TECHNICAL REPORT
SEPARATION PROPERTY

Latitude: 50^{o1}16' 42" N
Longitude: 94^{o}39' 13" W
UTM ZONE 15
382180mE, 5570910mN

Kenora Mining Division, Ontario

Pacific Iron Ore Corporation
Suite 4615, 400 3rd Ave.
Calgary, Alberta T2P 4H2

June 29th, 2009

CLARK EXPL. CONSULTING INC.

J. Garry Clark, P. Geo
Desmond Cullen, P.Geo

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3.0 SUMMARY

This report on the Separation Property (the "Property") was commissioned by Pacific Iron Ore Corporation ("Pacific Iron") to comply with the disclosure and reporting requirements set forth in National Instrument 43-101, and Form 43-101F1 and is intended to be used as supporting documentation to be filed with the British Columbia Securities Commission and the TSX Venture Exchange. This report is to support recommendations for an exploration program totaling $371,200.

The report summarizes the previous exploration completed on the area of the Property. The report was written and edited by Desmond Cullen and J. Garry Clark. The illustrations were completed and edited by Desmond Cullen and J. Garry Clark.

The Property is located in Paterson Lake Area (G-2634), approximately 70 kilometres by road north Kenora, Ontario (Figure 1). It is centred at latitude 50º16'42" N, longitude 94 º 39'13"W ---UTM Zone 15, 382180 mE, 5570910 mN.

The Property is comprised of 21 contiguous mining claims and a contiguous mining lease (2864 hectares) recorded in good standing within the Kenora Mining Division of Ontario (Table 2)(Figure 2). The Property is collectively known as the Separation Property with the mining lease portion known as the Big Mack Property as it hosts the Big Mack pegmatite. The only portion of the Property legally surveyed is the 14 unit mining lease (CLM 428) (224 hectares. Pacific Iron is the recorded owner of 100% interest in the Property.

The Property was acquired by Pacific Iron as a result of the amalgamation of Klondike Capital Corporation (KCC) and Emerald Field Resources Corporation (EFR)(April 2008). KCC and EFR entered into an agreement of amalgamation where KCC shareholders received one share of Pacific Iron for each 1.5 shares of KCC and EFR shareholders received 1 share of Pacific Iron for each share of EFR. The primary focus, for 12 months after amalgamation, was to be EFR's Pearson Iron Ore Project on Vancouver Island, British Columbia.

The Property lies within the traditional land use area of the Wabaseemoong Independent Nations of Whitedog, Ontario, an aboriginal community located approximately 35 km southwest of the property. Emerald Fields Resources has had discussions with Wabaseemoong Independent Nations in regard to previous exploration on the property. It would be courteous to contact the First Nation community about any exploration on the Property.

The Property is situated approximately 70 kilometres by road north of Kenora, Ontario and is directly accessible via a newly-constructed private road. The main line of the Canadian National Railway passes through the village of Redditt, just 50 km by road south of the Property.
The area has had a history of base and precious metals exploration with some work focusing on the uranium and iron potential. The Separation Lake Greenstone Belt (SLGB) has been the focus of extensive study by the Ontario Geological Survey since the area was

examined as part of Operation Kenora-Sydney Lake (Breaks et al. 1975). The Property occurs within the SLGB of the contact zone of the English River sub province and Winnipeg River sub province of the Archean Superior Province. Extensive research and mapping by the Ontario government from 1993 increased interest in the rare-metal pegmatite potential of the area.

The SLGB represents the easterly extension of the Bird River belt of Manitoba (Cerny et. al. 1981). The Bird River – SLGB system is noteworthy in being the locus for one of the highest concentration of rare-metal pegmatite mineralization in the Superior Province coupled with probably the greatest number of complex-type, petalite-subtype pegmatite occurrences in Canada (Cerny et. al. 1981).

Zoned pegmatites are host to many rare elements and metals such as tantalum, niobium, tin, lithium, rubidium and cesium. Tanco's Bernic Lake pegmatite in Manitoba, Bikita in Zimbabwe and the Greenbushes in Australia are some of the better known deposits currently being mined for their lithium and/or tantalum content.

The SLGB is comparable in size and potential to these major producing areas, with Pacific Iron's Big Mack and Avalon's Big Whopper petalite pegmatites being examples of potentially economic deposits.

The exploration work to date has identified a series of petalite and rare earth pegmatites on the Property. The most significant of these on the Property are the Big Mack, Eleven Zone, Glitter, Wolf and Rattler pegmatites.

The Property hosts a number of petalite (Lithium) and rare-metal bearing pegmatites that are part of the SLGB. These include the Big Mack, Glitter, Wolf and Rattler bodies. These pegmatites and pegmatites on the adjacent Avalon Ventures property have been determined to have economic potential by previous work completed. The Big Mack pegmatite has been drill tested to a limited depth and has had significant lithium values reported. Other pegmatites on the Property have had limited to no diamond drilling.

Further exploration of the Property should comprise prospecting, additional sampling and diamond drilling to further define the potential of the lithium and rare-metal pegmatites. Specifically, the work should include diamond drilling of the Big Mack pegmatite to depth and along strike to prove continuity and the potential associations to the other pegmatites in the immediate area. Geochemistry of all the pegmatites should be reviewed to help determine genesis and relationships of the pegmatites across the Property.

4.0 INTRODUCTION

This report on the Separation Property (the "Property") was commissioned by Pacific Iron Ore Corporation ("Pacific Iron") to comply with the disclosure and reporting requirements set forth in National Instrument 43-101, and Form 43-101F1 and is intended to be used as supporting documentation to be filed with the British Columbia Securities Commission and the TSX Venture Exchange. This report is to support recommendations for an exploration program totaling $371,200.

The report summarizes the previous exploration completed on the area of the Property. The report uses as sources of information those reports listed in Section 23. The report was written and edited by Desmond Cullen and J. Garry Clark. The illustrations were completed and edited by Desmond Cullen and J. Garry Clark. The report and recommendations are based on:

1. Public data archived at the Ministry of Northern Development and Mines, Kenora District Geologist's Office, Kenora and Sudbury, Ontario.
2. Exploration records provided by Pacific Iron. All of this data is also available at the Ministry of Northern Development and Mines, Kenora District Geologist's Office, Kenora and Sudbury, Ontario.
3. A personal site visit by Desmond Cullen to the Property on May 5th, 2009.

Desmond Cullen, one of the Author's, completed a Property visit on May 5th 2009. The access was by logging roads. Three samples were taken of the Big Mack pegmatite and analyzed for their lithium content. The samples were taken from the blasted pit that the previous bulk sample was taken. The three samples assayed 13250, 8830 and 10350 ppm lithium.

5.0 RELIANCE ON OTHER EXPERTS

The author has relied on previous exploration reports as referenced in Section 23.0 References. These reports may or may not have been completed by qualified persons as defined by NI 43-101. After reviewing the reports and associated data the author is satisfied the data presented is accurate.

6.0 PROPERTY DESCRIPTION AND LOCATION

The Property is located in Paterson Lake Area (G-2634), approximately 70 kilometres by road north Kenora, Ontario (Figure 1). It is centred at latitude 50º16'42" N, longitude 94 º 39'13"W ---UTM Zone 15, 382180 mE, 5570910 mN.

The Property is comprised of 21 contiguous mining claims and a contiguous mining lease (2864 hectares) recorded in good standing within the Kenora Mining Division of Ontario (Table 2)(Figure 2). The Property is collectively known as the Separation Property with the mining lease portion known as the Big Mack Property as it hosts the Big Mack pegmatite. The only portion of the Property legally surveyed is the 14 unit mining lease (CLM 428) (224 hectares. Pacific Iron is the recorded owner of 100% interest in the Property.

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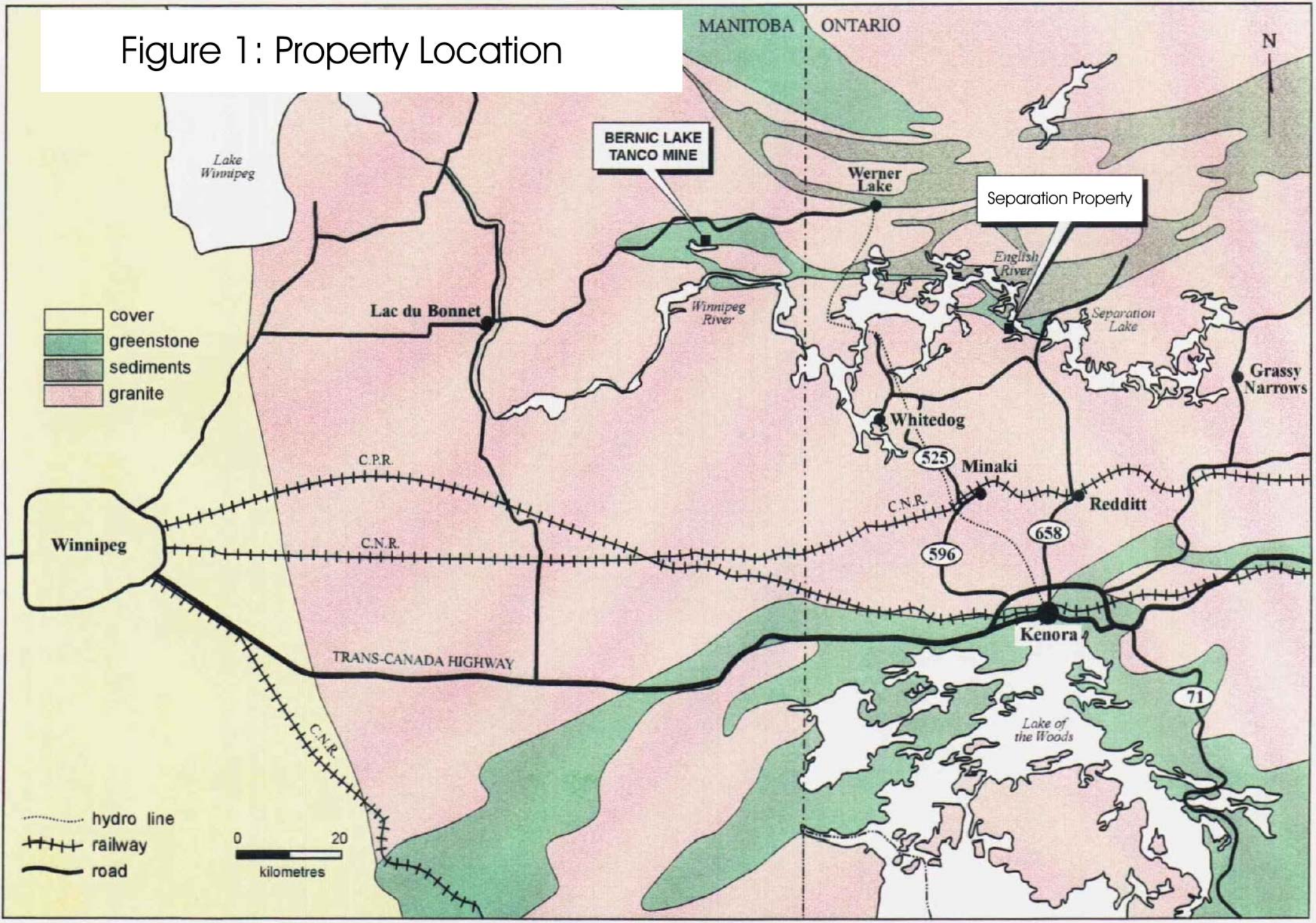
The Property lies within the traditional land use area of the Wabaseemoong Independent Nations of Whitedog, Ontario, an aboriginal community located approximately 35 km southwest of the property. Emerald Fields Resources has had discussions with Wabaseemoong Independent Nations in regard to previous exploration on the property. It would be courteous to contact the First Nation community about any exploration on the Property.

Table 1: Property Description

Township/Area	Claim Number	Recording Date	Claim Due Date	Hectares	Work Required
PATERSON LAKE	1178880	1997-Mar-03	2010-Mar-03	64	$ 1,600
PATERSON LAKE	1178881	1997-Mar-03	2010-Mar-03	16	$ 400
PATERSON LAKE	1178882	1997-Mar-03	2010-Mar-03	48	$ 1,200
PATERSON LAKE	1178883	1997-Mar-03	2010-Mar-03	96	$ 2,400
PATERSON LAKE	1178884	1997-Mar-03	2010-Mar-03	16	$ 400
PATERSON LAKE	1220417	1997-Nov-21	2009-Nov-21	96	$ 2,400
PATERSON LAKE	1220418	1997-Nov-21	2009-Nov-21	64	$ 1,600
PATERSON LAKE	1220419	2000-Mar-31	2010-Mar-31	32	$ 769
PATERSON LAKE	1220421	1998-Aug-27	2009-Aug-27	64	$ 1,600
PATERSON LAKE	1220424	1997-Nov-21	2009-Nov-21	256	$ 6,400
PATERSON LAKE	1220425	1997-Nov-21	2009-Nov-21	96	$ 2,400
PATERSON LAKE	1233596	1999-Feb-09	2009-Dec-09	256	$ 6,400
PATERSON LAKE	1233597	1999-Feb-09	2009-Dec-09	224	$ 5,600
PATERSON LAKE	1233598	1999-Feb-09	2009-Dec-09	128	$ 3,200
PATERSON LAKE	1233614	1999-May-05	2009-May-05	192	$ 4,800
PATERSON LAKE	4208747	2006-Apr-06	2009-Apr-06	96	$ 1,453
PATERSON LAKE	4208748	2006-Apr-06	2009-Apr-06	240	$ 5,053
PATERSON LAKE	4214235	2007-Mar-29	2009-Mar-29	160	$ 4,000
PATERSON LAKE	4214236	2007-Mar-29	2009-Mar-29	224	$ 5,600
PATERSON LAKE	4214237	2007-Mar-29	2009-Mar-29	96	$ 2,400
PATERSON LAKE	4224409	2008-Apr-09	2010-Apr-09	176	$ 4,400
PATERSON LAKE	CLM 428	BIG MACK PROPRTY	21 year lease	224	
			Total Hectares	2864	

Figure 1: Property Location



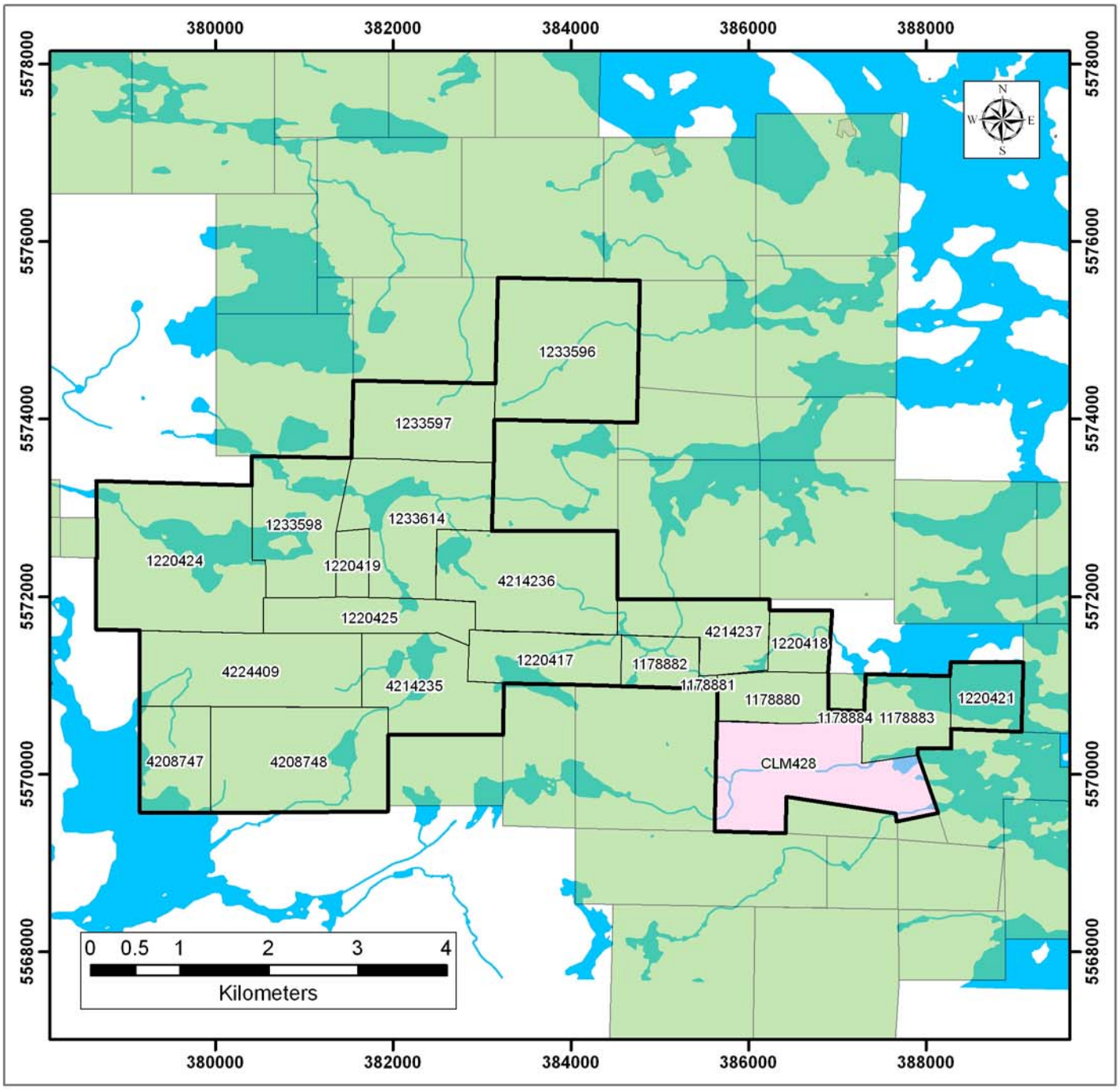


Figure 2: Claim Map

Paterson Lake Area, Kenora Mining Division
NTS Sheet 52 L/07

Legend

- Property Boundary
- Mining Claim
- Mining Lease

Map Projection: NAD 83 UTM Zone 15N
Map Grid: GCS 1983

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The government of Ontario requires expenditures of $400 per year per unit, prior to expiry, to keep the claims in good standing for the following year. The report must be submitted by the expiry date.

There are no known environmental liabilities associated with the property. For the proposed exploration program consisting of prospecting, mapping, geochemical sampling and drilling no permits are required. Permits are required if, during the course of exploration, waterways are affected.

7.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

The Property is situated approximately 70 kilometres by road north of Kenora, Ontario and is directly accessible via a newly-constructed private road. The main line of the Canadian National Railway passes through the village of Redditt, just 50 km by road south of the Property.

The climate of the area is typical of northwestern Ontario, and described as continental. The mean daily average temperature is 2.7 degrees Celsius, ranging from a high of 19.5 degrees C in July, to a low of -17.3 degrees C in January. Average annual precipitation in the area is 661.8 mm, with approx. 500 mm of rain and 158 cm of snow per year. Winter conditions typically extend from early to mid-November through late March, with freeze-up in mid-November and break-up in early April.

The area has well developed services, with the City of Kenora (population 16,000) located 70 kilometres to the south. Almost all supplies are readily available in Kenora, or the major Canadian city of Winnipeg, another 200 kilometres west. Kenora itself has a local diamond drilling contractor, and helicopter base, as well as several fixed wing bases with both float and ski equipped aircraft.

There is sufficient crown land available in the area for mining operations to take place if the project was found to host an economic deposit. Water for mineral processing is available in abundance in the area. The closest hydroelectric power generating station is located at Whitedog Falls. The transmission line comes within 30 km of the Property.

The Property area is typical of much of northwestern Ontario and the Canadian Shield. The property is relatively flat with an average elevation of approximately 350 m above sea level. Local topographic relief is limited to about 50 m. Outcrop exposure is in general less than 40%.

8.0 HISTORY

The area has had a history of base and precious metals exploration with some work focusing on the uranium and iron potential. Extensive research and mapping by the Ontario government from 1993 increased interest in the rare-metal pegmatite potential of the area.

In the mid 1930's, mineral exploration in the Umfreville-Separation Lake Greenstone Belt (SLGB) focused around Minaki, where work was conducted on the Minaki Pyrite Prospect on Vermillion Lake. Sporadic work for base metals was conducted near Redditt in 1956, by Stratmatt Limited. Both these areas are south of the Property.

The first mention of work on the property was completed on a claim block at Selwyn (alt. Celynn, Celyn) Lake. This property was staked by C. Alcock and the base metal occurrence is called the Alcock Occurrence (Figure 3). E.O. Chisholm (Resident Geologist Kenora), in 1948, reported pyrite, pyrrhotite, sphalerite, chalcopyrite and "lead" or molybdenite in a series of six pits northeast of Selwyn Lake. Assays recorded by Chisholm ranged from 0.10 to 1.20% Zn, 0.9 to 1.0% Pb, and 0.56% Cu. (Blackburn at al, 2000).

Canadian Nickel Company Ltd. completed an exploration program, south of Patterson Lake in 1963. The program consisted of one diamond drill hole (Figure 4). The hole, 22180, was drilled south at -55 degrees to a depth of 144.5 metres. Assay results were not submitted for assessment.

Can-Fer Exploration Syndicate, in 1968, completed a regional radiometric airborne survey of a large area including parts of the present Property. Claims were staked in the next year over the radiometric anomalies. One of the anomalies, the Tourist Lake Occurrence (Figure 3) was located by prospecting. The radioactivity was hosted in a biotitic schist within quartz monzonite. Trenching, geological mapping, geophysics (scintollometer and ground magnetics) and three winkie drill holes (unknown depths) were completed in 1969 and 1970. Huronian Mines Limited acquired the property in 1974 and sampling was completed by two companies of the western trenches. The results were:

- Hanna Mining: (4 samples) 90 feet by 6.67 feet averaging 0.0627% U3O8
- Denison Mines Limited: 90 feet by 9.0 feet averaging 0.0655% U3O8

In 1976 Huronian Mines Limited optioned the property to Consolidated Summit Mines Limited who completed 9 diamond drill holes (1635 feet). Eight of the holes targeted the trenched area. The reports indicate an average of 0.82 lbs U3O8 over 3.7 feet for a length of 370 feet. One hole intersected a subsidiary zone that reported 0.56 lbs U3O8 over 23 feet. In 1977 a further 5 holes (1,074) were drilled to test for extensions of the zone. Only minor radioactivity was encountered and the program was suspended.

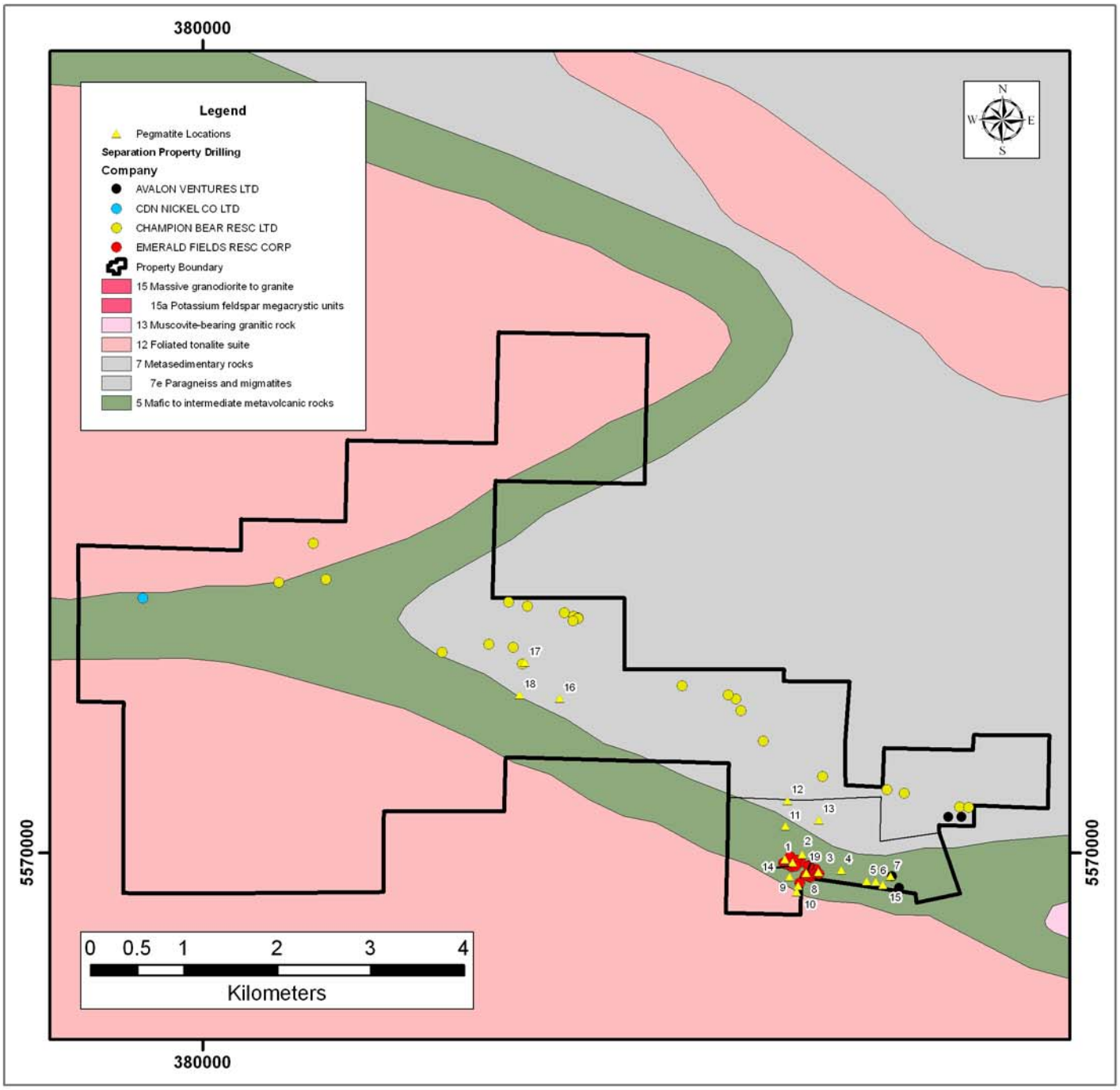

Figure 3

Property Compilation

Paterson Lake Area, Kenora Mining Division
NTS Sheet 52 L/07

NAD 83 UTM Zone 15N
June 2, 2009 - SS
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Pegmatites

1 - Ta-1	10 - Tent Zone (Ta-10)
2 - Ta-2	11 - Ta-11
3 - Ta-3	12 - Ta-12
4 - Ta-4	13 - Ta-13
5 - Ta-5	14 - Eleven Zone
6 - Ta-6	15 - 6059 Sprinkler Zone
7 - Ta-7	16 - Wolf
8 - Ta-8	17 - Rattler
9 - Ta-9	18 - Glitter
	19 - Big Mack Dike

Noranda Exploration Co. Ltd. completed a series of trenches at the Noranda-Celwyn Lake East and Celwyn Lake West (North) Uranium - Molybdenum showing (Figure 3). The mineralization is associated to pematitic to brecciated pink granite and migmatite dikes. No values are reported in assessment files.

Kamo Energy and Resources Ltd. completed an airborne magnetic and electromagnetic (VLF-EM) survey over part of the present property in 1990.

Champion Bear Resources Ltd. began accumulating claims in the SLGB in 1987 with the acquisition of a block of claims from Shabu Gold Mines Ltd. The focus of the exploration was gold and base metal mineralization centres on geophysics anomalies coincident to the Alcock occurrence and the Helder Lake occurrence to the west. The exploration programs were comprised of:

1988: Optioned the Campbell and Chaytor claim blocks (23 claims) and staked an additional 36 claims by staking that cover the general area of the Alcock occurrence (Figure 3).
1988-1989: Completed ground geophysical surveys (magnetics and electromagnetic) over claims.
1989: Completion of Airborne geophysics, geological mapping, stripping and additional staking.
1990: Completion of line cutting, geological mapping and manual and mechanical stripping.
1990 – 1991: Completion of 40 diamond drill holes (14,186 feet) across the entire property holdings.
1991 – 1992: Completion of 59 holes (21,030 feet) across the entire property holdings.

Champion Bear Resources traced the base metal horizon for over twenty kilometres with anomalous base metal mineralization (assays ranged from below detection limit to 0.66% copper, 0.97% zinc and 9 grams /ton silver). The drilling on the Property is illustrated on Figure 4 and presented in Table 2.

Table 2: Champion Bear Resources Drilling on the Property

Hole #	Azimuth	Dip	Depth Metres	Year
CB-17	360	-45	126.83	1991
CB-18	180	-45	115.85	1991
CB-19	180	-45	115.85	1991
CB-20	180	-45	78.05	1991
CB-26	360	-45	78.05	1991
CB-101	360	-45	75.00	1991
CB-102	360	-45	126.83	1991
CB-103	315	-45	96.04	1991
CB-104	315	-45	105.49	1991

Hole #	Azimuth	Dip	Depth Metres	Year
CB-105	360	-45	150.00	1991
CB-106	315	-45	75.00	1991
CB-107	315	-60	68.90	1991
CB-108	180	-45	96.34	1991
CB-27	360	-45	120.73	1992
CB-28	360	-45	120.73	1992
CB-29	360	-45	135.06	1992
CB-30	360	-45	99.39	1992
CB-33	360	-45	78.05	1992
CB-34	360	-45	75.00	1992
CB-35	180	-45	93.29	1992
CB-36	180	-45	120.73	1992
CB-37	360	-45	97.87	1992
CB-115	360	-45	69.82	1992
CB-116	360	-45	92.68	1992
CB-117	360	-45	73.78	1992
CB-118	360	-45	59.76	1992
CB-119	360	-45	68.90	1992
CB-120	360	-45	139.02	1992
CB-125	180	-45	71.95	1992
CB-126	180	-45	78.05	1992
CB-140	360	-45	62.80	1992
CB-141	360	-45	178.66	1992
CB-142	180	-45	90.24	1992
Total Drilling metres			3234.74	
Total Drilling metres			10610 feet	

Breaks et al. (1999) reports work completed by Champion Bear Resources in 1999 that included detailed mapping and sampling evaluating part of the present Property for rare-metal pegmatites. There was a reported 94 samples taken and three pegmatites located. The pegmatites were named: Glitter, Wolf and Rattler pegmatites (Figure 3).

The Glitter petalite-bearing pegmatite is exposed along its southeastern strike-length for 75 m and achieves a maximum width of 25 m. Channel samples were selected at 1 m intervals by Champion Bear Resources across part of the main petalite-bearing unit indicated in Figure 25.3. The results revealed Li2O contents between 1.03 and 1.64% accompanied by anomalous trace levels of other rare-metals (Breaks et. al., 1999).

The Wolf pegmatite occupies a 40 by 100 m area within a west-striking apophysis from the Skidder pluton. Maximum bulk values of 1000 ppm Cs, 0.016% Ta2O5, 0.024% Nb2O5, 859 ppm Sn, 0.17 % Rb2O and 0.39% Li20, were obtained in the sampling of Champion Bear Resources (Breaks et. al., 1999).

The Rattler pegmatite is up to 7 by 12 m, hosted in the most westward-striking apophysis of the Skidder pluton. Champion Bear Resources registered maximum bulk values of 831 ppm Cs, 0.021% Ta2O5, 0.015% Nb2O5, 124 ppm Sn, 0.41% Rb2O, and 0.20% Li2O in the zone (Breaks et. al., 1999).

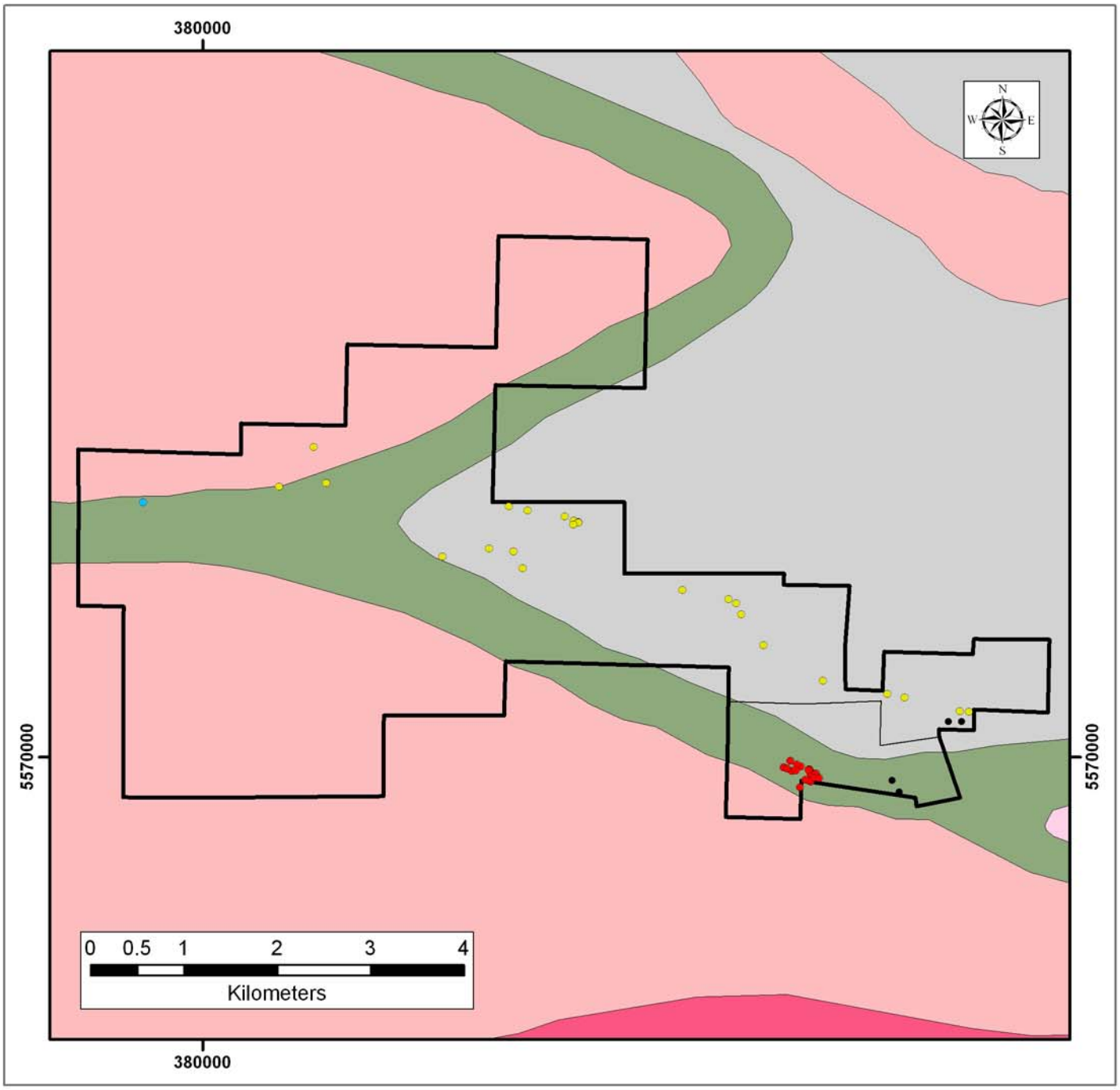

Figure 4

Previous Diamond Drilling

Paterson Lake Area, Kenora Mining Division
NTS Sheet 52 L/07

NAD 83 UTM Zone 15N
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Legend

Separation Property Drilling

Company

- AVALON VENTURES LTD
- CDN NICKEL CO LTD
- CHAMPION BEAR RESC LTD
- EMERALD FIELDS RESC CORP
- Property Boundary
- 15 Massive granodiorite to granite
- 15a Potassium feldspar megacrystic units
- 13 Muscovite-bearing granitic rock
- 12 Foliated tonalite suite
- 7 Metasedimentary rocks
- 7e Paragneiss and migmatites
- 5 Mafic to intermediate metavolcanic rocks

In 1996, Avalon Ventures Limited staked a series of claims immediately south west of the Big Mack pegmatite. When the Property was surveyed it was determined that the claim boundary was actually further south then thought. With the boundary redefined it was realized that Avalon Ventures had drilled four holes on Emerald Fields land (Table 3) (Figure 4).

Table 3: Avalon Diamond Drilling on Emerald Fields Claims

Hole #	Azimuth	Dip	Depth Metres	Year	LiO2 % Values Range % / metre
SR98-49	360	-45	110.00	1998	0.01 / 2.00 to 0.286 / 0.35
SR98-48	360	-45	215.00	1998	0.02 / 0.46 to 1.025 / 1.40
SR01-59	355	-60	179.00	2001	0.025 / 2.50 to 0.211 / 0.21
SR01-60	218	-60	158.00	2001	0.039 / 1.07 to 2.08 / 0.35

Avalon's diamond drilling intersected numerous pegmatites in each hole. Once the claim boundary was established further work was not completed.

In 1997, A. Mowat and P. Thorgrimson staked claims that are now part of the leased claim of the present Property. The claims were acquired following the release of the Ontario Geological Survey, Miscellaneous Paper 166 by Breaks and Tindle (1996). The pair prospected the area in the spring and summer 1997 collecting 62 samples from pegmatite outcrops. Samples were analyzed for 32 elements plus gold. The samples returned lithium values ranged from 7 to 380 ppm lithium (59 samples) with 3 samples analyzed with a lithium content of 800, 4400 and 5000 ppm. These high lithium values were indentified to be from a petalite-bearing pegmatite which was named Big Mack (Figure 3).

Emerald Fields Resources Corporation was formed in the fall of 1997 to further explore the Property. The primary focus became the area that is covered by the lease which hosts the Big Mack pegmatite.

1997: 3 diamond drill holes (AW size-103.8 metres) on the Big Mack pegmatite. Lithium values ranged from not detected over 0.38 metres to 1.10% over a metre (Table 4) (Figure 4).

1998: Line-cutting (40 km), soil and rock sampling, prospecting and stripping. Soil sampling indicated an anomalous tantalum-lithium trend associated with the general strike of the Big Mack pegmatite. The prospecting located numerous additional dikes including the Eleven Zone pegmatite (Figure 3) (See Section 11: Mineralization).

Table 4: 1998 and 1999 Diamond Drill Results Separation Property
All Holes on Big Mack except SR-99-10 + 11 on Eleven Zone Pegmatite

Hole #	Azimuth	Dip	Depth Metres	Year	Pegmatite Intercepts From –To (Metres)	Lithium Values % / metre
SR-98-1	180	-45	39.56	1998	0.0 - 7.82 13.39 – 18.42	Not detected / 0.38 to 1.26 / 1.0
SR-98-2	180	-45	30.64	1998	6.52 – 35.85	0.02 / 1.85 to 1.9 / 1.93
SR-98-3	180	-45	33.64	1998	0.50 – 9.80 12.72 – 15.60 15.76 – 30.64	0.01 / 0.88 to 1.18 / 1.0
SR-99-1	184	-50	75.30	1999	35.35 – 60.27	0.07 / 1.89 to 0.80 / 2.01
SR-99-2	184	-70	119.00	1999	91.65 – 108.05	0.01 / 1.37 to 0.11 / 1.46
SR-99-3	180	-50	87.50	1999	47.64 – 66.0	0.12 / 1.40 to 0.79 / 2.04
SR-99-4	180	-70	121.00	1999	26.67 – 36.60	0.02 / 0.27 – 0.14 / 1.09
SR-99-5	184	-50	90.52	1999	34.20 – 61.36 68.58 – 77.51	0.02 / 1.28 – 1.21 / 2.01
SR-99-6	180	-72	142.30	1999	75.0 – 98.18	0.01 / 0.91 – 0.33 / 1.69
SR-99-7	360	-60	124.10	1999	31.82 – 73.52	Not Sampled
SR-99-8	280	-80	153.30	1999	1.22 – 71.96	Not Sampled
SR-99-9	360	-58	96.70	1999	37.37 – 49.59 51.60 – 70.35	0.01 / 1.5 – 0.817 / 1.3
SR-99-10	360	-70	55.10	1999		No pegmatite
SR-99-11	360	-45	91.90	1999	70.56 – 77.57	Not Sampled

1999: A further 11 diamond drill holes were completed (BQ size-1156.7 metres) (Figure 4). Results are summarized in Table 4. The drilling defined the Big Mack pegmatite to be consistent to 50 metres vertical. Below 50 metres a petalite free pegmatite was intersected. A trench was blasted across the width of the Big Mack pegmatite (25 metres) approximately 2-3 metres wide and 1.0 metres deep. A five tonne sample of the blasted rock was randomly collected and shipped to International Metallurgical and Environmental Inc. of Kelowna, British Columbia. The sample was processed to extract a petalite concentrate. The concentrate was then sent to Corning Laboratory Services of Corning, New York for Petalite Analysis and Trial Glass Metals. Results from the Laboratory Analysis Report were:

> "Three glass melts were made using the customer supplied petalite. One melt was batched to yield a Corning Ware base pyroceram glass, another to yield a clear cooktop type glass and a third to yield a common soda lime glass (such as that used in container glass) with 0.3 Wt.% Li2O. The petalite proportions used in each batch were as follows:

Corning Ware Batch -741.9 grams Petalite per total batch of 1018 grams

Clear Cooktop Batch -763.4 grams Petalite per total batch of 1018 grams

Soda Lime with 0.3% Li2O Batch -54.7 grams Petalite per total batch of 1000 grams

These melts were poured into patties and annealed. A portion of each patty was cut off to yield glass for testing. The remaining patty portions have been shipped to you under separate cover. Your petalite yielded glass of acceptable visual quality. Analysis of certain glass properties will follow at the end of this section." (Wallding, 1999).

In the fall of 1999, claims K1149784, K1149785, K1149786 and K1178427 were perimeter surveyed by W.J., Bowman Ltd. and brought to lease as CLM 428.

2001: A compilation report of Emerald Fields Corporation claims in the Kenora area. The report summarizes the work completed on the Property and identifies Tin and Tantalum diamond drill targets. As part of the report a tonnage was calculated for the Big Mack pegmatite. **The calculation is non-compliant to NI 43-101 and indicates 84,405 tonnes of petalite** (Chastko 2001). Diamond drilling on the Big Mack pegmatite has tested a strike length of 75 metres and a vertical depth of 50 metres. Diamond drill holes below 50 metres intersected a non-petalite bearing pegmatite. A 17 hole (NQ size-2100 metre) diamond drill program was completed to test a number of dikes located on the CLM 428 lease (Table 5) (Figure 4). The drilling focused on testing smaller dikes for tin and tantalum. Holes SR-20 and SR=27 were drilled on the Eleven Zone and Big Mack pegmatites respectively.

Table 5: 2001 Diamond Drill Results Separation Property

Hole #	Azimuth	Dip	Depth metres	Year	Pegmatite Target	Results ppm / metres	No. Of Assays
SR-01-12	360	-45	102.72	2001	TA-1a	1055 / 0.39 Sn 514 / 0.17 Ta	19
SR-01-13	360	-60	127.10	2001	TA-1a	9857 / 0.96 Sn 306 / 0.55 Ta	18
SR-01-14	360	-45	99.67	2001	TA-1a	571 / 0.30 Sn 116 / 0.51 Ta	21
SR-01-15	360	-60	160.63	2001	TA-1a	364 / 0.50 Sn 166 / 0.54 Ta	36
SR-01-16	205	-45	99.67	2001	TA-1a	651 / 1.2 Sn 402 / 0.31 Ta	21
SR-01-17	205	-60	124.05	2001	TA-1a	1528 / 0.99 Sn 495 / 0.59 Ta	28
SR-01-18	360	-45	151.49	2001	TA-2	510 / 1.0 Sn 412 / 0.30 Ta	18
SR-01-19	360	-45	203.31	2001	TA-2	961 / 1.09 Sn 221 / 0.2 Ta	36
SR-01-20	360	-45	172.21	2001	Eleven Zone	5051 / 14.16 Li	34

Hole #	Azimuth	Dip	Depth metres	Year	Pegmatite Target	Results ppm / metres	No. Of Assays
SR-01-21	165	-45	84.43	2001	TA-3	1837 / 0.31 Sn 234 / 0.82 Ta	20
SR-01-22	165	-60	96.67	2001	TA-3	2165 / 1.04 Sn 1104 / 0.42 Ta	20
SR-01-23	195	-45	75.29	2001	TA-3	1597 / 0.28 Sn 585 / 0.20 Ta	20
SR-01-24	195	-60	99.67	2001	TA-3	2932 / 0.35 Sn 69 / 1.03 Ta	19
SR-01-25	360	-45	157.58	2001	TA-2	664 / 0.15 Sn 597 / 1.35 Ta	33
SR-01-26	245	-45	124.05	2001	South of Big Mack	111 / 1.0 Sn 52 / 1.2 Ta	18
SR-01-27	10	-45	96.62	2001	Big Mack	5126 / 15.9 Li	14
SR-01-28	190	-45	124.05	2001	Tent Zone TA-10	662 / 0.87 Sn 363 / 0.25 Ta	25

Multiple pegmatite dikes in all holes. Assay values shown are best values. Assays ranged from trace to these best values.

The most recent government geological map covering the region is Open File Map 241 (Blackburn, et a~ 1994). The Ontario Geological Survey has recently carried out numerous detailed programs on the pegmatite field in the Separation Lake English River area. Most of the work has been carried out by Dr. F.W. Breaks of the Mineral Field Services Section, Ontario Geological Survey. The most descriptive report for the Property is by Breaks et al. (1999). This work has spawned great interest in the SLGB pegmatite field.

9.0 GEOLOGICAL SETTING

The Separation Lake Greenstone Belt (SLGB) has been the focus of extensive study by the Ontario Geological Survey since the area was examined as part of Operation Kenora-Sydney Lake (Breaks et al. 1975). The Property occurs within the SLGB of the contact zone of the English River sub province and Winnipeg River sub province of the Archean Superior Province (Figure 1).

9.1 Regional Geology

The Property lies within the SLGB within boundary zone of the English River sub province and the Winnipeg River sub province boundary. The SLGB is comprised of metasedimentary-metavolcanic sequences intruded by mafic to felsic bodies (Figure 1).

It has been suggested that the SLGB is the extension of the Bird River belt to the west (Timmins et al. 1985). The Bird River- SLGB system is noteworthy in being the locus for one of the highest concentration of rare-metal pegmatite mineralization in the Superior Province coupled with probably the greatest number of complex-type, petalite-subtype pegmatite occurrences in Canada (Cerny et al. 1986).

The Bird River Greenstone Belt is host to the Winnipeg River-Cat Lake pegmatite fields that includes TANCO's tantalum and cesium producing mine at Bernic Lake, Manitoba. The SLGB is host to the SLGB pegmatite fields that includes the Big Mack petalite pegmatite and Avalon's Big Whopper pegmatite (Figure 3).

The Bird River greenstone belt has been subdivided into a number of formations, including metamorphosed meta-basalts (amphibolites) and derived volcaniclastic metasediments. In the SLGB, lithologies include predominant amphibolite (meta-basalt), volcaniclastic metasediments, iron formation, rhyolite, granite and related pegmatites, and lesser gabbroic intrusive rocks. The granite intrusion is called the Separation Rapids pluton, a highly-evolved, peraluminous granite exposed over an area of 2x4 kilometres immediately to the north of the Property. Metamorphic grades are lower to middle amphibolite facies. A north-south oriented compressional tectonic event imparted a strong foliation to both the supracrustal and intrusive rocks and produced high strain features such as folding, boudinage and ductile shear zones.

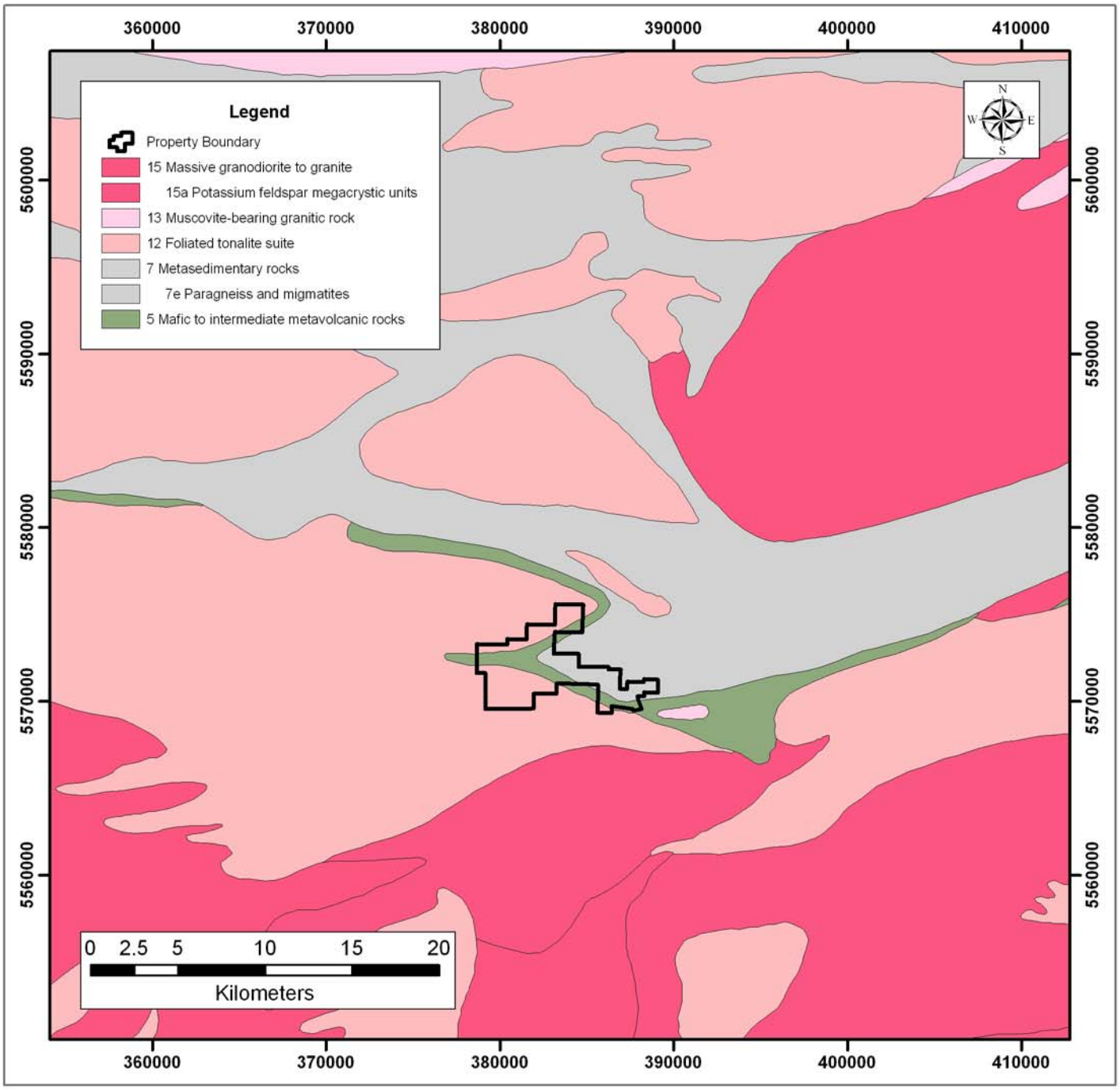

Figure 5

Regional Geology

Paterson Lake Area, Kenora Mining Division
NTS Sheet 52 L/07

NAD 83 UTM Zone 15N
June 2, 2009 - SS
Clark Exploration Consulting

1:250 000 Scale Bedrock Geology of Ontario,
Ontario Geological Survey
Miscellaneous Release Data 126 - Revised

9.2 Property Geology

The Property is predominantly underlain by meta-basalts and derived rocks of lower to middle amphibolite facies metamorphic grade, referred to collectively as amphibolite. Amphibolite commonly weathers recessively relative to granite and related pegmatites, and also occurs as narrow screens in pegmatite. Granite, pegmatitic granite and pegmatite dikes of the peraluminous Separation Rapids pluton intrude amphibolite over the north half of the property, with primary pegmatitic granite and related dikes of the Winnipeg River batholith intruding amphibolite on the south half of the property (Figure 6).

Pegmatitic granite related to the Separation Rapids pluton outcrops at several locations on the Property as irregular dikes and larger elliptical intrusions. It is comprised mainly of white K-feldspar, albite, green muscovite, quartz, with accessory spessartine garnet, cassiterite, apatite, tantalum-oxides, and gahnite. The Separation Rapids pluton, likely the parent granite to the Separation Rapids pegmatite field, is comparable in size and constituent granitic units to the fertile, peraluminous Greer Lake pegmatitic granite pluton, situated 55 kilometres west-northwest in Manitoba (Breaks, 1993).

Pegmatite dikes belong to the complex-type, petalite (LiAlSi4Oio) sub-type, class of rare metal pegmatites, and are divided into two coeval types (Pedersen 1998):

a. Albitites with accessory K-feldspar, green muscovite, quartz, cassiterite, spessartine garnet, Ta-oxides, and gahnite.
b. Petalite-bearing pegmatite with subordinate rubidian K-feldspar and albite, and accessory quartz, green muscovite, lepidolite, spessartine, apatite, cassiterite, Ta-oxides, spodumene, and topaz.

The largest of these and the Property is a petalite-bearing pegmatite, named the Big Mack, which is flanked by a swarm of narrower petalite pegmatites and albitites (Figure 4).

A strong tectonic fabric transgressing amphibolite and pegmatite trends west-northwest and dips vertically. This fabric progresses to proto-mylonite in pegmatite along a re-activated regional fault structure. Pegmatite was emplaced along bedding planes and schistosity and rarely exhibits cross cutting relationships. Isoclinal to tight open folds are abundant in amphibolite on a pervasive, small, centimetre to several metres scale. This folding is also imposed on pegmatites, which exhibit compressional high-strain features in the form of boudinage and small-scale ptygmatic folds. Fold hinges and related linear fabrics consistently plunge steeply eastward to sub-vertical (Pedersen 1998).

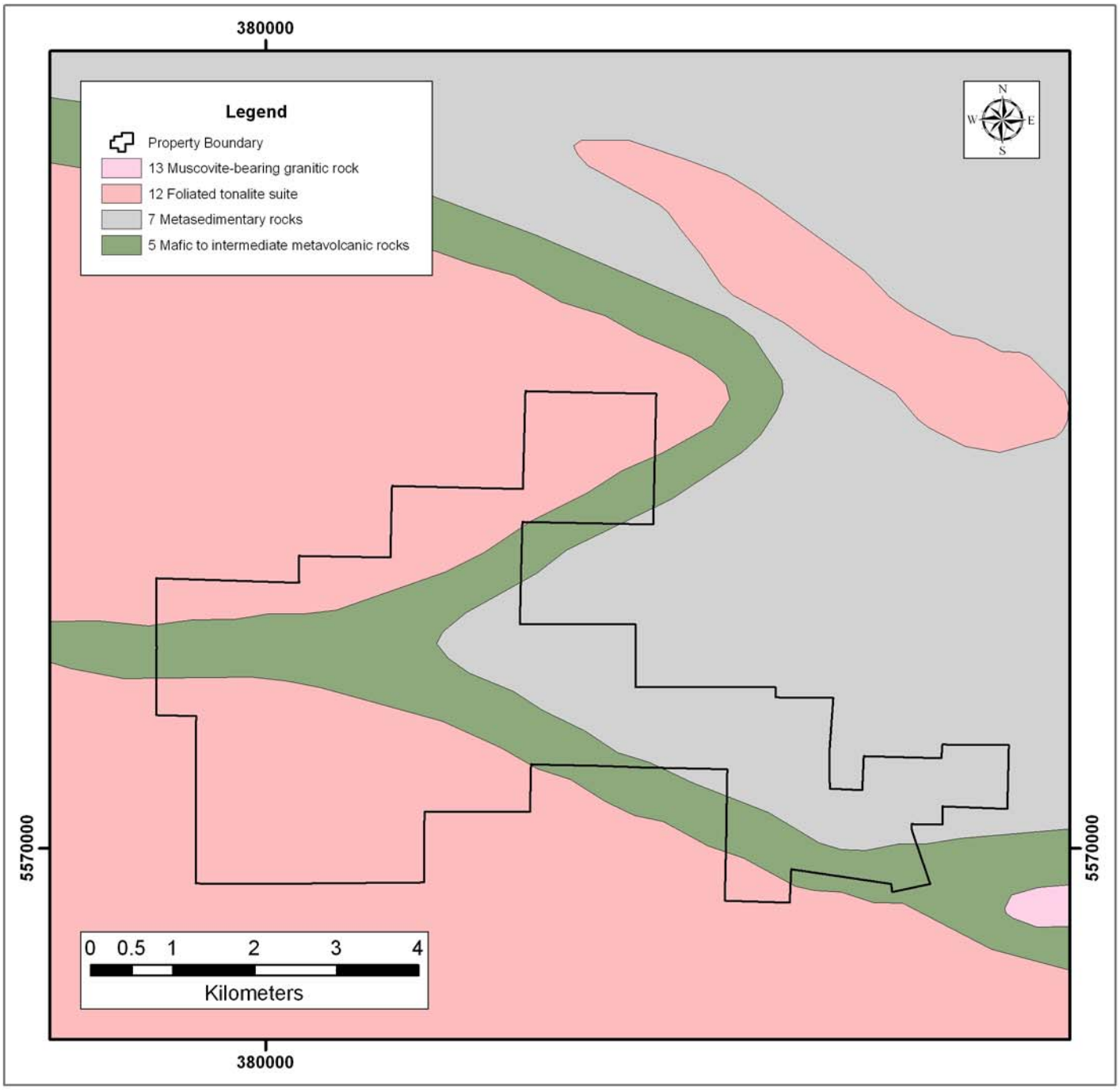

Figure 6

Property Geology

Paterson Lake Area, Kenora Mining Division
NTS Sheet 52 L/07

NAD 83 UTM Zone 15N
April 23, 2009 - SS
Clark Exploration Consulting

1:250 000 Scale Bedrock Geology of Ontario,
Ontario Geological Survey
Miscellaneous Release Data 126 - Revised

10.0 DEPOSIT TYPE

The SLGB represents the easterly extension of the Bird River belt of Manitoba (Cerny et. al. 1981). The Bird River – SLGB system is noteworthy in being the locus for one of the highest concentration of rare-metal pegmatite mineralization in the Superior Province coupled with probably the greatest number of complex-type, petalite-subtype pegmatite occurrences in Canada (Cerny et. al. 1981). The Property pegmatites can be compared to Tanco's Bernic Lake pegmatite in Manitoba and the Bikita pegmatites of Zimbabwe.

The Bird River belt hosts the Tanco's Bernic Lake pegmatite in Manitoba. The zoned petalite-subtype Tanco pegmatite intrudes amphibolite, and is located on the northwestern shore of Bernic Lake, about 180 km east–northeast of Winnipeg, near the Manitoba–Ontario border. It is a member of the Bernic Lake pegmatite group, and is located in the Bird River Greenstone Belt of the Superior Province.

The sub horizontal Tanco pegmatite (1990 X 1060 X 100 m) consists of nine pegmatite zones: border zone, wall zone, aplitic albite zone, lower intermediate zone, upper intermediate zone, central intermediate zone, quartz zone, pollucite zone and lepidolite zone. The border zone is dominantly an assemblage of saccharoidal albite and quartz along the pegmatite–wallrock contact, and is <30 cm thick. The wall zone consists dominantly of giant columnar microcline perthite (≤ 3 m) in a matrix of quartz, medium-grained albite and tabular greenish muscovite (≤ 10 cm). The aplitic albite zone consists mainly of fine-grained undulating layers of saccharoidal albite and quartz with significant Ta–Nb mineralization. The lower intermediate zone consists of two main assemblages: (1) large crystals of microcline perthite and spodumene + quartz pseudomorphs after petalite (≤ 2 m) embedded in medium-grained quartz, albite and micas; (2) quartz pods (0.5–2.0 m) with amblygonite– montebrasite and aggregates of spodumene + quartz. The lower intermediate zone grades gradually into the upper intermediate zone (50), characterized by gigantic crystals (e.g., amblygonite to 2 m, microcline perthite to 10 m, and petalite to 13 m long). The central intermediate zone (60) consists mainly of microcline perthite, quartz (5–40 cm) and fine-grained greenish muscovite with significant amounts of Ta–Nb oxide minerals, beryl and hafnian zircon. The quartz, pollucite and lepidolite zones are monomineralic. The Tanco pegmatite is mined for Ta (wodginite and tantalite), Cs (pollucite), Rb (lepidolite) and ceramic-grade spodumene (Selway et al. 2000).

The pegmatites of the SLGB are similar in composition to the Bikita area of Zimbabwe (Breaks et. al. 1997). Bikita is the world's premier petalite deposit.

Key similarities to Bikita are:

- the dominance of petalite as the principal lithium mineral with spodumene being rare;
- presence of cassiterite, topaz, lepidolite and pollucite and
- lack of tourmaline.

The Al Hayat sector (host of the main petalite production) of Bikita Mine is similar in width to Avalon's Big Whopper pegmatite.

This deposit-type is one of the most difficult to explore for in the Archean. The limited response to geophysics both airborne and ground surveys prevent the detection of the pegmatites especially in area of glacial deposits. The principle method of detection is by studying the geochemistry of the geological environments to determine if fertile granitoid intrusions are present.

11.0 MINERALIZATION

Zoned pegmatites are host to many rare elements and metals such as tantalum, niobium, tin, lithium, rubidium and cesium. Tanco's Bernic Lake pegmatite in Manitoba, Bikita in Zimbabwe and the Greenbushes in Australia are some of the better known deposits currently being mined for their lithium and/or tantalum content.

The SLGB is comparable in size and potential to these major producing areas, with Pacific Iron's Big Mack and Avalon's Big Whopper petalite pegmatites being examples of potentially economic deposits.

The exploration work to date has identified a series of petalite and rare earth pegmatites on the Property. The most significant of these on the Property are the Big Mack, Eleven Zone, Glitter, Wolf and Rattler pegmatites (Figure 3). Other pegmatites of the Property have been drill tested and are mentioned in Section 8.0: History.

11.1 Big Mack Pegmatite

The following description of the Big Mack pegmatite is modified from Breaks et al. (1999).

"The Big Mack pegmatite represents the largest petalite-bearing mass on the Property and is exposed over an 80 by 225 m area (Figure 7). The pegmatite comprises a 30 by 100 m main mass coupled with several prominent, narrow apophyses that taper towards the south and southeast. These apophyses consist of non-petalite-bearing sodic pegmatites, sodic aplites, potassic pegmatite and holmquistite-bearing granitic rocks, which contain sporadic, scattered grains of dark brown cassiterite and currently unidentified black oxide minerals.

The Big Mack Pegmatite exhibits an internal zonation expressed by a continuous wall zone, 0.5 to 3 m thick that grades into a main core mass of petalite-rich pegmatite. The wall zone is composed mainly of cordierite, quartz, and plagioclase and generally lacks petalite. This strongly peraluminous unit is characterized by abundant cordierite, up to 2 by 3 cm, variably altered to garnet + mica-rich symplectites enveloped by deep blue, fine-grained holmquistite. Petalite megacrysts, up to 2.5 by 6 cm, are only locally evident in the wall zone and are invariably partially altered to light pink clay minerals of the smectite group. Other varietal minerals include light green muscovite and garnet.

Petalite-rich pegmatite comprises most of the body and contains areas up to 56 to 60% light brown-weathering petalite, 30 to 33% blocky potassium feldspar, 5 to 11% quartz, and 2 to 4% muscovite based upon two modal analyses each conducted over a 1 square metre area. The petalite is white, grey or faint blue, translucent to locally transparent with individual well preserved crystals up to 10 by 15cm. Cordierite and mica-rich aggregates that replace this mineral are also noted locally in petalite-rich zones as at the northern end of the blasted trench. Deep-blue holmquistite is apparent along the fringes of these mica-rich aggregates and also extends into adjacent petalite.

Chrysoberyl-bearing petalite pegmatite is confined to a 2 to 6 by 25 m unit that is exposed within the southern end of the trench. This unit comprises the assemblage chrysoberyl + garnet + muscovite + petalite + potassium feldspar-plagioclase and is generally finer grained than the main petalite-bearing unit. The petalite content is noticeably lower than the adjacent quartz-potassium feldspar-petalite unit with milky to clear white petalite (10 to 20%) limited to sporadic megacrysts up to 10 cm diameter and narrow, irregular segregations composed of polycrystalline petalite, lesser white feldspar and sporadic, lime-green chrysoberyl.

Quartz-rich patches up to 0.3 by 1 m occur sporadically in the quartz-potassium feldspar-petalite pegmatite unit and may contain 5 to 10% petalite megacrysts and rare platy black oxide grains."

Exploration work by Emerald Fields Corporation included diamond drilling, bulk sampling and metallurgical testing (Chastko, 2001). This work is described with results in Section 8.0: History.

11.2 Glitter Pegmatite

Description of the Glitter Pegmatite is presented below modified from Breaks et al. (1999).

"The Glitter Pegmatite is a highly deformed, petalite-bearing pegmatite exposed along its southeastern strike-length for 75 m and achieves a maximum width of 25 m (Figure 3). It exhibits internal zonation as four distinct units:

- discontinuous wall zone of garnet + muscovite + quartz + plagioclase aplite
- main mass of muscovite + quartz + potassium feldspar + petalite pegmatite
- holmquistite + cordierite + muscovite + biotite granitic pegmatite
- replacement stage garnet + muscovite aplite as irregular patches and anastomosing vein network

Considerable deformation is obvious in the form of ubiquitous tectonic flames of biotite-rich, metasomatized mafic metavolcanic rock along the contact which locally are traceable into tight folds contained within the petalite-rich pegmatite zone. A similar structural history to the Big Mack pegmatite was observed. Notable thickening of petalite-bearing pegmatite within an adjacent apophysis was developed during the isoclinal folding stage.

Channel samples were selected at 1 m intervals by Champion Bear Resources across part of the main petalite-bearing unit. The results revealed Li2O contents between 1.03 and 1.64% accompanied by anomalous trace levels of other rare-metals.

Petalite in the main unit is light brown on the weathered surface and intensely recrystallized, such that original crystal shapes could not be discerned. Locally up to 80% petalite was noted. Oxide minerals occur sparsely disseminated and were identified by electron microprobe analysis as cassiterite, ferrowodginite, ferrotantalite, ferrocolumbite and ferrotapiolite."

No Diamond drilling has been completed on the Glitter Pegmatite.

11.3 Rattler Pegmatite

Description of the Rattler Pegmatite is presented below modified from Breaks et al. (1999).

"This zone consists of pink weathering, pegmatite segregations, up to 7 by 12 m, hosted in the most westward-striking apophysis of the Skidder pluton (Figure 3). The segregations, which grade imperceptibly into its medium- to coarse-grained, garnet-biotite granite host, are composed of tourmaline-muscovite potassic pegmatite. The pegmatite contains 5 to 10% coarse books of silver to light brown muscovite up to 10 cm thick. Local patches and layers of sodic aplite, up to 0.25 by 1 m, and composed of white cleavelandite, green muscovite, quartz, blocky potassium feldspar, sporadic dark brown and black oxide specks, and faint green apatite. Milky and lime-green euhedral beryl, up to 6 by 10 cm, is the most striking rare-metal mineral present and is most conspicuous in muscovite-quartz-rich pods. Oxide minerals are quite sparse and identified to date only in the aplite and muscovite-quartz pods, respectively as fine-grained black grains and a single, 1 cm diameter dark brown crystal. Champion Bear Resources registered maximum bulk values of 831 ppm Cs, 0.021% Ta2O5, 0.015% Nb2O5, 124 ppm Sn, 0.41% Rb2O, and 0.20% Li2O in the zone."

No Diamond drilling has been completed on the Rattler Pegmatite.

11.3 Wolf Pegmatite

Description of the Wolf Pegmatite is presented below modified from Breaks et al. (1999).

"This mass of pink-weathering pegmatite occupies a 40 by 100 m area within a west-striking apophysis from the Skidder pluton (Figure 3). The zone consists mostly of tourmaline-garnet-biotite-muscovite potassic pegmatitic leucogranite characterized by graphic intergrowths of quartz-potassium feldspar up to 0.7 by 1 m and abundant coarse books of silver-coloured muscovite up to 5 cm thick. A gradational contact between medium-grained, garnet-biotite-muscovite granite was noted on the north side of the pegmatite mass.

Oxide minerals up to 5 mm diameter, identified by electron microprobe analysis (see Table 25.2) as dark brown cassiterite, manganocolumbite and microlite, are mainly confined to small pods and layers of sodic aplite up to 0.8 by 1 m in size. Green beryl is rare.

Maximum bulk values of 1000 ppm Cs, 0.016% Ta2O5, 0.024% Nb2O5, 859 ppm Sn, 0.17 % Rb2O and 0.39% Li20, were obtained in the sampling of Champion Bear Resources."

No Diamond drilling has been completed on the Wolf Pegmatite.

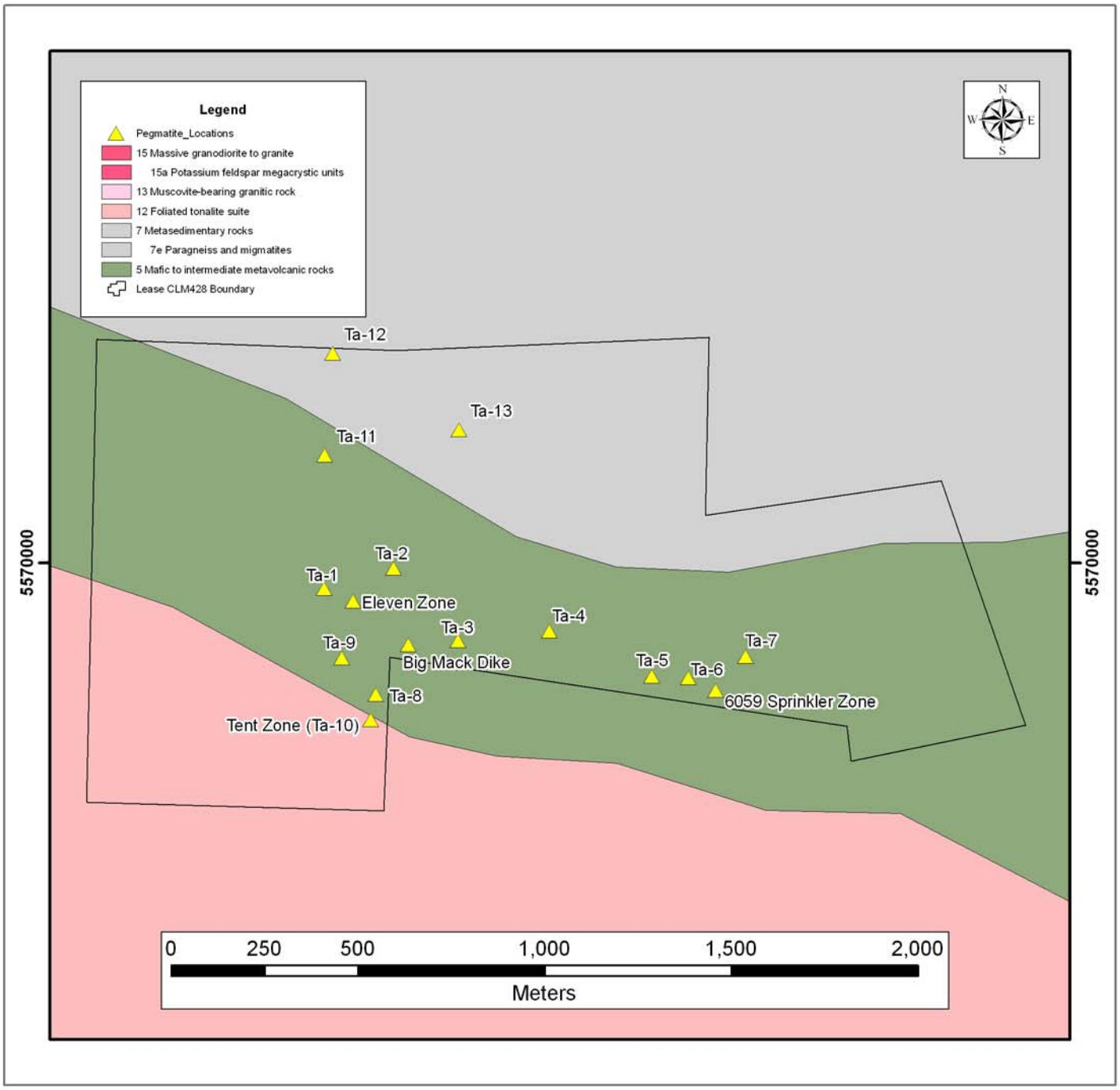

Figure 7

CLM 428 Compilation

Paterson Lake Area, Kenora Mining Division
NTS Sheet 52 L/07

NAD 83 UTM Zone 15N
June 2, 2009 - SS
Clark Exploration Consulting

1:250 000 Scale Bedrock Geology of Ontario,
Ontario Geological Survey
Miscellaneous Release Data 126 - Revised

12.0 EXPLORATION

Pacific Iron Ore has not completed exploration work on the Property.

Desmond Cullen, one of the Authors completed a Property visit May 5th, 2009. During the visit the blasted pit on the Big Mack pegmatite was examined and three samples were taken to assess the lithium content. The samples and results are presented in Table 6.

Table 6 : Authors Samples

Sample Number	Lithium ppm	Northing	Easting	Description
6600324	13250	5569883	386521	grey feldspar petalite (30-35%) muscovite, 1% oxides fine-grained coarse petalite
6600325	9830	5569883	386521	grey to white 1-2% oxides, 10% petalite, 5% muscovite fine-grained feldspar
6600326	10350	5569883	386521	10% petalite coarse-grained grey-white, 3-5% oxides, fine-grained feldspar

Zone 15 NAD 83

13.0 DRILLING

Pacific Iron Ore has not completed any drilling on the Property.

14.0 SAMPLING METHOD AND APPROACH

Pacific Iron Ore has not completed any sampling of the Property.

Desmond Cullen, one of the Authors, selected three grab samples from the blasted trench of the Big Mack pegmatite. These samples would be considered grab samples that were randomly chosen. Samples were placed in plastic bags with a numbered identification tag, sealed with flagging tape and then the identification number was inscribed with a permanent

marker on the outside of the bag. The author delivered the samples to ALS Chemex in Thunder Bay for analysis.

15.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

ALS Chemex in Thunder Bay is a sample preparation facility with final analysis completed in North Vancouver, B.C.. On deliver to the Thunder Bay facility the sample is logged in the tracking system, weighed, dried and finely crushed to better than 70 % passing a 2 mm (Tyler 9 mesh, US Std. No.10) screen. A split of up to 250 g is taken and pulverized to better than 85 % passing a 75 micron (Tyler 200 mesh, US Std. No. 200) screen. The prepared sample is then shipped to North Vancouver. The prepared sample (0.25 g) is digested with perchloric, nitric, hydrofluoric and hydrochloric acids. The residue is topped up with dilute hydrochloric acid and the resulting solution is analyzed by inductively coupled plasma-atomic emission spectrometry. Results are corrected for spectral interelement interferences.

Samples taken by the author were delivered to ALS Chemex in Thunder Bay an ISO 9001:2000 certified laboratory.

16.0 DATA VERIFICATION

Review of the previous work was completed with paper and digital files no attempt to verify previous analysis was completed. It is noted that analysis by Emerald Fields Resources was dominantly completed by ALS Chemex with some duplicate analysis at other laboratories. The only noted discrepancy was the variable tantalum contents of samples from the Big Mack pegmatite from different laboratories. Chastko (2001) attributed the variable values of tantalum to a potential nugget effect similar to gold mineralization.

Desmond Cullen completed a Property visit on May 5th, 2009. The access was by logging roads. Three samples were taken from the blasted trench on the Big Mack pegmatite. The samples analysis for lithium compared favourably with previous reported values.

The authors is of the opinion that the previous sampling meets the standards set out in NI 43-101 and that no additional data verification was required for this report.

17.0 ADJACENT PROPERTIES

The most significant adjacent property is that of Avalon Rare Metals Inc.. The Avalon property hosts the Big Whopper Project (BWP) (Figure 3). A summary of the project is presented on the Avalon Rare Metals Inc. website www.avalon.com.

A summary of the description from the website of the BWP is:

> "The Separation Rapids property is host to one of the largest rare metal pegmatite deposits in the world. Known as the "Big Whopper" Project ("BWP"), it is only the

fourth example in the world of a rare metal pegmatite with the size required to be of major economic importance and only the second to be enriched in the rare lithium mineral called petalite. The deposit is a potential source of lithium minerals for use in the glass and ceramics industry and specialty composite materials and is also a potential source of lithium chemicals for the growing rechargeable battery market. There is also potential for production of tantalum and rubidium minerals and a pure form of sodium feldspar.

Since acquiring the property in October 1996, Avalon has invested approximately $3.7 million on exploration and development work primarily focused on the lithium minerals potential. This involved geological mapping, trenching, ground magnetic surveys, mineralogical studies and diamond drilling totaling 10,152 m in 69 holes. This work culminated in 1999 with the completion of a comprehensive pre-feasibility study on the viability of producing petalite with by-product feldspars, by independent consultant Micon International Inc. The business model involved production of high purity concentrates of petalite for sale to glass-ceramics manufacturers such as Corning for use in its famous Corningware® cookware. The Company was unsuccessful in advancing the project on this basis following the shutdown of the Corningware manufacturing facility in the U.S. in 2001.

In 2002-2003, Avalon completed a Scoping Study to evaluate an alternative development concept for the project which involved producing a diluted petalite product called “high-lithium feldspar”. The concept was based on application of a simple dry processing technique to remove the iron and tantalum-bearing minerals by magnetic separation and aggregating the feldspar and quartz with the petalite into a material to be marketed as a low-cost, lithium-enriched glass sand. Subsequent process testwork on a six tonne bulk sample and crucible melt studies demonstrated that an acceptable quality product could be produced which would have the advantage of lowering the melting temperature of the glass batch, thereby reducing the manufacturers’ energy costs and emissions of greenhouse gases. However, development was frustrated by the requirement for large volume test samples and the lack of suitably-equipped custom milling facilities available to produce such a sample.

In 2005, a potential new market for the petalite ore was identified as an ingredient in a new non-combustible composite material with various potential construction applications. The untreated crushed petalite ore could be used directly in the manufacturing process for this material, creating an interesting development opportunity for Avalon. In 2006, a 300 tonne bulk sample of the ore was extracted and crushed for delivery to the customer for its own product development purposes. Deliveries of this material began in early 2007 but have since been discontinued, while the customer, a development stage company, attempted to raise additional capital. There has been no word as to when shipments might resume to this customer.

With increasing energy prices and concerns about climate change related to greenhouse gas emissions, interest in lithium additions to glass formulations is increasing, creating new opportunities for lithium minerals producers. The Company is continuing to investigate these opportunities through an on-going marketing

campaign and periodically produces small test samples for laboratory evaluation by potential customers.

Complex-type pegmatites are found in many areas of the world and are economically important as resources for the rare metals, including lithium, tantalum, cesium and rubidium. Except for the producing Tanco (Manitoba), Bikita (Zimbabwe) and Greenbushes (Western Australia) mines, most complex-type pegmatites are too small to be profitably mined. While comparable in size, the BWP exhibits some significant differences from the norm in its structural setting, preservation of magmatic zonation and overall crystal size. Unlike Tanco and Bikita, which are shallowly dipping, undeformed zoned intrusions, and Greenbushes, which is an approximately 45°-dipping, zoned pegmatite, the BWP is subvertically-dipping, complexly folded, and strongly foliated, with a smaller average grain size.

The 1997-98 drilling program delineated an indicated petalite resource of 8.9 million tonnes and an inferred petalite resource of 2.7 million tonnes grading 1.34% Li2O, 0.007% Ta2O5 and 0.30% Rb2O. These resources are delineated over a strike length of 600 m, to a maximum vertical depth of 250 m and remain open for expansion both to depth and along strike. The lithium and rubidium grades are consistent with a petalite content averaging 25±5% and an Rb-K-feldspar content averaging 10 to 15%, with the rest of the rock consisting mainly of albite, muscovite, lepidolite, and quartz. Important accessory minerals include spodumene, spessartine, cassiterite, and columbite-tantalite, the principal ore mineral for tantalum.

The mineralized zone is well exposed at surface in a low dome-shaped hill, where it averages 55 m in width over a 400 m strike length. This part of the deposit will be readily amenable to mining by low-cost quarrying methods. A conceptual open pit designed for the pre-feasibility study by Micon International contains a probable reserve of 7.72 million tonnes grading 1.4% Li2O, (NI 43-101 audited) which is the reserve used for present planning purposes."

18.0 MINERAL PROCESSING AND METALLURGICAL TESTING

Not applicable.

19.0 MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES

Not applicable.

20.0 OTHER RELEVANT DATA AND INFORMATION

There is no other data relevant to the property.

21.0 INTERPRETATION AND CONCLUSIONS

The Property hosts a number of petalite (Lithium) and rare-metal bearing pegmatites that are part of the SLGB. These include the Big Mack, Glitter, Wolf and Rattler bodies. These pegmatites and pegmatites on the adjacent Avalon Ventures property have been determined to have economic potential by previous work completed. The Big Mack pegmatite has been drill tested to a limited depth and has had significant lithium values reported. Other pegmatites on the Property have had limited to no diamond drilling.

Further exploration of the Property should comprise prospecting, additional sampling and diamond drilling to further define the potential of the lithium and rare-metal pegmatites. Specifically, the work should include diamond drilling of the Big Mack pegmatite to depth and along strike to prove continuity and the potential associations to the other pegmatites in the immediate area. Geochemistry of all the pegmatites should be reviewed to help determine genesis and relationships of the pegmatites across the Property.

22.0 RECOMMENDATIONS

A budget of $371,200 is recommended to evaluate the potential of the Property. The work program is to be comprised of comprise prospecting, additional sampling and diamond drilling to further define the potential of the lithium and rare-metal pegmatites.

The prospecting should focus on the entire Property. Previously the land base was fragmented and thorough prospecting may not have occurred. The expansion of the Property has also resulted in the acquisition of other known pegmatites. The areas of these pegmatites need to be prospected in detail as the original Emerald Field Resources has been.

Extensive sampling of the known and potentially new pegmatites should be completed. Geochemical analysis of the pegmatites should be undertaken to help determine the genesis and relationships of the pegmatites. Geochemical data can be added to the extensive database the Ontario government has available to help vector into non-outcropping pegmatites. The number of pegmatites identified on the CLM 428 lease should sampled to determine relationships of these pegmatites to the Big Whopper pegmatite on the adjacent Avalon Ventures ground.

The diamond drilling will enable the further expansion of the Big Mack pegmatite along strike and to depth. The diamond drilling and associated sampling will help understand the relationships of the identified pegmatites within the immediate area and the Big Whopper. The diamond drilling to depth will also assess the structural complexity and potential zonation of the Big Mack pegmatite.

PROPOSED PROGRAM		**Rate**	**Units**	**Cost**
Prospecting	2 men	600	60 days	36,000
Truck and quad		200	60 days	12,000
Room and Board	Kenora	350	60 days	21,000
Assays	Lithium and 32 element ICP	45	400 samples	18,000
Contingencies				8,700
			Subtotal	**95,700**
DRILL COSTS		**Rate**	**Metres**	**Cost**
Metrage	All inclusive of contractor costs	125/Metre	1500	187,500
Mob/Demob				10,000
Geologist	(logging, spotting holes and report)	35/metre	1500	52,500
Core Cutting	(saw, blades and technician)	12.50/metre	1500	18,750
Assays		45	150	6,750
			Subtotal	**275,500**
TOTAL BUDGET				**371,200**

23.0 REFERENCES

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24.0 DATE

This report is respectfully submitted this 9th day of June, 2009.

"J. Garry Clark"	"Desmond Cullen"
June 29th, 2009	June 29th, 2009

25.0 STATEMENT OF QUALIFICATIONS

J. Garry Clark
1000 Alloy Drive
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Canada, P7B 6A5
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CERTIFICATE OF QUALIFIED PERSON

I, J. Garry Clark, P. Geo. (#0254), do hereby certify that:

1. I am a consulting geologist with an office at 1000 Alloy Dr., Thunder Bay, Ontario

2. I graduated with the degree of Honours Bachelor of Science (Geology) from Lakehead University, Thunder Bay, in 1983

3. "Technical Report" refers to the report titled "Technical Report Separation Property," Kenora Mining Division, Northernwestern Ontario, Canada, and dated June 29th, 2009.

4. I am a registered Professional Geoscientist with the Association of Professional Geoscientists of Ontario (#0254) and a member Ontario Prospectors Association.

5. I have worked as a Geologist for 25 years since my graduation from university.

6. I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements as a Qualified Person for the purposes of NI 43-101.

7.

8. I am responsible for the preparation of the Technical Report.

9. I am independent of the party or parties (the “issuer”) involved in the transaction for which the Technical Report is required, other than providing consulting services, and in the application of all of the tests in section 1.4 of NI 43-101.

10. I have had no prior involvement with the mineral Property that forms the subject of this Technical Report.

11. I have read NI-43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that Instrument and Form.

12. As of the date of this certificate, and to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 29th Day of June, 2009.

SIGNED

"J. Garry Clark"

_____

J. Garry Clark, P.Geo.

Desmond Cullen
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Canada, P0T 1X0
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CERTIFICATE OF QUALIFIED PERSON

I, Desmond Cullen, P.Geo. (#0164), do hereby certify that:

1. I am a consulting geologist with Clark Exploration of Thunder Bay, Ontario

2. I graduated with the degree of Honours Bachelor of Science (Geology) from Lakehead University, Thunder Bay, in 1988

3. "Technical Report" refers to the report titled "Technical Report Separation Property, Kenora Bay Mining Division, Northwestern Ontario", and dated June 29th 15, 2009.

4. I am a registered Professional Geoscientist with the Association of Professional Geoscientists of Ontario (#0164) and a member Ontario Prospectors Association.

5. I have worked as a Geologist for 21 years since my graduation from university.

6. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements as a Qualified Person for the purposes of NI 43-101.

7. I visited the Separation Property (the "Property") on May 5th, 2009 for one day.

8. I am responsible for the preparation of the entire Technical Report.

9. I am independent of the party or parties (the "issuer") involved in the transaction for which the Technical Report is required, other than providing consulting services, and in the application of all of the tests in section 1.4 of NI 43-101.

10. I have had no prior involvement with the mineral Property that forms the subject of this Technical Report.

11. I have read NI-43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that Instrument and Form.

12. As of the date of this certificate, and to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is

required to be disclosed to make the Technical Report not misleading.

Dated this 29th Day of June, 2009.

SIGNED and SEALED

"Desmond Cullen"

_____

Desmond Cullen, P.Geo.