BC Geological Survey
Assessment Report
40136

Ministry of Energy & Mines
Energy & Minerals Division
Geological Survey Branch

ASSESSMENT REPORT
TITLE PAGE AND SUMMARY

TYPE OF REPORT (type of survey(s))	**TOTAL COST**	**$897.286.63**
Diamond Drilling		

AUTHOR(S) R. Tim Henneberry, P.Geo.

SIGNATURE(S) "signed and sealed"

NOTICE OF WORK NUMBER(S) / DATE(S) Permit MX-1-115 YEAR OF WORK 2021

STATEMENT OF WORK – CASH PAYMENT EVENT NUMBERS / DATE(S) 5864261

PROPERTY NAME Poplar

CLAIM NAME(S) (on which work was done)
1058301, 1058304

COMMODITIES SOUGHT Copper, molybdenum, silver, gold
MINERAL INVENTORY MINFILE NUMBERS, IF KNOWN 093L 239
MINING DIVISION Omineca NTS 093L/02 TRIM 093L006
LATITUDE LONGITUDE (at centre of work)
NORTHING 5987000 EASTING 632000 UTM ZONE 9 MAP DATUM NAD 83

OWNER 1
Doctors Investment Group Ltd.
MAILING ADDRESS
5884 Mayview Circle
Burnaby, British Columbia V5E 4B8

OWNER 2
Universal Copper Ltd.
830 – 100 Melville Street
Vancouver, British Columbia V6E 4A6

OPERATORS (who paid for work)
Universal Copper Ltd.
MAILING ADDRESS
830 – 100 Melville Street
Vancouver, British Columbia V6E 4A6

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size, attitude)
The Poplar property is primarily underlain by Cretaceous Kasalka Group fragmental volcanics in fault contact with Lower Jurassic Telkwa Formation fragmental volcanics. The units have been intruded by Late Cretaceous Bulkley Intrusion and the Late Cretaceous Kasalka Plutonic Suite granites to granodiorites. Finally, outliers of Eocene Ootsa Lake group felsic volcanics cover all of the older rocks. Disseminated, fracture filling and veinlets of pyrite, chalcopyrite, molybdenite and bornite comprise the Poplar porphyry mineralization.

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS
Too numerous to mention, most recent are: 38791, 38098, 37616

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (In Metric Units)	On Which Claims	Project Costs Apportioned
GEOLOGICAL (scale, area)			
Ground, mapping			
Photo Interpretation			
GEOPHYSICAL (line kilometres)			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Siesmic			
Other			
Airborne			
GEOCHEMICAL			
(number of samples analyzed for)			
Soil			
Rock			
Other			
DRILLING			
(total metres, number of holes, size)			
Core	6 holes – 3003 metres HQ/NQ	1058301, 1058304	$897.286.63
Non-core			
RELATED TECHNICAL			
Sampling / assaying			
Petrographic			
Mineralogical			
Metallurgic			
PROSPECTING (scale, area)			
PREPARATION / PHYSICAL			
Line/grid (kilometres)			
Topographic / Photogrammatic			
(scale, area)			
Legal Surveys (scale, area)			
Road, local access (kilometres)			
Trench (metres)			
Underground dev. (metres)			
Other			
		TOTAL COST	**$897.286.63**

MAMMOTH
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2021 DIAMOND DRILLING ASSESSMENT REPORT
Supporting Statement of Work 5864261

POPLAR PROPERTY
Tenures: 1055992, 1055993, 1058238, 1058241, 1058243, 1058244, 1058249, 1058250, 1058251, 1058252, 1058253, 1058269, 1058270, 1058272, 1058273, 1058274, 1058275, 1058276, 1058283, 1058284, 1058287, 1058289, 1058290, 1058291, 1058292, 1058296, 1058297, 1058298, 1058299, 1058300, 1058301, 1058302, 1058303, 1058304, 1058305, 1058307, 1058309, 1058310, 1058311, 1058312, 1058313, 1058314, 1058316, 1058317, 1058318, 1058350, 1058352, 1058353, 1058354, 1058355, 1072360, 1072362, 1072363, 1072364, 1076168, 1082547, 1082548, 1082549, 1082551, 1082552, 1082553, 1082554, 1082555, 1082556, 1082557, 1082558, 1082559, 1082560, 1082561, 1082562, 1082563

Work Performed on Tenures: 1058301, 1058304
Under Mineral Exploration Permit MX-1-115

Located at Tagetochlain Lake, South of Houston
Omineca Mining Division
NTS Map Sheets (093/E14, 093/E15, 093L/02, 093L/03)
632000E 5987000N NAD83 ZONE 9

Owner
Doctor's Investment Group Ltd. / Universal Copper Ltd.
5884 Mayview Circle
Burnaby, British Columbia V5E 4B8

Operator
Universal Copper Ltd.
830 – 1100 Meliville Street
Vancouver, British Columbia V6E 4A6

Work Program Completed By
Waldo Sciences Inc.

R. Tim Henneberry, P.Geo.
Mammoth Geological Ltd.
March 15, 2022

SUMMARY

Universal Copper Ltd.'s road accessible Poplar Copper Project lies 60 kilometres south of Houston, BC on the Nechako Plateau. Poplar has a long exploration history, with the early 1970's discovery of copper mineralization subsequently leading to a significant porphyry copper deposit which currently hosts an undiluted indicated mineral resource of 152.3 million tonnes grading 0.32 per cent copper, 0.009 per cent molybdenum, 0.09 gram per tonne gold and 2.58 g/t silver; and an undiluted inferred mineral resource of 139.3 million tonnes grading 0.29 per cent copper, 0.005 per cent molybdenum, 0.07 g/t gold and 4.95 g/t silver. The resource is divided between the two sections of the deposit, the Main Zone and the East Zone.

The 62,608 hectare property currently is comprised of 71 mineral tenures. While Utah Mines Ltd. concentrated on the Poplar deposit itself, a number of companies explored areas of the property peripheral to the deposit in spurts since the early 1970's. They have identified a number of high quality targets peripheral to the deposit through programs of soil geochemistry, geological mapping, ground magnetics and IP, airborne magnetics and electromagnetics, percussion drilling and diamond drilling. Most of these targets have received minimal exploration attention at best during the time Universal has held the project.

Universal Copper has been exploring Poplar since 2018, completing surface geochemistry programs and two small diamond drilling programs prior to the current program. Further, Universal has spent the last few months researching, digitizing and collating the various peripheral historical exploration programs into geochemical, geophysical and drilling databases for review and target generation.

During the late fall of 2021, Universal completed a series of 6 vertical ±500 metre HQ/NQ diamond drill holes, totaling 3,003 metres, through the heart of the deposit to confirm and expand the known high grade mineralization and test for depth extensions.

The program met with significant success with two of the holes in the East Zone returning grade through the entire 500 metre length of the holes. Equally, or more importantly, one of the East Zone holes hit 0.546% copper over the bottom 129 metres of the hole, strongly suggesting the mineralization has a plunge to the east-northeast and further suggesting mineralization continues in that direction.

A 1500 to 3000 metre program is recommended to follow up on the 2021 drill results at an estimated cost of $450,000 to $900,000.

The cost of the 2021 diamond drilling program was $897,286.63.

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INTRODUCTION

The purpose of this report it to document the 2021 diamond drilling program at Universal Copper Ltd.'s Poplar Copper Deposit south of Houston, BC. Six vertical HQ/NQ holes were completed to approximately 500 metres each, totaling 3003 metres. The program was undertaken by Waldo Sciences Ltd., with overall supervision by the author. Drilling was completed by Apex Diamond Drilling of Smithers and the camp and logistics were handled by Rugged Edge Holdings Ltd. Drill core was sawn top to bottom for each hole, sampled in more or less continuous 3 metre intervals and shipped to the ALS Minerals Laboratory in North Vancouver for analysis. Duplicates, blanks and standards were added to the sample stream at regular intervals for QA/QC control.

Unless otherwise specified all UTM coordinates and all maps are plotted in the map datum of NAD83 Zone 9.

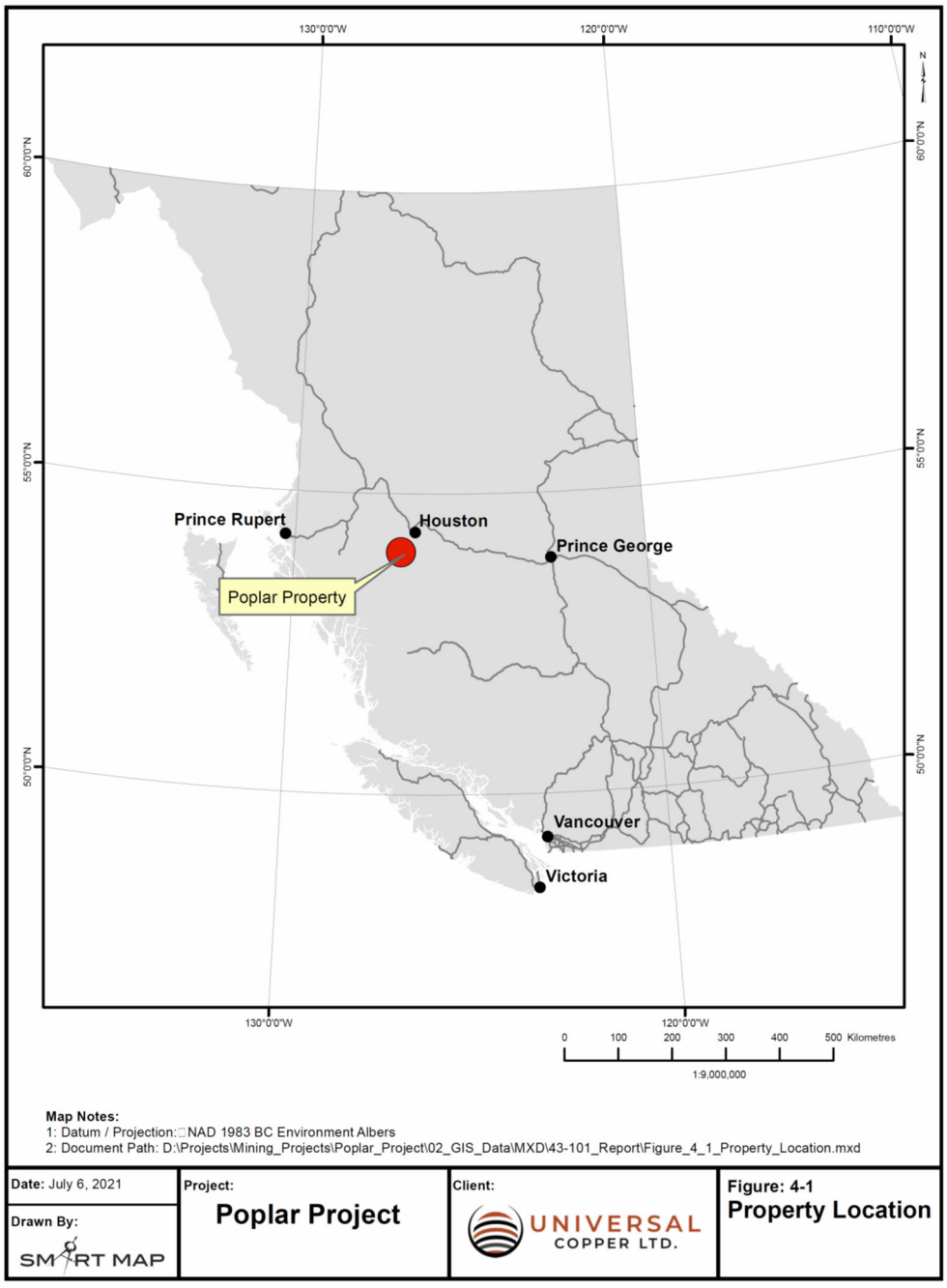
LOCATION / PHYSIOGRAPHY / ACCESS / INFRASTRUCTURE

The Poplar property is located in British Columbia's Central Interior, approximately 60 kilometers south of the town of Houston. (Figure 1). The main area of the drilling is accessible by two-wheel drive vehicle, with outlying sections of the property largely accessible by secondary logging roads and trails. While the main work area can be reached in 90 to 120 minutes, it is much more convenient to set up a camp at Tagetochlain Lake itself.

Poplar lies on the western margin of the Nechako Plateau, in an area of moderate relief ranging from 825 metres at lake level to 1,627 metres at the summit of Poplar Mountain. 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, from open meadows used for grazing livestock through open aspen parkland or scrub pine and spruce to sub-mature and mature stands of balsam fir at higher elevations. Fee simple district lots cover parts of the property around Tagetochlain Lake and are utilized for grazing of livestock. Logging is active in the area and large areas of the outlying sections have been clear-cut or are in regeneration. Surface and ground water for exploration can be found in the various stream, ponds and lakes throughout the claim block.

Figure 1. Poplar Project Regional Location



Climate at Poplar 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.

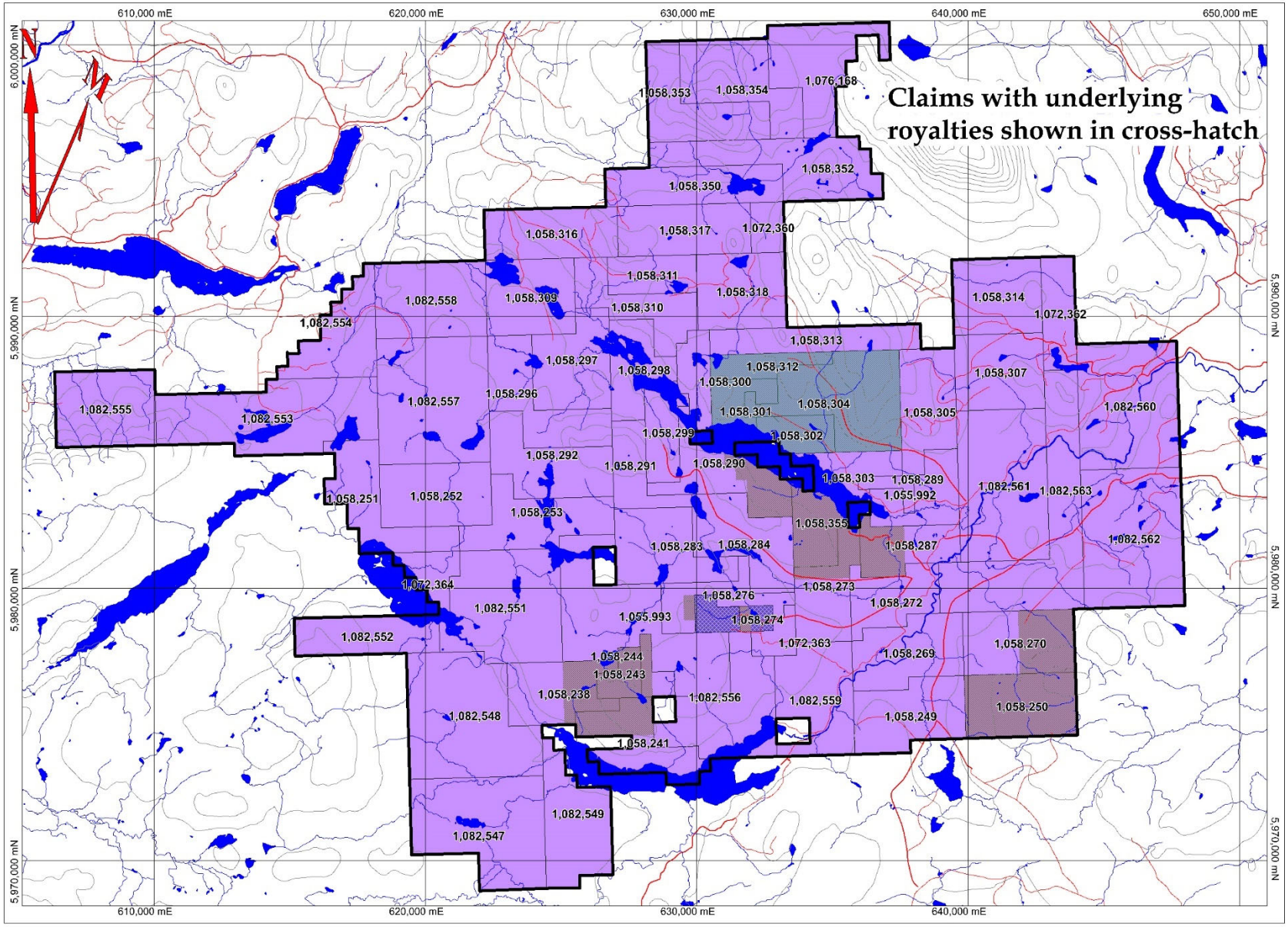
Houston is a major supply and industrial service center for the mining and logging operations located in the area, along with Smithers, approximately 70 kilometres to the west. Smithers is a major exploration centre for the region and is serviced daily by air from Vancouver.

The Poplar Property consists of 71 mineral tenures totaling 62,608 hectares as shown in Table 1. The original claim block (tenures 1055992 to 1076168) is held by Doctor's Investment Group Ltd. (owner 284658). Universal Copper is earning a 100% interest in these 39,286 hectares, with approximately 6,177.5 hectares subject to varying Net Smelter Return royalties of 1% to 2% attached to specific claims from original underlying agreements, from Doctor's Investment Group under an agreement dated November 17, 2017 and amended May 25, 2019. Tenures 1082547 to 1082549 are registered in the name of Alan John Wainwright (owner 142047) and held in trust for Universal Copper after their purchase from BA Copper Corp. on September 23, 2021. Tenures 1082551 to 1082563 are registered in the name of Thomas Reid Mumford (owner 287718) and held in trust for Universal Copper after their purchase from Poplar Copper Corp. on July 15, 2021. The Poplar claim map is shown as Figure 2 and the claims are shown in Table 1.

Table 1. Poplar Tenures at 2022-February-27

	Title Number	Claim Name	Owner	Issue Date	Good To Date	Area (ha)
1	1055992	Dilys	284658 (100%)	2022/Jul/25	2022/Jul/25	133.11
2	1055993	Thira	284658 (100%)	2022/Jul/25	2022/Jul/25	1770.05
3	1058238	Pop 5	284658 (100%)	2022/Jul/25	2022/Jul/25	799.79
4	1058241	Pop 7	284658 (100%)	2022/Jul/25	2022/Jul/25	800.15
5	1058243	Pop 9	284658 (100%)	2022/Jul/25	2022/Jul/25	228.49
6	1058244	Pop 10	284658 (100%)	2022/Jul/25	2022/Jul/25	171.36
7	1058249	Pop 14	284658 (100%)	2022/Jul/25	2022/Jul/25	952.45
8	1058250	Pop 15	284658 (100%)	2022/Jul/25	2022/Jul/25	952.45
9	1058251	Pop 16	284658 (100%)	2022/Jul/25	2022/Jul/25	893.71
10	1058252	Pop 17	284658 (100%)	2022/Jul/25	2022/Jul/25	950.67
11	1058253	Pop 18	284658 (100%)	2022/Jul/25	2022/Jul/25	931.83
12	1058269	Pop 20	284658 (100%)	2022/Jul/25	2022/Jul/25	932.99
13	1058270	Pop 21	284658 (100%)	2022/Jul/25	2022/Jul/25	951.99
14	1058272	Pop 23	284658 (100%)	2022/Jul/25	2022/Jul/25	647.10
15	1058273	Pop 24	284658 (100%)	2022/Jul/25	2022/Jul/25	685.12
16	1058274	Pop 25	284658 (100%)	2022/Jul/25	2022/Jul/25	114.20
17	1058275	Pop 26	284658 (100%)	2022/Jul/25	2022/Jul/25	190.32
18	1058276	Pop 27	284658 (100%)	2022/Jul/25	2022/Jul/25	513.81
19	1058283	Pop 28	284658 (100%)	2022/Jul/25	2022/Jul/25	951.10
20	1058284	Pop 30	284658 (100%)	2022/Jul/25	2022/Jul/25	932.06
21	1058287	Pop 32	284658 (100%)	2022/Jul/25	2022/Jul/25	608.79
22	1058289	Pop 34	284658 (100%)	2022/Jul/25	2022/Jul/25	608.54
23	1058290	Pop 35	284658 (100%)	2022/Jul/25	2022/Jul/25	855.54
24	1058291	Pop 36	284658 (100%)	2022/Jul/25	2022/Jul/25	475.27
25	1058292	Pop 37	284658 (100%)	2022/Jul/25	2022/Jul/25	931.43
26	1058296	Pop 41	284658 (100%)	2022/Jul/25	2022/Jul/25	912.04
27	1058297	Pop 42	284658 (100%)	2022/Jul/25	2022/Jul/25	911.82
28	1058298	Pop 43	284658 (100%)	2022/Jul/25	2022/Jul/25	626.92
29	1058299	Pop 44	284658 (100%)	2022/Jul/25	2022/Jul/25	475.15
30	1058300	Pop 45	284658 (100%)	2022/Jul/25	2022/Jul/25	379.99

Figure 2. Poplar Project Mineral Tenure Locations



Poplar Claim Block at 2022-Feb-27

Table 1. Poplar Tenures at 2022-February-27 (Continued)

	Title Number	Claim Name	Owner	Issue Date	Good To Date	Area (ha)
31	1058301	Pop 46	284658 (100%)	2023/Jul/25	2023/Jul/25	418.10
32	1058302	Pop 47	284658 (100%)	2022/Jul/25	2022/Jul/25	361.15
33	1058303	Pop 48	284658 (100%)	2022/Jul/25	2022/Jul/25	475.33
34	1058304	Pop 49	284658 (100%)	2023/Jul/25	2023/Jul/25	1368.17
35	1058305	Pop 50	284658 (100%)	2022/Jul/25	2022/Jul/25	836.11
36	1058307	Pop 52	284658 (100%)	2022/Jul/25	2022/Jul/25	911.86
37	1058309	Pop 54	284658 (100%)	2022/Jul/25	2022/Jul/25	911.30
38	1058310	Pop 55	284658 (100%)	2022/Jul/25	2022/Jul/25	702.58
39	1058311	Pop 56	284658 (100%)	2022/Jul/25	2022/Jul/25	455.62
40	1058312	Pop 57	284658 (100%)	2022/Jul/25	2022/Jul/25	322.96
41	1058313	Pop 58	284658 (100%)	2022/Jul/25	2022/Jul/25	721.76
42	1058314	Pop 59	284658 (100%)	2022/Jul/25	2022/Jul/25	911.32
43	1058316	Pop 61	284658 (100%)	2022/Jul/25	2022/Jul/25	910.87
44	1058317	Pop 62	284658 (100%)	2022/Jul/25	2022/Jul/25	910.94
45	1058318	Pop 63	284658 (100%)	2022/Jul/25	2022/Jul/25	911.38
46	1058350	Pop 75	284658 (100%)	2022/Jul/25	2022/Jul/25	910.55
47	1058352	Pop 76	284658 (100%)	2022/Jul/25	2022/Jul/25	1232.83
48	1058353	Pop 78	284658 (100%)	2022/Jul/25	2022/Jul/25	909.96
49	1058354	Pop 79	284658 (100%)	2022/Jul/25	2022/Jul/25	985.60
50	1058355	Pop 31	284658 (100%)	2022/Jul/25	2022/Jul/25	513.56
51	1072360	Nad 1	284658 (100%)	2022/Jul/25	2022/Jul/25	227.73
52	1072362	Nad 2	284658 (100%)	2022/Jul/25	2022/Jul/25	512.69
53	1072363	Nad 3	284658 (100%)	2022/Jul/25	2022/Jul/25	209.40
54	1072364	Newcombe Lake	284658 (100%)	2022/Jul/25	2022/Jul/25	323.43
55	1076168	Nadina	284658 (100%)	2022/Jul/25	2022/Jul/25	1042.40
56	1082547	Ba1	142047 (100%)	2022/Jul/25	2022/Jul/25	1715.72
57	1082548	Ba2	142047 (100%)	2022/Jul/25	2022/Jul/25	1904.74
58	1082549	Ba3	142047 (100%)	2022/Jul/25	2022/Jul/25	1010.36
59	1082551	Dingo	287718 (100%)	2022/Jul/25	2022/Jul/25	1674.62
60	1082552	Bulldog	287718 (100%)	2022/Jul/25	2022/Jul/25	742.37
61	1082553	Bernese	287718 (100%)	2022/Jul/25	2022/Jul/25	1862.21
62	1082554	Greyhound	287718 (100%)	2022/Jul/25	2022/Jul/25	835.58
63	1082555	Foxhound	287718 (100%)	2022/Jul/25	2022/Jul/25	1026.05
64	1082556	Chihuahua	287718 (100%)	2022/Jul/25	2022/Jul/25	1199.95
65	1082557	Boxer	287718 (100%)	2022/Jul/25	2022/Jul/25	1899.98
66	1082558	Bullmastiff	287718 (100%)	2022/Jul/25	2022/Jul/25	1139.09
67	1082559	Maltese	287718 (100%)	2022/Jul/25	2022/Jul/25	1047.52
68	1082560	Terrier	287718 (100%)	2022/Jul/25	2022/Jul/25	1710.27
69	1082561	Pointer	287718 (100%)	2022/Jul/25	2022/Jul/25	1825.48
70	1082562	Poodle	287718 (100%)	2022/Jul/25	2022/Jul/25	1883.40
71	1082563	Husky	287718 (100%)	2022/Jul/25	2022/Jul/25	1845.17
						62608.36

The principle mineralized zone on the Property is the Poplar Zone. It is located in the central portion of Tenure Number 1058301.

HISTORY

The current Poplar property has a long exploration history with initial exploration of some of the peripheral claims commencing in the late 1960's. The bulk of the exploration has been directed at the Poplar deposit itself as detailed in Table 2. Significant exploration has also taken part in other areas of the 626 square kilometre property as detailed in Table 8.

Table 2. Poplar Deposit Exploration History

Year	Operator	Program	Holes	Metres	ASRP	Author
1972	El Paso Mining and Milling Company	soils			3665	Jones, 1972
1974	Utah Mines Ltd.	diamond drilling	4	937	5360	Schmidt, 1975a
1974	Utah Mines Ltd.	IP, mag			5361	Witherley, 1975
1975	Utah Mines Ltd.	diamond drilling	11	2013	5586	Schmidt, 1975b
1975	Utah Mines Ltd.	mapping, IP			5679	Bowen, 1975
1976	Utah Mines Ltd.	diamond drilling	11	2286	6065	Bowen, 1976a
1976	Utah Mines Ltd.	diamond drilling	8	2048	6136	Bowen, 1976b
1977	Utah Mines Ltd.	diamond drilling	6	998	6539	Bowen, 1977
1979	Utah Mines Ltd.	diamond drilling	3	746	7983	Bowen and Holland, 1980
1980	Utah Mines Ltd.	diamond drilling	2	641	8129	Holland, 1980a
1980	Utah Mines Ltd.	diamond drilling	11	2860	8186	Holland, 1980b
1981	Utah Mines Ltd.	diamond drilling	16	4829	9431	Holland, 1981
1982	Utah Mines Ltd.	diamond drilling	5	1500	10298	Holland, 1982
1984	Geotech Resources Inc.	mag, VLF			12459	Mark, 1984
1984	Selco BP	mapping, sampling			13456	Humphreys, 1984
1992	New Canamin Resources Ltd.	diamond drilling	13	1300	22092	House, 1992
1999	Vendors	mapping, sampling			26001	Sookochoff, 1999
2004	Aumega Discoveries Ltd.	IP, mag			27838	Walcott, 2005
2005	Aumega Discoveries Ltd.	diamond drilling	7	1507	Na	no report filed
2005	Aumega Discoveries Ltd. (China Creek)	diamond drilling	8	1500	Na	no report filed
2009	Lion's Gate Metals Inc.	mapping, surveying			31004	Ogryzlo and Farrell, 2009
2010	Lion's Gate Metals Inc.	IP, soils			31373	Ogryzlo and Farrell, 2010
2009	Lion's Gate Metals Inc.	airborne EM, mag			31788	Farrell, 2010
2011	Lion's Gate Metals Inc.	soil, till			32813	Farrell, 2012a
2011	Lion's Gate Metals Inc.	diamond drilling	13	5569	33035	Farrell and Schroff, 2012
2011	Lion's Gate Metals Inc.	diamond drilling	29	10914	33575	Farrell and Schroff, 2013
2012	Lion's Gate Metals Inc.	reprocessing			33675	Farrell, 2012b
2013	Lion's Gate Metals Inc.	soils			34606	Farrell, 2014
2018	Tasca Resources Ltd.	soils, tills			37616	Farrell, 2018
2018	Tasca Resources Ltd.	diamond drilling	3	1098	38098	Farrell, 2019
2019	Universal Copper Ltd.	diamond drilling	1	551	38791	Farrell, 2020
Total			**151**	**41296**		

Poplar Deposit History

According to Price (2004), the initial discovery of mineralization on the Poplar Property was made in 1971 by prospector Frank Onucki, when a showing containing malachite was discovered on the north shore of Tagetochlain (Poplar) Lake. The Poplar Property was then staked on behalf of El Paso Mining and Milling Company by Onucki, M. Callaghan, and C. Critchlow. In 1971 and 1972, El Paso did soil geochemical sampling and some bulldozer trenching (Jones 1972), but results were disappointing and the property was subsequently re-acquired by the original stakers.

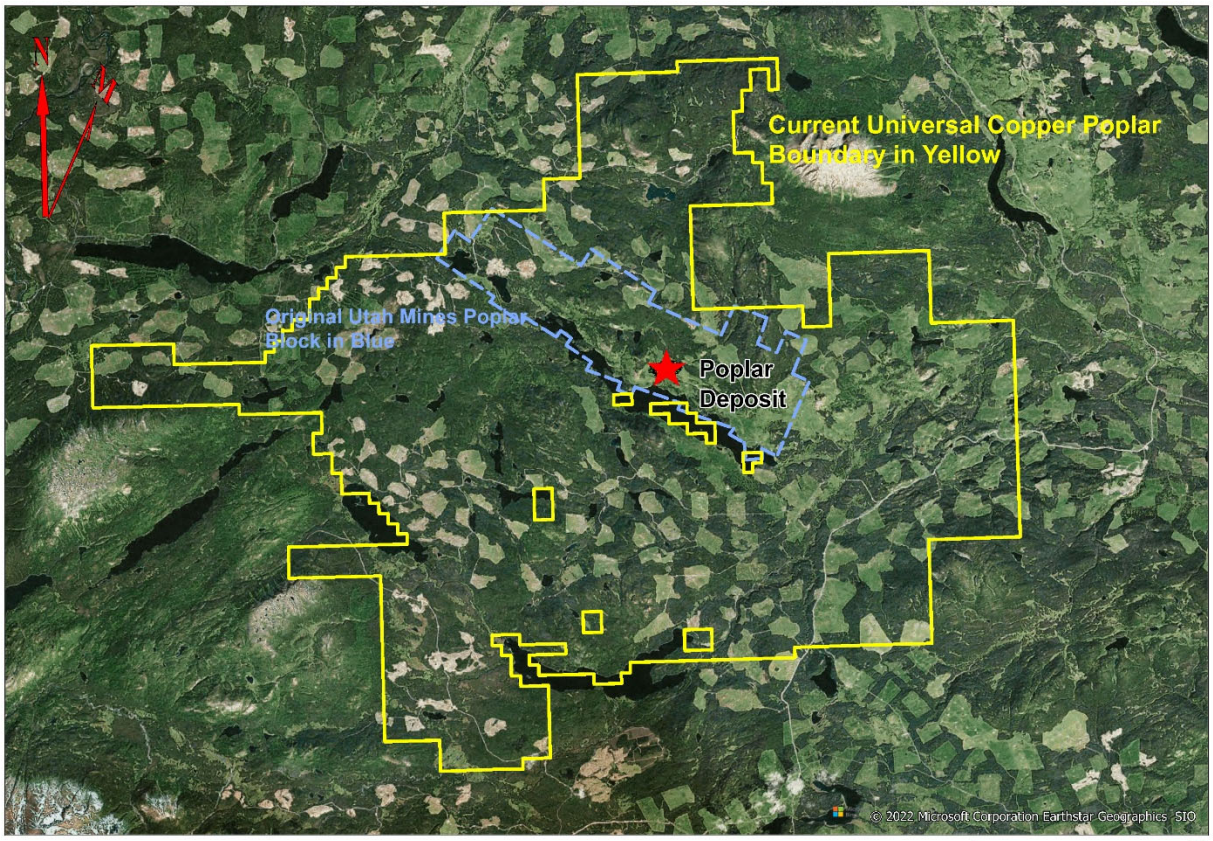
Table 3. Drill Intersection Highlights from Utah Mines Ltd. 1974 to 1981 drill programs

HOLE-ID	Azimuth	Dip	m length	m from	m to	m interval	% Cu	% Mo	g/t Au	g/t Ag
PC-01	0	-90	300.84	0.61	300.84	300.23	0.375	0.022	0.02	0.30
PC-02	65	-60	285.60	6.09	42.67	36.58	0.476	0.012	0.03	0.34
				100.58	285.60	185.02	0.288	0.013	0.01	0.05
PC-07	0	-90	229.21	25	229.20	204.20	0.368	0.019	0.02	0.45
PC-12	65	-60	230.73	3.4	54.40	51.00	0.472	0.001	0.02	0.58
				87.4	230.70	143.30	0.288	0.013	0.01	0.46
PC-22	0	-90	184.10	27.9	184.10	156.20	0.363	0.017	0.02	0.48
PC-24	90	-60	214.60	49	102.00	53.00	0.666	0.030	0.04	0.54
				6.71	214.60	207.89	0.429	0.016	0.03	0.33
PC-28	90	-60	306.60	156	306.60	150.60	0.368	0.018	0.02	0.16
PC-29	77	-70	239.60	15.4	186.00	170.60	0.349	0.000	0.02	0.11
PC-30	90	-60	260.90	11.5	66.00	54.50	0.330	0.005	0.02	0.16
				234.7	260.90	26.20	0.285	0.007	0.03	0.30
PC-31	90	-80	252.10	33.00	123.00	90.00	0.300	0.016	0.03	1.27
PC-33	0	-90	370.00	51.00	358.50	307.50	0.289	0.001	0.02	0.59
				184.00	326.00	142.00	0.371	0.001	0.02	0.74
PC-35	0	-90	608.70	360.00	608.70	248.70	0.319	0.004	0.01	2.65
PC-41	0	-90	300.80	168.00	212.80	44.80	0.449	0.001	0.01	0.39
PC-42	0	-90	287.60	255.00	287.60	32.60	0.331	0.001	0.02	3.12
PC-45	0	-90	337.42	75.00	337.42	262.42	0.269	0.001	0.10	2.88
				211.40	331.00	119.60	0.369	0.001	0.13	4.67
PC-47	90	-60	502.00	242.00	319.18	77.18	0.383	0.007	0.02	1.18
				319.80	502.00	182.20	0.360	0.014	na	na
PC-48	90	-65	151.20	97.80	151.18	53.38	0.385	0.011	0.02	0.03
PC-50	90	-70	180.44	39.62	180.44	140.82	0.358	0.018	0.14	0.83
PC-52	90	-60	300.83	16.01	46.00	29.99	0.345	0.016	0.03	0.38
				73.00	103.00	30.00	0.520	0.001	0.01	0.03
PC-57	0	-90	456.30	348.00	398.00	50.00	0.717	0.001	0.02	2.98
PC-59	110	-70	361.80	315.00	361.80	46.80	0.305	0.000	0.00	0.37
PC-61	90	-70	312.70	18.30	102.00	83.70	0.576	0.001	0.03	0.66
				213.00	288.00	75.00	0.402	0.001	0.01	1.18
PC-65	0	-90	349.60	24.40	315.00	290.60	0.390	0.015	0.00	0.53
PC-69	0	-90	337.11	126.00	337.11	211.11	0.349	0.007	0.01	1.19

Utah Mines (later BHP Utah and now BHP Billiton) optioned the Poplar Property in 1972, completing extensive programs of geological mapping, geochemical soil sampling, and magnetometer surveying, followed by focused programs of IP and 8,821 metres of diamond drilling in 40 holes between 1974 and 1977. Utah resumed work between 1979 and 1981, bringing the total diamond drilling metres to 17,900 with an additional 33 drill holes. This resulted in an historic resource estimate in 1982. However, with a looming final option payment in excess of $1 million and Island Copper in full production on Vancouver Island, Utah filed 10 years of assessment and returned the claims to the original property vendors.

The location on the Utah Mines original Poplar claim block is shown in Figure 3. Highlights from the drilling program are shown in Table 3 and collar locations of the Utah drill holes are shown in Figure 4.

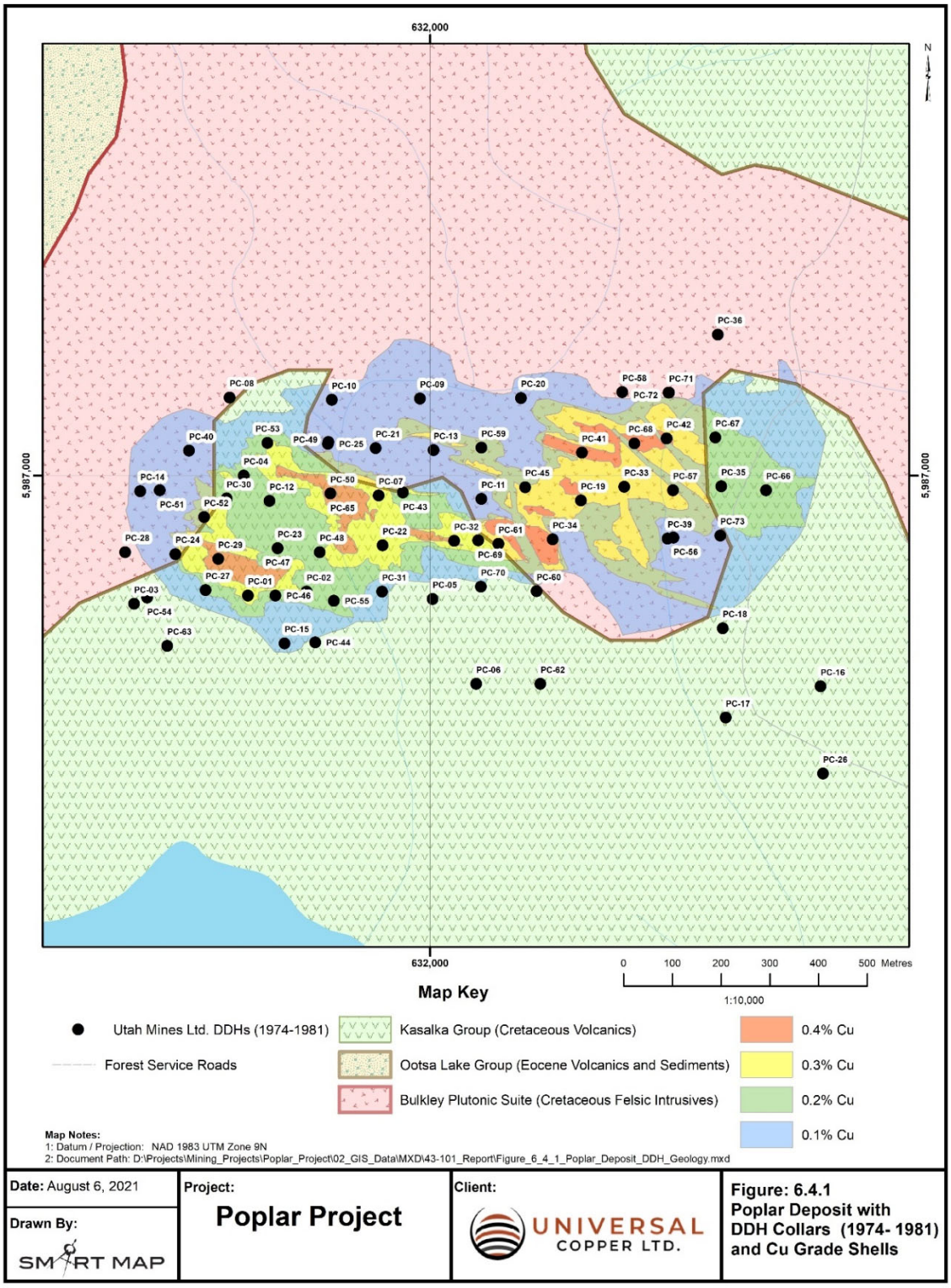
Figure 3. Utah Mines Original Poplar Block



Poplar Project - Original Utah Claim Block

Dr. Colin Godwin, at the University of British Columbia, advised P.M. Mesard on his Master Thesis on the Poplar deposit in 1978. Also in 1978, Dr. Nick Carter of the B.C. Department of Mines and took samples of the porphyry-copper host rocks for potassium-argon age dating.

Figure 4. Utah Mines Poplar Drill Collar Locations



The next period of activity was 1991, when Metamin Enterprises Limited optioned Poplar and subsequently assigned their option to New Canamin Resources Limited. Placer Dome Exploration produced a plan and series of 1:1000 sections from the Utah drilling in May – June 1991; these were subsequently reviewed later in the summer by Dr. Darryl Drummond, resulting in a report (Drummond, 1991) recommending exploration in the area of geochemical anomalies in the China Creek area on the east side of the Poplar Property, along with further definition drilling in the core of the Poplar porphyry deposit and exploration of geochemical anomalies between the porphyry- copper deposit and Tagetochlain Lake. New Canamin (House, 1991) drilled 13 diamond drill holes, totaling 1,300 meters based on Drummond's recommendations. Holes 91-1 to 91-3 explored an area of geochemical copper soil anomalies in the China Creek area on the eastern side of the Poplar Property, with the remaining 10 holes drilled to further define the known body of copper, molybdenum, gold, silver mineralization and also investigate an area of copper geochemical soil anomalies, which occur south of the known porphyry-copper deposit, between it and TagetochlainLake. Despite favorable drill results, New Canamin decided to concentrate on their other project, the Huckleberry Cu-Mo deposit, returning the Poplar Property to the vendors.

Table 4 Drill Intersection Highlights from New Canamin Resources Ltd. 1991 and Aumega Discoveries Ltd. 2005 drill programs

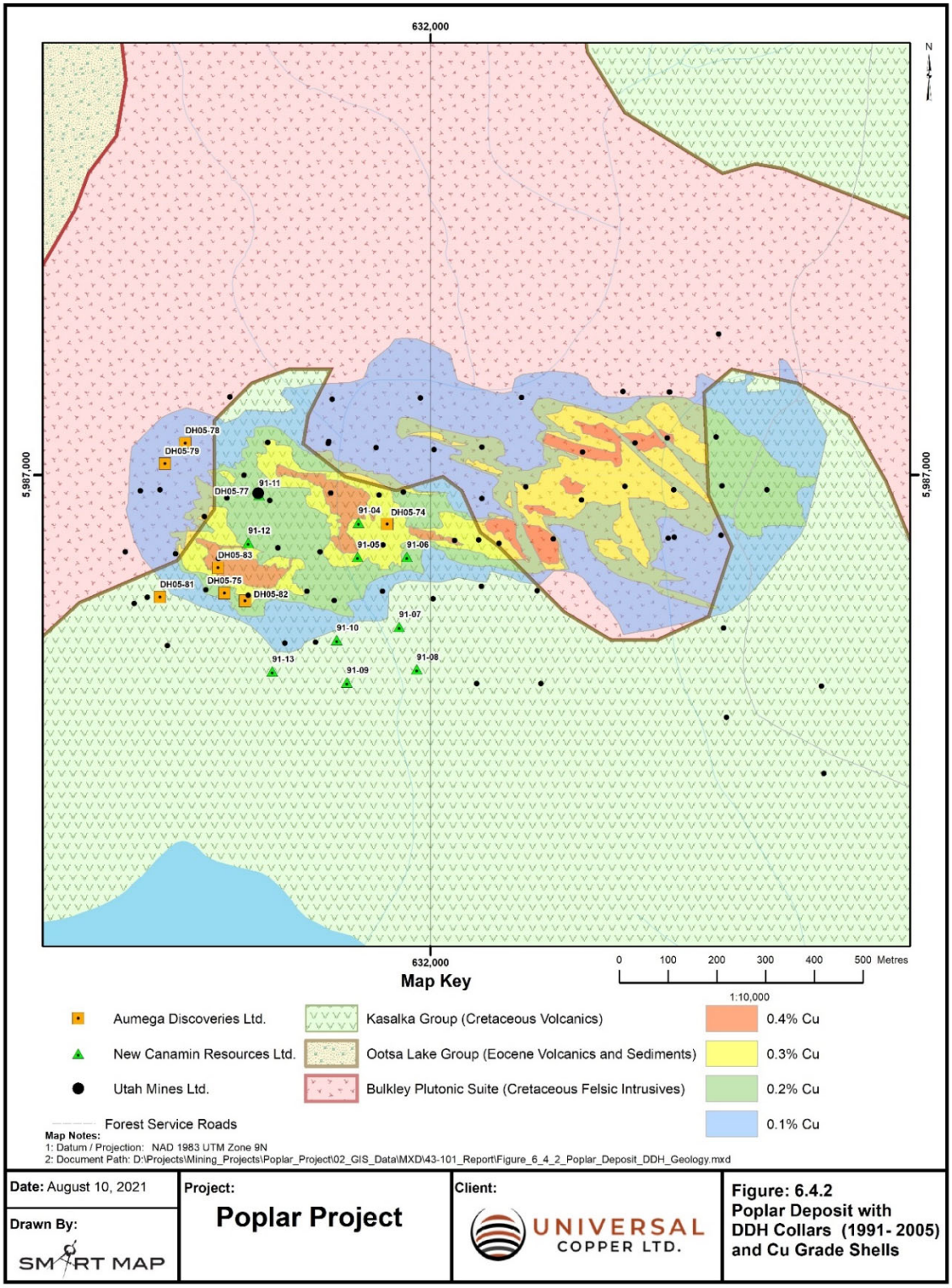
HOLE-ID	Azimuth	Dip	m length	m from	m to	m interval	% Cu	% Mo	g/t Au	g/t Ag
91-04	45	-60	99.80	22.80	99.80	77.00	0.407	0.008	0.11	7.94
91-05	45	-60	99.90	42.00	99.90	57.90	0.412	0.007	0.10	6.03
DH05-74	244	-65	190.50	24.99	187.39	162.40	0.415	0.011	0.12	3.35
DH05-75	42	-65	200.90	0.09	200.86	200.77	0.382	0.017	0.12	1.16
DH05-81	35	-50	163.70	69.19	163.68	94.49	0.493	0.021	0.12	1.42
DH05-82	45	-70	199.70	3.05	199.64	196.59	0.351	0.012	0.13	1.08
DH05-83	90	-60	203.30	11.28	177.24	165.96	0.478	0.022	0.13	1.79
				11.28	203.30	192.02	0.443	0.020	0.12	1.68

Over the next ten years, the property was optioned to several mining companies, but no work was ever done on the ground.

Hathor Exploration Limited optioned the Poplar property late in 2003, quickly joint venturing it to Aumega Discoveries Ltd. Aumega completed 35 line kilometres of IP surveying and approximately 3,000 metres of diamond drilling in 16 holes in 2005. None of this work was filed for assessment, though the data remained in the Company's files. Aumega later changed its name to Lion's Gate Metals, with the 2005 exploration data reported in Ogryzlo and Farrell (2009).

The New Canamin and Aumega drill intersections highlights are shown in Table 4 and the drill collar locations are shown in Figure 5.

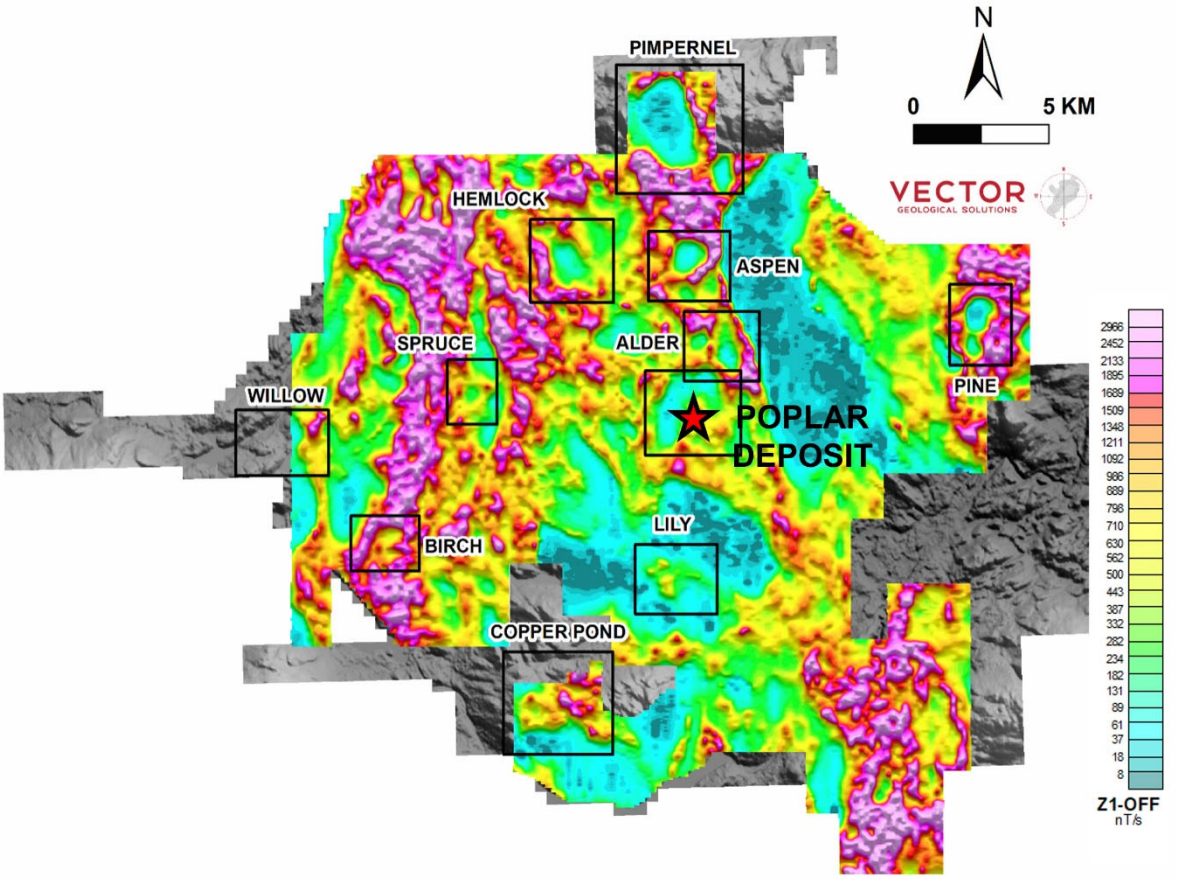
Figure 5. New Canamin and Aumega Poplar Drill Collar Locations



Lions Gate Metals aggressively explored Poplar between 2008 and 2012, growing the property to 780 square kilometres. This included programs of prospecting, mapping, IP surveying as well as a property wide aeromagnetic survey. In addition, they completed 16,483 metres of diamond drilling in 42 holes.

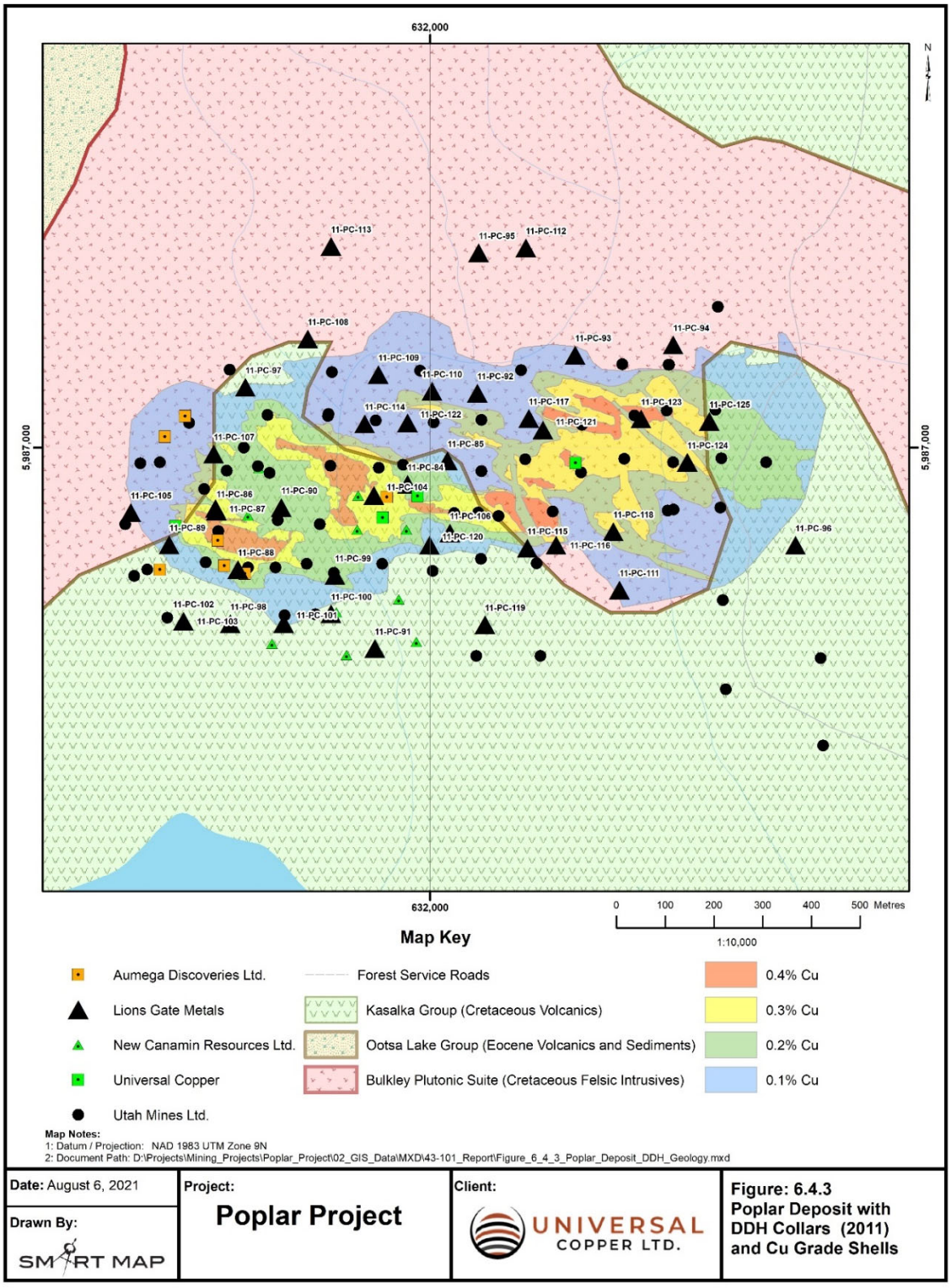
Lions Gate Metals first undertook a program of prospecting, mapping, surveying drill collars and QAQC check sampling of the 2005 drill program results in 2008. Samples within the China Creek area returned highlight grades of 2485 to 9764 ppm copper and 37.6 to 55.5 ppm Ag. (Ogryzlo and Farrell, 2009).

Figure 6. Airborne EM AeroTem (Zoff1) with Target Zones



Lions Gate Metals commissioned two geophysical surveys in 2009. The first was 7 line kilometres of Tuned Gradient and Deep Insight Section DCIP Surveys on the Poplar deposit itself. The DCIP survey indicated the mineralization appears to continue at depth and also identified lateral untested areas. (Ogryzlo and Farrell, 2010). The second was a 2681 line kilometre airborne electromagnetic and magnetic survey at 200 metre line spacings. Porphyry copper deposits commonly exhibit a circular or "donut" shaped response to electromagnetic and magnetic surveys, as a result of symmetrical zones of alteration and mineralization around the intrusive bodies that generated the deposits. The simple "donut" model may be disrupted by post mineralization faulting, but the zones of alteration and mineralization will still produce an electromagnetic and magnetic response. Circular feature responses were noted over the Poplar, Aspen, Pimpernel, Red Pine, Birch, and Willow targets. Weaker responses were seen over known mineralization on the Lily and Copper Pond copper occurrences. (Farrell, 2010).

Figure 7. Lions Gate Metals 2011 Poplar Drill Collar Locations



Based on the DCIP surveys, Lions Gate Metals undertook a 42 hole, 16,483 drilling program at the Poplar deposit in an effort to extend the know mineralization and complete a new mineral resource estimate. Both objectives were met as new higher grade zones were located within the deposit and the limits of the mineralization were extended (Farrell and Schroff, 2013). Highlights of the drilling are shown in Table 5 and the collar locations of the Lions Gate Metals drill holes are shown in Figure 7.

Table 5 Drill Intersection Highlights from Lions Gate Metals Ltd. 2011 drill program

HOLE-ID	Azimuth	Dip	m length	m from	m to	m interval	% Cu	% Mo	g/t Au	g/t Ag
11-PC-84	270	-65	465.10	24.99	402.88	377.89	0.357	0.012	0.10	1.74
				24.99	465.10	440.11	0.329	0.010	0.09	1.80
11-PC-85	180	-75	459.33	173.28	459.33	286.05	0.330	0.004	0.10	2.37
11-PC-86	270	-65	355.70	11.75	217.45	205.70	0.471	0.010	0.12	1.18
11-PC-88	360	-75	502.00	5.79	502.00	496.21	0.348	0.015	0.10	2.32
11-PC-90	90	-55	599.54	193.38	442.35	248.97	0.333	0.016	0.08	2.44
11-PC-92	180	-65	502.00	456.56	502.00	45.44	0.385	0.002	0.10	1.50
11-PC-93	180	-65	502.00	235.31	317.50	82.19	0.395	0.000	0.14	8.47
11-PC-97	180	-50	566.16	355.53	512.40	156.87	0.439	0.020	0.12	3.27
11-PC-99	295	-65	502.13	53.60	495.66	442.06	0.337	0.019	0.11	2.13
11-PC-104	270	-62	402.00	30.46	173.72	143.26	0.326	0.003	0.06	2.23
11-PC-109	180	-65	502.00	312.23	501.00	188.77	0.347	0.012	0.12	3.30
11-PC-110	180	-70	477.00	179.19	225.94	46.75	0.357	0.001	0.12	2.31
				339.71	477.00	137.29	0.426	0.005	0.14	1.63
11-PC-111	0	-70	498.00	233.46	457.24	223.78	0.301	0.002	0.06	3.07
11-PC-114	177	-50	200.25	45.55	200.25	154.70	0.337	0.018	0.12	1.59
11-PC-116	355	-49.8	252.00	149.26	252.00	102.74	0.335	0.001	0.14	2.15
11-PC-117	180	-60	599.54	142.08	339.95	197.87	0.337	0.000	0.12	3.52
				401.30	438.31	37.01	0.436	0.001	0.14	2.35

Lions Gate Metals wound exploration down after the 2011 drill program, largely due to the increasing difficulty in securing financing after the 2009 through 2011 junior market boom. They completed small conventional and till soil geochemistry surveys over a number of the target areas highlighted with airborne EM surveys. Anomalous values were obtained over several of the targets, but these results have yet to be followed up in earnest.

Lions Gate Metals reorganized in 2016 and sold the Poplar property to Doctor's Investment Group Limited, the current property vendor. Doctor's Group subsequently optioned the Poplar Property to Tasca Resources Ltd. (now Universal Copper Ltd.) in November 2017.

Universal Copper completed two small drill programs on the Poplar property, a 3 hole 1,097.6 metre program in 2018 and one hole totaling 551.4 metres in 2019. These were largely twin holes of earlier drilling to confirm the historic results in preparation for a mineral resource update.

The drill intersection highlights are shown in Table 6 and the collar locations of the Universal Copper drill holes are shown in Figure 8.

Figure 8. Universal Copper 2018 to 2019 Drill Collar Locations

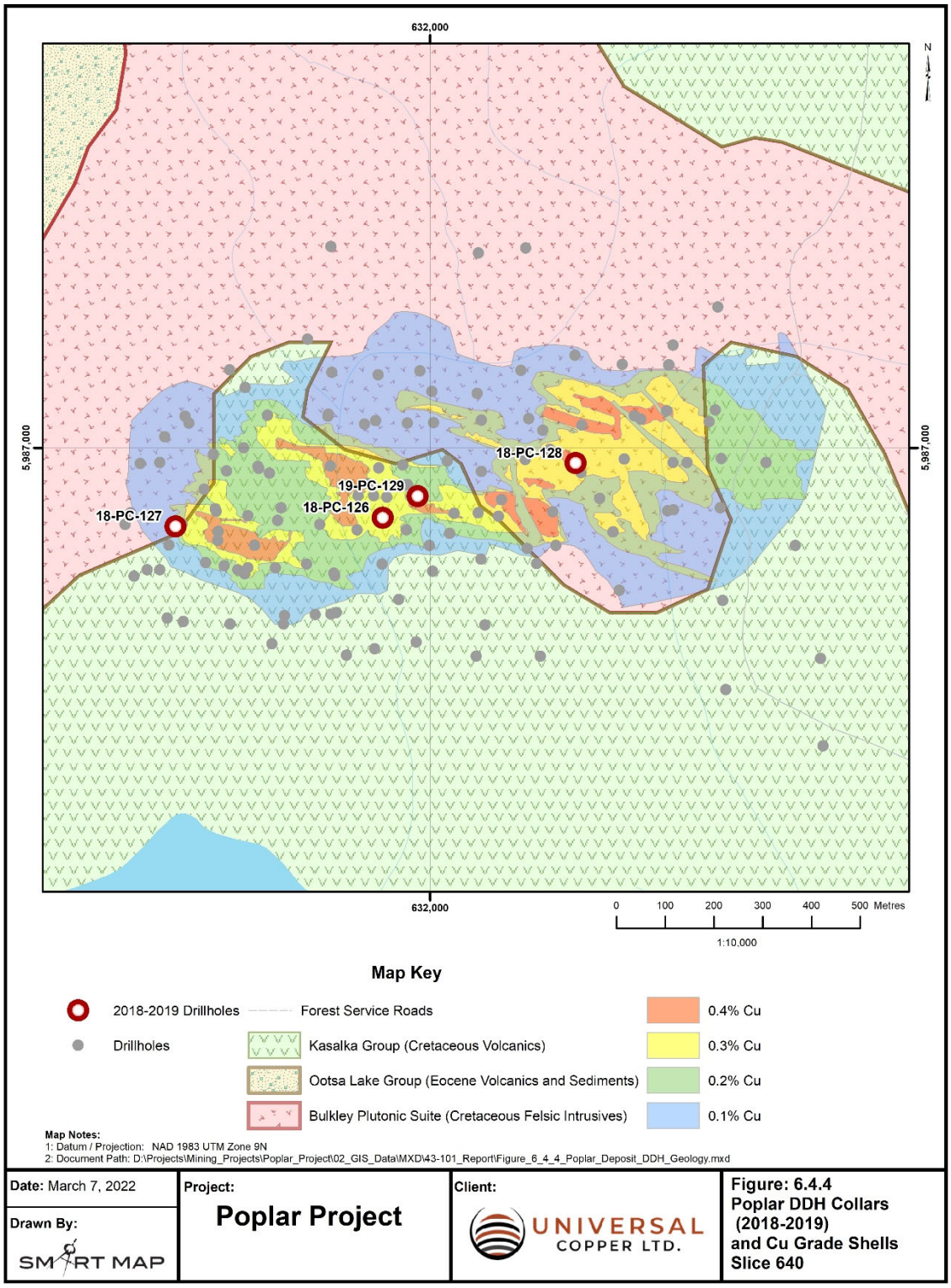


Table 6. Drill Intersection Highlights from Universal Copper 2018 to 2019 drill program

HOLE-ID	Azimuth	Dip	m length	m from	m to	m interval	% Cu	% Mo	g/t Au	g/t Ag
18-PC-126	180	-90	404.47	23.5	404.47	380.97	0.365	0.015	0.10	2.31
				374.3	404.47	30.17	0.554	0.027	0.15	4.44
18-PC-127	90	-60	270.36	5.5	270.36	264.86	0.421	0.013	0.10	2.63
				24.40	78.00	53.60	0.552	0.025	0.14	1.73
				51.00	78.00	27.00	0.643	0.030	0.15	2.62
18-PC-128	0	-90	422.76	5	422.76	417.76	0.197	0.001	0.07	3.03
				122.80	273.90	151.10	0.330	0.002	0.12	3.46
18-PC-129	270	-80	551.38	24	551.38	527.38	0.338	0.011	0.10	2.23
				143.18	527.65	384.47	0.420	0.014	0.12	2.30
				202.67	522.75	320.08	0.449	0.014	0.13	2.23

Since discovery in 1971, the Poplar Property has been tested by 39,648 meters of diamond drilling in 147 holes. This work led to the development of resource models and the estimation of mineral resources on the property. There have been 5 historic mineral resource estimates completed on Poplar, with Universal Copper's July 2021 estimate becoming the 6th. The author sees little benefit to this report in describing the various historic estimates in detail, other than to reference them for interested readers to follow up. These historic estimates are:

- Barney Bowen completed the initial estimate for Utah Mines Ltd. His 1982 report detailing the estimate is not available, but the estimate was reported in the paper on the Poplar Deposit found in the 1995 CIM Special Volume 45 on Porphyry Deposits of the Northwestern Cordillera of North America (House and Ainsworth, 1995).
- Darryl Drummond completed the second estimate for New Canamin Resources Ltd. in 1991, using the same data as Bowen used; "Report on the Poplar Copper – Molybdenum – Gold – Silver Porphyry Deposit" (Drummond, 1991).
- Gary Giroux (2011) completed the third estimate for Lions Gate Metals Inc.; "July 2011 Mineral Resource Estimate on the Poplar Deposit" dated September 30, 2011.
- Gary Giroux (2012) completed the fourth estimate one year later, again for Lions Gate Metals Inc.; "2012 Mineral Resource Update on the Poplar Deposit" dated March 30, 2012.
- Paul Gray and Gary Giroux (2015) completed the fifth estimate for Glenmark Capital Corp.; "2015 Update on the Poplar Deposit" dated February 5, 2015.

Table 7. Historic Resources Estimates at 0.02% Copper Cut-off

Indicated					Inferred					
tonnes	% Cu	% Mo	g/t Au	g/t Ag	tonnes	% Cu	% Mo	g/t Au	g/t Ag	Author
					260,000,000	0.37				Bowen, 1982
					116,122,000	0.316	0.001	0.10	1.00	Drummond, 1991
					180,000,000	0.300	0.008			Giroux, 2011
131,000,000	0.310	0.009	0.09	2.4	132,000,000	0.270	0.005	0.07	3.75	Giroux, 2012
131,000,000	0.310	0.009	0.09	2.4	132,000,000	0.270	0.005	0.07	3.75	Gray and Giroux, 2015
152,300,000	0.320	0.009	0.09	2.6	139,300,000	0.290	0.005	0.07	4.95	Ashton and Robb, 2021

Jim Ashton and Warren Robb (2021) completed the 6th and current mineral resource estimate for Universal Copper Ltd., incorporating all of the drilling, including the four Universal holes. The Mineral Resource Estimate ("MRE") incorporates over 38,854 metres of diamond drilling in 133 holes, outlining an indicated resource and an inferred resource at a 0.20 per cent copper cut-off. Highlights include:

- An undiluted indicated mineral resource of 152.3 million tonnes grading 0.32 per cent copper, 0.009 per cent molybdenum, 0.09 gram per tonne gold and 2.58 g/t silver;
- An undiluted inferred mineral resource of 139.3 million tonnes grading 0.29 per cent copper, 0.005 per cent molybdenum, 0.07 g/t gold and 4.95 g/t silver.

The resource estimate was completed by independent mining engineer James Ashton of Reno, Nev., with an effective date of July 1, 2021, and complies with National Instrument 43-101 and guidelines developed in 2014 by the Canadian Institute of Mining and Metallurgy (CIM). In accordance with NI 43-101, a technical report supporting the MRE has been filed on SEDAR.

2021 Mineral Resource Estimate Methodology

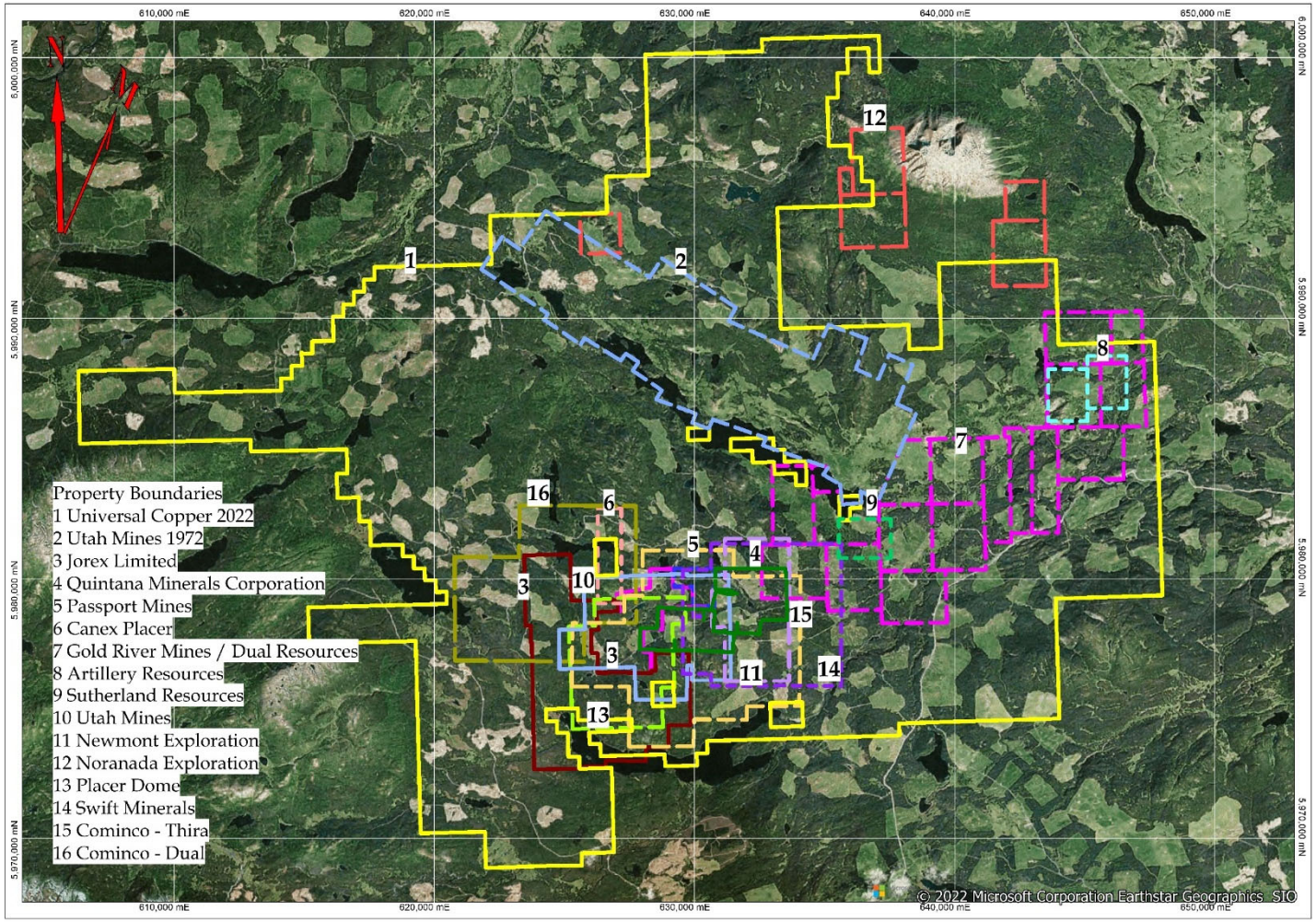
Universal Copper cautions investors mineral resources, which are not mineral reserves, do not have demonstrated economic viability.

The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, sociopolitical, marketing, changes in global gold markets or other relevant issues.

The CIM definitions (2014) were followed for classification of mineral resources. The quantity and grade of reported inferred mineral resources in this estimation are uncertain in nature and there has been insufficient exploration to define these inferred mineral resources as an indicated mineral resource. It is probable that further exploration drilling will result in upgrading them to an indicated or measured mineral resource category.

To determine the mineral resource present on Poplar a 3-D solid was constructed to constrain the interpolation of mineralization, using a 0.1-per-cent Cu grade limit as a guide. Large internal waste zones were modelled, as were some larger post mineral dikes. Of the total database, 133 drill holes totalling 38,854 metres were within the modelled area and were used in the MRE. Drill holes were compared with the mineralized solid and assays were tagged if inside. Copper, molybdenum, gold and silver assays within the mineralized solid were capped at 1.8 per cent copper, 0.16 per cent molybdenum, 0.80 g/t gold and 70 g/t silver respectively. Five-metre composites were calculated and used for variography. For this estimate and to aid with some preliminary planning, the blocks were five metres by five metres by 10 metres in dimension, and were estimated for Cu, Mo, Au and Ag by ordinary kriging. The resource is classified as indicated and inferred based on each block's proximity to data and the grade continuity within the mineralized solid. A 0.20-per-cent Cu cut-off has been selected as a possible open pit cut-off since, at this time, no economic evaluation has been completed. At a 0.20-per-cent Cu cut-off within the mineralized solid the undiluted indicated resource is 152.3 million tonnes at 0.32 per cent Cu, 0.009 per cent Mo, 0.09 g/t Au and 2.58 g/t Ag, while the undiluted inferred resource is an additional 139.3 million tonnes grading 0.29 per cent Cu, 0.005 per cent Mo, 0.07 g/t Au and 4.95 g/t Ag.

Figure 9 Poplar Peripheral Exploration History



Poplar Project - Peripheral Exploration Overview

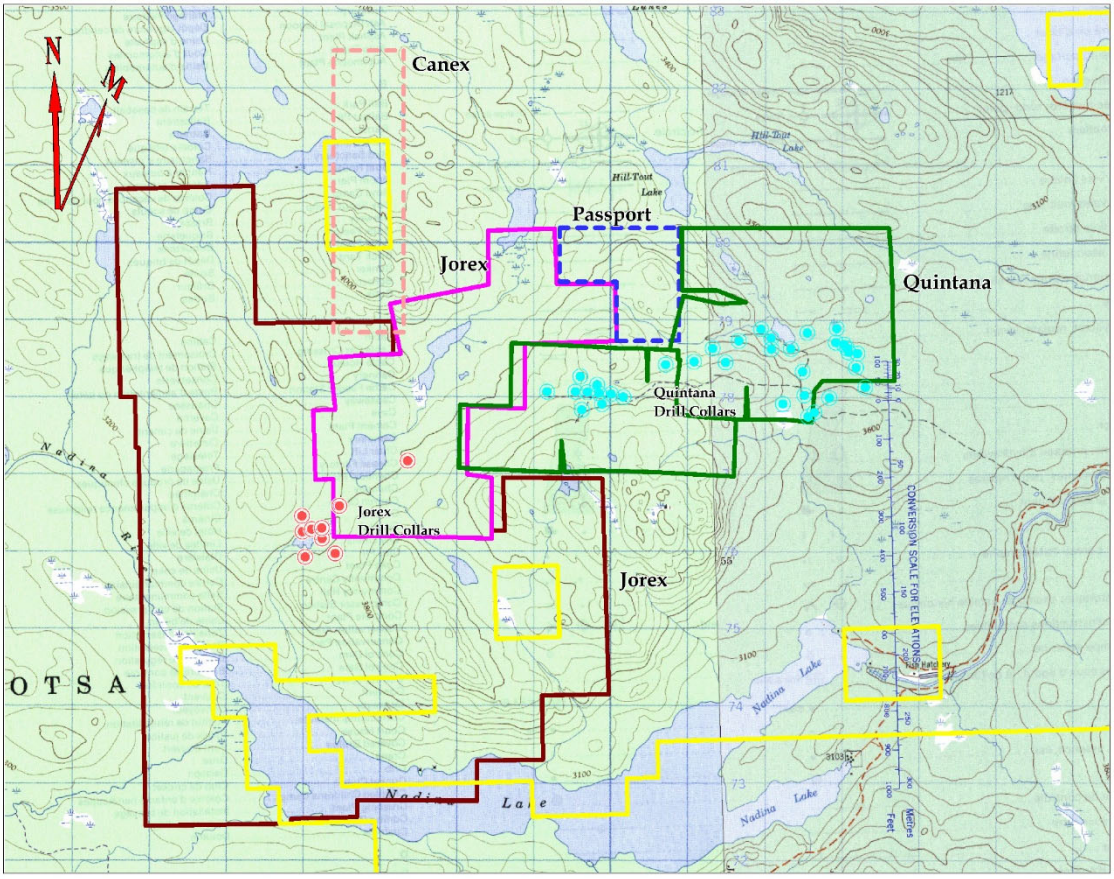
0 15
kilometers

Poplar Peripheral History

There has been considerable exploration completed on areas peripheral to the Poplar Deposit itself since the early 1970's as detailed in Table 8 and shown in Figure 9. The largest effort has been directed at the area to the south of the original Utah Mines Copper Poplar Block.

The first period of exploration was undertaken in the early 1970's. Kenneco Exploration and Passport Mines completed small soil programs on the Con block and Canex Placer Exploration completed a small soil program on Ale block. However, the bulk of the early exploration was focused on two blocks: the Ida and Nadi block of Jorex Limited and the AFP HT blocks or Lily project of Quintana Copper Limited. (Figure 10).

Figure 10. Early 1970's Peripheral Exploration History



Early 1970's Exploration History

The Jorex exploration commenced in 1970 and culminated in a 16 hole, diamond drilling program in 1973. Initial soil sampling was progressively followed by programs of magnetometer surveying and multiple IP surveying. Subsequent diamond drilling was largely conducted in the Copper Pond area, with two holes testing the area south of Camp Lake. The drilling program was never filed for assessment. Nine of the 16 holes returned values ranging from 0.101% to 0.217% copper over intervals ranging from 20 to 573 feet (6.1 to 174.65 metres). The assessment record suggests these intervals have never been followed up.

Table 8. Poplar Project Peripheral Exploration History

Year	Operator	Location / Project	Program	Holes	Metres	Holes	Metres	ASRP	Author
1968	Kenneco Explorations (Western) Limited	SE - Dual	soils					1647	Panteleyev and Black, 1968
1970	Summit Oil Ltd.	NE - Duck	soils, magnetics					2288	Stevenson, 1970
1971	Jorex Limited	SE - Nadi	streams, soils					2994	Woodcock, 1971
1971	Passport Mines Ltd.	SE - Con	soils					3345	Chisholm, 1971
1972	Jorex Limited	SE - Nadi	IP					3776	Hallof and Goudie, 1972
1972	Quintana Minerals Corporation	SE - Lily	mapping, soils					3877	Montgomery and Giroux, 1972
1972	Jorex Limited	SE - Nadi	mapping, soils, IP, magnetics					4181	Woodcock, 1973
1972	Jorex Limited	SE - Nadi	IP					4182	Hallof and Goudie, 1972b
1972	Jorex Limited	SE - Nadi	magnetics, EM					4183	Gutrath and Neilsen, 1973
1973	Jorex Limited	SE - Nadi	diamond drilling			16	2232.4	not filed	Woodcock, 1973
1973	Canex Placer Limited	W - Ale	mapping, soils					4184	Cyr, 1973
1974	Quintana Minerals Corporation	SE - Lily	percussion drilling	1	33.5			5166	Esner, 1974
1974	Quintana Minerals Corporation	SE - Lily	percussion drilling	10	795.5			5207	Anonymous, 1974
1974	Quintana Minerals Corporation	SE - Lily	percussion drilling	4	152.4			5277	Wolfhard, 1974
1974	Quintana Minerals Corporation	SE - Lily	percussion drilling	21	unknown			not filed	not documented
1974	Quintana Minerals Corporation	SE - Lily	IP					5314	Neilsen, 1974
1977	Gold River Mines Ltd / Dual Resources Ltd.	NE - Tagetochlain	airborne mag					6321	Mark, 1977
1978	Gold River Mines Ltd	NE - Poplar	soils					6718	Mark, 1978
1979	Artillery Resources Ltd	NE – Nettie	diamond drilling			7	258.8	7709	Saleken, 1979
1980	Sutherland Resources Ltd.	NE- Bonnie	diamond drilling			7	126.9	8741	Rolston, 1980
1982	Utah Mines Ltd.	SE - Second	mapping, mag, IP					11034	Holland, 1983
1982	Newmont Exploration of Canada Limited	SE - Nadina	mag, IP					11236	Limion, 1983

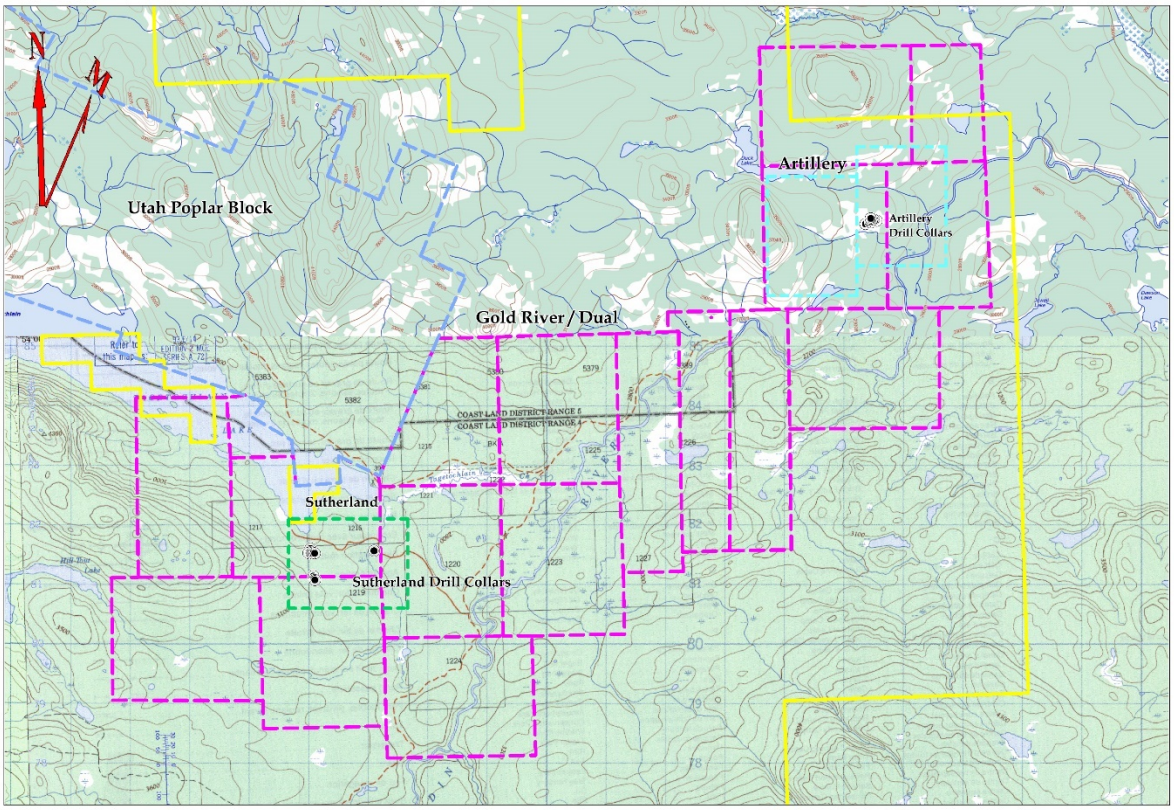
Table 8. Poplar Project Peripheral Exploration History (continued)

Year	Operator	Location / Project	Program	Holes	Metres	Holes	Metres	ASRP	Author
1983	Noranda Exploration Company, Limited	NE - Hari	Loop EM, mag					11587	Bradish, 1983
1983	Noranda Exploration Company, Limited	NE - Vampire	Loop EM, mag					11588	Bradish, 1983b
1983	Noranda Exploration Company, Limited	NE - Shawn	Loop EM, mag					11650	Bradish, 1983c
1983	Noranda Exploration Company, Limited	NE - Henk	Loop EM, mag					11651	Bradish, 1983d
1983	Noranda Exploration Company, Limited	NE - Bittern	mapping, soils, silts, VLF-EM					12711	Shearer, 1983
1984	Noranda Exploration Company, Limited	NE - Henk	diamond drilling			2	134.2	13092	Myers, 1984
1990	Placer Dome Inc.	SE - Thira	silt, IP					20101	Ditson, 1990
1990	Swift Minerals Ltd.	SE - Hill	diamond drilling			6	1994.5	20742	St. Clair Dunne, 1990
1993	New Canamin Resources Limited	W - Dual	airborne EM, mag					23206	Klein, 1993
1994	Cominco Ltd.	W - Dual	IP					23504	Jackish, 1994
1994	Cominco Ltd.	SE - Thira	IP					23587	Jackish, 1994
1994	Cominco Ltd.	SE - Thira	soils					23795	Wagner, 1995
1995	Cominco Ltd.	SE - Thira	soil, percussion drilling	8	429.7			24109	Wagner, 1995a
1995	Cominco Ltd.	SE - Thira	diamond drilling			3	300.5	24392	Wagner, 1996
1997	Hamblin	W - Dual	percussion drilling	20	609.6			25304	Illerbrun, 1997
1998	Hamblin	W - Dual	percussion drilling	15	457			25621	Hanson, 1998
1999	Hamblin	W - Dual	percussion drilling	42	1281			26124	Blower, 1999
Total				**121**	**3759**	**41**	**5047**		

The Quintana Minerals programs ran from 1972 to 1974 and included mapping, soil sampling, IP and percussion drilling, spread across a 5 kilometre strike length. Unfortunately, assessment filings prior to the mid to late 1970's did not require companies to provide drill logs or assay data, so there is no recorded of the percussion drilling, other than maps with collars locations.

The next series of exploration programs took place in the later 1970's, when Gold River Mines and Dual Resources undertook an area play staking rush, based on the Utah Mines success at the Poplar deposit. They staked 289 units in a strip 16 kilometres northeast by 2 to 4 kilometres southwest, completing an airborne magnetics survey followed by local soil surveying. Claim blocks were subsequently restaked , with two diamond drilling programs undertaken by Artillery Resources at Nettie and Sutherland Resources at Bonny, respectively. (Figure 11).

Figure 11. Late 1970's Peripheral Exploration History



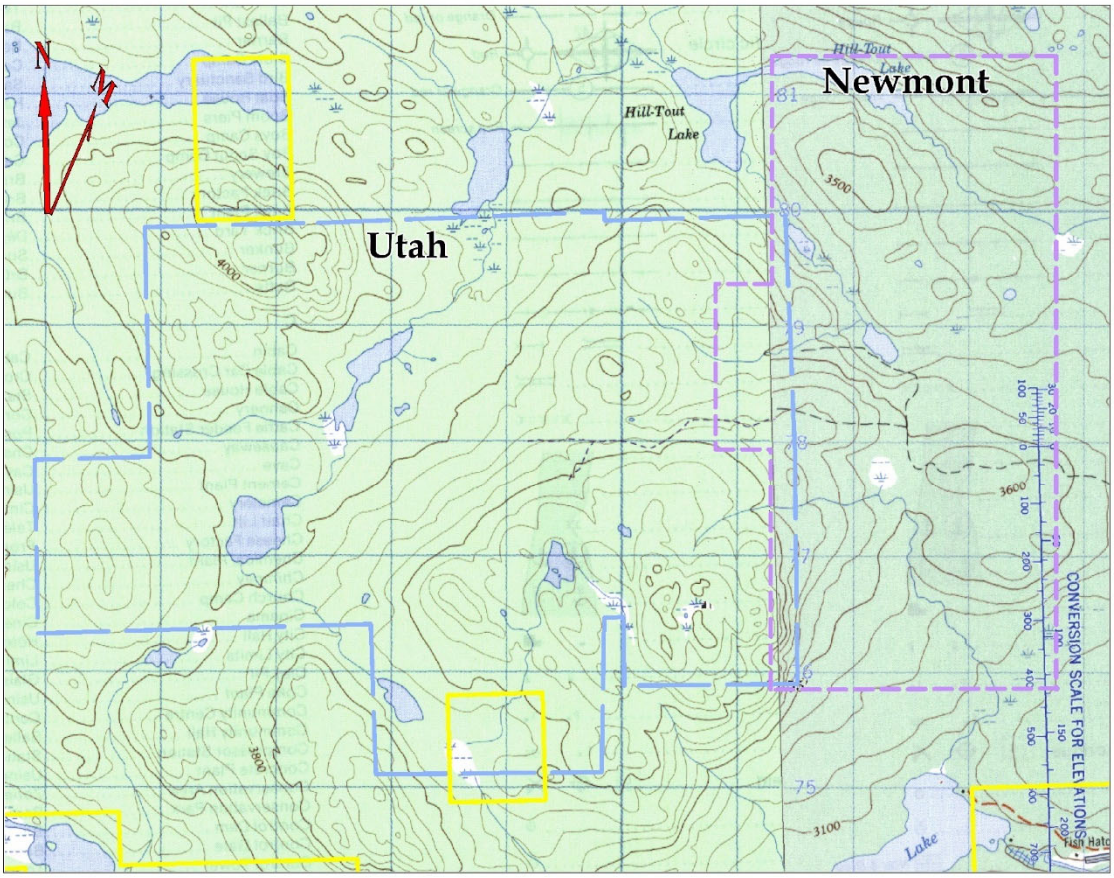
Late 1970's Exploration History

Four of the 7 Artillery Resources drill holes failed to reach bedrock. The remaing three intersected a biotite feldspar porphyry intrusion with minor sulfides; no samples were taken. None of the 7 Sutherland Resources holes reached bedrock.

The next period on exploration was the early 1980's. At the north end of the Universal Copper property (Figure 9), Noranda Exploration staked three small blocks looking for repeats of the poly metallic Equity Silver Sam Goosley deposit. They completed horizontal loop EM and magnetometer surveys on the central Shawn block and the eastern Vampire/ Henk block in 1983, following up with a short drill program on the Vampire claim in 1984, intersecting nothing of significance. They undertook mapping, soil, stream sediments and VLF-EM surveys on the western Bittern block in 1983, as well.

Utah Mines and Newmont completed surface exploration program's on their Second and Cu blocks, respectively, in the southeast area in the early 1980's over the ground previously held by Quintana and the northern portion of the ground previously held by Jorex. Utah completed mapping, IP and magnetics over much of their claim block, as did Newmont on theirs. Both companies eventually allowed the land packages to lapse.

Figure 12. Early 1980's Peripheral Exploration History

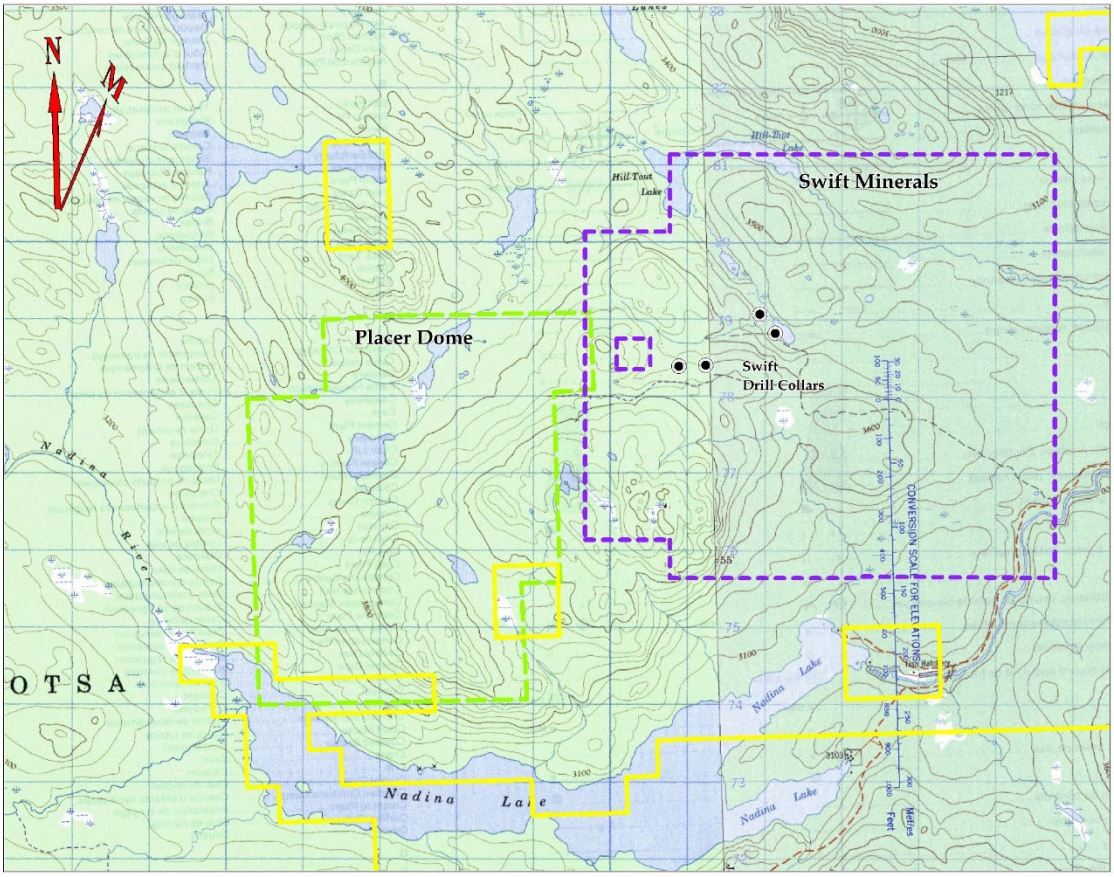


According to the assessment record, little happened in the southern area until the early 1990's when Placer Dome and Swift Minerals initiated programs.

Placer Dome consolidated the Thira block, which included the area of the 1973 Jorex drilling. They completed a small stream sediment sampling program and also undertook an IP survey, extending the original Jorex 1973 IP further to the south of the drilled area.

Swift Minerals consolidated the Hill claim block, including the historic Quintana and Newmont ground. They undertook a 6 hole diamond drilling program, testing some of the anomalies from the Newmont IP survey. St. Clair Dunne (1990) reported all holes intersected andesite and porphyritic quartz diorite exhibiting alteration ranging from propylitic to potassic, with up to 30 metre zones of virtually one hundred percent potassium feldspar flooding. Approximately ninety-five percent of the rocks encountered contained sulphides ranging from two to thirty percent. Overall, sulphide content averaged three percent. Sulphides are largely pyrite and pyrrhotite with minor chalcopyrite, sphalerite and tetrahedrite. Assays were generally sub-economic, with copper values ranging from 2 to 1500 ppm copper.

Figure 13. Early 1990's Peripheral Exploration History



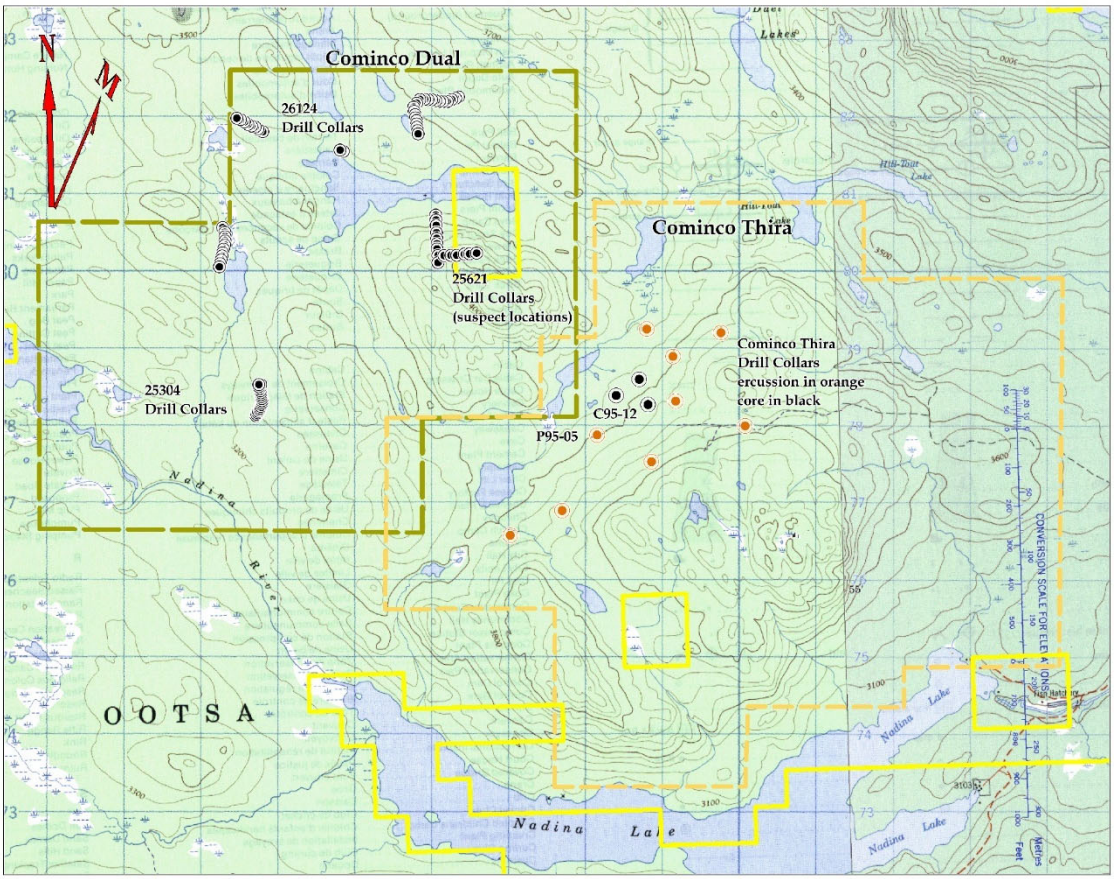
Early 1990's Exploration History

0 5
kilometers

Cominco ended up with most of the early 1990's Placer Dome Thira block in the mid-1990's, expanding it to cover some of the Swift Minerals ground to the east. They completed two seasons of grid soil sampling over the heart of the property and completed one reconnaissance line of IP. They followed this with an eight hole percussion drilling program testing some of the historic IP anomalies. Hole P95-05 intersected 220 feet (67 metres) averaging 0.183% copper and 0.021% molybdenite in a granitic intrusive. They followed up with a three hole diamond drilling program, following up on the P95-05 intersection. Hole C95-12 returned 0.104% copper and 0.004% molybdenum over the bottom 35.5 metres of the hole from a granodiorite intrusive.

Cominco also optioned the Dual Claim block immediately to the west, where they completed and airborne electromagnetic and magnetic survey, followed by a widely spaced property wide IP survey totaling 40.3 line kilometres. They returned the claims to the property vendor, who subsequently completed three air-tank drill percussion drilling program over selected areas of the property as shown in Figure 13.

Figure 14. Late 1990's Peripheral Exploration History



The 1997 program (ASRP 25304) consisted of 20 – 100 foot (30.5 metre) holes along 500 metres of logging road, centred on a series of barite-galena-sphalerite veins occur in a suite of strongly argillically altered volcanic host rocks. None of 100 foot composite samples from each hole returned any significant values.

The 1998 program (ASRP 25621) consisted of fifteen 30.5 metres along newly constructed logging road. No bedrock encountered. The location of these collars are suspect, as the location map in the filed assessment report is plotted at too broad a scale. The estimated plot based on the map is in an un-logged area with no road construction.

The 1999 program (ASRP 26124) consisted of forty-two 30.5 metre holes along existing logging roads. Twelve holes failed to reach bedrock. The remainder intersected altered andesitic lapilli tuffs or granodiorite. One composite sample was taken from each hole that penetrated bedrock. No significant assay values were returned.

Regional Geology (From Ogryzlo, 2010)

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 was 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.

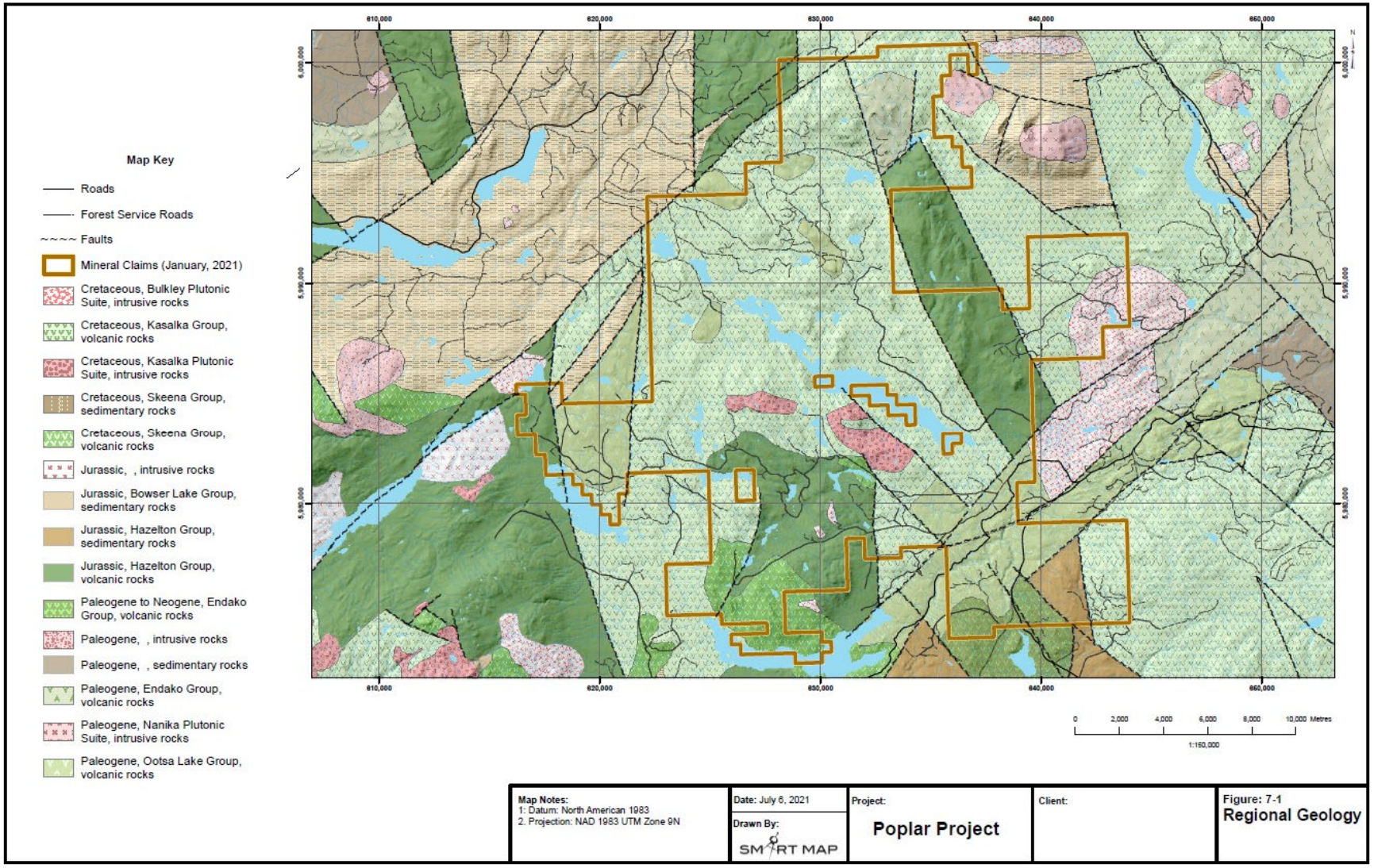
Continental volcanic rocks of Upper Cretaceous to Eocene age occur in the Poplar Lake area as the Upper Cretaceous Kasalka and the Oligocene to Eocene Ootsa Lake groups. The Eocene to Miocene Endako Lake Group is largely comprised of mafic volcanic rocks, and occurs as plateau basalts within the map 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 porphyritic intrusions of the Eocene Nanika Plutonic Suite. Host rocks at Poplar Lake had been previously 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.

Structurally, extensional tectonics has produced 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, Ferbey 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.

Figure 15. Poplar Regional Geology



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 producers, past producers and partially developed deposits with drill indicated resources. The area has been and continues to be 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.

Exploration in the area has also resulted in the development of a number of deposits with drill-indicated resources. 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.

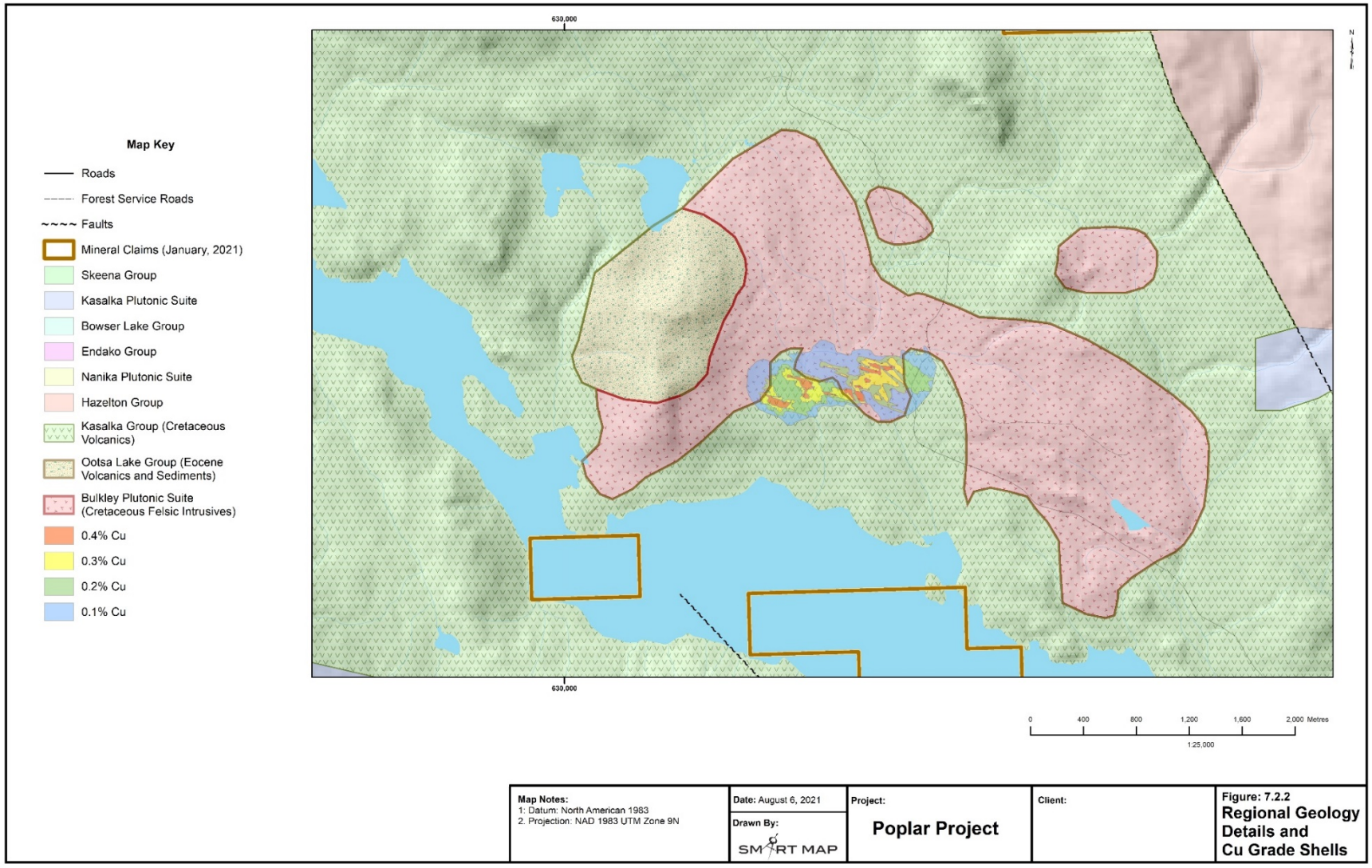
Property Geology (From Ogryzlo, 2010)

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 Tagetochlain Lake. Its exposed dimensions are approximately 4600 meters east-west by 1800 meters north-south. The southern limit of the Poplar 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 Poplar Stock appears to be composite, with a diorite core surrounded by border phase hornblende-phyric quartz monzonite.

The Poplar Stock intrudes a down-faulted block of Kasalka and Skeena Group rocks, which occupy the lowlands south and west of Poplar Mountain. The Skeena Group has tentatively been identified as dark grey to green crystal and lapilli tuff and siltstone, with lenses of medium grained sandstone. The Kasalka Group rocks have been described in outcrop and diamond drill core as volcaniclastic and epiclastic, most typically represented by a reddish brown polylithic conglomerate. Clasts within the conglomerate include felsic to intermediate tuff, andesite, quartz and banded chert in a matrix of fine grained chert and quartz, with silica and iron oxide cement. A block of Kasalka Group volcaniclastic rocks is enclosed within the Poplar Stock and may be a roof pendant in the upper portion of the intrusion. Sulphide mineralization is associated with the northern contact of this block with its surrounding intrusive rocks. Also within the down dropped block are outliers of the Eocene Ootsa Lake group. These are represented by felsic subaerial epiclastic rocks. The western portion of the Poplar Stock is partially covered by an outcrop of Ootsa Lake rocks.

Figure 16. Poplar Property Geology



Intrusions assigned to the Late Cretaceous Kasalka Plutonic Suite (MacIntyre 2007) outcrop south of Tagetochlain Lake. An intrusion described in this paper as the China Creek Stock occurs along the faulted contact between Lower Jurassic Telkwa Formation rocks and Upper Cretaceous Kasalka Group rocks on the southwest slope of the Poplar Mountain ridge. Copper and molybdenum mineralization is associated with the China Creek Stock and has been partially explored with Induced Polarization geophysical surveying and diamond drilling.

Mineralization (From 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.

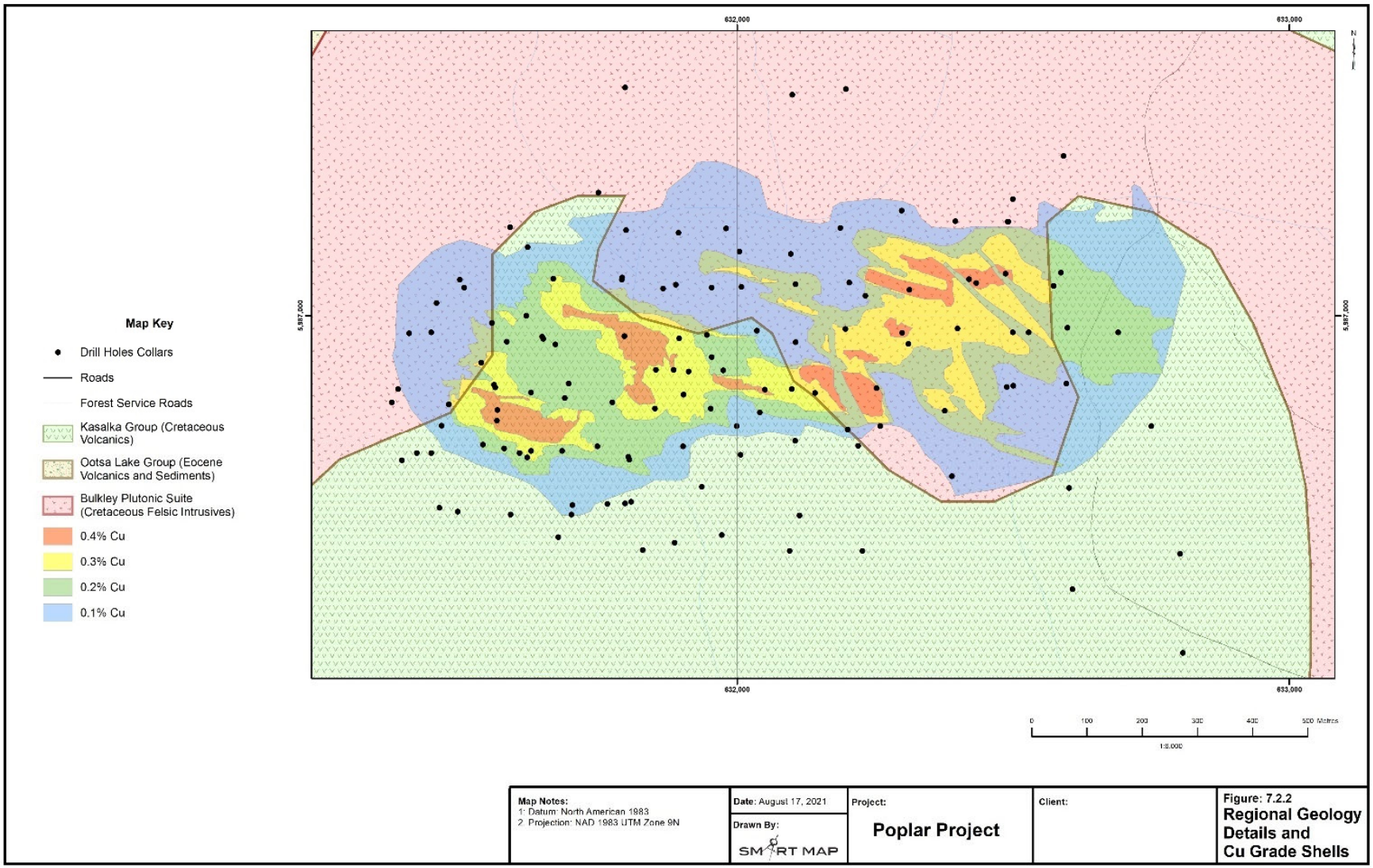
The sulphide mineralization is contained within broad envelopes of propylitic, argillic, phyllic and postassic alteration. The potassic alteration zone is characterized by envelopes of salmon pink orthoclase around quartz, quartz-molybdenite and chalcopyrite veinlets, and as groundmass flooding in the 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 2,000 meters east-west by 1,000 meters north south, with the argillic alteration zone enclosed within the potassic zone (Mesard et al, 1979).

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 for the Main Zone deposit. The Poplar Deposit may have been subject to structural adjustment, as the copper grade shells in the East Zone, as seen in Figure 17, appear to be capped by approximately 100 meters of poorly mineralized rock. The best grades in the Main Zone appear to wrap around a central, poorly mineralized core.

Figure 17. Grade Shell Distribution of Copper in the Poplar Deposit Projected to Surface from Resource Model.



Other Mineralized Zones

As detailed in the Poplar Peripheral section of the property history, there are several additional zones of mineralization on the Poplar Property. The southeast area is the main target area and includes the Copper Pond area drilled by Jorex in 1973 and the Thira claims drilled by Cominco in the mid-1990's.

Following up on soils and IP, Jorex drilled a series of holes in the Copper Pond area in 1973. Nine of the 16 holes returned values ranging from 0.101% to 0.217% copper over intervals ranging from 20 to 573 feet (6.1 to 174.65 metres).

Swift Minerals undertook a 6 hole diamond drilling program in 1990, testing IP anomalies from earlier IP surveys, south of Hill Tout Lake. Andesites and porphyritic quartz diorite were intersected with sulfide content ranging from 2% to 30%, largely pyrite and pyrrhotite with minor chalcopyrite, sphalerite and tetrahedrite. Copper values ranging from 2 to 1500 ppm.

Cominco drilled 8 percussion holes and 3 diamond drill holes to the northeast of Camp Lake in 1995. One of the percussion holes intersected 220 feet (67 metres) averaging 0.183% copper and 0.021% molybdenite in a granitic intrusive. One of the follow up diamond drill holes returned 0.104% copper and 0.004% molybdenum over the bottom 35.5 metres of the hole from a granodiorite intrusive.

None of these mineralized zones have been followed up.

2021 DIAMOND DRILL PROGRAM

The 2021 diamond drill program consists of 6 holes totaling 3,003 metres as detailed in Table 9. The collar locations are shown on Figure 18. Drilling was undertaken by Apex Diamond Drilling of Smithers. The upper portion of the holes were drilled HQ, with the holes reduced to NQ with increasing depth. The camp and expediting were completed by Rugged Edge Holdings also of Smithers. The day to day drilling supervision and core logging was completed by Jon Broadbent under the supervision of Ray Wladichuk, P.Geo. of Waldo Sciences Ltd. The core is stored at the Rugged Edge Holdings yard in Smithers.

Table 9. 2021 Drill Program Collar Details

Hole_ID	83Z09E	83Z09N	m elevation	azimuth	dip	m length
21-PC-131	631641	5986800	895.5	150.8	-89.6	498
21-PC-132	631492	5986844	897.9	65.5	-89.8	501
21-PC-133	631873	5986927	889.1	264.1	-89.7	501
21-PC-134	632147	5986894	904.2	339.6	-89.6	501
21-PC-135	632246	5986997	906.1	*	-89.9	498
21-PC-136	632349	5986896	902.0	261.7	-88	504
						3003

**There was a problem with the Reflex Tool, so 21-PC-135 was not surveyed down hole.*

The purpose of this program was to test the higher grade portions of the Poplar Copper Deposit and also test for depth extensions of the mineralization. 21-PC-130 was not drilled as the area was too wet to drill at the time of the program and will need to be drilled in the winter months. Three holes were drilled in the Main Zone and three holes were drilled in the East Zone.

21-PC-131 was drilled in the southern portion of the Main Zone. The hole intersected 432.8 metres of 0.423% copper, including a 76 metre interval of 0.506% copper. The copper grade drops sharply at 435 metres, though there is nothing obvious noted in the drill logs or the core photos. The hole intersected moderately to strongly altered quartz monzonite, containing 40% to 50%, 1-5mm subhedral feldspar phenocrysts and 7% to 10%, subhedral 1mm biotite. Alteration consists of varying degrees of silicification, potassic (K-feldspar and biotite) and phyllic (sericite, quartz pyrite). Mineralization consists of 1% to 3% disseminated and fracture pyrite and trace to 2% chalcopyrite.

21-PC-132 was drilled in the western portion of the Main Zone. The top 192 metres of the hole returned 0.436% copper over 186.35 metres. Copper grades dropped to 0.201% copper from 192 metres to 304 metres, where a series of dykes intrude the quartz monzonite through the remainder of the hole. The upper portion of the hole intersected moderately to strongly altered quartz monzonite, containing 40% to 50%, 1-5mm subhedral feldspar phenocrysts and 7% to 10%, subhedral 1mm biotite. Alteration consists of moderate to strong propylitic (chlorite and clays), weak to strong silicification, and weak to moderate potassic (K-feldspar and biotite). Mineralization consists of 1% to 3% disseminated and fracture pyrite and trace to 2% chalcopyrite. Lower down a series of dark, silicified porphyritic dykes ranging in thickness from centimetres to in excess of 35 metres were intersected. The volume of biotite in the quartz monzonite below the zone of dyking is only 3% to 5% and alteration grades from strong potassic to strong clay / propylitic. Mineralization is 1% to 3% pyrite.

21-PC-133 was the final hole drilled in the East Zone, concentrating in the eastern portion. This hole returned 479.75 metres of 0.408% copper and was well mineralized from the top of bedrock to the bottom of the hole. A higher grade section between 247.25 to 315.5 metres returned 0.655% copper. The hole intersected moderately to strongly altered quartz monzonite, containing 30% to 50%, 1-5mm subhedral feldspar phenocrysts and 5% to 7%, subhedral 1mm biotite. Alteration consists of varying degrees of silicification, potassic (K-feldspar and biotite) and propylitic (chlorite, clays). Mineralization consists of 1% to 5% disseminated and fracture pyrite and trace to 5% chalcopyrite.

21-PC-134 was drilled to test the southwest area of the East Zone. Several shorter copper rich intervals were intersected: 63 metres of 0.468% copper from 27 to 90 metres, 45 metres of 0.390% copper from 225 to 270 metres, 36 metres of 0.387 % copper from 315 to 351 metres and most importantly 81 metres of 0.344% copper over the last 81 metres of the hole. The hole was cut by several swarms of feldspar quartz / feldspar dykes: 103 to 163 metres, 238 to 269 metres, 359 to 421 metres and 461 to 486 metres. The remainder was quartz monzonite carrying 40-50% sub-euhedral 1-5mm feldspar phenocrysts. Alteration consists of varying degrees of weak to strong potassic alteration, weak to moderate sericitic alteration of feldspars, weak to moderate silicification and local chlorite. Mineralization consists of 1% to 5% disseminated, fracture filling and local thin veinlets of pyrite and trace to ½% disseminated chalcopyrite.

21-PC-135 was drilled to test the central area of the East Zone. This hole returned 492.7 metres of 0.288% copper from top to bottom, including 78 metres of 0.391% copper from 259 to 336 metres and 129 metres of 0.546% copper from 369 to the bottom of the hole at 498 metres. Again the dominant rock type was quartz monzonite carrying 40% to 50% 1-5mm subhedral feldspar phenocrysts and 1% to 10% 1-3mm biotite phenocrysts. Alteration ranges from weak to moderate to moderate to strong potassic alteration, weak to moderate to moderate to strong silicification, moderate to strong sericite alteration of feldspars, and moderate to strong propylitic alteration. A series of felsic dykes cut the quartz monzonite with zones of dyking from 150.5 to 153.5 metres and 424.7 to 453 metres. Mineralization consists of 1% to 3% disseminated, fracture filling and local thin veinlets of pyrite and trace to 1% disseminated chalcopyrite.

Table 10. 2021 Drill Intersections

Zone	Hole No	m from	m to	m length	Cu ppm	Mo ppm	Ag ppm	Au ppm
Main Zone	21-PC-131	2.2	435	432.8	4230	107	1.80	0.150
Main Zone	21-PC-131	242	318	76	5057	118	2.74	0.175
Main Zone	21-PC-132	5.65	192	186.35	4362	193	1.72	0.100
Main Zone	21-PC-133	21.25	501	479.75	4084	127	2.89	0.130
Main Zone	21-PC-133	247.25	315.5	68.25	6550	157	2.92	0.167
Main Zone	21-PC-133	462.5	501	38.5	3875	38	2.85	0.141
East Zone	21-PC-134	27	90	63	4677	23	2.66	0.127
East Zone	21-PC-134	225	270	45	3904	31	3.81	0.103
East Zone	21-PC-134	315	351	36	3586	12	1.85	0.114
East Zone	21-PC-134	420	501	81	3438	12	2.35	0.081
East Zone	21-PC-135	5.3	336	330.7	2656	16	4.01	0.084
East Zone	21-PC-135	258	336	78	3905	4	12.01	0.128
East Zone	21-PC-135	369	498	129	5464	5	6.94	0.148
East Zone	21-PC-135	5.3	498	492.7	2881	12	4.16	0.087
East Zone	21-PC-136	237	282	45	4303	15	3.81	0.167
East Zone	21-PC-136	345	369	24	5135	6	6.86	0.193
East Zone	21-PC-136	417	432	15	3752	51	3.26	0.087

21-PC-136 was drilled to test the southeastern portion of the East Zone. The quartz monzonite in this hole was cut by a significant number of dykes, comprising almost 35% of the core. This resulted in a number of chopped up copper-rich intervals including: 45 metres of 0.430% copper from 237 to 282 metres, 24 metres of 0.514% copper from 345 to 369 metres and 51 metres of 0.375% copper from 417 to 432 metres. The first 130 metres of this hole carried <1000 ppm copper, with the next 86 metres ranging from 1475 to 4460 ppm, with grade increasing significantly from 189 to 213 metres. Puzzlingly, the 25 metres below the last dyke at the bottom of the hole carried less than 700 ppm copper. The quartz monzonite carries 40% to 50% 1-5mm subhedral feldspar phenocrysts and 1% to 10% 1-3mm biotite phenocrysts. Alteration ranges from weak to moderate to moderate to strong potassic alteration, weak to moderate to moderate to strong silicification, moderate to strong sericite alteration of feldspars, and moderate to strong propylitic alteration. Mineralization consists of 1% to 3% disseminated, fracture filling and local thin veinlets of pyrite and trace to 1% disseminated chalcopyrite.

A zone from 236.9 to 251.8 metres was described as a fine silicified dyke-highly homogenized monzonite with stockwork veining in fine groundmass. The dyke showed strong silicification, with local moderate chlorite-potassic alteration of the groundmass along with local pink-green. The upper contact marked by sharp grainsize change. The dyke carries 1% to 3% pyrite in mm pyritized stringers, within stockwork veins, and locally disseminated in the groundmass. Traces of chalcopyrite were also observed. Unlike the other dykes, this dyke is pre-mineral as it carries good copper.

QA/QC

The core was transported from the drill site to the core logging facility at camp at Tagetochlain Lake. It was then cleaned, geo-teched, logged, photographed (3 boxes to a photo) and marked for sampling. The core was then sawn top to bottom for each hole and sampled in more or less continuous 3 metre intervals. Certified standards and a blank from CDN Resource Laboratories were inserted into the sample stream at one standard and blank every 20 samples. A duplicate sample was taken every 20 samples as well, with the sampled half core cut into half again to produce two samples. The sample was placed in a 3mil poly bag along with a sequentially numbered assay ticket and zap strapped.

The samples were then placed in rice bags and again zapped strapped and stored until they were taken to Bandra Transport in Smithers. Bandstra shipped them directly to the ALS Minerals Lab in North Vancouver for analysis. All samples were crushed using ALS CRU-31 procedure with 70% passing through 2mm, ruffle split to 250grams, and pulverized using ALS procedure PUL-31 where 85% passes through 75um.

The samples were analyzed via the ALS ME-MS61 procedure, a 48 element four acid ICP MS procedure. Over limit elements were reanalyzed via the ALS OG-62 procedure, a four acid ore grade analysis. All samples were also analyzed for gold via the ALS ICP-21 procedure, a 30 gram fire assay with an ICP-AES finish.

A review of the duplicates blanks and standards showed no assay discrepancies. However, there appear to have been a couple of mental assay ticketing errors. The assay tickets appear to have been switched for a standard and blank near the end of 21-PC-136 where the blank assayed 3110 ppm Cu and standard CDN-CM-37 assayed 28.1 ppm Cu (B466639 and B466640). The second assay ticketing error occurred at the bottom of the same hole, samples B466659 – core sample, B466660 – CDN-CM-37, B466661 - blank. The core sample returned 2120 ppm Cu, the standard returned 26.3 ppm Cu and the blank returned 399 ppm Cu. The standard should be the 26.3 ppm Cu in line with the rest of the blanks throughout the sample stream. The standard should be the 2120 ppm Cu value, and the core should be the 399 ppm Cu values in line with the core samples above and below. In the author's opinion, these are mental errors, as these were the last samples for the program, and therefore do not call into question the accuracy or validity of the assay results.

INTERPRETATIONS AND CONCLUSIONS

The purpose of the 2021 drilling program was to test the higher grade portions of the Poplar deposit for grade and to expand the footprint of the higher grade material in the Main Zone and in the East Zone. The program met it objectives with long intersections in 21-PC-131 and 21-PC-133 in the Main Zone and in 21-PC-135 in the East Zone where the bottom 129 metres of the hole returned 0.546% copper.

The results strongly suggest the main system is plunging to the east-northeast as evidenced in 21-PC-131, 21-PC-133 and 21-PC-135. Universal Copper has recently engaged Vector Geological Solutions to review the historic and 2021 drilling, with the aim of targeting the upcoming drill programs to expand the mineralized footprint and identify zones of higher grade mineralization. Based on initial discussion with the Vector principals, faulting appears to be an important aspect of the mineralization geometry at Poplar and the upcoming drill program will focus on targeting suspected faulted mineralized slices.

Concurrent with the drilling, the historical IP surveys over the Poplar deposit will be digitized and reprocessed based on the new Vector interpretations of the mineralization.

As well, the digitizing of the historical IP, magnetometer and soil geochemistry surveys over the peripheral of the property will continue with a goal of combining them all into one database for reprocessing and interpretation. The historical peripheral drilling will also be collated into one database for review, plotting and interpretation. The objective of the peripheral review will be to identify targets for a follow-up fall drill program of the highest priority targets.

A program of 1500 to 3000 metres is recommended to follow up the east-northeast plunge of the mineralization, coupled with the on-going interpretations of the mineralization geometry. Based on the 2021 - 3003 metre program, the all in cost per metre is estimated at $297.81 (say $300) the cost of the Phase I 2022 program is estimated at $450,000 to $900,000.

The total cost of the 2021 drill program was $897,286.93 as detailed in the Statement of Costs.

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CERTIFICATE FOR R. TIMOTHY HENNEBERRY

I, R.Tim Henneberry, P.Geo., a consulting geologist with offices at 2446 Bidston Road, Mill Bay, BC V0R 2P4 and 704 – 1060 Alberni Street, Vancouver, BC V6E 1A3 do hereby certify that: I am the Qualified Person for:

Universal Copper Ltd.
830 – 1100 Melville Street
Vancouver, BC V6E 4A6

I earned a Bachelor of Science Degree majoring in geology from Dalhousie University, graduating in May 1980.

I am registered with the Association of Professional Engineers and Geoscientists in the Province of British Columbia as a Professional Geoscientist.

I have practiced my profession continuously for 42 years since graduation.

I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101. My relevant experience for the purpose of this Technical Report is:

- 42 years of exploration experience in the western cordillera of North America
- 5 years experience on the Poplar Property

I am responsible for the preparation of the assessment report titled "2021 Diamond Drilling Assessment Report Poplar Property" and dated March 15, 2022 relating to the Polar Property. I last visited the Poplar property on August 11 and 12, 2021 to review outcrops, historic drill collars and drill core.

I have had prior involvement with the property that is the subject of the Assessment Report.

As of March 15, 2022, to the best of my knowledge, information and belief, the Assessment Report contains all scientific and technical information that is required to be disclosed to make the Assessment Report not misleading.

I am not independent of the Universal Copper Ltd., as I hold shares, warrants and options in Universal.

I make this Assessment Report effective March 15, 2022.

R.Tim Henneberry, P.Geo

Poplar Cost Statement

Date	Invoice	Particulars	Amount	GST	Total
Diamond Drilling - September 23 to October 30					
2021-Oct-02	2160-1002	Apex Diamond Drilling	$79,758.38	$3,982.84	$83,741.22
2021-Oct-09	2160-1009	Apex Diamond Drilling	$83,481.31	$4,151.94	$87,633.25
2021-Oct-16	2160-1016	Apex Diamond Drilling	$74,460.06	$3,715.86	$78,175.92
2021-Oct-23	2160-1023	Apex Diamond Drilling	$76,144.43	$3,790.94	$79,935.37
2021-Oct-30	2160-1029	Apex Diamond Drilling	$62,208.70	$3,103.16	$65,311.86
2021-Nov-15	2160-1115	Apex Diamond Drilling	$39,620.30	$1,981.03	$41,601.33
			$415,673.18		**$436,398.95**
Surveying - November 8					
2021-Nov-09	P21-01	Black Bear Exploration Ltd. - Survey of drill collars	$1,365.00	$68.25	$1,433.25
Camp / Expediting - September 21 to November 13, Saw Rentals to December 9					
2021-Oct-15	17120	Rugged Edge - Rentals, Personnel	$60,982.55	$3,049.13	$64,031.68
		Rugged Edge - Groceries, supplies, etc	$25,249.98	$778.70	$26,028.68
2021-Nov-15	17149	Rugged Edge - Rentals, Personnel	$78,946.25	$3,947.31	$82,893.56
		Rugged Edge - Groceries, supplies, etc	$27,368.41	$1,039.89	$28,408.30
2021-Dec-15	17178	Rugged Edge - Rentals, Personnel	$43,851.76	$2,192.59	$46,044.35
		Rugged Edge - Groceries, supplies, etc	$6,260.63	$301.11	$6,561.74
2021-Dec-20	17188	Rugged Edge - Rentals, Personnel	$7,822.86	$391.14	$8,214.00
		Rugged Edge - Groceries, supplies, etc	$242.86	$42.86	$285.72
			$250,725.30		**$262,468.03**
Analysis					
2022-Jan-11	VA21285386	PC-21-133	$15,176.69	$758.83	$15,935.52
2021-Dec-16	VA21299343	PC-21-131	$15,400.06	$770.00	$16,170.06
2022-Jan-11	VA21321124	PC-21-132	$15,372.66	$768.63	$16,141.29
2022-Jan-18	VA21330339	PC-21-134	$15,287.82	$764.39	$16,052.21
2022-Jan-28	VA21340601	PC-21-135	$15,475.29	$773.76	$16,249.05
2022-Feb-17	VA21340605	PC-21-136	$15,115.10	$755.76	$15,870.86
2021Nov-28	VA21324291	Freight	$498.11	$24.91	$523.02
2021-Dec-01	VA21328135	Freight	$506.48	$25.32	$531.80
2021-Dec-19	VA21346487	Freight	$675.55	$33.78	$709.33
2021-Dec-23	VA21351585	Freight	$580.01	$29.00	$609.01
			$94,087.77		**$98,792.15**
Geological -					
2021-Nov-01	UNV-11-01-2021	Waldo Sciences - on site geologist / core cutters	$28,675.00	$1,433.75	$30,108.75
2021-Dec-12	UNV-12-12-2021	Waldo Sciences - on site geologist / core cutters	$37,883.87	$2,411.13	$40,295.00
2021-Dec-12	UNV-12-12-2021	Waldo Sciences - supplies, travel, expenses, rentals	$10,388.66		$10,388.66
2021-Aug-23	INV 2	Jim Ashton - mineral resource estimate	$11,302.20		$11,302.20
2021-Aug-31	Aug-21-18.5	Warren Robb - mineral resource estimate	$2,800.00	$140.00	$2,940.00
2021-Nov-15	FES-TAS020	Farrell Exploration Services - permitting	$1,300.00	$65.00	$1,365.00
2021-May-18	2022-Mar-10	Mammoth Geological _ supervision and report	$34,625.00	$1,731.25	$36,356.25
2021-May-18	2022-Mar-10	Mammoth Geological - travel, supplies, maps	$4,960.65		$4,960.65
2022-Feb-08	JP2022_Universa	A.J.Pardoe, P.Geo. - permitting	$1,500.00		$1,500.00
2021-Jul-31	POP-07-21	Smartmap Services - GIS	$700.00	$35.00	$735.00
2021-Aug-31	POP-08-21	Smartmap Services - GIS	$1,300.00	$65.00	$1,365.00
			$135,435.38		**$141,316.51**

Poplar Cost Statement

Date	Invoice	Particulars	Amount	GST	Total
		Waldo Sciences - October 1 to November 24			
		Jim Ashton - June 22 to August 23			
		Warren Robb - August 21 to Aguust 21			
		Lorie Farrell - November 1 to November 15			
		Mammoth Geological May 18 to March 10			
		Jill Pardoe (invoice $2162.50 - $1500 prior to SOW filing			
		Dimaond Drilling	$415,673.18		$436,398.95
		Surveying	$1,365.00		$1,433.25
		Camp and Expediting	$250,725.30		$262,468.03
		Analysis	$94,087.77		$98,792.15
		Geological	$135,435.38		$141,316.51
Totals			**$897,286.63**		**$940,408.89**

Rugged Edge Holdings

Invoice 17120 Period September 1 to September 30 Date 2021-Oct-15			
Section 1:	CREW		$10,000.00
Section 2:	REH Equipment and Gear Rental		$42,300.75
Section 3:	Expediting		$4,777.50
Section 9:	Carrying Cost Associated with Purchasing - Taxable		
(Section 6 + Section 8) * 15%			$3,904.30
		TAX subtotal	***$60,982.55***
Section 8:	Purchases- Direct Pay Back		
		NON-TAX Subtotal	$26,028.68
		5% on Taxable Amount only	**$3,049.13**
			$90,060.36
Invoice 17149 Period October 1 to October 31 Date 2021-Oct-15			
Section 1:	CREW		$48,075.00
Section 2:	REH Equipment and Gear Rental		$18,840.00
Section 3:	Expediting		$7,770.00
Section 9:	Carrying Cost Associated with Purchasing - Taxable		
(Section 6 + Section 8) * 15%			$4,261.75
		TAX subtotal	***$78,946.75***
Section 8:	Purchases- Direct Pay Back		
		NON-TAX Subtotal	$28,408.30
		5% on Taxable Amount only	**$3,947.31**
			$111,302.36
Invoice 17178 Period November 1 to November 15 Date 2021-Dec-15			
Section 1:	CREW		$25,925.00
Section 2:	REH Equipment and Gear Rental		$10,460.00
Section 3:	Expediting		$6,482.50
Section 9:	Carrying Cost Associated with Purchasing - Taxable		
(Section 6 + Section 8) * 15%			$984.26
		TAX subtotal	***$43,851.76***
Section 8:	Purchases- Direct Pay Back		
		NON-TAX Subtotal	$6,561.74
		5% on Taxable Amount only	**$2,192.59**
			$52,606.09
Invoice 17188 Period November 15 to December 9 Date 2021-Dec-20			
Section 1:	CREW		$0.00
Section 2:	REH Equipment and Gear Rental		$4,000.00
Section 3:	Expediting		$3,780.00
Section 9:	Carrying Cost Associated with Purchasing - Taxable		
(Section 6 + Section 8) * 15%			$42.86
		TAX subtotal	***$7,822.86***
Section 8:	Purchases- Direct Pay Back		
		NON-TAX Subtotal	$285.72
		5% on Taxable Amount only	**$391.14**
			$8,499.72
Rugged Edge Holdings Total			**$262,468.53**

Rugged Edge Holdings

Invoice 17120 Period September 1 to September 30 Date 2021-Oct-15

Section 1: Crew

Date	Description	Quantity	Unit Price	Amount
Sept 21-30	Camp Manager-Denny P.	6	$800	$4,800.00
Sept 23-30	Head Cook -Dianne	8	$650	$5,200.00
			Section Total:	$10,000.00

Section 2: REH Equipment and Gear Rental

Date	Description	Quantity	Unit Price	Amount
Sept 20-26	Mob Cost Sept	1	$23,460.75	$23,460.75
Sept 21-Oct 21	1 Month Camp Rental	1	$18,840.00	$18,840.00
			Section Total:	$42,300.75

Section 3: Expediting

Date	Description	Quantity	Unit Price	Amount
Sept 21'	EXP: Shopping Devon	2.00	$105.00	$210.00
Sept 22'	EXP: Deliver Fuel Tank-Julien	6.50	$105.00	$682.50
Sept 23'	Exp; Shopping BVW-Sf-NF-Brenda	7.00	$105.00	$735.00
Sept 24'	EXP: BVW-Smithers -site-smithers-Marty	8.00	$105.00	$840.00
Sept 25'	Exp: Unload Trailer -Garbage -Recy-Wood to dumps-Carboeard-Sani Bins-Brandon	4.00	$105.00	$420.00
Sept 29'	Exp: Shopping Supplies-Brenda	5.00	$105.00	$525.00
Sept 29'	Exp: Fuel Drums-Smithers-Site-Smithers-Julien	6.50	$105.00	$682.50
Sept 30'	EXP: BVW-Smithers -site-Smithers-Benita	6.50	$105.00	$682.50
			Section Total:	$4,777.50

Invoice 17149 Period October 1 to October 31 Date 2021-Oct-15

Section 1: Crew

Date		Quantity	Unit Price	Amount
	Stat-ThanksGiving Oct			
Oct 1-30	Camp Manager-Denny P.	31.50	$800.00	$25,200.00
Oct 1-31	Head Cook -Dianne	31.50	$650.00	$20,475.00
Oct 29-31	Camp Manager-Dean H.	3	$800.00	$2,400.00
			Section Total:	$48,075.00

Section 2: REH Equipment and Gear Rental

Date		Quantity	Unit Price	Amount
Oct 22-Nov 22	1 Month Camp Rental	1	$18,840.00	$18,840.00

Section 3: Expediting

Date		Quantity	Unit Price	Amount
Oct 6'	EXP; Shopping Supplies-Brenda	3.00	$105.00	$315.00
Oct 7'	EXP: BVW-Smithers- Staging-Smithers-Mary 8	6.50	$105.00	$682.50
Oct 8'	EXP: Unload Tailer-Bin Sani-Recy-Cardboard-Garbage dump--Brandon	3.00	$105.00	$315.00
Oct 12'	EXP: Shopping Supplies-Brenda	3.50	$105.00	$367.50
Oct 13'	Exp: BVW-Smithers-Staging -Smithers- Benita	9.50	$105.00	$997.50
Oct 14'	EXP: Unload Tailer-Bin Sani-Recy-Garbage-Brandon	2.00	$105.00	$210.00
Oct 20;'	EXP: package, Load-Strap trailer and truck-Brandon	1.50	$105.00	$157.50
Oct 20'	Exp: Shop Supplies-Brenda	8.00	$105.00	$840.00
Oct 21'	EXP: Bvw-Smithers -Staging -Smithers -Cliff	7.00	$105.00	$735.00
Oct 25'	EXP: Unload Tailer-Bin Sani-Recy-Garbage-Brandon	2.00	$105.00	$210.00
Oct 26'	EXP_Smithers-Staging-Smithers-Brian	9.00	$105.00	$945.00
Oct 28'	Exp: Smihters -Staging -Benita-	9.00	$105.00	$945.00
Oct 29'	EXP: Trails North-Louelle	1.00	$105.00	$105.00
Oct 29'	EXP: Smithers-Camp-Smithers Crew Change-Benita	6.00	$105.00	$630.00
Oct 30'	EXP: Unload Tailer-Bin Sani-Recy-Garbage to Dump-Brandon	3.00	$105.00	$315.00
			Section Total:	$7,770.00

Invoice 17178 Period November 1 to November 15 Date 2021-Dec-15

Section 1: Crew

Date		Quantity	Unit Price	Amount
	STAT-Rememberance			
Nov 1-12	Camp Manager-Denny P.	12.50	$800.00	$10,000.00
Nov 1-12	Head Cook -Dianne	12.50	$650.00	$8,125.00
Nov 12& 13	Travis	2.00	$650.00	$1,300.00
Nov 12& 13	Klaine	2.00	$650.00	$1,300.00
Nov 12& 13	Chris	2.00	$650.00	$1,300.00
Nov 12& 13	Julien	2.00	$650.00	$1,300.00
Nov 12& 13	Devon	2.00	$650.00	$1,300.00
Nov 12& 13	Ben	2.00	$650.00	$1,300.00
			Section Total:	$25,925.00

Section 2: REH Equipment and Gear Rental

Date		Quantity	Unit Price	Amount
Nov 1-15	1 Month Camp Rental	15	$628.00	$9,420.00
Nov 12&13	Truck & Trailer T-20	2	$260.00	$520.00
Nov 12&13	Truck & Trailer T-22	2	$260.00	$520.00
			Section Total:	$10,460.00

Section 3: Expediting

Date		Quantity	Unit Price	Amount
Nov 1'	EXP: P/U Supplies -Louella	1.00	$105.00	$105.00
Nov 1'	EXP: P/U -Tidy Tank- NWF- Reh Devon	2.00	$105.00	$210.00
Nov 2'	EXP; Drove up to Site -Return -Julien	6.00	$105.00	$630.00
Nov 4'	EXP: Smithers- BVW -Return - Barrels & Garbage- Benita	6.00	$105.00	$630.00
Nov 5'	EXP: Unload Garbage-Recycling-Brandon	2.00	$105.00	$210.00
Nov 10'	EXP: Smithers-Supplies loaded @ Site -Return - Benita	9.50	$105.00	$997.50
Nov 11'	EXP: Smithers to Terrace airport-Smithers-Benita	4.00	$105.00	$420.00
Nov 11'	EXP: Unload garbage-Recycling-supplies -Brandon	2.50	$105.00	$262.50
Nov 12'	Semi-Smithers-Staging-Load Dozer & Supplies-Smithers-Brian	9.50	$185.00	$1757.50
Nov 15'	EXP: truck and Trailer to load core- banding and delicate loading-Julien	12.00	$105.00	$1260.00
			Section Total:	$6,482.50

Invoice 17188 Period November 15 to December 9 Date 2021-Dec-20

Section 2: REH Equipment and Gear Rental

Date		Quantity	Unit Price	Amount
Nov 15 Dec 9	Core Saw Rental	25	$30.00	$750.00
Nov 15 Dec 9	Core Saw Rental	25	$30.00	$750.00
Nov 15 Dec 9	Core Cutting Facility by Day	25	$100.00	$2,500.00
			Section Total:	$4,000.00

Section 3: Expediting

Date		Quantity	Unit Price	Amount
Nov 15'	EXP: unload Semi core at Vic drive-prep Core Shack - Devon	4.50	$105.00	$472.50
Nov 16'	EXP: unload Trailer Core -Fill water tanks -Snow plow-Devon	3.50	$105.00	$367.50
Nov 17'	EXP: Unload Fule tanks at Vic Drive- Devon	2.00	$105.00	$210.00
Nov 20'	EXP: Fill water tanks -Brandon	1.00	$105.00	$105.00
Nov 22'	Unload more fule drums- Remove Slush- Devon	2.00	$105.00	$210.00
Nov 22'	EXP: Fill water Cubs- Travis	1.00	$105.00	$105.00
Nov 22'	EXP: Unload suplies Fule drums- Vic Drive - Devon	1.00	$105.00	$105.00
Nov 23'	EXP: Fill water Cubs- Travis	1.00	$105.00	$105.00
Nov 26'	Exp-Fill Water Tanks -Move Gravel- Core- Devon	3.00	$105.00	$315.00
Nov 30'	EXP: Fill water Cubs- Moved around Core -Devon	1.50	$105.00	$157.50
Dec 1'	EXP: Fill water Cubs- Travis	1.00	$105.00	$105.00
Dec 2'	EXP: Fill water Cubs- Travis	1.00	$105.00	$105.00
Dec 3'	EXP: Fill water Cubs- Travis	1.00	$105.00	$105.00
Dec 6'	EXP: Fill water Cubs- Travis	1.00	$105.00	$105.00
Dec 7'	EXP: Fill water Cubs-Core to Bandstra- Travis	1.50	$105.00	$157.50
Dec 8'	EXP: Banded Core - Brandon	2.00	$105.00	$210.00
Dec 8'	EXP: Banded Core - NEVE	2.00	$105.00	$210.00
Dec 9'	EXP: Banded Core - Brandon	3.00	$105.00	$315.00
Dec 9'	EXP: Banded Core - NEVE	3.00	$105.00	$315.00
			Section Total:	$3,780.00

Rugged Edge Holdings

Invoice 17120 Period September 1 to September 30 Date 2021-Oct-15

Date	Description	Quantity	Unit Price	Amount	GST on Receipt
September 09	Canadian Tire	1	$93.11	$93.11	$4.43
September 17	Tmithers Timber Mart	1	$939.50	$939.50	$41.94
September 18	Smithers Timber Mart	1	$59.17	$59.17	$2.64
September 18	Canadian Tire	1	$316.10	$316.10	$14.11
September 18	BV Wholesale	1	$1,375.22	$1,375.22	$8.60
September 19	Shell Canada	1	$107.16	$107.16	$0.00
September 20	Hinton Husky	1	$77.69	$77.69	$3.70
September 20	Bon Voyage Restaurant	1	$14.65	$14.65	$0.70
September 20	Big Norn Motel	1	$75.21	$75.21	$3.45
September 20	BV Wholesale	1	$41.91	$41.91	$0.00
September 21	Bon Voyage GAS & GRO	1	$71.01	$71.01	$3.38
September 21	Bon Voyage Inn - Denis P.	1	$97.44	$97.44	$4.20
September 21	Air Canada - Dianne E.	1	$624.88	$624.88	$29.76
September 22	Aspen Inn - Denis P.	1	$145.00	$145.00	$6.25
September 22	Smithers Timber Mart	1	$603.68	$603.68	$26.95
September 22	N.C. Rentals Inc	1	$728.00	$728.00	$32.50
September 23	BV Wholesale	1	$5,909.93	$5,909.93	$49.58
September 23	Your Dollar Store	1	$18.82	$18.82	$0.84
September 23	Safeway	1	$34.93	$34.93	$0.01
September 23	Safeway	1	$139.67	$139.67	$0.28
September 23	Home Hardware	1	$321.70	$321.70	$14.36
September 24	Smithers Timber Mart	1	$845.38	$845.38	$37.74
September 24	Aspen Inn - Dianne E.	1	$145.00	$145.00	$6.25
September 24	Canadian Tire	1	$94.04	$94.04	$4.20
September 25	Tower Communications	1	$828.35	$828.35	$36.98
September 29	Safeway	1	$81.65	$81.65	$0.00
September 28	Northwest Fuels Ltd.	1	$2,462.65	$2,462.65	$117.27
September 29	BV Wholesale	1	$3,057.10	$3,057.10	$17.62
September 29	Northwest Fuels Ltd.	1	$3,685.67	$3,685.67	$175.51
September 29	Smithers Parts	1	$2,984.80	$2,984.80	$133.25
September 30	Evergreen	1	$49.26	$49.26	$2.20
Section 8 Total:			**$26,028.68**	**$26,028.68**	**$778.70**
Section 9:	Carrying Cost Associated with Purchasing - Taxable				
	Purchases- Direct Pay Back	15.00%	$26,028.68	**$3,904.30**	

Invoice 17149 Period October 1 to October 31 Date 2021-Oct-15

Date	Description	Quantity	Unit Price	Amount	GST on Receipt
October 01	Smithers Timber Mart	1	$4,032.00	$4,032.00	$180.00
October 05	Northwest Fuels Ltd.	1	$8,681.45	$8,681.45	$413.40
October 06	Safeway Smithers	1	$23.15	$23.15	$0.01
October 06	Safeway Smithers	1	$115.31	$115.31	$0.01
October 06	Bulkley Valley Wholesale	1	1,744.51	$1,744.51	$11.36
October 07	Copperside VII	1		$11.15	$0.50
October 07	Evergreen Industrial Supplies Ltd.	1		$43.68	$1.95
October 12	Safeway Smithers	1	$137.13	$137.13	$0.00
October 12	Northwest Fuels Ltd.	1	$558.43	$558.43	$26.59
October 12	Canadian Tire Smithers	1	$47.03	$47.03	$2.10

October 12	Bulkley Valley Wholesale	1	2,548.08	$2,548.08	$12.81
October 20	Safeway Smithers	1	$110.04	$110.04	$2.96
October 20	Canadian Tire Smithers	1	$65.90	$65.90	$2.94
October 20	Bulkley Valley Wholesale	1	$1,262.17	$1,262.17	$5.24
October 20	Pharmasave 105 Smithers	1	$5.76	$5.76	$0.27
October 20	Your Dollar Store With More	1	$19.09	$19.09	$0.85
October 22	Midway Services Telkwa	1	$913.00	$913.00	$1.00
October 25	Northwest Fuels Ltd.	1	$3,190.51	$3,190.51	$151.93
October 26	Safeway Smithers	1	$39.08	$39.08	$0.00
October 28	Bulkley Valley Wholesale	1	$32.45	$32.45	$1.45
October 28	Northwest Fuels Ltd.	1	$3,136.65	$3,136.65	$149.36
October 29	Trails North Powersports Ltd.	1	$848.01	$848.01	$37.86
October 29	Aspen Inn-Denny Poulin	1	$180.93	$180.93	$6.25
October 30	Big Horn Motel- Denis P		$75.21	$75.21	$3.45
October 30	Chevron Durk's Lake	1	$90.21	$90.21	$4.30
October 31	Ventura Motel	1	$98.10	$98.10	$4.50
October 31	Happy Creek Husky	1	$117.24	$117.24	$5.58
November 01	Petro Canada Loydminster	1	$84.60	$84.60	$4.03
November 01	Hotel 6 Regina	1	$81.70	$81.70	$3.68
November 03	Co-op	1	$115.73	$115.73	$5.51
Section 8 Total:				**$28,408.30**	**$1,039.89**
Section 9:	Carrying Cost Associated with Purchasing - Taxable				
	Purchases: Direct Payback	15.00%	$28,408.30	**$4,261.25**	

Invoice 17178 Period November 1 to November 15 Date 2021-Dec-15

Date	Description	Quantity	Unit Price	Amount	GST on Receipt
Nov 1'	Smithers Feed Store	1	$78.35	$78.35	$4.90
Nov 1'	Canadian tire	1	$85.94	$85.94	$3.84
Nov 1'	Northwest Fuels	1	$596.35	$596.35	$28.40
Nov 1'	Smithers Lumber Yard	1	$50.05	$50.05	$2.23
Nov 1'	Bulkley Valley Wholesale	1	$8.45	$8.45	$0.38
Nov 3''	Air Canada	1	$812.83	$812.83	$38.71
Nov 3''	Evergreen	1	$154.49	$154.49	$6.90
Nov 4''	Northwest Fuels	1	$576.11	$576.11	$27.43
Nov 10'	Tower Communications	1	$1585.53	$1585.53	$70.78
Nov 10'	Bulkley Valley Wholesale	1	$26.86	$26.86	$0.00
Nov 10'	Air Canada	1	227.85	$227.85	$10.85
Nov 12'	Whitecap-Covid test	1	$231.00	$231.00	$0.00
Nov 14'	Comfort Inn Terrace	1	$429.93	$429.93	$18.69
Nov 12'	Tylers Towing-Fuel tank	1	$1,848.00	$1,848.00	$88.00
Nov 18	Tip of the Glacier	1	-$70.00	-$70.00	$0.00
Nov 23'	Tip of the Glacier	1	-$80.00	-$80.00	$0.00
Section 8 Total:			**$6,561.74**	**$6,561.74**	**$301.11**
Section 9:	Carrying Cost Associated with Purchasing - Taxable				
	Purchases: Direct Payback	15.00%	$6,561.74	**$984.26**	

Invoice 17188 Period November 15 to December 9 Date 2021-Dec-20

Date	Description	Quantity	Unit Price	Amount	GST on Receipt
Nov 16'	Petro Canada	1	$41.72	$41.72	$1.99
Dec 8'	Smithers Lumber	1	$244.00	$244.00	$10.93

Section 8 Total:			$285.72	$285.72	$12.92
Section 9:	Carrying Cost Associated with Purchasing - Taxable				
	Purchases: Direct Payback	15.00%	$285.72	$42.86	

WALDO SCIENCES INC. / JUNIPER BAY ENTERPRISES

Invoice UNV-11-01-2021 Period October 1 to October 31 Date 2021-Nov-01

QTY		Technical Consulting Services	RATE	AMOUNT
31	daily rate	Jon Broadbent, M.Sc., GIT (Field Geologist)Oct 01-31, 2021	475.00	14,725.00
31	daily rate	Lucas Pool, EIT or Iain Sinclair (Field Technicians)Oct 01-31, 2021	325.00	10,075.00
QTY		Other Fees		
31	daily rate	Toyota Tacoma 4x4	125.00	3,875.00
		SUBTOTAL		28,675.00
		GST (5%)		1,433.75
		TOTAL (CAD)		**30,108.75**

Invoice UNV-12-12-2021 Period November 1 to December 12 Date 2021-Dec-12

QTY		Technical Consulting Services	RATE	AMOUNT
24	daily rate	Jon Broadbent, M.Sc., GIT (Field Geologist)Nov 01 - 24, 2021	$475.00	$11,400.00
40	daily rate	Iain Sinclair, (Field Technician) - Site work + demobNov 01 - Dec 10, 2021	$325.00	$13,000.00
12	daily rate	Lucas Pool, EIT (Field Technician) - Site work + demobNov 29 - Dec 10, 2021	$325.00	$3,900.00
QTY		Other Fees		
40	daily rate	Toyota Tacoma 4x4 (Nov 01 - Dec 10, 2021)	$125.00	$5,000.00
2	daily rate	Toyota 4Runner (Demob)	$125.00	$250.00
30	daily rate	Per Diem ($55 per day per person) Nov 10 - Dec 10, 2021	$110.00	$3,300.00
		FEES SUBTOTAL		$36,850.00

EXPENSES	
Accomodation (hotels in Smithers and Demob, Nov 10 to December 10)	$6,107.52
Fuel	$2,507.55
Supplies, Consumables, Misc. (Sample pails for metallurgical, PPE, remediation supplies, generator rental for Pothier Saw, rice bags, shrink wrap for shipping, printing, grinder wheels for sharpening saw blades)	$1,723.59
Pothier Core Saw Rental	no charge
Expenses subtotal	$10,338.66
Procurement fee (10%)	$1,033.87
SUBTOTAL	$48,222.53
GST (5%)	$2,411.13
TOTAL (CAD)	**$50,633.65**

MAMMOTH GEOLOGICAL LTD.

INV 2021-42 UNV Period August 1 to August 31 Date 2021-Aug-31

No.	DATE	TRAVEL	LODGING	MEALS	FIELD SUPPLIES	FUEL/OIL	GST	TOTAL	DESCRIPTION/COMMENTS
1	4-Aug-21	$1,878.50					$93.92	$1,972.42	Vancouver to Smithers, Henneberry, Robb
2	10-Aug-21			$98.63			$4.10	$102.73	Lunch at YVR
3	10-Aug-21			$70.71			$1.36	$72.07	Groceries - Smithers
4	10-Aug-21			$40.96			$1.36	$42.32	Drinks - Smithers
5	10-Aug-21			$126.91			$5.21	$132.12	Supper - Smithers
6	11-Aug-21			$35.61			$1.54	$37.15	Breakfast - Smithers
7	11-Aug-21			$63.34			$2.64	$65.98	Drinks - Smithers
8	11-Aug-21			$108.13			$2.38	$110.51	Supper - Smithers
9	12-Aug-21			$48.62			$2.10	$50.72	Breakfast - Smithers
10	12-Aug-21		$857.72				$37.60	$895.32	Presitige Inn - Henneberry, Robb 2 nights
11	12-Aug-21			$123.76			$5.14	$128.90	Lunch - Smithers
12	12-Aug-21					$98.25	$4.91	$103.16	Gas - Smithers
13	12-Aug-21			$29.59			$1.17	$30.76	Drinks - Smithers
14	12-Aug-21	$385.99					$18.05	$404.04	Truck Rental - Smithers
TOTAL		$2,264.49	$857.72	$746.26	$0.00	$98.25	**$181.48**	**$4,148.20**	

INV 2021-47 UNV Period September 1 to September 30 Date 2021-Sep-30

No.	DATE	TRAVEL	LODGING	MEALS	FIELD SUPPLIES	FUEL/OIL	GST	TOTAL	DESCRIPTION/COMMENTS
1	10-Sep-21				$544.10		$25.43	$569.53	Poplar - Sample Bags
2	10-Sep-21				$449.83		$21.02	$470.85	Poplar - QA/QC Standards
TOTAL		$0.00	$0.00	$0.00	$993.93	$0.00	**$46.45**	**$1,040.38**	

Hole ID: 21-PC-131	Easting (NAD 83): 0631643	Core Size: H (First 80 metres) Reduced to NQ (80-EOH)	DDH Started: 10/02/2021
	Northing (NAD83): 5986802	Hole Azimuth: 150.8	DDH Finished: 10/08/2021
Property: Poplar Deposit	Elevation: 893 m	Hole Dip: 89.6	Logged Completed: 10/14/2021
	Source: GSP	Total Depth: 498 m	Drilled By: Apex Drilling

Logged By: Jonathan Broadbent
Cut by: Iain Sinclair

Dip & Azimuth tests		
Depth	Azimuth	Dip
50.00	150.8	-89.6
102.00	215.5	-89.8
150.00	156.9	-89.3
204.00	154.9	-89
252.00	147.5	-89.4
300.00	135.9	-89.4
350.00	159.1	-89.4
408.00	157.6	-88.9
450.00	168.2	-89.2
501.00	156.8	-89.2

Summary: 21-PC-131 was drilled in the southern portion of the Main Zone. The hole intersected 432.8 metres of 0.423% copper, including a 76 metre interval of 0.506% copper. The copper grade drops sharply at 435 metres, though there is nothing obvious noted in the drill logs or the core photos. The hole intersected moderately to strongly altered quartz monzonite, containing 40% to 50%, 1-5mm subhedral feldspar phenocrysts and 7% to 10%, subhedral 1mm biotite. Alteration consists of varying degrees of silicification, potassic (K-feldspar and biotite) and phyllic (sericite, quartz pyrite). Mineralization consists of 1% to 3% disseminated and fracture pyrite and trace to 2% chalcopyrite.

Universal Copper			Hole: 21-PC-131	Elevation: 891m	Easting: 0631643	Azimuth: 150.8	
Poplar Project			Core Size: H-NQ	Total Depth: 498 metres	Northing: 5986802	Dip: 89.6	
FROM (m)	**TO (m)**	**GEOCODE**	**GEOLOGICAL DESCRIPTION**	**ALTERATION**	**MINERALIZATION**	**STRUCTURE**	**STRUCTURE ANGLE (DTCA)**
			No Recovery				
0	2.2	OVB					
2.2	7.52	Qtz Mnz	**Feldspar-biotite quartz monzonite.** 40-50% sub-euhedral feldspar phenocrysts are 1-5mm, feldspar phenocrysts increase in size down interval. Feldspar phenocrysts display variable (weak) sericite alteration. 7-10% sub-euhedral 1 mm biotite phenocryst laths. Light-dark grey salt and pepper appearance. Moderate magnetism.	First 3m of interval displays surficial oxidation. Minor sericite alteration and degradation of feldspar (minor propylitic alteration). Minor silicification.	Trace-1% very fine disseminated pyrite mineralization.	Moderate fractures. Minor occurrence of 1-10mm quartz-calcite veins.	10-15° dominant orientation of fractures. 15-20° quartz calcite veins.
7.5	44.4	Qtz Mnz	**Feldspar-biotite quartz monzonite with variable potassic alteration halos.** Dominantly occurring as tan-dark brown silicification, dark brown-black biotite flooding, and as pink biotite stripped feldspar enlarged alteration halos. Interval has blotchy-leopard pattern color distribution with common alteration halos bracketing fractures and veins. Moderate magnetism in intervals not stripped of biotite. Low magnetism in intervals of biotite stripping.	Variable - blotchy distribution of varying alteration. Intervals of strong potassic alteration (orthoclase (Kfeld), quartz, biotite), silicification, and minor-moderate phyllic alteration (sericite, quartz, pyrite).	1-3% pyrite dominantly occurring along 1-3mm quartz veins. Trace-1% chalcopyrite occurring along 1-10mm quartz veins. Chalcopyrite occurs most commonly in tan-pink potassic altered / silicified interval, and is rimmed with black clay.	Moderate-common 1-10mm quartz veins bracketed in black clay. Moderate-common black clay lined fractures. 9-22m Common fractured interval	Quartz veins subparellel-25° Fractures 33-40° (dominant), subparelel-5°
			40-50% sub-euhedral feldspar phenocrysts are 1-5mm, feldspar phenocrysts increase in size down interval. Feldspar phenocrysts display variable (weak) sericite alteration. 5-7% sub-euhedral 1 mm biotite phenocryst laths.	Dominant silicification (Tan-black, feldspar phenocrysts are blurred but visible - homogeneous appearing composition). Interval dominantly occurs between 8.35-14m .	7.30m 1-5mm medium-coarse grained sub-euhedral pyrite mineralizing 75% of 2cm vein.	Common randomly oriented (stockwork) black clay-pyrite lined fractures. Most common between 9-22m.	
				Intervals of enlarged/zoned feldspar phenocrysts in a tan-pink matrix (interval is dominantly stripped of biotite). Feldspar phenocrysts are 7mm with visible zonation and primary grain boundaries. Interval dominantly occurs between 27-35m.	Chalcopyrite occurs between 9-27m. Mineralization commonly occurs in tan-pink potassic altered / silicified interval, and is rimmed with black clay.		

Universal Copper			Hole: 21-PC-131	Elevation: 891m	Easting: 0631643	Azimuth: 150.8	
Poplar Project			Core Size: H-NQ	Total Depth: 498 metres	Northing: 5986802	Dip: 89.6	
FROM (m)	**TO (m)**	**GEOCODE**	**GEOLOGICAL DESCRIPTION**	**ALTERATION**	**MINERALIZATION**	**STRUCTURE**	**STRUCTURE ANGLE (DTCA)**
				Intervals of Minor-moderate sericite alteration of feldspar phenocrysts in greenish grey sericite-chlorite fine altered groundmass (gm). Sericite alteration increases down interval. Interval dominantly occurs between 35-44.4m. 35-37.5m, 42.75-44m: broken interval	Broken interval has 1-3% pyrite mineralization occurring on fractured surface.		
44.4	46.5	MSI	**Massive silicified interval (dyke-altered quartz monzonite).** Fine massive silicified interval possibly fine volcanic dyke, with bracketing host rock being completely Silicified producing massive texture. V.fine massive texture with rare remanent 1-5mm feldspar phenocryst occurring in grey-tan intervals. Black intervals are complexly massive. Contact with host rock is blurred due to alteration.	Black fine grain intervals are highly silicified with near conchoidal fracture on fractured surfaces. Grey-tan strongly silicification alteration. Pink potassic alteration bracketing veins. Alteration has overprinted-blurred individual crystal boundaries producing a massive texture.	Trace pyrite in quartz vein.	Common randomly oriented fractures. Minor 1-20mm quartz veins. 46m: 2cm quartz-calcite vein and black clay	Quartz veins: 20° Fractures: dominant orientation 20-25°
46.5	49.2	Qtz Mnz	**Feldspar-biotite quartz monzonite with strong potassic alteration**. Dominantly occurring as tan-pink biotite stripped feldspar enlarged alteration.	Tan-pink potassic altered monzonite dominantly stripped of biotite. Intervals of black-dark green possibly phyllic alteration (sericite alteration of feldspars, possibly chlorite in GM, biotite remains unaltered).	47.1m specular hematite mineralized vein. 48.6m 1cm vein of pyrite occurring within 3cm quartz vein.	48.6m: 3cm quartz and pyrite vein 47.1m specular hematite vein. Moderate-common black clay-chlorite fractures.	Hematite vein 70° Pyrite vein 30° Fractures dominantly at 25-30°
49.2	73	MSI	**Massive silicified interval (dyke-altered quartz monzonite).** Fine massive silicified interval possibly fine volcanic dyke, with bracketing host rock being completely Silicified producing massive texture. V.fine massive texture with rare remanent 1-5mm feldspar phenocryst occurring in grey-tan intervals. Black intervals are complexly massive. Contact with host rock is blurred due to alteration.	Black fine grain intervals are highly silicified with near conchoidal fracture on fractured surfaces. Grey-tan strongly silicification alteration. Pink potassic alteration bracketing veins. Alteration has overprinted-blurred individual crystal boundaries producing a massive texture.	Trace-1% pyrite and trace chalcopyrite mineralizing quartz veins and rimmed in black clay-chlorite.	Common 1mm randomly oriented quartz veins-stockwork fractures. Moderate 1-20mm quartz-calcite veins. Rare vuggy texture in veins. Quartz veins bracketed in black clay-chlorite. 47.25 4cm vugg with quartz crystal mineralization.	Quartz veins dominantly occurring sub parallel, other common sets 10-15, 20-25, 40-60°. Dominant fracture orientations 0-5, 40-60°

Universal Copper			Hole: 21-PC-131	Elevation: 891m	Easting: 0631643	Azimuth: 150.8	
Poplar Project			Core Size: H-NQ	Total Depth: 498 metres	Northing: 5986802	Dip: 89.6	
FROM (m)	TO (m)	GEOCODE	GEOLOGICAL DESCRIPTION	ALTERATION	MINERALIZATION	STRUCTURE	STRUCTURE ANGLE (DTCA)
73	87.1	Qtz Mnz	**Feldspar-biotite quartz monzonite with strong potassic alteration.** Greyish pink-greenish grey. Primary phenocryst texture dominantly blurred by alteration. Gradational upper contact marked by increase in preserved primary texture. Common 1-20mm quartz veins and fractures. 85m: 7 cm calcite vugg with coarse elongated euhedral prismic quartz crystal growth. 7cm xenolith-blotchy alteration: 1-5mm feldspar porphyritic quartz monzonite.	Dominant potassic alteration. Tan-pink alteration of groundmass. Moderate-strong silicification. Moderate sericite alteration of feldspar phenocrysts (phyllic). phenocrysts are blurred due to silicification.	1-2% chalcopyrite and 1% pyrite. Chalcopyrite and pyrite occurring in quartz veins and rimmed in black clay. Mineralization most common between 76.30-80m.	Common 1-20mm quartz veins bracketed by black clay. Moderate-common fractures at intersecting random orientations.	Quartz veins subparallel and 20-30°. Fractures subparellel-20°
87.1	111.7	Qtz Mnz	**Feldspar-biotite quartz monzonite**. 40-50% sub-euhedral feldspar phenocrysts are 1-5mm, feldspar phenocrysts. Feldspar phenocrysts display moderate-strong sericite alteration. 0-10% sub-euhedral 1 mm biotite phenocryst laths. Dark grey-greenish grey, with blotchy light tan biotite stripped alteration intervals.	Moderate-strong sericite alteration of feldspar and GM (phyllic). Minor v.fine specular hematite disseminated in GM. Minor-localized potassic alteration. 87.1-89m, 103.75-111.7m: Light tan intervals of biotite stripped minor potassic alteration.	Trace-1% pyrite and chalcopyrite occurring along fractures rimmed in black clay-chlorite.	minor-moderate black clay-chlorite lined fractures. Rare-moderate 1-5mm quartz veins bracketed by potassic alteration.	Quartz veins 15-25° Fractures subparellel-5°, 45-40
111.7	120.3	Qtz Mnz	**Feldspar-biotite quartz monzonite with strong potassic alteration.** Greyish pink-greenish grey. Primary phenocryst texture dominantly blurred by alteration. 1-20mm quartz veins and 1mm chlorite-black clay lined fractures. 114.85m: 3cm calcite vugg with quartz crystal mineralization.	Dominant potassic alteration. Tan-pink alteration of groundmass. Moderate-strong silicification. Minor sericite alteration of feldspar phenocrysts (phyllic). phenocrysts are blurred due to silicification.	1% chalcopyrite and 1% pyrite. Chalcopyrite and pyrite occurring in quartz veins and rimmed in black clay.	Moderate 1-20mm quartz veins bracketed by black clay. Moderate-common fractures at intersecting random orientations.	Quartz veins subparallel-10°, 20-30°. Fractures subparellel-20°
120.3	123.95	Qtz Mnz	**Feldspar-biotite quartz monzonite with strong phyllic-propylitic alteration.** Greenish grey-tan. Primary phenocryst texture dominantly blurred by alteration. 1-20mm quartz veins and 1mm chlorite-black clay lined fractures. 122m 2cm quartz-calcite vein with vuggy texture. 123.30m: 4cm white quartz vein subparallel to core axis.	Moderate-common sericite alteration of feldspar phenocrysts, and sericite-chlorite alteration of the GM. Moderate-strong silicification. phenocrysts are common blurred due to silicification.	1% chalcopyrite and pyrite. Chalcopyrite and pyrite occurring in quartz veins and rimmed in black clay and finely disseminated in groundmass.	Moderate 1-20mm quartz veins bracketed by black clay (stockwork). Moderate-common fractures at intersecting random orientations.	Quartz veins subparallel-10°, 20-30°. Fractures dominant orientation subparellel-20°
123.95	124.3	FSD	**Fine silicified dyke:** Fine / massive grey-tan volcanic dyke with >1mm visible feldspar and quartz phenocrysts. Glassy texture.	Silicified with tan perpendicular & 45° bands.	No mineralization observed		Bands and contact at 35°

Universal Copper			Hole: 21-PC-131	Elevation: 891m	Easting: 0631643	Azimuth: 150.8	
Poplar Project			Core Size: H-NQ	Total Depth: 498 metres	Northing: 5986802	Dip: 89.6	
FROM (m)	TO (m)	GEOCODE	GEOLOGICAL DESCRIPTION	ALTERATION	MINERALIZATION	STRUCTURE	STRUCTURE ANGLE (DTCA)
124.3	133	Qtz Mnz	**Feldspar-biotite quartz monzonite with strong potassic alteration.** Greyish pink-greenish grey. Primary phenocryst texture dominantly blurred by alteration. Common 1-20mm quartz veins and fractures.	Dominant potassic alteration. Tan-pink alteration of groundmass. Moderate-strong silicification. Moderate sericite alteration of feldspar phenocrysts (phyllic). phenocrysts are blurred due to silicification.	1-2% chalcopyrite and 1% pyrite. Chalcopyrite and pyrite occurring in quartz veins and rimmed in black clay.	Common 1-20mm quartz veins bracketed by black clay (stockwork). Moderate-common fractures at intersecting random orientations.	Quartz veins subparallel and 20-30°. Fractures subparellel-20° dominant.
133	135	Qtz Mnz	**Feldspar-biotite quartz monzonite.** 40-50% sub-euhedral feldspar phenocrysts are 1-5mm, feldspar phenocrysts. Feldspar phenocrysts display moderate-strong sericite alteration. 0-10% sub-euhedral 1 mm biotite phenocryst laths. Dark grey-greenish grey, with intervals of potassic alteration associated with fractures.	Moderate-strong sericite alteration of feldspars. Weak-moderate Specular hematite-chlorite alteration of GM. Moderate silicification. Moderated localized pink potassic alteration bracketing fractures and veins.	1-2% chalcopyrite finely disseminated in GM, and occurring partially mineralized quartz veins. Trace molybdenite.	Moderate 1-2mm quartz veins. Rare 1cm quartz vein. Minor fractures.	Quartz veins dominantly occurring at 15-20°
135	140.5	Qtz Mnz	**Feldspar-biotite quartz monzonite with strong potassic alteration.** Pink- red, and greenish grey. Primary phenocryst texture dominantly blurred by alteration. Common 1-20mm quartz veins and fractures.	Dominant potassic alteration. Tan-pink. Strong silicification. Moderate sericite alteration of feldspar phenocrysts (phyllic). Moderate Specular hematite-chlorite alteration of GM producing patches of red coloration.	1-2% chalcopyrite and 1% pyrite. Chalcopyrite and pyrite occurring in quartz veins and fractures. Trace bornite in fractures surrounding chalcopyrite grains.	Moderate-common 1-20mm quartz veins bracketed by black clay (stockwork). Moderate-common fractures at intersecting random orientations.	Quartz veins subparallel and 15-20°. Fractures subparellel-20° dominant.
140.5	142.7	Qtz Mnz	**Feldspar-biotite quartz monzonite.** 40-50% sub-euhedral feldspar phenocrysts are 1-5mm, feldspar phenocrysts. Feldspar phenocrysts display moderate-strong sericite alteration. 0-5% subhedral 1 mm biotite phenocryst laths. Dark grey-greenish grey, with blotchy potassic alteration.	Moderate-strong sericite alteration of feldspars. Moderate Specular hematite-chlorite alteration of GM. Moderate silicification. Minor-moderate potassic alteration.	1% chalcopyrite occurs in 1-5mm veins and finely disseminated, and 1% pyrite occurring in quartz veins.	Rare 1-5mm quartz veins bracketed by black clay. Moderate fractures.	Quartz veins 20-25°. Fractures subparellel-20° dominant.
142.7	151.12	Qtz Mnz	**Feldspar quartz monzonite with strong potassic-propylitic alteration.** Pink-greenish grey. Primary phenocryst texture dominantly blurred by alteration. Common 1-20mm quartz veins and fractures.	Dominant potassic alteration. Tan-pink. Strong silicification. Moderate-strong sericite alteration of feldspar phenocrysts (phyllic), minor chlorite alteration of GM (propylitic). Phyllic alteration increases down interval. 150-151.12m: silicification absent, and Gm biotite flooded.	1-3% chalcopyrite and 1% pyrite. Chalcopyrite and pyrite occurring in quartz veins, fractures and finely disseminated in host rock adjacent to veins. Trace bornite.	Moderate-common 1-20mm quartz veins bracketed by black clay and potassic alteration (stockwork). Moderate-common fractures.	Quartz veins subparallel and 15-20°. Fractures subparellel-20° dominant.

Universal Copper			Hole: 21-PC-131	Elevation: 891m	Easting: 0631643	Azimuth: 150.8	
Poplar Project			Core Size: H-NQ	Total Depth: 498 metres	Northing: 5986802	Dip: 89.6	
FROM (m)	TO (m)	GEOCODE	GEOLOGICAL DESCRIPTION	ALTERATION	MINERALIZATION	STRUCTURE	STRUCTURE ANGLE (DTCA)
151.12	159.5	Qtz Mnz	**Feldspar-biotite quartz monzonite with propylitic-potassic alteration.** 40-50% sub-euhedral feldspar phenocrysts are 1-5mm, feldspar phenocrysts. Feldspar phenocrysts display moderate sericite alteration. 0-5% subhedral 1 mm biotite phenocryst laths. Biotite phenocrysts display weak-moderate chlorite alteration. Dark grey-greenish grey, with blotchy potassic alteration.	Variable silicification (dominantly strong, with 1m interval of weak-moderate), Moderate chlorite alteration of GM and biotite (propylitic), and sericite alteration of feldspar phenocrysts (phyllic). Locally strong pink potassic alteration bracketing veins.	1-2% chalcopyrite and pyrite (50:50), dominantly occurring in 1-3mm veins-stringers. Minor disseminated mineralization.	Moderate-common quartz veins-stringers 1-10mm. Rare clay lined fractures.	Veins 10-60° dominantly 20-30°
159.5	161.85	Qtz Mnz	**Feldspar quartz monzonite with moderate-strong potassic alteration.** Light tan potassic and silicification with moderate quartz-black clay lined fractures-stringers.	Tan potassic altered monzonite. Minor chlorite-black clay rimming pyrite.	1% chalcopyrite and pyrite (60:40) occurring in 1-3mm veins-stringers, and finely disseminated. Equal% vein-dissemination.	Moderate-common quartz veins-stringers 1-10mm. Rare clay lined fractures.	Veins subparallel- 60, dominantly 20-30°
161.85	164.43	Qtz Mnz	**Feldspar-biotite quartz monzonite with strong potassic alteration.** 40-50% sub-euhedral feldspar phenocrysts are 1-5mm, feldspar phenocrysts. 0-5% subhedral 1 mm biotite phenocryst laths. Dark grey, with pink potassic alteration, and moderate biotite flooding of GM. Moderate magnetism.	Variable silicification (dominantly strong, lower 30 cm not silicified), strong pink potassic alteration bracketing veins.	1-2% chalcopyrite and pyrite (60:40), occurring in 1-3mm veins, and finely disseminated (70:30 veins: disseminated ratio).	Moderate-common quartz veins 1-10mm.	Veins 0-60° dominantly 5-15°
164.43	166.75	Qtz Mnz	**Feldspar quartz monzonite with moderate-strong potassic alteration.** Light tan potassic and silicification with common quartz veins. Quartz veins are bracketed by mineralized feldspar and interstitial calcite overgrowth.	Tan potassic altered monzonite with quartz veins and potassic feldspar and calcite overgrowth occurring between closely spaced veins (1-4cm). Moderate silicification.	3-5% chalcopyrite and pyrite (60:40) occurring in 1-10mm quartz veins / feldspar-calcite overgrowth (1-3cm). Trace molybdenite.	Common quartz veins-stringers 1-10mm.	Veins dominantly subparallel.

21-PC-131			SAMPLE DATA						
SAMPLE	INTERVAL (m)		LENGTH	TYPE	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62
NUMBER	FROM	TO	(m)	STD/Dup/B/Met	ppm Cu	ppm Mo	ppm Ag	ppm Au	% Cu
B464201	2.2	5.25	3.05		3240	3.01	0.74	0.109	
B464202	5.25	8.25	3		2960	7.51	0.81	0.09	
B464203	8.25	11.25	3		3820	3.24	1.63	0.145	
B464204	11.25	14.25	3		7990	4.37	2.93	0.341	
B464205	14.25	17.25	3		3050	3.96	1.39	0.138	
B464206	17.25	20.25	3		3390	2.63	1.2	0.161	
B464207	20.25	23.25	3		4700	1.64	0.96	0.197	
B464208	20.25	23.25	3	DUPLICATE	4800	1.97	0.94	0.219	
B464209	23.25	26.25	3		2880	3.77	0.74	0.103	
B464210	26.25	29.25	3		2250	3.05	0.45	0.091	
B464211	29.25	32.25	3		1110	2.2	0.57	0.042	
B464212	32.25	35.25	3		1560	5.06	3.75	0.065	
B464213	35.25	38.25	3		2410	2.45	0.53	0.157	
B464214	38.25	41.25	3		4760	5.24	0.8	0.178	
B464215	41.25	44.25	3		4100	6.18	0.83	0.169	
B464216	44.25	47.25	3		2840	15.4	2.12	0.091	
B464217	47.25	50.25	3		2980	18.55	0.73	0.108	
B464218				STD CDN CM-37	2090	246	1.26	NSS	
B464219				BLANK CDN-BL-10	29.5	4.41	0.02	<0.001	
B464220	50.25	53.25	3		2700	16.7	0.47	0.099	
B464221	53.25	56.25	3		3110	66.7	1.04	0.085	
B464222	56.25	59.25	3		3040	157	0.81	0.13	
B464223	59.25	62.25	3		6000	27.8	1.31	0.208	
B464224	59.25	62.25	3	DUPLICATE	4710	35.1	0.94	0.157	
B464225	62.25	65.25	3		4390	21.2	0.82	0.154	
B464226	65.25	68.25	3		3780	131	1.02	0.116	
B464227	68.25	71.25	3		2680	49.8	0.51	0.081	
B464228	71.25	74.25	3		4320	42	0.73	0.173	
B464229	74.25	77.25	3		3800	35.6	0.82	0.166	
B464230	77.25	80.25	3		4660	38.2	1.17	0.163	
B464231	80.25	83.25	3		2380	46.3	0.38	0.086	
B464232				STD CDN CM-33	3570	236	2.34	NSS	
B464233	83.25	86.25	3		5390	115	1.37	0.176	
B464234	86.25	89.25	3		3390	13.95	0.56	0.127	
B464235				BLANK CDN-BL-10	30	4.2	0.02	NSS	
B464236	89.25	92.25	3		2370	17.45	0.45	0.093	
B464237	92.25	95.25	3		2090	33.6	0.42	0.095	
B464238	95.25	98.25	3		2650	79.3	2.21	0.137	
B464239	98.25	101.25	3		2510	20.5	16.95	0.121	
B464240	101.25	104.25	3		1135	4.48	0.27	0.054	
B464241	104.25	107.25	3		2540	7.88	0.46	0.103	
B464242	107.25	110.25	3		2460	14.05	0.66	0.093	
B464243	110.25	113.25	3		1740	3.31	0.95	0.078	
B464244	113.25	116.25	3		2710	18.35	2.25	0.117	
B464245	116.25	119.25	3		3730	59.7	1.66	0.161	
B464246	119.25	122.25	3		5420	50.2	2.75	0.199	
B464247	122.25	125.25	3		3430	73.7	2.43	0.166	
B464248	125.25	128.25	3		6550	118	1.88	0.422	
B464249	128.25	131.25	3		5320	190.5	1.08	0.202	
B464250	131.25	134.25	3		2970	69.6	0.45	0.097	
B464251	134.25	137.25	3		3340	190	0.79	0.116	
B464252	137.25	140.25	3		5180	469	0.6	0.204	
B464253				STD CDN CM-37	2110	255	1.25	0.168	
B464254				BLANK CDN-BL-10	28.4	4.38	0.02	<0.001	
B464255	140.25	143.25	3		4630	95.3	0.73	0.267	
B464256	140.25	143.25	3	DUPLICATE	3970	112.5	0.77	0.176	

21-PC-131			SAMPLE DATA						
SAMPLE	INTERVAL (m)		LENGTH	TYPE	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62
NUMBER	FROM	TO	(m)	STD/Dup/B/Met	ppm Cu	ppm Mo	ppm Ag	ppm Au	% Cu
B464257	143.25	146.25	3		5720	21.2	4.72	0.259	
B464258	146.25	149.25	3		4550	18.35	7.31	0.194	
B464259	149.25	153	3.75		5040	126	2.43	0.174	
B464260	153	156	3		4190	121	0.99	0.15	
B464261	156	159	3		5210	118	1	0.203	
B464262	159	162	3		4920	185	1.28	0.181	
B464263	162	165	3		7390	192.5	1.07	0.325	
B464264	165	168	3		>10000	288	2.27	0.723	1.01
B464265	168	171	3		>10000	157	2.39	0.737	1.42
B464266	171	174	3		6520	33.1	1.3	0.292	
B464267	174	177	3		4460	43.5	0.93	0.132	
B464268	177	180	3		3950	60.5	0.74	0.113	
B464269	180	183	3		5700	130.5	1.02	0.201	
B464270	183	186	3		5020	225	0.84	0.164	
B464271				STD CDN CM-33	3430	237	2.36	0.023	
B464272				BLANK CDN-BL-10	28.5	4.17	0.03	0.001	
B464273	186	189	3		5630	43.5	0.96	0.127	
B464274	189	192	3		6210	13.15	0.92	0.196	
B464275	192	195	3		3060	8.67	0.69	0.085	
B464276	195	198	3		4410	18.95	6.81	0.153	
B464277	198	201	3		4610	7.4	3.6	0.15	
B464278	201	204	3		3270	8.45	1.6	0.145	
B464279	204	207	3		3950	16.7	2.29	0.165	
B464280	204	207	3	DUPLICATE	4080	11.85	2.34	0.153	
B464281	207	210	3		3350	16.8	1.8	0.129	
B464282	210	213	3		4490	14.8	2.4	0.186	
B464283	213	216	3		3890	185	2.57	0.153	
B464284	216	219	3		3040	22.4	1.02	0.148	
B464285	219	222	3		6410	162.5	3.43	0.292	
B464286	222	225	3		3360	14.2	1.19	0.171	
B464287	225	228	3		1910	25.4	0.41	0.097	
B464288	228	231	3		2300	13.25	0.47	0.106	
B464289	231	234	3		4070	23.6	1.13	0.215	
B464290	234	237	3		4390	16.8	1.01	0.228	
B464291				STD CDN CM-37	2110	255	1.26	0.196	
B464292	237	240	3		3910	27	0.92	0.2	
B464293				BLANK CDN-BL-10	31.3	3.79	0.03	0.003	
B464294	240	242	2		4180	42.9	4.39	0.214	
B464295	242	243	1		>10000	12.4	23.6	1.05	1.8
B464296	243	246	3		6820	506	5.07	0.384	
B464297	246	249	3		5260	11.35	2.6	0.185	
B464298	246	249	3	DUPLICATE	5340	8.69	2.49	0.289	
B464299	249	252	3		8500	92.2	3.22	0.411	
B464300	252	255	3		7600	74.6	4.29	0.326	
B464301	255	258	3		5610	57.1	2.11	0.144	
B464302	258	261	3		5480	101	1.6	0.165	
B464303	261	264	3		5540	101	1.36	0.196	
B464304	264	267	3		5050	87.3	1.13	0.182	
B464305	267	270	3		6560	75.7	2.58	0.203	
B464306	270	273	3		3580	44.7	0.91	0.104	
B464307	273	276	3		3650	304	1.62	0.103	
B464308	276	279	3		6440	354	7.23	0.225	
B464309	279	282	3		5630	97.4	7.64	0.171	
B464310	282	285	3		5220	64.7	1.18	0.134	
B464311	285	288	3		4430	72.3	1	0.128	
B464312				BLANK CDN-BL-10	27.2	3.96	0.03	0.003	

21-PC-131			SAMPLE DATA						
SAMPLE	INTERVAL (m)		LENGTH	TYPE	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62
NUMBER	FROM	TO	(m)	STD/Dup/B/Met	ppm Cu	ppm Mo	ppm Ag	ppm Au	% Cu
B464313	288	291	3		3890	57.9	1.1	0.108	
B464314				STD CDN CM-33	3350	232	2.33	0.021	
B464315	291	294	3		3850	102.5	1.25	0.114	
B464316	294	297	3		2620	67	0.7	0.065	
B464317	297	300	3		3010	65.1	0.73	0.08	
B464318	300	303	3		3100	87.1	0.81	0.081	
B464319	300	303	3	DUPLICATE	3170	55.5	0.79	0.083	
B464320	303	306	3		2790	64.1	1.31	0.084	
B464321	306	309	3		3230	55.7	3.34	0.077	
B464322	309	312	3		5060	262	4.53	0.156	
B464323	312	315	3		3210	87.6	1.41	0.074	
B464324	315	318	3		5900	121.5	2.79	0.136	
B464325	318	321	3		4210	475	1.98	0.115	
B464326	321	324	3		3680	97.4	2.06	0.117	
B464327				STD CDN CM-37	2100	238	1.15	0.169	
B464328	324	327	3		3490	365	2.52	0.086	
B464329	327	330	3		6700	153.5	2.31	0.202	
B464330	330	333	3		5360	95.1	1.46	0.138	
B464331	333	336	3		5010	64.5	1.86	0.12	
B464332				BLANK CDN-BL-10	25.7	3.88	0.02	0.002	
B464333	336	339	3		3600	72.9	1.06	0.08	
B464334	339	342	3		3170	90.3	1.04	0.069	
B464335	342	345	3		3210	72	0.89	0.058	
B464336	345	348	3		4250	101	1	0.088	
B464337	348	351	3		3620	96.6	0.99	0.078	
B464338	351	354	3		3410	207	0.95	0.076	
B464339	351	354	3	DUPLICATE	3280	318	0.94	0.07	
B464340	354	357	3		2620	183.5	0.95	0.084	
B464341	357	360	3		1860	109	1.39	0.067	
B464342	360	363	3		4610	102	1.49	0.089	
B464343	363	366	3		5470	154	1.45	0.123	
B464344	366	369	3		6770	123	1.51	0.152	
B464345	369	372	3		4770	251	1.28	0.096	
B464346	372	375	3		8520	804	1.72	0.256	
B464347	375	378	3		7410	595	1.73	0.196	
B464348	378	381	3		6220	530	1.91	0.163	
B464349	381	384	3		2920	310	1.38	0.067	
B464350				BLANK CDN-BL-10	27.5	4.29	0.03	0.001	
B464351	384	387	3		4510	362	1.81	0.105	
B464352	387	390	3		3010	83.1	1.02	0.067	
B464353				STD CDN CM-33	3530	245	2.3	0.032	
B464354	390	393	3		2930	130.5	0.89	0.072	
B464355	393	396	3		4350	216	1.35	0.099	
B464356	396	399	3		4040	185	1.79	0.076	
B464357	399	402	3		3290	140.5	1.19	0.06	
B464358	402	405	3		3340	185.5	1.96	0.053	
B464359	405	408	3		2630	146	1.27	0.051	
B464360	405	408	3	DUPLICATE	2790	155.5	1.25	0.054	
B464361	408	411	3		2160	95.5	2.39	0.03	
B464362	411	414	3		1990	135	0.77	0.035	
B464363	414	417	3		4160	211	1.62	0.067	
B464364	417	420	3		3910	95.3	1.31	0.065	
B464365	420	423	3		2820	79.6	1.06	0.055	
B464366	423	426	3		3630	103.5	2.15	0.064	
B464367	426	429	3		1980	80	0.71	0.038	
B464368	429	432	3		2530	91.5	1.14	0.042	

21-PC-131			SAMPLE DATA						
SAMPLE	INTERVAL (m)		LENGTH	TYPE	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62
NUMBER	FROM	TO	(m)	STD/Dup/B/Met	ppm Cu	ppm Mo	ppm Ag	ppm Au	% Cu
B464369	432	435	3		3090	192	1.7	0.046	
B464370				BLANK CDN-BL-10	29.2	4.43	0.02	<0.001	
B464371	435	438	3		1930	236	4.67	0.032	
B464372				STD CDN CM-37	2160	258	1.2	0.184	
B464373	438	441	3		1340	97.1	0.72	0.019	
B464374	441	444	3		978	70.6	0.89	0.012	
B464375	444	447	3		2040	53.6	0.88	0.033	
B464376	447	450	3		1450	89.6	3.48	0.019	
B464377	450	453	3		1070	37.7	3.01	0.015	
B464378	453	456	3		1150	70.6	3.28	0.016	
B464379	456	459	3		1210	34	1.75	0.015	
B464380	456	459	3	DUPLICATE	871	23.3	1.36	0.013	
B464381	459	462	3		1310	58.7	1.74	0.02	
B464382	462	465	3		1010	42.9	0.52	0.013	
B464383	465	468	3		600	17.7	0.57	0.009	
B464384	468	471	3		1060	11.85	0.54	0.014	
B464385	471	474	3		828	132.5	0.62	0.021	
B464386	474	477	3		774	20.6	0.75	0.008	
B464387	477	480	3		780	39.9	1.21	0.007	
B464388	480	483	3		946	62.9	1.31	0.01	
B464389	483	486	3		871	57.7	0.76	0.011	
B464390	486	489	3		894	39.1	0.8	0.01	
B464391	489	492	3		845	18.45	0.99	0.011	
B464392	492	495	3		845	16.55	1.99	0.01	
B464393	495	498	3	EOH	906	16.7	0.48	0.012	

Hole ID: 21-PC-132	Easting (NAD 83): 0631492	Core Size: H (First 80 metres) Reduced to NQ (80-EOH)	DDH Started: 10/09/2021
	Northing (NAD83): 5986843	Hole Azimuth: 65.5	DDH Finished: 10/014/2021
Property: Poplar Deposit	Elevation: 894 m	Hole Dip: -89.8	Logged Completed: 10/24/2021
	Source: GSP	Total Depth: 501	Drilled By: Apex Drilling

Logged By: Jonathan Broadbent
Cut by: Iain Sinclair

Dip & Azimuth tests		
Depth	Azimuth	Dip
51.00	65.5	-89.8
100.00	71.7	-89.3
153	91.40	-89.3
201.00	142	-89.4
252.00	130.2	-89.5
300.00	138.6	-89.2
351.00	121.4	-88.9
400.00	150.5	-89
450.00	158.6	-89.1
501.00	104.8	-89.4

Summary: 21-PC-132 was drilled in the western portion of the Main Zone. The top 192 metres of the hole returned 0.436% copper over 186.35. Copper grades dropped to 0.201% copper from 192 metres to 304 metres, where a series of dykes intrude the quartz monzonite through the remainder of the hole. The upper portion of the hole intersected moderately to strongly altered quartz monzonite, containing 40% to 50%, 1-5mm subhedral feldspar phenocrysts and 7% to 10%, subhedral 1mm biotite. Alteration consists of moderate to strong propylitic (chlorite and clays), weak to strong silicification, and weak to moderate potassic (K-feldspar and biotite). Mineralization consists of 1% to 3% disseminated and fracture pyrite and trace to 2% chalcopyrite. Lower down a series of dark, silicified porphyritic dykes ranging in thickness from centimetres to in excess of 35 metres were intersected. The volume of biotite in the quartz monzonite below the zone of dyking is only 3% to 5% and alteration grades from strong potassic to strong clay / propylitic. Mineralization is 1% to 3% pyrite.

Universal Copper			Hole: 21-PC-132	Elevation: 894m	Easting:0631492	Azimuth: 65.5	
Poplar Project			Core Size: H-NQ	Total Depth: 501 metres	Northing: 5986843	Dip: -89.8	
FROM (m)	TO (m)	GEOCODE	GEOLOGICAL DESCRIPTION	ALTERATION	MINERALIZATION	STRUCTURE	STRUCTURE ANGLE (DTCA)
0	5.65	OVB	12 cm Feldspar-biotite porphyritic boulder in brown mud.				
5.65	42.4	FPVD	**Fine silicified/propylitic altered volcanic dyke.** Very fine grained dark green propylitic altered / silicified volcanic dyke, with common fine fractures.	Moderate-strong silicification. Moderate-strong propylitic alteration, expressed as chlorite alteration of groundmass (GM), and localized clay alteration of GM. 22-24m: Zone of moderate potassic alteration, coincides with occurrence of 3cm quartz vein	1-3% pyrite dominantly occurring on fracture surfaces and rare 1-5mm mineralized quartz veins.	Common white clay lined fractures. Moderate quartz veins 1mm-3cm. 28-42m. Broken interval occurs between.	Fractures are randomly oriented from subparallel to perpendicular. Possible fracture sets include 0-10, 20-30°, 40-45°. Quartz veins: dominantly 10-15°
42.4	76.55	Qtz Mnz	Sharp contact marked by distinct change in grain size, color and silicification. **Feldspar-biotite quartz monzonite with moderate-strong propylitic alteration.** 40-50% sub-euhedral feldspar phenocrysts are 1-5mm. Feldspar phenocrysts display moderate-strong sericite alteration. 1-5% sub-euhedral 1-3 mm biotite phenocryst with strong chlorite alteration. Light-dark green and grey.	Moderate-strong propylitic alteration (moderate-strong chlorite alteration of biotite and GM, and moderate clay alteration of GM). Weak-moderate silicification. 45-57m: increase clay alteration with no silicification. Minor specular hematite. Weak potassic alteration occurs towards base of interval. Gradational basal contact marked by increase in potassic alteration and color change.	1-3 % pyrite. Finely disseminated-occurring in mineralized stringers, and replacement of biotite cores. (disseminated: veins ratio 60:40). 1-2% chalcopyrite finely disseminated.	Moderate-common white clay and calcite lined fractures. Moderate 1-10mm white-light pink quartz +/- calcite veins. Rare 2cm quartz veins. 45-57m: increased clay and moderate clay fractures. 55.55, 57.35m clay lined fault gouge. 73m: 1cm pyrite vein centered in 2cm quartz vein.	Dominant fracture set 20-30°. Quartz vein: subparellel-10°, 50-60°. Fault gouge: 40°
76.55	114.45	Qtz Mnz	**Feldspar-biotite quartz monzonite with moderate propylitic with weak-moderate potassic alteration.** 40-50% sub-euhedral feldspar phenocrysts are 1-5mm. Feldspar phenocrysts display moderate-strong sericite alteration. 1-5% sub-euhedral 1-3 mm biotite phenocryst with strong chlorite alteration. Light greenish- tan (clay alteration of GM, sericite alteration of feldspar, and chlorite alteration of biotite) to dark green- pinkish green (chlorite alteration of groundmass +/- potassic alteration).	Weak potassic alteration. Moderate propylitic alteration (moderate-strong chlorite alteration of biotite, GM, and bracketing fractures. Weak- moderate silicification. moderate-strong silicification in 1cm bracketing fractures. Sharp basal contact with following dyke. 76.55-86.5m: moderate pinkish green potassic and propylitic alteration 84.5-86.5m: moderate specular hematite.	1-3 % pyrite. Finely-3mm disseminated-occurring in mineralized stringers/ fractures, and replacement of biotite cores. Trace chalcopyrite finely disseminated adjacent to veins. (60:40 fractures/stringer: disseminated).	Moderate-common black clay lined fractures. Rare-moderate 1-5mm quartz +/- calcite veins. Interval commonly broken via both mechanical and naturally occurring fractures. 95.9m: 1.5cm brecciating very fine black dyke.	Fracture sets: subparellel-5, 20-25, 55-60° Veins: subparallel, 20-25° Dyke: 15° Basal contact: 60°

Universal Copper			Hole: 21-PC-132	Elevation: 894m	Easting:0631492	Azimuth: 65.5	
Poplar Project			Core Size: H-NQ	Total Depth: 501 metres	Northing: 5986843	Dip: -89.8	
FROM (m)	TO (m)	GEOCODE	GEOLOGICAL DESCRIPTION	ALTERATION	MINERALIZATION	STRUCTURE	STRUCTURE ANGLE (DTCA)
114.45	114.92	FVD	**Fine volcanic dyke.** Very fine massive homogeneous dyke with 5% 1-3mm blebby quartz phenocrysts. Tan-pink banded color.	Clay-potassic alteration leading to powdery texture and pink discoloration.			
114.92	127	Qtz Mnz	**Feldspar-biotite quartz monzonite with moderate propylitic alteration.** 40-50% sub-euhedral feldspar phenocrysts are 1-5mm. Feldspar phenocrysts display moderate-strong sericite alteration. 1-5% sub-euhedral 1-3 mm biotite phenocryst with strong chlorite alteration. Light-greenish- tan to dark green. Gradational lower contact marked by increase in silicification.	Moderate-strong propylitic alteration (moderate-strong chlorite alteration of biotite and GM, and weak clay alteration of GM). Common sericite alteration of feldspar. Locally weak potassic alteration.	1-2% finely disseminated pyrite. Trace chalcopyrite occurring in fractures and veins.	Moderate-common black clay lined fractures. Rare-moderate 1-5mm quartz +/- calcite veins. Upper contact not preserved.	Fracture sets: subparellel-5, 20-25° Veins: subparallel, 20-25
127	206.6	Qtz Mnz	**Feldspar quartz monzonite with moderate propylitic alteration, weak potassic alteration, and moderate-strong silicification.** 40-50% sub-euhedral feldspar phenocrysts are 1-5mm. Feldspar phenocrysts display moderate-strong sericite alteration. 1-2% biotite phenocrysts, dominantly altered via chlorite. Chlorite-clay alteration of GM. Pale tan-light green-pale brown.	Moderate-strong propylitic alteration (moderate-strong chlorite alteration of biotite and GM, and weak clay alteration of GM). Common sericite alteration of feldspar. Weak- locally moderate potassic alteration. Gradual basal contact marked by increase in potassic alteration. 203.6m: 1% specular hematite finely disseminated in GM.	1-2% finely disseminated pyrite. 1-2% chalcopyrite occurring in fractures and veins and finely disseminated. Disseminated: veins, 60:40.	Common black clay lined fractures. Rare-moderate 1-5mm quartz +/- calcite veins. Upper contact not preserved. Rare specular hematite mineralized fractures. Moderate fractures display 5-10mm silicification alteration brackets. 194M: 12cm quartz vein with 3% 1mm disseminated chalcopyrite.	Fracture sets: subparellel-5, 20-25° Veins: subparallel, 20-26
206.6	240.52	Qtz Mnz	**Feldspar-biotite quartz monzonite with strong silicification and potassic alteration.** Dark brown - burgundy in color, strongly silicified and potassic altered quartz monzonite.	Strong silicification and potassic alteration. Moderate chlorite alteration of GM and biotite phenocrysts.	1-3% pyrite and chalcopyrite finely disseminated in GM.	Common 1-3mm quartz veins and fractures.	Veins: subparrell-10, 20-25, 40-45, 65-70°

Universal Copper			Hole: 21-PC-132	Elevation: 894m	Easting:0631492	Azimuth: 65.5	
Poplar Project			Core Size: H-NQ	Total Depth: 501 metres	Northing: 5986843	Dip: -89.8	
FROM (m)	TO (m)	GEOCODE	GEOLOGICAL DESCRIPTION	ALTERATION	MINERALIZATION	STRUCTURE	STRUCTURE ANGLE (DTCA)
240.52	304.55	Qtz Mnz	**Feldspar-biotite quartz monzonite with moderate-strong potassic and moderate propylitic alteration.** Light tan-dark pinkish brown moderate-strong potassic alteration. Moderate green propylitic chlorite and clay alteration of GM. Sharp basal contact with following dyke.	moderate-strong potassic and moderate propylitic alteration. Variable weak- locally strong silicification. Locally moderate clay alteration of GM. Common clay-sericite alteration of feldspar phenocrysts. Biotite phenocrysts dominantly moderate-strongly altered via chlorite. Weak-moderate, locally strong chlorite alteration of GM. 278.80-298m: strong pink potassic alteration, strong silicification, moderate chlorite alteration of GM.	2-3% pyrite, 1-2% chalcopyrite commonly finely disseminated and replacement of biotite grains. Minor mineralization of 1-5mm veins. Veins: disseminated ratio 30:70. Greater mineralization with strong potassic alteration (pinkish brown-green; moderate potassic altered light tan clay altered intervals have 1-3% pyrite and chalcopyrite). Locally moderate specular hematite mineralization in GM (occurs in Dark pinkish brown potassic altered intervals).	Rare white and black clay fault gouge fractures. Moderate-common white-black clay and specular hematite fractures dominantly bracketed by strong chlorite alteration. Moderate 1-10mm quartz, rare 3-5mm vuggy calcite veins. 289-298m common white-purple quartz veins.	Fault gouge shear fractures: 40-45, 70-75° Fractures: subparellel-10, 20-25, 55-60°. Veins: subparellel-10, 20-25°, 40-45° .
304.55	304.95	FSXD	**Fine silicified porphyritic feldspar dyke with common host rock xenolith.** Very fine black-dark grey volcanic dyke. 10% subhedral feldspar phenocrysts are 1mm. Xenoliths are composed of host rock (moderate potassic altered feldspar-quartz monzonite) and are .5-3cm. Sharp upper contact. Compositionally similar to following unit with very fine grain size, possibly quenched dyke margin for following unit.	Dyke strongly silicified.			Dyke contact with host rock: 25°

Universal Copper			Hole: 21-PC-132	Elevation: 894m	Easting:0631492	Azimuth: 65.5	
Poplar Project			Core Size: H-NQ	Total Depth: 501 metres	Northing: 5986843	Dip: -89.8	
FROM (m)	TO (m)	GEOCODE	GEOLOGICAL DESCRIPTION	ALTERATION	MINERALIZATION	STRUCTURE	STRUCTURE ANGLE (DTCA)
304.95	342.22	Qtz Mnz-SD	**Black porphyritic feldspar-biotite quartz monzonite- silicified dyke.** Similar appearance to (larger average grainsize) and commonly associated with above dyke margin. Black feldspar-Biotite quartz monzonite. 40-50% Feldspar phenocrysts are anhedral-subhedral 1-5mm. 5-10% Biotite phenocrysts are sub-euhedral 1-5mm. Gm is predominantly composed of feldspar and biotite with visible white and black laths. Strong magnetism.	Moderate- locally strong sericite-clay alteration of feldspar phenocrysts. Moderate-strong silicification. Moderate biotite flooding of GM. Local moderate potassic alteration 25-40cm intervals and 1-5mm bracketing veins. 304.95-305.6m: Minty green sericite-chlorite alteration of feldspar. 329.75-333.15: moderate clay-sericite alteration of feldspar and GM (propylitic), not silicified, and pale green in color.	1-3% pyrite, 1% chalcopyrite dominantly finely disseminated in GM. Rare pyrite mineralization of quartz veins.	Common brittle clay lined fractures. Moderate white-purple (Mohs 3; fluorite?) veins Rare pink calcite, and smokey grey quartz veins 5-10mm. Rare 1-3mm pyrite mineralized quartz veins. Rare-locally moderate hematite lined fractures. 336-339.4m: 1-2cm purple quartz vein subparallel to core axis.	Fracture sets: subparellel-10, 30-35, 80-90° Veins: subparellel-10, 20-25, 40-45, 70-75° Pyrite mineralized veins: 70-75°
342.22	342.26	FSXD	**Very fine silicified porphyritic feldspar dyke with rare host rock xenolith.** Very fine black-dark grey volcanic dyke. 10% anhedral feldspar phenocrysts are 1mm. Xenoliths are composed of host rock (moderate potassic altered feldspar-quartz monzonite) and are .5 mm. Sharp lower contact marked by color and grainsize change.	Dyke strongly silicified.	Trace pyrite mineralized 1mm quartz vein.	Rare 1mm quartz vein.	Dyke contact with host rock: 50
342.26	342.8	Qtz Mnz	**Feldspar-biotite quartz monzonite with strong silicification and potassic alteration.** Dark brown - burgundy with dark green in GM. Strongly silicified and potassic altered quartz monzonite. Interval cross cut by following dykes.	Strong silicification and potassic alteration. Moderate chlorite alteration of GM and biotite phenocrysts.	3-5% pyrite finely disseminated in GM. Rare mineralized mm quartz veins.	Common 1-3mm white-purple (Mohs 3; fluorite?) veins and moderate-common white-black clay lined fractures-2mm veins. Rare quartz veins	Veins: subparrell-10, 20-25, 40-45, 65-70° Fractures: subparrell-10, 20-25, 40-45, 65-70°

Universal Copper			Hole: 21-PC-132	Elevation: 894m	Easting:0631492	Azimuth: 65.5	
Poplar Project			Core Size: H-NQ	Total Depth: 501 metres	Northing: 5986843	Dip: -89.8	
FROM (m)	TO (m)	GEOCODE	GEOLOGICAL DESCRIPTION	ALTERATION	MINERALIZATION	STRUCTURE	STRUCTURE ANGLE (DTCA)
342.8	343.05	FSXD	**Fine silicified porphyritic feldspar dyke with common host rock xenolith.** Very fine black-dark grey volcanic dyke. 10% anhedral feldspar phenocrysts are 1mm. Xenoliths are composed of host rock (moderate potassic altered feldspar-quartz monzonite) and are .5-1cm. Sharp upper and lower contact.	Dyke strongly silicified.			Dyke contact with host rock:
343.05	347.24	Qtz Mnz	**Feldspar-biotite quartz monzonite with strong silicification and potassic alteration.** Dark brown - burgundy with dark green in GM. Strongly silicified and potassic altered quartz monzonite. Interval cross cut by following dykes.	Strong silicification and potassic alteration. Moderate chlorite alteration of GM and biotite phenocrysts.	3-5% pyrite finely disseminated in GM. Rare mineralized mm quartz veins.	Common 1-3mm white-purple (Mohs 3; fluorite?) veins and moderate-common white-black clay lined fractures-2mm veins. Rare quartz veins	Veins: subparrell-10, 20-25, 40-45, 65-70° Fractures: subparrell-10, 20-25, 40-45, 65-70°
347.24	347.57	FSXD	**Fine silicified porphyritic feldspar dyke with moderate host rock xenolith.** Very fine black-dark grey volcanic dyke. 10% anhedral feldspar phenocrysts are 1mm. Xenoliths are composed of host rock (moderate potassic altered feldspar-quartz monzonite) and are .5-1cm. Sharp upper and lower contact.	Dyke strongly silicified.			Dyke contact with host rock: 30-40°
347.57	356.75	Qtz Mnz	**Feldspar-biotite quartz monzonite with strong silicification and potassic alteration.** Dark brown - burgundy with dark green in GM. Strongly silicified and potassic altered quartz monzonite. Interval cross cut by following dykes.	Strong silicification and potassic alteration. Moderate chlorite alteration of GM and biotite phenocrysts.	3-5% pyrite finely disseminated in GM. Rare mineralized mm quartz veins.	Common 1-3mm white-purple (Mohs 3; fluorite?) veins and moderate-common white-black clay lined fractures-2mm veins. Rare quartz veins	Veins: subparrell-10, 20-25, 40-45, 65-70° Fractures: subparrell-10, 20-25, 40-45, 65-70°
356.75	356.92	FSXD	**Fine silicified porphyritic feldspar dyke with moderate host rock xenolith.** Very fine black-dark grey volcanic dyke. 10% anhedral feldspar phenocrysts are 1mm. Xenoliths are composed of host rock (moderate potassic altered feldspar-quartz monzonite) and are .5-1cm. Sharp upper and lower contact.	Dyke strongly silicified.			Dyke contact with host rock: 55-60°

Universal Copper			Hole: 21-PC-132	Elevation: 894m	Easting:0631492	Azimuth: 65.5	
Poplar Project			Core Size: H-NQ	Total Depth: 501 metres	Northing: 5986843	Dip: -89.8	
FROM (m)	TO (m)	GEOCODE	GEOLOGICAL DESCRIPTION	ALTERATION	MINERALIZATION	STRUCTURE	STRUCTURE ANGLE (DTCA)
356.92	372.65	Qtz Mnz-SD	**Black porphyritic feldspar-biotite quartz monzonite- silicified dyke.** Similar appearance to (larger average grainsize) and commonly associated with above dyke margin. Black feldspar-Biotite quartz monzonite. 40-50% Feldspar phenocrysts are anhedral-subhedral 1-5mm. 5-10% Biotite phenocrysts are sub-euhedral 1-5mm. Gm is predominantly composed of feldspar and biotite. Strong magnetism.	Moderate sericite-clay alteration of feldspar phenocrysts. Moderate-strong silicification. Moderate biotite flooding of GM. Locally moderate potassic alteration bracketing veins.	1-3% pyrite and chalcopyrite finely disseminated in GM. 30:70 proportions chalcopyrite and pyrite.	Common brittle white clay lined fractures, white-purple fluorite-clay 2mm veins. Rare quartz veins 5-10mm. Rare-moderate hematite lined fractures.	Fracture sets: subparellel-10, 30-35, 70-80° Veins: subparellel-10, 40-45°, 70-80°
372.65	373	FSXD	**Fine silicified porphyritic feldspar dyke with common host rock xenolith.** Very fine black-dark grey volcanic dyke. 10% anhedral feldspar phenocrysts are 1mm. Xenoliths are composed of host rock (moderate potassic altered feldspar-quartz monzonite) and are .5-1cm. Gradual upper contact marked by decrease in average grain size and occurrence of xenoliths. sharp lower contact.	Dyke strongly silicified.			Dyke contact with host rock: 20°
373	374.45	Qtz Mnz	**Feldspar-biotite quartz monzonite with strong silicification and potassic alteration.** Dark brown - burgundy with dark green in GM. Strongly silicified and potassic altered quartz monzonite. Interval cross cut by following dyke.	Strong silicification and potassic alteration. Moderate-strong chlorite alteration of GM locally bracketing fractures and veins.	1-3% pyrite finely disseminated in GM. Trace chalcopyrite. Rare mineralized mm quartz veins.	Common 1-2mm white-purple (Mohs 3; fluorite?) veins and moderate-common white clay lined fractures-2mm veins. Rare quartz veins	Veins: subparrell-10, 30-40 Fractures: subparrell-10, 20-25, 40-45, 65-70°
374.45	374.75	FSXD	**Fine silicified porphyritic feldspar dyke with common host rock xenolith.** Very fine black-dark grey volcanic dyke. 10% anhedral feldspar phenocrysts are 1-3mm. Xenoliths are composed of host rock (moderate potassic altered feldspar-quartz monzonite) and are .5-2cm. Sharp upper and lower contact.	Dyke strongly silicified.			Dyke contact with host rock: 25°

Universal Copper			Hole: 21-PC-132	Elevation: 894m	Easting:0631492	Azimuth: 65.5	
Poplar Project			Core Size: H-NQ	Total Depth: 501 metres	Northing: 5986843	Dip: -89.8	
FROM (m)	TO (m)	GEOCODE	GEOLOGICAL DESCRIPTION	ALTERATION	MINERALIZATION	STRUCTURE	STRUCTURE ANGLE (DTCA)
374.75	379.55	Qtz Mnz	**Feldspar-biotite quartz monzonite with strong silicification and potassic alteration.** Dark brown - burgundy with dark green in GM. Strongly silicified and potassic altered quartz monzonite. Subparallel 3cm purple possible fluorite vein transects interval. Interval cross cut by following dyke.	Strong silicification and potassic alteration. Moderate-strong chlorite alteration of GM locally bracketing fractures and veins.	1-3% pyrite finely disseminated in GM. Trace chalcopyrite. Rare mineralized mm quartz veins.	Common 1-30mm white-purple (Mohs 3; fluorite?) veins and moderate-common white clay lined fractures-2mm veins. Rare quartz veins	Veins: subparrell-10, 30-40 Fractures: subparrell-10, 20-25, 40-45, 65-70°
379.55	381.2	FSXD	**Fine silicified porphyritic feldspar dyke with common host rock xenolith.** Very fine black-dark grey volcanic dyke. 10% anhedral feldspar phenocrysts are 1mm. Xenoliths are composed of host rock (moderate potassic altered feldspar-quartz monzonite) and are .5-4cm and elongated (rare 4x20cm xenolith). Sharp upper contact.	Dyke strongly silicified.			Dyke contact with host rock: 5
381.2	398.23	Qtz Mnz-SD	**Black porphyritic feldspar-biotite quartz monzonite- silicified dyke.** Similar appearance to (larger average grainsize) and commonly associated with above dyke margin. Black feldspar-Biotite quartz monzonite. 40-50% Feldspar phenocrysts are anhedral-subhedral 1-5mm. 5-10% Biotite phenocrysts are sub-euhedral 1-5mm. Gm is predominantly composed of feldspar and biotite. Strong magnetism.	Moderate sericite-clay alteration of feldspar phenocrysts. Moderate-strong silicification. Moderate biotite flooding of GM. Locally moderate potassic alteration bracketing veins. 387.6-389: pale green chlorite-sericite clay alteration of groundmass, lack of silicification.	1-3% pyrite finely disseminated in GM.	Common brittle white clay-fluorite lined fractures-2mm veins. rare quartz veins 5-10mm. Rare hematite lined fractures.	Fracture sets: subparellel-10, 30-35, 80-90° Veins: 20-25, 40-45°
398.23	402.6	Qtz Mnz	**Feldspar-biotite quartz monzonite with moderate-strong silicification and potassic alteration.** light brown - burgundy with dark green in GM.	Moderate-strong silicification and potassic alteration. Moderate chlorite alteration of GM and biotite locally bracketing fractures and veins. Moderate hematite staining.	1-3% pyrite finely disseminated in GM. Rare mineralized stringers	Moderate-common white clay-chlorite lined fractures. Rare-moderate 1-5mm quartz veins	Veins subparellel-10, 25-30. Fractures: 10-15, 35-40, 65-70

Universal Copper			Hole: 21-PC-132	Elevation: 894m	Easting:0631492	Azimuth: 65.5	
Poplar Project			Core Size: H-NQ	Total Depth: 501 metres	Northing: 5986843	Dip: -89.8	
FROM (m)	TO (m)	GEOCODE	GEOLOGICAL DESCRIPTION	ALTERATION	MINERALIZATION	STRUCTURE	STRUCTURE ANGLE (DTCA)
402.6	403.45	FSXD	**Fine silicified porphyritic feldspar dyke with common host rock xenolith.** Very fine black-dark grey volcanic dyke. 10% anhedral feldspar phenocrysts are 1mm. Xenoliths are composed of host rock (moderate potassic altered feldspar-quartz monzonite) and are .5-1cm. Sharp upper contact.	Dyke strongly silicified.			Dyke contact with host rock: 15°

21-PC-132			SAMPLE DATA						
SAMPLE	INTERVAL (m)		LENGTH	TYPE	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62
NUMBER	FROM	TO	(m)	STD/Dup/B/Met	ppm Cu	ppm Mo	ppm Ag	ppm Au	% Cu
B464394	5.65	9	3.35		2770	149	0.52	0.066	
B464395	9	12	3		4020	612	0.85	0.096	
B464396	12	15	3		4130	151	0.92	0.113	
B464397	15	18	3		2270	126	0.5	0.048	
B464398	18	21	3		2810	140.5	0.58	0.054	
B464399	21	24	3		3900	124.5	0.93	0.1	
B464400				BLANK BL-10	28.2	4.07	0.02	<0.001	
B464401	24	27	3		4520	288	1	0.101	
B464402	27	30	3		2170	131.5	0.52	0.045	
B464403				STANDARD CDN-CM-33	3730	256	2.26	0.019	
B464404	30	33	3		3170	207	0.57	0.071	
B464405	33	36	3		3480	288	0.65	0.094	
B464406	36	39	3		5790	260	1.18	0.168	
B464407	39	42	3		3440	229	0.96	0.089	
B464408	42	45	3		7380	219	1.65	0.216	
B464409	42	45	3	DUPLICATE	7390	203	2.04	0.229	
B464410	45	48	3		5770	246	1.4	0.175	
B464411	48	51	3		3550	1250	0.84	0.123	
B464412	51	54	3		3990	266	1.04	0.106	
B464413	54	57	3		3200	162.5	2.09	0.072	
B464414	57	60	3		3660	244	1.25	0.088	
B464415	60	63	3		2700	180	0.67	0.059	
B464416	63	66	3		3060	171.5	0.73	0.07	
B464417	66	69	3		2950	118.5	1.06	0.07	
B464418	69	72	3		3040	81.9	0.71	0.063	
B464419	72	75	3		3820	108.5	1.3	0.078	
B464420				BLANK BL-10	31.5	4.58	0.03	<0.001	
B464421				STANDARD CDN-CM-37	2160	273	1.22	0.162	
B464422	75	78	3		5420	196	1.2	0.119	
B464423	78	81	3		4210	95.8	1.05	0.097	
B464424	81	84	3		7480	103.5	1.69	0.184	
B464425	84	87	3		6620	132	1.39	0.163	
B464426	87	90	3		4450	58.6	1.05	0.098	
B464427	90	93	3		6260	81.4	1.39	0.154	
B464428	93	96	3		3510	483	0.88	0.079	
B464429	93	96	3	DUPLICATE	3960	411	0.89	0.088	
B464430	96	99	3		3250	487	2.99	0.066	
B464431	99	102	3		5850	171	1.88	0.142	
B464432	102	105	3		4000	128.5	1.19	0.11	
B464433	105	108	3		4080	123	0.9	0.114	
B464434	108	111	3		3770	168	6.5	0.076	
B464435	111	114	3		4770	299	25.8	0.102	
B464436	114	117	3		2510	130.5	8.75	0.067	
B464437	117	120	3		4940	157	1.25	0.102	
B464438	120	123	3		5330	198.5	1.68	0.122	
B464439	123	126	3		4480	98.1	1.11	0.077	
B464440				STANDARD CDN-CM-33	3530	245	2.39	0.022	
B464441				BLANK BL-10	29.7	4.6	0.03	0.002	
B464442	126	129	3		3920	286	0.88	0.081	
B464443	129	132	3		4230	204	1.11	0.089	
B464444	132	135	3		6450	221	1.39	0.192	
B464445	135	138	3		4070	114	1.15	0.083	
B464446	138	141	3		4570	205	1.67	0.095	
B464447	141	144	3		2970	120.5	0.87	0.055	
B464448	144	147	3		4010	79	0.87	0.084	
B464449	144	147	3	DUPLICATE	4140	105	0.93	0.088	

21-PC-132			SAMPLE DATA						
SAMPLE	INTERVAL (m)		LENGTH	TYPE	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62
NUMBER	FROM	TO	(m)	STD/Dup/B/Met	ppm Cu	ppm Mo	ppm Ag	ppm Au	% Cu
B464450	147	150	3		5430	131	0.97	0.118	
B464451	150	153	3		5180	146.5	0.98	0.108	
B464452	153	156	3		4690	154	0.94	0.086	
B464453	156	159	3		5800	88.9	1.22	0.12	
B464454	159	162	3		4780	109	0.93	0.105	
B464455	162	165	3		4180	105.5	0.84	0.1	
B464456	165	168	3		5790	115.5	1.18	0.126	
B464457	168	171	3		5420	82.2	0.98	0.103	
B464458	171	174	3		5830	221	1.1	0.102	
B464459	174	177	3		4160	88.3	0.92	0.085	
B464460				STANDARD CDN-CM-37	2150	269	1.21	0.165	
B464461				BLANK BL-10	27.9	4.34	0.54	<0.001	
B464462	177	180	3		7750	231	2.49	0.163	
B464463	180	183	3		4130	115.5	0.92	0.087	
B464464	183	186	3		4090	95.6	0.91	0.094	
B464465	186	189	3		3040	93.2	0.74	0.05	
B464466	189	192	3		3320	115	0.85	0.058	
B464467	192	195	3		2880	127	0.78	0.041	
B464468	195	198	3		1665	68.9	0.45	0.028	
B464469	195	198	3	DUPLICATE	1645	67.7	0.47	0.03	
B464470	198	201	3		2320	82.4	0.64	0.044	
B464471	201	204	3		2760	113.5	1.31	0.043	
B464472	204	207	3		2690	120	0.69	0.042	
B464473	207	210	3		1905	104	0.66	0.031	
B464474	210	213	3		2340	112.5	0.83	0.046	
B464475	213	216	3		1855	147.5	0.57	0.033	
B464476	216	219	3		1335	71.6	0.43	0.018	
B464477	219	222	3		1630	73.7	0.51	0.032	
B464478	222	225	3		1795	82.7	0.6	0.028	
B464479	225	228	3		1290	99.4	0.36	0.019	
B464480				BLANK BL-10	27.2	4.27	0.02	<0.001	
B464481	228	231	3		1425	76.6	0.46	0.02	
B464482				STANDARD CDN-CM-33	3640	248	2.3	0.025	
B464483	231	234	3		1895	104	0.6	0.028	
B464484	234	237	3		2550	128.5	0.85	0.047	
B464485	237	240	3		1340	75.7	0.55	0.017	
B464486	240	243	3		1910	95.9	0.54	0.027	
B464487	243	246	3		2470	130.5	0.65	0.041	
B464488	246	249	3		3790	130.5	1.48	0.063	
B464489	246	249	3	DUPLICATE	4480	128	1.06	0.078	
B464490	249	252	3		1540	86.2	0.63	0.019	
B464491	252	255	3		2200	211	0.96	0.029	
B464492	255	258	3		2460	89.4	2.49	0.041	
B464493	258	261	3		1015	43.7	0.76	0.009	
B464494	261	264	3		1160	56.2	1.22	0.012	
B464495	264	267	3		1530	102	2.03	0.016	
B464496	267	270	3		1715	128.5	1.22	0.023	
B464497	270	273	3		2050	84.2	1.57	0.029	
B464498	273	276	3		1845	150	0.75	0.025	
B464499	276	279	3		1470	67.8	0.52	0.021	
B464500				STANDARD CDN-CM-37	2200	267	1.16	NSS	
B464501				BLANK BL-10	26.8	4.27	0.04	NSS	
B464502	279	282	3		2230	55.7	0.75	0.033	
B464503	282	285	3		1965	55.3	0.66	0.036	
B464504	285	288	3		2260	42.6	0.72	0.044	
B464505	288	291	3		3380	260	1.16	0.06	

21-PC-132			SAMPLE DATA						
SAMPLE	INTERVAL (m)		LENGTH	TYPE	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62
NUMBER	FROM	TO	(m)	STD/Dup/B/Met	ppm Cu	ppm Mo	ppm Ag	ppm Au	% Cu
B464506	291	294	3		1970	93.4	0.54	0.032	
B464507	294	297	3		1635	61.2	0.52	0.028	
B464508	297	300	3		1130	52.6	0.42	0.018	
B464509	297	300	3	DUPLICATE	1215	44.1	0.42	0.018	
B464510	300	303	3		1780	74.9	0.69	0.032	
B464511	303	306	3		858	50.3	0.63	0.02	
B464512	306	309	3		315	17.05	0.18	0.003	
B464513	309	312	3		683	69.1	0.27	0.012	
B464514	312	315	3		768	37.7	0.3	0.009	
B464515	315	318	3		1140	34.9	0.34	0.011	
B464516	318	321	3		498	45.3	0.21	0.005	
B464517	321	324	3		567	12.15	0.21	0.006	
B464518	324	327	3		1165	27.2	0.55	0.015	
B464519	327	330	3		1945	118	0.71	0.033	
B464520				STANDARD CDN-CM-33	3530	250	2.31	0.019	
B464521				BLANK BL-10	26.8	4.33	0.02	<0.001	
B464522	330	333	3		1695	141	0.74	0.027	
B464523	333	336	3		1580	42.9	0.58	0.034	
B464524	336	339	3		2500	100	0.82	0.057	
B464525	339	342	3		2470	101	0.87	0.04	
B464526	342	345	3		1495	33.8	0.59	0.019	
B464527	345	348	3		1155	34.7	0.4	0.009	
B464528	348	351	3		982	74	0.37	0.011	
B464529	348	351	3	DUPLICATE	864	117.5	0.3	0.01	
B464530	351	354	3		1080	42.8	0.55	0.008	
B464531	354	357	3		1160	69	0.39	0.013	
B464532	357	360	3		337	2.26	0.16	0.003	
B464533	360	363	3		748	30.1	0.27	0.021	
B464534	363	366	3		996	35.9	0.38	0.015	
B464535	366	369	3		479	9.52	0.2	0.007	
B464536	369	372	3		1115	44	0.46	0.044	
B464537	372	375	3		779	11.05	0.25	0.009	
B464538	375	378	3		1280	241	0.48	0.021	
B464539	378	381	3		1345	685	0.73	0.018	
B464540				STANDARD CDN-CM-37	2120	260	1.17	0.185	
B464541				BLANK BL-10	26.1	4.28	0.03	0.004	
B464542	381	384	3		294	18.85	0.17	0.003	
B464543	384	387	3		841	25.8	0.36	0.021	
B464544	387	390	3		526	61.1	0.36	0.009	
B464545	390	393	3		1075	86.4	0.46	0.022	
B464546	393	396	3		1760	98.1	0.78	0.05	
B464547	396	399	3		1095	96.5	0.55	0.019	
B464548	399	402	3		1230	22.1	0.48	0.018	
B464549	399	402	3	DUPLICATE	1255	25.6	0.62	0.016	
B464550	402	405	3		632	17.75	0.3	0.015	
B464551	405	408	3		922	37.7	0.62	0.022	
B464552	408	411	3		392	26.4	0.26	0.01	
B464553	411	414	3		520	57	0.36	0.008	
B464554	414	417	3		2290	109.5	1.01	0.045	
B464555	417	420	3		1320	60.6	1.29	0.015	
B464556	420	423	3		920	38	1.13	0.013	
B464557	423	426	3		643	191.5	0.57	0.011	
B464558	426	429	3		945	79.9	0.54	0.014	
B464559	429	432	3		1625	67.4	0.95	0.026	
B464560				STANDARD CDN-CM-33	3550	247	2.22	0.024	
B464561				BLANK BL-10	24.1	3.93	0.02	<0.001	

21-PC-132			SAMPLE DATA						
SAMPLE	INTERVAL (m)		LENGTH	TYPE	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62
NUMBER	FROM	TO	(m)	STD/Dup/B/Met	ppm Cu	ppm Mo	ppm Ag	ppm Au	% Cu
B464562	432	435	3		1290	27.8	0.72	0.023	
B464563	435	438	3		990	31.9	0.6	0.014	
B464564	438	441	3		822	16.1	0.39	0.011	
B464565	441	444	3		1285	19.35	0.7	0.013	
B464566	444	447	3		1095	23.3	0.53	0.01	
B464567	447	450	3		679	11	0.42	0.011	
B464568	450	453	3		1005	106	1	0.015	
B464569	450	453	3	DUPLICATE	888	91.8	1.03	0.01	
B464570	453	456	3		334	9.19	0.8	0.009	
B464571	456	459	3		745	19.6	0.65	0.013	
B464572	459	462	3		1035	37.3	0.52	0.012	
B464573	462	465	3		1350	21.1	0.59	0.019	
B464574	465	468	3		765	14.95	0.54	0.014	
B464575	468	471	3		919	8.46	0.5	0.015	
B464576	471	474	3		938	20.4	0.34	0.01	
B464577	474	477	3		320	7.42	0.19	0.004	
B464578	477	480	3		751	54.9	1.05	0.007	
B464579	480	483	3		324	30.5	0.26	0.002	
B464580	483	486	3		174.5	6.46	0.11	0.002	
B464581				STANDARD CDN-CM-37	2140	268	1.17	0.195	
B464582				BLANK BL-10	23.5	3.87	0.02	<0.001	
B464583	486	489	3		452	2.69	0.32	0.013	
B464584	489	492	3		282	4.05	0.32	0.004	
B464585	492	495	3		272	9.6	0.18	0.003	
B464586	495	498	3		287	4.14	0.2	0.004	
B464587	498	501	3		174.5	2.99	0.13	0.002	

Hole ID: 21-PC-133	Easting (NAD 83): 631875	Core Size: H (First 80 metres) Reduced to NQ (80-EOH)	DDH Started: 09/26/2021
	Northing (NAD 83): 5986925	Hole Azimuth: 264.1	DDH Finished: 10/02/2021
Property: Poplar Deposit	Elevation: 881 m	Hole Dip: 89.7	Logged Completed: 10/05/2021
	Source: GSP	Total Depth: 501 m	Drilled By: Apex Drilling

Logged By: Jonathan Broadbent
Cut by: Lucas Poole/ Iain Sinclair

Dip & Azimuth tests		
Depth	Azimuth	Dip
42.00	264.1	-89.6
93.00	110.5	-89.6
144.00	74.3	-89.4
195.00	54	-89.4
246.00	51.5	-89.4
297.00	43.1	-89.1
348.00	37.4	-89
399.00	47.3	-88.8
450.00	41.7	-88.9
501.00	31.4	-89.1

Summary: 21-PC-133 was the final hole drilled in the East Zone, concentrating in the eastern portion. This hole returned 479.75 metres of 0.408% copper and was well mineralized from the top of bedrock to the bottom of the hole. A higher grade section between 247.25 to 315.5 metres returned 0.655% copper. The hole intersected moderately to strongly altered quartz monzonite, containing 30% to 50%, 1-5mm subhedra feldspar phenocrysts and 5% to 7%, subhedral 1mm biotite. Alteration consists of varying degrees of silicification, potassic (K-feldspar and biotite) and propylitic (chlorite, clays). Mineralization consists of 1% to 5% disseminated and fracture pyrite and trace to 5% chalcopyrite.

Universal Copper			Hole: 21-PC-133	Elevation: 881m	Easting: 631875	Azimuth:	
Poplar Project			Core Size: H-NQ	Total Depth: 500 metres	Northing: 5986925	Dip: 89.7	
FROM (m)	**TO (m)**	**GEOCODE**	**GEOLOGICAL DESCRIPTION**	**ALTERATION**	**MINERALIZATION**	**STRUCTURE**	**STRUCTURE ANGLE (DTCA)**
0	21.25	CASG	1-10cm pebbles to cobbles of various lithologies in dark grey to oxidized reddish brown clay.				
21.25	94.75	Qtz Mnz	**Feldspar quartz monzonite with variable potassic alteration** (dominantly occurring as silicification and biotite flooding of ground mass). Core is grey-dark grey with salt and pepper appearance.	First 3m of interval displays surficial oxidation. Weak to strong potassic alteration. Potassic alteration occurs dominantly as silicification and biotite flooding of ground mass, minor tan-pink coloration. Minor clay-sericite alteration (minor phyllic) imparting a greyish green color to feldspars, dominantly visible in silicified intervals.	2-5% v.fine to 3mm sub-euhedral cubic pyrite disseminated throughout interval, and in 1-2mm pyrite stringers in association with quartz and calcite veins. Trace to localized 1% chalco pyrite occurring in 1mm veins in association with quartz and calcite veins. 1cm cluster of 3mm euhedral pyrite at 66m. Trace v.fine bornite.	Variable (rare-common) quartz-calcite and possibly anhydrite 1mm-2cm veins. Veins more common in silicified intervals. Veins occur at random orientations (stockwork). Rare veins display 1-5mm vuggs.	Moderate-common veins and fractures. Veins have random orientations range from 5-50° (stockwork veining).
			30-40% euhedral-subhedral 1-3mm feldspar phenocryst in fine light-dark grey ground mass, imparting a salt and pepper appearance (more melanocratic in areas of biotite flooding). Feldspar phenocrysts decrease down interval to basal contact.	Clay rich intervals between 42.5-46m, 52-54m. Clay is tan to light green and black.		Interval of common veins and clay rich fractures (shear?) between 30-35m, 39-44m, 45-53m, 55-59m, 80-85m.	
			Core integrity is variable from well preserved to completely shattered into 1-5cm pieces. Core integrity higher in areas of silicification and lower in darker zones of greater biotite flooding of ground mass.	Zones of dominant biotite flooding of groundmass, with dark grey to black in color. Biotite flooded zones are commonly broken. Zones occur between 26-30m, 55-56m, 59-71m. Biotite flooding of groundmass increases down interval. Silicified zones occur between 21.25-25.6m, 30-39m. 46.55-50m, 54-59m, 65-67m. Silicified zones are grey to tan in color.		Zones of strongly fractured/broken intervals between 26-28.85m, 59.2-63m, 68.5-71m, 71-80m, 83-94m. All occurring in dark grey-black biotite flooded ground mass zones.	
			70-97.75 Pervasive biotite flooding of ground mass. Core is dark grey to black, and core is commonly broken. 1mm biotite phenocrysts occur towards base of interval up to 5%.	70-97.75 Pervasive biotite flooding of ground mass			

Universal Copper			Hole: 21-PC-133	Elevation: 881m	Easting: 631875	Azimuth:	
Poplar Project			Core Size: H-NQ	Total Depth: 500 metres	Northing: 5986925	Dip: 89.7	
FROM (m)	**TO (m)**	**GEOCODE**	**GEOLOGICAL DESCRIPTION**	**ALTERATION**	**MINERALIZATION**	**STRUCTURE**	**STRUCTURE ANGLE (DTCA)**
			Sharp basial contact marked by sudden increase in feldspar and biotite phenocrysts and change in color from black to greyish brown.				
94.75	139	Qtz Mnz	**Feldspar-biotite quartz monzonite** with variable (moderate-strong) potassic alteration, ranging from light grey to pinkish tan to black. Mineralogically same as above unit.	Unit has variable color ranging from pinkish tan to light-dark grey. Moderate to strong potassic alteration with minor pale green chlorite-sericite alteration of feldspar crystals (phyllic-propylitic alteration). Potassic alteration is identified by minor pink coloration (Potassium feldspar), silicification, and biotite.	2-5% v.fine to 1-2 mm sub-euhedral cubic pyrite disseminated throughout interval, and in 1-10mm pyrite in quartz and calcite veins.	Minor- localized common quartz-calcite (possibly dolomite) veins 1mm-1cm. Veins are composed of fine-medium grained quartz-calcite. Rare 2mm vuggy pits in veins. Zones of strong silicification and zones with biotite flooding of the groundmass, these intervals have a dark grey-black color and commonly broken.	Veins are variable from 10-40°
			40-50% sub-euhedral feldspar phenocrysts are 1-5mm, feldspar phenocrysts increase in size down interval. Feldspar phenocrysts display variable (weak) chloritic-sericite alteration (phyllic-propylitic). 5% subhedral 1 mm biotite phenocrysts.	126-131, moderate-strong pinkish tan silicified potassic altered zone with common quartz veins with moderate to common pyrite. Potassic alteration increases at 139m. Minor-moderate pale green alteration (sericite alteration). Silicified zones occur between 95-97m, 100-103m, 106-113m, 120-123m, 124-131.5m, 135-139	126-131 pyrite commonly mineralizing 1-10mm quartz-calcite veins.	95-97m 1-10mm quartz veins ranging from low-high angled, 102-103m random oriented quartz veins (stock work), 105-123m common veins and fractures with silicified alteration, 124-131m common quartz-calcite veins in silicified alteration.	95-97m 5-50° veins. 126-131m 5-20° veins. 102-103m 1-50° veins 105-123m Veins: 0-60°, Fractures: 0-30°. 124-131m veins 5-70°
			Dark grey broken intervals between 97-100.5m, 132-132.25m.				
			Gradual basal contact marked by a gradual increase in potassic and silicic alteration.				

Universal Copper			Hole: 21-PC-133	Elevation: 881m	Easting: 631875	Azimuth:	
Poplar Project			Core Size: H-NQ	Total Depth: 500 metres	Northing: 5986925	Dip: 89.7	
FROM (m)	**TO (m)**	**GEOCODE**	**GEOLOGICAL DESCRIPTION**	**ALTERATION**	**MINERALIZATION**	**STRUCTURE**	**STRUCTURE ANGLE (DTCA)**
139	227.05	Qtz Mnz	**Feldspar-biotite quartz monzonite** with variable potassic alteration, and moderate-strong silicification, ranging from pinkish tan-brown to black. Mineralogically same as above unit.	Moderate-locally strong potassic alteration, with intervals of strong silicification. Increase in clay/ sericite/ chlorite alteration down interval.	1-5% pyrite mineralization, commonly disseminated fine-v.fine grain sub-euhedral pyrite mineralization, and localized 1-20mm medium-coarse cubic euhedral pyrite mineralization in mm stringers and 2cm quartz/calcite veins. Trace chalco	Common sub parallel to perpendicular quartz calcite veins 1-20mm. Veins are more common in silicified zones.	Veins alternate from subparallel to perpendicular down interval with changes in alternation.
			40-50% sub-euhedral feldspar phenocrysts are 1-5mm, feldspar phenocrysts increase in size down interval. Feldspar phenocrysts display variable (weak) chloritic-sericite alteration (phyllic-propylitic). 5-7% sub-euhedral 1 mm biotite phenocrysts.	139-157.25m moderate potassic alteration, with weak-moderate silicification. Stronger potassic pink alteration bracketing veins. Pale pinkish brown in color.	139-157.25m 1-3 disseminated pyrite	139- 157.25m common quartz veins at random orientation, preferentially sub parallel to core axis. Veins 2-20mm.	139-157.25m veins 0-40°.
				157.25-163.25m, 172.25-175.25m, 192.25-201.95m strong silicification (potassic), weak-moderate Kfeld alteration bracketing veins. Dark grey to dark brown in color.	157.25-163.25m, 172.25-175.25m, 192.25-201.95m 5% disseminated pyrite 175.85m, 1cm pyrite vein 192.25-201.95m 1% chalco	157.25-163.25m, 172.25-175.25m, 192.25-201.95m. Common 1-3mm quartz/calcite veins dominantly sub perpendicular to core axis.	157.25-163.25m, 172.25-175.25m, 192.25-201.95m veins at 10-80° pyrite vein at 65°
				163.25-172.25m, 175.25-184m moderate silicification with weak-moderate K-feld pink potassic alteration bracketing veins, and minor clay/ sericite alteration. Light grey-brown in color.	163.25-172.25m, 175.25-184m 3% pyrite disseminated. Trace chalcopyrite in quartz veins.	163.25-172.25m, 175.25-184m Common 1-20mm quartz/calcite veins (stockwork) with rare localized 1-3mm vuggy pits.	163.25-172.25m, 175.25-184m veins at 5-50°
				184-184.45m weak potassic alteration		5cm quartz/calcite vein with 1cm vuggs.	Quartz vein 20°
			184.45m-190.25m Minor brecciation of host rock	184.45m-190.25m, 192.25-196.25m Moderate silicification with weak-moderate K-feld pink potassic alteration bracketing veins, and minor-moderate clay/ sericite alteration. Grey-brown in color.	184.45m-190.25m, 192.25-196.25m 1-3% v.fine disseminated pyrite, trace-1% disseminated v.fine chalcopyrite.	184.45m-190.25m, 192.25-196.25m Common 1-20mm quartz/calcite veins (stockwork) with rare localized 1-3mm vuggy pits	184.45m-190.25m, 192.25-196.25m veins at 5-50°
				190.25-192.25m, 222-222.5m strong clay alteration and decrease in core integrity		190.25-192.25m Common subparallel to random oriented veins and clay lined fractures.	190.25-192.25m Veins 0-30°

Universal Copper			Hole: 21-PC-133	Elevation: 881m	Easting: 631875	Azimuth:	
Poplar Project			Core Size: H-NQ	Total Depth: 500 metres	Northing: 5986925	Dip: 89.7	
FROM (m)	**TO (m)**	**GEOCODE**	**GEOLOGICAL DESCRIPTION**	**ALTERATION**	**MINERALIZATION**	**STRUCTURE**	**STRUCTURE ANGLE (DTCA)**
			201 10cm quartz calcite vein.				20° veins
			Moderate brecciation of host rock.	202.15-205.4m moderate-strong silicification, minor pink potassic alteration, with moderate sericite-chlorite alteration.	1-3% disseminated v.fine pyrite.	Random oriented common veins (stockwork).	10-50° veins
				205.4-222m. moderate-strong silicification, with moderate sericite-chlorite alteration.	1-5% v.fine pyrite and chalcopyrite. 1cm pyrite vein at 221.95m.	205.4-222m. Common 1-10mm quartz-calcite veins. 206.55, 220.50m 10cm quartz and calcite vein. 217.70-218.15m broken interval.	veins 10-70°, 10cm veins 20°
			222.5-227.05m	Moderate silicification, weak pink potassic alteration, moderate sericite-chlorite alteration (propylitic alteration)			
			Sharp basial contact marked by sudden increase in feldspar and biotite phenocrysts size.				
227.05	327	Qtz Mnz	**Feldspar-biotite quartz monzonit**e with moderate to strong phyllic-propylitic alteration ranging from pale-dark grey and pale green. Increase in phenocryst size compared to previous unit.	Moderate-strong propylitic-phyllic alteration, with variable minty green alteration of feldspar phenos and ground mass via sericite and clay, and biotite alteration via chlorite. Minor-moderate silicification.	1-3% disseminated pyrite fine-medium grained sub-euhedral. 1-5% fine chalcopyrite disseminated and in 1-5mm blebs. Pyrite and chalcopyrite occurring in 5-10mm quartz calcite veins. Trace Molybdenite in fine 1-2mm blebs associated with quartz-calcite veins.	Localized clay lined fractures/ fault gouge fractures. Moderate-locally common quartz-calcite veins.	Three main vein/fracture orientations (sets) 10-15, 20-25, 40-45°.

Universal Copper			Hole: 21-PC-133	Elevation: 881m	Easting: 631875	Azimuth:	
Poplar Project			Core Size: H-NQ	Total Depth: 500 metres	Northing: 5986925	Dip: 89.7	
FROM (m)	TO (m)	GEOCODE	GEOLOGICAL DESCRIPTION	ALTERATION	MINERALIZATION	STRUCTURE	STRUCTURE ANGLE (DTCA)
			40-50% sub-euhedral feldspar phenocrysts are 1-5mm, dominantly 3-5mm.Feldspar phenocrysts display variable (weak) chloritic- sericite alteration (phyllic-propylitic). 5-7% sub-euhedral 1-3 mm biotite phenocrysts.	225.05- 243.85m, Grey-green, Moderate-strong phyllic-propyllitic alteration of feldspar biotite and ground mas via sericite/clay/chlorite. Feldspar phenocrysts are commonly altered minty pale green via sericite. Weak-moderate silicification.	225.05- 243.85m - 1-3% disseminated pyrite fine-medium grained sub-euhedral. 1-3% v.fine chalcopyrite disseminated and in 1-5mm blebs. Pyrite and chalcopyrite occurring in 5-10mm quartz calcite veins. 234.85m Trace moly 2cm quartz vein, 233m 1cm chalcopyrite and pyrite mineralized quartz vein.	1-10mm quartz veins bracketed by calcite and black clay	242.85m Clay lined fracture 15° Three main vein sets 10-15, 20-25, 40-45°.
				243.85-252.85m, pale grey-green, weak-moderate clay/ phyllic-propylitic alteration. Feldspar displays sericite minty green alteration, minor-moderate chlorite alteration of biotite and groundmass. Localized silicification.	1-3% disseminated 1-3mm clusters of pyrite.	Moderate clay lined fractures and rare-moderate quartz veins 1-10mm	245,247m. Moderate clay lined fractures (possibly shear) at 20-25°
				252.85-269.55m light grey-green moderate-strong phyllic-propylitic (sericite and quartz-chlorite and clay) alteration, localized silicification and weak potassic alteration bracketing veins. Common sericite minty green alteration of feldspar, and chlorite alteration of groundmass.	252.85-269.55m, 1-3% pyrite, disseminated an in mineralizing 1-5mm veins, 261.25m, 1cm pyritized quartz vein (25% mineralization of vein). Trace-1% chalcopyrite mineralizing 1-5mm quartz veins	Moderate clay lined fractures and rare-moderate quartz veins 1-10mm.	Mineralized veins 10-15, 40-45° Dominant orientation of fractures 5-10°, dominant orientation of veins 15-20°
269.55	269.7	PFD	**Porphyritic feldspar dyke**: 15cm, 2-5mm feldspar phenos in fine gm.				
				269.7-270.60m strong dark green chlorite alteration with presence of moderate clay fractures and rare calcite veins, interpreted as propylitic alteration, moderate-weak potassic alteration bracketing fractures. Biotite phenos destroyed.	3-5% fine chalcopyrite and 1-3% pyrite disseminated and in 1-2mm mineralized veins (disseminated > vein mineralization). Localized specular hematite	Rare calcite veins and moderate clay lined fractures.	Fracture dominant orientation 15-20° Vein dominant orientation 10-15°

Universal Copper			Hole: 21-PC-133	Elevation: 881m	Easting: 631875	Azimuth:	
Poplar Project			Core Size: H-NQ	Total Depth: 500 metres	Northing: 5986925	Dip: 89.7	
FROM (m)	**TO (m)**	**GEOCODE**	**GEOLOGICAL DESCRIPTION**	**ALTERATION**	**MINERALIZATION**	**STRUCTURE**	**STRUCTURE ANGLE (DTCA)**
				270.60-317.25m Moderate-strong chlorite-clay alteration of ground mass (phyllic), weak pink potassic alteration. Light grey-green.	1-3% f-m pyrite commonly in veins and in 3-10mm clusters. >1-1% chalcopyrite 286, 288.5 V. coarse grain pyrite in 1-3 cm clusters, and rare 1cm chalcopyrite cluster associated with potassic alteration.	Moderate-common quartz veins bracketed by black clay, rare-moderate calcite veins, and clay lined fractures. 287, 289, Clay lined fault gouge/shear fractures.	Veins are at random/variable orientation ranging from 5-55° (dominant orientation 20-25), calcite veins 25-30°, clay fractures three main fracture sets 10-15, 20-25, 40-45°.
				317.25- 327 Moderate chlorite and clay alteration (propylitic) alteration	1% pyrite disseminated and in 1-3mm clusters and in rare veins.	Common clay lined shear fractures/ fault gouge. Common 1-2mm quartz-calcite veins. 318.75m 1cm quartz vein	Three main fracture sets 10-15, 20-25, 40-45°.
327	370.75	Qtz Mnz	**Feldspar-biotite quartz monzonite** with moderate to strong propylitic alteration ranging from grey-green and weak-moderate salmon pink potassic alteration.	Moderate -strong propylitic alteration, with common chlorite-clay alteration of groundmass. Biotite has dominantly been altered by chlorite. Feldspar phenocryst display moderate-strong sericite alteration. Minor silicification. Weak-moderate tan-pink potassic alteration commonly associated with veins. Potassic alteration increases down interval.	1% pyrite disseminated, occurring within rare biotite grains, and rare mineralized 1mm veins. Trace chalcopyrite. 344.9m, 5cm potassic (silica and kfeld) vein bearing chalcopyrite (2-5% of total 5cm vein). Rare specular hematite mineralized quartz vein.	Minor-locally moderate clay lined fractures. Common 1mm veins. Rare 1cm vuggs in quartz/calcite veins. Rare 5-10 mm quartz veins. 1cm veins display minor foliation. 344.25m 4cm clay filled shear fracture. Increase in veining and fracturing down interval.	1mm Veins dominantly oriented 20-25°, 1cm veins 40-45°, and rare subparallel. 344.25m shear fracture. 55°
			Alternating zonation of potassic propylitic and minor altered host rock intervals.	351.5-358.18 increase in potassic alteration (moderate-locally strong), weak-moderate silicification. Strong potassic alteration bracketing veins. Moderate-strong propylitic alteration.	1-3% disseminated pyrite, 1% chalcopyrite finely disseminated and in 2mm mineralized veins.	V. Common v.fine chlorite lined fractures at intersecting random orientations (stockwork). Rare-moderate 1-2cm sub parallel (to core axis) veins. 362.60-365m highly fractured. 367 2cm sub parallel quartz vein. 369.5m, 2cm quartz and calcite vein.	Rare-moderate 1-2cm sub parallel (to core axis) veins.

Universal Copper			Hole: 21-PC-133	Elevation: 881m	Easting: 631875	Azimuth:	
Poplar Project			Core Size: H-NQ	Total Depth: 500 metres	Northing: 5986925	Dip: 89.7	
FROM (m)	**TO (m)**	**GEOCODE**	**GEOLOGICAL DESCRIPTION**	**ALTERATION**	**MINERALIZATION**	**STRUCTURE**	**STRUCTURE ANGLE (DTCA)**
370.75	417	Qtz Mnz	**Feldspar-biotite quartz monzonite** with moderate to strong green propylitic alteration and weak-moderate salmon pink potassic alteration, with localized intervals of quartz and specular hematite infilled stockwork fracturing / veining	Moderate-strong propylitic and moderate potassic alteration. Potassic alteration coincides with fracture and vein occurrence. 374.3-346.6m, 382-3825m Clay alteration/ clay rich intervals. Potassic alteration increases down interval.	Rare 1-5mm pyrite veins. 371.9m Rare occurrence of trace-1% chalcopyrite in specular hematite brecciating stockwork veins. Trace-.5% chalcopyrite occurring in veins and 2mm clusters in potassic altered and brecciated intervals. 1-2% pyrite occurring as mineralized 1-3mm veins.	370.75-374, 379-382, 387.75-401 Common v.fine specular hematite-chlorite stockwork brecciating fractures and quartz and calcite veins in potassic alteration. Rare-moderate 1-2cm sub-parallel quartz-calcite veins.	2cm Quartz-calcite veins subparallel to core axis (0°). Brecciating specular hematite-chlorite fractures are randomly orientated. Pyrite veins 65-90°
376.6	399.6	PFD	**Porphyritic feldspar dyke** 23 cm. 2-5mm feldspar phenos in fine gm.				
417	459.5	Qtz Mnz	**Feldspar-biotite quartz monzonite** with moderate to strong salmon pink potassic alteration, and moderate green propylitic alteration. Dark-light greyish green with intervals and veins of salmon pink.	Moderate-strong pink potassic alteration, weak-moderate silicification. Strong potassic alteration bracketing and withing veins. Moderate green propylitic-clay alteration. Moderate-common chlorite alteration of groundmass, and sericite alteration of feldspar phenocrysts.	1% pyrite and trace chalcopyrite partially mineralizing 1-5mm veins.	Moderate pink silicified veins (possibly potassified dykes). Moderate 1- 10mm calcite-quartz veins with v. rare vuggs. Common 1-5mm specular hematite-chlorite lined fractures.	Quartz veins 10-15, 40-50° Potassic altered veins-dykes 10-20°. Fractures random orientation with dominant angles of 0-5, 20-25, 40-45°.
			40-50% sub-euhedral feldspar phenocrysts are 1-5mm, dominantly 2-3mm.Feldspar phenocrysts display variable (weak) chloritic- sericite alteration (phyllic-propylitic). 5-7% sub-euhedral 1-2 mm biotite phenocrysts.	417-435m. Silicified interval with common potassic altered veins-bracketing veins. 435- propylitic chlorite-clay alteration with variable potassic tan-pink alteration and silicification, and rare 15cm unaltered blotches. potassic alteration decreases down interval and clay alteration increases.	1% pyrite and trace chalcopyrite partially mineralizing 1-5mm veins.	417-435 Moderate-common specular hematite-chlorite lined stockwork fractures, minor-moderate brecciation of host rock. 435-459 common stockwork fracturing (lined with specular hematite, clay, and chlorite) and 2-10mm quartz-calcite veins. Clay lined fractures increase down interval.	Quartz veins 10-15, 40-50° Potassic altered veins-dykes 10-20°. Fractures random orientation with dominant angles of 0-5, 20-25, 40-45°.
459	461.56	PFD	**Porphyritic feldspar dyke:** 1.56m. 2-5mm feldspar phenos in fine gm.				40°

Universal Copper			Hole: 21-PC-133	Elevation: 881m	Easting: 631875	Azimuth:	
Poplar Project			Core Size: H-NQ	Total Depth: 500 metres	Northing: 5986925	Dip: 89.7	
FROM (m)	**TO (m)**	**GEOCODE**	**GEOLOGICAL DESCRIPTION**	**ALTERATION**	**MINERALIZATION**	**STRUCTURE**	**STRUCTURE ANGLE (DTCA)**
461.56	501		**Feldspar-biotite quartz monzonite** with moderate-strong green propylitic alteration, and weak pink potassic alteration. Minor decrease in phenocryst grainsize from previous interval. Unit intersected by following dyke.	Gradual decrease in potassic alteration over 10m. Weak-locally moderate potassic alteration moderate-strong propylitic clay-chlorite alteration. Rare 1m un-minor altered intervals. 462.75-463.75m, 466-467.25m: Clay rich intervals. 487-EOH moderate-strong silicification.	1% pyrite v.fine disseminated and partially mineralizing quartz veins. Trace chalcopyrite partially mineralizing 1-10mm veins.	rare-moderate 5-20mm quartz veins. Moderate-common clay-lined fractures.	Veins 20-40, 80-90 Fractures random orientation with preference to 10-15, 20-25, and subparallel.
500.5	500.53		**Porphyritic feldspar dyke:** 3cm, 2-5mm feldspar phenos in fine gm.				80°

21-PC-133			SAMPLE DATA						
SAMPLE	INTERVAL (m)		LENGTH	TYPE	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62
NUMBER	FROM	TO	(m)	STD/Dup/B/Met	ppm Cu	ppm Mo	ppm Ag	ppm Au	% Cu
B464001	21.25	24.25	3		5510	99.8	0.71	0.177	
B464002	24.25	27.25	3		3330	254	0.55	0.108	
B464003	27.25	30.25	3		3030	99.9	0.68	0.116	
B464004	30.25	33.25	3		1890	108.5	26.5	0.08	
B464005	33.25	36.25	3		3070	71.7	15.15	0.121	
B464006	36.25	37.25	1		2810	113.5	3.56	0.1	
B464007	37.25	40.25	3		3470	62.4	7.59	0.12	
B464008	40.25	43.25	3		3950	65.2	3.53	0.139	
B464009	43.25	46.25	3		2790	41.9	4.09	0.093	
B464010	46.25	49.25	3		4730	33.2	7.33	0.167	
B464011	49.25	52.25	3		3180	53.4	7.44	0.116	
B464012	52.25	55.25	3		3900	85.8	24	0.134	
B464013	55.25	58.25	3		6420	59.5	31	0.22	
B464014	58.25	61.25	3		4490	121	1.83	0.141	
B464015	61.25	64.25	3		4580	114	1.07	0.142	
B464016	64.25	67.25	3		5220	97.5	5.22	0.179	
B464017	67.25	70.25	3		5000	161.5	0.94	0.184	
B464018	67.25	70.25	3	DUPLICATE	4510	136.5	0.87	0.155	
B464019			0	STD CDN CM-37	2230	266	1.13	NSS	
B464020			0	BLANK CDN-BL-10	25.1	4.47	0.02	NSS	
B464022	70.25	73.25	3		2630	55.1	0.68	0.089	
B464023	73.25	76.25	3		3240	70	0.63	0.122	
B464024	76.25	79.25	3		2740	69.2	0.53	0.092	
B464025	79.25	82.25	3		3250	76.7	3.21	0.099	
B464026	82.25	85.25	3		4120	90.5	0.69	0.131	
B464027	85.25	88.25	3		4060	142.5	0.81	0.143	
B464028	88.25	91.25	3		3770	125.5	0.72	0.124	
B464029	91.25	94.25	3		4290	144.5	0.82	0.139	
B464030			0	STD CDN CM-33	3550	244	2.46	NSS	
B464031	94.25	97.25	3		4090	96.8	0.72	0.137	
B464032	97.25	100.25	3		2320	132	0.42	0.088	
B464033	100.25	103.25	3		3550	110.5	0.56	0.145	
B464034	103.25	106.25	3		2590	180.5	0.48	0.085	
B464035	106.25	109.25	3		2680	150	0.5	0.085	
B464036			0	BLANK CDN-BL-10	25.8	3.74	0.02	0.002	
B464037	109.25	112.25	3		2290	106.5	0.43	0.076	
B464038	109.25	112.25	3	DUPLICATE	2510	125	0.45	0.078	
B464039	112.25	115.25	3		3220	210	0.74	0.107	
B464041	115.25	118.25	3		3130	115	0.77	0.088	
B464042	118.25	121.25	3		3480	190	0.86	0.113	
B464043	121.25	124.25	3		3610	168	1.17	0.098	
B464044	124.25	127.25	3		3930	199	1.09	0.125	
B464045	127.25	130.25	3		4710	426	0.96	0.143	
B464046	130.25	133.25	3		4660	165.5	0.85	0.145	
B464047	133.25	136.25	3		4540	123.5	0.99	0.133	
B464048	136.25	139.25	3		4900	216	1.25	0.15	
B464049	139.25	142.25	3		5280	217	3.1	0.128	
B464050	142.25	145.25	3		5550	222	1.31	0.133	
B464051	145.25	148.25	3		5370	174	1.13	0.162	
B464052	148.25	151.25	3		4790	349	1.04	0.151	
B464053	151.25	154.25	3		4310	235	0.92	0.155	
B464054	154.25	157.25	3		4020	156	1.09	0.113	
B464055	157.25	160.25	3		5300	187	1.12	0.18	
B464056	160.25	163.25	3		3250	195	1.01	0.098	
B464057	163.25	166.25	3		4000	447	1.69	0.127	
B464058	166.25	169.25	3		4850	154.5	1.87	0.142	

21-PC-133			SAMPLE DATA						
SAMPLE	INTERVAL (m)		LENGTH	TYPE	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62
NUMBER	FROM	TO	(m)	STD/Dup/B/Met	ppm Cu	ppm Mo	ppm Ag	ppm Au	% Cu
B464059	169.25	172.25	3		4320	241	0.89	0.142	
B464060	172.25	175.25	3		3190	208	0.97	0.106	
B464061	175.25	178.25	3		3850	308	1.53	0.127	
B464062	178.25	181.25	3		3610	228	0.92	0.112	
B464063	181.25	184.25	3		4280	267	1.46	0.141	
B464064			0	STD CDN CM-37	2150	257	1.25	NSS	
B464065			0	BLANK CDN-BL-10	26	4.45	0.02	<0.001	
B464066	184.25	187.25	3		2770	294	3.72	0.063	
B464068	187.25	190.25	3		3170	354	2.44	0.084	
B464069	187.25	190.25	3	DUPLICATE	4270	364	2.06	0.132	
B464070	190.25	193.25	3		4340	262	2.21	0.138	
B464071	193.25	196.25	3		3170	268	12.15	0.081	
B464072	196.25	199.25	3		3510	284	4.3	0.095	
B464073	199.25	202.25	3		3120	224	1.71	0.091	
B464074	202.25	205.25	3		3200	250	0.92	0.093	
B464075	205.25	208.25	3		3410	179.5	1.39	0.083	
B464076	208.25	211.25	3		3570	154	1.41	0.095	
B464077	211.25	214.25	3		4340	146.5	1.7	0.136	
B464078	214.25	217.25	3		4230	290	4.44	0.137	
B464079	217.25	220.25	3		5630	608	4.51	0.192	
B464080	220.25	223.25	3		4480	216	2.63	0.149	
B464081			0	STD CDN CM-33	3780	160	3.01	0.112	
B464082			0	BLANK CDN-BL-10	3660	244	2.35	NSS	
B464083	223.25	226.25	3		29.1	4.67	0.02	0.001	
B464084	226.25	229.25	3		2680	104.5	3.31	0.061	
B464085	229.25	232.25	3		1420	25.6	5.37	0.036	
B464086	232.25	235.25	3		2420	45.7	2.18	0.05	
B464088	235.25	238.25	3		2750	65.8	3.3	0.088	
B464089	235.25	238.25	3	DUPLICATE	4550	291	3.05	0.11	
B464090	238.25	241.25	3		4620	348	4.62	0.075	
B464091	241.25	244.25	3		3960	60.5	2.83	0.056	
B464092	244.25	247.25	3		3550	137	1.8	0.135	
B464093	247.25	250.25	3		2680	102.5	1.56	0.168	
B464094	250.25	253.25	3		4910	106.5	2.79	0.199	
B464095	253.25	256.25	3		6770	262	1.84	0.149	
B464096	256.25	259.25	3		>10000	65.7	3.56	0.24	0.998
B464097	259.25	262.25	3		6490	52.4	2.36	0.161	
B464098	262.25	265.25	3		5170	97.2	2.52	0.214	
B464099	265.25	268.25	3		8270	63.6	3.61	0.176	
B464100	268.25	269.7	1.45		7170	70.7	2.92	0.119	
B464101			0	STD CDN CM-37	7700	136.5	2.56	0.088	
B464102			0	BLANK CDN-BL-10	2200	260	1.27	0.198	
B464103	269.7	270.75	1.05		26.6	4.27	0.02	0.003	
B464105	270.75	273.75	3		>10000	67.7	12	0.847	3.55
B464106	270.75	273.75	3	DUPLICATE	7110	431	2.24	0.178	
B464107	273.75	276.75	3		7460	660	2.62	0.17	
B464108	276.75	279.75	3		>10000	111.5	3.56	0.305	1.15
B464109	279.75	282.75	3		7900	300	2.9	0.205	
B464110	282.75	285.75	3		7670	373	6.14	0.181	
B464111	285.75	288.5	2.75		8350	101	4.19	0.242	
B464112	288.5	291.5	3		6120	152.5	6.67	0.101	
B464113	291.5	294.5	3		5490	161	2.82	0.15	
B464114	294.5	297.5	3		4040	120.5	1.81	0.105	
B464115	297.5	300.5	3		4460	144	2.54	0.121	
B464116	300.5	303.5	3		4280	314	1.82	0.11	
B464117			0	STD CDN CM-33	4190	101.5	2.35	0.138	

21-PC-133			SAMPLE DATA						
SAMPLE	INTERVAL (m)		LENGTH	TYPE	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62
NUMBER	FROM	TO	(m)	STD/Dup/B/Met	ppm Cu	ppm Mo	ppm Ag	ppm Au	% Cu
B464118			0	BLANK CDN-BL-10	3610	244	2.46	0.029	
B464119	303.5	306.5	3		26.2	3.74	0.02	<0.001	
B464121	306.5	309.5	3		3360	150	1.43	0.087	
B464122	306.5	309.5	3	DUPLICATE	5260	64.7	2.05	0.167	
B464123	309.5	312.5	3		5280	68.9	2.24	0.13	
B464124	312.5	315.5	3		6460	35.3	2.4	0.171	
B464125	315.5	318.5	3		3730	89.8	1.97	0.125	
B464126	318.5	321.5	3		3110	76.6	2.11	0.121	
B464127	321.5	324.5	3		3380	124.5	3.52	0.088	
B464128	324.5	327.5	3		2670	71.9	1.87	0.089	
B464129	327.5	330.5	3		3040	58.2	3.53	0.09	
B464130	330.5	333.5	3		3640	85	3.15	0.086	
B464131	333.5	336.5	3		3760	114	4.23	0.107	
B464132	336.5	339.5	3		3830	111.5	6.49	0.099	
B464133			0	STD CDN CM-33	5000	118	2.93	0.116	
B464134			0	BLANK CDN-BL-10	27.4	4.15	0.02	NSS	
B464135	339.5	342.5	3		4220	65.4	2.36	0.103	
B464137	342.5	345.5	3		3890	65.4	1.47	0.097	
B464138	342.5	345.5	3	DUPLICATE	4170	73.2	1.68	0.112	
B464139	345.5	348.5	3		4770	132.5	1.6	0.135	
B464140	348.5	351.5	3		4750	127.5	2.91	0.151	
B464141	351.5	354.5	3		5090	55.3	2.66	0.147	
B464142	354.5	357.5	3		3650	105.5	4.08	0.095	
B464143	357.5	360.5	3		2760	34.8	1.3	0.077	
B464144	360.5	363.5	3		4380	51.4	1.62	0.136	
B464145	363.5	366.5	3		3960	78.7	3.04	0.106	
B464146	366.5	369.5	3		4270	147	1.65	0.137	
B464147	369.5	372.5	3		3960	56.2	1.36	0.141	
B464148	372.5	375.5	3		3920	22.1	2.64	0.105	
B464149	375.5	378.5	3		3550	265	2.57	0.119	
B464150	378.5	381.5	3		3520	30.9	2.11	0.14	
B464151	381.5	384.5	3		3780	153	4.65	0.093	
B464152	384.5	387.5	3		2420	33	1.95	0.115	
B464153	387.5	390.5	3		2270	44.1	1.82	0.139	
B464154	390.5	393.5	3		1935	22.7	1.6	0.046	
B464155			0	STD CDN CM-37	2090	249	1.14	NSS	
B464156			0	BLANK CDN-BL-10	28.6	4.62	0.02	<0.001	
B464157	393.5	396.5	3		3260	64	2.48	0.1	
B464159	396.5	399.5	3		5150	22.5	2.22	0.166	
B464160	396.5	399.5	3	DUPLICATE	4800	34.2	2.08	0.155	
B464161	399.5	402.5	3		4300	163	3.39	0.128	
B464162	402.5	405.5	3		3760	31.3	1.97	0.121	
B464163	405.5	408.5	3		3160	21.6	1.92	0.611	
B464164	408.5	411.5	3		3830	103.5	7.86	0.199	
B464165	411.5	414.5	3		3090	27.2	1.53	0.165	
B464166	414.5	417.5	3		4110	22.6	1.38	0.18	
B464167	417.5	420.5	3		3240	30	1.55	0.127	
B464168	420.5	423.5	3		3660	63.3	0.94	0.146	
B464169	423.5	426.5	3		1530	13.15	0.84	0.072	
B464170	426.5	429.5	3		2060	26.8	0.81	0.09	
B464171	429.5	432.5	3		1885	10.5	0.39	0.074	
B464172	432.5	435.5	3		1995	41.8	0.73	0.071	
B464173	435.5	438.5	3		4720	56.2	1.15	0.174	
B464174	438.5	441.5	3		2260	14.7	1.22	0.045	
B464175			0	STD CDN CM-33	3440	238	2.12	NSS	
B464176			0	BLANK CDN-BL-10	26.2	3.87	0.02	0.002	

21-PC-133			SAMPLE DATA						
SAMPLE	INTERVAL (m)		LENGTH	TYPE	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62
NUMBER	FROM	TO	(m)	STD/Dup/B/Met	ppm Cu	ppm Mo	ppm Ag	ppm Au	% Cu
B464177	441.5	444.5	3		1560	11.8	1.24	0.081	
B464178	441.5	444.5	3	DUPLICATE	1585	12.6	1.27	0.052	
B464179	444.5	447.5	3		2070	13.95	0.68	0.088	
B464180	447.5	450.5	3		2100	24.6	3.1	0.139	
B464181	450.5	453.5	3		3050	27.9	3.37	0.131	
B464182	453.5	456.5	3		1955	56.4	1.17	0.072	
B464183	456.5	459.5	3		3360	15.9	1.46	0.11	
B464184	459.5	462.5	3		3990	17.95	1.43	0.131	
B464185	462.5	465.5	3		2380	19.35	1.97	0.073	
B464186	465.5	468.5	3		4390	70.4	3.3	0.193	
B464187	468.5	471.5	3		4050	21.8	3.98	0.197	
B464188	471.5	474.5	3		4240	51.1	2.37	0.174	
B464189	474.5	477.5	3		4410	42.4	2.97	0.157	
B464190	477.5	480.5	3		3850	63.2	1.57	0.109	
B464191	480.5	483.5	3		5670	49.6	2.09	0.211	
B464192	483.5	486.5	3		4460	10.85	2.29	0.164	
B464193	486.5	489.5	3		5300	27.5	4.21	0.126	
B464194	489.5	492.5	3		3480	21.3	2.52	0.178	
B464195	492.5	495.5	3		3970	33	5.04	0.139	
B464196	495.5	498.5	3		3060	39.8	3.66	0.076	
B464197	495.5	498.5	3	DUPLICATE	3060	50.3	3.06	0.076	
B464198	498.5	501	3		2850	55.8	2.88	0.087	
B464199				STD CDN CM-37	2080	244	1.19	NSS	
B464200				BLANK CDN-BL-10	28.3	4.05	0.02	NSS	

Hole ID: 21-PC-134	Easting (NAD 83): 0632147	Core Size: H (First 80 metres) Reduced to NQ (80-EOH)	DDH Started: 10/15/2021
	Northing (NAD83): 5986896	Hole Azimuth: 339.6	DDH Finished: 10/19/2021
Property: Poplar Deposit	Elevation: 897 m	Hole Dip: -89.6	Logged Completed: 11/01/2021
	Source: GSP	Total Depth: 501	Drilled By: Apex Drilling

Logged By: Jonathan Broadbent
Cut by: Iain Sinclair

Dip & Azimuth tests		
Depth	Azimuth	Dip
51.00	339.6	-89.6
100.00	269.1	-89.6
150.00	297.40	-89.5
201.00	286.4	-89.4
252.00	284	-89.3
300.00	231.9	-89.7
350.00	238.9	-89.7
400.00	346.8	-89.9
450.00	224.8	-89.8
501.00	253.8	-89.8

Summary: 21-PC-134 was drilled to test the southwest area of the East Zone. Several shorter copper rich intervals were intersected: 63 metres of 0.468% copper from 27 to 90 metres, 45 metres of 0.390% copper from 225 to 270 metres, 36 metres of 0.387 % copper from 315 to 351 metres and most importantly 81 metres of 0.344% copper over the last 81 metres of the hole. The hole was cut by several swarms of feldspar quartz / feldspar dykes: 103 to 163 metres, 238 to 269 metres, 359 to 421 metres and 461 to 486 metres. The remainder was quartz monzonite carrying 40-50% sub-euhedral 1-5mm feldspar phenocrysts. Alteration consists of varying degrees of weak to strong potassic alteration, weak to moderate sericitic alteration of feldspars, weak to moderate silicification and local chlorite. Mineralization consists of 1% to 5% disseminated, fracture filling and local thin veinlets of pyrite and trace to ½% disseminated chalcopyrite.

Universal Copper			Hole: 21-PC-134	Elevation: 897m	Easting:0632147	Azimuth: 339.6	
Poplar Project			Core Size: H-NQ	Total Depth: 501 metres	Northing: 5986896	Dip: -89.6	
FROM (m)	**TO (m)**	**GEOCODE**	**GEOLOGICAL DESCRIPTION**	**ALTERATION**	**MINERALIZATION**	**STRUCTURE**	**STRUCTURE ANGLE (DTCA)**
0	14.65	OVB	12 cm Feldspar-biotite porphyritic boulder in brown mud with assorted gravel.				
14.65	39.3	Qtz-Mnz	**Feldspar quartz monzonite with weak-moderate potassic alteration.** 40-50% sub-euhedral feldspar phenocrysts are 1-5mm. Feldspar phenocrysts display moderate-strong sericite alteration. Light grey-light pink.	Weak-moderate potassic alteration, with weak silicification of groundmass (GM). Moderate-weak sericite alteration of feldspar phenocrysts.	1-3% pyrite mineralization occurring in 1-10mm pyritized stringers-veins. 1% pyrite finely disseminated in GM.	Common broken interval. Common pyrite-black clay lined fractures.	Fracture sets: 25-30, 30-40, 45-50° Veins: subparallel, 10-15, 25-30°.
39.3	41.85	Qtz-Mnz	**Feldspar quartz monzonite with common pyrite-phyllic alteration.** Common interstitial pyrite alteration of GM. Light-dark greyish green with common pyritization.	Common Interstitial pyrite-phyllic alteration of GM.	3-5% pyrite mineralizing interstitial GM. 1-3% chalcopyrite.	Moderate-common black clay lined fractures.	Fracture sets: 15-20, 30-35, 40-45°.
41.85	55.78	Qtz-Mnz	**Feldspar-quartz monzonite with weak-moderate potassic alteration**. Light grey in color. Common silicification bracketing fractures.	Weak-moderate potassic alteration, with common silicification bracketing fractures.	3-5% pyrite equally distributed disseminated in GM along fractures and veins.	Common pyrite-black clay lined fractures. Moderate 2-5mm quartz veins	Fracture sets: 5-10, 25-30, 30-40, 45-50° Veins: subparallel, 10-15, 25-30°.
55.78	66.23	Qtz-Mnz	**Feldspar-quartz monzonite with moderate potassic alteration.** Light grey-salmon pink in color.	Moderate potassic alteration, with common silicification bracketing fractures.	3% pyrite equally distributed disseminated in GM along fractures and veins.	Common pyrite-black clay lined fractures. Moderate-common 2-5mm quartz veins. Rare 2cm quartz veins.	Fracture sets: 5-10, 25-30, 30-40, 45-50° Veins: subparallel, 10-15, 25-30°.
66.23	66.33	FVXD	**Fine volcanic xenolith dyke.** Fine black volcanic dyke with common 1-4cm host rock xenoliths.				Dyke contact: 20°
66.33	67.03	Qtz-Mnz	**Feldspar-quartz monzonite with moderate-strong potassic alteration.** Light grey-salmon pink in color. 40-50% sub-euhedral feldspar phenocrysts are 1-5mm.	Moderate-strong potassic alteration. Weak-moderate silicification bracketing fractures.	3% pyrite equally distributed disseminated in GM along fractures and veins.	Common pyrite-black clay lined fractures. Moderate-common 2-5mm quartz veins. Rare 2cm quartz veins.	Fracture sets: 5-10, 25-30, 30-40, 45-50° Veins: subparallel, 10-15, 25-30°.

Universal Copper			Hole: 21-PC-134	Elevation: 897m	Easting:0632147	Azimuth: 339.6	
Poplar Project			Core Size: H-NQ	Total Depth: 501 metres	Northing: 5986896	Dip: -89.6	
FROM (m)	**TO (m)**	**GEOCODE**	**GEOLOGICAL DESCRIPTION**	**ALTERATION**	**MINERALIZATION**	**STRUCTURE**	**STRUCTURE ANGLE (DTCA)**
67.03	67.32	FVXD	**67.03-67.32m: Fine volcanic xenolith dyke.** Fine black volcanic dyke with common 1-4cm host rock xenoliths. Two subparallel 4cm dykes transect core axes. Hosted in above and below intervals				Dyke contact: 15-20°
67.32	103.45	Qtz-Mnz	**Feldspar-quartz monzonite with moderate-strong potassic alteration.** Light grey-salmon pink in color, with 2-20mm pyrite veins. 40-50% sub-euhedral feldspar phenocrysts are 1-5mm.	Moderate-strong potassic alteration. Potassic alteration has moderately homogenized phenocrysts and GM. Weak-moderate silicification bracketing fractures. Locally moderate chlorite alteration of GM.	3% pyrite dominantly distributed along fractures and veins.	Common pyrite-black clay lined fractures. Common 2-5mm quartz veins. Moderate 2-10mm pyrite veins.	Fracture sets: 5-10, 25-30, 30-40, 45-50° Veins: subparallel, 10-15, 25-30°. Pyrite veins: 10-15,25-30°
103.45	140.35	FQD	**Feldspar-quartz porphyritic dyke in clay-propylitic altered GM.** Phenocrysts are 1-5mm. 25-30% subhedral feldspar phenocrysts dominantly altered. 10-15% anhedral blebby quartz phenocrysts. GM is pale tan-greenish tan and locally pink potassic stained. Sharp upper and lower contact marked by distinct change in texture.	Moderate propylitic -potassic alteration, GM alternating light pink-green. GM completely homogenized. Quartz phenocrysts unaltered. Feldspar phenocrysts dominantly altered light green, sericite-epidote altered. 106.32-106.6m:strong chlorite alteration of GM. 124.9-125.10m: clay rich interval.	Trace pyrite and specular hematite.	Rare-moderate clay lined fractures. Rare pink fluorite veins. Rare quartz veins.	Fractures:25-35° Veins: 10-15° Contact: 35-40°
140.35	147.75	Qtz-Mnz	**Feldspar-quartz monzonite with moderate-strong potassic alteration.** Light grey-salmon pink in color. 40-50% sub-euhedral feldspar phenocrysts are 2-5mm. Interval contains 1cm xenolith fine volcanic dyke at 145.4m.	Moderate-strong potassic alteration. Moderate silicification bracketing fractures. Locally moderate chlorite alteration of GM.	1% pyrite mineralizing rare veins and finely disseminated.	Moderate 1-2mm clay-fluorite veins (Mohs 2.5). Moderate black clay lined fractures. Rare 4mm pyrite veins.	Fracture sets: 5-10, 25-30, 30-40° Veins: 45-50, 60-70° Pyrite veins: 65° Dyke 20°
147.75	149.45	FCD	**Feldspar-porphyritic dyke in clay-propylitic altered GM.** Rare Phenocrysts are 1-4mm. GM is green stained. Sharp upper and lower contact marked by distinct change in texture.	Moderate-strong propylitic alteration. GM completely homogenized. Feldspar phenocrysts dominantly altered light green	Trace pyrite	Rare clay rich fractures	Contact: 30°
149.45	149.95	Qtz-Mnz	**Feldspar-quartz monzonite with moderate-strong potassic alteration.** Light grey-salmon pink in color. 40-50% sub-euhedral feldspar phenocrysts are 2-5mm. Interval contains 1cm xenolith fine volcanic dyke at 145.4m.	Moderate-strong potassic alteration. Moderate silicification bracketing fractures. Locally moderate chlorite alteration of GM.	1% pyrite mineralizing rare veins and finely disseminated.	Moderate black clay lined fractures.	Fracture sets: 5-10, 25-30, 30-40°

Universal Copper			Hole: 21-PC-134	Elevation: 897m	Easting:0632147	Azimuth: 339.6	
Poplar Project			Core Size: H-NQ	Total Depth: 501 metres	Northing: 5986896	Dip: -89.6	
FROM (m)	TO (m)	GEOCODE	GEOLOGICAL DESCRIPTION	ALTERATION	MINERALIZATION	STRUCTURE	STRUCTURE ANGLE (DTCA)
149.95	152.15	FQD	**Fine clay rich dyke with propylitic-clay altered GM.** GM is pale tan-greenish tan and locally pink potassic stained. Sharp upper and lower contact marked by distinct change in texture. Moderate clay rich intervals with lower clay integrity.	Moderate propylitic -potassic alteration, GM alternating light pink-green. GM completely homogenized.	Trace specular hematite.	Moderate 1-2mm clay-fluorite veins (Mohs 2.5).	Veins: 10-15° Contact: 35-40°
152.15	159.3	Qtz-Mnz	**Feldspar-quartz monzonite with weak propylitic alteration**. Light grey in color. Moderate silicification bracketing fractures. Rare chlorite alteration of GM.	Weak propylitic alteration, with moderate silicification bracketing fractures.	1-3% pyrite equally distributed disseminated in GM along fractures and veins.	Common pyrite-black clay lined fractures. Rare 2-5mm quartz veins	Fracture sets: 25-30, 30-40° Veins: subparallel, 25-30°.
159.3	162.82	FQD	**Fine clay rich dyke with propylitic-clay altered GM.** GM is pale tan-greenish tan and locally pink potassic stained. Sharp upper and lower contact marked by distinct change in texture.	Moderate propylitic -potassic alteration, GM alternating light pink-green. GM completely homogenized.	Trace specular hematite.	Moderate 1-2mm clay-fluorite veins (Mohs 2.5).	Veins: 10-15° Contact: 45°
162.82	209	Qtz-Mnz	**Feldspar-quartz monzonite with moderate- potassic-propylitic alteration.** Grey- pinkish grey in color. 40-50% sub-euhedral feldspar phenocrysts are 2-5mm.	Moderate potassic-propylitic alteration. Moderate silicification bracketing fractures. Feldspar phenocrysts are dominantly altered.	1-3% pyrite mineralizing rare veins and finely disseminated. Equal veins to disseminated.	Moderate black clay lined fractures. Moderate 1-2mm clay-fluorite veins (Mohs 2.5). Rare 1-2cm veins. Rare-moderate 1-10mm pyrite veins.	Fractures: 10-15, 25-35, 40-45° Veins: 10-15, 35-45, 55-60°
209	210.15	FVXD	**Fine volcanic xenolith dyke.** Fine black volcanic dyke with common 1-4cm angular host rock xenoliths. Sharp upper and lower contact.	Xenoliths are potassic - propylitic altered.			Dyke contact: 15°
210.15	233.78	Qtz-Mnz	**Feldspar-quartz monzonite with moderate- potassic-propylitic alteration.** Grey- pinkish grey in color. Feldspar phenocrysts dominantly potassic-sericite altered. Gm potassic-clay altered. Moderate silicification. 40-50% sub-euhedral feldspar phenocrysts are 2-5mm. Common veins and fractures (stockwork).	Weak-moderate potassic-propylitic alteration, with moderate silicification	3-5% pyrite occurring in 3-10mm pyrite veins along fractures and finely disseminated (veins: disseminated 70:30).	Moderate-common black clay lined fractures. Moderate-common 1-2mm clay-fluorite veins (Mohs 2.5). Common 3-10mm pyrite veins.	Fractures: 10-15, 25-35° Veins: 20-25, 50-55,60-65 Pyrite vein: 0-10, 20-25, 50-55°
			221.5-222.8m: Highly clay altered monzonite with common black flack lined fractures.	Highly clay altered with lower core integrity and silicification.	No mineralization observed.	Common black clay lined fractures	Black clay 35

Universal Copper			Hole: 21-PC-134	Elevation: 897m	Easting:0632147	Azimuth: 339.6	
Poplar Project			Core Size: H-NQ	Total Depth: 501 metres	Northing: 5986896	Dip: -89.6	
FROM (m)	TO (m)	GEOCODE	GEOLOGICAL DESCRIPTION	ALTERATION	MINERALIZATION	STRUCTURE	STRUCTURE ANGLE (DTCA)
			227.50-227.54m: 4cm Fine volcanic xenolith dyke. Fine black volcanic dyke with common 1-4cm angular host rock xenoliths. Sharp upper and lower contact. 1cm pyrite veins bracket dyke.		1cm Pyrite veins bracket dyke.		Dyke contact: 15°
233.78	234.2	FVXD	**Fine volcanic xenolith dyke with clay altered GM.** Fine black volcanic dyke with common 1-4cm angular host rock xenoliths. Sharp upper and lower contact.	Xenoliths are potassic - propylitic altered.	3-5% pyrite disseminated in 1-3mm clusters.		Dyke contact: 25-30°
234.2	237.3	Qtz-Mnz	**Feldspar-quartz monzonite with moderate- potassic alteration.** Grey- pinkish grey in color. Feldspar phenocrysts dominantly potassic-sericite altered. Gm potassic-clay altered. Moderate silicification. Common veins and fractures (stockwork).	Weak-moderate potassic alteration, with moderate silicification	5% pyrite occurring finely disseminated, interstitially around grains, veins, along fractures (veins: disseminated 30:70).	Moderate-common black clay lined fractures. Rare 1-2mm clay-fluorite veins (Mohs 2.5). Common 2-10mm quartz veins randomly oriented (Stockwork).	Fractures: 10-15, 25-35° Veins: 20-25, 40-45, 50-55, 60-65
237.3	238	FCD	**Feldspar-porphyritic dyke propylitic altered GM.** Phenocrysts are 1-5mm. 25-30% subhedral feldspar phenocrysts dominantly sericite altered. GM is chlorite green stained. Sharp upper and lower contact marked by distinct change in texture.	Moderate-strong propylitic alteration. GM completely homogenized. Feldspar phenocrysts dominantly altered via sericite. GM dominantly chlorite altered. Moderate silicification.	No mineralization observed.	Moderate clay lined fractures	Dyke contact: 25°
238	240.05	FPXD	**Feldspar porphyritic dyke with common subrounded xenoliths.** Xenoliths are 1-6cm and consists of porphyritic host material- and propylitic dyke.	Common sericite-clay alteration of feldspar. Common silicification. Xenoliths are dominantly potassic altered. Rare purple interstitial fluorite, around xenoliths.	1-3% pyrite occurring along fractures veins and finely disseminated. .5% chalcopyrite in 1-5mm clusters.	Moderate black clay lined fractures.	Fractures 35-45
240.05	243.2	Qtz-Mnz	**Feldspar-quartz monzonite with moderate- potassic alteration.** Grey- pinkish grey in color. Feldspar phenocrysts dominantly potassic-sericite altered. Gm potassic-clay altered. Moderate silicification. Common veins and fractures (stockwork).	Weak-moderate potassic alteration, with moderate silicification	3-5% pyrite mineralizing fractures and veins, and interstitial disseminated pyrite. Veins: disseminated equally proportions.	Moderate-common pyrite-black clay lined fractures. Rare-moderate pyrite mineralized quartz veins 1cm.	Fractures: 10-15, 25-30, 40-45 Veins 20-25

Universal Copper			Hole: 21-PC-134	Elevation: 897m	Easting:0632147	Azimuth: 339.6	
Poplar Project			Core Size: H-NQ	Total Depth: 501 metres	Northing: 5986896	Dip: -89.6	
FROM (m)	TO (m)	GEOCODE	GEOLOGICAL DESCRIPTION	ALTERATION	MINERALIZATION	STRUCTURE	STRUCTURE ANGLE (DTCA)
243.2	245.18	FPXD	**Feldspar porphyritic dyke with common subrounded xenoliths.** Xenoliths are and consists of porphyritic host material-following dyke.	Common sericite-clay alteration of feldspar. Common silicification. Xenoliths are dominantly potassic altered.	1-3% pyrite occurring along fractures veins and finely disseminated. .5% chalcopyrite in 1-5mm clusters.	Moderate black clay lined fractures.	Fractures 35-45
245.18	248.33	FCD	**Feldspar-porphyritic dyke propylitic altered GM.** Phenocrysts are 1-5mm. 25-30% subhedral feldspar phenocrysts dominantly sericite altered. GM is chlorite green stained. Sharp upper and lower contact marked by distinct change in texture.	Moderate-strong propylitic alteration. GM completely homogenized. Feldspar phenocrysts dominantly altered via sericite. GM dominantly chlorite altered. Moderate-strong silicification.	No mineralization observed.	Moderate clay lined fractures	Dyke contact: 75-80°
248.33	249.35	Qtz-Mnz	**Feldspar-quartz monzonite with moderate- potassic alteration.** Grey- pinkish grey in color. Feldspar phenocrysts dominantly potassic-sericite altered. Gm potassic-clay altered. Moderate silicification. Common veins and fractures (stockwork).	Weak-moderate potassic alteration, with moderate silicification	3-5% pyrite occurring in 3-10mm pyrite veins along fractures and finely disseminated (veins: disseminated 60:40).	Common quartz veins 5-10mm. Moderate black clay-pyrite lined fractures.	Veins: 35-40 Fractures: 0-10, 25-30, 40-45
249.35	250.5	FCD	**Feldspar-porphyritic dyke propylitic altered GM.** Phenocrysts are 1-5mm. 25-30% subhedral feldspar phenocrysts dominantly sericite altered. GM is chlorite green stained. Sharp upper and lower contact marked by distinct change in texture.	Moderate-strong propylitic alteration. GM completely homogenized. Feldspar phenocrysts dominantly altered via sericite. GM dominantly chlorite altered. Moderate silicification.	No mineralization observed.		Dyke contact: 50°
250.5	266	Qtz-Mnz	**Feldspar-quartz monzonite with moderate- potassic alteration.** Grey- pinkish grey in color. Feldspar phenocrysts dominantly potassic-sericite altered. Gm potassic-clay altered. Moderate silicification. Common veins and fractures (stockwork). Sharp upper and lower contact.	Weak-moderate potassic alteration, with moderate silicification. Common clay-sericite alteration of feldspar.	3% pyrite occurring in 3-10mm pyrite veins along fractures and finely disseminated (veins: disseminated 60:40).	Common quartz veins 5-10mm. Moderate black clay-pyrite lined fractures.	Veins: 10-15, 35-40 , 60-65 Fractures: 0-10, 25-30, 40-45 Pyrite veins: 10-15, 60-65

21-PC-134			SAMPLE DATA						
SAMPLE	INTERVAL (m)		LENGTH	TYPE	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62
NUMBER	FROM	TO	(m)	STD/Dup/B/Met	ppm Cu	ppm Mo	ppm Ag	ppm Au	% Cu
B464588	14.65	18	3.35		350	8.03	0.14	0.012	
B464589	18	21	3		221	3.36	0.09	0.007	
B464590	21	24	3		382	7.55	0.09	0.016	
B464591	24	27	3		711	51.1	0.15	0.018	
B464592	27	30	3		1220	34.8	0.19	0.029	
B464593	30	33	3		1920	44.1	0.18	0.05	
B464594				BLANK BL-10	26.1	3.78	0.03	<0.001	
B464595	33	36	3		6350	31.5	0.56	0.162	
B464596	36	39	3		8100	11.8	0.9	0.23	
B464597				STANDARD CDN-CM-33	3580	246	2.45	0.019	
B464598	39	42	3		>10000	17.75	3.6	0.566	2.29
B464599	42	45	3		6170	17.95	0.46	0.164	
B464600	45	48	3		3910	11.55	1.2	0.094	
B464601	48	51	3		2780	16.85	1.27	0.065	
B464602	51	54	3		2650	13.2	0.44	0.079	
B464603	51	54	3	DUPLICATE	2420	15.15	0.44	0.081	
B464604	54	57	3		5130	22.8	1.05	0.128	
B464605	57	60	3		1555	15.55	2.27	0.038	
B464606	60	63	3		1010	7.24	0.46	0.028	
B464607	63	66	3		1230	9.96	0.68	0.036	
B464608	66	69	3		2760	31.4	11.9	0.076	
B464609	69	72	3		2470	9.84	1.47	0.055	
B464610	72	75	3		4730	73.7	12.55	0.123	
B464611	75	78	3		4390	36.5	7.91	0.132	
B464612	78	81	3		3600	30.6	3.41	0.099	
B464613	81	84	3		5020	22.4	0.96	0.16	
B464614				BLANK BL-10	35.1	3.93	0.03	<0.001	
B464615				STANDARD CDN-CM-37	2130	254	1.22	0.181	
B464616	84	87	3		6420	5.05	1.21	0.213	
B464617	87	90	3		4020	19.35	3.26	0.137	
B464618	90	93	3		477	14.6	0.44	0.016	
B464619	93	96	3		337	17.2	0.3	0.008	
B464620	96	99	3		313	38.1	0.96	0.009	
B464621	99	102	3		273	11	2.23	0.016	
B464622	102	105	3		1560	26.2	2.28	0.03	
B464623	102	105	3	DUPLICATE	2150	25	2.52	0.037	
B464624	105	108	3		116.5	2.7	2.4	0.001	
B464625	108	111	3		5.1	1.62	0.24	<0.001	
B464626	111	114	3		6.7	3.56	1.52	0.002	
B464627	114	117	3		3.1	1.33	0.93	<0.001	
B464628	117	120	3		2.3	1.94	0.83	0.005	
B464629	120	123	3		2.1	1.3	0.48	<0.001	
B464630	123	126	3		6.8	1.54	0.87	<0.001	
B464631	126	129	3		8.6	2.27	1.14	<0.001	
B464632	129	132	3		2.3	1.59	0.6	<0.001	
B464633	132	135	3		2	1	0.65	<0.001	
B464634				STANDARD CDN-CM-33	3540	244	2.45	0.032	
B464635				BLANK BL-10	25.4	4.1	0.03	0.004	
B464636	135	138	3		2.1	1.15	0.96	<0.001	
B464637	138	141	3		19	2.89	0.56	0.001	
B464638	141	144	3		100	5.37	1.1	0.003	
B464639	144	147	3		301	9.78	0.22	0.007	
B464640	147	150	3		447	18.55	1.53	0.01	
B464641	150	153	3		127.5	17.05	1.2	0.001	
B464642	153	156	3		198	14.7	1.83	0.003	
B464643	153	156	3	DUPLICATE	201	14.8	1.86	0.002	

21-PC-134			SAMPLE DATA						
SAMPLE	INTERVAL (m)		LENGTH	TYPE	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62
NUMBER	FROM	TO	(m)	STD/Dup/B/Met	ppm Cu	ppm Mo	ppm Ag	ppm Au	% Cu
B464644	156	159	3		180	39.2	3.26	0.007	
B464645	159	162	3		101.5	11.9	1.03	0.004	
B464646	162	165	3		139	4.29	0.57	0.004	
B464647	165	168	3		674	7.07	1.05	0.015	
B464648	168	171	3		246	11.55	0.55	0.007	
B464649	171	174	3		195.5	12.35	1.26	0.008	
B464650	174	177	3		294	4.31	0.38	0.004	
B464651	177	180	3		261	3.76	0.15	0.004	
B464652	180	183	3		375	2.8	0.78	0.009	
B464653	183	186	3		215	11.6	0.21	0.005	
B464654				STANDARD CDN-CM-37	2200	269	1.24	0.163	
B464655				BLANK BL-10	26.3	4.24	0.04	<0.001	
B464656	186	189	3		467	7.44	0.34	0.021	
B464657	189	192	3		431	10.5	0.33	0.015	
B464658	192	195	3		404	9.62	0.81	0.01	
B464659	195	198	3		314	6.31	1.47	0.005	
B464660	198	201	3		399	4.79	1.17	0.014	
B464661	201	204	3		350	4.93	0.22	0.006	
B464662	204	207	3		318	2.53	1.32	0.01	
B464663	204	207	3	DUPLICATE	283	2.53	1.49	0.015	
B464664	207	210	3		666	6.35	2.52	0.02	
B464665	210	213	3		227	9.18	0.87	0.008	
B464666	213	216	3		322	2.89	0.6	0.006	
B464667	216	219	3		209	4.19	2.02	0.01	
B464668	219	222	3		271	4.75	0.48	0.006	
B464669	222	225	3		1510	3.91	2.05	0.04	
B464670	225	228	3		2150	15.05	3.75	0.056	
B464671	228	231	3		2360	19	2.24	0.06	
B464672	231	234	3		5130	32.5	2.86	0.122	
B464673	234	237	3		3410	17.6	7.31	0.085	
B464674				BLANK BL-10	27.2	4.37	0.03	<0.001	
B464675	237	240	3		2700	100.5	20.8	0.071	
B464676				STANDARD CDN-CM-33	3670	254	2.38	0.02	
B464677	240	243	3		2080	15.05	1.36	0.053	
B464678	243	246	3		1750	31.4	1.82	0.051	
B464679	246	249	3		1790	11.45	1.94	0.037	
B464680	249	252	3		2740	165.5	2.9	0.054	
B464681	252	255	3		5340	27.4	5.25	0.141	
B464682	255	258	3		8430	4.37	1.45	0.181	
B464683	255	258	3	DUPLICATE	9490	4.51	1.58	0.235	
B464684	258	261	3		6690	6.84	2.88	0.201	
B464685	261	264	3		5390	4.4	1.01	0.148	
B464686	264	267	3		6810	5.33	1.26	0.221	
B464687	267	270	3		1255	6.67	0.32	0.039	
B464688	270	273	3		432	5.77	0.37	0.012	
B464689	273	276	3		552	5.99	0.75	0.014	
B464690	276	279	3		734	8.72	1.43	0.029	
B464691	279	282	3		669	17.3	0.39	0.022	
B464692	282	285	3		580	10.2	0.77	0.022	
B464693	285	288	3		389	15.85	4.18	0.01	
B464694				STANDARD CDN-CM-37	2240	263	1.27	0.187	
B464695				BLANK BL-10	27.8	4.42	0.02	<0.001	
B464696	288	291	3		399	17.6	0.43	0.018	
B464697	291	294	3		613	12.2	0.31	0.012	
B464698	294	297	3		509	14.35	0.56	0.019	
B464699	297	300	3		670	21.8	0.66	0.02	

21-PC-134			SAMPLE DATA						
SAMPLE	INTERVAL (m)		LENGTH	TYPE	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62
NUMBER	FROM	TO	(m)	STD/Dup/B/Met	ppm Cu	ppm Mo	ppm Ag	ppm Au	% Cu
B464700	300	303	3		538	19.55	0.34	0.014	
B464701	303	306	3		513	14.3	0.31	0.015	
B464702	306	309	3		581	7.35	0.48	0.018	
B464703	306	309	3	DUPLICATE	537	11.55	0.58	0.017	
B464704	309	312	3		786	15.1	0.36	0.019	
B464705	312	315	3		3540	8.13	3.56	0.117	
B464706	315	318	3		4490	8.65	1.42	0.135	
B464707	318	321	3		9250	5.43	1.86	0.267	
B464708	321	324	3		4930	3.19	2.77	0.18	
B464709	324	327	3		3870	5.6	2.35	0.135	
B464710	327	330	3		3430	6.15	0.98	0.112	
B464711	330	333	3		1765	3.25	1	0.062	
B464712	333	336	3		2290	6.01	1.26	0.079	
B464713	336	339	3		1860	6.7	1.12	0.062	
B464714				STANDARD CDN-CM-33	3650	252	2.11	0.019	
B464715				BLANK BL-10	26.4	4.41	0.03	<0.001	
B464716	339	342	3		2060	60.6	1.18	0.066	
B464717	342	345	3		1135	4.62	0.71	0.034	
B464718	345	348	3		1865	3.34	1.76	0.049	
B464719	348	351	3		1755	5.37	1.84	0.049	
B464720	351	354	3		1045	33.4	1.4	0.031	
B464721	354	357	3		936	3.25	0.76	0.028	
B464722	357	360	3		805	6.59	0.95	0.024	
B464723	357	360	3	DUPLICATE	769	5.77	1.02	0.022	
B464724	360	363	3		22.5	0.95	0.15	<0.001	
B464725	363	366	3		22.3	1	0.36	<0.001	
B464726	366	369	3		12.8	1.43	0.37	<0.001	
B464727	369	372	3		821	6.42	1.84	0.016	
B464728	372	375	3		1470	2.85	1.36	0.034	
B464729	375	378	3		7	0.6	0.01	0.003	
B464730	378	381	3		571	1.61	0.94	0.014	
B464731	381	384	3		5220	7.12	2.47	0.153	
B464732	384	387	3		6520	19.35	3.94	0.138	
B464733	387	390	3		29.2	0.52	0.12	0.001	
B464734				STANDARD CDN-CM-37	2240	262	1.14	0.164	
B464735				BLANK BL-10	23.9	3.98	0.02	<0.001	
B464736	390	393	3		26.4	0.79	0.4	0.001	
B464737	393	396	3		19.2	0.92	0.21	0.002	
B464738	396	399	3		15	0.87	0.13	0.001	
B464739	399	402	3		95.4	3.9	0.44	0.002	
B464740	402	405	3		196	4.32	0.61	0.006	
B464741	405	408	3		24.6	0.72	0.28	0.001	
B464742	408	411	3		31	1.36	0.43	0.002	
B464743	408	411	3	DUPLICATE	23.9	1.18	0.26	0.001	
B464744	411	414	3		18	1.24	0.25	0.002	
B464745	414	417	3		33.3	17.85	0.87	0.003	
B464746	417	420	3		16.7	1.52	0.21	0.001	
B464747	420	423	3		3720	14.35	4.25	0.082	
B464748	423	426	3		4450	9.12	3.75	0.088	
B464749	426	429	3		4720	17.25	6.61	0.116	
B464750	429	432	3		4410	7.13	2.06	0.091	
B464751	432	435	3		3660	6.36	1.39	0.071	
B464752	435	438	3		2910	9.36	1.9	0.064	
B464753	438	441	3		4610	8.52	1.19	0.106	
B464754				STANDARD CDN-CM-33	3550	240	2.32	0.019	
B464755				BLANK BL-10	27.4	4.1	0.01	<0.001	

21-PC-134			SAMPLE DATA						
SAMPLE	INTERVAL (m)		LENGTH	TYPE	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62
NUMBER	FROM	TO	(m)	STD/Dup/B/Met	ppm Cu	ppm Mo	ppm Ag	ppm Au	% Cu
B464756	441	444	3		4150	28.8	2	0.099	
B464757	444	447	3		4100	7.67	1.54	0.095	
B464758	447	450	3		3380	7.6	2.98	0.119	
B464759	450	453	3		4500	47.8	1.93	0.111	
B464760	453	456	3		5670	14.55	2.38	0.134	
B464761	456	459	3		4950	11.7	3.58	0.113	
B464762	459	462	3		3020	34.9	2.19	0.062	
B464763	459	462	3	DUPLICATE	3230	39.4	2.35	0.064	
B464764	462	465	3		22.9	1.46	0.19	0.002	
B464765	465	468	3		20.8	0.92	0.13	0.001	
B464766	468	471	3		12	1.02	0.05	<0.001	
B464767	471	474	3		112.5	13.15	0.68	0.003	
B464768	474	477	3		4850	18.95	4.25	0.113	
B464769	477	480	3		1445	7.84	0.68	0.039	
B464770	480	483	3		2110	9.15	1.93	0.052	
B464771	483	486	3		3470	6.4	1.39	0.087	
B464772	486	489	3		6110	11.75	3	0.144	
B464773	489	492	3		4020	20.3	2.55	0.105	
B464774	492	495	3		4460	5.29	4.58	0.107	
B464775				STANDARD CDN-CM-37	2160	251	1.29	0.165	
B464776				BLANK BL-10	26.9	3.96	0.02	0.001	
B464777	495	498	3		3460	6.32	3.27	0.079	
B464778	498	501	3		4380	3.85	2.88	0.104	

Hole ID: 21-PC-135	Easting (NAD 83): 0632247	Core Size: H (First 80 metres) Reduced to NQ (80-EOH)	DDH Started: 10/19/2021
	Northing (NAD83): 5987002		DDH Finished: 10/24/2021
Property: Poplar Deposit	Elevation: 894 m	Hole Dip: -89.9	Logged Completed: 11/06/2021
	Source: GSP	Total Depth: 498	Drilled By: Apex Drilling

Logged By: Jonathan Broadbent
Cut by: Iain Sinclair

There were isuues with the Reflex unit so a down hole survey was not undertaken for this hole

Summary: 21-PC-135 was drilled to test the central area of the East Zone. This hole returned 492.7 metres of 0.288% copper from top to bottom including 78 metres of 0.391% copper from 259 to 336 metres and 129 metres of 0.546% copper from 369 to the bottom of the hole at 498 metres. Again the dominant rock type was quartz monzonite carrying 40% to 50% 1-5mm subhedral feldspar phenocrysts and 1% to 10% 1-3mm biotite phenocrysts. Alteration ranges from weak to moderate to moderate to strong potassic alteration, weak to moderate to moderate to strong silicification, moderate to strong sericite alteration of feldspars, and moderate to strong propylitic alteration. A series of felsic dykes cut the quartz monzonite with zones of dyking from 150.5 to 153.5 metres and 424.7 to 453 metres. Mineralization consists of 1% to 3% disseminated, fracture filling and local thin veinlets of pyrite and trace to 1% disseminated chalcopyrite.

Universal Copper			Hole: 21-PC-135	Elevation: 894	Easting:0632247		
Poplar Project			Core Size: H-NQ	Total Depth: 498 metres	Northing: 5987002		
FROM (m)	TO (m)	GEOCODE	GEOLOGICAL DESCRIPTION	ALTERATION	MINERALIZATION	STRUCTURE	STRUCTURE ANGLE (DTCA)
0	5.3	OVB	NO RECOVERY				
5.3	42.3	Qtz-Mnz	**Feldspar quartz monzonite with weak-moderate potassic alteration.** 40-50% sub-euhedral feldspar phenocrysts are 1-5mm. Feldspar phenocrysts display moderate-strong sericite alteration. Light grey-light pink.	Weak-moderate potassic alteration, with weak clay alteration- variable weak-moderate silicification of groundmass (GM). Moderate sericite alteration of feldspar phenocrysts. Minor surficial oxidization. Moderate clay rich intervals. Locally moderate chlorite alteration of GM.	1-3% pyrite mineralization occurring in 1-10mm pyritized stringers-veins. 1-2% pyrite finely disseminated in GM. 29m: Trace molybdenite in 2cm fluorite vein	Common broken interval. Common pyrite-black clay lined fractures. Moderate-common 2-10mm quartz veins and 5-30mm white-light tan (Mohs hardness 2.5, no HCL reaction, possibly fluorite) veins	Fracture sets: subparallel, 25-30, 30-40, 45-50° Veins: 20-25, 30-35, 45-50°.
42.3	50.6	FPVD	**Fine porphyritic volcanic dyke with weak-moderate hematite staining.** 10-15 % 1-5mm sericite altered feldspar phenocrysts. 5% 1-2mm biotite phenocrysts. Fine tan-red volcanic homogenized GM dyke with moderate tan alteration bracketed fractures. Sharp upper and lower contact marked by distinct textural and color change.		No Mineralization observed.	Moderate fractures bracketed by tan alteration halo.	Dyke contact: 55-65° Fractures: 15-30
50.6	100.6	Qtz-Mnz	**Feldspar quartz monzonite with moderate potassic alteration.** 40-50% sub-euhedral feldspar phenocrysts are 1-5mm. Feldspar phenocrysts display moderate-strong sericite alteration. Light grey-light pink.	Moderate potassic alteration, with moderate-strong silicification of groundmass (GM). Moderate sericite-clay alteration of feldspar phenocrysts. Locally moderate chlorite alteration of GM.	1-3% pyrite mineralization occurring in 1-10mm pyritized stringers-veins. 1-2% pyrite finely disseminated in GM.	Common pyrite-black clay lined fractures. Common 2-20mm quartz veins (stockwork). Rare-moderate 3-20mm white-pink fluorite veins.	Fracture sets: subparallel, 25-30, 30-40, 45-50° Veins: Subparelle-10, 20-25, 30-35, 45-50°.
100.6	103.83	FPVD	**Fine porphyritic volcanic dyke.** 10-15 % 1-5mm sericite altered feldspar phenocrysts. 5% 1-2mm biotite phenocrysts. Fine light green volcanic homogenized GM dyke. Sharp upper and lower contact marked by distinct textural and color change.	Strong clay- minty green sericite alteration.	No Mineralization observed.	Moderate clay lined fractures	Dyke contact: 55-65° Fractures: 15-30
103.83	107	Qtz-Mnz	**Feldspar quartz monzonite with moderate potassic and weak propylitic alteration.** 40-50% sub-euhedral feldspar phenocrysts are 1-5mm. Feldspar phenocrysts display moderate-strong sericite alteration. Light grey-light pink.	Moderate potassic alteration, with moderate-strong silicification of groundmass (GM). Moderate sericite-clay alteration of feldspar phenocrysts. weak chlorite alteration of GM.	1-3% pyrite mineralization occurring in 1-10mm pyritized stringers-veins, and evenly finely disseminated in GM.	Common pyrite-black clay lined fractures. Common 2-30mm quartz veins (stockwork). Rare-moderate 3-10mm white-pink fluorite veins.	Fracture sets: subparallel, 25-30, 30-40, 45-50° Veins: Subparelle-10, 20-25, 30-35, 45-50°.

Universal Copper			Hole: 21-PC-135	Elevation: 894	Easting:0632247		
Poplar Project			Core Size: H-NQ	Total Depth: 498 metres	Northing: 5987002		
FROM (m)	**TO (m)**	**GEOCODE**	**GEOLOGICAL DESCRIPTION**	**ALTERATION**	**MINERALIZATION**	**STRUCTURE**	**STRUCTURE ANGLE (DTCA)**
107	107.33	FBSD	**Fine black volcanic dyke with common mm pyrite stringers.** Black very fine volcanic dyke. Sharp upper and basal contact.		1-2% 1-3mm pyrite stringers.		Dyke contact: 40° Stringers subparallel, 40-45, 65-70
107.33	131.06	Qtz-Mnz	**Feldspar quartz monzonite with moderate potassic and weak propylitic alteration.** 40-50% sub-euhedral feldspar phenocrysts are 1-5mm. Feldspar phenocrysts display moderate-strong sericite alteration. Light grey-light pink. Gradual basal contact.	Moderate potassic alteration, with variable silicification of groundmass (moderate-strong locally weak). Local strong clay alteration of GM. Moderate sericite-clay alteration of feldspar phenocrysts. weak chlorite alteration of GM.	1-3% pyrite mineralization occurring in 1-10mm pyritized stringers-veins, and evenly finely disseminated in GM. Trace chalcopyrite.	Common pyrite-black clay lined fractures-5mm pyrite veins. Common 2-30mm quartz veins (stockwork). Rare 3-10mm white-pink fluorite veins.	Fracture sets: subparallel, 25-30, 30-40, 45-50° Veins: Subparelle-10, 20-25, 30-35, 45-50°.
131.06	150.5	Qtz-Mnz	**Feldspar biotite quartz monzonite with moderate potassic - propylitic alteration.** 40-50% sub-euhedral feldspar phenocrysts are 1-5mm. Feldspar phenocrysts display strong sericite alteration. Grey-greenish grey and locally pink.	Moderate potassic and propylitic alteration, with variable silicification of groundmass (moderate-strong locally weak). Local strong clay alteration of GM. Strong sericite-clay alteration of feldspar phenocrysts. Weak chlorite alteration of GM.	1-3% pyrite mineralization occurring in 1-10mm pyritized stringers-veins, and evenly finely disseminated in GM.	Common pyrite-black clay lined fractures-5mm pyrite veins. Moderate-common 2-30mm quartz veins.	Fracture sets: 20-30, 30-40, 45-50° Veins: 20-25, 30-35, 45-50°.
150.5	151.5	FCXD	**Fine strongly green clay altered dyke with common host rock xenoliths.** Sharp upper and basal contact. Xenoliths are 1-4cm	Strong-complete clay alteration of GM. Xenoliths are dominantly strongly propylitic altered.	No Mineralization observed.		Dyke contact: 55
151.5	210	Qtz-Mnz	**Feldspar biotite quartz monzonite with moderate potassic - propylitic alteration.** 40-50% sub-euhedral feldspar phenocrysts are 1-5mm. Feldspar phenocrysts display strong sericite alteration. Grey-greenish grey and locally pink. Interval intersected by following dykes (Dyke swarm).	Moderate potassic and propylitic alteration, with variable silicification of groundmass (moderate-strong locally weak). Local strong clay alteration of GM. Strong sericite-clay alteration of feldspar phenocrysts. Weak chlorite alteration of GM.	1-3% pyrite mineralization occurring in 1-10mm pyritized stringers-veins, and evenly finely disseminated in GM. Rare-moderate specular hematite increases down interval. Dominantly occurring in veins and along fractures.	Common pyrite-black clay lined fractures-5mm pyrite veins. Moderate-common 2-30mm quartz veins.	Fracture sets: 20-30, 30-40, 45-50° Veins: 20-25, 30-35, 45-50°.

Universal Copper			Hole: 21-PC-135	Elevation: 894	Easting:0632247		
Poplar Project			Core Size: H-NQ	Total Depth: 498 metres	Northing: 5987002		
FROM (m)	**TO (m)**	**GEOCODE**	**GEOLOGICAL DESCRIPTION**	**ALTERATION**	**MINERALIZATION**	**STRUCTURE**	**STRUCTURE ANGLE (DTCA)**
		FCXD	**152.45m:** 6cm Green clay altered xenolith dyke, same as described above. **152.55m**: 10cm dyke same as above described dyke **152.82m:** 2cm dyke same as above described dyke **152.96m**: 1cm dyke same as above described dyke **153.5m:** 6cm dyke same as above described dyke				
210	208.18	Qtz-Mnz	**Feldspar biotite quartz monzonite with moderate-strong propylitic and local potassic alteration.** 40-50% sub-euhedral feldspar phenocrysts are 1-5mm. Feldspar phenocrysts display strong sericite alteration. 1-10% biotite phenocrysts 1-3mm. Grey-dark greenish grey and locally pink. Chlorite and specular hematite increase down interval. decrease in potassic alteration down interval.	Moderate-strong propylitic alteration (moderate-strong chlorite alteration of GM), with local potassic alteration bracketing veins. Variable silicification of groundmass (moderate-strong locally weak and clay altered GM). Strong sericite-clay alteration of feldspar phenocrysts. Potassic alteration decreases down interval and propylitic chlorite and rare epidote alteration increases down interval	1-3% pyrite mineralization occurring in 1-10mm pyritized stringers-veins, and equal proportions finely disseminated in GM. Trace chalcopyrite finely disseminated and in pyritized veins. Common specular hematite in mineralized stringers-altering GM. Trace-rare locally 1% molybdenite. 264m, 285m: Locally 1% molybdenite.	Common pyrite-specular hematite and black clay lined fractures-bracketing veins. Moderate-common 2-15mm quartz veins. Quartz veins moderately have pyrite-specular hematite mineralized cores.	Fracture sets: subparallel, 15-20, 30-35, 45-50°. Veins: subparallel, 15-20, 30-35, 45-50°.
308.18	308.88	FPVD	**Fine volcanic dyke with moderate hematite staining.** Fine tan-red volcanic homogenized GM dyke. Sharp upper and lower contact marked by distinct textural and color change.	Strong hematite staining-GM alteration.	No Mineralization observed.	Moderate fluorite veins	Dyke contact: 65-70° Veins: 25-30

Universal Copper			Hole: 21-PC-135	Elevation: 894	Easting:0632247		
Poplar Project			Core Size: H-NQ	Total Depth: 498 metres	Northing: 5987002		
FROM (m)	**TO (m)**	**GEOCODE**	**GEOLOGICAL DESCRIPTION**	**ALTERATION**	**MINERALIZATION**	**STRUCTURE**	**STRUCTURE ANGLE (DTCA)**
308.88	335.8	Qtz-Mnz	**Feldspar biotite quartz monzonite with moderate-strong propylitic and local potassic alteration.** 40-50% sub-euhedral feldspar phenocrysts are 1-5mm. Feldspar phenocrysts display strong sericite alteration. 1-10% biotite phenocrysts 1-3mm. Grey-dark greenish black and locally pink, local black highly silicified biotite flooded GM intervals. Chlorite and specular hematite increase down interval. decrease in potassic alteration down interval.	Moderate-strong propylitic alteration, with local potassic alteration bracketing veins. Variable silicification of groundmass (moderate-strong locally weak and clay altered GM). Strong sericite-clay alteration of feldspar phenocrysts. Potassic alteration decreases down interval and propylitic chlorite and rare epidote alteration increases. Local black highly silicified biotite flooded GM intervals.	1-3% pyrite mineralization occurring in 1-10mm pyritized stringers-veins, and equal proportions finely disseminated in GM. Trace-.5%chalcopyrite equally finely disseminated and in pyritized veins. Common specular hematite in mineralized stringers-altering GM. Trace-rare locally 1% molybdenite. 328.85m: Locally 1% molybdenite.	Common pyrite-specular hematite and black clay lined fractures-bracketing veins. Moderate-common 2-15mm quartz veins. Quartz veins moderately have pyrite-specular hematite mineralized cores.	Fracture sets: subparallel, 15-20, 30-35, 45-50°. Veins: subparallel, 15-20, 30-35, 45-50°.
335.8	368.6	FPCD	**Fine feldspar porphyritic strongly green clay altered dyke.** Sharp upper and basal contact. Lime green in color. Feldspar 2-5mm dominantly chlorite altered.	Strong-complete clay alteration of GM. Feldspar phenocrysts dominantly altered via chlorite.	No Mineralization observed.	Moderate clay lined fractures.	Dyke contact: 30 Clay fractures 20-25, 40-45
368.6	424.7	Qtz-Mnz	**Feldspar biotite quartz monzonite with moderate-strong propylitic and local potassic alteration.** 40-50% sub-euhedral feldspar phenocrysts are 1-5mm. Feldspar phenocrysts display strong sericite alteration. 1-10% biotite phenocrysts 1-3mm. Grey-dark greenish black and locally pink.	Strong propylitic alteration, with local potassic alteration bracketing veins. Variable silicification of groundmass (moderate-strong locally weak and clay altered GM). Strong sericite-clay alteration of feldspar phenocrysts.	1-3% pyrite mineralization occurring in 1-10mm pyritized stringers-veins, and equal proportions finely disseminated in GM. .5-1%chalcopyrite equally finely disseminated and in pyritized veins. Common specular hematite in mineralized stringers-altering GM. Trace-rare locally 1% molybdenite.	Common pyrite-specular hematite and black clay lined fractures-bracketing veins. Moderate-common 2-15mm quartz veins. Quartz veins moderately have pyrite-specular hematite mineralized cores.	Fracture sets: subparallel, 15-20, 30-35, 45-50°. Veins: subparallel, 15-20, 30-35, 45-50°.
424.7	425.7	FPCD	**Fine feldspar porphyritic strongly green clay altered dyke.** Sharp upper and basal contact. Lime green in color. Feldspar 2-5mm dominantly chlorite altered.	Strong-complete clay alteration of GM. Feldspar phenocrysts dominantly altered via chlorite.	No Mineralization observed.	Moderate clay lined fractures.	Dyke contact: 35, 50 Clay fractures 20-25, 40-45

Universal Copper			Hole: 21-PC-135	Elevation: 894	Easting:0632247		
Poplar Project			Core Size: H-NQ	Total Depth: 498 metres	Northing: 5987002		
FROM (m)	**TO (m)**	**GEOCODE**	**GEOLOGICAL DESCRIPTION**	**ALTERATION**	**MINERALIZATION**	**STRUCTURE**	**STRUCTURE ANGLE (DTCA)**
425.7	436.25	Qtz-Mnz	**Feldspar biotite quartz monzonite with moderate-strong propylitic and local potassic alteration.** 40-50% sub-euhedral feldspar phenocrysts are 1-5mm. Feldspar phenocrysts display strong sericite alteration. 1-10% biotite phenocrysts 1-3mm. Grey-dark greenish black and locally pink.	Strong propylitic alteration, with local potassic alteration bracketing veins. Variable silicification of groundmass (moderate-strong locally weak and clay altered GM). Strong sericite-clay alteration of feldspar phenocrysts.	1-3% pyrite mineralization occurring in 1-10mm pyritized stringers-veins, and equal proportions finely disseminated in GM. .5-1%chalcopyrite equally finely disseminated and in pyritized veins. Common specular hematite in mineralized stringers-altering GM. Trace molybdenite.	Common pyrite-specular hematite and black clay lined fractures-bracketing veins. Moderate-common 2-15mm quartz veins. Quartz veins moderately have pyrite-specular hematite mineralized cores.	Fracture sets: subparallel, 15-20, 30-35, 45-50°. Veins: subparallel, 15-20, 30-35, 45-50°.
436.25	443	FPCD	**Fine feldspar porphyritic strongly green clay altered dyke.** Sharp upper and basal contact. Lime green in color. Feldspar 2-5mm dominantly chlorite altered.	Strong-complete clay alteration of GM. Feldspar phenocrysts dominantly altered via chlorite.	No Mineralization observed.	Moderate clay lined fractures.	Dyke contact: 30 Clay fractures 20-25, 40-45
443	478.4	Qtz-Mnz	**Feldspar biotite quartz monzonite with moderate-strong propylitic and local potassic alteration.** 40-50% sub-euhedral feldspar phenocrysts are 1-5mm. Feldspar phenocrysts display strong sericite alteration. 1-10% biotite phenocrysts 1-3mm. Grey-dark greenish black and locally pink.	Strong propylitic alteration, with local potassic alteration bracketing veins. Variable silicification of groundmass (moderate-strong locally weak and clay altered GM). Strong sericite-clay alteration of feldspar phenocrysts.	1-3% pyrite mineralization occurring in 1-10mm pyritized stringers-veins, and equal proportions finely disseminated in GM. .5-1%chalcopyrite equally finely disseminated and in pyritized veins. Common specular hematite in mineralized stringers-altering GM.	Common pyrite-specular hematite and black clay lined fractures-bracketing veins. Moderate-common 2-15mm quartz veins. Quartz veins moderately have pyrite-specular hematite mineralized cores.	Fracture sets: subparallel, 15-20, 30-35, 45-50°. Veins: subparallel, 15-20, 30-35, 45-50°.
478.4	490.95	FPCD	**Fine feldspar porphyritic strongly green clay altered dyke.** Sharp upper and basal contact. Lime green in color. Feldspar 2-5mm dominantly chlorite altered.	Strong-complete clay alteration of GM. Feldspar phenocrysts dominantly altered via chlorite.	No Mineralization observed.	Moderate clay lined fractures. 487-487.5: 2cm subparelle brecciating quartz vein	Dyke contact: 45 Clay fractures 20-25, 40-45

Universal Copper			Hole: 21-PC-135	Elevation: 894	Easting:0632247		
Poplar Project			Core Size: H-NQ	Total Depth: 498 metres	Northing: 5987002		
FROM (m)	**TO (m)**	**GEOCODE**	**GEOLOGICAL DESCRIPTION**	**ALTERATION**	**MINERALIZATION**	**STRUCTURE**	**STRUCTURE ANGLE (DTCA)**
440.95	498	Qtz-Mnz	**Feldspar biotite quartz monzonite with moderate-strong propylitic and local potassic alteration.** 40-50% sub-euhedral feldspar phenocrysts are 1-5mm. Feldspar phenocrysts display strong sericite alteration. 1-10% biotite phenocrysts 1-3mm. Grey-dark greenish black and locally pink.	Strong propylitic alteration, with local potassic alteration bracketing veins. Variable silicification of groundmass (moderate-strong locally weak and clay altered GM). Strong sericite-clay alteration of feldspar phenocrysts.	1-3% pyrite mineralization occurring in 1-10mm pyritized stringers-veins, and equal proportions finely disseminated in GM.	Common pyrite and black clay lined fractures-bracketing veins. Moderate 2-15mm quartz veins.	Fracture sets: subparallel, 15-20, 30-35, 45-50°. Veins: subparallel, 15-20, 30-35, 45-50°.
498	EOH						

21-PC-135			SAMPLE DATA						
SAMPLE	INTERVAL (m)		LENGTH	TYPE	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62
NUMBER	FROM	TO	(m)	STD/Dup/B/Met	ppm Cu	ppm Mo	ppm Ag	ppm Au	% Cu
B464779	5.3	9	3.7		1170	111	0.35	0.017	
B464780	9	12	3		1985	96.4	0.42	0.026	
B464781	12	15	3		1940	62	0.65	0.038	
B464782	15	18	3		767	62.3	1.2	0.011	
B464783	18	21	3		1300	102	1.44	0.014	
B464784	21	24	3		1455	58.6	0.67	0.025	
B464785				BLANK BL-10	26	4.06	0.02	<0.001	
B464786	24	27	3		869	76.6	0.63	0.013	
B464787	27	30	3		429	61.5	1.85	0.014	
B464788				STANDARD CDN-CM-33	3620	248	2.44	0.019	
B464789	30	33	3		1120	67.7	1.6	0.028	
B464790	33	36	3		1115	47.6	0.4	0.021	
B464791	36	39	3		1325	35.2	0.24	0.025	
B464792	39	42	3		1330	26.6	1.23	0.023	
B464793	42	45	3		135	3.64	0.33	0.001	
B464794	42	45	3	DUPLICATE	202	5.31	0.31	0.003	
B464795	45	48	3		24.6	2.44	0.1	0.002	
B464796	48	51	3		266	19	0.48	0.012	
B464797	51	54	3		1200	70.7	0.97	0.023	
B464798	54	57	3		1115	63.9	0.45	0.021	
B464799	57	60	3		733	81.9	0.25	0.006	
B464800	60	63	3		2150	72.3	0.53	0.018	
B464801	63	66	3		2390	65.9	1.71	0.052	
B464802	66	69	3		2660	23	1.14	0.06	
B464803	69	72	3		2660	35.9	2.21	0.06	
B464804	72	75	3		1140	20.4	2.59	0.032	
B464805				BLANK BL-10	28.9	3.86	0.03	<0.001	
B464806				STANDARD CDN-CM-37	2040	242	1.23	0.165	
B464807	75	78	3		1260	21.2	3.04	0.064	
B464808	78	81	3		2030	15.95	1.24	0.06	
B464809	81	84	3		1995	18.25	1.47	0.035	
B464810	84	87	3		2110	17.3	1.6	0.051	
B464811	87	90	3		5860	14.6	3.01	0.339	
B464812	90	93	3		2330	7.08	3.1	0.062	
B464813	93	96	3		4210	8.26	2.52	0.154	
B464814	93	96	3	DUPLICATE	3710	3.67	1.93	0.115	
B464815	96	99	3		3070	5.73	1.63	0.097	
B464816	99	102	3		2300	5.37	1.02	0.064	
B464817	102	105	3		895	2.69	1.01	0.031	
B464818	105	108	3		4220	7.6	4.77	0.146	
B464819	108	111	3		3220	4.15	5.85	0.128	
B464820	111	114	3		3430	4.65	1.48	0.118	
B464821	114	117	3		2430	5.25	1.07	0.078	
B464822	117	120	3		3220	4.39	0.78	0.111	
B464823	120	123	3		2240	3.99	3.4	0.085	
B464824	123	126	3		2530	3.66	0.9	0.077	
B464825				STANDARD CDN-CM-33	3640	240	2.37	0.026	
B464826				BLANK BL-10	27.7	4.14	0.02	<0.001	
B464827	126	129	3		4570	3.68	2.01	0.157	
B464828	129	132	3		2890	1.66	0.89	0.097	
B464829	132	135	3		2950	3.95	0.89	0.098	
B464830	135	138	3		3280	3.72	1.1	0.113	
B464831	138	141	3		1990	1.47	0.62	0.065	
B464832	141	144	3		3000	11.35	0.84	0.088	
B464833	144	147	3		3270	39.1	1.18	0.097	
B464834	144	147	3	DUPLICATE	3230	13.05	1.1	0.105	

21-PC-135			SAMPLE DATA						
SAMPLE	INTERVAL (m)		LENGTH	TYPE	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62
NUMBER	FROM	TO	(m)	STD/Dup/B/Met	ppm Cu	ppm Mo	ppm Ag	ppm Au	% Cu
B464835	147	150	3		2950	3.19	1.45	0.091	
B464836	150	153	3		2410	10.55	4.47	0.096	
B464837	153	156	3		1205	2.12	0.72	0.037	
B464838	156	159	3		1520	1.59	0.61	0.046	
B464839	159	162	3		4620	3.6	1.83	0.141	
B464840	162	165	3		3090	2.89	3.25	0.098	
B464841	165	168	3		2490	2.47	6.42	0.103	
B464842	168	171	3		4420	3.87	3.9	0.173	
B464843	171	174	3		3980	2.36	1.09	0.139	
B464844	174	177	3		3730	5.54	4.54	0.108	
B464845				STANDARD CDN-CM-37					
B464846				BLANK BL-10	31.3	4.17	0.03	<0.001	
B464847	177	180	3		3620	15.65	1.15	0.111	
B464848	180	183	3		1475	4.36	0.81	0.048	
B464849	183	186	3		1255	3.33	0.5	0.045	
B464850	186	189	3		1820	4.22	2	0.053	
B464851	189	192	3		2510	6.02	0.73	0.062	
B464852	192	195	3		1590	2.38	0.67	0.041	
B464853	195	198	3		1570	2.05	0.88	0.04	
B464854	195	198	3	DUPLICATE	1575	1.77	1.1	0.043	
B464855	198	201	3		1705	35.3	0.66	0.054	
B464856	201	204	3		2890	4.01	1.34	0.087	
B464857	204	207	3		2540	1.76	0.86	0.076	
B464858	207	210	3		4510	2.8	1.28	0.128	
B464859	210	213	3		3640	2.81	1.21	0.106	
B464860	213	216	3		4000	1.82	4.49	0.124	
B464861	216	219	3		4910	2.94	2.99	0.14	
B464862	219	222	3		3780	2.45	1.3	0.121	
B464863	222	225	3		1780	2.72	0.5	0.045	
B464864	225	228	3		2160	4.79	0.68	0.071	
B464865				BLANK BL-10					
B464866	228	231	3		1300	2.3	0.45	0.038	
B464867				STANDARD CDN-CM-33					
B464868	231	234	3		1390	1.3	0.45	0.047	
B464869	234	237	3		2290	2.49	1.07	0.077	
B464870	237	240	3		3160	15	1.58	0.096	
B464871	240	243	3		1560	3.23	0.51	0.043	
B464872	243	246	3		1450	3.96	2.22	0.041	
B464873	246	249	3		2110	4.02	1.13	0.087	
B464874	246	249	3	DUPLICATE	1825	2.34	0.92	0.055	
B464875	249	252	3		1140	2.08	0.73	0.029	
B464876	252	255	3		1215	3.6	2.23	0.039	
B464877	255	258	3		979	2.59	2.86	0.103	
B464878	258	261	3		2390	3.39	2.01	0.078	
B464879	261	264	3		2580	10.05	3.25	0.08	
B464880	264	267	3		3550	8.78	63.4	0.225	
B464881	267	270	3		4700	3.24	21.9	0.196	
B464882	270	273	3		5490	3.08	14.95	0.219	
B464883	273	276	3		4020	3.06	4.13	0.135	
B464884	276	279	3		1970	3.52	2.1	0.063	
B464885				STANDARD CDN-CM-37					
B464886				BLANK BL-10	28.8	4.01	0.03	<0.001	
B464887	279	282	3		2800	3.55	1.49	0.094	
B464888	282	285	3		3730	2	34.3	0.152	
B464889	285	288	3		3270	3.69	83	0.147	
B464890	288	291	3		3210	2.7	1.43	0.107	

21-PC-135			SAMPLE DATA						
SAMPLE	INTERVAL (m)		LENGTH	TYPE	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62
NUMBER	FROM	TO	(m)	STD/Dup/B/Met	ppm Cu	ppm Mo	ppm Ag	ppm Au	% Cu
B464891	291	294	3		4680	3.02	3.58	0.143	
B464892	294	297	3		4060	3.16	8.19	0.14	
B464893	297	300	3		3860	2.67	8.84	0.138	
B464894	297	300	3	DUPLICATE	3830	2.3	6.85	0.132	
B464895	300	303	3		4460	3.37	6.86	0.132	
B464896	303	306	3		4170	3.44	2.49	0.121	
B464897	306	309	3		3170	1.73	1.64	0.088	
B464898	309	312	3		3220	1.81	1.46	0.13	
B464899	312	315	3		3620	3.78	1.39	0.092	
B464900	315	318	3		5500	2.91	3.27	0.15	
B464901	318	321	3		6810	2.82	4.53	0.195	
B464902	321	324	3		4540	4.26	4.16	0.109	
B464903	324	327	3		4160	3.25	5.88	0.116	
B464904	327	330	3		4030	3.68	3.73	0.1	
B464905				STANDARD CDN-CM-33	3460	238	2.13	0.022	
B464906				BLANK BL-10	25.9	3.96	0.03	0.009	
B464907	330	333	3		3300	3.82	4.63	0.071	
B464908	333	336	3		4250	3.5	20.7	0.115	
B464909	336	339	3		53.4	1.47	3.61	0.041	
B464910	339	342	3		9.9	1.06	2.39	0.012	
B464911	342	345	3		11.8	0.63	2.95	0.012	
B464912	345	348	3		4.1	1.29	0.39	0.011	
B464913	348	351	3		4.6	1.85	0.35	0.014	
B464914	348	351	3	DUPLICATE	3.8	0.6	0.31	0.017	
B464915	351	354	3		4.3	1.47	0.31	0.026	
B464916	354	357	3		3.6	1.34	0.23	0.008	
B464917	357	360	3		2.8	0.74	0.18	0.006	
B464918	360	363	3		14.6	0.96	0.26	0.004	
B464919	363	366	3		3.3	0.91	0.21	0.005	
B464920	366	369	3		299	0.75	0.85	0.016	
B464921	369	372	3		4200	2.22	3.72	0.115	
B464922	372	375	3		2940	1.62	3.09	0.081	
B464923	375	378	3		4390	2.5	3.68	0.132	
B464924	378	381	3		3500	2.76	4.12	0.1	
B464925				STANDARD CDN-CM-37	2180	248	1.08	0.191	
B464926				BLANK BL-10	26.4	4.03	0.02	0.002	
B464927	381	384	3		4530	1.82	3.35	0.115	
B464928	384	387	3		5530	3.53	14.65	0.159	
B464929	387	390	3		6300	2.54	3.28	0.201	
B464930	390	393	3		3590	1.65	3.58	0.116	
B464931	393	396	3		4530	3.64	4.25	0.133	
B464932	396	399	3		3190	1.68	2.41	0.092	
B464933	399	402	3		5190	2.81	2.38	0.15	
B464934	399	402	3	DUPLICATE	5150	1.91	2.3	0.136	
B464935	402	405	3		6130	4.18	6.92	0.182	
B464936	405	408	3		4520	2.77	5.95	0.126	
B464937	408	411	3		5470	3.87	8.79	0.159	
B464938	411	414	3		>10000	5.83	11.95	0.251	1.06
B464939	414	417	3		5720	4.82	6.83	0.161	
B464940	417	420	3		8290	4.15	9.08	0.255	
B464941	420	423	3		4910	4.58	13.25	0.147	
B464942	423	426	3		2310	4.74	11.7	0.215	
B464943	426	429	3		2770	1.53	2.44	0.07	
B464944	429	432	3		2720	2.02	3.24	0.083	
B464945				STANDARD CDN-CM-33	3420	227	2.2	0.022	
B464946				BLANK BL-10	30.2	4.96	0.04	0.004	

21-PC-135			SAMPLE DATA						
SAMPLE	INTERVAL (m)		LENGTH	TYPE	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62
NUMBER	FROM	TO	(m)	STD/Dup/B/Met	ppm Cu	ppm Mo	ppm Ag	ppm Au	% Cu
B464947	432	435	3		2710	2.99	1.41	0.066	
B464948	435	438	3		1935	2.27	10.1	0.072	
B464949	438	441	3		62.3	1.43	0.43	0.007	
B464950	441	444	3		1020	2.03	2.29	0.027	
B464951	444	447	3		2630	4.93	1.57	0.062	
B464952	447	450	3		3810	3.98	2.16	0.071	
B464953	450	453	3		4300	9.44	3.28	0.106	
B464954	450	453	3	DUPLICATE	4950	7.58	5.32	0.094	
B464955	453	456	3		6570	4.4	2.82	0.146	
B464956	456	459	3		7010	6.89	10	0.14	
B464957	459	462	3		5700	8.88	14.05	0.232	
B464958	462	465	3		4880	4.95	4.87	0.105	
B464959	465	468	3		6210	16.4	7.01	0.149	
B464960	468	471	3		5340	2.38	4.73	0.115	
B464961	471	474	3		6860	3.97	4.17	0.129	
B464962	474	477	3		4470	6.32	5.86	0.084	
B464963	477	480	3		2190	3.1	2.79	0.053	
B464964	480	483	3		32.8	2.81	0.92	0.009	
B464965	483	486	3		26.8	4.36	0.76	0.002	
B464966				STANDARD CDN-CM-37	2200	253	1.22	0.185	
B464967				BLANK BL-10	24.2	4.13	0.02	<0.001	
B464968	486	489	3		26.9	2.25	0.82	0.003	
B464969	489	492	3		1980	2.95	6.38	0.037	
B464970	492	495	3		5910	2.42	5.41	0.134	
B464971	495	498	3		4710	1.87	6.83	0.088	

Hole ID: 21-PC-136	Easting (NAD 83): 0632347	Core Size: H (First 80 metres) Reduced to NQ (80-EOH)	DDH Started: 10/24/2021
	Northing (NAD83): 5986898	Hole Azimuth: 261.7	DDH Finished: 10/30/2021
Property: Poplar Deposit	Elevation: 912 m	Hole Dip: -88	Logged Completed: 11/12/2021
	Source: GSP	Total Depth: 501	Drilled By: Apex Drilling

Logged By: Jonathan Broadbent
Cut by: Iain Sinclair

Dip & Azimuth tests		
Depth	Azimuth	Dip
250.00	261.7	-88
300.00	275	-88.2
350.00	265.30	-87.7
402.00	272.5	-88.1
450.00	279.7	-88
501.00	277.3	-87.6

Summary: 21-PC-136 was drilled to test the southeastern portion of the East Zone. The quartz monzonite in this hole was cut by a significant number of dykes, comprising almost 35% of the core. This resulted in a number of chopped up copper-rich intervals including: 45 metres of 0.430% copper from 237 to 282 metres, 24 metres of 0.514% copper from 345 to 369 metres and 51 metres of 0.375% copper from 417 to 432 metres. The first 130 metres of this hole carried <1000 ppm copper, with the next 86 metres ranging from 1475 to 4460 ppm, with grade increasing significantly from 189 to 213 metres. Puzzlingly, the 25 metres below the last dyke at the bottom of the hole carried less than 700 ppm copper. The quartz monzonite carries 40% to 50% 1-5mm subhedral feldspar phenocrysts and 1% to 10% 1-3mm biotite phenocrysts. Alteration ranges from weak to moderate to moderate to strong potassic alteration, weak to moderate to moderate to strong silicification, moderate to strong sericite alteration of feldspars, and moderate to strong propylitic alteration. Mineralization consists of 1% to 3% disseminated, fracture filling and local thin veinlets of pyrite and trace to 1% disseminated chalcopyrite. A zone from 236.9 to 251.8 metres was described as a fine silicified dyke-highly homogenized monzonite with stockwork veining in fine groundmass. The dyke showed strong silicification, with local moderate chlorite-potassic alteration of the groundmass along with local pink-green. The upper contact marked by sharp grainsize change. The dyke carries 1% to 3% pyrite in mm pyritized stringers, within stockwork veins, and locally disseminated in the groundmass. Traces of chalcopyrite were also observed. Unlike the other dykes, this dyke is pre-mineral as it carries good copper.

Universal Copper			Hole: 21-PC-136	Elevation: 912m	Easting:0632347	Azimuth: 279.7	
Poplar Project			Core Size: H-NQ	Total Depth: 501 metres	Northing: 5986898	Dip: -88	
FROM (m)	**TO (m)**	**GEOCODE**	**GEOLOGICAL DESCRIPTION**	**ALTERATION**	**MINERALIZATION**	**STRUCTURE**	**STRUCTURE ANGLE (DTCA)**
0	2.5	OVB	Red oxidized mud				
2.5	8.05	Qtz-Mnz	**Feldspar quartz monzonite with weak-moderate potassic alteration.** 40-50% sub-euhedral feldspar phenocrysts are 1-5mm. Feldspar phenocrysts display moderate-strong sericite alteration. Light grey-light pink.	Weak-moderate potassic alteration, with weak clay alteration- variable weak-moderate silicification of groundmass (GM). Moderate sericite alteration of feldspar phenocrysts. Minor surficial oxidization. Moderate clay rich intervals.	1-3% pyrite mineralization occurring in 1-5mm pyritized stringers-veins, finely disseminated in GM.	Common broken interval. Common pyrite-black clay lined fractures.	Fracture sets: subparallel, 25-30, 30-40, 45-50°
8.05	27	FPVD	**Fine feldspar porphyritic volcanic dyke with strong clay alteration and weak-moderate hematite staining.** 15-20% 1-5mm sericite altered feldspar phenocrysts. 5% 1-2mm biotite phenocrysts. Fine greenish grey-burgundy volcanic homogenized GM dyke. Sharp upper and lower contact marked by distinct textural and color change. Clay rich fractures occur at contacts.	Strong sericite-chlorite alteration. Moderate local hematite alteration.	No Mineralization observed.	Rare-moderate clay lined fractures	Dyke contact: 40-45° Fractures: 10-15, 40-45
27	37.55	Qtz-Mnz	**Feldspar quartz monzonite with moderate potassic alteration.** 40-50% sub-euhedral feldspar phenocrysts are 1-5mm. Feldspar phenocrysts display moderate-strong sericite alteration. Light grey-light pink.	Moderate potassic alteration, with moderate-strong silicification of groundmass (GM). Moderate sericite-clay alteration of feldspar phenocrysts. Locally moderate chlorite alteration of GM.	1-3% pyrite mineralization occurring in 1mm pyritized stringers. 1-2% pyrite finely disseminated in GM.	Common pyrite-black clay lined fractures. Common 5mm silicified bracketing fractures. Moderate 3-10mm white fluorite veins.	Fracture sets: subparallel, 25-30, 30-40, 45-50° Veins: Subparelle-10, 50-55°.
37.55	47.23	FPVD	**Fine feldspar porphyritic volcanic dyke with strong clay alteration and weak-moderate hematite staining.** 15-20% 1-5mm sericite altered feldspar phenocrysts. Fine greenish grey-burgundy volcanic homogenized GM dyke. Sharp upper and lower contact marked by distinct textural and color change. Clay rich fractures occur at contacts.	Strong clay-sericite alteration. Moderate local hematite alteration.	No Mineralization observed.	Rare-moderate clay lined fractures	Dyke contact: 45-50 Fractures: 25-30

Universal Copper			Hole: 21-PC-136	Elevation: 912m	Easting:0632347	Azimuth: 279.7	
Poplar Project			Core Size: H-NQ	Total Depth: 501 metres	Northing: 5986898	Dip: -88	
FROM (m)	TO (m)	GEOCODE	GEOLOGICAL DESCRIPTION	ALTERATION	MINERALIZATION	STRUCTURE	STRUCTURE ANGLE (DTCA)
47.23	79.95	Qtz-Mnz	**Feldspar quartz monzonite with moderate potassic alteration.** 40-50% sub-euhedral feldspar phenocrysts are 1-5mm. Feldspar phenocrysts display moderate-strong sericite alteration. Light grey-light pink, and locally greenish grey.	Moderate potassic alteration, with moderate-strong silicification of groundmass (GM). Moderate sericite-clay alteration of feldspar phenocrysts. Locally weak chlorite alteration of GM.	3-5% pyrite mineralization occurring in 1-10mm pyritized stringers-veins, and evenly finely disseminated in GM. 54.25-55m: 7% pyritized GM.	Common pyrite-black clay lined fractures. Common 2-10mm quartz veins (stockwork). Rare-moderate 3-10mm white-pink fluorite veins. Rare 3cm quartz vein at 69.7	Fracture sets: subparallel, 25-30, 30-40, 45-50° Veins: Subparelle-10, 20-25, 30-35, 45-50°.
79.95	94.15	FPVD	**Fine feldspar porphyritic volcanic dyke with strong clay alteration and moderate hematite staining.** 15-20% 1-5mm sericite altered feldspar phenocrysts. Fine greenish grey-burgundy volcanic homogenized GM dyke. Sharp upper and lower contact marked by distinct textural and color change. Clay rich fractures occur at contacts.	Strong sericite-chlorite alteration. Moderate local hematite alteration.	No Mineralization observed.	Rare-moderate clay- lined fractures.	Dyke contact: 45-50 Fractures: 25-30
94.15	105.1	Qtz-Mnz	**Feldspar quartz monzonite with moderate potassic alteration.** 40-50% sub-euhedral feldspar phenocrysts are 1-5mm. Feldspar phenocrysts display moderate-strong sericite alteration. Light grey-light pink, and locally greenish grey.	Moderate potassic alteration, with strong silicification of groundmass (GM). Moderate sericite-clay alteration of feldspar phenocrysts. Locally weak chlorite alteration of GM.	3-5% pyrite mineralization occurring pyritized stringers, and evenly finely disseminated in GM.	Common pyrite-black clay lined fractures. Moderate-common 2-5mm quartz veins. Rare-moderate 3-10mm white-pink fluorite veins.	Fracture sets: subparallel, 25-30, 30-40, 45-50° Veins: Subparelle-10, 20-25, 30-35, 45-50°.
105.1	120.1	FBSD	**Fine black-green volcanic dyke with common mm pyrite stringers.** Greenish tan-black very fine volcanic dyke. Strong silicification. Sharp upper and basal contact.	Strong silicification. Moderate tan potassic -propylitic chlorite alteration.	1-2% 1-3mm pyrite stringers.	Common mm pyrite stringers.	Dyke contact: 40, 50° Stringers subparallel, 40-45, 65-70
120.1	129.47	FPVD	**Fine feldspar porphyritic volcanic dyke with strong clay alteration and moderate hematite staining.** 15-20% 1-5mm sericite altered feldspar phenocrysts. Fine greenish grey-burgundy volcanic homogenized GM dyke. Sharp upper and lower contact marked by distinct textural and color change. Clay rich fractures occur at contacts.	Strong sericite-chlorite alteration. Moderate local hematite alteration.	No Mineralization observed.	Rare-moderate clay lined fractures	Dyke contact: 45-50 Fractures: 25-30

Universal Copper			Hole: 21-PC-136	Elevation: 912m	Easting:0632347	Azimuth: 279.7	
Poplar Project			Core Size: H-NQ	Total Depth: 501 metres	Northing: 5986898	Dip: -88	
FROM (m)	TO (m)	GEOCODE	GEOLOGICAL DESCRIPTION	ALTERATION	MINERALIZATION	STRUCTURE	STRUCTURE ANGLE (DTCA)
129.47	132.35	FBSD	**Fine black volcanic dyke with 1-2mm feldspar phenocrysts.** Black very fine volcanic dyke. Moderate silicification. Sharp upper and basal contact.	Moderate silicification.	No Mineralization observed.		Dyke contact: 35-40°
132.35	215	FPVD	**Fine homogenized-feldspar-porphyritic volcanic dyke with moderate-strong silicification.** 10-15% 1-5mm sericite altered feldspar phenocrysts. Phenocrysts dominantly homogenized due to alteration/silicification (Visible in tan less silicified intervals). Fine greenish grey-tan and locally black volcanic-homogenized GM. Sharp upper and lower contact marked by distinct textural and color change.	Strong clay-sericite alteration of feldspar. Moderate chlorite alteration. Moderate-strong silicification and homogenization of interval. Weak-locally moderate potassic alteration.	1-3% pyrite occurring along fractures and within quartz veins.	Moderate-very common stockwork 2-10mm quartz veins (locally stockwork). Common fractures. 207.4: 10cm quartz medium-microcrystalline grain vein.	Fracture sets: subparallel, 25-30, 30-40, 45-50° Veins: Subparelle-10, 20-25, 30-35, 45-50°. Basal contact: 15
215	236.9	Qtz-Mnz	**Feldspar biotite quartz monzonite with moderate propylitic and potassic alteration.** 40-50% sub-euhedral feldspar phenocrysts are 1-5mm. Feldspar phenocrysts display strong sericite alteration. 1-10% biotite phenocrysts 1-3mm. greenish grey-dark grey and pinkish tan.	Moderate propylitic - potassic alteration. Moderate-strong silicification of groundmass. Strong sericite-clay alteration of feldspar phenocrysts. Weak chlorite alteration of GM locally visible.	1-3% pyrite mineralization occurring in mm pyritized stringers and within veins, and locally disseminated in GM. Trace chalcopyrite.	Common pyrite and black clay lined fractures-bracketing veins. Moderate-common 2-10mm quartz veins.	Fracture sets: subparallel, 15-20, 30-35, 45-50°. Veins: subparallel, 15-20, 30-35, 45-50°.
236.9	251.8	FVD	**Fine silicified dyke-highly homogenized** monzonite with stock work veining. Fine homogenized GM, with strong silicification, with local moderate chlorite-potassic alteration of GM. Black-tan with local pink-green alteration of GM. Upper contact marked by sharp grainsize change.	Strong silicification of groundmass. Highly homogenized due to silicification. Locally moderate propylitic - potassic alteration bracketing veins.	1-3% pyrite mineralization occurring in mm pyritized stringers, within veins, and locally disseminated in GM. Trace chalcopyrite.	Common pyrite and black clay lined fractures-bracketing veins. Common randomly oriented stockwork 2-10mm quartz veins.	Fracture sets: subparallel, 15-20, 30-35, 45-50°. Veins: stockwork Upper contact: 45
251.8	283	Qtz-Mnz	**Feldspar biotite quartz monzonite with moderate propylitic alteration.** 40-50% sub-euhedral feldspar phenocrysts are 1-5mm. Feldspar phenocrysts display strong sericite alteration. 1-10% biotite phenocrysts 1-3mm. greenish grey-dark grey.	Moderate propylitic - clay alteration. Moderate-strong silicification of groundmass. Strong sericite-clay alteration of feldspar phenocrysts. Weak-moderate chlorite alteration of GM locally visible.	1-3% pyrite mineralization occurring in mm pyritized stringers and within veins, and locally disseminated in GM. Trace chalcopyrite and specular hematite.	Common pyrite and black clay lined fractures-bracketing veins. Moderate-common 2-5mm quartz veins.	Fracture sets: subparallel, 15-20, 30-35, 45-50°. Veins: subparallel, 15-20, 30-35, 45-50°.

Universal Copper			Hole: 21-PC-136	Elevation: 912m	Easting:0632347	Azimuth: 279.7	
Poplar Project			Core Size: H-NQ	Total Depth: 501 metres	Northing: 5986898	Dip: -88	
FROM (m)	**TO (m)**	**GEOCODE**	**GEOLOGICAL DESCRIPTION**	**ALTERATION**	**MINERALIZATION**	**STRUCTURE**	**STRUCTURE ANGLE (DTCA)**
283	346.5	FPVD	**Fine porphyritic feldspar quartz volcanic dyke with homogenized Clay altered GM.** Fine tan volcanic homogenized GM dyke. Sharp upper and lower contact marked by shear clay fracture, distinct textural and color change. 1-5mm 20% green chlorite altered feldspar phenocrysts. 1-3mm 5% blebby anhedral quartz phenocrysts. Interval intersected by following dykes.	Strong clay homogenization of GM, very fine and tan in color. Feldspar phenocrysts strongly altered green via chlorite. Moderate silicification.	No Mineralization observed.	Moderate fluorite veins	Dyke contact: 65-70° Veins: 25-30
		FSD	2.84.6-284.8m, 292.08-292.6m: Fine silicified tan homogenous dyke similar to above interval however does not contain phenocrysts and displays greater silicification.				
346.5	397	Qtz-Mnz	**Feldspar biotite quartz monzonite with moderate propylitic alteration and variable silicification.** 40-50% sub-euhedral feldspar phenocrysts are 1-5mm. Feldspar phenocrysts display moderate-strong sericite alteration. 1-10% biotite phenocrysts 1-3mm. greenish grey-dark grey in color.	Moderate propylitic - clay alteration. Moderate-strong silicification of groundmass. Strong sericite-clay alteration of feldspar phenocrysts. Weak-moderate chlorite alteration of GM locally visible. Local weak potassic alteration.	1-3% pyrite mineralization occurring in mm pyritized stringers and within veins, and locally disseminated in GM. Trace chalcopyrite and specular hematite.	Common pyrite and black clay lined fractures-bracketing veins. Moderate-common 2-5mm quartz veins.	Fracture sets: subparallel, 15-20, 30-35, 45-50°. Veins: subparallel, 15-20, 30-35, 45-50°.
397	419.05	FPVD	**Fine porphyritic feldspar quartz volcanic dyke with homogenized Clay altered GM.** Fine tan volcanic homogenized GM dyke. Sharp upper and lower contact marked by shear clay fracture, distinct textural and color change. 1-5mm 20% green chlorite altered feldspar phenocrysts. 1-3mm 5% blebby anhedral quartz phenocrysts.	Strong clay homogenization of GM, very fine and tan in color. Feldspar phenocrysts strongly altered green via chlorite. Moderate silicification.	No Mineralization observed.	Moderate fluorite veins	Dyke contact: 65-70° Veins: 25-30
419.05	451.55	Qtz-Mnz	**Feldspar biotite quartz monzonite with moderate propylitic alteration and variable silicification.** 40-50% sub-euhedral feldspar phenocrysts are 1-5mm. Feldspar phenocrysts display moderate-strong sericite alteration. 1-10% biotite phenocrysts 1-3mm. greenish grey-dark grey in color.	Moderate propylitic - clay alteration. Moderate-strong silicification of groundmass. Strong sericite-clay alteration of feldspar phenocrysts. Weak-moderate chlorite alteration of GM locally visible. Local weak potassic alteration.	1-3% pyrite mineralization occurring in mm pyritized stringers and within veins, and locally disseminated in GM. Trace chalcopyrite and specular hematite.	Common pyrite and black clay lined fractures-bracketing veins. Moderate-common 2-5mm quartz veins.	Fracture sets: subparallel, 15-20, 30-35, 45-50°. Veins: subparallel, 15-20, 30-35, 45-50°.

Universal Copper			Hole: 21-PC-136	Elevation: 912m	Easting:0632347	Azimuth: 279.7	
Poplar Project			Core Size: H-NQ	Total Depth: 501 metres	Northing: 5986898	Dip: -88	
FROM (m)	TO (m)	GEOCODE	GEOLOGICAL DESCRIPTION	ALTERATION	MINERALIZATION	STRUCTURE	STRUCTURE ANGLE (DTCA)
451.55	464.15	FPVD	**Fine porphyritic feldspar quartz volcanic dyke with homogenized Clay altered GM.** Fine tan volcanic homogenized GM dyke. Sharp upper and lower contact marked by shear clay fracture, distinct textural and color change. 1-5mm 20% green chlorite altered feldspar phenocrysts. 1-3mm 5% blebby anhedral quartz phenocrysts.	Strong clay homogenization of GM, very fine and tan in color. Feldspar phenocrysts strongly altered green via chlorite. Moderate silicification.	No Mineralization observed.	Moderate fluorite veins	Dyke contact: 65-70° Veins: 25-30
464.15	471.5	Qtz-Mnz	**Feldspar biotite quartz monzonite with moderate propylitic alteration and variable silicification.** 40-50% sub-euhedral feldspar phenocrysts are 1-5mm. Feldspar phenocrysts display moderate-strong sericite alteration. 1-10% biotite phenocrysts 1-3mm. greenish grey-dark grey in color.	Moderate propylitic - clay alteration. Moderate-strong silicification of groundmass. Strong sericite-clay alteration of feldspar phenocrysts. Weak-moderate chlorite alteration of GM locally visible. Local weak potassic alteration.	1-3% pyrite mineralization occurring in mm pyritized stringers and within veins, and locally disseminated in GM. Trace chalcopyrite and specular hematite.	Common pyrite and black clay lined fractures-bracketing veins. Moderate-common 2-5mm quartz veins.	Fracture sets: subparallel, 15-20, 30-35, 45-50°. Veins: subparallel, 15-20, 30-35, 45-50°.
471.5	479	FPVD	**Fine porphyritic feldspar quartz volcanic dyke with homogenized Clay altered GM.** Fine tan volcanic homogenized GM dyke. Sharp upper and lower contact marked by shear clay fracture, distinct textural and color change. 1-5mm 20% green chlorite altered feldspar phenocrysts. 1-3mm 5% blebby anhedral quartz phenocrysts.	Strong clay homogenization of GM, very fine and tan in color. Feldspar phenocrysts strongly altered green via chlorite. Moderate silicification.	No Mineralization observed.	Moderate fluorite veins	Dyke contact: 65-70° Veins: 25-30
479	504	Qtz-Mnz	**Feldspar biotite quartz monzonite with moderate propylitic alteration and variable silicification.** 40-50% sub-euhedral feldspar phenocrysts are 1-5mm. Feldspar phenocrysts display moderate-strong sericite alteration. 1-10% biotite phenocrysts 1-3mm. greenish grey-dark grey in color.	Moderate propylitic - clay alteration. Moderate-strong silicification of groundmass. Strong sericite-clay alteration of feldspar phenocrysts. Weak-moderate chlorite alteration of GM locally visible. Local weak potassic alteration.	1-3% pyrite mineralization occurring in mm pyritized stringers and within veins, and locally disseminated in GM. Trace chalcopyrite and specular hematite.	Common pyrite and black clay lined fractures-bracketing veins. Moderate-common 2-5mm quartz veins.	Fracture sets: subparallel, 15-20, 30-35, 45-50°. Veins: subparallel, 15-20, 30-35, 45-50°.
504	EOH						

21-PC-136			SAMPLE DATA						
SAMPLE	INTERVAL (m)		LENGTH	TYPE	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62
NUMBER	FROM	TO	(m)	STD/Dup/B/Met	ppm Cu	ppm Mo	ppm Ag	ppm Au	% Cu
B464973	2.5	6	3.5		97.6	7.4	0.14	0.011	
B464974	6	9	3		117.5	6.05	0.07	0.007	
B464975	9	12	3		12.5	2.2	0.02	<0.001	
B464976	12	15	3		32.3	2.51	0.05	<0.001	
B464977	15	18	3		27.2	2.71	0.05	<0.001	
B464978	18	21	3		29.8	2.77	0.05	0.001	
B464979				BLANK BL-10	23.7	3.8	0.03	0.001	
B464980	21	24	3		27.7	2.27	0.06	<0.001	
B464981	24	27	3		20.6	2.4	0.08	<0.001	
B464982				STANDARD CDN-CM-33	3550	242	2.18	0.018	
B464983	27	30	3		63.7	10.65	0.34	0.002	
B464984	30	33	3		128.5	14.05	0.36	0.004	
B464985	33	36	3		86.6	21.6	0.51	0.004	
B464986	36	39	3		98.2	6.83	0.8	0.008	
B464987	39	42	3		5.4	1.08	0.18	0.001	
B464988	39	42	3	DUPLICATE	5.3	1.19	0.19	0.002	
B464989	42	45	3		13.2	0.92	0.82	0.013	
B464990	45	48	3		105	4.6	0.29	0.01	
B464991	48	51	3		183	6.32	0.05	0.013	
B464992	51	54	3		309	17.95	0.07	0.011	
B464993	54	57	3		573	91.2	0.13	0.024	
B464994	57	60	3		410	162	0.08	0.02	
B464995	60	63	3		309	26.3	0.04	0.009	
B464996	63	66	3		162	26.4	0.63	0.012	
B464997	66	69	3		198	35.7	0.4	0.005	
B464998	69	72	3		322	24	0.09	0.009	
B464999				BLANK BL-10	27.3	4.01	0.02	<0.001	
B465000				STANDARD CDN-CM-37	2320	267	1.15	0.171	
B466501	72	75	3		266	13.4	1.36	0.012	
B466502	75	78	3		303	23.6	0.79	0.013	
B466503	78	81	3		398	11.25	0.26	0.017	
B466504	81	84	3		583	12.1	0.25	0.016	
B466505	84	87	3		215	9.72	0.22	0.004	
B466506	87	90	3		521	26	0.19	0.016	
B466507	90	93	3		30.6	1.99	0.03	<0.001	
B466508	90	93	3	DUPLICATE	26.8	2.37	0.05	<0.001	
B466509	93	96	3		551	29.9	0.25	0.02	
B466510	96	99	3		733	90.7	0.26	0.029	
B466511	99	102	3		748	64.5	0.25	0.029	
B466512	102	105	3		529	28.8	0.19	0.015	
B466513	105	108	3		312	60.2	0.09	0.01	
B466514	108	111	3		492	40.8	0.2	0.016	
B466515	111	114	3		492	44.1	0.14	0.017	
B466516	114	117	3		607	31.1	2.84	0.018	
B466517	117	120	3		611	53	0.39	0.021	
B466518	120	123	3		37.4	3.34	0.18	0.002	
B466519				STANDARD CDN-CM-33	3680	251	2.35	0.018	
B466520				BLANK BL-10	28.2	4.2	0.03	<0.001	
B466521	123	126	3		4.2	0.89	0.03	<0.001	
B466522	126	129	3		55.1	2.62	0.63	<0.001	
B466523	129	132	3		440	14.95	0.42	0.008	
B466524	132	135	3		1475	32	2.05	0.047	
B466525	135	138	3		2590	25.9	1.25	0.08	
B466526	138	141	3		1765	13.55	1.04	0.06	
B466527	141	144	3		1685	25.3	0.92	0.06	
B466528	141	144	3	DUPLICATE	1790	29.4	1.05	0.067	

21-PC-136			SAMPLE DATA						
SAMPLE	INTERVAL (m)		LENGTH	TYPE	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62
NUMBER	FROM	TO	(m)	STD/Dup/B/Met	ppm Cu	ppm Mo	ppm Ag	ppm Au	% Cu
B466529	144	147	3		1865	29.8	0.74	0.056	
B466530	147	150	3		2130	38.2	0.61	0.06	
B466531	150	153	3		1870	18.45	0.96	0.056	
B466532	153	156	3		2560	20.8	1.77	0.083	
B466533	156	159	3		2320	16.2	2.85	0.077	
B466534	159	162	3		2100	14.8	10.8	0.071	
B466535	162	165	3		2580	16.55	7.56	0.098	
B466536	165	168	3		2540	31.7	2.27	0.092	
B466537	168	171	3		1750	19.1	2	0.067	
B466538	171	174	3		2430	23.8	3.05	0.089	
B466539				STANDARD CDN-CM-37	2170	260	1.12	0.164	
B466540				BLANK BL-10	24.6	3.75	0.02	0.006	
B466541	174	177	3		2610	20.1	3.28	0.092	
B466542	177	180	3		1800	20.2	2.87	0.063	
B466543	180	183	3		2110	12.45	2.95	0.08	
B466544	183	186	3		1735	19.95	2.15	0.067	
B466545	186	189	3		1535	13.9	1.11	0.046	
B466546	189	192	3		2760	16.7	3.42	0.095	
B466547	192	195	3		2080	22	2.25	0.064	
B466548	192	195	3	DUPLICATE	1995	22.9	2.17	0.064	
B466549	195	198	3		3200	16.9	2.04	0.113	
B466550	198	201	3		3250	16.15	4.18	0.108	
B466551	201	204	3		2110	36.6	3.05	0.069	
B466552	204	207	3		2910	12.05	1.16	0.095	
B466553	207	210	3		3000	11.75	5.16	0.09	
B466554	210	213	3		4460	5.86	2.7	0.156	
B466555	213	216	3		2430	10.05	6.08	0.095	
B466556	216	219	3		547	6.51	1.25	0.023	
B466557	219	222	3		511	6.8	0.67	0.017	
B466558	222	225	3		541	17.7	0.49	0.018	
B466559				BLANK BL-10	26.8	3.88	0.03	<0.001	
B466560	225	228	3		640	4.62	0.28	0.015	
B466561				STANDARD CDN-CM-33	3480	240	2.37	0.025	
B466562	228	231	3		632	7.04	0.37	0.017	
B466563	231	234	3		527	5	0.23	0.014	
B466564	234	237	3		514	6.66	0.32	0.013	
B466565	237	240	3		3700	21.6	1.11	0.118	
B466566	240	243	3		3810	9.86	1.31	0.14	
B466567	243	246	3		4210	10.4	1.38	0.146	
B466568	243	246	3	DUPLICATE	3870	12.35	1.38	0.138	
B466569	246	249	3		5140	21.7	1.66	0.152	
B466570	249	252	3		3870	10.5	14.35	0.366	
B466571	252	255	3		4330	7.61	2.63	0.13	
B466572	255	258	3		5220	39.6	3.89	0.163	
B466573	258	261	3		4040	20.8	3.77	0.13	
B466574	261	264	3		4410	5.16	2.53	0.126	
B466575	264	267	3		5270	8.86	3.95	0.192	
B466576	267	270	3		5030	9.34	2.7	0.184	
B466577	270	273	3		4330	6.98	6.17	0.195	
B466578	273	276	3		4470	10.5	4.84	0.205	
B466579				STANDARD CDN-CM-37	2140	263	1.13	0.182	
B466580				BLANK BL-10	27.6	3.73	0.02	<0.001	
B466581	276	279	3		3050	21.4	2.02	0.114	
B466582	279	282	3		3830	20.1	4.91	0.145	
B466583	282	285	3		33.5	1.24	0.45	0.015	
B466584	285	288	3		18.4	1.41	0.25	0.008	

21-PC-136			SAMPLE DATA						
SAMPLE	INTERVAL (m)		LENGTH	TYPE	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62
NUMBER	FROM	TO	(m)	STD/Dup/B/Met	ppm Cu	ppm Mo	ppm Ag	ppm Au	% Cu
B466585	288	291	3		14.7	1.16	0.17	0.003	
B466586	291	294	3		12.2	1.56	0.65	0.061	
B466587	294	297	3		5.8	1.6	0.36	0.016	
B466588	294	297	3	DUPLICATE	6.3	1.61	0.57	0.027	
B466589	297	300	3		10.8	1.66	0.9	0.04	
B466590	300	303	3		5.2	2.27	0.93	0.049	
B466591	303	306	3		6	1.13	0.71	0.063	
B466592	306	309	3		9.2	2.51	5.09	0.031	
B466593	309	312	3		3.4	1.12	0.52	0.006	
B466594	312	315	3		4.4	1.19	2.27	0.031	
B466595	315	318	3		3.6	1.26	1.47	0.033	
B466596	318	321	3		13.8	1.36	0.23	0.002	
B466597	321	324	3		12.2	0.88	0.96	0.004	
B466598	324	327	3		13.8	1.14	0.47	0.001	
B466599				STANDARD CDN-CM-33	3540	237	2.18	0.022	
B466600				BLANK BL-10	24.2	3.96	0.03	<0.001	
B466601	327	330	3		4.1	1.04	0.19	0.023	
B466602	330	333	3		2	0.71	0.16	0.016	
B466603	333	336	3		1.9	0.95	0.22	0.003	
B466604	336	339	3		2.3	1.14	0.29	0.005	
B466605	339	342	3		246	17.65	2.23	0.1	
B466606	342	345	3		4.9	1.79	0.31	0.053	
B466607	345	348	3		2220	1.58	4.73	0.4	
B466608	345	348	3	DUPLICATE	2480	1.69	4.53	0.139	
B466609	348	351	3		6640	2.73	6.35	0.295	
B466610	351	354	3		6530	4.45	6.99	0.193	
B466611	354	357	3		5960	4.24	7.76	0.222	
B466612	357	360	3		4490	15.7	8.02	0.14	
B466613	360	363	3		6600	8.44	9.21	0.189	
B466614	363	366	3		5170	8.69	6.8	0.138	
B466615	366	369	3		3340	3.76	5.14	0.099	
B466616	369	372	3		2340	3.03	5.36	0.07	
B466617	372	375	3		1440	3.46	1.44	0.057	
B466618	375	378	3		1690	4.01	0.62	0.045	
B466619				STANDARD CDN-CM-37	2180	253	1.17	0.173	
B466620				BLANK BL-10	26.2	4	0.02	<0.001	
B466621	378	381	3		1940	4.24	1.01	0.056	
B466622	381	384	3		1520	5.38	0.86	0.053	
B466623	384	387	3		1960	4.82	1.28	0.057	
B466624	387	390	3		2100	5.09	1.88	0.082	
B466625	390	393	3		1905	6.23	3.62	0.053	
B466626	393	396	3		1300	4.29	9.99	0.065	
B466627	396	399	3		320	2.03	7.88	0.081	
B466628	396	399	3	DUPLICATE	290	1.89	6.46	0.058	
B466629	399	402	3		14.5	0.93	0.26	0.002	
B466630	402	405	3		8.3	1.35	1.02	0.053	
B466631	405	408	3		6.2	1.17	0.52	0.081	
B466632	408	411	3		6.8	1.21	0.36	0.018	
B466633	411	414	3		12.2	1.62	0.68	0.027	
B466634	414	417	3		21.3	1.53	0.54	0.069	
B466635	417	420	3		2220	1.68	3.48	0.041	
B466636	420	423	3		5560	3.18	4.82	0.138	
B466637	423	426	3		7350	3.96	7.61	0.211	
B466638	426	429	3		3620	245	2.48	0.02	
B466639				STANDARD CDN-CM-33	28.1	4.3	0.02	0.004	
B466640				BLANK BL-10	3110	3.14	1.73	0.078	

21-PC-136			SAMPLE DATA						
SAMPLE	INTERVAL (m)		LENGTH	TYPE	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62
NUMBER	FROM	TO	(m)	STD/Dup/B/Met	ppm Cu	ppm Mo	ppm Ag	ppm Au	% Cu
B466641	429	432	3		2230	2.26	1.41	0.064	
B466642	432	435	3		1225	2.1	1.37	0.038	
B466643	435	438	3		1210	2.17	2.78	0.033	
B466644	438	441	3		1325	1.95	1.03	0.032	
B466645	441	444	3		764	6.08	0.72	0.025	
B466646	444	447	3		465	1.63	1.08	0.012	
B466647	447	450	3		442	2.65	0.75	0.012	
B466648	447	450	3	DUPLICATE	361	1.98	0.59	0.018	
B466649	450	453	3		436	2.3	1.06	0.013	
B466650	453	456	3		20.9	1.68	0.72	<0.001	
B466651	456	459	3		8.1	1.65	0.24	<0.001	
B466652	459	462	3		22.2	2.6	1.89	0.003	
B466653	462	465	3		322	2.15	1.59	0.016	
B466654	465	468	3		641	2.41	0.86	0.039	
B466655	468	471	3		631	5.31	0.54	0.024	
B466656	471	474	3		126.5	1.06	0.83	0.005	
B466657	474	477	3		4	0.8	0.04	<0.001	
B466658	477	480	3		202	1.25	0.41	0.009	
B466659	480	483	3		2120	237	1.1	NSS	
B466660				STANDARD CDN-CM-37	26.3	4.37	0.02	<0.001	
B466661				BLANK BL-10	399	1.63	0.49	0.013	
B466662	483	486	3		579	1.78	0.92	0.017	
B466663	486	489	3		478	1.3	0.88	0.015	
B466664	489	492	3		399	1.36	0.69	0.008	
B466665	492	495	3		631	2.53	0.53	0.014	
B466666	495	498	3		661	2.15	0.44	0.016	
B466667	498	501	3		455	1.71	0.69	0.01	
B466668	501	504	3		600	2.47	0.72	0.014	

Map Key

- Historical Drill Holes
- 2021 Drill Holes
- Cross Section Lines

631,500 632,000 632,500

5,987,000

21-PC-135 — 5,987,000N

21-PC-133 — 5,986,925N

21-PC-134 — 5,986,900N

21-PC-136

21-PC-132 — 5,986,850N

21-PC-131 — 5,986,800N

5,986,500

N

0 100 Metres

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Document Path: D:\Projects\Mining_Projects\Poplar_Project\02_GIS_Data\MXD\Assessment_Report\Poplar_Drill_Section_Location_Map_Mar_2022.mxd

Map Notes:
1: Datum: North American 1983 CSRS
2. Projection: NAD 1983 CSRS UTM Zone 9N

Date: March 8, 2022

Drawn By: [redacted]

Project: Poplar Project

Client:

Figure: #
2021 Drill Collars

631000 E
631200 E
631400 E
631600 E
631800 E
632000 E
632200 E

1000 RL
800 RL
600 RL
400 RL
200 RL
0 RL

21-PC-131

HOLES PLOTTED

TOTAL 1

21-PC-131

TOPOGRAPHY

50kdem_ft.flt

ROCK CODES	PAT	LABEL	DESCRIPTION
Rockcode2		OVBD	Overburden
		FELINT	Felsic Intrusives

VALUES	L/R	COL	RANGE
Cu_ppm	R		6705
			4860
			4188
			3620
			3103
			2640
			1533

SECTION SPECS:

REF. PT. E_N	631640 m	5986800 m
EXTENTS	1453 m	1255 m
SECTION TOP, BOT	1184 m	-70.39 m
TOLERANCE +/-	25 m	

SCALE

(m)

-20 0 20 40 60

NAD83(CSRS) / UTM zone 9N

AZIMUTH = 90°

N W E S

631000 E
631200 E
631400 E
631600 E
631800 E
632000 E
632200 E

1000 RL
800 RL
600 RL
400 RL
200 RL
0 RL

21-PC-132

HOLES PLOTTED

TOTAL 1

21-PC-132

TOPOGRAPHY

50kdem_ft.flt

ROCK CODES	PAT	LABEL	DESCRIPTION
Rockcode2		OVBD	Overburden
		FELINT	Felsic Intrusives
		VOLC	Volcanics
		QFPDYK	

VALUES	L/R	COL	RANGE
Cu_ppm	R		5705
			4860
			4188
			3620
			3103
			2640
			1533

SECTION SPECS:

REF. PT. E, N	631640 m	5986850 m
EXTENTS	1453 m	1255 m
SECTION TOP, BOT	1184 m	-70.39 m
TOLERANCE +/-	25 m	

SCALE

(m)

-20 0 20 40 60

NAD83(CSRS) / UTM zone 9N

AZIMUTH = 90°

N

W E

S

631000 E
631200 E
631400 E
631600 E
631800 E
632000 E
632200 E

1000 RL
800 RL
600 RL
400 RL
200 RL
0 RL

21-PC-133

HOLES PLOTTED

TOTAL 1

21-PC-133

TOPOGRAPHY

50kdem_flt.flt

ROCK CODES	PAT	LABEL	DESCRIPTION
Rockcode2		OVBD	Overburden
		FELINT	Felsic Intrusives
		QFPDYK	

VALUES	L/R	COL	RANGE
Cu_ppm	R		5705
			4860
			4188
			3620
			3103
			2640
			1533

SECTION SPECS:

REF. PT. E, N	631640 m	5986925 m
EXTENTS	1453 m	1255 m
SECTION TOP, BOT	1184 m	-70.39 m
TOLERANCE +/-	25 m	

SCALE

(m)

-20 0 20 40 60

NAD83(CSRS) / UTM zone 9N

AZIMUTH = 90°

N W E S

631200 E
631400 E
631600 E
631800 E
632000 E
632200 E
632400 E

1000 RL
800 RL
600 RL
400 RL
200 RL
0 RL

21-PC-134
21-PC-136

HOLES PLOTTED

TOTAL 2

21-PC-134 21-PC-136

TOPOGRAPHY

50kdem_flt.flt

ROCK CODES	PAT	LABEL	DESCRIPTION
Rockcode2		OVBD	Overburden
		FELINT	Felsic Intrusives
		VOLC	Volcanics
		QFPDYK	

VALUES	L/R	COL	RANGE
Cu_ppm	R		5705
			4860
			4158
			3620
			3103
			2540
			1533

SECTION SPECS:

REF. PT E, N	631750 m	5986900 m
EXTENTS	1453 m	1255 m
SECTION TOP, BOT	1184 m	-70.39 m
TOLERANCE +/-	25 m	

SCALE

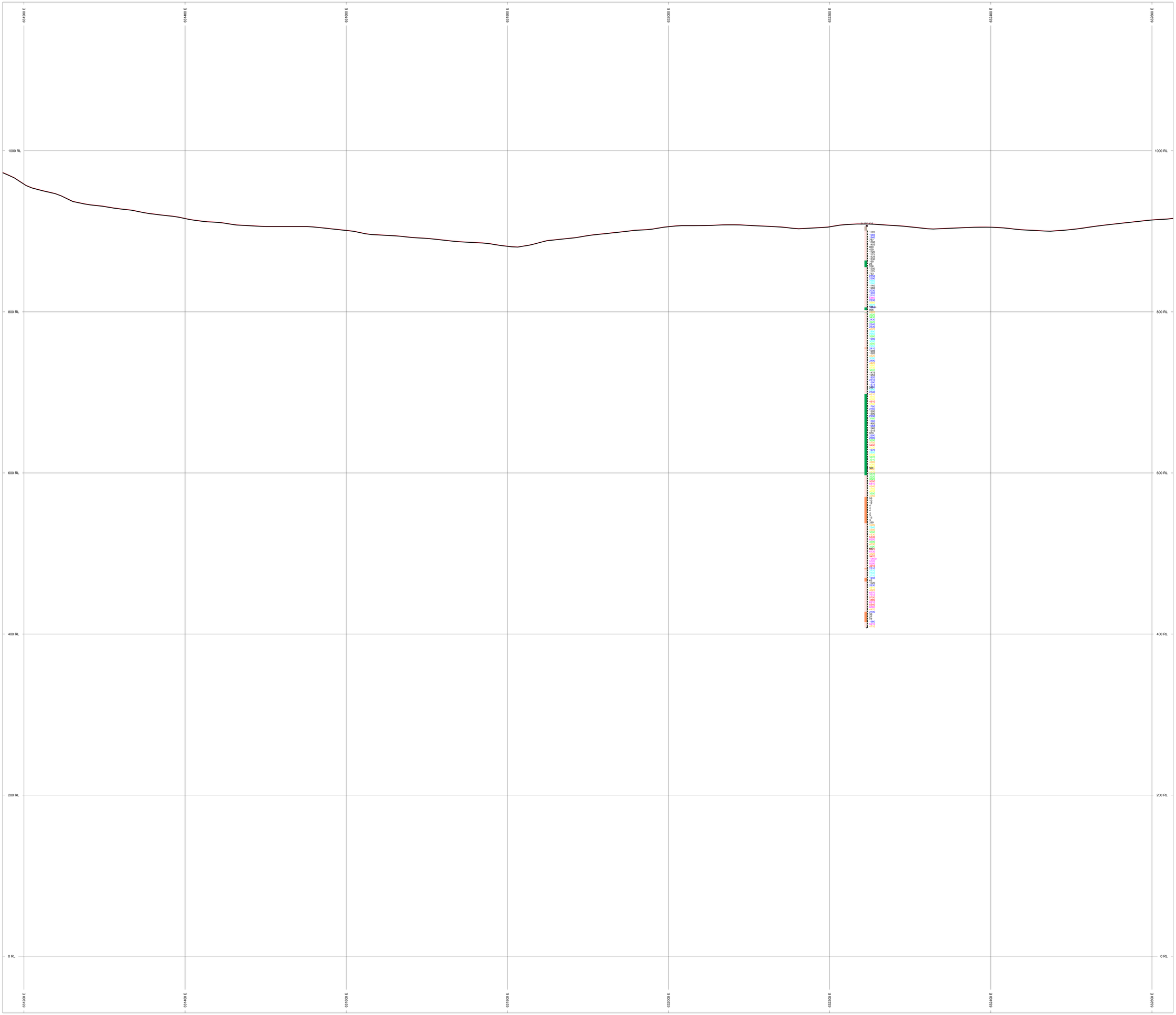
(m)

-20 0 20 40 60

NAD83(CSRS) / UTM zone 9N

AZIMUTH = 90°

N W E S



HOLES PLOTTED

TOTAL 1

21-PC-135

TOPOGRAPHY

50kdem_ft.flt

ROCK CODES	PAT	LABEL	DESCRIPTION
Rockcode2		OVBD	Overburden
		FELINT	Felsic Intrusives
		VOLC	Volcanics
		QFPDYK	

VALUES	L/R	COL	RANGE
Cu_ppm	R		5705
			4860
			4188
			3620
			3103
			2640
			1533

SECTION SPECS:

REF. PT. E, N	631900 m	5987000 m
EXTENTS	1453 m	1255 m
SECTION TOP, BOT	1184 m	-70.39 m
TOLERANCE +/-	25 m	

SCALE

(m)

-20 0 20 40 60

NAD83(CSRS) / UTM zone 9N

AZIMUTH = 90°

N W E S

631200 E
631400 E
631600 E
631800 E
632000 E
632200 E
632400 E
632600 E

1000 RL
800 RL
600 RL
400 RL
200 RL
0 RL

21-PC-134
21-PC-136

HOLES PLOTTED

TOTAL 2

21-PC-134 21-PC-136

TOPOGRAPHY

50kdem_flt.flt

ROCK CODES	PAT	LABEL	DESCRIPTION
Rockcode2		OVBD	Overburden
		FELINT	Felsic Intrusives
		VOLC	Volcanics
		QFPDYK	

VALUES	L/R	COL	RANGE
Cu_ppm	R		5705
			4860
			4158
			3620
			3103
			2540
			1533

SECTION SPECS:

REF. PT. E, N	631900 m	5986900 m
EXTENTS	1453 m	1255 m
SECTION TOP, BOT	1184 m	-70.39 m
TOLERANCE +/-	25 m	

SCALE

(m)

-20 0 20 40 60

NADS3(CSRS) / UTM zone 9N

AZIMUTH = 90°

N W E S

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

Finalized Date: 11-JAN-2022
Account: MAMGEO

CERTIFICATE VA21285386

Project: Poplar

This report is for 192 samples of Drill Core submitted to our lab in Vancouver, BC, Canada on 20-OCT-2021.

The following have access to data associated with this certificate:

TIM HENNEBERRY		

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-21	Sample logging - ClientBarCode
SND-01	Send samples to external laboratory
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 up to 250g 85% <75 um
LOG-23	Pulp Login - Rcvd with Barcode
SPL-21X	Addnl Crush Split w No Analysis

ANALYTICAL PROCEDURES

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

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:

Saa Traxler, General Manager, North Vancouver

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CERTIFICATE OF ANALYSIS VA21285386

Sample Description	Method / Analyte / Units / LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	ME-MS61 Ag ppm 0.01	ME-MS61 Al % 0.01	ME-MS61 As ppm 0.2	ME-MS61 Ba ppm 10	ME-MS61 Be ppm 0.05	ME-MS61 Bi ppm 0.01	ME-MS61 Ca % 0.01	ME-MS61 Cd ppm 0.02	ME-MS61 Ce ppm 0.01	ME-MS61 Co ppm 0.1	ME-MS61 Cr ppm 1	ME-MS61 Cs ppm 0.05	ME-MS61 Cu ppm 0.2
B464001		9.84	0.177	0.71	6.84	175.5	590	0.78	0.10	3.15	0.20	38.1	12.4	31	3.30	5510
B464002		11.96	0.108	0.55	7.32	70.0	540	1.01	0.09	2.52	0.21	44.3	12.3	29	5.51	3330
B464003		10.46	0.116	0.68	7.76	30.8	620	0.99	0.09	2.25	0.12	45.1	10.8	37	6.22	3030
B464004		11.74	0.080	26.5	5.40	392	210	1.03	0.16	2.17	17.65	36.7	12.6	19	9.76	1890
B464005		11.08	0.121	15.15	6.20	473	730	1.02	0.18	2.95	12.95	42.0	13.6	25	8.91	3070
B464006		4.04	0.100	3.56	6.79	231	460	1.05	0.09	3.58	1.24	42.9	13.4	34	6.57	2810
B464007		10.66	0.120	7.59	6.75	245	610	0.95	0.11	4.22	4.03	43.3	12.6	31	6.79	3470
B464008		11.18	0.139	3.53	6.78	115.5	580	0.87	0.14	3.19	1.26	41.6	16.6	30	6.93	3950
B464009		10.84	0.093	4.09	6.18	97.4	610	1.18	0.15	3.71	3.33	39.9	11.9	26	11.85	2790
B464010		11.48	0.167	7.33	6.61	281	530	0.98	0.44	3.76	6.20	36.9	13.6	29	8.52	4730
B464011		10.38	0.116	7.44	6.43	271	610	1.05	0.12	3.08	5.85	35.0	12.3	29	8.44	3180
B464012		10.96	0.134	24.0	6.29	111.0	580	1.10	0.18	2.86	3.99	37.4	17.7	26	13.35	3900
B464013		11.20	0.220	31.0	6.77	313	600	0.98	0.17	3.48	8.29	41.5	11.8	29	6.65	6420
B464014		9.86	0.141	1.83	7.66	17.2	650	1.05	0.09	2.56	0.16	48.9	12.7	35	5.45	4490
B464015		10.64	0.142	1.07	7.44	15.1	810	0.97	0.11	1.98	0.27	50.0	10.1	51	5.41	4580
B464016		4.72	0.179	5.22	5.97	49.6	650	0.86	0.13	1.95	1.27	59.7	9.4	99	4.71	5220
B464017		4.46	0.184	0.94	6.93	13.4	720	1.00	0.08	1.27	0.11	48.4	10.9	99	3.20	5000
B464018		4.54	0.155	0.87	6.71	9.1	770	0.98	0.07	1.23	0.10	48.4	9.3	96	3.21	4510
B464019		0.06	NSS	1.13	8.60	47.0	460	1.01	0.54	2.32	1.03	29.7	14.6	20	6.96	2230
B464020		0.06	NSS	0.02	7.22	1.8	860	1.10	0.03	1.71	<0.02	25.3	3.8	25	0.39	25.1
B464022		10.12	0.089	0.68	6.82	4.4	810	1.31	0.10	1.26	0.35	41.1	7.9	94	3.11	2630
B464023		8.46	0.122	0.63	7.49	5.3	740	1.27	0.10	1.44	0.21	41.9	9.4	98	3.57	3240
B464024		9.46	0.092	0.53	7.22	1.0	590	1.34	0.07	1.22	0.14	43.4	8.9	95	3.63	2740
B464025		9.58	0.099	3.21	6.62	84.7	760	1.28	0.08	1.95	1.54	42.9	9.7	84	6.30	3250
B464026		9.56	0.131	0.69	7.79	1.7	1070	1.44	0.06	1.19	0.16	44.9	9.9	96	3.70	4120
B464027		7.84	0.143	0.81	7.44	3.1	870	1.30	0.08	1.22	0.16	52.9	11.7	80	3.10	4060
B464028		5.20	0.124	0.72	7.54	16.2	1080	1.37	0.06	1.40	0.16	51.6	11.9	90	3.28	3770
B464029		3.44	0.139	0.82	7.83	2.4	1070	1.28	0.07	0.93	0.19	54.4	13.2	96	2.89	4290
B464030		0.06	NSS	2.46	6.81	31.8	720	1.29	1.68	1.95	1.01	36.8	35.4	234	3.29	3550
B464031		4.44	0.137	0.72	6.91	146.0	970	1.06	0.07	3.14	0.19	43.2	12.8	22	4.45	4090
B464032		4.40	0.088	0.42	7.75	7.0	940	1.25	0.05	1.65	0.15	53.2	8.9	19	4.22	2320
B464033		5.44	0.145	0.56	7.10	71.3	750	0.98	0.06	2.38	0.16	47.6	9.0	19	3.88	3550
B464034		4.94	0.085	0.48	7.56	93.9	790	1.07	0.07	2.25	0.11	45.4	10.1	19	3.86	2590
B464035		5.06	0.085	0.50	6.86	64.1	440	1.09	0.08	1.82	0.07	33.6	8.7	80	3.24	2680
B464036		0.06	0.002	0.02	6.73	2.0	800	1.01	0.02	1.59	0.02	23.4	3.4	23	0.35	25.8
B464037		3.04	0.076	0.43	7.02	61.4	340	1.27	0.07	1.88	0.09	37.7	10.0	88	3.50	2290
B464038		2.40	0.078	0.45	6.96	73.7	350	1.25	0.06	1.94	0.12	42.0	10.4	87	3.56	2510
B464039		3.92	0.107	0.74	6.99	45.6	740	1.28	0.09	2.57	0.17	44.6	13.0	86	3.35	3220
B464041		5.98	0.088	0.77	7.56	64.3	740	1.47	0.10	2.64	0.31	41.7	27.8	94	3.76	3130
B464042		6.36	0.113	0.86	7.19	103.0	590	1.27	0.07	2.22	0.19	41.9	12.1	83	3.52	3480

***** 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: 11-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21285386

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
B464001		3.10	14.50	0.11	0.4	0.080	1.48	18.6	26.6	1.11	559	99.8	0.18	4.2	17.4	1130
B464002		2.99	15.55	0.14	0.6	0.060	2.00	22.0	17.4	1.46	383	254	1.70	5.4	19.2	1340
B464003		3.19	16.15	0.17	0.5	0.050	2.43	23.3	12.8	1.55	601	99.9	2.03	5.6	16.5	1390
B464004		3.73	11.75	0.13	0.3	0.050	2.26	18.5	22.3	0.95	12750	108.5	0.04	3.2	14.9	890
B464005		3.11	13.50	0.13	0.3	0.079	2.34	20.8	25.4	1.18	6270	71.7	0.07	4.4	18.6	1110
B464006		2.69	15.90	0.14	0.4	0.067	1.79	19.7	33.2	1.13	1940	113.5	0.08	6.0	16.9	1240
B464007		2.81	15.00	0.16	0.4	0.067	1.70	21.3	33.6	1.30	2860	62.4	0.07	5.8	16.0	1180
B464008		3.42	14.35	0.14	0.5	0.087	2.34	21.4	25.2	1.59	1860	65.2	0.12	5.5	20.1	1130
B464009		2.79	13.80	0.14	0.5	0.066	2.27	19.7	24.7	1.23	2830	41.9	0.09	4.9	14.6	1050
B464010		3.71	15.10	0.15	0.4	0.133	2.25	18.3	23.9	1.30	3150	33.2	0.07	5.1	18.9	1170
B464011		2.81	14.60	0.14	0.4	0.066	2.20	16.3	28.8	1.14	4850	53.4	0.08	5.0	18.9	1190
B464012		2.85	13.80	0.16	0.5	0.084	2.41	18.4	24.8	1.05	4740	85.8	0.47	4.4	24.7	1100
B464013		3.01	14.00	0.17	0.5	0.108	2.32	20.4	31.5	1.45	2250	59.5	0.18	4.6	24.1	1200
B464014		2.73	16.35	0.19	0.5	0.095	2.43	23.3	16.5	1.44	512	121.0	1.99	5.7	25.8	1350
B464015		2.52	14.40	0.20	0.4	0.093	2.90	24.1	12.8	1.25	366	114.0	2.26	4.7	28.7	1120
B464016		2.18	11.85	0.18	0.4	0.115	2.42	29.3	17.2	0.98	875	97.5	1.20	4.6	34.8	760
B464017		2.35	12.25	0.20	0.4	0.119	2.84	24.7	12.2	1.06	287	161.5	2.50	4.6	36.6	640
B464018		2.14	12.30	0.19	0.4	0.116	2.84	24.6	11.3	0.98	258	136.5	2.47	4.5	35.2	550
B464019		4.65	17.80	0.15	0.2	0.099	2.57	15.1	30.7	0.99	976	266	1.66	5.7	11.7	750
B464020		2.58	13.80	0.17	1.9	0.023	1.90	14.3	2.9	0.41	605	4.47	3.34	5.9	14.7	380
B464022		2.15	11.25	0.23	0.3	0.063	3.12	21.5	12.6	1.09	273	55.1	2.20	5.6	32.7	420
B464023		2.26	12.40	0.14	0.5	0.081	3.04	22.2	11.0	1.14	248	70.0	2.59	5.9	38.9	460
B464024		2.08	12.60	0.14	0.4	0.066	2.70	21.8	11.6	1.19	175	69.2	2.98	6.2	38.5	510
B464025		1.96	12.55	0.15	0.4	0.076	3.20	21.6	20.3	0.98	1340	76.7	0.95	5.5	37.4	470
B464026		2.37	13.50	0.16	0.3	0.077	3.73	22.6	7.8	1.28	193	90.5	2.88	6.2	44.6	510
B464027		2.36	13.30	0.16	0.5	0.092	3.32	28.0	10.6	1.15	184	142.5	2.86	6.5	42.8	620
B464028		2.26	13.25	0.17	0.5	0.080	3.68	26.8	10.6	1.21	269	125.5	2.77	6.1	47.6	570
B464029		2.43	12.80	0.20	0.5	0.092	3.81	28.5	11.5	1.29	179	144.5	3.22	7.3	50.8	620
B464030		4.10	15.20	0.18	0.6	0.097	3.10	17.2	10.7	3.70	406	244	1.18	3.2	233	1040
B464031		2.15	13.95	0.16	0.6	0.095	2.61	21.0	34.5	1.14	227	96.8	1.27	6.9	24.4	1070
B464032		1.78	14.40	0.17	0.8	0.053	3.00	27.2	21.7	1.05	171	132.0	2.95	6.4	17.0	1160
B464033		1.79	13.65	0.15	0.7	0.074	2.62	23.2	17.0	0.87	228	110.5	1.67	5.8	20.1	1190
B464034		1.98	14.50	0.13	0.7	0.062	2.17	22.5	18.3	0.86	348	180.5	1.76	5.7	21.2	1160
B464035		1.71	11.75	0.13	0.4	0.060	1.84	17.0	17.0	0.80	291	150.0	1.97	5.3	29.6	580
B464036		2.38	12.05	0.09	1.7	0.021	1.77	12.2	2.5	0.38	563	3.74	3.11	5.4	13.0	340
B464037		1.80	12.45	0.11	0.5	0.057	1.75	18.2	14.1	0.93	222	106.5	2.71	5.7	37.0	580
B464038		1.79	12.95	0.12	0.5	0.064	1.70	19.9	15.1	0.92	225	125.0	2.62	5.9	37.8	590
B464039		1.90	12.75	0.13	0.5	0.069	2.47	21.5	23.2	0.99	409	210	1.05	4.6	42.7	620
B464041		2.32	14.45	0.13	0.5	0.073	2.73	20.3	32.8	1.15	451	115.0	0.16	6.2	44.1	650
B464042		2.11	12.95	0.12	0.5	0.066	2.42	20.9	31.2	0.95	436	190.0	0.38	5.5	40.4	630

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CERTIFICATE OF ANALYSIS VA21285386

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
B464001		9.7	27.5	0.267	1.42	1.87	8.7	4	1.2	165.5	0.25	<0.05	3.04	0.271	0.71	0.6
B464002		12.7	52.4	0.798	1.20	1.72	9.1	3	1.2	254	0.30	0.05	3.20	0.311	0.93	0.6
B464003		9.6	81.6	0.437	0.90	0.73	10.2	3	1.2	318	0.33	<0.05	3.60	0.345	1.02	0.7
B464004		729	106.5	0.364	1.61	264	6.7	3	1.2	625	0.19	0.11	2.52	0.183	1.25	0.9
B464005		621	114.0	0.278	1.24	244	8.0	3	1.1	720	0.24	0.08	3.09	0.246	1.30	0.8
B464006		70.6	50.4	0.461	0.88	10.50	10.0	3	1.0	222	0.31	0.06	3.30	0.327	1.05	0.5
B464007		378	59.1	0.231	0.89	59.4	9.2	2	1.1	221	0.31	0.06	3.46	0.311	0.92	0.7
B464008		64.4	73.0	0.233	1.22	12.10	8.4	3	1.2	173.5	0.34	0.10	3.71	0.285	1.10	0.8
B464009		195.5	81.4	0.187	1.23	19.20	7.5	2	1.2	259	0.29	0.12	3.84	0.242	1.24	1.1
B464010		325	81.2	0.155	2.07	45.4	9.0	3	1.5	239	0.28	0.29	3.22	0.274	1.28	0.8
B464011		290	74.4	0.256	1.04	78.0	8.7	2	1.2	413	0.28	<0.05	2.91	0.287	1.24	0.7
B464012		188.0	77.9	0.331	1.41	33.4	8.0	3	1.4	365	0.28	0.11	3.26	0.240	1.25	0.8
B464013		606	68.1	0.182	1.55	126.5	8.3	3	1.7	196.0	0.29	0.07	3.48	0.267	1.03	0.9
B464014		13.3	78.6	0.582	0.93	1.58	9.6	3	1.2	316	0.32	0.06	3.79	0.334	1.02	0.7
B464015		19.8	90.0	0.602	1.10	1.04	9.8	3	1.3	328	0.26	0.06	4.18	0.287	1.05	0.8
B464016		204	72.2	0.286	0.86	33.6	10.3	3	1.3	243	0.30	0.07	4.70	0.236	0.93	0.7
B464017		12.1	76.7	0.821	0.81	0.83	10.2	3	1.1	228	0.29	<0.05	4.93	0.261	0.87	0.6
B464018		11.7	78.4	0.656	0.71	0.56	10.7	3	1.1	236	0.27	<0.05	4.98	0.243	0.84	0.6
B464019		40.9	75.4	0.236	1.62	2.02	10.6	3	1.6	291	0.39	0.44	4.43	0.286	0.84	0.9
B464020		3.4	42.1	<0.002	0.01	0.32	6.3	<1	1.8	198.5	0.41	<0.05	2.85	0.181	0.17	1.3
B464022		35.8	72.8	0.226	0.51	1.10	10.1	2	1.0	229	0.34	0.05	5.45	0.272	0.88	0.6
B464023		15.3	78.7	0.264	0.74	0.46	12.3	2	0.9	260	0.35	0.05	6.31	0.293	0.82	0.7
B464024		11.7	72.9	0.283	0.42	0.10	11.8	1	0.8	269	0.37	<0.05	5.35	0.294	0.78	0.7
B464025		116.5	89.8	0.305	0.59	18.65	11.2	2	1.0	280	0.33	<0.05	5.56	0.272	1.15	0.7
B464026		12.3	84.1	0.361	0.66	0.20	13.0	2	1.0	278	0.37	<0.05	5.83	0.322	0.92	0.7
B464027		12.7	83.2	0.564	0.76	0.17	12.3	2	1.1	287	0.40	<0.05	6.59	0.291	0.83	5.5
B464028		12.8	81.8	0.454	0.67	0.23	13.2	2	1.0	282	0.37	<0.05	6.38	0.311	0.87	0.9
B464029		12.4	88.1	0.471	0.67	0.12	14.2	2	1.1	295	0.40	<0.05	6.90	0.329	0.88	0.8
B464030		20.5	85.5	0.286	2.38	7.54	12.2	3	1.4	273	0.20	1.29	2.67	0.336	1.14	1.0
B464031		10.0	42.9	0.329	0.64	0.61	7.8	2	1.0	422	0.40	<0.05	3.29	0.282	0.66	0.7
B464032		10.0	72.9	0.379	0.48	0.15	7.8	2	0.8	477	0.35	<0.05	4.23	0.272	0.77	0.9
B464033		14.0	51.9	0.463	0.63	0.35	7.4	2	0.9	292	0.34	<0.05	3.56	0.266	0.75	0.8
B464034		7.2	46.4	0.520	0.60	0.67	8.2	2	0.9	300	0.34	<0.05	3.83	0.275	0.67	0.8
B464035		6.4	45.6	0.456	0.55	0.81	10.6	1	1.0	236	0.32	<0.05	4.92	0.275	0.56	0.5
B464036		2.6	37.2	<0.002	0.01	0.27	5.5	<1	1.5	184.0	0.36	<0.05	2.56	0.169	0.14	1.1
B464037		6.8	42.2	0.356	0.40	0.50	11.6	1	0.8	284	0.33	<0.05	5.12	0.303	0.53	0.5
B464038		7.7	43.7	0.443	0.41	0.55	11.9	2	0.8	278	0.36	<0.05	5.51	0.304	0.54	0.6
B464039		10.9	46.1	0.818	0.60	1.48	11.6	1	1.1	219	0.28	<0.05	5.33	0.284	0.71	0.7
B464041		21.6	57.0	0.431	0.91	1.66	13.2	2	1.1	131.0	0.36	0.06	6.06	0.315	0.88	0.7
B464042		9.7	48.6	0.649	0.63	2.15	12.1	2	0.9	140.0	0.34	<0.05	5.54	0.300	0.72	0.7

***** 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: 11-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21285386

Sample Description	Method	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62
	Analyte	V	W	Y	Zn	Zr	Cu
	Units	ppm	ppm	ppm	ppm	ppm	%
	LOD	1	0.1	0.1	2	0.5	0.001
B464001		90	0.5	11.9	86	12.5	
B464002		101	0.4	14.5	76	23.1	
B464003		114	0.3	14.5	74	16.3	
B464004		73	5.4	10.0	2690	10.4	
B464005		90	4.2	12.0	1910	11.9	
B464006		105	0.6	12.2	207	16.7	
B464007		90	1.0	13.7	655	15.1	
B464008		93	0.5	12.5	261	15.3	
B464009		76	1.0	12.6	570	17.8	
B464010		96	1.7	12.5	908	15.7	
B464011		91	2.5	11.3	879	16.3	
B464012		88	2.0	11.7	665	16.1	
B464013		88	0.7	13.4	1260	16.8	
B464014		105	0.5	16.4	58	16.4	
B464015		96	0.8	15.6	69	11.4	
B464016		95	0.5	18.0	201	11.4	
B464017		93	0.4	14.6	47	12.0	
B464018		88	0.3	14.5	42	12.1	
B464019		112	4.5	11.9	248	4.8	
B464020		31	0.6	17.4	28	59.9	
B464022		87	0.7	11.3	82	11.5	
B464023		95	0.6	11.6	65	15.7	
B464024		95	0.4	13.0	54	13.2	
B464025		88	1.1	8.8	310	14.0	
B464026		108	0.3	10.8	59	12.1	
B464027		96	0.5	13.9	55	16.0	
B464028		104	0.4	11.5	58	15.6	
B464029		107	0.4	12.8	59	19.6	
B464030		129	18.3	10.8	188	15.7	
B464031		80	0.5	13.3	55	24.5	
B464032		72	0.4	16.3	46	28.4	
B464033		71	0.4	13.6	46	27.6	
B464034		80	0.5	12.9	41	28.6	
B464035		86	0.5	9.9	36	15.7	
B464036		29	0.5	14.5	26	53.4	
B464037		96	0.6	10.7	40	17.4	
B464038		96	0.6	11.9	42	17.6	
B464039		98	1.4	12.4	52	17.3	
B464041		104	4.2	11.8	84	19.0	
B464042		99	1.1	11.5	61	17.3	

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

Finalized Date: 11-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21285386

Sample Description	Method / Analyte / Units / LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	ME-MS61 Ag ppm 0.01	ME-MS61 Al % 0.01	ME-MS61 As ppm 0.2	ME-MS61 Ba ppm 10	ME-MS61 Be ppm 0.05	ME-MS61 Bi ppm 0.01	ME-MS61 Ca % 0.01	ME-MS61 Cd ppm 0.02	ME-MS61 Ce ppm 0.01	ME-MS61 Co ppm 0.1	ME-MS61 Cr ppm 1	ME-MS61 Cs ppm 0.05	ME-MS61 Cu ppm 0.2
B464043		5.94	0.098	1.17	6.55	76.9	800	1.09	0.07	2.29	0.19	45.0	10.5	77	4.31	3610
B464044		5.56	0.125	1.09	6.66	80.4	790	1.00	0.09	2.41	0.25	54.1	11.1	75	3.98	3930
B464045		5.40	0.143	0.96	7.42	117.5	1060	1.36	0.10	2.13	0.17	94.9	38.1	77	4.17	4710
B464046		7.12	0.145	0.85	7.84	154.0	1030	1.11	0.08	1.82	0.07	54.8	11.7	31	3.25	4660
B464047		6.14	0.133	0.99	7.50	178.5	1260	0.96	0.08	2.48	0.12	52.4	17.3	13	2.83	4540
B464048		6.38	0.150	1.25	7.15	241	1050	1.09	0.07	2.90	0.18	42.6	13.6	15	3.35	4900
B464049		5.84	0.128	3.10	6.57	704	680	0.99	0.13	3.72	3.39	76.8	37.8	16	4.63	5280
B464050		6.10	0.133	1.31	7.36	419	1010	0.95	0.07	2.63	0.33	54.7	16.4	17	2.68	5550
B464051		5.98	0.162	1.13	7.57	251	1300	0.94	0.08	1.24	0.14	50.2	20.6	16	2.80	5370
B464052		6.76	0.151	1.04	7.32	188.5	1150	0.92	0.09	1.83	0.12	55.6	10.1	16	2.88	4790
B464053		5.54	0.155	0.92	7.43	157.0	1060	1.12	0.08	2.19	0.08	48.1	11.2	18	4.03	4310
B464054		5.66	0.113	1.09	7.52	84.3	1300	0.98	0.08	1.85	0.13	51.1	15.5	17	3.38	4020
B464055		6.58	0.180	1.12	7.17	3.3	800	1.16	0.12	2.84	0.23	50.2	14.5	18	3.32	5300
B464056		6.50	0.098	1.01	7.10	19.2	600	1.12	0.07	2.64	0.32	50.7	11.6	59	5.06	3250
B464057		6.58	0.127	1.69	7.21	64.6	510	1.13	0.07	2.68	0.47	56.4	11.1	35	5.22	4000
B464058		6.24	0.142	1.87	7.24	101.0	580	0.93	0.12	3.17	0.29	49.3	14.4	13	4.68	4850
B464059		6.42	0.142	0.89	7.44	132.0	690	0.81	0.08	1.84	0.04	55.9	11.6	63	3.79	4320
B464060		6.94	0.106	0.97	7.36	80.5	700	0.95	0.07	2.19	0.16	58.1	10.0	92	5.47	3190
B464061		6.28	0.127	1.53	7.12	50.3	810	0.99	0.08	3.19	0.39	48.6	10.5	61	5.57	3850
B464062		6.00	0.112	0.92	7.16	45.9	980	1.03	0.11	2.02	0.15	43.7	16.0	90	4.38	3610
B464063		6.66	0.141	1.46	7.24	110.0	1140	1.04	0.24	2.13	0.18	49.6	15.5	81	4.32	4280
B464064		0.06	NSS	1.25	8.61	49.5	450	1.05	0.61	2.24	1.15	30.5	14.2	20	7.62	2150
B464065		0.08	<0.001	0.02	7.63	2.7	900	0.98	0.03	1.76	<0.02	25.4	3.8	26	0.40	26.0
B464066		4.04	0.063	3.72	6.50	167.5	1540	1.04	0.32	2.43	1.84	67.3	8.7	74	6.02	2770
B464067		3.82	0.084	2.44	6.82	160.5	1390	1.03	0.29	2.21	0.89	58.4	9.9	80	6.14	3170
B464068		3.64	0.132	2.06	7.01	139.0	1130	1.06	0.19	2.46	0.63	50.3	15.8	83	6.35	4270
B464069		4.10	0.138	2.21	6.76	148.0	1060	1.05	0.16	2.35	0.69	45.9	16.5	83	6.60	4340
B464070		6.14	0.081	12.15	6.75	827	1360	1.28	0.16	2.88	10.40	48.4	12.0	67	9.37	3170
B464071		7.04	0.095	4.30	7.80	103.0	970	1.56	0.09	2.23	1.48	44.4	14.9	88	8.38	3510
B464072		6.18	0.091	1.71	7.35	21.0	790	1.39	0.07	2.72	0.39	42.1	12.8	65	5.55	3120
B464073		5.38	0.093	0.92	7.64	8.5	990	1.34	0.08	2.45	0.17	54.9	11.5	83	4.75	3200
B464074		6.54	0.083	1.39	7.49	81.3	600	1.29	0.09	2.34	0.33	33.2	12.1	75	5.38	3410
B464075		7.10	0.095	1.41	7.36	103.0	1200	1.30	0.15	2.37	0.43	40.6	11.6	64	6.63	3570
B464076		6.22	0.136	1.70	7.02	165.0	800	1.08	0.15	2.33	0.23	52.5	14.7	87	5.48	4340
B464077		6.80	0.137	4.44	7.07	170.0	740	1.29	0.14	2.33	2.35	60.3	14.2	78	9.31	4230
B464078		6.52	0.192	4.51	6.80	66.9	1610	1.07	0.16	2.68	3.97	102.0	13.6	63	8.20	5630
B464079		5.46	0.149	2.63	6.62	31.6	820	1.24	0.10	3.09	0.94	63.0	15.0	77	8.65	4480
B464080		6.28	0.112	3.01	7.17	157.0	1180	1.15	0.19	3.30	1.60	48.3	18.8	52	14.50	3780
B464081		0.06	NSS	2.35	6.93	30.3	720	1.12	1.91	1.96	1.04	35.0	34.8	223	3.55	3660
B464082		0.06	0.001	0.02	7.54	2.3	890	1.08	0.03	1.74	0.02	27.8	3.9	26	0.42	29.1

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704-1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 11-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21285386

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
B464043		1.99	11.85	0.12	0.5	0.074	2.79	22.7	17.3	0.99	657	168.0	1.21	5.0	38.5	550
B464044		2.13	11.40	0.09	0.5	0.079	2.69	28.5	26.9	0.98	666	199.0	0.86	5.5	39.1	490
B464045		2.65	13.80	0.17	0.5	0.093	3.54	49.7	19.8	1.10	274	426	1.92	5.2	49.5	580
B464046		1.92	14.80	0.14	0.6	0.099	2.66	27.4	18.5	0.60	291	165.5	1.62	6.4	34.0	1220
B464047		2.16	14.20	0.14	0.6	0.092	2.81	25.5	17.3	0.65	349	123.5	1.30	5.8	30.3	1320
B464048		2.09	14.70	0.16	0.5	0.100	2.54	20.5	22.9	0.80	385	216	0.57	5.3	35.6	1260
B464049		3.22	12.15	0.14	0.5	0.112	2.83	42.1	21.0	1.21	905	217	0.21	3.5	36.2	1000
B464050		2.30	14.25	0.11	0.5	0.097	2.51	27.0	20.4	0.70	353	222	0.97	5.3	24.8	1310
B464051		1.86	14.10	0.13	0.7	0.108	3.13	25.4	15.7	0.37	217	174.0	1.75	5.1	22.2	1160
B464052		1.71	13.15	0.16	0.6	0.097	3.10	28.2	16.9	0.52	250	349	1.49	4.7	18.2	950
B464053		1.72	14.50	0.14	0.6	0.087	3.11	24.4	17.4	0.63	308	235	1.39	4.3	17.9	930
B464054		1.56	12.70	0.14	0.7	0.090	3.28	26.4	14.4	0.61	218	156.0	1.92	4.1	16.9	970
B464055		2.00	13.45	0.14	0.6	0.120	2.81	25.7	10.5	0.90	184	187.0	3.06	4.1	19.7	1040
B464056		1.84	13.60	0.15	0.5	0.073	2.71	25.8	14.2	1.08	646	195.0	2.25	5.1	22.9	820
B464057		1.82	14.25	0.15	0.8	0.087	2.41	28.7	18.8	1.11	1280	447	1.75	5.1	22.6	1000
B464058		1.95	13.90	0.12	0.9	0.102	2.55	23.2	14.1	0.98	1020	154.5	1.82	5.1	23.1	1230
B464059		1.33	13.55	0.12	0.6	0.085	2.33	28.5	19.1	0.54	230	241	1.60	4.7	27.7	910
B464060		1.71	14.15	0.13	0.5	0.073	2.59	29.6	19.1	1.09	536	208	1.16	5.0	37.6	640
B464061		1.85	14.75	0.14	0.5	0.085	2.64	24.9	24.4	1.30	945	308	0.19	5.3	35.3	810
B464062		2.01	14.20	0.13	0.5	0.083	3.00	21.0	28.7	1.16	348	228	1.20	5.1	46.0	550
B464063		2.00	14.15	0.14	0.5	0.109	3.69	24.7	19.5	0.99	468	267	1.01	3.9	45.0	640
B464064		4.55	18.90	0.12	0.2	0.113	2.55	15.1	28.5	0.97	954	257	1.62	6.2	11.9	730
B464065		2.62	13.10	0.13	1.9	0.021	2.03	13.5	2.9	0.42	638	4.45	3.52	5.8	13.2	390
B464066		1.77	12.55	0.18	0.4	0.094	3.43	39.3	21.3	1.07	1810	294	0.38	3.6	37.3	480
B464067		1.81	13.25	0.17	0.4	0.093	3.89	32.3	21.2	1.03	1720	354	0.48	3.7	40.1	550
B464068		2.08	12.75	0.15	0.4	0.098	3.68	24.6	42.3	1.09	1800	364	0.84	4.0	49.7	520
B464069		2.03	12.80	0.15	0.4	0.107	3.71	22.2	34.6	1.02	1660	262	0.77	3.9	50.9	540
B464070		2.19	12.60	0.16	0.4	0.073	2.59	25.9	47.9	1.18	5300	268	0.07	3.4	43.6	630
B464071		2.35	16.10	0.15	0.5	0.073	3.66	22.5	65.5	1.17	2180	284	1.13	5.3	57.0	710
B464072		2.00	14.70	0.15	0.5	0.067	2.92	20.4	9.3	1.12	433	224	2.79	5.4	45.2	900
B464073		1.89	14.20	0.19	0.4	0.053	3.61	28.6	21.8	1.31	593	250	1.32	3.8	46.9	710
B464074		1.90	15.10	0.15	0.6	0.069	2.69	16.5	37.5	1.12	987	179.5	1.05	4.5	45.9	730
B464075		2.18	14.80	0.16	0.5	0.078	3.50	20.2	68.0	1.08	1460	154.0	0.97	5.4	44.7	640
B464076		2.27	14.00	0.18	0.5	0.113	2.89	25.6	25.7	1.05	975	146.5	0.70	5.4	45.3	600
B464077		2.27	13.90	0.15	0.4	0.091	3.50	30.3	24.1	1.12	3500	290	0.28	4.7	48.0	580
B464078		2.25	13.25	0.21	0.3	0.128	4.28	57.4	17.8	1.10	2840	608	0.33	4.4	51.3	620
B464079		2.11	14.00	0.17	0.3	0.092	3.52	30.5	16.3	1.09	1440	216	1.36	4.5	53.9	700
B464080		2.23	14.15	0.16	0.6	0.094	3.34	26.0	27.9	1.20	3450	160.0	0.18	3.8	37.1	750
B464081		4.16	15.85	0.15	0.5	0.096	3.20	17.1	9.8	3.75	419	244	1.19	3.0	243	1060
B464082		2.61	14.25	0.14	1.9	0.022	1.98	14.4	3.3	0.42	629	4.67	3.45	6.1	14.3	380

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www.alsglobal.com/geochemistry

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

Finalized Date: 11-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21285386

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
B464043		18.5	60.9	0.634	0.65	2.46	10.4	2	0.8	240	0.28	0.05	5.42	0.254	0.78	0.7
B464044		30.0	52.1	0.907	0.85	1.86	10.6	2	1.0	311	0.32	0.06	6.18	0.276	0.69	0.7
B464045		14.4	71.5	1.275	1.34	1.14	12.4	3	1.5	315	0.33	0.08	8.91	0.281	0.87	1.2
B464046		7.9	54.2	0.522	0.73	1.64	9.4	3	1.0	257	0.39	0.05	5.84	0.284	0.70	0.7
B464047		9.1	46.7	0.500	0.87	1.98	7.0	3	0.9	298	0.41	0.06	5.35	0.258	0.71	0.8
B464048		11.8	38.3	0.702	0.73	2.87	7.1	3	0.9	226	0.35	0.05	4.01	0.264	0.70	0.7
B464049		96.9	65.0	0.594	1.98	32.7	8.0	4	1.2	226	0.23	0.07	4.37	0.192	1.03	2.2
B464050		12.6	41.9	0.596	0.98	4.11	7.2	3	1.1	288	0.36	0.05	4.55	0.261	0.71	0.9
B464051		8.2	63.0	0.572	1.00	2.20	7.3	3	1.1	269	0.30	0.05	4.47	0.247	0.79	0.9
B464052		8.1	54.7	1.085	0.69	1.43	6.8	2	0.9	278	0.28	0.05	4.45	0.239	0.78	0.6
B464053		8.3	61.8	0.735	0.70	1.14	7.4	3	0.9	231	0.27	<0.05	4.10	0.248	0.85	0.7
B464054		14.8	64.1	0.444	0.75	1.81	5.5	3	0.8	487	0.25	<0.05	4.50	0.210	0.86	0.7
B464055		13.4	64.9	0.556	2.10	0.17	6.9	2	1.0	493	0.24	0.07	3.91	0.228	0.72	0.8
B464056		26.3	70.4	0.686	1.14	3.75	10.1	2	0.8	548	0.31	0.06	4.09	0.288	0.86	0.6
B464057		37.6	63.4	1.820	0.60	4.58	8.7	2	0.8	426	0.29	0.05	3.88	0.292	0.98	0.8
B464058		32.5	51.3	0.470	0.83	3.02	6.3	3	1.0	269	0.30	0.07	3.11	0.296	0.88	0.9
B464059		8.9	47.8	0.752	0.62	3.49	7.9	3	0.9	284	0.30	<0.05	4.60	0.295	0.65	0.8
B464060		17.2	68.7	0.580	0.48	2.70	12.3	2	0.8	283	0.34	<0.05	5.62	0.322	0.88	0.7
B464061		37.2	58.6	0.847	0.58	3.77	10.8	2	0.9	272	0.38	<0.05	4.98	0.299	0.96	0.7
B464062		12.8	66.5	0.764	0.65	1.30	12.4	2	1.0	595	0.32	0.05	4.57	0.313	0.84	0.7
B464063		20.2	81.3	0.835	0.90	3.38	11.6	3	1.2	305	0.26	0.08	4.76	0.276	1.01	0.7
B464064		43.4	81.4	0.245	1.59	2.37	10.5	3	1.8	289	0.44	0.42	4.25	0.286	0.90	1.0
B464065		3.2	42.7	0.002	0.01	0.30	5.6	<1	1.8	210	0.42	<0.05	2.99	0.193	0.18	1.3
B464066		110.5	99.8	1.000	0.60	33.2	11.6	2	1.4	414	0.23	0.09	5.75	0.246	1.13	0.9
B464067		121.0	102.0	1.160	0.62	9.61	12.0	2	1.3	424	0.23	0.09	5.38	0.266	1.24	0.8
B464068		33.7	89.3	1.115	0.78	6.83	12.3	2	1.0	446	0.25	0.10	4.41	0.274	1.20	0.7
B464069		47.3	92.9	0.789	0.82	7.72	12.2	3	1.1	447	0.24	0.08	4.38	0.265	1.22	0.7
B464070		516	125.5	0.935	0.75	162.0	12.2	2	1.0	822	0.23	0.05	5.33	0.246	1.26	1.0
B464071		100.0	95.9	0.869	0.77	47.9	15.6	2	1.0	395	0.34	<0.05	5.65	0.342	1.27	1.0
B464072		35.7	78.8	0.701	1.41	9.13	12.8	2	1.0	564	0.35	<0.05	4.98	0.305	0.91	0.7
B464073		15.1	86.0	0.804	0.99	1.01	15.9	2	1.1	887	0.26	<0.05	6.06	0.293	1.02	1.0
B464074		31.0	56.9	0.665	0.61	7.79	14.4	2	1.1	306	0.31	<0.05	4.77	0.308	0.88	0.8
B464075		35.7	80.7	0.528	0.67	4.92	12.8	2	1.2	376	0.36	<0.05	4.98	0.298	1.04	0.9
B464076		22.2	78.8	0.540	0.69	2.33	14.4	2	1.1	252	0.35	<0.05	5.16	0.282	0.97	0.7
B464077		151.5	135.5	0.940	0.82	28.7	14.5	3	1.1	374	0.30	<0.05	5.46	0.288	1.60	0.8
B464078		157.5	150.0	2.16	1.34	8.45	13.6	3	1.2	7670	0.28	0.06	5.83	0.278	1.70	0.9
B464079		70.1	117.5	0.759	1.80	3.56	14.9	2	1.1	1030	0.27	<0.05	4.70	0.305	1.40	0.8
B464080		112.0	148.0	0.564	1.05	10.20	11.6	2	1.2	1470	0.25	0.07	5.15	0.247	1.62	0.9
B464081		22.4	87.2	0.295	2.42	8.01	12.4	3	1.5	280	0.21	1.37	2.62	0.340	1.19	0.9
B464082		2.9	45.6	0.002	0.01	0.34	6.1	<1	1.8	207	0.41	<0.05	2.99	0.190	0.18	1.3

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704-1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 11-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21285386

Sample Description	Method	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62
	Analyte	V	W	Y	Zn	Zr	Cu
	Units	ppm	ppm	ppm	ppm	ppm	%
	LOD	1	0.1	0.1	2	0.5	0.001
B464043		87	0.7	11.4	64	16.3	
B464044		88	1.0	9.4	73	16.7	
B464045		99	0.6	13.2	59	18.6	
B464046		82	0.5	14.7	35	18.7	
B464047		75	0.7	14.7	37	17.3	
B464048		78	0.4	13.2	65	16.0	
B464049		84	1.1	18.4	254	15.3	
B464050		80	0.5	15.0	87	15.8	
B464051		67	1.0	12.8	33	27.0	
B464052		68	0.7	12.4	29	21.2	
B464053		75	1.0	12.0	31	23.4	
B464054		54	2.6	12.0	34	22.4	
B464055		66	2.3	14.3	52	23.9	
B464056		94	0.6	12.1	76	16.5	
B464057		81	0.7	13.7	108	31.0	
B464058		83	1.1	13.4	77	37.1	
B464059		79	6.3	12.4	26	25.3	
B464060		105	1.7	11.8	59	15.9	
B464061		99	1.1	12.8	90	18.1	
B464062		109	1.0	11.5	50	17.3	
B464063		100	2.0	10.8	54	16.0	
B464064		108	4.6	12.3	243	5.8	
B464065		33	3.8	16.3	29	58.9	
B464066		93	3.4	10.8	292	13.8	
B464067		98	2.8	10.4	183	15.7	
B464068		107	1.1	9.9	144	14.2	
B464069		105	1.2	9.7	146	15.7	
B464070		99	4.0	7.9	1480	17.6	
B464071		137	1.4	9.8	246	19.6	
B464072		111	0.8	15.0	88	17.8	
B464073		128	1.5	13.1	47	15.6	
B464074		129	2.0	10.3	74	23.6	
B464075		115	1.4	9.1	101	19.4	
B464076		117	1.1	11.5	71	18.1	
B464077		109	1.5	11.0	421	13.4	
B464078		99	1.4	13.4	710	11.8	
B464079		108	1.0	19.3	200	10.1	
B464080		91	1.5	11.3	304	17.5	
B464081		130	19.3	11.4	188	17.4	
B464082		32	0.7	17.7	29	61.8	

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VANCOUVER BC V6E 4K2

Finalized Date: 11-JAN-2022
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Project: Poplar

CERTIFICATE OF ANALYSIS VA21285386

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
B464083		6.28	0.061	3.31	7.46	288	1260	1.28	0.40	2.70	1.99	51.8	20.7	12	8.82	2680
B464084		6.90	0.036	5.37	7.30	79.7	1000	1.28	0.68	3.13	3.58	38.5	17.6	26	9.59	1420
B464085		6.42	0.050	2.18	7.67	181.5	1140	1.25	0.59	3.13	0.93	40.1	36.9	24	8.68	2420
B464086		3.24	0.088	3.30	7.38	785	1120	1.15	0.41	2.69	2.79	41.6	29.5	17	7.73	2750
B464088		3.74	0.110	3.05	6.86	1290	1180	1.15	0.37	2.07	1.37	57.1	14.8	10	6.79	4550
B464089		3.64	0.075	4.62	6.77	1375	810	1.10	0.51	1.93	1.68	74.5	18.1	10	6.89	4620
B464090		6.38	0.056	2.83	7.34	234	970	1.32	0.41	2.57	1.58	40.8	24.1	18	6.63	3960
B464091		6.54	0.135	1.80	7.35	66.2	940	1.35	0.52	2.80	0.20	47.5	26.3	17	7.15	3550
B464092		6.38	0.168	1.56	7.47	90.0	1000	1.28	0.52	2.88	0.19	50.2	39.1	18	6.39	2680
B464093		5.96	0.199	2.79	6.86	16.8	930	1.09	0.92	2.93	0.14	37.3	18.9	13	3.66	4910
B464094		6.24	0.149	1.84	7.19	153.0	1030	1.07	0.41	2.87	0.19	37.3	17.4	12	4.45	6770
B464095		6.02	0.240	3.56	7.15	48.5	830	1.23	0.63	2.13	0.14	32.5	40.0	13	4.96	>10000
B464096		6.32	0.161	2.36	6.94	77.2	990	1.26	0.45	1.92	0.16	20.1	19.8	16	4.49	6490
B464097		6.56	0.214	2.52	7.19	108.5	1020	1.16	0.59	2.71	0.31	27.2	33.3	19	5.48	5170
B464098		6.40	0.176	3.61	6.89	196.0	1170	1.03	0.57	2.00	0.28	24.9	24.2	23	4.78	8270
B464099		6.52	0.119	2.92	6.61	361	1470	1.05	0.44	2.34	0.62	24.4	27.7	20	5.53	7170
B464100		3.42	0.088	2.56	6.21	108.0	940	1.15	0.53	3.37	0.22	88.3	21.9	18	5.13	7700
B464101		0.08	0.198	1.27	8.26	49.8	450	1.04	0.56	2.17	1.11	29.5	15.8	19	7.40	2200
B464102		0.08	0.003	0.02	6.96	2.4	830	1.10	0.03	1.61	0.03	25.2	3.8	24	0.40	26.6
B464103		1.10	0.847	12.00	4.40	188.5	280	0.87	0.95	4.13	0.59	76.0	9.6	11	4.37	>10000
B464105		3.56	0.178	2.24	6.32	1545	1090	1.04	0.26	2.24	1.25	63.4	13.4	13	4.98	7110
B464106		3.76	0.170	2.62	6.39	1445	1100	1.16	0.31	2.18	0.94	75.4	14.0	13	5.25	7460
B464107		6.80	0.305	3.56	7.04	2050	650	1.19	0.41	3.00	1.34	61.5	22.8	16	5.92	>10000
B464108		6.18	0.205	2.90	6.65	786	970	1.16	0.35	2.37	0.82	44.8	14.9	13	5.66	7900
B464109		6.44	0.181	6.14	6.03	1155	1180	0.86	0.55	2.98	0.64	57.9	9.7	14	5.85	7670
B464110		6.04	0.242	4.19	6.98	200	1010	1.14	0.53	2.56	0.22	32.0	18.1	19	5.83	8350
B464111		4.02	0.101	6.67	7.01	382	1050	1.17	0.65	2.73	0.44	58.5	15.7	27	8.58	6120
B464112		8.14	0.150	2.82	7.04	273	1010	1.24	0.58	2.44	0.26	45.0	13.2	31	7.74	5490
B464113		6.26	0.105	1.81	7.26	340	980	1.04	0.42	2.44	0.51	49.0	19.1	31	6.83	4040
B464114		5.72	0.121	2.54	7.17	772	810	1.21	0.57	2.21	1.01	48.0	18.8	24	7.16	4460
B464115		5.62	0.110	1.82	7.49	690	1350	1.25	0.57	2.34	0.64	67.5	23.0	19	6.42	4280
B464116		6.46	0.138	2.35	7.23	219	820	1.32	0.79	2.46	0.16	41.3	42.6	24	6.59	4190
B464117		0.06	0.029	2.46	6.99	31.3	750	1.32	1.85	1.94	0.98	35.9	35.7	245	3.54	3610
B464118		0.08	<0.001	0.02	7.06	2.1	860	1.00	0.03	1.66	0.03	24.5	3.9	23	0.38	26.2
B464119		4.00	0.087	1.43	7.45	86.5	920	1.14	0.47	2.57	0.13	43.1	27.9	17	6.13	3360
B464121		3.54	0.167	2.05	7.35	93.2	1210	1.26	0.55	2.31	0.12	26.1	34.1	17	4.73	5260
B464122		3.80	0.130	2.24	7.19	104.5	1040	1.11	0.56	2.20	0.13	26.4	34.8	16	4.56	5280
B464123		5.94	0.171	2.40	7.34	42.2	870	1.20	0.47	2.74	0.17	24.1	18.0	12	4.82	6460
B464124		6.52	0.125	1.97	7.31	1045	810	1.34	0.55	2.95	1.28	37.1	18.6	15	6.58	3730
B464125		6.04	0.121	2.11	6.41	785	920	1.10	0.51	2.97	1.12	34.3	27.1	14	6.39	3110

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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
B464083		2.10	16.30	0.16	1.0	0.092	3.63	27.3	99.9	0.92	2730	104.5	0.11	3.6	8.6	1170
B464084		3.42	18.40	0.15	1.5	0.055	2.91	18.9	68.8	1.10	6290	25.6	0.10	7.1	17.7	1580
B464085		3.00	17.85	0.15	1.1	0.081	3.43	20.4	87.5	1.06	3950	45.7	0.10	5.9	15.2	1490
B464086		2.45	14.70	0.15	0.5	0.089	3.52	21.2	98.6	0.98	3120	65.8	0.08	3.0	11.1	1040
B464088		1.86	14.15	0.15	0.7	0.111	2.83	29.9	66.4	0.75	2430	291	0.05	2.4	9.6	890
B464089		2.25	13.95	0.16	0.6	0.125	2.60	42.0	63.1	0.73	2190	348	0.04	2.1	10.9	850
B464090		2.50	16.30	0.14	0.6	0.110	3.18	20.5	91.5	0.91	3010	60.5	0.09	3.0	12.6	1090
B464091		2.38	15.55	0.15	0.9	0.128	3.19	24.3	97.2	0.98	1400	137.0	0.11	3.2	13.6	1120
B464092		2.68	15.60	0.18	0.7	0.131	3.49	27.1	142.0	1.04	1240	102.5	0.12	3.3	11.4	1060
B464093		2.27	15.25	0.16	0.6	0.170	2.94	18.2	35.0	0.95	906	106.5	0.13	3.6	8.7	1120
B464094		2.35	14.30	0.13	0.5	0.179	3.37	20.5	70.3	0.96	756	262	0.21	4.0	7.2	900
B464095		4.12	16.55	0.16	0.5	0.313	2.88	16.3	51.1	0.93	470	65.7	1.73	6.7	11.4	1450
B464096		2.40	15.60	0.14	0.7	0.214	3.22	10.5	125.0	0.70	353	52.4	1.62	4.9	7.1	830
B464097		2.94	15.85	0.16	0.7	0.209	3.41	14.0	95.1	0.95	753	97.2	0.96	4.1	8.0	1130
B464098		3.58	15.85	0.16	0.6	0.250	3.69	13.3	24.9	0.95	701	63.6	1.20	5.7	9.7	1080
B464099		3.02	13.65	0.14	0.6	0.251	3.68	13.6	40.1	0.88	1060	70.7	0.19	4.7	8.9	870
B464100		2.96	14.05	0.15	0.7	0.220	2.40	54.5	104.5	1.12	665	136.5	0.09	4.0	10.1	1150
B464101		4.47	18.20	0.14	0.2	0.111	2.52	15.3	29.6	0.95	954	260	1.60	5.6	12.4	720
B464102		2.45	13.05	0.16	2.0	0.021	1.86	13.9	3.1	0.39	594	4.27	3.26	5.4	14.0	360
B464103		5.69	13.70	0.15	0.5	0.796	1.60	39.9	83.8	1.21	1040	67.7	0.04	6.1	10.4	2340
B464105		2.01	12.45	0.14	0.5	0.172	2.98	37.0	155.5	0.68	700	431	0.10	4.0	6.8	840
B464106		2.09	12.60	0.15	0.5	0.193	2.95	46.2	166.0	0.68	662	660	0.10	4.3	7.2	930
B464107		2.95	15.80	0.15	0.9	0.271	2.37	32.1	191.0	0.86	1010	111.5	0.07	5.5	10.6	1760
B464108		2.23	13.15	0.14	0.6	0.196	3.46	24.5	70.5	0.75	989	300	0.11	3.3	8.0	790
B464109		2.10	10.35	0.15	0.5	0.257	3.39	35.2	55.2	0.67	1180	373	0.10	2.6	9.0	620
B464110		2.43	13.95	0.14	0.6	0.267	3.72	16.6	58.8	0.78	641	101.0	0.13	4.3	9.7	820
B464111		2.88	13.30	0.16	0.7	0.293	3.04	31.9	44.5	0.90	1080	152.5	0.04	4.0	10.2	760
B464112		2.14	14.00	0.15	0.7	0.223	3.47	22.3	70.4	0.76	626	161.0	0.07	3.9	12.4	810
B464113		1.96	14.15	0.17	0.7	0.163	3.30	25.3	69.2	0.71	678	120.5	0.09	4.7	14.0	960
B464114		2.08	13.65	0.16	0.6	0.181	3.29	24.9	52.7	0.78	816	144.0	0.08	4.7	14.2	950
B464115		2.10	13.85	0.18	0.8	0.188	3.54	36.0	99.8	0.84	599	314	0.10	4.2	12.4	950
B464116		2.43	14.95	0.16	0.7	0.194	3.37	20.9	82.2	0.86	585	101.5	0.15	4.8	14.6	970
B464117		4.15	15.30	0.17	0.7	0.092	3.17	17.6	10.1	3.72	412	244	1.19	2.7	240	1040
B464118		2.53	13.10	0.10	1.9	0.019	1.88	12.2	2.4	0.40	609	3.74	3.36	5.5	14.0	370
B464119		2.19	15.00	0.18	0.8	0.157	3.79	21.6	109.5	0.89	440	150.0	0.76	4.5	8.3	1000
B464121		2.84	16.05	0.15	0.6	0.212	3.55	13.3	104.5	0.74	371	64.7	1.37	6.6	7.3	900
B464122		2.89	15.75	0.14	0.6	0.227	3.61	13.7	103.0	0.73	368	68.9	1.19	6.4	7.2	820
B464123		2.93	16.30	0.16	0.6	0.220	3.22	12.3	83.7	0.79	369	35.3	0.72	7.1	5.6	1040
B464124		2.47	14.60	0.17	0.9	0.164	3.21	19.1	120.5	0.95	1000	89.8	0.08	5.9	8.0	1030
B464125		2.36	13.50	0.14	1.2	0.162	2.89	18.5	45.0	0.96	970	76.6	0.04	5.6	9.8	910

***** 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: 11-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21285386

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
B464083		51.5	114.0	0.199	1.09	14.55	6.0	2	1.4	317	0.26	0.11	5.47	0.180	1.46	1.7
B464084		684	100.5	0.067	0.96	15.60	8.6	2	1.2	295	0.51	0.12	4.74	0.324	1.38	2.3
B464085		95.9	119.5	0.174	1.35	5.34	8.2	2	1.5	526	0.43	0.20	4.88	0.290	1.49	2.0
B464086		505	135.5	0.173	1.28	75.4	7.1	3	1.6	515	0.23	0.15	4.45	0.189	1.51	1.1
B464088		87.1	99.8	0.391	1.06	75.8	5.6	3	2.1	809	0.18	0.14	4.68	0.138	1.29	1.4
B464089		81.5	114.5	0.377	1.60	93.4	5.7	3	2.1	775	0.16	0.25	4.82	0.128	1.24	1.6
B464090		141.0	104.0	0.156	1.47	8.79	7.2	3	2.1	367	0.20	0.14	4.35	0.206	1.35	1.1
B464091		18.0	94.2	0.309	1.21	3.14	7.2	3	1.6	394	0.23	0.15	4.22	0.206	1.30	1.2
B464092		18.1	113.5	0.216	1.36	3.36	6.6	3	1.5	416	0.22	0.16	4.76	0.206	1.27	1.2
B464093		13.3	67.6	0.320	1.23	1.20	5.1	3	1.4	224	0.25	0.81	4.06	0.174	0.98	1.0
B464094		15.0	78.1	0.512	1.27	3.74	4.2	3	1.4	359	0.29	0.14	4.11	0.155	1.04	1.0
B464095		14.7	85.0	0.223	2.12	1.66	5.0	5	2.0	820	0.49	0.26	4.62	0.199	0.97	0.9
B464096		15.2	76.0	0.096	1.30	1.49	4.9	3	1.5	727	0.39	0.19	3.99	0.187	0.98	0.8
B464097		20.0	93.8	0.337	1.57	4.80	5.7	3	1.7	443	0.33	0.24	3.95	0.215	1.21	1.0
B464098		20.1	98.0	0.136	1.65	3.16	6.2	3	1.9	1055	0.40	0.22	3.44	0.239	1.17	0.8
B464099		33.0	98.4	0.173	1.56	11.50	5.9	4	2.1	374	0.36	0.20	3.34	0.211	1.35	0.9
B464100		13.3	59.6	0.259	1.64	2.15	6.1	3	1.7	383	0.33	0.20	4.28	0.199	0.85	1.5
B464101		42.3	73.1	0.258	1.59	1.97	10.2	3	1.8	281	0.43	0.49	5.84	0.281	0.91	1.1
B464102		2.8	40.5	0.002	0.01	0.31	5.6	<1	1.8	194.0	0.41	<0.05	2.79	0.180	0.18	1.3
B464103		19.8	60.7	0.269	3.62	7.15	6.7	11	4.0	302	0.44	0.46	4.03	0.162	0.69	1.8
B464105		20.3	67.2	0.591	1.21	83.6	3.4	4	1.6	539	0.30	0.10	3.84	0.126	1.05	1.3
B464106		34.9	73.6	0.899	1.37	70.3	3.5	4	1.7	583	0.31	0.13	4.21	0.128	1.02	1.5
B464107		11.5	66.1	0.261	1.93	144.0	5.7	4	2.3	406	0.40	0.16	5.13	0.216	0.92	1.6
B464108		37.3	83.0	0.481	1.40	20.7	3.9	4	1.8	598	0.25	0.15	3.79	0.138	1.23	1.2
B464109		39.9	103.0	0.494	1.46	32.9	3.0	4	1.8	647	0.18	0.26	3.61	0.096	1.15	1.4
B464110		20.5	86.1	0.269	1.36	5.07	5.0	4	1.9	384	0.33	0.18	4.19	0.168	1.23	2.7
B464111		21.3	127.0	0.499	1.66	8.49	6.3	3	2.8	446	0.28	0.39	4.90	0.173	1.33	2.6
B464112		15.7	90.2	0.495	0.97	4.28	6.5	2	2.0	413	0.28	0.27	4.41	0.187	1.33	1.4
B464113		22.7	84.1	0.362	0.84	14.85	7.3	2	1.6	460	0.35	0.15	4.54	0.227	1.19	1.2
B464114		24.3	97.8	0.504	0.99	37.3	6.7	2	1.6	497	0.32	0.22	4.29	0.213	1.24	1.1
B464115		17.9	104.5	0.952	0.97	43.3	5.8	2	1.7	552	0.30	0.19	4.85	0.180	1.12	1.3
B464116		13.9	87.2	0.284	1.12	6.95	6.5	3	1.8	361	0.38	0.40	4.63	0.209	1.16	1.2
B464117		21.9	89.2	0.287	2.42	7.50	11.9	4	1.5	276	0.21	1.45	2.76	0.338	1.21	0.9
B464118		2.8	39.1	<0.002	0.01	0.29	5.9	<1	1.7	196.0	0.42	<0.05	2.58	0.185	0.18	1.1
B464119		11.2	89.1	0.394	0.84	2.29	5.1	2	1.5	392	0.35	0.17	4.81	0.190	1.18	1.6
B464121		8.9	72.4	0.188	1.27	3.59	4.3	3	1.3	404	0.48	0.20	3.94	0.197	0.98	2.2
B464122		8.9	74.9	0.208	1.22	3.97	4.2	3	1.3	383	0.47	0.20	4.31	0.191	1.01	3.1
B464123		9.7	62.6	0.107	1.24	1.61	4.0	3	1.4	256	0.53	0.12	4.07	0.200	0.89	1.7
B464124		9.2	80.6	0.413	0.99	120.5	4.9	2	1.2	478	0.45	0.22	4.59	0.208	1.02	1.3
B464125		17.9	89.1	0.186	0.90	74.6	5.0	2	1.2	367	0.41	0.23	4.19	0.201	1.12	1.2

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

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VANCOUVER BC V6E 4K2

Finalized Date: 11-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21285386

Sample Description	Method	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62
	Analyte	V	W	Y	Zn	Zr	Cu
	Units	ppm	ppm	ppm	ppm	ppm	%
	LOD	1	0.1	0.1	2	0.5	0.001
B464083		65	2.4	10.1	313	29.5	
B464084		97	3.1	11.8	651	46.8	
B464085		92	2.7	11.0	209	36.3	
B464086		72	2.6	9.1	452	14.7	
B464088		52	6.1	8.8	305	22.1	
B464089		49	6.6	10.7	333	20.5	
B464090		71	3.0	10.9	264	21.2	
B464091		74	3.1	10.3	66	28.5	
B464092		70	2.6	9.6	66	22.1	
B464093		54	3.2	11.1	36	20.6	
B464094		46	2.5	8.3	58	17.0	
B464095		65	3.6	11.7	63	15.4	0.998
B464096		52	2.8	6.6	50	24.3	
B464097		69	3.8	8.2	79	25.7	
B464098		71	2.6	8.4	93	17.7	
B464099		60	6.4	6.7	151	18.6	
B464100		71	2.7	11.6	61	22.7	
B464101		106	8.9	11.7	242	5.4	
B464102		30	0.6	15.9	28	62.2	
B464103		90	1.6	22.4	95	15.7	3.55
B464105		41	5.4	8.5	279	15.8	
B464106		41	5.6	9.6	240	14.9	
B464107		66	4.7	15.9	305	29.1	1.150
B464108		44	4.5	8.0	185	20.6	
B464109		33	3.4	7.6	184	14.6	
B464110		53	4.1	9.2	76	20.0	
B464111		61	9.4	13.1	133	22.7	
B464112		65	5.0	10.2	84	22.5	
B464113		73	8.3	10.3	122	21.2	
B464114		64	7.0	9.9	234	20.5	
B464115		56	4.1	11.4	154	24.0	
B464116		67	3.9	10.1	69	22.4	
B464117		130	19.9	11.3	187	17.4	
B464118		31	0.6	15.6	28	56.0	
B464119		57	2.8	10.0	49	25.3	
B464121		51	2.1	8.0	40	18.3	
B464122		49	2.1	7.2	44	16.8	
B464123		51	1.7	8.9	35	16.0	
B464124		55	2.9	10.1	261	30.1	
B464125		54	4.0	9.3	235	38.4	

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To: MAMMOTH GEOLOGICAL LTD.
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VANCOUVER BC V6E 4K2

Finalized Date: 11-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21285386

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
B464126		6.38	0.088	3.52	6.54	1260	1290	1.27	0.47	2.71	3.81	47.8	11.5	14	7.74	3380
B464127		6.74	0.089	1.87	7.07	677	850	1.27	0.72	2.96	0.89	36.6	16.4	18	7.98	2670
B464128		7.30	0.090	3.53	6.93	1135	660	1.11	0.49	2.94	2.05	39.2	12.2	15	7.90	3040
B464129		6.36	0.086	3.15	7.27	785	1020	1.37	0.41	3.07	0.89	39.4	10.4	15	8.23	3640
B464130		6.42	0.107	4.23	7.21	1095	740	1.34	0.42	2.91	2.37	37.9	14.8	13	7.76	3760
B464131		6.92	0.099	6.49	7.19	1050	900	1.24	0.49	2.15	3.80	41.8	10.9	11	8.47	3830
B464132		6.70	0.116	2.93	7.42	156.5	1210	1.35	0.32	2.50	0.39	41.2	11.2	14	6.45	5000
B464134		0.06	NSS	0.02	7.03	2.6	840	0.97	0.03	1.63	0.02	26.3	3.9	24	0.41	27.4
B464135		3.48	0.103	2.36	7.33	306	820	1.22	0.28	2.11	0.47	33.8	9.2	10	7.42	4220
B464137		3.06	0.097	1.47	6.82	446	800	1.09	0.24	2.22	0.42	30.0	10.1	10	6.69	3890
B464138		3.08	0.112	1.68	6.95	493	960	1.04	0.23	2.29	0.47	32.0	10.7	11	6.55	4170
B464139		6.74	0.135	1.60	7.00	427	880	1.04	0.21	2.14	0.47	36.2	9.1	12	5.67	4770
B464140		6.50	0.151	2.91	6.68	363	830	0.99	0.18	2.30	0.78	30.8	11.7	11	6.63	4750
B464141		6.60	0.147	2.66	7.07	275	940	1.05	0.21	2.12	0.34	27.5	10.3	11	6.71	5090
B464142		6.80	0.095	4.08	7.28	701	740	1.12	0.45	2.23	1.91	36.8	10.4	13	8.38	3650
B464143		6.42	0.077	1.30	7.18	257	840	1.12	0.18	2.22	0.25	26.5	8.4	11	6.32	2760
B464144		6.80	0.136	1.62	7.23	39.1	530	1.13	0.35	2.41	0.14	25.2	11.5	11	6.45	4380
B464145		6.80	0.106	3.04	7.07	370	810	1.14	0.34	2.82	0.95	30.6	13.3	12	7.40	3960
B464146		6.60	0.137	1.65	6.69	11.3	1360	1.00	0.20	1.98	0.10	30.4	8.7	15	4.38	4270
B464147		6.44	0.141	1.36	7.11	35.8	1220	0.93	0.18	2.01	0.21	23.8	11.0	14	4.08	3960
B464148		5.98	0.105	2.64	6.53	212	1240	0.97	0.22	3.00	0.56	24.8	8.4	13	5.89	3920
B464149		6.82	0.119	2.57	6.74	757	1000	1.08	0.28	3.02	6.83	38.6	9.3	13	7.63	3550
B464150		6.56	0.140	2.11	6.58	160.0	910	0.99	0.18	3.04	0.66	21.4	8.5	11	6.11	3520
B464151		7.12	0.093	4.65	6.81	594	910	0.95	0.37	2.28	6.44	37.6	8.1	14	7.72	3780
B464152		6.54	0.115	1.95	6.94	167.5	880	1.10	0.26	2.48	1.01	19.35	6.4	11	6.97	2420
B464153		6.50	0.139	1.82	6.93	87.5	1000	1.06	0.22	2.51	0.53	21.8	7.7	12	6.20	2270
B464154		6.62	0.046	1.60	6.89	15.5	990	1.01	0.22	2.12	0.22	15.60	8.4	14	4.99	1935
B464155		0.06	NSS	1.14	8.37	45.7	440	1.02	0.55	2.18	1.05	30.7	14.3	18	7.34	2090
B464156		0.06	<0.001	0.02	7.14	2.3	850	1.01	0.03	1.67	0.02	25.6	3.9	24	0.40	28.6
B464157		3.18	0.100	2.48	6.96	37.2	1070	1.02	0.28	1.89	0.35	20.0	8.7	11	4.48	3260
B464159		3.18	0.166	2.22	7.52	20.6	1240	1.13	0.39	1.94	0.46	23.1	9.6	14	4.63	5150
B464160		3.00	0.155	2.08	7.29	25.2	1210	1.04	0.33	1.93	0.46	22.9	9.9	13	4.60	4800
B464161		6.28	0.128	3.39	7.10	934	960	1.05	0.20	1.91	7.00	42.2	7.6	10	8.10	4300
B464162		6.56	0.121	1.97	7.27	265	890	1.04	0.40	2.00	0.85	21.3	8.0	11	6.14	3760
B464163		6.92	0.611	1.92	7.33	140.0	1200	1.14	0.68	1.98	2.62	24.4	8.9	14	5.60	3160
B464164		6.20	0.199	7.86	6.85	773	900	1.03	1.99	1.51	8.58	41.2	7.6	11	7.07	3830
B464165		6.62	0.165	1.53	7.19	106.5	1120	1.14	0.37	2.03	0.62	20.1	9.8	14	4.75	3090
B464166		6.68	0.180	1.38	7.46	83.4	1050	1.30	0.38	2.24	0.21	24.2	11.3	17	5.02	4110
B464167		6.30	0.127	1.55	6.93	126.5	1030	1.13	1.20	2.07	0.27	21.7	8.3	15	6.28	3240
B464168		6.78	0.146	0.94	7.45	132.5	930	1.27	0.16	2.01	1.14	22.2	9.3	16	5.51	3660

***** 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: 11-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21285386

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
B464126		2.11	13.00	0.16	0.9	0.169	2.81	24.6	95.0	0.90	2590	124.5	0.03	4.9	6.7	920
B464127		2.69	16.15	0.16	1.5	0.144	3.23	18.2	57.1	1.02	1220	71.9	0.03	7.8	9.3	1070
B464128		2.55	14.85	0.15	1.3	0.150	3.38	21.0	32.1	0.96	5440	58.2	0.03	6.7	8.6	990
B464129		2.55	14.70	0.15	1.0	0.146	2.99	20.3	130.0	0.96	2680	85.0	0.05	6.5	7.8	1080
B464130		2.60	14.55	0.13	0.9	0.151	3.22	19.6	114.5	0.95	2890	114.0	0.05	5.3	8.7	900
B464131		2.25	14.10	0.13	0.8	0.207	3.42	22.1	69.2	0.71	4280	111.5	0.04	5.5	6.8	840
B464132		2.10	13.95	0.16	0.9	0.173	4.02	21.3	102.0	0.83	1840	118.0	0.36	6.7	6.4	850
B464134		2.47	13.70	0.12	2.1	0.026	1.81	14.2	2.5	0.38	572	4.15	3.21	6.1	14.1	370
B464135		1.81	15.90	0.15	0.7	0.143	3.71	16.4	177.0	0.64	1760	65.4	0.77	7.4	4.9	850
B464137		1.86	14.65	0.13	0.6	0.127	3.24	14.5	156.5	0.71	843	65.4	0.76	6.4	4.3	810
B464138		1.92	14.35	0.14	0.6	0.123	3.36	15.7	159.0	0.73	913	73.2	0.70	5.8	4.6	800
B464139		1.87	15.05	0.16	0.6	0.131	3.21	17.9	145.0	0.65	856	132.5	0.96	6.3	5.2	790
B464140		2.05	14.95	0.15	0.6	0.131	3.57	14.9	123.5	0.69	1520	127.5	0.54	6.5	5.6	780
B464141		1.99	14.15	0.16	0.6	0.124	3.92	13.5	131.5	0.66	1170	55.3	0.55	6.4	5.1	770
B464142		2.26	14.15	0.16	1.0	0.217	3.63	19.3	36.2	0.76	3050	105.5	0.10	6.9	6.6	850
B464143		1.98	15.40	0.16	0.6	0.083	2.93	12.8	107.0	0.66	1060	34.8	1.02	8.4	4.7	810
B464144		2.29	14.00	0.15	0.6	0.129	2.66	11.7	70.4	0.74	871	51.4	1.07	7.9	5.6	860
B464145		2.46	15.55	0.17	0.8	0.126	3.46	14.5	66.5	0.84	1760	78.7	0.26	8.0	6.3	1000
B464146		2.00	14.20	0.17	0.6	0.114	3.10	14.5	45.4	0.63	438	147.0	1.74	6.9	5.4	860
B464147		2.00	14.55	0.15	0.5	0.126	3.54	11.3	41.6	0.60	589	56.2	1.61	5.7	6.0	780
B464148		2.13	13.55	0.16	0.4	0.113	3.83	11.7	54.4	0.69	2210	22.1	0.39	6.6	6.0	670
B464149		2.04	14.15	0.18	0.6	0.110	3.42	19.7	77.6	0.74	2510	265	0.09	6.0	7.2	980
B464150		2.46	13.55	0.15	0.5	0.120	3.49	10.2	54.1	0.80	2350	30.9	0.20	6.8	5.7	800
B464151		2.46	13.75	0.16	0.6	0.139	3.82	20.0	27.7	0.72	4870	153.0	0.21	6.1	6.4	810
B464152		2.26	15.50	0.15	0.6	0.118	3.96	9.0	46.9	0.69	2920	33.0	0.68	8.1	5.2	760
B464153		2.70	14.95	0.15	0.6	0.104	3.56	9.7	42.2	0.73	1960	44.1	0.98	8.3	6.3	930
B464154		3.21	15.15	0.17	0.5	0.055	3.47	7.8	18.7	0.59	1220	22.7	1.43	5.8	5.5	560
B464155		4.45	18.70	0.18	0.2	0.098	2.40	15.3	28.9	0.93	911	249	1.54	6.1	12.2	720
B464156		2.54	13.60	0.15	2.0	0.021	1.83	13.7	2.7	0.39	586	4.62	3.24	6.0	14.3	370
B464157		3.55	15.30	0.15	0.4	0.087	3.65	9.9	20.1	0.59	1140	64.0	1.56	5.5	6.6	640
B464159		3.67	16.00	0.17	0.5	0.154	3.66	11.4	26.1	0.66	849	22.5	1.65	6.3	8.1	900
B464160		3.25	15.25	0.17	0.5	0.148	3.63	11.2	23.1	0.64	849	34.2	1.64	6.3	7.4	890
B464161		1.94	15.35	0.17	0.5	0.120	3.78	21.4	67.4	0.53	1100	163.0	0.86	6.2	6.4	1180
B464162		2.32	16.00	0.16	0.5	0.119	3.26	10.4	49.9	0.61	1050	31.3	1.48	6.6	6.1	760
B464163		2.99	16.70	0.17	0.5	0.136	3.11	11.4	34.9	0.68	1090	21.6	1.83	7.5	7.0	940
B464164		2.64	15.10	0.18	0.4	0.204	3.58	22.9	26.1	0.50	2850	103.5	0.44	5.2	7.6	760
B464165		2.66	16.05	0.16	0.5	0.143	3.11	9.7	48.9	0.56	926	27.2	1.99	7.2	7.1	810
B464166		2.70	18.10	0.16	0.6	0.174	2.63	11.3	134.5	0.67	622	22.6	2.13	8.2	7.4	1120
B464167		2.72	16.35	0.17	0.5	0.258	3.24	10.5	70.8	0.55	1230	30.0	1.55	7.3	5.5	860
B464168		2.31	15.30	0.16	0.6	0.135	2.48	11.1	50.2	0.46	308	63.3	2.72	8.1	6.7	890

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704-1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 11-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21285386

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
B464126		227	115.5	0.295	0.79	45.3	4.5	2	1.1	770	0.37	0.16	4.44	0.174	1.27	1.1
B464127		32.0	99.8	0.155	0.91	51.1	6.0	2	0.9	593	0.57	0.24	4.45	0.259	1.31	1.6
B464128		105.5	145.0	0.113	0.81	61.6	5.8	2	0.9	397	0.49	0.18	4.75	0.237	1.57	1.6
B464129		33.3	102.5	0.176	0.89	29.7	5.4	2	1.1	530	0.49	0.13	4.66	0.228	1.28	1.1
B464130		66.3	114.5	0.312	1.02	116.0	4.5	2	1.3	479	0.39	0.13	4.49	0.186	1.43	1.2
B464131		171.0	157.0	0.298	1.10	44.5	4.2	2	1.2	385	0.40	0.14	4.60	0.180	1.62	2.0
B464132		29.6	121.0	0.259	0.83	2.95	4.4	2	1.2	444	0.49	0.12	4.63	0.206	1.43	1.1
B464134		3.1	42.8	<0.002	0.01	0.32	6.1	<1	1.7	193.5	0.44	<0.05	3.08	0.174	0.18	1.3
B464135		29.0	111.0	0.154	0.73	3.59	4.5	2	1.0	397	0.48	0.10	4.58	0.191	1.46	1.0
B464137		13.4	82.6	0.137	0.79	18.75	4.0	2	1.0	423	0.43	0.10	3.89	0.177	1.22	0.8
B464138		13.4	83.1	0.148	0.83	22.5	4.0	2	1.0	448	0.40	0.12	3.84	0.174	1.21	0.8
B464139		14.3	83.8	0.187	0.83	22.7	4.1	3	1.0	441	0.42	0.10	4.40	0.175	1.13	1.0
B464140		40.1	98.0	0.237	0.91	20.5	4.2	3	1.0	406	0.41	0.08	3.71	0.179	1.34	1.0
B464141		19.0	108.5	0.147	0.86	10.05	3.7	2	1.1	461	0.43	0.11	3.90	0.176	1.47	0.8
B464142		85.7	150.5	0.265	0.95	23.8	4.6	2	1.2	430	0.44	0.16	4.99	0.192	1.59	1.2
B464143		15.7	72.1	0.081	0.59	12.75	4.3	2	0.9	472	0.55	0.10	4.12	0.198	0.96	0.7
B464144		13.8	80.8	0.134	0.99	1.09	4.1	3	1.2	257	0.52	0.19	4.10	0.197	1.01	0.8
B464145		50.1	103.0	0.230	0.93	9.19	4.9	2	1.2	304	0.50	0.14	4.05	0.216	1.37	1.0
B464146		9.8	70.1	0.401	0.79	0.46	4.6	2	1.1	2580	0.43	0.15	4.17	0.200	0.81	0.7
B464147		11.2	78.6	0.176	0.75	1.48	4.1	2	1.0	1065	0.37	0.10	3.95	0.174	0.85	0.6
B464148		26.7	102.5	0.058	0.69	6.04	4.5	2	1.1	299	0.46	0.08	3.75	0.171	1.33	0.7
B464149		227	101.5	0.346	0.83	54.1	4.4	2	0.9	337	0.41	0.08	4.22	0.190	1.42	1.2
B464150		32.6	92.7	0.089	0.63	5.92	3.9	2	1.0	250	0.46	0.09	3.64	0.176	1.31	0.7
B464151		242	135.0	0.221	0.74	46.2	4.7	2	0.9	262	0.39	0.08	3.97	0.187	1.59	0.9
B464152		29.9	116.5	0.091	0.41	6.79	4.2	1	1.0	243	0.55	0.07	3.62	0.194	1.50	0.8
B464153		52.9	102.5	0.141	0.36	5.42	4.4	1	0.8	269	0.52	0.08	3.95	0.201	1.26	0.7
B464154		24.1	102.5	0.075	0.38	0.96	3.8	1	0.7	304	0.39	0.08	3.45	0.184	1.14	0.6
B464155		41.2	82.7	0.228	1.51	2.07	11.2	3	1.7	277	0.42	0.41	6.38	0.273	0.90	1.4
B464156		2.9	42.5	0.002	0.01	0.33	6.2	<1	1.7	196.0	0.43	<0.05	3.01	0.178	0.18	1.3
B464157		23.9	104.5	0.151	0.77	0.96	3.9	2	0.9	864	0.40	0.14	3.43	0.181	1.20	0.6
B464159		20.1	102.0	0.065	1.29	0.87	4.7	3	1.1	810	0.47	0.14	4.63	0.187	1.14	1.0
B464160		17.9	101.5	0.082	1.08	1.00	4.4	2	1.0	843	0.47	0.11	4.38	0.178	1.11	0.8
B464161		326	107.0	0.177	0.63	48.3	4.2	3	0.9	369	0.44	0.09	4.58	0.181	1.36	1.0
B464162		34.0	99.5	0.078	0.74	8.64	4.0	2	0.9	288	0.46	0.10	3.88	0.183	1.19	0.8
B464163		111.0	96.9	0.061	0.89	9.29	4.9	2	0.9	896	0.48	0.11	4.29	0.208	1.07	0.8
B464164		363	158.5	0.150	1.04	116.0	4.2	2	0.9	225	0.37	0.16	4.59	0.160	1.53	0.9
B464165		53.6	87.4	0.063	0.83	6.18	4.5	2	0.8	632	0.48	0.12	4.04	0.192	0.99	0.7
B464166		9.7	69.7	0.055	0.73	1.42	5.8	2	0.9	899	0.49	0.11	3.93	0.243	0.75	0.8
B464167		11.8	101.0	0.069	0.90	2.22	4.7	2	0.8	765	0.48	0.22	3.92	0.195	1.01	0.7
B464168		37.6	62.6	0.150	0.61	0.41	4.4	2	0.8	801	0.58	0.08	4.37	0.206	0.69	0.9

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

Finalized Date: 11-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21285386

Sample Description	Method	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62
	Analyte	V	W	Y	Zn	Zr	Cu
	Units	ppm	ppm	ppm	ppm	ppm	%
	LOD	1	0.1	0.1	2	0.5	0.001
B464126		48	3.8	9.8	603	28.5	
B464127		66	1.8	9.9	204	50.2	
B464128		61	3.3	10.0	475	44.6	
B464129		59	2.6	10.3	217	30.7	
B464130		53	2.7	9.4	425	30.3	
B464131		45	3.4	9.6	645	23.2	
B464132		48	2.5	9.2	88	27.4	
B464134		30	0.7	16.7	25	57.3	
B464135		45	2.0	8.7	109	18.5	
B464137		43	1.3	7.5	85	15.6	
B464138		43	1.3	7.5	94	15.4	
B464139		42	1.4	8.2	99	15.8	
B464140		45	2.0	8.2	137	18.7	
B464141		42	2.1	7.1	90	15.5	
B464142		46	4.2	9.2	339	24.0	
B464143		44	2.1	9.1	85	16.2	
B464144		47	1.2	8.6	45	15.4	
B464145		53	4.4	10.3	198	22.2	
B464146		47	1.8	10.2	33	15.4	
B464147		44	1.8	7.7	41	13.5	
B464148		45	3.5	8.3	132	10.7	
B464149		49	4.3	9.2	960	16.0	
B464150		47	2.8	8.1	151	12.7	
B464151		49	3.9	8.7	926	16.2	
B464152		42	2.8	7.9	202	15.5	
B464153		46	1.6	8.8	115	16.2	
B464154		54	0.9	6.3	69	13.6	
B464155		104	9.8	12.2	226	6.3	
B464156		31	0.7	16.5	25	57.1	
B464157		62	1.1	7.1	93	10.0	
B464159		59	2.0	8.8	106	12.5	
B464160		49	1.6	8.5	96	12.2	
B464161		46	3.9	10.7	1020	13.0	
B464162		47	2.3	7.4	225	13.0	
B464163		55	1.5	9.0	383	13.5	
B464164		50	3.4	8.5	1230	11.7	
B464165		46	1.1	8.4	125	13.8	
B464166		57	0.8	10.1	65	16.4	
B464167		45	2.4	8.6	109	14.0	
B464168		44	0.7	8.5	214	15.6	

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VANCOUVER BC V6E 4K2

Finalized Date: 11-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21285386

Sample Description	Method / Analyte / Units / LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	ME-MS61 Ag ppm 0.01	ME-MS61 Al % 0.01	ME-MS61 As ppm 0.2	ME-MS61 Ba ppm 10	ME-MS61 Be ppm 0.05	ME-MS61 Bi ppm 0.01	ME-MS61 Ca % 0.01	ME-MS61 Cd ppm 0.02	ME-MS61 Ce ppm 0.01	ME-MS61 Co ppm 0.1	ME-MS61 Cr ppm 1	ME-MS61 Cs ppm 0.05	ME-MS61 Cu ppm 0.2
B464169		6.66	0.072	0.84	7.18	212	700	1.15	0.21	1.77	0.83	17.60	7.6	18	6.51	1530
B464170		6.52	0.090	0.81	7.26	131.0	810	1.11	0.20	2.22	0.51	19.55	6.9	13	5.10	2060
B464171		6.96	0.074	0.39	7.40	14.8	900	1.21	0.10	2.39	0.13	23.0	10.3	18	17.30	1885
B464172		6.66	0.071	0.73	7.76	63.6	1000	1.42	0.52	2.83	0.14	21.1	7.6	18	8.50	1995
B464173		6.80	0.174	1.15	7.55	112.5	960	1.24	0.20	2.45	0.35	23.5	8.9	16	6.91	4720
B464174		6.34	0.045	1.22	6.42	130.0	730	1.01	0.26	2.82	0.95	12.00	6.5	16	5.13	2260
B464175		0.06	NSS	2.12	6.59	30.2	710	1.05	1.80	1.85	0.91	31.6	34.0	226	3.16	3440
B464176		0.06	0.002	0.02	7.15	2.4	850	0.96	0.03	1.65	0.02	23.8	3.6	25	0.36	26.2
B464177		3.04	0.081	1.24	6.82	148.0	790	1.15	0.39	2.58	1.68	19.25	8.8	22	6.31	1560
B464178		3.00	0.052	1.27	6.74	169.0	760	1.14	0.38	3.37	0.70	18.25	8.6	20	6.62	1585
B464179		3.08	0.088	0.68	6.64	91.9	840	1.18	0.20	2.39	0.20	15.95	7.7	13	7.67	2070
B464180		7.00	0.139	3.10	6.78	420	1040	1.06	0.78	1.62	2.50	20.0	8.5	12	6.80	2100
B464181		6.54	0.131	3.37	6.71	324	1090	1.03	0.78	2.12	1.79	21.5	7.8	12	7.54	3050
B464182		6.86	0.072	1.17	6.44	315	1240	1.05	0.24	3.67	0.73	14.75	7.8	16	8.74	1955
B464183		6.88	0.110	1.46	6.86	259	760	1.29	0.35	2.96	0.63	18.15	9.3	17	9.40	3360
B464184		6.82	0.131	1.43	7.18	16.0	1250	1.00	0.36	2.48	0.16	24.4	9.8	16	6.04	3990
B464185		6.54	0.073	1.97	6.47	31.2	1020	1.05	0.33	2.46	0.57	23.4	8.0	17	7.63	2380
B464186		6.84	0.193	3.30	6.67	134.5	1180	0.98	0.36	2.58	0.74	31.3	9.8	16	6.69	4390
B464187		7.06	0.197	3.98	6.85	286	780	1.20	0.56	2.27	1.64	25.7	13.7	16	8.75	4050
B464188		6.80	0.174	2.37	6.90	100.0	1010	1.01	0.27	2.01	0.36	26.2	12.1	20	5.56	4240
B464189		6.86	0.157	2.97	7.18	76.0	1000	1.10	0.33	2.34	0.75	28.9	10.8	16	6.37	4410
B464190		6.46	0.109	1.57	6.94	79.8	910	1.12	0.17	2.44	0.49	24.9	9.8	15	5.89	3850
B464191		6.38	0.211	2.09	7.39	218	970	1.27	0.21	2.06	0.85	23.9	13.2	19	5.72	5670
B464192		6.46	0.164	2.29	6.26	128.5	810	0.98	0.29	2.40	0.63	29.9	10.0	18	5.26	4460
B464193		6.48	0.126	4.21	7.26	257	550	1.33	0.37	3.11	1.47	29.8	12.4	19	7.41	5300
B464194		6.72	0.178	2.52	6.99	40.1	980	1.19	0.29	2.25	0.56	24.2	12.3	20	6.31	3480
B464195		3.40	0.139	5.04	6.93	135.5	930	1.20	0.71	2.33	1.04	30.8	11.0	18	7.61	3970
B464196		3.22	0.076	3.66	7.01	22.9	890	1.24	0.49	2.11	1.14	31.4	11.4	14	6.17	3060
B464197		3.24	0.076	3.06	7.01	19.6	850	1.20	0.48	2.09	1.06	29.6	13.2	18	5.74	3060
B464198		5.90	0.087	2.88	6.99	11.9	790	1.21	0.44	2.19	0.55	24.0	10.3	17	6.24	2850
B464199		0.06	NSS	1.19	8.14	45.6	430	1.02	0.55	2.11	1.09	28.7	14.2	19	6.81	2080
B464200		0.08	NSS	0.02	7.14	2.0	850	1.04	0.03	1.65	0.02	24.9	3.7	25	0.40	28.3

***** 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: 11-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21285386

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
B464169		3.72	17.05	0.14	0.5	0.088	2.30	8.4	108.0	0.41	587	13.15	2.10	6.1	7.0	720
B464170		2.59	15.65	0.15	0.5	0.110	2.37	9.6	27.3	0.49	541	26.8	2.26	7.3	6.3	800
B464171		4.95	18.30	0.17	0.7	0.111	2.21	10.5	14.2	0.64	435	10.50	2.77	9.2	9.2	1130
B464172		3.02	16.55	0.16	0.8	0.105	2.25	8.5	107.0	0.80	586	41.8	2.36	9.2	7.0	1270
B464173		2.87	16.40	0.18	0.7	0.140	2.65	9.6	144.5	0.75	1020	56.2	1.53	7.5	8.2	1250
B464174		3.44	14.00	0.11	0.4	0.066	2.58	4.9	75.4	0.87	1650	14.70	1.55	4.7	6.1	730
B464175		3.97	14.70	0.15	0.5	0.087	3.04	14.5	9.2	3.57	393	238	1.15	2.6	233	1010
B464176		2.48	12.70	0.14	1.7	0.016	1.89	11.7	2.7	0.40	601	3.87	3.31	5.4	13.4	370
B464177		3.08	15.35	0.15	0.4	0.087	2.60	7.8	126.0	0.80	1250	11.80	1.15	7.0	6.7	940
B464178		3.13	15.40	0.13	0.5	0.081	2.64	7.5	153.5	0.78	1630	12.60	1.10	7.0	6.6	920
B464179		2.62	14.70	0.16	0.5	0.081	2.99	6.9	164.5	0.71	894	13.95	1.46	5.5	6.5	750
B464180		2.46	14.60	0.14	0.5	0.181	3.22	9.4	81.8	0.56	5330	24.6	0.91	5.6	6.3	720
B464181		2.65	14.05	0.16	0.5	0.145	3.59	9.8	60.6	0.63	2450	27.9	0.93	5.7	6.1	750
B464182		2.58	13.90	0.15	0.6	0.062	2.90	6.7	178.0	1.02	1560	56.4	0.92	5.2	6.4	700
B464183		2.48	15.50	0.20	0.7	0.115	2.91	7.8	282	0.89	1250	15.90	0.87	5.6	7.4	910
B464184		2.62	15.90	0.17	0.8	0.125	3.24	10.1	35.5	0.83	618	17.95	1.58	6.6	8.0	1270
B464185		2.95	13.55	0.16	0.6	0.110	3.44	10.1	36.8	0.84	2200	19.35	0.91	6.6	7.1	780
B464186		2.13	15.45	0.16	0.7	0.170	3.46	14.0	50.2	0.68	3040	70.4	0.78	5.2	7.8	940
B464187		2.51	16.00	0.17	0.7	0.271	3.37	10.7	59.3	0.67	3620	21.8	0.66	5.8	8.9	990
B464188		2.28	16.20	0.18	0.8	0.137	3.13	11.2	35.0	0.74	1380	51.1	1.34	6.0	8.5	970
B464189		2.06	16.60	0.23	0.8	0.155	3.36	13.3	91.7	0.71	1750	42.4	0.64	6.0	7.7	1000
B464190		2.08	16.10	0.17	0.8	0.099	2.77	10.7	124.0	0.79	906	63.2	0.84	6.3	7.1	1030
B464191		2.46	16.80	0.19	0.8	0.166	2.95	10.8	60.6	0.83	733	49.6	1.47	6.6	9.5	1000
B464192		2.54	14.20	0.20	0.6	0.150	2.63	12.6	47.6	0.80	1140	10.85	1.40	5.3	8.4	1290
B464193		3.60	17.65	0.16	0.7	0.186	3.20	12.7	84.3	0.90	3670	27.5	0.71	7.0	10.3	1090
B464194		2.22	16.85	0.19	0.8	0.176	2.86	10.2	38.5	0.74	1740	21.3	1.75	7.5	9.3	1070
B464195		2.27	15.90	0.19	0.5	0.214	3.71	13.7	46.6	0.75	3780	33.0	0.74	5.2	8.0	940
B464196		2.06	16.90	0.23	0.5	0.172	3.13	13.4	19.7	0.70	2420	39.8	1.44	5.2	6.7	1130
B464197		2.09	16.20	0.19	0.5	0.160	3.13	12.5	20.6	0.69	2130	50.3	1.54	5.1	7.0	1070
B464198		1.89	16.05	0.19	0.5	0.102	3.03	10.3	43.6	0.70	1760	55.8	1.72	4.2	6.4	850
B464199		4.33	17.90	0.18	0.2	0.097	2.45	13.3	28.0	0.92	919	244	1.56	5.4	11.3	690
B464200		2.48	13.30	0.21	1.7	0.025	1.90	12.4	3.1	0.40	602	4.05	3.30	5.5	13.8	360

***** 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: 11-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21285386

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
B464169		38.5	70.0	0.035	0.43	9.85	4.0	1	0.8	616	0.44	0.07	4.38	0.180	0.75	0.7
B464170		32.3	66.3	0.081	0.30	8.27	4.1	1	0.7	529	0.48	0.06	4.33	0.188	0.69	0.7
B464171		7.3	56.0	0.026	0.28	1.55	6.8	1	1.0	796	0.59	0.05	4.27	0.274	0.57	0.9
B464172		7.3	47.7	0.127	0.47	5.29	6.4	1	0.8	1040	0.51	0.29	3.55	0.300	0.56	0.8
B464173		14.1	58.5	0.127	0.73	6.66	6.4	2	0.9	643	0.44	0.10	3.18	0.283	0.74	0.7
B464174		46.2	57.9	0.043	0.54	12.55	3.1	2	0.7	253	0.34	0.05	2.80	0.192	0.94	0.4
B464175		21.6	78.7	0.272	2.33	7.42	11.8	3	1.3	266	0.16	1.24	2.44	0.313	1.16	0.8
B464176		2.6	38.8	<0.002	0.01	0.29	5.8	<1	1.6	195.0	0.35	<0.05	2.63	0.181	0.14	1.1
B464177		53.8	77.8	0.032	0.88	18.25	5.2	1	0.9	391	0.41	0.10	3.59	0.222	0.94	0.6
B464178		48.7	72.0	0.027	0.83	23.7	5.2	2	0.9	347	0.43	0.08	3.74	0.227	0.96	0.7
B464179		8.0	73.7	0.035	0.72	5.64	3.7	1	0.7	416	0.36	0.08	3.97	0.168	0.90	0.6
B464180		284	99.7	0.068	0.92	48.9	3.8	1	0.9	323	0.37	0.10	4.19	0.164	1.14	0.7
B464181		65.3	96.9	0.080	0.92	8.95	3.6	1	0.9	503	0.41	0.23	4.49	0.170	1.14	0.8
B464182		9.3	67.1	0.129	1.03	56.2	4.4	1	0.8	1660	0.36	0.12	3.21	0.183	1.00	0.7
B464183		13.8	80.6	0.034	1.18	25.6	5.1	2	1.1	758	0.34	0.11	3.44	0.192	1.06	0.8
B464184		9.9	65.1	0.050	1.05	1.23	6.0	2	1.2	1240	0.39	0.19	4.05	0.243	0.88	0.9
B464185		38.6	82.7	0.035	0.62	3.04	10.0	2	1.0	333	0.42	0.10	3.75	0.203	0.93	0.7
B464186		38.8	95.8	0.102	0.91	20.5	5.2	2	0.8	351	0.33	0.06	3.52	0.196	1.14	0.9
B464187		114.5	104.0	0.051	1.09	44.4	5.1	2	0.9	283	0.35	0.07	3.62	0.208	1.32	0.8
B464188		15.1	85.0	0.114	1.00	2.69	5.5	2	0.9	793	0.37	0.13	3.80	0.214	1.02	0.8
B464189		58.1	88.2	0.104	0.87	6.69	5.4	2	1.0	207	0.39	0.10	4.26	0.217	1.10	0.9
B464190		17.8	59.6	0.140	0.70	5.77	5.4	2	0.9	203	0.39	0.11	3.40	0.229	0.89	0.9
B464191		20.4	70.9	0.112	0.96	8.04	6.2	2	1.0	456	0.43	0.10	3.81	0.247	0.92	0.8
B464192		29.1	79.5	0.019	0.81	2.90	5.2	3	1.0	366	0.33	0.14	3.79	0.196	0.84	0.8
B464193		72.9	98.6	0.073	1.49	10.75	5.8	3	1.2	236	0.42	0.24	4.35	0.243	1.22	1.0
B464194		31.6	83.8	0.045	0.73	1.92	6.0	2	0.8	1155	0.44	0.09	3.70	0.247	1.07	0.8
B464195		64.9	127.0	0.054	1.01	8.04	5.6	2	1.0	286	0.31	0.12	3.45	0.213	1.55	0.7
B464196		84.7	118.0	0.094	0.88	8.64	5.3	2	1.1	1580	0.32	0.13	4.09	0.193	1.25	0.8
B464197		77.2	104.5	0.114	0.92	7.70	5.1	2	1.1	1650	0.32	0.15	3.57	0.202	1.17	0.7
B464198		34.7	94.3	0.130	0.72	2.85	5.3	2	1.0	1730	0.25	0.37	3.79	0.193	1.13	0.7
B464199		39.7	73.9	0.223	1.53	1.85	10.5	3	1.6	276	0.38	0.42	4.09	0.271	0.85	0.8
B464200		2.7	41.2	<0.002	0.01	0.29	6.0	<1	1.6	196.5	0.36	<0.05	2.80	0.182	0.17	1.1

***** 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: 11-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21285386

Sample Description	Method	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62
	Analyte	V	W	Y	Zn	Zr	Cu
	Units	ppm	ppm	ppm	ppm	ppm	%
	LOD	1	0.1	0.1	2	0.5	0.001
B464169		48	1.7	7.5	228	13.7	
B464170		43	1.1	8.7	122	13.4	
B464171		69	0.6	14.4	63	20.1	
B464172		56	0.7	11.3	60	19.0	
B464173		65	1.1	10.0	133	18.3	
B464174		57	1.3	5.5	179	9.0	
B464175		124	17.5	10.1	183	11.6	
B464176		31	0.7	15.5	28	49.5	
B464177		51	2.5	8.0	264	10.4	
B464178		53	2.2	8.0	129	11.0	
B464179		44	1.2	6.0	66	11.9	
B464180		41	3.5	6.5	402	10.0	
B464181		42	2.8	6.3	382	11.3	
B464182		49	2.6	5.6	144	14.8	
B464183		52	2.6	6.7	130	18.5	
B464184		60	1.5	9.5	53	21.4	
B464185		57	1.8	9.6	133	15.3	
B464186		50	2.2	9.1	116	17.5	
B464187		52	3.1	8.1	233	19.5	
B464188		54	1.5	8.7	89	20.6	
B464189		52	1.9	9.1	130	22.0	
B464190		56	2.1	8.3	93	20.6	
B464191		65	1.4	8.5	164	21.7	
B464192		58	1.6	13.6	143	16.8	
B464193		66	3.4	10.0	302	20.2	
B464194		56	1.6	9.2	111	20.6	
B464195		60	4.5	7.9	177	12.6	
B464196		55	2.4	10.0	202	15.5	
B464197		56	2.4	9.1	189	15.3	
B464198		54	1.2	6.9	99	14.6	
B464199		102	12.1	10.9	236	4.6	
B464200		31	0.6	15.4	28	50.9	

***** 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: 11-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21285386

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: NSS is non-sufficient sample.
ALL METHODS

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

LABORATORY ADDRESSES

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

Au-ICP21	CRU-31	CRU-QC	Cu-OG62
LOG-21	LOG-23	ME-MS61	ME-OG62
PUL-31	PUL-QC	SND-01	SPL-21
SPL-21X	WEI-21		

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

Finalized Date: 16-DEC-2021
This copy reported on
11-JAN-2022
Account: MAMGEO

CERTIFICATE VA21299343

Project: Poplar

This report is for 193 samples of Drill Core submitted to our lab in Vancouver, BC, Canada on 3-NOV-2021.

The following have access to data associated with this certificate:

TIM HENNEBERRY		

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-21	Sample logging - ClientBarCode
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 up to 250g 85% <75 um
LOG-23	Pulp Login - Rcvd with Barcode
SPL-21X	Addnl Crush Split w No Analysis

ANALYTICAL PROCEDURES

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

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:

Saa Traxler, General Manager, North Vancouver

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

Finalized Date: 16-DEC-2021
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21299343

Sample Description	Method / Analyte / Units / LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	ME-MS61 Ag ppm 0.01	ME-MS61 Al % 0.01	ME-MS61 As ppm 0.2	ME-MS61 Ba ppm 10	ME-MS61 Be ppm 0.05	ME-MS61 Bi ppm 0.01	ME-MS61 Ca % 0.01	ME-MS61 Cd ppm 0.02	ME-MS61 Ce ppm 0.01	ME-MS61 Co ppm 0.1	ME-MS61 Cr ppm 1	ME-MS61 Cs ppm 0.05	ME-MS61 Cu ppm 0.2
B464201		11.26	0.109	0.74	7.38	57.8	900	1.07	0.07	2.50	0.17	29.1	8.8	16	9.00	3240
B464202		11.50	0.090	0.81	7.14	75.7	750	1.05	0.09	3.07	0.26	35.3	8.7	14	8.53	2960
B464203		12.02	0.145	1.63	7.26	1005	160	1.09	0.08	2.94	0.74	37.5	8.3	14	7.33	3820
B464204		5.98	0.341	2.93	6.86	1135	520	1.00	0.09	2.32	2.53	41.5	10.5	13	4.13	7990
B464205		12.52	0.138	1.39	7.45	567	620	0.93	0.11	2.23	0.35	37.1	8.8	13	6.47	3050
B464206		11.36	0.161	1.20	7.22	991	610	0.95	0.10	2.41	0.34	29.8	9.2	14	4.50	3390
B464207		5.60	0.197	0.96	7.40	563	630	0.93	0.10	3.08	0.28	39.7	8.2	13	6.12	4700
B464208		5.44	0.219	0.94	7.56	582	640	1.02	0.09	3.21	0.14	46.4	9.3	14	6.06	4800
B464209		11.36	0.103	0.74	7.76	405	790	0.90	0.07	3.34	0.15	52.2	9.6	16	6.40	2880
B464210		12.10	0.091	0.45	7.19	271	1000	0.79	0.06	3.25	0.12	27.2	8.7	14	5.83	2250
B464211		12.00	0.042	0.57	7.62	441	1160	0.70	0.06	2.85	0.34	31.1	8.4	16	4.35	1110
B464212		11.82	0.065	3.75	7.56	450	1080	0.86	0.05	3.05	4.22	35.9	7.7	16	5.53	1560
B464213		10.66	0.157	0.53	8.15	16.2	830	1.31	0.08	2.38	0.15	36.8	9.7	16	6.98	2410
B464214		8.40	0.178	0.80	7.84	24.6	790	1.23	0.11	2.63	0.15	32.4	11.1	14	8.16	4760
B464215		9.92	0.169	0.83	7.65	61.1	1090	0.96	0.07	2.15	0.19	38.9	10.1	15	8.22	4100
B464216		11.84	0.091	2.12	7.15	633	1110	0.90	0.09	2.89	1.06	40.2	8.9	26	7.96	2840
B464217		11.58	0.108	0.73	7.74	385	1040	1.05	0.09	2.44	0.18	33.5	8.0	27	8.24	2980
B464218		0.06	NSS	1.26	8.43	52.6	440	0.99	0.51	2.15	1.10	31.2	14.8	18	7.56	2090
B464219		0.06	<0.001	0.02	7.23	2.6	860	0.96	0.02	1.66	0.03	27.0	3.8	24	0.40	29.5
B464220		12.50	0.099	0.47	7.76	138.0	1030	1.17	0.08	1.73	0.16	41.7	8.2	87	8.23	2700
B464221		10.44	0.085	1.04	7.24	450	690	1.16	0.09	3.03	0.43	44.2	8.2	75	7.10	3110
B464222		12.78	0.130	0.81	7.51	689	670	1.24	0.07	2.98	0.22	63.7	8.8	63	8.06	3040
B464223		5.94	0.208	1.31	7.19	1235	800	0.91	0.13	2.90	0.23	57.2	8.9	30	5.74	6000
B464224		5.74	0.157	0.94	7.26	1075	1220	0.95	0.13	2.71	0.24	44.4	7.7	56	6.09	4710
B464225		5.52	0.154	0.82	7.21	895	780	1.02	0.16	2.47	0.25	34.8	8.5	49	6.24	4390
B464226		12.04	0.116	1.02	7.19	995	640	1.35	0.16	2.68	0.49	42.7	8.2	58	7.23	3780
B464227		12.18	0.081	0.51	7.85	266	920	1.21	0.08	2.29	0.23	34.0	7.8	93	7.97	2680
B464228		12.12	0.173	0.73	7.59	861	800	1.19	0.17	2.11	0.23	28.1	7.4	43	6.25	4320
B464229		11.20	0.166	0.82	7.04	578	1030	0.77	0.17	1.65	0.29	47.7	5.2	7	4.36	3800
B464230		11.26	0.163	1.17	7.26	714	1140	0.80	0.17	1.75	0.61	50.5	5.4	8	5.18	4660
B464231		11.78	0.086	0.38	7.74	268	1260	1.09	0.22	1.29	0.37	39.2	4.6	6	5.58	2380
B464232		0.06	NSS	2.34	6.87	30.4	740	1.15	1.94	1.91	0.97	35.0	35.0	223	3.39	3570
B464233		11.90	0.176	1.37	7.00	776	1060	0.72	0.20	1.69	0.38	42.1	6.5	13	5.03	5390
B464234		11.78	0.127	0.56	7.59	147.5	1200	1.22	0.08	2.69	0.15	34.8	7.6	17	13.00	3390
B464235		0.06	NSS	0.02	7.32	2.9	880	1.15	0.02	1.71	0.02	29.0	4.0	25	0.42	30.0
B464236		7.70	0.093	0.45	8.10	32.5	1300	1.13	0.08	2.47	0.12	42.8	11.5	19	8.05	2370
B464237		6.66	0.095	0.42	7.66	142.5	1240	1.26	0.06	2.63	0.19	35.4	7.8	17	9.92	2090
B464238		6.90	0.137	2.21	7.14	316	1480	1.03	0.07	3.02	0.87	45.0	7.3	14	8.92	2650
B464239		6.82	0.121	16.95	7.09	561	1610	1.23	0.05	2.84	5.59	36.6	8.6	14	10.30	2510
B464240		6.52	0.054	0.27	7.78	107.0	1580	1.31	0.04	2.52	0.14	33.4	8.6	17	9.45	1135

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704-1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 16-DEC-2021
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21299343

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
B464201		3.40	17.90	0.12	0.4	0.068	2.36	13.0	12.3	0.78	254	3.01	2.43	8.3	9.5	1270
B464202		3.79	17.25	0.12	0.4	0.050	2.00	15.7	26.5	0.80	263	7.51	1.27	7.3	9.5	1230
B464203		2.61	17.35	0.12	0.4	0.085	1.21	16.6	185.5	0.81	857	3.24	0.06	8.2	9.2	1300
B464204		3.22	15.65	0.12	0.4	0.127	1.25	18.2	54.9	0.75	794	4.37	0.08	7.8	11.9	1390
B464205		3.17	16.60	0.14	0.4	0.058	2.75	17.5	50.3	0.78	595	3.96	0.19	7.6	9.2	1310
B464206		3.19	17.10	0.11	0.5	0.067	1.94	13.0	57.3	0.70	583	2.63	0.13	8.2	9.0	1290
B464207		3.54	18.10	0.12	0.4	0.105	1.68	17.2	88.7	0.84	425	1.64	0.27	9.1	8.7	1720
B464208		3.68	18.40	0.15	0.4	0.113	1.56	20.5	112.0	0.86	458	1.97	0.24	9.2	9.0	2010
B464209		3.82	18.65	0.15	0.5	0.062	1.73	24.0	45.9	0.97	481	3.77	0.21	8.9	8.7	2000
B464210		3.22	19.05	0.11	0.6	0.054	2.02	11.8	42.7	0.83	296	3.05	0.44	8.0	8.7	1310
B464211		3.39	19.70	0.11	0.7	0.028	1.84	13.6	61.7	0.77	697	2.20	0.17	8.6	9.1	1310
B464212		3.23	18.55	0.11	0.7	0.030	1.96	15.7	46.4	0.93	839	5.06	0.55	8.5	9.1	1290
B464213		3.53	19.80	0.13	0.6	0.055	2.28	17.0	17.8	1.02	241	2.45	3.02	9.1	10.0	1440
B464214		3.68	18.80	0.13	0.5	0.103	2.49	14.0	44.8	0.86	255	5.24	1.82	9.2	10.8	1430
B464215		3.03	16.95	0.16	0.5	0.089	3.22	18.0	25.3	0.82	236	6.18	2.24	8.9	9.1	1330
B464216		2.65	16.70	0.13	0.4	0.062	2.33	18.2	88.2	0.86	492	15.40	0.26	8.5	10.5	1130
B464217		2.55	18.00	0.15	0.5	0.064	2.79	14.9	78.8	0.85	280	18.55	0.86	9.2	11.1	1260
B464218		4.35	18.25	0.13	0.2	0.096	2.44	15.3	29.2	0.93	901	246	1.54	5.9	11.7	690
B464219		2.51	13.75	0.12	1.9	0.022	1.91	13.5	2.6	0.40	592	4.41	3.30	6.0	13.7	360
B464220		2.14	17.30	0.15	0.6	0.061	3.54	19.5	45.9	0.91	234	16.70	2.05	9.3	23.1	710
B464221		2.23	17.30	0.15	0.5	0.057	2.56	21.2	88.5	1.11	291	66.7	0.86	9.6	15.7	500
B464222		2.14	17.70	0.17	0.6	0.064	1.35	30.4	368	0.96	318	157.0	0.12	11.2	14.9	850
B464223		2.30	16.10	0.32	0.4	0.116	2.09	26.1	147.0	0.84	273	27.8	0.17	7.6	15.6	1160
B464224		2.04	16.20	0.27	0.5	0.104	2.31	20.1	150.5	0.76	325	35.1	0.20	8.5	15.2	1020
B464225		2.16	16.45	0.24	0.5	0.081	1.94	15.2	114.0	0.68	286	21.2	0.14	8.7	14.1	960
B464226		2.15	17.40	0.24	0.5	0.070	2.64	18.8	117.5	0.84	310	131.0	0.23	8.8	15.5	940
B464227		2.29	18.80	0.22	0.6	0.056	3.55	15.4	61.7	0.88	294	49.8	0.80	9.6	21.9	800
B464228		2.08	17.60	0.25	0.5	0.091	3.02	12.6	139.0	0.59	272	42.0	0.28	7.8	15.0	840
B464229		1.30	13.25	0.26	0.4	0.063	4.10	22.5	92.9	0.47	182	35.6	0.30	5.4	7.3	630
B464230		1.32	13.90	0.32	0.5	0.073	3.46	24.2	197.5	0.45	184	38.2	0.28	5.4	6.6	910
B464231		0.96	16.30	0.41	0.9	0.059	3.41	19.7	254	0.37	162	46.3	0.27	6.1	7.3	770
B464232		4.06	15.20	0.27	0.5	0.084	3.05	16.6	10.3	3.63	397	236	1.18	2.6	232	1020
B464233		1.54	13.25	0.25	0.5	0.096	3.58	20.1	118.5	0.51	231	115.0	0.27	5.3	6.3	830
B464234		2.29	19.20	0.25	0.7	0.056	2.86	15.5	92.7	0.80	198	13.95	1.94	7.8	10.6	1330
B464235		2.55	13.80	0.21	1.7	0.022	1.93	14.7	3.0	0.40	603	4.20	3.38	5.8	15.6	370
B464236		3.51	20.0	0.24	0.7	0.042	2.74	20.2	30.0	1.02	215	17.45	2.56	7.8	11.1	1380
B464237		2.77	19.45	0.23	0.7	0.044	2.77	16.1	57.7	0.90	231	33.6	2.38	7.9	10.7	1310
B464238		2.22	17.75	0.25	0.7	0.043	2.73	21.0	105.5	0.89	452	79.3	1.17	7.3	9.8	1040
B464239		3.18	18.20	0.23	0.7	0.050	2.56	16.7	83.0	1.14	874	20.5	1.23	7.8	11.4	1280
B464240		3.49	20.5	0.20	0.8	0.035	2.35	14.3	72.1	0.95	290	4.48	1.71	8.1	10.6	1340

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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
B464201		13.9	51.9	0.005	0.50	1.65	6.2	3	0.7	437	0.52	0.05	4.16	0.252	0.64	0.5
B464202		28.2	50.9	0.018	1.65	2.59	6.0	3	1.8	379	0.48	0.07	4.38	0.233	0.62	0.6
B464203		56.4	30.6	0.031	0.60	69.9	6.3	3	0.9	930	0.53	0.05	4.10	0.255	0.66	0.6
B464204		82.4	27.5	0.016	1.01	45.0	6.1	5	1.3	994	0.48	0.07	4.81	0.223	0.47	0.9
B464205		23.1	65.4	0.014	0.85	14.10	6.5	3	1.2	559	0.48	0.06	5.24	0.234	0.74	0.6
B464206		16.3	33.1	0.018	0.64	50.0	6.4	3	0.9	588	0.52	0.05	4.54	0.245	0.76	0.7
B464207		12.2	25.5	0.009	0.63	30.8	6.8	3	0.8	320	0.57	0.06	4.77	0.267	0.52	0.5
B464208		12.7	26.6	0.010	0.60	31.2	7.2	4	0.9	353	0.58	0.06	4.90	0.270	0.49	0.5
B464209		10.2	38.5	0.015	0.38	22.9	7.3	2	0.7	302	0.57	<0.05	5.34	0.270	0.52	0.7
B464210		6.5	27.5	0.014	0.37	8.06	6.5	2	0.8	217	0.55	<0.05	3.97	0.279	0.67	0.7
B464211		24.4	28.9	0.019	0.48	106.5	7.3	1	0.8	547	0.57	<0.05	4.53	0.285	0.82	1.2
B464212		340	38.9	0.033	0.51	82.8	6.9	2	0.7	413	0.55	<0.05	4.73	0.282	0.78	1.0
B464213		8.4	62.0	0.007	0.36	0.51	7.5	2	0.8	695	0.61	<0.05	5.45	0.296	0.58	0.6
B464214		11.3	54.8	0.014	0.62	2.06	7.1	3	0.9	641	0.61	0.08	4.72	0.275	0.63	0.6
B464215		14.8	67.3	0.024	0.48	1.21	6.8	3	0.7	531	0.58	0.05	5.21	0.269	0.67	0.6
B464216		131.5	46.4	0.064	0.56	31.0	8.1	2	0.9	1030	0.52	0.05	4.59	0.267	0.79	1.0
B464217		15.7	57.5	0.062	0.42	2.93	8.3	2	0.8	759	0.57	0.05	5.31	0.288	0.85	0.6
B464218		39.0	84.5	0.222	1.51	1.99	11.4	3	1.7	271	0.56	0.44	4.64	0.273	0.85	0.9
B464219		2.8	42.9	0.002	0.01	0.33	6.4	<1	1.8	197.5	0.40	<0.05	2.81	0.176	0.17	1.2
B464220		14.3	74.9	0.051	0.36	0.39	15.7	2	0.9	832	0.54	<0.05	6.38	0.363	0.72	0.8
B464221		16.5	47.8	0.229	0.44	24.2	12.7	2	0.8	620	0.52	<0.05	4.69	0.332	0.66	0.9
B464222		16.8	32.2	0.415	0.39	82.7	12.6	2	0.8	1220	0.56	0.05	5.40	0.331	0.57	0.9
B464223		12.9	40.5	0.107	0.75	27.1	8.0	3	1.0	1335	0.48	0.08	4.74	0.274	0.70	0.6
B464224		16.5	39.6	0.210	0.57	99.7	10.3	3	0.9	1260	0.51	0.06	5.13	0.316	0.71	0.9
B464225		13.7	31.5	0.076	0.77	68.7	9.2	3	1.1	1260	0.48	0.06	4.36	0.295	0.77	0.6
B464226		16.3	43.9	0.457	0.49	22.1	10.9	2	0.9	1005	0.48	<0.05	4.84	0.314	0.80	1.0
B464227		10.0	56.4	0.167	0.38	13.35	16.4	1	0.9	729	0.51	<0.05	5.72	0.389	0.82	0.8
B464228		14.2	49.3	0.115	0.59	63.1	9.8	2	0.9	974	0.45	0.05	4.91	0.278	0.84	0.7
B464229		16.6	77.4	0.098	0.54	17.30	4.6	2	0.7	806	0.31	<0.05	4.76	0.152	0.90	0.8
B464230		19.9	66.7	0.113	0.60	4.53	4.6	3	0.9	896	0.31	0.08	4.74	0.164	0.78	0.9
B464231		10.2	70.4	0.114	0.32	1.25	4.9	1	0.7	805	0.40	<0.05	4.92	0.183	0.86	1.0
B464232		20.9	88.8	0.263	2.36	7.61	12.8	3	1.3	268	0.18	1.57	2.61	0.322	1.12	0.9
B464233		39.9	75.8	0.443	0.72	1.82	4.4	3	0.9	740	0.31	0.08	4.36	0.158	0.93	0.8
B464234		8.1	61.6	0.042	0.42	0.19	7.4	3	0.7	723	0.50	0.05	4.06	0.307	0.84	0.6
B464235		2.9	44.9	<0.002	0.01	0.32	6.4	<1	1.7	202	0.40	<0.05	2.78	0.182	0.16	1.2
B464236		10.0	75.6	0.037	1.06	0.26	8.0	2	1.1	1740	0.50	<0.05	5.11	0.310	0.72	0.8
B464237		17.6	62.1	0.123	0.35	0.26	7.4	1	0.7	1170	0.52	<0.05	4.50	0.306	0.77	0.8
B464238		81.6	59.2	0.187	0.42	25.2	7.3	3	0.7	644	0.47	<0.05	4.75	0.278	0.87	1.1
B464239		703	63.1	0.130	0.35	173.5	7.3	2	0.6	636	0.49	<0.05	4.51	0.288	0.88	0.8
B464240		10.2	53.6	0.011	0.18	0.58	7.6	1	0.5	1300	0.56	<0.05	4.70	0.301	0.92	0.8

***** 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: 16-DEC-2021
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21299343

Sample Description	Method	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62	Zn-OG62
	Analyte	V	W	Y	Zn	Zr	Cu	Zn
	Units	ppm	ppm	ppm	ppm	ppm	%	%
	LOD	1	0.1	0.1	2	0.5	0.001	0.001
B464201		66	0.4	10.3	70	11.9		
B464202		62	4.1	11.1	67	12.5		
B464203		58	1.2	11.2	176	10.7		
B464204		59	1.4	11.3	318	11.3		
B464205		65	1.9	11.5	105	12.4		
B464206		70	2.3	9.5	126	14.5		
B464207		72	1.8	13.2	79	10.7		
B464208		73	2.2	15.5	60	11.3		
B464209		77	2.5	17.0	70	13.6		
B464210		71	2.1	10.3	56	17.4		
B464211		78	2.8	10.1	95	20.5		
B464212		75	2.3	10.8	623	19.7		
B464213		76	0.4	11.8	65	15.4		
B464214		71	0.4	11.9	64	13.6		
B464215		62	0.4	11.9	78	13.4		
B464216		68	2.5	11.1	363	13.1		
B464217		71	2.2	10.0	110	15.7		
B464218		103	12.3	11.7	233	5.2		
B464219		31	0.7	16.0	27	56.3		
B464220		118	2.2	9.4	83	21.1		
B464221		93	2.2	10.0	148	17.6		
B464222		93	2.3	11.6	92	18.9		
B464223		68	6.3	11.1	71	11.8		
B464224		86	4.6	9.8	86	15.5		
B464225		74	6.0	7.5	116	14.5		
B464226		91	6.1	9.0	183	15.1		
B464227		131	1.3	9.2	67	20.8		
B464228		88	1.0	7.4	70	15.4		
B464229		29	2.8	8.2	77	13.8		
B464230		36	5.4	9.8	138	17.3		
B464231		36	9.8	8.3	42	25.0		
B464232		126	17.1	10.9	187	13.9		
B464233		36	2.6	8.7	143	14.8		
B464234		73	1.4	10.0	55	18.4		
B464235		31	0.6	17.3	27	56.3		
B464236		86	1.0	13.6	55	18.7		
B464237		78	0.8	10.9	86	21.9		
B464238		67	1.0	11.6	243	19.3		
B464239		75	1.7	10.3	836	19.8		
B464240		82	0.3	11.8	86	38.7		

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

Finalized Date: 16-DEC-2021
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21299343

Sample Description	Method / Analyte / Units / LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	ME-MS61 Ag ppm 0.01	ME-MS61 Al % 0.01	ME-MS61 As ppm 0.2	ME-MS61 Ba ppm 10	ME-MS61 Be ppm 0.05	ME-MS61 Bi ppm 0.01	ME-MS61 Ca % 0.01	ME-MS61 Cd ppm 0.02	ME-MS61 Ce ppm 0.01	ME-MS61 Co ppm 0.1	ME-MS61 Cr ppm 1	ME-MS61 Cs ppm 0.05	ME-MS61 Cu ppm 0.2
B464241		6.56	0.103	0.46	7.80	654	1290	1.02	0.05	2.93	0.36	35.4	8.2	15	6.43	2540
B464242		6.50	0.093	0.66	7.54	497	1050	1.07	0.05	2.56	0.30	34.1	8.4	15	8.04	2460
B464243		6.36	0.078	0.95	7.90	447	1030	1.06	0.05	2.61	0.63	38.7	8.1	16	7.33	1740
B464244		6.52	0.117	2.25	6.56	914	890	0.85	0.05	4.72	1.07	53.4	9.8	12	4.22	2710
B464245		6.88	0.161	1.66	7.48	1195	910	0.92	0.08	2.66	0.88	40.4	9.5	11	6.27	3730
B464246		6.56	0.199	2.75	7.12	741	800	1.00	0.10	2.86	1.06	39.2	8.8	12	9.54	5420
B464247		6.48	0.166	2.43	6.14	638	900	1.06	0.08	2.95	0.89	51.6	10.0	13	10.85	3430
B464248		6.30	0.422	1.88	6.75	1715	1560	0.81	0.08	2.17	2.86	77.6	14.7	13	7.92	6550
B464249		6.48	0.202	1.08	7.29	790	1150	0.89	0.08	2.37	0.58	44.7	10.9	13	7.35	5320
B464250		6.76	0.097	0.45	7.27	130.0	1200	1.09	0.06	2.40	0.16	38.9	8.2	12	9.64	2970
B464251		6.32	0.116	0.79	7.03	248	1250	0.97	0.07	2.32	0.41	42.2	7.9	13	7.32	3340
B464252		6.42	0.204	0.60	7.61	332	1220	0.94	0.07	2.31	0.16	42.3	10.1	14	6.69	5180
B464253		0.08	0.168	1.25	8.68	48.2	450	1.07	0.48	2.22	1.09	33.1	15.0	19	7.51	2110
B464254		0.10	<0.001	0.02	7.17	2.6	850	1.09	0.02	1.67	0.03	26.6	3.8	25	0.41	28.4
B464255		3.08	0.267	0.73	7.43	303	890	1.09	0.09	2.35	0.23	34.5	9.6	13	8.55	4630
B464256		2.88	0.176	0.77	7.38	366	960	1.18	0.08	2.33	0.21	30.0	8.9	12	8.49	3970
B464257		3.08	0.259	4.72	6.95	707	650	1.19	0.18	4.82	5.84	41.8	8.1	10	10.55	5720
B464258		6.34	0.194	7.31	6.38	659	1290	1.15	0.14	3.62	12.35	40.6	8.8	11	12.35	4550
B464259		6.36	0.174	2.43	6.36	226	1030	0.98	0.22	3.05	6.71	46.9	7.8	11	5.92	5040
B464260		4.14	0.150	0.99	7.20	16.7	980	1.02	0.09	2.73	1.90	39.0	8.6	12	3.78	4190
B464261		6.38	0.203	1.00	6.85	9.4	870	0.98	0.11	3.31	0.22	39.0	9.1	13	3.61	5210
B464262		6.42	0.181	1.28	6.56	166.5	1090	0.98	0.08	2.54	1.09	30.7	7.7	12	6.64	4920
B464263		6.70	0.325	1.07	6.87	45.0	970	0.94	0.13	2.80	0.17	37.1	11.0	16	4.94	7390
B464264		6.48	0.723	2.27	5.81	367	710	0.89	0.12	4.26	0.26	66.5	11.3	15	4.36	>10000
B464265		5.22	0.737	2.39	5.95	550	860	0.72	0.14	5.21	0.35	103.0	17.0	12	5.19	>10000
B464266		6.02	0.292	1.30	6.38	434	940	1.26	0.11	2.97	0.28	36.7	9.8	13	5.13	6520
B464267		6.30	0.132	0.93	7.32	5.2	1090	1.18	0.09	2.76	0.19	35.4	6.7	17	2.48	4460
B464268		6.56	0.113	0.74	7.11	10.3	1000	1.12	0.07	3.10	0.11	32.7	8.4	14	3.11	3950
B464269		6.58	0.201	1.02	6.71	4.1	870	1.18	0.09	3.72	0.15	69.4	9.0	14	2.00	5700
B464270		6.46	0.164	0.84	6.69	0.8	700	0.94	0.08	4.67	0.12	72.2	10.6	14	1.72	5020
B464271		0.08	0.023	2.36	6.63	30.8	710	1.12	1.79	1.81	0.95	33.8	34.4	227	3.27	3430
B464272		0.08	0.001	0.03	7.00	2.8	830	1.03	0.03	1.60	0.03	26.8	3.8	24	0.39	28.5
B464273		6.64	0.127	0.96	7.05	1.7	650	0.86	0.10	3.90	0.15	56.1	12.8	15	1.98	5630
B464274		6.44	0.196	0.92	6.81	23.4	1140	1.06	0.11	3.12	0.12	37.4	9.0	17	4.88	6210
B464275		6.52	0.085	0.69	7.54	19.1	1210	1.16	0.06	2.57	0.18	30.4	7.3	17	4.86	3060
B464276		6.54	0.153	6.81	7.28	288	1010	1.23	0.11	3.11	3.88	49.9	8.9	13	11.40	4410
B464277		6.18	0.150	3.60	6.54	81.4	1280	1.19	0.08	3.29	0.55	39.9	8.4	14	10.35	4610
B464278		3.04	0.145	1.60	6.61	24.7	1170	1.07	0.07	3.64	0.25	43.2	8.8	15	7.25	3270
B464279		2.92	0.165	2.29	7.05	129.0	1100	1.12	0.08	3.59	0.35	56.2	12.0	14	9.23	3950
B464280		3.12	0.153	2.34	7.18	111.5	1040	1.11	0.07	3.42	0.26	49.2	9.2	14	9.12	4080

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

Finalized Date: 16-DEC-2021
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21299343

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
B464241		3.08	20.0	0.21	0.8	0.056	1.65	15.3	167.0	0.86	373	7.88	0.17	8.2	10.1	1340
B464242		3.45	19.35	0.21	0.8	0.048	2.56	15.3	134.5	0.84	323	14.05	0.78	8.0	9.7	1280
B464243		3.61	19.15	0.18	0.7	0.040	1.58	17.5	126.0	0.86	778	3.31	0.14	7.5	11.8	1320
B464244		4.57	14.25	0.20	0.5	0.073	1.23	28.1	72.4	1.47	1340	18.35	0.10	6.7	16.0	1130
B464245		3.53	17.85	0.20	0.6	0.098	2.86	18.2	83.3	0.84	748	59.7	0.22	8.6	10.5	1380
B464246		3.24	16.95	0.19	0.5	0.135	2.43	18.0	70.6	0.89	753	50.2	0.14	8.8	9.3	1220
B464247		3.21	13.30	0.19	0.7	0.083	2.02	25.9	45.4	0.97	902	73.7	0.11	7.2	10.9	1100
B464248		2.96	15.30	0.26	0.4	0.138	2.87	34.3	62.1	0.64	486	118.0	0.20	8.5	12.7	1260
B464249		3.31	17.55	0.24	0.5	0.108	3.83	20.0	100.5	0.65	375	190.5	0.61	8.2	9.2	1330
B464250		3.03	17.10	0.24	0.5	0.059	3.91	17.4	90.7	0.72	308	69.6	1.47	8.3	6.8	1350
B464251		2.98	16.80	0.21	0.5	0.066	3.90	18.8	102.0	0.62	432	190.0	0.95	7.2	6.5	1140
B464252		3.43	17.90	0.22	0.5	0.117	4.01	18.8	161.0	0.58	368	469	0.73	7.9	8.8	1290
B464253		4.52	18.55	0.19	0.3	0.102	2.50	16.2	31.6	0.95	927	255	1.58	5.6	12.9	710
B464254		2.51	13.20	0.17	1.7	0.021	1.86	13.6	2.9	0.39	593	4.38	3.29	5.6	14.8	360
B464255		3.49	17.90	0.20	0.5	0.099	3.13	15.2	145.5	0.59	428	95.3	0.79	7.9	7.7	1310
B464256		3.54	18.35	0.17	0.5	0.087	3.20	12.5	161.0	0.57	444	112.5	0.80	8.0	8.1	1330
B464257		3.38	16.25	0.21	0.4	0.125	2.57	20.0	72.3	1.63	3930	21.2	0.11	7.0	9.6	1160
B464258		2.66	15.10	0.18	0.4	0.110	2.31	18.6	42.1	1.12	3290	18.35	0.08	7.2	9.7	1140
B464259		2.37	15.35	0.15	0.5	0.092	2.30	21.3	54.0	0.85	1400	126.0	0.87	8.2	8.5	1290
B464260		2.89	16.35	0.17	0.5	0.076	2.95	18.3	12.3	0.83	340	121.0	2.52	8.1	7.6	1230
B464261		2.21	15.65	0.18	0.5	0.103	2.76	18.0	13.5	0.80	249	118.0	2.00	8.6	7.9	1090
B464262		2.11	15.80	0.18	0.5	0.094	2.99	13.2	107.0	0.62	401	185.0	1.17	8.9	6.4	1190
B464263		3.01	16.10	0.17	0.5	0.161	2.81	17.4	77.7	0.74	233	192.5	2.04	8.2	9.9	1220
B464264		2.45	14.35	0.16	0.4	0.164	2.27	31.2	158.5	0.61	213	288	0.70	7.5	9.9	1170
B464265		2.95	13.95	0.22	0.4	0.279	2.91	50.7	103.0	0.81	289	157.0	0.95	7.7	15.2	1240
B464266		2.39	16.50	0.14	0.6	0.126	2.57	16.4	255	0.63	228	33.1	1.33	7.7	9.1	1080
B464267		2.49	16.90	0.16	0.7	0.084	2.58	17.0	7.4	0.73	203	43.5	2.88	8.3	7.2	920
B464268		2.88	16.80	0.17	0.7	0.071	2.24	15.9	7.6	0.81	198	60.5	2.82	7.9	7.6	820
B464269		3.01	16.85	0.20	0.6	0.101	2.15	30.8	7.2	0.87	219	130.5	2.84	8.5	9.4	2970
B464270		3.20	16.90	0.19	0.6	0.108	2.42	33.6	5.4	0.95	226	225	2.68	8.9	9.4	1960
B464271		3.87	14.65	0.14	0.4	0.090	2.91	15.8	9.2	3.47	388	237	1.11	2.8	231	1000
B464272		2.42	12.65	0.11	1.7	0.019	1.80	14.0	2.4	0.39	584	4.17	3.20	5.8	14.0	370
B464273		4.21	16.85	0.18	0.5	0.109	3.17	26.7	6.6	0.82	243	43.5	2.49	7.6	10.6	1330
B464274		3.16	16.95	0.16	0.6	0.095	2.55	16.9	86.8	0.72	233	13.15	2.24	7.8	9.1	1210
B464275		2.76	16.80	0.16	0.7	0.053	2.73	14.2	117.0	0.75	321	8.67	2.27	7.5	7.3	1110
B464276		2.59	16.25	0.17	0.6	0.052	2.95	24.6	68.8	0.91	2920	18.95	0.06	7.4	8.6	1210
B464277		3.23	16.45	0.17	0.7	0.065	3.02	17.4	54.6	0.77	2900	7.40	0.94	7.8	8.6	1260
B464278		3.02	16.45	0.18	0.7	0.046	2.81	19.3	33.3	0.82	440	8.45	1.95	8.0	8.6	1320
B464279		3.19	16.70	0.16	0.6	0.052	2.73	26.7	68.0	1.00	788	16.70	0.49	7.9	10.0	1430
B464280		2.82	17.00	0.15	0.7	0.048	2.91	22.7	66.2	0.95	837	11.85	0.50	8.1	8.9	1480

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Finalized Date: 16-DEC-2021
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Project: Poplar

CERTIFICATE OF ANALYSIS VA21299343

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
B464241		22.8	27.4	0.017	0.35	5.15	7.6	2	0.6	561	0.54	<0.05	4.60	0.300	0.88	1.0
B464242		25.4	52.8	0.039	0.31	4.30	7.4	2	0.7	520	0.55	<0.05	4.58	0.296	0.71	1.0
B464243		55.8	35.1	0.012	0.25	7.36	7.6	1	0.6	1150	0.50	<0.05	4.64	0.290	0.64	1.0
B464244		51.3	33.9	0.034	0.40	18.85	8.7	2	0.6	1660	0.42	<0.05	4.54	0.229	0.50	0.9
B464245		54.9	53.3	0.136	0.43	5.75	6.7	3	0.7	1120	0.50	<0.05	4.58	0.259	0.88	0.8
B464246		42.3	57.3	0.118	0.63	21.0	6.4	3	0.7	695	0.48	0.09	4.62	0.241	0.97	0.8
B464247		51.4	65.5	0.122	0.59	22.3	7.8	2	0.6	930	0.37	<0.05	4.23	0.237	1.32	0.9
B464248		113.0	61.2	0.323	0.84	9.17	5.6	4	0.8	758	0.45	0.07	5.42	0.230	1.19	1.7
B464249		29.3	72.8	0.410	0.63	2.03	6.2	3	0.8	744	0.46	0.05	4.49	0.241	0.97	0.9
B464250		10.0	74.6	0.161	0.34	0.58	6.4	2	0.6	910	0.49	<0.05	4.35	0.249	0.84	0.6
B464251		22.3	78.5	0.297	0.41	4.71	6.1	2	0.7	584	0.42	<0.05	4.23	0.217	0.96	0.7
B464252		12.6	72.3	0.641	0.58	0.70	6.1	3	0.7	443	0.47	0.05	4.53	0.251	0.95	0.7
B464253		40.7	89.6	0.232	1.55	2.06	11.6	3	1.7	279	0.39	0.47	5.56	0.273	0.78	1.1
B464254		2.8	42.9	<0.002	0.01	0.30	6.2	<1	1.6	196.0	0.38	<0.05	2.74	0.177	0.16	1.2
B464255		10.1	63.8	0.177	0.50	1.21	6.6	3	0.8	273	0.49	0.06	4.64	0.254	0.73	0.7
B464256		9.0	59.1	0.170	0.41	1.20	6.4	3	0.7	279	0.50	0.05	4.08	0.254	0.76	0.6
B464257		112.5	106.5	0.058	0.81	27.3	6.3	4	0.9	294	0.42	0.06	4.83	0.219	1.11	1.0
B464258		522	96.4	0.042	0.83	70.7	6.1	3	0.8	319	0.42	0.05	4.43	0.210	1.34	0.9
B464259		110.5	62.4	0.109	0.84	12.85	6.1	3	0.9	947	0.49	0.06	4.56	0.225	0.77	0.9
B464260		131.0	68.3	0.125	1.43	2.75	6.5	2	0.8	661	0.50	<0.05	4.74	0.236	0.62	0.7
B464261		13.9	63.3	0.152	1.35	0.70	7.1	3	0.9	520	0.57	0.06	4.10	0.232	0.54	0.7
B464262		37.5	59.6	0.210	0.75	0.72	7.0	3	0.7	1355	0.58	0.06	3.83	0.235	0.67	0.8
B464263		11.5	59.3	0.310	1.47	0.13	6.7	4	0.8	688	0.52	0.07	4.58	0.236	0.49	0.7
B464264		10.6	42.1	0.720	1.20	0.47	5.5	5	1.1	324	0.45	0.08	4.20	0.206	0.46	0.7
B464265		12.2	61.1	0.248	1.57	0.75	5.3	7	1.4	294	0.43	0.12	4.93	0.205	0.54	0.7
B464266		13.6	45.8	0.060	0.75	0.72	5.1	4	0.9	388	0.48	0.09	3.98	0.227	0.53	0.8
B464267		11.1	59.4	0.063	1.48	0.08	5.5	3	0.7	614	0.54	0.07	4.88	0.231	0.42	0.9
B464268		7.2	53.9	0.075	1.56	0.06	5.7	3	0.6	615	0.49	0.07	5.12	0.237	0.42	0.9
B464269		8.6	51.4	0.368	2.03	0.08	6.2	4	0.8	595	0.52	0.10	7.01	0.234	0.39	1.1
B464270		7.9	65.2	1.320	3.04	0.05	6.7	4	0.7	606	0.56	0.07	4.73	0.243	0.41	0.8
B464271		20.5	84.1	0.272	2.25	7.09	12.7	4	1.3	264	0.18	1.32	2.49	0.306	1.15	0.8
B464272		2.7	41.1	0.002	0.02	0.31	5.9	1	1.6	193.5	0.39	<0.05	2.88	0.176	0.15	1.2
B464273		8.4	68.6	0.126	2.79	0.05	6.4	3	0.8	554	0.48	0.08	4.93	0.217	0.48	0.8
B464274		9.3	55.3	0.017	1.66	0.14	5.7	4	0.9	642	0.49	0.08	4.70	0.226	0.50	0.8
B464275		11.0	61.8	0.015	0.89	0.45	5.3	2	0.7	563	0.48	0.05	5.17	0.236	0.55	0.9
B464276		424	126.0	0.038	0.83	48.2	5.9	3	1.2	391	0.44	0.05	5.54	0.216	1.27	1.2
B464277		362	85.3	0.011	1.44	13.80	6.0	3	1.0	990	0.49	<0.05	4.93	0.211	1.05	0.9
B464278		18.8	69.5	0.013	1.73	0.52	6.2	3	0.8	1010	0.49	0.05	5.23	0.225	0.74	1.0
B464279		23.9	73.5	0.024	1.00	2.10	6.0	3	0.9	534	0.49	0.07	5.30	0.228	4.12	1.1
B464280		18.7	72.3	0.021	0.80	1.70	5.8	3	0.9	426	0.51	0.05	5.30	0.238	1.20	1.1

***** 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: 16-DEC-2021
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21299343

Sample Description	Method	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62	Zn-OG62
	Analyte	V	W	Y	Zn	Zr	Cu	Zn
	Units	ppm	ppm	ppm	ppm	ppm	%	%
	LOD	1	0.1	0.1	2	0.5	0.001	0.001
B464241		80	1.1	11.8	211	23.7		
B464242		77	0.6	10.3	201	22.5		
B464243		84	1.5	11.3	309	20.8		
B464244		96	0.8	14.3	386	15.0		
B464245		66	1.7	12.7	462	19.7		
B464246		61	2.8	11.6	333	17.3		
B464247		73	1.3	13.1	317	23.4		
B464248		55	1.3	20.3	1140	12.2		
B464249		67	8.3	14.0	323	13.6		
B464250		62	5.3	12.9	76	14.3		
B464251		64	3.3	12.2	154	13.5		
B464252		69	11.9	13.2	94	14.0		
B464253		105	4.2	12.6	233	5.6		
B464254		30	0.6	16.4	28	53.0		
B464255		60	9.9	13.1	93	14.0		
B464256		64	9.1	12.0	106	13.9		
B464257		54	2.7	13.0	765	10.5		
B464258		44	2.9	11.7	1870	10.8		
B464259		52	1.6	15.4	1100	16.6		
B464260		60	0.4	14.1	348	16.3		
B464261		40	0.6	14.3	61	15.8		
B464262		47	0.8	11.6	211	16.2		
B464263		63	0.8	12.7	58	14.8		
B464264		53	0.3	14.5	78	12.5	1.010	
B464265		41	0.4	22.2	89	13.2	1.420	
B464266		51	0.5	11.7	76	19.6		
B464267		55	0.3	12.5	53	21.5		
B464268		58	0.2	12.0	49	20.9		
B464269		61	0.2	28.2	52	19.5		
B464270		66	0.2	26.3	56	16.6		
B464271		124	17.6	10.7	184	13.5		
B464272		31	0.6	16.5	28	55.3		
B464273		78	0.4	19.1	61	15.9		
B464274		71	0.3	13.3	49	20.3		
B464275		60	0.3	10.5	54	21.5		
B464276		53	2.8	12.7	574	18.1		
B464277		64	1.7	13.6	129	21.8		
B464278		66	0.3	14.4	70	22.3		
B464279		68	0.5	16.8	94	18.9		
B464280		66	0.5	14.8	94	21.2		

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To: MAMMOTH GEOLOGICAL LTD.
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VANCOUVER BC V6E 4K2

Finalized Date: 16-DEC-2021
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21299343

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
B464281		6.52	0.129	1.80	6.99	64.2	980	1.17	0.10	2.56	0.18	35.2	9.5	13	11.75	3350
B464282		6.36	0.186	2.40	6.90	89.7	1080	1.07	0.14	2.79	0.49	35.5	11.0	14	5.80	4490
B464283		6.62	0.153	2.57	6.89	356	3080	1.07	0.10	2.72	0.61	41.8	9.2	13	7.71	3890
B464284		6.36	0.148	1.02	7.12	323	940	1.52	0.07	3.45	0.32	38.4	9.3	13	8.00	3040
B464285		6.14	0.292	3.43	7.07	56.1	960	0.98	0.11	2.91	0.25	54.3	11.6	12	4.19	6410
B464286		5.90	0.171	1.19	7.11	266	930	0.91	0.12	3.59	0.33	43.2	9.3	11	4.71	3360
B464287		6.14	0.097	0.41	7.05	66.3	1270	1.09	0.07	2.54	0.10	33.8	8.9	13	6.35	1910
B464288		6.66	0.106	0.47	7.24	70.1	1220	1.21	0.09	2.63	0.10	33.9	10.7	13	6.03	2300
B464289		6.26	0.215	1.13	6.88	920	1040	1.57	0.15	2.82	0.34	33.5	12.8	15	7.95	4070
B464290		6.56	0.228	1.01	7.22	23.0	1180	1.06	0.17	2.63	0.10	36.6	11.4	14	6.24	4390
B464291		0.10	0.196	1.26	8.40	47.4	440	1.09	0.54	2.12	1.09	32.4	14.5	19	7.28	2110
B464292		6.64	0.200	0.92	7.13	57.9	1190	1.18	0.13	2.68	0.09	31.6	10.3	15	6.27	3910
B464293		0.10	0.003	0.03	6.90	3.3	820	1.00	0.03	1.57	<0.02	25.8	3.7	24	0.38	31.3
B464294		4.68	0.214	4.39	6.88	1350	1020	1.23	0.14	3.34	7.77	35.0	10.0	14	7.56	4180
B464295		0.88	1.050	23.6	6.95	6180	720	0.74	0.22	2.03	44.9	73.2	23.5	13	6.77	>10000
B464296		6.58	0.384	5.07	7.41	2080	1330	0.83	0.29	2.91	7.29	43.1	14.0	14	7.78	6820
B464297		2.86	0.185	2.60	6.61	1910	850	0.97	0.36	2.89	1.98	26.4	14.7	12	8.30	5260
B464298		3.50	0.289	2.49	6.74	1950	1090	1.05	0.33	3.08	1.88	26.9	11.7	14	8.66	5340
B464299		6.80	0.411	3.22	6.22	2070	880	0.88	0.36	2.82	1.30	28.6	11.2	9	8.04	8500
B464300		6.86	0.326	4.29	7.22	2210	660	1.31	0.26	3.11	2.39	41.4	15.5	7	12.05	7600
B464301		6.50	0.144	2.11	7.50	564	1220	1.09	0.21	2.13	0.60	33.6	11.1	9	9.15	5610
B464302		6.64	0.165	1.60	7.70	751	820	0.94	0.16	1.72	3.74	45.3	7.6	7	9.12	5480
B464303		6.02	0.196	1.36	7.14	687	680	0.97	0.23	1.86	2.40	40.0	8.7	6	7.86	5540
B464304		6.50	0.182	1.13	7.47	1020	650	1.00	0.12	1.84	4.42	40.3	9.7	6	8.21	5050
B464305		6.48	0.203	2.58	7.00	996	710	1.01	0.20	1.96	7.04	32.3	11.3	12	7.81	6560
B464306		6.64	0.104	0.91	7.71	276	710	1.10	0.14	1.68	1.66	46.1	7.7	7	9.00	3580
B464307		6.46	0.103	1.62	6.90	417	1080	0.93	0.14	1.61	2.04	83.8	7.4	9	7.47	3650
B464308		6.72	0.225	7.23	7.20	2050	740	1.14	0.17	2.17	12.25	89.9	10.9	9	10.05	6440
B464309		6.78	0.171	7.64	7.09	1980	770	1.18	0.20	1.92	25.5	58.8	9.2	7	10.00	5630
B464310		6.56	0.134	1.18	8.11	331	930	1.26	0.18	1.95	1.08	33.5	10.2	8	8.70	5220
B464311		6.06	0.128	1.00	8.04	104.5	1160	1.22	0.14	1.82	0.56	41.3	11.2	7	6.24	4430
B464312		0.08	0.003	0.03	7.20	2.3	860	1.07	0.03	1.69	0.03	27.9	3.9	27	0.40	27.2
B464313		7.02	0.108	1.10	7.79	248	530	1.24	0.16	1.80	1.24	47.1	12.9	8	8.10	3890
B464314		0.08	0.021	2.33	6.50	30.8	710	1.07	2.09	1.79	0.97	33.2	34.5	231	3.35	3350
B464315		6.62	0.114	1.25	7.51	145.5	910	1.28	0.14	1.91	0.39	39.8	11.8	7	8.32	3850
B464316		6.28	0.065	0.70	7.67	53.4	870	1.49	0.13	2.14	0.20	44.4	11.1	9	6.73	2620
B464317		6.58	0.080	0.73	7.63	82.2	950	1.39	0.10	2.16	0.21	52.1	10.3	12	7.18	3010
B464318		3.16	0.081	0.81	7.64	133.5	1000	1.21	0.10	2.17	0.62	39.1	9.2	9	7.23	3100
B464319		3.40	0.083	0.79	7.66	85.6	940	1.28	0.12	2.26	0.45	37.0	8.9	10	7.16	3170
B464320		3.34	0.084	1.31	7.60	168.0	600	1.20	0.17	2.44	0.69	37.9	10.2	10	8.64	2790

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Finalized Date: 16-DEC-2021
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21299343

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
B464281		3.28	17.20	0.15	0.7	0.067	3.09	15.8	86.8	0.84	730	16.80	0.84	8.6	9.9	1310
B464282		4.00	17.60	0.13	0.6	0.077	2.55	15.4	27.8	0.88	613	14.80	1.30	8.8	9.7	1400
B464283		2.93	15.85	0.13	0.6	0.052	2.77	20.3	84.1	0.85	1140	185.0	1.12	7.7	8.1	1220
B464284		3.02	17.95	0.13	0.7	0.054	2.29	16.8	409	0.75	803	22.4	0.12	8.3	9.5	1340
B464285		3.33	17.35	0.14	0.7	0.096	2.78	25.1	57.5	0.72	606	162.5	0.34	8.7	10.3	1460
B464286		3.46	17.10	0.13	0.6	0.068	1.99	19.8	132.5	0.93	791	14.20	0.12	8.0	9.0	1280
B464287		3.04	17.00	0.14	0.7	0.037	2.32	15.5	93.8	0.72	294	25.4	1.63	8.2	8.5	1240
B464288		3.35	17.40	0.14	0.7	0.047	2.43	15.0	75.7	0.75	250	13.25	2.16	8.5	8.0	1260
B464289		3.04	17.35	0.14	0.7	0.094	1.91	14.4	590	0.73	478	23.6	0.74	7.9	9.5	1240
B464290		2.93	16.55	0.17	0.6	0.104	2.60	17.3	97.8	0.76	207	16.80	2.35	7.8	9.0	1220
B464291		4.37	17.75	0.12	0.2	0.101	2.42	16.0	29.6	0.92	928	255	1.53	5.9	11.8	710
B464292		3.14	17.50	0.14	0.7	0.092	2.66	13.8	183.5	0.75	264	27.0	1.95	8.7	9.6	1230
B464293		2.40	12.65	0.13	1.7	0.020	1.80	13.1	2.8	0.38	577	3.79	3.13	5.7	13.7	350
B464294		2.88	16.75	0.15	0.6	0.088	2.02	16.3	377	0.86	972	42.9	0.30	7.5	8.4	1210
B464295		2.99	16.45	0.14	0.6	0.307	2.39	32.2	126.0	0.53	1060	12.40	0.13	7.6	29.1	1420
B464296		3.14	16.65	0.14	0.5	0.155	2.72	20.9	145.5	0.86	934	506	0.57	7.4	16.8	1310
B464297		3.39	16.35	0.10	0.4	0.128	2.19	11.9	239	0.78	861	11.35	0.34	6.8	11.2	1060
B464298		3.36	16.75	0.08	0.4	0.118	2.18	12.2	305	0.83	913	8.69	0.31	6.9	10.9	1090
B464299		3.43	14.40	0.10	0.4	0.188	2.91	13.2	195.0	0.75	721	92.2	0.73	4.8	10.5	910
B464300		2.30	14.90	0.12	0.5	0.143	2.21	20.7	358	0.85	826	74.6	0.27	5.3	11.9	920
B464301		1.89	14.40	0.12	0.5	0.081	3.21	16.3	217	0.58	386	57.1	1.29	5.4	5.6	870
B464302		1.46	14.80	0.14	0.6	0.084	3.11	22.8	126.0	0.47	349	101.0	0.97	5.5	5.3	880
B464303		1.60	13.95	0.12	0.5	0.113	2.61	19.3	144.5	0.49	380	101.0	0.77	5.6	6.2	880
B464304		1.70	14.60	0.15	0.7	0.096	2.89	19.0	229	0.42	372	87.3	1.08	6.4	6.5	850
B464305		1.73	13.25	0.12	0.6	0.129	2.70	16.0	97.8	0.51	327	75.7	1.49	5.1	6.4	810
B464306		1.35	14.75	0.13	0.6	0.071	2.54	23.4	142.0	0.47	265	44.7	1.98	5.1	4.3	860
B464307		1.28	12.45	0.17	0.5	0.074	3.30	45.5	53.6	0.54	369	304	0.44	4.6	4.4	800
B464308		1.72	13.30	0.16	0.6	0.105	3.11	46.7	61.2	0.70	834	354	0.12	4.0	6.1	980
B464309		1.53	12.95	0.11	0.6	0.135	3.15	29.0	56.7	0.60	1140	97.4	0.43	4.2	5.5	930
B464310		1.70	15.25	0.12	0.7	0.105	2.95	16.5	132.5	0.55	327	64.7	1.93	5.7	5.3	950
B464311		1.71	14.55	0.14	0.7	0.089	2.83	21.0	66.5	0.53	240	72.3	1.63	5.2	5.3	930
B464312		2.54	13.45	0.08	1.9	0.025	1.87	15.7	2.5	0.41	598	3.96	3.34	6.1	14.1	370
B464313		1.61	14.60	0.15	0.7	0.082	2.29	24.4	110.0	0.54	379	57.9	1.19	5.0	5.3	880
B464314		3.83	14.95	0.13	0.5	0.089	2.87	15.7	9.7	3.43	377	232	1.10	2.7	225	990
B464315		1.65	13.50	0.12	0.7	0.072	2.45	19.7	101.5	0.56	425	102.5	1.31	4.7	5.0	890
B464316		1.68	14.50	0.16	0.8	0.048	2.03	22.8	59.5	0.51	243	67.0	2.77	5.3	4.9	860
B464317		1.61	14.00	0.15	0.6	0.051	2.75	27.1	105.5	0.53	210	65.1	2.48	6.2	4.9	890
B464318		1.49	14.55	0.14	0.7	0.065	2.74	19.6	109.5	0.48	205	87.1	2.66	5.9	4.8	900
B464319		1.52	14.60	0.14	0.7	0.064	2.59	18.7	93.9	0.49	200	55.5	2.84	5.9	4.7	890
B464320		1.53	14.70	0.15	0.7	0.063	2.30	18.9	69.9	0.55	632	64.1	2.36	5.6	5.0	870

***** 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: 16-DEC-2021
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21299343

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
B464281		15.4	80.4	0.034	0.52	1.23	6.4	3	0.7	307	0.54	<0.05	5.18	0.235	0.98	1.0
B464282		33.2	62.6	0.031	0.78	8.25	8.2	3	0.8	617	0.56	0.09	5.44	0.230	0.70	1.0
B464283		25.9	72.6	0.362	0.84	6.01	5.7	3	0.6	1055	0.47	0.08	4.87	0.220	0.82	0.9
B464284		25.3	44.7	0.073	0.65	4.78	6.4	2	0.8	307	0.53	<0.05	4.75	0.245	0.71	0.9
B464285		38.8	53.9	0.276	0.81	0.93	6.1	4	0.8	187.0	0.55	0.05	6.11	0.244	0.71	1.1
B464286		9.8	43.0	0.028	0.58	7.55	5.7	3	0.6	232	0.54	0.06	5.24	0.230	0.72	0.9
B464287		7.0	50.2	0.062	0.50	0.83	6.1	2	0.5	634	0.55	0.05	4.92	0.230	0.58	1.0
B464288		7.2	56.9	0.034	1.06	0.68	6.2	2	0.6	903	0.57	0.07	5.12	0.237	0.59	1.1
B464289		6.8	41.1	0.080	1.14	9.48	6.2	4	0.8	900	0.53	0.13	4.70	0.230	0.58	1.0
B464290		7.8	67.4	0.036	1.54	0.67	6.0	3	0.8	886	0.53	0.13	5.18	0.230	0.61	0.9
B464291		41.7	84.4	0.240	1.53	1.86	11.2	3	1.6	279	0.40	0.46	5.47	0.272	0.88	1.1
B464292		7.4	60.5	0.072	1.19	0.43	6.3	3	0.8	930	0.55	0.10	4.95	0.241	0.68	0.8
B464293		2.7	40.5	<0.002	0.01	0.27	5.8	<1	1.6	190.0	0.38	<0.05	2.74	0.174	0.17	1.2
B464294		167.5	47.6	0.046	0.92	32.8	5.9	3	0.8	361	0.50	0.08	4.78	0.224	0.82	1.3
B464295		1250	57.7	0.023	2.37	147.0	5.3	10	1.9	855	0.53	0.14	5.21	0.225	1.07	4.8
B464296		368	75.5	0.591	1.36	50.6	5.7	4	1.0	1200	0.49	0.21	5.18	0.228	1.01	1.5
B464297		81.8	55.1	0.022	1.37	39.7	5.2	4	1.0	565	0.49	0.19	4.44	0.208	0.90	1.0
B464298		68.0	53.4	0.016	1.28	42.0	5.3	4	1.0	595	0.49	0.18	4.30	0.213	0.99	0.9
B464299		38.9	72.0	0.241	1.36	29.9	3.8	6	1.0	647	0.32	0.20	4.04	0.157	1.01	0.8
B464300		59.4	75.7	0.101	1.28	41.6	4.1	5	1.1	808	0.33	0.18	4.29	0.158	0.97	0.9
B464301		26.1	74.3	0.098	1.06	2.22	3.9	4	0.7	621	0.34	0.09	3.97	0.166	0.92	0.6
B464302		121.5	77.6	0.177	0.70	11.90	4.0	3	0.8	498	0.34	0.08	4.66	0.160	0.88	0.8
B464303		62.3	65.3	0.125	0.82	9.32	3.8	3	1.0	488	0.36	0.13	4.03	0.158	0.84	0.7
B464304		109.0	67.0	0.114	0.67	4.00	4.3	3	0.9	561	0.40	0.09	4.35	0.169	0.80	0.8
B464305		252	67.8	0.129	0.94	7.75	4.4	4	1.0	443	0.34	0.12	4.15	0.156	0.77	0.8
B464306		49.8	68.3	0.071	0.56	2.96	4.3	2	0.8	502	0.33	0.08	4.64	0.151	0.80	0.8
B464307		130.0	86.2	0.421	0.57	9.24	4.3	2	0.9	576	0.27	0.08	5.70	0.131	1.00	1.0
B464308		1445	82.6	0.397	0.96	24.5	4.1	4	1.0	792	0.25	0.10	4.71	0.139	1.08	1.0
B464309		2420	90.8	0.144	0.85	57.0	3.8	3	1.2	615	0.25	0.10	4.24	0.133	1.10	1.0
B464310		46.2	73.4	0.118	0.78	1.60	4.3	3	1.0	497	0.35	0.10	4.42	0.165	0.83	0.7
B464311		28.4	62.2	0.147	0.83	0.42	4.1	2	0.8	1610	0.35	0.12	4.69	0.158	0.72	0.8
B464312		2.9	43.1	<0.002	0.01	0.35	6.5	1	1.6	195.5	0.41	<0.05	3.16	0.181	0.18	1.3
B464313		64.8	67.2	0.126	0.85	3.02	4.2	3	0.9	337	0.32	0.08	4.89	0.149	0.80	0.9
B464314		21.2	83.3	0.277	2.22	7.16	12.4	4	1.4	261	0.18	1.36	2.56	0.306	1.15	0.9
B464315		18.2	68.4	0.288	0.78	1.72	3.8	2	0.8	375	0.30	0.09	4.10	0.141	0.82	0.8
B464316		11.9	53.3	0.126	0.88	0.22	4.1	2	0.8	3180	0.35	0.09	4.56	0.151	0.61	0.9
B464317		12.1	65.7	0.122	0.89	0.21	4.2	2	0.7	1340	0.39	0.07	4.72	0.166	0.69	0.8
B464318		18.6	62.2	0.180	0.92	0.30	4.1	2	0.8	947	0.39	0.06	4.54	0.166	0.68	0.8
B464319		17.0	57.2	0.098	1.00	0.20	4.1	2	0.7	846	0.39	0.06	4.55	0.170	0.64	0.8
B464320		37.5	66.0	0.106	0.88	2.15	4.2	2	0.8	901	0.37	0.08	4.27	0.166	0.75	0.7

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

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

Project: Poplar

CERTIFICATE OF ANALYSIS VA21299343

Sample Description	Method	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62	Zn-OG62
	Analyte	V	W	Y	Zn	Zr	Cu	Zn
	Units	ppm	ppm	ppm	ppm	ppm	%	%
	LOD	1	0.1	0.1	2	0.5	0.001	0.001
B464281		67	0.5	12.1	110	21.2		
B464282		74	0.9	13.6	112	18.8		
B464283		58	0.8	11.6	132	17.2		
B464284		74	1.9	12.4	84	21.9		
B464285		63	3.0	13.9	77	25.8		
B464286		66	2.1	13.4	89	20.4		
B464287		62	0.6	11.8	43	26.5		
B464288		62	0.4	12.5	44	24.1		
B464289		59	0.7	11.0	79	22.9		
B464290		57	0.4	12.7	35	20.9		
B464291		104	5.5	12.2	237	5.3		
B464292		61	0.8	11.9	40	21.5		
B464293		30	0.6	15.9	27	54.6		
B464294		59	4.2	11.4	1800	19.6		
B464295		49	18.3	16.1	>10000	19.2	1.800	1.005
B464296		60	7.3	11.6	1320	14.5		
B464297		60	4.1	9.1	539	10.7		
B464298		60	4.3	9.6	489	10.7		
B464299		68	1.2	7.6	385	10.7		
B464300		37	1.5	8.4	567	14.7		
B464301		38	1.0	7.8	145	13.0		
B464302		37	2.7	8.4	687	15.7		
B464303		40	2.2	8.0	576	14.3		
B464304		50	2.2	8.7	906	17.1		
B464305		49	1.9	8.3	1020	15.6		
B464306		38	2.2	8.5	286	17.3		
B464307		35	1.6	8.9	384	14.2		
B464308		40	1.6	10.2	1320	14.4		
B464309		39	1.7	9.1	2770	15.6		
B464310		44	1.7	8.2	263	18.3		
B464311		42	1.4	8.7	123	18.0		
B464312		31	0.6	16.9	28	57.1		
B464313		40	1.6	8.2	251	18.0		
B464314		122	17.3	10.4	175	14.3		
B464315		43	1.3	8.7	90	19.9		
B464316		44	1.0	9.6	58	19.1		
B464317		42	1.2	9.9	76	17.0		
B464318		41	1.0	9.4	146	17.9		
B464319		42	0.8	9.5	116	18.8		
B464320		42	1.1	8.4	157	17.5		

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

Finalized Date: 16-DEC-2021
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21299343

Sample Description	Method / Analyte / Units / LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	ME-MS61 Ag ppm 0.01	ME-MS61 Al % 0.01	ME-MS61 As ppm 0.2	ME-MS61 Ba ppm 10	ME-MS61 Be ppm 0.05	ME-MS61 Bi ppm 0.01	ME-MS61 Ca % 0.01	ME-MS61 Cd ppm 0.02	ME-MS61 Ce ppm 0.01	ME-MS61 Co ppm 0.1	ME-MS61 Cr ppm 1	ME-MS61 Cs ppm 0.05	ME-MS61 Cu ppm 0.2
B464321		6.46	0.077	3.34	7.03	877	1310	1.06	0.16	2.18	5.43	38.1	7.7	7	10.00	3230
B464322		6.68	0.156	4.53	6.54	1720	1650	1.02	0.23	2.05	9.62	50.7	8.5	8	8.75	5060
B464323		6.50	0.074	1.41	7.44	976	1070	1.14	0.13	1.97	2.09	34.7	9.7	6	9.61	3210
B464324		6.92	0.136	2.79	6.92	945	740	1.41	0.18	2.46	1.59	39.7	18.3	10	10.35	5900
B464325		6.30	0.115	1.98	6.78	414	640	1.17	0.25	2.40	0.37	59.7	15.9	8	5.88	4210
B464326		6.44	0.117	2.06	6.81	707	1990	1.43	0.14	2.91	0.64	37.4	17.6	8	8.73	3680
B464327		0.08	0.169	1.15	8.04	47.1	430	1.03	0.50	2.06	1.02	28.3	13.8	18	6.97	2100
B464328		7.02	0.086	2.52	6.80	1065	580	1.39	0.12	3.10	0.27	61.8	23.5	10	9.72	3490
B464329		6.62	0.202	2.31	7.74	1950	570	1.20	0.13	2.36	8.65	41.3	17.2	12	10.30	6700
B464330		6.14	0.138	1.46	7.38	121.5	590	1.32	0.11	3.08	0.23	34.0	17.1	13	12.20	5360
B464331		6.42	0.120	1.86	6.69	54.4	630	1.30	0.12	2.85	0.35	47.7	24.1	12	11.85	5010
B464332		0.08	0.002	0.02	7.20	2.3	850	1.06	0.02	1.67	0.02	26.0	3.6	25	0.38	25.7
B464333		6.86	0.080	1.06	8.05	36.5	620	1.41	0.11	2.88	0.21	39.7	18.9	13	6.01	3600
B464334		6.70	0.069	1.04	8.00	176.5	680	1.39	0.11	2.80	0.68	45.5	16.0	13	9.57	3170
B464335		6.44	0.058	0.89	8.22	28.3	790	1.33	0.11	2.64	0.20	46.2	18.8	12	7.80	3210
B464336		6.56	0.088	1.00	7.91	63.3	1190	1.40	0.12	2.16	0.17	42.6	15.4	9	7.47	4250
B464337		6.56	0.078	0.99	7.43	37.6	1240	1.22	0.14	2.51	0.21	34.1	9.0	8	6.17	3620
B464338		2.96	0.076	0.95	7.53	404	1120	1.43	0.20	2.46	0.18	46.4	10.3	8	8.50	3410
B464339		3.06	0.070	0.94	7.32	334	1200	1.39	0.17	2.55	0.18	48.1	9.9	7	7.85	3280
B464340		3.08	0.084	0.95	7.67	87.1	1410	1.36	0.17	2.20	0.29	50.7	8.6	8	6.47	2620
B464341		6.82	0.067	1.39	7.52	151.5	880	1.35	0.20	2.53	0.81	49.8	8.6	8	8.40	1860
B464342		6.46	0.089	1.49	7.83	150.5	1270	1.31	0.19	2.40	0.37	45.8	14.2	9	7.69	4610
B464343		6.62	0.123	1.45	7.11	122.5	1250	1.37	0.15	2.59	0.47	49.4	10.0	9	7.49	5470
B464344		6.60	0.152	1.51	7.41	293	760	1.55	0.19	2.42	0.71	38.4	14.7	7	8.30	6770
B464345		6.74	0.096	1.28	6.94	15.0	790	1.50	0.14	3.09	0.14	33.7	22.1	14	6.14	4770
B464346		6.48	0.256	1.72	7.33	45.4	1170	1.21	0.15	2.02	0.16	38.3	15.9	9	4.76	8520
B464347		6.54	0.196	1.73	7.47	113.5	1200	1.37	0.22	1.85	0.14	35.3	12.3	7	6.52	7410
B464348		6.72	0.163	1.91	7.40	194.5	1250	1.40	0.20	1.97	0.23	53.5	12.1	7	8.59	6220
B464349		6.60	0.067	1.38	7.44	16.9	1140	1.32	0.20	2.31	0.42	43.7	14.1	7	6.19	2920
B464350		0.08	0.001	0.03	7.17	2.8	840	1.03	0.02	1.67	0.02	26.4	3.7	25	0.37	27.5
B464351		7.00	0.105	1.81	7.05	66.2	1090	1.21	0.27	2.86	0.21	36.1	19.6	6	7.02	4510
B464352		6.34	0.067	1.02	7.89	36.7	890	1.47	0.16	2.02	0.17	46.1	19.0	9	7.03	3010
B464353		0.08	0.032	2.30	6.76	31.8	730	1.18	1.59	1.91	1.01	36.1	36.4	231	3.34	3530
B464354		6.64	0.072	0.89	7.37	15.5	950	1.43	0.10	2.34	0.18	27.1	13.0	7	6.58	2930
B464355		6.50	0.099	1.35	7.19	62.6	800	1.40	0.14	2.23	0.33	32.9	16.9	8	7.33	4350
B464356		6.38	0.076	1.79	7.09	107.5	950	1.25	0.18	2.48	1.38	34.8	17.6	8	6.90	4040
B464357		6.62	0.060	1.19	7.36	19.7	1120	1.37	0.20	2.34	0.30	39.9	17.6	7	6.86	3290
B464358		2.76	0.053	1.96	7.38	19.4	1170	1.25	0.28	2.35	0.29	37.5	18.4	8	5.62	3340
B464359		3.12	0.051	1.27	7.21	10.8	1090	1.31	0.18	2.27	0.16	37.7	16.0	7	6.42	2630
B464360		3.20	0.054	1.25	7.54	11.1	1220	1.38	0.18	2.43	0.20	47.6	16.0	9	6.83	2790

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

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To: MAMMOTH GEOLOGICAL LTD.
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VANCOUVER BC V6E 4K2

Finalized Date: 16-DEC-2021
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21299343

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
B464321		1.55	13.30	0.14	0.7	0.068	3.21	18.6	32.3	0.71	1850	55.7	0.80	3.9	5.2	850
B464322		1.60	13.45	0.13	0.5	0.107	3.13	23.3	61.6	0.64	1240	262	0.69	4.0	6.1	1080
B464323		1.56	14.60	0.12	0.7	0.062	2.99	16.9	87.3	0.62	571	87.6	1.35	4.1	4.5	910
B464324		2.33	13.55	0.14	1.2	0.122	2.75	19.3	297	0.68	1110	121.5	0.86	4.7	6.8	1110
B464325		2.16	12.70	0.15	0.8	0.094	2.30	31.7	96.8	0.57	358	475	1.92	4.9	5.4	830
B464326		2.12	13.65	0.14	1.1	0.085	2.43	17.0	264	0.71	1480	97.4	1.05	4.9	5.7	1070
B464327		4.24	17.10	0.11	0.2	0.093	2.38	13.8	29.7	0.89	915	238	1.51	5.6	11.5	700
B464328		2.66	14.65	0.14	1.2	0.078	2.57	30.7	269	0.87	965	365	1.01	5.6	6.9	1260
B464329		2.25	17.85	0.14	1.1	0.156	2.06	19.1	339	0.57	410	153.5	1.20	5.8	7.2	1480
B464330		2.65	17.65	0.13	1.1	0.117	2.16	15.0	67.6	0.85	324	95.1	2.74	6.4	7.4	1490
B464331		2.88	16.00	0.13	1.3	0.122	1.91	23.2	101.5	1.01	419	64.5	2.58	7.9	7.0	1530
B464332		2.48	13.25	0.10	1.8	0.023	1.85	13.2	2.3	0.39	592	3.88	3.29	5.7	12.2	370
B464333		2.64	18.95	0.12	1.2	0.086	1.94	17.9	90.6	0.98	272	72.9	3.09	6.4	6.3	1370
B464334		2.25	16.15	0.14	1.2	0.081	2.32	21.9	70.8	0.82	333	90.3	2.82	5.8	5.7	1330
B464335		2.76	20.0	0.14	1.4	0.072	2.27	22.7	49.2	0.83	241	72.0	3.35	5.5	5.6	1360
B464336		2.13	14.95	0.12	0.9	0.091	2.87	20.0	91.7	0.51	210	101.0	2.66	5.6	4.8	980
B464337		1.52	16.55	0.13	0.8	0.079	2.86	15.6	60.6	0.53	186	96.6	2.81	5.3	4.3	910
B464338		1.49	16.05	0.12	0.8	0.081	3.23	22.2	236	0.58	269	207	1.87	4.4	4.7	920
B464339		1.46	16.15	0.12	0.7	0.080	2.83	22.7	221	0.60	269	318	2.05	4.4	4.5	890
B464340		1.31	14.75	0.13	0.8	0.069	3.25	26.3	95.0	0.55	253	183.5	2.43	5.9	4.1	900
B464341		1.89	17.90	0.14	0.8	0.077	3.03	25.9	60.8	0.70	1400	109.0	1.77	3.6	4.1	870
B464342		2.11	16.90	0.13	0.9	0.105	3.06	23.2	110.0	0.58	275	102.0	2.41	5.0	4.5	920
B464343		1.54	13.80	0.14	0.8	0.112	3.07	24.5	195.0	0.55	233	154.0	1.52	4.2	4.6	820
B464344		1.97	13.80	0.13	0.8	0.141	3.04	18.4	310	0.57	320	123.0	1.75	4.6	5.1	840
B464345		2.45	11.80	0.12	1.0	0.074	2.70	15.2	61.8	0.68	187	251	2.25	3.1	8.2	1140
B464346		1.93	14.45	0.12	0.7	0.160	3.55	18.6	58.7	0.58	176	804	2.18	4.4	7.6	860
B464347		1.75	16.10	0.11	0.8	0.147	3.29	17.2	141.0	0.57	200	595	2.17	3.8	5.7	830
B464348		1.68	16.90	0.13	0.8	0.124	3.32	25.9	173.0	0.62	378	530	1.40	3.5	4.9	900
B464349		1.97	16.70	0.13	0.8	0.071	2.90	21.0	28.9	0.65	962	310	2.02	4.2	3.8	900
B464350		2.47	12.70	0.11	1.9	0.019	1.87	13.1	2.7	0.39	602	4.29	3.28	5.7	13.1	370
B464351		2.56	13.95	0.13	0.7	0.086	2.90	18.0	55.7	0.63	700	362	1.70	4.6	4.6	980
B464352		2.27	17.10	0.13	0.9	0.057	2.38	22.9	66.0	0.52	210	83.1	2.78	4.2	4.4	900
B464353		4.06	15.75	0.13	0.7	0.084	3.07	16.3	9.7	3.62	399	245	1.16	3.0	238	1030
B464354		1.76	15.30	0.11	0.9	0.048	2.40	12.4	51.5	0.56	180	130.5	2.89	3.5	3.9	890
B464355		1.86	14.45	0.10	0.9	0.069	2.53	15.5	38.6	0.58	231	216	2.45	3.3	4.5	880
B464356		2.05	13.20	0.11	1.0	0.067	3.16	16.5	34.0	0.53	287	185.0	2.22	3.3	4.3	870
B464357		1.98	13.70	0.14	1.0	0.054	2.98	20.0	21.5	0.56	232	140.5	2.50	3.4	4.1	870
B464358		2.01	13.45	0.11	1.0	0.066	2.93	17.4	16.6	0.59	348	185.5	2.44	3.5	4.4	870
B464359		1.97	13.90	0.11	1.0	0.045	2.70	17.9	26.7	0.54	228	146.0	2.58	3.7	4.1	860
B464360		2.02	14.40	0.13	1.0	0.046	3.00	23.1	25.2	0.57	247	155.5	2.57	3.8	4.2	910

***** 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: 16-DEC-2021
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21299343

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
B464321		366	105.5	0.092	0.65	31.9	4.2	2	0.9	409	0.27	0.07	4.43	0.129	1.34	1.0
B464322		1125	92.8	0.386	0.83	88.2	3.8	3	0.9	511	0.27	0.09	4.69	0.133	1.23	1.8
B464323		101.5	85.4	0.157	0.74	8.22	4.2	2	0.8	479	0.27	0.08	4.26	0.144	1.06	0.9
B464324		237	73.6	0.239	1.15	10.65	4.6	3	1.1	682	0.30	0.09	3.23	0.188	0.94	1.2
B464325		20.3	67.4	0.450	1.01	3.80	3.5	3	0.9	1015	0.31	0.09	4.26	0.135	0.73	1.1
B464326		1240	60.8	0.180	1.06	23.2	4.3	3	0.9	1240	0.30	0.05	3.19	0.172	0.84	1.2
B464327		40.9	74.4	0.212	1.49	1.87	10.3	3	1.5	271	0.41	0.41	3.96	0.263	0.82	0.9
B464328		43.3	69.3	0.510	1.04	20.1	5.3	2	0.8	1020	0.33	0.07	3.42	0.215	0.98	1.4
B464329		326	49.2	0.172	1.15	44.6	6.3	4	1.2	1060	0.33	0.11	3.10	0.265	0.81	1.2
B464330		15.4	57.1	0.269	1.11	1.10	8.7	3	1.0	847	0.35	0.08	2.85	0.313	0.71	0.9
B464331		36.3	75.9	0.112	1.30	3.97	9.0	3	1.2	1355	0.36	0.08	3.16	0.348	0.73	1.3
B464332		2.7	41.5	<0.002	0.01	0.30	6.0	1	1.5	199.5	0.39	<0.05	2.65	0.178	0.16	1.2
B464333		11.0	52.3	0.141	0.99	0.89	9.0	3	0.9	1300	0.33	0.07	2.75	0.305	0.59	0.8
B464334		49.0	72.3	0.112	1.23	31.3	7.0	3	0.9	1430	0.29	0.05	3.42	0.234	0.76	1.1
B464335		9.6	62.2	0.105	1.61	0.79	7.0	3	1.1	692	0.33	0.05	3.64	0.233	0.61	1.4
B464336		8.8	68.9	0.136	1.23	0.82	4.7	3	0.9	1820	0.32	0.06	4.79	0.165	0.69	1.0
B464337		11.8	61.3	0.250	1.28	0.50	4.3	2	0.9	1330	0.33	0.06	4.41	0.142	0.64	1.0
B464338		9.9	71.9	0.443	0.94	8.28	4.5	2	1.0	1870	0.27	0.07	4.12	0.145	0.88	1.0
B464339		9.2	65.4	1.005	0.85	7.64	4.4	2	0.9	2610	0.27	0.07	3.85	0.140	0.79	0.9
B464340		13.3	80.2	0.146	0.87	12.95	4.3	2	1.1	1285	0.36	0.05	4.83	0.158	0.81	1.0
B464341		52.9	96.7	0.120	1.30	3.81	4.4	2	2.8	836	0.25	0.10	4.35	0.135	1.00	0.9
B464342		18.2	72.4	0.197	1.44	13.60	4.3	3	1.1	899	0.32	0.08	4.79	0.140	0.76	1.2
B464343		16.2	68.1	0.248	1.07	1.37	4.1	3	1.2	2410	0.26	0.08	4.11	0.123	0.80	1.1
B464344		28.2	67.4	0.164	1.57	5.94	4.1	4	1.3	824	0.27	0.09	4.17	0.123	0.77	1.0
B464345		11.0	50.1	0.455	2.79	0.23	4.6	3	1.0	753	0.20	0.07	3.36	0.124	0.58	1.2
B464346		11.0	66.2	1.395	1.47	0.25	4.4	3	1.4	675	0.21	0.10	3.36	0.134	0.70	1.0
B464347		10.0	70.0	1.360	1.20	0.84	4.0	3	1.4	612	0.22	0.10	3.80	0.117	0.79	1.1
B464348		17.0	76.7	1.090	1.09	2.74	4.2	3	1.3	377	0.23	0.09	4.66	0.131	0.93	1.2
B464349		17.0	75.0	0.399	1.29	0.81	4.1	2	1.3	739	0.29	0.08	3.82	0.135	0.86	1.2
B464350		2.7	40.0	<0.002	0.01	0.29	5.7	1	1.7	195.5	0.39	<0.05	2.70	0.179	0.15	1.2
B464351		18.7	69.4	0.388	1.76	0.86	4.2	3	1.2	453	0.29	0.10	3.34	0.153	0.84	1.0
B464352		10.1	58.5	0.146	1.57	0.38	4.4	3	1.1	520	0.29	0.08	4.51	0.142	0.68	1.2
B464353		22.5	87.8	0.278	2.33	7.96	13.2	4	1.5	272	0.20	1.36	2.51	0.330	1.13	0.8
B464354		11.1	54.3	0.198	1.47	0.40	3.8	2	0.9	760	0.25	0.06	3.66	0.116	0.63	1.1
B464355		16.9	63.6	0.427	1.46	0.81	3.9	3	1.2	799	0.23	0.07	3.68	0.115	0.79	0.9
B464356		30.5	69.7	0.313	2.03	3.52	3.4	3	1.2	4340	0.24	0.09	3.47	0.109	0.85	1.1
B464357		12.7	73.6	0.211	2.03	0.58	3.7	3	1.2	667	0.24	0.09	3.77	0.105	0.84	1.2
B464358		23.6	69.8	0.296	1.99	2.22	3.8	2	1.1	533	0.25	0.09	3.90	0.114	0.84	1.2
B464359		12.7	69.3	0.199	1.76	0.53	3.9	3	1.0	634	0.26	0.05	3.66	0.113	0.85	1.2
B464360		15.1	79.3	0.236	1.89	0.58	4.1	3	1.1	706	0.26	0.07	4.10	0.120	0.85	1.2

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

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VANCOUVER BC V6E 4K2

Finalized Date: 16-DEC-2021
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21299343

Sample Description	Method	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62	Zn-OG62
	Analyte	V	W	Y	Zn	Zr	Cu	Zn
	Units	ppm	ppm	ppm	ppm	ppm	%	%
	LOD	1	0.1	0.1	2	0.5	0.001	0.001
B464321		41	1.8	8.6	867	17.4		
B464322		31	1.8	11.0	1420	13.3		
B464323		41	1.7	7.8	377	21.2		
B464324		49	2.0	8.8	313	43.4		
B464325		40	0.7	9.4	86	19.3		
B464326		47	1.3	10.2	125	35.2		
B464327		103	4.0	11.2	239	4.6		
B464328		54	1.2	11.0	80	41.4		
B464329		69	2.4	12.9	1260	37.1		
B464330		84	2.1	13.6	65	40.2		
B464331		96	3.6	16.3	82	46.6		
B464332		30	0.6	15.4	27	51.4		
B464333		82	0.7	12.6	58	39.6		
B464334		66	3.7	12.9	138	39.0		
B464335		62	1.3	14.0	55	46.4		
B464336		47	1.3	9.3	46	23.3		
B464337		41	0.8	9.6	46	21.3		
B464338		45	1.1	8.5	57	18.9		
B464339		43	1.0	9.1	55	18.8		
B464340		43	1.2	8.6	67	21.2		
B464341		42	2.3	9.4	136	19.0		
B464342		44	0.9	9.6	78	21.3		
B464343		39	0.7	8.2	73	19.6		
B464344		47	0.9	7.1	120	19.2		
B464345		52	0.7	10.3	41	32.6		
B464346		46	0.6	7.3	48	21.7		
B464347		40	0.8	6.5	50	20.5		
B464348		42	1.0	8.3	78	22.1		
B464349		45	1.1	8.0	85	22.7		
B464350		31	0.6	15.4	28	54.7		
B464351		51	1.0	7.9	61	18.7		
B464352		48	0.6	9.5	44	24.5		
B464353		127	20.6	11.2	189	19.3		
B464354		42	0.6	8.3	46	26.6		
B464355		43	0.7	8.0	66	26.2		
B464356		39	0.8	7.5	229	27.1		
B464357		38	0.9	8.1	56	28.0		
B464358		40	0.9	8.2	69	27.4		
B464359		41	0.8	8.4	46	29.7		
B464360		42	0.8	9.5	52	29.9		

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VANCOUVER BC V6E 4K2

Finalized Date: 16-DEC-2021
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21299343

Sample Description	Method / Analyte / Units / LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	ME-MS61 Ag ppm 0.01	ME-MS61 Al % 0.01	ME-MS61 As ppm 0.2	ME-MS61 Ba ppm 10	ME-MS61 Be ppm 0.05	ME-MS61 Bi ppm 0.01	ME-MS61 Ca % 0.01	ME-MS61 Cd ppm 0.02	ME-MS61 Ce ppm 0.01	ME-MS61 Co ppm 0.1	ME-MS61 Cr ppm 1	ME-MS61 Cs ppm 0.05	ME-MS61 Cu ppm 0.2
B464361		6.50	0.030	2.39	6.74	248	1040	1.40	0.19	2.82	3.59	33.0	14.4	6	9.29	2160
B464362		6.44	0.035	0.77	7.30	24.3	1170	1.36	0.13	2.39	0.14	27.9	10.1	8	6.07	1990
B464363		6.74	0.067	1.62	6.71	79.7	1040	1.25	0.20	4.39	0.11	29.1	13.6	6	6.03	4160
B464364		7.24	0.065	1.31	7.42	21.6	1030	1.33	0.13	2.23	0.14	35.7	18.8	7	6.67	3910
B464365		6.36	0.055	1.06	6.91	27.3	1270	1.19	0.11	2.13	0.11	37.0	18.3	8	6.14	2820
B464366		6.92	0.064	2.15	7.32	256	1280	1.29	0.15	2.70	0.78	42.5	19.6	6	7.34	3630
B464367		6.42	0.038	0.71	7.42	9.7	1270	1.40	0.10	2.17	0.10	37.9	15.2	7	6.03	1980
B464368		7.02	0.042	1.14	7.78	220	1510	1.31	0.19	2.10	0.18	42.3	14.3	8	7.33	2530
B464369		6.64	0.046	1.70	7.23	585	1460	1.22	0.20	2.48	0.33	41.5	11.7	6	7.70	3090
B464370		0.08	<0.001	0.02	7.10	3.2	850	1.09	0.02	1.67	0.02	27.5	3.8	25	0.39	29.2
B464371		6.38	0.032	4.67	7.20	685	970	1.41	0.22	2.05	8.57	40.1	20.7	5	9.07	1930
B464372		0.08	0.184	1.20	8.34	50.4	440	1.07	0.48	2.19	1.10	31.1	15.5	20	7.45	2160
B464373		6.88	0.019	0.72	8.08	379	870	1.37	0.17	1.64	0.61	49.8	22.7	5	8.28	1340
B464374		6.98	0.012	0.89	7.84	399	900	1.43	0.16	1.81	3.38	42.8	17.7	4	7.00	978
B464375		6.80	0.033	0.88	7.51	243	540	1.31	0.29	2.06	0.15	70.4	25.7	5	6.85	2040
B464376		7.26	0.019	3.48	7.97	553	700	1.31	0.32	2.13	3.34	42.0	24.3	5	7.85	1450
B464377		6.76	0.015	3.01	7.77	432	990	1.37	0.23	2.10	4.95	46.6	18.0	4	8.16	1070
B464378		3.92	0.016	3.28	7.02	459	1080	1.25	0.16	2.88	12.25	34.6	21.1	3	9.22	1150
B464379		3.42	0.015	1.75	7.41	488	740	1.23	0.22	3.51	1.38	31.2	18.7	5	7.38	1210
B464380		3.82	0.013	1.36	6.77	362	880	1.11	0.19	3.35	0.97	24.7	17.5	5	7.03	871
B464381		6.98	0.020	1.74	7.33	343	650	1.28	0.20	3.16	0.93	39.8	21.4	4	6.94	1310
B464382		6.82	0.013	0.52	6.82	269	910	1.29	0.19	2.87	0.19	31.7	18.9	5	8.37	1010
B464383		6.70	0.009	0.57	7.20	73.8	660	1.21	0.46	2.91	0.33	43.5	16.8	8	9.49	600
B464384		6.52	0.014	0.54	7.21	392	510	1.26	0.63	3.16	0.12	57.6	28.0	9	11.10	1060
B464385		6.70	0.021	0.62	6.87	307	490	1.08	0.23	6.62	0.48	34.0	22.1	7	12.55	828
B464386		6.50	0.008	0.75	7.15	187.0	780	1.14	0.26	3.29	1.99	27.2	17.8	10	10.00	774
B464387		6.52	0.007	1.21	7.07	101.5	600	1.06	0.23	2.67	0.82	24.1	18.4	13	8.61	780
B464388		6.74	0.010	1.31	7.04	130.5	750	1.18	0.30	3.11	0.57	53.7	25.1	11	9.06	946
B464389		6.62	0.011	0.76	6.91	78.4	940	1.13	0.29	3.32	0.54	29.0	21.6	9	10.35	871
B464390		7.08	0.010	0.80	7.47	143.5	800	1.08	0.38	2.78	0.28	37.7	26.8	10	9.51	894
B464391		7.20	0.011	0.99	6.86	194.5	660	1.03	0.47	2.86	0.28	32.0	21.6	13	8.46	845
B464392		6.78	0.010	1.99	6.88	246	440	1.00	0.52	2.84	0.67	23.9	22.1	12	8.77	845
B464393		6.76	0.012	0.48	7.23	6.0	480	1.05	0.53	3.02	0.07	35.1	26.3	13	8.33	906

***** 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: 16-DEC-2021
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21299343

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
B464361		1.88	14.10	0.11	0.9	0.039	2.87	14.9	43.8	0.62	1380	95.5	1.20	3.3	3.5	800
B464362		1.65	15.25	0.10	1.0	0.035	2.81	12.5	55.5	0.54	182	135.0	2.53	3.2	3.4	900
B464363		1.79	15.55	0.12	0.9	0.075	2.68	13.9	54.5	0.54	251	211	1.68	3.2	4.1	880
B464364		1.96	13.00	0.13	1.0	0.049	2.97	16.4	37.6	0.51	171	95.3	2.15	2.9	4.5	830
B464365		1.95	13.60	0.12	0.9	0.040	2.96	17.6	30.2	0.51	175	79.6	2.39	3.0	4.0	790
B464366		2.12	15.05	0.14	1.0	0.053	3.06	20.9	49.1	0.59	413	103.5	2.18	3.6	5.1	870
B464367		1.85	15.85	0.12	1.0	0.026	2.71	18.1	57.3	0.54	164	80.0	2.82	3.2	3.7	920
B464368		1.96	14.45	0.12	1.0	0.043	3.16	21.4	46.4	0.63	278	91.5	1.66	2.9	3.9	880
B464369		1.59	14.95	0.12	1.1	0.060	3.22	19.7	42.7	0.69	420	192.0	1.18	2.9	4.0	900
B464370		2.49	13.45	0.10	1.8	0.020	1.88	13.8	2.5	0.39	599	4.43	3.27	6.3	13.2	370
B464371		1.92	15.90	0.10	1.1	0.044	2.83	19.9	72.3	0.69	810	236	0.76	2.9	3.7	890
B464372		4.43	18.20	0.12	0.2	0.090	2.50	14.8	31.1	0.94	938	258	1.57	6.1	11.4	730
B464373		2.23	14.65	0.13	1.4	0.030	2.86	25.1	52.9	0.63	270	97.1	1.60	3.2	3.0	830
B464374		2.19	12.90	0.12	1.4	0.017	2.71	20.3	53.4	0.70	266	70.6	1.28	2.8	2.5	900
B464375		2.79	13.35	0.15	1.3	0.044	2.76	35.6	46.4	0.66	259	53.6	1.41	2.8	3.6	840
B464376		2.82	11.20	0.12	1.4	0.032	3.19	21.4	43.2	0.67	652	89.6	0.86	2.8	3.1	870
B464377		2.48	12.35	0.11	1.4	0.028	3.15	24.9	38.1	0.74	748	37.7	0.60	3.0	3.2	880
B464378		2.96	13.00	0.11	1.3	0.021	3.11	17.3	29.4	1.04	3850	70.6	0.36	2.7	3.8	780
B464379		2.93	14.10	0.11	1.4	0.024	2.97	14.1	52.5	1.05	759	34.0	0.87	2.9	3.3	830
B464380		2.59	12.60	0.09	1.3	0.021	2.79	11.2	34.8	0.95	686	23.3	0.94	2.7	2.7	840
B464381		2.94	11.05	0.11	1.3	0.044	2.87	19.1	53.6	0.68	460	58.7	0.28	2.6	7.6	840
B464382		2.80	12.80	0.10	1.4	0.027	2.49	14.3	84.5	0.70	252	42.9	0.85	2.7	4.3	950
B464383		4.30	15.95	0.12	1.8	0.025	2.47	20.1	66.8	0.91	494	17.70	0.73	2.2	5.6	1370
B464384		4.94	15.80	0.12	1.7	0.038	2.62	30.7	159.5	0.98	282	11.85	0.63	2.1	7.0	1400
B464385		3.48	13.15	0.10	1.6	0.020	2.40	17.1	163.5	1.23	464	132.5	0.38	2.5	5.7	1170
B464386		3.00	13.10	0.11	1.8	0.024	2.70	11.4	103.5	0.93	479	20.6	0.76	2.3	6.1	1270
B464387		3.07	13.45	0.09	1.5	0.021	2.92	11.9	36.0	1.03	1040	39.9	1.11	1.8	9.4	1180
B464388		3.47	13.10	0.11	1.6	0.022	2.54	27.9	82.6	1.02	700	62.9	1.23	2.1	6.9	1140
B464389		3.18	13.50	0.10	1.6	0.019	2.47	13.4	69.5	0.86	618	57.7	1.75	2.8	7.3	1150
B464390		3.32	11.75	0.11	1.8	0.024	2.56	18.8	67.4	0.85	358	39.1	1.96	2.6	8.6	1330
B464391		3.81	13.85	0.10	1.6	0.031	2.60	15.1	61.8	1.02	712	18.45	1.30	2.2	7.9	1130
B464392		4.02	13.85	0.09	1.6	0.035	3.02	11.1	35.6	1.10	1490	16.55	0.91	2.3	8.0	1080
B464393		3.94	15.05	0.11	1.6	0.034	2.45	16.2	14.8	0.97	302	16.70	1.88	2.5	10.7	1180

***** 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: 16-DEC-2021
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21299343

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
B464361		121.0	78.3	0.144	1.39	25.3	3.5	2	0.9	1140	0.23	0.05	3.28	0.109	1.03	1.1
B464362		8.8	54.2	0.220	1.09	0.32	3.7	2	0.8	631	0.24	0.05	3.38	0.121	0.70	1.2
B464363		9.1	60.3	0.337	1.39	0.72	3.3	3	1.1	683	0.22	0.07	2.97	0.105	0.78	0.9
B464364		9.9	67.1	0.146	1.89	0.46	3.7	3	1.1	596	0.21	0.06	3.77	0.095	0.75	1.1
B464365		8.7	63.1	0.105	1.76	0.35	3.4	3	0.9	672	0.21	0.05	3.42	0.099	0.72	1.0
B464366		48.7	77.4	0.226	1.70	13.50	4.0	3	1.1	929	0.24	0.09	3.78	0.121	0.87	1.1
B464367		8.1	61.6	0.126	1.62	0.29	3.9	2	0.9	799	0.23	0.07	3.91	0.114	0.70	1.2
B464368		15.4	93.2	0.204	1.70	1.99	3.9	2	1.1	3630	0.21	0.09	4.73	0.093	1.01	1.4
B464369		27.1	89.8	0.384	1.17	7.50	3.9	2	1.1	1575	0.22	0.09	3.83	0.102	1.15	1.2
B464370		2.6	41.3	0.002	0.01	0.30	5.8	1	1.7	199.5	0.42	<0.05	2.67	0.181	0.16	1.2
B464371		345	81.3	0.320	1.56	138.0	3.8	2	1.0	1415	0.21	0.11	3.84	0.093	1.11	1.3
B464372		41.3	79.0	0.240	1.57	2.22	11.1	3	1.7	282	0.41	0.42	4.26	0.279	0.82	0.8
B464373		15.6	95.6	0.091	1.78	30.0	3.7	2	1.1	1005	0.23	0.10	5.11	0.084	0.99	1.8
B464374		178.0	70.2	0.069	1.74	34.9	3.5	2	1.0	714	0.20	0.05	5.19	0.076	0.94	1.7
B464375		8.7	76.9	0.050	2.52	8.37	3.5	2	1.3	4570	0.21	0.12	4.31	0.075	0.85	1.7
B464376		318	100.0	0.101	2.45	58.2	3.5	2	1.1	1125	0.21	0.10	5.60	0.079	1.13	1.8
B464377		165.0	105.5	0.033	2.01	44.6	3.6	2	1.1	591	0.22	0.08	5.49	0.080	1.14	1.8
B464378		433	94.6	0.072	2.22	91.4	3.1	2	1.0	645	0.19	0.10	4.01	0.072	1.20	1.6
B464379		96.3	82.9	0.032	2.18	62.7	3.3	2	1.0	1010	0.21	0.08	3.81	0.083	1.07	1.7
B464380		71.7	68.2	0.021	1.92	49.2	2.8	2	0.9	1015	0.20	0.08	3.25	0.073	1.08	1.6
B464381		47.7	85.5	0.034	2.44	28.6	3.0	2	1.2	436	0.19	0.07	4.33	0.071	0.97	1.8
B464382		11.7	50.8	0.015	2.22	15.70	3.1	2	1.0	383	0.19	0.05	2.95	0.082	0.78	1.5
B464383		26.8	58.1	0.008	3.35	2.76	6.3	4	1.2	307	0.14	0.12	2.34	0.125	0.95	1.7
B464384		11.7	57.4	0.009	4.01	29.5	6.6	4	1.1	356	0.13	0.22	2.35	0.132	0.93	1.8
B464385		12.6	61.0	0.080	2.30	81.6	5.4	3	1.0	471	0.16	0.06	2.76	0.121	0.87	2.2
B464386		29.6	60.5	0.018	2.36	8.94	5.3	2	0.9	429	0.15	0.08	2.68	0.100	0.95	1.6
B464387		110.5	74.3	0.037	2.42	2.84	6.2	2	0.7	2730	0.13	0.07	2.94	0.095	1.10	1.4
B464388		52.3	71.9	0.039	2.91	5.70	5.1	3	0.8	2640	0.15	0.10	3.06	0.101	0.91	1.6
B464389		22.2	75.2	0.035	2.58	1.47	4.5	3	0.7	934	0.18	0.07	2.65	0.127	0.99	1.4
B464390		19.1	74.3	0.023	2.79	4.74	5.1	3	0.7	848	0.18	0.10	3.03	0.119	0.96	1.5
B464391		29.0	69.4	0.012	3.07	9.96	6.4	3	0.8	985	0.14	0.16	2.82	0.118	0.99	1.4
B464392		48.4	91.9	0.010	3.22	18.80	5.9	3	1.0	707	0.16	0.16	2.98	0.118	1.23	1.5
B464393		6.3	74.4	0.009	3.52	0.44	7.2	3	1.1	702	0.16	0.17	3.18	0.133	0.89	1.3

***** 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: 16-DEC-2021
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21299343

Sample Description	Method	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62	Zn-OG62
	Analyte	V	W	Y	Zn	Zr	Cu	Zn
	Units	ppm	ppm	ppm	ppm	ppm	%	%
	LOD	1	0.1	0.1	2	0.5	0.001	0.001
B464361		39	1.1	7.5	538	27.3		
B464362		44	0.7	6.8	39	26.6		
B464363		39	1.0	7.1	42	25.7		
B464364		42	0.8	8.0	37	27.9		
B464365		36	0.8	7.0	34	26.0		
B464366		43	0.8	9.1	128	28.9		
B464367		43	0.7	8.2	34	30.0		
B464368		42	1.0	8.3	49	29.6		
B464369		39	1.1	8.1	90	30.9		
B464370		31	0.6	16.1	27	56.6		
B464371		38	1.3	8.1	1260	34.7		
B464372		106	4.0	11.7	247	5.6		
B464373		34	1.0	9.4	135	44.3		
B464374		35	1.3	8.9	570	43.6		
B464375		36	1.3	9.3	41	42.7		
B464376		38	1.3	8.5	544	42.8		
B464377		34	1.2	9.3	739	41.6		
B464378		33	1.3	8.8	1740	38.5		
B464379		37	1.0	7.8	234	42.8		
B464380		33	0.9	7.1	165	41.3		
B464381		35	1.2	8.5	148	44.5		
B464382		37	0.9	7.4	62	51.3		
B464383		63	0.9	11.7	86	67.1		
B464384		68	0.9	11.1	68	64.0		
B464385		51	1.2	11.5	117	57.3		
B464386		54	1.1	10.5	281	65.4		
B464387		63	0.8	8.6	139	53.2		
B464388		50	1.1	11.0	114	59.9		
B464389		47	1.2	10.0	104	58.6		
B464390		54	1.4	12.7	64	64.5		
B464391		68	1.0	8.7	70	57.2		
B464392		63	1.6	9.0	123	55.2		
B464393		72	1.4	9.5	34	56.5		

***** 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: 16-DEC-2021
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21299343

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

NSS is non-sufficient sample.
Applies to Method: ALL METHODS

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

LABORATORY ADDRESSES

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Applies to Method:				
	Au-ICP21	CRU-31	CRU-QC	Cu-OG62
	LOG-21	LOG-23	ME-MS61	ME-OG62
	PUL-31	PUL-QC	SPL-21	SPL-21X
	WEI-21	Zn-OG62		

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

Finalized Date: 11-JAN-2022
Account: MAMGEO

CERTIFICATE VA21321124

Project: Poplar

This report is for 194 samples of Drill Core submitted to our lab in Vancouver, BC, Canada on 24-NOV-2021.

The following have access to data associated with this certificate:

TIM HENNEBERRY		

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-21	Sample logging - ClientBarCode
SND-01	Send samples to external laboratory
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 up to 250g 85% <75 um
LOG-23	Pulp Login - Rcvd with Barcode
SPL-21X	Addnl Crush Split w No Analysis

ANALYTICAL PROCEDURES

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

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:

Saa Traxler, General Manager, North Vancouver

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

Finalized Date: 11-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21321124

Sample Description	Method / Analyte / Units / LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	ME-MS61 Ag ppm 0.01	ME-MS61 Al % 0.01	ME-MS61 As ppm 0.2	ME-MS61 Ba ppm 10	ME-MS61 Be ppm 0.05	ME-MS61 Bi ppm 0.01	ME-MS61 Ca % 0.01	ME-MS61 Cd ppm 0.02	ME-MS61 Ce ppm 0.01	ME-MS61 Co ppm 0.1	ME-MS61 Cr ppm 1	ME-MS61 Cs ppm 0.05	ME-MS61 Cu ppm 0.2
B464394		12.34	0.066	0.52	7.89	143.5	690	1.47	0.10	1.21	0.21	50.7	15.1	88	6.38	2770
B464395		11.16	0.096	0.85	7.72	53.2	730	1.30	0.11	1.54	0.12	60.6	12.2	87	7.94	4020
B464396		12.04	0.113	0.92	7.67	60.1	660	1.36	0.11	1.17	1.29	53.4	14.8	87	6.94	4130
B464397		9.98	0.048	0.50	7.91	3.7	590	1.46	0.10	1.29	0.21	45.5	14.5	89	7.09	2270
B464398		11.50	0.054	0.58	8.03	4.0	800	1.51	0.11	1.07	0.19	45.8	18.2	88	9.10	2810
B464399		11.80	0.100	0.93	7.74	8.0	660	1.54	0.10	2.27	0.36	50.8	13.8	88	7.25	3900
B464400		0.08	<0.001	0.02	7.46	2.4	880	1.03	0.02	1.75	<0.02	26.9	3.8	25	0.42	28.2
B464401		11.54	0.101	1.00	8.34	46.6	860	1.64	0.12	1.79	0.29	56.9	15.0	91	8.64	4520
B464402		11.38	0.045	0.52	8.36	6.9	870	1.68	0.10	1.11	0.37	48.1	14.0	90	9.75	2170
B464403		0.10	0.019	2.26	6.90	29.0	740	1.07	1.85	1.96	0.98	33.1	33.7	238	3.39	3730
B464404		11.22	0.071	0.57	8.16	4.5	830	1.67	0.10	0.98	0.26	59.5	12.0	99	6.45	3170
B464405		8.24	0.094	0.65	8.01	2.6	1010	1.73	0.10	0.75	0.17	58.9	12.6	100	8.36	3480
B464406		7.66	0.168	1.18	8.57	2.6	1300	1.51	0.16	0.71	0.33	62.7	21.3	88	9.38	5790
B464407		9.68	0.089	0.96	8.70	23.8	930	1.83	0.15	1.04	0.56	62.4	16.9	85	14.75	3440
B464408		5.32	0.216	1.65	7.99	42.9	900	1.05	0.20	1.29	0.17	54.5	34.1	18	7.29	7380
B464409		5.92	0.229	2.04	8.11	38.5	870	1.12	0.21	1.17	0.18	47.2	34.9	15	7.22	7390
B464410		5.22	0.175	1.40	7.69	501	880	1.00	0.16	1.56	0.20	51.8	20.4	6	6.38	5770
B464411		11.52	0.123	0.84	7.25	313	1430	0.87	0.12	1.95	0.22	80.0	13.4	8	3.80	3550
B464412		12.16	0.106	1.04	7.65	321	1120	1.12	0.14	1.75	0.17	54.3	21.2	8	6.59	3990
B464413		11.88	0.072	2.09	7.66	432	880	1.24	0.19	1.85	0.60	49.2	14.4	6	7.72	3200
B464414		11.82	0.088	1.25	7.54	476	1260	1.10	0.13	2.25	0.27	48.9	12.6	7	5.59	3660
B464415		12.20	0.059	0.67	8.13	105.0	1320	1.36	0.13	1.79	0.19	47.7	12.9	10	4.83	2700
B464416		11.64	0.070	0.73	8.15	195.5	1110	1.16	0.11	1.41	0.17	56.7	15.0	8	5.86	3060
B464417		11.74	0.070	1.06	7.81	37.9	1110	1.28	0.13	1.97	0.25	49.7	15.6	8	5.36	2950
B464418		11.80	0.063	0.71	8.26	7.3	1130	1.24	0.12	1.43	0.17	47.7	15.6	7	6.47	3040
B464419		12.32	0.078	1.30	7.89	226	1060	1.14	0.25	1.45	0.49	42.7	19.9	6	6.89	3820
B464420		0.10	<0.001	0.03	7.52	3.1	890	0.93	0.03	1.75	0.03	30.1	3.9	24	0.43	31.5
B464421		0.08	0.162	1.22	8.99	50.6	470	0.95	0.57	2.32	1.09	34.2	14.6	19	7.61	2160
B464422		11.36	0.119	1.20	7.95	129.0	970	1.16	0.12	1.49	0.14	30.2	16.8	18	4.48	5420
B464423		10.54	0.097	1.05	7.97	8.4	930	1.40	0.14	1.25	0.15	33.6	25.8	26	5.00	4210
B464424		10.70	0.184	1.69	7.87	4.6	880	1.22	0.14	0.92	0.14	52.6	20.9	26	6.35	7480
B464425		11.58	0.163	1.39	7.93	12.2	860	1.22	0.15	1.62	0.19	47.1	17.6	26	3.94	6620
B464426		11.74	0.098	1.05	8.05	27.0	1170	1.25	0.13	1.53	0.26	46.1	10.7	7	4.82	4450
B464427		4.52	0.154	1.39	7.99	10.6	1210	1.26	0.14	1.42	0.24	52.0	14.3	8	5.06	6260
B464428		3.24	0.079	0.88	8.09	28.3	1280	1.22	0.13	1.52	0.13	61.8	14.0	9	5.89	3510
B464429		2.90	0.088	0.89	7.90	29.1	1340	1.23	0.14	1.46	0.14	57.8	13.9	8	5.53	3960
B464430		3.08	0.066	2.99	7.68	345	1380	1.08	0.25	2.06	3.79	66.7	7.4	5	8.59	3250
B464431		6.06	0.142	1.88	7.70	419	1430	1.10	0.12	1.81	1.26	64.5	11.3	8	5.56	5850
B464432		6.18	0.110	1.19	7.91	83.6	1230	1.08	0.24	1.78	0.16	49.6	10.6	6	5.10	4000
B464433		6.62	0.114	0.90	8.09	101.0	1330	1.16	0.10	1.66	0.23	57.8	8.6	6	5.66	4080

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

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VANCOUVER BC V6E 4K2

Finalized Date: 11-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21321124

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
B464394		2.76	14.90	0.09	0.7	0.057	3.09	27.7	87.9	1.10	387	149.0	2.13	4.6	59.7	700
B464395		2.66	14.90	0.06	0.6	0.064	2.97	33.5	75.7	1.15	327	612	1.69	4.9	58.3	650
B464396		2.85	15.05	0.09	0.6	0.066	2.88	28.6	28.7	1.24	338	151.0	2.35	5.0	68.5	640
B464397		2.89	15.65	0.09	0.7	0.033	2.70	23.8	36.9	1.36	305	126.0	1.42	4.8	62.5	670
B464398		2.97	15.75	0.08	0.8	0.040	2.71	24.0	38.0	1.27	267	140.5	2.24	4.4	72.3	720
B464399		2.37	15.50	0.08	0.9	0.058	3.05	27.8	30.0	1.29	322	124.5	0.26	4.9	53.1	710
B464400		2.62	13.35	0.08	1.8	0.020	1.95	14.5	2.6	0.41	631	4.07	3.42	5.9	13.9	380
B464401		2.39	16.85	0.11	1.0	0.059	3.47	30.5	27.9	1.15	276	288	0.67	4.2	60.7	750
B464402		2.28	18.05	0.08	1.2	0.027	3.30	24.8	28.8	1.19	273	131.5	1.98	4.9	60.3	740
B464403		4.20	14.60	0.09	0.8	0.085	3.14	16.0	9.7	3.73	417	256	1.20	2.8	241	1050
B464404		2.30	18.00	0.07	1.1	0.044	3.30	29.8	18.0	1.28	262	207	2.55	5.3	58.2	860
B464405		1.99	18.75	0.10	1.3	0.050	4.00	29.8	24.7	1.20	255	288	2.20	5.3	55.6	690
B464406		2.94	16.20	0.14	1.1	0.097	4.90	32.6	20.3	1.04	265	260	1.80	4.2	73.2	750
B464407		2.45	15.95	0.12	1.1	0.058	4.31	32.6	62.3	1.11	300	229	1.13	4.2	61.6	870
B464408		3.91	13.25	0.12	1.1	0.113	3.99	28.9	64.7	0.57	192	219	1.11	4.2	34.4	820
B464409		3.97	13.45	0.11	1.1	0.116	4.11	25.3	66.9	0.54	183	203	1.16	4.2	32.7	820
B464410		2.70	11.15	0.10	1.2	0.103	4.04	28.0	25.1	0.47	255	246	0.58	4.2	14.2	880
B464411		2.01	10.90	0.12	1.2	0.066	4.30	42.4	53.8	0.61	215	1250	0.53	3.6	8.5	900
B464412		2.72	12.25	0.12	1.4	0.064	3.66	28.1	54.8	0.54	214	266	0.67	4.1	8.8	1080
B464413		2.43	12.40	0.09	1.4	0.061	3.65	26.0	25.8	0.68	682	162.5	0.18	4.0	5.7	910
B464414		1.96	13.45	0.08	1.3	0.061	2.99	25.2	29.9	0.78	383	244	0.52	3.9	5.8	890
B464415		1.95	14.65	0.10	1.3	0.047	3.33	25.6	25.1	0.61	178	180.0	1.70	4.3	4.7	970
B464416		2.05	12.95	0.10	1.2	0.047	3.63	31.0	30.2	0.53	160	171.5	1.28	3.8	5.3	990
B464417		2.03	13.90	0.08	1.2	0.052	2.86	26.3	18.4	0.52	199	118.5	2.33	4.5	5.4	960
B464418		2.32	13.90	0.09	1.3	0.050	3.38	26.1	23.7	0.49	182	81.9	2.31	4.1	5.0	970
B464419		2.86	12.40	0.07	1.1	0.069	3.65	23.5	21.8	0.60	300	108.5	1.28	3.4	6.5	910
B464420		2.59	13.95	0.06	1.9	0.025	1.91	15.5	2.4	0.41	613	4.58	3.35	5.9	14.2	380
B464421		4.68	18.90	0.06	0.2	0.102	2.57	17.1	27.3	0.98	968	273	1.63	6.0	12.0	760
B464422		2.31	13.85	0.06	1.2	0.086	3.04	17.0	20.1	0.65	177	196.0	2.48	3.8	10.9	960
B464423		3.39	14.55	0.07	1.4	0.072	3.16	18.4	22.0	1.05	213	95.8	2.43	4.2	14.0	1200
B464424		3.33	13.05	0.08	1.3	0.119	3.82	27.7	25.6	1.04	197	103.5	1.76	3.9	14.8	1130
B464425		2.82	15.35	0.09	1.3	0.104	3.30	25.6	19.2	1.04	221	132.0	2.11	4.8	14.3	1100
B464426		1.71	14.45	0.07	1.1	0.067	3.21	25.0	30.7	0.59	178	58.6	2.70	4.5	6.0	930
B464427		1.99	15.30	0.08	1.1	0.116	3.04	28.1	30.5	0.59	162	81.4	3.11	4.6	8.8	860
B464428		1.78	14.75	0.08	1.1	0.061	3.34	34.5	32.7	0.54	187	483	2.57	4.5	5.8	850
B464429		1.79	14.45	0.08	1.1	0.068	3.43	32.8	32.8	0.53	184	411	2.52	4.5	5.4	830
B464430		1.70	14.00	0.08	1.0	0.107	3.68	38.3	41.3	0.67	1305	487	0.63	4.3	5.6	720
B464431		1.72	14.60	0.10	1.0	0.097	3.25	34.5	98.8	0.64	293	171.0	1.56	4.2	7.3	840
B464432		1.74	14.45	0.07	1.1	0.081	3.58	26.4	44.9	0.60	278	128.5	2.11	3.9	5.7	830
B464433		1.42	15.90	0.07	1.0	0.074	3.35	31.1	85.9	0.57	207	123.0	2.30	4.2	5.5	820

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

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704-1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 11-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21321124

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
B464394		12.4	75.4	0.364	0.92	1.60	15.2	2	1.1	291	0.29	<0.05	5.07	0.318	0.68	1.3
B464395		14.6	77.6	1.565	0.96	8.35	15.6	2	1.3	358	0.30	0.05	5.25	0.310	0.71	1.3
B464396		17.1	74.4	0.445	1.10	0.64	15.5	2	1.4	244	0.31	<0.05	5.13	0.310	0.65	1.2
B464397		13.7	74.2	0.420	1.00	0.36	15.6	1	1.3	197.0	0.31	<0.05	5.34	0.300	0.62	1.2
B464398		10.3	71.8	0.366	1.13	0.33	15.4	2	1.2	254	0.28	<0.05	5.42	0.275	0.58	1.3
B464399		17.4	74.3	0.381	0.81	5.75	14.2	3	1.2	206	0.32	<0.05	6.33	0.257	0.82	1.3
B464400		2.8	45.1	<0.002	0.01	0.29	6.0	<1	1.7	204	0.41	<0.05	2.94	0.183	0.17	1.3
B464401		16.3	87.0	0.881	1.20	1.65	15.3	3	1.6	237	0.29	<0.05	7.39	0.236	0.84	1.4
B464402		17.0	85.7	0.450	0.98	0.42	14.9	2	1.4	219	0.33	<0.05	7.11	0.252	0.73	1.7
B464403		19.8	88.4	0.277	2.38	6.98	11.8	3	1.3	275	0.19	1.35	2.64	0.330	1.11	1.0
B464404		11.7	79.2	0.564	0.95	0.12	15.4	2	1.3	215	0.39	<0.05	7.37	0.294	0.68	1.8
B464405		11.6	87.2	0.873	0.91	0.16	16.0	2	1.6	202	0.38	<0.05	7.74	0.273	0.78	2.2
B464406		18.8	105.0	0.585	1.67	0.49	16.8	3	1.7	224	0.27	0.06	7.91	0.207	0.95	2.0
B464407		17.8	111.0	0.519	1.39	0.67	16.1	2	1.8	279	0.27	<0.05	7.97	0.209	1.05	1.7
B464408		12.2	92.7	0.477	2.39	1.01	7.6	5	1.6	322	0.30	0.11	5.30	0.135	0.93	1.5
B464409		11.8	95.2	0.402	2.44	0.89	7.4	4	1.6	319	0.29	0.11	5.17	0.136	0.93	1.4
B464410		16.0	84.5	0.606	1.75	2.33	4.5	4	1.4	252	0.30	0.07	4.96	0.119	0.95	1.6
B464411		13.2	72.3	1.340	1.17	1.12	4.0	2	1.0	2350	0.26	0.08	4.47	0.102	0.90	1.6
B464412		13.0	84.0	0.569	1.74	1.11	4.8	3	1.3	939	0.29	0.05	4.84	0.110	0.96	1.6
B464413		49.3	107.5	0.561	1.47	8.79	4.5	2	1.7	312	0.28	0.10	4.96	0.107	1.39	1.6
B464414		16.9	61.9	0.615	1.13	15.50	4.2	2	1.3	327	0.29	<0.05	4.52	0.115	0.89	1.5
B464415		12.2	70.0	0.457	1.09	1.12	4.8	2	1.1	354	0.30	<0.05	5.25	0.126	0.72	1.5
B464416		12.4	80.2	0.365	1.27	0.82	4.4	2	1.1	332	0.27	0.06	5.29	0.110	0.79	1.5
B464417		15.4	63.6	0.233	1.16	0.46	4.5	2	1.1	403	0.33	0.05	4.96	0.127	0.68	1.3
B464418		10.5	75.5	0.216	1.24	0.13	4.7	2	1.1	360	0.30	0.07	5.14	0.119	0.73	1.5
B464419		25.3	97.1	0.343	2.20	0.94	4.7	3	1.8	420	0.25	0.07	5.04	0.105	1.08	1.4
B464420		2.8	45.1	<0.002	0.01	0.35	6.4	<1	1.7	206	0.42	<0.05	3.06	0.178	0.17	1.3
B464421		40.1	86.3	0.243	1.59	2.19	11.6	3	1.7	297	0.42	0.44	5.11	0.276	0.91	1.0
B464422		11.1	67.5	0.473	1.30	0.84	5.8	3	1.4	397	0.27	0.07	5.06	0.144	0.71	1.6
B464423		11.2	73.6	0.413	1.56	0.14	8.1	3	1.4	299	0.32	0.05	5.60	0.191	0.72	2.0
B464424		10.6	89.0	0.324	1.59	0.13	8.5	4	1.8	241	0.29	0.10	5.42	0.174	0.84	1.9
B464425		12.0	78.4	0.421	1.48	0.28	8.2	4	1.9	295	0.33	0.06	4.94	0.208	0.78	1.6
B464426		16.0	70.5	0.164	0.98	0.23	4.7	3	1.3	423	0.32	0.06	5.06	0.143	0.77	1.4
B464427		12.7	67.0	0.175	1.19	0.11	4.6	3	1.4	397	0.32	0.06	5.40	0.134	0.65	1.5
B464428		12.6	77.4	0.533	1.03	0.29	4.4	2	1.1	475	0.30	0.06	5.32	0.128	0.82	1.5
B464429		13.5	75.9	0.447	1.08	0.30	4.2	3	1.1	448	0.30	0.06	5.24	0.130	0.80	1.4
B464430		203	104.5	0.577	0.95	30.3	4.2	2	1.4	538	0.28	0.07	5.00	0.122	1.45	1.4
B464431		105.0	74.0	0.380	1.07	2.55	4.4	3	1.5	1375	0.28	0.08	4.94	0.124	0.94	1.2
B464432		10.4	77.5	0.283	0.94	0.60	4.2	3	1.1	494	0.30	0.07	5.04	0.124	0.92	1.3
B464433		13.4	70.1	0.281	0.70	0.53	4.6	2	1.1	530	0.29	<0.05	5.10	0.132	0.80	1.3

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Finalized Date: 11-JAN-2022
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Project: Poplar

CERTIFICATE OF ANALYSIS VA21321124

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
B464394		130	0.6	9.6	75	28.5
B464395		127	0.6	8.7	54	22.6
B464396		128	0.6	9.1	209	24.6
B464397		127	0.5	9.4	57	27.3
B464398		123	0.6	11.6	59	30.3
B464399		117	1.4	10.4	89	34.8
B464400		31	0.6	16.9	29	58.3
B464401		131	1.0	11.0	68	38.5
B464402		126	1.1	10.4	82	42.0
B464403		128	17.4	9.9	192	15.8
B464404		135	1.0	13.5	67	39.2
B464405		134	1.3	12.4	51	47.6
B464406		134	1.5	14.0	92	41.4
B464407		141	1.9	13.2	119	41.0
B464408		91	1.5	10.7	44	38.5
B464409		91	1.4	10.4	42	39.4
B464410		61	1.2	10.0	63	43.2
B464411		47	1.4	10.0	57	41.7
B464412		61	1.3	10.8	53	46.8
B464413		58	2.4	9.7	119	46.8
B464414		48	1.7	9.2	92	42.7
B464415		51	1.2	9.8	44	44.4
B464416		51	1.4	9.8	49	40.2
B464417		46	1.1	10.0	54	39.4
B464418		53	1.1	10.6	49	41.5
B464419		56	2.4	8.7	143	36.6
B464420		32	0.6	17.2	30	56.5
B464421		110	3.7	12.4	244	5.3
B464422		57	1.2	8.3	42	37.7
B464423		81	0.9	12.4	50	49.5
B464424		94	1.0	13.1	47	44.8
B464425		86	1.3	11.5	45	43.1
B464426		53	1.0	10.2	53	33.5
B464427		46	1.0	10.4	46	34.4
B464428		42	1.3	9.8	45	33.7
B464429		42	1.2	9.3	46	32.6
B464430		40	2.2	7.9	775	29.5
B464431		42	1.6	9.4	495	31.8
B464432		45	1.1	8.2	51	29.9
B464433		43	1.5	9.1	60	31.7

***** 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: 11-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21321124

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
B464434		6.26	0.076	6.50	7.44	532	1110	1.20	0.12	1.57	4.83	65.4	8.6	8	6.60	3770
B464435		6.02	0.102	25.8	7.55	812	990	1.27	0.15	1.52	25.7	59.7	17.1	7	7.63	4770
B464436		6.02	0.067	8.75	7.37	203	1170	1.10	0.12	2.20	9.28	45.6	14.1	8	8.96	2510
B464437		4.80	0.102	1.25	8.21	3.9	800	1.22	0.10	1.15	0.18	48.8	17.6	28	7.54	4940
B464438		6.06	0.122	1.68	7.77	120.5	790	1.32	0.12	1.70	0.32	57.3	17.2	25	6.89	5330
B464439		6.60	0.077	1.11	7.77	386	870	1.28	0.13	1.62	0.24	41.8	24.0	24	6.30	4480
B464440		0.08	0.022	2.39	6.93	31.7	750	1.01	1.84	1.94	1.03	35.3	35.5	231	3.46	3530
B464441		0.08	0.002	0.03	7.37	2.6	880	1.07	0.03	1.71	0.02	27.1	3.8	24	0.41	29.7
B464442		6.20	0.081	0.88	7.75	685	1120	1.20	0.10	1.89	0.75	49.1	16.9	24	5.83	3920
B464443		6.42	0.089	1.11	7.86	354	920	1.34	0.11	1.74	0.22	57.1	13.6	17	6.18	4230
B464444		6.10	0.192	1.39	7.68	677	1000	1.14	0.14	1.58	1.02	66.2	8.3	8	5.12	6450
B464445		5.92	0.083	1.15	7.97	764	1400	1.00	0.11	1.73	2.11	51.3	8.6	9	5.14	4070
B464446		6.10	0.095	1.67	7.71	1545	1460	1.10	0.12	1.81	5.15	71.0	9.2	7	5.53	4570
B464447		5.86	0.055	0.87	7.73	808	920	1.11	0.12	1.60	1.48	38.9	7.0	7	5.76	2970
B464448		2.80	0.084	0.87	8.16	725	1130	0.99	0.12	1.67	1.80	40.9	9.1	10	5.67	4010
B464449		3.08	0.088	0.93	7.89	775	1190	0.96	0.12	1.65	2.45	40.3	8.4	7	5.40	4140
B464450		2.82	0.118	0.97	7.78	885	1170	0.91	0.13	1.40	2.06	50.1	7.0	7	4.29	5430
B464451		6.06	0.108	0.98	7.42	531	1220	1.10	0.11	1.54	0.34	45.9	7.6	7	5.06	5180
B464452		6.46	0.086	0.94	7.86	478	1170	1.00	0.12	1.62	0.72	43.9	9.6	8	5.47	4690
B464453		6.44	0.120	1.22	8.35	274	1260	1.27	0.15	1.62	0.29	44.7	13.0	9	6.20	5800
B464454		6.42	0.105	0.93	8.01	458	1300	1.17	0.11	1.68	0.30	52.6	9.3	7	5.57	4780
B464455		6.12	0.100	0.84	8.12	390	1330	0.96	0.10	1.66	0.29	51.9	7.9	7	5.55	4180
B464456		6.44	0.126	1.18	7.66	488	1370	0.93	0.11	1.63	0.31	50.0	9.1	9	4.78	5790
B464457		6.76	0.103	0.98	8.28	657	1240	1.16	0.12	1.80	0.31	44.2	9.6	7	5.65	5420
B464458		5.92	0.102	1.10	8.21	854	1530	1.06	0.12	1.36	0.43	56.7	8.2	7	4.72	5830
B464459		6.32	0.085	0.92	8.13	659	1130	1.18	0.13	1.36	0.38	46.6	8.8	9	4.96	4160
B464460		0.08	0.165	1.21	8.71	49.0	470	0.91	0.59	2.28	1.13	29.3	14.2	18	7.23	2150
B464461		0.08	<0.001	0.54	7.46	2.5	890	1.01	0.02	1.74	0.02	27.0	3.8	25	0.42	27.9
B464462		6.38	0.163	2.49	7.43	1970	1310	1.03	0.13	1.32	2.28	66.1	12.6	17	6.44	7750
B464463		6.50	0.087	0.92	8.11	1170	960	1.32	0.13	1.11	0.62	58.3	12.3	8	6.42	4130
B464464		6.52	0.094	0.91	8.00	683	520	1.30	0.14	1.82	0.19	43.8	23.3	23	5.36	4090
B464465		6.68	0.050	0.74	7.86	602	470	1.18	0.12	1.94	0.27	52.3	9.9	10	4.37	3040
B464466		6.96	0.058	0.85	8.13	236	370	1.38	0.15	1.91	0.19	29.3	24.0	25	4.49	3320
B464467		5.96	0.041	0.78	7.67	499	470	1.20	0.15	2.05	0.63	59.0	13.4	19	4.43	2880
B464468		2.96	0.028	0.45	8.33	81.7	860	1.28	0.11	1.80	0.34	56.9	8.1	8	4.63	1665
B464469		3.08	0.030	0.47	7.96	78.8	790	1.24	0.11	1.75	0.34	52.9	7.8	9	4.44	1645
B464470		3.02	0.044	0.64	8.13	134.0	630	1.28	0.12	1.66	0.32	51.0	9.8	7	4.82	2320
B464471		6.92	0.043	1.31	7.63	629	430	1.20	0.15	2.35	0.28	44.7	25.5	18	6.94	2760
B464472		6.52	0.042	0.69	8.35	267	750	1.27	0.12	1.92	0.18	63.1	19.1	24	5.11	2690
B464473		5.96	0.031	0.66	8.12	9.2	1070	1.36	0.12	1.76	0.35	42.5	14.0	9	3.61	1905

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VANCOUVER BC V6E 4K2

Finalized Date: 11-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21321124

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
B464434		1.53	13.95	0.08	1.1	0.065	3.33	33.4	34.8	0.65	482	168.0	1.35	3.8	5.5	920
B464435		2.01	13.60	0.08	1.1	0.066	2.74	31.8	29.5	0.69	1050	299	0.89	3.0	6.7	790
B464436		2.57	15.25	0.08	1.3	0.051	2.90	23.4	31.0	0.77	1150	130.5	1.39	4.0	6.8	1020
B464437		3.31	15.20	0.09	1.2	0.088	3.05	26.7	20.5	1.09	248	157.0	2.54	5.1	13.0	1160
B464438		2.59	15.20	0.08	1.3	0.088	2.81	30.9	36.0	0.91	288	198.5	2.26	4.0	12.2	1110
B464439		3.09	14.50	0.06	1.4	0.077	2.62	21.9	79.3	0.70	259	98.1	1.77	3.7	13.3	1150
B464440		4.12	15.75	0.10	0.5	0.097	3.10	17.1	9.0	3.68	408	245	1.18	2.9	236	1060
B464441		2.56	13.65	0.06	1.9	0.022	1.89	14.4	2.4	0.40	615	4.60	3.29	5.9	14.2	390
B464442		2.47	14.80	0.09	1.5	0.063	3.25	25.8	103.5	0.67	300	286	1.26	4.0	13.2	1140
B464443		1.92	16.10	0.11	1.2	0.068	3.12	31.2	90.9	0.59	233	204	1.96	4.5	8.8	1190
B464444		1.63	14.15	0.11	0.9	0.089	3.50	38.3	49.9	0.61	293	221	1.96	3.6	6.9	790
B464445		1.51	15.40	0.10	0.9	0.071	3.82	29.5	47.4	0.57	294	114.0	1.91	3.8	5.6	870
B464446		1.66	13.95	0.12	1.0	0.070	4.17	39.7	49.8	0.57	377	205	1.32	3.3	6.0	820
B464447		1.35	13.65	0.10	1.0	0.059	3.38	22.3	27.5	0.60	347	120.5	1.94	4.0	4.8	640
B464448		1.48	16.35	0.09	1.0	0.068	3.40	22.5	57.0	0.53	275	79.0	1.94	4.1	5.7	820
B464449		1.50	15.75	0.09	0.9	0.069	3.59	22.3	51.0	0.53	280	105.0	1.84	4.0	5.5	770
B464450		1.45	14.95	0.10	1.0	0.087	3.47	28.5	117.0	0.45	257	131.0	1.49	3.8	5.1	780
B464451		1.53	15.20	0.11	0.9	0.082	3.51	25.4	84.0	0.56	235	146.5	1.44	3.6	5.7	800
B464452		1.63	15.80	0.10	0.9	0.083	3.50	24.0	74.7	0.53	220	154.0	1.77	3.9	5.3	930
B464453		1.80	17.40	0.09	1.0	0.101	3.36	24.2	140.5	0.53	205	88.9	1.88	4.4	6.4	940
B464454		1.61	16.90	0.11	1.0	0.082	3.20	27.3	237	0.52	225	109.0	1.44	4.4	5.1	880
B464455		1.43	16.60	0.09	1.0	0.080	3.17	28.6	160.0	0.51	210	105.5	1.62	4.8	5.3	910
B464456		1.63	14.35	0.09	0.7	0.096	3.37	27.0	122.5	0.51	200	115.5	1.72	3.9	5.6	850
B464457		1.66	15.95	0.12	0.8	0.077	3.30	23.7	215	0.55	234	82.2	1.44	3.3	5.3	960
B464458		1.46	14.80	0.10	0.8	0.080	3.73	31.3	144.5	0.48	215	221	1.33	3.5	5.4	930
B464459		1.50	14.80	0.10	0.8	0.055	3.35	25.6	96.7	0.57	202	88.3	1.94	3.5	4.9	900
B464460		4.64	18.50	0.08	0.2	0.102	2.53	15.2	26.5	0.96	961	269	1.63	5.8	11.8	760
B464461		2.59	13.50	0.06	1.9	0.018	1.88	14.3	2.5	0.41	615	4.34	3.33	5.7	14.4	380
B464462		1.81	12.60	0.11	0.7	0.125	3.74	36.9	78.5	0.53	313	231	0.88	3.6	9.9	830
B464463		1.62	14.15	0.09	0.9	0.069	3.71	32.7	117.5	0.49	189	115.5	1.20	3.8	6.0	880
B464464		3.24	16.20	0.08	1.2	0.067	2.64	22.8	103.0	0.72	275	95.6	1.97	3.4	13.0	1090
B464465		1.77	14.20	0.08	0.8	0.051	2.21	28.3	73.8	0.71	244	93.2	2.68	3.5	6.3	900
B464466		2.99	14.95	0.07	1.4	0.051	1.80	15.8	37.1	0.83	230	115.0	3.20	3.2	14.0	1180
B464467		2.28	13.75	0.09	1.3	0.052	2.25	32.2	53.5	0.82	290	127.0	2.42	3.3	10.1	1040
B464468		1.31	16.10	0.08	1.0	0.027	2.41	31.4	137.0	0.67	248	68.9	3.04	4.2	5.1	900
B464469		1.28	15.90	0.07	1.0	0.027	2.30	30.0	117.5	0.66	243	67.7	3.08	4.1	5.3	880
B464470		1.57	15.10	0.07	1.0	0.035	2.17	28.8	45.9	0.63	210	82.4	3.00	3.8	6.0	920
B464471		3.43	13.75	0.07	1.5	0.044	2.72	24.1	23.9	1.08	701	113.5	1.39	3.3	11.2	1100
B464472		2.68	15.35	0.10	1.6	0.048	2.77	33.7	33.8	0.92	249	120.0	2.56	3.5	10.3	1150
B464473		2.12	16.00	0.08	0.8	0.037	2.38	23.0	26.5	0.65	246	104.0	3.77	4.0	4.5	890

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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
B464434		211	88.9	0.346	0.90	20.6	4.5	2	1.6	897	0.26	0.05	4.82	0.108	1.08	1.5
B464435		744	87.3	0.444	1.42	305	3.7	3	1.4	650	0.22	0.07	4.83	0.089	1.12	1.4
B464436		255	82.5	0.344	1.26	113.0	5.6	2	1.3	606	0.27	0.06	4.45	0.167	1.18	1.4
B464437		13.2	82.0	0.545	1.02	0.59	8.4	3	1.3	383	0.36	0.07	5.73	0.196	0.84	1.8
B464438		18.6	74.3	0.579	1.27	1.51	8.0	3	1.4	551	0.30	0.10	5.40	0.172	0.86	1.7
B464439		19.8	68.4	0.259	1.69	1.41	7.5	3	1.1	1865	0.28	0.10	5.40	0.156	0.80	1.6
B464440		20.1	86.3	0.280	2.37	7.60	12.7	3	1.4	277	0.21	1.29	2.65	0.323	1.19	0.9
B464441		2.7	42.6	<0.002	0.01	0.32	6.2	<1	1.7	202	0.42	<0.05	2.96	0.176	0.17	1.3
B464442		43.3	67.4	0.817	1.16	1.68	7.7	3	1.1	817	0.30	0.06	4.95	0.176	0.84	1.6
B464443		10.7	69.3	0.473	0.98	1.80	6.5	3	1.2	855	0.31	0.07	4.84	0.166	0.84	1.5
B464444		28.5	77.6	0.454	0.96	4.53	4.4	4	1.5	887	0.24	0.08	4.90	0.119	0.91	1.5
B464445		55.5	82.3	0.208	0.76	3.70	4.4	2	1.1	926	0.28	0.05	4.80	0.126	0.94	1.2
B464446		131.5	86.7	0.385	1.01	8.52	3.9	3	1.2	1100	0.23	0.06	4.59	0.105	1.10	1.5
B464447		44.5	80.1	0.205	0.59	4.20	4.9	1	1.0	1030	0.28	0.06	4.76	0.129	0.98	1.2
B464448		55.8	76.8	0.208	0.75	2.21	4.9	2	1.2	879	0.29	0.05	4.97	0.143	0.92	1.3
B464449		81.9	79.0	0.251	0.78	2.41	4.8	3	1.2	818	0.27	0.05	4.61	0.137	0.90	1.2
B464450		71.5	72.8	0.270	0.85	5.06	4.2	3	1.4	831	0.26	<0.05	4.88	0.127	0.87	1.2
B464451		14.0	76.3	0.300	0.84	4.11	4.5	3	1.4	637	0.25	0.07	4.64	0.127	0.91	1.2
B464452		41.8	76.8	0.453	0.91	3.16	4.6	2	1.2	684	0.28	0.08	4.87	0.131	0.92	1.2
B464453		15.0	80.6	0.233	1.12	1.18	5.0	3	1.4	621	0.33	0.09	5.17	0.143	0.91	1.4
B464454		19.8	66.6	0.239	0.86	1.69	4.7	3	1.3	638	0.32	0.06	5.00	0.140	0.80	1.4
B464455		13.0	66.3	0.292	0.75	7.96	4.5	2	1.1	721	0.34	0.07	5.01	0.148	0.82	1.2
B464456		14.2	71.4	0.302	1.00	6.47	4.3	3	1.4	774	0.28	0.06	4.81	0.122	0.84	1.0
B464457		13.9	70.7	0.230	1.01	9.64	4.5	3	1.3	914	0.24	0.06	4.76	0.115	0.85	1.1
B464458		14.0	76.2	0.574	0.97	6.44	4.2	3	1.3	1290	0.25	0.07	4.82	0.110	0.89	1.2
B464459		14.3	75.4	0.207	0.87	3.39	4.2	2	1.3	831	0.24	<0.05	4.91	0.102	0.84	1.2
B464460		42.6	77.5	0.253	1.59	2.02	10.9	3	1.7	294	0.42	0.42	4.75	0.274	0.92	1.0
B464461		2.9	43.2	0.002	0.01	0.34	6.2	<1	1.7	202	0.40	<0.05	2.92	0.177	0.17	1.3
B464462		290	84.5	0.313	1.22	48.8	5.9	5	1.7	916	0.23	0.07	4.14	0.142	1.08	1.4
B464463		17.4	84.6	0.207	0.95	16.40	4.6	3	1.3	918	0.27	0.05	5.45	0.120	0.98	1.5
B464464		8.1	62.1	0.224	1.68	4.45	7.2	4	1.2	1075	0.24	0.08	5.07	0.148	0.72	1.5
B464465		17.6	54.3	0.258	0.77	12.40	4.7	2	1.0	901	0.24	0.05	4.95	0.129	0.65	1.1
B464466		14.2	45.0	0.298	1.49	0.52	7.1	3	1.1	849	0.23	0.08	5.13	0.151	0.56	1.6
B464467		220	51.4	0.256	0.89	13.70	6.1	2	1.1	948	0.24	<0.05	4.69	0.141	0.71	1.8
B464468		16.6	56.2	0.150	0.57	0.40	4.5	1	1.0	897	0.30	<0.05	5.16	0.126	0.64	1.4
B464469		16.2	52.9	0.142	0.58	0.30	4.4	2	1.0	796	0.29	<0.05	4.91	0.127	0.58	1.3
B464470		14.8	52.1	0.188	0.84	0.16	4.2	1	1.1	946	0.28	0.05	5.08	0.115	0.61	1.5
B464471		11.5	73.1	0.287	1.27	9.23	7.0	3	1.3	586	0.24	0.07	4.54	0.132	1.06	2.2
B464472		11.4	63.4	0.272	1.24	3.75	7.8	2	1.3	547	0.25	0.06	5.78	0.145	0.69	2.1
B464473		16.2	51.2	0.242	1.29	0.07	4.0	1	0.8	549	0.28	<0.05	4.94	0.121	0.55	1.3

***** 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: 11-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21321124

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
B464434		49	1.6	8.9	1055	34.4
B464435		39	1.6	8.7	3860	33.7
B464436		59	1.6	8.9	1435	43.4
B464437		86	0.6	12.8	61	41.8
B464438		76	0.8	11.5	77	42.6
B464439		72	1.9	9.6	80	47.1
B464440		130	19.6	10.6	191	14.3
B464441		31	0.7	16.7	30	55.6
B464442		74	1.8	9.4	208	53.0
B464443		64	3.6	9.6	63	39.6
B464444		46	2.0	8.7	191	25.7
B464445		46	1.5	8.7	439	26.1
B464446		42	1.2	10.0	1055	29.4
B464447		53	1.8	6.9	360	29.4
B464448		50	2.9	8.2	399	29.9
B464449		50	3.0	8.0	483	28.6
B464450		42	2.1	7.9	314	27.6
B464451		44	1.5	8.0	83	26.8
B464452		48	1.5	8.7	142	26.4
B464453		53	1.2	9.0	60	29.5
B464454		48	3.5	8.9	71	31.1
B464455		45	6.2	10.2	70	29.6
B464456		48	4.5	9.1	74	18.5
B464457		46	3.0	8.5	85	20.1
B464458		43	5.7	9.2	114	20.6
B464459		41	2.0	8.4	85	21.9
B464460		110	3.9	11.2	251	5.4
B464461		32	0.6	17.0	29	58.4
B464462		64	7.5	10.5	439	21.8
B464463		54	2.8	8.3	171	23.7
B464464		66	4.3	8.5	70	45.1
B464465		49	2.6	7.6	71	20.9
B464466		60	1.0	7.4	55	47.6
B464467		54	1.2	11.1	134	42.4
B464468		41	1.3	9.3	70	24.5
B464469		42	1.3	8.7	71	24.3
B464470		44	0.8	8.9	64	24.6
B464471		77	0.8	9.8	64	53.1
B464472		81	0.7	11.9	60	55.9
B464473		42	0.5	9.2	79	19.8

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To: MAMMOTH GEOLOGICAL LTD.
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VANCOUVER BC V6E 4K2

Finalized Date: 11-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21321124

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
B464474		5.80	0.046	0.83	7.96	2.6	1130	1.36	0.11	1.91	0.37	48.3	12.7	8	3.92	2340
B464475		6.86	0.033	0.57	8.00	1.6	1170	1.31	0.12	1.84	0.25	43.5	12.8	11	3.26	1855
B464476		6.34	0.018	0.43	8.28	1.4	1150	1.30	0.13	1.74	0.38	47.6	15.7	9	3.92	1335
B464477		6.60	0.032	0.51	8.05	3.5	1090	1.31	0.14	2.05	0.17	48.4	14.7	8	4.53	1630
B464478		6.72	0.028	0.60	7.92	10.1	1160	1.42	0.21	2.19	0.32	43.9	18.0	10	4.01	1795
B464479		6.26	0.019	0.36	8.08	0.9	1360	1.48	0.13	1.66	0.28	44.3	14.4	7	3.89	1290
B464480		0.08	<0.001	0.02	7.52	2.4	900	1.08	0.03	1.75	0.02	28.0	3.7	25	0.41	27.2
B464481		5.88	0.020	0.46	7.84	0.9	870	1.41	0.14	2.04	0.06	39.1	27.9	7	3.97	1425
B464482		0.08	0.025	2.30	7.00	29.4	760	1.14	1.75	1.94	0.99	34.2	34.9	237	3.35	3640
B464483		6.98	0.028	0.60	8.17	0.9	1230	1.26	0.12	1.98	0.23	43.8	15.0	10	4.03	1895
B464484		6.98	0.047	0.85	8.24	348	1420	1.46	0.14	1.88	0.30	47.5	19.0	7	5.07	2550
B464485		6.14	0.017	0.55	8.11	46.2	1440	1.47	0.12	2.11	0.21	45.9	13.6	8	4.99	1340
B464486		6.80	0.027	0.54	7.90	372	1250	1.44	0.26	1.82	0.13	49.0	14.2	9	6.26	1910
B464487		6.82	0.041	0.65	8.12	443	1220	1.44	0.17	1.84	0.14	49.0	17.5	7	5.29	2470
B464488		2.96	0.063	1.48	8.49	845	1260	1.54	0.12	1.61	0.41	59.7	13.8	6	5.50	3790
B464489		3.18	0.078	1.06	8.21	973	1340	1.48	0.14	1.53	0.48	56.4	15.4	8	5.31	4480
B464490		3.28	0.019	0.63	8.50	321	1190	1.57	0.14	1.90	0.38	46.3	20.7	8	7.58	1540
B464491		6.46	0.029	0.96	8.04	33.1	670	1.42	0.13	2.17	0.06	49.6	21.3	17	5.24	2200
B464492		6.34	0.041	2.49	7.61	65.3	510	1.31	0.16	1.79	3.59	37.8	34.5	18	7.40	2460
B464493		6.62	0.009	0.76	7.90	13.7	760	1.31	0.12	2.24	0.16	35.3	20.3	17	6.35	1015
B464494		6.54	0.012	1.22	7.96	4.9	1040	1.24	0.14	1.81	0.15	29.9	30.2	18	7.25	1160
B464495		6.74	0.016	2.03	7.36	27.6	1020	1.32	0.12	2.61	0.28	36.2	23.1	19	7.13	1530
B464496		6.44	0.023	1.22	7.87	116.5	810	1.44	0.20	1.80	0.37	34.0	34.3	19	6.87	1715
B464497		6.44	0.029	1.57	7.85	79.1	1260	1.44	0.11	2.49	1.31	38.5	20.2	9	8.05	2050
B464498		6.06	0.025	0.75	7.65	272	1570	1.36	0.09	2.39	1.10	44.6	14.4	7	6.55	1845
B464499		6.00	0.021	0.52	8.35	22.3	1430	1.39	0.09	2.10	0.29	39.3	13.5	6	4.39	1470
B464500		0.10	NSS	1.16	8.69	52.1	470	1.08	0.57	2.25	1.06	30.0	14.0	19	7.03	2200
B464501		0.08	NSS	0.04	7.41	2.1	890	1.08	0.03	1.72	0.02	27.0	3.7	25	0.40	26.8
B464502		6.28	0.033	0.75	8.45	2.0	1390	1.40	0.09	1.62	0.17	49.1	13.6	6	3.95	2230
B464503		5.72	0.036	0.66	8.38	2.7	1360	1.50	0.10	1.40	0.33	47.8	10.3	9	3.50	1965
B464504		6.16	0.044	0.72	8.43	2.0	1330	1.53	0.09	1.77	0.11	46.8	14.9	6	4.38	2260
B464505		6.20	0.060	1.16	7.15	2.8	510	1.26	0.11	3.34	0.05	58.4	18.9	7	3.46	3380
B464506		6.52	0.032	0.54	7.52	4.4	750	1.30	0.09	3.14	0.07	58.6	14.6	9	4.50	1970
B464507		6.20	0.028	0.52	7.65	42.4	800	1.48	0.12	2.31	0.15	43.3	16.8	9	4.65	1635
B464508		3.12	0.018	0.42	7.44	10.3	860	1.40	0.10	2.19	0.25	40.2	17.5	6	5.13	1130
B464509		3.46	0.018	0.42	7.78	7.9	900	1.56	0.11	2.47	0.15	41.6	17.2	9	5.59	1215
B464510		2.74	0.032	0.69	6.54	20.3	1050	1.20	0.10	3.30	0.08	36.9	14.6	6	4.93	1780
B464511		6.40	0.020	0.63	7.56	23.8	980	1.30	0.10	3.32	0.28	29.5	14.4	10	4.84	858
B464512		6.70	0.003	0.18	8.11	1.9	900	1.35	0.08	2.17	0.38	24.8	14.6	19	1.83	315
B464513		6.80	0.012	0.27	7.64	3.4	1090	1.14	0.09	2.37	0.38	27.2	17.2	14	3.66	683

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VANCOUVER BC V6E 4K2

Finalized Date: 11-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21321124

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
B464474		2.23	16.75	0.10	0.7	0.045	2.46	26.3	13.9	0.66	250	112.5	3.85	4.9	4.8	930
B464475		1.98	16.15	0.09	0.8	0.032	2.60	22.7	13.8	0.66	234	147.5	3.73	3.1	4.7	950
B464476		2.44	17.05	0.08	0.8	0.027	2.47	25.8	15.0	0.68	284	71.6	3.98	4.3	3.9	970
B464477		2.18	17.80	0.08	0.9	0.036	2.51	26.2	16.5	0.60	234	73.7	3.51	4.1	4.2	940
B464478		2.32	15.80	0.19	0.9	0.048	2.43	23.1	17.0	0.56	221	82.7	3.34	3.8	4.6	910
B464479		2.24	15.35	0.19	0.8	0.025	2.71	23.3	14.3	0.68	213	99.4	3.71	3.6	3.5	930
B464480		2.61	13.45	0.18	1.9	0.022	1.93	14.6	2.9	0.42	626	4.27	3.43	5.7	14.8	400
B464481		2.81	13.05	0.18	0.9	0.023	3.25	20.1	11.2	0.63	172	76.6	2.86	3.4	3.9	950
B464482		4.17	14.95	0.18	0.5	0.092	3.14	16.8	9.6	3.77	415	248	1.18	2.7	241	1090
B464483		2.61	14.05	0.18	0.8	0.036	2.83	22.8	19.7	0.64	214	104.0	3.36	3.4	4.4	940
B464484		2.27	15.60	0.22	0.8	0.047	3.06	25.6	128.5	0.52	223	128.5	2.52	4.2	4.8	950
B464485		2.71	14.95	0.22	0.9	0.030	2.98	23.8	59.5	0.56	200	75.7	3.00	3.6	4.1	960
B464486		2.09	15.05	0.24	1.0	0.037	3.02	25.9	31.3	0.63	201	95.9	2.13	4.5	4.9	960
B464487		2.19	14.90	0.24	1.0	0.051	2.82	26.0	99.4	0.63	214	130.5	2.31	4.4	5.2	930
B464488		2.38	15.35	0.21	1.0	0.065	3.00	31.6	151.5	0.57	216	130.5	2.11	4.1	6.2	1050
B464489		2.39	15.25	0.25	1.0	0.074	3.04	30.0	141.5	0.55	207	128.0	1.95	4.5	6.4	1050
B464490		2.78	15.20	0.20	1.3	0.028	2.89	24.1	121.5	0.72	289	86.2	1.83	3.5	5.6	1000
B464491		3.06	15.05	0.21	2.2	0.038	2.56	24.9	26.3	0.90	267	211	2.28	2.4	9.8	1180
B464492		5.34	12.50	0.16	1.7	0.040	3.38	19.2	24.4	0.93	909	89.4	0.48	2.1	13.8	1010
B464493		4.17	13.20	0.18	2.0	0.017	2.72	17.2	25.3	1.03	237	43.7	2.11	2.5	11.5	1170
B464494		4.73	12.10	0.15	1.9	0.022	3.13	15.5	14.4	0.98	680	56.2	1.57	2.6	12.0	1230
B464495		3.75	10.90	0.16	1.8	0.025	3.56	18.8	14.0	0.94	1325	102.0	0.37	2.1	9.5	1140
B464496		4.03	12.55	0.16	1.8	0.034	3.60	18.0	28.3	0.94	685	128.5	0.77	2.6	11.4	1170
B464497		2.71	15.15	0.21	1.2	0.037	2.97	19.2	50.5	0.61	357	84.2	1.41	4.1	6.1	960
B464498		2.43	14.00	0.23	1.0	0.028	3.28	23.2	58.8	0.52	238	150.0	1.36	4.0	4.2	900
B464499		2.21	15.55	0.20	1.0	0.025	2.89	19.9	42.1	0.61	198	67.8	2.58	3.8	3.6	990
B464500		4.62	18.10	0.17	0.2	0.101	2.56	14.0	29.5	0.97	971	267	1.63	5.5	12.4	770
B464501		2.60	13.25	0.20	1.8	0.024	1.93	14.4	2.8	0.41	621	4.27	3.38	5.6	14.2	390
B464502		2.34	15.50	0.23	1.0	0.032	3.09	25.5	16.2	0.68	191	55.7	3.14	5.1	4.3	990
B464503		1.91	16.20	0.22	1.0	0.039	2.96	25.3	15.4	0.69	208	55.3	3.42	4.8	4.5	990
B464504		2.01	15.25	0.21	1.1	0.036	2.97	24.2	16.4	0.65	173	42.6	2.95	4.0	5.1	1000
B464505		1.82	11.15	0.25	0.9	0.043	3.74	32.1	10.2	0.38	153	260	2.24	3.4	5.7	790
B464506		1.88	11.75	0.27	1.0	0.033	3.38	32.0	12.4	0.46	156	93.4	2.41	3.4	4.6	880
B464507		2.18	13.10	0.21	0.9	0.027	2.33	22.7	14.6	0.60	185	61.2	2.52	3.1	4.1	920
B464508		2.24	12.70	0.20	1.0	0.024	2.33	21.4	16.7	0.58	181	52.6	2.45	3.0	4.1	910
B464509		2.41	13.70	0.20	1.0	0.023	2.42	22.3	19.1	0.61	191	44.1	2.58	3.3	4.6	980
B464510		2.17	12.35	0.21	1.0	0.032	2.27	18.4	20.7	0.66	234	74.9	2.07	3.3	4.1	900
B464511		4.01	16.65	0.18	1.1	0.018	2.11	14.4	30.0	0.96	289	50.3	1.64	5.4	8.6	1340
B464512		6.14	18.30	0.19	1.0	0.018	2.40	13.0	11.0	1.62	384	17.05	3.14	7.0	12.4	1530
B464513		5.69	18.25	0.15	1.0	0.026	2.97	14.0	11.4	1.55	381	69.1	2.86	6.8	11.0	1510

***** 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: 11-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21321124

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
B464474		17.4	53.7	0.232	1.34	0.08	4.5	1	0.8	484	0.35	<0.05	5.00	0.144	0.58	1.1
B464475		15.3	52.2	0.500	1.65	0.08	4.1	2	1.0	463	0.23	<0.05	4.87	0.107	0.57	1.5
B464476		19.4	50.9	0.155	1.49	0.07	4.3	2	0.9	448	0.29	<0.05	5.11	0.132	0.55	1.3
B464477		11.2	58.8	0.140	1.51	0.22	4.4	1	1.1	428	0.29	0.05	5.11	0.132	0.59	1.3
B464478		12.8	58.5	0.236	1.78	0.22	4.1	2	1.0	508	0.26	0.05	4.36	0.119	0.63	1.2
B464479		14.4	54.6	0.207	1.78	0.08	4.0	2	0.9	443	0.24	0.05	4.46	0.116	0.57	1.5
B464480		2.9	43.5	<0.002	0.01	0.33	6.2	<1	1.8	206	0.39	<0.05	2.65	0.185	0.16	1.3
B464481		5.5	70.6	0.140	2.53	0.12	4.0	2	1.2	436	0.23	<0.05	4.21	0.104	0.74	1.4
B464482		21.0	87.9	0.311	2.41	7.54	12.2	4	1.5	281	0.18	1.32	2.32	0.328	1.17	0.9
B464483		12.8	53.5	0.217	2.05	0.09	3.7	2	0.9	487	0.25	<0.05	4.03	0.116	0.54	1.4
B464484		12.3	65.3	0.268	1.51	1.11	4.4	2	1.3	757	0.29	0.06	4.20	0.131	0.61	1.4
B464485		11.0	63.1	0.172	1.62	0.39	4.3	1	0.9	664	0.25	<0.05	4.50	0.110	0.66	1.4
B464486		5.2	74.2	0.185	1.17	3.61	4.3	2	1.2	758	0.31	0.05	4.14	0.122	0.80	1.4
B464487		9.9	65.1	0.261	1.29	8.58	4.3	2	1.1	754	0.30	0.05	4.31	0.126	0.78	1.5
B464488		11.9	67.5	0.260	1.44	13.50	4.5	3	1.3	914	0.29	0.06	4.48	0.126	0.75	1.8
B464489		12.6	70.0	0.275	1.49	21.3	4.4	3	1.6	910	0.31	0.06	4.39	0.130	0.78	1.8
B464490		9.9	73.2	0.158	1.76	7.03	4.7	3	1.0	1450	0.25	<0.05	4.53	0.111	0.80	1.7
B464491		5.0	62.3	0.561	2.10	0.56	7.4	3	1.2	1500	0.18	0.07	4.41	0.106	0.74	2.4
B464492		154.0	108.0	0.228	2.93	18.75	8.0	3	1.5	746	0.16	0.07	4.18	0.097	1.15	2.2
B464493		15.7	72.8	0.070	3.02	1.13	6.9	2	1.1	571	0.19	0.08	4.58	0.108	0.88	2.2
B464494		11.1	91.9	0.065	2.72	0.65	6.5	3	1.1	584	0.19	0.08	4.59	0.111	1.02	2.2
B464495		13.5	86.8	0.110	2.26	6.58	6.1	3	1.3	898	0.17	0.08	3.83	0.093	1.19	1.8
B464496		20.9	102.0	0.117	2.55	2.30	7.0	3	1.5	2060	0.20	0.11	4.28	0.122	1.18	2.0
B464497		81.4	66.7	0.132	1.45	8.24	5.2	2	1.2	423	0.28	0.06	3.90	0.125	0.80	1.5
B464498		73.8	65.9	0.201	1.32	2.13	4.0	2	1.2	574	0.28	0.05	3.76	0.113	0.79	1.3
B464499		11.4	60.0	0.101	1.26	0.06	4.2	2	1.0	343	0.26	0.06	4.10	0.113	0.63	1.3
B464500		42.9	76.6	0.265	1.61	2.21	10.6	3	1.8	294	0.39	0.42	3.67	0.280	0.85	1.1
B464501		2.8	42.2	<0.002	0.01	0.32	6.1	<1	1.8	204	0.40	<0.05	2.56	0.183	0.16	1.2
B464502		10.5	68.3	0.086	1.15	0.08	4.5	2	1.1	616	0.35	0.05	4.61	0.142	0.67	1.5
B464503		16.8	62.3	0.076	0.91	0.07	4.2	2	1.0	962	0.33	<0.05	4.65	0.139	0.61	1.5
B464504		7.9	65.2	0.073	1.36	0.17	4.3	2	1.3	452	0.28	0.05	4.43	0.114	0.62	1.6
B464505		6.8	63.1	0.292	2.82	0.24	2.9	3	1.3	574	0.23	0.05	3.24	0.100	0.75	1.5
B464506		5.3	64.1	0.098	2.62	0.18	3.3	2	1.2	584	0.25	0.06	3.84	0.097	0.68	1.6
B464507		8.3	51.2	0.069	1.95	0.29	3.9	2	1.2	435	0.22	<0.05	3.83	0.093	0.52	1.2
B464508		12.1	52.4	0.086	2.27	0.48	3.3	2	1.2	566	0.21	0.05	3.88	0.084	0.61	1.4
B464509		7.1	56.4	0.086	2.56	0.29	3.5	2	1.3	748	0.23	<0.05	3.91	0.089	0.57	1.4
B464510		4.2	46.8	0.146	1.55	0.33	3.1	3	1.3	1400	0.24	0.05	2.99	0.094	0.60	1.1
B464511		13.2	47.3	0.162	0.76	0.24	8.0	1	0.9	881	0.40	<0.05	3.69	0.264	0.62	1.5
B464512		13.7	78.4	0.021	0.49	<0.05	11.4	1	1.0	706	0.47	<0.05	3.83	0.378	0.71	1.6
B464513		14.8	74.7	0.076	0.67	<0.05	11.6	1	0.9	703	0.47	<0.05	3.34	0.372	0.74	1.5

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VANCOUVER BC V6E 4K2

Finalized Date: 11-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21321124

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
B464474		48	0.5	11.3	79	17.6
B464475		44	0.5	10.2	69	20.9
B464476		45	0.5	11.2	93	20.3
B464477		47	0.6	10.8	60	21.8
B464478		45	0.6	11.0	75	22.1
B464479		42	0.6	10.6	63	21.6
B464480		33	0.6	17.2	29	56.0
B464481		50	0.8	9.0	29	21.7
B464482		134	18.9	10.6	192	15.2
B464483		43	0.6	10.2	59	21.2
B464484		48	1.5	9.4	102	22.3
B464485		46	0.7	10.7	52	25.1
B464486		50	1.3	8.7	60	25.4
B464487		47	1.2	8.7	51	25.0
B464488		52	3.3	9.3	125	24.8
B464489		51	3.2	9.6	142	25.2
B464490		48	0.9	8.5	96	32.6
B464491		68	0.7	11.9	33	70.5
B464492		95	0.9	8.6	582	55.6
B464493		64	0.6	10.7	56	63.3
B464494		65	0.6	9.0	53	58.5
B464495		66	1.1	9.5	76	56.8
B464496		72	1.2	8.7	90	57.0
B464497		57	1.1	8.4	211	32.6
B464498		48	1.0	8.5	163	24.6
B464499		44	0.9	9.1	60	24.6
B464500		112	6.9	11.4	249	4.9
B464501		33	0.7	16.8	29	55.2
B464502		49	0.8	10.9	50	27.6
B464503		44	0.8	11.4	70	26.2
B464504		45	0.8	10.8	38	29.6
B464505		35	1.1	10.6	25	24.0
B464506		39	1.1	9.8	25	23.1
B464507		41	0.9	8.8	37	24.5
B464508		36	0.8	8.0	43	24.4
B464509		39	0.9	8.7	34	26.4
B464510		37	0.8	7.6	27	24.5
B464511		92	0.6	10.8	80	33.1
B464512		130	0.2	12.0	107	30.7
B464513		130	0.3	10.8	115	30.4

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Finalized Date: 11-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21321124

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
B464514		6.62	0.009	0.30	7.70	2.1	970	1.16	0.08	2.67	0.32	24.8	26.2	14	3.78	768
B464515		6.56	0.011	0.34	7.61	3.0	1020	1.30	0.10	2.52	0.18	24.8	27.2	16	3.55	1140
B464516		6.48	0.005	0.21	7.84	3.3	970	1.29	0.08	2.82	0.35	23.3	19.6	14	4.66	498
B464517		6.82	0.006	0.21	8.16	118.0	920	1.23	0.08	2.89	0.25	23.3	15.4	14	11.10	567
B464518		6.96	0.015	0.55	8.16	41.8	930	1.19	0.13	2.84	0.19	28.5	28.7	16	6.63	1165
B464519		7.00	0.033	0.71	7.85	2.2	820	1.16	0.14	2.72	0.21	25.6	32.3	16	2.32	1945
B464520		0.08	0.019	2.31	6.89	30.2	750	1.12	1.93	1.94	1.00	34.3	34.3	242	3.35	3530
B464521		0.08	<0.001	0.02	7.11	2.0	880	1.04	0.03	1.66	0.02	25.1	3.7	26	0.37	26.8
B464522		6.80	0.027	0.74	7.76	20.7	850	1.32	0.08	3.51	0.72	25.3	22.5	13	3.06	1695
B464523		7.00	0.034	0.58	7.45	1.4	1080	1.08	0.07	2.96	0.26	28.8	26.8	14	2.23	1580
B464524		7.26	0.057	0.82	7.05	0.7	760	1.06	0.08	4.61	0.21	60.3	29.2	15	1.61	2500
B464525		6.72	0.040	0.87	7.76	1.8	930	1.18	0.13	3.21	0.21	34.7	42.5	14	1.22	2470
B464526		7.26	0.019	0.59	7.32	2.0	410	1.12	0.15	2.17	0.24	32.2	40.9	20	3.20	1495
B464527		7.00	0.009	0.40	7.82	3.8	620	1.19	0.16	2.33	0.19	33.1	34.7	24	4.31	1155
B464528		3.04	0.011	0.37	7.65	1.9	910	1.24	0.12	2.66	0.32	27.8	24.9	21	4.11	982
B464529		3.24	0.010	0.30	6.90	2.0	700	1.18	0.11	2.73	0.31	30.5	22.7	20	4.01	864
B464530		3.08	0.008	0.55	7.23	2.6	560	1.27	0.12	2.88	0.17	19.05	38.9	20	4.62	1080
B464531		6.76	0.013	0.39	7.16	2.0	560	1.20	0.11	2.97	0.19	25.6	38.6	20	3.54	1160
B464532		6.06	0.003	0.16	7.92	1.2	880	1.27	0.08	2.80	0.43	22.2	14.2	15	1.30	337
B464533		6.94	0.021	0.27	7.95	0.7	820	1.21	0.07	3.09	0.31	29.0	15.8	18	0.87	748
B464534		6.24	0.015	0.38	7.59	1.3	930	1.12	0.09	2.67	0.36	31.5	18.8	18	0.88	996
B464535		7.52	0.007	0.20	8.26	1.8	1090	1.25	0.07	2.67	0.29	27.8	14.2	16	0.96	479
B464536		6.76	0.044	0.46	7.24	1.2	1140	1.04	0.07	2.57	0.46	26.0	19.8	14	2.06	1115
B464537		7.00	0.009	0.25	7.40	1.6	970	1.22	0.12	2.74	0.23	24.8	25.3	19	3.70	779
B464538		6.28	0.021	0.48	6.86	1.7	610	1.10	0.11	3.34	0.20	61.5	18.1	12	3.89	1280
B464539		6.46	0.018	0.73	6.34	4.5	360	0.94	0.07	8.39	0.14	111.0	12.2	8	3.47	1345
B464540		0.08	0.185	1.17	8.20	51.2	460	1.02	0.55	2.17	1.11	28.2	13.4	19	6.90	2120
B464541		0.08	0.004	0.03	7.32	2.5	880	1.06	0.03	1.71	0.03	25.7	3.7	26	0.40	26.1
B464542		6.64	0.003	0.17	7.97	1.2	1180	1.12	0.08	2.98	0.29	32.4	15.8	19	1.68	294
B464543		6.16	0.021	0.36	7.44	1.6	1220	1.06	0.07	3.08	0.33	33.8	12.9	15	2.60	841
B464544		6.56	0.009	0.36	7.14	7.3	1210	1.42	0.09	4.83	0.21	35.9	14.5	13	7.79	526
B464545		7.08	0.022	0.46	7.22	1.4	1350	1.07	0.08	2.96	0.34	36.0	12.0	16	2.29	1075
B464546		6.46	0.050	0.78	7.53	1.9	1390	1.00	0.10	3.49	0.28	41.0	14.4	15	3.13	1760
B464547		6.60	0.019	0.55	7.51	4.6	1410	1.20	0.10	3.86	0.26	36.7	14.8	12	6.65	1095
B464548		3.12	0.018	0.48	7.76	7.6	1200	1.28	0.14	1.92	0.27	37.1	22.7	10	3.84	1230
B464549		3.18	0.016	0.62	8.00	7.0	1230	1.24	0.15	1.89	0.24	38.0	21.3	9	3.83	1255
B464550		3.26	0.015	0.30	7.47	8.2	1190	1.22	0.09	3.97	0.20	33.1	14.7	12	6.20	632
B464551		7.14	0.022	0.62	8.01	1.3	1330	1.12	0.10	3.43	0.21	37.8	11.6	15	3.76	922
B464552		6.28	0.010	0.26	7.88	1.8	1350	1.14	0.10	3.06	0.27	33.8	13.5	14	2.70	392
B464553		7.72	0.008	0.36	7.74	1.6	1230	1.33	0.10	2.64	0.26	37.6	16.7	10	3.69	520

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CERTIFICATE OF ANALYSIS VA21321124

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
B464514		5.69	18.00	0.17	1.0	0.022	2.61	12.9	15.4	1.56	374	37.7	2.99	7.0	11.8	1450
B464515		5.37	17.00	0.15	1.0	0.028	2.69	12.1	15.6	1.56	365	34.9	2.97	7.6	15.8	1440
B464516		5.34	17.45	0.15	1.1	0.016	2.44	11.6	18.4	1.52	341	45.3	3.01	7.3	13.2	1530
B464517		5.11	17.95	0.16	1.1	0.015	2.10	11.6	27.0	1.15	352	12.15	2.49	7.1	10.6	1550
B464518		4.61	21.1	0.20	0.8	0.036	2.39	14.6	18.2	1.50	319	27.2	3.06	6.4	11.8	1570
B464519		4.86	18.15	0.18	0.8	0.044	2.22	12.7	14.9	1.54	316	118.0	3.08	6.7	12.8	1510
B464520		4.13	14.25	0.18	0.8	0.089	3.09	16.7	9.5	3.71	410	250	1.17	2.7	241	1080
B464521		2.55	12.50	0.16	1.9	0.023	1.88	13.0	2.6	0.40	602	4.33	3.32	5.5	14.0	380
B464522		3.91	19.10	0.17	0.9	0.034	2.04	12.0	45.1	0.83	323	141.0	0.15	6.4	11.1	1610
B464523		4.87	16.85	0.18	0.8	0.032	2.98	15.0	12.2	1.54	311	42.9	2.81	6.6	11.6	1590
B464524		4.03	15.20	0.19	0.7	0.045	2.53	33.4	10.3	1.44	277	100.0	2.81	5.8	14.1	1600
B464525		4.37	17.75	0.20	0.8	0.047	2.47	18.0	10.6	1.51	299	101.0	3.21	6.3	14.4	1480
B464526		4.69	13.65	0.17	1.5	0.022	2.76	16.2	16.2	1.09	242	33.8	2.58	3.4	13.1	1160
B464527		4.65	16.90	0.15	1.7	0.020	2.50	17.6	16.4	1.20	278	34.7	3.09	4.1	14.0	1250
B464528		2.79	15.15	0.18	1.8	0.021	2.86	13.6	23.9	0.90	195	74.0	2.49	3.1	11.1	1190
B464529		2.59	15.20	0.21	1.9	0.019	2.73	15.7	23.1	0.87	189	117.5	2.51	3.1	11.0	1140
B464530		3.21	14.05	0.17	1.8	0.024	2.59	9.4	17.8	0.88	206	42.8	2.45	2.6	12.4	1150
B464531		3.85	12.00	0.15	1.6	0.021	2.54	13.0	17.0	1.17	179	69.0	1.96	2.7	11.8	1170
B464532		5.27	19.30	0.18	1.2	0.017	2.10	9.5	10.8	1.53	361	2.26	3.36	7.3	11.7	1610
B464533		5.00	17.50	0.17	1.1	0.015	2.21	13.9	9.7	1.54	346	30.1	3.25	6.6	10.6	1600
B464534		4.84	16.95	0.19	1.0	0.022	2.55	15.8	9.1	1.40	319	35.9	2.89	6.3	12.0	1490
B464535		5.26	18.55	0.19	1.2	0.018	2.74	13.6	9.8	1.50	333	9.52	3.06	7.1	11.4	1570
B464536		4.31	18.40	0.16	1.3	0.024	3.05	12.3	13.6	1.47	298	44.0	2.80	6.9	10.2	1480
B464537		4.47	16.40	0.17	1.7	0.021	2.36	11.4	21.8	1.25	235	11.05	2.66	4.2	12.6	1370
B464538		1.97	11.55	0.22	1.0	0.023	3.21	32.4	24.1	0.60	155	241	2.36	2.9	5.8	980
B464539		2.60	12.60	0.29	1.0	0.029	1.97	57.9	13.2	0.98	212	685	2.07	3.8	7.8	1140
B464540		4.48	16.90	0.15	0.2	0.098	2.49	13.9	28.1	0.94	944	260	1.59	5.5	11.9	750
B464541		2.60	12.45	0.19	1.8	0.018	1.94	13.3	2.5	0.41	624	4.28	3.36	5.4	14.1	390
B464542		4.83	17.75	0.22	1.6	0.035	2.25	14.0	10.2	1.48	444	18.85	3.03	7.0	12.6	1500
B464543		4.11	17.30	0.21	1.5	0.040	2.38	14.8	11.4	1.36	400	25.8	2.73	6.6	8.9	1540
B464544		4.27	17.45	0.23	1.4	0.057	2.41	15.2	49.2	1.08	730	61.1	1.30	6.4	11.0	1430
B464545		4.56	17.05	0.21	1.3	0.092	2.66	14.4	9.8	1.49	573	86.4	2.95	6.6	13.5	1450
B464546		4.69	16.95	0.18	1.4	0.127	2.73	17.6	10.5	1.42	611	98.1	2.76	6.9	18.0	1500
B464547		4.49	17.20	0.19	1.3	0.071	2.75	16.0	22.3	0.92	544	96.5	1.56	6.1	11.9	1460
B464548		2.76	14.30	0.18	1.0	0.024	2.52	19.1	11.6	0.55	224	22.1	2.94	3.5	4.9	960
B464549		2.92	14.50	0.17	1.1	0.026	2.52	19.6	11.2	0.57	225	25.6	3.07	3.5	4.8	970
B464550		4.17	19.35	0.13	1.4	0.048	2.31	13.8	15.8	1.18	561	17.75	2.43	7.2	9.6	1340
B464551		4.93	19.05	0.15	1.5	0.086	2.60	14.3	13.8	1.44	614	37.7	3.07	8.3	11.9	1470
B464552		4.95	21.0	0.14	1.4	0.061	2.63	13.5	13.5	1.60	628	26.4	3.19	8.4	12.7	1460
B464553		3.62	18.30	0.14	1.3	0.034	2.63	17.4	11.2	1.05	408	57.0	3.08	5.9	7.3	1150

***** 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: 11-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21321124

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
B464514		14.8	71.3	0.038	1.21	0.20	12.0	1	0.9	718	0.48	<0.05	3.55	0.386	0.72	1.6
B464515		9.0	69.6	0.055	1.42	0.12	11.8	1	1.0	893	0.49	<0.05	3.31	0.398	0.78	1.6
B464516		15.7	66.7	0.045	0.94	0.12	11.0	1	0.9	729	0.52	<0.05	3.49	0.388	0.73	1.6
B464517		11.2	65.7	0.025	0.60	14.40	11.0	1	1.0	746	0.51	<0.05	3.62	0.384	0.85	1.4
B464518		12.0	82.2	0.028	1.73	1.30	12.2	2	1.1	770	0.43	<0.05	3.96	0.381	0.82	1.2
B464519		12.1	68.5	0.173	1.95	0.11	11.2	3	1.1	654	0.45	<0.05	3.57	0.374	0.81	1.3
B464520		21.0	89.1	0.294	2.39	7.32	12.6	3	1.4	278	0.19	1.57	2.31	0.336	1.08	0.8
B464521		2.8	43.2	<0.002	0.01	0.31	6.1	<1	1.7	199.0	0.39	<0.05	2.53	0.180	0.16	1.2
B464522		23.7	30.0	0.133	0.87	0.30	10.6	2	1.1	188.0	0.44	<0.05	2.97	0.363	0.65	1.3
B464523		12.6	75.7	0.054	1.68	0.05	10.9	1	1.1	649	0.44	<0.05	3.37	0.356	0.83	1.3
B464524		10.9	77.4	0.082	3.41	<0.05	10.2	2	1.0	691	0.40	<0.05	3.62	0.341	0.76	1.2
B464525		11.2	76.8	0.035	2.88	0.07	11.4	6	1.1	715	0.42	0.08	3.68	0.369	0.77	1.3
B464526		14.3	67.9	0.031	3.87	0.05	8.0	3	1.2	414	0.26	0.07	3.83	0.185	0.74	1.8
B464527		14.6	65.6	0.042	3.56	0.08	8.9	3	1.3	451	0.31	0.08	4.03	0.220	0.70	1.8
B464528		13.1	62.2	0.056	2.81	0.09	7.1	2	1.1	478	0.26	0.05	4.02	0.142	0.62	1.8
B464529		13.7	57.6	0.057	2.77	0.11	6.7	2	1.1	488	0.24	0.05	3.60	0.137	0.57	1.7
B464530		10.6	54.0	0.021	3.33	0.10	6.9	3	1.1	459	0.21	0.07	3.79	0.128	0.59	1.8
B464531		9.0	60.2	0.029	4.31	0.10	8.3	2	1.3	363	0.22	0.06	3.71	0.155	0.57	1.7
B464532		14.7	59.4	0.003	0.76	<0.05	11.4	<1	0.9	708	0.49	<0.05	3.49	0.381	0.63	1.9
B464533		13.5	68.4	0.021	1.19	0.05	11.5	1	0.9	723	0.45	<0.05	3.52	0.382	0.73	1.5
B464534		13.4	78.7	0.026	1.14	0.05	11.0	1	0.9	639	0.45	<0.05	3.73	0.351	0.73	1.5
B464535		13.5	78.5	0.017	0.76	0.05	11.8	1	0.9	705	0.49	<0.05	4.04	0.379	0.70	2.1
B464536		16.4	73.0	0.049	1.07	0.06	11.4	1	1.0	596	0.48	<0.05	3.31	0.353	0.81	1.9
B464537		13.3	51.4	0.011	2.34	0.11	9.1	1	1.1	589	0.30	0.05	3.18	0.231	0.60	1.9
B464538		9.8	61.1	0.057	3.10	0.15	4.0	2	1.1	534	0.20	0.05	3.32	0.097	0.67	1.4
B464539		11.1	60.8	0.096	6.06	0.16	7.7	1	0.9	781	0.25	<0.05	3.05	0.211	0.55	1.9
B464540		45.7	74.9	0.244	1.56	1.99	10.8	2	1.7	284	0.38	0.43	3.75	0.278	0.90	1.1
B464541		2.9	43.3	<0.002	0.01	0.29	6.2	<1	1.7	203	0.40	<0.05	2.53	0.181	0.17	1.2
B464542		13.3	49.6	0.009	0.63	0.07	10.9	<1	1.3	697	0.52	<0.05	3.93	0.372	0.54	2.4
B464543		10.7	47.4	0.005	0.74	0.09	10.0	1	1.2	658	0.46	<0.05	3.44	0.345	0.50	2.0
B464544		12.3	45.4	0.041	0.43	0.59	10.2	<1	1.5	562	0.44	<0.05	3.30	0.347	0.57	2.1
B464545		12.0	40.0	0.021	0.58	0.07	10.6	<1	1.8	620	0.44	<0.05	2.99	0.361	0.45	1.7
B464546		11.3	45.3	0.014	0.71	0.16	11.0	<1	1.8	718	0.46	<0.05	3.32	0.369	0.44	1.9
B464547		12.9	47.1	0.022	0.82	0.43	9.5	1	1.6	1405	0.43	0.07	3.02	0.322	0.58	1.7
B464548		12.2	59.1	0.020	2.11	0.18	4.5	2	0.8	512	0.25	0.06	3.93	0.118	0.51	1.5
B464549		11.2	59.0	0.037	2.29	0.16	4.5	2	0.8	533	0.26	0.06	3.95	0.120	0.53	1.5
B464550		9.9	54.0	0.009	0.72	0.34	10.9	1	1.2	637	0.44	<0.05	4.03	0.331	0.65	2.2
B464551		9.0	49.1	0.008	0.40	0.23	12.0	<1	1.6	665	0.50	<0.05	4.47	0.377	0.42	2.4
B464552		12.3	50.5	0.012	0.41	0.16	12.0	<1	1.5	686	0.49	<0.05	4.28	0.368	0.44	2.2
B464553		14.0	58.6	0.083	1.31	0.25	8.2	1	1.2	524	0.39	<0.05	4.53	0.238	0.56	1.9

***** 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: 11-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21321124

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
B464514		144	0.2	12.4	99	32.1
B464515		115	0.3	14.0	86	33.2
B464516		122	0.2	13.8	94	34.8
B464517		128	2.1	12.7	77	33.3
B464518		143	0.5	12.9	65	24.9
B464519		128	0.4	12.7	68	27.0
B464520		133	18.7	10.8	191	17.6
B464521		32	0.7	16.9	28	56.7
B464522		131	8.2	11.7	132	28.3
B464523		126	0.3	11.4	73	25.8
B464524		118	0.3	18.4	58	22.7
B464525		123	0.4	15.9	68	26.4
B464526		80	0.6	12.6	63	50.2
B464527		91	0.5	12.8	70	57.5
B464528		65	0.8	11.9	62	62.8
B464529		64	0.8	12.4	61	61.8
B464530		65	0.7	10.8	52	61.9
B464531		95	0.9	11.8	50	56.1
B464532		132	0.2	12.0	104	39.6
B464533		139	0.3	13.5	90	34.3
B464534		120	0.3	11.8	86	31.1
B464535		130	0.3	11.0	87	37.4
B464536		122	0.4	11.2	78	39.1
B464537		103	0.5	9.4	60	56.6
B464538		44	0.9	11.3	55	28.3
B464539		78	0.5	30.6	56	31.4
B464540		110	5.9	12.0	251	4.8
B464541		33	0.6	17.2	29	55.5
B464542		128	0.4	14.2	87	50.0
B464543		121	0.4	14.0	82	46.7
B464544		118	1.0	13.6	82	46.0
B464545		128	0.4	14.0	107	42.6
B464546		128	0.4	15.0	99	42.8
B464547		119	0.8	14.0	84	39.6
B464548		45	0.7	10.6	63	26.6
B464549		46	0.7	11.2	61	27.0
B464550		113	0.5	14.5	68	47.4
B464551		126	0.4	18.0	84	48.8
B464552		126	0.6	17.3	104	48.0
B464553		82	0.5	13.0	74	42.3

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To: MAMMOTH GEOLOGICAL LTD.
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VANCOUVER BC V6E 4K2

Finalized Date: 11-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21321124

Sample Description	Method / Analyte / Units / LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	ME-MS61 Ag ppm 0.01	ME-MS61 Al % 0.01	ME-MS61 As ppm 0.2	ME-MS61 Ba ppm 10	ME-MS61 Be ppm 0.05	ME-MS61 Bi ppm 0.01	ME-MS61 Ca % 0.01	ME-MS61 Cd ppm 0.02	ME-MS61 Ce ppm 0.01	ME-MS61 Co ppm 0.1	ME-MS61 Cr ppm 1	ME-MS61 Cs ppm 0.05	ME-MS61 Cu ppm 0.2
B464554		6.30	0.045	1.01	7.24	2.0	370	1.44	0.11	3.05	0.20	57.7	25.1	9	4.01	2290
B464555		6.38	0.015	1.29	7.52	3.2	530	1.30	0.13	2.63	0.58	42.8	29.6	8	4.33	1320
B464556		7.00	0.013	1.13	7.37	10.7	960	1.34	0.10	3.27	0.88	35.7	28.9	9	5.35	920
B464557		6.42	0.011	0.57	6.72	7.4	1240	1.41	0.12	4.10	0.27	42.0	23.1	8	6.18	643
B464558		6.24	0.014	0.54	6.88	7.3	1710	1.14	0.09	3.06	0.11	39.7	17.4	6	4.26	945
B464559		6.30	0.026	0.95	7.31	6.8	1300	1.19	0.13	2.84	0.27	53.1	22.1	7	4.26	1625
B464560		0.08	0.024	2.22	6.60	29.8	720	0.99	1.90	1.90	0.90	34.9	35.1	228	3.09	3550
B464561		0.08	<0.001	0.02	6.99	2.4	850	0.98	0.04	1.66	0.02	27.0	3.7	25	0.36	24.1
B464562		6.64	0.023	0.72	7.19	6.5	1060	1.28	0.12	2.88	0.12	34.3	23.5	6	4.80	1290
B464563		6.52	0.014	0.60	7.42	2.6	970	1.12	0.12	2.90	0.19	40.8	21.4	6	4.34	990
B464564		6.24	0.011	0.39	7.53	2.6	610	1.30	0.11	2.32	0.23	44.6	21.5	9	4.75	822
B464565		7.70	0.013	0.70	6.79	6.7	440	1.12	0.13	2.29	0.11	42.1	22.8	7	5.33	1285
B464566		6.24	0.010	0.53	7.72	17.0	880	1.04	0.13	2.14	0.12	38.3	24.6	6	5.31	1095
B464567		6.30	0.011	0.42	7.79	33.4	1090	1.15	0.10	2.32	0.20	37.1	15.8	8	5.92	679
B464568		3.02	0.015	1.00	7.50	65.1	1350	1.32	0.10	2.49	0.95	46.0	18.9	7	8.04	1005
B464569		3.20	0.010	1.03	7.85	67.9	1400	1.42	0.10	2.54	0.88	48.8	18.4	7	8.46	888
B464570		3.44	0.009	0.80	6.67	64.6	290	1.15	0.09	4.72	2.12	36.3	12.8	6	9.24	334
B464571		6.06	0.013	0.65	6.62	24.3	1200	1.22	0.10	4.24	1.54	38.1	17.2	5	5.61	745
B464572		6.40	0.012	0.52	7.60	2.7	1120	1.24	0.14	3.02	0.10	38.2	25.5	11	4.94	1035
B464573		6.72	0.019	0.59	6.74	10.9	910	1.04	0.11	5.57	0.12	34.9	24.7	14	5.07	1350
B464574		6.88	0.014	0.54	7.43	11.6	390	1.04	0.15	2.61	0.08	33.1	19.5	17	5.80	765
B464575		6.24	0.015	0.50	7.47	6.7	1110	1.02	0.14	4.18	0.16	37.3	17.9	29	6.10	919
B464576		4.54	0.010	0.34	7.91	7.8	710	1.18	0.11	2.60	0.16	30.0	16.4	19	5.98	938
B464577		6.52	0.004	0.19	7.71	6.2	920	1.14	0.08	3.72	0.30	28.4	12.6	12	4.20	320
B464578		7.08	0.007	1.05	6.84	116.0	520	1.20	0.11	3.54	19.45	36.9	24.7	17	7.24	751
B464579		6.70	0.002	0.26	7.47	68.8	850	1.26	0.09	2.50	0.21	41.9	24.2	29	5.66	324
B464580		6.98	0.002	0.11	7.74	16.9	660	1.10	0.09	2.22	0.15	39.5	13.9	26	5.11	174.5
B464581		0.08	0.195	1.17	8.05	59.2	440	0.97	0.56	2.17	1.07	31.5	15.7	18	7.65	2140
B464582		0.08	<0.001	0.02	6.81	2.5	830	0.93	0.03	1.62	0.02	27.3	3.7	24	0.35	23.5
B464583		7.00	0.013	0.32	7.42	61.9	910	1.32	0.09	3.57	0.24	26.5	14.8	15	12.70	452
B464584		6.20	0.004	0.32	6.53	43.2	460	1.05	0.11	4.25	0.78	29.8	25.5	19	5.40	282
B464585		5.86	0.003	0.18	7.38	10.2	460	0.95	0.13	2.49	0.08	35.3	16.0	22	4.08	272
B464586		7.00	0.004	0.20	7.59	17.0	500	1.09	0.11	2.25	0.10	33.5	13.7	26	4.03	287
B464587		6.40	0.002	0.13	7.50	3.8	280	1.00	0.13	1.96	0.12	36.2	13.0	21	3.64	174.5

***** 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: 11-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21321124

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
B464554		2.51	13.70	0.14	1.1	0.032	2.99	30.8	9.7	0.57	198	109.5	2.57	3.4	4.8	910
B464555		3.04	16.10	0.13	1.1	0.024	2.73	21.8	11.0	0.57	288	60.6	2.86	3.6	4.4	850
B464556		2.45	17.35	0.13	1.2	0.020	2.44	18.1	15.2	0.38	298	38.0	2.66	3.7	4.0	880
B464557		2.06	15.30	0.15	1.1	0.016	2.60	21.3	22.0	0.32	327	191.5	2.02	3.6	3.3	900
B464558		2.05	15.70	0.14	1.1	0.023	2.95	19.7	29.7	0.53	236	79.9	1.33	3.3	3.0	840
B464559		2.55	17.60	0.14	1.2	0.031	3.04	27.9	36.5	0.58	237	67.4	0.76	3.6	3.8	890
B464560		4.00	14.65	0.15	0.5	0.088	3.01	16.4	9.1	3.63	395	247	1.16	2.7	227	1000
B464561		2.52	12.80	0.13	1.8	0.025	1.87	14.2	2.4	0.41	595	3.93	3.31	5.8	12.7	370
B464562		2.61	14.55	0.15	1.1	0.025	2.73	16.5	25.4	0.49	198	27.8	1.66	3.8	3.7	870
B464563		2.77	14.85	0.15	1.2	0.019	2.46	20.2	17.7	0.49	208	31.9	2.22	4.1	3.3	860
B464564		2.78	14.60	0.15	1.3	0.016	2.63	23.1	21.9	0.59	179	16.10	2.47	3.7	3.6	840
B464565		3.11	13.05	0.16	1.3	0.019	2.89	22.2	16.6	0.70	338	19.35	2.05	5.4	4.4	850
B464566		3.02	14.20	0.16	1.2	0.018	2.83	19.6	20.1	0.74	391	23.3	2.21	4.0	3.7	860
B464567		2.68	18.15	0.14	1.3	0.016	2.77	18.8	31.3	0.79	404	11.00	1.54	3.8	3.5	900
B464568		2.70	16.80	0.15	1.2	0.019	2.92	24.5	52.5	0.85	877	106.0	0.13	4.2	3.8	900
B464569		2.70	18.60	0.14	1.3	0.018	2.99	26.4	60.3	0.90	917	91.8	0.12	4.2	3.6	920
B464570		2.79	13.90	0.15	1.0	0.019	2.77	19.7	33.7	1.22	2630	9.19	0.07	3.6	2.9	810
B464571		2.63	14.05	0.15	1.1	0.016	2.15	20.0	47.0	0.73	694	19.60	0.09	3.4	2.9	790
B464572		3.08	15.30	0.15	1.6	0.020	3.05	19.0	41.9	0.81	254	37.3	0.22	3.8	5.9	1030
B464573		3.76	14.05	0.13	1.6	0.022	2.25	18.2	40.3	0.97	320	21.1	0.59	3.0	7.4	980
B464574		4.14	16.25	0.15	1.8	0.017	3.05	16.0	20.9	1.00	293	14.95	1.44	3.0	9.3	1100
B464575		3.84	19.85	0.15	1.7	0.024	2.39	19.0	35.4	1.18	469	8.46	0.53	3.8	12.7	1170
B464576		3.77	25.1	0.14	1.2	0.025	1.71	14.6	37.4	1.09	230	20.4	1.25	6.9	12.7	1490
B464577		4.43	20.4	0.14	1.1	0.015	1.64	14.2	27.3	1.29	314	7.42	1.82	6.7	8.6	1460
B464578		4.03	15.35	0.13	1.4	0.016	2.53	18.9	50.6	1.23	1035	54.9	0.80	3.1	10.1	1090
B464579		3.14	14.50	0.14	1.4	0.012	2.75	21.4	58.8	0.97	253	30.5	1.33	2.5	15.4	810
B464580		3.47	15.35	0.14	1.7	0.012	2.30	20.1	40.0	1.08	205	6.46	1.64	2.4	15.4	1060
B464581		4.48	20.0	0.13	0.2	0.103	2.47	15.4	29.9	0.96	925	268	1.59	6.4	10.6	720
B464582		2.48	12.80	0.12	1.7	0.019	1.83	14.1	2.3	0.40	576	3.87	3.25	6.0	12.4	360
B464583		4.77	19.40	0.14	1.1	0.023	1.66	12.9	57.8	1.24	317	2.69	1.26	5.3	11.5	1390
B464584		4.42	17.95	0.13	1.7	0.013	1.88	14.2	34.4	1.09	315	4.05	1.05	2.5	11.5	1060
B464585		4.09	16.85	0.13	1.5	0.014	2.50	17.2	23.1	1.07	267	9.60	1.88	3.6	10.4	1100
B464586		3.99	18.65	0.12	2.0	0.013	2.34	16.3	26.9	1.28	209	4.14	1.91	3.1	13.5	1210
B464587		4.65	19.45	0.13	1.9	0.013	2.62	17.4	16.2	1.20	225	2.99	2.65	3.4	10.6	1150

***** 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: 11-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21321124

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
B464554		9.0	70.6	0.049	3.21	0.60	4.0	2	1.0	477	0.24	0.06	4.37	0.099	0.65	1.7
B464555		32.9	71.8	0.035	2.91	0.68	4.0	2	0.8	438	0.26	0.06	4.31	0.106	0.66	1.7
B464556		55.9	64.9	0.038	2.32	2.88	3.9	2	0.8	458	0.26	<0.05	4.09	0.108	0.70	1.4
B464557		20.1	66.0	0.209	1.81	0.63	3.9	2	0.8	500	0.24	<0.05	3.61	0.111	0.77	1.4
B464558		7.7	62.9	0.040	1.43	0.74	3.7	1	0.8	470	0.23	0.05	3.67	0.104	0.73	1.3
B464559		14.3	68.3	0.056	1.82	1.43	4.0	2	0.9	184.5	0.27	0.07	4.11	0.111	0.76	1.8
B464560		21.4	89.9	0.267	2.28	7.14	12.7	4	1.3	260	0.19	1.35	2.50	0.321	1.07	0.8
B464561		2.6	43.3	<0.002	0.01	0.29	5.8	<1	1.6	195.5	0.39	<0.05	2.68	0.179	0.16	1.2
B464562		7.3	66.0	0.018	2.09	0.80	3.6	2	1.0	262	0.28	0.07	3.89	0.102	0.71	1.4
B464563		8.6	65.0	0.011	2.15	0.36	3.7	2	1.0	590	0.29	0.06	4.14	0.113	0.64	1.4
B464564		10.8	72.2	0.009	2.62	0.33	3.8	2	1.0	805	0.26	0.08	4.35	0.099	0.69	1.5
B464565		7.3	91.4	0.018	2.94	0.89	3.9	2	1.2	1700	0.36	0.07	4.30	0.137	0.88	1.8
B464566		5.9	89.4	0.018	2.38	1.30	3.8	3	0.9	2340	0.29	0.08	4.34	0.109	0.86	1.5
B464567		10.2	84.0	0.006	1.99	3.31	4.1	2	0.8	480	0.27	0.05	4.22	0.118	0.85	1.5
B464568		55.1	89.5	0.057	1.86	10.30	4.6	2	0.8	229	0.28	0.07	4.16	0.137	1.09	1.7
B464569		44.4	97.9	0.056	1.81	10.90	4.8	2	0.8	222	0.30	0.07	4.47	0.137	1.12	1.8
B464570		99.8	115.5	0.009	1.57	7.16	3.9	2	0.7	124.5	0.26	0.05	3.94	0.122	1.15	1.7
B464571		42.7	72.8	0.020	1.80	4.81	3.9	2	0.7	204	0.24	0.05	4.00	0.121	0.76	1.6
B464572		7.5	83.5	0.020	2.13	1.13	6.3	2	0.9	185.5	0.27	0.08	4.07	0.161	0.86	1.7
B464573		7.7	77.0	0.011	2.58	3.24	7.3	2	1.1	223	0.21	0.09	3.52	0.175	0.72	2.0
B464574		7.0	102.5	0.010	3.22	3.49	8.6	2	1.2	387	0.22	0.09	3.66	0.177	0.97	1.9
B464575		14.8	76.8	0.004	2.21	1.44	9.4	1	1.5	201	0.25	0.06	3.60	0.259	0.83	2.6
B464576		10.6	54.4	0.012	1.38	0.78	11.9	1	1.2	187.0	0.43	<0.05	4.26	0.351	0.94	1.5
B464577		11.5	54.5	0.004	0.70	0.33	10.1	1	0.8	993	0.44	<0.05	4.29	0.310	0.62	2.2
B464578		336	78.8	0.013	2.91	19.60	8.2	2	1.1	304	0.21	<0.05	3.38	0.167	0.85	1.7
B464579		11.4	82.4	0.013	2.66	5.10	8.5	2	1.0	424	0.18	0.05	4.23	0.114	0.88	1.6
B464580		8.0	77.1	0.003	2.99	1.85	8.7	1	1.1	451	0.17	0.05	4.36	0.107	0.74	1.9
B464581		42.6	80.9	0.237	1.53	2.05	11.3	3	1.6	274	0.40	0.43	4.47	0.270	0.86	0.9
B464582		2.6	42.3	<0.002	0.01	0.28	5.7	<1	1.6	190.5	0.38	<0.05	2.68	0.173	0.16	1.1
B464583		11.1	57.1	0.002	1.38	3.26	10.6	1	0.9	1230	0.37	<0.05	4.10	0.270	0.86	2.1
B464584		31.3	58.7	0.002	3.90	5.87	8.0	2	1.3	749	0.18	0.06	3.03	0.138	0.70	1.7
B464585		6.3	76.6	0.008	2.96	1.16	8.0	1	1.3	554	0.25	0.08	3.45	0.207	0.83	1.6
B464586		9.1	72.7	0.002	2.91	2.47	10.1	1	1.5	663	0.22	0.07	3.50	0.213	0.81	2.0
B464587		7.1	76.7	<0.002	3.30	0.29	9.4	1	1.4	510	0.23	0.07	3.57	0.231	0.83	2.2

***** 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: 11-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21321124

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
B464554		43	0.8	11.8	42	33.3
B464555		40	0.8	10.7	107	35.4
B464556		42	0.8	10.2	142	36.3
B464557		44	0.8	9.9	57	35.0
B464558		44	0.8	9.1	37	35.3
B464559		46	0.9	10.7	54	37.1
B464560		125	18.5	10.7	180	14.3
B464561		31	0.6	16.5	28	58.3
B464562		41	0.7	8.7	33	34.8
B464563		40	0.7	10.3	46	37.6
B464564		40	0.7	10.1	47	39.4
B464565		42	1.0	10.2	34	40.4
B464566		38	0.7	9.6	35	39.1
B464567		44	0.6	9.3	48	38.8
B464568		50	1.3	9.9	141	38.8
B464569		50	1.3	10.6	139	39.4
B464570		44	1.9	10.3	302	32.8
B464571		42	1.8	9.7	244	33.1
B464572		65	1.6	10.9	37	59.1
B464573		73	1.3	12.3	44	61.1
B464574		78	0.9	11.2	40	68.0
B464575		97	1.1	12.2	60	64.6
B464576		119	2.3	13.1	60	42.7
B464577		108	0.8	13.5	72	36.2
B464578		76	1.4	11.0	2510	51.8
B464579		74	0.9	8.7	42	49.5
B464580		71	0.8	10.8	114	61.3
B464581		106	6.2	12.4	235	5.1
B464582		30	0.6	16.7	27	56.7
B464583		105	0.9	12.2	82	42.0
B464584		73	0.7	9.9	131	67.0
B464585		81	1.0	11.0	40	58.0
B464586		94	0.9	11.6	41	72.9
B464587		87	0.6	11.8	43	69.7

***** 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: 11-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21321124

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method:	NSS is non-sufficient sample. ALL METHODS
Applies to Method:	REEs may not be totally soluble in this method. ME-MS61

LABORATORY ADDRESSES

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Applies to Method:	Au-ICP21	CRU-31	CRU-QC	LOG-21
	LOG-23	ME-MS61	PUL-31	PUL-QC
	SND-01	SPL-21	SPL-21X	WEI-21

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

Finalized Date: 18-JAN-2022
Account: MAMGEO

CERTIFICATE VA21330339

Project: Poplar

This report is for 191 samples of Drill Core submitted to our lab in Vancouver, BC, Canada on 2-DEC-2021.

The following have access to data associated with this certificate:

TIM HENNEBERRY		

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-21	Sample logging - ClientBarCode
SND-01	Send samples to external laboratory
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 up to 250g 85% <75 um
LOG-23	Pulp Login - Rcvd with Barcode
SPL-21X	Addnl Crush Split w No Analysis

ANALYTICAL PROCEDURES

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

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:

Saa Traxler, General Manager, North Vancouver

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VANCOUVER BC V6E 4K2

Finalized Date: 18-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21330339

Sample Description	Method / Analyte / Units / LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	ME-MS61 Ag ppm 0.01	ME-MS61 Al % 0.01	ME-MS61 As ppm 0.2	ME-MS61 Ba ppm 10	ME-MS61 Be ppm 0.05	ME-MS61 Bi ppm 0.01	ME-MS61 Ca % 0.01	ME-MS61 Cd ppm 0.02	ME-MS61 Ce ppm 0.01	ME-MS61 Co ppm 0.1	ME-MS61 Cr ppm 1	ME-MS61 Cs ppm 0.05	ME-MS61 Cu ppm 0.2
B464588		13.86	0.012	0.14	7.94	2.2	290	1.44	0.44	1.77	0.19	41.4	9.4	16	5.06	350
B464589		10.88	0.007	0.09	7.78	1.3	200	1.44	0.21	2.33	0.14	38.3	8.6	13	5.58	221
B464590		9.74	0.016	0.09	8.03	1.1	250	1.46	0.26	1.71	0.12	38.8	11.4	12	5.91	382
B464591		11.92	0.018	0.15	7.58	1.4	100	1.12	0.29	1.55	0.12	25.2	13.7	7	4.96	711
B464592		11.48	0.029	0.19	7.46	1.5	90	1.22	0.27	1.54	0.12	23.7	14.2	7	3.19	1220
B464593		11.52	0.050	0.18	6.94	1.7	70	0.79	0.48	1.02	0.11	26.5	17.0	6	1.04	1920
B464594		0.10	<0.001	0.03	6.78	1.8	830	1.04	0.03	1.62	<0.02	23.1	3.6	25	0.39	26.1
B464595		11.96	0.162	0.56	6.30	18.2	50	0.66	1.10	0.82	0.09	29.2	22.7	7	0.82	6350
B464596		12.22	0.230	0.90	6.20	29.5	100	0.44	1.24	1.86	0.22	17.45	19.1	10	0.83	8100
B464597		0.08	0.019	2.45	6.68	30.6	730	1.23	1.76	1.90	0.98	33.5	36.9	246	3.45	3580
B464598		11.20	0.566	3.60	3.55	150.0	90	0.45	1.83	1.40	2.02	11.80	32.7	8	0.83	>10000
B464599		12.14	0.164	0.46	6.52	1.8	130	0.85	0.40	2.55	0.17	24.0	20.3	6	2.12	6170
B464600		11.60	0.094	1.20	6.01	11.0	130	0.71	0.56	2.43	0.83	14.25	19.3	11	1.40	3910
B464601		12.28	0.065	1.27	6.35	10.4	70	0.82	0.39	2.40	1.01	20.1	20.6	7	1.60	2780
B464602		5.30	0.079	0.44	6.19	5.4	100	0.91	0.30	2.20	0.29	23.4	14.3	7	1.23	2650
B464603		5.74	0.081	0.44	5.80	3.0	90	0.85	0.31	2.02	0.44	24.6	16.5	9	1.29	2420
B464604		5.40	0.128	1.05	5.98	8.9	240	0.78	0.42	2.82	1.28	22.6	17.5	8	1.55	5130
B464605		11.62	0.038	2.27	7.01	12.1	130	1.15	0.23	3.12	2.86	32.3	13.1	7	3.30	1555
B464606		11.56	0.028	0.46	7.28	2.0	110	1.15	0.27	3.02	0.30	32.4	10.5	9	3.05	1010
B464607		11.46	0.036	0.68	7.09	2.9	130	1.17	0.16	2.91	0.40	33.4	11.7	7	2.73	1230
B464608		13.02	0.076	11.90	6.38	12.2	490	1.10	0.50	2.72	8.67	27.3	16.6	7	2.97	2760
B464609		11.82	0.055	1.47	6.66	2.5	90	0.85	0.34	2.11	0.72	23.0	14.6	9	1.87	2470
B464610		12.64	0.123	12.55	5.51	24.9	300	0.67	0.43	1.48	5.34	11.45	35.9	10	2.19	4730
B464611		12.30	0.132	7.91	5.84	8.6	480	0.83	0.41	1.46	2.51	12.60	19.0	11	3.37	4390
B464612		12.82	0.099	3.41	5.88	8.2	300	0.80	0.44	1.82	2.29	12.55	18.0	14	2.85	3600
B464613		12.02	0.160	0.96	6.15	2.1	570	0.79	0.33	1.60	0.16	15.30	20.7	12	3.00	5020
B464614		0.10	<0.001	0.03	7.37	2.4	880	1.14	0.02	1.72	0.02	27.2	3.8	25	0.37	35.1
B464615		0.10	0.181	1.22	8.42	50.6	450	1.12	0.52	2.16	1.05	33.2	14.1	19	7.06	2130
B464616		9.18	0.213	1.21	5.86	2.6	660	0.73	0.43	1.96	0.11	13.95	17.8	11	2.69	6420
B464617		6.56	0.137	3.26	6.10	4.4	510	0.83	0.35	2.18	1.86	20.4	21.1	13	3.97	4020
B464618		6.52	0.016	0.44	7.53	1.9	130	1.18	0.30	2.82	0.74	40.2	8.9	9	4.58	477
B464619		6.58	0.008	0.30	7.50	3.9	180	1.26	0.31	2.89	0.20	43.5	8.1	9	3.61	337
B464620		6.20	0.009	0.96	6.93	2.0	70	0.80	0.50	2.76	2.30	33.6	11.1	11	2.06	313
B464621		6.40	0.016	2.23	7.01	5.8	100	0.88	0.53	3.01	3.05	39.1	9.6	10	3.11	273
B464622		2.90	0.030	2.28	6.25	65.0	320	1.26	0.34	1.86	3.39	29.3	8.0	9	4.62	1560
B464623		2.86	0.037	2.52	6.75	88.8	440	1.41	0.39	1.98	3.74	32.1	7.4	12	4.82	2150
B464624		3.16	0.001	2.40	6.40	27.4	1070	1.71	0.22	2.48	0.67	32.9	2.6	12	5.07	116.5
B464625		6.36	<0.001	0.24	6.54	4.8	1000	1.70	0.12	2.05	0.64	37.7	1.9	11	5.50	5.1
B464626		6.26	0.002	1.52	6.36	7.6	1010	1.65	0.23	2.03	1.56	32.7	2.4	9	5.55	6.7
B464627		6.30	<0.001	0.93	6.46	4.0	990	1.60	0.26	2.12	1.05	34.2	1.9	8	5.81	3.1

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

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VANCOUVER BC V6E 4K2

Finalized Date: 18-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21330339

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
B464588		3.94	18.10	0.13	1.7	0.071	1.89	20.0	16.2	1.24	361	8.03	1.08	3.1	9.9	1390
B464589		4.04	18.00	0.11	1.5	0.034	1.94	18.4	20.8	1.02	285	3.36	0.59	2.7	8.4	1490
B464590		4.09	18.75	0.11	1.8	0.041	1.78	19.4	14.5	1.03	207	7.55	1.58	2.8	8.4	1470
B464591		4.87	16.65	0.10	0.7	0.044	1.89	11.4	12.8	0.79	171	51.1	1.35	2.2	8.0	1170
B464592		4.84	15.25	0.09	0.5	0.046	1.94	10.8	18.0	0.79	314	34.8	0.27	2.1	6.4	1180
B464593		5.26	12.90	0.08	0.6	0.044	1.99	11.6	7.3	0.54	293	44.1	0.47	1.9	6.9	1100
B464594		2.45	12.50	0.07	1.8	0.021	1.82	12.0	2.6	0.38	591	3.78	3.19	5.5	13.2	360
B464595		6.70	12.45	0.08	0.5	0.089	1.62	13.2	7.8	0.42	107	31.5	0.59	1.8	8.6	1040
B464596		5.83	11.55	0.07	0.4	0.129	2.11	7.5	4.6	0.33	203	11.80	0.43	1.8	7.9	780
B464597		4.08	15.30	0.10	0.5	0.090	3.07	16.0	10.0	3.60	404	246	1.15	2.9	240	1050
B464598		8.35	8.03	0.06	0.2	0.288	0.70	5.4	8.9	0.26	110	17.75	0.32	0.9	16.4	380
B464599		5.18	13.85	0.06	0.6	0.102	0.93	11.8	15.2	0.71	244	17.95	0.53	1.7	8.6	930
B464600		5.04	11.60	0.08	0.4	0.081	1.91	6.3	9.2	0.27	248	11.55	0.40	2.1	7.7	860
B464601		5.44	11.05	0.12	0.5	0.067	1.74	9.2	10.2	0.50	410	16.85	0.47	1.6	9.9	980
B464602		5.14	13.50	0.13	0.4	0.066	1.74	11.0	10.4	0.49	283	13.20	0.42	1.7	6.9	910
B464603		4.79	13.60	0.13	0.5	0.065	1.67	11.6	8.5	0.48	284	15.15	0.39	1.7	7.4	870
B464604		5.53	11.00	0.11	0.4	0.110	1.73	10.7	8.7	0.72	513	22.8	0.29	1.6	8.6	960
B464605		3.87	13.70	0.15	0.7	0.059	2.15	15.7	9.6	0.80	1080	15.55	0.61	2.1	6.3	1100
B464606		3.91	16.45	0.12	0.8	0.049	2.38	14.7	9.6	0.78	571	7.24	0.66	2.0	6.1	1210
B464607		4.28	14.70	0.15	0.8	0.060	2.47	15.5	7.8	0.69	585	9.96	0.54	2.0	5.6	1110
B464608		5.44	15.00	0.14	0.6	0.093	2.09	11.8	8.1	0.69	974	31.4	0.54	2.0	7.8	1070
B464609		5.42	14.40	0.12	0.4	0.072	2.44	10.5	6.2	0.61	555	9.84	0.22	1.8	6.8	800
B464610		8.25	13.05	0.10	0.5	0.106	2.39	4.6	4.0	0.59	936	73.7	0.11	1.4	12.5	500
B464611		7.41	16.35	0.12	0.5	0.088	2.51	5.1	5.2	0.66	1005	36.5	0.35	1.6	9.2	780
B464612		8.00	17.25	0.10	0.4	0.069	2.42	5.1	6.2	0.73	662	30.6	0.10	1.6	8.7	770
B464613		7.56	15.15	0.10	0.5	0.081	2.64	6.3	4.8	0.76	187	22.4	0.66	1.9	9.4	840
B464614		2.59	12.85	0.12	1.8	0.021	1.92	14.0	2.4	0.41	617	3.93	3.34	5.5	13.9	390
B464615		4.47	17.35	0.15	0.2	0.099	2.48	16.8	29.1	0.96	935	254	1.58	5.6	11.7	720
B464616		6.87	14.85	0.09	0.5	0.112	2.33	5.9	6.5	0.72	160	5.05	0.26	1.7	8.9	700
B464617		6.84	13.05	0.11	0.7	0.078	2.17	10.1	9.6	0.94	986	19.35	0.16	2.0	7.8	730
B464618		4.29	14.80	0.11	1.4	0.037	1.99	19.1	12.2	0.82	550	14.60	0.47	2.2	7.0	1390
B464619		3.91	16.05	0.14	1.5	0.028	2.08	21.1	12.0	0.92	484	17.20	0.36	2.4	7.5	1370
B464620		4.72	13.50	0.12	1.4	0.046	2.60	15.4	7.9	0.45	519	38.1	0.37	2.1	7.9	1330
B464621		5.00	13.90	0.12	1.4	0.078	2.62	18.8	4.3	0.48	3150	11.00	0.40	2.3	7.0	1270
B464622		2.98	14.35	0.11	1.4	0.045	2.92	15.4	11.4	0.67	1760	26.2	0.10	5.3	4.5	730
B464623		3.06	14.80	0.12	1.5	0.055	3.17	16.6	12.2	0.73	1910	25.0	0.11	5.6	4.9	790
B464624		1.39	15.45	0.13	1.9	0.011	3.48	16.4	12.0	0.64	2660	2.70	0.10	8.7	2.7	780
B464625		1.19	14.75	0.11	2.0	0.010	3.51	19.8	7.7	0.56	1825	1.62	0.08	8.9	2.2	770
B464626		1.25	14.65	0.12	2.0	0.012	3.58	16.6	6.4	0.58	2280	3.56	0.08	8.8	2.5	730
B464627		1.18	15.40	0.11	2.0	0.011	3.92	17.1	7.1	0.39	1610	1.33	0.08	9.4	2.3	750

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

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704-1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 18-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21330339

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
B464588		14.0	58.9	0.048	3.33	0.79	8.2	2	1.6	261	0.23	0.19	5.17	0.142	1.00	2.0
B464589		10.8	49.0	0.020	4.05	0.61	7.2	2	1.3	294	0.19	0.09	4.89	0.106	0.95	1.8
B464590		9.1	55.0	0.021	3.74	0.17	7.5	2	1.4	324	0.22	0.14	5.24	0.125	0.88	2.2
B464591		12.2	52.8	0.420	5.10	0.37	6.1	4	1.6	280	0.17	0.18	4.86	0.081	0.83	0.9
B464592		9.6	50.6	0.291	4.86	0.34	5.8	4	1.8	258	0.15	0.24	5.02	0.082	0.79	0.7
B464593		7.5	51.5	0.435	5.35	0.41	5.9	4	3.3	241	0.14	0.28	4.78	0.072	0.75	0.7
B464594		2.7	41.2	<0.002	0.01	0.26	5.6	<1	1.6	187.0	0.41	<0.05	2.72	0.175	0.17	1.2
B464595		6.3	42.3	0.178	7.38	1.47	6.4	6	4.6	338	0.13	0.31	4.14	0.068	0.57	0.7
B464596		17.4	55.0	0.073	7.35	2.27	5.7	7	6.9	458	0.15	0.41	3.79	0.075	0.71	0.4
B464597		21.6	86.2	0.297	2.36	7.77	12.6	4	1.4	268	0.20	1.50	2.57	0.328	1.20	0.9
B464598		287	21.1	0.160	9.50	30.4	2.9	11	8.4	281	0.07	0.30	1.64	0.043	0.35	0.3
B464599		11.8	27.0	0.182	6.25	0.35	5.1	5	3.3	394	0.13	0.14	4.27	0.066	0.42	0.6
B464600		73.7	49.9	0.100	6.95	4.42	5.2	6	5.0	529	0.15	0.25	4.01	0.089	0.68	0.4
B464601		73.1	48.1	0.115	7.00	3.42	5.2	5	3.3	515	0.13	0.21	4.26	0.068	0.67	0.5
B464602		23.5	48.2	0.114	6.55	1.06	4.9	6	3.1	497	0.14	0.20	3.74	0.074	0.62	0.6
B464603		24.1	50.6	0.101	6.12	0.60	5.1	6	3.2	416	0.14	0.21	3.94	0.069	0.65	0.6
B464604		51.2	47.2	0.151	6.85	1.33	4.7	6	3.8	579	0.13	0.16	3.88	0.068	0.61	0.6
B464605		109.0	61.6	0.098	5.20	3.42	5.3	4	2.2	843	0.15	0.13	4.14	0.078	0.81	0.9
B464606		25.3	59.4	0.049	5.37	0.63	6.2	3	2.6	779	0.14	0.17	4.44	0.090	0.83	1.1
B464607		27.9	68.0	0.064	5.88	1.98	5.7	5	2.6	826	0.14	0.16	4.43	0.080	0.84	1.0
B464608		575	63.7	0.127	6.46	14.75	5.7	5	2.9	957	0.15	0.29	4.31	0.084	0.82	1.0
B464609		54.8	60.3	0.051	6.64	1.40	5.5	5	3.3	473	0.14	0.28	4.22	0.076	0.80	0.7
B464610		388	61.4	0.843	9.15	65.0	4.5	7	4.4	349	0.11	0.31	3.09	0.066	0.72	0.6
B464611		208	69.0	0.127	7.88	15.85	5.5	6	4.2	387	0.12	0.31	3.51	0.081	0.85	0.8
B464612		145.0	63.4	0.152	8.49	6.11	5.1	6	4.3	396	0.12	0.44	2.99	0.091	0.77	0.7
B464613		12.0	60.6	0.082	7.88	0.78	5.6	6	2.6	505	0.14	0.30	4.17	0.089	0.84	0.8
B464614		2.8	43.0	<0.002	0.02	0.33	6.1	<1	1.6	201	0.40	<0.05	2.87	0.181	0.16	1.2
B464615		39.7	85.5	0.229	1.58	1.95	10.9	3	1.7	280	0.40	0.41	4.64	0.278	0.82	0.9
B464616		9.0	56.2	0.043	7.47	0.78	4.9	5	3.1	548	0.13	0.20	3.79	0.084	0.76	0.7
B464617		106.5	63.2	0.061	7.00	3.27	5.9	5	2.6	483	0.15	0.21	3.82	0.089	0.78	1.0
B464618		28.7	51.2	0.029	5.03	0.58	6.4	3	1.2	475	0.18	0.13	4.33	0.079	0.77	1.9
B464619		15.0	63.1	0.042	4.83	1.18	6.8	3	1.4	579	0.19	0.12	5.00	0.076	0.81	2.0
B464620		88.1	62.0	0.174	6.50	0.60	6.2	3	2.4	527	0.16	0.13	3.97	0.078	0.90	1.7
B464621		148.0	83.4	0.035	6.37	1.63	6.4	4	2.5	504	0.17	0.22	4.32	0.078	1.02	2.2
B464622		162.5	114.5	0.124	2.77	15.20	3.3	2	1.8	216	0.51	0.11	7.51	0.077	1.33	2.9
B464623		190.5	122.5	0.086	2.76	18.60	3.3	3	1.7	249	0.56	0.08	7.77	0.081	1.37	3.1
B464624		100.5	128.5	0.003	0.61	3.92	2.5	1	0.7	318	0.91	<0.05	11.45	0.084	1.71	4.2
B464625		53.0	138.5	<0.002	0.13	1.18	2.1	1	0.6	337	0.94	<0.05	12.40	0.082	1.58	4.4
B464626		167.5	141.5	<0.002	0.10	1.27	2.1	<1	0.5	300	0.90	<0.05	11.80	0.079	1.72	7.6
B464627		61.1	146.0	<0.002	0.06	1.02	2.1	<1	0.5	346	0.94	<0.05	11.80	0.082	1.71	3.6

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

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Finalized Date: 18-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21330339

Sample Description	Method	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62
	Analyte	V	W	Y	Zn	Zr	Cu
	Units	ppm	ppm	ppm	ppm	ppm	%
	LOD	1	0.1	0.1	2	0.5	0.001
B464588		77	0.7	11.6	58	51.6	
B464589		74	0.7	10.1	49	48.0	
B464590		76	0.4	11.4	48	55.7	
B464591		59	0.6	7.9	41	19.8	
B464592		54	0.5	7.8	50	14.3	
B464593		55	0.7	9.0	66	15.0	
B464594		30	0.6	14.8	27	53.5	
B464595		60	0.7	8.5	28	15.0	
B464596		64	0.6	5.9	46	11.9	
B464597		129	19.3	11.2	185	13.8	
B464598		47	0.7	2.6	326	5.7	2.29
B464599		56	0.5	5.6	37	15.3	
B464600		64	1.2	4.8	158	11.8	
B464601		57	0.6	5.4	204	12.6	
B464602		58	0.6	5.6	73	12.9	
B464603		55	0.6	5.2	98	13.0	
B464604		55	0.7	5.7	267	12.2	
B464605		49	0.7	7.4	581	21.2	
B464606		60	0.5	8.1	82	22.5	
B464607		54	0.6	8.3	93	22.4	
B464608		54	0.7	6.7	1660	15.5	
B464609		51	0.6	5.7	166	12.5	
B464610		51	0.7	3.7	1035	15.8	
B464611		60	0.7	4.8	480	18.6	
B464612		60	0.6	4.5	501	12.0	
B464613		60	0.2	4.9	47	17.1	
B464614		31	0.6	16.5	29	56.9	
B464615		104	10.3	12.2	242	5.2	
B464616		55	0.3	4.1	32	16.7	
B464617		62	0.6	5.2	397	23.6	
B464618		69	0.6	9.4	174	47.5	
B464619		66	0.9	9.4	45	48.2	
B464620		70	1.0	8.7	446	47.4	
B464621		68	1.3	8.8	596	48.2	
B464622		35	0.9	7.2	647	37.4	
B464623		37	0.9	7.7	740	40.0	
B464624		27	1.4	10.6	223	46.4	
B464625		23	1.2	8.6	211	45.7	
B464626		22	1.3	8.9	345	43.9	
B464627		23	1.1	8.5	315	47.0	

***** 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: 18-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21330339

Sample Description	Method / Analyte / Units / LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	ME-MS61 Ag ppm 0.01	ME-MS61 Al % 0.01	ME-MS61 As ppm 0.2	ME-MS61 Ba ppm 10	ME-MS61 Be ppm 0.05	ME-MS61 Bi ppm 0.01	ME-MS61 Ca % 0.01	ME-MS61 Cd ppm 0.02	ME-MS61 Ce ppm 0.01	ME-MS61 Co ppm 0.1	ME-MS61 Cr ppm 1	ME-MS61 Cs ppm 0.05	ME-MS61 Cu ppm 0.2
B464628		6.36	0.005	0.83	6.40	6.4	980	1.73	0.37	1.85	1.08	35.9	2.0	7	5.63	2.3
B464629		6.58	<0.001	0.48	5.97	2.6	980	1.64	0.22	2.30	0.89	30.1	1.8	9	5.47	2.1
B464630		5.62	<0.001	0.87	5.88	16.2	860	1.56	0.34	2.18	1.48	28.4	2.2	9	5.94	6.8
B464631		6.68	<0.001	1.14	6.12	4.5	990	1.71	0.55	2.50	1.61	30.9	2.2	9	5.69	8.6
B464632		6.26	<0.001	0.60	6.16	2.9	970	1.55	0.28	2.29	1.07	31.2	2.1	12	5.64	2.3
B464633		6.58	<0.001	0.65	6.28	4.1	1000	1.54	0.16	2.15	0.61	35.8	2.2	9	5.59	2.0
B464634		0.10	0.032	2.45	6.88	30.8	700	1.13	1.67	1.89	0.95	34.5	35.0	228	3.27	3540
B464635		0.10	0.004	0.03	7.09	2.6	860	0.99	0.02	1.64	0.02	24.2	3.6	25	0.36	25.4
B464636		6.66	<0.001	0.96	5.97	5.1	910	1.67	0.10	2.44	0.51	30.5	2.1	8	5.17	2.1
B464637		6.68	0.001	0.56	6.50	8.3	980	1.60	0.17	2.28	0.83	37.6	3.4	11	5.29	19.0
B464638		6.64	0.003	1.10	7.12	2.1	70	1.05	0.20	3.42	1.54	41.9	10.1	12	3.87	100.0
B464639		6.86	0.007	0.22	7.64	4.5	100	1.22	0.19	3.05	0.44	45.4	8.8	11	6.40	301
B464640		7.32	0.010	1.53	7.16	17.4	260	1.30	0.49	2.89	0.88	38.0	10.5	12	7.80	447
B464641		7.30	0.001	1.20	6.76	26.8	1110	1.22	0.24	3.39	0.48	38.1	6.3	13	7.30	127.5
B464642		3.76	0.003	1.83	8.15	25.5	170	1.42	0.24	1.93	1.19	45.5	8.6	10	6.81	198.0
B464643		3.82	0.002	1.86	7.83	24.3	170	1.33	0.25	2.13	0.97	44.1	8.5	10	6.65	201
B464644		3.18	0.007	3.26	7.73	4.5	160	1.27	0.23	2.85	1.28	40.9	9.6	10	6.69	180.0
B464645		6.70	0.004	1.03	6.73	14.0	1120	1.45	0.73	3.43	1.00	40.6	6.8	13	9.69	101.5
B464646		7.28	0.004	0.57	7.41	5.5	220	1.34	0.40	3.21	1.14	39.7	7.4	13	7.40	139.0
B464647		7.74	0.015	1.05	7.29	3.2	590	0.97	0.38	3.28	0.88	34.0	10.8	10	3.98	674
B464648		7.44	0.007	0.55	7.48	4.2	110	1.35	0.27	3.28	1.28	38.4	10.3	12	6.16	246
B464649		7.32	0.008	1.26	7.71	9.0	400	1.26	0.27	2.95	1.75	39.3	10.6	15	4.63	195.5
B464650		8.00	0.004	0.38	7.58	8.6	300	1.10	0.11	3.25	0.29	37.2	10.2	14	4.68	294
B464651		7.84	0.004	0.15	7.72	2.4	130	1.22	0.12	3.56	0.17	38.6	8.0	16	5.97	261
B464652		7.72	0.009	0.78	8.00	5.4	140	1.25	0.18	2.79	0.66	40.4	9.4	18	5.50	375
B464653		8.14	0.005	0.21	7.73	1.5	130	1.28	0.12	3.06	0.22	39.1	14.5	15	5.57	215
B464654		0.10	0.163	1.24	8.68	48.6	460	0.97	0.52	2.26	1.09	35.3	14.6	18	7.46	2200
B464655		0.08	<0.001	0.04	7.36	2.5	880	1.12	0.03	1.75	0.04	28.8	4.0	25	0.49	26.3
B464656		7.72	0.021	0.34	7.87	3.0	250	1.28	0.12	2.89	0.34	38.7	16.7	15	5.19	467
B464657		7.90	0.015	0.33	7.25	5.7	120	1.04	0.16	3.76	0.53	36.9	14.2	11	5.20	431
B464658		7.76	0.010	0.81	7.68	16.0	120	1.07	0.11	2.92	0.37	42.3	9.9	12	4.28	404
B464659		7.98	0.005	1.47	7.54	5.9	190	1.08	0.12	2.94	1.23	41.7	10.7	11	4.28	314
B464660		7.70	0.014	1.17	7.75	8.9	130	1.12	0.25	2.63	1.29	43.0	7.9	11	4.57	399
B464661		7.54	0.006	0.22	7.62	3.9	120	1.14	0.12	3.37	0.14	40.3	9.5	11	5.31	350
B464662		3.00	0.010	1.32	7.45	6.8	110	1.04	0.13	3.42	2.60	43.7	9.7	13	4.70	318
B464663		4.04	0.015	1.49	7.03	9.1	100	0.98	0.14	3.83	6.28	40.4	8.6	16	4.19	283
B464664		3.20	0.020	2.52	7.70	22.7	140	1.26	0.25	2.26	5.97	46.3	10.9	22	5.69	666
B464665		7.72	0.008	0.87	6.94	5.5	60	0.81	0.24	2.15	1.53	35.1	12.3	19	2.91	227
B464666		7.74	0.006	0.60	7.63	3.1	350	1.31	0.15	3.26	0.98	38.8	7.9	17	5.42	322
B464667		7.72	0.010	2.02	5.98	10.8	60	0.70	0.38	3.95	3.24	30.9	12.9	16	1.99	209

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

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To: MAMMOTH GEOLOGICAL LTD.
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VANCOUVER BC V6E 4K2

Finalized Date: 18-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21330339

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
B464628		1.19	15.10	0.13	2.0	0.012	3.64	18.5	5.5	0.46	1710	1.94	0.08	9.2	2.3	730
B464629		1.12	14.25	0.12	1.9	0.013	3.42	15.0	6.2	0.43	1635	1.30	0.07	8.9	2.3	700
B464630		1.23	14.45	0.10	1.9	0.013	3.39	14.0	8.3	0.56	1495	1.54	0.07	9.0	2.3	680
B464631		1.28	14.80	0.10	2.0	0.009	3.32	15.7	7.8	0.65	1835	2.27	0.07	9.2	2.3	730
B464632		1.23	14.85	0.09	2.0	0.009	3.50	15.5	6.9	0.58	1590	1.59	0.08	9.3	2.5	720
B464633		1.22	14.65	0.10	2.0	0.008	3.69	18.5	5.3	0.56	1795	1.00	0.08	8.9	2.3	680
B464634		4.07	14.80	0.15	0.8	0.089	3.11	16.4	8.9	3.69	406	244	1.20	2.7	238	1050
B464635		2.52	12.35	0.11	1.7	0.021	1.87	12.6	2.3	0.40	600	4.10	3.27	5.4	13.7	370
B464636		1.23	14.70	0.11	2.0	0.009	3.49	14.8	5.6	0.59	2380	1.15	0.08	9.0	2.3	690
B464637		1.62	14.80	0.10	2.0	0.008	3.26	20.0	9.4	0.56	2020	2.89	0.09	7.7	3.6	770
B464638		4.36	13.70	0.13	1.5	0.016	2.69	19.6	9.8	0.58	478	5.37	0.42	2.1	7.6	1300
B464639		3.90	16.50	0.12	1.6	0.021	2.30	22.5	15.2	0.83	320	9.78	1.01	2.0	7.5	1380
B464640		4.31	16.20	0.13	1.6	0.025	3.00	19.0	18.5	1.06	801	18.55	0.16	3.9	7.5	1120
B464641		2.51	15.35	0.12	2.2	0.022	2.00	19.2	34.7	1.17	830	17.05	0.08	6.8	6.5	1040
B464642		4.51	16.40	0.10	1.7	0.017	2.95	22.9	14.4	0.94	855	14.70	0.20	1.5	8.2	1420
B464643		4.38	15.65	0.12	1.6	0.015	2.83	21.8	14.6	1.00	932	14.80	0.19	1.6	8.0	1400
B464644		4.18	15.55	0.12	1.3	0.017	2.45	19.5	19.5	0.96	475	39.2	0.17	1.9	7.2	1360
B464645		2.27	17.15	0.12	2.4	0.029	2.41	20.6	39.5	1.14	1080	11.90	0.06	7.8	6.6	940
B464646		3.64	15.85	0.11	1.7	0.021	2.50	19.6	25.2	1.12	1315	4.29	0.10	3.8	7.7	1260
B464647		4.70	14.70	0.12	1.2	0.030	2.60	16.4	12.4	0.91	688	7.07	0.15	1.8	8.0	1230
B464648		4.06	16.55	0.12	1.4	0.025	2.21	18.4	19.6	0.95	618	11.55	0.39	2.3	8.8	1350
B464649		4.47	15.10	0.14	1.6	0.034	2.72	18.8	13.8	0.83	585	12.35	0.24	2.1	8.7	1390
B464650		3.64	14.95	0.10	1.5	0.014	2.39	17.6	21.3	0.91	354	4.31	0.19	2.2	8.8	1370
B464651		3.89	16.85	0.10	1.4	0.014	1.80	18.1	18.0	0.82	144	3.76	1.31	2.2	8.5	1450
B464652		4.13	18.30	0.12	1.6	0.018	2.16	19.3	30.0	1.03	516	2.80	0.14	2.0	9.9	1490
B464653		4.36	16.85	0.11	1.6	0.011	2.14	18.9	24.0	0.99	187	11.60	0.19	1.9	9.3	1430
B464654		4.62	18.60	0.12	0.2	0.107	2.56	17.6	31.8	0.99	963	269	1.63	5.6	12.1	750
B464655		2.63	13.75	0.10	1.9	0.024	1.95	15.6	3.0	0.42	627	4.24	3.38	5.9	14.7	390
B464656		4.87	16.50	0.12	1.6	0.016	2.32	18.4	21.8	0.92	236	7.44	0.17	2.0	10.7	1420
B464657		4.65	13.90	0.13	1.1	0.029	2.19	17.0	15.6	0.78	289	10.50	0.46	1.8	6.9	1270
B464658		4.29	15.15	0.12	1.4	0.019	2.33	20.0	17.4	0.82	522	9.62	0.25	1.8	7.2	1320
B464659		4.82	15.05	0.12	1.4	0.019	2.73	20.8	9.0	0.77	960	6.31	0.26	1.8	7.3	1330
B464660		4.45	16.65	0.11	1.5	0.050	3.08	21.0	8.7	0.83	1225	4.79	0.16	1.8	7.2	1340
B464661		4.04	16.15	0.12	1.5	0.020	2.40	19.7	15.0	0.81	320	4.93	0.51	2.0	7.0	1330
B464662		3.99	15.65	0.12	1.5	0.018	2.77	21.1	8.7	0.70	1015	2.53	0.29	1.9	8.3	1390
B464663		3.84	14.65	0.10	1.4	0.017	2.69	19.4	8.4	0.65	1045	2.53	0.27	2.0	7.8	1320
B464664		4.33	16.60	0.14	1.6	0.038	3.05	22.3	10.2	0.66	1800	6.35	0.23	2.7	15.4	1410
B464665		7.88	13.65	0.12	1.4	0.022	2.59	16.2	8.0	0.57	652	9.18	0.34	1.5	10.8	1280
B464666		4.14	14.90	0.11	1.6	0.029	2.34	18.4	13.0	1.01	760	2.89	0.40	1.7	9.3	1400
B464667		6.65	13.10	0.11	1.4	0.018	2.56	14.0	4.4	0.43	817	4.19	0.33	1.8	12.2	1120

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To: MAMMOTH GEOLOGICAL LTD.
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Finalized Date: 18-JAN-2022
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Project: Poplar

CERTIFICATE OF ANALYSIS VA21330339

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
B464628		95.2	149.5	<0.002	0.08	1.20	2.1	<1	0.5	334	0.96	<0.05	12.15	0.081	1.72	5.9
B464629		50.6	128.0	<0.002	0.05	1.04	1.9	<1	0.5	312	0.90	<0.05	10.90	0.078	1.67	4.4
B464630		126.5	125.5	<0.002	0.08	1.47	2.0	<1	0.5	277	0.90	<0.05	10.55	0.075	1.68	3.1
B464631		114.0	126.5	<0.002	0.13	1.19	2.0	<1	0.5	325	0.92	<0.05	11.15	0.078	1.62	4.0
B464632		51.4	132.0	<0.002	0.13	1.18	2.0	<1	0.5	323	0.91	<0.05	11.35	0.078	1.76	3.4
B464633		140.5	144.5	<0.002	0.07	1.25	2.0	<1	0.6	351	0.91	<0.05	11.90	0.077	1.79	31.8
B464634		20.7	87.1	0.275	2.40	7.19	12.0	3	1.3	273	0.19	1.43	2.53	0.327	1.12	0.9
B464635		2.7	41.3	<0.002	0.01	0.29	5.8	<1	1.5	193.5	0.39	<0.05	2.54	0.179	0.15	1.2
B464636		97.6	130.0	<0.002	0.17	1.34	2.0	<1	0.6	300	0.92	<0.05	10.90	0.076	1.71	16.0
B464637		69.9	136.5	0.002	1.14	2.61	2.9	1	0.8	371	0.78	<0.05	11.45	0.079	1.60	4.0
B464638		70.7	77.0	0.010	6.32	0.73	6.7	3	2.4	665	0.15	0.10	5.03	0.085	0.93	1.9
B464639		19.4	77.9	0.007	4.98	0.80	7.1	2	1.4	629	0.15	0.07	5.30	0.079	0.95	2.3
B464640		46.4	118.5	0.020	3.92	3.53	6.2	2	1.2	388	0.30	0.15	5.53	0.113	1.64	3.4
B464641		51.5	78.1	0.014	1.57	11.00	5.9	1	1.0	590	0.52	<0.05	6.48	0.158	1.15	3.3
B464642		104.0	109.0	0.021	4.58	15.05	7.1	3	1.1	567	0.11	0.07	5.31	0.064	1.38	2.6
B464643		98.1	103.5	0.018	4.38	14.95	6.8	2	1.1	555	0.11	0.07	5.06	0.063	1.29	2.5
B464644		90.4	89.1	0.149	4.62	2.46	6.5	2	0.9	438	0.13	0.07	5.14	0.075	1.04	1.9
B464645		77.0	99.6	0.018	1.12	4.58	6.0	1	0.8	466	0.59	0.06	6.80	0.180	1.42	4.4
B464646		45.1	103.5	0.006	3.41	1.97	6.8	1	0.9	353	0.29	0.07	5.62	0.113	1.26	2.2
B464647		56.2	92.6	0.011	5.16	0.80	6.7	3	1.8	348	0.12	0.10	4.34	0.074	1.10	1.2
B464648		112.0	88.5	0.028	5.03	1.61	7.3	2	0.9	549	0.16	0.11	4.87	0.082	1.12	1.7
B464649		105.5	99.7	0.027	5.49	3.88	7.4	2	1.6	488	0.15	0.08	4.81	0.080	1.20	2.0
B464650		24.1	81.5	0.012	4.87	2.38	7.3	2	1.2	612	0.16	0.07	4.68	0.084	0.99	1.7
B464651		10.3	59.8	0.004	5.10	0.71	7.6	2	1.1	731	0.16	0.10	5.09	0.092	0.77	1.5
B464652		58.0	79.0	0.004	4.40	2.80	8.1	2	1.4	520	0.14	0.10	5.07	0.099	1.09	1.7
B464653		17.8	72.1	0.037	4.80	0.38	7.7	3	1.3	567	0.14	0.10	4.79	0.081	1.04	1.8
B464654		43.5	89.9	0.236	1.60	1.95	11.5	3	1.7	290	0.38	0.45	4.83	0.270	0.92	1.0
B464655		3.6	45.4	<0.002	0.06	0.38	6.4	<1	1.7	206	0.40	<0.05	2.94	0.180	0.20	1.3
B464656		26.9	78.8	0.020	5.51	0.83	8.4	3	1.9	626	0.15	0.08	4.63	0.085	1.10	1.9
B464657		21.3	66.2	0.046	6.25	1.20	6.1	3	1.3	605	0.13	0.11	4.70	0.069	0.86	1.6
B464658		64.6	73.8	0.041	5.44	8.46	6.6	2	1.4	550	0.13	0.07	5.02	0.069	0.96	2.1
B464659		135.0	91.6	0.025	6.17	2.90	6.4	2	1.4	539	0.13	0.10	4.84	0.069	1.14	2.1
B464660		125.5	116.5	0.021	5.22	4.15	6.5	2	1.4	558	0.13	0.09	5.19	0.073	1.42	2.2
B464661		11.3	82.7	0.012	5.47	1.28	6.6	2	1.8	699	0.15	0.08	4.98	0.080	1.06	2.1
B464662		166.5	100.0	0.004	5.63	3.99	6.9	2	1.8	653	0.14	0.09	4.91	0.077	1.22	2.1
B464663		206	90.7	0.004	5.84	5.07	7.0	2	2.0	734	0.15	0.09	4.61	0.083	1.14	2.0
B464664		245	125.5	0.020	4.84	16.85	8.8	2	2.1	897	0.17	0.12	4.84	0.123	1.45	2.1
B464665		93.9	89.1	0.031	8.97	1.02	8.0	6	2.9	539	0.11	0.09	3.80	0.078	0.98	1.7
B464666		44.2	86.0	0.008	5.18	1.58	7.1	3	1.0	746	0.13	0.10	4.66	0.070	1.10	1.7
B464667		159.0	73.6	0.008	9.46	10.90	6.9	4	2.7	656	0.14	0.08	3.70	0.086	0.91	1.6

***** 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: 18-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21330339

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	Cu-OG62 Cu % 0.001
B464628		23	0.9	8.4	311	46.0	
B464629		21	0.9	7.7	289	44.0	
B464630		21	1.1	7.5	369	45.3	
B464631		22	1.0	8.6	404	44.8	
B464632		21	0.9	8.4	307	46.3	
B464633		23	0.9	8.3	218	48.3	
B464634		127	18.2	11.1	191	13.9	
B464635		30	0.6	15.6	28	53.3	
B464636		22	1.1	8.5	194	47.3	
B464637		29	1.1	8.7	244	48.9	
B464638		69	1.0	10.2	318	51.9	
B464639		68	0.7	11.0	99	57.8	
B464640		64	0.7	9.1	168	55.2	
B464641		55	0.8	9.7	115	76.5	
B464642		68	0.5	11.0	207	57.1	
B464643		67	0.5	11.0	181	55.8	
B464644		63	0.4	10.5	233	50.6	
B464645		58	0.9	10.0	205	88.0	
B464646		67	0.5	9.6	264	60.4	
B464647		69	0.4	8.7	185	39.3	
B464648		68	0.4	10.0	239	52.8	
B464649		72	0.6	10.0	312	58.9	
B464650		71	0.4	10.2	57	52.7	
B464651		75	0.3	9.8	33	47.1	
B464652		79	0.3	10.2	132	57.0	
B464653		75	0.3	9.8	41	57.2	
B464654		108	9.1	12.6	248	5.0	
B464655		32	0.6	17.4	29	60.9	
B464656		81	0.5	9.8	74	55.8	
B464657		56	0.4	9.6	97	37.5	
B464658		65	0.4	9.2	77	43.9	
B464659		62	0.5	9.2	211	46.8	
B464660		63	0.5	8.7	245	46.7	
B464661		66	0.4	9.9	36	45.3	
B464662		67	0.5	9.9	480	50.9	
B464663		73	0.5	9.6	1210	49.6	
B464664		83	0.8	10.0	1060	59.8	
B464665		86	0.9	8.1	279	51.9	
B464666		69	0.3	9.0	192	55.9	
B464667		78	0.8	8.7	570	48.5	

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

Finalized Date: 18-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21330339

Sample Description	Method / Analyte / Units / LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	ME-MS61 Ag ppm 0.01	ME-MS61 Al % 0.01	ME-MS61 As ppm 0.2	ME-MS61 Ba ppm 10	ME-MS61 Be ppm 0.05	ME-MS61 Bi ppm 0.01	ME-MS61 Ca % 0.01	ME-MS61 Cd ppm 0.02	ME-MS61 Ce ppm 0.01	ME-MS61 Co ppm 0.1	ME-MS61 Cr ppm 1	ME-MS61 Cs ppm 0.05	ME-MS61 Cu ppm 0.2
B464668		8.12	0.006	0.48	7.56	10.6	110	1.01	0.11	2.75	0.67	42.1	9.2	14	4.16	271
B464669		7.84	0.040	2.05	8.15	119.5	180	1.22	0.14	2.01	1.84	29.0	9.8	14	6.62	1510
B464670		7.44	0.056	3.75	7.13	6.2	100	0.66	0.29	1.65	5.72	23.3	13.2	23	2.01	2150
B464671		8.06	0.060	2.24	7.47	21.2	390	0.91	0.31	2.20	1.22	35.5	13.0	10	3.61	2360
B464672		7.50	0.122	2.86	6.61	6.4	80	0.75	0.39	2.38	0.87	27.3	17.7	15	2.17	5130
B464673		7.56	0.085	7.31	5.59	12.5	120	0.43	1.32	1.24	3.81	12.95	21.7	14	1.10	3410
B464674		0.10	<0.001	0.03	7.15	1.9	870	1.08	0.03	1.71	0.04	27.4	3.9	26	0.43	27.2
B464675		8.04	0.071	20.8	7.08	119.5	460	1.38	0.92	2.90	6.27	42.1	17.8	27	7.43	2700
B464676		0.08	0.020	2.38	6.66	31.1	750	1.14	1.86	1.95	1.04	34.6	36.6	234	3.58	3670
B464677		7.46	0.053	1.36	7.08	63.7	190	0.83	0.50	1.71	0.67	29.3	13.3	13	2.63	2080
B464678		7.42	0.051	1.82	7.59	159.5	370	1.25	0.62	2.37	0.26	39.2	17.4	27	7.11	1750
B464679		7.74	0.037	1.94	7.33	189.0	500	1.10	0.71	2.19	0.41	31.2	13.2	19	8.47	1790
B464680		7.58	0.054	2.90	7.21	378	220	1.02	1.40	2.45	0.60	40.5	14.8	21	5.95	2740
B464681		7.88	0.141	5.25	6.50	310	100	0.69	0.33	1.11	2.64	15.50	19.2	14	2.71	5340
B464682		3.28	0.181	1.45	5.99	24.6	400	0.60	0.21	1.71	0.23	15.95	12.8	13	2.78	8430
B464683		3.66	0.235	1.58	5.49	26.4	400	0.60	0.21	1.58	0.20	18.90	13.6	15	2.65	9490
B464684		7.32	0.201	2.88	6.63	170.5	410	0.69	0.17	1.46	1.37	14.90	14.6	12	3.35	6690
B464685		7.96	0.148	1.01	7.00	80.4	190	0.84	0.16	1.82	0.13	16.40	12.5	11	4.04	5390
B464686		7.66	0.221	1.26	6.76	77.6	120	0.76	0.16	1.85	0.13	16.20	14.7	15	4.96	6810
B464687		7.26	0.039	0.32	7.31	14.2	200	1.07	0.13	2.28	0.10	33.3	8.5	13	5.43	1255
B464688		7.00	0.012	0.37	7.84	36.1	200	1.11	0.13	2.01	0.30	43.3	10.3	10	5.29	432
B464689		6.16	0.014	0.75	7.70	25.1	240	1.16	0.15	2.25	1.45	43.8	9.7	11	5.86	552
B464690		6.28	0.029	1.43	7.69	21.2	120	1.09	0.18	2.19	3.97	38.1	20.5	12	4.89	734
B464691		7.70	0.022	0.39	7.60	5.9	190	1.18	0.15	2.90	0.18	38.1	11.2	11	5.15	669
B464692		7.28	0.022	0.77	7.17	15.9	80	1.06	0.30	2.84	0.35	32.3	22.0	13	4.26	580
B464693		7.46	0.010	4.18	7.79	29.7	160	1.20	0.14	2.18	9.09	39.1	11.0	10	4.69	389
B464694		0.10	0.187	1.27	8.66	50.1	470	1.09	0.56	2.30	1.19	32.1	15.3	19	7.86	2240
B464695		0.10	<0.001	0.02	7.32	2.0	880	0.99	0.02	1.73	0.02	26.9	3.9	26	0.42	27.8
B464696		7.50	0.018	0.43	7.68	11.8	200	1.22	0.11	2.44	0.50	38.5	10.6	10	5.49	399
B464697		7.84	0.012	0.31	7.78	49.6	130	1.02	0.11	2.77	0.19	40.1	12.1	12	4.57	613
B464698		7.92	0.019	0.56	7.60	18.0	140	1.18	0.15	2.86	1.16	40.0	12.5	13	5.17	509
B464699		7.92	0.020	0.66	7.66	10.8	290	1.22	0.12	3.25	0.46	40.1	8.8	12	7.37	670
B464700		7.02	0.014	0.34	7.66	3.9	230	1.14	0.13	2.46	0.19	38.9	9.9	13	6.61	538
B464701		7.34	0.015	0.31	7.42	4.2	230	1.24	0.12	2.62	0.30	39.9	6.2	12	5.94	513
B464702		3.12	0.018	0.48	7.60	63.7	290	1.19	0.12	2.55	0.61	36.2	10.7	12	5.59	581
B464703		3.54	0.017	0.58	7.75	55.9	270	1.24	0.14	2.52	1.07	36.8	11.3	13	5.92	537
B464704		3.16	0.019	0.36	7.76	66.6	340	1.22	0.11	2.26	0.37	35.4	7.6	12	4.97	786
B464705		6.50	0.117	3.56	6.70	159.0	250	0.98	0.26	2.73	9.73	25.4	10.4	24	5.29	3540
B464706		6.64	0.135	1.42	6.69	75.9	270	0.97	0.18	2.54	0.31	19.80	19.1	33	4.86	4490
B464707		7.96	0.267	1.86	6.56	144.5	150	1.00	0.30	2.94	0.29	21.6	19.9	21	7.82	9250

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To: MAMMOTH GEOLOGICAL LTD.
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VANCOUVER BC V6E 4K2

Finalized Date: 18-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21330339

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
B464668		4.83	15.75	0.11	1.6	0.015	2.61	20.3	10.8	0.74	614	4.75	0.36	1.9	9.1	1330
B464669		4.40	16.15	0.11	0.8	0.027	2.83	13.8	19.3	0.95	1135	3.91	0.12	2.1	10.3	1420
B464670		5.91	13.65	0.11	0.4	0.042	2.92	10.8	6.9	0.58	460	15.05	0.18	1.6	11.5	1110
B464671		4.86	15.85	0.14	0.9	0.049	2.70	17.2	11.6	0.88	501	19.00	0.23	1.6	7.1	1150
B464672		5.17	13.15	0.11	0.7	0.085	2.47	12.8	7.3	0.55	293	32.5	0.31	1.5	9.3	1010
B464673		6.73	12.25	0.06	0.3	0.121	2.49	5.8	4.0	0.32	1080	17.60	0.15	1.4	14.8	650
B464674		2.57	13.70	0.08	1.9	0.024	1.92	14.4	2.6	0.40	621	4.37	3.34	5.8	14.8	380
B464675		3.53	16.25	0.08	1.2	0.174	3.03	23.0	15.5	0.87	7660	100.5	0.06	3.9	19.4	1040
B464676		4.18	16.25	0.11	0.5	0.099	3.14	16.7	10.5	3.70	423	254	1.18	2.8	248	1080
B464677		5.90	14.55	0.08	0.8	0.055	2.93	14.8	8.8	0.74	364	15.05	0.16	1.8	8.7	1030
B464678		4.54	17.40	0.08	1.1	0.126	2.62	20.8	28.6	0.96	953	31.4	0.10	4.7	20.5	1290
B464679		5.08	17.50	0.09	1.2	0.151	2.99	15.8	16.6	1.03	1005	11.45	0.57	5.0	13.8	1370
B464680		4.83	17.55	0.09	1.0	0.190	2.76	21.0	19.3	1.07	1450	165.5	0.07	4.2	14.6	1250
B464681		6.46	16.05	0.05	0.5	0.090	2.81	6.8	9.8	0.70	561	27.4	0.10	1.7	11.6	760
B464682		7.02	15.70	0.05	0.4	0.098	2.30	7.3	10.1	0.75	248	4.37	0.08	1.4	9.2	1080
B464683		6.93	15.05	0.06	0.3	0.109	2.12	8.2	9.6	0.68	214	4.51	0.07	1.4	10.4	1270
B464684		5.14	17.50	0.06	0.4	0.079	2.51	7.0	9.7	0.66	221	6.84	0.46	1.9	9.9	820
B464685		5.54	18.05	0.07	0.4	0.062	2.22	7.6	17.9	0.82	234	4.40	0.18	2.1	8.6	940
B464686		5.56	18.05	0.08	0.4	0.078	1.87	7.4	15.5	0.70	198	5.33	1.40	3.0	10.2	940
B464687		4.60	19.35	0.07	1.2	0.022	1.88	16.0	21.3	0.85	188	6.67	1.48	2.3	7.8	1270
B464688		4.70	21.3	0.07	1.3	0.013	2.14	22.4	26.2	0.98	491	5.77	0.18	2.0	7.7	1400
B464689		4.75	20.7	0.09	1.1	0.020	2.73	23.9	20.7	1.05	2240	5.99	0.15	2.1	8.8	1330
B464690		5.39	17.75	0.07	1.4	0.019	2.58	19.4	20.9	1.09	737	8.72	0.14	2.0	8.4	1380
B464691		3.71	17.25	0.09	1.4	0.022	2.43	18.3	17.8	0.96	297	17.30	0.84	2.4	7.2	1420
B464692		5.82	16.55	0.11	1.3	0.025	2.42	16.0	13.5	0.81	322	10.20	0.89	1.9	8.0	1360
B464693		4.11	18.40	0.08	1.2	0.018	2.45	19.3	26.3	0.95	961	15.85	0.10	2.3	7.7	1410
B464694		4.70	19.80	0.09	0.2	0.105	2.58	16.3	31.8	0.98	990	263	1.62	6.0	12.8	760
B464695		2.60	13.95	0.07	2.0	0.024	1.93	14.6	2.6	0.41	622	4.42	3.39	5.8	14.9	390
B464696		3.99	17.70	0.10	1.2	0.015	2.17	19.0	20.3	0.91	591	17.60	0.87	2.4	7.3	1370
B464697		4.30	17.00	0.08	1.3	0.019	2.44	19.5	22.4	0.94	368	12.20	0.57	2.3	7.7	1460
B464698		4.59	17.25	0.09	1.3	0.017	2.49	20.7	21.3	0.94	777	14.35	0.87	2.3	8.1	1350
B464699		3.36	18.30	0.08	1.4	0.022	2.05	20.8	12.3	0.88	920	21.8	2.03	3.0	6.9	1390
B464700		4.25	18.85	0.11	1.5	0.022	2.12	19.4	17.2	0.96	472	19.55	1.24	2.6	7.9	1410
B464701		3.94	18.60	0.10	1.5	0.023	1.88	20.3	14.7	0.82	282	14.30	1.86	2.7	6.9	1380
B464702		3.78	18.85	0.09	1.4	0.019	1.90	17.7	23.0	0.99	497	7.35	1.39	2.4	7.1	1420
B464703		3.83	19.50	0.10	1.4	0.018	2.00	18.0	23.4	1.02	614	11.55	1.32	2.4	7.6	1440
B464704		3.60	18.95	0.08	1.7	0.022	2.01	17.6	21.4	1.03	316	15.10	1.25	2.3	7.5	1450
B464705		4.91	19.60	0.09	0.7	0.066	1.66	13.0	24.6	1.09	1155	8.13	0.42	3.0	14.6	1110
B464706		5.59	20.3	0.08	0.3	0.088	1.38	9.5	33.4	1.05	521	8.65	0.59	4.1	18.2	1060
B464707		5.86	18.10	0.08	1.0	0.188	1.73	10.6	64.7	1.12	516	5.43	0.44	4.4	18.7	1130

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

Finalized Date: 18-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21330339

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
B464668		48.5	84.7	0.007	5.97	1.28	7.5	3	2.1	681	0.14	0.10	5.03	0.081	1.02	2.1
B464669		136.0	96.3	0.013	4.30	11.75	6.9	2	1.4	730	0.14	0.05	4.86	0.099	1.28	1.3
B464670		297	85.2	0.060	6.44	4.26	7.4	5	3.0	194.5	0.11	0.10	4.36	0.076	0.97	0.6
B464671		90.9	89.3	0.050	5.39	5.88	6.4	3	1.5	468	0.11	0.08	4.31	0.066	1.08	0.9
B464672		55.1	75.2	0.076	6.40	3.60	6.0	5	3.7	684	0.09	0.09	3.89	0.065	0.82	0.8
B464673		232	68.1	0.047	7.43	7.35	5.4	6	4.2	122.5	0.11	0.33	3.17	0.069	0.77	0.5
B464674		3.3	42.8	<0.002	0.01	0.36	6.0	<1	1.7	198.0	0.43	<0.05	3.06	0.183	0.19	1.3
B464675		395	135.0	0.172	3.08	227	8.1	3	1.3	359	0.27	0.22	5.50	0.192	1.45	1.7
B464676		23.0	79.2	0.289	2.41	8.57	13.2	4	1.5	278	0.20	1.48	2.60	0.329	1.23	0.9
B464677		58.5	88.0	0.043	6.53	3.45	5.8	4	2.3	319	0.13	0.12	4.42	0.076	1.00	1.0
B464678		28.9	99.9	0.081	3.15	3.23	8.0	2	1.5	493	0.35	0.41	5.37	0.212	1.13	1.6
B464679		36.0	97.4	0.029	2.86	2.59	7.6	3	1.6	420	0.35	0.39	5.13	0.204	1.38	1.6
B464680		56.8	107.0	0.340	3.66	15.55	7.6	3	1.5	434	0.30	0.84	5.39	0.171	1.45	1.8
B464681		163.5	81.8	0.060	6.54	49.8	5.6	5	2.5	334	0.12	0.17	4.01	0.077	1.05	0.9
B464682		11.2	64.5	0.015	7.19	0.52	5.0	5	2.7	496	0.11	0.13	3.82	0.069	0.87	0.6
B464683		10.1	60.9	0.013	7.09	0.50	4.8	5	2.7	476	0.10	0.14	3.43	0.062	0.81	0.6
B464684		85.3	74.2	0.021	4.96	21.5	5.6	3	2.1	435	0.16	0.11	3.92	0.086	1.03	0.8
B464685		6.6	64.5	0.011	5.09	1.12	5.6	3	2.2	326	0.17	0.14	4.22	0.097	0.94	0.6
B464686		8.5	55.4	0.018	4.85	1.28	5.8	3	2.1	516	0.23	0.11	4.14	0.133	0.87	0.7
B464687		8.2	57.0	0.010	4.30	0.67	6.9	2	1.2	793	0.19	0.07	4.73	0.115	0.91	1.7
B464688		34.1	67.5	0.008	4.74	4.33	6.9	2	0.9	276	0.16	0.07	5.69	0.074	0.95	2.0
B464689		51.0	108.0	0.012	4.81	2.80	7.2	2	1.2	252	0.15	0.05	5.70	0.075	1.28	2.0
B464690		184.5	91.0	0.022	5.43	7.46	7.3	4	1.3	214	0.15	0.09	5.48	0.090	1.23	1.8
B464691		14.1	78.8	0.060	4.13	0.70	7.1	2	1.1	926	0.19	0.05	5.48	0.092	1.17	1.9
B464692		21.8	71.7	0.024	7.07	1.56	6.8	4	1.9	802	0.15	0.10	5.06	0.073	0.95	2.2
B464693		141.5	77.8	0.059	4.33	46.0	7.1	2	1.0	388	0.18	0.08	5.46	0.090	1.15	1.8
B464694		46.1	90.5	0.247	1.62	2.28	11.8	3	1.9	290	0.42	0.46	5.03	0.286	0.91	1.0
B464695		3.1	43.7	<0.002	0.01	0.32	6.2	<1	1.8	202	0.43	<0.05	3.09	0.183	0.17	1.4
B464696		20.5	71.3	0.054	4.29	2.41	6.7	2	1.0	712	0.19	0.08	5.45	0.097	0.98	2.2
B464697		15.3	75.7	0.046	5.02	0.60	7.3	3	1.4	845	0.17	0.05	5.59	0.093	1.01	1.9
B464698		33.6	89.5	0.065	5.43	2.27	7.2	4	1.2	644	0.19	0.05	5.59	0.094	1.04	2.0
B464699		20.7	79.5	0.061	3.62	0.53	6.7	2	0.9	1120	0.23	0.05	5.57	0.139	1.05	1.8
B464700		11.4	75.2	0.053	4.27	0.49	7.1	3	1.2	1105	0.20	0.08	5.36	0.113	1.09	1.7
B464701		22.3	68.0	0.044	4.10	0.62	6.9	2	1.5	1035	0.21	0.07	5.48	0.118	0.94	2.0
B464702		26.9	61.9	0.016	3.71	4.64	6.8	2	1.1	523	0.19	0.05	5.33	0.106	1.03	1.7
B464703		83.8	68.3	0.027	3.79	4.97	7.0	2	1.0	495	0.21	0.07	5.29	0.103	1.02	1.7
B464704		21.4	60.8	0.045	3.38	3.20	7.1	2	1.2	388	0.19	0.06	4.97	0.110	0.91	2.0
B464705		128.5	72.8	0.028	3.83	28.6	8.9	2	1.7	253	0.21	0.14	5.57	0.173	0.96	1.3
B464706		42.3	61.8	0.028	4.20	4.16	9.4	3	1.8	286	0.24	0.12	3.40	0.203	0.79	0.8
B464707		14.3	63.3	0.016	4.39	8.85	9.6	4	2.5	392	0.26	0.18	3.19	0.262	0.92	0.9

***** 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: 18-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21330339

Sample Description	Method	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62
	Analyte	V	W	Y	Zn	Zr	Cu
	Units	ppm	ppm	ppm	ppm	ppm	%
	LOD	1	0.1	0.1	2	0.5	0.001
B464668		75	0.6	9.1	123	56.9	
B464669		66	0.4	7.8	360	29.5	
B464670		70	1.1	7.4	861	12.8	
B464671		62	0.4	8.6	201	30.2	
B464672		59	0.9	6.9	151	22.6	
B464673		69	1.5	4.5	607	10.3	
B464674		32	0.7	16.4	30	60.3	
B464675		74	2.6	11.2	812	28.3	
B464676		132	19.3	11.4	193	14.2	
B464677		63	0.7	7.1	125	25.6	
B464678		79	1.6	11.2	98	34.7	
B464679		76	3.7	9.2	144	37.1	
B464680		71	2.7	10.3	199	32.3	
B464681		61	0.9	5.3	399	12.8	
B464682		63	0.5	6.6	45	10.3	
B464683		58	0.5	8.4	34	9.7	
B464684		55	0.6	6.1	272	11.1	
B464685		61	0.5	6.5	35	10.9	
B464686		62	0.4	7.0	40	12.0	
B464687		69	0.4	9.8	30	38.6	
B464688		65	0.5	10.0	63	41.0	
B464689		64	0.7	8.8	260	35.4	
B464690		71	0.7	9.8	582	43.7	
B464691		69	0.9	10.6	34	41.6	
B464692		66	1.4	9.1	64	38.0	
B464693		68	0.6	10.2	1620	37.2	
B464694		111	8.0	12.7	256	5.7	
B464695		32	0.7	16.8	29	60.5	
B464696		65	0.4	10.4	106	36.6	
B464697		71	0.7	11.0	47	41.3	
B464698		66	0.6	11.0	200	39.3	
B464699		68	0.4	10.6	110	41.4	
B464700		69	0.5	10.2	55	43.0	
B464701		68	0.4	10.6	76	45.6	
B464702		68	0.4	9.9	136	41.9	
B464703		68	0.4	10.3	205	43.7	
B464704		75	0.7	10.8	85	52.7	
B464705		98	0.7	8.7	1765	24.1	
B464706		92	0.7	7.7	89	12.8	
B464707		106	0.5	7.6	79	41.0	

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704-1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 18-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21330339

Sample Description	Method / Analyte / Units / LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	ME-MS61 Ag ppm 0.01	ME-MS61 Al % 0.01	ME-MS61 As ppm 0.2	ME-MS61 Ba ppm 10	ME-MS61 Be ppm 0.05	ME-MS61 Bi ppm 0.01	ME-MS61 Ca % 0.01	ME-MS61 Cd ppm 0.02	ME-MS61 Ce ppm 0.01	ME-MS61 Co ppm 0.1	ME-MS61 Cr ppm 1	ME-MS61 Cs ppm 0.05	ME-MS61 Cu ppm 0.2
B464708		6.64	0.180	2.77	5.45	138.0	200	0.79	0.28	3.53	2.10	17.00	12.2	23	7.32	4930
B464709		7.04	0.135	2.35	6.47	383	160	0.96	0.41	2.91	0.86	24.8	17.6	20	4.56	3870
B464710		6.66	0.112	0.98	6.67	139.5	610	0.98	0.19	2.58	0.17	21.7	13.1	51	3.85	3430
B464711		7.26	0.062	1.00	7.00	119.5	720	1.07	0.18	2.79	1.86	25.4	8.3	18	5.07	1765
B464712		7.48	0.079	1.26	7.07	4.9	790	1.03	0.19	2.11	0.51	23.6	8.3	17	4.59	2290
B464713		8.16	0.062	1.12	7.27	7.8	820	1.07	0.17	2.10	0.25	25.7	10.5	13	5.32	1860
B464714		0.08	0.019	2.11	6.60	27.8	730	1.09	1.78	1.93	0.94	34.5	35.2	244	3.08	3650
B464715		0.10	<0.001	0.03	6.87	2.4	860	0.98	0.03	1.64	0.02	26.2	3.6	26	0.36	26.4
B464716		8.20	0.066	1.18	7.22	8.8	660	1.13	0.18	2.25	0.23	27.0	8.9	12	5.32	2060
B464717		7.70	0.034	0.71	7.32	14.1	760	1.13	0.10	2.39	0.10	23.6	10.4	13	5.16	1135
B464718		8.82	0.049	1.76	7.10	73.0	650	1.16	0.20	2.36	0.80	21.8	8.3	10	6.11	1865
B464719		8.34	0.049	1.84	7.88	287	640	1.14	0.23	2.20	2.82	28.6	10.9	10	6.16	1755
B464720		8.00	0.031	1.40	7.68	96.6	710	1.11	0.26	2.48	0.75	25.7	9.0	10	6.09	1045
B464721		6.04	0.028	0.76	7.53	11.8	810	1.11	0.15	2.47	0.24	20.8	7.1	9	5.29	936
B464722		2.88	0.024	0.95	6.80	69.6	1200	1.19	0.15	2.55	0.54	23.9	6.9	12	8.34	805
B464723		2.88	0.022	1.02	6.93	84.7	1700	1.19	0.17	2.59	0.62	25.4	7.2	13	8.12	769
B464724		3.08	<0.001	0.15	6.60	4.5	990	1.52	0.09	2.67	0.39	32.3	5.8	14	10.05	22.5
B464725		6.38	<0.001	0.36	6.52	4.6	1110	1.16	0.04	2.73	0.36	26.9	5.4	15	7.28	22.3
B464726		6.54	<0.001	0.37	6.47	5.4	1120	1.14	0.07	2.83	0.49	30.2	6.4	16	8.27	12.8
B464727		6.26	0.016	1.84	6.77	107.5	1190	1.24	0.16	2.98	1.01	31.3	7.5	13	9.06	821
B464728		6.96	0.034	1.36	7.57	227	860	1.30	0.15	2.30	0.76	33.6	8.1	11	10.30	1470
B464729		6.90	0.003	0.01	7.01	21.3	930	1.35	0.13	2.55	0.30	40.3	5.6	14	10.45	7.0
B464730		5.96	0.014	0.94	6.79	244	1000	1.26	0.12	2.46	0.70	32.6	5.2	13	10.15	571
B464731		7.00	0.153	2.47	6.45	443	240	0.95	0.14	1.61	0.52	21.0	12.5	9	5.77	5220
B464732		6.78	0.138	3.94	6.63	340	250	1.01	0.21	1.85	2.08	27.6	14.0	13	7.41	6520
B464733		6.80	0.001	0.12	6.35	8.7	1050	1.26	0.13	3.40	0.29	33.3	5.6	12	10.15	29.2
B464734		0.10	0.164	1.14	8.35	57.0	460	1.07	0.50	2.23	1.10	32.1	15.7	20	7.89	2240
B464735		0.08	<0.001	0.02	7.08	2.3	860	0.97	0.02	1.69	0.02	26.8	3.5	26	0.36	23.9
B464736		6.04	0.001	0.40	6.76	10.7	850	1.42	0.11	2.63	0.24	33.4	5.6	14	9.05	26.4
B464737		6.04	0.002	0.21	6.20	5.9	1070	1.27	0.11	2.64	0.30	31.1	6.0	16	8.44	19.2
B464738		6.54	0.001	0.13	6.49	8.7	950	1.31	0.19	2.58	0.34	32.3	5.9	16	8.33	15.0
B464739		6.94	0.002	0.44	6.68	10.4	1100	1.32	0.27	2.76	0.41	32.2	5.8	15	10.10	95.4
B464740		6.70	0.006	0.61	6.75	28.4	1110	1.29	0.15	2.59	0.65	35.7	5.8	16	11.00	196.0
B464741		6.86	0.001	0.28	6.75	13.0	930	1.34	0.07	2.59	0.38	33.4	5.6	14	9.58	24.6
B464742		3.08	0.002	0.43	6.45	21.5	1050	1.25	0.06	2.50	0.33	31.9	6.1	15	8.08	31.0
B464743		3.02	0.001	0.26	7.10	19.5	1000	1.25	0.06	2.56	0.37	39.0	6.3	15	8.90	23.9
B464744		3.56	0.002	0.25	6.93	16.4	1020	1.27	0.05	2.50	0.27	36.1	6.3	16	9.19	18.0
B464745		6.52	0.003	0.87	6.65	30.2	1030	1.29	0.06	2.31	1.87	35.7	7.1	15	9.09	33.3
B464746		6.92	0.001	0.21	6.73	19.6	1230	1.29	0.06	2.66	0.53	38.2	6.0	13	9.29	16.7
B464747		5.96	0.082	4.25	6.83	607	990	1.21	0.23	1.93	2.41	25.2	9.0	8	9.25	3720

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CERTIFICATE OF ANALYSIS VA21330339

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
B464708		3.64	13.80	0.05	0.3	0.123	1.02	8.2	36.4	1.15	601	3.19	0.04	3.6	12.8	900
B464709		6.56	17.00	0.11	0.4	0.101	1.89	11.0	30.5	1.11	1100	5.60	0.08	2.9	14.6	1020
B464710		4.87	18.00	0.11	0.4	0.081	2.14	9.6	23.2	1.13	772	6.15	0.97	4.5	19.0	1030
B464711		4.01	16.25	0.11	0.5	0.049	1.92	11.1	57.0	1.01	1025	3.25	0.22	4.2	9.3	1210
B464712		4.43	18.20	0.12	0.5	0.063	2.20	10.7	11.2	0.86	1250	6.01	2.06	4.3	9.3	1180
B464713		5.24	19.45	0.11	0.6	0.055	2.44	11.5	14.4	0.92	1185	6.70	2.05	4.6	8.0	1320
B464714		4.15	13.90	0.15	0.5	0.091	3.10	16.4	8.7	3.67	417	252	1.17	2.7	242	1070
B464715		2.50	12.05	0.11	1.8	0.022	1.87	13.5	2.4	0.40	604	4.41	3.28	5.5	13.8	380
B464716		4.76	16.75	0.12	0.6	0.052	2.13	12.2	12.2	0.89	800	60.6	2.18	4.3	7.9	1270
B464717		4.82	20.5	0.12	0.6	0.036	2.26	10.0	22.7	0.93	968	4.62	1.66	4.7	8.5	1370
B464718		4.18	19.40	0.10	0.6	0.042	2.33	9.3	44.6	0.92	1520	3.34	0.89	4.1	7.0	1340
B464719		4.48	19.10	0.10	0.6	0.041	2.77	12.9	33.0	0.93	1250	5.37	0.54	4.6	8.0	1400
B464720		4.94	20.3	0.10	0.6	0.037	2.59	11.3	31.1	1.02	1360	33.4	0.11	4.8	7.5	1430
B464721		4.64	19.45	0.09	0.5	0.034	2.34	8.6	24.3	1.08	1120	3.25	1.11	5.1	6.8	1420
B464722		2.94	18.80	0.10	1.6	0.032	3.00	10.8	23.4	0.86	675	6.59	0.92	7.7	7.4	1120
B464723		3.09	16.25	0.10	1.6	0.029	3.02	11.9	25.7	0.90	686	5.77	0.82	7.4	7.5	1100
B464724		2.04	16.50	0.11	2.7	0.021	3.45	15.6	40.5	0.88	472	0.95	0.50	10.1	8.1	920
B464725		2.14	14.45	0.10	2.5	0.021	3.32	12.5	18.1	0.84	438	1.00	1.30	8.6	7.6	960
B464726		2.16	16.10	0.12	2.8	0.022	3.26	13.9	15.4	0.90	514	1.43	0.89	9.8	8.6	930
B464727		3.05	16.85	0.11	1.9	0.035	2.93	14.8	51.9	1.02	634	6.42	0.22	8.0	8.4	1010
B464728		3.71	18.15	0.11	1.5	0.042	2.59	16.4	70.9	0.95	933	2.85	0.06	7.5	7.9	1190
B464729		2.25	17.10	0.12	2.8	0.019	3.22	20.7	21.8	0.88	642	0.60	0.03	10.6	7.5	900
B464730		2.63	15.60	0.11	2.2	0.025	2.94	15.8	32.7	0.86	823	1.61	0.04	8.3	6.9	1000
B464731		7.57	20.8	0.11	0.5	0.088	2.11	9.9	52.5	0.79	874	7.12	0.57	3.3	10.9	960
B464732		5.15	15.15	0.08	1.2	0.085	2.77	13.3	28.0	0.77	498	19.35	0.15	4.5	11.6	840
B464733		2.33	15.20	0.10	2.6	0.018	3.08	16.3	22.7	1.05	720	0.52	0.03	9.4	7.7	830
B464734		4.61	18.00	0.11	0.2	0.113	2.56	15.8	28.6	0.96	972	262	1.62	5.8	11.8	760
B464735		2.57	12.10	0.11	1.8	0.022	1.89	14.0	2.3	0.40	621	3.98	3.31	5.4	13.4	380
B464736		2.02	17.50	0.11	2.8	0.024	3.29	15.8	30.3	0.88	573	0.79	0.05	10.0	8.2	970
B464737		2.09	16.55	0.11	2.7	0.019	3.40	14.6	22.3	0.83	561	0.92	0.28	9.9	8.6	930
B464738		2.13	16.10	0.11	2.8	0.023	3.63	15.4	18.0	0.79	663	0.87	0.30	9.8	8.6	950
B464739		2.17	15.25	0.11	2.6	0.024	3.37	15.9	20.4	0.84	749	3.90	0.04	9.5	7.4	890
B464740		2.10	16.90	0.11	2.6	0.024	3.17	17.3	25.3	0.88	846	4.32	0.03	9.9	8.3	910
B464741		2.03	15.95	0.10	2.6	0.018	3.25	16.1	23.3	0.86	706	0.72	0.04	10.0	8.3	930
B464742		2.12	16.05	0.12	2.6	0.021	3.36	15.2	26.5	0.83	764	1.36	0.07	9.7	8.5	890
B464743		2.18	16.65	0.12	2.8	0.021	3.50	19.3	25.8	0.89	776	1.18	0.07	10.2	8.7	920
B464744		2.12	16.55	0.12	2.9	0.025	3.30	17.3	25.3	0.86	721	1.24	0.04	9.9	8.8	990
B464745		2.02	17.50	0.16	2.7	0.025	3.11	17.5	28.3	0.81	706	17.85	0.05	9.2	10.3	930
B464746		2.07	16.65	0.16	2.6	0.021	3.03	19.4	27.4	0.88	843	1.52	0.05	8.9	7.6	860
B464747		2.50	14.75	0.14	0.8	0.058	2.90	12.2	56.2	0.74	980	14.35	0.14	4.5	6.1	930

***** 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: 18-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21330339

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
B464708		226	43.8	0.009	2.54	16.70	7.1	2	1.4	175.5	0.22	0.13	3.00	0.184	0.57	0.8
B464709		26.2	74.1	0.011	5.35	47.7	6.1	3	2.0	350	0.22	0.20	4.06	0.142	0.89	1.3
B464710		9.8	57.3	0.016	2.87	8.94	10.2	2	1.4	188.5	0.29	0.10	4.06	0.217	0.95	0.7
B464711		64.6	52.6	0.009	2.35	5.16	6.3	1	1.2	421	0.30	0.07	3.86	0.202	0.89	0.9
B464712		50.9	71.8	0.018	2.29	0.62	6.1	2	1.1	880	0.30	0.09	3.93	0.203	0.97	0.7
B464713		14.3	77.1	0.021	2.47	0.68	6.2	2	1.2	766	0.32	0.09	3.93	0.209	1.00	0.9
B464714		21.6	81.3	0.292	2.40	6.64	13.0	4	1.3	273	0.19	1.20	2.48	0.330	1.20	0.9
B464715		2.6	43.0	<0.002	0.01	0.30	5.4	<1	1.6	192.5	0.39	<0.05	2.77	0.179	0.16	1.2
B464716		10.8	72.8	0.195	2.68	0.72	6.3	2	1.4	655	0.29	0.07	4.10	0.205	0.93	1.0
B464717		10.0	73.7	0.013	2.35	1.06	6.2	2	1.1	800	0.36	0.05	4.03	0.223	0.99	0.8
B464718		36.2	80.4	0.008	2.65	2.67	5.4	2	1.2	362	0.31	0.06	3.83	0.193	1.16	0.8
B464719		49.3	104.5	0.016	2.75	6.06	6.5	2	1.6	312	0.34	0.10	4.89	0.210	1.19	1.4
B464720		45.5	93.0	0.099	2.58	3.92	6.1	2	1.2	190.0	0.37	0.09	4.70	0.214	1.22	1.1
B464721		14.4	67.3	0.009	1.37	1.33	6.1	1	0.8	184.5	0.37	0.06	3.75	0.227	0.94	0.7
B464722		62.3	89.7	0.009	0.87	3.80	5.1	1	1.0	590	0.55	<0.05	4.80	0.213	1.34	1.7
B464723		65.2	93.5	0.005	0.97	4.94	5.1	1	0.9	566	0.54	<0.05	5.14	0.208	1.35	1.8
B464724		19.8	103.0	<0.002	0.05	1.34	4.7	<1	0.6	752	0.75	<0.05	6.19	0.217	1.51	3.1
B464725		18.4	83.9	<0.002	0.05	1.17	4.4	<1	0.5	762	0.65	<0.05	5.16	0.230	1.16	3.1
B464726		23.0	97.1	<0.002	0.05	1.49	5.0	<1	0.6	804	0.71	<0.05	6.03	0.223	1.32	3.3
B464727		42.7	93.0	0.004	0.69	8.86	5.5	1	0.9	772	0.55	<0.05	5.46	0.217	1.35	2.7
B464728		50.4	97.7	0.005	0.82	15.60	6.0	1	1.0	803	0.54	<0.05	5.95	0.220	1.17	2.4
B464729		27.2	124.0	<0.002	0.06	1.86	5.0	<1	0.6	1285	0.78	<0.05	7.91	0.211	1.40	2.5
B464730		49.7	106.5	<0.002	0.28	8.32	4.7	1	0.7	1000	0.64	<0.05	6.69	0.204	1.42	3.2
B464731		31.5	77.4	0.023	3.13	3.69	5.6	3	1.4	596	0.27	0.10	4.48	0.151	0.91	1.6
B464732		104.5	100.5	0.020	3.73	5.95	4.8	3	2.1	468	0.37	0.08	5.60	0.145	1.14	2.0
B464733		20.3	93.2	<0.002	0.10	1.53	4.3	<1	0.6	842	0.72	<0.05	6.54	0.198	1.36	3.0
B464734		43.1	86.2	0.237	1.61	1.98	12.2	3	1.7	286	0.43	0.41	4.90	0.289	0.91	1.1
B464735		2.6	43.5	<0.002	0.01	0.27	5.5	<1	1.6	196.0	0.40	<0.05	2.80	0.184	0.17	1.3
B464736		19.6	98.3	<0.002	0.05	1.64	5.2	<1	0.6	857	0.77	<0.05	6.48	0.232	1.46	3.7
B464737		24.3	106.5	<0.002	0.05	1.92	4.8	<1	0.6	680	0.71	<0.05	5.74	0.219	1.63	3.3
B464738		31.9	114.0	<0.002	0.04	2.30	5.0	<1	0.6	562	0.73	<0.05	5.91	0.226	1.73	4.1
B464739		32.1	114.5	0.002	0.12	2.28	4.5	<1	0.7	570	0.72	<0.05	6.42	0.214	1.65	3.4
B464740		41.1	119.0	0.004	0.22	3.46	5.0	<1	0.6	679	0.73	<0.05	7.05	0.214	1.52	3.7
B464741		21.0	106.5	<0.002	0.09	3.32	4.7	<1	0.6	665	0.72	<0.05	6.53	0.216	1.42	3.8
B464742		18.4	104.0	<0.002	0.12	5.08	4.7	<1	0.6	520	0.74	<0.05	6.29	0.212	1.56	3.8
B464743		18.4	129.5	<0.002	0.12	4.15	5.1	<1	0.7	531	0.78	<0.05	7.96	0.221	1.62	4.2
B464744		19.0	112.0	<0.002	0.15	3.73	5.3	<1	0.6	747	0.75	<0.05	6.75	0.232	1.60	3.9
B464745		183.5	98.1	0.012	0.15	6.25	5.6	1	0.7	765	0.73	<0.05	6.09	0.223	1.56	4.1
B464746		26.1	106.0	<0.002	0.11	2.54	5.3	<1	0.6	676	0.77	<0.05	6.66	0.205	1.37	4.5
B464747		171.5	96.4	0.025	1.70	77.1	4.8	2	1.5	397	0.35	0.08	4.51	0.130	1.19	1.6

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704-1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 18-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21330339

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	Cu-OG62 Cu % 0.001
B464708		66	2.0	6.3	404	11.4	
B464709		70	1.6	8.5	197	15.0	
B464710		90	0.5	8.2	86	13.9	
B464711		78	0.6	8.6	326	20.3	
B464712		73	0.3	9.0	100	18.3	
B464713		79	0.3	9.8	74	22.4	
B464714		132	17.3	11.3	192	14.2	
B464715		32	0.6	17.0	28	56.5	
B464716		78	0.3	10.1	70	23.6	
B464717		72	0.3	9.5	58	20.9	
B464718		64	0.5	8.7	143	19.9	
B464719		71	1.0	10.2	403	20.8	
B464720		73	0.7	10.4	149	20.5	
B464721		73	0.3	10.4	98	18.3	
B464722		60	0.7	8.8	130	51.9	
B464723		61	0.8	8.8	144	50.3	
B464724		58	1.8	9.0	128	92.2	
B464725		61	1.4	7.4	172	84.9	
B464726		60	1.8	8.8	195	94.7	
B464727		68	1.3	9.5	221	69.0	
B464728		69	2.3	10.4	209	51.4	
B464729		55	1.8	10.1	137	92.8	
B464730		56	1.0	8.9	216	71.8	
B464731		99	1.1	7.9	151	14.2	
B464732		65	0.6	7.5	339	38.0	
B464733		52	1.1	9.0	111	85.2	
B464734		112	5.1	12.5	256	5.1	
B464735		32	0.6	17.5	28	56.4	
B464736		62	1.3	9.3	109	95.7	
B464737		59	1.3	9.0	129	91.8	
B464738		59	1.8	9.0	143	91.2	
B464739		56	1.8	9.0	139	85.8	
B464740		57	1.4	10.1	178	87.4	
B464741		57	1.5	9.3	162	89.1	
B464742		56	1.4	9.0	149	89.5	
B464743		57	1.4	10.1	156	92.6	
B464744		61	1.6	9.6	133	95.4	
B464745		59	1.3	8.5	326	93.3	
B464746		54	1.1	8.6	159	88.8	
B464747		42	1.0	6.7	402	28.3	

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

Finalized Date: 18-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21330339

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
B464748		6.44	0.088	3.75	7.30	55.1	860	1.03	0.33	1.47	1.32	23.3	10.0	9	4.08	4450
B464749		6.70	0.116	6.61	7.15	199.5	600	1.16	0.23	1.49	4.76	21.0	11.7	10	4.79	4720
B464750		6.36	0.091	2.06	7.17	223	750	1.06	0.12	1.48	0.41	21.2	10.4	8	3.54	4410
B464751		6.80	0.071	1.39	6.35	151.5	320	0.83	0.12	1.77	0.43	18.90	10.8	10	3.39	3660
B464752		6.36	0.064	1.90	6.36	661	610	0.90	0.12	1.65	1.70	20.8	9.3	11	4.10	2910
B464753		6.70	0.106	1.19	7.09	507	570	1.01	0.11	1.51	0.14	24.0	9.7	8	5.33	4610
B464754		0.08	0.019	2.32	6.67	29.4	690	1.13	1.70	1.87	0.93	35.8	35.8	238	3.35	3550
B464755		0.10	<0.001	0.01	6.87	2.9	840	1.13	0.03	1.63	0.03	28.2	3.9	26	0.38	27.4
B464756		5.18	0.099	2.00	7.18	369	880	1.21	0.13	1.39	1.60	26.4	8.8	10	7.82	4150
B464757		6.94	0.095	1.54	6.91	210	830	1.07	0.07	1.99	0.38	20.4	8.7	9	4.47	4100
B464758		7.06	0.119	2.98	7.12	307	660	0.98	0.28	1.61	2.27	18.45	8.1	9	4.90	3380
B464759		6.40	0.111	1.93	7.02	202	670	1.03	0.12	1.79	0.53	21.2	10.6	14	4.37	4500
B464760		6.40	0.134	2.38	6.89	17.4	730	0.99	0.13	1.59	0.48	23.3	9.8	15	3.51	5670
B464761		6.46	0.113	3.58	6.82	138.5	760	1.04	0.32	1.83	1.84	20.5	10.2	14	4.87	4950
B464762		3.02	0.062	2.19	6.94	157.0	790	1.25	0.24	2.38	2.41	27.4	9.1	14	7.04	3020
B464763		3.26	0.064	2.35	6.71	168.0	840	1.17	0.19	2.32	2.13	27.2	9.1	15	7.02	3230
B464764		2.92	0.002	0.19	6.38	8.6	890	1.26	0.13	2.72	0.55	29.9	6.1	14	5.53	22.9
B464765		6.22	0.001	0.13	6.26	10.0	1300	1.32	0.07	2.97	0.42	28.5	6.2	16	5.84	20.8
B464766		6.26	<0.001	0.05	6.41	4.1	1230	1.33	0.07	3.11	0.51	29.0	6.8	16	5.43	12.0
B464767		6.50	0.003	0.68	6.73	17.0	1340	1.35	0.17	2.90	0.86	31.3	6.6	14	6.01	112.5
B464768		6.42	0.113	4.25	7.13	157.5	800	1.03	0.34	2.30	1.24	27.5	11.8	14	5.47	4850
B464769		6.58	0.039	0.68	6.96	39.2	770	1.21	0.15	2.75	0.25	32.2	9.5	8	6.43	1445
B464770		5.74	0.052	1.93	7.11	40.8	890	1.20	0.20	2.65	0.16	30.7	11.8	10	5.96	2110
B464771		6.60	0.087	1.39	7.16	21.3	830	1.16	0.09	2.27	0.14	26.4	10.9	13	5.36	3470
B464772		6.78	0.144	3.00	6.77	124.0	710	0.89	0.20	1.91	0.30	24.5	13.0	14	3.86	6110
B464773		6.68	0.105	2.55	6.48	794	690	1.16	0.20	2.22	1.08	25.9	12.5	14	6.53	4020
B464774		6.78	0.107	4.58	6.50	608	550	0.95	0.28	2.36	2.27	23.3	13.1	12	5.66	4460
B464775		0.08	0.165	1.29	8.14	44.7	440	1.03	0.54	2.12	1.08	30.8	14.2	19	7.13	2160
B464776		0.10	0.001	0.02	7.03	3.0	850	1.12	0.02	1.64	0.02	28.3	3.9	26	0.38	26.9
B464777		6.66	0.079	3.27	7.13	189.0	750	0.97	0.22	2.28	3.22	26.8	11.6	11	4.84	3460
B464778		6.80	0.104	2.88	7.27	444	740	0.97	0.21	2.21	1.48	24.2	14.2	14	4.92	4380

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

Finalized Date: 18-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21330339

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
B464748		2.52	15.25	0.15	0.5	0.062	3.16	10.9	28.9	0.66	1620	9.12	1.17	3.4	5.9	890
B464749		2.83	14.95	0.13	0.5	0.064	3.02	9.9	24.2	0.64	1545	17.25	1.19	3.2	6.9	810
B464750		2.40	14.60	0.15	0.5	0.052	2.80	9.3	24.1	0.67	540	7.13	1.56	3.2	5.8	790
B464751		2.87	11.85	0.13	0.5	0.036	2.62	8.6	16.3	0.58	286	6.36	0.87	2.1	6.4	680
B464752		3.02	14.05	0.14	0.4	0.028	2.36	9.5	46.2	0.70	484	9.36	0.67	3.2	5.9	850
B464753		3.18	14.45	0.15	0.5	0.040	2.70	11.0	66.1	0.70	422	8.52	0.93	3.3	8.0	970
B464754		4.01	15.20	0.17	0.6	0.099	3.04	16.8	10.1	3.57	396	240	1.15	2.7	233	1010
B464755		2.47	13.40	0.16	1.9	0.023	1.86	14.3	2.8	0.40	594	4.10	3.28	5.7	13.9	360
B464756		2.39	15.15	0.14	0.8	0.050	3.13	12.8	29.1	0.67	981	28.8	0.35	4.0	6.1	850
B464757		2.85	16.05	0.14	0.5	0.040	2.85	8.2	46.1	0.76	411	7.67	0.92	3.6	6.0	1010
B464758		2.89	13.30	0.13	0.3	0.105	3.12	8.1	26.9	0.70	1560	7.60	0.42	3.2	5.6	780
B464759		2.81	13.85	0.13	0.4	0.056	3.01	9.0	62.8	0.75	540	47.8	0.90	3.5	6.9	890
B464760		2.74	13.75	0.14	0.3	0.064	2.96	10.0	26.8	0.73	380	14.55	1.45	3.2	8.1	1030
B464761		2.90	14.10	0.14	0.4	0.095	3.11	8.7	34.1	0.73	794	11.70	1.20	3.6	7.2	980
B464762		2.59	15.15	0.14	1.3	0.055	3.18	12.8	23.3	0.83	767	34.9	0.80	5.4	7.2	950
B464763		2.51	15.30	0.16	1.1	0.069	3.03	12.8	19.1	0.80	766	39.4	0.75	5.1	7.1	910
B464764		2.06	17.25	0.15	2.7	0.024	3.31	14.3	10.3	0.80	645	1.46	1.08	9.4	7.5	860
B464765		1.97	17.15	0.17	2.7	0.027	3.25	13.0	10.8	0.81	669	0.92	0.96	9.2	7.9	910
B464766		2.11	18.35	0.17	3.0	0.030	3.30	13.0	9.7	0.78	865	1.02	1.32	9.8	8.7	930
B464767		2.09	17.60	0.19	2.9	0.034	3.47	14.3	10.7	0.77	1270	13.15	1.12	9.5	8.1	890
B464768		3.05	14.20	0.16	0.5	0.087	3.14	12.7	36.4	0.83	1020	18.95	0.88	4.1	7.6	970
B464769		2.82	17.30	0.18	1.9	0.042	3.00	14.8	17.4	0.98	1430	7.84	1.36	6.1	7.1	1220
B464770		3.05	16.45	0.17	1.4	0.047	2.98	14.8	29.8	0.87	1885	9.15	1.47	5.6	7.9	1200
B464771		2.71	17.10	0.18	1.1	0.065	2.84	12.0	27.1	0.77	849	6.40	2.00	5.6	7.6	1090
B464772		3.09	13.45	0.17	0.5	0.087	2.83	10.8	52.9	0.76	891	11.75	1.31	3.7	7.2	1050
B464773		2.91	13.90	0.14	0.6	0.059	2.91	12.3	86.9	0.82	889	20.3	0.09	3.8	9.0	890
B464774		3.24	14.05	0.14	0.5	0.060	2.52	10.4	56.0	0.86	1780	5.29	0.13	3.8	7.5	1000
B464775		4.41	17.70	0.17	0.2	0.105	2.48	14.8	30.1	0.92	923	251	1.59	5.8	11.5	710
B464776		2.51	13.25	0.16	1.8	0.024	1.88	14.3	2.8	0.40	596	3.96	3.32	5.8	14.1	360
B464777		3.19	15.35	0.15	0.6	0.086	2.86	12.3	30.8	0.86	1975	6.32	0.73	4.1	6.2	1100
B464778		3.09	15.60	0.16	0.5	0.115	2.68	10.3	36.2	0.79	1925	3.85	0.28	4.2	7.3	1140

***** 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: 18-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21330339

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
B464748		67.9	100.0	0.026	2.23	3.54	4.8	2	1.7	284	0.25	0.07	4.25	0.109	1.21	0.7
B464749		255	102.5	0.035	2.55	26.9	4.7	3	1.6	310	0.23	0.11	3.97	0.106	1.15	0.7
B464750		25.9	81.2	0.024	2.17	3.02	4.1	3	1.6	280	0.24	0.08	3.96	0.096	0.96	0.7
B464751		23.2	70.0	0.018	2.85	2.21	3.4	2	1.6	369	0.16	0.07	3.26	0.068	0.96	0.7
B464752		85.6	67.3	0.026	2.58	8.21	4.3	2	1.4	354	0.24	0.08	3.58	0.112	0.91	0.7
B464753		7.8	76.7	0.030	2.91	13.35	4.4	2	1.7	524	0.24	0.06	4.30	0.103	1.00	0.7
B464754		19.6	89.0	0.274	2.32	7.24	12.5	4	1.4	267	0.19	1.36	2.43	0.314	1.22	0.9
B464755		2.7	42.4	<0.002	0.01	0.32	6.1	<1	1.7	192.0	0.43	<0.05	2.71	0.178	0.16	1.3
B464756		92.2	118.0	0.071	2.01	9.77	4.6	2	1.7	525	0.31	<0.05	5.15	0.111	1.36	1.4
B464757		16.0	79.6	0.021	2.39	1.86	4.9	2	1.9	352	0.27	<0.05	3.93	0.114	1.03	0.7
B464758		75.3	97.4	0.019	2.47	20.8	4.9	2	1.5	302	0.24	0.07	3.93	0.108	1.14	0.6
B464759		27.7	83.7	0.100	2.38	1.56	5.8	3	1.5	652	0.25	0.09	4.10	0.122	0.99	0.5
B464760		26.6	85.4	0.045	2.40	0.93	5.4	2	1.8	759	0.22	0.06	4.90	0.105	0.96	0.5
B464761		96.3	92.3	0.035	2.50	3.30	6.0	3	1.7	761	0.27	0.11	4.50	0.129	1.19	0.5
B464762		122.0	107.0	0.066	1.56	5.60	5.5	2	1.3	716	0.44	0.06	4.91	0.157	1.31	1.8
B464763		116.5	109.5	0.081	1.53	5.61	5.4	2	1.3	670	0.40	0.06	5.10	0.145	1.32	1.7
B464764		25.5	104.5	<0.002	0.04	1.72	5.0	1	0.6	319	0.79	<0.05	5.90	0.205	1.44	3.4
B464765		16.3	95.0	<0.002	0.05	1.82	5.3	<1	0.6	369	0.77	<0.05	5.39	0.219	1.42	3.3
B464766		13.0	98.5	<0.002	0.05	2.14	5.4	<1	0.6	337	0.81	<0.05	5.24	0.227	1.42	3.1
B464767		70.3	116.5	0.005	0.10	5.29	5.4	<1	0.7	347	0.83	<0.05	6.04	0.215	1.59	4.2
B464768		73.8	106.5	0.078	2.31	8.84	6.1	2	1.6	388	0.29	0.08	4.54	0.140	1.25	0.7
B464769		11.0	106.5	0.017	0.82	3.58	6.1	1	1.0	421	0.38	<0.05	3.49	0.264	1.40	1.2
B464770		8.5	99.5	0.023	1.40	3.48	6.1	2	1.1	454	0.36	0.08	3.65	0.240	1.24	1.1
B464771		10.2	83.9	0.017	1.43	1.38	6.1	2	0.9	837	0.38	0.08	3.77	0.217	1.04	0.7
B464772		11.1	81.4	0.024	2.61	3.90	5.6	3	1.7	2090	0.27	0.11	4.35	0.134	0.94	0.6
B464773		37.9	96.9	0.088	2.40	33.7	6.3	2	1.4	404	0.28	0.09	4.51	0.133	1.16	0.9
B464774		84.9	90.7	0.014	2.52	68.4	5.7	2	1.4	298	0.29	0.07	4.22	0.131	1.06	0.9
B464775		40.4	78.8	0.246	1.55	2.00	11.0	3	1.7	275	0.41	0.42	4.26	0.269	0.94	1.0
B464776		2.7	43.4	<0.002	0.01	0.32	6.2	1	1.7	194.0	0.41	<0.05	2.87	0.177	0.18	1.3
B464777		228	105.5	0.026	2.53	24.5	6.2	3	1.3	197.5	0.31	0.06	4.52	0.136	1.14	0.8
B464778		60.2	93.0	0.010	2.31	80.2	6.3	3	1.5	226	0.32	0.07	4.42	0.156	1.06	0.9

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

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

Project: Poplar

CERTIFICATE OF ANALYSIS VA21330339

Sample Description	Method	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62
	Analyte	V	W	Y	Zn	Zr	Cu
	Units	ppm	ppm	ppm	ppm	ppm	%
	LOD	1	0.1	0.1	2	0.5	0.001
B464748		41	0.6	6.6	232	13.1	
B464749		38	0.7	6.0	756	13.2	
B464750		31	0.5	5.7	81	14.7	
B464751		29	0.5	4.7	75	14.1	
B464752		40	0.5	6.1	311	13.0	
B464753		39	0.4	6.3	48	14.4	
B464754		126	17.8	11.0	181	15.8	
B464755		31	0.6	16.5	24	56.8	
B464756		36	0.9	7.0	270	25.7	
B464757		43	1.7	6.7	82	13.5	
B464758		40	1.4	5.7	374	10.0	
B464759		45	0.5	6.7	109	10.1	
B464760		39	0.6	7.7	78	8.9	
B464761		48	0.9	7.3	278	10.6	
B464762		49	0.8	7.6	380	39.6	
B464763		46	0.8	7.6	326	35.0	
B464764		54	1.7	7.8	154	91.6	
B464765		58	1.8	7.5	150	91.6	
B464766		57	1.9	7.7	144	97.2	
B464767		57	1.8	8.2	192	93.9	
B464768		49	1.0	7.8	213	12.8	
B464769		74	0.8	7.7	100	74.5	
B464770		69	0.7	7.9	75	54.9	
B464771		59	0.4	8.4	68	41.5	
B464772		44	0.6	8.2	70	15.2	
B464773		52	1.0	7.4	227	19.2	
B464774		49	1.0	7.6	412	15.5	
B464775		105	4.1	12.1	236	5.2	
B464776		31	0.6	17.4	25	59.4	
B464777		51	1.0	8.5	448	16.2	
B464778		55	3.5	8.5	278	14.8	

***** 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: 18-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21330339

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

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

LABORATORY ADDRESSES

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

Au-ICP21	CRU-31	CRU-QC	Cu-OG62
LOG-21	LOG-23	ME-MS61	ME-OG62
PUL-31	PUL-QC	SND-01	SPL-21
SPL-21X	WEI-21		

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

Finalized Date: 28-JAN-2022
This copy reported on
3-MAR-2022
Account: MAMGEO

CERTIFICATE VA21340601

Project: Poplar

This report is for 196 samples of Drill Core submitted to our lab in Vancouver, BC, Canada on 13-DEC-2021.

The following have access to data associated with this certificate:

TIM HENNEBERRY		

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-21	Sample logging - ClientBarCode
SND-01	Send samples to external laboratory
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 up to 250g 85% <75 um
LOG-23	Pulp Login - Rcvd with Barcode
SPL-21X	Addnl Crush Split w No Analysis

ANALYTICAL PROCEDURES

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

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:
Saa Traxler, Director, North Vancouver Operations

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VANCOUVER BC V6E 4K2

Finalized Date: 28-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21340601

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
B464973		10.38	0.011	0.14	8.07	2.5	330	1.28	0.32	0.54	0.36	37.7	13.4	34	2.54	97.6
B464974		10.14	0.007	0.07	7.74	2.6	230	1.55	0.28	1.60	0.37	39.8	20.9	8	3.40	117.5
B464975		10.62	<0.001	0.02	6.71	3.1	1030	1.33	0.20	2.13	0.04	32.3	7.5	13	5.01	12.5
B464976		10.20	<0.001	0.05	6.71	2.9	1060	1.27	0.14	2.04	0.04	33.9	9.6	14	3.73	32.3
B464977		9.72	<0.001	0.05	7.08	2.7	1080	1.22	0.17	2.20	0.06	40.0	10.7	14	2.63	27.2
B464978		10.78	0.001	0.05	6.95	2.8	1030	1.20	0.17	2.41	0.05	35.2	9.2	14	2.97	29.8
B464979		0.08	0.001	0.03	7.35	2.6	880	0.99	0.03	1.70	0.03	26.2	3.7	24	0.40	23.7
B464980		10.94	<0.001	0.06	7.02	2.4	980	1.27	0.26	2.09	0.03	33.5	8.3	14	3.54	27.7
B464981		10.18	<0.001	0.08	6.93	6.9	970	1.24	0.22	2.09	0.08	33.5	8.7	13	3.24	20.6
B464982		0.08	0.018	2.18	6.73	32.5	580	1.08	1.71	1.90	0.90	35.3	34.7	228	3.46	3550
B464983		7.16	0.002	0.34	8.13	1.9	200	1.02	0.23	0.58	1.06	33.2	13.7	8	1.96	63.7
B464984		3.18	0.004	0.36	8.17	2.9	170	1.15	0.21	0.66	0.50	37.4	12.8	7	2.34	128.5
B464985		11.26	0.004	0.51	7.17	5.0	130	1.08	0.29	3.13	1.93	35.7	9.4	7	2.11	86.6
B464986		10.18	0.008	0.80	6.84	13.2	220	1.45	0.31	2.50	4.83	38.0	5.1	6	4.59	98.2
B464987		4.98	0.001	0.18	6.19	3.5	930	1.37	0.07	1.61	0.70	32.8	1.8	8	5.32	5.4
B464988		4.82	0.002	0.19	6.49	3.5	970	1.50	0.07	1.70	0.78	35.9	2.0	8	5.62	5.3
B464989		5.30	0.013	0.82	6.26	3.6	970	1.36	0.07	1.70	1.24	33.5	1.9	7	5.79	13.2
B464990		11.82	0.010	0.29	6.86	3.7	480	1.32	0.19	2.07	0.61	35.2	5.9	17	4.41	105.0
B464991		10.68	0.013	0.05	8.16	2.3	120	1.25	0.17	2.84	0.09	35.5	14.5	32	2.34	183.0
B464992		11.20	0.011	0.07	7.09	2.5	60	0.95	0.47	2.99	0.07	39.1	19.3	23	1.68	309
B464993		11.68	0.024	0.13	5.39	7.6	50	0.69	0.23	3.90	0.21	28.6	22.6	13	0.91	573
B464994		10.90	0.020	0.08	6.46	7.4	60	0.83	0.34	3.75	0.32	35.1	16.5	12	1.03	410
B464995		11.42	0.009	0.04	7.31	3.1	100	1.10	0.25	2.85	0.17	36.4	13.5	9	0.88	309
B464996		11.08	0.012	0.63	6.92	4.7	70	0.99	0.31	2.70	1.62	31.1	15.4	10	1.73	162.0
B464997		11.38	0.005	0.40	7.14	4.9	70	0.92	0.19	2.79	0.27	28.7	13.8	8	2.23	198.0
B464998		11.56	0.009	0.09	7.84	1.6	100	1.15	0.15	2.71	0.10	41.3	10.8	9	2.20	322
B464999		0.08	<0.001	0.02	7.50	3.1	900	1.12	0.03	1.74	0.03	29.1	4.2	25	0.42	27.3
B465000		0.08	0.171	1.15	9.26	51.6	480	0.98	0.50	2.36	1.08	36.4	15.6	19	7.67	2320
B466501		11.54	0.012	1.36	6.80	4.7	60	0.87	0.58	2.57	6.22	27.2	16.1	8	1.37	266
B466502		11.36	0.013	0.79	6.91	2.6	60	0.99	0.26	2.70	0.58	32.9	19.0	9	1.66	303
B466503		10.18	0.017	0.26	7.95	3.3	420	1.38	0.20	2.39	0.32	40.8	13.7	29	4.16	398
B466504		11.70	0.016	0.25	8.60	4.1	130	1.28	0.17	1.66	0.30	41.8	25.7	86	3.71	583
B466505		8.54	0.004	0.22	7.06	5.0	250	1.06	0.27	2.01	0.12	34.8	17.5	102	3.33	215
B466506		6.10	0.016	0.19	9.78	2.9	710	1.42	0.19	1.14	0.09	43.2	19.3	58	4.90	521
B466507		2.58	<0.001	0.03	7.01	3.8	1010	1.19	0.19	2.01	0.08	37.0	6.2	14	5.48	30.6
B466508		2.72	<0.001	0.05	7.28	3.6	1010	1.28	0.20	2.04	0.09	38.8	6.5	14	5.71	26.8
B466509		2.72	0.020	0.25	7.97	3.3	540	1.50	0.23	2.49	0.13	39.1	18.3	20	5.30	551
B466510		6.40	0.029	0.26	7.95	3.0	200	1.22	0.14	2.50	0.16	42.7	24.2	30	3.65	733
B466511		5.92	0.029	0.25	7.56	3.3	300	1.20	0.20	2.37	0.20	42.7	25.2	27	3.54	748
B466512		6.60	0.015	0.19	7.82	3.1	360	1.38	0.14	2.82	0.22	38.0	17.4	17	5.52	529

***** 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: 28-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21340601

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
B464973		5.14	17.35	0.12	1.5	0.039	1.89	18.4	8.1	0.27	285	7.40	0.77	1.7	12.2	870
B464974		5.92	17.55	0.12	1.9	0.036	1.92	19.7	13.0	0.64	578	6.05	0.55	3.3	10.1	1180
B464975		2.35	18.50	0.12	2.7	0.021	3.04	15.4	12.3	0.96	453	2.20	1.04	10.4	8.8	850
B464976		2.88	17.75	0.12	2.6	0.020	3.09	16.0	11.8	0.88	574	2.51	0.81	9.9	8.9	870
B464977		3.17	18.10	0.12	2.7	0.021	2.50	20.3	16.1	0.91	677	2.71	0.28	10.1	9.3	910
B464978		2.73	18.75	0.11	2.7	0.018	2.75	16.8	14.8	0.99	538	2.77	0.58	10.3	9.1	930
B464979		2.58	13.20	0.11	1.8	0.018	1.88	13.7	2.3	0.40	609	3.80	3.30	6.1	13.1	380
B464980		2.53	18.50	0.11	2.7	0.020	3.18	16.3	13.0	0.95	529	2.27	1.39	10.4	9.0	890
B464981		2.49	17.95	0.12	2.7	0.027	3.13	15.9	13.1	0.96	572	2.40	1.48	10.0	8.7	890
B464982		4.09	16.65	0.14	0.6	0.085	3.05	16.6	9.0	3.64	404	242	1.13	2.6	237	1060
B464983		5.74	13.75	0.11	1.1	0.034	2.29	16.3	8.0	0.31	483	10.65	0.71	1.1	10.6	1180
B464984		5.17	17.40	0.12	1.3	0.078	2.57	18.5	10.6	0.43	332	14.05	0.53	1.4	9.3	1210
B464985		4.80	12.60	0.12	1.1	0.099	1.94	15.7	9.8	0.43	396	21.6	0.73	1.2	9.6	930
B464986		3.30	13.25	0.10	1.6	0.023	2.47	18.5	20.9	0.70	2200	6.83	0.47	5.0	4.8	930
B464987		1.28	13.30	0.07	2.1	0.020	3.54	15.6	17.2	0.53	2170	1.08	0.21	8.6	2.1	730
B464988		1.33	14.10	0.09	2.2	0.015	3.68	17.2	17.7	0.55	2320	1.19	0.23	9.2	2.3	760
B464989		1.29	13.40	0.08	2.1	0.022	3.70	16.2	43.8	0.53	3800	0.92	0.19	8.8	2.2	730
B464990		2.92	13.20	0.09	1.8	0.018	3.20	17.0	16.6	0.76	1295	4.60	0.38	6.4	7.1	920
B464991		5.21	16.55	0.12	1.4	0.043	1.88	15.6	12.0	1.12	256	6.32	1.26	1.3	17.4	1550
B464992		7.74	14.70	0.14	1.4	0.060	2.25	17.2	6.9	0.81	133	17.95	0.52	1.3	16.6	1240
B464993		8.58	10.30	0.13	0.6	0.064	1.55	12.0	4.5	0.53	125	91.2	0.78	0.8	13.4	840
B464994		7.88	11.00	0.11	0.8	0.077	1.67	14.8	5.1	0.63	211	162.0	1.05	1.0	10.2	950
B464995		6.09	12.60	0.10	1.1	0.065	1.16	16.8	5.9	0.69	155	26.3	2.03	1.4	8.0	1150
B464996		7.32	12.60	0.11	1.1	0.055	2.03	13.2	7.2	0.47	190	26.4	0.65	1.3	8.5	1150
B464997		5.38	12.45	0.08	1.2	0.046	2.37	12.3	6.5	0.44	228	35.7	0.44	1.3	7.1	1050
B464998		4.49	14.30	0.10	1.3	0.038	2.03	20.5	8.9	0.59	192	24.0	0.79	1.6	6.8	1140
B464999		2.64	13.60	0.11	1.9	0.022	1.95	14.2	2.9	0.41	628	4.01	3.37	6.0	14.2	400
B465000		4.83	18.20	0.10	0.2	0.100	2.63	17.0	31.2	1.01	999	267	1.66	5.8	11.8	790
B466501		6.23	13.75	0.11	1.1	0.069	2.37	12.0	4.9	0.41	269	13.40	0.40	1.5	8.7	1060
B466502		7.18	13.90	0.12	0.8	0.047	2.10	14.7	5.3	0.46	318	23.6	0.83	1.4	8.9	1030
B466503		4.38	17.20	0.10	1.4	0.042	1.76	20.1	13.2	0.98	838	11.25	0.94	2.8	20.2	1080
B466504		6.06	17.85	0.10	0.8	0.050	2.41	20.1	10.1	0.68	471	12.10	0.59	1.5	87.5	1130
B466505		4.21	16.00	0.08	2.2	0.031	2.36	16.4	15.2	1.01	498	9.72	0.72	5.8	50.9	790
B466506		4.55	20.8	0.10	0.9	0.059	2.88	20.7	18.0	0.75	217	26.0	1.07	2.9	62.5	750
B466507		2.07	16.90	0.08	2.7	0.022	2.83	16.6	18.1	1.04	439	1.99	1.13	8.9	8.8	890
B466508		2.12	17.65	0.10	2.9	0.018	2.92	18.0	18.8	1.08	452	2.37	1.14	9.5	9.1	900
B466509		4.16	17.65	0.11	1.9	0.029	2.26	17.7	15.6	1.23	437	29.9	1.23	4.6	30.1	1210
B466510		5.15	16.15	0.12	1.2	0.031	1.59	20.0	11.7	1.24	287	90.7	1.73	1.5	28.1	1400
B466511		5.53	16.15	0.12	1.3	0.071	1.57	18.9	10.2	1.26	240	64.5	1.66	1.6	32.3	1280
B466512		4.39	17.10	0.10	1.2	0.038	1.64	17.0	12.0	1.18	439	28.8	1.26	1.8	28.8	1340

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VANCOUVER BC V6E 4K2

Finalized Date: 28-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21340601

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
B464973		21.9	59.3	0.015	3.37	0.39	10.1	4	1.9	210	0.12	0.15	3.93	0.092	0.91	1.8
B464974		15.8	62.9	0.028	3.91	0.61	6.4	4	1.2	195.0	0.25	0.11	4.89	0.091	0.80	2.5
B464975		7.4	93.2	<0.002	0.03	0.59	5.2	<1	0.6	99.8	0.75	<0.05	7.37	0.199	0.76	3.2
B464976		5.7	89.7	<0.002	0.03	0.49	5.0	1	0.6	82.8	0.69	<0.05	6.80	0.201	0.70	3.1
B464977		5.9	79.4	<0.002	0.04	0.61	5.4	<1	0.6	91.7	0.73	<0.05	7.97	0.211	0.66	3.5
B464978		5.7	75.1	<0.002	0.03	0.57	5.4	<1	0.6	93.3	0.73	<0.05	7.25	0.219	0.66	3.6
B464979		2.6	42.8	<0.002	0.01	0.29	6.0	1	1.6	202	0.38	<0.05	2.77	0.179	0.16	1.2
B464980		7.1	97.5	<0.002	0.02	0.49	5.2	<1	0.6	145.0	0.76	<0.05	7.55	0.206	0.74	3.4
B464981		11.8	94.0	0.004	0.27	0.75	5.2	1	0.6	140.5	0.72	<0.05	7.03	0.200	0.83	4.4
B464982		21.6	90.0	0.283	2.36	7.59	13.1	4	1.3	274	0.18	1.37	2.63	0.317	1.13	0.9
B464983		74.5	65.6	0.037	4.89	1.25	6.2	3	1.9	335	0.08	0.10	3.64	0.060	1.01	1.4
B464984		50.1	74.5	0.043	5.04	2.04	7.7	4	2.4	263	0.10	0.15	4.16	0.068	1.14	1.5
B464985		111.5	53.5	0.102	6.81	1.42	5.3	4	2.2	512	0.09	0.16	3.83	0.058	1.01	1.4
B464986		268	92.4	0.015	3.18	2.81	3.2	2	1.4	427	0.52	0.08	7.37	0.067	1.37	4.3
B464987		60.4	121.0	<0.002	0.11	1.67	1.9	1	0.4	276	0.96	<0.05	10.60	0.083	1.48	4.9
B464988		47.3	132.5	0.003	0.14	1.75	2.0	1	0.5	287	1.01	<0.05	11.10	0.088	1.56	5.4
B464989		208	136.0	<0.002	0.16	2.46	1.9	<1	0.5	293	0.95	<0.05	10.85	0.083	1.81	3.0
B464990		35.2	108.0	0.006	2.46	1.84	3.7	2	0.9	354	0.68	<0.05	8.35	0.090	1.41	5.4
B464991		7.5	55.6	0.021	5.91	0.27	9.7	5	1.8	449	0.10	0.17	2.86	0.090	1.04	1.4
B464992		6.2	66.8	0.080	9.77	0.36	8.9	9	2.4	390	0.09	0.36	2.58	0.083	1.21	1.5
B464993		12.5	48.7	0.265	>10.0	2.61	5.1	10	1.9	553	0.05	0.22	2.51	0.048	0.79	1.0
B464994		20.9	50.8	0.527	>10.0	5.25	5.0	8	1.8	555	0.07	0.30	2.95	0.056	0.80	1.1
B464995		11.7	36.7	0.093	8.25	0.49	6.4	6	1.5	479	0.10	0.23	3.79	0.058	0.59	1.3
B464996		54.9	52.0	0.144	9.34	4.03	5.9	7	2.7	591	0.09	0.26	3.18	0.066	0.89	1.5
B464997		17.2	56.3	0.186	7.23	1.84	5.4	6	3.1	627	0.09	0.15	2.92	0.069	0.92	2.3
B464998		8.7	59.1	0.117	5.74	0.33	6.9	6	2.1	471	0.11	0.19	3.69	0.081	0.90	1.7
B464999		3.1	49.5	<0.002	0.01	0.31	6.4	1	1.7	208	0.42	<0.05	2.86	0.185	0.20	1.3
B465000		42.8	89.7	0.249	1.66	2.00	11.8	3	1.6	308	0.47	0.40	4.71	0.286	0.93	1.2
B466501		261	61.9	0.072	8.11	1.11	5.7	7	3.2	507	0.11	0.37	2.74	0.076	1.02	1.2
B466502		37.2	60.3	0.111	8.91	0.58	5.6	6	2.3	424	0.10	0.71	3.07	0.068	0.94	1.1
B466503		22.5	59.4	0.081	4.11	0.72	8.6	4	1.7	390	0.21	0.19	4.18	0.114	0.97	1.8
B466504		16.5	69.7	0.137	6.35	0.49	14.4	6	2.1	392	0.10	0.18	3.31	0.108	1.05	1.4
B466505		15.4	82.6	0.065	3.44	1.76	8.3	3	1.2	453	0.47	0.12	5.56	0.155	1.07	3.4
B466506		8.1	86.7	0.168	3.99	0.44	15.0	4	1.9	299	0.21	0.14	4.56	0.158	1.20	2.0
B466507		10.9	94.3	0.005	0.22	0.83	4.8	1	0.6	513	0.73	<0.05	6.72	0.201	1.30	2.4
B466508		11.4	102.0	0.009	0.18	0.84	4.9	1	0.7	519	0.78	0.06	7.47	0.210	1.34	2.7
B466509		10.2	79.9	0.263	3.38	0.65	7.4	3	1.2	416	0.37	0.11	4.98	0.146	1.14	2.6
B466510		10.7	54.6	0.600	5.18	0.44	9.2	5	1.5	388	0.10	0.16	2.95	0.100	0.91	1.3
B466511		11.6	55.3	0.376	5.33	0.34	9.1	4	1.5	377	0.10	0.17	3.00	0.103	0.93	1.3
B466512		14.8	57.1	0.168	4.71	0.80	8.9	4	1.4	431	0.11	0.23	3.21	0.104	0.96	1.3

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Finalized Date: 28-JAN-2022
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Project: Poplar

CERTIFICATE OF ANALYSIS VA21340601

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
B464973		87	0.6	10.3	135	50.6
B464974		60	0.4	11.3	152	64.8
B464975		52	0.8	9.3	53	93.7
B464976		54	1.3	12.5	124	88.4
B464977		56	1.2	13.6	127	92.0
B464978		57	1.3	11.4	90	95.6
B464979		32	0.6	16.6	30	56.5
B464980		54	1.0	10.7	78	92.6
B464981		55	0.7	10.5	89	92.1
B464982		129	18.2	11.1	190	15.7
B464983		71	0.5	13.4	322	36.8
B464984		74	0.4	11.4	166	40.6
B464985		57	0.5	10.7	372	31.6
B464986		38	0.8	8.5	921	39.4
B464987		22	1.1	7.7	236	41.0
B464988		23	1.1	8.3	245	42.9
B464989		22	1.1	8.5	331	41.9
B464990		46	0.9	8.0	187	44.5
B464991		109	0.3	8.2	41	50.3
B464992		93	0.4	9.4	30	52.7
B464993		57	0.3	10.8	53	18.8
B464994		57	0.4	12.1	88	23.4
B464995		56	0.3	8.5	50	35.6
B464996		66	0.4	8.5	303	33.9
B464997		63	0.6	7.9	64	37.6
B464998		74	0.5	8.6	30	42.5
B464999		32	0.7	17.4	29	57.4
B465000		112	9.7	12.6	263	4.8
B466501		64	0.5	8.2	1155	34.5
B466502		61	0.4	7.8	113	26.9
B466503		75	0.4	7.7	87	46.3
B466504		118	0.3	8.3	72	32.5
B466505		79	0.6	8.1	55	65.8
B466506		128	0.5	8.9	34	32.0
B466507		51	0.8	8.0	70	83.6
B466508		52	0.8	8.4	72	87.2
B466509		74	0.4	8.9	64	62.7
B466510		82	0.2	9.8	49	46.5
B466511		86	0.3	8.9	51	48.3
B466512		82	0.2	9.2	57	44.7

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

Finalized Date: 28-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21340601

Sample Description	Method / Analyte / Units / LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	ME-MS61 Ag ppm 0.01	ME-MS61 Al % 0.01	ME-MS61 As ppm 0.2	ME-MS61 Ba ppm 10	ME-MS61 Be ppm 0.05	ME-MS61 Bi ppm 0.01	ME-MS61 Ca % 0.01	ME-MS61 Cd ppm 0.02	ME-MS61 Ce ppm 0.01	ME-MS61 Co ppm 0.1	ME-MS61 Cr ppm 1	ME-MS61 Cs ppm 0.05	ME-MS61 Cu ppm 0.2
B466513		6.88	0.010	0.09	8.87	2.0	170	1.31	0.21	1.12	0.04	42.7	21.2	121	2.68	312
B466514		6.64	0.016	0.20	8.05	3.4	150	1.22	0.19	1.31	0.14	36.3	23.3	152	2.41	492
B466515		6.08	0.017	0.14	7.47	2.8	170	1.48	0.19	1.88	0.07	34.9	19.9	124	3.53	492
B466516		6.18	0.018	2.84	8.58	31.3	510	1.52	0.16	1.85	0.97	43.9	23.5	70	6.74	607
B466517		6.26	0.021	0.39	9.55	9.0	920	1.64	0.29	1.69	0.45	46.8	24.5	118	9.23	611
B466518		5.38	0.002	0.18	7.75	4.7	920	1.66	0.32	2.10	0.48	41.1	6.8	20	11.25	37.4
B466519		0.08	0.018	2.35	6.89	31.4	720	1.18	1.66	1.92	0.90	37.2	36.7	232	3.38	3680
B466520		0.08	<0.001	0.03	7.31	3.3	870	1.10	0.03	1.68	0.03	28.5	4.1	24	0.41	28.2
B466521		5.72	<0.001	0.03	6.84	4.0	1000	1.30	0.18	2.52	0.32	33.8	5.7	13	10.40	4.2
B466522		5.36	<0.001	0.63	6.26	7.3	600	1.83	0.18	1.93	0.51	24.0	3.7	8	9.64	55.1
B466523		6.32	0.008	0.42	7.49	12.0	970	1.52	0.18	3.30	0.60	49.5	18.7	72	13.50	440
B466524		6.18	0.047	2.05	7.46	9.0	480	1.16	0.23	3.53	1.49	42.7	19.8	49	10.95	1475
B466525		5.80	0.080	1.25	7.62	5.7	390	1.12	0.30	2.63	0.47	37.9	19.7	37	9.17	2590
B466526		6.38	0.060	1.04	7.58	99.1	410	0.92	0.22	2.92	0.58	40.3	19.3	37	5.47	1765
B466527		2.90	0.060	0.92	7.63	106.0	450	0.96	0.13	2.92	0.61	39.0	16.6	39	6.06	1685
B466528		2.74	0.067	1.05	7.41	107.5	420	0.97	0.15	2.82	0.61	39.4	20.2	39	6.14	1790
B466529		2.56	0.056	0.74	7.81	77.9	650	1.14	0.36	2.39	0.24	39.4	21.5	41	5.85	1865
B466530		4.96	0.060	0.61	7.48	38.6	500	1.02	0.12	2.62	0.18	34.5	20.2	40	6.18	2130
B466531		5.00	0.056	0.96	7.52	92.5	560	1.09	0.21	2.63	0.41	40.0	16.5	37	6.16	1870
B466532		6.62	0.083	1.77	7.49	139.0	490	1.10	0.25	2.49	0.71	34.6	19.6	30	8.01	2560
B466533		6.22	0.077	2.85	7.44	64.6	460	1.00	0.19	2.43	0.98	33.4	15.7	29	7.13	2320
B466534		5.28	0.071	10.80	7.53	154.5	440	1.12	0.29	2.05	4.18	37.4	15.1	29	6.96	2100
B466535		4.18	0.098	7.56	7.07	168.5	220	1.05	0.32	1.97	2.93	34.2	17.6	25	5.91	2580
B466536		6.40	0.092	2.27	7.40	141.0	660	1.14	0.20	2.43	1.60	37.1	18.1	25	5.28	2540
B466537		5.90	0.067	2.00	7.55	82.3	330	1.18	0.23	2.16	1.18	35.8	17.4	17	5.53	1750
B466538		6.00	0.089	3.05	7.15	120.0	930	1.02	0.18	2.31	1.97	31.1	10.3	15	5.93	2430
B466539		0.10	0.164	1.12	8.33	46.3	450	1.04	0.47	2.15	1.00	30.0	14.7	18	7.19	2170
B466540		0.08	0.006	0.02	7.00	2.5	840	1.00	0.02	1.63	0.02	25.0	3.8	23	0.38	24.6
B466541		5.60	0.092	3.28	7.92	124.5	790	1.30	0.15	2.24	1.25	34.9	15.3	70	7.05	2610
B466542		6.26	0.063	2.87	8.00	46.1	950	1.28	0.19	2.27	1.82	34.5	12.7	84	6.02	1800
B466543		6.24	0.080	2.95	7.60	87.3	420	1.35	0.15	2.50	3.28	33.4	14.3	34	7.82	2110
B466544		5.98	0.067	2.15	7.46	103.0	730	1.27	0.16	2.79	1.65	38.4	12.7	19	6.62	1735
B466545		6.32	0.046	1.11	7.92	35.9	900	1.34	0.20	2.45	0.93	40.0	11.2	48	5.10	1535
B466546		6.98	0.095	3.42	8.40	86.0	200	1.59	0.29	1.92	1.78	40.3	19.5	81	5.48	2760
B466547		3.10	0.064	2.25	8.16	40.6	710	1.34	0.27	1.73	1.17	41.5	15.0	81	4.03	2080
B466548		2.86	0.064	2.17	8.05	34.6	800	1.41	0.24	1.69	1.32	42.7	15.2	81	4.06	1995
B466549		2.88	0.113	2.04	7.71	79.1	430	1.17	0.25	1.70	1.36	34.7	18.4	77	3.71	3200
B466550		6.20	0.108	4.18	8.42	302	430	1.48	0.32	1.57	2.33	40.4	25.8	75	5.19	3250
B466551		6.40	0.069	3.05	7.54	88.9	280	1.32	0.34	1.73	2.63	38.9	15.6	81	4.73	2110
B466552		6.24	0.095	1.16	6.20	11.0	410	1.34	0.23	1.48	0.38	30.8	19.9	83	5.40	2910

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

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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
B466513		5.38	18.55	0.11	0.5	0.042	2.73	19.6	7.5	0.86	119	60.2	1.06	1.8	136.0	640
B466514		5.50	17.45	0.10	0.4	0.042	2.59	15.5	8.0	0.99	193	40.8	0.79	1.3	131.0	570
B466515		5.10	15.65	0.09	0.6	0.038	2.22	15.3	9.2	0.84	181	44.1	0.90	0.8	96.3	570
B466516		5.38	17.70	0.09	0.6	0.039	2.68	19.6	13.0	1.01	974	31.1	0.76	1.6	102.0	2120
B466517		4.73	20.0	0.12	0.5	0.050	2.85	22.9	19.2	1.08	708	53.0	1.06	1.4	106.5	1650
B466518		2.16	19.35	0.10	3.0	0.027	4.85	18.8	18.6	1.06	641	3.34	0.25	10.8	16.8	840
B466519		4.10	14.80	0.12	0.5	0.093	3.12	16.2	9.8	3.69	414	251	1.16	2.8	240	1070
B466520		2.56	13.35	0.10	1.9	0.022	1.87	14.0	2.8	0.39	606	4.20	3.27	5.8	14.4	380
B466521		1.99	16.60	0.20	2.7	0.017	4.87	16.4	21.3	0.97	584	0.89	0.14	9.3	7.7	820
B466522		1.25	15.60	0.17	2.6	0.012	3.22	11.6	18.6	0.70	964	2.62	0.07	12.1	4.6	420
B466523		4.28	16.30	0.20	2.7	0.046	2.48	26.2	18.4	1.79	1040	14.95	0.35	7.5	42.5	1350
B466524		4.42	15.75	0.24	1.2	0.067	2.08	22.1	19.2	2.02	1655	32.0	0.53	5.2	29.5	1480
B466525		4.11	16.60	0.22	0.7	0.095	1.83	17.5	21.7	1.40	908	25.9	0.44	3.8	22.7	1380
B466526		4.02	15.65	0.20	0.7	0.071	1.50	18.6	34.5	1.08	1100	13.55	0.06	4.6	20.3	1400
B466527		3.59	15.95	0.18	0.8	0.069	1.40	18.8	34.3	1.17	1025	25.3	0.05	5.3	17.8	1390
B466528		3.66	16.35	0.20	0.8	0.082	1.36	18.2	32.9	1.14	969	29.4	0.05	5.5	18.9	1420
B466529		4.61	15.80	0.20	0.8	0.082	1.89	18.0	29.0	1.08	496	29.8	0.06	4.3	21.7	1410
B466530		4.15	16.85	0.18	0.7	0.090	1.61	15.7	30.6	1.28	550	38.2	0.37	4.8	20.6	1310
B466531		4.07	15.85	0.21	0.8	0.081	1.66	19.0	28.6	1.20	1120	18.45	0.05	4.6	20.1	1380
B466532		4.12	15.90	0.17	0.6	0.094	1.97	15.9	25.1	1.12	1255	20.8	0.14	4.4	20.2	1300
B466533		3.94	15.40	0.17	0.6	0.129	1.88	15.2	24.5	1.22	1410	16.20	0.30	4.1	18.2	1300
B466534		4.10	15.35	0.17	0.6	0.224	2.29	17.8	22.4	1.01	2380	14.80	0.06	4.5	17.3	1310
B466535		4.74	14.15	0.18	0.5	0.217	2.36	15.9	17.2	0.95	2630	16.55	0.07	3.3	18.8	1280
B466536		3.85	15.05	0.19	0.6	0.107	2.12	17.6	23.0	1.08	1510	31.7	0.06	4.4	18.0	1250
B466537		3.90	14.35	0.19	0.7	0.084	2.44	16.8	20.7	0.97	1395	19.10	0.09	3.2	16.3	1160
B466538		3.11	14.25	0.17	0.6	0.125	2.57	14.5	19.8	0.99	2480	23.8	0.07	3.4	15.8	1010
B466539		4.42	16.95	0.19	0.2	0.097	2.41	14.2	29.5	0.92	928	260	1.53	5.7	11.2	720
B466540		2.46	12.15	0.17	1.8	0.016	1.80	12.6	2.6	0.38	599	3.75	3.16	5.5	13.2	360
B466541		3.59	16.60	0.22	0.6	0.103	2.71	15.4	20.0	1.14	2620	20.1	0.81	3.6	49.7	980
B466542		3.17	15.80	0.20	0.5	0.127	3.14	15.2	19.8	1.08	2970	20.2	0.47	3.2	52.5	920
B466543		3.59	15.55	0.22	0.6	0.098	2.32	15.7	21.8	1.11	3670	12.45	0.07	4.1	29.4	1120
B466544		3.62	16.15	0.19	1.0	0.080	2.12	18.0	24.0	1.14	2140	19.95	0.06	4.5	21.5	1300
B466545		3.57	16.30	0.21	0.8	0.069	2.90	19.2	16.2	1.10	1420	13.90	0.59	3.4	32.9	1020
B466546		5.50	18.30	0.24	0.3	0.109	3.66	20.6	16.4	1.00	2770	16.70	0.54	3.1	74.8	800
B466547		4.30	14.95	0.23	0.3	0.077	3.51	21.1	13.0	1.03	1440	22.0	0.98	3.2	62.4	950
B466548		3.91	15.20	0.20	0.4	0.086	3.44	22.1	13.1	1.06	1355	22.9	1.00	3.4	59.0	970
B466549		4.22	13.70	0.19	0.4	0.092	3.32	16.4	10.0	0.94	1285	16.90	1.21	2.2	62.1	640
B466550		4.27	17.45	0.23	0.4	0.144	4.15	19.3	13.4	0.95	2900	16.15	0.44	2.2	85.9	540
B466551		4.06	15.80	0.24	0.3	0.105	3.09	18.2	15.2	0.99	1970	36.6	0.52	2.1	54.2	650
B466552		4.58	13.40	0.22	0.4	0.108	1.89	14.4	8.3	1.08	533	12.05	1.56	3.6	59.2	470

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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
B466513		5.1	76.7	0.279	5.28	0.35	19.1	5	2.2	220	0.11	0.30	3.30	0.152	1.20	1.0
B466514		18.0	74.3	0.233	5.30	0.29	18.2	5	2.6	221	0.08	0.26	2.72	0.127	1.13	0.9
B466515		7.1	69.8	0.285	5.54	0.43	15.9	4	2.4	278	0.05	0.20	2.43	0.084	0.99	0.7
B466516		33.6	91.6	0.194	4.24	45.1	18.4	4	1.8	244	0.12	0.24	3.73	0.133	1.32	1.5
B466517		17.3	104.0	0.401	3.30	1.33	22.5	3	1.6	395	0.10	0.32	3.51	0.154	1.50	1.2
B466518		40.0	170.5	0.018	0.36	2.25	5.5	1	0.8	382	0.88	<0.05	8.17	0.218	3.46	3.4
B466519		21.3	88.5	0.288	2.38	7.06	12.6	3	1.4	280	0.20	1.34	2.51	0.330	1.24	0.9
B466520		2.9	48.3	0.003	0.01	0.30	6.2	1	1.7	201	0.40	<0.05	2.74	0.176	0.17	1.2
B466521		32.5	199.0	<0.002	0.19	3.40	4.4	<1	0.6	296	0.77	<0.05	7.29	0.205	3.61	1.5
B466522		45.3	142.0	<0.002	0.34	2.66	2.7	<1	0.7	349	1.12	<0.05	11.85	0.100	2.13	7.0
B466523		32.1	87.3	0.099	2.15	2.91	13.6	1	1.4	1025	0.49	0.12	6.58	0.327	1.25	3.1
B466524		71.8	95.6	0.155	1.89	2.76	12.8	2	1.3	207	0.30	0.20	4.07	0.311	1.26	1.0
B466525		32.7	71.1	0.118	2.80	0.85	11.8	3	1.5	219	0.26	0.22	3.80	0.235	1.09	0.9
B466526		33.3	54.8	0.064	2.65	3.26	11.4	2	1.5	390	0.31	0.18	3.70	0.268	0.83	1.3
B466527		41.7	49.1	0.111	1.79	2.14	11.8	2	1.2	292	0.36	0.18	3.64	0.288	0.90	1.1
B466528		40.8	52.6	0.144	1.91	2.01	12.0	2	1.2	259	0.37	0.22	3.53	0.292	0.90	1.1
B466529		18.4	56.6	0.167	3.35	1.87	11.6	3	1.7	308	0.29	0.26	3.70	0.262	0.89	1.0
B466530		12.3	52.9	0.153	2.45	1.07	12.0	2	1.4	183.0	0.33	0.16	3.60	0.281	0.92	0.9
B466531		19.2	68.2	0.085	2.08	4.40	10.9	2	1.4	222	0.29	0.18	3.81	0.260	1.17	1.0
B466532		40.9	75.1	0.072	2.71	5.14	10.2	3	1.5	262	0.27	0.23	3.73	0.238	1.16	0.8
B466533		47.0	69.4	0.073	2.22	2.13	10.4	1	1.5	197.0	0.27	0.19	3.61	0.234	1.04	0.8
B466534		370	96.4	0.065	2.53	9.35	10.8	2	1.7	320	0.29	0.18	3.72	0.242	1.21	1.0
B466535		163.0	91.3	0.085	3.63	11.95	9.2	2	1.9	328	0.21	0.24	3.59	0.195	1.20	0.9
B466536		80.4	81.0	0.153	2.57	7.07	9.7	2	1.8	289	0.28	0.21	3.95	0.219	1.07	0.9
B466537		96.5	81.5	0.084	3.05	4.10	8.4	2	1.8	306	0.21	0.24	3.77	0.179	1.08	0.9
B466538		100.5	85.2	0.110	1.70	12.40	7.3	1	1.3	303	0.21	0.23	3.55	0.178	1.26	0.8
B466539		41.7	78.7	0.238	1.53	1.95	11.1	2	1.6	280	0.39	0.38	4.39	0.269	0.85	0.9
B466540		2.6	45.0	<0.002	0.01	0.28	5.9	<1	1.5	193.0	0.38	<0.05	2.69	0.174	0.16	1.2
B466541		85.1	85.5	0.087	1.76	5.72	14.1	1	1.2	301	0.24	0.22	4.68	0.225	1.30	0.7
B466542		118.0	82.7	0.084	1.92	8.19	16.9	1	1.3	355	0.20	0.18	5.42	0.221	1.24	0.7
B466543		116.0	105.5	0.052	1.77	9.26	11.6	2	1.3	405	0.26	0.23	3.92	0.223	1.26	0.8
B466544		175.0	71.1	0.080	2.12	11.45	9.3	2	1.2	353	0.30	0.22	4.43	0.213	1.12	1.2
B466545		84.5	74.8	0.057	2.61	6.57	12.1	2	1.2	387	0.25	0.25	5.40	0.207	1.15	1.1
B466546		135.0	97.3	0.076	4.39	10.15	19.6	3	2.1	452	0.21	0.42	5.79	0.205	1.25	1.0
B466547		112.5	86.5	0.106	3.40	5.03	18.2	2	1.6	438	0.21	0.35	5.80	0.201	1.16	0.8
B466548		84.4	85.4	0.108	2.91	4.85	18.0	2	1.5	382	0.22	0.30	5.98	0.208	1.20	0.8
B466549		85.0	75.7	0.089	3.24	4.29	14.7	3	1.4	426	0.16	0.35	5.57	0.176	1.13	0.7
B466550		143.0	105.5	0.078	3.29	9.96	18.0	3	1.8	351	0.14	0.54	5.55	0.176	1.45	0.9
B466551		152.0	88.1	0.136	3.18	9.25	14.2	2	2.1	525	0.14	0.54	4.11	0.172	1.22	0.6
B466552		23.1	78.9	0.050	2.98	0.57	8.8	3	1.6	347	0.21	0.48	3.66	0.195	1.05	0.4

***** 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: 28-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21340601

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
B466513		154	0.3	8.4	19	16.0
B466514		143	0.3	6.7	30	14.3
B466515		120	0.2	7.3	23	19.6
B466516		144	0.5	14.3	159	21.9
B466517		169	0.4	11.6	116	18.8
B466518		52	1.0	9.4	159	90.6
B466519		131	18.7	10.8	190	15.0
B466520		31	0.6	17.2	28	57.6
B466521		47	0.9	8.7	169	77.3
B466522		23	1.1	8.5	166	57.1
B466523		110	0.6	14.2	152	93.1
B466524		111	0.4	13.6	308	48.3
B466525		106	0.2	11.4	113	22.3
B466526		99	0.4	11.6	135	23.2
B466527		104	0.5	11.6	134	26.7
B466528		104	0.6	11.9	130	27.1
B466529		104	1.1	10.8	72	27.1
B466530		108	0.3	10.8	68	25.3
B466531		96	0.6	11.7	114	21.0
B466532		91	1.1	10.4	161	19.0
B466533		93	0.5	10.8	201	21.0
B466534		93	3.0	11.8	703	19.4
B466535		84	1.9	10.4	516	16.2
B466536		83	0.8	10.8	254	19.6
B466537		74	0.8	10.4	199	23.1
B466538		68	0.7	9.3	355	20.0
B466539		105	3.8	12.4	240	4.7
B466540		30	0.6	17.2	28	54.1
B466541		112	0.5	10.0	234	19.7
B466542		129	0.5	10.0	326	17.0
B466543		94	0.9	10.6	590	17.9
B466544		84	0.8	11.0	288	28.9
B466545		105	0.5	7.9	179	22.6
B466546		150	0.7	8.1	314	11.0
B466547		137	0.4	8.7	214	10.6
B466548		134	0.4	9.0	249	10.4
B466549		122	0.3	6.0	261	10.5
B466550		135	0.4	6.6	402	11.0
B466551		105	0.5	6.9	404	8.8
B466552		75	0.2	7.6	87	9.7

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

Finalized Date: 28-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21340601

Sample Description	Method / Analyte / Units / LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	ME-MS61 Ag ppm 0.01	ME-MS61 Al % 0.01	ME-MS61 As ppm 0.2	ME-MS61 Ba ppm 10	ME-MS61 Be ppm 0.05	ME-MS61 Bi ppm 0.01	ME-MS61 Ca % 0.01	ME-MS61 Cd ppm 0.02	ME-MS61 Ce ppm 0.01	ME-MS61 Co ppm 0.1	ME-MS61 Cr ppm 1	ME-MS61 Cs ppm 0.05	ME-MS61 Cu ppm 0.2
B466553		6.50	0.090	5.16	6.34	60.5	390	1.20	0.21	2.16	1.33	30.0	14.5	91	5.02	3000
B466554		6.44	0.156	2.70	5.67	25.0	290	1.13	0.20	1.86	1.06	25.4	19.4	92	4.89	4460
B466555		6.58	0.095	6.08	5.61	68.3	600	1.04	0.21	2.04	13.10	27.0	15.4	58	6.21	2430
B466556		6.68	0.023	1.25	7.36	25.0	1120	1.24	0.16	2.92	1.25	33.5	13.2	12	9.48	547
B466557		6.26	0.017	0.67	7.19	7.2	1170	1.07	0.09	3.08	0.69	29.5	9.2	14	7.04	511
B466558		6.52	0.018	0.49	7.26	3.3	960	1.02	0.15	3.17	0.44	28.6	8.7	13	6.50	541
B466559		0.06	<0.001	0.03	7.21	3.2	860	0.96	0.02	1.67	0.02	27.2	3.8	24	0.38	26.8
B466560		6.38	0.015	0.28	7.51	10.6	540	1.14	0.12	3.08	0.14	37.9	10.7	13	7.35	640
B466561		0.10	0.025	2.37	6.70	30.3	710	1.04	1.67	1.84	0.89	35.0	33.5	225	3.17	3480
B466562		6.34	0.017	0.37	7.58	33.9	970	1.19	0.13	2.84	0.18	36.2	11.0	14	6.33	632
B466563		5.88	0.014	0.23	7.40	3.2	660	1.02	0.13	3.24	0.10	33.0	11.2	15	5.50	527
B466564		6.06	0.013	0.32	7.45	3.7	1150	1.12	0.08	3.00	0.17	36.5	9.0	17	5.19	514
B466565		6.58	0.118	1.11	7.71	8.8	1480	1.18	0.17	1.37	0.18	43.3	9.6	93	3.79	3700
B466566		5.84	0.140	1.31	7.03	24.3	1230	0.94	0.26	2.22	0.21	34.9	12.5	81	4.44	3810
B466567		2.88	0.146	1.38	6.19	2.8	720	0.93	0.25	1.45	0.28	26.5	12.7	88	4.04	4210
B466568		2.82	0.138	1.38	6.05	3.5	680	0.88	0.27	1.55	0.67	24.4	12.8	90	4.03	3870
B466569		2.86	0.152	1.66	6.86	7.0	320	0.84	0.38	1.71	0.16	35.0	17.3	82	4.30	5140
B466570		6.86	0.366	14.35	6.10	239	220	0.90	0.94	1.54	59.8	33.7	12.6	65	6.90	3870
B466571		5.90	0.130	2.63	6.52	148.5	640	0.94	0.27	3.03	0.95	21.7	13.5	54	5.85	4330
B466572		6.56	0.163	3.89	7.26	124.0	640	0.90	0.23	3.03	1.13	24.1	13.7	38	5.51	5220
B466573		5.88	0.130	3.77	6.97	103.5	670	0.88	0.24	2.47	1.31	30.3	14.0	64	6.49	4040
B466574		6.28	0.126	2.53	7.43	40.0	840	1.06	0.21	2.17	0.67	30.4	14.0	85	4.89	4410
B466575		6.00	0.192	3.95	6.26	536	510	1.00	0.43	2.26	2.66	24.8	14.9	69	7.16	5270
B466576		6.66	0.184	2.70	6.91	83.4	630	0.94	0.25	2.20	0.96	32.7	15.2	80	5.29	5030
B466577		5.92	0.195	6.17	6.98	136.5	550	1.10	0.47	1.84	6.28	28.9	14.7	64	7.89	4330
B466578		6.42	0.205	4.84	6.29	218	550	0.98	0.28	1.94	2.22	23.7	11.4	76	7.38	4470
B466579		0.10	0.182	1.13	8.60	52.4	450	1.08	0.51	2.20	1.10	34.5	14.6	18	7.50	2140
B466580		0.10	<0.001	0.02	7.26	3.0	870	0.96	0.03	1.69	0.03	26.9	3.6	24	0.36	27.6
B466581		5.64	0.114	2.02	6.98	21.0	650	0.95	0.32	2.50	0.42	30.0	13.0	53	6.87	3050
B466582		6.36	0.145	4.91	7.14	97.7	1090	1.13	0.84	1.70	1.97	34.9	11.0	80	6.61	3830
B466583		6.48	0.015	0.45	6.70	10.8	670	1.72	0.18	1.69	2.13	24.7	2.6	10	7.32	33.5
B466584		5.42	0.008	0.25	6.53	7.2	630	1.78	0.13	1.79	1.72	25.8	2.2	9	6.20	18.4
B466585		6.16	0.003	0.17	6.34	6.6	730	1.52	0.15	1.15	1.41	23.3	1.3	8	5.72	14.7
B466586		5.96	0.061	0.65	6.67	7.2	610	1.54	0.16	1.59	4.66	25.0	4.0	10	6.99	12.2
B466587		3.08	0.016	0.36	6.58	6.9	460	1.46	0.29	1.50	0.59	23.8	1.7	8	5.45	5.8
B466588		2.76	0.027	0.57	6.59	5.8	500	1.46	0.30	1.53	0.84	24.0	1.6	8	5.37	6.3
B466589		2.94	0.040	0.90	5.69	6.4	820	1.62	0.30	2.32	3.45	14.70	1.6	9	5.39	10.8
B466590		5.74	0.049	0.93	5.83	6.3	580	1.68	0.30	2.22	2.15	17.35	1.5	8	4.92	5.2
B466591		6.14	0.063	0.71	5.75	6.5	540	1.68	0.23	1.82	1.79	16.40	1.5	7	5.29	6.0
B466592		6.40	0.031	5.09	5.98	6.5	570	1.65	0.29	1.81	2.39	17.15	1.5	8	5.39	9.2

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

Finalized Date: 28-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21340601

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
B466553		4.03	13.70	0.22	0.4	0.113	1.75	14.6	17.0	0.93	1535	11.75	0.95	2.4	46.4	590
B466554		5.00	15.10	0.21	0.3	0.145	1.77	12.2	9.2	1.12	1130	5.86	1.24	4.7	50.1	520
B466555		4.60	12.60	0.20	0.6	0.181	2.07	13.2	13.6	0.81	16000	10.05	0.45	3.8	32.4	670
B466556		3.90	17.05	0.21	1.3	0.058	3.06	14.9	17.6	0.99	2530	6.51	0.50	5.6	10.1	1300
B466557		3.59	17.80	0.21	1.2	0.034	2.44	12.2	8.8	0.91	1440	6.80	2.03	5.9	11.6	1320
B466558		3.56	17.40	0.20	1.2	0.031	1.96	12.3	11.6	0.88	568	17.70	2.25	5.2	8.7	1320
B466559		2.53	13.10	0.20	1.9	0.023	1.86	13.2	2.7	0.39	607	3.88	3.28	5.8	14.0	380
B466560		3.73	18.20	0.21	1.2	0.032	2.11	16.6	12.6	0.92	307	4.62	2.17	5.4	9.1	1410
B466561		4.04	14.50	0.23	0.5	0.087	3.00	15.4	9.2	3.54	390	240	1.12	2.6	233	1040
B466562		3.67	18.35	0.21	1.2	0.039	2.10	15.7	26.8	0.89	428	7.04	1.69	5.6	10.1	1420
B466563		3.77	17.70	0.20	1.2	0.038	1.92	14.2	8.8	0.92	212	5.00	2.45	5.1	10.6	1340
B466564		3.65	19.15	0.22	1.4	0.037	2.17	15.6	8.9	0.97	332	6.66	2.48	6.3	10.8	1350
B466565		3.28	16.75	0.23	0.4	0.158	3.72	20.8	8.2	1.07	314	21.6	2.00	5.0	43.5	660
B466566		3.97	17.50	0.21	0.4	0.180	3.86	16.2	17.2	1.01	666	9.86	0.29	4.7	42.1	540
B466567		4.02	15.00	0.20	0.2	0.202	2.92	12.4	12.0	1.08	360	10.40	0.90	5.3	44.5	450
B466568		4.02	14.25	0.19	0.2	0.182	2.82	11.4	12.0	1.13	389	12.35	0.84	5.3	44.6	440
B466569		4.75	16.00	0.22	0.4	0.217	3.33	16.2	11.5	1.03	456	21.7	0.79	4.4	41.5	620
B466570		4.68	14.70	0.20	0.3	0.412	2.41	15.0	19.4	0.78	4530	10.50	0.06	4.4	41.1	540
B466571		4.25	16.35	0.20	0.3	0.197	1.76	10.2	26.0	1.13	2730	7.61	0.03	5.3	35.5	760
B466572		4.47	16.45	0.18	0.4	0.221	2.27	10.5	23.4	1.18	2560	39.6	0.06	5.6	28.9	1160
B466573		4.25	15.90	0.18	0.5	0.143	3.09	14.3	21.8	1.11	3320	20.8	0.12	5.9	36.0	850
B466574		4.96	18.00	0.20	0.4	0.168	3.00	14.4	20.6	1.22	1265	5.16	0.62	6.0	46.0	710
B466575		5.03	15.60	0.19	0.3	0.230	2.38	11.6	22.6	0.99	2330	8.86	0.06	4.9	39.3	660
B466576		4.77	15.45	0.19	0.4	0.160	3.17	15.3	18.4	1.05	1265	9.34	0.17	5.2	40.3	690
B466577		4.92	18.60	0.20	0.7	0.247	2.68	13.4	19.0	1.08	3120	6.98	0.13	6.7	35.5	810
B466578		4.73	16.45	0.17	0.4	0.189	2.35	11.1	19.7	0.99	3570	10.50	0.06	5.3	34.4	670
B466579		4.51	18.65	0.21	0.2	0.104	2.47	16.0	30.4	0.95	943	263	1.56	5.8	11.9	750
B466580		2.56	12.55	0.19	1.9	0.020	1.87	13.2	2.5	0.40	611	3.73	3.28	5.5	12.8	380
B466581		5.81	18.35	0.21	0.6	0.158	2.52	13.4	19.6	1.18	2080	21.4	0.24	6.3	30.1	1220
B466582		3.59	15.35	0.20	0.7	0.242	3.77	16.3	22.6	0.85	5830	20.1	0.49	6.0	36.2	510
B466583		1.39	16.65	0.18	2.8	0.014	3.47	11.3	14.0	0.48	2300	1.24	0.04	13.5	3.6	480
B466584		1.23	17.60	0.19	2.8	0.014	3.42	12.5	9.2	0.50	1765	1.41	0.03	14.4	3.1	350
B466585		1.02	16.45	0.18	2.6	0.009	3.03	11.6	13.0	0.38	1290	1.16	0.02	13.4	2.2	300
B466586		1.74	17.00	0.17	2.8	0.025	3.64	10.8	44.8	0.47	1480	1.56	0.04	13.1	3.9	750
B466587		1.11	16.35	0.17	2.9	0.012	3.84	11.0	12.8	0.41	1390	1.60	0.04	14.3	2.6	330
B466588		1.09	16.40	0.18	2.8	0.012	3.78	11.0	12.2	0.41	1410	1.61	0.04	14.1	2.6	330
B466589		1.03	16.25	0.16	2.7	0.009	3.51	6.4	10.3	0.33	1295	1.66	0.02	13.5	2.6	230
B466590		0.96	15.60	0.17	2.6	0.009	3.83	7.7	11.0	0.33	1450	2.27	0.04	13.4	2.2	260
B466591		0.95	16.40	0.17	2.7	0.010	3.85	7.1	10.6	0.28	1165	1.13	0.04	14.0	2.2	260
B466592		1.03	16.65	0.19	2.9	0.013	4.05	7.4	11.0	0.31	1425	2.51	0.04	14.0	2.6	300

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CERTIFICATE OF ANALYSIS VA21340601

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
B466553		91.4	74.2	0.055	2.97	15.30	11.1	2	1.6	431	0.16	0.53	3.93	0.161	0.95	0.5
B466554		69.3	82.8	0.018	3.50	4.66	10.3	3	1.7	333	0.27	0.48	3.45	0.206	1.04	0.4
B466555		310	93.8	0.050	2.40	52.4	8.0	2	1.1	362	0.25	0.26	3.52	0.177	1.12	0.7
B466556		49.8	107.5	0.029	2.15	3.02	7.2	1	0.9	597	0.40	0.21	4.57	0.221	1.65	1.4
B466557		31.8	67.1	0.014	1.60	2.41	6.7	1	0.8	840	0.42	0.18	4.31	0.230	1.17	1.2
B466558		24.7	56.3	0.055	2.32	0.67	6.5	1	0.8	804	0.39	0.25	4.46	0.215	0.95	1.2
B466559		3.3	46.3	<0.002	0.01	0.35	6.2	<1	1.6	200	0.40	<0.05	3.06	0.178	0.19	1.3
B466560		9.8	62.5	0.010	2.79	0.81	7.6	2	0.9	902	0.37	0.22	4.78	0.227	0.92	1.3
B466561		20.4	84.7	0.261	2.31	6.82	12.2	4	1.3	269	0.19	1.30	2.78	0.318	1.17	0.9
B466562		9.4	60.5	0.014	2.36	2.25	7.5	2	1.0	803	0.38	0.16	4.79	0.237	0.93	1.4
B466563		8.9	55.2	0.007	2.80	0.41	7.2	2	1.0	766	0.35	0.21	4.53	0.229	0.84	1.3
B466564		16.0	60.1	0.015	1.28	0.51	7.6	1	0.9	755	0.42	0.11	4.67	0.242	0.92	1.6
B466565		16.8	92.5	0.070	1.35	0.67	15.4	1	1.3	488	0.31	0.28	6.63	0.255	1.18	0.7
B466566		17.5	86.5	0.034	1.72	2.33	14.0	3	1.1	235	0.31	0.38	5.87	0.233	1.14	0.7
B466567		18.6	85.6	0.044	2.11	0.63	12.2	3	1.4	180.5	0.30	0.35	4.44	0.210	1.05	0.3
B466568		31.8	82.3	0.051	2.10	0.69	11.8	3	1.4	171.0	0.29	0.33	4.02	0.210	0.98	0.3
B466569		16.5	86.3	0.090	3.06	1.47	12.6	3	1.6	228	0.29	0.51	6.14	0.217	1.18	0.6
B466570		1545	107.0	0.034	3.28	68.9	10.9	3	1.6	510	0.27	0.50	4.87	0.193	1.28	0.7
B466571		353	88.2	0.023	2.23	9.07	10.0	3	1.0	194.0	0.35	0.36	4.85	0.218	1.01	0.5
B466572		36.1	92.5	0.228	2.45	9.29	8.8	3	0.9	171.0	0.39	0.39	4.98	0.228	1.15	0.5
B466573		51.9	110.0	0.099	2.27	6.97	11.4	3	1.0	339	0.38	0.29	5.51	0.255	1.31	0.7
B466574		25.5	94.3	0.018	2.34	5.68	13.6	3	1.4	196.0	0.38	0.42	5.99	0.275	1.11	0.7
B466575		111.0	106.5	0.045	2.91	126.0	10.6	3	1.5	218	0.33	0.38	4.74	0.218	1.29	0.7
B466576		61.8	101.0	0.036	2.70	8.05	13.1	4	1.3	323	0.32	0.36	5.67	0.236	1.28	0.6
B466577		211	115.0	0.027	2.80	39.7	12.2	3	1.8	209	0.39	0.53	5.32	0.259	1.36	0.7
B466578		109.5	117.0	0.049	1.90	24.3	10.6	3	1.0	293	0.34	0.33	5.25	0.218	1.39	0.6
B466579		41.3	84.7	0.247	1.55	2.03	11.8	4	1.6	287	0.41	0.40	4.60	0.272	0.86	1.1
B466580		3.0	44.8	0.002	0.01	0.30	5.9	1	1.6	197.0	0.40	<0.05	3.08	0.181	0.19	1.3
B466581		21.4	106.5	0.116	2.20	1.11	9.4	2	1.1	189.0	0.42	0.41	5.57	0.244	1.31	0.7
B466582		117.5	116.0	0.077	1.71	35.8	12.2	2	1.3	304	0.46	0.32	7.94	0.235	1.55	1.7
B466583		159.0	139.5	0.002	0.06	4.23	3.3	1	0.7	331	1.30	<0.05	14.55	0.123	2.25	8.5
B466584		219	164.0	<0.002	0.05	1.48	2.6	1	0.7	305	1.35	<0.05	15.40	0.077	2.14	7.0
B466585		215	145.5	0.002	0.05	3.25	1.9	<1	0.7	235	1.36	<0.05	16.05	0.067	1.88	7.5
B466586		177.0	128.5	0.002	0.08	3.72	5.0	1	0.7	937	1.26	<0.05	12.20	0.190	2.22	8.0
B466587		143.0	150.0	0.002	0.03	1.70	2.1	<1	0.7	264	1.46	<0.05	16.10	0.071	2.40	9.3
B466588		161.0	147.5	<0.002	0.04	1.76	2.1	1	0.7	264	1.46	<0.05	15.90	0.071	2.39	8.6
B466589		215	141.0	<0.002	0.06	1.45	1.9	1	0.7	157.5	1.37	<0.05	12.90	0.067	2.23	7.2
B466590		161.0	146.5	<0.002	0.04	1.92	1.9	1	0.6	226	1.35	<0.05	13.20	0.066	2.25	8.7
B466591		164.0	151.0	<0.002	0.04	1.96	1.9	<1	0.6	210	1.39	<0.05	12.50	0.067	2.33	8.0
B466592		220	156.5	0.004	0.05	1.66	1.9	1	0.6	290	1.47	<0.05	12.50	0.069	2.44	8.7

***** 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: 28-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21340601

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
B466553		96	0.3	10.8	208	10.9
B466554		100	0.3	8.2	203	9.6
B466555		79	2.3	7.8	2120	15.0
B466556		75	0.7	9.3	287	33.9
B466557		75	0.2	8.5	153	35.3
B466558		74	0.2	8.2	105	32.3
B466559		31	0.6	16.3	29	58.7
B466560		80	0.2	9.6	41	36.3
B466561		126	18.9	10.2	180	13.8
B466562		80	0.2	9.5	54	36.6
B466563		79	0.2	9.3	40	35.7
B466564		80	0.1	9.3	61	41.2
B466565		116	0.3	8.7	56	13.2
B466566		110	0.4	8.0	74	11.9
B466567		92	0.3	6.9	92	7.7
B466568		91	0.3	6.3	180	7.0
B466569		101	0.3	8.0	59	11.2
B466570		89	1.7	7.0	8060	10.5
B466571		81	2.1	7.9	203	10.4
B466572		79	1.1	10.8	231	11.2
B466573		93	0.8	7.7	275	15.0
B466574		108	0.7	9.3	156	11.6
B466575		93	1.3	6.7	519	10.8
B466576		106	0.5	6.8	225	11.1
B466577		101	2.0	8.7	1060	15.0
B466578		91	1.6	7.2	438	11.6
B466579		106	4.0	12.2	246	4.8
B466580		31	0.6	15.8	29	55.3
B466581		99	1.7	10.7	134	16.9
B466582		93	1.7	7.3	403	17.2
B466583		26	1.4	8.2	463	63.6
B466584		16	1.4	9.1	393	61.0
B466585		13	1.5	6.7	330	52.5
B466586		46	1.7	7.4	799	62.5
B466587		13	1.5	7.4	246	54.5
B466588		13	1.5	7.2	291	52.3
B466589		13	1.4	6.7	681	51.1
B466590		12	1.3	6.7	442	50.8
B466591		12	1.4	6.1	400	55.4
B466592		13	1.6	6.2	487	54.5

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

Finalized Date: 28-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21340601

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
B466593		6.54	0.006	0.52	6.19	3.7	550	1.55	0.16	1.84	1.47	20.3	1.5	6	5.79	3.4
B466594		6.12	0.031	2.27	5.94	6.3	630	1.42	0.22	1.93	4.78	17.60	1.7	6	5.36	4.4
B466595		6.22	0.033	1.47	6.44	4.4	510	1.55	0.17	1.67	4.59	22.0	1.7	6	5.81	3.6
B466596		6.04	0.002	0.23	6.44	7.5	800	1.77	0.14	1.72	0.96	22.0	1.5	7	5.89	13.8
B466597		6.06	0.004	0.96	6.54	5.8	510	1.82	0.17	1.43	5.25	21.8	1.4	6	6.35	12.2
B466598		5.56	0.001	0.47	6.51	6.0	710	1.93	0.15	1.69	1.90	21.9	1.4	7	6.25	13.8
B466599		0.10	0.022	2.18	6.61	29.2	710	1.07	1.63	1.90	0.94	31.9	32.6	237	3.15	3540
B466600		0.08	<0.001	0.03	6.89	2.2	830	0.99	0.02	1.64	<0.02	24.5	3.5	25	0.35	24.2
B466601		6.62	0.023	0.19	6.18	5.8	670	1.91	0.11	1.86	2.10	21.2	1.3	6	5.90	4.1
B466602		6.26	0.016	0.16	6.58	9.4	600	1.59	0.08	1.83	3.05	21.5	1.5	5	6.02	2.0
B466603		6.46	0.003	0.22	6.10	3.7	490	1.57	0.09	1.98	1.70	18.60	1.5	6	5.10	1.9
B466604		6.28	0.005	0.29	6.14	16.3	590	1.76	0.15	2.01	1.70	17.55	1.4	6	5.70	2.3
B466605		6.28	0.100	2.23	7.00	59.1	680	1.85	0.39	1.70	4.94	25.1	2.0	7	6.58	246
B466606		5.78	0.053	0.31	6.65	5.3	620	1.91	0.42	1.38	3.33	21.7	1.4	6	6.66	4.9
B466607		3.08	0.400	4.73	6.70	294	760	1.59	0.38	2.15	2.81	23.6	6.9	10	6.30	2220
B466608		3.08	0.139	4.53	6.73	298	720	1.49	0.44	2.08	2.29	23.1	8.3	12	6.53	2480
B466609		3.34	0.295	6.35	6.44	64.2	540	1.08	0.55	2.02	1.03	16.35	13.8	27	6.21	6640
B466610		6.90	0.193	6.99	6.38	50.9	400	1.02	0.43	2.39	1.97	18.60	13.9	30	7.06	6530
B466611		6.74	0.222	7.76	5.70	158.5	500	0.91	0.74	1.47	3.32	12.10	11.3	63	5.27	5960
B466612		7.12	0.140	8.02	6.72	1130	650	1.15	0.56	1.93	4.90	26.0	14.3	47	7.16	4490
B466613		6.14	0.189	9.21	6.01	1290	610	1.03	0.72	1.65	4.49	15.90	13.8	67	5.85	6600
B466614		6.70	0.138	6.80	6.86	1235	450	1.14	0.33	2.23	4.21	25.8	12.3	68	7.47	5170
B466615		6.46	0.099	5.14	6.57	962	700	1.46	0.47	1.69	4.42	23.6	9.1	21	13.35	3340
B466616		6.06	0.070	5.36	6.58	745	630	1.28	0.65	1.91	3.77	24.3	8.4	9	9.88	2340
B466617		6.10	0.057	1.44	7.32	226	1070	1.76	0.27	2.19	1.00	24.3	8.4	9	6.81	1440
B466618		5.50	0.045	0.62	7.95	117.5	1070	1.92	0.08	2.59	0.25	26.6	10.0	12	7.80	1690
B466619		0.08	0.173	1.17	8.43	49.5	450	1.19	0.53	2.28	1.11	31.1	14.4	19	7.70	2180
B466620		0.08	<0.001	0.02	7.12	2.4	860	1.16	0.03	1.73	0.02	26.1	3.8	25	0.40	26.2
B466621		6.26	0.056	1.01	7.59	28.2	990	1.31	0.18	2.29	0.69	26.9	9.7	12	4.55	1940
B466622		6.38	0.053	0.86	7.44	40.3	1020	1.34	0.14	2.49	0.34	26.1	7.6	11	4.86	1520
B466623		6.26	0.057	1.28	7.48	241	930	1.69	0.21	2.35	1.39	25.7	9.3	11	6.07	1960
B466624		6.16	0.082	1.88	7.33	328	970	1.65	0.34	2.27	2.74	26.5	10.8	11	6.20	2100
B466625		6.86	0.053	3.62	7.35	250	970	1.58	0.78	2.67	3.01	27.7	9.2	11	6.82	1905
B466626		6.78	0.065	9.99	7.64	363	860	1.67	0.73	2.60	5.60	27.4	7.3	10	8.55	1300
B466627		2.88	0.081	7.88	6.87	95.7	940	1.78	0.67	1.24	17.45	24.5	4.6	7	6.74	320
B466628		2.86	0.058	6.46	6.12	94.7	1850	1.59	0.54	2.01	17.65	18.95	4.3	8	6.12	290
B466629		3.40	0.002	0.26	6.55	7.6	900	1.85	0.16	1.55	3.00	23.2	1.4	6	6.43	14.5
B466630		6.54	0.053	1.02	5.95	8.3	1090	1.51	0.48	1.92	12.80	20.7	1.6	6	4.52	8.3
B466631		6.16	0.081	0.52	6.03	9.0	1290	1.51	0.44	2.16	14.60	23.2	1.7	6	5.11	6.2
B466632		6.54	0.018	0.36	6.14	9.6	1110	1.54	0.31	1.62	5.72	24.0	1.5	6	5.81	6.8

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VANCOUVER BC V6E 4K2

Finalized Date: 28-JAN-2022
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Project: Poplar

CERTIFICATE OF ANALYSIS VA21340601

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
B466593		0.93	17.40	0.07	2.5	0.011	3.81	9.4	5.9	0.27	1350	1.12	0.04	12.6	2.2	300
B466594		0.92	17.40	0.06	2.6	0.013	3.17	7.9	6.1	0.28	1700	1.19	0.03	12.8	3.7	270
B466595		1.02	17.10	0.10	2.6	0.015	3.07	10.0	6.2	0.33	1995	1.26	0.03	12.3	4.3	290
B466596		1.11	17.40	0.08	2.6	0.008	2.97	10.5	9.8	0.45	1735	1.36	0.03	13.0	2.3	320
B466597		1.09	17.45	0.08	2.7	0.010	2.94	10.4	14.5	0.39	2500	0.88	0.04	13.0	2.4	270
B466598		1.14	17.60	0.08	2.6	0.010	2.85	10.4	12.7	0.45	3300	1.14	0.04	12.7	2.5	270
B466599		4.01	15.30	0.11	0.5	0.094	3.02	14.5	9.5	3.62	402	237	1.15	2.7	236	1010
B466600		2.44	12.75	0.06	1.7	0.017	1.83	11.8	2.4	0.39	590	3.96	3.19	5.2	13.1	350
B466601		1.12	17.20	0.07	2.5	0.009	2.70	10.5	10.2	0.58	2330	1.04	0.03	12.9	2.5	260
B466602		0.99	16.95	0.08	2.5	0.009	3.05	10.2	6.6	0.47	1680	0.71	0.03	12.4	2.2	270
B466603		0.91	16.40	0.10	2.5	0.008	3.60	8.4	5.7	0.32	1405	0.95	0.04	12.3	2.1	270
B466604		0.89	17.40	0.11	2.5	0.008	3.65	8.2	6.7	0.27	1310	1.14	0.04	12.9	2.1	290
B466605		1.25	19.20	0.10	2.4	0.038	3.72	12.0	12.1	0.48	2800	17.65	0.05	13.2	3.1	410
B466606		0.92	19.65	0.10	3.1	0.009	4.41	9.4	15.1	0.34	2620	1.79	0.07	15.9	2.4	320
B466607		2.90	18.30	0.10	1.5	0.076	3.39	11.0	16.4	0.68	2830	1.58	0.11	9.2	7.2	650
B466608		3.24	18.15	0.09	1.4	0.080	3.39	10.9	19.3	0.70	2700	1.69	0.11	9.1	8.6	710
B466609		5.62	19.85	0.11	0.5	0.186	2.48	7.5	32.6	1.15	1740	2.73	0.47	6.1	19.1	910
B466610		5.62	18.70	0.08	0.5	0.194	2.54	8.4	25.2	1.24	2840	4.45	0.09	5.8	19.9	1070
B466611		5.76	16.95	0.08	0.2	0.313	2.61	6.3	25.1	0.92	7690	4.24	0.08	4.5	23.6	400
B466612		4.55	18.15	0.09	0.6	0.154	2.89	12.4	23.1	0.98	7710	15.70	0.05	5.4	21.4	820
B466613		6.26	17.75	0.08	0.2	0.211	2.62	8.2	45.6	0.95	8470	8.44	0.05	5.1	29.8	360
B466614		4.17	16.60	0.09	0.6	0.166	2.59	12.2	37.5	1.06	4640	8.69	0.04	5.8	32.3	470
B466615		4.04	17.95	0.08	0.8	0.108	2.37	11.1	76.8	0.69	2540	3.76	0.05	6.4	13.7	840
B466616		4.43	17.80	0.07	0.6	0.088	2.32	10.9	168.0	0.78	2720	3.03	0.04	4.9	8.6	1070
B466617		4.55	19.55	0.07	0.8	0.187	2.52	10.3	273	0.86	5490	3.46	0.68	6.1	6.6	1280
B466618		4.26	21.3	0.08	0.9	0.059	2.12	12.3	344	0.94	550	4.01	1.92	7.1	7.6	1400
B466619		4.49	18.95	0.09	0.2	0.104	2.52	15.5	32.5	0.97	943	253	1.57	5.9	12.4	740
B466620		2.51	13.25	0.07	1.8	0.022	1.91	13.5	3.0	0.40	611	4.00	3.27	5.9	14.2	370
B466621		4.48	20.4	0.09	0.8	0.057	2.22	12.4	26.3	0.91	560	4.24	2.28	6.4	7.8	1300
B466622		4.12	20.6	0.08	0.7	0.052	2.16	11.3	90.2	0.86	508	5.38	2.06	6.6	7.1	1310
B466623		4.16	20.4	0.09	0.8	0.063	2.19	11.7	247	0.85	774	4.82	1.40	6.9	7.6	1320
B466624		4.20	19.90	0.09	0.7	0.081	2.30	11.9	332	0.82	765	5.09	1.49	6.4	7.5	1210
B466625		4.16	20.1	0.09	0.7	0.068	2.64	12.2	190.5	0.91	1645	6.23	1.21	6.9	7.7	1440
B466626		3.86	20.0	0.09	0.8	0.076	2.96	12.1	187.0	0.84	4550	4.29	0.12	6.8	6.7	1360
B466627		2.73	18.85	0.08	1.7	0.063	3.25	12.0	28.6	0.44	10450	2.03	0.04	10.1	4.0	680
B466628		2.39	17.70	0.08	1.6	0.056	3.01	8.9	27.2	0.43	9320	1.89	0.02	9.8	3.9	610
B466629		1.08	17.60	0.08	2.6	0.009	3.14	11.4	12.0	0.38	3250	0.93	0.03	13.8	2.4	310
B466630		1.26	16.20	0.07	2.4	0.016	3.02	10.2	8.7	0.42	5850	1.35	0.02	12.1	2.5	270
B466631		1.29	16.85	0.07	2.5	0.017	3.03	11.9	9.5	0.43	6410	1.17	0.02	12.9	2.5	290
B466632		1.11	16.10	0.07	2.6	0.011	3.04	12.5	9.7	0.40	4070	1.21	0.02	13.0	2.4	290

***** 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: 28-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21340601

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
B466593		208	158.5	<0.002	0.04	1.15	2.1	<1	0.6	304	1.28	<0.05	12.30	0.073	2.21	6.5
B466594		316	136.5	<0.002	0.08	1.35	2.1	<1	0.6	201	1.31	<0.05	11.15	0.077	1.83	8.9
B466595		278	139.5	<0.002	0.07	1.54	2.2	<1	0.6	301	1.30	<0.05	12.50	0.077	1.70	8.8
B466596		143.5	131.5	<0.002	0.06	1.48	2.1	<1	0.6	358	1.31	<0.05	14.60	0.069	1.74	6.9
B466597		375	130.0	<0.002	0.08	2.66	2.1	<1	0.7	266	1.34	<0.05	15.40	0.068	1.79	9.8
B466598		149.0	126.5	<0.002	0.06	2.36	2.1	1	0.6	224	1.36	<0.05	15.50	0.066	1.75	9.1
B466599		20.7	78.9	0.261	2.30	7.24	12.2	3	1.4	267	0.21	1.35	2.45	0.329	1.13	0.9
B466600		2.8	38.4	<0.002	0.01	0.27	5.7	<1	1.5	189.0	0.37	<0.05	2.70	0.174	0.16	1.1
B466601		111.0	133.0	<0.002	0.05	1.56	2.1	<1	0.7	252	1.28	<0.05	14.20	0.064	1.63	8.7
B466602		204	145.0	<0.002	0.05	1.32	2.2	1	0.7	242	1.27	<0.05	13.95	0.074	1.74	9.9
B466603		112.5	156.5	<0.002	0.03	1.14	2.0	<1	0.6	237	1.27	<0.05	11.90	0.077	2.13	9.6
B466604		131.0	159.5	<0.002	0.03	1.17	2.0	<1	0.7	306	1.30	<0.05	11.85	0.073	2.23	5.9
B466605		253	161.5	0.043	0.14	11.65	2.5	<1	0.9	321	1.29	<0.05	14.75	0.088	2.28	8.4
B466606		117.5	163.5	<0.002	0.08	3.80	2.2	<1	0.7	273	1.56	<0.05	14.70	0.079	2.75	9.6
B466607		108.0	151.5	0.002	1.00	20.5	4.4	2	1.0	224	0.85	0.09	9.67	0.136	1.92	5.4
B466608		104.5	159.0	0.002	1.24	16.90	4.7	1	1.2	241	0.82	0.09	9.34	0.148	1.95	5.0
B466609		17.3	112.0	0.004	1.94	2.57	8.4	3	1.4	326	0.38	0.30	3.23	0.234	1.27	0.5
B466610		20.6	125.0	0.010	1.75	1.85	8.4	2	1.3	160.5	0.36	0.21	3.14	0.237	1.37	0.5
B466611		55.3	113.5	0.016	2.36	4.11	9.2	3	1.6	214	0.30	0.28	4.21	0.194	1.21	0.4
B466612		83.9	144.0	0.054	2.34	76.8	9.5	3	1.7	518	0.36	0.23	5.12	0.242	1.51	0.9
B466613		84.1	129.0	0.020	2.21	132.5	10.7	3	1.5	407	0.31	0.29	6.03	0.201	1.38	0.6
B466614		109.0	135.0	0.047	2.02	197.5	12.1	3	1.6	405	0.38	0.19	6.89	0.246	1.41	0.8
B466615		177.5	109.0	0.008	1.80	189.0	6.8	2	1.5	570	0.52	0.15	6.40	0.175	1.17	2.0
B466616		130.0	107.0	0.007	1.76	209	6.1	1	1.3	675	0.36	0.18	4.13	0.191	1.16	1.1
B466617		79.9	85.7	0.008	1.28	25.4	6.5	1	0.9	799	0.44	0.05	4.11	0.241	1.10	1.1
B466618		10.7	54.2	0.008	1.10	20.4	7.2	1	0.8	946	0.47	0.11	4.68	0.247	0.74	1.2
B466619		42.5	82.8	0.230	1.55	2.08	11.6	3	1.6	285	0.41	0.45	4.58	0.274	0.90	1.0
B466620		2.8	40.7	<0.002	0.01	0.30	6.2	<1	1.6	197.0	0.40	<0.05	2.91	0.178	0.17	1.2
B466621		57.1	62.7	0.008	1.37	2.36	7.3	1	1.1	571	0.39	0.09	4.68	0.234	0.80	1.3
B466622		20.6	57.4	0.008	1.38	3.86	6.6	1	1.3	868	0.42	0.09	4.31	0.222	0.76	1.2
B466623		30.3	63.3	0.010	1.13	63.0	6.9	1	0.9	784	0.44	0.11	4.60	0.235	0.91	1.3
B466624		31.0	71.9	0.012	1.77	42.1	6.6	1	1.2	884	0.42	0.13	4.74	0.229	0.97	1.2
B466625		73.1	87.0	0.013	1.74	42.4	7.5	1	1.2	1155	0.43	0.14	4.26	0.250	1.15	1.1
B466626		311	114.5	0.008	0.99	141.5	7.0	1	0.8	256	0.45	0.09	4.89	0.240	1.63	1.3
B466627		662	171.5	<0.002	1.35	32.9	4.0	1	1.2	124.5	0.93	0.06	12.10	0.120	1.90	6.6
B466628		465	132.5	<0.002	1.08	32.2	3.4	1	1.0	242	0.90	0.06	9.43	0.112	1.76	5.3
B466629		100.0	149.5	<0.002	0.08	2.97	2.3	<1	0.6	328	1.31	<0.05	15.50	0.074	1.85	8.0
B466630		496	141.0	<0.002	0.20	2.72	2.2	<1	0.5	171.5	1.18	<0.05	12.90	0.072	1.75	8.3
B466631		466	134.0	<0.002	0.21	2.90	2.2	<1	0.6	195.5	1.21	<0.05	13.40	0.075	1.74	8.7
B466632		282	145.0	<0.002	0.13	3.05	2.2	<1	0.5	221	1.22	<0.05	14.30	0.072	1.77	9.0

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704-1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 28-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21340601

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
B466593		14	1.5	7.4	362	54.1
B466594		15	2.0	7.2	839	57.4
B466595		15	1.7	7.9	822	56.0
B466596		13	1.3	7.7	271	52.7
B466597		13	1.6	7.8	848	52.6
B466598		12	1.5	8.0	371	51.8
B466599		126	18.1	10.1	181	12.9
B466600		30	0.6	14.7	27	52.8
B466601		12	1.3	7.8	424	55.0
B466602		14	1.6	8.3	607	53.7
B466603		14	1.3	7.1	393	53.8
B466604		14	1.2	7.0	376	54.9
B466605		19	1.7	8.4	913	54.0
B466606		13	1.9	8.0	570	62.6
B466607		40	1.2	8.3	562	31.6
B466608		43	1.2	9.9	471	29.6
B466609		73	1.2	7.8	218	12.3
B466610		74	1.0	9.0	373	12.9
B466611		79	1.7	4.2	555	8.9
B466612		82	1.7	6.5	704	19.6
B466613		96	2.6	4.7	774	8.4
B466614		91	1.6	6.8	726	13.4
B466615		62	2.1	7.6	686	20.8
B466616		62	1.6	7.4	535	19.1
B466617		70	1.5	7.8	213	23.6
B466618		77	0.3	9.5	91	27.8
B466619		107	5.0	11.8	246	5.0
B466620		32	0.6	15.9	28	53.2
B466621		74	0.3	9.5	162	24.9
B466622		69	0.7	9.3	101	23.5
B466623		70	0.5	9.1	246	24.1
B466624		74	0.5	8.8	515	22.1
B466625		73	0.9	9.4	492	23.0
B466626		72	3.1	9.2	914	22.7
B466627		36	3.2	8.8	2830	35.5
B466628		32	2.7	7.2	2800	34.7
B466629		15	2.8	8.2	562	54.8
B466630		14	2.5	8.0	2170	51.6
B466631		16	2.5	8.1	2370	53.7
B466632		14	2.9	8.2	952	53.3

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

Finalized Date: 28-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21340601

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
B466633		6.74	0.027	0.68	6.37	13.0	850	1.59	0.37	1.47	5.96	25.6	1.9	6	6.13	12.2
B466634		6.94	0.069	0.54	6.43	11.6	930	1.85	0.52	1.33	19.05	24.7	1.9	6	6.52	21.3
B466635		6.44	0.041	3.48	6.56	361	1420	1.74	0.26	1.69	2.29	21.1	3.6	6	6.36	2220
B466636		6.38	0.138	4.82	7.14	115.0	770	1.27	0.21	2.07	0.59	16.45	12.8	10	5.83	5560
B466637		6.46	0.211	7.61	6.54	750	670	1.11	0.45	2.43	3.59	14.35	10.3	9	6.17	7350
B466638		0.08	0.020	2.48	6.71	31.6	710	1.18	1.80	1.96	1.01	35.2	34.8	234	3.58	3620
B466639		0.08	0.004	0.02	7.10	2.3	860	1.16	0.02	1.73	0.02	26.5	4.0	26	0.41	28.1
B466640		6.00	0.078	1.73	7.31	54.6	960	1.15	0.12	2.01	0.29	17.55	9.5	11	4.71	3110
B466641		6.44	0.064	1.41	7.12	26.7	1230	1.13	0.24	2.34	0.43	20.6	7.4	11	5.19	2230
B466642		6.68	0.038	1.37	7.50	144.0	880	1.25	0.19	2.28	0.74	24.9	6.8	11	5.85	1225
B466643		6.44	0.033	2.78	7.68	11.4	990	1.18	0.81	2.35	1.66	26.8	7.0	12	4.09	1210
B466644		6.74	0.032	1.03	7.31	4.4	870	1.00	0.12	2.28	0.51	27.3	7.6	12	4.22	1325
B466645		6.28	0.025	0.72	7.56	4.2	1040	1.07	0.09	2.48	0.65	24.8	7.2	12	4.72	764
B466646		2.92	0.012	1.08	7.83	3.5	750	1.11	0.09	2.67	0.75	24.0	6.4	10	5.07	465
B466647		2.80	0.012	0.75	7.84	4.1	930	1.08	0.09	2.56	0.75	25.3	6.1	10	5.13	442
B466648		2.74	0.018	0.59	7.48	5.0	1190	1.24	0.11	2.49	0.81	26.2	6.3	10	6.18	361
B466649		6.66	0.013	1.06	7.23	23.8	1060	1.25	0.21	2.20	4.02	30.1	6.4	11	7.65	436
B466650		5.78	<0.001	0.72	6.73	7.5	1110	1.36	0.16	2.95	1.96	29.3	7.7	18	8.24	20.9
B466651		6.56	<0.001	0.24	6.90	6.3	1130	1.32	0.14	3.20	0.63	30.5	7.5	20	8.21	8.1
B466652		7.44	0.003	1.89	7.15	24.2	1160	1.57	0.17	2.95	2.98	31.7	8.0	17	9.36	22.2
B466653		6.14	0.016	1.59	7.05	108.5	880	1.35	0.38	2.37	3.09	30.1	7.4	11	9.90	322
B466654		6.88	0.039	0.86	7.37	15.1	930	1.06	1.29	2.66	0.64	25.3	8.3	10	7.62	641
B466655		5.96	0.024	0.54	7.57	3.9	1230	1.19	0.21	2.29	0.21	27.0	7.7	11	7.43	631
B466656		6.40	0.005	0.83	6.91	13.8	1080	1.35	0.17	2.63	0.46	28.9	7.4	15	8.66	126.5
B466657		6.12	<0.001	0.04	7.02	2.7	1110	1.25	0.11	3.19	0.36	28.5	7.6	19	7.52	4.0
B466658		5.14	0.009	0.41	6.91	26.8	1350	1.51	0.12	3.51	1.11	33.4	7.4	13	8.77	202
B466659		0.08	NSS	1.10	8.35	47.4	440	0.97	0.54	2.22	1.09	30.3	14.8	18	7.30	2120
B466660		0.08	<0.001	0.02	7.32	2.5	880	1.02	0.03	1.75	0.02	27.8	4.2	25	0.41	26.3
B466661		6.50	0.013	0.49	7.49	8.3	1090	1.16	0.05	2.57	0.24	29.1	8.0	11	6.23	399
B466662		6.66	0.017	0.92	7.55	18.2	1120	1.13	0.66	2.65	0.64	29.8	7.6	11	5.40	579
B466663		6.12	0.015	0.88	7.70	39.6	990	1.14	0.17	2.45	0.69	29.1	7.2	10	5.42	478
B466664		7.10	0.008	0.69	7.56	10.0	1180	1.08	0.12	2.72	0.51	29.6	7.3	9	5.18	399
B466665		5.86	0.014	0.53	7.50	24.7	870	1.15	0.15	2.52	0.36	31.0	8.7	12	4.50	631
B466666		6.40	0.016	0.44	7.40	11.4	570	1.10	0.12	2.60	0.12	29.0	9.3	10	3.92	661
B466667		6.28	0.010	0.69	7.67	6.3	1280	1.21	0.10	2.54	0.81	31.1	7.5	11	4.45	455
B466668		6.10	0.014	0.72	7.40	2.8	820	1.10	0.19	2.42	0.74	31.7	9.9	11	4.10	600

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Project: Poplar

CERTIFICATE OF ANALYSIS VA21340601

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
B466633		1.05	17.15	0.08	2.5	0.010	3.13	13.0	9.8	0.38	2890	1.62	0.02	13.5	2.4	300
B466634		1.01	16.55	0.07	2.5	0.058	3.15	13.2	8.8	0.37	2900	1.53	0.02	13.1	2.3	300
B466635		1.53	17.35	0.07	2.1	0.068	3.25	10.7	17.4	0.48	3290	1.68	0.03	11.6	3.9	380
B466636		3.86	18.20	0.08	0.5	0.134	2.84	7.4	27.4	0.74	1485	3.18	1.48	6.3	8.1	910
B466637		3.61	16.55	0.08	0.4	0.244	2.79	6.6	38.7	0.71	3930	3.96	0.57	5.7	8.5	870
B466638		4.08	15.90	0.12	0.6	0.096	3.10	16.6	10.3	3.67	412	245	1.16	2.7	239	1050
B466639		2.53	13.70	0.08	1.9	0.023	1.92	13.9	2.9	0.40	605	4.30	3.30	5.9	15.1	380
B466640		3.57	18.00	0.08	0.5	0.070	2.72	8.4	47.2	0.70	736	3.14	1.91	6.7	7.1	880
B466641		3.22	18.75	0.07	0.6	0.066	2.64	9.2	39.9	0.77	1080	2.26	1.44	6.8	6.4	1080
B466642		3.70	18.80	0.09	0.7	0.034	2.98	11.8	105.5	0.78	1620	2.10	1.26	6.6	5.7	1220
B466643		3.67	19.55	0.08	0.7	0.048	2.34	13.3	22.8	0.81	428	2.17	2.57	6.8	5.8	1230
B466644		4.02	18.50	0.08	0.6	0.028	2.55	12.6	21.6	0.71	756	1.95	1.98	6.4	6.0	1190
B466645		3.53	18.90	0.08	0.8	0.018	2.45	11.7	15.1	0.75	998	6.08	2.09	7.1	5.6	1240
B466646		3.82	19.75	0.08	0.8	0.020	2.58	10.7	25.8	0.80	1725	1.63	0.95	7.4	5.2	1320
B466647		3.76	19.75	0.08	0.8	0.018	2.61	11.8	23.4	0.80	1735	2.65	1.04	7.6	5.2	1350
B466648		3.64	18.50	0.08	0.8	0.021	2.99	11.9	37.1	0.74	3260	1.98	1.27	6.7	5.1	1250
B466649		3.04	18.75	0.08	1.6	0.031	3.37	14.5	25.2	0.75	3260	2.30	0.66	7.7	6.7	1070
B466650		2.15	18.15	0.08	2.7	0.023	3.33	13.9	12.4	0.81	1115	1.68	0.72	9.6	10.7	970
B466651		2.22	17.95	0.08	2.7	0.022	3.47	13.8	11.8	0.83	933	1.65	0.93	9.5	10.6	1020
B466652		2.27	19.10	0.09	2.9	0.028	3.55	15.3	17.2	0.83	1950	2.60	0.06	10.1	10.4	1010
B466653		2.75	18.35	0.09	1.9	0.032	3.58	14.4	23.3	0.79	2900	2.15	0.11	8.3	7.1	1000
B466654		3.42	18.85	0.08	0.7	0.019	2.93	11.3	14.6	0.82	1420	2.41	1.49	6.5	5.5	1200
B466655		3.38	18.95	0.09	0.7	0.022	2.64	12.7	16.8	0.77	652	5.31	2.23	6.5	5.2	1270
B466656		2.33	18.70	0.09	2.5	0.021	3.53	13.8	15.8	0.76	707	1.06	0.63	9.2	8.6	940
B466657		2.30	17.40	0.09	2.6	0.020	3.45	13.1	13.2	0.85	760	0.80	1.02	9.2	10.5	1020
B466658		2.41	18.55	0.09	2.6	0.021	3.40	15.9	25.5	0.80	1475	1.25	0.26	9.0	7.7	970
B466659		4.37	18.25	0.09	0.2	0.099	2.47	15.3	28.4	0.94	915	237	1.53	5.7	12.0	710
B466660		2.57	13.90	0.08	2.0	0.023	1.95	14.8	2.8	0.41	621	4.37	3.33	6.1	15.3	380
B466661		3.49	19.35	0.09	0.8	0.016	2.72	13.3	32.4	0.76	1630	1.63	2.05	6.7	5.3	1250
B466662		3.48	19.40	0.09	0.9	0.077	2.67	13.8	31.2	0.71	1460	1.78	1.66	6.5	5.2	1250
B466663		3.65	20.0	0.08	0.9	0.019	2.96	13.4	44.5	0.79	1610	1.30	1.32	6.9	5.4	1280
B466664		3.64	18.50	0.09	0.8	0.018	2.66	13.9	42.3	0.78	1200	1.36	1.12	6.1	4.9	1260
B466665		3.49	18.75	0.09	0.8	0.023	2.41	15.1	75.0	0.74	458	2.53	2.11	6.2	5.3	1250
B466666		3.81	18.55	0.09	0.7	0.017	2.30	13.6	52.1	0.70	333	2.15	1.88	5.4	5.3	1220
B466667		3.33	19.25	0.10	0.9	0.019	2.62	14.1	22.6	0.79	817	1.71	1.90	6.5	4.9	1280
B466668		3.82	19.10	0.09	0.9	0.027	2.51	15.7	14.4	0.72	653	2.47	2.00	6.0	5.8	1160

***** 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: 28-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21340601

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
B466633		264	149.0	<0.002	0.14	5.49	2.4	<1	0.5	180.0	1.23	<0.05	15.30	0.077	1.78	10.2
B466634		231	157.5	<0.002	0.23	2.42	2.3	<1	0.8	216	1.23	<0.05	15.60	0.071	1.78	9.9
B466635		63.7	150.0	0.002	0.47	29.2	2.8	1	0.9	225	1.13	<0.05	13.50	0.088	1.82	8.7
B466636		16.1	96.2	0.006	2.08	1.96	5.5	2	1.3	474	0.40	0.15	4.28	0.171	1.21	0.7
B466637		80.9	110.5	0.010	2.06	56.1	4.3	3	1.3	232	0.39	0.20	3.91	0.144	1.29	0.7
B466638		21.6	89.0	0.274	2.38	7.72	12.8	4	1.4	275	0.19	1.55	2.82	0.318	1.23	0.9
B466639		2.8	40.4	<0.002	0.01	0.31	6.5	<1	1.6	199.5	0.40	<0.05	2.98	0.182	0.17	1.3
B466640		10.6	80.1	0.005	1.86	1.72	5.2	2	1.1	652	0.44	0.15	5.36	0.170	0.94	0.7
B466641		13.0	74.0	0.003	1.26	3.22	5.8	1	1.0	788	0.46	0.19	4.81	0.202	0.98	0.7
B466642		29.1	92.0	0.003	2.69	13.75	5.9	1	1.3	738	0.47	0.14	5.54	0.193	1.22	0.9
B466643		54.8	67.0	0.004	2.05	2.58	6.3	1	1.5	1100	0.48	0.77	5.54	0.203	0.79	0.9
B466644		21.6	80.0	0.002	2.37	1.02	5.9	1	1.3	604	0.44	0.11	5.73	0.181	0.92	1.0
B466645		27.5	70.7	0.012	1.67	0.76	5.8	1	1.0	814	0.49	0.09	5.29	0.206	0.91	1.0
B466646		17.5	70.3	0.002	1.26	0.96	6.3	1	1.1	170.5	0.51	0.07	5.26	0.217	1.02	1.1
B466647		16.4	76.9	0.004	1.20	0.96	6.4	1	1.0	267	0.50	0.07	5.59	0.218	1.03	1.1
B466648		13.2	94.1	0.003	1.46	1.19	5.7	1	1.0	447	0.47	0.10	5.25	0.196	1.30	1.2
B466649		176.5	134.5	0.003	1.26	10.40	5.6	1	1.0	301	0.57	0.05	6.30	0.197	1.55	2.2
B466650		104.5	122.5	<0.002	0.08	3.14	5.2	<1	0.6	343	0.69	<0.05	5.69	0.225	1.68	3.7
B466651		35.6	126.5	<0.002	0.07	2.39	5.2	<1	0.6	412	0.72	<0.05	5.74	0.238	1.69	3.2
B466652		190.5	121.5	<0.002	0.47	4.68	5.2	1	0.6	331	0.75	0.17	6.82	0.239	1.73	4.7
B466653		123.0	146.5	0.002	0.86	16.25	5.4	1	0.9	292	0.60	0.10	5.94	0.200	1.81	3.0
B466654		13.4	104.5	0.006	1.33	1.29	5.7	1	0.9	311	0.43	0.08	4.60	0.190	1.32	1.0
B466655		10.7	86.6	0.012	0.97	0.83	6.0	1	0.8	1755	0.45	0.05	5.13	0.196	1.03	1.1
B466656		49.7	136.5	<0.002	0.18	2.59	5.0	1	0.7	594	0.69	<0.05	6.48	0.216	1.82	3.0
B466657		13.9	123.5	<0.002	0.04	2.01	5.0	<1	0.6	381	0.69	<0.05	5.54	0.234	1.82	2.8
B466658		49.2	139.5	<0.002	0.32	4.69	5.2	1	0.9	332	0.69	<0.05	6.71	0.213	1.79	3.8
B466659		39.5	84.2	0.213	1.50	2.00	11.6	3	1.6	279	0.39	0.48	4.19	0.264	0.83	0.9
B466660		2.9	44.5	<0.002	0.01	0.32	6.5	<1	1.7	202	0.41	<0.05	2.93	0.179	0.17	1.3
B466661		21.9	86.4	0.004	1.01	1.83	6.1	1	0.8	848	0.46	0.09	5.14	0.198	0.96	1.3
B466662		30.0	82.0	0.003	1.54	2.48	6.0	1	1.0	908	0.44	0.13	4.96	0.192	0.91	1.4
B466663		19.4	102.0	0.002	1.61	7.71	6.4	1	1.1	278	0.50	0.12	5.19	0.203	1.24	1.3
B466664		23.2	80.2	0.003	1.84	4.20	5.9	1	1.2	307	0.43	0.11	5.18	0.189	0.99	1.4
B466665		11.9	70.4	0.007	2.21	7.21	6.1	1	1.2	1020	0.42	0.14	5.48	0.183	0.77	1.4
B466666		8.0	66.6	0.005	2.85	0.75	6.3	1	1.8	970	0.40	0.17	5.33	0.175	0.75	1.3
B466667		37.9	76.5	0.002	1.39	1.21	6.1	1	1.1	906	0.45	0.12	5.52	0.196	0.90	1.7
B466668		26.3	82.4	0.006	2.36	0.95	6.3	1	1.4	1095	0.39	0.14	5.47	0.185	0.83	1.6

***** 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: 28-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21340601

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
B466633		15	3.0	8.9	969	56.7
B466634		14	2.6	8.4	3230	54.4
B466635		20	2.1	8.3	404	42.4
B466636		52	0.7	7.1	135	15.6
B466637		38	1.4	6.4	587	13.1
B466638		130	18.4	11.0	188	14.0
B466639		32	0.6	16.4	29	54.4
B466640		52	0.4	6.8	82	15.8
B466641		58	0.5	7.6	95	17.3
B466642		62	0.6	7.3	162	17.4
B466643		65	1.5	8.5	305	17.9
B466644		61	0.6	8.5	108	18.2
B466645		62	0.4	8.5	139	20.7
B466646		65	1.1	8.6	162	22.9
B466647		67	1.0	9.0	152	22.3
B466648		62	0.7	8.5	183	21.5
B466649		56	1.3	8.4	686	49.1
B466650		56	1.0	7.8	400	91.7
B466651		58	1.0	7.7	206	86.1
B466652		58	1.1	8.1	554	96.1
B466653		55	1.9	8.5	544	60.5
B466654		61	0.6	8.9	145	18.3
B466655		63	0.2	9.6	69	20.0
B466656		56	0.7	7.9	168	82.9
B466657		58	0.9	7.4	153	85.2
B466658		56	1.1	8.9	264	82.3
B466659		103	4.4	11.8	236	4.9
B466660		32	0.6	17.0	29	57.7
B466661		62	0.4	9.5	77	20.3
B466662		62	0.8	9.0	114	23.0
B466663		64	0.5	8.9	141	22.7
B466664		63	0.5	9.0	104	20.8
B466665		61	0.3	9.2	74	20.8
B466666		63	0.4	9.5	37	18.1
B466667		63	0.4	10.2	168	24.3
B466668		60	0.5	8.7	147	22.9

***** 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: 28-JAN-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21340601

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: NSS is non-sufficient sample.
ALL METHODS

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

LABORATORY ADDRESSES

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

Au-ICP21	CRU-31	CRU-QC	LOG-21
LOG-23	ME-MS61	PUL-31	PUL-QC
SND-01	SPL-21	SPL-21X	WEI-21

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

Finalized Date: 17-FEB-2022
This copy reported on
3-MAR-2022
Account: MAMGEO

CERTIFICATE VA21340605

Project: Poplar

This report is for 193 samples of Drill Core submitted to our lab in Vancouver, BC, Canada on 13-DEC-2021.

The following have access to data associated with this certificate:

TIM HENNEBERRY		

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-21	Sample logging - ClientBarCode
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 up to 250g 85% <75 um
LOG-23	Pulp Login - Rcvd with Barcode
SPL-21X	Addnl Crush Split w No Analysis

ANALYTICAL PROCEDURES

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

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:

Saa Traxler, Director, North Vancouver Operations

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Finalized Date: 17-FEB-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21340605

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
B464779		10.84	0.017	0.35	8.75	23.2	250	1.00	0.71	0.23	0.60	37.7	23.8	145	1.16	1170
B464780		10.46	0.026	0.42	8.20	18.0	180	1.28	0.77	0.79	0.50	44.5	28.3	120	1.28	1985
B464781		13.48	0.038	0.65	8.37	22.6	120	1.32	0.91	0.55	0.31	38.9	40.3	135	0.94	1940
B464782		12.38	0.011	1.20	8.09	15.8	60	0.66	0.75	0.15	1.95	34.8	27.6	132	0.79	767
B464783		12.02	0.014	1.44	8.36	7.4	80	0.95	1.13	0.19	0.41	36.4	36.8	107	1.55	1300
B464784		11.42	0.025	0.67	7.82	6.5	100	1.10	0.98	0.84	0.35	32.4	30.6	35	1.39	1455
B464785		0.08	<0.001	0.02	7.40	2.8	890	1.10	0.03	1.72	0.02	27.7	4.0	27	0.41	26.0
B464786		12.12	0.013	0.63	9.10	6.3	100	0.96	1.17	0.63	0.71	37.5	25.3	106	0.80	869
B464787		13.30	0.014	1.85	7.97	9.7	90	0.84	1.13	1.60	1.24	33.7	21.7	68	1.27	429
B464788		0.07	0.019	2.44	6.94	33.1	750	1.18	1.82	1.95	0.98	35.5	36.2	248	3.49	3620
B464789		13.22	0.028	1.60	7.44	5.3	100	1.14	0.91	2.97	2.15	33.8	19.3	38	3.62	1120
B464790		13.46	0.021	0.40	7.44	3.0	440	1.16	0.17	3.11	0.24	33.9	14.6	33	2.58	1115
B464791		12.74	0.025	0.24	7.43	3.7	390	1.14	0.23	3.03	0.15	38.3	17.3	28	2.80	1325
B464792		13.48	0.023	1.23	7.59	13.7	220	1.30	0.36	3.49	3.10	40.6	17.4	23	4.88	1330
B464793		5.24	0.001	0.33	6.80	5.6	1050	1.40	0.16	3.12	0.57	33.3	7.0	15	6.92	135.0
B464794		6.76	0.003	0.31	7.05	6.6	970	1.48	0.16	3.21	0.40	37.9	7.3	13	7.44	202
B464795		7.06	0.002	0.10	7.03	6.0	990	1.34	0.20	3.56	0.07	37.2	6.6	17	5.90	24.6
B464796		12.08	0.012	0.48	6.93	11.9	940	1.32	0.99	2.97	0.49	34.3	9.5	19	6.43	266
B464797		13.86	0.023	0.97	6.61	4.8	90	0.84	0.43	2.49	1.42	28.0	20.0	22	2.13	1200
B464798		12.26	0.021	0.45	7.29	2.6	130	1.16	0.42	2.03	0.63	39.3	20.5	34	1.68	1115
B464799		12.12	0.006	0.25	8.05	14.2	140	0.92	0.78	1.43	0.42	42.4	22.2	83	1.08	733
B464800		12.64	0.018	0.53	7.79	62.8	90	1.14	1.28	1.50	0.85	41.2	26.4	100	2.01	2150
B464801		11.18	0.052	1.71	8.01	4.8	220	1.35	0.28	1.61	1.21	41.1	21.4	155	3.22	2390
B464802		11.66	0.060	1.14	7.59	18.2	120	1.26	0.41	1.88	1.46	33.9	21.5	56	4.20	2660
B464803		11.16	0.060	2.21	5.79	61.1	100	0.96	0.37	2.30	2.86	20.5	26.2	9	2.61	2660
B464804		11.16	0.032	2.59	5.86	38.7	130	0.77	0.40	2.48	4.54	18.50	14.9	10	2.11	1140
B464805		0.07	<0.001	0.03	6.59	2.7	810	1.07	0.03	1.56	0.03	28.4	3.7	24	0.38	28.9
B464806		0.08	0.165	1.23	8.07	47.6	430	1.14	0.54	2.10	1.04	33.8	13.7	19	7.23	2040
B464807		11.10	0.064	3.04	6.37	17.8	80	0.93	0.39	2.29	4.90	21.2	13.9	11	4.03	1260
B464808		11.62	0.060	1.24	6.62	13.5	140	1.08	0.60	2.36	2.35	21.9	14.1	9	4.86	2030
B464809		11.56	0.035	1.47	7.04	54.2	120	1.09	0.72	1.91	1.43	24.7	13.1	10	3.71	1995
B464810		11.76	0.051	1.60	6.88	31.0	130	1.11	0.45	1.98	2.32	24.7	12.7	9	4.11	2110
B464811		6.74	0.339	3.01	6.23	28.4	80	1.03	0.35	1.74	1.88	24.9	26.1	9	3.49	5860
B464812		7.20	0.062	3.10	6.42	24.6	100	0.97	0.43	1.97	5.16	20.1	12.3	11	4.58	2330
B464813		4.14	0.154	2.52	6.81	3.5	120	0.98	0.69	2.30	2.55	20.4	12.3	16	4.60	4210
B464814		3.14	0.115	1.93	6.88	3.4	190	1.04	0.56	2.20	1.13	20.2	9.6	11	4.68	3710
B464815		2.86	0.097	1.63	6.78	4.8	230	1.07	0.42	2.31	1.12	23.3	15.0	17	5.92	3070
B464816		6.32	0.064	1.02	6.36	6.2	330	1.19	0.45	1.89	0.76	28.9	9.2	12	8.34	2300
B464817		5.96	0.031	1.01	6.33	20.7	730	1.44	0.33	2.39	2.47	33.8	5.4	7	8.90	895
B464818		6.34	0.146	4.77	5.36	28.6	80	0.75	0.74	2.17	5.06	22.2	29.6	12	5.98	4220

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

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704-1060 ALBERNI STREET
VANCOUVER BC V6E 4K2

Finalized Date: 17-FEB-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21340605

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
B464779		4.52	14.80	0.16	0.6	0.129	3.35	18.0	4.2	0.31	80	111.0	0.45	1.4	109.5	920
B464780		4.85	15.90	0.16	0.6	0.159	2.71	20.5	6.8	0.52	391	96.4	0.56	1.2	118.0	1870
B464781		6.10	17.00	0.16	0.7	0.120	3.04	18.0	4.5	0.30	117	62.0	0.49	1.5	141.0	2490
B464782		6.85	14.30	0.16	0.5	0.063	3.35	15.7	2.7	0.27	24	62.3	0.33	1.3	107.0	940
B464783		6.30	15.20	0.15	0.9	0.174	3.43	17.5	3.1	0.36	907	102.0	0.32	1.4	93.7	580
B464784		6.79	13.90	0.15	0.8	0.155	2.68	15.9	5.2	0.59	926	58.6	0.37	1.3	50.5	910
B464785		2.56	13.75	0.13	1.9	0.025	1.91	14.8	2.6	0.41	619	4.06	3.32	6.0	14.7	380
B464786		5.32	18.25	0.16	0.7	0.140	4.07	17.0	2.9	0.41	197	76.6	0.28	1.7	90.9	580
B464787		5.39	15.05	0.14	0.6	0.073	3.56	15.7	2.5	0.47	1800	61.5	0.28	1.5	72.6	670
B464788		4.13	15.80	0.17	0.5	0.098	3.11	17.1	9.7	3.67	412	248	1.16	2.8	241	1050
B464789		4.28	15.75	0.16	0.6	0.126	2.74	16.8	6.4	0.85	1965	67.7	0.25	1.9	32.4	900
B464790		3.83	13.15	0.12	0.6	0.054	1.98	16.6	7.8	1.20	756	47.6	0.99	2.1	19.0	1240
B464791		3.87	14.40	0.15	0.7	0.050	2.04	19.1	6.5	0.96	291	35.2	1.11	1.9	22.7	1170
B464792		3.93	13.60	0.15	0.7	0.077	2.70	20.5	7.8	0.92	1370	26.6	0.17	2.0	15.9	1170
B464793		2.18	17.20	0.14	2.6	0.028	2.84	16.5	19.6	1.10	744	3.64	0.17	9.8	8.3	910
B464794		2.23	17.50	0.16	2.6	0.030	2.95	18.7	19.9	1.14	804	5.31	0.17	9.8	8.2	950
B464795		2.07	18.15	0.15	2.8	0.031	2.81	18.2	18.4	1.26	759	2.44	0.12	10.0	8.0	950
B464796		2.60	17.30	0.15	2.5	0.037	2.12	16.5	23.9	0.97	1005	19.00	0.08	8.9	12.4	860
B464797		5.14	10.50	0.14	0.6	0.061	2.52	13.7	3.8	0.47	792	70.7	0.31	1.6	30.7	770
B464798		4.49	12.40	0.16	0.6	0.067	2.48	18.5	6.1	0.53	390	63.9	0.46	2.2	39.7	1050
B464799		4.81	14.05	0.16	0.4	0.067	3.38	18.3	3.7	0.41	141	81.9	0.26	1.8	92.7	680
B464800		5.39	14.20	0.17	0.5	0.094	3.13	18.7	4.4	0.56	229	72.3	0.30	1.4	96.1	500
B464801		4.34	15.55	0.14	0.4	0.049	2.81	20.5	4.6	0.80	595	65.9	2.14	1.8	102.0	490
B464802		4.62	13.65	0.14	0.4	0.057	2.84	16.0	5.1	0.73	932	23.0	1.34	1.8	63.0	650
B464803		4.89	10.65	0.10	0.3	0.056	1.57	9.1	5.7	0.51	1025	35.9	0.50	1.9	21.1	630
B464804		4.10	9.12	0.14	0.3	0.052	2.07	7.6	4.5	0.27	1095	20.4	0.29	2.4	14.9	670
B464805		2.34	12.45	0.10	1.7	0.022	1.76	14.5	2.5	0.37	572	3.86	3.04	5.7	13.8	350
B464806		4.27	17.20	0.13	0.2	0.109	2.35	16.5	29.6	0.91	889	242	1.51	5.9	12.2	690
B464807		4.49	11.70	0.14	0.3	0.048	2.32	11.4	5.1	0.35	1900	21.2	0.28	2.1	11.2	930
B464808		4.73	13.60	0.11	0.3	0.058	1.99	10.1	7.9	0.68	1520	15.95	0.45	2.6	7.8	610
B464809		3.93	12.75	0.12	0.5	0.092	2.50	11.2	7.6	0.62	905	18.25	0.37	3.0	6.8	730
B464810		4.09	12.55	0.12	0.4	0.087	2.72	11.2	5.4	0.70	952	17.30	0.56	2.6	5.7	720
B464811		5.35	14.20	0.13	0.4	0.115	2.84	11.2	4.2	0.70	833	14.60	1.05	2.6	12.4	630
B464812		4.73	12.50	0.12	0.3	0.177	2.49	8.7	5.8	0.54	2970	7.08	0.22	2.2	7.7	860
B464813		4.99	15.95	0.11	0.3	0.109	2.13	8.7	7.0	0.75	1115	8.26	0.86	3.0	7.4	610
B464814		4.14	16.00	0.10	0.3	0.098	2.12	8.9	6.6	0.74	1115	3.67	0.83	3.0	6.0	620
B464815		4.48	16.10	0.12	0.4	0.078	1.77	10.3	6.8	0.83	1040	5.73	1.34	3.7	6.9	930
B464816		3.18	14.35	0.11	1.0	0.078	2.63	14.4	7.3	0.58	1255	5.37	0.59	5.7	5.5	780
B464817		2.05	14.90	0.13	1.5	0.059	3.22	17.3	8.3	0.50	2140	2.69	0.06	7.7	3.5	780
B464818		14.00	19.70	0.12	0.3	0.155	2.00	9.5	7.5	0.65	2200	7.60	0.16	2.6	8.6	800

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VANCOUVER BC V6E 4K2

Finalized Date: 17-FEB-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21340605

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
B464779		45.4	70.2	0.570	4.90	3.78	18.1	4	4.2	232	0.08	0.25	3.39	0.133	1.18	1.3
B464780		30.8	58.5	0.439	5.08	5.23	17.3	5	3.1	268	0.07	0.27	4.01	0.112	0.98	1.9
B464781		24.5	66.0	0.373	6.47	3.13	18.2	7	4.0	369	0.07	0.33	3.56	0.124	1.16	1.9
B464782		84.2	68.1	0.343	7.53	15.90	15.8	5	4.8	213	0.07	0.36	3.48	0.130	1.07	1.1
B464783		41.1	76.1	0.440	6.65	4.02	16.4	6	4.8	175.0	0.08	0.46	3.05	0.119	1.21	1.5
B464784		30.3	64.1	0.316	7.24	2.23	8.8	7	3.3	186.5	0.08	0.33	3.82	0.087	1.01	1.2
B464785		2.9	44.0	<0.002	0.01	0.31	6.4	<1	1.7	203	0.42	<0.05	3.20	0.181	0.18	1.4
B464786		41.2	88.8	0.406	6.10	1.89	19.7	5	5.6	245	0.09	0.33	4.23	0.145	1.29	1.2
B464787		3150	79.8	0.327	6.69	8.39	14.8	4	4.9	360	0.09	0.30	3.93	0.121	1.20	0.8
B464788		23.0	90.9	0.287	2.38	7.66	12.7	4	1.5	278	0.19	1.35	2.76	0.320	1.20	1.0
B464789		139.5	88.8	0.337	5.23	2.71	12.1	3	2.9	462	0.11	0.34	3.98	0.119	1.38	1.0
B464790		25.3	54.3	0.220	3.63	1.83	8.6	3	1.5	288	0.13	0.16	3.53	0.153	1.01	1.1
B464791		19.7	61.9	0.170	4.56	0.83	9.6	3	2.2	412	0.11	0.20	4.25	0.112	1.07	1.3
B464792		94.2	88.1	0.148	4.99	3.85	8.2	3	2.5	442	0.13	0.24	4.56	0.114	1.39	1.9
B464793		44.3	71.3	0.010	0.59	1.30	5.4	1	0.8	548	0.76	<0.05	6.87	0.206	1.42	4.0
B464794		19.4	82.0	0.014	0.63	1.48	5.7	1	0.8	508	0.75	<0.05	7.55	0.207	1.51	4.3
B464795		8.8	75.7	0.002	0.13	1.24	5.8	<1	0.7	509	0.75	<0.05	7.32	0.229	1.56	3.6
B464796		26.3	52.2	0.071	1.21	6.15	6.2	1	1.3	602	0.72	0.06	6.68	0.192	1.16	3.4
B464797		78.2	67.1	0.572	6.65	1.47	9.0	5	2.5	447	0.10	0.27	3.06	0.095	0.89	0.8
B464798		49.2	68.0	0.310	5.46	0.46	9.9	4	2.9	298	0.14	0.28	3.73	0.111	0.87	0.9
B464799		18.2	77.0	0.462	5.98	0.74	16.8	4	4.3	301	0.10	0.31	4.44	0.142	1.03	1.0
B464800		49.8	75.4	0.455	6.51	3.22	14.4	5	3.8	284	0.09	0.52	4.24	0.107	1.14	0.9
B464801		93.9	73.9	0.360	4.55	0.42	17.6	4	1.8	320	0.09	0.37	3.58	0.162	1.06	1.0
B464802		66.0	75.0	0.141	5.30	9.34	12.8	4	1.8	355	0.10	0.40	3.85	0.105	1.09	0.8
B464803		138.0	54.3	0.201	6.12	17.30	4.1	4	2.1	282	0.12	0.44	3.35	0.064	0.67	0.5
B464804		217	60.2	0.128	5.92	16.95	3.7	4	2.7	481	0.15	0.26	2.93	0.076	0.79	0.4
B464805		3.1	43.1	0.002	0.02	0.37	6.2	<1	1.6	185.0	0.38	<0.05	2.88	0.166	0.16	1.2
B464806		41.1	85.8	0.236	1.47	1.95	11.2	2	1.6	269	0.38	0.39	4.84	0.263	0.88	1.0
B464807		268	73.7	0.148	5.86	11.95	5.1	4	2.4	537	0.14	0.23	2.98	0.081	1.07	0.4
B464808		112.0	76.2	0.123	5.57	2.65	5.4	3	2.0	300	0.17	0.53	3.62	0.100	1.04	0.5
B464809		86.1	76.7	0.090	4.74	7.52	4.2	3	2.3	384	0.20	0.36	3.88	0.087	1.02	0.8
B464810		116.0	78.2	0.107	4.91	7.41	3.8	3	1.8	413	0.18	0.27	3.72	0.085	1.10	0.6
B464811		79.8	76.4	0.130	5.62	6.89	4.3	5	1.7	322	0.16	0.67	3.43	0.089	1.21	0.6
B464812		247	85.1	0.047	5.27	10.50	5.0	3	2.2	371	0.15	0.37	3.41	0.083	1.14	0.5
B464813		76.9	74.0	0.048	5.26	1.50	6.9	4	2.9	282	0.19	0.50	3.96	0.119	1.06	0.5
B464814		51.0	77.3	0.028	4.32	1.82	6.9	2	2.9	290	0.20	0.50	3.96	0.118	1.06	0.5
B464815		62.6	69.1	0.038	4.53	2.57	6.4	3	2.0	387	0.22	0.40	3.78	0.143	0.98	0.7
B464816		50.5	110.5	0.027	3.03	1.93	4.1	2	1.7	354	0.48	0.45	7.19	0.095	1.47	2.7
B464817		115.0	151.5	0.014	1.92	4.79	3.2	1	1.1	360	0.69	0.07	9.27	0.099	2.00	4.4
B464818		214	81.4	0.046	5.86	23.2	5.1	4	2.0	264	0.17	0.76	3.67	0.087	1.02	0.6

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Finalized Date: 17-FEB-2022
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Project: Poplar

CERTIFICATE OF ANALYSIS VA21340605

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	Cu-OG62 Cu % 0.001	Zn-OG62 Zn % 0.001
B464779		139	0.9	12.8	96	22.6		
B464780		126	0.6	13.9	104	20.3		
B464781		138	0.6	15.2	63	22.7		
B464782		129	0.9	11.3	335	18.7		
B464783		114	0.6	12.3	110	35.5		
B464784		74	0.4	9.5	113	27.5		
B464785		32	0.7	17.2	29	58.6		
B464786		150	0.9	10.9	135	26.6		
B464787		111	0.7	10.3	245	21.2		
B464788		131	18.1	11.6	191	16.1		
B464789		91	0.5	8.7	415	21.4		
B464790		98	0.3	7.9	93	18.4		
B464791		76	0.4	8.2	48	23.4		
B464792		74	0.5	8.4	581	23.5		
B464793		56	1.3	9.0	128	87.3		
B464794		58	1.2	9.7	98	88.4		
B464795		60	1.9	9.5	43	94.7		
B464796		58	1.7	9.1	120	79.8		
B464797		70	0.5	8.0	287	20.2		
B464798		69	0.5	9.2	125	20.9		
B464799		111	0.6	9.5	89	15.3		
B464800		101	0.6	9.2	172	18.7		
B464801		125	0.3	6.5	234	13.4		
B464802		80	0.4	6.7	286	14.8		
B464803		34	0.5	5.3	540	11.8		
B464804		37	0.7	6.8	785	12.2		
B464805		29	0.6	16.8	28	58.1		
B464806		102	3.7	11.7	229	5.5		
B464807		47	0.5	7.3	923	8.6		
B464808		56	0.7	5.7	440	9.3		
B464809		43	0.5	5.7	288	15.2		
B464810		38	0.4	5.1	417	13.7		
B464811		43	0.2	4.8	316	15.0		
B464812		49	0.4	5.6	917	9.8		
B464813		64	0.5	5.4	492	10.5		
B464814		63	0.5	5.3	229	12.1		
B464815		60	0.4	6.4	208	14.2		
B464816		42	0.8	6.8	187	26.0		
B464817		32	1.1	8.3	502	36.5		
B464818		56	0.4	6.0	901	9.3		

***** 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: 17-FEB-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21340605

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
B464819		5.74	0.128	5.85	5.93	42.6	90	0.85	0.72	2.92	13.55	29.5	22.0	16	4.94	3220
B464820		5.50	0.118	1.48	6.75	9.7	150	0.92	0.30	2.55	0.51	26.1	16.9	11	4.77	3430
B464821		5.94	0.078	1.07	7.01	7.1	150	0.98	0.41	2.55	0.46	29.3	16.1	12	5.27	2430
B464822		5.64	0.111	0.78	6.92	4.4	160	0.85	0.47	2.55	0.17	27.0	16.9	14	3.84	3220
B464823		5.70	0.085	3.40	6.90	5.3	230	1.02	0.81	1.82	4.29	25.4	16.0	10	4.81	2240
B464824		5.60	0.077	0.90	7.31	5.1	160	0.95	0.43	1.87	0.50	21.6	14.3	14	4.35	2530
B464825		0.08	0.026	2.37	6.82	29.3	630	1.16	1.90	1.94	0.96	33.9	35.8	229	3.42	3640
B464826		0.08	<0.001	0.02	7.05	2.2	850	1.06	0.02	1.67	0.02	24.6	3.9	24	0.40	27.7
B464827		6.06	0.157	2.01	7.01	11.9	100	0.90	0.78	2.03	1.07	20.5	15.8	15	4.30	4570
B464828		5.64	0.097	0.89	7.06	3.5	230	1.02	0.52	2.13	0.12	18.60	13.7	10	5.45	2890
B464829		5.54	0.098	0.89	6.77	2.1	330	0.95	0.27	2.15	0.11	18.35	12.0	16	4.74	2950
B464830		5.82	0.113	1.10	7.27	2.9	400	1.16	0.27	2.30	0.16	23.2	10.5	15	4.66	3280
B464831		6.22	0.065	0.62	7.47	3.0	350	1.06	0.27	2.06	0.08	25.8	13.0	10	4.45	1990
B464832		5.60	0.088	0.84	7.19	4.1	520	0.90	0.41	2.53	0.08	19.50	12.7	12	3.75	3000
B464833		2.12	0.097	1.18	7.14	4.7	190	0.99	0.49	2.04	0.11	19.15	14.8	15	4.84	3270
B464834		2.72	0.105	1.10	7.31	3.8	220	0.97	0.43	2.09	0.11	19.05	14.3	10	4.96	3230
B464835		2.84	0.091	1.45	7.38	33.6	170	0.94	0.39	2.40	0.21	20.0	14.6	15	4.55	2950
B464836		6.44	0.096	4.47	7.00	33.2	400	1.23	0.97	2.12	3.11	23.9	9.3	12	6.93	2410
B464837		5.52	0.037	0.72	7.30	4.8	320	1.07	0.25	2.47	0.21	25.1	10.6	9	6.19	1205
B464838		5.98	0.046	0.61	7.55	3.2	400	1.03	0.25	2.33	0.14	26.4	10.1	13	6.83	1520
B464839		5.80	0.141	1.83	6.32	4.3	110	0.87	0.51	1.68	0.19	13.90	13.7	19	5.32	4620
B464840		6.40	0.098	3.25	6.69	27.6	190	1.06	0.40	2.08	1.68	20.5	19.5	12	6.19	3090
B464841		5.86	0.103	6.42	7.23	80.9	250	1.16	0.38	1.89	4.38	20.9	13.0	14	7.82	2490
B464842		5.98	0.173	3.90	6.31	30.5	130	0.86	0.47	1.51	1.11	10.40	15.3	17	5.58	4420
B464843		6.38	0.139	1.09	6.49	2.3	110	0.92	0.37	1.59	0.12	13.25	14.0	14	4.27	3980
B464844		6.08	0.108	4.54	6.66	16.8	180	0.86	0.65	1.36	7.15	12.15	12.4	17	4.00	3730
B464845		Not Recvd														
B464846		0.08	<0.001	0.03	7.23	2.4	860	1.19	0.03	1.70	0.03	28.0	4.2	24	0.43	31.3
B464847		6.62	0.111	1.15	6.71	31.6	120	0.83	0.61	1.85	0.13	19.25	13.8	15	4.22	3620
B464848		6.14	0.048	0.81	7.19	6.4	340	1.28	0.27	2.64	0.29	27.0	13.6	10	7.79	1475
B464849		5.92	0.045	0.50	7.44	4.4	520	1.23	0.31	2.43	0.07	26.6	11.0	13	7.39	1255
B464850		6.26	0.053	2.00	7.24	84.2	320	1.11	0.36	2.58	0.90	23.7	12.3	12	7.27	1820
B464851		6.20	0.062	0.73	7.24	6.2	200	1.17	0.34	2.55	0.10	24.0	16.1	11	5.95	2510
B464852		6.16	0.041	0.67	7.40	4.6	240	1.10	0.29	2.49	0.58	27.7	11.0	15	5.35	1590
B464853		2.60	0.040	0.88	7.68	7.3	400	1.29	0.38	2.45	0.39	28.8	14.6	13	6.25	1570
B464854		2.94	0.043	1.10	7.15	8.9	340	1.29	0.36	2.69	1.20	27.6	14.7	10	6.47	1575
B464855		2.98	0.054	0.66	7.19	8.3	770	1.10	0.21	2.26	0.14	22.9	10.0	19	5.01	1705
B464856		6.26	0.087	1.34	6.89	16.2	220	1.04	0.31	2.06	0.32	21.1	15.9	19	5.06	2890
B464857		6.02	0.076	0.86	6.91	3.6	320	0.98	0.30	1.98	0.06	21.6	13.9	14	5.85	2540
B464858		6.16	0.128	1.28	6.08	5.1	130	0.71	0.33	1.41	0.19	11.75	14.9	20	2.87	4510

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VANCOUVER BC V6E 4K2

Finalized Date: 17-FEB-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21340605

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
B464819		5.54	14.85	0.13	0.4	0.134	2.17	14.0	8.8	0.70	2340	4.15	0.35	4.2	7.1	840
B464820		4.18	14.95	0.11	0.3	0.089	2.17	11.2	11.4	0.70	753	4.65	0.55	4.4	8.1	950
B464821		4.21	15.75	0.11	0.4	0.072	2.19	13.3	10.3	0.75	555	5.25	0.80	3.7	6.4	1140
B464822		4.94	13.85	0.11	0.3	0.081	2.34	11.5	10.3	0.79	568	4.39	0.47	3.1	7.5	1050
B464823		5.43	13.85	0.12	0.3	0.058	2.59	11.0	9.5	0.70	1620	3.99	0.10	3.0	6.7	1090
B464824		4.21	14.80	0.10	0.3	0.061	2.39	9.2	9.1	0.79	588	3.66	1.02	3.6	6.4	1010
B464825		4.09	14.60	0.13	0.4	0.094	3.12	14.8	9.8	3.65	401	240	1.17	2.7	236	1030
B464826		2.49	12.65	0.09	1.8	0.020	1.87	11.8	2.6	0.39	584	4.14	3.23	5.7	14.2	360
B464827		5.07	14.65	0.10	0.3	0.108	2.37	8.9	8.2	0.73	347	3.68	1.17	3.4	7.7	820
B464828		3.84	16.80	0.09	0.3	0.079	2.18	7.5	7.4	0.67	224	1.66	1.90	4.9	5.6	990
B464829		3.77	14.85	0.09	0.3	0.084	1.98	7.6	7.1	0.72	194	3.95	2.04	4.9	6.5	970
B464830		3.71	16.85	0.09	0.4	0.099	2.17	9.9	7.5	0.80	146	3.72	2.58	6.0	6.4	1100
B464831		4.74	18.60	0.10	0.4	0.066	1.96	10.6	11.2	0.84	276	1.47	1.97	6.2	6.5	1390
B464832		4.28	17.25	0.08	0.3	0.101	1.85	8.0	21.6	0.83	886	11.35	0.08	5.1	6.3	1150
B464833		4.31	15.90	0.09	0.3	0.102	2.08	8.2	8.3	0.69	210	39.1	1.90	4.5	6.2	960
B464834		4.19	16.05	0.09	0.3	0.101	2.13	8.2	8.2	0.71	224	13.05	1.98	4.6	5.4	1020
B464835		4.85	17.70	0.10	0.3	0.082	2.26	8.1	21.6	0.79	727	3.19	0.54	4.9	6.9	1070
B464836		3.81	16.55	0.11	0.8	0.139	2.67	10.6	18.3	0.73	5740	10.55	0.18	6.3	5.3	850
B464837		4.64	16.70	0.08	0.5	0.051	2.16	10.2	14.1	0.84	759	2.12	1.42	6.2	5.6	1270
B464838		4.77	17.65	0.08	0.4	0.044	1.96	11.3	6.4	0.88	241	1.59	2.49	6.4	6.0	1250
B464839		4.91	14.60	0.08	0.2	0.107	2.36	6.1	6.3	0.67	289	3.60	1.70	3.9	7.5	840
B464840		4.93	15.40	0.09	0.3	0.099	2.37	8.8	13.2	0.76	1975	2.89	0.62	3.8	6.2	950
B464841		4.77	15.85	0.10	0.3	0.073	2.59	9.1	16.6	0.73	5090	2.47	0.17	4.8	6.6	1070
B464842		5.53	14.80	0.09	0.2	0.108	2.79	5.0	8.4	0.73	1830	3.87	0.63	4.6	7.7	550
B464843		5.46	14.55	0.10	0.2	0.083	2.42	6.1	6.4	0.69	222	2.36	1.35	3.9	6.5	820
B464844		5.35	13.65	0.10	0.2	0.106	2.74	5.7	7.9	0.66	629	5.54	0.56	2.8	7.4	630
B464845																
B464846		2.56	13.90	0.10	1.9	0.023	1.90	14.2	2.7	0.40	597	4.17	3.31	6.2	15.0	370
B464847		4.84	14.10	0.08	0.4	0.089	2.40	8.3	14.5	0.70	284	15.65	0.57	3.4	6.8	960
B464848		4.42	17.55	0.11	0.7	0.058	1.97	10.8	14.4	0.79	452	4.36	1.45	5.1	5.5	1340
B464849		4.20	17.65	0.09	0.8	0.051	1.94	11.1	16.5	0.81	381	3.33	1.44	5.4	5.9	1330
B464850		4.34	16.30	0.08	0.7	0.070	2.27	9.5	20.2	0.85	801	4.22	0.66	4.3	5.8	1300
B464851		4.46	16.35	0.11	0.7	0.091	1.90	9.8	6.6	0.81	177	6.02	2.36	3.9	5.4	1170
B464852		4.44	15.55	0.08	0.7	0.059	2.17	11.8	7.8	0.82	269	2.38	2.36	4.5	5.7	1320
B464853		4.55	17.80	0.11	0.8	0.085	2.12	12.0	10.5	0.85	462	2.05	1.88	5.4	6.1	1340
B464854		4.57	17.45	0.11	0.8	0.079	2.04	11.3	12.0	0.89	552	1.77	1.61	5.3	5.9	1290
B464855		4.53	16.80	0.08	0.5	0.062	2.01	9.6	15.8	0.82	329	35.3	1.91	5.6	6.8	1200
B464856		5.23	16.50	0.10	0.5	0.098	1.96	9.5	13.5	0.76	305	4.01	1.87	4.8	8.9	1040
B464857		5.13	16.30	0.09	0.4	0.089	2.10	9.5	10.2	0.75	216	1.76	2.15	5.2	7.3	1060
B464858		5.71	15.00	0.07	0.2	0.125	2.34	5.6	7.5	0.66	314	2.80	1.81	4.4	8.8	730

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Finalized Date: 17-FEB-2022
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CERTIFICATE OF ANALYSIS VA21340605

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
B464819		367	82.4	0.015	5.79	23.3	5.8	3	2.4	424	0.25	0.48	3.76	0.148	1.06	0.6
B464820		40.0	65.8	0.023	4.38	9.20	6.0	3	1.7	484	0.27	0.19	4.24	0.152	1.02	0.5
B464821		30.1	70.6	0.024	4.48	5.00	6.2	3	2.1	470	0.23	0.23	4.26	0.137	0.96	0.5
B464822		12.5	69.7	0.022	5.38	2.31	6.6	4	2.4	391	0.20	0.20	4.17	0.125	1.04	0.4
B464823		176.5	83.8	0.026	5.30	1.80	6.5	4	2.0	286	0.19	0.37	4.14	0.123	1.18	0.5
B464824		20.8	69.4	0.016	3.87	1.40	6.0	3	1.8	506	0.22	0.29	4.46	0.142	1.05	0.4
B464825		20.9	87.2	0.276	2.34	7.69	12.7	4	1.5	271	0.16	1.37	2.54	0.320	1.27	0.8
B464826		2.8	41.8	<0.002	0.01	0.34	6.3	<1	1.7	195.0	0.38	<0.05	2.71	0.176	0.19	1.2
B464827		35.4	65.1	0.014	4.94	1.27	5.5	3	2.5	519	0.22	0.58	4.08	0.126	0.96	0.4
B464828		8.6	56.4	0.010	3.38	0.60	6.3	3	1.4	595	0.33	0.31	4.34	0.168	0.95	0.4
B464829		8.3	52.6	0.010	3.10	0.57	5.7	2	1.6	538	0.32	0.19	4.10	0.171	0.84	0.4
B464830		10.8	57.2	0.011	2.79	0.35	6.6	3	1.3	604	0.37	0.21	4.28	0.193	0.86	0.4
B464831		7.9	53.7	0.015	3.06	0.56	7.2	2	1.2	924	0.40	0.30	4.52	0.215	0.79	0.5
B464832		8.3	44.4	0.022	2.97	0.77	6.5	2	1.4	82.2	0.34	0.32	4.24	0.188	0.91	0.5
B464833		8.8	58.8	0.118	3.67	0.56	6.2	3	1.3	646	0.29	0.37	4.25	0.168	0.95	0.4
B464834		8.8	57.5	0.049	3.49	0.51	6.1	3	1.2	757	0.29	0.33	4.11	0.179	0.85	0.4
B464835		12.2	58.7	0.015	4.01	1.47	6.7	4	1.8	449	0.32	0.34	4.34	0.168	1.00	0.6
B464836		150.5	107.5	0.026	2.61	13.30	5.2	3	1.5	277	0.45	0.39	6.32	0.142	1.52	1.7
B464837		12.9	60.5	0.008	3.10	0.80	7.0	2	1.3	680	0.42	0.22	4.57	0.212	1.04	0.7
B464838		12.0	60.5	0.006	2.79	0.40	7.1	2	1.2	652	0.42	0.24	4.95	0.214	0.88	0.5
B464839		13.6	62.9	0.020	3.90	0.70	5.3	4	1.3	554	0.26	0.45	3.38	0.145	1.00	0.3
B464840		73.7	93.0	0.030	3.97	5.20	5.8	4	1.3	186.5	0.25	0.48	4.49	0.151	1.31	0.4
B464841		150.0	107.5	0.015	3.37	23.0	6.3	4	1.2	248	0.31	0.29	4.60	0.181	1.48	0.6
B464842		45.8	91.3	0.017	4.00	4.83	6.1	3	1.7	325	0.29	0.37	3.90	0.151	1.38	0.4
B464843		8.7	72.6	0.013	4.53	0.59	5.5	4	1.8	544	0.26	0.26	3.60	0.131	1.19	0.4
B464844		217	84.3	0.022	5.14	5.28	5.6	4	2.1	371	0.20	0.30	3.67	0.105	1.28	0.3
B464845																
B464846		3.2	43.7	<0.002	0.01	0.35	6.8	1	1.8	199.0	0.40	<0.05	2.97	0.181	0.19	1.2
B464847		9.4	72.9	0.097	4.14	0.99	5.8	3	1.9	454	0.21	0.63	4.10	0.134	1.06	0.6
B464848		22.9	59.8	0.032	3.31	1.26	6.6	3	1.3	1005	0.33	0.36	4.59	0.193	1.06	0.8
B464849		9.3	53.2	0.017	2.83	0.83	6.7	3	1.1	613	0.34	0.42	4.87	0.199	0.95	0.8
B464850		81.6	71.3	0.030	3.47	11.80	6.5	3	1.2	465	0.29	0.37	4.89	0.183	1.31	0.7
B464851		7.5	57.0	0.035	4.13	0.63	6.7	4	1.7	859	0.25	0.39	5.07	0.175	0.98	0.7
B464852		26.5	63.3	0.017	3.88	1.32	6.4	4	1.2	791	0.28	0.42	4.97	0.187	1.04	0.7
B464853		35.1	68.1	0.013	3.21	1.59	6.7	3	1.1	506	0.34	0.41	5.18	0.200	1.18	0.9
B464854		75.5	66.4	0.017	3.24	2.40	6.7	3	1.1	531	0.35	0.39	4.93	0.197	1.14	0.9
B464855		19.6	54.2	0.194	2.43	0.54	6.4	2	1.0	518	0.34	0.36	4.05	0.204	0.90	0.7
B464856		19.5	62.2	0.026	3.78	1.11	6.5	4	1.2	456	0.31	0.42	4.46	0.178	0.98	0.6
B464857		7.6	58.4	0.019	3.12	0.44	6.2	3	1.2	568	0.33	0.34	4.46	0.185	0.94	0.5
B464858		11.5	54.6	0.011	4.07	0.40	5.6	4	1.5	395	0.29	0.38	3.65	0.149	0.85	0.3

***** 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: 17-FEB-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21340605

Sample Description	Method	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62	Zn-OG62
	Analyte	V	W	Y	Zn	Zr	Cu	Zn
	Units	ppm	ppm	ppm	ppm	ppm	%	%
	LOD	1	0.1	0.1	2	0.5	0.001	0.001
B464819		51	1.0	8.0	2370	11.6		
B464820		57	0.2	7.9	114	10.5		
B464821		60	0.3	8.0	103	11.1		
B464822		64	0.3	7.9	45	9.6		
B464823		63	0.5	7.2	749	9.4		
B464824		56	0.4	7.0	121	7.6		
B464825		128	18.4	10.4	186	14.0		
B464826		30	0.6	16.7	28	54.9		
B464827		57	0.3	6.6	207	7.7		
B464828		58	0.1	7.0	39	8.1		
B464829		56	0.2	6.9	38	9.3		
B464830		56	0.2	8.7	42	12.4		
B464831		71	0.2	10.4	34	11.4		
B464832		62	0.8	8.1	38	8.5		
B464833		56	0.2	7.6	34	8.3		
B464834		58	0.2	7.6	35	8.3		
B464835		64	0.3	8.0	54	8.9		
B464836		47	1.4	8.3	480	19.7		
B464837		68	0.3	9.3	65	13.8		
B464838		70	0.1	9.3	54	11.0		
B464839		52	0.2	5.6	52	6.2		
B464840		50	0.3	6.2	303	8.8		
B464841		57	1.7	6.6	761	9.6		
B464842		56	0.4	4.2	208	6.6		
B464843		58	0.1	5.4	37	6.9		
B464844		47	0.2	4.3	1035	6.3		
B464845								
B464846		31	0.7	18.4	28	60.2		
B464847		52	0.3	6.3	47	11.1		
B464848		60	0.2	8.7	69	19.9		
B464849		61	0.2	9.2	37	22.1		
B464850		58	0.8	8.4	168	19.7		
B464851		57	0.3	7.7	34	20.1		
B464852		58	0.3	8.2	110	20.6		
B464853		63	0.2	8.4	90	22.7		
B464854		61	0.3	8.4	202	22.4		
B464855		67	0.2	7.6	52	15.2		
B464856		60	0.2	7.0	69	13.7		
B464857		60	0.2	7.3	36	12.3		
B464858		50	0.2	5.0	49	6.3		

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VANCOUVER BC V6E 4K2

Finalized Date: 17-FEB-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21340605

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
B464859		6.22	0.106	1.21	6.11	7.2	180	0.76	0.30	1.54	0.42	13.65	10.9	22	3.62	3640
B464860		6.48	0.124	4.49	6.03	150.0	160	0.82	0.73	1.33	1.66	12.70	12.4	17	4.31	4000
B464861		6.54	0.140	2.99	5.79	83.9	160	0.66	0.39	1.48	1.28	12.05	12.0	21	3.63	4910
B464862		6.42	0.121	1.30	5.75	9.8	130	0.72	0.24	1.26	0.16	13.30	16.9	19	2.72	3780
B464863		7.08	0.045	0.50	6.77	2.4	160	0.86	0.25	1.80	0.10	20.4	11.8	13	3.34	1780
B464864		6.24	0.071	0.68	6.36	2.0	90	0.74	0.35	1.75	0.11	19.40	12.0	17	2.78	2160
B464865		Not Recvd														
B464866		6.22	0.038	0.45	7.15	2.2	900	1.02	0.31	1.88	0.07	24.6	9.3	17	3.26	1300
B464867		Not Recvd														
B464868		6.06	0.047	0.45	7.26	3.1	860	0.98	0.36	1.88	0.06	24.9	6.6	13	3.64	1390
B464869		5.80	0.077	1.07	6.93	29.2	330	0.91	0.46	2.03	0.52	21.2	14.8	16	3.85	2290
B464870		6.34	0.096	1.58	5.61	19.1	130	0.74	0.39	1.67	0.76	18.05	17.4	16	3.49	3160
B464871		6.18	0.043	0.51	7.00	2.7	300	0.94	0.19	1.77	0.07	22.0	17.3	12	3.74	1560
B464872		5.78	0.041	2.22	6.71	63.6	620	0.92	0.16	2.89	1.24	24.3	11.5	13	4.65	1450
B464873		3.16	0.087	1.13	6.50	19.2	420	0.93	0.26	1.95	0.18	23.6	13.7	14	4.66	2110
B464874		2.68	0.055	0.92	6.88	9.5	770	1.00	0.23	2.19	0.16	23.2	10.3	11	4.70	1825
B464875		3.24	0.029	0.73	7.85	4.3	1080	1.17	0.18	2.27	0.18	31.2	9.3	13	5.22	1140
B464876		6.34	0.039	2.23	7.38	46.6	1020	1.01	0.13	2.88	1.16	28.8	8.5	13	6.56	1215
B464877		6.18	0.103	2.86	6.98	68.3	770	1.12	0.88	2.36	7.10	25.3	8.6	9	7.45	979
B464878		6.42	0.078	2.01	7.15	23.8	760	1.00	0.30	2.22	0.46	24.0	13.5	13	6.33	2390
B464879		6.46	0.080	3.25	6.72	100.5	500	0.96	0.35	2.41	1.16	24.5	11.1	13	8.15	2580
B464880		6.44	0.225	63.4	5.78	627	250	0.87	1.41	0.48	28.5	14.35	9.2	10	5.87	3550
B464881		6.28	0.196	21.9	6.17	586	140	0.91	0.63	2.02	10.70	16.15	11.3	14	6.72	4700
B464882		6.54	0.219	14.95	6.09	297	180	0.81	0.72	1.57	4.20	15.00	14.2	17	4.66	5490
B464883		6.56	0.135	4.13	6.65	97.9	280	0.86	0.23	1.96	0.99	16.65	12.5	16	5.23	4020
B464884		6.52	0.063	2.10	7.50	7.0	360	0.98	0.25	2.42	0.50	19.65	11.0	14	5.65	1970
B464885		Not Recvd														
B464886		0.08	<0.001	0.03	7.08	2.3	850	1.04	0.02	1.68	0.03	26.0	3.9	24	0.39	28.8
B464887		6.24	0.094	1.49	6.67	5.0	350	0.92	0.18	2.26	0.22	17.65	9.2	18	4.26	2800
B464888		5.86	0.152	34.3	6.36	24.8	150	0.93	0.30	1.79	12.45	14.45	11.2	15	4.00	3730
B464889		6.78	0.147	83.0	6.31	7.5	380	0.87	0.20	1.88	8.21	19.20	9.8	21	4.26	3270
B464890		6.60	0.107	1.43	6.90	3.1	820	0.91	0.19	1.89	0.12	22.6	11.2	18	3.75	3210
B464891		6.82	0.143	3.58	6.28	48.0	240	0.81	0.29	1.79	0.98	15.70	13.3	17	4.17	4680
B464892		6.34	0.140	8.19	6.49	287	310	0.90	1.02	1.59	5.31	18.10	12.8	18	6.23	4060
B464893		2.74	0.138	8.84	6.34	471	900	0.83	0.46	1.61	4.67	17.75	12.0	17	5.92	3860
B464894		3.20	0.132	6.85	6.33	350	960	0.83	0.37	1.70	4.00	17.65	12.0	16	5.63	3830
B464895		3.16	0.132	6.86	6.32	434	210	0.80	0.87	1.64	5.08	18.20	18.1	20	5.41	4460
B464896		6.28	0.121	2.49	6.60	176.5	270	0.84	0.41	2.38	1.59	18.90	17.5	17	4.16	4170
B464897		5.84	0.088	1.64	7.01	10.3	960	0.99	0.20	2.80	0.25	22.5	10.3	16	6.39	3170
B464898		6.36	0.130	1.46	6.80	3.4	1000	0.94	0.21	2.34	0.45	18.75	11.1	15	3.95	3220

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VANCOUVER BC V6E 4K2

Finalized Date: 17-FEB-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21340605

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
B464859		5.54	15.30	0.09	0.2	0.102	2.24	6.5	6.5	0.71	268	2.81	1.54	4.6	7.4	910
B464860		5.62	16.75	0.10	0.2	0.147	2.14	6.1	12.4	0.66	1495	1.82	0.34	4.0	7.2	700
B464861		6.38	15.90	0.11	0.2	0.149	2.18	5.9	10.6	0.66	585	2.94	0.83	3.9	8.2	690
B464862		6.70	16.20	0.09	0.3	0.124	2.05	6.2	7.7	0.65	120	2.45	1.68	4.2	8.1	760
B464863		6.31	16.50	0.10	0.3	0.055	1.81	9.3	9.6	0.77	181	2.72	1.72	4.6	5.6	1050
B464864		6.18	15.35	0.10	0.3	0.073	1.85	8.5	7.6	0.76	126	4.79	1.88	4.3	6.2	1000
B464865																
B464866		5.37	18.65	0.09	0.3	0.046	1.77	11.2	6.8	0.85	128	2.30	2.52	6.3	6.3	1220
B464867																
B464868		5.39	19.05	0.10	0.4	0.041	1.80	11.4	7.6	0.85	149	1.30	2.38	6.2	5.6	1240
B464869		5.70	18.15	0.09	0.5	0.072	1.98	9.8	8.1	0.80	371	2.49	2.09	5.2	6.8	1020
B464870		5.95	14.55	0.09	0.3	0.092	1.78	8.1	7.9	0.62	354	15.00	1.18	3.7	7.7	810
B464871		6.70	18.15	0.10	0.4	0.037	1.94	9.7	12.6	0.82	264	3.23	1.13	5.9	7.1	1120
B464872		4.97	17.00	0.10	0.4	0.039	1.87	11.6	22.7	0.91	899	3.96	0.13	5.5	6.1	1110
B464873		5.10	16.85	0.09	0.6	0.072	2.03	10.8	11.2	0.69	282	4.02	1.46	4.4	6.6	1010
B464874		5.03	18.10	0.10	0.7	0.062	2.13	10.2	10.4	0.74	275	2.34	1.77	4.9	5.4	1080
B464875		4.83	19.95	0.10	0.8	0.047	2.04	13.9	20.0	0.87	481	2.08	0.86	6.5	5.8	1300
B464876		4.68	18.05	0.11	0.8	0.045	2.56	13.8	24.4	0.96	1800	3.60	0.10	6.0	5.7	1210
B464877		5.02	18.15	0.10	0.5	0.139	2.62	12.0	19.3	0.89	3040	2.59	0.08	5.4	5.2	1100
B464878		5.18	17.95	0.11	0.6	0.087	2.14	11.0	15.6	0.82	884	3.39	0.87	5.5	6.9	1050
B464879		5.25	18.05	0.11	0.5	0.113	2.31	11.4	31.8	0.87	1600	10.05	0.09	5.3	6.6	970
B464880		5.18	15.85	0.09	0.3	0.480	2.61	7.0	13.3	0.41	12200	8.78	0.04	4.2	6.3	760
B464881		5.43	16.10	0.09	0.2	0.569	2.58	7.0	13.1	0.85	5580	3.24	0.07	4.5	7.4	870
B464882		6.39	17.05	0.10	0.2	0.302	2.36	6.9	9.8	0.70	3570	3.08	0.85	4.6	9.4	900
B464883		5.03	16.50	0.10	0.4	0.190	2.43	7.3	10.5	0.71	1480	3.06	1.30	5.3	6.7	940
B464884		4.64	18.85	0.10	0.7	0.096	2.39	8.3	10.6	0.81	1015	3.52	1.83	5.8	6.0	1240
B464885																
B464886		2.50	13.45	0.08	1.9	0.020	1.87	13.2	2.5	0.40	593	4.01	3.28	6.0	14.0	370
B464887		4.73	17.65	0.10	0.5	0.093	2.25	7.5	12.1	0.78	704	3.55	1.33	5.5	6.8	1000
B464888		5.13	16.05	0.09	0.3	0.449	2.05	6.5	10.9	0.70	3210	2.00	1.60	5.4	7.1	920
B464889		5.06	17.45	0.10	0.3	0.170	2.20	8.5	10.2	0.73	1255	3.69	1.69	5.6	7.1	970
B464890		5.06	17.90	0.11	0.4	0.129	1.91	9.9	11.7	0.85	342	2.70	2.24	6.2	7.2	1150
B464891		5.19	17.40	0.10	0.3	0.170	2.29	6.9	11.2	0.74	1450	3.02	1.53	4.8	6.8	820
B464892		5.46	18.70	0.09	0.3	0.576	2.93	8.1	12.0	0.68	8750	3.16	0.62	5.7	7.3	910
B464893		5.90	18.25	0.08	0.3	0.385	2.71	7.9	19.5	0.75	6480	2.67	0.29	5.5	7.3	930
B464894		5.83	18.20	0.08	0.3	0.364	2.55	7.8	23.2	0.75	6290	2.30	0.29	5.4	6.7	920
B464895		5.53	18.35	0.11	0.3	0.205	2.62	8.0	20.4	0.74	2440	3.37	0.51	5.4	7.6	980
B464896		5.36	18.35	0.10	0.4	0.141	2.33	8.2	24.7	0.81	993	3.44	0.47	5.3	8.1	1040
B464897		4.93	16.60	0.14	0.8	0.137	2.36	8.8	40.5	0.98	1175	1.73	0.98	5.6	8.0	1270
B464898		5.05	17.00	0.14	0.4	0.130	2.03	7.0	14.7	0.94	514	1.81	1.33	5.5	7.5	1120

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CERTIFICATE OF ANALYSIS VA21340605

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
B464859		28.3	61.3	0.008	3.36	0.56	5.6	3	1.5	414	0.30	0.32	3.62	0.153	0.90	0.3
B464860		196.0	73.9	0.008	3.75	27.1	5.7	4	2.1	208	0.25	0.65	3.54	0.146	1.08	0.5
B464861		87.2	64.4	0.008	4.21	2.08	5.0	5	1.8	244	0.26	0.51	3.39	0.134	0.95	0.4
B464862		10.5	47.8	0.010	4.38	0.27	5.1	4	1.2	420	0.29	0.39	3.25	0.148	0.73	0.3
B464863		7.4	46.6	0.011	4.00	0.38	5.5	3	1.2	444	0.33	0.28	4.25	0.169	0.68	0.4
B464864		9.2	47.5	0.013	4.34	0.24	5.7	4	1.0	528	0.31	0.40	3.90	0.168	0.76	0.4
B464865																
B464866		6.4	44.1	0.005	1.97	0.16	6.3	2	0.9	620	0.43	0.33	4.82	0.205	0.69	0.5
B464867																
B464868		5.9	52.4	0.008	2.03	0.22	6.4	2	1.1	785	0.43	0.37	5.00	0.207	0.77	0.6
B464869		30.5	56.0	0.017	3.19	1.23	5.7	3	1.1	627	0.38	0.51	5.00	0.194	0.85	0.6
B464870		35.5	51.8	0.113	3.89	1.04	5.0	4	1.1	488	0.28	0.52	3.36	0.141	0.76	0.4
B464871		7.6	54.1	0.044	3.07	0.49	6.3	2	1.0	252	0.43	0.27	4.84	0.202	0.81	0.6
B464872		78.8	60.5	0.035	2.29	4.34	5.9	2	0.9	128.5	0.39	0.19	4.37	0.188	0.93	0.6
B464873		17.1	56.6	0.014	2.84	0.71	5.7	3	0.9	430	0.31	0.37	4.49	0.170	0.90	0.9
B464874		15.2	55.2	0.011	2.33	0.55	5.8	2	0.9	559	0.35	0.29	4.67	0.183	0.93	0.9
B464875		19.0	57.0	0.005	1.50	0.69	6.7	2	0.9	203	0.42	0.19	5.45	0.214	0.91	1.3
B464876		67.3	93.6	0.018	1.48	5.02	6.2	2	0.9	153.0	0.42	0.16	5.19	0.200	1.33	1.2
B464877		146.0	106.5	0.015	2.02	13.75	5.8	2	1.2	173.5	0.37	0.25	4.95	0.184	1.52	0.8
B464878		33.7	71.0	0.011	2.52	1.39	6.0	2	1.3	195.5	0.39	0.34	5.05	0.198	1.07	0.8
B464879		67.6	89.6	0.027	2.61	5.51	5.8	2	1.0	183.5	0.36	0.36	4.63	0.180	1.20	0.8
B464880		4600	124.0	0.027	3.38	487	5.0	3	1.6	236	0.30	0.45	3.85	0.143	1.50	0.7
B464881		725	123.0	0.005	3.14	85.3	5.8	3	1.5	378	0.29	0.41	3.52	0.163	1.58	0.6
B464882		214	90.2	0.007	3.34	36.4	5.7	3	1.6	391	0.31	0.49	3.32	0.163	1.19	0.4
B464883		65.0	78.9	0.011	3.33	7.60	5.8	3	1.2	587	0.38	0.44	4.18	0.188	1.08	0.5
B464884		41.3	73.8	0.012	3.65	1.42	6.2	3	1.0	474	0.40	0.38	5.02	0.205	1.08	0.8
B464885																
B464886		3.0	41.5	<0.002	0.01	0.38	6.3	1	1.9	194.0	0.40	<0.05	2.89	0.180	0.18	1.3
B464887		15.8	60.4	0.006	3.04	0.76	6.1	3	1.1	250	0.37	0.26	4.39	0.184	0.91	0.6
B464888		3570	69.3	0.006	3.25	88.9	6.0	2	1.2	575	0.36	0.28	3.97	0.180	0.92	0.4
B464889		1115	74.7	0.010	2.32	38.4	6.2	2	1.0	454	0.35	0.22	3.79	0.179	0.96	0.5
B464890		14.6	54.3	0.005	2.13	0.62	6.4	2	1.1	539	0.39	0.25	3.80	0.197	0.70	0.5
B464891		46.6	75.1	0.011	3.46	2.23	5.8	3	1.5	443	0.31	0.41	3.69	0.171	1.00	0.4
B464892		230	122.0	0.007	2.58	37.2	6.1	2	1.6	315	0.36	0.36	4.24	0.184	1.48	0.6
B464893		295	108.5	0.006	1.62	69.6	5.9	2	0.9	287	0.36	0.24	3.73	0.178	1.38	0.5
B464894		227	100.0	0.004	1.69	32.4	5.9	2	0.8	277	0.36	0.21	3.78	0.172	1.24	0.5
B464895		263	97.0	0.011	3.09	42.4	6.3	3	1.6	424	0.35	0.66	3.72	0.177	1.24	0.6
B464896		68.4	71.3	0.013	3.30	17.15	6.1	3	1.6	247	0.35	0.38	4.15	0.172	0.94	0.6
B464897		16.9	74.4	0.005	1.14	1.11	7.0	2	0.8	429	0.42	0.21	3.90	0.262	0.97	0.6
B464898		13.7	57.3	0.004	1.54	0.63	6.1	2	0.9	427	0.39	0.18	3.83	0.204	0.71	0.5

***** 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-FEB-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21340605

Sample Description	Method	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62	Zn-OG62
	Analyte	V	W	Y	Zn	Zr	Cu	Zn
	Units	ppm	ppm	ppm	ppm	ppm	%	%
	LOD	1	0.1	0.1	2	0.5	0.001	0.001
B464859		51	0.1	6.1	95	5.3		
B464860		56	0.7	4.4	301	6.8		
B464861		56	0.4	4.8	249	5.5		
B464862		58	0.1	5.3	39	7.8		
B464863		64	0.1	6.8	39	8.8		
B464864		64	0.1	6.8	40	8.5		
B464865								
B464866		67	0.1	8.4	31	9.7		
B464867								
B464868		68	0.2	8.0	30	11.6		
B464869		64	0.4	5.9	85	12.6		
B464870		62	0.2	5.2	113	7.6		
B464871		73	0.2	6.8	37	11.3		
B464872		66	0.9	7.0	191	11.4		
B464873		71	0.2	6.5	57	17.7		
B464874		73	0.1	6.8	56	18.7		
B464875		69	0.3	9.2	73	25.1		
B464876		64	1.2	8.6	228	21.8		
B464877		61	2.4	7.3	1100	14.5		
B464878		64	0.9	7.1	125	14.7		
B464879		61	1.0	6.9	226	14.5		
B464880		50	3.9	4.6	3930	8.6		
B464881		63	2.6	5.5	1855	6.3		
B464882		67	1.5	5.8	622	5.8		
B464883		59	0.6	6.1	190	9.6		
B464884		60	0.3	7.3	106	19.9		
B464885								
B464886		31	0.6	16.4	29	59.5		
B464887		61	0.3	6.7	64	13.5		
B464888		59	0.6	6.1	1600	8.1		
B464889		64	0.9	6.8	996	9.1		
B464890		64	0.5	7.8	52	10.4		
B464891		60	0.4	5.7	188	8.2		
B464892		63	3.0	6.3	825	9.6		
B464893		65	2.7	6.3	738	9.1		
B464894		63	2.2	6.3	727	8.7		
B464895		62	2.2	6.4	743	8.6		
B464896		59	1.4	6.9	275	9.9		
B464897		78	0.8	7.3	84	27.2		
B464898		61	0.7	7.1	90	11.2		

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

Finalized Date: 17-FEB-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21340605

Sample Description	Method / Analyte / Units / LOD	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	ME-MS61 Ag ppm 0.01	ME-MS61 Al % 0.01	ME-MS61 As ppm 0.2	ME-MS61 Ba ppm 10	ME-MS61 Be ppm 0.05	ME-MS61 Bi ppm 0.01	ME-MS61 Ca % 0.01	ME-MS61 Cd ppm 0.02	ME-MS61 Ce ppm 0.01	ME-MS61 Co ppm 0.1	ME-MS61 Cr ppm 1	ME-MS61 Cs ppm 0.05	ME-MS61 Cu ppm 0.2
B464899		6.24	0.092	1.39	6.92	2.9	960	0.93	0.15	2.02	0.25	19.65	9.2	38	4.27	3620
B464900		6.16	0.150	3.27	6.61	15.6	570	1.00	0.35	1.77	1.69	19.85	11.3	52	4.57	5500
B464901		6.58	0.195	4.53	6.47	3.5	650	0.85	0.33	1.71	1.17	13.85	12.6	32	4.39	6810
B464902		6.30	0.109	4.16	6.93	3.1	580	0.85	0.29	1.74	1.12	17.00	12.4	23	4.24	4540
B464903		6.28	0.116	5.88	6.85	71.2	890	0.85	0.27	1.92	3.81	15.80	10.5	13	5.06	4160
B464904		6.54	0.100	3.73	7.30	90.9	1070	1.00	0.16	2.20	3.70	18.30	7.7	19	7.01	4030
B464905		0.08	0.022	2.13	6.46	27.2	710	1.08	1.92	1.84	0.96	31.0	34.3	242	3.31	3460
B464906		0.08	0.009	0.03	7.20	2.1	860	1.02	0.03	1.71	0.02	25.5	3.8	25	0.39	25.9
B464907		6.48	0.071	4.63	6.85	127.0	890	1.02	0.51	1.89	3.95	15.25	8.2	15	5.94	3300
B464908		6.26	0.115	20.7	6.31	597	450	1.07	0.43	1.93	85.9	12.05	10.2	26	6.33	4250
B464909		7.22	0.041	3.61	7.11	32.1	1200	1.80	0.27	1.01	8.29	24.7	1.9	8	7.22	53.4
B464910		4.82	0.012	2.39	6.39	8.5	610	1.70	0.18	1.63	3.43	19.80	1.9	7	5.93	9.9
B464911		5.62	0.012	2.95	6.61	5.1	720	1.58	0.18	2.31	4.17	25.5	1.9	5	5.88	11.8
B464912		6.68	0.011	0.39	6.54	3.3	640	1.62	0.19	2.03	4.48	22.4	1.8	7	6.38	4.1
B464913		2.46	0.014	0.35	6.39	3.5	700	1.53	0.18	1.95	4.82	24.3	1.7	9	5.76	4.6
B464914		2.34	0.017	0.31	6.30	3.4	830	1.46	0.17	1.87	4.94	23.2	1.6	5	5.76	3.8
B464915		3.34	0.026	0.31	6.17	3.0	540	1.62	0.21	2.21	5.88	20.1	1.5	8	5.85	4.3
B464916		6.08	0.008	0.23	5.57	4.5	690	1.51	0.16	2.25	4.50	15.85	1.4	7	5.01	3.6
B464917		6.58	0.006	0.18	6.16	3.4	780	1.68	0.10	1.96	4.03	18.70	1.6	4	6.64	2.8
B464918		6.58	0.004	0.26	6.62	6.3	970	1.56	0.09	3.16	2.23	36.6	8.9	43	19.75	14.6
B464919		6.18	0.005	0.21	6.38	2.5	760	1.48	0.11	1.67	3.21	22.5	1.4	6	5.17	3.3
B464920		6.32	0.016	0.85	6.77	33.9	500	1.50	0.15	1.40	3.51	24.6	2.6	5	11.10	299
B464921		6.40	0.115	3.72	7.19	268	410	0.94	2.05	2.33	4.16	20.1	14.0	11	8.68	4200
B464922		6.32	0.081	3.09	6.85	176.0	870	1.00	0.48	2.11	4.43	17.55	8.8	12	5.85	2940
B464923		6.86	0.132	3.68	7.14	382	880	1.04	0.25	2.37	1.88	22.7	12.2	12	5.99	4390
B464924		6.98	0.100	4.12	7.28	54.6	880	1.04	0.42	2.10	1.43	19.60	9.9	14	5.53	3500
B464925		0.08	0.191	1.08	8.06	50.6	440	1.05	0.57	2.15	1.08	27.2	13.8	19	6.98	2180
B464926		0.06	0.002	0.02	7.16	2.2	870	1.08	0.02	1.70	0.02	25.8	3.9	25	0.42	26.4
B464927		6.14	0.115	3.35	6.69	192.5	720	1.12	0.61	2.21	4.42	17.50	10.0	13	5.29	4530
B464928		6.10	0.159	14.65	6.38	75.4	190	0.93	11.40	1.86	8.71	18.70	11.1	11	3.81	5530
B464929		6.22	0.201	3.28	6.94	6.6	940	0.90	0.19	1.78	0.44	17.40	12.9	17	3.51	6300
B464930		6.08	0.116	3.58	6.68	60.9	1000	0.88	0.52	1.93	1.66	16.50	11.2	13	3.89	3590
B464931		6.02	0.133	4.25	7.17	113.0	840	1.10	0.61	2.15	3.04	19.85	10.8	11	5.92	4530
B464932		6.28	0.092	2.41	6.30	360	730	1.26	0.25	2.65	0.83	15.70	8.2	13	4.83	3190
B464933		3.02	0.150	2.38	6.96	692	750	1.14	0.29	2.09	0.99	19.00	10.4	13	5.44	5190
B464934		2.88	0.136	2.30	6.81	631	770	1.22	0.27	2.05	0.86	16.90	10.7	11	5.73	5150
B464935		2.64	0.182	6.92	6.48	880	790	0.88	0.64	2.09	3.89	14.75	10.8	14	4.84	6130
B464936		6.50	0.126	5.95	6.68	737	570	0.98	1.31	1.92	2.65	18.20	10.3	13	5.07	4520
B464937		6.62	0.159	8.79	6.18	1265	670	1.05	3.55	1.72	2.68	18.00	10.7	9	4.67	5470
B464938		5.86	0.251	11.95	6.36	867	510	0.79	0.59	1.82	2.14	15.10	12.0	12	4.45	>10000

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To: MAMMOTH GEOLOGICAL LTD.
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VANCOUVER BC V6E 4K2

Finalized Date: 17-FEB-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21340605

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
B464899		4.64	16.15	0.15	0.4	0.113	2.15	7.9	11.0	0.91	334	3.78	2.16	5.8	11.4	1010
B464900		5.11	16.45	0.15	0.4	0.262	2.20	8.2	9.0	1.13	1405	2.91	1.96	6.1	18.1	880
B464901		5.26	16.50	0.16	0.3	0.260	2.32	5.5	14.1	1.06	579	2.82	1.79	5.3	16.2	800
B464902		4.99	17.00	0.16	0.3	0.169	2.85	6.8	10.9	0.73	625	4.26	1.91	4.6	10.0	930
B464903		4.39	15.90	0.15	0.3	0.145	3.04	6.6	17.5	0.74	1610	3.25	1.09	4.6	8.0	830
B464904		3.83	16.80	0.17	0.4	0.154	3.22	7.0	28.3	0.77	1530	3.68	1.20	5.7	7.9	1030
B464905		3.93	13.90	0.18	0.5	0.092	2.92	14.4	9.1	3.52	393	238	1.11	2.4	227	980
B464906		2.55	12.35	0.18	1.8	0.026	1.87	12.9	2.6	0.41	613	3.96	3.29	5.1	14.1	370
B464907		5.06	17.40	0.16	0.4	0.174	3.28	5.9	35.8	0.74	1945	3.82	0.75	4.9	8.4	960
B464908		5.76	17.00	0.15	0.4	0.152	2.98	4.9	40.0	0.75	6850	3.50	0.09	4.5	10.8	590
B464909		1.35	16.60	0.18	2.6	0.017	3.24	12.6	18.5	0.28	4510	1.47	0.03	13.6	3.2	370
B464910		1.08	15.75	0.15	2.3	0.010	3.48	8.2	5.5	0.26	1725	1.06	0.03	11.2	2.7	310
B464911		1.11	16.90	0.17	2.6	0.014	4.25	12.6	5.5	0.30	2270	0.63	0.04	13.2	2.2	310
B464912		1.02	16.85	0.17	2.5	0.013	3.95	9.2	7.1	0.26	2340	1.29	0.04	13.0	2.7	340
B464913		1.04	15.60	0.17	2.5	0.013	3.40	10.6	6.8	0.25	2240	1.85	0.03	12.0	2.9	320
B464914		1.00	15.70	0.17	2.5	0.009	3.40	11.2	6.9	0.25	2220	0.60	0.03	12.4	2.0	310
B464915		0.98	15.95	0.16	2.4	0.011	3.21	7.9	6.7	0.22	4820	1.47	0.03	12.6	2.6	300
B464916		0.97	15.55	0.16	2.3	0.015	3.06	5.8	6.0	0.21	6490	1.34	0.02	12.2	2.5	270
B464917		0.91	16.40	0.16	2.4	0.013	3.18	7.4	8.6	0.23	3330	0.74	0.02	13.4	2.2	310
B464918		2.51	16.35	0.21	3.2	0.035	2.90	17.0	12.0	1.04	4590	0.96	0.45	11.1	19.6	1030
B464919		1.13	15.75	0.19	2.4	0.020	3.14	11.2	5.8	0.46	6220	0.91	0.02	11.4	2.6	290
B464920		1.45	16.50	0.21	2.3	0.023	2.94	12.2	22.3	0.44	3480	0.75	0.03	11.5	3.1	480
B464921		5.20	19.20	0.22	0.4	0.230	2.59	7.7	26.2	0.81	3740	2.22	0.39	5.1	6.9	1040
B464922		5.35	17.85	0.16	0.3	0.129	2.87	6.7	33.7	0.83	3470	1.62	0.64	5.1	6.0	1030
B464923		6.61	19.20	0.20	0.3	0.097	2.88	8.6	34.0	0.94	1360	2.50	0.27	5.6	7.1	1360
B464924		5.47	18.55	0.19	0.2	0.179	2.97	7.8	32.6	0.85	4000	2.76	0.70	5.7	6.7	1100
B464925		4.44	16.75	0.16	0.2	0.104	2.45	12.8	28.9	0.93	936	248	1.57	5.2	12.0	710
B464926		2.55	13.05	0.19	1.8	0.025	1.90	12.8	2.8	0.40	612	4.03	3.33	5.5	14.9	370
B464927		5.13	18.85	0.17	0.2	0.099	2.62	6.6	65.5	0.82	1865	1.82	0.20	5.2	6.7	1120
B464928		6.27	16.45	0.20	0.2	0.212	2.56	7.1	19.6	0.75	3130	3.53	0.45	4.6	7.3	1130
B464929		5.05	17.30	0.16	0.2	0.136	2.62	6.7	11.8	0.72	588	2.54	1.75	5.6	8.5	1040
B464930		4.73	17.00	0.16	0.2	0.147	2.81	6.0	20.5	0.75	3330	1.65	0.76	5.3	6.4	1090
B464931		4.52	17.40	0.19	0.2	0.128	3.06	8.0	37.5	0.80	3430	3.64	0.66	5.7	6.2	1090
B464932		3.84	16.60	0.15	0.2	0.077	2.17	5.8	171.5	0.82	1590	1.68	0.08	5.4	5.9	990
B464933		4.31	16.95	0.16	0.2	0.088	2.43	8.7	187.0	0.73	862	2.81	0.41	5.5	7.9	960
B464934		4.44	18.20	0.15	0.2	0.093	2.43	7.6	195.5	0.71	832	1.91	0.41	5.5	7.0	880
B464935		4.11	16.30	0.17	0.2	0.196	2.98	6.7	84.5	0.71	1735	4.18	0.23	4.9	7.2	880
B464936		4.56	16.30	0.15	0.3	0.156	2.87	8.3	110.5	0.71	2140	2.77	0.53	5.2	6.6	960
B464937		4.42	15.95	0.17	0.3	0.414	2.65	8.3	145.5	0.64	5320	3.87	0.36	4.9	5.8	890
B464938		4.14	15.00	0.17	0.2	0.228	3.09	7.0	45.2	0.67	1955	5.83	0.26	4.7	7.3	800

***** 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-FEB-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21340605

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
B464899		16.4	64.9	0.007	1.68	0.54	7.7	2	0.9	589	0.39	0.21	3.92	0.228	0.73	0.4
B464900		104.0	90.6	0.006	1.87	4.37	9.8	2	1.2	394	0.37	0.28	3.60	0.268	0.94	0.4
B464901		64.9	87.2	0.009	2.61	0.88	8.2	4	1.4	335	0.31	0.31	3.58	0.230	0.94	0.4
B464902		185.0	87.1	0.016	2.93	1.10	6.0	3	1.2	428	0.35	0.34	4.34	0.179	0.99	0.4
B464903		239	108.5	0.012	2.25	2.24	5.6	3	1.0	381	0.36	0.30	4.23	0.178	1.15	0.4
B464904		135.5	108.5	0.009	1.11	2.36	6.1	3	0.7	608	0.44	0.26	4.44	0.208	1.20	0.5
B464905		18.2	88.2	0.270	2.24	7.04	11.6	4	1.2	258	0.19	1.45	2.30	0.306	1.04	0.8
B464906		1.2	43.7	<0.002	0.01	0.29	6.0	1	1.5	197.0	0.39	<0.05	2.78	0.178	0.15	1.2
B464907		167.5	124.5	0.007	1.33	2.22	5.6	2	1.0	425	0.37	0.26	3.89	0.174	1.32	0.4
B464908		7490	135.0	0.009	2.29	194.5	6.5	2	0.9	456	0.34	0.17	4.25	0.165	1.40	0.9
B464909		371	171.5	0.002	0.15	10.10	2.3	1	0.7	442	1.39	<0.05	18.00	0.077	1.73	14.9
B464910		221	168.0	<0.002	0.05	0.97	2.2	1	0.6	347	1.10	<0.05	11.05	0.086	1.86	8.8
B464911		356	208	<0.002	0.06	1.33	2.3	1	0.6	355	1.33	<0.05	16.10	0.080	2.32	8.1
B464912		354	183.5	<0.002	0.07	1.09	2.2	1	0.6	340	1.28	<0.05	14.10	0.079	2.19	7.6
B464913		337	172.5	<0.002	0.07	0.99	2.1	1	0.7	317	1.28	<0.05	13.35	0.075	1.91	9.2
B464914		340	170.0	<0.002	0.08	0.98	2.0	1	0.6	356	1.23	<0.05	14.05	0.074	1.88	8.5
B464915		145.5	158.0	<0.002	0.09	1.02	2.0	1	0.7	216	1.26	<0.05	12.35	0.075	1.77	7.1
B464916		86.9	142.5	<0.002	0.08	1.05	1.9	1	0.6	192.0	1.20	<0.05	9.61	0.074	1.67	6.3
B464917		214	158.0	<0.002	0.07	1.18	2.1	1	0.6	294	1.28	<0.05	12.25	0.077	1.86	7.1
B464918		52.0	128.5	<0.002	0.07	1.26	7.5	1	0.9	395	1.00	<0.05	9.70	0.279	1.46	5.7
B464919		68.2	181.5	<0.002	0.06	1.18	2.2	1	0.6	274	1.22	<0.05	14.90	0.071	1.77	8.4
B464920		207	159.5	<0.002	0.25	5.80	2.8	1	0.7	453	1.20	<0.05	14.60	0.094	1.59	7.8
B464921		37.9	114.5	0.005	3.08	30.6	6.5	3	2.0	230	0.39	0.30	4.31	0.200	1.13	0.7
B464922		68.6	107.0	0.004	2.11	15.25	6.0	2	1.2	263	0.39	0.20	3.86	0.180	1.10	0.4
B464923		107.0	99.4	0.005	1.99	6.42	6.5	3	1.1	262	0.48	0.22	5.58	0.200	1.05	0.5
B464924		143.5	117.5	0.006	1.80	4.79	6.3	2	1.0	159.0	0.42	0.20	4.21	0.199	1.16	0.4
B464925		39.1	78.6	0.225	1.53	1.86	10.7	4	1.5	275	0.38	0.45	4.10	0.268	0.81	0.9
B464926		1.5	46.3	<0.002	0.01	0.29	6.3	1	1.6	198.5	0.41	<0.05	2.83	0.180	0.16	1.2
B464927		136.0	92.2	0.002	1.96	8.78	6.2	2	2.1	280	0.39	0.39	3.83	0.183	1.01	0.5
B464928		676	94.1	0.008	3.51	16.80	5.6	2	1.7	271	0.35	1.84	3.69	0.164	0.92	0.5
B464929		34.0	80.5	0.003	1.96	1.00	6.2	3	1.2	564	0.41	0.23	4.38	0.191	0.83	0.3
B464930		86.4	90.9	0.003	1.68	9.60	6.0	2	1.1	216	0.40	0.18	3.59	0.186	0.98	0.3
B464931		132.5	128.0	0.005	1.77	13.45	6.4	3	1.2	164.0	0.45	0.24	4.14	0.200	1.20	0.4
B464932		21.6	61.6	0.003	1.33	42.0	5.6	2	1.1	273	0.40	0.17	3.49	0.184	0.89	0.4
B464933		17.9	71.0	0.002	2.13	105.5	5.6	2	1.3	250	0.38	0.21	4.11	0.179	0.87	0.4
B464934		17.4	74.5	0.002	2.18	103.5	5.9	2	1.4	254	0.40	0.20	3.82	0.173	0.90	0.4
B464935		191.0	110.0	0.003	2.48	99.5	5.2	3	1.6	244	0.36	0.22	3.79	0.169	1.26	0.3
B464936		126.0	118.0	0.003	2.62	78.2	5.6	2	1.5	411	0.36	0.22	4.15	0.170	1.27	0.4
B464937		118.5	112.5	0.005	2.15	98.3	4.5	2	1.5	342	0.37	0.27	4.15	0.146	1.20	0.5
B464938		90.8	126.5	0.007	2.61	19.10	4.5	3	1.8	220	0.37	0.28	3.98	0.147	1.43	0.4

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

Finalized Date: 17-FEB-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21340605

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	Cu-OG62 Cu % 0.001	Zn-OG62 Zn % 0.001
B464899		70	0.2	6.5	66	9.7		
B464900		84	0.6	6.2	270	12.3		
B464901		75	0.4	5.5	194	11.7		
B464902		60	0.5	6.1	185	8.9		
B464903		57	0.8	5.4	579	9.6		
B464904		59	1.2	7.0	564	11.9		
B464905		123	17.4	9.1	176	14.5		
B464906		31	0.6	16.0	22	57.2		
B464907		61	1.4	6.4	655	9.3		
B464908		68	3.3	4.6	>10000	9.5		1.075
B464909		17	2.5	8.3	1310	58.1		
B464910		18	1.6	6.8	635	59.3		
B464911		15	1.5	8.0	727	61.8		
B464912		15	1.6	7.2	778	60.8		
B464913		15	1.7	7.1	841	57.7		
B464914		14	1.6	7.0	843	58.0		
B464915		15	1.5	6.7	992	54.8		
B464916		14	1.8	5.8	775	55.1		
B464917		15	2.0	6.6	718	57.4		
B464918		64	1.3	11.6	412	109.5		
B464919		14	1.7	7.3	558	52.7		
B464920		22	2.1	7.6	584	50.7		
B464921		62	2.8	6.9	682	10.9		
B464922		61	1.7	6.5	710	8.0		
B464923		75	2.6	8.8	377	6.5		
B464924		64	2.3	7.3	229	6.0		
B464925		105	5.3	10.4	240	4.9		
B464926		31	0.6	16.8	23	59.5		
B464927		64	3.5	6.9	517	5.8		
B464928		58	2.5	7.1	1225	5.0		
B464929		57	0.3	6.9	90	4.9		
B464930		58	1.1	7.2	257	5.0		
B464931		61	2.4	7.7	470	6.7		
B464932		57	3.2	6.3	189	6.4		
B464933		54	1.9	7.1	229	6.6		
B464934		57	2.0	6.7	195	6.6		
B464935		48	3.0	6.1	547	4.3		
B464936		53	1.5	6.9	402	6.4		
B464937		43	1.7	6.9	468	8.3		
B464938		39	1.6	5.5	344	5.6	1.060	

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

Finalized Date: 17-FEB-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21340605

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
B464939		5.98	0.161	6.83	6.68	1065	580	0.93	0.37	1.90	1.66	18.10	10.3	14	5.11	5720
B464940		6.40	0.255	9.08	6.15	839	640	0.89	0.41	1.68	1.61	15.90	11.7	8	3.99	8290
B464941		6.44	0.147	13.25	5.77	736	220	0.77	1.96	1.49	34.6	13.10	11.0	12	4.14	4910
B464942		6.88	0.215	11.70	6.32	287	550	1.08	6.17	1.81	13.35	27.5	9.4	10	7.26	2310
B464943		6.28	0.070	2.44	6.70	554	1080	0.95	0.75	2.23	1.13	19.15	10.1	10	6.29	2770
B464944		6.40	0.083	3.24	6.66	471	860	0.92	1.03	2.50	1.04	22.4	9.7	12	5.57	2720
B464945		0.08	0.022	2.20	6.29	30.4	680	1.00	1.68	1.80	0.93	33.5	31.7	219	3.24	3420
B464946		0.06	0.004	0.04	7.00	2.7	840	0.99	0.03	1.66	<0.02	26.7	3.7	25	0.39	30.2
B464947		6.68	0.066	1.41	7.06	231	920	1.05	0.38	2.51	0.41	21.3	9.3	12	5.14	2710
B464948		6.02	0.072	10.10	7.02	576	700	1.28	1.39	2.36	20.5	34.1	9.2	8	7.95	1935
B464949		6.98	0.007	0.43	6.78	38.5	870	1.26	0.15	3.83	0.61	36.7	10.2	18	9.21	62.3
B464950		6.18	0.027	2.29	7.26	101.0	720	1.18	0.35	2.83	0.95	32.8	10.1	13	7.71	1020
B464951		6.76	0.062	1.57	7.34	144.5	810	1.00	0.12	2.36	1.03	23.4	8.9	11	5.51	2630
B464952		6.34	0.071	2.16	7.17	60.8	820	1.03	0.16	2.21	2.24	22.4	9.2	14	4.36	3810
B464953		3.12	0.106	3.28	6.53	35.0	520	0.94	0.71	1.79	1.48	16.55	9.6	13	3.42	4300
B464954		3.08	0.094	5.32	6.60	45.6	620	0.94	1.40	1.71	1.03	16.75	9.2	10	3.33	4950
B464955		2.96	0.146	2.82	6.31	227	490	0.87	0.20	1.43	1.04	14.20	10.6	15	3.48	6570
B464956		6.94	0.140	10.00	6.45	370	590	0.88	4.64	1.53	3.26	14.85	9.8	13	4.37	7010
B464957		6.32	0.232	14.05	6.04	798	580	0.89	4.12	2.01	5.82	14.55	10.2	11	4.76	5700
B464958		5.88	0.105	4.87	6.67	58.4	610	0.89	0.83	1.69	2.88	14.65	9.4	17	4.23	4880
B464959		6.62	0.149	7.01	6.18	299	290	0.80	0.49	1.66	3.54	12.85	11.8	16	3.68	6210
B464960		6.30	0.115	4.73	6.67	148.5	610	0.80	0.26	1.83	1.46	16.25	13.6	14	3.64	5340
B464961		6.52	0.129	4.17	6.40	203	600	0.83	0.18	1.79	0.70	13.95	10.3	16	3.69	6860
B464962		6.38	0.084	5.86	6.76	69.1	400	0.79	0.62	1.67	1.86	14.95	11.8	16	3.60	4470
B464963		6.02	0.053	2.79	6.76	118.5	780	1.18	0.46	1.34	5.00	17.20	6.3	10	4.33	2190
B464964		6.10	0.009	0.92	6.72	12.6	1020	1.50	0.22	1.30	5.90	30.0	3.4	12	6.27	32.8
B464965		4.86	0.002	0.76	7.06	14.0	1190	1.35	0.23	3.19	3.35	38.0	6.4	18	6.96	26.8
B464966		0.06	0.185	1.22	8.39	47.1	450	1.00	0.57	2.22	1.14	31.4	14.0	19	7.34	2200
B464967		0.06	<0.001	0.02	6.84	2.2	830	0.91	0.02	1.63	0.02	25.9	3.5	24	0.37	24.2
B464968		7.00	0.003	0.82	6.56	15.4	840	1.39	0.49	4.62	2.45	36.5	6.2	14	7.01	26.9
B464969		5.18	0.037	6.38	6.89	291	680	1.23	0.82	2.35	9.38	28.6	8.0	18	6.50	1980
B464970		5.84	0.134	5.41	6.74	233	740	1.08	0.36	2.95	2.02	13.40	9.6	15	6.04	5910
B464971		6.56	0.088	6.83	7.17	720	280	1.00	0.91	2.52	3.16	14.25	10.2	13	6.03	4710

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

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VANCOUVER BC V6E 4K2

Finalized Date: 17-FEB-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21340605

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
B464939		4.61	16.60	0.17	0.2	0.120	3.03	8.6	94.1	0.72	1685	4.82	0.48	5.2	6.4	890
B464940		3.70	15.10	0.16	0.3	0.180	2.80	7.8	46.1	0.60	1580	4.15	0.60	4.7	6.5	680
B464941		5.01	15.05	0.13	0.2	0.346	2.62	6.3	36.8	0.59	4340	4.58	0.07	3.7	6.5	640
B464942		6.21	17.20	0.18	1.1	0.852	3.10	12.5	35.4	0.70	11050	4.74	0.04	5.1	6.6	1040
B464943		4.42	17.45	0.16	0.2	0.063	2.15	8.5	121.5	0.78	1155	1.53	0.09	5.5	5.6	1020
B464944		4.23	17.60	0.11	0.3	0.131	1.58	9.9	122.0	0.91	1855	2.02	0.06	6.2	5.8	1030
B464945		3.86	14.40	0.19	0.5	0.087	2.90	14.6	9.5	3.45	385	227	1.10	2.7	225	960
B464946		2.54	13.10	0.12	1.9	0.020	1.82	12.9	2.6	0.40	597	4.96	3.22	5.4	13.9	360
B464947		4.67	17.85	0.15	0.3	0.067	2.01	9.0	167.0	0.84	1060	2.99	0.35	6.3	5.9	1190
B464948		4.63	17.85	0.19	1.8	0.848	3.47	16.0	36.9	0.91	19050	2.27	0.05	6.2	8.1	1170
B464949		3.16	17.55	0.18	2.9	0.043	3.47	16.4	13.7	1.28	4040	1.43	0.05	6.8	14.6	1260
B464950		3.87	18.40	0.21	1.9	0.122	3.56	14.3	36.2	1.00	4670	2.03	0.26	6.6	10.9	1290
B464951		4.24	17.95	0.14	0.3	0.039	2.41	10.5	50.5	0.81	825	4.93	0.60	5.7	5.6	1170
B464952		4.41	18.00	0.15	0.3	0.063	2.14	10.0	52.5	0.75	1040	3.98	1.97	5.9	6.3	1110
B464953		4.19	16.00	0.14	0.3	0.079	2.35	7.5	39.6	0.59	523	9.44	1.33	4.7	6.1	840
B464954		3.98	15.85	0.15	0.2	0.093	2.46	7.5	27.7	0.60	593	7.58	1.31	4.7	5.4	850
B464955		3.43	13.90	0.13	0.3	0.081	2.46	6.8	32.6	0.56	372	4.40	1.14	4.2	6.8	700
B464956		3.49	14.05	0.17	0.2	0.147	2.95	7.1	34.6	0.59	2180	6.89	0.52	4.6	5.9	730
B464957		4.11	14.90	0.15	0.2	0.414	2.53	6.8	47.4	0.64	8410	8.88	0.60	5.1	5.3	780
B464958		3.66	16.25	0.16	0.2	0.107	2.74	7.1	32.3	0.61	1680	4.95	1.26	5.1	5.7	790
B464959		4.23	14.35	0.14	0.2	0.116	2.44	6.0	37.4	0.61	1795	16.40	1.21	4.2	7.1	680
B464960		4.48	16.10	0.14	0.3	0.070	2.38	7.3	30.8	0.68	647	2.38	1.71	4.9	5.8	870
B464961		3.52	14.85	0.13	0.2	0.080	2.26	6.1	54.4	0.64	600	3.97	1.65	4.6	6.4	790
B464962		3.99	15.00	0.15	0.3	0.081	2.72	6.8	35.2	0.61	908	6.32	1.46	4.3	5.8	820
B464963		2.69	16.30	0.15	1.4	0.049	2.87	8.7	16.8	0.46	1985	3.10	0.83	8.5	4.2	490
B464964		1.57	17.45	0.15	2.8	0.030	3.24	14.8	14.9	0.43	2630	2.81	0.03	11.2	5.0	520
B464965		2.31	17.45	0.17	2.7	0.033	3.41	18.4	13.1	0.99	1570	4.36	0.03	8.4	10.3	970
B464966		4.55	18.10	0.16	0.3	0.099	2.49	14.3	30.2	0.96	949	253	1.59	5.8	11.7	720
B464967		2.45	12.60	0.11	1.8	0.019	1.82	12.5	2.5	0.39	590	4.13	3.15	5.3	13.5	350
B464968		2.27	17.00	0.18	2.6	0.055	3.20	17.0	15.5	0.97	2050	2.25	0.04	8.4	9.2	910
B464969		3.35	16.20	0.16	1.8	0.199	3.30	13.6	18.6	0.80	2770	2.95	0.05	7.4	8.0	860
B464970		3.42	16.80	0.12	0.3	0.087	2.95	6.0	48.9	0.93	1725	2.42	0.36	5.6	6.4	850
B464971		4.11	16.75	0.14	0.3	0.106	3.17	6.9	65.7	0.88	1745	1.87	0.10	4.8	6.0	770

***** 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-FEB-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21340605

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
B464939		48.9	112.5	0.006	2.43	36.5	5.1	2	1.6	236	0.37	0.22	4.12	0.163	1.26	0.4
B464940		62.4	107.0	0.008	2.47	38.8	3.8	3	2.0	248	0.36	0.26	3.66	0.132	1.18	0.4
B464941		1160	108.5	0.006	3.15	107.5	4.0	2	2.1	171.0	0.29	0.38	3.18	0.127	1.16	0.4
B464942		1135	160.0	0.006	3.37	67.9	5.5	1	1.4	262	0.35	1.10	3.88	0.202	1.66	1.1
B464943		22.6	75.1	0.003	1.95	53.0	5.8	2	1.5	266	0.40	0.12	3.83	0.183	0.93	0.5
B464944		34.5	63.9	<0.002	1.34	80.6	6.1	1	0.9	230	0.44	0.16	4.34	0.188	0.76	0.5
B464945		21.5	80.3	0.275	2.20	7.58	11.4	3	1.3	255	0.19	1.34	2.55	0.312	1.17	0.9
B464946		3.1	42.0	<0.002	0.01	0.37	5.8	<1	1.6	191.5	0.38	<0.05	2.90	0.174	0.16	1.2
B464947		15.3	59.1	0.004	2.08	10.85	6.3	2	1.1	215	0.45	0.13	4.37	0.207	0.84	0.5
B464948		343	173.5	<0.002	0.86	164.5	6.3	1	0.8	284	0.43	<0.05	4.51	0.261	1.83	1.5
B464949		43.3	137.5	<0.002	0.09	6.71	7.6	<1	0.7	753	0.46	<0.05	4.24	0.334	1.94	2.1
B464950		81.1	147.0	<0.002	0.92	17.80	7.0	1	0.9	306	0.44	<0.05	4.27	0.296	1.88	1.4
B464951		44.7	86.0	0.020	2.33	3.51	6.5	2	1.5	446	0.42	0.12	5.10	0.197	0.98	0.5
B464952		77.1	78.2	0.006	2.37	2.34	6.3	2	1.3	699	0.43	0.10	4.40	0.199	0.82	0.4
B464953		85.2	79.1	0.020	2.81	0.65	5.0	2	1.8	627	0.34	0.14	3.60	0.153	0.90	0.4
B464954		111.5	84.2	0.025	2.68	0.95	4.9	2	2.0	607	0.35	0.12	3.80	0.149	0.96	0.4
B464955		48.5	86.1	0.009	2.71	2.95	4.1	3	1.9	316	0.35	0.14	4.39	0.129	0.97	0.4
B464956		206	120.0	0.024	2.64	39.4	4.4	3	1.7	172.5	0.34	0.35	4.26	0.144	1.25	0.4
B464957		514	114.5	0.022	2.45	96.0	5.4	3	1.6	280	0.33	0.24	3.81	0.164	1.23	0.4
B464958		186.5	113.0	0.009	2.53	2.69	5.5	3	1.7	439	0.38	0.15	3.79	0.165	1.08	0.4
B464959		187.5	93.8	0.048	3.42	20.8	4.7	4	1.7	460	0.31	0.15	3.80	0.134	1.03	0.4
B464960		83.2	83.7	0.004	3.10	1.21	5.5	3	1.8	539	0.34	0.10	4.00	0.158	0.91	0.4
B464961		62.3	72.3	0.011	2.72	2.90	5.3	3	2.0	506	0.34	0.11	3.90	0.151	0.85	0.4
B464962		141.0	93.1	0.009	3.32	1.59	5.1	3	2.0	424	0.33	0.13	5.03	0.147	0.98	0.5
B464963		146.5	127.0	0.003	1.74	8.17	3.8	2	1.2	418	0.79	0.09	8.74	0.117	1.30	4.8
B464964		255	164.0	<0.002	0.49	5.24	3.1	<1	0.6	213	1.08	0.38	12.00	0.124	1.89	8.1
B464965		147.0	167.5	<0.002	0.52	3.26	5.0	<1	0.6	315	0.70	0.38	7.44	0.217	2.15	4.8
B464966		40.2	82.1	0.212	1.54	1.98	11.1	3	1.7	282	0.45	0.39	4.13	0.275	0.96	0.9
B464967		2.8	39.3	<0.002	0.01	0.30	5.7	<1	1.6	188.5	0.37	<0.05	2.65	0.172	0.18	1.2
B464968		110.0	148.0	<0.002	0.44	3.92	4.8	<1	0.6	281	0.68	0.33	6.82	0.208	2.04	4.3
B464969		374	163.0	<0.002	1.97	33.8	5.0	2	1.1	216	0.53	0.57	6.09	0.187	1.84	3.0
B464970		97.0	105.5	0.003	1.82	25.9	5.4	2	1.4	158.5	0.38	0.12	4.13	0.182	1.39	0.4
B464971		126.5	133.5	0.003	2.90	40.0	5.5	3	1.9	185.5	0.34	0.28	5.39	0.160	1.40	0.5

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

Finalized Date: 17-FEB-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21340605

Sample Description	Method	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Cu-OG62	Zn-OG62
	Analyte	V	W	Y	Zn	Zr	Cu	Zn
	Units	ppm	ppm	ppm	ppm	ppm	%	%
	LOD	1	0.1	0.1	2	0.5	0.001	0.001
B464939		52	1.2	6.4	295	4.8		
B464940		33	0.7	5.0	264	8.7		
B464941		51	3.0	4.7	4990	6.4		
B464942		64	5.3	7.7	1780	37.4		
B464943		66	4.2	7.9	243	6.9		
B464944		59	8.2	9.1	211	7.7		
B464945		121	18.3	9.9	173	13.0		
B464946		30	0.7	15.8	22	55.5		
B464947		61	2.1	9.1	110	8.2		
B464948		72	7.4	9.3	1985	67.3		
B464949		90	2.4	9.4	258	102.5		
B464950		82	2.0	8.9	251	67.8		
B464951		65	0.9	8.7	168	6.5		
B464952		61	0.6	9.1	347	6.5		
B464953		45	1.9	6.5	230	6.4		
B464954		43	2.0	6.5	175	6.6		
B464955		34	0.7	5.0	179	5.6		
B464956		34	2.0	5.5	426	5.1		
B464957		39	3.7	6.3	836	5.6		
B464958		41	2.8	6.4	446	6.4		
B464959		42	0.7	5.3	480	5.3		
B464960		54	0.6	6.9	239	6.1		
B464961		44	0.5	6.0	120	5.4		
B464962		45	0.9	6.2	285	6.9		
B464963		32	1.3	6.7	778	27.3		
B464964		28	2.5	8.1	916	71.7		
B464965		56	1.6	8.5	583	83.1		
B464966		106	5.9	11.6	246	5.3		
B464967		30	0.6	15.8	23	54.1		
B464968		52	1.6	8.4	452	85.1		
B464969		53	2.8	8.0	1200	58.1		
B464970		52	0.8	6.7	352	7.3		
B464971		50	1.4	6.0	536	6.8		

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

Finalized Date: 17-FEB-2022
Account: MAMGEO

Project: Poplar

CERTIFICATE OF ANALYSIS VA21340605

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

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

LABORATORY ADDRESSES

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

Au-ICP21	CRU-31	CRU-QC	Cu-OG62
LOG-21	LOG-23	ME-MS61	ME-OG62
PUL-31	PUL-QC	SPL-21	SPL-21X
WEI-21	Zn-OG62		