APPENDIX F

Reed Report

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COMMENTARY ON JUMPING LAKE GEOPHYSICS FOE AUR LAKE EXPLORATION INC.

GENERAL

This is a review of an induced polarization (IP) and resistivity, and magnetometer and VLF-EM survey carried out on the Jumping Lake property of Aur Lake Exploration Inc. in the Sturgeon Lake area of northwestern Ontario. The surveys were carried out by ClearView Geophysics Inc. of Brampton, Ontario, Joe Mihelcic, President. 12 lines of varying length, oriented in a west-northwesterly direction were surveyed. Line 7 is missing from the sequence. The IP/resistivity survey employed a Pole-Dipole array with "a" = 25 metres, n=1-6, which covered all lines. Line 8 was also surveyed with an "a" spacing of 50 metres, n=7-8. A magnetometer survey covered the same lines as well as intervening connections using a walking mag. The reading interval for this was 1 second. The grid lines were surveyed with VLF-EM at a reading interval of 25 metres using Station Cutler, Maine.

Clearview has developed spectral IP components using the Cole-Cole model. These are "C", Spectral Tau, Spectral MIP, as well as standard chargeability (Mx) and resistivity. As well, Clearview has developed 2DIP sections using the UBC code. All of these elements are presented together as stacked sections along with magnetometer and VLF-EM profiles. Interpretation is presented in plan maps of Total Field Magnetics, First Vertical Derivative (1VD) Magnetics with total profiles, n=2, Mx response and n=2 resistivity response and elevation derived from GPS locations read on the survey lines.

Three lines (2, 3 and 4) of IP/resistivity (Dipole-Dipole, a=25m, n=1-4) done on the grid earlier by R.J. Meikle & Associates, were not reviewed in detail here.

SGH – Soil Gas Hydrocarbon geochemistry by Activation Laboratories Ltd. is also incorporated into this review.

Previous magnetometer and VLF-EM surveying by Matagami Lake Mines (1970) covered this area and a larger area supporting the current data results. Other companies: Steep Rock (magnetometer, VLF-EM, 1983); Dejour (geology); Granges, (drilling); have worked here. These data have not been looked at in detail for this review.

COMMENTARY

ClearView has provided a detail interpretation of their data: "Report on Geophysical Surveys at the Jumping Lake Project, NW Ontario, 2010". The data quality is good for all elements of the survey. Interpretation (figure 1) is placed on maps of the various parameters. The response of IP/resistivity and magnetics is very complex in the survey area. Unfortunately the overlay of interpretation suggests even greater complexity. The VLF-EM is simpler.





The interpretation is valid, but complications arise when significant weight is placed on the Cole-Cole parameters for discriminating among IP responses. There is a difference between the theory, which suggests that conductor grain size can be discriminated and practice. The theory has been shown in laboratory samples, but field cases are more complex. Further, gold alteration systems, while tending to develop fine grained pyrite (low Tau parameter) are not always so. For example, gold mined in a pit at Hemlo (Pit A, by the highway) was associated with coarse grained pyrite. There was a clear IP response at this site. It would seem better to target on clearly defined IP responses, and not allow the extra parameters to mislead the search into weaker responses.

A more simplified selection of targets is suggested here.

Figures 2 and 3 show the total field and 1VD magnetics and magnetic profiles. The magnetics show some of the complex behaviour of the lithology and structure on the survey area.



Figure 2: Total magnetics using the complete walking mag file.

Three magnetic events are circled and are suggested to have similar origins. M 1, M2 and M3 (small dashed circles) have complex strong response, bipolar behaviour and while the events are separate, the responses suggest common sources. Complexly folded iron formation (sulphides and/or magnetite may be in the source.

Two complex magnetic responses, M4 and M5 look about the same as M1, M2 and M3, with complex bipolar response, but do not have as strong amplitude. All 5 identified responses may have similar rock type sources. They may be separated from each other by complex folding/faulting.

These magnetic anomalies will be used for reference on subsequent maps.



Figure 3: 1VD of Total Magnetics with total field values in profile.



Figure 4: Resistivity using the n=2 array response.

There is a resistivity high response of about 69,000 ohm.metres central to the survey marked here as R1. This is used on the other maps as a reference and a focus. Although not fully defined due to some shorter lines, the very strong resistivity response seems to identify a closed, somewhat oval event, possibly an intrusive (felsic?) body or a strongly silicified altered unit. This may have significant implications to mineralization in the immediate vicinity. It does not have special responses in the magnetics (figures 2 and 3 above).

Other resistivity high horizons are marked. These suggest some northerly striking horizons of uncertain origin. The area of low response between M2 and M3 marks a pond, but also may suggest a bedrock topographical low striking to the northeast.



Figure 5: IP Chargeability, n=2

The R1 identified resistivity anomaly shows IP response around the northerly and westerly edge (IP4, 5) with extensions to the north and west IP3 and IP8). This implies conductive mineralization (pyrite likely) in close association with the interpreted silicified (?) zone or felsic intrusive. The westerly IP extension (IP8) follows the east-west structural or mineralized trends shown by the VLF-EM (figures 7, 8 and 9, below). The northern extension of the IP (IP3) passing through mag anomaly M2, also shows an association with a VLF conductor, suggesting sulphide, or at least conductive mineralization.

Magnetic anomaly M1 also shows IP response while M3 does not. M4 shows weak IP while M5 is in line with the east-west IP trend, but the IP stops before passing through the magnetic zone. So the mag/IP association is not consistent.

Conductive mineralization is suggested toward the east ends of lines 6 and 8 (IP7), as well as towards the west on lines 9 and 13 (IP10 and 11).



Figure 6: Elevation

The elevation is developed from the GPS readings. High readings are 430 metres above sea level. Lowest readings are about 400 metres above sea level.

The resistivity anomaly R1 closely fits a closed high elevation feature further supporting the possibility of a felsic intrusive or strongly silicified zone resistant to erosion. Elevations appear to further support lithology and structure as magnetic highs M2 to M5 are in topo lows. There may be north-northeasterly striking structures through M4 and M5. M1 is on slightly elevated ground.



Figure 7: VLF-EM profiles and identified conductors



Figure 8: 1VD magnetics with VLF-EM Horizons



Figure 9: CV gridding of filtered VLF response. East-west biased gridding fits the trends selected from profiles.

VLF-EM responses are dominated by east-westerly striking events. These were seen in earlier surveys by Mattagami Lake Mines and Steep Rock Iron Mines. Magnetic anomalies M1, M2 and M5 show direct association between the VLF conductors and magnetic responses. VLF responses completely avoid the resistivity anomaly R1, although the CV gridding (figure 9) may suggest otherwise. The VLF conductors may identify structure.

There is occasional association of IP and VLF response, but not consistently. IP1 and 2 in M1, show a VLF response (L6). IP3 may identify with VLF response L8 in M2. Part of IP8 may correlate with the VLF at the edge of M5 (L4). There is a resistivity low ath the edges of R1 and M4 that correlates with VLF L1. There is no IP high here. These associations are somewhat tenuous however.



Figure 10: Stacked IP Sections Line 5 South

The stacked sections, two of which are shown here (figures 10 and 11), provide insight into the Cole-Cole parameters "C", Tau and MIP. It is uncertain how these parameters enhance or focus attention on certain anomalies. Anomaly IP 4 in figure 10, which associates with Resistivity event R1, appears to be downgraded by the Tau and MIP response. The weak anomaly IP6 on this line is about the same in the MIP although appears enhanced by the Tau. Anomaly IP6 on line 8 is again enhanced by the Tau, as is its companion IP5. IP4, which lies on the flanks of R1, is unchanged by the Tau and MIP. The anomaly IP7 is lost in the C, Tau and MIP expressions, although it is a significant standard IP response.

It would seem that the standard IP, as well as the resistivity provides the soundest basis for describing the mineralization and lithologic expression of the rocks.



Figure 11: Stacked IP Sections Line 8 South

The UBC 2DIP, IP and resistivity sections need to be treated with caution. They only partially suggest the third dimension with a sense of reality. Perhaps the closest to real representation appears with anomaly IP7 on Line 8, where both IP and resistivity near surface seems real. The deeper portions on these inversion sections have in other applications of the method been seen to suggest a "flat earth" and these sections are no exception to this. Only the nearer to surface components might be acceptable. Note that IP 4 in figure 10, looks reasonable in the 2D section, but IP 6, which is deeper, has moved considerably.

There is value in looking at these parameters, both the Cole-Cole and the 2DIP products, as a way of keeping in mind the possibilities, but they must be treated with caution when placing dependence on them for exploration decisions. The primary IP and resistivity products should take the lead in decision making.



Figure 12: Soil Gas Hydrocarbon Chemistry



Figure 13: Soil Gas Hydrocarbon Chemistry

The soil gas response developed by Activation labs suggests a somewhat annular event around the central interpreted intrusive (R1) in the SGH1 (figure 12) image. A VMS target is suggested in this situation. Note that the IP suggests mineralization around the north westerly edge of R1 which may support mineralization in this area.

Gold is suggested by the high values in the SGH2 image (figure 13). This is reported in the Activation Laboratories report "SGH – Soil Gas Hydrocarbon Predictive Chemistry for Aur Lake Exploration Ltd., SGH Survey – Part III, Jumping Lake Project". Again note the IP response at the north of R1 suggesting mineralization.

This writer has no experience to judge the value of these SGH responses.

COMMENTS - RECOMMENDATIONS

No attempt has been made to site drill holes or trenches, but targets would be the IP highs associated with the central R1 anomaly. Other IP highs identified may also be of interest. These data would need to be merged with the previous assembly of images of previous work.

Cautions have been expressed above about placing too much weight on the Cole-Cole parameters. While these are providing expression to some physical variances in the rock, it would seem to be expecting too much from these parameters that they should give specific definition to the nature of source mineralization in the ground. It would be better having once seen the mineralization that can be associated to the IP responses, to refer back to these special parameters and extend the knowledge of the mineralization through the parameters away from the known occurrences in the ground.

The standard IP and resistivity responses are best for first pass use.

Attention has been drawn to a strong resistive event central to the grid. This could be the core of a siliceous alteration system or a felsic intrusive. It has possibilities to be associated with a mineralizing system. With this, induced polarization events in the immediate vicinity would have significant attraction.

Laurie E. Reed Geophysical Consultant Sept 14, 2010

APPENDIX G

Powers Report

MEMORANDUM

TO:	Mr. Michael Bulatovich
	Aur Lake Exploration Inc.
FROM:	David Powers
	David Powers Geological Services
DATE:	October 20, 2010.
SUBJECT:	A Commentary on the Jumping Lake Exploration Project,
	Aur Lake Exploration Inc.

INTRODUCTION:

A total of 15 days was spent reviewing the regional geology, geochemical and geophysical surveys completed by the Geological Survey of Canada, the Ontario Geological Survey, and work completed by Aur Lake Exploration Inc., over the Fourbay Lake area property including mineral claim PA 424887.

The proposal submitted to Mr. Bulatovich on September 23, 2010 suggested a 10 day billable review. The review of regional information and geo-referencing data into ArcMap took longer than expected.

Information provided to the author was in the form of PDF reports, figures, and ". Kml" files for Google Earth.

The product produced, and returned to Aur Lake Exploration Inc., includes:

- A commentary overview of the project presented in a Memo format;
- A PowerPoint (PDR) presentation "MRD104 Lake-Bottom Sediment Survey";
- A PowerPoint (PDF) presentation "Aur Surveys Clm., PA 424877";
- A GIS ESRI ArcMap compilation database file that includes:
 - AFRI (pdf) assessment files;
 - AFRI assessment file maps pertinent to the area geo-referenced;
 - 50,000 vector topography maps;
 - EDSO13 Drill Hole Database ON 2005 (ERLIS drill database 2005);
 - GDS1030 digital Sturgeon Lake-Savant Lake Airborne;
 - MDI 2 2004 Nad27;
 - MRD104 Lake-bottom Sediment Survey Sturgeon Lake Lac St. Joseph;
 - MRD126 Revised Geology of Ontario, 250,000 scale;
 - MRD142 DEM (digital elevation model shuttle radar) Ontario
 - MRD187 GIS Compilation Wabigoon;
 - MRD216 Geology of the Canadian Shield, Ontario;
 - "layer files; ".mxd" files; "dpgs shape files';

PDF files of local OGS reports.

The purpose of the commentary is to promote discussion regarding the author's observations and recommendations in order to assist in the advancement of the exploration in the Jumping Lake area.

References reviewed for this project are attached and located in Appendix 1. The commentary and discussion of PowerPoint presentation: "MRD104 lake-bottom sediment survey" is located in Appendix 2. Located in Appendix 3, is the slide descriptions, and discussion for the PowerPoint "Aur surveys Clm., PA 424877". The two PowerPoint (PDF format) presentations are attached separately, and located in the file named "Commentary"

The author was requested to review the work carried out on claim PA4242887 exclusively. However a regional overview to obtain a basic understanding of the geological and geophysical setting for the Fourbay Lake – Sturgeon Lake was necessary prior to viewing the detailed surveys over claim PA 4242887.

MRD104 and OFR 6087 document the survey, and results of 4400 lake-bottom sediment samples taken and analysed as part of Operation Treasure Hunt (2002). Forty-four lake-bottom sediment samples are located within close proximity to the Aur Exploration Inc.'s Fourbay Lake area mineral claims. A total of 12 samples can be described as being within the claim boundary. The appended PowerPoint (PDF) presentation MRD104 illustrates simplistic results of Geosoft's, Target default kriging of the full MRD104 lake-bottom survey raw data results, and showing the for the 44 sample window surrounding the Aur Exploration Inc. Claims. This is a first pass view to see if there are any highly anomalous trends or individual sample results situated within the Aur Lake Exploration Inc.'s claims (especially Claim PA 4242887). The format of the presentation is sample locations, sample locations and elemental results followed by the elemental colour contour map. The colour ramp scale presents the range beyond low to high for each element. Negative values represent values below the limit of detection. The colour contours represent a general trend. The analysis value illustrates the significance of a local anomalous trend. The colour contours should be treated with caution as the highs and lows can speak to quality of sample rather than equality of sample medium for elemental comparison.

The Ontario geophysical database for the area of investigation includes: GDS1033 Sturgeon Lake-Savant Lake Total Intensity Magnetic Survey, Airborne Electromagnetic Survey, 1990, Aerodat HEM System using 935 and 4600 Hz. Published hard copy maps are M81488 and M81490.

OBSERVATIONS:

- The comments presented in this review are a "paper" based, and thus lack the first hand, on site, field observations. To evaluate the geology, geochemical anomalies, and geophysical anomalies an intimate knowledge with on site field experience is required.
- 2. The use of Google Earth as a low cost effective way of viewing and presenting special data is impressively effective. At First glance the data received from Aur Lake Exploration Inc., was

overwhelming and induced an information overload. Once familiar with the area and the information presented the merits of a very good compilation are evident.

- 3. The geo-referencing of raster images by Aur Lake Exploration Inc. in their Google Earth presentation and by the author into ArcMap shows no noticeable difference in location. The author referenced all images in ArcMap to UTM NAD83, 15 north; with a NAD27 to NAD83 conversion have utilized NTv2 conversion for Canada.
- 4. Within the Jessie Lake Jumping Lake area of the Fourbay Lake Area (G-2543) portion of the Sturgeon Lake area, Aur Lake Exploration Inc., maintain mineral rights to 7 claims. The claim

	PA 4242887	(16 claim units)
	PA 4251897	(15 claim units)
	PA 4251896	(15 claim units)
	PA 4251895	(01 claim unit)
	PA 4247832	(15 claim units)
	PA 4247831	(09 claim units)
numbers are:	PA 4242888	(16 claim units)

- Geological strike as described by interpreting the magnetic contours and the position of EM conductors trends 085 to 090 degrees, roughly parallel to the north shore of King's Bay on Sturgeon Lake. This east-west trend is noted in the 59400 nT contour on map M-81489.
- 6. From historical ground geophysical surveys, VLF stations Seattle Washington, intersects a 090 degree baseline at 255 degrees, 15 degrees south of ideal coupling; Cutler main intersects a 090 degree baseline at 117 degrees, 27 degrees off of ideal coupling. The VLF station, to have ideal coupling, should be parallel to the grid's baseline. The grid baseline should be parallel to strike. Jumping Lake the base line should be oriented 085 to 095 degrees. Aur Lake Exploration Inc.'s grid lines trend roughly 120 (240) degrees. Giving an apparent baseline trend of 030 (210) degrees. The trend of 030° is parallel to interpreted glacial scour, plucking and deposition.
- The airborne and ground magnetic contour pattern is disrupted by "gabbroic" and "feldspathic felsic" intrusive. Historical conductor axial traces do not appear to exhibit displacement in the 030-210 degree trend. The magnetic contour of 59400 nT does not show displacement along the 030-210 degree trend.

Maps: M81488 and M81490 of the Aerodat geophysical survey fly over all of Aur Exploration Inc.'s mineral holdings in the Fourbay Lake area. This survey positions the individual mineral claims in the regional and local context and is used as an anchor reference in this review. In the accompanying figures historical and recent Aur Exploration Inc.'s surveys will be draped over or under the Aerodat survey.

Line No.	No Siemens (mho)	Anomal	y Letter	In-Phase (ppm)	Out of Phase (ppm)	Depth (metres)
62350S	Very Weak		J		15	
62380N	Very Weak		BV		7	
62390S	Very Weak		Н		9	
62400N	Very Weak		AV	3	15	
62410S	Very Weak		Μ		5	
62330S	Very Weak		J		4	
62340N	Very Weak		Р		4	
62350S	Very Weak		К		5	
62370S	Very Weak		G		2	
62400N	Very Weak		AU		3	
62360N	Very Weak		BH		7	
62380N	Very Weak		BS		12	
62350S	Very Weak		N		4	
62350S	Very Weak		0		3	
62340N	Very Weak		N		3	
TL8020E	Very Weak		AS		4	
62370S	<1		н	5	10	
62400N	<1		AT	1	2	44
62380N	<1		BR	2	1	
62350S	1-2		СМ	1	2	44
62360N	1-2		BJ	3	6	16
62380N	1-2		BU	3	4	37
62390S	2-4		J	4	4	37
62340N	2-4		0	2	1	64
62370S	4-8		J	3	2	52
62380N	4-8		BT	12	9	20
62390S	4-8		К	2	1	65
62330S	8-16		к	8	4	34

Underlying claim PA 242887 are the following Aerodat HEM anomalies:

Along East Claim Boundary of PA 242887

62410S	Very weak	М		5	
62410S	<1	Ν	1	3	
62410S	16-32	0	15	6	20

The attached "Surveys" PowerPoint (pdf) has been prepared to synthesized the comparison and relationships of survey results that have been preformed over the years within the PA 242887 claim boundary.

RECOMMENDATIONS:

- 1. It is recommended that the survey grid baseline be oriented east-west and the grid lines traversing north south.
- 2. A detailed geological map should be completed as soon as possible. Emphasis should be placed on structure, alteration, mineralization, and vein locations, extent and style.
- 3. It is recommended that the alteration, structure, mineralization in the area of the felsic intrusions should be mapped and sampled.
- 4. A significant emphasis of previous exploration programs include geochemistry and IP that has outlined near surface anomalies. A surficial geological survey should be considered in order to determine the type and structure of the tills, bars, material plucking, movement and deposition within the Pleistocene geology.
- 5. The author has questions of the recent geophysical survey's response compared with historical interpretation. Recommended is a discussion with Mr. Joe Mihelcic, Mr. Laurie Reed, Mr. Michael Bulatovich and the author to answer questions highlighted in the slide descriptions (Appendix 3).
- 6. Caution is recommended with the interpretation, from geophysics, pertaining to grain size, concentration and sulphides in the field.
- 7. If the Fourbay Property claims are strategic to Aur Lake Exploration Inc., there is a commitment to understand the underlying geology a detailed high resolution magnetic and EM survey such as VTEM is recommended. A 40 to 50 metre, north-south line spacing could better outline the stratigraphy, the intrusive contacts, and conductive zones. The author believes that this type of survey at this location could better define exploration targets.
- 8. The Actlabs recommended VMS target area is coincident with an Aerodat anomaly Line 62370S, J, 4-8 mhos, at an interpreted depth of 52 metres should be considered as a drill target.
- 9. To the north and east of the anomaly (recommendation 8) mentioned above, Duncan Crone's Mattagami 33-1 conductor axis is not documented as being drill tested. To understand the source of this conductor drilling should be considered.
- 10. Given the higher grade gold assays returned from samples of the McKinnon Showing a drill hole under the showing to test the width of the vein, and its depth extent may be warranted.

Recommendations: 5 and 6 are given without the insight of knowing if these zones have been previously drill tested. If they have been drill tested the proposed diamond drilling may not be necessary to explain the significance of the targets.

Respectfully Submitted

"David Powers"

David Powers P. Geo.

Appendix 1

References

Regional Review Reference Material Includes:

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- Williams, H.R., 1993: **Re-assessment of the Stratigraphy and Structure of the Northern Part of the Sturgeon Lake Region**, District of Kenora and Thunder Bay, **Open File Report 5845**, Ontario Geological Survey.

Miscellaneous Data Releases:

- Lemkow, D.R., Sanborn-Barrie, M. et. Al, 2005: **MRD187**, GIS Compilation of the Geology and Tectonostratigraphic Assemblages, Wabigoon-Winnipeg River-Marmion Transect Western Superior Province, Ontario, Ontario Ministry of Northern Development and Mines, Ontario Geological Survey.
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- Russell, D.F., 2002: **MRD104**, Lake Sediment Analytical Data for Sturgeon Lake-Lac St. Joseph Area, Ontario Ministry of Northern Development and Mines, Ontario Geological Survey.
- Shirota, J., Barnet, P.J., 2004: **MRD142**, Lineament Extraction from Digital Elevation (DEM) for the Province of Ontario, Ontario Ministry of Northern Development and Mines, Ontario Geological Survey.

Assessment File Research Imaging (AFRI)

- 52J01SW002/52J02SW0060 Wasabi Resources Limited, Central Crud Limited, Sturgeon Lake, Patricia Mining Division, District of Thunder Bay, Ontario. Exploration Report 1984. Horizontal Loop Electromagnetic Survey, Soil-Humus Geochemical Survey, U. Abolins, April 1995.
- 2. 52J02SW0001 Project Jessie Lake Gold Showing (plus),
- 3. **52JSW0032/52J02SW0046** Geophysical Survey in Fourbay Lake Area, East of King Bay, Sturgeon Lake, Kenora Mining Division, Ontario, James Campbell, 1984.

- 52J02SW0042/52JSW0050 Report on Loydex Resources Inc., Jumping Lake Property, Sturgeon Lake, Ontario, Prepared by Dejour Mines Limited, R.E. Routledge, P.A. Hartwick November 24, 1983.
- 52J02SW0049/52J02SW0040 Report on the Electromagnetic and Magnetic Survey on the Property of Loydex Resources Inc., Fourbay Lake Area, District of Kenora – Thunder Bay, Patricia Mining Division; L. Nelson, May 5, 1983.
- 52J02SW0060/52J02SW0069 Report on an Airborne Geophysical Survey, Four Bay Lake, Ontario, on behalf of Larchmont Mines Limited, Seigel Associates Limited, K. Danda, J.Klein, June 1971.
- 52J02SW0067/52J02SW0042 Report for Mattagami Lake Mines Limited covering Magnetic and Electromagnetic surveys over their # 33 – 34 Claim Group (Jumping Lake) (McPhar Fluxgate magnetometer and Crone Radem VLF), Prospecting Geophysics Ltd., H.J. Bergmann, July, 1970.
- 8. **52J02SW0089/52J02SW0049** Toronado Mines Ltd. Option, North Group, Sturgeon Lake, Ontario, Geological and Geophysical Reports, W. Benham, H. Beckmann, October 23, 1970.
- 52J02SW0092/52J02SW0057 E.M. Gun Electromagnetic and Magnetometer Surveys for Dome Exploration (Canada) Ltd., Project 29, Sturgeon Lake Area, Ontario, Geosearch Consultants Limited, April 16, 1971.
- 52J02SW0066/52J02SW0058 Electromagnetic and Magnetic Survey for Dome Exploration (Canada) Ltd., on Project 34, Sturgeon Lake Area Ontario, Geosearch Consultants Limited, April 4th, 1972.
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- 52J02SW0079/52J02SW0096 Report on a Magnetometer Survey of the North Sturgeon Lake Area, Thunder Bay District of Ontario for Dome Exploration (Canada) Limited conducted by Geoterrex Limited, Project 84-85B, D.M. Wagg, 1971.
- 13. **52J02SW0201/52J02SW0015** Diamond Drilling Report, Holes R-85-1, 2,3,4,5. Riverton Resources, L. Nelson, April 1, 1985.
- 14. **52J02SW7427/52J02SW0064** Horizontal Loop Electromagnetic Survey on Spooner Mines and Oils Limited Property, Sturgeon Lake Area, Ontario (west Grid), G. Zbitnoff, 1972.
- 15. **52J02SW8635** Geological Map for Loydex Fourbay Lake Property, Derry, Michener, Booth, Wahl, 1983.
- 16. **52J02SW8696** Diamond Drill logs, Spooner Mines and Oils Ltd.,, SPO-16,17,18,19,20, 1972
- 17. **52J02SW0044/52J02SW0026** Diamond Drill Report, KB-74, Falconbridge Limited., 1974.
- 52J02SW0048/52J02SW0044 Proton Magnetometer and VLF Electromagnetic Survey, King's Bay Project, Steep Rock Iron Mines Limited, Phantom Exploration Services Ltd. R.D Middaugh, July 1993.

Appendix 2

Commentary for PowerPoint Presentation: "MRD104 Lake-Bottom Sediment Survey"

PowerPoint	
Slide 1	Title
Slide 2	Sample locations and Topography
Slide 3	Ag (Silver) ppm [Transitional Metal (11)]
Slide 4	Ag (Silver) GeoSoft colour contour
Slide 5	Al (Aluminum) ppm [Other Metals (13)]
Slide 6	Al (Aluminum) GeoSoft colour contour
Slide 7	As (Arsenic) ppm [Other Metals (15)]
Slide 8	As (Arsenic) GeoSoft colour contour
Slide 9	Au (Gold) ppm [Transitional Metal (11)]
Slide 10	Au (Gold) GeoSoft colour contour
Slide 11	Ba (Barium) ppm [Alkaline Earth Metal (2)]
Slide 12	Ba (Barium) GeoSoft colour contour
Slide 13	Be (Beryllium) ppm [Alkaline Earth Metal (2)]
Slide 14	Be (Bervllium) GeoSoft colour contour
Slide 15	Br (Bromine) ppm [Non Metal (17)]
Slide 16	Br (Bromine) GeoSoft colour contour
Slide 17	Ca (Calcium) ppm [Alkaline Farth Metal (2)]
Slide 18	Ca (Calcium) GeoSoft colour contour
Slide 19	Cd (Cadmium) npm [Transitional Metal (12)]
Slide 20	Cd (Cadmium) GeoSoft colour contour
51142 20	
Slide 21	Ce (Cerium) ppm [Lanthanide Metal]
Slide 22	Ce (Cerium) GeoSoft colour contour
Slide 23	Co (Cobalt) nnm [Transitional Metal (9)]
Slide 2/	Co (Cobalt) GeoSoft colour contour
Slide 25	Cr (Chromium) nnm [Transitional Metal (6)]
Slide 26	Cr (Chromium) GeoSoft colour contour
Slide 27	Cs (Cesium) nnm [Alkali Metal (1)]
Slide 28	Cs (Cesium) GeoSoft colour contour
Slide 20	Cu (Conner) nom [Transitional Metal (11)]
Slide 30	Cu (Copper) GeoSoft colour contour
Side Su	
Slide 31	Dy (Dysprosium) ppm [Lanthanide Metal]
Slide 32	Dy (Dysprosium) GeoSoft colour contour
Slide 33	Fr (Frhium) nom [Lanthanide Metal]
Slide 3/	Er (Erbium) GeoSoft colour contour
Slide 35	Eu (Europium) ppm [Lanthanide Metal]
Slide 36	Eu (Europium) GeoSoft colour contour
Slide 37	Ee (Iron) npm [Transitional Metal (8)]
Slide 38	Fe (Iron) GeoSoft colour contour
Slide 30	Ga (Gallium) ppm [Other Metals (13)]
Slide 40	Ga (Gallium) GeoSoft colour contour
JINC 40	
Slide 41	Gd (Gadolinium) ppm [Lanthanide Metal]
Slide 42	Gd (Gadolinium) GeoSoft colour contour
Slide 12	Hf (Hafnium) npm [Transitional Metal (4)]

Slide 44	Hf (Hafnium) GeoSoft colour contour
Slide 45	Hg (Mercury) ppm [Transitional Metal (12)]
Slide 46	Hg (Mercury) GeoSoft colour contour
Slide 47	Ho (Holmium) ppm [Lanthanide Metal]
Slide 48	Ho (Holmium) GeoSoft colour contour
Slide 49	K (Potassium) ppm [Alkali Metal (1)]
Slide 50	K (Potassium) GeoSoft colour contour
Shac So	
Slide 51	La (Lanthanum) ppm [Lanthanide Metal]
Slide 52	La (Lanthanum) GeoSoft colour contour
Slide 53	Li (Lithium) ppm [Alkali Metal (1)]
Slide 54	Li (Lithium) GeoSoft colour contour
Slide 55	Lu (Lutetium) ppm [Transitional Metal (3)]
Slide 56	Lu (Lutetium) GeoSoft colour contour
Slide 57	Mg (Magnesium) ppm [Alkaline Earth Metal (2)]
Slide 58	Mg (Magnesium) GeoSoft colour contour
Slide 59	Mn (Manganese) ppm [Transitional Metal (7)]
Slide 60	Mn (Manganese) GeoSoft colour contour
Shac oo	
Slide 61	Mo (Molybdenum) ppm [Transitional Metal (6)]
Slide 62	Mo (Molybdenum) GeoSoft colour contour
Slide 63	Na (Sodium) npm [Alkali Metal (1)]
Slide 64	Na (Sodium) GeoSoft colour contour
Slide 65	Nb (Nichium) ppm [Transitional Metal (5)]
Slide 65	Nb (Niobium) CasSoft colour contour
	Nd (Needuraium) nem [Lentheride Metel]
Slide 67	Nd (Neodymum) ppm [Lanthanide Metai]
Slide 68	Na (Neodymium) Geosoft colour contour
Slide 69	NI (Nickel) ppm [Transitional Metal (10)]
Slide 70	NI (NICKEI) GEOSOFT COIOUR CONTOUR
Slido 71	P (Phosphorus) npm [Non Metal (15)]
Slide 72	P (Phosphorus) GeoSoft colour contour
Slide 72	P (Flosphords) Geosoft colour contour
Slide 75	Pb (Lead) Case of t calcur cantour
Slide 74	Pb (Leau) Geosori colour contour
Slide 75	Pr (Praseodymum) ppm [Lanthanide Metal]
Slide 76	Pr (Praseodymium) Geosoft colour contour
Slide //	Rb (Rubidium) ppm [Aikali Metal (1)]
Slide 78	Rb (Rubidium) GeoSoft colour contour
Slide 79	S (Sulphur) ppm [Non Metal (18)]
Slide 80	S (Sulphur) GeoSoft colour contour
Clido 01	Sh (Antimony) nnm [Other Metals (15)]
	Su (Antimony) ppin [Other Wieldis (15)]
	Su (Antimony) Geosoit Colour contour
	Sc (Scandium) ppm [Transitional Metal (3)]
Silde 84	Sc (Scandium) GeoSott colour contour
Slide 85	Sm (Samarium) ppm [Lanthanide Metal]
Slide 86	Sm (Samarium) GeoSott colour contour
Slíde 87	Sn (Tin) ppm [Other Metal (14)]

Slide 88	Sn (Tin) GeoSoft colour contour
Slide 89	Sr (Strontium) ppm [Alkaline Earth Metal (2)]
Slide 90	Sr (Strontium) GeoSoft colour contour
Slide 91	Ta (Tantalum) ppm [Transitional Metal (5)]
Slide 92	Ta (Tantalum) GeoSoft colour contour
Slide 93	Tb (Terbium) ppm [Lanthanide Metal]
Slide 94	Tb (Terbium) GeoSoft colour contour
Slide 95	Th (Thorium) ppm [Actinide Metal]
Slide 96	Th (Thorium) GeoSoft colour contour
Slide 97	Ti (Titanium) ppm [Transitional Metal (4)]
Slide 98	Ti (Titanium) GeoSoft colour contour
Slide 99	Tl (Thallium) ppm [Other Metal (13)]
Slide 100	Tl (Thallium) GeoSoft colour contour
Slide 101	Tm (Thulium) ppm [Lanthanide Metal]
Slide 102	Tm (Thulium) GeoSoft colour contour
Slide 103	U (Uranium) ppm [Actinide Metal]
Slide 104	U (Uranium) GeoSoft colour contour
Slide 105	V (Vanadium) ppm [Transitional Metal (5)]
Slide 106	V (Vanadium) GeoSoft colour contour
Slide 107	W (Tungsten) ppm [Transitional Metal (6)]
Slide 108	W (Tungsten) GeoSoft colour contour
Slide 109	Y (Yittrium) ppm [Transitional Metal (3)]
Slide 110	Y (Yittrium) GeoSoft colour contour
Slide 111	Yb (Ytterbium) ppm [Lanthanide Metal]
Slide 112	Yb (Ytterbium) GeoSoft colour contour
Slide 113	Zn (Zinc) ppm [Transitional (12)]
Slide 114	Zn (Zinc) GeoSoft colour contour
Slide 115	Zr (Zirconium) ppm [Transitional (4)]
Slide 116	Zr (Zirconium) GeoSoft colour contour

General Comments on the Plotting and Contour Results

- 1. Gold has a distorted west-northwest to east-southeast low. Little to no attention should be paid to this diagram as most of the results were below the limit of detection.
- 2. Elements Na, Rb, Th,Ti, have a similar contour pattern, exhibiting a southwest trending "bootlike" low between a sample in Six Mile Lake (sample 4188) and a lake not named (sample 4086). Most of claim PA 4242887 is situated in this low.
- 3. A northeast-southwest trending trough striking across claim PA 4242887 is exhibited by the following elements: Ce, Co, Cr, Cs, Dy, Er, Eu, Fe, Ga, Gd, Ho, La, Li, Mg, Nb, Nd, Pb, Sc, Yb, Pr, Sm, Tb, Tm, U, V and Y. Samples 4086, 4087, 4187, 4181, 4099 and 4143 contribute to the "highs" on either side of the trough.

- 4. Elements Zr, and Sn illustrate elevated values south of claim PA 4242887. These apparent high results are associated with samples: 4187, 4188, 4181.
- 5. There are similarities in the contour pattern for elements P, Al, Hg, Sb. The pattern displays a high wall to the northwest portion of PA 4242887. The pattern bifurcates the claim from the northeast corner (number 1 post position) to the number 4 post position of claim PA 4251896.
- 6. A contour low trough trends across PA 242887 from the number 4 post position of claim PA 4242887 to the number 3 post of claim PA 4251895. The elements Mn, Ba, As, Tl, Lu and K demonstrate this trend.
- 7. Only three (3) lake-bottom sediment samples are located within claim PA 4242887 the sample numbers are: 4142, 4144 and 4145. Hot colour contours within claim PA 4242887 include the following elements: S, Cu, Zn, Sr, Ag, W, Mo, Ca, Br Cd, Hf, and Ni. The table below lists the sample numbers, elements and the ppm result for the elements.

Table 1 Anomalous Lake-bottom Sample Results for Samples Taken From Claim AP4242887

Element	4142	4144	4145
S	9994	6688	5589
Cu	87.96	38.2	63.47
Zn	109.55	57.34	72.73
Sr	24.5	12.9	10.1
Ag	0.19	0.09	0.09
W	0.64	-0.05	-0.05
Мо	4.06	0.71	1.23
Са	18831.1	10927.5	7748.2
Br	54	16	66.5
Cd	0.717	0.391	0.628
Hf	0.06	0.06	0.05
Ni	15.26	24.14	23.79

Sample 4142 return the most of the higher results for the elements illustrated in the above Table 1. Table 2 Lists the survey statistics for the elements listed in Table 1.

 Table 2 Statistics for Lake-bottom Sediment Survey (MRD104) Regarding Elements In Table 1.

Elemen	t Count	Max	Min	Average		Percent	tile	
					50	75	85	95
					(median)			
S	4072	30636	302	3593.3	3058	4205.5	5148.5	7770
Cu	4072	472.83	3.38	27.41	23.14	31.61	37.88	54.97
Zn	4072	428.02	-1	77.68	74.92	91.99	102.29	124.39
Sr	4072	191.7	3.76	21.43	20.1	24.57	27.5	33.9
Ag	4048	4.02	-0.02	0.12	0.11	0.15	0.18	0.24
W	3980	7	-1	-0.83	-1	-1	-1	-1
Мо	4072	24.42	-0.1	1.38	1.1	1.68	2.13	3.24
Ca	4072	300000	1420.55	9416.86	8179.48	10693	1216.47	15661.36

Br	3980	411	3.9	42.68	41	50.6	56.92	69.31
Cd	4072	18.19	-0.05	0.53	0.512	0.618	0.69	0.82
Hf	4072	0.76	-0.56	-0.01	-0.05	0.06	0.08	0.124
Ni	4072	78.91	4.26	19.49	18.34	23.50	26.92	33.22

Table 3 Locates The Relative Percentile In Which the Element And Sample Number Are Situated Relative To The Total Survey Analysis

Element	4142	4144	4145
	Pe	ercentile	
S	>95	>85	>85
Cu	>95	>85	>95
Zn	>85	<50	<50
Sr	<75	<50	<50
Ag	>85	<50	<50
W	>95	<50	<50
Мо	>95	<50	>50
Ca	>95	>75	<50
Br	>75	<50	>85
Cd	>85	<50	>75
Hf	=75	=75	<75
Ni	<50	>75	>75

A VMS style mineralization environment could contribute to the elevated S, Cu, Zn, and Cd element values.

The elevated Ag, W, Mo, may be a sourced from hydrothermal alteration and quartz carbonate veining. These elements may also be associated with a felsic intrusion.

Anomalous Ca and Ni may the product of the break down and alteration of mafic / ultramafic rock units.

Strontium (Sr) is widely distributed in granitic and carbonate rocks.

Bromine (Br) is obtained mainly from sea and sea sediments. The elemental anomaly may be related to local metasedimentary rocks or an epigenetic alteration of source rock units.

Halfnium (HF) and zirconium are two elements that occur together. Commercial sources include beach and sand dunes, stream placers and eluvial deposits. Principal minerals accompanying them are ilmenite, leucoxene, rutile, staurolite, tourmaline, sillimanite, kyanite and quartz. Locally the source could be attributed to weathered metamorphosed mafic volcanic, metasedimentary rocks, and quartz rich intrusions.

Appendix 3

Commentary for PowerPoint Presentation: "Aur surveys Clm. PA 424877"

Slide 1 Geology (OFR5838) by D. Robinson

Geology consists of a series of metamorphosed mafic volcanic massive (1b, e) and pillowed flows (1d) striking generally in a west-east direction with tops facing southward. A GIF (geophysical interpreted iron formation) is indicated in the south central, western portion of the claim and intermittently striking east northeast across the claim. The metamorphosed volcano-sedimentary stratigraphy has been intruded by gabbro (4b), quartz feldspar porphyry (5c), and a granodiorite (6e). The largest intrusive bodies appear to be the granodiorite, located near the central portion of the north claim boundary. The quartz feldspar porphyry is situated along the central north, west claim boundary. The size and direction of strike has not been defined for the gabbro intrusion. As mapped both the granodiorite and quartz feldspar porphyry are amoeboid-like and appear that they may be folded. The relationship between the two intrusive has not been determined. Can they originate from the same parental source?

Slide 2 Geology (OFR5838) by D. Robinson draped by Aerodat survey maps M81488 and M81489.

The GIF interpretation is plotted between the central portions of HEM conductors returning a response of greater than 1 mho. There is a magnetic depression associated with the quartz feldspar porphyry. There is a slight distortion in the magnetic contours in the area mapped as granodiorite, but nothing distinctive to outline the contacts of the body. There is no apparent northerly or southerly displacement of the 59400 nT magnetic contour. The north northeast-south southwest linear parallel to lakeshore and "roches moutonnées" like "dunes or shoals" in the lakes does not appear to disturb the magnetic contours or EM conductor response.

Slide 3 High Resolution "Ikonos 431" air photo and sample locations of returned assays greater than 0.5 g/tonne gold.

Slide 4 Aerodat HEM and Magnetometer Survey, Maps M81488 and M81489.

Slide 5 Aerodat HEM and Magnetometer Survey draped over the high resolution air photo. The north-south flight line separation is approximately 200 metre spacing, however there is a drift variance of the closest 146 to the furthest of 275 metres.

Slide 6 Aerodat HEM and Magnetometer Survey draped by Duncan Crone's ground VLF survey's conductor axis (Seattle, WA) interpretation. There is a good correlation between the two EM surveys for conductor trace and location. The reference for Duncan Crone's interpretation is 52J02SW0067. Crone recommended the diamond drilling of two holes highlighted in a "ginger pink" colour. The proposed hole drill hole near the western claim boundary was to test conductor 33-3. The diamond drill hole was planned to be bored at: 650,762.7 m. east, 5,543,121.8 m. north, 180° az., -45° dip for 122 metres. The northeast hole was to test the western portion of conductor 33-1, at 651,989.5 m. east, 5,543540.9 m. north, 180° az., -45° dip to a depth of 183 metres. The author does not know if Mattagami Exploration followed up on Crone's recommendations and drill tested these locations.

Slide 7 High Resolution Air photo and Crone's Conductor Axes. The draping of Crone's interpretation suggests that some of the VLF response may be due to shore line, ridge or overburden. A more detailed review of the VLF profiles may help determine the source.

Slide 8Aerodat HEM and ground VLF (Cutler, Maine), from AFRI report numbers:52J02SW0032/0046 (report by J. Campbell), and 52J02SW0042/0050 (report by R.E. Rutledge, and P.A.Hartwick for Dejour Mines). The correlation between airborne and ground conductors is good.

Slide 9 Aerodat HEM and a compilation of magnetic 600 nT and 1000 nT contours from AFRI reports 52J02SW0042 and 52J02SW0067. The trend of the magnetic contours from the two surveys describe the trace of the magnetic differences in the bedrock and suggest that strike of the underlying rocks is west-east between 085° and 095°.

Slide 10 ClearView Plate14, VLF

The colour contoured VLF response leads to an east-west strike interpretation with no significant displacement.

Slide 11 ClearView Plate 14, VLF draped by The Aerodat and Crone's VLF conductor axes All three surveys compare favourably with a similar response.

Slide 12 ClearView Plate 13, Magnetics.

The highs and lows presented with this plate are difficult to interpret. There is not sufficient line and data coverage to confidently bring the contours between the lines.

Slide 13 ClearView Plate 13, Magnetics draped by the historical magnetic survey contours. Some of the magnetic highs correlate well. There appears to be a hint of a possible contour bias.

Slide 14 ClearView Plate 15, MxN2

There seems to be a bias to contour across the gridlines at an angle to believed geological strike. This should be discussed with the geophysicists.

Slide 15 ClearView Plate 15, MxN2 draped by the Aerodat HEM Survey Some of the hot colour contours of the MxN2 coincide to airborne EM anomalies, but not all. **This should discuss this with the geophysicists.**

Slide 16 ClearView Plate 16, Resistivity

The highs and lows presented with this plate are difficult to interpret. There is not sufficient line and data coverage to confidently bring the contours between the lines.

Slide 17 ClearView Plate 16, Resistivity draped by Crone's VLF conductor axes interpretation Low resistivity appears to correlate with Crone's conductor axes.

Slide 18 ClearView Plate 16, Resistivity draped by the Aerodat HEM Survey.

This slide provides a good comparison of the conductivity from the AEM and the low resistivity.

Question 1 - why is the < 1 mho conductor Line 62380N "BR" exhibiting a hot colour contour?

Question 2 - why was the grid not extended over and beyond conductor L62370S "J"?

Slide 19 ClearView MxInversion_28m

Slide 20 ClearView Interpretation

Slide 21 ClearView Interpretation draped by historical ground geophysics magnetic contours and VLF conductor axes. There appears to be a difference in contour trends with the ClearView contours trending approximately 030° and the historical interpretation of 085-095°. This should be discussed with the geophysicist for understanding and clarification. There could be a bias in instrument readings depending on which direction the geophysical operator was facing when taking the readings. Hopefully the operator was facing the same direction while reading the instrument for the complete survey (VLF & Magnetometer). Is there a difference in coupling array for IP if the readings are taken on a grid that is oriented diagonal to strike rather than normal to strike?

Slide 22 ClearView drill target locations and the SGH – VMS drill target locations plotted over the Aerodat HEM survey. As the SGH- VMS target location was picked by Dale Sutherland is situated over a 4-8 mho AEM conductor which as an interpreted depth of 52 metres diamond drilling of this target in order to understand the source of the two anomalies is recommended.

Slide 23Enzyme Leach Ag Response Ratio colour contouredThe warmer Ag colour contours occur south east of the gold showing and AEM conductor Line 62380Nanomaly BR (<1 mho).</td>

Slide 24 Enzyme Leach As Response Ratio colour contoured Two warm As colour contours occur south of AEM conductor Line 62390S K (4-8 mhos). The anomalies are separated by approximately 200m.

Slide 25 Enzyme Leach Au Response Ratio colour contoured A poorly defined anomaly occurs southwest of AEM conductor Line 62380N anomaly BR (<1 mho) and west of the McKinnon gold showing.

Slide 26 Enzyme Leach Bi Response Ratio colour contoured

There is no bismuth (Bi) anomaly.

Slide 27 Enzyme Leach Br Response Ratio colour contoured There is no significant bromine response.

Slide 28 Enzyme Leach Cd Response Ratio colour contoured A weak cadmium response is indicates in the western portion of the sample grid on either side of AEM conductor Line 62380N anomaly BR (<1 mho). The trend of this anomaly appears to be parallel to the glacial direction of 030°.

Slide 29 Enzyme Leach Ce Response Ratio colour contoured The cerium response is isolated away from the AEM conductors. There is an apparent elongation to the colour contour in the 030° orientation.

Slide 30 Enzyme Leach Cl Response Ratio colour contoured A chlorine countered response ratio is present in the north eastern portion of the sample grid and not associated with any AEM conductors.

Slide 31 Enzyme Leach Co Response Ratio colour contoured A weak cobalt response occurs south west of AEM conductor Line 62380N anomaly BR (<1 mho) and west of the McKinnon gold showing. A weak contour response occurs south of the higher grade samples of the McKinnon gold showing. Slide 32 Enzyme Leach Cu Response Ratio colour contoured

The copper contours indicate a weak response south and east of the gold showing. There is no direct correlation to any AEM anomaly. The trend of the contour is south-southeast.

Slide 33 Enzyme Leach Ga Response Ratio colour contoured There is a weak gallium response at the same location as the gold enzyme leach and a weak trend east of the gold showing.

Slide 34 Enzyme Leach Ge Response Ratio colour contoured A germanium anomaly is situated in the southeast portion of the sample grid exhibiting a weak southsoutheast trend similar to copper.

Slide 35 Enzyme Leach I Response Ratio colour contoured A weak non distinctive iodine contour is situated along the southwest portion of the sampling grid at a similar location the enzyme leach ("EL") to gold. The anomaly appears to have 3 crests with the troughs of trending northeast.

Slide 36Enzyme Leach Pb Response Ratio colour contouredIn the northern portion of the grid lead has a distinct hot colour contour situated south 150-200m of 2AEM conductors. The response is down glacial scour from the AEM conductor Line 62390S, K (4-8 mhos)and Line 62380N, BT (4-8 mhos).

Slide 37 Enzyme Leach Re Response Ratio colour contoured Two broad areas of rhenium are highlighted in the south western portion of the sample grid, south of the AEM conductor Line 62380N, BR (<1 mho) and in the central east half of the sample grid.

Slide 38Enzyme Leach Se Response Ratio colour contouredThe selenium response ratio is similar to that of rhenium.

Slide 39 Enzyme Leach Sn Response Ratio colour contoured The tin response ratio is mostly on the eastern half of the sampling grid's perimeter. There is an anomalous response approximately 100m east of AEM conductor Line 62380N, BR (<1 mho).

Slide 40 Enzyme Leach Ti Response Ratio colour contoured Ti, Tl and Zn have a similar response ratio contour beneath AEM conductor Line 62380N, BR (<1 mho), trending in a portheast, direction. There is also an elevated titanium response in the central portion of

trending in a northeast direction. There is also an elevated titanium response in the central portion of the sampling grid.

Slide 41 Enzyme Leach TI Response Ratio colour contoured

The highest response ration contour for thallium is along the western portion of the sampling grid where Ti, Tl and Zn show the same trend in the area of AEM conductor Line 62380N, BR (<1 mho).

Slide 42 Enzyme Leach U Response Ratio colour contoured The uranium response ratio is similar to copper and rhenium.

Slide 43 Enzyme Leach Zn Response Ratio colour contoured

The contoured response ratio for zinc illustrates a high along the western and northeast flank of the sampling grid. Ti, Tl and zinc show similar pattern of contoured response ration in the area of AEM conductor Line 62380N, BR (<1 mho).

Slide 44 MMI Ag Response Ratio colour contoured

The MMI survey for silver is more responsive than the EL. The peak highs of each survey are not situated in the same location. The northeast – southwest trend of the contours is evident in this plot.

Slide 45 MMI Au Response Ratio colour contoured

The gold MMI shows a weak contour trend south of the high grade rock sampling as well as a contour high approximately 100 metres east of the high grade sample results. Question has this showing been blasted and the spot high be a response to trench fly rock?

Slide 46 MMI Ca Response Ratio colour contoured

Relatively moderate contour colours for calcium flank both sides of the high grade samples from the McKinnon showing. The northeast southwest trend is evident in this plot.

Slide 47 MMI Cd Response Ratio colour contoured

There is not a strong comparison between MMI and EL for cadmium.

Slide 48 MMI Ce Response Ratio colour contoured

The plots of cerium between MMI and EL compare quite well but with a more defined colour gradient in the MMI.

Slide 49 MMI Cu Response Ratio colour contoured

MMI indicates a bulls-eye anomaly south of AEM conductor Line 62380N anomaly BR (<1 mho), as well as a response in the south central portion of the sampling grid. This anomaly is south west and offset from the response indicated from EL.

Slide 50 MMI Nb Response Ratio colour contoured

The strongest niobium response contoured is on the south and north edge of the grid. The northeastsouthwest trend is evident in this plate.

Slide 51 MMI Pb Response Ratio colour contoured The response of lead is stronger with the MMI survey than the EL. The northeast-southwest trend is

The response of lead is stronger with the MMI survey than the EL. The northeast-southwest trend is dominant.

Slide 52 MMI Sr Response Ratio colour contoured There is a small bulls-eye contour south east of AEM conductor Line 62380N anomaly BR (<1 mho), that appears to correlate with a MMI gold response contour, a Ce, and Cu contour.

Slide 53 MMI Ti Response Ratio colour contoured

The response ratio contours for titanium dominate on the perimeter of the sampling grid. A northeastsouthwest trend is evident.

Slide 54 MMI Zn Response Ratio colour contoured

The response ratios for MMI zinc and EL zinc barely resemble each other. The northeast-southwest trend of the colour ramp contours is evident.

Slide 55 SGH Gold Apical Anomaly A

Slide 56 SGH Gold Apical Anomaly A & Aerodat

The Apical anomaly outlined in 2009 is centred between AEM conductors Line 62360N, BJ (1-2 mhos); Line 62360N, BH (quadrature only); Line 62370S, H (<1 mho); and Line 62370S, J (4-8 mhos). This area was not covered by the Aur Exploration ground geophysical surveys. **The association of a SGH anomaly and EM anomalies is a target that requires further investigation.**

Slide 57 SGH Phase 3, Map 1 Gold

Slide 58 SGH Phase 3, Map 1 Gold, Aerodat

Slide 59 SGH Phase 3, Map 2 Gold

Slide 60 SGH Phase 3, Map 2 Gold, Aerodat

The four ellipsoids outlined by Dale Sutherland et. al., have three orientations. The dominate "trough" is in the direction of interpreted glacial scour. An understanding if the response given for the SGH anomalies is related to bedrock or overburden must be developed and tested.

- Slide 61 SGH VMS Map 1
- Slide 62 SGH VMS Map 1, Ikonos 431
- Slide 63 SGH VMS Map 1, Ikonos 431, Aerodat

Slide 64 SGH VMS Map 2

Slide 65 SGH VMS Map 2, Ikonos 431

Slide 66 SGH VMS Map 2, Ikonos 431, Aerodat

The SGH anomaly that Dale Sutherland et. al. have picked for testing falls over AEM anomaly Line 62370S, J (4-8 mhos) at an estimated depth of 52 metres. To determine the source and significance of this anomaly drilling should be considered.

The northeast-southwest trend is of concern. The EL, MMI and SGH geochemistry appears to have a pattern of high and low responses along this trend. This is the same trend as interpreted glacial plucking, scour and deposition. This is also the trend of valleys and linears.

APPENDIX H

Grab Sample Assay Results

Quality Analysis ...



Innovative Technologies

Date Submitted:16-Jun-10Invoice No.:A10-3135Invoice Date:12-Jul-10Your Reference:Kernel

Aur Lake Exploration INC. 95 Springdale Blvd Toronto ON M4J 1W8 Canada

ATTN: Michael Bulatovich

CERTIFICATE OF ANALYSIS

12 Rock samples and 100 Soil samples were submitted for analysis.

The following analytical packages were requested:

Code 1A2 Au - Fire Assay AA Code SGH Soil Gas Hydrocarbons

REPORT **A10-3135**

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

CERTIFIED BY :

Emmanuel Eseme , Ph.D. Quality Control



ACTIVATION LABORATORIES LTD.

1336 Sandhill Drive, Ancaster, Ontario Canada L9G 4V5 TELEPHONE +1.905.648.9611 or +1.888.228.5227 FAX +1.905.648.9613 E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

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Report:
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pratories Ltd.
Laboratories Ltd.
ration Laboratories Ltd.

Analyte Symbol	Au
Unit Symbol	ppb
Detection Limit	Ω.
Analysis Method	FAAA
131	ιΩ
132	υ
133	υ
134	υ
135	υ
136	υ
137	υ
138	υ
500	υ
501	2
502	νΩ

Quality Control	
Analyte Symbol	Au
Unit Symbol	þþ
Detection Limit	ω
Analysis Method	FAAA
OREAS 52P Meas	18
OREAS 52P Cert	183.00
OREAS 52P Meas	192
OREAS 52P Cert	183.00
501 Orig	57
501 Dup	26
Method Blank Method Blank	ν. 5
Method Blank Method Blank	55

Quality Analysis ...



Innovative Technologies

Aur Lake Exploration INC. 1603-7 Jackes Ave. Toronto ON M4T 1E3 Canada

ATTN: Michael Bulatovich

CERTIFICATE OF ANALYSIS

3 Rock samples and 274 Soil samples were submitted for analysis.

The following analytical packages were requested:

REPORT A10-1749 (i)

Code 1A2 Au - Fire Assay AA Code 1E3 Aqua Regia ICP(AQUAGEO) Code SGH Soil Gas Hydrocarbons

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Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3 Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY :

Emmanuel Eseme , Ph.D. Quality Control



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Report: A10-1749 (i)

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	В	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	К	La	Mg
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	%							
Detection Limit	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10	0.01
Analysis Method	FA-AA	AR-ICP																						
#1		< 0.2	< 0.5	9	166	3	9	4	14	0.07	4	< 10	15	< 0.5	< 2	0.74	2	40	0.70	< 10	< 1	0.03	< 10	0.11
#2	213																							
#3	16																							

Activation Laboratories Ltd. Report: A10-1749 (i)

													•		
Analyte Symbol	Na	Р	S	Sb	Sc	Sr	Ti	Te	TI	U	V	W	Y	Zr	
Unit Symbol	%	%	%	ppm	ppm	ppm	%	ppm							
Detection Limit	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	
Analysis Method	AR-ICP														

#1 0.044 < 0.001 0.01 < 2 < 1 14 < 0.01 < 1 < 2 < 10 3 < 10 < 1 < 1

#2 #3 Activation Laboratories Ltd. Re

Report: A10-1749 (i)

Quality Control																								
Analyte Symbol	Au	Ag	Cd	Cu	Mn	Мо	Ni	Pb	Zn	AI	As	в	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	к	La	Mg
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	%							
Detection Limit	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10	0.01
Analysis Method	FA-AA	AR-ICP																						
GXR-1 Meas		27.7	3.3	1210	828	14	35	555	679	0.26	368	15	188	0.9	1310	0.81	8	6	22.9	< 10	4	0.03	< 10	0.13
GXR-1 Cert		31.0	3.30	1110	852	18.0	41.0	730	760	3.52	427	15.0	750	1.22	1380	0.960	8.20	12.0	23.6	13.8	3.90	0.0500	7.50	0.217
GXR-4 Meas		3.6	0.8	6490	139	313	41	41	73	2.19	100	< 10	24	1.4	15	0.94	15	56	3.14	10	< 1	1.46	44	1.69
GXR-4 Cert		4.00	0.860	6520	155	310	42.0	52.0	73.0	7.20	98.0	4.50	1640	1.90	19.0	1.01	14.6	64.0	3.09	20.0	0.110	4.01	64.5	1.66
GXR-6 Meas		0.3	1.2	69	992	1	25	89	125	5.65	217	< 10	976	0.9	< 2	0.18	13	78	5.63	20	< 1	0.94	11	0.41
GXR-6 Cert		1.30	1.00	66.0	1010	2.40	27.0	101	118	17.7	330	9.80	1300	1.40	0.290	0.180	13.8	96.0	5.58	35.0	0.0680	1.87	13.9	0.609
OREAS 52P Meas	190																							
OREAS 52P Cert	183.00																							
OREAS 13P Meas				2860			2280												5.51					
OREAS 13P Cert				2500			2260												7.58					
OxC72 Meas	199																							
OxC72 Cert	205																							
#3 Orig	15																							
#3 Dup	16																							
Method Blank Method Blank	< 5																							
Method Blank Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10	< 0.01

Activation Laboratories Ltd. R

Report: A10-1749 (i)

Quality Control														
Analyte Symbol	Na	Р	S	Sb	Sc	Sr	Ti	Te	ті	U	v	w	Y	Zr
Unit Symbol	%	%	%	ppm	ppm	ppm	%	ppm						
Detection Limit	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1
Analysis Method	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GXR-1 Meas	0.075	0.038	0.21	74	1	164		15	< 2	32	75	188	23	14
GXR-1 Cert	0.0520	0.0650	0.257	122	1.58	275		13.0	0.390	34.9	80.0	164	32.0	38.0
GXR-4 Meas	0.127	0.127	1.78	4	7	70		3	< 2	< 10	80	15	11	9
GXR-4 Cert	0.564	0.120	1.77	4.80	7.70	221		0.970	3.20	6.20	87.0	30.8	14.0	186
GXR-6 Meas	0.230	0.032	0.01	4	22	37		< 1	2	< 10	165	< 10	6	11
GXR-6 Cert	0.104	0.0350	0.0160	3.60	27.6	35.0		0.0180	2.20	1.54	186	1.90	14.0	110
OREAS 52P Meas														
OREAS 52P Cert														
OREAS 13P Meas														
OREAS 13P Cert														
OxC72 Meas														
OxC72 Cert														
#3 Orig														
#3 Dup														
Method Blank Method Blank														
Method Blank Method Blank	0.010	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1



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Certificate of Analysis

Friday, October 22, 2010

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Aur Lake Exploration #7-1603 Jackes Ave Toronto, ON, CAN M4T 1E3

Date Received:	10/08/2010
Date Completed:	10/22/2010
Job #:	201044535

Reference:

Sample #: 51 Rock

Acc #		Client ID	Au ppb	Au oz/t	Au g/t (ppm)
313901		175	6	<0.001	0.006
313902		176	5	<0.001	0.005
313903		177	9	<0.001	0.009
313904		177b	<5	<0.001	< 0.005
313905		178	<5	<0.001	< 0.005
313906		179	6	<0.001	0.006
313907		180	35	0.001	0.035
313908		876	7	<0.001	0.007
313909		876f	87	0.003	0.087
313910		877	8	<0.001	0.008
313911	Dup	877	9	<0.001	0.009
313912		878	8	<0.001	0.008
313913		879	<5	<0.001	< 0.005
313914		882	6	<0.001	0.006
313915		884	10	<0.001	0.010
313916		885	102	0.003	0.102

PROCEDURE CODES: ALP1, ALFA1, ALMA1

Certified Bv: ason Moore, General Manager

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Rock

Certificate of Analysis

Friday, October 22, 2010

Aur Lake Exploration #7-1603 Jackes Ave Toronto, ON, CAN M4T 1E3

Date Received:	10/08/2010
Date Completed:	10/22/2010
Job #:	201044535
Reference:	

Sample #: 51

Au g/t (ppm)	Au oz/t	Au ppb	Client ID	ŧ	Acc #
0.012	< 0.001	12	886	7	313917
0.017	< 0.001	17	887	3	313918
0.011	< 0.001	11	888)	313919
0.377	0.011	377	889)	313920
0.005	< 0.001	5	890	l	313921
0.017	< 0.001	17	Dup 890	2 I	313922
0.012	< 0.001	12	891	3	313923
0.062	0.002	62	892	1	313924
0.009	< 0.001	9	894	5	313925
0.014	< 0.001	14	895	5	313926
0.011	<0.001	11	896	7	313927
0.009	<0.001	9	897	3	313928
0.008	< 0.001	8	898)	313929
0.016	< 0.001	16	899)	313930
0.016	<0.001	16	900	l	313931
0.046	0.001	46	901	2	313932

PROCEDURE CODES: ALP1, ALFA1, ALMA1

Certified Bv: ison Moore, General Manager

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Rock

Certificate of Analysis

Friday, October 22, 2010

Aur Lake Exploration #7-1603 Jackes Ave Toronto, ON, CAN M4T 1E3

Date Received:	10/08/2010
Date Completed:	10/22/2010
Job #:	201044535
Reference:	

Sample #: 51

Au g/t (ppm)	Au oz/t	Au ppb	Client ID		Acc #
0.016	< 0.001	16	901	Dup	313933
0.024	< 0.001	24	902		313934
0.007	< 0.001	7	903		313935
< 0.005	< 0.001	<5	904		313936
< 0.005	< 0.001	<5	905		313937
<0.005	< 0.001	<5	906		313938
< 0.005	< 0.001	<5	907		313939
0.005	< 0.001	5	908		313940
0.008	< 0.001	8	909		313941
< 0.005	< 0.001	<5	910		313942
0.006	< 0.001	6	913		313943
0.007	< 0.001	7	913	Dup	313944
0.006	< 0.001	6	914		313945
0.007	< 0.001	7	915		313946
0.006	< 0.001	6	916		313947
0.006	< 0.001	6	917		313948

PROCEDURE CODES: ALP1, ALFA1, ALMA1

Certified Bv: ason Moore, General Manager

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Friday, October 22, 2010

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Aur Lake Exploration #7-1603 Jackes Ave Toronto, ON, CAN M4T 1E3

Date Received:	10/08/2010		
Date Completed:	10/22/2010		
Job #:	201044535		
Reference:			
Sample #:	51	Rock	

Au g/t (ppm)	Au oz/t	Au ppb	Client ID	Acc #	Acc #
0.008	< 0.001	8	918	313949	313949
0.012	< 0.001	12	919	313950	313950
0.007	< 0.001	7	920	313951	313951
0.005	< 0.001	5	921	313952	313952
0.007	< 0.001	7	922	313953	313953
0.010	< 0.001	10	923	313954	313954
0.007	< 0.001	7	923	313955 Dup	313955
0.007	< 0.001	7	924	313956	313956

PROCEDURE CODES: ALP1, ALFA1, ALMA1

Certified Bv son Moore, General Manager

approval of the laboratory

the written

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Ø	ΛCCURASSAY
	LABORATORIES

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Certificate of Analysis

Friday, October 22, 2010

314001

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Aur Lake Exploration #7-1603 Jack	kes Ave		Date Received:	10/08/2010	
M4T 1E3			Date Completed:	10/22/2010	
			Job #:	201044538	
			Reference:		
			Sample #:	1 Rock	
Acc #	Client ID	Au ppb	Au oz/t		Au g/t (ppm)
314000	880	6	< 0.001		0.006

9

Dup PROCEDURE CODES: ALP1, ALFA1, ALMA1

Certified Bv

880

son Moore, General Manager

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< 0.001

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0.009