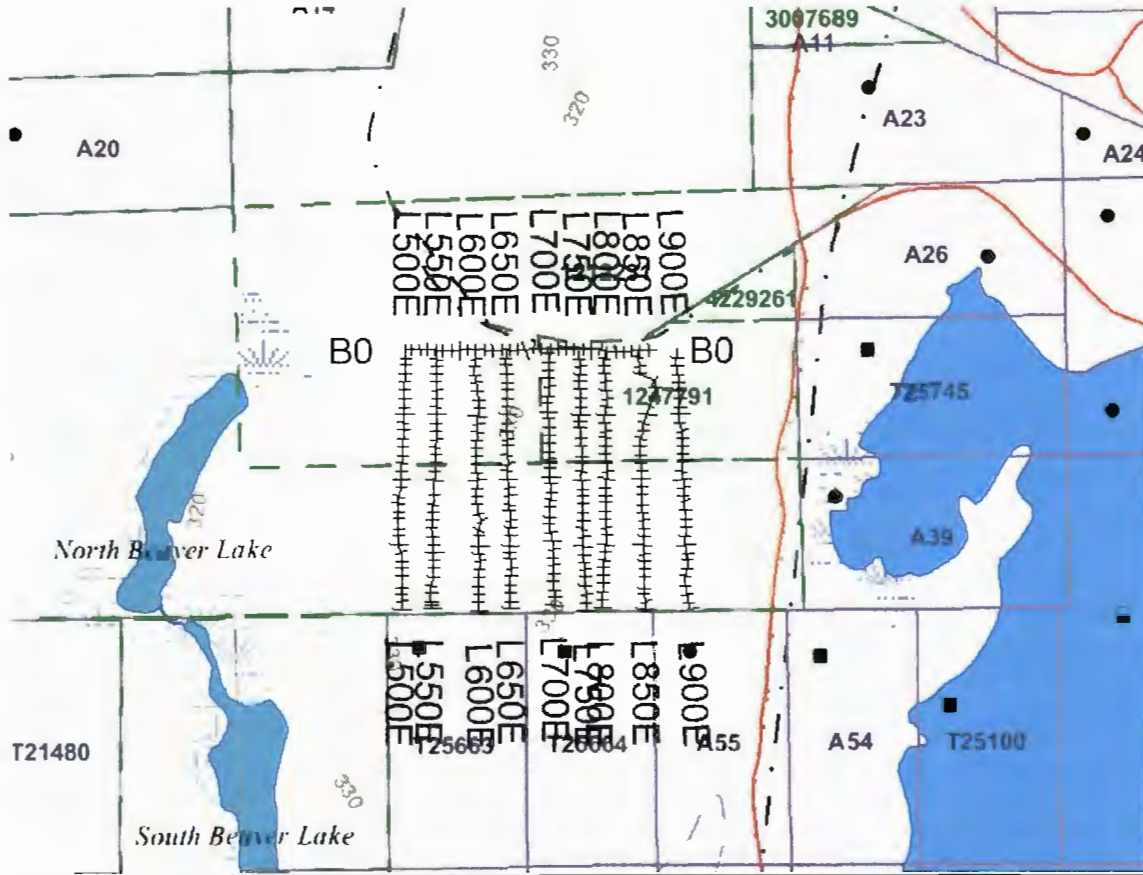


Figure 2: Claim Map with Waldman Property Traverses

1.4 ACCESS

The Waldman Property can be accessed by a 4x4 vehicle and ATV on an all season gravel road. From the community of Cobalt, the Silverfields Road is driven south for 3 km. From here, a west-bound trail was used with the ATV for approximately 300m where the survey area can be found.

1.5 SURVEY GRID

The traversed lines were established using a GPS in conjunction with the execution of the survey. The GPS operator would establish sample locations while remaining approximately 12.5m in front of the magnetometer operator. GPS waypoints and magnetic samples were taken every 12.5m along these controlled traverses. The GPS used was a Garmin 76 with an external antenna for added accuracy.

2. SURVEY WORK UNDERTAKEN**2.1 SURVEY LOG**

Date	Description	Line	Min Extent	Max Extent	Total Survey (m)
September 21, 2010	Locate access and survey area. Conduct survey.	0	500E	900E	400
		900E	400S	0	400
		850E	400S	0	400
		800E	400S	0	400
		750E	400S	0	400
		700E	400S	0	400
		650E	400S	0	400
		600E	400S	0	400
		550E	400S	0	400
		500E	400S	0	400

Table 1: Survey Log**2.2 PERSONNEL**

Claudia Moraga of Sudbury, Ontario conducted all the magnetic data collection with Bruce Lavalley also of Sudbury, responsible for the GPS control and GPS waypoint collection.

2.3 SURVEY SPECIFICATIONS

The survey was conducted with a GSM-19 v7 Overhauser magnetometer with a second GSM-19 magnetometer for a base station mode for diurnal correction.

A total of 4 kilometers of magnetic and VLF EM survey was conducted on September 21, 2010. This consisted of 320 magnetic with simultaneous VLF EM samples collected at a 12.5 meter sample interval.

3. OVERVIEW OF SURVEY RESULTS

3.1 SUMMARY INTERPRETATION

Historically we have noted that the silver bearing veins in this environment are generally associated with alteration zones. This usually is indicated with a magnetic low response due to a magnetite depletion within this alteration zone.

Through the survey, no strong VLF EM trends were highlighted and what is seen is most likely related to topography.

Generally the magnetic signature does not vary strongly which would indicate a generally uniform geological unit. Numerous magnetic depressed regions occur which most likely represent alteration zones.

Three magnetically depressed zones stand out and should be investigated further. The first zone that should be investigated is what appears to be a linear east west magnetic low feature near the 175S mark across the survey area. In particular, this feature appears to be broadest and strongest in the vicinity of lines 650E and 700E. This may indicate a zone of broad favorable alteration.

The first zone appears to be paralleled by a similar feature to the north at approximately 50S. Again, the magnetic signature appears to be the broadest and strongest over lines 650E and 700E. The difference with this signature from the first is a flanking magnetic high response on line 650E. This may indicate a more iron rich zone of alteration or a possible cultural source.

A strong localized magnetic response occurs in the region on line 900E at 275S. This response resembles that of a narrow highly magnetic feature such as an iron formation. However, this may also be associated with a cultural feature and should be investigated.

I would recommend prospecting the area and establishing the UTM coordinates for the known historical work and any known silver ore zones. When these are plotted on the magnetic map, any magnetic signature would be better identified and a better trend association can be investigated.

APPENDIX A**STATEMENT OF QUALIFICATIONS**

I, C. Jason Ploeger, hereby declare that:

1. I am a geophysicist (non-professional) with residence in Larder Lake, Ontario and am presently employed as Geophysical Manager of Larder Geophysics Ltd. of Larder Lake, Ontario.
2. I graduated with a Bachelor of Science degree in geophysics from the University of Western Ontario, in London Ontario, in 1999.
3. I have practiced my profession continuously since graduation in Africa, Bulgaria, Canada, Mexico and Mongolia.
4. I am a member of the Ontario Prospectors Association, a director of the Northern Prospectors Association and a member of the Society of Exploration Geophysicists.
5. I have no interest, nor do I expect to receive any interest in the properties or securities of **Outcrop Explorations Limited**.
6. I am responsible for the final processing and validation of the survey results and the compilation of the presentation of this report. The statements made in this report represent my professional opinion based on my consideration of the information available to me at the time of writing this report.

Larder Lake, ON
September 2010



C. Jason Ploeger, B.Sc. (geophysics)
Geophysical Manager of Larder Geophysics Ltd.

APPENDIX B

THEORETICAL BASIS AND SURVEY PROCEDURES

TOTAL FIELD MAGNETIC SURVEY

Base station corrected Total Field Magnetic surveying is conducted using at least two synchronized magnetometers of identical type. One magnetometer unit is set in a fixed position in a region of stable geomagnetic gradient, and away from possible cultural effects (i.e. moving vehicles) to monitor and correct for daily diurnal drift. This magnetometer, given the term 'base station', stores the time, date and total field measurement at fixed time intervals over the survey day. The second, remote mobile unit stores the coordinates, time, date, and the total field measurements simultaneously. The procedure consists of taking total magnetic measurements of the Earth's field at stations, along individual profiles, including Tie and Base lines. A 2 meter staff is used to mount the sensor, in order to optimally minimize localized near-surface geologic noise. At the end of a survey day, the mobile and base-station units are linked, via RS-232 ports, for diurnal drift and other magnetic activity (ionospheric and spheric) corrections using internal software.

For the gradiometer application, two identical sensors are mounted vertically at the ends of a rigid fiberglass tube. The centers of the coils are spaced a fixed distance apart (0.5 to 1.0m). The two coils are then read simultaneously, which alleviates the need to correct the gradient readings for diurnal variations, to measure the gradient of the total magnetic field.

VLF Electromagnetic

The frequency domain VLF electromagnetic survey is designed to measure both the vertical and horizontal in-phase (IP) and Quadrature (QP) components of the anomalous field from electrically conductive zones. The sources for VLF EM surveys are several powerful radio transmitters located around the world which generate EM radiation in the low frequency band of 15-25kHz. The signals created by these long-range communications and navigational systems may be used for surveying up to several thousand kilometres away from the transmitter. The quality of the incoming VLF signal can be monitored using the field strength. A field strength above 5pT will produce excellent quality results. Anything lower indicates a weak signal strength, and possibly lower data quality. A very low signal strength (<1pT) may indicate the radio station is down.

The EM field is planar and horizontal at large distances from the EM source. The two components, electric (E) and magnetic (H), created by the source field are orthogonal to each other. E lies in a vertical plane while H lies at right angles to the direction of propagation in a horizontal plane. In order to ensure good coupling, the strike of possible conductors should lie in the direction of the transmitter to allow the H vector to pass through the anomaly, in turn, creating a secondary EM field.

The VLF EM receiver has two orthogonal aenals which are tuned to the frequency of the transmitting station. The direction of the source station is located by rotating the sensor around a vertical axis until a null position is found. The VLF EM survey procedure consists of taking measurements at stations along each line on the grid. The receiver is rotated about a horizontal axis, right angles to the traverse and the tilt recorded at the null position.

APPENDIX C**GSM 19****Specifications****Overhauser Performance**

Resolution: 0.01 nT
 Relative Sensitivity: 0.02 nT
 Absolute Accuracy: 0.2nT
 Range: 20,000 to 120,000 nT
 Gradient Tolerance: Over 10,000nT/m
 Operating Temperature: -40°C to +60°C

Operation Modes

Manual: Coordinates, time, date and reading stored automatically at min. 3 second interval.
 Base Station: Time, date and reading stored at 3 to 60 second intervals.
 Walking Mag: Time, date and reading stored at coordinates of fiducial.
 Remote Control: Optional remote control using RS-232 interface.
 Input/Output: RS-232 or analog (optional) output using 6-pin weatherproof connector.

Operating Parameters

Power Consumption: Only 2Ws per reading. Operates continuously for 45 hours on standby.
 Power Source: 12V 2.6Ah sealed lead acid battery standard, other batteries available
 Operating Temperature: -50°C to +60°C

Storage Capacity

Manual Operation: 29,000 readings standard, with up to 116,000 optional. With 3 VLF stations: 12,000 standard and up to 48,000 optional.

Base Station: 105,000 readings standard, with up to 419,000 optional (88 hours or 14 days uninterrupted operation with 3 sec. intervals)

Gradiometer: 25,000 readings standard, with up to 100,000 optional. With 3 VLF stations: 12,000, with up to 45,000 optional.

Omnidirectional VLF

Performance Parameters: Resolution 0.5% and range to $\pm 200\%$ of total field. Frequency 15 to 30 kHz.

Measured Parameters: Vertical in-phase & out-of-phase, 2 horizontal components, total field coordinates, date, and time.

Features: Up to 3 stations measured automatically, in-field data review, displays station field strength continuously, and tilt correction for up to $\pm 10^\circ$ tilts.

Dimensions and Weights: 93 x 143 x 150mm and weighs only 1.0kg.

Dimensions and Weights

Dimensions:

Console: 223 x 69 x 240mm

Sensor: 170 x 71mm diameter cylinder

Weight:

Console: 2.1kg

Sensor and Staff Assembly: 2.0kg

Standard Components

GSM-19 magnetometer console, harness, battery charger, shipping case, sensor with cable, staff, instruction manual, data transfer cable and software.

Taking Advantage of a “Quirk” of Physics

Overhauser effect magnetometers are essentially proton precession devices except that they produce an order-of-magnitude greater sensitivity. These “supercharged” quantum magnetometers also deliver high absolute accuracy, rapid cycling (up to 5 readings / second), and exceptionally low power consumption.

The Overhauser effect occurs when a special liquid (with unpaired electrons) is combined with hydrogen atoms and then exposed to secondary polarization from a radio frequency (RF) magnetic field. The unpaired electrons transfer their stronger polarization to hydrogen atoms, thereby generating a strong precession signal— that is ideal for very high-sensitivity total field measurement. In comparison with proton precession methods, RF signal generation also keeps power consumption to an absolute minimum and reduces noise (i.e. generating RF frequencies are well out of the bandwidth of the precession signal).

In addition, polarization and signal measurement can occur simultaneously - which enables faster, sequential measurements. This, in turn, facilitates advanced statistical averaging over the sampling period and/or increased cycling rates (i.e. sampling speeds).

The unique Overhauser unit blends physics, data quality, operational efficiency, system design and options into an instrumentation package that ... exceeds proton precession and matches costlier optically pumped cesium capabilities.

APPENDIX C**GARMIN GPS 76****GPS Performance**

Receiver: WAAS-enabled, 12 parallel channel GPS receiver continuously tracks and uses up to 12 satellites to compute and update your position

Navigation Features

Waypoints/icons: 500 with name and graphic symbol, 10 nearest (automatic), 10 proximity

Routes: 50 reversible routes with up to 50 points each, plus MOB and TracBack® modes

Tracks: Automatic track log; 10 saved tracks let you retrace your path in both directions

Trip computer: Current speed, average speed, resettable max. speed, trip timer and trip distance

Alarms: Anchor drag, approach and arrival, off-course, proximity waypoint, shallow water and deep water

Tables: Built-in celestial tables for best times to fish and hunt, sun and moon rise, set and location

Map datums: More than 100 plus user datum

Position format: Lat/Lon, UTM/UPS, Maidenhead, MGRS, Loran TDs and other grids, including user grid

Acquisition times

Warm: Approximately 15 seconds

Cold: Approximately 45 seconds

AutoLocate®: Approximately 2 minutes

Update rate: 1/second, continuous

GPS accuracy

Position: < 15 meters, 95% typical*

Velocity: 0.05 meter/sec steady state

WAAS accuracy

Position: < 3 meters, 95% typical*

Velocity: 0.05 meter/sec steady state

Power

Source: Two "AA" batteries (not included)

Battery Life: Up to 16 hours

Physical

Size: 2.7"W x 6.2"H x 1.2"D (6.9 x 15.7 x 3.0 cm)

Weight: 7.7 ounces

Display

1.6"W x 2.2"H (4.1 x 5.6 cm)

180 x 240 pixels, high-contrast

FSTN with bright backlighting

Case: Fully gasketed, high-impact plastic alloy, waterproof to IEC 529 IPX7 standards
Interfaces: RS232 with NMEA 0183, RTCM 104 DGPS data format and proprietary Garmin®
Antenna: Built-in quadrifilar, with external antenna connection (MCX)
Differential: DGPS (USCG and WAAS capable)
Temperature range: 5°F to 158°F (-15°C to 70°C)
Dynamics: 6 g's
User data storage: Indefinite, no memory battery required

Specifications obtained from www.garmin.com

APPENDIX D

LIST OF MAPS (IN MAP POCKET)

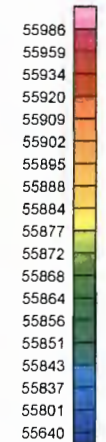
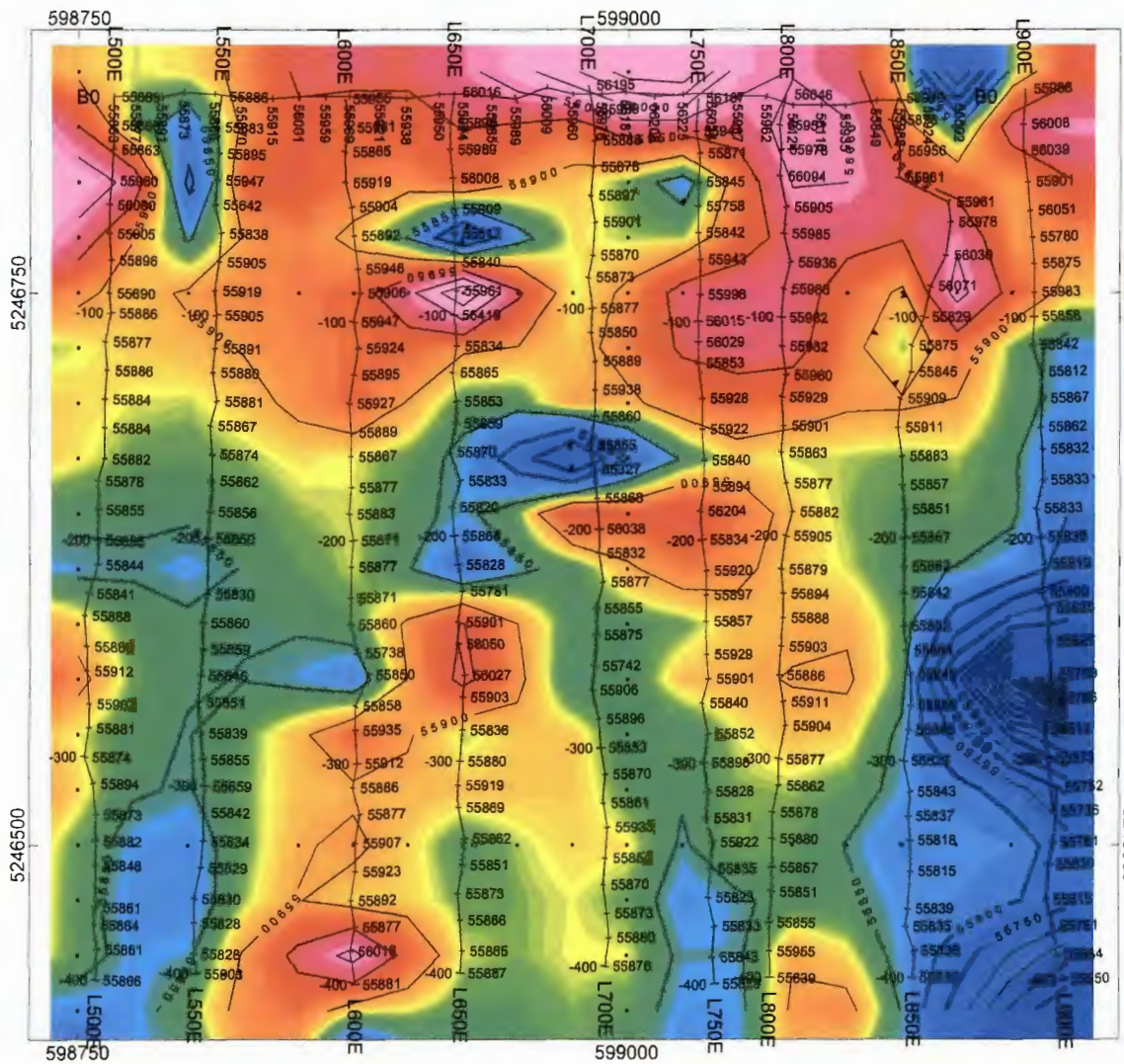
Posted profiled TFM plan map (1:2500)

- 1) OUTCROP-WALDMAN-MAG-CONT

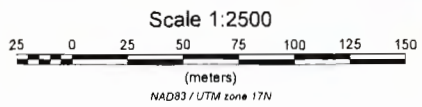
Posted profiled Fraser Filtered VLF EM plan map (1:2500)

- 2) OUTCROP-WALDMAN-VLF-NAA

TOTAL MAPS=2



TOTAL FIELD MAGNETIC
nanoTesla (nT)



OUTCROP EXPLORATIONS LIMITED
WALDMAN PROPERTY
Gillies Limit Township, Ontario

TOTAL FIELD MAGNETIC CONTOURED PLAN MAP
Base Station Corrected

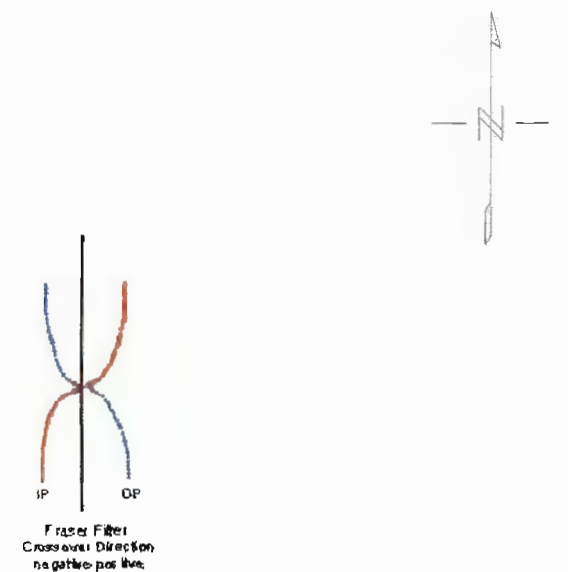
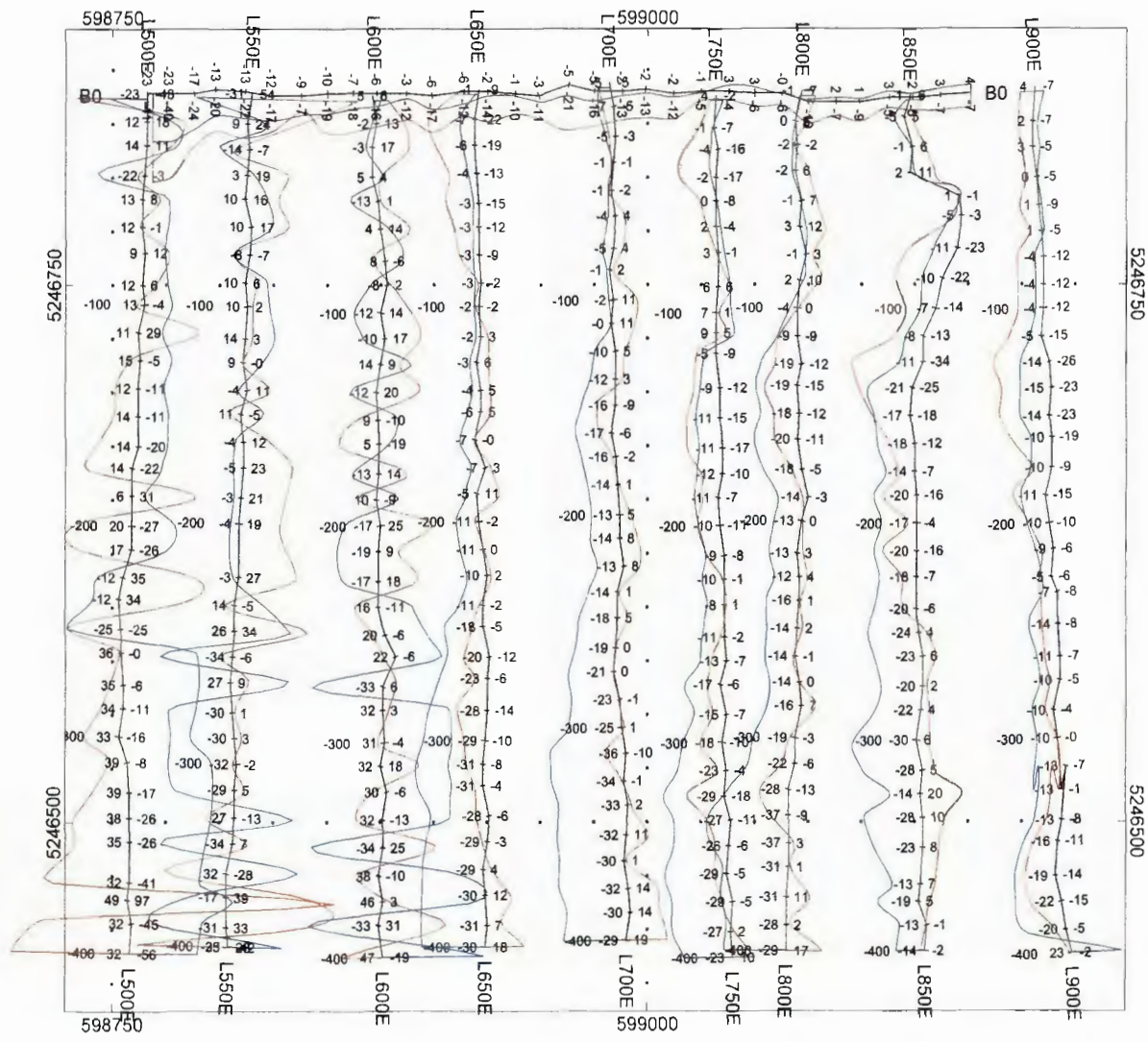
Posting Level: 0nT
Field Inclination/Declination: 74.7degN/12degW
Station Separation: 12.5 meters
Total Field Magnetic Contours: 50nT

GSM-19 OVERHAUSER MAGNETOMETER/VLF v7

Receiver Operated By: Claudia Moraga
GPS Operated By: Bruce Lavalley
Processed by: C Jason Ploeger, B.Sc.
Map Drawn By: C Jason Ploeger, B.Sc.
September 2010



Drawing : OUTCROP-WALDMAN-MAG-CONT



OUTCROP EXPLORATIONS LIMITED
WALDMAN PROPERTY
Gillies Limit Township, Ontario

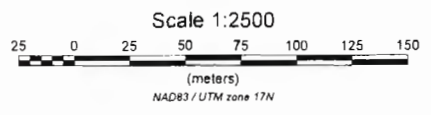
VLF IN PHASE/OUT PHASE PROFILED PLAN MAP
 24.0kHz NML - CUTLER USA

In Phase: Posted Right/Bottom (Red)
 Out Phase: Posted Left/Top (Blue)

Vertical Profile Scales: 2.5%/mm
 Contour Interval: 0, 5, 10, 15, 20, 25, 50, 100

Station Separation: 12.5 meters
 Posting Level: 0

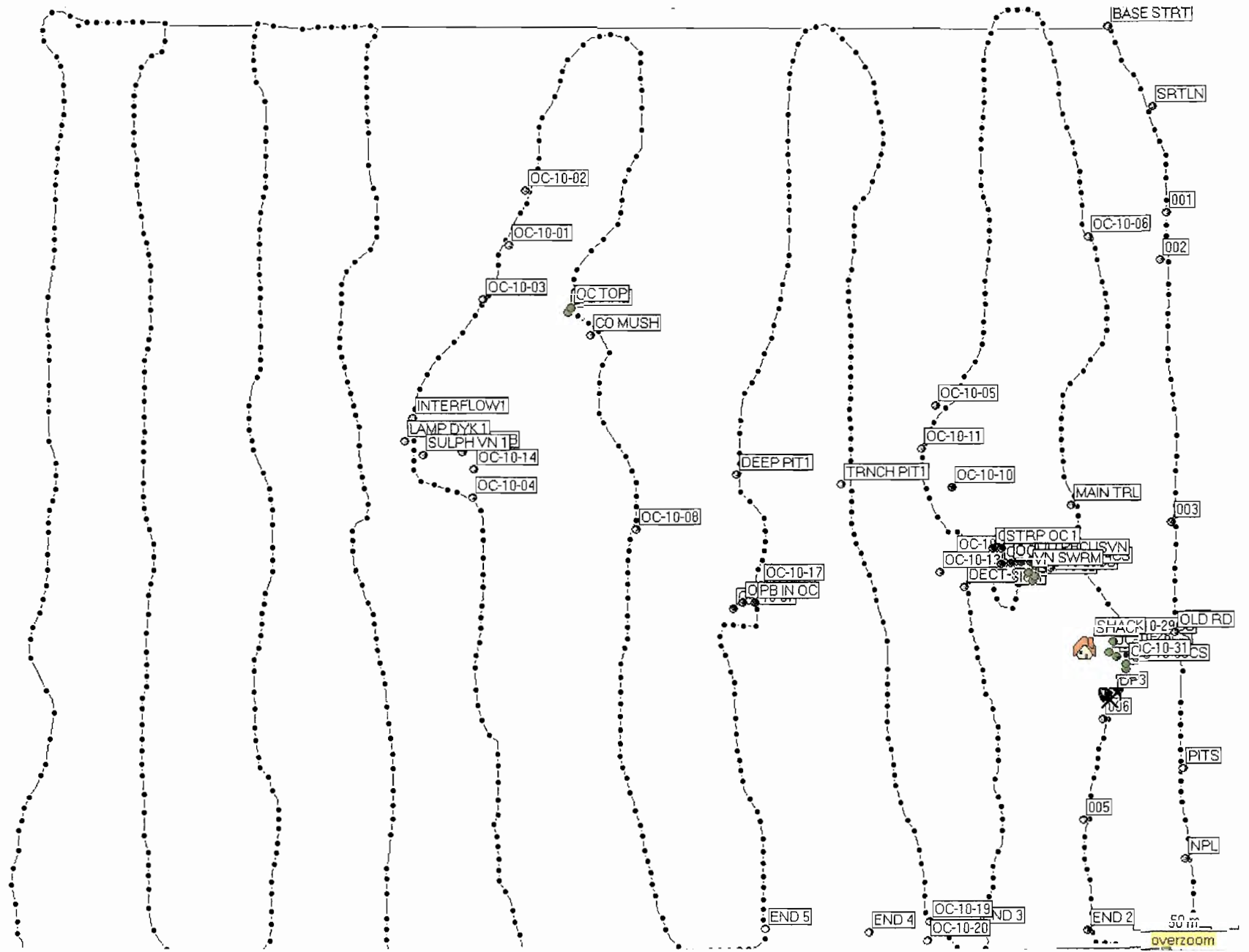
GSM-19 OVERHAUSER MAGNETOMETER/VLF v7



Receiver Operated By: Claudia Moraga
 GPS Operated By: Bruce Lavalley
 Processed by: C Jason Ploeger, B.Sc.
 Map Drawn By: C Jason Ploeger, B.Sc.
 September 2010



Drawing : OUTCROP-WALDMAN-VLF-NAA



Pictures



Channel Sampling



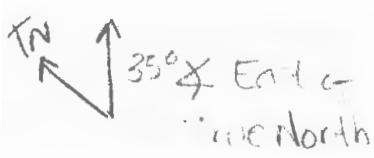
Felsic Dyke



HSM Student Helpers



Old Prospector's Shack



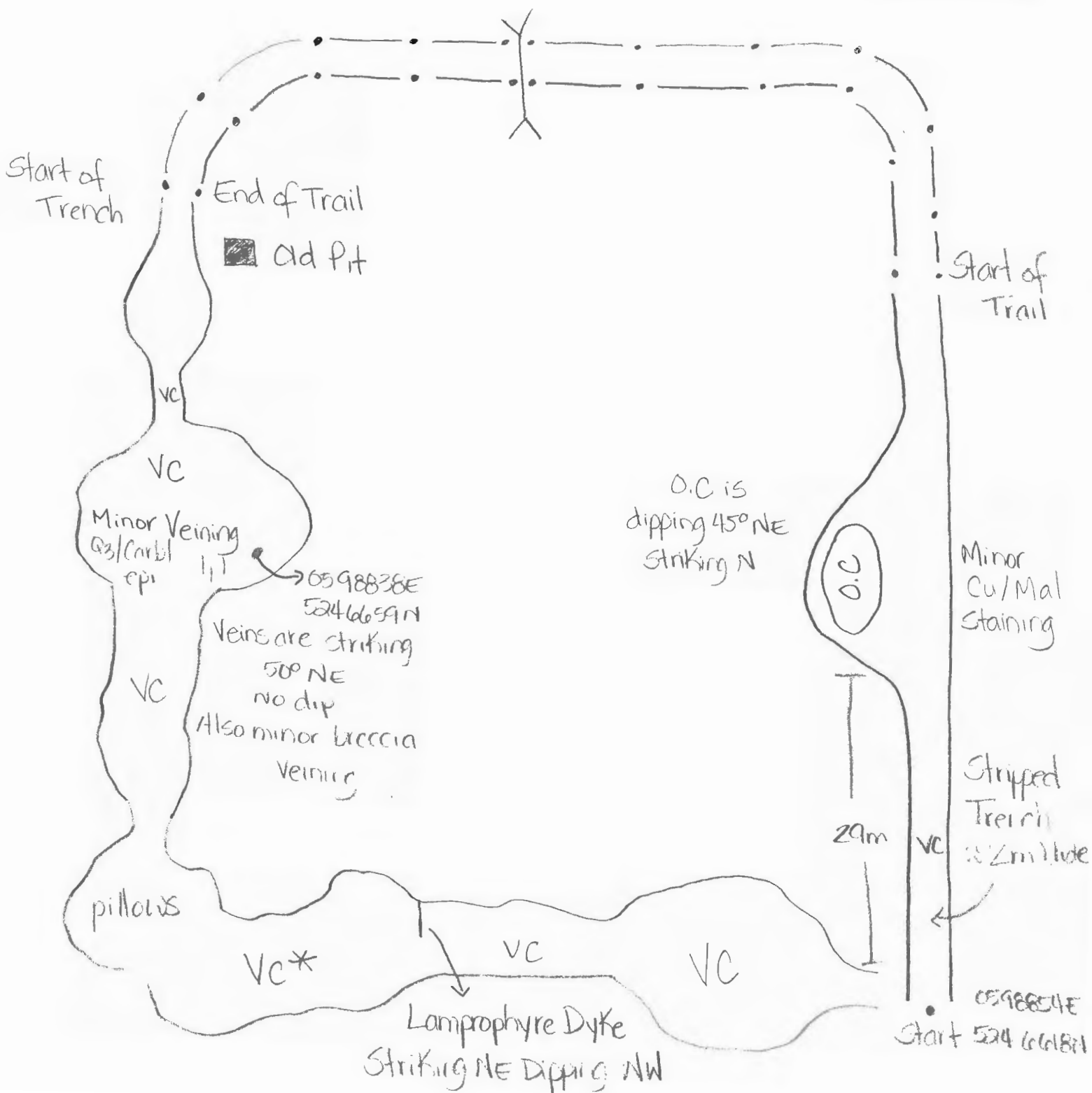
Waldman - 2010

Legend

- pit
- Y trench

* Blank, fine grained VC interflow, high in sulphides. Fracture zone dipping NW

• Top of Hill



Waldman South
2010

Path to pond



Trail

599139E, 5246590



- felsic structure
- X-cutting Vc
- Pinkish Qu/felt veins & blebs
- Highly fractured
- Zns/Pbs & Cpy/Py

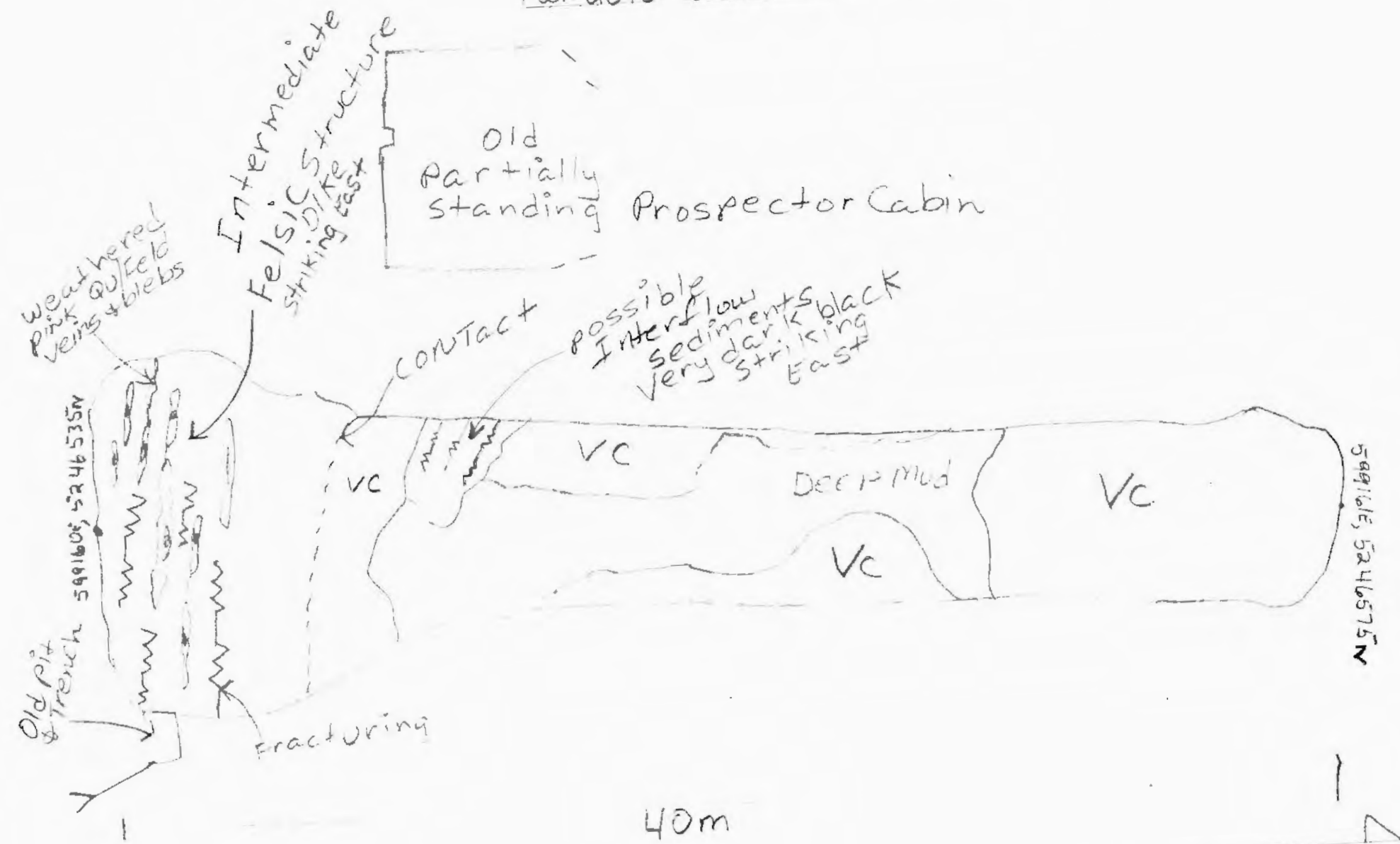
Legend

- Veins or blebs
- Fracturing
- outcrop top
- Qu vein
- Contact zone
- Trail
- path

26m

599107E 5246581N

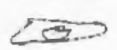


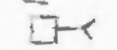

Fall 2010 Waldman South

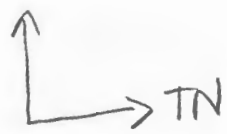


- Same felsic dike as previous stripped outcrop but offset.
- Small interflow dike
- Volcanics strike to NE

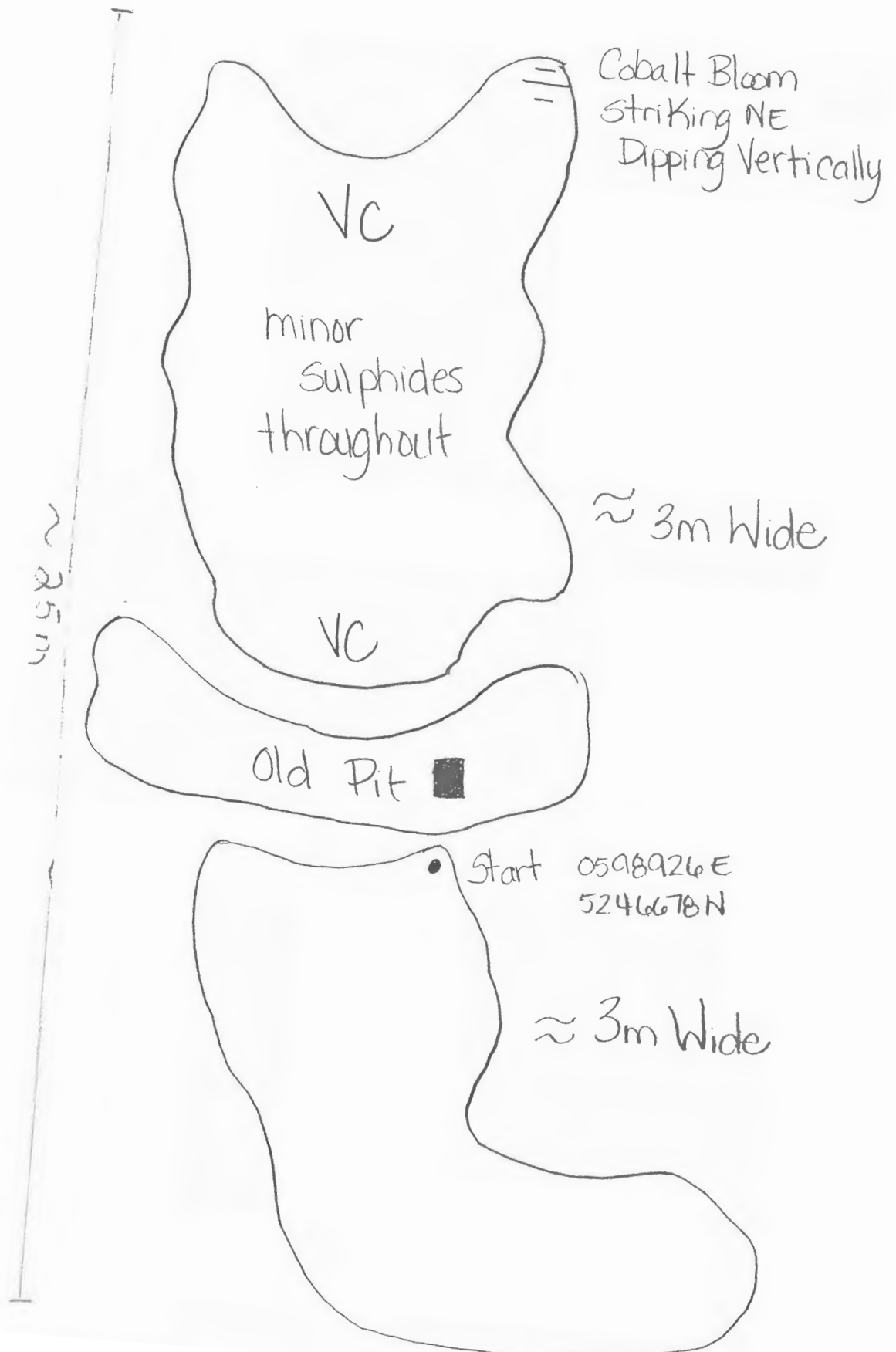
40m

Legend

	veins or blebs
	fracturing
	old cabin
	pit & trench
	contact zone

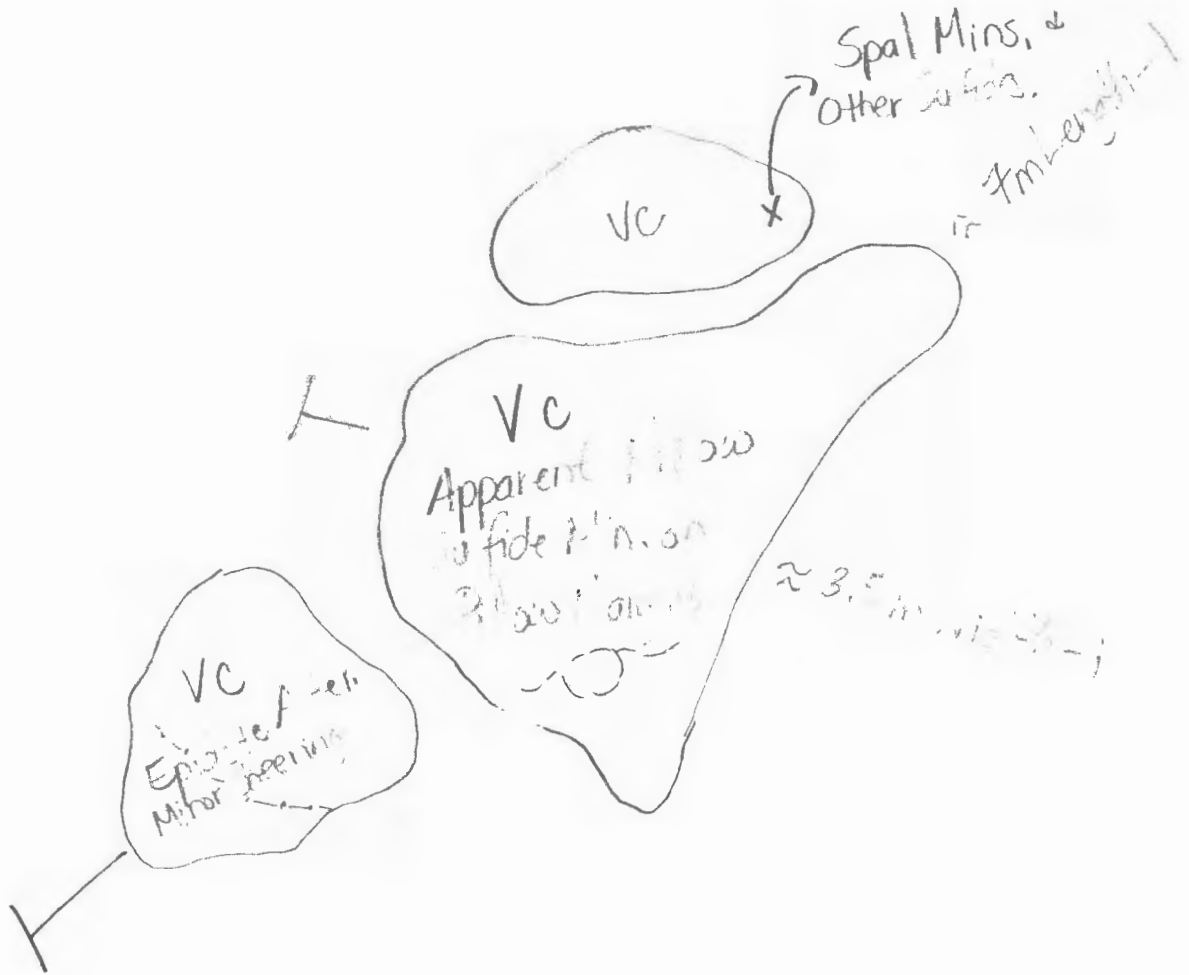


Waldman - Stripped Outcrop 2010





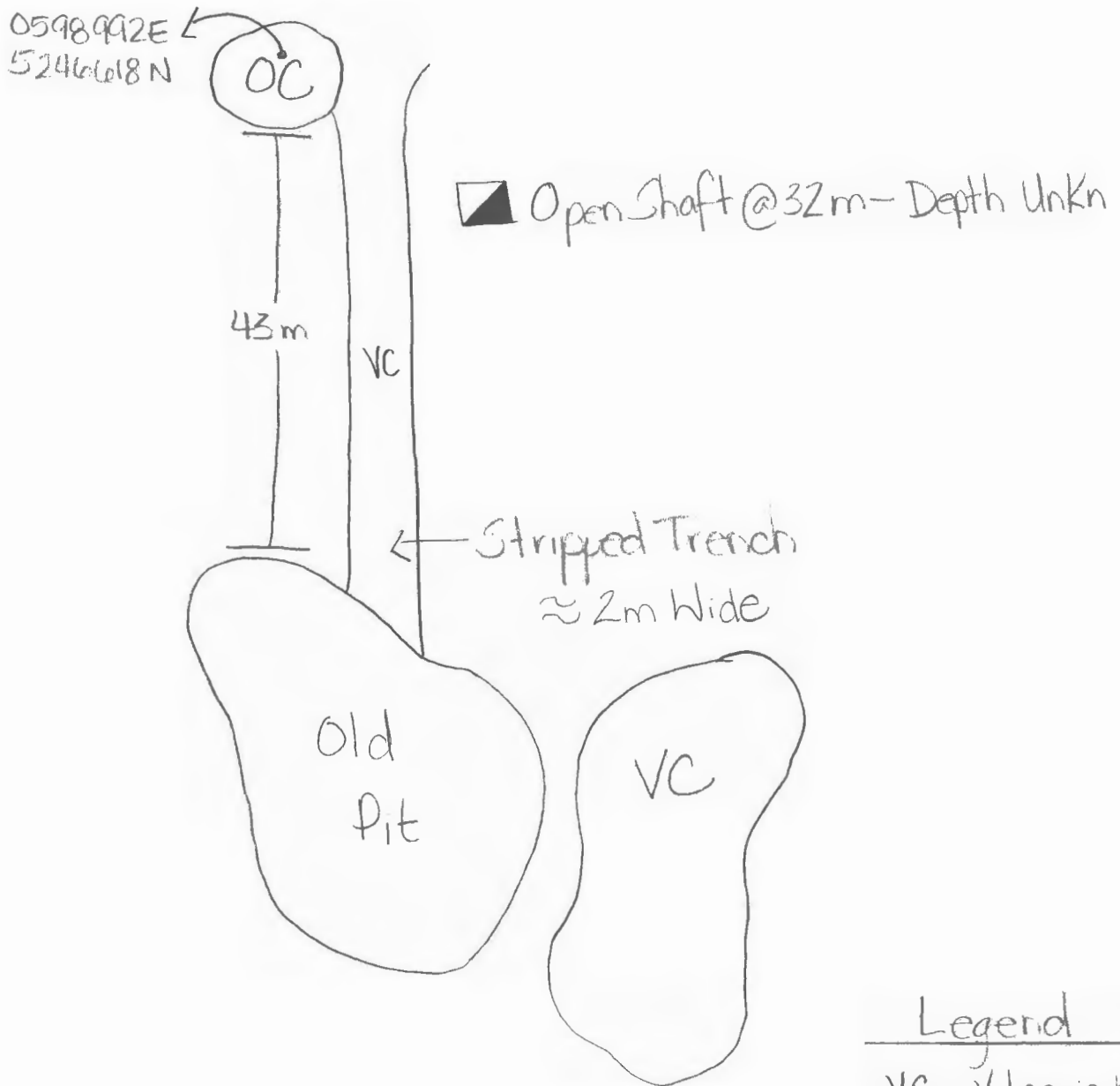
Waldman - Stripped Outcrop 2010



- Legend
- pillow
 - minor sheering
 - VC Volcanic Rock



The Waldman - 2010



0598992E
5246618N

Open Shaft @ 32m - Depth Unkn

43 m

VC

Stripped Trench
≈ 2m wide

Old Pit

VC

Legend

VC - Volcanic track

▣ - Shaft

O.C - Outcrop

2010 Daily Logs – Waldman South
Sept 2 - Access recon & prospecting
Sept 3 - No hours
Sept 4 - Flag access, prospecting
Sept 5 - No hours
Sept 6 - Prospecting
Sept 7 - No hours
Sept 8 - Prospecting
Sept 9 - Prospecting
Sept 10 - Plot map for prospecting/stripping/drilling
Sept 11 - Prospecting, plot map
Sept 12 - No hours
Sept 13 - Prospecting, plot map
Sept 14 - Prospecting, plot map
Sept 15 - MNM site visit, plot AutoCAD and geo physics maps
Sept 16 - No hours
Sept 17 - Prospecting
Sept 18 - Prospecting
Sept 19 - Up date map
Sept 20 - No hours
Sept 21 - Meet Geophysics crew, prospect/detect
Sept 22 - No hours
Sept 23 - No hours
Sept 24 - Review Mag survey maps and report
Sept 25 - No hours
Sept 26 - Plot Mag/MMI/trenching targets
Sept 27 - Trenching
Sept 28 - Trenching
Sept 29 - Trenching
Sept 30 - Trenching
Oct 1 - No hours
Oct 2 - No hours
Oct 3 - No hours
Oct 4 - No hours
Oct 5 - No hours
Oct 6 - Inspect and clean trenching, update map
Oct 7 - Inspect and clean trenching, update map
Oct 8 - Clean and prospect trenches
Oct 9 - No hours
Oct 10 - Clean and prospect trenches
Oct 11 - No hours
Oct 12 - Clean and prospect trenches
Oct 13 - Clean and prospect trenches
Oct 14 - Clean and prospect trenches
Oct 15 - Geo mapping Stripped areas
Oct 16 - Geo Map stripped area and prospecting
Oct 17 - No hours

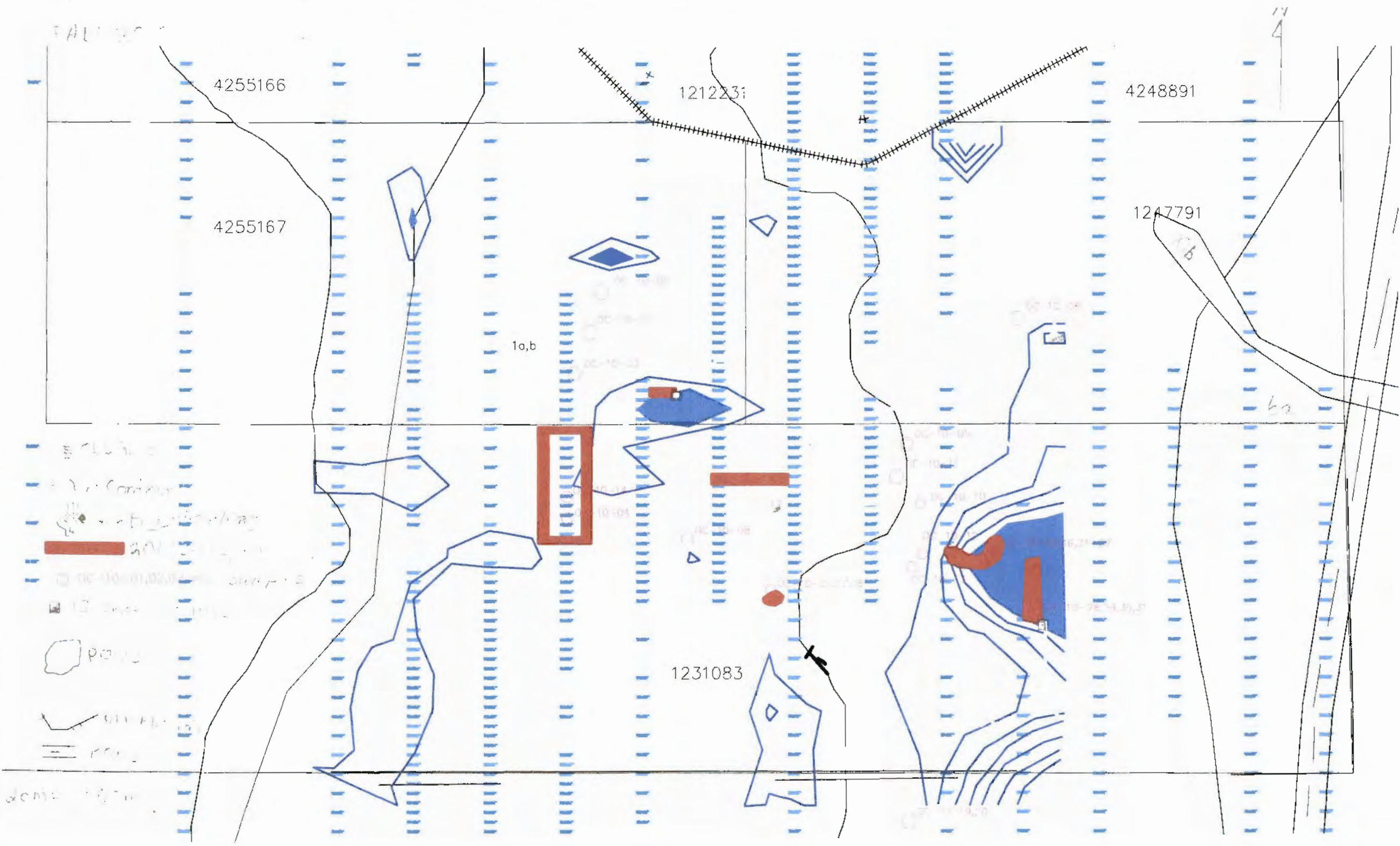
Oct 18 - Update AutoCAD map and data
Oct 19 - No hours
Oct 20 - No hours
Oct 21 - No hours
Oct 22 - No hours
Nov 1 - No hours
Nov 2 - Mapping, prospecting
Nov 3 - MNDM site visit, mapping
Nov 4 - Clean out trenches
Nov 5 - No hours
Nov 6 - Clean trenches
Nov 7 - Pressure wash trenches
Nov 8 - No hours
Nov 9 - Wash trenches, update maps, research reports
Nov 10 - Map trenches
Nov 11 - Wash trenches
Nov 12 - Wash trenches, channel saw sampling
Nov 13 - Wash trenches, channel saw sampling
Nov 14 - No hours
Nov 15 - Channel saw, sort samples

Note: Trenches = Overburden stripping

2010 Fall Waldman South Sample List

Sample #	Date & Description		Coordinates		Elevation
OC-10-01	06-SEP-10 Sulph in fracture Vn	17T	598870	5246724	344 m
OC-10-02	06-SEP-10 Sulph in fracture Vn	17T	598878	5246750	337 m
OC-10-03	06-SEP-10 Sulph in fracture Vn	17T	598859	5246698	332 m
OC-10-04	06-SEP-10 1:37 PRX BLDR	17T	598855	5246603	329 m
OC-10-05	08-SEP-10 Sulph in 5m Veinlettes-NEAR POND	17T	599078	5246651	345 m
OC-10-06	08-SEP-10 WALLINGFORD SHAFT Muck	17T	599151	5246733	327 m
OC-10-07	11-SEP-10 Sulph in Frac Vn	17T	598981	5246552	327 m
OC-10-08	11-SEP-10 Sulph in Frac Vn Near DDH	17T	598934	5246589	335 m
OC-10-09	13-SEP-10 Sulph in Pillows	17T	599123	5246561	322 m
OC-10-10	13-SEP-10 Sulph Veinlette	17T	599087	5246612	323 m
OC-10-12	17-SEP-10 Sulph Veinlette	17T	599089	5246579	320 m
OC-10-13	17-SEP-10 Sulph Veinlette POSS CONT	17T	599082	5246571	322 m
OC-10-14	28-SEP-10 Co/Ni float (mush)	17T	598855	5246617	346 m
OC-10-15	13-OCT-10 SULPH VN LOOSE	17T	599126	5246572	319 m
OC-10-16	13-OCT-10 SPHAL IN OC LOOSE	17T	599120	5246578	323 m
OC-10-17	13-OCT-10 SPHAL-PB ON OC	17T	598995	5246564	325 m
OC-10-18	14-OCT-10 SULPH IN OC NEAR TRL	17T	598986	5246555	335 m
OC-10-19	16-OCT-10 - TRC SULPH in Veinlettes on LRG OC	17T	599079	5246405	320 m
OC-10-20	16-OCT-10 Sulph in PROX BLDR	17T	599078	5246396	319 m
OC-10-22	12-NOV-10 FELSIC DYKE	17T	599127	5246569	321 m
OC-10-23CS	12-NOV-10 50CM CUT	17T	599128	5246571	322 m
OC-10-24CS	12-NOV-10 30CM CUT	17T	599135	5246574	326 m
OC-10-25CS	13-NOV-10 130CM CUT in FELSIC DYKE	17T	599107	5246583	328 m
OC-10-26CS	13-NOV-10 70CM IN SHEAR	17T	599111	5246576	338 m
OC-10-27CS	13-NOV-10 IN SHEAR	17T	599116	5246576	317 m
OC-10-28CS	15-NOV-10 47CM IN SHEAR	17T	599165	5246536	326 m
OC-10-29CS	15-NOV-10 62CM IN SHEAR	17T	599167	5246541	315 m
OC-10-30CS	15-NOV-10 80CM IN SHEAR	17T	599173	5246528	315 m
OC-10-31	15-NOV-10 SULPHIDE BLEB	17T	599173	5246531	315 m

Note: " Cut" refers to Channel Sample



FAU 100

4255166

1212231

4248891

4255167

1217791

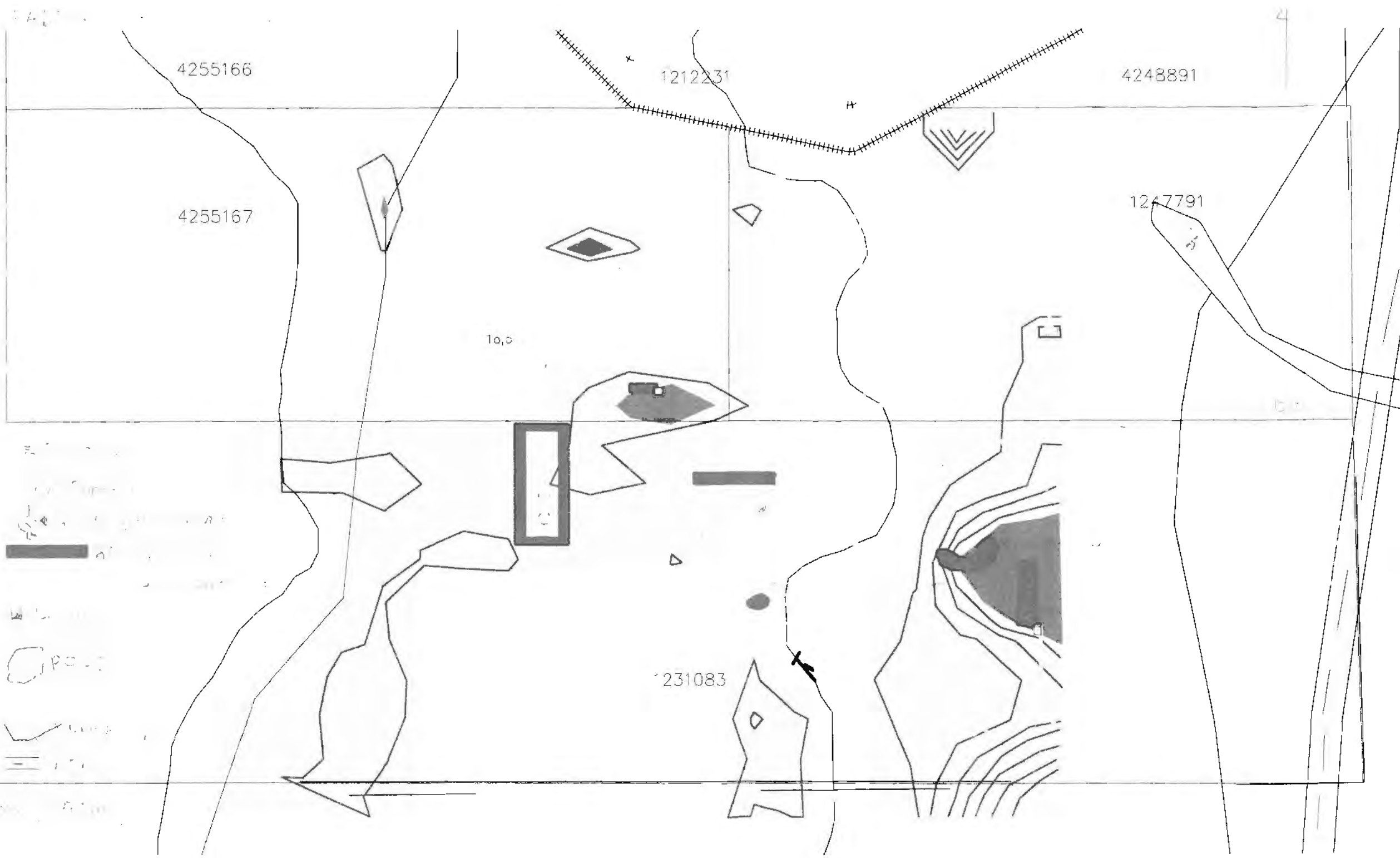
10,b

1231083

- 100-10-01, 02, 03
- 10-24, 25, 26, 27
- 10-28, 29, 30, 31
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- 10-28, 29, 30, 31
- 10-24, 25, 26, 27
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- 10-24, 25, 26, 27
- 10-28, 29, 30, 31



demarcation



4255166

1212231




4248891

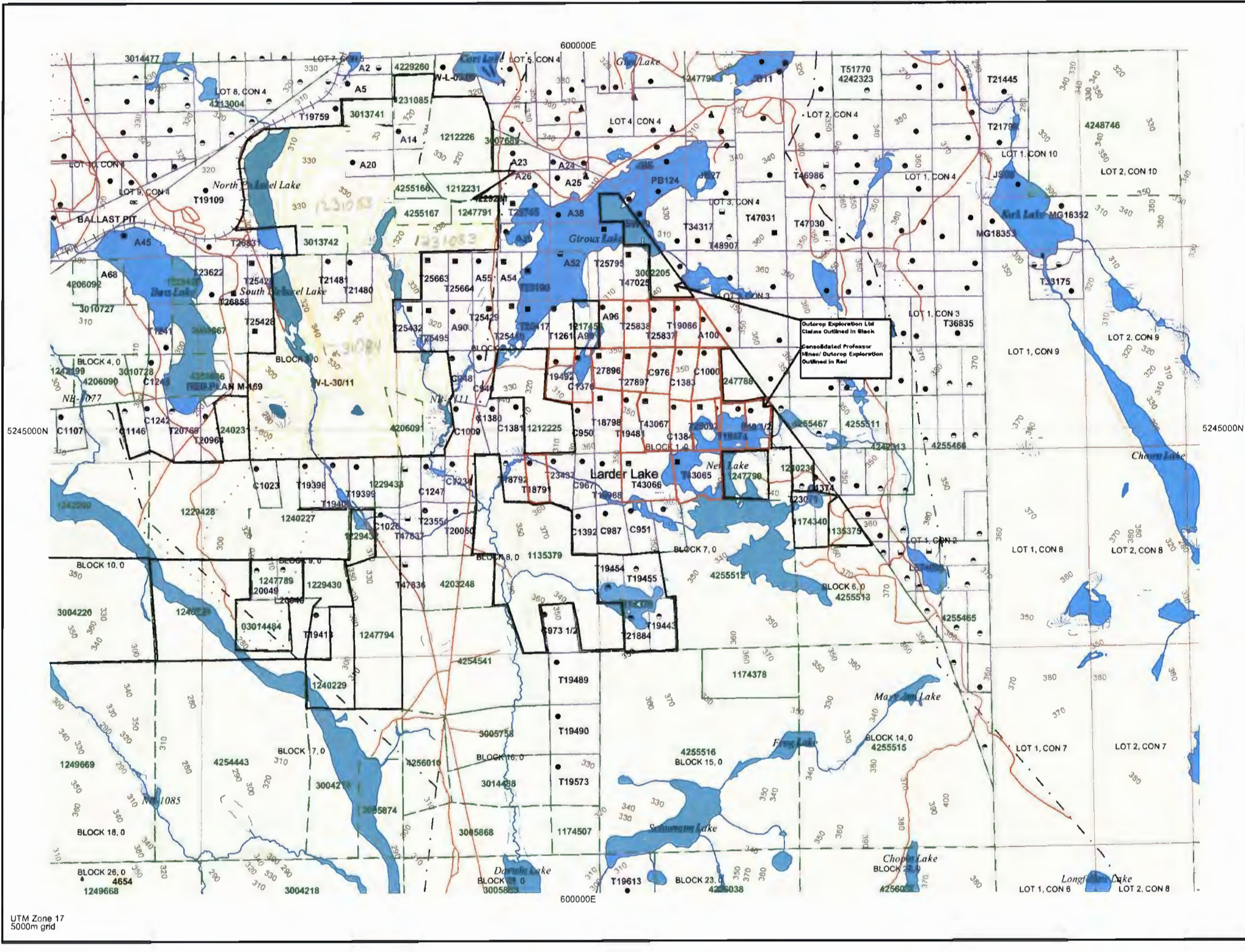
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1247791

10,0

1231083

-  POLY
-  ROAD
-  RAILROAD



Outcrop Exploration Ltd
Claims Outlined in Black
Consolidated Professor
Mines/Outcrop Exploration
Outlined in Red