008623

Peter Christopher & Associates Inc.
GEOLOGICAL & EXPLORATION SERVICES
3707 West 34th Ave., Vancouver, B.C. V6N 2K9
Office/Res: 263-6152

PROPERTY FILE

To: Jasi Nikhanj, President

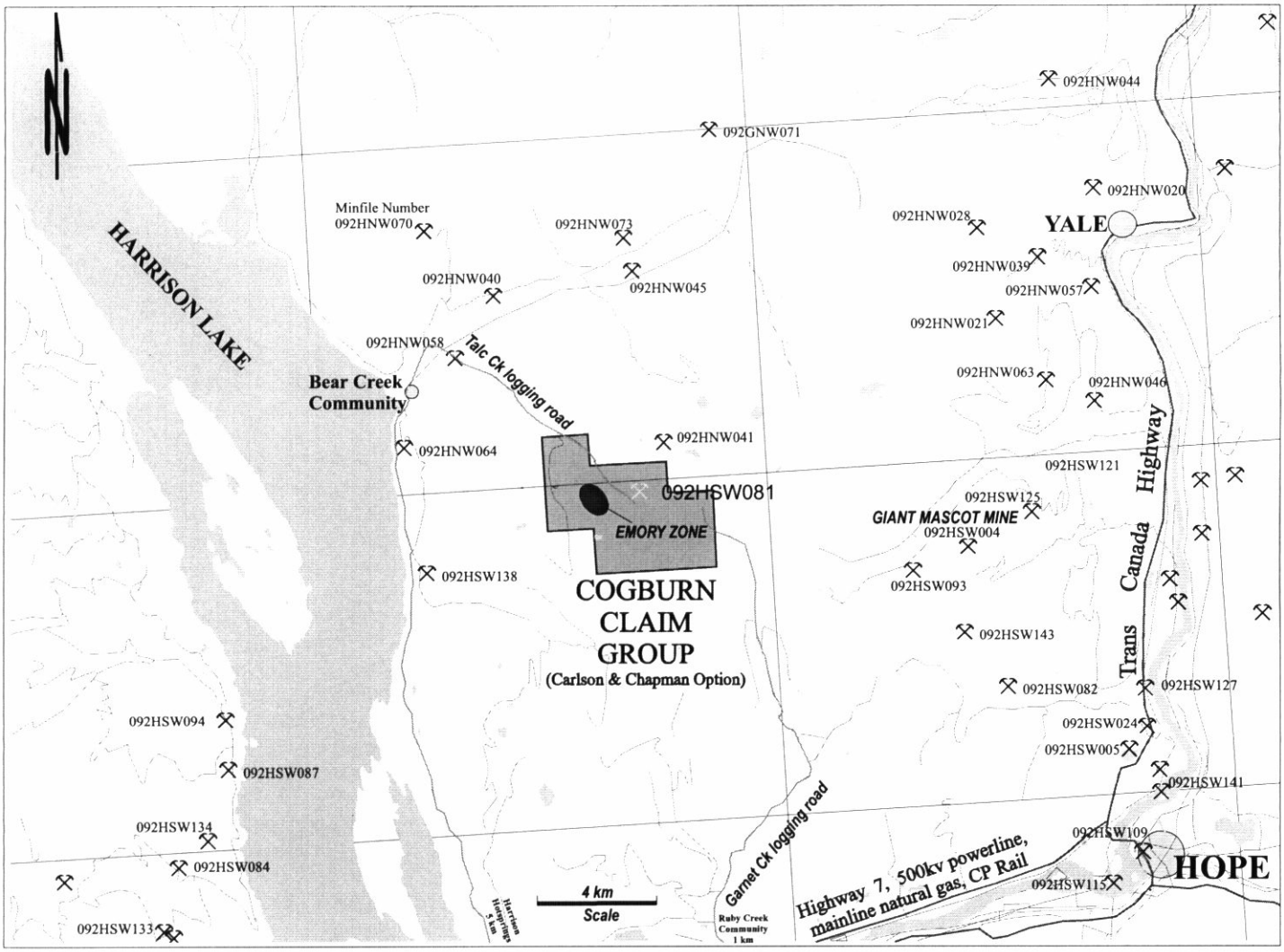
December 9, 2001

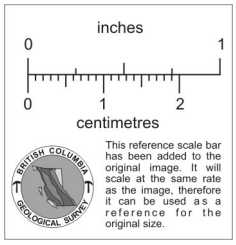
Leader Mining International Inc.
Memorandum Report: Re. Cosburn Masnesium Project

At your request, the writer conducted an engineering examination of Leader's Cogburn Creek Property. The examination was conducted on November 21, 2001 in order to meet the site examination requirement for a qualified person to prepare a technical report on a mining venture. The writer is familiar with ultramafic rocks in the Hope Map Area and spent parts of the 1974 and 1975 field season mapping and sampling on the Giant Mascot Mine property and Carolin Mines property. In 1975, the writer (Christopher, 1975) prepared a review of the Giant Mascot Ultrabasic Project for the British Columbia Government. The ultramafic complex at the Giant Mascot Mine contains a complete spectrum of ultramafic rocks with pyroxenite and peridotite the most common rock types and dunitic phases present. The Giant Mascot body is a zoned, elliptical ultramafic complex about 2.5 km in diameter with pipe-like, copper-nickel deposits. From 1958 to closure on August 31, 1974, total production from 26 orebodies at Giant Mascot was approximately 4,700,000 tons, yielding 59,000,000 pounds of nickel and 28,000,000 pounds of copper (Christopher, 1995).

Exploration work by Giant Mascot in the Cogburn Creek-Talc Creek areas (Figure 1) had revealed large zones of ~0.25% nickel, but no elevated grades were found by Mascot in an ultramaifc intrusive complex covering about 20 sq. km. Improved access and strong demand and price for platinum group metals (PGE), provided encouragement for Gerald Carlson, P.Geol. and John Chapman P.Eng. to acquire the Cogburn Creek-Tale Creek area in 2000, and examine the body for elevated PGE content (Leader News Release, May 8, 2001). Leader Mining was interested in a PGE project and optioned the property. The initial sampling resulted in low grade nickel, but very high magnesium values which indicated an ultrabasic parentage to serpentinized peridotitic rocks in the area.

Crest Geological, managed by Craig Payne, P.Geo., was retained to conduct a surface sampling and mapping program which outline a 2 km by 10 km area underlain by magnesium rich, serpentinized ultramafic rocks. Surface sampling showed that away from contact areas and minor Tertiary dykes, the ultramafic complex generally contained over 25% Mg (41.45% MgO). The Emory Zone was selected for initial drill testing because of logging road access to a





COGBURN CLAIM GROUP

New Westminster
Mining Division
British Columbia, Canada

NTS:
092H05E, 09H12E

Location Map

Figure 1

Source : The Map Place

Drawn By: J.A. Chapman after DKM

Date: December 8, 2001

clear-cut area with low sulphide content and surface Mg values over 25%. The writer collected 6, >5 kg. chip samples from the Emory Zone with results summarized in Table 1. and locations shown on Figure 2 (Appendix B). The samples were secured by the writer and personally submitted to Acme Analytical Laboratory in Vancouver for whole rock, boron, sulfur and ICP analyses. Certificates of analyses for the writer's samples are included as appendix A.

Table 1. Writer's Check Samples-Cogburn Magnesium Project.

Sample	Type	Meters	MgO%	Mg%	S%	B (ppm)	Ni (ppm)	Location
15007	chip	3.0	46.59	28.10	.04	25	2362	@5483765N 05953603 DDH CR01-09
15008	chip	3.0	46.26	28.02	.07	15	2399	@5483784N 05953413 25m NW of 007
15009	chip	3.0	49.56	29.89	.05	13	2426	@5483840N 05953973
15010	chip	3.0	45.58	27.49	.13	18	2359	@5483843N 05953773
15011	chip	3.0	42.55	25.66	.01	11	1921	@5483945N 05951493
15012	chip	3.0	43.62	26.31	.01	18	2025	@5483973N 0595124E
Averages			45.69	27.58	.05	17	2 2 4 9	

Samples were all probably serpentinized peridotite or dunite formed mainly from magnesium rich olivine (forsterite, Mg_2SiO_4) and pyroxene (enstatite, $MgSiO_3$). Since serpentine doesn't easily accept iron in its structure, iron in solid solution in pyroxene and olivine formed magnetite during serpentinization (magnetite was identified in writer's samples). Most magnesium rich serpentines average about 0.25% Ni and are enriched in Cr.

The writer's samples show excellent correlation with results obtain by Leader and by Crest Geological (Crest) personnel (Appendix B). Government research geologist Dr. Robert Pinsent (Pers. Corn. Dec. 2801) collected five rocks sample of peridotitic rocks from east of Talc Creek which contained whole rock MgO values between 43.2 and 46.5% (26.05-28.04% Mg). Magnesium values obtained by Leader and Crest geological suggest that areas not contaminated by country rock or diluted by minor Tertiary dykes consistently contain > 25% Mg content with six samples collected by the writer and 5 samples analyzed by the B. C. Ministry of Mines providing corroboration for the finding of Leader and Crest. Low sulfur values obtained by Crest and writer from the

Emory Zone, suggest that nickel values, generally less than **0.25%,** are obtained from silicate minerals.

In May 2001 Leader Mining recognized that they had a significant source for magnesium metal situated in an ideal setting about 29 kilometers northwest of Hope, B.C.. Hatch Associates Ltd. (Hatch), a recognized engineering firm with magnesium expertise, was commissioned to perform a scoping level engineering and economic study. A report on the **Cogburn** Magnesium Project was completed by Hatch in October 2001. Hatch conducted test work on material from the **Cogburn** Project and concluded that, "Test work at Process Research Orotech has demonstrated that the **Cogburn** magnesium silicate mineral can be efficiently leached to a pure magnesium chloride brine suitable for subsequent dehydration and fused salt electrolysis to magnesium metal. The **Cogburn** Project would use leach technology tailored to the raw material and proven dehydration and electrolysis technology for the production of primary magnesium."

The following conclusion were drawn from a one day site examination of the **Cogburn** Magnesium Project, six rock chip samples collected by the writer, review of the Hatch report, discussion with B.C. Government geological personnel, Leader personnel, Rick Roe and Craig Payne of Crest Geological and previous geological and exploration experience in the area.

1. The **Cogburn** ultramafic complex covers nearly 20 sq. km. and appears to be similar to the ultramafic that hosts the Giant Mascot copper-nickel mine, but without obvious strong copper and nickel concentrations. Nickel values of less than **0.25%,** at the Emory Zone, are probably contained in silicate minerals since sulfur values are low. The nickel and chromium values are typical of serpentine or high magnesium peridotite or dunite.

2. Surface sampling suggest fairly uniform and consistently **>25%** magnesium values. Boron, sulfur and calcium, considered impurities in magnesium metal production, consistently show low values in large areas of the ultramafic complex..

3. The property has excellent logging road access from Ruby Creek on Highway 7 or alternately about 30 km by road from Harrison Lake. The deposit is in an active logging area with large areas of clear-cut available for pit areas.

4. Baseline environmental studies are advanced since they were necessary for logging operation, and gas and electrical transmission lines which utilize the Fraser River corridor.

5. The Fraser River, CP Rail, and Highways 7 and 1 provide the infrastructure necessary for bulk shipping.

6. The field work and project are being planned and managed in a competent and professional manner with Crest personnel sawing core to obtain 2 meter samples for analyses. Two drills were active on the property, and were visited regularly by Crest personnel to secure bedrock cores. Samples are being analysed in Vancouver by Assayers Canada with the writer's and Crest's check sampling being conducted by Acme Analytical Laboratories Ltd. in Vancouver.

7. With two drills on the property, The project is progressing toward resource definition drilling and site selection for obtaining bulk metallurgical test material as part of a feasibility study. Advance project financing will be required to complete the two Phase, feasibility study, program outlined in the Hatch report.

Certificate of Qualifications

I, Peter A. Christopher P.Eng., Ph.D., certify that:

1. I am the owner and manager of Peter Christopher and Associates Inc., 3707 West 34th Avenue, Vancouver, B.C.
2. I am a consulting geological engineer registered **(#10474)** with the Association of Professional Engineers and Geoscientists of British Columbia since 1976.
3. I hold a **B.Sc.** (1966 from the State University of New York at Fredonia, a M.A. (1968) from Dartmouth College and a Ph.D. **(1973)** in geology from the University of B.C.
4. I have been practicing my profession as a Geologist for over 35 years and as a consulting geologist since June 1981. I made a personal examination of the **Cogburn** Creek Property on November 21, 2001. I worked during the 1974 and 1975 field seasons on ultramafic mineral deposits in the Hope Area (Giant Mascot and **Carolin** Mines). As a result of my experience and qualification, I am a qualified person as defined in National Instrument 43-101.
5. I have no direct or indirect, nor do I expect to receive any interest directly or indirectly in the properties or securities of Leader Mining International Inc. or associated companies. I am independent of Leader Mining International Inc. in accordance with application of Section 1.5 of National Instrument 43-101.

Dated at **Vancouver, British Columbia,** this 9th day of **December, 20**

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA P. A. Christopher

Peter A. Christopher, Ph.D., P.Eng.

APPENDIX A

Writer's Check of Samples
&
Certificate of Analyses

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716
Crest Geological Consulting PROJECT UM
Acme file # A104109 Received: NOV 22 2001 * 7 samples in this disk file.

ELEMENT	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	B*
SAMPLES	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm
C 15007		2	7	11	28 < .3		2362	124	1101	5.64	8 < 8		6 < 2		1	0.2 < 3		5 < 1	0.03	0.004 < 1		465	24.15	1 < .01		6	0.12	0.01 < .01	< 2		25
C 15008	< 1		5	5	22 < .3		2399	123	1054	5.57	7 < 8		7 < 2		1 < .2	< 3		8 < 1	0.01	0.003 < 1		511	23.68	2 < .01	< 3		0.13	0.01 < .01	< 2		15
C 15009	< 1		1	6	27 < .3		2426	121	1070	5.16	5	8	3 < 2		1 < .2	< 3	< 3	< 1	0.03	0.002 < 1		261	25.42	1 < .01	< 3		0.05	0.01 < .01	< 2		13
C 15010		2	8	4	22 < .3		2359	122	1082	5.58	10 < 8		6 < 2	< 1		0.2 < 3	< 3	1	0.01	0.002 < 1		564	22.66	2 < .01		3	0.15	0.01 < .01	< 2		18
C 15011	< 1		3	4	17 < .3		1921	105	865	4.92	14	8	7 < 2		2	0.2 < 3	< 3	4	0.25	0.002 < 1		780	18.07	2 < .01		9	0.23	0.01 < .01	< 2		11
C 15012	< 1		2 < 3		17 < .3		2025	107	1003	5.13	6	13	5 < 2		2 < .2	< 3		5	4	0.26	0.003 < 1		1046	20.24	2 < .01		13	0.26	0.01 < .01	< 2		18
RE C 15012		1	1 < 3		16 < .3		1987	106	981	5.03	7	16	6 < 2		2 < .2	< 3	< 3		6	0.26	0.003 < 1		1035	19.88	2 < .01		12	0.26	0.01 < .01	< 2		13
STANDARD I		10	123	38	151 < .3		37	12	786	3.1	32	11 < 2	-	3	26	5.6	6	9	75	0.5	0.093	17	181	0.58	150	0.08 < 3		1.74	0.04	0.16	6	2041

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716
Crest Geological Consulting PROJECT UM
Acme file # A104109 Received: NOV 22 2001 • 7 samples in this disk file.

ELEMENT	SiO2	Al2O3	Fe2O3	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO	Cr2O3	Ba	Ni	Sr	Zr	Y	Nb	Sc	LOI	TOT/C	TOT/S	SUM
SAMPLES	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%
C 15007	40.44	0.37	9.18	46.59	0.3	0.03	0.02	0.02	0.07	0.14	0.432	< 5		2126	< 10	< 10	< 10	< 10	5	2	0.03	0.04	99.86
C 15008	40.31	0.43	8.85	46.46	0.12	0.01	< .02	0.02	0.06	0.13	0.4		6	2084	< 10	< 10	< 10	< 10	5	2.8	0.03	0.07	99.87
C 15009	40.21	0.13	8.69	49.56	0.28	< .01	< .02	0.01	0.06	0.14	0.42	< 5		2206	< 10	< 10	< 10	< 10	3	0.1	0.03	0.05	99.89
C 15010	40.73	0.46	9	45.58	0.3	< .01	< .02	0.01	0.05	0.13	0.358	< 5		2017	< 10	< 10	< 10	< 10	4	3	0.03	0.13	99.88
C 15011	40.31	0.64	8.49	42.55	0.61	< .01	< .02	0.02	0.06	0.12	0.336		6	1843	< 10	< 10	< 10	< 10	8	6.5	0.17	0.01	99.88
C 15012	39.93	0.62	8.29	43.62	0.43	0.02	< .02	0.02	0.05	0.13	0.323		5	1848	< 10	12	< 10	< 10	6	6.3	0.24	0.01	99.98
RE C 15012	40.01	0.63	8.21	43.72	0.44	< .01	< .02	0.02	0.05	0.12	0.318	< 5		1886	< 10	< 10	< 10	< 10	7	6.1	0.24	0.01	99.87
STANDARD :	61.38	14.08	5.82	2.34	4.66	4.1	1.35	0.62	0.95	0.53	0.428		399	26	299	357	26	28	22	3.4	2.44	5.38	99.8

APPENDIX B

Sample Results
&
Figure 2. Sample Locations

News Release: 12/3/01

Cogburn Magnesium Property Sample Results

Leader Mining is pleased to list the results of its 80 surface chip and grab samples of the Cogburn ultramafic body. Five additional samples were collected from adjoining metasediments, and are not reported. The sampling was conducted over an area of 10 km x 2 km, along seven geological traverses and logging road access areas. Following table lists sample locations (UTM NAD83) with corresponding magnesium values. Concentrations of calcium, iron, sulfur and boron are well below the purification threshold limits to produce a clean magnesium chloride brine (HATCH, November 2001).

East (metres)	North (metres)	Sample No.	MgO(%)	Mg(%)	Ca(%)	Fe(%)	S(%)	B(ppm)
595397	5483828	17230	52.13	31.44	0.01	5.12	0.04	24
595358	5483730	17229	50.12	30.23	0.01	5.11	0.25	21
597544	5482425	17213	49.43	29.81	0.04	5.27	0.01	7
596907	5483458	17221	48.98	29.54	0.01	5.85	0.02	21
595190	5483873	713831	48.45	29.22	0.02	5.20	0.01	40
596902	5483351	713837	47.23	28.48	0.04	5.28	0.01	47
593653	5484724	17247	47.12	28.42	0.05	5.01	0.01	19
595018	5483864	723803	46.87	28.27	0.05	4.69	0.02	29
595362	5483857	713834	46.32	27.93	0.01	4.84	0.04	55
592681	5486734	17194	46.28	27.91	0.02	4.69	<0.01	14
594821	5483914	17233	45.47	27.42	0.07	3.97	0.01	43
592897	5485123	17197	45.33	27.34	0.03	5.95	0.01	17
595797	5483338	713836	45.26	27.30	0.01	5.20	1.71	73
592006	5484767	17201	45.13	27.22	0.09	4.70	0.02	15
591523	5486705	17192	45.12	27.21	0.03	4.50	<0.01	19
595694	5483365	713835	45.07	27.18	0.01	5.73	2.54	52
595030	5483849	713826	45.05	27.17	0.20	5.43	0.01	1
595855	5483547	723801	45.01	27.14	0.01	4.77	1.71	29
594263	5485549	17186	44.97	27.12	0.43	5.15	<0.01	7
591250	5486503	17235	44.93	27.10	0.08	4.55	0.03	90
595249	5483853	713832	44.87	27.06	0.01	5.03	0.87	48
597423	5482802	713841	44.85	27.05	0.28	4.73	0.01	23
592620	5486637	17240	44.81	27.02	0.01	5.26	0.01	13
594190	5484857	17248	44.76	26.99	0.03	6.53	0.01	21
591315	5486678	17191	44.59	26.89	0.08	4.84	<0.01	14
593615	5485860	17210	44.55	26.87	0.01	4.79	0.01	13
593168	5486267	17209	44.52	26.85	0.08	4.98	0.01	13
594255	5485455	17249	44.48	26.82	0.28	4.93	0.02	22
597648	5482464	17212	44.43	26.79	0.06	4.79	0.01	2
593311	5484396	17246	44.28	26.70	0.01	5.33	0.02	14
592540	5484762	17199	44.27	26.70	0.05	5.24	0.01	14
591023	5485670	17203	44.25	26.69	0.06	4.86	0.04	19
595029	5483784	713830	44.01	26.54	0.10	4.85	0.01	18
591881	5486586	17193	43.95	26.51	0.21	4.91	<0.01	11
595406	5483858	723802	43.94	26.50	0.01	5.37	4.34	21
593523	5485671	17211	43.85	26.44	0.06	4.90	0.02	6
595046	5483720	713829	43.81	26.42	0.13	5.16	0.01	20
592826	5485089	17198	43.80	26.41	0.02	5.35	0.01	19
594695	5484335	17234	43.66	26.33	0.05	5.42	0.01	27
593075	5484164	17245	43.65	26.32	0.19	4.79	0.04	37
594948	5483511	17232	43.61	26.30	0.12	5.16	0.03	41
597301	5482981	713840	43.56	26.27	0.05	4.82	0.01	36
595540	5483406	17228	43.44	26.20	0.02	5.63	2.31	29
591685	5486998	17239	43.18	26.04	0.03	5.25	0.01	39
595315	5482817	17231	42.97	25.91	0.33	4.71	0.01	41
596389	5483186	17222	42.76	25.79	0.02	5.17	1.24	46

595084	5483797	713827	42.58	25.68	0.14	5.10	0.01	16
591267	5486666	17195	42.23	25.47	0.06	4.83	0.02	20
591212	5485397	17205	42.21	25.46	0.19	5.22	0.01	12
594622	5485472	17250	42.20	25.45	0.02	4.65	0.01	29
594702	5485334	17157	42.00	25.33	0.25	4.81	<0.01	<1
591856	5486670	723844	41.90	25.27	0.09	4.79	<0.01	4
595300	5484096	723811	41.79	25.20	0.08	5.48	0.04	29
591023	5485723	17202	41.48	25.02	0.22	4.93	0.03	16
591628	5487005	17189	41.41	24.97	0.09	4.39	0.03	35
591395	5486099	17237	41.28	24.89	0.03	4.49	0.02	17
597085	5483189	723824	40.70	24.55	0.01	5.10	0.01	25
593153	5486324	17208	40.41	24.37	0.11	4.96	0.01	20
595553	5484095	723808	40.37	24.35	0.25	5.14	0.02	21
597801	5483075	17215	39.67	23.92	0.73	4.39	0.07	7
591306	5486687	723847	39.57	23.86	0.07	5.18	<0.01	10
595725	5483381	723807	39.46	23.80	0.01	3.78	2.36	26
591563	5486422	723842	39.39	23.76	0.20	4.73	<0.01	19
591544	5486693	723846	39.30	23.70	0.04	4.80	<0.01	5
595353	5483764	723805	39.22	23.65	0.02	4.58	3.10	32
595136	5484145	723822	39.03	23.54	0.01	4.94	0.40	31
597807	5482951	17214	38.84	23.42	0.19	4.41	0.09	11
595441	5484121	723809	37.32	22.51	0.37	4.69	0.17	28
595247	5484242	723810	37.28	22.48	0.16	4.71	0.12	23
597068	5483299	723814	37.21	22.44	0.04	5.62	0.02	21
595553	5484054	723817	36.80	22.19	0.06	5.27	0.11	19
592516	5485887	17238	36.75	22.16	0.07	3.75	0.01	19
591719	5486549	723843	36.26	21.87	0.14	5.16	<0.01	27
595227	5483974	723812	35.77	21.57	0.17	4.61	0.14	25
591802	5486560	17236	35.69	21.52	0.35	4.42	0.09	19
595038	5484325	723821	35.21	21.23	0.10	5.08	0.02	35
595128	5484281	723820	35.09	21.16	0.10	4.44	0.02	19
597017	5483465	723813	32.20	19.42	0.03	5.05	0.01	31
595457	5484234	723818	31.34	18.90	0.18	4.84	0.13	21
595308	5484249	723819	29.10	17.55	0.55	3.93	0.16	24

The average value of these samples is 42.44% MgO (25.6% Mg).

One of the most promising areas for hosting a large source of feedstock for a magnesium refinery is designated as the Emory Zone. It is located in the south-eastern part of the Cogburn property and covers an area of about 1.5km2. Eighteen (18) samples from the Emory Zone average 44.89% MgO (26.9% Mg). For comparison, at Noranda's Magnola magnesium facility in Quebec, serpentine tailings containing 23 % Mg are being processed.

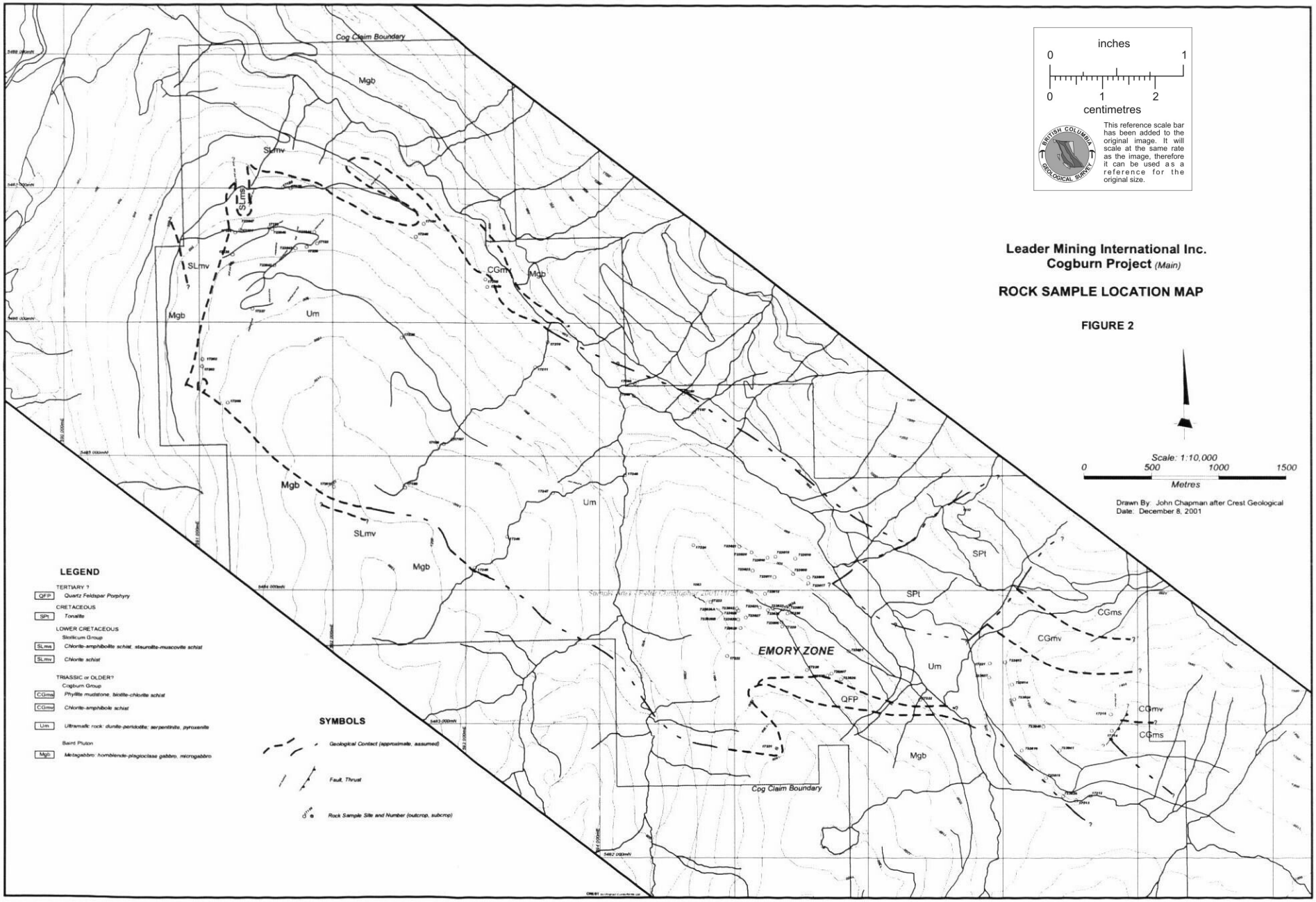
Two core drills are now operating at Cogburn and to date a total of 15 holes have been completed to a depth of 50m to 150m. An additional 9 holes are to be completed by the end of this week. Assays are pending.

Magnesium Market:

Magnesium has a bright future. The average selling price for magnesium metal over the past ten years has been US$1.55 per pound.

Noranda Magnesium Inc. (A. Bergeron, et al) reports: "the growth in aluminum production has increased by a factor of 25 since 1940. Magnesium is expected to mirror the market development and growth that aluminum experienced and is on the verge of explosive growth."

"Magnesium demand is growing rapidly, with the highest growth rate projected for diecasting. Magnesium use in diecast automotive components is driven by a global trend to lightweight vehicles to reconcile consumer preferences for larger vehicles with government fuel economy standards. Climate change concerns reinforce pressures to reduce fuel consumption."


Cog Claim Boundary
Mgb
SLmv
SLms
CGmv
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EMORY ZONE
QFP
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Cog Claim Boundary
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This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.
Leader Mining International Inc.
Cogburn Project (Main)
ROCK SAMPLE LOCATION MAP
FIGURE 2
Scale: 1:10,000
0
500
1000
1500
Metres
Drawn By: John Chapman after Crest Geological
Date: December 8, 2001
LEGEND
TERTIARY ?
QFP Quartz Feldspar Porphyry
CRETACEOUS
SPt Tonalite
LOWER CRETACEOUS
Slollicum Group
SLms Chlorite-amphibolite schist, staurolite-muscovite schist
SLmv Chlorite schist
TRIASSIC or OLDER?
Cogburn Group
CGms Phyllite mudstone, biotite-chlorite schist
CGmv Chlorite-amphibole schist
Um Ultramafic rock: dunite-peridotite, serpentinite, pyroxenite
Baird Pluton
Mgb Metagabbro: hornblende-plagioclase gabbro, microgabbro
SYMBOLS
Geological Contact (approximate, assumed)
Fault, Thrust
Rock Sample Site and Number (outcrop, subcrop)