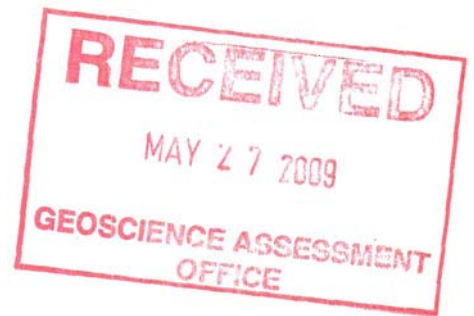


2.41681

ASSESSMENT REPORT

**VALE INCO LIMITED
GEOPHYSICAL SURVEY
LORNE TOWNSHIP
NTS: 41-1-5**

MAY 2009



Maggie Layman
Vale Inco Technical Services Limited
May 21, 2009

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Summary

A three week program was conducted along the Lorne property in April and May 2009. The purpose of the program was to locate historical drillholes in the area with potential for geophysical surveys. A total of five holes were located, two holes were open with one hole UTEM-4 surveyed.

Introduction

Vale Inco Limited mapping indicates the Worthington offset cuts across the Lorne property and is trending southwest. Historical drilling intersected quartz diorite and inclusion quartz diorite with weakly mineralized sections.

Property

Location and Access (Figure 1)

The Lorne Township Property is located on the southern half of Lot 9 Concession 6, the northern half of Lot 9 Concession 5, and Lot 10 Concession 5 of Lorne Township, Sudbury Mining Division, NTS 41-I-5. The Parcels are 3.5 km northeast of the Town of Narin. Access to the southern part of the property is excellent along a northeast-trending gravel road at the junction of Highway 17 with the Bell Lake Road. Access can also be gained along the CPR rail line bisecting the property. An Ontario Federation of Snowmobile Clubs (OFSC) sanctioned snowmobile trail runs through the northern portion of the property.

Property Status (Figure 2)

The Lorne property is comprised of three parcels of land (73395-0220, 73395-0221 and 73395-0222) with a total of 619 ha (Figure 2). The property is patented surface and mining rights 100% owned by Vale Inco Limited. The exploration expenditures incurred on the Lorne property is being submitted for assessment credits and applied on a series of unpatented mining claims contiguous to the property.

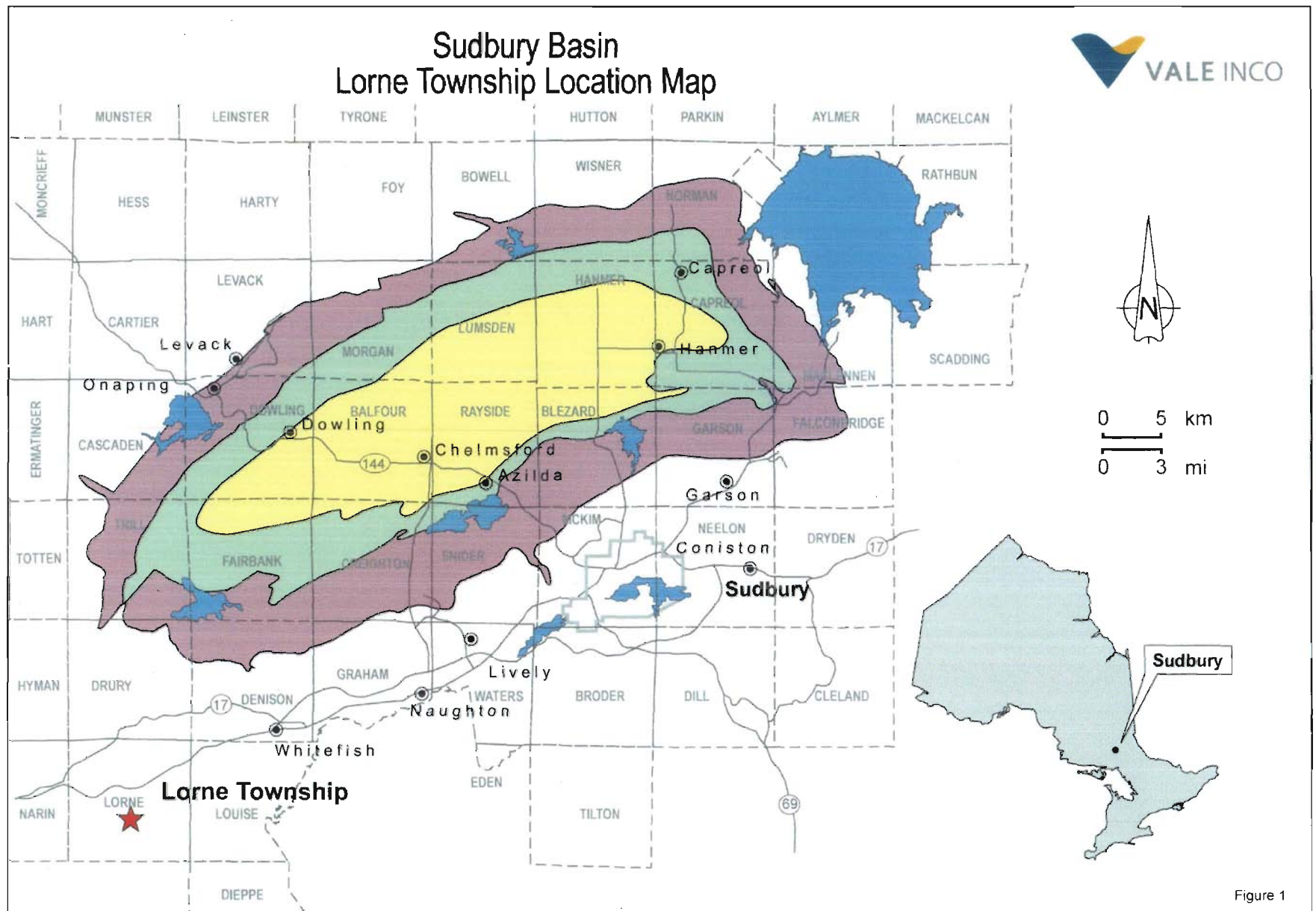


Figure 1: Lorne Township location map.

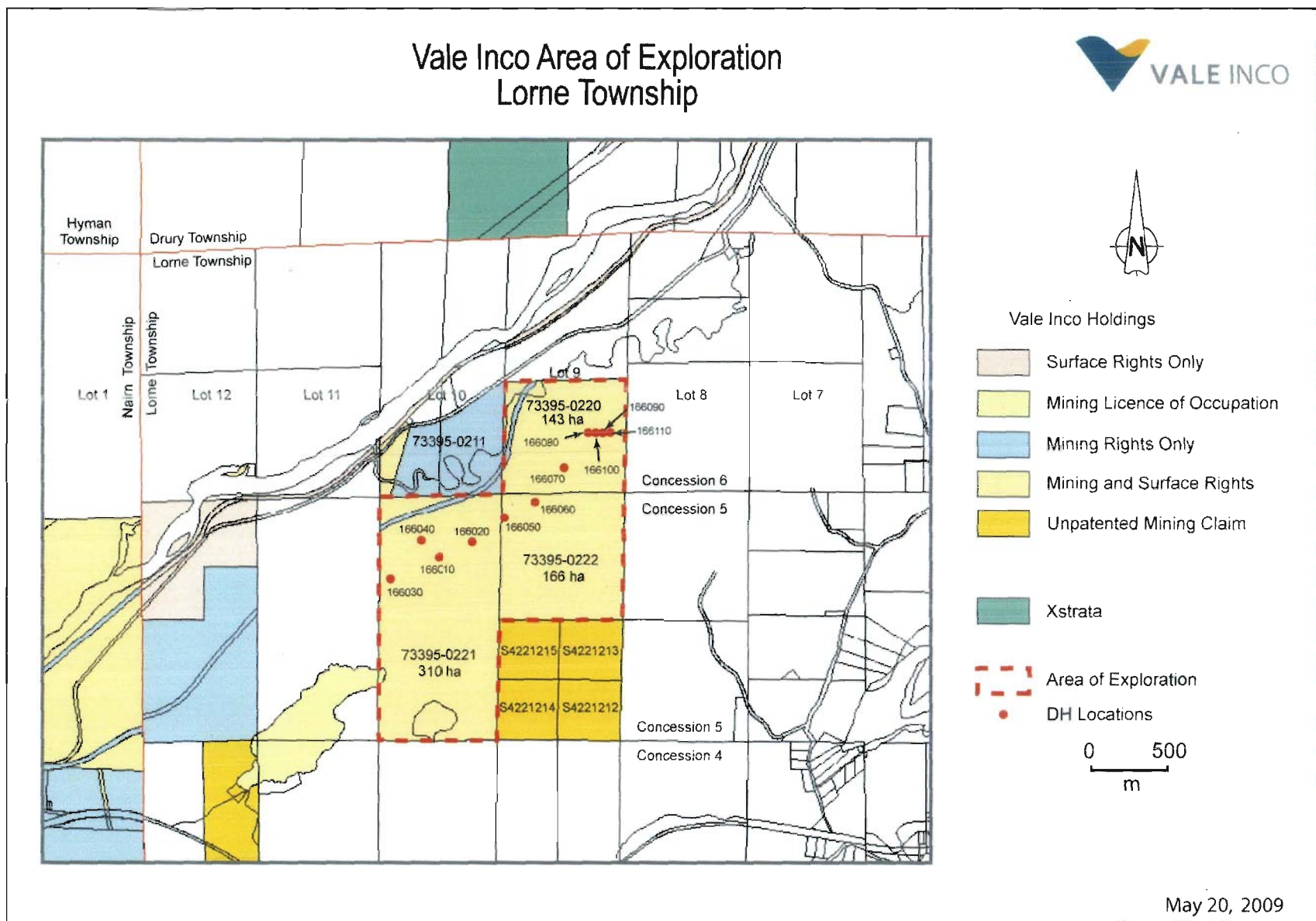


Figure 2: Lorne Township property map.

Figure 2

Environmental Status

The terrain is typical rugged Canadian Shield, covered by new growth forest, comprised of a mixture of poplar, spruce, maple and birch in the low areas, and northeast-trending outcrop ridges dominated by red pine, spruce and oak. Maximum relief is 50 m. Open marshland dominates the property north of the rail line. Major cultural features include the CPR rail line, OFSC snowmobile trail, and a gravel road, as indicated on the accompanying geological map. Locally an overgrown roadbed subparallel to the gravel road was observed. Foot trails and hunting stands are evidence of recreational activities. No environmental liabilities are judged to exist on the property (Makela, 2005).

Regional Geology

The oldest rocks in the property area are Early Proterozoic sediments of the Huronian Supergroup, deposited between 2500 and 2150 Ma (Van Schmus, 1965). This assemblage forms part of the Penokean Fold Belt of the Southern Province (Dressler, 1984). Clastic metasediments of the Pecors, Mississagi, Bruce, Espanola and Serpent Formations are exposed. Card (1978) considers the sediments to be derived mainly from the Superior Province to the north, with deposition occurring predominantly underwater in fluvial-deltaic to marine neritic environments. Lindsey (1971) suggests a glacial origin for the conglomerates.

Emplacement of sills, dykes and irregular bodies of Early Proterozoic Nipissing into the sediments occurred around 2150 Ma (Van Schmus, 1965). The 1850 Ma Sudbury Event (Krogh et al., 1984) resulted in brecciation of all of these lithologies, and triggered the emplacement of the Sudbury Igneous Complex (SIC), including the Worthington Offset, an Early Proterozoic quartz diorite dyke that extends over 10 km from the SIC in Denison Township (Hattie and Davis, 2000), into the northwest corner of Lorne Township.

The above lithologies suffered a protracted history of low to middle rank regional metamorphism and related structural deformation during the Penokean Orogeny (Goldich, 1968) between 2200 and 1750 Ma.

The last intrusive event to affect the area was emplacement of the Middle Proterozoic northwest-trending olivine diabase dykes. Age of emplacement of these dykes has been calculated by Gates and Hurley (1973) at 1460 ± 130 Ma.

Property Geology (Appendix I)

Overview

Clastic metasediments of the Huronian Supergroup comprise the oldest lithologies on the property. These units are in intrusive contact with a metagabbro of a regionally extensive Nipissing Diabase sill. One occurrence of Sudbury Breccia was noted. A segment of the northeast-trending Worthington Quartz Diorite Offset dyke occurs adjacent the metasediment-metagabbro contact in the south portion of the property (Makela, 2005).

Property History

Previous Work

Previous work on the property included a ground Total Field Magnetics survey conducted by Inco Technical Services Limited in 2003, and the historic Vale Inco Limited outcrop map. In 2005, additional reconnaissance mapping was completed including geochemical and thin section analysis.

Between 1958 and 1959, eleven shallow holes were drilled to test the mineralized potential of the projected Worthington offset. Appendix I illustrates these collar locations at surface. These include BH 16601-0 to 16611-0. Ten holes intersected minor quartz diorite and inclusion quartz diorite with several holes intersecting sulphide mineralization.

2009 Exploration Program

The 2009 Exploration program consisted of evaluating the historical drillhole database for anomalous samples and intervals for down hole UTEM-4 surveys. All eleven holes were added to the Vale Inco old hole database and include boreholes 166010 to 166110. The field program consisted of lengthening the existing trail and locating the holes in the field. The drillholes that were located were then dummy probed to ensure they were not blocked and suitable for survey and then surveying appropriate holes. BH 166010 was surveyed during this program. Figure 2 is a longitudinal section of the drilling. A brief description of relevant geology and mineralization along with work completed for each hole is outlined below.

16601-0

BH 16601-0 reached a final depth of 377 m and intersected 21 m of weakly mineralized quartz diorite. No significant assays are present in this hole. The hole was located in the field and UTEM-4 surveyed on April 28 2009.

16602-0

BH 16602-0 reached a final depth of 414 m and intersected 21 m of weakly mineralized quartz diorite. No significant assays are present in this hole. This hole was located in the field for potential UTEM-4 survey but was blocked at 11 m.

16603-0

BH 16603-0 reached a final depth of 335 m and intersected quartz diorite from 259-285 m. No significant assays are present in this hole. This hole was located in the field and was determined not suitable for surveying as the drill casing was bent at 1 m depth.

16604-0

BH 16604-0 reached a final depth of 172 m and intersected quartz diorite from 24-127 m. No significant assays are present in this hole. This hole was not located in the field

16605-0

BH 16605-0 reached a final depth of 346 m and intersected quartz diorite from 252-310m. No significant assays are reported in this hole. This hole was not located in the field.

16606-0

BH 16606-0 reached a final depth of 476 m and intersected quartz diorite from 399-441 m. No significant assays are present in this hole. This hole was located in the field and was determined not suitable for UTEM-4 survey as the drillhole casing was damaged and the hole was blocked.

16607-0

BH 16607-0 reached a final depth of 435 m. Sporadic intersections of quartz diorite is present throughout the hole. A 0.1 m massive sulphide intersection is present at 311 m. This sample grades 0.41% Ni and 0.12% Cu. This hole was located in the field however a survey was not possible as the hole was blocked at 200 m.

16608-0

BH 16608-0 reached a final depth of 311 m. No quartz diorite or significant assays are present in this hole. This hole was not located in the field.

16609-0

BH 16609-0 reached a final depth of 267 m. Quartz diorite is present from 59-87 m. Within the quartz diorite at 75.8-76 m breccia sulphide is present grading 1.81% Ni and 1.86% Cu. This hole was located in the field and open to foot of hole but a geophysical UTEM-4 survey was not possible due to steep terrain.

16610-0

BH 16610-0 reached a final depth of 184 m. Sporadic intermittent quartz diorite is present throughout the hole. From 65.5-68 m sulphide is hosted within a gabbroic unit and shear having a cumulative grade of 0.46% Ni and 0.12% Cu. This hole was not located in the field.

16611-0

BH 16611-0 reached a final depth of 181 m. Intersecting quartz diorite units up to 14 m are present throughout. No significant assays are present in this hole. This hole was not located in the field.

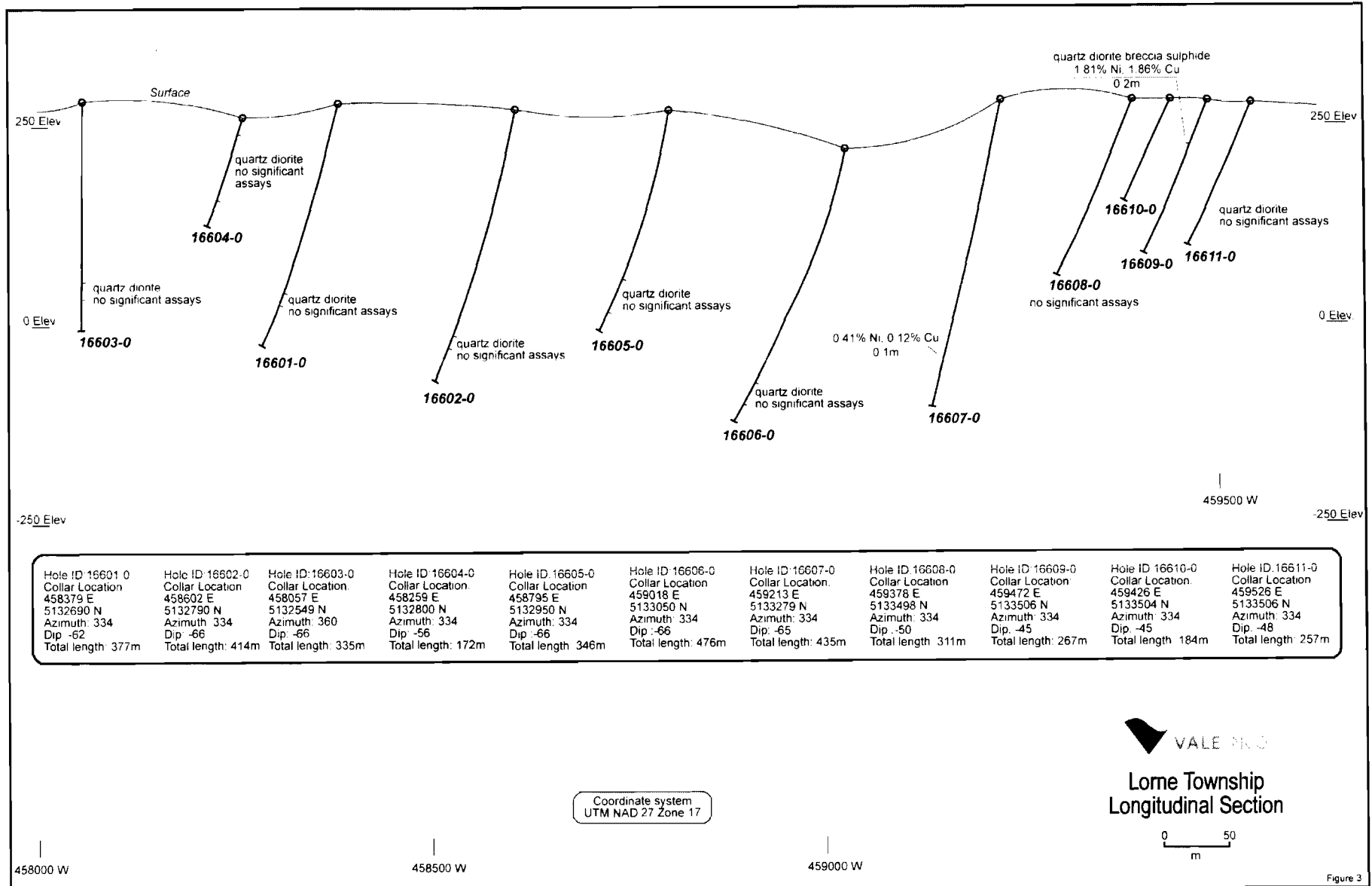


Figure 3: Lorne Township longitudinal section of historical drilling.

Geophysics

Survey Procedures

Geophysical work in the Lorne area consisted of a borehole UTEM survey completed by Lamontagne geophysics. The survey was carried out using the UTEM-4 borehole EM system at a base frequency of 31Hz. This survey utilized a surface loop of wire as a transmitter to create a time-varying electromagnetic field, and measured the three-component response of the anomalous magnetic field down a drill hole. A receiver collected the three-component response of the total magnetic field, which was then processed to determine the anomalous field. The final data (Appendix II) was modelled using the Maxwell EM modelling software (O'neill, 2009).

Survey Results and Conclusions

BH 166010 was surveyed with a single loop UTEM4 survey in April. The survey was designed to test the area along the Worthington offset dyke located in the southwest corner of the basin. Preliminary results indicated a weak, broad channel one anomaly near the top and bottom of the hole. Due to the lack of borehole orientation data the anomaly was suspected to be geometry related, and a gyro survey was requested for the hole. The gyro survey was completed along with the borehole collar being accurately located, and the reprocessed data concluded that the anomaly was geometrically produced, and that no significant conductors were detected (O'neill, 2009).

Recommendations

Further evaluation of the property for economic sulphide targets should consist of surface electromagnetic methods of detection including surface UR surveys. Additional down hole geophysics is recommended for BH 166090 as sulphides are present within the hole. This work would be required to occur in the winter months as steep terrain and muddy slopes in the spring prevented this hole from being surveyed.

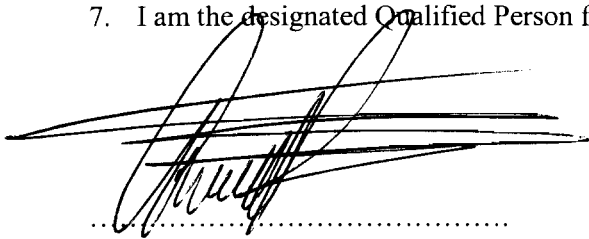
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Certificate of Qualifications

I, Arnold D. Burton, P.Geol. of 44 Northfield Crescent, Sudbury, Ontario hereby certify that:

1. I am a 1983 graduate of Laurentian University at Sudbury, with an Honours Bachelor of Science Degree in Geology.
2. I am Practising Member 0338 of the Association of Professional Geoscientists of Ontario.
3. I have practised in my profession continuously since 1983.
4. I am currently employed as Project Manager with Vale Inco in Copper Cliff, Ontario.
5. The work documented in this report was conducted under my supervision.
6. Maggie Layman is the author of this report.
7. I am the designated Qualified Person for the purposes of this report.



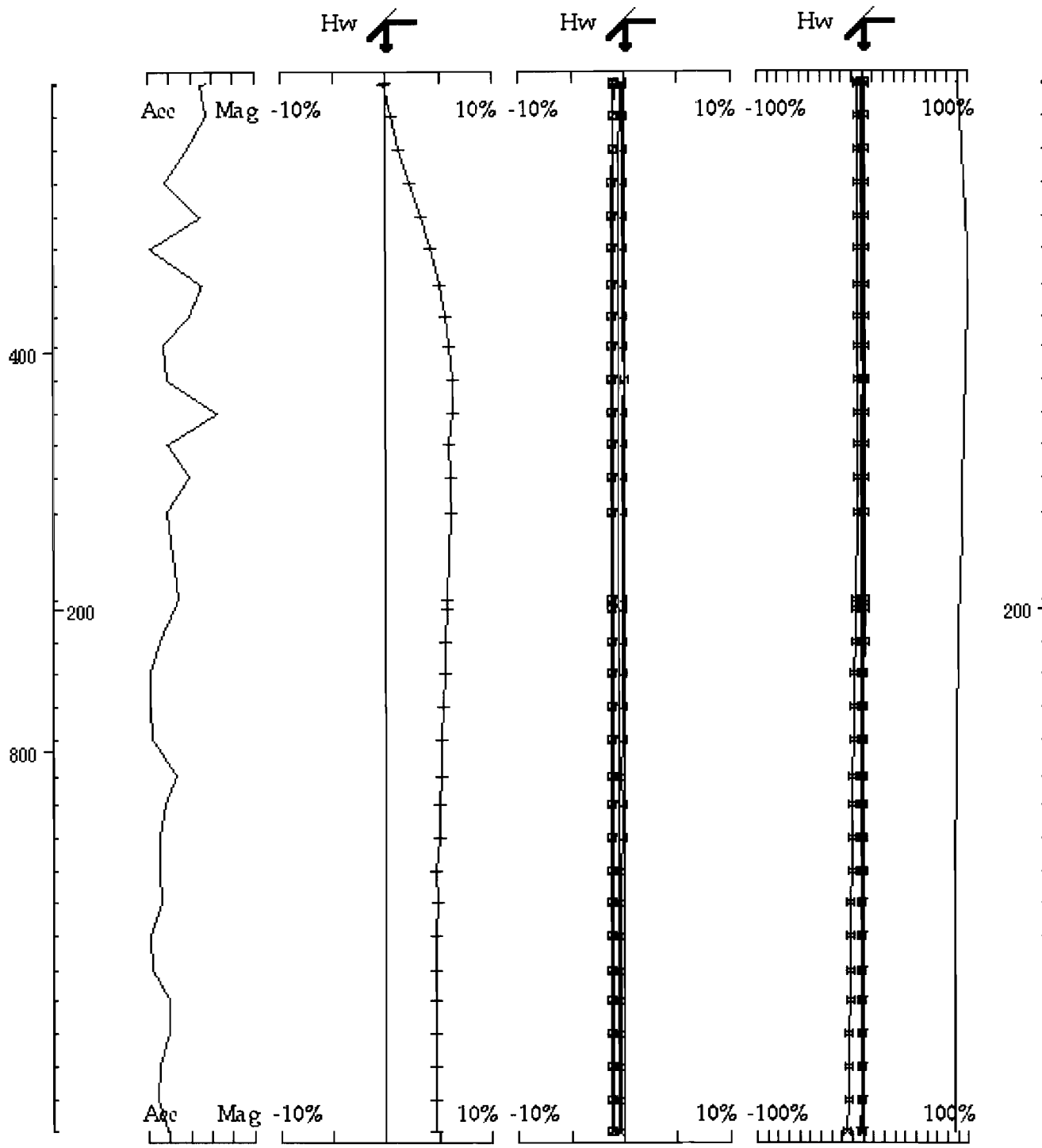
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Arnold D. Burton
May 21, 2009

APPENDIX I

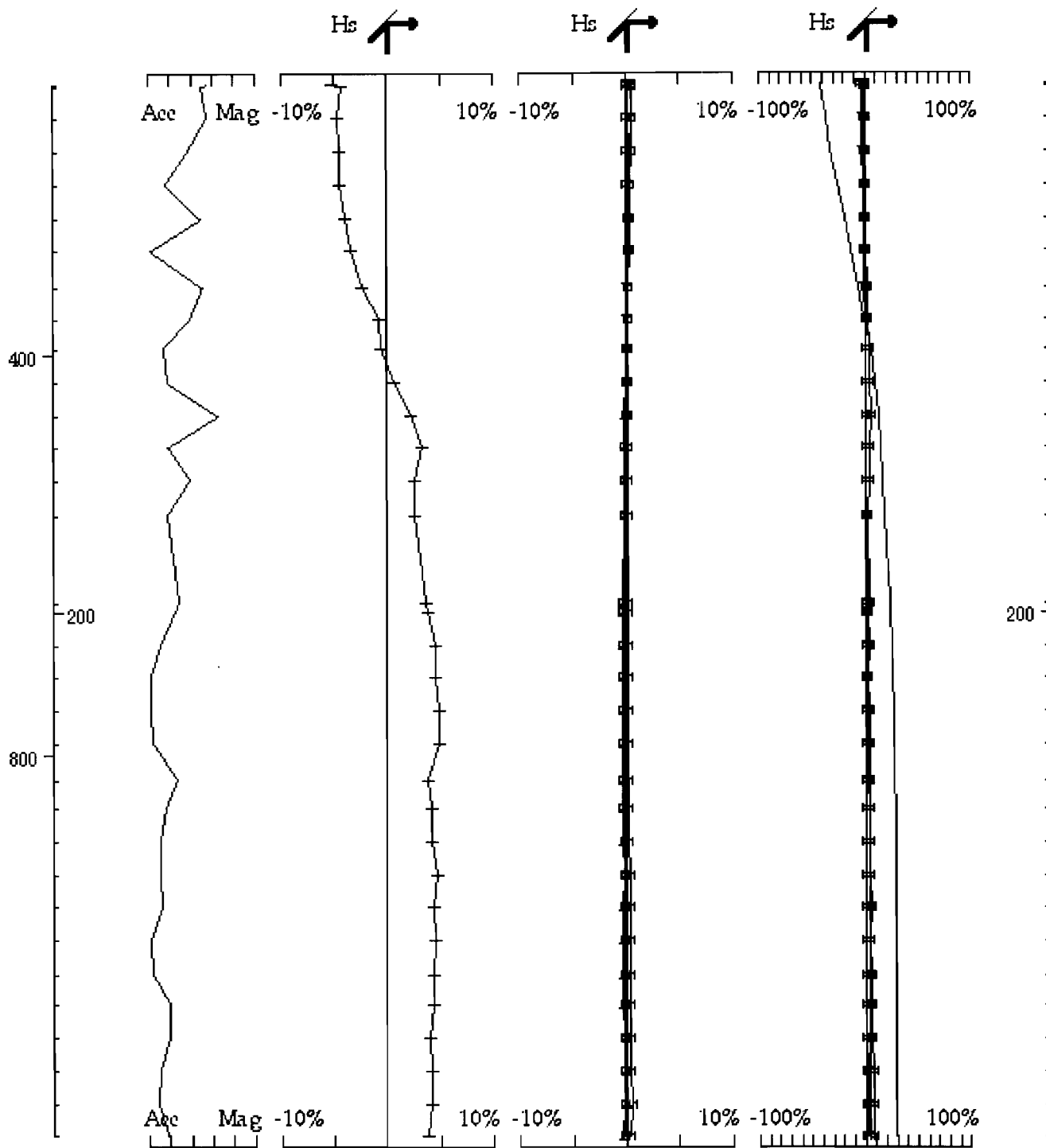
Lorne Geology Map 1:5,000 Scale

APPENDIX II

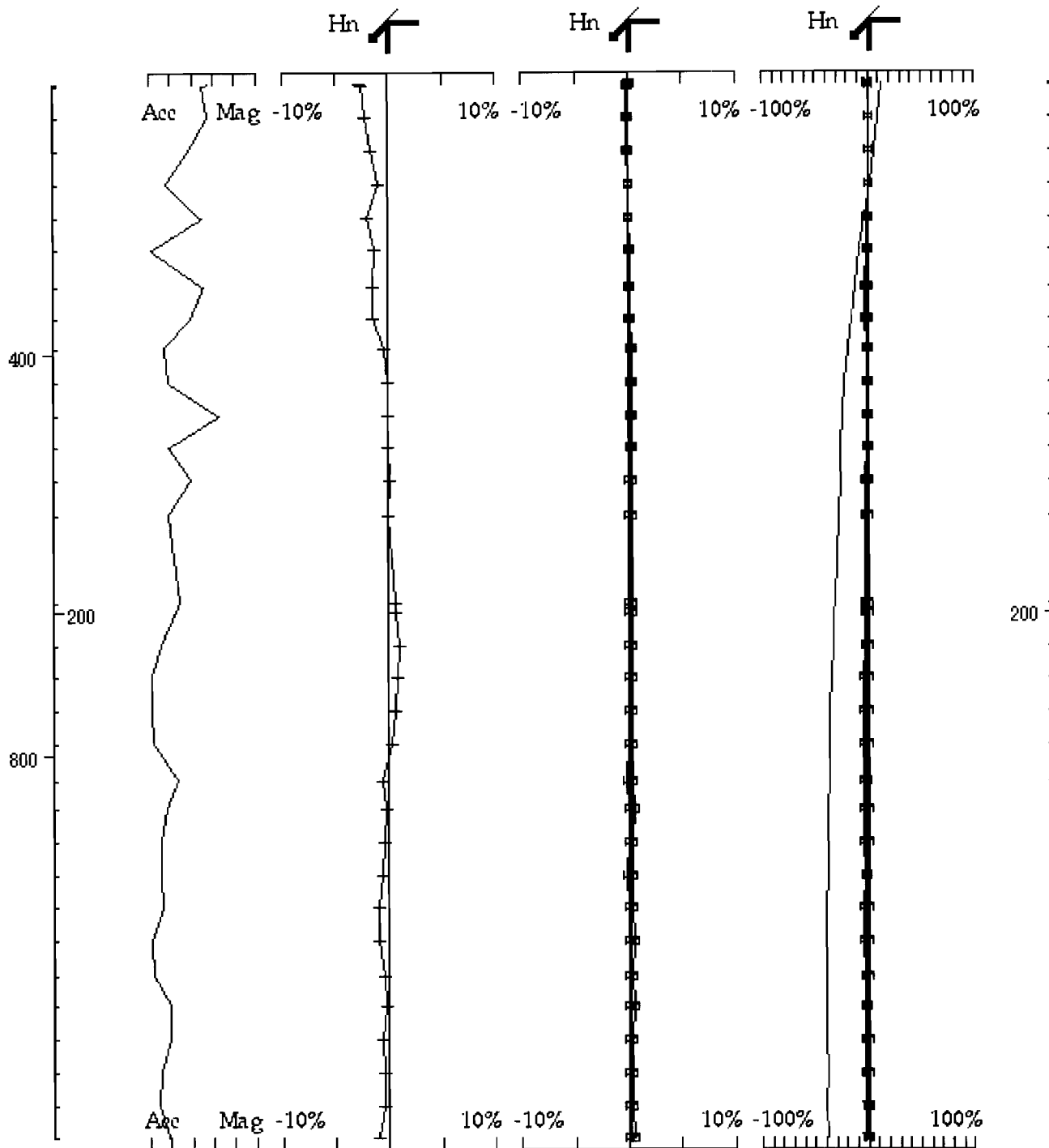
Geophysical Data- Lamontagne Geophysics Ltd.



Hole: 16601 Lp: 0920; Job: 0903 Cpt: Hw S 360°; N 90°	Secondary. (Chr-Ch1)/ Hp Cont norm @ Δz: 0m Base freq: 30.974 Hz Gain factor: -0.9	BHUTEM-4 Survey at: Loren For: CVDR Inco L'AMONTAGNI	GEOPHYSICS LTD GEOPHYSIQUE LTEE Surv: 28/4/9 Red: 8/5/9 Plot: 20/5/9
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Hole: 16601	Secondary, (Chn-Ch1)/ Hp	BHUTEM-4 Survey at: Loren	
Lp: 0920; Job: 0903	Cont norm @ Δz 0m	For: CVDR Inco	
Cpt: Hs	Base freq: 30.974 Hz	L'AMONTAGNI	GEOPHYSICS LTD
S 360°; N 90°	Gain factor: -0.9		GEOPHYSIQUE LTEE
			Surv: 28/4/9 Red: 8/5/9 Plot: 20/5/9



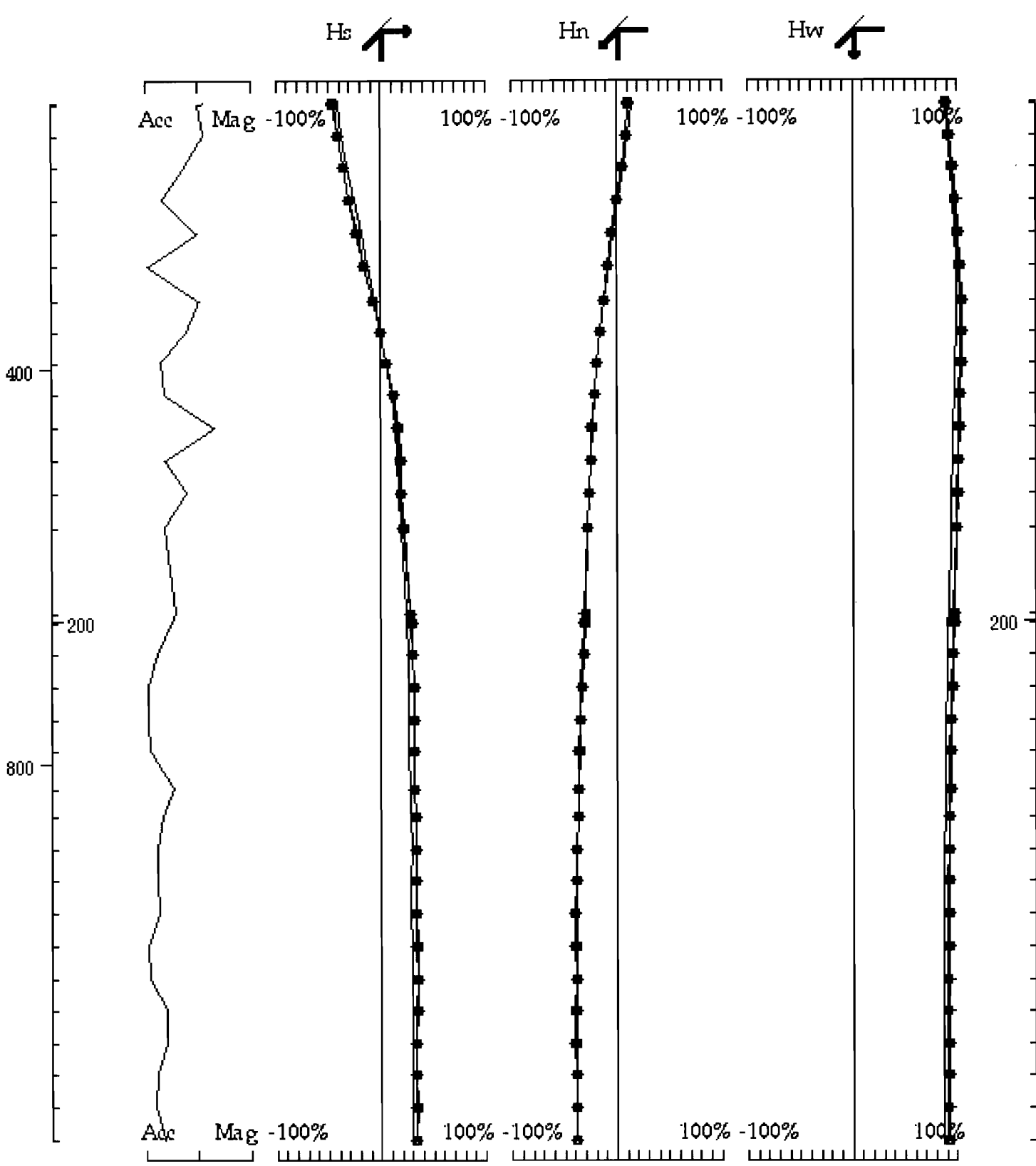
Hole: 16601
 Lp: 0920; Job: 0903
 Cpt: Hn
 S 360°; N 90°

Secondary, (Chn-Ch1) / | Hp |
 Cont norm @ Δz: 0m
 Base freq: 30.974 Hz
 Gain factor: -0.9

BHUTEM-4 Survey at: Loren
 For: CVDR Inco

L'AMONTAGNE GEOPHYSICS LTD
 GEOPHYSIQUE LTEE

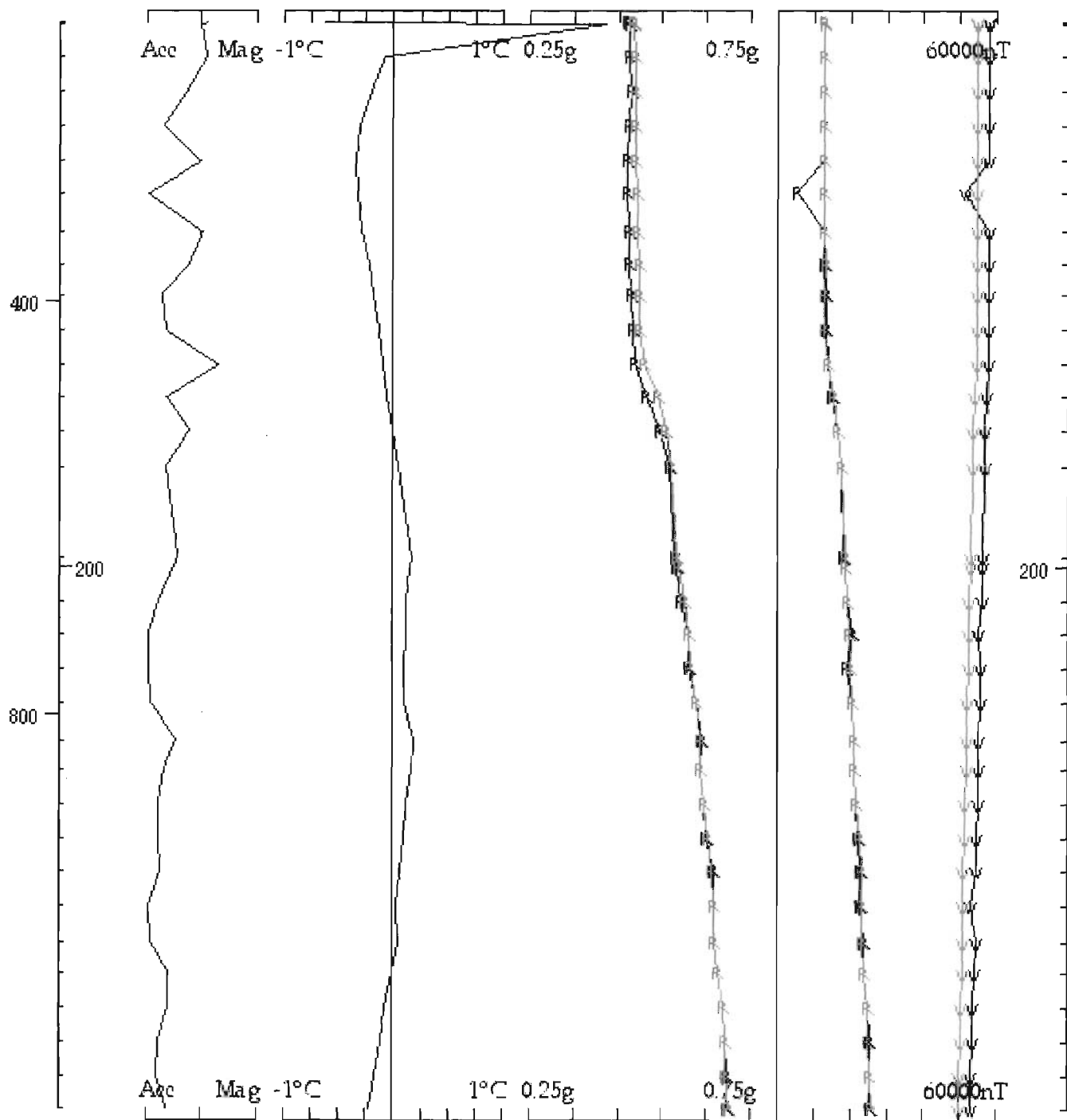
Surv: 28/4/9
 Red: 5/5/9
 Plot: 20/5/9



Hole: 16601 Lp: 0920; Job: 0903 Cpt: Hs, Hn, Hw S 360°; N 90°	Total, Chn/ Hpl Cont norm @ Δz: 0m Base freq: 30.974 Hz Gain factor: -0.9	BHUTEM-4 Survey at: Loren For: CVDR Inco	Surv: 28/4/9 Red: 8/5/9 Plot: 20/5/9
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LAMONTAGNI

**GEOPHYSICS LTD
GEOPHYSIQUE LTEE**



Hole: 16601 Lp: 0920; Job: 0903 Cpt: S 360°; N 90°	Secondary, (Chn-Ch1)/ Hp Cont norm @ Δz: 0m Base freq: 30.974 Hz Gain factor: -0.9	BHUTEM-4 Survey at: Loren For: CVDR Inco CANIONAGNI	GEOFYSICS LTD GEOFYSIQUE LTEE Surv: 28/4/9 Red: 8/5/9 Plot: 20/5/9
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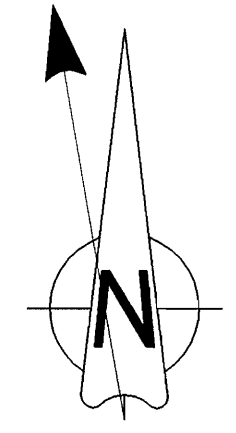
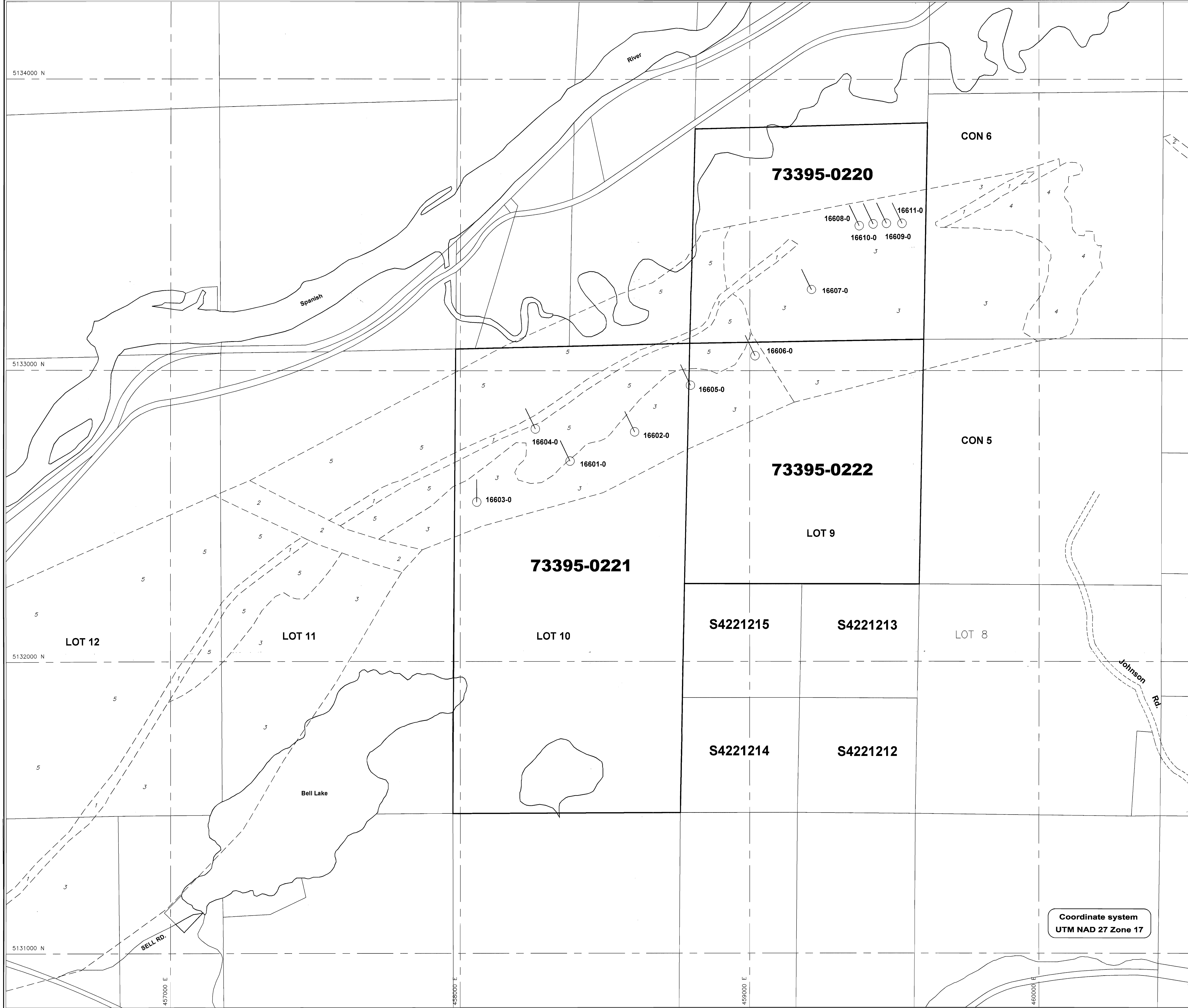
APPENDIX IV

List of Personnel

APPENDIX IV

LIST OF PERSONNEL

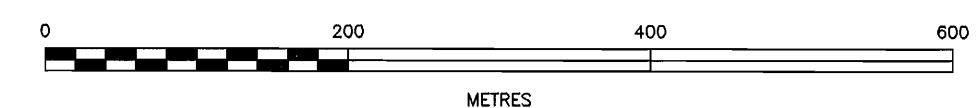
Personnel	Days Worked	Total Hours Worked	Affiliation
Maggie Layman	April 1, May 19, 20	24	Vale Inco Technical Services Limited Hwy 17 W Copper Cliff, ON P0M 1N0
Andrew Bouchard	March 26, 30, 31, April 1, 2.	35	
Kevin Hunter	March 26, 30, 31	16	
Dave Desbiens	April 1, 2, 23	28.5	
Steve Kant	April 15, 16, May 7	35.5	
Jason Forget	Apr 15, 16, 23	33	
John Reipas	April 23	8	
Pat Ferguson	May 6, 7	8	
Joe Mader	May 6	8	
Krystal O'Neill	Feb 19,20,23 April 3,6,24 May 6, 7, 8, 11	26	



Magnetic Declination = 10° W

LEGEND

- 16607-0
Drillhole Location and Number
- 5
Sediment
- 4
Breccia
- 3
Gabbro
- 2
Olivine Diabase
- 1
Quartz Diorite
- Interpreted Geology**



Coordinate system
UTM NAD 27 Zone 17

		Copper Cliff, Ontario POM 1NG
Project: LORNE TOWNSHIP		Area: Sudbury, Ontario
Drill Location Plan		
Compiled by: M. Layman	Supervisor: M. Layman	Date drawn: May 29, 2009
Drawn by: D. Walsh	Revised by:	Revised:
Scale: 1:5000	N.T.S. 41 1 5	File: Lorne Twp CL 5000_09.dwg