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PROSPECTING REPORT

on

GEOLOGICAL MAPPING AND LITHOGEOCHEMICAL SAMPLING

JACKFISH LAKE WEST PROPERTY

FOR MICHEL DORVAL

THUNDER BAY MINING DIVISION

DISTRICT OF THUNDER BAY, ONTARIO

NTS 042D14/15



Marathon, Ontario
September 20, 2019

Rudolf Wahl, Prospector
Marathon, Ontario

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1.0 Introduction

Between November 20, 2018 and September 20, 2019 general prospecting, geological mapping and rock sampling was conducted on the Jackfish Lake West property. We prospected the Jackfish Lake West property to find and outline Au / PGE mineralization.

2.0 LOCATION AND ACCESS

The property is situated in the Terrace Bay area Thunder Bay Mining Division of North-western Ontario. The claims are found within the Syine Township. Syine Twp. is approximately 20 km east of Terrace Bay, situated on the north shore of Lake Superior between Thunder Bay and Sault Ste. Marie.

The Trans Canada Highway 17 runs along the western and norther portion of the property. The Terrace Bay Airfield is less than 15 km east of the Jackfish Lake property.



2.1 PROPERTY DESCRIPTION

The Jackfish Lake West Property consists of 48 contiguous mining cell claims recorded in good standing in Thunder Bay Mining Division within Syine Twp. (G- 0634)

Claims/units

105738, 105758, 105759, 112281, 112282, 122291, 122292, 126667, 137214, 138278, 138634, 141135, 155214, 171184, 172846, 173329, 190666, 202898, 207222, 207223, 209564, 221462, 236346, 236347, 238531, 246924, 246925, 246926, 246927, 246928, 255021, 256709, 257436, 266484, 275876, 286078, 286079, 303591, 305203, 310432, 313499, 313500, 313501, 323224, 334640, 341864, 344977, 344978

Assessment Work Breakdown

<u>Type of Work</u>	<u>Name & Address</u>	<u>Dates Worked</u>	<u>Days = 8 to 10 hours</u>	<u>Signature</u>
Prospecting , Geological mapping, Hand Stripping, Rock sampling along Travers line on claim 344977, 236347, 207222, 286079, 313501, 246927, 303591, 141135, 310432, 207223	Michel Dorval Box 565 Marathon, Ontario POT 2E0 <u>CLN # 401181</u>	November 23, 2018 To November 25, 2018	3	
Prospecting , Geological mapping, Rock sampling along Travers line on claim 344977, 236347, 207222, 286079, 313501, 246927, 303591, 141135, 310432, 207223	Frederick Lowndes 28 Steedman Drive Marathon, Ontario POT 2E0 <u>CLN #410033</u>	November 23, 2018 To November 25, 2018	3	F.L.
Prospecting , Geological mapping, Rock sampling along Travers line on claim 344977, 236347, 207222, 286079, 313501, 246927, 303591, 141135, 310432, 207223	Rudolf Wahl Box 1022 Marathon, Ontario POT 2E0 <u>CLN # 206079</u>	November 23, 2018 To November 25, 2018	3	R.W
Prospecting , Geological mapping, Hand Stripping, Rock sampling along Travers line on claim 341864, 266484, 255021	Frederick Lowndes 28 Steedman Drive Marathon, Ontario POT 2E0 <u>CLN #410033</u>	August 14, 2019 To August 17, 2019	4	F.L.
Prospecting , Geological mapping, Hand Stripping, Rock sampling along Travers line on claim 341864, 266484, 255021	Rudolf Wahl Box 1022 Marathon, Ontario POT 2E0 <u>CLN # 206079</u>	August 14, 2019 To August 17, 2019	4	R.W
Prospecting , Geological mapping, Rock sampling along Travers line on claim 105758, 313499, 246924, 173329, 155214, 323224, 138634, 334640, 305203, 275876, 221462	Michel Dorval Box 565 Marathon, Ontario POT 2E0 <u>CLN # 401181</u>	August 20, 2019 To August 23, 2019	4	
Prospecting , Geological mapping, Hand Stripping, Rock sampling along Travers line on claim 105758, 313499, 246924, 173329, 155214, 323224, 138634, 334640, 305203, 275876, 221462	Frederick Lowndes 28 Steedman Drive Marathon, Ontario POT 2E0 <u>CLN #410033</u>	August 20, 2019 To August 23, 2019	4	F.L.
Prospecting , Geological mapping, Rock sampling along Travers line on claim 105758, 313499, 246924, 173329, 155214, 323224, 138634, 334640, 305203, 275876, 221462	Rudolf Wahl Box 1022 Marathon, Ontario POT 2E0 <u>CLN # 206079</u>	August 20, 2019 To August 23, 2019	4	R.W

Total page 1

29 Days

Prospecting , Geological mapping, Hand Stripping, Rock sampling along Travers line on claim 246928, 344978, 286078, 172846	Frederick Lowndes 28 Steedman Drive Marathon, Ontario P0T 2E0 CLN #410033	August 27, 2019 To August 28, 2019	2	F.L.
Prospecting , Geological mapping, Rock sampling along Travers line on claim 246928, 344978, 286078, 172846	Rudolf Wahl Box 1022 Marathon, Ontario P0T 2E0 CLN # 206079	August 27, 2019 To August 28, 2019	2	R.W.


Total page 1 & 2

33 Days


Assessment Work Breakdown

A total of 33 days in between November 23, 2018 and August 28, 019 where used for prospecting, hand stripping, geological mapping and rock sampling on the Jackfish Lake West Property.

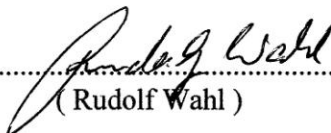
Dated.....*Sept 4th*.....2019, Marathon, Ont.

Signed.....
(Mike Dorval)

Dated.....*Sept 02*.....2019, Marathon, Ont

Signed.....
(Frederick Lowndes)

Dated.....*Sept 09*.....2019, Marathon, Ont

Signed.....
(Rudolf Wahl)

Assessment Work Breakdown days:

November 23, 2018 to November 25, 2018 prospecting on claim 344977, 236347, 207222, 286079, 313501, 246927, 303591, 141135, 310432, 207223.

We used our 4wheelers from Hwy.17 onto a small gravel road on the southern end of Jackfish Lake and drove along the CPR-Railway to access the property in the southern section.

We prospected and hand stripped and geological mapped along traverse lines. The traverse lines going from the CPR Rail to the north within the southern section of the property where we seen outcrop.

Most of the cell claims are covered by granite – gneisses and a lot of glacial till.

August 14, 2019 to August 17, 2019 prospecting on claim 341864, 266484, 255021

We used our 4wheelers from Hwy.17 onto a small gravel road on the southern end of Jackfish Lake and used one 16 foot canoe up on Jackfish Lake to access the southeastern section of property from the Roberson Creek that drains into the Jackfish Lake. We prospected rock sampled and hand stripped and geological mapped along traverse lines. Most of the three cell claim units are covered by granite – gneisses, syenite within most of the southern and northern part of the claims cells. We located a large gabbro unit in the eastern center section of cell claim unit 341864 what has the potential to host some PGE minerals.

August 20, 2019 to August 23, 2019 prospecting on claim 105758, 313499, 246924, 173329, 155214, 323224, 138634, 334640, 305203, 275876, 221462

We used our 4wheelers from Hwy.17 to the south to access the northern section of the claim cells.

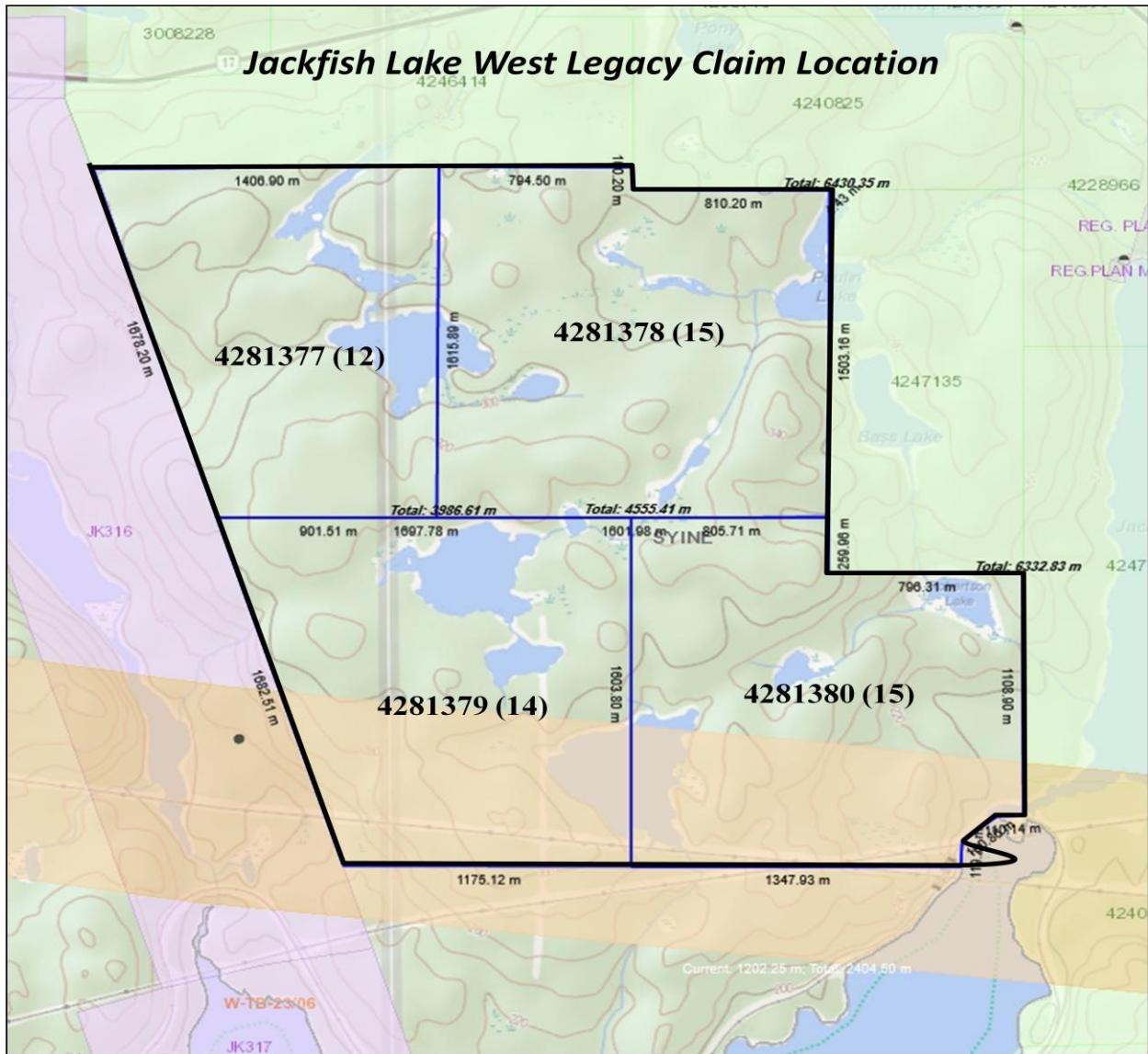
We prospected and geological mapped along traverse lines. To access the southern part of the claim units 105758, 313499 and 246924 we used a Helicopter to prospect that section since it is very time consuming to access that section. Most of the 11 claim units are underline by granite and gneisses and no rock samples were collected, what was very depressing not finding any mineralization within that section.

August 27, 2019 to August 28, 2019 prospecting on claim 246928, 344978, 286078, 172846

We used our 4wheelers from Hwy.17 onto a small gravel road on the southern end of Jackfish Lake and drove along the CPR-Railway to access the property in the southern section. We prospected and hand stripped and geological mapped along traverse lines. Most of the cell claims are covered by granite – gneisses and the area is covered with glacial till. No rock samples were collected within that area.

Jackfish Lake West Property Key Location Map





Legacy claim 4281377 Converted to cell claim(s) 105738, 105758, 105759, 138634, 155214, 173329, 190666, 190667, 219984, 323224 and boundary claim(s) 126667, 171184, 190651, 256709.

Legacy claim 4281378 Converted to cell claim(s) 105758, 138634, 221462, 246924, 275876, 305203, 313499, 323224, 334640 and boundary claim(s) 112281, 112282, 137214, 236346, 238531, 256709, 257436.

Legacy claim 4281379 Converted to cell claim(s) 105758, 105759, 138278, 172846, 190667, 190757, 190758, 202898, 209564, 238929, 246924, 246925, 246926, 246927, 246928, 286078, 286079, 313499, 313500, 313501, 344977, 344978.

Legacy claim 4281380 Converted to cell claim(s) 141135, 207222, 207223, 209564, 236347, 246924, 246927, 286079, 303591, 310432, 344977 and boundary claim(s) 122291, 122292, 187702, 236346, 255021, 266484, 341864.

Note: some of the cell claim blocks are not within the cell claims today.

Jackfish Lake West Property 48 Claim Cell Units

322149	151377	115453	115450	320023	285553	303927	322142	303967	204730	249402
322495	207415	170147	373595	285552	170146	170176	154496	303967	303967	303967
207415	322145	170147	303928	322144	322143	154107	226334	216839	332816	238533
334219	226308	115454	303928	322144	322143	154107	226334	303962	332816	238533
151375	42014H340	4201E321	4201E322	4201E323	4201E324	4201E325	4201E326	4201E327	4201E328	4201E329
285555	285556	256709	256709	257436	322146	23256410	198489	230050	270724	198489
171184	171184	334169	334169	334169	112281	337091	288739	132008	170591	267329
105738	173329	323224	323224	305203	334640	337091	288739	195023	251344	132007
190666	190666	138634	138634	277862	275876	309466	316214	337091	135888	200551
105759	105759	105758	105758	313499	246924	155024	146935	296769	155428	135889
138278	138278	313500	313500	245925	209564	230081	309467	255021	113125	220141
202898	202898	246926	246926	313501	344977	141135	236347	141846	237151	311166
172846	172846	172846	172846	286078	246927	310432	303591	122292	280193	318223
246928	246928	246928	246928	344978	286079	207223	207222	177518	300247	251693
184881	184881	184881	184881	4201E3103	4201E3104	4201E3105	4201E3106	339099	263695	146867
4201E3106	4201E3106	4201E3106	4201E3106	4201E3106	4201E3106	4201E3106	4201E3106	4201E3106	4201E3106	4201E3106

3.0

Regional - Property Geology

The Property is underlain by a conformable sequence of intercalated volcanic and sedimentary units of early Precambrian age. Intrusions of basic and granitic rocks have crosscut all formations with the latter being represented by the Jackfish Lake Batholith exposed along the property's southern boundary. Regional metamorphism from green schist to lower amphibolite facies has been recognized by Walker (1967). The area was mapped by J.W.R. Walker for Ontario Department of Mines in 1953. A preliminary report of this work was published in 1956 but it was not until 1967 that the final report included colored maps.

Structurally the area has probably several episodes of deformation with the most notable being the anticlinal and synclinal folding associated with the numerous granitic bodies. Foliations generally trending east-west with southerly dips are common in most rock types while shearing of various intensity also occurs.

A small proportion of the property is underlain by volcanic rocks of mafic composition. In the southern claims massive or foliated flows predominate the succession and were pervasively altered by carbonate and to a lesser extent by epidote and silica. Pillowed flows, similar mineralogically to the massive flows are exposed in the eastern claims. Selvages are well preserve and contain fine euhedral garnets. Shearing made top determinations impossible. Flows of possible pillowed origin have been noted in the wet-central portion of the property but here again shearing had masked the original structures.

Mafic tuffs have been recognized throughout but were most common within the eastern claims. Pinkish to white weathering surfaces were diagnostic colours for the felsic tuffs and crystal tuffs on the property. They occurred essentially in the north-central part of the ground but were also found as narrow lensoidal units in the mafic succession. Blue quartz-eyes were also characteristic with the crystal tuffs having a larger percentage.

Intercalated with these volcanics were narrow bands of siliceous and in part pyritiferous chert. Only a few outcrops ere noted however Walker's (1997) map (OGS Map 2107) illustrates the possible existence of numerous such units.

Diorite and gabbro were mapped as late but in part synvolcanic intrusives which in many cases could have represented feeder dykes or sills. Some of the diorite contained the blue quartz eyes and may represent either felsic tuff or altered mafic volcanics.

Granodiorite exposed along the southern boundary belongs to the Jackfish Lake Batholith, a late granitic intrusive which probably affected the area structurally as well as metamorphically.

3.1

Mineralization - Deposits

Many historical gold showings have been located along the contact of the Terrace Bay Batholith. The two most significant are:

1. Empress mine – This former mine lies 3km to the west of the property in silicified and carbonate sheared sections of mafic tuff and metavolcanics. Between 1895 and 1899, 112 ounces of gold were produced from 1100 tons of ore (calculated aver. of 0.1 oz/t or 3.5 g/t Au). There were intense surface and underground headings developed to trace two parallel gold-bearing quartz veins. In 1899 the mine was closed due to insufficient working capital and an inadequate ore grade.

In 2008 Alto Ventures Ltd were exploring the area along strike from the Empress Mine. Alto's claims are located directly to the west of the Kellyn Option. A gold-bearing quartz vein "Empress Structure" has been traced for over 1.6 km across the property (see fig 4). In Alto's 2008 drill program, anomalous gold was intersected in all holes, up to 0.6 g/t over 2.3m including a higher grade section contained 2.0 g/t over 0.5 m (see fig 5).

During 1999 Cameco Gold Corp compiled all past work carried out on the Empress property. Some of the data reviewed overlaps onto the Kellyn property. Landsat, Airborne Magnetics and I.P were flown and analyzed by Cameco Gold.

The Landsat and Magnetic data highlighted numerous lineaments and structures. A number of EM anomalies have been identified on the Kellyn property

Ursa Major Gold Prospect -This deposit lies 4 km to the northwest in chloritized-silicified sections of amphibolitic-schistose metavolcanics. Some massive quartz veins up to 5m wide are reported to carry high-grade gold values.

Other occurrences consist of small showings found in quartz-intruded sections of the granitic rocks, close to contacts with the metavolcanic units.

Exploration by Galahad Metals Inc. 2008/2009 adjacent to the Jackfish Lake property to the north-west.

The highest grade sample collected by Galahad Metals contains 26.8 g/t (0.84 oz/t) gold and two contain from 3 to 13 oz/t silver. Preliminary sampling confirmed the gold-rich content of the vein system.

4.0 Prospecting / Geological Mapping

Most of the Jackfish Lake West property was geologically mapped and prospected / sampled with emphasis on prospecting in order to locate significant mineralization.

5.0 Work conducted on the Jackfish Lake West property.

The Jackfish Lake West Property consists of 48 mining cell claim units recorded in good standing in Thunder Bay Mining Division within Syine Township (G634).

Work conducted on claim:

Claims/units

344977, 236347, 207222, 286079, 313501, 246927, 303591, 141135, 310432, 207223, 341864, 266484, 255021, 105758, 313499, 246924, 173329, 155214, 323224, 138634, 334640, 305203, 275876, 221462, 246928, 344978, 286078, 172846.

Total 28 cell claim units

5.1 Work completed

- a. Geological mapping on traverse lines.
- b. Rock sampling over mineralized out crops along traverse lines.
- c. Rock sample where collected by UTM: ZONE 16 NAD 83 locations.
- d. All sample where taking with a Geo tool.
- e. A total of 14 samples where obtained for assay for Gold –ICP-PGE-REE.
- f. Topographic features (trail, lakes, creeks) were also used to control mapping and prospecting.

6.0 Results and Conclusion

14 Rock samples were collected from the Jackfish Lake West property and 14 rock sample were sent out for assaying Au, REE, ICP.

The assay results from Actlabs were disappointing; none of the collected and assayed samples returned any positive results.

Part of the Jackfish Lake West property was geologically mapped and prospected with emphasis on prospecting in order to locate significant mineralization.

Some of the terrain on the claim block is very rugged with steep hills and a lot of overburden, which makes prospecting very difficult and time consuming. Most of the area to the west-northwest and south-southwest are underlain by granite and gneisses. The area west of the Robertson Lake looks very interesting in regards to PGE potential mineralization within a large gabbro unit.

6.1 RECOMMENDATIONS

Because of the existence of favorable stratigraphy and surrounding claims within the Jackfish Lake area that host gold occurrences within granite further prospecting in regards to gold mineralization is warranted within the property. Even so the assay results from the gabbro unit were disappointing, Further prospecting is recommended since only a small portion of the gabbro unit was exposed within the area. It is recommended to perform a MAG/EM/VLF UAV (**Unmanned** Aerial Vehicle) survey over the property and it is recommended to perform a soil geochemical survey over the entire property to outline potential targets for prospecting in regards to the gold and PGE mineralization on the property. Exploration Work Permits are in place for the property.

**Marathon, Ontario
September 20, 2019**

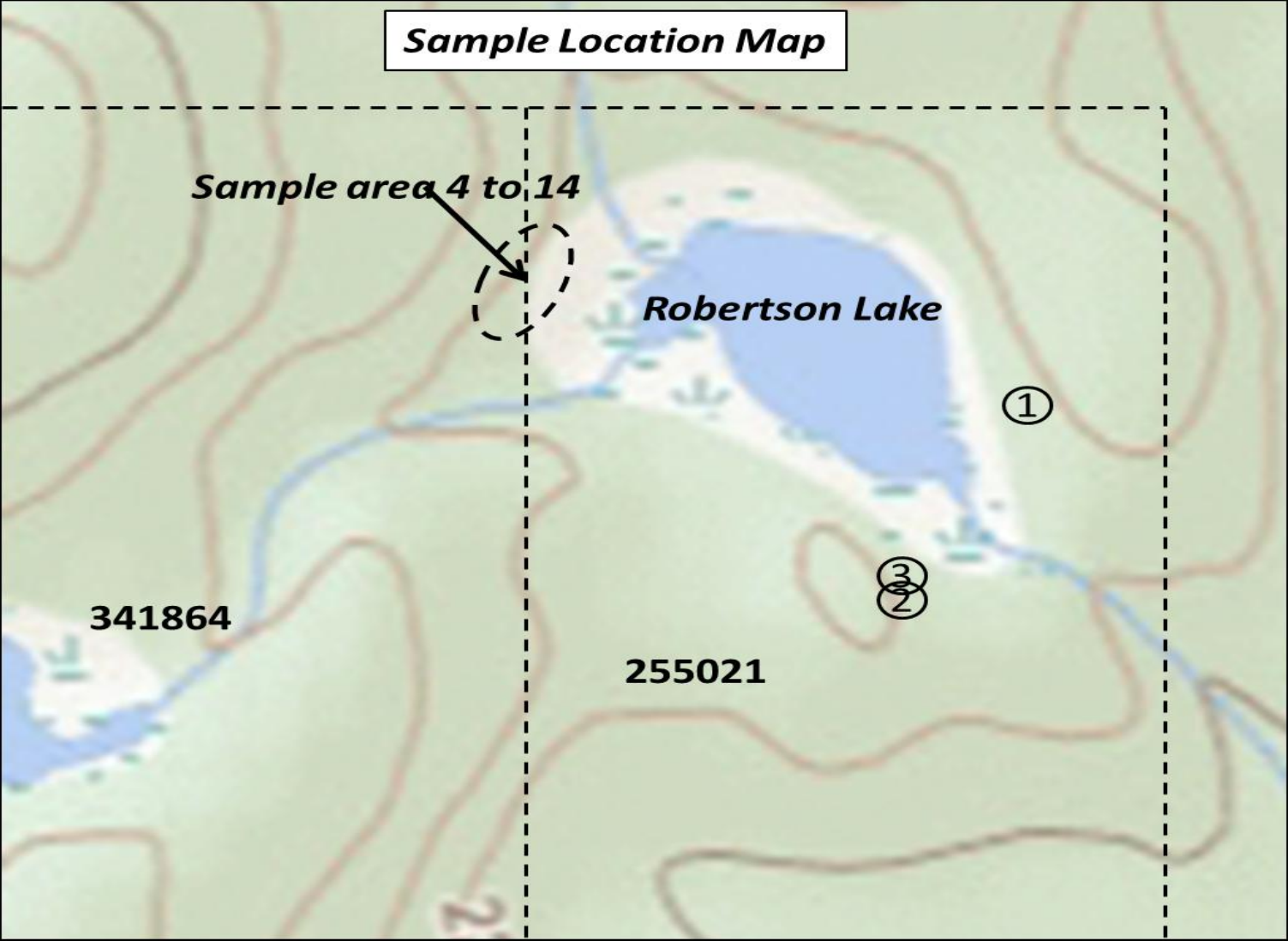
Respectfully submitted



**Rudolf Wahl
Prospector**

Appendix I

Sample Location Map



Sample area 4 to 14

Robertson Lake

①

③
②

341864

255021

**Jackfish Lake West Sample Program 2018-2019, UTM
NAD 83**

# Sample Location	Sample #	Easting	Northing
1	1219336	503081	5408238
2	1219337	502985	5408104
3	1219338	502987	5408106
4	1219362	502713	5408378
5	1219363	502714	5408379
6	1219364	502716	5408380
7	1219365	502717	5408381
8	1219366	502705	5408377
9	1219367	502698	5408370
10	582151	502705	5408383
11	582152	502708	5408385
12	582153	502711	5408392
13	582154	502722	5408395
14	582155	502721	5408408

Appendix II

DESCRIPTION OF ROCK SAMPLES
(See Geological map for sample location)

Sample Location #	Sample #	Rock Sample Description
1	1219336	Granite with quartz veining, carbon
2	1219337	Syenite breccia - Carbonatite
3	1219338	Syenite breccia - Carbonatite
4	1219362	Gabbro with magnetite and 7% sulphide
5	1219363	Gabbro with magnetite and 10% sulphide
6	1219364	Gabbro with magnetite and 5% sulphide
7	1219365	Gabbro with magnetite and 15% sulphide
8	1219366	Gabbro with magnetite and 10% sulphide
9	1219367	Gabbro with magnetite and 5% sulphide
10	582151	Gabbro with magnetite and 10% sulphide
11	582152	Gabbro with magnetite and 5% sulphide
12	582153	Gabbro with magnetite and 5% sulphide
13	582154	Gabbro with magnetite and 15% sulphide
14	582155	Gabbro with magnetite and 10% sulphide

Appendix III



Date Submitted: 22-Aug-19
Invoice No.: A19-11141
Invoice Date: 05-Sep-19
Your Reference:

Mike Dorval
22 Van
Horne Cres
Marathon On P0T 2E0
Canada

ATTN: Mike Dorval

CERTIFICATE OF ANALYSIS

14 Rock samples were submitted for analysis.

The following analytical package(s) were requested:

Code 1A2-Tbay QOP AA-Au (Au - Fire Assay AA)

Code 1C-OES-Tbay QOP PGE-OES (Fire Assay ICPOES)

Code 1E3-Tbay QOP AquaGeo (Aqua Regia ICPOES)

REPORT **A19-11141**

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Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Total includes all elements in % oxide to the left of total.

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:



Elitsa Hrischeva, Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.

1201 Walsh Street West, Thunder Bay, Ontario, Canada, P7E 4X6
TELEPHONE +807 622-6707 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Date Submitted: 22-Aug-19
Invoice No.: A19-11141
Invoice Date: 05-Sep-19
Your Reference:

Mike Dorval
22 Van
Horne Cres
Marathon On P0T 2E0
Canada

ATTN: Mike Dorval

CERTIFICATE OF ANALYSIS

14 Rock samples were submitted for analysis.

The following analytical package(s) were requested:

Code 8-REE Assay Package QOP WRA/ QOP WRA 4B2 (Major/Trace Elements Fusion ICPOES/ICPMS)

REPORT **A19-11141**

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Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Total includes all elements in % oxide to the left of total.

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CERTIFIED BY:



Elitsa Hrischeva, Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.
41 Bittern Street, Ancaster, Ontario, Canada, L9G 4V5
TELEPHONE +905 648-9611 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au	Au	Pd	Pt	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga
Unit Symbol	ppb	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	5	2	5	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10
Method Code	FA-AA	FA-ICP	FA-ICP	FA-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
1219336	< 5																						
1219337																							
1219338					< 0.2	< 0.5	2	630	< 1	12	< 2	85	0.86	< 2	< 10	96	< 0.5	< 2	0.58	5	35	1.55	< 10
1219362		< 2	< 5	< 5																			
1219363		< 2	< 5	< 5																			
1219364		< 2	< 5	< 5																			
1219365		< 2	< 5	< 5																			
1219366		< 2	< 5	< 5																			
1219367		< 2	< 5	< 5																			
582151		< 2	< 5	< 5																			
582152		< 2	< 5	< 5																			
582153		< 2	< 5	< 5																			
582154		< 2	< 5	< 5																			
582155		< 2	< 5	< 5																			

Analyte Symbol	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr	SiO2	Al2O3	Fe2O3(T)	MnO
Unit Symbol	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%
Lower Limit	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1	0.01	0.01	0.01	0.001
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP
1219336																							
1219337																				71.37	14.70	2.41	0.048
1219338	< 1	0.15	22	0.77	0.135	0.046	< 0.01	< 2	3	74	0.16	< 20	2	< 2	< 10	32	< 10	10	12				
1219362																							
1219363																							
1219364																							
1219365																							
1219366																							
1219367																							
582151																							
582152																							
582153																							
582154																							
582155																							

Analyte Symbol	MgO	CaO	Na2O	K2O	TiO2	P2O5	LOI	Total	Sc	Be	V	Cr	Co	Ni	Cu	Zn	Ga	Ge	As	Rb	Sr	Y	Zr
Unit Symbol	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.01	0.01	0.01	0.001	0.01		0.01	1	1	5	20	1	20	10	30	1	1	5	2	2	2	4
Method Code	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	GRAV	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-ICP	FUS-ICP	FUS-ICP
1219336																							
1219337	1.07	1.54	5.49	2.47	0.270	0.10	1.11	100.6	3	1	34	60	5	< 20	< 10	50	22	< 1	< 5	58	579	10	105
1219338																							
1219362																							
1219363																							
1219364																							
1219365																							
1219366																							
1219367																							
582151																							
582152																							
582153																							
582154																							
582155																							

Analyte Symbol	Nb	Mo	Ag	In	Sn	Sb	Cs	Ba	Bi	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	1	2	0.5	0.2	1	0.5	0.5	3	0.4	0.1	0.1	0.05	0.1	0.1	0.05	0.1	0.1	0.1	0.1	0.1	0.05	0.1	0.04
Method Code	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
1219336																							
1219337	4	< 2	< 0.5	< 0.2	1	< 0.5	1.5	786	< 0.4	21.0	48.3	5.71	22.5	3.8	0.99	2.8	0.4	1.8	0.3	1.0	0.14	0.9	0.15
1219338																							
1219362																							
1219363																							
1219364																							
1219365																							
1219366																							
1219367																							
582151																							
582152																							
582153																							
582154																							
582155																							

Analyte Symbol	Hf	Ta	W	Tl	Pb	Th	U
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.2	0.1	1	0.1	5	0.1	0.1
Method Code	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
1219336							
1219337	2.9	0.3	< 1	0.3	8	4.0	1.0
1219338							
1219362							
1219363							
1219364							
1219365							
1219366							
1219367							
582151							
582152							
582153							
582154							
582155							

Analyte Symbol	Au	Au	Pd	Pt	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga
Unit Symbol	ppb	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	5	2	5	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10
Method Code	FA-AA	FA-ICP	FA-ICP	FA-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
DNC-1 Meas																							
DNC-1 Cert																							
GXR-6 Meas					0.2	< 0.5	68	1080	2	22	96	129	7.41	243	< 10	746	0.9	< 2	0.13	13	82	5.72	20
GXR-6 Cert					1.30	1.00	66.0	1010	2.40	27.0	101	118	17.7	330	9.80	1300	1.40	0.290	0.180	13.8	96.0	5.58	35.0
TDB-1 Meas																							
TDB-1 Cert																							
W-2a Meas																							
W-2a Cert																							
DTS-2b Meas																							
DTS-2b Cert																							
SY-4 Meas																							
SY-4 Cert																							
BIR-1a Meas																							
BIR-1a Cert																							
ZW-C Meas																							
ZW-C Cert																							
OREAS 101b (Fusion) Meas																							
OREAS 101b (Fusion) Cert																							
NCS DC86318 Meas																							
NCS DC86318 Cert																							
SARM 3 Meas																							
SARM 3 Cert																							
USZ 25-2006 Meas																							
USZ 25-2006 Cert																							
USZ 42-2006 Meas																							
USZ 42-2006 Cert																							
PK2 Meas		4860	5930	4790																			
PK2 Cert		4785	5918	4749																			
OREAS 922 (AQUA REGIA) Meas					0.8	< 0.5	2050	754	< 1	33	63	259	2.92	6		87	0.8	5	0.41	19	46	4.96	< 10
OREAS 922 (AQUA REGIA) Cert					0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7	5.05	7.62
OREAS 923 (AQUA REGIA) Meas					1.5	< 0.5	4050	862	< 1	30	77	336	2.94	7		69	0.7	16	0.42	21	42	5.73	< 10
OREAS 923 (AQUA REGIA) Cert					1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326	22.2	39.4	5.91	8.01

Analyte Symbol	Au	Au	Pd	Pt	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga
Unit Symbol	ppb	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	5	2	5	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10
Method Code	FA-AA	FA-ICP	FA-ICP	FA-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Cert																							
REE-1 Meas																							
REE-1 Cert																							
Oreas 96 (Aqua Regia) Meas					10.0		> 10000				87	415						5		45			
Oreas 96 (Aqua Regia) Cert					11.50		39100.00				100	448						27.9		49.2			
CDN-PGMS-27 Meas		4380	2000	1280																			
CDN-PGMS-27 Cert		4800	2000	1290.00																			
OREAS 220 (Fire Assay) Meas	836																						
OREAS 220 (Fire Assay) Cert	866																						
Oreas 621 (Aqua Regia) Meas					66.4	299	3540	543	14	25	> 5000	> 10000	1.83	78			0.6	2	1.71	32	30	3.48	< 10
Oreas 621 (Aqua Regia) Cert					68.0	278	3660	520	13.3	25.8	13600	51700	1.60	75.0			0.530	3.85	1.65	27.9	31.3	3.43	9.29
OREAS 238 (Fire Assay) Meas	2960																						
OREAS 238 (Fire Assay) Cert	3030																						
1219336 Orig	< 5																						
1219336 Dup	< 5																						
1219337 Orig																							
1219337 Dup																							
582155 Orig		< 2	< 5	< 5																			
582155 Dup		< 2	< 5	< 5																			
Method Blank		< 2	< 5	< 5																			
Method Blank	< 5																						
Method Blank					< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	11	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10
Method Blank																							

Analyte Symbol	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr	SiO2	Al2O3	Fe2O3(T)	MnO
Unit Symbol	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%
Lower Limit	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1	0.01	0.01	0.01	0.001
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP
DNC-1 Meas																				47.56	18.53	9.48	0.145
DNC-1 Cert																				47.15	18.34	9.97	0.150
GXR-6 Meas	< 1	1.17	< 10	0.43	0.089	0.036	0.01	3	21	28	< 20	2	< 2	< 10	177	< 10	5	9					
GXR-6 Cert	0.0680	1.87	13.9	0.609	0.104	0.0350	0.0160	3.60	27.6	35.0	5.30	0.0180	2.20	1.54	186	1.90	14.0	110					
TDB-1 Meas																							
TDB-1 Cert																							
W-2a Meas																				53.07	15.20	10.55	0.170
W-2a Cert																				52.4	15.4	10.7	0.163
DTS-2b Meas																							
DTS-2b Cert																							
SY-4 Meas																				49.95	21.14	6.29	0.108
SY-4 Cert																				49.9	20.69	6.21	0.108
BIR-1a Meas																				48.21	15.62	11.05	0.172
BIR-1a Cert																				47.96	15.50	11.30	0.175
ZW-C Meas																							
ZW-C Cert																							
OREAS 101b (Fusion) Meas																							
OREAS 101b (Fusion) Cert																							
NCS DC86318 Meas																							
NCS DC86318 Cert																							
SARM 3 Meas																							
SARM 3 Cert																							
USZ 25-2006 Meas																							
USZ 25-2006 Cert																							
USZ 42-2006 Meas																							
USZ 42-2006 Cert																							
PK2 Meas																							
PK2 Cert																							
OREAS 922 (AQUA REGIA) Meas		0.48	36	1.35	0.034	0.062	0.35	4	4	16	< 20		< 2	< 10	35	< 10	22	24					
OREAS 922 (AQUA REGIA) Cert		0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0	14.5		0.14	1.98	29.4	1.12	16.0	22.3					
OREAS 923 (AQUA REGIA) Meas		0.40	34	1.44		0.059	0.64	3	4	15	< 20		< 2	< 10	34	< 10	20	30					

Analyte Symbol	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr	SiO2	Al2O3	Fe2O3(T)	MnO
Unit Symbol	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%
Lower Limit	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1	0.01	0.01	0.01	0.001
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP
OREAS 923 (AQUA REGIA) Cert		0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6		14.3		0.12	1.80	30.6	1.96	14.3	22.5				
REE-1 Meas																							
REE-1 Cert																							
Oreas 96 (Aqua Regia) Meas							3.65	6															
Oreas 96 (Aqua Regia) Cert							4.38	4.53															
CDN-PGMS-27 Meas																							
CDN-PGMS-27 Cert																							
OREAS 220 (Fire Assay) Meas																							
OREAS 220 (Fire Assay) Cert																							
Oreas 621 (Aqua Regia) Meas	4	0.38	19	0.47	0.191	0.035	4.38	128	3	19	< 20			< 2	< 10	13	< 10	9	66				
Oreas 621 (Aqua Regia) Cert	3.93	0.333	19.4	0.436	0.160	0.0335	4.50	107	2.20	18.9	5.91			0.770	1.63	10.9	1.00	6.87	55.0				
OREAS 238 (Fire Assay) Meas																							
OREAS 238 (Fire Assay) Cert																							
1219336 Orig																							
1219336 Dup																							
1219337 Orig																				71.29	14.95	2.42	0.048
1219337 Dup																				71.45	14.44	2.41	0.048
582155 Orig																							
582155 Dup																							
Method Blank																							
Method Blank																							
Method Blank	< 1	< 0.01	< 10	< 0.01	0.015	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1				
Method Blank																				< 0.01	< 0.01	< 0.01	0.003

Analyte Symbol	MgO	CaO	Na2O	K2O	TiO2	P2O5	Total	Sc	Be	V	Cr	Co	Ni	Cu	Zn	Ga	Ge	As	Rb	Sr	Y	Zr	Nb
Unit Symbol	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.01	0.01	0.01	0.001	0.01	0.01	1	1	5	20	1	20	10	30	1	1	5	2	2	2	4	1
Method Code	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS
DNC-1 Meas	9.89	11.19	1.95	0.23	0.481	0.06		31		154										142	15	31	
DNC-1 Cert	10.13	11.49	1.890	0.234	0.480	0.070		31		148										144.0	18.0	38	
GXR-6 Meas																							
GXR-6 Cert																							
TDB-1 Meas											260		100	340	150					22			
TDB-1 Cert											251		92	323	155					23			
W-2a Meas	6.24	10.97	2.25	0.64	1.080	0.12		35	< 1	277	100	43	80	110	80	17	2	< 5	20	195	19	80	8
W-2a Cert	6.37	10.9	2.14	0.626	1.06	0.140		36.0	1.30	262	92.0	43.0	70.0	110	80.0	17.0	1.00	1.20	21.0	190	24.0	94.0	7.90
DTS-2b Meas											14700	129	3800										
DTS-2b Cert											15500	120	3780										
SY-4 Meas	0.50	8.06	6.91	1.67	0.289	0.13		< 1	3	7				90	36				55	1212	111	534	13
SY-4 Cert	0.54	8.05	7.10	1.66	0.287	0.131		1.1	2.6	8.0				93	35				55.0	1191	119	517	13
BIR-1a Meas	9.56	13.54	1.83	0.02	0.982	0.02		44	< 1	338	400	51	180	130	70	15				107	14	13	
BIR-1a Cert	9.700	13.30	1.82	0.030	0.96	0.021		44	0.58	310	370	52	170	125	70	16				110	16	18	
ZW-C Meas															1040	98			8800				200
ZW-C Cert															1050.00	99			8500				198
OREAS 101b (Fusion) Meas												45	< 20	420									
OREAS 101b (Fusion) Cert												47	9	420									
NCS DC86318 Meas																				382			
NCS DC86318 Cert																				369.42			
SARM 3 Meas																							949
SARM 3 Cert																							978
USZ 25-2006 Meas															630								
USZ 25-2006 Cert															600								
USZ 42-2006 Meas															470								32
USZ 42-2006 Cert															469								31.00
PK2 Meas																							
PK2 Cert																							
OREAS 922 (AQUA REGIA) Meas																							
OREAS 922 (AQUA REGIA) Cert																							
OREAS 923 (AQUA REGIA) Meas																							

Analyte Symbol	MgO	CaO	Na2O	K2O	TiO2	P2O5	Total	Sc	Be	V	Cr	Co	Ni	Cu	Zn	Ga	Ge	As	Rb	Sr	Y	Zr	Nb
Unit Symbol	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.01	0.01	0.01	0.001	0.01	0.01	1	1	5	20	1	20	10	30	1	1	5	2	2	2	4	1
Method Code	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS
OREAS 923 (Aqua Regia) Cert																							
REE-1 Meas											290		20	80				122					
REE-1 Cert											277		24.7	79.7				124					
Oreas 96 (Aqua Regia) Meas																							
Oreas 96 (Aqua Regia) Cert																							
CDN-PGMS-27 Meas																							
CDN-PGMS-27 Cert																							
OREAS 220 (Fire Assay) Meas																							
OREAS 220 (Fire Assay) Cert																							
Oreas 621 (Aqua Regia) Meas																							
Oreas 621 (Aqua Regia) Cert																							
OREAS 238 (Fire Assay) Meas																							
OREAS 238 (Fire Assay) Cert																							
1219336 Orig																							
1219336 Dup																							
1219337 Orig	1.07	1.54	5.50	2.48	0.272	0.09	100.8	3	2	34	60	5	< 20	< 10	50	22	< 1	< 5	58	585	10	103	4
1219337 Dup	1.07	1.55	5.48	2.46	0.267	0.10	100.4	3	1	34	50	5	< 20	< 10	50	22	< 1	< 5	57	573	10	107	4
582155 Orig																							
582155 Dup																							
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank	< 0.01	< 0.01	< 0.01	< 0.01	< 0.001	< 0.01		< 1	< 1	< 5	< 20	< 1	< 20	< 10	< 30	< 1	< 1	< 5	< 2	< 2	< 2	< 4	< 1

Analyte Symbol	Mo	Ag	In	Sn	Sb	Cs	Ba	Bi	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	2	0.5	0.2	1	0.5	0.5	3	0.4	0.1	0.1	0.05	0.1	0.1	0.05	0.1	0.1	0.1	0.1	0.1	0.05	0.1	0.04	0.2
Method Code	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
DNC-1 Meas								106															
DNC-1 Cert								118															
GXR-6 Meas																							
GXR-6 Cert																							
TDB-1 Meas									16.6	38.9		23.4		2.00									
TDB-1 Cert									17	41		23		2.1									
W-2a Meas	< 2				0.7	0.9	176	< 0.4	10.7	23.3		12.4	3.2	1.10		0.6	3.8	0.8			2.0	0.31	2.4
W-2a Cert	0.600				0.790	0.990	182	0.0300	10.0	23.0		13.0	3.30	1.00		0.630	3.60	0.760			2.10	0.330	2.60
DTS-2b Meas																							
DTS-2b Cert																							
SY-4 Meas						1.5	346		61.6	130	15.1	59.0	13.3	2.04	14.6	2.8	18.9	4.3	14.3	2.25	15.1	2.22	10.7
SY-4 Cert						1.5	340		58	122	15.0	57	12.7	2.00	14.0	2.6	18.2	4.3	14.2	2.3	14.8	2.1	10.6
BIR-1a Meas					< 0.5		9		0.6	1.9		2.4	1.1	0.51							1.7		0.5
BIR-1a Cert					0.58		6		0.63	1.9		2.5	1.1	0.55							1.7		0.60
ZW-C Meas				1310	4.5	257			30.9		9.60	25.1	6.9		4.7								
ZW-C Cert				1300.000	4.2	260			30.0		9.5	25.0	6.6		4.70								
OREAS 101b (Fusion) Meas	19								795	1370	123	372	48.0	7.95		5.4	30.9	6.2	18.5	2.66	17.5	2.61	
OREAS 101b (Fusion) Cert	21								789	1331	127	378	48	7.77		5.37	32.1	6.34	18.7	2.66	17.6	2.58	
NCS DC86318 Meas						11.0			1990	426	737	3230	1650	19.2	2300	516	3150	589	1690	263	1760	253	
NCS DC86318 Cert						10.28			1960	430	740	3430	1720	18.91	2095	470	3220	560	1750	270	1840	260.0	
SARM 3 Meas																							
SARM 3 Cert																							
USZ 25-2006 Meas									19300	30900	2790	8450	869	212									
USZ 25-2006 Cert									19300	29000	2800	8800	900	211.00									
USZ 42-2006 Meas	36								20300	27700	2250	6160	489	93.0									
USZ 42-2006 Cert	34.40								21100	27600	2300	6500	539	87.22									
PK2 Meas																							
PK2 Cert																							
OREAS 922 (AQUA REGIA) Meas																							
OREAS 922 (AQUA REGIA) Cert																							
OREAS 923 (AQUA REGIA) Meas																							

Analyte Symbol	Mo	Ag	In	Sn	Sb	Cs	Ba	Bi	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	2	0.5	0.2	1	0.5	0.5	3	0.4	0.1	0.1	0.05	0.1	0.1	0.05	0.1	0.1	0.1	0.1	0.1	0.05	0.1	0.04	0.2
Method Code	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
OREAS 923 (Aqua Regia) Cert																							
REE-1 Meas						1.1			1750	4180		1500		25.3	452		895	214	713				491
REE-1 Cert						1.07			1661	3960		1456		23.5	433		847	208	701				479
Oreas 96 (Aqua Regia) Meas																							
Oreas 96 (Aqua Regia) Cert																							
CDN-PGMS-27 Meas																							
CDN-PGMS-27 Cert																							
OREAS 220 (Fire Assay) Meas																							
OREAS 220 (Fire Assay) Cert																							
Oreas 621 (Aqua Regia) Meas																							
Oreas 621 (Aqua Regia) Cert																							
OREAS 238 (Fire Assay) Meas																							
OREAS 238 (Fire Assay) Cert																							
1219336 Orig																							
1219336 Dup																							
1219337 Orig	< 2	< 0.5	< 0.2	1	< 0.5	1.5	785	< 0.4	21.4	48.8	5.81	22.8	3.9	1.00	2.8	0.4	1.8	0.3	1.0	0.14	0.9	0.14	2.8
1219337 Dup	< 2	< 0.5	< 0.2	1	< 0.5	1.5	786	< 0.4	20.7	47.7	5.61	22.1	3.8	0.97	2.8	0.4	1.8	0.3	0.9	0.14	0.9	0.15	3.0
582155 Orig																							
582155 Dup																							
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank	< 2	< 0.5	< 0.2	< 1	< 0.5	< 0.5	< 3	< 0.4	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.04	< 0.2

Analyte Symbol	Ta	W	Tl	Pb	Th	U
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.1	1	0.1	5	0.1	0.1
Method Code	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
DNC-1 Meas						
DNC-1 Cert						
GXR-6 Meas						
GXR-6 Cert						
TDB-1 Meas					2.6	
TDB-1 Cert					2.7	
W-2a Meas	0.5	< 1	< 0.1	7	2.3	0.5
W-2a Cert	0.500	0.300	0.200	9.30	2.40	0.530
DTS-2b Meas						
DTS-2b Cert						
SY-4 Meas	0.9			10	1.5	
SY-4 Cert	0.9			10	1.4	
BIR-1a Meas				< 5		
BIR-1a Cert				3		
ZW-C Meas	83.0	333	33.9			19.3
ZW-C Cert	82	320	34			20.0
OREAS 101b (Fusion) Meas					35.5	397
OREAS 101b (Fusion) Cert					37.1	396
NCS DC86318 Meas					65.0	
NCS DC86318 Cert					67.0	
SARM 3 Meas						
SARM 3 Cert						
USZ 25-2006 Meas				1090		
USZ 25-2006 Cert				1100		
USZ 42-2006 Meas				1590	909	
USZ 42-2006 Cert				1600	946	
PK2 Meas						
PK2 Cert						
OREAS 922 (AQUA REGIA) Meas						
OREAS 922 (AQUA REGIA) Cert						
OREAS 923 (AQUA REGIA) Meas						
OREAS 923						

Analyte Symbol	Ta	W	Tl	Pb	Th	U
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.1	1	0.1	5	0.1	0.1
Method Code	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
(AQUA REGIA) Cert						
REE-1 Meas						
REE-1 Cert						
Oreas 96 (Aqua Regia) Meas						
Oreas 96 (Aqua Regia) Cert						
CDN-PGMS-27 Meas						
CDN-PGMS-27 Cert						
OREAS 220 (Fire Assay) Meas						
OREAS 220 (Fire Assay) Cert						
Oreas 621 (Aqua Regia) Meas						
Oreas 621 (Aqua Regia) Cert						
OREAS 238 (Fire Assay) Meas						
OREAS 238 (Fire Assay) Cert						
1219336 Orig						
1219336 Dup						
1219337 Orig	0.3	< 1	0.3	8	4.0	1.0
1219337 Dup	0.3	< 1	0.3	8	4.0	1.1
582155 Orig						
582155 Dup						
Method Blank						
Method Blank						
Method Blank						
Method Blank	< 0.1	< 1	< 0.1	< 5	< 0.1	< 0.1

Final Report
Activation Laboratories

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Analyte Symbol	Au	Au	Pd	Pt	Ag
Unit Symbol	ppb	ppb	ppb	ppb	ppm
Detection Limit	5	2	5	5	0.2
Analysis Method	FA-AA	FA-ICP	FA-ICP	FA-ICP	AR-ICP
1219336	< 5				
1219337					
1219338					< 0.2
1219362		< 2	< 5	< 5	
1219363		< 2	< 5	< 5	
1219364		< 2	< 5	< 5	
1219365		< 2	< 5	< 5	
1219366		< 2	< 5	< 5	
1219367		< 2	< 5	< 5	
582151		< 2	< 5	< 5	
582152		< 2	< 5	< 5	
582153		< 2	< 5	< 5	
582154		< 2	< 5	< 5	
582155		< 2	< 5	< 5	

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Activation Laboratories

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Analyte Symbol	Cd	Cu	Mn	Mo	Ni
Unit Symbol	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.5	1	5	1	1
Analysis Method	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP

1219336

1219337

1219338 < 0.5 2 630 < 1 12

1219362

1219363

1219364

1219365

1219366

1219367

582151

582152

582153

582154

582155

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Activation Laboratories

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Analyte Symbol	Pb	Zn	Al	As	B
Unit Symbol	ppm	ppm	%	ppm	ppm
Detection Limit	2	2	0.01	2	10
Analysis Method	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP

1219336

1219337

1219338	< 2	85	0.86	< 2	< 10
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1219362

1219363

1219364

1219365

1219366

1219367

582151

582152

582153

582154

582155

Final Report
Activation Laboratories

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Analyte Symbol	Ba	Be	Bi	Ca	Co
Unit Symbol	ppm	ppm	ppm	%	ppm
Detection Limit	10	0.5	2	0.01	1
Analysis Method	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP

1219336

1219337

1219338 96 < 0.5 < 2 0.58 5

1219362

1219363

1219364

1219365

1219366

1219367

582151

582152

582153

582154

582155

Final Report
Activation Laboratories

Report Number: A19-11141

Report Date: 5/9/2019

Analyte Symbol	Cr	Fe	Ga	Hg	K
Unit Symbol	ppm	%	ppm	ppm	%
Detection Limit	1	0.01	10	1	0.01
Analysis Method	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP

1219336

1219337

1219338	35	1.55	< 10	< 1	0.15
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1219362

1219363

1219364

1219365

1219366

1219367

582151

582152

582153

582154

582155

Final Report
Activation Laboratories

Report Number: A19-11141

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Analyte Symbol	La	Mg	Na	P	S
Unit Symbol	ppm	%	%	%	%
Detection Limit	10	0.01	0.001	0.001	0.01
Analysis Method	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP

1219336

1219337

1219338	22	0.77	0.135	0.046	< 0.01
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1219362

1219363

1219364

1219365

1219366

1219367

582151

582152

582153

582154

582155

Final Report
Activation Laboratories

Report Number: A19-11141

Report Date: 5/9/2019

Analyte Symbol	Sb	Sc	Sr	Ti	Th
Unit Symbol	ppm	ppm	ppm	%	ppm
Detection Limit	2	1	1	0.01	20
Analysis Method	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP

1219336

1219337

1219338 < 2 3 74 0.16 < 20

1219362

1219363

1219364

1219365

1219366

1219367

582151

582152

582153

582154

582155

**Final Report
Activation Laboratories**

Report Number: A19-11141

Report Date: 5/9/2019

Analyte Symbol	Te	Tl	U	V	W
Unit Symbol	ppm	ppm	ppm	ppm	ppm
Detection Limit	1	2	10	1	10
Analysis Method	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
1219336					
1219337					
1219338	2	< 2	< 10	32	< 10
1219362					
1219363					
1219364					
1219365					
1219366					
1219367					
582151					
582152					
582153					
582154					
582155					

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Activation Laboratories

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Analyte Symbol	Y	Zr	SiO2	Al2O3	Fe2O3(T)
Unit Symbol	ppm	ppm	%	%	%
Detection Limit	1	1	0.01	0.01	0.01
Analysis Method	AR-ICP	AR-ICP	FUS-ICP	FUS-ICP	FUS-ICP
1219336					
1219337			71.37	14.7	2.41
1219338	10	12			
1219362					
1219363					
1219364					
1219365					
1219366					
1219367					
582151					
582152					
582153					
582154					
582155					

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Activation Laboratories

Report Number: A19-11141

Report Date: 5/9/2019

Analyte Symbol	MnO	MgO	CaO	Na2O	K2O
Unit Symbol	%	%	%	%	%
Detection Limit	0.001	0.01	0.01	0.01	0.01
Analysis Method	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP
1219336					
1219337	0.048	1.07	1.54	5.49	2.47
1219338					
1219362					
1219363					
1219364					
1219365					
1219366					
1219367					
582151					
582152					
582153					
582154					
582155					

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Activation Laboratories

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Analyte Symbol	TiO2	P2O5	LOI	Total	Sc
Unit Symbol	%	%	%	%	ppm
Detection Limit	0.001	0.01		0.01	1
Analysis Method	FUS-ICP	FUS-ICP	GRAV	FUS-ICP	FUS-ICP
1219336					
1219337	0.27	0.1	1.11	100.6	3
1219338					
1219362					
1219363					
1219364					
1219365					
1219366					
1219367					
582151					
582152					
582153					
582154					
582155					

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Activation Laboratories

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Analyte Symbol	Be	V	Cr	Co	Ni
Unit Symbol	ppm	ppm	ppm	ppm	ppm
Detection Limit	1	5	20	1	20
Analysis Method	FUS-ICP	FUS-ICP	FUS-MS	FUS-MS	FUS-MS
1219336					
1219337	1	34	60	5	< 20
1219338					
1219362					
1219363					
1219364					
1219365					
1219366					
1219367					
582151					
582152					
582153					
582154					
582155					

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Activation Laboratories

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Analyte Symbol	Cu	Zn	Ga	Ge	As
Unit Symbol	ppm	ppm	ppm	ppm	ppm
Detection Limit	10	30	1	1	5
Analysis Method	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
1219336					
1219337	< 10	50	22	< 1	< 5
1219338					
1219362					
1219363					
1219364					
1219365					
1219366					
1219367					
582151					
582152					
582153					
582154					
582155					

Final Report
Activation Laboratories

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Analyte Symbol	Rb	Sr	Y	Zr	Nb
Unit Symbol	ppm	ppm	ppm	ppm	ppm
Detection Limit	2	2	2	4	1
Analysis Method	FUS-MS	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS
1219336					
1219337	58	579	10	105	4
1219338					
1219362					
1219363					
1219364					
1219365					
1219366					
1219367					
582151					
582152					
582153					
582154					
582155					

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Analyte Symbol	Mo	Ag	In	Sn	Sb
Unit Symbol	ppm	ppm	ppm	ppm	ppm
Detection Limit	2	0.5	0.2	1	0.5
Analysis Method	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
1219336					
1219337	< 2	< 0.5	< 0.2	1	< 0.5
1219338					
1219362					
1219363					
1219364					
1219365					
1219366					
1219367					
582151					
582152					
582153					
582154					
582155					

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Activation Laboratories

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Analyte Symbol	Cs	Ba	Bi	La	Ce
Unit Symbol	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.5	3	0.4	0.1	0.1
Analysis Method	FUS-MS	FUS-ICP	FUS-MS	FUS-MS	FUS-MS
1219336					
1219337	1.5	786	< 0.4	21	48.3
1219338					
1219362					
1219363					
1219364					
1219365					
1219366					
1219367					
582151					
582152					
582153					
582154					
582155					

Final Report
Activation Laboratories

Report Number: A19-11141

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Analyte Symbol	Pr	Nd	Sm	Eu	Gd
Unit Symbol	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.05	0.1	0.1	0.05	0.1
Analysis Method	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
1219336					
1219337	5.71	22.5	3.8	0.99	2.8
1219338					
1219362					
1219363					
1219364					
1219365					
1219366					
1219367					
582151					
582152					
582153					
582154					
582155					

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Activation Laboratories

Report Number: A19-11141

Report Date: 5/9/2019

Analyte Symbol	Tb	Dy	Ho	Er	Tm
Unit Symbol	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.1	0.1	0.1	0.1	0.05
Analysis Method	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
1219336					
1219337	0.4	1.8	0.3	1	0.14
1219338					
1219362					
1219363					
1219364					
1219365					
1219366					
1219367					
582151					
582152					
582153					
582154					
582155					

Final Report
Activation Laboratories

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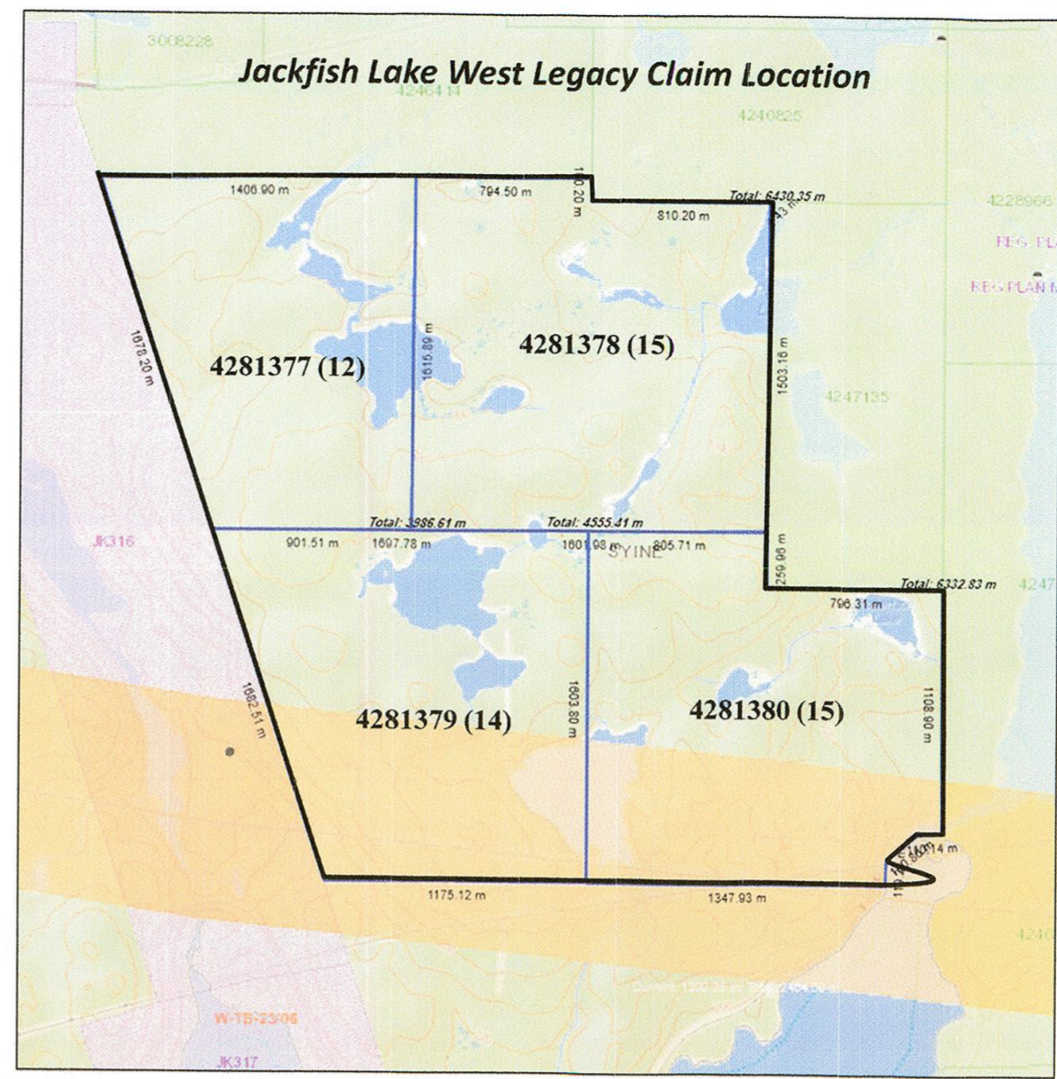
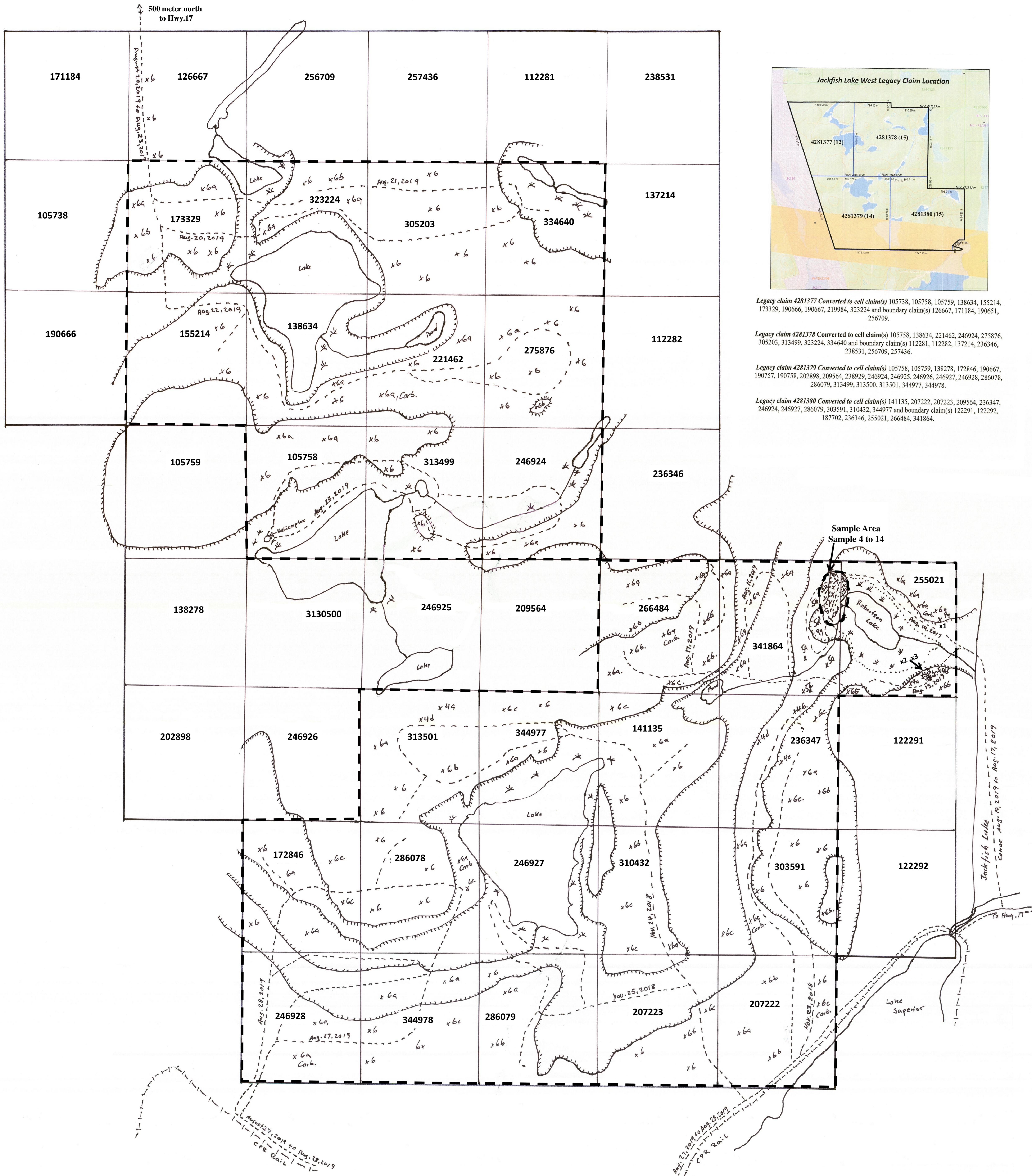
Analyte Symbol	Yb	Lu	Hf	Ta	W
Unit Symbol	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.1	0.04	0.2	0.1	1
Analysis Method	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
1219336					
1219337	0.9	0.15	2.9	0.3	< 1
1219338					
1219362					
1219363					
1219364					
1219365					
1219366					
1219367					
582151					
582152					
582153					
582154					
582155					

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Activation Laboratories

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Analyte Symbol	Tl	Pb	Th	U
Unit Symbol	ppm	ppm	ppm	ppm
Detection Limit	0.1	5	0.1	0.1
Analysis Method	FUS-MS	FUS-MS	FUS-MS	FUS-MS
1219336				
1219337	0.3	8	4	1
1219338				
1219362				
1219363				
1219364				
1219365				
1219366				
1219367				
582151				
582152				
582153				
582154				
582155				

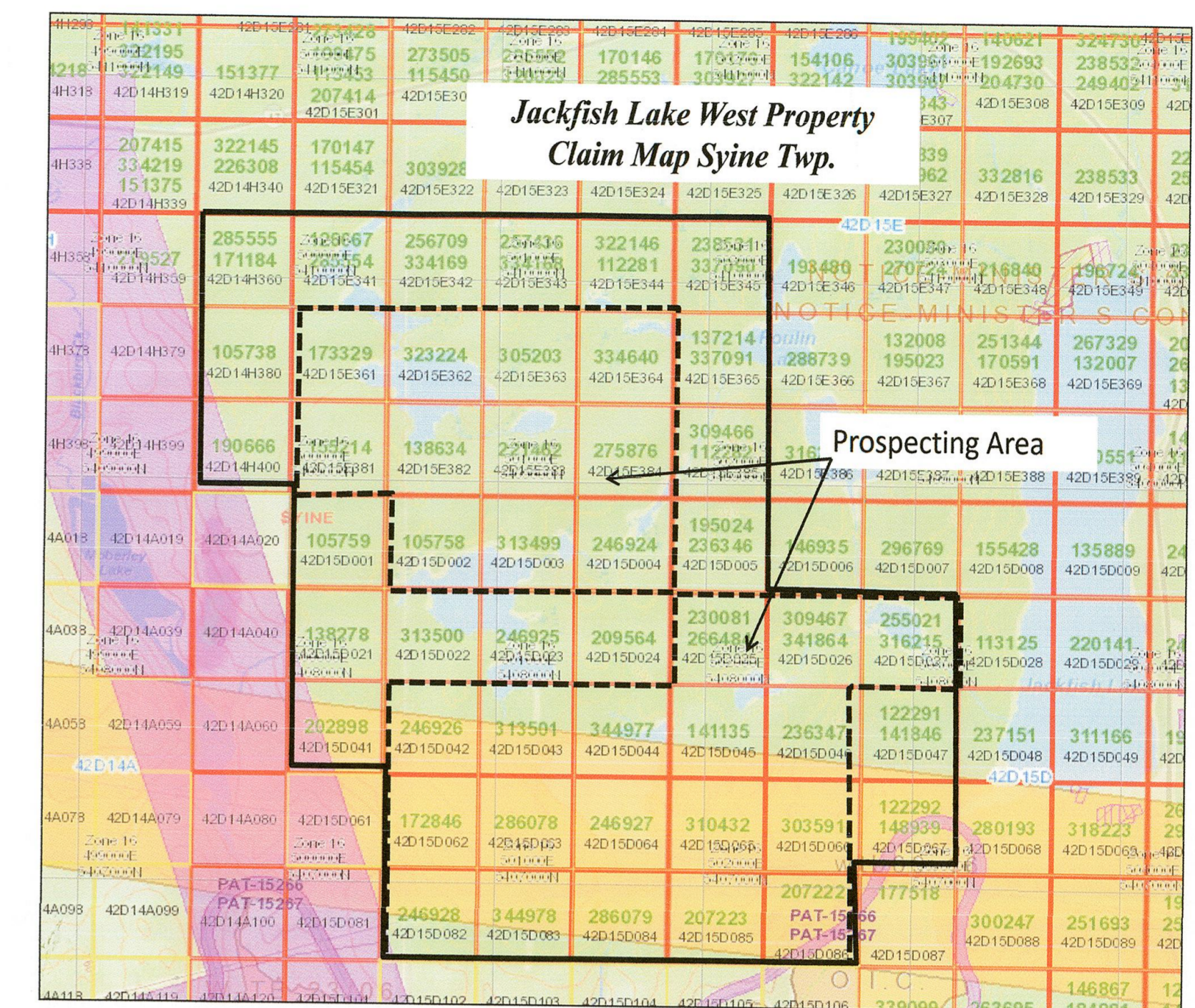


Legacy claim 4281377 Converted to cell claim(s) 105738, 105758, 105759, 138634, 155214, 173329, 190666, 190667, 219984, 323224 and boundary claim(s) 126667, 171184, 190651, 256709.

Legacy claim 4281378 Converted to cell claim(s) 105758, 138634, 221462, 246924, 275876, 305203, 313499, 323224, 334640 and boundary claim(s) 112281, 112282, 137214, 236346, 238531, 256709, 257436.

Legacy claim 4281379 Converted to cell claim(s) 105758, 105759, 138278, 172846, 190667, 190757, 190758, 202898, 209564, 238929, 246924, 246925, 246926, 246927, 246928, 286078, 286079, 313499, 313500, 313501, 344977, 344978.

Legacy claim 4281380 Converted to cell claim(s) 141135, 207222, 207223, 209564, 236347, 246924, 246927, 286079, 303591, 310432, 344977 and boundary claim(s) 122291, 122292, 187702, 236346, 255021, 266484, 341864.



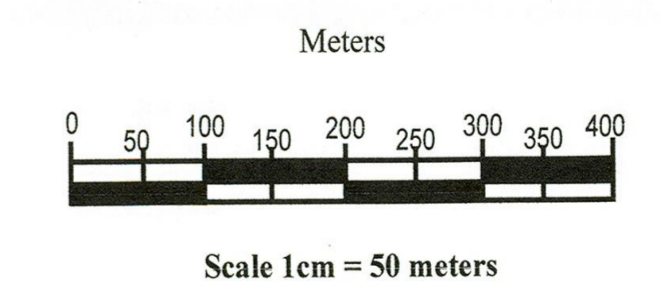
- LEGEND**
- GRANITIC GNEISSES
 - 6 Granite
 - 6a Biotite granite gneiss.
 - 6b Hornblende granite gneiss.
 - 6c Biotite-hornblende -felspar gneiss.
 - OLDER BASIC INTRUSIVE ROCKS
 - 5a Gabbro
 - SEDIMENTARY ROCKS
 - 4a Greywacke
 - 4b Slate
 - 4d Mica phyllite and schist from sedimentary rock
 - 4e Garnetiferous
- SYMBOLS**
- Down slope
 - X Bedrock
 - Muskeg or swamp
 - Property location
 - Traverse Line
 - 4 Wheeler Trail
 - 1-14 Rock sample location location and Bedrock
- ABBREVIATIONS**
- S - Sulphides
 - Py - Pyrite
 - Carb - Carbonate

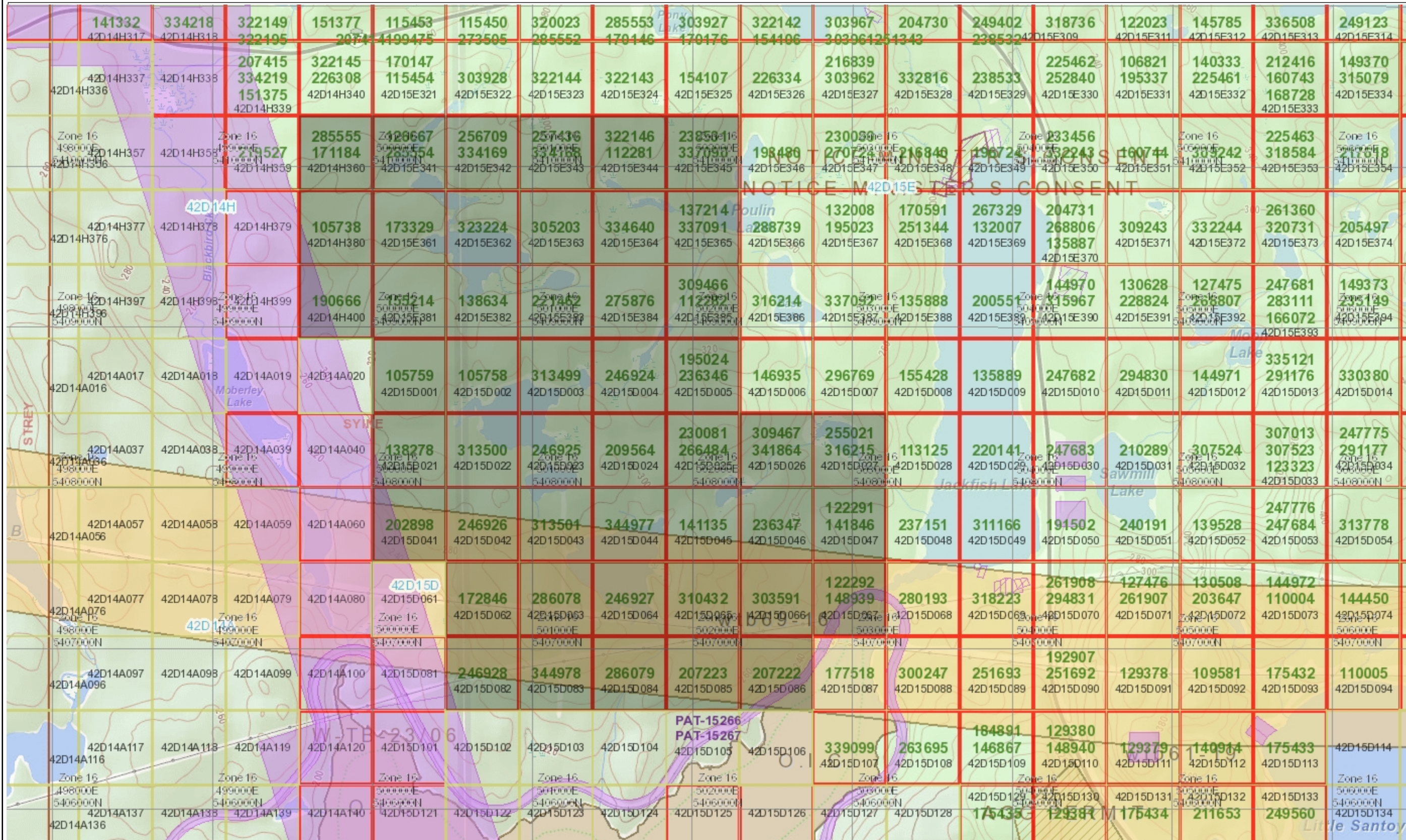
Jackfish Lake West Sample Locations
2018-2019, UTM NAD 83

# Sample Location	Sample #	Easting	Northing
1	1219336	503081	5408238
2	1219337	502985	5408104
3	1219338	502987	5408106
4	1219362	502713	5408378
5	1219363	502714	5408379
6	1219364	502716	5408380
7	1219365	502717	5408381
8	1219366	502705	5408377
9	1219367	502698	5408370
10	582151	502705	5408385
11	582152	502708	5408385
12	582153	502711	5408392
13	582154	502722	5408395
14	582155	502721	5408408

Wahl Prospecting
JACKFISH LAKE WEST PROPERTY
 Syine Township, G-0634
 Thunder Bay M.D. Ontario
Geology and Rock Sample Locations

Prep. by Rudolf Wahl September 10, 2019 Dwg.#
 Drawn by Rudolf Wahl Scale 1: 5000 1





Legend

- Provincial Grid Cell**
 - Available
 - Pending
 - Unavailable
- Mining Claim**
 - Mining Claim
 - Boundary Claim
- Alienation**
 - Withdrawal
 - Notice
- ENDM Administrative Boundaries**
 - ENDM Townships and Areas
 - Geographic Lot Fabric
 - UTM Grid 1K
 - UTM Grid 10K
 - Mining Division
 - Mineral Exploration and Development Region
 - CLUPA Protected Area - Far North
 - Resident Geologist District
 - Federal Land Other
 - Native Reserves
- AMIS Sites**
 - AMIS Sites
 - AMIS Features
 - Drill Hole
 - Mineral Occurrences
- MLAS Mining History**
 - Withdrawal - History
 - Notice - History
 - Mining Claim - History
 - Mining Land Tenure - History
 - Legacy Claim
- Provincial Grid**
 - Provincial Grid 250K
 - Provincial Grid 50K
 - Provincial Grid Group
- Land Tenure**
 - Surface Rights
 - Mining Rights
 - Mining and Surface Rights
 - Order-in-Council

0 1.21 km

Projection: Web Mercator

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