DIAMOND DRILL CORE LOG-SUMMARY SHEET

Project:Loveland NE PN 9040Date:February 14 to March 7, 2001Logged by:Robert CalhounDrilling Co:Colbert Drilling

2.21759 DDH: ELW01-1

Claim Number: 1222919

SURVEYS: Acid Test

COLLAR LOCATION: L600E/160N

UTM COORDINATES

GRID COORDINATES

Setup:

<u>Depth</u> <u>0.0m</u> <u>120.0m</u> <u>246.0m</u> <u>Azimuth</u> <u>Dip</u> <u>215°</u> <u>-51°</u> <u>-47°</u> <u>-42°</u> Northing: Easting: Elevation: 0.0 meters TD: 333.0 meters 160N 600E

DRILLING DATES Started: February 14, 2001 Finished: March 7, 2001



42A12NE2029 2.21759 LOVELAND

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DIAMOND DRILL SUMMARY LOG

Project: Loveland NE PN 9040 Date: February 14, 2001 Logged By: R. F. Calhoun DDH: ELW01-1

GEOLOGIC SUMMARY

FROM	TO	DESCRIPTION]	NTERVAI		SIC	INIFICAN	IT ASSAY	AVERAG	iES
(m)	(m)		From (m)	To (m)	Width (m)	Cu ppm	Zn ppm	Pb ppm	Ag g/t	Au ppb
0.0	28,9	Overburden							£	FE
28.9	34.4	Intermediate Volcanic								ĺ
34.4	42.0	Intermediate to Felsic Volcanic								
42.0	49.9	Intermediate Tuff - Graphite								
49.9	55.2	Argillite/Tuff/Graphite								
55.2	106.3	Mafic Dyke/Diabase								ł
106,3	115.9	Gabbro/Mafic Dyke								ł
115.9	124.7	Mafic Volcanics								1
124.7	136.2	Intermediate Tuff/Graphite								4
136.2	162.8	Mafic Volcanic								1
162.8	169.5	Mafic Volcanic						}		ł
169.5	191.8	Mafic Volcanic	185.2	186.4	1.2	967	3900	12	4.3	10
191.8	194.8	Mafic Tuff								
194.8	202.1	Mafic Tuff/Quartz Veining/Graphite	199.5	200.5	1.0	3250	441	62	1.2	nil
202.1	210.5	Intermediate Lapilli Tuff								l
210.5	252.1	Intermed. to Felsic Crystal Tuff/Lapilli								
252.1	272.0	Intermediate to Felsic Tuff/Crystal Tuff								1
272.0	285.1	Crystal Tuff/Lapilli Tuff								
285.1	291.9	Ash Tuff - Volcanic								(
291.9	308.9	Crystal Tuff/Lapilli Tuff								
308.9	320.1	Intermediate Flow								1
320.1	333.0	Diorite								
	333.0	End of Hole								

COMMENTS

Property: Loveland NE PN 9040	Hole Number: <u>ELW01-1</u>	Claim Number: <u>1222919</u>
Location: <u>L600E/160N</u>	Final Depth: <u>333 meters</u>	Logged By: <u>Robert Calhoun</u>
Azimuth: Grid South (215°)	Dates Drilled: February 14 to March 7, 2001	Drilled By: Colbert Drilling
Dip: <u>-51°</u>	Dates Logged: February 17 to March 8, 2001	Signature

							Assay	S			
From	То	Description	Sample #	From	То	Length (meter)	Cu ppm	Zn ppm	Pb ppm	Ag ppm	Au ppb
0.0	28.9	Overburden									
28.9	34.4	Intermediate Volcanic -fine grained, pale green grey, locally amygduloidal with white feldspars. Unit is quite massive except for minor brecciation at 32.2-32.8m with sub rounded breccia pieces, no discernible foliation.									
34.4	42.0	Intermediate to Felsic Volcanic -fine grained, light grey green especially towards end of section. This unit is fairly massive but contains vesicules weakly orientated, flattened with dark colour, soft, possible chlorite fillings. There are random calcite veinlets and minor calcite fracture fillings and "nodules" (small). Sulfides of pyrite to 5% occur from 37.1-38.5m. 40.8-42.0m -unit is pale to medium green, granular, highly broken.	52585	37.0	38.2	1.2	113	66	1	0.1	10
42.0	49.9	Intermediate Tuff - Graphite -fine grained, light to medium green to green grey, fractured with graphitic fillings with minor to 1% pyrite as fine laminae and disseminations. The unit is highly fracture, broken and locally crushed, especially in high graphite sections. Locally the graphite/argillite is dominant with nodular pyrite infrequent.									

							Assa	ys			
From	То	Description	Sample #	From	То	Length (meter)	Cu ppm	Zn ppm	Pb ppm	Ag g/ton	Au ppb
49.9	55.2	Argillite/Tuff/Graphite -the fine ash tuff, medium green to green beige is interbedded with black graphite, graphitic argillite. Sulfides of pyrite occur in each unit as disseminated, nodules in argillite and fine laminae as fracture fillings. Minor limonite occurs in fractures, vugs. 50.3-51.4m -graphitic argillite 1-2% pyrite 52.9-55.2m -50% tuff/50% graphitic argillite	52586 52587 52588 52589	49.9 50.3 51.4 52.9	50.3 51.4 52.9 55.2	0.4 1.1 1.5 2.3	172 142 85 143	679 1250 169 365	32 48 11 7	0.3 0.4 0.2 0.2	nił 21 5 nil
55.2	106.3	Mafic Dyke/Diabase -medium grained, medium to dark grey green, upper contact fine grained, chilled, unit is competent with local broken sections. Unit is magnetic locally weak to moderate, has minor feldspar "popcorns" more easily seen when core is dry. The unit remained equigranular to 102.5m and became chilled to 106.3m, darker in colour and fine grained. There are an increased number of pale green saussauritized feldspar "popcorns" in lower section.									
106.3	115.9	Gabbro/Mafic Dyke -medium grained, green grey gabbro interlayered with dark grey to blackish fine grained dyke as above. The dyke makes sharp contacts with gabbro at 60° to core axis. Dyke sections range from 30cm to 1m. Nil sulfides to trace in gabbroic section.									
115.9	124.7	Mafic Volcanics -fine to medium grained, light to medium green. Contact area has 50cm white quartz and carbonate vein at 40° to core axis, nil sulfides. Unit is finely laminated to foliated (55°) to 117.25m. The unit becomes medium grained, mottled with dark green chloritoid in pale green matrix (50:50). There are minor carbonate veins <1cm in width and local feldspar rich veinlets.									
124.7	136.2	Intermediate Tuff/Graphite -fine grained, medium to light green, massive to weakly foliated. The unit is increasingly argillite/graphite rich as small disrupted veinlets with pyrrhotite and/or pyrite									

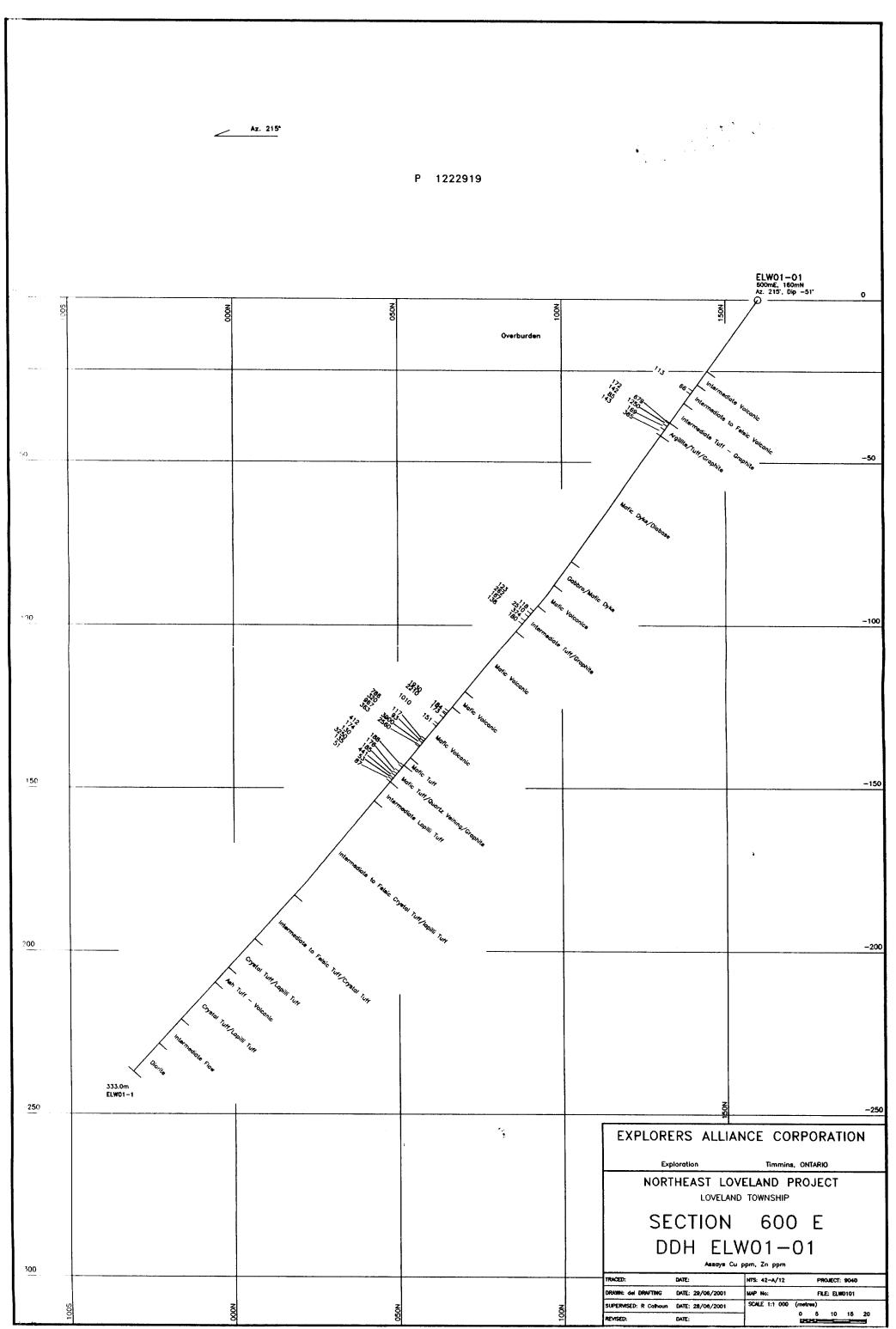
	Assays										
From	То	Description	Sample #	From	То	Length (meter)	Cu ppm	Zn ppm	Pb ppm	Ag g/ton	Au ppb
		sulfides(pyrrhotite dominated). There are bands, layers of graphite argillite below 128.3m.	52590	127.0	128.3	1.3	123	118	1	0.1	2
		128.3-129.6m -graphite/argillite with 5-8% pyrrhotite/pyrite as nodules/laminae	52591	128.3	129.6	1.3	262	2510	8	0.3	3
		129.6-130.0m -50% graphite/argillite 1-2% sulfides 130.0-131.1m -tuff 1-2% sulfides 131.1-131.5m -tuff/graphitic argillite 1-2% pyrite	52592	129.6	131.5	1.9	167	374	1	0.1	9
		minor pyrrhotite. Contacts lower 60° to core axis. 131.5-133.6m -tuff with minor graphite in laminae and two veins 6cm and 8cm wide. Sulfides <1% overall mainly in graphite sections. There are small massive pyrrhotite nodules locally. Graphite/argillite occurs as disseminations, probable grains in lower part of unit.	52593	131.5	132.9	1.4	138	180	1	0.1	5
136.2	162.8	Mafic Volcanic -fine to medium grained, medium to light green mottled in upper section as above to feldspar porphyritic below 141.5m. The porphyritic section has white feldspar phenocrysts to crystals 1mm in size. To 144.8m, the feldspar rich/finer tuff alternate but below 144.8 the feldspar porphyritic nature is dominant to exclusive. The feldspars are 15-20% of section to 152m and occur in "layers" to 162.8m.									
162.8	169.5	Mafic Volcanic -fine to medium grained, medium to locally dark green with chloritoid green possible amygdules. There are local pyrite and pyrrhotite sulfides over <10cm to 3% as at 163.5m. 166.2-168.0m -80% quartz +/- calcite veining with two generations of quartz white milky and greyish clear. Minor pyrrhotite/chalcopyrite noted at 167.0m. 168.0-170.5m -10-15% quartz +/- calcite									
169.5	191.8	Mafic Volcanic -fine to medium grained, medium green possible tuffaceous with feldspar phenocrysts as above locally. There are "layers" with pyrite/pyrrhotite randomly distributed through the section. Locally there is chalcopyrite as blebs, grains and minor stringers									

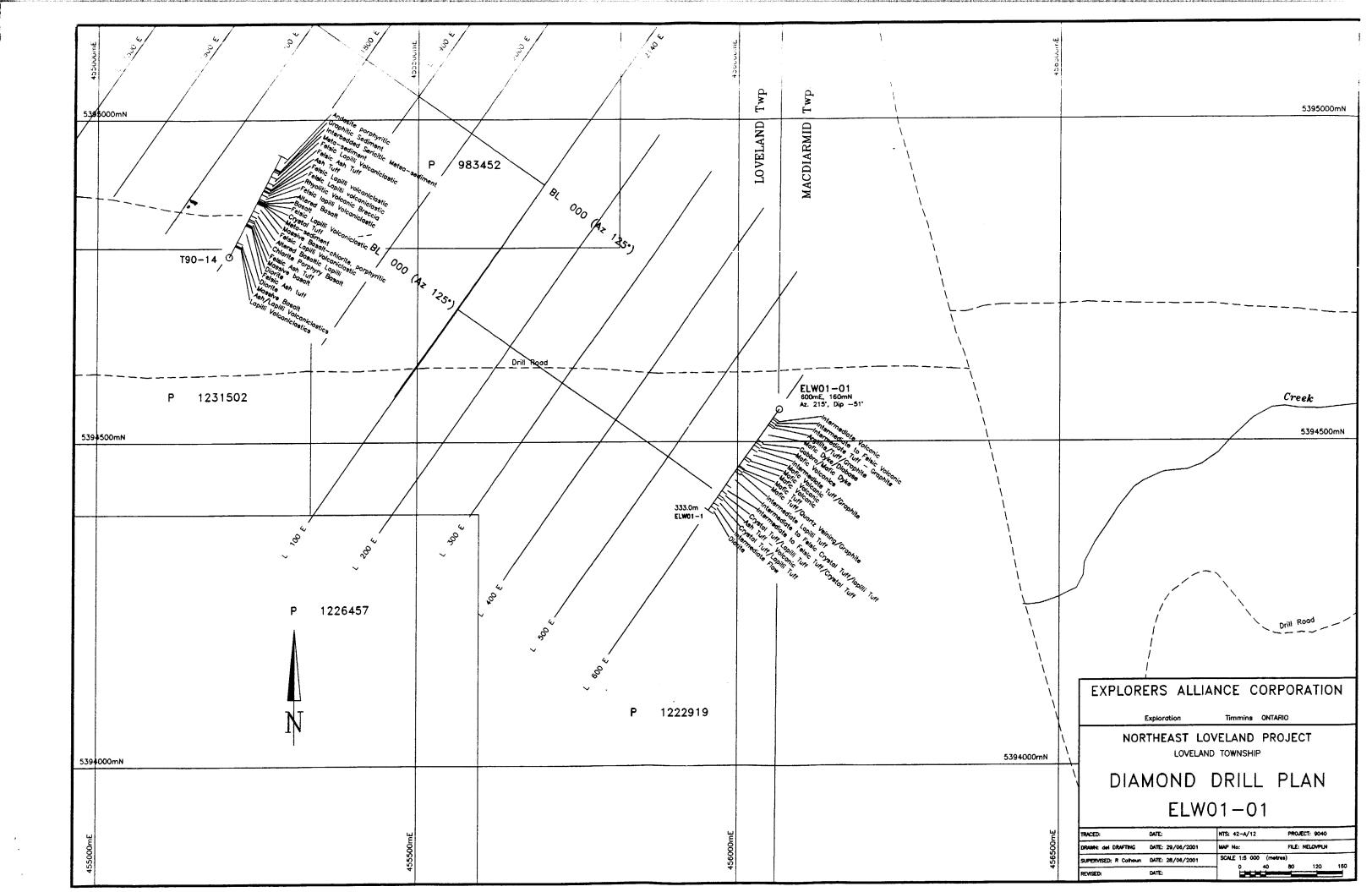
							Assa	ys			
From	То	Description	Sample #	From	То	Length (meter)	Cu ppm	Zn ppm	Pb ppm	Ag g/ton	Au ppb
		generally <0.5% 171.5-172.4m -5-8% pyrite/pyrrhotite as fracture fillings, disseminations and small laminae with <0.5%chalcopyrite. Black chlorite is a major component	52594	171.5	172.4	0.9	1930	184	1	1.2	7
		of the section. 172.9-174.2m -5% sulfides in black chlorite as above. Chalcopyrite is <0.5% except from 174.0- 174.1m where chalcopyrite is 2-3%. 174.2-1770m -patchy sulfides to 3-5% over <10cm.	52595	172.9	174.2	1.3	2210	173	1	['] 1.7	nil
		177.0-177.9m -5-8% pyrite, pyrrhotite as above with minor chalcopyrite 177.9-183.7m -patchy sulfides as disseminations and occasional blobs to 0.5cm. There is black chlorite in this section, random. Unit is locally brecciated.	52596	177.0	177.9	0.9	1010	151	1	0.5	2
		183.7-184.5m -15% pyrite, pyrrhotite with minor chalcopyrite. The sulfides may be in filling around breccia fragments.	52597	183.7	184.5	0.8	786	117	7	0.5	2
		184.5-185.3m -brecciated with sulfides and black chlorite in fillings. Breccia fragments are pale green altered.	52598	184.5	185.2	0.7	320	93	1	0.5	nil
		185.3-186.4m -Graphite/graphitic argillite with fine laminae of pyrite, minor quartz carbonate. Contact (lower) is 68° to core axis.	52599	185.2	186.4	1.2	967	3900	12	4.3	10
		186.4-186.9m -tuff fine laminae of pyrite, pyrrhotite, lesser sphalerite, red brown to tan and minor chalcopyrite. 186.9-191.8m -fine tuff, medium green grey to sericitic green with 10% quartz carbonate veining randomly orientated	52600	186.4	186.9	0.5	363	2560	3	0.8	3
191.8	194.8	Mafic Tuff -fine grained, medium green mafic matrix, hosting feldspar crystals to 2mm, white, angular. The unit is soft with minor quartz veining.									
194.8	202.1	Mafic Tuff/Quartz Veining/Graphite -this is a mixed section possibly including a fault zone. The tuff section is pale green, fine grained with dark fragments, lapilli interbedded with graphitic argillite/ graphite and quartz veins.									

							Assa	ys			
From	То	Description	Sample #	From	То	Length (meter)	Cu ppm	Zn ppm	Pb ppm	Ag g/ton	Au ppb
		195.0-195.5m -quartz vein fractured with graphite fillings fractures. 195.5-195.8m -graphite/argillite, minor sulfides 195.8-197.8m -tuff	52651	195.0	195.8	0.8	412	188	7	2.8	9
		197.8-198.6m -graphite/argillite mixed with tuff. Highly broken, crushed	52652	197.5	198.6	1.1	174	176	12	. 0.9	7
		198.6-200.5m -this section is quartz veins, minor tuff/graphite. The quartz has fragments of graphitic argillite, tuff possible tourmaline and sulfides of pyrite, pyrrhotite and chalcopyrite. There is abundant chalcopyrite from 199.5-200.5m up to 2% overall and 3- 4% over 10cm. Remainder of section has <0.5 chalcopyrite	52653 52654	198.6 199.5	199.5 200.5	0.9 1.0	130 3250	185 441	41 62	0.4 1.2	5 nil
		200.5-201.2m -tuff with minor quartz veining 201.2-202.1m -80% white quartz veining with possible tourmaline, minor graphite and minor sulfides	52655 52656	200.5 201.2	201.2 202.1	0.7 0.9	135 51	53 87	1 3	0.3 0.2	5 3
202.1	210.5	Intermediate Lapilli Tuff -fine grained, light to medium green to green grey with fine lapilli local fracturing and local feldspar crystals to phenocrysts. The unit has minor quartz carbonate veining white to grey. The unit is quite competent.									
210.5	252.1	Intermediate to Felsic Crystal Tuff/Lapilli Tuff -fine grained, light to locally medium green grey crystal tuff, feldspar to 3-4m, quartz. This tuff contains lapilli, pale grey to dark grey blackish probable rhyolitic, locally porphyritic lapilli. The lapilli are generally ,1cm dark grey and <0.5cm pale grey to beige. There is no obvious sorting although the lapilli appear to get larger down hole. 226.5-228.6m -lapilli are larger , dark grey to 2cm generally with blocks to 10cm 228.6-232.1m -unit becomes dark grey green probable chlorite and 10% quartz +/- carbonate veins to veinlets. 234.5-238.0m -coarse crystal tuff, rhyolitic in nature with occasional lapilli to 2cm, dominant <0.5cm grey beige to medium grey. 238.0-242.8m -fine tuff pale green, massive occasional quartz +/- carbonate veinlets.									

			Assays								
From	То	Description	Sample #	From	То	Length (meter)	Cu ppm	Zn ppm	Pb ppm	Ag g/ton	Au ppb
		242.8-252.1m -crystal tuff/lapilli tuff with grey beige small lapilli.									
252.1	272.0	Intermediate to Felsic Tuff/Crystal Tuff -fine grained, medium green grey local dark green grey, weakly to moderately chloritic tuff. Tuff is generally fine tuff with lapilli to <1cm dark grey hard to light grey beige. There are short sections with coarser lapilli to 2cm in width, grey porphyritic, hard. Some sections are crystal tuff with white feldspars to 4mm, possible porphyroblasts. 259.0-261.9m -felsic tuff, dark grey to medium grey green with several lapilli >4cm in size, light grey porphyritic with white feldspars. 261.9-265.7m -fine tuff ash with minor feldspar, weakly to locally moderately sericitic as at lower contact. 265.7-266.7m -coarse tuff with fragments, lapilli to 3cm. 266.7-272.0m -finer ash tuff with small lapilli to <3mm generally rarely greater than 0.5cm.									
272.0	285.1	Crystal Tuff/Lapilli Tuff -medium green to pale green, dominated by feldspar quartz crystals and small grey beige lapilli. There are short sections of fine lesser concentrated crystals over <1-1.5m									
285.1	291.9	Ash Tuff - Volcanic -fine grained, pale to medium green with local dark green to blackish chlorite generally in fractures and small "amygdules". Unit is of intermediate composition.									
291.9	308.9	Crystal Tuff/Lapilli Tuff -fine to medium matrix, colour variable from light green grey to dark medium green, green grey. The unit is a coarse crystal tuff with feldspars weakly saussauritized and lapilli locally up to 10cm blocks. The coarser lapilli are from 299.2-303.4m. There is a weakly laminated section from 303.4-304.9m. Feldspars are more highly saussauritized from 304.9-308.9m. Lower contact is.									

							Assa	ys			
From	То	Description	Sample #	From	То	Length (meter)	Cu ppm	Zn ppm	Pb ppm	Ag g/ton	Au ppb
308.9	320.1	marked by dark chlorite vein at 80° to core axis Intermediate Flow									
		-fine grained, medium grey green possible pillows marked by chlorite and pale green feldspar (altered) and possible sericite. There are two small pyrrhotite veins < 1cm which may be in pillow edges. Unit has abundant pale green feldspar/sericite discordant veining. Lower contact 45° to core axis.									
320.1	333.0	Diorite -medium grained, medium green to locally dark green micro dioritic or coarse mafic flow with feldspar locally as laths. There are also poikiloblastic feldspars to 2cm randomly distributed. Fractures are chloritic dark green at 45-60° to core axis. Unit is locally weakly magnetic. 330.2-330.9m -chloritic section with some carbonate veining, leucoxenitic.									
	333.0	End of Hole Acid Tests									
		120.0m -47° 246.0m -42°									







Work Report Summary

Transaction No:	W0160.30442	Status:	APPROVED
Recording Date:	2001-JUL-11	Work Done from:	2001-FEB-14
Approval Date:	2001-SEP-11	to:	2001-MAR-06
Client(s):			
169976	MEUNIER, DAVID		
180618	PEGG, CHRISTOPHER	CHARLES	

223993	G.K. STRINGER LIMITED
302826	1232448 ONTARIO INC.

Survey Type(s):

			ASSAY		PDRILL					
W	ork Report D	etails:								
Cl	aim#	Perform	Perform Approve	Applied	Applied Approve	Assign	Assign Approve	Reserve	Reserve Approve	Due Date
Ρ	1219251	\$0	\$0	\$5,997	\$5,997	\$0	0	\$0	\$0	2002-DEC-09
Ρ	1219254	\$0	\$0	\$6,065	\$6,065	\$0	0	\$0	\$0	2002-DEC-09
Ρ	1222919	\$19,369	\$19,369	\$0	\$0	\$16,910	16,910	\$2,459	\$2,459	2001-SEP-23
Ρ	1226230	\$0	\$0	\$1,124	\$ 1,1 24	\$0	0	\$0	\$0	2003-JAN-05
Ρ	1226231	\$0	\$0	\$2,998	\$2,998	\$0	0	\$0	\$0	2003-JAN-05
Ρ	1226312	\$0	\$0	\$726	\$726	\$0	0	\$0	\$0	2003-FEB-05
		\$19,369	\$19,369	\$16,910	\$16,910	\$16,910	\$16,910	\$2,459	\$2,459	-

Status of claim is based on information currently on record.



LOVELAND

42A12NE2029 2.21759

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Ministry of Northern Development and Mines

1232448 ONTARIO INC.

168 ALGONQUIN BLVD. E TIMMINS, ONTARIO

CANADA

Date: 2001-SEP-13

Ministère du Développement du Nord et des Mines



GEOSCIENCE ASSESSMENT OFFICE 933 RAMSEY LAKE ROAD, 6th FLOOR SUDBURY, ONTARIO P3E 6B5

Tel: (888) 415-9845 Fax:(877) 670-1555

Submission Number: 2.21759 Transaction Number(s): W0160.30442

Dear Sir or Madam

P4N 1A9

Subject: Approval of Assessment Work

We have approved your Assessment Work Submission with the above noted Transaction Number(s). The attached Work Report Summary indicates the results of the approval.

At the discretion of the Ministry, the assessment work performed on the mining lands noted in this work report may be subject to inspection and/or investigation at any time.

If you have any question regarding this correspondence, please contact JIM MCAULEY by email at james.mcauley@ndm.gov.on.ca or by phone at (705) 670-5855.

Yours Sincerely,

Roy Spooner Supervisor, Geoscience Assessment Office

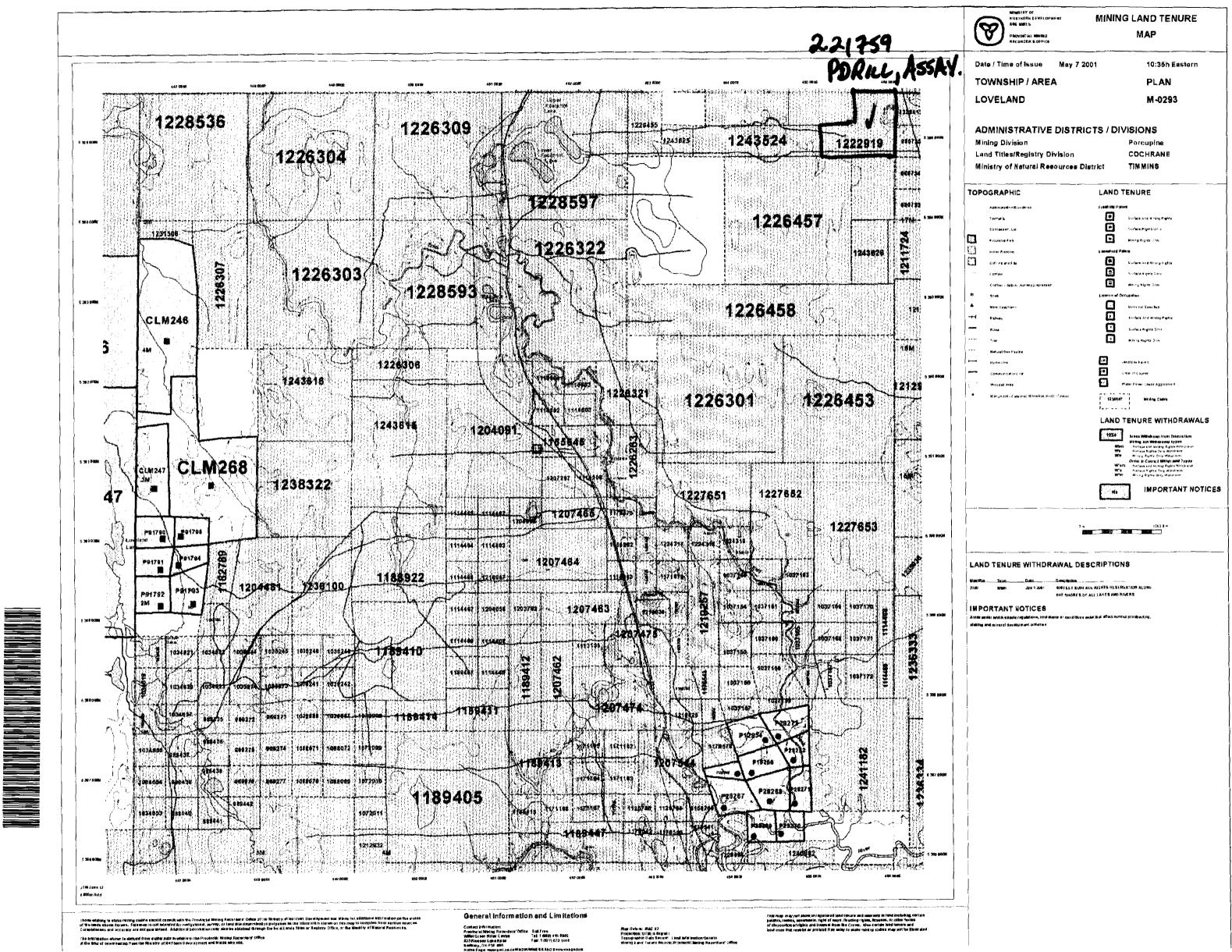
Cc: Resident Geologist

Falconbridge Limited (Claim Holder)

1232448 Ontario Inc. (Claim Holder) Assessment File Library

G.K. Stringer Limited (Claim Holder)

1232448 Ontario Inc. (Assessment Office)



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