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GEOCHEMICAL REPORT ON THE JORDAIN LAKE PGE PROSPECT, NORTHWESTERN ONTARIO, CANADA

Thunder Bay Mining Division

Wardrope Township NTS 52 H/4NW N48° 57' 22.8'' and W89°59'55.3'' UTM Zones U15 and U16 280490E, 5426936N (U16)

for

Empire Rock Minerals Inc. 702-889 West Pender St. Vancouver, B.C. V6C 3B2

by

Bohumil (Boris) Molak, PhD., P. Geo (BC) and William J. Richmond

June 21, 2019

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SUMMARY

The Jordain Lake Prospect ("JLP") is a potential platinum group element ("PGE") target situated approximately 95 km northwest of Thunder Bay in Northwestern Ontario. A field program was conducted in 2018 on behalf of Empire Metals Corp. ("Empire") to locate and sample the mafic and/or ultramafic outcrops on the JLP.

In agreement with the previous work on the property, the 2018 fieldwork failed to locate any rock outcrops on the JLP. The claim area appears to be contiguously covered by glacial-fluvial till, and locally glacial boulders of felsic to mafic/ultramafic composition.

OGS geological maps of the area indicate that the bedrock is made up of granitoid rocks. The historical airborne geophysical surveys did not detect any significant magnetic or gravity anomalies that would be conducive to mafic/ultramafic rocks below the glacial overburden. Based on available information, the potential for finding the rock outcrops on the property is small and we recommend Empire to consider a drone-borne magnetic survey to test a remote possibility of mafic/ultramafic rocks being buried below the glacial overburden.

1. INTRODUCTION

The JLP consists of 25 cell claims covering 530 hectares. The JLP claim holder W. J. Richmond optioned the claims in 2015 to Empire Metals Corp. ("Empire"). The Option Agreement gives Empire the right to explore the Jordain Claims and acquire a 100% beneficial and legal interest in and to the claims for the cash payment of \$74,000 and issuance of 80,000 non-assessable common shares.

Empire Metals Corp ("Empire") retained the writers on September 10, 2018 to conduct prospecting and outcrop mapping/sampling on the JLP and to prepare a report for filing. The first writer is a consulting geologist residing in Vancouver, BC, and a Professional Geoscientist with over forty years of experience in geology, mineral exploration and research. Together with the claim holder and field assistant they conducted a field program on the JLP on September 23 and October 10 - 12, 2018. Subject to agreement with Empire, the writers consent to the filing of this report with the Provincial Mining Recorder Office, Ministry of Northern Development and Mines of Ontario.

1.1. Location and Access

The JLP is situated approximately 95 kilometers northwest of Thunder Bay in Northwestern Ontario. The prospect lies within the Thunder Bay Mining Division (Figs. 1, 2) on the Map Sheet NTS 52 H/4 and is centered at N48°57'22.8" latitude and W89°59'55.3" longitude, the UTM coordinates 280490E and 5426936 N, zones U15 and U16 (NAD83).

The access from Thunder Bay is by Highway 17 and then via all-weather Dog River Road for about 10.5 km north where a dirt road branches off to the west and runs across the JLP. A network of more or less maintained dirt roads provides access to other parts of the prospect.

1.2. The Claims

The JLP consist of 25 cell claims covering approximately 5.18 sq. kms (518 hectares). The claim information as of January 22, 2019 is listed in Table 1 below:

Table 1: claim	information			
Legacy Claim	Tenure ID	Tenure Type	Hectares	Aniversary date
4266050	138752	Single Cell Mining Claim	21.218	7/21/2020
4266050	138753	Single Cell Mining Claim	21.218	7/21/2020
4266050	155815	Single Cell Mining Claim	21.216	7/21/2020
4266050	171799	Single Cell Mining Claim	21.219	7/21/2020
4266050	173959	Single Cell Mining Claim	21.221	7/21/2020
4266050	173960	Single Cell Mining Claim	21.221	7/21/2020
4266050	191276	Single Cell Mining Claim	21.219	7/21/2020
4266050	220578	Single Cell Mining Claim	21.218	7/21/2020
4266050	220579	Single Cell Mining Claim	21.216	7/21/2020
4266050	228535	Single Cell Mining Claim	21.216	7/21/2020
4266050	240692	Single Cell Mining Claim	21.214	7/21/2020
4266050	247493	Single Cell Mining Claim	21.214	7/21/2020
4266050	286602	Single Cell Mining Claim	21.214	7/21/2020
4266050	286603	Single Cell Mining Claim	21.219	7/21/2020
4266050	286604	Single Cell Mining Claim	21.221	7/21/2020
4266050	286605	Single Cell Mining Claim	21.214	7/21/2020
4266050	286606	Single Cell Mining Claim	21.216	7/21/2020
4266050	295229	Single Cell Mining Claim	21.217	7/21/2020
4266050	307326	Single Cell Mining Claim	21.221	7/21/2020
4266050	307327	Single Cell Mining Claim	21.219	7/21/2020
4266050	307328	Single Cell Mining Claim	21.221	7/21/2020
4266050	324513	Single Cell Mining Claim	21.214	7/21/2019
4266050	334961	Single Cell Mining Claim	21.216	7/21/2019
4266050	334962	Single Cell Mining Claim	21.219	7/21/2019
4266050	334963	Single Cell Mining Claim	21.218	7/21/2019
	HAS		530.439	
	ACRES		1,310.743	

W. J. Richmond staked the JLP claim in 2014, based on the occurrence of mafic/ultramafic float and possibly a potential for PGE mineralization being associated with such rocks being buried below fluvio-glacial overburden.



Fig. 1: Jordain Lake Prospect, location map.

1.3. Topography, Vegetation and Local Resources

Topographic relief is moderately flat ranging from 470 meters to 490 meters above sea level. The area belongs to boreal forest eco-region characterized by numerous lakes and swamps. The area is characterized by hot summers with maximum temperatures of 38 ° C and cold, snowy winters, with minimum temperature of - 40 ° C. Mean annual precipitation is about 715 mm. The area is snow covered for up to 5.5 months per year. Relative humidity ranges from 50 per cent to 80 per cent and the prevailing winds in the area blow from the northwest.

The vegetation consists of mature stands of black spruce, jack pine, poplar and birch with moss covered regolith and little underbrush composed mainly of willow and Labrador teeth. Patchy areas of thick willow, alder and dwarf cedar bushes are common and usually represent

slightly lower elevated areas or along old logging roads. Most of the area is covered by glacial till and no outcrops were found.

The city of Thunder Bay is the closest main centre that provides all services required to conduct mineral exploration. It includes an airport with daily flights to major Canadian cities, rail and an ocean connection via Great Lakes and St. Lawrence Seaway.

1.4. History

The mafic/ultra-mafic intrusions of Northwestern Ontario were targeted for their copper – nickel - PGE potential since the 1950's. In 1962, the Ontario Department of Mines in conjunction with the Geological Survey of Canada conducted an aeromagnetic survey in the area (ODM-GSC 1962).

Ontario Geological Survey released the Bedrock Geology of Ontario, a geological map at 1:1,000,000 scale (Map 2545) with Explanatory Notes and Legend. the Bedrock Geology of Ontario west-central sheet, Map 2542 (1991) and the Precambrian Geology Map P.2229 at 1:250,000 scale (Stone, 2010)

W. J. Richmond staked the claim 4266050 in 2014 based on the occurrence of mafic to ultramafic float and possibly outcrops with a potential to contain PGE mineralization.

1.5. Regional Geology

The JLP is located in the Wabigoon Subprovince of Northwestern Ontario, within an Archean granite/gneiss terrain. The area is underlain predominantly by an earlier, gneissic to foliated tonalite to granodiorite suite and supracrustal rocks of the Bo Lake - Heaven Lake greenstone belt. The Neo- to Mesoarchean greenstone belt consists of greenstones surrounded and cut into by granitic rocks 3,200 to 2,650 MA ago. The Mafic plain assemblage ("MPA") consisting of mafic to lesser amount of ultramafic flow rocks with minor layers of deep-water graphite schists and argillites are also part of the greenstone belt (Blackburn et al, 1991).

A relatively younger granitoid suite comprising granodiorite, tonalite, quartz diorite and granite, intrudes both gneissic tonalite and supracrustal rocks, and is thought to be coeval with mafic to ultramafic intrusive rocks of the Lac des Iles - Buck Lake area (Smith and Sutcliffe, 1988). Middle Proterozoic diabase dikes and sills were emplaced during the Keweenawan rifting (1.1 Ga) and intrude all the above rock types (Osmani, 2001).

Several mafic to ultramafic intrusions occur 20 to 50 km north and northeast of JLP including the Lac des Iles Intrusion, Tib Lake Intrusion, Buck Lake Intrusion, Dog River Intrusion, Shelby Lake Intrusion, Demars Lake Intrusion, Wakinoo Lake Intrusion and Taman Lake Intrusion. The largest of them, the Lac des Iles Intrusive Complex, hosts the Lac des Iles PGE deposit. The intrusions are characterized by magnetic and Bouger gravity anomalies (Gupta and Sutcliffe 1990).

All these intrusions are similar in that they are late tectonic, emplaced into tonalite gneiss and commonly contain phases ranging from ultra-mafic peridotite and pyroxenitic cumulates to magnesium gabbronorite and iron-rich gabbro with hybrid marginal zones consisting of hornblendite intruded by hornblende diorite and are thought to be contamination of the mafic magma by a granitoide component (Sutcliffe, 1986). Texturally, they are massive to varied with variable degrees of brecciation and hydrothermal alteration and most contain PGE mineralization.

The Quetico Fault, a large regional northeast trending fault that has been referred to as a zone of structural weakening, is a structure along which several mafic to ultra-mafic intrusions were emplaced (OGS, 1991).

During the Quaternary period, which lasted approximately one million years, four major glaciations (the Nebraskan. Kansan. Illinoian and Wiseonsinan) occurred, each lasting about 100.000 years (Sims and Baldwin, 1991). During Wisconsinan, virtually all of Canada was covered by ice and the glacial climax took place about 20,000 years ago. In parts of northwestern Ontario the ice was as much as 4,000 m thick and deglaciation was accompanied by isostalic, rebound process that continues until today. The total uplift is estimated at about 100 m near the northwestern Lake Superior shoreline.

1.6. Local Geology

The Bedrock Geology Map, west-central sheet (OGS, 1991) and the Precambrian Geology Map P.2229 at 1:250,000 scale (Stone, 2010) show the JLP is underlain by Neo- to Mesoarchean granodiorite to granite with tonalite inclusions. The bedrock on JLP is contiguously covered by glacial till, unsorted sediments ranging from clay through sand and gravel to boulders of felsic, mafic and ultramafic composition.

2. LITHO-GEOCHEMICAL SAMPLING AND PROSPECTING

Fieldwork on the JLP was carried out intermittently from September 27 to October 12, 2018 and consisted of traversing and prospecting with a rationale to locate and sample the maficultramafic outcrops and/or float (Figs. 3, 4, 6, 7) and to recommend further work. The area is covered mainly by fluvio-glacial deposits and swamps and no outcrops were encountered. A total of 14 chip samples were collected from glacial boulders. Their locations are shown in Figs. 4 and 7 and sample descriptions and selected assays are presented in Appendix I. The assay certificates are in Appendix II.

2.1. Itinerary

September 27, 2018: Geologist B. B. Molak (BM), claim holder W. J. Richmond (WR) and field assistant D. Siccia (DS) traverse the claims 138752, 220578 and 171799. The claim area is flat and locally swampy and no rock exposures were found (Fig. 3).

October 10, 2018: BM, WR and DS conduct outcrop mapping and sampling on the claims 138753, 171799, 191276, 286603, 307327 and 334962 (Figs. 3, 6, 7). The area is covered by

glacial and/or fluvio-glacial deposits and scattered granitoide and mafic/ultramafic boulders up to a few meters in diameter. Six chip samples collected from glacial boulders.

October 11, 2018: BM, WR and DS prospects the claims 138752, 171799, 228535 and 334961 (Figs. 3, 6, 7). Several glacial boulders found, most are semi-oval, showing evidence of glacial and/or fluvial transport, others are semi-angular indicating limited transport from their original source. Six chip samples from glacial boulders collected.

October 12, 2018: BM, WR and DS traverse the claim 171799, collect two chip samples from glacial boulders (Figs. 6, 7), then demobilize and transport samples to Activation Laboratories in Thunder Bay.

2.2. Sampling Method and Analysis

Chip samples were placed in standard polypropylene bags, provided with tags with sample numbers and closed with flagging tape. The sample locations (Figs. 4 and 7) were recorded using GPS (NAD 83, zones 15 and 16, respectively) and are presented with sample descriptions in Appendix I. The samples were not modified after collection. The writers personally dispatched samples from JLP to Activation Laboratories ("Actlabs") in Thunder Bay for analysis.

Actlabs is ISO 17025 and CAN-P-1579 accredited for specific registered tests and their quality system complies with international standards. The protocol for sample preparation involves drying, crushing, splitting, pulverizing and matting. If necessary, the samples are placed in a drying oven prior to preparation (approximately 50 ° C) until dry. The entire sample is prepared (RX1+1000) by crushing to a nominal minus 10 mesh (1.7 mm), mechanically split (riffle) to obtain a representative sample and then pulverized to at least 95% minus 150 mesh (106 microns).



Fig. 2: Jordain Lake Prospect, claim map (U16).



Fig.3: Traverses, eastern portion of Jordain claim block.



Geochemical Report on the Jordain Lake PGE Prospect, Northwestern Ontario, Canada

Fig: 4: Location of samples (red lozenges), eastern portion of Jordain claim block (U16 zone); sample numbers, Pt, Pd and Au values in brackets (in ppb).



Fig. 5: Jordain claims, western portion (U15) with outline of detail map.





Fig. 7: location of samples (red lozenges), western portion (U15), with sample numbers and Pt, Pd and Au values in brackets (in ppb).

The platinum, palladium and gold determinations are conducted by fire assay and ICP method (FA-ICP). The basic procedure for fire assay involves mixing an aliquot of powdered sample (10g, 15g, 30g, or 50g) with sodium carbonate, sodium borate, litharge (PbO), baking flour, silica and potassium nitrate. To this mixture, Ag as a collector can be added in solution or as a foil. The well mixed material is fired at temperatures ranging from 1100° C to 1200° C. The lead button is cupelled at 950° C in a magnesia cupel. A tiny Ag bead which contains Au, Pt and Pd can be dissolved and analyzed by ICP. The assay for 38 elements (AR-ICP) includes fusion with ICP.

The protocol for whole rock assay (FUS-ICP-WR) involves fusion, dilution and analysis by Perkin Elmer Sciex ELAN 6000, 6100 or 9000 ICP/MS. Three blanks and five controls are analyzed per group of samples. Duplicates are fused and analyzed every 15 samples. Instrument is recalibrated every 40 samples.

In total, 14 chip samples were collected from glacial boulders found on the JLP in 2018. Most assays returned platinum, palladium and gold below DL. The assays above DL include four platinum values ranging from 6 to 16 ppb, six palladium values ranging 8 to 14 ppb and four gold values ranging 2 to 3 ppb (Appendix I). Silver in all samples is below DL. Copper, nickel and chromium values are shown in graphs in Figs. 8 a, b and c.

Based on the glacial trajectories and composition, glacial boulders on the JLP originate from the mafic/ultramafic intrusives and/or the granitoide outcrops situated north and northeast of the prospect.

Since most precious metal assays fall below detection limit, no descriptive statistics and/or correlations can be made.



Fig. 8 a, b, c.

2.3. Quality Control

Actlabs perform their assays with an aim to obtain accuracy within 1 - 3% range as long as the analyte is greater than 100 times the detection limit of the method. For some elements that are more difficult to analyze, this may stretch to 5%.

For this report, Actlabs used PK-2 standard for platinum, palladium and gold and the Oreas 520, 621, 904, 922 and 953 standards for 38 elements. The results are presented in graphs in Figs. 9 (a, b), 10 (a, b, c) and 11 (a, b, c).



Fig. 9 a, b: PK2 standard, measured vs certified.

Certified vs measured PK2 standard for Pt, Pd and Au ranged from minus 1 % to plus 2.4 % (Table 2).

Table 2	: PK2 certified vs measured	
Pt	1.0 % -	0.9 % +
Pd	1.4 % +	2.4 % +
Au	1.1 % +	2.2 % +

4:6-1 2. DV2

One repeat assay was performed on the sample 5560889, which resulted in Pt, Pd and Au being all below DL. Although Pd and Au in the repeat also assayed below DL, Pt assayed 6 ppb.

The blanks for platinum, palladium, gold and 38 elements are all below DL.

In conclusion we can state that most platinum, palladium and gold assays are below detection limits and most of those above detection limit are reasonably reproducible. Thus, the assays and quality control made by Actlab for this project meet industry standards and are sufficient for this stage of the project.



Fig. 10 a, b, c: Oreas 520, 621 and 904 standards for all elements above DL.





Oreas 923 standard, measured (blue) vs certified (brown)



Fig. 10 a, b: Oreas standards 922 and 923 for all elements above DL.



Fig. 11: original sample 5560890 compared to duplicate.

3. CONCLUSIONS AND RECOMMENDATIONS

Empire's 2018 fieldwork on the JLP consisted of traversing, outcrop searching and sampling. Traversed area is covered by fluvio-glacial deposits and glacial boulders of various sizes, degree of abrasion and composition, ranging from felsic to mafic and ultramafic, occur locally. No rock outcrops have been encountered. Some boulders contain up to 1 % disseminated sulphides but the assays returned the PGE and gold values either below or barely above the detection limits.

The OGS geological maps indicate that the bedrock underlying the JLP is made up of Archean granodiorite to granite with tonalite inclusions. The airborne magnetic map does not show any significant magnetic anomalies that would be conducive to mafic/ultramafic rocks. Based on the glaciation maps the sources of felsic, mafic and/or ultramafic boulders on the JLP are probably the outcrops situated north and northeast of JLP.

Based on to-date results, the possibility of finding rock outcrops on the property is minimal and no further geochemical work is recommended. However, we recommend a drone-borne magnetic survey to test the claim area for smaller mafic/ultramafic bodies buried below the overburden, which may have been missed by the regional airborne surveys. Contingent on the drone survey further work may be recommended including mechanical trenching to expose the bedrock for sampling.

Proposed Budget

Fieldwork	Days	Fees/day	Amount
QP research, geological background and report preparation	4	\$ 800.00	\$ 3,200.00
Drone magnetic survey	2	\$ 7,500.00	\$15,000.00
Data processing and maps	4	\$ 1,000.00	\$ 4,000.00
Truck rental, gas	2	\$ 150.00	\$ 300.00
Accommodation and meals	2	\$ 300.00	\$ 600.00
Report preparation	2	\$ 915.00	\$ 1,830.00
Total			\$25,410.00

XYQUEST MINING CORP.

Suite 702 • 889 West Pender Street • Vancouver BC • V6C 3B2 • Tel. 604 683.3288

Empire Metals Corp. 702-889 West Pender Street Vancouver, BC V6C 3B2 8-Jan-19 Account #2019-002 GST#896269297

RE: Jordain Lake Property Exploration 2018

	Days	Fees pe	r Day	Am	ount
Senior Geologist, Dr. Bohumil B. Molak, PhD, PGeo					
Septmeber 2018 Field work	3.50	\$ 9	900.00		3,150.00
Mobilization and demobilization	2	\$	900.00		1,800.00
Report Preparation	5	\$8	800.00	\$	4,000.00
				\$	8,950.00
Geological Assistant, David Siccia					
September 2018 Field work	3.5	\$ 3	350.00	\$	1,225.00
Mobilization and demobilization	1	\$ 3	350.00		350.00
				\$	1,575.00
					,
Prospector, William Richmond					
September 2018 Field work	4	\$ 3	350.00	\$	1.400.00
Mobilization and demobilization	0.5	\$ 3	350.00	*	175.00
	0.0	•		\$	1 575 00
				Ψ	1,010.00
Geological Assistant, Luis Botto					
Research new system upgrades, data and man preparation and	٦	\$	350.00		1 050 00
input for new system communication with Ontario Mining	0	Ŷ	550.00		1,000.00
Recorder regarding system ungade				•	1 050 00
recorder regarding system upgade				φ	1,050.00
Expanses.					
Airfare					252 77
Accommodation					353.77
Food (Moole, Gracerice, etc.)					02.02
Fuel/ Transportation shares					178.30
Truel Pontal (4 days @ \$75/day, 100km/day, @ \$0.25/(m)					48.33
Access (4.4 constant @ \$40/ constant)					440.00
Assays (14 samples @ \$40/ sample)					560.00
Equipment rental (Satellite Phone - 4 days)					20.00
Equipment rental (vvalkie-1 alkie - 4 days @ \$7/day)					28.00
Expense Administration Fee and Office Charge					1,041.18
T					
l otal Expenses				\$	2,732.40
Digitization, Preliminary Exploration Report (at 10% of costs)				\$	1,588.24
Subtotal				\$	17,470.64
GST 5%				\$	873.53
Total				\$	18,344.17
				-	

This is our account herein

XYQUE\$T MINING,CORP. per:

ANTHONY J. BERUSCHI

• INTEREST OF 2% PER MONTH, COMPOUNDED MONTHLY, OR 26.8% PER ANNUM CHARGED ON OVERDUE ACCOUNTS

5. REFERENCES

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Sutcliffe, R. H., 1986: Regional Geology of the Lac des Iles Area, District of Thunder Bay (in: Summary of Field Work and Other Activities 1986, by the Ontario Geological Survey, edited by P.C. Thurston, Owen L. White, R.B. Barlow, M.E. Cherry and A.C. Colvine; Ontario Geological Survey Miscellaneous Paper 132, 435 p. (accompanied by 1 Chart).

6. STATEMENT OF QUALIFICATIONS

I, Bohumil (Boris) Molak, Ph.D., P.Geo (BC) do hereby certify that:

I am a Professional Geoscientist residing at 312, 9298 University Crescent, Burnaby, V5A 4X8, B.C., Canada.

I am a member of the Association of Professional Engineers and Geoscientists of British Columbia (License No. 28600) in good standing.

I graduated from the Comenius University of Bratislava, Czechoslovakia, with a Bachelor of Science (Mag.) in Economic Geology in 1970. From the same university I obtained in 1980 the title Master of Science in Economic Geology (RNDr.) and in 1990 the title Doctor of Philosophy (CSc.). I have practiced my profession continuously since 1970.

Since 1970 I have been involved in the geological, prospecting, exploration and research projects on precious, base and ferrous metals, industrial minerals and hydrocarbons in Czechoslovakia, Bulgaria, Zambia, Cuba, Guinea, Canada, Chile and Argentina.

Since 2003 until present I am a self-employed consulting geologist.

I conducted the litho-geochemical sampling program on the Jordain Lake PGE Prospect from September 27 to October 12, 2018.

I am responsible for all items in this report except the Item "IN ACCOUNT WITH", which was prepared by Xyquest Mining Corp. The sources of all information not based on personal examination are quoted in the references item. The information provided by other parties is to the best of my knowledge correct.

As of the date of this Statement I am not aware of any material fact or material change with respect to the subject matter of this report that is not reflected in this report, the omission of which would make the report misleading.

I am independent of Empire Metals Corp.



Dated at Vancouver, BC, Canada, this the 21st day of June, 2019.

7. STATEMENT OF QUALIFICATIONS

I, William J. Richmond do hereby certify that:

I am a Prospector residing at # 413 Lillian Street, Thunder Bay, ON, Canada.

I am a holder of Permanent Prospector's License.

From 1970 to 1991 I completed the courses as follows: Natural Resources Course at Hammarskjold High School, Thunder Bay, Grades 11-12, Geology, Mineralogy; baseline cutting; claim staking; geophysics; mineral prospecting.

From 1988 to 1998 I optioned the following properties: Smiley Lake Property (to John North of Newnorth Exploration, Toronto, ON); Clive Brooks (to Home Ventures, Vancouver, BC); East Dog River Property; Mirage Lake Property.

From 1992 to 1997 I conducted the OPAP programs on the Dog River, Orbit Buck Lake, Mirage Lake and Buck Lake prospects.

I took part in the litho-geochemical sampling program on the Jordain Lake Prospect on September 27 and October 10 to 12, 2018.

Dated at Thunder Bay, ON, Canada, this the 21sth day of June, 2019.

APPENDIX I

Sample Description

#	Easting	Northing	Description	Pt	Pd	Au	Cu	Ni	Cr
5560879	718949	5426838	Mafic boulder 1.0 x 0.8 m	6	11	2	135	188	10
5560880	719067	5426762	Mafic boulder 1.0 x 0.8 m	< 5	12	2	104	29	70
5560881	719306	5426283	Mafic/ultramafic boulder, oval 0.6 x 0.6 m	< 5	10	< 2	137	107	13
5560882	280439	5426432	Dark grey mafic/ultramafic boulder	< 5	< 5	< 2	7	167	769
5560883	719475	5426549	Dark grey mafic/ultramafic boulder	< 5	< 5	< 2	9	173	729
5560884	719402	5429536	Grey granitoide boulder	< 5	< 5	< 2	33	14	39
5560885	280397	5426709	Mafic/ultramafic boulder, oval 1.0 x 1.0 m	< 5	< 5	< 2	12	222	706
5560886	719559	5426755	Mafic/ultramafic boulder, oval 1.0 x 2.0 m	16	8	< 2	< 1	573	951
5560887	719599	5426727	Mafic/ultramafic boulder, angular 2.0 x 3.0 m	< 5	< 5	< 2	14	232	678
5560888	719578	5426761	Mafic/ultramafic boulder, 2.0 x 3.0 m	< 5	< 5	< 2	< 1	764	1110
5560889	719554	5426738	Dark to black, mafic/ultramafic boulder	< 5	< 5	< 2	12	188	641
5560890	719554	5426736	Mafic boulder (diorite?) with biotite	6	< 5	< 2	10	223	1520
5560891	719308	5426285	Green, brown, grey gabbro (amphibolite ?) boulder 1.0 x 1.0 m	7	13	2	127	174	25
5560892	719308	5426285	Green, brown, grey gabbro (amphibolite ?) boulder 1.0 x 1.0 m	< 5	14	3	147	99	22

Note: Pt, Pd and Au in ppb, Cu, Ni, Cr in ppm.

Geochemical Report on the Jordain Lake PGE Prospect, Northwestern Ontario, Canada

APPENDIX II

Assays and Quality Assurance

Quality Analysis ...



Innovative Technologies

 Date Submitted:
 12-Oct-18

 Invoice No.:
 A18-14955

 Invoice Date:
 29-Nov-18

 Your Reference:
 X

Empire Metals Corp. 702-889 W. Pender St Vancouver BC Canada

ATTN: Boris Molak

CERTIFICATE OF ANALYSIS

14 Rock samples were submitted for analysis.

The following analytical package(s) were requested:

Code 1C-OES-Tbay Fire Assay ICPOES (QOP Fire Assay Tbay) Code 1E3-Tbay Aqua Regia ICP(AQUAGEO)

REPORT **A18-14955**

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

Notes:

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

CERTIFIED BY:

Emmanuel Eseme , 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 Results

Activation Laboratories Ltd.

Report: A18-14955

Analyte Symbol	Au	Pd	Pt	Ag	Cd	Cu	Mn	Мо	Ni	Pb	Zn	AI	As	В	Ва	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg
Unit Symbol	ppb	ppb	ppb	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm							
Lower Limit	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	1
Method Code	FA-ICP	FA-ICP	FA-ICP	AR-ICP																			
5560879	2	11	6	< 0.2	< 0.5	135	732	< 1	188	< 2	65	6.20	3	< 10	53	< 0.5	< 2	3.46	40	10	7.40	10	2
5560880	2	12	< 5	< 0.2	< 0.5	104	303	< 1	29	< 2	31	4.79	2	< 10	42	< 0.5	< 2	3.14	11	70	2.86	10	< 1
5560881	< 2	10	< 5	< 0.2	< 0.5	137	540	< 1	107	< 2	51	6.69	3	< 10	51	< 0.5	< 2	3.80	30	13	5.75	10	2
5560882	< 2	< 5	< 5	< 0.2	< 0.5	7	549	< 1	167	< 2	30	1.56	9	< 10	48	< 0.5	< 2	1.53	26	769	3.47	< 10	2
5560883	< 2	< 5	< 5	< 0.2	< 0.5	9	395	< 1	173	2	19	1.04	3	< 10	40	< 0.5	< 2	1.72	22	729	2.43	< 10	< 1
5560884	< 2	< 5	< 5	< 0.2	< 0.5	33	349	< 1	14	< 2	51	1.66	< 2	< 10	122	< 0.5	< 2	0.81	9	39	2.75	< 10	< 1
5560885	< 2	< 5	< 5	< 0.2	< 0.5	12	406	< 1	222	< 2	19	1.18	< 2	< 10	48	< 0.5	< 2	1.93	25	706	2.43	< 10	< 1
5560886	< 2	8	16	< 0.2	< 0.5	< 1	898	< 1	573	< 2	16	0.72	< 2	37	17	< 0.5	3	1.39	46	951	5.07	< 10	< 1
5560887	< 2	< 5	< 5	< 0.2	< 0.5	14	391	< 1	232	< 2	18	1.23	< 2	< 10	49	< 0.5	< 2	1.88	25	678	2.33	< 10	< 1
5560888	< 2	< 5	< 5	< 0.2	< 0.5	< 1	952	< 1	764	6	29	0.86	< 2	25	33	< 0.5	3	1.64	72	1110	6.05	< 10	< 1
5560889	< 2	< 5	< 5	< 0.2	< 0.5	12	360	< 1	188	< 2	17	1.21	< 2	< 10	63	< 0.5	< 2	1.70	22	641	2.12	< 10	< 1
5560890	< 2	< 5	6	< 0.2	< 0.5	10	709	< 1	223	< 2	28	1.61	< 2	< 10	22	< 0.5	< 2	1.29	31	1520	3.56	< 10	< 1
5560891	2	13	7	< 0.2	< 0.5	127	670	< 1	174	< 2	57	6.47	< 2	< 10	54	< 0.5	< 2	3.77	40	25	6.50	10	2
5560892	3	14	< 5	< 0.2	< 0.5	147	501	< 1	99	< 2	49	7.15	< 2	< 10	52	< 0.5	< 2	4.14	28	22	5.47	10	3

Results

Activation Laboratories Ltd.

Analyte Symbol	к	La	Mg	Na	Р	S	Sb	Sc	Sr	Ti	Th	Te	TI	U	V	W	Y	Zr
Unit Symbol	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm							
Lower Limit	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP																	
5560879	0.19	< 10	2.87	1.14	0.036	0.01	< 2	3	96	0.22	< 20	< 1	< 2	< 10	121	< 10	3	4
5560880	0.13	< 10	0.86	1.04	0.028	< 0.01	< 2	6	83	0.23	< 20	< 1	3	< 10	155	< 10	2	4
5560881	0.17	< 10	1.69	1.16	0.037	< 0.01	< 2	2	104	0.20	< 20	< 1	< 2	< 10	120	< 10	3	3
5560882	0.17	< 10	3.57	0.144	0.010	< 0.01	3	14	16	0.09	< 20	< 1	< 2	< 10	83	< 10	2	3
5560883	0.11	< 10	2.99	0.163	0.007	< 0.01	< 2	13	33	0.06	< 20	3	< 2	< 10	66	< 10	2	2
5560884	0.68	18	0.94	0.169	0.048	0.16	< 2	4	28	0.24	< 20	< 1	< 2	< 10	48	< 10	4	5
5560885	0.14	< 10	3.22	0.231	0.008	< 0.01	< 2	13	51	0.07	< 20	2	< 2	< 10	59	< 10	2	3
5560886	0.03	< 10	8.45	0.070	0.003	< 0.01	3	14	16	0.03	< 20	2	< 2	< 10	50	< 10	1	2
5560887	0.15	< 10	3.20	0.241	0.010	< 0.01	< 2	12	56	0.06	< 20	< 1	< 2	< 10	57	< 10	2	3
5560888	0.06	< 10	11.2	0.071	0.005	< 0.01	4	16	10	0.04	< 20	< 1	< 2	< 10	56	< 10	1	2
5560889	0.20	< 10	2.60	0.237	0.013	< 0.01	2	11	53	0.08	< 20	< 1	< 2	< 10	58	< 10	2	3
5560890	0.03	< 10	4.26	0.048	0.003	< 0.01	5	7	21	0.08	< 20	< 1	< 2	< 10	75	< 10	1	2
5560891	0.18	< 10	2.74	1.17	0.034	< 0.01	2	3	101	0.22	< 20	< 1	< 2	< 10	121	< 10	3	4
5560892	0.18	< 10	1.61	1.28	0.039	< 0.01	3	3	112	0.24	< 20	< 1	< 2	< 10	121	< 10	3	4

Activation Laboratories Ltd.

Report: A18-14955

Analyte Symbol	Au	Pd	Pt	Ag	Cd	Cu	Mn	Мо	Ni	Pb	Zn	Al	As	В	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg
Unit Symbol	ppb	ppb	ppb	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm							
Lower Limit	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	1
Method Code	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							
PK2 Meas	4840	6060	4700																				
PK2 Cert	4785	5918	4749																				
PK2 Meas	4890	6000	4790																				
PK2 Cert	4785	5918	4749																				
OREAS 904 (Aqua Regia) Meas				0.3	< 0.5	6180	466	2	37	10	26	2.09	98		78	7.8	6	0.05	95	27	6.49	< 10	
OREAS 904 (Aqua Regia) Cert				0.366	0.0580	6300	410	2.02	36.6	8.49	22.4	1.25	91.0		68.0	6.54	3.74	0.0404	82.0	17.5	6.40	3.40	
OREAS 922 (AQUA REGIA) Meas				1.1	< 0.5	2200	805	< 1	37	57	278	3.06	7		85	0.8	7	0.42	17	47	5.31	< 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				1.6	< 0.5	4350	921	< 1	35	77	356	3.11	9		70	0.7	21	0.42	19	45	6.21	< 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	
OREAS 520 (Aqua Regia) Meas						2980	2120	56	74	7	21	1.65	142			0.6	4	3.53	178	36	16.8	10	
OREAS 520 (Aqua Regia) Cert						2960	2280	62.0	73.0	5.22	20.7	1.56	152			0.540	2.90	3.84	196	37.4	15.74	13.7	
Oreas 621 (Aqua Regia) Meas				68.9	298	3600	570	15	31	> 5000	> 10000	1.95	81			0.7	7	1.70	31	37	3.58	10	4
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	3.93
5560889 Orig	< 2	< 5	< 5																				
5560889 Dup	< 2	< 5	6																				
5560890 Orig				< 0.2	< 0.5	10	711	< 1	225	< 2	28	1.62	3	< 10	22	< 0.5	< 2	1.29	31	1520	3.58	< 10	< 1
5560890 Dup				< 0.2	< 0.5	10	708	< 1	222	< 2	28	1.60	< 2	< 10	22	< 0.5	< 2	1.28	31	1520	3.54	< 10	< 1
Method Blank	< 2	< 5	< 5																				
Method Blank				< 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	< 1

QC

Activation Laboratories Ltd.

Analyte Symbol	к	La	Mg	Na	Р	S	Sb	Sc	Sr	Ti	Th	Те	TI	U	V	W	Y	Zr
Unit Symbol	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm							
Lower Limit	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
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
PK2 Meas																		
PK2 Cert																		
PK2 Meas																		
PK2 Cert																		
OREAS 904 (Aqua Regia) Meas	0.99	41	0.24		0.100	0.04	3	5	20		< 20		< 2	< 10	34		17	
OREAS 904 (Aqua Regia) Cert	0.603	33.9	0.143		0.0950	0.0340	0.780	3.83	16.5		7.56		0.150	5.20	21.7		17.2	
OREAS 922 (AQUA REGIA) Meas	0.54	38	1.46	0.033	0.063	0.35	2	4	17		< 20		< 2	< 10	37	< 10	19	10
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	0.47	36	1.57		0.060	0.63	2	4	15		< 20		< 2	< 10	36	< 10	17	16
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
OREAS 520 (Aqua Regia) Meas	0.52	68	1.25	0.071	0.072	0.86	6	12	31	0.16	< 20	< 1	< 2	< 10	234	26	11	34
OREAS 520 (Aqua Regia) Cert	0.506	83.0	1.14	0.0520	0.0740	1.03	1.97	11.8	36.0	0.135	8.03	0.33	0.0900	14.9	247	29.6	14.3	28.0
Oreas 621 (Aqua Regia) Meas	0.42	21	0.50	0.199	0.034	4.79	121	3	20		< 20		< 2	< 10	14	< 10	7	56
Oreas 621 (Aqua Regia) Cert	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
5560889 Orig																		
5560889 Dup																		
5560890 Orig	0.03	< 10	4.29	0.048	0.003	< 0.01	6	7	21	0.08	< 20	< 1	< 2	< 10	75	< 10	1	2
5560890 Dup	0.03	< 10	4.24	0.047	0.004	< 0.01	5	7	21	0.08	< 20	< 1	< 2	< 10	75	< 10	1	2
Method Blank																		
Method Blank	< 0.01	< 10	< 0.01	0.013	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1