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BC Geological Survey Assessment Report 38098

Ministry of Energy, Mines & Petroleum Resources
Mining & Minerals Division
BC Geological Survey

Assessment Report Title Page and Summary

TYPE OF REPORT [type of survey(s)]: Diamond Drilling

TOTAL COST: $355,487.64

AUTHOR(S): Lorie Farrell **SIGNATURE(S):** Lorie Farrell

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): MX-1-115 Approval No.: 18-0200289-1030 **YEAR OF WORK:** 2018

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): 5724095, 5739431

PROPERTY NAME: Poplar

CLAIM NAME(S) (on which the work was done): 105831, 1058304

COMMODITIES SOUGHT: Cu, Mo, Au, Ag

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: 093L 239

MINING DIVISION: Ominica **NTS/BCGS:** 093L02, 93L03, 93E14, 93E15

LATITUDE: 54 ° 00 ' 48 " **LONGITUDE:** 126 ° 59 ' 10 " **(at centre of work)**

OWNER(S):
1) Doctors Investment Group 2)

MAILING ADDRESS:
5884 Mayview Circle
Burnaby BC V5E 4B8

OPERATOR(S) [who paid for the work]:
1) Tasca Resources 2)

MAILING ADDRESS:
830-1100 Melville Street
Vancouver BC V6E 4A6

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):

Copper Molybdenum Silver Gold Porphyry, Cretaceous Bulkley Intrusive, Cretaceous Kasalka Volcanics

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 33575, 33035

31104, 31373, 10298 etc

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TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping			
Photo interpretation			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
GEOCHEMICAL (number of samples analysed for...)			
Soil			
Silt			
Rock			
Other			
DRILLING (total metres; number of holes, size)			
Core	1097.59m in three holes, HQ	1058301, 1058304	$329,490.95
Non-core			
RELATED TECHNICAL			
Sampling/assaying	463 samples	1058301, 1058304	$25,996.69
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale, area)			
PREPARATORY / PHYSICAL			
Line/grid (kilometres)			
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)			
Road, local access (kilometres)/trail			
Trench (metres)			
Underground dev. (metres)			
Other			
		TOTAL COST:	$355,487.64

1 TITLE PAGE

Assessment Report:

2018 Diamond Drilling on the

Poplar Property

Mineral Titles Online Tenure Numbers:

1058301, 1058304

OMINECA MINING DIVISION

BRITISH COLUMBIA, CANADA

Latitude 54^{O} North
Longitude 127^{O} West
NTS 1:50,000 map sheets
093L02, 93L03, 93E14, 93E15

Prepared for:
Tasca Resources Ltd.
830-1100 Melville Street
Vancouver BC V6E 4A6
and
Doctors Investor Group
5884 Mayview Circle
Burnaby BC V5E 4B8

By:

Farrell Exploration Services Inc.
Lorie Farrell P. Geo.
April 25, 2019

The effective date of the exploration data is December 30, 2018.

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2 SUMMARY

From November 21 to December 21, 2018, Tasca Resources conducted a diamond drill program at the Poplar deposit which is under option from the Doctor's Investment Group. The program consisted of 1,097.59m in three holes, producing HQ diamond drill core.

The program was designed to duplicate three historic drill holes that were completed in 1976, covering the eastern Main Zone, western Main Zone as well as the East Zone, to extend open mineralization at depth and test geophysics targets from the 2009 Insight geophysics program. Additional samples were collected to allow for future metallurgical testing.

This assessment report was prepared to satisfy assessment filing requirements by the Mineral Titles Branch of the Ministry of Energy Mines and Petroleum Resources, Government of B.C..

The Poplar deposit is a porphyry copper – molybdenum deposit located 750 meters north of Tagetochlain (Poplar) Lake at approximately 900m elevation. The deposit is associated with the Late Cretaceous Poplar stock. The past producing Huckleberry Mine is located approximately 35 kilometers to the southwest of the Poplar deposit and produced copper and molybdenum from a deposit of similar age and setting.

The Poplar property has been an exploration target since 1971 with several diamond drill programs since 1974. Exploration targets on the property have been developed using geophysical and geochemical characteristics common to porphyry deposits.

The 2009 Insight geophysics survey provided 13 kilometers of deep imaging induced polarization geophysics over the central and eastern portions of the Poplar deposit. Geophysical characteristics of the known deposit were used as a template for selecting targets for additional testing by drilling.

Prior to drilling in 2011, over 23,000m of drilling had been done on the Poplar deposit. Previous operators had produced historic models and resource estimates and the extent and grade of potentially economic mineralization was largely known. These historic drill results needed to be verified under modern standards for geological analysis and quality control before Lions Gate

Metals was able to produce a now historic 43-101 compliant resource estimate. Two phases of drilling was done by Lions Gate Metals in 2011 adding an additional 16,482.63m in 42 holes to the deposit. These programs were designed to confirm and expand upon the known extents of porphyry style copper-molybdenum mineralization. Most 2011 drill holes fully or partially intersected the historic grade shells, incrementally tested the extents of the deposit, expanded known areas of higher grade mineralization, infilled areas to provide silver and gold analysis for grade estimation and tested geophysics anomalies that were identified in the 2009 exploration program. Recommendations for follow up consisted of metallurgical testing of the deposit and duplication of ten of the historic drill holes to confirm copper and molybdenum grades and to provide additional infill gold and silver analysis.

Drilling in 2018 followed through on duplicating three of the historic drill holes as well as extending open mineralization at depth. Samples were also collected for future metallurgical sampling.

3 PROPERTY DESCRIPTION AND LOCATION

The Poplar Mineral Property consists of 81 mineral tenures covering a surface area of 64,985.09 hectares. The claims are located in the Omineca Mining Division, Province of British Columbia; NTS map sheets 093L02, 093L03, 093L14 and 093L15.

The Poplar claims are in good standing until November 1, 2019. Work described in this report occurred over the central part of the Poplar claims at the Poplar deposit.

Doctors Investor Group is the registered owner of the Poplar Property and holds 100% of the rights to the claims. Tasca Resources Ltd. entered into an option agreement with the Doctors Investment Group to earn 100% in all of the Poplar claims in 2017. Doctors Investor Group's interest in certain claims is subject to an Amended and Restated Property Option Agreement dated July 30, 2007 between Hathor Exploration Limited and Fortress Base Metals Corporation, a predecessor of Lions Gate Metals Inc. The agreement includes an Underlying Royalty of two per cent of the net smelter returns to the benefit of the estate of Mr. Frank Onucki, Mr. Mike Callaghan and Mr. Clyde Critchlow. The Company's interest in an additional 13 mineral claims is also subject to an option agreement for a total of 3902 hectares dated April 29, 2009 with Mr.

John Bot and a total of 266.5 hectares are subject to an option agreement dated May 25, 2009 with Ms. Patti Walker.

The Poplar Mineral Claims lie within an area in which Statements of Interest have been expressed by the Wet'suwet'en Nation and the Carrier Sekani Tribal Council.

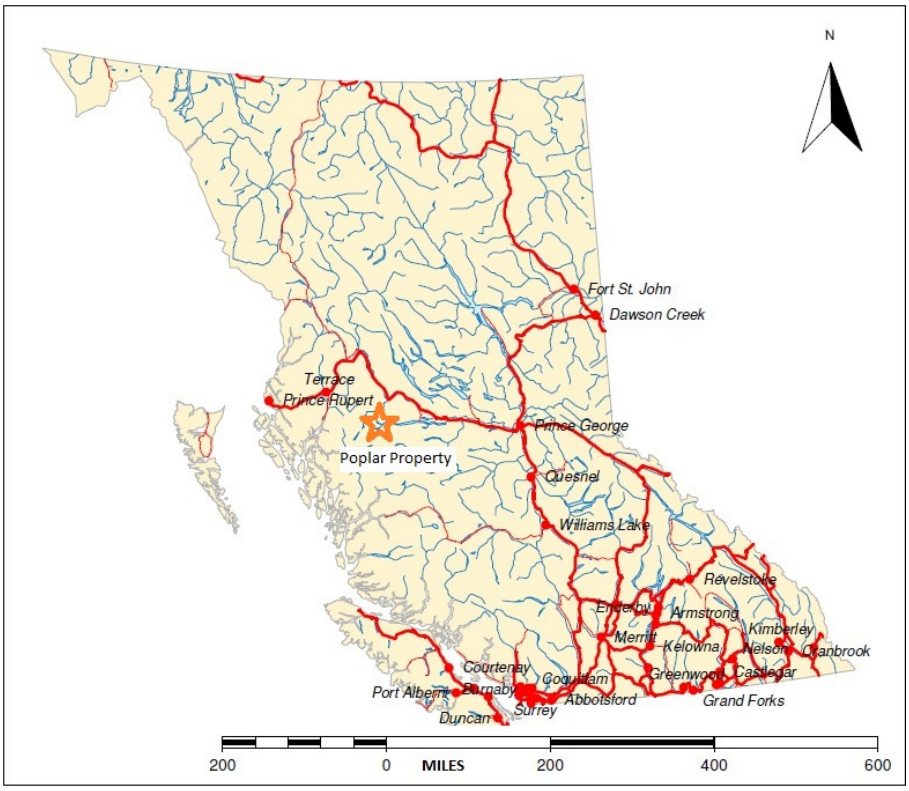

Figure 1. Location of the Poplar Property

Table 1. Summary of Mineral Tenures

Doctors Investor Group., Poplar Lake area, British Columbia

Title Number	Claim Name	Owner	Map Number	Issue Date	Good To Date	Status	Area (ha)
1055990	NADINA	284658 (100%)	093L	2017/NOV/01	2019/NOV/01	GOOD	1042.398
1055992	DILYS	284658 (100%)	093E	2017/NOV/01	2020/NOV/01	GOOD	133.1102
1055993	THIRA	284658 (100%)	093E	2017/NOV/01	2019/NOV/01	GOOD	1770.051
1058234	POP 1	284658 (100%)	093E	2018/FEB/04	2019/NOV/01	GOOD	456.4557
1058235	POP 2	284658 (100%)	093E	2018/FEB/04	2019/NOV/01	GOOD	951.3788
1058236	POP 3	284658 (100%)	093E	2018/FEB/04	2019/NOV/01	GOOD	951.3268
1058237	POP 4	284658 (100%)	093E	2018/FEB/04	2019/NOV/01	GOOD	932.4715
1058238	POP 5	284658 (100%)	093E	2018/FEB/04	2019/NOV/01	GOOD	799.7946
1058239	POP 6	284658 (100%)	093E	2018/FEB/04	2019/NOV/01	GOOD	914.5161

1058241	POP 7	284658 (100%)	093E	2018/FEB/04	2019/NOV/01	GOOD	800.1506
1058242	POP 8	284658 (100%)	093E	2018/FEB/04	2019/NOV/01	GOOD	895.6289
1058243	POP 9	284658 (100%)	093E	2018/FEB/04	2019/NOV/01	GOOD	228.4864
1058244	POP 10	284658 (100%)	093E	2018/FEB/04	2019/NOV/01	GOOD	171.3626
1058246	POP 11	284658 (100%)	093E	2018/FEB/04	2019/NOV/01	GOOD	990.5097
1058247	POP 12	284658 (100%)	093E	2018/FEB/04	2019/NOV/01	GOOD	685.7809
1058248	POP 13	284658 (100%)	093E	2018/FEB/04	2019/NOV/01	GOOD	953.1173
1058249	POP 14	284658 (100%)	093E	2018/FEB/04	2019/NOV/01	GOOD	952.4465
1058250	POP 15	284658 (100%)	093E	2018/FEB/04	2019/NOV/01	GOOD	952.4482
1058251	POP 16	284658 (100%)	093E	2018/FEB/04	2019/NOV/01	GOOD	893.7085
1058252	POP 17	284658 (100%)	093E	2018/FEB/04	2019/NOV/01	GOOD	950.6696
1058253	POP 18	284658 (100%)	093E	2018/FEB/04	2019/NOV/01	GOOD	931.8296
1058268	POP 19	284658 (100%)	093E	2018/FEB/05	2019/NOV/01	GOOD	952.0256
1058269	POP 20	284658 (100%)	093E	2018/FEB/05	2019/NOV/01	GOOD	932.9941
1058270	POP 21	284658 (100%)	093E	2018/FEB/05	2019/NOV/01	GOOD	951.9884
1058271	POP 22	284658 (100%)	093E	2018/FEB/05	2019/NOV/01	GOOD	913.494
1058272	POP 23	284658 (100%)	093E	2018/FEB/05	2019/NOV/01	GOOD	647.0992
1058273	POP 24	284658 (100%)	093E	2018/FEB/05	2019/NOV/01	GOOD	685.1215
1058274	POP 25	284658 (100%)	093E	2018/FEB/05	2020/JAN/01	GOOD	114.2015
1058275	POP 26	284658 (100%)	093E	2018/FEB/05	2019/DEC/01	GOOD	190.322
1058276	POP 27	284658 (100%)	093E	2018/FEB/05	2019/NOV/01	GOOD	513.8093
1058283	POP 28	284658 (100%)	093E	2018/FEB/05	2019/NOV/01	GOOD	951.1014
1058284	POP 30	284658 (100%)	093E	2018/FEB/05	2019/NOV/01	GOOD	932.0602
1058287	POP 32	284658 (100%)	093E	2018/FEB/05	2019/NOV/01	GOOD	608.7937
1058288	POP 33	284658 (100%)	093E	2018/FEB/05	2019/NOV/01	GOOD	913.0327
1058289	POP 34	284658 (100%)	093E	2018/FEB/05	2019/NOV/01	GOOD	608.5438
1058290	POP 35	284658 (100%)	093E	2018/FEB/05	2019/NOV/01	GOOD	855.5418
1058291	POP 36	284658 (100%)	093E	2018/FEB/05	2019/NOV/01	GOOD	475.269
1058292	POP 37	284658 (100%)	093E	2018/FEB/05	2019/NOV/01	GOOD	931.4301
1058293	POP 38	284658 (100%)	093E	2018/FEB/05	2019/NOV/01	GOOD	950.2196
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1058295	POP 40	284658 (100%)	093L	2018/FEB/05	2019/NOV/01	GOOD	949.7586
1058296	POP 41	284658 (100%)	093L	2018/FEB/05	2019/NOV/01	GOOD	912.0366
1058297	POP 42	284658 (100%)	093L	2018/FEB/05	2019/NOV/01	GOOD	911.8159
1058298	POP 43	284658 (100%)	093L	2018/FEB/05	2019/NOV/01	GOOD	626.9153
1058299	POP 44	284658 (100%)	093E	2018/FEB/05	2019/NOV/01	GOOD	475.1531
1058300	POP 45	284658 (100%)	093L	2018/FEB/05	2019/NOV/01	GOOD	379.9947
1058301	POP 46	284658 (100%)	093L	2018/FEB/05	2020/NOV/01	GOOD	418.099
1058302	POP 47	284658 (100%)	093L	2018/FEB/05	2019/NOV/01	GOOD	361.147
1058303	POP 48	284658 (100%)	093E	2018/FEB/05	2019/NOV/01	GOOD	475.3253
1058304	POP 49	284658 (100%)	093L	2018/FEB/05	2020/NOV/01	GOOD	1368.167
1058305	POP 50	284658 (100%)	093E	2018/FEB/05	2019/NOV/01	GOOD	836.1123
1058306	POP 51	284658 (100%)	093E	2018/FEB/05	2019/NOV/01	GOOD	912.4522
1058307	POP 52	284658 (100%)	093L	2018/FEB/05	2019/NOV/01	GOOD	911.856
1058308	POP 53	284658 (100%)	093L	2018/FEB/05	2019/NOV/01	GOOD	949.292
1058309	POP 54	284658 (100%)	093L	2018/FEB/05	2019/NOV/01	GOOD	911.2966
1058310	POP 55	284658 (100%)	093L	2018/FEB/05	2019/NOV/01	GOOD	702.5751
1058311	POP 56	284658 (100%)	093L	2018/FEB/05	2019/NOV/01	GOOD	455.6221

1058312	POP 57	284658 (100%)	093L	2018/FEB/05	2019/NOV/01	GOOD	322.964
1058313	POP 58	284658 (100%)	093L	2018/FEB/05	2019/NOV/01	GOOD	721.761
1058314	POP 59	284658 (100%)	093L	2018/FEB/05	2019/NOV/01	GOOD	911.3189
1058315	POP 60	284658 (100%)	093L	2018/FEB/05	2019/NOV/01	GOOD	948.8254
1058316	POP 61	284658 (100%)	093L	2018/FEB/05	2019/NOV/01	GOOD	910.8726
1058317	POP 62	284658 (100%)	093L	2018/FEB/05	2019/NOV/01	GOOD	910.9384
1058318	POP 63	284658 (100%)	093L	2018/FEB/05	2019/NOV/01	GOOD	911.3777
1058319	POP 64	284658 (100%)	093L	2018/FEB/05	2019/NOV/01	GOOD	911.3325
1058320	POP 65	284658 (100%)	093L	2018/FEB/05	2019/NOV/01	GOOD	911.3162
1058338	POP 65	284658 (100%)	093L	2018/FEB/06	2019/NOV/01	GOOD	910.8854
1058339	POP 66	284658 (100%)	093L	2018/FEB/06	2019/NOV/01	GOOD	436.4312
1058340	POP 67	284658 (100%)	093L	2018/FEB/06	2019/NOV/01	GOOD	758.8041
1058341	POP 68	284658 (100%)	093L	2018/FEB/06	2019/NOV/01	GOOD	910.9091
1058342	POP 69	284658 (100%)	093L	2018/FEB/06	2019/NOV/01	GOOD	911.3072
1058344	POP 70	284658 (100%)	093L	2018/FEB/06	2019/NOV/01	GOOD	911.8472
1058346	POP 71	284658 (100%)	093E	2018/FEB/06	2019/NOV/01	GOOD	1368.914
1058347	POP 72	284658 (100%)	093L	2018/FEB/06	2019/NOV/01	GOOD	911.8616
1058348	POP 73	284658 (100%)	093L	2018/FEB/06	2019/NOV/01	GOOD	948.3697
1058349	POP 74	284658 (100%)	093L	2018/FEB/06	2019/NOV/01	GOOD	910.4144
1058350	POP 75	284658 (100%)	093L	2018/FEB/06	2019/NOV/01	GOOD	910.5534
1058352	POP 76	284658 (100%)	093L	2018/FEB/06	2019/NOV/01	GOOD	1232.833
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1058354	POP 79	284658 (100%)	093L	2018/FEB/06	2019/NOV/01	GOOD	985.6041
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							64985.1

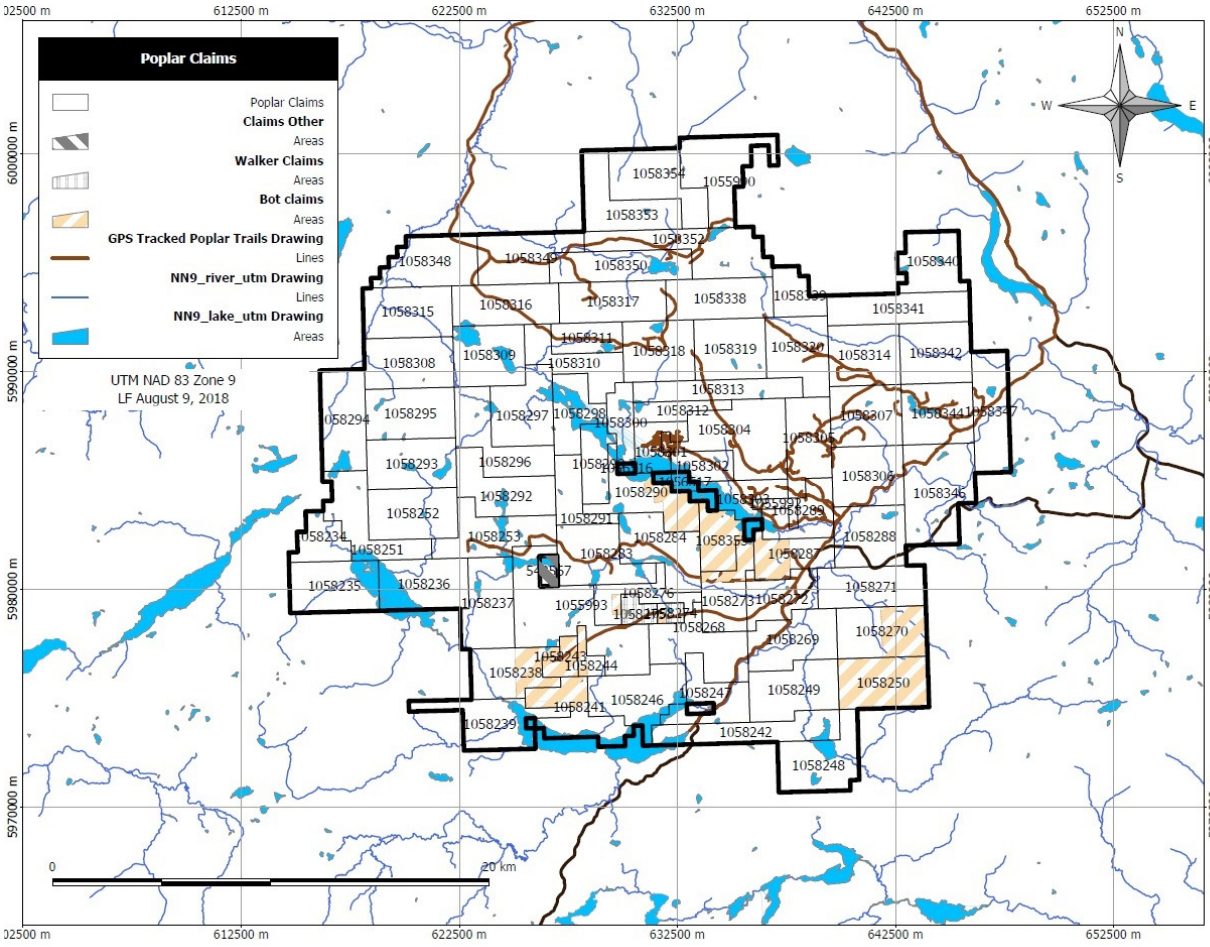

Figure 2. Location of the Mineral Tenures owned by Doctors Investor Group at Poplar Lake, British Columbia. Grey hatched areas represent Mineral Tenures owned by individuals unrelated to Lions Gate Minerals. Tenure locations are as of April 2019.

4 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE and PHYSIOGRAPHY

4.1 Topography, elevation and vegetation

The property is located in the Tagetochlain (Poplar) Lake – Poplar Mountain district south of Houston, British Columbia. The district is located on the western margin of the Nechako Plateau physiographic region of central British Columbia. Relief is moderate on the property with a maximum difference in elevation of approximately 800 meters. The highest point on the property is the summit of Poplar Mountain, a local landmark, at approximately 1627 meters, with the lowest point at 825 meters on the shores of Poplar Lake. To the northeast, outside of the property

boundaries is Nadina Mountain with an elevation of 2,124m, the 2018 glacial till grid is located to the north of the Poplar deposit and south of Pimpernel Mountain, the soil lines were located north of Nadina Lake.

Poplar Mountain drains to the south into Poplar Lake, thence by Poplar Creek into the Nadina River, and thence into the Fraser River system.

Ground cover is varied on the property. Open meadows used for grazing livestock are partially succeeded by open aspen parkland or scrub pine and spruce, which yield to sub-mature and mature stands of balsam fir at higher elevations.

4.2 Access to the Poplar Deposit

The Poplar deposit is located approximately60 kilometers south of the town of Houston in the Central Interior of British Columbia.

From Houston, road access to the deposit is approximately 90 km using a two-wheel drive vehicle in fair weather. Road access is achieved by first travelling west from Houston on Highway 16 to the intersection with the Morice Forest Service Road; thence south 56.5 km on the Morice FSR and the Morice Owen FSR to the intersection with the Morice Nadina Forest Service Road. Travel is then south and west along the Morice Nadina FSR a further 19 kilometers to the Hill Tout Forest Service Road at 74km. The Hill Tout FSR is taken to the west for approximately 2.5 km to the intersection with the Alcan Tahtsa access road. The Alcan Tahtsa Road is taken 1.3 kilometres north to the intersection with the Poplar Forest Service Road, which is followed for approximately 11.5 kilometers west to the Main Zone of the Poplar property.

4.3 Local Infrastructure

Houston, British Columbia is a major supply and industrial service center for the mining and logging operations located in the area. Houston is serviced by the CNR transcontinental railway as well as by Highway 16, a major thoroughfare. Daily air service to Vancouver is available from the Smithers, B.C. airport, which is approximately 70 kilometers by road to the west of Houston.

There is a municipal airstrip west of Houston for non-scheduled services, and helicopters may be hired locally. The town of Smithers is located approximately 65 km to the west and is a service center for the mineral exploration industry, with diamond drilling contractors, air services, and professional exploration personnel.

4.4 Climate and Operating Season

Climate on the Poplar property is typical of the Central Interior, with short cool summers, and long relatively mild winters. Annual temperature variation in the region is approximately –25 to +25 degrees Celsius. Snowpack in the winter ranges from approximately 1 to 2 meters. Exploration activities may be undertaken year round, with provision for freeze-up in the fall and break-up in the spring, when activities may be curtailed.

4.5 Other Resources

Adequate supplies of surface and ground water for exploration and mining are available. Water use is subject to provincial and federal regulation. Land use for exploration and mining purposes is governed by the Mineral Tenure Act, the Mines Right of Way Act, the Mines Act and other applicable laws of the Province of British Columbia.

The claims are located on Crown Land. Other resource related tenures in the area consist of grazing leases on the open pastures around Poplar Lake. The Nadina Lake Lodge is located on Gordeau Bay in Nadina Lake and is the only privately held land known of by the author on the claims. A Forest Service public campsite is located on the northeast shore of Poplar Lake. A set of spawning channels is located on the Nadina River near the outlet of Nadina Lake, approximately 12.5 kilometers south of the Poplar Deposit. The spawning channels service one of the Fraser River sockeye salmon runs.

The 138 KVA power line and the access road servicing the Huckleberry Mine are located approximately eleven kilometers east of the Poplar deposit and pass through the Poplar claims.

5 HISTORY

5.1 Exploration and Mining History of the western Nechako Plateau

In general, the western edge of the Nechako Plateau has been actively explored since the early part of the 20th century. The Emerald Glacier Mine (MINFILE 093E001) is located in the Whiting Creek drainage approximately 35 km SW of the Poplar Property Claim, and was one of the first mines developed in north central British Columbia. The mine intermittently exploited a high grade Ag-Pb-Zn vein between 1951 and 1968. Reported production was 2.6 million grams of Ag, 1,524 grams of gold, 1.7 tonnes of Cd, 9 tonnes of Cu, 766 tonnes of lead and 892 tonnes of Zn extracted from 8,293 tonnes of ore. The ore was produced from a series of en-echelon polymetallic quartz veins cutting feldspathic sandstone and lesser siltstone and tuffaceous shale near the contact with overlying andesitic volcanic rocks and breccia.

A major thrust of exploration occurred in the late 1960s and early 1970s. This work led to the development of the Silver Queen underground mine (MINFILE 093L002) at Owen Lake, approximately 18 km northeast of the Poplar property. Silver Queen produced approximately 438,790 ounces of silver, 3,157 ounces of gold and 11.1 million pounds of zinc with lesser credits for lead, copper and cadmium from approximately 200,000 tons of ore in 1972 and 1973.

Exploration during this period also led to the discovery of the Huckleberry Mine (MINFILE 093E 037), which was actively explored from 1963 to 1994. The mine is located on the north side of Tahtsa Reach approximately 42 km WSW of the Poplar property. Porphyry copper-molybdenum mineralization at Huckleberry is associated with an elliptical stock of the Late Cretaceous Bulkley Intrusions. Production began in 1997, and the mine was on care and maintenance at the time of this report. The operation was a modern mine and mill industrial complex producing copper, molybdenum, silver and gold, and is well-serviced with road, power and water. Combined geological resources at the opening of the mine were 162 million tonnes containing 0.47% Cu and 0.014 % Mo. The deposit has also produced 8,576 kilograms of silver and 253,460 grams of gold up to 2001.

The above information regarding production from the surrounding deposits has not been verified. The information is not necessarily indicative of the mineralization on the property that is the subject of this assessment report.

5.2 Previous exploration - Geophysical surveying (1974 – 2005)

With its well-developed pyrite halo, the Poplar deposit responds well to the Induced Polarization method of geophysical surveying. Surveys performed from 1974-1976 (Witherly, 1974, Bowen 1975, 1976) effectively mapped the phyllic (quartz-sericite-pyrite) alteration zone, and served to direct the diamond drilling during the nineteen seventies and eighties. Surveys were performed with electrode configurations of n=2 and n=4, which only provided a partial image of chargeability distribution with depth. On the recommendation of Barry Price (Price, 2004) a survey was performed in 2005 by Peter Walcott and Associates. The survey read electrode configurations n=1 to n=6, and provided a clear representation of chargeabilities west of the Main Zone, and indicated the presence of elevated chargeabilities at China Creek (Alex Walcott, personal communication). No assessment was filed for the 2005 geophysical survey, and the results are in the company files of Lions Gate Metals, Inc.

The early Induced Polarization surveys were accompanied by magnetometer surveys, but the deposit did not respond well magnetically.

5.3 Previous exploration - Geochemical surveying (1971- 1975)

Geochemical surveys were completed in 1972 by the El Paso Mining and Milling Company (Jones, 1972) and Utah Mines (Bowen, 1975). In general, the deposit responded well to geochemical surveying. Copper anomalies are displaced to the west from the areas of higher grade mineralization, possibly from dispersion by glacial ice movements. The area around Bill Nye Lake was also surveyed, but response was inadequate to serve as a guide to further exploration west of the Poplar Deposit.

5.4 Interpretation of historical exploration

The early ground surveys were invaluable in selecting the area of the Poplar deposit for further development. The geochemical response of the soil samples provided a clear indication of the presence of elevated concentrations of metals. The concentrations of sulphides in the alteration halo and in the deposit were similarly mapped by the Induced Polarization survey, and served to target the discovery hole, PC-1 in 1974. The surveys were carried out before Lions Gate Metals or its predecessor companies were in existence, and no relationship therefore exists between the contractors and companies carrying out the investigations. The data is considered to be reliable considering the technology in use at the time.

5.5 Previous Exploration – Diamond Drilling (1974 – 2005)

Several campaigns of diamond drilling by different operators have tested the Poplar property between 1974 and 1991. A total of 21,664 metres was drilled during this period in 90 holes at an estimated cost of $1.7 million dollars.

Aumega Discoveries Ltd. completed approximately 3,000 metres of diamond drilling in 16 holes in 2005 on the Main Zone of the Poplar deposit and on the China Creek target. The results of this 2005 drill program were presented in AR #31104 in detail.

5.6 Exploration by LGM (2009 - 2012)

A deep imaging Induced Polarization survey was completed over the Poplar deposit in October 2009 (Dawson, 2009). Approximately 13 line kilometres were surveyed. The survey was designed by Insight Geophysics Inc. of Oakville Ontario to map the electrical properties of the area from surface to a maximum estimated depth of approximately 500 meters. This was accomplished by using the Insight or “Schlumberger” current electrode array for “depth sounding” along the survey lines. Approximately 13 line kilometres were surveyed using a Gradient IP array, and approximately 10 line kilometres were surveyed to produce the Insight depth sounding cross sections. Cross sections of chargeability and apparent resistivity were inverted to produce models of the electrical properties. These models were compared with the

known mineralized intercepts in the diamond drill holes in order to look for extensions of mineralization both laterally and at depth. (Ogryzlo, 2010)

The 2009 IP survey (AR #31373) was focused on the Poplar deposit and its immediate area, and was used to refine drilling targets for 2011. LGM's 2011 Phase 1 drill program (Farrell and Schroff, 2012) consisted of 5,568.70m in 13 holes and phase 2 consisted of 10,913.93m in 29 holes (Farrell and Schroff, 2013). The Phase 1 and 2 programs achieved several objectives, including confirming historical drill hole data, extending the limits of potentially economic mineralization in the deposit area, and providing new subsurface geological information to correlate with the 2009 IP survey.

Other recent programs with a more regional focus include an airborne electromagnetic and magnetic survey done over LGM's claims (AR #31788) and regional geochemical soil and till sampling programs.

6 GEOLOGICAL SETTING

6.1 Regional Geology

The Whitesail and Smithers map areas (NTS 93E / 93L) straddle the boundary between the Coast tectonic belt and the Intermontane tectonic belt (MacIntyre et al., 1994, 2007). The Kitimat Ranges of the Coast Mountains lie to the west, with the Tahtsa Ranges of the Hazelton Mountains lying between the Interior Plateau and the Coast Mountains. Much of the map area is underlain by the Lower to Middle Jurassic Hazelton Group. The Hazelton group is comprised of folded and weakly metamorphosed to undeformed intermediate and basic volcanic rocks, as well as derived sedimentary rocks attributed to ancient island arc complexes of the Stikine Terrane. Mesozoic compressional tectonics resulting from the joining of the Stikine Terrane to continental North America were succeeded by Late Cretaceous and Tertiary extension and rifting. The Cretaceous Skeena Group is comprised of black marine shale and siltstone, with lesser sandstone and conglomerate. These rocks were deposited in successor marine basins as igneous activity waned.

Continental volcanic rocks of Upper Cretaceous to Eocene age occur in the Poplar Lake area as the Upper Cretaceous Kasalka and the Oligocene to Eocene Ootsa Lake groups. The Eocene to

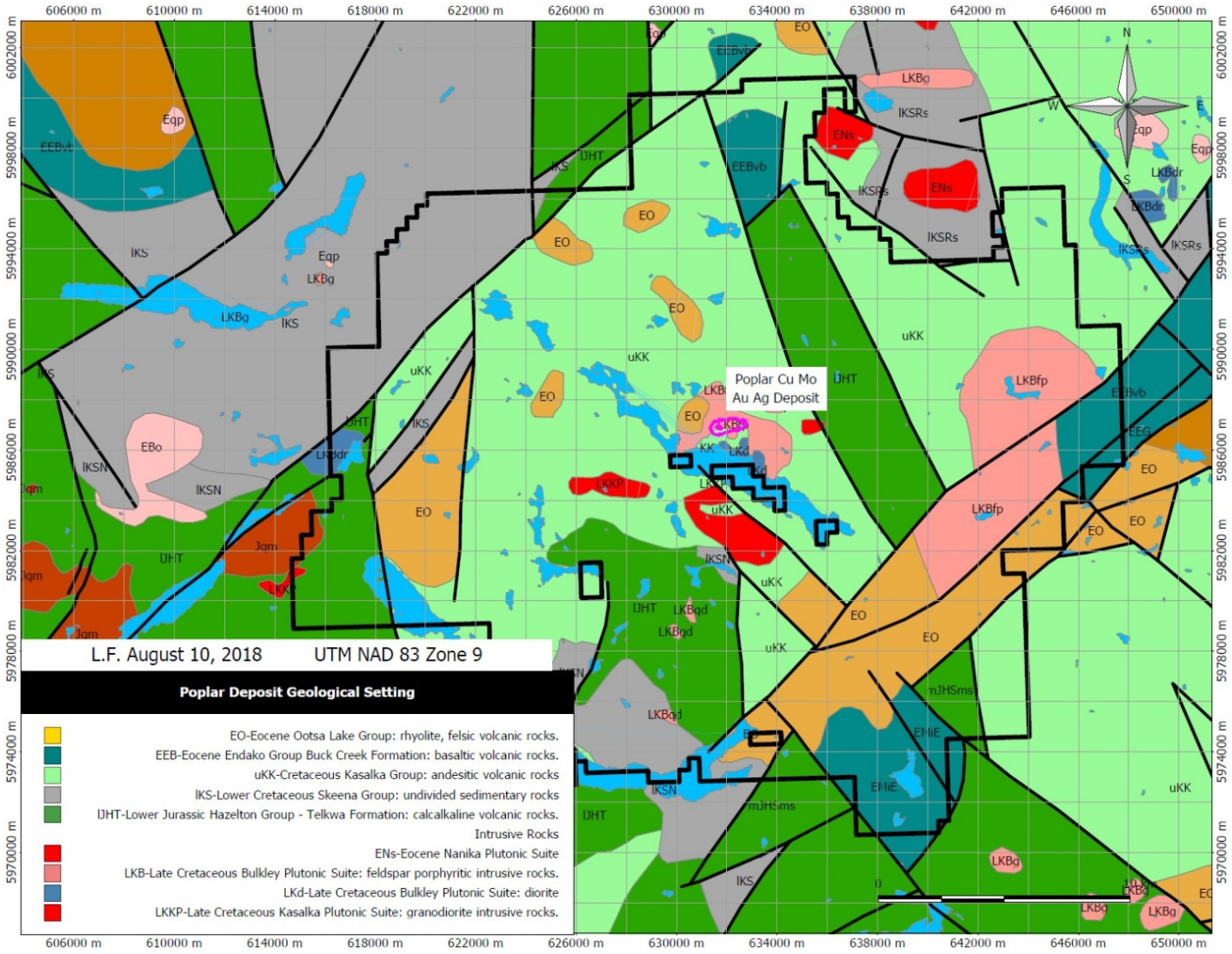

Figure 3. Regional Geological Setting Poplar Deposit. Geology after MacIntyre (2007), Mesard et al (1979) and property files.

Miocene Endako Lake Group is largely comprised of mafic volcanic rocks, and occurs as plateau basalts within the map area, as well as occupying the down drop basin of the Ootsa Lake valley.

The Intermontane Belt has been the site of episodic plutonic activity from Late Triassic time onwards. The plutons are grouped according to age, and have varying associated metal

concentrations. The oldest plutons on the map sheets are the feldspar phyric intrusions of the Late Cretaceous Bulkley Plutonic Suite. The Poplar Stock, with its associated haloes of mineralization and alteration has been ascribed to the Bulkley Plutonic Suite. These were succeeded by granodiorite intrusions of the Cretaceous Kasalka Plutonic Suite. The extensive outpourings of continental volcanic rocks in Eocene time have their equivalents in the porphyrytic intrusions of the Eocene Nanika Plutonic Suite. Host rocks at Poplar Lake had been previous assigned to the Telkwa Formation of the Lower Jurassic Hazelton Group. These older rocks are now confined to a NNW trending block which forms highlands of Poplar Mountain.

Extensional tectonics produced structural down drop basins, which are filled with younger rocks of the Kasalka and Skeena Groups. MacIntyre (2007) has reassigned the volcanic rocks around the Poplar deposit to the Cretaceous Kasalka Group. The major faults which defined the fault blocks are generally oriented west-northwest, and northeast. The scarp of one of the NNW trending faults forms the steep western slope of the Poplar Mountain ridge.

The topography of the area has been extensively modified by Quaternary ice sheets of Wisconsinian age. Ice movements in the area were complex, with an apparent reversal in the direction of ice flow (Ferbey and Levson, 2001). At the Huckleberry mine, two dominant ice flow directions have been reported, namely 040-091 degrees and 236-265 degrees. Along the shores of Tahtsa Reach and Ootsa Lake, ice flow was topographically controlled and appears to have flowed parallel to the valleys. At lower elevation, Ferby and Levson (2001b) report that it is common to find WSW and ENE ice flow indicators at opposite ends of the same outcrop. At the onset of glaciation, ice flowed east from the Coast Mountains directed by the major valleys. As glaciation advanced, an ice dome or ice divide formed in central British Columbia during the glacial maximum. Ice flowed west to southwest back over the adjoining peaks of the Coast Mountains.

As glaciation waned, the ice divide shifted to the west, and ice flow once again was to the ENE along the major valleys. These ice flow reversals will have an effect on any surface drift exploration in the region.

The region is exceptionally well mineralized, with a number of past producers and partially developed deposits with drill indicated resources. The area has been an important supplier of base and precious metals in the Province of British Columbia. The most important of these operations are the past producing Emerald Glacier Mine, the past producing Silver Queen Mine, and the Huckleberry Mine of Imperial Metals currently on care and maintenance.

Exploration in the area has also resulted in the development of a number of deposits with drill-indicated resources. The Poplar Cu Mo Ag Au Deposit (MINFILE 093L 239) is central to the claim group. The Whiting Creek stockwork Mo-Cu deposit (MINFILE 093E 112) is located eight kilometers north of the Huckleberry Mine. The Lucky Ship stockwork molybdenum deposit (MINFILE 093L053) is located 23 km west of the Poplar Property. The Ootsa property consists of a series of copper gold porphyry deposits (MINFILE 093E 105) and is located 37 km south of the Poplar deposit.

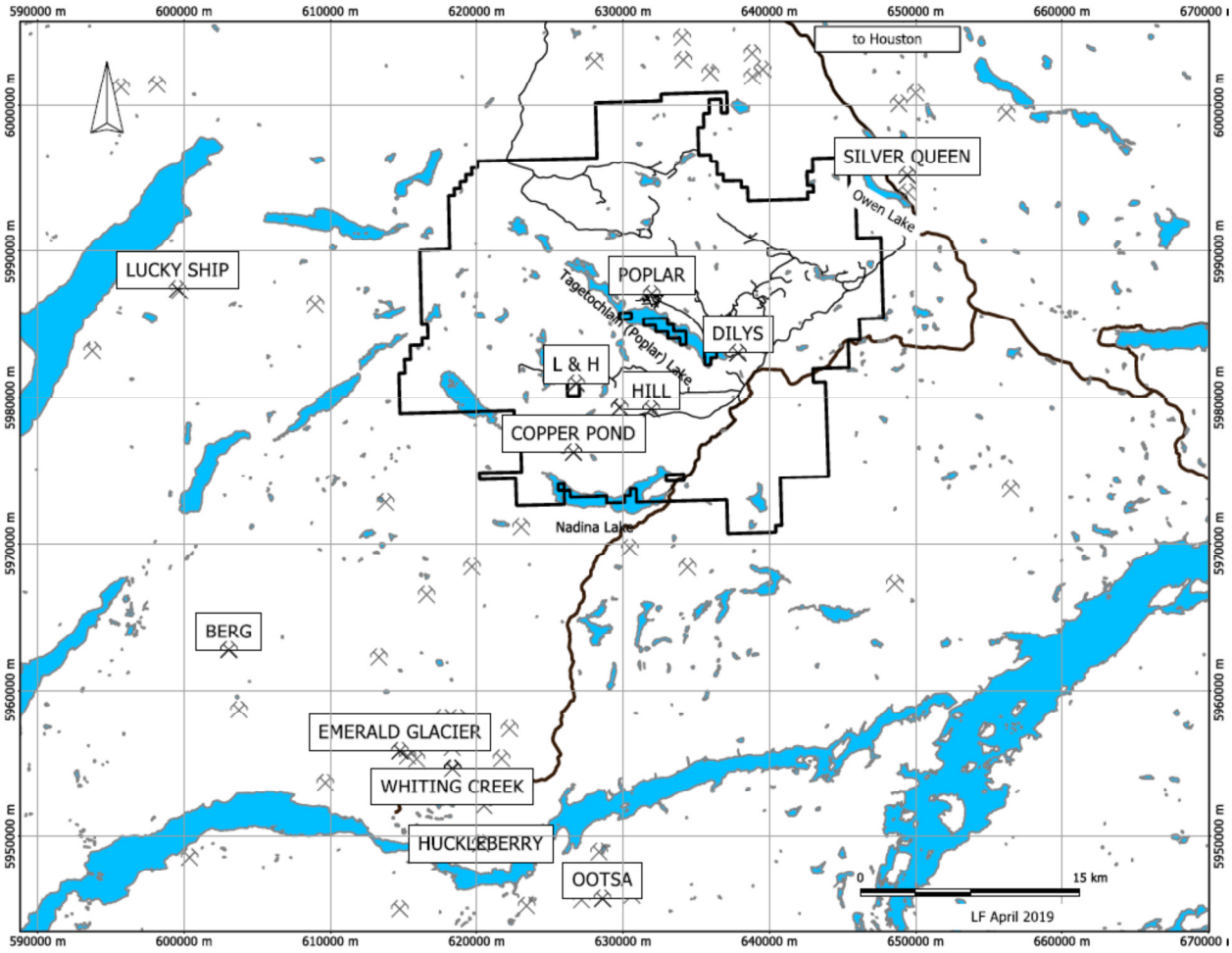

Figure 4. Poplar Lake Property access with mineralized zone and surrounding mineral properties

6.2 Local and Property Geology - Poplar Mineral Claims

Rocks ranging in age from Mesozoic to Tertiary underlie the Poplar Property.

The Poplar Property is primarily underlain by fragmental volcanic rocks of the Cretaceous Kasalka Group (MacIntyre, 2007). These rocks are in fault contact with fragmental volcanic rocks of the Lower Jurassic Telkwa Formation. The volcanic rocks have been intruded by granitic to granodioritic rocks of the Late Cretaceous Bulkley Intrusions, and the Late Cretaceous Kasalka Plutonic Suite. An outlier of felsic volcanic rocks of the Eocene Ootsa Lake group partially overlies the western portion of the Poplar deposit.

The Poplar Stock is located on the north shore of Tagetochelain Lake. Its exposed dimensions are approximately 4,600 meters east-west by 1,800 meters north-south. The southern limit of the stock is not exposed, and may lie underneath Tagetochlain Lake. The stock has been assigned a Late Cretaceous age. A radiometric date of 76.2 +/- 2.7 Ma was derived from biotite by Carter (Mesard et al, 1979), indicating that the intrusion may be assigned to the Bulkley Plutonic Suite. The stock appears to be composite, with a diorite core surrounded by border phase hornblende-phyric quartz monzonite.

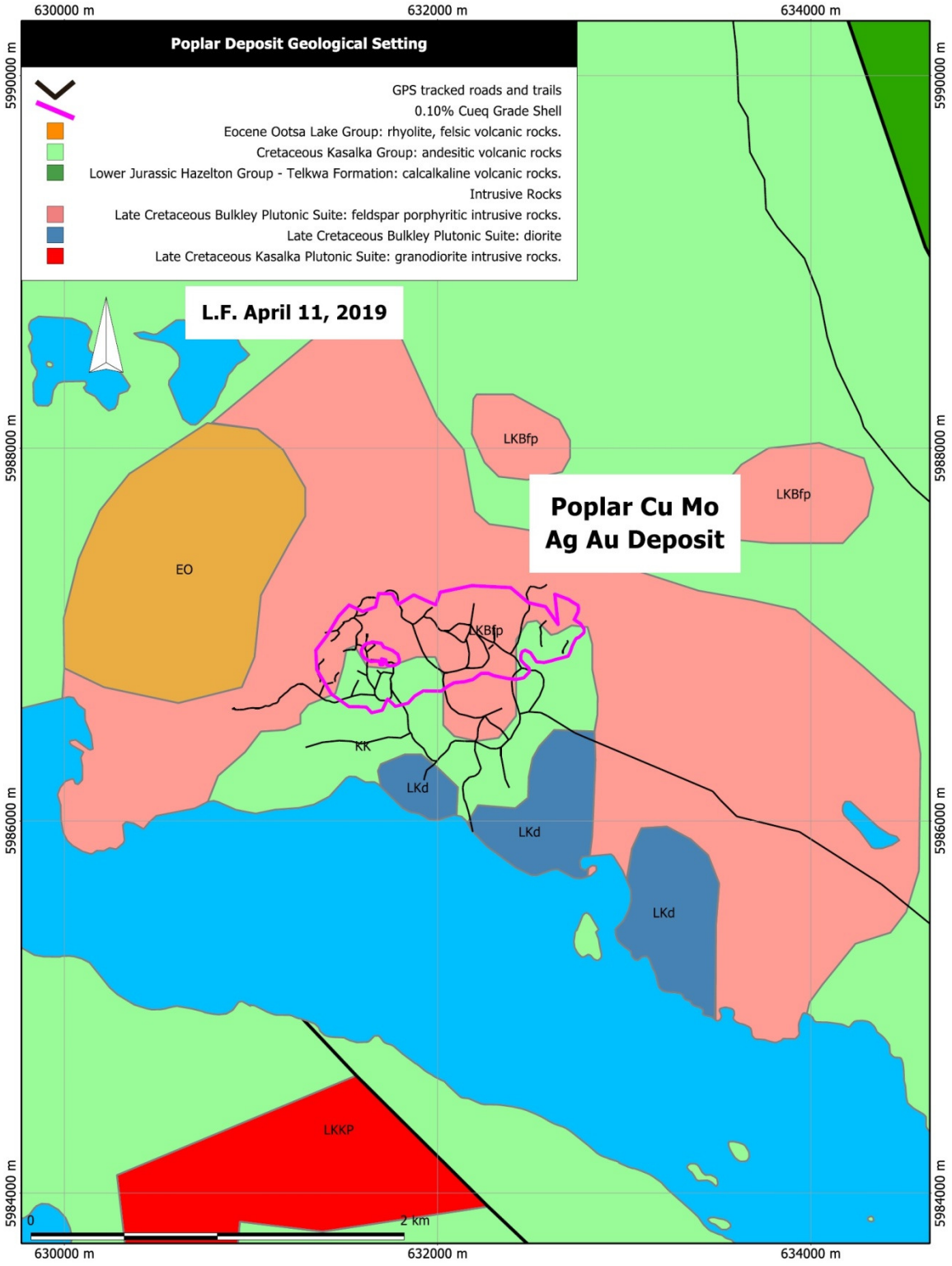

Figure 5. Poplar Lake Deposit Geology. From MacIntyre (2007), Mesard et al (1979) and property files

7 MINERALIZATION (**Ogryzlo, 2010**)

Chalcopyrite occurs in the Poplar deposit most commonly as disseminations and less commonly as 1-5mm veinlets associated with quartz. Chalcopyrite also has been observed as minute inclusions with pyrite in magnetite grains. Molybdenite mineralization is largely restricted to quartz veins. The veins are either ribboned with alternating bands of quartz and coarse-grained molybdenite, or as dark bands of quartz with fine grained disseminated molybdenite. Bornite appears as fine grained disseminations with chalcopyrite and specular hematite. Covellite has been observed as iridescent tarnish on chalcopyrite and bornite.

The sulphide mineralization is contained within broad envelopes of propylitic, argillic, phyllic and postassic alteration. The potassic alteration zone is characterized by envelopes of salmon pink orthoclase around quartz, quartz-molybdenite and chalcopyrite veinlets, and as groundmass flooding in the host rock. Secondary biotite also occurs in the potassic alteration zone, imparting a dusty brown hue to the rock. Magnetite accompanies the secondary biotite in disseminations with chalcopyrite. Phyllic alteration is the most extensive, and is characterized by sericite and pyrite. Pyrite content locally reaches 10%. Quartz, gypsum and anhydrite accompany these minerals.

Argillic and propylitic alteration are present, but are volumetrically not as important as the potassic and phyllic alteration. The potassic alteration envelope to the deposit has been defined for approximately 2000 metres east-west by 1000 metres north-south, with the argillic alteration zone enclosed within the potassic zone (Mesard et al, 1979).

7.1 Copper distribution

Copper mineralization has been identified in diamond drilling along the northern contact of the inlier of Kasalka Group volcaniclastic rocks. The copper grades shells have been projected to surface to the Main Zone deposit. The deposit may have been subject to structural adjustment, as the copper grade shells in the East Zone as seen in Figure 8 appear to be capped by approximately 100 metres of poorly mineralized rock. The best grades in the Main Zone appear to wrap around a central poorly mineralized core.

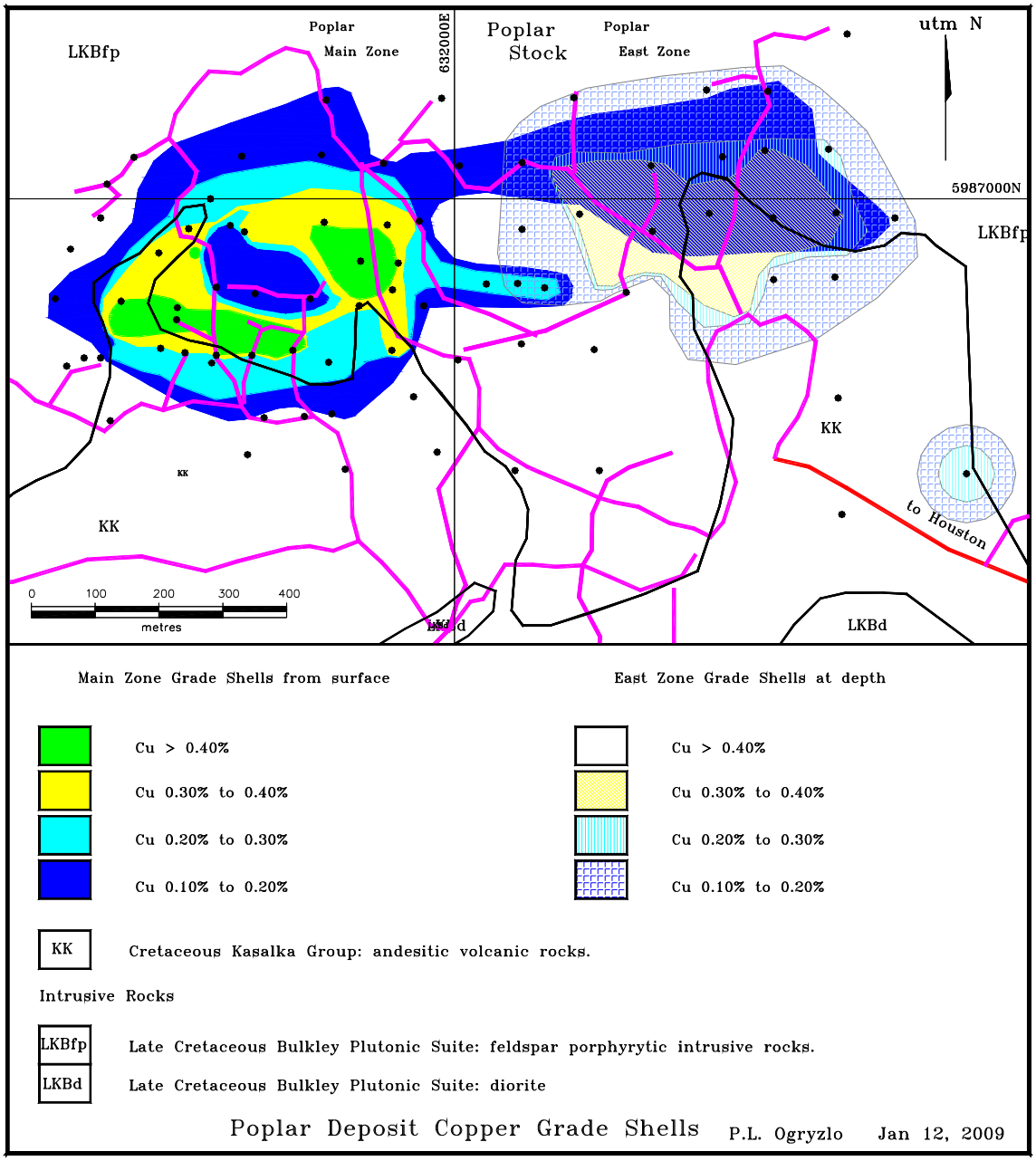

Figure 6: Distribution of copper in the Poplar Deposit as of 2009. Grades are projected to surface from drill intercepts. Copper grades from Bowen (1976a,1967b, 1977, 1979), Holland (1980a, 1980b, 1981, 1982) House (1992), Schmidt (1974, 1975). Copper grades for 2005 drilling from internal company records and Turna (Personal communication with Ogryzlo).

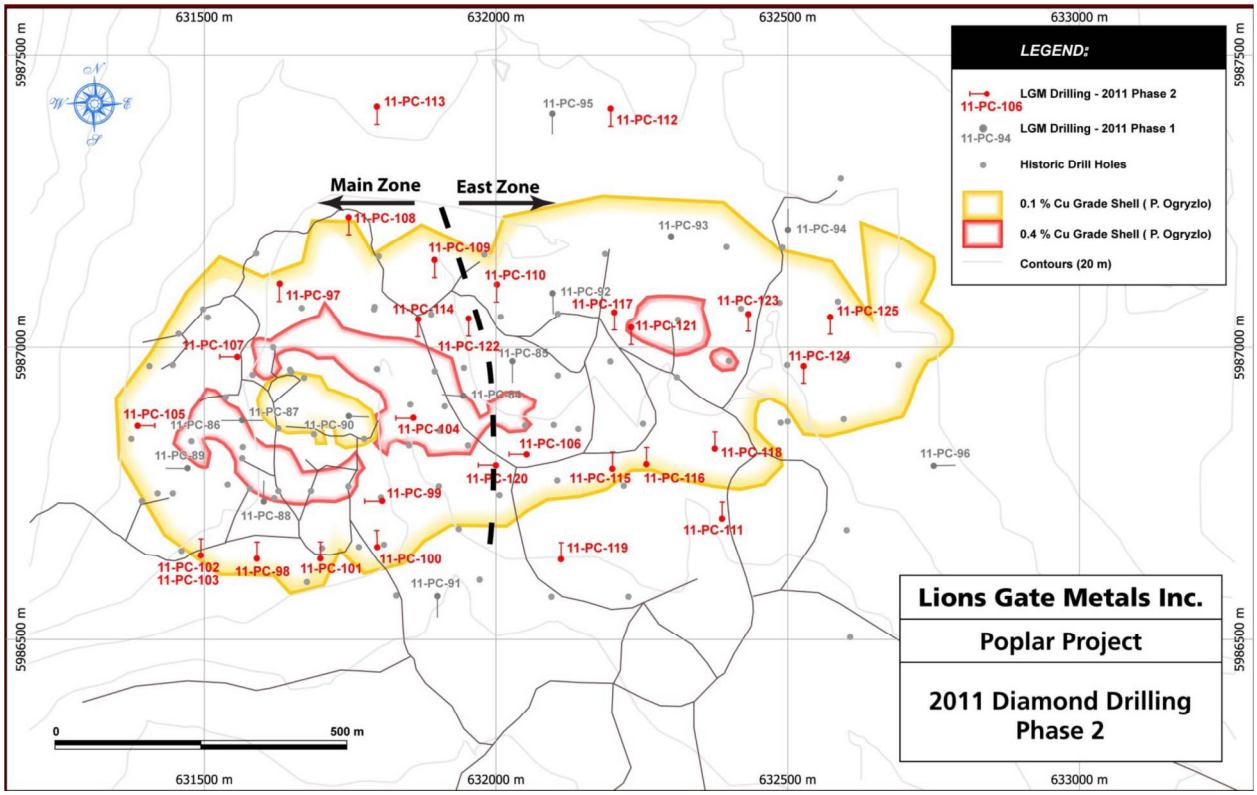

Figure 7. Poplar 2011 Phase 2 drilling showing 0.1% and 0.4% Cu grade shells (from AR 33575)

7.2 Other Mineralized Zones

Other zones of mineralization have been identified within the claims surrounding the Poplar Deposit. The China Creek zone was tested by Induced Polarization and diamond drilling in 2005. Sub-economic concentrations of copper and molybdenum were identified in granitic rocks.

Sulphide mineralization has been identified on the Hill / Lily Showing (MinFile 093E 052). Sulphide minerals outcrop in a road cut on the Hill-Tout Forest Service Road approximately 2.7 km southeast of Hill-Tout Lake. The mineralization is on claims optioned from J. Bot and P. Walker.

Sulphide mineralization has also been identified at Copper Pond (MinFile 093E 071), approximately 2400 meters northwest of the western end of Nadina Lake. Sub-economic concentrations of copper and molybdenum were identified during the course of diamond drilling in 1973. Approximately 2400 meters of diamond drilling guided by geochemical and induced

polarization surveys were completed at Copper Pond. The mineralized zone lies on tenures under option from J. Bot.

8 DRILLING

From November 21 to December 21, 2018, a diamond drill program consisting of 1,097.59 meters in three holes, producing HQ diamond drill core was conducted.

The program was designed to duplicate three historic drill holes that were completed in 1976, covering the eastern Main Zone, western Main Zone as well as the East Zone, to extend open mineralization at depth and test geophysics targets from the 2009 Insight geophysics program. Additional samples were collected to allow for future metallurgical testing.

The drilling was contracted to JT Thomas Diamond drilling Ltd. of Smithers. Core logging and sampling supervision services were provided by J. Stacey P. Geo. North Mountain Geosciences of Smithers. Core shack, split shack, supplies and some expediting was supplied by Rugged Edge Holdings of Smithers. The drill core was logged on site for lithology, alteration, mineralization, structures, core recovery, RQD and magnetic susceptibility. Core sampling with a rock saw was initially done on site and was then moved to Smithers at the Rugged Edge yard after the drill was shut down. Samples were delivered to Bandstra and shipped to the ALS Minerals prep lab in Terrace.

Table 2. Summary of 2018 Poplar Drill Hole Locations

Hole ID	Easting	Northing	Elevation	Azimuth	Dip	Total Depth m
18-PC-126	631903	5986857	888	0	-90	404.47
18-PC-127	631478	5986839	910	90	-60	270.36
18-PC-128	632299	5986969	902	0	-90	422.76

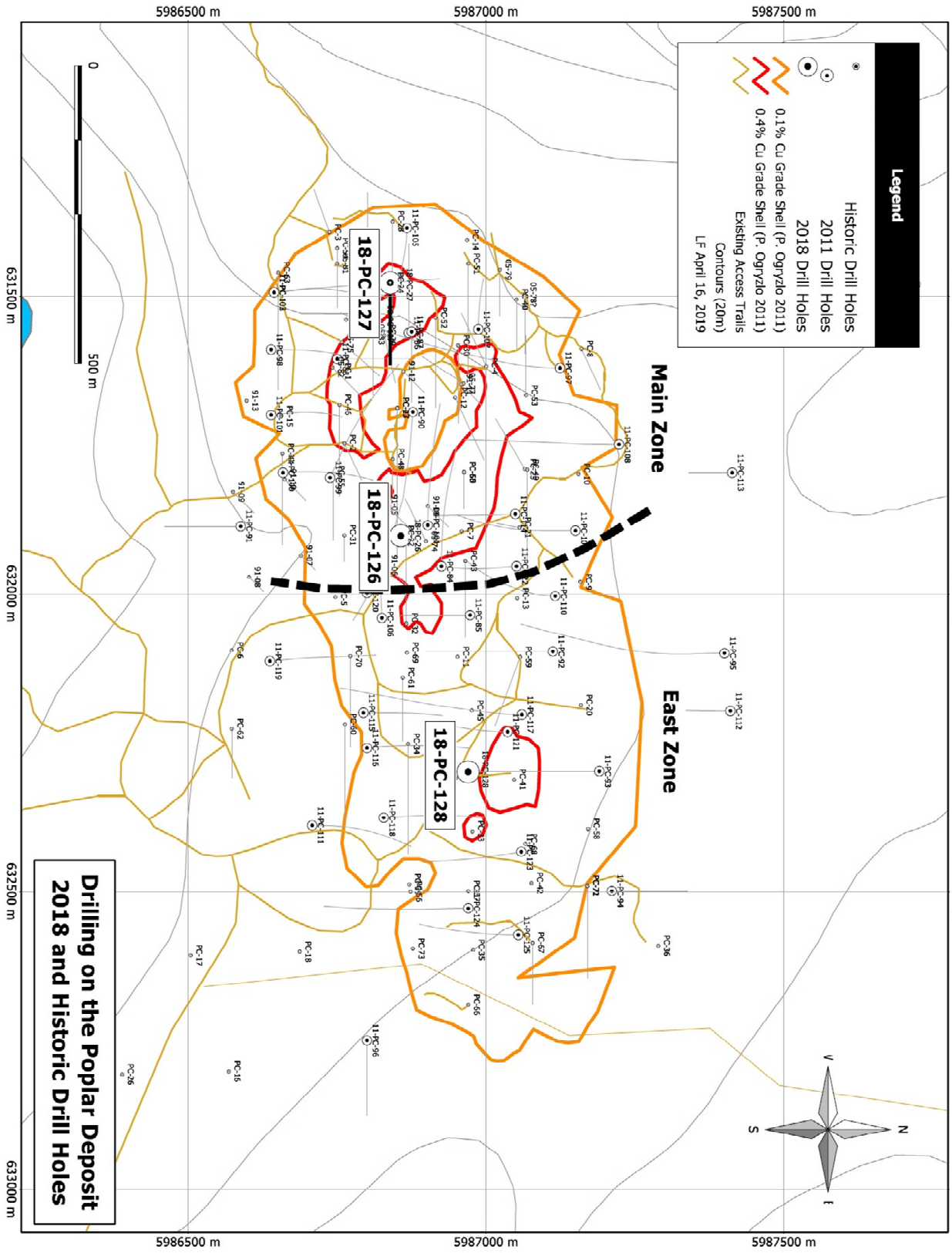

Figure 8. 2018 Diamond Drilling with historic drilling at Poplar Lake Deposit.

Drill hole 18-PC-126 was twinning PC-22 in the eastern part of the main zone. Casing from PC-22 was still in situ and the drill was set up immediately next to this. Quartz Monzonite was the dominant lithology that was intersected with local phases of quartz poor Monzonite and scattered interval of fine grained tuffaceous volcanic rock that were likely xenoliths or part of the roof pendant extending into the Quartz Monzonite. This hole was mineralized through the length and was shut down in a section of greater than 0.4% Cu. Copper and molybdenum assays for this hole were comparable with the hole being twinned with 0.36% Cu and 0.017% Mo over 156.20m in PC-22 and 0.37% Cu and 0.014% Mo in 18-PC-126. Silver is higher and gold slightly lower with 2.51g/t Ag and 0.129 g/t Au over 152.10m in PC-22 and 3.21 g/t Ag and 0.113 g/t Au over 154.28m in 18-PC-126.

Drill hole 18-PC-127 was located in the western part of the Main Zone and is twinning PC-24. Casing from PC-24 was still in situ and the drill was set up immediately next to this. The PC-24 casing was deformed by equipment during pad preparation and no longer represents the correct orientation of the holes. Fine grained sediments or volcanic tuff were present at the top of the hole followed by sandstone. Quartz monzonite was present from 78m to the end of hole. Visual mineralization was not obvious from 105-203m. Copper and molybdenum assays for this hole were comparable at 0.43% Cu and 0.016 Mo over 207.89m for PC-24 and 0.426% Cu and 0.016 Mo over 211m in 18-PC-127. Silver was higher and gold lower in 18-PC-127 with 1.614 g/t Ag and 0.17 g/t Au over 207.89m in PC-24 and 2.675 g/t Ag and 0.106 g/t Au over 211m in 18-PC-127.

Drill hole 18-PC-128 is located in the East zone and was drilled to twin PC-19, however casing from PC-19 had been removed. Two potential historic drill sites near the coordinates were present. The coordinates for the current drill database were collected in 2008 when all of the historic drill sites were visited and casing or drill pads were located. Drill sites were generally shifted to the north or west compared to the coordinates that were calculated from the mine grid information. The one that was selected for the twinning location in 2018 was at the coordinates that were given in 2008 based on mine grid information. The current coordinates for PC-19 are recorded as to the SE of this. Top of hole consisted of fine grained volcanic or sedimentary rock, followed by quartz monzonite below 118.4m. Post mineralized dykes of andesitic to rhyolitic composition were present through the hole. Abundant pyrite and strong quartz-pyrite stock work

was present but visual copper mineralization was not obvious. Copper and molybdenum grades were comparable for this hole with 0.19% Cu and 0.003% Mo over 181.4m in PC-19 and 0.188% Cu and 0.002% Mo in 18-PC-128. Silver is lower in PC-19 with 2.52g/t over 114m compared to 3.28g/t Ag in 18-PC-128, Gold is higher with 0.12g/t in PC-19 and 0.085g/t in 18-PC-128.

Table 3. Select Summary of Assays from the 2018 Drill Program

		m from	m to	m interval	% Cu	% Mo	g/t Au	g/t Ag
18-PC-126		23.5	404.47	380.97	0.364	0.015	0.10	2.29
	including	23.5	374.3	350.8	0.353	0.014	0.10	2.16
	including	374.3	404.47	30.17	0.483	0.025	0.13	3.92
18-PC-127		5.5	270.36	264.86	0.421	0.013	0.10	2.63
	including	5.5	239.1	233.6	0.414	0.015	0.10	2.60
	including	239.1	260.1	21	0.598	0.000	0.14	2.77
	including	48	78	30	0.621	0.030	2.44	0.14
18-PC-128		5	422.76	417.76	0.197	0.001	0.07	3.02
	including	298.5	317.6	19.1	0.279	0.001	0.09	15.27
	including	122.8	273.9	151.1	0.330	0.002	0.12	3.45
	including	253.7	273.9	20.2	0.489	0.001	0.17	4.36
	including	202.9	273.9	71	0.373	0.001	0.13	3.73

8.1 2018 Drilling Sample Preparation, Analysis and Security

Sample preparation, analysis and security for the 2018 diamond drill program at the Poplar Property were under the supervision of Lorie Farrell P. Geo. and Jacques Stacey P. Geo. As the diamond drill core was removed from the core barrel by the drill helper, it was boxed at the drill site and transported by truck to the on-site core shack. At the core shack, the core was checked for marker block errors, measured for core recovery, RQD and magnetic susceptibility. Core logging recorded lithology type, alteration, mineralization and structure. Sampling intervals were typically placed at 3m intervals with shorter intervals created to break samples at significant changes in lithology, alteration and mineralization and were recorded along with a unique identifying sample number in a triplicate sample book. Core was photographed after sample tags were stapled in the boxes to mark the sample locations.

After being photographed, the core was sawn in half with one half of the core placed in a poly ore sample bag labelled with the unique identifying number and one part of the triplicate sample tag before being sealed up with a "zap strap". The other half of the core was returned to the core box, core boxes were stacked in order on pallets and banded. The core is stored in the Rugged Edge Holdings yard in Smithers.

Suites of reference materials, blanks and duplicates were added to the sample sequence every 10 samples. The blank material was white garden dolomite landscaping material and the reference material was 100 grams of one of CDN-CM-8, CDN-CM-11A or CDN-CGS-27. Duplicates were created by quartering the pieces of core that were being sent for analysis and splitting them between two samples.

Samples were placed in "rice bags" and packaged on a pallet before being shipped by Bandstra Transportation Systems Ltd. to the ALS Canada Ltd laboratory in Terrace for preparation before being shipped down to their lab in North Vancouver for assay. ALS Canada Ltd in North Vancouver has ISO/IEC 17025:2005, RG-MINERAL accreditation from the Standards Council of Canada. The author is not aware of any relationship between ALS Canada Ltd. and the Company.

Upon receipt by ALS Canada, all samples were dried, crushed and pulverized. Samples were analyzed with four acid ICP-MS for 48 elements and FA ICP-AES finish for Au. Pulverized samples were split down to 0.25g for the 48 element analysis and digested with perchloric, nitric and hydrofluoric acids. The residue is leached with dilute hydrochloric acid and diluted to volume. It is then analyzed by inductively coupled plasma-atomic emission spectrometry and inductively coupled plasma-mass spectrometry. For gold analysis, a prepared sample is fused with a mixture of lead oxide, sodium carbonate, borax, silica and other reagents as required, inquarted with 6mg of gold-free silver and then cupelled to yield a precious metal bead. The bead is digested in 0.5 mL of dilute nitric acid in the microwave oven. 0.5 mL of concentrated hydrochloric acid is added and the bead is further digested in the microwave at lower power. The digested solution is cooled, diluted to total volume of 4 mL with de-mineralized water and analyzed by inductively coupled plasma atomic emission spectrometry against matrix-matched standards.

In the laboratory, a suite of blanks, reference materials and duplicate samples were inserted into the sample stream. Approximately one in every five samples represented some form of quality control check. Results reported from the lab control samples were within the limits of instrumental and analytical accuracy. No corrective actions were taken.

Internal QA-QC returned results from four standards that were between the second and third standard deviations, the rest of standards were within two standard deviations of the recommended values. Acceptable blank values were set at 30 ppm Cu, 30 ppm Mo, 0.1 ppm Ag and 0.2ppm Au, all passed. All duplicate samples returned results within 20 percent of the samples they were testing.

In the author's opinion, the sample preparation, security and analytical procedures used in the 2018 drilling are compatible to industry standards.

9 Interpretation and Conclusions

The 2018 diamond drilling on the Poplar deposit was successful in meeting objectives, known limits of anticipated mineralization were extended. While minor variations between the twinned holes at specific depths are present assays from the twinned holes confirmed reasonable consistency with historic results through the hole depth at sites where historic casing remained and exact hole location was known.

10 RECOMMENDATIONS

Samples were collected during the 2018 diamond drill program for the purposes of metallurgical testing prior to assays being returned. These should be reviewed for suitability as metallurgical samples and sent off for metallurgical analysis if found to be suitable.

Previous recommendations were for ten holes to be twinned to confirm historic assay results, to meet these recommendations; an additional seven holes that were drilled in the 1970's - 1980's should be twinned for further confirmation of results..

Subject to positive results from the previous phase, a phase two exploration program of 10,000 m of drilling was recommended to upgrade the historic Inferred Resource to Measured and Indicated Resources. Seventeen holes were proposed.

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Appendix 1: Statement of Qualifications

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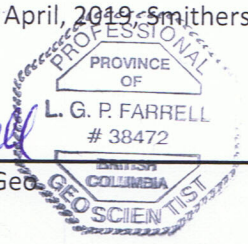
I, Lorie Farrell, of Smithers, British Columbia, do hereby certify that:

1. I am a self-employed consulting geologist and a co-owner of:
   Farrell Exploration Services Inc.
   4547 Whistler Road
   Smithers, B.C. V0J 2N4
2. I graduated with a Bachelor of Science Degree in Geology from the University of Saskatchewan in Saskatoon, Saskatchewan in 2002.
3. I am registered as a member in good standing with Engineers and Geoscientists of B.C. (Member No. 38472)
4. I have practiced my profession as an exploration geologist continuously for the last seventeen years with the exception of the period from the summer of 2014 to the spring of 2016. I have worked as a geologist in British Columbia, the Yukon and Northwest Territories, Nunavut and Saskatchewan; this has included working on a variety of copper-molybdenum, molybdenum, molybdenum-tungsten, and copper-gold porphyry deposits as well as poly-metallic vein deposits as well as other deposit types. My experience relevant to this program includes, project management, planning and supervision of drill programs, report writing, core logging.
5. I am the author of the report titled "Assessment Report: 2018 Diamond Drilling on the Poplar Property, Ominica Mining Division, British Columbia" and am responsible for all sections of this report.
6. I planned and supervised the 2018 drilling program on the Poplar property with reference to planning work done by the Lions Gate Metals exploration team in 2012.
7. I was involved with Lions Gate Metals on the Poplar Project on the 2008-2012 programs.

Dated this 26th day of April, 2019, Smithers B.C.



Lorie Farrell, B.Sc. P. Geo.

Certificate – J.R. Stacey

I, Jacques Rémi Stacey, of 3885 9th Avenue in the Town of Smithers in the Province of British Columbia, do hereby certify that:

- I am a Consulting Geologist with the firm of North Mountain Geosciences, registered in the province of British Columbia with offices at 3885 9th Avenue, PO Box 4702, Smithers, BC V0J 2N0.

- I was responsible for on-site drill supervision as a Certified Mine Supervisor in British Columbia, as well as core logging, supervision of core sampling and Quality Assurance/Quality Control protocol, and database update and verification for Tasca Resources Limited's 2018 drill program on the Poplar Property.

- I am a graduate of Saint Francis Xavier University, BSc. Geology (1999), and the University of Calgary, MSc. Geology (2006), and I have practiced my profession continuously since before graduation.

- Over the last fourteen (14) years, I have acquired considerable experience with porphyry and vein-hosted gold, silver, copper, molybdenum, and other commodities in British Columbia. During the last eleven (11) years I have designed and supervised numerous exploration programs, including, but not limited to: geochemical and geophysical surveys, geological and structural mapping programs, diamond drilling programs, and core logging.

- I am registered as a Professional Geologist (P.Geol.) in good standing with Engineers and Geoscientists British Columbia (Member No. 185998).

- I was present on the Poplar Property and the Smithers core shack facility from November 23 to December 20, 2018. During this time I supervised drill activities on the property and completed core logging and sampling as described above.

- I am independent of the Issuer, Tasca Resources Ltd., and the Poplar Property, as set out in Section 1.5 of NI 43-101, and currently own no shareholding in the company. I do not expect to receive any interest (direct, indirect, or contingent) in the property described herein nor in the securities of or any related companies in respect of services rendered in the preparation of this report.

- I had no involvement with Tasca Resources Ltd. or the Poplar Property prior to the 2018 drill program.

DATED at Smithers, British Columbia, this 24th day of April, 2019.

Signed and Sealed by,

Jacques R. Stacey, MSc., P.Geol.

Appendix 2: Statement of Expenditures

Exploration Work type	Comment	Days			Totals
Personnel (Name)* / Position	**Field Days (list actual days)**	**Days**	**Rate**	**Subtotal***	
Lorie Farrell Project Manager	November 19-December 21	25.53	$550.00	$14,041.50	
Jacques Stacey Project Geologist	November 23-December 20	25.88	$603.48	$15,618.06	
John Taylor Geotech	November 21-December 19	29	$500.00	$14,500.00	
Chad Abou Core Splitter	November 23-December 18	24.5	$350.00	$8,575.00	
			$0.00	$0.00	
			$0.00	$0.00	
				$52,734.56	**$52,734.56**
Office Studies	**List Personnel (note - Office only, do not include field days**				
Archaeology Report	Roy Northern Environmental		$0.00	$7,246.42	
Wildlife Management Plan	McKay Environmental Consulting Ltd.		$0.00	$4,500.00	
Computer modelling			$0.00	$0.00	
Reprocessing of data			$0.00	$0.00	
Database update	Jacques Stacey	1.5	$475.00	$712.50	
Wrap up and Report preparation estimate			$0.00	$7,000.00	
Other (specify)	Planning drill program including research, permitting and arranging contractors			$11,000.00	
				$30,458.92	**$30,458.92**
Geochemical Surveying	**Number of Samples**	**No.**	**Rate**	**Subtotal**	
Drill (cuttings, core, etc.)	463	463.0	$56.15	$25,996.69	
				$25,996.69	**$25,996.69**
Drilling	**No. of Holes, Size of Core and Metr**	**No.**	**Rate**	**Subtotal**	
Diamond	3 holes with 1,097.59 meters	1097.59	$91.00	$99,880.69	
Customer time			$0.00	$23,501.00	
Chargeable Materials				$3,887.42	
312 Excavator (15 hours), 668 Skidder (25.5 hours), Reflex Instument and 19 tests				$8,785.00	
Bridge rent, installation & removal	JT Thomas and J Hols	1.0	$0.00	$18,303.00	
Sand/gravel on Poplar Road	Turcotte and Noralee	3.0	$0.00	$2,055.46	
				######	**$156,412.57**
Other Operations	**Clarify**	**No.**	**Rate**	**Subtotal**	
OFA 3 REH	Grant Huson	16.0	$525.00	$8,400.00	
ETV Rental & mob/demob REH		18.0	$0.00	$4,740.00	
Core & Split Shack & Gear REH	set up, tear down, rental and purchase, at site and in town		$0.00	$21,266.94	
Expediting	REH	14.0	$95.00	$1,330.00	
				$35,736.94	**$35,736.94**
Reclamation	**Clarify**	**No.**	**Rate**	**Subtotal**	
After drilling	Labour, truck, ATV + seeder re	1.0	$0.00	$1,025.00	
Monitoring		1.0	$0.00	$0.00	
Other (specify)	Pasture seed		$0.00	$325.00	
				$1,350.00	**$1,350.00**
Transportation		**No.**	**Rate**	**Subtotal**	
Train ticket	John Taylor	1.00	$0.00	$175.00	
Travel to site	John Taylor and Chad Abou	3.00	$0.00	$750.00	
truck rental	Northwest Truck Rental includes mileage, insurance &	26.00	$119.41	$3,104.58	

kilometers	North Mountain Geosciences	2373.00	$0.55	$1,305.15	
ATV	Walkat Holdings Ltd	15.00	$0.00	$1,375.71	
fuel	Farrell Exploration Services & North Mountain Geosciences		$0.00	$1,351.95	
			$0.00	$0.00	
			$0.00	$0.00	
Other					
				$8,062.39	**$8,062.39**
Accommodation & Food	**Rates per day**				
Fireweed Motel Smithers		14 days	$0.00	$1,631.90	
Noralee Resort cabins and meals		23 days	$0.00	$18,762.74	
Meals	Chad and John in Smithers	13.50	$52.00	$702.00	
				$21,096.64	**$21,096.64**
Miscellaneous					
Irridium & Inreach, mobile radio (X3), magsus, GPS rentals			$0.00	$426.16	
Drill Sections (creation and printing)				$5,000.00	
Core Shack and Sampling Supplies				$3,273.25	
				$5,426.16	**$5,426.16**
Equipment Rentals					
Field Gear (Specify)			$0.00	$0.00	
Other (Specify)					
				$0.00	**$0.00**
Freight, rock samples					
		1.0	$1,284.78	$1,284.78	
			$0.00	$0.00	
				$1,284.78	**$1,284.78**

SUBTOTAL Expenditures	**$338,559.65**
5% office Overhead	$16,927.98
TOTAL EXPENDITURES	**$355,487.64**

Appendix 3: Drill Core Logs

2018 Poplar Drilling

Hole ID: 18-PC-126	**Easting (NAD 83): 631903**	**Core Size: HQ**	**DDH Started: November 23, 2018**
	Northing (NAD 83): 5986857	**Hole Azimuth: 0**	**DDH Finished: November 29, 2018**
Property: Poplar Deposit	**Elevation: 888 m**	**Hole Angle: -90**	**Log Completed: December 1, 2018**
	Source: GPS	**Total Depth: 404.47 m**	**Analysis by: ALS Minerals**

Logged by: J.Stacey
Geotechnician: J. Taylor
Geotech type: Basic

Dip & Azimuth Tests		
Depth	**Azimuth**	**Dip**
38.71	**361**	**-88**
108.81	**369**	**-88**
169.77	**353**	**-88**
233.7816	**365.3**	**-88.2**
297.7896	**354.7**	**-88.3**
358.7496	**356.6**	**-88.6**
401.4216	**352.9**	**-88.8**

Summary: Hole drilled as a twin of PC-22. Mostly composed of various phases of Qtz Monzonite and local Monzonite (Qtz-poor phase), with scattered intervals of fine-grained tuffaceous volcanic rock, probably xenoliths or part of roof pendants extending down into Qtz Monzonite body. Mineralized throughout, ranging from weak to strong. Tuff intervals tend to be strongly mineralized. Moderate to strong mineralization from approximately: 1. 60-90 m; 2. 107-160 m; 3. 270-312 m; 4. 330-345 m; and 5. 372-397 m. Several types of mineralized veins, including Qtz-Py+/-Cpy and Qtz-Py-Mo+/-Cpy. Interpreted paragenetic sequence of alteration and mineralization as follows (deduced from crosscutting relationships): 1. Early Kfs alteration along fractures, accompanied by fine Qtz-Py+/-Cpy veining and local stockwork formation; minor disseminated Py-Cpy formation; possibly accompanied or preceded by early Bt alteration; 2. Heavier Qtz-Py-Cpy+/-Mo veining and stronger stockwork formation and disseminated mineralization; accompanied by strong pervasive Kfs+/-Si alteration, maybe local sericitization; 3. Localized strong subvertical Qtz-Py-Mo+/-Cpy veining, possibly associated with sericitization and argillic alteration; Mo-bearing veins tend to be wider than Qtz-Py+/-Cpy, and do not form strong stockworks on the scale of the drill core; strongest Mo-bearing veins seem to be hosted by Monzonite, rather than Qtz Monzonite, and may be sourced from similar rock or at least a different phase of the intrusion than that which sourced Cpy-bearing, Mo-absent veins; 4. Late pyritic veining associated with milky Qtz veins; Py locally forms massive seams up to 20 mm wide; these veins mostly barren, but locally accompanied by minor Cpy; possibly accompanied by Clay-Ser alteration?; 5. Late Qtz-Sericite-Pyrite veining (strong Ser envelopes); mostly barren; 6. Late, post-ore drusy calcite veining; and 7. Local very late Gypsum+/-Qtz+/-Fluorite veining spatially associated with mineralized veins, but which have probably exploited pre-existing structures. Could gypsum veins be associated with Eocene volcanism in the region?

Hole ID: 18-PC-126			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
0	23.5	OVB	Heterolithic mix of coarse intrusive rock (Qtz Monz) and finer grained						
			volcanics; brown mud and gravel. Local mineralized chunks.						
23.5	29.9	Qtz Monz	Med to coarse grained medium to dark grey Qtz Monzonite; variably						
			porphyritic, with weakly clay-altered euhedral Plag phenocrysts to	23.5	26.5	2.5	0.5	tr	moderate to strong stockwork and dissem
			6 mm in coarser grained rock; finer grained material equigranular	26.50	29.60	4.0	1.0	tr?	frac controlled and dissem; fracs contain Hem
			to very weakly porphyritic with local weakly sericitized Plag						
			phenocrysts to 4 mm. Limonitic fractures and veins to ~27 m depth.						
			23.5-26.5: weak to moderate patchy and fracture-controlled Kfs						
			alteration locally forms haloes up to 5 mm wide around fractures						
			and Qtz-Sulfide veins; moderate to strong stockwork						
			Qtz-Py+/-Cpy+/-Mo veining through this interval (veins 4-6mm wide						
			at 0-45 degrees TCA), as well as hairline to 2 mm massive Py+/-Hem						
			veinlets and fracture fill. Estimate 2-3% Py, <1% Cpy, and trace						
			Mo over interval.						
			26.5-29.6: finer-grained Qtz Monz interval; strong fracture-controlled						
			Py throughout, with trace Cpy. Pyritic fractures strongly Hematitic.						
			Local Qtz-Sulfide veining, but not in stockworks like overlying						
			interval; abundant fine grained disseminated Py and Cpy.						
			Estimate 3-5% Py, trace-1% Cpy over interval. Weak patchy K alt						
			throughout. Core strongly shattered throughout.						
29.9	35.6	Volc	light grey to brownish, fine to med grained volcanic rock. Non	30.70	32.80	3.0	0.5	tr?	strong to mod strockwork and dissem
			porphyritic. Weak argillic alteration throughout, overprinted locally						veins 30-45 degrees TCA
			by moderate secondary Biotite and weak patchy Kfs+Si.						
			30.7-32.8: strong to moderate stockwork Qtz-Py+/-Cpy+/-Mo veining;						
			veins hairline to 12 mm wide; Two types of Qtz veins - grey glassy						
			massive veins with fine-grained sulfide, and off-white to beige vuggy						
			Qtz veins with coarser crystalline Py. Py mostly very fine grained						
			within veins, but locally forms lensoid coarse crystalline masses to						
			6 mm wide, 20 mm long. Py and Cpy also occur as fine-grained						
			disseminations. Estimate 3% Py, 0.5% Cpy over interval.						
			32.8-35.6: stockwork veining weakens; local Qtz-Kfs-Py+/-Cpy+/-Mo	32.80	35.60	3.0	tr	tr	stockwork weakens; local Qtz-Sulfide veins
			veins up to 2 mm wide; strong fracture-controlled Py+Hem; weak						Py+Hem fracs; dissem Py, Cpy
			to moderate fine grained disseminated sulfide throughout						
			groundmass of rock. Estimate 3% Py, trace Cpy, trace Mo over interval.						
35.60	42.40	Qtz Monz	Fine to medium grained Qtz monzonite. Dark grey colour. Strongly	35.60	42.40	5.0	tr		fracture controlled Py+Hem; local Qtz-Py veins
			shattered throughout. Coarser grained sections are porphyritic with						fine grained dissem Py+/-Cpy
			strongly clay-altered and sericitized Plag phenocrysts to 6 mm.						
			Finer-grained sections more equigranular and darker in colour.						

Hole ID: 18-PC-126			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
			Upper contact wavy but fairly sharp at 30 degrees TCA. Weak patchy						
			K alt throughout, and possibly moderate to strong pervasive 2nd Bt.						
			Moderate to strong fracture controlled Py+Hem throughout. Local						
			Qtz-Py veins up to 6 mm wide at angles of 0-90 degrees TCA, but no						
			stockwork veining. Abundant dissem Py+/-Cpy in groundmass of rock.						
			Estimate ~5% Py over interval, with local trace Cpy.						
			Lower contact with underlying volcanic or volcanic sediment						
			obscured by shattered core.						
42.40	47.90	Volc Sed?	Very dark grey to black, fine-grained biotitic volcanic rock or more	42.40	47.90	3.0	tr		dissem and frac controlled Py+/-Cpy; local weak
			likely volcanic-derived sediment. Contains subrounded to						Qtz-Py+/-Cpy stockworks over 10-20 cm intvls
			subangular detrital(?) feldspar grains. Strong Biotite alteration						
			throughout. Moderate fracture-controlled Py without Hem; also						
			fine-grained dissem Py throughout groundmass of rock. Py on						
			fractures is coarser grained than disseminated material. Rare local						
			weak Qtz-Py+/-Cpy stockwork veining over 10-20 cm intervals, with						
			veins up to 5 mm wide at all angles TCA. Estimate ~3% Py, trace Cpy						
			through interval.						
47.90	50.60	Volc	Light grey to tan coloured rock; fine-grained with local patchy	47.90	50.60	2.0	tr		dissem and vein controlled Py, trace Cpy
			porphyritic sections; probably an intermediate volcanic rock -						
			possibly tuff? Upper contact gradational with overlying volc sed.						
			Moderate to strong Bt alteration throughout; weak to moderate						
			patchy to vein-controlled Kfs alteration throughout. Bt and Kfs						
			alteration overprints earlier weak pervasive argillic alt. Moderate						
			very fine-grained disseminated Py in groundmass of rock. Local						
			Qtz-Py+/-Hem+/-Cpy veins and veinlets from hairline to 4 mm width						
			at angles of 10-70 degrees TCA. Estimate 2% Py, trace Cpy through						
			interval. Qtz-sulfide veins locally show weak ribbon texture, with Qtz						
			lining vein walls and a strip of sulfide down center of vein.						
50.60	55.10	Qtz Monz	Massive, light grey, coarse-grained Qtz Monzonite and occasional	50.60	53.00	1.0	0.5	tr	mod stkwk and semi-stkwk veining, dissem
			intervals of fine-grained, non-porphyritic tuffaceous volcanic rock as						sulfide in groundmass of rock
			above - probably xenoliths. Upper contact wavy but sharp at 60						
			degrees TCA. Monzonite strongly porphyritic, with moderately clay-						
			altered, subhedral to euhedral Plag phenocrysts to 6 mm. Weak to						
			mod pervasive Kfs alt and local patchy secondary Biotite.						
			50.6-53.0: moderate stockwork and semi-stockwork Qtz-sulfide						
			veining. Veins range from hairline to ~10 mm width, at angles of						
			10-40 degrees TCA, and contain fine-grained Py, Cpy, and local Mo.						
			Mineralized veins are locally crosscut by late patchy barren Calcite						

Hole ID: 18-PC-126			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
			breccia veins. Rock also contains weak fine-grained disseminated						
			sulfide in groundmass of rock. Estimate 1% Py, 0.5% Cpy, and trace						
			Mo over interval. Veining dies out at 53 m, though sulfides continue						
			as fine disseminations.						
			53.0-55.1: coarse grained porphtritic Qtz monzonite with heavily clay	53.00	55.10	2.0	tr	tr	dissem and vein sulfide
			altered euhedral to subhedral Plag phenocrysts to 13 mm.						
			Contains minor dissem Py, Cpy, as well as occasional grey, glassy						
			Qtz-Py+/-Cpy veins up to 6 mm wide and rare Qtz-Py-Mo veins						
			containing milky Qtz. Mo-bearing veins may be different generation						
			than Qtz-Py+/-Cpy veins. Lower contact fuzzy against underlying						
			Felsic tuff and invaded by a barren 3-35 mm wide milky Qtz vein						
			at ~10 degrees TCA. Estimate 2% Py, trace Cpy, trace Mo over interval						
			Sulfide bearing veins at ~45 degrees TCA						
55.10	83.60	Tuff + QM	Mixed interval of felsic tuff invaded by dykes of coarse grained Qtz	55.60	60.50	2.0	tr		weak veining and local stockwork; rare
			Monzonite. Tuff interval is probably a xenolith within overall QM						dark Chalcocite in some veins
			intrusion. QM dykes generally 0.5-1.5 m in length at shallow angles to						
			core axis. Tuff intervals 2-4 m length. Tuff generally displays weak						
			background argillic alteration which is moderately to strongly						
			overprinted by Kfs and Bt alteration, especially in areas of stronger						
			stockwork veining. QM dykes generally contain moderate to strong						
			clay alteration of Plag phenocrysts, as well as strong background Bt						
			and local patchy Kfs alteration, especially around veins.						
			55.6-60.5: weak veining with minor local stockwork development.						
			Veins at 20-70 degrees TCA, range from hairline to ~7 mm width.						
			Mostly composed of Qtz-Py+/-Cpy+/-Chalcocite (Chalcocite very rare);						
			accompanied by moderate Kfs, Bt, and local Ser alt. Rock also						
			contains very fine-grained disseminated sulfide in groundmass.						
			Estimate 2% Py, trace Cpy, trace Chalcocite over interval.						
			60.5-60.6: fine clay gouge at 70 degrees TCA.						
			60.6-68.7: moderate to strong stockwork veining accompanied by	60.60	68.70	4.0	0.5	tr	trace Chalcocite as above
			strong Kfs and Bt alteration. Veins most strongly developed in						
			tuffaceous sections, though also present in lower quantities in						
			narrow QM dykes. Veins range from hairline to 15 mm width at all						
			angles TCA. Vein composition mostly Qtz-Py+/-Cpy, with local						
			Chalcocite and rare Mo. Rock also contains fine grained dissem Py						
			and Cpy in groundmass. Occasional coarse Py seams up to 12 mm						
			wide may crosscut stockwork veining. Estimate 4% Py, 0.5% Cpy,						
			trace Chalcocite, and trace Mo over interval.						

Hole ID: 18-PC-126			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
			68.7-70.5: pervasive Kfs alteration disappears in Qtz Monz dyke,	68.70	70.50	1.0	0.5		lower vein density
			replaced by strong Bt, and local weak Ser. Vein density much lower						
			in QM than in tuff, though still contains occasional Qtz-Py-Cpy veins						
			3-12 mm wide at shallow angles TCA. Estimate 1% Py, trace to						
			0.5% Cpy over interval.						
			70.5-83.5: moderate to strong stockwork veining in predominantly	70.50	83.50	4.5	0.5	0.1	mod to strong stockwork veining
			tuffaceous rock, accompanied by strong Kfs and Bt alteration. Veins						
			range from hairline to 30 mm width at all angles TCA. Two types of						
			veins - Qtz-Py+/-Cpy and Qtz-Py-Mo+/-Cpy. Mo locally forms blobby						
			discontinuous seams and stringers up to 2 mm wide, 20 mm long.						
			Qtz-Py+/-Cpy veins are grey and glassy, while Mo-bearing veins are						
			more milky appearance. Paragenetic sequence between Cu and Mo						
			bearing veins not clear. Qtz-Py+/-Cpy veins are locally crosscut by						
			chalky white Qtz-Py veins with little to no Cpy. Rock also contains						
			fine grained disseminated Py, Cpy in groundmass. Estimate 4-5% Py,						
			0.5% Cpy, trace to 0.1% Mo, rare trace Chacocite over interval.						
			75.5-76.1: core heavily invaded by vuggy barren Qtz-Gypsum vein;						
			likely post-mineralization as it crosscuts everything. Vein at 20						
			degrees TCA						
83.5	99.3	Qtz Monz	Light to dark grey porphyritic monzonite with occasional xenoliths of	83.50	90.60	1.5	tr	tr	weak stockwork veining
			felsic tuff. QM locally megacrystic with large Plag phenocrysts to 25						
			mm. Plag phenocrysts weakly sericitized. Strong Albite alteration in						
			upper 20 cm of interval, just below contact with overlying tuff. Upper						
			CT at 30 degrees TCA. Mostly moderate Bt alteration with weak to						
			moderate Silicification in monzonite, stronger silicification with						
			patchy moderate Kfs and pervasive moderate Bt alteration in						
			tuffaceous intervals. Weak stockwork veining throughout, though						
			lower vein density than overlying mineralized interval described						
			above. Veins composed mostly of Qtz-Py+/-Cpy, with occasional						
			Qtz-Py-Mo veins; veins at all angles TCA, and range from hairline to						
			5 mm width. Veins locally crosscut by late barren Qtz-Gyp veins.						
			Rock also contains abundant fine grained disseminated Py, local						
			Cpy in groundmass. Estimate 1-2% Py, trace Cpy, and trace Mo						
			from 83.6-90.6.						
			90.6-91.4: slightly stronger disseminated Cpy mineralization	90.60	91.40	2.0	1.0		strong disseminated sulfide
			approaching 1% Cpy, also ~2% disseminated Py; rock strongly						
			silicified and K altered. Si and K cut off abruptly at lower contact						
			between dark Qtz Monz above and light grey Qtz Monz below.						

Hole ID: 18-PC-126			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
			91.4-96.1: very light grey Qtz monzonite with weak Si and Ser alt.	91.40	96.10	3.0	0.5	tr	weak stockwork veining
			May be a younger dyke of different composition than dark Q Monz?						
			Contains local weak stockwork veining over intervals of 20-40 cm, as						
			well as isolated veins. Veins composed of Qtz-Py+/-Cpy+/-Mo. Veins						
			locally display weak Kfs haloes a few mm wide. One stockwork						
			interval from 92-92.3 m contains Qtz-Albite-Py-Cpy-Mo veins - first						
			occurrence of albite in veins in this drill hole. Broader interval also						
			contains abundant disseminated fine-grained Py and Cpy in						
			groundmass of rock. Estimate ~3% Py, 0.5% Cpy, and trace Mo						
			through broader interval. Veins generally around 30-60 degrees TCA.						
			Bt alteration reappears at 95.2 m, and Ser diminishes. However,						
			one 3-5 mm wide Qtz-Py-Mo vein at 95.2-95.4 m has a 25-30 mm						
			wide Sericite halo around it. Upper CT of light grey Qmonz at 65						
			degrees TCA, sharp. Lower CT a bit fuzzy at 45 degrees TCA.						
			96.1-99.3: Dark brown Qtz monzonite with strong background Bt	96.10	99.30	4.5	0.5		weak stockwork veining, local coarse dissem
			alteration, strongly overprinted by patchy and vein-controlled						Cpy, Py
			Kfs+/-Ser (Kfs dominant). Weak stockwork Qtz-Py-Cpy veining						
			throughout interval; stronger vein areas associated with stronger						
			potassic alteration. Rare coarse Cpy blobs up to 6 mm diameter here						
			and there in rock - blobs partially vein controlled, but also occur in						
			groundmass of rock. Rock also contains moderate fine-grained						
			disseminated sulfide throughout. Estimate 4-5% Py, 0.5-1% Cpy						
			through interval.						
99.30	104.50	Volc	Mottled light grey to dark brown, very fine-grained rock, seems like	99.30	104.50	3.0	0.5	0.1	moderate veining with local weak stockwork
			an intermediate to felsic tuff(?). Moderate background Bt alteration						strong Cpy and Mo
			is overprinted by strong patchy to vein- and fracture-controlled K and						
			Ser, and is moderately to strongly silicified throughout. Weak to						
			moderate veining throughout, with local weak stockwork						
			development. Most veins range from hairline to 4 mm in width at						
			angles of 10-80 degrees TCA. Two populations of mineralized						
			veins - older Qtz-Py+/-Cpy, and younger Qtz-Py-Mo+/-Cpy. Mo-absent						
			veins are glassy and narrow, Mo-bearing veins are wider, patchy						
			milky white, and locally vuggy. Mo-bearing veins crosscut Qtz-Py-Cpy						
			veins. Milky Mo-bearing veins up to 35 mm wide at angles of 20-40						
			degrees TCA. Rock also contains abundant fine-grained disseminated						
			Py and Cpy. Estimate 3% Py, 0.5% Cpy, and 0.1% Mo over interval.						
			Lower edge of volcanic interval occupied by a 3 cm-wide chloritic						
			shear at 50 degrees TCA. Si weakens over lower 1 m of interval.						

Hole ID: 18-PC-126			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
104.5	107.3	Qtz Monz	Dark brownish grey medium grained Qtz monzonite. Seems like a	104.50	107.30	3.5	0.5		weak stockwork veining; no Mo observed
			dyke within overall tuffaceous interval. Strong background Bt						
			alteration throughout, overprinted by moderate vein-controlled						
			K+/-Ser alteration. K-Ser as haloes up to 10 mm wide around veins.						
			Weak stockwork veining throughout, comprising Qtz-Py+/-Cpy veins						
			ranging from hairline to 6 mm width. Rock also contains fine grained						
			disseminated Py and local Cpy in groundmass, as well as occasional						
			discontinuous hairline sulfide stringers up to 15 mm long. Estimate						
			3-4% Py, 0.5% Cpy (max). No Mo observed in Qtz monz interval.						
			Upper contact sharp at shear described above. Lower contact fairly						
			sharp at 75 degrees TCA. Lower contact intrusive in nature.						
107.3	120	Volc	Light grey to brownish, fine grained volcanic rock. Probably a tuff as						
			above due to the presence of small phenocrysts and lack of						
			rounded/transported grains. Locally intruded by 5-30+ cm wide Qtz						
			Monz dykes at shallow angles TCA. Moderate background Bt						
			alteration is overprinted by strong Kfs +/- Ser alteration around veins.						
			Kfs/Ser pervasive around stockwork veining, forms 5-10 mm wide						
			haloes around more isolated veins. Moderate to strong stockwork						
			veining throughout tuffaceous sections, with lower vein density in						
			Q Monz dykes. Several types of veins observed, including						
			Qtz-Py+/-Cpy, Qtz-Py-Mo-Cpy, and late vuggy Qtz-Cal+/-Py veins. Also						
			late barren Gypsum veins. Mineralized vein angles of 10-70 degrees						
			TCA. Veins range from hairline to 30 mm wide max. Sulfides mostly						
			fine grained within veins, though occasional veins carry coarse						
			chunky Py and Cpy blobs and seams up to 4 mm wide. Oldest veins						
			are Qtz-Py-Kfs+/-Cpy; next youngest are Qtz-Mo-Py veins (crosscut						
			Qtz-Py-Kfs+/-Cpy); vuggy Qtz-Cal+/-Py veins cut both; youngest veins						
			are barren Gypsum. Local strong Qtz-Cpy-Mo-Py veining, e.g. 107.3-108.4						
			107.3-108.4: Strong Qtz-Cpy-Mo-Py and Qtz-Py-Cpy veining at angles	107.30	108.40	5.0	0.5	0.5	Strong Qtz-Cpy-Mo-Py and Qtz-Py-Cpy veining
			of 20-80 degrees TCA; strong Kfs and Si alteration; Qtz-Py-Cpy veins						
			up to 20 mm wide, Qtz-Mo-Cpy-Py veins up to 30 mm wide. Also fine-						
			grained disseminated Py and Cpy in groundmass of rock. Estimate						
			5% Py, 0.5% Mo, and 0.5% Cpy over interval.						
			108.4-120.0: Mo content diminishes somewhat, and vein density	108.40	120.00	3.0	0.5	tr	weak stockwork veining
			decreases. Moderate to strong Kfs and Si alteration throughout, with						
			local patchy and vein-controlled Ser. Weak stockwork veining						
			throughout. Also abundant fine-grained disseminated Py and Cpy in						
			groundmass of rock. Estimate 3% Py, 0.5% Cpy, and trace Mo over						

Hole ID: 18-PC-126			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
			interval.						
			119.05-119.12: 40 mm wide Qtz-Kfs-Py ribbon vein at 60 degrees TCA.						
			Weak stockwork veining extends outwards ~10 cm above and below						
			ribbon vein						
120	148.6	Qtz Monz	Medium to dark grey, medium to fine-grained porphyritic Qtz						
			Monzonite. Possibly two mixed phases of Qtz Monz indicated by						
			different colours and grain sizes. May also include local xenoliths of						
			volcanic rock. Weak to moderate background Bt alteration is						
			overprinted by K-Si haloes around veins. Weak clay alteration of						
			Plag phenocrysts. Local patchy silicification. Moderate veining						
			throughout, at angles of 20-80 degrees TCA. Local stockwork						
			development over 20-40 cm intervals. Two types of veins - glassy						
			Qtz-Py-Cpy, sometimes carrying up to 10% Py, 5% Cpy in individual						
			veins, and milky white to off-white Qtz-Py veins with weak to nil Cpy.						
			Local Mo here and there. Both types of sulfide-bearing veins have						
			moderate to strong Kfs alteration haloes. Milky veins are younger						
			and crosscut glassy veins. Section also includes late glassy Qtz veins						
			that appear to be mostly barren. Rock also includes fine- to medium-						
			grained disseminated sulfides in groundmass, as well as occasional						
			coarser sulfide blobs and discontinuous hairline to 2 mm sulfide						
			stringers. Py locally up to 5%, Cpy locally up to 1% over short						
			intervals.						
			120-127.2: Estimate 3% Py, 0.5% Cpy	120	127.2	3.0	0.5		moderate veining with local stockwork
			127.2-133.9: strength of Qtz-Py-Cpy-Kfs veining increases somewhat,	127.2	133.9	5.0	2.0	tr	stronger veining; much stronger disseminated
			and concentration of disseminated and stringer sulfide (especially						and stringer sulfide
			Cpy) increases dramatically. Qtz-Py-Cpy veins have strong Kfs						
			alteration envelopes up to 15 mm wide around veins. Strong						
			background Bt alteration is overprinted by Kfs. Seems to be at least						
			two generations of mineralized veins - earlier Qtz-Py-Cpy-Kfs veins						
			and later Qtz-Py veins generally barren of Cpy and without strong Kfs						
			haloes. Later veins crosscut Cpy bearing veins. No strong stockwork						
			development, though occasional weak stockworks occur over 20-40						
			cm intervals. Vein angles range from 20-70 degrees TCA, average						
			around 50 degrees TCA. Estimate 5% Py, 2% Cpy over interval. Maybe						
			trace Mo here and there.						
			133.9-137.0: at least 3 x long Qtz-Py-Cpy-Kfs+/-Fluorite+/-Gypsum	133.9	137	3.0	4.0	tr	3 x long Qtz-Py-Cpy-Kfs+/-Fluorite+/-Gypsum
			veins running subparallel to core axis; veins up to 30 mm wide, and						veins running subparallel to core axis
			contain coarse blobby to streaky Cpy that is dominant over chunky to						

Hole ID: 18-PC-126			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
			streaky Py. Gypsum is probably not related to mineralized veins, but						
			seems to have exploited existing structures. Fluorite may be related						
			to mineralization. Vein angles range from 0-30 degrees TCA.						
			Surrounding rock is not particularly altered unlike overlying veins						
			with strong Kfs haloes. Estimate 4% Cpy, 3% Py,trace Mo over interval						
			137.0-143.5: Moderate to strong Qtz-Sulfide veining throughout, with	137	143.5	5.0	3.0	tr	Moderate to strong Qtz-Sulfide veining , local
			local stockwork development. At least two populations of veins -						stockwork development
			Earlier glassy Qtz-Py-Cpy-Kfs veins with strong Kfs alteration haloes,						
			and later milky white to tan Qtz-Py-Mo veins which crosscut glassy						
			veins. Also a population of hairline to 1 mm glassy Qtz+/-Py veins that						
			seem to have filled in fine fractures. Evidence for early (pre-						
			mineralization) potassic alteration along fractures - one example at						
			139.6 m has a K-altered fracture that is crosscut by a poorly						
			mineralized glassy Qtz-Py vein, and then later the pre-existing						
			fracture was invaded by a milky Qtz-Py-Mo vein which crosscuts the						
			glassy vein. Local Gypsum bearing veins, which like above seem to						
			have exploited pre-existing structures. Vein angles to core axis seem						
			to form a conjugate set, with veins at ~20 and ~40-60 degrees TCA.						
			Interval also includes abundant fine to medium grained						
			disseminated and stringer Py and Cpy in groundmass of rock and						
			fractures. Estimate 5% Py, 3% Cpy over interval, rare trace Mo.						
			143.5-148.6: Mo becomes more abundant in core as long, low-angle	143.5	148.6	3.0	0.75	0.1	increasing Mo content
			milky Qtz-Py-Mo veins that crosscut earlier glassy Qtz-Cpy-Py veins						
			(+/- Ribbon texture). Strong Kfs alteration haloes around Mo-bearing						
			veins, while glassy veins do not show strong alteration haloes.						
			Vein-related alteration overprints background Bt. Mo-bearing veins						
			at 0-15 degrees TCA, while earlier glassy veins generally around						
			40-60 degrees TCA. Rock also contains abundant disseminated and						
			stringer Py and Cpy. Estimate 3% Py, 0.5-1% Cpy, and 0.1% Mo over						
			interval. All vein types are locally crosscut by late barren Gypsum						
			veins.						
148.6	154.4	Monz	Light pink to greenish, massive equigranular to weakly porphyritic	148.6	154.4	1.0	tr	5.0	strong Qtz-Mo-Py veining, weak to nil Cpy
			Qtz Monzonite or possibly just Monzonite(?). Qtz content is generally						
			lower than well-defined Qtz Monzonite above. Strong K-Si+/-Ser						
			alteration throughout, which differs from overlying rock and						
			contributes to interpretation that this is a different intrusive phase.						
			Irregular upper contact at ~30 degrees TCA. Overall Cpy content						
			decreases to trace to nil, and Mo content increases significantly.						

Hole ID: 18-PC-126			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
			Interval contains occasional glassy Qtz-Py veins, but dominant vein						
			type is Qtz-Kfs-Mo-Py (which cut glassy veins). Mo content very strong						
			in veins, forming massive pods, stringers, and blobs up to 12 mm						
			wide and >300 mm length. Individual Mo-bearing veins range from						
			hairline to 1 mm wide in weak breccias, and from 3-20+ mm wide in						
			discrete veins. Discrete veins at 10-20 degrees TCA. Textures in Mo-						
			bearing veins range from ribboned to breccia texture. Local very						
			strong Mo mineralization in discrete veins, approaching 50% of vein						
			in some areas. Mo generally medium grained, flaky texture. Rock						
			also contains very fine grained disseminated Py, Mo, and rare Cpy in						
			groundmass. Estimate 5% Mo, 1% Py, trace Cpy over interval.						
			Strong Mo veining ends abruptly at base of sequence.						
154.4	161.1	Volc	Very fine-grained, massive to very weakly porphyritic volcanic rock,	154.4	161.1	3.0	1.0	0.1	mod veining; local stockwork development
			probably intermediate tuff. Locally intruded by 10-20 cm wide Hbl-						
			bearing Qtz Monzonite dykes at ~30 degrees TCA. Strong background						
			Bt alteration throughout, overprinted by Si-Ser alt, which is in turn						
			overprinted by later patchy to vein-controlled Kfs. Moderate veining						
			throughout, with local weak stockwork development. Veins range						
			from hairline to ~3 mm width at angles of 10-70 degrees TCA. As						
			above, there seem to be at least two generations of mineralized						
			veins - earlier glassy Qtz-Py-Cpy-Kfs+/-Mo veins and crosscutting milky						
			white Qtz-Py+/-Mo veins. Rock also contains moderate fine- to						
			medium-grained disseminated Py and Cpy in groundmass.						
			Upper and lower contacts somewhat fuzzy/gradational.						
			Estimate 3% Py, 1% Cpy, trace to 0.1% Mo over interval.						
161.1	186	Qtz Monz	Light grey to pinkish, moderately porphyritic Qtz Monzonite.	161.1	162.75	tr			poorly mineralized
			Plagioclase phenocrysts are weakly sericitized. Weak background Bt						
			alteration overprinted by moderate Silicification, which is in turn						
			overprinted by patchy to strongly pervasive Kfs. Poorly mineralized						
			from 161.1-162.75 m, with only trace disseminated Py in groundmass						
			of rock. At 162.75 m, Kfs alteration starts to strengthen, and						
			disseminated Py+Cpy in groundmass of rock increases to 1-2%						
			combined.						
			162.75-166.0: Strong to very strong Kfs+Si alteration. Trace to 1%	162.75	166	tr-1	tr-0.5		disseminated sulfide increasing; strong Kfs alt
			combined disseminated Py+Cpy in groundmass of rock, and						local Qtz-Sulfide veins
			occasional fuzzy, glassy Qtz-Py+/-Cpy+/-Ser veins at angles of 0-50						
			degrees TCA. Estimate 1% Py, trace to 0.1% Cpy over interval.						
			166.0-168.0: K weakens to moderate, mostly controlled by veins and	166	168	0.5			weak dissem Py

Hole ID: 18-PC-126			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
			fractures. Weak Py in Qtz-Kfs-Py veins at ~30 degrees TCA. Minor						
			dissem Py in groundmass of rock. Estimate 0.5% Py over interval.						
			168.0-175.0 : K alteration mostly disappears except around some	168	175	1.0	tr-0.5		weak dissem and stringer Py and Cpy
			veins. Weak Ser alteration of Plag phenocrysts; strong pervasive Si						
			throughout. Minor glassy Qtz-Py+/-Cpy veining throughout, with						
			intersecting conjugate veins at 30 degrees TCA. Veins range from						
			1-7 mm width. Minor disseminated and stringer Py, Cpy in						
			groundmass of rock. Poorly mineralized overall, though rock contains						
			occasional coarse blobs and stringers of Cpy controlled by fractures.						
			Weak stockwork veining from 173.2-175 m, with Qtz-Py+/-Cpy veins						
			up to 10 mm wide at angles of 20-50 degrees TCA. Estimate 1% Py,						
			trace to 0.1% Cpy through interval.						
			175.0-181.5: buff-coloured Qtz Monz with weak K and Bt alteration	175	181.5	0.5	tr		weakly mineralized
			throughout. Weak Si. Poorly mineralized overall, and contains						
			numerous barren Qtz veins. Occasional Qtz-Kfs-Py+/-Cpy veins with						
			narrow Kfs alteration haloes. Minor dissem Py and Cpy in						
			groundmass of rock. Estimate 0.5% Py, trace Cpy over interval.						
			181.5-186.0: Silicification weakens. Moderate to strong background	181.5	186	1.0	tr-0.1		occasional veins, dissem and stringer sulfides
			Bt alteration, and Plag phenocrysts are weakly sericitized. Not						
			strongly mineralized, but interval contains occasional Qtz-Py+/-Cpy						
			veins, as well as minor dissem and stringer Py and Cpy in groundmass						
			of rock. Estimate 1% Py, trace to 0.1% Cpy over interval						
186	194.6	Monz	Abrupt colour change from dark brown to light greenish grey at	186	189.2	1.0		tr-0.1	local Qtz-Py+/-Mo veins
			contact. Rock contains only trace Qtz so is probably monzonite rather						
			than Qtz Monz. Sharp upper contact at 80 degrees TCA.						
			Strong argillic alteration and moderate Sericite						
			throughout, locally overprinted by fracture- and vein-controlled Kfs.						
			Strongly clay-altered gougy breccias from 186.5-188.8 m, with gouge						
			planes at 30-50 degrees TCA. Local Qtz-Py+/-Mo veins up to 20 mm						
			wide at angles of 20-30 degrees TCA. Veins are locally dismembered						
			in more strongly brecciated rock. Estimate 1% Py, trace to 0.1% Mo						
			from 186-189.2						
			188.5-188.8: main gouge interval at 50 degrees TCA; minor Py in						
			gouge.						
			189.2-190.4: moderate Qtz-Py-Mo vein swarm, containing 8-10 veins	189.2	190.4	1.5		0.1	Qtz-Py-Mo vein swarm
			up to 10 mm wide at a fairly uniform 20 degrees TCA. Stronger Mo						
			and Py in this interval, estimate 1-2% Py, 0.1-0.5% Mo over interval.						
			190.4-194.0: weakly to moderately brecciated rock, with local	190.4	194	1.5	0.5	0.1	moderate breccia

Hole ID: 18-PC-126			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
			sections of strong brecciation (e.g. 193-194 m). Moderate						
			Qtz-Py+/-Cpy+/-Mo veining, with veins up to 20 mm wide at shallow						
			angles TCA. Sulfide content stronger from 192.5-194 m, includes						
			coarse streaky to blobby Cpy and patchy Mo in a vein parallel to core						
			axis, as well as breccia fill. Estimate 1-2% Py, 0.5% Cpy, 0.1% Mo over						
			interval.						
			Lower 50 cm of interval contains strong gouge and local shearing at						
			55 degrees TCA. Gouge marks boundary between Monzonite above						
			and Qtz Monzonite below. Minor Py in gouge.						
			194.0-194.6: gougy chloritic shear at 55 degrees TCA.						
194.6	404.47	Qtz Monz	Light grey to tan, weakly porphyritic Qtz monzonite. Subhedral to	194.6	200.5	1.0	tr-0.1		Moderate Qtz-Py+/-Cpy veining
			euhedral Plag phenocrysts to 6 mm. Weak argillic alteration						
			throughout, locally overprinted by weak Kfs associated with some						
			veins, and local weak spotty Bt. Moderate Qtz-Py+/-Cpy veining						
			throughout, ranging from hairline to ~7 mm width. Intersecting						
			conjugate veins at intervals of 0-20 degrees TCA. Rock also contains						
			minor disseminated Py and Cpy in groundmass.						
			194.6-200.5: Estimate 1% Py,trace to 0.1% Cpy.						
			200.5-202.1: Stronger Kfs alteration associated with stronger	200.5	202.1	2.0	0.5		stonger veining
			Qtz-Py-Cpy veining. Veins are somewhat diffuse, up to 10 mm wide						
			at shallow angles 10-20 degrees TCA. Cpy and Py form coarse						
			stringers and pods in veins up to 3 mm wide and several cm long.						
			Estimate 2% Py, 0.5% Cpy over interval.						
			202.1-203.6: Kfs alteration diminishes, and spotty Bt increases to	202.1	203.6	0.5	tr		Local Qtz-Py+/-Cpy veins and dissem sulfide
			moderate. Local Qtz-Py+/-Cpy veins and minor dissem sulfide in						
			groundmass of rock. Estimate 0.5% Py, trace Cpy over interval.						
			203.6-217.2: light grey Qtz monzonite to monzonite with locally	203.6	217.2	1.0	tr	tr	weak Qtz-Py+/-Cpy+/-Mo veining
			variable Qtz content. Moderately porphyritic, with weakly clay-						
			sericite-altered euhedral to subhedral Plag phenocrysts up to 7 mm.						
			Also Biotite phenocrysts to 6 mm.						
			Weak to moderate argillic alteration throughout, locally overprinted						
			by patchy to vein-controlled weak Kfs alteration. Weakly veined						
			throughout, comprising Qtz-Py+/-Cpy+/-Mo veins ranging from hairline						
			to 20 mm wide at angles of 20-60 degrees TCA. Local hairline to 2 mm						
			fracture-controlled Mo seams at shallow angles TCA (<20 degrees).						
			Rare sections of strong Qtz flooding, accompanied by minor Py, Cpy,						
			and Mo. Rock also includes trace disseminated sulfide in						
			groundmass. Estimate 1% Py, trace Cpy, and trace Mo over interval.						

Hole ID: 18-PC-126			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
			217.2-220.6: strong pervasive potassic alteration (Bt + Kfs) partially	217.2	220.6	1.0	tr		disseminated sulfide; local veins
			obscures primary mineralogy and textures. Minor disseminated fine						
			grained Py and Cpy throughout, plus occasional weak to very weak						
			Qtz-Kfs-Py+/-Cpy stockwork vein sets. Veins up to 5 mm wide at 10-80						
			degrees TCA. Estimate 1% Py, trace Cpy over interval. No Mo						
			observed.						
			220.6-222.7: Back into weakly argillic Plag- and Bt-phyric Qtz Monzonite	220.6	222.7	tr		tr	poorly mineralized
			to Monzonite as above. Weak to Mod clay-sericite alteration of Plag						
			phencrysts. Background alteration locally overprinted by diffuse						
			patchy zones of silicification, as well as weak to moderate patchy to						
			vein-controlled Kfs. Poorly mineralized to 222.7 m, comprising trace						
			Py and rare Cpy disseminated in groundmass of rock.						
			222.7-241.1: Increasing strength of sulfide mineralization. Alteration	222.7	241.1	1.0	0.5	tr	increasing sulfide content
			as above, including local patchy diffuse silicification. Moderate						
			disseminated Py and Cpy, with local rare Mo in groundmass of rock,						
			including local coarse Py and Cpy blobs up to 12 mm diameter.						
			Occasional diffuse, glassy Qtz-Py+/-Cpy+/-Mo veins up to 10 mm width						
			at angles of 0-40 degrees TCA. Rare hairline to 2 mm wide Mo seams						
			in some fractures. Wider glassy veins surrounded by Kfs alteration						
			haloes up to 7 mm wide. Rock also contains fine to medium grained						
			disseminated Py and Cpy in groundmass. Estimate 1% Py, 0.5% Cpy,						
			and trace Mo over interval.						
			241.1-242.9: pervasive Kfs alteration increases to moderate.	241.1	242.9	2.0		tr-0.1	dissem Py, Qtz-Py veins; Mo seams
			Moderate disseminated Py in groundmass of rock, as well as						
			occasional Qtz-Py veins and hairline Mo seams in fractures at						
			shallow angles TCA. Estimate 2% Py, trace-0.1% Mo over (ongoing)						
			interval.						
			242.9-246.2: Light grey, bleached Qtz Monz with moderate Clay	242.9	246.2	1.0	tr		sinuous Qtz-Py+/-Cpy veins
			alteration of Plag phenocrysts. Kfs alteration disappears. Local						
			sinuous Qtz-Py+/-Cpy veins up to 20 mm wide at angles of 10-20						
			degrees TCA. Minor Py on fractures. No Mo. Estimate 1% Py, trace						
			Cpy over interval.						
			246.2-249.2: Argillic alteration disappears, replaced by moderate	246.2	249.2	2.0	0.5		local weak stockworks, dissem sulfide
			background Bt and weak Si, locally overprinted by weak Kfs in haloes						
			around veins. Rock is dark grey to brownish. Local weak stockwork						
			development of Qtz-Py+/-Cpy veins. Rock also contains moderate						
			disseminated Py and Cpy in groundmass. Estimate 2% Py, 0.5% Cpy						
			over interval. No Mo.						

Hole ID: 18-PC-126			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
			249.2-255.7: Bt alteration disappears and rock has bleached	249.2	255.7	3.0	0.5	tr	wk-mod veining, local wk stockwork
			appearance. Moderate argillic alteration and weak pervasive Kfs						
			throughout. Weak to moderate veining throughout, with local weak						
			stockwork development. Veins comprise Qtz-Py+/-Cpy+/-Mo and						
			typically show narrow Kfs alteration haloes. Veins range from						
			hairline to 10 mm wide at angles of 10-70 degrees TCA. Moderate to						
			strong disseminated to patchy/blobby Py and Cpy in groundmass of						
			rock. Estimate 3% Py, 0.5% Cpy, trace Mo through interval.						
			Local strong patchy pistachio green sericite alt of phenocrysts.						
			255.7-273.6: patchy strong pervasive K-Si alteration obscures	255.7	273.6	3.0	0.5	tr	moderate veining
			original textures. Rock is pinkish grey except where K-Si is weaker						
			and original mineralogy is preserved. Rare Magnetite grains here						
			and there. Background argillic alteration in sections not affected by						
			overprinting K-Si. Moderate veining throughout, with local weak						
			stockwork development. Veins comprise Qtz-Py+/-Cpy+/-rare Mo.						
			Veins are somewhat sinuous, and range from 1-25 mm width at						
			angles of 10-40 degrees TCA. Abundant disseminated Py and Cpy in						
			groundmass of rock. Estimate 3% Py, 0.5% Cpy, trace Mo over interval.						
			Veins typically have narrow Kfs alteration envelopes.						
			273.6-276.7: strong pervasive K-Si disappears, replaced with	273.6	276.7	1.0	tr	tr	moderate veining and disseminated sulfide
			bleached argillic-altered rock with weak silcification. Moderate						
			Qtz-Py+/-Cpy+/-Mo veining and fracture fill. Weak disseminated						
			sulfide in groundmass of rock. Estimate 1% Py, trace Cpy, and trace						
			Mo over interval. Veins hairline to 15 mm wide, 0-40 degrees TCA.						
			276.7-288.8: K-Si alteration strengthens and overprints background	276.7	288.8	2.0	0.5	tr	moderate veining and disseminated sulfide
			Argillic alteration. Moderate veining throughout, with local moderate						
			stockwork development. Veins mostly less than 5 mm width at angles						
			of 20-60 degrees TCA. Veins comprise Qtz-Py+/-Cpy+/-rare Mo.						
			One vein at 282.7 at 60 degrees TCA is 25 mm wide and contains						
			~50% Py, 5% Cpy as lensoid massive sulfide patches within vein.						
			Rock also contains fine disseminated sulfide in groundmass.						
			Estimate 2% Py, trace-0.5% Cpy, and trace Mo over interval.						
			288.8-294.0: different phase of Qtz Monzonite - very strongly	288.8	294	3.0	0.5	tr	strong coarse dissem sulfide, weaker veining
			porphyritic ("crowded crystal porphyry"), with euhedral sericitized						
			and clay-altered Plag phenocrysts to 7 mm. Vein density decreases						
			significantly in this rock, though it contains comparatively stronger						
			disseminated mineralization comprising coarse blobs and patches of						
			Py+Cpy up to 10 mm wide. Local Qtz-Py-Mo+/-Cpy veins up to 15 mm						

Hole ID: 18-PC-126			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
			wide at angles of 20-60 degrees TCA, displaying moderate to strong						
			ribbon textures. Gradational upper boundary. Lower boundary						
			against a strong clay gouge at 45 degrees TCA. Immediate						
			hangingwall of gouge occupied by a 12-15 mm wide Qtz-Py-Mo vein at						
			45 degrees TCA. Estimate 3% Py, 0.5% Cpy, trace Mo over interval.						
			Weak to nil Si, weak to mod pervasive Kfs, and moderate Argillic						
			alteration throughout unit.						
			294.0-294.1: strong clay gouge at 45 degrees TCA.						
			294.1-312.3: Light grey, weakly porphyritic Qtz Monzonite (same as	294.1	312.3	3.0	0.5	tr	mod veining, local weak stkwk, wk dissem
			intvl 288.8-294): Weak to nil Argillic alteration; weak pervasive Kfs,						
			and moderate silcification throughout. Moderate Qtz-Py+/-Cpy veining						
			throughout, with local weak to moderate stockwork development.						
			Veins mostly <5 mm width at all angles TCA. Rare Mo observed in						
			some of the wider veins. Weak disseminated Py and trace Cpy						
			throughout groundmass of rock. Estimate 3% Py, 0.5% Cpy, trace Mo						
			over interval.						
			312.3-314.3: Crowded crystal porphyry as above, with local round	312.3	314.3	1.0	tr		local Qtz-Py-Cpy veins, rare coarse dissem
			Diorite blobs. Poorly mineralized overall, through contains						
			occasional Qtz-Py-Cpy veins and local coarse blobs of Py and/or Cpy.						
			Irregular upper boundary suggests magma intrusion						
			contemporaneous with other types of Qtz Monzonite. Gradational						
			lower boundary. Estimate 1% Py, trace Cpy over interval.						
			314.3-322.2: weakly to moderately porphyritic Qtz Monz.	314.3	322.2	1.0	tr	tr	fine dissem sulfide, rare veins
			Moderate pervasive Si and Kfs throughout partially obscures original						
			textures. Generally poorly mineralized - only trace dissem Py and Cpy						
			in groundmass of rock, and local Qtz-Py+/-Cpy+/-Kfs veins here and						
			there. In one instance, a 25 mm wide Qtz-Kfs-Py vein is crosscut by a						
			glassy Qtz-Py vein, suggesting early Kfs alteration followed by glassy						
			Qtz veining. At 319.8 m, a Qtz-Mo vein is offset by a Qtz-Py-Cpy-Kfs						
			vein, indicating at least some Qtz-Py-Cpy veining following a Mo						
			event. Rock also contains fine disseminated sulfide in groundmass.						
			Estimate 1% Py, trace Cpy, trace Mo over interval.						
			322.2-329.2: Moderate to strong pervasive Kfs-Si alteration gives	322.2	329.2	3.0	0.5	tr	moderate Qtz-Py+/-Cpy and Qtz-Py-Cpy+/-Mo
			rock a buff to tan colour. Local spotty Bt alteration. Weak Kfs haloes						veining; coarse dissem sulfide
			around some veins overprint background Kfs-Si. Weak to moderate						
			veining throughout, comprising thin (<5 mm) Qtz-Py+/-Cpy veins at						
			20-80 degrees TCA, and wider, sinuous Qtz-Py-Cpy+/-Mo veins up to						
			40+ mm wide at shallow angles TCA. Sulfides locally form coarse						

Hole ID: 18-PC-126			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
			patches and seams in both types of veins. Groundmass of rock also						
			contains coarse sulfide blobs up to 5 mm diameter. Estimate 3% Py,						
			0.5-1% Cpy, and trace Mo over interval.						
			329.2-333.0: moderate to strong stockwork veining throughout,	329.2	333	3.0	0.5	0.1	mod to strong stkwk veining; Qtz-Py-Cpy and
			accompanied by strong pervasive Kfs-Si alteration. Two species of						Qtz-Py-Mo+/-Cpy; fg dissem sulfide
			veins - Qtz-Py+/-Cpy and Qtz-Py-Mo+/-Cpy. Mo-bearing veins locally						
			crosscut Mo-absent veins. Py+Cpy locally form hairline seams along						
			fractures. Veins at all angles TCA and range in width from hairline						
			to ~7 mm. Fine-grained disseminated Py and rare Cpy in groundmass						
			of rock. Estimate 3% Py, 0.5% Cpy, and 0.1% Mo over interval.						
			333.0-336.3: strongly K-Si altered fine grained rock - may be a xenolith	333	336.3	3.0	tr	0.1	fine Qtz-Py+/-Cpy veins; wider Qtz-Py-Mo veins
			of volcanics within Qtz monzonite? Shot through with fine						at shallow angles TCA; fg dissem sulfide
			Qtz-Py+/-Cpy veins and occasional wider Qtz-Py-Mo veins, with weak						
			to moderate stockwork development throughout. At 333.6 m, an						
			8 mm-wide Qtz-Py-Mo ribbon vein is truncated and offset by a 1-2 mm						
			wide barren milky Qtz vein. At 336.1 m, a Qtz-Py vein is crosscut by a						
			Qtz-Mo vein. Mo-bearing veins tend to be wider (up to 10 mm) and at						
			shallower angles TCA than Qtz-Py+/-Cpy veins (hairline to 5 mm wide).						
			Rock also contains fine-grained disseminated sulfide in groundmass.						
			Estimate 3% Py, trace Cpy, and 0.1% Mo over interval.						
			336.3-345.2: Back into weakly porphyritic Qtz monzonite. Buff to tan	336.3	345.2	2.0	0.1	tr	weak to mod veining; earlier Qtz-Py-Cpy; later
			colour due to strong pervasive Kfs-Si alteration throughout. Weak to						Qtz-Mo veins at shallow angles TCA
			moderate veining throughout, with local moderate stockwork						
			development over 0.4-1 m intervals. Veins mostly comprise fine						
			Qtz-Py+/-Cpy, with occasional wider glassy Qtz-Py-Mo ribbon veins up						
			to 10 mm wide. Qtz-Py+/-Cpy veins at all angles TCA; Mo-bearing veins						
			generally around 20 degrees TCA. Veining dies out somewhat around						
			345.2 m. Rock also contains trace disseminated Py and Cpy in						
			groundmass. Estimate 2% Py, trace to 0.1% Cpy, and trace Mo over						
			interval.						
			345.2-349.6: Veining weakens, though rock retains strong pervasive	345.2	349.6	1.5	tr	tr	weak veining, local weak stockworks; rare
			Kfs-Si alteration. Local Qtz-Py-Cpy and Qtz-Py+/-Cpy+/-Mo veins, with						late? Qtz-Ser-Py veins
			local weak stockwork development over intervals of 50-70 cm.						
			Sulfides locally form coarse streaks and patches within wider veins.						
			At 348.3, rock contains a 35 mm-wide vuggy Qtz-Ser-Py ribbon vein at						
			80 degrees TCA - evidence of multiple fluid pulses and open-space						
			filling, probably in later stages of mineralization.						
			Rock also contains fine grained disseminated sulfide.						

Hole ID: 18-PC-126			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
			Estimate 1-2% Py, trace Cpy, and trace Mo over interval.						
			349.6-351.6: fine sulfide-bearing veins in bleached Qtz Monzonite	349.6	351.6	1.0	tr		fine Qtz-Py+/-Cpy veining, fine dissem sulfide
			have strong Bt haloes 2-4 mm wide. Kfs-Si disappears and is replaced						
			with weak to moderate argillic alteration. Fairly uniform						
			veining at 20-30 degrees TCA. Disseminated Py and Cpy in						
			groundmass of rock. Estimate 1% Py, trace Cpy over interval.						
			351.6-359.2: Strong pervasive Si-K alteration overprints background	351.6	359.2	1.0	0.5	tr	weak to mod veining; rare Mo; local coarse
			Bt. Weakly brecciated (or proto-brecciated) throughout, with						patchy dissem sulfide; weak breccia
			moderate Qtz-Py+/-Cpy stockwork development. Fractures have						
			narrow, but strong Kfs alteration envelopes. Weak to moderate						
			Qtz-Py+/-Cpy+/-Ser veining throughout, with very rare Mo-bearing						
			veins.Disseminated sulfide, including local coarse patchy Cpy.						
			Rock is fine grained and may be a volcanic xenolith within Qtz Monz.						
			Estimate 1% Py, 0.5% Cpy, and trace Mo over interval.						
			359.2-367.4: Light grey to white Qtz Monzonite. Moderately	359.2	367.4	3.0	0.5	0.1	moderate veining; local fine stockwork
			porphyritic with subhedral Plag phenocrysts to ~4 mm. Weak argillic						
			alteration throughout, locally overprinted by weak to moderate						
			patchy to pervasive Kfs+Si, as well as local weak Kfs alteration						
			haloes around some veins. Moderate veining throughout, with local						
			weak fine stockwork development. Thin veins and fine stockworks						
			composed of Qtz-Py+/-Cpy veins ranging from hairline to 3 mm width.						
			Cpy bearing veins are crosscut by grey, glassy Qtz-Py-Mo veins at						
			shallow angles TCA (0-20 degrees TCA). Both types of veins are						
			crosscut by milky Qtz-Py veins barren of Cpy. Rock also contains weak						
			to moderate fine disseminated sulfide in groundmass, as well as						
			local coarser discontinuous Py+/-Cpy seams along fractures.						
			Estimate 3% Py, 0.5% Cpy, 0.1% Mo over interval.						
			367.4-372.3: strong pervasive Kfs-Si alteration partially obscures	367.4	372.3	4.0	1.0	0.05	weak veining and local stockwork development
			original textures and overprints weak background Bt alteration.						Qtz-Py-Mo crosscuts Qtz-Py-Cpy
			Interval may also include occasional narrow xenoliths of fine-grained						
			volcanic rock. Weak veining throughout, with local weak stockwork						
			development. Crosscutting relationships indicate the following						
			sequence - 1. Early Qtz-Py+/-Cpy veining and weak stockwork						
			development, locally accompanied by Hem-Cpy veins. Hem rare, and						
			seems to be cut off by Qtz-Py+/-Cpy; 2. Qtz-Py-Mo+/-Cpy veining at low						
			angles TCA crosscuts Qtz-Py+/-Cpy; 3. Late thin Qtz-Py veining and						
			fracture fill crosscuts both types of veins. Strong disseminated Py						
			and Cpy in groundmass of rock may accompany earlier Qtz-Py+/-Cpy						

Hole ID: 18-PC-126			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
			veining. Estimate 4% Py, 1% Cpy, trace to 0.1% Mo over interval.						
			Interval also contains late(?) coarse massive Py+/-Qtz seams up to 9						
			mm wide that crosscut earlier veining. No Cpy in these veins, may						
			be post-mineralization.						
			372.3-379.0: strong pervasive K-Si weakens, replaced with weak	372.3	379	5.0	2.0	0.5	strong veining and stockwork; coarse sulfide
			Argillic alteration and local moderate to strong patchy to pervasive						core broken and gougy
			Sericite in whitish bleached Qtz Monz. Strong veining and stockwork						
			development throughout, including a network of fine glassy						
			Qtz-Py+/-Cpy veins and moderate stockworks (all angles TCA) which						
			are crosscut by strong, low-angle (0-20 degrees TCA) Qtz-Py-Mo-Cpy						
			veins ranging in width from 5 mm to 35+ mm. Mo veins run						
			subparallel to core axis. Both vein types crosscut by late gougy						
			fractures at low angles TCA. Rock in area of strongest Mo veining						
			from 374.6-377.5 is strongly broken and somewhat gougy (some core						
			loss in this mineralized interval). Mo-bearing veins locally contain						
			coarse patches of Py and/or Cpy >10 mm diameter. Rock also						
			contains weak to moderate fine disseminated sulfide in groundmass.						
			Estimate 5% Py, 2% Cpy, 0.5% Mo over interval.						
			379.0-381.7: Continuation of above mineralized zone, with the	379	381.7	4.0	0.5	0.1	mineralization accompanied by strong Kfs
			addition of strong salmon-coloured vuggy Qtz-Kfs veins along and						veining
			across Qtz-Py-Cpy-Mo veins subparallel to core axis. Mo veins locally						
			have diffuse vein walls. Unclear whether Kfs veins are						
			contemporaneous with Mo veins, or if they slightly post-date them.						
			In some cases, the Kfs veins are barren and crosscut Mo veins, while						
			other Kfs veins are vuggy and contain coarse-grained Py, Cpy, and Mo.						
			These sulfide bearing Kfs veins may have scavenged sulfide from						
			local sources, rather than being a primary source of mineralization.						
			Rest of rock contains moderate to strong pervasive Sericite						
			alteration and local weak silicification. Also contains a network of						
			fine glassy Qtz-Py-Cpy+/-Mo veins as weak to moderate stockworks,						
			and fine disseminated sulfide in groundmass. Estimate 4% Py, 0.5%						
			Cpy, and 0.1% Mo over interval.						
			381.7-386.9: moderate to strong Si and weak Ser alteration; Ser	381.7	386.9	3.0	0.75	0.05	mod to str Q-Cpy veining and stkwks XC by Qmo
			replaces Plag phenocrysts. Locally overprinted by weak to moderate						
			patchy to vein-controlled Kfs. Alteration overprints background Bt.						
			Moderate to strong veining and local moderate stockworks of glassy						
			fine Qtz-Py-Cpy veins and Py-Cpy fracture fill, crosscut by hairline to						
			2 mm sinuous Qtz-Py-Mo veins and fracture fill at low angles TCA.						

Hole ID: 18-PC-126			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
			Moderate to strong disseminated sulfide, locally approaching						
			1% Cpy in groundmass of rock. Estimate 3% Py, 0.5-1% Cpy, and						
			trace to 0.1% Mo over interval.						
			386.9-397.3: Moderate to strong pervasive Si-Kfs alteration	386.9	397.3	3.0	0.75	0.05	strong stkwk veining, local coarse sulfide
			overprints weak to moderate background Sericite and argillic						
			alteration. Strong Qtz-Py+/-Cpy+/-Mo stockwork veining throughout.						
			Areas of stronger veining have comparatively stronger Kfs alteration.						
			Cpy locally forms coarse patches within wider veins, Cpy patches up						
			to 75 x 25 mm dimensions where edge of drill core cut obliquely						
			through a vein (e.g. at 387.7 m). Interval also contains late(?) grungy						
			Qtz-Bt-Py veins, as well as occasional Qtz-Ser-Py veins at high angles						
			TCA, both of which crosscut earlier stockworks. Rock contains fine						
			disseminated Py and Cpy in groundmass. Estimate 3% Py, 0.5% Cpy,						
			and trace to 0.1% Mo over interval. Strong stockworks peter out						
			around 397.3 m, though base of interval contains a 40 mm wide						
			Qtz-Py+/-Cpy ribbon vein at 25 degrees TCA, just below a 4 cm gougy						
			breccia at 388.5-388.6 at 30 degrees TCA.						
			397.3-404.47 EOH: Kfs-Si alteration weakens to moderate. Overprints	397.3	404.47	2.0	tr	tr	weak to mod veining, local weak stockwork
			background Argillic alteration. Weak to moderate Qtz-Py+/-Cpy+/-Mo						
			veining throughout, with local weak stockwork development over						
			intervals of 20-50 cm. Stockworks accompanied by stronger Kfs-Si						
			alteration. Local late QSP veins crosscut earlier vein types. Weak,						
			fine-grained disseminated Py, Mo, and rare Cpy in groundmass of						
			rock. Estimate 2% Py, trace Cpy, and trace Mo over interval.						
			EOH						

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
23.5	26.5	w	w			m	K haloes; clay altered Plag phenoxts	23.5	26.5	QPCM vns	0-40	mod	mod to strong stockwork veining
26.50	29.60					w	patchy to pervasive K; no clay or Ser						
29.60	29.90	w				m	Kfs haloes around local Qtz veins						
29.90	32.60	w		m		w	weak argillic alt overprinted by Kfs and Bt	30.70	32.80	QPCM vns	30-45	mod	stockwork Qtz-Sulfide veining
32.60	35.60	w		s		w	strong spotty Bt overprints argillic	32.80	35.60	QPCM vns	30-80	wk	weak Qtz-sulfide veining
35.60	42.40	w	w	m		w	local Clay-Ser alt of phenoxts; patchy K;	35.60	35.70	CT	30		wavy upper contact of Qtz monz
							mod pervasive 2nd Bt?						

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
42.40	47.90			s			strong Bt alt; no Kfs						
47.90	50.60	w		m		w	mod to strong Bt and weak to mod Kfs	47.90	50.60	QPC vns	10-70	w	local weak Qtz-Sulfide veining,minor Hem
							overprint earlier weak argillic alt						
50.60	53.00			w		m	weak to mod Kfs and Bt alt						

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
53.00	55.10	s				w	clay altered Plag and local patchy Kfs	53.00	55.10	QPC vns	45	w	local Qtz-Sulfide veins
								55.10	55.50	Milky QV	10		barren Qtz vein at litho boundary
								55.50	55.60	GOUGE	70		10 cm sandy gouge
55.10	60.50	w	w	m		m	Argillic alt in tuff overprinted by Bt, Kfs						
							QM dykes bkgr Bt alt overprinted by Kfs						
							local Ser alt around veins						
								55.60	60.50	QPC vns	20-70	w	Qtz-Sulfide veining
60.50	60.60	vs					clay gouge	60.50	60.60	GOUGE	70	vs	strong clay gouge
60.60	68.70			s		s	strong Kfs and Bt alt around stockwork	60.60	68.70	QPCM vns	all	m	stockwork veining

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
68.70	70.50		w	s			Kfs out; Bt Ser in	68.70	70.50	QPC vns	10-30	w	veining at shallow angles TCA
70.50	83.50		w	s		s	strong Kfs Bt alt, local Ser	70.50	75.50	QPC vns	all	m	stockwork veining
								75.50	76.10	Gyp Vn	20	s	late Gypsum breccia vein
								76.10	83.50	QPCM vns	all	m	stockwork veining
83.50	83.70						strong Albitization at contact	83.50	99.30	QPC vns	all	m	weak stockwork veining
83.70	99.30			m	m	m	moderate Bt, Si, Kfs						
90.60	91.40				s	s	strong Si, K around heavily dissem sulfide						

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
91.40	96.10		w		w		bleached Q Monz, weak Si and Ser	91.40	91.50	CT	65	s	sharp upper monzonite contact
								96.00	96.10	CT	45	w	fuzzy lower monzonite contact
96.10	99.30		s	s		s	Kfs Ser overprint Bt						
99.30	104.50		s	m		s	Kfs Ser overprint Bt	99.30	104.50	QPC vns	10-80	m	weak to mod veining, local stockwork
								99.30	104.50	QPMC vns	20-40	m	crosscutting Qtz-Py-Mo+/-Cpy veins
								104.40	104.50	SHR	50	m	3 cm wide shear at contact

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
104.50	107.30		m	s		m	Kfs Ser overprint Bt	104.50	107.30	QPC vns	all	w	weak stockwork veining
								107.20	107.30	CT	75	m	fairly sharp lower monzonite contact
107.30	108.40		s	m	m	s	moderate to strong Kfs, Ser overprints	107.3	108.4	QPMC vns	20-80	s	strong veining, variable angles TCA
							background Bt and Si						
108.4	120		m	m	s	s	mod to strong Kfs Si with local patchy Ser						

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
								119.05	119.12	QKP vn	60	s	40 mm wide Qtz-Sulfide ribbon vein
120	143.5	w		m	m	m	weak clay alt of Plag; background Bt; K-Si	120	133.9	QPC vns	20-80	m	moderate veining
							overprints bkgr	120	133.9	Milky QV	20-80	w	local late milky Qtz vns
								133.9	137	QPCK vns	0-30		Qtz-Py-Cpy-Kfs+/-Fluorite+/-Gypsum veins
													subparallel TCA

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
								137	143.5	QPC vns	20	m	one angle of conjugate vein set
								137	143.5	QPM vns	40-60	m	other angles of conjugate vein set
143.5	148.6	w		w	w	s	strong Kfs alt around Mo-bearing veins	143.5	148.6	QPC vns	40-60	m	glassy Qtz veins
								143.5	148.6	QPM vns	0-20	m	Mo-bearing veins crosscut QPC vns
148.6	154.4		s		s	s	may be different composition of intrusive	148.6	148.7	CT	30	w	irregular upper contact
							rock - Monzonite? Strong K-Si-Ser alt; strong	148.6	154.4	QPM vns	10-20	s	Mo veins at shallow angles TCA
							Mo veining. No Bt alteration						

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
154.4	161.1		m	s	m	m	Bt reappears in tuff; overprinted by Si-Ser	154.4	161.1	DYK	30	w	local thin Q Monz dykes at 30 degrees TCA
							Si-Ser overprinted by Kfs	154.4	161.1	QPCM vns	10-70	m	Qtz-Sulfide veining
161.1	162.75		w	w	m	s	background Bt overprinted by Si						
							Si overprinted by Kfs; increasing K strength						
162.75	166				s	s	strong to very strong K-Si alt overprints all	162.75	166	QPC vns	0-50	w	glassy Qtz-Sulfide veins
							earlier alteration minerals						
166	168				s	m	Kfs weakens	166	168	QKP vns	30	w	

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
168	175		w		s		K mostly out except around veins	168	173.2	QPC vns	30	w	conjugate vein set
								173.2	175	QPC vns	20-50	w	weak stockwork veining
175	181.5			w		w	weak Kfs and Bt alteration						
181.5	186		w	m			Background Bt; sericitized Plag						
186	189.2	s	m			w	colour change; gougy; Kfs ovp Clay-Ser	186	186.1	CT	80	s	sharp upper contact
								186.5	188.8	BX	20-30	s	gougy breccias
								188.5	188.8	GOUGE	50	s	main gouge zone
189.2	190.4	w	m			m	Qtz-Py-Mo vein swarm	189.2	190.4	QPM vns	20	s	vein swarm, uniform angles TCA
190.4	194.1		w			m	weak breccia; stronger Kfs alteration	190.4	104	BX		w	weak to mod brecciated rock

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
194.1	194.6	vs					gougy shear; strong clay						
								194	194.6	GOUGE	55	s	strong gougy shear at base of monzonite
194.6	200.5	w		w		w	weak argillic ovp by weak K and Bt	194.6	200.5	QPC vns	0-20	w	conjugate veins
200.5	202.1	w		w		m	Kfs alteration increases	200.5	203.6	QPC vns	10-20	m	moderate veining
202.1	203.6	w		m		w	Kfs decreases, Bt increases						
203.6	217.2	w				w	Kfs around veins overprints argillic	203.6	217.2	QPCM vns	20-60	w	weak veining

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
217.2	220.6			s		s	strong Kfs and Bt alteration	217.2	220.6	QPC vns	10-80	w	weak veining, local weak stockworks
220.6	241.1	w			m	m	Kfs and Si overprint argillic						
								222.7	241.1	QPCM vns	0-40	m	moderate veining
241.1	242.9	w				m	increasing Kfs alteration	241.1	242.9	Mo seams	0-20	w	fracture controlled thin Mo seams
242.9	246.2	w					Kfs out; weak clay alt of phenocrysts	242.9	246.2	QPC vns	10-20	m	sinuous Qtz-Py+/-Cpy veins
246.2	249.2			m	w	w	Kfs overprints background Bt, Si						

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
249.2	255.7	m	s			w	mod argillic and weak pervasive Kfs	249.2	255.7	QPCM vns	10-70	m	weak to mod veining, local weak stockworks
							locally strong pistachio green Ser alt patches						
255.7	273.6	w		w	s	s	patchy strong pervasive K-Si	255.7	273.6	QPCM vns	10-40	m	moderate veining, local weak stockwork
							rare Magnetite associated with Biotite						
273.6	276.7	m			w		bleached argillic alt, weak Si	273.6	276.7	QPCM vns	0-40	m	moderate veining
276.7	288.8	w			m	m	strengthening K-Si overprints argillic	276.7	288.8	QPCM vns	20-60	m	moderate veining
288.8	294	m	m				strong clay-ser alt of phenocrysts	288.8	294	QPMC vns	20-60	m	wider veins with ribbon textures

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
294	294.1	vs					clay gouge	294	294.1	GOUGE	45	s	strong clay gouge
294.1	312.3				m	w	weak pervasive K-Si alt	294.1	312.3	QPC vns	all	m	moderate veining, all angles TCA
312.3	314.3	m	m				clay-ser alt of Plag phenocrysts						
314.3	322.2				m	m	moderate pervasive K-Si						
322.2	329.2				s	s	mod to strong K-Si alt	322.2	329.2	QPC vns	20-80	m	moderate Qtz-Py+/-Cpy and Qtz-Py-Cpy+/-Mo
								322.2	329.2	QPCM vns	0-20	w	veining; Mo veins shallow angle TCA

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
329.2	333				s	s	strong pervasive K-Si alt	329.2	333	QPCM vns	all	m	moderate to strong stockwork veining
333	336.3				s	s	fine grained Kfs-Si altered rock - volc?	333	336.3	QPC vns	all	w	weak to mod stockwork veining; Mo veins at
								333	336.3	QPM vns	0-20	w	shallow angles TCA
336.3	345.2				s	s	strong buff coloured Si-K alt	336.3	345.2	QPC vns	all	m	moderate veining, local stockwork; Mo veins
								336.3	345.2	QPM vns	0-20	m	shallow angle TCA
345.2	349.6				s	s	strong Si-K alt	345.2	349.6	QPCM vns	all	w	weak veining, local weak stockworks

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
349.6	351.6	w	w	m			Si-K alt out; weak argillic alt; Qtz-Py veins	349.6	351.6	QPC vns	20-30	m	moderate Qtz-Py veining with strong Bt haloes
							have narrow Bt haloes						
351.6	359.2				s	s	strong pervasive Si-K alt; strong K	351.6	359.2	QPC vns	all	w	weak breccia with moderate veining
							envelopes on fractures; weak breccia						
359.2	367.4		w		w	w	argillic overprinted by Kfs Si; weak	359.2	367.4	QPC vns	all	m	mod Qtz-Py-Cpy veining, local stkwk
							Kfs haloes around veins	359.2	367.4	QPM vns	20	w	Qmo veins crosscut Qcpy
367.4	372.3			w	s	s	strong Kfs-Si overprints background Bt	367.4	372.3	QPC vns	all	w	weak Qtz-Py-Cpy veining
								367.4	372.3	QPM vns	20	w	Qmo veins crosscut Qcpy

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
372.3	379	w	m				weak Argillic, mod to strong Ser in bleached	372.3	379	QPC vns	0-20	s	strong QPC veining and stockwork
							Qtz Monzonite	372.3	379	QPMC vns	0-20	m	Qmo veins crosscut Qcpy stockworks
379	381.7		m		w	s	strong background Ser, ovp by Kfs and Si	379	381.7	QPMC vns	0-20	s	long Qtz-Mo veins running subparallel TCA
								379	381.7	QK vns	0-20	s	Qtz-K Xcut QPMC vns, may be contemporaneous
													or post-date mineralization?
381.7	386.9		w	w	m	m	mod-str Si, wk Ser, ovp by vein Kfs	381.7	386.9	QPC vns	all	m	Qtz-Py-Cpy veining and stockwork
								381.7	386.9	Qmo	0-20	m	Qtz-Mo veins and frac fill Xcut Qtz-Py-Cpy

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Sericite	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
386.9	397.3	w	w		s	s	mod-str Kfs-Si ovp Ser-Arg	386.9	397.3	QPCM vns	all	s	strong stockwork veining
								388.5	388.6	GOUGE	30	s	gougy breccia
								388.6	388.7	QPC vn	40	s	40 mm wide Qtz-Py-Cpy ribbon vein below gouge
397.3	404.47	w			m	m	mod pervasive K-Si ovp Arg	397.3	404.47	QPCM vns	all	w	weak to mod veining, local weak stockworks

Hole ID: 18-PC-126		Geotechnical Data						
From	To	Length	Recovery	%	RQD	%	Magnetics	Comments
22.1	23.47	1.37	na	#####		0		Overburden
23.47	26.52	3.05	2.9	95.08	0.4	13.11	0.625	All mag readings taken at depth marker block
26.52	29.57	3.05	3.05	100	0	0	0.482	
29.57	32.61	3.04	3.05	100.3	1.95	64.14	1.922	
32.61	35.66	3.05	3.05	100	0.82	26.89	0.165	
35.66	38.71	3.05	3.05	100	0	0	0.108	
38.71	41.76	3.05	2.9	95.08	0	0	0.02	
41.76	44.81	3.05	3	98.36	0	0	0.031	
44.81	47.85	3.04	3.05	100.3	0	0	0.547	
47.85	50.9	3.05	3.05	100	2.32	76.07	0.42	
50.9	53.95	3.05	2.92	95.74	1.28	41.97	0.044	
53.95	57	3.05	3.05	100	1.63	53.44	0.303	
57	60.05	3.05	3.05	100	2.45	80.33	0.225	
60.05	63.09	3.04	3.05	100.3	1.48	48.68	0.046	
63.09	66.14	3.05	2.6	85.25	0.47	15.41	0.042	loss at 64-66
66.14	69.19	3.05	3	98.36	0.6	19.67	0.29	
69.19	72.24	3.05	3.05	100	1.82	59.67	0.22	
72.24	75.29	3.05	2.9	95.08	0.46	15.08	0.024	
75.29	78.33	3.04	3	98.68	0.9	29.61	0.082	
78.33	81.38	3.05	3.05	100	1.7	55.74	0.033	
81.38	84.43	3.05	3	98.36	2.1	68.85	0.039	
84.43	87.48	3.05	3.04	99.67	2.76	90.49	0.027	
87.48	90.53	3.05	3.05	100	3.05	100	0.307	
90.53	93.58	3.05	2.9	95.08	1.74	57.05	0.106	
93.58	96.63	3.05	3	98.36	1	32.79	0.024	
96.63	99.68	3.05	3.05	100	2.74	89.84	0.034	
99.68	102.73	3.05	3.02	99.02	1.1	36.07	0.412	
102.73	105.78	3.05	3	98.36	0.5	16.39	0.022	
105.78	108.83	3.05	3	98.36	0.83	27.21	0.477	
108.83	111.88	3.05	2.95	96.72	1.6	52.46	0.277	
111.88	114.93	3.05	2.95	96.72	0.56	18.36	1.555	
114.93	117.98	3.05	2.8	91.8	0.58	19.02	0.412	
117.98	121.03	3.05	3	98.36	0.8	26.23	0.396	
121.03	124.08	3.05	3	98.36	0.3	9.836	4.933	
124.08	127.13	3.05	2.95	96.72	0.28	9.18	0.241	
127.13	130.18	3.05	3.05	100	0.86	28.2	1.02	
130.18	133.23	3.05	2.95	96.72	3	98.36	2.08	
133.23	136.28	3.05	3	98.36	2.93	96.07	0.433	
136.28	139.29	3.01	3.05	101.3	3.05	101.3	2.175	
139.29	142.34	3.05	3.05	100	2.43	79.67	3.096	
142.34	145.39	3.05	3.05	100	2.96	97.05	0.474	
145.39	148.44	3.05	2.95	96.72	2.53	82.95	0.084	
148.44	151.49	3.05	3	98.36	1.88	61.64	0.062	

151.49	154.53	3.04	3.05	100.3	2.66	87.5	0.105	
154.53	157.58	3.05	3.05	100	2.65	86.89	0.031	
157.58	160.63	3.05	3.05	100	3.05	100	0.776	
160.63	163.68	3.05	2.9	95.08	1.05	34.43	0.141	
163.68	166.73	3.05	2.95	96.72	1.71	56.07	0.609	
166.73	169.77	3.04	3.05	100.3	2.34	76.97	0.425	
169.77	172.82	3.05	3	98.36	1.5	49.18	0.338	
172.82	175.87	3.05	3.05	100	2	65.57	0.335	
175.87	178.92	3.05	2.8	91.8	1.22	40	0.152	loss 177.5-178
178.92	181.97	3.05	3.05	100	2.36	77.38	0.345	
181.97	185.01	3.04	3.05	100.3	2.65	87.17	0.277	
185.01	188.06	3.05	2.7	88.52	1.28	41.97	0.36	loss 187.5-188
188.06	191.11	3.05	3	98.36	1.4	45.9	0.456	
191.11	194.16	3.05	2.9	95.08	1.75	57.38	0.286	
194.16	197.21	3.05	2.9	95.08	2.1	68.85	0.252	
197.21	200.25	3.04	3	98.68	2.7	88.82	0.248	
200.25	203.3	3.05	3.05	100	2.48	81.31	0.838	
203.3	206.35	3.05	2.86	93.77	2.61	85.57	0.658	
206.35	209.4	3.05	3.05	100	2.76	90.49	0.675	
209.4	212.45	3.05	3.05	100	2.68	87.87	0.498	
212.45	215.49	3.04	3	98.68	2.73	89.8	0.513	
215.49	218.54	3.05	3.05	100	2.65	86.89	1.688	
218.54	221.59	3.05	3	98.36	2.8	91.8	0.326	
221.59	224.64	3.05	2.83	92.79	2.5	81.97	0.352	
224.64	227.69	3.05	3.05	100	2.85	93.44	0.376	
227.69	230.73	3.04	3.05	100.3	2.75	90.46	0.818	
230.73	233.78	3.05	3	98.36	2.7	88.52	0.27	
233.78	236.83	3.05	3.05	100	2.88	94.43	0.313	
236.83	239.88	3.05	3.05	100	2.9	95.08	0.412	
239.88	242.93	3.05	3	98.36	2.26	74.1	0.519	
242.93	245.97	3.04	2.95	97.04	2.78	91.45	0.313	
245.97	249.02	3.05	3	98.36	2.22	72.79	0.917	
249.02	252.07	3.05	3.05	100	2.55	83.61	0.191	
252.07	255.12	3.05	3	98.36	2.75	90.16	0.07	
255.12	258.17	3.05	3.05	100	2.71	88.85	4.973	
258.17	261.21	3.04	3	98.68	2.15	70.72	8.367	
261.21	264.26	3.05	2.75	90.16	2.45	80.33	0.563	core loss?
264.26	267.31	3.05	3.05	100	3.05	100	0.535	
267.31	270.36	3.05	2.95	96.72	2.49	81.64	0.437	
270.36	273.41	3.05	3.05	100	2.6	85.25	0.06	
273.41	276.45	3.04	3.05	100.3	2.75	90.46	0.125	
276.45	279.5	3.05	3.05	100	2.8	91.8	0.096	
279.5	282.55	3.05	3.05	100	2.88	94.43	0.151	
282.55	285.6	3.05	3.05	100	2.9	95.08	0.302	
285.6	288.65	3.05	3.03	99.34	2.85	93.44	0.18	
288.65	291.69	3.04	3	98.68	2.6	85.53	2.965	
291.69	294.74	3.05	2.95	96.72	2.85	93.44	0.261	

294.74	297.79	3.05	3.05	100	2.84	93.11	0.117	
297.79	300.84	3.05	2.9	95.08	2.64	86.56	0.319	
300.84	303.89	3.05	3.05	100	2.45	80.33	0.315	
303.89	306.93	3.04	3.05	100.3	2.6	85.53	0.146	
306.93	309.98	3.05	3.05	100	2.8	91.8	0.133	
309.98	313.03	3.05	3.05	100	2.47	80.98	10.59	
313.03	316.08	3.05	3	98.36	2.88	94.43	0.463	
316.08	319.13	3.05	3.05	100	2.23	73.11	0.48	
319.13	322.17	3.04	2.95	97.04	2.35	77.3	0.422	
322.17	325.22	3.05	3.05	100	2.45	80.33	0.503	
325.22	328.27	3.05	2.95	96.72	2.7	88.52	0.355	
328.27	331.32	3.05	2.9	95.08	2.7	88.52	0.487	
331.32	334.37	3.05	3	98.36	2.75	90.16	0.315	
334.37	337.41	3.04	2.85	93.75	2.6	85.53	0.214	minor loss at start of run
337.41	340.46	3.05	3.05	100	2.93	96.07	1.762	
340.46	343.51	3.05	3.05	100	3	98.36	0.108	
343.51	346.56	3.05	3.05	100	3	98.36	0.096	
346.56	349.61	3.05	3.05	100	2.75	90.16	0.316	
349.61	352.65	3.04	3	98.68	2.92	96.05	0.44	
352.65	355.7	3.05	3.05	100	2.89	94.75	0.388	
355.7	358.75	3.05	3.05	100	2.75	90.16	0.297	
358.75	361.8	3.05	3.05	100	2.62	85.9	0.289	
361.8	364.85	3.05	3	98.36	2.36	77.38	0.319	
364.85	367.89	3.04	3	98.68	2.54	83.55	0.107	
367.89	370.94	3.05	2.94	96.39	2.74	89.84	0.567	
370.94	373.99	3.05	2.95	96.72	1.91	62.62	0.109	
373.99	377.04	3.05	2.5	81.97	1.64	53.77	0.349	loss 371.5-373
377.04	380.09	3.05	3.05	100	3.05	100	1.207	
380.09	383.13	3.04	2.97	97.7	2.85	93.75	0.206	
383.13	386.18	3.05	2.9	95.08	2.54	83.28	0.934	
386.18	389.23	3.05	3.05	100	2.31	75.74	0.275	
389.23	392.28	3.05	3.05	100	2.89	94.75	1.137	
392.28	395.33	3.05	3.05	100	2.8	91.8	0.128	
395.33	398.38	3.05	3	98.36	2.66	87.21	0.05	
398.38	401.42	3.04	2.9	95.39	2.06	67.76	0.106	
401.42	404.47	3.05	3.05	100	2.23	73.11	0.11	EOH at 404.47

Hole ID: 18-PC-126	Assay Data							
Sample	Interval (m)		Sample	Type	Cu	Mo	Au	Ag
Number	From	To	Length	Std/B/Dup	%	%	g/t	g/t
96351	23.50	26.00	2.50		0.374	0.00626	0.105	0.67
96352	26.00	28.00	2.00		0.331	0.0154	0.109	0.63
96353	28.00	29.90	1.90		0.345	0.00543	0.105	0.65
96354	29.90	32.90	3.00		0.444	0.0203	0.132	1.04
96355	32.90	35.60	2.70		0.342	0.01005	0.105	0.66
96356	35.60	38.00	2.40		0.43	0.01835	0.136	0.89
96357	38.00	41.00	3.00		0.437	0.01865	0.133	0.85
96358	41.00	42.40	1.40		0.397	0.01815	0.129	0.64
96359	42.40	45.00	2.60		0.43	0.01225	0.137	1.05
96360				STD CDN-CM-8	0.355	0.0172	0.909	3.63
96361	45.00	47.90	2.90		0.48	0.00981	0.16	0.91
96362	47.90	50.60	2.70		0.51	0.00594	0.156	1.02
96363	50.60	53.00	2.40		0.454	0.00857	0.162	1.87
96364	53.00	55.10	2.10		0.286	0.00442	0.07	1.42
96365	55.10	58.10	3.00		0.37	0.0202	0.112	29.8
96366	58.10	61.10	3.00		0.34	0.0143	0.089	2.12
96367	61.10	63.10	2.00		0.439	0.0199	0.121	2.79
96368	63.10	66.10	3.00		0.319	0.01425	0.091	5.66
96369	66.10	68.70	2.60		0.444	0.0256	0.129	29.7
96370				BLANK	0.00143	0.000076	<0.001	0.07
96371	68.70	70.50	1.80		0.378	0.0155	0.098	2.77
96372	70.50	73.50	3.00	**PLUS METALLURGICAL SAMPLE "096372 MET"**	0.36	0.0277	0.109	0.73
96373	73.50	76.50	3.00		0.338	0.0194	0.102	0.64
96374	76.50	79.50	3.00		0.363	0.0185	0.093	1.49
96375	79.50	82.00	2.50		0.303	0.0143	0.084	3.55
96376	82.00	83.60	1.60		0.277	0.0162	0.071	0.8
96377	83.60	86.60	3.00		0.344	0.0209	0.101	3.23
96378	86.60	89.60	3.00		0.361	0.01935	0.095	0.76
96379	89.60	91.40	1.80		0.379	0.01995	0.102	1.45
96380				DUP of 96379	0.363	0.0279	0.1	1.08
96381	91.40	94.40	3.00		0.381	0.0109	0.096	3.66
96382	94.40	96.10	1.70		0.374	0.0123	0.09	5.97
96383	96.10	99.10	3.00		0.24	0.00972	0.057	0.67
96384	99.10	102.10	3.00		0.326	0.0157	0.079	1.16
96385	102.10	105.10	3.00		0.343	0.0122	0.075	0.92
96386	105.10	108.10	3.00		0.388	0.0442	0.114	0.91
96387	108.10	111.10	3.00		0.362	0.0114	0.084	0.69
96388	111.10	114.10	3.00		0.354	0.01635	0.086	0.71
96389	114.10	117.10	3.00		0.249	0.00785	0.051	0.5
96390				STD CDN-CM-11A	0.336	0.0355	1.11	1.69

Hole ID: 18-PC-126	Assay Data							
Sample	Interval (m)		Sample	Type	Cu	Mo	Au	Ag
Number	From	To	Length	Std/B/Dup	%	%	g/t	g/t
96391	117.10	120.00	2.90		0.345	0.01355	0.087	0.72
96392	120.00	123.00	3.00		0.387	0.0182	0.145	0.73
96393	123.00	126.00	3.00		0.356	0.019	0.134	0.66
96394	126.00	129.00	3.00		0.34	0.00738	0.122	0.67
96395	129.00	132.00	3.00		0.311	0.00723	0.113	0.65
96396	132.00	133.90	1.90		0.244	0.00843	0.085	0.72
96397	133.90	135.50	1.60		0.594	0.00647	0.161	1.31
96398	135.50	137.00	1.50		0.696	0.0122	0.206	1.38
96399	137.00	140.00	3.00		0.38	0.0143	0.118	0.84
96400				BLANK	0.00175	0.000073	<0.001	0.01
98101	140.00	142.00	2.00		0.287	0.00852	0.11	0.6
98102	142.00	143.50	1.50		0.429	0.00942	0.128	1.15
98103	143.50	146.00	2.50		0.428	0.0145	0.139	1.85
98104	146.00	148.44	2.44		0.349	0.00959	0.103	1.04
98105	148.44	151.40	2.96		0.335	0.0101	0.122	12.45
98106	151.40	154.40	3.00		0.343	0.0165	0.123	35.6
98107	154.40	157.40	3.00		0.356	0.01655	0.109	0.85
98108	157.40	159.40	2.00		0.302	0.01495	0.106	0.74
98109	159.40	161.10	1.70		0.429	0.0121	0.128	1.57
98110				DUP of 96409	0.407	0.01465	0.123	1.39
98111	161.10	164.10	3.00		0.388	0.00645	0.138	0.96
98112	164.10	167.10	3.00		0.44	0.00701	0.138	1.1
98113	167.10	170.10	3.00		0.409	0.0105	0.145	0.81
98114	170.10	173.10	3.00	**PLUS METALLURGICAL SAMPLE "098114 MET" - LOW GRADE**	0.347	0.00333	0.096	0.8
98115	173.10	176.10	3.00		0.309	0.0193	0.122	0.54
98116	176.10	179.10	3.00		0.353	0.00811	0.115	0.66
98117	179.10	182.10	3.00		0.326	0.01085	0.087	0.74
98118	182.10	184.10	2.00		0.284	0.00909	0.096	0.56
98119	184.10	186.00	1.90		0.304	0.0141	0.096	0.57
98120				STD CDN-CGS-27	0.364	0.01425	0.509	2.17
98121	186.00	189.00	3.00		0.435	0.0199	0.146	3.83
98122	189.00	191.00	2.00		0.365	0.0419	0.103	5.02
98123	191.00	193.00	2.00		0.463	0.0645	0.146	5.12
98124	193.00	194.60	1.60		0.319	0.0408	0.077	5.98
98125	194.60	197.60	3.00		0.323	0.00752	0.092	1.21
98126	197.60	200.50	2.90		0.346	0.00776	0.106	0.95
98127	200.50	202.10	1.60		0.442	0.0265	0.154	1.42
98128	202.10	205.10	3.00		0.334	0.01135	0.106	0.94
98129	205.10	208.10	3.00		0.382	0.00872	0.128	0.89

Hole ID: 18-PC-126	Assay Data							
Sample	Interval (m)		Sample	Type	Cu	Mo	Au	Ag
Number	From	To	Length	Std/B/Dup	%	%	g/t	g/t
98130				BLANK	0.00182	0.000063	0.018	0.02
98131	208.10	211.10	3.00		0.337	0.01755	0.098	1.17
98132	211.10	214.10	3.00		0.331	0.0459	0.114	1.04
98133	214.10	217.20	3.10		0.334	0.071	0.114	0.81
98134	217.20	218.80	1.60		0.335	0.00377	0.104	0.82
98135	218.80	220.60	1.80		0.209	0.00303	0.093	0.54
98136	220.60	222.70	2.10		0.316	0.00872	0.119	1.05
98137	222.70	225.70	3.00		0.382	0.01385	0.112	1.67
98138	225.70	228.70	3.00		0.497	0.01285	0.144	1.4
98139	228.70	231.70	3.00		0.475	0.00669	0.127	1.16
98140				DUP of 98139	0.476	0.00632	0.127	1.11
98141	231.70	234.70	3.00		0.399	0.0067	0.142	1.58
98142	234.70	237.70	3.00	**PLUS METALLURGICAL SAMPLE "098142 MET" - LOW/MEDIUM GRADE**	0.368	0.0049	0.1	1.7
98143	237.70	239.70	2.00		0.497	0.00584	0.135	1.29
98144	239.70	241.10	1.40		0.341	0.00667	0.115	1.26
98145	241.10	244.10	3.00		0.33	0.012	0.11	2.67
98146	244.10	246.20	2.10		0.376	0.00611	0.111	1.61
98147	246.20	249.20	3.00		0.338	0.0116	0.093	0.93
98148	249.20	252.20	3.00		0.433	0.00977	0.154	1.01
98149	252.20	255.20	3.00		0.323	0.01285	0.096	0.84
98150				STD CDN-CM-8	0.355	0.016	0.946	2.92
98151	255.20	258.20	3.00		0.259	0.00746	0.079	0.62
98152	258.20	261.20	3.00		0.253	0.00453	0.067	0.65
98153	261.20	264.20	3.00		0.247	0.01145	0.07	1.12
98154	264.20	267.20	3.00	**PLUS METALLURGICAL SAMPLE "098154 MET" - MEDIUM GRADE**	0.283	0.01405	0.085	0.62
98155	267.20	270.20	3.00		0.334	0.00852	0.089	0.72
98156	270.20	271.80	1.60		0.314	0.00873	0.102	0.7
98157	271.80	273.60	1.80		0.294	0.01885	0.081	0.69
98158	273.60	276.70	3.10		0.38	0.02	0.095	1.03
98159	276.70	279.70	3.00		0.287	0.00857	0.106	0.81
98160				BLANK	0.00139	0.000038	<0.001	0.02
98161	279.70	282.70	3.00		0.314	0.00654	0.119	1.81
98162	282.70	285.70	3.00		0.396	0.00978	0.134	1.56
98163	285.70	288.80	3.10		0.317	0.00743	0.103	0.95

Hole ID: 18-PC-126	Assay Data							
Sample	Interval (m)		Sample	Type	Cu	Mo	Au	Ag
Number	From	To	Length	Std/B/Dup	%	%	g/t	g/t
98164	288.80	291.80	3.00		0.292	0.0138	0.095	0.82
98165	291.80	294.00	2.20		0.406	0.00841	0.14	0.94
98166	294.00	297.00	3.00		0.354	0.0088	0.084	1.02
98167	297.00	300.00	3.00		0.354	0.0111	0.1	1.42
98168	300.00	303.00	3.00		0.321	0.012	0.074	1.02
98169	303.00	306.00	3.00		0.312	0.00891	0.073	0.98
98170				DUP of 98169	0.303	0.01045	0.069	0.87
98171	306.00	309.00	3.00		0.335	0.01015	0.069	1.06
98172	309.00	311.00	2.00		0.353	0.0185	0.086	1.12
98173	311.00	312.30	1.30		0.373	0.00825	0.096	0.95
98174	312.30	314.30	2.00		0.385	0.01055	0.089	1.49
98175	314.30	317.30	3.00		0.314	0.01115	0.07	2.33
98176	317.30	320.30	3.00		0.294	0.00912	0.069	1
98177	320.30	322.20	1.90		0.276	0.00604	0.101	1.51
98178	322.20	325.20	3.00		0.254	0.00776	0.061	1.2
98179	325.20	327.00	1.80		0.21	0.0259	0.048	2.29
98180				STD CDN-CM-11A	0.346	0.0354	1.025	1.78
98181	327.00	329.20	2.20		0.366	0.0273	0.083	1.35
98182	329.20	331.20	2.00		0.39	0.00995	0.086	1.03
98183	331.20	333.00	1.80		0.4	0.00819	0.084	1.07
98184	333.00	336.00	3.00		0.284	0.00975	0.058	1.56
98185	336.00	339.00	3.00		0.281	0.01015	0.073	0.87
98186	339.00	342.00	3.00		0.406	0.00905	0.092	1.17
98187	342.00	344.00	2.00		0.384	0.00887	0.088	1.11
98188	344.00	345.20	1.20		0.439	0.00795	0.107	2.48
98189	345.20	348.20	3.00		0.385	0.01145	0.087	2.32
98190				BLANK	0.00097	0.00002	0.002	0.01
98191	348.20	349.60	1.40		0.265	0.0113	0.067	1.68
98192	349.60	351.60	2.00		0.248	0.01275	0.06	0.68
98193	351.60	354.60	3.00		0.331	0.01655	0.066	1.05
98194	354.60	357.60	3.00		0.288	0.01445	0.059	0.9
98195	357.60	359.20	1.60		0.277	0.00874	0.054	0.86
98196	359.20	362.20	3.00		0.389	0.0144	0.073	1.1
98197	362.20	365.20	3.00		0.29	0.0222	0.059	1.27
98198	365.20	367.40	2.20		0.381	0.01	0.078	1.59
98199	367.40	370.40	3.00		0.326	0.01475	0.064	1.03
98200				DUP of 98199	0.365	0.0141	0.077	1.2
98201	370.40	372.30	1.90		0.318	0.00736	0.069	1.07
98202	372.30	374.30	2.00		0.295	0.01245	0.059	2.17
98203	374.30	376.30	2.00		0.408	0.0455	0.097	4.26
98204	376.30	379.00	2.70		0.561	0.0913	0.114	5.75
98205	379.00	381.70	2.70		0.351	0.0393	0.063	7.42
98206	381.70	384.70	3.00		0.554	0.0348	0.159	4.86

Hole ID: 18-PC-126	Assay Data						
Sample	Interval (m)		Sample	Type	Cu	Mo	Au	Ag
Number	From	To	Length	Std/B/Dup	%	%	g/t	g/t
98207	384.70	386.90	2.20		0.404	0.01475	0.097	2.07
98208	386.90	389.90	3.00	**PLUS METALLURGICAL SAMPLE "098208 MET" - MEDIUM/HIGH GRADE**	0.627	0.01435	0.217	5.81
98209	389.90	392.90	3.00		0.482	0.00627	0.152	1.71
98210				STD CDN-CM-8	0.362	0.015	0.855	3.02
98211	392.90	395.90	3.00		0.558	0.00765	0.147	2.3
98212	395.90	397.30	1.40		0.414	0.01095	0.096	4.62
98213	397.30	400.30	3.00		0.465	0.00604	0.124	1.98
98214	400.30	402.30	2.00		0.435	0.0103	0.104	3.12
98215	402.30	404.47	2.17	EOH at 404.47	0.415	0.01655	0.106	3.16

2018 Poplar Drilling

Hole ID: 18-PC-127	**Easting (NAD 83): 631478**	**Core Size: HQ**	**DDH Started: November 30, 2018**
	Northing (NAD 83): 5986839	**Hole Azimuth: 090**	**DDH Finished: December 3, 2018**
Property: Poplar Deposit	**Elevation: 910 m**	**Hole Angle: -60**	**Log Completed: December 5, 2018**
	Source: GPS	**Total Depth: 270.36 m**	**Analysis by: ALS Minerals**

Logged by: J.Stacey
Geotechnician:J. Taylor
Geotech type: Basic

Dip & Azimuth Tests		
Depth	**Azimuth**	**Dip**
17.37	**89**	**-60**
84.43	**92**	**-60**
148.44	**92**	**-61**
212.4456	**94.5**	**-61.2**
261.2136	**100**	**-61.8**

Summary: 18-PC-127 drilled as a twin to PC-24. Hole comprises fine-grained sediment or tuff to 42 m, underlain by recognizable sandstone to 78 m. Fine-grained sediment or tuff contains strong Silica-Kfeldspar alteration associated with moderate to strong veining and stockwork development. Sandstone altered to Clay-Sericite background, locally overprinted by vein controlled Kfs. Strong disseminated sulfide in sandstone. Both sediment types contain moderate to strong veining and stockwork development. Local gougy sections contain strong clay-sericite alteration and are generally poorly mineralized. Qtz Monzonite from 78-270.36 m (EOH). Moderate veining and stockwork formation to 105 m. 105-144 m only weakly mineralized. 144-203 m poorly mineralized. Areas of weak to strong brecciation typically altered to clay-ser and contain little sulfide mineralization. Clay-ser overprints earlier Kfs-Si alteration and may have caused sulfide to be stripped out? Clay-ser seems to be associated with post-mineralization faults. 203-220 m moderate to weak veining and stockwork formation. 220-227 m clay-ser interval, trace to nil mineralization. 227-262 m strong Hematite-sulfide veining and massive sulfide fracture fillings, hairline to a few mm wide. Strong disseminated sulfide in groundmass of rock. Sulfide weakens from 262 to 270.36 m (EOH). Throughout hole, veins composed of Qtz-Py-Cpy are crosscut by Mo-bearing veins, indicating the main Mo event post-dates the main Cu event. Hematite-bearing veins and strong sulfide fracture fill from 227-262 m seem to be related to an entirely separate mineralization event than the Qtz-Cpy and Qtz-Mo events.

Hole ID: 18-PC-127			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
0	5.5	OVB	Overburden monolithic, contains shattered fragments of underlying						
			bedrock with local brown clay/mud seams. Bedrock surface						
			interpreted below last occurrence of mud and gravel.						
5.5	42	Sed?	Medium grey to brownish, very fine-grained sedimentary rock or						
			possibly tuff. Probably volcanic derived either way. Contains tiny Kfs						
			grains which can be euhedral to subrounded, as well as minor						
			subrounded Qtz grains. No obvious stratification, though presence						
			of subrounded Qtz grains suggests sedimentary origin. Strong						
			pervasive Si throughout. Si overprints weak patchy background Bt						
			alteration. Si and Bt are both overprinted by Kfs+/-Ser haloes around						
			fractures and diffuse Qtz-sulfide veins. Limonitic fractures down to						
			~8.5 m. Rock strongly fractured and broken down to ~42 m.						
			5.5-10.2: strong pervasive Si; weak Kfs bleaching along fractures;	5.50	10.20	1.0	tr		mod dissem Py, Cpy; rare veins; Deep blue
			moderate dissem Py+/-Cpy in groundmass of rock. Very rare						bornite noted in 1-2 veins
			Qtz-Py+/-Cpy+/-Bn veins here and there up to 1 mm wide at 10-20						
			degrees TCA. Bornite may be secondary after Cpy? Only observed in						
			1-2 veins. Estimate 1% Py, trace Cpy, trace to nil Bn over interval.						
			10.2-12.7: Strong pervasive Si continues, overprinted by fine lines of	10.20	12.70	2.0	tr	tr	weak fracture/vein stockwork, mod dissem
			Kfs+/-Ser alteration along fractures and veins. Most fractures contain						sulfide
			hairline Qtz-Py+/-Cpy+/-Mo veins at angles of 0-70 degrees TCA.						
			Intersecting fracture pattern creates a weak stockwork effect.						
			Glassy Qtz-sulfide veins locally crosscut by milky barren to weakly						
			mineralized Qtz+/-Py veins. Rock contains moderate very fine-grained						
			Py, Cpy, and rare Mo in groundmass. Estimate 2% Py, trace Cpy, and						
			trace Mo over interval.						
			12.7-15.0: Strength and width of veining increases, with occasional	12.70	15.00	2.0	0.5	tr	stronger Qtz-Py-Cpy+/-Mo veining, local strong
			strong stockwork development over ~30 cm intervals. Str pvs Si.						stockwork; some wider ribbon veins
			Qtz-Py-Cpy+/-Mo veins range from 3-45+ mm in width and locally						
			show ribbon textures in the wider veins. Veins mostly around 20-40						
			degrees TCA. Individual veins carry up to 5% Py, 3% Cpy, and 0.5% Mo.						
			Groundmass of rock contains weak disseminated Py and rare Cpy.						
			Estimate 2% Py, 0.5% Cpy, and trace Mo over interval.						
			15.0-18.3: moderately fractured, with hairline to 2 mm wide	15.00	18.30	1.0	0.5	tr	Qtz-Py-Cpy fracture fill; diffuse "veins" probably
			Qtz-Py+/-Cpy fracture fill. Interval also includes occasional diffuse						mineralized fractures with strong Qtz
			Qtz-Py-Cpy veins up to 5 mm wide at angles of 20-40 degrees TCA.						alteration envelopes. Strong Qtz-Py-Cpy-Mo
			Rare Qtz-Bt-Magnetite veins carry minor Py and Cpy. Rare streaky Mt						vein shallow TCA at base of sequence
			fills some fractures over short distances (0.5-1 cm). Trace						
			disseminated Py and rare Cpy in groundmass of rock. Lower 40 cm of						

Hole ID: 18-PC-127			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
			interval (17.85-18.25 m) occupied by a 10-15 mm wide drusy Qtz vein						
			at ~20 degrees TCA containing coarse, chunky Py, Cpy, and Mo.						
			Sulfide blobs (including Mo) up to 3 mm diameter in vein. This vein						
			alone contains ~5% Py, 5% Cpy, and 1% Mo. Overall interval estimate						
			1% Py, 0.5% Cpy, and trace Mo.						
			18.3-18.6: Patch of very strong Bt-Chl alteration with heavily	18.30	18.60	5.0	3.0		heavy, coarse dissem sulfide in Chl-Bt alt
			disseminated coarse Py and Cpy. Rock is quite soft due to strong						
			Bt-Chl and lack of Si. Sulfide grains up to 2 mm. No veins.						
			Estimate 5% Py, 3% Cpy over short interval.						
			18.6-21.4: Strong pervasive Si returns. Weak Kfs+/-Ser alteration	18.60	21.40	3.0	0.5		weak veining and fracture fill; locally coarse
			around veins and fractures. Rock is strongly broken throughout						disseminated sulfide
			interval. Local diffuse Qtz-Py+/-Cpy veins follow fractures, but veining						
			is generally weak. Weak to moderate, very fine-grained to locally						
			coarse disseminated Py and Cpy in groundmass of rock, as well as						
			abundant sulfide skins on fracture surfaces. Estimate 3% Py,						
			0.5% Cpy over interval.						
			Note: "diffuse" veins in this and following intervals are mineralized						
			fractures with strong Qtz+/-Kfs envelopes up to 5 mm wide. Si and						
			other alteration minerals evidently percolated into wallrock from						
			the fracture.						
			21.4- 22.6: Strength and width of veining increases, with local	21.40	22.60	3.0	0.5	tr	stronger veining, local stockwork; early
			moderate stockwork development. Moderate background Bt						Qtz-Py-Cpy veins are cut by later drusy
			alteration is overprinted by fracture- and vein-controlled Kfs+/-Ser.						Qtz-sulfide veins
			Contains several discrete 4-7 mm wide Qtz-sulfide veins of varying						
			composition: Early glassy Qtz-Py-Cpy veins are crosscut by later drusy						
			Qtz-Py-Cpy-Mo-Kfs veins at low angles TCA. Early veins may be either						
			diffuse or sharply defined. Moderate to strong disseminated Py-Cpy						
			in groundmass of rock. Estimate 3% Py, 0.5% Cpy, and trace Mo over						
			interval. Cpy locally forms coarse blobs in veins up to 3 mm diameter.						
			22.6-24.4: strongly fractured rock is weakly clay altered in and	22.60	24.40	1.0	tr		poorly mineralized; local Py on fracs, weak
			around fractures. Clay seems to overprint earlier Si and Bt. Fractures						dissem Py+/-Cpy
			locally contain Py and minor Cpy. Poorly mineralized overall;						
			estimate 1% Py, trace Cpy over interval.						
			24.4-31.4: strong pervasive Si and weak to moderate pervasive Kfs	24.40	31.40	5.0	0.75	0.1	mod to strong veining. Local coarse veins with
			alteration throughout. Kfs alteration largely fracture-controlled, but						strong to very strong coarse sulfide with
			has spread out from fractures into surrounding rock. Kfs alteration						patchy to feathery textures
			strongest around highest density of fractures. Moderate to strong						
			discrete to diffuse veining throughout, including some late veins						

Hole ID: 18-PC-127			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
			that contain very strong sulfide mineralization. Strongly mineralized						
			discrete veins mostly at low angles TCA (0-20 degrees TCA) and range						
			in width from a few mm to 35+ mm. Sulfides within stronger veins						
			locally display coarse patchy and finer streaky to feathery textures.						
			Feathery textures likely due to crack-seal mineralization during						
			vein formation. Two species of veins - Qtz-Py-Cpy+/-Mo						
			and Qtz-Py-Mo+/-Cpy. Both vein types at low angles TCA. Mo-rich						
			veins tend to have sharper vein walls than Cpy-rich veins. Both						
			vein types at low angles TCA. Cpy and Py locally form coarse blobs						
			and patches up to 40x15 mm dimensions. Rock also contains fine-						
			grained disseminated to weakly fracture controlled Py and Cpy.						
			Strong veining dies out around 31.4 m. Estimate 5% Py, 0.5-1% Cpy,						
			and trace to 0.1% Mo over interval.						
			31.4-42.0: Strong veining dies out. Kfs+/-Ser alteration dies out,	31.40	42.00	1.0	tr	tr	rare coarse Qtz-Py+/-Cpy vns at low angle TCA
			replaced with moderate pervasive background Bt. Strongly						
			fractured, with weak Kfs bleaching and minor Py mineralization along						
			fractures. Very rare, fracture controlled, coarse-grained Qtz-Py+/-Cpy						
			veins at low angles TCA (e.g. at 34-34.3 and 35.9-36). Trace						
			disseminated Py and Cpy in very fine fractures in groundmass of rock.						
			Estimate 1% Py, trace Cpy, trace to nil Mo over interval.						
			Note: core is intensely broken over interval.						
42.00	78.00	Sandstone	42.0-60.1: Light grey rock starts to become more recognizable as	42.00	60.10	2.0	1.0	tr	strong dissem sulfide; Qtz-Py+/-Cpy+/-Mo veining
			sandstone - contains well rounded, mm-scale Qtz grains in a fine-						
			grained sericitic and clay-altered matrix. No Kfs grains. Mod to strong						
			background Bt alteration may be earliest alteration product. Bt						
			overprinted by diffuse Kfs+/-Ser alteration extending outwards from						
			fractures, and may also be partially controlled by bedding planes or						
			laminations at 25 degrees TCA. Kfs+/-Ser alteration also seems to be						
			associated with local weak Qtz-Py+/-Cpy veining. Kfs alteration is						
			overprinted by moderate to very strong pervasive Clay-Ser alteration.						
			Strong Si disappears atound 42 m.						
			Strongest Clay-Ser alteration associated with weakly brecciated rock.						
			Veins in brecciated rock are weakly dismembered, suggesting						
			breccias formed post-mineralization. Mineralized veins include early						
			diffuse Qtz-Py+/-Cpy veins controlled by fractures, and later, more						
			discrete Qtz-Mo+/-Py+/-Cpy veins at shallow angles TCA (0-15 degrees						
			TCA). Qtz-Mo veins are less strongly dismembered than Qtz-Cpy, so						
			the breccia/clay event may be contemporaneous with later stages of						

Hole ID: 18-PC-127			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
			Qtz-Mo veining. Moderate to strong disseminated fine to medium						
			grained Py and Cpy in areas not strongly affected by Clay-Ser						
			alteration. Locally up to 5% combined disseminated sulfide. Where						
			Clay and Ser are stronger, disseminated sulfides seem to have been						
			stripped out - chunks of less-altered original rock in strong Clay areas						
			retain disseminated sulfide, so it seems likely that Clay-Ser post-						
			dates most mineralization events. Breccias and mineralized veins						
			are crosscut by late barren milky Qtz veins at 30-45 degrees TCA.						
			Estimate 2% Py, 1% Cpy, and trace Mo over interval.						
			60.1-64.0: strong Clay-Ser alteration continues, and overprints	60.10	64.00	1.0	tr	tr	local Qtz-Mo+/-Py veins; strong dissem sulfide
			diffuse Kfs+/-Ser alteration as above. Rock is a bit more strongly						in areas of weaker clay alteration
			brecciated and contains late bright white clay seams/breccia fill that						
			crosscut all other veins. From 64-64.7 m, rock contains several						
			6-30 mm wide Qtz-Mo+/-Py veins at 20 degrees TCA, which are offset						
			along gougy fractures at ~60 degrees TCA. Broader interval contains						
			few Qtz-Py-Cpy veins compared to overlying interval. Weak to						
			moderate, fine grained disseminated Py and rare Cpy in matrix of						
			rock. Occasional less-altered breccia fragments locally contain						
			strong disseminated Py+/-Cpy. Estimate 1% Py, trace Cpy, trace Mo						
			over interval.						
			64.0-73.1: Strongly brecciated throughout, with the strongest breccia	64.00	73.10	1.0	tr	tr	strong gougy breccia; strong dissem sulfide in
			zone extending from 64.0-66.2. Breccia planes at ~10-15 degrees						remnant breccia clasts
			TCA. Alteration as above, with very strong clay alteration in more						
			brecciated section. Local moderate to strong white clay breccia fill.						
			Strong gouge throughout.						
			Weak to moderate diseminated Py and Cpy in less strongly altered						
			breccia fragments. Rare dismembered veins include fine glassy						
			Qtz-Py+/-Cpy veins and local vuggy Qtz-Py veins. Generally poor in						
			sulfide content throughout, estimate 1% Py, trace Cpy, and possibly						
			trace Mo over interval.						
			73.1-78.0: Brecciation dies out. Strong clay alteration disappears	73.10	78.00	2.0	tr	tr	mod to strong disseminated Py Cpy Mo; rare
			and is replaced with strong Ser and moderate pervasive Si. Si and Ser						veins
			may overprint local diffuse Kfs alteration along fractures. Few						
			mineralized veins, but rock contains moderate to strong						
			disseminated Py, Cpy, and local Mo. Rare veins include glassy						
			Qtz-Py+/-Cpy veins and occasional vuggy Qtz-Py-Mo veins. Fractures						
			occasionally contain small lensoid blebs of Cpy and/or Py.						
			Both vein types are crosscut by late barren milky Qtz veins.						

Hole ID: 18-PC-127			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
			Rock loses granular texture and is fine grained - may be either a						
			sediment or possibly a tuff?						
			Estimate 2% Py, trace Cpy, and trace Mo over (ongoing) interval.						
78.00	270.36	Qtz Monz	Light grey, greenish-grey, and greenish-white to buff coloured Qtz						
			monzonite. Upper contact broken, but sharp at 20 degrees TCA. Plag-						
			phyric throughout, with local intervals containing Bt phenocrysts to						
			~5 mm. Moderately to strongly porphyritic, with local intervals						
			displaying "crowded crystal" porphyritic texture. Plag phenocrysts						
			typically greenish due to strong Ser and clay replacement. Moderate						
			to strong Clay-Ser alteration throughout seems to overprint earlier						
			patchy to pervasive Si and Kfs alteration. Local gougy brecciated						
			sections. Local Magnetite accociated with stronger Biotite.						
			78.0-84.0: Buff coloured Qtz monzonite. Moderate Si and weak Kfs	78.00	84.00	3.0	0.5	tr	moderate Qtz-Py-Cpy veining; local Mo veins
			alteration throughout, locally overprinted by weak Ser in Plag						
			phenocrysts. Moderate glassy Qtz-Py-Cpy veining throughout, with						
			local weak stockwork development. Qtz-Py-Cpy veins up to 7 mm						
			wide and range from 10-60 degrees TCA. Wider veins (>4mm) locally						
			show ribbon textures. Some veins have weak diffuse Kfs haloes.						
			Lower 80 cm of interval contains a network of fine Pyritic fractures.						
			Glassy Qtz-Py-Cpy veins locally crosscut by rare vuggy Qtz-Py-Cpy-Mo						
			veins at ~20 degrees TCA. Weak to nil disseminated Py and rare Cpy						
			in groundmass of rock. Estimate 3% Py, 0.5% Cpy, and trace Mo over						
			interval.						
			84.0-85.0: Gougy section, with strong background Si overprinted by	84.00	85.00	tr			trace remnant Py in gougy section
			gougy clay and sericite. Local spotty Py here and there. Gougy						
			fractures contain minor grungy Mo. Gougy fractures at 10 degrees						
			TCA. Poorly mineralized - trace Py and trace Mo over interval.						
			85.0-86.0: moderate vein swarm of Qtz-Py-Mo-Cpy veins up to 15 mm	85.00	86.00	1.0	tr	0.05	Qtz-Py-Mo-Cpy vein swarm; rare Qtz-Py+/-Cpy vnS
			wide at ~20 degrees TCA. Moderate pervasive Kfs alteration around						no dissem sulfide
			veins partially overprinted by Clay-Ser. Veins locally truncated by						
			gougy fractures at low angles TCA (0-15 degrees TCA). Mo-bearing						
			veins crosscut and offset rare earlier Qtz-Py+/-Cpy veins. No						
			disseminated sulfide. Estimate 1% Py, trace Cpy, and trace to 0.1%						
			Mo over interval.						
			86.0-94.6: Weak pervasive Si is overprinted by moderate Clay and Ser	86.00	94.60	0.5	tr	tr	local isolated Qtz-Py-Cpy+/-Mo vns
			alteration, largely affecting Plag phenocrysts. Local isolated						weak to nil dissem sulfide
			Qtz-Py-Cpy+/-Mo veins up to 7 mm wide at angles of 0-30 degrees TCA.						
			No real stockwork development, but veins locally show mutually						

Hole ID: 18-PC-127			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
			crosscutting textures. Veins locally offset along barren fractures						
			at ~70 degrees TCA. Weak to nil disseminated sulfide in groundmass						
			of rock. Estimate 0.5% Py, trace Cpy, and trace to nil Mo over interval.						
			Glassy Qtz-Py-Cpy veins are locally crosscut by late barren milky Qtz						
			veins.						
			90.3-90.4: strong clay gouge at 60 degrees TCA.						
			94.6-101.4: Strength of veining increases to moderate. Moderate Ser	94.60	101.40	1.0	0.5	tr	moderate Qtz-Py-Cpy+/-Mo veining
			alt throughout overprints background Si. Interval contains a number						trace Mo in fractures
			of long, 1-5 mm wide Qtz-Py-Cpy+/-Mo veins at shallow angles TCA						
			(0-10 degrees TCA) with local weak stockwork development. Veins						
			have weak Kfs alteration haloes and pervasive Kfs alteration gets						
			stronger around weak stockworks. Fractures at shallow angles TCA						
			contain trace grungy Mo. Clay alteration increases with proximity to						
			underlying gougy section. Estimate 1% Py, 0.5% Cpy, and trace Mo						
			over interval.						
			101.4-102.3: Gougy breccia zone; trace dissem Py remains in gouge.	101.40	102.30	tr			trace remnant Py in gouge zone
			Rare gouge planes at 20 degrees TCA.						
			102.3-105.2: Pinkish to buff-coloured Qtz monzonite with moderate	102.30	105.20	1.0	0.5	0.05	weak to moderate Qtz-Py-Cpy veins, stkwk, and
			to strong Si and local moderate Clay-Ser alteration of Plag						Qtz-Py-Mo+/-Cpy veining
			phenocrysts. Weak to moderate glassy Qtz-Py-Cpy veining						
			throughout, including local weak stockwork development. Some						
			fractures contain minor pyritic fill. Rare, sharply defined						
			Qtz-Py-Mo+/-Cpy veins up to 20 mm wide at angles of 40-50 degrees						
			TCA truncate earlier Qtz-Py-Cpy veins. Mo-bearing veins tend to have						
			coarser sulfide than Qtz-Py-Cpy veins. Estimate 1% Py, 0.5% Cpy, and						
			trace to 0.1% Mo over interval.						
			105.2-105.6: grougy breccia at 30 degrees TCA. Unmineralized.	105.20	105.60	0.0	0.0	0.0	unmineralized gougy breccia
			105.6-109.0: Pinkish to buff coloured Qtz Monzonite; moderate	105.60	109.00	0.5	tr		poorly mineralized; rare Qtz-Py+/-Cpy veins
			Clay-Ser alteration and local patchy moderate Kfs-Si. Poorly						
			mineralized through this interval, with only occasional Qtz-Py+/-Cpy						
			veins up to 12 mm wide at angles of ~30 degrees TCA. Some veins						
			show weak breccia textures. At 106-106.1 m, rock contains a 15 mm						
			wide gougy breccia band at 40 degrees TCA; likely related to overlying						
			gougy breccia zone. Estimate 0.5% Py, trace Cpy over interval.						
			109.0-114.3: Strong pervasive Si-Kfs alteration throughout, with local	109.00	114.30	2.0	0.5	tr	moderate Qtz-Py-Cpy+/-Mo veining; mod stkwk
			patches of weak to moderate Ser-Clay alteration of Plag phenocrysts.						
			Moderately veined throughout, with local moderate stockwork						
			development. Veins up to 10-15 mm width at angles of 10-45 degrees						

Hole ID: 18-PC-127			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
			TCA. Kfs alteration stronger around more intensely veined areas.						
			Veins comprise Qtz-Py+/-Cpy+/-Mo. Late Qtz-Py veins and fractures						
			crosscut earlier glassy veins. Strong stockwork veining at 113.8-114.3						
			contains glassy, sharply defined Qtz-Py-Cpy-Mo veins containing						
			coarse patchy sulfides. Strong veining dies out at 114.3 m.						
			Estimate 2% Py, 0.5% Cpy, trace Mo over interval.						
			114.3-123.5: variable alteration comprising patchy 1-2 m sections	114.3	123.5	2.0	0.5		weak Qtz-Py-Cpy veining; local fracture sulfide
			of strong reddish-brown silicification+/-Kfs, and ~1 m sections of						
			moderate argillic alteration with no silicification. All the same phase						
			of Qtz monzonite - suspect that Si overprints Argillic. Silicified						
			sections contain moderate disseminated Py and Cpy, while Argillic						
			sections contain trace to nil disseminated sulfide. Weak Qtz-Py-Cpy						
			veining throughout. Veins range from <1 mm to ~15 mm width at						
			angles of 10-70 degrees TCA (average ~30 degrees TCA). Local						
			discontinuous fracture-controlled Py and Cpy here and there.						
			Estimate 2% Py, 0.5% Cpy over interval.						
			123.5-129.7: Moderate to strong Si, mod pervasive Kfs. Moderate	123.5	129.7	3.0	0.5	0.05	Moderate veining and stockwork
			veining and stockwork development throughout. Veins range from						QPC and QPCM veins, nil dissem sulfide
			1-10 mm width at angles of 0-60 degrees TCA. Qtz-Py-Cpy veins						
			generally at steeper angles than Qtz-Py-Cpy+/-Mo veins. Mo bearing						
			veins 0-20 degrees TCA and locally crosscut Qtz-Py-Cpy veins.						
			Mineralization mostly confined to veins - trace to nil disseminated						
			sulfide. Estimate 3% Py, 0.5% Cpy, and trace to 0.1% Mo over interval.						
			Veining dies out gradually over 20 cm from 129.5-129.7 m.						
			129.7-136.7: Strong pervasive Si, weak patchy to diffuse Kfs. Rare	129.7	136.7	0.5	tr	tr	rare isolated veins, no disseminated sulfide
			isolated 2-5 mm wide Qtz-Py-Cpy+/-Mo veins at angles of 20-60						
			degrees TCA. Trace to nil disseminated Py, poorly mineralized overall.						
			Local isolated coarse Cpy blobs disseminated here and there in						
			groundmass of rock. Estimate 0.5% Py, trace Cpy, trace Mo over						
			interval.						
			136.7-142.05: Mixed alteration package - strong pervasive	136.7	142.05	3.0	0.5	0.1	weak to mod veining; no strong stockwork
			background Kfs-Si alt is strongly overprinted by patchy Si-Ser						
			alteration. Strong Si-Ser intervals are weakly brecciated. Weak to						
			moderate Qtz-Py-Mo+/-Cpy veining throughout. Veins range from						
			hairline to 6 mm width at angles of 10-45 degrees TCA. Veins are						
			locally sinuous and in some cases follow fractures, and others are						
			gougy. Interval also contains Mo-absent Qtz-Py-Cpy veins which are						
			crosscut by Mo-bearing veins. Estimate 3% Py, 0.5% Cpy, and 0.1% Mo						

Hole ID: 18-PC-127			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
			over interval.						
			142.05-144.6: strong to very strong pervasive Si-Ser completely	142.05	144.6	5.0	3.0	1.0	Strong patchy disseminated Mo-Hem-Py-Cpy
			replaces original rock textures and mineralogy. Strong Qtz flooding						Spatially associated with barren Qtz-Kfs Bx
			throughout, accompanied by strong disseminated to patchy Mo,						
			Hem, Py, and Cpy (locally coarse grained). Patchy disseminated						
			Hem-Mo mineralization gives rock a spotted, scabrous appearance.						
			Local breccias are filled with barren drusy buff coloured Qtz+/-Kfs						
			veins. Interval also conatins a couple of glassy Qtz-Py-Cpy veins up						
			to 30 mm wide at 20 degrees TCA. Estimate 5% Py, 3% Cpy, and						
			1% Mo over interval.						
			144.6-150.7: sulfide content drops of sharply. Moderate pervasive	144.6	150.7	tr	tr	tr	sulfide content drops sharply; trace dissem
			Si-Ser alteration overprints earlier background Kfs-Si alteration.						
			Interval strongly brecciated and heavily invaded by barren drusy						
			buff-coloured Qtz-Kfs veins and breccia fill. Trace disseminated Py in						
			groundmass of rock, as well as local hairline sulfide fracture fillings.						
			Estimate trace Py, trace Cpy, and local trace Mo over interval.						
			Barren Qtz-Kfs locally crosscuts rare Qtz-Py-Cpy veins.						
			150.7-164.2: Strong Si-Ser alteration and barren drusy Qtz-Kfs veining	150.7	164.2	1.0	tr	tr	weak to moderate veining; nil dissem sulfide
			dies out. Strong pervasive Kfs-Si alteration is locally overprinted by						
			weak Si-Ser. Weak to moderate Qtz-Py-Cpy veining with local weak						
			stockwork development. Qtz veins locally contain reddish jasper.						
			Jasperoid veins are wider than stockwork Qtz-Py-Cpy veins, ranging						
			up to 10 mm width at 10 degrees TCA. Qtz-Py-Cpy veins and fracture						
			fill at angles of 10-60 degrees TCA, range from hairline to 3 mm width.						
			Around 160.6 m, veins start to pick up minor Mo, and start to						
			show weak Kfs alteration haloes. Mo-bearing veins locally vuggy, up						
			to 10 mm wide, at 10-30 degrees TCA. From 160.3-160.9, rock						
			contains two gougy brecciated fractures at 20 degrees TCA. From						
			162.7-162.8 m is a sandy clay gouge at 80 degrees TCA that truncates						
			adjacent Qtz-Py-Cpy veins. Strength of veining weakens to nil						
			from 163.5-164.2 m. Trace to nil disseminated Py and rare Cpy						
			through interval. Estimate 1% Py, trace Cpy, and trace Mo over						
			interval.						
			162.8-171.0: Strong background Bt alteration and moderate pervasive	162.8	171	1.0	tr	tr	poorly mineralized; local veins
			Si are overprinted by weak Kfs alteration along fractures and as weak						
			haloes around veins. Local patchy moderate Ser alteration. Poorly						
			mineralized overall, though contains occasional Qtz-Py+/-Cpy and						
			Qtz-Py+/-Mo+/-Cpy veins here and there ranging from hairline to 4 mm						

Hole ID: 18-PC-127			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
			width at angles of 40-70 degrees TCA. One isolated 4 mm wide vein						
			at 169.9 m at 40 degrees TCA contains ~70% massive Cpy+Py. Bt						
			alteration dies out around 171.0 m. Almost no disseminated sulfide						
			in interval. Estimate 1% Py, trace Cpy, trace Mo over interval.						
			171.0-173.7: Weak pervasive Si is overprinted by weak to moderate	171	173.7	1.0	tr	tr	local weak veining and fracture fill
			pervasive Sericite. Local weak Qtz-Py-Cpy+/-Mo veins and hairline						
			fracture fill at 20-40 degrees TCA. Estimate 1% Py, trace Cpy, and						
			trace Mo over interval.						
			173.7-175.4: rock is pinkish-red due to strong pervasive Jasperoid	173.7	175.4	1.0	tr	0.1	QPCM veins and dissem Mo
			(Qtz+Hem) alteration. Jasper weakly overprinted by Sericite. Local						
			disseminated Mo grains up to 1 mm associated with pervasive						
			Jasper. Local isolated 1-3 mm Qtz-Py-Cpy+/-Mo veins at 20-40						
			degrees TCA . Estimate 1% Py, trace Cpy, and 0.1% Mo over interval.						
			Gradational upper and lower boundaries of Jasperoid alteration.						
			175.4-176.5: Jasper disappears, back into weakly Si-Ser altered rock.	175.4	176.5	tr			weak Py
			Poorly mineralized, only trace Py noted over interval.						
			176.5-177.7: Gougy, strongly clay-altered rock. Gouge planes at 10-15	176.5	177.7	1.0	0.5	tr	remnant sulfides in gouge
			degrees TCA. Moderate disseminated to streaky Py, Cpy, and Mo in						
			gouge. Streaky material likely remnants of pre-existing veins						
			disrupted by faulting. Estimate 1% Py, 0.5% Cpy, and trace Mo over						
			interval.						
			177.7-178.7: Strong Qtz breccia. Mostly barren. Likely related to	177.7	178.7	tr			barren Qtz breccia; local trace remnant Py
			overlying gouge zone and probably post-mineralization. Trace						
			remnant Py grains here and there in breccia.						
			178.7-182.8: Gougy, strongly brecciated rock with strong Clay-Ser	178.7	182.8	2.0			low-angle Qtz-Py veins
			alteration. Local gouge planes at 10-20 degrees TCA. Heavily invaded						
			by buff-coloured Qtz-Kfs breccia veins subparallel TCA (0-20 degrees).						
			Qtz-Kfs veins are spatially associated with long low-angle Qtz-Py						
			veins, which probably pre-date Qtz-Kfs. Pyrite is quite coarse-grained						
			within precursor veins. Estimate 2% Py over interval.						
			182.8-197.5: Gougy, strongly brecciated rock as above but mostly	182.8	197.5	1.0	tr		weak mineralization; coarse Qtz-Py vns
			lacking in the buff-coloured Qtz-Kfs veins. Gouge planes at 0-20						
			degrees TCA. Local hairline to 5 mm wide Qtz-Py veins are strongly						
			dismembered by brecciation. Rare buff-coloured Qtz-Kfs breccia						
			veins. Main gougy fault at 187-187.5 m, probably at ~30 degrees TCA.						
			Poorly mineralized throughout, though contains occasional late,						
			coarse-grained Py+/-Qtz seams and local weak Qtz-Py stockworks						
			over short intervals (<20 cm). Estimate 1% Py, trace Cpy over interval.						

Hole ID: 18-PC-127			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
			197.5-203.1: Strongly brecciated and flooded with barren white Bull	197.5	203.1	0.5	0.5		Intense barren Bull Qtz breccia; local remnant
			Qtz. Veins and breccia at 10 degrees TCA. Local isolated remnant Py						sulfides
			and Cpy grains here and there. Less altered fragments of host rock						
			contain minor disseminated Py and Cpy, and local truncated						
			Qtz-Py+/-Cpy veinlets. Local discontinuous fracture-controlled						
			Cpy+/-Py seams up to 2 mm wide and 10 cm long are crosscut by Bull						
			Qtz. Estimate 0.5% Py, 0.5% Cpy over interval.						
			203.1-213.5: Pinkish to greenish Qtz monzonite. Mod pervasive Si and	203.1	213.5	1.0	tr	tr	weak to mod Py-Cpy seams, local glassy QPC vns
			Kfs throughout, weakly to moderately overprinted by Ser. Weak to						and weak stkwks; late Qtz-Py vns Xcut all
			moderate fracture-controlled Py-Cpy seams, locally up to 3 mm wide,						
			form weak stockworks. Local glassy Qtz-Py-Cpy veins form weak						
			stockworks over short intervals (<20 cm). Rare veins contain trace						
			Mo. Mineralized veins are crosscut by late coarse grained Qtz-Py						
			veins at high angles TCA. Sericite alteration dies out from						
			213-213.5 m. Trace to nil disseminated sulfide in groundmass of						
			rock. Estimate 1% Py, trace Cpy and trace to nil Mo over interval.						
			213.5-220.6: Qtz monzonite with strong pervasive Bt background	213.5	220.6	2.0	0.5		moderate fine fracture controlled Py-Cpy
			alteration and strong pervasive Si. Locally overprinted by weak Kfs						rare Qtz-Py-Cpy-K vns
			haloes around veins, and rare patches of diffuse Kfs. Local Magnetite						
			grains associated with stronger Bt. No strong Qtz veining, but interval						
			contains moderate Py and Cpy mineralization as fracture-controlled						
			seams up to 6 mm wide. Py seams are wider than Cpy seams and						
			may be late relative to Cpy. Rock also contains local Qtz-Py-Cpy-K						
			veins at low angles TCA (0-20). Local disseminated Py and Cpy.						
			Some veins carry minor black Hematite.						
			Estimate 2% Py, 0.5% Cpy over interval. Sericite alteration increases						
			in strength from 219.5-220.6 m						
			220.6-227.4: Bt alteration dies out. Moderate background Kfs-Si	220.6	227.4	tr	tr		trace remnant Py, Cpy in gougy section
			alteration is strongly overprinted by Clay-Ser alteration, and is						
			completely stripped out in more gougy sections. Interval contains						
			long gougy shears subparallel TCA (<10 degrees). Shears truncate						
			and dismember local pre-existing Qtz-Py-Cpy veins. Shear planes are						
			black to greenish grey, and are probably composed of chlorite, clay,						
			and possibly local Mo.Strong gougy breccia from 224.2-227.4 m.						
			No sulfide in gougy breccia - may have been stripped out by strong						
			Clay alteration. Estimate trace Py, trace Cpy over interval.						
			227.4-233.1: Gouge disappears. Strong to moderate Si and weak	227.4	233.1	1.0	0.5	tr	moderate QPCM+/-Hem frac fill and veining
			pervasive Kfs alteration. Local weak Kfs haloes around some veins.						local stockwork development

Hole ID: 18-PC-127			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
			Local patchy moderate Sericite. Moderate Qtz-Py+/-Cpy+/-Mo+/-Hem						
			veining and hairline fracture fill throughout. Local moderate						
			stockwork development, mostly controlled by fractures. Mineralized						
			veins hairline to ~6 mm width at all angles TCA. Locally crosscut by						
			long barren milky Qtz veins at low angles TCA (0-10 degrees). Not						
			much disseminated sulfide (trace to nil). Estimate 1% Py, 0.5% Cpy,						
			and trace to nil Mo over interval. Hem common, probably ~3%.						
			233.1-242.4: Spotty euhedral Bt appears in rock, locally accompanied	233.1	242.4	5.0	3.0		strong frac controlled Py-Cpy seams; mod to
			by Magnetite. Strong pervasive Kfs-Si alteration throughout gives						strong dissem sulfide; local veins
			rock a dark glassy reddish appearance. Local weak Kfs haloes on						
			some veins. Generally weak Qtz-Py-Cpy-K veining, but strong fracture-						
			controlled Py-Cpy seams throughout. Qtz-Py-Cpy veins up to 9 mm						
			wide at angles of 20-80 degrees TCA. Py-Cpy seams hairline to ~2 mm						
			wide at all angles TCA. Moderate to strong disseminated and patchy						
			Cpy and Py in groundmass of rock. Estimate 5% Py, 3% Cpy over						
			interval.						
			242.4-244.9: Bt disappears. Strong pervasive Kfs-Si alteration	242.4	244.9	5.0	3.0		strong frac controlled stkwk QPCH veining
			throughout. Strong fracture-controlled stockwork Qtz-Py-Cpy-Hem						
			veining throughout. Veins range from hairline to ~9 mm width and						
			dominant vein set is at ~20 degrees TCA. Hematite dominant over						
			Qtz in matrix of veins. Sulfides locally form coarse patches up to 6 mm						
			wide within veins. Cpy locally forms contiguous seams up to 1 mm						
			wide across width of core. Mineralized veins locally crosscut by milky						
			barren Qtz veins at high angles TCA. Estimate 5% Py, 3% Cpy over						
			interval.						
			244.9-260.0: Bt back in. Strong pervasive Si throughout, overprinted	244.9	260	3.0	5.0		mod to strong QPC+/-Hem veining, fracture
			by weak to moderate Kfs haloes around veins. Kfs stronger where						controlled massive sulfide seams; ~1% Hem
			vein density is greater. Local intervals of patchy strong Sericite						
			overprint Kfs-Si and seem to be fracture controlled. Moderate to						
			strong Qtz-Py-Cpy+/-Hem veining throughout, with local weak						
			stockwork development. Strong, fracture-controlled massive Cpy-Py						
			seams throughout. Cpy locally forms massive lensoid seams up to						
			15 mm wide. Moderate disseminated Py and Cpy in groundmass, as						
			well as abundant discontinuous fracture-controlled hairline Cpy+/-Py						
			seams up to 10 mm long. Veins range up to 20 mm wide and show						
			pinch-and-swell morphology in wider veins. Sulfide content starts to						
			weaken in lower 1 m of interval. Estimate 3% Py, 5% Cpy over						
			interval. Probably ~1% Hem.						

Hole ID: 18-PC-127			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
			260.0-270.36 EOH: diminishing sulfide content. Strong pervasive Si	260	270.36	1.0	tr		sulfide diminishes; local QPC vns, Py frac fill
			alteration disappears by 262.5 m. Succeeded by moderate patchy						local spotty Hem-Py
			pervasive Sericite and moderate background Argillic alteration. Local						
			Qtz-Py+/-Cpy veins, and occasional coarse pyritic fracture fill.						
			Occasional patches of spotty, scabrous disseminated Hem-Py. Local						
			breccias at low angles TCA invaded by buff-coloured barren Qtz+/-Kfs						
			veins which locally truncate Qtz-Py veins. Estimate 1% Py, trace Cpy						
			over interval.						
			EOH						

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
5.50	10.2				s	w	strong Si, wk Kfs on fracs	5.50	10.2	QPC veins	10-20	w	rare QTz-Py-Cpy+/-Bn veins at shallow angles TCA
10.20	12.70		w		s	w	strong Si; wk Kfs-Ser on fracs, veins	10.20	12.70	QPCM veins	0-70	m	fracture controlled Qtz-Py+/-Cpy+/-Mo veins,
													weak stockwork
12.70	15.00				s	m	strong pervasive Si, Kfs alt on veins fracs	12.7	15	QPCM veins	20-40	s	strong veining and stockwork; Qtz-Py-Cpy+/-Mo
15.00	18.30		w		s	m	local Bt-Magnetite veins; strong Si; mod	15.00	17.85	QPC veins	20-40	w	weak diffuseQtz-Py-Cpy veins shallow TCA
							Kfs on fracs and veins	17.85	18.30	Dru QPCM vn	20	s	strong drusy Qtz vein with coarse Py Cpy Mo

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
18.30	18.60			s			Strong Bt-Chl alteration w heavy dissem						
							sulfide						
18.60	21.40		w		s	m	strong Si; Kfs+/-Ser on fracs and veins	18.60	21.40	QPC veins	all	w	weak Qtz-Py+/-Cpy veining and fracture fill at
													all angles TCA
21.40	22.60		w	m	m	m	bkgr Bt overprinted by Si, Kfs+/-Ser	21.40	22.60	QPC Vns	all	m	moderate Qtz-Py-Cpy veining and stockwork
								21.40	22.60	Dru QPCM vns	0-20	m	crosscutting coarse grained drusy Qtz-Py-Cpy-Mo
22.60	24.40	w			s	m	strong Si; weak to mod Kfs spreads out	22.60	24.40	Frac	all	s	strong fracturing, poor mineralization
							from fractures; weak clay around fracs						
24.40	31.40		w		s	w	strong Si; weal to mod Kfs-Ser spreading	24.40	31.40	QPC vns	all	m	mod to strong diffuse veining, Qtz-Py-Cpy+/-Mo
							out from fractures	24.40	31.40	QPMC	0-20	m	crosscutting Qtz-Py-Mo+/-Cpy veins

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
31.40	42.00			m	w	w	strong veining and Kfs-Ser alt weakens;	31.40	42.00	QPC vns	0-20	w	rare coarse Qtz-Py-Cpy veins at low angle TCA
							background Bt stronger						
42.00	60.10	s	s	m		m	strong Clay-Ser overprints Kfs, Bt	42.00	60.10	QPC vns	all	w	weak veining and frac fill
								42.00	60.10	QPMC vns	0-15	w	local Qtz-Py-Mo+/-Cpy vns at low angles TCA
								42.00	60.10	Milky QV	30-45	w	late crosscutting barren Qtz vns

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
60.10	64.00	s	s			w	strong clay-Ser alteration; local Kfs	64.00	64.70	QMP vns	20	m	discrete Qtz-Mo+/-Py veins
								64.00	64.70	frac	60	m	gougy fractures offsetting above veins
64.00	73.10	vs	w		w	w	strong gougy breccia with strong clay	64.00	73.10	BX	10-15	vs	strong gougy breccia, internal angles of 10-15
													degrees TCA
73.10	78.00		s		s		strong Ser, mod pervasive Si	73.10	78.00	QPC vns			descriptions pending
								73.10	78.00	QPM vns			

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
								78.00	78.10	CT	20	s	sharp upper contact of Qtz monzonite
78.00	84.00		w		m	w	mod Si, weak Kfs; Ser alt of Plag	78.00	84.00	QPC vns	10-60	m	moderate Qtz-Py-Cpy veining
								78.00	84.00	QPCM vns	20	w	local Qtz-Py-Cpy-Mo Xcut above veins
84.00	85.00	s	s		s		strong background Si ovp by Clay-Ser	84.00	85.00	GOUGE	10	m	gougy section; gouge planes at 20 degrees TCA
85.00	86.00	m	m			m	mod pervasive Kfs ovp by Clay-Ser	85.00	86.00	QPMC vns	20	m	Qtz-Py-Mo-Cpy vein swarm at 20 degrees TCA
								85.00	86.00	frac	0-15	w	gougy fractures
86.00	94.60	m	m		w		weak Si ovp by mod Clay-Ser	86.00	94.60	QPCM vns	0-30	w	local isolated Qtz-Py-Cpy+/-Mo veins
								86.00	94.60	frac	70	w	fractures offsetting above veins

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
90.30	90.40	vs					strong clay gouge	90.30	90.40	GOUGE	60	vs	strong clay gouge at 60 degrees TCA
94.60	101.40	m	m		w	m	mod Ser alt ovp Si; increasing clay twd Bx	94.60	101.40	QPCM vns	0-15	m	moderate Qtz-Py-Cpy+/-Mo veining
								94.60	101.40	Mo frac	0-10	w	local trace Mo in grungy fractures
101.40	102.30	vs					strong clay in gougy breccia zone	101.40	102.30	BX	20	s	gougy breccia at 20 degrees TCA
102.30	105.20	m	m		s	w	strong Si+/-Kfs; Clay-Ser alt of Plag	102.30	105.20	QPC vns	all	m	weak to mod Qtz-Py-Cpy veining, weak stockwork
								102.30	105.20	QPMC veins	45	w	rare Qtz-Py-Mo-Cpy vns Xcut above veining
105.2	105.6	s					gougy breccia	105.20	105.60	BX	30	s	gougy breccia at 30 degrees TCA
105.6	109	m	m		w	w	mod clay-Ser; patchy mod Kfs-Si	105.60	109.00	QPC vns	30	w	local Qtz-Py-Cpy veins
109	114.3	w	w		s	s	strong Kfs-Si alt; local weak-mod Clay-ser	109.00	114.30	QPCM vns	10-45	m	moderate Qtz-Py-Cpy+/-Mo veining, loal stkwk
								109	114.3	QP vns	pending		crosscut by late Qtz-Py vns (no Cpy)

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
114.3	123.5	m	m		s	s	strong Kfs-Si overprints Argillic?	114.3	123.5	QPC vns	10-70	w	weak Qtz-Py-Cpy veining
123.5	129.7				s	m	Mod to strong Si, mod Kfs	123.5	129.7	QPC vns	0-60	m	moderate Qtz-Py-Cpy veining, stockwork
								123.5	129.7	QPCM vns	0-20	m	crosscutting Qtz-Py-Cpy+/-Mo veins
129.7	136.7				s	w	strong Si, weak patchy diffuse Kfs	129.7	136.7	QPCM vns	20-60	w	rare isolated Qtz-Py-Cpy+/-Mo veins
136.7	142.05		s		s	s	strong bkgr Kfs-Si overprinted by Si-Ser	136.7	142.05	QPCM vns	10-45	m	weak to mod QPC and QPCM veining

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
142.05	144.6		s		s		strong Si-Ser, Qtz flooding	142.05	144.6	QPC vns	20	w	local glassy Qtz-Py-Cpy veins
144.6	150.7		m		m	m	Si-Ser overprints Si-Kfs						
150.7	164.2		w		s	s	strong Kfs-Si ovp by Si-Ser	150.7	164.2	QPC vns	10-60	m	weak to mod Qtz-Py-Cpy veining
								160.6	164.2	QPCM vns	10-30	w	Mo-bearing veins crosscut QPCM
								160.3	160.9	frac	20	s	gougy fractures
								162.7	162.8	GOUGE	80	s	strong clay gouge
162.8	171		w	s	m	w	strong bkgr Bt, mod Si; weak Kfs vn haloes	162.8	171	QPCM vns	40-70	w	local Qtz-Py+/-Cpy+/-Mo veins
								169.9	169.95	Cpy-Py seam	40	s	massive Cpy-Py in 4 mm wide vein

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
171	173.7		m		w		weak Si overprinted by mod Ser	171	173.7	QPCM vns	20-40	w	local weak veining
173.7	175.4		w		s		Strong Jasperoid (Qtz-Hem) alt; local Ser	173.7	175.4	QPCM vns	20-40	w	local Qtz-Py-Cpy+/-Mo vns
175.4	176.5		w		w		weak Si-Ser						
176.5	177.7	s					strong clay in gougy rock	176.5	177.7	GOUGE	10-15	s	strong gouge at 10-15 degrees TCA
177.7	178.7				vs		Qtz breccia; mostly barren	177.7	178.7	BX		vs	Qtz breccia
178.7	182.8	s	s			w	strong Clay-Ser in brecciated gougy rock	178.7	182.8	GOUGE	10-20	s	gouge planes at 10-20 degrees TCA
							Qtz-Kfs veins low angle TCA	178.7	182.8	QK Bx	0-20	m	Qtz-Kfs veins may exploit pre-existing Qtz-Py vns
182.8	197.5	s	s				gougy brecciated rock	182.8	197.5	GOUGE	0-20	s	gouge planes at 0-20 degrees TCA
								187	187.5	FLT	30	s	main fault controlling gougy interval

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
197.5	203.1				vs		intense barren Bull Qtz breccia	197.5	203.1	Q Bx	10	vs	intense barren Bull Qtz breccia
203.1	213.5		w		m	m	mod pervasive Kfs-Si; weak Ser	203.1	213.5	QPC vns	all	w	weak to mod fracture controlled mineralization
								203.1	213.5	QP vns	70-90	w	local late crosscutting Qtz-Py vns
213.5	220.6			s	s	w	strong bkgr Bt-Si; weak Kfs vein haloes	213.5	220.6	frac	all	m	moderate fracture network/stockwork with
													sulfide fracture fillings
								213.5	220.6	QPCK vns	0-20	w	local Qtz-Py-Cpy-Kfs veins at low angles TCA
220.6	227.4	s	s		w	w	bkgr Kfs-Si alt stripped out by gougy Clay	220.6	227.4	GOUGE	0-10	s	long gougy shears subparallel TCA
								224.2	227.4	Bx	10	s	strong gougy breccia below shear bands
227.4	233.1				s	w	strong Si; weak to mod Kfs pvs and veins	227.4	233.1	QPCMH vns	all	m	mod Qtz-Py+/-Cpy+/-Mo+/-Hem veins and frac fill
													local stwk

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
								227.4	233.1	Milky QV	0-10	w	local late milky Qtz veins
233.1	242.4			m	s	s	strong pvs Kfs-Si; spotty Bt	233.1	242.4	frac	all	s	strong fracture controlled Py-Cpy seams
								233.1	242.4	QPC vns	20-80	w	local weak Qtz-Py-Cpy veining
242.4	244.9				s	s	strong pervasive Kfs-Si	242.4	244.9	QPCH vns	20-80	s	stronng Qtz-Py-Cpy-Hem veining, dominant vein
													set at 20 degrees TCA
244.9	260				s	w	strong Si; weak Kfs vein haloes	244.9	260	QPCH vns	all	s	mod to strong Qtz-Py-Cpy-Hem veining and stkwk

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
260	270.36	m	m				Si disappears; mod bkgr Argillic; patchy Ser	260	270.36	QPC vns	all	w	local weak veining at various angles TCA

Hole ID: 18-PC-127		Geotechnical Data						
From	To	Length	Recovery	%	RQD	%	Magnetics	Comments
2.13	5.18	3.05	0.52	17.05	0	0	2.011	loss throughout
5.18	8.23	3.05	2.5	81.97	0.12	3.934	8.066	loss throughout
8.23	11.28	3.05	2.5	81.97	0.13	4.262	0.154	loss throughout
11.28	14.33	3.05	2.8	91.8	1.1	36.07	0.126	loss throughout
14.33	17.37	3.04	2.8	92.11	1.86	61.18	12.06	loss throughout
17.37	20.42	3.05	2.7	88.52	0.83	27.21	1.999	loss throughout
20.42	23.47	3.05	2.7	88.52	0.48	15.74	0.109	loss 22.5-23.5
23.47	26.52	3.05	3	98.36	1.04	34.1	0.083	
26.52	29.57	3.05	2.75	90.16	1.73	56.72	0.74	
29.57	32.61	3.04	3.05	100.3	1.7	55.92	0.472	
32.61	35.66	3.05	2.7	88.52	0.12	3.934	0.148	loss throughout
35.66	38.71	3.05	2.5	81.97	0.14	4.59	0.413	loss throughout
38.71	41.76	3.05	2.5	81.97	0	0	0.25	loss throughout
41.76	44.81	3.05	3.05	100	2.13	69.84	0.812	
44.81	47.85	3.04	3.05	100.3	2.4	78.95	0.532	
47.85	50.9	3.05	3.05	100	2.6	85.25	0.539	
50.9	53.95	3.05	3.05	100	2.65	86.89	0.461	
53.95	57	3.05	2.85	93.44	2.52	82.62	0.394	
57	60.05	3.05	3.1	101.6	2.73	89.51	0.087	
60.05	63.09	3.04	3	98.68	2.41	79.28	0.19	
63.09	66.14	3.05	3	98.36	2.9	95.08	0.108	
66.14	69.19	3.05	3.05	100	2.07	67.87	0.113	
69.19	72.24	3.05	2.95	96.72	2.11	69.18	0.138	
72.24	75.29	3.05	2.9	95.08	1.43	46.89	0.124	
75.29	78.33	3.04	2.95	97.04	1.77	58.22	0.125	
78.33	81.38	3.05	2.95	96.72	2.65	86.89	0.143	
81.38	84.43	3.05	3	98.36	2.9	95.08	0.261	
84.43	87.48	3.05	3.05	100	2.55	83.61	1.716	
87.48	90.53	3.05	2.95	96.72	2.35	77.05	0.374	
90.53	93.57	3.04	2.9	95.39	1.4	46.05	0.794	
93.57	96.62	3.05	3.05	100	1.85	60.66	0.276	
96.62	99.67	3.05	2.9	95.08	1.4	45.9	0.094	
99.67	102.72	3.05	2.9	95.08	1.5	49.18	0.725	
102.72	105.77	3.05	3	98.36	2.25	73.77	0.07	
105.77	108.81	3.04	3	98.68	2	65.79	16.68	
108.81	111.86	3.05	3.05	100	2.55	83.61	0.327	
111.86	114.91	3.05	2.95	96.72	2.9	95.08	1.7	
114.91	117.96	3.05	3.05	100	1.75	57.38	1.608	
117.96	121.01	3.05	3	98.36	2.27	74.43	1.158	
121.01	124.05	3.04	3.05	100.3	3.05	100.3	0.141	
124.05	127.1	3.05	2.95	96.72	1.85	60.66	0.108	
127.1	130.15	3.05	3.05	100	2.95	96.72	4.234	
130.15	133.2	3.05	2.95	96.72	2.9	95.08	0.392	
133.2	136.25	3.05	3	98.36	2.85	93.44	1.308	

136.25	139.29	3.04	2.9	95.39	2.35	77.3	0.381	
139.29	142.34	3.05	3	98.36	2.5	81.97	0.556	
142.34	145.39	3.05	3.05	100	2.68	87.87	0.807	
145.39	148.44	3.05	3	98.36	2.85	93.44	0.717	
148.44	151.49	3.05	3	98.36	2.55	83.61	0.522	
151.49	154.53	3.04	3	98.68	2.1	69.08	2.798	
154.53	157.58	3.05	2.9	95.08	2.2	72.13	1.036	
157.58	160.63	3.05	3.05	100	2.2	72.13	0.544	
160.63	163.68	3.05	2.9	95.08	2.3	75.41	0.749	
163.68	166.73	3.05	2.9	95.08	2.45	80.33	13.29	
166.73	169.77	3.04	2.88	94.74	1.68	55.26	9.164	
169.77	172.82	3.05	2.85	93.44	2.28	74.75	0.537	
172.82	175.87	3.05	3	98.36	2.07	67.87	1.001	
175.87	178.92	3.05	2.9	95.08	0.51	16.72	0.499	
178.92	181.97	3.05	3	98.36	1.5	49.18	0.463	
181.97	185.01	3.04	2.9	95.39	2.5	82.24	0.302	
185.01	188.06	3.05	2.5	81.97	0.68	22.3	0.522	loss throughout
188.06	191.11	3.05	3.05	100	0.15	4.918	0.466	
191.11	194.16	3.05	2.9	95.08	0.45	14.75	0.43	
194.16	197.21	3.05	2.8	91.8	2.05	67.21	0.424	
197.21	200.25	3.04	2.85	93.75	1.52	50	0.544	
200.25	203.3	3.05	3.05	100	2.26	74.1	0.368	
203.3	206.35	3.05	2.95	96.72	2.39	78.36	1.085	
206.35	209.4	3.05	3.05	100	2.68	87.87	0.651	
209.4	212.45	3.05	2.9	95.08	2.66	87.21	17	
212.45	215.49	3.04	2.9	95.39	2.22	73.03	21.26	
215.49	218.54	3.05	2.87	94.1	1.97	64.59	5.449	
218.54	221.59	3.05	2.8	91.8	2	65.57	1.525	
221.59	224.64	3.05	3.05	100	2	65.57	0.179	
224.64	227.69	3.05	3.05	100	2.55	83.61	0.519	
227.69	230.73	3.04	2.9	95.39	2.3	75.66	24.97	
230.73	233.78	3.05	2.9	95.08	2.71	88.85	11.47	
233.78	236.83	3.05	2.95	96.72	2.19	71.8	9.963	
236.83	239.88	3.05	2.95	96.72	1.59	52.13	75.73	
239.88	242.93	3.05	3	98.36	2.33	76.39	1.659	
242.93	245.97	3.04	2.95	97.04	2.43	79.93	30.68	
245.97	249.02	3.05	3	98.36	2.15	70.49	58.37	
249.02	252.07	3.05	3.05	100	2.77	90.82	24.61	
252.07	255.12	3.05	3.05	100	2.35	77.05	75.15	
255.12	258.17	3.05	3.05	100	2.37	77.7	26.53	
258.17	261.21	3.04	2.9	95.39	2.24	73.68	18.54	
261.21	264.26	3.05	2.95	96.72	1.81	59.34	0.328	
264.26	267.31	3.05	3	98.36	2.54	83.28	0.974	
267.31	270.36	3.05	3.05	100	2.44	80	0.582	EOH at 270.36 m

Hole ID: 18-PC-127	Assay Data							
Sample	Interval (m)		Sample	Type	Cu	Mo	Au	Ag
Number	From	To	Length	Std/B/Dup	%	%	g/t	g/t
98216	5.50	8.50	3.00		0.16	0.00606	0.027	0.43
98217	8.50	11.50	3.00		0.335	0.01555	0.08	0.92
98218	11.50	12.70	1.20		0.331	0.00887	0.07	0.69
98219	12.70	15.70	3.00		0.46	0.0219	0.113	0.94
98220				STD CDN-CGS-27	0.392	0.0143	0.406	2.5
98221	15.70	18.70	3.00		0.46	0.01445	0.108	1.17
98222	18.70	21.40	2.70		0.356	0.01075	0.09	0.72
98223	21.40	22.60	1.20		0.462	0.01825	0.098	1.1
98224	22.60	24.40	1.80		0.346	0.01455	0.077	1.05
98225	24.40	27.40	3.00	**PLUS METALLURGICAL SAMPLE "098225 MET" MODERATE/HIGH GRADE**	0.59	0.01955	0.207	1.12
98226	27.40	30.40	3.00		0.859	0.01885	0.304	1.23
98227	30.40	31.40	1.00		0.727	0.0622	0.118	1.18
98228	31.40	33.40	2.00		0.296	0.0253	0.072	0.51
98229	33.40	36.40	3.00		0.401	0.01925	0.109	0.74
98230				BLANK	0.00114	0.000101	0.002	0.01
98231	36.40	39.40	3.00		0.283	0.01885	0.066	0.63
98232	39.40	42.00	2.60		0.318	0.01605	0.072	0.67
98233	42.00	45.00	3.00		0.401	0.0151	0.099	0.69
98234	45.00	48.00	3.00		0.365	0.0154	0.113	0.76
98235	48.00	51.00	3.00		0.457	0.0245	0.113	0.77
98236	51.00	54.00	3.00		0.814	0.0505	0.201	2.91
98237	54.00	57.00	3.00		0.777	0.0447	0.178	3.08
98238	57.00	60.10	3.10		0.608	0.0231	0.126	2.75
98239	60.10	63.10	3.00		0.575	0.0255	0.119	1.87
98240				DUP of 98239	0.501	0.0372	0.133	1.88
98241	63.10	66.10	3.00		0.756	0.0234	0.19	4.07
98242	66.10	69.10	3.00		0.441	0.0255	0.097	2.55
98243	69.10	71.10	2.00		0.607	0.0213	0.128	4.38
98244	71.10	73.10	2.00		0.617	0.026	0.149	1.39
98245	73.10	76.10	3.00		0.621	0.0266	0.146	1.77
98246	76.10	78.00	1.90		0.569	0.0228	0.109	1.08
98247	78.00	81.00	3.00		0.395	0.00528	0.083	0.73
98248	81.00	84.00	3.00		0.488	0.0227	0.109	1.97
98249	84.00	85.00	1.00		0.257	0.00878	0.059	81.5
98250				STD CDN-CM-8	0.369	0.0158	0.856	3.4
98251	85.00	88.00	3.00		0.343	0.0425	0.087	3.45
98252	88.00	91.00	3.00		0.435	0.0209	0.121	2.85
98253	91.00	93.00	2.00		0.326	0.0183	0.078	1.1

Hole ID: 18-PC-127	Assay Data							
Sample	Interval (m)		Sample	Type	Cu	Mo	Au	Ag
Number	From	To	Length	Std/B/Dup	%	%	g/t	g/t
98254	93.00	94.60	1.60		0.422	0.0163	0.114	0.97
98255	94.60	97.60	3.00		0.492	0.00733	0.094	1.7
98256	97.60	99.60	2.00		0.253	0.00526	0.059	1.81
98257	99.60	101.40	1.80		0.352	0.0132	0.066	1.55
98258	101.40	103.30	1.90		0.205	0.00317	0.064	0.78
98259	103.30	106.30	3.00		0.323	0.01345	0.07	1.66
98260				BLANK	0.00131	0.000042	0.002	0.01
98261	106.30	109.00	2.70		0.378	0.01135	0.09	1.35
98262	109.00	112.00	3.00		0.35	0.01825	0.092	2.92
98263	112.00	115.00	3.00	**PLUS METALLURGICAL SAMPLE "098263 MET" MODERATE/HIGH GRADE**	0.444	0.01415	0.101	2.51
98264	115.00	118.00	3.00		0.288	0.00553	0.073	0.77
98265	118.00	121.00	3.00		0.314	0.00356	0.067	0.73
98266	121.00	123.50	2.50		0.384	0.00489	0.095	1.17
98267	123.50	126.50	3.00		0.575	0.0157	0.175	1.57
98268	126.50	129.70	3.20		0.534	0.0267	0.148	2.1
98269	129.70	132.70	3.00		0.408	0.0222	0.139	0.99
98270				DUP of 98269	0.391	0.0222	0.132	0.99
98271	132.70	134.70	2.00		0.598	0.0252	0.228	1.09
98272	134.70	136.70	2.00		0.269	0.00898	0.082	0.53
98273	136.70	139.70	3.00		0.289	0.0227	0.078	2.95
98274	139.70	142.05	2.35		0.226	0.00808	0.059	3.24
98275	142.05	144.60	2.55		0.915	0.12	0.229	29.4
98276	144.60	147.60	3.00		0.31	0.0168	0.084	4.27
98277	147.60	150.70	3.10		0.404	0.0203	0.087	5.3
98278	150.70	153.70	3.00		0.533	0.0238	0.136	3.62
98279	153.70	156.70	3.00		0.513	0.022	0.118	2.44
98280				STD CDN-CM-11A	0.348	0.0355	0.992	1.71
98281	156.70	159.70	3.00	**PLUS METALLURGICAL SAMPLE "098281 MET" LOW GRADE**	0.453	0.0231	0.149	1.47
98282	159.70	162.70	3.00		0.322	0.0146	0.069	2.32
98283	162.70	164.20	1.50		0.45	0.00937	0.102	3.42
98284	164.20	167.20	3.00		0.285	0.00765	0.069	0.78
98285	167.20	169.20	2.00		0.469	0.0144	0.092	1.42
98286	169.20	171.00	1.80		0.308	0.0084	0.068	0.82
98287	171.00	173.70	2.70		0.448	0.0116	0.115	3.9

Hole ID: 18-PC-127	Assay Data							
Sample	Interval (m)		Sample	Type	Cu	Mo	Au	Ag
Number	From	To	Length	Std/B/Dup	%	%	g/t	g/t
98288	173.70	175.40	1.70		0.377	0.00923	0.087	4.03
98289	175.40	176.50	1.10		0.417	0.00722	0.094	2.3
98290				BLANK	0.00109	0.000036	<0.001	0.02
98291	176.50	177.70	1.20		0.572	0.0157	0.16	6.51
98292	177.70	178.70	1.00		0.12	0.001475	0.034	4.69
98293	178.70	181.70	3.00		0.323	0.0014	0.061	4.1
98294	181.70	182.80	1.10		0.568	0.00538	0.091	5.5
98295	182.80	184.70	1.90		0.306	0.00296	0.058	5.18
98296	184.70	185.80	1.10		0.393	0.000717	0.077	4.51
98297	185.80	188.80	3.00		0.327	0.00205	0.06	2.19
98298	188.80	191.80	3.00		0.355	0.00168	0.073	1.88
98299	191.80	194.80	3.00		0.409	0.000723	0.1	1.74
98300				STD CDN-CM-8	0.366	0.01565	0.927	3.46
98301	194.80	197.50	2.70		0.23	0.000477	0.059	1.07
98302	197.50	200.50	3.00		0.0901	0.000764	0.067	0.94
98303	200.50	203.10	2.60		0.244	0.000876	0.041	2.17
98304	203.10	206.10	3.00		0.471	0.000544	0.14	2.33
98305	206.10	209.10	3.00	**PLUS METALLURGICAL SAMPLE "098305 MET" LOW GRADE**	0.415	0.000785	0.097	2.01
98306	209.10	211.10	2.00		0.257	0.000576	0.061	0.67
98307	211.10	213.50	2.40		0.513	0.00017	0.108	3
98308	213.50	216.50	3.00		0.421	0.000195	0.105	0.76
98309	216.50	218.50	2.00		0.369	0.000473	0.093	0.85
98310				DUP of 98309	0.369	0.000362	0.092	0.98
98311	218.50	220.60	2.10		0.447	0.000211	0.127	1.48
98312	220.60	223.60	3.00		0.292	0.000261	0.062	2.2
98313	223.60	225.60	2.00		0.266	0.000107	0.061	2.75
98314	225.60	227.40	1.80		0.278	0.000181	0.064	3.32
98315	227.40	230.40	3.00		0.318	0.00029	0.072	3.32
98316	230.40	233.10	2.70		0.286	0.000112	0.145	2.43
98317	233.10	236.10	3.00		0.227	0.000127	0.051	0.63
98318	236.10	239.10	3.00		0.268	0.000435	0.055	0.73
98319	239.10	241.00	1.90		0.403	0.000106	0.086	1.11
98320				STD CDN-CM-11A	0.355	0.035	1.035	1.59
98321	241.00	242.40	1.40		0.484	0.000315	0.098	1.29

Hole ID: 18-PC-127	Assay Data						
Sample	Interval (m)		Sample	Type	Cu	Mo	Au	Ag
Number	From	To	Length	Std/B/Dup	%	%	g/t	g/t
98322	242.40	244.90	2.50	PLUS METALLURGICAL SAMPLE "098322 MET" MEDIUM/HIGH GRADE	0.733	0.000178	0.185	2.76
98323	244.90	247.90	3.00		0.813	0.000265	0.197	3.59
98324	247.90	250.90	3.00		0.705	0.000136	0.139	2.77
98325	250.90	253.90	3.00		0.705	0.000115	0.178	4.29
98326	253.90	257.00	3.10		0.472	0.000141	0.094	3.21
98327	257.00	260.10	3.10		0.371	0.000134	0.107	1.75
98328	260.10	263.10	3.00		0.195	0.000202	0.068	2.53
98329	263.10	266.10	3.00		0.133	0.001025	0.034	2.68
98330				BLANK	0.00126	0.000011	<0.001	0.03
98331	266.10	268.10	2.00		0.185	0.000556	0.066	2.38
98332	268.10	270.36	2.26	EOH	0.367	0.000542	0.095	4.75

2018 Poplar Drilling

Hole ID: 18-PC-128	**Easting (NAD 83): 632299**	**Core Size: HQ**	**DDH Started: December 4, 2018**
	Northing (NAD 83): 5986969	**Hole Azimuth: 0**	**DDH Finished: December 8, 2018**
Property: Poplar Deposit	**Elevation: 916 m**	**Hole Angle: -90**	**Log Completed: December 10, 2018**
	Source: GPS	**Total Depth: 422.76 m**	**Analysis by: ALS Minerals**

Logged by: J.Stacey
Geotechnician:J. Taylor
Geotech type: Basic

Dip & Azimuth Tests		
Depth	**Azimuth**	**Dip**
17.37	**19.9**	**-89.5**
87.48	**81.8**	**-89.6**
148.44	**51.3**	**-89.6**
215.4936	**31.8**	**-89.7**
276.4536	**22.6**	**-89.6**
346.5576	**22.4**	**-89.8**
422.7576	**37.2**	**-89.7**

Summary: Ddh 18-PC-128 drilled as a twin of historical ddh PC-19. However, the casing for PC-19 had been removed by previous operators, so the exact location of PC-19 is not known. The site for 18-PC-128 was chosen in an area thought to be the most likely site of PC-19, and which displayed minor signs of historical disturbance. 18-PC-128 has 4.9 m of overburden. Qtz monzonite from 4.9-35.0 m; heavy Qtz-Py veining and massive Py fracture fill. Also heavy coarse disseminated Py. Trace to nil copper minerals. Post-mineralization andesite dyke from 35-45.3 m. Fine-grained, buff to yellowish sedimentary(?) rock or tuff(?) from 45.3-104.2 m, with occasional Qtz Monzonite dykes and post-mineralization andesite to rhyolite dykes; strong stockwork Qtz-Py veining, Py fracture fill, and disseminated Py in sediment/tuff and Qtz Monzonite. Trace to nil copper minerals. Post-mineralization rhyolite dyke from 105.6-118.4. Qtz Monzonite from 118.4-422.76 m EOH, with occasional post-mineralization intermediate to felsic dykes. Strong Qtz-Py stockwork veining and pyrite fracture fill throughout, except in late dykes. Local trace Cpy and/or Mo in some veins, but generally poor in copper and molybdenum minerals. Weakly enriched in copper (Cpy) from about 250-390 m, but Cpy content rarely exceeds 0.1% over short intervals (<10 m). In general, ddh 18-PC-128 contains significant stockwork Pyrite mineralization, but veins are typically poor in copper and molybdenum.

Hole ID: 18-PC-128			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
0	4.9	OVB	Overburden. Mix of intrusive, volcanic, and post-mineralization dyke						
			material. Cobble size. Local brown mud seams.						
4.9	35	Qtz Monz	Light grey, massive equigranular to very weakly porphyritic Qtz	4.9	35	7-10	tr		Very heavy coarse grained Py mineralization as
			Monzonite. Moderate to strong pervasive Si and weak pervasive						fracture fillings, stockworks, and disseminations
			background argillic alteration throughout. Very heavily mineralized						
			with Pyrite, but very few copper minerals observed. Minor Cpy and						
			Bornite noted in some veins from 16-22 m, and Cpy appears						
			occasionally in veins down to top of dyke at 35.0 m. Local trace						
			Limonite in veins down to ~21 m. Rock is intensely shattered and						
			broken down to 24 m. Mineralization comprises coarse-grained Py						
			seams up to 16 mm wide at all angles TCA as isolated veins, fracture						
			fills, and moderate to strong stockworks. Stockwork mineralization						
			strongly controlled by fractures. Strong coarse grained disseminated						
			Py throughout. Estimate 7-10% Py,trace Cpy, trace Bn through						
			interval. Basal 6 cm of interval is strongly sheared at 55 degrees TCA						
			against underlying Andesite Dyke						
35	45.3	And Dyke	Maroon to bleached grey-tan coloured intermediate dyke of probable	35.00	45.3	0.0	0.0	0.0	Post-mineralization andesite dyke
			Andesitic composition. Moderately porphyritic, with isolated scatt.						
			subhedral to euhedral Plag phenocrysts to 7 mm. Local blobby						
			Plag-Chl glomerophenocrysts up to 20 mm diameter. Local						
			amygdules are filled with glassy to chalky zeolite(?) minerals.						
			Groundmass aphanitic and contains tiny Plag laths <1 mm length.						
			Sharp, planar upper contact at 55 degrees TCA. Local Qtz-Ser veins						
			along fractures have bleached buff coloured haloes that probably						
			contain Kfs. No mineralization. Sharp lower contact at 60 TCA.						
45.30	50.30	Sed?	Fine grained, buff to yellowish-tan coloured rock. May be a sediment	45.30	50.30	5.0	tr		strong coarse grained Qtz-Py stockwork veining,
			or a tuff - locally contains rounded Fsp and Qtz grains, suggesting						frac fill, and dissem; rare Cpy
			some aqueous transport; no stratification. A bit gougy in upper 50 cm						
			adjacent to dyke. Gouge bands at 60 degrees TCA. Strong Kfs-Si						
			alteration, moderately overprinted by Ser. Strong, coarse-grained						
			Qtz-Py stockwork veining, Py fracture fill, and disseminated Py						
			throughout. No copper minerals observed, but may be trace Cpy						
			mixed in here and there. Estimate 5% Py, trace(?) Cpy over interval.						
50.30	51.35	Qtz Monz	Light grey porphyritic Qtz Monzonite dyke. Sharp upper contact at 70	50.30	51.35	3.0			mod stockwork Qtz-Py veining
			degrees TCA. Sharp lower contact at 50 degrees TCA. No chilled						
			margins. Moderate stockwork Qtz-Py veins and fracture-controlled						
			Py seams up to 5 mm wide. Moderate disseminated Py. Estimate						
			3% Py over interval. Weak argillic alt, mod Si.						

Hole ID: 18-PC-128			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
			Qtz-Py veins crosscut intrusive contact.						
51.35	92.7	Sed?	51.35-58.2: Fine grained, buff to yellowish tan sediment(?) as above.	51.35	58.20	5.0			strong stockwork Qtz-Py veining
			Str pervasive Kfs-Si alteration, weak to nil Ser. Strong stockwork Qtz-Py						
			veins, fracture-controlled Py seams, and moderate disseminated Py						
			throughout. Py seams up to 5 mm wide. Local very strong Si						
			characterized by Qtz flooding. No copper minerals observed.						
			Estimate 5% Py over interval.						
			58.2-62.4: fine grained sed(?) as above. Weakly brecciated, and	58.20	62.40	3.0			mod fracture Py seams and Qtz-Py vns
			strong pervasive Kfs-Si alteration is overprinted by weak to moderate						
			Sericite. Interval contains long planar gougy fractures at 10-15						
			degrees TCA. Moderate fracture-controlled Py seams, dissem Py, and						
			rare Qtz-Py veins thoughout. No copper minerals observed. Estimate						
			3% Py over interval.						
			62.4-73.0: strong pervasive Kfs-Si alteration. Strong stockwork Qtz-Py	62.40	73.00	5.0		tr	strong Qtz-Py veining and stkwk; maybe tr Mo?
			veining, fracture controlled Py seams, and disseminated Py						
			throughout. Maybe trace very fine grained Mo here and there in						
			some veins? Py seams up to 4 mm wide. Qtz-Py veins are locally						
			diffuse, with strong Si haloes. Kfs alteration confined to background,						
			and does not form haloes around veins. Estimate 5% Py, maybe trace						
			Mo over interval.						
			73.0-74.5: Weak breccia with local gougy bands up to 3 cm wide at 50	73.00	74.50	1.0			gougy section is poorly mineralized
			degrees TCA. Moderate to strong pervasive Clay-Ser alteration						
			overprints background Kfs-Si. Moderate dissem Py and locally						
			dismembered Qtz-Py veins. Estimate 1% Py over interval. Base of						
			gougy section occupied by a 20 mm wide gougy Qtz-Py vein at 50						
			degrees TCA, containing ~50% coarse Py.						
			74.5-75.8: Kfs-Si weakens; rock contains weak to moderate Argillic	74.50	75.80	3.0			strong stockwork Qtz-Py veining
			alteration which seems to overprint Kfs-Si. Strong stockwork Qtz-Py						
			veining throughout. Estimate 3% Py in interval.						
			75.8-85.5: strong Kfs-Si alteration returns. Strong stockwork Qtz-Py	75.80	85.50	3-5			strong stockwork Qtz-Py veins, Xcut by massive
			veining throughout, with moderate dissem Py. Qtz-Py veins up to 12						frac controlled Py seams
			mm wide are crosscut by massive Py seams up to 3 mm wide. All						
			angles TCA. Estimate 3-5% Py over interval.						
			85.5-92.7:Same rock and alteration as above, but Qtz-Py veins and Py	85.50	92.70	3.0	tr	tr	minor Cpy in with Py; maybe rare trace Mo?
			seams start to pick up trace amounts of Cpy and rare local Hematite.						
			Maybe trace very fine-grained Mo here and there.						
			Estimate 3% Py, trace Cpy and trace to nil Mo over interval.						
92.70	93.45	And Dyke	Red to green porphyritic dyke; probably andesite? Strong oxidation in	92.70	93.45	0.0	0.0	0.0	Post-mineralization andesite dyke

Hole ID: 18-PC-128			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
			middle of dyke (Hem) with reduced margins. Sharp upper and lower						
			contacts at 65 degrees TCA. No mineralization.						
			Dyke seems to have exploited earlier Qtz Monz dyke structure.						
93.45	95.00	Qtz Monz	Light grey Qtz Monzonite dyke. Sharp upper CT at 65 degrees TCA;	93.45	95.00	5.0	tr		strong stkwk Qtz-Py+/-Cpy veins, dissem Py
			sharp lower contact at 55 degrees TCA. Weak patchy Ser alteration						
			throughout. Strong stockwork Qtz-Py+/-Cpy veins and disseminated						
			Py throughout. Estimate 5% Py, trace Cpy over interval.						
95.00	104.20	Sed?	Buff to tan-coloured sediment(?) as above. Strong pervasive Kfs-Si	95.00	104.20	5.0	tr	tr	strong Qtz-Py veining; local Cpy, maybe tr Mo?
			alteration throughout. Very strong silicification from 102-104.5 m.						
			Strong stockwork Qtz-Py+/-Cpy veining throughout; possibly trace Mo						
			here and there. Moderate to strong disseminated Py. Local fracture						
			controlled Py+/-trace Cpy seams up to 5 mm wide. Veins and						
			fractures at all angles TCA. Estimate 5% Py, trace Cpy, trace Mo(?)						
			over interval.						
104.20	105.10	Rhy Dyke	Light tan-coloured to buff Qtz-eye rhyolite dyke. Strong Plag and Qtz	104.2	105.1	0.0	0.0	0.0	post-mineralization rhyolite dyke
			phenocrysts in aphanitic groundmass. Sharp upper contact at 50						
			degrees TCA. No mineralization. Plag phenoxts sericitized						
105.10	105.60	Sed?	Xenolith of country rock near upper contact of Rhy dyke. Mod dissem	105.10	105.60	2.0			mod dissem Py in sediment xenolith near upper
			Py throughout. Weakly brecciated.Upper and lower margins weakly						contact of rhyolite dyke
			sheared at 50-60 degrees TCA. Estimate 2% Py in xenolith.						
105.60	118.40	Rhy Dyke	Qtz-eye rhyolite dyke as above. No mineralization. Sharp, weakly	105.60	118.40	0.0	0.0	0.0	post-mineralization rhyolite dyke
			sheared lower contact at 40 degrees TCA.						
118.4	163.3	Qtz Monz	Light grey to buff to pinkish Qtz Monzonite. Weakly porphyritic, with	118.40	122.80	2.0	tr		Mod Qtz-Py+/-Cpy veining and Py frac fill
			Plag phenocrysts to ~4 mm.						
			118.4-122.8: Light grey weakly brecciated Qtz monzonite. Moderate						
			bkgr Kfs-Si alt is overprinted by moderate Clay and weak Sericite						
			related to breccia and local gouge bands at 40-50 degrees TCA.						
			Moderate Qtz-Py+/-Cpy veining and late fracture-controlled Py seams.						
			Weak disseminated Py in groundmass. Estimate 2% Py, trace Cpy						
			over interval. Local very late crosscutting Gypsum veins.						
			122.8-151.8: Strong pervasive Si-Kfs alteration throughout, locally	122.80	151.80	3.0	tr	tr	strong Qtz-Py veining, local trace Cpy/Mo
			overprinted by weak Clay-Ser in weak breccias and local narrow						
			gougy sections. Kfs-Si intervals pinkish, Clay-Ser intervals white to						
			greenish-grey. Strong stockwork Qtz-Py veining throughout,						
			sometimes accompanied by very minor trace Cpy and/or Mo. Qtz-Py						
			veins are crosscut by late fracture-controlled Py seams. Veins up to						
			35 mm wide (maximum), with an average around 5 mm. Py seams up						
			to 4 mm width. Local weak disseminated Py in groundmass. Kfs						

Hole ID: 18-PC-128			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
			alteration starts to weaken at 151.8 m. Estimate 3% Py, trace Cpy,						
			and local trace Mo over interval.						
			151.8-157.0: Kfs-Si weakens to weak/moderate in weakly brecciated	151.80	157.00	2.0	tr		mod Qtz-Py veining, local dissem Py; one coarse
			section. Overprinted by weak Clay-Ser. Rock more light grey than pink.						sulfide vein up to 30 mm wide contains
			Moderate Qtz-Py veining and local patchy disseminated Py here and						significant Cpy
			there. Possibly rare fine-grained Cpy here and there. At 156.1-156.2						
			m, a lensoid 3-30 mm wide Qtz-sulfide vein at 20 degrees TCA						
			contains ~80% Py, 5% Cpy - sulfides coarse-grained. Strongest Cpy						
			mineralization seen in any vein so far in this drill hole. Estimate 2%						
			Py, trace Cpy over interval.						
			157-163.3: Mod to strong Kfs-Si alteration back in, locally overprinted	157.00	163.30	3.0	tr		Strong stockwork Qtz-Py veining
			by Clay+/-Ser in weakly gougy sections. Strong Qtz-Py stockwork						
			veining throughout, with occasional very rare Hem-Py-Cpy veins						
			crosscutting earlier Qtz-Py veins. Some Qtz veins carry trace amounts						
			of Cpy, but most veins only Py. Late fracture-controlled Py seams						
			crosscut earlier vein types. Estimate 3% Py, trace Cpy over interval.						
163.3	163.7	And Dyke	Dark reddish brown, very weakly porphyritic post-mineralization	163.30	163.70	0.0	0.0	0.0	Post-mineralization Andesite dyke
			dyke. Probably andesitic composition. No mineralization						
			Sharp upper and lower contacts at 25 degrees TCA.						
163.70	169.00	Qtz Monz	Light grey to greenish-grey Qtz Monzonite. Weak to moderate Clay-Ser	163.70	169.00	2.0		tr	strong stkwk Qtz-Py veining; one isolated
			alteration overprints weak background Kfs-Si. Strong stockwork						discontinuous Mo seam
			Qtz-Py veining throughout; veins locally up to 20 mm wide with weak						
			ribbon textures. One discontinuous Mo seam, hairline to 5 mm wide,						
			noted at 164.8 m. Trace Mo in some Qtz-Py veins. Weak to moderate						
			dissem Py in groundmass. Estimate 2% Py, trace Mo over interval.						
			20 cm interval above underlying dyke gougy and brecciated at 40						
			degrees TCA.						
169	169.1	And Dyke	10 cm wide Andesite dyke. Sharp upper and lower contacts at 40	169.00	169.10	0.0	0.0	0.0	post-mineralization Andesite dyke
			degrees TCA.						
169.10	170.55	Qtz Monz	Red and green, heavily altered Qtz Monzonite. Strong Ser and Hem.	169.10	170.55	2.0			dissem Py in heavily altered rock adjacent to
			May be hornfelsed due to dyke intrusion? Moderate dissem Py and						andesite dyke
			rare veining. Estimate 2% Py over interval.						
170.55	175.9	Bt Qtz Monz	Dark brown to black, strongly biotitic Qtz monzonite with local round	170.55	175.9	1.0			weak veining
			diorite blobs. Moderate to strong Ser alteration throughout. Veining						
			generally weak throughout, and almost no disseminated						
			Py. 174.4-174.7 m contains a 30 cm wide grey glassy Barren Qtz vein						
			hosting fracture-controlled Py. Estimate 1% Py over interval. Sharp						
			upper contact at 60 degrees TCA; sharp lower CT at 45 degrees TCA.						

Hole ID: 18-PC-128			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
175.9	234.5	Qtz Monz	175.9-185.2: Strong Bt disappears, though rock contains scattered Bt	175.90	185.20	2.0	tr		moderate diffuse Qtz-Py veining; rare Cpy
			phenocrysts (or alteration-related porphyroblasts?) down to 179.2 m.						
			Rock light greenish-grey to white. Weak pervasive Clay-Ser alteration						
			throughout, with local patchy weak Kfs. Moderate diffuse Qtz-Py						
			veining throughout, with local weak stockwork development. Veins						
			up to 15 mm wide at angles of 0-40 degrees TCA. Local hairline to						
			2 mm wide fracture controlled Py seams crosscut diffuse Qtz-Py						
			veining. Weak to moderate disseminated Py in groundmass of rock.						
			Estimate 2% Py, trace to nil Cpy over interval.						
			185.2-196.7: Moderate Kfs-Si alteration is locally overprinted by	185.20	196.70	2.0	tr		weak to mod stkwk Qtz-Py veining
			weak patchy Clay-Ser. Weak to moderate stockwork Qtz-Py veining						
			throughout. Weak disseminated Py in groundmass of rock. Estimate						
			2% Py, trace to nil Cpy over interval.						
			196.7-205.1: Strong pervasive Kfs-Si alteration throughout. Moderate	196.70	205.10	2.0	tr		mod stkwk Qtz-Py veining; local rare Cpy
			to strong Qtz-Py stockwork veining. Veins hairline to 7 mm width at						
			angles of 20-60 degrees TCA. Weak to moderate disseminated Py.						
			Rare diffuse Hem-Py+/-Cpy veins. Estimate 2% Py, trace Cpy over						
			interval.						
			205.1-213.4: Alteration as above, through slightly stronger Si.	205.10	213.40	2.0	tr		mod stkwk Qtz-Py vns; Qtz-Hem-Py vns and frac
			Moderate stockwork Qtz-Py veining throughout, with the addition of						fill
			occasional Qtz-Hem-Py veins and hematitic fracture fill. Qtz-Py veins						
			hairline to 7 mm wide, all angles TCA. Hem seams mostly hairline in						
			fractures at all angles TCA. Estimate 2% Py, trace Cpy over interval.						
			213.4-221.9:Very strong pervasive Si and moderate Kfs throughout.	213.40	221.90	1.0	tr		weak veining
			Local patchy Ser. Vein density somewhat lower than overlying						
			intervals. Contains weak Qtz-Py veining with local weak stockwork						
			development. Also contains occasional Hem-Py+/-Cpy veins and						
			hairline fracture fills. Trace to nil disseminated sulfide. Estimate						
			1% Py, trace Cpy over interval.						
			221.9-231.9: Strong Si-Kfs alteration dies out, replaced with weak	221.90	231.90	2.0	tr		mod Qtz-Py veining
			Clay-Ser. Moderate Qtz-Py veining throughout, with local short						
			intervals (<50 cm) of very strong veining and Qtz flooding. Rare veins						
			contain trace Cpy. Occasional Qtz-Hem+/-Py veins and hematitic						
			fracture fills are locally crosscut by late, planar Qtz-Py+/-Cpy veins.						
			Trace to nil disseminated sulfide. Estimate 2% Py, trace Cpy over						
			interval.						
			231.9-234.5: Strong pervasive Kfs-Si alteration, locally overprinted by	231.90	234.50	3.0	0.1		strong stkwk Qtz-Py+/-Cpy veining
			weak Clay+/-Ser alteration of phenocrysts. Strong Qtz-Py+/-Cpy						

Hole ID: 18-PC-128			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
			stockwork veining; local trace disseminated Py and very rare patchy						
			Cpy in groundmass of rock. Minor Bt-Magnetite alteration,						
			e.g. at 233.8 m. Throughout interval, Qtz-Py+/-Cpy veins truncate and						
			crosscut earlier Hem veins and frac fill. Estimate 3% Py, 0.1% Cpy						
			over interval.						
234.50	236.30	Mafic Dyke	Black to very dark brown aphanitic mafic dyke. Heavily sericitized	234.50	236.30	2.0			strong stkwk Qtz-Py, Qtz-Hem vns; no Cpy
			around veins. Strong stockwork Qtz-Py and Qtz-Py-Hem veins						
			throughout crosscut dyke contacts. Upper contact sharp at 40						
			degrees TCA.Lower contact very sharp at 30 degrees TCA. Intrusion of						
			dyke probably just after formation of host rock, and certainly prior to						
			vein formation. Estimate 2% Py over interval.						
236.3	264.2	Qtz Monz	236.3-246: Pinkish to pinkish grey to white Qtz Monzonite. Strong pvs	236.30	246.00	3.0	tr		mod to strong stkwk Qtz-Py vns; rare Cpy
			Kfs-Si alteration throughout, with local patches of very strong Si.						
			Local hematitic fractures. Moderate to strong stockwork Qtz-Py						
			veining throughout, with local intervals containing strong Qtz						
			flooding and coarse Py mineralization. Some veins carry trace Cpy.						
			Veins range up to 18 mm wide and some wider veins show ribbon						
			textures. All angles TCA. Trace to nil dissem Py in groundmass of rock.						
			Estimate 3% Py, trace Cpy over interval.						
			246.0-247.7: Rock weakly brecciated around a gouge zone	246.00	247.70	2.0			mod Qtz-Py vns in Ser-altered interval
			from 246.7-246.9 m at 30 degrees TCA. Kfs-Si alteration replaced by						
			strong Ser, weak Clay. Local patchy Hem alteration. Moderate Qtz-Py						
			veining is crosscut by gouge. No disseminated sulfide. 80 cm interval						
			below gouge contains strong glassy Qtz-Hem-Py veining with veins up						
			to 8 mm wide at angles of 10 and 30 degrees TCA (conjugate set).						
			Estimate 2% Py over interval.						
			247.7-257.8: Strong Ser weakens, replaced by moderate to strong	247.70	257.80	3.0	0.1		mod stkwk Qtz-Py and Qtz-Hem+/-Py+/-Cpy vns
			Kfs-Si with weak Ser alteration of phenocrysts and local diffuse						
			patches of weak pervasive Ser. Ser seems to overprint Kfs-Si.						
			Moderate veining and weak stockwork development throughout,						
			mostly at angles of 0-30 degrees TCA (conjugate veins). Numerous						
			long glassy Qtz-Hem+/-Py veins up to 10 mm wide at very low angles						
			TCA (0-10) are crosscut by glassy Qtz-Py veins. Qtz-Hem veins locally						
			carry trace Cpy here and there. Interval also includes local patchy						
			Hem alteration and abundant hairline Hem fracture fills. Glassy						
			Qtz-Py veins generally contain coarse grained pyrite up to 50% of						
			individual veins and carry minor Cpy here and there. Nil						
			disseminated sulfide in groundmass of rock. Estimate 3% Py, trace						

Hole ID: 18-PC-128			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
			to 0.1% Cpy over interval. Lower 2 m of interval contains occasional						
			gougy fractures at 15-25 degrees TCA that truncate Qtz-Py veins.						
			257.8-260.4: Strong pervasive Si-Kfs alteration. Moderate stockwork	257.80	260.40	2.0			mod stkwk Qtz-Py veining; no Cpy
			Qtz-Py veining throughout, weakening toward 260.4 m, crosscuts						
			earlier hematitic fractures and Qtz-Hem veins. No Cpy observed. Nil						
			dissem Py in groundmass. Estimate 2% Py over interval.						
			260.4-262.9: strong background Bt alteration and weak Ser alt of	260.40	262.90	2.0	tr		weaker veining; local Qtz-Py+/-Cpy vns
			Plag phenocrysts. Veining weaker in biotitic rock, but contains local						
			Qtz-Py+/-Cpy veins which seem to be crosscut by Hem veins. Trace						
			disseminated Py and rare Cpy in groundmass of rock. Estimate 2% Py,						
			trace Cpy over interval.						
			262.9-264.2: Strong pervasive Si-Ser alteration with minor patchy	262.90	264.20	1.0			weak stkwk Qpt-Py vns; minor dissem Py
			Kfs-Si. Weak hairline stockwork Qtz-Py veining throughout. Minor						
			disseminated Py. Estimate 1% Py over interval.						
			264.2-273.9: Strong pervasive Si-Kfs alteration with local Si-Ser alt	264.2	273.9	2.0	tr	tr	mod Qtz-Py vns and local wk stkwk; rare Cpy
			around low-angle gougy fractures. Rubbly fault zone (no measureable						local glassy Qtz-Hem-Py+/-Cpy subpar. TCA
			angle TCA) from 264.7-265.1 m truncates Qtz-Py veins. Moderate						
			Qtz-Py veining and local weak stockwork development. Qtz-Py veins						
			up to 18 mm wide at angles of 20-40 degrees TCA. Some veins						
			carry trace Cpy. Local glassy Qtz-Hem-Py+/-Cpy veins up to 20 mm						
			wide at angles of 0-30 degrees TCA. Qtz-Py veins crosscut Hem-						
			bearing veins and fractures. One 40 mm wide Qtz-Py-Cpy vein						
			at 270.0 m displays strong ribbon texture; 40 degrees TCA. One 10 mm						
			wide Qtz vein at 268.4 m contains a hairline Mo seam in the middle						
			of the vein. Estimate 2% Py, trace Cpy, trace Mo over interval.						
264.2	298.5	Rhy Dyke	Light tan to pinkish to light green Qtz-eye rhyolite dyke. Sharp upper	264.2	298.5	0.0	0.0	0.0	post-mineralization rhyolite dyke
			contact at 45 degrees TCA. Irregular/"curvy" lower contact at ~30						
			degrees TCA. Strong Qtz and Plag phenocrysts throughout; Plag locally						
			strongly sericitized to bright green colour and/or clay-altered to						
			chalky white. No mineralization in dyke.						
298.5	341.25	Qtz Monz	298.5-304.5: Strong pervasive Kfs-Si alteration weakly overprinted	298.5	304.5	5.0	0.1		strong glassy Qtz-Py+/-Cpy vns invaded by Kfs
			by Sericite alteration of Plag phenocrysts. Minor Bt alt or phenoxts?						
			scattered throughout. Local patches of intense Si. Strong glassy						
			Qtz-Py+/-Cpy stockwork veins are strongly invaded by vuggy Kfs within						
			3 m of overlying dyke contact - could vuggy Kfs veins be related to						
			rhyolite intrusion? Kfs veins are spatially associated with						
			mineralized Qtz veins, but seem to have exploited these pre-existing						
			structures, as the Kfs veins themselves are unmineralized. Interval						

Hole ID: 18-PC-128			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
			also contains hairline Hem frac fill that is crosscut by Qtz-Py+/-Cpy						
			veins. Mineralized veins typically have glassy Qtz along vein walls,						
			with a seam of Py+/-Cpy running down center of vein. Veins range						
			from 1-10 mm width at angles of 0-20 degrees TCA. Estimate 5% Py,						
			0.1% Cpy over interval.						
			304.5-312.4: Very strong patchy to pervasive Si overprints weak	304.5	312.4	2.0	tr		glassy Qtz-Py vns; rare Cpy, trace dissem Py
			background Ser. Strength of veining decreases to moderate.						
			Stockwork veining mostly disappears. Instead, weakly mineralized						
			glassy Qtz veins up to 20 mm wide tend to run subparallel TCA, up to						
			max 20 degrees TCA, with local branching/flanking veins. Glassy						
			Qtz-Py veins are crosscut by fine hairline						
			Py+/-Cpy fracture fill. Trace disseminated sulfide in more strongly						
			silicified intervals. Estimate 2% Py, trace Cpy over interval.						
			312.4-317.6: Strong pervasive Sericite associated with weaky	312.4	317.6	2.0	tr		discrete Qtz-Py veining; rare Cpy
			sheared/brecciated rocks in the upper 4 m of interval; Ser weakens						
			from 316.6-317.6 m. Occasional patchy strong Kfs is probably						
			background (i.e. overprinted by Ser). Si weak throughout. Occasional						
			more clay-rich patches. Local shear/breccia bands at 10-20 degrees						
			TCA. Weak to moderate Qtz-Py veining up to 20 mm wide at angles of						
			20-40 degrees TCA. No strong stockwork veining - veins generally						
			glassy and discrete; contain coarse Py seams in center of veins up to						
			3 mm wide. Veins typically dismembered by shear/breccia. Trace to						
			nil disseminated Py in groundmass of rock. Estimate 2% Py, trace						
			Cpy here and there.						
			317.6-321.1: Strong pervasive Kfs-Si alteration, with patchy greenish	317.6	321.1	1.0	tr		weak Qtz-Py+/-Cpy veining, weak stkwk
			Ser alteration of Plag phenocrysts. Weak Qtz-Py+/-Cpy veining						
			throughout, with local very weak stockwork development. Veins 2-18						
			mm wide, mostly at 20-40 degrees TCA. Wider veins have diffuse						
			boundaries. Trace to nil dissem Py in groundmass of rock.						
			Estimate 1% Py, trace Cpy over interval.						
			321.1-324.8: Very strong pervasive Si alteration accompanied by	321.1	324.8	2.0	tr		weak Qtz-Py veining; rare Cpy;
			euhedral Bt blasts. Weak Kfs alteration haloes on some veins.						
			Generally weak veining throughout, comprising Qtz-Py veins up to						
			7 mm wide at angles of 10-60 degrees TCA. From 321.1-321.5, rock						
			contains an unusually regular fracture set at 50 degrees TCA -						
			fractures spaced every 2-3 mm and have consistent orientation.						
			Hairline Py fracture fill. These fractures are crosscut by a long 5 mm						
			wide Qtz-Py vein at 10 degrees TCA. Lower edge of strong Si alteration						

Hole ID: 18-PC-128			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
			ragged against underlying "crowded-crystal" Qtz monzonite.						
			Estimate 2% Py, trace Cpy over interval.						
			324.8-327.7: White "crowded crystal" Qtz monzonite. Mod pervasive	324.8	327.7	1.0	tr		Qtz-Py veins at low angle TCA
			Clay alteration with moderate Ser. Weak veining, comprising 2-4						
			glassy Qtz-Py veins up to 12 mm wide at angles of 15-20 degrees TCA.						
			Py generally forms thin seams running down center of vein. Rare						
			trace Cpy here and there mixed in with Py. Estimate 1% Py, trace to						
			nil Cpy over interval.						
			327.7-341.25: Strong pervasive Kfs-Si alteration, with local patches	327.7	341.25	2.0	tr		mod to strong Qtz-Py veining; local stkwk
			of very strong Si. Local greenish Ser patches. Moderate to strong						
			Qtz-Py veining throughout, with local moderate stockworks. Trace						
			Cpy here and there in veins. Veins range up to 10 mm in width at						
			angles of 0-90 degrees TCA, with an average of ~20 degrees TCA. Local						
			weak hematitic fractures are crosscut by Qtz-Py veins. Nil						
			disseminated Py in groundmass of rock. Estimate 2% Py, trace Cpy						
			over interval. Ser alteration strengthens and Kfs-Si weakens in lower						
			1 m of interval, approaching narrow post-mineral dyke.						
341.25	341.5	Rhy Dyke	Light green, aphanitic to very weakly porphyritic felsic dyke. Probably	341.25	341.5	0.0	0.0	0.0	felsic dyke; no mineralization
			rhyolitic composition. Sharp upper contact at 45 degrees TCA.						
			Irregular, "xenolithic" or brecciated lower contact at ~20 degrees						
			TCA. No mineralization.						
341.5	389.5	Qtz Monz	341.5-344.6: Qtz monz with moderate Ser alteration. No Si. Moderate	341.5	344.6	2.0	tr		mod Qtz-Py veining; rare Cpy; local weak stkwk
			Qtz-Py veining throughout, with local weak stockwork development.						local Qtz-Hem vns and fracs
			Veins up to 12 mm wide at angles of 20-70 degrees TCA, with an						
			average around 30 degrees TCA. Veins mostly glassy Qtz-Py with rare						
			trace Cpy in some veins. Local Qtz-Hem veins and hematitic fractures						
			are crosscut by Qtz-Py veins. Ser alteration dies out around 344.6 m.						
			Estimate 2% Py, trace Cpy over interval.						
			344.6-349.6: Ser alteration disappears. Strong pervasive Kfs-Si	344.6	349.6	4.0	tr		weak to mod Qtz-Py+/-Cpy veining; local strong
			alteration throughout with local patchy moderate Ser. Weak to						veins with ribbon textures
			moderate Qtz-Py veining as above with local trace Cpy in some veins.						
			Vein density increases around 346 m (mod to strong), though						
			stockwork development remains weak. From 346-349.6, veins range						
			from 5-15 mm in width, are generally at angles of 20-60 degrees TCA						
			with an average of ~30 degrees TCA, and have weak ribbon textures						
			with coarse grained Py seams running down center of veins.						
			Estimate 4% Py, trace Cpy over interval.						
			349.6-354.4: Mod to strong pervasive Ser overprints background	349.6	354.4	1.0			minor Qtz-Py veining; no Cpy

Hole ID: 18-PC-128			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
			Kfs-Si alteration. Weak stockwork veining here and there through						local Qtz-Hem vns and fracs
			interval. Veins comprise barren Qtz-Hem and minor Qtz-Py veining at						
			angles of 10-45 degrees TCA. Local 3-7 mm wide Py seams subparallel						
			TCA crosscut Qtz-Py veins. Gougy from 350.8-351.2 m; gouge planes						
			at 20&70 degrees TCA (possibly conjugate set?). Moderate shear zone						
			from 352-352.4 m; shearing at 40 degrees TCA. Strength of veining						
			decreases significantly below shear zone. Estimate 1% Py over						
			interval. No Cpy observed. Note: Greenish 6 cm wide Rhy dyke						
			at 349.96-350.06 m at 40 degrees TCA. Sharp contacts.						
			354.4-363.9: Strong Kfs-Si alteration back in; local sections have very	354.4	363.9	3.0	0.1		moderate Qtz-Py+/-Cpy veining; local weak stkwk
			strong Si and/or moderate Si-Ser. Strength of veining increases						local patchy dissemPy-Cpy
			somewhat, and includes minor to locally significant Cpy in more than						
			half of veins observed.						
			Veins range up to ~10 mm wide and have somewhat diffuse						
			boundaries with weak Kfs+/-Bt haloes. Veins mostly around 30-40						
			degrees TCA and form local weak stockworks. Local 1-2 mm Py seams						
			on fractures. Local patchy coarse disseminated Py+/-Cpy.						
			Estimate 3% Py, 0.1% Cpy over interval.						
			363.9-368.75: Strength of veining decreases, and Cpy almost	363.9	368.75	1.0			weak veining; Cpy out
			completely disappears. Moderate patchy to pervasive Kfs-Si is						
			overprinted by patchy moderate Ser. Occasional Qtz-Py veins up to						
			7 mm wide and hairline to 2 mm Py seams. Vein angles of 15-45						
			degrees TCA. Almost no disseminated sulfide. Estimate 1% Py over						
			interval.						
			368.75-371.4: Si disappears, replaced by moderate Clay-Ser	368.75	371.40	0.5			local isolated Qtz-Py veins
			alteration. Minor isolated Qtz-Py veining, with veins up to 20 mm						
			wide at angles of 20-60 degrees TCA. No disseminated sulfide.						
			Estimate 0.5% Py over interval.						
			371.4-374.0: Strong Si+/-Kfs back in. Minor isolated Qtz-Py veining and	371.4	374	0.5			local isolated Qtz-Py veins
			occasional Py seams. Qtz-Py veins up to 7 mm wide, mostly at angles						
			of ~50 degrees TCA. Local mutually-crosscutting veins at 10 degrees						
			TCA may be conjugate to 50 degree veins? No disseminated sulfide.						
			Estimate 0.5% Py over interval.						
			374.0-379.2: Si weakens considerably, replaced with weak to	374	379.2	1.0			weak Qtz-Py veining
			moderate patchy Clay and moderate to strong patchy Ser. Local						
			remnant patches of moderate Si. Weak Qtz-Py veining throughout,						
			ranging up to 12 mm wide at angles of ~50 degrees TCA. No stockwork						
			development. Very minor trace Cpy in some veins. Strong sandy clay						

Hole ID: 18-PC-128			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
			gouge from 378.5-378.7 m; gouge at ~50 degrees TCA. Estimate 1% Py						
			over interval.						
			379.2-389.5: Moderate to strong Si-Kfs alteration with local sections	379.2	389.5	1.0	tr		weak Qtz-Py veining; rare Cpy; local weak stkwk
			of moderate to strong Ser. Qtz-Py veining generally weak throughout,						
			ranging up to 15 mm wide at angles of 30-70 degrees TCA. Weak						
			stockwork development from 385.4-388.8, including some veins with						
			trace Cpy. Local 2-4 mm Py seams. No disseminated sulfide.						
			Estimate 1% Py, trace Cpy over interval.						
389.5	390.4	Rhy Dyke	Light pinkish tan, massive to very weakly porphyritic intrusive dyke.	389.5	390.4	0.0	0.0	0.0	felsic dyke; no mineralization
			Probably ~rhyolitic. Includes a couple of chunks of Qtz Monz wallrock.						
			Sharp upper contact at 50 degrees TCA; moderately sharp lower						
			contact at 60 degrees TCA. No mineralization.						
390.4	391.2	Qtz Monz	Weakly sericitized Qtz Monz adjacent to dyke. Rare Qtz-Py veins.	390.4	391.2	tr			trace dissem Py in slice of monz next to dyke
			Estimate trace Py over interval.						
391.2	392.4	Rhy Dyke	20 cm Rhy dyke as above. No mineralization. Sharp upper and lower	391.2	392.4	0.0	0.0	0.0	felsic dyke; no mineralization
			contacts at ~55 degrees TCA.						
392.4	422.76	Qtz Monz	392.4-400.4: Strong background Kfs-Si alteration is overprinted by	392.4	400.4	1.0			weak Qtz-Py veining; no stkwk
			weak Clay-Ser. Weak veining throughout, no real stockwork						
			development. Qtz-Py veins up to 20 mm wide locally have weak Kfs or						
			Ser haloes. Veins generally 20-40 degrees TCA. Trace disseminated						
			Py in goundmass of rock. Sericite weakens from 398-400.4, and clay						
			mostly disappears. Estimate 1% Py over interval.						
			400.4-410.7: Strong pervasive Kfs-Si alteration is locally overprinted	400.4	410.7	1.0			weak to mod Qtz-Py veining; tr dissem Py
			by weak Clay-Ser. Weak veining, except for 405.2-407.8 m, where						
			thin Qtz-Py veining forms a weak to moderate stockwork at angles of						
			20-40 degrees TCA. Trace disseminated Py in groundmass of rock.						
			Lower half of interval contains few mineralized veins and several						
			barren milky Qtz veins. Kfs-Si weakens from 409.2-410.7 m, gradually						
			replaced by Clay-Ser. Estimate 1% Py over interval.						
			410.7-415.8: Strengthening Clay-Ser alteration overprints Kfs-Si. Rock	410.7	415.8	0.5			local weak Qtz-Py veing
			weakly brecciated and strongly Clay-Ser altered from 412.7-414.7.						
			Generally weak Qtz-Py veining through interval, with local 1-10 mm						
			wide Qtz-Py veins at angles of 0-30 degrees TCA. Trace disseminated						
			sulfide here and there. Local barren Qtz veins crosscut Qtz-Py veins.						
			Estimate 0.5% Py over interval.						
			415.8-422.76 EOH: Moderate pervasive Kfs-Si alteration overprinted	415.8	422.76	2.0			weak Qtz-Py veining; local strong Ser haloes
			by patchy Ser+/-Clay. Weak Qtz-Py veining, with local moderate						
			stockwork development. Veins up to 5 mm width at angles of 20-50						

Hole ID: 18-PC-128			Description	Mineralization					
Depth (m)		Litho		Depth		%	%	%	Comments
From	To	Code		From	To	Py	Cpy	Mo	
			degrees TCA. Some veins have strong Ser haloes up to 10 mm wide.						
			No Cpy noted. Estimate 2% Py over interval.						
			EOH						

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
4.90	35.00	w			s		mod to strong Si, weak backgr clay	4.90	35.00	Py seams	all	s	strong fracture controlled Py stockwork
								34.90	35.00	SHR	55	s	strongly sheared against underlying dyke
35.00	45.30	w?				w	Kfs(?) or clay(?) bleaching in andesite dyke	35.00	35.10	CT	55	s	sharp upper dyke contact
								45.20	45.30	CT	60	s	sharp lower dyke contact
45.30	50.30		m		s	s	strong tan coloured Kfs-Si alt; local Ser	45.30	45.80	GOUGE	60	m	local gouge bands in country rock below dyke
								45.8	50.3	QP vns	all	s	strong Qtz-Py stockwork; nil Cpy
50.30	51.35	w	w		m		weak argillic alt in monz dyke	50.30	50.35	CT	70	s	sharp upper contact Qtz Monz dyke
								50.30	51.35	QP vns	all	s	strong Qtz-Py veining, stockwork
								51.30	51.35	CT	50	s	sharp lower Contact of Qtz Monz dyke

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
51.35	58.20		w		s	s	strong Kfs-Si, local weak Ser	51.35	58.20	QP vns	all	s	strong stockwork Qtz-Py veining
58.20	62.40		m		s	s	strong Kfs-Si is ovp by weak to mod Ser	58.20	62.40	frac	10-15	w	long low-angle gougy fractures
								58.20	62.40	QP vns	all	m	moderate Qtz-Py veining and frac fill
62.40	73.00				s	s	strong pervasive Kfs-Si alteration	62.40	73.00	QP vns	all	s	strong Qtz-Py veins and Py seams
73.00	74.50	s	s			w	clay-ser overprints Kfs	73.00	74.50	GOUGE	50	m	gougy bands to 3 cm
								74.45	74.50	QP vn	50	s	discrete 20 mm wide coarse Qtz-Py vein
74.50	75.80	m			w	w	argillic alt overprints Kfs-Si?	74.50	75.80	QP vns	all	s	strong stockwork Qtz-Py veining
75.80	92.70				s	s	strong Kfs-Si alt	75.80	85.50	QP vns	all	s	strong Qtz-Py stockwork Xcut by frac controlled
													massive Py seams
92.70	93.45						red to green oxidized/reduced And dyke	92.70	93.45	CT	65	s	sharp upper and lower Andesite dyke contacts

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
93.45	95.00		w				weak patchy Ser	93.45	95.00	QP vns	all	s	strong stockwork Qtz-Py vns
95.00	104.20				s	s	strong pervasive Kfs-Si	95.00	104.20	QP vns	all	s	strong stockwork Qtz-Py vns; tr Cpy, Mo
104.20	105.10		w				siliceous rhyolite dyke, no real alteration	104.20	104.30	CT	50	s	sharp upper contact of rhyolite dyke
							other than sericitized Plag phenocrysts						
105.10	105.60		s		w	w	sericitized xenolith in rhyolite	104.20	105.60	CT	55	s	weakly sheared margins of xenolith in Rhy
105.60	118.40		w				siliceous rhyolite dyke, no real alteration	118.35	118.40	CT	40	s	lower contact of rhyolite dyke
							other than sericitized Plag phenocrysts						
118.40	122.80	m	w		m	m	mod bkgr Kfs-Si ovp by Clay-Ser	118.40	122.80	GOUGE	45	w	local 1-3 CM gouge bands
								118.40	122.80	QP vns	all	m	moderate Qtz-Py veining, trace local Cpy
122.80	151.80	w	w		s	s	strong Kfs-Si, local Clay-Ser in gouge	122.80	151.80	QP vns	all	s	strong stockwork Qtz-Py veining; local tr Cpy/Mo

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
151.80	157.00	w	w		w	w	weak to mod Kfs-Si ovp by weak Clay-Ser	151.80	157.00	QP vns	all	m	mod Qtz-Py veining, Py seams; local Cpy
								156.10	156.20	QPC vn	20	s	coarse massive Qtz-Py-Cpy vein to 30 mm wide
157.00	163.30	w	w		s	s	strong Kfs-Si; local Clay-Ser in gougy areas	157.00	163.30	QPC vns	all	s	strong Qtz-Py stkwk; local Qtz-Py-Cpy veins
													crosscut Qtz-Py vns
163.30	163.70						reddish brown dyke; oxidized Hem?	163.30	163.70	CT	25	s	sharp contacts of andesite dyke
163.70	169.00	m	m		w	w	weak to mod Clay-Ser ovp Kfs-Si	163.70	169.00	QP vns	all	s	strong Qtz-Py stockwork; one isolated Mo seam
169.00	169.10						reddish brown dyke; oxidized Hem?	169.00	169.10	CT	40	s	10 cm andesite Dyke
169.10	170.55		s				strong Ser and Hem; red and green rock						
							maybe hornfelsed?						
170.55	175.9		s	s			biotitic Qtz monz; strong Ser	170.55	170.60	CT	60	s	sharp upper contact of Bt Qtz monzonite
								175.80	175.90	CT	45	s	sharp lower contact of Bt Qtz monzonite

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
175.90	185.20	w	w			w	weak Clay-Ser alt throughout; local wk Kfs	175.90	185.20	QP vns	0-40	m	moderate diffuse Qtz-Py veining
185.20	196.70	w	w		m	m	mod Kfs-Si locally ovp by weak Clay-Ser	185.20	196.70	QP vns	all	m	weak to mod Qtz-Py veining
196.70	205.10				s	s	strong pervasive Kfs-Si	196.70	205.10	QP vns	20-60	m	mod to strong stkwk Qtz-Py veining; rare Cpy
205.10	213.40				s	s	strong pervasive Kfs-Si	205.10	213.40	QP vns	all	m	mod stkwk Qtz-Py veins; local Qtz-Hem-Py veins
213.40	221.90		w		vs	m	very strong Si; mod Kfs; local Ser	213.40	221.90	QP vns	all	w	weak veining; local weak stkwk
221.90	231.90	w	w				Kfs Si dies out; replaced with weak Clay-Ser	221.90	231.90	QP vns	all	m	mod Qtz-Py veining
231.90	234.50	w	w		s	s	strong Kfs-Si locally ovp by Clay-Ser	231.90	234.50	QPC vns	all	s	strong stkwk Qtz-Py+/-Cpy vns; Hem fracs

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
234.50	236.30		s	s?			strong Ser haloes around vns; dk brown/	234.50	234.55	CT	40	s	upper contact of mafic dyke
							black bkgr may be strong vfg Bt?	234.50	236.30	QP vns	all	s	strong Qtz-Py stkwk veining
								236.25	236.30	CT	30	vs	sharp lower contact of mafic dyke
236.30	246.00				s	s	strong pervasive Kfs-Si; patchy very str Si	236.30	246.00	QPC vns	all	s	mod to strong stkwk Qtz-Py; rare Cpy
246.00	247.70	w	s				strong Ser, weak Clay around gouge	246.70	246.90	GOUGE	30	s	narrow but strong gouge w Ser halo
247.70	257.80		s		m	m	mod to strong Kfs-Si; weak Ser repl Plag	247.70	257.80	QP vns	0-30	m	mod veining and stockwork; Qtz-Py Xcuts Q-Hem
								255.80	257.80	frac	15-25	m	low angle gougy fractures

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
257.80	260.40				s	s	Strong pervasive Kfs-Si	257.80	260.40	QP vns	all	m	mod stkwk Qtz-Py veining; no Cpy
260.40	262.90		w	s			strong Bt and local weak Ser; rare Kfs	260.40	262.90	QPC vns	all	w	local Qtz-Py+/-Cpy vns, various angles TCA
262.9	264.2		s		s		strong Si-Ser	262.9	264.2	QP vns	all	w	weak stockwork hairline Qtz-Py vns
264.2	273.9		m		s	s	strong Si-Kfs; local Si-Ser on gougy fracs	264.2	273.9	QP vns	20-40	m	mod Qtz-Py veining
								264.70	265.10	FLT	na	s	rubbly fault zone; no measureable angle TCA
								268.4	268.5	QPC vn	40	s	40mm wide Qtz-Py-Cpy ribbon vein
								270	270.1	QPM vn	30	s	glassy Qtz-Py vn with a hairline Mo seam in center
273.9	298.5		m				siliceous rhyolite dyke, no real alteration	264.2	264.3	CT	45	s	sharp upper contact of rhyolite dyke
							other than sericitized Plag phenocrysts	298.2	298.5	CT	0-30	m	wavy/irregular or embayed lower CT of Rhy dyke
298.5	304.5		w		s	s	strong Kfs-Si; weak Ser alt of Plag	298.5	304.5	QPC vns	0-20	s	strong Qtz-Py+/-Cpy vns; invaded by vuggy Kfs vns

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
304.5	312.4		w		vs		very strong patchy Si ovp weak bkgr Ser	304.5	312.4	QP vns	0-10	m	glassy Qtz-Py veins subparallel TCA; branching
													side veins
312.4	317.6		s		w	w	Strong pervasive Ser; weak bkgr Kfs, Si	312.4	317.6	QP vns	20-40	w	weak to mod Qtz-Py veining
								312.4	317.6	SHR/BX	10-20	w	local shear/breccia bands truncate veins
317.6	321.1		w		s	s	strong pervasive Kfs-Si; patchy Ser; strong	317.6	321.1	QPC vns	20-40	w	weak Qtz-Py+/-Cpy veining; local weak stockwork
							Si haloes around dffuse wider veins						
321.1	324.8			m	vs	w	very strong pervasive Si; euhedral Bt; weak	321.1	324.8	QP vns	10-60	w	weak veining at various angles TCA
							Kfs haloes on some veins	321.1	321.5	Py frac	50	s	fine pyritic fractures at consistent 50 deg TCA

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
324.8	327.7	m	m				moderate Clay-Ser in crowded crystal	324.8	327.7	QP vns	15-20	w	Qtz-Py veins at low angle TCA
							monzonite						
327.7	341.25		vs		s	s	strong Kfs-Si alt; local very strong Ser	327.7	341.25	QPC vns	20	m	avg angle of mod Qtz-Py+/-Cpy veining; local
													mod stkwk
341.25	341.5	w					dyke may be weakly clay-altered	341.25	341.3	CT	45	s	sharp upper contact of felsic dyke
								341.4	341.5	CT	20	w	brecciated/xenolithic lower CT of felsic dyke
341.5	344.6		m				moderate Ser alt	341.5	344.6	QP vns	30		avg angle of Qtz-Py vns, local weak stkwk
344.6	349.6		m		s	s	strong pervasive Kfs-Si; local patchy Ser	344.6	349.6	QPC vns	30		avg angle of Qtz-Py vns, local weak stkwk
349.6	354.4		s		w	w	mod to strong Ser ovp bkgr Kfs-Si	349.6	354.4	QP vns	10-45	w	weak Qtz-Py veining

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
								350.8	351.2	GOUGE	20,70	m	conjugate? gouge planes at 20 & 70 degrees TCA
								349.96	350.06	DYKE	40	s	6 cm felsic dyke
								352	352.4	SHR	40	m	moderate to strong shearing over 40 cm
354.4	363.9		m		vs	s	strong Kfs-Si; local very strong Si & str Ser	354.4	363.9	QPC vns	30-40	m	moderate Qtz-Py+/-Cpy; local weak stkwk
363.9	368.75		m		m	m	mod patchy Kfs-Si ovp by patchy mod Ser	363.9	368.75	QP vns	15-45	w	weak Qtz-Py veining
368.75	371.40	m	m				Si out; replaced by Clay-Ser	368.75	371.40	QP vns	20-60	w	weak Qtz-Py veining
371.4	374				s	s	strong pervasive Kfs-Si	371.4	374	QP vns	50	w	Qtz-Py veins possibly conjugate at 10 & 50 TCA
								371.4	374	QP vns	10	w	Qtz-Py veins possibly conjugate at 10 & 50 TCA
374	379.2	m	m				weak to moderate patchy Clay and Ser	374	379.2	QP vns	50	w	weak Qtz-Py veining
								378.5	378.7	GOUGE	50	s	strong sandy clay gouge

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	
379.2	389.5		s		s	s	mod to strong Kfs-Si, local mod to str Ser	379.2	389.5	QP vns	30-70	w	weak Qtz-Py veining; local Cpy
389.5	390.4						unaltered felsic dyke	389.5	389.6	CT	50	s	sharp upper contact of felsic dyke
								390.3	390.4	CT	60	m	moderately sharp lower CT of felsic dyke
390.4	391.2		w				weak Ser						
391.2	392.4						unaltered felsic dyke	391.2	392.4	DYKE	45	s	felsic dyke
392.4	400.4	w	w		s	s	strong bkgr Kfs-Si ovp by Clay-Ser	392.4	400.4	QP vns	20-40	w	weak Qtz-Py veining
400.4	410.7	w	w		s	s	strong Kfs-Ser locally ovp by Clay-Ser	400.4	410.7	QP vns	20-40	w	weak Qtz-Py veining
410.7	415.8	s	s		w	w	strong Clay-Ser in weakly brecciated rock	410.7	415.8	QP vns	0-30	w	weak Qtz-Py veining
415.8	422.76		s		m	m	mod pvs Kfs-Si; local strong Ser haloes on veins	415.8	422.76	QP vns	20-50	w	weak Qtz-Py veining

Alteration Scale: vw-w-m-s-vs								Structure					
Depth		2nd	Serici	2nd	2nd	2nd	Comments	Depth			Angle	% or	Comments
From	To	Clay		Bio	Sil	Ksp		From	To	Type	tca	Strength	

Hole ID: 18-PC-128		Geotechnical Data						
From	To	Length	Recovery	%	RQD	%	Magnetics	Comments
2.13	5.18	3.05	0.7	22.95	0	0	0.123	Overburden
5.18	8.23	3.05	1.6	52.46	0	0	0.051	All mag readings taken at depth marker block
8.23	11.28	3.05	2.8	91.8	0	0	0.06	
11.28	14.33	3.05	3.05	100	0	0	0.061	
14.33	17.37	3.04	2.7	88.82	0	0	0.095	
17.37	20.42	3.05	2.7	88.52	0	0	0.093	
20.42	23.47	3.05	2.9	95.08	0	0	0.245	
23.47	26.52	3.05	3.05	100	2.4	78.69	0.389	
26.52	29.57	3.05	3.05	100	2.83	92.79	0.065	
29.57	32.61	3.04	3.05	100.3	3.05	100.3	0.102	
32.61	35.66	3.05	3.05	100	2.66	87.21	0.362	
35.66	38.71	3.05	3.05	100	2.62	85.9	0.317	
38.71	41.76	3.05	3.05	100	2.7	88.52	0.109	
41.76	44.81	3.05	2.95	96.72	1.72	56.39	0.31	
44.81	47.85	3.04	2.95	97.04	1.95	64.14	0.175	
47.85	50.9	3.05	2.95	96.72	2.37	77.7	0.111	
50.9	53.95	3.05	3	98.36	2.7	88.52	0.76	
53.95	57	3.05	2.9	95.08	2.05	67.21	0.685	CAVE at 54 m; not sampled
57	60.05	3.05	3	98.36	2.8	91.8	0.362	
60.05	63.09	3.04	3	98.68	2.6	85.53	0.379	
63.09	66.14	3.05	3.05	100	2.7	88.52	0.078	
66.14	69.19	3.05	2.95	96.72	2.35	77.05	0.123	
69.19	72.24	3.05	3	98.36	2.7	88.52	0.219	
72.24	75.29	3.05	3.05	100	3.05	100	0.114	
75.29	78.33	3.04	2.9	95.39	2.9	95.39	0.066	
78.33	81.38	3.05	3.03	99.34	2.75	90.16	0.292	
81.38	84.43	3.05	3.1	101.6	3.05	100	0.067	
84.43	87.48	3.05	3	98.36	2.65	86.89	0.149	
87.48	90.53	3.05	3	98.36	2.77	90.82	0.357	
90.53	93.57	3.04	2.95	97.04	2.84	93.42	0.28	
93.57	96.62	3.05	3.05	100	2.89	94.75	0.186	
96.62	99.67	3.05	3.05	100	2.98	97.7	0.348	
99.67	102.72	3.05	2.95	96.72	2.68	87.87	0.414	
102.72	105.77	3.05	3.05	100	2.95	96.72	0.105	
105.77	108.81	3.04	2.95	97.04	2.27	74.67	0.099	
108.81	111.86	3.05	3.05	100	2.44	80	0.129	
111.86	114.91	3.05	3	98.36	2.52	82.62	0.1	
114.91	117.96	3.05	3	98.36	2.81	92.13	0.267	
117.96	121.01	3.05	3	98.36	2.65	86.89	0.038	
121.01	124.05	3.04	3.05	100.3	3.05	100.3	0.059	
124.05	127.1	3.05	3.05	100	2.9	95.08	0.115	
127.1	130.15	3.05	3	98.36	2	65.57	0.076	
130.15	133.2	3.05	3.03	99.34	2.93	96.07	0.127	
133.2	136.25	3.05	3	98.36	2.85	93.44	0.346	

136.25	139.29	3.04	2.97	97.7	2.72	89.47	0.12	
139.29	142.34	3.05	3.05	100	3	98.36	0.074	
142.34	145.39	3.05	3.05	100	2.76	90.49	0.316	
145.39	148.44	3.05	3.05	100	3.05	100	0.13	
148.44	151.49	3.05	3	98.36	2.75	90.16	0.63	
151.49	154.53	3.04	3.05	100.3	2.82	92.76	0.516	
154.53	157.58	3.05	3	98.36	2.9	95.08	0.126	
157.58	160.63	3.05	3.05	100	2.87	94.1	0.096	
160.63	163.68	3.05	2.85	93.44	2.75	90.16	1.61	
163.68	166.73	3.05	3.03	99.34	2.81	92.13	0.087	
166.73	169.77	3.04	2.95	97.04	2.47	81.25	15.94	
169.77	172.82	3.05	3.05	100	2.81	92.13	1.048	
172.82	175.87	3.05	3.05	100	2.46	80.66	12.52	
175.87	178.92	3.05	3.05	100	2.76	90.49	0.469	
178.92	181.97	3.05	3.05	100	3	98.36	0.271	
181.97	185.01	3.04	3.05	100.3	2.37	77.96	0.286	
185.01	188.06	3.05	2.78	91.15	2.7	88.52	0.317	
188.06	191.11	3.05	3	98.36	2.86	93.77	0.17	
191.11	194.16	3.05	3	98.36	2.29	75.08	0.365	
194.16	197.21	3.05	2.96	97.05	2.46	80.66	0.368	
197.21	200.25	3.04	3.05	100.3	2.76	90.79	0.74	
200.25	203.3	3.05	3.05	100	2.98	97.7	0.986	
203.3	206.35	3.05	2.9	95.08	2.18	71.48	0.165	
206.35	209.4	3.05	3.05	100	3.05	100	0.316	
209.4	212.45	3.05	2.98	97.7	2.42	79.34	0.499	
212.45	215.49	3.04	3.05	100.3	2.05	67.43	9.663	
215.49	218.54	3.05	3.03	99.34	2.74	89.84	0.874	
218.54	221.59	3.05	2.93	96.07	2.61	85.57	2.232	
221.59	224.64	3.05	2.96	97.05	2.48	81.31	0.941	
224.64	227.69	3.05	3	98.36	2.95	96.72	1.138	
227.69	230.73	3.04	3.05	100.3	2.46	80.92	0.494	
230.73	233.78	3.05	2.96	97.05	2.64	86.56	88.1	
233.78	236.83	3.05	3.05	100	2.84	93.11	10.26	
236.83	239.88	3.05	3.05	100	3.05	100	0.243	
239.88	242.93	3.05	3.05	100	3	98.36	6.157	
242.93	245.97	3.04	3.05	100.3	2.92	96.05	0.47	
245.97	249.02	3.05	2.85	93.44	1.97	64.59	1.545	
249.02	252.07	3.05	3.05	100	2.35	77.05	0.417	
252.07	255.12	3.05	3	98.36	2.77	90.82	0.912	
255.12	258.17	3.05	2.93	96.07	2.5	81.97	56.37	
258.17	261.21	3.04	3.05	100.3	2.78	91.45	49.92	
261.21	264.26	3.05	3.05	100	2.8	91.8	0.917	
264.26	267.31	3.05	2.9	95.08	1.84	60.33	0.504	
267.31	270.36	3.05	3.05	100	2.17	71.15	2.559	
270.36	273.4	3.04	3.05	100.3	2.95	97.04	0.423	
273.4	276.45	3.05	2.9	95.08	1.95	63.93	0.121	
276.45	279.5	3.05	2.95	96.72	2.66	87.21	0.112	

279.5	282.55	3.05	3.05	100	2.85	93.44	0.223	
282.55	285.6	3.05	3.05	100	2.62	85.9	0.13	
285.6	288.65	3.05	3.05	100	2.68	87.87	0.144	
288.65	291.69	3.04	3	98.68	2.34	76.97	0.173	
291.69	294.74	3.05	3	98.36	2.45	80.33	0.312	
294.74	297.79	3.05	3.05	100	2.52	82.62	0.379	
297.79	300.84	3.05	3	98.36	2.87	94.1	0.627	
300.84	303.89	3.05	3.05	100	2.17	71.15	35.9	
303.89	306.93	3.04	3.05	100.3	3.05	100.3	41.78	
306.93	309.98	3.05	3.05	100	2.42	79.34	6.388	
309.98	313.03	3.05	2.9	95.08	2.48	81.31	0.4	
313.03	316.08	3.05	2.95	96.72	2.35	77.05	14.2	
316.08	319.12	3.04	2.95	97.04	2.67	87.83	0.398	
319.12	322.17	3.05	3.05	100	2.81	92.13	25.83	
322.17	325.22	3.05	3.05	100	2.44	80	6.854	
325.22	328.23	3.01	3	99.67	2.65	88.04	1.676	
328.23	331.32	3.09	3.05	98.71	2.65	85.76	30.42	
331.32	334.36	3.04	3.05	100.3	2.42	79.61	3.054	
334.36	337.41	3.05	2.95	96.72	2.49	81.64	0.551	
337.41	340.46	3.05	2.9	95.08	2.68	87.87	0.84	
340.46	343.5	3.04	3	98.68	2.23	73.36	36.92	
343.5	346.55	3.05	3.05	100	3.02	99.02	1.26	
346.55	349.6	3.05	3.02	99.02	2.68	87.87	1.002	
349.6	352.65	3.05	2.9	95.08	2.06	67.54	2.525	
352.65	355.7	3.05	3.03	99.34	2.57	84.26	6.31	
355.7	358.75	3.05	3.02	99.02	2.62	85.9	4.452	
358.75	361.8	3.05	2.95	96.72	2.79	91.48	0.765	
361.8	364.85	3.05	3	98.36	2.62	85.9	4.377	
364.85	367.89	3.04	3	98.68	2.5	82.24	2.007	
367.89	370.94	3.05	2.9	95.08	2.27	74.43	1.077	
370.94	373.99	3.05	3.05	100	2.3	75.41	8.332	
373.99	377.04	3.05	3	98.36	1.87	61.31	0.501	
377.04	380.09	3.05	3.05	100	1.95	63.93	22.38	
380.09	383.13	3.04	3.05	100.3	2.28	75	3.881	
383.13	386.18	3.05	3.05	100	2.92	95.74	0.134	
386.18	389.23	3.05	3.05	100	2.6	85.25	0.603	
389.23	392.28	3.05	3.05	100	2.6	85.25	0.467	
392.28	395.33	3.05	3.05	100	2.12	69.51	2.211	
395.33	398.37	3.04	3.05	100.3	2.3	75.66	0.215	
398.37	401.42	3.05	3	98.36	2.36	77.38	19.71	
401.42	404.47	3.05	3	98.36	2.56	83.93	0.351	
404.47	407.52	3.05	2.95	96.72	2.65	86.89	1.416	
407.52	410.57	3.05	3.05	100	2.7	88.52	3.1	
410.57	413.61	3.04	3.05	100.3	2.65	87.17	0.289	
413.61	416.66	3.05	3	98.36	2.5	81.97	0.726	
416.66	419.71	3.05	3.05	100	2.8	91.8	0.372	
419.71	422.76	3.05	2.9	95.08	2.6	85.25	2.214	EOH at 422.76 m

Hole ID: 18-PC-128	Assay Data							
Sample	Interval (m)		Sample	Type	Cu	Mo	Au	Ag
Number	From	To	Length	Std/B/Dup	%	%	g/t	g/t
98333	5.00	8.00	3.00		0.104	0.00312	0.031	0.47
98334	8.00	11.00	3.00		0.0483	0.00498	0.016	1.13
98335	11.00	14.00	3.00		0.0226	0.00355	0.017	0.29
98336	14.00	17.00	3.00		0.112	0.001465	0.039	0.59
98337	17.00	20.00	3.00		0.0567	0.00186	0.016	0.31
98338	20.00	23.00	3.00		0.0658	0.00462	0.045	0.66
98339	23.00	26.00	3.00		0.01275	0.0045	0.013	0.54
98340				STD CDN-CM-8	0.352	0.016	0.887	3.46
98341	26.00	29.00	3.00		0.0825	0.001585	0.038	0.82
98342	29.00	32.00	3.00		0.106	0.00132	0.035	0.32
98343	32.00	35.00	3.00		0.103	0.001255	0.03	0.88
98344	35.00	38.00	3.00		0.00304	0.000185	<0.001	0.11
98345	38.00	41.00	3.00		0.00479	0.000357	<0.001	0.17
98346	41.00	44.00	3.00		0.0035	0.000385	<0.001	0.3
98347	44.00	45.30	1.30		0.00234	0.000145	<0.001	0.09
98348	45.30	48.30	3.00		0.1625	0.00313	0.044	0.67
98349	48.30	50.30	2.00		0.196	0.00501	0.057	0.65
98350				BLANK	0.00091	0.000037	<0.001	0.02
98351	50.30	51.35	1.05		0.1035	0.001065	0.055	0.77
98352	51.35	54.30	2.95		0.1535	0.00401	0.034	0.88
98353	54.30	57.30	3.00		0.149	0.00311	0.04	1.49
98354	57.30	60.30	3.00		0.1655	0.004	0.043	2.3
98355	60.30	62.50	2.20		0.163	0.00263	0.05	5.66
98356	62.50	65.50	3.00		0.148	0.00336	0.034	1.6
98357	65.50	68.50	3.00		0.268	0.00495	0.103	1.83
98358	68.50	71.50	3.00		0.215	0.00462	0.053	1.24
98359	71.50	73.00	1.50		0.1655	0.00356	0.039	2.04
98360				DUP of 98359	0.1545	0.00364	0.03	1.71
98361	73.00	74.50	1.50		0.189	0.0036	0.041	2.93
98362	74.50	75.80	1.30		0.229	0.00298	0.039	0.76
98363	75.80	78.80	3.00		0.1865	0.00323	0.038	1.27
98364	78.80	81.80	3.00		0.232	0.00329	0.063	1.39
98365	81.80	83.80	2.00		0.219	0.00307	0.046	2.1
98366	83.80	85.50	1.70		0.239	0.001765	0.066	1.04
98367	85.50	88.50	3.00		0.274	0.00156	0.073	1.13
98368	88.50	90.50	2.00		0.223	0.00231	0.036	1.29
98369	90.50	92.70	2.20		0.27	0.001045	0.056	1.35
98370				STD CDN-CM-11A	0.331	0.0345	1.03	1.76
98371	92.70	93.45	0.75		0.153	0.00114	0.034	1.16
98372	93.45	95.00	1.55		0.267	0.00258	0.063	1.94
98373	95.00	98.00	3.00		0.217	0.00208	0.038	3.61
98374	98.00	101.00	3.00		0.318	0.00202	0.07	7.71
98375	101.00	102.50	1.50		0.208	0.00286	0.053	10.8

Hole ID: 18-PC-128	Assay Data							
Sample	Interval (m)		Sample	Type	Cu	Mo	Au	Ag
Number	From	To	Length	Std/B/Dup	%	%	g/t	g/t
98376	102.50	104.20	1.70		0.272	0.00251	0.09	16.45
98377	104.20	107.20	3.00		0.0676	0.000239	0.03	2.35
98378	107.20	110.20	3.00		0.00251	0.000094	0.002	0.49
98379	110.20	113.20	3.00		0.00355	0.000078	0.029	0.91
98380				BLANK	0.00052	0.000016	0.001	0.02
98381	113.20	116.20	3.00		0.00127	0.000083	0.006	0.56
98382	116.20	118.40	2.20		0.00144	0.00016	0.004	0.52
98383	118.40	120.50	2.10		0.153	0.00212	0.038	7.92
98384	120.50	122.80	2.30		0.1765	0.00207	0.047	2.82
98385	122.80	125.80	3.00		0.309	0.00338	0.117	1.29
98386	125.80	128.80	3.00		0.283	0.001755	0.091	3
98387	128.80	131.80	3.00		0.29	0.00395	0.121	2.65
98388	131.80	134.80	3.00		0.288	0.00313	0.098	2.53
98389	134.80	137.80	3.00		0.267	0.00198	0.069	2.2
98390				DUP of 98389	0.224	0.001635	0.064	1.33
98391	137.80	140.80	3.00	**PLUS METALLURGICAL SAMPLE "98391 MET" LOW GRADE**	0.233	0.00209	0.074	2.39
98392	140.80	143.80	3.00		0.271	0.00201	0.107	2.2
98393	143.80	146.80	3.00		0.286	0.00252	0.117	4.89
98394	146.80	149.80	3.00		0.293	0.00206	0.155	3.71
98395	149.80	151.80	2.00		0.178	0.000691	0.081	1.44
98396	151.80	154.80	3.00		0.303	0.000487	0.124	11.1
98397	154.80	157.80	3.00		0.338	0.00514	0.127	8.01
98398	157.80	160.80	3.00		0.366	0.00103	0.106	2.96
98399	160.80	163.30	2.50		0.341	0.001185	0.12	2.21
98400				STD CDN-CM-8	0.351	0.0151	0.813	4.22
98401	163.30	163.70	0.40		0.0463	0.00141	0.027	2.6
98402	163.70	166.70	3.00		0.283	0.00253	0.131	5.88
98403	166.70	169.70	3.00		0.289	0.00349	0.122	5.05
98404	169.70	170.55	0.85		0.295	0.00204	0.109	0.91
98405	170.55	173.00	2.45		0.313	0.00128	0.121	0.87
98406	173.00	175.90	2.90		0.385	0.000567	0.132	0.97
98407	175.90	178.90	3.00		0.254	0.000528	0.082	0.74
98408	178.90	181.90	3.00		0.296	0.00255	0.096	2.96
98409	181.90	184.90	3.00		0.271	0.0021	0.11	2.69
98410				BLANK	0.00122	0.000024	0.001	0.01
98411	184.90	187.90	3.00		0.319	0.00676	0.105	1.82
98412	187.90	190.90	3.00		0.303	0.00223	0.096	3.25
98413	190.90	193.90	3.00		0.268	0.00291	0.101	4.1
98414	193.90	196.90	3.00		0.31	0.000982	0.117	3.88

Hole ID: 18-PC-128	Assay Data							
Sample	Interval (m)		Sample	Type	Cu	Mo	Au	Ag
Number	From	To	Length	Std/B/Dup	%	%	g/t	g/t
98415	196.90	199.90	3.00		0.264	0.00208	0.099	1.49
98416	199.90	202.90	3.00		0.309	0.00454	0.123	2.25
98417	202.90	205.10	2.20		0.326	0.000738	0.111	1.49
98418	205.10	208.10	3.00		0.29	0.000611	0.093	0.97
98419	208.10	211.10	3.00		0.256	0.000903	0.079	1.37
98420				DUP of 98419	0.277	0.00112	0.089	1.38
98421	211.10	213.40	2.30		0.253	0.000629	0.089	1.32
98422	213.40	216.40	3.00		0.287	0.000168	0.093	1.02
98423	216.40	219.40	3.00		0.228	0.000354	0.074	0.74
98424	219.40	221.90	2.50		0.438	0.00042	0.156	2.07
98425	221.90	224.90	3.00		0.335	0.000242	0.138	9.21
98426	224.90	227.90	3.00	**PLUS METALLURGICAL SAMPLE "98426 MET" LOW GRADE Cu, BUT STRONG QTZ-PY VEINING**	0.292	0.000696	0.097	3.96
98427	227.90	230.90	3.00		0.294	0.00035	0.101	1.93
98428	230.90	231.90	1.00		0.378	0.000546	0.122	4.01
98429	231.90	234.50	2.60		0.326	0.000609	0.097	1.48
98430				STD CDN-CM-11A	0.334	0.0349	1.02	1.68
98431	234.50	236.30	1.80		0.579	0.000485	0.183	2.01
98432	236.30	239.30	3.00		0.304	0.000332	0.096	1.06
98433	239.30	242.30	3.00		0.348	0.000872	0.102	1.33
98434	242.30	245.30	3.00		0.345	0.000224	0.113	2.32
98435	245.30	247.70	2.40		0.373	0.00058	0.233	24.9
98436	247.70	250.70	3.00		0.37	0.000519	0.138	2.78
98437	250.70	253.70	3.00		0.332	0.000408	0.095	4.56
98438	253.70	256.70	3.00		0.456	0.000853	0.19	4.71
98439	256.70	257.80	1.10		0.471	0.000224	0.149	4.14
98440				BLANK	0.00118	0.000016	<0.001	0.02
98441	257.80	260.40	2.60		0.388	0.000217	0.119	2.46
98442	260.40	262.90	2.50		0.237	0.00066	0.079	1.98
98443	262.90	264.30	1.40		0.328	0.000516	0.138	10.1
98444	264.30	267.30	3.00		0.506	0.000792	0.166	2.5
98445	267.30	270.30	3.00		0.65	0.000286	0.223	4.35
98446	270.30	272.00	1.70		0.824	0.00112	0.286	6.13
98447	272.00	273.90	1.90		0.557	0.000344	0.145	6.85
98448	273.90	276.90	3.00		0.00404	0.000065	0.006	0.32
98449	276.90	279.90	3.00		0.00124	0.000041	0.006	0.19
98450				DUP of 98449	0.00119	0.000052	0.004	0.19
98451	279.90	282.90	3.00		0.00064	0.000032	0.004	0.15

Hole ID: 18-PC-128	Assay Data							
Sample	Interval (m)		Sample	Type	Cu	Mo	Au	Ag
Number	From	To	Length	Std/B/Dup	%	%	g/t	g/t
98452	282.90	285.90	3.00		0.0004	0.00019	0.004	0.51
98453	285.90	288.90	3.00		0.00071	0.000238	0.008	0.81
98454	288.90	291.90	3.00		0.00069	0.000153	0.001	0.42
98455	291.90	294.90	3.00		0.00046	0.000165	0.005	0.41
98456	294.90	296.50	1.60		0.00058	0.000223	0.013	0.65
98457	296.50	298.50	2.00		0.015	0.000158	0.011	1.18
98458	298.50	301.50	3.00		0.311	0.00177	0.104	81
98459	301.50	304.50	3.00		0.246	0.000559	0.079	2.16
98460				STD CDN-CM-8	0.349	0.0158	0.849	2.84
98461	304.50	307.50	3.00		0.23	0.000269	0.077	2.36
98462	307.50	310.50	3.00		0.196	0.000298	0.075	1.88
98463	310.50	312.40	1.90		0.331	0.00068	0.085	4.12
98464	312.40	315.40	3.00		0.283	0.000717	0.075	5.45
98465	315.40	317.60	2.20		0.407	0.000218	0.121	2.42
98466	317.60	319.50	1.90		0.14	0.00021	0.041	1.26
98467	319.50	321.10	1.60		0.126	0.000682	0.04	0.97
98468	321.10	323.10	2.00		0.0938	0.000489	0.035	0.72
98469	323.10	324.80	1.70		0.0877	0.000215	0.03	1.04
98470				BLANK	0.00052	0.000011	<0.001	0.02
98471	324.80	327.70	2.90		0.0902	0.000228	0.05	0.95
98472	327.70	330.70	3.00	**PLUS METALLURGICAL SAMPLE "98472 MET" LOW GRADE Cu, BUT STRONG QTZ-PY VEINING**	0.127	0.000522	0.057	1.37
98473	330.70	333.70	3.00		0.137	0.000224	0.049	2.39
98474	333.70	336.70	3.00		0.1485	0.000177	0.045	2.19
98475	336.70	338.70	2.00		0.1835	0.00016	0.047	2.12
98476	338.70	341.20	2.50		0.0901	0.000169	0.024	1.85
98477	341.20	343.00	1.80		0.1195	0.00029	0.043	19
98478	343.00	344.60	1.60		0.0834	0.000247	0.034	2.61
98479	344.60	347.60	3.00		0.13	0.000353	0.04	2.73
98480				DUP of 98479	0.12	0.000313	0.041	2.91
98481	347.60	349.60	2.00		0.0763	0.000402	0.021	1.68
98482	349.60	352.60	3.00		0.116	0.000304	0.037	1.91
98483	352.60	354.40	1.80		0.1125	0.000113	0.033	0.68
98484	354.40	357.40	3.00		0.197	0.000178	0.053	1.29

Hole ID: 18-PC-128	Assay Data							
Sample	Interval (m)		Sample	Type	Cu	Mo	Au	Ag
Number	From	To	Length	Std/B/Dup	%	%	g/t	g/t
98485	357.40	360.40	3.00	PLUS METALLURGICAL SAMPLE "98485 MET" LOW-MEDIUM GRADE	0.169	0.000179	0.041	1.08
98486	360.40	363.40	3.00	PLUS METALLURGICAL SAMPLE "98486 MET" LOW-MEDIUM GRADE	0.239	0.000223	0.053	3.29
98487	363.40	366.40	3.00		0.1105	0.000344	0.039	3.58
98488	366.40	369.40	3.00		0.0703	0.000313	0.021	1.14
98489	369.40	371.40	2.00		0.0986	0.000303	0.03	1.39
98490				STD CDN-CM-11A	0.331	0.0345	1.065	1.55
98491	371.40	374.00	2.60		0.0491	0.000411	0.013	0.44
98492	374.00	377.00	3.00		0.0316	0.000509	0.01	0.4
98493	377.00	379.20	2.20		0.0642	0.000236	0.016	0.85
98494	379.20	382.20	3.00		0.0484	0.000295	0.012	0.7
98495	382.20	385.20	3.00		0.0503	0.000335	0.021	4.02
98496	385.20	388.20	3.00		0.0976	0.00114	0.035	2.43
98497	388.20	389.50	1.30		0.0972	0.00061	0.048	2.01
98498	389.50	390.40	0.90		0.0115	0.000176	0.003	0.61
98499	390.40	391.40	1.00		0.1035	0.000535	0.037	3.02
98500				BLANK	0.00032	0.000006	<0.001	0.03
98801	391.40	394.40	3.00		0.089	0.000122	0.036	2.1
98802	394.40	397.40	3.00		0.1145	0.00022	0.045	1.9
98803	397.40	400.40	3.00		0.0934	0.000157	0.027	1.49
98804	400.40	403.40	3.00		0.0831	0.000107	0.025	1.46
98805	403.40	406.40	3.00		0.0854	0.000149	0.025	1.3
98806	406.40	409.40	3.00		0.0708	0.000082	0.023	0.94
98807	409.40	410.70	1.30		0.0897	0.000158	0.026	0.8
98808	410.70	413.70	3.00		0.1025	0.000259	0.044	2.61
98809	413.70	415.80	2.10		0.1175	0.000159	0.044	4.11
98810				DUP of 98509	0.118	0.000126	0.039	4.09
98811	415.80	418.80	3.00		0.203	0.000133	0.053	3.34
98812	418.80	420.80	2.00		0.0881	0.000081	0.03	2.33
98813	420.80	422.76	1.96	EOH at 422.76	0.14	0.000092	0.048	1.7

Appendix 4: Signed Assay Sheets

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To: MAMMOTH GEOLOGICAL LTD.
704- 1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 7- JAN- 2019
This copy reported on
15- JAN- 2019
Account: MAMGEO

CERTIFICATE TR18321458

Project: Poplar

This report is for 165 Drill Core samples submitted to our lab in Terrace, BC, Canada on 17- DEC- 2018.

The following have access to data associated with this certificate:

LORIE FARRELL	TIM HENNEBERRY	DEIRDRE KEARNEY

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
LOG- 22	Sample login - Rcd w/o BarCode
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
LOG- 24	Pulp Login - Rcd w/o Barcode

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME- OG62	Ore Grade Elements - Four Acid	ICP- AES
Pb- OG62	Ore Grade Pb - Four Acid	
Au- ICP21	Au 30g FA ICP- AES Finish	ICP- AES
ME- MS61	48 element four acid ICP- MS	

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 7- JAN- 2019
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Project: Poplar

CERTIFICATE OF ANALYSIS TR18321458

Sample Description	Method	WEI- 21	Au- ICP21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu
	Units	kg	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
	LOD	0.02	0.001	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2
096351		9.05	0.105	0.67	7.37	21.9	1030	1.16	0.09	2.37	0.21	43.0	10.8	19	4.59	3740
096352		8.44	0.109	0.63	7.53	10.6	820	1.43	0.11	1.75	0.21	44.1	13.2	22	5.95	3310
096353		7.53	0.105	0.65	7.20	5.0	980	1.33	0.10	1.51	0.16	45.1	16.8	56	5.50	3450
096354		11.02	0.132	1.04	6.37	17.6	800	1.17	0.12	2.29	0.30	54.0	11.9	98	4.41	4440
096355		10.78	0.105	0.66	6.90	9.6	950	1.27	0.07	1.41	0.17	49.3	11.7	86	3.91	3420
096356		9.53	0.136	0.89	6.92	12.4	490	1.29	0.10	1.97	0.19	54.2	15.3	88	4.92	4300
096357		11.23	0.133	0.85	6.81	4.3	930	1.32	0.15	1.18	0.21	47.6	16.4	102	3.65	4370
096358		4.43	0.129	0.64	7.40	2.9	1280	1.26	0.07	0.98	0.22	51.9	11.1	79	3.03	3970
096359		10.10	0.137	1.05	7.22	3.5	1120	1.47	0.09	0.79	0.25	53.9	13.8	98	3.17	4300
096360		0.13	0.909	3.63	8.15	84.4	670	1.46	0.70	0.50	0.93	37.3	21.6	43	7.28	3550
096361		11.17	0.160	0.91	6.73	14.8	960	1.33	0.07	1.00	0.25	49.5	14.7	89	3.81	4800
096362		9.77	0.156	1.02	7.28	160.5	1020	1.33	0.10	1.79	0.24	50.4	17.5	94	4.32	5100
096363		8.92	0.162	1.87	6.53	602	830	0.86	0.07	3.71	0.49	49.0	12.3	41	4.42	4540
096364		7.11	0.070	1.42	7.50	20.8	1000	1.15	0.06	3.09	0.34	41.4	14.4	25	5.02	2860
096365		11.81	0.112	29.8	6.23	87.2	850	1.14	0.07	4.19	5.66	50.2	12.9	54	6.17	3700
096366		10.45	0.089	2.12	6.81	70.8	750	1.29	0.11	2.87	0.63	49.1	14.7	79	5.70	3400
096367		6.98	0.121	2.79	6.84	258	650	1.13	0.79	2.45	0.86	56.0	17.5	91	4.93	4390
096368		10.83	0.091	5.66	7.04	28.6	1980	1.18	0.08	1.70	1.16	48.5	10.8	82	5.17	3190
096369		10.36	0.129	29.7	6.60	134.0	860	1.29	0.14	2.22	3.74	51.1	14.0	92	6.51	4440
096370		0.87	<0.001	0.07	0.14	<0.2	20	0.05	0.02	32.4	0.03	1.10	0.6	2	0.07	14.3
096371		6.52	0.098	2.77	7.27	7.1	790	1.18	0.09	2.12	0.65	53.0	13.9	36	5.53	3780
096372		5.20	0.109	0.73	6.71	9.7	930	1.28	0.08	2.11	0.17	74.9	9.7	80	4.51	3600
096373		11.90	0.102	0.64	6.79	15.7	1100	1.15	0.07	2.47	0.15	82.8	12.8	77	4.00	3380
096374		12.03	0.093	1.49	7.15	87.8	730	1.70	0.10	2.27	0.34	54.3	18.2	86	5.98	3630
096375		9.54	0.084	3.55	6.84	45.3	750	1.63	0.08	2.45	0.96	57.4	14.1	86	6.42	3030
096376		4.91	0.071	0.80	7.31	12.2	770	1.51	0.11	1.94	0.15	59.3	14.1	89	6.76	2770
096377		11.26	0.101	3.23	6.64	30.5	950	1.41	0.09	2.79	1.08	45.2	12.7	19	7.21	3440
096378		10.95	0.095	0.76	6.62	9.2	660	1.49	0.08	3.07	0.16	44.5	13.1	53	6.68	3610
096379		3.89	0.102	1.45	6.89	4.4	730	1.25	0.07	3.50	0.22	53.0	13.1	23	6.17	3790
096380		3.26	0.100	1.08	7.03	3.4	790	1.08	0.07	3.40	0.22	51.5	12.5	21	6.00	3630
096381		10.68	0.096	3.66	7.04	270	1160	1.16	0.07	3.03	1.29	45.4	15.9	22	6.21	3810
096382		6.07	0.090	5.97	7.00	259	1150	1.47	0.17	2.77	1.24	58.2	16.9	86	6.64	3740
096383		11.29	0.057	0.67	7.17	8.5	840	1.58	0.19	2.43	0.14	54.5	12.2	89	5.96	2400
096384		11.32	0.079	1.16	7.70	12.9	1050	1.61	0.11	1.75	0.20	52.5	16.3	85	6.03	3260
096385		10.93	0.075	0.92	7.67	51.4	880	1.45	0.11	2.41	0.21	51.1	16.6	78	9.40	3430
096386		10.95	0.114	0.91	7.10	158.0	860	1.15	0.13	3.00	0.17	56.4	16.7	43	7.18	3880
096387		11.00	0.084	0.69	7.21	55.1	640	1.46	0.14	2.89	0.10	41.4	17.7	69	5.01	3620
096388		10.98	0.086	0.71	6.91	44.9	830	1.36	0.06	2.32	0.11	51.9	14.7	88	4.47	3540
096389		10.44	0.051	0.50	6.53	5.8	720	1.45	0.05	2.50	0.11	43.1	14.3	87	4.65	2490
096390		0.13	1.110	1.69	5.42	15.3	550	0.83	0.51	1.73	0.42	20.3	9.0	43	0.89	3360

***** See Appendix Page for comments regarding this certificate *****

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To: MAMMOTH GEOLOGICAL LTD.
704- 1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 7- JAN- 2019
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18321458

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Fe	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOD	0.01	0.05	0.05	0.1	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
096351		2.11	13.40	0.24	0.7	0.067	2.95	20.9	12.1	0.91	222	62.6	1.87	4.9	23.9	1150
096352		2.30	14.80	0.19	0.9	0.091	2.52	21.8	11.4	0.84	162	154.0	2.75	6.4	24.6	1130
096353		2.68	14.20	0.19	0.6	0.095	2.74	22.1	10.2	0.94	162	54.3	2.68	6.2	35.5	1030
096354		2.14	13.00	0.17	0.6	0.084	2.16	27.2	19.8	0.95	200	203	0.71	4.4	36.3	550
096355		2.07	13.60	0.16	0.5	0.073	2.63	24.4	12.0	0.91	136	100.5	2.40	5.3	40.6	600
096356		2.85	14.55	0.20	0.6	0.082	1.92	27.0	15.0	0.97	182	183.5	2.43	6.0	47.5	720
096357		2.82	13.45	0.13	0.6	0.098	2.84	25.1	11.9	1.09	187	186.5	2.26	4.9	45.6	560
096358		2.25	13.00	0.15	0.5	0.084	3.58	26.8	13.4	1.19	142	181.5	2.49	4.4	33.0	750
096359		2.40	14.55	0.13	0.6	0.103	3.44	27.9	12.9	1.31	147	122.5	2.57	5.5	49.7	520
096360		5.01	18.40	0.11	0.9	0.063	5.43	18.8	12.2	0.81	513	172.0	1.16	4.8	30.4	1140
096361		2.33	12.70	0.11	0.5	0.100	2.96	25.7	13.2	1.05	152	98.1	2.42	5.1	47.8	530
096362		2.44	14.15	0.13	0.6	0.128	2.93	26.2	17.4	0.80	181	59.4	1.81	4.7	55.2	570
096363		2.38	13.00	0.14	0.5	0.095	2.01	25.2	39.7	1.11	681	85.7	0.23	4.9	37.4	940
096364		2.66	15.95	0.13	0.7	0.069	2.57	19.7	25.3	1.44	878	44.2	0.16	6.9	25.8	1250
096365		2.25	12.55	0.15	0.5	0.082	2.51	25.8	22.0	1.19	1780	202	0.11	4.8	32.6	880
096366		2.30	13.40	0.12	0.6	0.064	2.57	24.7	23.8	1.17	886	143.0	0.33	4.5	43.9	740
096367		3.06	11.90	0.12	0.5	0.106	2.03	28.2	32.8	1.13	609	199.0	0.09	2.9	45.1	570
096368		1.83	12.15	0.19	0.7	0.050	3.22	24.0	15.7	1.06	392	142.5	1.42	4.0	35.7	670
096369		2.39	12.75	0.09	0.4	0.078	2.98	25.1	21.0	1.09	1170	256	0.28	4.1	40.8	550
096370		0.13	0.39	<0.05	0.1	<0.005	0.02	1.1	1.2	2.12	135	0.76	0.05	0.2	1.2	80
096371		2.38	13.55	0.09	0.6	0.060	3.15	27.3	20.6	1.43	462	155.0	0.77	4.9	31.2	1020
096372		1.86	13.15	0.11	0.5	0.047	3.67	36.6	12.1	1.30	417	277	1.35	3.7	34.8	530
096373		2.27	12.15	0.12	0.5	0.053	3.29	41.1	10.7	1.34	291	194.0	1.84	4.7	42.6	520
096374		2.55	14.35	0.10	0.7	0.063	2.81	26.3	18.0	1.29	760	185.0	1.43	4.9	50.5	560
096375		2.30	13.50	0.09	0.7	0.052	2.67	28.1	18.4	1.51	1140	143.0	0.85	5.0	39.2	550
096376		2.43	13.80	0.09	0.5	0.052	2.98	29.2	13.8	1.40	672	162.0	1.66	5.6	35.6	620
096377		1.93	12.70	0.10	0.5	0.056	2.98	21.4	20.9	1.08	794	209	1.37	3.0	18.6	1120
096378		2.24	11.05	0.09	0.5	0.066	2.57	22.1	14.2	0.98	228	193.5	2.16	3.7	23.6	850
096379		2.17	12.30	0.10	0.5	0.076	2.90	26.0	15.4	0.96	315	199.5	2.22	4.8	19.3	1100
096380		2.22	12.35	0.09	0.5	0.077	2.95	25.6	14.9	0.97	282	279	2.30	4.9	18.6	1070
096381		2.45	13.35	0.08	0.5	0.073	2.11	21.2	47.3	1.01	2080	109.0	0.18	5.3	20.5	1080
096382		2.83	14.05	0.10	0.6	0.086	2.06	30.3	39.3	1.38	1240	123.0	0.21	5.8	41.2	690
096383		2.19	13.30	0.08	0.6	0.046	2.67	26.7	9.5	1.13	323	97.2	2.31	4.6	39.7	660
096384		2.68	14.75	0.08	0.5	0.053	3.15	25.6	12.8	1.22	453	157.0	2.18	3.9	53.5	650
096385		2.76	15.30	0.10	0.6	0.061	2.85	24.3	30.2	1.17	579	122.0	0.99	4.6	47.7	720
096386		2.81	14.15	0.07	0.6	0.071	2.09	28.3	25.4	1.28	602	442	0.76	6.2	29.3	1010
096387		2.87	13.85	0.09	0.6	0.067	2.50	19.6	25.5	1.18	751	114.0	0.19	4.8	35.6	930
096388		2.36	12.25	0.09	0.5	0.060	2.70	26.1	17.8	1.06	433	163.5	1.18	4.7	38.7	470
096389		2.31	11.90	0.08	0.5	0.039	2.25	20.7	10.5	1.07	229	78.5	2.00	4.9	36.2	570
096390		3.75	11.00	<0.05	1.4	0.063	0.91	8.8	14.0	0.83	577	355	2.05	4.0	31.3	550

***** See Appendix Page for comments regarding this certificate *****

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Finalized Date: 7- JAN- 2019
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18321458

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOD	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
096351		13.4	62.9	0.205	1.07	0.43	7.6	3	1.4	271	0.29	<0.05	4.39	0.227	0.91	1.0
096352		11.9	67.3	0.626	0.94	0.23	8.8	3	1.3	383	0.37	<0.05	4.89	0.256	0.80	0.8
096353		11.8	72.4	0.213	1.01	0.17	10.5	3	1.3	409	0.36	<0.05	4.73	0.276	0.84	0.8
096354		19.7	59.1	0.696	1.20	1.46	11.3	4	1.6	127.5	0.26	0.06	5.76	0.228	0.83	1.2
096355		11.4	67.0	0.397	0.86	0.30	10.9	2	1.3	264	0.28	<0.05	5.05	0.251	0.91	0.9
096356		12.6	63.7	0.434	1.15	0.17	11.8	3	1.4	248	0.32	<0.05	5.26	0.274	0.79	1.0
096357		14.8	77.2	0.636	1.41	0.48	12.2	3	1.7	216	0.30	0.06	6.23	0.254	0.89	1.0
096358		12.0	78.6	0.730	1.00	0.27	11.1	2	1.6	264	0.25	<0.05	5.98	0.259	0.96	1.0
096359		13.7	87.2	0.366	1.04	0.33	13.5	3	1.8	246	0.32	0.05	6.75	0.282	1.03	1.1
096360		52.5	120.5	0.404	2.86	9.51	15.6	8	3.4	259	0.27	1.47	3.27	0.274	1.79	1.4
096361		13.5	74.4	0.388	1.09	0.26	11.8	4	1.6	280	0.30	<0.05	5.50	0.251	0.91	1.0
096362		13.6	63.5	0.243	1.28	2.59	12.2	4	1.6	371	0.28	<0.05	6.53	0.258	0.81	1.2
096363		31.1	50.7	0.301	1.01	37.3	9.7	4	1.7	552	0.27	<0.05	5.27	0.242	0.94	1.3
096364		89.9	69.6	0.180	0.91	4.13	10.3	2	1.4	221	0.42	<0.05	5.10	0.323	1.07	1.0
096365		934	82.4	0.664	1.21	119.0	9.8	3	1.6	267	0.29	<0.05	4.65	0.245	1.10	1.0
096366		57.9	67.6	0.688	1.25	12.45	11.8	2	1.6	279	0.26	0.05	5.57	0.251	1.12	1.0
096367		56.7	71.7	0.872	2.25	4.92	12.0	5	2.2	326	0.17	0.38	6.24	0.192	1.29	0.9
096368		75.7	87.4	0.486	0.79	43.9	11.4	2	1.4	507	0.23	<0.05	6.49	0.239	1.17	1.1
096369		523	95.9	0.646	1.45	98.3	10.8	3	1.5	354	0.27	0.07	5.24	0.235	1.20	0.8
096370		1.9	0.7	0.002	<0.01	0.47	0.2	1	<0.2	72.3	<0.05	<0.05	0.09	0.008	<0.02	0.2
096371		35.1	92.6	0.507	1.16	6.21	9.3	3	1.2	626	0.31	<0.05	4.21	0.279	1.10	0.9
096372		14.4	78.9	0.759	0.77	1.15	11.1	2	1.1	461	0.23	<0.05	6.50	0.241	1.03	1.2
096373		11.2	74.2	0.654	1.08	0.46	11.1	2	0.9	1600	0.30	<0.05	6.57	0.262	0.85	1.6
096374		33.8	76.1	0.773	1.25	6.30	13.2	3	1.2	403	0.32	<0.05	7.08	0.279	1.00	1.1
096375		77.8	81.5	0.452	0.95	23.9	11.7	2	1.2	267	0.34	<0.05	7.38	0.264	1.11	1.1
096376		18.2	98.0	0.712	1.21	1.77	11.9	3	1.4	419	0.40	0.07	8.02	0.282	1.16	1.0
096377		62.0	81.1	0.811	1.46	19.60	7.4	2	1.1	627	0.18	<0.05	3.65	0.188	1.09	0.8
096378		12.6	73.2	0.808	2.29	0.52	8.5	2	1.0	502	0.24	<0.05	4.29	0.218	0.84	0.7
096379		21.1	76.8	0.674	2.33	0.40	7.8	3	1.0	718	0.30	<0.05	4.03	0.246	0.87	0.7
096380		18.6	77.7	1.045	2.31	0.35	7.7	3	1.0	700	0.30	<0.05	3.91	0.249	0.92	0.8
096381		163.0	56.7	0.449	1.13	19.05	8.0	2	1.0	598	0.33	<0.05	3.68	0.265	0.86	1.0
096382		116.0	82.3	0.501	1.25	37.2	10.5	3	1.3	427	0.40	0.10	5.75	0.272	0.91	1.2
096383		13.4	77.2	0.361	1.65	0.59	11.9	2	1.0	617	0.32	<0.05	6.47	0.272	0.88	1.0
096384		19.7	79.1	0.633	1.66	0.77	13.4	2	1.2	442	0.25	0.05	7.28	0.250	0.86	1.1
096385		17.9	74.0	0.617	1.24	2.13	12.5	2	1.3	323	0.31	<0.05	6.99	0.270	0.92	1.1
096386		10.5	66.6	0.702	1.15	2.43	9.6	2	1.1	243	0.39	0.07	4.24	0.295	0.83	1.1
096387		9.5	61.6	0.485	1.30	3.11	11.2	3	1.2	177.5	0.31	<0.05	4.96	0.299	0.80	0.9
096388		10.1	66.2	0.549	0.97	0.84	10.6	2	1.1	260	0.31	<0.05	5.49	0.265	0.80	0.9
096389		8.2	63.5	0.272	1.45	0.22	10.2	2	0.9	540	0.32	0.05	5.22	0.262	0.73	0.9
096390		23.2	27.5	0.301	0.42	4.89	9.9	2	2.2	245	0.26	0.20	2.05	0.265	0.22	1.0

***** See Appendix Page for comments regarding this certificate *****

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To: MAMMOTH GEOLOGICAL LTD.
704- 1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 7- JAN- 2019
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18321458

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	Pb- OG62
	Analyte	V	W	Y	Zn	Zr	Pb
	Units	ppm	ppm	ppm	ppm	ppm	%
	LOD	1	0.1	0.1	2	0.5	0.001
096351		73	0.4	13.1	55	17.8	
096352		81	0.4	14.4	47	20.5	
096353		105	0.3	13.9	45	16.2	
096354		102	0.7	12.1	52	17.1	
096355		95	0.3	12.9	39	16.7	
096356		106	0.4	16.3	51	17.4	
096357		108	0.8	13.4	57	17.0	
096358		101	0.5	14.2	51	15.4	
096359		111	1.3	13.2	51	18.3	
096360		180	31.1	14.9	139	29.4	
096361		104	0.5	12.6	54	15.8	
096362		104	0.8	10.8	61	18.6	
096363		90	0.8	12.7	134	13.8	
096364		106	0.8	13.2	73	15.5	
096365		95	4.5	11.9	807	12.6	
096366		106	1.3	11.5	119	18.5	
096367		97	1.9	12.4	177	17.4	
096368		94	0.7	11.9	166	18.7	
096369		98	1.3	10.6	536	15.0	
096370		2	0.1	2.2	5	2.4	
096371		98	0.4	12.9	117	21.9	
096372		94	0.6	14.4	49	16.4	
096373		89	0.6	16.0	46	17.6	
096374		104	0.6	11.3	100	23.0	
096375		94	0.7	12.5	179	24.2	
096376		102	0.5	12.0	56	14.9	
096377		68	0.6	12.8	171	15.0	
096378		82	0.4	13.3	51	15.1	
096379		80	0.4	15.2	61	17.2	
096380		81	0.4	15.4	62	16.6	
096381		85	1.3	11.0	217	13.7	
096382		96	0.8	13.8	186	20.8	
096383		107	0.5	15.0	49	16.3	
096384		107	0.6	12.9	63	17.8	
096385		108	0.5	11.4	62	20.0	
096386		98	0.5	12.2	57	21.5	
096387		109	1.2	11.1	45	19.9	
096388		97	0.6	11.4	41	15.6	
096389		87	0.9	14.0	38	16.0	
096390		82	1.6	14.2	67	69.7	

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Finalized Date: 7- JAN- 2019
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18321458

Sample Description	Method	WEI- 21	Au- ICP21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu
	Units	kg	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
	LOD	0.02	0.001	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2
096391		10.31	0.087	0.72	6.68	4.0	800	1.36	0.06	2.68	0.09	48.1	13.0	81	4.41	3450
096392		10.98	0.145	0.73	6.54	4.5	700	1.03	0.09	3.28	0.09	51.8	10.2	30	5.00	3870
096393		10.67	0.134	0.66	7.45	2.3	600	1.16	0.08	3.64	0.07	50.7	12.3	34	6.37	3560
096394		11.47	0.122	0.67	7.05	1.5	650	1.09	0.05	3.49	0.07	41.4	12.1	34	4.95	3400
096395		11.99	0.113	0.65	7.27	1.4	580	1.12	0.07	3.51	0.09	50.8	14.8	41	5.19	3110
096396		6.07	0.085	0.72	7.08	1.3	530	1.08	0.10	3.54	0.10	42.2	14.8	43	5.09	2440
096397		6.05	0.161	1.31	6.25	6.3	200	0.80	0.09	6.73	0.14	51.6	21.4	31	4.64	5940
096398		5.72	0.206	1.38	5.53	2.0	160	0.80	0.07	7.63	0.12	60.3	17.7	30	3.59	6960
096399		11.44	0.118	0.84	6.97	3.7	610	1.08	0.06	4.06	0.12	49.8	14.4	42	4.81	3800
096400		0.78	<0.001	0.01	0.06	0.2	30	<0.05	0.01	31.0	0.02	1.21	0.5	2	0.05	17.5
098101		7.56	0.110	0.60	7.16	1.6	610	1.13	0.07	3.41	0.10	41.0	15.9	43	5.52	2870
098102		5.78	0.128	1.15	7.63	1.9	910	1.16	0.08	3.60	0.18	46.9	17.8	22	6.50	4290
098103		10.10	0.139	1.85	6.97	5.1	770	0.89	0.05	3.87	0.28	50.1	13.8	40	7.77	4280
098104		9.76	0.103	1.04	7.36	4.0	740	1.08	0.06	3.66	0.15	45.9	14.4	44	7.67	3490
098105		12.96	0.122	12.45	6.73	412	2280	1.33	0.30	2.21	8.14	33.7	14.0	36	10.30	3350
098106		12.82	0.123	35.6	6.48	470	820	1.29	0.19	1.72	21.6	38.5	12.9	60	10.85	3430
098107		12.47	0.109	0.85	7.63	10.3	1010	1.59	0.15	1.47	0.27	57.0	20.4	72	6.36	3560
098108		7.82	0.106	0.74	7.58	8.5	800	1.34	0.09	2.41	0.20	45.8	15.7	31	4.70	3020
098109		4.43	0.128	1.57	7.45	43.2	910	1.63	0.14	1.95	0.16	52.7	22.6	92	5.71	4290
098110		3.76	0.123	1.39	7.42	39.5	870	1.52	0.13	1.87	0.21	51.3	22.0	91	5.61	4070
098111		11.67	0.138	0.96	7.86	312	990	1.24	0.13	2.13	0.14	41.9	18.4	25	6.09	3880
098112		11.28	0.138	1.10	7.75	354	1030	1.16	0.13	2.08	0.13	41.2	20.4	18	6.42	4400
098113		12.99	0.145	0.81	7.67	136.5	840	1.26	0.34	2.53	0.12	44.7	18.3	30	7.18	4090
098114		6.20	0.096	0.80	7.48	152.5	690	1.09	0.13	2.83	0.10	40.2	17.6	37	8.96	3470
098115		12.43	0.122	0.54	7.63	421	750	1.04	0.07	2.28	0.03	46.6	13.4	38	7.04	3090
098116		10.45	0.115	0.66	7.90	395	630	1.08	0.09	2.38	0.07	41.1	17.1	37	5.67	3530
098117		11.85	0.087	0.74	8.11	339	630	1.28	0.09	2.35	0.06	46.7	16.1	39	8.68	3260
098118		8.02	0.096	0.56	7.80	295	790	1.19	0.07	2.48	0.09	46.5	17.6	40	10.95	2840
098119		7.38	0.096	0.57	7.36	114.0	680	1.04	0.09	2.68	0.09	43.5	14.4	40	7.50	3040
098120		0.13	0.509	2.17	8.26	61.2	640	1.30	0.52	0.51	0.40	36.7	21.1	63	4.31	3640
098121		10.93	0.146	3.83	7.13	295	1100	1.63	0.10	3.45	1.52	46.5	15.3	23	15.00	4350
098122		7.78	0.103	5.02	7.52	402	880	1.40	0.11	2.75	2.23	57.1	14.5	40	11.70	3650
098123		7.58	0.146	5.12	6.77	406	900	1.34	0.11	2.85	1.75	74.8	20.4	66	9.92	4630
098124		5.75	0.077	5.98	7.23	360	910	1.57	0.16	3.10	4.16	54.8	17.5	51	19.05	3190
098125		11.61	0.092	1.21	7.77	87.8	1090	1.14	0.13	2.58	0.37	33.0	16.4	10	8.80	3230
098126		11.25	0.106	0.95	7.58	113.5	1120	1.19	0.15	2.63	0.17	36.3	15.8	10	6.30	3460
098127		6.66	0.154	1.42	7.16	481	1120	1.26	0.11	2.85	0.19	51.7	13.1	10	5.05	4420
098128		13.10	0.106	0.94	7.60	22.3	1190	1.14	0.10	2.74	0.16	37.9	12.9	13	5.88	3340
098129		11.13	0.128	0.89	7.46	15.0	1160	1.14	0.21	2.61	0.18	35.1	12.9	14	4.49	3820
098130		0.87	0.018	0.02	0.07	<0.2	20	0.11	0.03	31.8	0.02	1.23	1.4	1	0.07	18.2

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Finalized Date: 7- JAN- 2019
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18321458

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Fe	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOD	0.01	0.05	0.05	0.1	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
096391		2.17	11.15	0.09	0.5	0.062	2.54	24.1	10.8	1.08	184	135.5	2.13	4.6	30.9	580
096392		2.11	13.40	0.10	0.4	0.079	2.30	23.2	36.6	1.18	275	182.0	1.40	4.2	19.7	1040
096393		2.42	16.20	0.11	0.6	0.084	2.14	24.4	26.5	1.42	428	190.0	1.07	6.6	21.2	1210
096394		2.48	14.85	0.07	0.6	0.058	1.99	19.6	10.7	1.37	186	73.8	2.60	6.5	21.6	1240
096395		2.73	16.90	0.11	0.7	0.060	1.96	23.9	11.7	1.57	188	72.3	2.85	7.6	22.8	1280
096396		2.94	17.00	0.08	0.8	0.062	1.93	20.2	12.8	1.67	241	84.3	2.61	7.4	22.1	1390
096397		3.44	12.40	0.08	0.6	0.118	1.86	24.6	12.6	1.36	196	64.7	1.84	5.7	33.3	1230
096398		2.96	11.05	0.11	0.4	0.133	1.86	29.1	8.9	1.01	154	122.0	1.70	5.0	34.3	800
096399		2.56	15.05	0.09	0.7	0.078	2.23	24.5	8.5	1.49	221	143.0	2.52	6.6	24.1	1140
096400		0.16	0.20	<0.05	<0.1	<0.005	0.02	1.2	0.8	2.70	137	0.73	0.02	0.1	0.9	70
098101		3.04	16.10	0.08	0.8	0.063	2.13	20.0	9.6	1.64	299	85.2	2.44	7.7	23.1	1360
098102		3.17	16.35	0.09	0.9	0.093	2.36	20.0	9.5	1.24	343	94.2	2.82	7.7	20.5	1830
098103		2.59	14.90	0.07	0.8	0.087	2.36	24.3	15.6	1.52	1230	145.0	1.87	7.1	27.1	1360
098104		2.73	15.55	0.09	0.8	0.077	2.28	21.8	11.8	1.63	547	95.9	2.11	7.4	27.0	1340
098105		2.75	13.85	<0.05	0.6	0.109	2.21	16.4	38.0	0.91	10850	101.0	0.05	4.2	29.7	950
098106		2.76	12.30	<0.05	0.6	0.201	2.56	18.8	26.2	0.77	12450	165.0	0.06	3.1	33.7	470
098107		2.70	14.35	0.10	0.6	0.088	3.33	29.1	14.4	1.04	286	165.5	2.04	4.4	50.1	600
098108		2.20	14.00	0.07	0.9	0.050	2.54	22.1	10.8	0.99	236	149.5	2.92	4.9	26.7	990
098109		2.73	15.20	0.10	0.6	0.096	2.88	27.0	10.9	1.04	488	121.0	2.23	5.9	59.6	580
098110		2.71	14.55	0.09	0.5	0.089	2.70	26.6	11.8	1.04	446	146.5	2.13	5.8	57.2	600
098111		2.67	14.45	0.06	0.6	0.096	2.51	20.8	12.3	0.80	331	64.5	2.27	5.3	24.9	1170
098112		2.66	14.50	0.12	0.6	0.102	2.48	20.5	12.4	0.73	249	70.1	2.32	5.6	21.4	1130
098113		2.54	16.80	0.12	0.6	0.079	2.28	21.0	15.0	1.12	245	105.0	2.43	6.5	25.6	1270
098114		3.12	15.45	0.08	0.6	0.069	1.94	19.1	15.0	1.49	396	33.3	1.91	6.9	25.9	1310
098115		2.49	15.60	0.11	0.7	0.058	2.04	23.1	17.3	1.10	286	193.0	1.78	6.9	20.5	1260
098116		2.70	17.80	0.12	0.8	0.085	1.70	18.8	25.4	1.07	313	81.1	1.45	7.9	24.8	1390
098117		2.60	18.55	0.12	0.9	0.086	1.91	22.5	24.1	1.14	293	108.5	1.80	8.1	24.6	1420
098118		2.74	18.10	0.11	0.9	0.066	2.05	21.6	21.4	1.26	264	90.9	1.96	8.1	26.2	1410
098119		2.56	16.45	0.11	0.8	0.077	2.19	22.0	25.2	1.60	283	141.0	1.64	7.3	24.2	1390
098120		4.62	17.40	0.13	1.0	0.046	5.88	18.9	11.8	1.01	424	142.5	1.43	4.1	39.6	1160
098121		2.27	14.40	0.13	0.6	0.091	2.27	23.1	137.5	1.18	2730	199.0	0.12	5.1	30.2	1200
098122		2.20	14.70	0.10	0.6	0.071	3.05	28.5	61.8	1.02	4480	419	0.10	4.5	34.5	1000
098123		2.32	12.65	0.10	0.4	0.072	2.84	40.0	34.7	1.10	4180	645	0.09	3.5	43.1	880
098124		2.43	14.15	0.07	0.4	0.077	2.63	28.8	45.8	1.03	8450	408	0.04	4.7	34.1	860
098125		1.96	16.40	0.07	0.4	0.044	2.88	14.8	100.5	0.90	695	75.2	0.97	4.3	11.9	1150
098126		1.99	16.95	0.17	0.4	0.067	2.64	16.4	116.5	0.82	354	77.6	1.02	4.9	13.9	1240
098127		1.81	15.90	0.11	0.4	0.072	2.74	26.3	303	0.79	401	265	1.08	4.3	16.3	1290
098128		1.98	17.45	0.13	0.4	0.059	2.60	18.1	36.6	0.84	357	113.5	2.36	5.4	13.8	1280
098129		1.91	17.00	0.11	0.4	0.064	2.49	16.8	44.2	0.80	221	87.2	2.29	5.1	11.6	1210
098130		0.22	0.33	0.15	<0.1	0.006	0.02	1.2	2.0	3.06	159	0.63	0.02	0.2	0.9	60

***** See Appendix Page for comments regarding this certificate *****

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To: MAMMOTH GEOLOGICAL LTD.
704- 1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 7- JAN- 2019
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18321458

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOD	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
096391		11.0	69.6	0.505	1.77	0.20	10.1	2	1.1	491	0.29	<0.05	5.27	0.269	0.72	0.9
096392		8.5	61.6	0.694	1.47	0.32	9.0	3	1.4	645	0.27	<0.05	3.62	0.264	0.84	0.9
096393		8.2	68.6	0.614	1.09	0.35	10.7	2	1.2	381	0.41	<0.05	4.14	0.345	0.82	1.1
096394		6.6	72.6	0.314	2.00	0.17	9.1	2	1.1	594	0.41	<0.05	3.74	0.343	0.75	1.0
096395		7.2	83.5	0.335	1.86	0.22	11.5	2	1.2	612	0.46	<0.05	4.24	0.374	0.87	1.1
096396		8.1	85.6	0.301	1.97	0.29	11.4	2	1.3	611	0.45	0.06	3.84	0.381	0.88	1.0
096397		7.0	71.8	0.248	4.84	0.27	8.6	4	1.3	774	0.33	0.06	3.15	0.293	0.77	0.8
096398		8.0	66.5	0.418	6.21	0.33	7.6	4	1.2	691	0.30	<0.05	2.98	0.252	0.71	0.7
096399		8.1	83.5	0.479	2.54	0.23	10.3	3	1.2	637	0.39	<0.05	3.91	0.348	0.94	0.9
096400		0.5	0.7	<0.002	0.02	0.23	0.2	1	<0.2	73.1	<0.05	<0.05	0.08	0.005	<0.02	0.1
098101		8.2	82.0	0.318	1.52	0.24	10.9	2	1.1	606	0.44	<0.05	3.92	0.387	0.93	1.0
098102		11.5	80.8	0.315	1.82	0.39	8.4	3	1.1	707	0.44	<0.05	3.73	0.377	0.91	1.2
098103		138.5	95.4	0.512	1.97	0.75	9.9	3	1.1	866	0.41	<0.05	3.89	0.350	1.01	1.0
098104		17.0	91.6	0.352	1.77	0.52	11.1	2	1.1	873	0.45	<0.05	3.88	0.378	1.00	0.9
098105		2380	109.5	0.359	1.07	155.5	9.7	3	1.1	726	0.30	<0.05	4.31	0.235	1.36	0.9
098106		>10000	112.0	0.539	1.22	252	10.2	3	1.2	536	0.22	0.08	5.95	0.200	1.50	0.9
098107		38.8	78.4	0.619	1.35	0.99	13.4	3	1.4	314	0.32	<0.05	8.49	0.251	0.92	1.3
098108		27.4	65.9	0.531	1.52	0.73	9.3	3	1.2	465	0.32	<0.05	4.97	0.267	0.78	1.3
098109		24.9	87.1	0.462	1.29	0.80	14.2	4	1.4	489	0.41	0.07	7.01	0.308	1.06	1.1
098110		23.1	82.5	0.566	1.27	0.73	13.7	4	1.4	521	0.39	0.07	6.55	0.307	1.04	1.0
098111		16.5	62.7	0.248	1.09	0.52	8.5	3	1.3	483	0.34	0.06	3.90	0.276	0.82	0.9
098112		12.3	61.2	0.283	1.14	0.47	7.7	2	1.2	539	0.40	0.07	4.36	0.266	0.83	0.9
098113		10.7	70.0	0.415	0.84	0.25	10.6	2	1.4	1070	0.41	<0.05	4.47	0.328	0.90	1.0
098114		11.9	69.9	0.125	0.83	0.38	11.5	2	1.2	340	0.41	0.05	3.88	0.373	0.78	0.9
098115		7.0	63.5	0.722	0.59	0.78	11.0	2	1.0	323	0.43	<0.05	4.11	0.362	0.80	0.9
098116		6.9	56.7	0.294	0.65	2.25	11.9	3	1.2	269	0.54	<0.05	4.45	0.390	0.83	0.9
098117		7.9	67.3	0.364	0.60	3.05	12.9	2	1.3	304	0.51	<0.05	4.69	0.399	0.86	1.0
098118		7.4	73.3	0.322	0.71	1.38	12.3	2	1.2	312	0.54	<0.05	4.82	0.382	1.00	1.1
098119		7.8	73.0	0.433	0.63	0.57	12.2	2	1.3	316	0.44	<0.05	4.18	0.380	0.98	1.0
098120		27.2	121.5	0.295	2.27	4.37	18.4	7	2.6	265	0.27	0.92	3.14	0.321	1.41	1.3
098121		263	84.6	0.630	0.98	19.05	9.1	3	1.4	1170	0.31	<0.05	4.25	0.257	1.16	0.9
098122		267	115.0	1.275	1.01	8.31	11.0	2	1.3	657	0.32	0.06	5.22	0.272	1.40	1.0
098123		256	109.5	1.485	1.13	18.70	12.3	3	1.2	829	0.22	0.06	6.23	0.254	1.38	1.0
098124		469	125.0	0.901	1.04	31.1	11.9	2	1.3	684	0.32	<0.05	5.93	0.269	1.52	1.0
098125		33.2	71.2	0.212	1.09	2.78	6.7	2	1.1	283	0.35	<0.05	5.17	0.199	1.06	0.7
098126		12.8	62.7	0.278	0.91	1.16	7.0	3	1.2	334	0.42	<0.05	5.63	0.214	0.83	0.8
098127		26.1	60.2	0.315	0.97	1.96	6.6	3	1.2	672	0.36	<0.05	5.64	0.196	0.86	1.1
098128		22.2	69.5	0.337	1.23	0.29	7.3	3	1.2	902	0.40	<0.05	5.61	0.221	0.94	0.8
098129		12.8	62.9	0.201	1.18	0.23	7.0	2	1.2	1005	0.41	<0.05	5.39	0.209	0.81	0.8
098130		1.4	1.0	<0.002	0.03	0.15	0.3	1	<0.2	78.2	<0.05	<0.05	0.10	0.006	<0.02	0.3

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To: MAMMOTH GEOLOGICAL LTD.
704- 1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 7- JAN- 2019
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18321458

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	Pb- OG62
	Analyte	V	W	Y	Zn	Zr	Pb
	Units	ppm	ppm	ppm	ppm	ppm	%
	LOD	1	0.1	0.1	2	0.5	0.001
096391		93	0.5	13.2	36	16.0	
096392		90	0.5	12.8	34	12.8	
096393		110	0.4	14.5	40	23.0	
096394		103	0.2	13.2	33	24.2	
096395		117	0.4	14.5	40	28.9	
096396		116	0.9	13.6	46	31.4	
096397		91	0.3	17.9	38	20.3	
096398		83	0.3	21.7	34	15.8	
096399		109	0.3	15.4	41	27.5	
096400		1	<0.1	2.2	7	1.2	
098101		113	0.3	13.4	50	31.0	
098102		99	0.3	16.2	68	38.5	
098103		103	0.5	14.8	75	28.8	
098104		113	0.3	14.7	54	31.8	
098105		84	4.5	10.4	1370	19.6	
098106		78	7.9	8.6	3400	17.7	1.375
098107		104	1.0	13.0	60	19.6	
098108		86	0.9	15.1	51	32.7	
098109		111	1.2	14.3	56	15.8	
098110		110	1.0	14.6	56	15.2	
098111		87	1.2	13.1	49	18.2	
098112		81	1.6	12.0	43	16.1	
098113		100	0.7	13.9	39	18.6	
098114		123	0.5	12.5	48	23.0	
098115		112	0.4	12.7	36	22.8	
098116		118	0.5	13.1	42	26.8	
098117		117	0.6	14.3	39	29.2	
098118		114	0.5	13.8	40	29.9	
098119		116	0.7	13.0	39	26.2	
098120		209	18.2	14.1	71	34.2	
098121		87	3.0	11.6	285	18.7	
098122		101	6.1	11.7	420	17.3	
098123		103	3.1	12.2	301	10.6	
098124		104	16.5	11.9	791	13.2	
098125		68	1.2	10.1	90	11.2	
098126		70	1.6	11.6	44	9.7	
098127		66	0.7	10.6	62	9.2	
098128		68	0.7	12.7	43	9.4	
098129		67	0.7	11.4	35	10.4	
098130		2	0.1	3.0	4	1.4	

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VANCOUVER BC V6E 4K2

Finalized Date: 7- JAN- 2019
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18321458

Sample Description	Method	WEI- 21	Au- ICP21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu
	Units	kg	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
	LOD	0.02	0.001	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2
098131		11.26	0.098	1.17	7.00	105.0	1050	1.32	0.26	2.81	0.19	45.3	11.8	11	6.27	3370
098132		11.60	0.114	1.04	7.08	48.7	1130	1.37	0.13	2.74	0.39	78.5	8.7	11	5.89	3310
098133		11.88	0.114	0.81	7.33	8.9	1260	1.25	0.12	2.62	0.31	95.1	11.5	11	6.98	3340
098134		6.00	0.104	0.82	7.73	1.3	1320	1.33	0.10	2.66	0.18	42.4	14.3	15	4.03	3350
098135		6.65	0.093	0.54	7.85	2.1	1400	1.35	0.09	2.57	0.17	39.9	11.5	13	5.10	2090
098136		8.06	0.119	1.05	7.64	232	1220	1.27	0.12	2.90	0.49	40.9	12.6	14	6.13	3160
098137		10.70	0.112	1.67	7.18	7.4	1220	1.30	0.15	2.32	0.37	38.0	15.5	16	5.86	3820
098138		11.09	0.144	1.40	7.44	18.0	1150	1.18	0.13	2.38	4.30	36.7	14.6	13	4.91	4970
098139		5.71	0.127	1.16	7.62	21.0	1340	1.21	0.13	2.27	0.33	42.9	16.9	11	5.37	4750
098140		5.23	0.127	1.11	7.73	9.9	1410	1.26	0.11	2.13	0.20	36.9	15.8	12	5.29	4760
098141		11.74	0.142	1.58	7.42	14.1	1330	1.15	0.11	2.81	0.71	36.6	12.8	14	5.86	3990
098142		5.27	0.100	1.70	7.73	28.7	1250	1.08	0.09	2.52	0.72	37.3	12.8	13	5.93	3680
098143		7.56	0.135	1.29	7.39	8.0	1270	1.06	0.11	2.61	0.19	37.7	17.1	16	4.92	4970
098144		5.23	0.115	1.26	7.59	11.7	1360	1.07	0.12	2.88	0.18	37.7	15.9	15	5.69	3410
098145		12.06	0.110	2.67	7.10	829	1060	1.43	0.12	2.65	1.65	35.9	15.4	15	9.13	3300
098146		7.44	0.111	1.61	7.33	361	1340	1.15	0.10	2.59	0.40	36.0	13.6	11	6.81	3760
098147		12.12	0.093	0.93	7.22	10.9	1230	1.14	0.12	3.01	0.13	40.7	16.4	35	7.74	3380
098148		11.47	0.154	1.01	7.04	276	810	1.06	0.09	2.96	0.16	40.3	18.4	25	7.49	4330
098149		11.22	0.096	0.84	7.48	68.5	1400	1.06	0.13	2.75	0.15	44.6	11.3	11	5.46	3230
098150		0.13	0.946	2.92	8.29	80.6	680	1.19	0.57	0.54	0.77	36.0	19.6	44	6.52	3550
098151		11.85	0.079	0.62	7.80	12.9	1570	1.11	0.08	2.60	0.07	46.0	12.0	14	4.91	2590
098152		12.10	0.067	0.65	7.67	2.0	1400	1.13	0.13	3.00	0.08	43.0	11.8	10	3.77	2530
098153		11.53	0.070	1.12	7.54	1.1	1340	1.11	0.15	2.97	0.41	37.6	10.0	14	4.40	2470
098154		5.40	0.085	0.62	7.67	1.5	1380	1.02	0.07	2.74	0.09	43.9	9.5	13	3.28	2830
098155		10.32	0.089	0.72	7.76	1.3	1300	0.99	0.07	2.88	0.09	41.7	10.4	15	3.28	3340
098156		5.47	0.102	0.70	7.63	2.4	1390	1.12	0.09	2.46	0.10	39.7	11.3	13	3.80	3140
098157		6.68	0.081	0.69	7.42	7.1	1410	1.13	0.08	2.16	0.16	38.1	9.3	8	4.27	2940
098158		10.53	0.095	1.03	6.94	15.2	1110	1.11	0.12	2.86	0.17	41.2	12.1	5	4.62	3800
098159		10.34	0.106	0.81	7.59	75.7	1180	1.19	0.12	2.03	0.21	37.4	11.9	8	5.81	2870
098160		0.69	<0.001	0.02	0.07	1.0	30	0.05	0.02	37.3	0.02	1.38	0.9	1	<0.05	13.9
098161		10.60	0.119	1.81	7.54	159.0	1280	1.04	0.16	2.00	0.47	32.5	13.6	7	5.91	3140
098162		10.72	0.134	1.56	7.73	228	1330	1.29	0.13	2.35	0.35	39.2	15.0	7	6.12	3960
098163		11.24	0.103	0.95	7.79	295	1750	1.22	0.18	2.20	0.18	41.2	11.3	7	6.78	3170
098164		10.62	0.095	0.82	7.47	44.7	1310	1.43	0.10	2.63	0.14	40.3	17.3	12	6.49	2920
098165		7.56	0.140	0.94	7.62	5.3	1300	1.05	0.09	3.59	0.13	52.0	18.2	10	4.69	4060
098166		10.65	0.084	1.02	7.66	432	1050	1.22	0.13	2.26	0.14	41.4	11.2	5	6.10	3540
098167		10.58	0.100	1.42	7.09	1005	1120	1.17	0.07	2.22	0.61	42.3	9.6	6	6.52	3540
098168		10.98	0.074	1.02	7.82	695	660	1.65	0.10	1.98	0.35	30.5	11.5	6	7.11	3210
098169		5.23	0.073	0.98	7.74	883	490	1.37	0.12	2.15	0.50	29.6	11.0	6	8.06	3120
098170		5.18	0.069	0.87	7.84	888	510	1.53	0.11	2.15	0.50	30.7	11.5	6	8.55	3030

***** See Appendix Page for comments regarding this certificate *****

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To: MAMMOTH GEOLOGICAL LTD.
704- 1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 7- JAN- 2019
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18321458

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Fe	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOD	0.01	0.05	0.05	0.1	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
098131		1.73	16.05	0.19	0.5	0.057	2.38	22.3	314	0.83	457	175.5	1.02	4.5	13.7	1130
098132		1.40	14.80	0.21	0.6	0.055	2.92	44.0	216	0.88	759	459	0.89	3.9	12.8	1100
098133		1.65	16.80	0.21	0.6	0.065	2.94	54.2	38.8	0.95	452	710	0.83	4.6	14.1	1170
098134		2.01	17.55	0.13	0.7	0.067	2.75	20.3	16.8	0.90	226	37.7	3.00	6.1	13.5	1320
098135		2.32	18.20	0.18	0.6	0.045	2.44	18.6	21.6	0.94	260	30.3	2.85	7.3	9.9	1330
098136		2.12	17.50	0.11	0.6	0.055	2.73	18.5	109.0	0.96	674	87.2	0.71	6.3	16.2	1350
098137		1.93	16.75	0.10	0.4	0.062	3.01	17.8	28.5	0.83	872	138.5	1.61	5.3	19.9	1130
098138		2.13	16.00	0.13	0.3	0.080	3.21	17.3	22.3	0.95	918	128.5	1.23	4.9	14.2	1180
098139		2.07	16.40	0.16	0.5	0.080	3.06	20.8	18.9	0.90	505	66.9	1.49	5.2	13.2	1220
098140		2.02	16.75	0.11	0.5	0.074	3.18	17.1	18.4	0.86	425	63.2	1.59	5.3	12.2	1250
098141		2.01	14.60	0.14	0.5	0.049	2.93	16.7	20.5	0.90	1270	67.0	1.40	5.2	11.4	1160
098142		2.21	14.60	0.10	0.5	0.049	2.85	16.8	184.5	0.92	2100	49.0	1.46	5.7	11.4	1240
098143		2.39	14.55	0.10	0.4	0.075	2.75	17.7	21.9	0.94	474	58.4	1.94	5.8	13.0	1330
098144		2.32	14.85	0.12	0.5	0.055	2.72	17.7	109.5	0.99	856	66.7	0.72	5.5	12.1	1310
098145		2.20	14.75	0.10	0.5	0.045	2.75	16.4	330	0.88	2650	120.0	0.08	4.5	12.8	1160
098146		2.04	15.20	0.10	0.6	0.061	2.69	16.6	254	0.84	1190	61.1	0.57	4.6	10.3	1250
098147		2.70	15.50	0.12	0.7	0.056	2.27	18.1	54.6	1.38	422	116.0	1.68	4.9	15.9	1360
098148		2.38	15.45	0.11	0.7	0.060	2.04	19.0	296	0.79	814	97.7	0.18	4.5	16.1	1330
098149		2.10	16.00	0.12	0.6	0.071	3.05	21.2	135.0	0.80	554	128.5	0.62	5.7	8.1	1260
098150		5.04	16.25	0.17	0.9	0.060	5.64	17.8	11.7	0.83	526	160.0	1.15	4.6	28.3	1150
098151		2.48	16.40	0.13	0.6	0.051	2.83	21.6	62.3	0.88	243	74.6	2.40	6.7	7.9	1370
098152		2.37	16.05	0.12	0.6	0.059	2.79	20.2	13.0	0.88	224	45.3	2.27	6.7	6.9	1320
098153		2.08	15.60	0.12	0.5	0.044	2.83	17.9	14.2	0.83	613	114.5	2.30	5.5	6.7	1230
098154		1.59	14.55	0.12	0.6	0.041	3.19	22.5	9.5	0.87	137	140.5	2.76	5.1	6.3	1110
098155		1.89	14.50	0.08	0.5	0.033	2.92	20.8	9.2	0.92	136	85.2	2.94	5.3	7.1	1190
098156		1.74	14.95	0.13	0.6	0.040	3.16	20.0	12.2	0.77	138	87.3	3.05	5.1	6.3	1070
098157		1.31	12.40	0.11	0.7	0.035	3.41	17.6	14.8	0.48	122	188.5	2.69	3.6	4.2	810
098158		1.50	12.35	0.14	0.7	0.056	2.92	18.9	56.3	0.57	259	200	0.17	3.6	6.2	930
098159		1.77	12.90	0.10	0.6	0.060	2.89	17.4	166.5	0.60	280	85.7	1.93	4.3	5.0	880
098160		0.14	0.25	0.25	<0.1	0.018	0.02	1.4	1.3	1.57	180	0.38	0.02	0.1	0.5	80
098161		1.95	12.05	0.16	0.7	0.055	3.38	15.2	106.0	0.66	714	65.4	1.40	3.5	5.1	850
098162		1.96	13.10	0.19	0.8	0.073	3.60	18.4	144.0	0.68	771	97.8	1.28	4.4	6.3	1030
098163		1.76	12.70	0.22	0.7	0.083	3.59	19.2	192.0	0.75	952	74.3	0.98	3.6	5.1	960
098164		2.17	14.20	0.16	0.9	0.056	2.72	18.9	362	0.79	556	138.0	1.54	4.9	8.5	1450
098165		2.11	13.80	0.19	0.9	0.060	2.88	25.9	92.8	0.88	351	84.1	0.49	3.9	8.1	1610
098166		1.72	13.00	0.22	0.7	0.068	2.70	20.6	151.5	0.75	474	88.0	0.19	3.9	5.4	890
098167		1.58	12.55	0.18	0.6	0.048	2.91	21.6	206	0.69	798	111.0	0.11	3.4	6.5	840
098168		1.56	13.70	0.21	0.8	0.070	2.00	13.5	550	0.57	483	120.0	1.16	4.5	9.2	870
098169		1.69	13.15	0.14	0.7	0.055	2.16	13.5	510	0.66	751	89.1	1.24	3.9	5.7	840
098170		1.63	13.50	0.12	0.7	0.067	2.12	14.1	530	0.66	753	104.5	1.19	4.0	5.7	840

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To: MAMMOTH GEOLOGICAL LTD.
704- 1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 7- JAN- 2019
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18321458

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOD	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
098131		14.9	56.1	0.387	0.81	1.23	7.3	3	1.2	504	0.33	0.13	5.19	0.197	0.88	1.2
098132		30.4	72.2	0.830	0.65	1.52	7.0	2	1.0	516	0.31	<0.05	5.52	0.173	0.99	2.1
098133		20.8	70.0	1.325	0.74	0.71	7.6	3	1.0	667	0.37	<0.05	6.02	0.206	1.03	2.3
098134		13.9	70.1	0.148	1.62	0.11	7.5	2	1.1	933	0.46	<0.05	6.04	0.236	0.97	1.1
098135		13.8	66.2	0.082	1.04	0.10	7.5	1	1.0	2060	0.53	0.05	6.18	0.255	0.92	1.1
098136		31.0	67.7	0.243	0.70	8.63	7.8	2	1.1	541	0.47	<0.05	5.93	0.244	0.97	1.0
098137		42.9	83.4	0.529	0.86	0.63	8.0	3	1.1	1065	0.42	<0.05	5.52	0.216	1.13	0.8
098138		115.5	82.7	0.400	1.01	2.27	7.0	3	1.2	439	0.38	0.05	5.53	0.218	1.09	0.8
098139		39.1	79.7	0.192	1.02	2.76	7.0	4	1.3	874	0.39	0.05	5.70	0.214	0.94	1.0
098140		14.7	78.3	0.192	0.99	0.54	7.1	3	1.2	1135	0.41	0.06	5.77	0.219	1.04	0.9
098141		123.0	85.5	0.179	0.90	5.88	7.4	4	1.3	365	0.37	0.05	5.23	0.217	1.09	0.9
098142		88.2	80.1	0.182	1.01	3.48	7.0	3	1.3	1130	0.40	<0.05	5.03	0.244	1.08	0.9
098143		17.9	78.0	0.220	1.05	0.34	7.8	4	1.4	984	0.37	0.06	4.97	0.246	1.05	0.8
098144		14.8	71.4	0.200	0.90	0.63	7.8	3	1.3	325	0.41	<0.05	5.25	0.255	0.97	0.8
098145		84.1	92.4	0.346	1.09	62.5	8.0	2	1.3	521	0.33	0.06	5.05	0.225	1.37	1.0
098146		29.2	76.1	0.232	0.98	18.90	6.9	3	1.2	459	0.37	<0.05	5.24	0.212	1.10	0.9
098147		20.4	78.6	0.342	1.15	0.68	11.5	2	1.4	2990	0.29	0.08	4.11	0.361	1.20	1.0
098148		11.0	50.1	0.292	1.03	9.90	10.0	3	1.5	474	0.29	<0.05	4.35	0.295	0.88	1.0
098149		10.8	75.5	0.413	0.87	1.94	7.0	3	1.3	297	0.39	<0.05	5.61	0.220	1.03	1.0
098150		49.8	134.5	0.357	2.83	8.47	14.6	9	3.2	264	0.28	1.48	2.97	0.289	1.69	1.2
098151		9.2	70.2	0.183	1.16	0.49	7.6	2	1.2	2100	0.48	0.05	5.73	0.254	0.88	0.9
098152		9.3	68.8	0.149	0.91	0.18	7.0	2	1.2	997	0.49	0.07	6.02	0.247	0.88	1.0
098153		24.5	70.5	0.289	1.33	0.30	6.8	3	1.3	1020	0.40	0.06	5.55	0.212	0.83	0.9
098154		9.6	72.7	0.377	1.70	0.10	6.8	2	1.3	649	0.34	<0.05	5.39	0.210	0.87	1.0
098155		8.8	65.1	0.212	1.88	0.06	6.6	2	1.4	719	0.40	0.06	5.48	0.224	0.80	1.0
098156		10.3	73.6	0.233	1.65	0.08	6.4	2	1.3	623	0.35	0.07	5.13	0.198	0.87	0.9
098157		10.5	66.3	0.652	1.33	0.19	4.1	2	1.2	785	0.24	<0.05	4.67	0.130	0.82	1.0
098158		12.5	57.4	0.454	0.98	1.56	4.6	3	1.4	201	0.25	0.05	4.52	0.134	0.94	1.1
098159		11.7	72.8	0.229	1.00	1.25	4.8	3	1.1	1260	0.28	0.07	4.80	0.153	0.90	1.1
098160		0.6	0.6	<0.002	0.02	0.08	0.2	<1	0.2	96.3	<0.05	<0.05	0.07	0.005	<0.02	0.1
098161		31.9	88.6	0.170	1.32	1.90	4.2	3	1.0	1765	0.24	0.05	4.71	0.140	1.10	0.8
098162		16.7	88.3	0.206	1.08	7.52	4.9	3	1.3	452	0.29	0.06	4.85	0.171	1.11	1.0
098163		12.1	92.4	0.254	1.01	8.21	4.6	3	1.2	2410	0.25	0.07	5.03	0.152	1.19	0.9
098164		9.4	66.8	0.429	0.96	2.01	7.7	3	1.1	790	0.33	0.05	5.31	0.239	0.90	1.5
098165		9.3	68.3	0.159	1.09	0.33	7.5	3	1.3	244	0.27	0.06	5.42	0.231	0.88	1.2
098166		9.2	70.2	0.221	0.95	8.82	4.7	3	1.4	323	0.25	0.08	4.73	0.147	0.92	0.8
098167		9.8	75.4	0.256	0.84	71.1	4.5	2	1.2	435	0.22	0.05	4.49	0.139	1.06	0.9
098168		9.8	55.8	0.292	0.86	52.8	4.8	2	1.1	397	0.30	0.07	5.09	0.160	0.82	0.8
098169		5.6	66.5	0.279	0.90	90.3	4.2	2	1.1	351	0.27	0.08	4.81	0.156	0.89	0.8
098170		5.6	66.8	0.316	0.85	95.7	4.3	2	1.5	352	0.27	0.07	4.86	0.153	0.87	0.8

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Finalized Date: 7- JAN- 2019
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18321458

Sample Description	Method Analyte Units LOD	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5	Pb- OG62 Pb % 0.001
098131		69	1.0	10.5	47	13.1	
098132		66	1.1	11.0	71	14.9	
098133		70	1.1	13.5	56	14.9	
098134		70	0.5	13.9	53	15.7	
098135		70	0.4	13.2	56	14.6	
098136		75	2.3	12.6	129	13.6	
098137		73	0.9	12.6	91	9.3	
098138		73	0.9	10.9	740	9.2	
098139		65	0.6	12.1	93	11.6	
098140		66	0.6	11.7	42	12.3	
098141		69	0.8	10.7	128	10.7	
098142		71	0.9	9.6	118	11.1	
098143		73	0.5	11.8	58	8.0	
098144		77	2.0	11.6	50	11.4	
098145		76	1.2	8.9	328	12.3	
098146		69	0.9	9.3	116	11.8	
098147		112	0.7	11.7	41	21.4	
098148		98	3.3	9.6	55	20.0	
098149		67	2.1	11.1	43	12.7	
098150		180	29.9	13.4	134	27.8	
098151		72	0.5	12.5	29	14.6	
098152		67	0.6	13.1	30	13.2	
098153		65	0.8	11.5	109	12.5	
098154		62	0.5	11.3	24	12.9	
098155		66	0.4	11.6	26	11.6	
098156		58	0.6	11.1	30	14.0	
098157		40	0.5	9.7	31	18.7	
098158		46	1.8	9.6	39	18.5	
098159		46	0.5	8.9	55	18.1	
098160		1	0.1	2.3	2	1.1	
098161		45	0.7	6.9	123	16.7	
098162		48	0.9	8.5	87	20.1	
098163		45	0.8	7.6	70	17.2	
098164		77	0.6	10.6	40	22.1	
098165		73	2.4	12.9	30	21.0	
098166		46	0.7	8.0	42	16.4	
098167		43	0.6	7.2	139	16.4	
098168		45	0.6	7.9	89	17.9	
098169		44	0.7	6.6	143	17.4	
098170		43	0.6	6.9	147	17.3	

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Finalized Date: 7- JAN- 2019
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18321458

Sample Description	Method	WEI- 21	Au- ICP21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu
	Units	kg	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
	LOD	0.02	0.001	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2
098171		10.76	0.069	1.06	7.72	748	590	1.41	0.12	2.35	0.35	37.6	10.1	4	7.83	3350
098172		7.49	0.086	1.12	7.33	580	530	1.33	0.10	2.56	0.35	36.5	10.3	6	7.83	3530
098173		4.80	0.096	0.95	7.62	64.0	940	1.26	0.11	2.53	0.16	43.1	11.9	6	5.68	3730
098174		7.24	0.089	1.49	7.56	10.7	1250	0.93	0.11	3.00	0.13	44.7	13.1	17	5.08	3850
098175		11.53	0.070	2.33	7.19	98.5	820	1.07	0.14	3.39	0.39	49.3	11.7	42	9.17	3140
098176		10.64	0.069	1.00	7.62	29.0	890	1.22	0.14	2.80	0.10	42.9	14.8	39	8.43	2940
098177		6.63	0.101	1.51	7.68	502	1070	1.59	0.22	2.33	0.51	39.2	14.2	33	12.25	2760
098178		11.55	0.061	1.20	7.23	289	740	1.49	0.23	2.88	0.30	47.8	33.1	49	11.40	2540
098179		6.63	0.048	2.29	6.72	304	1290	1.17	0.33	3.45	1.33	71.1	9.9	24	9.42	2100
098180		0.14	1.025	1.78	5.52	16.3	560	0.76	0.54	1.74	0.44	20.2	10.0	45	0.92	3460
098181		7.84	0.083	1.35	7.23	239	810	1.14	0.13	2.40	0.20	74.0	16.0	36	7.62	3660
098182		6.73	0.086	1.03	7.71	68.9	1150	1.19	0.10	2.24	0.11	44.7	13.4	43	7.38	3900
098183		6.24	0.084	1.07	7.81	71.6	890	1.28	0.09	2.35	0.15	40.0	13.2	22	8.44	4000
098184		11.29	0.058	1.56	7.03	118.0	940	1.60	0.28	2.51	0.37	41.2	15.6	67	7.45	2840
098185		10.29	0.073	0.87	7.78	197.5	990	1.47	0.09	2.58	0.18	45.9	13.7	36	7.67	2810
098186		11.06	0.092	1.17	7.85	62.3	1370	1.31	0.19	2.18	0.40	41.0	15.7	24	6.79	4060
098187		7.86	0.088	1.11	7.61	99.1	690	1.47	0.15	2.59	1.35	38.5	16.1	24	9.18	3840
098188		4.61	0.107	2.48	7.78	115.5	450	1.89	0.21	2.97	1.58	42.3	15.8	27	14.20	4390
098189		10.74	0.087	2.32	7.26	227	950	1.49	0.22	2.73	5.99	43.2	14.4	31	7.82	3850
098190		0.95	0.002	0.01	0.08	0.6	20	0.08	0.02	33.1	0.02	1.64	0.7	1	0.08	9.7
098191		5.67	0.067	1.68	7.20	710	610	1.36	0.23	2.98	0.91	49.7	11.9	31	9.62	2650
098192		7.32	0.060	0.68	7.82	10.2	1330	1.15	0.12	2.37	0.15	50.6	10.8	19	4.89	2480
098193		10.46	0.066	1.05	7.85	111.5	1070	1.56	0.26	2.18	0.17	63.8	15.2	75	6.12	3310
098194		10.74	0.059	0.90	7.26	19.1	1080	1.40	0.16	1.87	0.12	54.4	12.4	55	4.45	2880
098195		5.50	0.054	0.86	8.05	22.8	1280	1.47	0.33	1.82	0.14	47.8	16.1	84	4.64	2770
098196		10.69	0.073	1.10	6.69	839	1070	1.44	0.37	2.51	0.36	44.4	15.1	15	7.83	3890
098197		11.37	0.059	1.27	6.40	306	1210	1.21	0.32	2.61	0.32	49.4	11.0	22	7.24	2900
098198		8.81	0.078	1.59	6.89	239	940	1.37	0.31	2.05	0.26	46.7	14.4	9	8.89	3810
098199		5.01	0.064	1.03	6.73	162.0	1300	1.19	0.40	1.90	0.17	61.4	14.4	39	7.05	3260
098200		4.81	0.077	1.20	6.56	155.0	1160	1.22	0.39	1.82	0.19	57.3	14.8	34	7.05	3650
098201		7.11	0.069	1.07	6.64	145.0	1140	1.55	0.27	2.21	0.61	40.9	13.1	35	8.11	3180
098202		7.88	0.059	2.17	7.22	529	1030	1.30	0.30	2.03	0.80	42.1	8.3	8	9.78	2950
098203		6.47	0.097	4.26	6.32	655	750	1.17	0.76	1.77	2.30	59.3	8.1	21	8.96	4080
098204		10.93	0.114	5.75	6.39	887	1150	1.22	0.53	1.64	1.85	85.9	9.5	50	8.89	5610
098205		11.38	0.063	7.42	6.51	833	800	1.08	1.99	1.27	5.97	57.7	9.9	49	9.36	3510
098206		10.62	0.159	4.86	6.77	292	700	1.24	0.27	2.70	1.08	47.3	10.6	28	9.64	5540
098207		8.39	0.097	2.07	7.11	62.5	1110	1.26	0.24	2.59	0.81	39.6	9.8	27	7.93	4040
098208		6.00	0.217	5.81	6.81	500	980	1.13	0.43	1.74	3.10	33.7	9.6	6	9.22	6270
098209		11.66	0.152	1.71	6.70	7.9	1240	1.02	0.18	2.35	0.26	31.0	8.4	6	5.32	4820
098210		0.13	0.855	3.02	7.84	86.8	640	1.34	0.58	0.50	0.78	33.9	19.3	44	6.78	3620

***** See Appendix Page for comments regarding this certificate *****

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704- 1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 7- JAN- 2019
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18321458

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Fe	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOD	0.01	0.05	0.05	0.1	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
098171		1.53	14.65	0.16	0.8	0.059	2.25	17.4	394	0.70	814	101.5	1.30	3.8	5.5	940
098172		1.54	13.45	0.16	0.6	0.051	2.53	16.2	313	0.66	965	185.0	1.02	3.3	6.0	830
098173		1.60	14.55	0.15	0.5	0.066	2.80	21.0	221	0.72	465	82.5	0.26	4.3	13.9	960
098174		2.25	15.60	0.15	0.4	0.078	3.01	20.8	41.6	0.96	497	105.5	0.77	6.2	17.7	1340
098175		2.13	14.70	0.18	0.5	0.076	3.17	24.6	120.0	1.00	1600	111.5	0.74	5.6	21.8	980
098176		3.12	16.10	0.17	0.6	0.083	2.28	20.2	268	1.12	678	91.2	0.95	7.6	18.3	1240
098177		2.08	16.50	0.08	0.5	0.076	2.19	19.7	404	0.63	1040	60.4	0.56	8.1	16.9	1190
098178		2.42	15.65	0.08	0.4	0.066	2.53	25.2	336	0.95	1120	77.6	0.22	6.7	19.9	960
098179		2.34	14.25	0.09	0.4	0.091	2.92	40.5	64.9	1.13	3000	259	0.10	5.1	16.1	1110
098180		3.78	11.10	0.07	1.6	0.062	0.91	9.9	14.5	0.83	583	354	2.05	4.2	33.0	560
098181		2.61	14.85	0.10	0.5	0.073	2.70	42.3	157.5	0.79	865	273	0.58	5.1	20.1	990
098182		2.35	16.25	0.08	0.6	0.074	2.79	23.5	159.0	0.88	386	99.5	1.13	5.8	20.0	910
098183		2.45	15.35	0.06	0.7	0.058	2.88	20.2	127.0	0.93	497	81.9	0.77	5.6	18.4	1170
098184		2.27	16.70	0.09	0.4	0.062	3.05	20.5	103.5	0.97	944	97.5	0.71	5.1	34.9	770
098185		2.15	16.25	0.09	0.5	0.051	2.63	24.4	284	0.81	802	101.5	0.61	6.3	23.3	1050
098186		2.37	14.95	0.08	0.6	0.097	3.07	20.8	155.0	0.81	659	90.5	1.58	5.6	16.7	1110
098187		2.07	16.55	0.08	0.9	0.098	2.54	17.9	335	0.75	1000	88.7	0.41	5.4	20.7	1290
098188		2.49	17.85	0.09	0.7	0.090	2.19	20.2	401	0.94	1080	79.5	0.40	5.0	19.0	1400
098189		2.07	15.40	0.11	0.7	0.092	2.74	22.2	119.0	1.03	1200	114.5	1.46	4.8	18.6	980
098190		0.16	0.24	<0.05	<0.1	0.005	0.02	1.5	2.2	2.58	154	0.20	0.02	0.1	0.6	60
098191		2.19	16.00	0.14	0.7	0.077	2.68	24.6	157.0	0.89	1560	113.0	0.21	4.9	16.3	1060
098192		1.92	16.25	0.18	0.8	0.064	2.84	26.5	42.5	1.03	432	127.5	1.32	5.3	13.6	1170
098193		2.46	15.10	0.16	0.4	0.066	3.58	33.9	82.7	1.06	538	165.5	2.06	4.9	40.3	610
098194		2.15	14.80	0.13	0.5	0.060	3.27	29.2	41.2	0.99	207	144.5	2.50	5.2	27.1	710
098195		2.56	16.70	0.15	0.3	0.066	3.38	24.8	33.9	1.17	335	87.4	2.27	4.1	43.5	820
098196		2.34	14.30	0.10	0.6	0.095	3.31	23.6	234	0.91	863	144.0	0.38	4.6	17.0	1050
098197		2.14	14.25	0.10	0.6	0.076	3.15	26.5	229	0.86	704	222	0.68	5.5	13.4	940
098198		2.00	16.70	0.12	0.8	0.104	3.47	24.5	242	0.78	910	100.0	1.04	5.3	12.0	1290
098199		2.36	14.00	0.12	0.6	0.081	3.51	33.1	174.5	0.70	547	147.5	1.42	5.7	17.5	940
098200		2.33	14.70	0.13	0.6	0.087	3.45	30.9	173.0	0.68	537	141.0	1.46	5.7	17.3	950
098201		2.36	15.70	0.11	0.5	0.084	2.93	21.2	232	0.88	914	73.6	1.16	7.9	17.9	1000
098202		1.74	14.10	0.12	0.7	0.087	3.52	22.1	123.5	0.76	1880	124.5	0.09	5.1	9.3	920
098203		2.57	13.35	0.12	0.2	0.491	3.02	33.9	87.1	0.66	8440	455	0.08	5.7	10.5	870
098204		2.12	13.25	0.11	0.4	0.158	3.26	50.5	77.5	0.67	2430	913	0.08	5.8	15.1	760
098205		3.69	13.35	0.09	0.3	0.552	3.10	33.1	36.5	0.61	15600	393	0.04	4.8	17.5	640
098206		2.35	15.70	0.09	0.5	0.133	3.31	25.7	142.0	1.00	2710	348	0.30	7.0	16.7	1070
098207		2.39	15.50	0.10	0.5	0.117	3.20	20.7	107.0	1.08	2400	147.5	0.47	6.9	13.9	1040
098208		2.02	14.60	0.09	0.6	0.229	3.45	18.2	61.4	0.64	3800	143.5	0.44	5.2	10.0	790
098209		1.80	15.20	0.09	0.6	0.110	3.29	16.6	54.8	0.82	1840	62.7	0.90	6.3	5.6	840
098210		4.94	17.25	0.12	1.0	0.051	4.95	18.5	12.3	0.82	496	150.0	1.14	6.0	26.1	1110

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To: MAMMOTH GEOLOGICAL LTD.
704- 1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 7- JAN- 2019
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18321458

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOD	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
098171		10.4	72.3	0.226	0.83	58.1	4.8	3	1.2	411	0.26	<0.05	5.13	0.150	1.04	1.0
098172		22.1	76.1	0.448	0.90	28.0	4.4	3	1.2	351	0.22	0.05	4.77	0.135	1.07	0.9
098173		14.8	69.9	0.184	0.81	3.10	5.5	3	1.3	254	0.30	0.08	5.32	0.171	1.01	0.8
098174		11.5	76.6	0.223	0.79	0.66	9.3	2	1.3	273	0.40	0.08	4.59	0.277	1.02	0.7
098175		31.8	99.9	0.287	0.77	2.79	11.8	3	1.6	396	0.34	0.09	5.00	0.263	1.17	0.9
098176		10.3	63.7	0.290	0.87	0.79	10.9	2	1.2	347	0.45	0.08	5.15	0.330	0.80	0.7
098177		35.5	66.0	0.148	0.93	31.3	8.9	2	1.2	502	0.50	0.10	4.58	0.291	0.91	0.6
098178		11.8	77.0	0.182	0.99	10.20	10.2	2	1.2	374	0.41	0.15	5.02	0.290	1.02	0.7
098179		515	120.0	0.332	0.66	15.10	8.1	1	1.2	450	0.33	0.07	4.58	0.232	1.30	1.1
098180		25.5	27.4	0.314	0.42	5.24	11.0	1	2.3	241	0.27	0.25	2.28	0.270	0.27	1.0
098181		11.8	81.9	0.397	1.45	8.08	8.9	3	1.2	438	0.31	0.10	4.69	0.246	0.94	1.2
098182		8.8	76.9	0.265	0.82	1.93	9.7	3	1.1	461	0.37	0.07	5.40	0.269	0.90	0.7
098183		8.7	73.2	0.188	0.88	2.06	8.3	2	1.2	482	0.36	0.06	4.49	0.270	0.91	0.8
098184		21.5	79.6	0.262	0.93	5.19	12.6	2	1.2	462	0.32	0.09	5.88	0.258	1.13	0.9
098185		11.9	69.0	0.199	0.85	7.78	9.8	2	1.2	617	0.41	0.07	4.95	0.270	0.99	0.8
098186		35.9	77.5	0.251	1.14	2.43	7.6	2	1.0	1540	0.38	0.10	4.82	0.252	0.94	0.8
098187		42.9	68.7	0.238	0.94	5.55	8.8	2	1.1	572	0.36	0.06	4.25	0.281	1.02	1.0
098188		38.2	76.0	0.204	1.25	3.13	10.6	3	1.5	375	0.28	0.08	3.76	0.328	1.02	0.8
098189		79.4	95.9	0.348	1.04	4.17	8.4	3	1.2	1460	0.31	0.11	5.04	0.233	1.06	0.9
098190		0.8	0.9	<0.002	0.01	0.10	0.6	2	<0.2	89.8	<0.05	<0.05	0.07	0.005	0.03	0.1
098191		55.1	78.3	0.379	0.86	24.9	9.0	1	1.1	582	0.32	0.09	5.02	0.253	1.19	1.1
098192		10.5	75.4	0.345	0.68	0.39	8.4	2	1.1	1180	0.34	0.08	4.82	0.255	0.92	1.0
098193		14.3	95.2	0.496	1.17	2.60	13.8	2	1.4	753	0.32	0.12	9.37	0.274	1.03	1.3
098194		10.0	82.1	0.474	1.24	0.26	10.8	1	1.3	1380	0.35	0.08	7.18	0.245	0.88	1.0
098195		11.0	91.2	0.277	1.26	0.51	15.8	2	1.5	1050	0.28	0.16	6.64	0.315	0.93	0.9
098196		10.9	96.1	0.351	1.36	29.6	6.6	2	1.8	473	0.30	0.18	4.89	0.199	1.15	1.0
098197		34.4	88.8	0.419	1.04	15.00	6.9	2	1.4	372	0.34	0.14	4.79	0.214	1.06	1.0
098198		12.3	106.5	0.285	1.10	16.65	8.0	2	1.7	364	0.34	0.16	4.99	0.238	1.27	1.1
098199		9.9	95.2	0.373	1.49	13.60	7.8	3	1.5	511	0.36	0.18	5.34	0.221	1.09	1.1
098200		9.9	94.7	0.337	1.29	11.50	7.4	2	1.4	536	0.38	0.24	5.65	0.215	1.10	1.0
098201		14.2	91.0	0.186	0.95	14.60	8.4	2	1.3	452	0.49	0.14	5.55	0.271	1.06	0.8
098202		23.7	124.0	0.240	0.81	25.3	5.0	2	1.4	357	0.33	0.14	4.84	0.166	1.42	1.0
098203		185.0	117.0	0.692	1.09	43.0	6.8	2	1.2	356	0.36	0.14	4.61	0.209	1.26	0.9
098204		90.8	130.0	1.290	1.21	60.3	7.7	3	1.7	581	0.32	0.18	5.23	0.222	1.37	1.3
098205		460	161.5	0.729	1.38	87.0	10.5	2	1.4	412	0.28	0.13	5.30	0.230	1.60	1.0
098206		71.0	126.0	0.689	0.97	17.70	9.2	2	1.2	411	0.39	0.14	4.76	0.275	1.39	0.9
098207		70.4	112.0	0.338	0.79	2.63	8.7	2	1.2	320	0.40	0.14	4.51	0.281	1.29	0.8
098208		249	136.5	0.354	1.22	28.8	4.6	3	1.4	246	0.36	0.14	4.85	0.160	1.53	0.9
098209		16.7	94.1	0.151	0.76	1.00	4.6	2	1.0	213	0.45	0.05	5.04	0.188	1.15	0.8
098210		44.2	109.0	0.349	2.78	8.18	14.1	7	3.1	248	0.37	1.20	2.94	0.316	1.65	1.3

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Finalized Date: 7- JAN- 2019
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18321458

Sample Description	Method Analyte Units LOD	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5	Pb- OG62 Pb % 0.001
098171		46	0.7	8.5	97	18.9	
098172		42	0.9	7.0	87	16.1	
098173		52	0.7	9.7	39	13.6	
098174		91	0.9	13.1	42	9.3	
098175		96	2.1	11.0	96	14.8	
098176		97	0.8	12.5	50	16.3	
098177		84	2.0	10.9	117	16.0	
098178		93	3.1	10.5	73	12.6	
098179		79	4.3	12.6	245	9.2	
098180		83	3.6	14.4	67	51.9	
098181		81	6.0	11.3	76	14.8	
098182		89	1.3	10.5	38	16.1	
098183		83	3.5	10.8	52	21.1	
098184		101	3.3	9.4	87	14.5	
098185		90	2.8	9.6	59	14.0	
098186		77	1.0	10.6	78	19.7	
098187		85	1.1	10.4	218	29.1	
098188		99	1.7	12.7	314	21.2	
098189		75	1.1	11.6	1160	21.6	
098190		1	<0.1	3.6	4	1.4	
098191		82	4.1	10.9	213	20.5	
098192		78	1.5	13.9	40	24.9	
098193		109	1.1	10.7	58	12.3	
098194		90	0.8	12.2	38	14.9	
098195		130	0.9	11.9	38	9.6	
098196		60	1.6	9.7	94	17.9	
098197		65	1.2	9.4	70	18.9	
098198		76	1.7	11.2	69	24.3	
098199		71	1.8	9.9	60	18.6	
098200		69	1.6	10.0	57	18.4	
098201		77	1.3	10.1	125	16.0	
098202		49	2.9	8.8	193	20.4	
098203		70	9.6	9.1	387	7.3	
098204		91	11.1	8.4	361	11.1	
098205		88	10.8	8.3	965	10.7	
098206		83	6.5	10.3	227	19.0	
098207		82	1.6	10.4	159	16.2	
098208		46	3.0	7.9	493	16.5	
098209		49	1.2	8.8	61	14.5	
098210		175	31.7	13.8	126	32.9	

***** See Appendix Page for comments regarding this certificate *****

ALS Canada Ltd.

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www.alsglobal.com/geochemistry

To: MAMMOTH GEOLOGICAL LTD.
704- 1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 7- JAN- 2019
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18321458

Sample Description	Method	WEI- 21	Au- ICP21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu
	Units	kg	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
	LOD	0.02	0.001	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2
098211		11.24	0.147	2.30	6.40	129.5	650	1.14	0.23	1.87	0.46	25.2	8.9	9	6.41	5580
098212		4.52	0.096	4.62	6.07	703	1240	1.25	0.56	1.87	23.6	30.9	7.8	6	9.37	4140
098213		11.86	0.124	1.98	7.06	463	1110	1.22	0.23	2.13	1.81	26.4	10.0	6	7.12	4650
098214		7.39	0.104	3.12	6.74	662	1210	1.13	0.16	2.01	2.18	29.2	8.8	6	6.85	4350
098215		8.54	0.106	3.16	6.62	1255	1150	1.13	0.17	1.97	13.45	32.3	9.8	6	8.48	4150

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CERTIFICATE OF ANALYSIS TR18321458

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Fe	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOD	0.01	0.05	0.05	0.1	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
098211		1.83	14.20	0.09	0.5	0.123	2.77	13.4	100.5	0.71	1600	76.5	0.94	5.1	5.7	820
098212		1.61	13.65	0.10	0.5	0.195	2.59	17.1	75.8	0.66	2230	109.5	0.40	4.9	5.5	740
098213		1.83	14.50	0.12	0.6	0.109	3.61	12.1	141.0	0.63	1440	60.4	0.72	5.1	5.4	820
098214		1.69	12.55	0.10	0.4	0.075	3.85	13.3	75.1	0.67	1340	103.0	0.34	3.4	4.9	780
098215		1.79	13.80	0.11	0.5	0.086	3.61	15.1	66.2	0.59	2120	165.5	0.10	3.8	5.7	860

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VANCOUVER BC V6E 4K2

Finalized Date: 7- JAN- 2019
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18321458

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOD	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
098211		27.1	93.7	0.144	1.07	6.11	4.5	3	1.2	208	0.38	0.09	4.74	0.171	1.04	0.8
098212		413	102.0	0.178	0.99	43.7	4.3	2	1.0	292	0.34	0.10	4.73	0.155	1.15	0.9
098213		64.4	94.1	0.147	0.89	9.22	4.2	2	0.9	274	0.37	0.09	4.32	0.170	1.29	0.9
098214		87.4	106.5	0.252	0.88	15.10	3.9	2	0.9	306	0.26	0.05	4.14	0.135	1.45	0.8
098215		418	116.5	0.422	1.00	52.2	4.2	2	0.9	295	0.26	0.06	4.18	0.148	1.60	1.0

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704- 1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 7- JAN- 2019
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18321458

Sample Description	Method Analyte Units LOD	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5	Pb- OG62 Pb % 0.001
098211		49	1.9	7.4	103	13.7	
098212		48	2.8	7.5	3960	14.0	
098213		45	2.5	7.2	301	14.1	
098214		45	1.9	6.3	426	10.8	
098215		48	3.9	7.5	2080	13.2	

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Finalized Date: 7- JAN- 2019
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18321458

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Terrace located at 2912 Molitor Street, Terrace, BC, Canada.

CRU- 31	CRU- QC	LOG- 22	LOG- 24
PUL- 31	PUL- QC	SPL- 21	WEI- 21

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Au- ICP21	ME- MS61	ME- OG62	Pb- OG62

ALS Canada Ltd.

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To: MAMMOTH GEOLOGICAL LTD.
704- 1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 31- DEC- 2018
This copy reported on
15- JAN- 2019
Account: MAMGEO

CERTIFICATE TR18321459

Project: Poplar

This report is for 117 Drill Core samples submitted to our lab in Terrace, BC, Canada on 17- DEC- 2018.

The following have access to data associated with this certificate:

LORIE FARRELL	TIM HENNEBERRY	DEIRDRE KEARNEY

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
LOG- 22	Sample login - Rcd w/o BarCode
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
LOG- 24	Pulp Login - Rcd w/o Barcode

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- ICP21	Au 30g FA ICP- AES Finish	ICP- AES
ME- MS61	48 element four acid ICP- MS	

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:

Colin Ramshaw, Vancouver Laboratory Manager

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704- 1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 31- DEC- 2018
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18321459

Sample Description	Method	WEI- 21	Au- ICP21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu
	Units	kg	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
	LOD	0.02	0.001	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2
098216		12.39	0.027	0.43	8.02	8.6	930	1.67	0.09	0.64	0.34	47.4	19.3	88	9.98	1600
098217		12.88	0.080	0.92	7.61	35.7	780	1.60	0.13	1.31	0.34	51.8	19.3	83	8.85	3350
098218		4.55	0.070	0.69	8.04	9.4	820	1.85	0.15	1.22	0.15	45.4	21.0	89	9.62	3310
098219		10.57	0.113	0.94	7.37	15.5	780	1.77	0.14	1.47	0.23	60.0	15.9	83	7.30	4600
098220		0.13	0.406	2.50	8.41	61.6	650	1.41	0.39	0.45	0.37	37.6	22.4	65	4.91	3920
098221		12.40	0.108	1.17	7.98	7.1	810	1.79	0.14	1.29	0.19	63.4	27.3	85	10.60	4600
098222		10.59	0.090	0.72	7.94	6.8	690	2.08	0.11	1.21	0.15	57.9	16.4	91	8.63	3560
098223		4.04	0.098	1.10	8.11	27.6	1240	1.84	0.13	1.77	0.11	65.9	14.5	87	6.97	4620
098224		7.06	0.077	1.05	7.85	45.1	900	1.86	0.14	2.35	0.19	50.2	18.7	84	6.49	3460
098225		5.86	0.207	1.12	7.62	134.0	870	1.77	0.13	1.91	0.18	66.4	17.3	84	7.27	5900
098226		11.05	0.304	1.23	7.65	20.1	1170	1.42	0.16	2.03	0.16	56.1	17.1	87	7.19	8590
098227		4.05	0.118	1.18	6.99	12.6	970	1.37	0.15	2.12	0.14	57.0	19.3	76	6.12	7270
098228		9.12	0.072	0.51	8.19	8.8	890	1.48	0.15	1.08	0.08	52.8	13.5	87	7.53	2960
098229		11.54	0.109	0.74	7.71	8.5	960	1.40	0.17	1.42	0.17	66.6	14.9	88	6.12	4010
098230		1.04	0.002	0.01	0.07	<0.2	20	0.05	0.02	31.5	<0.02	1.24	0.5	1	0.05	11.4
098231		12.01	0.066	0.63	8.02	8.4	920	1.61	0.12	1.05	0.65	49.2	18.7	86	9.31	2830
098232		9.39	0.072	0.67	7.90	14.2	920	1.46	0.13	0.99	0.27	56.4	17.8	87	7.13	3180
098233		12.11	0.099	0.69	7.34	18.5	890	1.39	0.10	1.52	0.13	58.8	15.8	88	6.09	4010
098234		11.61	0.113	0.76	7.82	18.9	870	1.62	0.09	1.88	0.25	53.2	13.9	90	6.39	3650
098235		11.51	0.113	0.77	8.31	36.8	960	1.55	0.10	1.95	0.27	57.0	12.3	92	5.91	4570
098236		11.52	0.201	2.91	7.62	265	730	1.95	0.13	3.11	1.34	74.1	14.9	93	7.39	8140
098237		10.75	0.178	3.08	8.20	18.6	910	1.51	0.16	2.49	2.25	50.0	19.7	91	8.89	7770
098238		11.34	0.126	2.75	8.09	132.0	770	1.63	0.16	2.31	0.74	42.1	19.4	91	8.43	6080
098239		5.93	0.119	1.87	8.35	58.4	470	1.61	0.10	3.07	0.31	46.6	12.3	93	6.63	5750
098240		5.16	0.133	1.88	7.07	56.9	810	1.50	0.10	3.53	0.50	55.5	11.7	79	6.74	5010
098241		11.75	0.190	4.07	7.26	324	600	1.55	0.11	3.65	0.68	59.5	19.4	77	9.18	7560
098242		11.09	0.097	2.55	7.17	243	730	1.46	0.11	4.13	0.86	52.4	9.7	78	9.19	4410
098243		7.15	0.128	4.38	7.11	448	640	1.31	0.14	4.36	0.87	76.2	12.8	76	11.20	6070
098244		7.59	0.149	1.39	7.78	89.6	510	1.88	0.14	2.55	0.33	55.9	19.2	90	6.90	6170
098245		10.33	0.146	1.77	7.50	55.0	730	1.54	0.15	2.76	0.35	51.9	12.4	86	7.09	6210
098246		6.68	0.109	1.08	8.48	14.6	860	1.14	0.16	2.46	0.34	43.4	9.7	98	4.70	5690
098247		10.14	0.083	0.73	7.66	46.5	1160	0.78	0.09	3.09	0.13	46.7	6.4	16	4.05	3950
098248		11.04	0.109	1.97	7.13	126.5	830	0.73	0.07	3.40	1.80	52.8	5.8	14	5.30	4880
098249		3.39	0.059	81.5	5.23	211	810	0.98	0.05	5.23	11.70	38.3	6.6	7	13.40	2570
098250		0.13	0.856	3.40	8.09	83.1	660	1.11	0.58	0.50	0.81	35.9	18.5	44	6.73	3690
098251		13.00	0.087	3.45	6.70	40.5	4310	1.16	0.09	3.08	1.18	61.2	5.6	13	12.55	3430
098252		10.91	0.121	2.85	7.06	40.8	1110	0.98	0.08	2.65	2.33	56.2	7.6	13	6.87	4350
098253		7.26	0.078	1.10	6.81	9.7	950	0.93	0.07	2.83	0.19	36.6	6.4	13	4.03	3260
098254		5.74	0.114	0.97	7.01	7.3	1190	0.94	0.08	2.43	0.15	41.0	6.0	14	3.93	4220
098255		10.93	0.094	1.70	7.79	95.4	1020	0.89	0.08	3.32	0.37	47.3	6.3	16	5.50	4920

***** See Appendix Page for comments regarding this certificate *****

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VANCOUVER BC V6E 4K2

Finalized Date: 31- DEC- 2018
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18321459

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Fe	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOD	0.01	0.05	0.05	0.1	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
098216		2.95	18.20	0.08	1.4	0.032	2.79	25.4	33.4	1.01	277	60.6	2.12	4.0	67.7	740
098217		2.55	16.35	0.09	1.2	0.059	2.74	26.3	50.2	1.04	237	155.5	1.81	3.5	79.1	700
098218		2.58	17.70	0.08	1.5	0.054	2.61	23.3	43.9	0.99	259	88.7	1.87	4.0	69.0	760
098219		1.98	15.90	0.08	1.1	0.068	3.03	31.4	35.6	1.17	207	219	1.08	3.9	63.6	680
098220		4.80	18.15	0.08	1.0	0.046	5.34	20.4	13.8	1.04	408	143.0	1.50	3.9	40.0	1150
098221		3.14	18.55	0.10	1.2	0.072	3.01	32.8	51.8	1.57	280	144.5	1.32	4.2	82.6	850
098222		2.50	17.10	0.10	1.3	0.058	2.63	29.8	36.7	1.28	251	107.5	2.39	5.0	66.2	820
098223		2.12	18.45	0.10	1.2	0.081	3.28	35.4	41.0	1.17	357	182.5	1.77	5.1	57.9	590
098224		2.28	17.35	0.09	1.1	0.049	3.15	25.5	35.6	1.08	356	145.5	0.35	3.8	62.6	740
098225		2.48	18.15	0.11	1.1	0.081	2.99	34.0	34.5	1.12	219	195.5	1.71	4.7	75.0	690
098226		3.31	15.80	0.11	0.9	0.103	3.20	26.3	19.9	1.33	329	188.5	1.47	4.9	75.6	2100
098227		3.01	14.45	0.10	0.9	0.088	2.65	27.5	13.2	1.07	356	622	0.65	2.8	49.8	860
098228		2.39	17.60	0.11	1.1	0.037	3.12	25.0	13.9	1.17	287	253	1.61	4.5	58.8	710
098229		2.29	17.25	0.12	1.0	0.052	3.32	33.1	14.8	1.16	258	192.5	1.57	4.8	55.7	730
098230		0.15	0.25	<0.05	<0.1	0.007	0.02	1.2	1.1	2.72	142	1.01	0.02	0.1	0.4	60
098231		2.51	16.85	0.09	1.2	0.038	3.34	23.7	24.1	1.17	337	188.5	1.76	4.0	59.8	740
098232		2.43	17.20	0.09	1.2	0.047	3.36	27.4	20.8	1.05	242	160.5	1.92	4.0	60.4	760
098233		2.53	16.10	0.12	1.1	0.054	3.15	29.2	15.7	1.20	187	151.0	1.48	4.5	61.7	780
098234		2.00	18.50	0.11	1.2	0.052	3.54	25.5	24.8	1.03	225	154.0	0.66	5.1	60.1	940
098235		2.21	16.10	0.08	1.0	0.068	3.66	27.8	79.3	0.97	230	245	0.80	4.8	52.8	720
098236		2.41	15.00	0.08	0.9	0.123	2.42	38.7	268	1.09	643	505	0.11	5.1	53.7	870
098237		3.28	12.90	0.07	0.7	0.097	3.70	23.5	36.0	1.17	687	447	0.19	4.5	52.6	1130
098238		3.36	14.00	0.08	0.8	0.079	3.30	19.7	101.5	1.01	614	231	0.12	4.6	58.8	770
098239		2.54	13.15	0.07	0.8	0.071	2.19	21.5	52.3	1.24	532	255	0.06	4.4	39.4	1230
098240		2.38	12.95	0.08	0.7	0.080	1.83	26.7	43.4	1.35	602	372	0.04	4.2	38.2	1220
098241		2.94	13.25	0.07	0.8	0.115	2.21	29.1	28.1	1.49	730	234	0.05	4.0	49.5	1180
098242		2.34	13.85	0.07	0.9	0.066	1.97	25.2	63.8	1.73	944	255	0.04	3.8	42.2	630
098243		2.70	12.95	0.10	0.7	0.081	1.97	38.5	56.8	1.75	1190	213	0.03	4.3	46.6	700
098244		2.53	16.30	0.08	1.0	0.093	1.50	25.6	166.5	0.93	368	260	0.04	4.9	57.7	1520
098245		2.36	14.20	0.10	0.8	0.098	2.75	25.2	44.8	1.11	437	266	0.14	4.8	39.7	1030
098246		2.13	16.25	0.09	0.8	0.086	3.15	20.1	31.2	0.91	330	228	0.20	6.8	28.1	850
098247		2.04	16.05	0.08	0.9	0.051	2.33	22.2	27.7	1.01	298	52.8	0.19	7.7	12.3	1380
098248		1.93	15.70	0.09	0.8	0.067	2.64	26.9	30.9	1.10	527	227	0.17	6.9	8.6	1160
098249		2.22	11.35	0.07	0.6	0.035	1.99	20.0	30.0	1.80	2010	87.8	0.03	4.8	6.0	810
098250		4.98	17.10	0.14	0.9	0.057	5.54	17.8	10.8	0.82	495	158.0	1.15	4.4	25.3	1120
098251		2.04	15.55	0.12	0.8	0.054	2.85	31.5	50.0	0.87	1320	425	0.16	7.2	6.5	1200
098252		2.21	16.60	0.09	0.9	0.074	2.57	26.3	41.2	0.81	891	209	0.14	7.6	8.3	1320
098253		2.25	17.00	0.07	1.0	0.055	1.05	16.0	42.4	0.70	594	183.0	0.04	8.3	6.9	1300
098254		2.29	16.50	0.09	0.8	0.062	1.46	18.2	33.4	0.65	417	163.0	0.08	7.6	6.8	1270
098255		2.69	17.15	0.09	0.8	0.073	1.88	22.2	50.3	1.01	728	73.3	0.09	7.3	6.4	1420

***** See Appendix Page for comments regarding this certificate *****

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To: MAMMOTH GEOLOGICAL LTD.
704- 1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 31- DEC- 2018
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18321459

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOD	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
098216		14.5	78.4	0.151	1.20	0.83	13.7	1	1.3	188.0	0.29	<0.05	7.62	0.220	0.74	1.7
098217		28.5	68.9	0.492	1.24	4.25	13.0	2	1.4	253	0.24	0.05	7.25	0.191	0.72	1.8
098218		11.7	67.6	0.294	1.40	0.31	14.3	2	1.5	235	0.29	0.05	7.83	0.215	0.73	1.9
098219		14.2	70.0	0.676	1.06	0.30	13.5	3	1.7	200	0.28	<0.05	7.26	0.211	0.72	1.4
098220		29.5	106.0	0.319	2.32	4.75	17.7	8	2.6	261	0.25	0.96	3.28	0.311	1.45	1.3
098221		12.1	86.0	0.430	1.44	0.25	15.0	3	1.6	209	0.30	<0.05	7.69	0.213	0.95	1.8
098222		11.7	73.1	0.331	1.00	0.83	15.9	2	1.4	245	0.35	<0.05	7.64	0.272	0.68	1.7
098223		12.7	86.5	0.527	1.03	1.06	17.6	3	1.7	360	0.34	0.05	8.70	0.260	0.87	1.6
098224		14.5	67.1	0.494	1.27	6.15	14.2	2	1.8	223	0.27	0.05	7.13	0.201	0.86	1.4
098225		14.2	69.7	0.560	1.37	3.46	16.4	4	2.0	316	0.32	0.06	7.50	0.243	0.83	1.5
098226		9.8	71.1	0.552	1.91	1.55	13.8	3	2.5	247	0.31	0.08	6.26	0.238	0.82	1.4
098227		5.6	64.5	3.43	2.15	2.26	12.6	4	2.8	163.5	0.18	0.09	6.47	0.148	0.76	1.9
098228		6.7	79.4	0.767	1.04	0.56	15.2	1	1.4	203	0.30	0.05	8.01	0.219	0.74	1.7
098229		11.9	77.3	0.497	1.31	0.76	14.3	2	1.8	210	0.32	0.05	7.61	0.241	0.76	1.6
098230		<0.5	0.7	0.005	<0.01	0.05	0.2	<1	<0.2	71.5	<0.05	<0.05	0.09	<0.005	<0.02	0.1
098231		38.7	82.6	0.601	1.38	0.94	13.9	2	1.2	219	0.27	<0.05	7.13	0.201	0.83	1.6
098232		18.0	81.5	0.471	1.40	0.51	14.9	2	1.2	197.5	0.28	0.05	7.97	0.205	0.80	1.7
098233		10.2	76.9	0.420	1.30	1.03	13.9	2	1.3	195.5	0.28	0.05	7.33	0.218	0.71	1.4
098234		14.2	74.2	0.512	0.99	2.78	15.3	2	1.7	193.0	0.32	0.05	7.97	0.247	0.82	1.6
098235		12.3	64.7	0.640	1.08	2.83	13.2	2	1.6	313	0.31	<0.05	6.77	0.267	0.73	1.4
098236		89.5	43.7	1.160	1.42	20.1	13.9	3	1.8	462	0.35	<0.05	5.99	0.283	0.86	1.5
098237		230	75.5	1.175	1.89	3.99	12.7	2	1.3	392	0.29	<0.05	6.28	0.267	0.99	0.9
098238		41.3	72.9	0.588	2.19	10.25	14.7	2	1.6	477	0.28	0.05	6.31	0.246	0.99	1.0
098239		25.7	44.4	0.712	1.41	4.14	13.7	3	1.3	391	0.29	<0.05	6.01	0.255	0.79	1.1
098240		37.8	42.4	1.095	1.14	5.09	13.0	2	1.6	317	0.27	<0.05	5.72	0.224	0.75	1.1
098241		85.5	58.3	0.620	1.67	35.4	13.1	3	1.9	292	0.25	<0.05	6.55	0.203	0.96	1.4
098242		68.2	54.7	0.741	0.97	19.10	13.6	2	1.6	483	0.26	<0.05	6.84	0.211	0.89	1.3
098243		75.3	80.6	0.639	1.16	59.4	13.3	3	1.5	569	0.28	<0.05	7.09	0.226	1.00	1.3
098244		22.3	34.8	0.826	1.50	17.95	15.0	2	1.7	391	0.30	<0.05	7.17	0.247	0.57	1.3
098245		32.4	52.6	0.818	1.27	9.68	12.6	2	1.7	315	0.30	<0.05	5.99	0.257	0.90	1.2
098246		82.7	47.2	0.616	0.91	2.10	16.3	2	1.5	206	0.44	0.07	6.59	0.346	0.78	0.9
098247		9.0	37.0	0.186	0.67	3.60	7.1	2	1.2	193.0	0.50	<0.05	5.31	0.278	0.66	0.8
098248		79.3	42.2	0.343	0.72	8.67	6.6	2	1.5	180.5	0.42	<0.05	4.59	0.252	0.74	0.9
098249		3380	82.0	0.214	0.60	280	4.4	1	0.9	218	0.31	<0.05	4.11	0.159	0.97	0.8
098250		50.3	133.0	0.361	2.81	8.62	13.3	8	3.0	250	0.28	1.17	3.08	0.270	1.51	1.2
098251		321	69.4	0.851	0.55	3.31	5.6	2	0.8	513	0.47	0.05	5.34	0.230	1.08	1.0
098252		257	55.0	0.535	0.55	3.73	6.1	2	0.8	190.5	0.52	0.05	5.43	0.244	0.86	1.0
098253		16.7	16.6	0.386	0.43	2.18	5.6	2	0.9	124.5	0.55	<0.05	4.15	0.246	0.48	0.8
098254		12.1	27.1	0.363	0.56	1.78	5.8	2	1.2	125.5	0.52	<0.05	5.01	0.238	0.50	0.8
098255		34.0	39.0	0.157	0.66	6.16	5.9	2	1.1	164.0	0.51	0.06	5.67	0.249	0.74	0.8

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Finalized Date: 31- DEC- 2018
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18321459

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	V	W	Y	Zn	Zr
	Units	ppm	ppm	ppm	ppm	ppm
	LOD	1	0.1	0.1	2	0.5
098216		124	0.7	11.8	58	46.5
098217		114	0.5	11.9	78	42.2
098218		114	0.5	12.0	45	48.3
098219		108	0.6	12.0	60	37.3
098220		209	19.4	14.5	71	35.3
098221		125	0.5	13.9	60	42.0
098222		126	0.5	14.5	52	43.5
098223		129	0.7	11.9	35	40.4
098224		119	2.9	10.7	45	38.7
098225		131	0.7	13.0	44	37.6
098226		143	0.6	14.9	44	32.4
098227		117	1.2	11.4	26	31.4
098228		136	0.8	10.0	33	37.3
098229		127	1.0	10.8	45	35.6
098230		2	<0.1	2.6	4	1.3
098231		117	0.7	9.7	123	40.8
098232		126	0.8	10.9	63	41.4
098233		124	0.7	11.9	41	38.9
098234		134	1.1	12.0	63	38.9
098235		141	1.3	9.4	66	31.8
098236		161	1.6	9.0	269	27.7
098237		154	1.4	10.0	479	23.3
098238		172	1.8	8.0	153	27.4
098239		157	2.2	10.1	80	27.2
098240		135	1.9	11.6	113	25.4
098241		140	1.8	12.0	144	26.5
098242		127	1.7	8.2	155	27.6
098243		121	1.5	9.4	195	24.6
098244		139	4.5	12.5	81	32.1
098245		135	4.0	10.5	93	28.0
098246		179	10.5	9.5	101	25.0
098247		77	2.1	11.6	39	23.0
098248		70	0.9	11.0	299	23.0
098249		47	1.5	9.1	1360	15.4
098250		176	30.3	13.4	131	27.4
098251		63	0.6	11.4	168	21.9
098252		65	4.7	12.3	267	24.4
098253		60	24.4	10.0	65	24.6
098254		62	22.6	10.4	52	22.8
098255		70	6.6	11.7	98	22.5

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To: MAMMOTH GEOLOGICAL LTD.
704- 1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 31- DEC- 2018
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18321459

Sample Description	Method	WEI- 21	Au- ICP21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu
	Units	kg	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
	LOD	0.02	0.001	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2
098256		7.74	0.059	1.81	7.24	408	1040	1.10	0.06	3.50	0.62	51.0	6.8	12	9.70	2530
098257		5.92	0.066	1.55	6.81	291	1090	0.92	0.08	3.77	0.52	44.6	6.4	12	6.18	3520
098258		7.39	0.064	0.78	6.91	55.1	790	0.97	0.06	3.87	0.16	33.6	6.1	11	5.31	2050
098259		11.62	0.070	1.66	6.59	382	1570	0.93	0.07	4.52	1.69	41.1	6.0	11	5.75	3230
098260		1.05	0.002	0.01	0.09	1.5	20	<0.05	0.08	31.7	0.02	1.31	0.5	1	0.06	13.1
098261		9.69	0.090	1.35	6.94	240	1190	1.06	0.07	3.20	0.44	40.7	6.6	12	6.17	3780
098262		11.24	0.092	2.92	6.70	157.5	1380	0.99	0.09	2.91	1.66	33.8	6.6	14	4.97	3500
098263		4.68	0.101	2.51	6.69	197.5	1270	1.06	0.10	2.83	0.55	30.3	7.5	14	5.85	4440
098264		11.95	0.073	0.77	7.17	48.9	1280	1.11	0.08	2.28	0.16	27.9	6.5	15	7.01	2880
098265		12.07	0.067	0.73	7.03	96.4	1400	1.07	0.09	2.58	0.16	27.4	6.2	14	6.01	3140
098266		9.19	0.095	1.17	7.10	122.0	1320	1.03	0.09	2.84	0.18	34.6	7.0	13	5.90	3840
098267		10.79	0.175	1.57	6.17	171.5	1290	0.75	0.10	2.62	0.18	43.9	6.8	12	3.46	5750
098268		12.07	0.148	2.10	6.66	168.5	1460	0.79	0.10	2.86	0.43	58.6	7.2	14	4.64	5340
098269		5.76	0.139	0.99	6.64	114.0	1550	0.84	0.11	2.60	0.18	52.2	7.6	12	4.68	4080
098270		5.85	0.132	0.99	6.69	114.0	1580	0.79	0.10	2.53	0.17	53.4	7.8	14	4.72	3910
098271		8.14	0.228	1.09	6.56	121.0	1490	0.81	0.18	2.90	0.21	55.9	7.2	12	4.28	5980
098272		7.89	0.082	0.53	6.98	155.5	1280	0.93	0.11	2.72	0.22	34.7	7.3	12	4.41	2690
098273		12.58	0.078	2.95	6.13	717	1010	1.02	0.09	2.79	2.18	61.3	6.8	12	8.78	2890
098274		9.45	0.059	3.24	5.99	633	1460	1.26	0.09	3.42	2.94	46.1	6.2	12	11.65	2260
098275		10.10	0.229	29.4	4.64	2380	1540	0.85	0.12	3.92	21.5	127.5	8.9	12	9.26	9150
098276		12.27	0.084	4.27	6.35	701	1640	1.08	0.06	3.07	3.06	77.9	6.4	15	11.25	3100
098277		12.72	0.087	5.30	6.24	510	1210	1.03	0.09	3.81	1.41	69.4	6.8	13	13.20	4040
098278		11.82	0.136	3.62	6.58	584	1150	0.85	0.09	3.16	1.39	56.6	7.4	13	6.49	5330
098279		12.20	0.118	2.44	6.69	412	1240	0.86	0.13	3.52	0.50	50.7	9.9	15	5.26	5130
098280		0.13	0.992	1.71	5.46	15.1	560	0.65	0.55	1.67	0.43	20.7	9.5	44	0.92	3480
098281		5.90	0.149	1.47	6.70	183.0	1280	0.86	0.10	3.41	0.20	45.6	8.2	11	5.05	4530
098282		11.95	0.069	2.32	6.69	164.0	1180	1.08	0.09	3.01	0.27	40.4	8.2	12	9.90	3220
098283		7.40	0.102	3.42	6.77	159.5	1320	0.99	0.11	3.18	0.25	41.3	7.5	12	9.95	4500
098284		10.26	0.069	0.78	6.72	116.0	1300	0.92	0.09	2.44	0.22	28.5	7.3	13	6.51	2850
098285		7.56	0.092	1.42	6.73	148.5	1020	1.00	0.13	3.17	0.19	38.7	8.5	12	6.11	4690
098286		8.66	0.068	0.82	6.89	153.0	1170	1.08	0.09	2.70	0.27	32.5	7.6	13	6.52	3080
098287		10.25	0.115	3.90	6.64	198.5	1530	1.02	0.11	3.01	6.30	39.9	7.1	12	11.30	4480
098288		6.97	0.087	4.03	6.76	239	1160	1.06	0.12	3.18	0.90	33.7	6.9	12	11.50	3770
098289		4.19	0.094	2.30	6.73	71.1	1400	0.91	0.10	2.58	0.24	31.6	7.2	11	9.45	4170
098290		0.78	<0.001	0.02	0.38	0.7	50	0.10	0.02	31.7	0.03	2.12	2.4	4	0.09	10.9
098291		4.44	0.160	6.51	5.71	287	1010	1.13	0.24	4.44	7.91	36.0	12.5	9	14.75	5720
098292		4.65	0.034	4.69	3.22	361	410	0.83	0.10	7.30	4.77	19.60	6.1	6	10.75	1200
098293		13.18	0.061	4.10	6.15	464	290	1.16	0.14	2.44	1.71	33.4	9.0	10	15.10	3230
098294		4.20	0.091	5.50	6.29	747	890	0.99	0.10	3.74	0.68	56.5	6.0	11	11.90	5680
098295		8.76	0.058	5.18	5.83	900	310	1.11	0.13	3.10	5.29	37.6	11.0	10	17.50	3060

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Finalized Date: 31- DEC- 2018
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18321459

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Fe	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOD	0.01	0.05	0.05	0.1	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
098256		2.02	16.20	0.08	0.8	0.042	2.19	25.0	56.3	1.14	1560	52.6	0.04	7.3	6.6	1180
098257		2.11	14.00	0.06	0.7	0.069	1.20	21.5	39.8	1.09	772	132.0	0.03	6.7	5.9	1180
098258		2.28	15.30	0.06	0.8	0.037	1.07	15.4	44.0	1.14	560	31.7	0.04	7.5	7.2	1250
098259		2.30	14.25	0.07	0.7	0.059	1.46	19.2	51.3	1.49	1120	134.5	0.05	6.7	5.2	1150
098260		0.20	0.28	<0.05	<0.1	0.008	0.02	1.2	1.2	4.24	183	0.42	0.02	0.1	0.3	70
098261		2.19	17.55	0.08	0.8	0.064	1.89	18.8	41.3	0.92	763	113.5	0.10	8.1	7.0	1300
098262		2.08	17.25	0.07	0.9	0.060	2.30	16.6	27.7	0.76	346	182.5	0.72	7.9	9.0	1250
098263		2.58	17.15	0.07	0.8	0.062	2.44	14.1	16.9	0.80	318	141.5	1.47	7.8	7.7	1290
098264		2.52	17.95	0.07	0.8	0.053	2.51	13.4	14.4	0.75	297	55.3	2.46	8.2	6.5	1220
098265		2.43	17.40	0.07	0.9	0.066	2.39	12.6	25.9	0.73	295	35.6	1.13	7.9	6.7	1260
098266		2.55	17.15	0.09	0.8	0.075	2.42	16.6	26.3	0.86	501	48.9	1.01	7.9	7.5	1220
098267		1.86	14.50	0.08	0.7	0.096	3.06	20.4	29.3	0.68	330	157.0	0.31	6.8	6.7	1100
098268		1.89	15.65	0.11	0.8	0.103	4.00	28.8	35.8	0.78	487	267	0.33	7.0	6.6	1200
098269		2.29	17.05	0.09	1.0	0.093	3.99	25.4	31.3	0.73	508	222	0.77	8.0	6.5	1300
098270		2.32	16.90	0.09	1.0	0.092	4.01	26.7	30.1	0.71	479	222	0.79	7.9	6.6	1320
098271		2.15	16.20	0.09	0.9	0.132	3.88	27.0	37.0	0.74	359	252	0.44	8.1	7.6	1300
098272		2.96	17.95	0.07	0.9	0.062	3.17	16.7	44.8	0.75	504	89.8	0.51	8.4	6.6	1390
098273		2.68	15.30	0.08	0.7	0.069	2.36	31.4	52.5	0.94	2670	227	0.07	7.1	6.4	1230
098274		2.82	15.00	0.08	0.8	0.055	2.11	22.5	59.7	1.18	3390	80.8	0.02	6.9	6.4	1210
098275		3.18	11.20	0.12	0.4	0.137	1.84	69.2	40.7	1.46	3850	1200	0.02	4.8	8.4	1060
098276		3.34	14.25	0.09	0.6	0.070	2.26	42.1	50.2	1.18	4690	168.0	0.03	6.0	7.2	1130
098277		3.49	13.90	0.07	0.5	0.094	2.53	38.2	29.5	1.46	6590	203	0.02	6.7	7.3	1130
098278		3.16	16.45	0.09	0.6	0.108	2.82	27.5	60.7	0.98	1550	238	0.18	8.0	8.4	1360
098279		3.92	17.35	0.10	0.6	0.102	3.13	25.2	41.5	1.00	638	220	0.26	8.3	9.3	1420
098280		3.76	11.25	0.06	1.4	0.063	0.94	9.8	14.1	0.83	577	355	2.05	4.0	31.7	570
098281		3.26	16.75	0.09	0.7	0.106	3.16	20.9	45.4	0.90	739	231	0.27	8.3	8.5	1370
098282		3.47	17.20	0.08	0.7	0.072	3.21	19.4	41.6	0.92	724	146.0	0.26	8.2	7.6	1290
098283		2.99	16.85	0.09	0.7	0.099	3.50	20.0	50.2	0.97	820	93.7	0.30	7.7	7.6	1250
098284		3.06	17.65	0.07	0.7	0.065	3.20	12.9	17.3	0.75	321	76.5	1.85	8.0	7.2	1260
098285		2.91	17.85	0.08	0.6	0.113	2.70	17.7	23.3	0.85	399	144.0	1.20	8.1	7.9	1430
098286		3.23	18.50	0.08	0.7	0.074	2.97	14.4	17.0	0.77	473	84.0	1.74	8.5	7.6	1350
098287		3.37	16.25	0.08	0.5	0.094	3.42	18.8	53.1	1.00	3060	116.0	0.30	7.5	7.3	1290
098288		3.77	17.35	0.07	0.7	0.078	3.83	14.8	59.6	1.01	2550	92.3	0.27	8.0	7.7	1430
098289		3.82	16.70	0.08	0.6	0.081	4.02	14.2	47.2	0.91	1720	72.2	0.47	8.0	7.1	1270
098290		0.56	1.03	0.05	0.1	0.034	0.04	1.7	2.3	3.57	257	0.36	0.12	0.3	3.5	100
098291		3.91	13.45	0.07	0.5	0.132	2.25	16.9	46.3	1.10	3720	157.0	0.09	6.1	8.9	1080
098292		3.75	7.53	<0.05	0.3	0.047	1.26	9.6	37.8	2.53	7380	14.75	0.02	2.9	6.0	560
098293		3.79	14.00	0.06	0.5	0.080	2.37	16.3	48.4	0.98	9230	14.00	0.02	6.7	8.3	1010
098294		3.34	14.60	0.09	0.6	0.103	2.47	26.8	60.3	1.24	5720	53.8	0.02	7.5	6.1	1160
098295		3.24	14.15	0.07	0.5	0.076	2.15	18.7	50.1	1.15	3750	29.6	0.03	6.8	8.3	1090

***** See Appendix Page for comments regarding this certificate *****

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To: MAMMOTH GEOLOGICAL LTD.
704- 1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 31- DEC- 2018
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18321459

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOD	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
098256		46.0	81.1	0.124	0.38	21.4	5.7	1	0.7	250	0.50	<0.05	6.32	0.225	1.08	1.1
098257		25.8	32.5	0.301	0.52	22.6	5.1	1	0.8	238	0.46	0.05	4.87	0.223	0.59	1.0
098258		10.5	22.4	0.083	0.36	11.30	5.4	1	0.7	157.5	0.50	<0.05	4.88	0.240	0.51	1.1
098259		64.5	36.3	0.333	0.43	28.0	5.0	1	0.6	310	0.46	<0.05	4.40	0.216	0.66	0.8
098260		0.7	0.5	<0.002	<0.01	0.22	0.2	1	<0.2	63.5	<0.05	<0.05	0.08	0.006	<0.02	0.1
098261		13.2	40.3	0.188	0.48	22.9	5.8	2	0.8	194.5	0.54	<0.05	4.90	0.245	0.82	0.8
098262		73.6	33.5	0.333	0.54	39.5	5.7	2	1.0	255	0.54	<0.05	4.40	0.239	0.63	0.9
098263		33.5	39.0	0.354	0.69	17.45	5.6	3	1.2	356	0.50	0.05	3.60	0.242	0.62	1.0
098264		9.9	47.4	0.148	0.46	1.32	5.7	2	0.9	1480	0.54	0.05	4.18	0.242	0.62	0.9
098265		12.7	38.2	0.101	0.46	7.91	5.8	2	1.0	664	0.51	0.07	3.97	0.247	0.63	1.0
098266		13.2	45.2	0.090	0.50	9.91	5.7	3	1.0	268	0.52	0.06	4.62	0.235	0.66	1.0
098267		12.5	37.5	0.297	0.70	23.3	5.2	3	1.2	179.0	0.41	0.08	4.25	0.214	0.67	0.9
098268		47.4	56.1	0.436	0.61	40.5	6.1	3	0.9	251	0.42	0.05	4.40	0.230	0.94	1.0
098269		10.8	61.1	0.368	0.48	22.0	6.2	2	0.8	241	0.46	0.05	4.23	0.238	0.86	1.1
098270		11.1	62.2	0.423	0.47	20.7	6.5	2	0.7	245	0.45	0.05	4.44	0.242	0.83	1.1
098271		11.7	48.9	0.272	0.70	12.55	6.0	4	0.8	241	0.46	0.10	4.30	0.240	0.78	1.0
098272		8.9	39.5	0.151	0.30	12.10	6.0	1	0.7	215	0.48	<0.05	3.28	0.257	0.68	0.8
098273		97.2	54.4	0.274	0.38	155.5	5.9	2	0.6	621	0.41	<0.05	3.92	0.210	1.47	1.0
098274		104.5	47.7	0.100	0.32	104.0	5.9	1	0.5	909	0.40	<0.05	3.27	0.230	1.23	1.1
098275		793	81.0	3.40	0.97	724	4.4	4	1.0	651	0.27	0.09	3.95	0.140	1.06	1.6
098276		156.5	95.1	0.217	0.41	160.0	5.5	2	0.7	687	0.37	<0.05	4.62	0.190	1.52	1.0
098277		44.8	113.0	0.259	0.49	153.0	5.4	2	0.8	463	0.39	0.06	4.35	0.193	1.52	1.0
098278		91.4	50.5	0.281	0.59	150.0	6.1	3	1.1	328	0.48	0.08	4.82	0.225	1.01	1.0
098279		19.0	48.0	0.306	0.61	79.8	7.8	3	1.0	259	0.51	0.07	4.55	0.242	0.92	1.2
098280		23.6	26.1	0.332	0.42	5.40	10.4	1	2.4	240	0.26	0.20	2.13	0.262	0.24	1.0
098281		10.8	43.9	0.354	0.51	25.7	6.4	3	0.9	237	0.51	0.06	4.20	0.235	0.84	0.8
098282		15.3	60.8	0.245	0.40	8.84	6.2	2	0.7	239	0.48	0.06	4.33	0.239	1.05	0.9
098283		16.2	67.4	0.239	0.45	7.28	6.2	3	0.8	279	0.49	0.06	4.37	0.239	1.20	0.9
098284		11.2	52.1	0.133	0.31	6.02	6.2	2	0.7	660	0.49	<0.05	3.77	0.241	0.70	0.7
098285		10.7	49.7	0.305	0.75	18.35	6.7	3	1.4	269	0.48	0.08	4.13	0.238	0.74	0.9
098286		12.7	51.0	0.158	0.37	20.4	6.5	2	0.9	484	0.54	<0.05	3.98	0.251	0.70	0.8
098287		339	74.5	0.170	0.69	5.96	6.0	3	1.0	394	0.47	0.08	3.97	0.229	1.18	0.9
098288		28.1	64.7	0.139	0.45	3.18	6.5	2	0.9	760	0.48	0.05	4.22	0.240	1.18	0.9
098289		16.1	74.1	0.081	0.46	2.23	6.1	2	0.9	322	0.47	0.07	4.18	0.227	1.10	0.7
098290		0.8	1.1	<0.002	0.01	0.16	1.5	1	0.2	84.1	<0.05	<0.05	0.12	0.035	<0.02	0.1
098291		1300	64.8	0.198	1.22	24.6	4.8	3	1.3	434	0.36	0.13	3.85	0.185	1.01	1.8
098292		274	59.7	0.009	0.56	61.8	3.4	1	0.7	242	0.18	<0.05	2.05	0.114	0.66	1.2
098293		90.1	106.5	0.028	0.90	37.6	4.9	3	1.0	297	0.40	0.06	4.39	0.193	1.25	0.9
098294		24.0	100.0	0.096	0.64	27.7	5.4	4	1.2	715	0.43	0.10	4.84	0.202	1.38	0.9
098295		148.5	105.5	0.070	0.78	107.5	5.6	2	0.9	490	0.40	0.06	4.44	0.198	1.26	1.0

***** See Appendix Page for comments regarding this certificate *****

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Finalized Date: 31- DEC- 2018
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18321459

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	V	W	Y	Zn	Zr
	Units	ppm	ppm	ppm	ppm	ppm
	LOD	1	0.1	0.1	2	0.5
098256		61	1.9	10.8	231	22.8
098257		61	3.2	9.8	159	19.3
098258		61	5.7	9.5	57	22.2
098259		58	1.5	9.7	298	18.9
098260		2	<0.1	2.2	5	1.4
098261		68	2.5	10.1	133	23.6
098262		68	7.7	9.5	215	24.8
098263		64	2.1	9.9	115	23.2
098264		64	0.5	9.3	57	24.8
098265		62	2.7	9.7	61	24.8
098266		59	3.1	10.5	58	23.9
098267		49	5.8	10.5	62	20.7
098268		58	8.7	11.4	96	28.8
098269		66	9.5	11.4	56	33.3
098270		69	8.5	11.6	54	32.3
098271		55	6.5	11.0	57	29.2
098272		68	5.5	9.6	75	30.2
098273		61	4.1	11.0	364	23.5
098274		64	3.7	9.4	447	25.5
098275		50	6.2	17.6	1370	12.9
098276		58	5.4	12.9	439	19.7
098277		56	5.6	13.3	268	17.8
098278		67	5.5	15.3	206	19.4
098279		81	6.0	15.5	127	19.1
098280		85	1.7	14.0	64	48.9
098281		66	11.7	14.9	71	20.1
098282		69	0.9	12.5	90	21.3
098283		64	0.9	11.7	92	20.1
098284		66	0.8	9.7	70	20.7
098285		63	4.8	12.8	63	19.8
098286		67	3.1	11.5	78	21.5
098287		60	0.8	12.5	1170	16.2
098288		74	1.1	11.8	281	19.3
098289		66	0.5	11.7	105	18.7
098290		10	<0.1	4.4	10	3.5
098291		54	1.9	11.7	1090	15.9
098292		41	2.5	7.3	471	10.1
098293		51	5.8	10.3	274	15.9
098294		51	4.6	13.2	211	17.3
098295		56	4.1	10.0	403	16.7

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Finalized Date: 31- DEC- 2018
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18321459

Sample Description	Method	WEI- 21	Au- ICP21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu
	Units	kg	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
	LOD	0.02	0.001	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2
098296		5.02	0.077	4.51	6.09	1005	320	1.01	0.11	4.32	4.83	31.9	8.1	10	12.15	3930
098297		13.00	0.060	2.19	5.83	572	720	0.91	0.78	5.99	0.96	31.9	5.9	10	9.02	3270
098298		11.39	0.073	1.88	7.47	274	810	1.04	0.13	5.05	0.20	37.8	8.7	11	7.04	3550
098299		12.66	0.100	1.74	6.80	562	810	1.18	0.19	4.08	0.42	31.4	7.6	10	7.13	4090
098300		0.13	0.927	3.46	7.89	80.3	640	1.19	0.61	0.48	0.83	35.4	19.5	42	6.70	3660
098301		11.11	0.059	1.07	5.76	331	530	0.97	0.09	7.87	0.25	26.5	6.5	8	6.92	2300
098302		11.67	0.067	0.94	1.98	184.0	360	0.54	0.21	13.55	0.60	13.90	5.8	5	4.65	901
098303		10.96	0.041	2.17	3.85	425	240	0.74	0.12	10.75	1.01	18.85	7.0	5	7.23	2440
098304		11.74	0.140	2.33	7.05	436	920	0.98	0.14	4.22	0.34	35.6	9.3	10	8.07	4710
098305		6.36	0.097	2.01	7.13	427	820	1.04	0.11	2.71	1.44	36.6	8.4	11	9.87	4150
098306		9.58	0.061	0.67	7.47	153.0	1270	1.00	0.12	2.68	0.24	32.3	8.9	13	7.70	2570
098307		7.76	0.108	3.00	7.55	468	1180	0.94	0.11	3.19	0.46	42.9	9.9	11	7.53	5130
098308		11.62	0.105	0.76	7.61	9.4	1070	1.05	0.11	2.75	0.14	38.5	10.5	15	6.46	4210
098309		3.90	0.093	0.85	7.31	18.1	1350	1.02	0.22	2.76	0.19	50.4	8.2	13	6.65	3690
098310		3.92	0.092	0.98	7.38	38.8	1470	1.06	0.16	2.67	0.27	45.5	8.8	13	6.61	3690
098311		8.12	0.127	1.48	7.33	26.1	1100	1.02	0.14	2.28	0.25	24.8	8.4	12	7.07	4470
098312		11.03	0.062	2.20	6.63	30.5	260	1.06	0.11	4.48	0.21	27.8	5.6	11	17.65	2920
098313		7.48	0.061	2.75	6.55	179.5	460	1.06	0.13	4.50	0.36	25.6	8.7	10	20.1	2660
098314		6.72	0.064	3.32	6.87	961	1720	1.14	0.27	3.10	8.91	27.7	10.5	10	18.20	2780
098315		11.73	0.072	3.32	7.02	855	790	1.17	0.11	2.94	0.66	26.2	8.1	12	10.20	3180
098316		11.09	0.145	2.43	7.06	727	1080	1.17	0.32	2.84	0.39	23.4	10.0	12	7.77	2860
098317		12.58	0.051	0.63	7.52	34.0	1190	1.08	0.14	2.39	0.09	26.0	9.1	14	5.37	2270
098318		12.50	0.055	0.73	7.59	11.7	1220	1.12	0.23	2.33	0.09	26.9	9.4	15	5.04	2680
098319		7.34	0.086	1.11	7.84	2.2	1180	1.04	0.18	2.35	0.09	28.8	11.5	15	5.25	4030
098320		0.13	1.035	1.59	5.58	14.5	570	0.65	0.54	1.69	0.41	20.2	10.2	43	0.89	3550
098321		5.85	0.098	1.29	7.36	17.2	1180	1.05	0.22	2.22	0.12	28.4	11.1	17	5.58	4840
098322		5.13	0.185	2.76	7.38	920	1330	0.97	0.44	1.89	1.90	29.6	8.8	15	6.88	7330
098323		12.10	0.197	3.59	7.40	177.0	1220	1.02	0.47	2.53	2.25	31.8	11.1	16	5.78	8130
098324		12.48	0.139	2.77	7.76	10.0	1220	1.10	0.33	2.28	0.38	30.8	10.8	16	5.87	7050
098325		12.35	0.178	4.29	7.14	229	1500	1.07	0.28	2.33	0.86	31.3	10.7	14	7.55	7050
098326		13.37	0.094	3.21	7.02	244	1360	1.05	0.31	2.34	2.22	26.6	9.8	16	7.47	4720
098327		12.66	0.107	1.75	7.49	74.5	1210	1.08	0.32	2.43	0.28	33.9	10.8	16	6.50	3710
098328		12.22	0.068	2.53	7.67	172.0	1600	0.98	0.39	2.30	0.43	29.9	10.5	16	8.60	1950
098329		11.95	0.034	2.68	7.24	390	1240	1.01	0.36	1.65	5.71	24.6	9.8	15	10.90	1330
098330		0.83	<0.001	0.03	0.16	1.4	50	0.05	0.01	31.9	0.05	1.24	1.3	2	0.08	12.6
098331		8.41	0.066	2.38	7.22	328	970	1.10	0.59	3.09	1.08	27.2	11.0	14	10.10	1850
098332		9.81	0.095	4.75	7.00	882	1260	1.02	0.68	2.84	2.22	33.0	13.0	13	10.65	3670

***** See Appendix Page for comments regarding this certificate *****

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To: MAMMOTH GEOLOGICAL LTD.
704- 1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 31- DEC- 2018
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18321459

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Fe	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOD	0.01	0.05	0.05	0.1	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
098296		2.82	13.85	0.07	0.5	0.088	2.43	16.0	39.4	1.40	4000	7.17	0.02	6.6	6.6	1020
098297		3.40	13.70	0.06	0.5	0.082	1.66	15.5	66.8	1.80	4090	20.5	0.02	6.4	5.0	1020
098298		4.05	17.65	0.16	0.6	0.074	1.26	17.6	78.5	1.70	2180	16.80	0.03	8.5	6.4	1360
098299		3.77	16.50	0.13	0.6	0.076	1.39	14.0	159.5	1.28	1830	7.23	0.03	7.5	5.9	1110
098300		4.89	18.05	0.16	0.8	0.056	5.14	18.2	11.0	0.81	485	156.5	1.13	4.5	25.8	1090
098301		3.52	13.90	0.10	0.5	0.047	1.30	12.2	111.0	1.98	2370	4.77	0.03	6.5	6.0	1000
098302		4.65	5.16	0.08	0.1	0.053	0.76	6.2	26.2	3.38	8220	7.64	0.01	1.7	5.0	290
098303		3.81	9.41	0.08	0.3	0.072	1.66	8.7	17.4	2.89	7060	8.76	0.02	4.1	6.1	650
098304		3.73	17.15	0.10	0.6	0.100	1.60	16.2	168.0	1.19	1960	5.44	0.04	8.3	6.5	1250
098305		3.74	18.20	0.13	0.6	0.080	2.75	16.1	118.5	0.92	2160	7.85	0.12	8.0	7.0	1280
098306		4.29	19.65	0.14	0.6	0.065	3.01	13.3	174.0	0.86	841	5.76	0.69	8.5	7.9	1460
098307		4.87	20.0	0.14	0.4	0.107	2.50	17.7	127.5	1.01	829	1.70	0.47	8.5	8.9	1930
098308		4.77	20.3	0.16	0.5	0.084	2.84	15.3	14.5	1.01	423	1.95	2.48	9.2	9.1	1910
098309		3.76	19.10	0.17	0.5	0.089	2.96	19.6	50.0	0.86	369	4.73	1.94	8.4	7.4	2410
098310		3.87	19.70	0.16	0.5	0.086	3.08	18.2	42.9	0.88	390	3.62	2.03	8.5	7.7	2290
098311		4.63	19.85	0.11	0.5	0.094	2.87	10.0	34.5	0.85	562	2.11	1.26	7.6	8.7	1190
098312		3.07	17.35	0.13	0.3	0.057	2.13	13.0	39.1	0.96	1520	2.61	0.07	6.8	5.2	1100
098313		3.61	17.80	0.11	0.3	0.064	1.61	11.9	41.2	1.02	940	1.07	0.03	6.8	6.2	1040
098314		3.17	17.60	0.13	0.4	0.076	2.44	12.5	54.5	0.98	1850	1.81	0.05	6.7	6.4	1080
098315		3.41	19.35	0.11	0.4	0.078	2.27	10.8	209	0.90	1460	2.90	0.26	8.0	5.8	1160
098316		4.15	17.65	0.13	0.4	0.085	2.33	10.1	156.0	0.98	1190	1.12	0.70	7.0	6.7	1230
098317		4.24	19.70	0.14	0.5	0.058	2.06	11.5	20.4	0.81	282	1.27	2.40	7.9	7.0	1220
098318		3.91	19.45	0.12	0.5	0.072	2.28	12.0	14.3	0.82	236	4.35	2.69	8.0	7.5	1240
098319		4.51	20.6	0.14	0.5	0.108	2.38	12.3	14.2	1.03	287	1.06	2.79	9.1	8.2	1410
098320		3.81	11.70	0.12	1.5	0.062	0.95	9.2	13.1	0.84	579	350	2.08	4.2	33.0	580
098321		5.21	20.5	0.13	0.6	0.120	2.55	12.8	12.1	0.88	300	3.15	2.52	8.5	8.9	1260
098322		4.00	18.50	0.13	0.5	0.182	2.79	13.4	57.1	0.61	318	1.78	1.75	8.1	8.5	1240
098323		4.68	20.3	0.15	0.3	0.207	2.41	14.2	16.3	1.00	466	2.65	2.35	9.3	9.4	1400
098324		4.88	20.7	0.15	0.3	0.147	2.55	13.4	11.2	0.98	338	1.36	2.68	9.4	9.7	1560
098325		4.47	19.55	0.15	0.5	0.163	2.74	13.6	39.6	0.89	1220	1.15	1.66	8.8	9.2	1370
098326		4.39	18.75	0.14	0.4	0.150	2.53	11.5	49.5	0.92	1520	1.41	1.78	8.0	8.8	1210
098327		4.45	19.65	0.13	0.4	0.114	2.53	14.3	35.7	0.98	609	1.34	2.40	8.6	8.6	1680
098328		4.16	19.70	0.13	0.5	0.111	3.31	12.9	39.5	0.99	1700	2.02	1.48	9.0	9.1	1380
098329		4.14	17.95	0.11	0.3	0.088	2.55	11.2	75.4	0.84	5280	10.25	0.14	7.0	8.6	1120
098330		0.27	0.47	0.07	0.1	0.008	0.04	1.2	1.6	3.00	172	0.11	0.05	0.2	1.7	80
098331		4.04	18.85	0.10	0.4	0.111	2.45	11.9	220	1.09	1220	5.56	0.68	8.1	9.9	1250
098332		3.96	17.15	0.13	0.5	0.196	2.90	15.6	114.5	1.05	1680	5.42	0.45	8.3	10.8	1290

***** See Appendix Page for comments regarding this certificate *****

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To: MAMMOTH GEOLOGICAL LTD.
704- 1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 31- DEC- 2018
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18321459

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOD	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
098296		152.5	112.0	0.021	0.59	96.7	4.9	2	1.0	260	0.40	0.06	4.20	0.194	1.33	0.9
098297		28.2	79.2	0.058	0.47	66.7	4.9	2	0.9	321	0.40	0.46	4.13	0.189	0.91	0.8
098298		13.4	61.5	0.075	0.42	41.7	6.4	2	1.0	143.0	0.56	0.08	5.78	0.244	1.26	0.9
098299		13.3	63.6	0.028	0.83	59.1	5.1	3	1.2	184.5	0.54	0.10	7.48	0.201	0.83	0.9
098300		48.6	104.0	0.345	2.74	8.28	13.9	9	3.2	245	0.27	1.28	3.04	0.265	1.69	1.3
098301		11.6	60.0	0.016	0.39	45.8	4.7	1	0.6	206	0.46	<0.05	5.31	0.182	1.02	0.9
098302		18.1	36.3	0.025	0.48	24.3	1.9	1	0.5	207	0.11	0.05	1.43	0.049	0.45	0.6
098303		19.3	74.8	0.033	0.49	37.3	3.2	1	0.7	171.0	0.26	0.07	2.75	0.114	0.90	0.8
098304		19.6	67.2	0.018	0.72	38.5	6.1	3	1.0	234	0.54	0.08	5.75	0.228	0.86	1.0
098305		49.7	94.2	0.019	0.61	24.8	6.3	3	1.1	211	0.53	0.09	5.41	0.226	1.22	1.1
098306		11.5	68.4	0.018	0.52	2.66	6.9	2	1.0	324	0.53	0.06	5.59	0.251	0.89	1.1
098307		12.1	68.6	0.004	0.61	5.73	7.2	3	1.2	290	0.51	0.09	6.87	0.237	0.87	1.0
098308		11.4	64.5	0.007	0.70	1.38	7.4	2	1.0	1060	0.53	0.07	5.87	0.259	0.64	0.8
098309		11.7	70.7	0.008	0.70	0.81	6.4	3	1.1	919	0.53	0.11	6.65	0.241	0.75	0.9
098310		12.3	71.9	0.005	0.83	0.88	6.2	3	1.2	765	0.55	0.08	6.51	0.249	0.80	0.9
098311		13.8	72.5	0.003	0.56	2.88	6.3	3	1.1	333	0.50	0.08	5.15	0.241	0.81	0.7
098312		12.3	85.7	0.005	0.38	11.90	5.7	2	0.9	149.0	0.48	0.07	4.87	0.217	0.97	1.4
098313		16.0	72.7	0.003	0.55	38.5	5.8	2	1.7	148.0	0.45	0.08	4.80	0.217	0.85	0.7
098314		267	101.5	0.004	0.81	57.8	5.5	2	1.5	343	0.49	0.11	5.78	0.208	1.22	1.2
098315		64.6	69.7	0.008	0.49	29.6	6.5	2	1.2	327	0.57	0.06	5.82	0.235	1.04	0.8
098316		48.7	65.8	0.002	0.80	77.3	5.6	2	1.0	322	0.51	0.17	5.28	0.226	0.84	0.8
098317		8.3	52.7	0.003	0.59	0.78	6.2	2	0.9	727	0.57	0.10	6.03	0.240	0.52	0.7
098318		7.9	55.6	0.012	0.71	0.39	6.4	2	0.9	611	0.59	0.09	6.44	0.245	0.52	0.8
098319		7.7	58.3	0.002	0.78	0.31	7.7	3	1.0	614	0.63	0.15	6.25	0.281	0.54	0.8
098320		25.5	25.8	0.326	0.42	4.92	11.1	2	2.4	243	0.27	0.23	2.24	0.267	0.30	1.0
098321		9.4	62.6	0.007	1.03	0.42	7.1	3	1.1	676	0.60	0.11	6.67	0.249	0.61	1.1
098322		79.3	63.5	0.004	1.25	14.35	6.0	4	1.2	541	0.60	0.17	6.55	0.234	0.80	1.2
098323		64.7	66.4	0.004	1.42	1.06	7.1	4	1.3	753	0.67	0.22	6.47	0.249	0.69	0.7
098324		15.4	66.8	0.004	0.95	0.33	7.2	5	1.2	665	0.65	0.14	7.14	0.252	0.69	0.7
098325		183.5	81.4	0.002	0.95	6.14	6.9	5	1.0	887	0.64	0.14	7.27	0.237	0.90	0.9
098326		161.5	79.6	0.005	0.99	4.81	6.5	3	1.0	540	0.56	0.11	5.66	0.241	0.90	0.8
098327		17.5	72.9	0.003	0.77	1.24	7.3	3	0.9	671	0.63	0.10	6.90	0.275	0.80	0.9
098328		43.1	100.5	0.005	0.75	5.80	7.3	2	0.9	1380	0.62	0.13	5.97	0.285	1.10	1.1
098329		234	113.0	0.035	0.68	34.0	6.4	2	0.8	255	0.54	0.11	5.54	0.240	1.40	0.9
098330		0.9	1.0	<0.002	0.02	0.31	0.6	1	<0.2	76.3	<0.05	<0.05	0.09	0.014	<0.02	0.1
098331		14.4	80.6	0.010	1.07	18.25	7.0	2	1.1	337	0.59	0.22	5.91	0.274	1.23	0.9
098332		84.8	107.0	0.012	1.14	36.6	6.6	2	1.0	479	0.58	0.20	5.79	0.253	1.32	1.1

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To: MAMMOTH GEOLOGICAL LTD.
704- 1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 31- DEC- 2018
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18321459

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	V	W	Y	Zn	Zr
	Units	ppm	ppm	ppm	ppm	ppm
	LOD	1	0.1	0.1	2	0.5
098296		50	3.9	9.7	419	17.8
098297		51	3.4	10.7	237	17.4
098298		63	2.7	13.2	102	19.3
098299		53	2.5	10.7	147	16.3
098300		171	32.5	14.3	126	29.5
098301		51	1.4	9.9	134	16.0
098302		29	1.3	9.0	155	4.2
098303		36	2.7	9.4	205	9.6
098304		63	1.1	11.9	145	18.0
098305		69	2.7	11.5	194	17.9
098306		86	0.8	12.2	84	19.9
098307		101	1.5	17.1	127	14.0
098308		90	0.2	17.5	83	13.7
098309		68	0.5	19.7	67	16.3
098310		69	0.6	17.9	82	17.4
098311		80	0.8	10.7	83	14.2
098312		62	1.6	11.4	65	10.9
098313		65	1.6	10.1	136	8.9
098314		60	2.2	9.6	1170	10.6
098315		62	2.2	10.4	191	11.5
098316		65	0.9	9.7	102	11.5
098317		66	0.4	10.6	49	13.0
098318		64	0.6	10.8	45	14.2
098319		75	0.4	11.7	53	15.3
098320		85	1.8	14.7	65	49.6
098321		77	0.4	11.5	53	17.1
098322		61	0.9	11.3	425	12.0
098323		68	0.8	12.4	340	9.1
098324		69	0.4	12.8	86	9.4
098325		69	1.0	12.7	185	11.9
098326		65	1.1	10.8	378	11.2
098327		71	0.4	14.2	75	12.7
098328		75	1.3	10.6	123	15.7
098329		65	5.5	9.7	838	8.5
098330		4	0.5	2.6	11	2.5
098331		71	1.8	10.6	169	10.8
098332		72	2.3	10.9	375	15.3

***** See Appendix Page for comments regarding this certificate *****

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To: MAMMOTH GEOLOGICAL LTD.
704- 1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 31- DEC- 2018
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18321459

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Terrace located at 2912 Molitor Street, Terrace, BC, Canada.

CRU- 31	CRU- QC	LOG- 22	LOG- 24
PUL- 31	PUL- QC	SPL- 21	WEI- 21

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Au- ICP21	ME- MS61

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To: MAMMOTH GEOLOGICAL LTD.
704- 1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 17- JAN- 2019
Account: MAMGEO

CERTIFICATE TR18330137

Project: Poplar

This report is for 181 Drill Core samples submitted to our lab in Terrace, BC, Canada on 27- DEC- 2018.

The following have access to data associated with this certificate:

LORIE FARRELL	TIM HENNEBERRY	DEIRDRE KEARNEY

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
LOG- 22	Sample login - Rcd w/o BarCode
CRU- QC	Crushing QC Test
PUL- QC	Pulverizing QC Test
CRU- 31	Fine crushing - 70% < 2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
LOG- 24	Pulp Login - Rcd w/o Barcode

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au- ICP21	Au 30g FA ICP- AES Finish	ICP- AES
ME- MS61	48 element four acid ICP- MS	

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:

Colin Ramshaw, Vancouver Laboratory Manager

ALS Canada Ltd.
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To: MAMMOTH GEOLOGICAL LTD.
704- 1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 17- JAN- 2019
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18330137

Sample Description	Method	WEI- 21	Au- ICP21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu
	Units	kg	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
	LOD	0.02	0.001	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2
098333		7.77	0.031	0.47	7.88	24.1	100	0.75	0.88	0.04	0.17	33.5	17.1	9	0.73	1040
098334		13.33	0.016	1.13	7.36	9.3	90	0.75	0.62	0.16	1.79	21.1	13.8	10	0.61	483
098335		14.17	0.017	0.29	7.56	4.5	160	1.00	0.45	0.38	0.84	39.2	10.3	9	0.76	226
098336		11.38	0.039	0.59	7.70	8.8	230	1.33	0.61	0.49	0.67	39.9	13.2	7	1.42	1120
098337		10.62	0.016	0.31	8.03	8.0	190	1.22	0.78	0.34	1.27	34.2	14.1	9	1.31	567
098338		11.30	0.045	0.66	7.73	12.2	120	0.93	0.74	0.23	1.21	42.2	16.1	11	0.97	658
098339		12.37	0.013	0.54	6.80	7.0	60	0.68	0.31	1.61	1.49	16.55	13.7	10	0.50	127.5
098340		0.13	0.887	3.46	8.12	81.1	660	1.20	0.57	0.52	0.75	36.4	19.1	44	6.47	3520
098341		12.16	0.038	0.82	6.30	14.1	60	0.89	0.51	2.69	1.74	20.7	12.5	8	1.23	825
098342		12.49	0.035	0.32	6.79	11.7	80	1.03	0.59	2.82	0.83	29.6	11.8	8	1.25	1060
098343		11.47	0.030	0.88	6.95	7.2	120	0.96	0.59	2.66	1.72	25.6	12.1	8	2.12	1030
098344		11.74	<0.001	0.11	6.56	3.1	930	1.37	0.20	2.95	0.09	27.8	6.3	13	7.35	30.4
098345		12.19	<0.001	0.17	7.00	3.9	960	1.41	0.14	3.43	0.03	33.5	7.2	15	6.69	47.9
098346		11.56	<0.001	0.30	6.28	9.5	1380	1.25	0.17	3.57	0.03	25.9	9.1	14	5.97	35.0
098347		5.42	<0.001	0.09	6.99	3.3	920	1.55	0.18	2.54	0.08	28.4	5.3	13	6.85	23.4
098348		12.23	0.044	0.67	9.63	4.5	310	1.31	0.34	0.76	0.39	27.6	24.0	91	3.58	1625
098349		9.08	0.057	0.65	9.73	5.1	280	1.31	0.39	0.52	0.21	36.9	28.9	92	2.74	1960
098350		0.86	<0.001	0.02	0.10	0.4	20	0.06	0.04	31.1	<0.02	1.20	0.8	1	<0.05	9.1
098351		4.65	0.055	0.77	7.62	5.5	320	1.13	0.24	2.51	1.51	32.8	9.0	11	6.71	1035
098352		13.43	0.034	0.88	8.78	4.6	210	0.96	0.28	1.04	0.83	29.9	24.0	93	2.34	1535
098353		12.56	0.040	1.49	8.71	10.1	200	1.01	0.33	0.77	1.27	33.9	23.2	101	2.16	1490
098354		12.62	0.043	2.30	8.36	12.2	210	1.32	0.89	0.58	3.52	26.4	24.9	95	3.88	1655
098355		8.72	0.050	5.66	8.31	86.2	80	1.23	0.48	0.69	11.15	24.9	24.9	100	3.23	1630
098356		13.15	0.034	1.60	10.10	16.1	480	1.36	0.50	0.80	2.58	38.5	20.0	79	3.20	1480
098357		12.64	0.103	1.83	8.87	4.7	290	1.34	0.75	1.18	0.89	35.5	22.3	77	3.47	2680
098358		12.32	0.053	1.24	9.84	4.1	390	1.47	0.46	1.17	0.85	43.7	31.1	77	2.80	2150
098359		3.20	0.039	2.04	8.01	6.1	210	1.22	0.45	0.87	2.75	39.1	24.8	82	3.24	1655
098360		3.46	0.030	1.71	8.89	6.0	230	1.25	0.51	1.02	2.99	43.2	24.4	89	3.44	1545
098361		6.56	0.041	2.93	7.43	41.6	80	1.14	0.43	2.09	5.59	44.6	31.7	91	3.46	1890
098362		5.74	0.039	0.76	7.91	4.5	160	1.31	0.34	1.91	0.88	32.2	25.0	138	3.89	2290
098363		11.45	0.038	1.27	7.25	5.9	200	1.14	0.33	1.71	2.58	26.9	34.6	148	4.72	1865
098364		11.81	0.063	1.39	6.65	8.1	170	1.21	0.37	1.81	0.98	27.0	34.7	194	4.92	2320
098365		7.84	0.046	2.10	6.55	8.6	140	1.17	0.48	2.22	3.57	26.0	28.7	170	5.25	2190
098366		6.64	0.066	1.04	5.73	10.3	80	0.75	0.35	1.86	0.55	18.90	36.2	186	2.93	2390
098367		11.44	0.073	1.13	6.30	10.1	90	1.02	0.63	1.88	1.58	22.7	34.6	269	4.59	2740
098368		8.24	0.036	1.29	6.93	15.0	100	0.95	0.87	2.01	2.10	24.9	23.6	256	3.54	2230
098369		8.24	0.056	1.35	5.89	7.3	180	0.78	0.47	2.38	1.85	22.8	28.4	259	3.69	2700
098370		0.13	1.030	1.76	5.35	15.5	550	0.67	0.54	1.70	0.40	18.90	9.4	43	0.93	3310
098371		8.40	0.034	1.16	7.35	12.6	620	1.47	0.32	2.76	2.40	29.0	16.9	47	10.90	1530
098372		12.69	0.063	1.94	8.67	8.0	200	1.30	0.44	1.70	1.99	45.1	27.1	82	4.19	2670

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CERTIFICATE OF ANALYSIS TR18330137

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Fe	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOD	0.01	0.05	0.05	0.1	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
098333		6.98	14.00	0.11	1.2	0.097	2.87	16.2	4.2	0.20	38	31.2	0.47	3.1	14.0	290
098334		7.95	11.10	0.10	1.0	0.119	2.93	9.7	2.2	0.22	103	49.8	0.33	3.0	12.3	890
098335		5.20	11.50	0.11	1.0	0.077	2.84	18.4	3.8	0.31	178	35.5	0.42	2.8	6.7	950
098336		4.98	14.70	0.08	1.1	0.146	2.62	18.8	5.9	0.47	807	14.65	0.46	2.9	6.2	870
098337		5.12	13.70	0.08	1.0	0.074	2.47	17.3	6.3	0.28	327	18.60	0.60	2.8	9.3	920
098338		5.50	14.60	0.10	1.0	0.072	2.96	19.4	3.7	0.26	290	46.2	0.44	3.2	11.0	800
098339		5.71	11.50	0.07	0.8	0.088	2.93	7.1	1.8	0.17	156	45.0	0.35	3.1	8.8	810
098340		5.01	18.45	0.10	1.0	0.062	4.23	18.8	11.3	0.82	485	160.0	1.16	4.6	28.4	1120
098341		4.93	12.20	0.08	0.8	0.117	2.45	9.4	4.1	0.35	377	15.85	0.36	3.0	6.4	770
098342		4.94	12.90	0.10	0.6	0.106	2.13	14.9	4.7	0.42	325	13.20	0.59	2.8	5.1	750
098343		4.62	13.95	0.10	0.9	0.126	2.46	13.2	5.0	0.54	1080	12.55	0.48	3.2	5.4	780
098344		2.07	18.50	0.05	3.2	0.022	2.86	13.6	14.8	0.83	550	1.85	0.84	9.7	8.3	900
098345		2.19	18.20	0.06	3.1	0.025	2.87	17.1	14.1	0.95	431	3.57	0.84	9.2	9.0	950
098346		1.84	17.70	0.07	3.0	0.019	2.67	12.6	12.8	0.94	481	3.85	0.90	9.3	8.8	920
098347		2.11	18.80	0.10	3.3	0.017	2.95	13.7	17.0	0.77	615	1.45	0.97	10.2	8.2	950
098348		5.85	21.4	0.09	0.9	0.074	3.48	14.2	8.5	0.46	304	31.3	0.64	2.3	81.6	550
098349		6.52	21.8	0.14	0.9	0.064	3.75	18.0	6.9	0.38	349	50.1	0.70	2.3	110.5	370
098350		0.22	0.25	0.06	0.1	0.008	0.02	1.1	1.0	3.39	180	0.37	0.03	0.1	0.9	80
098351		5.23	18.85	0.08	1.2	0.031	1.50	16.0	10.3	0.89	1160	10.65	1.45	3.6	14.8	1410
098352		5.80	19.20	0.08	0.8	0.053	3.31	14.8	4.6	0.53	359	40.1	0.89	2.0	88.4	480
098353		5.56	19.95	0.08	0.9	0.072	3.58	15.8	4.2	0.46	330	31.1	0.43	2.5	91.6	400
098354		5.85	20.1	0.12	0.7	0.204	3.60	13.5	5.4	0.33	667	40.0	0.38	2.1	98.5	600
098355		6.16	18.85	0.07	0.8	0.112	3.30	12.6	6.0	0.31	1560	26.3	0.42	1.9	95.8	1110
098356		4.73	23.7	0.09	0.6	0.091	3.86	18.8	8.5	0.51	582	33.6	0.73	2.3	76.6	380
098357		5.42	21.7	0.13	0.7	0.115	2.89	18.5	6.7	0.63	725	49.5	1.49	2.1	78.1	430
098358		5.62	22.7	0.12	0.7	0.117	3.51	20.7	6.3	0.55	511	46.2	1.69	2.4	100.0	1090
098359		5.92	17.55	0.11	0.7	0.098	3.18	18.1	6.8	0.56	642	35.6	0.49	2.0	100.5	430
098360		5.75	18.05	0.12	0.9	0.092	3.43	19.4	7.2	0.63	729	36.4	0.48	2.2	93.1	440
098361		6.34	15.85	0.16	0.6	0.082	3.09	20.8	6.4	0.80	1080	36.0	0.14	1.6	104.5	1850
098362		5.12	16.70	0.11	0.3	0.066	3.01	16.6	6.7	0.98	772	29.8	1.08	1.7	101.0	550
098363		6.90	14.40	0.10	0.6	0.052	2.94	14.4	5.7	0.78	868	32.3	0.16	1.3	120.0	600
098364		6.19	14.45	0.07	0.6	0.069	2.61	14.8	6.2	0.81	1400	32.9	0.10	1.5	114.0	690
098365		5.54	13.40	0.12	0.4	0.089	2.60	14.4	6.1	0.75	1780	30.7	0.09	1.4	101.0	640
098366		7.38	12.60	0.09	0.4	0.062	2.21	9.9	4.5	0.83	319	17.65	0.38	1.1	135.0	690
098367		6.62	15.30	0.10	0.3	0.085	2.40	12.5	5.5	0.99	623	15.60	0.46	1.3	117.5	570
098368		6.12	15.15	0.11	0.3	0.103	2.72	13.5	5.0	0.88	438	23.1	0.58	1.2	100.0	630
098369		7.17	12.70	0.09	0.4	0.103	2.32	12.6	4.5	0.94	724	10.45	0.46	1.6	118.0	540
098370		3.72	11.65	0.07	1.6	0.070	0.94	10.0	13.8	0.82	562	345	2.04	3.7	34.9	570
098371		3.91	16.70	0.08	1.4	0.073	3.35	15.3	9.0	1.27	1220	11.40	0.47	4.9	46.0	1010
098372		5.40	17.70	0.12	0.4	0.094	3.74	21.2	5.5	0.86	680	25.8	1.54	2.1	101.5	1400

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	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOD	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
098333		20.3	64.0	0.235	7.41	5.40	5.5	7	3.3	103.0	0.16	0.36	4.92	0.107	1.16	1.8
098334		100.5	67.4	0.273	8.56	12.15	4.6	6	3.9	214	0.16	0.24	4.45	0.101	1.09	1.5
098335		42.8	58.1	0.187	5.44	1.57	3.4	3	3.6	180.0	0.18	0.24	4.38	0.094	1.15	1.8
098336		38.2	64.5	0.119	4.69	3.06	3.9	3	3.2	110.5	0.19	0.26	4.79	0.093	1.28	2.0
098337		36.6	61.2	0.107	5.32	1.47	3.9	4	3.1	230	0.21	0.10	5.14	0.088	1.18	1.8
098338		78.2	67.1	0.281	5.66	6.62	4.3	4	4.5	206	0.18	0.21	4.54	0.097	1.37	1.5
098339		111.5	60.5	0.188	7.13	4.44	3.4	4	4.4	357	0.20	0.23	1.95	0.102	1.15	0.8
098340		54.3	98.0	0.302	2.78	8.03	13.9	8	3.3	259	0.29	1.21	2.99	0.271	1.79	1.3
098341		115.0	44.6	0.105	6.85	13.60	3.3	3	3.8	550	0.20	0.26	3.09	0.092	1.09	1.0
098342		58.2	43.3	0.084	6.97	5.21	3.7	2	3.4	551	0.18	0.21	4.01	0.086	0.93	1.0
098343		162.5	61.4	0.082	5.84	2.68	3.9	2	3.6	578	0.22	0.34	3.82	0.101	1.14	1.6
098344		9.9	73.8	0.002	0.08	0.88	5.1	<1	0.8	659	0.77	<0.05	6.44	0.205	0.83	3.7
098345		6.6	74.8	0.003	0.10	0.63	5.5	1	0.8	601	0.78	<0.05	6.98	0.221	0.67	4.2
098346		7.0	55.5	0.012	0.20	0.73	4.8	1	0.8	1350	0.77	<0.05	5.65	0.212	0.67	14.7
098347		14.0	81.1	<0.002	0.05	1.56	5.2	<1	0.8	458	0.89	<0.05	6.80	0.217	0.95	3.6
098348		26.5	83.5	0.170	5.69	0.79	17.7	4	3.5	178.5	0.15	0.42	3.69	0.177	1.64	2.2
098349		25.4	88.6	0.310	6.28	0.83	18.4	6	3.0	156.5	0.14	0.43	4.26	0.182	1.67	2.9
098350		1.2	0.7	<0.002	0.02	0.10	0.2	1	<0.2	73.2	<0.05	<0.05	0.08	0.005	0.02	0.2
098351		94.5	49.3	0.092	5.17	3.31	6.9	3	1.5	515	0.27	0.22	4.93	0.164	1.12	1.5
098352		80.3	73.2	0.211	6.09	2.36	14.9	5	3.6	276	0.12	0.33	3.95	0.160	1.49	1.5
098353		112.5	81.9	0.212	5.52	9.47	17.1	3	3.8	145.5	0.15	0.48	3.80	0.189	1.53	1.6
098354		209	94.3	0.258	5.99	4.86	16.2	4	3.8	364	0.13	0.58	3.65	0.169	1.60	1.6
098355		559	84.3	0.138	6.44	63.4	17.2	5	3.6	423	0.11	0.41	3.86	0.153	1.41	1.8
098356		204	92.9	0.223	4.87	6.30	20.7	5	3.6	261	0.14	0.32	3.85	0.196	1.45	1.3
098357		69.7	77.2	0.259	5.28	1.10	18.1	4	3.4	252	0.14	0.75	3.79	0.155	1.35	1.9
098358		100.0	80.8	0.240	5.52	1.66	19.9	5	3.0	226	0.15	0.51	4.55	0.184	1.51	1.6
098359		173.5	79.1	0.174	6.13	2.17	16.3	6	2.8	177.5	0.13	0.52	3.82	0.154	1.21	1.5
098360		180.0	84.7	0.184	6.06	1.92	16.9	5	2.9	205	0.13	0.49	4.32	0.170	1.43	1.6
098361		219	74.7	0.219	7.03	27.0	14.9	5	3.1	263	0.11	0.56	3.67	0.139	1.15	1.7
098362		53.8	79.2	0.136	5.34	1.53	15.5	3	2.5	215	0.09	0.33	3.11	0.172	1.35	0.9
098363		128.5	96.1	0.215	7.54	1.80	14.6	7	2.6	318	0.07	0.34	2.64	0.135	1.40	0.8
098364		59.1	99.7	0.218	6.41	2.80	13.8	4	2.4	256	0.09	0.37	2.57	0.146	1.38	0.8
098365		191.0	94.0	0.201	6.41	2.39	12.1	4	2.3	549	0.08	0.27	2.62	0.138	1.38	0.7
098366		48.1	63.7	0.183	7.93	1.02	11.4	5	2.7	240	0.06	0.26	1.90	0.120	0.92	0.6
098367		139.0	83.0	0.120	6.57	1.60	12.9	6	2.7	284	0.07	0.36	2.37	0.143	1.22	0.8
098368		114.5	79.0	0.162	6.95	4.71	13.7	5	3.7	334	0.06	0.36	2.34	0.142	1.10	0.6
098369		109.0	73.5	0.083	8.12	1.98	11.7	6	2.6	297	0.08	0.33	2.16	0.160	1.03	0.7
098370		22.2	26.4	0.307	0.42	5.11	10.5	2	2.2	244	0.24	0.18	2.16	0.253	0.27	1.0
098371		64.8	104.5	0.083	3.33	4.19	9.4	2	1.6	373	0.38	0.28	5.05	0.204	1.95	2.3
098372		91.6	85.8	0.160	5.59	1.72	16.5	4	2.0	223	0.13	0.37	4.68	0.184	1.39	1.4

***** See Appendix Page for comments regarding this certificate *****

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To: MAMMOTH GEOLOGICAL LTD.
704- 1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 17- JAN- 2019
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18330137

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	V	W	Y	Zn	Zr
	Units	ppm	ppm	ppm	ppm	ppm
	LOD	1	0.1	0.1	2	0.5
098333		59	0.7	6.3	24	41.1
098334		51	0.7	9.1	226	33.3
098335		49	0.7	10.0	136	26.5
098336		49	0.6	10.0	202	29.1
098337		50	0.7	11.4	134	28.4
098338		54	0.8	12.0	167	28.0
098339		50	0.8	7.2	269	20.9
098340		172	32.0	13.4	129	28.7
098341		48	0.7	6.3	307	19.7
098342		45	0.5	6.7	185	16.5
098343		47	0.7	6.0	321	20.7
098344		55	1.5	7.5	43	93.6
098345		59	2.6	8.2	30	97.5
098346		55	2.1	7.2	31	91.1
098347		58	1.1	7.8	56	100.5
098348		157	1.0	7.3	79	23.6
098349		160	0.7	7.4	49	26.4
098350		2	0.1	2.0	5	1.4
098351		77	0.3	7.3	297	29.1
098352		147	0.8	6.6	152	24.4
098353		156	0.9	6.4	174	24.2
098354		152	1.0	7.1	565	19.5
098355		145	0.8	9.0	1560	25.5
098356		154	0.9	7.5	395	17.6
098357		129	0.7	7.0	153	21.4
098358		146	0.9	9.8	160	20.1
098359		125	0.7	6.7	492	20.1
098360		131	0.8	7.2	555	20.9
098361		116	0.4	12.4	713	16.4
098362		120	0.3	6.1	157	10.0
098363		122	0.3	6.6	483	19.7
098364		121	0.4	7.2	198	15.9
098365		109	0.5	6.0	660	9.3
098366		109	0.3	5.9	118	8.7
098367		129	0.2	5.5	293	11.0
098368		127	0.4	6.0	376	9.4
098369		135	0.2	4.9	337	9.2
098370		83	1.7	14.1	64	47.9
098371		88	0.6	7.8	484	37.3
098372		133	0.3	9.5	391	11.3

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VANCOUVER BC V6E 4K2

Finalized Date: 17- JAN- 2019
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18330137

Sample Description	Method	WEI- 21	Au- ICP21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu
	Units	kg	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
	LOD	0.02	0.001	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2
098373		11.60	0.038	3.61	8.51	14.8	180	1.18	0.67	1.58	4.91	43.0	27.4	67	4.88	2170
098374		6.12	0.070	7.71	8.57	19.2	200	1.41	1.36	1.39	12.55	48.6	29.0	74	5.37	3180
098375		2.95	0.053	10.80	7.45	41.8	540	1.33	0.69	1.57	9.82	46.1	16.5	50	4.67	2080
098376		3.38	0.090	16.45	7.56	92.6	560	1.52	0.88	1.69	13.25	47.4	19.7	64	5.00	2720
098377		10.97	0.030	2.35	6.37	10.7	1080	1.47	0.34	1.52	1.57	34.7	6.7	19	5.54	676
098378		10.16	0.002	0.49	5.89	2.3	1100	1.49	0.18	1.71	0.90	27.3	1.6	12	5.06	25.1
098379		12.10	0.029	0.91	5.87	4.3	1120	1.28	0.18	1.66	7.99	25.3	1.8	9	5.00	35.5
098380		0.78	0.001	0.02	0.08	0.3	20	0.05	0.02	31.3	0.03	0.97	0.5	1	0.10	5.2
098381		11.66	0.006	0.56	6.02	6.3	970	1.40	0.05	1.88	1.56	26.6	1.8	8	5.63	12.7
098382		8.29	0.004	0.52	5.79	9.6	1060	1.27	0.13	2.22	2.06	23.6	1.7	7	5.16	14.4
098383		8.65	0.038	7.92	6.60	84.1	210	1.23	0.61	2.25	12.35	20.0	11.9	9	8.21	1530
098384		8.86	0.047	2.82	6.43	50.5	150	1.03	0.80	2.80	5.28	24.1	12.2	9	4.25	1765
098385		12.97	0.117	1.29	6.15	14.7	200	0.83	0.38	3.13	0.49	17.70	15.1	17	3.49	3090
098386		11.47	0.091	3.00	6.41	86.7	270	0.92	0.73	3.19	2.59	18.30	12.9	8	4.16	2830
098387		12.39	0.121	2.65	6.94	47.9	300	0.94	0.90	2.79	1.64	22.1	11.4	12	4.01	2900
098388		12.17	0.098	2.53	6.84	10.2	300	1.04	1.12	2.75	0.80	28.1	13.5	12	5.26	2880
098389		5.98	0.069	2.20	6.94	11.4	300	1.20	0.64	2.95	0.85	30.5	10.9	10	5.48	2670
098390		5.77	0.064	1.33	6.93	7.1	380	1.11	0.56	2.96	0.42	29.8	11.2	10	5.50	2240
098391		5.80	0.074	2.39	6.89	13.9	310	1.18	0.79	2.83	2.71	29.1	10.3	8	5.96	2330
098392		12.47	0.107	2.20	6.79	35.0	450	1.10	0.68	2.58	2.27	25.8	10.0	9	4.82	2710
098393		11.85	0.117	4.89	7.00	47.2	320	1.03	0.83	2.45	4.45	26.3	9.8	8	5.39	2860
098394		12.32	0.155	3.71	6.81	29.3	330	0.93	0.50	2.38	4.58	23.6	10.0	9	4.67	2930
098395		7.91	0.081	1.44	6.92	10.8	590	1.23	0.31	3.06	1.11	32.1	10.9	10	7.79	1780
098396		12.29	0.124	11.10	6.70	126.5	290	0.99	0.60	1.59	8.93	19.95	10.7	8	5.27	3030
098397		11.94	0.127	8.01	6.47	95.3	240	0.83	0.61	2.11	3.98	19.10	12.3	10	3.76	3380
098398		12.95	0.106	2.96	6.70	29.5	160	0.90	0.51	2.29	1.97	23.5	15.5	15	7.15	3660
098399		10.61	0.120	2.21	6.54	26.0	150	0.90	0.47	2.71	1.32	24.7	13.9	16	7.23	3410
098400		0.14	0.813	4.22	8.13	86.1	650	1.17	0.57	0.52	0.86	37.2	18.5	43	6.51	3510
098401		1.86	0.027	2.60	7.08	18.1	750	1.52	0.30	3.79	3.43	58.8	18.9	70	17.45	463
098402		12.26	0.131	5.88	6.31	51.4	190	1.00	0.45	2.87	10.75	21.7	10.6	10	8.77	2830
098403		11.64	0.122	5.05	7.11	14.8	320	1.08	0.29	2.20	5.74	24.2	11.2	14	9.60	2890
098404		3.93	0.109	0.91	7.66	6.0	1350	0.87	0.40	1.06	0.08	24.2	10.6	10	5.81	2950
098405		9.36	0.121	0.87	7.36	2.5	720	0.90	0.19	2.59	0.22	24.9	10.6	18	5.40	3130
098406		11.76	0.132	0.97	6.56	2.9	330	0.76	0.31	1.90	0.10	17.15	12.4	12	4.23	3850
098407		12.33	0.082	0.74	7.55	2.9	620	0.88	0.25	2.07	0.18	23.5	9.8	11	4.57	2540
098408		12.27	0.096	2.96	6.66	59.9	240	0.88	0.38	2.21	1.59	19.85	11.3	12	5.10	2960
098409		12.65	0.110	2.69	6.48	156.0	440	0.89	0.32	2.10	0.60	19.40	11.5	11	5.90	2710
098410		0.85	0.001	0.01	0.07	1.0	10	<0.05	<0.01	35.0	<0.02	0.23	0.5	1	<0.05	12.2
098411		11.04	0.105	1.82	6.79	103.5	350	0.91	0.31	1.99	0.48	20.1	11.2	11	4.91	3190
098412		11.68	0.096	3.25	7.06	204	350	0.91	0.25	2.06	0.59	23.1	8.6	11	5.61	3030

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Project: Poplar

CERTIFICATE OF ANALYSIS TR18330137

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Fe	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOD	0.01	0.05	0.05	0.1	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
098373		6.06	17.10	0.13	0.4	0.084	3.75	19.9	6.2	0.82	916	20.8	0.93	1.6	94.6	770
098374		6.19	18.85	0.13	0.5	0.174	3.47	23.8	8.1	0.72	1600	20.2	0.81	2.3	90.3	560
098375		3.79	16.65	0.08	1.2	0.071	3.93	23.7	10.2	0.67	2810	28.6	0.12	4.7	57.3	620
098376		4.36	17.60	0.14	0.9	0.107	3.69	23.2	10.5	0.79	3670	25.1	0.11	3.2	69.9	600
098377		1.88	15.15	0.08	2.1	0.038	2.96	17.7	11.9	0.49	2880	2.39	0.06	7.5	18.5	680
098378		1.25	15.75	0.08	2.2	0.010	3.13	14.4	11.9	0.43	2290	0.94	0.05	8.7	2.6	720
098379		1.29	15.20	0.07	2.1	0.071	3.14	14.0	7.4	0.43	2970	0.78	0.05	8.3	2.3	680
098380		0.16	0.26	0.07	<0.1	<0.005	0.03	1.2	0.9	2.90	146	0.16	0.02	0.1	0.9	80
098381		1.19	15.20	0.11	2.3	0.018	3.47	14.2	8.2	0.41	2580	0.83	0.05	8.9	2.2	720
098382		1.15	14.80	0.10	2.2	0.014	3.24	12.4	5.6	0.46	2730	1.60	0.06	8.9	2.1	710
098383		3.73	12.55	0.09	0.6	0.113	3.00	10.3	6.9	0.49	2670	21.2	0.11	2.8	7.5	690
098384		3.31	12.80	0.10	0.5	0.117	2.84	13.0	5.3	0.56	787	20.7	0.15	3.1	5.3	630
098385		3.43	13.55	0.09	0.5	0.115	2.34	8.6	4.6	0.61	734	33.8	1.31	3.4	8.9	780
098386		3.58	13.05	0.10	0.4	0.108	2.37	9.7	7.1	0.56	1060	17.55	0.22	3.0	5.7	580
098387		3.29	15.30	0.09	0.5	0.127	2.65	11.5	6.0	0.61	702	39.5	0.90	3.6	4.9	870
098388		3.29	15.30	0.08	0.4	0.128	2.75	12.1	8.3	0.73	942	31.3	0.62	3.8	6.3	1030
098389		3.15	14.80	0.08	0.4	0.120	2.53	13.2	8.2	0.80	868	19.80	0.76	4.4	5.5	1200
098390		3.06	15.20	0.08	0.4	0.109	2.56	12.5	8.6	0.77	823	16.35	0.75	4.5	5.5	1220
098391		3.03	13.80	0.10	0.4	0.106	2.84	13.0	9.8	0.62	1800	20.9	0.43	3.8	4.0	840
098392		2.98	14.00	0.07	0.4	0.102	2.38	11.1	6.8	0.57	1250	20.1	1.14	3.7	4.3	710
098393		2.86	15.40	0.08	0.4	0.111	2.85	11.2	8.5	0.53	1150	25.2	0.56	4.0	3.8	800
098394		3.11	14.90	0.09	0.4	0.089	2.93	10.3	7.8	0.59	1310	20.6	0.55	4.3	4.5	800
098395		3.83	16.60	0.12	0.7	0.060	2.53	13.4	10.5	0.90	1980	6.91	0.58	5.8	5.7	1310
098396		3.67	16.40	0.08	0.3	0.117	2.52	9.0	11.1	0.46	764	4.87	0.07	3.2	5.7	600
098397		4.32	13.15	0.09	0.3	0.118	2.52	8.6	8.5	0.58	1160	51.4	0.08	3.1	6.3	550
098398		4.62	15.70	0.10	0.3	0.137	2.45	10.0	11.3	0.72	1160	10.30	0.40	4.7	7.7	900
098399		4.37	15.15	0.09	0.4	0.160	2.39	10.7	12.7	0.84	1720	11.85	0.16	4.4	7.8	860
098400		4.97	17.85	0.12	0.9	0.053	4.21	19.9	11.3	0.81	497	151.0	1.15	4.7	27.2	1110
098401		5.10	15.85	0.13	3.9	0.079	2.37	28.3	16.8	2.15	5930	14.10	0.32	9.1	39.6	2050
098402		4.23	14.90	0.08	0.3	0.124	2.71	9.5	8.0	0.66	9550	25.3	0.06	4.2	5.3	830
098403		4.50	16.10	0.09	0.4	0.116	2.84	10.5	12.5	0.81	6180	34.9	0.08	4.6	7.1	1010
098404		5.88	19.50	0.08	0.5	0.127	3.42	11.2	14.2	0.63	795	20.4	0.74	2.1	8.1	1060
098405		4.80	18.25	0.07	0.5	0.129	2.10	10.3	15.2	1.38	1010	12.80	0.43	6.8	9.0	1310
098406		4.49	15.45	0.09	0.4	0.148	2.07	7.5	10.6	0.73	309	5.67	1.12	4.5	10.0	960
098407		4.14	16.50	0.12	0.5	0.098	2.33	9.9	15.1	0.86	393	5.28	0.92	5.3	4.7	1120
098408		4.93	15.50	0.09	0.4	0.132	2.40	8.7	14.9	0.86	1280	25.5	0.08	4.6	5.9	1000
098409		4.89	15.00	0.09	0.4	0.169	2.34	8.6	18.4	0.79	1780	21.0	0.08	4.8	7.3	980
098410		0.06	0.17	0.07	<0.1	<0.005	0.02	<0.5	0.5	1.67	40	0.24	<0.01	<0.1	1.0	70
098411		4.20	15.85	0.09	0.4	0.247	2.45	8.7	19.5	0.75	1280	67.6	0.14	5.1	5.2	1040
098412		4.09	15.50	0.08	0.5	0.156	2.46	9.8	20.3	0.78	1540	22.3	0.06	4.8	5.4	1080

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Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOD	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
098373		251	94.3	0.124	6.56	4.36	16.0	4	2.4	183.5	0.10	0.33	4.58	0.140	1.48	1.5
098374		474	101.0	0.127	6.24	4.03	15.3	4	2.2	241	0.14	0.32	6.21	0.158	1.53	2.6
098375		615	140.5	0.087	3.35	8.40	11.3	3	1.6	340	0.40	0.07	7.91	0.148	2.09	7.7
098376		905	124.0	0.103	3.54	14.10	13.5	4	2.0	316	0.22	0.06	5.87	0.161	1.74	8.7
098377		105.0	127.0	0.016	1.05	2.13	3.7	1	0.8	365	0.83	<0.05	11.00	0.093	1.81	6.9
098378		62.1	127.0	0.005	0.22	1.16	1.9	<1	0.6	323	0.92	<0.05	10.65	0.077	2.08	2.3
098379		138.0	135.0	<0.002	0.24	1.21	1.8	<1	0.5	224	0.88	<0.05	10.80	0.076	1.95	5.0
098380		1.0	1.2	<0.002	0.01	0.15	0.2	<1	<0.2	72.4	<0.05	<0.05	0.11	<0.005	0.04	0.1
098381		208	140.0	<0.002	0.40	1.20	1.8	<1	0.5	304	0.93	<0.05	11.05	0.080	2.30	4.2
098382		197.0	130.5	0.002	0.54	3.42	1.7	<1	0.6	345	0.95	<0.05	10.30	0.081	2.17	7.0
098383		431	90.1	0.109	4.93	84.7	3.4	2	1.9	437	0.21	0.25	4.14	0.087	1.49	1.0
098384		209	76.9	0.087	4.96	19.30	3.6	3	2.6	456	0.22	0.23	3.65	0.095	1.16	0.7
098385		26.1	58.9	0.159	4.70	1.54	4.1	3	1.9	495	0.22	0.24	3.80	0.120	1.12	0.5
098386		114.0	66.9	0.093	5.02	23.3	3.7	3	2.4	318	0.21	0.26	4.09	0.098	1.07	0.5
098387		51.3	73.8	0.195	4.51	5.70	4.4	3	2.3	471	0.24	0.25	4.17	0.129	1.18	0.6
098388		37.9	92.7	0.152	3.98	3.96	5.3	2	1.6	494	0.25	0.30	3.87	0.146	1.49	0.6
098389		35.6	84.6	0.090	4.00	7.12	6.4	2	2.9	494	0.28	0.28	4.05	0.171	1.30	0.6
098390		22.4	82.9	0.072	3.97	3.80	6.3	2	2.5	500	0.29	0.27	3.78	0.174	1.28	0.6
098391		92.0	95.8	0.080	3.94	9.07	4.3	2	1.7	411	0.26	0.22	4.08	0.131	1.45	0.6
098392		64.5	77.7	0.085	3.98	6.48	3.8	2	1.7	397	0.24	0.22	4.07	0.122	1.17	0.5
098393		231	88.0	0.093	3.77	32.6	4.4	3	1.6	512	0.27	0.22	4.13	0.138	1.45	0.6
098394		175.5	84.4	0.091	3.76	22.0	4.3	3	1.5	390	0.28	0.31	3.89	0.139	1.24	0.5
098395		53.5	88.4	0.034	3.38	5.19	6.4	2	1.3	421	0.38	0.27	4.05	0.218	1.47	0.8
098396		436	83.4	0.027	4.54	97.9	3.9	2	2.4	449	0.23	0.32	3.99	0.112	1.20	0.5
098397		195.5	74.6	0.231	5.23	50.3	4.4	3	2.2	307	0.23	0.34	4.00	0.126	1.08	0.5
098398		88.2	86.4	0.039	4.66	9.45	6.5	3	2.0	436	0.28	0.37	3.56	0.183	1.32	0.5
098399		48.0	86.4	0.063	4.39	10.35	6.3	3	1.7	569	0.27	0.36	3.37	0.178	1.38	0.5
098400		47.4	103.5	0.333	2.83	8.11	13.8	8	3.1	257	0.29	1.23	2.73	0.280	1.64	1.1
098401		76.0	72.4	0.041	1.17	17.75	14.2	<1	1.6	388	0.42	0.12	4.38	0.527	1.07	1.3
098402		701	117.0	0.103	4.14	39.7	5.6	3	1.5	677	0.28	0.31	3.94	0.165	1.65	0.4
098403		307	107.5	0.182	3.10	10.00	6.4	2	1.5	640	0.31	0.38	4.48	0.190	1.50	0.5
098404		8.4	78.5	0.091	1.75	1.48	6.3	2	0.9	402	0.17	0.41	4.24	0.106	1.31	0.6
098405		20.1	66.6	0.084	1.89	1.77	8.0	2	1.5	152.0	0.42	0.25	3.98	0.282	1.01	0.5
098406		10.6	53.0	0.030	3.34	1.83	5.6	2	1.9	336	0.33	0.46	3.77	0.180	0.89	0.4
098407		19.8	66.2	0.020	3.10	0.48	6.3	2	1.7	415	0.38	0.32	4.87	0.195	0.96	0.5
098408		103.5	83.9	0.064	3.96	4.65	5.6	2	1.7	169.5	0.30	0.36	4.08	0.175	1.05	0.5
098409		39.9	85.5	0.045	3.72	8.14	5.9	3	1.2	278	0.34	0.44	4.29	0.167	1.25	0.5
098410		<0.5	0.3	<0.002	0.05	0.07	0.2	1	<0.2	5010	<0.05	<0.05	0.03	<0.005	<0.02	1.4
098411		25.5	71.3	0.150	3.07	2.22	5.8	3	1.4	222	0.35	0.33	4.42	0.180	1.17	0.5
098412		30.5	94.4	0.069	2.97	3.06	5.6	2	1.4	437	0.33	0.35	4.40	0.177	1.30	0.6

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To: MAMMOTH GEOLOGICAL LTD.
704- 1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 17- JAN- 2019
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18330137

Sample Description	Method Analyte Units LOD	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5
098373		124	0.5	8.6	917	13.1
098374		127	0.5	8.1	2350	13.1
098375		91	1.2	10.1	1810	25.6
098376		108	1.3	10.3	2350	22.1
098377		37	1.3	7.8	369	36.6
098378		21	0.9	7.8	284	42.2
098379		22	1.0	7.9	1460	39.8
098380		2	<0.1	1.9	10	1.3
098381		22	1.1	7.8	399	42.8
098382		22	1.2	7.3	436	40.7
098383		35	0.7	5.6	2280	15.5
098384		34	0.6	6.3	874	13.0
098385		43	0.4	5.4	100	12.3
098386		44	0.5	5.6	436	12.2
098387		49	0.4	7.1	265	13.9
098388		56	0.4	8.1	154	11.3
098389		63	0.5	8.9	109	12.5
098390		62	0.4	9.0	84	12.9
098391		46	0.7	7.8	456	12.5
098392		40	0.5	7.0	368	13.2
098393		44	0.6	7.0	579	12.8
098394		44	0.4	6.8	690	12.0
098395		68	0.5	9.2	224	17.9
098396		44	0.5	5.7	1180	10.3
098397		47	0.5	5.0	556	9.4
098398		64	0.4	7.6	337	10.8
098399		63	0.4	7.2	250	10.8
098400		172	36.8	14.1	130	29.2
098401		121	0.7	18.6	613	166.0
098402		53	1.1	7.3	1760	7.4
098403		64	0.5	8.0	1010	14.8
098404		80	0.2	6.8	63	13.4
098405		79	0.1	8.7	78	14.5
098406		60	0.1	6.6	37	10.2
098407		60	0.1	7.9	52	12.4
098408		56	0.5	6.6	288	10.2
098409		54	0.5	6.9	140	9.8
098410		<1	<0.1	0.3	2	<0.5
098411		53	0.5	7.3	91	11.2
098412		52	0.4	7.7	142	11.5

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To: MAMMOTH GEOLOGICAL LTD.
704- 1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 17- JAN- 2019
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18330137

Sample Description	Method	WEI- 21	Au- ICP21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu
	Units	kg	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
	LOD	0.02	0.001	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2
098413		8.01	0.101	4.10	6.71	411	380	1.06	0.20	1.80	1.03	20.3	8.9	9	6.44	2680
098414		15.49	0.117	3.88	6.82	311	220	0.80	0.28	1.85	1.01	18.45	11.7	10	5.52	3100
098415		11.69	0.099	1.49	6.75	28.2	220	0.81	0.25	2.08	0.30	21.4	9.9	15	4.70	2640
098416		12.83	0.123	2.25	6.37	7.1	210	0.81	0.18	2.21	1.03	18.95	10.3	14	5.80	3090
098417		8.54	0.111	1.49	6.85	2.7	410	0.93	0.27	1.99	0.19	19.40	8.7	11	5.98	3260
098418		12.88	0.093	0.97	6.69	2.2	720	0.78	0.19	1.88	0.24	17.00	7.4	12	5.24	2900
098419		5.95	0.079	1.37	6.74	9.6	330	0.80	0.37	1.90	0.62	15.30	10.7	9	5.25	2560
098420		6.00	0.089	1.38	6.77	9.9	310	0.80	0.42	1.82	0.54	16.35	9.2	9	5.34	2770
098421		9.40	0.089	1.32	6.72	1.9	420	0.83	0.37	1.85	1.72	16.20	8.3	10	5.06	2530
098422		12.36	0.093	1.02	6.71	1.8	880	0.88	0.25	1.90	0.13	16.65	8.7	11	4.83	2870
098423		11.67	0.074	0.74	6.80	1.8	810	0.89	0.19	2.14	0.23	16.60	8.5	11	5.08	2280
098424		10.31	0.156	2.07	6.33	14.3	270	0.84	0.31	1.91	0.38	14.90	15.6	12	5.22	4380
098425		12.24	0.138	9.21	6.80	74.0	930	0.83	1.49	1.48	5.54	18.20	6.7	8	6.93	3350
098426		5.73	0.097	3.96	6.34	19.7	350	0.78	0.47	1.74	3.60	16.50	12.3	17	5.77	2920
098427		12.37	0.101	1.93	6.86	11.2	830	0.84	0.23	2.15	0.17	17.80	11.0	13	6.93	2940
098428		4.04	0.122	4.01	6.41	163.0	370	0.84	0.29	2.20	2.02	17.10	16.5	10	6.44	3780
098429		10.50	0.097	1.48	6.56	4.1	980	0.93	0.18	1.89	0.16	15.05	10.7	14	5.89	3260
098430		0.13	1.020	1.68	5.34	15.1	550	0.59	0.49	1.68	0.40	20.5	9.6	42	0.89	3340
098431		7.75	0.183	2.01	6.61	4.2	320	1.03	0.22	1.89	0.11	21.8	23.9	96	7.19	5790
098432		12.09	0.096	1.06	6.63	5.1	440	0.88	0.29	1.81	0.26	17.10	12.9	16	4.91	3040
098433		12.50	0.102	1.33	6.65	11.8	750	0.78	0.25	1.92	0.25	15.60	11.7	9	5.09	3480
098434		12.46	0.113	2.32	6.75	89.9	1010	0.88	0.16	2.00	0.37	16.95	11.2	12	5.55	3450
098435		10.75	0.233	24.9	6.06	329	1290	0.97	1.18	0.89	12.25	14.20	12.4	8	7.57	3730
098436		11.47	0.138	2.78	6.40	52.1	990	0.76	0.15	1.75	1.65	15.10	9.2	9	4.98	3700
098437		12.90	0.095	4.56	6.42	101.0	520	0.88	0.47	1.50	2.79	16.70	11.6	8	6.36	3320
098438		12.60	0.190	4.71	6.43	18.1	800	0.96	0.63	1.81	0.68	16.30	10.6	8	7.24	4560
098439		4.19	0.149	4.14	6.42	60.4	810	0.94	0.30	2.03	1.13	15.50	10.2	8	6.67	4710
098440		0.76	<0.001	0.02	0.08	<0.2	20	0.06	0.01	32.0	0.02	1.11	0.7	1	<0.05	11.8
098441		10.56	0.119	2.46	6.41	4.8	910	0.71	0.23	2.48	0.28	16.10	9.5	10	5.35	3880
098442		9.26	0.079	1.98	6.88	10.3	920	0.99	0.14	2.35	0.21	22.1	11.9	17	7.90	2370
098443		5.60	0.138	10.10	6.73	207	900	0.92	0.34	1.56	5.29	19.00	10.7	17	8.27	3280
098444		10.98	0.166	2.50	6.08	128.5	760	0.77	0.30	1.87	0.67	13.75	11.1	35	5.10	5060
098445		11.85	0.223	4.35	5.68	53.7	770	0.80	0.31	1.43	1.20	13.50	10.5	33	7.17	6500
098446		6.89	0.286	6.13	5.92	40.4	500	0.83	0.70	1.43	2.13	13.15	14.0	9	5.34	8240
098447		7.94	0.145	6.85	6.18	221	790	0.87	0.46	1.69	1.22	16.95	14.2	39	7.11	5570
098448		11.49	0.006	0.32	5.79	16.0	680	1.69	0.18	1.38	3.12	17.40	1.6	5	6.03	40.4
098449		5.46	0.006	0.19	5.62	4.2	710	1.52	0.11	1.85	1.48	16.65	1.5	4	6.57	12.4
098450		5.82	0.004	0.19	5.30	3.8	750	1.70	0.13	1.79	1.62	14.40	1.6	4	6.38	11.9
098451		11.21	0.004	0.15	5.37	3.3	660	1.62	0.12	2.18	2.70	14.50	1.8	5	6.66	6.4
098452		11.84	0.004	0.51	5.11	6.2	620	1.53	0.28	2.28	3.60	14.20	1.8	4	6.61	4.0

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Finalized Date: 17- JAN- 2019
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CERTIFICATE OF ANALYSIS TR18330137

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Fe	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOD	0.01	0.05	0.05	0.1	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
098413		3.75	15.40	0.08	0.3	0.134	2.25	8.9	21.9	0.74	1580	29.1	0.04	5.0	5.5	950
098414		5.07	17.40	0.11	0.4	0.129	2.21	7.8	22.3	0.79	1060	9.82	0.17	4.9	6.0	960
098415		5.26	17.30	0.12	0.5	0.095	2.36	8.7	11.5	0.69	373	20.8	1.62	4.9	5.6	1130
098416		4.69	15.80	0.12	0.4	0.094	2.26	7.9	12.4	0.67	617	45.4	1.51	4.8	7.1	920
098417		5.16	18.65	0.12	0.4	0.126	2.27	8.0	13.6	0.68	605	7.38	1.69	5.0	5.8	980
098418		4.03	16.15	0.09	0.4	0.093	2.08	7.6	12.5	0.69	354	6.11	1.77	5.1	5.4	990
098419		4.54	16.90	0.10	0.3	0.139	2.24	6.8	12.9	0.71	554	9.03	1.33	4.3	5.1	970
098420		4.58	17.15	0.11	0.3	0.125	2.29	7.3	13.3	0.71	566	11.20	1.27	4.4	5.2	960
098421		4.31	17.25	0.12	0.3	0.188	2.35	7.3	16.9	0.70	1100	6.29	1.22	4.8	4.9	970
098422		4.71	18.70	0.13	0.3	0.118	2.21	7.5	7.2	0.67	340	1.68	2.08	5.4	5.2	1020
098423		4.05	16.90	0.11	0.4	0.075	1.93	7.6	7.6	0.70	309	3.54	2.22	5.5	4.8	1030
098424		5.08	17.10	0.11	0.4	0.143	1.87	6.8	9.3	0.63	460	4.20	1.64	4.6	6.0	870
098425		4.20	17.60	0.09	0.3	0.454	2.49	8.6	17.6	0.69	5060	2.42	0.07	5.3	5.1	930
098426		5.18	17.35	0.10	0.3	0.193	2.36	7.5	11.7	0.72	1540	6.96	0.18	4.4	6.4	870
098427		4.28	17.90	0.09	0.4	0.187	2.42	7.9	17.6	0.83	986	3.50	0.28	5.9	6.3	1070
098428		5.24	16.75	0.11	0.4	0.198	2.35	8.0	15.7	0.87	1950	5.46	0.08	4.7	7.9	870
098429		4.44	17.60	0.12	0.3	0.118	2.37	6.7	9.4	0.74	449	6.09	1.33	5.5	6.6	960
098430		3.71	11.30	0.12	1.6	0.060	0.91	9.6	13.2	0.80	569	349	2.03	3.9	32.4	560
098431		6.00	20.1	0.13	0.4	0.206	1.95	9.5	14.5	1.35	549	4.85	1.06	8.6	24.2	1090
098432		4.55	17.75	0.11	0.4	0.106	2.04	8.0	10.3	0.70	248	3.32	1.65	5.0	6.8	910
098433		4.21	17.35	0.11	0.3	0.129	2.26	7.2	11.6	0.71	337	8.72	1.36	4.8	5.5	950
098434		4.25	17.50	0.14	0.4	0.147	2.37	7.9	17.0	0.76	956	2.24	0.93	5.6	5.6	920
098435		5.82	17.40	0.10	0.4	1.430	2.75	6.5	10.0	0.47	13050	5.80	0.07	4.0	6.4	850
098436		5.20	16.75	0.12	0.3	0.135	2.83	7.0	14.0	0.71	1500	5.19	0.52	4.3	5.3	910
098437		5.30	18.70	0.11	0.3	0.794	3.08	7.9	11.3	0.62	8660	4.08	0.14	4.6	5.9	880
098438		4.68	18.15	0.10	0.2	0.998	2.95	7.5	17.0	0.65	9140	8.53	0.12	5.2	6.3	900
098439		5.54	18.65	0.11	0.3	0.395	2.88	7.4	14.9	0.73	4400	2.24	0.17	4.6	7.4	860
098440		0.16	0.24	0.06	<0.1	0.007	0.02	1.2	1.0	2.67	172	0.16	0.03	0.1	0.6	80
098441		4.79	17.30	0.09	0.4	0.133	2.70	7.1	16.3	0.71	1060	2.17	0.86	5.2	6.3	1020
098442		5.28	20.1	0.10	0.4	0.113	2.25	9.5	14.8	0.99	1280	6.60	1.44	7.7	8.8	1330
098443		4.70	17.40	0.10	0.3	0.190	2.97	9.0	14.3	0.71	4850	5.16	0.07	5.8	9.4	1000
098444		5.21	17.70	0.09	0.4	0.198	2.82	6.8	16.4	0.83	861	7.92	0.13	4.8	13.3	630
098445		4.89	16.65	0.10	0.3	0.234	2.81	6.5	13.9	0.74	545	2.86	0.17	4.7	15.3	670
098446		5.75	18.20	0.09	0.2	0.320	2.94	6.2	9.9	0.73	641	11.20	0.17	3.8	13.5	780
098447		4.96	17.55	0.10	0.3	0.209	3.07	8.1	18.2	0.79	1150	3.44	0.30	5.5	17.7	770
098448		1.08	18.00	0.11	2.9	0.014	2.87	7.7	14.2	0.32	2040	0.65	0.04	14.2	2.1	280
098449		0.90	17.30	0.11	2.8	0.012	2.86	7.5	5.8	0.22	2060	0.41	0.03	13.2	2.0	310
098450		0.90	17.15	0.12	2.8	0.012	2.83	6.4	5.4	0.21	2070	0.52	0.03	13.1	2.0	270
098451		0.98	18.10	0.10	2.9	0.012	3.23	6.3	5.2	0.22	2010	0.32	0.04	13.8	2.2	290
098452		0.94	17.85	0.13	2.8	0.010	3.01	6.2	5.9	0.22	2980	1.90	0.04	14.0	1.9	270

***** See Appendix Page for comments regarding this certificate *****

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To: MAMMOTH GEOLOGICAL LTD.
704- 1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 17- JAN- 2019
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18330137

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOD	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
098413		42.3	102.5	0.132	2.41	7.31	5.2	1	1.0	490	0.34	0.29	4.34	0.175	1.32	0.7
098414		43.6	82.3	0.038	3.33	7.15	5.8	2	1.1	336	0.34	0.33	4.24	0.173	1.19	0.5
098415		34.1	60.0	0.047	3.83	0.63	5.9	2	1.2	597	0.36	0.36	4.58	0.179	0.98	0.5
098416		70.4	70.7	0.077	4.28	1.24	5.6	3	1.3	579	0.31	0.26	4.02	0.173	1.06	0.4
098417		18.0	66.4	0.020	3.01	1.02	5.7	2	1.4	834	0.35	0.38	4.04	0.171	1.02	0.4
098418		20.8	51.9	0.019	2.54	0.73	5.2	2	1.5	727	0.35	0.30	4.18	0.177	0.89	0.4
098419		31.1	64.0	0.020	3.66	0.99	5.2	3	1.7	605	0.30	0.45	4.14	0.156	0.99	0.4
098420		30.5	67.3	0.019	3.66	0.95	5.2	2	1.8	573	0.31	0.40	4.27	0.156	1.09	0.4
098421		128.0	66.4	0.010	3.19	0.95	5.5	2	1.6	571	0.35	0.36	4.54	0.159	1.08	0.4
098422		12.1	58.6	0.005	2.25	0.58	5.4	1	1.3	459	0.38	0.32	4.49	0.165	0.91	0.4
098423		13.6	52.0	0.012	2.50	0.71	5.5	2	1.3	512	0.40	0.32	4.68	0.181	0.86	0.3
098424		30.3	61.2	0.020	4.31	1.35	5.3	4	1.9	511	0.33	0.39	4.20	0.150	0.94	0.4
098425		513	102.5	0.008	1.52	30.9	5.2	2	1.2	209	0.37	0.28	4.64	0.169	1.34	0.5
098426		68.9	77.6	0.044	3.87	3.99	5.4	2	1.7	111.5	0.30	0.45	4.15	0.152	1.17	0.4
098427		13.9	71.7	0.016	2.08	1.99	6.0	2	1.3	141.0	0.39	0.34	3.95	0.197	1.20	0.4
098428		132.5	89.6	0.023	3.96	10.35	5.5	3	1.5	111.0	0.35	0.37	4.39	0.162	1.80	0.5
098429		14.5	65.9	0.037	2.03	1.20	5.6	1	1.1	337	0.38	0.33	4.19	0.174	1.07	0.4
098430		23.5	26.3	0.316	0.42	4.78	10.3	1	2.3	241	0.24	0.20	2.23	0.263	0.27	1.0
098431		15.7	78.3	0.019	2.22	1.21	16.0	2	1.4	131.0	0.47	0.42	3.49	0.359	1.08	0.4
098432		14.4	62.6	0.014	3.37	1.02	5.9	2	1.6	721	0.36	0.41	4.61	0.165	1.00	0.4
098433		15.5	67.3	0.034	2.90	1.23	5.3	2	1.5	341	0.35	0.36	5.51	0.160	1.05	0.4
098434		28.4	77.1	0.010	1.86	8.60	5.5	1	1.0	608	0.39	0.33	4.64	0.176	1.18	0.5
098435		493	113.5	0.022	3.81	24.8	4.9	2	1.9	187.5	0.27	0.38	3.90	0.130	1.49	0.5
098436		63.5	87.6	0.047	2.11	2.94	4.9	2	1.0	193.0	0.32	0.30	4.07	0.147	1.21	0.4
098437		145.5	120.5	0.024	3.43	5.02	5.5	3	1.5	350	0.33	0.34	4.67	0.149	1.49	0.4
098438		54.5	124.0	0.037	1.99	5.68	5.3	2	1.1	309	0.35	0.28	4.38	0.167	1.54	0.4
098439		57.3	112.0	0.013	2.50	4.10	5.1	2	1.2	210	0.34	0.39	4.44	0.153	1.39	0.4
098440		<0.5	0.7	<0.002	0.01	0.06	0.2	1	<0.2	74.7	<0.05	<0.05	0.08	0.005	<0.02	0.1
098441		18.3	76.7	0.006	1.89	0.87	4.9	2	1.0	470	0.36	0.35	4.15	0.163	1.21	0.4
098442		14.0	90.6	0.031	1.49	1.47	7.5	2	0.9	650	0.48	0.21	3.85	0.243	1.25	0.4
098443		454	137.5	0.039	2.14	76.9	6.5	2	1.1	219	0.40	0.35	4.35	0.199	1.79	0.5
098444		33.7	95.7	0.057	2.76	5.72	7.0	2	1.6	210	0.30	0.46	4.21	0.165	1.34	0.4
098445		44.4	111.5	0.014	2.30	1.98	6.8	2	1.5	268	0.28	0.57	3.84	0.162	1.44	0.3
098446		97.9	120.0	0.132	3.01	1.82	5.1	3	2.2	179.5	0.28	0.54	4.10	0.136	1.57	0.4
098447		83.4	128.0	0.011	2.00	16.95	7.8	2	1.2	190.0	0.34	0.28	4.48	0.184	1.70	0.5
098448		163.5	120.0	<0.002	0.08	2.47	1.9	<1	0.8	223	1.36	<0.05	12.25	0.065	1.97	8.2
098449		100.5	125.5	<0.002	0.05	1.45	1.8	<1	0.8	336	1.26	<0.05	10.60	0.073	1.84	6.4
098450		104.5	122.5	<0.002	0.05	1.42	1.7	<1	0.9	302	1.28	<0.05	9.50	0.072	1.90	5.9
098451		161.0	138.0	<0.002	0.05	1.45	1.8	<1	0.9	271	1.31	<0.05	9.60	0.078	2.17	6.9
098452		166.5	133.0	<0.002	0.07	2.16	1.7	<1	0.8	198.5	1.32	<0.05	9.64	0.070	1.98	8.0

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To: MAMMOTH GEOLOGICAL LTD.
704- 1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 17- JAN- 2019
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18330137

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	V	W	Y	Zn	Zr
	Units	ppm	ppm	ppm	ppm	ppm
	LOD	1	0.1	0.1	2	0.5
098413		51	0.4	7.2	231	8.5
098414		58	0.4	7.2	211	9.2
098415		59	0.2	8.4	72	10.6
098416		53	0.3	7.1	144	9.3
098417		60	0.2	7.3	64	9.6
098418		55	0.2	7.0	63	8.8
098419		53	0.3	6.4	119	8.1
098420		53	0.5	6.5	112	8.2
098421		53	0.4	7.1	301	7.5
098422		55	0.4	7.7	51	8.0
098423		56	0.1	7.2	56	7.3
098424		54	0.2	6.5	83	6.9
098425		51	1.3	6.8	920	6.9
098426		54	0.5	6.4	530	7.7
098427		61	0.4	7.5	72	9.2
098428		52	0.8	7.1	292	9.6
098429		55	0.2	6.9	54	8.6
098430		82	1.7	14.7	66	70.2
098431		126	0.3	10.7	62	9.3
098432		54	0.2	7.0	52	9.7
098433		52	0.2	6.5	54	8.3
098434		55	0.2	6.7	98	10.4
098435		53	3.4	6.0	1900	9.3
098436		56	0.3	6.5	265	6.8
098437		53	3.3	7.4	378	7.2
098438		54	6.8	7.4	153	5.9
098439		56	0.9	6.7	193	7.8
098440		1	0.1	2.2	4	1.6
098441		56	0.2	7.2	78	9.1
098442		75	0.7	10.1	85	10.6
098443		63	2.7	7.5	845	9.3
098444		69	0.7	5.7	164	9.9
098445		69	0.3	6.0	239	6.8
098446		56	0.7	6.0	337	4.5
098447		73	1.0	6.8	275	8.8
098448		13	1.5	7.2	557	53.7
098449		14	1.4	6.5	334	55.2
098450		14	1.5	6.0	356	55.1
098451		15	1.6	5.9	533	58.8
098452		13	1.8	6.0	650	55.8

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VANCOUVER BC V6E 4K2

Finalized Date: 17- JAN- 2019
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18330137

Sample Description	Method	WEI- 21	Au- ICP21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu
	Units	kg	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
	LOD	0.02	0.001	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2
098453		11.65	0.008	0.81	5.03	6.2	950	1.55	0.56	2.38	5.93	14.40	1.6	4	6.12	7.1
098454		11.73	0.001	0.42	6.14	6.7	720	1.82	0.35	1.92	3.32	20.5	1.6	5	5.86	6.9
098455		11.93	0.005	0.41	6.19	10.3	680	1.97	0.31	1.71	4.06	19.75	1.7	4	5.82	4.6
098456		6.85	0.013	0.65	6.45	12.3	680	1.88	0.53	1.65	5.79	22.7	1.4	4	5.91	5.8
098457		7.32	0.011	1.18	6.52	61.1	780	1.66	0.53	0.61	3.00	24.7	1.3	6	5.69	150.0
098458		12.38	0.104	81.0	5.82	332	480	0.93	0.64	1.52	12.50	14.00	10.8	14	4.88	3110
098459		12.86	0.079	2.16	6.67	18.1	750	0.98	0.23	2.18	1.15	17.80	10.6	11	4.57	2460
098460		0.14	0.849	2.84	7.96	87.7	650	1.28	0.56	0.50	0.80	35.7	18.4	45	6.39	3490
098461		12.43	0.077	2.36	6.86	9.9	890	1.06	0.20	2.03	0.66	18.40	8.2	13	4.86	2300
098462		12.49	0.075	1.88	6.94	7.0	970	0.99	0.27	2.05	0.83	21.3	7.8	15	4.62	1960
098463		7.49	0.085	4.12	6.31	66.3	630	0.99	0.20	2.82	2.19	16.95	8.4	10	4.85	3310
098464		12.02	0.075	5.45	6.78	91.6	390	1.03	0.36	2.42	3.83	19.90	10.0	11	7.70	2830
098465		9.13	0.121	2.42	6.30	41.5	910	0.87	0.17	2.54	0.57	17.95	9.0	15	5.80	4070
098466		7.60	0.041	1.26	7.41	42.0	970	1.01	0.19	2.48	0.42	27.2	6.2	8	5.46	1400
098467		6.46	0.040	0.97	7.01	37.4	1040	1.10	0.15	2.96	0.45	28.0	6.4	9	6.20	1260
098468		8.62	0.035	0.72	7.39	6.1	1350	1.24	0.16	2.38	1.18	31.7	7.8	11	4.93	938
098469		6.23	0.030	1.04	7.05	8.5	1190	1.13	0.17	2.16	1.16	29.8	8.4	9	4.68	877
098470		0.78	<0.001	0.02	0.68	3.4	40	0.27	0.04	29.4	0.03	1.13	0.9	1	0.06	5.2
098471		9.59	0.050	0.95	7.32	16.1	1030	1.18	0.16	2.46	0.72	27.6	8.5	9	5.78	902
098472		3.93	0.057	1.37	6.92	25.6	120	1.12	0.41	1.85	0.35	28.9	9.2	10	3.99	1270
098473		10.57	0.049	2.39	7.08	71.6	1290	1.09	0.22	2.25	1.06	29.1	9.5	9	5.38	1370
098474		10.99	0.045	2.19	7.03	27.4	1180	1.10	0.18	2.26	0.95	29.7	9.2	8	6.19	1485
098475		6.46	0.047	2.12	6.88	142.0	750	1.06	0.18	2.42	1.31	27.3	12.0	7	4.94	1835
098476		8.39	0.024	1.85	6.93	177.0	1040	1.19	0.22	2.10	1.35	29.1	8.7	8	5.08	901
098477		6.50	0.043	19.00	6.91	306	980	1.16	0.25	1.84	12.25	27.9	9.1	7	7.68	1195
098478		5.53	0.034	2.61	7.35	148.5	1260	1.24	0.49	2.05	3.64	28.5	5.6	8	7.16	834
098479		4.06	0.040	2.73	6.83	113.0	940	1.03	0.29	1.83	0.75	26.2	8.8	8	6.18	1300
098480		5.98	0.041	2.91	7.14	114.0	1190	1.33	0.27	1.98	0.76	27.3	8.0	8	6.72	1200
098481		7.10	0.021	1.68	7.18	211	1170	1.20	0.23	2.02	0.89	28.8	7.4	8	7.47	763
098482		11.09	0.037	1.91	7.21	387	1050	1.27	0.26	1.61	1.43	29.6	9.3	8	14.20	1160
098483		6.73	0.033	0.68	6.95	9.9	1270	1.02	0.22	2.46	0.17	26.4	6.1	9	6.21	1125
098484		10.89	0.053	1.29	7.21	9.0	650	1.07	0.88	2.09	0.12	21.8	9.3	10	4.35	1970
098485		4.62	0.041	1.08	7.39	17.5	1210	1.16	0.45	2.07	0.40	25.8	7.7	9	4.55	1690
098486		4.41	0.053	3.29	7.40	19.9	1060	1.14	2.91	2.28	0.17	29.8	8.7	9	5.14	2390
098487		10.60	0.039	3.58	7.26	78.8	1050	1.17	2.52	2.32	1.91	27.2	6.2	8	6.78	1105
098488		10.82	0.021	1.14	7.28	61.4	1300	1.38	0.29	2.48	1.59	32.9	8.2	9	6.01	703
098489		6.94	0.030	1.39	7.23	216	1160	1.70	0.23	2.16	0.64	30.1	10.2	9	6.97	986
098490		0.13	1.065	1.55	5.31	13.4	550	0.63	0.48	1.69	0.37	19.40	8.7	43	0.81	3310
098491		9.29	0.013	0.44	7.47	12.7	1470	1.08	0.14	2.45	0.12	30.4	5.7	9	4.88	491
098492		9.65	0.010	0.40	7.64	23.9	1310	1.20	0.10	2.44	0.15	31.2	6.2	8	6.17	316

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Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Fe	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOD	0.01	0.05	0.05	0.1	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
098453		0.98	17.25	0.13	2.7	0.020	2.72	6.4	5.1	0.26	5280	2.38	0.03	13.0	1.9	240
098454		1.04	16.80	0.09	2.8	0.015	2.96	9.4	5.2	0.32	3580	1.53	0.03	12.7	2.2	290
098455		1.03	17.00	0.09	2.5	0.017	3.05	8.7	4.7	0.34	3140	1.65	0.03	12.3	2.1	300
098456		1.12	16.70	0.08	2.8	0.075	2.95	10.9	9.0	0.45	4660	2.23	0.04	12.8	1.9	280
098457		1.36	17.00	0.09	2.6	0.114	4.36	12.0	20.7	0.25	7020	1.58	0.07	12.9	2.5	330
098458		6.10	17.55	0.08	0.5	0.163	2.86	6.1	17.6	0.62	11700	17.70	0.09	4.3	9.7	810
098459		5.39	19.65	0.08	0.6	0.102	2.49	7.0	26.7	0.78	1750	5.59	1.04	5.3	7.7	1120
098460		4.87	17.60	0.13	0.9	0.051	5.21	19.3	11.7	0.80	487	158.0	1.13	4.2	26.8	1100
098461		4.76	19.35	0.10	0.7	0.108	2.24	7.4	16.6	0.76	2000	2.69	1.83	5.6	7.1	1150
098462		4.80	18.95	0.09	0.7	0.109	2.23	8.5	8.8	0.78	1060	2.98	2.10	5.9	6.6	1260
098463		5.26	17.65	0.08	0.5	0.119	2.46	6.8	26.9	0.90	2830	6.80	0.19	5.2	6.8	1080
098464		6.08	20.0	0.08	0.5	0.139	2.24	8.2	27.6	0.92	3350	7.17	0.07	4.9	7.1	1170
098465		4.99	16.95	0.07	0.6	0.119	2.14	7.8	44.1	0.92	1280	2.18	0.09	5.0	9.1	1030
098466		4.14	19.15	0.09	0.7	0.057	2.42	11.5	85.0	0.83	745	2.10	0.20	4.9	5.7	1260
098467		3.95	19.80	0.09	0.9	0.054	2.32	12.0	105.5	0.92	771	6.82	0.46	5.4	6.0	1280
098468		3.98	19.40	0.10	1.1	0.043	2.30	13.9	14.9	0.75	646	4.89	2.18	5.8	5.7	1360
098469		4.41	18.10	0.08	1.0	0.043	2.29	13.0	30.6	0.76	908	2.15	1.65	5.0	5.6	1290
098470		0.19	2.11	<0.05	0.2	<0.005	0.04	1.1	1.8	3.00	155	0.11	0.47	0.4	0.5	70
098471		4.11	19.40	0.08	1.0	0.045	2.21	11.3	60.0	0.76	731	2.28	0.24	5.1	5.4	1340
098472		6.49	20.5	0.08	1.0	0.058	2.45	12.4	35.7	0.63	483	5.22	1.26	3.8	5.5	1240
098473		4.26	19.10	0.07	1.0	0.064	2.58	12.1	28.1	0.70	2220	2.24	1.43	5.4	5.6	1280
098474		4.10	18.75	0.07	0.9	0.052	2.61	12.2	23.3	0.72	2720	1.77	1.59	5.5	5.3	1250
098475		4.84	18.95	0.10	0.8	0.069	2.28	11.3	85.8	0.73	1800	1.60	0.29	5.0	5.4	1220
098476		4.10	18.30	0.10	0.8	0.052	2.56	12.4	81.5	0.69	1220	1.69	0.24	4.8	5.0	1260
098477		4.32	17.65	0.08	1.2	0.064	3.19	13.1	17.2	0.78	5850	2.90	0.06	4.6	5.6	1070
098478		4.50	18.85	0.09	1.1	0.126	3.25	12.4	63.5	0.75	2170	2.47	0.35	5.0	4.9	1180
098479		5.34	18.30	0.08	0.9	0.049	2.67	12.0	101.0	0.67	2370	3.53	0.78	4.2	5.2	1040
098480		5.01	19.30	0.09	1.0	0.050	2.73	12.1	115.5	0.70	2570	3.13	0.78	4.6	5.2	1090
098481		4.32	18.20	0.08	1.1	0.047	2.75	12.8	104.0	0.72	1890	4.02	0.92	4.8	5.2	1160
098482		4.95	18.75	0.11	1.2	0.061	2.71	14.0	127.0	0.72	1560	3.04	0.08	4.2	6.5	1100
098483		3.81	19.25	0.09	0.7	0.051	2.22	11.0	37.3	0.79	851	1.13	1.36	5.5	4.9	1290
098484		4.96	19.45	0.10	0.7	0.096	2.51	9.4	14.2	0.73	322	1.78	2.21	5.1	5.8	1180
098485		4.49	19.85	0.10	0.8	0.076	2.51	11.1	18.8	0.73	534	1.79	1.83	5.1	5.4	1200
098486		4.50	20.7	0.09	1.0	0.102	2.61	12.7	21.8	0.80	753	2.23	1.04	5.2	5.3	1240
098487		3.97	19.85	0.10	0.8	0.090	2.79	11.2	51.1	0.78	1780	3.44	0.80	5.7	4.9	1280
098488		3.67	19.95	0.11	1.2	0.056	2.51	14.6	50.6	0.73	1130	3.13	1.67	5.8	5.1	1250
098489		3.78	20.0	0.09	1.2	0.073	2.49	12.0	349	0.72	1590	3.03	0.46	5.3	5.7	1230
098490		3.70	9.90	0.10	1.5	0.058	0.92	9.3	13.2	0.81	569	345	2.01	3.5	31.2	550
098491		3.54	17.05	0.12	1.1	0.030	2.39	14.5	51.2	0.73	465	4.11	2.21	5.5	4.6	1270
098492		3.68	17.00	0.12	1.1	0.025	2.51	14.6	158.0	0.76	827	5.09	0.65	6.3	4.3	1340

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To: MAMMOTH GEOLOGICAL LTD.
704- 1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 17- JAN- 2019
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18330137

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOD	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
098453		171.0	124.5	<0.002	0.09	1.51	1.7	<1	0.8	141.5	1.27	<0.05	10.25	0.066	1.88	8.4
098454		95.7	151.5	<0.002	0.06	1.50	2.0	<1	0.9	130.0	1.24	<0.05	12.20	0.075	2.10	7.9
098455		98.0	154.5	<0.002	0.06	1.62	2.0	<1	0.8	175.5	1.19	<0.05	11.45	0.080	2.18	7.5
098456		141.0	157.5	<0.002	0.09	1.95	2.0	<1	0.8	230	1.29	<0.05	14.20	0.067	2.01	10.0
098457		126.5	190.5	<0.002	0.12	15.25	2.4	<1	0.9	211	1.25	<0.05	14.45	0.075	3.08	9.1
098458		767	109.0	0.087	3.91	179.0	5.3	3	1.8	168.0	0.30	0.48	3.56	0.151	1.38	0.7
098459		50.6	65.9	0.021	2.71	1.64	6.1	2	1.5	419	0.37	0.23	3.64	0.188	1.07	0.6
098460		45.3	116.5	0.372	2.77	8.18	13.4	8	3.0	254	0.28	1.18	2.82	0.270	1.63	1.2
098461		46.4	71.9	0.011	1.79	5.29	6.2	2	1.2	753	0.38	0.22	3.85	0.202	1.05	0.6
098462		19.2	67.7	0.011	2.19	1.16	6.0	2	1.1	1095	0.40	0.20	3.94	0.202	0.98	0.7
098463		83.4	63.9	0.029	2.86	8.14	5.5	2	1.3	214	0.37	0.23	3.42	0.180	1.11	0.6
098464		238	76.3	0.027	3.49	27.3	6.3	2	2.3	125.5	0.34	0.40	3.59	0.190	1.03	0.7
098465		25.3	50.6	0.006	2.14	2.71	6.2	1	1.3	172.0	0.32	0.19	3.10	0.195	0.90	0.8
098466		18.7	61.5	0.012	1.65	1.59	5.5	1	1.5	167.0	0.36	0.19	4.63	0.187	0.99	1.0
098467		17.5	52.9	0.018	1.10	1.65	5.4	<1	1.1	240	0.38	0.18	4.14	0.191	1.00	1.1
098468		38.5	60.4	0.004	1.35	0.83	5.8	<1	1.1	2690	0.42	0.20	4.59	0.209	0.89	1.5
098469		40.9	61.2	0.002	2.19	0.89	5.6	1	1.3	1715	0.36	0.21	4.51	0.191	0.88	1.4
098470		0.9	1.2	<0.002	0.02	0.11	0.2	2	<0.2	76.9	0.06	<0.05	0.45	0.005	0.02	0.8
098471		39.3	50.2	0.002	1.36	2.24	5.5	<1	1.3	130.0	0.37	0.16	4.18	0.202	1.00	1.3
098472		29.1	72.4	0.008	6.04	0.97	5.6	2	3.4	651	0.25	0.26	4.31	0.152	0.98	1.5
098473		50.0	74.6	0.005	1.56	3.12	5.6	1	1.1	641	0.38	0.19	4.12	0.194	1.12	1.3
098474		38.5	77.1	0.002	1.42	1.86	5.5	1	1.1	759	0.38	0.14	4.15	0.197	1.12	1.2
098475		43.2	57.5	0.004	2.54	9.79	5.3	2	1.3	273	0.35	0.20	3.98	0.185	1.03	0.9
098476		81.8	69.6	0.003	2.15	7.46	5.4	1	1.9	226	0.33	0.17	4.48	0.175	1.16	1.2
098477		486	155.0	0.009	2.05	62.3	5.4	1	1.4	336	0.32	0.17	5.03	0.197	1.73	1.6
098478		209	137.0	0.003	1.96	5.72	5.5	1	1.4	367	0.37	0.23	5.50	0.181	1.85	1.4
098479		39.2	96.2	0.005	2.25	2.52	5.4	1	1.3	456	0.33	0.18	5.07	0.164	1.33	1.4
098480		42.5	97.7	0.005	1.89	2.71	5.7	1	1.4	340	0.34	0.15	5.21	0.174	1.34	1.4
098481		85.2	92.9	0.012	1.78	18.55	5.5	2	1.1	621	0.36	0.15	5.20	0.174	1.43	1.7
098482		30.8	112.0	0.004	2.28	111.0	5.6	1	1.8	569	0.31	0.16	5.26	0.179	1.53	1.5
098483		16.8	56.5	<0.002	0.78	1.71	5.6	1	1.0	764	0.39	0.16	4.13	0.199	0.96	1.0
098484		12.5	66.0	0.004	2.96	0.66	5.6	2	1.6	732	0.40	0.61	5.30	0.187	0.94	1.0
098485		16.1	75.7	0.002	2.11	0.87	5.8	1	2.2	698	0.39	0.32	5.42	0.191	1.03	1.3
098486		17.3	77.3	0.005	2.51	1.37	5.7	1	2.9	502	0.37	1.11	5.35	0.190	1.16	1.7
098487		86.4	85.5	0.005	1.65	3.62	5.5	1	1.7	225	0.44	0.27	4.81	0.201	1.29	1.2
098488		71.2	76.3	0.004	1.34	3.40	5.6	1	1.6	982	0.40	0.16	5.26	0.198	1.09	1.6
098489		17.1	70.1	0.002	1.79	34.3	5.5	1	1.6	271	0.39	0.16	4.88	0.190	1.18	1.4
098490		24.3	25.4	0.309	0.41	4.65	9.3	2	2.0	238	0.21	0.20	1.96	0.260	0.25	0.9
098491		14.1	56.6	0.004	0.74	1.07	5.2	<1	0.9	1210	0.38	0.13	4.78	0.210	0.92	1.7
098492		10.3	57.4	0.011	0.70	4.12	5.4	<1	0.9	235	0.44	0.09	4.92	0.230	1.02	1.4

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To: MAMMOTH GEOLOGICAL LTD.
704- 1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 17- JAN- 2019
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18330137

Sample Description	Method Analyte Units LOD	ME- MS61 V ppm 1	ME- MS61 W ppm 0.1	ME- MS61 Y ppm 0.1	ME- MS61 Zn ppm 2	ME- MS61 Zr ppm 0.5
098453		13	2.0	6.2	994	53.1
098454		14	1.9	7.7	589	55.4
098455		15	2.1	7.4	691	53.5
098456		12	1.8	7.8	985	52.4
098457		16	3.2	8.5	533	50.7
098458		65	2.3	6.2	1780	10.9
098459		67	0.3	7.5	194	15.0
098460		173	28.7	13.8	131	27.0
098461		65	0.7	7.8	135	15.4
098462		66	0.4	8.6	167	16.2
098463		63	2.9	7.5	384	12.5
098464		64	1.2	8.0	580	12.9
098465		65	0.9	7.2	137	16.0
098466		63	0.5	8.0	98	18.0
098467		63	0.4	8.6	116	24.4
098468		68	0.4	9.9	156	29.5
098469		65	0.8	8.9	151	25.9
098470		1	0.1	3.4	5	3.4
098471		65	1.3	8.8	120	27.5
098472		60	0.7	8.2	70	28.2
098473		64	1.6	8.7	169	27.6
098474		63	0.8	8.8	161	24.7
098475		64	2.6	7.8	202	22.7
098476		61	1.2	8.1	214	22.8
098477		61	1.0	8.4	1910	39.2
098478		59	1.2	8.3	628	27.9
098479		60	0.6	8.2	160	24.5
098480		61	0.6	8.5	168	26.0
098481		60	0.7	8.5	187	29.5
098482		63	1.1	7.5	290	27.5
098483		63	0.3	8.6	65	17.6
098484		57	1.0	8.4	44	19.1
098485		60	0.7	8.7	93	22.2
098486		64	1.9	8.6	60	27.0
098487		61	1.4	8.4	324	22.7
098488		62	0.6	9.5	270	36.2
098489		60	0.6	8.3	129	33.2
098490		82	1.5	13.5	67	49.4
098491		64	0.3	9.0	55	34.6
098492		65	0.8	8.6	73	35.1

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To: MAMMOTH GEOLOGICAL LTD.
704- 1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 17- JAN- 2019
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18330137

Sample Description	Method	WEI- 21	Au- ICP21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu
	Units	kg	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
	LOD	0.02	0.001	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2
098493		8.04	0.016	0.85	7.35	86.4	1140	1.53	0.16	2.49	0.47	28.2	9.3	9	7.24	642
098494		10.36	0.012	0.70	7.65	25.9	1250	1.02	0.12	2.36	0.18	31.0	7.6	8	6.33	484
098495		10.81	0.021	4.02	7.53	143.5	1240	1.21	0.21	2.15	3.58	33.2	6.8	8	7.63	503
098496		9.78	0.035	2.43	7.52	294	840	1.02	0.26	2.25	1.67	31.4	9.0	8	5.90	976
098497		5.09	0.048	2.01	7.52	372	780	1.31	0.33	2.44	2.48	28.8	7.6	7	8.88	972
098498		3.17	0.003	0.61	7.43	48.8	600	1.45	0.19	3.70	0.74	31.7	10.2	8	9.98	115.0
098499		3.53	0.037	3.02	7.49	175.5	900	1.16	0.31	2.89	2.14	28.1	8.4	7	10.20	1035
098500		0.97	<0.001	0.03	0.05	0.3	20	0.06	0.01	33.4	0.02	0.99	0.8	1	0.10	3.2
098801		11.53	0.036	2.10	7.47	124.5	1120	1.12	0.94	2.40	0.98	33.0	6.3	9	7.40	890
098802		11.25	0.045	1.90	7.11	100.5	1130	0.97	0.44	2.47	1.86	29.0	5.6	9	5.11	1145
098803		11.86	0.027	1.49	7.46	30.9	1000	0.95	0.25	2.57	0.89	34.9	5.8	9	6.17	934
098804		11.59	0.025	1.46	7.65	21.8	1130	0.96	0.68	2.48	0.87	31.6	5.6	12	4.65	831
098805		11.62	0.025	1.30	7.25	75.5	1080	0.99	0.21	2.49	1.10	28.9	6.6	11	4.69	854
098806		11.99	0.023	0.94	7.40	19.1	1160	1.06	0.18	2.66	0.52	31.8	6.2	12	4.43	708
098807		4.93	0.026	0.80	7.57	18.9	1230	1.04	0.15	2.36	0.27	26.2	5.7	9	5.52	897
098808		11.24	0.044	2.61	7.65	26.0	990	1.22	0.99	2.56	1.64	31.7	7.8	8	8.44	1025
098809		3.19	0.044	4.11	7.15	398	540	1.15	1.26	2.57	3.86	31.9	7.7	8	6.71	1175
098810		4.33	0.039	4.09	7.58	403	960	1.31	1.19	3.02	4.01	35.1	7.9	8	7.95	1180
098811		11.30	0.053	3.34	7.65	157.5	1060	1.18	0.33	2.27	2.46	25.1	9.6	11	5.15	2030
098812		7.81	0.030	2.33	7.41	122.5	940	1.11	0.59	2.51	1.37	29.4	7.9	9	4.86	881
098813		7.39	0.048	1.70	7.74	188.0	1130	1.27	0.27	2.21	0.59	26.1	7.6	15	4.65	1400

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Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Fe	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOD	0.01	0.05	0.05	0.1	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
098493		3.70	17.85	0.12	1.0	0.040	2.54	13.0	308	0.77	1180	2.36	0.30	6.1	4.9	1300
098494		3.49	17.95	0.14	1.0	0.028	2.59	14.6	38.3	0.76	770	2.95	1.06	6.2	4.7	1320
098495		3.50	17.05	0.12	0.9	0.079	3.04	16.0	68.9	0.72	6200	3.35	0.50	6.1	4.6	1250
098496		3.47	16.80	0.14	0.5	0.053	3.21	15.3	69.6	0.83	1440	11.40	0.50	5.1	4.8	1220
098497		3.33	17.90	0.12	0.5	0.066	3.72	12.9	45.5	0.83	2370	6.10	0.41	6.0	4.7	1260
098498		3.27	18.30	0.12	2.7	0.036	4.19	14.6	16.0	1.08	2330	1.76	0.26	7.3	9.9	1520
098499		3.29	17.70	0.13	1.2	0.071	3.69	12.8	40.6	0.86	2240	5.35	0.79	6.9	5.8	1330
098500		0.19	0.23	0.13	<0.1	<0.005	0.02	1.1	1.2	3.36	172	0.06	0.02	0.1	0.6	60
098801		3.80	17.80	0.10	0.7	0.101	3.61	15.7	69.0	0.76	4120	1.22	0.39	6.5	4.6	1300
098802		3.11	16.85	0.12	0.7	0.056	3.18	13.2	40.6	0.76	1310	2.20	0.81	6.4	4.4	1230
098803		3.55	17.25	0.13	0.7	0.042	3.01	16.3	19.0	0.86	994	1.57	0.94	6.3	4.5	1280
098804		3.72	17.25	0.12	0.7	0.049	2.98	14.7	24.5	0.78	877	1.07	1.56	6.2	4.4	1310
098805		3.14	16.85	0.13	0.7	0.032	2.78	13.2	36.6	0.77	876	1.49	1.81	6.4	4.5	1260
098806		3.32	17.25	0.11	0.8	0.038	2.81	15.1	22.5	0.73	823	0.82	2.07	6.6	4.6	1260
098807		3.31	17.65	0.12	0.6	0.034	2.88	11.6	17.8	0.78	872	1.58	1.69	6.8	4.6	1340
098808		3.66	19.05	0.12	0.6	0.102	3.40	14.6	38.9	0.82	3120	2.59	0.29	7.2	5.4	1320
098809		4.19	16.80	0.12	0.6	0.118	3.28	15.3	62.9	0.86	2450	1.59	0.07	5.4	4.3	1210
098810		4.01	17.40	0.13	0.6	0.145	3.39	17.6	90.7	0.97	2810	1.26	0.07	6.0	4.7	1220
098811		4.00	17.55	0.12	0.5	0.060	3.32	11.4	91.3	0.77	1860	1.33	1.13	6.0	5.2	1330
098812		3.82	17.40	0.14	0.5	0.061	3.19	13.4	25.6	0.85	1710	0.81	0.74	6.1	4.4	1290
098813		3.53	17.55	0.14	0.4	0.044	3.08	12.0	121.0	0.76	1000	0.92	1.42	6.3	4.9	1320

***** See Appendix Page for comments regarding this certificate *****

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704- 1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 17- JAN- 2019
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18330137

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOD	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
098493		17.0	67.7	0.002	1.19	14.90	5.7	<1	1.2	367	0.40	0.10	4.79	0.218	1.15	1.5
098494		13.6	68.6	0.004	0.84	2.46	5.6	<1	0.9	487	0.44	0.09	5.15	0.222	1.12	1.6
098495		176.5	115.0	0.005	1.05	27.2	5.6	1	0.9	315	0.42	0.09	5.27	0.214	1.50	1.6
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098497		135.0	128.5	0.019	1.98	26.6	5.6	1	1.3	325	0.42	0.23	4.99	0.204	1.87	0.8
098498		50.5	122.5	<0.002	0.26	8.45	6.4	<1	0.8	412	0.44	<0.05	3.56	0.373	2.40	1.9
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098500		1.2	1.0	<0.002	0.03	0.11	0.2	1	<0.2	76.3	<0.05	<0.05	0.06	0.005	0.02	0.1
098801		51.9	133.5	0.002	2.09	14.15	5.7	1	1.7	1090	0.46	0.25	5.18	0.221	1.74	1.1
098802		37.4	91.0	0.007	1.66	9.62	5.1	1	1.3	527	0.44	0.24	4.58	0.214	1.40	0.9
098803		42.2	101.5	0.005	2.22	2.66	5.7	1	1.5	378	0.43	0.17	5.25	0.210	1.35	1.0
098804		67.2	94.5	0.002	2.22	0.98	5.5	1	1.5	867	0.41	0.17	5.05	0.219	1.23	1.0
098805		57.9	84.1	0.004	2.02	1.55	5.5	1	1.0	629	0.43	0.15	4.83	0.207	1.18	1.0
098806		56.9	81.4	<0.002	1.82	0.98	5.5	1	1.0	747	0.47	0.11	4.99	0.213	1.11	1.1
098807		24.5	83.0	0.005	0.93	0.92	5.6	1	0.8	1340	0.47	0.10	4.51	0.230	1.20	0.7
098808		127.0	122.0	0.005	1.81	3.12	6.1	1	1.7	263	0.49	0.32	5.35	0.232	1.58	0.9
098809		266	143.5	0.002	2.72	102.0	5.4	1	1.8	271	0.38	0.26	5.14	0.176	1.54	1.1
098810		208	160.5	0.002	2.19	106.5	5.8	1	1.4	356	0.41	0.25	5.66	0.196	1.67	1.1
098811		153.5	121.0	0.002	2.32	6.41	5.9	1	1.4	1080	0.43	0.19	4.76	0.213	1.45	0.8
098812		100.5	112.5	<0.002	1.89	6.89	5.5	1	1.6	366	0.42	0.16	4.53	0.207	1.43	0.8
098813		50.1	95.3	0.002	1.68	4.77	5.9	1	1.0	486	0.43	0.17	4.95	0.216	1.23	0.7

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Finalized Date: 17- JAN- 2019
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS TR18330137

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	V	W	Y	Zn	Zr
	Units	ppm	ppm	ppm	ppm	ppm
	LOD	1	0.1	0.1	2	0.5
098493		63	1.8	7.8	117	31.3
098494		65	0.6	9.9	70	31.4
098495		60	2.0	8.6	662	28.2
098496		57	0.6	7.5	327	15.0
098497		64	0.9	7.5	464	14.5
098498		99	1.3	9.2	284	108.0
098499		73	1.0	8.2	451	44.8
098500		1	<0.1	2.0	6	1.5
098801		67	2.5	8.8	203	21.0
098802		62	1.1	7.5	337	20.4
098803		66	0.9	8.6	173	17.6
098804		66	1.9	8.5	189	19.4
098805		64	0.7	8.4	214	20.7
098806		66	0.7	9.1	125	21.3
098807		64	0.7	7.9	83	15.7
098808		65	3.7	9.0	323	16.6
098809		58	3.3	8.4	550	15.5
098810		59	3.0	8.9	571	15.9
098811		63	1.2	7.4	470	12.8
098812		63	2.8	7.9	281	14.1
098813		64	0.9	7.5	158	12.1

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Project: Poplar

CERTIFICATE OF ANALYSIS TR18330137

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

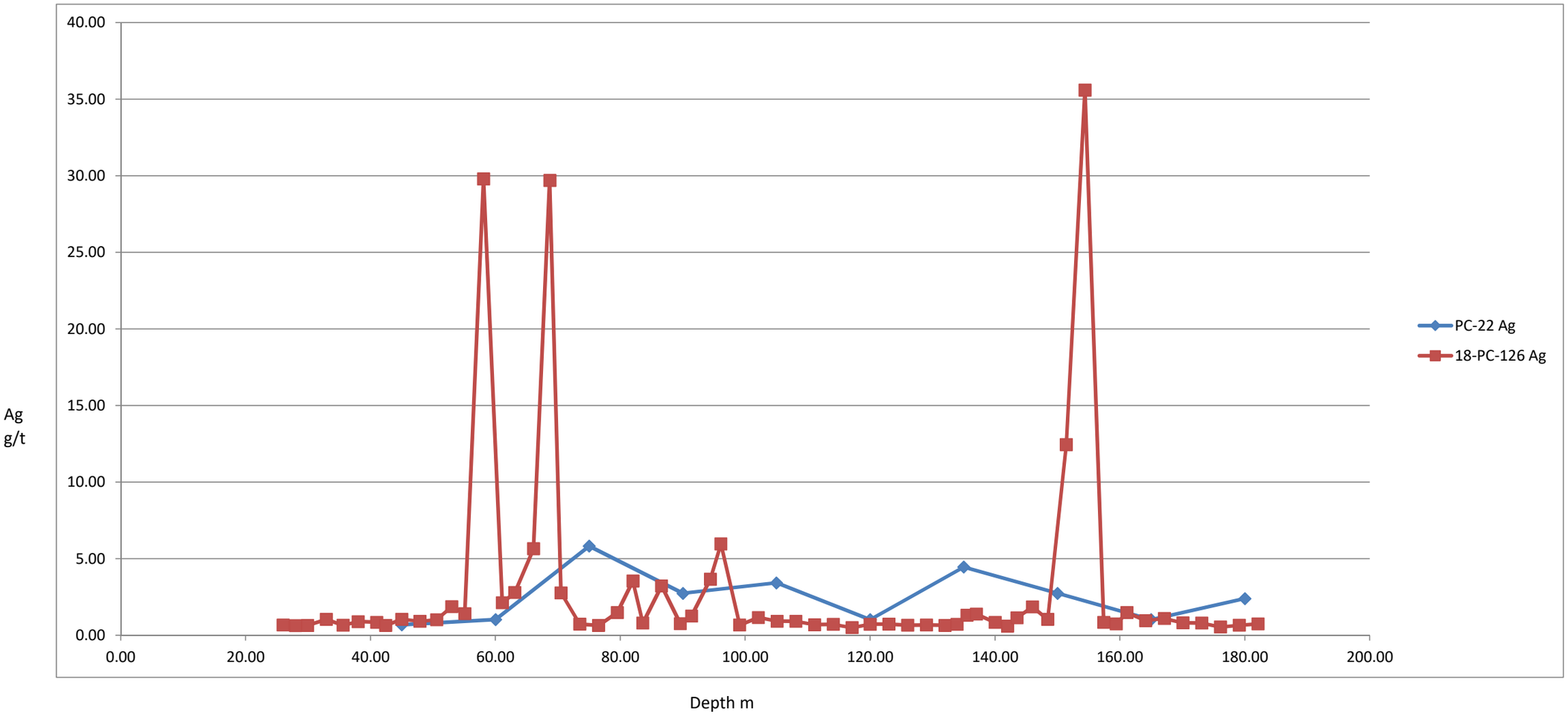
Applies to Method: Processed at ALS Terrace located at 2912 Molitor Street, Terrace, BC, Canada.

CRU- 31	CRU- QC	LOG- 22	LOG- 24
PUL- 31	PUL- QC	SPL- 21	WEI- 21

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Au- ICP21	ME- MS61

Appendix 5: Comparisons of Historic and Twinned Assays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100.00
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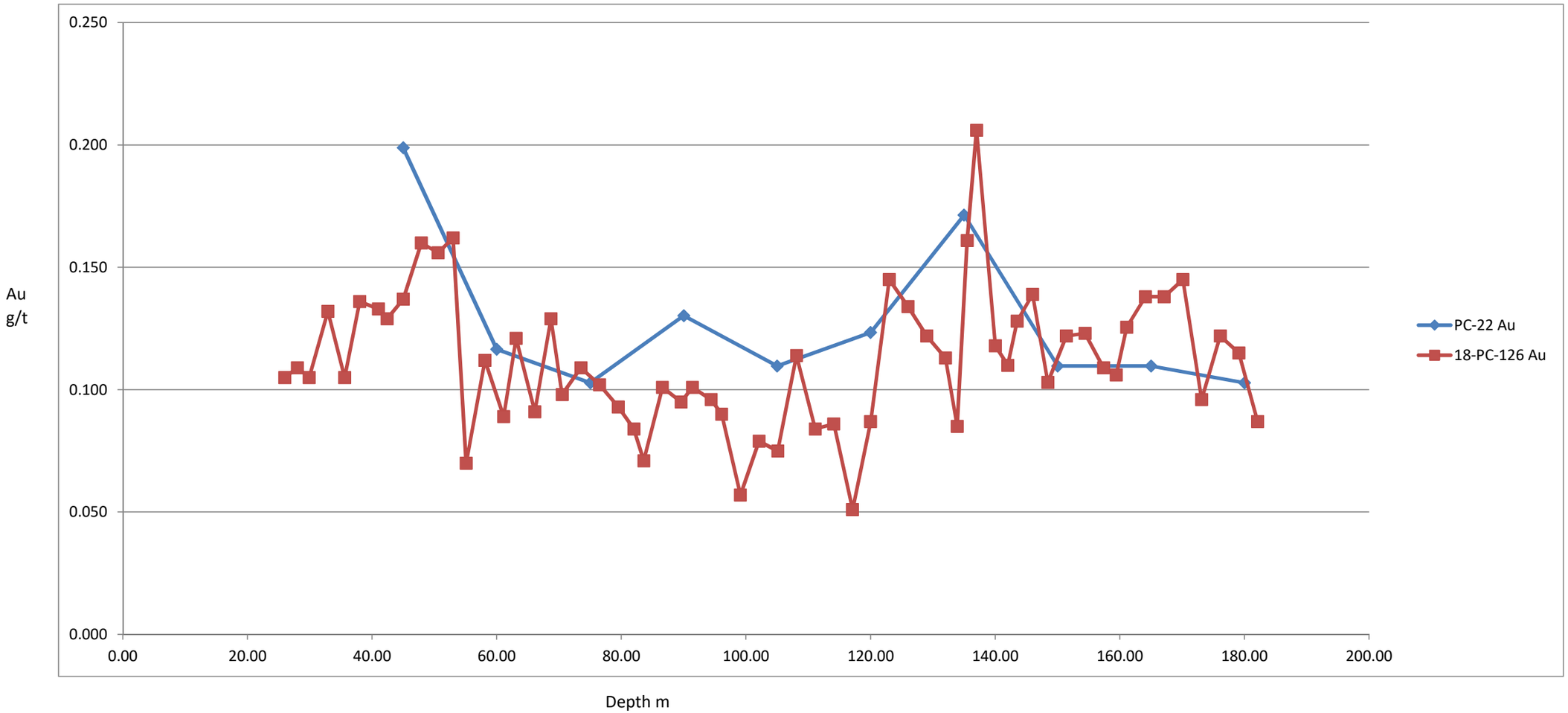
180.00
200.00
Depth m
PC-22 Ag
18-PC-126 Ag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20.00
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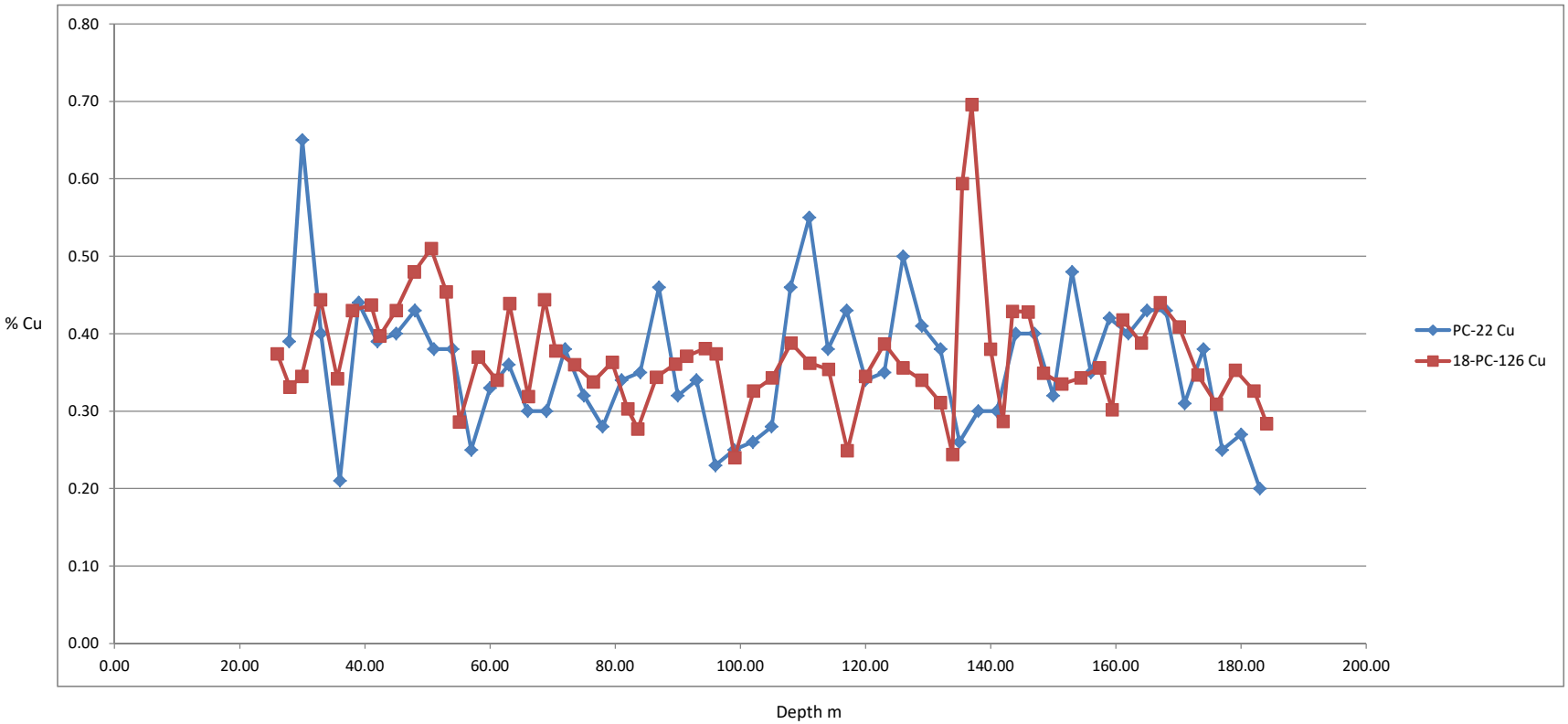
180.00
200.00
Depth m
PC-22 Au
18-PC-126 Au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0.50
0.40
0.30
0.20
0.10
0.00
% Cu
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20.00
40.00
60.00
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120.00
140.00
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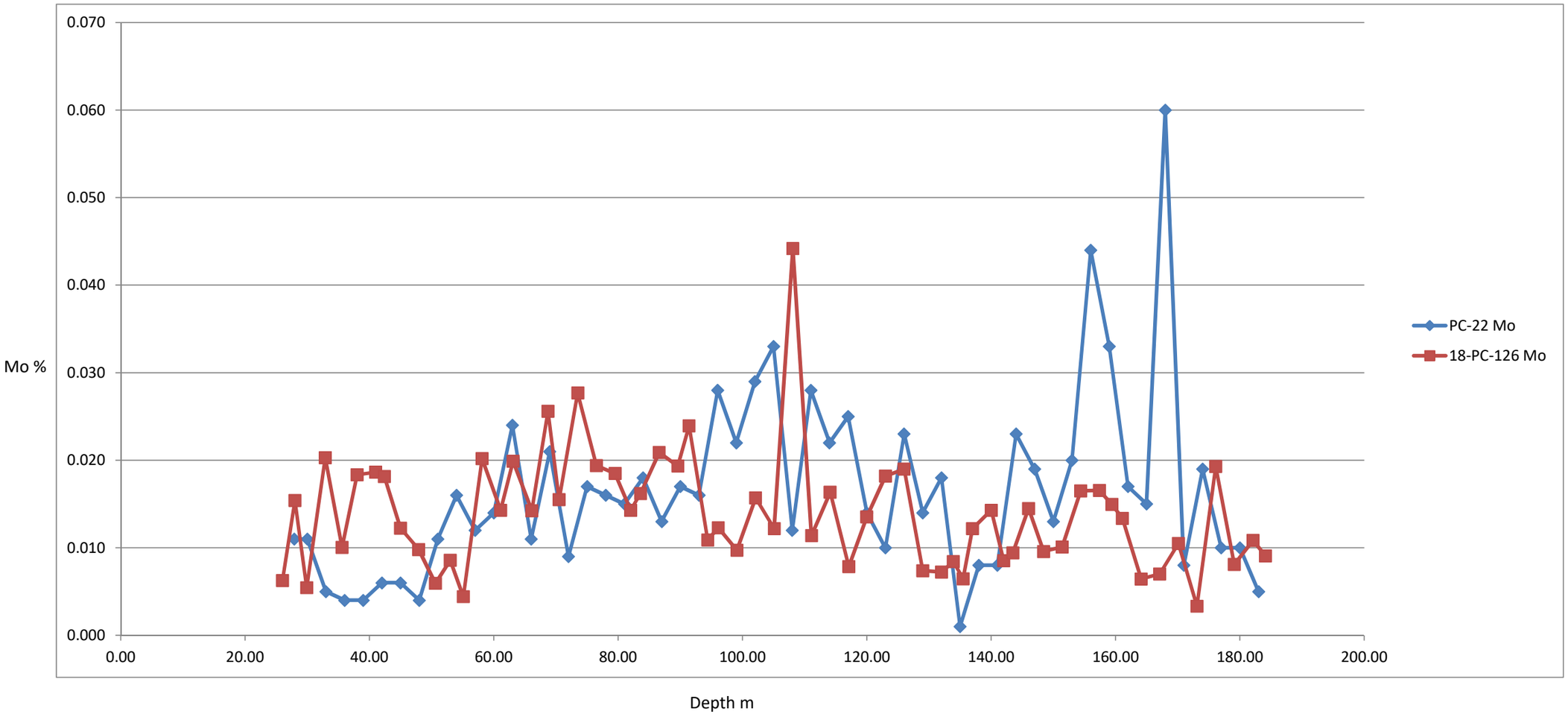
200.00
Depth m
PC-22 Cu
18-PC-126 Cu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0.050
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Mo %
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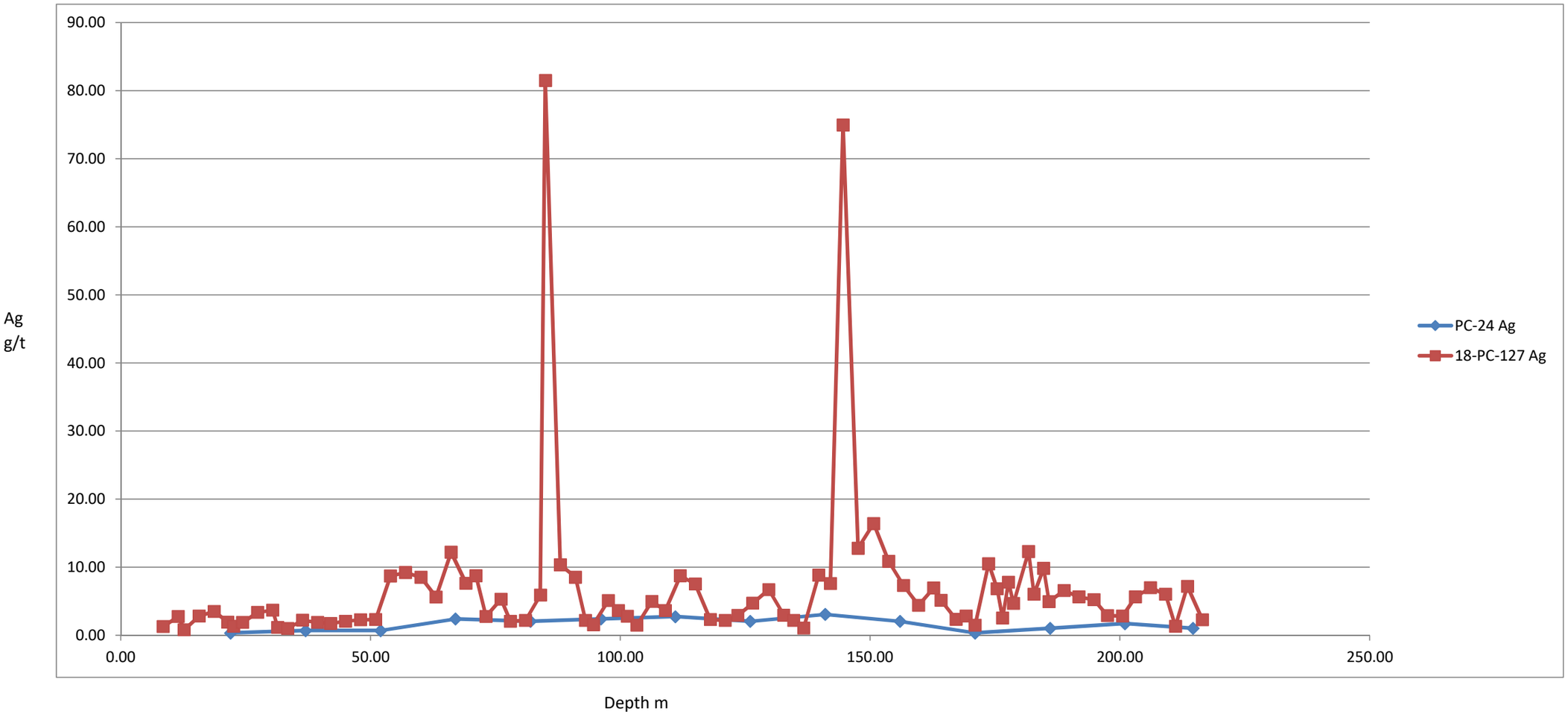
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Depth m
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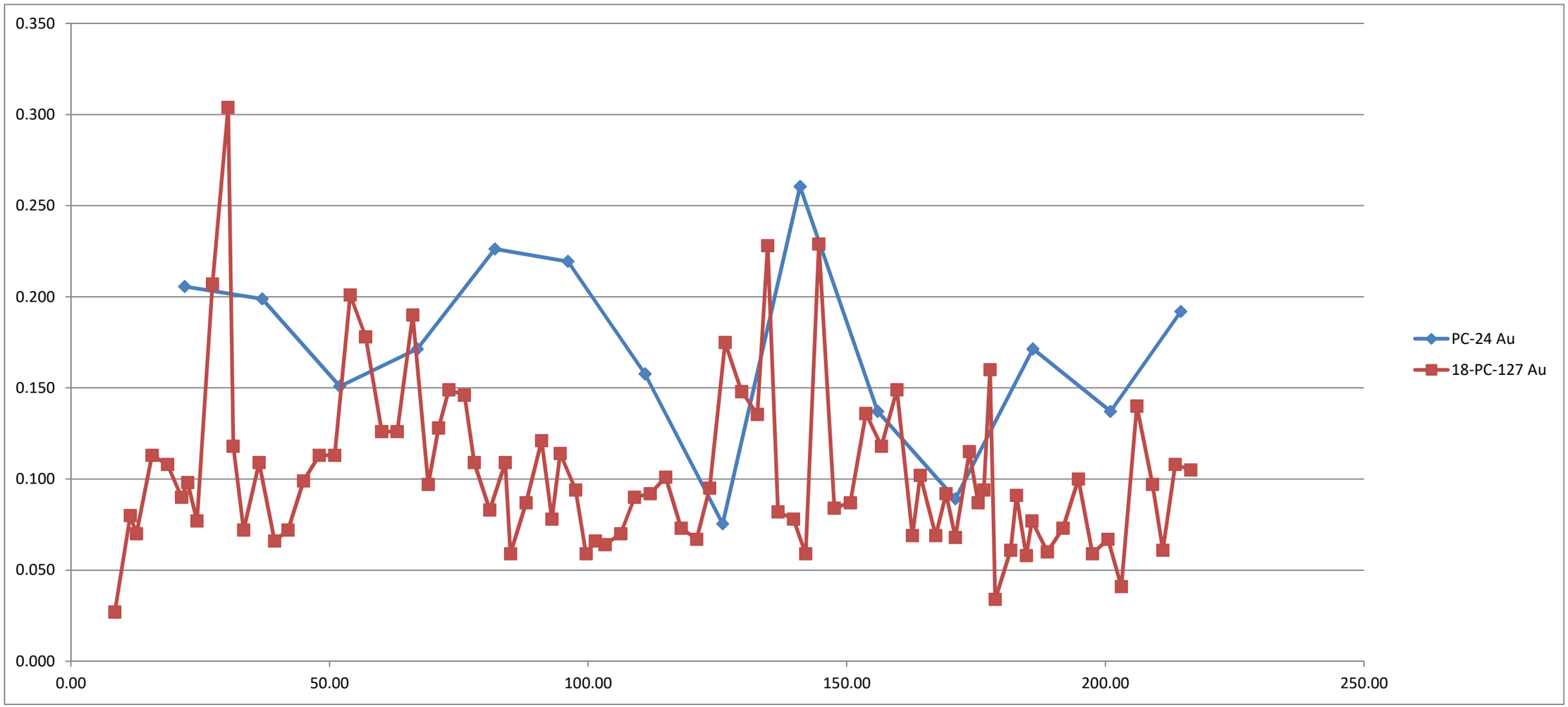
18-PC-127 Ag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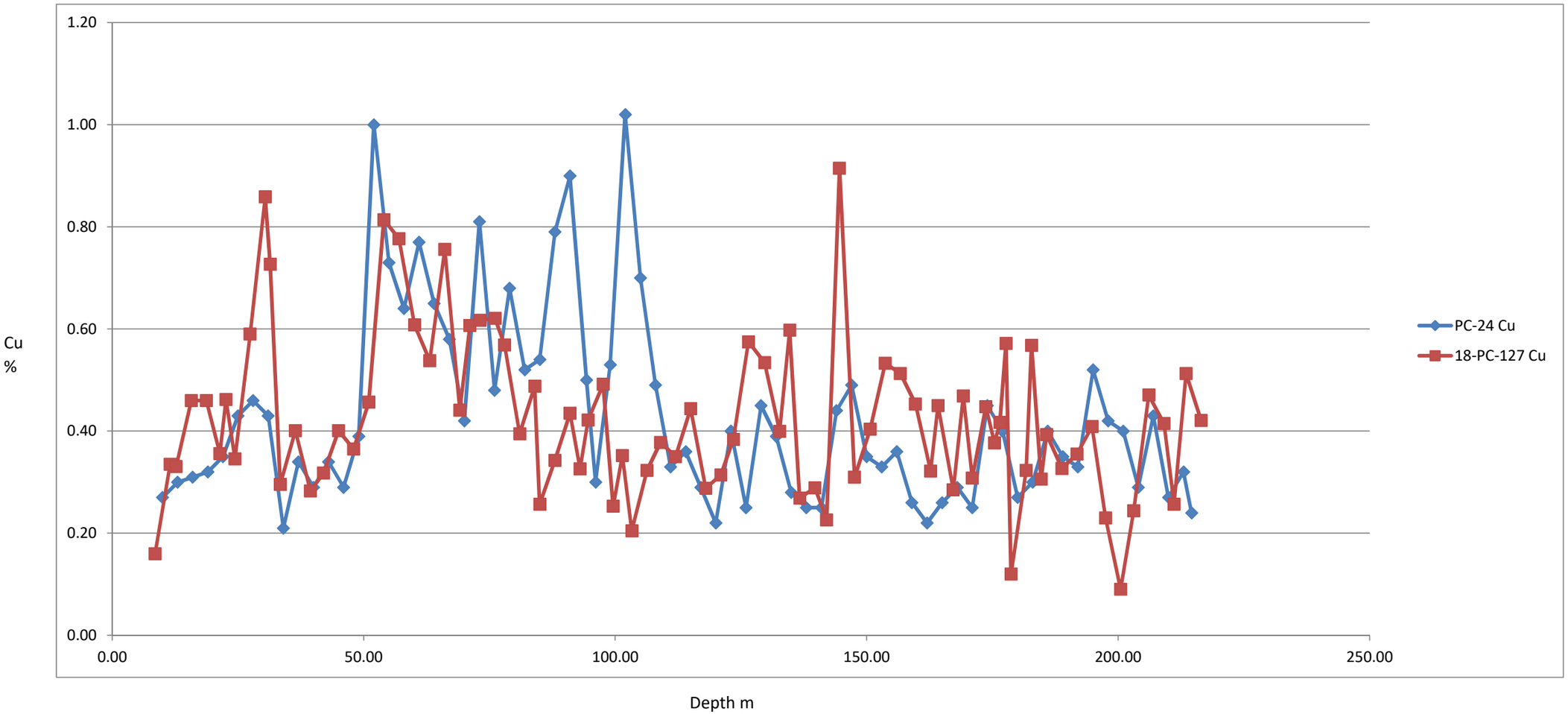
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Cu
%
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200.00
250.00
Depth m
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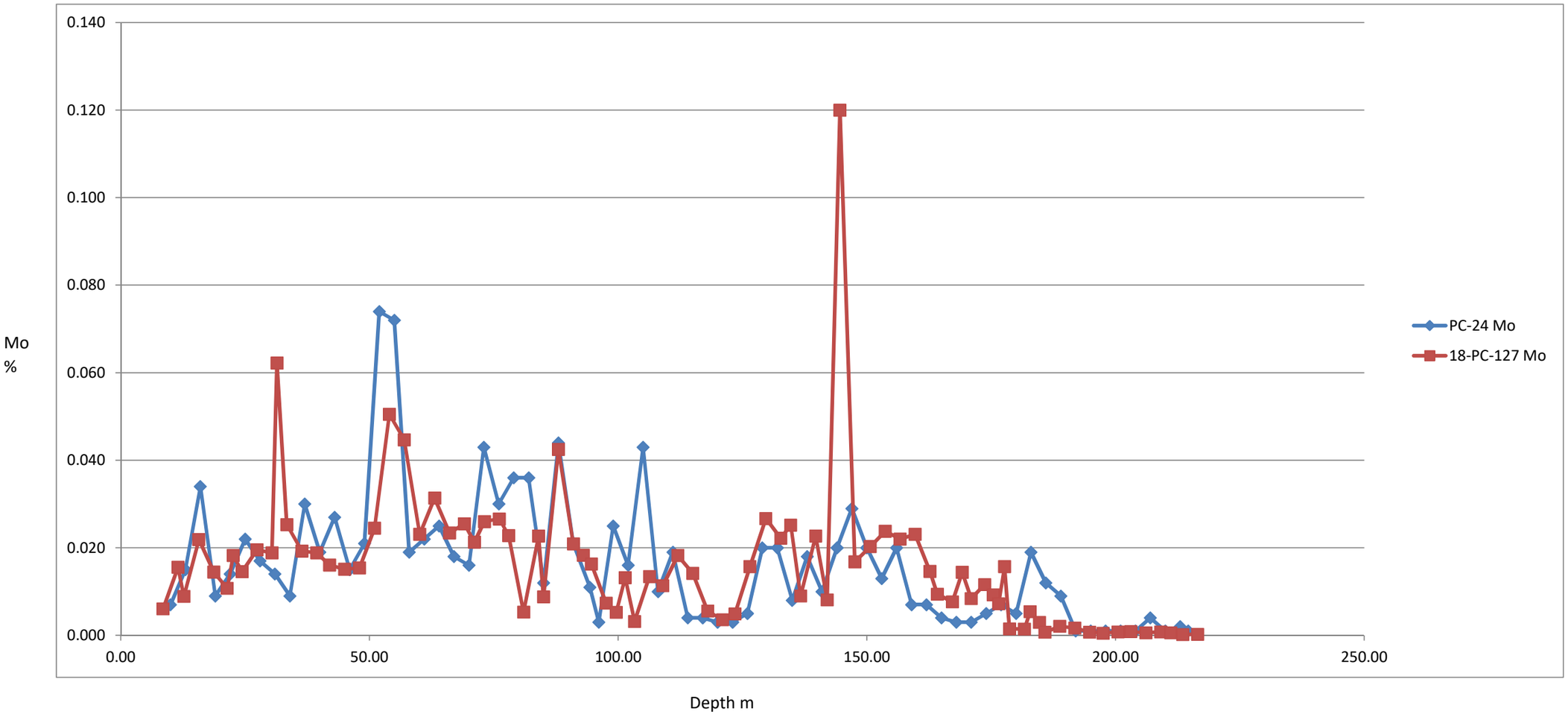
18-PC-127 Cu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%
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Depth m
PC-24 Mo
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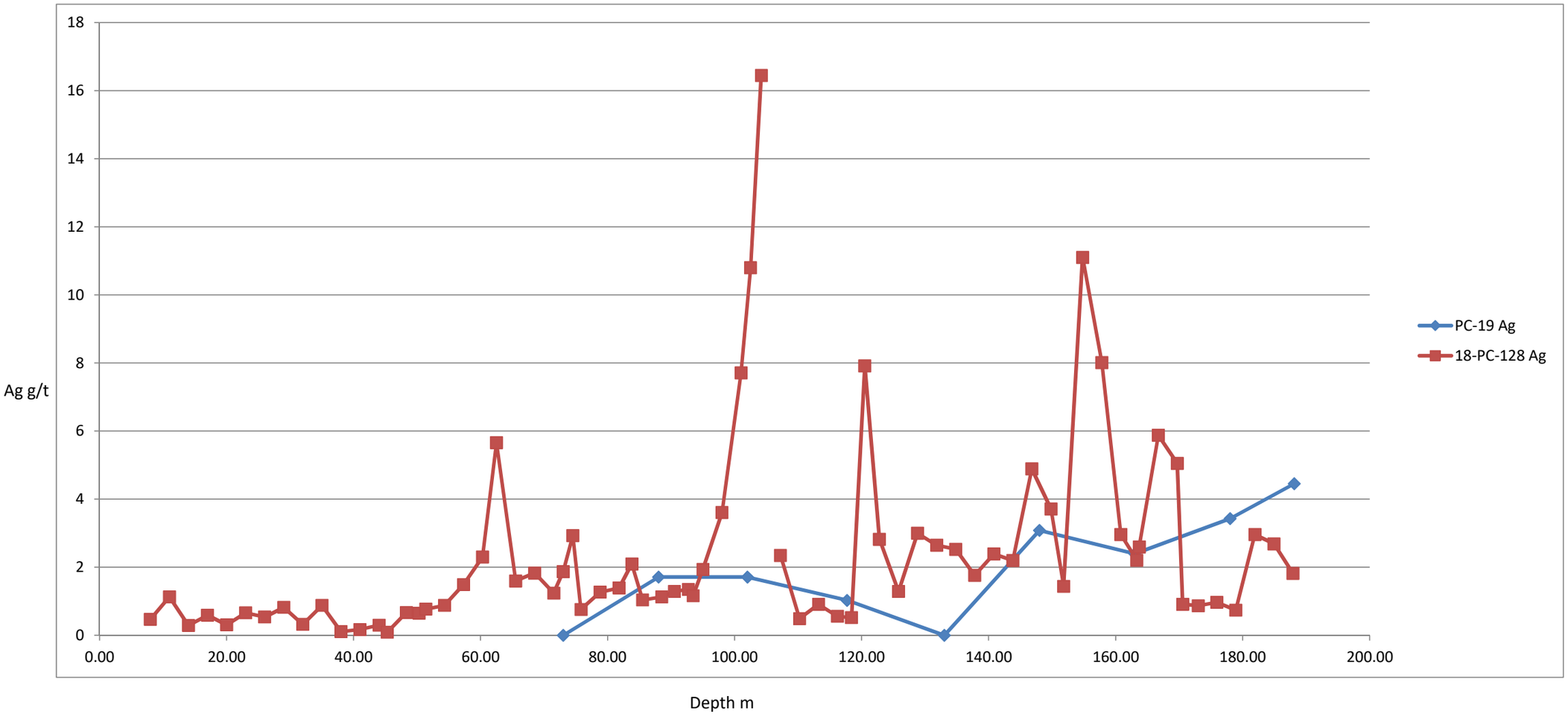
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Depth m
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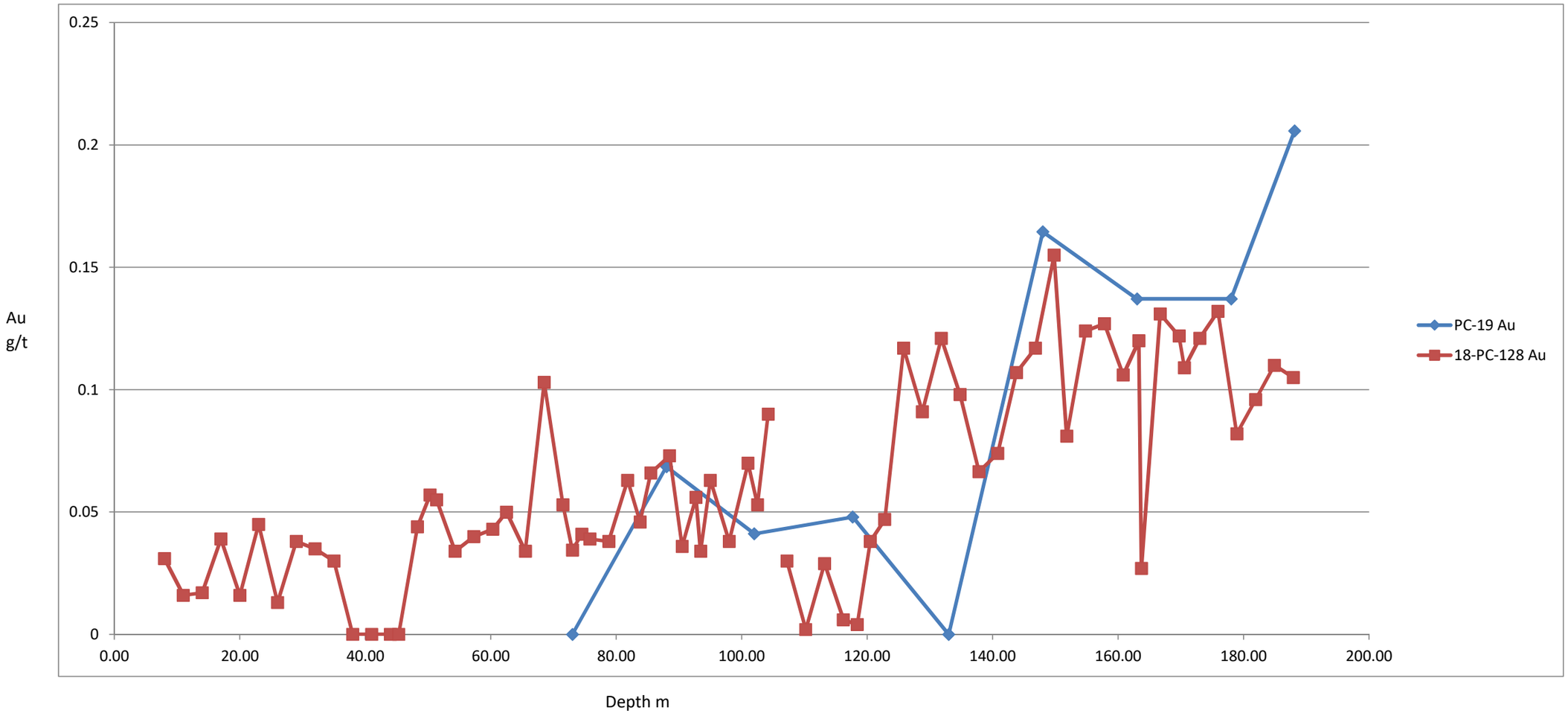
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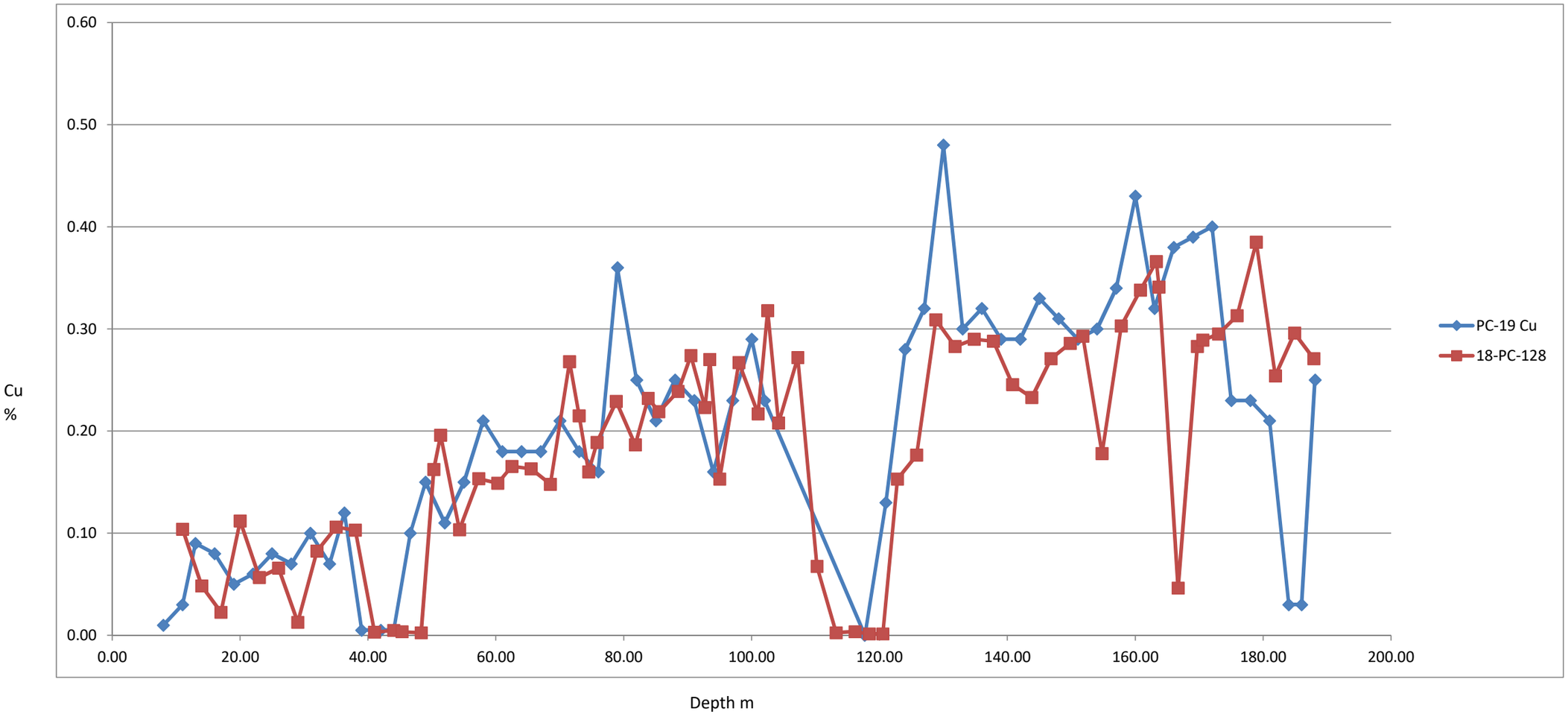
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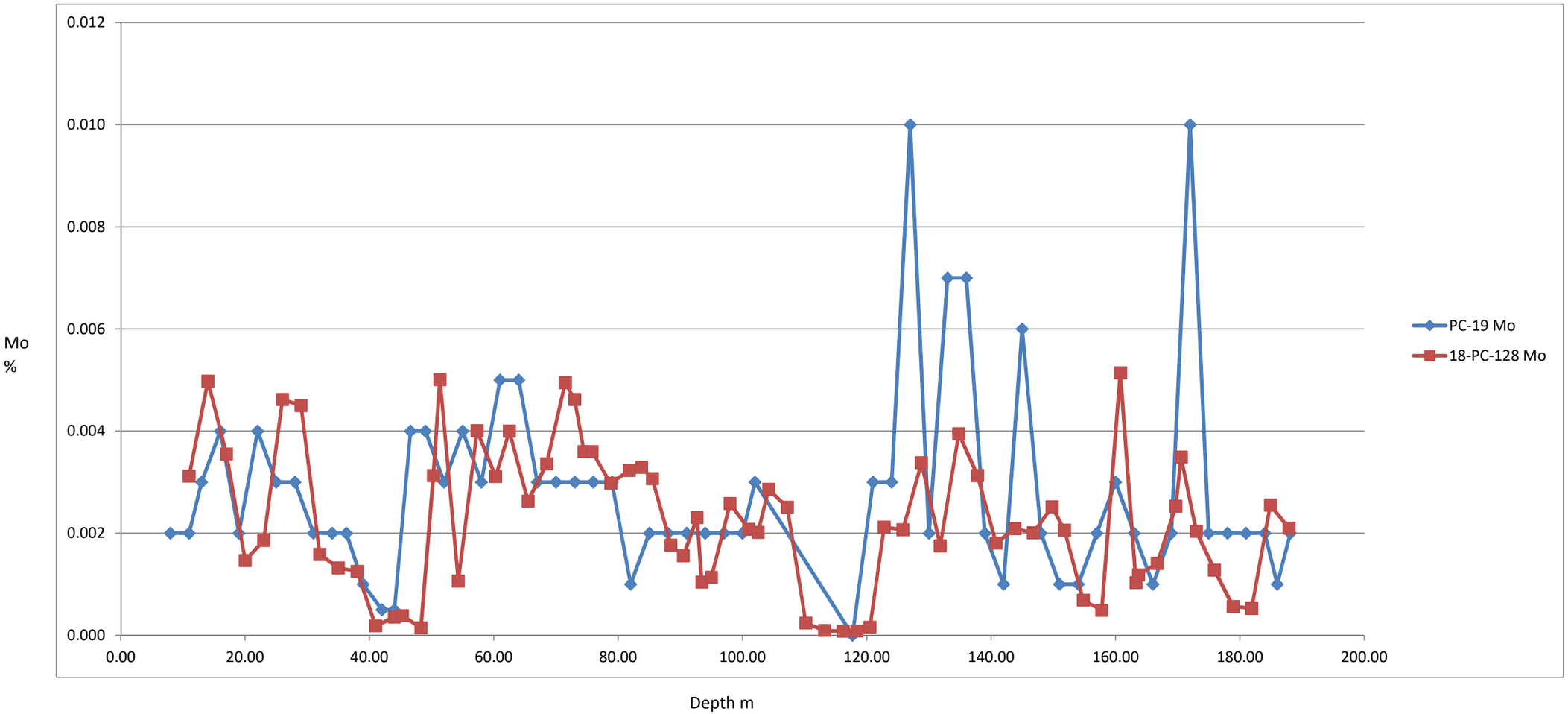
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80.00
100.00
120.00
140.00
160.00
180.00
200.00
Depth m
PC-19 Mo
18-PC-128 Mo

Appendix 6: Wildlife Management Report

Wildlife Mitigation and Monitoring Plan

Prepared for:

Tasca Resources Ltd.

Prepared by:

Kerrith McKay, MSc.

McKay Environmental Consulting Ltd.

Smithers, BC

November 2018

1. Disclaimer

This report has been prepared by McKay Environmental Consulting Ltd. for Tasca Resources Ltd. (the Client) to provide information and guidance in the form of a Wildlife Mitigation and Monitoring Plan for proposed mineral exploration work in northwest British Columbia. The information contained in this report has been obtained and prepared in accordance with generally accepted biological standards and management guidelines and is intended for the exclusive use of the Client. The information contained in this report is dependent on the conditions at the time and any recommendations or conclusions are based on the author's best judgement at the time of preparation. The Client acknowledges that ecological conditions can change over time and that the conclusions and recommendations outlined in this report are time sensitive.

Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. The authors and McKay Environmental accept no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

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List of Figures

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3591 2nd Ave. ♦ Smithers, BC ♦ V0J 2N0
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2. INTRODUCTION

This Wildlife Management Plan provides the owners, employees and contractors of Tasca Mining Inc. ('Tasca') with measures to reduce impacts on wildlife and wildlife habitat. This management plan is specific to the proposed permit area within the 'Poplar Property' (Figure 1).

An initial assessment of the permit area for wildlife concerns identified mountain goat, Northern Goshawk, moose and grizzly bear, as having critical habitats that require explanation and a mitigation and monitoring plan. This plan has been prepared primarily for the protection of these 4 and their habitats, in order to reduce adverse affects from proposed exploration activities around the Tagetochlain (Poplar) Lake area. It also provides information and references relevant for human-wildlife interactions, wildlife collisions, Bear Safety resources, bird nesting sites, riparian areas, wildlife reporting and wildlife observation forms.

This proposed permit area spans the traditional territories of the Wet'suwet'en and the Carrier Sekani First Nation (Figure 1). Provincially, the property is located within the Skeena Region inside the administrative boundary of the Nadina Forest District and under the objectives of the Morice Land and Resource Management Plan (LRMP).

2.1. Objectives and Goals

The objectives of this plan are to minimize potential effects to wildlife and wildlife habitat caused by components of the proposed project while supporting operational requirements for the safety of employees and contractors. To meet this objective, this plan targets the following goals:

- Avoid interactions with wildlife;
- Reduce potential wildlife disturbance;
- Reduce and mitigate habitat disturbance; and
- Prevent wildlife mortalities.

Development of the goals and objectives reflects key guiding principles from sources including:

- Regulatory requirements and Provincial / Federal Management objectives;
- Objectives of the Morice Land and Resource Management Plan (LRMP) (2007);
- Provincial species management (BC Mountain Goat Management Plan (2010); Provincial Framework for Moose Management In BC (2015) and Interim Northern Goshawk Strategy for the Skeen Region (2017));
- Guidelines, standard operating procedures and best management practices (MOE 2008, MEMPR & MOE 2009, FLNRO 2014);
- Primary literature (regional studies by independent scientists); and
- First Nations interests and rights (e.g. Wet'suwet'en management principles and consultation guidelines).

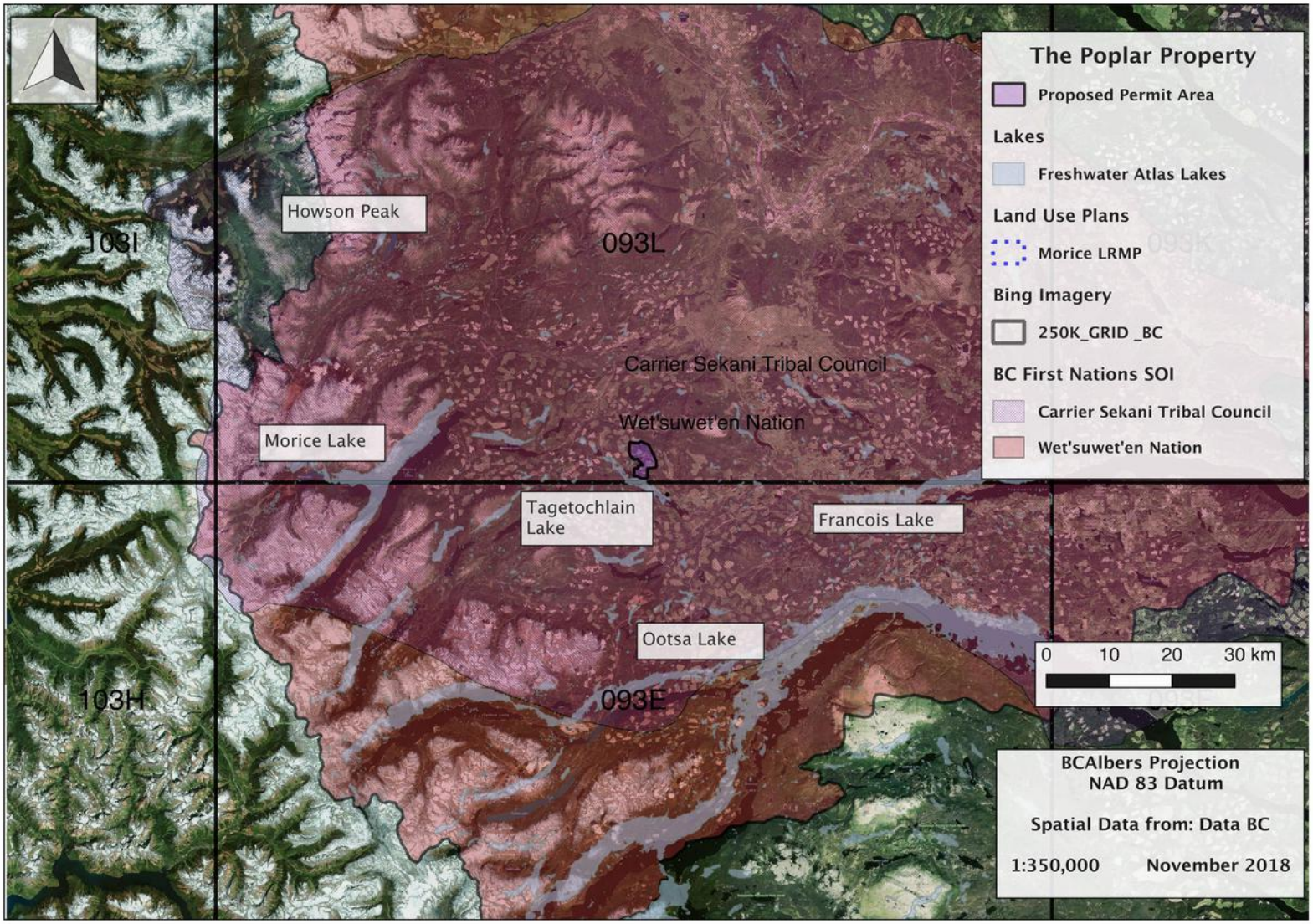

Figure 1. Location of the proposed permit area within the Poplar Property if Tasca Resrouces and First Nations Statement of Interest Areas (SOIs).

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3. WILDLIFE MITIGATION AND MONITORING PLAN

3.1. High Value Wildlife Habitats

Portions of the Poplar Property are within approved Ungulate Winter Range (UWR 'u-6-003') for mountain goat and contain high-value grizzly bear, moose and Northern Goshawk habitats (Figure 2). These habitats lie within and surrounding the proposed permit area and working within and around these habitats is addressed throughout this monitoring and mitigation plan.

3.2. Critical Timing Windows

Timing windows are defined by the BC government on a regional scale as the period(s) during the year when work may be carried out with the lowest risk to fish and wildlife species and habitat. They are a tool to help identify times of year when wildlife have varying needs and susceptibilities to human activity. A level of risk (low, caution, critical) is associated with each window, which tries to avoid and minimize impacts to wildlife during different parts of their life cycle. Low, critical and cautionary risk timing windows have been identified by the (then) BC Ministry of Forests, Lands and Natural Resource Operations (FLNRO) and are summarized for numerous species in *A Compendium of Wildlife Guidelines for Industrial Development Projects in the North Area* (FLNRO 2014). In low risk times, *restrictions would not normally apply*, increasing to a caution level of risk where *operators should avoid development activities during these timeframes,* and finally to a critical risk level where their recommendation states that *development activities are not appropriate.*

For the 2018 operating season, exploration activities are proposed during the caution risk period for mountain goat and moose, low risk for Northern Goshawk and grizzly bears. However, as exploration activities in subsequent years of this 5-year permit may impinge on cautionary and critical timing windows and high-value habitats; management direction and mitigation for working inside timing windows and habitats is provided.

3.3. Species Specific Habitat and Timing Windows

3.3.1. Mountain Goats

As mountain goats tend to use similar habitats year-round, they can be found within or near their winter range during natal times, summer feeding and rutting periods. Goats spend little time greater than 500m from steep rocky (escape) terrain used as refuge from predators. The goal of habitat protection is based on providing thermal and security cover with forage next to escape terrain and by limiting disturbance to such areas. Winter habitat is critical and is the most important given the difficulty of obtaining adequate forage (FLRNO 2014). Goat habitat use is not confined to mountainous habitats, it can also reflect an alternate pattern of habitat use, such as canyon- and escarpment-dwelling populations that use forested habitats adjacent to steep, rocky terrain in all seasons (FLRNO 2014).

In this area of the province – mountain goat habitat is transitional between interior and coastal conditions – meaning their dependence on forest canopy and use of alpine habitats in various seasons varies with snow loads. In mountain ranges (coast and Skeena ranges) and large lone mountains (such as Nadina and Morice), goats use alpine habitat in summer and typically winter in subalpine areas nearby. In the area south and east of Nadina and Morice Mountains, in and around this permit area, animals use lower elevation cliff systems and canyons surrounded by forested terrain all year round (Blume & Turney 2003, Turney & Roberts 2004 and ILMB 2007).

The UWRs spatially identified within and around the permit area reflect this alternate use of habitat. These habitats are non-alpine, forested knolls that provide winter habitat in the form of thermal and security cover, a winter food source while being near suitable (if small) escape terrain. Opportunities for dispersal and intact corridors for movement between habitats is especially important here. This is reflected in the goals, objectives and strategies from the Morice LRMP (#11 & 12) to "maintain adequate forage habitat and functional movement corridors by maintaining dispersal corridors between habitats" (pg. 131).

Of the drilling program proposed for November/December 2018, the drill locations are in the southern portion of the permit area, outside the UWR polygons (#402 & #405) and high value habitat (Figure 2).

A critical timing window is identified by FLNRO from January 15th to July 15th, during the late winter and kidding/natal period (FLNRO 2014). For the winter season (relevant to the current drilling program), November 1st to January 14th, FLNRO has identified a cautionary timing window related to the rut and transitions of animals to winter (often forested) habitats and cautions that *operators should avoid development activities during this timeframe*.

3.3.2. Grizzly Bear

Grizzly bears are large, far ranging mammals that utilize different food sources during specific seasons throughout the year. Abundant food sources are often spatially disjunct; therefore, grizzly bears often make considerable seasonal movements to obtain sufficient resources for their survival. The Poplar Property overlaps high value spring foraging habitat (ILMB 2007). This habitat includes lakeshore, south-facing slopes with deciduous canopy and open grassy sloes which are areas of early green-up, providing an important spring food source for newly emerged bears.

The main management issues are human interaction and maintaining quality seasonal foraging habitats that are connected. Lack or degradation of these critical habitats can limit health of individuals, decrease reproduction and lead to increased human-bear interactions. Human interactions are the most common cause of mortality for grizzly bears. Beyond maintaining important habitat with connectivity between these habitats, decreasing human-bear interactions in the permit bear is most important. FLRNO (2014) guidance and mitigation measures reflect this and are included in section 2.4.2 of this plan.

Suitability mapping in the Morice LRMP area did show high value spring foraging areas within the permit area. This mapping is being reviewed by government and will be used as one source for the future proposal of WHAs in the area (Vanderstar pers comm.).

FLRNO (2014) identifies no low risk timing periods for grizzly bears. Critical and cautionary periods are tied to specific habitat and ecosystem features (e.g. salmon spawning sites, wet meadows and avalanche chutes). The full denning period extends through the early to late winter (October to April), including birthing (mid-to-late winter) and is identified as a critical period (FLNRO 2014). FLNRO has also identified a cautionary timing period related to specific habitat features important for feeding. This translates at the local landscape scale, specific to the Poplar Property, as spring foraging on south-facing slopes early April through June.

During the growing season, cows range in this area. Due to extensive and long-term use, the area has documented grizzly bear use in the fall, well into November (L. Farrell pers. comm.). This area specific late use should be considered in addition to general habitat use for mitigation measures.

3.3.3. Northern Goshawk

Northern Goshawks are a large forest raptor found in mature to old forests and are distributed in northern ecosystems around the world. They maintain a predictably sized breeding territory that includes nesting, post-fledgling and foraging areas in forests with suitable structure (Stuart-Smith et al. 2012 and ILMB 2007). When prey numbers allow, they are year round residents. The area needed during the breeding season is about 24ha. This includes nestlings and post-fledgling areas where there is a mature closed canopy and open understory for access to hare, squirrels and grouse, their main food sources (Mahon 2009 and Stuart-Smith et al. 2012).

The subspecies of goshawk found in this part of the province is not officially listed under federal or provincial risk lists or as an identified wildlife species (IWMS 2004). However, it is a species of regional concern given the collapse in occupancy of known breeding areas in the region by up to 90% since monitoring began in the mid-1990s (Mahon 2009, Doyle 2014).

While this subspecies of goshawk is not included in the *Compendium of Wildlife Guidelines* (2014), there is currently a *Northern Goshawk management strategy for the Skeena Region* (Doyle et al. 2017). This agreement outlines management and mitigation for any new breeding territories found or anywhere activity has been noted within the last 5 years (Doyle and Hetherington pers. comm.).

Historically, a breeding territory was in use in the eastern part of the permit area from 2000-2004 and monitored as vacant 2005-2009. The last confirmed occupation of the breeding territory was 2004, but the site has only been surveyed once (2015) since 2010. The breeding territory and nest trees (3) were logged in 2010, 2011, and 2012 (Doyle pers comm).

3.3.4. Moose

Moose are a large bodied ungulate with sustainable populations within this province and this region (FLNRORD 2015). Specifically in the area, moose utilize shrub habitat created by cutblocks on the landscape and found in wetlands and riparian areas. In the fall and early winter they move to lower elevations. Their critical (and often limiting) time is finding habitat in winter when food availability and quality is at its lowest. Their preferred forage at this time is willow, dogwood, Saskatoon and other shrubs. These are found on south-facing low elevation slopes around rivers and lakes and in wetlands. Moose also require specific habitat features such as mineral licks, wallows and wetlands, which they will travel distance to use.

Provincially, moose management is guided by a framework to maintain sustainable moose populations (FLRNORD 2015). Maintaining critical habitats and habitat features is a main objective towards this goal (ILMB 2007). Within the permit area, the south-facing slopes with an open shrubby understory, would normally be considered high value winter habitat for moose. Winter moose and spring bear habitat overlap spatially, not necessarily temporally. Any moose carcasses on such wintering grounds are choice food for newly emerged bears.

Given the current amount and length of cattle grazing on these slopes, the value of the habitat has been reduced. The understory is degraded from what would be considered prime moose winter range by the mid-high grazing intensity. However, given the latitude of the area and the proximity to more coastal influences, there is a limited amount of these south-facing open deciduous slopes. So even though this particular area is not considered pristine, it is valuable to the local moose population during the winter when range cattle are gone from the area.

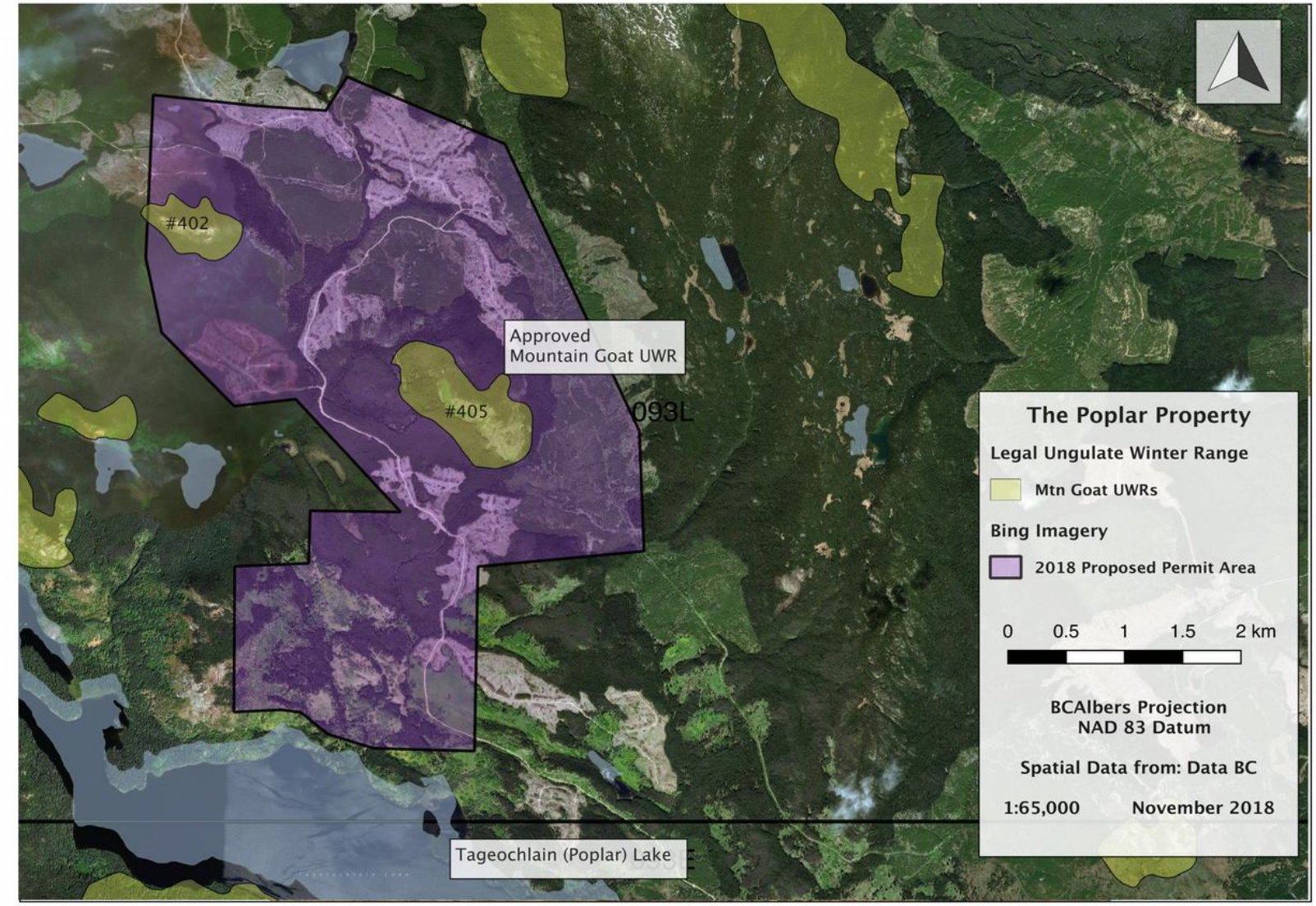

Figure 2. Location of the proposed permit area in relation to approved Mountain Goat Ungulate Winter Range (UWR) polygons.

A critical timing window is identified by FLNRO from May 15th to July 15th, during the calving period (FLNRO 2014). For the winter season (relevant to the current drilling program), November 16th to May 14th, FLNRO has identified a cautionary timing window related to the winter rut and later winter period and cautions that *operators should avoid development activities during this timeframe*.

1. Rationale for Conducting Activities within Critical Timing Windows

The Poplar Property is a project with limited previous mineral exploration activity. The last drilling program occurred on site in 2011. Results from those geologic surveys warranted more exploration. Tasca has proposed a 5-year, area based exploration program consisting of drilling and a potential addition to the existing road network, later in the permit window. The initial 2018 program is small, consisting of less than 5 drill sites, located in the southern half of the permit area. No camp is proposed, as crews will mobilize daily to the site. If exploration results are positive, in subsequent years, Tasca may increase activities and establish a camp. This would require a longer operating season. At such a time this wildlife management and mitigation plan would be re-visited and revised as necessary.

Based on the potential operational requirements and wildlife guidelines outlined by FLNRO (2014) for the critical and cautionary timing windows and operating within critical habitats, specific measures are provided for operations in mitigation measures (2.4).

A summary of rationale for operation within these windows and habitats is included in the plan, should the need arise for the length of this permit.

The exploration window within the permit area is limited due to access by existing resource roads. Access is closed during the fall freeze-up and spring break-up periods. Use of mechanical exploration is also not feasible during this time. Summer access can be limited due to presence of cattle on the range tenure. A Summary of rationale for the 2018 operating season and that would trigger mitigation measures in future years are summarized below.

- (All) Limited window for exploration activities due access road constraints;
- (All) Small areas affected by operations due to limited disturbance at drill, sites, scale of operations and low number of personnel;
- (All) Limited tree falling for Health and Safety reasons;
- (All) Use of existing roads and trails in the first years of this Notice of Work;
- (Mtn Goat) Operations in the northern half of the permit area (UWRs) are not proposed until after the year 1 program. Wildlife observations will be collected;
- (GB) Operations are tied to the same conditions that govern access on resource roads (spring break-up and fall freeze-up). No mechanical operations would be planned during that time, reducing overlap with spring bear feeding in the area; and
- (NOGO) Survey of operational area for raptor nests done prior to any nesting season program (April to August). Buffer zones can be implemented if necessary.

3.4. Mitigation Measures

Sources of best management practices and mitigation measures for mineral exploration related to wildlife are compiled from the following documents. This wildlife management plan does not replace these documents as a source of information for exploration projects.

1. *A Compendium of Wildlife Guidelines for Industrial Development Projects in the North Area, British Columbia* (FLRNO 2014).
2. *Handbook for Mineral and Coal Exploration in* BC (MEMPR and MOE 2009).
3. Guidelines for Managing Impacts from Mining Exploration on Wildlife and Habitat (MOE 2008).

Most mitigation measures for mountain goat, grizzly bear and moose are directly from the *Compendium* (FLNRO 2014). Grizzly bear safety and access measures are from a combination of the 3 documents. Northern Goshawk mitigation strategies were derived from the Northern Goshawk management strategy for the Skeena region (Doyle et al 2015) and in conversation with local experts (Doyle and Hetherington pers comm).

3.4.1. For working within spatially identified goat habitat

Future work programs under this Notice of Work may move north in the permit area adjacent or within the mountain goat UWRs. According to the goals and guidance set out for mountain goat by FLRNO (2014) and in accordance with the UWR general wildlife measures (FLRNO 2013), Tasca will include the following mitigation measures during work planning and operations:

- Use of existing clearings, trails or roads, when practicable;
- If or when roads or trails are planned, these will not exceed 3.5 m wide and will be managed for use by exploration staff and contractors and will be deactivated according to best management practices;
- Helicopters use wildlife avoidance techniques when approaching within 500m vertical and 1500m horizontal distance of UWR polygons; and
- Minimize site disturbance at drill locations and when moving between drill locations within the UWR polygons.

Given the small and specific amount of goat habitat used year round in the permit area, it is recommended that these measures be applied outside critical and cautionary timing windows throughout the field season.

3.4.2. For working within grizzly bear habitat

For grizzly bear management, FLNRO provides 13 pieces of guidance with multiple mitigation measures for each (pgs 73-89; FLNRO 2014). Their guidance highlights avoiding new disturbance to habitats or increasing access. The most important mitigation for grizzly bears is avoidance of human-wildlife interaction.

Alteration or degradation of habitat will not be significant issues on the Poplar Property under this NoW, given the size of the permit area, the existing condition of the habitat (high range use) and scope and location of work proposed.

Any work on open south-facing slopes should be mitigated by **first** not scheduling work until the spring and early summer foraging period is over **or** scheduling work in the northern part of the permit area, away from south-facing slopes with early green-up and sources of food for newly emerged bears.

If work in these areas is unavoidable during this time, mitigation would include diligence of crews pre-checking the area daily before work begins and possible use of a bear monitor would, as discussed with qualified biologist or conservation officer.

- If no bears are in the proposed work areas, then proceed as normal.
- If bears are observed within the proposed work area then change work planning, leave the area and go to another site.
- All personal should always follow health and safety guidelines for working in bear country and have a current Bear Safety Awareness certificate (MEMPR 2017).

3.4.3. For working Northern Goshawk Territories

Any work programs should try to avoid nesting and fledging season (March – August 15). IF **If work in these areas is unavoidable**, conduct call playback durveys early in the breeding season to identify any potentially breeding pairs. If an active nest is found, regional best management practices from the Skeena management strategy apply (Doyle et al 2017 and Doyle pers comm).

- Inform one or all of McKay Environmental, regional habitat biologist or Frank Doyle (Goshawk specialist);
- Keep a 1km forested buffer around each nest until a further assessment can be made and management direction confirmed; and
- From February 15 – August 15, using buffers, limit mechanical activity within 500m of the nest and human activity within 200m. Mechanical activities include road building, harvesting, drilling and blasting; human activities include layout, assessment, hand-falling, surveying and silviculture.

If a breeding pair is not found, continue a spring call-playback survey for 2 subsequent years.

3.4.4. For working within Moose winter habitat

For moose management, FLNRO provides 11 pieces of guidance with multiple mitigation measures for each (pgs 30-39; FLNRO 2014). Their guidance includes identifying and maintaining critical habitat features such as mineral licks, winter habitat and calving areas. The most important mitigation for moose is avoiding or minimizing habitat disturbance.

- Any work in the southern part of the permit area (winter habitat) during the cautionary period (Nov to May) should be mitigated by:
- Use of existing clearings, trails or roads whenever practicable;
- If or when roads are trails are planned, these will not exceed 3.5 m wide and will be managed for use by exploration staff and contractors and will be deactivated according to best management practices; and
- Minimize site disturbance at drill locations and when moving between drill locations within the winter range.

3.4.5. Mineral Licks

Mineral licks are an important habitat feature critical for maintaining mountain goat and moose health during the spring, summer and fall. They provide needed minerals for all animals, especially lactating females with young in spring and summer. They are limits on the landscape and animals will travel several kilometres to reach them. To ensure that animals are able to access these sites when required, the following mitigation measures will be employed:

- If at any time personnel find evidence of a mineral lick within the permit area, a 250 m no development buffer should be established on the lick and the trails leading to the site to prevent disturbance of animals using the site;
- Where practicable, maintain visual screens of vegetation near the lick and associated trails; and
- If road access or mineral exploration is required within 250 m of a known mineral lick, a qualified Professional Biologist should be consulted to help in the development of a detailed mitigation and management plan for the site.

3.4.6. Flight Planning

Should the use of helicopters by Tasca on the Poplar Property be required at some point in the duration of this permit, the following mitigation measures should be reviewed with staff and pilots and adhered to during flights. When helicopters are used, the FLNRORD guidelines for aircraft flight avoidance of wildlife will be consulted (FLNRORD 2018). Mitigation measures for avoiding wildlife and known important wildlife habitats is summarized below:

- Avoid disturbance to sensitive areas (i.e. wildlife that is known or has been recently observed in the area) whenever practicable;
- Follow the provincial guidelines of keeping a 500m vertical limit and 1500m horizontal limit from identified mountain goat habitat;
    - If access is needed within these limits, use flight paths to avoid disturbance when travelling. These flight paths will be defined with a qualified biologist and pilot with the objectives of reducing disturbance to wildlife, keeping in mind the requirements of flight safety in a mountainous environment (FLNRORD 2018a);
- Avoid identified critical wildlife areas (e.g. cliffs, alpine and sub-alpine meadow areas and mineral licks) wherever practicable;
- Do not pursue, chase, or harass wildlife. If wildlife is seen from the air, the pilot should avoid getting any closer to the animals, especially if young are noted (e.g. cows/calves and sow/cubs); and
- Deviations from agreed to flight lines are inevitable given the mountainous environment, seasonal weather, and dynamic nature of exploration, but will be kept to a minimum.

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3.5. Human-Wildlife Interactions

The following mitigation measures are designed to minimize human-wildlife interactions while in and traveling to/from the Tasca permit area. Reporting procedures for wildlife-human interactions will be included in employee training. Tasca personnel will follow these measures and ensure that all employees and contractors will adhere to these practices.

- If dogs are on site, they must be controlled to reduce harassment of wildlife. Dogs found harassing wildlife will be removed from the Project.
- A No Hunting policy would be enforced for all mine personnel at the site while staying at, or working on, the project, including after-work periods. This policy would be communicated to all employees as part of their employee orientation. Contractors would also be required to adhere to this policy.

- All firearms on site (or within employee or contractor vehicles) must be stored in accordance with the *Firearms Act*, and the Site Manager must be made aware of, and approve, any firearms on site.

3.6. Access Management

At this time, access to the Poplar Property is by ground transport only. Tasca will avoid and minimize disturbance to important habitats using guidance and proposed measures from FLRNO (2014) and in accordance with the *Mineral Exploration Handbook* goal to "minimize impacts on wildlife and wildlife habitat" (2009).

FLRNO (2014) outlines guidance specifically for mountain goats and grizzly bears:

- Avoid or minimize new disturbance to important habitats such as physical destruction of the mineral lick sites, wildlife trails connecting mineral licks, and rich early spring foraging sites for bear (e.g. wet meadows and avalanche chutes);
- Avoid increasing access to or within goat habitat and bear habitat features by:
    - Limiting the amount of road or trail access in close proximity to winter ranges (1-2km), denning sites, and avalanche chutes(500m);
    - Deactivate and reclaim non essential roads and trails; and
    - Consider access control measures (such as risk timings windows).
- Avoid displacing mountain goats especially in winter and during kidding and early-rearing by having no direct approach to animals; and
- Restricting ground-motorized access within 500m of mountain goat and grizzly bear habitats and known goshawk nests.

In future, if helicopter access is approved, flight planning and wildlife avoidance techniques will be applied (FLRNORD 2018).

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3.7. Bird Nesting Sites

Migratory bird nesting sites can be found anywhere during the nesting season, which is generally between April 15 and August 15. Non-migratory, or resident, species including raptors and woodpeckers can be found on breeding territories 4-8 weeks prior.

The main mitigation during drill pad construction, geophysical surveys (IP and mag), road/trail building or exploration activities that clear vegetation is to take care to reduce destroying nests that can be found on the ground, in shrubs/trees or tree cavities.

- The *Migratory Birds Convention Act (1994*) protects the nests and eggs of migratory birds. It is expected that issues may arise during land clearing or works related to the proposed Project.
    - If an active nest of a migratory bird (e.g. waterfowl, most small bird species) is found directly near or in the path of the construction work, a suggested no-work zone of 50m (suggested 300m for raptors) will be established and crews will work in another area until birds have vacated the nest.
    - If an active raptor nest (stick nest) is found that could be a goshawk nest; Tasca will get species confirmation by a qualified biologist. For Northern Goshawk nests, see sections 2.3.3 and 2.4.4 of this plan.

General mitigation techniques to minimize effects on breeding birds and their habitat include:

- Avoid clearing during sensitive breeding periods: Avoiding vegetation and tree clearing during the general bird breeding period will minimize potential direct effects on nesting birds and nestlings, and ensure adherence to the provincial Wildlife Act and federal Migratory Birds Convention Act. The breeding bird window occurs from 1 April to 31 July, a period that coincides with the breeding window for most species found in the area.
- If timing of project development outside the general breeding season is not feasible then pre-construction and clearing surveys for active nests should be done. Surveys for pre-existing raptor nests can be done anytime of year, prior to development, given the multi-year use of the nests. Ideally, surveys are completed during spring to identify any active breeding territories and buffers can then be put in place with mitigation measures fine tuned.
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3.8. Riparian Habitats

Streamside, lakeshore and wetland areas are known as riparian habitats and are critical to fish and amphibians as well as containing high value feeding sites for species such as moose, bears and bird species. To avoid impacting riparian habitats, Tasca employees and contractors will follow these protocols:

- Follow the riparian setback widths outlined in Table 4.2 of the *Mineral Exploration Handbook* and Table 9.1 of the *Health Safety and Reclamation Code for Mines in British Columbia,* which were developed to meet the requirements of the *Fisheries Act* for fish habitat protection (Table 1);
- Whenever practicable, place/route drill pads, trenches, and access roads/trails outside the setback area;
- Avoid creating roads and trails parallel to a watercourse within a riparian setback;
- Where crossing streams, cross at right angles in areas with larger substrate to minimize the area of disturbance within the riparian zone and downstream siltation; and
- Consult and follow guidance in the Riparian Management checklist (MinEx Handbook 2009).

Table 1. Riparian setback distances from the *Health, Safety and Reclamation Code for Mines in British Columbia* (2008).

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*Source = Mx Code Table 9.1 (2008)

RIPARIAN SETBACK DISTANCES* (Measured horizontally from the top of bank)			
Riparian Type	**Drilling (m)**	**Exploration Access (m)**	
Streams	>20	50	70
(width)	>5 and ≤20	30	50
	1.5 and ≤5	20	40
	<1.5	5	30
	<0.5 in alpine areas above timberline	5	15
Wetlands	> 5	10	30
(area)	>1.0 - < 5.0	10	20
	> 0.25 - < 1.0	10	10
Lakes		10	30

3.9. Record Keeping

Reliable records of anecdotal wildlife observations will be generated to help document wildlife travel routes, behaviour, timing of use, and local habitat. This practice will ensure that observations are recorded in a timely and systematic fashion and avoid bias.

All employees and contractors are required to report all wildlife observations. An incidental wildlife observations record book will be maintained by each personal to record and report the following information:

- Wildlife observations, including information on the animal species, number, and age when possible (e.g. grizzly bear female and cubs), and include information surrounding the location (GPS location for example, closest river or creek), signs, and behavior of animal if possible (e.g. feeding, walking, scat); and
- Wildlife incidents such as road kills, interactions with wildlife or dead animals found.

Example wildlife observation and wildlife incident forms are provided in Appendix A.

4. PLAN MANAGEMENT AND IMPLEMENTATION

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To ensure that all personnel involved in the exploration program are aware of the issues related to protecting and interacting with wildlife and wildlife habitat, Tasca will:

- ✓ Educate all employees and contractors on the applicable practices contained within this Wildlife Management and Mitigation Plan;
- ✓ Educate all employees and contractors on the guidelines and Best Management Practices outlined in the *Guidelines for Managing Impacts from Mining Exploration on Wildlife and Habitat (*MOE 2008);

- ✓ Ensure that all employees and contractors have received Bear Aware Training and training in wildlife awareness such as those provided at the following web-sites:
    - Staying Safe Around Wildlife (https://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/wildlife/human-wildlife-conflict/staying-safe-around-wildlife)
    - Wildlife-Human Conflict (https://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/wildlife/human-wildlife-conflict)
    - Reporting Human-Wildlife Conflict (https://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/wildlife/human-wildlife-conflict/report-human-wildlife-conflict); and
- ✓ Ensure that Safe Camp procedures are followed to avoid wildlife encounters.
    - AMEBC Safety Guidelines 5th edition (http://amebc.ca/wp-content/uploads/2017/06/AME-BC-Safety-Guidelines_5th-Ed-2014-Rev_Web.pdf)

Tasca will revise this plan as necessary to reflect changes in field programs as well as new regulations, information, and guidelines as they become available.

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Personal Communications:

Frank Doyle. Senior biologist and principal, Wildlife Dynamics Consulting. Smithers, B.C. November 2018.

Anne Hetherington. Senior ecosystems biologist, Skeena Region. Smithers. November 2018.

Len Vanderstar. Senior ecosystems biologist, Skeena Region. Smithers. November 2018.

APPENDIX A

Wildlife Observation Form

This data form is intended to record wildlife encountered during mining exploration activities. Individuals completing the form are encouraged to take photographs as a record, provided the wildlife is not disturbed. Wildlife Observation forms will be submitted to McKay Environmental for collation and a summary will be provided to FLNRORD after the current field season.

Directions

Employees observing wildlife should fill in the Wildlife Observations form, providing information on the date and time of the observation, the species observed, the number observed and the location observed. Additional information such as the sex, habitat they were observed in and behaviours are also important to record.

Wildlife Incident Report

This form is filled out where a wildlife incident occurs that caused an employee or wildlife to be injured or a 'near-miss' occurred that could have resulted in an injury. Wildlife Incident Report forms should be submitted to the Conservation Officer Service in Skeena Region office of the Ministry of Environment.

Directions

Employees that have a wildlife incident must fill in the Wildlife Incident Report form, providing information on the date and time of the incident, the details of the incident, the species involved and the corrective actions taken to reduce the potential of a similar incident.

WILDLIFE OBSERVATIONS

Date/Time (ddmmyy/24hr)	Observer	Species[1]	Number	Activity[2]	Observer Location (UTM or Lat Long)	Wildlife Location (distance & direction from observer)	Weather [3]			Comments (age/sex of animal, behaviour of animal, reaction to disturbance, photo number, any other relevant info)
							Temp (^{0}C)	Wind (N, L, M, S)	Precip (N, L, M, H, S)	

[1] **Species Codes:** Moose (ALAM) Black Bear (URAM), Grizzly Bear (URAR), Caribou (RATA), Mountain Goat (OVDA), Mountain Goat (ORAM), Bald Eagle (BAEA), Golden Eagle (GOEA), Gyrfalcon (GYRF)
[1] **Species Groups: I**f species unknown: Duck (DU), Swan (SW), Goose (GO), Eagle (EA) Hawk (HA), Other Bird (OB), Frog/Toad (FT), Ungulate (UN), Carnivore (CA), Small Mammal (SM)
[2] **Activity:** Swimming (TS), Feeding (FD), Flying (TF), Territorial (TE), Walking (TW) Nesting (NE)
[3] **Weather:** Wind: **(**N) None, (L) Light, (M) Moderate, (S) Strong; Precipitation: **(**N) None, (L) Light, (M) Moderate, (S) Snow

WILDILFE INCIDENT REPORT

If a staff member has an incident, “near miss” incident, or identifies a situation that may pose or could have posed a risk to wildlife or themselves from the wildlife, they must complete this report immediately and bring it to the attention of the Supervisor/Mine Manager.

Reporting Person:	
Supervisor / Manager:	
Date / Time of Report:	
Date / Time of Incident	

Description of Incident: (Provide as much information as possible about the incident including the actions of yourself and the animal involved)

Wildlife Species Involved: (Provide information on the wildlife involved, the number, age and sex of the animals)

Wildlife Activity: (Provide details on the behaviours of the animals, the habitats they were in and what they were doing at the time of the incident)

WILDILFE INCIDENT REPORT

Any Additional Information: (Provide any other information that may be relevant including previous encounters with this animal, weather, time of day, etc.)

Corrective Action Taken: (Describe what corrective action was taken to reduce the likelihood of this type of incident occurring again)

Corrective Action Completed By:

Signature:	**Date:**

Copies of this report to: ___ Resource Agency ___ Supervisor/Manager ___ Employee

Appendix 7: Archaeological Overview Assessment

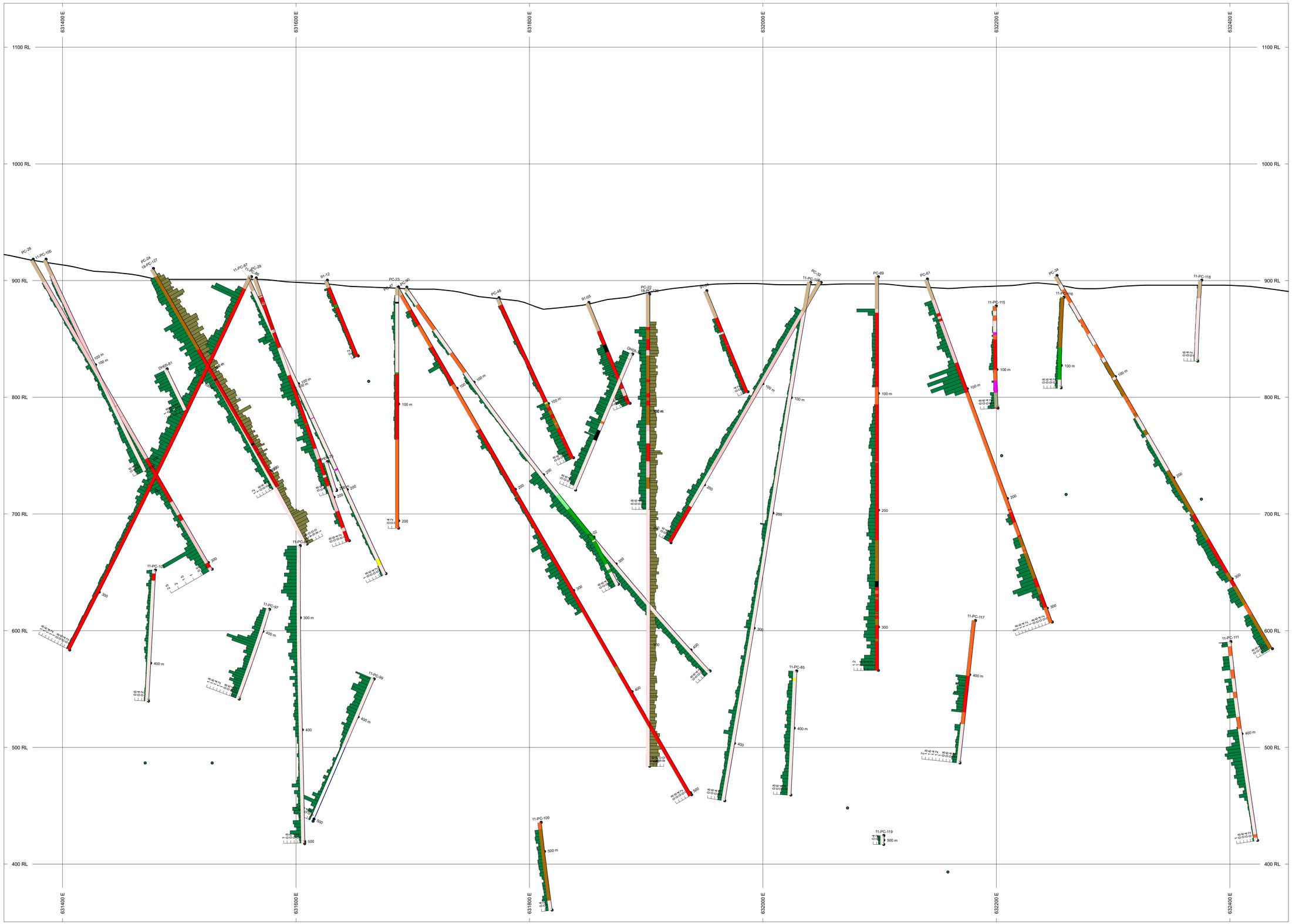
NOTE

Archaeological Impact Assessment (AIA) reports and other archaeological studies completed by Professional Archaeologists that are received and reviewed by the Geological Survey Branch which are found to be acceptable for exploration and development work credit will remain on file and kept confidential.

For archaeological studies that are submitted as part of a larger technical assessment report, the section of the report pertaining to the archaeology report will remain on file, kept confidential and excluded from the version of the report that is uploaded to ARIS.

Requests for a copy of an AIA report from Geological Survey Branch or Mineral Titles will be directed to the Archaeological Branch at Ministry of Forests, Lands, Natural Resource Operations and Rural Development.

Appendix 8: Drill Sections



HOLES PLOTTED

TOTAL 37

11-PC-100	11-PC-103	11-PC-105	11-PC-106
11-PC-111	11-PC-115	11-PC-116	11-PC-117
11-PC-118	11-PC-119	11-PC-85	11-PC-86
11-PC-87	11-PC-88	11-PC-90	11-PC-97
11-PC-99	18-PC-126	18-PC-127	91-05
91-06	91-12	DH05-74	DH05-75
DH05-81	PC-02	PC-22	PC-23
PC-24	PC-28	PC-29	PC-32
PC-34	PC-47	PC-48	PC-61
PC-69			

TOPOGRAPHY

50kdem_flt.flt

BAR GRAPHS	L/R	COL
CU_Historical	L	
Cu_2018	R	

ROCK CODES	PAT	LABEL	DESCRIPTION
Rockcode2		OVBD	Overburden
		FELINT	Felsic intrusives
		FLDPOR	Biotite feldspar porphyry
		BIOPOR	Biotite porphyry
		FLDPRP	Feldspar porphyry
		SEDMNT	Sediments
		VOLC	Volcanics
		BRXFLT	Breccias/faults
		QFPDYK	
		MAFDYK	Mafic dykes
		PORDYK	Porphyry dykes
		QBFPser	
		QERD	
		QFPD	
		TRAN	
		VEIN	

SECTION SPECS:

REF. PT. E, N	631900 m	5986850 m
EXTENTS	1100 m	787.1 m
SECTION TOP, BOT	1138 m	350.6 m
TOLERANCE +/-	37.5 m	

SCALE

(m)

-20 0 20 40 60

NAD83(CSRS) / UTM zone 9N

AZIMUTH = 90°

N W E S

EW Section 13; 5,986,850

Geology and Copper Assays

Copper Values in Percent

Document Path: D:\Projects\Mining_Projects\Poplar_Project\02_GIS_Data\MXD\Drill_Sections\EW_Section13\Poplar_Drill_EW_Copper_Geology_Section_13_Twinned_Holes.mxd

631400 E
631600 E
631800 E
632000 E
632200 E
632400 E
1100 RL
1000 RL
900 RL
800 RL
700 RL
600 RL
500 RL
400 RL
PC-38
11-PC-105
PC-24
18-PC-127
11-PC-87
11-PC-39
PC-86
91-12
PC-23
PC-90
PC-48
91-05
DH05-74
PC-22
18-PC-126
91-04
PC-32
11-PC-106
PC-69
PC-61
11-PC-115
PC-34
11-PC-116
11-PC-118
DH05-81
11-PC-103
11-PC-97
11-PC-99
11-PC-100
11-PC-85
11-PC-119
11-PC-117
11-PC-111
100 m
200
300
400 m
500 m
0.02
0.04
0.1
0.2
0.3
0.25
0.15
0.05

HOLES PLOTTED

TOTAL 37

11-PC-100	11-PC-103	11-PC-105	11-PC-106
11-PC-111	11-PC-115	11-PC-116	11-PC-117
11-PC-118	11-PC-119	11-PC-85	11-PC-86
11-PC-87	11-PC-88	11-PC-90	11-PC-97
11-PC-99	18-PC-126	18-PC-127	91-05
91-06	91-12	DH05-74	DH05-75
DH05-81	PC-02	PC-22	PC-23
PC-24	PC-28	PC-29	PC-32
PC-34	PC-47	PC-48	PC-61
PC-69			

TOPOGRAPHY

50kdem_flt.flt

BAR GRAPHS	L/R	COL
MO_Historical	L	
Mo_2018	R	

ROCK CODES	PAT	LABEL	DESCRIPTION
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		FLDPOR	Biotite feldspar porphyry
		BIOPOR	Biotite porphyry
		FLDPRP	Feldspar porphyry
		SEDMNT	Sediments
		VOLC	Volcanics
		BRXFLT	Breccias/faults
		QFPDYK	
		MAFDYK	Mafic dykes
		PORDYK	Porphyry dykes
		QBFPser	
		QERD	
		QFPD	
		TRAN	
		VEIN	

SECTION SPECS:

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TOLERANCE +/-	37.5 m	

SCALE

(m)

-20 0 20 40 60

NAD83(CSRS) / UTM zone 9N

AZIMUTH = 90°

N W E S

EW Section 13; 5,986,850

Geology and Molybdenum Assays

Molybdenum Values in Percent

Document Path: D:\Projects\Mining_Projects\Poplar_Project\02_GIS_Data\MXD\Drill_Sections\EW_Section13\Poplar_Drill_EW_Moly_Geology_Section_13_Twinned_Holes.mxd

5986400 N
5986600 N
5986800 N
5987000 N
5987200 N
5987400 N

1100 RL
1000 RL
900 RL
800 RL
700 RL
600 RL
500 RL
400 RL
300 RL

PC-62
200 m
PC-60
200 m
PC-34
100 m
PC-19
100 m
18-PC-128
200 m
PC-41
100 m
200
11-PC-93
100 m
200
300
400
500

HOLES PLOTTED

TOTAL 7

11-PC-93	18-PC-128	PC-19	PC-34
PC-41	PC-60	PC-62	

TOPOGRAPHY

50kdem_flt.flt

BAR GRAPHS	L/R	COL
CU_Historical	L	
Cu_2018	R	

ROCK CODES	PAT	LABEL	DESCRIPTION
Rockcode2		OVBD	Overburden
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		FLDPOR	Biotite feldspar porphyry
		FLDPRP	Feldspar porphyry
		SEDMNT	Sediments
		VOLC	Volcanics
		BRXFLT	Breccias/faults
		QFPDYK	
		MAFDYK	Mafic dykes
		QFPD	
		TRAN	

SECTION SPECS:

REF. PT. E, N	632300 m	5986900 m
EXTENTS	1272 m	909.9 m
SECTION TOP, BOT	1150 m	240.1 m
TOLERANCE +/-	25 m	

SCALE

(m)

-20 0 20 40 60

NAD83(CSRS) / UTM zone 9N

AZIMUTH = 0°

N W E S

NS Section 38; 632,300E

Geology and Copper Assays

Copper Values in Percent

Document Path: D:\Projects\Mining_Projects\Poplar_Project\02_GIS_Data\MXD\Drill_Sections\Section38\Poplar_Drill_NS_Section_38_Geology_Copper_Twinned_Holes.mxd

5986400 N
5986600 N
5986800 N
5987000 N
5987200 N
5987400 N

1100 RL
1000 RL
900 RL
800 RL
700 RL
600 RL
500 RL
400 RL
300 RL

PC-62
200 m
0.02

PC-60
200 m
0.02

PC-34
100 m
0.02

PC-19
100 m
0.02

18-PC-128
100 m
200
300
400
500
0.02

PC-41
100 m
200
0.02
300

11-PC-93
100 m
200
300
400

HOLES PLOTTED

TOTAL 7

11-PC-93	18-PC-128	PC-19	PC-34
PC-41	PC-60	PC-62	

TOPOGRAPHY

50kdem_flt.flt

BAR GRAPHS	L/R	COL
MO_Historical	L	
Mo_2018	R	

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		SEDMNT	Sediments
		VOLC	Volcanics
		BRXFLT	Breccias/faults
		QFPDYK	
		MAFDYK	Mafic dykes
		QFPD	
		TRAN	

SECTION SPECS:

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NAD83(CSRS) / UTM zone 9N

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N W E S

NS Section 38; 632,300E

Geology and Molybdenum Assays

Molybdenum Values in Percent

Document Path: D:\Projects\Mining_Projects\Poplar_Project\02_GIS_Data\MXD\Drill_Sections\Section38\Poplar_Drill_NS_Section_38_Geology_Moly_Twinned_Holes.mxd