

We are committed to providing [accessible customer service](#).
If you need accessible formats or communications supports, please [contact us](#).

Nous tenons à améliorer [l'accessibilité des services à la clientèle](#).
Si vous avez besoin de formats accessibles ou d'aide à la communication, veuillez [nous contacter](#).

**Assessment Report
Red Lake North, East Bay and Humlin Property
2017 Winter Sampling Program
Rubicon Minerals Corp.
January 11, 2017 to May 3, 2017**

Black Bear Lake, Bateman and Fairlie Township Area
Red Lake Mining District
Northwestern Ontario

NTS: 52N/04
NAD83 / UTM zone 15N

Prepared for

Rubicon Minerals Corporation
Suite 701, 1 Richmond Street West
Toronto, ON
M5H 3W4

By
Mark Ross, Chief Geologist P. Geo
May 2, 2017

TABLE OF CONTENTS

1.0 SUMMARY.....	3
2.0 INTRODUCTION.....	3
3.0 PROPERTY DESCRIPTION, LOCATION AND ACCESS.....	3
4.0 PHYSIOGRAPHY.....	4
5.0 EXPLORATION HISTORY.....	5
6.0 REGIONAL GEOLOGY.....	5
7.0 LOCAL GEOLOGY.....	5
8.0 EXPLORATION WORK PREFORMED, RESULTS, RECOMMENDATIONS .6	6
9.0 BIBLIOGRAPHY	15
10.0PROFESSIONALCERTIFICATION.....	17

LIST OF TABLES

Table 1: Mining claims pertinent to the report list.....	4
Table 2: Sample ID, Location (UTM) and Assay Results.....	6

LIST OF FIGURES

Figure 1: Mining Claims Location Map Work Performed.....	4
Figure 2.1: Mining Claim 4267796 samples location and Au (ppb) results.....	10
Figure 2.2: Mining Claim 4267791 samples location and Au (ppb) results.....	11
Figure 2.3: Mining Claim 4267792 samples location and Au (ppb) results.....	12
Figure 2.4: Mining Claim 4267793 samples location and Au (ppb) results	13
Figure 2.5: Mining Claim 4267794 samples location and Au (ppb) results	14

1.0 SUMMARY

During the winter of 2017, Rubicon Minerals Corporation completed a georeferenced bark sample on 5 unpatented mining claims located within the regional exploration properties.

The program was designated as a reconnaissance survey, with a sample density sufficient to test anomalous gold in rugged terrain. With the work program carried out in winter months and the likelihood of collecting representative till samples in frozen ground, Black Spruce bark sampling provided a good alternative. The abundant Black Spruce tree cover throughout the claims, provided sufficient material to sample from.

As expected, we were able to use the reconnaissance method of systematic sampling the Black Spruce (*Picea mariana*) trees to produce 179 samples over the 5 claims.

2.0 INTRODUCTION

This report is prepared to summarize exploration work performed by Rubicon Minerals Corporation on the 5 unpatented mineral claims located within Red Lake North, East Bay and Humlin property being submitted to the Ministry of Northern Development and Mines for assessment credit. Expenditures \$16,471 are being submitted for assessment credit incurred for the collection of a total of 179 bark sampling between January 11, 2017 and January 21, 2017.

Black Spruce (*Picea mariana*) was the tree chosen to be sampled during the program. The samples were collected around the base of the tree (30cm from bottom) and analyzed for gold. Typically the sampler using a cupped paint scraper and a contoured dust pan to collect the periderm portion of the tree bark. The sampler would scrape the tree bark into a contoured dust pan, looking to collect 150g of sample.

All work was supervised by Mark Ross P.Geo, Chief Geologist.

3.0 PROPERTY DESCRIPTION, LOCATION AND ACCESS

Claims 4267791, 4267792, 4267793, 4267794 and 4267796 are totaling 9 units and are part of Rubicon Minerals Corporation properties located in the Black Bear Lake, Bateman and Fairlie township area within the Red Lake Mining Division, Ontario. (Table 1)

Unpatented claims subject to the report are located from as close as 7 kilometers northeast and as far as 17 kilometers southwest of the Town of Red Lake (Fig 1: attached map) The claims are accessible via logging roads from Nungesser Road and Pineridge Road.

Table 1. Mining claims pertinent to the report list:

ClaimID	Units	Township_Area	Recorded_Owner	Recording_Date	Claim_Due_Date	Work_Required
4267791	2	BLACKBEAR LAKE AREA (G-1739)	RUBICON MINERALS CORPORATION	3/3/2015	18-Sep-17	800
4267793	2	BATEMAN (G-3741)	RUBICON MINERALS CORPORATION	3/16/2015	18-Sep-17	800
4267794	1	FAIRLIE (G-3731)	RUBICON MINERALS CORPORATION	3/16/2015	18-Sep-17	400
4267792	1	BATEMAN (G-3741)	RUBICON MINERALS CORPORATION	3/16/2015	18-Sep-17	400
4267796	3	BLACKBEAR LAKE AREA (G-1739)	RUBICON MINERALS CORPORATION	3/16/2015	18-Sep-17	1200

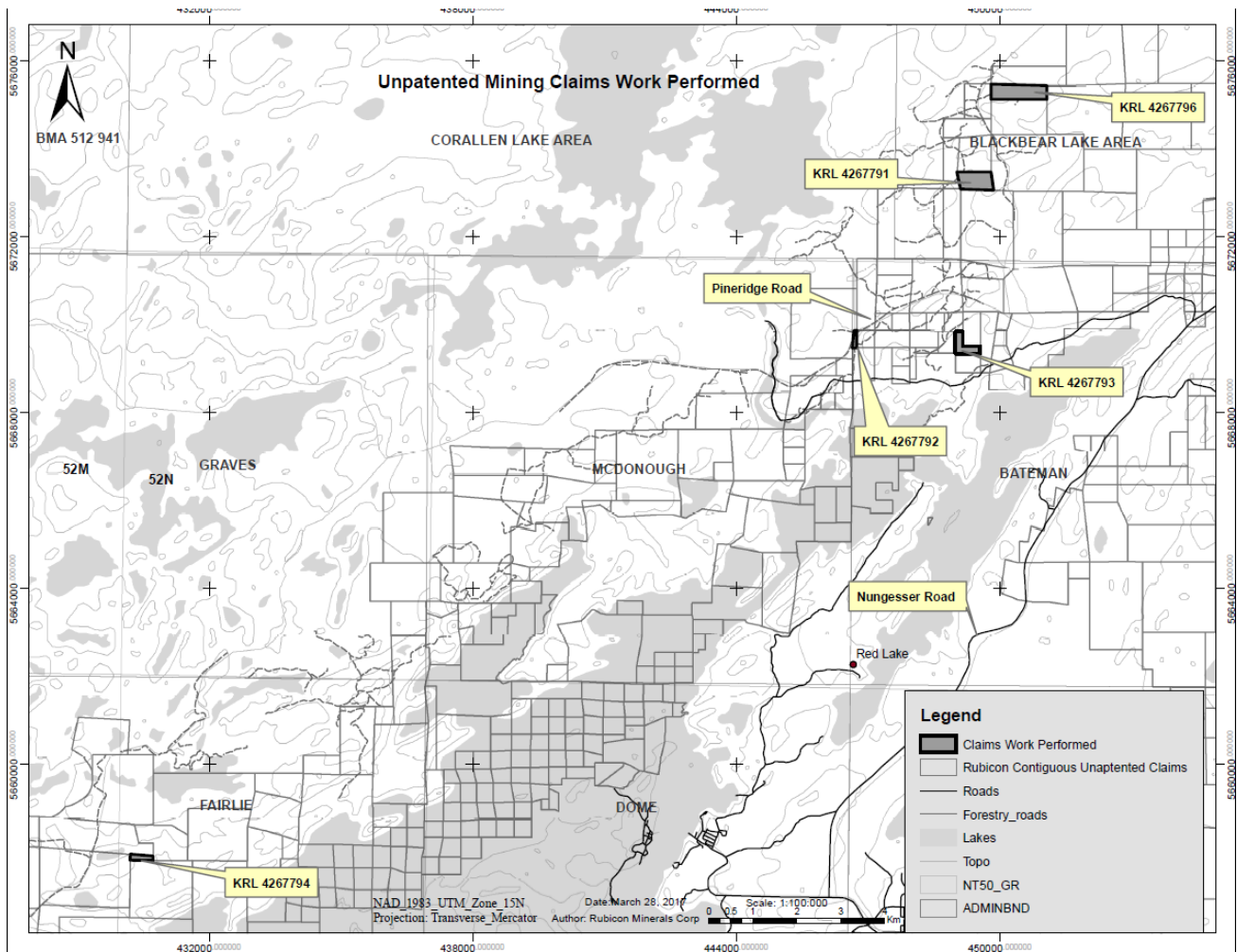


Figure 1: Mining Claims Location Map Work Performed

4.0 PHYSIOGRAPHY

The property within mining claims is typical of the Canadian Shield, consisting of small hilly glaciated outcrops separated by overburden and lake cover. Elevations vary across the Property from approximately 340 meters to 430 meters above sea level. Vegetation typically consists of pine, spruce and birch forest. The Property is covered by 2 to 10 m of glacial overburden with bedrock outcrop mostly restricted to shoreline exposures.

5.0 EXPLORATION HISTORY

The claims that pertain to this report, have no record of exploration. With the lack of exploration history specific to these claims, Rubicon felt that Black Spruce bark sampling would assist with identifying targets for follow-up. The dense tree cover and thick overburden cover on these claims makes for reconnaissance mapping difficult, and conventional till sampling impossible. The bark sampling proved a cost effective way for preliminary target selection.

6.0 REGIONAL GEOLOGY

The Red Lake greenstone belt (“RLGB”) is located in the western portion of the Uchi Subprovince of the Canadian Shield, which consists of an E-W trending sequence of volcanic and sedimentary rocks, with syn-volcanic intrusive that span a period of 300 million years.

The RLGB preserves a sequence of Archean magmatic and sedimentary rocks that range in age from ~3.0 to 2.7 Ga (billion years). The initial period of volcanism, sedimentation, and intrusive activity, from 2,990 Ma (million years) to 2,850 Ma, is thought to have developed along a continental margin of early Achaean crust; whereas the latter periods of volcanism, sedimentation and intrusive activity developed within a subduction zone created by collision with an older fragment of Archean continental crust (moving from a southerly direction). There are three main intrusive episodes dominated by granitic plutons dated between 2,734 Ma and 2,700 Ma.

7.0 LOCAL GEOLOGY

Claims 4267791, 4267792, and 4267796 are located within Red Lake North Regional property and are underlain by the northeast extension of the Red Lake Greenstone Belt. Primary geology consists of mafic to intermediate metavolcanics with minor ultramafic, felsic and iron formation rocks. Exploration targets include Hemlo style mineralization within sericite schist rocks.

Claim 4267793 is located within East Bay Regional property underlain by Balmer assemblage rocks consisting of mafic to ultramafic flows and intrusions and minor intercalated iron formation. Two major (>100 m thick) ultramafic bodies – the East Bay Serpentinite and the Pindar Creek Serpentinite – trend northeast across the center of the property for a combined strike length of 6 km. Ultramafics like these are associated with gold mineralization throughout the camp, including at the major mines and occurrences found the length of East Bay, and are considered first order exploration targets. The mafic to ultramafic sequence dips moderately to steeply to the northwest, and is flanked by large granodiorite bodies to the north and southeast (the Blackbear Pluton and Walsh Lake Pluton respectively).

Claim 4267794 is located within Humlin Regional property underlain by mafic to ultramafic flows, chert-magnetite iron formation and ultramafic intrusions of the Balmer assemblage, and lesser felsic tuff and siliciclastic rocks of the Confederation assemblage, which overlies the Balmer assemblage on a regional-scale angular unconformity. The western margin of the Dome stock (2718 Ma) underlies the southeast corner of the area, and the Killala-Baird batholith (2704 Ma) underlies the southwest corner of the area.

The most striking structural feature of the Humlin area is a broad (>1 km wide), ‘Mine Trend’ parallel, regional-scale, northwest trending structure referred to as the Pipestone Bay – St. Paul Bay deformation zone.

Hydrothermal alteration includes Fe-carbonate and fuchsite (potassic) alteration of mafic and ultramafic rocks, disseminated tourmaline in quartz-rich sedimentary rocks overlying the angular unconformity, and talc alteration of ultramafic rocks

8.0 EXPLORATION WORK PREFORMED, RESULTS AND RECOMMENDATIONS

The work that was conducted on the claims 4267791, 4267793, 4267794, 4267792 and 4267796 was a systematic Black Spruce (*Picea mariana*) tree bark sampling program. The sampling program was based on a reconnaissance style program, to identify potential targets. The historic record of exploration on these claims is limited, so a systematic blanket approach program was launched. A potential sampling grid was developed to determine a proper budget for work performed. The programs purpose was to look for anomalies, to better focus a secondary exploration program.

The work was conducted January 11 – January 29, 2017, on the 5 claims.

The samplers used a cupped paint scraper, and a dust pan contoured to tightly fit around the exterior of the tree. The sampler would scrape the outer bark fully around the Black Spruce tree until a 150g sample was gathered (hand full). Each sample was referenced with a hand held GPS unit.

All samples were properly labeled, dried and sent for assay. Samples were turned to ash, and tested with a routine fire assay analysis. Samples were plotted and results displayed.

Table 2: Sample Id, Location (Northing; Easting), and assay results

# Sample	Easting	Northing	Sample ID	Au (ppb)
1	451108	5675028	TH0001301	<5
2	451107	5675060	TH0001302	<5
3	451101	5675119	TH0001303	<5
4	451098	5675203	TH0001304	<5
5	451100	5675314	TH0001305	<5
6	451096	5675411	TH0001306	6
7	451036	5675425	TH0001307	<5
8	450951	5675423	TH0001308	5
9	450886	5675421	TH0001309	<5
10	450817	5675424	TH0001310	<5
11	450848	5675369	TH0001311	8
12	450922	5675353	TH0001312	<5
13	450995	5675361	TH0001313	6
14	451054	5675369	TH0001314	<5
15	451037	5675317	TH0001315	6
16	451044	5675258	TH0001316	7
17	451046	5675170	TH0001317	7
18	451045	5675119	TH0001318	<5
19	450979	5675119	TH0001319	<5
20	450895	5675111	TH0001320	<5
21	450800	5675114	TH0001321	<5
22	450708	5675135	TH0001322	<5
23	450595	5675130	TH0001323	<5

24	450489	5675113	TH0001324	6
25	450529	5675042	TH0001325	5
26	450637	5675047	TH0001326	5
27	450734	5675045	TH0001327	6
28	450818	5675039	TH0001328	6
29	450928	5675046	TH0001329	<5
30	451029	5675039	TH0001330	8
31	449882	5675033	TH0001331	6
32	449885	5675118	TH0001332	6
33	449894	5675205	TH0001333	<5
34	449890	5675303	TH0001334	<5
35	449881	5675369	TH0001335	<5
36	449881	5675437	TH0001336	6
37	449967	5675436	TH0001337	<5
38	450046	5675422	TH0001338	<5
39	450164	5675411	TH0001339	<5
40	450274	5675432	TH0001340	<5
41	450365	5675431	TH0001341	6
42	450464	5675431	TH0001342	<5
43	450576	5675404	TH0001343	<5
44	450675	5675412	TH0001344	<5
45	450552	5675092	TH0001345	<5
46	450437	5675050	TH0001346	<5
47	450352	5675052	TH0001347	<5
48	450253	5675050	TH0001348	<5
49	450202	5675124	TH0001349	<5
50	450148	5675200	TH0001350	<5
51	450086	5675274	TH0001351	<5
52	450007	5675270	TH0001352	<5
53	449946	5675224	TH0001353	<5
54	449956	5675149	TH0001354	<5
55	450053	5675187	TH0001355	<5
56	450116	5675130	TH0001356	<5
57	450142	5675045	TH0001357	<5
58	450057	5675052	TH0001358	<5
59	450015	5675111	TH0001359	<5
60	449958	5675058	TH0001360	<5
61	449853	5673089	TH0001361	<5
62	449851	5673185	TH0001362	<5
63	449842	5673293	TH0001363	<5
64	449850	5673407	TH0001364	<5
65	449849	5673458	TH0001365	<5
66	449767	5673450	TH0001366	6
67	449627	5673451	TH0001367	<5
68	449494	5673437	TH0001368	<5
69	449361	5673446	TH0001369	<5
70	449268	5673444	TH0001370	<5
71	449180	5673446	TH0001371	5
72	449205	5673404	TH0001372	<5
73	449305	5673380	TH0001373	7
74	449396	5673355	TH0001374	<5
75	449495	5673335	TH0001375	7
76	449605	5673328	TH0001376	16
77	449716	5673333	TH0001377	6
78	449781	5673292	TH0001378	<5
79	449728	5673215	TH0001379	5
80	449791	5673153	TH0001380	<5

81	449769	5673088	TH0001381	<5
82	449697	5673135	TH0001382	<5
83	449608	5673171	TH0001383	<5
84	449552	5673222	TH0001384	<5
85	449465	5673241	TH0001385	6
86	449375	5673273	TH0001386	<5
87	449276	5673309	TH0001387	<5
88	449195	5673350	TH0001388	<5
89	449125	5673420	TH0001390	<5
90	449132	5673340	TH0001391	<5
91	449150	5673265	TH0001392	<5
92	449140	5673193	TH0001393	6
93	449136	5673111	TH0001394	5
94	449210	5673111	TH0001395	6
95	449309	5673108	TH0001396	<5
96	449347	5673175	TH0001397	<5
97	449444	5673171	TH0001398	<5
98	449438	5673101	TH0001399	<5
99	449528	5673121	TH0001400	6
100	449620	5673110	TH0001401	5
101	449120	5669850	TH0001402	11
102	449117	5669831	TH0001403	6
103	449110	5669782	TH0001404	<5
104	449092	5669721	TH0001405	5
105	449110	5669708	TH0001406	5
106	449104	5669632	TH0001407	<5
107	449073	5669635	TH0001408	<5
108	449061	5669568	TH0001409	<5
109	449092	5669557	TH0001410	<5
110	449091	5669499	TH0001411	6
111	449037	5669474	TH0001412	5
112	449024	5669408	TH0001413	5
113	449016	5669341	TH0001414	<5
114	449076	5669352	TH0001415	5
115	449147	5669356	TH0001416	5
116	449225	5669349	TH0001417	<5
117	449289	5669333	TH0001418	6
118	449349	5669352	TH0001419	6
119	449429	5669364	TH0001420	8
120	449513	5669358	TH0001421	9
121	449570	5669356	TH0001422	7
122	449574	5669416	TH0001423	6
123	449560	5669472	TH0001424	6
124	449504	5669471	TH0001425	6
125	449442	5669477	TH0001426	<5
126	449366	5669469	TH0001427	6
127	449287	5669473	TH0001428	7
128	449216	5669473	TH0001429	23
129	449138	5669471	TH0001430	6
130	449081	5669472	TH0001431	<5
131	449098	5669410	TH0001432	7
132	449177	5669427	TH0001433	8
133	449229	5669392	TH0001434	10
134	449264	5669435	TH0001435	7
135	449309	5669391	TH0001436	<5
136	449334	5669440	TH0001437	<5
137	449400	5669393	TH0001438	7

138	449441	5669442	TH0001439	7
139	449477	5669394	TH0001440	7
140	449529	5669436	TH0001441	<5
141	446641	5669716	TH0001442	6
142	446645	5669778	TH0001443	7
143	446644	5669837	TH0001444	<5
144	446646	5669873	TH0001445	5
145	446691	5669870	TH0001446	<5
146	446743	5669863	TH0001447	<5
147	446742	5669812	TH0001448	<5
148	446743	5669758	TH0001449	<5
149	446741	5669705	TH0001450	<5
150	446747	5669651	TH0001451	<5
151	446742	5669600	TH0001452	<5
152	446742	5669554	TH0001453	<5
153	446752	5669492	TH0001454	<5
154	446694	5669504	TH0001455	<5
155	446647	5669508	TH0001456	<5
156	446648	5669556	TH0001457	<5
157	446648	5669610	TH0001458	<5
158	446696	5669620	TH0001459	<5
159	446697	5669676	TH0001460	<5
160	446648	5669678	TH0001461	<5
161	430206	5657946	TH0001462	<5
162	430252	5657936	TH0001463	9
163	430402	5657937	TH0001464	<5
164	430451	5657929	TH0001465	<5
165	430493	5657936	TH0001466	<5
166	430549	5657931	TH0001467	<5
167	430615	5657933	TH0001468	<5
168	430666	5657927	TH0001469	<5
169	430712	5657945	TH0001470	<5
170	430713	5657886	TH0001471	<5
171	430703	5657835	TH0001472	<5
172	430645	5657831	TH0001473	<5
173	430586	5657840	TH0001474	<5
174	430526	5657839	TH0001475	<5
175	430490	5657842	TH0001476	<5
176	430388	5657837	TH0001477	<5
177	430328	5657869	TH0001478	<5
178	430324	5657828	TH0001479	<5
179	430269	5657829	TH0001480	<5

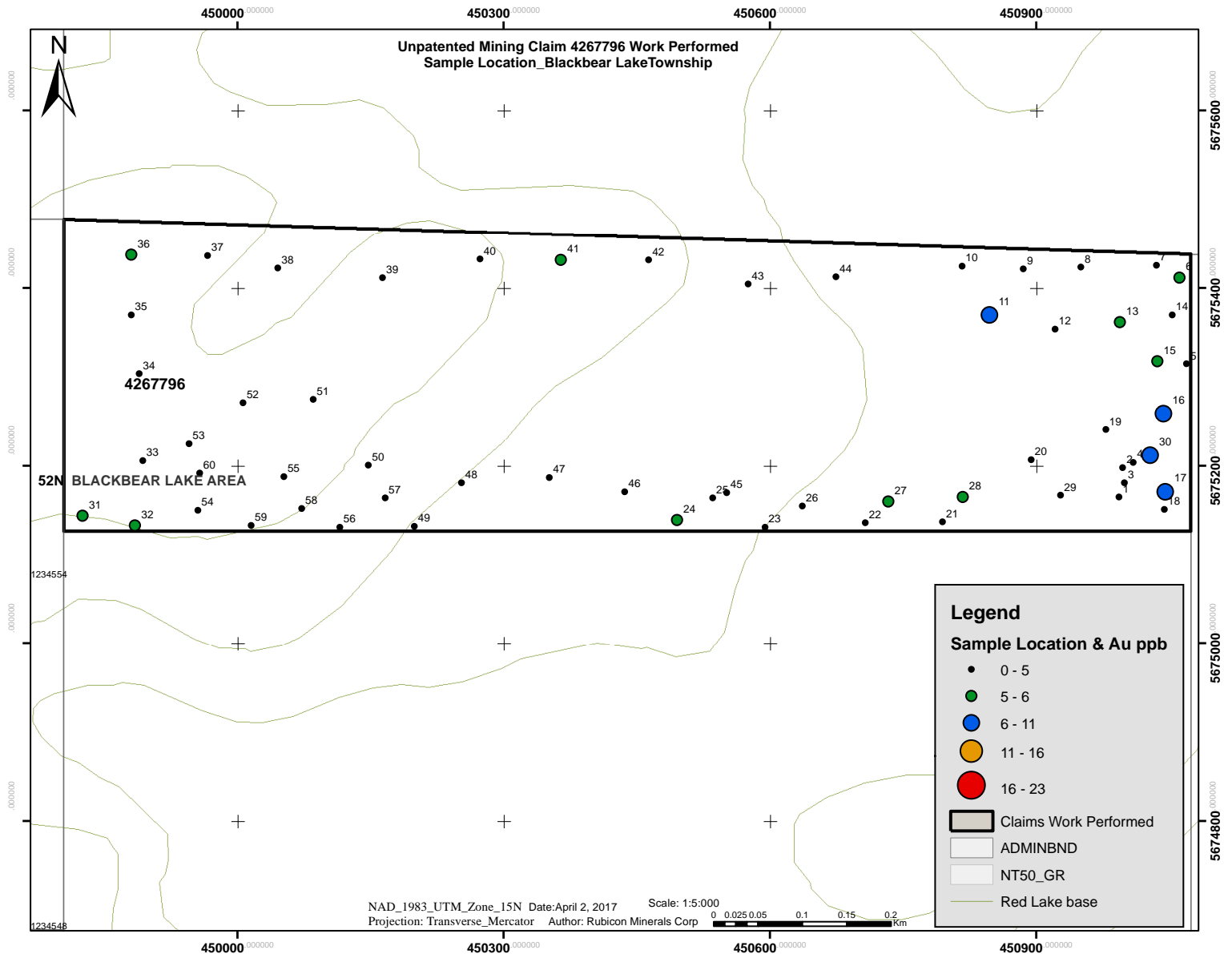


Fig. 2.1 Mining Claim 4267796 Black Spruce bark samples location and Au (ppb) results

Claim 4267796

60 Black Spruce tree bark samples were collected. 46 samples returned results at or lower than detection. (5 - <5 ppb Au). 14 samples returned slightly higher elevated Au (ppb) with value from 6 to 8 Au (ppb), samples located mostly in the SE corner of claim boundary. Based on the Black Spruce bark sampling, future work programs will be focused in the SE corner of the claim.

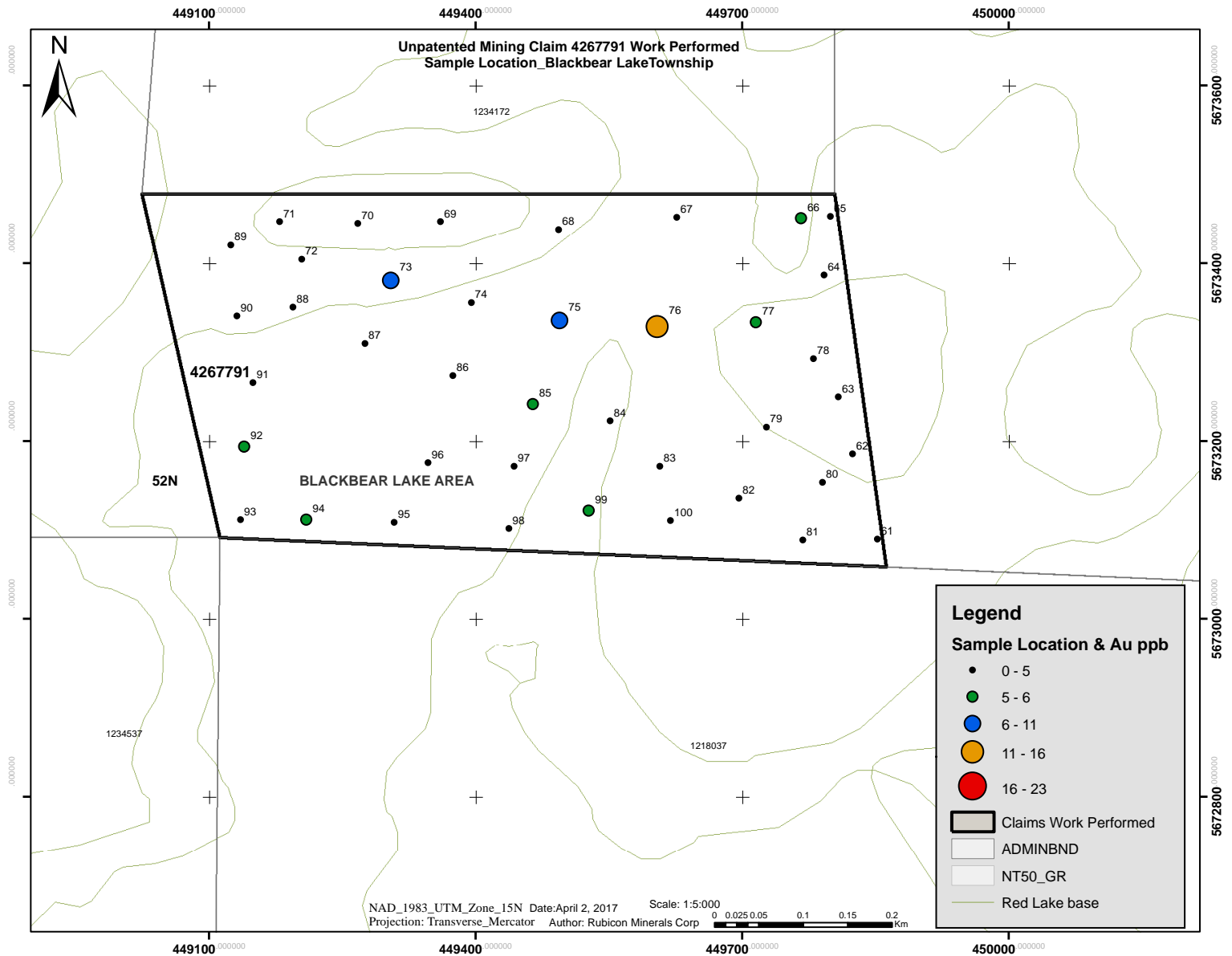


Fig. 2.2 Mining Claim 4267791, Black Spruce bark samples location and Au (ppb) results

Claim 4267791

40 Black Spruce tree bark samples were collected. 31 samples returned results at or lower than detection. (5 - <5 ppb Au).

9 samples returned slightly higher elevated Au (ppb) with value from 6 to 16 Au (ppb). Based on the Black Spruce bark sampling, future work programs will be focused in central portion of the claim.

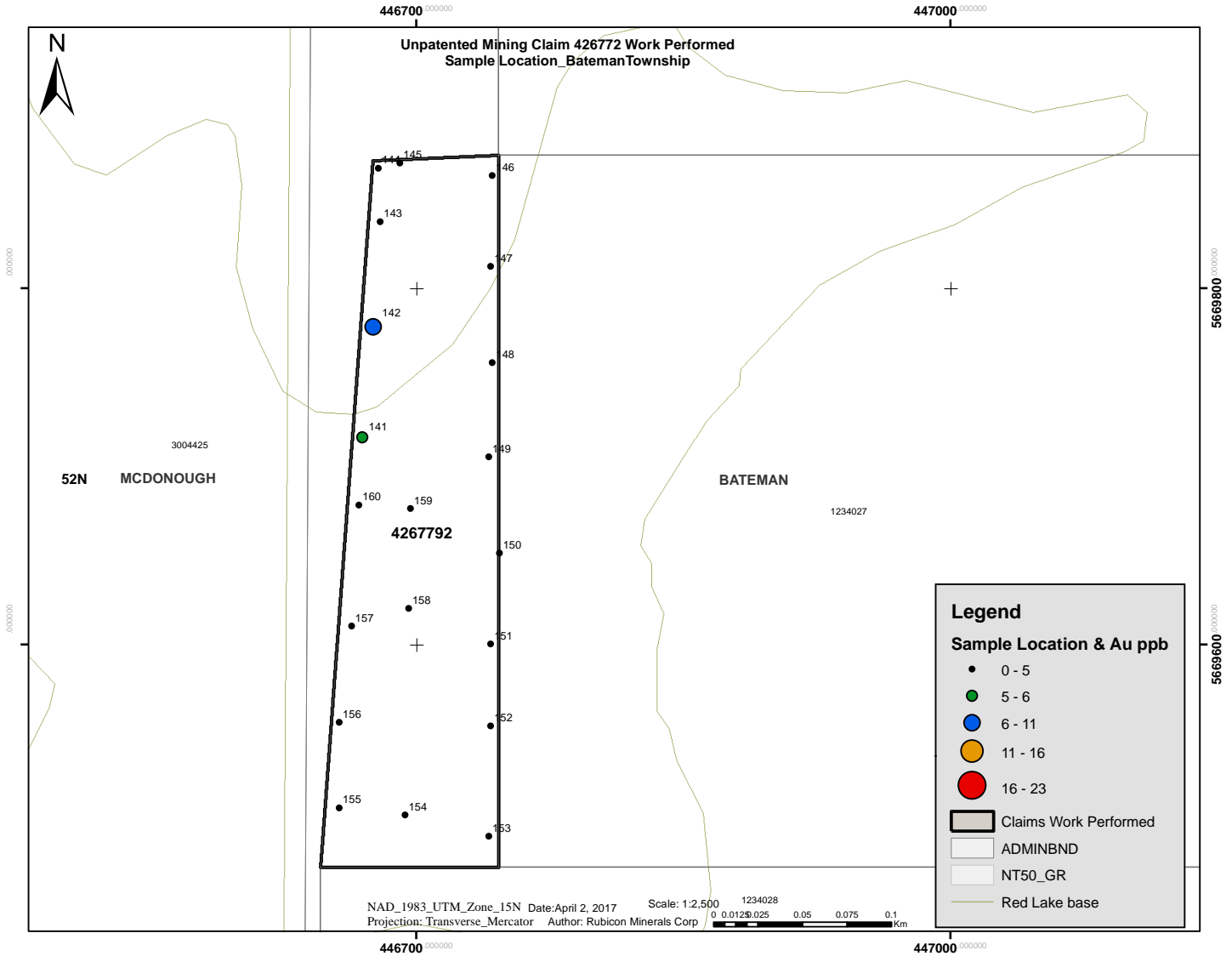


Fig. 2.3 Mining Claim 4267792, Black Spruce bark samples location and Au (ppb) results

Claim 4267792

20 Black Spruce tree bark samples were collected. 18 samples returned results at or lower than detection (5 - <5 ppb Au).

2 samples returned slightly higher elevated Au (ppb) with value from 6 to 7 Au (ppb). Based on the Black Spruce bark sampling, future work programs will be focused in North-Central portion of the claim.

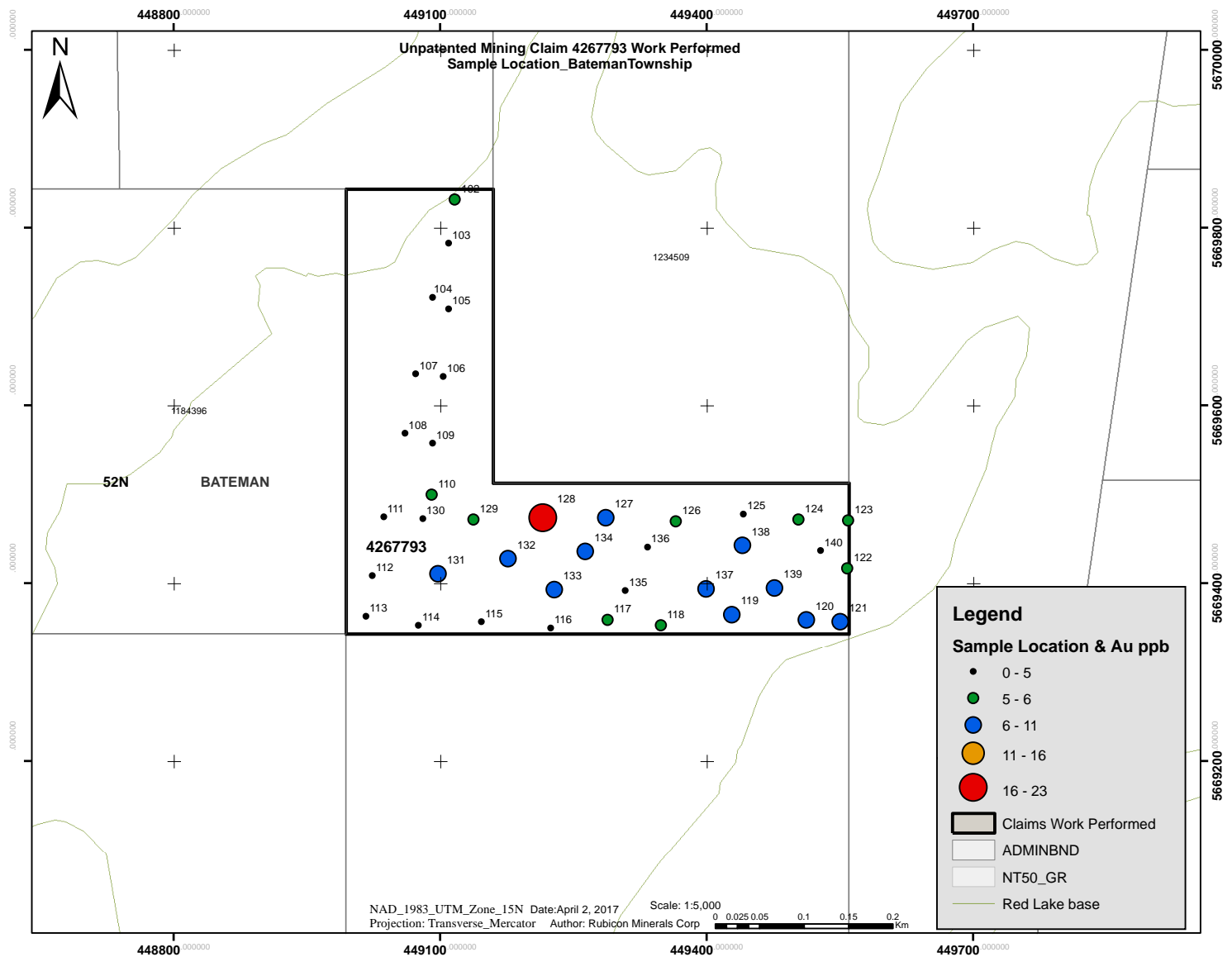


Fig. 2.4 Mining Claim 4267793, Black Spruce bark samples location and Au (ppb) results

Claim 4267793

40 Black Spruce tree bark samples were collected. 18 samples returned results at or less than detection. (5 - <5 ppb Au). 21 samples returned slightly higher elevated Au (ppb) with value from 6 to 11 Au (ppb).

One sample returned the highest value of 23 Au (ppb). Based on the Black Spruce bark sampling, future work programs will be focused in central south portion of the claim.

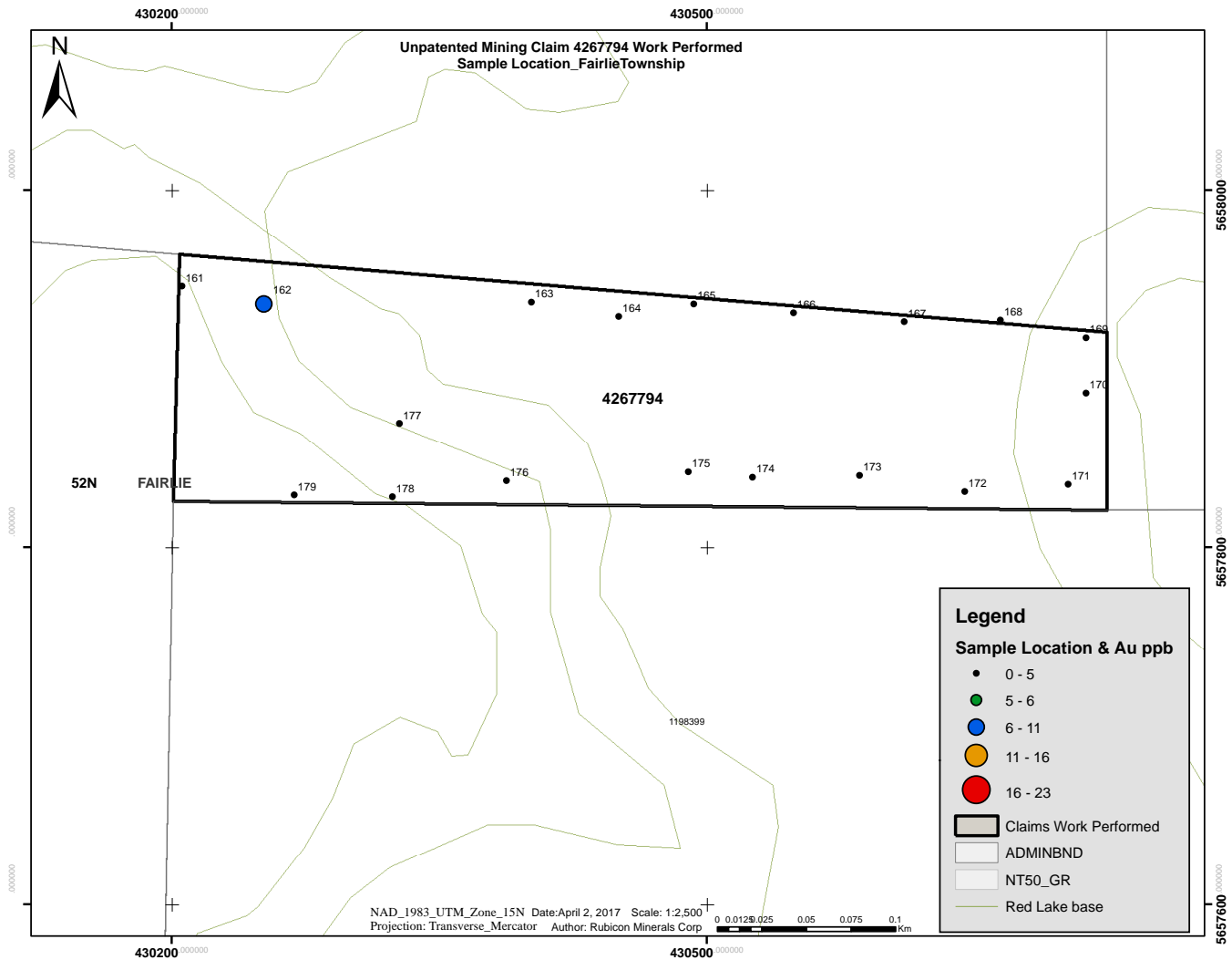


Fig. 2.5 Mining Claim 4267794, Black Spruce bark samples location and Au (ppb) results

Claim 4267794

19 Black Spruce tree bark samples were collected. 18 samples returned results at or lower than detection (5 - <5 ppb Au).

One sample returned slightly higher elevated Au (ppb) with value of 9 Au (ppb). No anomaly can be delineated within the claim boundary. Future work on this claim will look at different reconnaissance styles of exploration.

Conclusion and recommendation

An accepted sampling medium did not detect significant biogeochemical anomalies on the property. The isolated elevated Au (ppb) anomaly (s) will be used as follow up to future sampling programs.

Based on the assay value obtained from Black Spruce (*Picea mariana*) bark sampling the company will follow work in the future using different prospecting methods.

9.0 BIBLIOGRAPHY

- Andrews, A.J., Hugon, H., Durocher, M., Corfu, F., and Lavigne, M., 1986. The anatomy of a gold-bearing greenstone belt: Red Lake, northwestern Ontario; *in* Proceedings of GOLD '86, an International Symposium on the Geology of Gold Deposits, (ed.) A.J. MacDonald; Konsult International Inc., Toronto, Ontario, p. 3-22
- Corfu, F., Davis, D.W., Stone, D., and Moore, M., 1998. Chronostratigraphic constraints on the genesis of Archean greenstone belts, northwestern Superior Province, Ontario, Canada; *Precambrian Research*, v. 92, p. 277-295.
- Corfu, F., and Andrews, A.J., 1987. Geochronological constraints on the timing of magmatism, deformation and gold mineralization in the Red Lake greenstone belt, northwestern Ontario; *Canadian Journal of Earth Sciences*, v. 24, p. 1301-1320.
- Corfu, F., and Wallace, H., 1986. U-Pb zircon ages for magmatism in the Red Lake greenstone belt, northwestern Ontario; *Canadian Journal of Earth Sciences*, v. 23, p. 27-42.
- Dube, B., Williamson, K., and Malo, M., 2002. Geology of the Goldcorp Inc. High grade zone, Red Lake mine, Ontario: an update; Geological Survey of Canada, Current Research 2002-C26, 13 p.
- Dube, B., Williamson, K., and Malo, M., 2001. Preliminary report on the geology and controlling parameters of the Goldcorp Inc. High Grade zone, Red Lake mine, Ontario; Geological Survey of Canada, Current Research 2001-C18, 33 p.
- Dube, B., Balmer, W., Sanborn-Barrie, M., Skulski, T., and Parker, J., 2000. A preliminary report on amphibolite-facies, disseminated-replacement-style mineralization at the Madsen gold mine, Red Lake, Ontario; Geological Survey of Canada, Current Research 2000-C17, 12 p.
- Durocher, M.E., Burchell, P., and Andrews, A.J., 1987. Gold occurrences, prospects, and deposits of the Red Lake area; Ontario Geological Survey, Open File Report 5558, v. 1 & 2, 704 p.
- Horwood, 1945. Geology and Mineral Deposits of the Red Lake Area, ODM Annual Report, Vol. 49, Part II, pp. 72-74.
- Pirie, J., 1982. Regional geological setting of gold deposits, eastern Red Lake area, northwestern Ontario; *in* Proceedings of the CIM Gold Symposium, September 1980, The Canadian Institute of Mining and Metallurgy, Special Volume 24, p. 171-183.

Sanborn-Barrie, M., Skulski, T., and Parker, J., 2001. Three hundred million years of tectonic history recorded by the Red Lake greenstone belt, Ontario; Geological Survey of Canada, Current Research 2001-C19, 30 p.

Sanborn-Barrie, M., Skulski, T., Parker, J., and Dube, B., 2000. Integrated regional analysis of the Red Lake greenstone belt and its mineral deposits, western Superior Province, Ontario; Geological Survey of Canada, Current Research 2000-C18, 16 p.

10.0 PROFESSIONAL CERTIFICATION

PROFESSIONAL CERTIFICATION

I, Mark Ross, a geologist with Rubicon Minerals Corporation, residing at 4 Waterfront Road, Red Lake Ontario, hereby certify that:

1. I am a graduate of Laurentian University, 2002.
2. I have been employed in the geoscience industry since April 1999, and as Chief Geologist with Rubicon Minerals Corporation since 2013.
3. I personally prepared and reviewed sections of this work report.
4. I am a member in good standing of the APGO, member number 1877.
4. I am not aware of any material fact or material change with respect to the subject matter of the assessment report which is not reflected in the assessment report, the omission to disclose which makes the assessment report misleading.

Dated this 2th day of May, 2017

Mark Ross, B.Sc. PGeo.



Signature of Author



Certificate of Analysis
Work Order : VC170256
[Report File No.: 0000020932]

Date: February 21, 2017

To: **Chris Hunter**
RUBICON MINERALS CORPORATION
103 MCMARMAC ROAD PO BOX 274
COCHENOUR ON P0V 1L0

P.O. No.: PHRR-12663 / PROJ. 2017_01_31_Bark
Project No.: -
Samples: 72
Received: Feb 7, 2017
Pages: Page 1 to 3
(Inclusive of Cover Sheet)


Methods Summary

<u>No. Of Samples</u>	<u>Method Code</u>	<u>Description</u>
72	G_LOG02	Pre-preparation processing, sorting, logging, boxing
72	G_ASH01	Ashing of samples prior to analysis
72	GE_FAA313	@Au, FAS, AAS, 30g-5ml(Final Mode)

Storage: Pulp & Reject

REJECT STORAGE : DISCARD
PULP STORAGE : RETURN AFTER 90 DAYS

Certified By : _____


John Chiang
QC Chemist

SGS Minerals Services Geochemistry Vancouver conforms to the requirements of ISO/IEC 17025 for specific tests as listed on their scope of accreditation which can be found at <http://www.scc.ca/en/search/palcan/sgs>

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample
n.a. = Not applicable -- = No result

*INF = Composition of this sample makes detection impossible by this method

M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion

Methods marked with an asterisk (e.g. *NAA08V) were subcontracted

Elements marked with the @ symbol (e.g. @Cu) denote assays performed using accredited test methods

This document is issued by the Company under its General Conditions of Service accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

WARNING: The sample(s) to which the findings recorded herein (the "Findings") relate was (were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativity of the goods and strictly relate to the sample (s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted. The findings report on the samples provided by the client and are not intended for commercial or contractual settlement purposes. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law .



Final : VC170256 Order: PHRR-12663 / PROJ. 2017_01_31_Bark

Page 2 of 3

Report File No.: 0000020932

Element Method Det.Lim. Units	@Au GE_FAA313 5 ppb
TH0001301	<5
TH0001302	<5
TH0001303	<5
TH0001304	<5
TH0001305	<5
TH0001306	6
TH0001307	<5
TH0001308	5
TH0001309	<5
TH0001310	<5
TH0001311	8
TH0001312	<5
TH0001313	6
TH0001314	<5
TH0001315	6
TH0001316	7
TH0001317	7
TH0001318	<5
TH0001319	<5
TH0001320	<5
TH0001321	<5
TH0001322	<5
TH0001323	<5
TH0001324	6
TH0001325	5
TH0001326	5
TH0001327	6
TH0001328	6
TH0001329	<5
TH0001330	8
TH0001331	6
TH0001332	6
TH0001333	<5
TH0001334	<5
TH0001335	<5
TH0001336	6
TH0001337	<5
TH0001338	<5
TH0001339	<5
TH0001340	<5

This document is issued by the Company under its General Conditions of Service accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

WARNING: The sample(s) to which the findings recorded herein (the "Findings") relate was (were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativity of the goods and strictly relate to the sample (s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted. The findings report on the samples provided by the client and are not intended for commercial or contractual settlement purposes. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law .



Report File No.: 0000020932

Element Method Det.Lim. Units	@Au GE_FAA313 5 ppb
TH0001341	6
TH0001342	<5
TH0001343	<5
TH0001344	<5
TH0001345	<5
TH0001346	<5
TH0001347	<5
TH0001348	<5
TH0001349	<5
TH0001350	<5
TH0001351	<5
TH0001352	<5
TH0001353	<5
TH0001354	<5
TH0001355	<5
TH0001356	<5
TH0001357	<5
TH0001358	<5
TH0001359	<5
TH0001360	<5
TH0001361	<5
TH0001362	<5
TH0001363	<5
TH0001364	<5
TH0001365	<5
TH0001366	6
TH0001367	<5
TH0001368	<5
TH0001369	<5
TH0001370	<5
TH0001371	5
TH0001372	<5

This document is issued by the Company under its General Conditions of Service accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

WARNING: The sample(s) to which the findings recorded herein (the "Findings") relate was (were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativity of the goods and strictly relate to the sample (s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted. The findings report on the samples provided by the client and are not intended for commercial or contractual settlement purposes. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law .



Certificate of Analysis
Work Order : VC170257
[Report File No.: 0000020930]

Date: February 21, 2017

To: **Chris Hunter**
RUBICON MINERALS CORPORATION
103 MCMARMAC ROAD PO BOX 274
COCHENOUR ON P0V 1L0

P.O. No.: PHRR-12663 / PROJ. 2017_01_31_Bark
Project No.: -
Samples: 72
Received: Feb 7, 2017
Pages: Page 1 to 3
(Inclusive of Cover Sheet)


Methods Summary

<u>No. Of Samples</u>	<u>Method Code</u>	<u>Description</u>
72	G_LOG02	Pre-preparation processing, sorting, logging, boxing
72	G_ASH01	Ashing of samples prior to analysis
72	GE_FAA313	@Au, FAS, AAS, 30g-5ml(Final Mode)

Storage: Pulp & Reject

REJECT STORAGE : DISCARD
PULP STORAGE : RETURN AFTER 90 DAYS

Certified By : _____


John Chiang
QC Chemist

SGS Minerals Services Geochemistry Vancouver conforms to the requirements of ISO/IEC 17025 for specific tests as listed on their scope of accreditation which can be found at <http://www.scc.ca/en/search/palcan/sgs>

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample
n.a. = Not applicable -- = No result
*INF = Composition of this sample makes detection impossible by this method
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion
Methods marked with an asterisk (e.g. *NAA08V) were subcontracted
Elements marked with the @ symbol (e.g. @Cu) denote assays performed using accredited test methods

This document is issued by the Company under its General Conditions of Service accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

WARNING: The sample(s) to which the findings recorded herein (the "Findings") relate was (were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativity of the goods and strictly relate to the sample (s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted. The findings report on the samples provided by the client and are not intended for commercial or contractual settlement purposes. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law .



Final : VC170257 Order: PHRR-12663 / PROJ. 2017_01_31_Bark

Page 2 of 3

Report File No.: 0000020930

Element Method Det.Lim. Units	@Au GE_FAA313 5 ppb
TH0001373	7
TH0001374	<5
TH0001375	7
TH0001376	16
TH0001377	6
TH0001378	<5
TH0001379	5
TH0001380	<5
TH0001381	<5
TH0001382	<5
TH0001383	<5
TH0001384	<5
TH0001385	6
TH0001386	<5
TH0001387	<5
TH0001388	<5
TH0001390	<5
TH0001391	<5
TH0001392	<5
TH0001393	6
TH0001394	5
TH0001395	6
TH0001396	<5
TH0001397	<5
TH0001398	<5
TH0001399	<5
TH0001400	6
TH0001401	5
TH0001402	11
TH0001403	6
TH0001404	<5
TH0001405	5
TH0001406	5
TH0001407	<5
TH0001408	<5
TH0001409	<5
TH0001410	<5
TH0001411	6
TH0001412	5
TH0001413	5

This document is issued by the Company under its General Conditions of Service accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

WARNING: The sample(s) to which the findings recorded herein (the "Findings") relate was (were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativity of the goods and strictly relate to the sample (s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted. The findings report on the samples provided by the client and are not intended for commercial or contractual settlement purposes. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law .



Report File No.: 0000020930

Element Method Det.Lim. Units	@Au GE_FAA313 5 ppb
TH0001414	<5
TH0001415	5
TH0001416	5
TH0001417	<5
TH0001418	6
TH0001419	6
TH0001420	8
TH0001421	9
TH0001422	7
TH0001423	6
TH0001424	6
TH0001425	6
TH0001426	<5
TH0001427	6
TH0001428	7
TH0001429	23
TH0001430	6
TH0001431	<5
TH0001432	7
TH0001433	8
TH0001434	10
TH0001435	7
TH0001436	<5
TH0001437	<5
TH0001438	7
TH0001439	7
TH0001440	7
TH0001441	<5
TH0001442	6
TH0001443	7
TH0001444	<5
TH0001445	5

This document is issued by the Company under its General Conditions of Service accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

WARNING: The sample(s) to which the findings recorded herein (the "Findings") relate was (were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativity of the goods and strictly relate to the sample (s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted. The findings report on the samples provided by the client and are not intended for commercial or contractual settlement purposes. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law .



Certificate of Analysis
Work Order : VC170258
[Report File No.: 0000020939]

Date: February 21, 2017

To: **Chris Hunter**
RUBICON MINERALS CORPORATION
103 MCMARMAC ROAD PO BOX 274
COCHENOUR ON P0V 1L0

P.O. No.: PHRR-12663 / PROJ. 2017_01_31_Bark
Project No.: -
Samples: 35
Received: Feb 7, 2017
Pages: Page 1 to 2
(Inclusive of Cover Sheet)

Methods Summary

<u>No. Of Samples</u>	<u>Method Code</u>	<u>Description</u>
35	G_LOG02	Pre-preparation processing, sorting, logging, boxing
35	G_ASH01	Ashing of samples prior to analysis
35	GE_FAA313	@Au, FAS, AAS, 30g-5ml(Final Mode)

Storage: Pulp & Reject

REJECT STORAGE : DISCARD
PULP STORAGE : RETURN AFTER 90 DAYS

Certified By : _____

John Chiang
QC Chemist

SGS Minerals Services Geochemistry Vancouver conforms to the requirements of ISO/IEC 17025 for specific tests as listed on their scope of accreditation which can be found at <http://www.scc.ca/en/search/palcan/sgs>

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample
n.a. = Not applicable -- = No result
*INF = Composition of this sample makes detection impossible by this method
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion
Methods marked with an asterisk (e.g. *NAA08V) were subcontracted
Elements marked with the @ symbol (e.g. @Cu) denote assays performed using accredited test methods

This document is issued by the Company under its General Conditions of Service accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

WARNING: The sample(s) to which the findings recorded herein (the "Findings") relate was (were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativity of the goods and strictly relate to the sample (s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted. The findings report on the samples provided by the client and are not intended for commercial or contractual settlement purposes. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law .



Final : VC170258 Order: PHRR-12663 / PROJ. 2017_01_31_Bark

Report File No.: 0000020939

Element Method Det.Lim. Units	@Au GE_FAA313 5 ppb
TH0001446	<5
TH0001447	<5
TH0001448	<5
TH0001449	<5
TH0001450	<5
TH0001451	<5
TH0001452	<5
TH0001453	<5
TH0001454	<5
TH0001455	<5
TH0001456	<5
TH0001457	<5
TH0001458	<5
TH0001459	<5
TH0001460	<5
TH0001461	<5
TH0001462	<5
TH0001463	9
TH0001464	<5
TH0001465	<5
TH0001466	<5
TH0001467	<5
TH0001468	<5
TH0001469	<5
TH0001470	<5
TH0001471	<5
TH0001472	<5
TH0001473	<5
TH0001474	<5
TH0001475	<5
TH0001476	<5
TH0001477	<5
TH0001478	<5
TH0001479	<5
TH0001480	<5

This document is issued by the Company under its General Conditions of Service accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

WARNING: The sample(s) to which the findings recorded herein (the "Findings") relate was (were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativity of the goods and strictly relate to the sample (s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted. The findings report on the samples provided by the client and are not intended for commercial or contractual settlement purposes. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law .