ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TITLE OF REPORT: Geological and Biogeochemical Assessment Report on the Swannell Property

TOTAL COST: $24, 545.50

AUTHOR(S): Dustin L. Perry
SIGNATURE(S):

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S):
STATEMENT OF WORK EVENT NUMBER(S)/DATE(S):

YEAR OF WORK: 2018

PROPERTY NAME: Swannell

CLAIM NAME(S) (on which work was done): Swan, Swanward

COMMODITIES SOUGHT: Zn, Pb, Ag

MINERAL INVENTORY MINFILE NUMBER(S),IF KNOWN: 094C 005; 094C 003

MINING DIVISION: Omineca
NTS / BCGS: 094C/11E
LATITUDE: 56° 40’
LONGITUDE: 125° 10’ (at centre of work)

OWNER(S):
Douglas Cavey (in trust for Douglas Cavey, Francis MacDonald, Dustin Perry

MAILING ADDRESS: 6891 Wiltshire St. Vancouver, BC V6P 5H2

OPERATOR(S) [who paid for the work]: Dustin Perry

MAILING ADDRESS: PO Box 2526, Garibaldi Highlands, BC V0N 1T0

REPORT KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude. **Do not use abbreviations or codes**)

Limestone; Hadrynian; Ingenika Group; Carbonate-Replacement Deposit; Carbonate-hosted Zn-Pb-Ag

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS:

00153A; 01136; 13452; 14032; 26608A; 26702A; 26794A; 27253; 27614; 28461; 35743

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (in metric units)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping			
Photo interpretation			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
GEOCHEMICAL (number of samples analysed for …)			
Soil			
Silt			
Rock	18	1035234 and 1030918	$12,271.75
Tree Bark	175	1035234 and 1030918	$12,271.75
DRILLING (total metres, number of holes, size, storage location)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling / Assaying			
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale/area)			
PREPATORY / PHYSICAL			
Line/grid (km)			
Topo/Photogrammetric (scale, area)			
Legal Surveys (scale, area)			
Road, local access (km)/trail			
Trench (number/metres)			
Underground development (metres)			

Other		
	TOTAL COST	$24,503.50

GEOCHEMICAL and BIOGEOCHEMICAL

ASSESSMENT REPORT

on the

SWANNELL PROPERTY

Tenure No's: 1030918, 1035234, 1035396, 1035363

Omineca Mining Division

NTS: 094C/11E

Latitude: 56º 40' N; Longitude: 125º 10' W

UTM (NAD83 – Zone 10): 367000E, 6282000N

Owner/Operator: Dustin Perry, Douglas Cavey, Francis MacDonald

Author: Dustin Perry, BSc.

January 10th, 2019

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4 (in pocket))	Property Geology	1 : 10,000
5 (in pocket	Rocks - North	1 : 1000
6 (in pocket)	Rocks - South	1 : 1000
7 (in pocket)	Biogeochemical Sample Locations - North	1 : 1000
8 (in pocket)	Biogeochemical Sample Locations- South	1 : 1000
9 (in pocket)	Biogeochemical North Lead	1 : 1000
10 (in pocket)	Biogeochemical North Zinc	1 : 1000
11 (in pocket)	Biogeochemical North Silver	1 : 1000
12 (in pocket)	Biogeochemical South Lead	1 : 1000
13 (in pocket)	Biogeochemical South Zinc	1 : 1000
14 (in pocket)	Biogeochemical South Silver	1 : 1000

1.0 SUMMARY

The Swannell property consists of 4 contiguous mineral claims covering 1333.99 Ha in north-central British Columbia. The property has excellent access from Mackenzie along the main forest service road and secondary service roads that transect the area. Spearhead Mining Corporation owns 100% of the Swannell property, which was acquired by online staking in 2014.

The Swannell property was acquired by Spearhead Mining Corporation on the basis of interesting drill intersects and rock samples obtained by previous operators that had not been adequately followed up. The property lies within the Proterozoic to Paleozoic miogeoclinal rocks of the Cassiar Platform, an allochthonous continental fragment of ancestral North America that spans from the central Yukon Territory border to central-eastern British Columbia that hosts multiple styles of zinc-lead-silver mineralization, most notable being SEDEX, Mississippi-Valley type, and high-temperature carbonate-replacement deposits.

This report summarizes the prospecting and geological mapping programs carried out during May of 2018. Spearhead Mining Corporation contracted Dustin Perry and Francis MacDonald to carry out a program consisting of detailed rock sampling in addition to a pilot biogeochemical tree bark survey.

Work was conducted on Tenure Numbers: 1030918 and 1035234. A total of 18 rock samples and 175 tree bark samples were taken. Expenditures totalled $24,534.58 and can be found in Appendix B.

2.0 INTRODUCTION

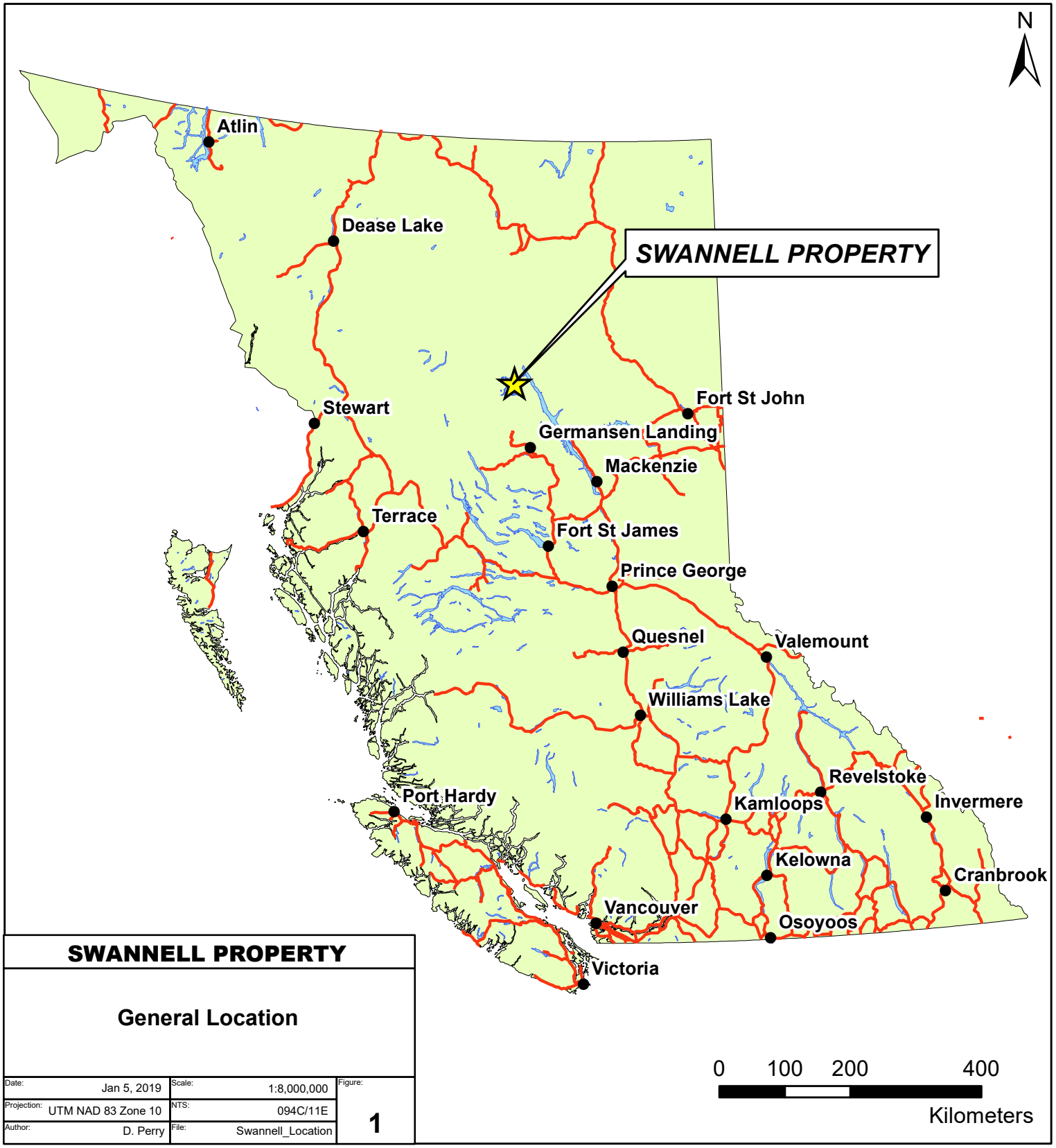
2.1 Property

The Swannell property consists of 4 contiguous mineral claims (Table 1) covering 1333.99 Ha in north-central British Columbia (Figures 1 and 2). The property is located within NTS map sheet 094C/11E approximately 216 km north from Mackenzie and is centered at 56º 40’ N latitude, 125º 10’ W longitude, within the Omineca Mining Division.

Title Number	Owner	Issue Date	Good To Date	Status	Area (ha)
1030918	Douglas Cavey (In Trust for SMC)	2014/sep/12	2020/JUN/05	GOOD	355.9244
1035234	Douglas Cavey (In Trust for SMC)	2015/apr/03	2020/JUN/05	GOOD	497.9515
1035363	Douglas Cavey (In Trust for SMC)	2015/apr/08	2020/JUN/05	GOOD	266.8045
1035396	Douglas Cavey (In Trust for SMC)	2015/apr/09	2020/JUN/05	GOOD	213.3058

"Good To Date" assumes the work detailed in this report is accepted for assessment.

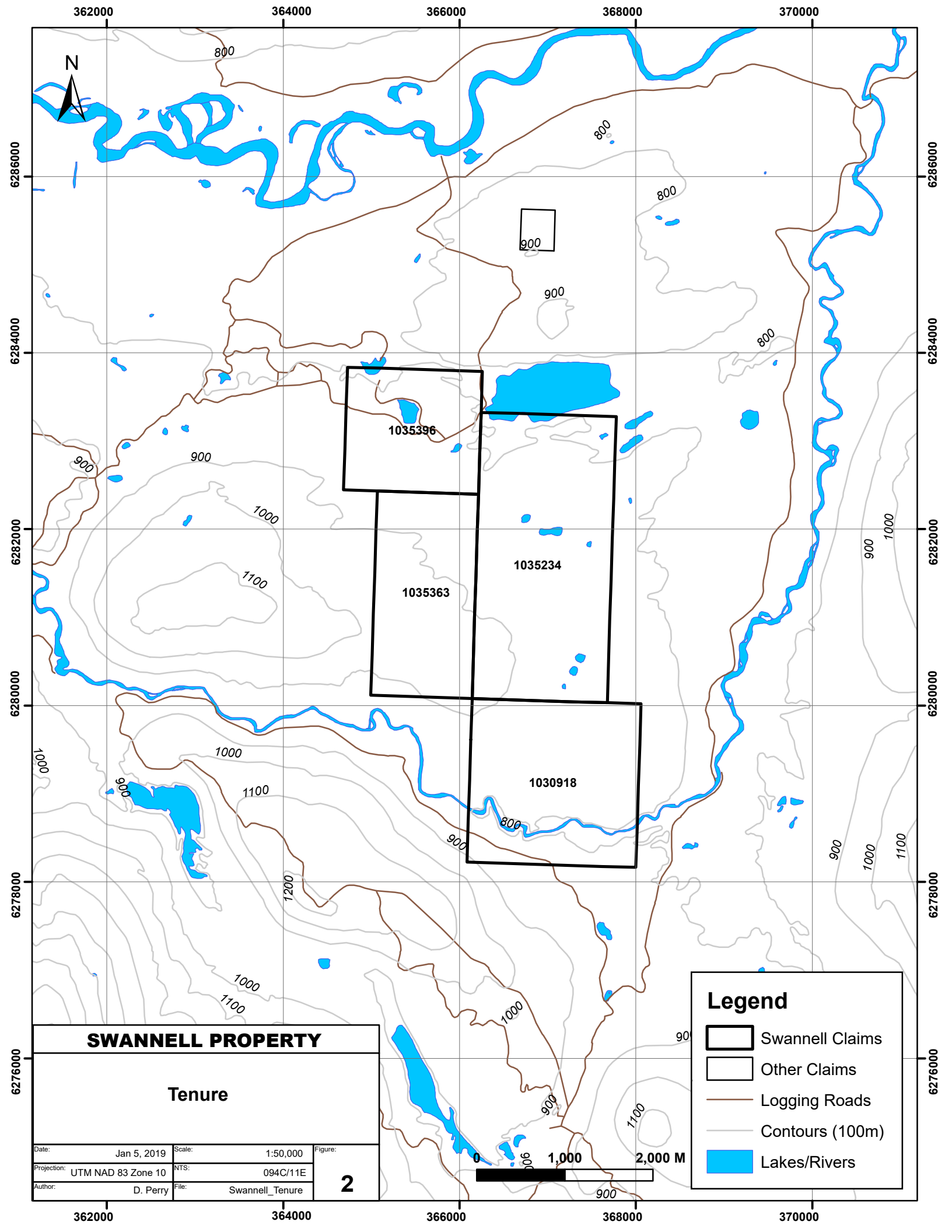
Table 1: Tenure Information



SWANNELL PROPERTY

General Location

Date: Jan 5, 2019	Scale: 1:8,000,000	Figure: 1
Projection: UTM NAD 83 Zone 10	NTS: 094C/11E	
Author: D. Perry	File: Swannell_Location	


362000
364000
366000
368000
370000
6286000
6284000
6282000
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6278000
6276000
N
1035396
1035234
1035363
1030918
800
900
1000
1100
1200
0
1,000
2,000 M
Legend
Swannell Claims
Other Claims
Logging Roads
Contours (100m)
Lakes/Rivers
SWANNELL PROPERTY
Tenure
Date: Jan 5, 2019
Scale: 1:50,000
Figure: 2
Projection: UTM NAD 83 Zone 10
NTS: 094C/11E
Author: D. Perry
File: Swannell_Tenure

The property is owned by Doug Cavey, Francis MacDonald, and Dustin Perry (100%). The claims were acquired in 2014 by online staking by Douglas Ross Cavey in trust Doug Cavey, Francis MacDonald, and Dustin Perry

2.2 Accessibility

The Swannell property is located in the Ingenika Range, a subset of the Swannell Ranges of the Omineca Mountains in the Omineca Mining Division, approximately 195 kilometers northwest of MacKenzie, B.C on NTS map sheet 094C/11E. The property covers the area to the south of the old Ingenika Mine and is situated primarily on west side of the Swannell River just upstream from its confluence with the Ingenika River. Geographic coordinates at the center of the property are latitude 56º 40' N; longitude: 125º 10' W and the UTM coordinates are 367000 E, 6282000 N in UTM Zone 10.

There is excellent access to the property as a result of intense logging activity in the area. Access to the property is gained by driving 216 kilometers north from Mackenzie along the west side of Williston Lake on a main logging haulage road, then west 18 kilometers, south for 10 kilometers, and west for 3 kilometers to Delkluz Lake. Secondary logging roads are used to access the claims.

2.3 Physiography and Climate

The Swannell area has cold, medium snowfall winters and warm, dry summers. The topography of the claims is relatively flat with low rolling hills that are heavily timbered by pine and spruce. In the clear cuts deciduous willows and poplars predominate.

3.0 HISTORY

The following list summarizes the work history of the Swannell and Ingenika prospects:

1917 – The original claims in the Ingenika area staked by S. Ferguson to cover the oxidized limestone hill, named Ferguson Hill. Mineralization consists of stratabound sphalerite, galena, and pyrite that ranges from 1 – 3m in thickness, strikes at 280º degrees and dips 20º – 40º to the north.

1926 – These claims were acquired by the Selkirk Mining Syndicate of Victoria. In 1927, Ingenika Mines Ltd. was formed and from 1927 – 1932 completed existing historic underground development of drifts, crosscuts, and raises. There was also extensive trenching completed and some diamond drilling. The ARIS database has very limited information because the Ingenika Mine was covered by crown granted mineral claims and therefore assessment reporting was not required. The work completed from 1927 – 1932 was summarized in the Geological Survey of Canada, Memoir 274, by E.F. Roots. The underground development explored four base metal zones from four levels, the 1, 2, 4 and 5 levels. Ore was encountered in all levels except for the lowest level, 5-level, which is postulated as being driven too low in stratigraphy.

1936 – The Swannell property was staked as the Dominion claims by H. Ravenal. Hand trenching was completed and the property was examined by E. Brunland for the Consolidated Mining and Smelting Co. Ltd. (former name of Cominco Ltd.)

1956 – The Swannell property was staked as the Swannell, Dell,and Mike Pedro Fox claims by Gust Ola of Prince George. Cominco optioned the claims and completed geological mapping and sampling.

1957 – Cominco conducted regional and local mapping, geophysics (McPhar VLEM) and drilled 3602 meters of AQ-size diamond drilling in and around the Ingenika Mine, Onward, Onward South, and Swannell showings. Three holes were abandoned in overburden. Cominco terminated the option subsequent to this work.

1967 – Northlode Exploration Ltd. completed a gravity geophysical survey over a grid located to the southwest of Delkluz Lake as part of an exploration program targeting the Swannell showing to the south. Three diamond drill holes were completed testing gravity anomalies, but results were not reported.

1969 – Dorita Silver Mines acquired the property and completed surface and underground mapping and 21 diamond drill holes totaling 550m. Reserves for the Ingenika Mine were estimated to be 22,677 tonnes grading 119.9g/t silver, 9.8% lead, and 6.1% zinc.

1981 - Cominco Ltd. restaked the Swannell claims as the Kluz 1 to 4 claims.

1982 - A.B. Mawer examined and re-evaluated the property on behalf of Cominco Ltd.

1984 - Cominco Ltd., through a joint venture with Elite Resources, completed horizontal-loop electromagnetic and induced polarization geophysical surveys.

1985 - The Kluz 5 claim was staked and the joint venture completed three NQ-size diamond-drill holes totalling 465.7 metres on the southeastern corner of the Kluz 1 claim. Further drilling on the base metal horizon was recommended but not completed.

1991 - International Impala Resources acquired the Ingenika property in 199 1 and completed 24 km of VLF and magnetometer surveying, 7 km of I.P. surveying, collected 490 soil geochemical samples and 14 rock samples. The company concluded that drilling east of the No.5 level workings would intersect the ore if it rakes northeast.

2001 - Cross Lake Minerals Limited optioned the Swannell property from Teck Cominco (formerly known as Cominco) and staked the Del 4 and 5 claims. That year, Cross Lake undertook an exploration program consisting of geochemical sampling and drilling on the Swannell and Ingenika properties. A mobile metal ion geochemical sampling technique was first tested on the Onwards South showing. After receiving favourable results from the trial run, a mobile metal ion soil sampling grid was used to trace the strike extension of the known Swannell showing and explore for new mineralization. Three BQTK-size diamond-drill holes totalling 400.8 metres were completed on the Swannell property.

2002 - Cross Lake Minerals Ltd. completed four diamond-drill holes totalling 491.2m: one on the Ingenika property and three on the Swannell property. The drillholes were designed to test the mobile metal ion anomalies identified in 2001. Four trenches totalling 175m were completed, none of which reached bedrock due to extensive glacial till cover.

2004 – Cross Lake Minerals Ltd. completed a test 3D inversion IP survey in and around the Ingenika Mine in order to test this survey method over a known mineral occurrence, 17.0 km of IP survey being conducted on Gnd "A". Based on the positive results, a more extensive 3D-IP survey was carried out further south over Grid "B", 49.5 line km of survey being conducted.

2005 – Cross Lake Minerals Ltd. completed seven diamond drill holes totalling 992.67m testing 3D-IP anomalies from the 2004 survey. Ownership of the Swannell and Ingenika properties was transferred to Selkirk Metals Holdings Corporation in 2005.

2007 – Selkirk Metals Holdings Corporation forfeited the claims encompassing the Swannell and Ingenika properties.

2015 – Spearhead Mining Corp. completed a program of reconnaissance geological mapping, prospecting, and rock sampling on the Swannell Property. Work led to the discovery of a new high grade Zn-Ag showing on the south banks of the Swannell River which has not adequately been drill tested by previous drilling in the area.

4.0 GEOLOGY

4.1 Regional Geology

The Swannell property lies within the core of the Cassiar trough, a para-autochthonous continental fragment of the miogeoclinal rocks of ancenstral North America (referred to as the Winderemere Supergroup) that range in age from Proterozoic to Cambrian, which are unconformably overlain by Lower Cambrian to Ordivician Atan and Kechika Group rock. The Windermere Supergroup is interpreted to represent the volcanic and sedimentary record following the break-up of the supercontinent Rodinia and the formation of the proto-Pacific Ocean at ~700 Ma, and consists of predominantly deep marine sedimentary and lesser volcanic rocks of Late Proterozoic to Cambrian age.

Strata exposed in the Ingenika Range belong to the Hadrynian Ingenika Group, which is unconformably overlain by Lower Cambrian to Lower Ordovician Kechika and Atan Groups. Ingenika Group rocks are comprised of the Swannell, Tsaydiz, Espee, and Stelkluz Formations.

The Swannell Formation is composed of three members: the Lower Member (mica schist, impure quartzite, and minor thin carbonate beds), the Middle Member (feldspar quartz pebble conglomerates, grits, green phyllite, and minor crystalline limestone), and the Upper Member (grey quartzite, phyllite, and minor limestone). The base of the Swannell Formation is not exposed, but currently stratigraphic thickness is estimated to be at least 2000m. The Tsaydiz Formation sits conformably on top of the Swannell Formation, and is composed of thinly bedded green phyllites with minor limestone and fine grit. Stratigraphic thickness is estimated to be on the order of 200m. The Espee Formation sits conformably on top of the Tsaydiz formation, and is composed of thickly bedded, varicoloured, coarse crystalline limestone and has a stratigraphic thickness of 90 – 400m. The Stelkluz Formation sits conformably on top of the Espee Formation, and is composed of varicoloured limestone, pelite, and sandstone, and has an estimated stratigraphic thickness of 300 – 500m (Bellefontaine, 1990). Rocks of the Atan Group are interpreted to sit unconformably on top of the Ingenika Group, and are composed of quartzites, phyllites, siltstones, limestones, and calcareous shales (BCGS mapping).

Ingenika Group rocks have experienced three distinct overprinting roughly colinear deformation events and four sets of crosscutting structures. The regional D_1 event is expressed as a bedding-parallel well-

developed penetrative foliation that contains a pronounced mineral lineation that plunges moderately to the northwest. F_1 folds are typically northeast vergent, northwest plunging, tight, recumbent to overturned folds with well-developed schistosicty. D_2 structures are similar to D_1 structures, but with a switch in vergence towards the southwest and are best viewed in thin section. The D_3 event is characterized by open and upright F_3 folds which are commonly devoid of cleavage, and plunge shallowly to moderately to the northwest. The Swannell Anticlinorium that outcrops to the west of the current tenements is attributed to this D_3 event (Bellefontaine, 1990). This fold has been interpreted as a regional-scale doubly-plunging anticlinorium as the result of southwest vergent folding and thrusting during the Jurassic based on metamorphic isograd zonation (Bellefontaine, 1990). The synform that occupies the Swannell area would be a parasitic fold to the larger scale D_3 fold system.

Northeast trending normal faults down drop wedges of Paleozoic Kechika and Atan Group rocks into surrounding Proterozoic rocks to the north of the Ingenika River. These normal faults are bounded to the southwest by the Pelly Fault, and to the northeast by the Rocky Mountain Trench.

Cretaceous to Neogene post orogenic plutonic rocks intrude Ingenika rocks to the south and north of the Swannell property.

To the east of the property, the Cassiar terrane is bounded by the Rocky Mountain Trench, which is the continuation of the Tintina Fault that transects the northern Cordillera from Alaska to southern British Columbia. Hundreds of kilometers of right-lateral movement has been recorded on the Rocky Mountain Trench/Tintina Fault during a transpressional stress regime from 60 – 10 Ma (Nelson & Colpron, 2007)

4.2 Property Geology

The Swannell property is currently thought to encompass two different formations of the Ingenika Group. Limestones encountered at the Swannell property are fine grained, micritic, unfossiliferous and interlayered with fine grained deep water siliciclastics. This suggests that they belong to the Proterozoic Ingenika group, as opposed to Paleozoic Kechika Group as indicated by BCGS mapping (Okulitch et al., 2002). This interpretation is tentative as there has not been enough mapping completed to determine a robust stratigraphic correlation.

Rock types encountered during property-scale mapping in 2015 were thinly to thickly bedded laminated micritic limestones and dolostones, calcareous siltstones, phylittic siltstones and argillites, graphitic argillites, and strongly sericite-dolomite altered intermediate igneous rocks, which may represent intrusive phases. Previous drilling campaigns have encountered glacial till cover up to 45m thick; for the most part, outcrop is limited to road cuts and along river banks.

Bedding-parallel S_1 fabrics are ubiquitous throughout the mapping area and are expressed as a pervasive penetrative foliation. Fabrics and structures related to D_2 deformation of Bellefonatine (1990) were not encountered, which are almost always only visible in thin section. S_3 fabrics were encountered as discreet zones of penetrative foliation and spaced cleavage, which are axial planar to F_3 open and upright folding. S_0-S_1 intersection lineations are common, which plunge moderately to the northwest and are co-linear with F_1 and F_3 fold hinges.

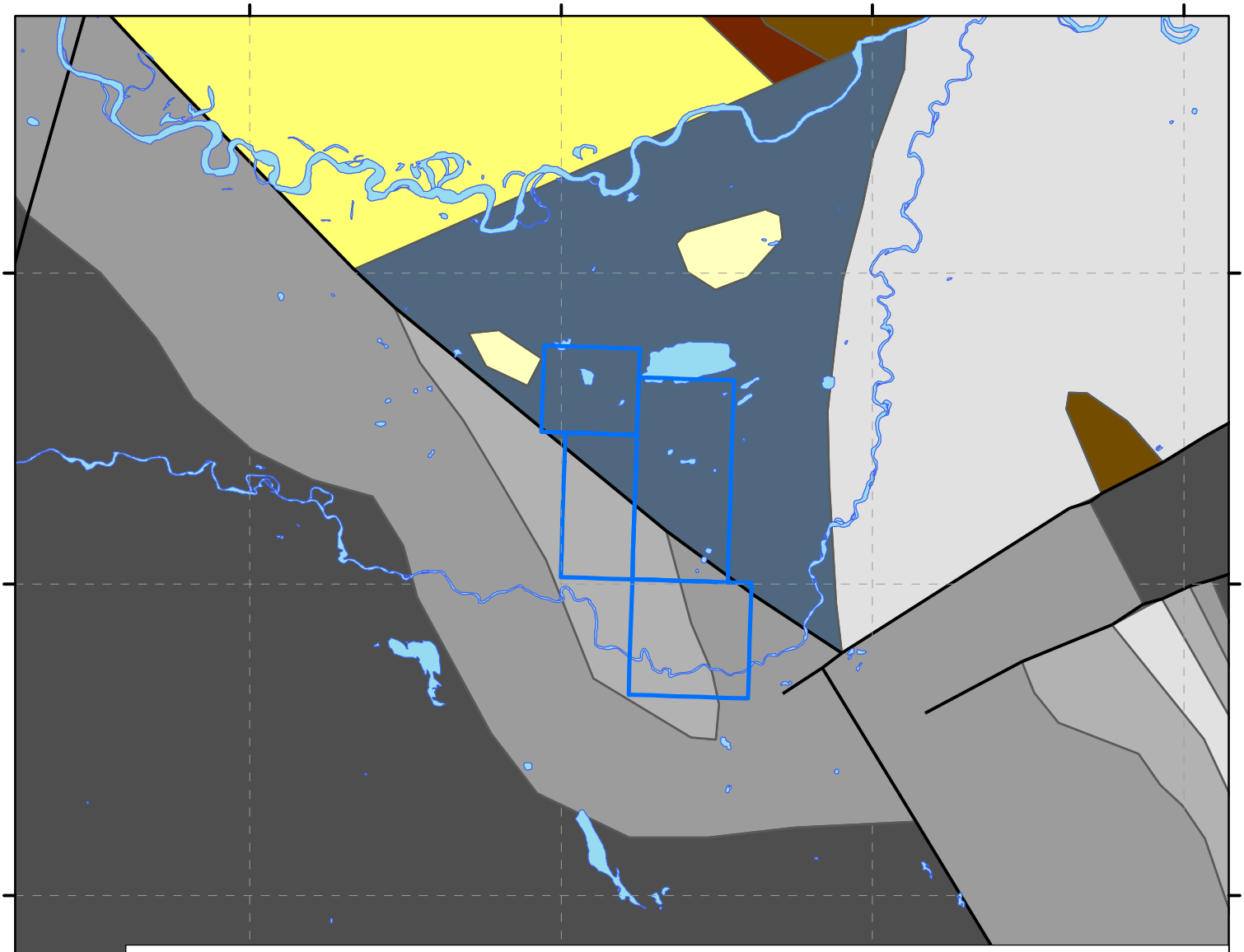
The Pelly Fault transects the Swannell Property, which is a northwest-trending topolinear that cuts approximately 250km of the Cassiar terrane. At the Swannell showing on the north and south banks of

the Swannell river, the Pelly Fault is exposed and hosts Zn-Pb-Ag mineralization. Where the fault outcrops in the river, S_1 pervasive foliation is dragged into the fault zone, indicating at the earliest late D_1 displacement. The fault juxtaposes a package of graphitic argillites with interbedded limestone units (to the west) against a package of phyllitic non-graphitic siltstones with interbedded limestones (to the east), which are currently interpreted as different formations of the Ingenika Group. Later cataclastic breccias and brittle fault gouge are also within the Pelly Fault and proximal second order structures indicating later brittle reactivation. Also, milled quartz vein fragments that have similar textures to mineralized veining, and late euhedral gypsum within the fault zone indicate very late movement, possibly related to the dextral transpressional deformation along the Tintina Fault between 60-10 Ma (Nelson & Colpron, 2007).

Multiple cm- to dm-scale graphitic faults that crosscut S_1 foliations and S_3 foliations/F_3 folds were mapped. The general trend of these faults is consistently northwest, but dips alternate between northeast and southwest. In one area, slickensides were noted in the footwall of a fault that plunge shallowly to the southeast where limestone beds slipped along bedding planes. Importantly, a pod/manto of high-grade mineralization plunges parallel to these slickensides. These late graphitic faults are interpreted as part of a flower structure that may have allowed the emplacement of intrusions and mineralizing fluids.

At the Onwards showing on the southern side of Delkluz Lake, bedding is approximately east-west striking with a shallow to moderate dip to the north. Pb-Zn-Ag mineralization is hosted in quartz-ankerite-galena veining, which is discordant to stratigraphy with a north-south trend and moderate to steep west dip. In a restored adit at the showing, there is excellent exposure of an east-southeast trending moderately south dipping fault which crosscuts stratigraphy and mineralization. Rotation of bedding and foliation suggests that this fault is a south-side down normal fault. At the Ingenika Mine showing, a pervasive spaced cleavage was observed at the scarp of a steep hill with the same orientation, indicating that stratigraphy and mineralization at Ingenika may have a similar structural history of south-side down normal faulting.

An airborne electromagnetic survey that encompasses all of the current tenements from 1966 (ARIS #01136) was digitized and imported into GIS. The interpreted Pelly Fault is conicident with a sharp boundary between conductive graphic argillites to the west, and non-conductive siltstones and phyllties to the east. Multiple northeast-trending lineaments crosscut and seemingly displace the Pelly Fault with no coherent sense of lateral movement. These north-easterly lineaments are confirmed in gradient-array IP data from 2005 (ARIS #27614), where lineaments in resistivity and chargeability crosscut other lithologic and structural features. Tentatively, these northeast trending lineaments are interpreted to be the youngest structural feature in the area, although their relationship to late east-southeast trending, south-side down normal faults is unclear.



Legend

Regional Geology - Lithology

Paleozoic

- Undetermined Paleozoic - Proterozoic formation
- Kechika Group
- Atan Group - Boya Formation
- Atan Group - Rosella Formation

Proterozoic

- Ingenika Group - undetermined formation
- Ingenika Group - Stelkluz Formation
- Ingenika Group - Espee Formation
- Ingenika Group - Tsaydiz Formation
- Ingenika Group - Swannell Formation

- Regional Geology - Faults
- Swannell Claims
- Lakes and Rivers

N

1:100,000

0 1 2 4

Kilometers

SWANNELL PROPERTY

Regional Geology

Date: Jan 5, 2019	Scale: 1:100,000	Figure: 3
Projection: UTM NAD 83 Zone 10	NTS: 094C/11E	
Author: D. Perry	File: Swannell_RegGeo	

4.3 Mineralization

4.3.1 Swannell

Mineralization at the Swannell showing has three different styles:

The first consists of quartz veins carrying up to 5 per cent pyrite and galena, sphalerite, minor malachite and covellite. One 0.5 metre wide vein exposed over a length of 50 metres had been repeated by isoclinal folding to a width of 2.5 metres. Graphitic septa are present in much of the veining.

The second style of mineralization consists of layers of quartz, crystalline calcite, sphalerite, galena and minor pyrite in blue-grey, thinly bedded limestone. The host strata are drag folded, and the mineralized layers are stratiform. A composite assay (Geological Survey of Canada Memoir 274, page 210) of two selected samples yielded 0.69 gram per tonne gold, 279.1 grams per tonne silver, 0.05 per cent copper, 24.6 per cent lead and 27.4 per cent zinc.

The third type of mineralization consists of bedding-parallel layers of coarse granular pyrite, fine galena and sphalerite in brecciated, silicified blue-grey limestone. One layer containing approximately 10 per cent sulphides reaches 3 metres in thickness. Some layers consist of semi-massive sulphides. Grab samples in 2015 of pods/mantos of massive sulfide mineralization returned values of 31% Zn, 19% Pb, 223 g/t Ag. In a 1985 diamond drill program (ARIS# 14032), Cominco Limited reported "fracture-controlled" galena-sphalerite mineralization and a grade of 1.23 per cent lead and 5.2 per cent zinc across 9.5 metres in the best hole.

4.3.2 Onwards

Mineralization at Onwards is hosted in a 6-7m wide zone of veining and brecciation that is discordant to the finely laminated grey-white limestone host. Rock samples from outcrop in 2015 returned values up to 21.6% Pb and 302 g/t Ag, and previous operators have reported values up to 64.2% Pb and 1870 g/t Ag (West Cirque press release, 2012). Mineralization consists of quartz-galena-ankerite veining and massive pods of galena-pyrite +/- sphalerite.

The northern extent of mineralization is well defined where it terminates against an east-southeast trending, south-side down normal fault. At the southern extent of the vein, surface trenching and underground exploration have failed to extend the mineralization, possibly due to structural complications.

5.0 2018 Geological, Geochemical and Biogeochemical Program

5.1 General

Four days were spent carrying out a program consisting rock sampling and biogeochemical sampling. The rock geochemical program consisted of detailed channel sampling at the Onwards and Swannell showings and additional rock sampling at the Onwards South and Onwards West showings. The biogeochemical survey consisted of a 175 sample tree bark sampled over the Onwards and Swannell areas. The sampling program that was designed to fingerprint both the Onwards and Swannell showings

as well as sample the nearby and on trend areas in the vicinity of both showings and determine whether or not it was an effective exploration method for the remainder of the property.

5.2 Sampling Procedures and Analytical Methodology

Rock samples were taken from outcrops and are representative of the underlying geology. Samples were shipped to ALS Labs in North Vancouver, BC for analysis. Analytical results, procedures, and QAQC documents can be found in Appendix D. Sample notes can be found in Appendix C.

Tree bark samples were taken from Black Spruce and Lodgepole Pine trees by scraping the dried bark around the outside of the tree with a paint scraper. Samples were collected with a paint scraper and modified dust pan. Samples were placed in Kraft bags and allowed to dry prior to analysis. Analysis consisted of grinding each sample in a coffee grinder and they placing within a ZipLoc plastic bag. Between each sample, the coffee grinder was cleaned with isopropyl. Samples were analysed using an Olympus XRF machine. Standards and blanks were tested regularly and no analytical issues were noted.

6.0 CONCLUSIONS

The 2018 geochemical program was successful in increasing the sample inventory for the Swannell and Onwards showing, including providing unbiased channel samples. The program also relocated the Onwards South and Onwards West showings and test pit areas.

Sampling at the Onwards showing returned values as high as 3m of 19.87% Pb and 275 g/t Ag (7793705) and 25.77% Pb, 383 g/t Ag, 0.14% Cu, 0.84 g/t Au, and 402 ppm Sb in grab sampling (7793708). Elevated gold, antimony, and copper values further illustrate the likelihood of a hydrothermal source to the mineralization. At the Onwards West showing grab sampling returned 3.36% Pb and 36.4 g/t Ag (7793717) while sampling at Onwards South returned up to 3.68% Pb, 30.88% Zn, and 34.9 g/t Ag (7793714). Sampling at the Swannell showing returned the highest value of 1m of 7.23% Pb, 22.1% Zn, and 79.1 g/t Ag.

The biogeochemical program failed to show any extensions of anomalies throughout the test area but it did fingerprint the known areas with strong lead signatures.

Figures X through Z found in Appendix E detail the sampling results in further detail.

Rock sampling on the property provided further evidence for the presence of high grade Lead-Zinc-Silver mineralization. The presence of copper, gold, and antimony also highlights the likelihood of a hydrothermal source to mineralization. Given the working model of mineralization being related to Tertiary intrusives, future programs should utilize geophysical techniques to determine the location of any associated intrusives.

7.0 RECOMMENDATIONS

The 2018 field program provided further evidence of high grade carbonate hosted hydrothermal Lead-Zinc-Silver mineralization. Additionally, the program returned results with anomalous gold and copper which were not noted by previous operators – giving further evidence to the hydrothermal nature of the mineralization.

Biogeochemical sampling was proven to be a quick and cost effective method for determining the presence of shallow mineralisation. The survey failed to detect any extensions of mineralisation beneath deep cover so it does not appear to be as useful of an exploration tool as was hoped. The survey method should be implemented on a broader scale since only a small fraction of the property was tested.

Future work should include more traditional biogeochemical sampling (Ah-Horizon w aqua regia digestion) in addition to gravity surveys performed in order to detect massive sulphide bodies, and also to find possible intrusive bodies that may be the source of mineralization. Additionally, a shallow drill program is recommended for testing the extension of the Onwards showing, Onwards West, and Onwards South. Drilling should also be completed on the Swannell showing. Both the Onwards and Swannell showing have seen drilling in the area but drill holes at both locations did not adequately test known mineralized bodies because drilling was done parallel to the trend and plunge of mineralization.

Respectfully submitted,

Dustin Perry, BSc.

January 9th, 2019

8.0 REFERENCES

Bellefontaine, K.A., (1990): The tectonic evolution of the Ingenika Group and its implications for the boundary between the Omineca and Intermontane belts, North-Central British Columbia, Unpublished Masters' thesis, McGill.

Nelson, J. L. & Colpron, M. (2007): Tectonics and Metallogeny of the Canadian and Alaskan Cordillera,1.8 Ga to present. In: Goodfellow, W. D. (eds) Mineral Deposits of Canada: A Synthesis of Major Deposit Types, District Metallogeny, the Evolution of Geological Provinces, and Exploration Methods. Mineral Deposit Division, Geological Association of Canada, Special Publications, 5, 755–791.

Okulitch, A.V., MacIntyre, D.G., Taylor, G.C., Gabrielse, H., Cullen, B., Massey, N., Bellefontaine, K.A., (2002): Geology, Fort Nelson, British Columbia; Central Foreland Map NO-10-G, scale 1:500,000. Geological Survey of Canada, Open File 3604.

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Ross, G.M., (1991): Tectonic setting of the Windermere Supergroup revisited. Geology, v. 19, p. 1125-1128

West Cirque Resources Ltd. (2013): http://www.infomine.com/index/pr/PB168028.PDF

APPENDIX A: STATEMENT OF QUALIFICATIONS

For: Dustin Perry of 42012 Birken Rd, Squamish, BC.

I graduated from the University of British Columbia with a Bachelor of Sciences Degree in Geology (2013);

I have been practicing my profession as a geologist in mineral exploration and mining continuously since 2010 and seasonally since 2008

The observations, conclusions and recommendations contained in the report are based on supervision of the described program, field examinations, and the evaluation of results of the exploration program completed by the operator of the property.

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Dustin Perry, BSc.

January 10th, 2019

APPENDIX B: STATEMENT OF EXPENDITURES

Exploration Work Type	Comment	No.	Rate		Totals
Field Work					
Personnel (Name,Position)		**Days**	**Rate**	**Subtotal**	
Francis MacDonald, Geologist	May 7th to 13th, 2018	7	$800.00	$5,600.00	
Dustin Perry, Geologist	May 7th to 13th, 2019	7	$800.00	$5,600.00	
				$11,200.00	$11,200.00
Office Work		**Days**	**Rate**	**Subtotal**	
Report preparation	Dustin Perry	5	$800.00	$4,000.00	
GIS drafting	Francis MacDonald	4	$800.00	$3,200.00	
Program Planning	Francis MacDonald/Dustin Perry (May 6th)	1	$1,600.00	$1,600.00	
Tree Bark Sample Prep/Analysis	Francis MacDonald/Dustin Perry	1	$1,600.00	$1,600.00	
				$7,200.00	$7,200.00
Ground Exploration Surveys	**Area in Hectares/Personnel**				
Rock Sampling				$0.00	
Tree Bark Sampling				$0.00	
				$0.00	$0.00
Geochemical Surveying	**Analytical Methods**	**No.**	**Rate**	**Subtotal**	
Rock	ICP-MS incl Overlimit analysis	18	$57.44	$1,033.92	
				$1,033.92	$1,033.92
Transportation		**No.**	**Rate**	**Subtotal**	
Truck Rental	Toyota Tundra	2940	0.75	$2,205.00	
Fuel					
				$2,205.00	$2,205.00
Accomodations & Food		**No.**	**Rate**	**Subtotal**	
Hotel		2	$130.00	$260.00	
Meals		1	$179.23	$179.23	
Groceries		1	$377.71	$377.71	
				$816.94	$816.94
Miscellaneous		**No.**	**Rate**	**Subtotal**	
Field Supplies	Sample bags, bear spray, stationary, etc.			$55.33	
				$55.33	$55.33
Equipment Rentals		**No.**	**Rate**	**Subtotal**	
Radios (Orevista)	2 rental units plus truck unit ($20/Day)	7	20	$140.00	
Satellite Phone	1 week rental + airtime	1		$137.67	
InReach Communication (Orevista)	1 week rental + airtime	1		$50.00	
XRF Rental				$304.64	
Camp Rental (Orevista)	$100/pp/day	14	100	$1,400.00	
				$2,032.31	$2,032.31
	TOTAL EXPENDITURES				**$24,543.50**

APPENDIX C: SAMPLE INFORMATION

sample_id	latitude	longitude	sampler	date	time	sample_medium	sample_type	from_m
7793701	56.6739975	-125.1706672	FMD	2018-05-09	9:37	rock	channel	0
7793702	56.6740099	-125.1705637	DP	2018-05-09	10:13	rock	channel	0
7793704	56.6740055	-125.1705425	DP	2018-05-09	10:34	rock	channel	0
7793703	56.6740395	-125.1706017	FMD	2018-05-09	10:45	rock	channel	1
7793705	56.6739889	-125.1705613	DP	2018-05-09	11:05	rock	channel	0
7793706	56.6739763	-125.1706836	FMD	2018-05-09	11:23	rock	channel	0
7793707	56.6740875	-125.1706601	DP	2018-05-09	11:28	rock	channel	1
7793708	56.6322055	-125.1705462	FMD	2018-05-09	13:10	rock	grab	0
7793709	56.6322961	-125.1697115	DP	2018-05-09	13:40	rock	grab	0
7793710	56.6320779	-125.1696012	DP	2018-05-09	13:43	rock	grab	0
7793711	56.6320553	-125.1687975	FMD	2018-05-09	14:53	rock	channel	0
7793712	56.6323319	-125.1689601	DP	2018-05-09	15:07	rock	channel	0
7793713	56.6322683	-125.1688814	DP	2018-05-09	15:10	rock	grab	0
7793714	56.6705793	-125.1732854	FMD	2018-05-09	18:05	rock	grab	0
7793715	56.6706314	-125.1731985	FMD	2018-05-09	18:09	rock	grab	0
7793716	56.6706158	-125.1731944	FMD	2018-05-09	18:14	rock	grab	0
7793717	56.6733707	-125.1722972	DP	2018-05-09	18:39	rock	grab	0
7793718	56.6740751	-125.1709094	DP	2018-05-10	11:44	rock	grab	0

sample_id	to_m	lith_simple	mineralization_1	minstyle_1	min_pct_1	mineraliza	minstyle_2	min_pct_2	mineraliza	minstyle_3
7793701	1	vein	galena	vein - sulphide vein	10	pyrite	vein - qtz-c	1		
7793702	2	carbonate rocks	galena	banded	15	chalcopyrit	disseminat	1		
7793704	2	carbonate rocks	chalcopyrite	disseminated	2	galena	disseminat	1		
7793703	2	carbonate rocks	galena	disseminated	1			0		
7793705	3	carbonate rocks	galena	massive	50	chalcopyrit	disseminat	1		
7793706	1	vein	galena	banded	5	chalcopyrit	disseminat	2		
7793707	2	carbonate rocks	galena	banded	10	chalcopyrit	disseminat	1		
7793708	0				0			0		
7793709	0	carbonate rocks	sphalerite	banded	0	pyrite	disseminat	3		
7793710	0	carbonate rocks	pyrite	disseminated	15	fe-oxides	massive	60		
7793711	1	carbonate rocks	sphalerite	massive	30	galena	massive	5	pyrite	disseminat
7793712	1	carbonate rocks	sphalerite	banded	30	galena	banded	10	chalcopyrit	disseminat
7793713	0	carbonate rocks	sphalerite	banded	20	galena	banded	10		
7793714	0	carbonate rocks	sphalerite	poddy	30	galena	poddy	5		
7793715	0		galena	poddy	10	sphalerite	poddy	5		
7793716	0	fault-related rocks			0			0		
7793717	0	carbonate rocks	galena	banded	12	pyrite	disseminat	2		
7793718	0	carbonate rocks	galena	banded	17	chalcopyrit	disseminat	1	pyrite	disseminat

sample_id	min_pct_3	structure_t	structure_strike	structure_dip	structure_width_m	alteration_min_1	alteration_intensity_1
7793701	0	vein	180	55	50	siderite	moderate (10-50% volume)
7793702	0		0	0	0	siderite	moderate (10-50% volume)
7793704	0		0	0	0	siderite	weak (1-10% volume)
7793703	0		0	0	0	silica	weak (1-10% volume)
7793705	0		0	0	0	siderite	moderate (10-50% volume)
7793706	0	vein	180	0	0		moderate (10-50% volume)
7793707	0		0	0	0		
7793708	0		0	0	0		
7793709	0		0	0	0	siderite	moderate (10-50% volume)
7793710	0		0	0	0	fe-oxides	strong (50-100% volume)
7793711	2	vein	145	80	1	silica	strong (50-100% volume)
7793712	1		0	0	0	siderite	moderate (10-50% volume)
7793713	0		0	0	0	siderite	moderate (10-50% volume)
7793714	0		0	0	0	dolomite	strong (50-100% volume)
7793715	0		0	0	0	siderite	moderate (10-50% volume)
7793716	0	breccia	0	0	0	siderite	strong (50-100% volume)
7793717	0		0	0	0	siderite	weak (1-10% volume)
7793718	1		0	0	0	siderite	moderate (10-50% volume)

sample_id	alteration_style_1	alteration_min_2	alteration_intensity_2	alteration_style_2
7793701	vein-halo	silica		
7793702	banded	silica	moderate (10-50% volume)	pervasive
7793704	pervasive	fe-oxides	moderate (10-50% volume)	pervasive
7793703	vein-halo	siderite	moderate (10-50% volume)	vein-halo
7793705	pervasive	silica	moderate (10-50% volume)	pervasive
7793706	vein-halo	dolomite	moderate (10-50% volume)	vein-halo
7793707				
7793708				
7793709	pervasive			
7793710	pervasive			
7793711	pervasive			
7793712	pervasive	silica	weak (1-10% volume)	pervasive
7793713	pervasive	silica	weak (1-10% volume)	pervasive
7793714	pervasive			
7793715	pervasive			
7793716	patchy			
7793717	banded			
7793718	pervasive	fe-oxides	moderate (10-50% volume)	pervasive

Test Label	P_ppm	S_ppm	K_ppm	Ca_ppm	Ti_ppm	V_ppm	Cr_ppm	Mn_ppm	Fe_ppm	Co_ppm	Ni_ppm	Cu_ppm
35	86	89	3916	7466	15	0.5	0.5	95	229	6	8	0.5
36	384	129	1689	19587	3	0.5	0.5	42	73	6	8	0.5
37	0.5	36	647	6603	17	0.5	0.5	141	286	6	8	0.5
38	69	49	1624	9758	37	0	0.5	247	565	6	8	0.5
39	0.5	96	1350	2033	5	0.5	0.5	79	258	6	8	0.5
40	0.5	113	2489	14101	54	7	0.5	253	334	6	8	0.5
41	0.5	55	1863	12995	58	10	0.5	355	189	6	8	0.5
42	60	42	944	13647	39	6	0	146	166	6	8	0.5
43	102	14	620	2710	15	0.5	0.5	37	200	6	8	0.5
44	147	46	1358	6227	23	0	0.5	328	357	6	8	0.5
45	0.5	73	1377	12991	50	2	0.5	136	599	6	8	0.5
46	0.5	28	819	6630	11	0.5	0.5	56	167	6	8	0.5
47	72	17	810	14745	55	8	0.5	242	89	6	8	0.5
48	106	101	738	9649	18	1	3	272	402	6	8	0.5
49	0.5	83	1742	16005	36	3	0.5	156	192	6	8	0.5
50	116	80	531	1241	6	0.5	0	103	157	6	8	0.5
51	243	87	2603	12295	69	5	1	249	699	6	8	0.5
54	44	98	2093	11396	58	4	0.5	804	528	6	8	0.5
55	105	30	590	1007	8	0.5	0.5	157	164	6	8	0.5
56	136	67	843	2479	7	0.5	0.5	141	212	6	8	0.5
57	29	63	1032	1452	4	0.5	0.5	130	149	6	8	0.5
59	104	42	674	2109	6	0.5	0.5	174	138	6	8	0.5
60	122	87	748	1579	11	0.5	0.5	128	259	6	8	0.5
61	18	57	596	1725	10	0.5	0.5	124	237	6	8	0.5
62	4	34	502	1248	4	0.5	0.5	80	121	6	8	0.5
63	3	57	536	2226	7	0.5	0.5	99	193	6	8	0.5
64	0.5	51	559	1594	3	0.5	0.5	133	88	6	8	0.5
65	186	31	802	1609	11	0.5	0	178	243	6	8	0.5
66	113	23	692	1249	7	0.5	0.5	82	139	6	8	0.5
67	0.5	64	593	2462	12	0.5	0.5	110	237	6	8	0.5
68	205	83	706	1487	22	0	0	176	420	6	8	0.5
71	113	39	530	2351	8	0.5	0.5	117	191	6	8	0.5
72	0.5	27	1557	7214	31	0	0.5	82	398	6	8	0.5

Test Label	P_ppm	S_ppm	K_ppm	Ca_ppm	Ti_ppm	V_ppm	Cr_ppm	Mn_ppm	Fe_ppm	Co_ppm	Ni_ppm	Cu_ppm
73	34	75	1729	13409	59	3	0.5	180	668	6	8	0.5
74	0.5	31	713	1412	7	0.5	0.5	72	211	6	8	0.5
75	0.5	64	720	2061	6	0.5	0.5	146	172	6	8	0.5
77	55	70	570	1825	4	0.5	0.5	162	123	6	8	0.5
78	44	34	685	1208	5	0.5	0.5	183	144	6	8	0.5
76	120	51	585	1687	6	0.5	0.5	137	131	6	8	0.5
81	0.5	24	481	2393	5	0.5	0.5	105	142	6	8	0.5
82	19	28	439	1401	2	0.5	0.5	110	51	6	8	0.5
83	0.5	89	683	1415	7	0.5	0.5	113	184	6	8	0.5
84	95	25	567	1597	5	0.5	0.5	106	131	6	8	0.5
85	75	41	483	1992	4	0.5	0.5	109	150	6	8	0.5
86	0.5	58	643	2004	5	0.5	0.5	136	176	6	8	0.5
87	51	87	568	2695	11	0.5	0.5	168	153	6	8	0.5
88	66	39	508	1943	6	0.5	0.5	168	97	6	8	0.5
89	32	108	749	8739	10	0	0.5	381	111	6	8	0.5
90	211	75	1632	16109	46	5	0.5	196	189	6	8	0.5
91	0.5	109	2475	23229	68	11	0.5	229	115	6	8	0.5
92	0.5	69	3308	15461	46	6	0.5	257	73	6	8	0.5
93	0.5	88	1502	19854	62	11	0.5	223	45	6	8	0.5
94	157	92	2751	22538	58	9	0.5	81	102	6	8	0.5
95	0.5	79	3378	13865	40	6	0.5	40	57	6	8	0.5
96	0.5	50	2921	13159	32	5	0.5	146	27	6	8	0.5
97	177	97	3009	21191	71	12	0.5	286	62	6	8	0.5
98	0.5	130	2849	14621	82	14	0.5	149	81	6	8	0.5
99	0.5	82	897	17424	41	6	0.5	247	59	6	8	0.5
101	0.5	71	1166	10254	26	4	0.5	81	10	6	8	0.5
102	0.5	54	2089	16650	25	3	0.5	168	28	6	8	0.5
103	85	36	544	2309	2	0.5	0.5	108	36	6	8	0.5
104	0.5	37	3977	7909	35	5	0.5	204	69	6	8	0.5
106	57	37	652	1765	4	0.5	0.5	224	59	6	8	0.5
107	0.5	84	1767	7459	79	13	0.5	272	40	6	8	0.5
108	44	57	492	1973	1	0.5	0.5	185	21	6	8	0.5
109	0.5	58	2233	9803	44	7	0.5	345	56	6	8	0.5

Test Label	P_ppm	S_ppm	K_ppm	Ca_ppm	Ti_ppm	V_ppm	Cr_ppm	Mn_ppm	Fe_ppm	Co_ppm	Ni_ppm	Cu_ppm
110	197	81	994	8630	13	1	4	693	54	6	8	0.5
111	0.5	55	816	6789	10	0	0.5	639	51	6	8	0.5
112	37	47	956	5896	6	0	0.5	521	41	6	8	0.5
113	233	64	681	4514	5	0.5	0.5	260	67	6	8	0.5
114	0.5	50	1010	9054	17	2	0	372	50	6	8	0.5
115	0.5	43	1485	13099	87	15	0.5	372	23	6	8	0.5
116	148	73	854	6230	11	0	0.5	450	85	6	8	0.5
237	0.5	60	821	6219	9	0.5	0.5	417	92	6	8	0.5
117	0.5	71	931	9263	14	1	0.5	460	56	6	8	0.5
118	0.5	50	586	7027	10	0	0.5	486	33	6	8	0.5
119	58	39	478	9462	10	1	0	462	53	6	8	0.5
120	0.5	62	1222	8821	11	1	0.5	414	107	6	8	0.5
121	60	77	1619	6423	34	4	0.5	334	131	6	8	0.5
122	19	30	803	2534	18	1	0.5	317	73	6	8	0.5
123	99	35	575	1030	0.5	0.5	0.5	179	32	6	8	0.5
124	131	53	530	1634	0	0.5	0.5	146	34	6	8	0.5
125	95	65	588	7090	16	1	0.5	700	151	6	8	0.5
126	71	52	699	4227	16	0.5	0.5	254	240	6	8	0.5
127	137	83	1148	5267	10	0	0.5	308	130	6	8	0.5
128	0.5	84	841	6586	31	0	0.5	419	351	6	8	0.5
129	0.5	81	672	12424	14	1	0.5	376	145	6	8	0.5
148	0.5	27	498	4835	11	0.5	0.5	187	113	6	8	0.5
149	28	1	513	5849	10	0	0.5	400	84	6	8	0.5
150	0.5	42	1542	10094	32	1	0.5	114	403	6	8	0.5
151	88	27	617	6862	36	1	0.5	130	402	6	8	0.5
152	118	75	641	9071	31	0	0.5	166	518	6	8	0.5
153	170	9	1552	7421	2341	0.5	0.5	116	259	6	8	0.5
154	0.5	13	695	2214	9	0.5	0.5	63	243	6	8	0.5
155	201	62	825	8445	39	3	0.5	410	412	6	8	0.5
156	0.5	69	1129	22543	2981	0	0	297	303	6	8	0.5
157	0.5	36	635	12286	46	4	0.5	186	119	6	8	0.5
158	144	75	934	8157	72	3	0.5	350	779	6	8	0.5
159	0.5	69	2077	12155	34	2	0.5	124	292	6	8	0.5

Test Label	P_ppm	S_ppm	K_ppm	Ca_ppm	Ti_ppm	V_ppm	Cr_ppm	Mn_ppm	Fe_ppm	Co_ppm	Ni_ppm	Cu_ppm
160	0.5	24	1775	12434	72	7	0.5	195	448	6	8	0.5
161	0.5	22	1535	10870	38	4	0.5	103	97	6	8	0
162	5	1	772	4423	387	1	0.5	95	22	6	8	1
163	40	76	1458	12722	2802	0.5	0.5	147	106	6	8	0.5
164	0.5	71	1556	18228	37	5	0.5	129	107	6	8	0.5
165	0.5	23	3067	14009	52	5	0.5	363	297	6	8	0.5
167	12	19	571	1461	21	0	0.5	282	216	6	8	0.5
168	42	51	737	2431	5	0.5	0.5	150	122	6	8	0.5
169	78	68	727	1672	8	0.5	0.5	120	231	6	8	0.5
170	0.5	57	594	2670	10	0.5	0.5	91	218	6	8	0.5
171	0.5	46	845	1550	62	0.5	0.5	174	315	6	8	0.5
172	86	21	569	1094	7	0.5	0.5	77	220	6	8	0.5
173	181	62	558	1823	1227	0.5	0.5	113	192	6	8	0.5
174	242	63	871	4526	36	0	0.5	280	464	6	8	0.5
175	20	67	523	2402	1637	0.5	0.5	129	160	6	8	0.5
176	0.5	34	535	2662	15	0.5	0.5	404	232	6	8	0.5
177	17	72	735	4338	52	3	0.5	517	511	6	8	0.5
178	0.5	38	579	1486	13	0.5	0.5	107	210	6	8	0.5
179	0.5	30	573	1566	15	0.5	0.5	106	220	6	8	0.5
180	24	34	535	1038	11	0.5	0.5	181	241	6	8	0.5
181	0.5	38	475	2044	9	0.5	0.5	90	178	6	8	0.5
182	95	29	481	1862	9	0.5	0.5	98	222	6	8	0.5
183	0.5	44	498	1897	6	0.5	0.5	86	188	6	8	0.5
184	0.5	39	455	947	488	0.5	0.5	77	156	6	8	0.5
185	0.5	36	574	1746	7	0.5	0.5	133	146	6	8	0.5
186	195	60	673	1908	7	0.5	0.5	156	141	6	8	0.5
187	0.5	14	462	1529	2	0.5	0.5	153	82	6	8	0.5
188	72	46	648	2076	6	0.5	0.5	134	155	6	8	0.5
189	29	49	438	2428	2	0.5	0.5	113	67	6	8	0.5
190	15	17	455	1556	2	0.5	0.5	96	98	6	8	0.5
191	239	24	403	1314	2	0.5	0.5	91	114	6	8	0.5
192	5	49	612	933	2	0.5	0.5	51	94	6	8	0.5
193	103	85	543	1815	3	0.5	0.5	117	136	6	8	0.5

Test Label	P_ppm	S_ppm	K_ppm	Ca_ppm	Ti_ppm	V_ppm	Cr_ppm	Mn_ppm	Fe_ppm	Co_ppm	Ni_ppm	Cu_ppm
194	118	81	507	2514	9	0.5	0.5	104	147	6	8	0.5
195	262	88	672	2378	4	0.5	0.5	133	128	6	8	0.5
196	91	185	1317	9017	10	0.5	0.5	360	214	6	8	0.5
197	0.5	236	4433	22497	78	12	0.5	235	129	6	8	0.5
198	311	228	1198	22641	60	7	0.5	328	101	6	8	0.5
199	0.5	183	4330	18305	69	9	0.5	205	114	6	8	0.5
200	67	118	2970	17636	82	14	0.5	208	12	6	8	0.5
201	43	81	849	3265	0	0.5	0.5	105	35	6	8	0.5
202	0.5	91	3323	10043	20	0	0.5	103	31	6	8	0.5
203	0.5	148	2799	15810	65	8	0.5	555	113	6	8	0.5
204	48	104	729	3449	1	0.5	0.5	49	64	6	8	0.5
205	156	150	1409	18258	64	8	0.5	185	112	6	8	0.5
212	51	91	1692	11121	42	5	0.5	148	44	6	8	0.5
206	210	75	1618	11052	28	2	0.5	135	12	6	8	0.5
207	161	172	3422	18021	35	3	0.5	104	138	6	8	0.5
223	0.5	78	1537	12548	46	5	0.5	179	19	6	8	0.5
233	109	149	537	3294	4	0.5	0.5	320	66	6	8	0.5
235	74	113	907	2886	5	0.5	0.5	236	43	6	8	0.5
234	0.5	76	1586	5018	45	5	0.5	262	68	6	8	0.5
236	126	69	2283	9016	128	20	0.5	633	37	6	8	0.5
224	99	61	4155	8230	41	5	0.5	158	24	6	8	0.5
229	0.5	49	528	1567	0	0.5	0.5	316	9	6	8	0.5
219	79	76	2853	8474	42	4	0.5	288	48	6	8	0.5
232	0	86	1009	8938	7	0.5	0.5	391	72	6	8	0.5
225	0.5	153	2937	12443	61	8	0.5	582	52	6	8	0.5
230	0.5	72	1394	8161	54	7	0.5	178	32	6	8	0.5
217	258	107	1168	6481	40	4	0.5	973	81	6	8	0.5
231	256	99	1183	3092	30	3	0.5	340	55	6	8	0.5
215	0.5	132	1163	9163	8	0.5	0.5	562	76	6	8	0.5
227	0.5	92	1098	7028	3	0.5	0.5	274	35	6	8	0.5
228	0.5	141	4749	16737	77	11	0.5	666	59	6	8	0.5
216	5	59	2917	10028	58	7	0.5	397	15	6	8	0.5
226	0.5	186	2436	15598	68	9	0.5	391	61	6	8	0.5

Test Label	P_ppm	S_ppm	K_ppm	Ca_ppm	Ti_ppm	V_ppm	Cr_ppm	Mn_ppm	Fe_ppm	Co_ppm	Ni_ppm	Cu_ppm
222	87	73	674	6191	44	5	0.5	547	72	6	8	0.5
218	0.5	94	918	4615	51	6	0.5	734	79	6	8	0.5
221	234	72	731	6713	51	8	0.5	788	50	6	8	0.5
220	0.5	70	946	5499	57	7	0.5	649	79	6	8	0.5
208	218	60	660	8874	12	0	0.5	615	39	6	8	0.5
209	0.5	18	933	5247	50	6	0.5	643	56	6	8	0.5
210	128	177	5048	14060	55	4	0.5	571	219	6	8	0.5
211	85	48	2426	9879	56	7	0.5	432	17	6	8	0.5
214	0.5	92	1466	8017	29	3	0.5	377	83	6	8	0.5
213	36	150	2230	14092	75	11	0.5	359	68	6	8	0.5

Test Label	Zn_ppm	As_ppm	Se_ppm	Rb_ppm	Sr_ppm	Y_ppm	Zr_ppm	Nb_ppm	Mo_ppm	Ag_ppm	Cd_ppm	Sn_ppm
35	68	0.5	0.5	10	91	0	0.5	0	0	0.5	0.5	0.5
36	279	0	0.5	3	94	0.5	1	0	0.5	0.5	0.5	0.5
37	43	0.5	0.5	2	50	0	1	0.5	0.5	0	0.5	0.5
38	110	0	0.5	3	96	1	0	1	2	0.5	4	0.5
39	34	24	0.5	4	17	0.5	0.5	0	0	0.5	0.5	0.5
40	68	0	0.5	5	119	0.5	0.5	0	2	0.5	1	0.5
41	120	0.5	0.5	5	176	0.5	0.5	0	1	0.5	0.5	0.5
42	100	0.5	0.5	4	112	0	1	0.5	0.5	3	0.5	0.5
43	18	0.5	0.5	3	38	0	0.5	0.5	0.5	0.5	1	0.5
44	43	0.5	0.5	5	61	0.5	3	0.5	0.5	0.5	4	0.5
45	27	0.5	0.5	6	103	0	0.5	1	0	0.5	0.5	0.5
46	62	0.5	0.5	3	72	0.5	0.5	0	0.5	0.5	0.5	0.5
47	86	0.5	0.5	3	136	0	0.5	0.5	0	0.5	1	0.5
48	47	0.5	0.5	3	49	1	0.5	0.5	0	0.5	0.5	0.5
49	102	0.5	0.5	6	242	0.5	0.5	0.5	0.5	0	0.5	1
50	21	0.5	0.5	3	12	1	0	0.5	0.5	0.5	0.5	0.5
51	55	0.5	0.5	4	190	0.5	0	0.5	0.5	0.5	0.5	0.5
54	71	0.5	0.5	5	82	0	3	0	0.5	4	4	0.5
55	25	0.5	0.5	3	9	1	0.5	0.5	3	0.5	2	0.5
56	37	0.5	0.5	3	21	1	0	0	1	2	9	2
57	20	0.5	0.5	3	9	0.5	0	0	2	0.5	4	5
59	38	0.5	0.5	3	24	0.5	0	0.5	2	0.5	2	0.5
60	25	0.5	0.5	3	18	0	0.5	0	1	0	3	0.5
61	25	0.5	0.5	6	19	0	0.5	0.5	0.5	0.5	0.5	0.5
62	17	0.5	0.5	2	8	1	0.5	0	2	0.5	0	0.5
63	26	0.5	0.5	3	21	0	1	0.5	0.5	0	8	0.5
64	34	0.5	0.5	3	18	1	0.5	0.5	2	1	3	0.5
65	36	0.5	0.5	3	19	2	3	1	0.5	1	4	0.5
66	19	0.5	0.5	3	8	0	2	0	0.5	0.5	1	0.5
67	42	0.5	0.5	3	12	0	0	0.5	1	0.5	0.5	0.5
68	37	0.5	0.5	23	13	0.5	2	1	1	0.5	0.5	0.5
71	25	0.5	0.5	9	10	0.5	0	0	1	0.5	0.5	0.5
72	56	0.5	0.5	7	65	0.5	2	0.5	0.5	0.5	2	0.5

Test Label	Zn_ppm	As_ppm	Se_ppm	Rb_ppm	Sr_ppm	Y_ppm	Zr_ppm	Nb_ppm	Mo_ppm	Ag_ppm	Cd_ppm	Sn_ppm
73	97	0	0.5	6	111	0	0.5	0	0	1	0.5	0.5
74	20	0.5	0.5	3	8	0.5	1	0.5	0.5	0.5	3	0.5
75	25	0.5	0.5	34	9	0.5	0	1	2	0	0	0.5
77	24	0.5	0.5	3	18	0.5	1	0.5	1	0.5	4	0.5
78	30	0.5	0.5	3	19	0.5	0	0	0.5	0.5	0.5	0
76	24	0.5	0.5	3	15	2	1	0.5	0.5	0.5	0.5	0.5
81	25	0.5	0.5	6	30	0.5	0	0.5	0.5	0	5	0.5
82	34	0.5	0.5	3	14	0	0.5	1	1	3	5	0.5
83	28	0.5	0.5	3	22	0.5	1	0.5	1	0.5	3	0.5
84	32	0.5	0.5	3	25	0	0	1	0	0.5	0.5	0.5
85	14	0.5	0.5	3	21	0	2	0.5	0	0	0.5	0.5
86	36	0.5	0.5	2	25	0	0.5	0	0.5	0.5	0.5	0.5
87	28	0.5	0.5	3	28	2	0	0	3	3	4	1
88	37	0.5	0.5	3	29	0.5	0.5	0.5	0.5	0.5	0.5	0.5
89	94	0.5	0.5	4	50	0.5	0.5	0.5	0	0.5	7	0.5
90	85	0.5	0.5	4	136	0.5	0.5	0	0.5	2	4	0.5
91	114	0.5	0.5	4	205	0	0.5	0.5	0.5	2	2	0.5
92	82	0.5	0.5	5	195	1	0.5	0.5	0.5	0.5	0.5	0.5
93	110	0.5	0.5	3	143	0.5	1	0.5	0.5	0	3	0.5
94	205	0.5	0.5	4	241	0.5	0.5	0	0.5	0.5	0.5	0.5
95	261	0	0.5	4	97	0.5	2	0.5	0.5	2	6	0.5
96	172	0.5	0.5	5	103	0	0	0.5	0.5	0.5	0.5	0.5
97	115	0.5	0.5	4	174	1	0	0	0.5	4	7	0.5
98	114	0.5	0.5	7	248	1	0.5	0	0	0.5	0.5	0
99	114	0.5	0.5	4	151	0.5	0.5	0	0	0.5	0.5	0.5
101	163	0.5	0.5	4	111	0	0.5	0.5	0.5	0.5	0.5	0.5
102	109	0.5	0.5	6	98	0	0	0.5	0.5	0.5	0.5	0.5
103	20	0.5	0.5	4	2	0.5	1	1	1	0.5	1	0.5
104	46	0.5	0	41	57	0.5	0.5	2	2	0.5	0	0.5
106	33	0.5	0.5	2	9	0.5	0.5	1	1	0.5	4	0.5
107	85	0.5	0.5	4	66	1	0.5	0	0	1	0	0.5
108	24	0.5	0.5	3	9	0.5	0.5	0	1	1	0.5	0.5
109	58	0.5	0.5	4	49	0.5	0.5	0.5	0	0.5	0.5	0.5

Test Label	Zn_ppm	As_ppm	Se_ppm	Rb_ppm	Sr_ppm	Y_ppm	Zr_ppm	Nb_ppm	Mo_ppm	Ag_ppm	Cd_ppm	Sn_ppm
110	101	0.5	0.5	4	29	0.5	0.5	0.5	0.5	0.5	0.5	0.5
111	73	0.5	0.5	3	28	0.5	0	0.5	1	0	1	0.5
112	119	0.5	0.5	4	38	0	0.5	0.5	1	0.5	0.5	0.5
113	40	0.5	0.5	4	23	0.5	0	0.5	0.5	0.5	3	0.5
114	119	0.5	0.5	4	52	0.5	0.5	0	0.5	0.5	0.5	0.5
115	103	0.5	0.5	5	89	1	0.5	0.5	0.5	0.5	0	0.5
116	77	0.5	0.5	4	36	0	0	1	0	0.5	2	0
237	67	0.5	0.5	3	16	0	1	0.5	0	0.5	0.5	6
117	169	0.5	0.5	4	46	1	0.5	0.5	0.5	0.5	0.5	0.5
118	88	0.5	0.5	3	36	0	0.5	0	0	0	3	0.5
119	82	0.5	0.5	3	25	0	0.5	0.5	0	0.5	0.5	0.5
120	76	0.5	0.5	5	28	0	0	0.5	0.5	5	7	0.5
121	68	0.5	0.5	5	45	0.5	3	1	0.5	0.5	0.5	0.5
122	24	0.5	0.5	3	26	0	0	0	0.5	3	2	0.5
123	30	0.5	0.5	3	3	0.5	0.5	0	0	3	6	0.5
124	27	0.5	0.5	2	8	0.5	0.5	0	1	0.5	0	0.5
125	94	0.5	0.5	3	27	0	0.5	0.5	0	0.5	0.5	6
126	61	0.5	0.5	3	19	0	0.5	0	0.5	0.5	0.5	0.5
127	74	0.5	0.5	5	18	0.5	0.5	0	0.5	0.5	0.5	2
128	92	0.5	0.5	4	26	0.5	0	0.5	0.5	0.5	5	0.5
129	64	0.5	0.5	4	25	0	2	0	0.5	2	2	0.5
148	70	0.5	0.5	21	21	0.5	0	1	0	0.5	0	0.5
149	105	0.5	0.5	3	22	0	0.5	0.5	0.5	0.5	0.5	0.5
150	56	0.5	0	59	126	0.5	0.5	3	1	0.5	0.5	0.5
151	83	0.5	0.5	2	87	2	1	0.5	0.5	0.5	0.5	0.5
152	62	0.5	0.5	3	74	1	4	0	0.5	0.5	0	0.5
153	48	0.5	0.5	4	67	0	5	0	0.5	0.5	0.5	0.5
154	35	0.5	0.5	4	12	0.5	0.5	1	1	0.5	1	0.5
155	56	0.5	0.5	4	41	0	0.5	0.5	0	0.5	0.5	0.5
156	129	0.5	0.5	4	86	1	0.5	0	2	0.5	0.5	0.5
157	99	0.5	0.5	2	94	0	0	0.5	0.5	2	1	0.5
158	41	0.5	0.5	5	48	0	1	0.5	0	0.5	0.5	0.5
159	77	0.5	0.5	5	130	0	0	0	0.5	0.5	0	0.5

Test Label	Zn_ppm	As_ppm	Se_ppm	Rb_ppm	Sr_ppm	Y_ppm	Zr_ppm	Nb_ppm	Mo_ppm	Ag_ppm	Cd_ppm	Sn_ppm
160	66	0.5	0.5	5	157	2	0	0.5	0.5	0.5	0.5	0.5
161	72	0.5	0.5	4	120	0.5	1	0	0.5	0.5	0.5	0.5
162	29	0.5	0.5	2	45	0.5	0.5	0.5	1	0.5	2	7
163	95	0.5	0.5	6	158	1	0.5	0.5	0.5	1	0.5	0.5
164	120	0.5	0.5	5	424	0.5	0.5	0	0.5	0.5	0.5	0.5
165	66	0.5	0.5	4	122	0	0.5	0.5	0.5	0.5	0.5	0.5
167	23	0.5	0.5	3	25	0.5	0	0	0.5	1	0.5	0.5
168	41	0.5	0.5	3	20	0	2	0	0	0.5	0.5	0.5
169	32	0.5	0.5	3	11	0	1	0.5	0.5	0	0	0.5
170	29	0.5	0.5	3	8	1	1	0.5	0	0.5	2	0.5
171	32	0.5	0.5	4	20	0	1	0.5	0.5	0.5	0.5	0.5
172	37	0.5	0.5	3	8	0.5	1	0	2	0	5	0.5
173	29	0.5	0.5	3	20	1	0.5	0	0.5	0.5	0.5	0.5
174	20	0.5	0.5	4	39	0.5	0	1	0.5	0	0.5	0.5
175	25	0.5	0.5	3	16	0	3	0	0	0.5	0.5	0.5
176	15	0.5	0.5	3	19	0.5	0.5	0	0	0.5	2	0.5
177	59	0.5	0.5	3	42	0	0	0.5	0.5	0.5	1	0
178	39	0.5	0.5	2	12	0	0.5	0	1	0.5	0.5	0.5
179	23	0.5	0.5	3	9	0	0.5	0.5	0	2	4	0.5
180	23	0.5	0.5	2	8	0.5	1	0.5	0.5	0.5	0.5	0.5
181	37	0.5	0.5	2	8	0.5	0.5	0.5	0.5	0.5	5	0.5
182	25	0.5	0.5	3	8	0.5	0.5	0	0	0.5	4	5
183	25	0.5	0.5	3	9	0	0	0	0	0.5	0.5	0.5
184	18	0.5	0.5	2	14	2	0.5	0.5	0.5	0.5	0	0.5
185	40	0.5	0.5	3	16	1	0	0	0.5	0.5	0.5	0.5
186	32	0.5	0.5	3	22	0	0.5	0.5	0	5	0	0.5
187	30	0.5	0.5	3	18	1	0	1	1	3	0.5	0.5
188	29	0.5	0.5	3	15	0	1	0.5	0.5	0.5	0.5	0.5
189	21	0.5	0.5	3	21	0.5	0	0	0	0.5	2	0.5
190	17	0.5	0.5	2	18	1	0.5	1	1	0.5	0.5	0.5
191	22	0.5	0.5	2	24	0	0.5	0	2	0.5	4	0.5
192	16	0.5	0.5	3	15	0	0.5	0	2	1	0	0.5
193	36	0.5	0.5	3	21	0.5	0	0.5	2	0.5	0	0.5

Test Label	Zn_ppm	As_ppm	Se_ppm	Rb_ppm	Sr_ppm	Y_ppm	Zr_ppm	Nb_ppm	Mo_ppm	Ag_ppm	Cd_ppm	Sn_ppm
194	25	0.5	0.5	2	31	0	1	0.5	0	0.5	0.5	1
195	28	0.5	0.5	3	16	0.5	0.5	0	2	0.5	0	0.5
196	77	0.5	0.5	5	39	0.5	0	0	0.5	0.5	3	0.5
197	120	0.5	0.5	6	171	0.5	0.5	0	2	0.5	5	3
198	151	0.5	0.5	3	161	0.5	0.5	0.5	0	0.5	5	0.5
199	79	0	0.5	6	178	0	0.5	0	0.5	0	3	0.5
200	74	0.5	0.5	5	137	0	0.5	0.5	1	0.5	0.5	0.5
201	37	0.5	0.5	3	13	0.5	0.5	0.5	1	0.5	4	0.5
202	146	0.5	0.5	4	55	0.5	0.5	0.5	0	0.5	4	1
203	91	0.5	0.5	6	99	0	0	0	0.5	0.5	1	0.5
204	31	0.5	0.5	2	16	0	0.5	0.5	1	0.5	0.5	0
205	146	0.5	0.5	4	128	1	0.5	0.5	2	0.5	0.5	0.5
212	128	0	0.5	3	111	0	0.5	0	0.5	0.5	1	4
206	107	0.5	0.5	4	77	0	0.5	0.5	0.5	0.5	2	0.5
207	114	0	0.5	7	184	0	0.5	0.5	0	0.5	1	0.5
223	75	0.5	0.5	4	78	1	0.5	0	2	0.5	0	0
233	43	0.5	0.5	2	9	0.5	0	0.5	0.5	0.5	1	0.5
235	41	0.5	0.5	2	14	0.5	0.5	0.5	0.5	0.5	1	0.5
234	58	0.5	0.5	4	31	0.5	0.5	0	0.5	0.5	0.5	0.5
236	100	0.5	0.5	4	78	1	0.5	0	0	0.5	4	0.5
224	30	0.5	0.5	5	38	0.5	0.5	0	1	0.5	3	0.5
229	39	0.5	0.5	3	8	0	0.5	0.5	1	0.5	0.5	3
219	54	0.5	0.5	6	50	0.5	0.5	0	1	0.5	4	0.5
232	68	0.5	0.5	3	26	0	0	1	0.5	0.5	0.5	0.5
225	116	0.5	0.5	5	58	0.5	0.5	0	2	5	4	0.5
230	84	0.5	0.5	3	75	0.5	0	0	0.5	0.5	2	0.5
217	71	0.5	0.5	4	37	0	0.5	0.5	0.5	0	0.5	0.5
231	27	0.5	0.5	4	17	0.5	0.5	0	1	0.5	2	0.5
215	93	0.5	0.5	4	33	0	1	0.5	0.5	0	0.5	0.5
227	67	0.5	0.5	3	17	0.5	0.5	0	0.5	0.5	0.5	0.5
228	86	0.5	0.5	7	79	0.5	0.5	0	1	0.5	0.5	0.5
216	98	0.5	0.5	7	51	0	0.5	0.5	0	0.5	0.5	0.5
226	86	0.5	0.5	4	87	0.5	0.5	0	1	0.5	0	0.5

Test Label	Zn_ppm	As_ppm	Se_ppm	Rb_ppm	Sr_ppm	Y_ppm	Zr_ppm	Nb_ppm	Mo_ppm	Ag_ppm	Cd_ppm	Sn_ppm
222	64	0.5	0.5	3	49	0	0.5	0.5	0	0.5	2	3
218	59	0.5	0.5	3	35	0	0.5	0	0	0.5	0.5	0.5
221	102	0.5	0.5	3	28	0.5	0.5	0.5	0	1	5	2
220	60	0.5	0.5	4	26	0	0	1	3	0.5	0.5	0.5
208	131	0.5	0.5	3	29	1	0.5	0.5	0	0.5	4	0.5
209	54	0.5	0.5	3	26	0	0.5	0.5	0	0.5	0.5	0.5
210	67	0.5	0.5	8	82	0	0.5	0	0	0.5	0.5	7
211	66	0.5	0.5	5	52	0.5	0.5	1	0.5	0.5	6	0
214	49	0.5	0.5	5	29	0.5	0.5	0.5	0.5	2	3	0.5
213	82	0.5	0.5	5	66	0.5	0.5	0	0.5	0.5	1	0.5

Test Label	Sb_ppm	Te_ppm	Ba_ppm	La_ppm	Ce_ppm	Pr_ppm	Nd_ppm	Ta_ppm	W_ppm	Au_ppb	Hg_ppm	Tl_ppm
35	24	50	13	15	0.5	0.5	7.5	12	4	1.5	0.5	0
36	37	39	16	0.5	85	0.5	167	5	6	1.5	0.5	0.5
37	36	54	0.5	77	118	0.5	70	0.5	8	1.5	0.5	0
38	25	36	0.5	0.5	11	43	136	12	7	1.5	0.5	0
39	32	47	22	14	66	38	7.5	4	11	1.5	0.5	3
40	0	26	39	0.5	0.5	0	366	0.5	7	1.5	0.5	0
41	4	34	64	0.5	16	0.5	7.5	0.5	8	1.5	0.5	0
42	23	41	47	0.5	0.5	0.5	7.5	0.5	4	1.5	0.5	0
43	11	35	4	0.5	59	23	167	2	13	1.5	0.5	0
44	7	40	21	18	85	1	0	13	7	1.5	0.5	0
45	4	37	28	0.5	102	116	263	0.5	10	1.5	0.5	0
46	0.5	33	11	26	50	8	7.5	5	6	1.5	0.5	0
47	18	41	50	0.5	29	0.5	7.5	0.5	7	1.5	0.5	0
48	0.5	52	14	41	0.5	65	248	2	9	1.5	0.5	1
49	37	39	35	0.5	0.5	22	7.5	23	9	1.5	0.5	0
50	1	45	0.5	20	68	60	144	32	6	1.5	0.5	1
51	0.5	40	52	36	107	96	7.5	0.5	8	1.5	0.5	0
54	3	43	37	71	137	263	257	0.5	7	1.5	0.5	0
55	25	40	14	0.5	0.5	61	7.5	0.5	3	1.5	0.5	0
56	19	39	0.5	0.5	70	78	7.5	0.5	9	1.5	0.5	0
57	13	46	2	0.5	82	0.5	7.5	0.5	4	1.5	0.5	0
59	20	45	0.5	0.5	90	73	113	4	13	1.5	0.5	0
60	3	46	0.5	47	0.5	0.5	7.5	0.5	7	1.5	0.5	0
61	3	48	6	0.5	101	80	7.5	0.5	3	1.5	0.5	1
62	16	35	0.5	0.5	0.5	0	30	0.5	9	1.5	0.5	1
63	10	40	0.5	14	0.5	0.5	7.5	2	4	1.5	0.5	0
64	19	50	7	0.5	0.5	0.5	7.5	5	9	1.5	0.5	0
65	4	58	12	38	42	7	7.5	20	8	1.5	0.5	0
66	9	44	7	0.5	97	8	7.5	6	7	1.5	0.5	0
67	12	49	0.5	0.5	44	0.5	186	5	8	1.5	0.5	0
68	0	52	0.5	35	91	61	7.5	0.5	3	11	0.5	5
71	5	44	40	0.5	0.5	0.5	7.5	0.5	3	1.5	0.5	2
72	5	32	0.5	12	118	181	7.5	22	2	1.5	0.5	0

Test Label	Sb_ppm	Te_ppm	Ba_ppm	La_ppm	Ce_ppm	Pr_ppm	Nd_ppm	Ta_ppm	W_ppm	Au_ppb	Hg_ppm	Tl_ppm
73	5	45	18	8	0.5	28	7.5	0.5	4	1.5	0.5	0
74	13	46	0.5	0.5	76	0.5	7.5	0.5	9	1.5	0.5	1
75	0.5	50	0	8	46	0.5	7.5	0	3	18	0	7
77	15	54	0.5	0.5	0.5	133	470	0.5	8	1.5	0.5	1
78	38	38	0.5	13	24	65	7.5	2	10	1.5	0.5	0
76	2	46	10	0.5	0.5	0.5	7.5	0	10	1.5	0.5	0
81	6	45	8	18	0.5	25	27	2	2	1.5	0.5	1
82	12	41	10	0.5	0.5	20	319	18	5	1.5	0.5	0
83	10	31	0.5	0.5	2	43	7.5	10	9	1.5	0.5	0
84	23	46	2	42	15	0.5	7.5	0.5	6	1.5	0.5	0.5
85	15	40	0.5	43	91	36	7.5	0.5	8	1.5	0.5	0
86	7	40	7	41	0.5	0.5	154	0.5	7	1.5	0.5	0
87	9	32	6	0.5	0.5	0.5	219	0.5	7	1.5	0.5	1
88	8	43	0.5	0.5	0.5	35	46	2	7	1.5	0.5	0
89	0.5	53	46	0.5	0.5	0.5	7.5	7	9	1.5	0.5	0
90	13	48	84	0.5	0.5	0.5	7.5	11	3	1.5	0.5	0
91	14	47	66	27	121	0.5	73	2	2	1.5	0.5	0
92	7	52	56	0.5	47	0.5	7.5	0.5	2	1.5	0.5	0.5
93	15	40	71	18	0.5	0.5	60	0.5	8	1.5	0.5	1
94	19	40	84	0.5	11	66	7.5	0.5	8	1.5	0.5	0.5
95	3	45	72	56	0.5	0.5	7.5	0.5	0	1.5	0.5	0
96	29	51	43	40	0.5	0.5	291	13	11	1.5	0.5	0
97	5	41	122	60	80	40	7.5	23	7	1.5	0.5	0
98	0.5	49	143	0.5	0.5	0.5	7.5	0.5	0	1.5	0.5	0
99	17	49	65	0.5	0.5	24	7.5	13	5	1.5	0.5	0
101	4	41	32	29	0.5	0.5	7.5	0.5	9	1.5	0.5	0
102	0.5	42	45	19	0.5	0.5	7.5	23	10	1.5	0.5	0
103	6	53	26	0.5	7	0.5	7.5	22	7	1.5	0.5	1
104	1	30	74	15	77	0.5	69	14	3	18	0.5	7
106	6	53	0.5	15	106	32	76	0.5	7	1.5	0.5	1
107	4	32	105	0.5	89	0.5	7.5	10	9	1.5	0.5	0
108	0.5	57	0.5	8	22	15	7.5	11	6	1.5	0.5	1
109	0	43	45	0.5	93	52	7.5	0.5	9	1.5	0.5	0

Test Label	Sb_ppm	Te_ppm	Ba_ppm	La_ppm	Ce_ppm	Pr_ppm	Nd_ppm	Ta_ppm	W_ppm	Au_ppb	Hg_ppm	Tl_ppm
110	0.5	43	0.5	20	71	0.5	7.5	0.5	6	1.5	0.5	0
111	0.5	49	0.5	11	103	54	7.5	8	9	1.5	0.5	0
112	6	43	21	0.5	0.5	0.5	7.5	2	4	1.5	0.5	0
113	7	37	0.5	0.5	0.5	0.5	47	0.5	7	1.5	0.5	0
114	2	49	32	0.5	116	39	7.5	0.5	6	1.5	0.5	0
115	8	29	141	1	41	0.5	7.5	6	5	1.5	0.5	0
116	1	42	33	65	58	131	240	0.5	3	1.5	0.5	0
237	5	54	0.5	0.5	0.5	0.5	7.5	17	8	1.5	0.5	0
117	0.5	45	1	21	10	0.5	155	6	7	1.5	0.5	1
118	0.5	27	44	56	127	0.5	199	7	6	1.5	0.5	1
119	0	41	15	53	7	29	7.5	20	4	1.5	0.5	0
120	0.5	47	31	56	34	21	56	0.5	7	1.5	0.5	0
121	10	54	60	20	12	0.5	7.5	0.5	6	1.5	0.5	0
122	4	36	34	0.5	15	0.5	7.5	9	6	1.5	0.5	0
123	0.5	26	0.5	12	28	95	151	6	9	1.5	0.5	0
124	0	39	25	13	23	0.5	7.5	2	8	1.5	0.5	1
125	4	42	8	0.5	51	0.5	7.5	24	2	1.5	0.5	1
126	9	44	25	7	63	0.5	7.5	0.5	6	1.5	0.5	0
127	5	46	0.5	0.5	0.5	9	7.5	21	8	1.5	0.5	0
128	9	34	13	48	20	0.5	7.5	0.5	8	1.5	0.5	1
129	0.5	42	15	10	84	0.5	247	0.5	6	1.5	0.5	0
148	0.5	50	10	0.5	39	19	7.5	2	3	7	0.5	4
149	5	40	20	0.5	11	0.5	7.5	5	6	1.5	0.5	1
150	8	48	0.5	0.5	48	0.5	23	1	3	33	3	12
151	10	56	6	2	36	0.5	7.5	2	9	1.5	0.5	0
152	0.5	40	24	0.5	0.5	0.5	7.5	2	8	1.5	0.5	0
153	0.5	38	46	42	18	0.5	7.5	10	7	1.5	0.5	0
154	16	49	21	0.5	0.5	0.5	286	0.5	10	1.5	0.5	1
155	9	40	39	39	143	0.5	11	0.5	7	1.5	0.5	0
156	5	35	45	0.5	0.5	0.5	7.5	21	4	1.5	0.5	0
157	6	45	45	0.5	0.5	0.5	7.5	29	5	1.5	0.5	0
158	0.5	29	54	13	124	36	7.5	0.5	6	1.5	0.5	0
159	3	46	20	0.5	7	0.5	7.5	0.5	8	1.5	0.5	0

Test Label	Sb_ppm	Te_ppm	Ba_ppm	La_ppm	Ce_ppm	Pr_ppm	Nd_ppm	Ta_ppm	W_ppm	Au_ppb	Hg_ppm	Tl_ppm
160	0.5	40	61	0.5	0.5	0.5	7.5	5	10	1.5	0.5	0
161	0	34	48	0.5	0.5	30	7.5	13	4	1.5	0.5	0
162	1	51	18	0.5	19	103	101	0.5	7	1.5	0.5	0
163	0.5	39	25	0.5	0.5	0.5	117	8	7	1.5	0.5	0.5
164	12	41	30	0.5	0.5	0.5	7.5	0.5	7	1.5	0.5	1
165	0.5	42	45	0.5	89	0.5	121	0.5	9	1.5	0.5	0
167	0.5	40	1	16	18	61	7.5	0.5	7	1.5	0.5	0
168	4	49	0.5	20	120	0.5	7.5	0.5	6	1.5	0.5	0
169	0.5	43	7	0.5	0.5	0.5	7.5	6	7	1.5	0.5	0
170	0.5	36	15	0.5	60	0.5	88	15	6	1.5	0.5	0
171	23	41	0.5	11	68	17	7.5	16	6	1.5	0.5	0
172	0	45	0.5	0.5	14	9	7.5	4	9	1.5	0.5	1
173	0.5	47	28	68	0.5	0.5	7.5	18	8	1.5	0.5	0
174	0.5	37	0.5	41	0.5	81	7.5	0.5	4	1.5	0.5	0
175	0.5	49	8	0.5	0.5	0.5	147	12	5	1.5	0.5	0
176	1	30	25	44	45	82	164	0.5	7	1.5	0.5	0
177	6	39	30	9	0.5	0.5	7.5	13	6	1.5	0.5	0.5
178	0.5	39	10	27	32	0.5	7.5	10	6	1.5	0.5	0.5
179	6	46	26	72	45	0.5	7.5	0.5	7	1.5	0.5	0
180	0.5	29	8	40	0.5	0.5	7.5	0.5	5	1.5	0.5	0
181	0.5	29	21	45	69	87	7.5	2	10	1.5	0.5	0
182	1	40	33	40	0.5	0.5	7.5	19	6	1.5	0.5	0
183	0	37	5	23	74	0.5	7.5	0.5	5	1.5	0.5	0
184	0.5	42	0.5	76	98	41	286	0.5	10	1.5	0.5	0
185	11	38	4	3	0.5	11	7.5	7	6	1.5	0.5	0
186	14	46	0.5	0.5	0.5	124	7.5	0.5	5	1.5	0.5	0
187	2	39	0.5	0.5	0.5	0.5	69	0.5	8	1.5	0.5	0
188	0.5	41	6	0.5	114	25	385	14	8	1.5	0.5	0
189	0.5	49	0.5	36	112	0.5	7.5	2	9	1.5	0.5	0.5
190	0.5	46	23	0.5	0.5	0.5	7.5	0.5	7	1.5	0.5	0
191	0	40	9	0.5	50	51	7.5	0.5	9	1.5	0.5	0
192	0.5	43	14	34	166	5	7.5	3	6	1.5	0.5	0
193	14	37	9	0.5	0.5	0.5	7.5	5	7	1.5	0.5	0

Test Label	Sb_ppm	Te_ppm	Ba_ppm	La_ppm	Ce_ppm	Pr_ppm	Nd_ppm	Ta_ppm	W_ppm	Au_ppb	Hg_ppm	Tl_ppm
194	2	49	4	0.5	48	0.5	7.5	0.5	6	1.5	0.5	0
195	0.5	40	0.5	0.5	7	0.5	7.5	3	13	1.5	0.5	0
196	4	36	27	0.5	0	0.5	7.5	0.5	5	1.5	0.5	0.5
197	0.5	33	109	0.5	70	0.5	7.5	0.5	0	1.5	0.5	0
198	0.5	40	90	36	32	71	7.5	0.5	10	1.5	0.5	0
199	7	39	79	44	0.5	0.5	7.5	0	7	1.5	0.5	0
200	9	40	112	0.5	0.5	0.5	7.5	4	10	1.5	0.5	0
201	0.5	42	0.5	0.5	20	0.5	7.5	7	5	1.5	0.5	0
202	0.5	52	20	0.5	10	90	101	0.5	3	1.5	0.5	0.5
203	0.5	42	94	9	60	0.5	7.5	0.5	6	1.5	0.5	0.5
204	2	47	5	7	8	89	57	0.5	7	1.5	0.5	0
205	0.5	39	130	8	54	0.5	7.5	0.5	4	1.5	0.5	0
212	0	47	53	38	0.5	26	7.5	0.5	7	1.5	0.5	0.5
206	0.5	28	21	19	57	0.5	7.5	13	6	1.5	0.5	0.5
207	2	46	38	10	58	56	7.5	12	7	1.5	0.5	0.5
223	10	43	79	24	153	0.5	7.5	14	7	1.5	0.5	0
233	2	46	11	0.5	74	0.5	196	0.5	10	1.5	0.5	0
235	3	36	25	16	0.5	5	7.5	0.5	7	1.5	0.5	0
234	6	34	50	0.5	0.5	29	7.5	0.5	8	1.5	0.5	0
236	9	42	125	5	29	0.5	7.5	0.5	10	1.5	0.5	0
224	0.5	44	76	0.5	0.5	0.5	7.5	34	7	1.5	0.5	0
229	10	48	10	94	0.5	0.5	7.5	3	7	1.5	0.5	1
219	2	44	61	0	43	0	38	1	6	1.5	0.5	0.5
232	0	40	0.5	0.5	105	0.5	7.5	2	7	1.5	0.5	0
225	0.5	48	71	44	23	0.5	7.5	0.5	9	1.5	0.5	1
230	0.5	31	62	0.5	0.5	53	188	0.5	7	1.5	0.5	0
217	1	42	45	0.5	11	28	7.5	0.5	6	1.5	0.5	0
231	7	48	35	0.5	28	0.5	7.5	13	5	1.5	0.5	0
215	0.5	39	14	15	0.5	0.5	7.5	9	6	1.5	0.5	0
227	8	32	16	25	94	0.5	7.5	0.5	6	1.5	0.5	0
228	4	33	120	0.5	27	11	7.5	3	4	1.5	0.5	0.5
216	1	39	74	0.5	31	88	7.5	8	6	1.5	0.5	0
226	0.5	47	112	6	0.5	0.5	7.5	0.5	5	1.5	0.5	0

Test Label	Sb_ppm	Te_ppm	Ba_ppm	La_ppm	Ce_ppm	Pr_ppm	Nd_ppm	Ta_ppm	W_ppm	Au_ppb	Hg_ppm	Tl_ppm
222	5	42	63	0.5	0.5	0.5	7.5	0.5	7	1.5	0.5	0
218	13	38	55	6	0.5	0.5	7.5	0.5	6	1.5	0.5	0
221	6	46	76	30	0.5	27	169	7	2	1.5	0.5	0
220	5	48	68	0.5	9	0.5	7.5	0.5	6	1.5	0.5	0.5
208	24	64	33	0.5	23	12	7.5	0.5	8	1.5	0.5	0
209	0	44	28	0.5	74	0.5	7.5	0.5	9	1.5	0.5	0
210	5	38	69	0.5	70	0.5	333	0.5	8	1.5	0.5	0.5
211	3	33	59	0.5	0.5	0.5	7.5	5	8	1.5	0.5	0.5
214	6	46	26	0.5	0.5	42	7.5	10	11	1.5	0.5	0
213	0.5	41	89	0.5	0.5	15	78	11	7	1.5	0.5	0

Test Label	Pb_ppm	Bi_ppm	Th_ppm	U_ppm	info	latitude	longitude	sample_id	samplers	tree_speci	tree_diam	tree_healt
35	1	3	0.5	0.5	DP-01	56.67405	-125.171	DP-1	DP	spruce	30	healthy
36	0.5	3	0.5	3	DP-01	56.67409	-125.171	DP-2	DP	poplar	21	healthy
37	2	3	0.5	1	DP-03	56.67414	-125.171	DP-3	DP	spruce	16	healthy
38	5	3	0.5	0.5	DP-04	56.67393	-125.171	DP-4	DP	spruce	4	healthy
39	393	3	0.5	0.5	DP-05	56.674	-125.171	DP-5	DP	pine	5	healthy
40	12	3	0.5	0.5	DP-06	56.67414	-125.171	DP-6	DP	spruce	21	healthy
41	1	3	2	0.5	DP-07	56.67409	-125.172	DP-7	DP	spruce	26	healthy
42	1	3	0.5	3	DP-08	56.67399	-125.172	DP-8	DP	spruce	41	healthy
43	0	3	0.5	4	DP-09	56.67393	-125.171	DP-9	DP	spruce	11	healthy
44	1	3	0.5	5	DP-10	56.67404	-125.171	DP-10	DP	spruce	14	healthy
45	0	3	2	0.5	DP-11	56.67403	-125.171	DP-11	DP	spruce	11	healthy
46	1	3	0.5	2	DP-12	56.67401	-125.17	DP-11	DP	spruce	23	healthy
47	0	3	0.5	4	DP-13	56.67405	-125.17	DP-13	DP	spruce	31	healthy
48	1	3	0.5	2	DP-14	56.67409	-125.17	DP-14	DP	spruce	28	not healthy
49	0	3	0.5	8	DP-15	56.67426	-125.169	DP-15	DP	spruce	33	healthy
50	1	3	0.5	0.5	DP-16	56.674	-125.169	DP-16	DP	spruce	17	healthy
51	0	3	0.5	7	DP-17	56.67396	-125.169	DP-17	DP	spruce	16	healthy
54	0	3	0.5	3	DP-18	56.67411	-125.169	DP-18	DP	spruce	13	healthy
55	0	3	0.5	0.5	DP-19	56.6741	-125.169	DP-19	DP	pine	18	healthy
56	1	3	0.5	0.5	DP-20	56.67355	-125.169	DP-20	DP	pine	14	healthy
57	1	3	0	0.5	DP-21	56.67353	-125.169	DP-21	DP	pine	12	healthy
59	1	3	0.5	0.5	DP-22	56.67357	-125.169	DP-22	DP	pine	16	healthy
60	1	3	0.5	0.5	DP-23	56.67357	-125.169	DP-23	DP	pine	17	healthy
61	0	3	0.5	4	DP-24	56.67349	-125.17	DP-24	DP	pine	14	healthy
62	0	3	1	0.5	DP-25	56.67355	-125.17	DP-25	DP	pine	15	healthy
63	0	3	0.5	2	DP-26	56.67346	-125.171	DP-26	DP	pine	16	healthy
64	0	3	0.5	0.5	DP-27	56.67355	-125.171	DP-27	DP	pine	19	healthy
65	1	3	0.5	0.5	DP-28	56.67351	-125.171	DP-28	DP	pine	13	healthy
66	0	3	0.5	3	DP-29	56.67351	-125.171	DP-29	DP	pine	13	healthy
67	0	3	0.5	0.5	DP-30	56.67354	-125.172	DP-30	DP	pine	13	healthy
68	3	3	3	0.5	DP-31	56.67354	-125.172	DP-31	DP	pine	17	healthy
71	1	3	0	0.5	DP-32	56.67351	-125.172	DP-32	DP	pine	22	healthy
72	0	3	0.5	2	DP-33	56.67331	-125.172	DP-33	DP	spruce	17	healthy

Test Label	Pb_ppm	Bi_ppm	Th_ppm	U_ppm	info	latitude	longitude	sample_id	samplers	tree_speci	tree_diam	tree_healt
73	0	3	0.5	3	DP-34	56.67336	-125.172	DP-34	DP	spruce	11	healthy
74	0	3	0	2	DP-35	56.67343	-125.173	DP-35	DP	pine	14	healthy
75	3	3	0.5	0.5	DP-36	56.67311	-125.173	DP-36	DP	pine	16	healthy
77	1	3	0.5	0.5	DP-37	56.67311	-125.172	DP-37	DP	pine	13	healthy
78	1	3	0.5	0.5	DP-38	56.67321	-125.172	DP-38	DP	pine	13	healthy
76	1	3	0.5	6	DP-39	56.67318	-125.172	DP-39	DP	pine	17	healthy
81	0	3	0.5	0.5	DP-40	56.67327	-125.171	DP-40	DP	pine	14	healthy
82	0	3	0.5	0.5	DP-41	56.67309	-125.171	DP-41	DP	pine	21	healthy
83	0	3	0.5	0.5	DP-42	56.6731	-125.17	DP-42	DP	pine	15	healthy
84	1	3	0	0.5	DP-43	56.6731	-125.17	DP-43	DP	pine	16	healthy
85	0	3	0.5	0	DP-44	56.67308	-125.17	DP-44	DP	pine	15	healthy
86	1	3	0.5	0.5	DP-45	56.67313	-125.169	DP-45	DP	pine	14	healthy
87	1	3	0.5	0.5	DP-46	56.67315	-125.169	DP-46	DP	pine	14	healthy
88	1	3	1	0	DP-47	56.67323	-125.168	DP-47	DP	pine	13	healthy
89	0	3	0.5	1	DP-48	56.63221	-125.167	DP-48	DP	spruce	27	not healthy
90	0.5	3	0.5	2	DP-49	56.63226	-125.167	DP-49	DP	spruce	26	healthy
91	0	3	0.5	8	DP-50	56.63222	-125.168	DP-50	DP	spruce	19	healthy
92	0	3	0.5	7	DP-51	56.63221	-125.168	DP-51	DP	spruce	24	healthy
93	1	3	0.5	6	DP-52	56.63219	-125.168	DP-52	DP	spruce	25	healthy
94	5	3	0	6	DP-53	56.63242	-125.169	DP-53	DP	spruce	17	healthy
95	1	3	0.5	0	DP-54	56.63239	-125.169	DP-54	DP	spruce	28	healthy
96	1	3	0.5	8	DP-55	56.63214	-125.169	DP-55	DP	spruce	23	healthy
97	0	3	0	2	DP-56	56.63221	-125.169	DP-56	DP	spruce	33	healthy
98	0	3	0.5	0.5	DP-57	56.63219	-125.169	DP-57	DP	spruce	23	healthy
99	0	3	0	0	DP-58	56.63212	-125.17	DP-58	DP	spruce	37	healthy
101	1	3	0.5	4	DP-59	56.63213	-125.17	DP-59	DP	spruce	54	healthy
102	0	3	0.5	4	DP-60	56.63173	-125.171	DP-60	DP	spruce	33	healthy
103	1	3	0.5	0.5	DP-61	56.63187	-125.171	DP-61	DP	pine	13	healthy
104	3	3	0.5	0.5	DP-62	56.63179	-125.17	DP-62	DP	spruce	25	healthy
106	0	3	0.5	0.5	DP-63	56.63168	-125.17	DP-63	DP	pine	20	healthy
107	0.5	3	0.5	0	DP-64	56.63165	-125.169	DP-64	DP	spruce	17	healthy
108	1	3	2	3	DP-65	56.63171	-125.169	DP-65	DP	pine	13	healthy
109	1	3	1	0.5	DP-66	56.63172	-125.169	DP-66	DP	spruce	17	healthy

Test Label	Pb_ppm	Bi_ppm	Th_ppm	U_ppm	info	latitude	longitude	sample_id	samplers	tree_speci	tree_diam	tree_healt
110	1	3	0.5	4	DP-67	56.63175	-125.169	DP-67	DP	spruce	21	not healthy
111	1	3	2	2	DP-68	56.63177	-125.168	DP-68	DP	spruce	30	not healthy
112	0	3	0	0	DP-69	56.63173	-125.168	DP-69	DP	spruce	25	not healthy
113	0	3	0.5	0	DP-70	56.63172	-125.167	DP-70	DP	spruce	22	not healthy
114	0	3	0.5	6	DP-71	56.63176	-125.167	DP-71	DP	spruce	34	not healthy
115	0	3	2	0.5	DP-72	56.63123	-125.167	DP-72	DP	spruce	26	healthy
116	1	3	0.5	0.5	DP-73	56.63127	-125.167	DP-73	DP	spruce	18	not healthy
237	0	3	0	0.5	DP-74	56.63136	-125.168	DP-74	DP	spruce	18	not healthy
117	1	3	0.5	3	DP-75	56.63144	-125.168	DP-75	DP	spruce	31	not healthy
118	0	3	1	0.5	DP-76	56.63148	-125.168	DP-76	DP	spruce	32	not healthy
119	1	3	0.5	0	DP-77	56.63156	-125.169	DP-77	DP	spruce	37	not healthy
120	0	3	0	2	DP-78	56.63144	-125.169	DP-78	DP	spruce	30	not healthy
121	1	3	0.5	1	DP-79	56.63138	-125.17	DP-79	DP	spruce	20	healthy
122	1	3	0.5	0.5	DP-80	56.63145	-125.17	DP-80	DP	spruce	17	healthy
123	0	3	0.5	0	DP-81	56.63138	-125.17	DP-81	DP	pine	16	healthy
124	0	3	0.5	0	DP-82	56.63136	-125.171	DP-82	DP	pine	17	healthy
125	1	3	0.5	0.5	DP-83	56.6305	-125.169	DP-84	DP	spruce	34	not healthy
126	0	3	2	4	DP-84	56.63041	-125.168	DP-85	DP	spruce	29	not healthy
127	1	3	0	0.5	DP-86	56.63037	-125.168	DP-86	DP	spruce	43	not healthy
128	0	3	1	1	DP-87	56.63041	-125.168	DP-87	DP	spruce	33	not healthy
129	0	3	0.5	1	DP-88	56.63031	-125.167	DP-88	DP	spruce	30	not healthy
148	2	3	0.5	0.5	DP-89	56.63028	-125.167	DP-89	DP	spruce	45	not healthy
149	0	3	0.5	10	DP-90	56.63056	-125.167	DP-90	DP	spruce	39	not healthy
150	12	3	0.5	0.5	FM-042	56.67401	-125.171	FM042	FMD	spruce	10	healthy
151	4	3	1	3	FM-043	56.67397	-125.171	FM043	FMD	spruce	20	some healt
152	1	3	0.5	5	FM-044	56.67401	-125.17	FM044	FMD	spruce	13	healthy
153	4	3	0.5	0	FM-045	56.67403	-125.171	FM045	FMD	spruce	20	healthy
154	2	3	2	0.5	FM-046	56.67398	-125.171	FM046	FMD	pine	8	healthy
155	0	3	2	0.5	FM-047	56.67402	-125.172	FM047	FMD	spruce	23	healthy
156	0	3	0.5	0.5	FM-048	56.67394	-125.172	FM048	FMD	spruce	32	healthy
157	0.5	3	0.5	4	FM-049	56.67396	-125.172	FM049	FMD	spruce	31	healthy
158	0	3	1	0	FM-050	56.67399	-125.171	FM050	FMD	spruce	13	healthy
159	0	3	0.5	2	FM-051	56.67399	-125.171	FM051	FMD	spruce	22	healthy

Test Label	Pb_ppm	Bi_ppm	Th_ppm	U_ppm	info	latitude	longitude	sample_id	samplers	tree_speci	tree_diam	tree_healt
160	0	3	0.5	9	FM-052	56.67398	-125.171	FM052	FMD	spruce	25	healthy
161	1	3	0.5	5	FM-053	56.67398	-125.17	FM053	FMD	spruce	26	healthy
162	0	3	0.5	1	FM-054	56.674	-125.17	FM054	FMD	spruce	20	healthy
163	0	3	0.5	9	FM-055	56.67422	-125.17	FM055	FMD	spruce	36	healthy
164	0.5	3	0.5	9	FM-056	56.67427	-125.169	FM056	FMD	spruce	30	healthy
165	0	3	0.5	4	FM-057	56.67403	-125.169	FM057	FMD	spruce	12	healthy
167	0	3	0	0.5	FM-058	56.67406	-125.169	FM058	FMD	spruce	9	healthy
168	0	3	0.5	0	FM-059	56.67411	-125.169	FM059	FMD	pine	15	healthy
169	1	3	0.5	2	FM-060	56.6735	-125.168	FM060	FMD	pine	17	healthy
170	1	3	0.5	0.5	FM-061	56.67346	-125.169	FM061	FMD	pine	17	healthy
171	0	3	0.5	6	FM-062	56.67361	-125.169	FM062	FMD	pine	16	healthy
172	1	3	0	0.5	FM-063	56.6735	-125.17	FM063	FMD	pine	16	healthy
173	1	3	0.5	0.5	FM-064	56.67351	-125.17	FM064	FMD	pine	15	healthy
174	0	3	0.5	0.5	FM-065	56.67345	-125.171	FM065	FMD	pine	9	healthy
175	0	3	0.5	0	FM-066	56.67343	-125.171	FM066	FMD	pine	18	healthy
176	0	3	0.5	1	FM-067	56.67345	-125.171	FM067	FMD	spruce	7	healthy
177	0	3	0	0	FM-068	56.67345	-125.171	FM068	FMD	spruce	12	healthy
178	0	3	0.5	0.5	FM-069	56.67352	-125.172	FM069	FMD	pine	14	healthy
179	0	3	0	0.5	FM-070	56.67357	-125.172	FM070	FMD	pine	12	healthy
180	0	3	0	0	FM-071	56.67355	-125.172	FM071	FMD	pine	12	healthy
181	0	3	0.5	0	FM-072	56.67347	-125.172	FM072	FMD	pine	16	healthy
182	1	3	0.5	0	FM-073	56.6734	-125.172	FM073	FMD	pine	18	healthy
183	0	3	0.5	0.5	FM-074	56.6734	-125.172	FM074	FMD	pine	16	healthy
184	0	3	0.5	1	FM-075	56.67359	-125.173	FM075	FMD	pine	16	healthy
185	0	3	0.5	2	FM-076	56.67308	-125.173	FM076	FMD	pine	18	healthy
186	0	3	0	0	FM-077	56.67349	-125.172	FM077	FMD	pine	13	healthy
187	0	3	0.5	0.5	FM-078	56.67316	-125.172	FM078	FMD	pine	16	healthy
188	1	3	0.5	1	FM-079	56.67312	-125.172	FM079	FMD	pine	14	healthy
189	0	3	3	0.5	FM-080	56.67326	-125.171	FM080	FMD	pine	16	healthy
190	0	3	0	0.5	FM-081	56.67319	-125.171	FM081	FMD	pine	14	healthy
191	1	3	0.5	0.5	FM-082	56.67311	-125.17	FM082	FMD	pine	14	some healt
192	0.5	3	0	1	FM-083	56.67311	-125.17	FM083	FMD	pine	20	healthy
193	0	3	0.5	1	FM-084	56.67311	-125.17	FM084	FMD	pine	14	healthy

Test Label	Pb_ppm	Bi_ppm	Th_ppm	U_ppm	info	latitude	longitude	sample_id	samplers	tree_speci	tree_diam	tree_healt
194	0	3	0.5	2	FM-085	56.67314	-125.169	FM085	FMD	pine	14	healthy
195	0	3	0.5	0.5	FM-086	56.67314	-125.169	FM086	FMD	pine	16	healthy
196	1	3	0.5	2	FM-087	56.67327	-125.169	FM087	FMD	spruce	25	not healthy
197	0	3	0.5	0.5	FM-088	56.63221	-125.167	FM088	FMD	spruce	31	healthy
198	0	3	0.5	2	FM-089	56.63208	-125.167	FM089	FMD	spruce	26	healthy
199	0.5	3	0.5	0.5	FM-090	56.63227	-125.168	FM090	FMD	spruce	13	healthy
200	0	3	0.5	4	FM-091	56.63219	-125.168	FM091	FMD	spruce	26	healthy
201	0	3	0.5	0.5	FM-092	56.63208	-125.168	FM092	FMD	pine	16	healthy
202	1	3	0.5	0.5	FM-093	56.63241	-125.169	FM093	FMD	spruce	26	healthy
203	0	3	0.5	3	FM-095	56.6322	-125.169	FM095	FMD	spruce	14	healthy
204	0	3	0.5	0.5	FM-096	56.63223	-125.169	FM096	FMD	pine	11	healthy
205	0	3	0.5	0.5	FM-097	56.63212	-125.169	FM096	FMD	spruce	30	healthy
212	0	3	0.5	7	FM-098	56.6321	-125.169	FM098	FMD	spruce	38	healthy
206	0.5	3	0.5	6	FM-099	56.63217	-125.17	FM099	FMD	spruce	36	healthy
207	0.5	3	0.5	2	FM-301	56.63224	-125.17	FM301	FMD	spruce	35	healthy
223	0.5	3	0.5	0.5	FM-302	56.63218	-125.17	FM302	FMD	spruce	19	healthy
233	0	3	0.5	1	FM-303	56.63217	-125.17	FM303	FMD	pine	14	healthy
235	0	3	0.5	1	FM-344	56.63185	-125.171	FM344	FMD	pine	12	healthy
234	1	3	0.5	0.5	FM-345	56.63182	-125.17	FM345	FMD	spruce	35	healthy
236	0	3	0.5	0.5	FM-346	56.63177	-125.17	FM346	FMD	spruce	20	healthy
224	0	3	0.5	0.5	FM-394	56.63181	-125.17	FM394	FMD	spruce	25	healthy
229	0	3	0	0.5	FM-546	56.63169	-125.169	FM546	FMD	pine	10	healthy
219	0.5	3	0	0.5	FM-547	56.63186	-125.169	FM547	FMD	spruce	18	healthy
232	0.5	3	0.5	2	FM-548	56.6318	-125.169	FM548	FMD	spruce	25	not healthy
225	0	3	0.5	0.5	FM-549	56.6318	-125.168	FM549	FMD	spruce	25	healthy
230	0	3	0.5	3	FM-661	56.63176	-125.168	FM661	FMD	spruce	41	healthy
217	0	3	0.5	10	FM-678	56.6317	-125.167	FM678	FMD	spruce	21	healthy
231	0	3	1	2	FM-679	56.63177	-125.167	FM679	FMD	spruce	19	healthy
215	0	3	0.5	3	FM-680	56.63124	-125.167	FM680	FMD	pine	14	not healthy
227	0.5	3	0.5	0.5	FM-681	56.63125	-125.167	FM681	FMD	spruce	48	not healthy
228	0	3	2	0.5	FM-682	56.63133	-125.168	FM682	FMD	spruce	10	healthy
216	0.5	3	0.5	1	FM-683	56.63141	-125.168	FM683	FMD	spruce	25	healthy
226	0.5	3	2	0.5	FM-684	56.63154	-125.169	FM684	FMD	spruce	20	healthy

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222	0.5	3	0	2	FM-728	56.63135	-125.169	FM678	FMD	spruce	33	healthy
218	0	3	0	0	FM-750	56.6314	-125.169	FM750	FMD	spruce	30	healthy
221	0	3	0.5	1	FM-751	56.63092	-125.169	FM751	FMD	spruce	26	healthy
220	1	3	0.5	0.5	FM-903	56.63092	-125.169	FM903	FMD	spruce	25	not healthy
208	0	3	1	0.5	FM-1375	56.63096	-125.169	FM1375	FMD	spruce	36	not healthy
209	0	3	0.5	0	FM-1419	56.63094	-125.169	FM1419	FMD	spruce	26	healthy
210	0.5	3	0.5	4	FM-1440	56.63098	-125.168	FM1440	FMD	spruce	16	healthy
211	0.5	3	0.5	0.5	FM-1449	56.63102	-125.168	FM1449	FMD	spruce	23	healthy
214	0	3	0.5	1	FM-1451	56.63085	-125.168	FM1451	FMD	spruce	20	some healt
213	0.5	3	0	2	FM-1503	56.63106	-125.168	FM1503	FMD	spruce	10	healthy

Test Label	date
35	10-May-18
36	10-May-18
37	10-May-18
38	10-May-18
39	10-May-18
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Test Label	date
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Test Label	date
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116	11-May-18
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159	10-May-18

Test Label	date
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161	10-May-18
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170	10-May-18
171	10-May-18
172	10-May-18
173	10-May-18
174	10-May-18
175	10-May-18
176	10-May-18
177	10-May-18
178	10-May-18
179	10-May-18
180	10-May-18
181	10-May-18
182	10-May-18
183	10-May-18
184	10-May-18
185	10-May-18
186	10-May-18
187	10-May-18
188	10-May-18
189	10-May-18
190	10-May-18
191	10-May-18
192	10-May-18
193	10-May-18

Test Label	date
194	10-May-18
195	10-May-18
196	11-May-18
197	11-May-18
198	11-May-18
199	11-May-18
200	11-May-18
201	11-May-18
202	11-May-18
203	11-May-18
204	11-May-18
205	11-May-18
212	11-May-18
206	11-May-18
207	11-May-18
223	11-May-18
233	11-May-18
235	11-May-18
234	11-May-18
236	11-May-18
224	11-May-18
229	11-May-18
219	11-May-18
232	11-May-18
225	11-May-18
230	11-May-18
217	11-May-18
231	11-May-18
215	11-May-18
227	11-May-18
228	11-May-18
216	11-May-18
226	11-May-18

Test Label	date
222	11-May-18
218	11-May-18
221	11-May-18
220	11-May-18
208	11-May-18
209	11-May-18
210	11-May-18
211	11-May-18
214	11-May-18
213	11-May-18

APPENDIX D: ASSAYS

ALS Canada Ltd.

2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com/geochemistry

To: **OREVISTA EXPLORATION CONSULTANTS**
PO BOX 2526
GARIBALDI HIGHLANDS BC V0N 1T0

Finalized Date: 9-JUN-2018
This copy reported on
7-JAN-2019
Account: CONORE

VA18112478

Project: Swannell

This report is for 18 Rock samples submitted to our lab in Vancouver, BC, Canada on 14-MAY-2018.

The following have access to data associated with this certificate:

FRANCIS MACDONALD	D. PERRY	

SAMPLE PREPARATION

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

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	
Ag-OG46	Ore Grade Ag - Aqua Regia	
ME-OG46	Ore Grade Elements - AquaRegia	ICP-AES
Pb-OG46	Ore Grade Pb - Aqua Regia	
Zn-OG46	Ore Grade Zn - Aqua Regia	
ME-MS41	Ultra Trace Aqua Regia ICP-MS	

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

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

Signature:

Colin Ramshaw, Vancouver Laboratory Manager

ALS Canada Ltd.

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To: **OREVISTA EXPLORATION CONSULTANTS**
PO BOX 2526
GARIBALDI HIGHLANDS BC V0N 1T0

Finalized Date: 9-JUN-2018
Account: CONORE

Project: Swannell

CERTIFICATE OF ANALYSIS VA18112478

Sample Description	Method	WEI-21	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
	Analyte	Recvd Wt.	Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
	LOD	0.02	0.01	0.01	0.1	0.02	10	10	0.05	0.01	0.01	0.01	0.02	0.1	1	0.05
7793701		3.40	50.5	0.04	31.5	<0.02	<10	10	0.08	0.15	17.30	1.30	3.58	4.6	3	<0.05
7793702		2.24	75.4	0.03	4.4	<0.02	<10	<10	0.08	1.35	6.24	1.48	1.65	2.4	4	<0.05
7793703		1.08	1.48	0.02	4.0	<0.02	<10	20	0.07	0.08	21.8	0.06	1.59	1.4	3	<0.05
7793704		1.30	26.0	0.01	9.1	<0.02	<10	<10	0.06	0.01	2.68	0.23	1.88	15.0	3	0.05
7793705		3.94	>100	0.02	6.2	0.08	<10	<10	<0.05	0.60	6.20	5.49	2.40	2.7	3	<0.05
7793706		2.30	27.3	0.02	4.2	0.02	<10	10	0.05	0.27	8.02	0.61	1.78	2.0	4	0.05
7793707		1.66	79.5	0.02	21.3	0.09	<10	<10	0.09	0.28	9.40	1.72	2.50	4.9	4	<0.05
7793708		5.32	>100	0.16	1.3	0.84	<10	<10	<0.05	0.58	5.31	8.40	1.76	4.7	2	<0.05
7793709		1.18	0.95	0.02	9.9	<0.02	<10	20	0.06	0.02	>25.0	2.10	5.68	1.4	1	<0.05
7793710		2.30	11.50	0.07	158.0	<0.02	<10	50	0.10	0.36	8.20	21.7	2.17	9.4	3	0.18
7793711		4.20	79.1	0.02	13.1	<0.02	<10	30	<0.05	0.07	2.34	299	0.69	28.6	2	0.05
7793712		2.80	37.8	0.03	27.9	0.02	<10	30	<0.05	0.07	0.96	325	0.74	29.1	2	0.07
7793713		2.66	25.8	0.03	18.9	0.02	<10	20	<0.05	0.06	1.91	259	0.67	26.7	3	0.08
7793714		2.68	34.9	0.01	2.2	<0.02	<10	<10	<0.05	0.46	14.80	>1000	9.86	43.7	<1	<0.05
7793715		1.60	17.00	0.01	3.3	<0.02	<10	<10	0.07	1.12	17.55	53.4	1.21	5.5	<1	0.05
7793716		1.18	0.17	0.50	5.7	<0.02	<10	30	0.14	0.04	15.25	1.02	11.55	5.1	8	0.44
7793717		2.60	36.4	0.04	39.4	<0.02	<10	10	0.06	0.85	9.71	2.01	4.06	13.0	3	0.10
7793718		3.78	83.2	0.06	19.6	<0.02	<10	<10	0.05	0.75	4.95	1.44	3.26	8.9	5	0.05

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

ALS Canada Ltd.

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www.alsglobal.com/geochemistry

To: **OREVISTA EXPLORATION CONSULTANTS**
PO BOX 2526
GARIBALDI HIGHLANDS BC V0N 1T0

Finalized Date: 9-JUN-2018
Account: CONORE

Project: Swannell

CERTIFICATE OF ANALYSIS VA18112478

Sample Description	Method	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
	Analyte	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb
	Units	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
	LOD	0.2	0.01	0.05	0.05	0.02	0.01	0.005	0.01	0.2	0.1	0.01	5	0.05	0.01	0.05
7793701		746	4.33	0.17	<0.05	0.02	<0.01	0.047	0.01	2.2	2.7	1.46	1710	0.33	<0.01	<0.05
7793702		1460	4.94	0.14	0.05	<0.02	<0.01	0.037	<0.01	1.1	3.4	0.65	2210	0.45	<0.01	<0.05
7793703		93.1	2.40	0.09	<0.05	<0.02	<0.01	0.012	<0.01	0.8	1.2	1.32	1100	0.30	<0.01	<0.05
7793704		3340	35.2	0.39	0.23	0.04	0.03	0.146	<0.01	0.9	2.8	1.40	7980	0.48	<0.01	<0.05
7793705		466	10.75	0.21	0.08	0.04	0.01	0.046	<0.01	1.2	1.9	1.50	3500	0.27	<0.01	<0.05
7793706		963	6.57	0.15	<0.05	<0.02	<0.01	0.028	0.01	1.0	1.3	1.24	2780	0.42	<0.01	<0.05
7793707		307	6.40	0.13	0.05	<0.02	0.01	0.025	<0.01	1.4	2.1	1.98	2550	0.43	<0.01	<0.05
7793708		1420	7.50	0.64	0.06	<0.02	0.01	0.056	<0.01	0.7	3.6	0.68	2340	0.36	<0.01	<0.05
7793709		7.1	0.48	0.10	<0.05	0.02	0.16	0.005	<0.01	2.5	0.5	0.51	740	<0.05	<0.01	<0.05
7793710		47.4	4.20	0.24	0.05	0.06	1.06	0.149	0.03	0.9	0.4	0.50	722	0.37	<0.01	<0.05
7793711		84.5	1.93	12.65	0.05	<0.02	47.3	0.056	0.01	0.3	0.1	0.08	362	0.56	<0.01	<0.05
7793712		45.4	3.29	7.13	0.07	<0.02	55.2	0.073	0.01	0.3	0.1	0.15	1390	0.47	<0.01	<0.05
7793713		85.4	1.65	5.61	<0.05	<0.02	43.9	0.008	0.01	0.3	0.1	0.07	271	0.68	<0.01	<0.05
7793714		22.6	2.89	0.85	<0.05	<0.02	1.27	0.383	0.01	5.8	0.1	0.30	1930	<0.05	<0.01	<0.05
7793715		6.3	8.57	0.14	<0.05	<0.02	0.12	0.112	<0.01	0.7	1.1	6.34	3800	0.11	<0.01	<0.05
7793716		7.4	11.20	1.50	<0.05	0.04	0.09	0.066	0.07	5.9	5.2	1.21	3980	0.27	0.01	0.14
7793717		17.0	5.90	0.18	<0.05	0.02	0.03	0.048	0.02	2.3	0.7	1.97	2220	0.38	<0.01	<0.05
7793718		3980	5.41	0.30	<0.05	0.06	0.02	0.073	0.01	1.7	2.0	1.17	1460	1.52	<0.01	<0.05

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

ALS Canada Ltd.

2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com/geochemistry

To: **OREVISTA EXPLORATION CONSULTANTS**
PO BOX 2526
GARIBALDI HIGHLANDS BC V0N 1T0

Finalized Date: 9-JUN-2018
Account: CONORE

Project: Swannell

CERTIFICATE OF ANALYSIS VA18112478

Sample Description	Method	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
	Analyte	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOD	0.2	10	0.2	0.1	0.001	0.01	0.05	0.1	0.2	0.2	0.2	0.01	0.01	0.2	0.005
7793701		12.9	30	>10000	0.4	<0.001	1.16	41.1	0.7	0.7	2.7	215	<0.01	0.01	0.3	0.006
7793702		8.6	20	>10000	0.2	<0.001	0.82	52.4	0.6	1.8	4.3	63.8	<0.01	0.02	<0.2	0.005
7793703		1.9	20	378	0.3	<0.001	0.01	1.20	0.7	0.5	<0.2	333	<0.01	<0.01	0.2	0.005
7793704		65.1	220	85.3	0.1	<0.001	0.67	0.78	1.0	0.2	2.8	26.7	<0.01	0.01	0.9	0.005
7793705		11.8	340	>10000	0.1	<0.001	2.78	279	1.2	0.9	5.8	65.5	<0.01	0.13	0.9	0.005
7793706		4.7	20	>10000	0.4	<0.001	0.35	14.25	1.1	1.6	1.5	65.6	<0.01	0.01	0.2	0.006
7793707		11.5	60	>10000	0.2	<0.001	0.90	66.2	0.8	1.3	3.6	89.3	<0.01	0.03	0.3	0.006
7793708		14.8	10	>10000	0.1	<0.001	3.40	402	1.1	1.0	3.8	48.8	<0.01	0.22	<0.2	0.005
7793709		1.5	640	679	0.3	<0.001	0.36	1.36	0.6	0.8	<0.2	525	<0.01	0.01	0.3	0.005
7793710		25.7	890	8760	1.4	<0.001	5.00	14.30	1.1	9.1	<0.2	186.5	<0.01	0.08	0.8	0.006
7793711		2.2	230	>10000	0.5	<0.001	5.22	95.8	0.3	7.2	2.4	32.9	<0.01	0.03	0.3	0.005
7793712		2.1	120	>10000	0.7	<0.001	6.45	39.7	0.3	8.5	2.4	20.5	<0.01	0.04	0.4	0.005
7793713		2.7	110	>10000	0.8	<0.001	4.32	31.7	0.2	3.0	0.4	28.7	<0.01	0.03	0.4	<0.005
7793714		1.9	10	>10000	0.5	<0.001	4.57	32.3	0.2	4.7	0.9	176.0	<0.01	0.03	0.2	<0.005
7793715		4.1	10	>10000	0.1	<0.001	0.82	17.00	0.2	1.3	0.2	153.0	<0.01	0.02	<0.2	<0.005
7793716		12.2	110	153.5	4.4	<0.001	0.04	0.38	1.4	0.2	<0.2	154.0	<0.01	0.01	2.2	0.008
7793717		28.8	420	>10000	1.1	<0.001	0.56	37.7	0.8	4.1	0.3	85.9	<0.01	0.07	0.5	<0.005
7793718		27.7	100	>10000	0.4	<0.001	1.52	64.6	1.0	4.6	1.1	54.8	<0.01	0.08	1.3	<0.005

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

ALS Canada Ltd.
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www.alsglobal.com/geochemistry

To: **OREVISTA EXPLORATION CONSULTANTS**
PO BOX 2526
GARIBALDI HIGHLANDS BC V0N 1T0

Finalized Date: 9-JUN-2018
Account: CONORE

Project: Swannell

CERTIFICATE OF ANALYSIS VA18112478

Sample Description	Method	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	Ag-OG46	Pb-OG46	Zn-OG46
	Analyte	Tl	U	V	W	Y	Zn	Zr	Ag	Pb	Zn
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%
	LOD	0.02	0.05	1	0.05	0.05	2	0.5	1	0.001	0.001
7793701		0.02	0.34	2	<0.05	0.64	121	0.6		3.42	
7793702		<0.02	0.22	1	<0.05	0.24	59	<0.5		5.19	
7793703		<0.02	0.21	1	<0.05	0.34	12	<0.5			
7793704		0.02	0.87	4	0.07	0.38	60	1.3			
7793705		0.04	0.49	2	<0.05	0.48	39	1.1	275	>20.0	
7793706		<0.02	0.18	2	<0.05	0.36	35	<0.5		2.44	
7793707		0.02	0.24	1	<0.05	0.38	37	<0.5		6.94	
7793708		0.07	0.28	1	<0.05	0.60	80	<0.5	383	>20.0	
7793709		0.20	0.22	1	<0.05	5.71	1170	0.6			
7793710		2.65	0.40	1	<0.05	5.59	>10000	1.5			1.280
7793711		0.17	0.21	<1	<0.05	0.75	>10000	<0.5		7.23	22.1
7793712		0.07	0.29	<1	<0.05	0.71	>10000	<0.5		3.22	24.9
7793713		0.26	0.17	<1	<0.05	0.62	>10000	<0.5		2.53	20.9
7793714		0.02	0.08	<1	<0.05	0.61	>10000	<0.5		3.68	>30.0
7793715		<0.02	0.22	1	0.08	0.17	>10000	<0.5		2.37	1.260
7793716		0.03	1.11	7	0.06	1.97	533	1.5			
7793717		0.02	0.56	1	<0.05	2.17	359	0.7		3.36	
7793718		0.02	0.77	2	<0.05	0.65	67	1.2		7.86	

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

ALS Canada Ltd.

2103 Dollarton Hwy
North Vancouver BC V7H 0A7
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www.alsglobal.com/geochemistry

To: **OREVISTA EXPLORATION CONSULTANTS**
PO BOX 2526
GARIBALDI HIGHLANDS BC V0N 1T0

Finalized Date: 9-JUN-2018
Account: CONORE

Project: Swannell

CERTIFICATE OF ANALYSIS VA18112478

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: Gold determinations by this method are semi-quantitative due to the small sample weight used (0.5g).
ME-MS41

LABORATORY ADDRESSES

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

Ag-OG46	CRU-31	CRU-QC	LOG-22
ME-MS41	ME-OG46	Pb-OG46	PUL-31
PUL-QC	SPL-21	WEI-21	Zn-OG46

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To: **OREVISTA EXPLORATION CONSULTANTS**
PO BOX 2526
GARIBALDI HIGHLANDS BC V0N 1T0

Finalized Date: 20-JUN-2018
This copy reported on 7-JAN-2019
Account: CONORE

VA18139166

Project: Swannell

This report is for 3 Rock samples submitted to our lab in Vancouver, BC, Canada on 13-JUN-2018.

The following have access to data associated with this certificate:

FRANCIS MACDONALD	D. PERRY	

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
FND-02	Find Sample for Addn Analysis

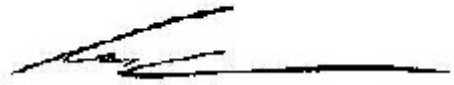
ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION
Pb-VOL70	Pb by Titration
Zn-VOL50	Zn by titration

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

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

Signature:



Colin Ramshaw, Vancouver Laboratory Manager

ALS Canada Ltd.
2103 Dollarton Hwy
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To: **OREVISTA EXPLORATION CONSULTANTS**
PO BOX 2526
GARIBALDI HIGHLANDS BC V0N 1T0

Finalized Date: 20-JUN-2018
Account: CONORE

Project: Swannell

CERTIFICATE OF ANALYSIS VA18139166

Sample Description	Method	Pb-VOL70	Zn-VOL50
	Analyte	Pb	Zn
	Units	%	%
	LOD	0.01	0.01
7793705		19.87	
7793708		25.77	
7793714			30.88

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

ALS Canada Ltd.
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To: **OREVISTA EXPLORATION CONSULTANTS**
PO BOX 2526
GARIBALDI HIGHLANDS BC V0N 1T0

Finalized Date: 20-JUN-2018
Account: CONORE

Project: Swannell

CERTIFICATE OF ANALYSIS VA18139166

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

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

Applies to Method:			
	FND-02	Pb-VOL70	Zn-VOL50

ALS Canada Ltd.

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To: **OREVISTA EXPLORATION CONSULTANTS**
PO BOX 2526
GARIBALDI HIGHLANDS BC V0N 1T0

Finalized Date: 9-JUN-2018
This copy reported on
7-JAN-2019
Account: CONORE

VA18112478

Project: Swannell

This report is for 18 Rock samples submitted to our lab in Vancouver, BC, Canada on 14-MAY-2018.

The following have access to data associated with this certificate:

FRANCIS MACDONALD	D. PERRY	

SAMPLE PREPARATION

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

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	
Ag-OG46	Ore Grade Ag - Aqua Regia	
ME-OG46	Ore Grade Elements - AquaRegia	ICP-AES
Pb-OG46	Ore Grade Pb - Aqua Regia	
Zn-OG46	Ore Grade Zn - Aqua Regia	
ME-MS41	Ultra Trace Aqua Regia ICP-MS	

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

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

Signature:

Colin Ramshaw, Vancouver Laboratory Manager

ALS Canada Ltd.
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To: **OREVISTA EXPLORATION CONSULTANTS**
PO BOX 2526
GARIBALDI HIGHLANDS BC V0N 1T0

Finalized Date: 9-JUN-2018
Account: CONORE

Project: Swannell

QC CERTIFICATE OF ANALYSIS VA18112478

Sample Description	Method	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
	Analyte	Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu
	Units	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
	LOD	0.01	0.01	0.1	0.02	10	10	0.05	0.01	0.01	0.01	0.02	0.1	1	0.05	0.2
STANDARDS																
CCU-1e																
Target Range - Lower Bound																
Upper Bound																
GBM903-13																
Target Range - Lower Bound																
Upper Bound																
OGGeo08		20.5	2.10	124.0	0.06	<10	180	0.73	11.15	0.84	17.05	58.9	98.2	80	9.68	8000
OGGeo08		19.65	2.16	123.5	0.07	<10	70	0.74	9.89	0.88	18.05	59.5	92.9	80	10.25	8220
Target Range - Lower Bound		18.15	2.05	107.0	0.03	<10	60	0.61	9.44	0.82	16.75	56.7	87.2	75	8.68	7800
Upper Bound		22.2	2.53	131.0	0.11	30	110	0.89	11.55	1.02	20.5	69.3	107.0	93	10.70	8980
OREAS 604																
OREAS 604																
Target Range - Lower Bound																
Upper Bound																
OREAS 621																
Target Range - Lower Bound																
Upper Bound																
OREAS 920		0.09	2.28	4.8	<0.02	<10	70	0.72	0.53	0.30	0.06	69.8	15.1	40	1.88	111.0
OREAS 920		0.09	2.19	4.7	<0.02	<10	70	0.68	0.64	0.30	0.05	70.8	14.3	39	1.91	107.5
Target Range - Lower Bound		0.07	2.18	4.2	<0.02	<10	50	0.59	0.60	0.28	0.04	64.8	13.4	37	1.84	102.0
Upper Bound		0.12	2.68	5.3	0.04	20	110	0.87	0.76	0.37	0.08	79.2	16.6	48	2.36	118.0
BLANKS																
BLANK		<0.01	<0.01	<0.1	<0.02	<10	<10	<0.05	<0.01	<0.01	<0.01	<0.02	<0.1	<1	<0.05	<0.2
BLANK		<0.01	<0.01	<0.1	<0.02	<10	<10	<0.05	<0.01	<0.01	<0.01	<0.02	<0.1	<1	<0.05	<0.2
Target Range - Lower Bound		<0.01	<0.01	<0.1	<0.02	<10	<10	<0.05	<0.01	<0.01	<0.01	<0.02	<0.1	<1	<0.05	<0.2
Upper Bound		0.02	0.02	0.2	0.04	20	20	0.10	0.02	0.02	0.02	0.04	0.2	2	0.10	0.4
BLANK																
Target Range - Lower Bound																
Upper Bound																

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Finalized Date: 9-JUN-2018
Account: CONORE

Project: Swannell

QC CERTIFICATE OF ANALYSIS VA18112478

Sample Description	Method	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
	Analyte	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni
	Units	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm
	LOD	0.01	0.05	0.05	0.02	0.01	0.005	0.01	0.2	0.1	0.01	5	0.05	0.01	0.05	0.2
STANDARDS																
CCU-1e																
Target Range - Lower Bound																
Upper Bound																
GBM903-13																
Target Range - Lower Bound																
Upper Bound																
OGGeo08		4.90	8.48	0.22	0.83	0.48	1.385	0.95	28.8	32.8	0.92	378	861	0.26	1.09	8410
OGGeo08		4.95	7.87	0.17	0.79	0.45	1.385	1.03	28.7	28.9	0.93	381	872	0.28	1.01	8700
Target Range - Lower Bound		4.51	7.69	0.21	0.72	0.41	1.335	0.94	26.7	28.4	0.84	350	811	0.26	0.97	7760
Upper Bound		5.53	9.51	0.45	0.92	0.57	1.645	1.18	33.1	35.0	1.05	438	991	0.34	1.29	9480
OREAS 604																
OREAS 604																
Target Range - Lower Bound																
Upper Bound																
OREAS 621																
Target Range - Lower Bound																
Upper Bound																
OREAS 920		3.44	6.85	0.11	0.50	<0.01	0.032	0.37	34.9	22.6	1.03	492	0.31	0.01	0.35	36.8
OREAS 920		3.34	6.32	0.09	0.48	<0.01	0.026	0.38	35.6	20.0	1.02	480	0.31	0.01	0.34	39.4
Target Range - Lower Bound		3.26	6.12	<0.05	0.48	<0.01	0.019	0.37	33.3	19.0	0.93	454	0.26	<0.01	0.22	34.4
Upper Bound		4.00	7.60	0.22	0.63	0.02	0.043	0.47	41.1	23.4	1.15	566	0.50	0.02	0.46	42.4
BLANKS																
BLANK		<0.01	<0.05	<0.05	<0.02	<0.01	<0.005	<0.01	<0.2	<0.1	<0.01	<5	<0.05	<0.01	<0.05	<0.2
BLANK		<0.01	<0.05	<0.05	<0.02	<0.01	<0.005	<0.01	<0.2	<0.1	<0.01	<5	<0.05	<0.01	<0.05	<0.2
Target Range - Lower Bound		<0.01	<0.05	<0.05	<0.02	<0.01	<0.005	<0.01	<0.2	<0.1	<0.01	<5	<0.05	<0.01	<0.05	<0.2
Upper Bound		0.02	0.10	0.10	0.04	0.02	0.010	0.02	0.4	0.2	0.02	10	0.10	0.02	0.10	0.4
BLANK																
Target Range - Lower Bound																
Upper Bound																

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Finalized Date: 9-JUN-2018
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Project: Swannell

QC CERTIFICATE OF ANALYSIS VA18112478

Sample Description	Method	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
	Analyte	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
	Units	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOD	10	0.2	0.1	0.001	0.01	0.05	0.1	0.2	0.2	0.2	0.01	0.01	0.2	0.005	0.02
STANDARDS																
CCU-1e																
Target Range - Lower Bound																
Upper Bound																
GBM903-13																
Target Range - Lower Bound																
Upper Bound																
OGGeo08		780	6900	122.5	1.340	2.73	18.10	5.9	10.8	12.5	63.0	<0.01	0.14	16.6	0.290	1.26
OGGeo08		780	7170	131.0	1.375	2.70	20.9	5.8	10.4	12.2	61.0	0.01	0.13	15.6	0.302	1.34
Target Range - Lower Bound		700	6520	109.5	1.295	2.51	17.70	5.6	9.7	12.0	59.6	<0.01	0.14	14.8	0.279	1.14
Upper Bound		880	7970	134.5	1.585	3.09	24.1	7.0	12.3	15.1	73.2	0.03	0.20	18.6	0.353	1.58
OREAS 604																
OREAS 604																
Target Range - Lower Bound																
Upper Bound																
OREAS 621																
Target Range - Lower Bound																
Upper Bound																
OREAS 920		690	22.8	23.2	<0.001	0.02	0.55	2.8	0.4	1.0	16.8	0.01	0.02	14.4	0.106	0.14
OREAS 920		670	19.4	24.1	<0.001	0.02	0.59	2.7	0.3	0.9	16.1	0.01	0.02	14.8	0.095	0.14
Target Range - Lower Bound			19.2	22.2	<0.001	<0.01	0.45	2.5	<0.2	0.6	15.0	<0.01	<0.01	13.6	0.106	0.09
Upper Bound			23.9	27.4	0.002	0.05	0.77	3.3	0.7	1.6	18.8	0.02	0.04	17.0	0.140	0.20
BLANKS																
BLANK		<10	0.3	<0.1	<0.001	<0.01	<0.05	<0.1	<0.2	<0.2	<0.2	<0.01	<0.01	<0.2	0.005	<0.02
BLANK		<10	<0.2	<0.1	<0.001	<0.01	<0.05	<0.1	<0.2	<0.2	<0.2	<0.01	<0.01	<0.2	<0.005	<0.02
Target Range - Lower Bound		<10	<0.2	<0.1	<0.001	<0.01	<0.05	<0.1	<0.2	<0.2	<0.2	<0.01	<0.01	<0.2	<0.005	<0.02
Upper Bound		20	0.4	0.2	0.002	0.02	0.10	0.2	0.4	0.4	0.4	0.02	0.02	0.4	0.010	0.04
BLANK																
Target Range - Lower Bound																
Upper Bound																

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GARIBALDI HIGHLANDS BC V0N 1T0

Finalized Date: 9-JUN-2018
Account: CONORE

Project: Swannell

QC CERTIFICATE OF ANALYSIS VA18112478

Sample Description	Method	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	Ag-OG46	Cu-OG46	Pb-OG46	Zn-OG46
	Analyte	U	V	W	Y	Zn	Zr	Ag	Cu	Pb	Zn
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%
	LOD	0.05	1	0.05	0.05	2	0.5	1	0.001	0.001	0.001
STANDARDS											
CCU-1e								208	22.3	0.696	3.04
Target Range - Lower Bound								197	22.1		
Upper Bound								213	23.7		
GBM903-13								25	3.01	2.19	0.958
Target Range - Lower Bound								22	2.79	2.07	0.901
Upper Bound								26	3.00	2.23	0.968
OGGeo08		4.67	78	2.92	16.50	6670	23.0				
OGGeo08		4.66	79	3.38	15.70	6840	23.4				
Target Range - Lower Bound		4.45	70	2.58	15.35	6500	19.5				
Upper Bound		5.55	88	3.60	18.85	7950	27.5				
OREAS 604								488	2.21	0.093	0.262
OREAS 604								486	2.20	0.079	0.271
Target Range - Lower Bound								474			0.244
Upper Bound								510			0.264
OREAS 621								69	0.361	1.340	5.13
Target Range - Lower Bound								65	0.349	1.310	4.99
Upper Bound								71	0.377	1.410	5.35
OREAS 920		1.94	24	0.43	17.30	104	17.8				
OREAS 920		1.90	23	0.45	16.35	101	18.6				
Target Range - Lower Bound		1.89	21	0.31	15.80	93	17.6				
Upper Bound		2.42	28	0.61	19.40	119	25.0				
BLANKS											
BLANK		<0.05	<1	<0.05	<0.05	<2	<0.5				
BLANK		<0.05	<1	<0.05	<0.05	<2	<0.5				
Target Range - Lower Bound		<0.05	<1	<0.05	<0.05	<2	<0.5				
Upper Bound		0.10	2	0.10	0.10	4	1.0				
BLANK								<1	<0.001	0.001	0.002
Target Range - Lower Bound								<1	<0.001	<0.001	<0.001
Upper Bound								2	0.002	0.002	0.002

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Project: Swannell

QC CERTIFICATE OF ANALYSIS VA18112478

Sample Description	Method	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
	Analyte	Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu
	Units	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
	LOD	0.01	0.01	0.1	0.02	10	10	0.05	0.01	0.01	0.01	0.02	0.1	1	0.05	0.2
DUPLICATES																
ORIGINAL		1.85	0.50	83.3	<0.02	10	60	0.68	0.59	1.36	7.58	34.7	4.2	2	8.19	78.9
DUP		1.81	0.51	74.5	<0.02	<10	70	0.59	0.59	1.36	7.30	34.8	4.1	2	8.65	77.4
Target Range - Lower Bound		1.73	0.47	74.9	<0.02	<10	50	0.55	0.55	1.28	7.06	33.0	3.8	<1	7.95	75.2
Upper Bound		1.93	0.54	82.9	0.04	20	80	0.72	0.63	1.44	7.82	36.5	4.5	3	8.89	81.1
7793713																
DUP																
Target Range - Lower Bound																
Upper Bound																

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QC CERTIFICATE OF ANALYSIS VA18112478

Sample Description	Method	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
	Analyte	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni
	Units	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm
	LOD	0.01	0.05	0.05	0.02	0.01	0.005	0.01	0.2	0.1	0.01	5	0.05	0.01	0.05	0.2
DUPLICATES																
ORIGINAL		1.99	1.30	0.05	0.04	0.06	0.587	0.20	17.7	4.6	0.09	268	1.41	0.01	<0.05	1.2
DUP		1.99	1.31	0.05	0.04	0.09	0.566	0.21	17.8	4.3	0.10	270	1.34	<0.01	<0.05	1.2
Target Range - Lower Bound		1.88	1.19	<0.05	<0.02	0.06	0.543	0.18	16.7	4.1	0.08	251	1.26	<0.01	<0.05	0.9
Upper Bound		2.10	1.42	0.10	0.06	0.09	0.610	0.23	18.8	4.8	0.11	287	1.49	0.02	0.10	1.5
7793713																
DUP																
Target Range - Lower Bound																
Upper Bound																

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QC CERTIFICATE OF ANALYSIS VA18112478

Sample Description	Method	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
	Analyte	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl
	Units	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
	LOD	10	0.2	0.1	0.001	0.01	0.05	0.1	0.2	0.2	0.2	0.01	0.01	0.2	0.005	0.02
DUPLICATES																
ORIGINAL		550	227	15.5	0.006	2.24	1.03	0.5	0.8	0.2	59.9	<0.01	0.30	6.2	0.005	0.20
DUP		550	252	15.9	0.007	2.26	1.13	0.5	0.8	0.2	58.7	<0.01	0.28	5.5	0.006	0.20
Target Range - Lower Bound		510	227	14.8	0.005	2.13	0.95	0.4	0.6	<0.2	56.1	<0.01	0.27	5.4	<0.005	0.17
Upper Bound		590	252	16.6	0.008	2.37	1.21	0.6	1.0	0.4	62.5	0.02	0.31	6.3	0.010	0.24
7793713																
DUP																
Target Range - Lower Bound																
Upper Bound																

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Finalized Date: 9-JUN-2018
Account: CONORE

Project: Swannell

QC CERTIFICATE OF ANALYSIS VA18112478

Sample Description	Method	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	Ag-OG46	Cu-OG46	Pb-OG46	Zn-OG46
	Analyte	U	V	W	Y	Zn	Zr	Ag	Cu	Pb	Zn
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%
	LOD	0.05	1	0.05	0.05	2	0.5	1	0.001	0.001	0.001
DUPLICATES											
ORIGINAL		1.19	3	0.14	4.30	946	1.0				
DUP		1.17	3	0.17	4.16	1060	1.0				
Target Range - Lower Bound		1.07	2	0.09	3.97	951	<0.5				
Upper Bound		1.29	4	0.22	4.49	1055	1.6				
7793713										2.53	20.9
DUP								27	0.010	2.43	20.2
Target Range - Lower Bound								25	0.009	2.42	20.0
Upper Bound								29	0.011	2.54	21.1

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QC CERTIFICATE OF ANALYSIS VA18112478

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: Gold determinations by this method are semi-quantitative due to the small sample weight used (0.5g).
ME-MS41

LABORATORY ADDRESSES

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

Ag-OG46	CRU-31	CRU-QC	LOG-22
ME-MS41	ME-OG46	Pb-OG46	PUL-31
PUL-QC	SPL-21	WEI-21	Zn-OG46

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Finalized Date: 20-JUN-2018
This copy reported on
7-JAN-2019
Account: CONORE

VA18139166

Project: Swannell

This report is for 3 Rock samples submitted to our lab in Vancouver, BC, Canada on 13-JUN-2018.

The following have access to data associated with this certificate:

FRANCIS MACDONALD	D. PERRY	

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
FND-02	Find Sample for Addn Analysis

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION
Pb-VOL70	Pb by Titration
Zn-VOL50	Zn by titration

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

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

Signature:

Colin Ramshaw, Vancouver Laboratory Manager

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com/geochemistry

To: **OREVISTA EXPLORATION CONSULTANTS**
PO BOX 2526
GARIBALDI HIGHLANDS BC V0N 1T0

Finalized Date: 20-JUN-2018
Account: CONORE

Project: Swannell

QC CERTIFICATE OF ANALYSIS VA18139166

Sample Description	Method Analyte Units LOD	Pb-VOL70 Pb % 0.01	Zn-VOL50 Zn % 0.01
STANDARDS			
CPB-2		63.65	
Target Range - Lower Bound		61.92	
Upper Bound		65.12	
CZN-4			55.15
Target Range - Lower Bound			53.85
Upper Bound			56.63
DUPLICATES			
7793708		25.77	
DUP		25.51	
Target Range - Lower Bound		25.18	
Upper Bound		26.10	
7793714			30.88
DUP			30.35
Target Range - Lower Bound			30.06
Upper Bound			31.17

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

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Project: Swannell

QC CERTIFICATE OF ANALYSIS VA18139166

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

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

FND-02 Pb-VOL70 Zn-VOL50

APPENDIX D: MAPS

INGENIKA MINE

ONWARD SHOWING

SWANNELL SHOWING

Legend

- Swannell Claims
- Lakes and Rivers

Structure - Interpreted

Formlines

- contact
- F2 syncline

Structures

- normal fault
- fault major
- fault inferred

Lithology - Interpreted

- graphitic clastic sedimentary rocks
- clastic sedimentary rocks
- chemical sedimentary rocks

Point Structures

Structure Type

- Bedding, top unknown
- Bedding, transposed
- S-fold of pre-existing foliation
- Z-fold of pre-existing foliation
- axial plane of fold of bedding/stratigraphy
- axial plane of fold of pre-existing foliation
- contact
- crenulation cleavage
- crenulation hinge
- fault, normal sense of displacement
- fault, unknown sense of displacement
- fold of bedding/stratigraphy, unspecified asymmetry
- fold of pre-existing foliation, unspecified asymmetry
- foliation, dominant
- foliation, second generation
- intersection lineation, involves bedding
- mineral lineation, generation unspecified
- slicken striae
- spaced fractures
- vein

N

0 125 250 500 Meters

SWANNELL PROPERTY

Property Geology

Date:	Jan 5, 2019	Scale:	1:10,000
Projection:	UTM NAD 83 Zone 10	NTS:	094C/11E
Author:	D. Perry	File:	Swannell_PropGeo

Figure: 4

SWANNELL PROPERTY

Rock Geochemistry North

Date	Jan 3rd, 2019	File	2018_Swan_N_Rocks
Projection	UTM NAD83 - Z10	Scale	1:1000
Author	D. Perry	Figure	5

N

7793717: 3.36% Pb.
359 ppm Zn,
36.4 g/t Ag

7793715: 2.37% Pb, 1.26% Zn, 17 g/t Ag

7793716: 153.5 ppm Pb, 533 ppm Zn, 0.17 g/t Ag

7793714: 3.68% Pb, 30.88% Zn, 34.9 g/t Ag

7793707: 1m of 6.95% Pb,
39 ppm Zn, 79.5 g/t Ag

7793718: 7.86% Pb.
67 ppm Zn,
83 g/t Ag

7793708: 25.77% Pb, 80 ppm Zn,
383 g/t Ag (0.84 g/t Au, 1420 ppm Cu,
402 ppm Sb)

7793702: 2m 5.19% Pb, 59 ppm Zn,
75.4 g/t Ag (1460 ppm Cu)

7793704: 2m 378 ppm Pb,
12 ppm Zn,
1.48 g/t Ag

7793701: 1m 3.42% Pb, 121 ppm Zn,
50.5 g/t Ag (746 ppm Cu)

7793705: 3m of 19.87% Pb,
39 ppm Zn, 275 g/t Ag
(466 ppm Cu)

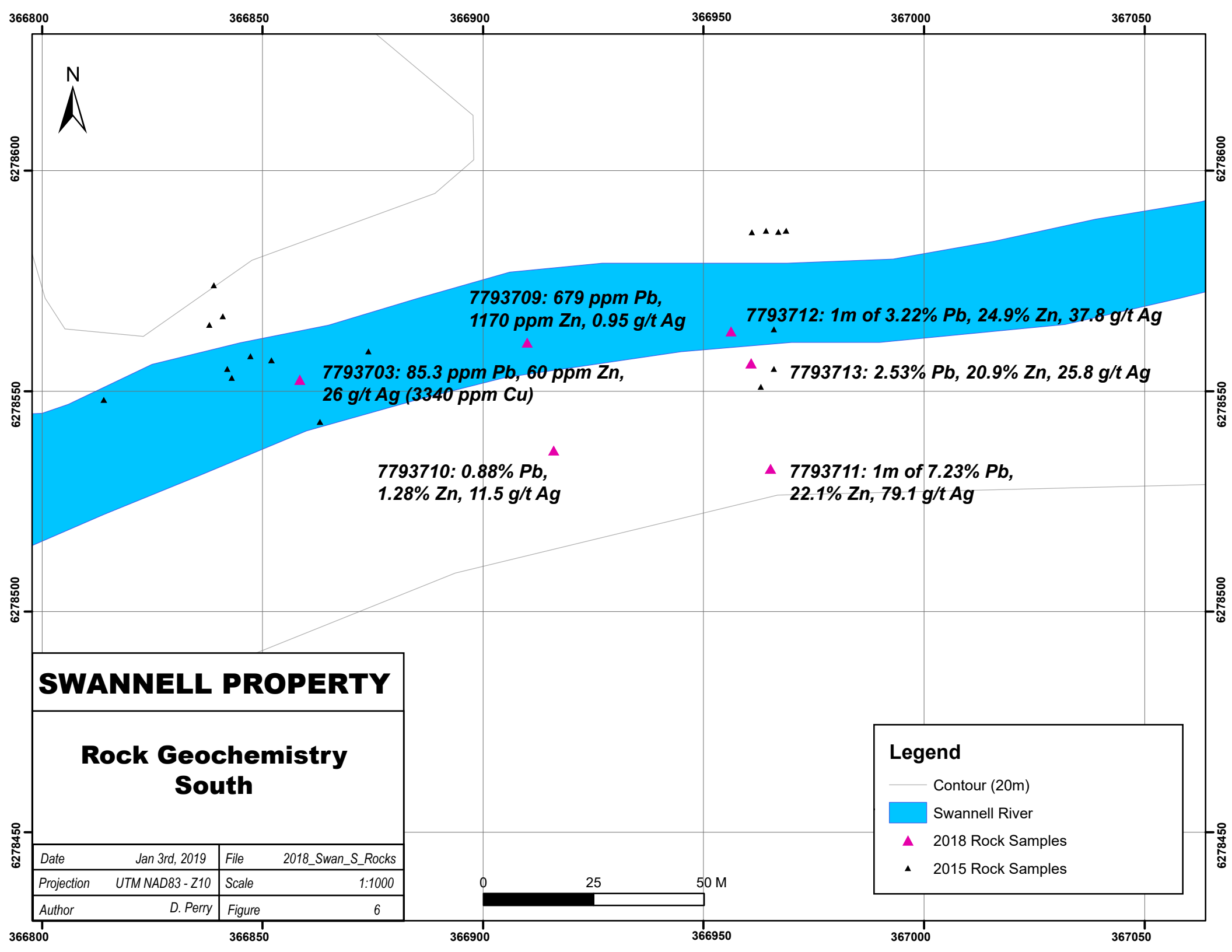
7793706: 1m 2.44% Pb, 35 ppm Zn,
27.3 g/t Au (963 ppm Cu)

1:200

0 25 50 M

Legend

- Contour (20m)
- Lake
- 2018 Rock Samples
- 2015 Rock Samples


366800
366850
366900
366950
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367050
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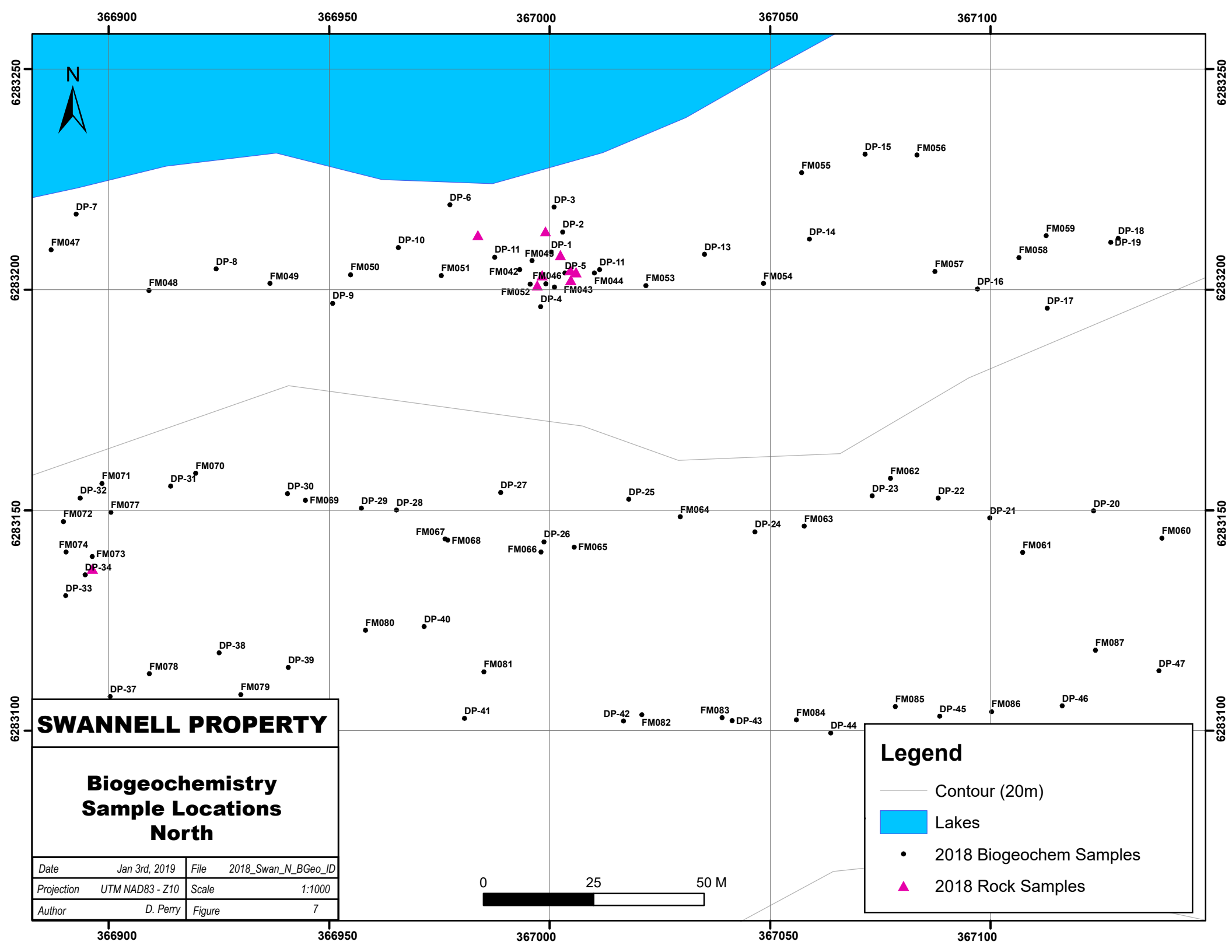
6278550
6278500
6278450
N
7793709: 679 ppm Pb,
1170 ppm Zn, 0.95 g/t Ag
7793712: 1m of 3.22% Pb, 24.9% Zn, 37.8 g/t Ag
7793703: 85.3 ppm Pb, 60 ppm Zn,
26 g/t Ag (3340 ppm Cu)
7793713: 2.53% Pb, 20.9% Zn, 25.8 g/t Ag
7793710: 0.88% Pb,
1.28% Zn, 11.5 g/t Ag
7793711: 1m of 7.23% Pb,
22.1% Zn, 79.1 g/t Ag
SWANNELL PROPERTY
Rock Geochemistry
South
Date Jan 3rd, 2019
File 2018_Swan_S_Rocks
Projection UTM NAD83 - Z10
Scale 1:1000
Author D. Perry
Figure 6
0
25
50 M
Legend
Contour (20m)
Swannell River
2018 Rock Samples
2015 Rock Samples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FM046
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FM043
DP-4
FM071
FM070
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FM069
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DP-25
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DP-23
DP-22
FM077
FM072
FM064
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FM067
FM068
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FM060
FM074
FM073
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FM083
DP-43
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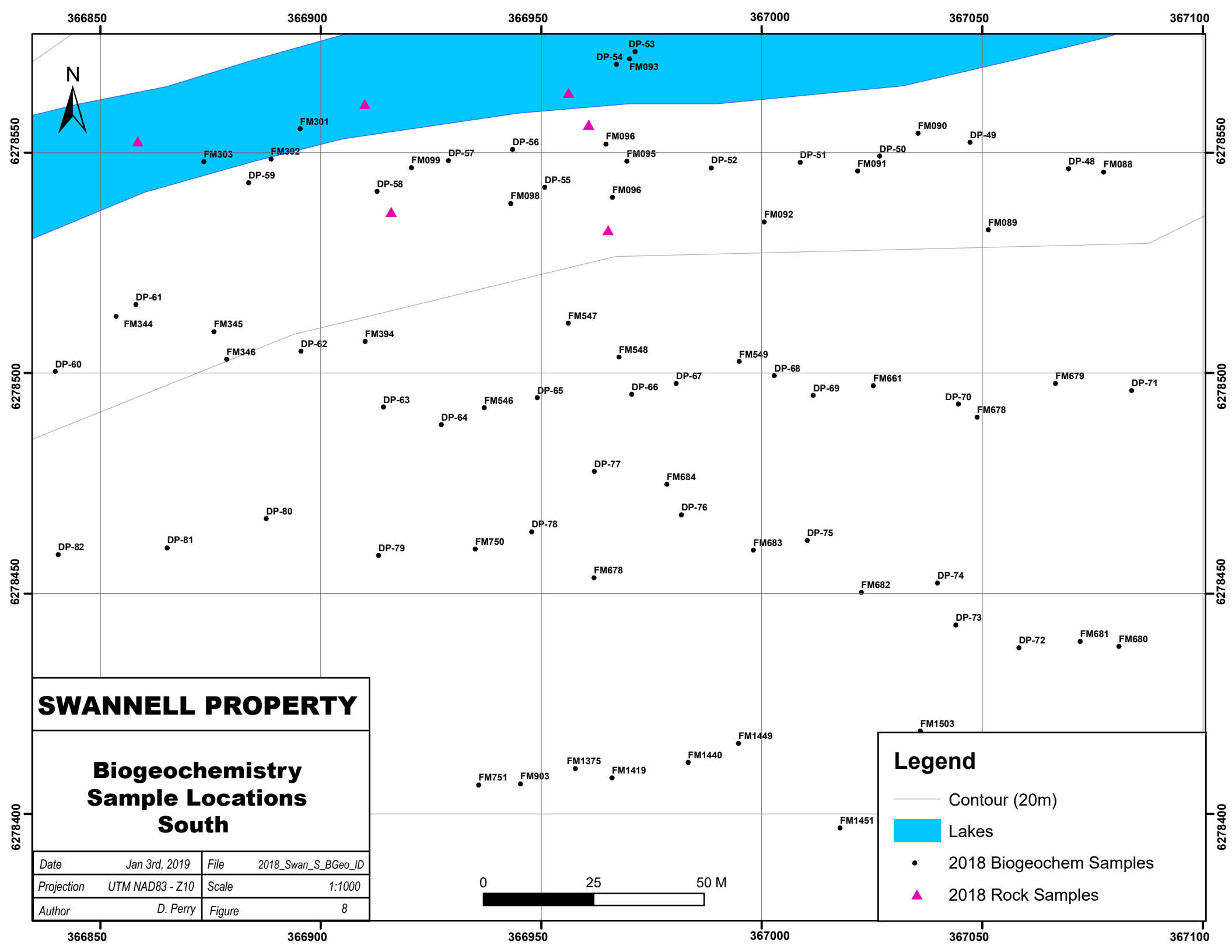
DP-45
FM086
DP-44
SWANNELL PROPERTY
Biogeochemistry Sample Locations North
Date Jan 3rd, 2019
File 2018_Swan_N_BGeo_ID
Projection UTM NAD83 - Z10
Scale 1:1000
Author D. Perry
Figure 7
0
25
50 M
Legend
Contour (20m)
Lakes
2018 Biogeochem Samples
2018 Rock Samples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FM1449
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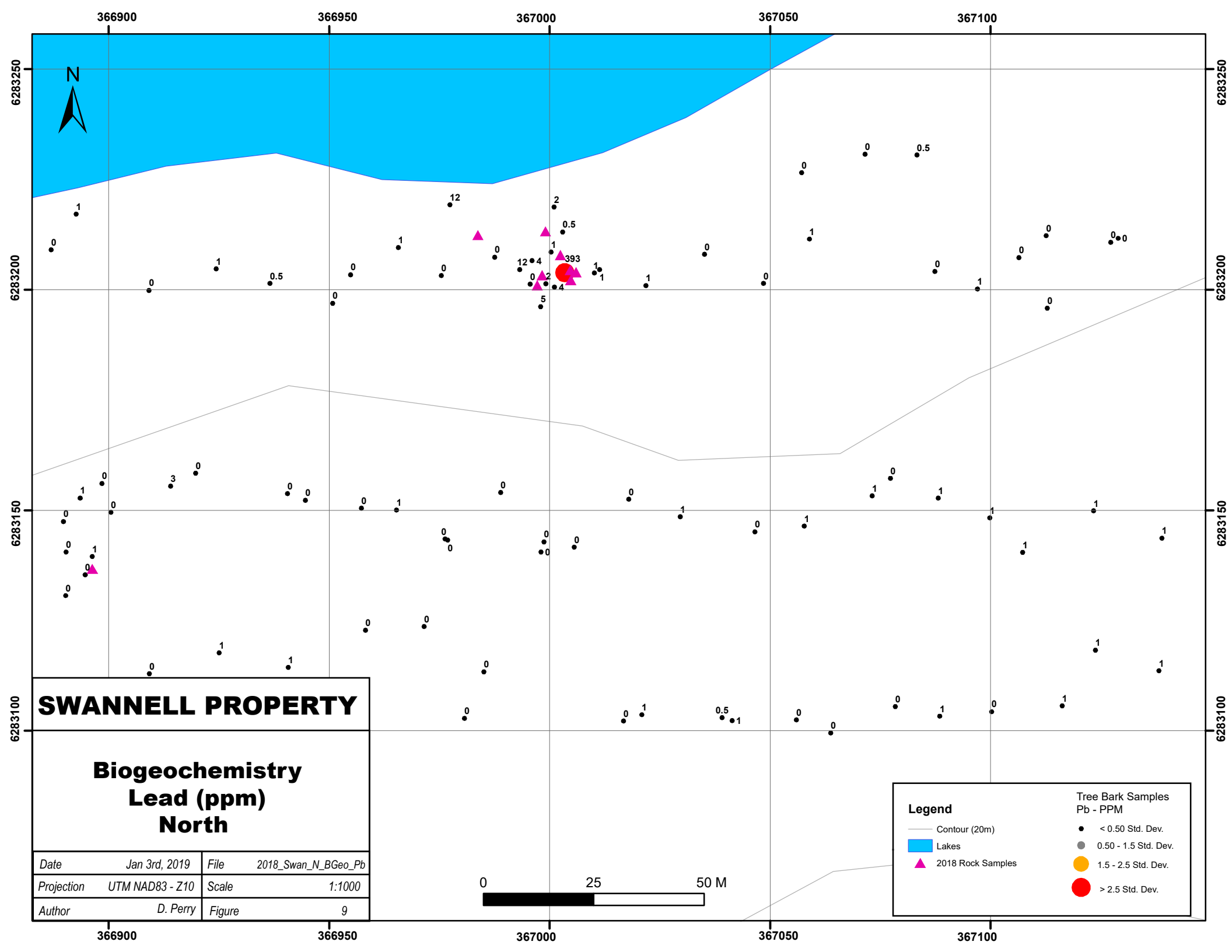
FM1375
FM1419
FM751
FM903
FM1451
SWANNELL PROPERTY
Biogeochemistry Sample Locations South
Date Jan 3rd, 2019
File 2018_Swan_S_BGeo_ID
Projection UTM NAD83 - Z10
Scale 1:1000
Author D. Perry
Figure 8
0
25
50 M
Legend
Contour (20m)
Lakes
2018 Biogeochem Samples
2018 Rock Samples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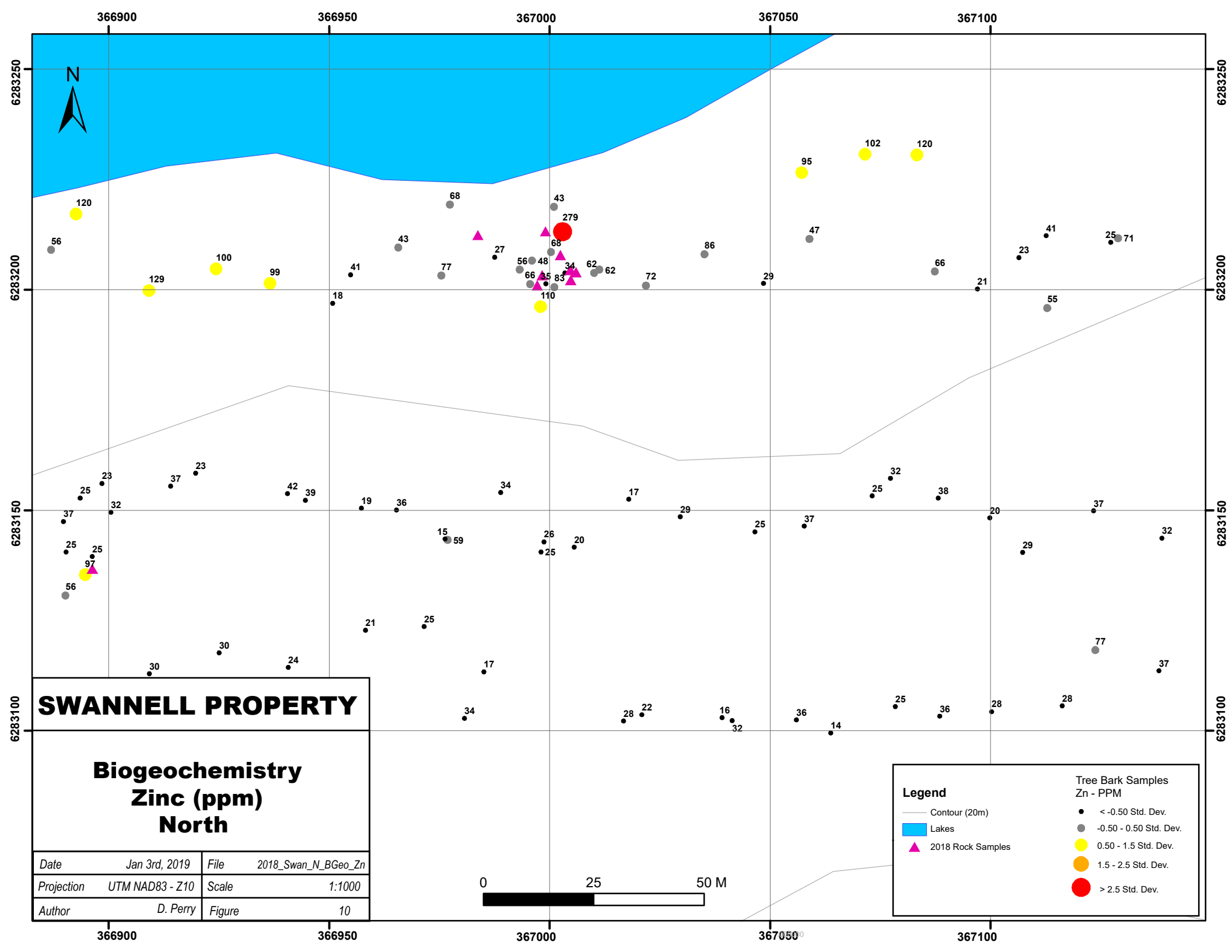
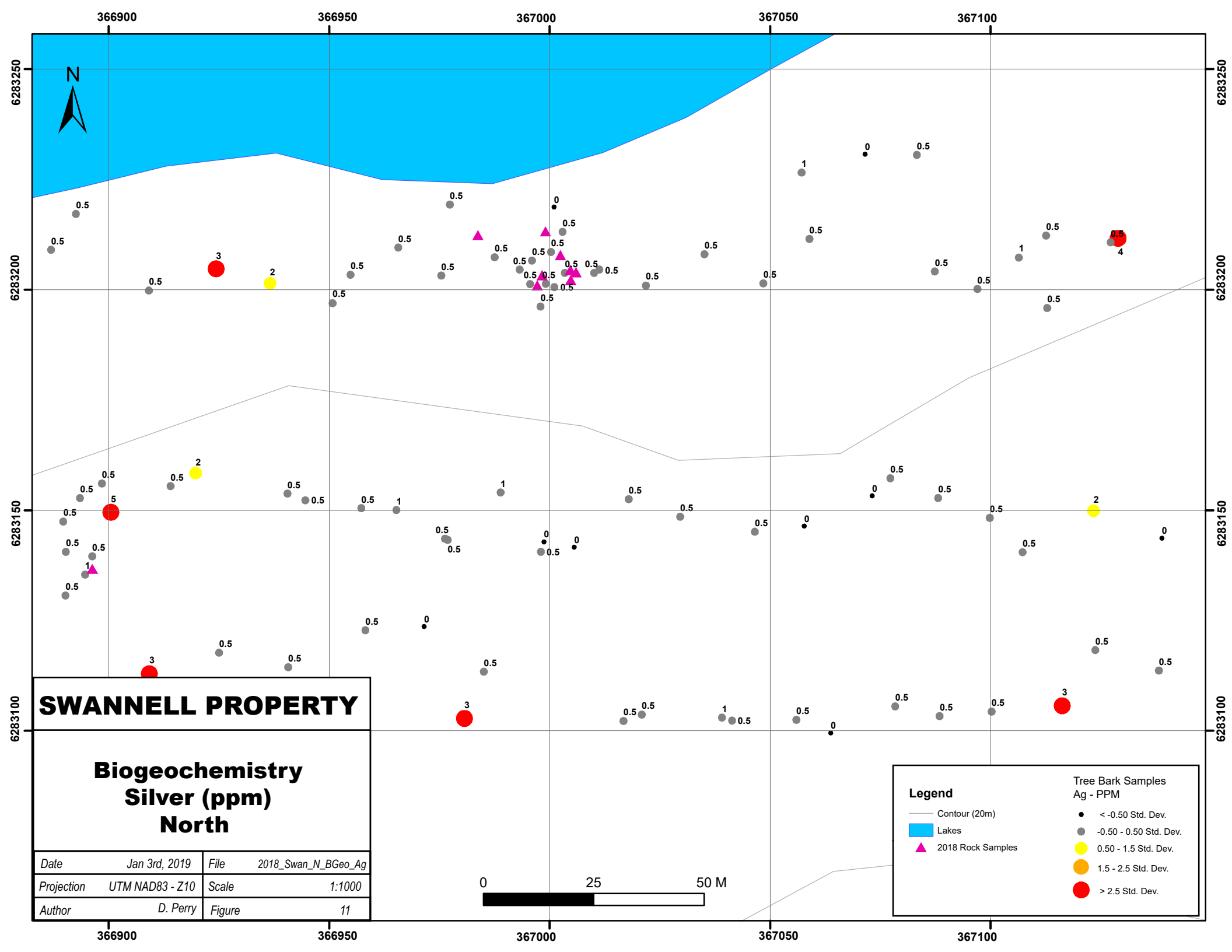
367000
367050
367100
6283250
6283200
6283150
6283100
N
SWANNELL PROPERTY
Biogeochemistry
Lead (ppm)
North
Date Jan 3rd, 2019
File 2018_Swan_N_BGeo_Pb
Projection UTM NAD83 - Z10
Scale 1:1000
Author D. Perry
Figure 9
0 25 50 M
Legend
Contour (20m)
Lakes
2018 Rock Samples
Tree Bark Samples
Pb - PPM
< 0.50 Std. Dev.
0.50 - 1.5 Std. Dev.
1.5 - 2.5 Std. Dev.
> 2.5 Std. Dev.


366900
366950
367000
367050
367100
6283250
6283200
6283150
6283100
N
SWANNELL PROPERTY
Biogeochemistry
Zinc (ppm)
North
Date Jan 3rd, 2019
File 2018_Swan_N_BGeo_Zn
Projection UTM NAD83 - Z10
Scale 1:1000
Author D. Perry
Figure 10
0 25 50 M
Legend
Contour (20m)
Lakes
2018 Rock Samples
Tree Bark Samples
Zn - PPM
< -0.50 Std. Dev.
-0.50 - 0.50 Std. Dev.
0.50 - 1.5 Std. Dev.
1.5 - 2.5 Std. Dev.
> 2.5 Std. Dev.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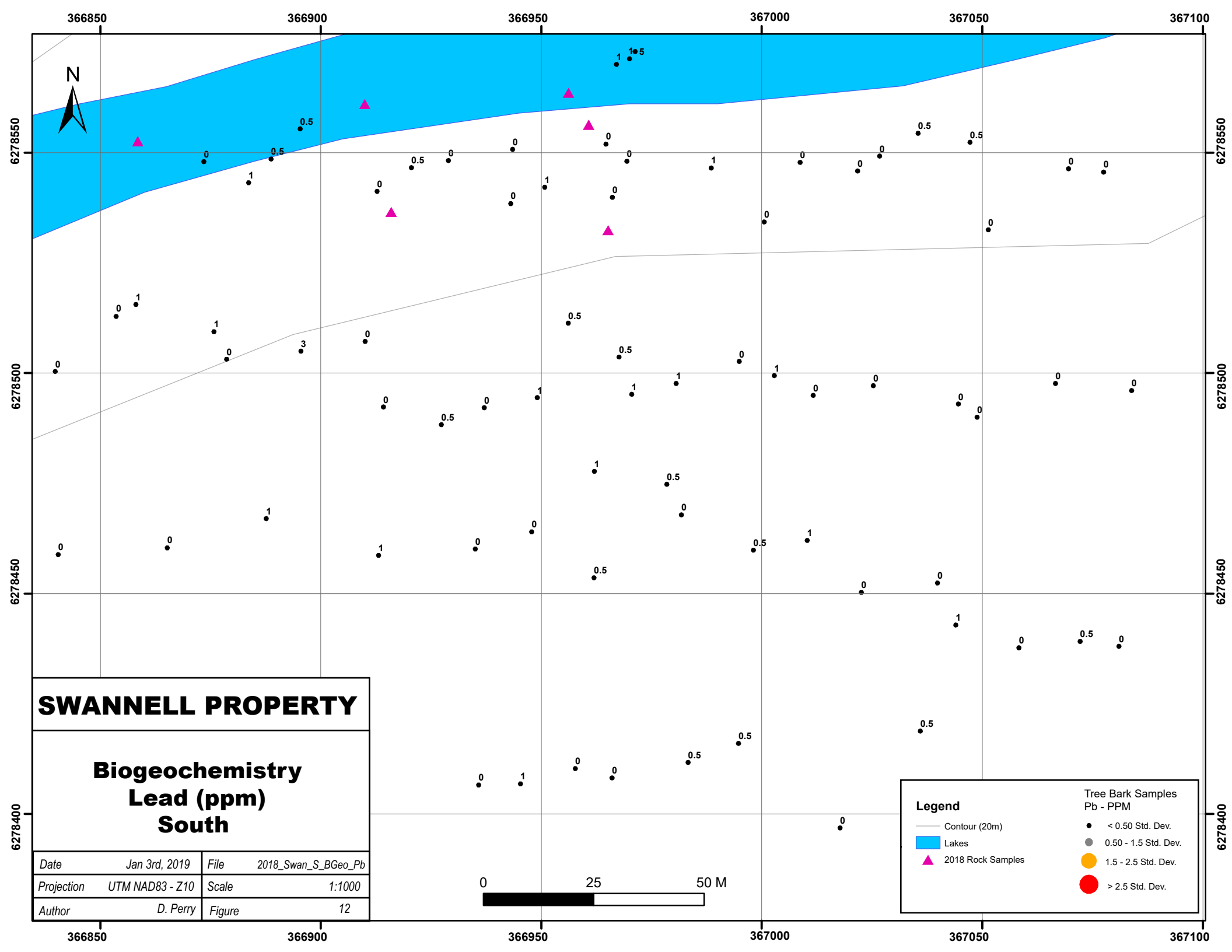
367100
6283250
6283200
6283150
6283100
N
SWANNELL PROPERTY
Biogeochemistry
Silver (ppm)
North
Date Jan 3rd, 2019
File 2018_Swan_N_BGeo_Ag
Projection UTM NAD83 - Z10
Scale 1:1000
Author D. Perry
Figure 11
0 25 50 M
Legend
Contour (20m)
Lakes
2018 Rock Samples
Tree Bark Samples
Ag - PPM
< -0.50 Std. Dev.
-0.50 - 0.50 Std. Dev.
0.50 - 1.5 Std. Dev.
1.5 - 2.5 Std. Dev.
> 2.5 Std. Dev.


366850
366900
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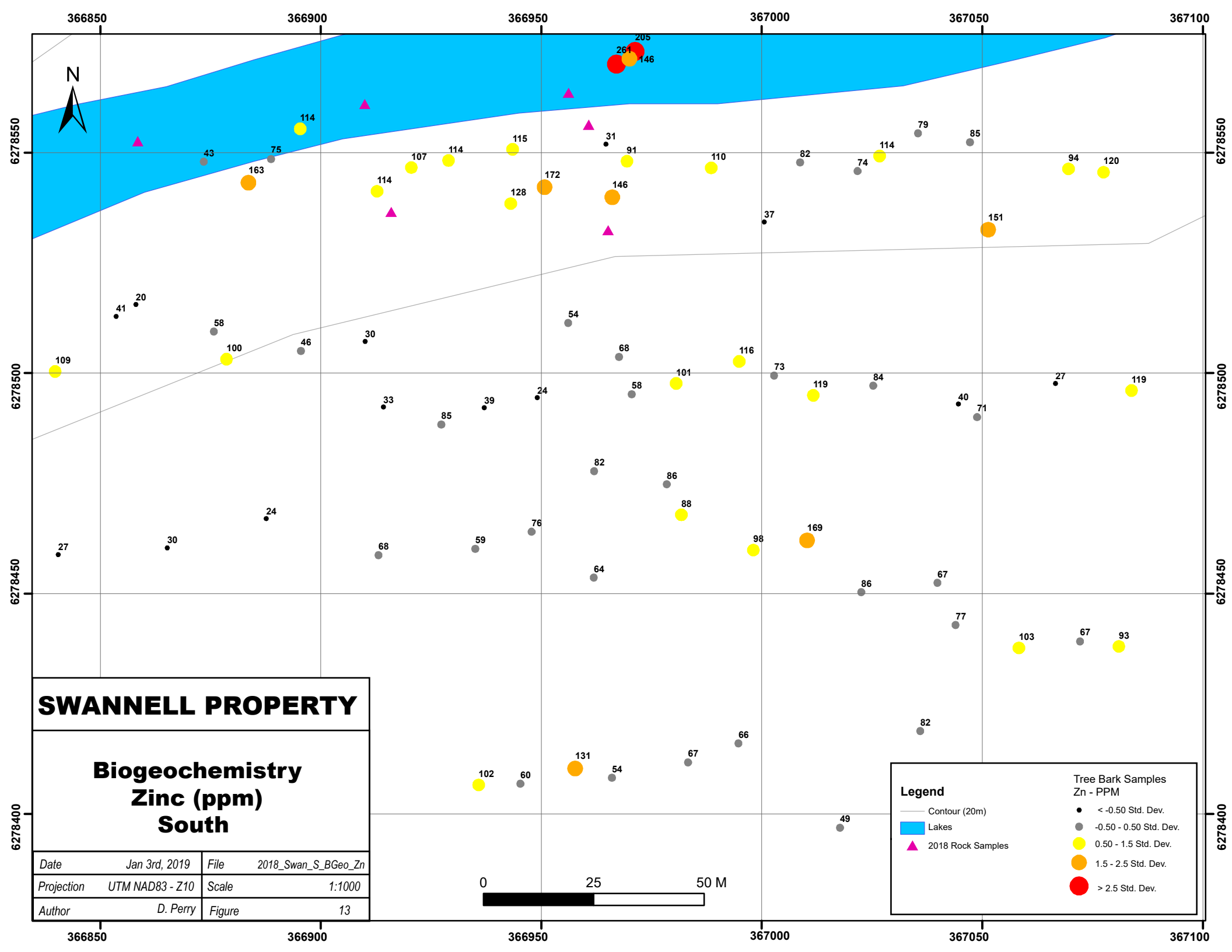
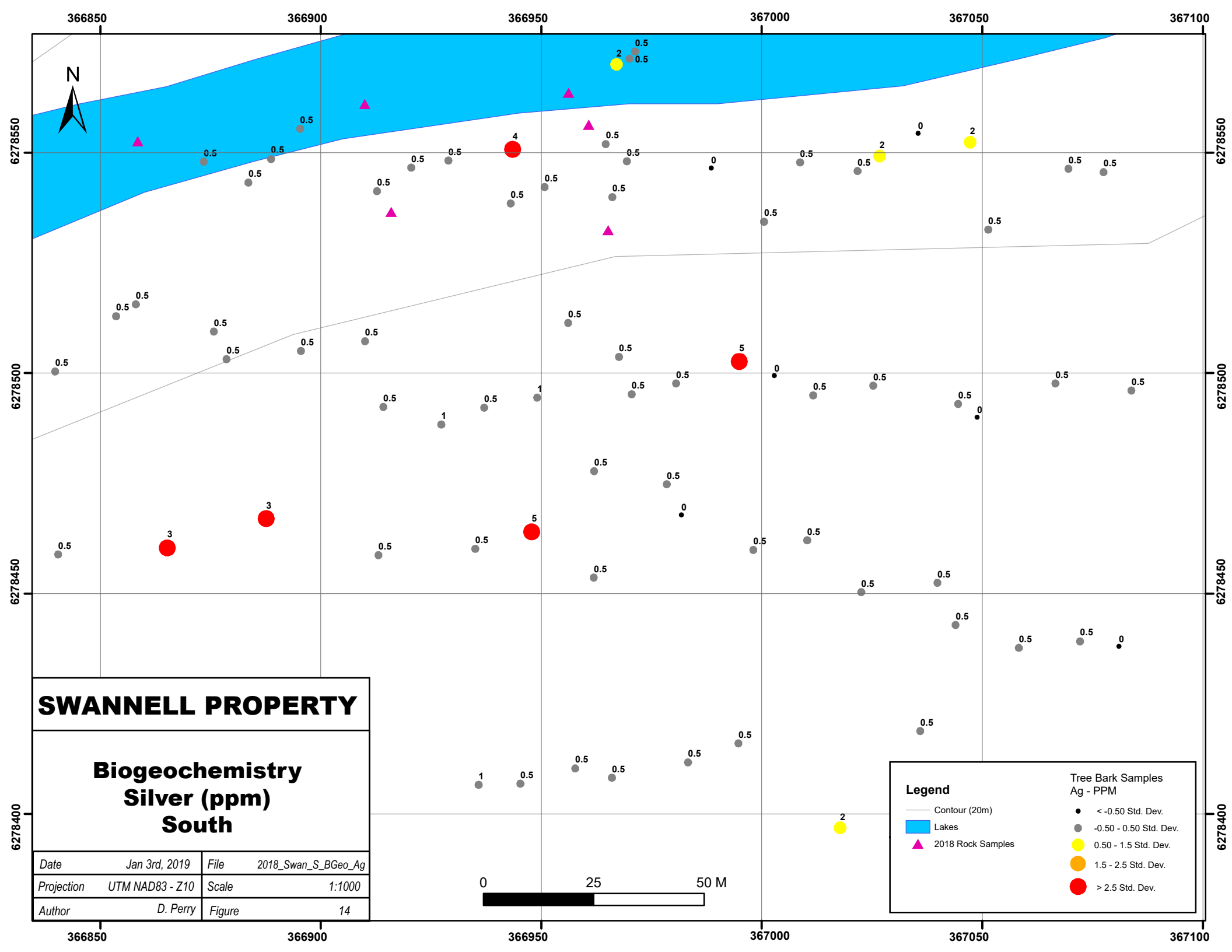
367000
367050
367100
6278550
6278500
6278450
6278400
N
SWANNELL PROPERTY
Biogeochemistry
Lead (ppm)
South
Date Jan 3rd, 2019
File 2018_Swan_S_BGeo_Pb
Projection UTM NAD83 - Z10
Scale 1:1000
Author D. Perry
Figure 12
0 25 50 M
Legend
Contour (20m)
Lakes
2018 Rock Samples
Tree Bark Samples
Pb - PPM
< 0.50 Std. Dev.
0.50 - 1.5 Std. Dev.
1.5 - 2.5 Std. Dev.
> 2.5 Std. Dev.



SWANNELL PROPERTY

Biogeochemistry
Zinc (ppm)
South

Date	Jan 3rd, 2019	File	2018_Swan_S_BGeo_Zn
Projection	UTM NAD83 - Z10	Scale	1:1000
Author	D. Perry	Figure	13


366850
366900
366950
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367050
367100
6278550
6278500
6278450
6278400
N
SWANNELL PROPERTY
Biogeochemistry
Silver (ppm)
South
Date Jan 3rd, 2019
File 2018_Swan_S_BGeo_Ag
Projection UTM NAD83 - Z10
Scale 1:1000
Author D. Perry
Figure 14
0 25 50 M
Legend
Contour (20m)
Lakes
2018 Rock Samples
Tree Bark Samples
Ag - PPM
< -0.50 Std. Dev.
-0.50 - 0.50 Std. Dev.
0.50 - 1.5 Std. Dev.
1.5 - 2.5 Std. Dev.
> 2.5 Std. Dev.