AR2011-015

Clear Lake Resources Inc.

Johnston Lake District

Colchester County, Nova Scotia

11E/11B

Joint Assessment Report for Exploration Licenses

08996, 08997 & 08998 RECEIPT FEB01'11 13:18

Author: Alex MacKay

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1.0 Summary

The Johnson Lake District is located in a mafic-felsic volcanic and plutonic suite of rocks in the Cobequid highlands. Recent discoveries of anomalous REE indicator minerals (Th, Zr, Y, Nb) in such rocks as well as the increasing potential for IOCG type discoveries along the Cobequid-Chedabucto Fault Zone make the Johnson Lake District a strong candidate for discovery of either type of deposit.

The 2010 work program focused establishing access to the properties as well as completing orientation scintillometer survey as well as XRF geochemical surveys. In total 36 scintilometer survey stations were established while XRF data was collect at 33 stations. Samples were also collected at XRF station for more thorough XRF analysis at Clear Lake Resources headquarters. Scintillometer results have begun to outline a total counts per second anomaly southwest of Johnson Lake. Preminary XRF data was used to produce grids to identify regions of anomalous indicator mineral concentrations for rare earth element indicators as well as Iron oxide Copper-Gold indicators. Preliminary grids have outlined elevated REE values in the NE area of the Johnson Lake properties, while IOCG indicator grids have begun to outline elevated values in the NW area of the properties.

Additional work carried out was to compile topographical, geological and forestry road network maps available from NSDNR's digital database. Various maps were overlain to establish differences in mapped geology as well as to be used for gaining access to the property. Maps were then checked for validity in the field. Geological maps proved to be accurate in some areas while other areas were not. Foresty network roads proved to be the most inaccurate of all maps available from NSDNR. In the end a major part of the work completed was for Clear Lake Resources crews to generate our own road map of the property.

2.0 Introduction

As the potential for rare earth mineralization increases in the Cobequid Highlands (MacHattie, 2010a), regional exploration of the Hart Lake-Byers Lake granite body and overlying Byers Brook Formation is warranted. Licences 08996, 08997 and 08998, collectively referred to as the "Johnson Lake properties", span the geological units of the Hart Lake-Byers Lake granite and the overlying Byers Brook and Diamond Brook Formations, as mapped on the 1:500 000 provincial geology map.

Potential for IOCG style mineralization also exists as the properties lie to the north of the Cobequid-Chedabucto Fault zone (MacHattie, O'Reilly, 2009b). More specifically the Rockland brook fault(RBF) cuts the Johnson Lake properties at the southern extent.

The objectives of the 2010 work program were to establish access to the property and then to complete orientation surveys with scintilometers and a 40 keV portable X-ray florescence(XRF) analyzer. A scintillometer survey to determine if Thorium, a well known REE indicator is present and an XRF survey to collect geochemical data for both REE indicators (Y, Nb, Th, Zr) and Iron Oxide Copper-Gold (IOCG) mineral indicators(Ba, Fe, Cu,Co).

Field work was completed by Alex MacKay, geologist and author, Lindsay Allen, prospector and manager and Alex Debay, prospector.

3.0 Location and Access

The Johnson Lake properties are located in Colchester County, NS, approximately 22 km NNW of the town of Truro. The properties are accessible from both from the north and the south via local logging roads. Access from the north is gained via the Warwick mountain road off of highway 246. At UTM X=470961 Y=5051408 (NAD 83) on the Warwick mountain road take an unnamed logging road proceeds south on to licence 08998.

Multiple logging roads provide access from the south by taking exit 13 off of highway 104, and proceeding north through the villages of Debert and Staples Brook. See figure 1 on the following page.

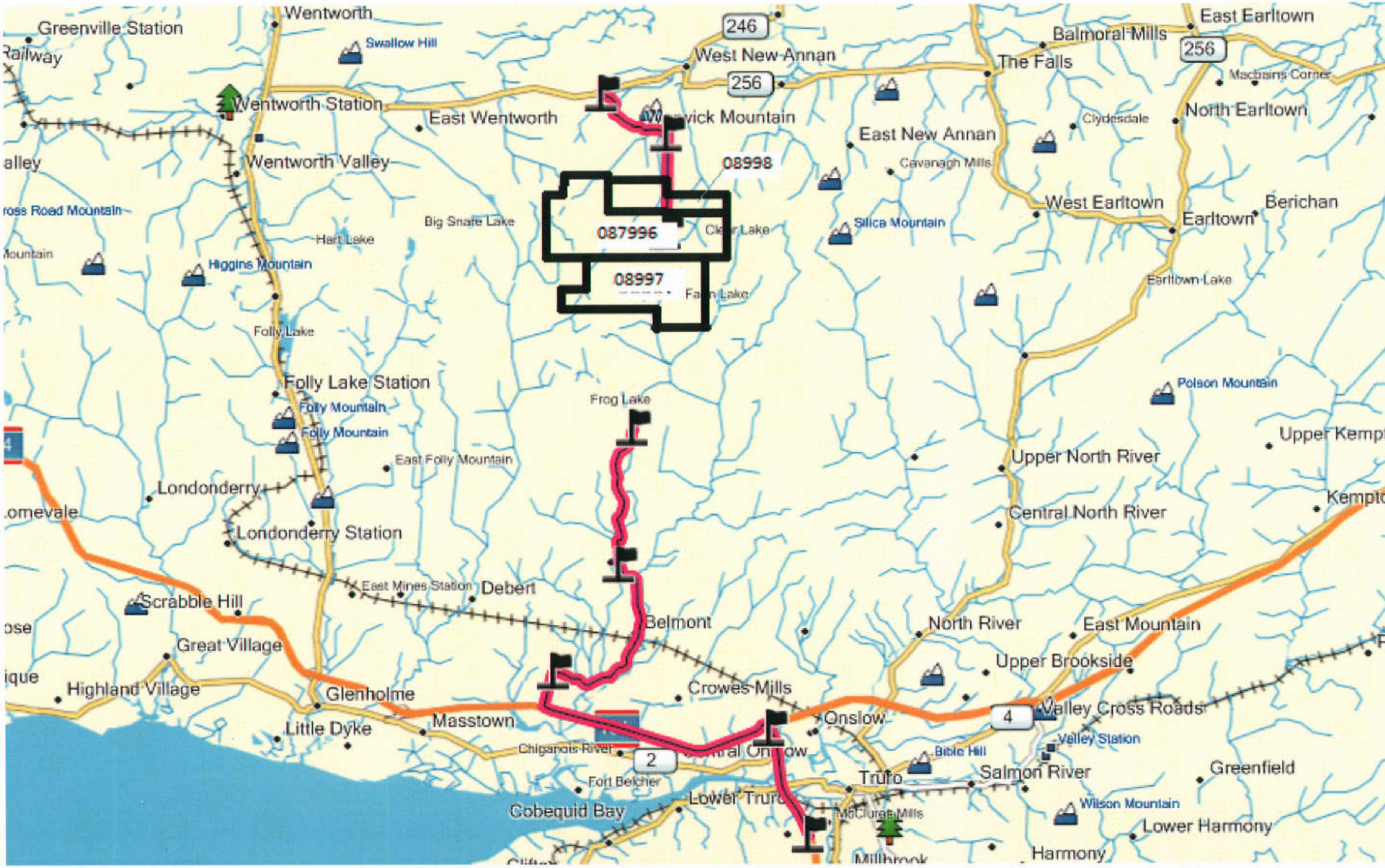

Figure 1-Properties Location Map from Truro, not to scale

4.0 License Tabulation

Licences 08996, 08997, and 08998 are held in the name of Clear Lake Resources Inc. This assessment report is authored by Alex MacKay for Clear Lake Resources. See table below for tabulation of licence information.

Table 1-Tabulation of Exploration Licenses 08996, 08997 & 08998 held in the name of Clear Lake Resources Inc.

License #	NTS Map Sheet	Tract	Claims	Date of issue
08997	11E/11B	41 ✓	JKLMNOPQ	02/02/2010
08997	11E/11B	42 ✓	JKLMNOPQ	02/02/2010
08997	11E/11B	43 ✓	ABCDEFGH JKLMNOPQ	02/02/2010
08997	11E/11B	54 ✓	ABCDEFGH JKLMNOPQ	02/02/2010
08997	11E/11B	55 ✓	ABCDEFGH JKLMNOPQ	02/02/2010
08997	11E/11B	56 ✓	ABGHJKPQ	02/02/2010
08996	11E/11B	64 ✓	AHJQ	02/02/2010
08996	11E/11B	65 ✓	ABCDEFGH JKLMNOPQ	02/02/2010
08996	11E/11B	66 ✓	ABCDEFGH JKLMNOPQ	02/02/2010
08996	11E/11B	67 ✓	ABCDEFGH JKLMNOPQ	02/02/2010
08996	11E/11B	68 ✓	CDEFLMNO	02/02/2010
08996	11E/11B	80 ✓	ABCDEFGH JKLMNOPQ	02/02/2010
08996	11E/11B	81 ✓	AH	02/02/2010
08998	11E/11B	77 ✓	EFDC	02/02/2010
08998	11E/11B	78 ✓	ABCDEFGH	02/02/2010
08998	11E/11B	79 ✓	ABCDEFGH MLKJ	02/02/2010

5.0 Previous Work

During the late 1970's and early 1980's Gulf Minerals Canada Ltd. carried out an extensive exploration program for Uranium in the Cobequid highlands. Gulf's program included geological mapping, soil and rock sampling, trenching, and drilling. Gulf also carried out ground and airborne gamma ray spectrometry surveys as well as VLF-EM- magnetometer survey. Unfortunately, Gulf's work was focused to the west of licences 08996, 08997, and 08998.

6.0 Local and Regional Geology

Regional geology of the area is dominated by four Late Devonian-Early Carboniferous mafic-felsic volcanic and plutonic units as shown plate 1. This suite of rocks is bound to the north by unconformably overlying late Carboniferous rocks of the Cumberland Basin and to the south by the Rockland Brook fault (RBF) (MacHattie, 2010a). From east to west the units are: the Folly Lake gabbro-diorite (FLGB), the Hart Lake-Byers Lake granite (HLBL), the Byers Brook Formation (BBF) and the Diamond Brook Formation (DBF).

Locally, the RBF cuts the southern portion of the property. This section of the fault has been interpreted to be a ductile shear zone (Pe-Piper, 1989). Geological units on the property and south of the RBF, from east to west, are Horton Group sediments, an unnamed Siluran-Ordiviction unit of wacke's, siltstones, shales and tuffs and a window of the HLBL. North of the RBF the licenses are dominated by felsic volcanic and volcaniclastic rocks of the BBF. Gower (1988) reports an attitude of 115/70 for the BBF.

The BBF has been further broken down into two periods of volcanism separated by a period of lacustrine siltstone deposition; both volcanic events are characterized by early pyroclastic events which grade into rhyolitic flow units (Gower, 1988).

The BBF contacts the conformably overlying DBF in the north east corner of the property. The DBF is interpreted to be post BBF volcanism with early rhyolitic flows grading to flow basalts which dominate the unit (Pe-Piper, 2002). The extrusive volcanic units are often separated by sandy and/or conglomerate facies sediments (Pe-Piper, 2002).

7.0 Work Performed

Work on the Johnson Lake properties included computer based research and map compilation, basic geological mapping/field checking of mapped units, an orientation scintillometer survey as well as the collection of geochemical data via a handheld XRF analyzer. Scintillometer and XRF data was then downloaded and plotted for additional study.

Geological and topographical maps were produced in early November for use in the field. Two sets of geological maps were obtained via shape files from the Nova Scotia Department of Natural Resources Minerals Branch digital database. The primary geological map used was the 1:500 000 provincial geology map (see plate 4). Also used was Pe-Pipers map (see plate 3) which was generated as part of Pe-Piper 2002 paper <u>A Synopsis of the Geology of the Cobequid Highlands</u>. These maps were compared and checked for validity while in the field. 1:10 000 topography maps were also used in conjunction with geology maps in the field. XRF geochemical data obtained by Clear Lake has been plotted on the provincial geology map (See plates 6-13). Geology maps were overlain with forestry network roads downloaded from NSDNR forestry branch's digital database for use in the field.

Field work was carried out in late November through December 2010. Large parts of these days were spent trying to gain access to the property as many of the roads mapped in the forestry network files are either impassable or non-existent. It is suspected that this is because old roads were not deleted from the files when new ones were produced. Plate 2 shows a comparison of the roads as mapped by Clear Lake crews vs the foresty network roads map downloaded from the NSDNR. As a result, a large area of the property southwest of Johnson Lake and northeast of Guyon Lake were not accessible via access roads. Traverses are planned for these areas next field season.

Where access to the property was gained general rock descriptions, locations, scintillometer total counts per second (CPS) and XRF geochemical analysis were recorded. Where appropriate a sample was also collected for future geochemical analysis. Geological observations, scintillometer readings and XRF analysis were recorded by way of station numbers which range from JL-1 thru JL-52. Stations can be assumed to be outcrop unless otherwise noted in appendix A.

Locations were recorded using a Garmin GPSmap 76S © GPS receiver. UTM coordinates were recorded and are reported based on the NAD 83. Total counts per seconds were recorded using an Urtec UG130 Threshold Gamma Ray Scintillometer. XRF analyses were completed using an Olympus-Innovex Delta 90 handheld portable XRF analyzer. Condensed versions of recorded field notes and CPS readings can be seen in Appendix A. Averaged, uncalibrated XRF results are available in Appendix B, while XRF analyser specifications can be seen in Appendix C.

Scintillometer readings were collected by scanning the entire outcrop with the Urtec unit and recording the highest reading. Generally, the readings would not change more than 10% over an outcrop. Preliminary XRF scans were completed in the field, while samples were collected and a more thorough multi scan analysis to generate averages was completed at Clear Lake headquarters.

Sample preparation included breaking off between 2-3 kg of material from the area with the highest scintillometer reading. Material was placed in a plastic sample bag which was labeled with station number and UTM location. These samples are now stored at Clear Lake Resources headquarters for future use if necessary. XRF analyses were completed using the 3 beam soils method set to 10 seconds per beam. For the multi scans three fresh, unweathered faces were analyzed from each sample and an average was generated. All averaged results obtained are presented in Appendix B. Results for REE and IOCG indicator minerals are plotted on plates 6-13.

8.0 Results of Work

The two geological maps downloaded from NSDNR differ. Comparison of the maps showed that Pe-Pipers map offers more accuracy in the details of the rocks. This is particularly true of the HLBL granite which is broken down into several regions based on grain size. The provincial map does not differentiate within the granite body. Current theory of Clear Lake Resources is that the coarser grained windows on licence 08997 are later stage granite. Field evidence for this is that the larger grained windows show a sharp contrast in scintillometer readings. That is, moving from the coarse grained into the medium grained unit, there was a noticeable drop in the audio signal given off by the scintillometer. Also of note is the fact that the coarser grained regions were cut by diabase dykes which were not observed to cut the medium grained or fine grained granites. XRF geochemical evidence although plotted was not analyzed for correlations with the scintillometer readings at the time of production of this report.

Another notable difference between the two maps is the inclusion of a gabbroic-dioritic unit between the HLBL granite and BBF by Pe-Piper. Field evidence for this was not observed by Clear Lake field crews. Although the presence of diorite was recorded at stations located on this unit, the primary rocks encountered there were recorded as rhyolitic tuffs, ignimbrites and porphyries, consistent with the 1:500 000 map.

The last major difference between the two maps is the presence of a SE-NW trending fault which splays off of the RBF. The RBF was confirmed at stations JL-15 and JL-31. No evidence for the former was observed. This will be checked more thoroughly in future field work by Clear Lake Resources.

Extensive field study was not possible as part of this year's field program as crews were hampered by inclement weather as well as by the fact that roads into the center of the properties are impassable or non existent. For example, at station JL-30, located south of claim, forestry network roads appear to provide access to the southwest of Johnson Lake. When this road was accessed it was impassable due to wash out and high water conditions. It should be noted that with the exception of the road beyond station JL-30, all roads accessible with 4x4 truck were driven and mapped. For example, where a forestry network mapped road appears to continue or branch on plate 2, it is either non-existent or grown in.

Results of the scintillometer survey are encouraging as a large anomaly has been identified around the southern end of Johnson Lake. Clear Lake Resources have established that the background total counts is 150 cps on the Johnson Lake properties. Anything over 300cps is considered anomalous. Values southwest of Johnson Lake consistently showed to be anomalous. These anomalies are bounded by the geological contact to the north and remain open to the south. The southern area of the anomaly is one of the vehicularly inaccessible areas not traversed this year, it will be part of next year's field program. Other stations showing anomalous values included JL-10 and, JL-15, JL-37 and JL-38.

Geochemical data collected via the portable XRF analyzer was to be used to generate thematic grids for each set of indicator minerals(see figure's 3-10). Grids were produced using the inverse distance weighted interpolation method with a grid cell size 462 m x 462m. 10 inflection points were used based on percentage of max value (see figure 2). Points where XRF analysis produced an ND, or no data, were assumed to be concentration of 0 ppms.

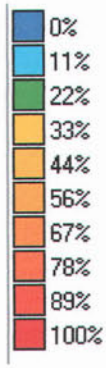

Figure 2-Inflection point percentage colours

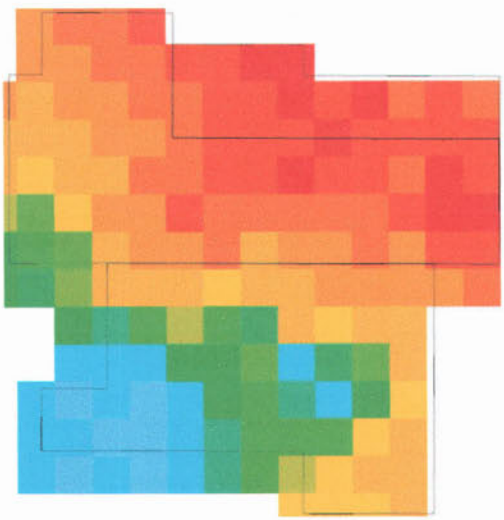

Figure 3-Y Thematic Grid

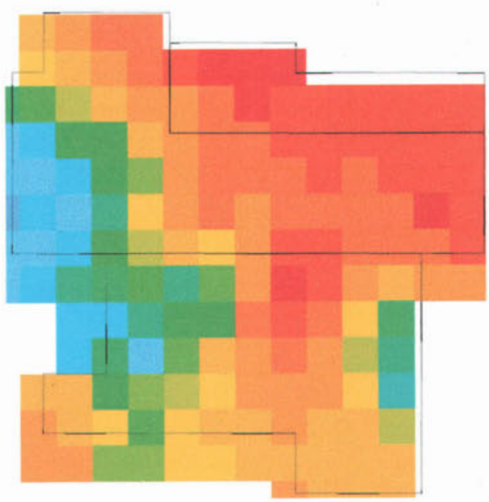

Figure 4-Nb Thematic Grid

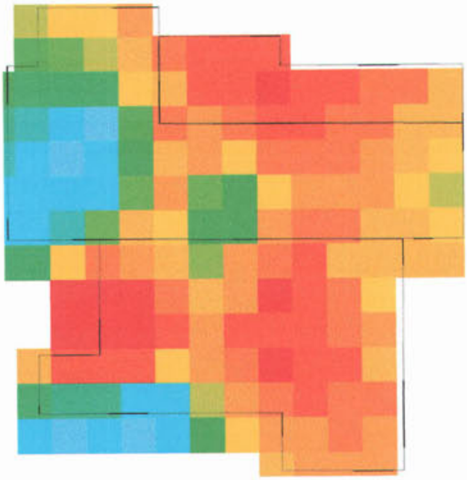

Figure 5-Th Thematic Grid

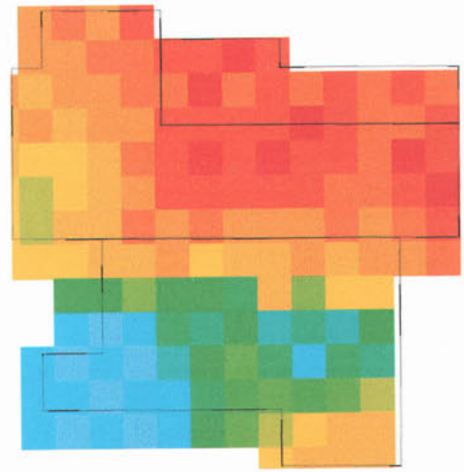

Figure 6-Zr Thematic Grid

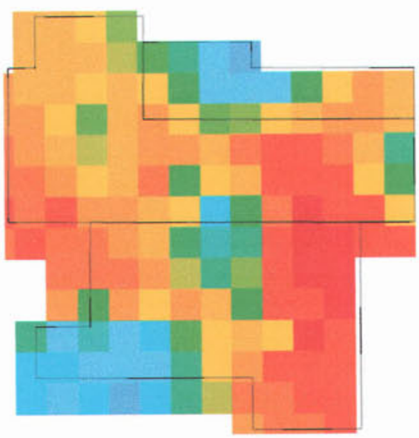

Figure 7-Ba Thematic Grid

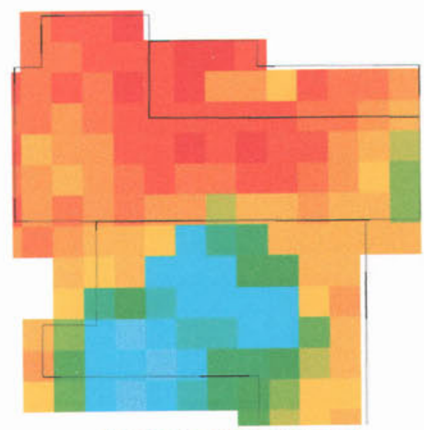

Figure 8-Fe Thematic Grid

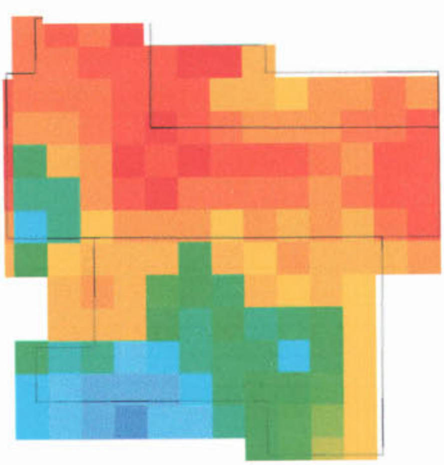

Figure 9-Cu Thematic Grid

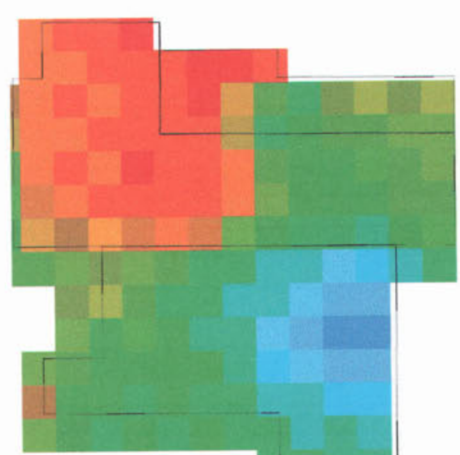

Figure 10-Co Thematic Grid

Unfortunately, the results of the grids are not top quality. This mainly attributed to the fact that not enough data was collected due to lack of access. That said, the grids do start to give an insight into possible trends in the data.

The REE indicator grids (Y, Nb,Th, Zr) indicate generally higher values in the NE as well as in the central regions for the case of Th and Nb. IOCG indicator grids (Ba, Fe, Cu, Co) are a little less clear showing a slight trend of elevated values in the NW

9.0 Conclusions and Recommendations

Although time and money were limited for a thorough examination of the property, the 2010 field program has produced some interesting results and further work is recommended.

Further work should include:

-Remediation of access roads

-Field traverses around the coarse grained windows identified by Pe-Piper

-Field traverses around the CPS anomaly identified at the southern end of Johnson Lake

-A whole rock sampling program

-More XRF readings to refine resolution of IOCG and REE indicator grids

10.0 References

Downey, N. 1978: Cobequid Project, exploration program 1977-78 on parts of 11E/11A, B, C and D; Gulf minerals Exploration Limite; Nova Scotia Department of Mines; Assessment Report ME 11E/11B 54-D-16(02).

Gower, D.P. 1988: Geology and genesis of uranium mineralization in subaerial felsic volcanic rocks of the Byers Brook Formation and the comagmatic Hart Lake granite, Wentworth area, Cobequid Highlands, Nova Scotia; unpublished M.Sc. thesis, Memorial University of Newfoundland, p. 1-358.

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MacHattie, T.G., 2010b: Nature of Rare Earth Element Mineralization in the Northeastern Cobequid Highlands; *in* Mineral Resources Branch, Geology Matters 2010: Program with Abstracts; Nova Scotia Department of Natural Resources, Report ME 2010-2, p. 2.

O'Reilly, G.A., 2010: The Oxford Tripoli Company Diatomite Mine at East New Annan; *in* Mineral Resources Branch, Nova Scotia Minerals Update Autumn 2010; Nova Scotia Depatment of Natural Resources v. 27-4, p. 5.

Pe-Piper, G., Murphy, J.B. and Turner, D.S. 1989:Petrology, geochemistry and tectonic setting of some Carboniferous plutons of the eastern Cobequid Hills; Atlantic Geology, v. 25, p. 37-49.

Pe-Piper, G., Piper, D.J.W 2002: A synopsis of the geology of the Cobequid Highlands, Nova Scotia; Atlantic Geology, v. 38, p.145-160.

11.0 Statement of Qualifications

I, S. Alex Mackay of Westville, Nova Scotia do hereby swear to be a qualified author for Nova Scotia exploration assessment reports. Qualifications stem from degrees obtained from Dalhousie University of Halifax, Nova Scotia Canada.

-BSc. Earth Science & Physics (2008)

-Dip. of Engineering (2003)

In addition to degree qualifications, I have 3+ years of professional work experience including report writing, as well as Au and REE exploration experience in Nova Scotia and abroad.

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Alex MacKay (BSc.)

Appendix A

Condensed field notes

-all notes recorded from outcrop unless otherwise noted. See Plate 4 for locations.

Date	X	Y	Station	Rock type	Rock type 2	CPS	Type	**Notes** OC=OUTCROP FL=FLOAT N=NOTES XRF=SAMPLE TAKEN py=pyrite chpy=chalcopyrite qtz=quartz eg168/70=strike/dip
26/11/2010	471044	5049878	JL-1	basalt		50	OC	25m x 25m pit of basalt, mix grey/green, minor brecciation, pink vesicles-calcite?, abundant sulphides throughout, py, chpy
26/11/2010	471023	5049654	JL-2	basalt			OC	10mx10m pit, basalt brecciated, more quartz than in pit to the north
26/11/2010	470987	5048743	JL-3	Float		135	FL	Till cover with mixed qtz, quartzite, rhyolite, basalt, some minor sulphides
26/11/2010	465674	5043426	JL-4	Float			FL	Large (up 2m) boulders of mafic rock with grano-dioritic veins
30/11/2010	470733	5047735	JL-5 XRF	rhyolite		215	OC	Deep pink rhyolite, K-alteration?, some black streaks
30/11/2010	470625	5047210	JL-6 XRF	rhyolite	diorite	190	OC	Rhyolite and diorite outcrops in ditch along side of road, pink/grey, aplite? Possible seam along ditch?
30/11/2010	470374	5047095	JL-7 XRF	ignimbrite		200	OC	Grey porphyritic rhyolite (ignimbrite), fine grey ground mass with 1cm slender feldspar crystals, minor clay alteration on some surfaces
30/11/2010	469792	5047057	JL-8 XRF	Float		250	FL	50cm pink rhyolitic boulders in a swamp (250 cps)
30/11/2010	470965	5048692	JL-9 XRF	ignimbrite	diorite	260	OC	Rhyolitic ignimbrite with sulphides, outcrop is fractured, fe staining,
30/11/2010	467421	5047163	JL-10 XRF	granite		300	OC	Granite-K-spa-magnetite?-biotite, large outcrop
30/11/2010	470355	5049449	JL-11 XRF	quartzite		200	OC	Quartizite with sulphides - 2010 Nova Scotia Prospectors Association field trip Stop, Au potential (pers. comm. O'Rielly+MacHattie)
30/11/2010	469547	5047756	JL-12 XRF	porphyry		225	OC	Granite/rhyolite/porphyry, large outcrop, fractured, flow banding?

07/12/2010	471712	5043962	JL-13	granite		225	OC	K-altered granite-rhyolite, pink aphanitic matrix with 1-2 mm qtz phenocrysts, epidote veining, mod-heavy 2D fracturing (168/70, 051/60), slickensides 186/70 some surfaces
07/12/2010	471557	5044723	JL-14	Granite		230	OC	equigranular granite, k-alteration
07/12/2010	471452	5045232	JL-15 XRF	Granite		330	OC	Coarse grained granite, 50:50 qtz-K-spar, perpendicular fracturing with black material infilling cracks, later stage granite?, mafic dykes cut granite (30-50 cm), sharp contact on dykes
07/12/2010	471667	50455818	JL-16 XRF	Granite		230	OC	Pink medium grained granite, fractured, diabase contacts epidote (veins)
07/12/2010	470878	5046325	JL-17 XRF	Float			FL	Interesting boulders in till by Johnson Lake (source appears to be nearby granite)
07/12/2010	470800	5046277	JL-18 XRF	Granite		325	OC	Fine and coarse grained granite, near to contact with mafic unit? (it's buried in till), some epidote filled fractures
07/12/2010	470650	5046274	JL-19 XRF	Granite		440	OC	Granite with magnetite, different grain sizes-redder coarser grains test better with XRF, outcrop is large continues for 100m along road and composes hillside to the west
07/12/2010	470561	5046070	JL-20	granite		300	OC	Granite on roadside
07/12/2010	470348	5046022	JL-21	note			N	Road ends-ATV only
07/12/2010	471077	5045896	JL-22	note			N	Landing on roadside
07/12/2010	470696	5045465	JL-23	note			N	Road ends
07/12/2010	470696	5045465	JL-24	granite		140	OC	Granite with green intrusions, road stops at top of hill

07/12/2010	471175	5044538	JL-25	granite		180	OC	Granite
07/12/2010	471175	5044538	JL-26	note			N	End of road-ATV only
07/12/2010	472336	5045150	JL-27 XRF	porphyry		200	OC	Granite porphyry, 2-3 mm quartz grains in fine pink matrix
07/12/2010	470929	5043798	JL-28	note			N	Road ends-no outcrop
08/12/2010	468110	5044341	JL-29 XRF	granite		180	OC	Medium grained granite with quartz veinlets, , abundant coarse grained boulders around, minor foliations? in granite
08/12/2010	468249	5043351	JL-30	note			N	Beaver dam, flooded road(+-25m)
08/12/2010	468249	5043351	JL-31	siltstone?			OC	Fault? - heavily fractured siltstone with layered slickensides
08/12/2010	469578	5040789	JL-32	note			N	Frog Lake road, passable with high 4 wheel drive
11/12/2010	467626	5046867	JL-33 XRF	granite			N	Bridge-out, ATV only past here, granite in-situ boulders with nice epidote veining, pink almost sugary texture
11/12/2010	468342	5047395	JL-34 XRF	diorite	rhyolite		OC	Dark grey/black host with aplite and epidote veining, epidote veins up to 1cm, contacts pink rhyolite just to west
11/12/2010	468790	5047501	JL-35 XRF	granite			OC	Sample from road with coarse grained granite vein
11/12/2010	466543	5046994	JL-36 XRF	granite	rhyolite		OC	Contact between granite and rhyolite, mafic breccia?
11/12/2010	468430	5044934	JL-37 XRF	granite	diorite	325	OC	Pink granite, mixing with mafics? - lots of mafic boulders in area

11/12/2010	468388	5045172	JL-38 XRF	granite	diorite	325	OC	Pink granite with diorite dykes
11/12/2010	468607	5044550	JL-39 XRF	granite	diorite	200	OC	Granite with diorite veins, granite veins just off road in diorite with sugary texture
11/12/2010	468819	5044349	JL-40 XRF	granite	rhyolite	180	OC	Granite/rhyolite mix
11/12/2010	468671	5044054	JL-41 XRF	granite	rhyolite	160	OC	Granite/rhyolite mix
16/12/2010	473187	5047146	JL-42 XRF	porphyry	diorite	220	OC	Granite porphyry mixing with mafics, 1-2 mm qtz phenocrysts in finer K-spar matrix
16/12/2010	473173	5047070	JL-43 XRF	porphyry	diorite	220	OC	Granite porphyry mixing with mafics, 1-2 mm qtz phenocrysts in finer K-spar matrix
16/12/2010	470550	5046693	JL-44 XRF	rhyolite		200	OC	Pink and grey rhyolite, green veins, layered? flow banding
16/12/2010	470345	5046656	JL-45 XRF	rhyolite	diorite	200	OC	Contact between rhyolite and diorite, small waterfall above bog, both units magnetic
16/12/2010	470316	5046503	JL-46 XRF	rhyolite	aplite	260	OC	Between Johnson Lake gabbros and granites
16/12/2010	470314	5046447	JL-47 XRF	granite		330	OC	K-spar rich, some plagioclase, minor hornblende and biotite, large outcrop, coarse grained
16/12/2010	470328	5046441	JL-48 XRF	granite		400	OC	Medium grained granite with magnetite, qtz vein in granite(014/54)
16/12/2010	470421	5046534	JL-49	rhyolite			OC	Rhyolitic tuff ignimbrite, heavily fractured rock under a blow down tree, green veins
23/12/2010	470038	5045921	JL-50 XRF	granite		280	OC	Coarse pink granite, weathers white, fractured
23/12/2010	470097	5045824	JL-51	granite		290	OC	Granite
11/12/2010	468398	5044806	JL-52 XRF	granite	granite	220	OC	Coarse grained granite with diabase dykes

Appendix B

UNCALIBRATED XRF DATA

Portable handheld XRF analyzers are a relatively new technology in the exploration business. Manufactures of the Delta 90 recommend calibrating the analyzer for each rock type to get the best results. This requires having known geochemical test samples to test the analyzer results against to find out where correction factors need to be applied. As no samples have yet been sent for geochemical analysis; results are reported in raw, uncorrected form. All data was collected under the "fundamental parameters" setting in the 3 beam soil analysis mode as per manufactures recommendations for use without inputting calibration factors into the analyzer. Each station involved 30 secs of total analysis time with each beam analyzing for 10 secs. The analyzer was set to analysis for 35 elements including P, S, Cl, K, Ca, Sc, Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, As, Se, Rb, Sr, Y, Zr, Nb, Mo, Ag, Cd, Sn, Sb, Ba, W, Au, Hg, Pb, Bi, Th & U.

Since most of the rocks analyzed were of rhyolitic or similar granitic composition it is assumed that raw data is precise enough for identifying trends and relative anomalous values. The accuracy of the values cannot be assumed 100% at this time.

Currently, the Canadian Mining Industry Research Organization (CAMIRO) in conjunction with the Geological Survey of Canada is completing a research project (CAMIRO PROJECT 10E01) to identify accuracy and precision of a wide range of element and matrices as well as to develop standard practices for collecting portable XRF data. Upon completion of this project, anticipated to be finished in April 2011, recommendations put forward by CAMIRO will be evaluated and where appropriate will be incorporated into Clear Lake Resources Inc. XRF data collection methods.

Station ID	Easting	Northing	P	S	Cl	K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	As	Se
JL-5	470733	5047735	2052	ND	3	31465	2714	ND	4690	252	267	541	40647	1	22	27	38	9	ND
JL-6	470625	5047213	ND	491	ND	35292	1046	14	908	25	26	490	7749	3	ND	11	73	9	ND
JL-7	470374	5047095	229	ND	ND	56770	1772	39	1444	63	64	260	13335	5	ND	21	30	3	ND
JL-8	469792	5047057	1923	ND	ND	22022	79689	325	3474	173	176	892	33898	5	2	25	66	10	ND
JL-9	470965	5048672	721	ND	12	66618	499	5	644	25	21	139	5000	0	25	6	40	130	ND
JL-10	467421	5047163	1873	ND	ND	53810	7473	82	1863	51	39	470	14654	4	7	ND	33	ND	ND
JL-11	470355	5049449	2478	83256	ND	58190	1985	ND	7971	141	179	603	61990	13	ND	34	662	37	ND
JL-12	469457	5047756	420	ND	ND	25621	56655	172	1246	131	104	740	27292	6	ND	33	102	ND	ND
JL-15	471452	5045232	2427	ND	21	37788	395	ND	570	19	35	183	7534	0	5	5	13	12	ND
JL-16	471667	5045818	616	ND	ND	32215	6802	109	2187	908	812	3411	19121	ND	29	15	226	34	ND
JL-17	470878	5046325	13271	5052	ND	36695	2200	28	4181	116	145	310	19116	1	38	45	179	4	ND
JL-18	470800	5046277	1600	144	ND	42921	218	ND	2766	31	10	105	26977	ND	25	19	10	7	ND
JL-19	470650	5046274	2787	257	8	44330	6049	22	322	16	26	103	6333	1	2	9	5	2	ND
JL-27	472336	5045150	2790	175	ND	31147	33615	108	1274	175	148	1353	20124	0	4	13	116	2	ND
JL-29	468110	5044341	ND	ND	ND	32196	16832	159	4624	50	42	997	25096	4	ND	10	25	1	ND
JL-33	467626	5046867	3056	ND	ND	48512	21202	102	3361	221	175	1413	21004	2	9	6	52	0	ND
JL-34	468342	5047395	463	ND	ND	36032	259052	158	2105	104	80	860	25284	7	ND	27	130	3	ND
JL-35	468790	5047501	3729	ND	31	36734	6475	ND	848	99	100	986	8799	0	9	11	59	ND	ND
JL-36	466543	5046994	1550	ND	ND	47894	5165	ND	2548	149	125	7375	28014	ND	26	54	687	34	ND
JL-37	468430	5044934	1624	ND	ND	40510	939	21	605	16	25	101	6549	1	8	12	9	5	ND
JL-38	468388	5045172	4689	ND	ND	48761	14603	49	3784	232	200	597	18540	3	ND	29	252	10	ND
JL-39	468607	5044550	393	ND	ND	50079	14083	67	2615	135	77	744	11710	1	6	2	51	8	ND
JL-40	468819	5044349	2447	ND	113	48810	4145	13	1556	51	43	410	10498	2	ND	ND	28	0	ND
JL-41	468671	5044054	1231	ND	ND	40399	1082	3	1288	125	101	244	8875	1	7	6	117	ND	ND
JL-42	473187	5047146	3525	ND	ND	40111	ND	ND	2231	96	123	415	15390	2	8	24	89	3	ND
JL-43	473173	5047070	2014	ND	ND	37900	970	ND	1100	83	104	313	12023	3	6	23	43	1	ND
JL-44	470550	5046693	ND	ND	ND	31801	16864	90	1156	514	492	1409	16680	1	ND	24	86	6	ND
JL-45	470345	5046656	2182	ND	ND	53316	5202	79	2074	155	138	449	10720	3	ND	9	28	3	ND
JL-46	470316	5046503	4910	ND	ND	31957	6774	153	2683	64	54	430	10542	2	0	11	14	4	ND
JL-47	470314	5046447	2213	ND	ND	35419	163	ND	300	19	45	357	8004	0	9	4	46	8	ND
JL-48	470328	5046441	1333	ND	ND	40681	14	6	229	10	18	91	7066	1	8	2	19	ND	ND
JL-50	470038	5045921	295	ND	ND	37302	3007	30	1040	185	164	2928	9431	1	4	8	32	2	ND
JL-52	468398	5044806	2597	ND	ND	47531	2682	ND	765	59	52	300	7209	1	6	0	6	0	ND

Station ID	X	Y	Rb	Sr	Y	Zr	Nb	Mo	Ag	Cd	Sn	Sb	Ba	W	Au	Hg	Pb	Bi	Th	U
JL-5	470733	5047735	177	25	2584	1123	1624	5	19	ND	18	ND	1601	15	1	2	47	ND	181	4
JL-6	470625	5047213	396	25	325	74	1187	ND	ND	ND	32	ND	ND	7	ND	8	46	ND	104	8
JL-7	470374	5047095	213	44	2621	818	1707	6	3	ND	2	ND	ND	ND	15	ND	58	ND	123	3
JL-8	469792	5047057	151	181	2872	1095	1744	10	45	7	16	ND	1180	4	1	9	77	ND	156	4
JL-9	470965	5048672	357	26	2156	480	2204	8	6	ND	7	ND	ND	ND	17	4	337	ND	188	5
JL-10	467421	5047163	236	68	1001	206	695	5	13	13	15	11	913	2	ND	6	27	6	125	5
JL-11	470355	5049449	320	57	2809	1045	2664	2	36	16	34	31	693	ND	7	11	200	ND	183	ND
JL-12	469457	5047756	152	316	1629	702	1286	7	43	14	25	ND	965	8	8	3	42	ND	181	6
JL-15	471452	5045232	383	6	356	75	1589	2	7	13	5	ND	ND	10	3	10	51	ND	218	8
JL-16	471667	5045818	189	42	1325	272	1045	7	16	12	ND	ND	5612	3	ND	5	139	ND	129	1
JL-17	470878	5046325	296	19	2887	918	1706	ND	29	0	13	6	911	ND	5	11	77	ND	217	1
JL-18	470800	5046277	515	6	937	138	3908	3	14	11	31	ND	40	29	ND	7	45	ND	301	10
JL-19	470650	5046274	502	7	886	98	2066	ND	8	22	14	ND	ND	ND	1	6	29	ND	172	13
JL-27	472336	5045150	190	53	923	166	751	1	6	2	11	0	828	ND	4	3	28	ND	150	1
JL-29	468110	5044341	253	111	895	171	1648	2	24	1	7	17	659	4	ND	10	28	ND	122	3
JL-33	467626	5046867	211	101	731	246	765	6	1	8	ND	ND	1212	2	6	1	12	ND	121	5
JL-34	468342	5047395	186	160	947	237	783	5	6	20	13	9	772	13	ND	7	66	ND	101	6
JL-35	468790	5047501	294	44	1100	76	1122	2	ND	ND	13	ND	597	3	9	3	35	ND	81	4
JL-36	466543	5046994	293	61	965	280	588	9	25	7	25	5	966	ND	0	1	213	ND	137	6
JL-37	468430	5044934	250	7	676	72	3093	7	ND	ND	8	ND	ND	14	ND	4	22	ND	353	2
JL-38	468388	5045172	186	124	741	188	605	2	ND	10	7	11	1468	1	0	4	54	ND	277	6
JL-39	468607	5044550	121	185	629	213	466	2	ND	ND	7	ND	669	ND	3	6	35	ND	111	2
JL-40	468819	5044349	208	36	697	153	584	4	5	ND	27	ND	180	2	14	4	25	ND	98	2
JL-41	468671	5044054	171	11	551	147	936	4	17	9	2	15	503	ND	14	5	12	ND	82	5
JL-42	473187	5047146	139	14	2757	1067	1581	13	2	12	ND	5	669	ND	4	2	9	ND	135	6
JL-43	473173	5047070	159	12	2482	518	2166	6	2	6	9	ND	392	15	ND	8	35	ND	150	6
JL-44	470550	5046693	209	30	1027	225	819	7	ND	12	4	ND	2432	3	2	4	40	ND	112	5
JL-45	470345	5046656	219	31	965	339	932	4	ND	3	14	ND	581	ND	15	3	25	ND	136	5
JL-46	470316	5046503	159	175	527	160	786	4	11	9	ND	10	90	5	ND	3	39	ND	74	0
JL-47	470314	5046447	325	4	392	93	1511	3	ND	ND	ND	ND	48	0	ND	6	35	ND	183	8
JL-48	470328	5046441	297	9	236	59	1131	4	ND	ND	6	5	ND	ND	7	6	24	ND	75	2
JL-50	470038	5045921	265	27	820	124	643	3	23	13	4	ND	1111	3	52	5	6	15	ND	83
JL-52	468398	5044806	208	31	813	85	728	3	9	ND	ND	ND	282	14	ND	2	20	ND	104	4

APPENDIX C

XRF Analyzer Specs and Theory

DELTA
Dynamic XRF

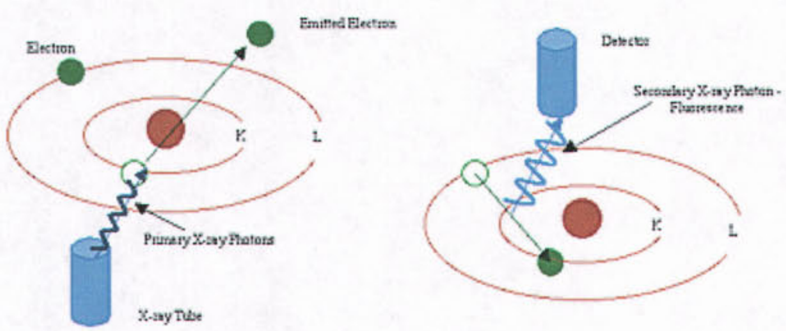
X-Ray Fluorescence (XRF) Spectrometry

BASIC THEORY

Although more popularly known for its diagnostic use in the medical field, the use of x-rays forms the basis of many other powerful measurement techniques, including X-ray Fluorescence (XRF) Spectrometry.

XRF Spectrometry is used to identify elements in a substance and quantify the amount of those elements present to ultimately determine the elemental composition of a material. An element is identified by its characteristic X-ray emission wavelength (λ) or energy (E). The amount of an element present is quantified by measuring the intensity (I) of its characteristic emission.

All atoms have a fixed number of electrons (negatively charged particles) arranged in orbitals around the nucleus. Energy Dispersive (ED) XRF and Wavelength Dispersive (WD) XRF Spectrometry typically utilize activity in the first three electron orbitals, the K, L, and M lines, where K is closest to the nucleus.



In XRF Spectrometry, high-energy primary X-ray photons are emitted from a source (X-ray tube) and strike the sample. The primary photons from the X-ray tube have enough energy to knock electrons out of the innermost, K or L, orbitals. When this occurs, the atoms become ions, which are unstable. An electron from an outer orbital, L or M, will move into the newly vacant space at the inner orbital to regain stability. As the electron from the outer orbital moves into the inner orbital space, it emits an energy known as a secondary X-ray photon. This phenomenon is called fluorescence. The secondary X-ray produced is characteristic of a specific element. The energy (E) of the emitted fluorescent X-ray photon is determined by the difference in energies between the initial and final orbitals of the individual transitions.

This is described by the formula

$$E=hc\lambda^{-1}$$

where h is Planck's constant; c is the velocity of light; and λ is the characteristic wavelength of the photon.

Energies are inversely proportional to the wavelengths; they are characteristic for each element. For example the Kα energy for Iron (Fe) is about 6.4keV. Typical spectra for EDXRF Spectrometry appear as a plot of Energy (E) versus the Intensity (I).

Elemental Analysis

XRF Spectrometry is the choice of many analysts for elemental analysis. XRF Spectrometry easily and quickly identifies and quantifies elements over a wide dynamic concentration range, from PPM levels up to virtually 100% by weight. XRF Spectrometry does not destroy the sample and requires little, if any, sample preparation. It has a very fast overall analysis turnaround time. These factors lead to a significant reduction in the per sample analytical cost when compared to other elemental analysis techniques.

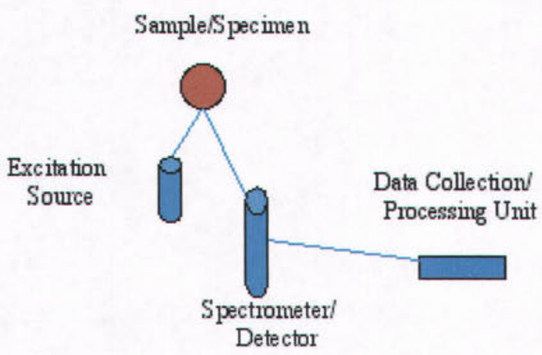
Aqueous elemental analysis instrument techniques typically require destructive and time-consuming specimen preparation, often using concentrated acids or other hazardous materials. Not only is the sample destroyed, waste streams are generated during the analysis process that need to be disposed of, many of which are hazardous. These aqueous elemental analysis techniques often take twenty minutes to several hours for sample preparation and analysis time. All of these factors lead to a relatively high cost per sample. However, if PPB and lower elemental concentrations are the primary measurement need, aqueous instrument elemental analysis techniques are necessary.

All elemental analysis techniques experience interferences, both chemical and physical in nature, and must be corrected or compensated for in order to achieve adequate analytical results. Most aqueous instrument techniques for elemental analysis suffer from interferences that are corrected for by extensive and complex sample preparation techniques, instrumentation modifications or enhancements, and by mathematical corrections in the system's software. In XRF Spectrometry, the primary interference is from other specific elements in a substance that can influence (matrix effects) the analysis of the element(s) of interest. However, these interferences are well known and documented; and, instrumentation advancements and mathematical corrections in the system's software easily and quickly correct for them. In certain cases, the geometry of the sample can affect XRF analysis, but this is easily compensated for by selecting the optimum sampling area, grinding or polishing the sample, or by pressing a pellet or making glass beads.

Quantitative elemental analysis for XRF Spectrometry is typically performed using Empirical Methods (calibration curves using standards similar in property to the unknown) or Fundamental Parameters (FP). FP is frequently preferred because it allows elemental analysis to be performed without standards or calibration curves. This enables the analyst to use the system immediately, without having to spend additional time setting up individual calibration curves for the various elements and materials of interest. The capabilities of modern computers allow the use of this no-standard mathematical analysis, FP, accompanied by stored libraries of known materials, to determine not only the elemental composition of an unknown material quickly and easily, but even to identify the unknown material itself.

Spectrometers

Innov-X Systems utilizes the EDXRF Spectrometer technique for its mechanical simplicity and excellent adaptation to portable field use. An EDXRF system typically has three major components: an excitation source, a spectrometer/detector, and a data collection/processing unit. The ease of use, rapid analysis time, lower initial purchase price and substantially lower long-term maintenance costs of EDXRF Spectrometers have led to having more systems in use today worldwide than WDXRF Spectrometer systems. Handheld, field portable EDXRF units can be taken directly to the sample as opposed to bringing the sample to the analyzer and configuring it to fit in an analysis chamber. Innov-X Systems portable, handheld EDXRF units solve real 21 st century application problems: solving crimes, analyzing alloys, exposing pollution, preserving history, searching for WMD's, conserving art treasures, and a myriad of other elemental field-oriented analyses.



The Deltas' Cutting-edge features include:

- Exceptional speed and sample throughput due to state-of-the-art electronics, a floating point processor, and redesigned analytical geometry

- Ruggedized, weather and dustproof industrialized LEXAN housing – no PDA or movable screen – provides superior reliability

- Significant improvement in LODs and light element analysis resulting from the DELTA's unique 4W, 200μA (max) x-ray tube

- Advanced integrated technology including an accelerometer, barometer, true hot-swap battery capabilities, and other innovations
- Icon-driven UI via bright, Blanview ™ color touchscreen
    - brightens in sunlight – easy to read in all environments
- Available with fully integrated camera and X-ray spot collimation
    - crisp accurate sample images that can be archived into memory
    - small spot collimation for focusing the beam to a 3mm diameter spot.

Innov-X has reinvented on-site analysis with the DELTA line; a new breed of handheld XRF. We've redesigned our analyzers from the ground up to create instruments that are both analytically superior AND rugged enough for virtually any environment. The DELTA analyzers feature the very latest in large area silicon drift detector technology, and unique 4W, 200µA (max) x-ray tubes for maximized accuracy and precision.

DELTA analyzers are also fully industrialized tools, and offer unsurpassed testing speed; yielding significantly increased productivity and throughput for operators. Take hundreds more tests per day with the DELTA analyzer. Smart on the inside. Tough on the outside. **No compromises.**

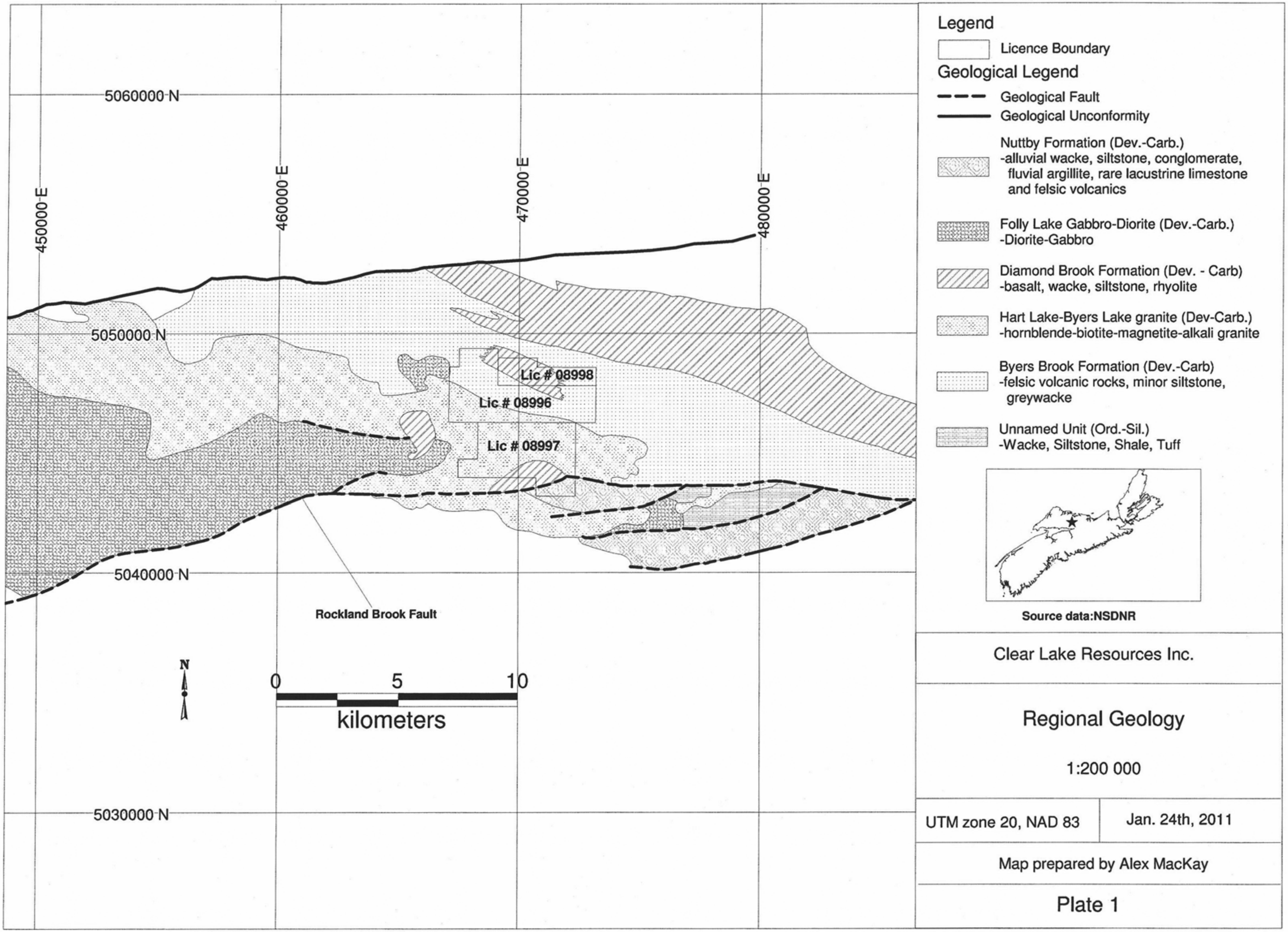
The DELTA line of analyzers feature our signature upgradeability. Customers may purchase a value-leading **Classic** model and upgrade to the analytically best **Premium** model at any time as analytical needs change - all with the same hardware platform and intuitive, friendly user interface.

The Innov-X Handheld XRF for elemental analysis meets EPA Method 6200 for metals in soil, NIOSH Method 7702 for lead in air filters, and OSHA Methods OSSA1 and OSS1 for lead in air filters and dust wipes. The 8 RCRA Metals and Priority Pollutant Metals are easily monitored on-site with the Innov-X Handheld XRF.

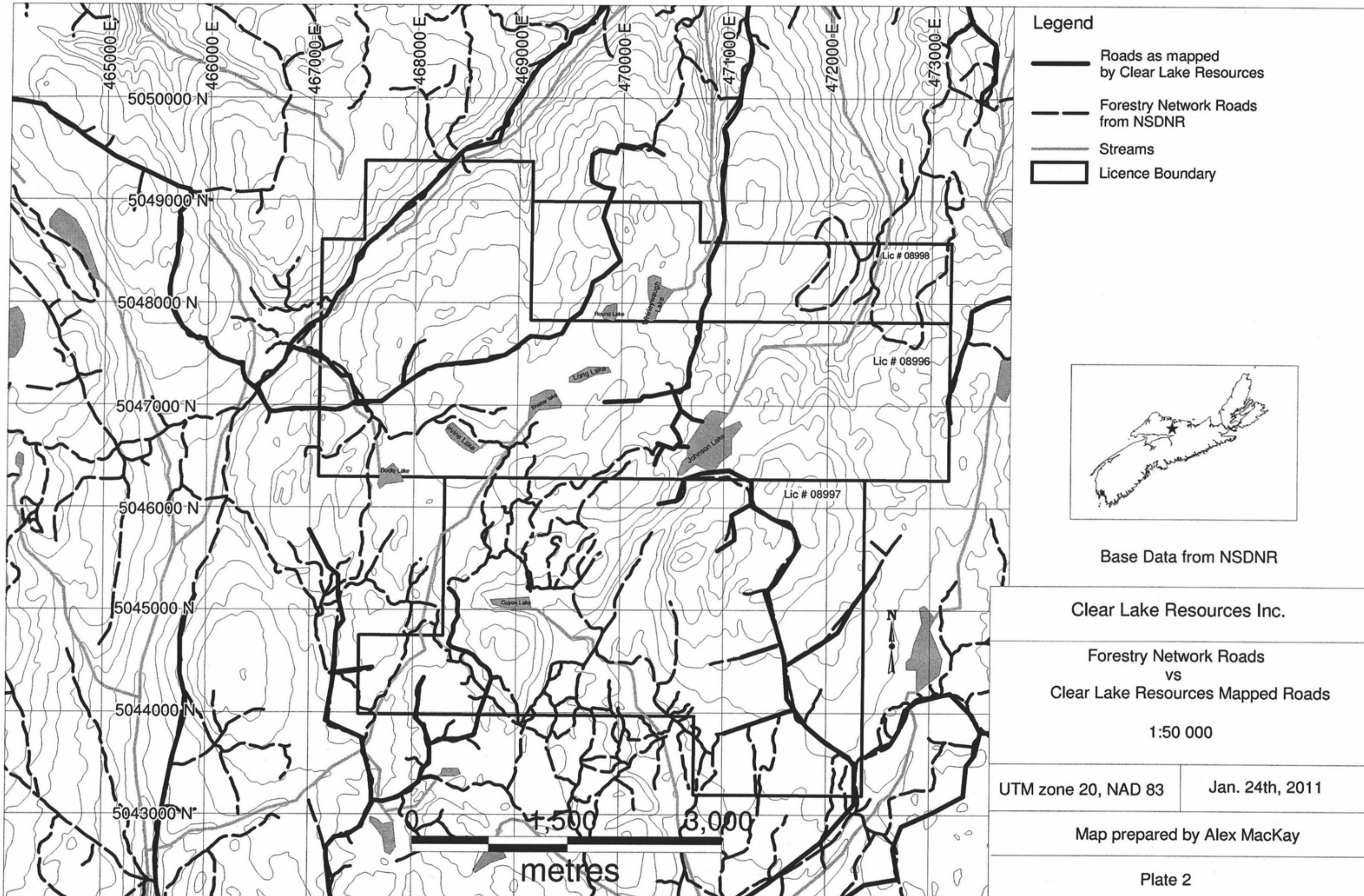
The Innov-X Systems Materials Testing & Mining Analyzers include standard hardware and accessories. Capabilities available include Fundamental Parameters, Empirical Analysis, linear or quadratic calibration modes, LEAP for Light Element Analysis, and Single or Multi element analysis capability.

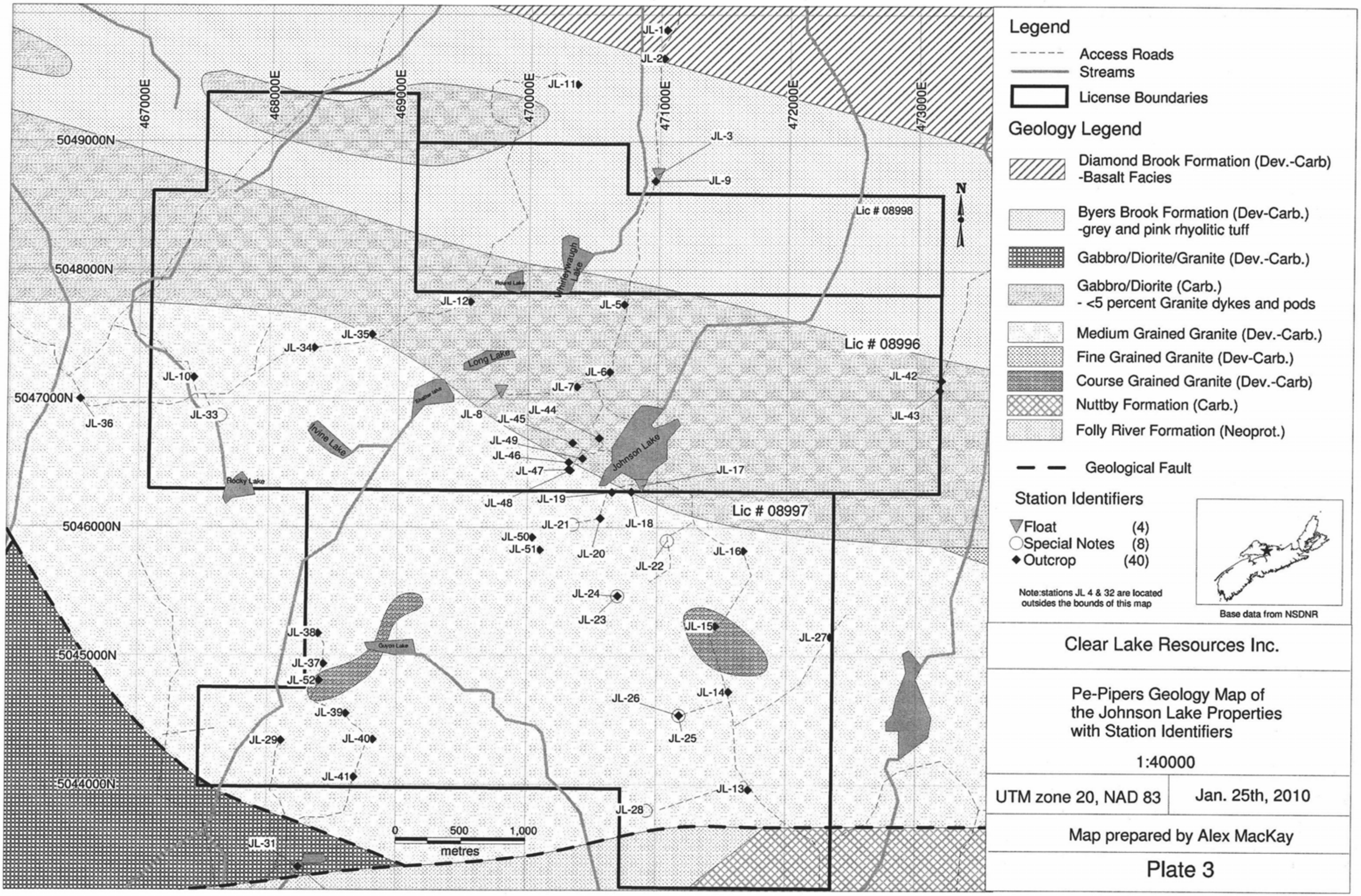
Appendix D

Geological Map, Scintillometer and XRF Geochemical Maps



5060000 N
5050000 N
5040000 N
5030000 N
450000 E
460000 E
470000 E
480000 E
Lic # 08998
Lic # 08996
Lic # 08997
Rockland Brook Fault
N
0
5
10
kilometers
Legend
Licence Boundary
Geological Legend
Geological Fault
Geological Unconformity
Nuttby Formation (Dev.-Carb.)
-alluvial wacke, siltstone, conglomerate, fluvial argillite, rare lacustrine limestone and felsic volcanics
Folly Lake Gabbro-Diorite (Dev.-Carb.)
-Diorite-Gabbro
Diamond Brook Formation (Dev. - Carb)
-basalt, wacke, siltstone, rhyolite
Hart Lake-Byers Lake granite (Dev-Carb.)
-hornblende-biotite-magnetite-alkali granite
Byers Brook Formation (Dev.-Carb)
-felsic volcanic rocks, minor siltstone, greywacke
Unnamed Unit (Ord.-Sil.)
-Wacke, Siltstone, Shale, Tuff
Source data:NSDNR
Clear Lake Resources Inc.
Regional Geology
1:200 000
UTM zone 20, NAD 83
Jan. 24th, 2011
Map prepared by Alex MacKay
Plate 1


Legend
Roads as mapped by Clear Lake Resources
Forestry Network Roads from NSDNR
Streams
Licence Boundary
Base Data from NSDNR
Clear Lake Resources Inc.
Forestry Network Roads vs Clear Lake Resources Mapped Roads
1:50 000
UTM zone 20, NAD 83
Jan. 24th, 2011
Map prepared by Alex MacKay
Plate 2
465000 E
466000 E
467000 E
468000 E
469000 E
470000 E
471000 E
472000 E
473000 E
5050000 N
5049000 N
5048000 N
5047000 N
5046000 N
5045000 N
5044000 N
5043000 N
Lic # 08998
Lic # 08996
Lic # 08997
Long Lake
Johnson Lake
Irvine Lake
Round Lake
0
1,500
3,000
metres
N


Legend
Access Roads
Streams
License Boundaries
Geology Legend
Diamond Brook Formation (Dev.-Carb) -Basalt Facies
Byers Brook Formation (Dev-Carb.) -grey and pink rhyolitic tuff
Gabbro/Diorite/Granite (Dev.-Carb.)
Gabbro/Diorite (Carb.) - <5 percent Granite dykes and pods
Medium Grained Granite (Dev.-Carb.)
Fine Grained Granite (Dev-Carb.)
Course Grained Granite (Dev.-Carb)
Nuttby Formation (Carb.)
Folly River Formation (Neoprot.)
Geological Fault
Station Identifiers
Float (4)
Special Notes (8)
Outcrop (40)
Note:stations JL 4 & 32 are located outsides the bounds of this map
Base data from NSDNR
Clear Lake Resources Inc.
Pe-Pipers Geology Map of the Johnson Lake Properties with Station Identifiers
1:40000
UTM zone 20, NAD 83
Jan. 25th, 2010
Map prepared by Alex MacKay
Plate 3
467000E
468000E
469000E
470000E
471000E
472000E
473000E
5049000N
5048000N
5047000N
5046000N
5045000N
5044000N
N
Lic # 08998
Lic # 08996
Lic # 08997
Long Lake
Irvine Lake
Johnson Lake
Whitleywaugh Lake
Rocky Lake
Round Lake
Guyon Lake
0 500 1,000
metres
JL-1
JL-2
JL-3
JL-5
JL-6
JL-7
JL-8
JL-9
JL-10
JL-11
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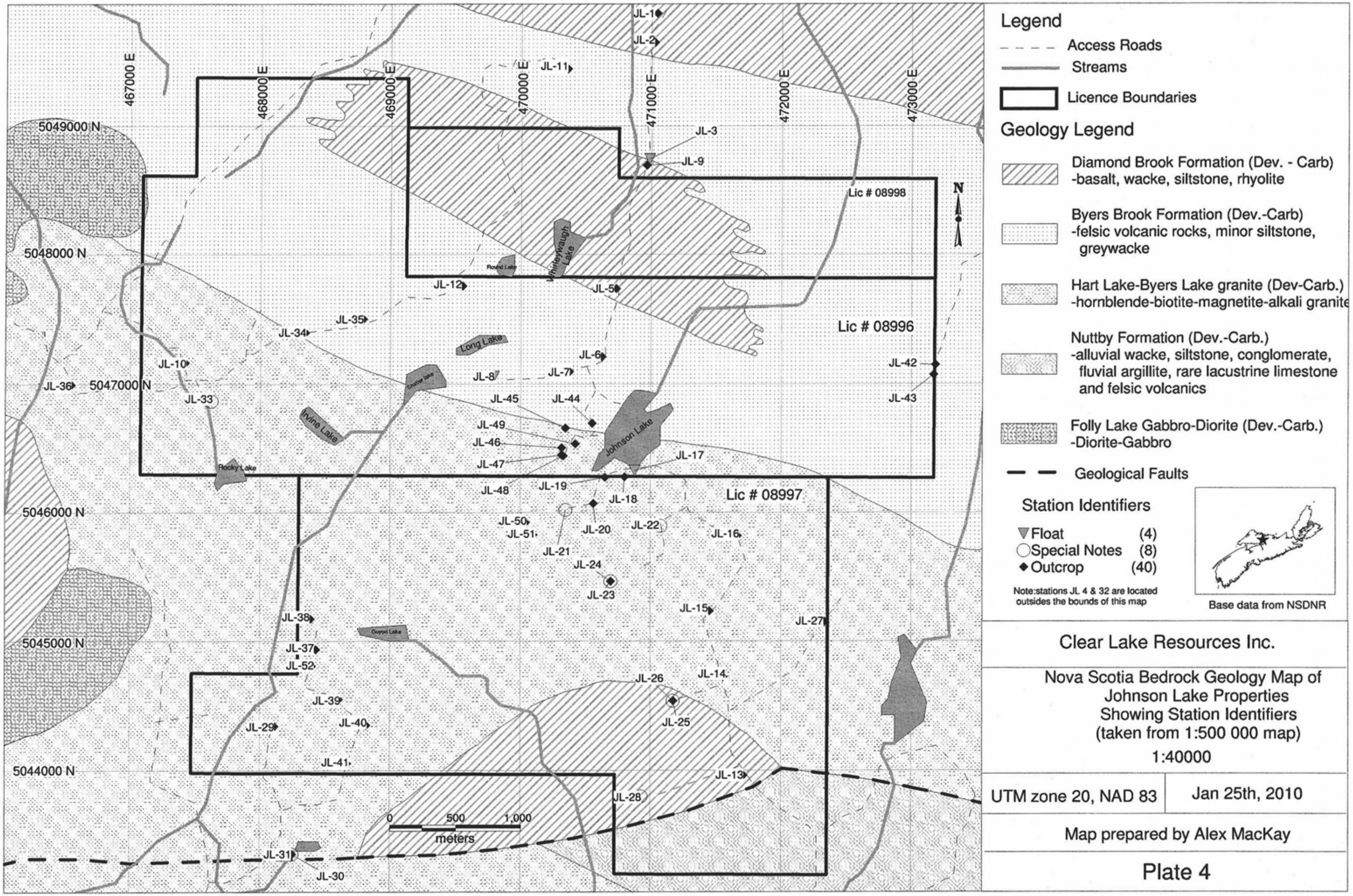
JL-51
JL-52



Legend
Access Roads
Streams
Licence Boundaries
Geology Legend
Diamond Brook Formation (Dev. - Carb)
-basalt, wacke, siltstone, rhyolite
Byers Brook Formation (Dev.-Carb)
-felsic volcanic rocks, minor siltstone, greywacke
Hart Lake-Byers Lake granite (Dev-Carb.)
-hornblende-biotite-magnetite-alkali granite
Nuttby Formation (Dev.-Carb.)
-alluvial wacke, siltstone, conglomerate, fluvial argillite, rare lacustrine limestone and felsic volcanics
Folly Lake Gabbro-Diorite (Dev.-Carb.)
-Diorite-Gabbro
Geological Faults
Station Identifiers
Float (4)
Special Notes (8)
Outcrop (40)
Note:stations JL 4 & 32 are located outsides the bounds of this map
Base data from NSDNR
Clear Lake Resources Inc.
Nova Scotia Bedrock Geology Map of Johnson Lake Properties Showing Station Identifiers (taken from 1:500 000 map)
1:40000
UTM zone 20, NAD 83
Jan 25th, 2010
Map prepared by Alex MacKay
Plate 4
467000 E
468000 E
469000 E
470000 E
471000 E
472000 E
473000 E
5049000 N
5048000 N
5047000 N
5046000 N
5045000 N
5044000 N
Lic # 08998
Lic # 08996
Lic # 08997
N
Round Lake
Whiteywaugh Lake
Long Lake
Irvine Lake
Johnson Lake
Rocky Lake
Guyon Lake
0
500
1,000
meters
JL-1
JL-2
JL-3
JL-5
JL-6
JL-7
JL-8
JL-9
JL-10
JL-11
JL-12
JL-13
JL-14
JL-15
JL-16
JL-17
JL-18
JL-19
JL-20
JL-21
JL-22
JL-23
JL-24
JL-25
JL-26
JL-27
JL-28
JL-29
JL-30
JL-31
JL-33
JL-34
JL-35
JL-36
JL-37
JL-38
JL-39
JL-40
JL-41
JL-42
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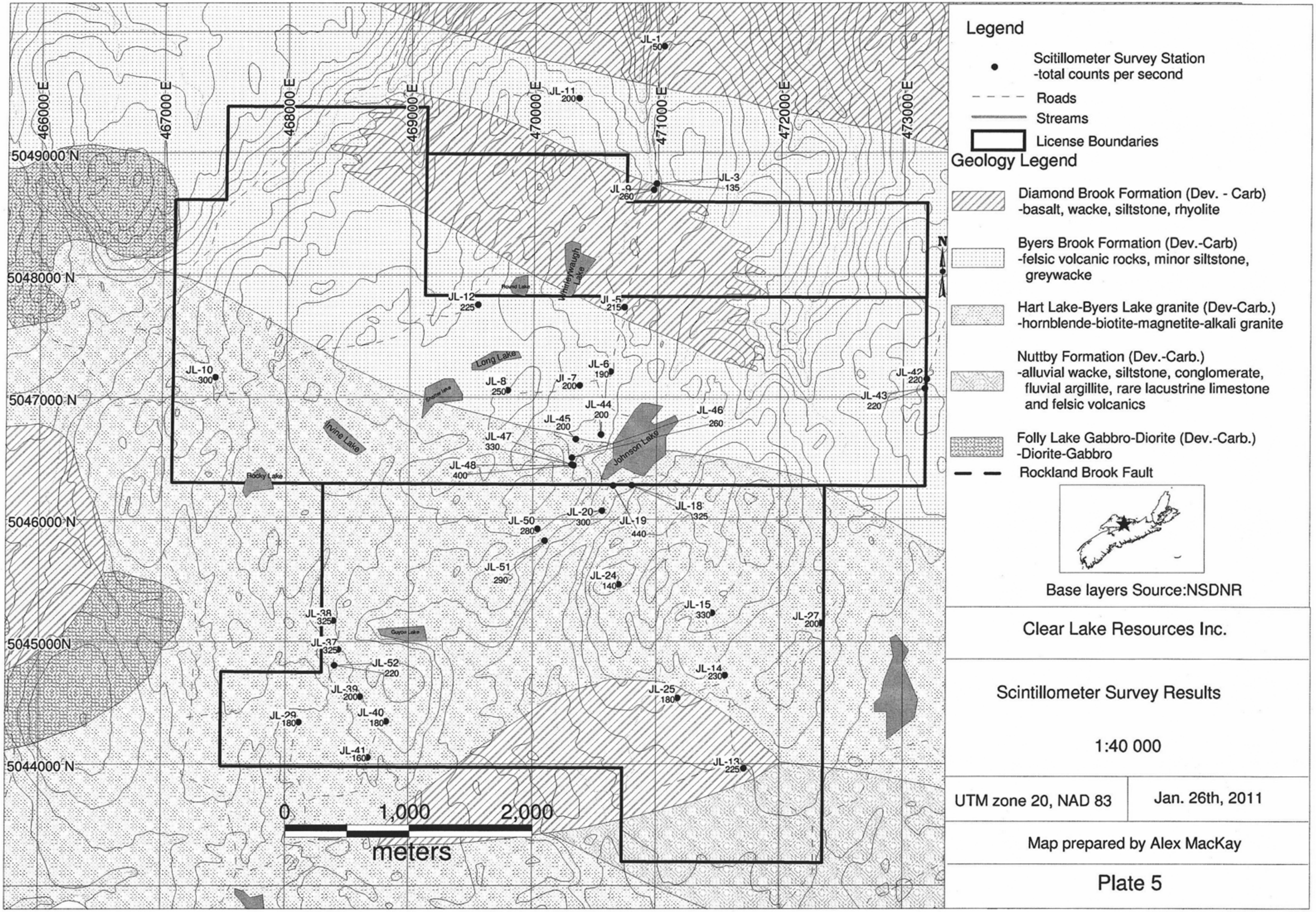
JL-48
JL-49
JL-50
JL-51
JL-52



Clear Lake Resources Inc.

Scintillometer Survey Results

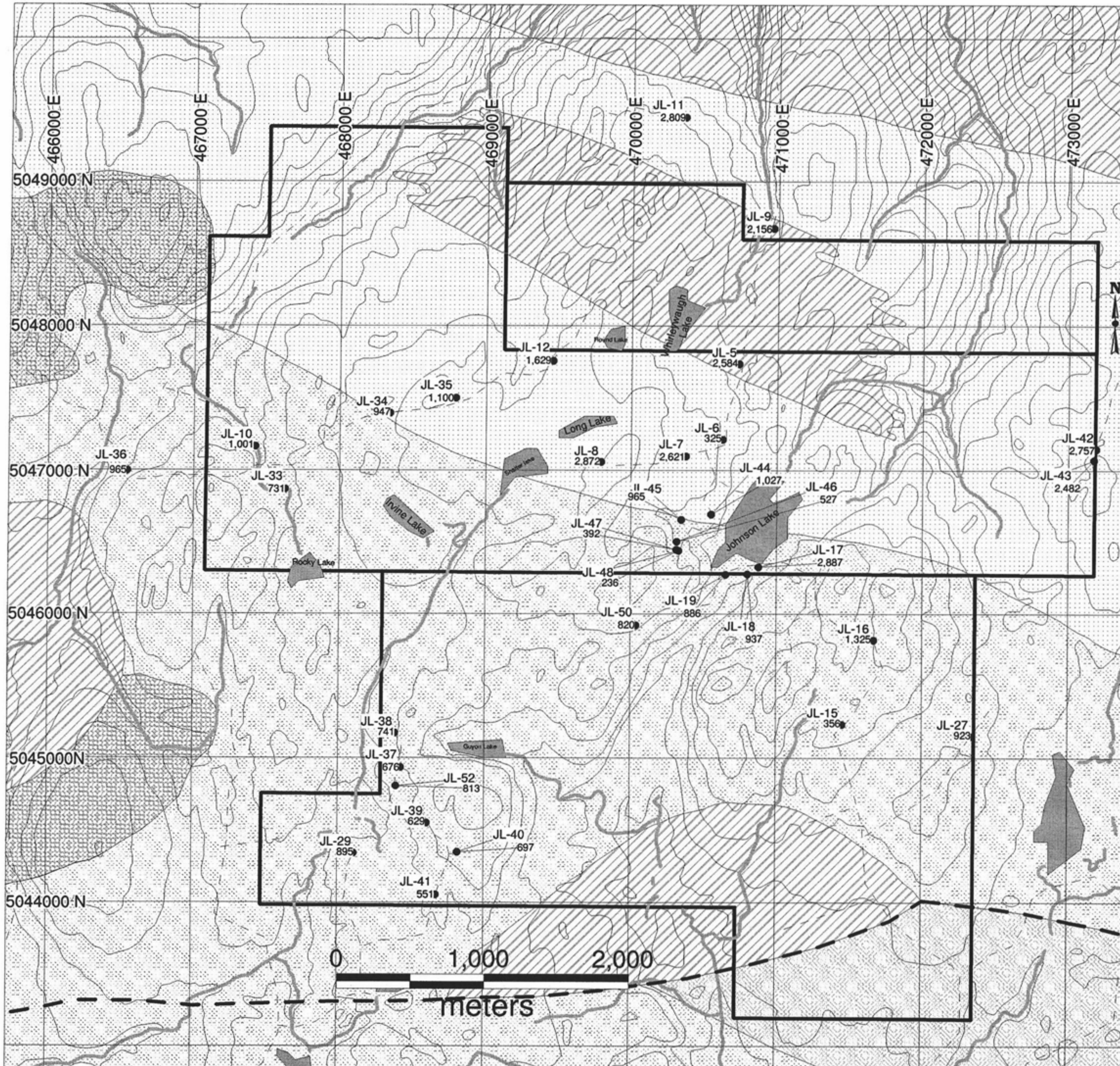
1:40 000

UTM zone 20, NAD 83

Jan. 26th, 2011

Map prepared by Alex MacKay

Plate 5



Legend

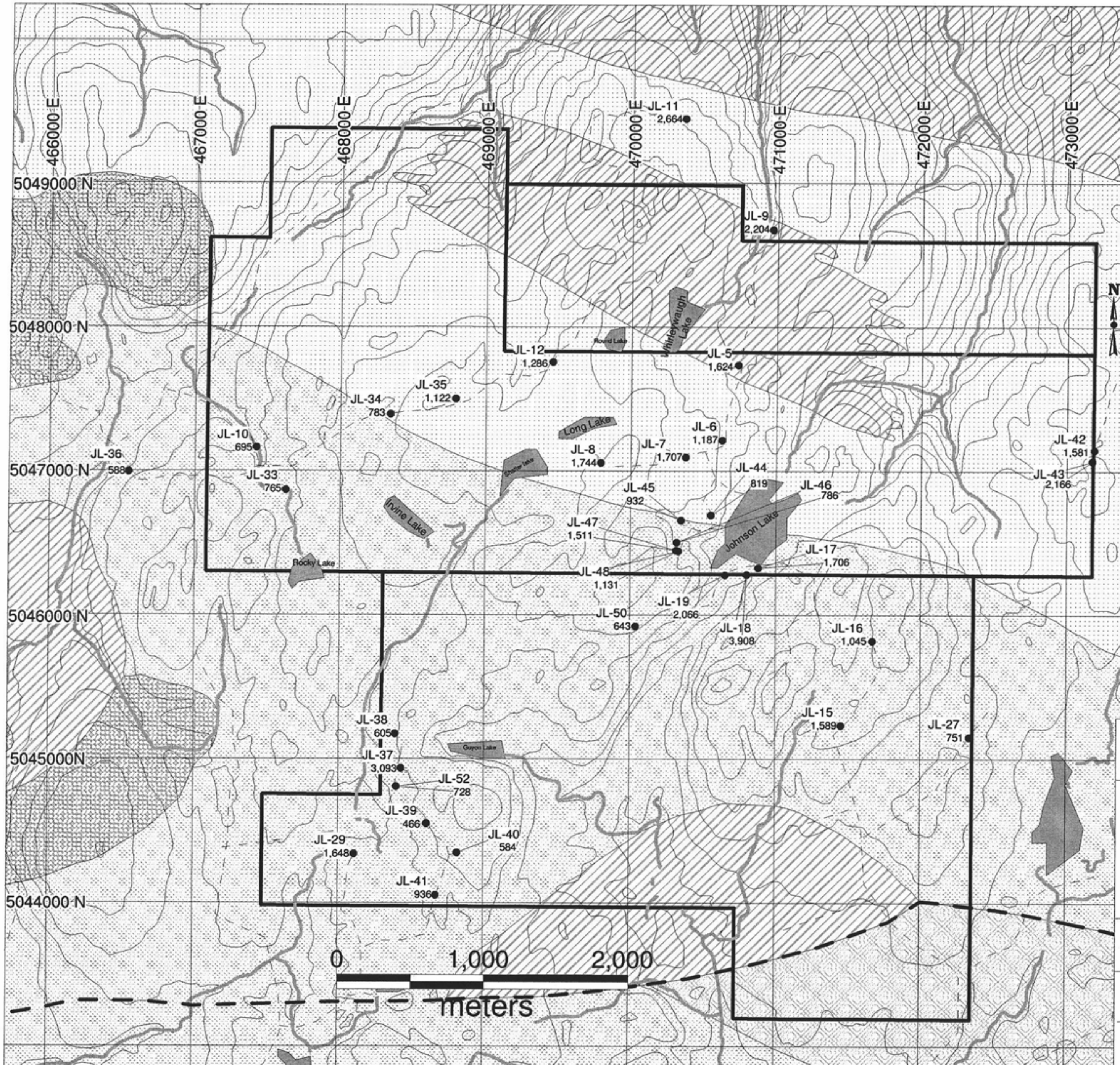
- • XRF Station ID uncalibrated XRF analysis (ppm)
- Roads
- Streams
- License Boundaries

Geology Legend

- Diamond Brook Formation (Dev. - Carb) -basalt, wacke, siltstone, rhyolite
- Byers Brook Formation (Dev.-Carb) -felsic volcanic rocks, minor siltstone, greywacke
- Hart Lake-Byers Lake granite (Dev-Carb.) -hornblende-biotite-magnetite-alkali granite
- Nuttby Formation (Dev.-Carb.) -alluvial wacke, siltstone, conglomerate, fluvial argillite, rare lacustrine limestone and felsic volcanics
- Folly Lake Gabbro-Diorite (Dev.-Carb.) -Diorite-Gabbro
- Rockland Brook Fault

Base layers Source:NSDNR

Clear Lake Resources Inc.	
Uncalibrated XRF Y Results	
1:40 000	
UTM zone 20, NAD 83	Jan. 26th, 2011
Map prepared by Alex MacKay	
Plate 6	



Clear Lake Resources Inc.

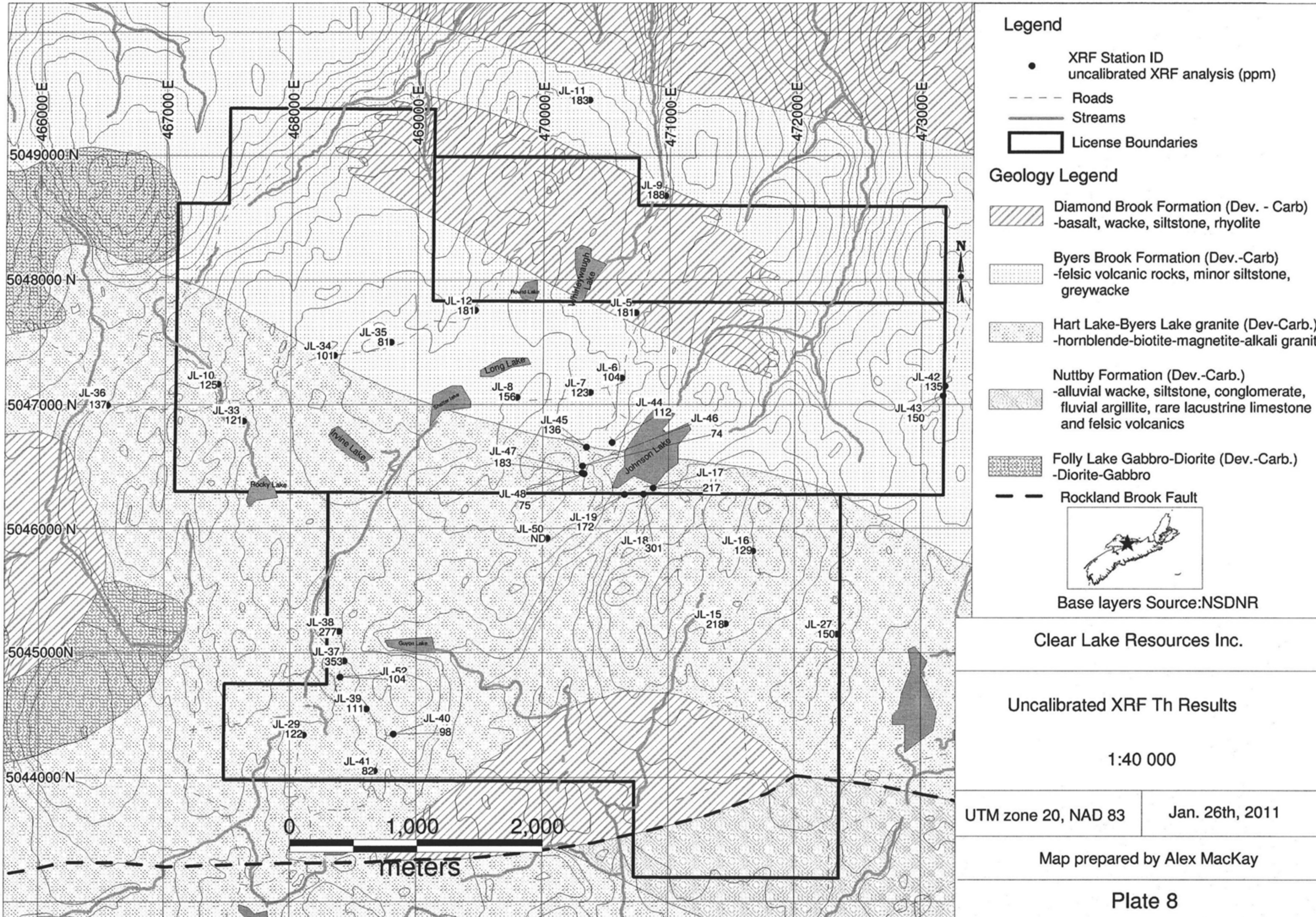
Uncalibrated XRF Nb Results

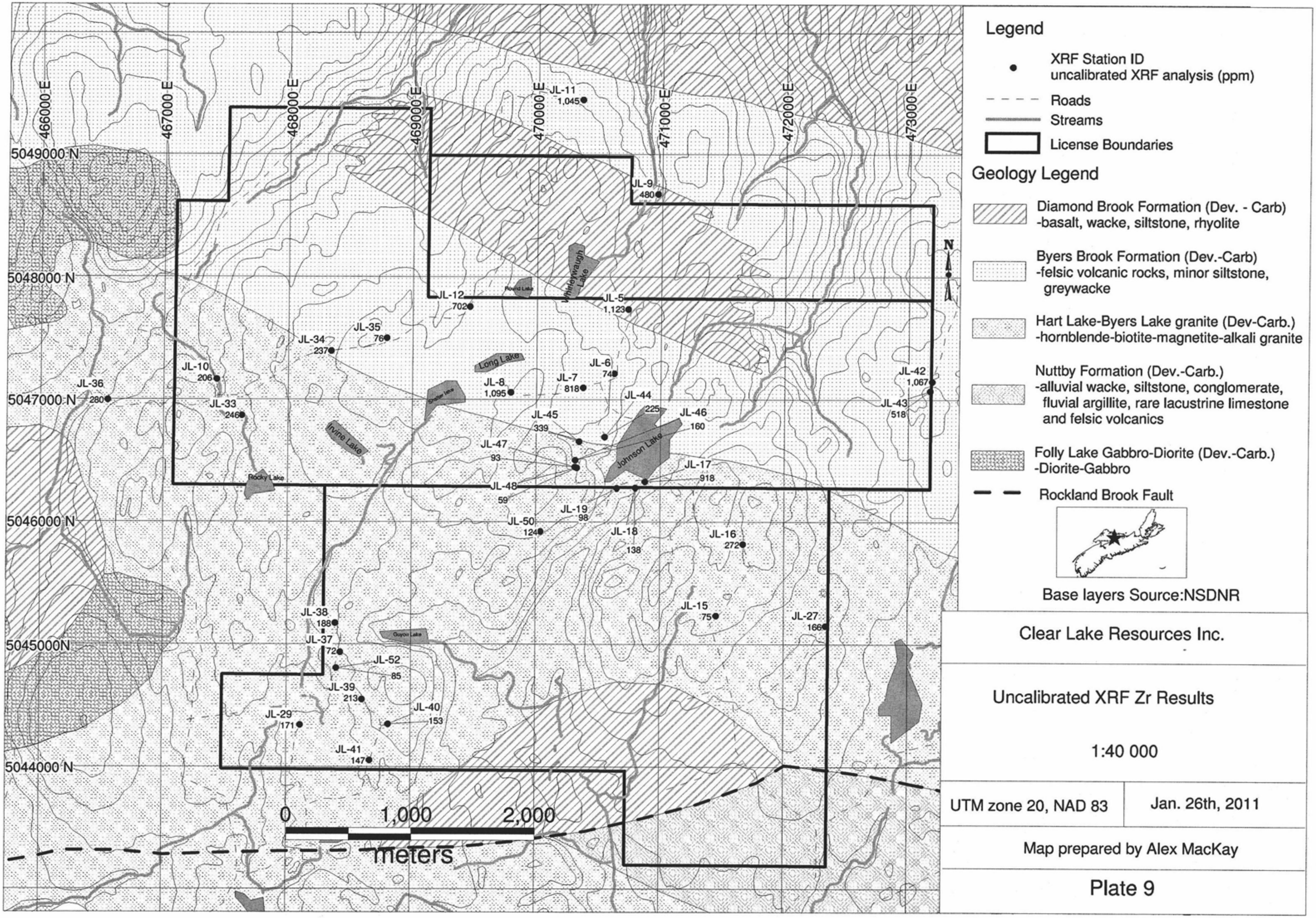
1:40 000

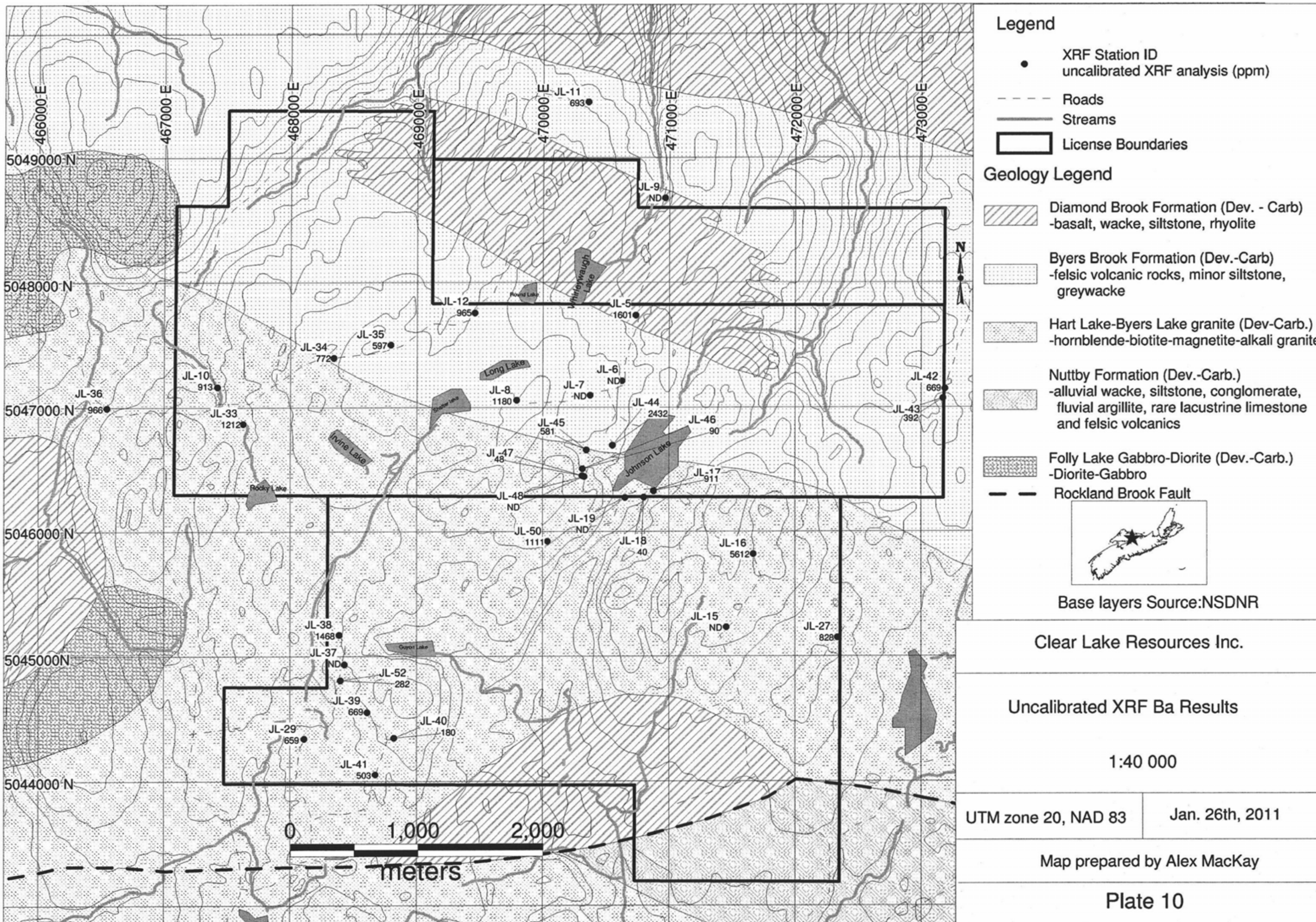
UTM zone 20, NAD 83	Jan. 26th, 2011

Map prepared by Alex MacKay

Plate 7


Legend
XRF Station ID
uncalibrated XRF analysis (ppm)
Roads
Streams
License Boundaries
Geology Legend
Diamond Brook Formation (Dev. - Carb)
-basalt, wacke, siltstone, rhyolite
Byers Brook Formation (Dev.-Carb)
-felsic volcanic rocks, minor siltstone, greywacke
Hart Lake-Byers Lake granite (Dev-Carb.)
-hornblende-biotite-magnetite-alkali granite
Nuttby Formation (Dev.-Carb.)
-alluvial wacke, siltstone, conglomerate, fluvial argillite, rare lacustrine limestone and felsic volcanics
Folly Lake Gabbro-Diorite (Dev.-Carb.)
-Diorite-Gabbro
Rockland Brook Fault
Base layers Source:NSDNR
N
466000 E
467000 E
468000 E
469000 E
470000 E
471000 E
472000 E
473000 E
5049000 N
5048000 N
5047000 N
5046000 N
5045000 N
5044000 N
JL-11 183
JL-9 188
JL-12 181
JL-5 181
JL-35 81
JL-34 101
JL-10 125
JL-36 137
JL-33 121
JL-8 156
JL-7 123
JL-6 104
JL-42 135
JL-43 150
JL-44 112
JL-46 74
JL-45 136
JL-47 183
JL-17 217
JL-48 75
JL-19 172
JL-50 ND
JL-18 301
JL-16 129
JL-15 218
JL-27 150
JL-38 277
JL-37 353
JL-52 104
JL-39 111
JL-29 122
JL-40 98
JL-41 82
Long Lake
Round Lake
Whiteywaugh Lake
Irvine Lake
Johnson Lake
Rocky Lake
Guyon Lake
0 1,000 2,000
meters
Clear Lake Resources Inc.
Uncalibrated XRF Th Results
1:40 000
UTM zone 20, NAD 83
Jan. 26th, 2011
Map prepared by Alex MacKay
Plate 8


Legend
XRF Station ID
uncalibrated XRF analysis (ppm)
Roads
Streams
License Boundaries
Geology Legend
Diamond Brook Formation (Dev. - Carb)
-basalt, wacke, siltstone, rhyolite
Byers Brook Formation (Dev.-Carb)
-felsic volcanic rocks, minor siltstone, greywacke
Hart Lake-Byers Lake granite (Dev-Carb.)
-hornblende-biotite-magnetite-alkali granite
Nuttby Formation (Dev.-Carb.)
-alluvial wacke, siltstone, conglomerate, fluvial argillite, rare lacustrine limestone and felsic volcanics
Folly Lake Gabbro-Diorite (Dev.-Carb.)
-Diorite-Gabbro
Rockland Brook Fault
Base layers Source:NSDNR
Clear Lake Resources Inc.
Uncalibrated XRF Zr Results
1:40 000
UTM zone 20, NAD 83
Jan. 26th, 2011
Map prepared by Alex MacKay
Plate 9
N
466000 E
467000 E
468000 E
469000 E
470000 E
471000 E
472000 E
473000 E
5049000 N
5048000 N
5047000 N
5046000 N
5045000N
5044000 N
0
1,000
2,000
meters
JL-11
1,045
JL-9
480
JL-12
702
JL-5
1,123
JL-35
76
JL-34
237
JL-10
206
JL-36
280
JL-33
246
JL-8
1,095
JL-7
818
JL-6
74
JL-42
1,067
JL-43
518
JL-44
225
JL-46
160
JL-45
339
JL-47
93
JL-17
918
JL-48
59
JL-19
98
JL-50
124
JL-18
138
JL-16
272
JL-15
75
JL-27
166
JL-38
188
JL-37
72
JL-52
85
JL-39
213
JL-40
153
JL-29
171
JL-41
147
Long Lake
Irvine Lake
Johnson Lake
Whiteyvaugh Lake
Rocky Lake



Clear Lake Resources Inc.

Uncalibrated XRF Ba Results

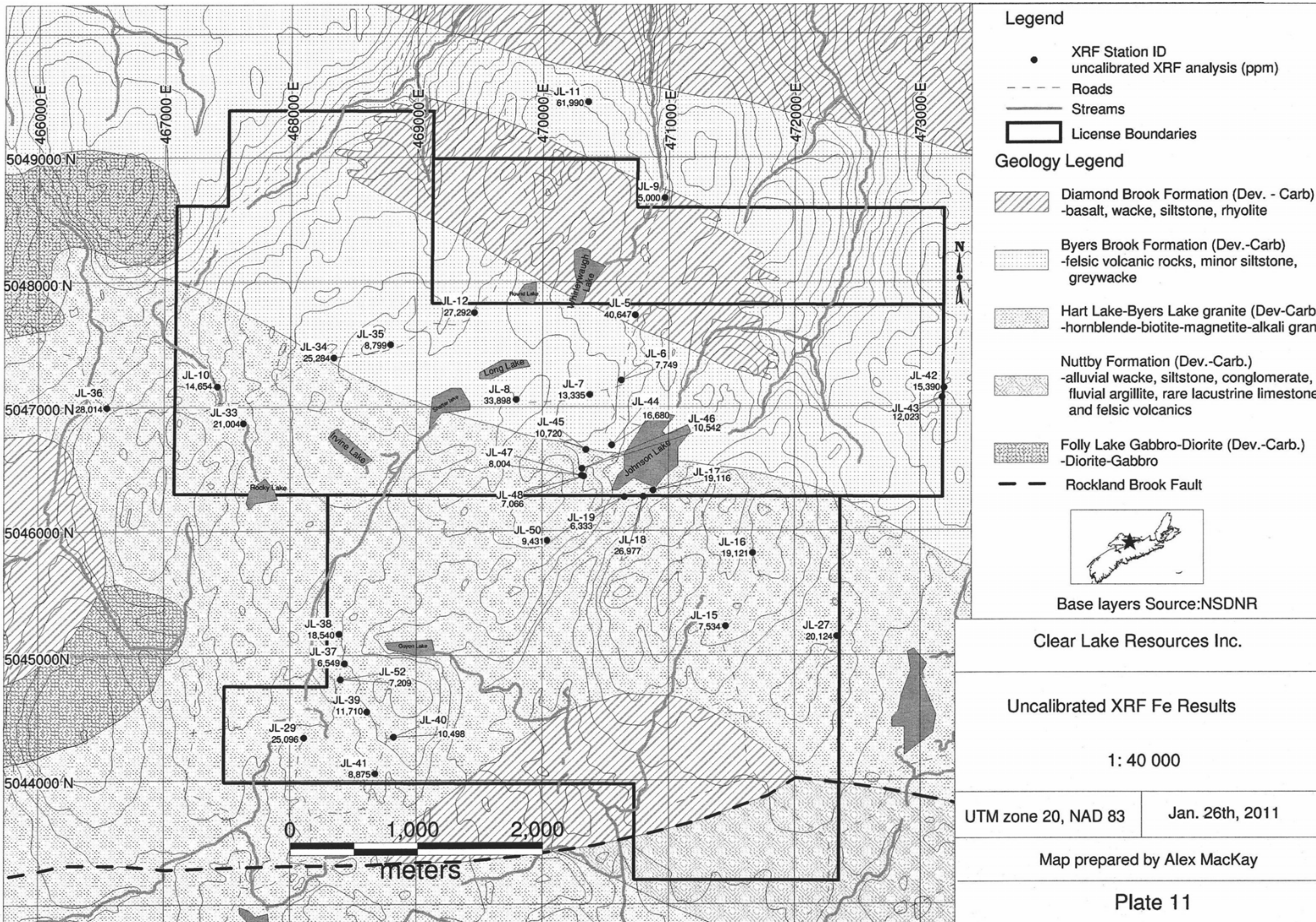
1:40 000

UTM zone 20, NAD 83

Jan. 26th, 2011

Map prepared by Alex MacKay

Plate 10



Clear Lake Resources Inc.

Uncalibrated XRF Fe Results

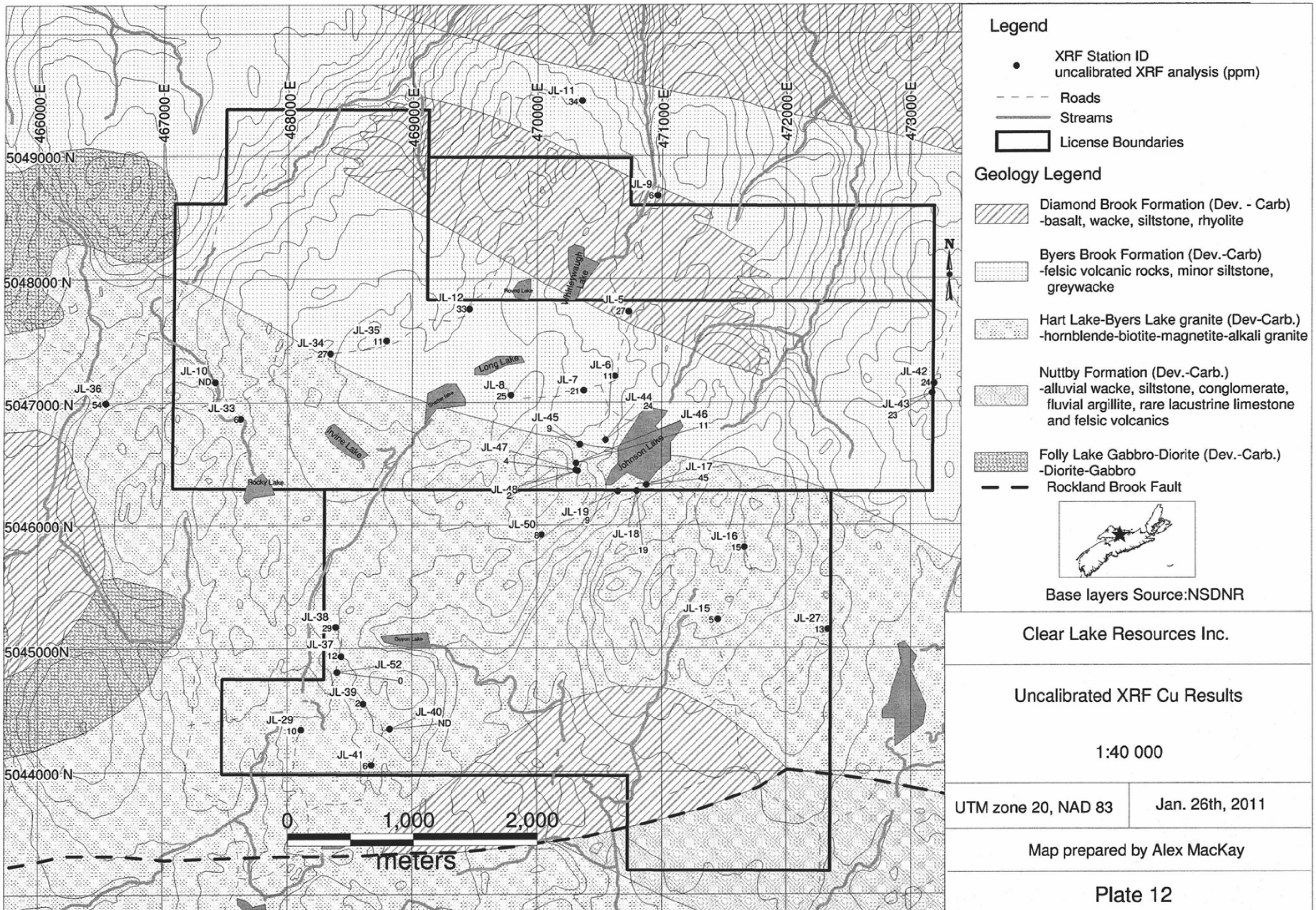
1: 40 000

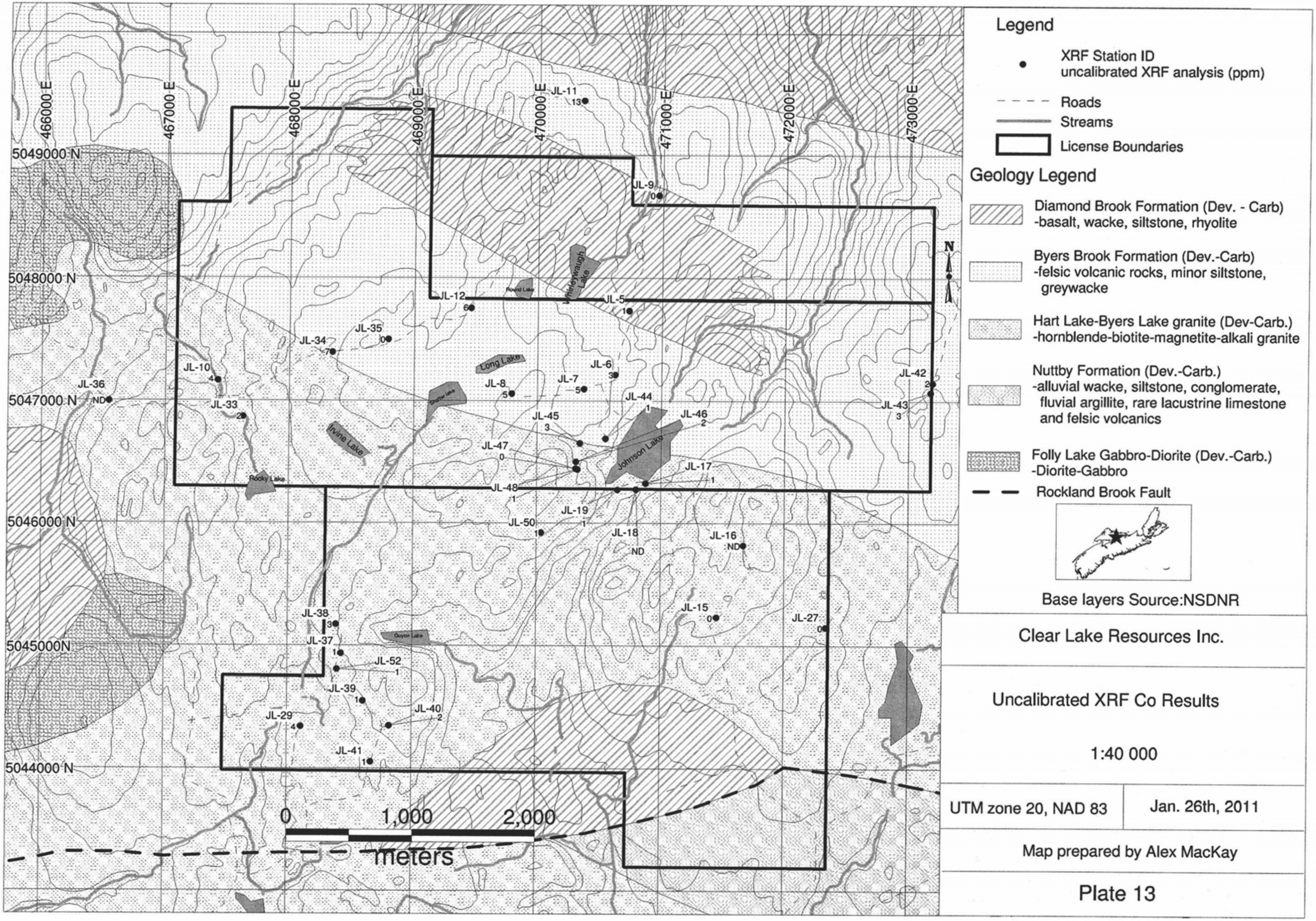
UTM zone 20, NAD 83

Jan. 26th, 2011

Map prepared by Alex MacKay

Plate 11


Legend
XRF Station ID
uncalibrated XRF analysis (ppm)
Roads
Streams
License Boundaries
Geology Legend
Diamond Brook Formation (Dev. - Carb)
-basalt, wacke, siltstone, rhyolite
Byers Brook Formation (Dev.-Carb)
-felsic volcanic rocks, minor siltstone, greywacke
Hart Lake-Byers Lake granite (Dev-Carb.)
-hornblende-biotite-magnetite-alkali granite
Nuttby Formation (Dev.-Carb.)
-alluvial wacke, siltstone, conglomerate, fluvial argillite, rare lacustrine limestone and felsic volcanics
Folly Lake Gabbro-Diorite (Dev.-Carb.)
-Diorite-Gabbro
Rockland Brook Fault
Base layers Source:NSDNR
Clear Lake Resources Inc.
Uncalibrated XRF Cu Results
1:40 000
UTM zone 20, NAD 83
Jan. 26th, 2011
Map prepared by Alex MacKay
Plate 12
0
1,000
2,000
meters
Long Lake
Johnson Lake
Irvine Lake
Rocky Lake
Whitleywaugh Lake


Legend
XRF Station ID
uncalibrated XRF analysis (ppm)
Roads
Streams
License Boundaries
Geology Legend
Diamond Brook Formation (Dev. - Carb)
-basalt, wacke, siltstone, rhyolite
Byers Brook Formation (Dev.-Carb)
-felsic volcanic rocks, minor siltstone, greywacke
Hart Lake-Byers Lake granite (Dev-Carb.)
-hornblende-biotite-magnetite-alkali granite
Nuttby Formation (Dev.-Carb.)
-alluvial wacke, siltstone, conglomerate, fluvial argillite, rare lacustrine limestone and felsic volcanics
Folly Lake Gabbro-Diorite (Dev.-Carb.)
-Diorite-Gabbro
Rockland Brook Fault
Base layers Source:NSDNR
Clear Lake Resources Inc.
Uncalibrated XRF Co Results
1:40 000
UTM zone 20, NAD 83
Jan. 26th, 2011
Map prepared by Alex MacKay
Plate 13
466000 E
467000 E
468000 E
469000 E
470000 E
471000 E
472000 E
473000 E
5049000 N
5048000 N
5047000 N
5046000 N
5045000N
5044000 N
0
1,000
2,000
meters
N
JL-11 13
JL-9 0
JL-12 6
JL-5 1
JL-35 0
JL-34 7
JL-10 4
JL-36 ND
JL-33 2
JL-6 3
JL-7 5
JL-8 5
JL-42 2
JL-43 3
JL-44 1
JL-45 3
JL-46 2
JL-47 0
JL-17 1
JL-48 1
JL-19 1
JL-50 1
JL-18 ND
JL-16 ND
JL-15 0
JL-27 0
JL-38 3
JL-37 1
JL-52 1
JL-39 1
JL-40 2
JL-29 4
JL-41 1
Long Lake
Round Lake
Whitleywaugh Lake
Irvine Lake
Johnson Lake
Rocky Lake
Guyon Lake

NOVA SCOTIA
Natural Resources

Map 11E 11B
Refs.

Form 10 - Statement of Assessment Work Expenditure

(pursuant to the *Mineral Resources Act*, S.N.S. 1990, c. 18, s. 43(1))

(Complete as necessary to substantiate the total claimed.)

Re: Licence No. 08996 Date of issue FEB 2, 2010

Type of Work		Amount Spent
1. Prospecting 4@300 = 1200 4@400=1600 1@500 = 500	9 days	3300
2. Geological mapping 3x500 GEOLOGIST	3 days	1500
3. Trenching/stripping/refilling	___ m^2 / ___ m^3	
4. Assaying & whole rock analysis XRF RENTAL 1 OFFICE SCAN SAMPLES ~~4~~ FIELD DAY = 5x$1500	$7500 #	7500
5. Other ~~laboratory~~ GEOLOGIST 1 DAY RESEARCH/COMPILATION/MAP GENERATION 1 DAY OFFICE SCAN SAMPLES + DATA DOWNLOAD ETC	#	1000
6. Grid: (a) Line cutting (b) Picket setting (c) Flagging — USING GPS UTM (NAD83) VIRTUAL GRID - CALIBRATED TO LANDMARKS	km km km	750
7. Geophysical surveys Airborne:		
(a) EM/VLF	km	
(b) Mag or Grad	km	
(c) Radiometric	km	
(d) Combination	km	
(e) Other	km	
8. Geophysical surveys Ground: 4 DAYS 2 SCINTILLOMETER RENTAL @ $60/DAY EACH 8x60= $480		480
(a) EM/VLF	km	
(b) Seismic soundings	#	
(c) Magnetic/telluric	km	
(d) IP/resistivity	km	
(e) Gravity	km	
(f) Other RADIOMETRIC	km	
9. Geochemical surveys		
(a) Lake, stream, spring (i) Water	samples	
(ii) Sediments	samples	
(b) (i) Rock	samples	
(ii) Core	samples	
(iii) Chips	samples	
(c) (i) Soil	samples	
(ii) Overburden	samples	
(d) Gas	samples	
(e) Biogeochemistry	samples	
(f) Sample collection	samples	
(g) Other XRF SCANNING	5 days	
10. Drilling:		
(a) Diamond (# holes/m)	/ m	
(b) Percussion (# holes/m)	/ m	
(c) Rotary (# holes/m)	/ m	
(d) Auger (# holes/m)	/ m	
(e) Reverse circulation (# holes/m)	/ m	
(f) Logging, supervision, etc.	days	
(g) Sealing (# holes)	#	
11. Other (describe) MILEAGE 1880Km@50¢ = $940 12 FIELD MEALS @$25 = $300	940 + 300 = 1240	1240
Subtotal		15,770.00
Overhead costs 10% OVERHEAD	1577.00	1577.00
12. Secretarial services		
13. Drafting services		
14. Office expenses (rent, heat, light, etc.)		
15. Field supplies		
16. Compensation paid to landowners		
17. Legal fees		
18. Other (describe)		
Subtotal		
Grand total		17,347.00

ONRMEB FEB01'11 13:18

List the names of the persons who conducted the work reported in the previous table and the dates during which the work was performed.

Name	Address	Dates Worked (2010)
ALEX DEBAY $300/DAY PROSPECTOR	19 MARYLYN CT DARTMOUTH NS	NOV 18 DEC 8, 16, 23
ALEX MACKAY $500/DAY GEOLOGIST	PICTOU NS	NOV 13, 18, 29 DEC 8, 16. JAN 25/2011
LINDSAY ALLEN $400/DAY MANAGER/PROSPECTOR	11 RIVER RD TERENCE BAY NS	NOV 18, DEC 8, 16, 23

I hereby certify that the information in this form is true and correct, that it has not before been submitted for assessment work credit and that it is the total of all work conducted on the licence during the past licensed year.

As AUTHORIZED AGENT / OWNER I am duly authorized to make this certification.
(position in company or licensee)

Dated at HALIFAX in the Province of NS on FEB 1, 2011.

Name and address of licensee: CLEAR LAKE RESOURCES INC
11 RIVER RD, TERENCE BAY RIVER, NS B3T 1X2

Signature [signature]

For further information, contact the Registrar of Mineral and Petroleum Titles at 1-902-424-4068.

NOVA SCOTIA
Natural Resources

Map 11E 11B
Refs.

Form 10 - Statement of Assessment Work Expenditure

(pursuant to the *Mineral Resources Act*, S.N.S. 1990, c. 18, s. 43(1))

(Complete as necessary to substantiate the total claimed.)
Re: Licence No. 08997 Date of issue FEB 2, 2010

Type of Work		Amount Spent
1. Prospecting 4@300=1200 1@500=500 4@400=1600	9 days	3300
2. Geological mapping 3x500 GEOLOGIST	3 days	1500
3. Trenching/stripping/refilling	m² / m³	
4. Assaying & whole rock analysis XRF RENTAL 1/2 DAY OFFICE SCAN SAMPLES + 5 FIELD DAYS = 5½ x $1500	$8250 #	8250
5. Other laboratory GEOLOGIST ½ DAY RESEARCH/COMPILATION/MAP GENERATION ½ DAY OFFICE SCAN SAMPLES + DATA DOWNLOAD ETC	#	500
6. Grid: (a) Line cutting (b) Picket setting (c) Flagging } USING GPS VIRTUAL GRID CALIBRATED TO LANDMARKS	km / km / km	750
7. Geophysical surveys Airborne: (a) EM/VLF (b) Mag or Grad (c) Radiometric (d) Combination (e) Other	km / km / km / km / km	
8. Geophysical surveys Ground: 5 DAYS 2 SCINTILLOMETER RENTAL @ $60/DAY EACH 10x60=$600 (a) EM/VLF (b) Seismic soundings (c) Magnetic/telluric (d) IP/resistivity (e) Gravity (f) Other RADIOMETRIC	km / # / km / km / km / km	600
9. Geochemical surveys (a) Lake, stream, spring (i) Water (ii) Sediments (b) (i) Rock (ii) Core (iii) Chips (c) (i) Soil (ii) Overburden (d) Gas (e) Biogeochemistry (f) Sample collection (g) Other: XRF SCANNING	samples (×9); 5½ days	
10. Drilling: (a) Diamond (# holes/m) (b) Percussion (# holes/m) (c) Rotary (# holes/m) (d) Auger (# holes/m) (e) Reverse circulation (# holes/m) (f) Logging, supervision, etc. (g) Sealing (# holes)	/ m (×5); days; #	
11. Other (describe) MILEAGE 1520 Km @ 50¢ = $760 12 FIELD MEALS @ $25 = $300	760 300 1060	1060
Subtotal		15960.00
Overhead costs 10% OVERHEAD	1596.00	1596.00
12. Secretarial services		
13. Drafting services		
14. Office expenses (rent, heat, light, etc.)		
15. Field supplies		
16. Compensation paid to landowners		
17. Legal fees		
18. Other (describe)		
Subtotal		
Grand total		17,556.00

DNRMPT FEB01'11 13:18

List the names of the persons who conducted the work reported in the previous table and the dates during which the work was performed.

Name	Address	Dates Worked (2010)
*ALEX DEBAY 300/DAY PROSPECTOR	19 MARYLYN CT. DARTMOUTH NS	NOV 22, 26 DEC 7, 11 ½DAY
*ALEX MACKAY 500/DAY GEOLOGIST	PICTOU NS	NOV 14, 22, 26 DEC 7, 11. ½DAY JAN 26/2011
*LINDSAY ALLEN 400/DAY MANAGER/PROSPECTOR	11 RIVER RD TERENCE BAY NS	NOV 22, 29 DEC 7, 11

I hereby certify that the information in this form is true and correct, that it has not before been submitted for assessment work credit and that it is the total of all work conducted on the licence during the past licensed year.

As AUTHORIZED AGENT / OWNER I am duly authorized to make this certification.
(position in company or licensee)

Dated at HALIFAX in the Province of NS on FEB 1 2011.

Name and address of licensee: CLEAR LAKE RESOURCES INC
11 RIVER RD, TERENCE BAY RIVER, NS B3T 1X2

Signature [signature]

For further information, contact the Registrar of Mineral and Petroleum Titles at 1-902-424-4068.

NOVA SCOTIA
Natural Resources

Map 11E 11B
Refs.

Form 10 - Statement of Assessment Work Expenditure
(pursuant to the *Mineral Resources Act*, S.N.S. 1990, c. 18, s. 43(1))

(Complete as necessary to substantiate the total claimed.)
Re: Licence No. 08998 Date of issue FEB 2, 2010

Type of Work		Amount Spent
1. Prospecting 1@300 1@400	2 days	700
2. Geological mapping 1@500 GEOLOGIST	1 days	500
3. Trenching/stripping/refilling	__ m² / __ m³	
4. Assaying & whole rock analysis XRF RENTAL 1/2 DAY OFFICE SCAN SAMPLES + 1 FIELD DAY = 1 1/2 x 1500	2250 #	2250
5. Other laboratory GEOLOGIST 1/2 DAY RESEARCH/COMPILATION/MAP GENERATION 1/2 DAY OFFICE SCAN SAMPLES + DATA DOWNLOAD ETC	__ #	500
6. Grid: (a) Line cutting (b) Picket setting (c) Flagging } USING GPS VIRTUAL GRID - CALIBRATED TO LANDMARKS	 __ km __ km __ km	750
7. Geophysical surveys Airborne: (a) EM/VLF (b) Mag or Grad (c) Radiometric (d) Combination (e) Other __	 __ km __ km __ km __ km __ km	
8. Geophysical surveys Ground: 1 DAY 2 SCINTILLOMETER (a) EM/VLF RENTAL @ $60/DAY EACH (b) Seismic soundings (c) Magnetic/telluric 2x60 = $120 (d) IP/resistivity (e) Gravity (f) Other __	 __ km __ # __ km __ km __ km __ km	120
9. Geochemical surveys (a) Lake, stream, spring (i) Water (ii) Sediments (b) (i) Rock (ii) Core (iii) Chips (c) (i) Soil (ii) Overburden (d) Gas (e) Biogeochemistry (f) Sample collection (g) Other __	 __ samples __ samples __ samples __ samples __ samples __ samples __ samples __ samples __ samples __ days	
10. Drilling: (a) Diamond (# holes/m) (b) Percussion (# holes/m) (c) Rotary (# holes/m) (d) Auger (# holes/m) (e) Reverse circulation (# holes/m) (f) Logging, supervision, etc. (g) Sealing (# holes)	 __ / __ m __ / __ m __ / __ m __ / __ m __ / __ m __ days __ #	
11. Other (describe) MILEAGE 980KM @ 50¢ = $490 3 FIELD MEALS @ $25 = $75	490 75 565	565
Subtotal		5385.00
Overhead costs 10% OVERHEAD	538.50	538.50
12. Secretarial services		
13. Drafting services		
14. Office expenses (rent, heat, light, etc.)		
15. Field supplies		
16. Compensation paid to landowners		
17. Legal fees		
18. Other (describe)		
Subtotal		
Grand total		5923.50

FEB 01'11 13:18

List the names of the persons who conducted the work reported in the previous table and the dates during which the work was performed.

Name	Address	Dates Worked (2010)
ALEX DEBAY $300/DAY PROSPECTOR	19 MARYLYN CT DARTMOUTH NS	NOV 30
ALEX MACKAY $500/DAY GEOLOGIST	PICTOU NS	NOV 14 (½ DAY) NOV 30 JAN 26 (½ DAY) 2011
LINDSAY ALLEN $400/DAY MANAGER/PROSPECTOR	11 RIVER RD TERENCE BAY NS	NOV 30
		~~NOV 30~~ la.

I hereby certify that the information in this form is true and correct, that it has not before been submitted for assessment work credit and that it is the total of all work conducted on the licence during the past licensed year.

As AUTHORIZED AGENT / OWNER I am duly authorized to make this certification.
(position in company or licensee)

Dated at HALIFAX in the Province of NS on FEB 1, 2011.

Name and address of licensee: CLEAR LAKE RESOURCES INC
11 RIVER RD, TERENCE BAY RIVER, NS B3T 1X2

Signature L.A.

For further information, contact the Registrar of Mineral and Petroleum Titles at 1-902-424-4068.