



BC Geological Survey
Assessment Report
40058



Ministry of Energy and Mines
BC Geological Survey

Assessment Report
Title Page and Summary

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

TOTAL COST: \$805,526.83

AUTHOR(S): Kristopher Raffle, B.Sc., P. Geo., Mohammad Asmail, M.Sc., SIGNATURE(S):

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): 1640293-201901 / MX-13-168 YEAR OF WORK: 2019

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): 5857585 - 2021/DEC/22

PROPERTY NAME: Wicheeda

CLAIM NAME(S) (on which the work was done): 516112

COMMODITIES SOUGHT: Rare Earth Elements

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN:

MINING DIVISION: Cariboo Mining Division NTS/BCGS: NTS 93J060

LATITUDE: 54 ° 32 ' 11 " LONGITUDE: -122 ° 6 ' 58 " (at centre of work)

OWNER(S):

1) Spectrum Mining Corporation 2)

MAILING ADDRESS:

6242 Cartwright St. Wardner, BC, Canada, V0B 2J0

Phone: 250-429-3572

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

1) Defense Metals Corp. 2)

MAILING ADDRESS:

605-815 Hornby St. Vancouver BC, Canada. V6Z 1T9

Phone 778 994 8072

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

The Wicheeda Carbonatite Complex is located in the Foreland Belt, part of a south-trending intrusive carbonatite-syenite complex cutting/occupying a structural panel within calcareous siltstones and limestones of the Cambrian to Ordovician Kechika Group.

The Wicheeda Carbonatite is comprised mainly of dolomite carbonatite, xenolithic dolomite carbonatite with varieties of matrix to clast-supported fenite breccia. Wicheeda carbonatite is characterized by REE mineralization.

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 16246, 30873

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
<b>GEOLOGICAL (scale, area)</b>			
<b>Ground, mapping</b> _____			
<b>Photo interpretation</b> _____			
<b>GEOPHYSICAL (line-kilometres)</b>			
<b>Ground</b>			
<b>Magnetic</b> _____			
<b>Electromagnetic</b> _____			
<b>Induced Polarization</b> _____			
<b>Radiometric</b> _____			
<b>Seismic</b> _____			
<b>Other</b> _____			
<b>Airborne</b> _____			
<b>GEOCHEMICAL (number of samples analysed for...)</b>			
<b>Soil</b> _____			
<b>Silt</b> _____			
<b>Rock</b> _____			
<b>Other</b> _____			
<b>DRILLING (total metres; number of holes, size)</b>			
<b>Core</b> 2007.50 m, 13 holes, NQ size		516112	\$649,786.32
<b>Non-core</b> _____			
<b>RELATED TECHNICAL</b>			
<b>Sampling/assaying</b> 717		516112	\$155,740.51
<b>Petrographic</b> _____			
<b>Mineralographic</b> _____			
<b>Metallurgic</b> _____			
<b>PROSPECTING (scale, area) _____</b>			
<b>PREPARATORY / PHYSICAL</b>			
<b>Line/grid (kilometres)</b> _____			
<b>Topographic/Photogrammetric (scale, area)</b> _____			
<b>Legal surveys (scale, area)</b> _____			
<b>Road, local access (kilometres)/trail</b> _____			
<b>Trench (metres)</b> _____			
<b>Underground dev. (metres)</b> _____			
<b>Other</b> _____			
<b>TOTAL COST:</b>			<b>\$805,526.83</b>

NTS 93J060  
Cariboo Mining Division  
British Columbia, Canada

## **2019 ASSESSMENT REPORT ON THE WICHEEDA PROPERTY**

**Work Completed:**  
Diamond Drilling

**Approximate Property Location:**  
557000 m E, 6043500 m N  
(NAD 1983 UTM Zone 10N)

**Claims:**  
516112, 516121, 516124, 591827, 591828, 591829

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Effective Date: February 23<sup>rd</sup>, 2022

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## 1 Summary

This assessment report (the “Report”) is written to present the results of, and expenditures related to, 2019 exploration work conducted on the Wicheeda Property (“Wicheeda” or the “Property”), located within the Cariboo Mining Division in central British Columbia. APEX Geoscience Ltd. (“APEX”) was retained by Defense Metals Corp. (“Defense”) during 2019 as consultants to complete a diamond drilling program and an assessment report specific to the Wicheeda Property.

The Wicheeda Property is located in central British Columbia, approximately 80 km northeast of Prince George, BC, and 50 km east of Bear Lake, BC. The Property comprises 6 contiguous mineral claims covering approximately 1,708 hectares. The claims are 100% owned by Spectrum Mining Corporation (“Spectrum”). On November 22, 2018 Defense entered into an option agreement with Spectrum to acquire ownership of the Wicheeda Property. The principal area of interest, historically referred to as the “Main Zone” and currently the “Wicheeda Carbonatite”, is located 1.3 km from the Wichcika forest service road, south of Wicheeda Lake.

Exploration work at Wicheeda dates back to 1961 with a regional aeromagnetic survey completed by the Geophysics Division of the Geological Survey of Canada identifying a magnetic high anomaly in project area. Local scale prospecting by Kol Lovang in 1976 and 1977 identified minor base metal anomalies. Later assaying of Lovang’s samples by Teck Explorations Limited (“Teck”) revealed anomalous niobium and Teck subsequently entered into a prospecting agreement with Lovang in early 1986, and completed a helicopter supported stream silt geochemical survey later in the year. Exploration continued in 1986 and 1987 with soil and rock geochemical sampling, geological mapping, trenching and ground magnetic surveying. The claims were eventually allowed to lapse, and subsequently re-staked in 2001 by Mr. Chris Graf. Mr. Graf did not conduct any work on the claims, and in 2008 transferred ownership to Spectrum.

In 2008, Spectrum completed four diamond drill holes with a total length of 866 m. Each drill hole confirmed the presence of a light rare earth element (LREE) bearing dolomite carbonatite body, the Wicheeda Carbonatite. In 2009, Spectrum completed an additional 15 drill holes totalling 1824 m. Ten holes tested the Wicheeda Carbonatite, three holes evaluated a soil anomaly west of Wicheeda Lake, and two holes were drilled to intersect a small carbonatite dyke southwest of Wicheeda Lake. All diamond drill holes in the Wicheeda Carbonatite intersected significant intervals of rare earth element (REE) bearing dolomite carbonatite from surface to variable depths. During the same year, Spectrum submitted a composite sample from the Wicheeda Carbonatite to produce a REE concentrate. Bench scale heavy liquid-magnetic separation produced a high REE concentrate comparable to the Mianning bastnäsite-bearing carbonatite ore from Sichuan, China.

In 2010, Spectrum conducted a soil sampling survey with a total of 977 samples collected over a 5.5 km<sup>2</sup> area. The survey covered the Wicheeda Carbonatite and other target areas that were drilled in 2009. Results identified three multi-element soil geochemical

anomalies and a strong correlation between cerium, lanthanum, yttrium, niobium, thorium, lead, manganese, molybdenum, iron and phosphorous. During the same year, Spectrum submitted two composite samples from drill core. REE grade recoveries were up to 97% for fine fractions from both composite.

In 2011, Bolero Resources Corporation conducted a helicopter-borne radiometric and magnetic gradiometer survey over a nearby property that encompassed part of the Wicheeda Property. Results identified a strong magnetic anomaly on the Property that may correspond to syenite intrusions. During the same year, Spectrum completed a test work program to investigate the direct flotation of rare earth oxide (REO) on REO-bearing samples from Wicheeda Carbonatite. The program produced a concentrate grade of 42% and an average recovery of 83%. Subsequent hydrometallurgical testing in 2012 on a 2 kg sample of the concentrate grading 39.7 % total rare earth oxide (TREO) produced an upgraded and purified precipitate that contained 71% TREO through a process of pre-leaching and roasting. In 2018, Defense Metals collected a 30-tonne surface bulk sample on the Wicheeda Property for a multi-phase program of bench-scale metallurgical test work. Select head grade assay results for the 30 tonne bulk sample include: 1.77% lanthanum-oxide, 2.34% cerium-oxide, 0.52% neodymium-oxide, and 0.18% praseodymium-oxide for a total of 4.81% TREO.

The Wicheeda REE Property is located in the morphogeological Foreland Belt of the Canadian Cordillera, within the structurally dominant NW-trending Rocky Mountain Trench. The Rocky Mountain Trench is recognized for the occurrence of several Devonian to Mississippian, carbonatite-syenite intrusion-related complexes that were geologically deformed, tilted, and transported to the east in thrust panels. The REE-enriched carbonatites located on the Property are part of a narrow, elongate, south-trending intrusive carbonatite-syenite complex utilizing a structural panel within sedimentary sequences of the Cambrian to Ordovician Kechika Group.

Locally, the Property consists of a sequence of northwest-trending interbedded, limestone, calcareous argillite and argillite with sub-vertical dips. Small intrusive syenite-monzonite bodies cuts through the sedimentary rocks in the southern area and minor, narrow, dismembered mafic to intermediate dykes crosscut the deposit at variable orientations.

Exploration work at the Wicheeda Property during 2019 was completed between July 28<sup>th</sup> and October 22<sup>nd</sup>, 2019. The total cost to complete the program was \$805,526.83. Thirteen diamond drill holes totalling 2,007.5 m were collared from three separate drill pads. The program was designed to test the northern, southern and western extent of the Wicheeda Carbonatite and further delineate the relatively higher-grade near surface dolomite-carbonatite unit. All drill holes intersected variable lengths of significant REE mineralization, mainly in the carbonatite dolomite body and, to a lesser extent, in the lithologies enveloping the Wicheeda Carbonatite. The 2019 exploration program expanded the main carbonatite body to the north by 120 m along strike, 40 m to the southeast and 25 m to the southwest from previously defined resource model.

Results to date indicate that further geological work and diamond drilling is warranted at the Wicheeda Property. Detailed geological mapping, structural review focusing on the northern section of the Wicheeda carbonatite body, and follow-up diamond drilling north, north west, west and south of drill Pad 3 should be completed to expand the extent and confirm the geometry of the mineralized dolomite-carbonatite body.

For 2020, APEX recommends a 40-day exploration program comprising geological mapping and a 2000 m of diamond drilling. The total estimated cost for the proposed exploration work is \$700,000 (\$350 per meter all inclusive).



## 2 Introduction

This assessment report (the “Report”) is written to present the results of, and expenditures related to, 2019 exploration work conducted on the Wicheeda Property (“Wicheeda” or the “Property”), located within the Cariboo Mining Division in central British Columbia. The Property comprises 6 contiguous mineral claims, covering a combined area of 1,708 hectares. The Property is located approximately 80 km northeast of Prince George, BC and 50 km east of Bear Lake.

APEX Geoscience Ltd. (“APEX”) was retained by Defense Metals Corp. (“Defense”) during 2019 as consultants to complete a diamond drilling program and an assessment report specific to the Wicheeda Property.

## 3 Property Description and Location

### 3.1 Description and Location

The Property is located at Wicheeda Lake approximately 80 km northeast of Prince George, BC and 50 km east of Bear Lake (Figure 3.1). The Property is situated within BCGS map sheet 93J060 and centred at approximately 557200 m E 6043550 m N (NAD 83 UTM Zone 10N). The claims cover Wicheeda Lake and straddle a segment of Wichcika Creek. The principal area of interest, the Wicheeda Carbonatite, is centred between Wicheeda Lake and the Wichcika gravel pit, where the 2019 exploration camp was located.

The Property is comprised of six contiguous mineral claims that cover 1,707.63 ha in the Cariboo Mining Division (Figure 3.2). The claims are listed as active and in good standing on the Province of British Columbia's Mineral Titles Online (MTO) website and are 100%-owned by Spectrum Mining Corp. (“Spectrum”). The individual claims and their respective anniversary dates are listed in Table 3.1.

**Table 3.1. Wicheeda Property Mineral Claim Details**

Tenure Number	Claim Name	Owner (%)	Area (ha)	Good to Date	Map Number
516112		Spectrum Mining Corporation	356.59	September 30, 2024	093J060
516121		Spectrum Mining Corporation	18.76	September 30, 2024	093J060
516124	Wicheeda West	Spectrum Mining Corporation	75.05	September 30, 2024	093J060
591827	Wicheeda 6	Spectrum Mining Corporation	450.20	September 23, 2024	093J060
591828	Wicheeda 7	Spectrum Mining Corporation	469.31	September 23, 2024	093J060
591829	Wicheeda 8	Spectrum Mining Corporation	337.72	September 23, 2024	093J060

Figure 3.1. Wicheeda Property Location Map

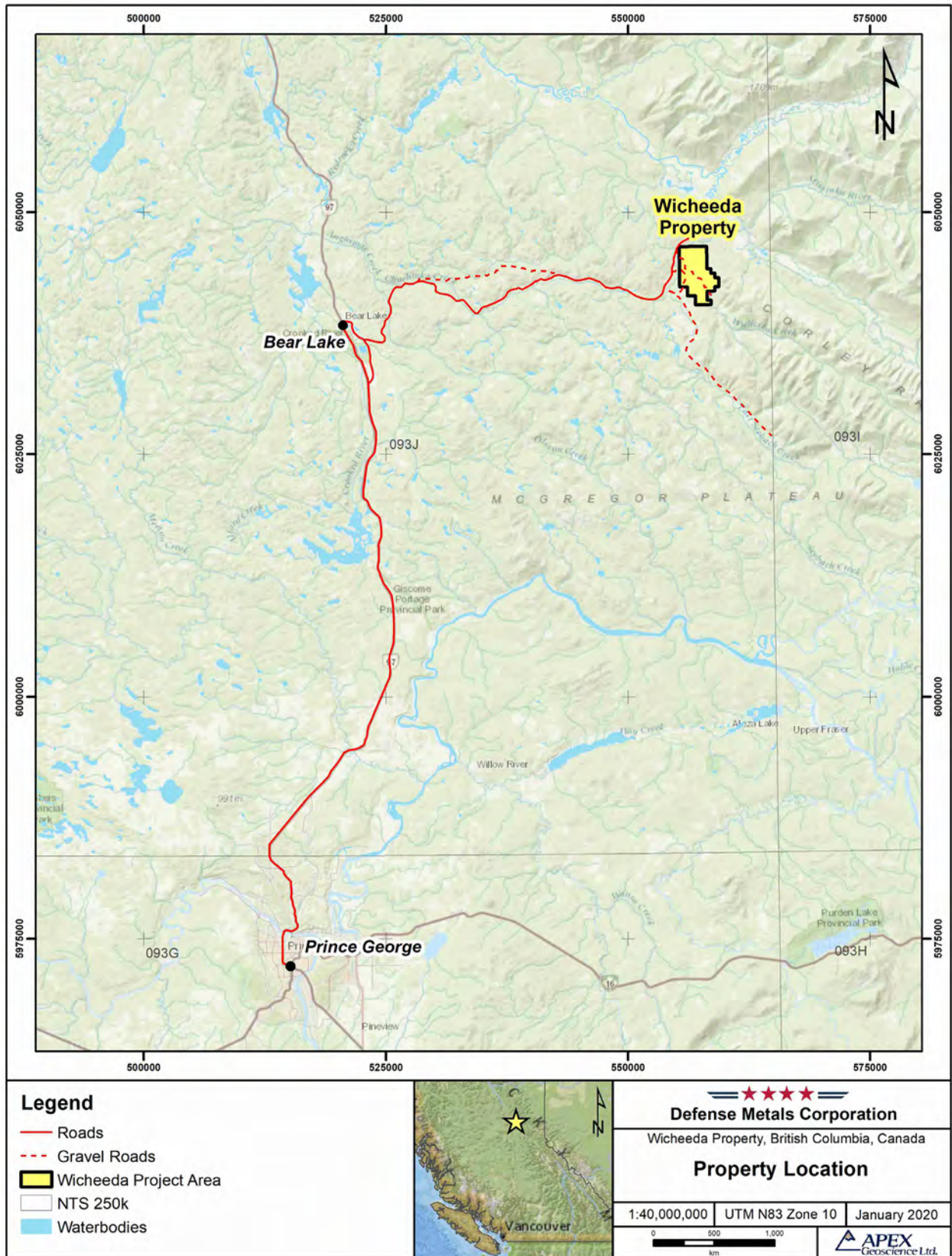
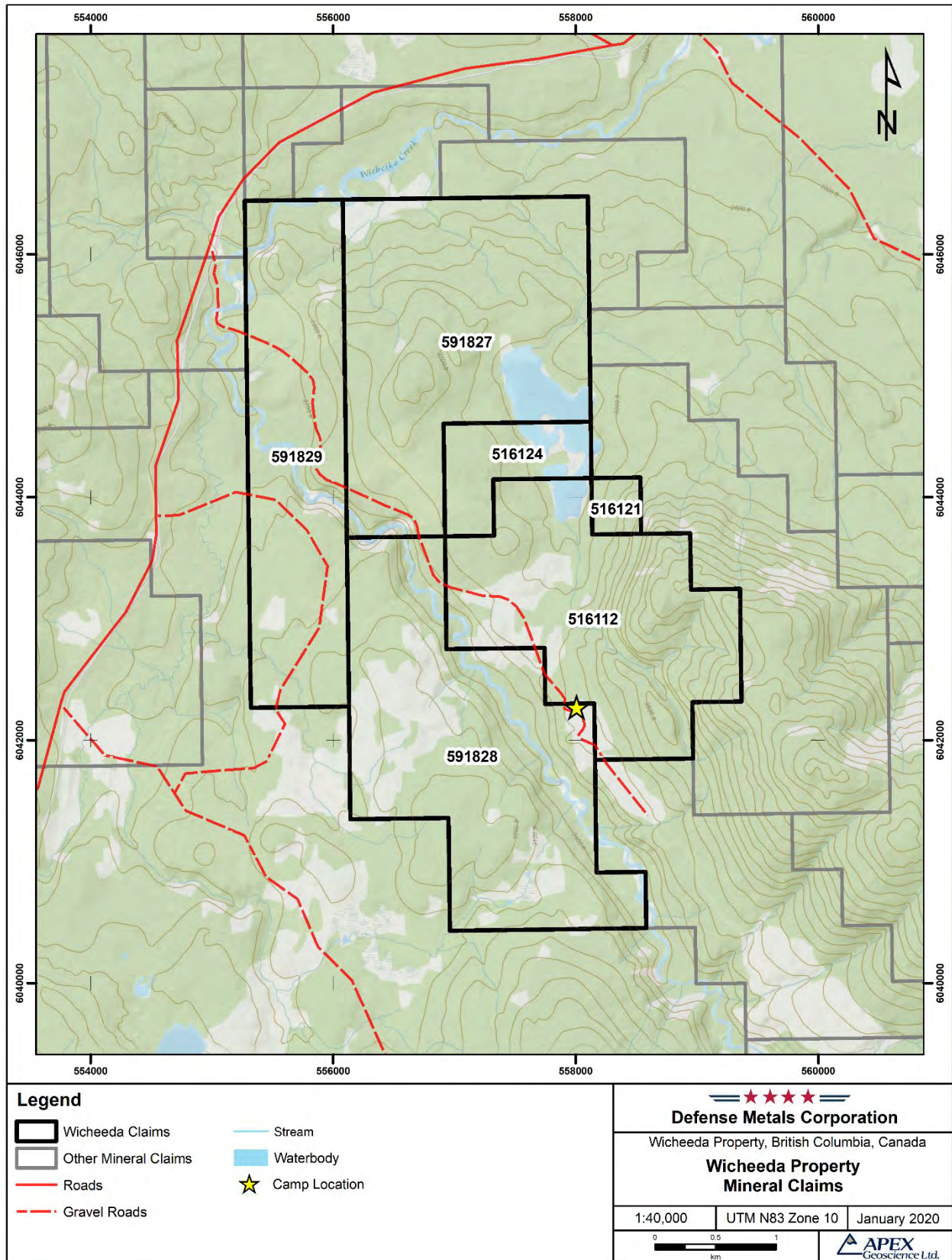




Figure 3.2. Wicheeda Property Claim Map



### 3.2 Royalties and Agreements

The Property is subject to an Option Agreement dated November 22, 2018 (“Option Agreement Effective Date”), where Spectrum and its shareholders (collectively the “Vendors”) granted Defense an Option to acquire ownership of the Wicheeda Project. In order to exercise the Option and to maintain good standing, Defense is required to:

- a) incur expenditures totaling \$1,930,000 as follows: (i) \$680,000 within 12 months of the Option Agreement Effective Date; (ii) an additional \$625,000 within 24 months of the Option Agreement Effective Date; and (iii) an additional \$625,000 within 36 months of the Option Agreement Effective Date;
- b) pay to Spectrum: (i) \$25,000 in cash during the negotiation of this Agreement (received), such funds to be utilized by Spectrum to expend approximately \$70,000 of the \$120,000 to be advanced to it by Defense as provided to partially finance the collection of approximately thirty (30) tonnes of ore from the Property for sampling at the SGS laboratory in Peterborough, Ontario; (ii) \$95,000 in cash within five (5) business days of the Option Agreement Effective Date; (iii) \$50,000 in cash on or before the first anniversary of the Option Agreement Effective Date; (iv) \$100,000 in cash on or before the second anniversary of the Option Agreement Effective Date; (v) \$100,000 in cash on or before the third anniversary of the Option Agreement Effective Date;
- c) issue to Spectrum: (i) 200,000 common shares of Defense on the Option Agreement Effective Date; (ii) \$50,000 in common shares of Defense on or before the first anniversary of the Effective Date.

Once fulfilled, Defense will have earned the right for a period of 90 days thereafter, to exercise the Option (the “Exercise Period”) by written notice to the Spectrum within the Exercise Period (the “Exercise Notice”). If within the Exercise Period Defense delivers the Exercise Notice to Spectrum, it shall have exercised the Option and be deemed to have acquired registered and beneficial ownership of all of the Spectrum shares, and Defense shall forthwith:

- (a) issue to the Vendors on a pro rata basis, such number of common shares of Defense equal to 49% of the aggregate of the following: (i) the issued and outstanding common shares of the Defense at the time of issuance of these common shares; plus (ii) the common shares of the Defense to be issued; and
- (b) pay to the Vendors on a pro rata basis, a cash payment in the aggregate of \$100,000. In the event Defense exercises the Option and acquires an indirect 100% right, title and interest in and to the Project, the Vendors shall thereafter be entitled to a 2.0% Net Smelter Returns royalty (“NSR Royalty”) with respect to the Project, payable upon the commencement of Commercial Production. Defense has the right to purchase one-half (1/2) of the NSR Royalty from the Vendors, also on a basis pro rata to their current shareholdings in the Optionor (being 1.0% of Net Smelter Returns) for \$1,000,000, leaving the Vendors with an aggregate 1.0% NSR Royalty.

### 3.3 Environmental Liabilities, Permitting and Significant Factors

The Property currently has an active and amended Multi-Year Permit, issued to Spectrum on February 26, 2019 (Permit MX-13-168). This permit approves exploration work including camp building, storage of fuel, and diamond drilling. The permit was reviewed and approved by the British Columbia Ministry of Energy and Mines.

Traditional lands of the McLeod Lake Indian Band (“MLIB”) overlap the Project. Spectrum has, in the past, shared information regarding its proposed exploration programs with the MLIB, but the authors are not aware of any agreements that have been negotiated between Spectrum or Defense and the MLIB. The writer is not aware of any other encumbrances, or potential encumbrances, that would negatively impact the future exploration of the Project.

No surface rights are held by either Spectrum or Defense or, to the authors’ knowledge, by any other parties. Should the Project advance to the mining stage, Defense will be required to obtain all necessary surface rights by way of filing an application for mining leases for the construction and operation of a mine on the Project.

## 4 Accessibility, Local Resources, Infrastructure, Climate and Physiography

### 4.1 Accessibility, Local Resources and Infrastructure

The Wicheeda Property is located at the base of the Rocky Mountains, on the edge of the Central Interior Plateau in east central British Columbia. Access to the Property from Prince George is provided by Highway 97 and two all-season gravel forestry roads. From Prince George, travel north on Highway 97 for approximately 80 km to the turn-off for the Chuchinka Forest Service Road (FSR) located just south of the community of Bear Lake. Travel east on the Chuchinka FSR for approximately 51 km to the Wichcika FSR; then travel south on the Wichcika FSR for approximately 5.6 km to the Wichcika gravel pit. The gravel pit was used as a camp location in 2019 and equipment staging area. A cut trail, approximately 1,300 m in length, links the gravel pit and areas of diamond drilling.

Hotel accommodations, groceries, camp outfitters and supplies can be acquired in Prince George (80 km southwest). Industry services such as labourers, mining equipment, drilling companies, air transportation, railway, electric power and a gas pipeline are also available in Prince George or closer to the Property. Overnight transport for samples is available to laboratories in Kamloops or Vancouver.

### 4.2 Climate and Physiography

The Wicheeda Property is located in undulated to cliffy topography at elevations ranging between 900 and 1,520 m. In cliffy terranes in the east and south, slopes are moderate to steep. Outcrops are sparse within the Property.

The area has been logged previously and is currently covered with stands of alder and pine with variably thick undergrowth. Forest plantations, buck brush and devil's club occur at lower elevations.

The climate of the area is humid continental, cold and temperate; typified by moderate seasonal temperature differences, with warm (and often humid) summers and cold winters. Precipitation falls mostly in the winter, with little rain in the summer. The average annual temperature is 0.2 °C. July is the warmest month with an average temperature of 12.6 °C, and January is the coldest month with temperatures averaging -15.5 °C. The average annual precipitation is 494 mm.



## 5 History

### 5.1 Property History

In 1961, the Geophysics Division of the Geological Survey of Canada completed a regional aeromagnetic survey over parts of BC and identified a magnetic anomaly in the Wicheeda Lake District. Prospecting of the area in 1976 and 1977 by Kol Lovang identified minor base metal showings which covered two mineral claims. No follow-up work was done and the claims were allowed to lapse. Later assaying of Lovang's samples by Teck Explorations Limited ("Teck") revealed anomalous niobium and Teck subsequently entered into a prospecting agreement with Lovang in early 1986.

Teck staked its initial claims in April 1986 and proceeded with a helicopter-supported stream silt geochemical survey of the Wichcika Creek drainage. This work identified several anomalies, resulting in additional claims being staked.

Further exploration completed in 1986 and 1987 consisted of soil and rock geochemical sampling, geological mapping, trenching and ground magnetic surveying. The 'Lake', 'George', and 'Prince' soil geochemical survey grids outlined a linear carbonatitic intrusion and a small syenite body hosted by limestone and calcareous fine-grained sedimentary rocks over a total strike length of 7 km. Rock geochemical sampling and bedrock mapping led to additional claims being staked during 1986 as the location of intrusive zones became better defined (Betmanis, 1987).

Pronounced cerium soil geochemical anomalies partially cover both the 'Lake' and 'George' grid areas. Locally, these anomalies coincide with barium and niobium highs and reflect the underlying intrusive rock. Intensely oxidized, coarse grained calcite carbonatite and fine-grained pyrochlore-bearing, pink calcite carbonatite was identified in trenches at the 'Lake' grid by Greenwood and Mader (1988). Ground magnetometer surveys outlined modest magnetic highs on both grids that are thought to be reflective of relatively narrow dykes that may or may not be genetically related to the intrusive carbonatites (Betmanis, 1987).

Follow-up work outlined a deeply weathered carbonatite of unknown dimensions on the 'Lake' grid (Mader and Greenwood, 1988); and a semi-circular body of carbonatite, measuring about 250 m across, on the 'George' grid (Lovang and Meyer, 1987). A circular thorium (Th) radiometric anomaly, roughly 500 m in diameter, was found to coincide with the 'George' grid carbonatite and additional Th radiometric anomalies 100-200 m across followed a southeasterly trend. Soil geochemistry on the 'George' grid estimated the circular intrusive body at approximately 400 m in diameter. One or more narrow dyke-like carbonatite bodies were located south of 'George' grid (Lovang and Meyer, 1987; Minfile 093J 014) partially covering the southern portion of the project area.

Lovang and Meyer (1987) found the carbonatites were generally anomalous in light rare earth elements (LREE) and niobium. A limited hand trenching program on the George grid yielded encouraging values of lanthanum (La), neodymium (Nd) and cerium (Ce),

modest values of niobium (Nb) and yttrium (Y), and anomalous values of samarium (Sm) and europium (Eu). Values for the principal LREE ranged from 202 to >1000 ppm La, from 104 to >1000 ppm Nd, and from 254 to >10000 ppm Ce over sample lengths of 2-10 m and an aggregate sample length of 87 m in three trenches spaced across the carbonatite body.

Subsequently, the claims were staked in March 2001 by Mr. Chris Graf after Teck allowed the claims to lapse. Mr. Graf, a principle of Spectrum Mining Corporation (“Spectrum”), did not conduct any work of significance on the claims, and in September 2008, he transferred ownership of the claims to Spectrum.

In 2008, during a two-week period from late September to mid-October, Spectrum completed four diamond drill holes (WI08-01 to WI08-04) with an aggregate length of 866 m within the original George grid (Lane, 2009; Table 5.1; Figure 5.1). The holes were drilled from one helicopter-supported drill pad and included one vertical hole and three inclined holes drilled on different azimuths. Each drill hole was collared in intrusive carbonatite and confirmed the presence of a LREE-bearing dolomite carbonatite body of significance that outcrops on a west-facing slope 1 km south of Wicheeda Lake. Due to the limited drilling campaign, the overall geometry of the Wicheeda Carbonatite was not defined; however, diamond drilling established an eastern structural footwall to the zone. The Wicheeda Carbonatite was found to contain significant concentrations of the LREE cerium (Ce), lanthanum (La), and neodymium (Nd) as well as anomalous concentrations of Nb, Pr, Y, As, Ba, Mo, Mn, Pb, Sr, and Th (Lane, 2009).

In 2009, Spectrum completed another 15 drill holes (WI09-05 to WI09-20) on the Project totaling 1824 m (Lane, 2010; Table 5.1; Figure 5.1). Ten holes tested the Wicheeda Carbonatite from two different set-ups (sites A and B), two holes were drilled northwest of previous sites to intersect a small carbonatite dyke that outcrops on a trail leading to Wicheeda Lake (site C), and three holes evaluated a REE soil anomaly located northwest of site C and southwest of Wicheeda Lake (site D). All ten holes drilled on the Wicheeda Carbonatite intersected significant intervals of REE-bearing dolomite ± calcite carbonatite from surface to variable depths. The highest REE values correlated with dolomite carbonatite, dolomite carbonatite breccia and calcite carbonatite. To a lesser degree, high REE values also occurred in syenite breccia, later recognized as fenite where dolomite carbonatite, as matrix to clasts of syenite (fenite), formed >50% of the rock mass (Lane, 2010). During the same year, a bench scale heavy liquid – magnetic separation was performed on a composite sample from the Wicheeda Lake carbonatite to separate minerals and produce a concentrate comparable to other well-known REE deposits around the world. The study achieved a high grade REE concentrate comparable with the Mianning bastnäsite-bearing carbonatite ore from Sichuan, China (Mariano, 2009).



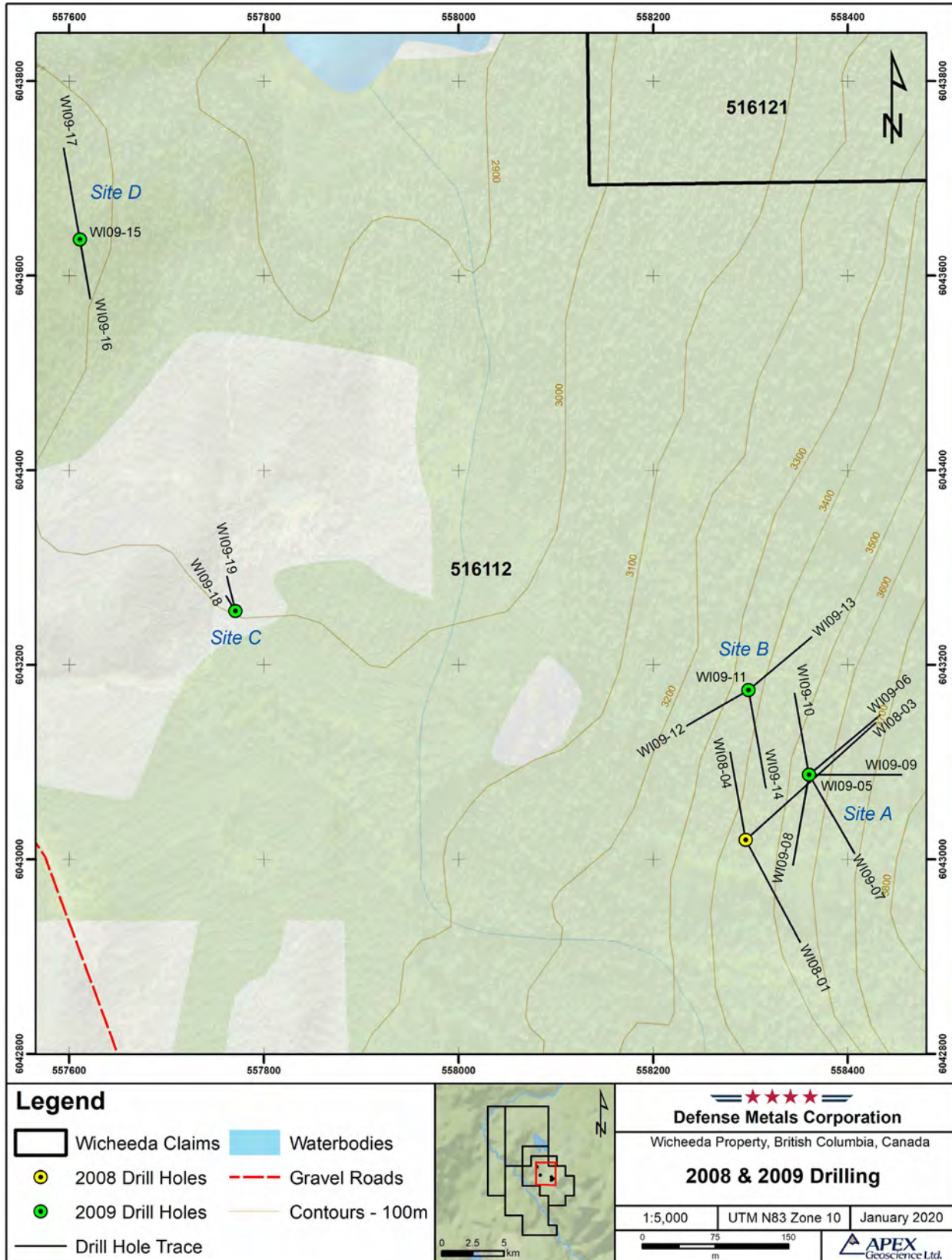
**Table 5.1. 2008-2009 Wicheeda Drill Hole Collars**

Hole	Year	Easting N83z10	Northing N83z10	Elevation (m)	Azimuth	Dip	Hole Depth (m)	Site ID
WI08-01	2008	558295	6043020	1048	152	-50	185.62	-
WI08-02	2008	558295	6043020	1048	0	-90	215.80	-
WI08-03	2008	558295	6043020	1048	48	-54	305.41	-
WI08-04	2008	558295	6043020	1048	350	-55	159.23	-
WI09-05	2009	558360	6043087	1084	0	-90	56.39	A
WI09-06	2009	558360	6043087	1084	50	-50	147.86	A
WI09-07	2009	558360	6043087	1084	150	-50	145.39	A
WI09-08	2009	558360	6043087	1084	190	-50	146.91	A
WI09-09	2009	558360	6043087	1084	90	-50	148.13	A
WI09-10	2009	558360	6043087	1084	350	-55	148.13	A
WI09-11	2009	558298	6043174	1032	0	-90	146.61	B
WI09-12	2009	558298	6043174	1032	240	-60	146.61	B
WI09-13	2009	558298	6043174	1032	50	-55	147.52	B
WI09-14	2009	558298	6043174	1032	170	-45	144.17	B
WI09-15	2009	557611	6043637	940	0	-90	101.80	D
WI09-16	2009	557611	6043637	940	170	-50	95.71	D
WI09-17	2009	557611	6043637	940	350	-50	148.13	D
WI09-18	2009	557771	6043255	930	328	-70	53.95	C
WI09-19	2009	557771	6043255	930	346	-50	57.91	C

In 2010, Spectrum contracted Hendex Exploration Limited of Prince George to conduct a GPS-controlled soil sampling survey over a 5.5 km<sup>2</sup> area measuring approximately 2300 m north-south by 2200 m east-west (Graf, 2011; Figure 5.2). The survey covered the Wicheeda Carbonatite as well as other targets to the northwest that were drilled in 2009. A total of 977 soil samples were collected at stations spaced 50 m apart along east-west lines spaced 100 m apart. The survey data outlined three significant multi-element soil geochemical anomalies on the Project; the Wicheeda Carbonatite soil anomaly, the Southwest soil anomaly and the Northwest soil anomaly. The Wicheeda Carbonatite anomaly determined a strong correlation between cerium, lanthanum, yttrium, niobium, thorium, lead, manganese, molybdenum, iron and phosphorous (Graf, 2011).

In June 2010, Spectrum submitted two composite samples from drill core, a Syenite Breccia (SB) and a Dolomite Carbonatite (DC), to the mineralogy department of SGS Canada Inc. ("SGS") at Lakefield, Ontario, to determine the overall mineral assemblage and textural characteristics in each sample, and the liberation/association of the REE carriers. The mineralogical study of the samples identified dolomite, ankerite and K-feldspar as the dominant minerals and Ce carbonate oxides, monazite and columbite as the main REE minerals. Liberation analysis indicates monazite and cerium carbonate / oxides are well liberated at 67 to 86% in the SB and DC respectively, where the liberation of monazite (79%) and Ce-carbonate/oxides (86%) are higher in DC by 12% than that of the SB composite. The REE grade averaged between 48% to 56% with recoveries of 72% - 92% (SB, coarse fraction) and 85% to 96% (DC, coarse fraction) up to 97% for fine fractions for both composite (Morton and Prout, 2010).

Figure 5.1. 2008 & 2009 Wicheeda Diamond Drilling



In 2011, Bolero Resources Corporation conducted a helicopter-borne radiometric and magnetic gradiometer survey over its vast Carbonatite Syndicate Property that encompassed the Project (Koffyberg and Gilmour, 2012; Figure 5.3). This survey was flown over a portion of the Project and outlined a potentially significant 500 m long by 200 m wide radiometric anomaly inside the southeastern most corner of the claims. There is incomplete soil sample coverage in this area; however, the existing soil sample data indicates that a multi-element geochemical anomaly may extend into this area and is potentially 400 m long. The strongest airborne magnetic anomaly on the Project trends in a northwest direction and is 600 m long by 200 m wide. This anomaly may be the expression of a magnetite-bearing syenites (Bird et al., 2019).

In 2011, Spectrum commissioned SGS to complete a test work program to investigate the direct flotation of rare earth oxide (REO) on samples from Wicheeda Carbonatite. The lab work achieved a concentrate grade of 42% and an average recovery of 83%. Subsequent hydrometallurgical testing in 2012 on a 2 kg sample of the concentrate grading 39.7 % total rare earth oxide (TREO) produced an upgraded and purified precipitate that contained 71% TREO through a process of pre-leaching and roasting (Bulatovic and Imeson, 2011).

In October 2018, Defense Metals collected a 30 tonne surface bulk sample on the Wicheeda Property for a multi-phase program of bench-scale metallurgical test work (Defense Metals, 2019). The sample was submitted for metallurgical testing with SGS Canada. Select head grade assay results for the 30 tonne bulk sample include: 1.77% lanthanum-oxide, 2.34% cerium-oxide, 0.52% neodymium-oxide, and 0.18% praseodymium-oxide which the Company considers potentially economically significant, for a total of 4.81% light rare earth oxide (LREO).

## 5.2 Property History—Academic Studies.

Two academic studies were completed on the Wicheeda Carbonatite in 2014. One study focused on the nature and origin of the deposit; the principal results were:

- the carbonatite comprises a dolomitic core and a thin outer calcitic facies,
- Bastnäsite-(Ce) and subordinate monazite (Ce) are the main REE minerals, and
- the REE mineralization was the product of magmatic hydrothermal fluids which also fenitized the surrounding metasedimentary rocks (Trofanenko et al., 2014).

The other study evaluated the application of portable x-ray fluorescence (XRF) as an exploration tool for REE-enriched carbonatites. It concluded, based on the mineralogy of the Wicheeda carbonatite complex (detectable concentrations of Nb, Ta, La, Ce, Pr, Nd, and Y), that monazite, REE-fluorocarbonates and carbonates, and pyrochlore ( $\pm$  columbite) are prospective indicator minerals for Wicheeda carbonatite-type REE deposits (Mackay and Simandl, 2014).



Figure 5.2. 2010 Soil Sampling

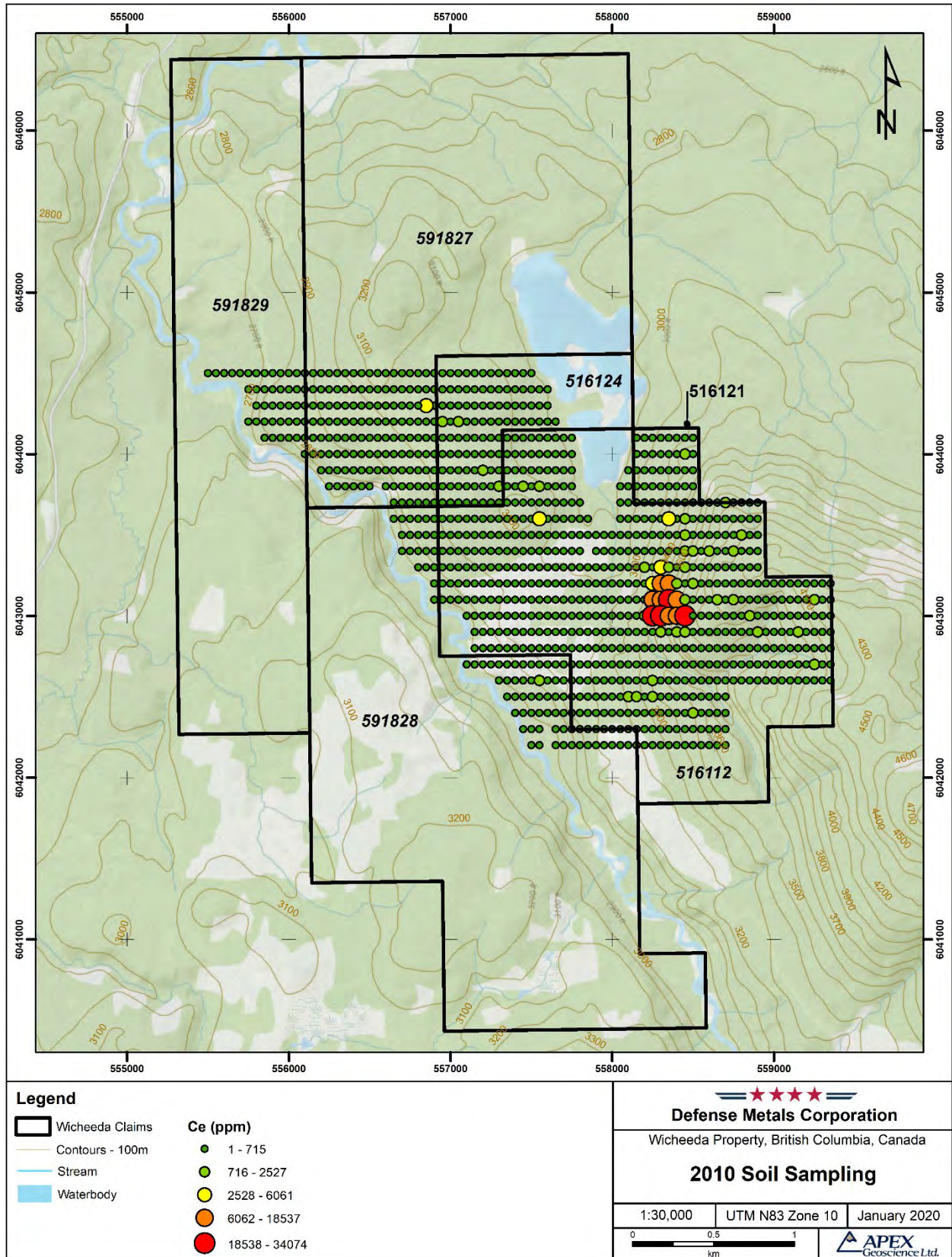
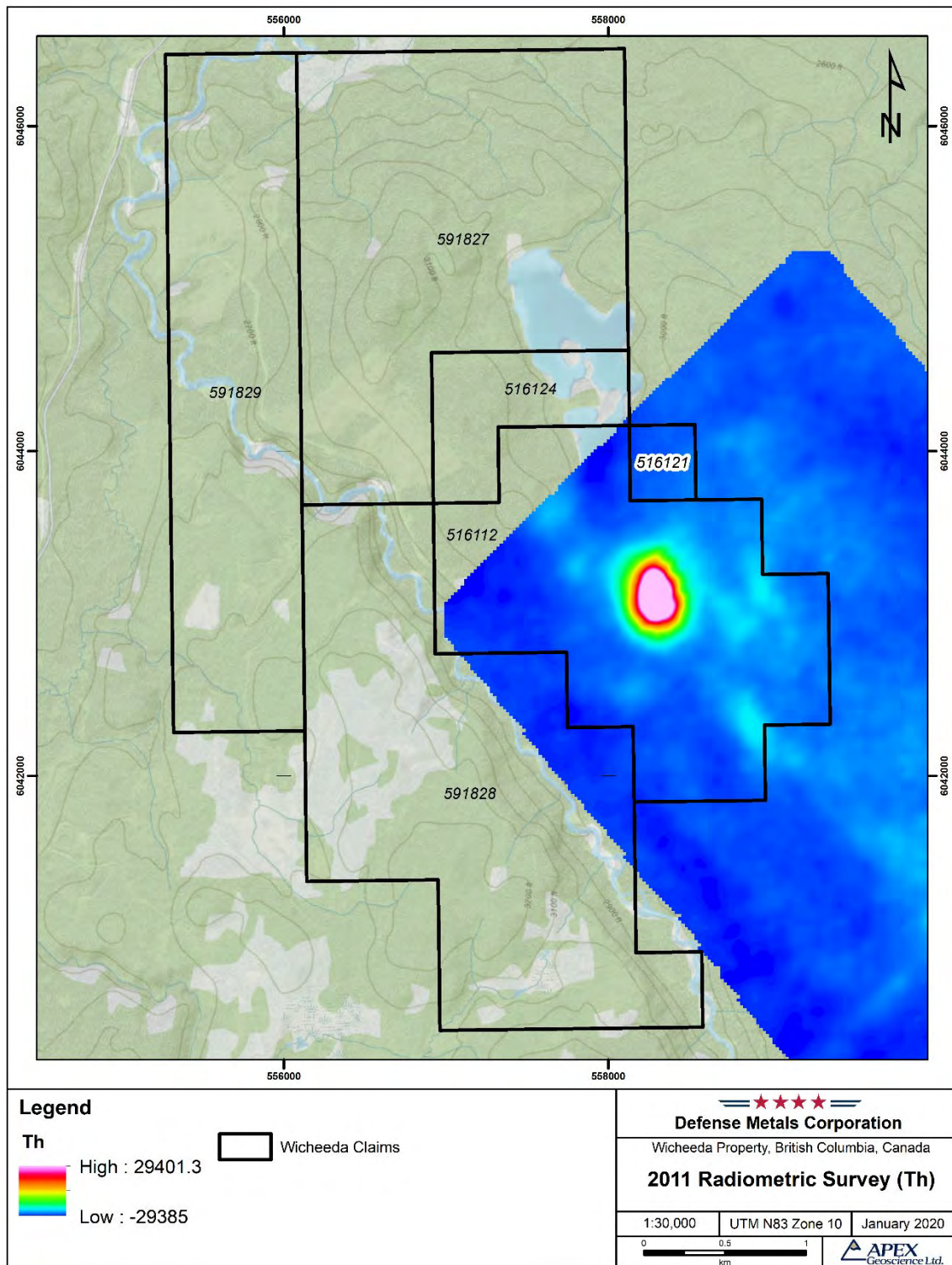




Figure 5.3. 2011 Radiometric Survey



## 6 Geological Setting and Mineralization

### 6.1 Regional Geology

The Wicheeda Carbonatite Complex is located in the Foreland Belt, a morphogeological belt of imbricated and folded miogeoclinal rocks that forms the eastern mountain ranges and foothills of the Canadian Cordillera (Gabrielse et al., 1991). In British Columbia, a small number of carbonatite-related complexes occur. These complexes are typically sub-circular to elongate in plan and commonly have well-developed metasomatic alteration haloes. Many of the intrusions that follow the trend of the Rocky Mountain Trench are Devonian to Mississippian in age. They were subjected to sub-greenschist facies metamorphism during the Columbian orogeny but behaved as inflexible and cohesive bodies during orogenesis and were rotated, tilted and/or transported eastwards in thrust panels (Pell, 1987). Well known carbonatite-alkaline complexes of the Foreland Belt include the Aley, Kechika, Ice River, Bearpaw and Rock Canyon (Pell, 1994).

The regional bedrock mainly consists of limestone, marble, siltstone, argillite and calcareous sedimentary rocks of the upper Cambrian to lower Ordovician Kechika Group. The Kechika Group sedimentary rocks are in fault contact with unassigned, Cambrian to Devonian carbonates, slates and siltstones to the east. To the west, the Kechika Group sedimentary rocks are in fault contact with Upper Proterozoic to Permian Gog Group quartzite rocks and Devonian to Permian unassigned felsic volcanic rocks (Lane, 2009). The Kechika Group lies on top of an erosional surface of uplifted Atan Group. Generally, the strata strike between 120 and 140° with steep dips to the northwest or southeast.

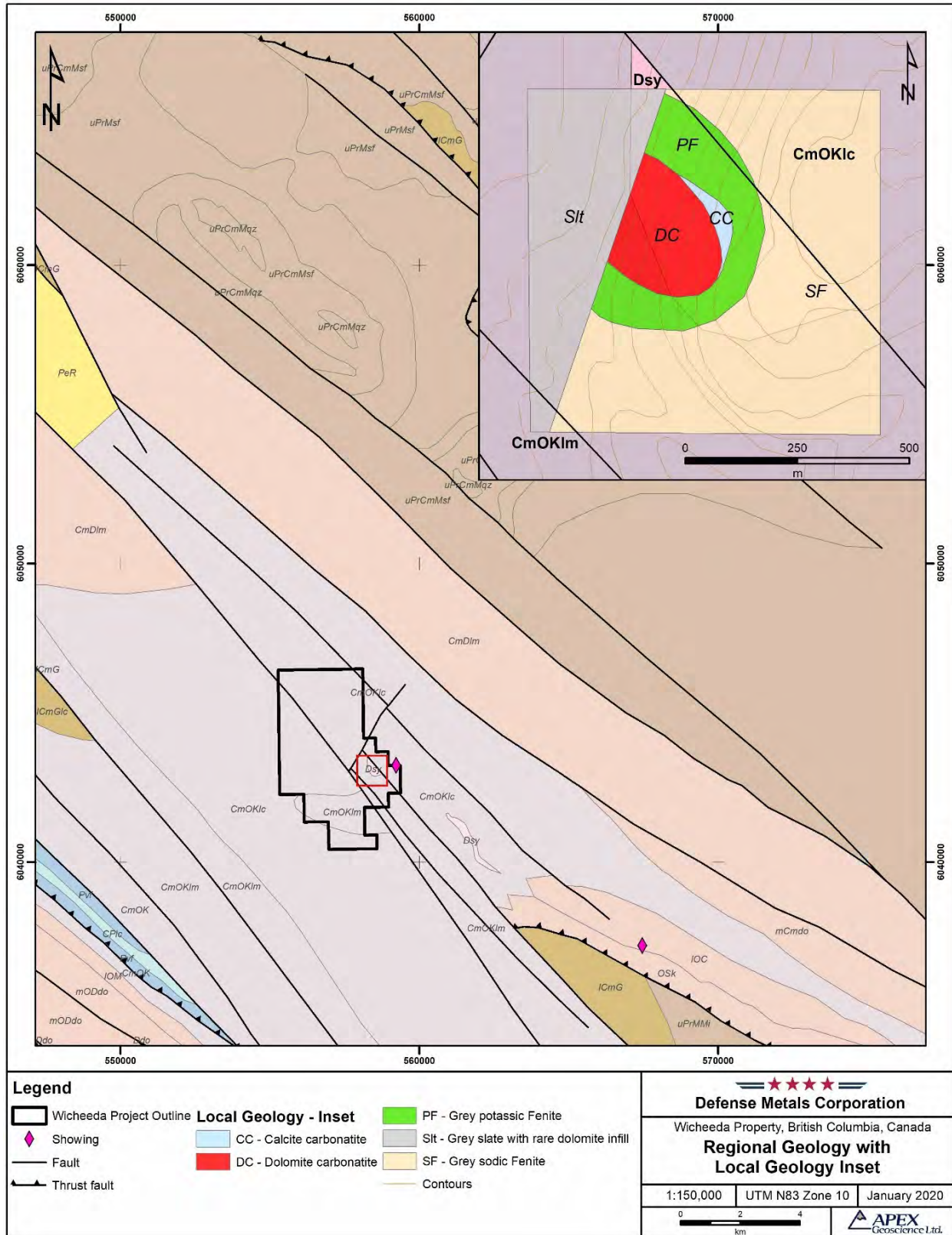
The complex is located within the McGregor Plateau between two dominant faults: the McLeod Lake fault to the west and the Rocky Mountain Trench to the east (Armstrong et al. 1969). The northwest-trending Rocky Mountain Trench which likely follows the Parsnip River valley, a dominant structural and geographical feature, occurs east of the Property. A number of other major northwest trending faults occur in the area.






















The age of carbonatite – alkaline complexes in British Columbia extend over 460 Ma. U-Pb and Th-Pb zircon dating defined three distinct ages of alkaline magmatism; a Neoproterozoic (700-800 Ma), Late Cambrian (~500 Ma) and Upper Devonian to Lower Carboniferous (~340-360 Ma). The Neoproterozoic magmatism corresponds to extensional settings during the initial break-up of the Rodinia supercontinent while the other ages correspond to renewed extensional tectonics (Millonig et al., 2012).

The regional geology of the area was described by Armstrong et al. (1969, McLeod Lake map sheet) and Taylor and Stott (1979, Monkman Pass map sheet). The regional geology map presented in Figure 6.1 is from a 1:250,000 scale digital compilation of the area (Digital Geology Map of British Columbia, BC MEMPR, Open file 2005-2).



Figure 6.1. Regional Geology



<b>Regional Geology</b>	
<b>Paleocene, Reynolds Creek Succession</b>	<b>Cambrian to Devonian</b>
 PeR - conglomerate, coarse clastic sedimentary rocks	 CmDlm - limestone, marble, calcareous sedimentary rocks
<b>Permian</b>	<b>Cambrian to Ordovician, Kechika Group</b>
 Pvf - rhyolite, felsic volcanic rocks	 CmOKlm - limestone, marble, calcareous sedimentary rocks
<b>Carboniferous to Permian</b>	 CmOKlc - limestone, slate, siltstone, argillite
 CPic - limestone, slate, siltstone, argillite	 CmOK - undivided sedimentary rocks
<b>Devonian</b>	<b>Middle Cambrian</b>
 Ddo - dolomitic carbonate rocks	 mCmdo - dolomitic carbonate rocks
 Dsy - syenitic to monzonitic intrusive rocks	<b>Lower Cambrian, Gog Group</b>
<b>Middle Ordovician to Middle Devonian</b>	 ICmGlc - limestone, slate, siltstone, argillite
 mODdo - dolomitic carbonate rocks	 ICmG - undivided sedimentary rocks
<b>Ordovician, Skoki Formation</b>	<b>Neoproterozoic to Cambrian, Misinchinka Group</b>
 OSk - dolomitic carbonate rocks	 uPrCmMqz - quartzite, quartz arenite sedimentary rocks
<b>Lower Ordovician, Chushina Formation</b>	 uPrCmMsf - mudstone, siltstone, shale fine clastic sedimentary rocks
 IOC - limestone, marble, calcareous sedimentary rocks	<b>Neoproterozoic, Misinchinka Group</b>
<b>Lower Ordovician, Monkman Quartzite</b>	 uPrMgs - greenstone, greenschist metamorphic rocks
 IOM - quartzite, quartz arenite sedimentary rocks	 uPrMMi - greenstone, greenschist metamorphic rocks
	 uPrMsf - mudstone, siltstone, shale fine clastic sedimentary rocks



## 6.2 Property Geology

Limited areas of the Wicheeda claim group have been covered by reconnaissance and/or grid-based bedrock mapping (inset Figure 6.1). The REE-enriched carbonatites located on the Property are part of a narrow elongate, south-trending intrusive carbonatite-syenite complex cutting or occupying a structural panel within calcareous siltstones and limestones of the Cambrian to Ordovician Kechika Group. Some of the geological contacts observed in core are intrusive while others are almost certainly structural. The carbonatite complex extends southward from the south end of Wicheeda Lake for approximately 13 km.

Outcrop on a moderately steep, west-facing slope south of Wicheeda Lake, an area that coincides with part of the former 'George' grid, consists of a sequence of interbedded limestone, calcareous argillite and argillite with consistent northwest-trending attitudes and sub-vertical dips (Betmanis, 1987). A small intrusion cuts the sedimentary rocks in the southern part of the grid, just north of 'A' Creek. This feature was mapped as syenite in 1986 by Betmanis (1987), although during a re-evaluation of the area (including trenching) the following year, it was concluded that the intrusion was a carbonatite (Lovang and Meyer, 1987).

Three types of narrow (0.5 to 1.5 m), northwest-trending dykes were also observed in the gridded area, including: a K-feldspar phyric type with a fine-grained albite matrix and abundant Fe-rich biotite; a blue sodalite-rich (as phenocrysts and matrix) type, and; a feldspar and augite-phyric intermediate type with aphanitic groundmass that appears to be the youngest of the three varieties.

Outcrop in the area covered by the former 'Lake' grid is rare, but consists of strongly weathered, medium to coarse-grained calcite carbonatite, a band of fresh, fine-grained calcite carbonatite and related syenite were exposed in trenches (Mader and Greenwood, 1988).

## 6.3 Wicheeda Carbonatite and Mineralization

The Wicheeda Carbonatite is comprised mainly of dolomite carbonatite (Figure 6.1), xenolithic dolomite carbonatite with varieties of matrix to clast-supported fenite breccia where dolomite carbonatite occurs as the dominant matrix component, and minor calcite carbonatite. This carbonatite body intrudes into syenite and minor mafic dykes, limestone and calcareous sedimentary wall rocks. The upper part of the complex consists mainly of dolomite carbonatite, brecciated dolomite carbonatite and lesser calcite carbonatite with minor fenitized limestone, mafic dyke and syenite xenoliths whereas the lower part of the complex is weakly constrained by drilling and mainly consists of xenolithic varieties of brecciated dolomite-carbonatite, fenitized limestone, syenite and country wall rocks.

The geometry of the Wicheeda carbonatite was originally interpreted to be sub-circular in plan (Lovang and Meyer, 1987; Greenwood and Mader, 1988). Subsequent modeling of the carbonatite body following diamond drilling showed a more oblong or lensoid-shape

with a long axis that is approximately north-south (Lane, 2009; 2010), a subvertical dip and a plunge to the northwest. The main carbonatite body was intersected over the extent of 215 m and is in fault contact with unaltered metasedimentary rocks of the Kechika Group on its western edge, and in intrusive contact with fenitized argillaceous limestones of the Kechika Group on its eastern margin (Betmanis, 1987). As defined by drilling, the carbonatite body stretches over 360 m along a north-south strike, 160 m east-west width and up to 250 m deep in the central down-dip portion of the body.

In their study of the Wicheeda Carbonatite on the Wicheeda Project, Trofanenko et al. (2014) proposed a preliminary model in which the carbonatite magma exsolved a fluid which fenitized the host metasediments near the intrusion to potassic fenite and heated formational water distal to the intrusion, altering the metasedimentary rocks to sodic fenite. The REE were concentrated by magmatic hydrothermal fluids, which partially dissolved the carbonatite, altered the dolomite, and lead to deposition of compositionally zoned dolomite and later bastnäsité-(Ce) and monazite-(Ce) in veins and vugs in response to cooling and an increase in pH.

REE mineralization at the Wicheeda Carbonatite is zoned into high, moderate and low grade. High REE mineralization is directly related to dolomite carbonatite, xenolithic dolomite carbonatite where country rock xenoliths are less than 20%, and around mafic dyke xenoliths where columbite and pyrochlore is observed. Moderate REE mineralization is typically associated with mixed zones where xenolithic dolomite carbonatite, fenitized limestone, syenite and mafic dyke xenoliths exceed 30% and less than 70%. These mixed zones have the potential to add size to the deposit with more modest grades. Low REE mineralization is typically encountered in fresh and fenitized limestone, calcareous sedimentary rocks, syenite and fresh, weakly brecciated mafic xenoliths.

Field observation of REE mineralization includes disseminated to cloty dark grey-bluish columbite, disseminated, inclusion and fractured pyrochlore, rare fluorite and sphene / rutile and a combination of bastnäsité-parasite and monazite observed as aggregates and patches in veins and vugs. Vein-type mineralization was commonly noted in amorphous to coarse-grained dolomite-carbonate intersecting earlier fine-grained, dolomite carbonatite with disseminated fine-grained REE mineralization and proximal to strongly altered – brecciated mafic dyke xenoliths. Vein-type mineralization range in width from few centimeters to over a meter wide. On the other hand, vuggy and disseminated REE mineralization was noted in all lithologies, except the fresh limestone and calcareous sedimentary rocks, in variable percentages throughout the drill core.

## 7 Exploration

During 2019, Defense Metals retained APEX Geoscience Ltd. to conduct a diamond drilling exploration program at the Wicheeda Property. The program directive was to test the extent of the Wicheeda deposit where it is still open, and further delineate the relatively higher-grade near surface dolomite unit. Thirteen NQ diameter diamond drill holes, totalling 2007.5 m, were completed from 3 different drill pads, testing the southern, central and northern zones of the carbonatite (Table 7.1, Figure 7.1). All drill holes intersected variable lengths of significant REE mineralization, mainly in the carbonatite dolomite body and, to a lesser extent, in the lithologies enveloping the carbonatite deposit. The 2019 exploration program expanded the main carbonatite body to the north by 120 m along strike to a total of 360 m from 240 m defined by previous exploration drilling.

**Table 7.1. 2019 Wicheeda Diamond Drill Hole Collars**

Hole	East UTM N83z10	North UTM N83z10	Pad No.	Elevation (m)	Az	Dip	Hole Depth (m)	Core Size	Drill Company	Geologist
WI19-20	558299	6043020	1	1051	230	-55	136.4	NQ	Falcon Drilling	MA
WI19-21	558299	6043020	1	1051	290	-55	179.35	NQ	Falcon Drilling	MA
WI19-22	558406	6043064	2	1124	0	-90	127	NQ	Falcon Drilling	MA
WI19-23	558406	6043064	2	1124	100	-45	126	NQ	Falcon Drilling	MA
WI19-24	558406	6043064	2	1124	140	-45	122.95	NQ	Falcon Drilling	MA
WI19-25	558406	6043064	2	1124	185	-45	175.65	NQ	Falcon Drilling	MA
WI19-26	558406	6043064	2	1124	295	-65	156.3	NQ	Falcon Drilling	MA
WI19-27	558406	6043064	2	1124	10	-45	139.85	NQ	Falcon Drilling	MA
WI19-28	558406	6043064	2	1124	45	-45	117.15	NQ	Falcon Drilling	MA
WI19-29	558396	6043254	3	1082	190	-45	184.05	NQ	Falcon Drilling	MA
WI19-30	558396	6043254	3	1082	250	-55	179.5	NQ	Falcon Drilling	MA
WI19-31	558396	6043254	3	1082	275	-55	138.5	NQ	Falcon Drilling	MA
WI19-32	558396	6043254	3	1082	300	-55	224.7	NQ	Falcon Drilling	MA

The drilling program was supervised by APEX personnel. APEX also provided geologists and camp support personnel. Falcon Drilling Ltd. of Prince George, BC was contracted to execute the drilling. Pad building was completed by KayJay Solutions of Terrace, BC, and first aid services were provided by CICC Camp Services of Prince George, BC. The 2019 Wicheeda drilling program was completed between July 28<sup>th</sup> and October 22<sup>nd</sup>, 2019 at a total cost of \$805,526.83. A complete breakdown of the 2019 expenditures and personnel involved with the program are presented in Appendix 1. Drill collars and geotechnical logs are presented in Appendix 2. The lithology, alteration and weathering, structure, and mineralization logs are presented in Appendix 3. Full analytical results and copies of the laboratory certificates are presented in Appendix 4.

Prior to drilling, drill hole collars and drill sites were located by handheld GPS. Upon completion of each 3 metre drilling run, core was removed from the core tube and placed

directly into four row NQ-sized wooden core boxes with standard 1.2 m length. The core boxes were then sealed with wooden lids, strapped tightly and transported by helicopter to the gravel pit camp site for logging. The core was then carefully reconstructed, geotechnical data were recorded (depth markers, core recovery, rock quality designation (RQD), specific gravity, scintillometer), geological observations were recorded (lithology, alteration and weathering, structure, veining, mineralization), core photos were taken and sample intervals were marked for analysis. Once sampled, the core was cut, placed in a sealed poly bags and shipped to the analyzing laboratory. Down-hole survey directional data was collected using a Reflex EZ-Shot instrument.

## 7.1 2019 Diamond Drilling Results

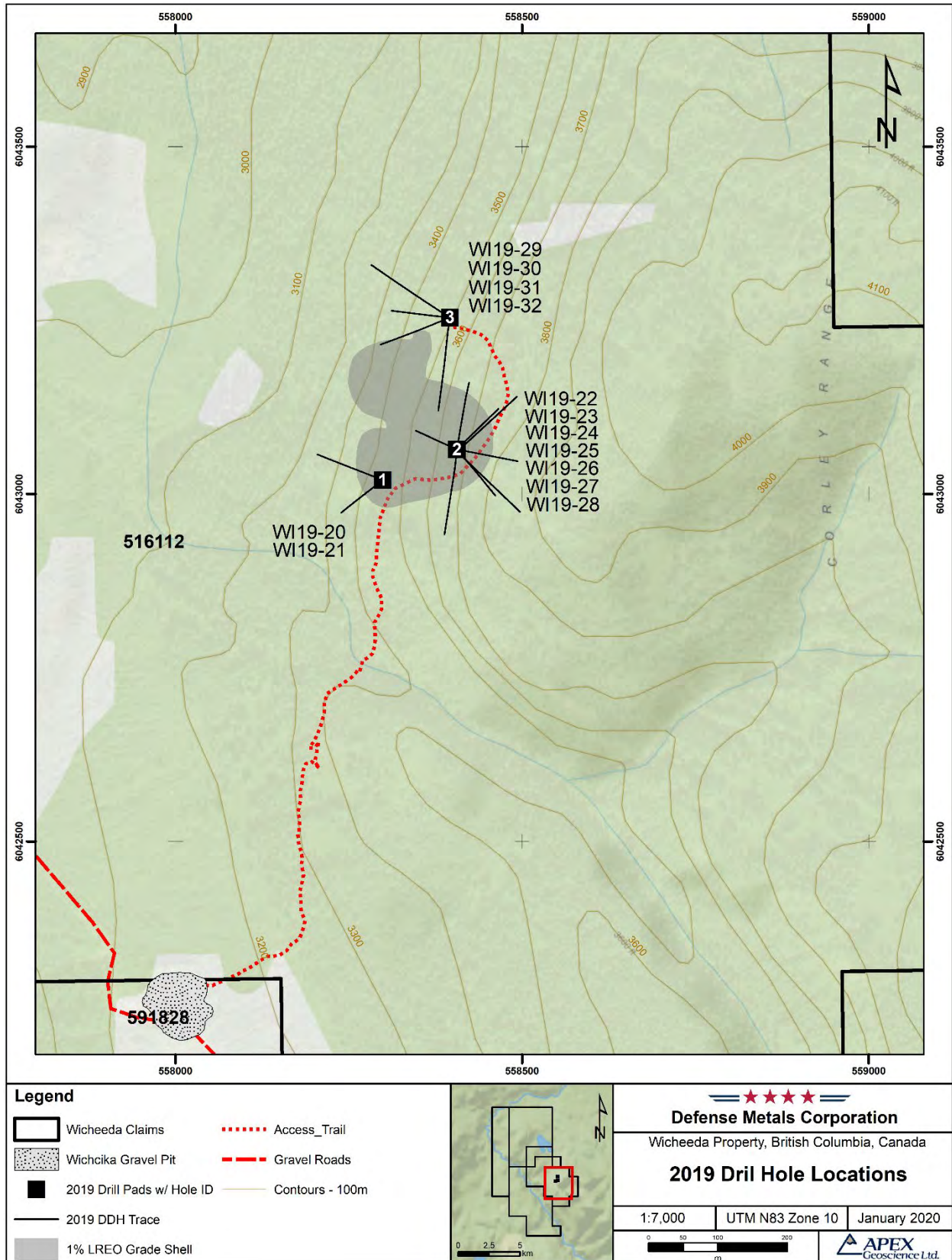
All 13 drill holes intersected significant intercepts of REE-mineralized dolomite carbonatite. Drilling at the northern extent of the deposit delineated and expanded the carbonatite body 120 m, representing a 50% increase in the strike length of the Wicheeda Carbonatite. The last hole (WI19-32) of the drilling program intersected a 130 m interval of REE-mineralized dolomite carbonatite and, as a result, the deposit remains open to the north. Infill drilling southeast of the deposit expanded the deposit 40 m beyond the existing limit and delineation drilling in the southwest area of the deposit extended the limit of the dolomite carbonatite a further 25 m. Table 7.1 outlines significant drill intercepts from the 2019 drilling program.

Two diamond drill holes (WI19-20 and WI19-21) were collared at the 2018 Wicheeda bulk sample site (Pad 1). Drill hole WI19-20 (230 Az, -55 dip), drilled southwestward, intersected REE mineralized carbonatite from start of sampling at 1.68 m to a downhole depth of 64.2 m, with medium to coarse-grained REE minerals (monazite and bastnäsité-parasite) forming millimetre to centimeter-scale aggregates interstitial to dolomite. Assay results returned 4.32 % LREO over a drill core interval of 64 m. Drill hole WI19-21 (290 Az, -55 dip), drilled northwest, intersected REE-mineralized dolomite carbonatite containing visible REE mineralization from 3.9 m to a downhole depth of 114 m, with aggregates of medium to coarse-grained REE minerals (monazite and bastnäsité-parasite) observed throughout the interval. Assay results returned 3.26 % LREO over a 110 m interval from surface.

Drill hole WI19-22 (00 Az, -90 dip) was collared at Pad 2, northeast of Pad 1 at higher elevation, and is part of a cluster of seven holes (WI19-22 to WI19-28) designed to increase the confidence of the REE mineralized dolomite-carbonatite within the deposit. Hole WI19-22, a vertical hole, intersected REE-mineralized dolomite carbonatite from a depth of 7.0 m to a depth of 113 m with medium- to coarse- grained REE minerals forming millimetre to centimeter scale aggregates interstitial to dolomite. Hole WI19-22 assayed 2.71 % LREO over a drill core interval of 106 m.



Figure 7.1. 2019 Wicheeda Drill Hole Locations



**Table 7.2. 2019 Wicheeda Significant Drill Intercepts**

Hole ID	From (m)	To (m)	Interval (m)	Ce <sub>2</sub> O <sub>3</sub> (%)	La <sub>2</sub> O <sub>3</sub> (%)	Nd <sub>2</sub> O <sub>3</sub> (%)	Pr <sub>2</sub> O <sub>3</sub> (%)	Sm <sub>2</sub> O <sub>3</sub> (%)	LREO (%)
WI19-20	4.6	68.8	64.2	2.1	1.54	0.46	0.18	0.04	4.32
WI19-21	3.9	114	110.1	1.57	1.16	0.36	0.14	0.04	3.26
WI19-22	7	113	106	1.31	0.98	0.28	0.11	0.03	2.71
WI19-23	4	109	105	1.49	1.14	0.34	0.13	0.03	3.12
WI19-24	2.9	83	80.1	1.18	0.83	0.29	0.1	0.03	2.43
WI19-25	1.1	143.4	142.3	1.08	0.78	0.24	0.09	0.03	2.22
<i>including</i>	1.1	25	23.9	1.89	1.42	0.39	0.14	0.04	3.87
<i>and</i>	60	83	23	1.9	1.42	0.43	0.15	0.04	3.93
WI19-26	1.8	128	126.2	1.34	1.07	0.29	0.1	0.03	2.82
<i>including</i>	32	80	48	1.99	1.61	0.42	0.15	0.04	4.21
WI19-27	2	120.3	118.3	1.22	0.92	0.27	0.1	0.03	2.54
WI19-28	3.2	72.6	69.5	1.17	0.9	0.27	0.1	0.03	2.46
WI19-29	73	162	89	1.44	1.07	0.35	0.12	0.04	3.01
WI19-30	47	177.8	130.8	1.24	0.91	0.31	0.11	0.03	2.59
<i>including</i>	47	74	27	2.11	1.59	0.5	0.18	0.05	4.43
WI19-31	55.7	138.5	82.9	2.08	1.6	0.51	0.19	0.05	4.43
<i>including</i>	64	97	33	2.58	1.96	0.64	0.23	0.06	5.47
WI19-32	86	114	28	1.25	1.01	0.3	0.11	0.03	2.71
<i>and</i>	142	217	75	1.74	1.33	0.37	0.14	0.04	3.63
<i>including</i>	151	209	58	1.92	1.49	0.4	0.16	0.04	4.01

Drill hole WI19-23 (100 Az, -45 dip) was drilled eastward and assay results returned an average grade of 3.12% LREO over an interval of 105 m, expanding the eastern drill-defined edge of the deposit a distance of 40 m beyond the limit of the previous model. Significantly, much of the WI19-23 mineralized intercept (a 39 m core interval) also occurs inside the 2019 Lerchs-Grossman (LG) pit shell within rocks previously defined as waste.

Drill hole WI19-24 (140 Az, -45 dip) was drilled southeastward. The drill hole intersected REE-mineralized carbonatite containing REE mineralization from the start of sampling at 2.9 m to a downhole depth of 83 m, and returned an average grade of 2.43% LREO over 81 m. This hole modestly expanded the eastern drill-defined edge of the deposit a distance of 8.0 m and provided an additional pierce point of the carbonatite envelope.

Drill hole WI19-25 (185 Az, -45 dip) was drilled southeastward. It intersected REE-mineralized dolomite carbonatite containing REE mineralization from the start of sampling at 1.1 m to a downhole depth of 143.4 m. Assay results returned an average grade of 2.22% LREO over a 142.3 m interval, including 3.87% LREO over 23.9 m and 3.93% LREO over 23 m. This hole have also expanded the eastern drill-defined edge of the deposit and provided an additional pierce point of the carbonatite envelope.

Drill hole WI19-26 (295 Az, -65 dip) was drilled southwestward. It has intersected REE-mineralized dolomite carbonatite containing REE mineralization from the start of sampling at 1.8 m to a downhole depth of 128 m. Assay results returned an average grade of 2.82% LREO over 126.2 m interval including 4.21% LREO over 48.0 m.

Drill hole WI19-27 (10 Az, -45 dip) was drilled westward. It intersected REE-mineralized dolomite carbonatite containing REE mineralization from the start of sampling at 2.0 m to a downhole depth of 120.3 m. Assay results returned an average grade of 2.54% LREO over an interval of 118.3 m.

The last drill hole on Pad 2 was drill hole WI19-28 (45 Az, -45 dip). This definition drill hole was designed to cut through the northeastern contact of the dolomite-carbonatite. Assays returned values of 2.46% LREE over a drill core interval of 69.5 m.

Four diamond drill holes were collared from Pad 3 to test the potential of REE-mineralized dolomite carbonatite zones beyond the limit of the previous block model to the north. Drill hole WI19-29 (190 Az, -45 dip) drilled southward and returned assays values of 3.01% LREO over a drill core interval of 89 m. This hole successfully expanded the REE-mineralized dolomite carbonate a distance of 45 m.

Drill hole WI19-30 (250 Az, -55 dip) was drilled westward and intersected a broad zone of mineralization returning 2.59% LREO over an interval of 130.8 m, including a 4.43% LREO over an interval of 27 m.

Drill hole WI19-31 (275 Az, -55 dip) was drilled northwestward and due to technical challenges, the hole was terminated in mineralization at a downhole depth of 138.5 m. Assay values returned 4.43% LREO over an interval of 83 m, including a 5.47% LREO over an interval of 33 m.

Drill hole WI19-32 (300 Az, -55 dip) drilled northwestward and was the final hole of the 2019 resource definition program. This hole returned 4.01% LREO over an interval of 58 m, within a broader zone of mineralization assaying 3.63% LREO over an interval of 75 m, in addition to an upper mineralized intercept assaying 2.71 LREO over a 28 m interval.

Figures 7.2 to 7.5 show the 2019 diamond drill holes and highlight significant mineralization.



Figure 7.2. 2019 Wicheeda Drilling Plan Map

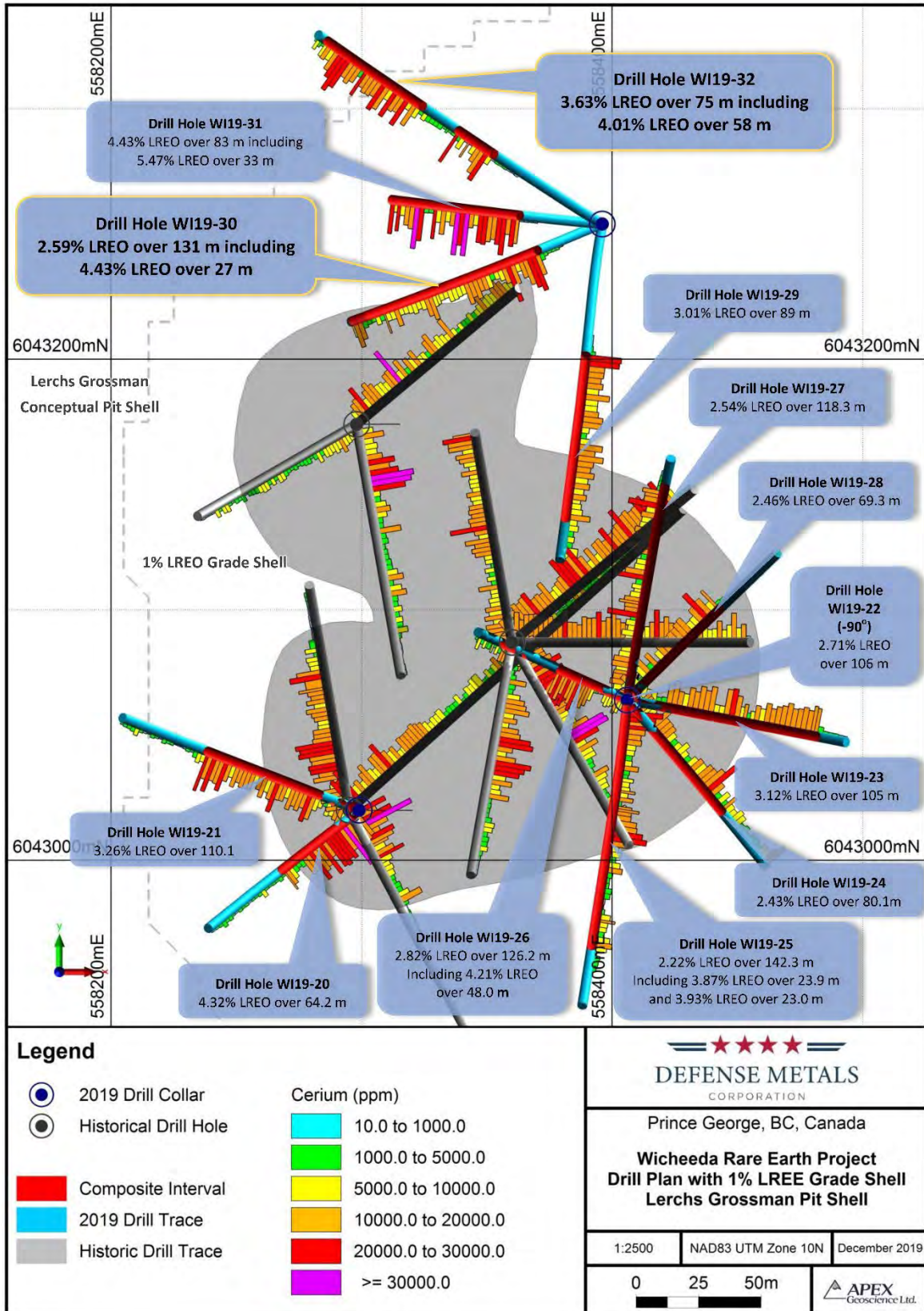




Figure 7.3. 2019 Wicheeda Drilling – WI19-20 & WI19-21

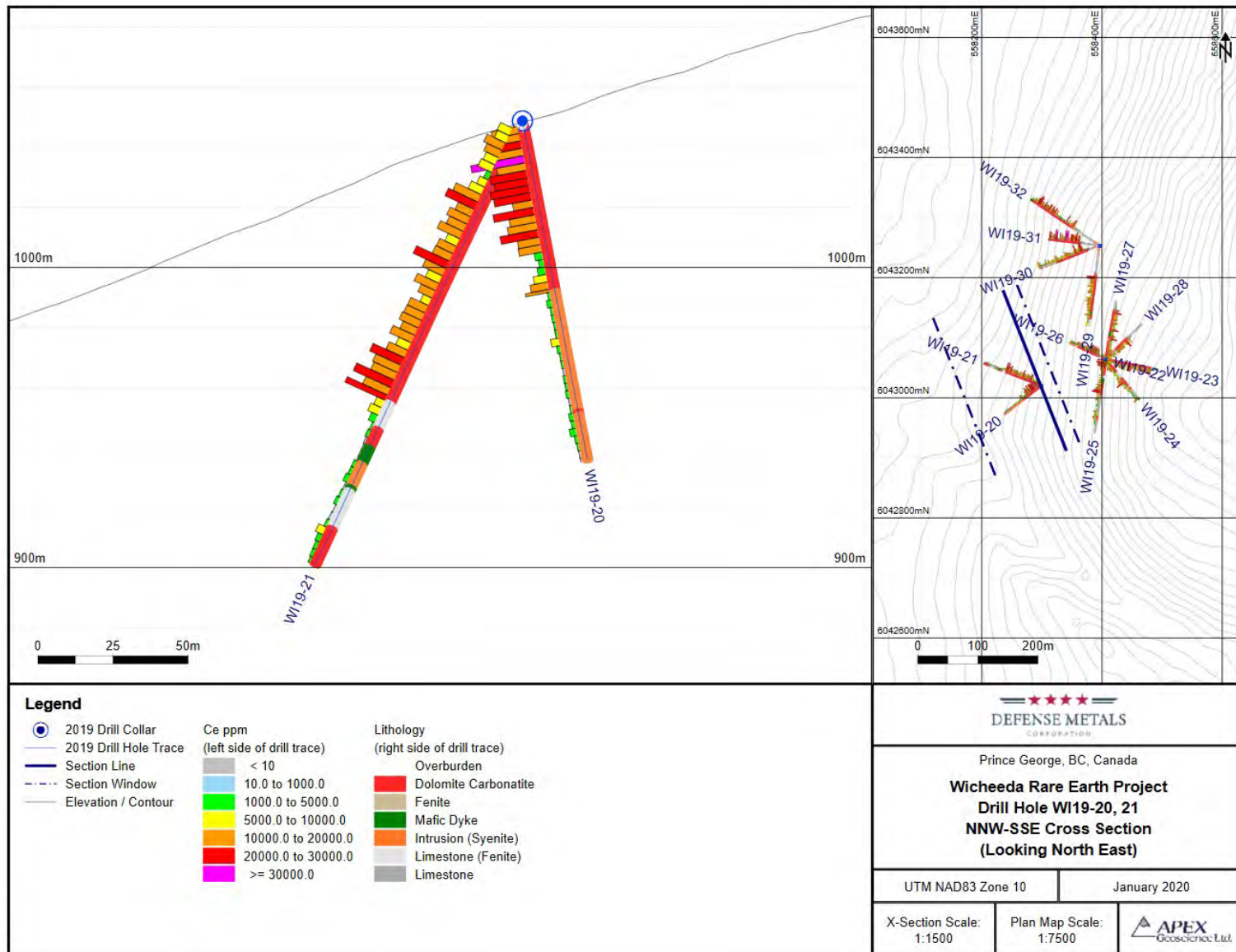


Figure 7.4. 2019 Wicheeda Drilling – WI19-22 – WI19-28

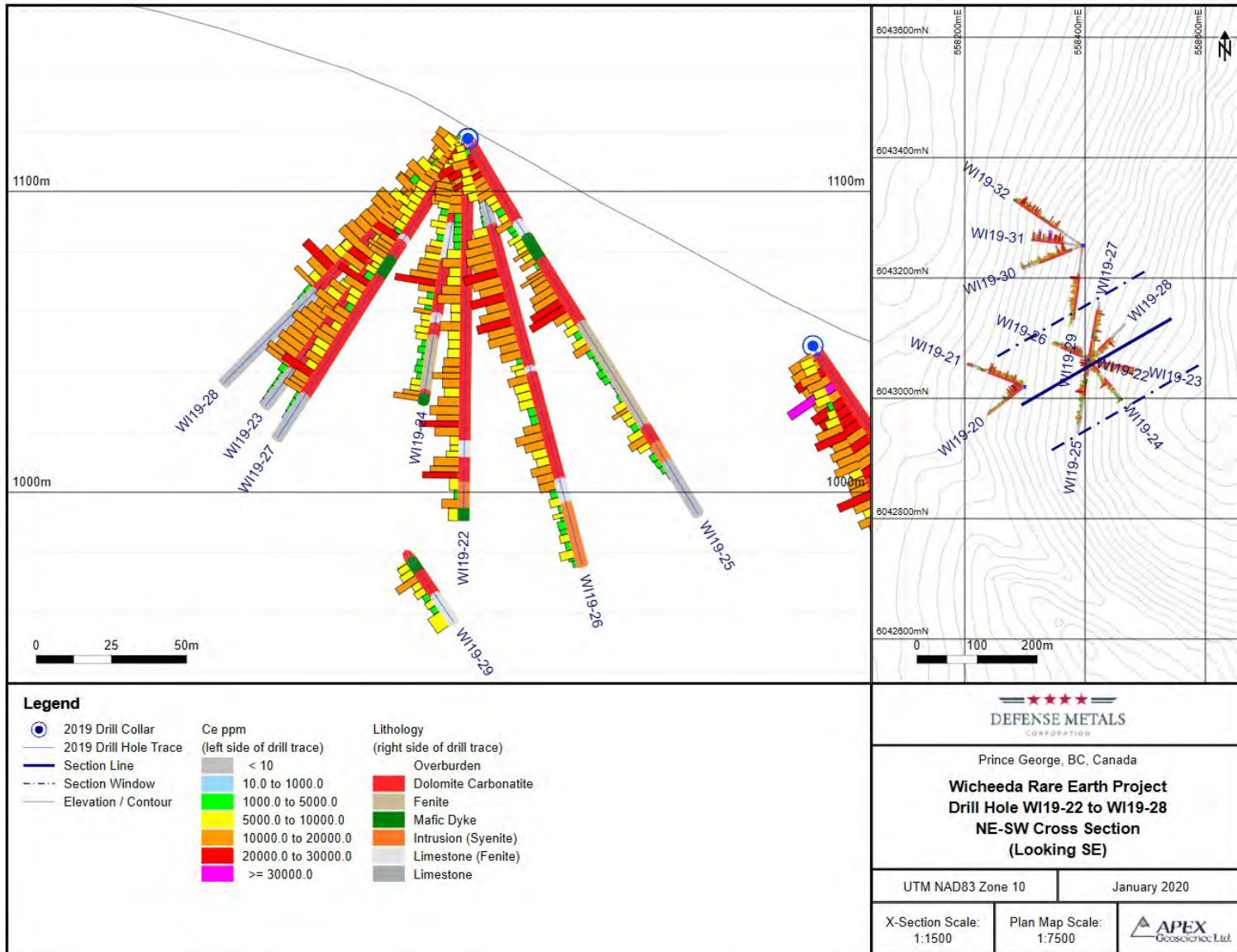
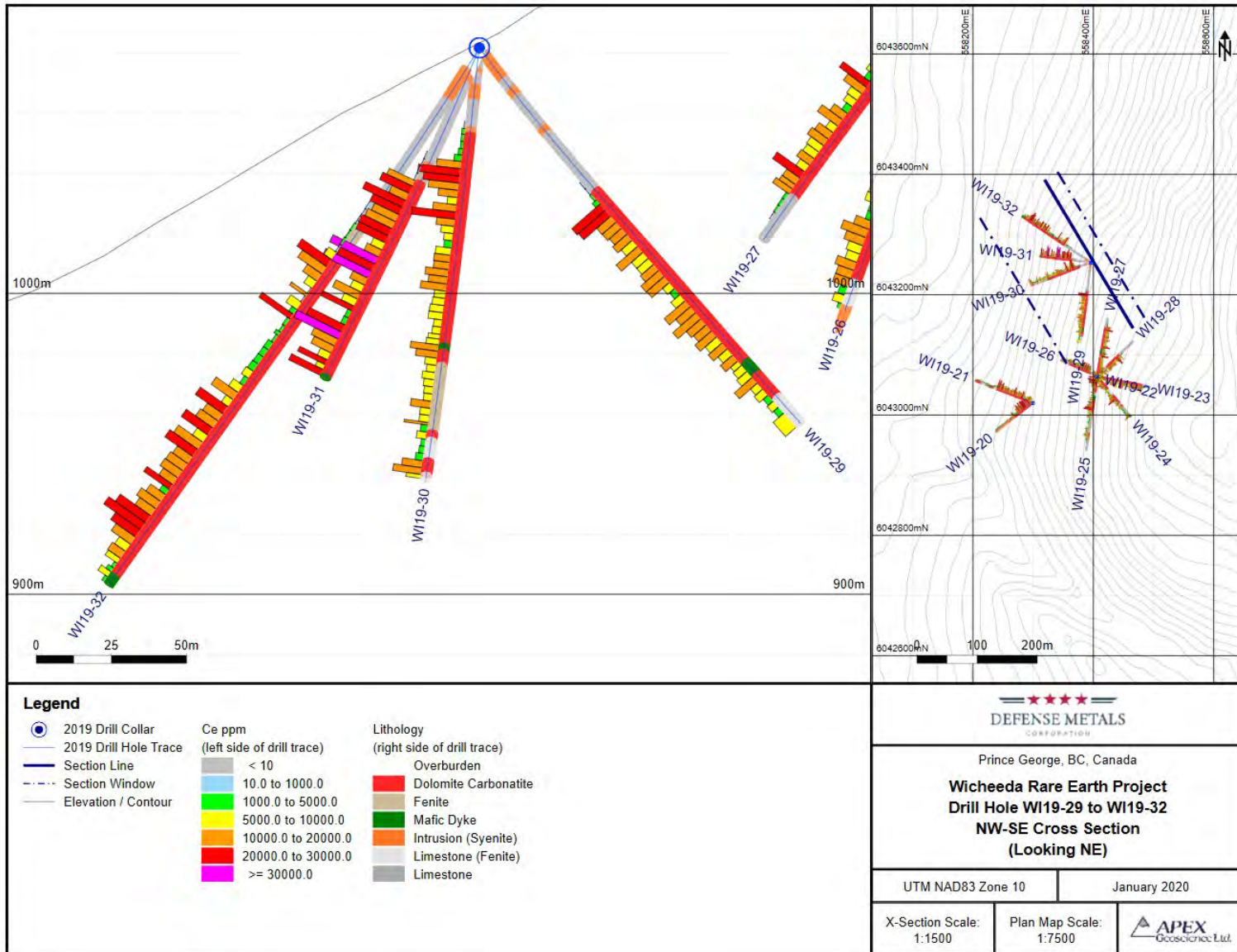


Figure 7.5. 2019 Wicheeda Drilling – WI19-29 – WI 19-32





## 8 Sample Preparation, Analyses and Security

### 8.1 Sample Collection and Security

A total of 717 samples were collected and sent for analysis, including 145 QA/QC samples. Sample intervals were typically between 1 and 3 m. Due to poor core recovery, one sample measured 7.05 m hole length; however the actual core length was 1.85 m. Sample intervals were marked out and tagged by APEX geologists, and the core was then photographed. Standard, blank and duplicate samples were inserted at regular intervals in the sample sequence.

Drill core samples were sawed in half longitudinally using a diamond bladed core saw. For each sample, one half core was sent for analysis and the other was left in the box. Duplicate samples were cut into quarters, where one quarter of the core was used as the “original” sample and the other quarter was used as the “duplicate” sample. The remaining half core was left in the box.

Drill core samples were placed into labelled plastic sample bags along with a sample tag inscribed with the unique sample number. The samples, including requisite QA/QC samples, were placed into woven poly (rice) bags for shipping to the analyzing laboratory. Cable ties were used to securely close the rice bags. Samples were transported by APEX personnel to a shipping company in Prince George, BC. Samples were then shipped via ground service to ALS Minerals (“ALS”) laboratory in Kamloops, British Columbia for preparation. Upon receiving the samples, the laboratory sorted and checked the samples received against the sample submission form.

The authors did not monitor the drill core samples at all times during transport; however, the sealed rice bags with unique identifiers were intact when received by ALS. The authors have no reason to believe that the security of the samples was compromised in any way during transport or once they entered the ALS chain of custody.

### 8.2 Sample Preparation and Analysis

Once received by ALS, the drill core samples were logged in to the ALS computerized tracking system, assigned bar code labels. The samples were then air dried overnight or oven dried to a maximum of 120°C. The samples were then weighed, crushed to better than 70% passing 2 mm, and the whole sample homogenized before taking the final split for the pulp. Once the samples were homogenized, a 250 g split was selected to be pulverized to better than 85% passing 75 microns. The prepped samples were then shipped to the ALS facility in North Vancouver, British Columbia, for analysis for high grade REE. The samples were analyzed using lithium metaborate fusion with an ICP/MS finish (ALS code ME-MS81h).

ALS is an ISO 9001:2015 certified laboratory and has received ISO/IEC 17025:2017 accreditation from the Standards Council of Canada (SCC).

### 8.3 Quality Assurance – Quality Control

Quality assurance and quality control (QA/QC) measures at ALS include routine screentests to verify crushing and pulverizing efficiency, sample preparation duplicates (every 50 samples), and analytical quality controls (blanks, standards, and duplicates). Quality control samples are inserted with each analytical run, with the minimum number of QC samples dependant on the rack size specific to the chosen analytical method. Results for quality control samples that fall beyond the established limits are automatically red-flagged for serious failures and yellow-flagged for borderline results. Every batch of samples is subject to a dual approval and review process, both by the individual analyst and the Department Manager, before final approval and certification. ALS North Vancouver is certified with ISO/IEC 17025:2017 and ISO 9001:2015 accreditation from the Standards Council of Canada.

The QA/QC measures employed by APEX geologist comprised inserting field standards, blanks and duplicate samples. Analytical standards were inserted into the sample stream to verify the accuracy of the laboratory analysis. Barren coarse material was used for coarse “blank” samples to monitor potential contamination during the sample preparation procedure. Duplicate samples were collected to assess the repeatability of individual analytical values. QA/QC samples were inserted at a rate of approximately 1 standard, blank or duplicate per 20 samples.

The standards, blanks and duplicates were assayed for Nd, Ce, La, and Pr. No significant QA/QC issues were detected during review of the diamond drilling data.

#### *Standards*

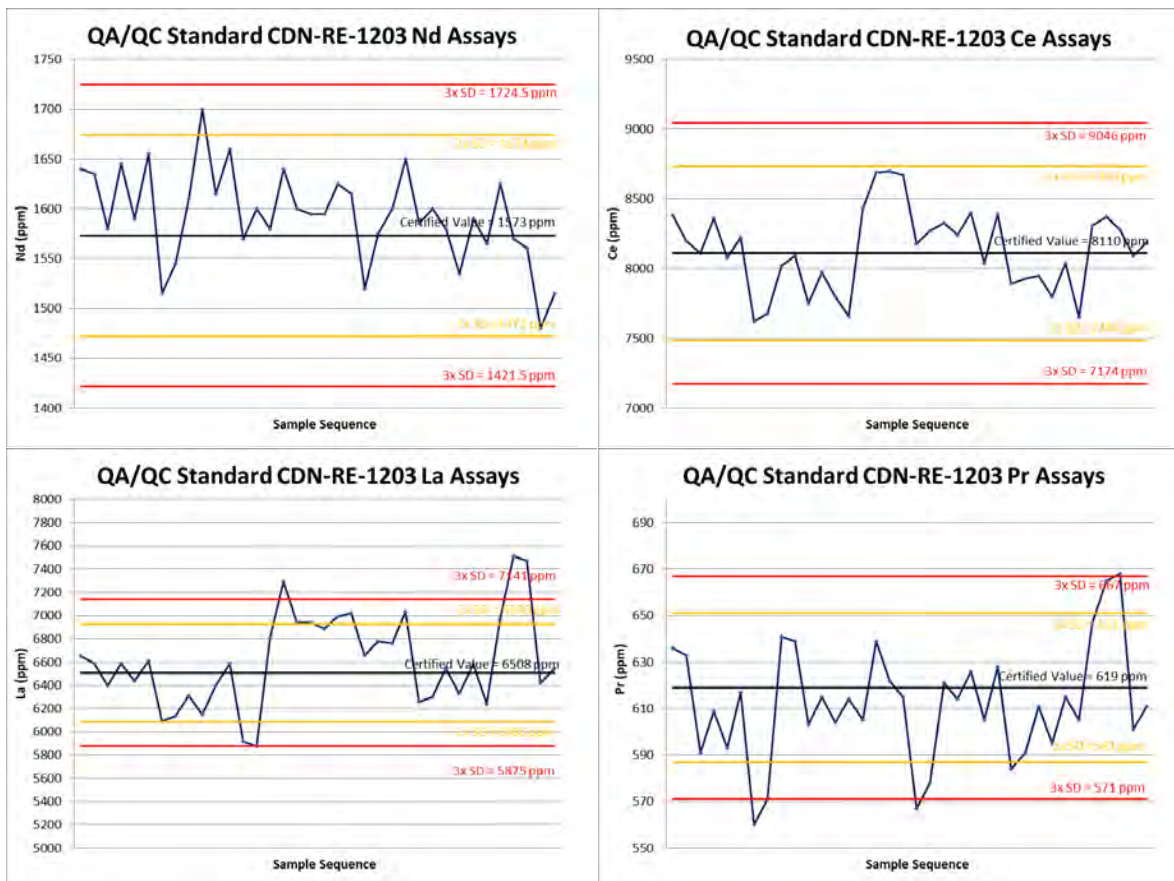
Analytical standards were inserted into the sample stream to verify the accuracy of the laboratory analysis. CDN Resource Laboratories CDN-RE-1203 reference material was selected for the 2019 diamond drilling program. A total of 36 standards were inserted into the sample stream. QA/QC summary charts showing the measured values for each standard, in addition to the certified value, and the second and third “between laboratory” standard deviation for Nd, Ce, La and Pr are presented in Figure 8.1.

Each standard has an accepted concentration as well as known “between laboratory” standard deviations or expected variability. There are two general industry criteria employed by which standards are assigned a “pass” or “reviewable” status. First, a “reviewable” standard is defined as any standard occurring anywhere in a drill hole returning greater than three standard deviations (>3SD) above or below the accepted value for an element. Second, if two or more consecutive standards from the same batch return values greater than two standard deviations (>2SD above or below the accepted value on the same side of the mean for at least one element, they are classified as “reviewable”. QA/QC samples falling outside established limits are flagged and subject to review and possibly re-analysis, along with the 10 preceding and succeeding samples.

Assay results show all Nd assay were within the acceptable standard deviation from the certified value (1573 ppm  $\pm$  151.5 ppm), and all Ce assay results were within the acceptable standard deviation for the certified value (8110 ppm  $\pm$  936 ppm). Three La result fell outside of the acceptable standard deviation (certified value; 6508 ppm  $\pm$  633 ppm), and three Pr assays fell outside of the acceptable standard deviation from certified value (619 ppm  $\pm$  48 ppm).

As part of their internal QA/QC program, ALS completed routine re-analysis of internal standards to monitor precision. ALS analyzed a total of 49 standards using four standards (AMIS0185, OREAS 146, OREAS 101b and SY-4).

Figure 8.1. QA/QC Analytical Standards (Nd, Ce, La, Pr)

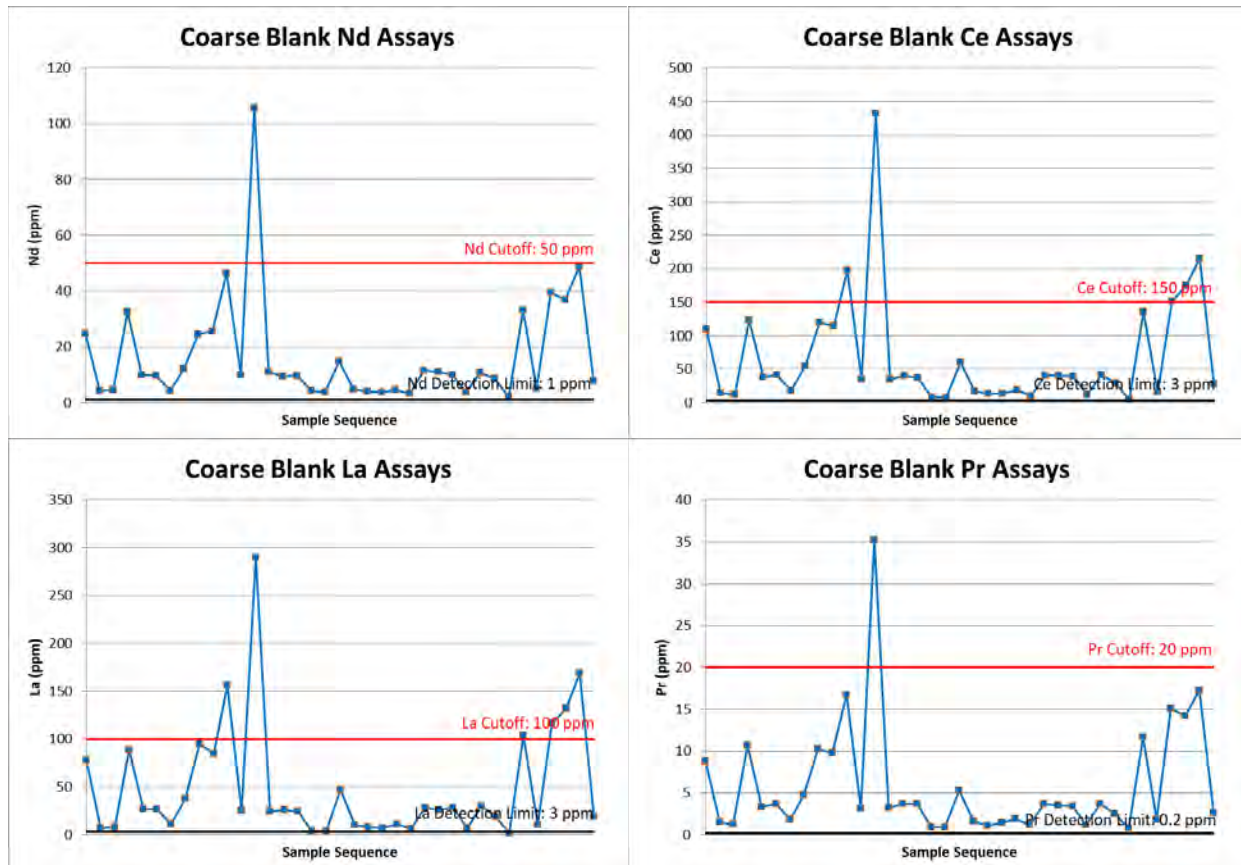


**Blanks**

Coarse blank samples were inserted into the sample stream to check for contamination during the sample preparation procedures. Analytical Solutions Ltd. coarse silica blanks were used, sourced from Carboniferous sedimentary rocks of the Maritimes Basin in New Brunswick. Of 37 blanks analyzed, only one sample exceeded the Nd cut-off value of 50 ppm, while three Ce assays exceeded the cut-off value of 150 ppm. Five La results exceeded the cut-off value of 100 ppm, and 1 Pr assay exceeded the cut-off value of 20 ppm. QA/QC summary charts for the blanks are presented in Figure 8.2.

As part of their internal QA/QC program, ALS completed routine re-analysis of blank samples to monitor precision. ALS analyzed a total of 25 blanks.

**Figure 8.2. QA/QC Blank Samples (Nd, Ce, La, Pr)**



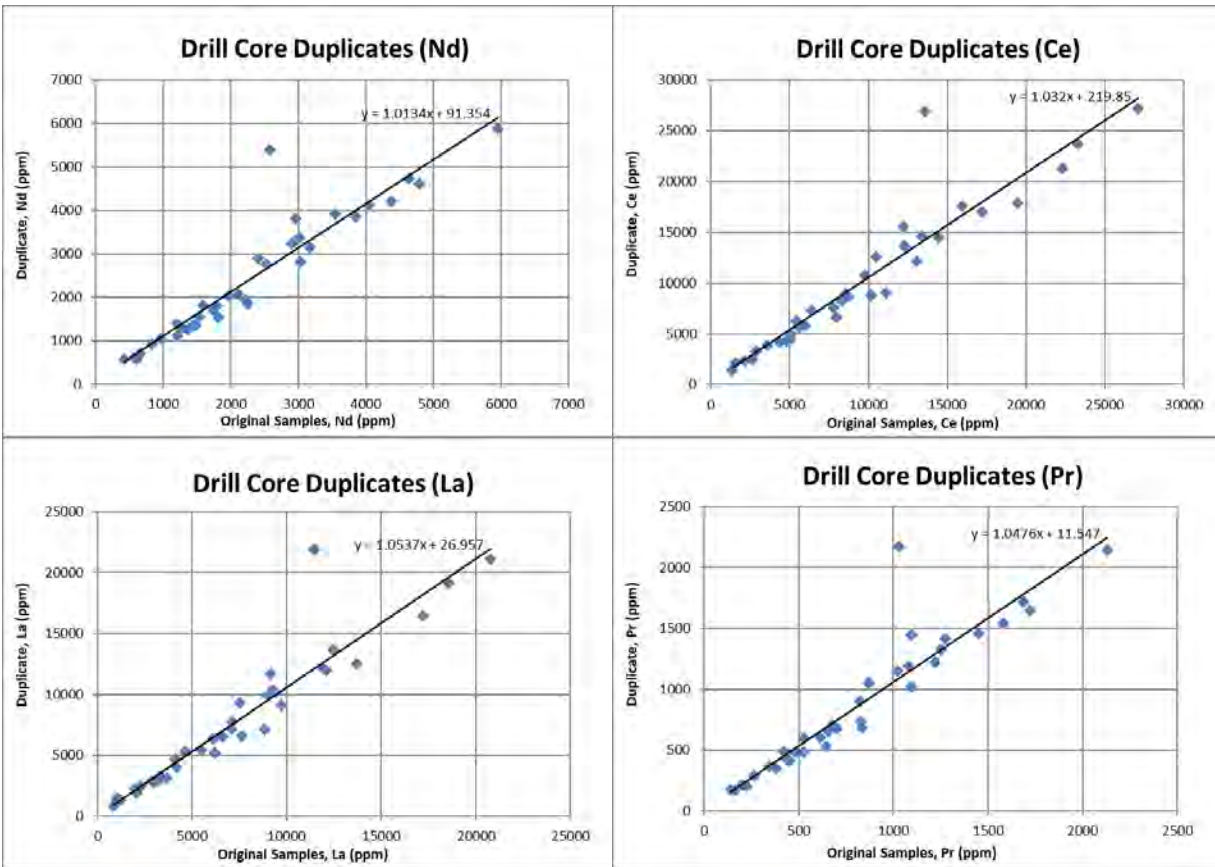
### Duplicates

Duplicate (quartered drill core) samples were collected to assess the repeatability of individual analytical values. Seventy-two duplicate core samples were collected during the diamond drill program. Results of duplicate samples indicate good overall repeatability of the Nd, Ce, La, and Pr values. This is interpreted to indicate a low “nugget” effect with respect to REE analysis. Excluding primary geological heterogeneity (quarter-core), the data show a homogenous distribution of Nd, Ce, La and Pr values within the Wicheeda drill core. QA/QC summary charts for duplicate samples are presented in Figure 8.3.

As part of their internal QA/QC program, ALS completed routine re-analysis of prep (coarse reject) and pulp duplicates to monitor precision. ALS analyzed a total of 10 prep duplicates and 25 pulp duplicates for a total of 35 prep/pulp duplicates.



**Figure 8.3. QA/QC Quartered Core Duplicate Samples (Nd, Ce, La, Pr)**



It is the authors' opinion that the sample collection, preparation, security, analytical and QA/QC measures used during the 2019 diamond drilling program were adequate for this stage of exploration at the Wicheeda Property.

## 9 Exploration Expenditures

The 2019 Wicheeda exploration program was completed between July 28<sup>th</sup> and October 22<sup>nd</sup>. The program completed 13 diamond drill holes totalling 2,007.5 m. The total cost for work done in 2019 related to this program was \$805,526.83 (Appendix 1).



## 10 Interpretation and Conclusions

The Wicheeda Property has been explored in several phases of mapping, geochemical sampling and geophysical surveys since the early 1960's, with exploration drilling targeting rare earth elements dating back to 2008. The Property is located in the morphogeological Foreland Belt of the Canadian Cordillera, within the structurally dominant NW-trending Rocky Mountain Trench. The Rocky Mountain Trench is recognized for the occurrence of several Devonian to Mississippian, carbonatite-syenite intrusion-related complexes that were geologically deformed, tilted, and transported to the east in thrust panels.

Diamond drilling completed at the Wicheeda REE Project during 2019 was designed to test the limit of the dolomite carbonatite-hosted REE mineralization and further delineate the relatively higher-grade, near-surface dolomite carbonatite unit. A total of 13 diamond core holes were completed from three separate drill pads (Pad 1, 2 and 3) totalling 2,007.5 m. Two drill holes (WI19-20 and 21) were collared on Pad 1, located at the 2018 Wicheeda bulk sample site, and 7 holes (WI19-22 to 28) were collared at Pad 2, located northeast of Pad 1. The first nine holes were drilled within the historic block model to infill and better define the limits of the resource model, and to achieve an indicated resource classification. Four drill holes (WI19-29 to 32) were collared on Pad 3, north of the previously defined resource model, to test the northern extension of the REE-mineralized carbonatite-dolomite.

All 13 drill holes intersected significant intercepts of visible REE-mineralized dolomite-carbonatite. Drilling in the southwest area of the deposit (WI19-20 and 21) extended the dolomite-carbonatite 25 m beyond the previous limit. Drilling in the east central area of the deposit (WI19-22 to 28) extended the eastern edge of the deposit 40 m. Drilling north of the previously defined resource (WI19-29 to 32) was expanded the deposit 120 m along strike, which represents an approximately 50% increase in the total extent of the deposit. The last hole of the 2019 drill program intersected 130 m of REE mineralized dolomite-carbonatite, leaving the deposit open for further expansion to the north. Additional definition drilling increased confidence in the geometry of the REE mineralized dolomite-carbonate rocks at higher elevation in the deposit, as well as providing additional pierce points to refine the carbonatite envelope.

In drill core, mineralization appears to be preferentially hosted in dolomite carbonatite, xenolithic dolomite-carbonatite, strongly altered – brecciated mafic xenoliths and to a lesser degree, dolomite-calcite carbonatite and syenite. Mineralization appears in vuggy, disseminated, aggregates, patches and vein related. Positive assay values strongly correspond to bastnäsite-parasite and monazite ± pyrochlore ± sphene ± columbite.

The work that was completed evaluated and confirmed the exploration potential at Wicheeda. Results indicate that additional drilling at the northern end of the deposit is warranted to further define the extent and attempt to close the deposit.

## 11 Recommendations

Results to date indicate that further geological work and diamond drilling is warranted at the Wicheeda Property. Detailed geological mapping and structural review should be completed on the eastern part of the Defense Metals' Wicheeda claims, focusing on the northern section of the Wicheeda carbonatite body.

Follow-up diamond drilling north, north west, west and south of drill Pad 3 should be completed to expand and define the geometry of the mineralized dolomite-carbonatite body. If diamond drill results are successful in confirming additional mineralization to the north, a new resource model should be considered with a new inferred and/or indicated resource estimate.

For 2020, APEX recommends a 40-day exploration program comprising geological mapping and 2000 m of diamond drilling. The program could be completed by 2 APEX personnel at a total estimated cost of \$350 per meter all inclusive, totaling approximately \$700,000 (Table 11.1).

**Table 11.1. Proposed 2019 Wicheeda Property Exploration Budget**

Budget Item	Cost
APEX personnel, travel costs and site visits	\$62,500
APEX Rentals (equipments, trucks, software, etc.)	\$8,500
Analytical (~700 core samples) and freight costs	\$46,500
Third Party Rentals & Supplies	\$12,500
Camp accommodation, food and maintenance	\$44,500
Helicopter	\$82,000
Diamond drilling and pad building	\$332,500
Management, reporting and modelling	\$48,000
Subtotal	\$637,000
~10% Contingency	\$63,000
<b>TOTAL (not including GST)</b>	<b>\$700,000</b>

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## 13 Certificate of Author

### 13.1 Kristopher J. Raffle Certificate of Author

I, Kristopher J. Raffle, P.Ge., residing in Vancouver, British Columbia, do hereby certify that:

1. I am a Principal of APEX Geoscience Ltd., located at 410-800 West Pender Street, Vancouver, British Columbia, Canada.
2. I am the author and responsible for all the sections of the report entitled “**2019 Assessment Report on the Wicheeda Property**”, dated February 23<sup>rd</sup>, 2022 (the “Assessment Report”)
3. I am a graduate of The University of British Columbia, Vancouver, British Columbia with a B.Sc. in Geology (2000) and have practiced my profession continuously since 2000.
4. I am a Professional Geologist (P.Ge.) registered with Engineers and Geoscientists of British Columbia, and I am a ‘Qualified Person’ in relation to the subject matter of this Report.
5. To the best of my knowledge, information and belief, the Assessment Report contains all scientific and technical information that is required to make the Assessment Report not misleading.
6. I consent to the filing of the Assessment Report with the regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files or their websites.

Dated this 23<sup>rd</sup> Day of February, 2022  
Vancouver, British Columbia, Canada

“Signed”

Kristopher J. Raffle, B.Sc., P.Ge.

### 13.2 Mohammad Asmail Certificate of Author

I, Mohammad Asmail, M.Sc., residing in Burnaby, British Columbia, do hereby certify that:

1. I am a Geologist of APEX Geoscience Ltd., located at 410-800 West Pender Street, Vancouver, British Columbia, Canada.
2. I am the author and responsible for all the sections of the report entitled “**2019 Assessment Report on the Wicheeda Property**”, dated February 23<sup>rd</sup>, 2022 (the “Assessment Report”).
3. I am a graduate of The University of Western Ontario, London, Ontario with a B.Sc. in Earth Sciences (2012) and a M.Sc. in Economic Geology (2017). I have worked as an exploration geologist for six years.
4. To the best of my knowledge, information and belief, the Assessment Report contains all scientific and technical information that is required to make the Assessment Report not misleading.
5. I consent to the filing of the Assessment Report with the regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files or their websites.

Dated this 23<sup>rd</sup> Day of February, 2022  
Vancouver, British Columbia, Canada

“Signed”

Mohammad Asmail, M.Sc.

## Appendix 1. Personnel and Statement of Expenditures

## 2019 Wicheeda Field Personnel

Name	Position	Company	Days	Day Rate	Dates Worked*
Kris Raffle	Principal & Consultant	APEX Geoscience Ltd.	5	\$800	July 29 – August 28
Andrew Turner	Principal & Consultant	APEX Geoscience Ltd.	9	\$800	August 23 – August 31
Alex Wallis	Project Geologist	APEX Geoscience Ltd.	27.7	\$600	July 28 – August 24
Graham Bolt	Geologist	APEX Geoscience Ltd.	58.5	\$500	July 31 – October 22
Mo Asmail	Geologist	APEX Geoscience Ltd.	58.17	\$500-\$525	August 26 – October 22
Scott Ames	Camp Manager	APEX Geoscience Ltd.	49.14	\$575	July 29 – September 16
Kurtis Carlgren	Pad Builder Foreman	KayJay Solutions	22	\$550	August 3 – August 24
Devon Lynn	Pad Builder	KayJay Solutions	8	\$375	August 3 – August 10
Jeff Dyrblom	Pad Builder/Geotech	KayJay Solutions	55	\$275-\$375	August 12 – October 22
Donna Moore	Cook / First Aid	CICC	22	\$500	August 8 – August 29
Rick	Cook / First Aid	CICC	16	\$500	August 30 – September 14
Jeff Price	Pad Builder	Falcon Drilling	20	\$49.50/hr	August 4 – August 23
Mark Kokoski	Driller – Supervisor	Falcon Drilling	23	\$60-\$75/hr	August 9 – August 31
Ethan Martin	Driller	Falcon Drilling	23	\$60-\$75/hr	August 9 – August 31
Jason Martin	Driller	Falcon Drilling	12	\$60-\$75/hr	September 1 – September 12
Mitch Mackenzie	Drill Helper	Falcon Drilling	23	\$60/hr	August 9 – August 31
Reuben Soames	Drill Helper	Falcon Drilling	23	\$60/hr	August 9 – August 31

## 2019 Wicheeda Office Personnel

Name	Position	Company	Days	Day Rate	Dates Worked*
Mike Dufrense	Principal & Consultant	APEX Geoscience Ltd.	0.2	\$850	June - July
Kris Raffle	Principal & Consultant	APEX Geoscience Ltd.	45.94	\$800	February - November
Steve Nicholls	Principal & Consultant	APEX Geoscience Ltd.	0.29	\$850	July - September
Chris Livingstone	Project Geologist	APEX Geoscience Ltd.	4.41	\$575	February - November
Alex Wallis	Project Geologist	APEX Geoscience Ltd.	9.9	\$425	June - September
Alfonso Rodriguez	Geologist	APEX Geoscience Ltd.	7.48	\$425	February - April
Mo Asmail	Geologist	APEX Geoscience Ltd.	14.07	\$375	April - November
Warren Black	Geologist	APEX Geoscience Ltd.	0.07	\$575	April – May
Mark Hanki	Geophysicist	APEX Geoscience Ltd.	2	\$625	April - May
Robyn Christian	Geologist	APEX Geoscience Ltd.	12.96	\$425	April - November
Tara Gunson	Geologist	APEX Geoscience Ltd.	0.4	\$525	June - July
Katelynn Brown	Geologist	APEX Geoscience Ltd.	0.47	\$375	June - September
Celine McEachern	Geologist	APEX Geoscience Ltd.	0.37	\$325	June - November
Max Finn	Geologist	APEX Geoscience Ltd.	0.87	\$375	July - August
Kevin Hon	Geologist	APEX Geoscience Ltd.	0.3	\$475	July - August
Shannon Frey	Geologist	APEX Geoscience Ltd.	1	\$425	August - September
Karys Fortune	Geologist	APEX Geoscience Ltd.	0.56	\$325	September - November



## 2019 Wicheeda Expenditures

Date	Memo	Amount
<b>Geological field work</b>		
06-30-2019	Geological Services Performed Field - Kris Raffle (May 22-June 21/19)	\$800.00
08-31-2019	Party Leader Geological Services Field - Alex Wallis (July 22-Aug 21/19)	\$14,820.00
08-31-2019	Geological Services Performed Field - Kris Raffle (July 22-Aug 21/19)	\$1,600.00
08-31-2019	Geological Services Performed Field - Graham Bolt (July 22-Aug 21/19)	\$11,500.00
08-31-2019	Geological Services Performed Field - Scott Ames (July 22-Aug 21/19)	\$11,500.00
09-30-2019	Geological Services Performed Field - Scott Ames (Aug 22-Sept 21/19)	\$15,525.00
09-30-2019	Geological Services Performed Field - Graham Bolt (Aug 22-Sept 21/19)	\$4,250.00
09-30-2019	Party Leader Geological Services Field - Alex Wallis (Aug 22-Sept 21/19)	\$1,800.00
09-30-2019	Geological Services Performed Field - Andrew Turner (Aug 22-Sept 21/19)	\$7,200.00
09-30-2019	Geological Services Performed Field - Mo Asmail (Aug 22-Sept 21/19)	\$3,500.00
09-30-2019	Geological Services Performed Field - Kris Raffle (Aug 22-Sept 21/19)	\$1,600.00
09-30-2019	Party Leader Geological Services Field - Mo Asmail (Aug 22-Sept 21/19)	\$11,025.00
10-31-2019	Party Leader Geological Services Field - Mo Asmail (Sept 22-Oct 21/19)	\$16,012.50
10-31-2019	Geological Services Performed Field - Graham Bolt (Sept 22-Oct 21/19)	\$13,500.00
09-19-2019	Kayjay Solutions - 09-19-2019	\$5,634.42
12-02-2019	Kayjay Solutions - FINAL 11-02-2019	\$6,411.35
<b>Geological field work</b>		<b>\$126,678.27</b>
<b>Geological office work</b>		
03-31-2019	Geological Services Performed Office - Alfonso Rodriguez Madrid (Feb 22-March 21/19)	\$2,880.00
03-31-2019	Geological Services Performed Office - Kris Raffle (Feb 22-March 21/19)	\$3,040.00
03-31-2019	Geological Services Performed Office - Chris Livingstone (Feb 22-March 21/19)	\$155.25
04-30-2019	Geological Services Performed Office - Kris Raffle (March 22-April 21/19)	\$2,936.00
04-30-2019	Geological Services Performed Office - Alfonso Rodriguez Madrid (March 22-April 21/19)	\$301.50
05-31-2019	Geological Services Performed Office - Mark Hanki (April 22-May 21/19)	\$1,250.00
05-31-2019	Geological Services Performed Office - Warren Black (April 22-May 21/19)	\$40.25
05-31-2019	Geological Services Performed Office - Chris Livingstone (April 22-May 21/19)	\$40.25
05-31-2019	Geological Services Performed Office - Robyn Christian (April 22-May 21/19)	\$55.25
05-31-2019	Geological Services Performed Office - Mo Asmail (April 22-May 21/19)	\$2,201.25
05-31-2019	Geological Services Performed Office - Kris Raffle (April 22-May 21/19)	\$2,616.00
06-30-2019	Geological Services Performed Office - Kris Raffle (May 22-June 21/19)	\$2,880.00
07-31-2019	Principal Directly Involved Office - Michael Dufresne (June 22-July 21/19)	\$170.00
07-31-2019	Geological Services Performed Office - Kris Raffle (June 22-July 21/19)	\$6,400.00
07-31-2019	Geological Services Performed Office - Chris Livingstone (June 22-July 21/19)	\$764.75
07-31-2019	Geological Services Performed Office - Robyn Christian (June 22-July 21/19)	\$1,372.75
07-31-2019	Geological Services Performed Office - Alex Wallis (June 22-July 21/19)	\$1,899.75
07-31-2019	Geological Services Performed Office - Tara Gunson (June 22-July 21/19)	\$210.00
07-31-2019	Geological Services Performed Office - Katelynn Brown (June 22-July 21/19)	\$26.25
07-31-2019	Geological Services Performed Office - Celine McEachern (June 22-July 21/19)	\$22.75
08-31-2019	Geological Services Performed Office - Alex Wallis (July 22-Aug 21/19)	\$2,125.00
08-31-2019	Geological Services Performed Office - Robyn Christian (July 22-Aug 21/19)	\$2,324.75
08-31-2019	Geological Services Performed Office - Chris Livingstone (July 22-Aug 21/19)	\$460.00
08-31-2019	Geological Services Performed Office - Kris Raffle (July 22-Aug 21/19)	\$5,920.00
08-31-2019	Geological Services Performed Office - Maxwell Finn (July 22-Aug 21/19)	\$326.25
08-31-2019	Geological Services Performed Office - Kevin Hon (July 22-Aug 21/19)	\$142.50

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Date	Memo	Amount
09-30-2019	Apex Geoscience Australia Pty: subcontract services, Steve Nicholls (office), July 1-Sept 30/19	\$250.35
09-30-2019	Geological Services Performed Office - Robyn Christian (Aug 22-Sept 21/19)	\$565.25
09-30-2019	Geological Services Performed Office - Kris Raffle (Aug 22-Sept 21/19)	\$3,200.00
09-30-2019	Geological Services Performed Office - Alex Wallis (Aug 22-Sept 21/19)	\$182.75
09-30-2019	Geological Services Performed Office - Katelynn Brown (Aug 22-Sept 21/19)	\$150.00
09-30-2019	Geological Services Performed Office - Shannon Frey (Aug 22-Sept 21/19)	\$425.00
10-31-2019	Geological Services Performed Office - Kris Raffle (Sept 22-Oct 21/19)	\$4,000.00
10-31-2019	Geological Services Performed Office - Karys Leonard-Fortune (Sept 22-Oct 21/19)	\$139.75
11-30-2019	Geological Services Performed Office - Mo Asmail (Oct 22-Nov 21/19)	\$3,075.00
11-30-2019	Geological Services Performed Office - Kris Raffle (Oct 22-Nov 21/19)	\$5,760.00
11-30-2019	Geological Services Performed Office - Chris Livingstone (Oct 22-Nov 21/19)	\$1,115.50
11-30-2019	Geological Services Performed Office - Robyn Christian (Oct 22-Nov 21/19)	\$1,190.00
11-30-2019	Geological Services Performed Office - Karys Leonard-Fortune (Oct 22-Nov 21/19)	\$42.25
11-30-2019	Geological Services Performed Office - Celine McEachern (Oct 22-Nov 21/19)	\$97.50
<b>Geological office work</b>		<b>\$60,753.85</b>
<b>Overhead &amp; management fee</b>		
08-31-2019	Operator's overhead and management fee (10%)	\$2,163.45
09-30-2019	Operator's overhead and management fee (10%)	\$972.62
10-31-2019	Operator's overhead and management fee (10%)	\$1,143.04
11-30-2019	Operator's overhead and management fee (10%)	\$3,736.25
<b>Overhead &amp; management fee</b>		<b>\$8,015.36</b>
<b>Rentals - APEX</b>		
09-30-2019	APEX rental - truck (2 months)	\$4,500.00
09-30-2019	APEX rental - RS-230 super scintolometer (2 months)	\$4,000.00
09-30-2019	APEX rental - laptop (2 months)	\$1,130.00
09-30-2019	APEX rental - level 2 first aid kit (2 months)	\$1,350.00
09-30-2019	APEX rental - sat phone (2 months)	\$680.00
09-30-2019	APEX rental - 6 radios (2 months)	\$1,380.00
09-30-2019	APEX rental - GPS (2 months)	\$230.00
09-30-2019	APEX rental - digital scale (2 months)	\$450.00
09-30-2019	APEX rental - shotgun (2 months)	\$450.00
09-30-2019	APEX rental - micromine software (1 month)	\$1,500.00
<b>Rentals - APEX</b>		<b>\$15,670.00</b>
<b>Rental - equipment</b>		
08-14-2019	Tower Communications: satellite system rental, Aug 14/19, inv 247918	\$695.50
08-31-2019	Reflex: survey instrument rental, Aug 8-31/19, inv 64458	\$1,984.03
09-06-2019	Alex Wallis: core saw rental, Aug 12-Sept 9/19	\$921.96
09-14-2019	Tower Communications: satellite system rental, Sept 14/19, inv 248411	\$695.50
09-30-2019	Reflex: survey instrument rental, Sept 1-23/19, inv 65055	\$1,961.02
10-11-2019	Alex Wallis: core saw rental, Sept 9-Oct 7/19	\$921.96
10-31-2019	Mo Asmail: saw rental, Oct 7-15/19	\$276.12
<b>Rental - equipment</b>		<b>\$7,456.09</b>
<b>Drilling</b>		
08-15-2019	Falcon Drilling Ltd. - DMC 19-01	44,931.86
08-31-2019	Falcon Drilling Ltd. - DMC 19-02	110,536.89
09-15-2019	Falcon Drilling Ltd. - DMC 19-03	110,710.36
10-30-2019	Falcon Drilling Ltd. - DMC 19-04	16,186.20

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Date	Memo	Amount
10-30-2019	Falcon Drilling Ltd. - DMC 19-01 Other	62,758.99
08-29-2019	Kayjay Solutions - pad building1	19,787.53
	<b>Drilling</b>	<b>364,911.83</b>
<b>Helicopter Support</b>		
08-05-2019	Yellowhead Helicopters Ltd.	50,000.00
09-16-2019	Yellowhead Helicopters Ltd.	15,517.01
	<b>Helicopter Support</b>	<b>65,517.01</b>
<b>Assays &amp; related costs</b>		
07-22-2019	CDN Resource Laboratories: standards, July 22/19, inv 1907045	\$1,995.37
08-15-2019	Alex Wallis: standards, July 19/19	\$165.87
08-09-2019	ALS Canada: supplies, sample tag books, Aug 9/19, inv 4841092	\$133.75
10-23-2019	ALS Canada: assay analysis, certificate KL19240505, Oct 23/19, inv 4907072	\$4,626.70
11-09-2019	ALS Canada: assay analysis, certificate KL19251631, Nov 9/19, inv 4926758	\$5,777.44
11-19-2019	ALS Canada: assay analysis, certificate KL19259327, Nov 19/19, inv 4941678	\$7,006.19
11-22-2019	ALS Canada: assay analysis, certificate KL19260475, Nov 22/19, inv 4945628	\$5,259.18
11-25-2019	ALS Canada: assay analysis, certificate KL19264778, Nov 25/19, inv 4949954	\$4,097.74
	<b>Assays &amp; related costs</b>	<b>\$29,062.24</b>
<b>Field supplies</b>		
08-15-2019	Alex Wallis: supplies, Aug 2-12/19	\$4,069.69
09-04-2019	Graham Bolt: supplies, Aug 2-27/19	\$1,190.51
09-06-2019	Alex Wallis: supplies, Aug 12-22/19	\$1,037.17
09-20-2019	Andrew Turner: supplies, Aug 23/19	\$12.16
09-23-2019	Andrew Turner: supplies, Aug 29-Sept 1/19	\$155.05
10-30-2019	Graham Bolt: supplies, Sept 27-Oct 4/19	\$66.18
10-31-2019	Mo Asmail: supplies, Aug 27-Oct 18/19	\$674.59
	<b>Field supplies</b>	<b>\$7,205.35</b>
<b>Freight - other</b>		
08-26-2019	Reflex: freight, Air Canada, waybill 0141456037, Aug 8/19, inv 70739	\$444.89
09-05-2019	FedEx: courier, waybill 814514496094, Aug 19/19, inv 2-400-43903	\$294.80
09-05-2019	FedEx: courier, waybill 789036114059, Aug 9/19, inv 2-400-43903	\$60.74
09-10-2019	Tower Communications: freight, Aug 12/19, inv 248159	\$27.00
09-23-2019	Robyn Christian: postage, Sept 3/19	\$25.50
09-23-2019	Andrew Turner: freight, Aug 30/19	\$253.79
10-31-2019	Mo Asmail: freight, Sept 9-Oct 18/19	\$412.82
11-05-2019	FedEx: courier, waybill 776775270253, Oct 22/19, inv 2-406-71006	\$24.19
	<b>Freight - other</b>	<b>\$1,543.73</b>
<b>Freight - samples</b>		
10-31-2019	Mo Asmail: freight, samples, Sept 24-Oct 18/19	\$2,521.39
	<b>Freight - samples</b>	<b>\$2,521.39</b>
<b>Camp, Food and Accommodations</b>		
08-15-2019	Alex Wallis: hotel, Edmonton, July 31/19	\$109.20
08-15-2019	Alex Wallis: hotel, Edmonton, July 31-Aug 1/19	\$123.19
08-15-2019	Alex Wallis: hotel, Graham Bolt, Edmonton, July 31-Aug 1/19	\$123.19
08-15-2019	Alex Wallis: hotel, Scott Ames, Prince George, Aug 3-4/19	\$123.83
08-15-2019	Alex Wallis: hotel, Prince George, Aug 1-4/19	\$371.49
08-15-2019	Alex Wallis: hotel, Graham Bolt, Prince George, Aug 1-4/19	\$371.49
10-31-2019	Mo Asmail: hotel, Prince George, Aug 26-27/19	\$154.29

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Date	Memo	Amount
10-31-2019	Mo Asmail: hotel, Prince George, Sept 15-16/19	\$87.69
10-31-2019	Mo Asmail: hotel, Prince George, Sept 17-24/19	\$505.05
10-31-2019	Mo Asmail: hotel, Graham Bolt, Prince George, Sept 20-23/19	\$283.05
10-31-2019	Mo Asmail: hotel, Graham Bolt, Prince George, Sept 23-24/19	\$94.35
10-31-2019	Mo Asmail: hotel, Prince George, Sept 24-25/19	\$72.15
10-31-2019	Mo Asmail: hotel, Graham Bolt, Prince George, Sept 24-Oct 17/19	\$2,297.70
10-31-2019	Mo Asmail: hotel, Prince George, Sept 25-Oct 18/19	\$2,680.65
10-31-2019	Mo Asmail: hotel, Edmonton, Oct 19-21/19	\$263.52
08-15-2019	Alex Wallis: food, July 29-Aug 9/19	\$3,145.35
09-04-2019	Graham Bolt: food, July 31-Aug 28/19	\$397.21
09-06-2019	Alex Wallis: food, Aug 12-24/19	\$676.83
09-20-2019	Andrew Turner: food, Aug 23/19	\$10.99
09-23-2019	Andrew Turner: food, Aug 29-Sept 1/19	\$245.45
10-30-2019	Graham Bolt: food, Sept 22-Oct 17/19	\$388.27
10-31-2019	Mo Asmail: food, Aug 26-Sept 30/19	\$1,817.00
10-31-2019	Mo Asmail: food, Oct 1-21/19	\$1,716.13
10-02-2019	Dunkley Lumber Ltd. - CAMP132	7,800.00
10-02-2019	Dunkley Lumber Ltd. - CAMP121	390.00
08-23-2019	Central Interior Catering - 7103	5,033.59
08-29-2019	Rugged Edge Holdings Ltd. - INV 16425	35,000.00
08-31-2019	Central Interior Catering - 7115	12,785.00
09-10-2019	576112 B.C. Ltd. - Travel camp costs	2,104.72
09-15-2019	Central Interior Catering - 7124	10,210.00
11-24-2019	CANADIAN SPRINGS - INV 19619655 102719	494.25
11-30-2019	Rugged Edge Holdings Ltd. - INV 16263 - balance owing	6,852.44
11-30-2019	Prince George Portable Toilet Serv. Ltd. - INV 104942	1,249.00
11-30-2019	Prince George Portable Toilet Serv. Ltd. - INV 104765	1,063.55
<b>Camp and Accommodations</b>		<b>\$99,040.62</b>
<b>Travel - airfare/bus fare</b>		
07-26-2019	Vision Travel Solutions: airfare, Kris Raffle, Vancouver/Prince George (ret), July 29, 30/19, in...	\$1,151.25
07-26-2019	Vision Travel Solutions: airfare, Alex Wallis, Castlegar/Vancouver/Prince George, July 28,29/19,...	\$1,024.25
07-26-2019	Vision Travel Solutions: airfare, Alex Wallis, Prince George/Edmonton, July 30/19, inv 4387664	\$525.12
07-29-2019	Vision Travel Solutions: airfare, Graham Bolt, St Johns/Edmonton, July 31/19, inv 4387773	\$1,048.72
07-30-2019	Vision Travel Solutions: airfare, Scott Ames, Winnipeg/Prince George, Aug 3/19, inv 4387962	\$757.52
08-02-2019	Vision Travel Solutions: airfare, Kurtis Carlgren, Terrace/Prince George, Aug 4/19, inv 4388300	\$508.12
08-15-2019	Alex Wallis: excess baggage fee, July 28-29/19	\$100.00
08-16-2019	Vision Travel Solutions: airfare, Alex Wallis, Prince George/Castlegar, Aug 30/19, inv 4389878	\$562.12
08-18-2019	Vision Travel Solutions: airfare, Graham Bolt, Prince George/Toronto/St. Johns, Aug 27, 28/19, i...	\$1,068.37
08-21-2019	Vision Travel Solutions: airfare, Mo Asmail, Toronto/Prince George, Aug 26/19, inv 4390407	\$928.52
08-22-2019	Vision Travel Solutions: airfare, Kris Raffle, Vancouver/Prince George, Aug 27/19, inv 4390448	\$969.25
08-23-2019	Vision Travel Solutions: airfare, Kurtis Carlgren, Prince George/Terrace, Aug 24/19, inv 4390613	\$568.87
08-23-2019	Vision Travel Solutions: airfare, Alex Wallis, Prince George/Castlegar, Aug 24/19, inv 4390608	\$520.13
09-06-2019	Alex Wallis: excess baggage fee, Aug 24/19	\$50.00
09-15-2019	Vision Travel Solutions: airfare, Scott Ames, Prince George/Winnipeg, Sept 16/19, inv 4393657	\$723.32
10-07-2019	Vision Travel Solutions: airfare, Kris Raffle, Prince George/Vancouver, Oct 9/19, inv 4396893	\$528.02
10-07-2019	Vision Travel Solutions: airfare, Kris Raffle, Vancouver/Prince George, Oct 9/19, inv 4396894	\$282.12
10-16-2019	Direct Travel: airfare, Graham Bolt, Prince George/Halifax, Oct 17/19, inv 4398030	\$1,108.27



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Date	Memo	Amount
10-20-2019	Direct Travel: airfare, Mo Asmail, Edmonton/Toronto, Oct 21/19, inv 4398630	\$732.12
10-21-2019	Direct Travel: airfare credit, Mo Asmail, Edmonton/Toronto, Oct 21/19, inv 4398643	-\$687.12
10-21-2019	Direct Travel: airfare, Mo Asmail, Edmonton/London, Oct 21/19, inv 4398649	\$749.12
10-31-2019	Mo Asmail: excess baggage fee, Oct 21/19	\$50.00
12-03-2019	Direct Travel: airfare, Kris Raffle, Vancouver/Saskatoon (ret), Dec 4, 6/19, inv 4404178	\$844.45
<b>Travel - airfare/bus fare</b>		<b>\$14,112.54</b>
<b>Fuel</b>		
08-15-2019	Alex Wallis: fuel, Aug 1-9/19	\$640.66
09-04-2019	Graham Bolt: fuel, Aug 18/19	\$118.60
09-06-2019	Alex Wallis: fuel, Aug 13-22/19	\$327.77
09-20-2019	Andrew Turner: fuel, Aug 23-25/19	\$390.74
09-23-2019	Andrew Turner: fuel, Aug 30/19	\$54.16
10-31-2019	Mo Asmail: fuel, Aug 26-Oct 21/19	\$997.85
<b>Fuel</b>		<b>\$2,529.78</b>
<b>Travel - taxi, parking &amp; other</b>		
08-15-2019	Alex Wallis: taxi, July 28-31/19	\$84.24
09-04-2019	Graham Bolt: taxi, July 31/19	\$99.88
10-30-2019	Graham Bolt: taxi, Oct 17/19	\$31.24
10-31-2019	Mo Asmail: taxi & parking, Aug 26-Oct 22/19	\$159.46
<b>Travel - taxi, parking &amp; other</b>		<b>\$374.82</b>
<b>Automotive expenses</b>		
11-18-2019	Andrew Turner: wheel alignment, 2018 Toyota Tundra, Nov 13/19	\$120.00
<b>Automotive expenses</b>		<b>\$120.00</b>
<b>Computer supplies &amp; software</b>		
11-19-2019	Mo Asmail: software, converter for Mac, Nov 13/19	\$13.95
<b>Computer supplies &amp; software</b>		<b>\$13.95</b>
<b>TOTAL</b>		<b>\$805,526.83</b>

## Appendix 2. Drill Hole Collars and Geotechnical Logs

### Drill Hole Collars

Hole	Easting N83Z10	Northing N83Z10	Pad No.	Elevation (m)	Azimuth	Dip	Hole Depth (m)	Core Size	Drill Company	Geologist
WI19-20	558299	6043020	1	1051	230	-55	136.40	NQ	Falcon Drilling	MA
WI19-21	558299	6043020	1	1051	290	-55	179.35	NQ	Falcon Drilling	MA
WI19-22	558406	6043064	2	1124	0.0	-90	127.15	NQ	Falcon Drilling	MA
WI19-23	558406	6043064	2	1124	100	-45	126.00	NQ	Falcon Drilling	MA
WI19-24	558406	6043064	2	1124	140	-45	122.95	NQ	Falcon Drilling	MA
WI19-25	558406	6043064	2	1124	185	-45	175.65	NQ	Falcon Drilling	MA
WI19-26	558406	6043064	2	1124	295	-65	156.30	NQ	Falcon Drilling	MA
WI19-27	558406	6043064	2	1124	10	-45	139.85	NQ	Falcon Drilling	MA
WI19-28	558406	6043064	2	1124	45	-45	117.15	NQ	Falcon Drilling	MA
WI19-29	558396	6043254	3	1082	190	-45	184.05	NQ	Falcon Drilling	MA
WI19-30	558396	6043254	3	1082	250	-55	179.50	NQ	Falcon Drilling	MA
WI19-31	558396	6043254	3	1082	275	-55	138.50	NQ	Falcon Drilling	MA
WI19-32	558396	6043254	3	1082	300	-55	224.70	NQ	Falcon Drilling	MA

**Downhole Reflex Survey**

Hole ID	Survey depth (m)	Mag. Azi	True Azi (+17.1)	Dip	Mag Field	Deviation from target azimuth	Deviation from target dip	Tool	Comments
W119-20			230.0	-55.0				Compass	
W119-20	14.00	216.1	233.2	-55.5	56322	-3.2	0.5	Reflex Easy-Shot	
W119-20	55.00	215.4	232.5	-56.2	55966	-2.5	1.2	Reflex Easy-Shot	
W119-20	96.00	215.6	232.7	-56.8	55804	-2.7	1.8	Reflex Easy-Shot	
W119-20	136.00	214.7	231.8	-57.6	56093	-1.8	2.6	Reflex Easy-Shot	
W119-21			290.0	-55.0				Compass	
W119-21	12.00	356.0	13.1	-54.9	52048	276.9	-0.1	Reflex Easy-Shot	Possibly too close to rig/casing
W119-21	18.00	275.5	292.6	-55.1	56478	-2.6	0.1	Reflex Easy-Shot	retest
W119-21	57.00	274.2	291.3	-55.6	56068	-1.3	0.6	Reflex Easy-Shot	
W119-21	94.00	273.9	291.0	-56.0	56062	-1.0	1.0	Reflex Easy-Shot	
W119-21	134.00	261.4	278.5	-56.5	51952	11.5	1.5	Reflex Easy-Shot	Bad Mag reading
W119-21	179.00	274.9	292.0	-56.9	56096	-2.0	1.9	Reflex Easy-Shot	
W119-22			100.0	-90.0				Compass	
W119-22	14.00	89.7	106.8	-89.7	56063	-6.8	-0.3	Reflex Easy-Shot	
W119-22	38.00	89.5	106.6	-89.5	56055	-6.6	-0.5	Reflex Easy-Shot	
W119-22	68.00	89.6	106.7	-89.6	56043	-6.7	-0.4	Reflex Easy-Shot	
W119-22	98.00	89.7	106.8	-89.7	56042	-6.8	-0.3	Reflex Easy-Shot	
W119-22	128.00	89.6	106.7	-89.6	56109	-6.7	-0.4	Reflex Easy-Shot	
W119-23			100.0	-45.0				Compass	
W119-23	16.00	84.0	101.1	-45.0	56208	-1.1	0.0	Reflex Easy-Shot	
W119-23	65.00	84.0	101.1	-45.6	56151	-1.1	0.6	Reflex Easy-Shot	
W119-23	95.00	84.0	101.1	-45.6	56024	-1.1	0.6	Reflex Easy-Shot	
W119-23	126.00	83.9	101.0	-45.4	56180	-1.0	0.4	Reflex Easy-Shot	
W119-24			140.0	-45.0				Compass	
W119-24	16.00	122.4	139.5	-45.1	56299	0.5	0.1	Reflex Easy-Shot	
W119-24	56.00	123.8	140.9	-45.8	56156	-0.9	0.8	Reflex Easy-Shot	
W119-24	95.00	124.4	141.5	-46.4	56249	-1.5	1.4	Reflex Easy-Shot	
W119-24	122.95	124.5	141.6	-46.5	56210	-1.6	1.5	Reflex Easy-Shot	
W119-25			185.0	-45.0				Compass	
W119-25A	16.00	171.8	188.9	-44.7	56091	-3.9	-0.3	Reflex Easy-Shot	Azimuth 4° off, abandoned and re-aligned
W119-25			17.1			167.9	-45.0	Reflex Easy-Shot	Casing likely kicked off boulder, continued drilling
W119-25	56.00	172.3	189.4	-45.6	55970	-4.4	0.6	Reflex Easy-Shot	
W119-25	96.00	172.4	189.5	-45.5	56042	-4.5	0.5	Reflex Easy-Shot	
W119-25	136.00	172.8	189.9	-46.1	56119	-4.9	1.1	Reflex Easy-Shot	
W119-25	175.00	172.4	189.5	-46.5	56005	-4.5	1.5	Reflex Easy-Shot	
W119-26			295.0	-65.0				Compass	
W119-26	16.00	276.9	294.0	-65.4	56055	1.0	0.4	Reflex Easy-Shot	
W119-26	95.00	278.4	295.5	-65.8	56057	-0.5	0.8	Reflex Easy-Shot	
W119-26	135.00	277.5	294.6	-66.5	56072	0.4	1.5	Reflex Easy-Shot	
W119-26	150.00	277.0	294.1	-66.8	56055	0.9	1.8	Reflex Easy-Shot	
W119-27			10.0	-45.0				Compass	
W119-27	14.80	352.6	9.7	-45.4	57113	0.3	0.4	Reflex Easy-Shot	
W119-27	55.00	352.9	10.0	-45.9	56559	0.0	0.9	Reflex Easy-Shot	
W119-27	95.00	353.3	10.4	-46.2	56372	-0.4	1.2	Reflex Easy-Shot	
W119-27	139.85	356.2	13.3	-46.8	98521	-3.3	1.8	Reflex Easy-Shot	Strange Mag reading
W119-28			45.0	-45.0				Compass	
W119-28	22.60	27.9	45.0	-44.8	56858	0.0	-0.2	Reflex Easy-Shot	
W119-28	59.20	29.7	46.8	-44.9	56590	-1.8	-0.1	Reflex Easy-Shot	
W119-28	98.85	29.8	46.9	-44.7	56772	-1.9	-0.3	Reflex Easy-Shot	
W119-28	117.00	29.6	46.7	-45.0	56898	-1.7	0.0	Reflex Easy-Shot	
W119-29			190.0	-45.0				APS	
W119-29	40.70	168.9	186.0	-44.1	56440	4.0	-0.9	Reflex Easy-Shot	
W119-29	83.40	169.2	186.3	-42.9	56625	3.7	-2.1	Reflex Easy-Shot	
W119-29	120.00	171.3	188.4	-42.2	56429	1.6	-2.8	Reflex Easy-Shot	
W119-29	148.00	170.7	187.8	-42.1	56429	2.2	-2.9	Reflex Easy-Shot	
W119-29	184.05	171.0	188.1	-41.7	56575	1.9	-3.3	Reflex Easy-Shot	
W119-30			250.0	-55.0				APS	
W119-30	14.00	230.6	247.7	-54.6	56595	2.3	-0.4	Reflex Easy-Shot	
W119-30	56.00	231.2	248.3	-53.6	56814	1.7	-1.4	Reflex Easy-Shot	
W119-30	96.15	231.9	249.0	-53.7	56630	1.0	-1.3	Reflex Easy-Shot	
W119-30	179.50	233.5	250.6	-52.7	56538	-0.6	-2.3	Reflex Easy-Shot	
W119-31			275.0	-55.0				APS	
W119-31	15.00	257.9	275.0	-55.0	56600	0.0	0.0	Reflex Easy-Shot	Drillers missed taking a test after casing
W119-31	66.05	260.0	277.1	-52.3	56600	-2.1	-2.7	Reflex Easy-Shot	
W119-31	102.65	260.8	277.9	-51.7	56588	-2.9	-3.3	Reflex Easy-Shot	
W119-31	138.50	260.1	277.2	-51.4	56651	-2.2	-3.6	Reflex Easy-Shot	
W119-32			300.0	-55.0				APS	
W119-32	20.35	286.6	303.7	-54.5	56755	-3.7	-0.5	Reflex Easy-Shot	
W119-32	57.00	286.6	303.7	-53.7	56647	-3.7	-1.3	Reflex Easy-Shot	
W119-32	99.65	287.6	304.7	-52.9	56822	-4.7	-2.1	Reflex Easy-Shot	
W119-32	151.55	287.7	304.8	-52.6	56566	-4.8	-2.4	Reflex Easy-Shot	
W119-32	224.75	288.0	305.1	-52.2	56688	-5.1	-2.8	Reflex Easy-Shot	



Drill Hole Geotechnical Logs

Recovery RQD

Hole Id	Depth		Interval (m)	Recovery RQD		RQD (m)	RQD (%)
	From (m)	To (m)		Recovery (m)	Recovery (%)		
WI-19-20	7.90	10.95	3.05	2.66	87.21	1.58	51.80
WI-19-20	10.95	14.00	3.05	1.80	59.02	0.59	19.34
WI-19-20	14.00	17.05	3.05	1.38	45.25	0.11	3.61
WI-19-20	17.05	20.10	3.05	2.35	77.05	0.89	29.18
WI-19-20	20.10	23.15	3.05	1.80	59.02	0.23	7.54
WI-19-20	23.15	26.20	3.05	1.93	63.28	0.45	14.75
WI-19-20	26.20	29.25	3.05	2.06	67.54	0.70	22.95
WI-19-20	29.25	32.30	3.05	1.96	64.26	0.84	27.54
WI-19-20	32.30	35.35	3.05	1.95	63.93	1.23	40.33
WI-19-20	35.35	38.40	3.05	1.65	54.10	0.12	3.93
WI-19-20	38.40	41.45	3.05	1.80	59.02	0.72	23.61
WI-19-20	41.45	44.50	3.05	2.10	68.85	0.34	11.15
WI-19-20	44.50	47.55	3.05	2.63	86.23	1.81	59.34
WI-19-20	47.55	50.60	3.05	2.59	84.92	0.68	22.30
WI-19-20	50.60	53.65	3.05	2.85	93.44	1.40	45.90
WI-19-20	53.65	56.70	3.05	2.40	78.69	1.21	39.67
WI-19-20	56.70	59.75	3.05	2.90	95.08	1.18	38.69
WI-19-20	59.75	62.80	3.05	2.25	73.77	0.86	28.20
WI-19-20	62.80	65.85	3.05	2.75	90.16	1.00	32.79
WI-19-20	65.85	68.90	3.05	2.43	79.67	1.37	44.92
WI-19-20	68.90	71.95	3.05	2.30	75.41	0.44	14.43
WI-19-20	71.95	75.00	3.05	2.05	67.21	0.26	8.52
WI-19-20	75.00	78.05	3.05	1.88	61.64	0.49	16.07
WI-19-20	78.05	81.10	3.05	1.34	43.93	0.00	0.00
WI-19-20	81.10	84.15	3.05	1.59	52.13	0.48	15.74
WI-19-20	84.15	87.20	3.05	1.80	59.02	0.11	3.61
WI-19-20	87.20	90.25	3.05	1.53	50.16	0.57	18.69
WI-19-20	90.25	93.30	3.05	2.73	89.51	1.55	50.82
WI-19-20	93.30	96.35	3.05	2.70	88.52	0.82	26.89
WI-19-20	96.35	99.40	3.05	2.90	95.08	1.03	33.77
WI-19-20	99.40	102.45	3.05	2.50	81.97	1.01	33.11
WI-19-20	102.45	105.50	3.05	1.95	63.93	0.00	0.00
WI-19-20	105.50	108.55	3.05	2.14	70.16	0.00	0.00
WI-19-20	108.55	111.60	3.05	0.86	28.20	0.00	0.00
WI-19-20	111.60	114.65	3.05	1.72	56.39	0.10	3.28
WI-19-20	114.65	117.70	3.05	2.45	80.33	0.00	0.00
WI-19-20	117.70	120.75	3.05	2.04	66.89	0.10	3.28
WI-19-20	120.75	123.80	3.05	2.02	66.23	0.31	10.16
WI-19-20	123.80	126.85	3.05	1.62	53.11	0.12	3.93
WI-19-20	126.85	129.90	3.05	1.80	59.02	0.00	0.00
WI-19-20	129.90	132.95	3.05	1.95	63.93	0.14	4.59
WI-19-20	132.95	136.00	3.05	1.68	55.08	0.20	6.56
WI-19-20	136.00	136.40	0.40	0.18	45.00	0.00	0.00

Specific Gravity

Hole Id	Depth		Length of Core (m)	Specific Gravity		SG
	From (m)	To (m)		Dry Weight (g)	Wet Weight (g)	
WI-19-20	4.85	7.40	0.364	1891.7	1220.4	2.82
WI-19-20	9.37	11.60	0.480	2172.9	1434.9	2.94
WI-19-20	13.70	17.10	0.305	1478.5	977.8	2.95
WI-19-20	18.30	21.10	0.445	1837.5	1212.9	2.94
WI-19-20	22.90	25.50	0.220	981.2	642.0	2.89
WI-19-20	26.40	28.30	0.360	1578.2	1050.7	2.99
WI-19-20	29.20	31.30	0.320	1398.3	916.3	2.90
WI-19-20	32.30	34.35	0.390	1863.2	1218.1	2.89
WI-19-20	35.35	37.60	0.310	1590.4	1065.0	3.03
WI-19-20	38.80	41.00	0.300	1412.8	922.4	2.88
WI-19-20	42.10	44.60	0.290	1415.3	925.3	2.89
WI-19-20	45.50	47.50	0.310	1595.7	1053.8	2.94
WI-19-20	48.50	50.80	0.300	1479.0	975.0	2.93
WI-19-20	51.80	53.90	0.315	1551.7	1014.5	2.89
WI-19-20	54.80	56.80	0.330	1552.4	1025.9	2.95
WI-19-20	57.80	59.80	0.200	1072.6	709.1	2.95
WI-19-20	61.00	63.10	0.270	1415.0	940.1	2.98
WI-19-20	64.30	66.60	0.400	1881.7	1249.2	2.98
WI-19-20	67.60	70.50	0.275	1265.4	818.3	2.83
WI-19-20	71.80	74.00	0.195	906.7	571.1	2.70
WI-19-20	75.00	77.00	0.265	1242.1	806.0	2.85
WI-19-20	78.50	80.50	0.190	631.6	395.1	2.67
WI-19-20	81.00	83.00	0.210	860.0	535.9	2.65
WI-19-20	84.00	86.10	0.195	738.2	466.5	2.72
WI-19-20	86.90	89.00	0.285	1412.0	918.1	2.86
WI-19-20	90.30	92.20	0.390	1726.9	1131.5	2.90
WI-19-20	93.20	95.20	0.200	1110.6	698.7	2.70
WI-19-20	96.20	98.20	0.250	1203.8	768.0	2.76
WI-19-20	99.20	101.20	0.290	1360.2	869.5	2.77
WI-19-20	102.80	104.80	0.165	866.4	553.5	2.77
WI-19-20	105.80	107.90	0.130	559.7	333.0	2.47
WI-19-20	111.60	111.60	0.030	225.0	141.3	2.69
WI-19-20	113.90	116.00	0.140	751.7	468.6	2.66
WI-19-20	117.20	119.30	0.145	667.1	427.6	2.79
WI-19-20	121.30	122.30	0.150	750.4	471.3	2.69
WI-19-20	123.20	125.10	0.170	867.1	537.2	2.63
WI-19-20	126.20	128.30	0.195	746.5	418.9	2.28
WI-19-20	129.20	131.20	0.165	567.8	357.9	2.71
WI-19-20	132.20	134.20	0.185	977.9	618.6	2.72
WI-19-20	135.20	135.20	0.05	302.00	193.600	2.79

Drill Hole Geotechnical Logs

Recovery RQD

Specific Gravity

Hole Id	Depth From (m)	Depth To (m)	Interval (m)	Recovery (m)	Recovery (%)	RQD (m)	RQD (%)
WI-19-21	3.90	5.50	1.60	1.60	100.00	1.39	86.88
WI-19-21	5.50	8.55	3.05	2.16	70.82	0.92	30.16
WI-19-21	8.55	11.60	3.05	1.87	61.31	0.67	21.97
WI-19-21	11.60	14.65	3.05	1.18	38.69	0.24	7.87
WI-19-21	14.65	17.70	3.05	2.53	82.95	1.93	63.28
WI-19-21	17.70	20.75	3.05	1.63	53.44	0.64	20.98
WI-19-21	20.75	23.80	3.05	2.43	79.67	1.74	57.05
WI-19-21	23.80	26.85	3.05	2.48	81.31	1.44	47.21
WI-19-21	26.85	29.90	3.05	2.35	77.05	1.23	40.33
WI-19-21	29.90	32.95	3.05	1.96	64.26	0.56	18.36
WI-19-21	32.95	36.00	3.05	2.05	67.21	1.12	36.72
WI-19-21	36.00	39.05	3.05	1.43	46.89	0.57	18.69
WI-19-21	39.05	42.10	3.05	2.04	66.89	0.76	24.92
WI-19-21	42.10	45.15	3.05	1.87	61.31	0.90	29.51
WI-19-21	45.15	48.20	3.05	2.00	65.57	0.56	18.36
WI-19-21	48.20	51.25	3.05	2.44	80.00	0.94	30.82
WI-19-21	51.25	54.30	3.05	2.29	75.08	1.38	45.25
WI-19-21	54.30	57.35	3.05	2.57	84.26	1.02	33.44
WI-19-21	57.35	60.40	3.05	2.15	70.49	0.89	29.18
WI-19-21	60.40	63.45	3.05	2.05	67.21	0.29	9.51
WI-19-21	63.45	66.50	3.05	2.13	69.84	0.24	7.87
WI-19-21	66.50	69.55	3.05	2.17	71.15	0.77	25.25
WI-19-21	69.55	72.60	3.05	2.35	77.05	1.06	34.75
WI-19-21	72.60	75.65	3.05	2.65	86.89	1.81	59.34
WI-19-21	75.65	78.70	3.05	2.30	75.41	1.18	38.69
WI-19-21	78.70	81.75	3.05	2.88	94.43	1.68	55.08
WI-19-21	81.75	84.80	3.05	2.40	78.69	1.52	49.84
WI-19-21	84.80	87.85	6.10	4.15	68.03	1.32	21.64
WI-19-21	87.85	90.90	3.05	2.40	78.69	0.79	25.90
WI-19-21	90.90	93.95	3.05	2.60	85.25	1.12	36.72
WI-19-21	93.95	97.00	3.05	2.45	80.33	0.40	13.11
WI-19-21	97.00	100.05	3.05	2.62	85.90	0.85	27.87
WI-19-21	100.05	103.10	3.05	2.40	78.69	0.42	13.77
WI-19-21	103.10	106.15	3.05	2.40	78.69	0.28	9.18
WI-19-21	106.15	109.20	3.05	2.45	80.33	0.30	9.84
WI-19-21	109.20	112.25	3.05	2.00	65.57	0.00	0.00
WI-19-21	112.25	115.30	3.05	2.24	73.44	0.00	0.00
WI-19-21	115.30	118.35	3.05	1.95	63.93	0.35	11.48
WI-19-21	118.35	121.40	3.05	2.05	67.21	0.44	14.43
WI-19-21	121.40	124.45	3.05	2.25	73.77	0.20	6.56
WI-19-21	124.45	127.50	3.05	2.60	85.25	0.36	11.80
WI-19-21	127.50	130.55	3.05	2.80	91.80	1.40	45.90
WI-19-21	130.55	133.60	3.05	3.10	101.64	1.54	50.49
WI-19-21	133.60	136.65	3.05	2.80	91.80	1.44	47.21
WI-19-21	136.65	139.70	3.05	1.30	42.62	0.16	5.25
WI-19-21	139.70	142.75	3.05	1.75	57.38	0.00	0.00
WI-19-21	142.75	145.80	3.05	2.75	90.16	0.46	15.08
WI-19-21	145.80	148.85	3.05	2.85	93.44	0.91	29.84
WI-19-21	148.85	151.90	3.05	1.90	62.30	0.00	0.00
WI-19-21	151.90	154.95	3.05	2.20	72.13	0.11	3.61
WI-19-21	154.95	158.00	3.05	2.70	88.52	0.40	13.11
WI-19-21	158.00	161.05	3.05	2.00	65.57	0.31	10.16
WI-19-21	161.05	164.10	3.05	1.90	62.30	0.00	0.00
WI-19-21	164.10	167.15	3.05	1.70	55.74	0.00	0.00
WI-19-21	167.15	170.20	3.05	2.30	75.41	0.00	0.00
WI-19-21	170.20	173.25	3.05	2.30	75.41	0.00	0.00
WI-19-21	173.25	176.30	3.05	2.85	93.44	0.74	24.26

Hole Id	Depth From (m)	Depth To (m)	Length of Core (m)	Dry Weight (g)	Wet Weight (g)	SG
WI-19-21	4.00	6.00	0.430	2007.5	1295.8	2.82
WI-19-21	7.00	9.00	0.330	1565.9	985.6	2.70
WI-19-21	10.00	12.00	0.315	1623.5	1077.1	2.97
WI-19-21	13.00	15.00	0.300	1555.4	1028.6	2.95
WI-19-21	16.00	18.00	0.365	1729.7	1107.7	2.78
WI-19-21	19.00	21.00	0.295	1425.0	934.7	2.91
WI-19-21	22.00	24.00	0.250	1135.5	699.0	2.60
WI-19-21	25.00	27.00	0.265	1384.1	894.5	2.83
WI-19-21	28.00	30.00	0.440	2286.5	1486.7	2.86
WI-19-21	31.00	33.00	0.255	1346.6	875.6	2.86
WI-19-21	34.00	36.00	0.430	2212.0	1437.6	2.86
WI-19-21	37.00	39.00	0.285	1551.4	1019.6	2.92
WI-19-21	40.00	42.00	0.195	947.4	612.1	2.83
WI-19-21	43.00	45.00	0.275	1468.5	955.6	2.86
WI-19-21	47.00	48.00	0.280	1527.7	999.1	2.89
WI-19-21	49.00	51.00	0.290	1604.7	1036.2	2.82
WI-19-21	52.00	54.00	0.390	1884.2	1240.2	2.93
WI-19-21	55.00	57.00	0.315	1709.2	1129.9	2.95
WI-19-21	58.00	60.00	0.290	1640.3	1106.1	3.07
WI-19-21	61.00	63.00	0.165	898.1	587.0	2.89
WI-19-21	64.00	66.00	0.210	1131.3	742.2	2.91
WI-19-21	67.00	69.00	0.330	1888.4	1254.6	2.98
WI-19-21	70.00	72.00	0.290	1694.9	1117.7	2.94
WI-19-21	73.00	75.00	0.435	2453.7	1612.4	2.92
WI-19-21	76.00	78.00	0.340	1857.7	1200.9	2.83
WI-19-21	79.00	81.00	0.460	2491.4	1649.5	2.96
WI-19-21	82.00	84.00	0.430	2311.4	1536.6	2.98
WI-19-21	85.00	87.00	0.305	1793.0	1189.6	2.97
WI-19-21	88.00	90.00	0.320	1942.3	1302.7	3.04
WI-19-21	91.00	93.00	0.420	2343.0	1558.2	2.99
WI-19-21	94.00	96.00	0.325	1793.3	1166.9	2.86
WI-19-21	97.00	99.00	0.270	1499.7	1002.2	3.01
WI-19-21	100.00	102.00	0.300	1672.5	1114.3	3.00
WI-19-21	103.00	105.00	0.285	1546.1	1026.0	2.97
WI-19-21	106.00	108.00	0.285	1524.2	1001.3	2.91
WI-19-21	109.00	111.00	0.325	1838.4	1229.5	3.02
WI-19-21	112.25	118.35	0.210	1111.1	735.9	2.96
WI-19-21	121.40	127.50	0.280	1577.6	1018.9	2.82
WI-19-21	130.55	136.65	0.310	1815.4	1227.4	3.09
WI-19-21	139.70	145.80	0.360	1921.6	1261.4	2.91
WI-19-21	148.85	154.95	0.330	1803.1	1135.4	2.70
WI-19-21	158.00	164.10	0.350	1794.7	1113.6	2.64
WI-19-21	170.20	173.25	0.130	822.0	539.6	2.91
WI-19-21	176.30	179.35	0.180	1025.2	677.6	2.95

**Drill Hole Geotechnical Logs**

**Recovery RQD**

Hole Id	Depth From (m)	Depth To (m)	Interval (m)	Recovery (m)	Recovery (%)	RQD (m)	RQD (%)
WI-19-22	4.00	7.05	3.05	0.50	16.39	0.10	3.28
WI-19-22	7.05	10.10	3.05	1.90	62.30	0.18	5.90
WI-19-22	10.10	13.15	3.05	1.95	63.93	0.70	22.95
WI-19-22	13.15	16.20	3.05	2.05	67.21	0.70	22.95
WI-19-22	16.20	19.25	3.05	2.00	65.57	0.60	19.67
WI-19-22	19.25	22.30	3.05	2.30	75.41	0.10	3.28
WI-19-22	22.30	25.35	3.05	2.15	70.49	0.20	6.56
WI-19-22	25.35	28.40	3.05	2.35	77.05	0.54	17.70
WI-19-22	28.40	31.45	3.05	2.97	97.38	1.80	59.02
WI-19-22	31.45	34.50	3.05	3.05	100.00	2.02	66.23
WI-19-22	34.50	37.55	3.05	2.90	95.08	1.86	60.98
WI-19-22	37.55	40.60	3.05	3.00	98.36	0.60	19.67
WI-19-22	40.60	43.65	3.05	2.92	95.74	1.70	55.74
WI-19-22	43.65	46.70	3.05	2.82	92.46	1.75	57.38
WI-19-22	46.70	49.75	3.05	3.00	98.36	1.45	47.54
WI-19-22	49.75	52.80	3.05	2.25	73.77	0.13	4.26
WI-19-22	52.80	55.85	3.05	2.05	67.21	0.12	3.93
WI-19-22	55.85	58.90	3.05	3.00	98.36	0.96	31.48
WI-19-22	58.90	61.95	3.05	2.64	86.56	0.94	30.82
WI-19-22	61.95	65.00	3.05	2.75	90.16	1.00	32.79
WI-19-22	65.00	68.05	3.05	2.60	85.25	0.72	23.61
WI-19-22	68.05	71.10	3.05	3.00	98.36	0.52	17.05
WI-19-22	71.10	74.15	3.05	2.80	91.80	0.47	15.41
WI-19-22	74.15	77.20	3.05	3.05	100.00	0.42	13.77
WI-19-22	77.20	80.25	3.05	3.01	98.69	1.53	50.16
WI-19-22	80.25	83.30	3.05	2.75	90.16	0.10	3.28
WI-19-22	83.30	86.35	3.05	2.70	88.52	0.31	10.16
WI-19-22	86.35	89.40	3.05	2.95	96.72	0.41	13.44
WI-19-22	89.40	92.45	3.05	2.55	83.61	0.10	3.28
WI-19-22	92.45	95.50	3.05	2.95	96.72	0.17	5.57
WI-19-22	95.50	98.55	3.05	2.95	96.72	0.33	10.82
WI-19-22	98.55	101.60	3.05	3.00	98.36	0.51	16.72
WI-19-22	101.60	104.65	3.05	2.75	90.16	0.00	0.00
WI-19-22	104.65	107.70	3.05	2.30	75.41	0.48	15.74
WI-19-22	107.70	110.75	3.05	2.90	95.08	0.66	21.64
WI-19-22	110.75	113.80	3.05	2.80	91.80	0.95	31.15
WI-19-22	113.80	116.85	3.05	2.85	93.44	0.32	10.49
WI-19-22	116.85	119.90	3.05	2.85	93.44	0.73	23.93
WI-19-22	119.90	122.95	3.05	1.70	55.74	0.00	0.00
WI-19-22	122.95	126.00	3.05	0.80	26.23	0.00	0.00
WI-19-22	126.00	127.15	1.15	0.60	52.17	0.00	0.00

**Specific Gravity**

Hole Id	Depth (m)	Length of Core (m)	Dry Weight (g)	Wet Weight (g)	SG
WI-19-22	4.00	0.100	504.1	313.5	2.64
WI-19-22	7.05	0.080	434.9	286.7	2.93
WI-19-22	10.10	0.070	342.0	226.7	2.97
WI-19-22	13.15	0.090	468.5	311.5	2.98
WI-19-22	16.20	0.140	721.6	483.3	3.03
WI-19-22	19.25	0.090	491.4	318.8	2.85
WI-19-22	22.30	0.070	409.3	271.2	2.96
WI-19-22	25.35	0.080	476.8	317.7	3.00
WI-19-22	28.40	0.150	876.5	580.6	2.96
WI-19-22	31.45	0.100	560.0	349.4	2.66
WI-19-22	34.50	0.120	655.7	433.5	2.95
WI-19-22	37.55	0.100	567.6	374.9	2.95
WI-19-22	40.60	0.070	426.5	283.1	2.97
WI-19-22	43.65	0.130	724.7	487.3	3.05
WI-19-22	46.70	0.100	517.2	344.1	2.99
WI-19-22	49.75	0.130	713.4	475.2	2.99
WI-19-22	52.80	0.120	632.0	403.7	2.77
WI-19-22	55.85	0.085	490.1	328.0	3.02
WI-19-22	58.90	0.130	724.2	471.7	2.87
WI-19-22	61.95	0.060	389.1	254.1	2.88
WI-19-22	65.00	0.090	530.4	349.9	2.94
WI-19-22	68.05	0.110	567.8	366.0	2.81
WI-19-22	71.10	0.090	557.0	368.8	2.96
WI-19-22	74.15	0.090	548.0	362.5	2.95
WI-19-22	77.20	0.110	663.4	439.3	2.96
WI-19-22	80.25	0.100	579.3	389.3	3.05
WI-19-22	83.30	0.080	519.7	344.6	2.97
WI-19-22	86.35	0.090	569.1	374.5	2.92
WI-19-22	89.40	0.070	447.1	296.7	2.97
WI-19-22	92.45	0.080	514.8	342.4	2.99
WI-19-22	95.50	0.090	578.4	393.9	3.13
WI-19-22	98.55	0.060	397.4	265.9	3.02
WI-19-22	101.60	0.060	345.4	214.6	2.64
WI-19-22	104.65	0.100	516.3	330.4	2.78
WI-19-22	107.70	0.090	542.4	357.2	2.93
WI-19-22	110.75	0.110	686.4	464.1	3.09
WI-19-22	113.80	0.130	766.7	511.9	3.01
WI-19-22	116.85	0.070	373.3	233.6	2.67
WI-19-22	119.90	0.100	636.9	421.3	2.95
WI-19-22	122.95	0.080	392.9	247.1	2.69
WI-19-22	126.00	0.070	411.6	270.4	2.92

Drill Hole Geotechnical Logs

Recovery RQD

Hole Id	Depth From (m)	Depth To (m)	Interval (m)	Recovery (m)	Recovery (%)	RQD (m)	RQD (%)
WI-19-23	0.95	4.00	3.05	2.69	88.20	0.78	25.57
WI-19-23	4.00	7.05	3.05	2.40	78.69	0.55	18.03
WI-19-23	7.05	10.10	3.05	2.60	85.25	0.21	6.89
WI-19-23	10.10	13.15	3.05	2.75	90.16	1.15	37.70
WI-19-23	13.15	16.20	3.05	2.70	88.52	0.10	3.28
WI-19-23	16.20	19.25	3.05	2.70	88.52	1.01	33.11
WI-19-23	19.25	22.30	3.05	2.90	95.08	1.97	64.59
WI-19-23	22.30	25.35	3.05	2.80	91.80	1.35	44.26
WI-19-23	25.35	28.40	3.05	2.78	91.15	1.58	51.80
WI-19-23	28.40	31.45	3.05	2.95	96.72	2.06	67.54
WI-19-23	31.45	34.50	3.05	2.82	92.46	1.86	60.98
WI-19-23	34.50	37.55	3.05	2.88	94.43	1.96	64.26
WI-19-23	37.55	40.60	3.05	3.00	98.36	2.27	74.43
WI-19-23	40.60	43.65	3.05	2.90	95.08	2.15	70.49
WI-19-23	43.65	46.70	3.05	2.88	94.43	1.33	43.61
WI-19-23	46.70	49.75	3.05	2.25	73.77	1.58	51.80
WI-19-23	49.75	52.80	3.05	2.73	89.51	0.41	13.44
WI-19-23	52.80	55.85	3.05	2.40	78.69	0.76	24.92
WI-19-23	55.85	58.90	3.05	1.00	32.79	0.00	0.00
WI-19-23	58.90	61.95	3.05	3.08	100.98	0.84	27.54
WI-19-23	61.95	65.00	3.05	2.75	90.16	1.20	39.34
WI-19-23	65.00	68.05	3.05	2.85	93.44	1.65	54.10
WI-19-23	68.05	71.10	3.05	2.40	78.69	0.75	24.59
WI-19-23	71.10	74.15	3.05	3.00	98.36	1.59	52.13
WI-19-23	74.15	77.20	3.05	2.50	81.97	0.19	6.23
WI-19-23	77.20	80.25	3.05	2.80	91.80	0.87	28.52
WI-19-23	80.25	83.30	3.05	2.90	95.08	0.67	21.97
WI-19-23	83.30	86.35	3.05	2.75	90.16	0.29	9.51
WI-19-23	86.35	89.40	3.05	2.95	96.72	0.95	31.15
WI-19-23	89.40	92.45	3.05	2.86	93.77	0.46	15.08
WI-19-23	92.45	95.50	3.05	2.80	91.80	0.31	10.16
WI-19-23	95.50	98.55	3.05	2.94	96.39	1.35	44.26
WI-19-23	98.55	101.60	3.05	3.03	99.34	1.48	48.52
WI-19-23	101.60	104.65	3.05	3.00	98.36	0.86	28.20
WI-19-23	104.65	107.70	3.05	2.60	85.25	0.43	14.10
WI-19-23	107.70	110.75	3.05	2.30	75.41	0.29	9.51
WI-19-23	110.75	113.80	3.05	3.05	100.00	0.97	31.80
WI-19-23	113.80	116.85	3.05	2.30	75.41	0.57	18.69
WI-19-23	116.85	119.90	3.05	2.65	86.89	0.32	10.49
WI-19-23	119.90	122.95	3.05	2.82	92.46	0.56	18.36
WI-19-23	122.95	126.00	3.05	2.65	86.89	0.59	19.34

Specific Gravity

Hole Id	Depth (m)	Length of Core (m)	Dry Weight (g)	Wet Weight (g)	SG
WI-19-23	0.95	0.090	468.1	295.5	2.71
WI-19-23	4.00	0.110	579.7	369.9	2.76
WI-19-23	7.05	0.130	715.2	466.9	2.88
WI-19-23	10.10	0.080	412.7	265.0	2.79
WI-19-23	13.15	0.070	405.8	267.8	2.94
WI-19-23	16.20	0.080	451.5	298.4	2.95
WI-19-23	19.25	0.120	655.2	431.6	2.93
WI-19-23	22.30	0.120	697.6	464.7	3.00
WI-19-23	25.35	0.090	491.4	329.5	3.04
WI-19-23	28.40	0.100	558.2	370.4	2.97
WI-19-23	31.45	0.100	603.8	400.8	2.97
WI-19-23	34.50	0.150	823.1	547.5	2.99
WI-19-23	37.55	0.110	617.6	415.6	3.06
WI-19-23	40.60	0.090	514.1	340.5	2.96
WI-19-23	43.65	0.130	731.4	488.6	3.01
WI-19-23	46.70	0.110	584.7	388.6	2.98
WI-19-23	49.75	0.130	694.6	462.3	2.99
WI-19-23	52.80	0.090	486.9	317.0	2.87
WI-19-23	55.85	0.110	554.3	366.9	2.96
WI-19-23	58.90	0.140	816.0	541.5	2.97
WI-19-23	61.95	0.120	707.8	480.9	3.12
WI-19-23	65.00	0.120	659.6	439.1	2.99
WI-19-23	68.05	0.120	667.6	442.4	2.96
WI-19-23	71.10	0.110	577.1	371.9	2.81
WI-19-23	74.15	0.120	677.7	445.5	2.92
WI-19-23	77.20	0.050	286.1	193.5	3.09
WI-19-23	80.25	0.080	506.9	337.5	2.99
WI-19-23	83.30	0.110	632.4	419.5	2.97
WI-19-23	86.35	0.130	684.6	448.4	2.90
WI-19-23	89.40	0.110	588.2	391.0	2.98
WI-19-23	92.45	0.120	633.5	419.9	2.97
WI-19-23	95.50	0.090	465.8	309.9	2.99
WI-19-23	98.55	0.130	725.5	484.3	3.01
WI-19-23	101.60	0.100	675.7	455.3	3.07
WI-19-23	104.65	0.095	526.9	348.9	2.96
WI-19-23	107.70	0.130	751.6	502.5	3.02
WI-19-23	110.75	0.100	486.6	310.5	2.76
WI-19-23	113.80	0.140	670.9	419.9	2.67
WI-19-23	116.85	0.110	552.0	352.6	2.77
WI-19-23	119.90	0.130	647.6	404.7	2.67
WI-19-23	122.95	0.090	451.9	283.4	2.68
WI-19-23	126.00	0.110	554.6	348.2	2.69



Drill Hole Geotechnical Logs

Recovery RQD

Specific Gravity

Hole Id	Depth From (m)	Depth To (m)	Interval (m)	Recovery (m)	Recovery (%)	RQD (m)	RQD (%)
WI-19-24	0.95	4.00	3.05	1.28	41.97	0.13	4.26
WI-19-24	4.00	7.05	3.05	2.24	73.44	0.87	28.52
WI-19-24	7.05	10.10	3.05	2.51	82.30	0.21	6.89
WI-19-24	10.10	13.15	3.05	2.60	85.25	1.10	36.07
WI-19-24	13.15	16.20	3.05	2.54	83.28	0.60	19.67
WI-19-24	16.20	19.25	3.05	2.90	95.08	1.52	49.84
WI-19-24	19.25	22.30	3.05	2.92	95.74	1.46	47.87
WI-19-24	22.30	25.35	3.05	2.86	93.77	0.70	22.95
WI-19-24	25.35	28.40	3.05	3.05	100.00	1.72	56.39
WI-19-24	28.40	31.45	3.05	2.56	83.93	0.68	22.30
WI-19-24	31.45	34.50	3.05	2.59	84.92	1.04	34.10
WI-19-24	34.50	37.55	3.05	2.86	93.77	0.29	9.51
WI-19-24	37.55	40.60	3.05	2.86	93.77	1.48	48.52
WI-19-24	40.60	43.65	3.05	2.96	97.05	1.19	39.02
WI-19-24	43.65	46.70	3.05	3.02	99.02	0.50	16.39
WI-19-24	46.70	49.75	3.05	3.05	100.00	3.05	100.00
WI-19-24	49.75	52.80	3.05	2.80	91.80	1.41	46.23
WI-19-24	52.80	55.85	3.05	3.05	100.00	0.45	14.75
WI-19-24	55.85	58.90	3.05	2.30	75.41	0.11	3.61
WI-19-24	58.90	61.95	3.05	2.94	96.39	0.44	14.43
WI-19-24	61.95	65.00	3.05	2.82	92.46	0.42	13.77
WI-19-24	65.00	68.05	3.05	2.90	95.08	0.51	16.72
WI-19-24	68.05	71.10	3.05	2.94	96.39	0.30	9.84
WI-19-24	71.10	74.15	3.05	1.17	38.36	0.20	6.56
WI-19-24	74.15	77.20	3.05	2.20	72.13	0.13	4.26
WI-19-24	77.20	80.25	3.05	2.38	78.03	0.37	12.13
WI-19-24	80.25	83.30	3.05	2.32	76.07	0.00	0.00
WI-19-24	83.30	86.35	3.05	2.02	66.23	0.31	10.16
WI-19-24	86.35	89.40	3.05	3.02	99.02	0.32	10.49
WI-19-24	89.40	92.45	3.05	2.36	77.38	0.34	11.15
WI-19-24	92.45	95.50	3.05	2.68	87.87	0.54	17.70
WI-19-24	95.50	98.55	3.05	2.86	93.77	0.95	31.15
WI-19-24	98.55	101.60	3.05	2.83	92.79	0.39	12.79
WI-19-24	101.60	104.65	3.05	2.94	96.39	0.00	0.00
WI-19-24	104.65	107.70	3.05	3.00	98.36	0.24	7.87
WI-19-24	107.70	110.75	3.05	3.05	100.00	0.44	14.43
WI-19-24	110.75	113.80	3.05	2.76	90.49	0.43	14.10
WI-19-24	113.80	116.85	3.05	2.86	93.77	0.53	17.38
WI-19-24	116.85	119.90	3.05	2.50	81.97	0.45	14.75
WI-19-24	119.90	122.95	3.05	2.50	81.97	0.60	19.67

Hole Id	Depth (m)	Length of Core (m)	Dry Weight (g)	Wet Weight (g)	SG
WI-19-24	4.00	0.140	778.6	519.2	3.00
WI-19-24	7.05	0.110	570.0	380.2	3.00
WI-19-24	10.10	0.110	615.5	410.6	3.00
WI-19-24	13.15	0.110	651.5	428.5	2.92
WI-19-24	16.20	0.100	559.3	368.9	2.94
WI-19-24	19.25	0.130	686.8	448.9	2.89
WI-19-24	22.30	0.120	653.0	439.0	3.05
WI-19-24	25.35	0.080	490.6	333.4	3.12
WI-19-24	28.40	0.120	715.0	490.0	3.18
WI-19-24	31.45	0.110	553.8	364.9	2.93
WI-19-24	34.50	0.100	545.5	365.7	3.03
WI-19-24	37.55	0.200	1041.7	691.5	2.97
WI-19-24	40.60	0.120	667.4	439.9	2.93
WI-19-24	43.65	0.150	859.3	576.1	3.03
WI-19-24	46.70	0.150	760.4	493.6	2.85
WI-19-24	49.75	0.130	711.7	469.4	2.94
WI-19-24	52.80	0.150	873.7	578.3	2.96
WI-19-24	55.85	0.100	520.2	347.6	3.01
WI-19-24	58.90	0.110	600.0	394.2	2.92
WI-19-24	61.95	0.080	438.4	293.1	3.02
WI-19-24	65.00	0.120	687.0	476.5	3.26
WI-19-24	68.05	0.090	466.3	307.7	2.94
WI-19-24	71.10	0.110	624.7	420.6	3.06
WI-19-24	74.15	0.080	427.2	286.4	3.03
WI-19-24	77.20	0.090	451.7	301.8	3.01
WI-19-24	80.25	0.130	706.2	464.4	2.92
WI-19-24	83.30	0.070	440.4	288.9	2.91
WI-19-24	86.35	0.070	405.5	264.9	2.88
WI-19-24	89.40	0.070	373.1	246.1	2.94
WI-19-24	92.45	0.070	342.4	223.5	2.88
WI-19-24	95.50	0.080	377.1	241.4	2.78
WI-19-24	98.55	0.105	583.1	386.7	2.97
WI-19-24	101.60	0.100	515.0	337.0	2.89
WI-19-24	104.65	0.070	361.7	236.2	2.88
WI-19-24	107.70	0.090	496.4	325.5	2.90
WI-19-24	110.75	0.130	722.7	473.2	2.90
WI-19-24	113.80	0.150	787.0	500.5	2.75
WI-19-24	116.85	0.100	563.1	364.7	2.84
WI-19-24	119.90	0.110	604.8	401.3	2.97
WI-19-24	122.95	0.160	856.8	567.1	2.96

Drill Hole Geotechnical Logs

Recovery RQD

Specific Gravity

Hole Id	Depth From (m)	Depth To (m)	Interval (m)	Recovery (m)	Recovery (%)	RQD (m)	RQD (%)
WI-19-25	1.35	1.80	0.45	0.45	100.00	0.32	71.11
WI-19-25	1.80	4.85	3.05	2.67	87.54	0.98	32.13
WI-19-25	4.85	7.90	3.05	2.50	81.97	0.86	28.20
WI-19-25	7.90	10.95	3.05	2.13	69.84	0.35	11.48
WI-19-25	10.95	14.00	3.05	2.45	80.33	0.12	3.93
WI-19-25	14.00	17.05	3.05	2.22	72.79	1.20	39.34
WI-19-25	17.05	20.10	3.05	2.05	67.21	0.78	25.57
WI-19-25	20.10	23.15	3.05	2.40	78.69	0.80	26.23
WI-19-25	23.15	26.20	3.05	2.57	84.26	1.25	40.98
WI-19-25	26.20	29.25	3.05	2.30	75.41	1.73	56.72
WI-19-25	29.25	32.30	3.05	2.50	81.97	0.70	22.95
WI-19-25	32.30	35.35	3.05	2.51	82.30	0.98	32.13
WI-19-25	35.35	38.40	3.05	2.15	70.49	0.79	25.90
WI-19-25	38.40	41.45	3.05	2.62	85.90	1.33	43.61
WI-19-25	41.45	44.50	3.05	2.00	65.57	0.30	9.84
WI-19-25	44.50	47.55	3.05	1.60	52.46	0.72	23.61
WI-19-25	47.55	50.60	3.05	1.44	47.21	0.23	7.54
WI-19-25	50.60	53.65	3.05	2.08	68.20	0.49	16.07
WI-19-25	53.65	56.70	3.05	1.20	39.34	0.26	8.52
WI-19-25	56.70	59.75	3.05	0.85	27.87	0.11	3.61
WI-19-25	59.75	62.80	3.05	2.00	65.57	0.49	16.07
WI-19-25	62.80	65.85	3.05	2.41	79.02	0.75	24.59
WI-19-25	65.85	68.90	3.05	1.77	58.03	0.13	4.26
WI-19-25	68.90	71.95	3.05	1.70	55.74	0.61	20.00
WI-19-25	71.95	75.00	3.05	1.86	60.98	0.24	7.87
WI-19-25	75.00	78.05	3.05	1.62	53.11	0.22	7.21
WI-19-25	78.05	81.10	3.05	1.70	55.74	0.22	7.21
WI-19-25	81.10	84.15	3.05	1.25	40.98	0.11	3.61
WI-19-25	84.15	87.20	3.05	0.85	27.87	0.00	0.00
WI-19-25	87.20	90.25	3.05	2.00	65.57	0.41	13.44
WI-19-25	90.25	93.30	3.05	1.83	60.00	0.27	8.85
WI-19-25	93.30	96.35	3.05	2.18	71.48	0.45	14.75
WI-19-25	96.35	99.40	3.05	1.95	63.93	0.43	14.10
WI-19-25	99.40	102.45	3.05	1.83	60.00	0.00	0.00
WI-19-25	102.45	105.50	3.05	0.94	30.82	0.00	0.00
WI-19-25	105.50	108.55	3.05	1.80	59.02	0.00	0.00
WI-19-25	108.55	111.60	3.05	1.09	35.74	0.11	3.61
WI-19-25	111.60	114.65	3.05	1.50	49.18	0.00	0.00
WI-19-25	114.65	117.70	3.05	1.20	39.34	0.14	4.59
WI-19-25	117.70	120.75	3.05	2.33	76.39	0.54	17.70
WI-19-25	120.75	123.80	3.05	1.91	62.62	0.00	0.00
WI-19-25	123.80	126.85	3.05	1.04	34.10	0.00	0.00
WI-19-25	126.85	129.90	3.05	2.15	70.49	0.29	9.51
WI-19-25	129.90	132.95	3.05	1.92	62.95	0.10	3.28
WI-19-25	132.95	136.00	3.05	1.75	57.38	0.10	3.28
WI-19-25	136.00	139.05	3.05	2.26	74.10	0.20	6.56
WI-19-25	139.05	142.10	3.05	1.75	57.38	0.11	3.61
WI-19-25	142.10	145.15	3.05	2.30	75.41	0.43	14.10
WI-19-25	145.15	148.20	3.05	1.82	59.67	0.10	3.28
WI-19-25	148.20	151.25	3.05	1.00	32.79	0.20	6.56
WI-19-25	151.25	154.30	3.05	2.18	71.48	1.14	37.38
WI-19-25	154.30	157.35	3.05	2.00	65.57	0.91	29.84
WI-19-25	157.35	160.40	3.05	1.88	61.64	0.51	16.72
WI-19-25	160.40	163.45	3.05	1.52	49.84	0.12	3.93
WI-19-25	163.45	166.50	3.05	1.04	34.10	0.00	0.00
WI-19-25	166.50	169.55	3.05	2.00	65.57	0.12	3.93
WI-19-25	169.55	172.60	3.05	0.80	26.23	0.00	0.00
WI-19-25	172.60	175.65	3.05	1.12	36.72	0.00	0.00

Hole Id	Depth (m)	Length of Core (m)	Dry Weight (g)	Wet Weight (g)	SG
WI-19-25	4.85	0.130	649.0	427.0	2.92
WI-19-25	7.90	0.070	382.6	254.9	3.00
WI-19-25	10.95	0.080	392.2	261.2	2.99
WI-19-25	14.00	0.100	508.1	336.7	2.96
WI-19-25	17.05	0.080	412.6	271.2	2.92
WI-19-25	20.10	0.150	654.9	421.4	2.80
WI-19-25	23.15	0.160	753.6	499.8	2.97
WI-19-25	26.20	0.100	475.3	323.9	3.14
WI-19-25	29.25	0.090	474.7	313.9	2.95
WI-19-25	32.30	0.090	497.3	327.3	2.93
WI-19-25	35.35	0.080	368.7	235.5	2.77
WI-19-25	38.40	0.130	606.7	400.0	2.94
WI-19-25	41.45	0.070	334.2	223.9	3.03
WI-19-25	44.50	0.140	744.3	491.8	2.95
WI-19-25	47.55	0.090	418.0	266.8	2.76
WI-19-25	50.60	0.100	535.9	355.0	2.96
WI-19-25	53.65	0.080	357.5	239.0	3.02
WI-19-25	56.70	0.110	491.5	315.5	2.79
WI-19-25	59.75	0.080	319.4	208.5	2.88
WI-19-25	62.80	0.100	567.7	373.9	2.93
WI-19-25	65.85	0.120	559.9	372.0	2.98
WI-19-25	68.90	0.130	645.6	427.8	2.96
WI-19-25	71.95	0.120	632.5	422.3	3.01
WI-19-25	75.00	0.100	374.3	247.8	2.96
WI-19-25	78.05	0.090	305.2	188.1	2.61
WI-19-25	81.10	0.090	451.2	299.0	2.96
WI-19-25	84.15	0.120	538.9	352.0	2.88
WI-19-25	87.20	0.050	245.3	158.0	2.81
WI-19-25	90.25	0.090	448.7	295.7	2.93
WI-19-25	93.30	0.105	539.5	350.2	2.85
WI-19-25	96.35	0.090	472.2	309.4	2.90
WI-19-25	99.40	0.100	518.7	331.3	2.77
WI-19-25	102.45	0.110	442.1	276.1	2.66
WI-19-25	105.50	0.060	240.7	156.7	2.87
WI-19-25	108.55	0.080	394.4	256.4	2.86
WI-19-25	111.60	0.080	464.4	308.3	2.98
WI-19-25	114.65	0.070	485.2	355.5	3.74
WI-19-25	117.70	0.080	448.8	280.8	2.67
WI-19-25	120.75	0.070	309.1	201.9	2.88
WI-19-25	123.80	0.060	318.9	208.1	2.88
WI-19-25	126.85	0.080	334.4	220.2	2.93
WI-19-25	129.90	0.085	430.2	285.6	2.98
WI-19-25	132.95	0.085	385.3	255.6	2.97
WI-19-25	136.00	0.080	356.3	220.9	2.63
WI-19-25	139.05	0.100	434.8	286.1	2.92
WI-19-25	142.10	0.105	449.7	291.3	2.84
WI-19-25	145.15	0.050	404.0	264.3	2.89
WI-19-25	148.20	0.050	262.9	171.4	2.87
WI-19-25	151.25	0.100	519.8	335.9	2.83
WI-19-25	154.30	0.060	260.6	167.4	2.80
WI-19-25	157.35	0.090	384.3	243.9	2.74
WI-19-25	160.40	0.110	546.9	343.9	2.69
WI-19-25	163.45	0.050	316.9	200.0	2.71
WI-19-25	166.50	0.060	295.5	181.8	2.60
WI-19-25	169.55	0.080	328.7	206.9	2.70
WI-19-25	172.60	0.050	237.3	148.6	2.68
WI-19-25	175.65	0.065	290.5	182.3	2.68

Drill Hole Geotechnical Logs

Recovery RQD

Specific Gravity

Hole Id	Depth From (m)	Depth To (m)	Interval (m)	Recovery (m)	Recovery (%)	RQD (m)	RQD (%)
WI-19-26	2.20	3.80	1.60	1.60	100.00	0.72	45.00
WI-19-26	3.80	6.85	3.05	1.75	57.38	0.76	24.92
WI-19-26	6.85	9.90	3.05	2.15	70.49	1.08	35.41
WI-19-26	9.90	12.95	3.05	2.33	76.39	1.48	48.52
WI-19-26	12.95	16.00	3.05	1.40	45.90	0.23	7.54
WI-19-26	16.00	19.05	3.05	2.55	83.61	1.65	54.10
WI-19-26	19.05	22.10	3.05	2.46	80.66	0.94	30.82
WI-19-26	22.10	25.15	3.05	2.00	65.57	1.32	43.28
WI-19-26	25.15	28.20	3.05	1.80	59.02	0.40	13.11
WI-19-26	28.20	31.25	3.05	1.40	45.90	0.16	5.25
WI-19-26	31.25	34.30	3.05	1.50	49.18	0.33	10.82
WI-19-26	34.30	37.35	3.05	1.70	55.74	0.60	19.67
WI-19-26	37.35	40.40	3.05	1.30	42.62	1.28	41.97
WI-19-26	40.40	43.45	3.05	2.58	84.59	0.46	15.08
WI-19-26	43.45	46.50	3.05	2.05	67.21	1.30	42.62
WI-19-26	46.50	49.55	3.05	2.55	83.61	1.50	49.18
WI-19-26	49.55	52.60	3.05	2.90	95.08	0.71	23.28
WI-19-26	52.60	55.65	3.05	2.00	65.57	0.16	5.25
WI-19-26	55.65	58.70	3.05	1.25	40.98	0.24	7.87
WI-19-26	58.70	61.75	3.05	2.00	65.57	1.13	37.05
WI-19-26	61.75	64.80	3.05	2.70	88.52	1.16	38.03
WI-19-26	64.80	67.85	3.05	2.58	84.59	0.84	27.54
WI-19-26	67.85	70.90	3.05	2.65	86.89	1.70	55.74
WI-19-26	70.90	73.95	3.05	3.00	98.36	2.19	71.80
WI-19-26	73.95	77.00	3.05	2.75	90.16	1.93	63.38
WI-19-26	77.00	80.05	3.05	2.41	79.02	1.15	37.70
WI-19-26	80.05	83.10	3.05	2.10	68.85	0.21	6.89
WI-19-26	83.10	86.15	3.05	2.30	75.41	1.42	46.56
WI-19-26	86.15	89.20	3.05	1.05	34.43	0.15	4.92
WI-19-26	89.20	92.25	3.05	1.65	54.10	0.11	3.61
WI-19-26	92.25	95.30	3.05	2.40	78.69	0.71	23.28
WI-19-26	95.30	98.35	3.05	2.60	85.25	0.26	8.52
WI-19-26	98.35	101.40	3.05	1.63	53.44	0.00	0.00
WI-19-26	101.40	104.45	3.05	1.85	60.66	0.00	0.00
WI-19-26	104.45	107.50	3.05	2.25	73.77	0.77	25.25
WI-19-26	107.50	110.55	3.05	2.95	96.72	1.21	39.67
WI-19-26	110.55	113.60	3.05	2.40	78.69	0.86	28.20
WI-19-26	113.60	116.65	3.05	2.70	88.52	0.67	21.97
WI-19-26	116.65	119.70	3.05	1.60	52.46	0.00	0.00
WI-19-26	119.70	122.75	3.05	2.10	68.85	0.26	8.52
WI-19-26	122.75	125.80	3.05	2.00	65.57	0.30	9.84
WI-19-26	125.80	128.85	3.05	2.36	77.38	0.13	4.26
WI-19-26	128.85	131.90	3.05	1.60	52.46	0.15	4.92
WI-19-26	131.90	134.95	3.05	2.37	77.70	0.59	19.34
WI-19-26	134.95	138.00	3.05	2.62	85.90	0.76	24.92
WI-19-26	138.00	141.05	3.05	2.65	86.89	1.09	35.74
WI-19-26	141.05	144.10	3.05	2.40	78.69	0.57	18.69
WI-19-26	144.10	147.15	3.05	2.70	88.52	1.12	36.72
WI-19-26	147.15	150.20	3.05	2.65	86.89	0.10	3.28
WI-19-26	150.20	153.25	3.05	2.50	81.97	0.47	15.41
WI-19-26	153.25	156.30	3.05	2.20	72.13	0.46	15.08

Hole Id	Depth (m)	Length of Core (m)	Dry Weight (g)	Wet Weight (g)	SG
WI-19-26	3.80	0.100	512.1	328.3	2.79
WI-19-26	6.85	0.110	586.6	379.1	2.83
WI-19-26	9.90	0.140	722.2	470.9	2.87
WI-19-26	12.95	0.130	660.5	427.5	2.83
WI-19-26	16.00	0.080	499.0	313.7	2.69
WI-19-26	19.05	0.120	619.6	405.2	2.89
WI-19-26	22.10	0.080	371.3	239.8	2.82
WI-19-26	25.15	0.110	575.3	361.3	2.69
WI-19-26	28.20	0.150	749.3	471.1	2.69
WI-19-26	31.25	0.090	499.4	319.2	2.77
WI-19-26	34.30	0.060	334.2	216.5	2.84
WI-19-26	37.35	0.070	382.3	248.5	2.86
WI-19-26	40.40	0.100	609.9	403.5	2.95
WI-19-26	43.45	0.070	325.3	209.3	2.80
WI-19-26	46.50	0.100	437.5	288.0	2.93
WI-19-26	49.55	0.120	612.9	402.4	2.91
WI-19-26	52.60	0.140	705.5	464.8	2.93
WI-19-26	55.65	0.160	746.7	457.1	2.58
WI-19-26	58.70	0.060	382.1	246.8	2.82
WI-19-26	61.75	0.100	572.2	371.2	2.85
WI-19-26	64.80	0.080	378.5	244.3	2.82
WI-19-26	67.85	0.170	897.2	591.7	2.94
WI-19-26	70.90	0.080	449.8	290.1	2.82
WI-19-26	73.95	0.140	760.2	494.4	2.86
WI-19-26	77.00	0.170	927.4	608.4	2.91
WI-19-26	80.05	0.100	493.6	321.7	2.87
WI-19-26	83.10	0.090	428.8	273.0	2.75
WI-19-26	86.15	0.130	663.2	425.6	2.79
WI-19-26	89.20	0.150	728.4	465.1	2.77
WI-19-26	92.25	0.110	531.9	347.1	2.88
WI-19-26	95.30	0.130	650.2	423.6	2.87
WI-19-26	98.35	0.080	431.4	281.6	2.88
WI-19-26	101.40	0.050	287.7	185.6	2.82
WI-19-26	104.45	0.070	313.1	202.3	2.83
WI-19-26	107.50	0.120	640.0	416.2	2.86
WI-19-26	110.55	0.120	627.9	407.3	2.85
WI-19-26	113.60	0.070	437.2	283.5	2.84
WI-19-26	116.65	0.080	440.8	281.5	2.77
WI-19-26	119.70	0.040	185.6	115.5	2.65
WI-19-26	122.75	0.080	420.8	270.0	2.79
WI-19-26	125.80	0.080	360.8	213.5	2.45
WI-19-26	128.85	0.140	657.7	423.8	2.81
WI-19-26	131.90	0.090	460.9	284.3	2.61
WI-19-26	134.95	0.120	527.2	322.8	2.58
WI-19-26	138.00	0.110	551.1	351.8	2.77
WI-19-26	141.05	0.120	473.0	298.1	2.70
WI-19-26	144.10	0.170	796.8	512.6	2.80
WI-19-26	147.15	0.150	689.5	438.5	2.75
WI-19-26	150.20	0.110	512.1	317.2	2.63
WI-19-26	153.25	0.140	595.9	365.4	2.59
WI-19-26	156.30	0.080	334.7	208.2	2.65

**Drill Hole Geotechnical Logs**

**Recovery RQD**

**Specific Gravity**

Hole Id	Depth From (m)	Depth To (m)	Interval (m)	Recovery (m)	Recovery (%)	RQD (m)	RQD (%)
WI-19-27	2.00	2.60	0.60	0.60	100.00	0.31	51.67
WI-19-27	2.60	5.65	3.05	2.06	67.54	0.84	27.54
WI-19-27	5.65	8.70	3.05	2.35	77.05	0.74	24.26
WI-19-27	8.70	11.75	3.05	2.30	75.41	0.50	16.39
WI-19-27	11.75	14.80	3.05	2.80	91.80	1.19	39.02
WI-19-27	14.80	17.85	3.05	2.55	83.61	1.60	52.46
WI-19-27	17.85	20.90	3.05	2.51	82.30	0.98	32.13
WI-19-27	20.90	23.95	3.05	1.40	45.90	0.00	0.00
WI-19-27	23.95	27.00	3.05	2.56	83.93	0.22	7.21
WI-19-27	27.00	30.05	3.05	2.75	90.16	1.46	47.87
WI-19-27	30.05	33.10	3.05	2.66	87.21	1.44	47.21
WI-19-27	33.10	36.15	3.05	2.50	81.97	0.90	29.51
WI-19-27	36.15	39.20	3.05	1.92	62.95	1.22	40.00
WI-19-27	39.20	42.25	3.05	2.75	90.16	2.43	79.67
WI-19-27	42.25	45.30	3.05	2.55	83.61	1.41	46.23
WI-19-27	45.30	48.35	3.05	3.00	98.36	1.90	62.30
WI-19-27	48.35	51.40	3.05	2.71	88.85	1.26	41.31
WI-19-27	51.40	54.45	3.05	2.65	86.89	0.95	31.15
WI-19-27	54.45	57.50	3.05	2.43	79.67	0.70	22.95
WI-19-27	57.50	60.55	3.05	2.57	84.26	1.04	34.10
WI-19-27	60.55	63.60	3.05	2.60	85.25	1.42	46.56
WI-19-27	63.60	66.65	3.05	2.62	85.90	1.90	62.30
WI-19-27	66.65	69.70	3.05	2.85	93.44	1.86	60.98
WI-19-27	69.70	72.75	3.05	2.63	86.23	1.37	44.92
WI-19-27	72.75	75.80	3.05	2.60	85.25	1.03	33.77
WI-19-27	75.80	78.85	3.05	2.50	81.97	0.78	25.57
WI-19-27	78.85	81.90	3.05	2.25	73.77	0.41	13.44
WI-19-27	81.90	84.95	3.05	1.60	52.46	0.91	29.84
WI-19-27	84.95	88.00	3.05	2.23	73.11	0.12	3.93
WI-19-27	88.00	91.05	3.05	1.46	47.87	0.10	3.28
WI-19-27	91.05	94.10	3.05	2.20	72.13	0.64	20.98
WI-19-27	94.10	97.15	3.05	2.40	78.69	0.58	19.02
WI-19-27	97.15	100.20	3.05	2.30	75.41	0.34	11.15
WI-19-27	100.20	103.25	3.05	2.40	78.69	0.10	3.28
WI-19-27	103.25	106.30	3.05	2.70	88.52	0.75	24.59
WI-19-27	106.30	109.35	3.05	2.25	73.77	0.56	18.36
WI-19-27	109.35	112.40	3.05	2.68	87.87	0.20	6.56
WI-19-27	112.40	115.45	3.05	1.80	59.02	0.11	3.61
WI-19-27	115.45	118.50	3.05	1.00	32.79	0.00	0.00
WI-19-27	118.50	121.55	3.05	1.20	39.34	0.10	3.28
WI-19-27	121.55	124.60	3.05	2.38	78.03	1.16	38.03
WI-19-27	124.60	127.65	3.05	2.70	88.52	1.61	52.79
WI-19-27	127.65	130.70	3.05	2.51	82.30	1.24	40.66
WI-19-27	130.70	133.75	3.05	2.50	81.97	1.18	38.69
WI-19-27	133.75	136.80	3.05	2.75	90.16	1.43	46.89
WI-19-27	136.80	139.85	3.05	2.68	87.87	1.58	51.80

Hole Id	Depth (m)	Length of Core (m)	Dry Weight (g)	Wet Weight (g)	SG
WI-19-27	2.60	0.100	514.1	332.1	2.82
WI-19-27	5.65	0.130	689.8	440.9	2.77
WI-19-27	8.70	11.500	643.0	425.4	2.95
WI-19-27	11.75	0.150	687.6	454.9	2.95
WI-19-27	14.80	0.100	533.6	348.8	2.89
WI-19-27	17.85	0.110	621.2	410.2	2.94
WI-19-27	20.90	0.110	513.6	340.0	2.96
WI-19-27	24.95	0.080	406.9	270.1	2.97
WI-19-27	27.00	0.080	415.9	276.5	2.98
WI-19-27	30.05	0.120	638.0	428.8	3.05
WI-19-27	33.10	0.125	728.7	492.9	3.09
WI-19-27	36.15	0.140	691.2	456.2	2.94
WI-19-27	39.20	0.100	503.0	333.9	2.97
WI-19-27	42.25	0.140	690.7	461.2	3.01
WI-19-27	45.30	0.130	711.9	475.4	3.01
WI-19-27	48.35	0.090	499.5	336.1	3.06
WI-19-27	51.40	0.090	509.0	339.4	3.00
WI-19-27	54.45	0.100	486.6	324.4	3.00
WI-19-27	57.50	0.120	538.6	358.0	2.98
WI-19-27	60.55	0.130	659.2	435.1	2.94
WI-19-27	63.60	0.080	512.9	338.5	2.94
WI-19-27	66.65	0.110	575.5	381.0	2.96
WI-19-27	69.70	0.090	540.3	358.9	2.98
WI-19-27	72.75	0.070	389.7	262.9	3.07
WI-19-27	75.80	0.120	600.7	398.1	2.96
WI-19-27	78.85	0.075	394.5	261.8	2.97
WI-19-27	81.90	0.120	570.3	377.0	2.95
WI-19-27	84.95	0.150	758.9	503.8	2.97
WI-19-27	88.00	0.080	456.2	304.2	3.00
WI-19-27	91.05	0.090	456.3	297.7	2.88
WI-19-27	94.10	0.100	568.7	379.0	3.00
WI-19-27	97.15	0.130	670.1	445.5	2.98
WI-19-27	100.20	0.080	505.0	335.2	2.97
WI-19-27	103.25	0.060	324.7	213.9	2.93
WI-19-27	106.30	0.120	686.2	469.5	3.17
WI-19-27	109.35	0.080	421.7	278.3	2.94
WI-19-27	112.40	0.110	634.4	426.3	3.05
WI-19-27	115.45	0.080	302.3	202.4	3.03
WI-19-27	118.50	0.110	395.6	259.2	2.90
WI-19-27	121.55	0.070	317.8	211.2	2.98
WI-19-27	124.60	0.080	344.8	217.0	2.70
WI-19-27	127.65	0.100	393.9	251.2	2.76
WI-19-27	130.70	0.120	528.2	335.6	2.74
WI-19-27	133.75	0.160	682.9	432.8	2.73
WI-19-27	136.80	0.080	438.1	279.4	2.76
WI-19-27	139.85	0.150	684.2	437.8	2.78



**Drill Hole Geotechnical Logs**

**Recovery RQD**

**Specific Gravity**

Hole Id	Depth From (m)	Depth To (m)	Interval (m)	Recovery (m)	Recovery (%)	RQD (m)	RQD (%)
WI-19-28	3.15	4.30	1.15	1.15	100.00	0.64	55.65
WI-19-28	4.30	7.35	3.05	2.14	70.16	0.54	17.70
WI-19-28	7.35	10.40	3.05	2.00	65.57	0.82	26.89
WI-19-28	10.40	13.45	3.05	1.40	45.90	0.53	17.38
WI-19-28	13.45	16.50	3.05	1.52	49.84	0.40	13.11
WI-19-28	16.50	19.55	3.05	1.80	59.02	0.97	31.80
WI-19-28	19.55	22.60	3.05	2.35	77.05	0.21	6.89
WI-19-28	22.60	25.65	3.05	2.56	83.93	0.92	30.16
WI-19-28	25.65	28.70	3.05	2.77	90.82	0.81	26.56
WI-19-28	28.70	31.75	3.05	2.40	78.69	0.20	6.56
WI-19-28	31.75	34.80	3.05	3.00	98.36	2.38	78.03
WI-19-28	34.80	37.85	3.05	2.67	87.54	1.09	35.74
WI-19-28	37.85	40.90	3.05	2.77	90.82	0.86	28.20
WI-19-28	40.90	43.95	3.05	3.05	100.00	1.87	61.31
WI-19-28	43.95	47.00	3.05	3.05	100.00	2.00	65.57
WI-19-28	47.00	50.05	3.05	3.00	98.36	0.78	25.57
WI-19-28	50.05	53.10	3.05	3.05	100.00	1.62	53.11
WI-19-28	53.10	56.15	3.05	2.10	68.85	1.06	34.75
WI-19-28	56.15	59.20	3.05	2.70	88.52	0.33	10.82
WI-19-28	59.20	62.25	3.05	2.90	95.08	0.75	24.59
WI-19-28	62.25	65.30	3.05	3.05	100.00	0.85	27.87
WI-19-28	65.30	68.35	3.05	2.60	85.25	0.58	19.02
WI-19-28	68.35	71.40	3.05	2.60	85.25	0.57	18.69
WI-19-28	71.40	74.45	3.05	2.65	86.89	0.14	4.59
WI-19-28	74.45	77.50	3.05	2.80	91.80	0.40	13.11
WI-19-28	77.50	80.55	3.05	3.00	98.36	1.68	55.08
WI-19-28	80.55	83.60	3.05	2.68	87.87	1.21	39.67
WI-19-28	83.60	86.65	3.05	2.53	82.95	0.56	18.36
WI-19-28	86.65	89.70	3.05	2.40	78.69	0.57	18.69
WI-19-28	89.70	92.75	3.05	2.42	79.34	0.69	22.62
WI-19-28	92.75	95.80	3.05	2.70	88.52	1.01	33.11
WI-19-28	95.80	98.85	3.05	2.80	91.80	0.64	20.98
WI-19-28	98.85	101.90	3.05	2.50	81.97	0.60	19.67
WI-19-28	101.90	104.95	3.05	2.70	88.52	0.74	24.26
WI-19-28	104.95	108.00	3.05	2.15	70.49	0.65	21.31
WI-19-28	108.00	111.05	3.05	2.45	80.33	0.20	6.56
WI-19-28	111.05	114.10	3.05	2.30	75.41	0.57	18.69
WI-19-28	114.10	117.15	3.05	2.15	70.49	0.00	0.00

Hole Id	Depth (m)	Length of Core (m)	Dry Weight (g)	Wet Weight (g)	SG
WI-19-28	4.30	0.120	602.0	397.3	2.94
WI-19-28	7.35	0.100	466.9	302.8	2.85
WI-19-28	10.40	0.150	623.8	389.5	2.66
WI-19-28	13.45	0.110	449.5	280.5	2.66
WI-19-28	16.50	0.100	493.7	315.6	2.77
WI-19-28	19.55	0.090	396.0	259.2	2.89
WI-19-28	22.60	0.120	544.7	351.4	2.82
WI-19-28	25.65	0.090	371.4	231.3	2.65
WI-19-28	28.70	0.110	523.4	346.7	2.96
WI-19-28	31.75	0.100	501.1	327.5	2.89
WI-19-28	34.80	0.120	581.0	377.7	2.86
WI-19-28	37.85	0.130	648.5	428.0	2.94
WI-19-28	40.90	0.110	567.9	373.8	2.93
WI-19-28	43.95	0.110	506.8	326.7	2.81
WI-19-28	47.00	0.100	506.9	332.0	2.90
WI-19-28	50.05	0.150	675.1	448.4	2.98
WI-19-28	53.10	0.080	400.8	262.3	2.89
WI-19-28	56.15	0.090	494.3	325.5	2.93
WI-19-28	59.20	0.150	774.6	509.2	2.92
WI-19-28	62.25	0.110	495.4	325.8	2.92
WI-19-28	65.30	0.130	553.0	372.9	3.07
WI-19-28	68.35	0.140	524.9	358.8	3.16
WI-19-28	71.40	0.090	412.9	268.4	2.86
WI-19-28	74.45	0.090	392.4	252.4	2.80
WI-19-28	77.50	0.120	502.8	309.9	2.61
WI-19-28	80.55	0.110	489.4	310.0	2.73
WI-19-28	83.60	0.110	444.5	278.2	2.67
WI-19-28	86.65	0.150	703.1	447.1	2.75
WI-19-28	89.70	0.085	435.8	284.5	2.88
WI-19-28	92.75	0.070	298.0	187.7	2.70
WI-19-28	95.80	0.085	395.1	246.9	2.67
WI-19-28	98.85	0.105	501.5	316.7	2.71
WI-19-28	101.90	0.130	674.5	430.1	2.76
WI-19-28	104.95	0.090	425.6	270.1	2.74
WI-19-28	108.00	0.090	364.0	226.0	2.64
WI-19-28	111.05	0.090	437.0	276.3	2.72
WI-19-28	114.10	0.090	430.0	270.0	2.69
WI-19-28	117.15	0.080	329.5	207.5	2.70

Drill Hole Geotechnical Logs

Recovery RQD								Specific Gravity					
Hole Id	Depth From (m)	Depth To (m)	Interval (m)	Recovery (m)	Recovery (%)	RQD (m)	RQD (%)	Hole Id	Depth (m)	Length of Core (m)	Dry Weight (g)	Wet Weight (g)	SG
WI-19-29	2.75	4.10	1.35	1.35	100.00	0.63	46.67	WI-19-29	4.10	0.150	674.5	417.5	2.62
WI-19-29	4.10	7.15	3.05	2.80	91.80	0.77	25.25	WI-19-29	7.15	0.130	625.5	398.9	2.76
WI-19-29	7.15	10.20	3.05	3.05	100.00	1.95	63.93	WI-19-29	10.20	0.130	644.2	410.8	2.76
WI-19-29	10.20	13.25	3.05	3.05	100.00	2.69	88.20	WI-19-29	13.25	0.150	701.2	440.4	2.69
WI-19-29	13.25	16.30	3.05	3.00	0.00	2.62	85.90	WI-19-29	16.30	0.080	378.5	239.8	2.73
WI-19-29	16.30	19.35	3.05	2.75	90.16	1.70	55.74	WI-19-29	19.35	0.140	655.0	419.1	2.78
WI-19-29	19.35	22.40	3.05	2.80	91.80	2.04	66.89	WI-19-29	22.40	0.105	479.9	294.8	2.59
WI-19-29	22.40	25.45	3.05	2.70	88.52	0.91	29.84	WI-19-29	25.45	0.110	563.2	367.1	2.87
WI-19-29	25.45	28.50	3.05	2.80	91.80	0.67	21.97	WI-19-29	28.50	0.080	386.6	245.8	2.75
WI-19-29	28.50	31.55	3.05	2.80	91.80	1.30	42.62	WI-19-29	31.55	0.140	696.1	444.2	2.76
WI-19-29	31.55	34.60	3.05	2.89	94.75	0.81	26.56	WI-19-29	34.60	0.080	382.3	244.5	2.77
WI-19-29	34.60	37.65	3.05	2.50	81.97	0.54	17.70	WI-19-29	37.65	0.060	368.5	228.5	2.63
WI-19-29	37.65	40.70	3.05	3.00	98.36	2.03	66.56	WI-19-29	40.70	0.060	351.8	223.7	2.75
WI-19-29	40.70	43.75	3.05	2.39	78.36	1.09	35.74	WI-19-29	43.75	0.080	480.2	318.9	2.98
WI-19-29	43.75	46.80	3.05	2.70	88.52	0.93	30.49	WI-19-29	46.80	0.070	376.0	241.9	2.80
WI-19-29	46.80	49.85	3.05	2.80	91.80	1.60	52.46	WI-19-29	49.85	0.100	506.1	325.7	2.81
WI-19-29	49.85	52.90	3.05	3.00	98.36	1.46	47.87	WI-19-29	52.90	0.060	298.7	187.1	2.68
WI-19-29	52.90	55.95	3.05	2.60	85.25	0.67	21.97	WI-19-29	55.95	0.100	448.6	288.5	2.80
WI-19-29	55.95	59.00	3.05	3.00	98.36	2.36	77.38	WI-19-29	59.00	0.140	654.0	414.2	2.73
WI-19-29	59.00	62.05	3.05	3.02	99.02	1.60	52.46	WI-19-29	62.05	0.120	580.3	371.5	2.78
WI-19-29	62.05	65.10	3.05	3.00	98.36	1.72	56.39	WI-19-29	65.10	0.120	615.8	392.7	2.76
WI-19-29	65.10	68.15	3.05	2.90	95.08	1.53	50.16	WI-19-29	68.15	0.140	628.9	397.7	2.72
WI-19-29	68.15	71.20	3.05	2.77	90.82	0.79	25.90	WI-19-29	71.20	0.120	568.6	358.7	2.71
WI-19-29	71.20	74.25	3.05	2.42	79.34	0.22	7.21	WI-19-29	74.25	0.120	629.0	419.4	3.00
WI-19-29	74.25	77.30	3.05	2.70	88.52	0.67	21.97	WI-19-29	77.30	0.150	803.5	546.9	3.13
WI-19-29	77.30	80.35	3.05	2.90	95.08	0.90	29.51	WI-19-29	80.35	0.100	495.7	330.6	3.00
WI-19-29	80.35	83.40	3.05	2.90	95.08	1.17	38.36	WI-19-29	83.40	0.120	464.0	304.2	2.90
WI-19-29	83.40	86.45	3.05	2.81	92.13	1.36	44.59	WI-19-29	86.45	0.140	647.4	433.1	3.02
WI-19-29	86.45	89.50	3.05	2.96	97.05	1.74	57.05	WI-19-29	89.50	0.125	619.6	410.3	2.96
WI-19-29	89.50	92.55	3.05	2.76	90.49	0.94	30.82	WI-19-29	92.55	0.105	545.3	361.1	2.96
WI-19-29	92.55	95.60	3.05	2.58	84.59	0.00	0.00	WI-19-29	95.60	0.110	513.5	342.7	3.01
WI-19-29	95.60	98.65	3.05	2.70	88.52	0.65	21.31	WI-19-29	98.65	0.120	490.7	325.7	2.97
WI-19-29	98.65	101.70	3.05	3.00	98.36	1.02	33.44	WI-19-29	101.70	0.130	552.2	365.5	2.96
WI-19-29	101.70	104.75	3.05	2.85	93.44	1.46	47.87	WI-19-29	104.75	0.100	483.8	318.4	2.93
WI-19-29	104.75	107.80	3.05	2.66	87.21	0.52	17.05	WI-19-29	107.80	0.160	800.8	535.7	3.02
WI-19-29	107.80	110.85	3.05	2.70	88.52	0.59	19.34	WI-19-29	110.85	0.120	686.9	451.8	2.92
WI-19-29	110.85	113.90	3.05	2.58	84.59	0.53	17.38	WI-19-29	113.90	0.120	598.1	390.7	2.88
WI-19-29	113.90	116.95	3.05	2.45	80.33	0.15	4.92	WI-19-29	116.95	0.100	450.0	292.8	2.86
WI-19-29	116.95	120.00	3.05	2.68	87.87	0.78	25.57	WI-19-29	120.00	0.140	657.5	430.7	2.90
WI-19-29	120.00	123.05	3.05	2.90	95.08	1.04	34.10	WI-19-29	123.05	0.110	560.7	374.6	3.01
WI-19-29	123.05	126.10	3.05	2.91	95.41	2.13	69.84	WI-19-29	126.10	0.140	693.8	463.2	3.01
WI-19-29	126.10	129.15	3.05	2.90	95.08	1.09	35.74	WI-19-29	129.15	0.120	502.7	336.0	3.02
WI-19-29	129.15	132.20	3.05	2.70	88.52	1.69	55.41	WI-19-29	132.20	0.130	607.1	399.0	2.92
WI-19-29	132.20	135.25	3.05	3.00	98.36	2.16	70.82	WI-19-29	135.25	0.140	571.6	378.2	2.96
WI-19-29	135.25	138.30	3.05	2.85	93.44	1.59	52.13	WI-19-29	138.30	0.070	324.9	216.1	2.99
WI-19-29	138.30	141.35	3.05	2.91	95.41	1.64	53.77	WI-19-29	141.35	0.120	611.2	405.1	2.97
WI-19-29	141.35	144.40	3.05	2.40	78.69	0.29	9.51	WI-19-29	144.40	0.130	606.9	402.0	2.96
WI-19-29	144.40	147.45	3.05	2.00	65.57	0.33	10.82	WI-19-29	147.45	0.090	567.5	381.8	3.06
WI-19-29	147.45	150.50	3.05	1.70	55.74	0.00	0.00	WI-19-29	150.50	0.110	472.9	309.6	2.90
WI-19-29	150.50	153.55	3.05	2.33	76.39	0.00	0.00	WI-19-29	153.55	0.080	315.8	200.9	2.75
WI-19-29	153.55	156.60	3.05	1.90	62.30	1.30	42.62	WI-19-29	156.60	0.090	423.0	281.5	2.99
WI-19-29	156.60	159.65	3.05	2.03	66.56	0.10	3.28	WI-19-29	159.65	0.110	550.9	365.0	2.96
WI-19-29	159.65	162.70	3.05	2.40	78.69	0.56	18.36	WI-19-29	162.70	0.110	662.5	435.6	2.92
WI-19-29	162.70	165.75	3.05	2.23	73.11	1.20	39.34	WI-19-29	165.75	0.130	644.2	412.5	2.78
WI-19-29	165.75	168.80	3.05	1.70	55.74	0.00	0.00	WI-19-29	168.80	0.080	354.7	230.0	2.84
WI-19-29	168.80	171.85	3.05	2.70	88.52	0.90	29.51	WI-19-29	171.85	0.120	527.9	330.7	2.68
WI-19-29	171.85	174.90	3.05	2.80	91.80	2.00	65.57	WI-19-29	174.90	0.090	387.1	257.5	2.99
WI-19-29	174.90	177.95	3.05	1.95	63.93	0.10	3.28	WI-19-29	177.95	0.110	464.8	292.0	2.69
WI-19-29	177.95	181.00	3.05	0.83	27.21	0.00	0.00	WI-19-29	181.00	-	-	-	-
WI-19-29	181.00	184.05	3.05	0.60	19.67	0.00	0.00	WI-19-29	184.05	-	-	-	-

Drill Hole Geotechnical Logs

Recovery RQD

Specific Gravity

Hole Id	Depth From (m)	Depth To (m)	Interval (m)	Recovery (m)	Recovery (%)	RQD (m)	RQD (%)
WI-19-30	4.00	4.65	0.65	0.65	100.00	0.55	84.62
WI-19-30	4.65	7.70	3.05	2.65	86.89	2.00	65.57
WI-19-30	7.70	10.75	3.05	3.15	103.28	2.36	77.38
WI-19-30	10.75	13.80	3.05	3.00	98.36	2.11	69.18
WI-19-30	13.80	16.85	3.05	3.05	100.00	2.39	78.36
WI-19-30	16.85	19.90	3.05	3.05	100.00	2.37	77.70
WI-19-30	19.90	22.95	3.05	2.90	95.08	2.40	78.69
WI-19-30	22.95	26.00	3.05	3.00	98.36	1.34	43.93
WI-19-30	26.00	29.05	3.05	2.65	86.89	0.75	24.43
WI-19-30	29.05	32.10	3.05	2.65	86.89	0.45	14.75
WI-19-30	32.10	35.15	3.05	2.80	91.80	0.67	21.97
WI-19-30	35.15	38.20	3.05	2.85	93.44	0.77	25.25
WI-19-30	38.20	41.25	3.05	2.85	93.44	1.72	56.39
WI-19-30	41.25	44.30	3.05	2.80	91.80	0.96	31.48
WI-19-30	44.30	47.35	3.05	2.50	81.97	0.78	25.57
WI-19-30	47.35	50.40	3.05	2.62	85.90	1.63	53.44
WI-19-30	50.40	53.45	3.05	2.83	92.79	1.18	38.69
WI-19-30	53.45	56.50	3.05	2.65	86.89	0.77	25.25
WI-19-30	56.50	59.55	3.05	2.83	92.79	1.32	43.28
WI-19-30	59.55	62.60	3.05	2.30	75.41	0.54	17.70
WI-19-30	62.60	65.65	3.05	3.00	98.36	1.21	39.67
WI-19-30	65.65	68.70	3.05	2.95	96.72	0.65	21.31
WI-19-30	68.70	71.75	3.05	2.80	91.80	1.51	49.51
WI-19-30	71.75	74.80	3.05	2.80	91.80	1.42	46.56
WI-19-30	74.80	77.85	3.05	2.70	88.52	1.71	56.07
WI-19-30	77.85	80.90	3.05	3.05	100.00	1.51	49.51
WI-19-30	80.90	83.95	3.05	2.80	91.80	2.13	69.84
WI-19-30	83.95	87.00	3.05	2.40	78.69	1.35	44.26
WI-19-30	87.00	90.05	3.05	3.00	98.36	0.67	21.97
WI-19-30	90.05	93.10	3.05	2.48	81.31	0.46	15.08
WI-19-30	93.10	96.15	3.05	3.00	98.36	1.01	33.11
WI-19-30	96.15	99.20	3.05	2.70	88.52	0.65	21.31
WI-19-30	99.20	102.25	3.05	3.05	100.00	1.92	62.95
WI-19-30	102.25	105.30	3.05	2.60	85.25	1.08	35.41
WI-19-30	105.30	108.35	3.05	2.75	90.16	0.36	11.80
WI-19-30	108.35	111.40	3.05	3.05	100.00	1.51	49.51
WI-19-30	111.40	114.45	3.05	3.05	100.00	1.71	56.07
WI-19-30	114.45	117.50	3.05	3.05	100.00	1.84	60.33
WI-19-30	117.50	120.55	3.05	3.05	100.00	2.58	84.59
WI-19-30	120.55	123.60	3.05	2.90	95.08	0.95	31.15
WI-19-30	123.60	126.65	3.05	3.05	100.00	1.91	62.62
WI-19-30	126.65	129.70	3.05	2.50	81.97	0.20	6.56
WI-19-30	129.70	132.75	3.05	2.80	91.80	0.00	0.00
WI-19-30	132.75	135.80	3.05	2.41	79.02	0.42	13.77
WI-19-30	135.80	138.85	3.05	2.80	91.80	0.00	0.00
WI-19-30	138.85	141.90	3.05	2.67	87.54	0.00	0.00
WI-19-30	141.90	144.95	3.05	2.80	91.80	0.34	11.15
WI-19-30	144.95	148.00	3.05	2.87	94.10	0.53	17.38
WI-19-30	148.00	151.05	3.05	2.80	91.80	0.41	13.44
WI-19-30	151.05	154.10	3.05	2.80	91.80	0.00	0.00
WI-19-30	154.10	157.15	3.05	2.75	90.16	0.28	9.18
WI-19-30	157.15	160.20	3.05	2.30	75.41	0.13	4.26
WI-19-30	160.20	163.25	3.05	2.82	92.46	1.10	36.07
WI-19-30	163.25	166.30	3.05	3.30	108.20	2.08	68.20
WI-19-30	166.30	169.35	3.05	3.10	101.64	1.40	45.90
WI-19-30	169.35	172.40	3.05	3.05	100.00	2.04	66.89
WI-19-30	172.40	175.45	3.05	2.55	83.61	0.72	23.61
WI-19-30	175.45	178.50	3.05	2.70	88.52	0.58	19.02
WI-19-30	178.50	179.50	1.00	0.84	84.00	0.00	0.00

Hole Id	Depth (m)	Length of Core (m)	Dry Weight (g)	Wet Weight (g)	SG
WI-19-30	4.65	0.170	815.8	521.6	2.77
WI-19-30	7.70	0.110	478.9	314.1	2.91
WI-19-30	10.75	0.095	425.0	263.3	2.63
WI-19-30	13.80	0.120	468.3	299.8	2.78
WI-19-30	16.85	0.130	516.9	324.9	2.69
WI-19-30	19.90	0.125	470.7	295.0	2.68
WI-19-30	22.95	0.140	558.1	344.2	2.61
WI-19-30	26.00	0.100	482.1	307.2	2.76
WI-19-30	29.05	0.110	533.7	341.3	2.77
WI-19-30	32.10	0.090	339.0	213.6	2.70
WI-19-30	35.15	0.085	418.8	275.8	2.93
WI-19-30	38.20	0.100	519.0	331.0	2.76
WI-19-30	41.25	0.120	549.5	347.8	2.72
WI-19-30	44.30	0.120	534.5	342.2	2.78
WI-19-30	47.35	0.080	358.2	224.6	2.68
WI-19-30	50.40	0.100	443.8	293.7	2.96
WI-19-30	53.45	0.070	394.5	263.0	3.00
WI-19-30	56.50	0.110	529.9	347.3	2.90
WI-19-30	59.55	0.080	471.1	308.9	2.90
WI-19-30	62.60	0.080	378.6	250.1	2.95
WI-19-30	65.65	0.090	443.0	291.6	2.93
WI-19-30	68.70	0.110	535.0	348.3	2.87
WI-19-30	71.75	0.090	464.5	308.8	2.98
WI-19-30	74.80	0.130	611.9	400.2	2.89
WI-19-30	77.85	0.130	608.5	400.9	2.93
WI-19-30	80.90	0.090	339.4	220.9	2.86
WI-19-30	83.95	0.130	608.0	401.5	2.94
WI-19-30	87.00	0.100	506.9	337.2	2.99
WI-19-30	90.05	0.120	464.6	307.1	2.95
WI-19-30	93.10	0.080	296.9	196.9	2.97
WI-19-30	96.15	0.120	582.4	385.8	2.96
WI-19-30	99.20	0.090	365.1	242.5	2.98
WI-19-30	102.25	0.070	280.1	185.8	2.97
WI-19-30	105.30	0.150	765.8	509.7	2.99
WI-19-30	108.35	0.100	457.5	301.8	2.94
WI-19-30	111.40	0.100	471.4	311.9	2.96
WI-19-30	114.45	0.130	619.6	411.1	2.97
WI-19-30	117.50	0.110	522.5	348.2	3.00
WI-19-30	120.55	0.120	576.5	384.6	3.00
WI-19-30	123.60	0.080	408.5	272.4	3.00
WI-19-30	126.65	0.070	336.7	225.9	3.04
WI-19-30	129.70	0.100	438.3	287.9	2.91
WI-19-30	132.75	0.070	338.0	22.7	1.07
WI-19-30	135.80	0.100	498.8	324.7	2.87
WI-19-30	138.85	0.090	522.9	345.9	2.95
WI-19-30	141.90	0.090	365.8	231.6	2.73
WI-19-30	144.95	0.150	688.8	456.9	2.97
WI-19-30	148.00	0.170	794.2	512.5	2.82
WI-19-30	151.05	0.080	362.4	227.5	2.69
WI-19-30	154.10	0.090	331.9	211.0	2.75
WI-19-30	157.15	0.080	413.3	266.6	2.82
WI-19-30	160.20	0.130	478.7	313.3	2.89
WI-19-30	163.25	0.150	595.8	393.0	2.94
WI-19-30	166.30	0.160	693.6	440.5	2.74
WI-19-30	169.35	0.120	607.8	394.7	2.85
WI-19-30	172.40	0.150	669.8	428.8	2.78
WI-19-30	175.45	0.150	735.0	489.0	2.99
WI-19-30	178.50	0.110	522.3	347.7	2.99
WI-19-30	179.50	0.040	334.1	218.4	2.89

**Drill Hole Geotechnical Logs**

**Recovery RQD**

**Specific Gravity**

Hole Id	Depth From (m)	Depth To (m)	Interval (m)	Recovery (m)	Recovery (%)	RQD (m)	RQD (%)
WI-19-31	8.10	11.15	3.05	0.84	27.54	0.10	3.28
WI-19-31	11.15	14.20	3.05	2.75	90.16	0.95	31.15
WI-19-31	14.20	17.25	3.05	3.00	98.36	1.53	50.16
WI-19-31	17.25	20.30	3.05	3.00	98.36	1.82	59.67
WI-19-31	20.30	23.35	3.05	2.82	92.46	1.87	61.31
WI-19-31	23.35	26.40	3.05	3.10	101.64	1.33	43.61
WI-19-31	26.40	29.45	3.05	2.76	90.49	1.45	47.54
WI-19-31	29.45	32.50	3.05	3.15	103.28	0.87	28.52
WI-19-31	32.50	35.55	3.05	3.05	100.00	0.61	20.00
WI-19-31	35.55	38.60	3.05	3.05	100.00	0.88	28.85
WI-19-31	38.60	41.65	3.05	2.85	93.44	0.70	22.95
WI-19-31	41.65	44.70	3.05	3.05	100.00	1.00	32.79
WI-19-31	44.70	47.75	3.05	3.05	100.00	0.37	12.13
WI-19-31	47.75	50.80	3.05	3.10	101.64	1.20	39.34
WI-19-31	50.80	53.85	3.05	2.97	97.38	1.45	47.54
WI-19-31	53.85	56.90	3.05	2.75	90.16	1.20	39.34
WI-19-31	56.90	59.95	3.05	3.05	100.00	0.61	20.00
WI-19-31	59.95	63.00	3.05	2.80	91.80	0.69	22.62
WI-19-31	63.00	66.05	3.05	2.80	91.80	1.00	32.79
WI-19-31	66.05	69.10	3.05	2.90	95.08	1.15	37.70
WI-19-31	69.10	72.15	3.05	2.85	93.44	1.42	46.56
WI-19-31	72.15	75.20	3.05	2.95	96.72	2.46	80.66
WI-19-31	75.20	78.25	3.05	2.90	95.08	1.33	43.61
WI-19-31	78.25	81.30	3.05	3.05	100.00	0.28	9.18
WI-19-31	81.30	84.35	3.05	2.85	93.44	1.25	40.98
WI-19-31	84.35	87.40	3.05	3.05	100.00	0.95	31.15
WI-19-31	87.40	90.45	3.05	2.95	96.72	0.79	25.90
WI-19-31	90.45	93.50	3.05	3.05	100.00	0.60	19.67
WI-19-31	93.50	96.55	3.05	2.75	90.16	1.00	32.79
WI-19-31	96.55	99.60	3.05	3.05	100.00	1.23	40.33
WI-19-31	99.60	102.65	3.05	3.05	100.00	1.01	33.11
WI-19-31	102.65	105.70	3.05	3.05	100.00	0.16	5.25
WI-19-31	105.70	108.75	3.05	2.95	96.72	0.30	9.84
WI-19-31	108.75	111.80	3.05	3.05	100.00	1.57	51.48
WI-19-31	111.80	114.85	3.05	2.90	95.08	0.85	27.87
WI-19-31	114.85	117.90	3.05	3.00	98.36	1.79	58.69
WI-19-31	117.90	120.95	3.05	3.05	100.00	1.60	52.46
WI-19-31	120.95	124.00	3.05	3.05	100.00	1.53	50.16
WI-19-31	124.00	127.05	3.05	2.95	96.72	1.92	62.95
WI-19-31	127.05	130.10	3.05	2.80	91.80	0.35	11.48
WI-19-31	130.10	133.15	3.05	3.05	100.00	1.32	43.28
WI-19-31	133.15	136.20	3.05	3.00	98.36	1.19	39.02
WI-19-31	136.20	138.50	2.30	1.90	82.61	1.41	61.30

Hole Id	Depth (m)	Length of Core (m)	Dry Weight (g)	Wet Weight (g)	SG
WI-19-31	11.15	0.120	437.8	269.2	2.60
WI-19-31	14.20	0.100	434.8	275.2	2.72
WI-19-31	17.25	0.080	367.6	229.4	2.66
WI-19-31	20.30	0.080	489.6	315.6	2.81
WI-19-31	23.35	0.140	651.0	413.6	2.74
WI-19-31	26.40	0.130	534.0	339.0	2.74
WI-19-31	29.45	0.090	493.6	311.8	2.72
WI-19-31	32.50	0.140	550.1	349.5	2.74
WI-19-31	35.55	0.120	557.0	354.8	2.75
WI-19-31	38.60	0.150	640.2	402.3	2.69
WI-19-31	41.65	0.140	591.3	375.4	2.74
WI-19-31	44.70	0.120	411.4	256.6	2.66
WI-19-31	47.75	0.090	353.7	221.7	2.68
WI-19-31	50.80	0.120	504.9	317.1	2.69
WI-19-31	53.85	0.090	475.3	299.3	2.70
WI-19-31	56.90	0.150	638.3	396.3	2.64
WI-19-31	59.95	0.090	402.5	263.7	2.90
WI-19-31	63.00	0.110	571.8	379.8	2.98
WI-19-31	66.05	0.140	653.8	439.5	3.05
WI-19-31	69.10	0.150	662.0	437.6	2.95
WI-19-31	72.15	0.120	546.3	360.4	2.94
WI-19-31	75.20	0.160	750.8	495.1	2.94
WI-19-31	78.25	0.140	755.6	518.4	3.19
WI-19-31	81.30	0.210	486.9	334.7	3.20
WI-19-31	84.35	0.080	404.0	270.2	3.02
WI-19-31	87.40	0.130	557.6	364.5	2.89
WI-19-31	90.45	0.150	758.5	509.0	3.04
WI-19-31	93.50	0.090	458.5	304.4	2.98
WI-19-31	96.55	0.130	700.4	496.4	3.43
WI-19-31	99.60	0.090	377.3	248.3	2.92
WI-19-31	102.65	0.110	518.0	337.6	2.87
WI-19-31	105.70	0.070	394.1	266.2	3.08
WI-19-31	108.75	0.080	399.0	262.8	2.93
WI-19-31	111.80	0.100	482.2	317.3	2.92
WI-19-31	114.85	0.100	492.7	324.2	2.92
WI-19-31	117.90	0.070	325.4	215.0	2.95
WI-19-31	120.95	0.100	551.9	368.4	3.01
WI-19-31	124.00	0.080	343.0	228.2	2.99
WI-19-31	127.05	0.150	701.5	466.0	2.98
WI-19-31	130.10	0.110	359.6	241.2	3.04
WI-19-31	133.15	0.150	747.8	496.5	2.98
WI-19-31	136.20	0.100	465.3	306.9	2.94
WI-19-31	138.50	0.150	578.4	392.1	3.10

**Drill Hole Geotechnical Logs**

**Recovery RQD**

Hole Id	Depth From (m)	Depth To (m)	Interval (m)	Recovery (m)	Recovery (%)	RQD (m)	RQD (%)
WI-19-32	8.15	11.20	3.05	2.40	78.69	1.19	39.02
WI-19-32	11.20	14.25	3.05	2.70	88.52	1.45	47.54
WI-19-32	14.25	17.30	3.05	2.88	94.43	1.48	48.52
WI-19-32	17.30	20.35	3.05	3.00	98.36	2.12	69.51
WI-19-32	20.35	23.40	3.05	3.05	100.00	2.84	93.11
WI-19-32	23.40	26.45	3.05	3.40	111.48	2.80	91.80
WI-19-32	26.45	29.50	3.05	2.90	95.08	1.97	64.59
WI-19-32	29.50	32.55	3.05	2.77	90.82	1.92	62.95
WI-19-32	32.55	35.60	3.05	2.89	94.75	1.65	54.10
WI-19-32	35.60	38.65	3.05	2.70	88.52	1.38	45.25
WI-19-32	38.65	41.70	3.05	2.75	90.16	1.65	54.10
WI-19-32	41.70	44.75	3.05	2.80	91.80	1.17	38.36
WI-19-32	44.75	47.80	3.05	2.75	90.16	0.65	21.31
WI-19-32	47.80	50.85	3.05	2.60	85.25	0.90	29.51
WI-19-32	50.85	53.90	3.05	3.30	108.20	1.90	62.30
WI-19-32	53.90	56.95	3.05	2.85	93.44	0.32	10.49
WI-19-32	56.95	60.00	3.05	2.70	88.52	0.64	20.98
WI-19-32	60.00	63.05	3.05	3.05	100.00	0.80	26.23
WI-19-32	63.05	66.10	3.05	2.90	95.08	0.23	7.54
WI-19-32	66.10	69.15	3.05	2.95	96.72	0.87	28.52
WI-19-32	69.15	72.20	3.05	3.10	101.64	0.67	21.97
WI-19-32	72.20	75.25	3.05	3.00	98.36	0.69	22.62
WI-19-32	75.25	78.30	3.05	2.90	95.08	0.64	20.98
WI-19-32	78.30	81.35	3.05	3.05	100.00	1.03	33.77
WI-19-32	81.35	84.40	3.05	3.05	100.00	0.73	23.93
WI-19-32	84.40	87.45	3.05	2.63	86.23	1.50	49.18
WI-19-32	87.45	90.50	3.05	3.00	98.36	0.75	24.59
WI-19-32	90.50	93.55	3.05	3.00	98.36	2.17	71.15
WI-19-32	93.55	96.60	3.05	3.02	99.02	2.08	68.20
WI-19-32	96.60	99.65	3.05	3.02	99.02	1.46	47.87
WI-19-32	99.65	102.70	3.05	3.00	98.36	2.02	66.23
WI-19-32	102.70	105.75	3.05	3.00	98.36	1.16	38.03
WI-19-32	105.75	108.80	3.05	2.45	80.33	0.55	18.03
WI-19-32	108.80	111.85	3.05	2.66	87.21	1.82	59.67
WI-19-32	111.85	114.90	3.05	2.70	88.52	0.76	24.92
WI-19-32	114.90	117.95	3.05	2.90	95.08	1.80	59.02
WI-19-32	117.95	121.00	3.05	3.05	100.00	1.60	52.46
WI-19-32	121.00	124.05	3.05	2.97	97.38	1.09	35.74
WI-19-32	124.05	127.10	3.05	2.62	85.90	0.98	32.13
WI-19-32	127.10	130.15	3.05	3.05	100.00	1.64	53.77
WI-19-32	130.15	133.20	3.05	2.85	93.44	1.67	54.75
WI-19-32	133.20	136.25	3.05	2.85	93.44	0.63	20.66
WI-19-32	136.25	139.30	3.05	2.87	94.10	0.25	8.20
WI-19-32	139.30	142.35	3.05	3.05	100.00	0.10	3.28
WI-19-32	142.35	145.40	3.05	1.70	55.74	0.16	5.25
WI-19-32	145.40	148.45	3.05	2.85	93.44	0.90	29.51
WI-19-32	148.45	151.50	3.05	2.65	86.89	0.64	20.98
WI-19-32	151.50	154.55	3.05	2.85	93.44	1.21	39.67
WI-19-32	154.55	157.60	3.05	2.75	90.16	0.66	21.64
WI-19-32	157.60	160.65	3.05	2.50	81.97	0.00	0.00
WI-19-32	160.65	163.70	3.05	3.05	100.00	0.00	0.00
WI-19-32	163.70	166.75	3.05	3.00	98.36	0.34	11.15
WI-19-32	166.75	169.80	3.05	2.92	95.74	1.27	41.64
WI-19-32	169.80	172.85	3.05	3.05	100.00	0.15	4.92
WI-19-32	172.85	175.90	3.05	2.90	95.08	0.10	3.28
WI-19-32	175.90	178.95	3.05	2.55	83.61	0.48	15.74
WI-19-32	178.95	182.00	3.05	2.55	83.61	0.12	3.93
WI-19-32	182.00	185.05	3.05	2.85	93.44	1.20	39.34
WI-19-32	185.05	188.10	3.05	2.75	90.16	0.73	23.93
WI-19-32	188.10	191.15	3.05	2.88	94.43	0.80	26.23
WI-19-32	191.15	194.20	3.05	3.05	100.00	0.84	27.54
WI-19-32	194.20	197.25	3.05	3.05	100.00	1.40	45.90
WI-19-32	197.25	200.30	3.05	2.82	92.46	0.27	8.85
WI-19-32	200.30	203.35	3.05	3.05	100.00	0.86	28.20
WI-19-32	203.35	206.40	3.05	3.10	101.64	0.63	20.66
WI-19-32	206.40	209.45	3.05	3.00	98.36	0.25	8.20
WI-19-32	209.45	212.50	3.05	3.10	101.64	0.83	27.21
WI-19-32	212.50	215.55	3.05	2.85	93.44	0.94	30.82
WI-19-32	215.55	218.60	3.05	2.90	95.08	0.10	3.28
WI-19-32	218.60	221.65	3.05	3.15	103.28	0.82	26.89
WI-19-32	221.65	224.70	3.05	3.10	101.64	0.25	8.20

**Specific Gravity**

Hole Id	Depth (m)	Length of Core (m)	Dry Weight (g)	Wet Weight (g)	SG
WI-19-32	11.20	0.150	566.3	350.5	2.62
WI-19-32	14.25	0.160	693.6	440.8	2.74
WI-19-32	17.30	0.155	823.1	529.5	2.80
WI-19-32	20.35	0.120	534.1	339.0	2.74
WI-19-32	23.40	0.150	679.4	431.7	2.74
WI-19-32	26.45	0.120	522.1	332.5	2.75
WI-19-32	29.50	0.140	654.2	419.2	2.78
WI-19-32	32.55	0.130	528.3	338.6	2.78
WI-19-32	35.60	0.150	714.9	456.5	2.77
WI-19-32	38.65	0.140	597.0	390.1	2.89
WI-19-32	41.70	0.120	496.0	315.5	2.75
WI-19-32	44.75	0.120	497.1	316.1	2.75
WI-19-32	47.80	0.130	501.2	317.9	2.73
WI-19-32	50.85	0.110	461.9	297.7	2.81
WI-19-32	53.90	0.090	474.7	304.2	2.78
WI-19-32	56.95	0.105	425.7	270.0	2.73
WI-19-32	60.00	0.100	481.4	304.7	2.72
WI-19-32	63.05	0.105	508.6	326.7	2.80
WI-19-32	66.10	0.130	521.0	327.8	2.70
WI-19-32	69.15	0.120	557.9	343.1	2.60
WI-19-32	72.20	0.210	443.8	280.0	2.71
WI-19-32	75.25	0.090	371.8	234.7	2.71
WI-19-32	78.30	0.150	622.3	405.0	2.86
WI-19-32	81.35	0.085	432.1	283.6	2.91
WI-19-32	84.40	0.100	386.8	250.2	2.83
WI-19-32	87.45	0.110	461.1	302.6	2.91
WI-19-32	90.50	0.080	407.2	270.7	2.98
WI-19-32	93.55	0.140	732.4	485.6	2.97
WI-19-32	96.60	0.070	391.6	266.1	3.12
WI-19-32	99.65	0.120	624.5	410.2	2.91
WI-19-32	102.70	0.130	585.8	383.2	2.89
WI-19-32	105.75	0.100	343.2	223.7	2.87
WI-19-32	108.80	0.110	654.4	435.4	2.99
WI-19-32	111.85	0.150	572.2	374.1	2.89
WI-19-32	114.90	0.130	669.0	440.4	2.93
WI-19-32	117.95	0.130	551.9	364.7	2.91
WI-19-32	121.00	0.110	426.9	280.0	2.91
WI-19-32	124.05	0.090	406.2	265.9	2.90
WI-19-32	127.10	0.160	833.1	540.5	2.85
WI-19-32	130.15	0.170	852.3	562.0	2.94
WI-19-32	133.20	0.150	749.0	495.9	2.96
WI-19-32	136.25	0.150	730.0	478.0	2.90
WI-19-32	139.30	0.075	387.8	252.5	2.87
WI-19-32	142.35	0.140	658.2	431.9	2.91
WI-19-32	145.40	0.060	373.2	245.8	2.93
WI-19-32	148.45	0.130	633.9	413.2	2.87
WI-19-32	151.50	0.110	515.6	335.8	2.87
WI-19-32	154.55	0.110	507.0	335.9	2.96
WI-19-32	157.60	0.060	301.6	197.9	2.91
WI-19-32	160.65	0.100	435.8	289.9	2.99
WI-19-32	163.70	0.060	286.3	189.0	2.94
WI-19-32	166.75	0.075	355.4	230.5	2.85
WI-19-32	169.80	0.100	527.5	351.2	2.99
WI-19-32	172.85	0.085	379.3	255.2	3.06
WI-19-32	175.90	0.100	446.6	294.6	2.94
WI-19-32	178.95	0.050	285.4	188.3	2.94
WI-19-32	182.00	0.110	431.9	285.1	2.94
WI-19-32	185.05	0.100	492.0	330.2	3.04
WI-19-32	188.10	0.070	371.2	248.2	3.02
WI-19-32	191.15	0.100	550.7	367.5	3.01
WI-19-32	194.20	0.070	379.6	257.0	3.10
WI-19-32	197.25	0.100	444.9	290.1	2.87
WI-19-32	200.30	0.120	552.8	370.8	3.04
WI-19-32	203.35	0.120	712.0	480.3	3.07
WI-19-32	206.40	0.130	597.8	393.1	2.92
WI-19-32	209.45	0.110	476.6	315.4	2.97
WI-19-32	212.50	0.120	558.7	389.7	3.31
WI-19-32	215.55	0.070	355.5	242.4	3.14
WI-19-32	218.60	0.070	319.1	206.2	2.83
WI-19-32	221.65	0.070	400.0	265.8	2.98
WI-19-32	224.70	0.150	665.1	452.9	3.13



### Scintillometer Log

Hole Id	Depth From (m)	Depth To (m)	Total Count
WI-19-20	1.68	2.00	470
WI-19-20	2.00	3.00	625
WI-19-20	3.00	4.00	550
WI-19-20	4.00	5.00	400
WI-19-20	5.00	6.00	575
WI-19-20	6.00	7.00	465
WI-19-20	7.00	7.90	500
WI-19-20	7.90	8.91	450
WI-19-20	8.91	9.93	450
WI-19-20	9.93	10.95	400
WI-19-20	10.95	11.96	375
WI-19-20	11.96	12.98	425
WI-19-20	12.98	14.00	625
WI-19-20	14.00	15.01	500
WI-19-20	15.01	16.03	425
WI-19-20	16.03	17.05	350
WI-19-20	17.05	18.06	525
WI-19-20	18.06	19.08	430
WI-19-20	19.08	20.10	405
WI-19-20	20.10	21.11	420
WI-19-20	21.11	22.13	400
WI-19-20	22.13	23.15	325
WI-19-20	23.15	24.16	350
WI-19-20	24.16	25.18	400
WI-19-20	25.18	26.20	450
WI-19-20	26.20	27.21	420
WI-19-20	27.21	28.23	350
WI-19-20	28.23	29.25	525
WI-19-20	29.25	30.26	450
WI-19-20	30.26	31.28	350
WI-19-20	31.28	32.00	350
WI-19-20	32.00	33.00	290
WI-19-20	33.00	34.00	340
WI-19-20	34.00	35.00	490
WI-19-20	35.00	36.00	450
WI-19-20	36.00	37.00	445
WI-19-20	37.00	38.00	385
WI-19-20	38.00	39.00	310
WI-19-20	39.00	40.00	350
WI-19-20	40.00	41.00	360
WI-19-20	41.00	42.00	275
WI-19-20	42.00	43.00	310
WI-19-20	43.00	44.00	265
WI-19-20	44.00	45.00	295
WI-19-20	45.00	46.00	455
WI-19-20	46.00	47.00	425
WI-19-20	47.00	48.00	320
WI-19-20	48.00	49.00	335
WI-19-20	49.00	50.00	575
WI-19-20	50.00	51.00	565
WI-19-20	51.00	52.00	585
WI-19-20	52.00	53.00	275
WI-19-20	53.00	54.00	285
WI-19-20	54.00	55.00	210
WI-19-20	55.00	56.00	250
WI-19-20	56.00	57.00	255

### Scintillometer Log

Hole Id	Depth From (m)	Depth To (m)	Total Count
WI-19-20	57.00	58.00	225
WI-19-20	58.00	59.00	250
WI-19-20	59.00	60.00	300
WI-19-20	60.00	61.00	260
WI-19-20	61.00	62.00	270
WI-19-20	62.00	63.00	350
WI-19-20	63.00	64.00	310
WI-19-20	64.00	65.00	260
WI-19-20	65.00	66.00	275
WI-19-20	66.00	67.00	500
WI-19-20	67.00	68.00	310
WI-19-20	68.00	69.00	275
WI-19-20	69.00	70.00	270
WI-19-20	70.00	71.00	260
WI-19-20	71.00	72.00	205
WI-19-20	72.00	73.00	220
WI-19-20	73.00	74.00	225
WI-19-20	74.00	75.00	250
WI-19-20	75.00	76.00	245
WI-19-20	76.00	77.00	250
WI-19-20	77.00	78.00	215
WI-19-20	78.00	79.00	215
WI-19-20	79.00	80.00	230
WI-19-20	80.00	81.00	225
WI-19-20	81.00	82.00	220
WI-19-20	82.00	83.00	200
WI-19-20	83.00	84.00	210
WI-19-20	84.00	85.00	200
WI-19-20	85.00	86.00	220
WI-19-20	86.00	87.00	240
WI-19-20	87.00	88.00	330
WI-19-20	88.00	89.00	215
WI-19-20	89.00	90.00	230
WI-19-20	90.00	91.00	220
WI-19-20	91.00	92.00	255
WI-19-20	92.00	93.00	240
WI-19-20	93.00	94.00	245
WI-19-20	94.00	95.00	245
WI-19-20	95.00	96.00	225
WI-19-20	96.00	97.00	265
WI-19-20	97.00	98.00	235
WI-19-20	98.00	99.00	245
WI-19-20	99.00	100.00	245
WI-19-20	100.00	101.00	285
WI-19-20	101.00	102.00	245
WI-19-20	102.00	103.00	260
WI-19-20	103.00	104.00	255
WI-19-20	104.00	105.00	280
WI-19-20	105.00	106.00	240
WI-19-20	106.00	107.00	265
WI-19-20	107.00	108.00	240
WI-19-20	108.00	109.00	490
WI-19-20	109.00	110.00	445
WI-19-20	110.00	111.00	470
WI-19-20	111.00	112.00	410
WI-19-20	112.00	113.00	440

### Scintillometer Log

Hole Id	Depth From (m)	Depth To (m)	Total Count
WI-19-20	113.00	114.00	470
WI-19-20	114.00	115.00	405
WI-19-20	115.00	116.00	560
WI-19-20	116.00	117.00	540
WI-19-20	117.00	118.00	320
WI-19-20	118.00	119.00	725
WI-19-20	119.00	120.00	350
WI-19-20	120.00	121.00	360
WI-19-20	121.00	122.00	395
WI-19-20	122.00	123.00	550
WI-19-20	123.00	124.00	650
WI-19-20	124.00	125.00	365
WI-19-20	125.00	126.00	680
WI-19-20	126.00	127.00	525
WI-19-20	127.00	128.00	670
WI-19-20	128.00	129.00	695
WI-19-20	129.00	130.00	280
WI-19-20	130.00	131.00	660
WI-19-20	131.00	132.00	335
WI-19-20	132.00	133.00	460
WI-19-20	133.00	134.00	390
WI-19-20	134.00	135.00	435
WI-19-20	135.00	136.00	385
WI-19-20	136.00	136.40	430
WI-19-21	Scint readings at the start of the hole average 600 - 800 and decrease to 500 average at the end of bx 4, 5 and 6. It increases gradually at box 7 to >900 - 1300 to the end of box 12 and picks up again at box 14 to the end of box.		
WI-19-21	112.00	113.00	460
WI-19-21	113.00	114.00	450
WI-19-21	114.00	115.00	360
WI-19-21	115.00	116.00	380
WI-19-21	116.00	117.00	270
WI-19-21	117.00	118.00	200
WI-19-21	118.00	119.00	190
WI-19-21	119.00	120.00	330
WI-19-21	120.00	121.00	230
WI-19-21	121.00	122.00	190
WI-19-21	122.00	123.00	160
WI-19-21	123.00	124.00	190
WI-19-21	124.00	125.00	200
WI-19-21	125.00	126.00	200
WI-19-21	126.00	127.00	195
WI-19-21	127.00	128.00	230
WI-19-21	128.00	129.00	220
WI-19-21	129.00	130.00	220
WI-19-21	130.00	131.00	230
WI-19-21	131.00	132.00	230
WI-19-21	132.00	133.00	410
WI-19-21	133.00	134.00	170
WI-19-21	134.00	135.00	230
WI-19-21	135.00	136.00	250
WI-19-21	136.00	137.00	370
WI-19-21	137.00	138.00	260
WI-19-21	138.00	139.00	230

### Scintillometer Log

Hole Id	Depth From (m)	Depth To (m)	Total Count
WI-19-21	139.00	140.00	250
WI-19-21	140.00	141.00	290
WI-19-21	141.00	142.00	190
WI-19-21	142.00	143.00	250
WI-19-21	143.00	144.00	215
WI-19-21	144.00	145.00	360
WI-19-21	145.00	146.00	380
WI-19-21	146.00	147.00	230
WI-19-21	147.00	148.00	200
WI-19-21	148.00	149.00	195
WI-19-21	149.00	150.00	190
WI-19-21	150.00	151.00	200
WI-19-21	151.00	152.00	210
WI-19-21	152.00	153.00	200
WI-19-21	153.00	154.00	470
WI-19-21	154.00	155.00	220
WI-19-21	155.00	156.00	170
WI-19-21	156.00	157.00	220
WI-19-21	157.00	158.00	200
WI-19-21	158.00	159.00	210
WI-19-21	159.00	160.00	190
WI-19-21	160.00	161.00	220
WI-19-21	161.00	162.00	250
WI-19-21	162.00	163.00	220
WI-19-21	163.00	164.00	200
WI-19-21	164.00	165.00	490
WI-19-21	165.00	166.00	515
WI-19-21	166.00	167.00	580
WI-19-21	167.00	168.00	290
WI-19-21	168.00	169.00	220
WI-19-21	169.00	170.00	480
WI-19-21	170.00	171.00	200
WI-19-21	171.00	172.00	180
WI-19-21	172.00	173.00	190
WI-19-21	173.00	174.00	460
WI-19-21	174.00	175.00	500
WI-19-21	175.00	176.00	220
WI-19-21	176.00	177.00	250
WI-19-21	177.00	178.00	220
WI-19-21	178.00	179.00	340
WI-19-22	4.00	5.00	280
WI-19-22	5.00	6.00	230
WI-19-22	6.00	7.00	230
WI-19-22	7.00	8.00	310
WI-19-22	8.00	9.00	240
WI-19-22	9.00	10.00	335
WI-19-22	10.00	11.00	300
WI-19-22	11.00	12.00	290
WI-19-22	12.00	13.00	360
WI-19-22	13.00	14.00	305
WI-19-22	14.00	15.00	240
WI-19-22	15.00	16.00	280
WI-19-22	16.00	17.00	315
WI-19-22	17.00	18.00	340
WI-19-22	18.00	19.00	400
WI-19-22	19.00	20.00	390

### Scintillometer Log

Hole Id	Depth From (m)	Depth To (m)	Total Count
WI-19-22	20.00	21.00	380
WI-19-22	21.00	22.00	325
WI-19-22	22.00	23.00	310
WI-19-22	23.00	24.00	230
WI-19-22	24.00	25.00	340
WI-19-22	25.00	26.00	250
WI-19-22	26.00	27.00	250
WI-19-22	27.00	28.00	210
WI-19-22	28.00	29.00	300
WI-19-22	29.00	30.00	440
WI-19-22	30.00	31.00	320
WI-19-22	31.00	32.00	250
WI-19-22	32.00	33.00	280
WI-19-22	33.00	34.00	290
WI-19-22	34.00	35.00	230
WI-19-22	35.00	36.00	220
WI-19-22	36.00	37.00	225
WI-19-22	37.00	38.00	305
WI-19-22	38.00	39.00	245
WI-19-22	39.00	40.00	310
WI-19-22	40.00	41.00	360
WI-19-22	41.00	42.00	390
WI-19-22	42.00	43.00	370
WI-19-22	43.00	44.00	210
WI-19-22	44.00	45.00	270
WI-19-22	45.00	46.00	260
WI-19-22	46.00	47.00	425
WI-19-22	47.00	48.00	260
WI-19-22	48.00	49.00	280
WI-19-22	49.00	50.00	370
WI-19-22	50.00	51.00	235
WI-19-22	51.00	52.00	280
WI-19-22	52.00	53.00	320
WI-19-22	53.00	54.00	390
WI-19-22	54.00	55.00	220
WI-19-22	55.00	56.00	260
WI-19-22	56.00	57.00	290
WI-19-22	57.00	58.00	305
WI-19-22	58.00	59.00	205
WI-19-22	59.00	60.00	230
WI-19-22	60.00	61.00	390
WI-19-22	61.00	62.00	445
WI-19-22	62.00	63.00	565
WI-19-22	63.00	64.00	325
WI-19-22	64.00	65.00	440
WI-19-22	65.00	66.00	380
WI-19-22	66.00	67.00	430
WI-19-22	67.00	68.00	340
WI-19-22	68.00	69.00	405
WI-19-22	69.00	70.00	380
WI-19-22	70.00	71.00	440
WI-19-22	71.00	72.00	400
WI-19-22	72.00	73.00	370
WI-19-22	73.00	74.00	330
WI-19-22	74.00	75.00	260
WI-19-22	75.00	76.00	295



### Scintillometer Log

Hole Id	Depth From (m)	Depth To (m)	Total Count
WI-19-22	76.00	77.00	390
WI-19-22	77.00	78.00	230
WI-19-22	78.00	79.00	450
WI-19-22	79.00	80.00	280
WI-19-22	80.00	81.00	380
WI-19-22	81.00	82.00	590
WI-19-22	82.00	83.00	570
WI-19-22	83.00	84.00	620
WI-19-22	84.00	85.00	440
WI-19-22	85.00	86.00	450
WI-19-22	86.00	87.00	455
WI-19-22	87.00	88.00	420
WI-19-22	88.00	89.00	535
WI-19-22	89.00	90.00	440
WI-19-22	90.00	91.00	1330
WI-19-22	91.00	92.00	500
WI-19-22	92.00	93.00	325
WI-19-22	93.00	94.00	460
WI-19-22	94.00	95.00	295
WI-19-22	95.00	96.00	720
WI-19-22	96.00	97.00	565
WI-19-22	97.00	98.00	660
WI-19-22	98.00	99.00	580
WI-19-22	99.00	100.00	430
WI-19-22	100.00	101.00	400
WI-19-22	101.00	102.00	425
WI-19-22	102.00	103.00	370
WI-19-22	103.00	104.00	390
WI-19-22	104.00	105.00	410
WI-19-22	105.00	106.00	285
WI-19-22	106.00	107.00	320
WI-19-22	107.00	108.00	355
WI-19-22	108.00	109.00	480
WI-19-22	109.00	110.00	415
WI-19-22	110.00	111.00	435
WI-19-22	111.00	112.00	370
WI-19-22	112.00	113.00	490
WI-19-22	113.00	114.00	310
WI-19-22	114.00	115.00	275
WI-19-22	115.00	116.00	250
WI-19-22	116.00	117.00	225
WI-19-22	117.00	118.00	270
WI-19-22	118.00	119.00	310
WI-19-22	119.00	120.00	270
WI-19-22	120.00	121.00	300
WI-19-22	121.00	122.00	350
WI-19-22	122.00	123.00	855
WI-19-22	123.00	124.00	420
WI-19-22	124.00	125.00	900
WI-19-22	125.00	126.00	670
WI-19-22	126.00	127.00	350
WI-19-23	1.00	2.00	230
WI-19-23	2.00	3.00	235
WI-19-23	3.00	4.00	195
WI-19-23	4.00	5.00	315
WI-19-23	5.00	6.00	575

### Scintillometer Log

Hole Id	Depth From (m)	Depth To (m)	Total Count
WI-19-23	6.00	7.00	300
WI-19-23	7.00	8.00	310
WI-19-23	8.00	9.00	310
WI-19-23	9.00	10.00	395
WI-19-23	10.00	11.00	365
WI-19-23	11.00	12.00	270
WI-19-23	12.00	13.00	290
WI-19-23	13.00	14.00	285
WI-19-23	14.00	15.00	370
WI-19-23	15.00	16.00	305
WI-19-23	16.00	17.00	305
WI-19-23	17.00	18.00	305
WI-19-23	18.00	19.00	300
WI-19-23	19.00	20.00	315
WI-19-23	20.00	21.00	310
WI-19-23	21.00	22.00	360
WI-19-23	22.00	23.00	620
WI-19-23	23.00	24.00	410
WI-19-23	24.00	25.00	500
WI-19-23	25.00	26.00	450
WI-19-23	26.00	27.00	400
WI-19-23	27.00	28.00	560
WI-19-23	28.00	29.00	400
WI-19-23	29.00	30.00	460
WI-19-23	30.00	31.00	430
WI-19-23	31.00	32.00	355
WI-19-23	32.00	33.00	280
WI-19-23	33.00	34.00	300
WI-19-23	34.00	35.00	370
WI-19-23	35.00	36.00	390
WI-19-23	36.00	37.00	260
WI-19-23	37.00	38.00	305
WI-19-23	38.00	39.00	330
WI-19-23	39.00	40.00	285
WI-19-23	40.00	41.00	200
WI-19-23	41.00	42.00	240
WI-19-23	42.00	43.00	425
WI-19-23	43.00	44.00	230
WI-19-23	44.00	45.00	740
WI-19-23	45.00	46.00	410
WI-19-23	46.00	47.00	460
WI-19-23	47.00	48.00	470
WI-19-23	48.00	49.00	550
WI-19-23	49.00	50.00	220
WI-19-23	50.00	51.00	230
WI-19-23	51.00	52.00	200
WI-19-23	52.00	53.00	240
WI-19-23	53.00	54.00	315
WI-19-23	54.00	55.00	365
WI-19-23	55.00	56.00	420
WI-19-23	56.00	57.00	870
WI-19-23	57.00	58.00	935
WI-19-23	58.00	59.00	850
WI-19-23	59.00	60.00	385
WI-19-23	60.00	61.00	400
WI-19-23	61.00	62.00	330

### Scintillometer Log

Hole Id	Depth From (m)	Depth To (m)	Total Count
WI-19-23	62.00	63.00	300
WI-19-23	63.00	64.00	280
WI-19-23	64.00	65.00	190
WI-19-23	65.00	66.00	380
WI-19-23	66.00	67.00	270
WI-19-23	67.00	68.00	390
WI-19-23	68.00	69.00	240
WI-19-23	69.00	70.00	245
WI-19-23	70.00	71.00	315
WI-19-23	71.00	72.00	260
WI-19-23	72.00	73.00	255
WI-19-23	73.00	74.00	350
WI-19-23	74.00	75.00	560
WI-19-23	75.00	76.00	425
WI-19-23	76.00	77.00	450
WI-19-23	77.00	78.00	395
WI-19-23	78.00	79.00	425
WI-19-23	79.00	80.00	420
WI-19-23	80.00	81.00	540
WI-19-23	81.00	82.00	395
WI-19-23	82.00	83.00	350
WI-19-23	83.00	84.00	225
WI-19-23	84.00	85.00	265
WI-19-23	85.00	86.00	295
WI-19-23	86.00	87.00	300
WI-19-23	87.00	88.00	275
WI-19-23	88.00	89.00	490
WI-19-23	89.00	90.00	475
WI-19-23	90.00	91.00	470
WI-19-23	91.00	92.00	380
WI-19-23	92.00	93.00	520
WI-19-23	93.00	94.00	620
WI-19-23	94.00	95.00	440
WI-19-23	95.00	96.00	405
WI-19-23	96.00	97.00	420
WI-19-23	97.00	98.00	540
WI-19-23	98.00	99.00	370
WI-19-23	99.00	100.00	380
WI-19-23	100.00	101.00	455
WI-19-23	101.00	102.00	335
WI-19-23	102.00	103.00	270
WI-19-23	103.00	104.00	330
WI-19-23	104.00	105.00	330
WI-19-23	105.00	106.00	320
WI-19-23	106.00	107.00	400
WI-19-23	107.00	108.00	260
WI-19-23	108.00	109.00	445
WI-19-23	109.00	110.00	290
WI-19-23	110.00	111.00	290
WI-19-23	111.00	112.00	270
WI-19-23	112.00	113.00	275
WI-19-23	113.00	114.00	275
WI-19-23	114.00	115.00	245
WI-19-23	115.00	116.00	250
WI-19-23	116.00	117.00	240
WI-19-23	117.00	118.00	225

### Scintillometer Log

Hole Id	Depth From (m)	Depth To (m)	Total Count
WI-19-23	118.00	119.00	250
WI-19-23	119.00	120.00	255
WI-19-23	120.00	121.00	260
WI-19-23	121.00	122.00	245
WI-19-23	122.00	123.00	260
WI-19-23	123.00	124.00	250
WI-19-23	124.00	125.00	215
WI-19-23	125.00	126.00	250
WI-19-24	1.00	2.00	
WI-19-24	2.00	3.00	
WI-19-24	3.00	4.00	
WI-19-24	4.00	5.00	240
WI-19-24	5.00	6.00	380
WI-19-24	6.00	7.00	370
WI-19-24	7.00	8.00	390
WI-19-24	8.00	9.00	420
WI-19-24	9.00	10.00	340
WI-19-24	10.00	11.00	355
WI-19-24	11.00	12.00	310
WI-19-24	12.00	13.00	355
WI-19-24	13.00	14.00	440
WI-19-24	14.00	15.00	340
WI-19-24	15.00	16.00	320
WI-19-24	16.00	17.00	330
WI-19-24	17.00	18.00	475
WI-19-24	18.00	19.00	320
WI-19-24	19.00	20.00	300
WI-19-24	20.00	21.00	570
WI-19-24	21.00	22.00	280
WI-19-24	22.00	23.00	460
WI-19-24	23.00	24.00	480
WI-19-24	24.00	25.00	460
WI-19-24	25.00	26.00	265
WI-19-24	26.00	27.00	380
WI-19-24	27.00	28.00	420
WI-19-24	28.00	29.00	440
WI-19-24	29.00	30.00	320
WI-19-24	30.00	31.00	260
WI-19-24	31.00	32.00	250
WI-19-24	32.00	33.00	260
WI-19-24	33.00	34.00	420
WI-19-24	34.00	35.00	255
WI-19-24	35.00	36.00	255
WI-19-24	36.00	37.00	340
WI-19-24	37.00	38.00	245
WI-19-24	38.00	39.00	435
WI-19-24	39.00	40.00	360
WI-19-24	40.00	41.00	430
WI-19-24	41.00	42.00	350
WI-19-24	42.00	43.00	300
WI-19-24	43.00	44.00	270
WI-19-24	44.00	45.00	250
WI-19-24	45.00	46.00	240
WI-19-24	46.00	47.00	295
WI-19-24	47.00	48.00	265
WI-19-24	48.00	49.00	250

### Scintillometer Log

Hole Id	Depth From (m)	Depth To (m)	Total Count
WI-19-24	49.00	50.00	260
WI-19-24	50.00	51.00	290
WI-19-24	51.00	52.00	430
WI-19-24	52.00	53.00	300
WI-19-24	53.00	54.00	430
WI-19-24	54.00	55.00	440
WI-19-24	55.00	56.00	540
WI-19-24	56.00	57.00	300
WI-19-24	57.00	58.00	340
WI-19-24	58.00	59.00	500
WI-19-24	59.00	60.00	510
WI-19-24	60.00	61.00	570
WI-19-24	61.00	62.00	345
WI-19-24	62.00	63.00	230
WI-19-24	63.00	64.00	295
WI-19-24	64.00	65.00	745
WI-19-24	65.00	66.00	515
WI-19-24	66.00	67.00	405
WI-19-24	67.00	68.00	520
WI-19-24	68.00	69.00	530
WI-19-24	69.00	70.00	400
WI-19-24	70.00	71.00	430
WI-19-24	71.00	72.00	395
WI-19-24	72.00	73.00	655
WI-19-24	73.00	74.00	260
WI-19-24	74.00	75.00	220
WI-19-24	75.00	76.00	460
WI-19-24	76.00	77.00	240
WI-19-24	77.00	78.00	620
WI-19-24	78.00	79.00	255
WI-19-24	79.00	80.00	270
WI-19-24	80.00	81.00	275
WI-19-24	81.00	82.00	280
WI-19-24	82.00	83.00	350
WI-19-24	83.00	84.00	335
WI-19-24	84.00	85.00	310
WI-19-24	85.00	86.00	350
WI-19-24	86.00	87.00	290
WI-19-24	87.00	88.00	250
WI-19-24	88.00	89.00	505
WI-19-24	89.00	90.00	275
WI-19-24	90.00	91.00	310
WI-19-24	91.00	92.00	310
WI-19-24	92.00	93.00	495
WI-19-24	93.00	94.00	235
WI-19-24	94.00	95.00	290
WI-19-24	95.00	96.00	270
WI-19-24	96.00	97.00	320
WI-19-24	97.00	98.00	220
WI-19-24	98.00	99.00	205
WI-19-24	99.00	100.00	445
WI-19-24	100.00	101.00	390
WI-19-24	101.00	102.00	280
WI-19-24	102.00	103.00	475
WI-19-24	103.00	104.00	360
WI-19-24	104.00	105.00	360



### Scintillometer Log

Hole Id	Depth From (m)	Depth To (m)	Total Count
WI-19-24	105.00	106.00	345
WI-19-24	106.00	107.00	230
WI-19-24	107.00	108.00	280
WI-19-24	108.00	109.00	240
WI-19-24	109.00	110.00	330
WI-19-24	110.00	111.00	265
WI-19-24	111.00	112.00	315
WI-19-24	112.00	113.00	215
WI-19-24	113.00	114.00	440
WI-19-24	114.00	115.00	215
WI-19-24	115.00	116.00	330
WI-19-24	116.00	117.00	235
WI-19-24	117.00	118.00	240
WI-19-24	118.00	119.00	700
WI-19-24	119.00	120.00	295
WI-19-24	120.00	121.00	325
WI-19-24	121.00	122.00	340
WI-19-24	122.00	123.00	350
WI-19-25	1.00	2.00	260
WI-19-25	2.00	3.00	470
WI-19-25	3.00	4.00	270
WI-19-25	4.00	5.00	211
WI-19-25	5.00	6.00	220
WI-19-25	6.00	7.00	375
WI-19-25	7.00	8.00	376
WI-19-25	8.00	9.00	400
WI-19-25	9.00	10.00	300
WI-19-25	10.00	11.00	345
WI-19-25	11.00	12.00	250
WI-19-25	12.00	13.00	327
WI-19-25	13.00	14.00	320
WI-19-25	14.00	15.00	530
WI-19-25	15.00	16.00	350
WI-19-25	16.00	17.00	260
WI-19-25	17.00	18.00	330
WI-19-25	18.00	19.00	240
WI-19-25	19.00	20.00	230
WI-19-25	20.00	21.00	1400
WI-19-25	21.00	22.00	300
WI-19-25	22.00	23.00	263
WI-19-25	23.00	24.00	270
WI-19-25	24.00	25.00	200
WI-19-25	25.00	26.00	340
WI-19-25	26.00	27.00	270
WI-19-25	27.00	28.00	260
WI-19-25	28.00	29.00	248
WI-19-25	29.00	30.00	240
WI-19-25	30.00	31.00	260
WI-19-25	31.00	32.00	360
WI-19-25	32.00	33.00	260
WI-19-25	33.00	34.00	250
WI-19-25	34.00	35.00	300
WI-19-25	35.00	36.00	250
WI-19-25	36.00	37.00	315
WI-19-25	37.00	38.00	380
WI-19-25	38.00	39.00	240

### Scintillometer Log

Hole Id	Depth From (m)	Depth To (m)	Total Count
WI-19-25	39.00	40.00	200
WI-19-25	40.00	41.00	222
WI-19-25	41.00	42.00	224
WI-19-25	42.00	43.00	250
WI-19-25	43.00	44.00	257
WI-19-25	44.00	45.00	200
WI-19-25	45.00	46.00	200
WI-19-25	46.00	47.00	270
WI-19-25	47.00	48.00	270
WI-19-25	48.00	49.00	215
WI-19-25	49.00	50.00	250
WI-19-25	50.00	51.00	350
WI-19-25	51.00	52.00	260
WI-19-25	52.00	53.00	330
WI-19-25	53.00	54.00	240
WI-19-25	54.00	55.00	250
WI-19-25	55.00	56.00	240
WI-19-25	56.00	57.00	211
WI-19-25	57.00	58.00	220
WI-19-25	58.00	59.00	200
WI-19-25	59.00	60.00	244
WI-19-25	60.00	61.00	360
WI-19-25	61.00	62.00	450
WI-19-25	62.00	63.00	700
WI-19-25	63.00	64.00	500
WI-19-25	64.00	65.00	250
WI-19-25	65.00	66.00	350
WI-19-25	66.00	67.00	530
WI-19-25	67.00	68.00	260
WI-19-25	68.00	69.00	300
WI-19-25	69.00	70.00	230
WI-19-25	70.00	71.00	515
WI-19-25	71.00	72.00	700
WI-19-25	72.00	73.00	400
WI-19-25	73.00	74.00	360
WI-19-25	74.00	75.00	480
WI-19-25	75.00	76.00	450
WI-19-25	76.00	77.00	230
WI-19-25	77.00	78.00	400
WI-19-25	78.00	79.00	500
WI-19-25	79.00	80.00	250
WI-19-25	80.00	81.00	300
WI-19-25	81.00	82.00	290
WI-19-25	82.00	83.00	240
WI-19-25	83.00	84.00	500
WI-19-25	84.00	85.00	1020
WI-19-25	85.00	86.00	250
WI-19-25	86.00	87.00	210
WI-19-25	87.00	88.00	300
WI-19-25	88.00	89.00	270
WI-19-25	89.00	90.00	260
WI-19-25	90.00	91.00	930
WI-19-25	91.00	92.00	450
WI-19-25	92.00	93.00	500
WI-19-25	93.00	94.00	245
WI-19-25	94.00	95.00	215

### Scintillometer Log

Hole Id	Depth From (m)	Depth To (m)	Total Count
WI-19-25	95.00	96.00	308
WI-19-25	96.00	97.00	270
WI-19-25	97.00	98.00	300
WI-19-25	98.00	99.00	230
WI-19-25	99.00	100.00	260
WI-19-25	100.00	101.00	230
WI-19-25	101.00	102.00	210
WI-19-25	102.00	103.00	300
WI-19-25	103.00	104.00	500
WI-19-25	104.00	105.00	520
WI-19-25	105.00	106.00	260
WI-19-25	106.00	107.00	230
WI-19-25	107.00	108.00	257
WI-19-25	108.00	109.00	230
WI-19-25	109.00	110.00	540
WI-19-25	110.00	111.00	270
WI-19-25	111.00	112.00	227
WI-19-25	112.00	113.00	230
WI-19-25	113.00	114.00	500
WI-19-25	114.00	115.00	442
WI-19-25	115.00	116.00	320
WI-19-25	116.00	117.00	290
WI-19-25	117.00	118.00	220
WI-19-25	118.00	119.00	205
WI-19-25	119.00	120.00	230
WI-19-25	120.00	121.00	250
WI-19-25	121.00	122.00	260
WI-19-25	122.00	123.00	550
WI-19-25	123.00	124.00	256
WI-19-25	124.00	125.00	830
WI-19-25	125.00	126.00	350
WI-19-25	126.00	127.00	680
WI-19-25	127.00	128.00	400
WI-19-25	128.00	129.00	270
WI-19-25	129.00	130.00	310
WI-19-25	130.00	131.00	270
WI-19-25	131.00	132.00	250
WI-19-25	132.00	133.00	200
WI-19-25	133.00	134.00	250
WI-19-25	134.00	135.00	200
WI-19-25	135.00	136.00	190
WI-19-25	136.00	137.00	250
WI-19-25	137.00	138.00	250
WI-19-25	138.00	139.00	500
WI-19-25	139.00	140.00	250
WI-19-25	140.00	141.00	400
WI-19-25	141.00	142.00	230
WI-19-25	142.00	143.00	240
WI-19-25	143.00	144.00	260
WI-19-25	144.00	145.00	210
WI-19-25	145.00	146.00	215
WI-19-25	146.00	147.00	260
WI-19-25	147.00	148.00	230
WI-19-25	148.00	149.00	530
WI-19-25	149.00	150.00	180
WI-19-25	150.00	151.00	280

### Scintillometer Log

Hole Id	Depth From (m)	Depth To (m)	Total Count
WI-19-25	151.00	152.00	300
WI-19-25	152.00	153.00	180
WI-19-25	153.00	154.00	200
WI-19-25	154.00	155.00	210
WI-19-25	155.00	156.00	150
WI-19-25	156.00	157.00	160
WI-19-25	157.00	158.00	170
WI-19-25	158.00	159.00	175
WI-19-25	159.00	160.00	180
WI-19-25	160.00	161.00	180
WI-19-25	161.00	162.00	170
WI-19-25	162.00	163.00	175
WI-19-25	163.00	164.00	170
WI-19-25	164.00	165.00	165
WI-19-25	165.00	166.00	180
WI-19-25	166.00	167.00	200
WI-19-25	167.00	168.00	185
WI-19-25	168.00	169.00	190
WI-19-25	169.00	170.00	206
WI-19-25	170.00	171.00	200
WI-19-25	171.00	172.00	250
WI-19-25	172.00	173.00	165
WI-19-25	173.00	174.00	170
WI-19-25	174.00	175.00	180
WI-19-26	2.00	3.00	200
WI-19-26	3.00	4.00	250
WI-19-26	4.00	5.00	240
WI-19-26	5.00	6.00	240
WI-19-26	6.00	7.00	240
WI-19-26	7.00	8.00	285
WI-19-26	8.00	9.00	360
WI-19-26	9.00	10.00	300
WI-19-26	10.00	11.00	240
WI-19-26	11.00	12.00	250
WI-19-26	12.00	13.00	275
WI-19-26	13.00	14.00	210
WI-19-26	14.00	15.00	200
WI-19-26	15.00	16.00	275
WI-19-26	16.00	17.00	215
WI-19-26	17.00	18.00	300
WI-19-26	18.00	19.00	240
WI-19-26	19.00	20.00	250
WI-19-26	20.00	21.00	228
WI-19-26	21.00	22.00	200
WI-19-26	22.00	23.00	200
WI-19-26	23.00	24.00	170
WI-19-26	24.00	25.00	170
WI-19-26	25.00	26.00	200
WI-19-26	26.00	27.00	180
WI-19-26	27.00	28.00	190
WI-19-26	28.00	29.00	195
WI-19-26	29.00	30.00	186
WI-19-26	30.00	31.00	180
WI-19-26	31.00	32.00	240
WI-19-26	32.00	33.00	220
WI-19-26	33.00	34.00	250

### Scintillometer Log

Hole Id	Depth From (m)	Depth To (m)	Total Count
WI-19-26	34.00	35.00	210
WI-19-26	35.00	36.00	560
WI-19-26	36.00	37.00	340
WI-19-26	37.00	38.00	220
WI-19-26	38.00	39.00	411
WI-19-26	39.00	40.00	330
WI-19-26	40.00	41.00	400
WI-19-26	41.00	42.00	330
WI-19-26	42.00	43.00	380
WI-19-26	43.00	44.00	340
WI-19-26	44.00	45.00	350
WI-19-26	45.00	46.00	220
WI-19-26	46.00	47.00	300
WI-19-26	47.00	48.00	410
WI-19-26	48.00	49.00	315
WI-19-26	49.00	50.00	310
WI-19-26	50.00	51.00	370
WI-19-26	51.00	52.00	400
WI-19-26	52.00	53.00	320
WI-19-26	53.00	54.00	490
WI-19-26	54.00	55.00	230
WI-19-26	55.00	56.00	280
WI-19-26	56.00	57.00	310
WI-19-26	57.00	58.00	300
WI-19-26	58.00	59.00	290
WI-19-26	59.00	60.00	375
WI-19-26	60.00	61.00	250
WI-19-26	61.00	62.00	250
WI-19-26	62.00	63.00	300
WI-19-26	63.00	64.00	330
WI-19-26	64.00	65.00	310
WI-19-26	65.00	66.00	320
WI-19-26	66.00	67.00	410
WI-19-26	67.00	68.00	280
WI-19-26	68.00	69.00	380
WI-19-26	69.00	70.00	350
WI-19-26	70.00	71.00	500
WI-19-26	71.00	72.00	360
WI-19-26	72.00	73.00	240
WI-19-26	73.00	74.00	390
WI-19-26	74.00	75.00	300
WI-19-26	75.00	76.00	290
WI-19-26	76.00	77.00	360
WI-19-26	77.00	78.00	230
WI-19-26	78.00	79.00	360
WI-19-26	79.00	80.00	350
WI-19-26	80.00	81.00	210
WI-19-26	81.00	82.00	180
WI-19-26	82.00	83.00	170
WI-19-26	83.00	84.00	280
WI-19-26	84.00	85.00	200
WI-19-26	85.00	86.00	380
WI-19-26	86.00	87.00	250
WI-19-26	87.00	88.00	200
WI-19-26	88.00	89.00	250
WI-19-26	89.00	90.00	423



### Scintillometer Log

Hole Id	Depth From (m)	Depth To (m)	Total Count
WI-19-26	90.00	91.00	200
WI-19-26	91.00	92.00	330
WI-19-26	92.00	93.00	240
WI-19-26	93.00	94.00	280
WI-19-26	94.00	95.00	270
WI-19-26	95.00	96.00	250
WI-19-26	96.00	97.00	280
WI-19-26	97.00	98.00	240
WI-19-26	98.00	99.00	340
WI-19-26	99.00	100.00	360
WI-19-26	100.00	101.00	400
WI-19-26	101.00	102.00	460
WI-19-26	102.00	103.00	225
WI-19-26	103.00	104.00	220
WI-19-26	104.00	105.00	203
WI-19-26	105.00	106.00	270
WI-19-26	106.00	107.00	230
WI-19-26	107.00	108.00	230
WI-19-26	108.00	109.00	460
WI-19-26	109.00	110.00	280
WI-19-26	110.00	111.00	375
WI-19-26	111.00	112.00	395
WI-19-26	112.00	113.00	380
WI-19-26	113.00	114.00	330
WI-19-26	114.00	115.00	300
WI-19-26	115.00	116.00	220
WI-19-26	116.00	117.00	240
WI-19-26	117.00	118.00	600
WI-19-26	118.00	119.00	530
WI-19-26	119.00	120.00	290
WI-19-26	120.00	121.00	240
WI-19-26	121.00	122.00	240
WI-19-26	122.00	123.00	215
WI-19-26	123.00	124.00	225
WI-19-26	124.00	125.00	213
WI-19-26	125.00	126.00	230
WI-19-26	126.00	127.00	200
WI-19-26	127.00	128.00	215
WI-19-26	128.00	129.00	205
WI-19-26	129.00	130.00	190
WI-19-26	130.00	131.00	280
WI-19-26	131.00	132.00	225
WI-19-26	132.00	133.00	220
WI-19-26	133.00	134.00	250
WI-19-26	134.00	135.00	230
WI-19-26	135.00	136.00	260
WI-19-26	136.00	137.00	530
WI-19-26	137.00	138.00	230
WI-19-26	138.00	139.00	280
WI-19-26	139.00	140.00	190
WI-19-26	140.00	141.00	630
WI-19-26	141.00	142.00	250
WI-19-26	142.00	143.00	300
WI-19-26	143.00	144.00	300
WI-19-26	144.00	145.00	310
WI-19-26	145.00	146.00	320

### Scintillometer Log

Hole Id	Depth From (m)	Depth To (m)	Total Count
WI-19-26	146.00	147.00	165
WI-19-26	147.00	148.00	232
WI-19-26	148.00	149.00	330
WI-19-26	149.00	150.00	330
WI-19-26	150.00	151.00	445
WI-19-26	151.00	152.00	600
WI-19-26	152.00	153.00	235
WI-19-26	153.00	154.00	310
WI-19-26	154.00	155.00	250
WI-19-26	155.00	156.00	200
WI-19-27	2.00	3.00	200
WI-19-27	3.00	4.00	450
WI-19-27	4.00	5.00	380
WI-19-27	5.00	6.00	215
WI-19-27	6.00	7.00	380
WI-19-27	7.00	8.00	250
WI-19-27	8.00	9.00	238
WI-19-27	9.00	10.00	223
WI-19-27	10.00	11.00	205
WI-19-27	11.00	12.00	300
WI-19-27	12.00	13.00	280
WI-19-27	13.00	14.00	217
WI-19-27	14.00	15.00	260
WI-19-27	15.00	16.00	275
WI-19-27	16.00	17.00	410
WI-19-27	17.00	18.00	215
WI-19-27	18.00	19.00	475
WI-19-27	19.00	20.00	249
WI-19-27	20.00	21.00	460
WI-19-27	21.00	22.00	240
WI-19-27	22.00	23.00	300
WI-19-27	23.00	24.00	190
WI-19-27	24.00	25.00	250
WI-19-27	25.00	26.00	240
WI-19-27	26.00	27.00	318
WI-19-27	27.00	28.00	389
WI-19-27	28.00	29.00	160
WI-19-27	29.00	30.00	290
WI-19-27	30.00	31.00	230
WI-19-27	31.00	32.00	360
WI-19-27	32.00	33.00	500
WI-19-27	33.00	34.00	250
WI-19-27	34.00	35.00	220
WI-19-27	35.00	36.00	275
WI-19-27	36.00	37.00	370
WI-19-27	37.00	38.00	240
WI-19-27	38.00	39.00	350
WI-19-27	39.00	40.00	211
WI-19-27	40.00	41.00	300
WI-19-27	41.00	42.00	234
WI-19-27	42.00	43.00	305
WI-19-27	43.00	44.00	270
WI-19-27	44.00	45.00	230
WI-19-27	45.00	46.00	320
WI-19-27	46.00	47.00	160
WI-19-27	47.00	48.00	300

### Scintillometer Log

Hole Id	Depth From (m)	Depth To (m)	Total Count
WI-19-27	48.00	49.00	275
WI-19-27	49.00	50.00	245
WI-19-27	50.00	51.00	205
WI-19-27	51.00	52.00	216
WI-19-27	52.00	53.00	226
WI-19-27	53.00	54.00	375
WI-19-27	54.00	55.00	220
WI-19-27	55.00	56.00	290
WI-19-27	56.00	57.00	400
WI-19-27	57.00	58.00	260
WI-19-27	58.00	59.00	290
WI-19-27	59.00	60.00	244
WI-19-27	60.00	61.00	266
WI-19-27	61.00	62.00	230
WI-19-27	62.00	63.00	200
WI-19-27	63.00	64.00	220
WI-19-27	64.00	65.00	210
WI-19-27	65.00	66.00	200
WI-19-27	66.00	67.00	275
WI-19-27	67.00	68.00	150
WI-19-27	68.00	69.00	185
WI-19-27	69.00	70.00	490
WI-19-27	70.00	71.00	400
WI-19-27	71.00	72.00	215
WI-19-27	72.00	73.00	250
WI-19-27	73.00	74.00	230
WI-19-27	74.00	75.00	290
WI-19-27	75.00	76.00	400
WI-19-27	76.00	77.00	210
WI-19-27	77.00	78.00	232
WI-19-27	78.00	79.00	170
WI-19-27	79.00	80.00	260
WI-19-27	80.00	81.00	157
WI-19-27	81.00	82.00	185
WI-19-27	82.00	83.00	275
WI-19-27	83.00	84.00	205
WI-19-27	84.00	85.00	215
WI-19-27	85.00	86.00	190
WI-19-27	86.00	87.00	550
WI-19-27	87.00	88.00	230
WI-19-27	88.00	89.00	210
WI-19-27	89.00	90.00	206
WI-19-27	90.00	91.00	190
WI-19-27	91.00	92.00	300
WI-19-27	92.00	93.00	210
WI-19-27	93.00	94.00	213
WI-19-27	94.00	95.00	270
WI-19-27	95.00	96.00	380
WI-19-27	96.00	97.00	300
WI-19-27	97.00	98.00	300
WI-19-27	98.00	99.00	350
WI-19-27	99.00	100.00	420
WI-19-27	100.00	101.00	220
WI-19-27	101.00	102.00	270
WI-19-27	102.00	103.00	520
WI-19-27	103.00	104.00	280

### Scintillometer Log

Hole Id	Depth From (m)	Depth To (m)	Total Count
WI-19-27	104.00	105.00	380
WI-19-27	105.00	106.00	460
WI-19-27	106.00	107.00	400
WI-19-27	107.00	108.00	198
WI-19-27	108.00	109.00	440
WI-19-27	109.00	110.00	650
WI-19-27	110.00	111.00	450
WI-19-27	111.00	112.00	700
WI-19-27	112.00	113.00	450
WI-19-27	113.00	114.00	200
WI-19-27	114.00	115.00	211
WI-19-27	115.00	116.00	600
WI-19-27	116.00	117.00	250
WI-19-27	117.00	118.00	243
WI-19-27	118.00	119.00	210
WI-19-27	119.00	120.00	230
WI-19-27	120.00	121.00	150
WI-19-27	121.00	122.00	180
WI-19-27	122.00	123.00	150
WI-19-27	123.00	124.00	250
WI-19-27	124.00	125.00	180
WI-19-27	125.00	126.00	170
WI-19-27	126.00	127.00	170
WI-19-27	127.00	128.00	165
WI-19-27	128.00	129.00	170
WI-19-27	129.00	130.00	177
WI-19-27	130.00	131.00	200
WI-19-27	131.00	132.00	160
WI-19-27	132.00	133.00	180
WI-19-27	133.00	134.00	260
WI-19-27	134.00	135.00	163
WI-19-27	135.00	136.00	170
WI-19-27	136.00	137.00	150
WI-19-27	137.00	138.00	350
WI-19-27	138.00	139.00	200
WI-19-27	139.00	139.85	190
WI-19-28	3.00	4.00	250
WI-19-28	4.00	5.00	220
WI-19-28	5.00	6.00	250
WI-19-28	6.00	7.00	210
WI-19-28	7.00	8.00	205
WI-19-28	8.00	9.00	175
WI-19-28	9.00	10.00	220
WI-19-28	10.00	11.00	150
WI-19-28	11.00	12.00	240
WI-19-28	12.00	13.00	170
WI-19-28	13.00	14.00	180
WI-19-28	14.00	15.00	239
WI-19-28	15.00	16.00	185
WI-19-28	16.00	17.00	240
WI-19-28	17.00	18.00	215
WI-19-28	18.00	19.00	165
WI-19-28	19.00	20.00	182
WI-19-28	20.00	21.00	300
WI-19-28	21.00	22.00	220
WI-19-28	22.00	23.00	170

### Scintillometer Log

Hole Id	Depth From (m)	Depth To (m)	Total Count
WI-19-28	23.00	24.00	140
WI-19-28	24.00	25.00	185
WI-19-28	25.00	26.00	375
WI-19-28	26.00	27.00	310
WI-19-28	27.00	28.00	160
WI-19-28	28.00	29.00	160
WI-19-28	29.00	30.00	260
WI-19-28	30.00	31.00	185
WI-19-28	31.00	32.00	200
WI-19-28	32.00	33.00	350
WI-19-28	33.00	34.00	375
WI-19-28	34.00	35.00	260
WI-19-28	35.00	36.00	225
WI-19-28	36.00	37.00	400
WI-19-28	37.00	38.00	365
WI-19-28	38.00	39.00	320
WI-19-28	39.00	40.00	220
WI-19-28	40.00	41.00	330
WI-19-28	41.00	42.00	270
WI-19-28	42.00	43.00	220
WI-19-28	43.00	44.00	230
WI-19-28	44.00	45.00	270
WI-19-28	45.00	46.00	360
WI-19-28	46.00	47.00	254
WI-19-28	47.00	48.00	290
WI-19-28	48.00	49.00	250
WI-19-28	49.00	50.00	350
WI-19-28	50.00	51.00	330
WI-19-28	51.00	52.00	185
WI-19-28	52.00	53.00	505
WI-19-28	53.00	54.00	220
WI-19-28	54.00	55.00	200
WI-19-28	55.00	56.00	210
WI-19-28	56.00	57.00	275
WI-19-28	57.00	58.00	340
WI-19-28	58.00	59.00	185
WI-19-28	59.00	60.00	380
WI-19-28	60.00	61.00	500
WI-19-28	61.00	62.00	350
WI-19-28	62.00	63.00	310
WI-19-28	63.00	64.00	650
WI-19-28	64.00	65.00	420
WI-19-28	65.00	66.00	370
WI-19-28	66.00	67.00	275
WI-19-28	67.00	68.00	250
WI-19-28	68.00	69.00	230
WI-19-28	69.00	70.00	310
WI-19-28	70.00	71.00	285
WI-19-28	71.00	72.00	335
WI-19-28	72.00	73.00	190
WI-19-28	73.00	74.00	244
WI-19-28	74.00	75.00	202
WI-19-28	75.00	76.00	240
WI-19-28	76.00	77.00	180
WI-19-28	77.00	78.00	212
WI-19-28	78.00	79.00	170

### Scintillometer Log

Hole Id	Depth From (m)	Depth To (m)	Total Count
WI-19-28	79.00	80.00	160
WI-19-28	80.00	81.00	230
WI-19-28	81.00	82.00	170
WI-19-28	82.00	83.00	170
WI-19-28	83.00	84.00	175
WI-19-28	84.00	85.00	200
WI-19-28	85.00	86.00	175
WI-19-28	86.00	87.00	165
WI-19-28	87.00	88.00	180
WI-19-28	88.00	89.00	220
WI-19-28	89.00	90.00	210
WI-19-28	90.00	91.00	210
WI-19-28	91.00	92.00	170
WI-19-28	92.00	93.00	205
WI-19-28	93.00	94.00	180
WI-19-28	94.00	95.00	208
WI-19-28	95.00	96.00	170
WI-19-28	96.00	97.00	180
WI-19-28	97.00	98.00	180
WI-19-28	98.00	99.00	160
WI-19-28	99.00	100.00	170
WI-19-28	100.00	101.00	170
WI-19-28	101.00	102.00	165
WI-19-28	102.00	103.00	175
WI-19-28	103.00	104.00	180
WI-19-28	104.00	105.00	160
WI-19-28	105.00	106.00	180
WI-19-28	106.00	107.00	155
WI-19-28	107.00	108.00	190
WI-19-28	108.00	109.00	185
WI-19-28	109.00	110.00	165
WI-19-28	110.00	111.00	180
WI-19-28	111.00	112.00	185
WI-19-28	112.00	113.00	162
WI-19-28	113.00	114.00	175
WI-19-28	114.00	115.00	185
WI-19-28	115.00	116.00	175
WI-19-28	116.00	117.00	170
WI-19-29	3.00	4.00	250
WI-19-29	4.00	5.00	215
WI-19-29	5.00	6.00	210
WI-19-29	6.00	7.00	190
WI-19-29	7.00	8.00	260
WI-19-29	8.00	9.00	185
WI-19-29	9.00	10.00	175
WI-19-29	10.00	11.00	215
WI-19-29	11.00	12.00	204
WI-19-29	12.00	13.00	210
WI-19-29	13.00	14.00	240
WI-19-29	14.00	15.00	210
WI-19-29	15.00	16.00	200
WI-19-29	16.00	17.00	200
WI-19-29	17.00	18.00	170
WI-19-29	18.00	19.00	220
WI-19-29	19.00	20.00	217
WI-19-29	20.00	21.00	220



### Scintillometer Log

Hole Id	Depth From (m)	Depth To (m)	Total Count
WI-19-29	21.00	22.00	225
WI-19-29	22.00	23.00	230
WI-19-29	23.00	24.00	175
WI-19-29	24.00	25.00	200
WI-19-29	25.00	26.00	200
WI-19-29	26.00	27.00	185
WI-19-29	27.00	28.00	185
WI-19-29	28.00	29.00	225
WI-19-29	29.00	30.00	190
WI-19-29	30.00	31.00	200
WI-19-29	31.00	32.00	180
WI-19-29	32.00	33.00	219
WI-19-29	33.00	34.00	210
WI-19-29	34.00	35.00	180
WI-19-29	35.00	36.00	200
WI-19-29	36.00	37.00	185
WI-19-29	37.00	38.00	175
WI-19-29	38.00	39.00	180
WI-19-29	39.00	40.00	190
WI-19-29	40.00	41.00	195
WI-19-29	41.00	42.00	227
WI-19-29	42.00	43.00	170
WI-19-29	43.00	44.00	185
WI-19-29	44.00	45.00	171
WI-19-29	45.00	46.00	195
WI-19-29	46.00	47.00	210
WI-19-29	47.00	48.00	320
WI-19-29	48.00	49.00	185
WI-19-29	49.00	50.00	165
WI-19-29	50.00	51.00	175
WI-19-29	51.00	52.00	160
WI-19-29	52.00	53.00	185
WI-19-29	53.00	54.00	165
WI-19-29	54.00	55.00	175
WI-19-29	55.00	56.00	190
WI-19-29	56.00	57.00	175
WI-19-29	57.00	58.00	185
WI-19-29	58.00	59.00	175
WI-19-29	59.00	60.00	165
WI-19-29	60.00	61.00	175
WI-19-29	61.00	62.00	175
WI-19-29	62.00	63.00	180
WI-19-29	63.00	64.00	165
WI-19-29	64.00	65.00	240
WI-19-29	65.00	66.00	180
WI-19-29	66.00	67.00	205
WI-19-29	67.00	68.00	185
WI-19-29	68.00	69.00	275
WI-19-29	69.00	70.00	165
WI-19-29	70.00	71.00	190
WI-19-29	71.00	72.00	185
WI-19-29	72.00	73.00	190
WI-19-29	73.00	74.00	350
WI-19-29	74.00	75.00	475
WI-19-29	75.00	76.00	390
WI-19-29	76.00	77.00	250

### Scintillometer Log

Hole Id	Depth From (m)	Depth To (m)	Total Count
WI-19-29	77.00	78.00	220
WI-19-29	78.00	79.00	600
WI-19-29	79.00	80.00	405
WI-19-29	80.00	81.00	250
WI-19-29	81.00	82.00	400
WI-19-29	82.00	83.00	365
WI-19-29	83.00	84.00	260
WI-19-29	84.00	85.00	210
WI-19-29	85.00	86.00	330
WI-19-29	86.00	87.00	385
WI-19-29	87.00	88.00	340
WI-19-29	88.00	89.00	360
WI-19-29	89.00	90.00	240
WI-19-29	90.00	91.00	390
WI-19-29	91.00	92.00	270
WI-19-29	92.00	93.00	390
WI-19-29	93.00	94.00	350
WI-19-29	94.00	95.00	350
WI-19-29	95.00	96.00	620
WI-19-29	96.00	97.00	315
WI-19-29	97.00	98.00	215
WI-19-29	98.00	99.00	320
WI-19-29	99.00	100.00	400
WI-19-29	100.00	101.00	200
WI-19-29	101.00	102.00	300
WI-19-29	102.00	103.00	350
WI-19-29	103.00	104.00	220
WI-19-29	104.00	105.00	230
WI-19-29	105.00	106.00	397
WI-19-29	106.00	107.00	400
WI-19-29	107.00	108.00	300
WI-19-29	108.00	109.00	225
WI-19-29	109.00	110.00	280
WI-19-29	110.00	111.00	375
WI-19-29	111.00	112.00	220
WI-19-29	112.00	113.00	200
WI-19-29	113.00	114.00	225
WI-19-29	114.00	115.00	280
WI-19-29	115.00	116.00	415
WI-19-29	116.00	117.00	440
WI-19-29	117.00	118.00	415
WI-19-29	118.00	119.00	415
WI-19-29	119.00	120.00	285
WI-19-29	120.00	121.00	225
WI-19-29	121.00	122.00	325
WI-19-29	122.00	123.00	450
WI-19-29	123.00	124.00	350
WI-19-29	124.00	125.00	350
WI-19-29	125.00	126.00	300
WI-19-29	126.00	127.00	300
WI-19-29	127.00	128.00	450
WI-19-29	128.00	129.00	440
WI-19-29	129.00	130.00	660
WI-19-29	130.00	131.00	250
WI-19-29	131.00	132.00	240
WI-19-29	132.00	133.00	304

### Scintillometer Log

Hole Id	Depth From (m)	Depth To (m)	Total Count
WI-19-29	133.00	134.00	312
WI-19-29	134.00	135.00	210
WI-19-29	135.00	136.00	300
WI-19-29	136.00	137.00	375
WI-19-29	137.00	138.00	315
WI-19-29	138.00	139.00	205
WI-19-29	139.00	140.00	350
WI-19-29	140.00	141.00	250
WI-19-29	141.00	142.00	240
WI-19-29	142.00	143.00	260
WI-19-29	143.00	144.00	240
WI-19-29	144.00	145.00	260
WI-19-29	145.00	146.00	210
WI-19-29	146.00	147.00	200
WI-19-29	147.00	148.00	220
WI-19-29	148.00	149.00	230
WI-19-29	149.00	150.00	216
WI-19-29	150.00	151.00	210
WI-19-29	151.00	152.00	175
WI-19-29	152.00	153.00	230
WI-19-29	153.00	154.00	185
WI-19-29	154.00	155.00	265
WI-19-29	155.00	156.00	200
WI-19-29	156.00	157.00	215
WI-19-29	157.00	158.00	200
WI-19-29	158.00	159.00	320
WI-19-29	159.00	160.00	230
WI-19-29	160.00	161.00	380
WI-19-29	161.00	162.00	225
WI-19-29	162.00	163.00	230
WI-19-29	163.00	164.00	185
WI-19-29	164.00	165.00	350
WI-19-29	165.00	166.00	375
WI-19-29	166.00	167.00	205
WI-19-29	167.00	168.00	185
WI-19-29	168.00	169.00	210
WI-19-29	169.00	170.00	225
WI-19-29	170.00	171.00	600
WI-19-29	171.00	172.00	210
WI-19-29	172.00	173.00	240
WI-19-29	173.00	174.00	254
WI-19-29	174.00	175.00	200
WI-19-29	175.00	176.00	220
WI-19-29	176.00	177.00	200
WI-19-29	177.00	178.00	580
WI-19-29	178.00	179.00	400
WI-19-29	179.00	180.00	500
WI-19-29	180.00	181.00	545
WI-19-29	181.00	182.00	500
WI-19-29	182.00	183.00	470
WI-19-29	183.00	184.00	370
WI-19-30	4.00	5.00	230
WI-19-30	5.00	6.00	190
WI-19-30	6.00	7.00	175
WI-19-30	7.00	8.00	190
WI-19-30	8.00	9.00	190

### Scintillometer Log

Hole Id	Depth From (m)	Depth To (m)	Total Count
WI-19-30	9.00	10.00	230
WI-19-30	10.00	11.00	225
WI-19-30	11.00	12.00	185
WI-19-30	12.00	13.00	185
WI-19-30	13.00	14.00	200
WI-19-30	14.00	15.00	210
WI-19-30	15.00	16.00	215
WI-19-30	16.00	17.00	195
WI-19-30	17.00	18.00	200
WI-19-30	18.00	19.00	220
WI-19-30	19.00	20.00	230
WI-19-30	20.00	21.00	240
WI-19-30	21.00	22.00	230
WI-19-30	22.00	23.00	210
WI-19-30	23.00	24.00	190
WI-19-30	24.00	25.00	185
WI-19-30	25.00	26.00	215
WI-19-30	26.00	27.00	290
WI-19-30	27.00	28.00	211
WI-19-30	28.00	29.00	200
WI-19-30	29.00	30.00	200
WI-19-30	30.00	31.00	185
WI-19-30	31.00	32.00	215
WI-19-30	32.00	33.00	240
WI-19-30	33.00	34.00	232
WI-19-30	34.00	35.00	280
WI-19-30	35.00	36.00	195
WI-19-30	36.00	37.00	225
WI-19-30	37.00	38.00	300
WI-19-30	38.00	39.00	305
WI-19-30	39.00	40.00	275
WI-19-30	40.00	41.00	245
WI-19-30	41.00	42.00	280
WI-19-30	42.00	43.00	240
WI-19-30	43.00	44.00	335
WI-19-30	44.00	45.00	436
WI-19-30	45.00	46.00	300
WI-19-30	46.00	47.00	285
WI-19-30	47.00	48.00	300
WI-19-30	48.00	49.00	380
WI-19-30	49.00	50.00	360
WI-19-30	50.00	51.00	520
WI-19-30	51.00	52.00	614
WI-19-30	52.00	53.00	675
WI-19-30	53.00	54.00	360
WI-19-30	54.00	55.00	430
WI-19-30	55.00	56.00	370
WI-19-30	56.00	57.00	320
WI-19-30	57.00	58.00	300
WI-19-30	58.00	59.00	450
WI-19-30	59.00	60.00	270
WI-19-30	60.00	61.00	326
WI-19-30	61.00	62.00	220
WI-19-30	62.00	63.00	230
WI-19-30	63.00	64.00	259
WI-19-30	64.00	65.00	225

### Scintillometer Log

Hole Id	Depth From (m)	Depth To (m)	Total Count
WI-19-30	65.00	66.00	290
WI-19-30	66.00	67.00	385
WI-19-30	67.00	68.00	275
WI-19-30	68.00	69.00	318
WI-19-30	69.00	70.00	360
WI-19-30	70.00	71.00	650
WI-19-30	71.00	72.00	260
WI-19-30	72.00	73.00	230
WI-19-30	73.00	74.00	280
WI-19-30	74.00	75.00	400
WI-19-30	75.00	76.00	240
WI-19-30	76.00	77.00	265
WI-19-30	77.00	78.00	365
WI-19-30	78.00	79.00	245
WI-19-30	79.00	80.00	240
WI-19-30	80.00	81.00	250
WI-19-30	81.00	82.00	214
WI-19-30	82.00	83.00	230
WI-19-30	83.00	84.00	250
WI-19-30	84.00	85.00	250
WI-19-30	85.00	86.00	265
WI-19-30	86.00	87.00	240
WI-19-30	87.00	88.00	230
WI-19-30	88.00	89.00	250
WI-19-30	89.00	90.00	250
WI-19-30	90.00	91.00	220
WI-19-30	91.00	92.00	240
WI-19-30	92.00	93.00	250
WI-19-30	93.00	94.00	430
WI-19-30	94.00	95.00	360
WI-19-30	95.00	96.00	250
WI-19-30	96.00	97.00	575
WI-19-30	97.00	98.00	300
WI-19-30	98.00	99.00	270
WI-19-30	99.00	100.00	290
WI-19-30	100.00	101.00	314
WI-19-30	101.00	102.00	290
WI-19-30	102.00	103.00	215
WI-19-30	103.00	104.00	275
WI-19-30	104.00	105.00	300
WI-19-30	105.00	106.00	300
WI-19-30	106.00	107.00	230
WI-19-30	107.00	108.00	310
WI-19-30	108.00	109.00	280
WI-19-30	109.00	110.00	260
WI-19-30	110.00	111.00	275
WI-19-30	111.00	112.00	400
WI-19-30	112.00	113.00	220
WI-19-30	113.00	114.00	283
WI-19-30	114.00	115.00	245
WI-19-30	115.00	116.00	222
WI-19-30	116.00	117.00	200
WI-19-30	117.00	118.00	265
WI-19-30	118.00	119.00	230
WI-19-30	119.00	120.00	260
WI-19-30	120.00	121.00	237

### Scintillometer Log

Hole Id	Depth From (m)	Depth To (m)	Total Count
WI-19-30	121.00	122.00	225
WI-19-30	122.00	123.00	286
WI-19-30	123.00	124.00	275
WI-19-30	124.00	125.00	600
WI-19-30	125.00	126.00	750
WI-19-30	126.00	127.00	250
WI-19-30	127.00	128.00	876
WI-19-30	128.00	129.00	740
WI-19-30	129.00	130.00	266
WI-19-30	130.00	131.00	180
WI-19-30	131.00	132.00	215
WI-19-30	132.00	133.00	550
WI-19-30	133.00	134.00	304
WI-19-30	134.00	135.00	650
WI-19-30	135.00	136.00	350
WI-19-30	136.00	137.00	185
WI-19-30	137.00	138.00	285
WI-19-30	138.00	139.00	536
WI-19-30	139.00	140.00	220
WI-19-30	140.00	141.00	220
WI-19-30	141.00	142.00	230
WI-19-30	142.00	143.00	2
WI-19-30	143.00	144.00	360
WI-19-30	144.00	145.00	235
WI-19-30	145.00	146.00	270
WI-19-30	146.00	147.00	265
WI-19-30	147.00	148.00	380
WI-19-30	148.00	149.00	300
WI-19-30	149.00	150.00	285
WI-19-30	150.00	151.00	227
WI-19-30	151.00	152.00	630
WI-19-30	152.00	153.00	220
WI-19-30	153.00	154.00	280
WI-19-30	154.00	155.00	240
WI-19-30	155.00	156.00	260
WI-19-30	156.00	157.00	320
WI-19-30	157.00	158.00	280
WI-19-30	158.00	159.00	260
WI-19-30	159.00	160.00	230
WI-19-30	160.00	161.00	280
WI-19-30	161.00	162.00	300
WI-19-30	162.00	163.00	385
WI-19-30	163.00	164.00	290
WI-19-30	164.00	165.00	280
WI-19-30	165.00	166.00	260
WI-19-30	166.00	167.00	260
WI-19-30	167.00	168.00	240
WI-19-30	168.00	169.00	205
WI-19-30	169.00	170.00	250
WI-19-30	170.00	171.00	245
WI-19-30	171.00	172.00	230
WI-19-30	172.00	173.00	340
WI-19-30	173.00	174.00	260
WI-19-30	174.00	175.00	410
WI-19-30	175.00	176.00	375
WI-19-30	176.00	177.00	570



### Scintillometer Log

Hole Id	Depth From (m)	Depth To (m)	Total Count
WI-19-30	177.00	178.00	440
WI-19-30	178.00	179.00	370
WI-19-30	179.00	179.50	230
WI-19-31	8.00	9.00	220
WI-19-31	9.00	10.00	280
WI-19-31	10.00	11.00	275
WI-19-31	11.00	12.00	202
WI-19-31	12.00	13.00	179
WI-19-31	13.00	14.00	180
WI-19-31	14.00	15.00	180
WI-19-31	15.00	16.00	175
WI-19-31	16.00	17.00	204
WI-19-31	17.00	18.00	220
WI-19-31	18.00	19.00	215
WI-19-31	19.00	20.00	160
WI-19-31	20.00	21.00	230
WI-19-31	21.00	22.00	170
WI-19-31	22.00	23.00	180
WI-19-31	23.00	24.00	165
WI-19-31	24.00	25.00	176
WI-19-31	25.00	26.00	237
WI-19-31	26.00	27.00	210
WI-19-31	27.00	28.00	230
WI-19-31	28.00	29.00	200
WI-19-31	29.00	30.00	161
WI-19-31	30.00	31.00	170
WI-19-31	31.00	32.00	220
WI-19-31	32.00	33.00	175
WI-19-31	33.00	34.00	173
WI-19-31	34.00	35.00	170
WI-19-31	35.00	36.00	180
WI-19-31	36.00	37.00	200
WI-19-31	37.00	38.00	190
WI-19-31	38.00	39.00	200
WI-19-31	39.00	40.00	230
WI-19-31	40.00	41.00	180
WI-19-31	41.00	42.00	190
WI-19-31	42.00	43.00	170
WI-19-31	43.00	44.00	180
WI-19-31	44.00	45.00	180
WI-19-31	45.00	46.00	188
WI-19-31	46.00	47.00	180
WI-19-31	47.00	48.00	180
WI-19-31	48.00	49.00	250
WI-19-31	49.00	50.00	210
WI-19-31	50.00	51.00	215
WI-19-31	51.00	52.00	190
WI-19-31	52.00	53.00	210
WI-19-31	53.00	54.00	250
WI-19-31	54.00	55.00	204
WI-19-31	55.00	56.00	250
WI-19-31	56.00	57.00	500
WI-19-31	57.00	58.00	450
WI-19-31	58.00	59.00	265
WI-19-31	59.00	60.00	370
WI-19-31	60.00	61.00	285

### Scintillometer Log

Hole Id	Depth From (m)	Depth To (m)	Total Count
WI-19-31	61.00	62.00	210
WI-19-31	62.00	63.00	230
WI-19-31	63.00	64.00	200
WI-19-31	64.00	65.00	400
WI-19-31	65.00	66.00	550
WI-19-31	66.00	67.00	430
WI-19-31	67.00	68.00	400
WI-19-31	68.00	69.00	220
WI-19-31	69.00	70.00	435
WI-19-31	70.00	71.00	430
WI-19-31	71.00	72.00	300
WI-19-31	72.00	73.00	350
WI-19-31	73.00	74.00	716
WI-19-31	74.00	75.00	275
WI-19-31	75.00	76.00	385
WI-19-31	76.00	77.00	450
WI-19-31	77.00	78.00	330
WI-19-31	78.00	79.00	613
WI-19-31	79.00	80.00	330
WI-19-31	80.00	81.00	284
WI-19-31	81.00	82.00	310
WI-19-31	82.00	83.00	430
WI-19-31	83.00	84.00	300
WI-19-31	84.00	85.00	270
WI-19-31	85.00	86.00	340
WI-19-31	86.00	87.00	200
WI-19-31	87.00	88.00	233
WI-19-31	88.00	89.00	370
WI-19-31	89.00	90.00	530
WI-19-31	90.00	91.00	430
WI-19-31	91.00	92.00	245
WI-19-31	92.00	93.00	850
WI-19-31	93.00	94.00	400
WI-19-31	94.00	95.00	880
WI-19-31	95.00	96.00	540
WI-19-31	96.00	97.00	260
WI-19-31	97.00	98.00	270
WI-19-31	98.00	99.00	250
WI-19-31	99.00	100.00	230
WI-19-31	100.00	101.00	300
WI-19-31	101.00	102.00	280
WI-19-31	102.00	103.00	230
WI-19-31	103.00	104.00	230
WI-19-31	104.00	105.00	500
WI-19-31	105.00	106.00	340
WI-19-31	106.00	107.00	320
WI-19-31	107.00	108.00	180
WI-19-31	108.00	109.00	200
WI-19-31	109.00	110.00	330
WI-19-31	110.00	111.00	430
WI-19-31	111.00	112.00	200
WI-19-31	112.00	113.00	200
WI-19-31	113.00	114.00	175
WI-19-31	114.00	115.00	175
WI-19-31	115.00	116.00	200
WI-19-31	116.00	117.00	200

### Scintillometer Log

Hole Id	Depth From (m)	Depth To (m)	Total Count
WI-19-31	117.00	118.00	500
WI-19-31	118.00	119.00	350
WI-19-31	119.00	120.00	520
WI-19-31	120.00	121.00	400
WI-19-31	121.00	122.00	550
WI-19-31	122.00	123.00	360
WI-19-31	123.00	124.00	575
WI-19-31	124.00	125.00	250
WI-19-31	125.00	126.00	330
WI-19-31	126.00	127.00	260
WI-19-31	127.00	128.00	260
WI-19-31	128.00	129.00	250
WI-19-31	129.00	130.00	230
WI-19-31	130.00	131.00	185
WI-19-31	131.00	132.00	230
WI-19-31	132.00	133.00	460
WI-19-31	133.00	134.00	380
WI-19-31	134.00	135.00	250
WI-19-31	135.00	136.00	675
WI-19-31	136.00	137.00	500
WI-19-31	137.00	138.00	950
WI-19-31	138.00	139.00	630
WI-19-32	8.00	9.00	160
WI-19-32	9.00	10.00	200
WI-19-32	10.00	11.00	175
WI-19-32	11.00	12.00	183
WI-19-32	12.00	13.00	160
WI-19-32	13.00	14.00	170
WI-19-32	14.00	15.00	170
WI-19-32	15.00	16.00	180
WI-19-32	16.00	17.00	200
WI-19-32	17.00	18.00	215
WI-19-32	18.00	19.00	200
WI-19-32	19.00	20.00	185
WI-19-32	20.00	21.00	160
WI-19-32	21.00	22.00	175
WI-19-32	22.00	23.00	175
WI-19-32	23.00	24.00	185
WI-19-32	24.00	25.00	250
WI-19-32	25.00	26.00	185
WI-19-32	26.00	27.00	170
WI-19-32	27.00	28.00	225
WI-19-32	28.00	29.00	185
WI-19-32	29.00	30.00	230
WI-19-32	30.00	31.00	200
WI-19-32	31.00	32.00	290
WI-19-32	32.00	33.00	185
WI-19-32	33.00	34.00	220
WI-19-32	34.00	35.00	240
WI-19-32	35.00	36.00	230
WI-19-32	36.00	37.00	175
WI-19-32	37.00	38.00	300
WI-19-32	38.00	39.00	225
WI-19-32	39.00	40.00	210
WI-19-32	40.00	41.00	192
WI-19-32	41.00	42.00	180

### Scintillometer Log

Hole Id	Depth From (m)	Depth To (m)	Total Count
WI-19-32	42.00	43.00	180
WI-19-32	43.00	44.00	175
WI-19-32	44.00	45.00	170
WI-19-32	45.00	46.00	350
WI-19-32	46.00	47.00	200
WI-19-32	47.00	48.00	170
WI-19-32	48.00	49.00	180
WI-19-32	49.00	50.00	185
WI-19-32	50.00	51.00	185
WI-19-32	51.00	52.00	200
WI-19-32	52.00	53.00	180
WI-19-32	53.00	54.00	180
WI-19-32	54.00	55.00	196
WI-19-32	55.00	56.00	270
WI-19-32	56.00	57.00	175
WI-19-32	57.00	58.00	175
WI-19-32	58.00	59.00	180
WI-19-32	59.00	60.00	300
WI-19-32	60.00	61.00	185
WI-19-32	61.00	62.00	195
WI-19-32	62.00	63.00	185
WI-19-32	63.00	64.00	180
WI-19-32	64.00	65.00	170
WI-19-32	65.00	66.00	170
WI-19-32	66.00	67.00	180
WI-19-32	67.00	68.00	185
WI-19-32	68.00	69.00	190
WI-19-32	69.00	70.00	200
WI-19-32	70.00	71.00	190
WI-19-32	71.00	72.00	195
WI-19-32	72.00	73.00	200
WI-19-32	73.00	74.00	210
WI-19-32	74.00	75.00	195
WI-19-32	75.00	76.00	200
WI-19-32	76.00	77.00	225
WI-19-32	77.00	78.00	200
WI-19-32	78.00	79.00	270
WI-19-32	79.00	80.00	330
WI-19-32	80.00	81.00	340
WI-19-32	81.00	82.00	250
WI-19-32	82.00	83.00	235
WI-19-32	83.00	84.00	206
WI-19-32	84.00	85.00	230
WI-19-32	85.00	86.00	240
WI-19-32	86.00	87.00	0
WI-19-32	87.00	88.00	235
WI-19-32	88.00	89.00	360
WI-19-32	89.00	90.00	475
WI-19-32	90.00	91.00	415
WI-19-32	91.00	92.00	500
WI-19-32	92.00	93.00	400
WI-19-32	93.00	94.00	460
WI-19-32	94.00	95.00	564
WI-19-32	95.00	96.00	300
WI-19-32	96.00	97.00	275
WI-19-32	97.00	98.00	200

### Scintillometer Log

Hole Id	Depth From (m)	Depth To (m)	Total Count
WI-19-32	98.00	99.00	242
WI-19-32	99.00	100.00	230
WI-19-32	100.00	101.00	285
WI-19-32	101.00	102.00	175
WI-19-32	102.00	103.00	190
WI-19-32	103.00	104.00	300
WI-19-32	104.00	105.00	215
WI-19-32	105.00	106.00	170
WI-19-32	106.00	107.00	185
WI-19-32	107.00	108.00	570
WI-19-32	108.00	109.00	187
WI-19-32	109.00	110.00	250
WI-19-32	110.00	111.00	176
WI-19-32	111.00	112.00	285
WI-19-32	112.00	113.00	1000
WI-19-32	113.00	114.00	640
WI-19-32	114.00	115.00	230
WI-19-32	115.00	116.00	275
WI-19-32	116.00	117.00	160
WI-19-32	117.00	118.00	330
WI-19-32	118.00	119.00	273
WI-19-32	119.00	120.00	445
WI-19-32	120.00	121.00	962
WI-19-32	121.00	122.00	215
WI-19-32	122.00	123.00	285
WI-19-32	123.00	124.00	300
WI-19-32	124.00	125.00	410
WI-19-32	125.00	126.00	270
WI-19-32	126.00	127.00	170
WI-19-32	127.00	128.00	180
WI-19-32	128.00	129.00	525
WI-19-32	129.00	130.00	434
WI-19-32	130.00	131.00	230
WI-19-32	131.00	132.00	225
WI-19-32	132.00	133.00	410
WI-19-32	133.00	134.00	200
WI-19-32	134.00	135.00	400
WI-19-32	135.00	136.00	225
WI-19-32	136.00	137.00	230
WI-19-32	137.00	138.00	243
WI-19-32	138.00	139.00	214
WI-19-32	139.00	140.00	217
WI-19-32	140.00	141.00	200
WI-19-32	141.00	142.00	230
WI-19-32	142.00	143.00	485
WI-19-32	143.00	144.00	220
WI-19-32	144.00	145.00	920
WI-19-32	145.00	146.00	762
WI-19-32	146.00	147.00	265
WI-19-32	147.00	148.00	350
WI-19-32	148.00	149.00	270
WI-19-32	149.00	150.00	224
WI-19-32	150.00	151.00	450
WI-19-32	151.00	152.00	490
WI-19-32	152.00	153.00	362
WI-19-32	153.00	154.00	380

### Scintillometer Log

Hole Id	Depth From (m)	Depth To (m)	Total Count
WI-19-32	154.00	155.00	350
WI-19-32	155.00	156.00	235
WI-19-32	156.00	157.00	330
WI-19-32	157.00	158.00	620
WI-19-32	158.00	159.00	230
WI-19-32	159.00	160.00	375
WI-19-32	160.00	161.00	375
WI-19-32	161.00	162.00	260
WI-19-32	162.00	163.00	330
WI-19-32	163.00	164.00	215
WI-19-32	164.00	165.00	330
WI-19-32	165.00	166.00	230
WI-19-32	166.00	167.00	400
WI-19-32	167.00	168.00	340
WI-19-32	168.00	169.00	340
WI-19-32	169.00	170.00	360
WI-19-32	170.00	171.00	420
WI-19-32	171.00	172.00	230
WI-19-32	172.00	173.00	470
WI-19-32	173.00	174.00	930
WI-19-32	174.00	175.00	350
WI-19-32	175.00	176.00	350
WI-19-32	176.00	177.00	270
WI-19-32	177.00	178.00	650
WI-19-32	178.00	179.00	260
WI-19-32	179.00	180.00	350
WI-19-32	180.00	181.00	330
WI-19-32	181.00	182.00	400
WI-19-32	182.00	183.00	290
WI-19-32	183.00	184.00	286
WI-19-32	184.00	185.00	470
WI-19-32	185.00	186.00	287
WI-19-32	186.00	187.00	220
WI-19-32	187.00	188.00	245
WI-19-32	188.00	189.00	300
WI-19-32	189.00	190.00	400
WI-19-32	190.00	191.00	375
WI-19-32	191.00	192.00	420
WI-19-32	192.00	193.00	255
WI-19-32	193.00	194.00	280
WI-19-32	194.00	195.00	330
WI-19-32	195.00	196.00	470
WI-19-32	196.00	197.00	549
WI-19-32	197.00	198.00	300
WI-19-32	198.00	199.00	310
WI-19-32	199.00	200.00	400
WI-19-32	200.00	201.00	315
WI-19-32	201.00	202.00	400
WI-19-32	202.00	203.00	570
WI-19-32	203.00	204.00	300
WI-19-32	204.00	205.00	250
WI-19-32	205.00	206.00	370
WI-19-32	206.00	207.00	611
WI-19-32	207.00	208.00	230
WI-19-32	208.00	209.00	920
WI-19-32	209.00	210.00	360



### Scintillometer Log

Hole Id	Depth From (m)	Depth To (m)	Total Count
WI-19-32	210.00	211.00	320
WI-19-32	211.00	212.00	450
WI-19-32	212.00	213.00	440
WI-19-32	213.00	214.00	360
WI-19-32	214.00	215.00	230
WI-19-32	215.00	216.00	235
WI-19-32	216.00	217.00	600
WI-19-32	217.00	218.00	200
WI-19-32	218.00	219.00	470
WI-19-32	219.00	220.00	<b>4200</b>
WI-19-32	220.00	221.00	<b>2800</b>
WI-19-32	221.00	222.00	180
WI-19-32	222.00	223.00	340
WI-19-32	223.00	224.00	200
WI-19-32	224.00	225.00	217

## Appendix 3. Drill Hole Geological Logs

**Drill Hole Lithology Log**

Hole Id	From (m)	To (m)	Interval (m)	Lithology	Unit Description
W119-20	0	1.68	1.68	OB	Over burden material (not retrieved in core box but assumed; otherwise, it is a difference between head/drill pad elevation and ground).
W119-20	1.68	68.8	67.12	Dolomite Carbonatite	Coarse grained, tanned with patches of white and dark brown dolomite-carbonatite (Scint box scan mode ~ 650 - 1100). Euhedral secondary dolomite (replacement textures) are observed in/around veins. From 56m, Scint box scan is relatively lower than the upper interval, averaging 350 - 450 and the last 1.5m shows weak REE mineralization.
W119-20	68.8	117	48.2	Intrusion (Syenite)	This unit is composed of dark green-colour at the start of the unit with bleached, light tan/grey, medium grained syenite. Almost interlocking igneous texture of feldspars, quartz and trace mafic minerals (elongated hornblende / biotite altered partially to chlorite) with trace epidote alteration halos around mafic minerals and magnetite blebs locally enriched with cm-scale patches; the magnetite blebs show hematite alteration in few patches where the core appears dull red/maroon in colour. Besides that, in the dark green / black intervals, the unit is weakly chloritized, occasionally pyritic and magnetic; rubby material is magnetic enough to be picked by a magnetic pen (111.6 - 113m). The rock has been altered by major silica alteration and minor, patchy K - carbonate - dolomite and trace chlorite alteration and occasionally veined. Trace patches of fragmental wall rock (± volcanic fragments) is observed 'floating' within late carbonate-dolomite fluids.
W119-20	117	118.1	1.1	Dolomite Carbonatite	Coarse grained, tan-coloured with patches of white and dark brown dolomite-carbonatite. Ree minerals are visually identified in mm-cm-scale, disseminated patches (slightly elevated Scint reading).
W119-20	118.1	136.4	18.3	Intrusion (Syenite)	Dark green-colour with bleached, light tan/grey, medium grained syenite. Compositionally, feldspars, quartz and trace mafic minerals (elongated hornblende / biotite altered partially to chlorite) and black spotty magnetite blebs is locally observed. Silica alteration is seen toward the end of the unit (@ 129m) and trace carbonate - chlorite veinlets crosscut the rock with trace pyrite.
W119-21	0	3.9	3.9	OB	Over burden material (not retrieved in core box but assumed; otherwise, it is a difference between head/drill pad elevation and ground).
W119-21	3.9	114	110.1	Dolomite Carbonatite	Coarse grained, tan with patches of white and dark brown carbonate (dolomite) carbonatite (Scint box scan mode ~ 650 up to 1800). Euhedral secondary dolomite (replacement textures) are observed in/around veining that lack REE mineralization. This unit is crosscut by a fine-grained, medium brown, sharp-contact, intermediate dyklets (10-30cm wide) between 22.5 - 25m. The unit also hosts few fragments (dark green, fine-grained, massive) which appear 'floating' and 1 fragment of an igneous rock (altered syenite) that is crosscut by Dol - carb.
W119-21	114	124.5	10.5	Limestone (Fenite)	Light grey to tan coloured mm to cm-clasts of limestone, altered by secondary fluids and appears weakly brecciated. This unit Scint box scan is low, averaging 500-550.
W119-21	124.5	131.8	7.3	Dolomite Carbonatite	Coarse grained, secondary, white dolomite-carbonatite with patches of tan and dark grey fragments of wall rock xenoliths. REE are rarely observed in this unit, weak Scint box reading 300-400.
W119-21	131.8	138.45	6.65	Mafic dyke	Dark green, fine-grained, massive mafic dyke but brecciated and crosscut by Dol - Carb and sulphur-bearing fluids. Within the unit, black mineral form patches in the form of nodules that appears to be acrocline and is elevated in REE (a kick in SR). Patches of hydrothermal chlorite clots are seen throughout this unit.
W119-21	138.45	147.8	9.35	Intrusion (Syenite)	Altered / bleached, light grey, medium grained intrusive rock (syenite). Compositionally, feldspars, quartz and trace mafic minerals (elongated hornblende / biotite altered partially to chlorite). Silica alteration is moderate throughout the unit.
W119-21	147.8	149.2	1.4	Mafic Dyke	Dark green to black, fine grained, mafic dyke with newgrown plagioclase.
W119-21	149.2	164.3	15.1	Limestone (Fenite)	Light grey to tan coloured (limestone?), altered by secondary carbonate fluids and appears brecciated. This unit contains minor zones of strongly altered mafic components. Scint box scan readings are generally low and average 500-550.
W119-21	164.3	179.35	15.05	Dolomite Carbonatite	Coarse grained, secondary, white dolomite-carbonatite with cm-dm patches of tan and dark grey fragments of wall rock xenoliths (limestone). Mafic dyklets crosscut the unit at 176.4 - 178m - these have been partially altered and crosscut by carbonate alteration / veins. REE are rarely observed in this unit, weak Scint box reading ~300.
W119-22	3.5	4	0.5	OB	Possible over burden material composed of brecciated limestone veined by minor Fe-rich carbonates.
W119-22	4	100.5	96.5	Dolomite Carbonatite	Coarse grained, tan with minor patches of white and dark brown carbonate (dolomite) carbonatite (Scint box scan mode ~ 650 up to 1100). Euhedral secondary dolomite (replacement textures) and calcite are observed in/around veining that lack REE mineralization. The unit is intruded by a felsic dyke at 28-29m and is brecciated from 56.5 - 61m, 63-64 and 69-71m. From 75m, mineralized carbonate - white with patches of tan carbonate and REE mineralization - scint box scan >800 1900 domains. The unit also hosts few xenoliths (dark green, completely altered to chl), limestone and a small igneous dyke (Syenite) at 96.5m.
W119-22	100.5	106	5.5	Limestone (Fenite)	Light grey to tan coloured (limestone?), altered by secondary carbonate fluids, appears brecciated, and contains minor limestone xenoliths. This unit Scint box scan reading is low. The bottom 50cm is composed of fine-grained, dark brown - black biotite forming a nodule-like shape that has been veined / brecciated by Dol-carb fluids (possibly biotite after mafic minerals).
W119-22	106	114.25	8.25	Dolomite Carbonatite	Coarse grained, tanned Dolomite - carbonatite with patches of white carbonate and REE mineralization. High Scint box scan mode. Secondary euhedral dolomite ± calcite (replacement textures) are observed at the start and end of the interval observed in/around veining that lack REE mineralization. The unit also is a host to a 20cm wide Fenite (possibly LST protolith - dark grey) toward the end of the unit.
W119-22	114.25	122.9	8.65	Intrusion (Syenite)	Light grey - bleached, medium grained intrusive rock (syenite). Compositionally, trace feldspars (possible K-spar), recrystallized quartz and trace mafic minerals (elongated hornblende / biotite). About 10% of the unit is composed of Fenite. The unit contains roughly 1m of brecciation veined by Carb-dol fluids.
W119-22	122.9	127.15	4.25	Mafic Dyke	Dark green to black mafic dyke. Fine grained dark-green/black domains and black elongated HBL with newgrown plagioclase and trace quartz and ilmenite.
W119-23	0	0.95	0.95	OB	Over burden material (not retrieved in core box).
W119-23	0.95	3.75	2.8	Limestone	Light grey limestone strongly brecciated by tan-coloured dolomite - carbonatite. The limestone fragments, cm-scale in size, are altered / bleached by the secondary carbonate fluids. This unit Scint box scan reading is low.
W119-23	3.75	68.3	64.55	Dolomite Carbonatite	Coarse grained, tan with minor patches of white and dark brown carbonate (dolomite) carbonatite. The upper interval of the unit (up to meter 10) contains possibly strongly-altered xenoliths (Limestone) - although no bedding observed; however, at 19.7 - 20.3m, limestone xenoliths are observed. Besides that, this interval hosts moderate dark-green chlorite infilling fractures, black semi-needle tourmaline and dark grey-bluish Moly. The unit is crosscut by minor (cm-dm scale, dark green / black) mafic dykes which are in turn are veined by minor carb-dol. Trace patches of REE mineralization is observed. From 22.2m, white patches of carbonate and REE mineralization are observed - scint box scan >800 up to 1400 and SR values decrease gradually at meter 50. The unit also hosts few brecciated LST xenoliths (63.4 - 38.1m - 43.4-43.0m) and cm-dm scale mafic dykes. From 49 - 55.8m, the unit contains moderate replacement textures + calcite veining and cm-scale xenoliths of grey 'Fenite' or strongly brecciated/ altered LST and brecciated/ altered intrusive rock 'Syenite' + trace REE mineralization + Scint box scan <700. From 55.8 to end of unit, patches of white carbonate and moderate REE mineralization and scint box scan mode > 700 up to 1070 are recorded despite occurrence of coarse euhedral dolomite (replacement textures).
W119-23	68.3	72.3	4	Intrusion (Syenite)	Milky whiter/light pink to dark - green, brecciated, intrusive rock / Syenite. Carbonate fluids brecciated cm-scale fragments that is strongly bleached and occasionally chloritized.
W119-23	72.3	109.5	37.2	Dolomite Carbonatite	Coarse grained, tan Dolomite - carbonatite with moderate replacement textures + calcite veining. Weak REE mineralization. Scint box scan mode <800 throughout the interval.
W119-23	109.5	126	16.5	Limestone	Light to dark grey limestone, strongly brecciated near the contact with upper unit and moderately altered by secondary carbonate fluids. Away from the contact, the rock exhibits well-developed laminated bedding. This unit Scint box scan reading is low <500 and average at 350.
W119-24	0	2.9	2.9	OB	Over burden material (not retrieved in core box).
W119-24	2.9	40	37.1	Dolomite Carbonatite	Coarse grained, tan-light brown Dolomite-carbonatite with minor patches of white calcitic veins (over 1m) and dark green-black xenoliths/mafic dykes. The unit also contains strongly altered, light to dark grey, up to 1cm wide xenoliths of LST. Dark-green chlorite infilling fractures is also observed near the chloritized dykes, which are strongly brecciated and veined by carb-dol. This unit Scint box scan reading is 650-1000 (7.3-3m). From 19m, this carb dol unit hosts 1) relict limestone interval (40cm) with relict bedding @ 25.5m, 2) chloritized xenoliths, possibly after a mafic dyke, and 3) light grey to dark-grey, limestone xenoliths - intervals up to 30cm wide. REE patches are well observed and scint box scan reading is high (700-1400SR) to 41.2m.
W119-24	40	58.1	18.1	Limestone (Fenite)	The unit starts with ~ 50cm wide moderately brecciated, recrystallized LST. Downhole, the intensity of brecciation increases with 1) lesser intact LST intervals, rather dispersed xenoliths, in a sea of calcite-carbonatite +/- dolomite fluids, 2) the xenoliths are increasingly bleached to light grey and light brown, and 3) the development of pink carbonate at 49.6m. This unit Scint box scan reading is low (500-650).
W119-24	58.1	83.3	25.2	Dolomite Carbonatite	Coarse grained, tan carbonate dolomite with minor patches of white (calcite) and dark brown (dolomite/ankerite) carbonate. The unit hosts 1) relict limestone interval (40cm) with relict bedding @ 25.5m, 2) chloritized xenoliths, possibly after a mafic dyke, and 3) light grey to dark-grey, limestone xenoliths - intervals up to 30cm wide. REE patches are well observed. This unit Scint box scan reading is high (700-1400SR).
W119-24	83.3	88	4.7	Limestone (Fenite)	Light grey, cm-scale xenoliths of relict limestone that has been completely recrystallized, altered by secondary carbonate fluids and brecciated. The unit is veined by sub to mm-scale chlorite veinlets and these occasionally have stiblenides. Box scan SR is 650-700.
W119-24	88	93.6	5.6	Dolomite Calcite Carbonatite	This unit starts with ~ 2m of mod mineralized interval of Dol-calc Carbonatite and the rest of the unit is calcite-dol Carb. This unit box scan SR is 600-700.
W119-24	93.6	118.8	25.2	Fenite	A dark green to black chlorite veinlets and sheen-black chlorite dominates the rock at 93.6 - 96.1m and an intrusive interval (Syenite!) intrudes the rock at 97 - 97.8m. At 100m, the unit hosts ~ 50cm wide of moderately brecciated, recrystallized LST and intrusive (syenitic) xenoliths. Downhole, the intensity of brecciation increases with 1) lesser intact LST intervals, rather dispersed xenoliths, in a sea of calcite-carbonatite +/- dolomite fluids, 2) the xenoliths are increasingly bleached to light grey and light brown, and 3) the development of pink carbonate at 49.6m. This unit Scint box scan reading is low (500-650).
W119-24	118.8	120.55	1.75	Dolomite Carbonatite	Coarse grained, tan carbonate with a cm-scale dyket and light brown dolomite/ankerite. This unit Scint box scan reading is intermediate (>700 - <800).
W119-24	120.55	122.95	2.4	Mafic Dyke	Dark green, massive, fine-grained crosscutting the Dol - Carb and is weakly veined by late dol-carb veins. Coarse grained pyrite is seen as clots and box scan SR is 750.
W119-25	0	1.1	1.1	OB	Over burden material (not retrieved in core box).
W119-25	1.1	39.55	38.45	Dolomite Carbonatite	Coarse grained, dark to light brown Dolomite-carbonatite with minor brecciated LST xenoliths (5%; up to 10cm wide) and strongly chloritized, brecciated mafic dyke (15-20cm). This unit Scint box scan reading is 800. From 6.1 - 13m, tan carbonate (+/- minor patches of secondary / coarse dolomite and dark brown Ferrocarbonatite) with moderate REE mineralization is present with scint box scan reading of ~950. Starting at 13m, light brown - tan Dolomite-carbonatite with minor replacement patches of white calcite-Dol and Ferrocarbonatite is crosscut by cm-scale network of mafic dykes that has been chloritized (14.3 - 16m) and hosts trace, cm-patches of LST. Although the unit is mod mineralized at 23m, the unit Scint box scan reading is intermediate (>700 - <800).
W119-25	39.55	46.1	6.55	Limestone (Fenite)	Light grey, cm xenoliths to cm-patches of relict limestone that is partially to completely recrystallized, altered and brecciated by late carbonate fluids. The regression from dark grey to white is a reflection of alteration. The few relict xenoliths that maintain bedding is measured at 45 degree. Minor cm-dark green mafic dykes crosscut the rock toward the end of the unit. Box scan SR is low at 400.
W119-25	46.1	57.4	11.3	Mafic dyke	This unit is composed of dark green to black mafic dyke network that crosscut the rock. These are brecciated and strongly flooded by carbonate creating cm-xenoliths of dyke material and carbonate floating in dyke zones - these dyke xenoliths are crosscut by later carbonate fluids. The later hydrothermal fluids appears strongly mineralized than earlier ones.
W119-25	57.4	87.2	29.8	Dolomite Carbonatite	Coarse grained, tan dol carb and calcite carb at the start of the unit. Moderate to strong REE patches and the unit box scan SR range from 750 - 1100 with highest SR at 62.5m (1500). The unit also contains cm up to 50cm wide mafic dykes that have been chloritized and altered by carb fluids.
W119-25	87.2	135.5	48.3	Fenite	Light grey to tan coloured mm to cm-clasts of limestone, mafic and syenitic xenoliths that is strongly brecciated and altered by secondary fluids. From 114, the clasts are strongly altered and volumetrically, more carbonate fluids are present - these are weakly mineralized with both REE minerals. At the starts of the unit (89-90.5m, a dark grey recrystallized brecciated LST interval dominates the unit). This unit box scan SR averages at 750 with lowest SR at 100-120m; 400-600). An intrusive syenite dyke is present at 128.2 - 129.3m.
W119-25	135.5	143.4	7.9	Dolomite Carbonatite	Coarse grained, dol carb +/- calcite with moderate REE mineralization in patches and clots - both Monazite and Bastnesite are present in clots and over cm-patches. The unit is crosscut by mafic dyke at 134.4-134.9m. Scan box SR is 800-1200.
W119-25	143.4	152	8.6	Intrusion (Syenite)	Medium to light grey, medium grained intrusive rock / Syenite. Carbonate fluids is more dominant from 146.4 to end of unit and brecciates cm-scale fragments that is chloritized and recrystallized.
W119-25	152	175.65	23.65	Limestone	Dark grey limestone, strongly brecciated by carb fluids near the upper contact with carb unit (almost a Fenite). Away from the contact, the rock exhibits relict bedding at 70-90 degree TCA. This unit Scint box scan reading averages at 350.
W119-26	0	1.8	1.8	OB	Over burden material (not retrieved in core box; otherwise its space).
W119-26	1.8	19	17.2	Dolomite Carbonatite	Medium grained, dark brown dolomite - carbonatite with brecciated mafic dyke (5cm) and LST xenoliths (1m wide at 12-13m). The mafic dyke xenoliths are strongly chloritized and the LST is strongly bleached by carb fluids. This unit scan box SR is relatively low (500).
W119-26	19	32	13	Limestone	The upper contact of this unit is gradational over a meter with light - dark grey brecciated, altered limestone. Relict primary textures are rarely preserved and show weak bedding at 70-80 degree TCA. Away from the contact, the rock exhibits well-developed lamination/bedding. This unit scan box SR is very low (300).
W119-26	32	83.9	51.9	Dolomite Carbonatite	Medium to coarse grained, light brown Dolomite-carbonatite with patches of dark brown carbonate (ferrocarbonatite). The unit contains a patch of moderately mineralized zone at 38-41m. This unit scan box SR averages at 800. From 45 - 83.9m, medium grained tan and coarse grained mafic, dolomite carbonatite is moderately mineralized (both Monazite and Bastnesite are present in clots and over cm-patches) and contains trace xenoliths (1-3%) of mafic dyke and LST between 59.5-60.5m and 52m + scan box SR averages at 900 and range between 700-1200.
W119-26	83.9	86.15	2.25	Limestone (Fenite)	Medium to dark grey, mm to 1cm xenoliths of relict limestone that has been completely recrystallized, altered by silica fluids and also veined/brecciated by late Dol-carb fluids. This unit box scan SR is ~ 600.
W119-26	86.15	125	38.85	Dolomite Carbonatite	Medium grained, tan Dolomite-carbonatite and white calcite +/- calcite-dol carbonate (93 - 109m) and very coarse-grained, tan Dol-carbonatite. The unit is crosscut by a mafic-chloritized dyke at 101 - 101.35m. Minor patches of fenitized wall rock (altered LST xenoliths) is present from 120 - end of the unit. This unit scan box SR averages at 650 (minimum of 400 @ 98-101).
W119-26	125	133.7	8.7	Limestone (Fenite)	Light-medium grey, xenoliths of relict wallrock (LST), partially to completely altered, recrystallized and brecciated by late carbonate fluids and intrusive rock at the lower contact. The transition into the next unit is very diffuse and altered by fluids from the intrusion. Minor mm dark green veinlets of chlorite is observed within the unit with sulphides at/near margins. This unit scan box SR averages at 700 and range between 500 - 850; highest of 1300 @ 151.3m.
W119-26	133.7	156.3	22.6	Intrusion (Syenite)	Light to dark green and milky/light pink with rare pink halos. Where altered by secondary carb fluids (133.7-141m; 149 - 154.5m), the unit appears lighter in colour - light green/milky to light pink - and where unit is less altered, it is darker in colour and primary igneous textures are easily recognized. The plagioclase is saucerized. The unit also contains patches of relict LST at 139.6-140.6m. The intrusion is more crystalline toward the EOH.
W119-27	0	2	2	OB	Over burden material (not retrieved in core box but assumed; otherwise, it is a difference between head/drill pad elevation and ground).
W119-27	2	46.7	44.7	Dolomite Carbonatite	Coarse grained, dark to light brown / tan Dolomite-carbonatite with minor replacement patches of white calcite-Dol dilution zones. The unit hosts minor, light to dark grey LST xenoliths (@ 3m). Trace, sub-mm chlorite infilling stylolitic fractures is observed throughout. This unit Scint box scan reading average at 800. From 18.4 - 27m, white carb with moderate REE mineralization and highest scan box SR at 20 - 22.5m (up to 1000; gradually / slightly decrease over few meters). Visually, both REE minerals are still present in cm-patches despite a slightly lower SR than previous dol carb interval. At 27 - 46.7m, dark to light brown / tan Dolomite-carbonatite with minor replacement patches of white calcite-Dol dilution zones and veins (@ 46.7 - 47.7m). Within this interval, the rock hosts minor, dark grey LST xenoliths (@ 45.3m) and trace, sub-mm chlorite veinlets + scint box scan reading of 700-850.
W119-27	46.7	49.05	2.35	Limestone (Fenite)	Light grey to brown, cm-scale, subrounded xenoliths of relict limestone that has been completely recrystallized, altered by secondary carbonate fluids - some xenoliths are mineralized and resembles the REE minerals colour they are hosting. The subrounded xenoliths have yellow clots of Bastnesite and trace red maroon monazite (both are observed at the bottom 40cm of this unit - up to 900SR).

**Drill Hole Lithology Log**

Hole Id	From (m)	To (m)	Interval (m)	Lithology	Unit Description
W119-27	49.05	56.4	7.35	Dolomite Carbonatite	Coarse grained, light brown - tan Dolomite-carbonatite with minor replacement patches of white calcite-Dol. The unit contains trace, sub-mm dark-green to black chlorite infilling stylolitic fractures. This unit Scint box scan reading average 800.
W119-27	56.4	65.5	9.1	Mafic dyke	Dark green to black, fine-grained, massive mafic dyke, strongly brecciated by carb fluids. Xenoliths range from 1cm to >10cm, angular, and margins are altered and appears grey to light grey in colour. Sulphide accompany these xenoliths and precipitated at xenolith margins while REE mineralization are clotty.
W119-27	65.5	120.35	54.85	Dolomite Carbonatite	This unit starts with very coarse grained, tan Dolomite-carbonatite with major replacement of white calcite-Dol in and around major veining (box scan SR = 450) and transition into coarse to medium-grained, tan - white dol / cal carb with moderate-strong REE mineralization - visible and forms patched up to 10cm wide of Monazite and Bastnesite at 68.5m (box scan SR is ~ 650 - 1200 and mineralization gradually / slightly decrease over few meters past the 73.5m mark). From 74m, the unit transitions back to barren Dolomite-carbonatite with moderate secondary replacement textures of white calcite-Dol + tan Dol-calc dilation zones and veins. The lith is strongly brecciated from 85.2 - 93.4m with ~1m of faulting on both ends (this interval could be separated into its lith as 'brecciated carbonate' but was included in this unit for simplicity). At this interval, sub-mm-scale chlorite veinlets infill fractures (Scint box scan reading is ~ 700-800). At 95.2 - 120.35m, the unit again transitions into white cal-dol carb with moderate to strong REE mineralization - although have the highest SR in the entire hole, mineralization is visually less visible than in previous carb interval @ 68.5-74m (box scan SR range between 900 - 1500 with highest SR (2100) at 110.5m). Mineralization again gradually / slightly decrease over few meters toward the end of the unit.
W119-27	120.35	139.85	19.5	Limestone	Light grey, bleached limestone, strongly brecciated and moderately altered by secondary carbonate fluids (dol and calcite). Where alteration is minimum, LST is dark grey - black with relict primary bedding (@125m) and where alteration/deformation is strong, no bedding is preserved (Fenite). At the upper contact, SR average 550 and it range 350-450 through the rest of the unit. Bedding is partially preserved.
W119-28	0	3.15	3.15	OB	Over burden material (not retrieved in core box; otherwise its space).
W119-28	3.15	20.8	17.65	Dolomite Carbonatite	Medium grained, light brown / tan Dolomite-carbonatite with minor replacement patches of white calcite-Dol (@ 14m and 18 - 18.6m). The unit hosts minor, dark green, chloritized mafic dykes at the start of the hole (4.3 - 6.5m) and light grey - bleached white LST xenoliths (@ 9.4 - 13.7m). The LST xenoliths show relict, brecciated bedding (45-60 degree TCA). Trace Fe-carbonate veinlets crosscut the rock throughout the unit. This unit Scint box scan reading average at 450.
W119-28	20.8	24.65	3.85	Limestone (Fenite)	Light grey, bleached limestone, strongly brecciated and altered by secondary carbonate fluids. Where alteration is minimum, LST is dark grey and xenoliths are easily recognized - angular in shape; few preserve primary bedding and majority lacks bedding. SR averages at 450.
W119-28	24.65	26.7	2.05	Dolomite Carbonatite	Medium grained, light brown / tan Dolomite-carbonatite with moderate REE mineralization. Scint box scan reading is 650 - 750.
W119-28	26.7	32	5.3	Limestone	Light grey, bleached limestone, strongly brecciated and moderately altered by secondary carbonate fluids. Where alteration is minimum, LST is dark grey. In this unit, xenoliths define a relict bedding at 30-45 degree TCA. SR averages at 400.
W119-28	32	72.6	40.6	Carbonatite-Dolomite	Coarse grained, tan, moderately-mineralized dolomite carbonatite with minor white cal carb. Visible patches of REE mineralization is seen throughout the core but the SR is strangely low - averages at 850 and spikes at 63-66m up to 1700 - highest encountered in this hole). The unit contains an altered mafic dyke (41.5-41.8m) and an interval of altered LST xenoliths (45.5 - 47m). From 51.25 - 55m, the unit hosts strongly altered LST mafic dyke xenoliths and mineralization is well developed in this section. At 60 - 72.6, unit is moderately mineralized, coarse, tan-coloured with patches of strong mineralization @ 63-66m (visible REE mineralization is seen from start of the unit to 66m and spotty high SR ~ 1400-1700 + average of 800. Few xenoliths of LST is observed at the 61m mark.
W119-28	72.6	117.15	44.55	Limestone	The unit starts with a light grey, bleached limestone, strongly brecciated and moderately altered by secondary carbonate fluids (72.6 - 80.5m). From 80.5 - 93, 98-105.4, 108.8-EOH, the unit shows slightly-dippered primary bedding where biotite occasionally occupy bedding planes. In the brecciated intervals (93-98 and 105.4-108.8m), LST xenoliths altered by late carb fluids. Where alteration is minimum, LST is dark grey and milky-white where alteration is strong. SR average @ 200, highest of 500 near the contact with the upper unit.
W119-29	0	2.75	2.75	OB	Over burden material (not retrieved in core box; otherwise it difference between drill head and ground).
W119-29	2.75	15.1	12.35	Intrusion (Syenite)	Light to dark brown at the start of the hole - weathered rocks - and light grey with creamy white and pink halos at the center of the unit. The unit is crosscut by Fe-carbonate +/- dolomite +/- silica veins throughout the unit. The unit is massive in texture and fine-grained foliated biotite define the contact metamorphism at 18.8 - 16.5m (biotite possibly occupying bedding planes of relict limestone). Mineralized, strongly altered syenite dykes start 13.2 - end of the unit.
W119-29	15.1	19.5	4.4	Limestone	Light grey, bleached limestone and altered by fluids from the intrusive rocks. The upper contact is gradational and occupied by stringers of pyrite while the lower contact is sharper. Relict primary textures are occupied by pyrite stringers.
W119-29	19.5	22.93	3.43	Intrusion (Syenite)	Light brown with brown / pink halos, massive, sulphidized intrusive unit. The unit is crosscut by Fe-carbonate +/- dolomite +/- quartz +/- chlorite veinlets throughout the unit.
W119-29	22.93	37.75	14.82	Limestone	Light grey, bleached limestone and altered by fluids from the intrusive rocks and Fe-carbonate/dolomite. The lithological contacts are sharp and primary bedding is observed in the unit.
W119-29	37.75	40.6	2.85	Intrusion (Syenite)	Light brown with brown / pink halos, massive, sulphidized intrusive unit. The unit is crosscut by Fe-carbonate +/- dolomite veinlets and pyrite stringers.
W119-29	40.6	68.15	27.55	Limestone	Light grey, bleached limestone and altered by fluids from the intrusive rocks and Fe-carbonate/dolomite. The lithological contacts are sharp and primary bedding is observed in the unit.
W119-29	68.15	153.1	84.95	Dolomite Carbonatite	Medium to coarse grained, tan to light brown dol - carbonatite with minor patches of white cal-dol carb. The upper contact with LST is gradational over several meters (68.15 - 72m) and minor, medium-grained xenoliths (<1cm) is often seen near the contact. Also, inside the unit, multiple intervals with cm-xenoliths of chloritized mafic dykes are strongly brecciated by this carb fluids. The unit is moderately mineralized with cm-dm zones of strong mineralization and high SR - Mineralization is evenly distributed throughout the unit. The mafic dyke @ 93.7 - 97.6 is comparable to the brecciated mafic dyke in hole 27. From 133m - 153.1m, the unit shows patches of moderate mineralization despite less SR (750- 600 SR @ 133 - 144m) than previous interval (average of 750 at 133m to 500 past the 144m mark). Minor percentage of mafic dykes (1 - 10cm wide) and 1 3cm wide LST xenolith @147.45m, brecciation over 1m @ 137 - 144m and major veining toward the end of the unit with no mineralization is observed at the 133 - 153.1 carb interval.
W119-29	153.1	159.3	6.2	Mafic Dyke	Dark green to black, fine-grained, massive mafic dyke xenoliths that is strongly brecciated by carb fluids. Xenoliths range from up to 70cm at the start of the unit; however, mean size is few cm wide, angular, and margins are altered and appears grey to light grey in colour. Cubic pyrite formed at xenolith margins while moderate REE mineralization seen in 2 cm wide clots in dol-carb veins.
W119-29	159.3	170.7	11.4	Dolomite Carbonatite	Medium grained, light brown / tan Dolomite-carbonatite + minor calcite; contains minor % of LST xenoliths, rarely mineralized unit. Scint box scan reading is 650 - 750. The unit is gradational over a meter to the next unit.
W119-29	170.7	184.05	13.35	Limestone (Fenite)	Light grey, cm-scale, subrounded xenoliths of relict limestone that has been completely recrystallized, altered by secondary carbonate fluids. Scint box scan reading avg @ 550.
W119-30	0	4	4	OB	Over burden material (not retrieved in core box; otherwise it difference between drill head and ground).
W119-30	4	5.5	1.5	Intrusion (Syenite)	Light brown with brown / pink halos, massive, sulphidized intrusive unit. The unit is crosscut by Fe-carbonate +/- dolomite +/- quartz veinlets throughout the unit.
W119-30	5.5	8.7	3.2	Limestone	Light to dark grey, cm-scale, subrounded xenoliths of relict limestone that has been partially recrystallized, altered by secondary carbonate fluids. Two intervals of thinly bedded siltstone (or strongly foliated LST?) is foliated and occur toward the end of this unit.
W119-30	8.7	11.15	2.45	Intrusion (Syenite)	Light brown with brown / pink halos, massive, sulphidized intrusive unit. The unit is crosscut by Fe-carbonate +/- dolomite +/- quartz veinlets throughout the unit.
W119-30	11.15	15.57	4.42	Limestone	Light to dark grey and green, nm-subrounded xenoliths of relict limestone at the start of the unit and thinly bedded siltstone +/- mudstone through the rest of the unit. The unit is weakly foliated and superimpose bedding planes; crenulations are well developed at 12.7 - end and brown biotite occurs along foliation planes.
W119-30	15.57	22	6.43	Intrusion (Syenite)	Light brown with brown / pink halos, massive, strongly silicified and strongly sulphidized intrusive unit. The unit is crosscut by Fe-carbonate +/- dolomite +/- quartz veinlets throughout the unit.
W119-30	22	33.3	11.3	Limestone	Light grey, bedded LST with minor patches of cm-scale, subrounded xenoliths. The unit possibly shows a fold over several meters as bedding angles gradually increase from 45/50 to 80 and back to 45/50. Brecciation and minor alteration over few cm from lower unit is observed near the lower contact.
W119-30	33.3	35.7	2.4	Intrusion (Syenite)	Light brown, massive, sulphidized intrusive unit. The unit is crosscut by Fe-carbonate +/- dolomite +/- quartz veinlets throughout the unit and alteration by dolomite - carb fluids dominate and obliterate the lower contact. The unit is brecciated by carb fluids.
W119-30	35.7	123.4	87.7	Dolomite Carbonatite	The unit starts with fine to medium grained, light brown / tan Dolomite-carbonatite + angular syenite xenoliths up to 30cm wide brecciated by carb fluids (box scan SR of 500 up to 750 toward the end of this interval @ 44.3m). The tan carb is crosscut by milky carb. From 44.3 - 71m, medium + coarse grained, tan to dark - light brown dol - carbonatite is moderately mineralized with cm-dm zones of strong mineralization (mineralization is evenly distributed throughout) and high SR (average box scan SR is highest in this hole - up to 1850 and avg of 1100 - lowly over 3m @ 60-63m). An interval (44.2 - 59m) contains cm-wide of strongly altered, brecciated fenitized LST and chloritized mafic dyke xenoliths. From 71 - 112.6m, the unit transitions back into the fine to medium grained Dolomite-carbonatite (similar to the 35.7 - 44.3m interval). Minor calcite carb patches (@106 - 108m) and the tan carb (dol carb) appears crosscut by the milky calcite carb. More mineralization is observed at 92 - 101.5m (higher SR too). Box scan SR averages at 650-700. Massive, milky white calcite-dol Carb with minor REE mineralization (box scan SR avg of 550) is observed at 112.6 - 123.4m.
W119-30	123.4	126.15	2.75	Mafic dyke	Dark green to black, fine-grained, massive, relict xenoliths of mafic dyke, strongly brecciated and floated by carb fluids. Few xenoliths of LST (light grey) was also observed. The unit is strongly mineralized with REE - Bastnesite.
W119-30	126.15	131.7	5.55	Dolomite Carbonatite	Medium-grained, massive, brecciated and rubby milky white calcite-dol Carb with minor REE mineralization. The unit contains minor xenoliths of LST and mafic dyke. This unit box scan SR avg at 500.
W119-30	131.7	160	28.3	Fenite	Dark grey, cm to dm xenoliths of relict limestone that has been strongly altered, recrystallized and veined/brecciated by late, mineralized Dol-carb fluids. The unit also contains brecciated xenoliths of syenite starting from 150-154.3m. cm up to 10cm wide brecciation is observed @ 2 zones: 154.5m and 159.8m and a strongly mineralized zone at 156 - 158.1m is observed. This unit scan box SR is ~ 650.
W119-30	160	163	3	Dolomite Carbonatite	Medium-grained, tan dol - carbonatite with minor LST and mafic dyke xenoliths that is moderately brecciated, and strongly altered by mineralized carb fluids. The unit is similar to appearance and texture of the 'Bx mafic dyke' @ 123.5m, however, the unit contains lesser xenoliths than it (i.e more carb fluids) - mineralization is strong and SR is elevated (~1000).
W119-30	163	171.7	8.7	Limestone (Fenite)	Dark to light grey, cm to dm xenoliths of relict limestone that has been moderately altered, recrystallized along margins and veined/brecciated by late, mineralized Dol-carb fluids. Xenoliths % are major - compared to that at 131.7m. A mafic dyke is observed at 171.3-171.7m. One xenolith @ 166.3m is serpenitized. This unit box scan SR is at 650.
W119-30	171.7	177.75	6.05	Dolomite Carbonatite	Medium-grained, tan dol - carbonatite with 2 cm-wide strongly altered, brecciated fenitized LST and chloritized mafic dyke xenoliths. The unit is strongly mineralized with cm-dm zones of strong mineralization and high SR (>1000) - Mineralization occur in patches.
W119-30	177.75	179.5	1.75	Limestone (Fenite)	Dark grey, few xenoliths of relict limestone flooded by late Dol-carb fluids. The unit contains over a 75cm of fault gouge at the start of the unit. This unit scan box SR is ~ 650.
W119-31	0	8.05	8.05	??	No core retrieved.
W119-31	8.05	11.25	3.2	OB	Over burden - small fractured pieces of syenitic rock (up to 10cm wide), dark brown, moderately rusty.
W119-31	11.25	14.2	2.95	Intrusion (Syenite)	Light (where altered) to dark brown (where carb-veined), massive to slightly foliated, sulphidized intrusive unit. The unit contains minor xenoliths of relict 'foliated LST' and is crosscut by minor Fe-carbonate +/- dolomite quartz veinlets throughout the unit.
W119-31	14.2	48	33.8	Limestone	The unit starts with dark grey to black, aligned small fragmented of LST (35 degree) and transitions into altered, weakly foliated, light coloured (light grey - tan) LST @ 15.5 - 17.7mm and into thinly bedded sediments (LST maybe) that is strongly foliated, medium grey with blue halos with thin patches of mod-strong silification (29.4 - 29.85 and 39-45m). Foliation/bedding is disturbed from 36 - end of unit. Within the unit, nm-seams of biotite occur between foliation planes and nm carb veinlets. From 39 - 48m, the unit is light grey, cm to dm xenoliths of relict limestone that has been strongly altered, recrystallized, moderately silicified patches and veined/brecciated by late carb fluids (scan box SR is 400).
W119-31	48	50.1	2.1	Intrusion (Syenite)	Light brown with orange halo, massive, strongly altered, sulphidized intrusive unit. The unit is crosscut by quartz veinlets and late dolomite and later calcite veinlets. Fluids from the intrusion obliterate contacts and infiltrate country rocks.
W119-31	50.1	55.65	5.55	Fenite	Light grey, cm to dm xenoliths of relict limestone that has been strongly altered, recrystallized, silicified and veined/brecciated by late carb fluids. From 52 - 54m, the unit contains higher % of dol - carb (non mineralized) and appears light brown / tan in colour. From 54m, the unit contains strongly brecciated, angular xenoliths of LST. This unit scan box SR is 400.
W119-31	55.65	137.8	82.15	Dolomite Carbonatite	Medium to coarse-grained, tan to dark brown dol - carbonatite with few intervals of dark green/black chloritized mafic dyke (62-62.5m) and cm-dm patches of light grey, strongly altered and sheared LST. This unit is strongly mineralized (up to 10%) with both REE (clotty, cm-dm zones of mineralization) and high SR (>1200 avg and range btw 950 - 1750). The unit is hydrothermally veined by ~5% chlorite with moly, particularly @ 72 - 81.6m. The unit also contains what appears to be remnants of mafic dykes btw 81 - 82.1m and the equivalent of mineralized 'Bx mafic dyke' @ 89.75 - 90.45m. The lower contact gradually transitions into the next unit. Two intervals of semi-fenitized LST is seen: (1) 65 - 81.5m and (2) 117 - 123m. The unit also contains 2 semi-barren intervals with secondary textures at 97 - 109m and 111 - 117m (box scan SR avg at 600 - 750). The other 2 mineralized dol - carb intervals are characterized by cm-patches of light grey with orange halo of mineralized relict LST (scan box SR ~ 1200) at 109 - 111m (interval 1) and 117 - 137.8m (the latter 117 - 125.4m have high SR @ 1300 avg and range from 1000 - 1900 and the rest is ~ 700).
W119-31	137.8	138.5	0.7	Mafic dyke	Dark green to black, fine-grained, massive, relicts of chloritized mafic dyke, strongly brecciated and floating in carb fluids. The unit is strongly mineralized with REE mineralization - Bastnesite. This unit scan box SR is 900.
W119-32	0	7.8	7.8	??	No core retrieved.
W119-32	7.8	8.2	0.4	OB	Over burden - small pieces of syenitic rock (up to 3cm wide), dark brown, moderately rusty and rubby.
W119-32	8.2	21	12.8	Intrusion (Syenite)	Light (where altered) to dark brown (where carb-veined), massive to slightly foliated, sulphidized intrusive unit. The unit contains minor xenoliths of relict 'foliated LST' and a large patch of altered LST xenoliths @ 12.7 - 13.5m. The unit is crosscut by minor Fe-carbonate +/- dolomite quartz veinlets throughout the unit. Scan box SR is 260.
W119-32	21	74	53	Limestone	The unit starts with medium to coarse-grained dark grey to black, brecciated, weakly aligned LST xenoliths veined by light green/bluish halo (@ 10 - 20 degree TCA). The unit transitions into foliated weakly altered and carb-veined, light coloured (light grey) LST @ 29-34m, 43 - 45.5m, 48 - 55m. Structurally, the unit starts with LST xenoliths @ shallow degree TCA (@ (10-20) and @ 26m - 34m, the bedding is foliated @ 30-40 degree TCA, back into 5 - 15 degree TCA from 34 - 43m and finally back to 35 - 40 degree TCA up to 52.5m where minor deformation disturb primary bedding. This unit scan box SR is 350. From 57.2m, the unit is brecciated and contains cm to dm xenoliths of relict limestone; altered, recrystallized and veins/brecciated by late carb fluids (xenoliths compose more than 70% of the unit). Scan box SR of this interval is 275.
W119-32	74	89	15	Fenite	Light grey to tan coloured 'Fenite' with mm to cm-clasts of relict limestone, mod - strongly brecciated and altered by late, carb fluids. Volumetrically, more carbonate fluids (~ 50-60%) are present in this unit than previous unit. The lower contact is gradational over 1m and the contact is strongly brecciated over ~1m (88 - 89.9m). This unit box scan SR averages at 450.

**Drill Hole Lithology Log**

Hole Id	From (m)	To (m)	Interval (m)	Lithology	Unit Description
W119-32	89	220.75	131.75	Dolomite Carbonatite	This unit contains 4 mineralized high SR intervals of dol carbonatite; (1) 88.5 - 98m, (2) 112 - 114m, (3) 144 - 178m and (4) 188.2 - 214.5m. These intervals are typically medium grained +/- coarse-grained patches of dol carb dominating the intervals, tan to light-brown in colour, moderately to strongly mineralized with cm zones / patches / coarse clots of both REE minerals. These intervals are often crosscut (?) by coarse-grained veins and SR avg @ 750 - 1000 and highest @ 5200 @ 219.7m. Milky white cal carb is randomly observed throughout the core. Chlorite veinlets and/or chloritized mafic xenoliths was common throughout these intervals; and a lesser percentage of altered LST is observed. The lesser mineralized Dol carb intervals (% of mineralization is less) was observed with major secondary textures / veining and appear coarser grained than the visually mineralized sections. These semi-mineralized intervals record scan box SR of 500 - 750 avg.
W119-32	220.75	224.7	3.95	Mafic dyke	Dark green to black, fine-grained, massive in texture but strongly brecciated/faulted where brecciated gaps are infilled by chlorite veinlets, chloritized mafic dyke. The dyke is crosscut by sharp contact veins of dol-carbonatite. This unit scan box SR is 600.

**Drill Hole Alteration Log**

Hole ID	From (m)	To (m)	Interval (m)	Alteration 1	Intensity	Alteration 2	Intensity	Weathering	Comments
WI-19-20	1.68	2.7	1.02					Moderate	Weathering of Fe carbonate +/-oxide minerals (around dolomite crystals) gives the rock a brownish appearance
WI-19-20	2.7	4.7	2					Intense	
WI-19-20	4.7	31	26.3					Moderate	
WI-19-20	31	44.5	13.5					Weak	
WI-19-20	80.3	84.3	4	Silica - Carb	Wk -Mod	K-spar	Trace		The core contains patches of mod silica alt and cm-patches of K-alt
WI-19-20	87.5	99.8	12.3	Silica - Carb	Strong	K-spar	Trace		Strong silica flooding with later dolomite and carb alteration filling fractures and void spaces. Wk K-alteration is also observed in core - Kspar crystals and trace K-veining.
WI-19-20	101.7	103.3	1.6	K-spar	Mod				Patches of moderate K-spar alteration with minor silica - carbonate
WI-19-20	108.4	111.6	3.2	Carb - calcite	Mod	K-spar	Trace		
WI-19-20	114.6	129.2	14.6	Carb - calcite	Weak				Patches of moderate carbonate / dolomite occur throughout the interval with minor REE mineralization.
WI-19-20	129.2	135.7	6.5	Silica - Carb	Mod				Moderately silicified zones with carbonate veining infilling fractures and crosscutting the rock
WI-19-21	3.9	8	4.1					Moderate	Weathering of Fe carbonate
WI-19-21	8	10	2					Strong	
WI-19-21	10	46	36					Moderate	
WI-19-21	46	47	1					Intense	Intense weathering of a meter wide carbonate veining
WI-19-21	47	49	2					Moderate	
WI-19-21	49	61	12					Weak	
WI-19-21	61	72	11					Moderate	
WI-19-21	72	75	3					Weak	
WI-19-21	75	76	1					Strong	
WI-19-21	76	80	4					Weak	
WI-19-21	80	179.35	99.35					None	
WI-19-21	10.5	16.5	6	Dol-carb	Mod				Weak to moderate replacement textures - DT
WI-19-21	52	61	9	Dol-carb	Mod				Moderate replacement texture, yet high SR than core above - main phase. DT
WI-19-21	71.9	75.3	3.4	Dol-carb	Strong				Strong replacement texture and high SR due to patches of REE (72.7 - 78.3m) Recrystallized cm-scale patches are seen in this interval. DT
WI-19-21	76.3	84.7	8.4	Dol-carb	Mod				Secondary textures, medium and coarse-grained, over 50% of the rock. DT
WI-19-21	86.3	89	2.7	Dol-carb	Mod				Weak to moderate replacement textures - DT
WI-19-21	89	96	7	Dol-carb	Strong				Strong secondary very coarse textures over 1cm wide - DT
WI-19-21	99.8	101.8	2	Dol-carb	Mod				Moderate replacement / veining textures - DT
WI-19-21	122.2	123.7	1.5	Dol-carb	Mod	Silica	Strong		Moderate silica and Carb-dol alteration
WI-19-21	123.8	127.5	3.7	Calcite carb +/- Dol.	Mod				Moderate replacement textures - DT + pyrite + light grey hydrothermal mineral
WI-19-21	131.8	138.4	6.6	Dol-carb	Weak	Chlorite	Mod		Hydrothermal and replacement textures with >5% pyrite
WI-19-21	164.3	176.4	12.1	Dol-carb	Mod				
WI-19-22	3.5	28.5	25					Moderate	
WI-19-22	28.5	48	19.5					Weak	Secondary replacement textures
WI-19-22	48	57.5	9.5					Moderate	
WI-19-22	63	69	6					Moderate	
WI-19-22	29.6	47.7	18.1	Dol-carb	Mod				
WI-19-22	56.5	71	14.5	Carb	Mod				Carbonate fluids infiltrate a brecciated section within the Dol-carb unit
WI-19-22	71		-71						
WI-19-22	100.5	106	5.5	Fenite (K-spar)	Mod				Moderate Fenite alteration throughout this zone in a LST unit
WI-19-22	114.25	122.9	8.65	Fenite (K-spar)	Mod				Moderate Fenite alteration throughout this zone in a Syenite unit
WI-19-23	0.95	23.5	22.55					Weak	Minor Weathering. This hole is rarely weathered compared to previous holes
WI-19-23	26	39	13	Dol-carb	Mod				Secondary textures, medium and coarse-grained, over 20% of the rock. DT
WI-19-23	42	47.3	5.3	Dol-carb	Mod				Secondary textures, medium and coarse-grained, over 20% of the rock. DT
WI-19-23	49	69.5	20.5	Dol-carb	Mod				Secondary textures, medium and coarse-grained, over 10% of the rock. DT
WI-19-23	72.3	109.5	37.2	Dol-carb-Cal	Mod				Secondary textures, medium and coarse-grained, over 10% of the rock. DT
WI-19-23	109.5	126	16.5	Dol-carb-Cal	Weak	Silica	Weak		Tan/light yellow Dol, + white calcite and silica alteration and veining
WI-19-24	2.9	3.05	0.15					Intense	
WI-19-24	3.05	19	15.95					Weak	
WI-19-24	27	31.4	4.4					Weak	
WI-19-24	2.95	40	37.05	Dol-carb	Weak				Secondary textures, medium and coarse-grained, 10% of the rock.
WI-19-24	40	66	26	Cal Carb +/- Dol	Mod				Secondary textures, medium and coarse-grained, ~ 40% of the rock. DT
WI-19-24	66	69	3	Dol-carb	Weak				Primary mineralized phase with minor secondary alteration
WI-19-24	70.5	75.5	5	Cal Carb +/- Dol	Mod				Secondary textures, medium and coarse-grained, ~ 40% of the rock. DT



**Drill Hole Alteration Log**

Hole ID	From (m)	To (m)	Interval (m)	Alteration 1	Intensity	Alteration 2	Intensity	Weathering	Comments
WI-19-24	78	81	3	Cal Carb +/- Dol	Mod				Secondary textures, medium and coarse-grained, ~ 30% of the rock. DT
WI-19-24	87	93.1	6.1	Cal Carb +/- Dol	Mod				Secondary textures, medium and coarse-grained, ~ 40% of the rock. DT
WI-19-24	96.5	105.5	9	Cal Carb +/- Dol	Mod				Secondary textures, medium and coarse-grained, ~ 40% of the rock. DT
WI-19-24	105.5	118.5	13	Cal Carb +/- Dol	Mod				Secondary textures and veining, medium and coarse-grained, ~ 50% of the rock. LST xenoliths are recrystallized and few appears cherty in texture. DT although some cm-zones have mod mineralization (107.7 - 108.2m; 109.1-109.8m; 118.7-122.5m)
WI-19-25	1.1	41.5	40.4					Moderate	Moderate weathering of the rock
WI-19-25	11	16	5	Dol-carb +/- cal	Weak				Secondary textures, medium and coarse-grained, 30% of the rock.
WI-19-25	19.1	28.3	9.2	Dol-carb	Mod				Secondary textures, medium and coarse-grained, 30% of the rock. Few patches are strongly altered near veining
WI-19-25	33.9	34.5	0.6	Silica	Strong				Silica alteration in dm-patches (15-20cm) - almost a vein - with pyrite clusters at margins.
WI-19-25	37.5	57.1	19.6	Dol-carb +/- cal	Mod				Secondary textures, medium and coarse-grained, 40% of the rock. The alteration overprints xenoliths of LST and early-phase carbonatite forming veins at some instances
WI-19-25	57.1	85.5	28.4	Dol-carb	Strong				Secondary hydrothermal textures, medium grain, 50% of the rock. Cm scale patches of REE
WI-19-25	85.5	132.8	47.3	Dol-carb +/- cal	Weak				Secondary carbonatite strongly brecciating LST and mafic dyke xenoliths. Cm-patches of REE
WI-19-25	132.8	134.2	1.4	Dol-carb	Moderate				Secondary hydrothermal textures, medium grain + moderate cm-patches of REE
WI-19-25	135.35	143.4	8.05	Dol-carb	Strong				Secondary hydrothermal textures, medium grain, 50% of the rock. Cm scale patches of REE
WI-19-26	1.8	21	19.2					Strong	
WI-19-26	28	60	32					Moderate	Moderate weathering of the rock with few patches of strong weathered rocks
WI-19-26	60	100	40					Weak	Weak / trace weathering of rock/fractures/faults - so far deepest weathering profile.
WI-19-26	51	54	3	Dol-carb	Mod				Secondary textures, medium to coarse-grained, 50% of the rock. Coarse clots of REE
WI-19-26	68.5	83.9	15.4	Dol-carb	Mod				Secondary textures, medium to coarse-grained, in form of alteration and veining, 30% of the rock. Cm clots and patches of REE
WI-19-26	83.9	98	14.1	Dol-carb	Mod				Secondary textures, medium to coarse-grained, in form of alteration and veining, 30% of the rock. Trace patches of REE
WI-19-26	98	126.5	28.5	Dol-carb +/- cal	Mod				Secondary textures, medium to coarse-grained, in form of alteration and veining, 30% of the rock. Minor calcite and trace patches of REE
WI-19-26	126.5	141	14.5	Silica - Carb	Wk -Mod				Altered and bleached rocks; siliceous and altered by carb fluids
WI-19-26	144.2	154	9.8	Dol-Carb	Mod-str				Altered and veined Syenitic rocks; altered by carb fluids
WI-19-26	154.5	156.3	1.8	Silica	Mod				Moderately silicified syenitic rocks
WI-19-27	2	18	16					Moderate	
WI-19-27	18	26.7	8.7	Cal Carb +/- Dol	Strong				Medium and coarse-grained replacement textures, ~ 80% of the rock however, moderately mineralized with REE and pyrite
WI-19-27	26.7	46.7	20	Dol-cal carb	Mod				Secondary textures, medium and coarse-grained, 30% of the rock. Partial dilution textures. Cal carb is observed in form in veining at @ 39m and 45.7-46.7m
WI-19-27	46.7	55.7	9	Dol carb	Mod				Secondary textures, medium and coarse-grained, ~ 20% of the rock. DT
WI-19-27	62	68.5	6.5	Dol-cal carb	Mod				Secondary textures, medium and coarse-grained, ~ 50% of the rock. Three 5cm patches of REE are within this zone. Hydrothermal mobilization of REE!
WI-19-27	71	81	10	Dol-cal carb	Mod				Secondary textures, medium and coarse-grained, ~ 30% of the rock.
WI-19-27	95.2	99	3.8	Dol carb	Mod				Secondary textures, medium and coarse-grained, ~ 30% of the rock.
WI-19-27	102	120.35	18.35	Dol-cal carb	Weak				Secondary textures, medium and coarse-grained, ~ 5% of the rock.
WI-19-28	3.15	20.5	17.35					Moderate	
WI-19-28	24.6	26.6	2	Dol carb	Mod				Secondary textures, medium-grained, ~ 30% of the rock.
WI-19-28	32	62.5	30.5	Dol-cal carb	Mod				Secondary textures, medium and coarse-grained, ~ 60% of the rock. REE mineralization dominates this interval - Hydrothermal mobilization of REE is seen at 49-50 where Monazite develops sub-mm stringers.
WI-19-28	62.5	72.3	9.8	Dol-cal carb	Mod	Chlorite	Mod		Secondary textures, medium to coarse-grained, ~ 10% of the rock; chlorite is present in form of veinlets and alteration of minor mafic xenoliths
WI-19-28	72.3	81.6	9.3	Dol carb	Wk -Mod				Mod altered and brecciated LST by secondary carb fluids.
WI-19-28	81.6	96	14.4	Dol carb	Weak				Weakly altered LST along bedding and brecciation planes with minor veining
WI-19-29	2.75	6	3.25					Moderate	
WI-19-29	10	12	2					Moderate	
WI-19-29	20	39.5	19.5					Weak	
WI-19-29	7.8	13.2	5.4	Silica	Strong	Fe-carb	Wk-mod		Strong silica flooding with later dolomite - carb alteration and veining crosscutting the rock.
WI-19-29	13.2	15.7	2.5	Silica	Strong				Strong sulphidized silica alteration
WI-19-29	17.5	19.5	2	Silica	Mod	Dol-carb	Weak		Mod altered LST interval.
WI-19-29	19.5	31.75	12.25	Silica	Weak	Dol-carb	Weak		Weak alteration and minor veining
WI-19-29	31.75	40.6	8.85	Silica	Mod	Dol-carb	Weak		Altered and veined Syenitic rocks
WI-19-29	46.9	48.1	1.2	Silica	Mod	Dol-carb	Weak		Altered and veined LST unit

### Drill Hole Alteration Log

Hole ID	From (m)	To (m)	Interval (m)	Alteration 1	Intensity	Alteration 2	Intensity	Weathering	Comments
WI-19-29	68	73	5	Silica	Weak	Dol-carb	Weak		Secondary alteration at the lith contact
WI-19-29	73	145.1	72.1	Dol-carb	Mod-str				Mod altered and veined carb unit with zones of strong alteration and mineralization - altered by carb fluids
WI-19-29	145.1	153.1	8	Dol +/- cal -carb	Weak				Weak with minor patches of mod alteration
WI-19-29	153.1	159.6	6.5	Chlorite	Mod				Chloritized mafic dyke.
WI-19-29	159.6	170	10.4	Dol - carb	Mod				Secondary textures, medium-grained, DT - no min
WI-19-30	4	10.2	6.2					Moderate	
WI-19-30	15.5	26	10.5					Weak	
WI-19-30	42	75	33					Moderate	
WI-19-30	4	5.3	1.3	Silica	Mod				Moderate silica alteration in a syenitic dyke
WI-19-30	8.7	11	2.3	Silica	Mod				Moderate silica alteration in a syenitic dyke
WI-19-30	15.5	22.7	7.2	Silica	Strong				Strong silica alteration in a syenitic dyke
WI-19-30	35.7	75	39.3	Dol carb	Mod				Moderate dol-carb alteration and few cm-dm zones of strong alteration (almost veining) with presence of monazite - red maroon - rusty looking from 51.5-60m
WI-19-30	75	112.3	37.3	Dol carb	Mod				Secondary replacement textures with Bastnesite clots and no monazite (very rare). Dm-patches of cal-carb from 106.7 - 108
WI-19-30	112.3	131.7	19.4	Cal Carb +/- Dol	Mod-str				
WI-19-30	131.7	156	24.3	Dol carb	Mod				Patchy (cm-dm wide) mod alteration
WI-19-30	156	163	7	Dol carb	Mod-str				Mod to strongly altered/veined zone with strong mineralization.
WI-19-30	163	171.7	8.7	Dol carb	Mod				Patchy (cm-dm wide) mod alteration with mod mineralization
WI-19-30	171.7	177.8	6.1	Dol carb	Mod-str				Mod to strongly altered/veined zone with strong mineralization.
WI-19-30	177.8	179.5	1.7	Dol carb	Wk -Mod				2 patches (cm-dm wide) mod alteration - no mineralization
WI-19-31	0	14.2	14.2					Moderate	
WI-19-31	14.2	20	5.8					Weak	
WI-19-31	55.5	70.5	15					Moderate	
WI-19-31	11.25	13.2	1.95	Silica	Mod				Mod alteration + clots of pyrite
WI-19-31	13.2	14.2	1	Fe-carb + silica	Mod				
WI-19-31	15.5	17.7	2.2	Carb - silica - ser	Wk -Mod				Weak silica - sericite alteration and moderate carb
WI-19-31	29.4	29.8	0.4	Silica	Intense				Intense silica alteration
WI-19-31	39	52	13	Silica - Carb	Mod				Cm - dm patches of mod silica - carb alteration
WI-19-31	50.8	54	3.2	Dol carb	Wk -Mod				
WI-19-31	55.65	97	41.35	Dol carb	Strong				Strong alteration of this interval with strong hydrothermal REE mineralization. Both medium grained and coarse-grained dolomite phases are present; coarse-grained postdate medium grained and occur as veins crosscutting the rock
WI-19-31	97	131.8	34.8	Dol carb +/- calcite	Mod-str				Moderate alteration + few patches of strong alteration and REE min
WI-19-31	131.8	138.5	6.7	Calcite carb +/- Dol.	Mod-str				Moderate to strong alteration + REE min
WI-19-32	7.8	20	12.2					Moderate	
WI-19-32	8.15	21	12.85	Fe-carb + Dol	Weak	Silica	Mod		Moderate silica alteration in a syenitic dyke and weak carb alteration.
WI-19-32	21	43	22	Carb	Weak				Light bluish / greenish fussy carb in between LST xenoliths
WI-19-32	43	45.5	2.5	Cal Carb +/- Dol	Weak				Weak alteration with small patch of tan-colour semi xenoliths floating in a white creamy carb.
WI-19-32	48	57	49.5	Cal Carb +/- Dol	Weak				Weak alteration + a patch of mod alteration @ 52.5 - 53.2m
WI-19-32	57	74	17	Cal Carb +/- Dol	Weak				Minor alteration + mm stockwork of veinlets crosscutting the rock.
WI-19-32	74	88.7	14.7	Cal Carb +/- Dol	Minor				Minor alteration + mm stockwork of veinlets crosscutting the rock.
WI-19-32	88.7	102	13.3	Dol carb +/- calcite	Mod	Chlorite	Weak		Moderate carb alteration + few patches of strong alteration and REE min @ 88.7 - 98m. Minor chlorite veinlets crosscut this interval.
WI-19-32	102	103.3	1.3	Dol carb	Strong				Strong alteration and coarse-grained vein
WI-19-32	103.3	220.75	117.45	Dol +/- calcite	Mod	Chlorite	Weak		Moderate carb alteration + cm to dm patches of strong alteration, veining and strong min @ 112 - 114m, 145 - 176.5, 188 - 204, 209 - 214. Minor chlorite veinlets crosscut this interval or filling fractures.

**Drill Hole Structure Log**

Hole ID	From (m)	To (m)	Width (m)	Structure type	Angle TCA	Type	Intensity / %	Comments
WI-19-20	28.85	34.7	5.85	Veining	Variable	Carbonate	Weak	Mm-scale veinlets of oxidized Fe-carbonate crosscut the rock at variable degrees TCA, also infill gaps between late, crystalline carbonate phase. This phase of veining occur near a shear zone within 1m of this veining
WI-19-20	35.18	35.25	0.07	Vein	5	Kspar-qtz	30%	Qv crosscut the core parallel to CA with 2mm wide k-spar along vein margins Pyrite observed within the vein selvage
WI-19-20	37	37.2	0.2	Fault	NA		100%	Dark green - black, rubbly material of country rocks with minor fault gouge
WI-19-20	43.6	66	22.4	Veining	Variable	Dol ± qtz ± carb	50-60%	This interval starts with minor veining and frequency and intensity increase at the core of the interval (starting at 47m - 51m and 54 - 56m). Dolomite veining commonly show sharp contacts but occasionally are diffuse with earlier phase. Mineralization still occur but not apparent in these veining. Late, trace, qtz-feldspar occasionally crosscut rock
WI-19-20	68.8	87.5	18.7	Fault	NA	Rubble	50%	This rubbly rocks occur at the contact between the carbonatite and country rocks. The start of the interval is strongly pulverized (20cm wide) and ~ 50% of the interval is crushed to less than 3cm
WI-19-20	75.9	76	0.1	Vein	20	Calcite	100%	Cm-scale vein with up to 5%, coarse-grained pyrite forming clusters up to 3cm
WI-19-20	87.5	93.3	5.8	Veining	Variable	Silica-carb ± Kspar	10%	Cm up to 20cm wide veins of variable composition and angle with clusters of pyrite (up to 4cm wide). Most Pyrite appears associated with carb veins and some veins have sharp contacts with brecciated texture around contact with wall rock
WI-19-20	101	101.05	0.05	Vein	70	Carb-Chl-Py	50%	A brecciated calcite-dolomite vein infilled by hydrothermal chlorite, 1cm wide pyrite at vein margin
WI-19-20	102.2	102.6	0.4	Fault	NA	Fault gouge + rubble	30%	About 30% of fault gouge
WI-19-20	103.2	103.6	0.4	Fault	NA	Rubble	50%	Fractured and rubbly rocks
WI-19-20	105.6	130.3	24.7	Fault	NA	Fault gouge + rubble	70%	About 30% fault gouge, 40% fractured and rubbly material and 20% core pieces larger than 5cm. Brecciation is seen at 107 - 108.2m
WI-19-20	113	119.5	6.5	Veining	Variable	Dol ± qtz ± carb	10%	Cm scale veining crosscutting the rock with minor pyrite
WI-19-20	122.3	127.3	5	Veining	Variable	Chl+ silica ± dol	10%	Cm scale veining crosscutting the rock with minor pyrite. Chlorite veinlets crosscut the rock giving the rock a slightly greenish appearance, associated with chlorite and silica veining is fine-grained pyrite (up to 1%)
WI-19-21	7.5	10	2.5	Veining	Variable	Carb-qtz-Chl	20%	Dark brown carbonate veining + oxidized pyrite with trace quartz and chlorite veinlets crosscutting the Carb veins
WI-19-21	15	19	4	Veining	Stockwork	Carb-qtz	5%	Dark brown carbonate veining + vuggy oxidized pyrite around qtz vein selvages
WI-19-21	23	23.15	0.15	Vein	50	Carb	80%	Dark brown, oxidized Fe-carbonate vein with minor dolomite clasts up to 1cm and dark grey-purple metallic mineral (molybdenite or graphite?)
WI-19-21	41	41.3	0.3	Faulting	NA	Fault gouge + rubble	50%	Tan rubbly material over 10cm wide
WI-19-21	43.5	46.5	3	Faulting	NA	Fault gouge + rubble	80%	Rubbly material and ~10% fault gouge
WI-19-21	49	51.2	2.2	Faulting	NA	Fault gouge + rubble	80%	Rubbly material and ~50% fault gouge
WI-19-21	61	64.3	3.3	Shearing + Faulting	NA	Fault gouge + rubble	25%	Two intervals of >10cm fault gouge at the start of the zone and rubbly material throughout
WI-19-21	67	71.3	4.3	Shearing	NA	Fractures + rubble	30%	Fractured rocks and minor rubbly material
WI-19-21	71.9	75.3	3.4	Veining	NA	Dol ± qtz ± carb	80%	Secondary textures are well developed with diffuse margins and these textures appears to be part of a vein network where sharp contacts are observed in small fractures
WI-19-21	84.05	87.5	3.45	Shearing	NA	Fractures + rubble	30%	Fractured rocks and minor rubbly material
WI-19-21	92.2	96	3.8	Veining	NA	Dol ± carb	80%	Secondary textures are well developed with moderately-developed margins, secondary textures within these vein are very coarse grained in the middle of the vein interval
WI-19-21	99.8	107	7.2	Veining	NA	Dol ± qtz ± carb ± chl	5%	Cm scale veining, occasionally with sharp contacts, crosscutting the rock
WI-19-21	103.4	104.6	1.2	Shearing	NA	Fractures + rubble	10%	Fractured rocks and minor rubbly material
WI-19-21	107.9	130.5	22.6	Shearing	NA	Fractures + rubble	50%	Fractured rocks and minor rubbly material
WI-19-21	122.2	123.2	1	Veining	NA	Carb-dol	100%	Veining of carbonate minerals
WI-19-21	139.5	145.2	5.7	Shearing	NA	Fractures + rubble	50%	Fractured rocks and minor rubbly material
WI-19-21	152.3	164.1	11.8	Shearing	NA	Fractures + rubble	50%	Fractured rocks and rubbly material
WI-19-21	164.1	176.1	12	Shearing	NA	Rubble	80%	Rubbly material throughout
WI-19-21	164.2	177.25	13.05	Veining	NA	Dol ± carb + pyrite	3%	Minor cm-scale veining in the rock with pyrite mineralization - no evidence of veining other than pyrite presence uphole and downhole at the end of this interval
WI-19-21	178.5	179	0.5	Vein	NA	Dol ± carb + pyrite	40%	Clusters of pyrite (up to 2cm) in a dol-carbonatite vein
WI-19-22	4	28.5	24.5	Shearing	NA	Fractures + rubble	20%	Fractured rocks and minor rubble material
WI-19-22	38.6	39.5	0.9	Shearing	NA	Fractures + fault gouge	80%	Fractured rocks and minor fault gouge over 5cm
WI-19-22	48.15	50.9	2.75	Veining	Stockwork	Dol ± carb + chl	5%	Mm to 1cm wide, infilling fractures in between carb dolomite unit
WI-19-22	49.2	57.5	8.3	Shearing	NA	Fractures + fault gouge	40%	Fractured rocks and minor fault gouge over 10 cm
WI-19-22	59	60.8	1.8	Shearing	NA	Rubble + fault gouge	80%	Rubbly rocks and fault gouge - hydrothermal chlorite on naturally-fractured surfaces
WI-19-22	56.5	60.8	4.3	Brecciation	NA	Breccia	80%	Cm-scale brecciated fragments with late carbonate fluids infilling fractures/gap spaces
WI-19-22	63.3	65.7	2.4	Shearing	NA	Fractures + rubble	20%	Fractured rocks and minor rubble material over 10 - 20cm intervals
WI-19-22	68.2	70	1.8	Shearing	NA	Fractures + rubble	20%	Fractured rocks and minor rubble material over 10 - 20cm intervals
WI-19-22	71.45	76	4.55	Shearing	NA	Fractures + rubble	20%	Fractured rocks and minor rubble material over 10 - 20cm intervals
WI-19-22	80.5	82.5	2	Fault	NA	Fractures + fault gouge	20%	Fractured rocks and minor fault gouge over 10 - 20cm intervals
WI-19-22	84.9	85.3	0.4	Shearing	NA	Fractures + fault gouge	20%	Fractured rocks and minor fault gouge over 5 - 15cm intervals
WI-19-22	87.3	97.5	10.2	Shearing	NA	Fractures + fault gouge	40%	Fractured rocks and fault gouge over 5 - 20cm intervals
WI-19-22	96.7	99.7	3	Fault	NA	Fractures + fault gouge	40%	Fractured rocks and fault gouge over 5 - 20cm intervals
WI-19-22	107.1	109.45	2.35	Fault	NA	Fractures + fault gouge	40%	Fractured rocks and fault gouge over 5 - 20cm intervals
WI-19-22	113	115.1	2.1	Shearing	NA	Fractures + rubble	20%	Fractured rocks and fault gouge over 5 - 20cm intervals
WI-19-22	120.9	127.15	6.25	Fault	NA	Rubble + fault gouge	60%	Rubbly material and ~50% fault gouge

### Drill Hole Structure Log

Hole ID	From (m)	To (m)	Width (m)	Structure type	Angle TCA	Type	Intensity / %	Comments
WI-19-23	0.95	10	9.05	Shearing	NA	Fractures + rubble	5%	Minor fractured and rubbly rocks
WI-19-23	0.95	9	8.05	Brecciation	NA	Breccia	50%	Cm-scale brecciated fragments of LST and other chlorite-altered wall rock with late carbonate fluids infilling fractures/gap spaces
WI-19-23	10.1	13	2.9	Veining	NA	Dol ± carb(calcite)	50%	Wide veining infilling fractures in between carb dolomite unit
WI-19-23	21.3	22.4	1.1	Brecciation	NA	Breccia	80%	Cm-scale brecciated fragments with late carbonate fluids infilling fractures/gap spaces
WI-19-23	39.9	40.7	0.8	Veining	NA	Dol ± carb	80%	Wide secondary veining - No mineralization
WI-19-23	51.1	61.05	9.95	Shearing	NA	Fractures + rubble	40%	Fractured and rubbly rocks
WI-19-23	55.3	58.8	3.5	Fault	NA	Fractures + fault gouge	60%	Fractured rocks and rubbly rocks - missing over 2m in this interval
WI-19-23	69.3	70.1	0.8	Shearing	NA	Fractures + rubble	10%	Minor fractured and rubbly rocks
WI-19-23	74.8	84.5	9.7	Shearing	NA	Fractures + rubble	40%	Fractured and rubbly rocks with minor (25cm) fault gouge
WI-19-23	101.5	102	0.5	Shearing	NA	Fractures + rubble	10%	Minor fractured and rubbly rocks
WI-19-23	105	110.9	5.9	Shearing	NA	Fractures + rubble	25%	Minor fractured and rubbly rocks
WI-19-23	97	112	15	Brecciation	NA	Breccia	10%	Cm-scale brecciated fragments of the Dol-Carb by late carbonate fluids and wall rock fragments near the LST contact
WI-19-24	12.6	13.3	0.7	Shearing	NA	Fractures + rubble	10%	Minor fractured and rubbly rocks
WI-19-24	10.6	12	1.4	Veining	NA	Dol - Calcite - Qtz	100%	Veining in a Carb dolomite unit. Quartz is recrystallized
WI-19-24	13	18.5	5.5	Veining	NA	Stockwork	10%	Mm veinlets of Fe-carbonates
WI-19-24	23.5	23.5	0	Bedding	60-75			Bedding taken from a LST xenolith with relict beddings
WI-19-24	23.7	24.8	1.1	Shearing	NA	Fractures + rubble	30%	Minor fractured and rubbly rocks
WI-19-24	34.7	38	3.3	Shearing	NA	Fractures + rubble	30%	Minor fractured and rubbly rocks
WI-19-24	36.8	58	21.2	Veining	NA	Dol - Calcite	50%	Veining in a Bx LST Cal-Carb + minor dolomite unit
WI-19-24	41.5	58	16.5	Shearing	NA	Breccia	50%	Cm-scale brecciated fragments of LST floating in a late carbonate (calcite + minor dol) fluids
WI-19-24	72	75	3	Shearing	NA	Breccia	50%	Cm-scale brecciated fragments with late carbonate fluids infilling fractures/gap spaces
WI-19-24	83	89.3	6.3	Shearing	NA	Breccia	70%	Cm-scale brecciated fragments with late carbonate fluids infilling fractures/gap spaces
WI-19-24	100	118.5	18.5	Shearing	NA	Breccia	50%	Cm-scale brecciated fragments with late carbonate fluids infilling fractures/gap spaces
WI-19-24	41.5	74.4	32.9	Shearing	NA	Fractures + rubble	40%	Fractured and rubbly rocks
WI-19-24	74.4	79.3	4.9	Fault	NA	Fractures + fault gouge	60%	Multiple fractured and fault gouge zones over 30cm wide
WI-19-24	79.3	107.7	28.4	Shearing	NA	Fractures + rubble	40%	Fractured and rubbly rocks
WI-19-24	90.2	91.2	1	Veining	NA	Calcite - Dol	100%	Veining in a Carb dolomite unit
WI-19-24	116.5	120.55	4.05	Shearing	NA	Rubble + fault gouge	40%	Rubbly rock and minor green fault gouge
WI-19-24	97.9	120.55	22.65	Veining	NA	Calcite - Dol	50%	Cm up to 30cm wide veining brecciating the rock and replacing primary textures. Minor intervals of Mod mineralization in cm-scale patches
WI-19-25	9	10	1	Shearing	NA	Fractures + rubble	80%	Fractured and rubbly rocks
WI-19-25	25.35	25.5	0.15	Veining	40	Fe-carbonate	80%	An ankerite vein with lower contact at 40 degree TCA
WI-19-25	25.4	26.15	0.75	Veining	10	Fe-carbonate	25%	A 2cm wide dolomite with patches of ankerite at 10 degree TCA
WI-19-25	1.1	39.55	38.45	Veining	Stockwork	Fe-carbonate	1%	Sub-mm dark brown veinlets
WI-19-25	39.55	56	16.45	Brecciation	NA	Breccia	50%	Brecciated dol-carb and mafic dyke xenoliths with late-phase, mineralized carb fluids.
WI-19-25	38.2	38.3	0.1	Fault	NA	Fault gouge	100%	Tan- light brown fault gouge
WI-19-25	40.1	21	-19.1	Shearing	NA	Fractures + rubble	30%	Fractured and rubbly rocks
WI-19-25	61.4	62.8	1.4	Veining	NA	Dol-carb-py-REE	100%	Medium to coarse grained dolomite carbonatite with massive sulphides (py) up to 15cm. Pure rare earth mineralization (monazite) in a 15cm band
WI-19-25	64.2	66.5	2.3	Veining	NA	Dol-carb-REE	100%	Medium to coarse grained dolomite carbonatite. Pure rare earth mineralization in a 5cm band
WI-19-25	70.2	71.75	1.55	Veining	NA	Dol-carb-REE	100%	Medium to coarse grained dolomite carbonatite. Pure rare earth mineralization in a 20cm patch
WI-19-25	83	83.5	0.5	Veining	NA	Dol-carb-REE	100%	Medium to coarse grained dolomite carbonatite. Pure rare earth mineralization (bastnesite) in a 12cm patch
WI-19-25	112.35	112.55	0.2	Veining	NA	Dol-carb-py	100%	Massive sulphides/ fine grain hydrothermal py with minor dol carbonatite
WI-19-25	127.9	128.05	0.15	Veining	NA	Dol-carb-REE	60%	Medium grained dolomite carbonatite. With up to 3cm wide monazite vein
WI-19-25	129.23	129.28	0.05	Veining	NA	Dol-carb-REE	100%	Medium grained dolomite carbonatite. With up to 3cm wide monazite vein
WI-19-25	137.5	139.3	1.8	Veining	NA	Dol-carb-REE	100%	Medium grained dolomite carbonatite. With cm patches of REE (up to 15cm wide)
WI-19-25	76	99.8	23.8	Shearing	NA	Fractures + rubble	30%	Fractured and rubbly rocks. Up to 30cm gouge at 84.2
WI-19-25	97.9	124.2	26.3	Shearing	NA	Fractures + rubble	40%	Fractured and rubbly rocks
WI-19-25	114.5	116.2	1.7	Fault	NA	Fault Gouge	80%	Fault gouge material of dolomite carbonatite and mafic dyke
WI-19-25	124.2	126.6	2.4	Fault	NA	Fault gouge	30%	Fault gouge material of dolomite carbonatite
WI-19-25	86	133	47	Brecciation	NA	Breccia	30%	Brecciated mafic dyke and LST xenoliths with late-phase, mineralized carb fluids
WI-19-26	5.3	6.3	1	Veining	NA	Fe-carbonate	25%	Ankerite dark-brown veins/veinlets with diffuse contacts crosscutting the rock - crosscut by 2cm calcite vein @ 16m
WI-19-26	9.3	11.5	2.2	Veining	50	Dol - carb + Fe-carbonate	70%	A Dol-carbonatite vein from 9.3 - 10.3 and ankerite dark-brown vein from 10.3 - 11.5 - crosscut by a 5cm wide mafic dyke and mm-calcite veinlets
WI-19-26	12.4	12.8	0.4	Folding				A tight fold of the rock (most likely altered LST) along the CA
WI-19-26	12.95	15	2.05	Veining	NA	Fe-carbonate	70%	Dark-brown ankerite veins with later, mineralized carb-dol fluids. These Fe-rich fluids are crosscut by a soft, mm light-brown dol-veins @ 20 degree TCA
WI-19-26	23	26	3	Structure	50-70	Bedding		Relict bedding planes in LST unit
WI-19-26	18	32	14	Structure	NA	Breccia		Brecciated zone

**Drill Hole Structure Log**

Hole ID	From (m)	To (m)	Width (m)	Structure type	Angle TCA	Type	Intensity / %	Comments
WI-19-26	42	43.5	1.5	Structure	50-70			
WI-19-26	55	55.5	0.5	Fault	NA	Fault	80%	Fault gouge material of Fe-carbonate
WI-19-26	54	55.5	1.5	Veining	NA	Fe-carbonate	70%	Ankerite dark-brown veins infilling fractures/gaps
WI-19-26	72.4	72.65	0.25	Fault	NA	Fault gouge	100%	Tan dol-carbonatite fault gouge
WI-19-26	80	83.1	3.1	Shearing	NA	Fractures + rubble	30%	Fractured and rubbly rocks
WI-19-26	86	93.8	7.8	Shearing	NA	Rubble + fault gouge	40%	Rubbly rocks and fault gouge @ 86.15m
WI-19-26	97	107	10	Shearing	NA	Fractures + rubble	50%	Fractured, fault gouge @ 100.1 - 101.2 and rubbly rocks
WI-19-26	100.1	101.2	1.1	Fault	NA	Fault gouge	80%	Mafic dyke and Dol - carb fault gouge
WI-19-26	112.8	113.3	0.5	Fault	NA	Fault gouge	80%	Dol - carb fault gouge
WI-19-26	116.5	120.5	4	Shearing	NA	Fractures + rubble	50%	Fractured and rubbly rocks
WI-19-26	122.7	127.5	4.8	Shearing	NA	Fractures + rubble	30%	Fractured and rubbly rocks
WI-19-26	138.2	139.4	1.2	Veining	50	Dol-Carb-qtz-REE	100%	Tan dol-carbonatite vein with minor REE mineralization - Monazite
WI-19-26	144.2	148.5	4.3	Veining	Variable	Dol-Carb-REE	70%	Tan, mineralized dol-carbonatite veins - REE in and around vein margins
WI-19-26	151.1	153	1.9	Veining	Variable	Dol-Carb-REE	25%	Tan, mineralized dol-carbonatite veins - REE in and around vein margins. High SR - 1300 at 151.3m
WI-19-27	2	18.5	16.5	Veining	NA	Stockwork	<5%	Mm up to 1cm wide Fe-carbonate veining infilling fractures +/- pyrite
WI-19-27	6.9	9.9	3	Shearing	NA	Fractures + rubble	40%	Fractured and rubbly rocks
WI-19-27	9.9	10.8	0.9	Fault	NA	Rubble + fault gouge	70%	Rubbly and fault gouge zones over 50cm wide
WI-19-27	13.7	14.9	1.2	Brecciation	NA	Fault + breccia	100%	A 10cm wide fault zone and brecciated tan dol-carb xenoliths (mean = 1cm; up to 10cm wide) with finer grained, darker brown, dol matrix
WI-19-27	19.1	19.85	0.75	Fault	NA	Rubble + fault gouge	80%	Rubbly and fault gouge zones over 50cm wide
WI-19-27	21	22	1	Fault	NA	Rubble + fault gouge	70%	Rubbly and fault gouge zones over 50cm wide
WI-19-27	23.6	25.5	1.9	Shearing	NA	Fractures + rubble	60%	Fractured and rubbly rocks
WI-19-27	29	41	12	Texture	NA	Vuggy texture	1%	Vuggy texture - up to 1cm - in and around REE mineralization
WI-19-27	45.7	46.7	1	Veining	30	Cal - Dol	100%	A coarse-grained vein with diffuse upper contact and sharp lower contact (@ 30 degree TCA)
WI-19-27	62	68.5	6.5	Veining	45	Dol +/- cal	70%	A coarse-grained vein brecciating mafic dykes at the top and veining against a 1cm wide LST horizon with a sharp contact - fluids infiltrate into lower unit
WI-19-27	78	79.5	1.5	Shearing	NA	Fractures + rubble	20%	Fractured and fault gouge (15cm)
WI-19-27	85.1	85.7	0.6	Fault	NA	Rubble + fault gouge	80%	Rubbly and fault gouge zones over 50cm wide
WI-19-27	85.7	94.3	8.6	Brecciation	NA	Breccia	50%	Brecciated tan dol-carb xenoliths with dark grey matrix and green chlorite infilling fractures
WI-19-27	93.3	94.35	1.05	Fault	NA	Rubble + fault gouge	80%	Rubbly and fault gouge zones over 50cm wide
WI-19-27	99.3	101	1.7	Fault	NA	Rubble + fault gouge	50%	Rubbly and fault gouge zones over 50cm wide
WI-19-27	113	121.55	8.55	Fault	NA	Rubble + fault gouge	40%	Rubbly and fault gouge zones over 50cm wide
WI-19-27	126.3	127	0.7	Shearing	NA	Fractures + rubble	50%	Fractured and rubbly rocks
WI-19-27	125	126	1	Bedding	30-45	Bedding		Bedding taken from altered LST. A minor fold is apparent in the rock
WI-19-27	138	139.35	1.35	Structure	NA	folding		Deformed shallow bedding (range from 5 to 20 degree TCA)
WI-19-28	14.2	16.5	2.3	Shearing	NA	Rubble + fault gouge	50%	Rubbly and fault gouge zones over 50cm wide
WI-19-28	18.8	20.2	1.4	Fault	NA	Fault gouge + rubble	50%	Rubbly and fault gouge zones over 50cm wide
WI-19-28	28.3	32	3.7	Shearing	NA	Fractures + rubble	50%	Fractured rocks and fault gouge (10cm)
WI-19-28	20.6	32	11.4	Brecciation	NA	Breccia	50%	Brecciated LST xenoliths
WI-19-28	32	51.3	19.3	Veining	Variable	Dol +/- cal	5-10%	Dol - carb veining range from cm to 50cm wide
WI-19-28	51.3	62.5	11.2	Veining	Variable	Dol +/- cal	5%	Dol - carb veining with clots and patches of REE mineralization
WI-19-28	62.3	72.6	10.3	Veining	Variable	Chlorite	3-5%	Chlorite veinlets in brecciated dolomite - carbonatite unit
WI-19-28	60.5	72.6	12.1	Brecciation	NA	Breccia	50%	Brecciated Dol-carb xenoliths by late-phase, mineralized carb fluids. Rubbly rocks from 69.5 - end
WI-19-28	80	96	16	Veining	Variable	Dol-carb	1%	Minor mm to 1cm wide veinlets/veins of Dol - Carb crosscutting the LST unit at variable degree TCA
WI-19-28	80.8	81	0.2	Folding	Shallow	Open fold		An open fold in LST - shallow left limb (15 degree) and 50 degree right limb (downhole)
WI-19-28	82	83	1	Bedding	15-20			15-20 degree TCA bedding in LST
WI-19-28	83.3	83.6	0.3	Folding	Shallow	Open fold + fault gouge		An open fold in LST and fault gouge at the start of the fold
WI-19-28	85	88	3	Bedding	45-60			Multiple measurements of bedding in LST unit TCA
WI-19-28	90.8	90.8	0	Bedding	30			Deformed shallow bedding TCA
WI-19-28	96.3	100	3.7	Bedding	45-50			Multiple measurements of bedding in LST unit TCA
WI-19-28	102	109.3	7.3	Bedding	70-90			Multiple measurements of bedding in LST unit TCA
WI-19-28	109.3	109.8	0.5	Folding	Tight	Tight fold		A tight fold in LST (limbs at 60-70 degree TCA)
WI-19-28	114	116	2	Bedding	50-65			Multiple measurements of bedding in LST unit TCA
WI-19-29	3.9	6	2.1	Foliation	40			Foliation planes defined by biotite (upper contact metamorphism)
WI-19-29	8	9	1	Foliation	50			Foliation planes in a strongly silicified zone within intrusive rock - crosscut by late quartz veining @ 60 degree TCA and oblique to the 50 degree S1
WI-19-29	9.6	12	2.4	Contact	30			Contact of a crystalline phase of syenite
WI-19-29	9.6	12	2.4	Veining	60	Quartz + Fe-carbonate		
WI-19-29	13.2	13.2	0	Contact	80			Contact of mineralized, late, mineralized phase of syenite
WI-19-29	13.2	15.1	1.9	Veining	Stockwork	Silica	50%	Stockwork of white silica veining (0.1-3cm wide)

**Drill Hole Structure Log**

Hole ID	From (m)	To (m)	Width (m)	Structure type	Angle TCA	Type	Intensity / %	Comments
WI-19-29	15.1	16.5	1.4	Bedding	40			Relict bedding planes in LST unit - strongly mineralized for 1m at the start of the zone
WI-19-29	19.5	22.93	3.43	Veining	Stockwork	Quartz, Fe-carb, chl	10%	Stockwork of veining (0.1-3cm wide)
WI-19-29	22.95	33.7	10.75	Bedding	45			
WI-19-29	33.7	40.6	6.9	veining	Stockwork	Quartz + Fe-carbonate	30%	Stockwork of white silica and tan/brown Fe-carb/dol veining + pyrite stringers (0.1-3cm wide)
WI-19-29	40.85	40.95	0.1	Brecciation	40	Breccia	100%	A horizon marker seen in previous 2 holes
WI-19-29	41	42	1	Foliation	40			Foliation planes mixed with LST beddings defined by biotite and LST (possible lower contact metamorphism)
WI-19-29	42	46.1	4.1	Brecciation	NA	Breccia	50%	Brecciated LST xenoliths
WI-19-29	46.1	51	4.9	Bedding	55-60			
WI-19-29	54	55	1	Bedding	40			
WI-19-29	57	63	6	Bedding	50-60			
WI-19-29	68.15	71	2.85	Contact	Gradational			Gradational contact between Dol-Carb and LST
WI-19-29	71	73.8	2.8	Shearing	NA	Fractures + rubble		Fractured and rubbly rocks
WI-19-29	76.5	78	1.5	Shearing	NA	Fractures + rubble		Fractured and rubbly rocks
WI-19-29	89.8	91.6	1.8	Shearing	NA	Fractures + rubble		Fractured and rubbly rocks
WI-19-29	94	95	1	Shearing	NA	Fractures + rubble		Fractured and rubbly rocks
WI-19-29	110.85	111.5	0.65	Faulting	NA	Fault gouge + rubble		Fault gouge and minor rubble
WI-19-29	112.5	119.5	7	Veining	NA	Dol-carb		Secondary dolomite veining with minor hydrothermal REE
WI-19-29	120.2	120.5	0.3	Shearing	NA	Fractures + rubble		Fractured and rubbly rocks
WI-19-29	120.2	121	0.8	Brecciation	NA	Breccia		Brecciated zone
WI-19-29	137.7	138.5	0.8	Shearing	NA	Fractures + rubble		Fractured and rubbly rocks
WI-19-29	145.3	152	6.7	Veining	NA	Dol-carb		Secondary dolomite veining with trace hydrothermal REE
WI-19-29	144	149.3	5.3	Shearing	NA	Fractures + rubble		Fractured and rubbly rocks
WI-19-29	149.3	151.5	2.2	Faulting	NA	Fault gouge + rubble		Major Fault gouge and minor rubble
WI-19-29	155.5	160.7	5.2	Shearing	NA	Fault gouge + rubble		Fault gouge and rubble
WI-19-29	179	184.05	5.05	Brecciation	NA	Breccia		Brecciated zone of Fenite
WI-19-30	5.5	5.5	0	Bedding	50			
WI-19-30	8.3	8.7	0.4	Bedding	45-60			Disturbed bedding planes in a sedimentary interval - LST beds
WI-19-30	10.5	12.7	2.2	Bedding	45-55			
WI-19-30	12.7	13.7	1	Foliation	30			Shallow crenulations at shallow degree TCA
WI-19-30	14	15.57	1.57	Bedding	45-50			
WI-19-30	16	16.2	0.2	Bedding	60			Disturbed bedding planes in a sedimentary interval - LST beds
WI-19-30	22.8	25	2.2	Bedding	45			
WI-19-30	25.5	26.5	1	Bedding	75-80			Possibly folding in this unit!
WI-19-30	26.8	26.8	0	Bedding	60			
WI-19-30	28.8	28.8	0	Bedding	50			
WI-19-30	31	32	1	Bedding	50			
WI-19-30	31	33.3	2.3	Brecciation	NA			Cm to dm brecciation of rocks
WI-19-30	33.3	44.5	11.2	Brecciation	NA			Syenite / dolomite carb breccia
WI-19-30	43.5	44	0.5	Foliation	45-50			Weakly foliated zone of dol-carb
WI-19-30	44.5	59.15	14.65	Brecciation	NA			Weakly brecciated and carb flooded zone
WI-19-30	50.6	77	26.4	Veining	Stockwork	Fe-carbonate		Mm veinlets of Fe - carbonate veinlets
WI-19-30	90	94	4	Shearing	NA	Fractured		Naturally fractured pieces of rock
WI-19-30	126.1	146	19.9	Shearing	NA	Rubble + fault gouge		Over 70% of rubble and up to 30cm fault gouge at the start of this interval
WI-19-30	149	159	10	Shearing	NA	Fractures + rubble	50%	Fractured and rubbly rocks, over 60%
WI-19-30	126.1	158.3	32.2	Brecciation	NA	Breccia	70%	Brecciated LST and syenite xenoliths (subangular)
WI-19-30	163	171.7	8.7	Brecciation	NA	Breccia	50%	Brecciated LST xenoliths
WI-19-30	177.8	178.5	0.7	Faulting	NA	Fault gouge	100%	fault gouge
WI-19-31	14.2	39	24.8	Foliated	NA		100%	Foliated bedded LST
WI-19-31	39	48	9	Brecciation	NA		100%	Brecciated LST
WI-19-31	16	17	1	Foliation	25-35			Very weak foliation planes
WI-19-31	20	22	2	Foliation	30			
WI-19-31	22	25	3	Foliation	20			
WI-19-31	25.25	25.25	0	Foliation	32			
WI-19-31	25.5	27	1.5	Foliation	20			
WI-19-31	29.6	32	2.4	Foliation	30-35			
WI-19-31	33	39	6	Foliation	40-45			Includes micro folding @ 37-38m
WI-19-31	42	48	6	Brecciation	NA	Breccia	30%	Brecciated LST xenoliths flooded by carb and syenitic fluids
WI-19-31	50	54.65	4.65	Brecciation	NA	Breccia	30%	Brecciated LST xenoliths flooded by carb and syenitic fluids
WI-19-31	54.65	65	10.35	Brecciation	NA	Breccia	30%	Brecciated Dol-Carb; up to 1cm wide Dol xenoliths in a medium brown, fg matrix



**Drill Hole Structure Log**

Hole ID	From (m)	To (m)	Width (m)	Structure type	Angle TCA	Type	Intensity / %	Comments
WI-19-31	56.8	56.9	0.1	Shearing	NA	Fault gouge	100%	Dark-brown fault gouge
WI-19-31	61.6	62.6	1	Shearing	NA	Fractures + rubble	80%	Fractured and rubbly rocks
WI-19-31	62.6	64.6	2	Veining	NA	Dol - carb	60%	Dol carb veining with lesser mineralization. DT
WI-19-31	65	67	2	Foliation	40		50%	Foliated patches of strongly altered LSt xenoliths in a dol-carb unit
WI-19-31	67	67.7	0.7	Shearing	NA	Fractures + rubble	80%	Fractured and rubbly rocks
WI-19-31	68.8	70.6	1.8	Veining	40	Dol + Fe-carbonate & Chl	50%	Cm veins of Fe-carb (weathered) + Dol carb and mm veinlets of hydrothermal chlorite crosscutting the rock - mod mineralization
WI-19-31	80	82	2	Shearing	NA	Fractures + rubble	80%	Fractured and rubbly rocks
WI-19-31	76	81.7	5.7	Brecciation	NA	Breccia	30%	Brecciated Dol-Carb; up to 1cm wide Dol xenoliths in a medium brown, fg matrix. Strongly brecciated + fault gouge toward the end of the interval
WI-19-31	81.7	87.4	5.7	veining	NA	Dol - carb	40%	Secondary, non-mineralized veins
WI-19-31	94	107	13	Brecciation	NA	Breccia	20%	Weak brecciation throughout the unit
WI-19-31	111	113.7	2.7	Veining	NA	Dol - carb +/- calcite	80%	Secondary, non-mineralized vein + 2 xenoliths of strongly recrystallized LST
WI-19-31	113.5	116.5	3	Veining	Stockwork	Fe-carbonate	3%	Mm veinlets of Fe - carbonate veinlets
WI-19-31	127.7	129.1	1.4	Shearing	NA	Fractures + rubble	50%	Fractured and rubbly rocks
WI-19-32	21	57.2	36.2	Foliated	NA		100%	Foliated bedded LST
WI-19-32	57.2	74	16.8	Brecciation	NA		100%	Brecciated LST
WI-19-32	8.2	21	12.8	Foliation	35 - 40		20%	Relict bedding planes in LST patches within the intrusive body - have been altered and deformed
WI-19-32	21	30	9	Foliation	10 - 20.			Foliated bedded LST
WI-19-32	30	33	3	Foliation	35-40			Foliated bedded planes of LST - POSSIBLE LEFT LIMB
WI-19-32	33	43	10	Foliation	2-15.			Foliated bedded planes of LST - POSSIBLE FOLD AT THIS INTERVAL
WI-19-32	43	51	8	Foliation	40-50			Foliated bedded planes of LST - POSSIBLE RIGHT LIMB
WI-19-32	51	74	23	Brecciation	Stockwork	LST Breccia	20%	LST xenoliths are brecciated by minor carb veinlets
WI-19-32	68.2	68.4	0.2	Brecciation	Stockwork	Breccia	80%	Strongly brecciated zone
WI-19-32	88.3	89.9	1.6	Brecciation	Stockwork	Breccia	80%	Strongly brecciated zone @ 88.3 - 89m, zone occurs @ the contact between 2 lith units
WI-19-32	101.8	111.25	9.45	Veining	NA	Dol - carb	60%	Secondary, non-mineralized veins - but contains rare clots of REE. Sharp contacts with what appears to be domains of relicts mafic xenoliths that is now occupied by veinlets of chlorite
WI-19-32	107.2	108.4	1.2	Brecciation	NA	Breccia	80%	Brecciated Dol-Carb with hydrothermal chlorite infilling fractures
WI-19-32	123.9	127.5	3.6	Brecciation	NA	Breccia	50%	Brecciated Dol-Carb with light grey matrix and trace dark green chlorite infilling fractures
WI-19-32	161.9	162.7	0.8	Brecciation	NA	Breccia	20%	Weakly brecciated zone
WI-19-32	144	145.1	1.1	Faulting	NA	Fault + rubble	100%	Dol carb brecciated zone + clotty mineralization
WI-19-32	154.5	156	1.5	Shearing	NA	Fractures + rubble	70%	Fractured and rubbly rocks
WI-19-32	158.9	166	7.1	Shearing	NA	Fractures + rubble	60%	Fractured and rubbly rocks with minor fault gouge
WI-19-32	171	182	11	Shearing	NA	Fractures + rubble	70%	Fractured and rubbly rocks with minor fault gouge
WI-19-32	204.7	205	0.3	Shearing	NA	Rubble + fault gouge	100%	
WI-19-32	206.4	209.9	3.5	Shearing	NA	Rubble + fault gouge	70%	Rubbly rocks with three dm scale fault gouge
WI-19-32	221.1	224.7	3.6	Faulting	NA	Fault gouge + rubble	70%	Fault gouge and rubble in a mafic dyke, cemented by chlorite

**Drill Hole Mineralization Log**

Hole ID	From (m)	To (m)	Interval (m)	Min 1	Intensity	Percentage	Min 2	Intensity	Percentage	Comments
WI-19-20	1.68	56	54.32	pyrite	Wk	<1%	REE	Wk-Mod		Trace pyrite (cubic, 1 - 3cm) throughout the core (up to 1%, 9-11m and 45-48m). Mg to cg, light brown REE form cm-scale patches and avg btw 480 - 1080 in box scan. From 45 - 47m and 51 - 56m is enriched in REE and box scan gives highest readings.
WI-19-20	56	68.8	12.8	pyrite	Wk	Trace	REE	Weak		Minor, dispersed light brown REE toward the end of this zone and trace, up to 2cm wide clusters of pyrite from 65 - 66.9m.
WI-19-20	87.5	93.3	5.8	pyrite		5%	REE	Rare		Random grains of REE is dispersed throughout and cm clusters of pyrite seen in late silica - carbonate veins
WI-19-20	105.5	107.7	2.2	pyrite		3%				Fine to medium-grained pyrite in rubbly material
WI-19-20	117	118	1	REE	Wk-Mod	1%				Minor patches of light brown REE minerals are visually observed in this interval
WI-19-21	3.9	31	27.1	pyrite	Weak	Trace	REE	Wk-Mod		Light brown REE are weakly observed and SR average is over 500 - 750 box scan
WI-19-21	31	114	83	pyrite	Weak	Trace	REE	Mod-strong		Light brown REE is observed throughout the core, except at 48.5 - 50m, with SR >750 - 1200 and an average of 900 throughout the zone. Visually high grade zones include the following: 42-43m, 52-61m, 67-68m, 72.7-73.3m, 87.5-90m, 95.5-99.8m, 101.2-110m, 111-113.5m. Pyrite is seen in clots and mostly associated with late carbonate veining and trace hydrothermal chlorite
WI-19-21	123.2	131.8	8.6	pyrite	Wk	1 - 3%				Mm clots of fine-grained pyrite throughout the core. Not seen any REE
WI-19-21	131.8	138.4	6.6	pyrite	Mod	5-10%				Cm clots of pyrite, disseminated and in syb-mm stringers crosscutting this zone
WI-19-21	164.2	177.25	13.05	pyrite	Weak	Trace	REE	Trace		Mm-cm scale clots of pyrite, crushed in a rubbly core, mainly associated with late carbonate veining. Trace clots of REE at 164.5m
WI-19-21	178.5	179	0.5	pyrite	Mod	5 - 10%				Cm clots of pyrite in a dm-scale veining
WI-19-22	4	29.5	25.5	pyrite	Trace	< 1%	REE	Weak	Trace	Trace patches of light brown REE minerals are visually observed in this interval and up to 1cm wide cubic pyrite
WI-19-22	29.5	34.2	4.7	pyrite	Trace		REE	Minor	1%	Minor patches of light brown REE minerals
WI-19-22	45	54	9	pyrite	Trace		REE	Mod	1-3%	Minor patches of moderate REE mineralization - form patches - especially around 52 - 54m
WI-19-22	60.9	77.3	16.4	pyrite	Trace	<1%	REE	Minor	1%	Minor patches of light brown REE minerals
WI-19-22	77.3	80	2.7	Moly	Trace		REE	Mod	1-3%	Minor patches of moderate REE mineralization + marron/red rusty mineral (pyrochlore?). Moly in mm-scale veinlets
WI-19-22	80	87.5	7.5				REE	Trace	Trace	Trace patches of light brown REE minerals + maroon red cm-patches of certain mineral (Thorite?)
WI-19-22	87.5	96	8.5				REE	Mod	3-5%	Patches of moderate REE mineralization + marron/red rusty mineral (pyrochlore?) gives high SR
WI-19-22	97.1	100.4	3.3	pyrite	Mod	1-3%	REE	Trace	Trace	Trace REE and cm-cubic secondary pyrite
WI-19-22	100.4	106	5.6	pyrite	Weak	1%	REE	Trace		Trace REE mineralization + up to % pyrite over a meter at 104 - 105m
WI-19-22	106	113.1	7.1				REE	Mod	3-5%	Mm to cm patches of moderate light brown/tan REE mineralization
WI-19-22	113.1	127.15	14.05	pyrite	Trace	<1%	REE	Trace	<1%	Trace REE, Pyrite and Moly
WI-19-23	0.95	15	14.05	pyrite	Weak	1%	REE	Trace		Cm-scale clots of pyrite throughout the core and cm-scale patches of moderate REE mineralization
WI-19-23	22.2	49	26.8	pyrite	Trace		REE	Moderate	1-3%	Patches of moderate REE mineralization + maroon/red rusty mineral (pyrochlore?). Moly in mm-scale veinlets. A 5cm semi massive pyrite at 41.5
WI-19-23	55.8	68.9	13.1				REE	Moderate	1%	Minor patches of moderate REE mineralization + marron/red rusty mineral (pyrochlore?). Trace Py
WI-19-23	72.3	109.5	37.2				REE	Weak	<1%	Trace, disseminated REE mineralization (Monazite + Pyrochlore) and coarse-grained, cubic or twinned pyrite crystals with secondary pyrite intergrowth
WI-19-24	2.9	7.25	4.35	pyrite			REE	Weak	<1	
WI-19-24	7.25	9.25	2	pyrite			REE	Mod	1%	
WI-19-24	9.25	19	9.75	pyrite	Trace		REE	Weak	<1	Cm-scale clots of pyrite and trace maroon REE mineralization (Monazite)
WI-19-24	19	41.2	22.2	pyrite	Trace		REE	Mod	>1-3%	Cm-scale clots of pyrite throughout the core and disseminated/clotty, Monazite and Bastnaesite REE mineralization
WI-19-24	41.2	51.25	10.05		Trace					Cm-scale clots of pyrite throughout the core mod REE mineralization in cm-patches ( 1-3cm, 1-3% of the 3cm interval)
WI-19-24	51.25	51.35	0.1				REE	Strong	10%	REE mineralization (Monazite) in cm-patches
WI-19-24	60	69	9	pyrite	1%		REE	Mod	1%	Coarse grained, cubic pyrite and dispersed clots of REE (monazite, Bastnaesite) and HSR of hydrothermal green-coloured pyrochlore at 64.4m. Trace Moly in mm veinlets and clots
WI-19-24	75.5	79	3.5				REE	Mod	1%	Mm to cm-scale clots of Bastnaesite throughout the core and up to 10cm wide intervals of strong REE min at 77m (almost a REE vein - monazite mixed with bastnaesite).
WI-19-24	80	81	1				REE	Trace		Dispersed Cm clots of bastnaesite
WI-19-24	81.7	82.7	1				REE	Mod	1-3%	Both REE minerals (monazite and Bastnaesite) occur in mm to cm clots with partial flooding of carbonatite fluids.
WI-19-24	88.5	90.3	1.8	pyrite	Trace		REE	Weak	<1%	Cm clots of bastnaesite and Monazite
WI-19-24	100.7	101	0.3				REE	Weak	<1%	Cm clots of bastnaesite and Monazite
WI-19-24	107.8	108.2	0.4				REE	Mod	1-3%	REE mineralization is disseminated throughout this interval
WI-19-24	109.1	111	1.9	pyrite	Trace		REE	Mod	3%	REE mineralization is seen in cm-scale clots - both Monazite (@ 109.1m) and Bastnaesite (@ 110.8m)
WI-19-24	112.6	112.7	0.1	Fluorite	Mod		REE	Strong	5%	Light purple cm-wide fluorite is observed throughout this patch
WI-19-24	113.8	115.1	1.3				REE	Weak	1%	Dispersed Cm clots of REE min
WI-19-24	118.8	120.3	1.5				REE	Weak	1%	Light brown REE min - appears following some kind of banding (or possible a gneissic texture?)
WI-19-24	120.55	122.95	2.4	pyrite						Medium to coarse-grained pyrite (up to 1cm) - both primary (cubic) and secondary (fg replacing primary texture)
WI-19-25	6.1	13	6.9				REE	Weak	1%	REE mineralization (monazite) at top of zone and Bastnaesite toward the end of the zone
WI-19-25	16.1	21	4.9	pyrite	Trace		REE	Mod	3%	REE mineralization - Monazite - in 3 rosey cm-patches @ 17.05, 17.8 and 20.6-20.9. These zones appears in halos and not clear evidence of what controls the mineralization here (possibly mobilization? as it fills gaps between relict dol grains
WI-19-25	23	24.4	1.4				REE	Mod	1-3%	Clotty REE mineralization in cm-patches
WI-19-25	30.7	30.75	0.05				REE	Strong	50%	REE mineralization (pink/ red - high SR) in carb vein.
WI-19-25	44	46.2	2.2	pyrite		3%	REE	Mod	1-3%	Clotty REE mineralization in cm-patches
WI-19-25	48.8	49.4	0.6	pyrite			REE	Weak	1%	Clotty REE mineralization in cm-patches (monazite + Bastnaesite)
WI-19-25	51	52.7	1.7				REE	Mod	1-3%	Clotty REE mineralization in cm-patches (monazite + Bastnaesite) + Moly
WI-19-25	53.6	54	0.4				REE	Mod	3%	Clotty REE mineralization in cm-patches (monazite + Bastnaesite) + Moly
WI-19-25	59.2	62	2.8	pyrite	Strong	20%	REE	Weak	<1	Massive pyrite in cm-scale bands and minor clots of REE
WI-19-25	62	62.8	0.8	pyrite	Strong	20%	REE	Strong	30%	A 15cm wide hydrothermal vein of REE and major cm-clots of pyrite on the bottom side of the core.
WI-19-25	62.8	85	22.2	pyrite	Weak	1-3%	REE	Moderate	3-5%	Cm-scale hydrothermal veins and patches of REE throughout the core hosted in Dol-carbonatite and minor clots of pyrite.
WI-19-25	85	129	44	pyrite	Weak	Trace	REE	Weak	<1%	Trace REE in form of 1-2cm patches/clots
WI-19-25	132.8	143.2	10.4				REE	Mod	1-3%	REE mineralization in cm patches/clots

**Drill Hole Mineralization Log**

Hole ID	From (m)	To (m)	Interval (m)	Min 1	Intensity	Percentage	Min 2	Intensity	Percentage	Comments
WI-19-25										
WI-19-26	9.3	9.9	0.6				REE	Mod	1-3%	REE mineralization in cm patches/clots
WI-19-26	20.3	20.4	0.1	pyrite	Strong	50%				Massive pyrite in a cm-scale band
WI-19-26	33.8	38	4.2				REE	Weak		Minor REE mineralization in clots
WI-19-26	38	42	4				REE	Mod	1-3%	REE mineralization in cm clots - Bastnaesite
WI-19-26	42	52.5	10.5				REE	Mod	3-5%	REE mineralization in cm patches and clots - mainly Bastnaesite
WI-19-26	52.5	61	8.5				REE	Weak	<1%	Disseminated clots of REE mineralization
WI-19-26	61	79	18				REE	Mod	3-5%	REE mineralization in cm clots and patches - highest grade in hole
WI-19-26	79	83.9	4.9				REE	Weak	1%	Disseminated clots of REE mineralization. A 3cm REE patch @ 83.2m
WI-19-26	88.3	105	16.7				REE	Weak	<1%	Disseminated clots of REE mineralization - Monazite
WI-19-26	105	116	11				REE	Weak	1%	Disseminated clots of REE mineralization - Monazite clots in hydrothermal veins
WI-19-26	119	124.3	5.3				REE	Weak	1%	Disseminated clots of REE mineralization - Monazite clots in hydrothermal veins
WI-19-26	124.3	127.6	3.3	pyrite	Mod	3-5%				Fine to medium-grained pyrite near the contact at the Dol-carb and Fenite
WI-19-26	136.5	140.7	4.2				REE	Mod	1%	Cm to dm-scale veins (5%) with up to 20% REE
WI-19-26	144.2	146.8	2.6				REE	Mod	3%	Cm to dm-scale veins with up to 10% REE
WI-19-26	151.1	153	1.9				REE	Strong	5-10%	Cm to dm-scale veins with up to 50% REE
WI-19-27	2	18.5	16.5	pyrite	Trace	<1%	REE	Weak	<1%	Cubic pyrite - up to 3cm - replaced by fg, secondary pyrite. Up to 15cm of cm-wide clots of pyrite at 10.4m. Cm-scale patches of strong REE mineralization at 9.5m and 13.3m
WI-19-27	18.5	27	8.5	pyrite	Mod	5%	REE	Mod	1-3%	REE mineralization is observed in mm - cm clots throughout this interval - both Bastnaesite (major) and Monazite (trace) are seen. 2 zones of massive pyrite over 10cm - 30cm wide is observed between 24-25m.
WI-19-27	27	41	14	pyrite	Trace		REE	Weak	1%	Cm clots of REE mineralization (bastnaesite - more %, and Monazite) - SR is relatively low due to dispersed REE mineralization
WI-19-27	46.7	49.5	2.8				REE	Weak	>1%	Mm -clots of REE mineralization (bastnaesite - more%, and Monazite) observed in LST/Fenite unit. Min appears to be in the LST xenoliths and only in the bottom 30cm where mineralization is in matrix / host carb fluids as well as LST xenoliths.
WI-19-27	49.5	68.5	19	pyrite	Trace		REE	Trace		Trace REE mineralization, the only significant interval is between 51 - 51.5m, 55-55.6m, and four 3cm patches where both REE minerals are seen Monazite is dominant.
WI-19-27	68.5	74	5.5	pyrite	Trace		REE	Strong	5%	REE mineralization in cm patches; red maroon Monazite, light brown Bastnaesite and light yellow with green halo - translucent mineral.
WI-19-27	74	76	2	pyrite	Trace		REE	Mod	1-3%	REE mineralization in cm patches; red maroon Monazite, light brown Bastnaesite and light yellow with green halo - translucent mineral.
WI-19-27	76	89	13	pyrite	Trace		REE	Weak	<1%	Trace REE mineralization in mm-patches and along fractured planes
WI-19-27	95.2	113.8	18.6				REE	Mod	1-3%	REE mineralization in mm and cm patches; red maroon Monazite, light brown Bastnaesite.
WI-19-27	115	124	9	pyrite	Mod	3%				cubic pyrite - up to 3cm - replaced by fg, secondary pyrite.
WI-19-28	16	17	1				REE	Weak	<1%	Minor clots of REE
WI-19-28	19.4	20.6	1.2				REE	Weak	<1%	Minor clots of REE
WI-19-28	24.6	26.7	2.1				REE	Mod	1-3%	Up to 1cm clots of REE mineralization
WI-19-28	32	34.6	2.6				REE	Mod-strong	3-5%	Medium sized clots of mineralization
WI-19-28	36	42	6				REE	Mod	1-3%	Mm to cm clots and patches of moderate light brown/tan REE mineralization
WI-19-28	44	54.1	10.1	pyrite	Minor		REE	Mod-strong	3-5%	Cm-patches and coarse clots of light brown/red maroon REE mineralization, particularly at 44, 46, 49-50, 52.1 - 52.3 and 54 - 54.1m. Trace Moly is seen at 45.5m
WI-19-28	55.8	60.3	4.5				REE	Wk-Mod	1%	Minor clots of REE
WI-19-28	60.3	63	2.7				REE	Mod	1-3%	Minor clots of REE
WI-19-28	63	66	3	pyrite		1%	REE	Mod-strong	3-5%	Clots and cm-patches of light brown and red maroon REE mineralization, specially at 60.5, 60.9, 63.1 - 65.8m. Cm clots of py @ 65 - 65.5m combined with high SR 1400-1700
WI-19-28	71	71.4	0.4				REE	Mod	1-3%	High SR of the rock ~850 - 900 - no REE is recognizable - rocks are rubbly.
WI-19-29	8	13.1	5.1	pyrite	minor	1%				Disseminated pyrite
WI-19-29	13.1	15.6	2.5	pyrite		5-10%				Disseminated and stringers (up to 2cm)
WI-19-29	19.5	22.93	3.43	pyrite		3-5%				Disseminated
WI-19-29	22.93	31.75	8.82	pyrite	Trace	<1%				Disseminated
WI-19-29	31.75	40.6	8.85	pyrite		3-5%				Disseminated and stringers (up to 2cm)
WI-19-29	46.9	48.1	1.2	pyrite		1%				Disseminated and mm stringers
WI-19-29	73	78.3	5.3	pyrite	Minor	1%	REE	Mod	3-5%	REE mineralization in mm and cm patches; red maroon Monazite, light brown Bastnaesite and Cubic (1-3cm) Pyrite in / adjacent to mafic xenoliths
WI-19-29	78.25	78.5	0.25				REE	Strong	20%	REE mineralization in cm patches; red maroon Monazite and light brown Bastnaesite
WI-19-29	78.5	94.9	16.4	pyrite	Trace		REE	Mod	3-5%	REE mineralization in mm and cm patches; red maroon Monazite, light brown Bastnaesite. Visible mineralization has mostly been circled on the core. Trace pyrite near mafic xenoliths
WI-19-29	92	93	1				REE	Strong	5-10%	REE mineralization in disseminated throughout the interval and in cm patches; red maroon Monazite and light brown Bastnaesite
WI-19-29	94.9	99.5	4.6				REE	Strong	5-10%	REE mineralization in disseminated throughout the interval and in cm patches; red maroon Monazite and light brown Bastnaesite
WI-19-29	99.5	105.3	5.8	pyrite	Minor		REE	Mod	1-3%	REE mineralization in disseminated throughout the interval and in cm patches; red maroon Monazite and light brown Bastnaesite; Cubic pyrite (1-3cm) @ mafic xenoliths
WI-19-29	105.3	112	6.7				REE	Strong	5-10%	REE mineralization in disseminated throughout the interval and in cm patches; red maroon Monazite is more visible than other mineralized intervals.
WI-19-29	112	117.35	5.35				REE	Mod	1-3%	REE mineralization in disseminated throughout the interval and in cm patches; red maroon Monazite and light brown Bastnaesite
WI-19-29	117.35	120.1	2.75				REE	Strong	5-10%	REE mineralization in disseminated throughout the interval and in cm patches; red maroon Monazite and light brown Bastnaesite
WI-19-29	121	132.2	11.2				REE	Mod	5-10%	REE mineralization in disseminated throughout the interval and in cm patches; red maroon Monazite and light brown Bastnaesite. Where REE form semi stringers, its at 60 degree TCA. This is characterized by high SR
WI-19-29	132.2	144	11.8				REE	Mod	3%	REE mineralization in disseminated throughout the interval and in cm patches; red maroon Monazite and light brown Bastnaesite

**Drill Hole Mineralization Log**

Hole ID	From (m)	To (m)	Interval (m)	Min 1	Intensity	Percentage	Min 2	Intensity	Percentage	Comments
WI-19-29	144	184.05	40.05	pyrite	Minor		REE	Weak	<1%	cm massive pyrite @ 165.5 - 167.02m and trace, disseminated REE mineralization.
WI-19-30	4	5.5	1.5	pyrite		3%				Disseminated and clotty fine to medium-grained pyrite.
WI-19-30	8.7	11.15	2.45	pyrite		3%				Disseminated and clotty fine to medium-grained pyrite.
WI-19-30	15.57	22	6.43	pyrite		5%				Disseminated and mm stringers (up to 1cm) of fine-grained pyrite
WI-19-30	33.75	35.5	1.75	pyrite		5%				Disseminated, clotty up to 2cm wide stringers of fine-grained pyrite
WI-19-30	44	44.5	0.5				REE	Mod		Stretched maroon monazite clots with high SR - 1600
WI-19-30	46.5	60	13.5	pyrite	Minor		REE	Mod	3-5%	REE mineralization - moderate to strong, clots and in semi halos of veins - particularly btw 51 - 59m, there are 3 dm-intervals of red/maroon that contains high % of monazite and SR is extremely high (up to 1850)
WI-19-30	63.3	71	7.7	pyrite	Minor		REE	Mod	3-5%	REE mineralization - moderate to strong, clotty
WI-19-30	71	93	22	pyrite	Minor		REE	Weak	1%	REE mineralization in mm to cm clots. Both REE minerals are present but Bastnaesite dominate
WI-19-30	93	97.9	4.9				REE	Mod	1-3%	REE mineralization in mm to cm clots. Both REE minerals are present but Bastnaesite dominate
WI-19-30	97.9	98.5	0.6				REE	Strong	30%	Major REE mineralization, clots, patches and up to 20cm wide vein of REE
WI-19-30	98.5	106.3	7.8				REE	Mod	1-3%	REE mineralization in mm to cm clots. Both REE minerals are present but Bastnaesite dominate
WI-19-30	106.3	108	1.7				REE	Trace	<1%	Trace REE mineralization
WI-19-30	108	113	5				REE	Mod	1-3%	REE mineralization in mm to cm clots. Both REE minerals are present but Bastnaesite dominate
WI-19-30	113	123.4	10.4				REE	Wk-Mod	1-3%	REE mineralization in mm to cm clots. Both REE minerals are present but Bastnaesite dominate. @ 119 - 121m, mineralization is up to 3%
WI-19-30	123.4	126.1	2.7				REE	Strong	10-15%	Major REE mineralization, mg light brown/tan - yellow clots (Bastnaesite!) in cm-dm patches. SR is up to 1500.
WI-19-30	126.1	156	29.9				REE	Weak	1%	REE mineralization in mm to cm clots. Both REE minerals are present but Bastnaesite dominate. Includes up to 3% @ 138.3 - 138.6, 147-147.7, 149.2-150m
WI-19-30	156	157	1				REE	Strong	15%	Strong REE mineralization, both clotty and in cm-patches, Bastnaesite dominates over Monazite
WI-19-30	157.3	161	3.7				REE	Weak	1%	REE mineralization in mm to cm clots.
WI-19-30	161	163	2				REE	Mod	1-3%	REE mineralization in mm clots - more red maroon Monazite.
WI-19-30	167	168	1				REE	Mod	3-5%	REE mineralization in mm clots - Monazite dominates
WI-19-30	169.55	170	0.45				REE	Mod	5%	REE mineralization in mm clots - Bastnaesite dominates
WI-19-30	170.3	172.15	1.85				REE	Mod	1-3%	
WI-19-30	172.15	177.7	5.55				REE	Strong	15-20%	Major REE mineralization, mg light brown/tan (Bastnaesite) and red maroon monazite in cm-dm patches. SR is up to 1500.
WI-19-31	11.2	14.2	3	pyrite	Minor					Minor, sub-cm clots of fg pyrite.
WI-19-31	48	50	2	pyrite	Minor					Minor, sub-cm clots of fg pyrite.
WI-19-31	55.65	60.4	4.75				REE	Mod	3%	REE mineralization in mm to cm clots.
WI-19-31	60.4	61	0.6				REE	Strong	33%	Major REE mineralization, clots, patches and up to 20cm wide vein of REE - Bastnaesite.
WI-19-31	61	64.6	3.6				REE	Mod	1-3%	REE mineralization - diluted by veining with minor mineralization; however, min could be on margins of vein (which is in the next interval)
WI-19-31	64.6	71.5	6.9				REE	Mod	5-10%	Clotty and cm-patches of Bastnaesite and minor Monazite
WI-19-31	71.5	81.7	10.2	Moly		1-3%	REE	Mod	3-5%	Clotty and cm-patches of Bastnaesite and minor Monazite + mm stringers of moly + clusters of coarse pyrite @ 72.4 - 73m
WI-19-31	81.7	83.7	2				REE	Mod	1-3%	Disseminated clots of REE mineralization.
WI-19-31	83.7	90.45	6.75				REE	Mod	5-10%	Clotty and cm-patches of Bastnaesite and minor Monazite
WI-19-31	90.45	92	1.55	pyrite		1-3%	REE	Mod	1-3%	REE mineralization in mm to cm clots + clots of coarse grained pyrite
WI-19-31	92	92.8	0.8				REE	Strong	20-25%	Major REE mineralization, mg light brown/tan - yellow clots (Bastnaesite!) in cm-dm patches. SR is up to 1500.
WI-19-31	92.8	94.2	1.4				REE	Mod	1-3%	REE mineralization in mm to cm clots.
WI-19-31	94.2	94.5	0.3				REE	Strong	25%	Major REE mineralization, mg light brown/tan - yellow clots (Bastnaesite.) in cm-dm patches.
WI-19-31	94.5	98	3.5				REE	Mod	3%	REE mineralization in mm to cm clots.
WI-19-31	98	104.6	6.6				REE	Mod	1-3%	REE mineralization in mm to cm clots (mainly Bastnaesite)
WI-19-31	104.6	105.1	0.5				REE	Strong	5-10%	Clotty Bastnaesite
WI-19-31	105.1	109	3.9				REE	Mod	1%	
WI-19-31	109	111	2				REE	Strong	15-20%	Major REE mineralization, mg light brown/tan - yellow clots (Bastnaesite!) in cm-dm patches @ / near recrystallized LST xenoliths.
WI-19-31	117.05	125.4	8.35				REE	Strong	15-20%	Major REE mineralization, mg light brown/tan - yellow clots (Bastnaesite!) in cm-dm patches @ / near recrystallized LST xenoliths.
WI-19-31	125.4	132	6.6				REE	Mod	3-5%	REE mineralization in mm to cm clots; 1 strongly mineralized zone @ 128.9 - 129.4m.
WI-19-31	128.9	129.4	0.5				REE	Strong	10-15%	REE mineralization in cm patches
WI-19-31	132	133	1				REE	Strong	40%	Major REE mineralization, light brown - yellow, weakly foliated Bastnaesite clots and in vein like cm (up to 30cm) zones. REE is veined and aligned @ 40 - 50 degree.
WI-19-31	133	138.5	5.5				REE	Strong	5-10%	Major REE mineralization, light brown - yellow, weakly foliated Bastnaesite clots and in vein like cm (up to 2cm) zones + 1 vein like Monazite vein. REE is veined @ 90 degree in 2 small veins.
WI-19-32	8.2	20.8	12.6	pyrite	Minor	<1%				Minor, mm clots of fg-mg pyrite in moderately silicified, weakly carbonatized syenitic rock.
WI-19-32	88.8	98	9.2	pyrite	Minor		REE	Mod	3-5%	REE mineralization in mm to cm clots concentrated near relict mafic xenoliths
WI-19-32	98	100.1					REE	Weak	1%	Minor clots of REE
WI-19-32	100.1	100.7	0.6				REE	Mod	3-5%	REE mineralization in mm to cm clots hosted in strongly altered xenoliths of LST
WI-19-32	103.3	104.5	1.2				REE	Mod	3-5%	Clotty and cm-patches of Bastnaesite + Monazite @ the margins of hydrothermally chl-veined interval.
WI-19-32	109.5	110	0.5				REE	Mod	3-5%	A 2 cm wide vein of Monazite - Bastnaesite and clots of both
WI-19-32	110	112	2				REE	Weak	1%	Disseminated mm clots of REE mineralization3
WI-19-32	112	114	2				REE	Strong	10%	A 4cm wide vein of Monazite and cm-patches of Monazite - bastnaesite throughout this zone.
WI-19-32	119.9	121	1.1				REE	Mod	1-3%	Disseminated mm clots of REE mineralization - mainly Monazite
WI-19-32	121	144.9	23.9				REE	Minor	<1%	
WI-19-32	144.95	145.8	0.85				REE	Strong	10%	REE mineralization in cm patches. SR up to 1800
WI-19-32	145.8	151	5.2				REE	Wk-Mod	1-3%	Disseminated REE mineralization in mg and minor clots of Monazite and Bastnaesite

**Drill Hole Mineralization Log**

Hole ID	From (m)	To (m)	Interval (m)	Min 1	Intensity	Percentage	Min 2	Intensity	Percentage	Comments
WI-19-32	151	163	12				REE	Mod	5%	Major mineralization - Mm to cm clots and patches of moderate light brown/tan and red-marron REE mineralization, stronger mineralization @ 151 - 154m, 157.25-157.45,160-163m. @ 151.5, there are altered light-red xenoliths that is deceiving and look like monazite but possibly its altered LST or ...?
WI-19-32	166	171	5				REE	Strong	16%	Cm clots and patches of REE mineralization, possible dm scale Bastnaesite vein at 170.2 - 170.6m
WI-19-32	171	182	11				REE	Mod	1-3%	mm to cm clots and patches of moderate light brown/tan and red-marron REE mineralization. A strong 20cm patch of mineralization at 176m
WI-19-32	182	183.9	1.9	pyrite	Minor		REE	Mod	1-3%	Up to 2cm clots and semi-stringers of red maroon (Monazite) and clots of Bastnaesite with stringers of pyrite infilling fractures. REE and pyrite is in late coarse-grained white vein.
WI-19-32	183.9	185.9	2				REE	Strong	5-10%	Major mineralization - cm clots and patches of moderate light brown/tan and red-marron REE mineralization, possible Parasite too. REE form semi veining of Monazite but Bastnaesite is more clotty than veiny. 3cm wide vein of pyrite crosscut the core @ 35degree TCA.
WI-19-32	188.1	203	14.9				REE	Strong	5-10%	Major mineralization - cm clots and patches of moderate light brown/tan and red-marron REE mineralization. Both REE form semi veining. Stronger mineralization @ 197 - 202.7 (broken down below).
WI-19-32	197	203.7	6.7				REE	Strong	10-15%	Cm to dm wide of strong Bastnaesite mineralization and concentrated clots of Monazite @ 203.4 - 203.6m.
WI-19-32	204	214.4	10.4				REE	Mod	3-5%	Disseminated mm to cm clots of REE and rare patches of mineralization near veining. Pyrite is clotty and occur close to intervals where hydrothermal chlorite veinlets occur.
WI-19-32	214.4	219.7	5.3				REE	Weak	<1%	Minor clots of REE and one 3 patch of REE and pyrite @ 218.7m
WI-19-32	219.7	220.7	1	pyrite	rare		REE	Intense	6%	1-2mm of red maroon Monazite crystals concentrated @ 219.7 - 219.85 and 220.2 - 220.35m. These 2 intervals have the highest SR of 5200.

## Appendix 4. Drill Hole Analytical Results and Certificates



**Drill Hole Sample Results**

HOLE ID	FROM	TO	INTERVAL	SAMPLE #	TYPE	QA/QC	Ce (ppm)	La (ppm)	Nd (ppm)	Pr (ppm)	Nb (ppm)	Sm (ppm)	CERT#
WI-19-20	1.68	4.60	2.92	A0795228	HC		17750	13200	3790	1375	28	351	KL19240505
WI-19-20	4.60	7.60	3.00	A0795001	HC		19700	14900	4060	1565	16	376	KL19240505
WI-19-20	7.60	10.60	3.00	A0795002	HC		21500	16400	4400	1695	45	379	KL19240505
WI-19-20	10.60	13.60	3.00	A0795003	HC		19500	14300	4090	1565	91	367	KL19240505
WI-19-20	13.60	16.60	3.00	A0795004	HC		35600	27100	7350	2990	63	634	KL19240505
WI-19-20				A0795005	STD	CDN-RE-1203	8380	6650	1640	636	330	166.5	KL19240505
WI-19-20	16.60	19.60	3.00	A0795006	HC		18950	13450	4150	1550	44	405	KL19240505
WI-19-20	19.60	22.60	3.00	A0795007	HC		24500	17900	5120	1965	49	466	KL19240505
WI-19-20	22.60	25.60	3.00	A0795008	HC		22500	17100	4750	1810	59	432	KL19240505
WI-19-20	25.60	28.60	3.00	A0795009	HC		26200	19650	5560	2110	37	495	KL19240505
WI-19-20				A0795010	BLK	Silica Blank	110	78	24.8	8.8	1	1.7	KL19240505
WI-19-20	28.60	31.60	3.00	A0795011	HC		24800	17700	5300	2000	40	483	KL19240505
WI-19-20	31.60	34.60	3.00	A0795012	HC		12950	9210	3020	1095	37	289	KL19240505
WI-19-20	34.60	37.60	3.00	A0795013	HC		27100	19750	6000	2230	26	555	KL19240505
WI-19-20	37.60	40.60	3.00	A0795014	QC		17200	12100	4050	1450	87	463	KL19240505
WI-19-20				A0795015	Dup	Dup of A0795014	17050	12000	4120	1460	81	456	KL19240505
WI-19-20	40.60	43.60	3.00	A0795016	HC		19350	13700	4270	1605	45	430	KL19240505
WI-19-20	43.60	46.60	3.00	A0795017	HC		25200	18600	5730	2090	85	544	KL19240505
WI-19-20	46.60	49.60	3.00	A0795018	HC		14400	10250	3460	1240	87	360	KL19240505
WI-19-20	49.60	52.60	3.00	A0795019	HC		14850	9440	4180	1380	206	525	KL19240505
WI-19-20	52.60	55.60	3.00	A0795020	HC		4930	3560	1230	424	325	142	KL19240505
WI-19-20	55.60	58.60	3.00	A0795021	HC		3140	2170	829	279	16	101	KL19240505
WI-19-20	58.60	61.60	3.00	A0795022	HC		4930	3690	1110	406	19	112	KL19240505
WI-19-20	61.60	64.60	3.00	A0795023	HC		8490	6350	1910	703	15	196	KL19240505
WI-19-20	64.60	67.60	3.00	A0795024	HC		11650	8960	2590	947	28	255	KL19240505
WI-19-20				A0795025	STD	CDN-RE-1203	8200	6590	1635	633	319	165	KL19240505
WI-19-20	67.60	68.80	1.20	A0795026	HC		15750	12200	3330	1250	34	309	KL19240505
WI-19-20	68.80	71.80	3.00	A0795027	HC		1320	766	392	126.5	562	55.6	KL19240505
WI-19-20	71.80	74.80	3.00	A0795028	HC		2940	1690	814	277	605	101	KL19240505
WI-19-20	74.80	77.80	3.00	A0795029	HC		1390	756	411	135	611	53.3	KL19240505
WI-19-20				A0795030	BLK	Silica Blank	15	7	4.3	1.5	2	0.9	KL19240505
WI-19-20	77.80	80.80	3.00	A0795031	HC		1545	813	481	153	803	67.1	KL19240505
WI-19-20	80.80	83.80	3.00	A0795032	HC		1060	587	314	102.5	589	45.4	KL19240505
WI-19-20	83.80	87.20	3.40	A0795033	HC		1215	640	328	105	752	44	KL19240505
WI-19-20	87.20	90.20	3.00	A0795034	QC		5010	2880	1255	429	870	140	KL19240505
WI-19-20				A0795035	Dup	Dup of A0795034	4990	2880	1320	437	1020	151.5	KL19240505
WI-19-20	90.20	93.20	3.00	A0795036	HC		1995	1140	573	179.5	832	75.6	KL19240505
WI-19-20	93.20	96.20	3.00	A0795037	HC		1065	561	343	98.4	694	55.3	KL19240505
WI-19-20	96.20	99.20	3.00	A0795038	HC		1165	619	358	107.5	749	55.5	KL19240505
WI-19-20	99.20	102.20	3.00	A0795039	HC		873	456	283	81.4	535	44.4	KL19240505
WI-19-20	102.20	105.20	3.00	A0795040	HC		1465	709	472	138	750	72.5	KL19240505
WI-19-20	105.20	108.20	3.00	A0795041	HC		1315	672	428	126	857	66.5	KL19240505
WI-19-20	108.20	111.20	3.00	A0795042	HC		1870	961	658	184.5	626	105	KL19240505
WI-19-20	111.20	114.20	3.00	A0795043	HC		773	430	253	75.2	1225	41.2	KL19240505
WI-19-20	114.20	117.20	3.00	A0795044	HC		1015	473	367	100	1770	65	KL19240505
WI-19-20				A0795045	STD	CDN-RE-1203	8110	6400	1580	591	317	164.5	KL19240505
WI-19-20	117.20	120.20	3.00	A0795046	HC		2620	1465	869	249	595	133.5	KL19240505
WI-19-20	120.20	123.20	3.00	A0795047	HC		2000	1175	638	186.5	1135	98.8	KL19240505
WI-19-20	123.20	126.20	3.00	A0795048	HC		4130	2610	1250	376	577	166	KL19240505
WI-19-20	126.20	129.20	3.00	A0795049	HC		1725	988	575	162.5	802	98.6	KL19240505
WI-19-20				A0795050	BLK	Silica Blank	12	8	4.6	1.3	4	0.8	KL19240505
WI-19-20	129.20	132.20	3.00	A0795051	HC		1090	544	421	109	893	87.1	KL19240505
WI-19-20	132.20	135.20	3.00	A0795052	HC		786	410	320	85.4	845	70.2	KL19240505
WI-19-20	135.20	136.40	1.20	A0795053	HC		661	342	276	71.8	738	57.9	KL19240505
WI-19-21	3.90	6.90	3.00	A0795054	QC		8570	6110	1970	681	28	219	KL19240505
WI-19-21			0.00	A0795055	Dup	Dup of A0795054	8980	6370	2030	708	41	221	KL19240505
WI-19-21	6.90	9.90	3.00	A0795056	HC		8130	5630	1945	664	32	213	KL19240505
WI-19-21	9.90	12.90	3.00	A0795057	HC		13350	9430	3200	1150	24	327	KL19240505

**Drill Hole Sample Results**

HOLE ID	FROM	TO	INTERVAL	SAMPLE #	TYPE	QA/QC	Ce (ppm)	La (ppm)	Nd (ppm)	Pr (ppm)	Nb (ppm)	Sm (ppm)	CERT#
WI-19-21	12.90	15.90	3.00	A0795058	HC		10750	7870	2520	921	16	258	KL19240505
WI-19-21	15.90	18.90	3.00	A0795059	HC		8650	6170	1950	681	66	196	KL19240505
WI-19-21	18.90	21.90	3.00	A0795060	HC		9810	6740	2190	795	301	226	KL19240505
WI-19-21	21.90	24.90	3.00	A0795061	HC		3090	2240	733	248	814	77.3	KL19240505
WI-19-21	24.90	27.90	3.00	A0795062	HC		5700	4130	1310	453	98	132.5	KL19240505
WI-19-21	27.90	30.90	3.00	A0795063	HC		9270	6850	2190	738	139	233	KL19240505
WI-19-21	30.90	33.90	3.00	A0795064	HC		17950	12750	4540	1570	72	479	KL19240505
WI-19-21				A0795065	STD	CDN-RE-1203	8360	6590	1645	609	318	169.5	KL19240505
WI-19-21	33.90	36.90	3.00	A0795066	HC		21100	15200	5560	1835	43	529	KL19240505
WI-19-21	36.90	39.90	3.00	A0795067	HC		11100	7990	2800	987	12	300	KL19240505
WI-19-21	39.90	42.90	3.00	A0795068	HC		14600	10450	3490	1255	30	361	KL19240505
WI-19-21	42.90	45.90	3.00	A0795069	HC		12400	8830	2960	1075	60	327	KL19240505
WI-19-21				A0795070	BLK	Silica Blank	123	89	32.6	10.7	1	3.4	KL19240505
WI-19-21	45.90	48.90	3.00	A0795071	HC		16450	11900	3990	1415	42	433	KL19240505
WI-19-21	48.90	51.90	3.00	A0795072	HC		8200	5980	2040	672	3	222	KL19240505
WI-19-21	51.90	54.90	3.00	A0795073	HC		11900	8770	2870	1025	1	307	KL19240505
WI-19-21	54.90	57.90	3.00	A0795074	QC		12300	9000	3010	1080	6	323	KL19240505
WI-19-21			0.00	A0795075	Dup	Dup of A0795074	13600	9940	3360	1190	6	363	KL19240505
WI-19-21	57.90	60.90	3.00	A0795076	HC		23700	17100	6210	2050	122	588	KL19240505
WI-19-21	60.90	63.90	3.00	A0795077	HC		14350	10700	3300	1210	75	335	KL19240505
WI-19-21	63.90	66.90	3.00	A0795078	HC		9680	7150	2120	799	268	221	KL19240505
WI-19-21	66.90	69.90	3.00	A0795079	HC		15350	11250	3520	1310	59	353	KL19240505
WI-19-21	69.90	72.90	3.00	A0795080	HC		10050	7400	2350	849	189	247	KL19240505
WI-19-21	72.90	75.90	3.00	A0795081	HC		5960	3490	2030	576	101	287	KL19240505
WI-19-21	75.90	78.90	3.00	A0795082	HC		12550	8940	3130	1090	33	367	KL19240505
WI-19-21	78.90	81.90	3.00	A0795083	HC		12750	9340	3040	1105	132	320	KL19240505
WI-19-21	81.90	84.90	3.00	A0795084	HC		13700	10500	2880	1115	194	283	KL19240505
WI-19-21				A0795085	STD	CDN-RE-1203	8080	6440	1590	593	315	164	KL19240505
WI-19-21	84.90	87.90	3.00	A0795086	HC		10700	7980	2260	871	184	211	KL19240505
WI-19-21	87.90	90.90	3.00	A0795087	HC		15450	11600	3380	1285	147	315	KL19240505
WI-19-21	90.90	93.90	3.00	A0795088	HC		8750	6460	1945	691	14	188.5	KL19240505
WI-19-21	93.90	96.90	3.00	A0795089	HC		13300	9730	2860	1100	489	282	KL19240505
WI-19-21				A0795090	BLK	Silica Blank	38	27	10	3.3	1	1.3	KL19240505
WI-19-21	96.90	99.90	3.00	A0795091	HC		22600	17100	4860	1800	68	418	KL19240505
WI-19-21	99.90	102.90	3.00	A0795092	HC		18000	13600	3690	1445	73	348	KL19240505
WI-19-21	102.90	105.90	3.00	A0795093	HC		16900	12650	3510	1375	285	336	KL19240505
WI-19-21	105.90	108.90	3.00	A0795094	QC		27100	20800	5950	2130	798	482	KL19240505
WI-19-21				A0795095	Dup	Dup of A0795094	27200	21100	5870	2140	877	487	KL19240505
WI-19-21	108.90	111.90	3.00	A0795096	HC		17800	13600	3750	1430	453	354	KL19240505
WI-19-21	111.90	114.00	2.10	A0795097	HC		29000	23100	6150	2240	251	504	KL19240505
WI-19-21	114.00	117.00	3.00	A0795098	HC		5410	3930	1275	432	664	137.5	KL19240505
WI-19-21	117.00	120.00	3.00	A0795099	HC		7340	4430	2120	661	420	250	KL19240505
WI-19-21	120.00	123.00	3.00	A0795100	HC		4290	2630	1155	371	265	131.5	KL19240505
WI-19-21	123.00	126.00	3.00	A0795101	HC		1145	596	376	109	834	64.6	KL19240505
WI-19-21	126.00	129.00	3.00	A0795102	HC		1900	1095	593	175	585	88.9	KL19240505
WI-19-21	129.00	131.50	2.50	A0795103	HC		913	469	281	84.1	2870	45.1	KL19240505
WI-19-21	131.50	134.00	2.50	A0795104	HC		436	250	131.5	40.7	3660	18.8	KL19240505
WI-19-21				A0795105	STD	CDN-RE-1203	8220	6610	1655	617	322	166	KL19240505
WI-19-21	134.00	136.50	2.50	A0795106	HC		408	230	119.5	36.1	2820	14.3	KL19240505
WI-19-21	136.50	138.40	1.90	A0795107	HC		340	198	88	30.7	4680	12.1	KL19240505
WI-19-21	138.40	141.00	2.60	A0795108	HC		1740	1035	577	166	1085	85.6	KL19240505
WI-19-21	141.00	144.00	3.00	A0795109	HC		1745	1000	595	170.5	1290	90.9	KL19240505
WI-19-21				A0795110	BLK	Silica Blank	42	27	9.8	3.7	3	1.6	KL19240505
WI-19-21	144.00	147.00	3.00	A0795111	HC		2890	1870	820	254	970	105	KL19240505
WI-19-21	147.00	150.00	3.00	A0795112	HC		620	359	208	58.6	1330	34.2	KL19240505
WI-19-21	150.00	153.00	3.00	A0795113	HC		1230	726	386	114	726	51.5	KL19240505
WI-19-21	153.00	156.00	3.00	A0795114	QC		2120	1225	657	201	879	74.8	KL19240505
WI-19-21				A0795115	Dup	Dup of A0795114	2330	1335	712	219	919	85.6	KL19240505

**Drill Hole Sample Results**

HOLE ID	FROM	TO	INTERVAL	SAMPLE #	TYPE	QA/QC	Ce (ppm)	La (ppm)	Nd (ppm)	Pr (ppm)	Nb (ppm)	Sm (ppm)	CERT#
WI-19-21	156.00	159.00	3.00	A0795116	HC		394	224	130.5	38	1005	18.1	KL19240505
WI-19-21	159.00	162.00	3.00	A0795117	HC		914	529	287	86.1	821	35.8	KL19240505
WI-19-21	162.00	165.00	3.00	A0795118	HC		1665	978	503	157	969	62.6	KL19240505
WI-19-21	165.00	168.00	3.00	A0795119	HC		5220	3160	1480	472	303	152.5	KL19240505
WI-19-21	168.00	171.00	3.00	A0795120	HC		3160	1840	906	285	383	95	KL19240505
WI-19-21	171.00	174.00	3.00	A0795121	HC		2200	1445	630	195	446	80.1	KL19240505
WI-19-21	174.00	177.00	3.00	A0795122	HC		1940	1200	576	173.5	916	72.9	KL19240505
WI-19-21	177.00	179.35	2.35	A0795123	HC		1195	736	357	109.5	1260	49.3	KL19240505
WI-19-22	4.00	7.00	3.00	A0795124	HC		3830	2910	866	301	56	88.3	KL19251631
WI-19-22				A0795125	STD	CDN-RE-1203	7620	6090	1515	560	279	157	KL19251631
WI-19-22	7.00	10.00	3.00	A0795126	HC		10150	7790	2180	777	92	207	KL19251631
WI-19-22	10.00	13.00	3.00	A0795127	HC		13200	10300	2670	988	11	249	KL19251631
WI-19-22	13.00	16.00	3.00	A0795128	HC		11650	9030	2380	874	41	224	KL19251631
WI-19-22	16.00	19.00	3.00	A0795129	HC		15050	11250	3110	1160	39	267	KL19251631
WI-19-22				A0795130	BLK	Silica Blank	18	11	4.2	1.8	1	0.8	KL19251631
WI-19-22	19.00	22.00	3.00	A0795131	HC		19800	14500	4310	1615	68	386	KL19251631
WI-19-22	22.00	25.00	3.00	A0795132	HC		10900	8160	2460	867	32	232	KL19251631
WI-19-22	25.00	28.00	3.00	A0795133	HC		4290	3190	1055	351	136	120.5	KL19251631
WI-19-22	28.00	29.50	1.50	A0795134	QC		4390	2950	1205	379	698	162	KL19251631
WI-19-22				A0795135	Dup	Dup of A0795134	4150	2790	1120	353	766	146	KL19251631
WI-19-22	29.50	32.00	2.50	A0795136	HC		4600	3340	1140	375	89	127	KL19251631
WI-19-22	32.00	34.50	2.50	A0795137	HC		4890	3670	1180	397	63	125	KL19251631
WI-19-22	34.50	37.00	2.50	A0795138	HC		4400	3210	1020	351	50	107	KL19251631
WI-19-22	37.00	40.00	3.00	A0795139	HC		8850	6590	1990	701	46	211	KL19251631
WI-19-22	40.00	43.00	3.00	A0795140	HC		12100	9270	2530	925	6	247	KL19251631
WI-19-22	43.00	46.00	3.00	A0795141	HC		7400	5520	1715	587	17	174	KL19251631
WI-19-22	46.00	49.00	3.00	A0795142	HC		8810	6810	1855	673	18	187	KL19251631
WI-19-22	49.00	52.00	3.00	A0795143	HC		12200	8700	2650	950	124	265	KL19251631
WI-19-22	52.00	55.00	3.00	A0795144	HC		14950	11050	3340	1180	253	343	KL19251631
WI-19-22				A0795145	STD	CDN-RE-1203	7680	6140	1545	571	288	155.5	KL19251631
WI-19-22	55.00	58.00	3.00	A0795146	HC		6060	4580	1260	456	45	119.5	KL19251631
WI-19-22	58.00	61.00	3.00	A0795147	HC		5820	4310	1260	451	49	125	KL19251631
WI-19-22	61.00	64.00	3.00	A0795148	HC		13100	9630	2890	1035	47	283	KL19251631
WI-19-22	64.00	67.00	3.00	A0795149	HC		7640	5580	1740	600	83	174	KL19251631
WI-19-22				A0795150	BLK	Silica Blank	55	38	12	4.8	1	1.4	KL19251631
WI-19-22	67.00	70.00	3.00	A0795151	HC		7190	5300	1630	568	223	171.5	KL19251631
WI-19-22	70.00	73.00	3.00	A0795152	HC		7800	5860	1735	610	504	187.5	KL19251631
WI-19-22	73.00	76.00	3.00	A0795153	HC		10300	7630	2220	792	333	223	KL19251631
WI-19-22	76.00	78.00	2.00	A0795154	QC		11100	8830	2250	833	304	210	KL19251631
WI-19-22				A0795155	Dup	Dup of A0795154	9060	7160	1840	682	173	175	KL19251631
WI-19-22	78.00	80.00	2.00	A0795156	HC		17650	13650	3780	1390	165	363	KL19251631
WI-19-22	80.00	83.00	3.00	A0795157	HC		11050	8460	2430	861	70	223	KL19251631
WI-19-22	83.00	86.00	3.00	A0795158	HC		9760	7550	2130	757	63	223	KL19251631
WI-19-22	86.00	89.00	3.00	A0795159	HC		13900	10900	2950	1060	294	292	KL19251631
WI-19-22	89.00	92.00	3.00	A0795160	HC		19150	14100	4170	1575	88	353	KL19251631
WI-19-22	92.00	94.00	2.00	A0795161	HC		14450	10350	3100	1180	59	275	KL19251631
WI-19-22	94.00	96.00	2.00	A0795162	HC		26100	19050	5560	2290	439	476	KL19251631
WI-19-22	96.00	99.00	3.00	A0795163	HC		15700	11350	3530	1310	415	338	KL19251631
WI-19-22	99.00	102.00	3.00	A0795164	HC		5610	4000	1480	501	522	166	KL19251631
WI-19-22				A0795165	STD	CDN-RE-1203	8020	6310	1610	641	304	160	KL19251631
WI-19-22	102.00	104.00	2.00	A0795166	HC		5340	3960	1285	458	1160	129.5	KL19251631
WI-19-22	104.00	106.00	2.00	A0795167	HC		7920	6120	1595	626	3060	140	KL19251631
WI-19-22	106.00	109.00	3.00	A0795168	HC		16200	12550	3210	1285	200	271	KL19251631
WI-19-22	109.00	111.00	2.00	A0795169	HC		18500	14150	3520	1400	61	277	KL19251631
WI-19-22				A0795170	BLK	Silica Blank	120	95	24.5	10.2	4	1.9	KL19251631
WI-19-22	111.00	113.00	2.00	A0795171	HC		23500	17550	4720	1885	382	381	KL19251631
WI-19-22	113.00	117.00	4.00	A0795172	HC		5550	3970	1390	479	829	152.5	KL19251631
WI-19-22	117.00	120.00	3.00	A0795173	HC		2390	1625	667	213	1405	98.2	KL19251631

**Drill Hole Sample Results**

HOLE ID	FROM	TO	INTERVAL	SAMPLE #	TYPE	QA/QC	Ce (ppm)	La (ppm)	Nd (ppm)	Pr (ppm)	Nb (ppm)	Sm (ppm)	CERT#
WI-19-22	120.00	123.00	3.00	A0795174	QC		10500	7530	2400	870	2770	269	KL19251631
WI-19-22				A0795175	Dup	Dup of A0795174	12600	9340	2890	1055	1840	310	KL19251631
WI-19-22	123.00	127.15	4.15	A0795176	HC		6020	3970	1765	557	1560	272	KL19251631
WI-19-23	0.95	4.00	3.05	A0795177	HC		2610	1825	677	232	147	81.7	KL19251631
WI-19-23	95.00	7.00	-88.00	A0795178	HC		10450	7450	2460	866	439	232	KL19251631
WI-19-23	7.00	10.00	3.00	A0795179	HC		9840	7100	2310	839	465	221	KL19251631
WI-19-23	10.00	13.00	3.00	A0795180	HC		7520	5330	1795	632	145	180.5	KL19251631
WI-19-23	13.00	16.00	3.00	A0795181	HC		6350	4460	1580	539	152	164	KL19251631
WI-19-23	16.00	19.00	3.00	A0795182	HC		2920	2120	796	255	113	89.5	KL19251631
WI-19-23	19.00	22.00	3.00	A0795183	HC		3720	2620	914	323	143	91.2	KL19251631
WI-19-23	22.00	25.00	3.00	A0795184	HC		15100	10700	3670	1260	57	341	KL19251631
WI-19-23				A0795185	STD	CDN-RE-1203	8090	6150	1700	639	307	160	KL19251631
WI-19-23	25.00	28.00	3.00	A0795186	HC		18300	13000	4290	1540	19	381	KL19251631
WI-19-23	28.00	31.00	3.00	A0795187	HC		10650	7520	2620	910	9	253	KL19251631
WI-19-23	31.00	34.00	3.00	A0795188	HC		9710	6850	2400	828	25	220	KL19251631
WI-19-23	34.00	37.00	3.00	A0795189	HC		15300	10950	3260	1235	62	272	KL19251631
WI-19-23				A0795190	BLK	Silica Blank	114	85	25.5	9.8	2	2.4	KL19251631
WI-19-23	37.00	40.00	3.00	A0795191	HC		13100	9480	3090	1090	180	276	KL19251631
WI-19-23	40.00	43.00	3.00	A0795192	HC		18050	13150	4030	1510	58	334	KL19251631
WI-19-23	43.00	46.00	3.00	A0795193	HC		15500	11000	3450	1290	354	307	KL19251631
WI-19-23	46.00	49.00	3.00	A0795194	QC		19450	13700	4370	1580	231	383	KL19251631
WI-19-23				A0795195	Dup	Dup of A0795194	17900	12550	4200	1545	217	367	KL19251631
WI-19-23	49.00	52.00	3.00	A0795196	HC		5770	4370	1420	487	303	162.5	KL19251631
WI-19-23	52.00	55.00	3.00	A0795197	HC		5670	4270	1410	477	234	157.5	KL19251631
WI-19-23	55.00	58.00	3.00	A0795198	HC		19850	15700	4770	1695	214	399	KL19251631
WI-19-23	58.00	61.00	3.00	A0795199	HC		21000	16550	4930	1775	144	385	KL19251631
WI-19-23	61.00	64.00	3.00	A0795200	HC		16100	12600	3670	1405	219	351	KL19251631
WI-19-23	64.00	66.00	2.00	A0795201	HC		8020	5960	1750	639	119	164.5	KL19251631
WI-19-23	66.00	68.00	2.00	A0795202	HC		10600	8050	2450	922	328	251	KL19251631
WI-19-23	68.00	70.00	2.00	A0795203	HC		4220	3080	1045	357	402	111	KL19251631
WI-19-23	70.00	72.25	2.25	A0795204	HC		6030	4700	1440	499	434	158.5	KL19251631
WI-19-23				A0795205	STD	CDN-RE-1203	7750	6400	1615	603	302	161.5	KL19251631
WI-19-23	72.25	75.00	2.75	A0795206	HC		11350	8920	2560	984	294	235	KL19251631
WI-19-23	75.00	78.00	3.00	A0795207	HC		9530	7620	2120	819	214	193.5	KL19251631
WI-19-23	78.00	81.00	3.00	A0795208	HC		14600	11750	3140	1230	114	274	KL19251631
WI-19-23	81.00	84.00	3.00	A0795209	HC		11200	9030	2460	964	135	213	KL19251631
WI-19-23				A0795210	BLK	Silica Blank	198	156	46.4	16.7	3	4.4	KL19251631
WI-19-23	84.00	87.00	3.00	A0795211	HC		13700	10950	3000	1165	329	269	KL19251631
WI-19-23	87.00	90.00	3.00	A0795212	HC		15150	12250	3210	1270	108	269	KL19251631
WI-19-23	90.00	93.00	3.00	A0795213	HC		17950	14500	3930	1530	152	343	KL19251631
WI-19-23	93.00	96.00	3.00	A0795214	QC		14450	11900	3170	1220	231	277	KL19251631
WI-19-23				A0795215	Dup	Dup of A0795214	14500	12150	3140	1220	187	282	KL19251631
WI-19-23	96.00	99.00	3.00	A0795216	HC		15200	12350	3260	1285	253	289	KL19251631
WI-19-23	99.00	102.00	3.00	A0795217	HC		17250	14050	3700	1455	123	317	KL19251631
WI-19-23	102.00	105.00	3.00	A0795218	HC		15600	12700	3430	1335	149	300	KL19251631
WI-19-23	105.00	107.00	2.00	A0795219	HC		19800	15350	4220	1655	404	348	KL19251631
WI-19-23	107.00	109.00	2.00	A0795220	HC		18400	14700	4000	1550	409	341	KL19251631
WI-19-23	109.00	112.00	3.00	A0795221	HC		4190	3300	1010	347	1040	125.5	KL19251631
WI-19-23	112.00	115.00	3.00	A0795222	HC		1350	965	370	116.5	659	64.6	KL19251631
WI-19-23	115.00	118.00	3.00	A0795223	HC		1110	738	312	97.6	631	57.2	KL19251631
WI-19-23	118.00	121.00	3.00	A0795224	HC		1080	709	307	94.2	757	55.7	KL19251631
WI-19-23				A0795225	STD	CDN-RE-1203	7970	6590	1660	615	315	166	KL19251631
WI-19-23	121.00	124.00	3.00	A0795226	HC		596	438	163	52.9	481	25.1	KL19251631
WI-19-23	124.00	126.00	2.00	A0795227	HC		494	348	151	46.2	404	28.2	KL19251631
WI-19-24	2.90	5.00	2.10	A0795229	HC		6600	5010	1595	548	448	177	KL19251631
WI-19-24				A0795230	BLK	Silica Blank	35	25	10	3.1	3	0.9	KL19251631
WI-19-24	5.00	7.00	2.00	A0795231	HC		13700	10650	3150	1205	81	285	KL19251631
WI-19-24	7.00	9.00	2.00	A0795232	HC		13000	9490	3150	1175	160	309	KL19251631

**Drill Hole Sample Results**

HOLE ID	FROM	TO	INTERVAL	SAMPLE #	TYPE	QA/QC	Ce (ppm)	La (ppm)	Nd (ppm)	Pr (ppm)	Nb (ppm)	Sm (ppm)	CERT#
WI-19-24	9.00	11.00	2.00	A0795233	HC		12800	8430	2710	1030	141	260	KL19251631
WI-19-24	11.00	13.00	2.00	A0795234	QC		5950	4180	1430	524	170	139.5	KL19251631
WI-19-24				A0795235	Dup	Dup of A0795234	5830	4020	1350	482	138	140	KL19251631
WI-19-24	13.00	16.00	3.00	A0795236	HC		8120	5590	1770	653	117	176.5	KL19251631
WI-19-24	16.00	19.00	3.00	A0795237	HC		7490	5460	1735	643	110	183.5	KL19251631
WI-19-24	19.00	22.00	3.00	A0795238	HC		16050	10300	3780	1300	127	348	KL19251631
WI-19-24	22.00	25.00	3.00	A0795239	HC		10900	7940	2580	940	475	262	KL19251631
WI-19-24	25.00	28.00	3.00	A0795240	HC		10850	7660	2560	922	180	252	KL19251631
WI-19-24	28.00	31.00	3.00	A0795241	HC		10100	7130	2350	832	113	220	KL19251631
WI-19-24	31.00	34.00	3.00	A0795242	HC		7240	5160	1780	629	208	180.5	KL19251631
WI-19-24	34.00	37.00	3.00	A0795243	HC		4760	3500	1185	403	107	126.5	KL19251631
WI-19-24	37.00	40.00	3.00	A0795244	HC		5370	3690	1285	438	80	150.5	KL19251631
WI-19-24				A0795245	STD	CDN-RE-1203	7800	5920	1570	604	302	154	KL19251631
WI-19-24	40.00	43.00	3.00	A0795246	HC		9920	6920	2350	845	413	255	KL19251631
WI-19-24	43.00	46.00	3.00	A0795247	HC		5350	3710	1360	469	600	177.5	KL19251631
WI-19-24	46.00	49.00	3.00	A0795248	HC		4130	3010	1050	371	156	117.5	KL19251631
WI-19-24	49.00	52.00	3.00	A0795249	HC		7900	5400	1985	681	59	207	KL19251631
WI-19-24				A0795250	BLK	Silica Blank	432	290	105.5	35.2	5	10.8	KL19251631
WI-19-24	52.00	55.00	3.00	A0795251	HC		10300	7060	2390	841	141	235	KL19251631
WI-19-24	55.00	58.00	3.00	A0795252	HC		9810	6850	2540	851	213	249	KL19251631
WI-19-24	58.00	61.00	3.00	A0795253	HC		12950	9270	3230	1105	130	331	KL19251631
WI-19-24	61.00	64.00	3.00	A0795254	QC		13400	9420	3850	1250	80	388	KL19251631
WI-19-24				A0795255	Dup	Dup of A0795254	14650	10150	3840	1325	114	399	KL19251631
WI-19-24	64.00	67.00	3.00	A0795256	HC		17800	12500	4060	1520	275	419	KL19251631
WI-19-24	67.00	70.00	3.00	A0795257	HC		27200	19350	6390	2400	445	622	KL19251631
WI-19-24	70.00	73.00	3.00	A0795258	HC		10700	7210	2510	890	400	241	KL19251631
WI-19-24	73.00	76.00	3.00	A0795259	HC		4150	2930	1090	367	297	118.5	KL19251631
WI-19-24	76.00	79.00	3.00	A0795260	HC		9560	6400	2710	884	136	289	KL19251631
WI-19-24	79.00	81.00	2.00	A0795261	HC		4620	3200	1260	415	117	147	KL19251631
WI-19-24	81.00	83.00	2.00	A0795262	HC		11300	7780	2800	949	218	292	KL19251631
WI-19-24	83.00	86.00	3.00	A0795263	HC		6080	4390	1585	521	633	183	KL19251631
WI-19-24	86.00	89.00	3.00	A0795264	HC		5070	3750	1350	447	708	151.5	KL19251631
WI-19-24				A0795265	STD	CDN-RE-1203	7660	5880	1600	614	304	152	KL19251631
WI-19-24	89.00	92.00	3.00	A0795266	HC		8730	6100	2290	769	250	238	KL19251631
WI-19-24	92.00	95.00	3.00	A0795267	HC		7230	4980	1815	630	593	203	KL19251631
WI-19-24	95.00	98.00	3.00	A0795268	HC		2800	1915	834	267	566	120.5	KL19251631
WI-19-24	98.00	101.00	3.00	A0795269	HC		4740	3570	1250	400	521	161.5	KL19251631
WI-19-24				A0795270	BLK	Silica Blank	35	24	11.1	3.2	3	1.5	KL19251631
WI-19-24	101.00	104.00	3.00	A0795271	HC		1530	1080	402	126	519	53.6	KL19251631
WI-19-24	104.00	107.00	3.00	A0795272	HC		4030	2870	1115	350	678	148	KL19251631
WI-19-24	107.00	110.00	3.00	A0795273	HC		4830	3430	1340	420	592	172	KL19251631
WI-19-24	110.00	113.00	3.00	A0795274	QC		2900	2010	833	261	329	113.5	KL19251631
WI-19-24				A0795275	Dup	Dup of A0795274	3260	2250	935	289	318	129.5	KL19251631
WI-19-24	113.00	116.00	3.00	A0795276	HC		6060	4400	1720	536	862	245	KL19251631
WI-19-24	116.00	118.50	2.50	A0795277	HC		6060	4460	1660	529	993	219	KL19251631
WI-19-24	118.50	120.55	2.05	A0795278	HC		10450	7610	2750	895	298	319	KL19251631
WI-19-24	120.55	122.95	2.40	A0795279	HC		16100	9980	4910	1530	1055	685	KL19251631
WI-19-25	1.10	3.50	2.40	A0795280	HC		23200	17150	4640	1740	76	393	KL19259327
WI-19-25	3.50	6.10	2.60	A0795281	HC		4620	3130	1005	353	183	111	KL19259327
WI-19-25	6.10	9.00	2.90	A0795282	HC		25700	19250	5020	1920	81	411	KL19259327
WI-19-25	9.00	12.00	3.00	A0795283	HC		20400	15750	4010	1525	43	337	KL19259327
WI-19-25	12.00	14.10	2.10	A0795284	HC		18450	13950	3610	1375	27	316	KL19259327
WI-19-25				A0795285	STD	CDN-RE-1203	8430	6810	1580	605	324	154	KL19259327
WI-19-25	14.10	16.15	2.05	A0795286	HC		21300	15550	4440	1640	672	461	KL19259327
WI-19-25	16.15	19.00	2.85	A0795287	HC		12800	9610	2820	997	144	302	KL19259327
WI-19-25	19.00	22.00	3.00	A0795288	HC		10000	7570	2390	818	81	285	KL19259327
WI-19-25	22.00	25.00	3.00	A0795289	HC		10950	8470	2450	860	133	254	KL19259327
WI-19-25				A0795290	BLK	Silica Blank	40	26	9.3	3.7	2	1.5	KL19259327

**Drill Hole Sample Results**

HOLE ID	FROM	TO	INTERVAL	SAMPLE #	TYPE	QA/QC	Ce (ppm)	La (ppm)	Nd (ppm)	Pr (ppm)	Nb (ppm)	Sm (ppm)	CERT#
WI-19-25	25.00	28.00	3.00	A0795291	HC		6960	5090	1555	544	52	177.5	KL19259327
WI-19-25	28.00	31.00	3.00	A0795292	HC		6260	4460	1475	501	261	167	KL19259327
WI-19-25	31.00	34.00	3.00	A0795293	HC		4920	3240	1165	391	59	130	KL19259327
WI-19-25	34.00	37.00	3.00	A0795294	QC		5380	4080	1195	418	334	133	KL19259327
WI-19-25				A0795295	Dup	Dup of A0795294	6270	4690	1385	488	331	158	KL19259327
WI-19-25	37.00	39.55	2.55	A0795296	HC		11000	8200	2370	849	177	241	KL19259327
WI-19-25	39.55	42.00	2.45	A0795297	HC		4340	2910	984	337	43	109	KL19259327
WI-19-25	42.00	44.00	2.00	A0795298	HC		3700	2430	853	287	323	101.5	KL19259327
WI-19-25	44.00	46.10	2.10	A0795299	HC		8450	6090	1855	660	89	191.5	KL19259327
WI-19-25	46.10	49.00	2.90	A0795300	HC		5770	4190	1245	441	568	146	KL19259327
WI-19-25	49.00	51.00	2.00	A0795301	HC		6600	4750	1465	509	406	164.5	KL19259327
WI-19-25	51.00	52.35	1.35	A0795302	HC		11200	8260	2390	860	438	256	KL19259327
WI-19-25	52.35	55.00	2.65	A0795303	HC		5870	4170	1440	476	697	179	KL19259327
WI-19-25	55.00	57.20	2.20	A0795304	HC		10400	7450	2630	855	281	326	KL19259327
WI-19-25				A0795305	STD	CDN-RE-1203	8690	7290	1640	639	348	165.5	KL19259327
WI-19-25	57.20	60.00	2.80	A0795306	HC		1690	962	585	174	13	73.7	KL19259327
WI-19-25	60.00	61.40	1.40	A0795307	HC		10550	7860	2390	821	318	273	KL19259327
WI-19-25	61.40	62.80	1.40	A0795308	HC		16650	10500	4750	1495	71	505	KL19259327
WI-19-25	62.80	65.00	2.20	A0795309	HC		10750	7960	2320	824	426	228	KL19259327
WI-19-25				A0795310	BLK	Silica Blank	37	24	9.7	3.7	1	1.8	KL19259327
WI-19-25	65.00	68.00	3.00	A0795311	HC		11050	7740	2680	898	342	293	KL19259327
WI-19-25	68.00	71.00	3.00	A0795312	HC		16150	11950	3760	1300	553	400	KL19259327
WI-19-25	71.00	74.00	3.00	A0795313	HC		17150	12950	3960	1365	271	430	KL19259327
WI-19-25	74.00	77.00	3.00	A0795314	QC		22300	17200	4790	1720	554	456	KL19259327
WI-19-25				A0795315	Dup	Dup of A0795314	21300	16450	4600	1645	599	432	KL19259327
WI-19-25	77.00	80.00	3.00	A0795316	HC		26200	20100	5620	2020	132	569	KL19259327
WI-19-25	80.00	83.00	3.00	A0795317	HC		10700	8160	2270	811	862	254	KL19259327
WI-19-25	83.00	86.00	3.00	A0795318	HC		5170	3340	1110	387	797	150	KL19259327
WI-19-25	86.00	89.00	3.00	A0795319	HC		8230	5870	1840	643	1035	238	KL19259327
WI-19-25	89.00	92.00	3.00	A0795320	HC		4140	2620	1005	331	828	148.5	KL19259327
WI-19-25	92.00	95.00	3.00	A0795321	HC		8290	6000	1840	644	816	214	KL19259327
WI-19-25	95.00	98.00	3.00	A0795322	HC		10700	7650	2430	857	828	267	KL19259327
WI-19-25	98.00	101.00	3.00	A0795323	HC		3690	2390	922	303	663	133.5	KL19259327
WI-19-25	101.00	104.00	3.00	A0795324	HC		1820	1215	506	163.5	809	80.3	KL19259327
WI-19-25				A0795325	STD	CDN-RE-1203	8700	6940	1600	622	339	170	KL19259327
WI-19-25	104.00	107.00	3.00	A0795326	HC		2040	1415	539	180	496	87.5	KL19259327
WI-19-25	107.00	110.00	3.00	A0795327	HC		4860	3030	1165	395	399	150	KL19259327
WI-19-25	110.00	113.00	3.00	A0795328	HC		4030	2520	1040	342	355	133.5	KL19259327
WI-19-25	113.00	116.00	3.00	A0795329	HC		803	530	234	75.3	538	37.9	KL19259327
WI-19-25				A0795330	BLK	Silica Blank	8	4	4.3	0.9	2	<0.2	KL19259327
WI-19-25	116.00	119.00	3.00	A0795331	HC		417	275	131.5	39	431	25.3	KL19259327
WI-19-25	119.00	122.00	3.00	A0795332	HC		1770	1195	497	157.5	311	76.4	KL19259327
WI-19-25	122.00	125.00	3.00	A0795333	HC		7060	5120	1745	578	155	235	KL19259327
WI-19-25	125.00	126.50	1.50	A0795334	HC		11350	8140	2880	948	180	357	KL19259327
WI-19-25	126.50	129.30	2.80	A0795335	HC		5950	3600	1540	500	531	209	KL19259327
WI-19-25	129.30	132.00	2.70	A0795336	QC		5570	3310	1530	479	482	252	KL19259327
WI-19-25				A0795337	Dup	Dup of A0795336	5650	3340	1550	483	464	250	KL19259327
WI-19-25	132.00	135.00	3.00	A0795338	HC		4280	2640	1115	363	355	154	KL19259327
WI-19-25	135.00	138.00	3.00	A0795339	HC		9470	6530	2350	788	225	279	KL19259327
WI-19-25	138.00	141.00	3.00	A0795340	HC		11950	8130	3170	1030	465	405	KL19259327
WI-19-25	141.00	143.40	2.40	A0795341	HC		8150	4770	2440	760	85	333	KL19259327
WI-19-25	143.40	146.00	2.60	A0795342	HC		814	455	238	76.6	622	29.8	KL19259327
WI-19-25	146.00	149.00	3.00	A0795343	HC		3910	1920	1225	366	459	194.5	KL19259327
WI-19-25	149.00	152.00	3.00	A0795344	HC		3170	1520	941	293	416	131	KL19259327
WI-19-25				A0795345	STD	CDN-RE-1203	8670	6940	1595	615	317	167.5	KL19259327
WI-19-25	152.00	155.00	3.00	A0795346	HC		2230	1120	714	226	298	93.9	KL19259327
WI-19-25	155.00	158.00	3.00	A0795347	HC		337	195	102.5	32.2	85	13.8	KL19259327
WI-19-26	1.80	4.00	2.20	A0795348	HC		5250	3390	1280	433	439	157.5	KL19259327

**Drill Hole Sample Results**

HOLE ID	FROM	TO	INTERVAL	SAMPLE #	TYPE	QA/QC	Ce (ppm)	La (ppm)	Nd (ppm)	Pr (ppm)	Nb (ppm)	Sm (ppm)	CERT#
WI-19-26	4.00	7.00	3.00	A0795349	HC		9050	6820	1975	701	117	208	KL19259327
WI-19-26				A0795350	BLK	Silica Blank	8	4	3.8	0.9	1	<0.2	KL19259327
WI-19-26	7.00	10.00	3.00	A0795351	HC		10700	7730	2420	839	67	258	KL19259327
WI-19-26	10.00	13.00	3.00	A0795352	HC		5910	4670	1390	451	193	154	KL19259327
WI-19-26	13.00	16.00	3.00	A0795353	HC		7070	5570	1595	531	68	155	KL19259327
WI-19-26	16.00	19.00	3.00	A0795354	QC		8310	6630	1790	613	9	185.5	KL19259327
WI-19-26				A0795355	Dup	Dup of A0795354	8220	6540	1795	603	10	185.5	KL19259327
WI-19-26	19.00	22.00	3.00	A0795356	HC		5970	4200	1375	449	839	180	KL19259327
WI-19-26	22.00	25.00	3.00	A0795357	HC		155	112	46.8	14.7	61	7.9	KL19259327
WI-19-26	25.00	28.00	3.00	A0795358	HC		702	504	189.5	59.6	158	25.6	KL19259327
WI-19-26	28.00	30.00	2.00	A0795359	HC		1400	1100	358	117	131	47.2	KL19259327
WI-19-26	30.00	32.00	2.00	A0795360	HC		1600	1195	387	128	138	42.6	KL19259327
WI-19-26	32.00	35.00	3.00	A0795361	HC		9090	7590	1935	660	17	199.5	KL19259327
WI-19-26	35.00	38.00	3.00	A0795362	HC		14650	12450	3180	1080	28	337	KL19259327
WI-19-26	38.00	41.00	3.00	A0795363	HC		17700	15050	3960	1325	82	409	KL19259327
WI-19-26	41.00	44.00	3.00	A0795364	HC		18250	14600	3960	1355	33	347	KL19259327
WI-19-26				A0795365	STD	CDN-RE-1203	8180	6890	1595	567	317	160.5	KL19259327
WI-19-26	44.00	47.00	3.00	A0795366	HC		15050	11950	3320	1130	97	312	KL19259327
WI-19-26	47.00	50.00	3.00	A0795367	HC		23400	18700	5010	1760	56	452	KL19259327
WI-19-26	50.00	53.00	3.00	A0795368	HC		18600	15250	3860	1370	37	351	KL19259327
WI-19-26	53.00	56.00	3.00	A0795369	HC		15350	12500	3190	1125	73	284	KL19259327
WI-19-26				A0795370	BLK	Silica Blank	60	47	14.7	5.3	1	1.4	KL19259327
WI-19-26	56.00	59.00	3.00	A0795371	HC		22900	18350	4770	1685	97	407	KL19259327
WI-19-26	59.00	62.00	3.00	A0795372	HC		13850	11300	2680	972	476	229	KL19259327
WI-19-26	62.00	65.00	3.00	A0795373	HC		19800	16050	3710	1375	190	287	KL19259327
WI-19-26	65.00	68.00	3.00	A0795374	QC		23300	18550	4640	1685	75	384	KL19259327
WI-19-26				A0795375	Dup	Dup of A0795374	23700	19100	4730	1720	75	380	KL19259327
WI-19-26	68.00	71.00	3.00	A0795376	HC		17050	13250	3810	1290	470	373	KL19259327
WI-19-26	71.00	74.00	3.00	A0795377	HC		18400	14400	4070	1385	331	383	KL19259327
WI-19-26	74.00	77.00	3.00	A0795378	HC		11800	9440	2650	890	36	256	KL19259327
WI-19-26	77.00	80.00	3.00	A0795379	HC		13000	10450	2880	980	30	283	KL19259327
WI-19-26	80.00	82.00	2.00	A0795380	HC		3460	2430	815	266	181	85.9	KL19259327
WI-19-26	82.00	83.90	1.90	A0795381	HC		8290	6400	1875	625	385	188.5	KL19259327
WI-19-26	83.90	86.15	2.25	A0795382	HC		6310	4810	1500	481	1260	174.5	KL19259327
WI-19-26	86.15	89.00	2.85	A0795383	HC		12450	10200	2680	924	174	268	KL19259327
WI-19-26	89.00	92.00	3.00	A0795384	HC		9790	7830	2070	718	219	203	KL19259327
WI-19-26				A0795385	STD	CDN-RE-1203	8270	6990	1625	578	328	163.5	KL19259327
WI-19-26	92.00	95.00	3.00	A0795386	HC		8970	7180	1990	677	125	187.5	KL19259327
WI-19-26	95.00	98.00	3.00	A0795387	HC		9410	7490	2190	722	106	216	KL19259327
WI-19-26	98.00	101.00	3.00	A0795388	HC		4820	3490	1100	383	142	111.5	KL19259327
WI-19-26	101.00	104.00	3.00	A0795389	HC		4620	3200	1050	361	286	111.5	KL19259327
WI-19-26				A0795390	BLK	Silica Blank	17	10	4.9	1.6	1	0.7	KL19259327
WI-19-26	104.00	107.00	3.00	A0795391	HC		10850	8460	2430	867	42	244	KL19259327
WI-19-26	107.00	110.00	3.00	A0795392	HC		17650	14200	3750	1380	56	354	KL19259327
WI-19-26	110.00	113.00	3.00	A0795393	HC		13200	10800	2840	1040	134	272	KL19259327
WI-19-26	113.00	116.00	3.00	A0795394	HC		9410	7580	2040	748	59	196	KL19259327
WI-19-26	116.00	119.00	3.00	A0795395	QC		7980	6200	1815	644	94	189	KL19259327
WI-19-26				A0795396	Dup	Dup of A0795395	6650	5180	1530	532	56	153.5	KL19259327
WI-19-26	119.00	122.00	3.00	A0795397	HC		13050	10250	2870	1045	197	270	KL19259327
WI-19-26	122.00	125.00	3.00	A0795398	HC		10300	8260	2260	815	890	228	KL19259327
WI-19-26	125.00	128.00	3.00	A0795399	HC		10400	8510	2010	778	4060	184	KL19259327
WI-19-26	128.00	131.00	3.00	A0795400	HC		4490	3330	871	335	1360	90.7	KL19259327
WI-19-26	131.00	134.00	3.00	A0795401	HC		6440	5080	1365	496	2050	152.5	KL19259327
WI-19-26	134.00	136.60	2.60	A0795402	HC		1850	1300	573	174	1410	106	KL19259327
WI-19-26	136.60	138.20	1.60	A0795403	HC		6700	5210	1480	525	1725	192	KL19259327
WI-19-26	138.20	139.40	1.20	A0795404	HC		2070	1460	618	197.5	10	84.7	KL19259327
WI-19-26				A0795405	STD	CDN-RE-1203	8330	7020	1615	621	333	166.5	KL19259327
WI-19-26	139.40	142.40	3.00	A0795406	HC		4950	3420	1285	415	1275	198.5	KL19259327



**Drill Hole Sample Results**

HOLE ID	FROM	TO	INTERVAL	SAMPLE #	TYPE	QA/QC	Ce (ppm)	La (ppm)	Nd (ppm)	Pr (ppm)	Nb (ppm)	Sm (ppm)	CERT#
WI-19-26	142.40	144.20	1.80	A0795407	HC		4540	3040	1285	395	1140	213	KL19259327
WI-19-26	144.20	147.00	2.80	A0795408	HC		5920	4230	1440	491	850	182	KL19259327
WI-19-26	147.00	150.00	3.00	A0795409	HC		3560	2400	975	311	1100	149	KL19259327
WI-19-26				A0795410	BLK	Silica Blank	13	8	4	1.1	2	0.7	KL19259327
WI-19-26	150.00	153.00	3.00	A0795411	HC		8740	6450	2260	742	1325	297	KL19259327
WI-19-26	153.00	154.00	1.00	A0795412	HC		3770	2410	962	315	874	128.5	KL19259327
WI-19-26	154.00	156.30	2.30	A0795413	HC		1910	1325	595	186	1435	79.3	KL19259327
WI-19-27	2.00	5.00	3.00	A0795414	QC		15950	12450	3550	1275	88	337	KL19259327
WI-19-27				A0795415	Dup	Dup of A0795414	17600	13650	3910	1415	82	382	KL19259327
WI-19-27	5.00	8.00	3.00	A0795416	HC		8660	6910	1895	689	113	182	KL19259327
WI-19-27	8.00	11.00	3.00	A0795417	HC		12100	9370	2750	982	138	281	KL19259327
WI-19-27	11.00	14.00	3.00	A0795418	HC		10450	8150	2270	827	29	226	KL19259327
WI-19-27	14.00	16.00	2.00	A0795419	HC		10400	8480	2140	799	43	200	KL19259327
WI-19-27	16.00	18.00	2.00	A0795420	HC		9140	7370	1965	713	50	188.5	KL19259327
WI-19-27	18.00	21.00	3.00	A0795421	HC		13100	10500	2860	1040	32	278	KL19259327
WI-19-27	21.00	24.00	3.00	A0795422	HC		12050	9640	2670	965	26	254	KL19259327
WI-19-27	24.00	27.00	3.00	A0795423	HC		8510	6750	1860	669	17	186.5	KL19259327
WI-19-27	27.00	30.00	3.00	A0795424	HC		7340	5370	1630	595	35	180	KL19259327
WI-19-27				A0795425	STD	CDN-RE-1203	8240	6660	1520	614	317	161.5	KL19259327
WI-19-27	30.00	33.00	3.00	A0795426	HC		8290	6030	1885	679	20	216	KL19259327
WI-19-27	33.00	36.00	3.00	A0795427	HC		5870	4070	1285	474	3	146	KL19259327
WI-19-27	36.00	39.00	3.00	A0795428	HC		9120	6860	1890	722	3	207	KL19259327
WI-19-27	39.00	42.00	3.00	A0795429	HC		5060	3430	1100	406	86	125	KL19259327
WI-19-27				A0795430	BLK	Silica Blank	13	7	3.9	1.4	1	0.7	KL19259327
WI-19-27	42.00	45.00	3.00	A0795431	HC		7150	5250	1580	584	41	192	KL19259327
WI-19-27	45.00	46.70	1.70	A0795432	HC		4140	2700	935	336	251	100	KL19259327
WI-19-27	46.70	49.60	2.90	A0795433	HC		23100	18600	4080	1705	50	353	KL19259327
WI-19-27	49.60	52.00	2.40	A0795434	QC		10150	7630	2220	826	135	240	KL19259327
WI-19-27				A0795435	Dup	Dup of A0795434	8820	6580	1935	729	127	206	KL19259327
WI-19-27	52.00	54.20	2.20	A0795436	HC		10600	8130	2170	838	72	213	KL19259327
WI-19-27	54.20	55.70	1.50	A0795437	HC		15450	11800	3140	1210	92	299	KL19259327
WI-19-27	55.70	58.00	2.30	A0795438	HC		11700	9150	2390	926	1325	249	KL19259327
WI-19-27	58.00	61.00	3.00	A0795439	HC		7680	5670	1645	620	1070	175	KL19259327
WI-19-27	61.00	63.00	2.00	A0795440	HC		5290	3560	1090	417	533	115	KL19259327
WI-19-27	63.00	65.50	2.50	A0795441	HC		7340	5780	1420	558	481	144	KL19259327
WI-19-27	65.50	68.50	3.00	A0795442	HC		4910	3330	1085	400	354	121	KL19259327
WI-19-27	68.50	71.00	2.50	A0795443	HC		22300	17150	4640	1775	19	486	KL19259327
WI-19-27	71.00	74.00	3.00	A0795444	HC		14950	11800	2960	1165	20	305	KL19259327
WI-19-27				A0795445	STD	CDN-RE-1203	8400	6780	1575	626	321	167	KL19259327
WI-19-27	74.00	77.00	3.00	A0795446	HC		8210	6210	1705	657	7	182.5	KL19259327
WI-19-27	77.00	80.00	3.00	A0795447	HC		7120	5180	1560	575	4	166	KL19259327
WI-19-27	80.00	83.00	3.00	A0795448	HC		4310	2850	918	341	14	98.7	KL19259327
WI-19-27	83.00	86.00	3.00	A0795449	HC		10300	7880	2170	822	103	236	KL19259327
WI-19-27				A0795450	BLK	Silica Blank	19	11	4.6	1.9	1	0.6	KL19259327
WI-19-27	86.00	89.00	3.00	A0795451	HC		16500	12500	3570	1345	2140	380	KL19259327
WI-19-27	89.00	92.00	3.00	A0795452	HC		5970	3860	1390	499	3830	160	KL19259327
WI-19-27	92.00	95.00	3.00	A0795453	HC		11000	8300	2420	886	634	263	KL19259327
WI-19-27	95.00	98.00	3.00	A0795454	QC		13050	9730	3020	1095	40	333	KL19259327
WI-19-27				A0795455	Dup	Dup of A0795454	12150	9150	2810	1020	18	311	KL19259327
WI-19-27	98.00	101.00	3.00	A0795456	HC		9870	7520	2300	826	111	262	KL19259327
WI-19-27	101.00	104.00	3.00	A0795457	HC		8990	6350	2260	779	37	280	KL19259327
WI-19-27	104.00	107.00	3.00	A0795458	HC		10200	7210	2600	898	40	317	KL19259327
WI-19-27	107.00	110.00	3.00	A0795459	HC		6940	4190	1960	635	33	241	KL19259327
WI-19-27	110.00	113.00	3.00	A0795460	HC		22100	16450	5940	1935	93	696	KL19259327
WI-19-27	113.00	116.00	3.00	A0795461	HC		10350	7090	2810	909	71	362	KL19259327
WI-19-27	116.00	118.00	2.00	A0795462	HC		10550	7790	2750	903	295	326	KL19259327
WI-19-27	118.00	120.30	2.30	A0795463	HC		12850	9740	3180	1075	436	373	KL19259327
WI-19-27	120.30	123.00	2.70	A0795464	HC		1760	1235	517	164	574	84.2	KL19259327

**Drill Hole Sample Results**

HOLE ID	FROM	TO	INTERVAL	SAMPLE #	TYPE	QA/QC	Ce (ppm)	La (ppm)	Nd (ppm)	Pr (ppm)	Nb (ppm)	Sm (ppm)	CERT#
WI-19-27				A0795465	STD	CDN-RE-1203	8040	6760	1600	605	328	161.5	KL19259327
WI-19-27	123.00	126.00	3.00	A0795466	HC		1540	940	545	160.5	496	112.5	KL19259327
WI-19-27	126.00	129.00	3.00	A0795467	HC		1230	761	429	123	245	85.2	KL19259327
WI-19-27	129.00	132.00	3.00	A0795468	HC		797	549	235	74.1	139	42.4	KL19259327
WI-19-28	3.15	6.00	2.85	A0795469	HC		7370	5630	1785	611	275	193	KL19260475
WI-19-28				A0795470	BLK	Silica Blank	10	6	3.3	1.2	1	0.5	KL19260475
WI-19-28	6.00	9.00	3.00	A0795471	HC		12450	9750	2780	1000	219	282	KL19260475
WI-19-28	9.00	12.00	3.00	A0795472	HC		5460	3910	1235	438	60	134	KL19260475
WI-19-28	12.00	15.00	3.00	A0795473	HC		1330	975	340	115.5	23	36.1	KL19260475
WI-19-28	15.00	18.00	3.00	A0795474	QC		8710	7090	1735	657	64	173.5	KL19260475
WI-19-28				A0795475	Dup	Dup of A0795474	8650	7180	1715	650	108	165	KL19260475
WI-19-28	18.00	21.00	3.00	A0795476	HC		12450	10150	2580	953	87	236	KL19260475
WI-19-28	21.00	24.00	3.00	A0795477	HC		4240	3110	881	321	44	85.3	KL19260475
WI-19-28	24.00	26.70	2.70	A0795478	HC		11200	8830	2490	899	103	251	KL19260475
WI-19-28	26.70	29.00	2.30	A0795479	HC		316	221	75.9	25.7	48	10.4	KL19260475
WI-19-28	29.00	32.00	3.00	A0795480	HC		6900	5420	1535	548	129	154	KL19260475
WI-19-28	32.00	35.00	3.00	A0795481	HC		13500	10650	3090	1105	31	310	KL19260475
WI-19-28	35.00	38.00	3.00	A0795482	HC		12650	9740	2820	1015	35	296	KL19260475
WI-19-28	38.00	41.00	3.00	A0795483	HC		10050	7990	2250	810	34	221	KL19260475
WI-19-28	41.00	44.00	3.00	A0795484	HC		10900	8560	2490	886	110	248	KL19260475
WI-19-28				A0795485	STD	CDN-RE-1203	8390	7030	1650	628	344	173	KL19260475
WI-19-28	44.00	47.00	3.00	A0795486	HC		10650	8370	2460	865	362	266	KL19260475
WI-19-28	47.00	50.00	3.00	A0795487	HC		12600	9920	2710	1000	50	249	KL19260475
WI-19-28	50.00	53.00	3.00	A0795488	HC		13350	10050	3270	1120	469	347	KL19260475
WI-19-28	53.00	56.00	3.00	A0795489	HC		6100	4250	1495	511	390	169	KL19260475
WI-19-28				A0795490	BLK	Silica Blank	40	28	11.5	3.7	2	1.9	KL19260475
WI-19-28	56.00	59.00	3.00	A0795491	HC		6770	5270	1575	547	286	174.5	KL19260475
WI-19-28	59.00	62.00	3.00	A0795492	HC		12600	9880	2800	1010	337	277	KL19260475
WI-19-28	62.00	65.00	3.00	A0795493	HC		23900	17750	5790	2040	381	521	KL19260475
WI-19-28	65.00	68.00	3.00	A0795494	HC		13800	10250	3150	1175	297	306	KL19260475
WI-19-28	68.00	71.00	3.00	A0795495	QC		6390	4640	1590	527	221	174	KL19260475
WI-19-28				A0795496	Dup	Dup of A0795495	7280	5310	1810	600	225	199.5	KL19260475
WI-19-28	71.00	72.60	1.60	A0795497	HC		16500	12000	3940	1425	362	399	KL19260475
WI-19-28	72.60	75.60	3.00	A0795498	HC		2060	1530	535	164.5	1190	116	KL19260475
WI-19-28	75.60	78.60	3.00	A0795499	HC		1340	860	362	111	837	61.6	KL19260475
WI-19-28	78.60	81.60	3.00	A0795500	HC		599	395	163	52.5	307	29.8	KL19260475
WI-19-29	62.15	65.15	3.00	A0797501	HC		694	404	234	67.8	217	45.8	KL19260475
WI-19-29	65.15	68.15	3.00	A0797502	HC		730	382	265	74.9	266	56.1	KL19260475
WI-19-29	68.15	71.00	2.85	A0797503	HC		1310	658	420	122.5	387	68.5	KL19260475
WI-19-29	71.00	73.00	2.00	A0797504	HC		3480	2380	922	294	242	109	KL19260475
WI-19-29				A0797505	STD	CDN-RE-1203	7890	6260	1585	584	296	161.5	KL19260475
WI-19-29	73.00	76.00	3.00	A0797506	HC		24700	18150	6490	2140	160	616	KL19260475
WI-19-29	76.00	79.00	3.00	A0797507	HC		23500	17250	6000	2050	42	613	KL19260475
WI-19-29	79.00	82.00	3.00	A0797508	HC		12150	8800	3010	1020	35	309	KL19260475
WI-19-29	82.00	85.00	3.00	A0797509	HC		12000	8630	3060	1025	43	324	KL19260475
WI-19-29				A0797510	BLK	Silica Blank	40	26	11	3.5	1	1.6	KL19260475
WI-19-29	85.00	88.00	3.00	A0797511	HC		10350	7500	2620	866	23	277	KL19260475
WI-19-29	88.00	91.00	3.00	A0797512	HC		12300	8830	3200	1085	139	340	KL19260475
WI-19-29	91.00	94.00	3.00	A0797513	HC		9370	6810	2420	782	680	265	KL19260475
WI-19-29	94.00	97.00	3.00	A0797514	HC		18500	13800	4440	1585	425	442	KL19260475
WI-19-29	97.00	100.00	3.00	A0797515	HC		9720	7180	2420	798	108	257	KL19260475
WI-19-29	100.00	103.00	3.00	A0797516	QC		9810	7120	2520	822	331	268	KL19260475
WI-19-29				A0797517	Dup	Dup of A0797516	10750	7730	2760	900	382	295	KL19260475
WI-19-29	103.00	106.00	3.00	A0797518	HC		11300	8240	2770	931	142	283	KL19260475
WI-19-29	106.00	109.00	3.00	A0797519	HC		15400	11000	3990	1375	292	419	KL19260475
WI-19-29	109.00	112.00	3.00	A0797520	HC		14900	10600	3860	1335	158	416	KL19260475
WI-19-29	112.00	115.00	3.00	A0797521	HC		5610	3520	1700	513	296	217	KL19260475
WI-19-29	115.00	118.00	3.00	A0797522	HC		4040	2520	1320	385	157	179	KL19260475

**Drill Hole Sample Results**

HOLE ID	FROM	TO	INTERVAL	SAMPLE #	TYPE	QA/QC	Ce (ppm)	La (ppm)	Nd (ppm)	Pr (ppm)	Nb (ppm)	Sm (ppm)	CERT#
WI-19-29	118.00	121.00	3.00	A0797523	HC		7510	5260	2020	638	271	230	KL19260475
WI-19-29	121.00	124.00	3.00	A0797524	HC		18000	14200	3880	1475	46	362	KL19260475
WI-19-29				A0797525	STD	CDN-RE-1203	7930	6300	1600	591	309	164.5	KL19260475
WI-19-29	124.00	127.00	3.00	A0797526	HC		12550	9430	2910	1035	29	283	KL19260475
WI-19-29	127.00	130.00	3.00	A0797527	HC		19800	15300	4750	1695	76	483	KL19260475
WI-19-29	130.00	133.00	3.00	A0797528	HC		12550	9750	2830	1045	490	282	KL19260475
WI-19-29	133.00	136.00	3.00	A0797529	HC		10850	8520	2410	879	218	239	KL19260475
WI-19-29				A0797530	BLK	Silica Blank	39	28	9.9	3.4	2	1	KL19260475
WI-19-29	136.00	139.00	3.00	A0797531	HC		14150	11400	3000	1140	142	301	KL19260475
WI-19-29	139.00	142.00	3.00	A0797532	HC		9880	7770	2220	808	8	228	KL19260475
WI-19-29	142.00	145.00	3.00	A0797533	HC		11700	9000	2690	968	123	276	KL19260475
WI-19-29	145.00	148.00	3.00	A0797534	QC		7790	5510	2110	701	680	253	KL19260475
WI-19-29				A0797535	Dup	Dup of A0797534	7560	5410	2060	680	579	245	KL19260475
WI-19-29	148.00	151.00	3.00	A0797536	HC		10300	7850	2300	843	137	225	KL19260475
WI-19-29	151.00	153.10	2.10	A0797537	HC		6150	4620	1445	514	373	147	KL19260475
WI-19-29	153.10	156.10	3.00	A0797538	HC		7200	5450	1670	599	1360	175.5	KL19260475
WI-19-29	156.10	159.10	3.00	A0797539	HC		8700	6550	1940	711	942	201	KL19260475
WI-19-29	159.10	162.00	2.90	A0797540	HC		15350	11650	3550	1345	292	367	KL19260475
WI-19-29	162.00	165.00	3.00	A0797541	HC		5710	4390	1340	472	418	147	KL19260475
WI-19-29	165.00	168.00	3.00	A0797542	HC		7120	5460	1685	596	261	173.5	KL19260475
WI-19-29	168.00	171.00	3.00	A0797543	HC		3930	2950	974	334	1045	115.5	KL19260475
WI-19-29	171.00	174.00	3.00	A0797544	HC		5100	3920	1180	422	>5000	136.5	KL19260475
WI-19-29				A0797545	STD	CDN-RE-1203	7950	6550	1580	611	313	167.5	KL19260475
WI-19-29	174.00	177.00	3.00	A0797546	HC		4080	3180	952	336	2960	113.5	KL19260475
WI-19-29	177.00	184.05	7.05	A0797547	HC		9180	7280	2030	742	2550	220	KL19260475
WI-19-30	30.30	33.30	3.00	A0797548	HC		533	374	150	49	141	28.1	KL19260475
WI-19-30	33.30	35.70	2.40	A0797549	HC		1670	858	612	173.5	874	112	KL19260475
WI-19-30				A0797550	BLK	Silica Blank	12	7	3.7	1.2	3	0.5	KL19260475
WI-19-30	35.70	38.70	3.00	A0797551	HC		1640	822	618	172	197	112.5	KL19260475
WI-19-30	38.70	41.70	3.00	A0797552	HC		1460	762	532	148	466	100	KL19260475
WI-19-30	41.70	44.30	2.60	A0797553	HC		2500	1405	899	255	201	166	KL19260475
WI-19-30	44.30	47.00	2.70	A0797554	QC		4780	3200	1480	451	452	257	KL19260475
WI-19-30				A0797555	Dup	Dup of A0797554	4290	2880	1360	409	392	236	KL19260475
WI-19-30	47.00	50.00	3.00	A0797556	HC		15950	11600	4090	1480	52	446	KL19260475
WI-19-30	50.00	53.00	3.00	A0797557	HC		27900	20600	7220	2510	74	720	KL19260475
WI-19-30	53.00	56.00	3.00	A0797558	HC		23700	17650	5660	2120	95	586	KL19260475
WI-19-30	56.00	59.00	3.00	A0797559	HC		19850	14750	4700	1765	31	496	KL19260475
WI-19-30	59.00	62.00	3.00	A0797560	HC		12750	9820	2890	1050	14	287	KL19260475
WI-19-30	62.00	65.00	3.00	A0797561	HC		6090	4550	1445	508	7	156.5	KL19260475
WI-19-30	65.00	68.00	3.00	A0797562	HC		15150	11600	3460	1315	21	352	KL19260475
WI-19-30	68.00	71.00	3.00	A0797563	HC		28700	22600	6620	2440	44	594	KL19260475
WI-19-30	71.00	74.00	3.00	A0797564	HC		11700	9050	2570	950	34	256	KL19260475
WI-19-30				A0797565	STD	CDN-RE-1203	7800	6330	1535	595	301	162.5	KL19260475
WI-19-30	74.00	77.00	3.00	A0797566	HC		8080	6180	1920	680	35	207	KL19260475
WI-19-30	77.00	80.00	3.00	A0797567	HC		5570	4210	1345	471	24	147	KL19260475
WI-19-30	80.00	83.00	3.00	A0797568	HC		4810	3590	1165	403	4	123.5	KL19260475
WI-19-30	83.00	86.00	3.00	A0797569	HC		9960	7510	2340	831	15	233	KL19260475
WI-19-30				A0797570	BLK	Silica Blank	42	30	10.7	3.7	1	1.5	KL19260475
WI-19-30	86.00	89.00	3.00	A0797571	HC		10400	7830	2420	870	14	247	KL19260475
WI-19-30	89.00	92.00	3.00	A0797572	HC		10050	7470	2410	842	37	264	KL19260475
WI-19-30	92.00	95.00	3.00	A0797573	HC		14950	11550	3440	1315	61	359	KL19260475
WI-19-30	95.00	98.00	3.00	A0797574	QC		12250	9270	2900	1020	18	300	KL19260475
WI-19-30				A0797575	Dup	Dup of A0797574	13700	10350	3240	1150	19	335	KL19260475
WI-19-30	98.00	101.00	3.00	A0797576	HC		16900	12450	4210	1540	34	441	KL19260475
WI-19-30	101.00	104.00	3.00	A0797577	HC		7190	5360	1720	609	16	189	KL19260475
WI-19-30	104.00	107.00	3.00	A0797578	HC		7790	5780	1880	661	8	201	KL19260475
WI-19-30	107.00	110.00	3.00	A0797579	HC		8920	6620	2090	748	34	216	KL19260475
WI-19-30	110.00	113.00	3.00	A0797580	HC		9160	6790	2170	775	22	226	KL19260475

**Drill Hole Sample Results**

HOLE ID	FROM	TO	INTERVAL	SAMPLE #	TYPE	QA/QC	Ce (ppm)	La (ppm)	Nd (ppm)	Pr (ppm)	Nb (ppm)	Sm (ppm)	CERT#
WI-19-30	113.00	116.00	3.00	A0797581	HC		5050	3760	1190	425	11	125	KL19260475
WI-19-30	116.00	119.00	3.00	A0797582	HC		5410	4050	1250	453	19	126	KL19260475
WI-19-30	119.00	121.00	2.00	A0797583	HC		7620	5760	1720	625	13	175	KL19260475
WI-19-30	121.00	123.40	2.40	A0797584	HC		8460	6220	2010	716	5	212	KL19260475
WI-19-30				A0797585	STD	CDN-RE-1203	8040	6580	1590	615	312	166.5	KL19260475
WI-19-30	123.40	126.10	2.70	A0797586	HC		18350	12400	4990	1745	32	592	KL19260475
WI-19-30	126.10	129.00	2.90	A0797587	HC		14150	9950	3750	1345	67	410	KL19260475
WI-19-30	129.00	132.00	3.00	A0797588	HC		7430	5440	1760	631	447	184.5	KL19260475
WI-19-30	132.00	135.00	3.00	A0797589	HC		5770	3970	1585	522	932	203	KL19260475
WI-19-30				A0797590	BLK	Silica Blank	29	19	8.6	2.5	2	1	KL19260475
WI-19-30	135.00	138.00	3.00	A0797591	HC		7940	5690	2100	705	866	258	KL19260475
WI-19-30	138.00	141.00	3.00	A0797592	HC		6370	4470	1640	556	1285	185.5	KL19260475
WI-19-30	141.00	144.00	3.00	A0797593	HC		5440	3800	1430	484	593	169	KL19260475
WI-19-30	144.00	147.00	3.00	A0797594	QC		5080	3650	1370	450	783	179	KL19260475
WI-19-30				A0797595	Dup	Dup of A0797594	4520	3140	1250	409	699	161	KL19260475
WI-19-30	147.00	150.00	3.00	A0797596	HC		13000	9570	3070	1100	712	339	KL19260475
WI-19-30	150.00	153.00	3.00	A0797597	HC		6200	4300	1670	555	936	217	KL19260475
WI-19-30	153.00	156.00	3.00	A0797598	HC		6020	4190	1665	543	801	207	KL19260475
WI-19-30	156.00	157.10	1.10	A0797599	HC		15700	10350	4540	1560	180	492	KL19260475
WI-19-30	157.10	160.00	2.90	A0797600	HC		4150	2870	1145	378	865	137	KL19260475
WI-19-30	160.00	163.00	3.00	A0797601	HC		6150	4270	1620	555	683	196	KL19260475
WI-19-30	163.00	166.00	3.00	A0797602	HC		2560	1750	760	241	995	117	KL19260475
WI-19-30	166.00	169.00	3.00	A0797603	HC		3180	2210	810	284	1150	92.8	KL19260475
WI-19-30	169.00	172.00	3.00	A0797604	HC		4860	3450	1310	438	1260	161.5	KL19260475
WI-19-30				A0797605	STD	CDN-RE-1203	7650	6240	1565	605	311	162	KL19260475
WI-19-30	172.00	175.00	3.00	A0797606	HC		13200	8580	3850	1330	169	462	KL19260475
WI-19-30	175.00	177.80	2.80	A0797607	HC		18550	13100	4980	1785	320	581	KL19260475
WI-19-30	177.80	179.50	1.70	A0797608	HC		9370	6680	2470	842	1100	329	KL19260475
WI-19-31	49.65	52.65	3.00	A0797609	HC		773	445	291	82.4	719	62.5	KL19264778
WI-19-31				A0797610	BLK	Silica Blank	5	<3	2.2	0.8	2	0.3	KL19264778
WI-19-31	52.65	55.65	3.00	A0797611	HC		745	417	305	82.2	753	65.7	KL19264778
WI-19-31	55.65	58.00	2.35	A0797612	HC		18650	13950	4560	1725	145	467	KL19264778
WI-19-31	58.00	61.00	3.00	A0797613	HC		21400	16050	5200	1985	69	523	KL19264778
WI-19-31	61.00	64.00	3.00	A0797614	QC		12200	9150	2960	1095	55	300	KL19264778
WI-19-31				A0797615	Dup	Dup of A0797614	15550	11650	3810	1445	108	377	KL19264778
WI-19-31	64.00	67.00	3.00	A0797616	HC		29000	21500	7820	2700	52	724	KL19264778
WI-19-31	67.00	70.00	3.00	A0797617	HC		21100	15800	5260	1935	60	544	KL19264778
WI-19-31	70.00	73.00	3.00	A0797618	HC		17550	12650	4360	1645	56	465	KL19264778
WI-19-31	73.00	76.00	3.00	A0797619	HC		19850	14600	4820	1820	49	493	KL19264778
WI-19-31	76.00	79.00	3.00	A0797620	HC		22400	16800	5470	2040	32	583	KL19264778
WI-19-31	79.00	82.00	3.00	A0797621	HC		21400	16000	5460	2010	97	625	KL19264778
WI-19-31	82.00	85.00	3.00	A0797622	HC		8080	5420	2280	751	320	280	KL19264778
WI-19-31	85.00	88.00	3.00	A0797623	HC		10400	7380	2670	927	281	281	KL19264778
WI-19-31	88.00	91.00	3.00	A0797624	HC		33300	26600	7860	2880	46	683	KL19264778
WI-19-31				A0797625	STD	CDN-RE-1203	8310	6970	1625	647	336	163	KL19264778
WI-19-31	91.00	94.00	3.00	A0797626	HC		25400	19950	5760	2220	46	524	KL19264778
WI-19-31	94.00	97.00	3.00	A0797627	HC		33500	26700	8410	2980	80	736	KL19264778
WI-19-31	97.00	100.00	3.00	A0797628	HC		10750	8490	2490	909	13	237	KL19264778
WI-19-31	100.00	103.00	3.00	A0797629	HC		7990	6230	1825	672	17	174	KL19264778
WI-19-31				A0797630	BLK	Silica Blank	136	104	33	11.7	1	3.6	KL19264778
WI-19-31	103.00	106.00	3.00	A0797631	HC		18350	14700	3990	1610	41	371	KL19264778
WI-19-31	106.00	109.00	3.00	A0797632	HC		9340	7190	2080	781	32	196	KL19264778
WI-19-31	109.00	111.00	2.00	A0797633	HC		22800	18400	5110	1995	29	493	KL19264778
WI-19-31	111.00	114.00	3.00	A0797634	QC		2650	2070	609	223	7	70.9	KL19264778
WI-19-31				A0797635	Dup	Dup of A0797634	2440	1930	568	204	6	63.4	KL19264778
WI-19-31	114.00	117.00	3.00	A0797636	HC		2940	2320	679	246	15	68.1	KL19264778
WI-19-31	117.00	120.00	3.00	A0797637	HC		25800	20900	6220	2260	29	551	KL19264778
WI-19-31	120.00	123.00	3.00	A0797638	HC		32400	26500	7960	2840	37	698	KL19264778

**Drill Hole Sample Results**

HOLE ID	FROM	TO	INTERVAL	SAMPLE #	TYPE	QA/QC	Ce (ppm)	La (ppm)	Nd (ppm)	Pr (ppm)	Nb (ppm)	Sm (ppm)	CERT#
WI-19-31	123.00	126.00	3.00	A0797639	HC		17050	13900	3850	1500	36	368	KL19264778
WI-19-31	126.00	129.00	3.00	A0797640	HC		14550	11650	3190	1260	58	288	KL19264778
WI-19-31	129.00	132.00	3.00	A0797641	HC		7310	5910	1635	609	13	159.5	KL19264778
WI-19-31	132.00	134.00	2.00	A0797642	HC		20200	15300	5040	1865	97	503	KL19264778
WI-19-31	134.00	136.00	2.00	A0797643	HC		5400	3620	1535	507	69	179.5	KL19264778
WI-19-31	136.00	138.50	2.50	A0797644	HC		22900	16200	6660	2230	48	622	KL19264778
WI-19-31				A0797645	STD	CDN-RE-1203	8370	7510	1570	665	328	155.5	KL19264778
WI-19-31	43.65	46.65	3.00	A0797646	HC		570	387	182.5	60.4	252	37.7	KL19264778
WI-19-31	46.65	49.65	3.00	A0797647	HC		528	306	246	65.9	833	66.1	KL19264778
WI-19-32	65.00	68.00	3.00	A0797648	HC		957	668	267	94	273	38.9	KL19264778
WI-19-32	68.00	71.00	3.00	A0797649	HC		588	381	178	63.8	408	27.9	KL19264778
WI-19-32				A0797650	BLK	Silica Blank	16	10	5.2	1.8	3	0.6	KL19264778
WI-19-32	71.00	74.00	3.00	A0797651	HC		788	531	225	79.5	430	29.9	KL19264778
WI-19-32	74.00	77.00	3.00	A0797652	HC		1260	775	473	149.5	392	105	KL19264778
WI-19-32	77.00	80.00	3.00	A0797653	HC		1050	625	442	126	500	117	KL19264778
WI-19-32	80.00	83.00	3.00	A0797654	QC		1360	814	569	161	507	131.5	KL19264778
WI-19-32				A0797655	Dup	Dup of A0797654	1420	839	612	169	530	143.5	KL19264778
WI-19-32	83.00	86.00	3.00	A0797656	HC		935	571	384	108.5	453	98.8	KL19264778
WI-19-32	86.00	89.00	3.00	A0797657	HC		6100	4890	1520	548	550	214	KL19264778
WI-19-32	89.00	92.00	3.00	A0797658	HC		23800	19700	5450	2110	86	566	KL19264778
WI-19-32	92.00	95.00	3.00	A0797659	HC		19250	15700	4440	1720	40	464	KL19264778
WI-19-32	95.00	98.00	3.00	A0797660	HC		11150	9120	2540	981	22	272	KL19264778
WI-19-32	98.00	101.00	3.00	A0797661	HC		6250	5230	1490	557	71	161	KL19264778
WI-19-32	101.00	103.30	2.30	A0797662	HC		337	245	100.5	34.6	19	14.5	KL19264778
WI-19-32	103.30	104.50	1.20	A0797663	HC		13000	10200	3270	1195	12	392	KL19264778
WI-19-32	104.50	107.00	2.50	A0797664	HC		606	412	170	59.5	36	25.2	KL19264778
WI-19-32				A0797665	STD	CDN-RE-1203	8280	7470	1560	668	335	159	KL19264778
WI-19-32	107.00	110.00	3.00	A0797666	HC		8420	6580	2190	789	53	247	KL19264778
WI-19-32	110.00	112.00	2.00	A0797667	HC		3480	2470	889	317	17	111	KL19264778
WI-19-32	112.00	114.00	2.00	A0797668	HC		25000	19750	6340	2290	98	705	KL19264778
WI-19-32	114.00	117.00	3.00	A0797669	HC		1890	1370	571	193.5	53	69.1	KL19264778
WI-19-32				A0797670	BLK	Silica Blank	151	116	39.5	15.1	2	4.9	KL19264778
WI-19-32	117.00	119.60	2.60	A0797671	HC		1410	960	460	153.5	37	57.3	KL19264778
WI-19-32	119.60	121.00	1.40	A0797672	HC		3170	2090	860	304	90	105.5	KL19264778
WI-19-32	121.00	124.00	3.00	A0797673	HC		1390	930	454	149	137	66.3	KL19264778
WI-19-32	124.00	127.00	3.00	A0797674	QC		3600	2310	968	344	75	108	KL19264778
WI-19-32				A0797675	Dup	Dup of A0797674	3870	2490	1050	369	77	123	KL19264778
WI-19-32	127.00	130.00	3.00	A0797676	HC		3620	2540	980	338	252	131	KL19264778
WI-19-32	130.00	133.00	3.00	A0797677	HC		3810	2750	987	349	34	124	KL19264778
WI-19-32	133.00	136.00	3.00	A0797678	HC		4250	3120	1130	395	25	151.5	KL19264778
WI-19-32	136.00	139.00	3.00	A0797679	HC		5190	4300	1290	474	4	157.5	KL19264778
WI-19-32	139.00	142.00	3.00	A0797680	HC		2590	1775	654	232	5	82.1	KL19264778
WI-19-32	142.00	145.00	3.00	A0797681	HC		7480	4680	2210	702	37	279	KL19264778
WI-19-32	145.00	148.00	3.00	A0797682	HC		17500	11600	4910	1695	146	705	KL19264778
WI-19-32	148.00	151.00	3.00	A0797683	HC		5280	3790	1305	447	36	156.5	KL19264778
WI-19-32	151.00	154.00	3.00	A0797684	HC		22200	17650	4710	1855	337	529	KL19264778
WI-19-32				A0797685	STD	CDN-RE-1203	8090	6420	1480	601	293	161	KL19264778
WI-19-32	154.00	157.00	3.00	A0797686	HC		12250	9810	2740	931	161	293	KL19264778
WI-19-32	157.00	160.00	3.00	A0797687	HC		13850	11550	2660	1100	110	282	KL19264778
WI-19-32	160.00	163.00	3.00	A0797688	HC		21300	16600	4370	1755	402	454	KL19264778
WI-19-32	163.00	166.00	3.00	A0797689	HC		8200	6160	1695	645	101	175	KL19264778
WI-19-32				A0797690	BLK	Silica Blank	175	132	37	14.2	4	4.2	KL19264778
WI-19-32	166.00	169.00	3.00	A0797691	HC		19450	14650	4250	1680	1070	473	KL19264778
WI-19-32	169.00	172.00	3.00	A0797692	HC		22400	18150	4520	1815	492	492	KL19264778
WI-19-32	172.00	175.00	3.00	A0797693	HC		12100	9560	2550	969	303	289	KL19264778
WI-19-32	175.00	178.00	3.00	A0797694	QC		13550	11450	2580	1030	310	281	KL19264778
WI-19-32				A0797695	Dup	Dup of A0797694	26900	21900	5380	2170	493	606	KL19264778
WI-19-32	178.00	181.00	3.00	A0797696	HC		14050	10800	3010	1190	267	343	KL19264778

**Drill Hole Sample Results**

HOLE ID	FROM	TO	INTERVAL	SAMPLE #	TYPE	QA/QC	Ce (ppm)	La (ppm)	Nd (ppm)	Pr (ppm)	Nb (ppm)	Sm (ppm)	CERT#
WI-19-32	181.00	183.90	2.90	A0797697	HC		11200	8550	2240	868	88	228	KL19264778
WI-19-32	183.90	185.90	2.00	A0797698	HC		20600	15700	4070	1675	108	392	KL19264778
WI-19-32	185.90	188.10	2.20	A0797699	HC		4990	3670	1055	398	751	118.5	KL19264778
WI-19-32	188.10	191.00	2.90	A0797700	HC		11950	8820	2520	996	402	263	KL19264778
WI-19-32	191.00	194.00	3.00	A0797701	HC		15400	11600	3180	1285	141	326	KL19264778
WI-19-32	194.00	197.00	3.00	A0797702	HC		12600	9660	2470	1010	271	245	KL19264778
WI-19-32	197.00	200.00	3.00	A0797703	HC		24500	19150	4660	1960	222	438	KL19264778
WI-19-32	200.00	203.00	3.00	A0797704	HC		29700	22700	6490	2450	418	600	KL19264778
WI-19-32				A0797705	STD	CDN-RE-1203	8190	6540	1515	611	305	164	KL19264778
WI-19-32	203.00	206.00	3.00	A0797706	HC		20000	15400	4040	1655	320	385	KL19264778
WI-19-32	206.00	209.00	3.00	A0797707	HC		15450	11300	3490	1330	401	451	KL19264778
WI-19-32	209.00	212.00	3.00	A0797708	HC		8580	6100	2020	706	1295	294	KL19264778
WI-19-32	212.00	215.00	3.00	A0797709	HC		10200	7230	2420	851	151	287	KL19264778
WI-19-32				A0797710	BLK	Silica Blank	215	169	48.7	17.2	6	5.9	KL19264778
WI-19-32	215.00	217.00	2.00	A0797711	HC		9410	7020	2310	783	327	352	KL19264778
WI-19-32	217.00	219.00	2.00	A0797712	HC		1775	1160	452	151	917	79	KL19264778
WI-19-32	219.00	220.60	1.60	A0797713	HC		3840	2480	1010	341	113	132	KL19264778
WI-19-32				A0797714	BLK	Silica Blank	28	19	7.7	2.6	4	1	KL19264778
WI-19-32	220.60	222.70	2.10	A0797715	HC		7390	5510	1835	621	1310	251	KL19264778
WI-19-32	222.70	224.70	2.00	A0797716	QC		1595	1015	421	138	1550	66.4	KL19264778
WI-19-32				A0797717	Dup	Dup of A0797716	2110	1425	572	176.5	1370	83.2	KL19264778



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**CERTIFICATE KL19240505**

Project: Wicheeda

This report is for 124 Drill Core samples submitted to our lab in Kamloops, BC, Canada on 25-SEP-2019.

The following have access to data associated with this certificate:

KRIS RAFFLE	MOE SMAIL
-------------	-----------

SAMPLE PREPARATION	
ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
PUL-QC	Pulverizing QC Test
LOG-21	Sample logging - ClientBarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize up to 250g 85% <75 um
LOG-23	Pulp Login - Rcvd with Barcode
CRU-QC	Crushing QC Test

ANALYTICAL PROCEDURES		
ALS CODE	DESCRIPTION	INSTRUMENT
ME-MS81h	High grade REE by fusion/ICPMS	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:**   
 Saa Traxler, General Manager, North Vancouver





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**CERTIFICATE OF ANALYSIS KL19240505**

Sample Description	Method	WEI-21	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h
	Analyte	Recvd Wt.	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nb	Nd	Pr	Rb	Sm
	Units	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	LOD	0.02	3	0.3	0.2	0.2	0.3	1	0.05	3	0.05	1	0.5	0.2	1	0.2
A0795001		6.40	19700	40.5	5.0	79.7	176.5	<1	3.25	14900	0.17	16	4060	1565	1	376
A0795002		6.52	21500	47.5	6.8	77.7	162.0	<1	4.61	16400	0.31	45	4400	1695	1	379
A0795003		4.56	19500	43.7	6.4	79.8	155.0	<1	4.44	14300	0.37	91	4090	1565	4	367
A0795004		4.02	35600	59.9	9.3	133.5	254	<1	5.89	27100	0.37	63	7350	2990	4	634
A0795005		0.07	8380	35.8	10.1	39.6	92.9	1	4.36	6650	0.68	330	1640	636	53	166.5
A0795006		4.52	18950	51.6	8.8	93.6	174.0	<1	5.47	13450	0.44	44	4150	1550	1	405
A0795007		4.13	24500	62.6	8.8	109.0	207	<1	5.99	17900	0.36	49	5120	1965	2	466
A0795008		4.74	22500	55.5	8.8	99.4	200	<1	5.81	17100	0.21	59	4750	1810	6	432
A0795009		4.87	26200	58.3	8.3	110.5	221	<1	5.96	19650	0.29	37	5560	2110	5	495
A0795010		0.16	110	0.6	0.4	0.5	1.2	2	0.13	78	<0.05	1	24.8	8.8	1	1.7
A0795011		4.65	24800	59.2	8.9	108.5	213	<1	5.84	17700	0.34	40	5300	2000	1	483
A0795012		4.91	12950	37.0	6.3	60.6	126.0	<1	3.77	9210	0.26	37	3020	1095	1	289
A0795013		4.16	27100	60.5	8.2	113.5	236	<1	5.28	19750	0.32	26	6000	2230	1	555
A0795014		2.12	17200	80.7	17.9	119.5	231	<1	9.45	12100	0.58	87	4050	1450	6	463
A0795015		2.03	17050	75.0	15.4	107.0	221	<1	8.79	12000	0.66	81	4120	1460	6	456
A0795016		5.03	19350	51.3	9.3	91.2	191.0	<1	5.65	13700	0.45	45	4270	1605	3	430
A0795017		6.05	25200	60.3	8.8	113.5	245	<1	5.81	18600	0.33	85	5730	2090	1	544
A0795018		6.38	14400	43.0	6.6	72.1	164.5	<1	3.91	10250	0.30	87	3460	1240	3	360
A0795019		6.39	14850	90.8	21.8	135.5	266	<1	10.40	9440	0.96	206	4180	1380	5	525
A0795020		6.05	4930	19.0	3.2	31.9	71.6	<1	1.97	3560	0.22	325	1230	424	29	142.0
A0795021		5.80	3140	9.2	1.3	21.0	48.4	<1	0.78	2170	0.13	16	829	279	1	101.0
A0795022		6.48	4930	11.3	2.1	22.1	49.8	<1	1.18	3690	0.08	19	1110	406	1	112.0
A0795023		6.00	8490	18.3	2.3	41.2	90.1	<1	1.51	6350	0.09	15	1910	703	1	196.0
A0795024		5.82	11650	22.5	2.4	51.3	113.0	<1	2.00	8960	0.15	28	2590	947	1	255
A0795025		0.07	8200	37.0	10.2	39.5	88.3	1	4.90	6590	0.65	319	1635	633	46	165.0
A0795026		2.88	15750	30.5	3.5	67.1	139.0	<1	2.52	12200	0.14	34	3330	1250	3	309
A0795027		6.65	1320	20.4	7.6	12.8	35.3	3	3.34	766	0.61	562	392	126.5	125	55.6
A0795028		5.84	2940	21.9	5.9	24.2	56.0	1	2.92	1690	0.21	605	814	277	119	101.0
A0795029		5.69	1390	20.0	6.3	14.8	35.6	2	2.78	756	0.46	611	411	135.0	163	53.3
A0795030		0.17	15	0.6	0.4	<0.2	0.5	1	0.08	7	<0.05	2	4.3	1.5	2	0.9
A0795031		3.53	1545	24.9	9.9	18.2	46.7	1	3.51	813	0.50	803	481	153.0	167	67.1
A0795032		4.01	1060	12.1	2.9	13.4	29.2	<1	1.65	587	0.09	589	314	102.5	143	45.4
A0795033		6.15	1215	16.8	4.7	11.7	33.0	2	2.42	640	0.41	752	328	105.0	181	44.0
A0795034		1.70	5010	23.1	5.2	29.2	80.7	1	2.85	2880	0.38	870	1255	429	91	140.0
A0795035		1.84	4990	23.5	4.9	30.7	87.6	1	2.99	2880	0.33	1020	1320	437	92	151.5
A0795036		6.22	1995	18.3	4.5	18.4	46.8	2	2.69	1140	0.35	832	573	179.5	66	75.6
A0795037		6.25	1065	18.8	5.4	15.9	43.1	<1	2.62	561	0.23	694	343	98.4	118	55.3
A0795038		5.80	1165	12.9	3.3	14.2	37.6	2	1.87	619	0.20	749	358	107.5	121	55.5
A0795039		5.94	873	14.7	5.5	11.8	31.8	3	2.16	456	0.43	535	283	81.4	179	44.4
A0795040		5.28	1465	26.6	10.6	17.8	51.5	2	4.43	709	0.68	750	472	138.0	175	72.5



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**CERTIFICATE OF ANALYSIS KL19240505**

Sample Description	Method Analyte Units LOD	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	
		Sn	Ta	Tb	Th	Tm	U	W	Y	Yb	Zr
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		5	0.5	0.05	0.3	0.05	0.3	5	3	0.2	10
A0795001		<5	<0.5	13.70	638	0.39	1.1	<5	84	1.9	30
A0795002		<5	<0.5	14.20	665	0.65	1.8	<5	98	2.2	<10
A0795003		<5	0.7	13.15	590	0.60	1.2	<5	95	2.3	20
A0795004		<5	0.7	20.2	1180	0.65	1.8	<5	134	2.2	10
A0795005		<5	1.2	8.87	262	1.08	2.4	<5	109	5.2	100
A0795006		<5	<0.5	15.55	630	0.73	1.1	<5	108	3.0	20
A0795007		<5	<0.5	18.35	622	0.76	0.9	<5	127	2.8	30
A0795008		<5	<0.5	17.30	744	0.83	1.2	<5	125	3.1	30
A0795009		<5	<0.5	17.85	905	0.62	0.9	<5	128	2.5	50
A0795010		<5	<0.5	0.12	6.9	<0.05	0.5	<5	3	0.2	50
A0795011		<5	<0.5	18.20	664	0.82	0.9	<5	119	2.9	20
A0795012		<5	<0.5	11.85	435	0.58	0.8	<5	81	2.5	20
A0795013		<5	<0.5	18.75	1020	0.81	1.7	<5	124	2.9	30
A0795014		<5	<0.5	21.9	574	1.66	1.6	<5	193	6.7	80
A0795015		<5	<0.5	19.55	657	1.24	1.3	<5	171	5.4	40
A0795016		<5	0.5	15.85	838	0.60	2.2	<5	104	3.8	<10
A0795017		<5	0.8	19.15	1140	0.69	2.3	<5	122	3.3	<10
A0795018		<5	0.6	13.65	773	0.53	1.5	<5	85	2.2	20
A0795019		<5	0.9	24.8	1205	2.02	3.1	<5	240	9.6	20
A0795020		<5	3.1	6.11	341	0.34	2.9	<5	36	1.4	30
A0795021		<5	<0.5	3.35	185.5	0.12	0.4	<5	20	0.6	40
A0795022		<5	<0.5	3.81	202	0.14	0.4	<5	24	0.9	10
A0795023		<5	<0.5	7.30	366	0.17	0.7	<5	37	0.8	30
A0795024		<5	<0.5	8.58	486	0.22	1.3	<5	41	1.0	10
A0795025		<5	1.3	9.51	259	0.98	2.4	<5	106	5.4	30
A0795026		<5	0.6	10.80	595	0.25	1.3	<5	51	1.0	20
A0795027		<5	17.4	4.40	138.5	0.89	11.2	9	81	5.2	260
A0795028		<5	9.9	5.44	189.5	0.59	9.7	<5	69	3.0	90
A0795029		<5	13.1	4.31	120.5	0.76	21.7	<5	78	3.3	130
A0795030		<5	<0.5	0.05	1.8	<0.05	0.4	<5	3	0.3	70
A0795031		<5	13.8	5.35	153.5	0.91	21.9	<5	102	4.8	150
A0795032		<5	8.9	3.09	68.0	0.27	6.8	<5	37	1.3	60
A0795033		<5	12.6	3.64	123.0	0.55	43.5	<5	59	3.3	160
A0795034		<5	10.1	6.72	289	0.53	28.7	<5	66	2.6	80
A0795035		<5	10.9	7.30	327	0.55	27.9	5	68	2.6	90
A0795036		<5	14.7	4.61	150.0	0.45	27.7	<5	52	2.6	140
A0795037		<5	12.5	4.53	102.5	0.48	9.9	<5	63	2.2	10
A0795038		<5	11.8	3.60	111.0	0.35	13.0	<5	41	1.5	170
A0795039		<5	12.6	3.36	80.9	0.59	8.2	<5	57	3.4	200
A0795040		<5	15.6	5.74	139.5	1.16	14.0	<5	120	6.6	200



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**CERTIFICATE OF ANALYSIS KL19240505**

Sample Description	Method	WEI-21	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h
	Analyte	Recvd Wt.	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nb	Nd	Pr	Rb	Sm
Units		kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
LOD		0.02	3	0.3	0.2	0.2	0.3	1	0.05	3	0.05	1	0.5	0.2	1	0.2
A0795041		5.29	1315	23.5	7.7	17.3	48.1	1	3.50	672	0.41	857	428	126.0	146	66.5
A0795042		2.38	1870	24.8	6.4	24.2	68.6	<1	3.25	961	0.35	626	658	184.5	152	105.0
A0795043		5.20	773	15.8	5.6	10.8	30.8	4	2.52	430	0.55	1225	253	75.2	164	41.2
A0795044		4.57	1015	21.7	6.3	17.0	48.9	1	3.17	473	0.29	1770	367	100.0	149	65.0
A0795045		0.06	8110	35.0	9.6	37.9	95.6	1	4.73	6400	0.78	317	1580	591	52	164.5
A0795046		5.66	2620	37.1	11.2	32.7	87.6	1	5.43	1465	0.58	595	869	249	70	133.5
A0795047		6.34	2000	40.1	12.3	25.6	73.0	3	5.81	1175	0.67	1135	638	186.5	100	98.8
A0795048		4.90	4130	39.0	11.3	40.6	98.9	<1	5.35	2610	0.53	577	1250	376	92	166.0
A0795049		5.94	1725	49.8	16.9	28.5	81.4	<1	8.18	988	0.81	802	575	162.5	80	98.6
A0795050		0.17	12	0.4	0.3	<0.2	0.6	2	0.09	8	0.07	4	4.6	1.3	2	0.8
A0795051		6.29	1090	70.9	26.0	27.3	93.6	<1	12.05	544	1.00	893	421	109.0	110	87.1
A0795052		4.68	786	60.1	23.3	22.0	72.7	<1	10.05	410	1.05	845	320	85.4	156	70.2
A0795053		1.85	661	45.0	16.8	17.6	59.1	<1	7.69	342	0.64	738	276	71.8	130	57.9
A0795054		3.01	8570	26.1	4.2	50.2	114.0	<1	2.62	6110	0.15	28	1970	681	1	219
A0795055		2.94	8980	25.7	4.1	49.2	111.5	<1	2.80	6370	0.23	41	2030	708	1	221
A0795056		5.36	8130	22.2	3.5	43.6	106.5	<1	2.27	5630	0.26	32	1945	664	1	213
A0795057		4.10	13350	26.8	4.1	60.8	149.0	<1	2.55	9430	0.20	24	3200	1150	1	327
A0795058		4.18	10750	21.0	3.4	48.4	114.0	<1	2.16	7870	0.17	16	2520	921	<1	258
A0795059		5.68	8650	21.8	3.7	39.1	94.7	<1	2.34	6170	0.26	66	1950	681	1	196.0
A0795060		5.13	9810	24.4	3.8	46.2	107.0	<1	2.49	6740	0.23	301	2190	795	31	226
A0795061		6.19	3090	11.0	2.0	18.6	37.8	<1	1.22	2240	0.09	814	733	248	103	77.3
A0795062		5.78	5700	14.6	2.5	28.1	66.7	<1	1.68	4130	0.22	98	1310	453	2	132.5
A0795063		6.51	9270	30.0	5.3	46.9	122.0	<1	3.25	6850	0.20	139	2190	738	10	233
A0795064		6.15	17950	48.3	7.4	87.0	234	<1	5.02	12750	0.33	72	4540	1570	1	479
A0795065		0.06	8360	35.4	10.0	38.2	99.4	1	4.80	6590	0.68	318	1645	609	53	169.5
A0795066		4.75	21100	52.5	7.9	94.7	258	<1	5.60	15200	0.33	43	5560	1835	5	529
A0795067		4.37	11100	26.7	3.9	50.7	138.5	<1	2.78	7990	0.17	12	2800	987	2	300
A0795068		5.26	14600	35.8	5.5	64.7	168.5	<1	3.47	10450	0.25	30	3490	1255	9	361
A0795069		5.62	12400	35.6	5.3	65.0	145.5	<1	3.83	8830	0.25	60	2960	1075	5	327
A0795070		0.17	123	0.6	0.3	0.7	1.8	1	0.09	89	0.05	1	32.6	10.7	2	3.4
A0795071		5.23	16450	40.8	5.5	84.5	192.5	<1	3.98	11900	0.27	42	3990	1415	1	433
A0795072		6.13	8200	19.9	2.6	42.9	93.5	<1	1.81	5980	0.18	3	2040	672	1	222
A0795073		6.07	11900	26.0	3.3	58.0	127.5	<1	2.34	8770	0.18	1	2870	1025	<1	307
A0795074		3.00	12300	26.9	3.4	61.6	137.0	<1	2.58	9000	0.14	6	3010	1080	1	323
A0795075		2.86	13600	30.7	3.6	66.6	151.0	<1	2.73	9940	0.21	6	3360	1190	1	363
A0795076		6.08	23700	54.0	7.6	110.5	242	<1	5.47	17100	0.36	122	6210	2050	7	588
A0795077		3.58	14350	31.9	4.7	63.8	140.5	<1	3.05	10700	0.20	75	3300	1210	5	335
A0795078		7.51	9680	21.2	2.8	43.2	94.4	<1	2.08	7150	0.18	268	2120	799	18	221
A0795079		6.08	15350	30.1	4.0	67.5	148.5	<1	2.77	11250	0.19	59	3520	1310	3	353
A0795080		6.50	10050	30.5	7.6	46.9	107.0	<1	3.69	7400	0.60	189	2350	849	15	247



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 Account: TTB

Project: Wicheeda

**CERTIFICATE OF ANALYSIS KL19240505**

Sample Description	Method Analyte Units LOD	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	
		Sn	Ta	Tb	Th	Tm	U	W	Y	Yb	Zr
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		5	0.5	0.05	0.3	0.05	0.3	5	3	0.2	10
A0795041		<5	15.5	5.21	124.0	0.70	13.1	<5	91	3.8	60
A0795042		<5	11.5	6.47	195.0	0.67	9.1	<5	78	3.0	20
A0795043		<5	22.9	3.31	115.5	0.70	28.8	17	64	4.2	380
A0795044		<5	26.8	5.04	142.0	0.57	40.4	6	73	2.5	80
A0795045		<5	1.4	9.22	239	1.01	2.3	<5	107	5.2	70
A0795046		<5	10.0	9.18	254	1.16	16.1	<5	131	5.7	80
A0795047		<5	16.9	8.48	240	1.33	34.6	<5	138	6.2	160
A0795048		<5	9.8	9.50	270	1.02	11.1	<5	126	4.7	10
A0795049		<5	12.7	10.35	217	1.59	14.4	<5	194	7.1	50
A0795050		<5	<0.5	0.10	2.3	0.06	0.5	<5	3	0.3	70
A0795051		<5	13.3	13.35	235	2.40	16.5	<5	295	10.7	<10
A0795052		<5	12.4	10.75	179.0	2.35	13.6	<5	259	9.4	20
A0795053		<5	12.2	8.71	132.5	1.58	14.7	<5	194	6.9	<10
A0795054		<5	<0.5	9.02	241	0.32	0.6	<5	52	1.5	20
A0795055		<5	<0.5	9.04	243	0.42	0.5	<5	52	1.7	10
A0795056		<5	<0.5	8.09	257	0.29	0.7	<5	45	1.7	20
A0795057		<5	0.5	9.96	440	0.28	1.1	<5	52	1.4	<10
A0795058		<5	0.5	8.07	311	0.28	1.0	<5	43	1.4	<10
A0795059		<5	0.7	7.28	243	0.33	1.2	<5	48	1.3	30
A0795060		<5	3.6	8.51	240	0.30	4.0	<5	49	1.6	<10
A0795061		<5	8.9	3.33	78.2	0.17	8.3	<5	26	0.8	<10
A0795062		<5	1.6	4.96	189.0	0.28	1.6	<5	37	1.4	<10
A0795063		<5	1.9	9.39	341	0.50	1.9	<5	64	1.7	20
A0795064		<5	1.0	17.35	660	0.63	1.2	<5	98	3.0	<10
A0795065		<5	1.8	9.38	250	0.92	2.4	<5	107	5.8	10
A0795066		<5	0.8	18.75	938	0.62	1.7	<5	109	2.6	20
A0795067		<5	<0.5	10.05	474	0.27	0.9	<5	58	1.5	30
A0795068		<5	<0.5	12.45	770	0.39	2.0	<5	69	1.5	50
A0795069		<5	<0.5	12.50	508	0.41	1.4	<5	68	1.8	10
A0795070		<5	<0.5	0.16	6.6	<0.05	<0.3	<5	3	0.3	30
A0795071		<5	<0.5	15.15	733	0.45	3.5	<5	81	2.3	<10
A0795072		<5	<0.5	7.26	344	0.20	3.2	<5	37	1.1	20
A0795073		<5	<0.5	9.75	551	0.28	1.0	<5	51	1.0	10
A0795074		<5	<0.5	10.35	570	0.29	0.3	<5	50	1.3	<10
A0795075		<5	<0.5	11.50	667	0.28	0.5	<5	56	1.5	<10
A0795076		<5	1.1	19.00	904	0.59	1.7	<5	102	2.6	10
A0795077		<5	1.0	11.50	504	0.38	4.0	<5	63	1.3	10
A0795078		<5	2.7	7.55	314	0.24	2.3	<5	39	1.2	<10
A0795079		<5	0.5	11.25	570	0.28	1.2	<5	57	1.4	10
A0795080		<5	1.6	9.26	447	0.83	1.6	<5	74	4.9	10



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**CERTIFICATE OF ANALYSIS KL19240505**

Sample Description	Method	WEI-21	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h
	Analyte	Recvd Wt.	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nb	Nd	Pr	Rb	Sm
	Units	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	LOD	0.02	3	0.3	0.2	0.2	0.3	1	0.05	3	0.05	1	0.5	0.2	1	0.2
A0795081		6.81	5960	63.9	20.0	61.3	155.5	<1	9.04	3490	1.72	101	2030	576	6	287
A0795082		6.62	12550	31.4	3.5	68.3	157.5	<1	2.73	8940	0.24	33	3130	1090	3	367
A0795083		7.29	12750	26.3	2.7	63.5	138.0	<1	2.19	9340	0.09	132	3040	1105	7	320
A0795084		7.28	13700	25.7	3.0	57.9	119.5	<1	2.34	10500	0.12	194	2880	1115	8	283
A0795085		0.07	8080	34.4	8.8	37.6	87.9	1	4.65	6440	0.70	315	1590	593	50	164.0
A0795086		6.13	10700	22.9	3.6	42.8	89.4	<1	2.29	7980	0.17	184	2260	871	5	211
A0795087		5.25	15450	41.4	7.9	58.6	131.0	<1	4.78	11600	0.24	147	3380	1285	2	315
A0795088		6.53	8750	21.4	3.3	40.5	80.1	<1	2.20	6460	0.14	14	1945	691	<1	188.5
A0795089		7.31	13300	38.0	6.6	60.5	122.5	<1	4.15	9730	0.30	489	2860	1100	18	282
A0795090		0.18	38	0.5	0.3	0.2	0.7	1	0.13	27	0.06	1	10.0	3.3	2	1.3
A0795091		7.16	22600	42.4	5.9	87.4	171.0	<1	4.29	17100	0.22	68	4860	1800	3	418
A0795092		7.31	18000	39.0	6.1	78.5	152.0	<1	4.14	13600	0.27	73	3690	1445	1	348
A0795093		6.71	16900	42.9	8.2	68.0	138.5	<1	5.28	12650	0.40	285	3510	1375	13	336
A0795094		3.26	27100	47.6	7.2	96.2	189.0	<1	4.86	20800	0.33	798	5950	2130	11	482
A0795095		3.02	27200	46.7	7.1	97.2	189.5	<1	4.58	21100	0.27	877	5870	2140	10	487
A0795096		7.51	17800	27.9	3.6	66.1	136.5	<1	2.65	13600	0.12	453	3750	1430	4	354
A0795097		4.48	29000	38.1	4.6	94.5	190.0	<1	3.50	23100	0.15	251	6150	2240	1	504
A0795098		6.36	5410	16.4	3.1	28.5	59.9	<1	1.79	3930	0.18	664	1275	432	76	137.5
A0795099		6.62	7340	22.5	3.9	46.4	103.5	<1	2.34	4430	0.18	420	2120	661	50	250
A0795100		5.69	4290	15.1	2.9	26.8	55.0	<1	1.77	2630	0.20	265	1155	371	58	131.5
A0795101		6.28	1145	38.8	14.2	17.6	51.0	1	6.33	596	0.91	834	376	109.0	25	64.6
A0795102		6.85	1900	27.8	8.6	21.4	54.3	1	4.14	1095	0.50	585	593	175.0	42	88.9
A0795103		5.84	913	16.1	6.7	11.8	29.3	14	2.96	469	0.64	2870	281	84.1	34	45.1
A0795104		7.10	436	10.1	6.0	5.0	12.9	45	2.18	250	1.06	3660	131.5	40.7	86	18.8
A0795105		0.07	8220	36.4	9.3	39.3	96.0	1	4.55	6610	0.68	322	1655	617	49	166.0
A0795106		4.86	408	8.3	4.8	4.3	11.0	47	1.56	230	0.86	2820	119.5	36.1	98	14.3
A0795107		4.86	340	7.2	4.8	3.1	8.3	66	1.41	198	1.15	4680	88.0	30.7	31	12.1
A0795108		4.85	1740	32.3	9.8	22.0	61.1	<1	4.68	1035	0.49	1085	577	166.0	141	85.6
A0795109		3.30	1745	30.4	8.4	21.8	59.1	1	4.26	1000	0.56	1290	595	170.5	124	90.9
A0795110		0.16	42	0.6	0.5	0.3	0.8	2	0.12	27	<0.05	3	9.8	3.7	2	1.6
A0795111		5.33	2890	29.4	8.0	26.1	69.9	<1	4.38	1870	0.44	970	820	254	110	105.0
A0795112		6.15	620	20.0	6.1	9.5	30.4	2	2.78	359	0.21	1330	208	58.6	157	34.2
A0795113		5.64	1230	16.4	4.8	14.5	32.0	1	2.30	726	0.26	726	386	114.0	170	51.5
A0795114		2.94	2120	12.7	3.6	15.6	37.8	2	1.60	1225	0.31	879	657	201	143	74.8
A0795115		2.76	2330	13.2	3.5	18.3	40.6	2	1.73	1335	0.29	919	712	219	144	85.6
A0795116		5.65	394	8.9	3.1	5.4	13.7	3	1.24	224	0.19	1005	130.5	38.0	162	18.1
A0795117		6.23	914	9.0	3.0	9.0	20.1	1	1.20	529	0.33	821	287	86.1	139	35.8
A0795118		4.65	1665	12.9	4.3	14.0	31.6	3	1.91	978	0.37	969	503	157.0	138	62.6
A0795119		4.18	5220	18.8	4.7	29.4	70.3	<1	2.16	3160	0.23	303	1480	472	53	152.5
A0795120		4.61	3160	15.1	4.5	17.2	42.3	<1	1.82	1840	0.29	383	906	285	107	95.0



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Sample Description	Method Analyte Units LOD	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	
		Sn	Ta	Tb	Th	Tm	U	W	Y	Yb	Zr
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		5	0.5	0.05	0.3	0.05	0.3	5	3	0.2	10
A0795081		<5	<0.5	16.00	543	2.24	2.1	<5	208	12.0	20
A0795082		<5	<0.5	11.95	814	0.24	3.0	<5	56	1.0	80
A0795083		<5	1.1	10.65	547	0.23	1.9	<5	45	1.0	<10
A0795084		<5	1.8	9.75	434	0.21	3.9	<5	44	0.9	20
A0795085		5	1.4	9.29	241	0.97	2.0	<5	103	5.0	70
A0795086		<5	1.2	7.75	329	0.26	2.5	<5	48	1.2	20
A0795087		<5	0.9	12.35	498	0.60	2.6	<5	90	2.6	<10
A0795088		<5	<0.5	7.27	294	0.25	0.3	<5	43	1.3	<10
A0795089		<5	2.4	11.60	467	0.54	4.5	<5	85	2.2	<10
A0795090		<5	<0.5	0.11	2.2	<0.05	<0.3	<5	3	0.4	90
A0795091		<5	<0.5	14.25	812	0.47	1.8	<5	88	1.9	40
A0795092		<5	0.5	13.25	524	0.52	1.0	<5	87	2.1	40
A0795093		<5	2.5	12.95	573	0.68	4.3	<5	100	2.7	70
A0795094		<5	3.3	15.80	855	0.51	8.1	<5	105	2.1	40
A0795095		<5	3.0	15.75	823	0.53	7.9	<5	101	2.2	30
A0795096		<5	1.2	10.65	629	0.25	2.1	<5	56	1.0	10
A0795097		<5	<0.5	14.65	908	0.32	1.1	<5	80	1.5	<10
A0795098		<5	9.2	5.42	234	0.27	12.8	40	37	1.3	20
A0795099		<5	6.8	8.27	418	0.31	9.5	<5	53	1.4	10
A0795100		<5	5.2	4.81	222	0.33	7.3	<5	40	1.6	50
A0795101		<5	9.8	7.42	153.0	1.64	15.5	5	167	8.0	50
A0795102		<5	6.2	6.29	167.5	0.90	11.9	<5	104	4.8	80
A0795103		<5	17.1	3.64	110.5	0.74	42.3	7	81	4.3	1420
A0795104		13	32.0	1.94	75.3	0.84	51.5	<5	54	6.0	5070
A0795105		<5	1.3	9.25	265	0.96	2.5	<5	110	4.7	70
A0795106		13	28.9	1.65	73.4	0.75	52.2	5	45	5.8	3830
A0795107		20	37.2	1.21	79.3	0.82	69.0	9	42	7.1	5260
A0795108		<5	14.2	7.17	175.0	1.01	29.6	<5	110	4.5	20
A0795109		<5	15.6	6.74	204	0.80	35.9	<5	103	4.4	30
A0795110		<5	<0.5	0.09	3.9	<0.05	0.4	<5	3	0.4	70
A0795111		<5	12.0	7.28	263	0.85	22.6	<5	102	3.8	70
A0795112		<5	18.2	4.19	93.4	0.58	34.1	7	71	2.9	250
A0795113		<5	9.7	3.65	92.3	0.62	17.7	<5	57	2.4	70
A0795114		<5	10.9	3.20	198.0	0.31	22.7	<5	39	1.8	200
A0795115		<5	11.5	3.52	202	0.41	24.9	<5	42	2.0	240
A0795116		<5	12.4	1.71	74.0	0.36	33.2	<5	36	2.1	270
A0795117		<5	12.3	2.20	90.2	0.41	24.2	<5	33	2.1	160
A0795118		<5	12.3	2.95	108.0	0.47	34.6	<5	48	2.6	190
A0795119		<5	10.7	5.25	306	0.45	6.6	<5	59	3.2	50
A0795120		<5	4.9	3.45	258	0.47	6.0	<5	46	2.7	50



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Sample Description	Method Analyte Units LOD	WEI-21	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	
		Recvd Wt. kg	Ce ppm	Dy ppm	Er ppm	Eu ppm	Gd ppm	Hf ppm	Ho ppm	La ppm	Lu ppm	Nb ppm	Nd ppm	Pr ppm	Rb ppm	Sm ppm
		0.02	3	0.3	0.2	0.2	0.3	1	0.05	3	0.05	1	0.5	0.2	1	0.2
A0795121		5.46	2200	25.7	10.7	19.5	51.0	<1	4.26	1445	0.86	446	630	195.0	50	80.1
A0795122		5.83	1940	23.4	9.0	18.9	44.4	2	3.57	1200	0.65	916	576	173.5	117	72.9
A0795123		5.13	1195	26.1	8.9	14.9	39.4	5	3.87	736	0.51	1260	357	109.5	118	49.3
A0795228		5.73	17750	39.6	4.9	75.6	166.5	1	3.30	13200	0.20	28	3790	1375	1	351





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Sample Description	Method Analyte Units LOD	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	
		Sn ppm 5	Ta ppm 0.5	Tb ppm 0.05	Th ppm 0.3	Tm ppm 0.05	U ppm 0.3	W ppm 5	Y ppm 3	Yb ppm 0.2	Zr ppm 10
A0795121		<5	4.8	5.59	201	1.18	7.9	<5	114	6.5	60
A0795122		<5	10.0	5.01	164.0	0.93	27.3	<5	90	5.6	140
A0795123		<5	13.3	5.37	129.0	0.89	33.1	<5	102	6.2	430
A0795228		<5	<0.5	13.60	618	0.41	0.9	<5	75	1.9	20



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**CERTIFICATE OF ANALYSIS KL19240505**

**CERTIFICATE COMMENTS**

**LABORATORY ADDRESSES**

Applies to Method:	Processed at ALS Kamloops located at 2953 Shuswap Drive, Kamloops, BC, Canada.			
	CRU-31	CRU-QC	LOG-21	LOG-23
	PUL-31	PUL-QC	SPL-21	WEI-21
Applies to Method:	Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.			
	ME-MS81h			



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**QC CERTIFICATE KL19240505**

Project: Wicheeda

This report is for 124 Drill Core samples submitted to our lab in Kamloops, BC, Canada on 25-SEP-2019.

The following have access to data associated with this certificate:

KRIS RAFFLE	MOE SMAIL	
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SAMPLE PREPARATION	
ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
PUL-QC	Pulverizing QC Test
LOG-21	Sample logging - ClientBarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize up to 250g 85% <75 um
LOG-23	Pulp Login - Rcvd with Barcode
CRU-QC	Crushing QC Test

ANALYTICAL PROCEDURES		
ALS CODE	DESCRIPTION	INSTRUMENT
ME-MS81h	High grade REE by fusion/ICPMS	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:**   
 Saa Traxler, General Manager, North Vancouver



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 Finalized Date: 23-OCT-2019  
 Account: TTB

Project: Wicheeda

**QC CERTIFICATE OF ANALYSIS KL19240505**

Sample Description	Method Analyte Units LOD	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	
		Ce ppm	Dy ppm	Er ppm	Eu ppm	Gd ppm	Hf ppm	Ho ppm	La ppm	Lu ppm	Nb ppm	Nd ppm	Pr ppm	Rb ppm	Sm ppm	Sn ppm
		3	0.3	0.2	0.2	0.3	1	0.05	3	0.05	1	0.5	0.2	1	0.2	5
<b>STANDARDS</b>																
AMIS0185		41700	27.1	5.1	86.5	141.5	2	2.82	29400	0.27	115	9180	3700	5	561	<5
AMIS0185		40300	26.5	4.8	88.6	139.0	1	2.98	28500	0.27	112	9500	3360	5	544	<5
Target Range - Lower Bound		37900	24.9	4.3	83.9	126.5	<1	2.68	27700	0.15	105	8590	3230	3	517	<5
Upper Bound		43700	29.3	5.3	96.9	146.0	3	3.20	31900	0.36	123	9890	3710	7	595	11
OREAS 146		4790	214	83.7	122.5	365	4	35.2	2530	6.07	398	2160	526	27	443	44
OREAS 146		4870	224	84.3	124.0	362	4	34.6	2540	6.57	398	2290	554	26	459	43
Target Range - Lower Bound		4360	208	80.7	118.0	334	2	34.2	2330	5.81	360	2030	509	25	410	35
Upper Bound		5020	240	93.3	136.0	384	6	39.4	2690	6.79	416	2330	587	31	472	57
OREAS-101b		1375	29.7	18.1	7.4	36.8	10	5.92	739	2.42	61	372	120.0	190	49.2	10
OREAS-101b		1360	31.6	19.1	7.8	36.3	10	6.25	779	2.40	59	390	125.0	182	50.7	9
Target Range - Lower Bound		1235	24.8	17.2	7.0	37.8		5.85	731	2.35		351	118.0		44.4	
Upper Bound		1425	29.2	20.2	8.5	44.2		6.83	847	2.81		405	136.0		51.6	
SY-4		126	18.6	13.8	1.7	13.4	11	4.04	58	1.96	13	59.2	15.1	51	12.2	6
SY-4		121	17.7	14.0	1.8	14.5	12	4.20	57	2.09	14	57.2	14.1	54	13.3	8
Target Range - Lower Bound		110	16.6	13.0	1.6	12.7	9	3.95	51	1.90	11	52.5	13.8	50	11.6	<5
Upper Bound		134	19.8	15.4	2.4	15.3	13	4.65	65	2.30	15	61.5	16.3	60	13.8	18
<b>BLANKS</b>																
BLANK		<3	<0.3	<0.2	<0.2	<0.3	<1	<0.05	<3	<0.05	<1	<0.5	<0.2	<1	<0.2	<5
BLANK		<3	<0.3	<0.2	<0.2	<0.3	<1	<0.05	<3	<0.05	<1	<0.5	<0.2	<1	<0.2	<5
BLANK		<3	<0.3	<0.2	<0.2	<0.3	<1	<0.05	<3	<0.05	<1	<0.5	<0.2	<1	<0.2	<5
BLANK		<3	<0.3	<0.2	<0.2	<0.3	<1	<0.05	<3	<0.05	<1	<0.5	<0.2	<1	<0.2	<5
Target Range - Lower Bound		<3	<0.3	<0.2	<0.2	<0.3	<1	<0.05	<3	<0.05	<1	<0.5	<0.2	<1	<0.2	<5
Upper Bound		6	0.6	0.4	0.4	0.6	2	0.10	6	0.10	2	1.0	0.4	2	0.4	10
<b>DUPLICATES</b>																
A0795006		18950	51.6	8.8	93.6	174.0	<1	5.47	13450	0.44	44	4150	1550	1	405	<5
DUP		18450	49.1	7.8	91.0	171.0	<1	5.03	13200	0.34	43	4090	1515	2	403	<5
Target Range - Lower Bound		18050	48.3	7.8	88.9	166.0	<1	5.02	12850	0.33	41	3980	1480	<1	390	<5
Upper Bound		19350	52.4	8.8	95.7	179.0	2	5.48	13800	0.45	46	4260	1585	2	418	10



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Project: Wicheeda

**QC CERTIFICATE OF ANALYSIS KL19240505**

Sample Description	Method	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	
	Analyte	Ta	Tb	Th	Tm	U	W	Y	Yb	Zr
	Units LOD	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		0.5	0.05	0.3	0.05	0.3	5	3	0.2	10
<b>STANDARDS</b>										
AMIS0185		<0.5	9.85	226	0.38	45.0	<5	60	1.8	80
AMIS0185		<0.5	10.05	215	0.35	43.9	<5	56	1.7	70
Target Range - Lower Bound		<0.5	9.20	211	0.32	42.8	<5	51	1.4	40
Upper Bound		1.2	10.70	243	0.54	49.8	11	65	2.3	80
OREAS 146		4.1	43.9	896	9.55	2.5	27	891	51.4	220
OREAS 146		4.0	44.0	898	9.41	2.4	29	926	51.6	250
Target Range - Lower Bound		3.2	43.8	839	9.16	2.0	18	839	49.6	200
Upper Bound		5.4	50.6	967	10.65	3.3	40	971	57.4	260
OREAS-101b		2.8	5.00	33.8	2.74	364	18	165	16.5	380
OREAS-101b		2.7	5.12	35.5	2.62	392	19	167	17.0	440
Target Range - Lower Bound			4.94	33.6	2.42	360		163		
Upper Bound			5.80	39.2	2.90	414		193		
SY-4		0.9	2.68	1.3	2.11	0.9	<5	113	14.2	610
SY-4		0.9	2.62	2.0	2.26	1.3	<5	114	14.5	620
Target Range - Lower Bound		<0.5	2.37	0.7	2.09	<0.3	<5	108	13.6	550
Upper Bound		1.9	2.83	1.9	2.51	1.4	15	130	16.0	660
<b>BLANKS</b>										
BLANK		<0.5	<0.05	<0.3	<0.05	<0.3	<5	<3	<0.2	<10
BLANK		<0.5	<0.05	<0.3	<0.05	<0.3	<5	<3	<0.2	<10
BLANK		<0.5	<0.05	<0.3	<0.05	<0.3	<5	<3	<0.2	<10
BLANK		<0.5	<0.05	<0.3	0.06	<0.3	<5	<3	<0.2	10
Target Range - Lower Bound		<0.5	<0.05	<0.3	<0.05	<0.3	<5	<3	<0.2	<10
Upper Bound		1.0	0.10	0.6	0.10	0.6	10	6	0.4	20
<b>DUPLICATES</b>										
A0795006		<0.5	15.55	630	0.73	1.1	<5	108	3.0	20
DUP		<0.5	15.15	613	0.68	1.0	<5	106	3.1	20
Target Range - Lower Bound		<0.5	14.75	599	0.63	0.7	<5	100	2.7	<10
Upper Bound		1.0	15.95	644	0.78	1.4	10	114	3.4	30



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Project: Wicheeda

**QC CERTIFICATE OF ANALYSIS KL19240505**

Sample Description	Method Analyte Units LOD	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	
		Ce ppm	Dy ppm	Er ppm	Eu ppm	Gd ppm	Hf ppm	Ho ppm	La ppm	Lu ppm	Nb ppm	Nd ppm	Pr ppm	Rb ppm	Sm ppm	Sn ppm
		3	0.3	0.2	0.2	0.3	1	0.05	3	0.05	1	0.5	0.2	1	0.2	5
<b>DUPLICATES</b>																
A0795042		1870	24.8	6.4	24.2	68.6	<1	3.25	961	0.35	626	658	184.5	152	105.0	<5
DUP		1870	24.8	6.4	23.7	67.4	<1	3.39	945	0.38	609	665	183.5	152	106.0	<5
Target Range - Lower Bound		1800	23.6	6.0	22.9	65.3	<1	3.15	917	0.30	595	638	177.5	146	101.5	<5
Upper Bound		1940	26.0	6.8	25.0	70.7	2	3.49	989	0.43	640	685	190.5	158	109.5	10
A0795078		9680	21.2	2.8	43.2	94.4	<1	2.08	7150	0.18	268	2120	799	18	221	<5
DUP		9850	20.7	3.1	41.7	92.2	<1	2.12	7300	0.16	264	2180	796	18	224	<5
Target Range - Lower Bound		9420	19.9	2.6	40.8	89.7	<1	1.98	6970	0.11	256	2070	769	16	215	<5
Upper Bound		10100	22.0	3.3	44.1	96.9	2	2.22	7480	0.23	276	2230	826	20	230	10
A0795114		2120	12.7	3.6	15.6	37.8	2	1.60	1225	0.31	879	657	201	143	74.8	<5
DUP		2110	13.0	3.6	14.6	36.5	2	1.59	1215	0.18	835	654	199.5	141	75.4	<5
Target Range - Lower Bound		2040	12.1	3.3	14.4	35.5	<1	1.49	1175	0.19	826	632	193.0	136	72.3	<5
Upper Bound		2190	13.6	3.9	15.8	38.8	3	1.70	1265	0.30	888	679	207	148	77.9	10
<b>PREP DUPLICATES</b>																
A0795057		13350	26.8	4.1	60.8	149.0	<1	2.55	9430	0.20	24	3200	1150	1	327	<5
A0795057 PREP DUP		13900	26.1	3.4	64.0	150.0	1	2.30	10100	0.18	34	3400	1155	<1	349	<5
A0795113		1230	16.4	4.8	14.5	32.0	1	2.30	726	0.26	726	386	114.0	170	51.5	<5
A0795113 PREP DUP		1175	15.0	4.7	13.7	31.4	1	2.06	697	0.27	744	364	110.5	171	49.4	<5



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**QC CERTIFICATE OF ANALYSIS KL19240505**

Sample Description	Method Analyte Units LOD	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	
		Ta ppm	Tb ppm	Th ppm	Tm ppm	U ppm	W ppm	Y ppm	Yb ppm	Zr ppm
		0.5	0.05	0.3	0.05	0.3	5	3	0.2	10
<b>DUPLICATES</b>										
A0795042		11.5	6.47	195.0	0.67	9.1	<5	78	3.0	20
DUP		11.0	6.01	197.0	0.64	8.7	<5	77	2.9	10
Target Range - Lower Bound		10.4	5.97	189.0	0.58	8.3	<5	72	2.6	<10
Upper Bound		12.1	6.51	203	0.73	9.5	10	83	3.3	20
A0795078		2.7	7.55	314	0.24	2.3	<5	39	1.2	<10
DUP		2.7	7.49	325	0.26	2.5	<5	39	1.1	<10
Target Range - Lower Bound		2.1	7.21	308	0.19	2.0	<5	35	0.9	<10
Upper Bound		3.3	7.83	331	0.31	2.8	10	43	1.4	20
A0795114		10.9	3.20	198.0	0.31	22.7	<5	39	1.8	200
DUP		10.6	3.37	196.5	0.36	22.0	<5	40	2.0	210
Target Range - Lower Bound		9.9	3.12	190.0	0.27	21.3	<5	35	1.6	190
Upper Bound		11.6	3.45	204	0.40	23.4	10	44	2.2	220
<b>PREP DUPLICATES</b>										
A0795057		0.5	9.96	440	0.28	1.1	<5	52	1.4	<10
A0795057 PREP DUP		<0.5	10.75	472	0.33	1.1	<5	55	1.8	30
A0795113		9.7	3.65	92.3	0.62	17.7	<5	57	2.4	70
A0795113 PREP DUP		10.1	3.46	90.8	0.44	17.3	<5	55	2.7	110





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Project: Wicheeda

<b>QC CERTIFICATE OF ANALYSIS KL19240505</b>
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	<b>CERTIFICATE COMMENTS</b>								
	<b>LABORATORY ADDRESSES</b>								
Applies to Method:	<p>Processed at ALS Kamloops located at 2953 Shuswap Drive, Kamloops, BC, Canada.</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">CRU-31</td> <td style="width: 33%;">CRU-QC</td> <td style="width: 33%;">LOG-21</td> <td style="width: 33%;">LOG-23</td> </tr> <tr> <td>PUL-31</td> <td>PUL-QC</td> <td>SPL-21</td> <td>WEI-21</td> </tr> </table>	CRU-31	CRU-QC	LOG-21	LOG-23	PUL-31	PUL-QC	SPL-21	WEI-21
CRU-31	CRU-QC	LOG-21	LOG-23						
PUL-31	PUL-QC	SPL-21	WEI-21						
Applies to Method:	<p>Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.</p> <p>ME-MS81h</p>								



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**CERTIFICATE KL19251631**

Project: Wicheeda  
 P.O. No.: 99185  
 This report is for 155 Drill Core samples submitted to our lab in Kamloops, BC, Canada on 7-OCT-2019.  
 The following have access to data associated with this certificate:

MO ASMAIL	KRIS RAFFLE
-----------	-------------

SAMPLE PREPARATION	
ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
PUL-QC	Pulverizing QC Test
LOG-21	Sample logging - ClientBarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize up to 250g 85% <75 um
LOG-23	Pulp Login - Rcvd with Barcode
CRU-QC	Crushing QC Test

ANALYTICAL PROCEDURES		
ALS CODE	DESCRIPTION	INSTRUMENT
ME-MS81h	High grade REE by fusion/ICPMS	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:**   
 Saa Traxler, General Manager, North Vancouver



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Project: Wicheeda

**CERTIFICATE OF ANALYSIS KL19251631**

Sample Description	Method	WEI-21	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h
	Analyte	Recvd Wt.	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nb	Nd	Pr	Rb	Sm
Units		kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
LOD		0.02	3	0.3	0.2	0.2	0.3	1	0.05	3	0.05	1	0.5	0.2	1	0.2
A0795124		2.00	3830	12.9	2.6	19.4	41.2	<1	1.35	2910	0.11	56	866	301	3	88.3
A0795125		0.07	7620	34.9	9.3	35.9	86.3	1	4.35	6090	0.65	279	1515	560	49	157.0
A0795126		3.16	10150	23.5	4.1	42.4	89.5	1	2.63	7790	0.22	92	2180	777	6	207
A0795127		3.51	13200	23.6	3.1	52.1	107.0	<1	2.02	10300	0.16	11	2670	988	2	249
A0795128		3.85	11650	25.5	3.6	43.8	95.8	1	2.40	9030	0.24	41	2380	874	2	224
A0795129		4.06	15050	26.2	3.7	54.6	110.5	<1	2.36	11250	0.10	39	3110	1160	2	267
A0795130		0.18	18	0.3	0.2	<0.2	0.5	1	0.09	11	0.06	1	4.2	1.8	3	0.8
A0795131		4.47	19800	39.6	4.7	78.7	160.0	<1	3.69	14500	0.27	68	4310	1615	4	386
A0795132		4.02	10900	27.0	3.8	47.1	102.5	1	2.41	8160	0.15	32	2460	867	2	232
A0795133		4.49	4290	15.1	2.3	29.3	54.4	<1	1.44	3190	0.08	136	1055	351	30	120.5
A0795134		1.23	4390	26.3	5.2	35.8	81.2	<1	2.93	2950	0.18	698	1205	379	116	162.0
A0795135		1.39	4150	24.4	4.8	29.8	70.4	<1	2.76	2790	0.22	766	1120	353	103	146.0
A0795136		4.92	4600	16.9	3.4	25.3	61.0	<1	1.87	3340	0.18	89	1140	375	3	127.0
A0795137		5.38	4890	18.8	3.2	28.0	61.1	1	1.96	3670	0.11	63	1180	397	6	125.0
A0795138		5.35	4400	18.6	3.7	23.5	50.5	<1	2.04	3210	0.18	50	1020	351	1	107.0
A0795139		6.80	8850	30.3	4.9	44.1	95.4	<1	3.25	6590	0.25	46	1990	701	<1	211
A0795140		6.32	12100	28.0	4.1	50.8	112.0	<1	2.50	9270	0.20	6	2530	925	1	247
A0795141		6.04	7400	16.5	3.0	32.7	69.4	1	1.84	5520	0.18	17	1715	587	2	174.0
A0795142		6.35	8810	19.2	3.0	37.2	79.8	1	1.68	6810	0.12	18	1855	673	2	187.0
A0795143		5.07	12200	32.7	6.3	52.2	117.0	1	3.75	8700	0.28	124	2650	950	4	265
A0795144		4.09	14950	48.0	8.8	69.8	157.0	2	5.18	11050	0.25	253	3340	1180	5	343
A0795145		0.07	7680	36.2	9.0	36.8	87.2	1	4.76	6140	0.75	288	1545	571	50	155.5
A0795146		4.99	6060	15.2	2.7	25.4	54.5	1	1.66	4580	0.24	45	1260	456	2	119.5
A0795147		6.57	5820	18.7	4.2	26.4	57.5	<1	1.97	4310	0.19	49	1260	451	1	125.0
A0795148		5.84	13100	30.6	4.6	57.2	124.5	<1	2.85	9630	0.22	47	2890	1035	1	283
A0795149		5.31	7640	19.7	3.6	37.1	76.0	1	2.22	5580	0.17	83	1740	600	1	174.0
A0795150		0.16	55	0.4	0.2	0.3	0.9	2	0.09	38	<0.05	1	12.0	4.8	2	1.4
A0795151		5.91	7190	27.4	4.9	36.7	83.9	2	2.97	5300	0.25	223	1630	568	3	171.5
A0795152		6.10	7800	32.4	5.8	40.0	92.1	1	3.49	5860	0.26	504	1735	610	4	187.5
A0795153		6.89	10300	35.3	5.5	51.0	108.5	2	3.94	7630	0.26	333	2220	792	4	223
A0795154		2.21	11100	29.7	4.4	46.6	98.6	1	2.83	8830	0.21	304	2250	833	2	210
A0795155		2.14	9060	25.1	4.2	38.0	83.2	1	2.70	7160	0.24	173	1840	682	2	175.0
A0795156		4.66	17650	50.0	8.4	79.1	170.5	1	5.65	13650	0.41	165	3780	1390	15	363
A0795157		5.47	11050	26.3	4.6	45.8	99.0	<1	2.77	8460	0.19	70	2430	861	2	223
A0795158		6.02	9760	34.6	6.3	52.5	111.0	<1	3.99	7550	0.42	63	2130	757	2	223
A0795159		6.71	13900	65.1	14.0	60.5	140.5	<1	8.33	10900	0.40	294	2950	1060	17	292
A0795160		5.47	19150	44.5	8.9	71.2	170.0	<1	5.24	14100	0.34	88	4170	1575	1	353
A0795161		5.08	14450	36.8	7.4	62.0	141.5	1	3.96	10350	0.36	59	3100	1180	1	275
A0795162		3.67	26100	65.3	14.6	98.2	221	<1	7.84	19050	0.57	439	5560	2290	12	476
A0795163		6.50	15700	56.8	11.0	81.3	178.0	<1	6.35	11350	0.55	415	3530	1310	63	338



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Sample Description	Method Analyte Units LOD	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	
		Sn	Ta	Tb	Th	Tm	U	W	Y	Yb	Zr
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		5	0.5	0.05	0.3	0.05	0.3	5	3	0.2	10
A0795124		<5	1.0	3.92	155.0	0.17	1.0	<5	28	1.1	40
A0795125		<5	1.3	9.78	237	0.87	2.4	<5	98	5.1	40
A0795126		<5	0.6	8.14	338	0.36	1.2	<5	50	1.6	10
A0795127		<5	<0.5	9.04	399	0.25	0.6	<5	44	1.2	10
A0795128		<5	<0.5	8.79	326	0.28	0.7	<5	49	1.4	30
A0795129		<5	0.9	9.66	436	0.28	0.6	<5	50	1.1	70
A0795130		<5	<0.5	0.05	2.0	0.06	0.4	<5	3	0.3	100
A0795131		<5	2.1	14.60	657	0.36	0.6	<5	74	1.5	70
A0795132		<5	<0.5	9.51	355	0.30	0.7	<5	51	1.2	20
A0795133		<5	3.8	4.82	158.5	0.20	1.5	<5	31	1.0	70
A0795134		<5	11.6	8.05	409	0.43	9.8	<5	57	1.8	70
A0795135		<5	11.9	6.82	383	0.36	11.1	<5	53	1.7	60
A0795136		<5	8.4	5.61	210	0.23	1.7	<5	39	1.2	70
A0795137		<5	0.9	5.68	175.5	0.30	1.2	<5	41	1.5	20
A0795138		<5	18.5	5.35	113.0	0.32	0.9	<5	41	1.7	70
A0795139		<5	0.7	9.16	294	0.44	0.7	<5	62	2.1	70
A0795140		<5	<0.5	9.53	418	0.28	0.4	<5	55	1.4	70
A0795141		<5	<0.5	5.53	201	0.22	0.7	<5	38	1.0	20
A0795142		<5	<0.5	6.78	304	0.27	0.6	<5	40	1.2	20
A0795143		<5	1.4	10.65	449	0.56	2.2	<5	72	2.6	30
A0795144		<5	2.4	14.75	661	0.71	4.3	<5	106	3.4	50
A0795145		<5	1.4	9.45	239	1.02	2.3	<5	103	5.3	90
A0795146		<5	0.5	4.75	214	0.31	0.9	<5	37	1.4	50
A0795147		<5	0.7	5.65	228	0.33	1.2	<5	44	1.7	60
A0795148		<5	1.9	10.60	505	0.38	1.5	<5	63	2.2	60
A0795149		<5	1.8	6.69	293	0.34	2.4	<5	45	1.6	40
A0795150		<5	<0.5	0.12	4.4	<0.05	0.4	<5	3	0.3	50
A0795151		<5	1.9	7.92	228	0.37	3.5	<5	59	1.8	60
A0795152		<5	2.3	9.40	256	0.44	4.7	<5	65	1.7	40
A0795153		<5	1.8	11.15	354	0.55	7.1	<5	78	2.7	80
A0795154		<5	1.4	9.32	310	0.37	3.3	<5	62	1.7	30
A0795155		<5	1.1	7.91	245	0.31	2.2	<5	54	1.6	40
A0795156		<5	0.8	16.65	487	0.63	2.1	<5	108	3.3	40
A0795157		<5	7.8	8.81	387	0.36	2.5	<5	56	2.0	30
A0795158		<5	1.2	10.90	371	0.56	1.8	<5	80	2.4	60
A0795159		<5	3.2	16.30	520	1.16	5.6	<5	149	5.4	90
A0795160		<5	1.2	13.95	689	0.74	1.8	<5	102	2.9	50
A0795161		<5	0.7	11.80	515	0.59	1.7	<5	86	2.8	20
A0795162		<5	4.9	18.65	986	1.07	7.4	<5	166	5.3	50
A0795163		<5	4.3	15.65	585	1.03	6.6	<5	146	4.9	20



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	Analyte	Recvd Wt.	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nb	Nd	Pr	Rb	Sm
LOD	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		0.02	3	0.3	0.2	0.2	0.3	1	0.05	3	0.05	1	0.5	0.2	1	0.2
A0795164		5.56	5610	19.4	2.9	40.1	82.5	<1	1.97	4000	0.16	522	1480	501	11	166.0
A0795165		0.07	8020	35.8	9.7	38.0	96.9	1	4.59	6310	0.67	304	1610	641	54	160.0
A0795166		4.40	5340	11.7	1.7	27.6	63.1	<1	1.28	3960	<0.05	1160	1285	458	67	129.5
A0795167		3.85	7920	16.6	3.0	33.1	69.4	<1	1.63	6120	0.14	3060	1595	626	99	140.0
A0795168		6.13	16200	18.0	2.4	49.6	113.5	<1	1.70	12550	0.13	200	3210	1285	4	271
A0795169		4.49	18500	21.6	2.8	51.0	122.5	<1	2.04	14150	0.11	61	3520	1400	1	277
A0795170		0.15	120	0.4	0.3	0.4	1.0	1	0.11	95	0.06	4	24.5	10.2	2	1.9
A0795171		4.48	23500	38.6	6.0	77.5	169.5	<1	3.73	17550	0.19	382	4720	1885	12	381
A0795172		8.64	5550	16.7	3.9	28.8	68.6	<1	2.04	3970	0.21	829	1390	479	72	152.5
A0795173		5.66	2390	17.7	3.8	24.7	51.3	<1	2.03	1625	0.27	1405	667	213	89	98.2
A0795174		2.15	10500	25.9	4.4	56.0	129.0	<1	2.62	7530	0.24	2770	2400	870	87	269
A0795175		2.30	12600	28.2	4.3	65.7	158.0	<1	2.75	9340	0.24	1840	2890	1055	89	310
A0795176		3.33	6020	33.8	5.8	58.7	147.0	<1	3.49	3970	0.26	1560	1765	557	301	272
A0795177		6.12	2610	22.5	6.4	21.1	51.8	1	3.16	1825	0.18	147	677	232	3	81.7
A0795178		5.56	10450	31.1	5.0	48.7	115.5	<1	2.88	7450	0.19	439	2460	866	40	232
A0795179		6.27	9840	37.5	7.4	43.3	112.5	<1	4.40	7100	0.34	465	2310	839	31	221
A0795180		6.49	7520	24.8	3.9	43.6	91.2	1	2.71	5330	0.20	145	1795	632	16	180.5
A0795181		6.25	6350	27.8	5.5	34.3	82.9	<1	3.37	4460	0.29	152	1580	539	33	164.0
A0795182		5.94	2920	14.2	3.2	20.5	46.0	1	1.72	2120	0.18	113	796	255	16	89.5
A0795183		6.17	3720	13.5	2.9	18.7	45.1	<1	1.42	2620	0.17	143	914	323	2	91.2
A0795184		7.10	15100	28.2	4.7	60.2	143.5	<1	2.82	10700	0.27	57	3670	1260	1	341
A0795185		0.07	8090	34.1	9.9	37.1	96.8	1	4.32	6150	0.77	307	1700	639	55	160.0
A0795186		6.56	18300	30.5	4.4	70.3	168.0	<1	2.85	13000	0.21	19	4290	1540	2	381
A0795187		6.67	10650	20.4	2.2	44.6	111.5	1	1.81	7520	0.15	9	2620	910	2	253
A0795188		6.63	9710	20.5	2.8	42.0	99.7	1	1.86	6850	0.15	25	2400	828	2	220
A0795189		6.57	15300	29.6	5.2	55.9	119.5	1	3.08	10950	0.22	62	3260	1235	1	272
A0795190		0.15	114	0.5	0.3	0.6	1.3	2	0.09	85	0.05	2	25.5	9.8	3	2.4
A0795191		6.60	13100	30.8	5.0	52.9	119.5	<1	3.47	9480	0.29	180	3090	1090	53	276
A0795192		6.55	18050	32.3	5.1	60.3	138.0	1	2.97	13150	0.32	58	4030	1510	2	334
A0795193		6.75	15500	47.6	9.0	63.3	143.0	<1	5.64	11000	0.41	354	3450	1290	12	307
A0795194		2.42	19450	41.8	7.4	72.1	170.5	<1	4.61	13700	0.39	231	4370	1580	2	383
A0795195		2.54	17900	45.4	8.6	69.4	163.0	<1	5.04	12550	0.32	217	4200	1545	2	367
A0795196		5.88	5770	27.5	6.3	37.4	87.3	<1	3.45	4370	0.33	303	1420	487	11	162.5
A0795197		5.10	5670	26.1	5.5	35.4	83.8	1	3.16	4270	0.25	234	1410	477	17	157.5
A0795198		2.57	19850	46.4	8.1	86.8	193.0	<1	5.32	15700	0.32	214	4770	1695	6	399
A0795199		5.45	21000	40.6	6.9	73.6	173.0	<1	4.40	16550	0.29	144	4930	1775	3	385
A0795200		6.43	16100	57.3	11.9	74.4	188.0	<1	7.12	12600	0.49	219	3670	1405	3	351
A0795201		4.16	8020	18.4	3.6	30.7	73.2	1	2.10	5960	0.25	119	1750	639	1	164.5
A0795202		4.52	10600	37.2	7.2	51.8	129.0	<1	4.50	8050	0.28	328	2450	922	5	251
A0795203		3.63	4220	19.9	4.5	25.9	62.0	<1	2.53	3080	0.19	402	1045	357	71	111.0



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		Sn	Ta	Tb	Th	Tm	U	W	Y	Yb	Zr
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		5	0.5	0.05	0.3	0.05	0.3	5	3	0.2	10
A0795164		<5	7.0	6.51	171.0	0.28	8.3	<5	41	1.0	20
A0795165		<5	1.3	8.94	258	0.98	2.3	<5	108	5.9	60
A0795166		<5	15.0	4.45	174.0	0.16	15.4	<5	29	0.9	70
A0795167		<5	16.5	5.77	191.5	0.20	20.3	8	42	1.2	70
A0795168		<5	9.4	7.65	487	0.24	1.6	<5	43	0.8	70
A0795169		<5	2.6	8.69	460	0.22	1.9	<5	53	1.3	60
A0795170		<5	4.5	0.16	5.3	<0.05	0.3	<5	<3	0.2	110
A0795171		<5	2.5	12.80	554	0.51	4.7	<5	84	2.0	60
A0795172		<5	12.7	5.25	223	0.37	15.2	<5	51	2.1	70
A0795173		<5	16.3	4.90	124.0	0.35	23.5	6	45	1.7	30
A0795174		<5	28.1	8.97	659	0.39	24.4	8	58	1.6	70
A0795175		<5	16.1	10.25	722	0.31	21.0	6	65	1.5	70
A0795176		<5	22.0	11.30	537	0.51	20.5	6	75	2.1	70
A0795177		<5	0.7	5.50	129.5	0.68	1.6	<5	74	3.2	40
A0795178		<5	5.2	9.26	431	0.42	7.2	<5	59	1.7	30
A0795179		<5	5.3	10.65	399	0.55	7.0	<5	85	2.8	30
A0795180		<5	1.2	7.84	266	0.31	2.1	<5	54	1.5	40
A0795181		<5	1.7	7.70	291	0.36	2.5	<5	69	2.7	50
A0795182		<5	1.5	3.85	121.0	0.31	1.8	<5	45	1.6	40
A0795183		<5	1.5	3.62	135.0	0.23	1.1	<5	36	1.2	40
A0795184		<5	<0.5	10.35	688	0.32	1.0	<5	71	1.7	50
A0795185		<5	1.4	9.36	264	0.97	2.5	<5	113	5.3	80
A0795186		<5	<0.5	12.05	722	0.36	0.8	<5	70	1.5	20
A0795187		<5	<0.5	7.76	467	0.22	0.4	<5	46	1.1	40
A0795188		<5	<0.5	7.54	383	0.24	0.6	<5	45	1.2	30
A0795189		<5	0.6	9.98	463	0.33	2.2	<5	71	1.6	50
A0795190		<5	<0.5	0.13	5.6	0.07	0.4	<5	4	0.3	90
A0795191		<5	2.7	9.95	449	0.46	3.7	<5	70	1.7	30
A0795192		<5	<0.5	10.35	570	0.38	1.2	<5	71	1.9	40
A0795193		<5	4.4	13.00	544	0.83	5.1	<5	121	3.2	30
A0795194		<5	2.1	13.60	786	0.62	3.4	<5	109	2.8	50
A0795195		<5	1.7	13.80	691	0.79	3.0	<5	112	2.8	80
A0795196		<5	4.4	7.65	205	0.63	3.7	<5	65	2.5	50
A0795197		<5	2.8	7.41	213	0.52	4.5	<5	67	2.4	20
A0795198		<5	2.2	15.25	555	0.73	4.7	<5	109	2.5	30
A0795199		<5	0.7	13.70	677	0.58	3.2	<5	96	2.4	20
A0795200		<5	1.2	16.95	490	1.06	3.3	<5	145	4.3	20
A0795201		<5	0.6	6.11	243	0.37	0.7	<5	46	1.7	20
A0795202		<5	4.2	11.40	439	0.68	6.0	<5	84	2.8	50
A0795203		<5	6.5	5.35	180.5	0.41	7.5	<5	53	2.1	80



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	Analyte	Recvd Wt.	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nb	Nd	Pr	Rb	Sm
	Units	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	LOD	0.02	3	0.3	0.2	0.2	0.3	1	0.05	3	0.05	1	0.5	0.2	1	0.2
A0795204		4.88	6030	24.3	4.8	38.4	83.0	<1	2.85	4700	0.20	434	1440	499	100	158.5
A0795205		0.07	7750	34.2	9.0	36.8	98.3	1	4.67	6400	0.60	302	1615	603	51	161.5
A0795206		5.90	11350	31.6	5.8	47.5	114.0	<1	3.78	8920	0.27	294	2560	984	14	235
A0795207		5.99	9530	25.0	4.7	40.2	93.0	<1	2.79	7620	0.21	214	2120	819	9	193.5
A0795208		6.44	14600	28.7	4.9	53.3	123.0	<1	3.14	11750	0.21	114	3140	1230	2	274
A0795209		8.07	11200	25.5	4.6	40.7	99.1	<1	2.87	9030	0.21	135	2460	964	2	213
A0795210		0.16	198	0.7	0.4	0.7	2.1	2	0.11	156	0.05	3	46.4	16.7	3	4.4
A0795211		5.80	13700	37.0	6.9	52.1	127.0	<1	4.43	10950	0.31	329	3000	1165	20	269
A0795212		6.69	15150	32.1	5.5	51.6	120.0	<1	3.58	12250	0.26	108	3210	1270	1	269
A0795213		6.96	17950	32.6	5.2	66.7	149.0	<1	3.53	14500	0.26	152	3930	1530	3	343
A0795214		3.41	14450	36.8	7.2	57.2	130.5	1	4.33	11900	0.31	231	3170	1220	17	277
A0795215		3.12	14500	32.6	5.7	62.8	132.5	1	3.69	12150	0.27	187	3140	1220	10	282
A0795216		6.88	15200	37.9	7.1	59.0	135.5	1	4.52	12350	0.32	253	3260	1285	19	289
A0795217		7.41	17250	30.7	5.6	57.6	135.0	1	3.73	14050	0.26	123	3700	1455	1	317
A0795218		7.06	15600	35.5	8.3	60.2	137.5	<1	4.64	12700	0.59	149	3430	1335	1	300
A0795219		4.88	19800	33.9	6.7	65.3	144.5	1	3.79	15350	0.37	404	4220	1655	1	348
A0795220		4.34	18400	39.7	8.5	67.6	149.0	<1	4.94	14700	0.41	409	4000	1550	1	341
A0795221		5.74	4190	28.2	8.1	32.0	78.1	1	3.94	3300	0.75	1040	1010	347	57	125.5
A0795222		5.89	1350	23.5	9.0	17.8	50.2	<1	3.57	965	0.82	659	370	116.5	43	64.6
A0795223		4.45	1110	24.5	9.4	16.5	49.2	1	4.03	738	0.79	631	312	97.6	51	57.2
A0795224		5.45	1080	25.2	9.2	16.4	48.2	1	4.09	709	1.02	757	307	94.2	35	55.7
A0795225		0.07	7970	33.8	9.1	37.6	99.7	1	4.80	6590	0.70	315	1660	615	51	166.0
A0795226		6.48	596	10.9	4.5	6.9	19.8	2	1.68	438	0.48	481	163.0	52.9	10	25.1
A0795227		3.61	494	9.6	3.4	7.8	22.3	1	1.48	348	0.29	404	151.0	46.2	25	28.2
A0795229		3.82	6600	24.1	4.2	37.3	92.9	1	2.68	5010	0.16	448	1595	548	5	177.0
A0795230		0.17	35	0.5	0.3	0.3	1.1	1	0.12	25	<0.05	3	10.0	3.1	3	0.9
A0795231		3.14	13700	26.9	4.4	54.6	130.5	<1	3.03	10650	0.15	81	3150	1205	1	285
A0795232		3.66	13000	42.7	8.2	57.7	147.0	<1	4.96	9490	0.35	160	3150	1175	33	309
A0795233		4.11	12800	39.8	7.2	58.6	136.5	<1	4.25	8430	0.26	141	2710	1030	26	260
A0795234		2.06	5950	26.3	5.6	35.5	72.9	<1	2.93	4180	0.26	170	1430	524	38	139.5
A0795235		1.97	5830	22.3	4.7	33.0	71.7	<1	2.40	4020	0.16	138	1350	482	37	140.0
A0795236		5.99	8120	26.5	5.5	38.5	91.7	<1	2.76	5590	0.22	117	1770	653	7	176.5
A0795237		6.36	7490	35.9	7.8	44.2	95.9	<1	4.12	5460	0.35	110	1735	643	5	183.5
A0795238		7.08	16050	40.9	7.8	70.2	162.5	<1	4.09	10300	0.26	127	3780	1300	3	348
A0795239		6.67	10900	53.5	11.1	70.7	145.0	<1	5.65	7940	0.59	475	2580	940	44	262
A0795240		7.20	10850	31.6	6.2	55.0	124.0	<1	3.46	7660	0.25	180	2560	922	18	252
A0795241		5.88	10100	26.3	4.2	50.0	116.0	<1	2.65	7130	0.26	113	2350	832	8	220
A0795242		5.94	7240	20.8	3.6	36.3	88.3	<1	2.62	5160	0.21	208	1780	629	29	180.5
A0795243		5.72	4760	23.6	4.4	34.9	76.7	<1	2.41	3500	0.30	107	1185	403	20	126.5
A0795244		6.48	5370	21.3	4.7	34.8	83.9	<1	2.47	3690	0.23	80	1285	438	7	150.5



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Sample Description	Method	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	
	Analyte	Sn	Ta	Tb	Th	Tm	U	W	Y	Yb	Zr
	Units LOD	ppm 5	ppm 0.5	ppm 0.05	ppm 0.3	ppm 0.05	ppm 0.3	ppm 5	ppm 3	ppm 0.2	ppm 10
A0795204	<5	13.3	7.24	188.5	0.38	8.0	<5	57	1.9	60	
A0795205	<5	1.1	9.32	251	0.96	2.4	<5	102	5.8	50	
A0795206	<5	4.5	9.90	363	0.55	3.3	<5	74	2.0	50	
A0795207	<5	4.7	7.95	303	0.38	3.8	<5	55	1.7	50	
A0795208	<5	0.6	9.41	448	0.44	2.3	<5	65	1.9	50	
A0795209	<5	1.4	8.22	344	0.44	2.1	<5	61	1.8	60	
A0795210	<5	<0.5	0.18	8.3	0.06	0.4	<5	4	0.4	70	
A0795211	<5	5.4	11.35	415	0.62	4.3	<5	87	2.5	50	
A0795212	<5	0.6	10.05	392	0.47	1.5	<5	75	2.0	60	
A0795213	<5	1.0	11.15	433	0.44	2.3	<5	75	1.8	50	
A0795214	<5	1.1	10.75	481	0.59	3.6	<5	88	2.6	30	
A0795215	<5	0.8	10.65	398	0.51	2.6	<5	82	2.3	40	
A0795216	<5	2.2	11.55	465	0.71	5.1	<5	94	2.5	30	
A0795217	<5	0.5	10.15	508	0.50	1.6	<5	79	2.3	40	
A0795218	<5	0.7	11.05	448	0.84	2.2	<5	109	4.3	40	
A0795219	<5	1.9	11.00	453	0.60	3.1	<5	88	3.1	30	
A0795220	<5	3.8	12.10	538	0.78	3.6	<5	104	3.9	50	
A0795221	<5	9.6	7.33	229	0.83	14.1	<5	89	4.8	50	
A0795222	<5	5.8	5.36	148.5	1.05	7.5	<5	89	6.3	40	
A0795223	<5	5.7	5.57	106.0	1.06	7.0	<5	98	6.6	90	
A0795224	<5	5.2	5.71	103.0	1.20	4.3	<5	100	7.0	50	
A0795225	<5	1.3	9.51	254	1.00	2.5	<5	102	5.8	70	
A0795226	<5	2.0	2.35	31.3	0.61	1.6	<5	49	3.2	130	
A0795227	<5	4.3	2.27	57.8	0.42	5.5	<5	36	2.4	110	
A0795229	<5	3.2	7.49	253	0.34	3.9	<5	52	1.6	30	
A0795230	<5	0.6	0.12	3.1	<0.05	0.4	<5	3	0.3	70	
A0795231	<5	1.0	9.99	477	0.33	1.2	<5	60	1.4	50	
A0795232	<5	1.7	13.00	890	0.75	2.7	<5	93	3.2	50	
A0795233	<5	1.6	11.80	745	0.63	3.1	<5	84	2.7	10	
A0795234	<5	2.0	6.81	228	0.43	3.5	<5	63	2.6	10	
A0795235	<5	2.0	6.14	228	0.41	2.5	<5	54	1.8	10	
A0795236	<5	0.9	7.56	310	0.41	1.2	<5	67	2.4	10	
A0795237	<5	1.0	9.38	297	0.64	1.6	<5	84	3.0	10	
A0795238	<5	0.8	12.25	605	0.50	1.7	<5	97	2.4	<10	
A0795239	<5	4.7	13.65	429	0.97	5.8	<5	137	4.5	10	
A0795240	<5	1.9	9.60	460	0.46	2.4	<5	81	2.4	10	
A0795241	<5	1.2	8.39	448	0.36	2.0	<5	67	2.1	10	
A0795242	<5	2.0	6.44	370	0.29	2.1	<5	52	1.7	10	
A0795243	<5	1.6	6.52	272	0.34	1.7	<5	57	1.9	10	
A0795244	<5	1.0	7.10	258	0.42	1.8	<5	55	2.0	10	





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Sample Description	Method	WEI-21	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h
	Analyte	Recvd Wt.	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nb	Nd	Pr	Rb	Sm
	Units	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	LOD	0.02	3	0.3	0.2	0.2	0.3	1	0.05	3	0.05	1	0.5	0.2	1	0.2
A0795245		0.07	7800	34.7	8.9	38.3	97.4	1	4.56	5920	0.78	302	1570	604	53	154.0
A0795246		6.74	9920	45.2	9.4	65.7	153.5	<1	4.76	6920	0.48	413	2350	845	68	255
A0795247		7.18	5350	37.0	8.5	48.3	108.0	<1	4.47	3710	0.31	600	1360	469	110	177.5
A0795248		7.88	4130	15.2	2.8	28.1	59.0	<1	1.57	3010	0.30	156	1050	371	27	117.5
A0795249		7.50	7900	25.1	5.4	47.3	107.5	<1	2.74	5400	0.31	59	1985	681	3	207
A0795250		0.17	432	2.0	0.7	2.2	5.6	1	0.25	290	<0.05	5	105.5	35.2	1	10.8
A0795251		7.25	10300	39.5	7.5	53.1	124.5	<1	4.26	7060	0.29	141	2390	841	2	235
A0795252		6.24	9810	34.5	6.2	55.6	122.0	<1	3.76	6850	0.30	213	2540	851	6	249
A0795253		6.12	12950	48.0	9.5	70.5	165.0	<1	5.87	9270	0.45	130	3230	1105	1	331
A0795254		3.69	13400	38.2	6.1	76.8	180.5	<1	3.59	9420	0.36	80	3850	1250	1	388
A0795255		3.52	14650	41.2	6.0	73.1	184.5	<1	3.96	10150	0.28	114	3840	1325	1	399
A0795256		7.80	17800	66.3	14.1	99.0	227	<1	7.70	12500	0.51	275	4060	1520	9	419
A0795257		7.63	27200	64.4	11.3	139.0	300	<1	6.75	19350	0.49	445	6390	2400	47	622
A0795258		4.61	10700	32.1	6.5	51.0	122.5	<1	3.64	7210	0.29	400	2510	890	20	241
A0795259		4.37	4150	14.8	3.1	26.5	63.0	<1	1.39	2930	0.08	297	1090	367	56	118.5
A0795260		5.49	9560	30.7	5.7	57.9	145.0	<1	2.95	6400	0.36	136	2710	884	18	289
A0795261		3.46	4620	17.2	3.4	29.5	67.9	<1	1.62	3200	0.30	117	1260	415	22	147.0
A0795262		4.35	11300	33.3	6.2	61.1	152.0	<1	3.37	7780	0.21	218	2800	949	7	292
A0795263		4.59	6080	31.6	5.6	45.5	110.0	<1	3.35	4390	0.23	633	1585	521	6	183.0
A0795264		6.57	5070	18.6	3.5	34.2	81.1	<1	1.93	3750	0.14	708	1350	447	6	151.5
A0795265		0.07	7660	38.3	11.1	37.5	100.5	1	4.51	5880	0.62	304	1600	614	52	152.0
A0795266		5.56	8730	24.3	4.7	46.5	118.0	<1	2.50	6100	0.28	250	2290	769	4	238
A0795267		7.10	7230	23.5	3.4	43.8	109.5	<1	1.82	4980	0.21	593	1815	630	17	203
A0795268		6.51	2800	13.4	2.4	23.2	56.7	<1	1.40	1915	0.05	566	834	267	29	120.5
A0795269		6.29	4740	19.0	3.2	32.4	78.4	<1	1.85	3570	0.12	521	1250	400	62	161.5
A0795270		0.17	35	0.6	0.4	0.2	0.8	1	0.08	24	<0.05	3	11.1	3.2	1	1.5
A0795271		6.86	1530	7.8	1.5	11.0	26.3	<1	0.83	1080	0.11	519	402	126.0	74	53.6
A0795272		6.74	4030	13.6	2.8	27.5	62.7	<1	1.40	2870	0.10	678	1115	350	47	148.0
A0795273		6.10	4830	18.0	2.8	31.8	74.5	<1	1.63	3430	0.12	592	1340	420	44	172.0
A0795274		3.38	2900	14.5	3.1	24.4	52.1	<1	1.65	2010	0.21	329	833	261	47	113.5
A0795275		3.38	3260	16.1	3.4	27.3	59.8	<1	1.94	2250	0.19	318	935	289	37	129.5
A0795276		6.69	6060	25.6	4.5	51.8	110.0	<1	2.60	4400	0.25	862	1720	536	42	245
A0795277		5.83	6060	33.2	6.8	44.4	106.5	<1	3.69	4460	0.22	993	1660	529	61	219
A0795278		5.04	10450	33.1	6.7	54.0	133.0	<1	3.68	7610	0.27	298	2750	895	48	319
A0795279		5.31	16100	94.8	20.2	121.5	314	<1	11.00	9980	0.91	1055	4910	1530	157	685



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Sample Description	Method Analyte Units LOD	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	
		Sn	Ta	Tb	Th	Tm	U	W	Y	Yb	Zr
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		5	0.5	0.05	0.3	0.05	0.3	5	3	0.2	10
A0795245		<5	1.3	9.15	249	1.21	2.3	<5	107	4.7	40
A0795246		<5	5.0	13.00	578	0.71	8.3	<5	113	3.3	10
A0795247		<5	7.8	10.35	341	0.79	8.7	<5	102	3.5	<10
A0795248		<5	1.9	4.77	183.0	0.28	2.1	<5	38	1.6	10
A0795249		<5	0.5	8.12	330	0.48	1.3	<5	56	1.5	10
A0795250		<5	<0.5	0.48	17.9	0.08	0.4	<5	6	0.3	50
A0795251		<5	1.2	10.15	432	0.54	1.8	<5	91	2.3	10
A0795252		<5	1.6	10.15	397	0.57	2.6	<5	87	2.7	10
A0795253		<5	0.8	13.75	663	0.72	3.8	<5	106	2.9	<10
A0795254		<5	0.5	13.25	706	0.49	1.5	<5	86	1.9	<10
A0795255		<5	0.8	13.65	727	0.46	1.5	<5	89	2.3	10
A0795256		<5	2.6	18.80	754	1.09	3.9	<5	146	4.6	10
A0795257		<5	3.8	23.1	1080	0.84	10.3	<5	161	4.7	10
A0795258		<5	3.9	9.18	630	0.45	6.2	<5	79	2.3	10
A0795259		<5	4.8	4.86	201	0.13	5.2	<5	35	1.3	10
A0795260		<5	2.0	10.40	604	0.35	4.2	<5	70	2.1	10
A0795261		<5	1.8	5.71	262	0.35	2.3	<5	45	1.3	10
A0795262		<5	2.8	11.50	707	0.60	3.8	<5	78	2.4	10
A0795263		<5	9.5	9.11	335	0.49	10.3	<5	72	2.1	10
A0795264		<5	9.4	5.86	331	0.26	9.6	<5	44	1.6	10
A0795265		<5	1.3	9.51	263	0.99	2.3	<5	110	5.8	30
A0795266		<5	3.1	8.21	469	0.36	3.9	<5	55	1.6	30
A0795267		<5	10.5	7.49	412	0.21	13.9	<5	43	1.0	20
A0795268		<5	9.7	4.42	255	0.18	11.6	<5	35	1.0	10
A0795269		<5	9.0	5.92	330	0.26	7.7	<5	35	1.2	<10
A0795270		<5	<0.5	0.12	3.9	<0.05	0.5	<5	3	0.2	30
A0795271		<5	8.3	2.08	103.5	0.13	8.7	<5	20	0.8	<10
A0795272		<5	6.1	4.99	235	0.22	13.6	<5	29	1.1	<10
A0795273		<5	6.6	5.45	337	0.24	8.4	<5	36	1.0	<10
A0795274		<5	3.2	4.08	136.5	0.29	4.7	<5	39	1.6	<10
A0795275		<5	2.7	4.78	171.0	0.30	4.4	<5	40	1.4	<10
A0795276		<5	9.6	8.06	219	0.34	15.6	<5	53	1.7	<10
A0795277		<5	10.9	9.00	310	0.58	16.4	<5	84	3.2	<10
A0795278		<5	4.7	9.41	518	0.53	6.9	<5	72	2.3	20
A0795279		<5	17.0	26.0	695	1.80	31.1	<5	214	9.0	20



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Project: Wicheeda

**CERTIFICATE OF ANALYSIS KL19251631**

**CERTIFICATE COMMENTS**

**LABORATORY ADDRESSES**

Applies to Method:	Processed at ALS Kamloops located at 2953 Shuswap Drive, Kamloops, BC, Canada.			
	CRU-31	CRU-QC	LOG-21	LOG-23
	PUL-31	PUL-QC	SPL-21	WEI-21
Applies to Method:	Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.			
	ME-MS81h			



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**QC CERTIFICATE KL19251631**

Project: Wicheeda  
 P.O. No.: 99185  
 This report is for 155 Drill Core samples submitted to our lab in Kamloops, BC, Canada on 7-OCT-2019.  
 The following have access to data associated with this certificate:

MO ASMAIL	KRIS RAFFLE
-----------	-------------

SAMPLE PREPARATION	
ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
PUL-QC	Pulverizing QC Test
LOG-21	Sample logging - ClientBarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize up to 250g 85% <75 um
LOG-23	Pulp Login - Rcvd with Barcode
CRU-QC	Crushing QC Test

ANALYTICAL PROCEDURES		
ALS CODE	DESCRIPTION	INSTRUMENT
ME-MS81h	High grade REE by fusion/ICPMS	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:**   
 Saa Traxler, General Manager, North Vancouver



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Project: Wicheeda

**QC CERTIFICATE OF ANALYSIS KL19251631**

Sample Description	Method Analyte Units LOD	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	
		Ce ppm	Dy ppm	Er ppm	Eu ppm	Gd ppm	Hf ppm	Ho ppm	La ppm	Lu ppm	Nb ppm	Nd ppm	Pr ppm	Rb ppm	Sm ppm	Sn ppm
		3	0.3	0.2	0.2	0.3	1	0.05	3	0.05	1	0.5	0.2	1	0.2	5
<b>STANDARDS</b>																
AMIS0185		39500	27.8	4.6	85.6	137.5	1	2.73	27800	0.21	107	9230	3280	5	530	<5
AMIS0185		39300	27.9	4.5	84.1	142.0	1	2.88	29000	0.27	107	9280	3330	6	564	<5
Target Range - Lower Bound		37900	24.9	4.3	83.9	126.5	<1	2.68	27700	0.15	105	8590	3230	3	517	<5
Upper Bound		43700	29.3	5.3	96.9	146.0	3	3.20	31900	0.36	123	9890	3710	7	595	11
OREAS 146		4680	214	81.5	122.0	360	5	34.2	2410	6.56	361	2100	541	26	421	42
OREAS 146		4510	216	84.1	131.5	367	4	35.8	2370	6.02	368	2030	514	27	414	40
OREAS 146		4660	215	81.0	120.0	370	4	35.9	2550	6.30	383	2230	543	27	449	43
Target Range - Lower Bound		4360	208	80.7	118.0	334	2	34.2	2330	5.81	360	2030	509	25	410	35
Upper Bound		5020	240	93.3	136.0	384	6	39.4	2690	6.79	416	2330	587	31	472	57
OREAS-101b		1310	31.4	18.1	7.1	36.8	11	6.10	765	2.44	57	384	128.5	191	48.8	9
OREAS-101b		1395	31.7	19.9	7.3	37.9	11	6.22	788	2.52	59	395	127.0	195	49.0	8
OREAS-101b		1360	30.0	18.5	7.5	38.4	11	6.25	766	2.56	59	397	127.0	196	51.5	10
Target Range - Lower Bound		1235	24.8	17.2	7.0	37.8		5.85	731	2.35		351	118.0		44.4	
Upper Bound		1425	29.2	20.2	8.5	44.2		6.83	847	2.81		405	136.0		51.6	
SY-4		118	18.8	14.7	1.8	14.1	12	4.20	54	1.98	13	57.7	14.2	51	13.2	7
SY-4		118	19.1	13.5	1.6	13.8	11	4.37	57	2.08	13	57.5	14.4	52	13.3	7
Target Range - Lower Bound		110	16.6	13.0	1.6	12.7	9	3.95	51	1.90	11	52.5	13.8	50	11.6	<5
Upper Bound		134	19.8	15.4	2.4	15.3	13	4.65	65	2.30	15	61.5	16.3	60	13.8	18
<b>BLANKS</b>																
BLANK		<3	<0.3	<0.2	<0.2	<0.3	1	<0.05	<3	<0.05	<1	<0.5	<0.2	1	<0.2	<5
BLANK		<3	<0.3	<0.2	<0.2	<0.3	<1	<0.05	<3	<0.05	<1	<0.5	<0.2	1	<0.2	<5
BLANK		<3	<0.3	<0.2	<0.2	<0.3	<1	<0.05	<3	<0.05	<1	<0.5	<0.2	<1	<0.2	<5
BLANK		<3	<0.3	<0.2	<0.2	<0.3	<1	<0.05	<3	<0.05	<1	<0.5	<0.2	<1	<0.2	<5
BLANK		<3	<0.3	<0.2	<0.2	<0.3	<1	<0.05	<3	<0.05	<1	<0.5	<0.2	1	<0.2	<5
Target Range - Lower Bound		<3	<0.3	<0.2	<0.2	<0.3	<1	<0.05	<3	<0.05	<1	<0.5	<0.2	<1	<0.2	<5
Upper Bound		6	0.6	0.4	0.4	0.6	2	0.10	6	0.10	2	1.0	0.4	2	0.4	10



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Project: Wicheeda

**QC CERTIFICATE OF ANALYSIS KL19251631**

Sample Description	Method Analyte Units LOD	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	
		Ta	Tb	Th	Tm	U	W	Y	Yb	Zr
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		0.5	0.05	0.3	0.05	0.3	5	3	0.2	10
<b>STANDARDS</b>										
AMIS0185		0.7	9.48	213	0.37	43.3	<5	55	2.0	90
AMIS0185		<0.5	9.42	217	0.33	43.3	<5	56	1.8	70
Target Range - Lower Bound		<0.5	9.20	211	0.32	42.8	<5	51	1.4	40
Upper Bound		1.2	10.70	243	0.54	49.8	11	65	2.3	80
OREAS 146		3.8	44.4	864	9.26	2.3	27	871	51.2	250
OREAS 146		4.0	47.4	849	9.43	2.2	27	923	53.1	230
OREAS 146		3.9	45.0	944	9.62	2.5	26	868	49.8	250
Target Range - Lower Bound		3.2	43.8	839	9.16	2.0	18	839	49.6	200
Upper Bound		5.4	50.6	967	10.65	3.3	40	971	57.4	260
OREAS-101b		2.8	5.18	36.4	2.61	373	18	171	17.8	440
OREAS-101b		2.8	5.34	36.3	2.74	364	20	183	19.0	430
OREAS-101b		2.6	5.18	35.4	2.92	383	18	164	18.0	440
Target Range - Lower Bound			4.94	33.6	2.42	360		163		
Upper Bound			5.80	39.2	2.90	414		193		
SY-4		0.7	2.69	1.2	2.17	0.7	<5	112	15.3	560
SY-4		0.5	2.60	1.1	2.17	0.8	<5	113	15.9	630
Target Range - Lower Bound		<0.5	2.37	0.7	2.09	<0.3	<5	108	13.6	550
Upper Bound		1.9	2.83	1.9	2.51	1.4	15	130	16.0	660
<b>BLANKS</b>										
BLANK		<0.5	<0.05	<0.3	<0.05	<0.3	<5	<3	<0.2	20
BLANK		<0.5	<0.05	<0.3	<0.05	<0.3	<5	<3	<0.2	20
BLANK		<0.5	<0.05	<0.3	<0.05	<0.3	<5	<3	<0.2	<10
BLANK		<0.5	<0.05	<0.3	<0.05	<0.3	<5	<3	<0.2	<10
BLANK		<0.5	<0.05	<0.3	<0.05	<0.3	<5	<3	<0.2	20
Target Range - Lower Bound		<0.5	<0.05	<0.3	<0.05	<0.3	<5	<3	<0.2	<10
Upper Bound		1.0	0.10	0.6	0.10	0.6	10	6	0.4	20



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**QC CERTIFICATE OF ANALYSIS KL19251631**

Sample Description	Method Analyte Units LOD	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	
		Ce ppm	Dy ppm	Er ppm	Eu ppm	Gd ppm	Hf ppm	Ho ppm	La ppm	Lu ppm	Nb ppm	Nd ppm	Pr ppm	Rb ppm	Sm ppm	Sn ppm
		3	0.3	0.2	0.2	0.3	1	0.05	3	0.05	1	0.5	0.2	1	0.2	5
<b>DUPLICATES</b>																
A0795133		4290	15.1	2.3	29.3	54.4	<1	1.44	3190	0.08	136	1055	351	30	120.5	<5
DUP		4400	15.6	2.3	29.5	58.6	1	1.57	3230	0.09	128	1090	361	33	122.5	<5
Target Range - Lower Bound		4190	14.5	2.0	28.2	54.2	<1	1.40	3090	<0.05	126	1035	343	29	117.0	<5
Upper Bound		4500	16.2	2.6	30.6	58.8	2	1.61	3330	0.10	138	1110	369	34	126.0	10
A0795169		18500	21.6	2.8	51.0	122.5	<1	2.04	14150	0.11	61	3520	1400	1	277	<5
DUP		18600	21.8	2.8	53.0	122.0	<1	2.00	14200	0.15	57	3580	1420	1	287	<5
Target Range - Lower Bound		17900	20.6	2.5	50.0	117.5	<1	1.90	13700	0.08	56	3430	1360	<1	272	<5
Upper Bound		19200	22.8	3.1	54.0	127.0	2	2.14	14650	0.18	62	3670	1460	2	292	10
A0795205		7750	34.2	9.0	36.8	98.3	1	4.67	6400	0.60	302	1615	603	51	161.5	<5
DUP		7810	34.7	9.2	37.5	97.8	1	4.76	6490	0.67	314	1640	610	50	165.5	<5
Target Range - Lower Bound		7500	32.9	8.6	35.6	94.3	<1	4.50	6220	0.56	296	1570	585	48	157.5	<5
Upper Bound		8060	36.0	9.6	38.7	102.0	2	4.93	6670	0.71	320	1685	628	53	169.5	10
A0795242		7240	20.8	3.6	36.3	88.3	<1	2.62	5160	0.21	208	1780	629	29	180.5	<5
DUP		7000	20.3	4.3	35.0	83.4	<1	2.12	4910	0.24	208	1825	609	32	190.5	<5
Target Range - Lower Bound		6870	19.5	3.6	34.2	82.5	<1	2.24	4860	0.17	200	1740	597	28	179.0	<5
Upper Bound		7370	21.6	4.3	37.1	89.2	2	2.50	5210	0.28	216	1865	641	33	192.0	10
A0795278		10450	33.1	6.7	54.0	133.0	<1	3.68	7610	0.27	298	2750	895	48	319	<5
DUP		10000	31.9	6.3	51.1	129.0	<1	3.55	7330	0.32	297	2660	858	48	308	<5
Target Range - Lower Bound		9860	31.1	6.1	50.5	126.0	<1	3.44	7210	0.23	286	2610	846	45	302	<5
Upper Bound		10600	33.9	6.9	54.6	136.0	2	3.79	7730	0.36	309	2800	907	51	325	10
<b>PREP DUPLICATES</b>																
A0795180		7520	24.8	3.9	43.6	91.2	1	2.71	5330	0.20	145	1795	632	16	180.5	<5
A0795180 PREP DUP		7200	27.1	4.2	44.4	90.9	<1	2.69	5530	0.18	141	1700	582	14	202	<5
A0795237		7490	35.9	7.8	44.2	95.9	<1	4.12	5460	0.35	110	1735	643	5	183.5	<5
A0795237 PREP DUP		7500	33.0	6.8	37.4	88.8	<1	3.51	5760	0.30	97	1735	606	4	190.5	<5



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Project: Wicheeda

**QC CERTIFICATE OF ANALYSIS KL19251631**

Sample Description	Method	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	
	Analyte	Ta	Tb	Th	Tm	U	W	Y	Yb	
Units		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
LOD		0.5	0.05	0.3	0.05	0.3	5	3	0.2	
	Zr									
	ppm									
	10									
<b>DUPLICATES</b>										
A0795133		3.8	4.82	158.5	0.20	1.5	<5	31	1.0	70
DUP		2.9	5.13	163.5	0.18	1.4	<5	33	0.9	70
Target Range - Lower Bound		2.7	4.75	155.0	0.13	1.1	<5	28	0.7	60
Upper Bound		4.0	5.20	167.0	0.25	1.8	10	36	1.2	80
A0795169		2.6	8.69	460	0.22	1.9	<5	53	1.3	60
DUP		1.5	8.22	468	0.27	2.1	<5	52	1.1	60
Target Range - Lower Bound		1.5	8.11	447	0.19	1.6	<5	48	1.0	50
Upper Bound		2.6	8.80	481	0.30	2.4	10	57	1.4	70
A0795205		1.1	9.32	251	0.96	2.4	<5	102	5.8	50
DUP		2.2	9.25	253	0.99	2.4	<5	101	5.4	80
Target Range - Lower Bound		1.1	8.91	243	0.89	2.0	<5	95	5.2	50
Upper Bound		2.2	9.66	261	1.06	2.8	10	108	6.0	80
A0795242		2.0	6.44	370	0.29	2.1	<5	52	1.7	10
DUP		1.9	6.00	398	0.30	2.4	<5	50	1.5	10
Target Range - Lower Bound		1.4	5.95	370	0.23	1.9	<5	46	1.3	<10
Upper Bound		2.5	6.49	398	0.36	2.6	10	56	1.9	20
A0795278		4.7	9.41	518	0.53	6.9	<5	72	2.3	20
DUP		4.4	9.64	508	0.48	6.7	<5	72	2.7	<10
Target Range - Lower Bound		3.9	9.14	495	0.44	6.3	<5	66	2.2	<10
Upper Bound		5.2	9.91	531	0.57	7.3	10	78	2.8	20
<b>PREP DUPLICATES</b>										
A0795180		1.2	7.84	266	0.31	2.1	<5	54	1.5	40
A0795180 PREP DUP		0.9	8.22	257	0.40	2.0	<5	53	1.5	<10
A0795237		1.0	9.38	297	0.64	1.6	<5	84	3.0	10
A0795237 PREP DUP		0.6	8.01	281	0.52	1.5	<5	71	2.4	<10





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**QC CERTIFICATE OF ANALYSIS KL19251631**

### CERTIFICATE COMMENTS

#### LABORATORY ADDRESSES

Applies to Method:	Processed at ALS Kamloops located at 2953 Shuswap Drive, Kamloops, BC, Canada.		
	CRU-31	CRU-QC	LOG-21
	PUL-31	PUL-QC	SPL-21
			LOG-23
			WEI-21
Applies to Method:	Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.		
	ME-MS81h		



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**CERTIFICATE KL19259327**

Project: Wicheeda  
 P.O. No.: 99185  
 This report is for 189 Drill Core samples submitted to our lab in Kamloops, BC, Canada on 15-OCT-2019.  
 The following have access to data associated with this certificate:

MO ASMAIL	KRIS RAFFLE
-----------	-------------

SAMPLE PREPARATION	
ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
PUL-QC	Pulverizing QC Test
LOG-21	Sample logging - ClientBarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize up to 250g 85% <75 um
LOG-23	Pulp Login - Rcvd with Barcode
CRU-QC	Crushing QC Test

ANALYTICAL PROCEDURES		
ALS CODE	DESCRIPTION	INSTRUMENT
ME-MS81h	High grade REE by fusion/ICPMS	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:**   
 Saa Traxler, General Manager, North Vancouver



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Project: Wicheeda

**CERTIFICATE OF ANALYSIS KL19259327**

Sample Description	Method	WEI-21	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h
	Analyte	Recvd Wt.	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nb	Nd	Pr	Rb	Sm
Units		kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
LOD		0.02	3	0.3	0.2	0.2	0.3	1	0.05	3	0.05	1	0.5	0.2	1	0.2
A0795280		4.89	23200	44.9	6.8	81.7	150.0	<1	4.51	17150	0.29	76	4640	1740	4	393
A0795281		5.19	4620	18.5	3.0	26.4	47.5	<1	2.14	3130	0.31	183	1005	353	41	111.0
A0795282		5.95	25700	40.3	5.5	84.1	146.0	<1	3.78	19250	0.22	81	5020	1920	3	411
A0795283		6.20	20400	37.0	5.4	68.7	129.5	<1	3.27	15750	0.26	43	4010	1525	1	337
A0795284		4.75	18450	35.8	4.0	63.8	119.5	<1	3.07	13950	0.08	27	3610	1375	3	316
A0795285		0.07	8430	36.8	8.1	36.4	80.8	1	4.44	6810	0.76	324	1580	605	55	154.0
A0795286		3.87	21300	100.5	21.1	104.0	194.5	<1	12.15	15550	0.88	672	4440	1640	83	461
A0795287		5.71	12800	45.4	6.7	69.0	130.5	<1	4.44	9610	0.40	144	2820	997	4	302
A0795288		6.15	10000	46.1	8.6	65.4	130.0	<1	4.36	7570	0.43	81	2390	818	9	285
A0795289		5.61	10950	34.1	5.7	64.3	114.5	1	3.46	8470	0.29	133	2450	860	1	254
A0795290		0.15	40	0.7	0.4	0.2	0.8	1	0.09	26	0.05	2	9.3	3.7	4	1.5
A0795291		5.96	6960	26.4	4.9	42.9	82.8	<1	2.71	5090	0.33	52	1555	544	1	177.5
A0795292		6.71	6260	24.4	3.6	35.9	68.8	<1	2.46	4460	0.23	261	1475	501	47	167.0
A0795293		5.95	4920	17.7	3.7	28.3	59.5	<1	2.01	3240	0.21	59	1165	391	7	130.0
A0795294		2.80	5380	26.1	5.0	31.3	64.6	<1	2.69	4080	0.17	334	1195	418	19	133.0
A0795295		2.65	6270	26.1	5.1	35.2	70.9	<1	2.87	4690	0.12	331	1385	488	17	158.0
A0795296		5.45	11000	37.0	6.3	52.9	110.5	<1	4.03	8200	0.39	177	2370	849	3	241
A0795297		5.45	4340	15.5	3.2	23.7	49.3	<1	1.89	2910	0.17	43	984	337	<1	109.0
A0795298		2.94	3700	14.2	2.5	24.1	43.8	<1	1.52	2430	0.09	323	853	287	37	101.5
A0795299		3.02	8450	16.0	3.2	37.1	70.4	<1	1.78	6090	0.20	89	1855	660	13	191.5
A0795300		4.09	5770	25.3	4.6	32.6	66.5	<1	2.62	4190	0.27	568	1245	441	74	146.0
A0795301		2.79	6600	30.6	5.2	41.0	80.4	<1	3.30	4750	0.25	406	1465	509	69	164.5
A0795302		2.74	11200	42.5	7.4	63.4	121.5	<1	4.25	8260	0.48	438	2390	860	84	256
A0795303		3.97	5870	29.4	5.2	45.3	86.0	<1	3.22	4170	0.25	697	1440	476	111	179.0
A0795304		2.43	10400	38.0	6.2	79.4	145.5	<1	3.58	7450	0.21	281	2630	855	178	326
A0795305		0.07	8690	35.7	8.1	35.5	81.8	1	4.39	7290	0.66	348	1640	639	54	165.5
A0795306		2.66	1690	7.9	1.8	11.8	28.1	<1	0.79	962	0.14	13	585	174.0	1	73.7
A0795307		3.50	10550	50.7	9.5	70.2	138.0	<1	5.57	7860	0.48	318	2390	821	36	273
A0795308		1.91	16650	35.7	4.5	80.5	170.0	<1	3.09	10500	0.14	71	4750	1495	2	505
A0795309		5.39	10750	27.2	3.9	49.6	95.5	<1	2.59	7960	0.10	426	2320	824	55	228
A0795310		0.17	37	<0.3	0.4	0.2	0.6	2	0.05	24	<0.05	1	9.7	3.7	2	1.8
A0795311		5.56	11050	37.1	6.3	61.0	124.0	<1	3.89	7740	0.36	342	2680	898	39	293
A0795312		6.53	16150	41.4	6.2	81.0	157.0	<1	3.85	11950	0.30	553	3760	1300	50	400
A0795313		5.84	17150	41.5	5.2	93.7	178.0	<1	3.76	12950	0.29	271	3960	1365	9	430
A0795314		2.67	22300	45.4	7.5	88.8	169.5	<1	4.67	17200	0.22	554	4790	1720	27	456
A0795315		2.84	21300	45.3	6.4	86.2	161.5	<1	4.75	16450	0.21	599	4600	1645	16	432
A0795316		4.55	26200	40.4	6.1	98.8	248	<1	4.30	20100	0.35	132	5620	2020	4	569
A0795317		4.67	10700	28.2	5.4	49.3	128.0	<1	3.14	8160	0.07	862	2270	811	21	254
A0795318		2.65	5170	19.6	3.8	33.5	80.9	<1	2.57	3340	0.23	797	1110	387	41	150.0
A0795319		4.52	8230	28.3	4.8	55.0	122.5	<1	3.42	5870	0.32	1035	1840	643	33	238



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Sample Description	Method Analyte Units LOD	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	
		Sn	Ta	Tb	Th	Tm	U	W	Y	Yb	Zr
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		5	0.5	0.05	0.3	0.05	0.3	5	3	0.2	10
A0795280		<5	0.5	14.10	754	0.72	0.8	<5	93	2.4	10
A0795281		<5	1.6	4.90	144.0	0.38	2.2	<5	44	1.9	10
A0795282		<5	<0.5	12.90	674	0.49	0.8	<5	87	1.8	20
A0795283		<5	<0.5	11.35	540	0.60	0.6	<5	78	2.3	<10
A0795284		<5	<0.5	11.60	538	0.46	0.8	<5	70	1.9	10
A0795285		<5	1.1	8.89	239	1.00	2.3	<5	106	5.6	40
A0795286		<5	5.5	25.0	595	2.18	7.9	5	226	8.1	20
A0795287		<5	1.0	12.65	372	0.66	2.2	<5	104	3.1	20
A0795288		<5	13.3	13.00	651	0.85	1.5	<5	115	3.5	50
A0795289		<5	0.7	11.40	371	0.60	1.2	<5	76	2.5	20
A0795290		<5	1.4	0.08	4.5	<0.05	0.4	<5	<3	0.4	80
A0795291		<5	5.8	8.30	208	0.34	0.7	<5	61	2.3	40
A0795292		<5	4.2	6.65	223	0.43	4.0	<5	58	1.7	40
A0795293		<5	0.9	5.82	200	0.40	1.0	<5	44	1.6	50
A0795294		<5	4.3	6.96	252	0.49	5.6	<5	60	2.1	20
A0795295		<5	5.2	7.31	317	0.49	5.7	<5	62	1.9	40
A0795296		<5	1.5	11.05	399	0.71	3.2	<5	87	2.4	40
A0795297		<5	0.6	5.05	154.0	0.34	0.7	<5	40	1.8	50
A0795298		<5	4.7	4.36	154.0	0.24	5.5	<5	40	1.3	<10
A0795299		<5	1.4	5.88	275	0.26	1.5	<5	41	1.3	10
A0795300		<5	8.1	7.14	211	0.60	7.1	<5	63	2.4	10
A0795301		<5	4.1	8.63	311	0.67	4.4	<5	76	3.0	<10
A0795302		<5	4.9	12.75	544	0.69	5.8	<5	102	4.3	10
A0795303		<5	9.1	9.09	282	0.53	8.9	<5	72	2.3	10
A0795304		<5	5.1	12.95	240	0.45	5.5	<5	81	2.1	20
A0795305		<5	1.4	9.54	238	0.97	2.2	<5	111	5.9	50
A0795306		<5	<0.5	2.41	80.4	0.22	<0.3	<5	18	1.2	10
A0795307		<5	3.7	14.25	438	1.19	5.7	<5	110	3.8	10
A0795308		<5	0.6	12.40	710	0.43	8.0	<5	80	2.1	<10
A0795309		<5	4.2	8.85	363	0.35	6.8	<5	55	1.5	10
A0795310		<5	<0.5	<0.05	3.3	<0.05	0.4	<5	<3	0.2	60
A0795311		<5	3.6	11.75	429	0.52	4.6	<5	88	2.8	30
A0795312		<5	5.7	13.35	635	0.63	6.6	<5	85	2.7	<10
A0795313		<5	2.2	15.25	618	0.51	3.4	<5	89	1.9	10
A0795314		<5	3.6	14.85	722	0.69	6.9	<5	100	2.8	30
A0795315		<5	3.7	14.95	740	0.67	6.1	<5	91	2.8	20
A0795316		<5	0.8	16.55	969	0.52	2.4	<5	91	2.6	<10
A0795317		<5	9.9	10.10	377	0.31	14.1	<5	62	1.1	<10
A0795318		<5	10.3	6.64	580	0.41	15.8	<5	53	1.9	<10
A0795319		<5	12.3	9.57	500	0.34	16.0	<5	70	2.0	30



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Sample Description	Method	WEI-21	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h
	Analyte	Recvd Wt.	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nb	Nd	Pr	Rb	Sm
Units		kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
LOD		0.02	3	0.3	0.2	0.2	0.3	1	0.05	3	0.05	1	0.5	0.2	1	0.2
A0795320		4.78	4140	21.0	4.2	38.6	91.5	<1	2.71	2620	0.21	828	1005	331	115	148.5
A0795321		7.37	8290	21.8	3.9	49.1	111.0	<1	2.76	6000	0.32	816	1840	644	47	214
A0795322		5.91	10700	25.4	3.8	53.8	129.5	<1	2.66	7650	0.10	828	2430	857	38	267
A0795323		6.28	3690	15.0	2.6	33.1	74.2	<1	1.84	2390	0.11	663	922	303	78	133.5
A0795324		4.20	1820	8.4	1.7	19.2	44.5	<1	0.92	1215	0.16	809	506	163.5	105	80.3
A0795325		0.07	8700	32.7	10.0	37.9	101.0	1	4.66	6940	0.68	339	1600	622	50	170.0
A0795326		4.59	2040	11.6	1.6	20.4	48.7	<1	1.39	1415	0.08	496	539	180.0	82	87.5
A0795327		5.01	4860	14.9	3.0	31.0	75.1	<1	1.80	3030	0.11	399	1165	395	52	150.0
A0795328		4.51	4030	12.8	2.3	28.1	68.4	<1	1.45	2520	0.09	355	1040	342	54	133.5
A0795329		4.43	803	5.7	1.1	9.2	22.8	<1	0.62	530	<0.05	538	234	75.3	99	37.9
A0795330		0.15	8	<0.3	<0.2	<0.2	0.8	1	0.10	4	<0.05	2	4.3	0.9	3	<0.2
A0795331		4.48	417	3.8	0.9	6.7	16.6	<1	0.41	275	0.06	431	131.5	39.0	91	25.3
A0795332		7.00	1770	8.8	1.5	19.5	44.7	<1	1.17	1195	0.13	311	497	157.5	68	76.4
A0795333		5.64	7060	21.0	3.5	51.4	120.0	<1	2.22	5120	0.05	155	1745	578	66	235
A0795334		2.67	11350	24.3	3.4	63.2	170.0	<1	2.87	8140	0.13	180	2880	948	49	357
A0795335		6.13	5950	22.2	5.1	40.5	101.0	1	2.62	3600	0.33	531	1540	500	94	209
A0795336		3.24	5570	27.1	4.8	66.6	146.0	<1	3.04	3310	0.22	482	1530	479	95	252
A0795337		3.20	5650	26.8	4.8	60.0	139.0	<1	2.97	3340	0.16	464	1550	483	116	250
A0795338		6.09	4280	20.2	4.8	37.1	82.7	1	2.65	2640	0.21	355	1115	363	109	154.0
A0795339		6.67	9470	23.2	2.5	54.6	135.5	<1	2.25	6530	0.19	225	2350	788	31	279
A0795340		6.93	11950	43.4	8.6	84.6	209	<1	5.34	8130	0.15	465	3170	1030	63	405
A0795341		4.55	8150	33.8	6.1	53.7	167.0	<1	3.69	4770	0.35	85	2440	760	11	333
A0795342		5.68	814	13.5	7.1	7.6	25.4	4	2.56	455	0.57	622	238	76.6	168	29.8
A0795343		5.39	3910	48.0	13.6	46.0	132.5	<1	7.01	1920	0.45	459	1225	366	63	194.5
A0795344		3.74	3170	31.5	8.7	31.4	86.7	<1	4.80	1520	0.39	416	941	293	54	131.0
A0795345		0.07	8670	32.0	8.5	39.8	100.5	1	4.65	6940	0.89	317	1595	615	46	167.5
A0795346		5.35	2230	18.7	6.5	20.9	55.5	1	2.89	1120	0.37	298	714	226	47	93.9
A0795347		6.06	337	6.7	3.5	3.8	10.5	3	1.36	195	0.27	85	102.5	32.2	95	13.8
A0795348		4.02	5250	13.5	1.8	28.4	67.7	<1	1.23	3390	0.05	439	1280	433	78	157.5
A0795349		4.26	9050	17.3	2.7	39.9	96.1	<1	1.81	6820	0.08	117	1975	701	31	208
A0795350		0.17	8	0.4	0.2	<0.2	0.5	1	<0.05	4	0.09	1	3.8	0.9	1	<0.2
A0795351		5.07	10700	20.8	2.5	50.3	123.0	<1	2.12	7730	0.06	67	2420	839	9	258
A0795352		5.40	5910	15.5	1.9	34.1	62.5	<1	1.35	4670	<0.05	193	1390	451	37	154.0
A0795353		4.01	7070	17.8	2.2	32.9	67.9	<1	1.51	5570	0.08	68	1595	531	4	155.0
A0795354		2.52	8310	18.4	2.6	40.7	85.2	<1	1.63	6630	0.12	9	1790	613	1	185.5
A0795355		2.50	8220	18.4	2.1	39.2	83.8	<1	1.60	6540	0.17	10	1795	603	1	185.5
A0795356		6.07	5970	54.5	13.4	48.1	107.5	<1	7.06	4200	0.91	839	1375	449	13	180.0
A0795357		4.47	155	3.7	1.4	2.1	5.7	<1	0.57	112	0.11	61	46.8	14.7	13	7.9
A0795358		5.12	702	9.6	4.6	6.7	16.4	1	1.48	504	0.43	158	189.5	59.6	32	25.6
A0795359		2.42	1400	7.0	1.9	12.0	24.3	1	0.79	1100	0.20	131	358	117.0	37	47.2



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Sample Description	Method Analyte Units LOD	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	
		Sn	Ta	Tb	Th	Tm	U	W	Y	Yb	Zr
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		5	0.5	0.05	0.3	0.05	0.3	5	3	0.2	10
A0795320		<5	11.4	7.69	314	0.26	13.7	<5	56	1.4	<10
A0795321		<5	15.4	8.48	603	0.36	10.6	5	56	1.6	10
A0795322		<5	8.9	9.22	628	0.38	11.2	<5	62	1.3	<10
A0795323		<5	10.3	5.45	213	0.22	10.2	<5	34	1.1	<10
A0795324		<5	13.6	3.31	161.0	0.15	13.6	<5	24	1.0	<10
A0795325		<5	1.3	9.67	250	1.06	2.4	<5	107	6.1	30
A0795326		<5	8.5	3.93	125.5	0.16	6.7	<5	27	0.9	<10
A0795327		<5	5.8	5.57	267	0.23	6.2	<5	35	1.3	<10
A0795328		<5	5.4	4.69	319	0.09	6.8	<5	33	0.8	20
A0795329		<5	8.9	1.84	73.9	0.14	9.2	<5	15	0.5	<10
A0795330		<5	<0.5	0.11	2.1	<0.05	0.3	<5	3	0.3	40
A0795331		<5	7.0	1.25	71.7	0.11	6.3	<5	11	0.6	<10
A0795332		<5	5.9	2.93	128.5	0.23	5.4	<5	23	0.9	<10
A0795333		<5	2.5	8.17	378	0.20	3.6	<5	47	1.2	<10
A0795334		<5	2.5	11.30	821	0.30	3.1	<5	54	1.5	<10
A0795335		<5	8.8	7.26	458	0.62	35.5	<5	61	3.2	100
A0795336		<5	8.7	10.40	518	0.40	9.9	<5	61	2.3	10
A0795337		<5	9.1	10.05	406	0.47	10.3	<5	62	2.7	30
A0795338		<5	7.8	6.35	264	0.48	8.9	<5	59	2.5	50
A0795339		<5	3.3	8.92	498	0.30	6.5	<5	54	1.3	<10
A0795340		<5	7.4	15.45	719	0.80	10.8	<5	111	2.9	<10
A0795341		<5	1.0	13.05	515	0.50	1.8	<5	81	2.8	<10
A0795342		<5	15.7	2.86	87.7	1.00	16.8	<5	70	5.1	350
A0795343		<5	5.6	12.50	383	1.44	8.5	<5	168	7.2	30
A0795344		<5	5.6	8.62	282	0.76	9.7	<5	113	3.8	70
A0795345		<5	1.0	9.94	251	1.01	2.5	<5	108	5.8	30
A0795346		<5	3.5	5.42	166.5	0.73	6.2	<5	70	3.7	30
A0795347		<5	0.6	1.33	20.8	0.35	1.2	<5	35	2.7	120
A0795348		<5	5.1	4.99	255	0.18	5.0	<5	27	1.0	10
A0795349		<5	0.9	7.19	351	0.14	1.3	<5	38	1.1	10
A0795350		<5	<0.5	<0.05	1.9	<0.05	0.4	<5	<3	0.2	60
A0795351		<5	0.5	8.37	380	0.12	1.8	<5	39	0.8	10
A0795352		<5	2.5	5.55	214	0.19	2.6	<5	27	0.9	10
A0795353		<5	<0.5	6.09	250	0.22	1.5	<5	35	1.1	10
A0795354		<5	<0.5	7.66	239	0.16	0.5	<5	36	1.4	10
A0795355		<5	<0.5	6.76	267	0.16	0.6	<5	36	1.1	<10
A0795356		<5	2.4	13.35	304	1.52	4.9	<5	169	7.9	10
A0795357		<5	<0.5	0.71	14.3	0.13	0.4	<5	16	0.8	<10
A0795358		<5	0.7	2.04	37.6	0.46	0.5	<5	44	3.0	60
A0795359		<5	0.9	2.15	56.8	0.21	0.6	<5	24	1.5	60



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Sample Description	Method	WEI-21	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h
	Analyte	Recvd Wt.	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nb	Nd	Pr	Rb	Sm
Units		kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
LOD		0.02	3	0.3	0.2	0.2	0.3	1	0.05	3	0.05	1	0.5	0.2	1	0.2
A0795360		2.98	1600	9.7	3.5	10.3	22.0	<1	1.25	1195	0.19	138	387	128.0	9	42.6
A0795361		4.60	9090	25.7	3.8	45.4	96.8	<1	2.50	7590	0.17	17	1935	660	1	199.5
A0795362		5.21	14650	42.5	5.2	74.1	163.0	<1	4.25	12450	0.17	28	3180	1080	1	337
A0795363		4.58	17700	55.5	7.7	87.7	198.5	<1	5.75	15050	0.45	82	3960	1325	1	409
A0795364		6.47	18250	42.2	6.0	74.9	154.0	<1	3.96	14600	0.24	33	3960	1355	2	347
A0795365		0.07	8180	37.0	8.7	37.9	87.1	1	4.65	6890	0.75	317	1595	567	55	160.5
A0795366		7.67	15050	34.7	5.4	64.7	130.5	<1	3.45	11950	0.19	97	3320	1130	1	312
A0795367		6.43	23400	51.1	5.3	90.9	197.5	<1	4.61	18700	0.20	56	5010	1760	4	452
A0795368		7.11	18600	36.6	4.4	74.3	155.5	<1	3.48	15250	0.11	37	3860	1370	3	351
A0795369		5.79	15350	36.3	4.6	60.2	128.0	<1	3.94	12500	0.20	73	3190	1125	2	284
A0795370		0.17	60	0.8	0.4	0.3	1.0	2	0.16	47	0.06	1	14.7	5.3	3	1.4
A0795371		4.65	22900	44.5	6.1	79.7	163.0	<1	4.48	18350	0.14	97	4770	1685	5	407
A0795372		6.87	13850	26.0	3.5	47.4	97.1	<1	2.56	11300	0.11	476	2680	972	36	229
A0795373		6.77	19800	34.5	5.2	57.2	121.0	<1	3.62	16050	0.09	190	3710	1375	6	287
A0795374		3.19	23300	45.0	7.0	81.3	159.5	<1	4.79	18550	0.27	75	4640	1685	2	384
A0795375		3.06	23700	46.2	6.6	81.7	159.0	<1	4.85	19100	0.25	75	4730	1720	1	380
A0795376		6.45	17050	53.0	7.1	80.6	176.5	<1	4.88	13250	0.20	470	3810	1290	11	373
A0795377		6.96	18400	41.6	5.1	83.4	178.5	<1	3.91	14400	0.09	331	4070	1385	10	383
A0795378		6.83	11800	25.3	3.0	51.7	115.0	<1	2.48	9440	<0.05	36	2650	890	2	256
A0795379		6.44	13000	26.5	2.8	54.6	119.0	<1	2.29	10450	0.13	30	2880	980	1	283
A0795380		4.27	3460	12.2	2.0	17.3	39.9	<1	1.25	2430	0.21	181	815	266	17	85.9
A0795381		3.75	8290	23.1	3.2	39.9	85.7	<1	2.12	6400	0.12	385	1875	625	27	188.5
A0795382		4.20	6310	30.1	4.0	49.4	83.1	<1	2.89	4810	0.19	1260	1500	481	79	174.5
A0795383		2.91	12450	35.0	4.7	61.4	122.0	<1	3.92	10200	0.23	174	2680	924	15	268
A0795384		4.74	9790	32.6	5.5	46.2	94.2	<1	3.36	7830	0.22	219	2070	718	6	203
A0795385		0.07	8270	36.2	8.6	38.0	86.6	1	4.80	6990	0.69	328	1625	578	48	163.5
A0795386		6.78	8970	34.3	7.6	41.6	89.6	<1	4.74	7180	0.32	125	1990	677	9	187.5
A0795387		6.65	9410	30.0	5.6	41.3	91.2	<1	3.49	7490	0.26	106	2190	722	8	216
A0795388		5.41	4820	15.5	3.7	24.7	60.6	<1	1.83	3490	0.21	142	1100	383	24	111.5
A0795389		5.74	4620	16.6	4.3	24.1	60.1	<1	2.00	3200	0.11	286	1050	361	77	111.5
A0795390		0.17	17	0.5	0.3	<0.2	0.6	1	0.14	10	0.07	1	4.9	1.6	1	0.7
A0795391		6.22	10850	16.7	2.3	45.2	112.0	<1	1.49	8460	0.11	42	2430	867	2	244
A0795392		7.29	17650	27.1	3.1	70.4	163.0	<1	2.55	14200	0.13	56	3750	1380	6	354
A0795393		6.67	13200	20.7	2.4	54.3	125.0	<1	1.75	10800	0.05	134	2840	1040	3	272
A0795394		6.78	9410	18.1	3.0	38.3	96.0	<1	1.80	7580	0.19	59	2040	748	2	196.0
A0795395		2.82	7980	17.8	3.0	35.8	87.1	<1	1.84	6200	0.23	94	1815	644	2	189.0
A0795396		2.87	6650	14.9	2.5	30.2	74.1	<1	1.71	5180	0.11	56	1530	532	<1	153.5
A0795397		6.35	13050	21.6	2.9	54.1	130.5	<1	2.23	10250	0.10	197	2870	1045	23	270
A0795398		5.61	10300	16.6	1.9	42.2	103.0	<1	1.59	8260	0.07	890	2260	815	33	228
A0795399		7.05	10400	17.2	2.8	42.4	97.0	<1	1.93	8510	0.07	4060	2010	778	44	184.0



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Sample Description	Method Analyte Units LOD	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	
		Sn	Ta	Tb	Th	Tm	U	W	Y	Yb	Zr
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		5	0.5	0.05	0.3	0.05	0.3	5	3	0.2	10
A0795360		<5	2.3	2.22	74.7	0.32	0.7	<5	34	1.9	20
A0795361		<5	<0.5	8.95	348	0.35	0.4	<5	53	2.1	<10
A0795362		<5	<0.5	14.90	627	0.40	0.6	<5	78	1.6	10
A0795363		<5	1.0	19.40	753	0.63	1.1	<5	106	2.4	10
A0795364		<5	<0.5	14.95	583	0.47	0.7	<5	82	1.7	10
A0795365		<5	1.2	9.19	242	0.90	2.2	<5	107	5.9	50
A0795366		<5	0.9	12.00	418	0.34	1.6	<5	71	1.5	10
A0795367		<5	0.5	18.05	717	0.42	1.0	<5	92	2.2	20
A0795368		<5	<0.5	13.55	567	0.33	1.2	<5	72	1.4	20
A0795369		<5	0.7	12.10	535	0.46	2.7	<5	82	1.9	30
A0795370		<5	<0.5	<0.05	4.2	0.08	0.4	<5	3	0.2	60
A0795371		<5	0.6	15.10	633	0.54	1.4	<5	93	2.1	20
A0795372		<5	2.0	8.85	348	0.22	4.3	<5	56	1.6	<10
A0795373		<5	1.0	11.90	417	0.32	1.6	<5	73	1.5	30
A0795374		<5	0.6	16.15	572	0.62	1.2	<5	96	2.8	10
A0795375		<5	<0.5	15.10	594	0.60	0.9	<5	103	2.6	20
A0795376		<5	1.9	16.95	553	0.55	4.2	<5	95	2.4	10
A0795377		<5	1.1	14.80	551	0.41	3.1	<5	77	1.3	10
A0795378		<5	<0.5	10.00	328	0.22	1.0	<5	51	1.3	30
A0795379		<5	<0.5	10.25	361	0.20	1.1	<5	50	0.9	10
A0795380		<5	1.4	4.15	132.0	0.19	2.3	<5	26	0.5	10
A0795381		<5	3.2	7.66	305	0.20	3.7	<5	45	0.9	10
A0795382		<5	12.2	8.58	177.0	0.37	18.6	6	58	1.4	20
A0795383		<5	1.5	12.50	315	0.47	2.6	<5	85	1.9	10
A0795384		<5	1.3	9.59	276	0.48	2.4	<5	70	1.9	10
A0795385		<5	1.3	10.00	245	0.97	2.4	<5	110	5.9	40
A0795386		<5	1.2	9.69	324	0.64	2.3	<5	89	3.1	20
A0795387		<5	1.2	9.00	265	0.48	2.1	<5	72	2.3	20
A0795388		<5	2.5	4.50	149.5	0.26	2.9	<5	41	1.5	10
A0795389		<5	4.9	4.54	194.0	0.26	4.3	<5	40	1.6	<10
A0795390		<5	<0.5	0.07	2.0	0.07	0.3	<5	4	0.3	50
A0795391		<5	<0.5	6.62	344	0.16	1.6	<5	31	0.9	<10
A0795392		<5	<0.5	10.50	592	0.16	2.4	<5	50	0.9	<10
A0795393		<5	<0.5	7.47	423	0.20	1.2	<5	40	1.0	<10
A0795394		<5	<0.5	6.16	358	0.21	1.1	<5	39	1.2	10
A0795395		<5	<0.5	6.00	299	0.12	1.9	<5	37	1.5	20
A0795396		<5	0.8	5.26	232	0.19	1.5	<5	31	1.2	10
A0795397		<5	1.1	8.93	417	0.16	2.7	<5	41	0.9	<10
A0795398		<5	6.1	6.46	311	0.07	11.4	<5	32	0.7	10
A0795399		<5	10.8	6.36	270	0.18	20.6	6	38	0.8	20





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Sample Description	Method	WEI-21	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h
	Analyte	Recvd Wt.	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nb	Nd	Pr	Rb	Sm
	Units	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	LOD	0.02	3	0.3	0.2	0.2	0.3	1	0.05	3	0.05	1	0.5	0.2	1	0.2
A0795400		4.69	4490	11.2	1.5	21.9	47.9	<1	1.12	3330	<0.05	1360	871	335	127	90.7
A0795401		6.01	6440	17.1	2.6	40.3	88.0	1	1.95	5080	0.06	2050	1365	496	79	152.5
A0795402		6.34	1850	13.3	2.0	28.4	66.5	<1	1.18	1300	<0.05	1410	573	174.0	147	106.0
A0795403		3.45	6700	21.0	3.3	50.7	114.5	<1	2.18	5210	0.18	1725	1480	525	107	192.0
A0795404		2.45	2070	8.1	1.9	13.4	42.0	<1	1.07	1460	0.05	10	618	197.5	1	84.7
A0795405		0.07	8330	38.5	9.5	39.4	100.0	1	4.61	7020	0.74	333	1615	621	45	166.5
A0795406		6.49	4950	17.5	2.6	46.9	110.5	<1	1.74	3420	0.05	1275	1285	415	89	198.5
A0795407		3.34	4540	22.3	3.7	61.5	114.5	<1	2.09	3040	0.08	1140	1285	395	140	213
A0795408		6.45	5920	17.0	2.4	39.2	99.8	<1	1.84	4230	0.17	850	1440	491	46	182.0
A0795409		7.13	3560	14.4	2.6	34.9	82.3	<1	1.57	2400	0.10	1100	975	311	115	149.0
A0795410		0.18	13	0.4	0.2	<0.2	0.7	1	0.09	8	<0.05	2	4.0	1.1	2	0.7
A0795411		7.06	8740	26.4	4.3	62.6	140.5	<1	2.78	6450	0.12	1325	2260	742	94	297
A0795412		2.25	3770	12.7	2.5	27.1	58.3	<1	1.35	2410	0.14	874	962	315	116	128.5
A0795413		3.57	1910	8.8	1.3	13.5	39.1	<1	1.06	1325	<0.05	1435	595	186.0	142	79.3
A0795414		2.38	15950	32.6	4.4	67.3	171.0	<1	3.34	12450	0.15	88	3550	1275	3	337
A0795415		2.56	17600	37.3	4.9	76.8	186.5	<1	3.45	13650	0.13	82	3910	1415	2	382
A0795416		5.96	8660	22.5	3.1	36.1	92.9	<1	2.43	6910	0.07	113	1895	689	3	182.0
A0795417		5.83	12100	29.1	4.0	55.4	134.5	<1	2.84	9370	0.20	138	2750	982	10	281
A0795418		5.93	10450	22.8	3.2	47.1	119.0	<1	2.39	8150	0.25	29	2270	827	1	226
A0795419		4.34	10400	21.9	2.6	41.6	102.5	<1	2.19	8480	0.22	43	2140	799	<1	200
A0795420		4.08	9140	20.7	3.0	35.3	95.1	<1	2.08	7370	0.13	50	1965	713	1	188.5
A0795421		5.91	13100	29.5	4.0	54.6	146.5	<1	2.81	10500	0.20	32	2860	1040	1	278
A0795422		3.56	12050	26.1	3.2	51.3	132.5	<1	2.43	9640	0.09	26	2670	965	2	254
A0795423		4.56	8510	17.1	1.9	37.0	95.4	<1	1.47	6750	0.12	17	1860	669	2	186.5
A0795424		6.28	7340	17.0	2.7	34.4	72.2	<1	1.58	5370	0.23	35	1630	595	11	180.0
A0795425		0.07	8240	33.8	9.4	36.8	83.5	1	4.62	6660	0.52	317	1520	614	49	161.5
A0795426		6.45	8290	17.9	2.5	38.3	91.9	<1	1.64	6030	0.09	20	1885	679	5	216
A0795427		5.63	5870	11.7	1.3	27.0	57.4	<1	0.99	4070	0.09	3	1285	474	2	146.0
A0795428		4.79	9120	15.8	2.1	41.0	84.0	<1	1.46	6860	0.10	3	1890	722	1	207
A0795429		6.47	5060	9.7	1.4	24.0	53.8	<1	1.02	3430	<0.05	86	1100	406	1	125.0
A0795430		0.17	13	0.5	0.8	<0.2	0.5	2	0.17	7	<0.05	1	3.9	1.4	3	0.7
A0795431		6.39	7150	16.4	2.1	33.0	76.9	<1	1.32	5250	0.05	41	1580	584	6	192.0
A0795432		3.97	4140	9.7	1.5	20.7	43.9	<1	0.92	2700	0.11	251	935	336	34	100.0
A0795433		6.81	23100	32.3	5.1	65.6	131.0	<1	3.39	18600	0.25	50	4080	1705	3	353
A0795434		2.60	10150	24.5	4.3	46.2	102.0	<1	2.57	7630	0.16	135	2220	826	9	240
A0795435		2.40	8820	18.2	3.1	39.9	87.7	<1	1.72	6580	0.06	127	1935	729	9	206
A0795436		4.76	10600	19.4	2.6	42.3	84.7	<1	1.71	8130	0.10	72	2170	838	2	213
A0795437		2.70	15450	29.5	5.0	61.8	129.0	<1	2.88	11800	0.13	92	3140	1210	4	299
A0795438		4.89	11700	38.1	6.3	58.1	115.5	<1	4.00	9150	0.12	1325	2390	926	101	249
A0795439		6.20	7680	20.4	2.5	36.0	72.3	<1	2.03	5670	0.11	1070	1645	620	68	175.0



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 Account: TTB

Project: Wicheeda

**CERTIFICATE OF ANALYSIS KL19259327**

Sample Description	Method Analyte Units LOD	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	
		Sn	Ta	Tb	Th	Tm	U	W	Y	Yb	Zr
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		5	0.5	0.05	0.3	0.05	0.3	5	3	0.2	10
A0795400		<5	11.6	3.58	157.0	0.10	15.9	<5	20	0.5	40
A0795401		<5	16.7	5.89	241	0.18	33.2	5	38	0.9	60
A0795402		<5	20.7	4.27	283	0.15	23.4	<5	24	1.0	10
A0795403		<5	16.1	7.89	365	0.18	27.5	<5	44	1.0	20
A0795404		<5	<0.5	2.78	184.0	0.15	2.4	<5	26	1.1	10
A0795405		<5	1.0	9.39	264	1.05	2.5	<5	110	5.6	50
A0795406		<5	16.7	6.60	414	0.15	23.4	12	35	1.0	20
A0795407		<5	17.4	7.38	220	0.26	21.1	5	42	1.1	20
A0795408		<5	9.5	6.76	448	0.15	11.8	<5	39	1.0	10
A0795409		<5	16.3	5.30	320	0.18	18.8	5	32	0.9	10
A0795410		<5	<0.5	<0.05	2.3	<0.05	0.4	<5	<3	0.3	50
A0795411		<5	20.3	9.22	677	0.34	28.0	6	57	1.7	50
A0795412		<5	14.3	3.90	271	0.25	17.5	<5	28	1.1	20
A0795413		<5	24.3	2.79	112.5	0.11	25.9	7	19	0.8	20
A0795414		<5	<0.5	12.70	572	0.31	0.9	<5	64	1.7	10
A0795415		<5	0.5	13.30	579	0.33	0.9	<5	68	1.6	10
A0795416		<5	1.0	7.52	287	0.30	1.5	<5	43	1.3	<10
A0795417		<5	1.1	9.91	406	0.32	2.0	<5	56	1.9	10
A0795418		<5	<0.5	8.43	370	0.27	0.6	<5	41	1.0	10
A0795419		<5	<0.5	7.67	353	0.27	0.5	<5	50	1.2	10
A0795420		<5	<0.5	5.99	375	0.30	0.6	<5	44	1.5	<10
A0795421		<5	<0.5	10.20	578	0.38	0.8	<5	64	1.4	20
A0795422		<5	<0.5	9.09	502	0.32	0.8	<5	56	1.5	30
A0795423		<5	<0.5	6.39	325	0.15	0.6	<5	32	1.1	30
A0795424		<5	<0.5	5.90	298	0.26	0.5	<5	32	1.6	<10
A0795425		<5	1.2	9.57	246	0.96	2.4	<5	102	5.4	30
A0795426		<5	<0.5	6.72	393	0.22	<0.3	<5	33	1.2	<10
A0795427		<5	<0.5	4.58	243	0.11	0.4	<5	24	1.2	<10
A0795428		<5	<0.5	6.40	313	0.19	0.5	<5	30	0.9	<10
A0795429		<5	1.3	4.00	207	0.11	<0.3	<5	20	0.7	10
A0795430		<5	<0.5	0.14	1.7	<0.05	0.5	<5	4	0.5	50
A0795431		<5	<0.5	6.08	304	0.22	0.3	<5	28	0.8	<10
A0795432		<5	0.6	3.72	160.5	0.10	1.1	<5	19	0.6	<10
A0795433		<5	<0.5	10.75	482	0.42	0.4	<5	63	1.6	<10
A0795434		<5	0.5	8.78	425	0.37	1.0	<5	47	1.4	<10
A0795435		<5	<0.5	6.73	342	0.20	0.8	<5	34	1.4	<10
A0795436		<5	<0.5	7.03	308	0.24	0.5	<5	36	1.1	<10
A0795437		<5	<0.5	10.70	464	0.32	0.8	<5	54	1.7	<10
A0795438		<5	5.0	11.00	377	0.43	11.4	<5	66	1.9	<10
A0795439		<5	6.1	6.35	228	0.18	15.4	<5	36	1.0	<10



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**CERTIFICATE OF ANALYSIS KL19259327**

Sample Description	Method	WEI-21	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h
	Analyte	Recvd Wt.	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nb	Nd	Pr	Rb	Sm
	Units	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	LOD	0.02	3	0.3	0.2	0.2	0.3	1	0.05	3	0.05	1	0.5	0.2	1	0.2
A0795440		4.37	5290	12.2	2.4	23.6	49.0	<1	1.16	3560	0.11	533	1090	417	109	115.0
A0795441		5.19	7340	15.9	2.5	30.3	61.7	<1	1.72	5780	0.07	481	1420	558	21	144.0
A0795442		6.62	4910	11.5	2.1	23.4	51.1	<1	1.12	3330	0.09	354	1085	400	<1	121.0
A0795443		5.64	22300	35.2	3.6	94.6	200	<1	3.16	17150	0.28	19	4640	1775	6	486
A0795444		6.15	14950	24.4	2.7	59.3	129.5	<1	2.10	11800	0.08	20	2960	1165	1	305
A0795445		0.07	8400	35.2	10.5	36.3	86.1	1	4.67	6780	0.72	321	1575	626	51	167.0
A0795446		5.85	8210	15.9	2.2	37.2	79.9	<1	1.54	6210	0.23	7	1705	657	1	182.5
A0795447		5.77	7120	15.0	2.6	31.5	71.1	<1	1.24	5180	<0.05	4	1560	575	1	166.0
A0795448		4.80	4310	7.5	1.2	18.2	40.0	<1	0.75	2850	0.08	14	918	341	<1	98.7
A0795449		4.76	10300	21.7	2.9	46.6	101.0	<1	2.02	7880	0.12	103	2170	822	<1	236
A0795450		0.18	19	0.7	0.2	0.2	0.6	1	0.09	11	<0.05	1	4.6	1.9	2	0.6
A0795451		4.75	16500	40.7	5.0	83.5	165.0	<1	3.73	12500	0.08	2140	3570	1345	8	380
A0795452		4.18	5970	18.8	3.5	43.7	67.2	<1	2.25	3860	0.06	3830	1390	499	58	160.0
A0795453		4.77	11000	23.1	3.6	52.5	108.0	<1	2.44	8300	<0.05	634	2420	886	6	263
A0795454		3.10	13050	29.9	4.4	62.1	144.0	<1	2.59	9730	0.13	40	3020	1095	1	333
A0795455		3.33	12150	29.3	4.2	59.3	132.0	<1	2.61	9150	0.19	18	2810	1020	<1	311
A0795456		5.59	9870	35.1	9.0	50.8	116.0	<1	4.10	7520	0.36	111	2300	826	2	262
A0795457		5.54	8990	31.4	4.7	54.6	121.5	<1	3.24	6350	0.27	37	2260	779	<1	280
A0795458		6.66	10200	35.8	5.7	62.5	142.5	<1	3.55	7210	0.23	40	2600	898	2	317
A0795459		6.96	6940	26.3	5.0	41.5	103.5	<1	2.77	4190	0.31	33	1960	635	4	241
A0795460		6.34	22100	80.7	15.5	137.5	326	<1	8.84	16450	0.94	93	5940	1935	2	696
A0795461		5.22	10350	49.4	11.2	76.5	172.5	<1	5.50	7090	0.80	71	2810	909	<1	362
A0795462		2.01	10550	41.5	6.4	67.7	154.0	<1	4.01	7790	0.34	295	2750	903	1	326
A0795463		2.33	12850	42.6	6.3	74.2	171.0	<1	4.07	9740	0.43	436	3180	1075	1	373
A0795464		3.84	1760	23.4	6.8	20.9	54.1	2	3.55	1235	0.76	574	517	164.0	52	84.2
A0795465		0.07	8040	34.3	10.2	38.7	94.7	1	4.57	6760	0.57	328	1600	605	55	161.5
A0795466		6.33	1540	58.2	19.2	34.4	100.5	1	8.88	940	1.05	496	545	160.5	40	112.5
A0795467		6.92	1230	53.8	17.4	26.7	80.0	1	8.34	761	0.93	245	429	123.0	25	85.2
A0795468		6.64	797	24.9	11.4	11.3	37.0	1	4.26	549	0.99	139	235	74.1	1	42.4



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Project: Wicheeda

**CERTIFICATE OF ANALYSIS KL19259327**

Sample Description	Method Analyte Units LOD	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	
		Sn ppm	Ta ppm	Tb ppm	Th ppm	Tm ppm	U ppm	W ppm	Y ppm	Yb ppm	Zr ppm
		5	0.5	0.05	0.3	0.05	0.3	5	3	0.2	10
A0795440		<5	3.1	3.75	157.0	0.27	6.3	<5	24	0.9	<10
A0795441		<5	2.0	5.49	230	0.22	3.2	<5	31	1.1	<10
A0795442		<5	1.4	3.81	208	0.14	0.6	<5	22	1.0	<10
A0795443		<5	<0.5	15.20	843	0.20	0.8	<5	63	1.5	<10
A0795444		<5	<0.5	9.62	573	0.22	0.6	<5	42	1.2	<10
A0795445		<5	1.2	9.15	250	0.99	2.5	<5	106	5.2	30
A0795446		<5	<0.5	6.44	314	0.23	0.6	<5	31	1.1	<10
A0795447		<5	<0.5	5.67	320	0.17	0.3	<5	28	1.2	<10
A0795448		<5	<0.5	2.88	153.5	0.11	0.3	<5	16	1.0	<10
A0795449		<5	0.7	8.28	407	0.18	1.5	<5	42	0.9	<10
A0795450		<5	<0.5	0.08	2.1	0.07	0.4	<5	3	0.3	40
A0795451		<5	5.5	13.90	601	0.33	10.3	7	75	1.1	<10
A0795452		<5	24.5	6.77	223	0.28	40.7	11	42	1.1	10
A0795453		<5	2.4	8.20	413	0.27	5.4	<5	52	1.4	10
A0795454		<5	<0.5	11.20	574	0.38	0.4	<5	64	1.5	<10
A0795455		<5	<0.5	9.80	504	0.31	0.4	<5	58	1.4	<10
A0795456		<5	<0.5	10.30	454	0.65	1.5	<5	81	3.4	<10
A0795457		<5	<0.5	9.95	654	0.34	0.5	<5	64	2.5	<10
A0795458		<5	<0.5	11.70	699	0.39	0.6	<5	68	2.1	<10
A0795459		<5	<0.5	7.96	640	0.55	0.5	<5	59	3.0	<10
A0795460		<5	<0.5	25.6	1475	1.44	1.2	<5	213	7.3	20
A0795461		<5	<0.5	14.95	611	1.17	1.0	<5	129	6.8	<10
A0795462		<5	<0.5	12.95	482	0.56	0.3	<5	88	2.8	10
A0795463		<5	0.8	14.55	480	0.53	0.3	<5	83	2.7	<10
A0795464		<5	5.5	5.97	106.5	0.87	7.1	<5	95	4.6	100
A0795465		<5	1.1	9.39	250	1.01	2.3	<5	102	5.4	30
A0795466		<5	3.5	12.95	113.0	2.09	5.9	<5	234	8.7	50
A0795467		<5	1.6	11.80	65.2	1.80	3.7	<5	215	8.0	60
A0795468		<5	1.3	4.98	92.3	1.29	1.8	<5	122	7.8	50



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Project: Wicheeda

**CERTIFICATE OF ANALYSIS KL19259327**

**CERTIFICATE COMMENTS**

**LABORATORY ADDRESSES**

Applies to Method:	Processed at ALS Kamloops located at 2953 Shuswap Drive, Kamloops, BC, Canada.			
	CRU-31	CRU-QC	LOG-21	LOG-23
	PUL-31	PUL-QC	SPL-21	WEI-21
Applies to Method:	Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.			
	ME-MS81h			



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**QC CERTIFICATE KL19259327**

Project: Wicheeda  
 P.O. No.: 99185  
 This report is for 189 Drill Core samples submitted to our lab in Kamloops, BC, Canada on 15-OCT-2019.  
 The following have access to data associated with this certificate:

MO ASMAIL	KRIS RAFFLE
-----------	-------------

SAMPLE PREPARATION	
ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
PUL-QC	Pulverizing QC Test
LOG-21	Sample logging - ClientBarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize up to 250g 85% <75 um
LOG-23	Pulp Login - Rcvd with Barcode
CRU-QC	Crushing QC Test

ANALYTICAL PROCEDURES		
ALS CODE	DESCRIPTION	INSTRUMENT
ME-MS81h	High grade REE by fusion/ICPMS	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:**   
 Saa Traxler, General Manager, North Vancouver



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**QC CERTIFICATE OF ANALYSIS KL19259327**

Sample Description	Method Analyte Units LOD	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	
		Ce ppm	Dy ppm	Er ppm	Eu ppm	Gd ppm	Hf ppm	Ho ppm	La ppm	Lu ppm	Nb ppm	Nd ppm	Pr ppm	Rb ppm	Sm ppm	Sn ppm
		3	0.3	0.2	0.2	0.3	1	0.05	3	0.05	1	0.5	0.2	1	0.2	5
<b>STANDARDS</b>																
AMIS0185		43600	27.5	4.3	88.9	132.5	1	2.71	30800	0.26	121	9120	3440	4	541	<5
AMIS0185		41900	26.8	4.6	88.5	140.5	2	2.71	31500	0.20	119	9040	3680	6	529	<5
AMIS0185		42100	27.8	5.1	86.5	140.0	1	2.87	29800	0.35	115	8880	3490	6	557	<5
Target Range - Lower Bound		37900	24.9	4.3	83.9	126.5	<1	2.68	27700	0.15	105	8590	3230	3	517	<5
Upper Bound		43700	29.3	5.3	96.9	146.0	3	3.20	31900	0.36	123	9890	3710	7	595	11
OREAS 146		5010	204	83.4	125.0	378	5	35.5	2460	6.61	409	2160	544	26	462	41
OREAS 146		5020	224	82.3	125.0	393	4	36.2	2500	5.85	411	2180	551	29	465	42
OREAS 146		4880	213	79.0	126.5	359	5	34.4	2450	6.44	410	2180	545	27	461	43
Target Range - Lower Bound		4360	208	80.7	118.0	334	2	34.2	2330	5.81	360	2030	509	25	410	35
Upper Bound		5020	240	93.3	136.0	384	6	39.4	2690	6.79	416	2330	587	31	472	57
OREAS-101b		1335	31.1	17.4	7.3	38.0	10	6.02	756	2.79	61	372	122.0	187	50.0	9
OREAS-101b		1240	29.1	17.3	7.3	38.1	11	6.16	749	2.49	60	367	122.5	154	46.8	11
OREAS-101b		1300	29.9	19.9	8.1	39.5	12	6.30	783	2.76	63	393	125.5	193	50.1	9
Target Range - Lower Bound		1235	24.8	17.2	7.0	37.8		5.85	731	2.35		351	118.0		44.4	
Upper Bound		1425	29.2	20.2	8.5	44.2		6.83	847	2.81		405	136.0		51.6	
SY-4		120	19.8	14.7	1.8	13.1	10	4.10	55	1.91	14	58.7	15.0	52	12.3	9
SY-4		114	19.1	14.7	1.7	12.8	12	4.47	55	2.13	14	53.4	13.9	56	11.8	7
SY-4		117	17.9	15.3	1.7	14.2	11	3.99	55	2.07	14	56.3	14.3	52	13.1	7
Target Range - Lower Bound		110	16.6	13.0	1.6	12.7	9	3.95	51	1.90	11	52.5	13.8	50	11.6	<5
Upper Bound		134	19.8	15.4	2.4	15.3	13	4.65	65	2.30	15	61.5	16.3	60	13.8	18
<b>BLANKS</b>																
BLANK		<3	<0.3	<0.2	<0.2	<0.3	<1	<0.05	<3	<0.05	<1	<0.5	<0.2	<1	<0.2	<5
BLANK		<3	<0.3	<0.2	<0.2	<0.3	<1	<0.05	<3	<0.05	<1	<0.5	<0.2	<1	<0.2	<5
BLANK		<3	<0.3	<0.2	<0.2	<0.3	<1	<0.05	<3	<0.05	<1	<0.5	<0.2	1	<0.2	<5
BLANK		<3	<0.3	<0.2	<0.2	<0.3	<1	<0.05	<3	<0.05	<1	<0.5	<0.2	1	<0.2	<5
BLANK		<3	<0.3	<0.2	<0.2	<0.3	<1	<0.05	<3	<0.05	<1	<0.5	<0.2	<1	<0.2	<5
BLANK		<3	<0.3	<0.2	<0.2	<0.3	<1	0.05	<3	0.05	<1	<0.5	0.2	<1	<0.2	<5
Target Range - Lower Bound		<3	<0.3	<0.2	<0.2	<0.3	<1	<0.05	<3	<0.05	<1	<0.5	<0.2	<1	<0.2	<5
Upper Bound		6	0.6	0.4	0.4	0.6	2	0.10	6	0.10	2	1.0	0.4	2	0.4	10



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 Account: TTB

Project: Wicheeda

**QC CERTIFICATE OF ANALYSIS KL19259327**

Sample Description	Method Analyte Units LOD	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	
		Ta	Tb	Th	Tm	U	W	Y	Yb	Zr
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		0.5	0.05	0.3	0.05	0.3	5	3	0.2	10
<b>STANDARDS</b>										
AMIS0185		<0.5	10.10	216	0.41	44.9	<5	57	1.6	90
AMIS0185		<0.5	10.15	217	0.38	45.4	<5	54	1.5	70
AMIS0185		<0.5	9.87	225	0.42	45.0	<5	56	2.1	60
Target Range - Lower Bound		<0.5	9.20	211	0.32	42.8	<5	51	1.4	40
Upper Bound		1.2	10.70	243	0.54	49.8	11	65	2.3	80
OREAS 146		3.7	45.5	853	9.76	2.4	27	911	52.3	240
OREAS 146		3.7	44.9	901	9.41	2.9	28	901	52.8	240
OREAS 146		3.7	45.5	871	9.47	2.5	28	886	50.1	250
Target Range - Lower Bound		3.2	43.8	839	9.16	2.0	18	839	49.6	200
Upper Bound		5.4	50.6	967	10.65	3.3	40	971	57.4	260
OREAS-101b		2.6	5.19	34.5	2.53	370	19	171	19.2	430
OREAS-101b		2.5	5.06	34.5	2.67	383	18	164	16.9	440
OREAS-101b		2.7	5.53	36.6	2.87	392	21	173	19.1	450
Target Range - Lower Bound			4.94	33.6	2.42	360		163		
Upper Bound			5.80	39.2	2.90	414		193		
SY-4		0.8	2.72	1.4	2.18	0.8	<5	117	15.6	600
SY-4		0.8	2.61	1.4	2.18	1.0	<5	117	15.6	600
SY-4		0.9	2.52	1.2	2.11	0.7	<5	111	15.2	590
Target Range - Lower Bound		<0.5	2.37	0.7	2.09	<0.3	<5	108	13.6	550
Upper Bound		1.9	2.83	1.9	2.51	1.4	15	130	16.0	660
<b>BLANKS</b>										
BLANK		<0.5	<0.05	<0.3	<0.05	<0.3	<5	<3	<0.2	<10
BLANK		<0.5	<0.05	<0.3	<0.05	<0.3	<5	<3	<0.2	<10
BLANK		<0.5	<0.05	<0.3	<0.05	<0.3	<5	<3	<0.2	<10
BLANK		<0.5	<0.05	<0.3	<0.05	<0.3	<5	<3	<0.2	<10
BLANK		<0.5	0.05	<0.3	<0.05	<0.3	<5	<3	<0.2	<10
BLANK		<0.5	<0.05	<0.3	<0.05	<0.3	<5	<3	<0.2	<10
Target Range - Lower Bound		<0.5	<0.05	<0.3	<0.05	<0.3	<5	<3	<0.2	<10
Upper Bound		1.0	0.10	0.6	0.10	0.6	10	6	0.4	20





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Project: Wicheeda

**QC CERTIFICATE OF ANALYSIS KL19259327**

Sample Description	Method Analyte Units LOD	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	
		Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nb	Nd	Pr	Rb	Sm	Sn
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		3	0.3	0.2	0.2	0.3	1	0.05	3	0.05	1	0.5	0.2	1	0.2	5
<b>DUPLICATES</b>																
A0795289		10950	34.1	5.7	64.3	114.5	1	3.46	8470	0.29	133	2450	860	1	254	<5
DUP		11150	38.8	5.5	67.8	121.5	<1	3.78	8810	0.32	131	2510	886	2	266	<5
Target Range - Lower Bound		10650	34.9	5.2	63.5	113.5	<1	3.44	8330	0.24	126	2390	842	<1	251	<5
Upper Bound		11450	38.0	6.0	68.6	122.5	2	3.80	8950	0.37	138	2570	904	2	269	10
A0795325		8700	32.7	10.0	37.9	101.0	1	4.66	6940	0.68	339	1600	622	50	170.0	<5
DUP		8560	31.8	8.9	38.0	100.5	1	4.44	6860	0.52	317	1580	608	48	166.0	<5
Target Range - Lower Bound		8320	30.8	8.9	36.4	96.9	<1	4.34	6660	0.53	316	1535	593	46	162.0	<5
Upper Bound		8940	33.7	10.0	39.5	104.5	2	4.76	7140	0.67	340	1645	637	52	174.0	10
A0795361		9090	25.7	3.8	45.4	96.8	<1	2.50	7590	0.17	17	1935	660	1	199.5	<5
DUP		8810	26.6	3.8	45.4	92.7	<1	2.45	7270	0.14	15	1905	643	1	196.5	<5
Target Range - Lower Bound		8630	24.9	3.5	43.6	91.1	<1	2.34	7170	0.10	14	1850	628	<1	191.0	<5
Upper Bound		9270	27.4	4.1	47.2	98.4	2	2.61	7690	0.21	18	1990	675	2	205	10
A0795397		13050	21.6	2.9	54.1	130.5	<1	2.23	10250	0.10	197	2870	1045	23	270	<5
DUP		13600	23.0	2.3	57.2	137.0	<1	2.16	10700	0.08	203	2980	1080	25	279	<5
Target Range - Lower Bound		12850	21.2	2.3	53.5	129.0	<1	2.07	10100	<0.05	192	2820	1025	22	265	<5
Upper Bound		13800	23.4	2.9	57.8	138.5	2	2.32	10850	0.10	208	3030	1100	26	284	10
A0795433		23100	32.3	5.1	65.6	131.0	<1	3.39	18600	0.25	50	4080	1705	3	353	<5
DUP		23200	31.6	4.9	65.4	132.0	<1	3.25	18800	0.16	45	4120	1730	1	356	<5
Target Range - Lower Bound		22300	30.5	4.6	63.0	126.5	<1	3.15	18050	0.15	45	3960	1655	<1	342	<5
Upper Bound		24000	33.4	5.4	68.0	136.5	2	3.49	19350	0.26	50	4240	1780	3	367	10
A0795468		797	24.9	11.4	11.3	37.0	1	4.26	549	0.99	139	235	74.1	1	42.4	<5
DUP		836	25.9	11.1	12.6	36.7	1	4.54	573	0.81	146	251	80.9	2	44.2	<5
Target Range - Lower Bound		785	24.2	10.7	11.3	35.3	<1	4.20	538	0.82	137	234	74.6	<1	41.6	<5
Upper Bound		848	26.6	11.8	12.6	38.4	2	4.60	584	0.98	148	252	80.4	2	45.0	10
<b>PREP DUPLICATES</b>																
A0795336		5570	27.1	4.8	66.6	146.0	<1	3.04	3310	0.22	482	1530	479	95	252	<5
A0795336 PREP DUP		5170	30.1	5.2	64.8	138.5	<1	3.14	3200	0.28	468	1520	473	107	252	<5
A0795392		17650	27.1	3.1	70.4	163.0	<1	2.55	14200	0.13	56	3750	1380	6	354	<5
A0795392 PREP DUP		16100	25.3	3.6	67.3	141.5	<1	1.82	13000	0.18	58	3510	1280	5	336	<5



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**QC CERTIFICATE OF ANALYSIS KL19259327**

Sample Description	Method Analyte Units LOD	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	
		Ta	Tb	Th	Tm	U	W	Y	Yb	Zr
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		0.5	0.05	0.3	0.05	0.3	5	3	0.2	10
<b>DUPLICATES</b>										
A0795289		0.7	11.40	371	0.60	1.2	<5	76	2.5	20
DUP		0.9	11.50	380	0.52	1.1	<5	83	2.3	20
Target Range - Lower Bound		<0.5	11.00	362	0.49	0.8	<5	74	2.1	<10
Upper Bound		1.0	11.90	389	0.63	1.5	10	85	2.7	30
A0795325		1.3	9.67	250	1.06	2.4	<5	107	6.1	30
DUP		1.1	9.65	248	1.12	2.2	<5	109	5.3	40
Target Range - Lower Bound		0.7	9.27	240	1.00	1.9	<5	101	5.3	20
Upper Bound		1.7	10.05	258	1.18	2.7	10	115	6.1	50
A0795361		<0.5	8.95	348	0.35	0.4	<5	53	2.1	<10
DUP		<0.5	8.64	336	0.27	0.4	<5	52	1.7	20
Target Range - Lower Bound		<0.5	8.44	330	0.25	<0.3	<5	48	1.6	<10
Upper Bound		1.0	9.15	354	0.37	0.6	10	57	2.2	20
A0795397		1.1	8.93	417	0.16	2.7	<5	41	0.9	<10
DUP		1.2	9.05	427	0.24	2.6	<5	43	0.9	10
Target Range - Lower Bound		0.6	8.63	407	0.14	2.3	<5	38	0.7	<10
Upper Bound		1.7	9.35	437	0.26	3.0	10	46	1.1	20
A0795433		<0.5	10.75	482	0.42	0.4	<5	63	1.6	<10
DUP		<0.5	11.20	493	0.33	0.5	<5	60	1.2	<10
Target Range - Lower Bound		<0.5	10.55	470	0.31	<0.3	<5	56	1.2	<10
Upper Bound		1.0	11.40	505	0.44	0.6	10	67	1.6	20
A0795468		1.3	4.98	92.3	1.29	1.8	<5	122	7.8	50
DUP		1.1	5.10	94.6	1.23	2.0	<5	124	7.7	50
Target Range - Lower Bound		0.7	4.81	89.9	1.17	1.5	<5	116	7.3	40
Upper Bound		1.7	5.27	97.0	1.35	2.3	10	130	8.2	60
<b>PREP DUPLICATES</b>										
A0795336		8.7	10.40	518	0.40	9.9	<5	61	2.3	10
A0795336 PREP DUP		8.9	10.10	563	0.44	10.1	<5	67	2.1	10
A0795392		<0.5	10.50	592	0.16	2.4	<5	50	0.9	<10
A0795392 PREP DUP		<0.5	10.10	533	0.30	2.3	<5	47	1.3	10



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Sample Description	Method	Analyte	Units	LOD	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h			
					Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nb	Nd	Pr	Rb	Sm	Sn
					ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
					3	0.3	0.2	0.2	0.3	1	0.05	3	0.05	1	0.5	0.2	1	0.2	5
<b>PREP DUPLICATES</b>																			
A0795447					7120	15.0	2.6	31.5	71.1	<1	1.24	5180	<0.05	4	1560	575	1	166.0	<5
A0795447 PREP DUP					6290	13.3	2.2	30.9	71.0	<1	1.12	4620	0.20	4	1460	514	<1	149.0	<5

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



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**QC CERTIFICATE OF ANALYSIS KL19259327**

	Method Analyte Units LOD	ME-MS81h Ta ppm 0.5	ME-MS81h Tb ppm 0.05	ME-MS81h Th ppm 0.3	ME-MS81h Tm ppm 0.05	ME-MS81h U ppm 0.3	ME-MS81h W ppm 5	ME-MS81h Y ppm 3	ME-MS81h Yb ppm 0.2	ME-MS81h Zr ppm 10
		<b>PREP DUPLICATES</b>								
A0795447		<0.5	5.67	320	0.17	0.3	<5	28	1.2	<10
A0795447 PREP DUP		<0.5	4.92	310	0.11	0.3	<5	29	0.9	10



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**QC CERTIFICATE OF ANALYSIS KL19259327**

### CERTIFICATE COMMENTS

#### LABORATORY ADDRESSES

Applies to Method:	Processed at ALS Kamloops located at 2953 Shuswap Drive, Kamloops, BC, Canada.		
	CRU-31	CRU-QC	LOG-21
	PUL-31	PUL-QC	SPL-21
			LOG-23
			WEI-21
Applies to Method:	Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.		
	ME-MS81h		



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**CERTIFICATE KL19260475**

Project: Wicheeda

This report is for 140 Drill Core samples submitted to our lab in Kamloops, BC, Canada on 16-OCT-2019.

The following have access to data associated with this certificate:

MO ASMAIL	KRIS RAFFLE
-----------	-------------

SAMPLE PREPARATION	
ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
PUL-QC	Pulverizing QC Test
LOG-21	Sample logging - ClientBarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize up to 250g 85% <75 um
LOG-23	Pulp Login - Rcvd with Barcode
CRU-QC	Crushing QC Test

ANALYTICAL PROCEDURES		
ALS CODE	DESCRIPTION	INSTRUMENT
ME-MS81h	High grade REE by fusion/ICPMS	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:**   
 Saa Traxler, General Manager, North Vancouver



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Project: Wicheeda

**CERTIFICATE OF ANALYSIS KL19260475**

Sample Description	Method	WEI-21	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h
	Analyte	Recvd Wt.	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nb	Nd	Pr	Rb	Sm
	Units	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	LOD	0.02	3	0.3	0.2	0.2	0.3	1	0.05	3	0.05	1	0.5	0.2	1	0.2
A0795469		5.64	7370	19.6	3.2	38.8	86.1	<1	2.29	5630	0.15	275	1785	611	67	193.0
A0795470		0.18	10	0.4	0.2	<0.2	0.5	1	<0.05	6	0.06	1	3.3	1.2	3	0.5
A0795471		5.13	12450	27.9	3.6	57.4	130.0	<1	2.88	9750	0.19	219	2780	1000	17	282
A0795472		3.87	5460	17.8	3.8	28.3	64.4	<1	2.11	3910	0.22	60	1235	438	1	134.0
A0795473		3.47	1330	5.8	1.4	7.7	15.7	<1	0.68	975	0.12	23	340	115.5	1	36.1
A0795474		1.92	8710	17.9	2.4	34.4	75.0	<1	1.70	7090	0.09	64	1735	657	1	173.5
A0795475		1.91	8650	18.1	3.0	35.0	78.3	<1	1.71	7180	0.19	108	1715	650	1	165.0
A0795476		5.01	12450	23.1	4.1	47.9	107.5	<1	2.57	10150	0.18	87	2580	953	1	236
A0795477		5.32	4240	10.2	2.0	16.6	41.5	<1	1.05	3110	0.12	44	881	321	1	85.3
A0795478		5.61	11200	27.9	4.5	51.3	118.0	<1	2.99	8830	0.24	103	2490	899	5	251
A0795479		4.69	316	2.3	0.8	2.9	5.4	<1	0.31	221	0.07	48	75.9	25.7	6	10.4
A0795480		5.97	6900	20.9	3.7	32.6	77.6	<1	2.29	5420	0.21	129	1535	548	23	154.0
A0795481		6.71	13500	29.8	3.7	59.7	141.5	<1	3.03	10650	0.26	31	3090	1105	6	310
A0795482		6.73	12650	33.0	4.5	65.7	138.5	<1	3.13	9740	0.18	35	2820	1015	3	296
A0795483		6.34	10050	23.0	4.0	44.5	98.3	<1	2.41	7990	0.15	34	2250	810	2	221
A0795484		6.98	10900	23.5	3.8	47.5	103.0	<1	2.25	8560	0.13	110	2490	886	88	248
A0795485		0.07	8390	35.3	9.8	40.7	96.5	1	4.47	7030	0.69	344	1650	628	52	173.0
A0795486		6.67	10650	31.6	4.2	52.5	125.5	<1	3.14	8370	0.16	362	2460	865	35	266
A0795487		6.90	12600	18.9	2.6	48.4	98.7	<1	1.64	9920	0.10	50	2710	1000	3	249
A0795488		6.79	13350	27.4	3.1	69.0	147.5	<1	2.47	10050	0.15	469	3270	1120	41	347
A0795489		4.91	6100	16.4	2.9	33.1	76.2	<1	1.66	4250	0.20	390	1495	511	58	169.0
A0795490		0.18	40	0.3	0.2	<0.2	0.7	1	0.05	28	0.05	2	11.5	3.7	2	1.9
A0795491		6.36	6770	16.2	2.4	32.7	71.5	<1	1.43	5270	0.11	286	1575	547	5	174.5
A0795492		6.74	12600	26.6	3.9	59.6	126.0	<1	2.61	9880	0.19	337	2800	1010	7	277
A0795493		6.85	23900	46.8	6.4	102.0	217	<1	4.26	17750	0.25	381	5790	2040	19	521
A0795494		6.80	13800	32.1	4.4	62.9	129.0	<1	3.06	10250	0.20	297	3150	1175	10	306
A0795495		3.05	6390	22.5	3.7	35.9	79.5	1	2.34	4640	0.21	221	1590	527	12	174.0
A0795496		2.99	7280	25.1	4.4	40.6	88.6	<1	2.57	5310	0.19	225	1810	600	10	199.5
A0795497		3.95	16500	42.4	7.8	81.3	174.0	1	4.06	12000	0.46	362	3940	1425	7	399
A0795498		5.67	2060	47.1	14.7	32.0	92.6	1	6.45	1530	1.22	1190	535	164.5	51	116.0
A0795499		6.24	1340	27.6	9.6	19.4	49.3	1	4.09	860	0.92	837	362	111.0	50	61.6
A0795500		5.86	599	13.9	6.0	9.8	23.4	4	2.11	395	0.49	307	163.0	52.5	34	29.8
A0797501		6.85	694	21.8	8.4	12.4	35.7	1	3.52	404	0.79	217	234	67.8	16	45.8
A0797502		5.88	730	28.4	8.5	15.7	45.8	1	4.00	382	0.36	266	265	74.9	14	56.1
A0797503		5.44	1310	27.8	10.1	20.4	51.0	1	4.02	658	1.01	387	420	122.5	47	68.5
A0797504		4.16	3480	30.9	13.3	23.3	60.1	<1	5.09	2380	1.52	242	922	294	11	109.0
A0797505		0.07	7890	35.5	9.1	38.6	91.6	1	4.29	6260	0.70	296	1585	584	53	161.5
A0797506		6.40	24700	46.0	5.1	113.5	256	<1	3.66	18150	0.24	160	6490	2140	54	616
A0797507		6.94	23500	48.6	5.8	117.0	261	<1	3.99	17250	0.26	42	6000	2050	34	613
A0797508		6.83	12150	25.6	3.4	55.5	132.5	<1	2.17	8800	0.12	35	3010	1020	34	309



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Sample Description	Method Analyte Units LOD	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	
		Sn	Ta	Tb	Th	Tm	U	W	Y	Yb	Zr
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		5	0.5	0.05	0.3	0.05	0.3	5	3	0.2	10
A0795469		<5	3.4	7.26	283	0.27	5.4	<5	38	0.8	10
A0795470		<5	<0.5	0.08	1.6	0.14	0.4	<5	<3	0.4	50
A0795471		<5	2.1	10.40	396	0.25	2.3	<5	55	1.4	<10
A0795472		<5	0.5	5.82	212	0.34	1.0	<5	40	1.6	20
A0795473		<5	<0.5	1.74	48.6	0.10	0.4	<5	16	1.0	10
A0795474		<5	<0.5	6.21	258	0.21	0.6	<5	39	1.0	10
A0795475		<5	0.5	6.35	243	0.25	0.7	<5	43	1.0	20
A0795476		<5	<0.5	8.46	432	0.31	0.8	<5	58	1.6	<10
A0795477		<5	<0.5	3.43	138.5	0.16	0.3	<5	25	1.3	<10
A0795478		<5	<0.5	9.62	436	0.36	0.8	<5	60	1.9	20
A0795479		<5	<0.5	0.60	8.0	0.10	0.3	<5	8	0.6	10
A0795480		<5	0.5	6.17	258	0.38	0.9	<5	45	0.9	10
A0795481		<5	<0.5	10.60	563	0.31	0.7	<5	65	2.6	10
A0795482		<5	<0.5	11.55	393	0.36	0.6	<5	65	1.5	10
A0795483		<5	<0.5	7.56	336	0.26	0.6	<5	48	1.3	10
A0795484		<5	1.1	8.38	336	0.25	2.4	<5	47	1.6	<10
A0795485		<5	1.2	10.10	257	1.09	2.6	<5	114	6.0	30
A0795486		<5	1.5	10.65	419	0.26	2.3	<5	62	1.1	<10
A0795487		<5	<0.5	7.56	396	0.15	0.6	<5	34	0.7	10
A0795488		<5	4.5	10.80	536	0.28	8.2	<5	49	1.1	10
A0795489		<5	4.0	6.16	284	0.24	4.9	<5	33	1.2	<10
A0795490		<5	<0.5	0.05	3.4	0.06	0.3	<5	3	0.4	60
A0795491		<5	3.7	5.35	293	0.20	4.5	<5	33	1.2	10
A0795492		<5	3.6	9.78	483	0.29	5.5	<5	56	1.3	10
A0795493		<5	2.9	15.75	897	0.52	6.4	<5	84	2.2	10
A0795494		<5	1.9	10.00	454	0.35	5.0	<5	59	1.9	20
A0795495		<5	2.9	6.80	351	0.35	4.8	<5	48	1.9	20
A0795496		<5	2.9	7.44	457	0.35	5.7	<5	54	1.5	20
A0795497		<5	2.3	13.50	768	0.68	3.2	<5	98	3.7	30
A0795498		<5	7.4	10.00	303	1.54	9.4	<5	146	9.7	40
A0795499		<5	7.0	5.53	127.0	1.24	7.8	<5	102	7.2	70
A0795500		<5	2.2	2.74	49.0	0.67	2.5	<5	62	4.4	260
A0797501		<5	0.9	4.48	72.2	1.09	1.6	<5	94	5.2	70
A0797502		<5	1.4	5.91	105.0	0.84	2.1	<5	101	3.8	30
A0797503		<5	3.8	5.89	150.0	1.11	6.6	<5	123	7.1	40
A0797504		<5	1.9	6.53	183.5	1.75	2.8	<5	186	11.9	30
A0797505		<5	0.9	9.04	245	0.96	2.3	<5	102	5.8	40
A0797506		<5	<0.5	17.25	1095	0.33	0.4	<5	83	1.7	20
A0797507		<5	<0.5	17.80	1010	0.38	0.8	<5	91	2.1	20
A0797508		<5	<0.5	9.09	537	0.27	0.6	<5	47	1.3	10





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Sample Description	Method	WEI-21	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h
	Analyte	Recvd Wt.	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nb	Nd	Pr	Rb	Sm
	Units	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	LOD	0.02	3	0.3	0.2	0.2	0.3	1	0.05	3	0.05	1	0.5	0.2	1	0.2
A0797509		6.64	12000	28.8	4.2	56.8	135.5	<1	2.89	8630	0.26	43	3060	1025	34	324
A0797510		0.20	40	0.5	0.4	0.3	1.0	2	0.11	26	<0.05	1	11.0	3.5	3	1.6
A0797511		6.54	10350	20.6	2.3	52.5	116.0	<1	1.79	7500	0.09	23	2620	866	9	277
A0797512		6.83	12300	32.0	5.2	63.3	142.0	1	2.89	8830	0.23	139	3200	1085	17	340
A0797513		6.17	9370	35.4	5.1	52.4	118.0	<1	3.46	6810	0.16	680	2420	782	55	265
A0797514		6.16	18500	37.2	4.3	89.7	185.5	<1	3.00	13800	0.15	425	4440	1585	36	442
A0797515		7.43	9720	26.5	3.9	50.8	113.0	<1	2.45	7180	0.14	108	2420	798	3	257
A0797516		3.23	9810	22.1	2.8	55.4	114.0	<1	1.99	7120	0.14	331	2520	822	37	268
A0797517		3.28	10750	24.8	2.9	59.8	124.0	<1	2.13	7730	0.11	382	2760	900	50	295
A0797518		7.05	11300	23.6	2.9	65.0	120.5	<1	1.85	8240	0.17	142	2770	931	11	283
A0797519		6.40	15400	34.5	4.1	84.7	180.0	<1	2.94	11000	0.12	292	3990	1375	32	419
A0797520		6.18	14900	35.6	4.1	77.7	177.0	<1	3.17	10600	0.14	158	3860	1335	26	416
A0797521		6.75	5610	37.3	9.0	50.0	104.0	<1	4.29	3520	0.50	296	1700	513	42	217
A0797522		6.37	4040	39.3	10.5	41.3	88.6	1	5.05	2520	0.71	157	1320	385	42	179.0
A0797523		6.93	7510	37.8	8.7	52.8	112.0	<1	4.35	5260	0.52	271	2020	638	7	230
A0797524		6.72	18000	32.9	4.3	74.8	157.5	1	2.85	14200	0.16	46	3880	1475	3	362
A0797525		0.07	7930	35.5	10.0	38.6	87.3	1	4.41	6300	0.61	309	1600	591	53	164.5
A0797526		6.92	12550	24.1	3.3	56.4	118.5	1	2.20	9430	0.12	29	2910	1035	2	283
A0797527		6.41	19800	37.0	4.6	97.2	206	1	3.15	15300	0.20	76	4750	1695	3	483
A0797528		6.47	12550	23.3	3.5	55.3	124.0	<1	2.13	9750	0.10	490	2830	1045	19	282
A0797529		6.80	10850	18.9	2.3	46.7	109.5	1	1.79	8520	0.08	218	2410	879	20	239
A0797530		0.17	39	0.4	0.3	0.3	1.0	2	0.08	28	0.05	2	9.9	3.4	4	1.0
A0797531		6.87	14150	25.0	3.5	59.4	138.0	1	2.34	11400	0.14	142	3000	1140	3	301
A0797532		6.98	9880	17.6	2.0	43.1	99.8	1	1.57	7770	0.11	8	2220	808	4	228
A0797533		7.76	11700	20.2	2.5	48.2	120.5	1	2.00	9000	0.12	123	2690	968	7	276
A0797534		2.49	7790	43.0	11.3	46.0	128.5	<1	6.01	5510	0.63	680	2110	701	16	253
A0797535		2.62	7560	41.5	11.0	43.8	123.5	<1	5.35	5410	0.50	579	2060	680	18	245
A0797536		5.48	10300	15.0	2.4	40.2	95.7	<1	1.39	7850	0.14	137	2300	843	19	225
A0797537		4.94	6150	12.1	1.8	26.8	61.6	1	1.08	4620	0.14	373	1445	514	80	147.0
A0797538		6.22	7200	14.3	1.9	34.6	78.1	1	1.47	5450	0.06	1360	1670	599	169	175.5
A0797539		6.80	8700	18.2	2.6	41.6	94.3	1	1.92	6550	0.13	942	1940	711	152	201
A0797540		7.56	15350	25.3	3.2	67.9	161.5	1	2.33	11650	0.20	292	3550	1345	12	367
A0797541		5.92	5710	13.6	2.4	28.2	66.8	<1	1.52	4390	0.13	418	1340	472	5	147.0
A0797542		5.32	7120	12.2	1.8	29.6	70.5	1	1.22	5460	0.12	261	1685	596	2	173.5
A0797543		7.41	3930	9.1	1.4	19.8	51.2	1	0.88	2950	0.08	1045	974	334	7	115.5
A0797544		6.39	5100	14.0	2.1	30.9	69.0	1	1.50	3920	0.10	>5000	1180	422	72	136.5
A0797545		0.07	7950	33.8	9.4	37.2	96.0	1	4.63	6550	0.74	313	1580	611	56	167.5
A0797546		5.29	4080	11.9	1.9	24.3	54.9	1	1.41	3180	0.05	2960	952	336	104	113.5
A0797547		4.55	9180	17.0	3.1	42.0	97.6	1	1.66	7280	0.12	2550	2030	742	64	220
A0797548		6.14	533	21.9	11.6	8.2	28.0	3	4.49	374	0.99	141	150.0	49.0	20	28.1



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Sample Description	Method Analyte Units LOD	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	
		Sn	Ta	Tb	Th	Tm	U	W	Y	Yb	Zr
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		5	0.5	0.05	0.3	0.05	0.3	5	3	0.2	10
A0797509		<5	<0.5	9.98	655	0.29	0.7	<5	56	1.7	20
A0797510		<5	<0.5	0.10	3.4	0.05	0.4	<5	3	0.3	70
A0797511		<5	<0.5	7.66	418	0.20	0.3	<5	38	0.9	20
A0797512		<5	0.5	10.35	544	0.33	1.6	<5	57	1.8	40
A0797513		<5	1.9	10.10	396	0.36	3.5	<5	61	1.6	10
A0797514		<5	1.5	12.95	768	0.29	2.6	<5	64	1.5	20
A0797515		<5	<0.5	8.73	440	0.33	0.6	<5	47	1.3	10
A0797516		<5	2.5	7.75	425	0.21	4.8	<5	38	0.9	20
A0797517		<5	2.7	8.63	434	0.27	5.6	<5	42	1.1	20
A0797518		<5	<0.5	8.37	431	0.22	1.2	<5	39	0.8	10
A0797519		<5	1.7	12.30	635	0.28	2.9	<5	58	1.2	20
A0797520		<5	1.0	12.80	676	0.28	2.5	<5	62	1.3	20
A0797521		<5	2.5	9.56	304	0.74	6.3	<5	92	4.3	20
A0797522		<5	1.0	9.15	430	1.08	2.5	<5	127	6.4	40
A0797523		<5	1.4	10.10	754	0.72	4.9	<5	89	3.5	20
A0797524		<5	<0.5	11.40	574	0.25	1.5	<5	60	1.2	30
A0797525		<5	0.9	8.97	245	0.98	2.5	<5	103	5.8	40
A0797526		<5	<0.5	8.56	414	0.25	0.6	<5	46	1.2	30
A0797527		<5	<0.5	14.00	748	0.36	1.0	<5	61	1.4	30
A0797528		<5	1.0	8.87	431	0.23	2.9	<5	43	1.1	10
A0797529		<5	0.7	7.14	384	0.20	2.8	<5	38	0.7	10
A0797530		<5	<0.5	0.09	3.4	<0.05	0.5	<5	3	0.4	50
A0797531		<5	<0.5	9.74	463	0.25	1.5	<5	46	1.0	10
A0797532		<5	<0.5	6.75	332	0.15	0.6	<5	31	0.8	20
A0797533		<5	<0.5	7.99	375	0.23	1.5	<5	41	1.3	20
A0797534		<5	3.6	11.70	308	1.10	7.6	<5	114	4.6	10
A0797535		<5	3.2	11.05	289	0.95	6.3	<5	102	4.5	10
A0797536		<5	0.6	6.40	306	0.16	2.5	<5	30	0.6	10
A0797537		<5	2.3	4.37	185.0	0.16	3.3	<5	23	0.6	20
A0797538		<5	7.2	5.71	219	0.14	11.0	<5	29	0.7	20
A0797539		<5	4.2	6.81	258	0.15	6.9	<5	38	0.9	20
A0797540		<5	2.0	10.50	500	0.26	5.5	<5	55	0.9	20
A0797541		<5	3.5	5.31	213	0.19	7.5	<5	34	0.9	20
A0797542		<5	1.4	4.80	283	0.14	2.9	<5	30	0.7	40
A0797543		<5	5.3	3.43	215	0.15	9.0	<5	21	0.6	20
A0797544		6	20.9	4.90	199.5	0.18	37.6	15	31	0.8	20
A0797545		<5	1.2	9.33	255	0.94	2.4	<5	106	5.5	40
A0797546		<5	19.6	4.07	168.0	0.16	25.0	5	27	0.8	30
A0797547		<5	17.2	6.82	337	0.21	21.8	6	37	1.2	20
A0797548		<5	0.8	4.10	93.4	1.55	2.6	<5	136	8.2	160



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Sample Description	Method	WEI-21	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h
	Analyte	Recvd Wt.	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nb	Nd	Pr	Rb	Sm
	Units	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	LOD	0.02	3	0.3	0.2	0.2	0.3	1	0.05	3	0.05	1	0.5	0.2	1	0.2
A0797549		4.92	1670	41.5	12.1	28.7	89.1	2	5.96	858	0.49	874	612	173.5	84	112.0
A0797550		0.17	12	0.5	0.3	0.2	0.8	2	0.11	7	0.06	3	3.7	1.2	4	0.5
A0797551		6.10	1640	33.8	13.0	25.8	77.0	<1	5.43	822	1.16	197	618	172.0	18	112.5
A0797552		5.95	1460	32.2	11.1	25.9	74.9	1	5.11	762	0.95	466	532	148.0	79	100.0
A0797553		5.63	2500	29.0	9.7	35.9	99.3	1	4.05	1405	0.64	201	899	255	25	166.0
A0797554		2.67	4780	73.7	20.4	61.2	178.0	1	10.35	3200	0.81	452	1480	451	31	257
A0797555		2.57	4290	60.9	16.1	57.9	164.0	<1	8.57	2880	0.69	392	1360	409	29	236
A0797556		6.08	15950	40.2	6.4	79.6	201	1	4.35	11600	0.21	52	4090	1480	17	446
A0797557		6.98	27900	54.8	8.0	125.0	312	1	5.39	20600	0.31	74	7220	2510	36	720
A0797558		6.99	23700	41.9	6.1	101.5	261	1	4.07	17650	0.30	95	5660	2120	27	586
A0797559		6.41	19850	38.6	5.4	90.5	223	1	4.06	14750	0.23	31	4700	1765	12	496
A0797560		6.12	12750	21.2	2.8	56.0	126.0	1	1.95	9820	0.12	14	2890	1050	2	287
A0797561		6.45	6090	13.2	2.0	29.8	73.2	1	1.30	4550	0.11	7	1445	508	4	156.5
A0797562		7.11	15150	29.1	3.7	69.4	162.5	1	2.68	11600	0.16	21	3460	1315	2	352
A0797563		5.77	28700	40.9	6.0	108.5	254	1	3.60	22600	0.23	44	6620	2440	4	594
A0797564		6.19	11700	21.8	3.2	48.3	102.0	<1	1.81	9050	0.16	34	2570	950	4	256
A0797565		0.07	7800	36.5	8.9	36.3	86.0	1	4.22	6330	0.58	301	1535	595	50	162.5
A0797566		6.11	8080	16.7	2.0	37.7	81.9	<1	1.35	6180	0.13	35	1920	680	2	207
A0797567		7.34	5570	12.5	1.8	26.6	56.9	<1	1.09	4210	0.11	24	1345	471	5	147.0
A0797568		6.71	4810	9.1	1.4	22.0	48.3	<1	0.91	3590	0.12	4	1165	403	5	123.5
A0797569		5.78	9960	18.6	2.3	42.4	93.6	<1	1.50	7510	0.12	15	2340	831	4	233
A0797570		0.15	42	0.4	0.3	0.2	0.9	1	0.09	30	<0.05	1	10.7	3.7	2	1.5
A0797571		7.53	10400	20.4	2.4	46.7	98.7	<1	1.69	7830	0.11	14	2420	870	2	247
A0797572		6.81	10050	25.0	3.3	48.3	106.5	<1	2.10	7470	0.14	37	2410	842	6	264
A0797573		6.88	14950	36.4	4.6	68.3	146.5	<1	2.93	11550	0.14	61	3440	1315	3	359
A0797574		2.98	12250	27.7	3.5	57.9	122.5	<1	2.49	9270	0.15	18	2900	1020	1	300
A0797575		3.32	13700	31.5	3.7	64.2	134.5	<1	2.59	10350	0.16	19	3240	1150	1	335
A0797576		6.70	16900	35.0	3.9	75.9	168.0	<1	2.79	12450	0.23	34	4210	1540	5	441
A0797577		6.45	7190	18.7	2.7	36.9	81.9	<1	1.68	5360	0.14	16	1720	609	1	189.0
A0797578		6.51	7790	20.0	3.0	40.5	86.8	<1	1.65	5780	0.13	8	1880	661	2	201
A0797579		7.18	8920	18.8	2.4	41.3	92.9	<1	1.65	6620	0.10	34	2090	748	3	216
A0797580		6.85	9160	17.6	2.1	41.3	93.7	<1	1.37	6790	0.12	22	2170	775	3	226
A0797581		7.20	5050	11.9	1.7	24.5	54.5	<1	0.95	3760	0.14	11	1190	425	<1	125.0
A0797582		7.05	5410	12.0	1.8	24.2	54.6	<1	1.09	4050	0.12	19	1250	453	1	126.0
A0797583		5.00	7620	15.8	2.3	32.9	71.8	<1	1.31	5760	0.14	13	1720	625	1	175.0
A0797584		5.34	8460	20.8	2.7	39.3	85.4	<1	1.58	6220	0.14	5	2010	716	2	212
A0797585		0.07	8040	39.1	9.9	37.8	90.1	1	4.51	6580	0.74	312	1590	615	51	166.5
A0797586		6.30	18350	121.5	27.9	137.5	298	<1	14.60	12400	1.21	32	4990	1745	23	592
A0797587		6.01	14150	60.8	12.2	85.0	193.5	<1	6.80	9950	0.45	67	3750	1345	15	410
A0797588		7.18	7430	17.4	3.0	33.1	76.5	<1	1.74	5440	0.18	447	1760	631	33	184.5



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Project: Wicheeda

**CERTIFICATE OF ANALYSIS KL19260475**

Sample Description	Method Analyte Units LOD	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	
		Sn	Ta	Tb	Th	Tm	U	W	Y	Yb	Zr
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		5	0.5	0.05	0.3	0.05	0.3	5	3	0.2	10
A0797549		5	8.8	9.22	251	1.20	14.1	<5	148	4.7	60
A0797550		<5	<0.5	0.12	2.5	0.07	0.5	<5	4	0.4	50
A0797551		<5	1.3	7.63	252	1.59	3.7	<5	136	9.0	10
A0797552		<5	5.4	7.56	201	1.27	6.9	<5	131	7.6	20
A0797553		<5	2.0	8.17	325	1.04	4.3	<5	112	5.4	20
A0797554		<5	4.5	18.30	468	1.85	10.8	<5	236	7.4	30
A0797555		<5	4.3	15.90	409	1.54	8.8	<5	194	6.6	20
A0797556		<5	<0.5	15.05	683	0.51	1.4	<5	85	2.2	20
A0797557		<5	<0.5	20.8	1110	0.55	2.6	<5	106	2.2	20
A0797558		<5	<0.5	16.95	881	0.47	1.1	<5	77	1.9	50
A0797559		<5	<0.5	15.00	776	0.50	0.6	<5	77	2.1	20
A0797560		<5	<0.5	8.89	428	0.27	0.4	<5	40	1.2	40
A0797561		<5	<0.5	5.14	263	0.18	<0.3	<5	25	1.1	20
A0797562		<5	<0.5	11.20	565	0.30	0.4	<5	57	1.5	30
A0797563		<5	<0.5	16.80	972	0.45	0.6	<5	72	2.1	40
A0797564		<5	<0.5	7.83	432	0.24	0.3	<5	37	1.1	<10
A0797565		<5	0.8	8.83	244	0.94	2.5	<5	102	5.4	20
A0797566		<5	<0.5	6.43	316	0.14	<0.3	<5	30	0.7	<10
A0797567		<5	<0.5	4.30	223	0.15	<0.3	<5	21	0.9	<10
A0797568		<5	<0.5	3.29	120.5	0.11	<0.3	<5	18	0.9	<10
A0797569		<5	<0.5	6.92	374	0.18	<0.3	<5	31	1.0	<10
A0797570		<5	<0.5	0.11	3.5	<0.05	0.4	<5	3	0.4	30
A0797571		<5	<0.5	7.20	385	0.19	<0.3	<5	33	0.9	<10
A0797572		<5	<0.5	8.32	424	0.26	0.3	<5	40	1.1	<10
A0797573		<5	<0.5	11.55	553	0.29	0.7	<5	56	1.4	<10
A0797574		<5	<0.5	9.38	451	0.26	0.3	<5	47	1.4	<10
A0797575		<5	<0.5	10.65	529	0.26	0.4	<5	51	1.2	<10
A0797576		<5	<0.5	12.10	625	0.33	0.4	<5	56	1.5	<10
A0797577		<5	<0.5	6.84	308	0.21	<0.3	<5	32	1.0	<10
A0797578		<5	<0.5	6.85	325	0.21	<0.3	<5	33	1.2	<10
A0797579		<5	<0.5	7.02	349	0.18	<0.3	<5	31	1.2	<10
A0797580		<5	<0.5	6.98	382	0.19	<0.3	<5	28	0.8	<10
A0797581		<5	<0.5	4.22	207	0.12	0.4	<5	19	0.9	<10
A0797582		<5	<0.5	4.07	191.0	0.19	<0.3	<5	21	0.9	<10
A0797583		<5	<0.5	5.44	248	0.22	0.4	<5	26	0.9	<10
A0797584		<5	<0.5	6.78	329	0.26	0.7	<5	35	1.3	<10
A0797585		<5	0.8	9.32	257	1.02	2.3	<5	107	5.7	20
A0797586		<5	<0.5	29.9	1165	2.54	1.7	<5	337	11.5	<10
A0797587		<5	<0.5	16.75	584	1.18	1.2	<5	165	4.7	<10
A0797588		<5	4.3	5.97	285	0.22	7.2	<5	38	1.5	<10



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**CERTIFICATE OF ANALYSIS KL19260475**

Sample Description	Method Analyte Units LOD	WEI-21	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	
		Recvd Wt. kg	Ce ppm	Dy ppm	Er ppm	Eu ppm	Gd ppm	Hf ppm	Ho ppm	La ppm	Lu ppm	Nb ppm	Nd ppm	Pr ppm	Rb ppm	Sm ppm
		0.02	3	0.3	0.2	0.2	0.3	1	0.05	3	0.05	1	0.5	0.2	1	0.2
A0797589		5.19	5770	21.9	4.3	39.4	90.8	<1	2.41	3970	0.15	932	1585	522	99	203
A0797590		0.17	29	0.5	0.2	0.2	0.7	1	0.07	19	<0.05	2	8.6	2.5	1	1.0
A0797591		5.65	7940	32.2	5.6	57.0	125.0	<1	3.35	5690	0.28	866	2100	705	114	258
A0797592		6.83	6370	27.4	5.1	36.4	86.3	1	2.74	4470	0.22	1285	1640	556	116	185.5
A0797593		7.14	5440	24.2	5.4	33.3	82.1	<1	2.63	3800	0.38	593	1430	484	50	169.0
A0797594		3.43	5080	34.8	7.7	48.0	92.6	<1	4.19	3650	0.42	783	1370	450	92	179.0
A0797595		3.21	4520	30.5	6.9	39.8	81.0	<1	3.45	3140	0.40	699	1250	409	88	161.0
A0797596		6.87	13000	48.3	9.1	74.1	157.0	<1	5.29	9570	0.36	712	3070	1100	38	339
A0797597		6.62	6200	48.6	10.8	51.1	114.0	<1	5.72	4300	0.57	936	1670	555	86	217
A0797598		5.28	6020	31.3	6.5	43.6	97.8	<1	3.41	4190	0.23	801	1665	543	60	207
A0797599		2.68	15700	46.7	7.6	82.5	203	<1	4.78	10350	0.43	180	4540	1560	8	492
A0797600		5.11	4150	21.3	5.6	32.0	74.3	<1	2.51	2870	0.41	865	1145	378	56	137.0
A0797601		6.14	6150	42.2	11.6	50.1	111.5	<1	5.55	4270	0.70	683	1620	555	55	196.0
A0797602		6.89	2560	53.7	18.6	32.7	90.8	<1	8.45	1750	0.82	995	760	241	132	117.0
A0797603		7.06	3180	20.2	5.7	22.1	54.0	<1	2.75	2210	0.33	1150	810	284	116	92.8
A0797604		6.85	4860	16.4	3.2	32.4	80.9	<1	1.60	3450	0.18	1260	1310	438	101	161.5
A0797605		0.07	7650	33.0	9.5	37.3	98.1	1	4.58	6240	0.69	311	1565	605	51	162.0
A0797606		6.20	13200	100.0	32.1	109.5	264	<1	14.35	8580	1.25	169	3850	1330	22	462
A0797607		5.86	18550	134.5	40.8	136.5	339	<1	19.45	13100	1.72	320	4980	1785	31	581
A0797608		4.13	9370	153.5	53.9	85.6	260	<1	24.1	6680	2.19	1100	2470	842	74	329



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Sample Description	Method Analyte Units LOD	ME-MS81h Sn ppm	ME-MS81h Ta ppm	ME-MS81h Tb ppm	ME-MS81h Th ppm	ME-MS81h Tm ppm	ME-MS81h U ppm	ME-MS81h W ppm	ME-MS81h Y ppm	ME-MS81h Yb ppm	ME-MS81h Zr ppm
		5	0.5	0.05	0.3	0.05	0.3	5	3	0.2	10
A0797589		<5	11.1	6.99	304	0.33	15.9	5	53	2.0	<10
A0797590		<5	<0.5	0.11	2.7	0.06	0.4	<5	3	0.4	30
A0797591		<5	9.9	10.10	300	0.48	18.0	<5	67	2.2	<10
A0797592		<5	12.8	7.60	303	0.44	22.2	5	64	2.3	60
A0797593		<5	5.7	6.81	339	0.58	8.5	<5	63	3.0	<10
A0797594		<5	9.5	8.77	298	0.74	14.9	<5	95	3.8	<10
A0797595		<5	8.9	7.36	261	0.59	13.6	<5	82	3.5	<10
A0797596		<5	5.5	14.00	502	0.83	11.5	<5	118	3.7	<10
A0797597		<5	10.7	11.65	330	1.04	23.1	<5	120	5.3	<10
A0797598		<5	9.3	8.64	321	0.64	16.1	<5	75	2.6	<10
A0797599		<5	1.0	14.65	775	0.77	4.2	<5	116	3.1	<10
A0797600		<5	8.5	6.35	255	0.50	12.2	<5	65	2.6	<10
A0797601		<5	5.8	11.20	641	1.19	12.1	<5	137	5.6	<10
A0797602		<5	12.8	11.50	322	1.80	23.0	5	213	8.7	<10
A0797603		<5	12.9	5.18	187.5	0.52	21.9	6	69	2.4	<10
A0797604		<5	11.4	5.88	265	0.28	20.2	<5	42	1.4	<10
A0797605		<5	0.9	9.21	253	1.03	2.5	<5	107	5.7	40
A0797606		<5	1.1	24.8	897	2.88	4.5	<5	400	13.5	<10
A0797607		<5	1.8	34.2	957	3.88	5.8	<5	490	17.7	<10
A0797608		<5	6.2	32.6	675	4.75	12.1	5	644	21.4	<10



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**CERTIFICATE OF ANALYSIS KL19260475**

**CERTIFICATE COMMENTS**

**LABORATORY ADDRESSES**

Applies to Method:	Processed at ALS Kamloops located at 2953 Shuswap Drive, Kamloops, BC, Canada.		
	CRU-31	CRU-QC	LOG-21
	PUL-31	PUL-QC	SPL-21
			LOG-23
			WEI-21
Applies to Method:	Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.		
	ME-MS81h		



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**QC CERTIFICATE KL19260475**

Project: Wicheeda

This report is for 140 Drill Core samples submitted to our lab in Kamloops, BC, Canada on 16-OCT-2019.

The following have access to data associated with this certificate:

MO ASMAIL	KRIS RAFFLE
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SAMPLE PREPARATION	
ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
PUL-QC	Pulverizing QC Test
LOG-21	Sample logging - ClientBarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize up to 250g 85% <75 um
LOG-23	Pulp Login - Rcvd with Barcode
CRU-QC	Crushing QC Test

ANALYTICAL PROCEDURES		
ALS CODE	DESCRIPTION	INSTRUMENT
ME-MS81h	High grade REE by fusion/ICPMS	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:**   
 Saa Traxler, General Manager, North Vancouver





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**QC CERTIFICATE OF ANALYSIS KL19260475**

Sample Description	Method	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	
	Analyte	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nb	Nd	Pr	Rb	Sm	Sn
Units		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
LOD		3	0.3	0.2	0.2	0.3	1	0.05	3	0.05	1	0.5	0.2	1	0.2	5
<b>STANDARDS</b>																
AMIS0185		40400	26.6	5.0	86.6	138.0	1	2.69	28300	0.19	108	9630	3410	5	544	<5
AMIS0185		40700	28.6	4.8	84.0	141.0	2	3.04	29300	0.16	108	9520	3570	4	559	<5
Target Range - Lower Bound		37900	24.9	4.3	83.9	126.5	<1	2.68	27700	0.15	105	8590	3230	3	517	<5
Upper Bound		43700	29.3	5.3	96.9	146.0	3	3.20	31900	0.36	123	9890	3710	7	595	11
OREAS 146		4880	213	79.0	126.5	359	5	34.4	2450	6.44	410	2180	545	27	461	43
OREAS 146		4800	209	83.2	122.5	373	5	34.4	2610	6.24	382	2170	550	29	464	43
OREAS 146		4760	216	87.3	128.0	382	4	35.5	2610	6.10	405	2250	567	29	471	46
Target Range - Lower Bound		4360	208	80.7	118.0	334	2	34.2	2330	5.81	360	2030	509	25	410	35
Upper Bound		5020	240	93.3	136.0	384	6	39.4	2690	6.79	416	2330	587	31	472	57
OREAS-101b		1300	29.9	19.9	8.1	39.5	12	6.30	783	2.76	63	393	125.5	193	50.1	9
OREAS-101b		1370	29.8	20.2	7.6	39.3	12	6.03	773	2.54	58	376	124.5	195	49.2	9
OREAS-101b		1310	29.3	18.3	7.4	37.1	12	5.98	738	2.43	60	381	124.0	196	47.8	10
Target Range - Lower Bound		1235	24.8	17.2	7.0	37.8		5.85	731	2.35		351	118.0		44.4	
Upper Bound		1425	29.2	20.2	8.5	44.2		6.83	847	2.81		405	136.0		51.6	
SY-4		121	19.2	14.0	2.0	14.1	13	4.25	55	2.20	13	58.7	14.6	57	13.3	7
SY-4		121	18.8	14.9	1.8	13.6	11	4.24	57	1.94	13	57.8	15.5	55	13.4	7
Target Range - Lower Bound		110	16.6	13.0	1.6	12.7	9	3.95	51	1.90	11	52.5	13.8	50	11.6	<5
Upper Bound		134	19.8	15.4	2.4	15.3	13	4.65	65	2.30	15	61.5	16.3	60	13.8	18
<b>BLANKS</b>																
BLANK		<3	<0.3	<0.2	<0.2	<0.3	<1	0.05	<3	0.05	<1	<0.5	0.2	<1	<0.2	<5
BLANK		<3	<0.3	<0.2	<0.2	<0.3	<1	<0.05	<3	<0.05	<1	<0.5	<0.2	1	<0.2	<5
BLANK		<3	<0.3	<0.2	<0.2	<0.3	1	<0.05	<3	<0.05	<1	<0.5	<0.2	1	<0.2	<5
BLANK		<3	<0.3	<0.2	<0.2	<0.3	<1	<0.05	<3	<0.05	<1	<0.5	<0.2	<1	<0.2	<5
BLANK		<3	<0.3	<0.2	<0.2	<0.3	<1	<0.05	<3	<0.05	<1	<0.5	<0.2	<1	<0.2	<5
Target Range - Lower Bound		<3	<0.3	<0.2	<0.2	<0.3	<1	<0.05	<3	<0.05	<1	<0.5	<0.2	<1	<0.2	<5
Upper Bound		6	0.6	0.4	0.4	0.6	2	0.10	6	0.10	2	1.0	0.4	2	0.4	10



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**QC CERTIFICATE OF ANALYSIS KL19260475**

Sample Description	Method Analyte Units LOD	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	
		Ta	Tb	Th	Tm	U	W	Y	Yb	Zr
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		0.5	0.05	0.3	0.05	0.3	5	3	0.2	10
<b>STANDARDS</b>										
AMIS0185		<0.5	9.60	214	0.42	43.6	<5	54	1.7	70
AMIS0185		<0.5	9.85	223	0.44	45.2	<5	56	1.6	60
Target Range - Lower Bound		<0.5	9.20	211	0.32	42.8	<5	51	1.4	40
Upper Bound		1.2	10.70	243	0.54	49.8	11	65	2.3	80
OREAS 146		3.7	45.5	871	9.47	2.5	28	886	50.1	250
OREAS 146		3.7	44.0	889	9.92	2.7	28	889	52.2	240
OREAS 146		3.8	46.4	920	9.66	2.5	29	945	53.8	240
Target Range - Lower Bound		3.2	43.8	839	9.16	2.0	18	839	49.6	200
Upper Bound		5.4	50.6	967	10.65	3.3	40	971	57.4	260
OREAS-101b		2.7	5.53	36.6	2.87	392	21	173	19.1	450
OREAS-101b		2.4	5.30	35.8	2.55	386	18	170	19.1	410
OREAS-101b		2.3	5.03	34.9	2.66	383	19	170	16.6	410
Target Range - Lower Bound			4.94	33.6	2.42	360		163		
Upper Bound			5.80	39.2	2.90	414		193		
SY-4		0.5	2.48	1.4	2.21	0.9	<5	114	14.3	630
SY-4		<0.5	2.68	1.2	2.10	0.7	<5	115	15.5	590
Target Range - Lower Bound		<0.5	2.37	0.7	2.09	<0.3	<5	108	13.6	550
Upper Bound		1.9	2.83	1.9	2.51	1.4	15	130	16.0	660
<b>BLANKS</b>										
BLANK		<0.5	<0.05	<0.3	<0.05	<0.3	<5	<3	<0.2	<10
BLANK		<0.5	<0.05	<0.3	<0.05	<0.3	<5	<3	<0.2	10
BLANK		<0.5	<0.05	<0.3	<0.05	<0.3	<5	<3	<0.2	10
BLANK		<0.5	<0.05	<0.3	<0.05	<0.3	<5	<3	<0.2	<10
BLANK		<0.5	<0.05	<0.3	<0.05	<0.3	<5	<3	<0.2	<10
Target Range - Lower Bound		<0.5	<0.05	<0.3	<0.05	<0.3	<5	<3	<0.2	<10
Upper Bound		1.0	0.10	0.6	0.10	0.6	10	6	0.4	20



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**QC CERTIFICATE OF ANALYSIS KL19260475**

Sample Description	Method Analyte Units LOD	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	
		Ce ppm	Dy ppm	Er ppm	Eu ppm	Gd ppm	Hf ppm	Ho ppm	La ppm	Lu ppm	Nb ppm	Nd ppm	Pr ppm	Rb ppm	Sm ppm	Sn ppm
		3	0.3	0.2	0.2	0.3	1	0.05	3	0.05	1	0.5	0.2	1	0.2	5
<b>DUPLICATES</b>																
A0795468		797	24.9	11.4	11.3	37.0	1	4.26	549	0.99	139	235	74.1	1	42.4	<5
DUP		836	25.9	11.1	12.6	36.7	1	4.54	573	0.81	146	251	80.9	2	44.2	<5
Target Range - Lower Bound		785	24.2	10.7	11.3	35.3	<1	4.20	538	0.82	137	234	74.6	<1	41.6	<5
Upper Bound		848	26.6	11.8	12.6	38.4	2	4.60	584	0.98	148	252	80.4	2	45.0	10
A0797501		694	21.8	8.4	12.4	35.7	1	3.52	404	0.79	217	234	67.8	16	45.8	<5
DUP		709	23.3	8.9	12.4	36.9	1	3.67	414	0.70	210	238	68.6	16	45.8	<5
Target Range - Lower Bound		674	21.5	8.1	11.8	34.7	<1	3.42	392	0.67	205	227	65.6	14	44.0	<5
Upper Bound		729	23.6	9.2	13.0	37.9	2	3.77	426	0.82	222	245	70.8	18	47.6	10
A0797537		6150	12.1	1.8	26.8	61.6	1	1.08	4620	0.14	373	1445	514	80	147.0	<5
DUP		6300	11.7	2.1	28.3	63.5	1	1.15	4740	0.11	395	1475	530	82	150.5	<5
Target Range - Lower Bound		6000	11.2	1.7	26.4	60.1	<1	1.03	4510	0.07	370	1410	504	77	143.5	<5
Upper Bound		6450	12.6	2.2	28.7	65.0	2	1.20	4850	0.18	398	1510	540	85	154.0	10
A0797573		14950	36.4	4.6	68.3	146.5	<1	2.93	11550	0.14	61	3440	1315	3	359	<5
DUP		15250	33.8	4.1	70.8	154.5	<1	2.88	11750	0.14	49	3520	1335	3	357	<5
Target Range - Lower Bound		14550	33.6	4.0	66.9	145.0	<1	2.75	11250	0.09	52	3360	1280	2	345	<5
Upper Bound		15650	36.6	4.7	72.2	156.0	2	3.06	12050	0.19	58	3600	1370	4	371	10
A0797608		9370	153.5	53.9	85.6	260	<1	24.1	6680	2.19	1100	2470	842	74	329	<5
DUP		9360	148.5	52.1	86.4	258	<1	23.8	6670	1.94	1120	2470	840	73	328	<5
Target Range - Lower Bound		9030	145.5	50.9	82.8	250	<1	23.1	6440	1.94	1070	2380	811	70	317	<5
Upper Bound		9700	156.5	55.1	89.2	268	2	24.8	6910	2.19	1150	2560	871	77	340	10
<b>PREP DUPLICATES</b>																
A0797524		18000	32.9	4.3	74.8	157.5	1	2.85	14200	0.16	46	3880	1475	3	362	<5
A0797524 PREP DUP		18250	31.7	4.4	78.1	179.5	<1	3.04	14750	0.19	57	3990	1590	2	383	<5
A0797580		9160	17.6	2.1	41.3	93.7	<1	1.37	6790	0.12	22	2170	775	3	226	<5
A0797580 PREP DUP		9010	16.1	1.9	44.4	105.5	<1	1.31	6700	0.11	20	2210	791	2	235	<5



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**QC CERTIFICATE OF ANALYSIS KL19260475**

Sample Description	Method Analyte Units LOD	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	
		Ta ppm	Tb ppm	Th ppm	Tm ppm	U ppm	W ppm	Y ppm	Yb ppm	Zr ppm
		0.5	0.05	0.3	0.05	0.3	5	3	0.2	10
<b>DUPLICATES</b>										
A0795468		1.3	4.98	92.3	1.29	1.8	<5	122	7.8	50
DUP		1.1	5.10	94.6	1.23	2.0	<5	124	7.7	50
Target Range - Lower Bound		0.7	4.81	89.9	1.17	1.5	<5	116	7.3	40
Upper Bound		1.7	5.27	97.0	1.35	2.3	10	130	8.2	60
A0797501		0.9	4.48	72.2	1.09	1.6	<5	94	5.2	70
DUP		0.7	4.19	72.5	0.94	1.7	<5	94	5.9	80
Target Range - Lower Bound		<0.5	4.13	69.5	0.93	1.3	<5	88	5.2	60
Upper Bound		1.0	4.54	75.2	1.10	2.0	10	100	5.9	90
A0797537		2.3	4.37	185.0	0.16	3.3	<5	23	0.6	20
DUP		2.4	4.31	190.5	0.14	3.5	<5	26	0.8	20
Target Range - Lower Bound		1.8	4.14	181.0	0.09	3.0	<5	21	0.5	<10
Upper Bound		2.9	4.54	194.5	0.21	3.8	10	28	0.9	30
A0797573		<0.5	11.55	553	0.29	0.7	<5	56	1.4	<10
DUP		<0.5	11.55	579	0.40	0.6	<5	54	1.4	<10
Target Range - Lower Bound		<0.5	11.10	546	0.28	<0.3	<5	50	1.2	<10
Upper Bound		1.0	12.00	586	0.41	1.0	10	60	1.6	20
A0797608		6.2	32.6	675	4.75	12.1	5	644	21.4	<10
DUP		6.1	32.3	671	4.70	12.0	5	625	20.8	10
Target Range - Lower Bound		5.4	31.3	649	4.51	11.3	<5	609	20.2	<10
Upper Bound		6.9	33.6	697	4.94	12.8	10	660	22.0	20
<b>PREP DUPLICATES</b>										
A0797524		<0.5	11.40	574	0.25	1.5	<5	60	1.2	30
A0797524 PREP DUP		<0.5	12.50	621	0.29	1.5	<5	66	1.4	<10
A0797580		<0.5	6.98	382	0.19	<0.3	<5	28	0.8	<10
A0797580 PREP DUP		<0.5	6.97	382	0.17	<0.3	<5	29	0.9	<10



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**QC CERTIFICATE OF ANALYSIS KL19260475**

### CERTIFICATE COMMENTS

#### LABORATORY ADDRESSES

Applies to Method:	Processed at ALS Kamloops located at 2953 Shuswap Drive, Kamloops, BC, Canada.		
	CRU-31	CRU-QC	LOG-21
	PUL-31	PUL-QC	SPL-21
			LOG-23
			WEI-21
Applies to Method:	Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.		
	ME-MS81h		



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**CERTIFICATE KL19264778**

Project: Wicheeda

This report is for 109 Drill Core samples submitted to our lab in Kamloops, BC, Canada on 21-OCT-2019.

The following have access to data associated with this certificate:

MO ASMAIL	KRIS RAFFLE
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SAMPLE PREPARATION	
ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
PUL-QC	Pulverizing QC Test
LOG-21	Sample logging - ClientBarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize up to 250g 85% <75 um
LOG-23	Pulp Login - Rcvd with Barcode
CRU-QC	Crushing QC Test

ANALYTICAL PROCEDURES		
ALS CODE	DESCRIPTION	INSTRUMENT
ME-MS81h	High grade REE by fusion/ICPMS	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:**   
 Saa Traxler, General Manager, North Vancouver



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**CERTIFICATE OF ANALYSIS KL19264778**

Sample Description	Method	WEI-21	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h
	Analyte	Recvd Wt.	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nb	Nd	Pr	Rb	Sm
LOD	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
A0797609		0.02	3	0.3	0.2	0.2	0.3	1	0.05	3	0.05	1	0.5	0.2	1	0.2
A0797610		5.97	773	25.5	8.6	18.5	46.5	<1	3.80	445	0.56	719	291	82.4	61	62.5
A0797611		0.18	5	<0.3	0.3	<0.2	0.5	2	0.10	<3	<0.05	2	2.2	0.8	3	0.3
A0797612		5.51	745	30.3	10.6	19.5	52.2	<1	4.46	417	0.74	753	305	82.2	89	65.7
A0797613		5.10	18650	37.5	5.3	86.4	188.5	<1	3.40	13950	0.33	145	4560	1725	18	467
A0797614		6.52	21400	45.9	6.8	97.6	216	<1	4.16	16050	0.36	69	5200	1985	32	523
A0797615		3.65	12200	26.9	4.2	51.9	118.5	<1	2.46	9150	0.23	55	2960	1095	50	300
A0797616		3.19	15550	34.8	5.2	68.9	155.5	<1	3.51	11650	0.27	108	3810	1445	71	377
A0797617		6.37	29000	59.7	8.2	129.0	281	<1	5.60	21500	0.33	52	7820	2700	32	724
A0797618		6.63	21100	57.8	8.2	110.5	236	<1	5.54	15800	0.39	60	5260	1935	59	544
A0797619		6.76	17550	42.5	6.6	83.7	194.5	<1	3.86	12650	0.23	56	4360	1645	21	465
A0797620		6.50	19850	50.9	8.2	107.5	208	<1	5.29	14600	0.33	49	4820	1820	23	493
A0797621		6.89	22400	72.1	13.0	137.5	268	<1	7.57	16800	0.50	32	5470	2040	33	583
A0797622		6.91	21400	89.6	19.7	154.5	298	<1	10.40	16000	0.75	97	5460	2010	46	625
A0797623		6.43	8080	37.8	6.8	59.3	127.5	<1	4.17	5420	0.27	320	2280	751	26	280
A0797624		7.48	10400	27.4	3.9	54.3	119.0	<1	2.55	7380	0.29	281	2670	927	5	281
A0797625		6.23	33300	58.5	8.1	123.5	258	<1	5.36	26600	0.37	46	7860	2880	9	683
A0797626		0.07	8310	35.1	9.1	39.4	91.3	1	4.51	6970	0.70	336	1625	647	55	163.0
A0797627		6.73	25400	45.6	6.8	97.9	200	<1	4.30	19950	0.22	46	5760	2220	6	524
A0797628		6.37	33500	65.7	11.0	133.5	267	<1	6.54	26700	0.40	80	8410	2980	2	736
A0797629		6.69	10750	20.4	3.1	46.4	93.5	<1	1.95	8490	0.19	13	2490	909	1	237
A0797630		6.49	7990	17.3	3.0	33.9	69.4	<1	1.73	6230	0.17	17	1825	672	1	174.0
A0797631		0.16	136	0.6	0.3	0.6	1.5	1	0.11	104	<0.05	1	33.0	11.7	2	3.6
A0797632		6.63	18350	36.1	5.6	74.3	146.5	<1	3.62	14700	0.22	41	3990	1610	3	371
A0797633		6.62	9340	22.9	4.2	39.0	80.1	<1	2.29	7190	0.23	32	2080	781	2	196.0
A0797634		4.65	22800	44.2	6.6	98.7	194.5	<1	4.16	18400	0.30	29	5110	1995	1	493
A0797635		3.29	2650	9.9	1.8	17.6	31.8	<1	1.00	2070	0.19	7	609	223	1	70.9
A0797636		2.77	2440	9.2	1.9	16.0	29.3	<1	1.10	1930	0.12	6	568	204	1	63.4
A0797637		6.22	2940	9.5	2.4	16.3	29.1	<1	1.24	2320	0.13	15	679	246	3	68.1
A0797638		6.83	25800	39.7	4.0	106.0	206	<1	3.21	20900	0.27	29	6220	2260	4	551
A0797639		7.01	32400	47.9	6.0	133.0	267	<1	4.36	26500	0.22	37	7960	2840	2	698
A0797640		6.21	17050	27.2	3.5	68.5	136.0	<1	2.26	13900	0.15	36	3850	1500	1	368
A0797641		6.00	14550	24.2	4.0	54.5	106.0	<1	2.41	11650	0.19	58	3190	1260	1	288
A0797642		6.54	7310	15.8	2.8	32.0	63.6	<1	1.70	5910	0.14	13	1635	609	<1	159.5
A0797643		4.61	20200	45.4	8.1	95.3	196.0	<1	4.74	15300	0.38	97	5040	1865	12	503
A0797644		4.50	5400	66.6	19.7	54.8	106.0	<1	9.28	3620	1.11	69	1535	507	19	179.5
A0797645		5.46	22900	74.4	13.7	124.5	266	<1	8.12	16200	0.68	48	6660	2230	41	622
A0797646		0.07	8370	32.2	9.5	40.0	105.5	1	4.84	7510	0.59	328	1570	665	50	155.5
A0797647		5.92	570	16.5	7.7	11.2	33.3	<1	3.20	387	0.71	252	182.5	60.4	12	37.7
A0797648		6.26	528	47.2	15.9	24.9	83.2	<1	8.07	306	0.64	833	246	65.9	106	66.1
A0797648		6.07	957	17.7	6.1	12.1	37.3	<1	3.03	668	0.38	273	267	94.0	49	38.9



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Sample Description	Method Analyte Units LOD	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	
		Sn	Ta	Tb	Th	Tm	U	W	Y	Yb	Zr
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		5	0.5	0.05	0.3	0.05	0.3	5	3	0.2	10
A0797609		<5	7.1	5.93	163.0	0.88	8.2	<5	110	4.9	10
A0797610		<5	<0.5	0.10	1.7	<0.05	0.3	<5	3	0.4	40
A0797611		<5	8.0	6.97	140.5	0.95	9.2	<5	132	5.8	10
A0797612		<5	1.1	14.50	742	0.48	2.5	<5	98	2.4	<10
A0797613		<5	<0.5	17.35	936	0.55	1.5	<5	99	2.7	<10
A0797614		<5	<0.5	9.78	488	0.34	1.0	<5	60	1.8	10
A0797615		<5	<0.5	12.35	617	0.42	1.6	<5	79	2.3	20
A0797616		<5	<0.5	22.3	1070	0.57	0.9	<5	128	2.5	<10
A0797617		<5	<0.5	19.95	812	0.66	0.9	<5	124	2.5	<10
A0797618		<5	<0.5	15.75	770	0.49	0.8	<5	97	2.1	<10
A0797619		<5	<0.5	17.75	843	0.76	1.1	<5	122	3.1	<10
A0797620		<5	<0.5	23.1	880	1.08	0.6	<5	195	4.3	<10
A0797621		<5	<0.5	27.8	861	1.58	1.3	<5	302	7.6	<10
A0797622		<5	1.2	11.55	560	0.57	1.5	<5	98	3.1	<10
A0797623		<5	1.1	9.45	517	0.24	0.6	<5	62	1.5	<10
A0797624		<5	<0.5	21.2	1270	0.56	1.0	<5	127	2.6	<10
A0797625		<5	1.0	10.05	270	0.99	2.5	<5	119	5.8	30
A0797626		<5	<0.5	16.85	915	0.47	0.3	<5	99	2.0	<10
A0797627		<5	<0.5	22.0	1340	0.88	2.0	<5	163	3.4	<10
A0797628		<5	<0.5	7.52	393	0.29	0.3	<5	48	1.1	<10
A0797629		<5	<0.5	5.91	302	0.28	0.5	<5	45	1.4	<10
A0797630		<5	<0.5	0.19	8.0	0.05	<0.3	<5	4	0.3	50
A0797631		<5	<0.5	12.95	598	0.42	1.0	<5	95	2.1	<10
A0797632		<5	<0.5	7.47	287	0.33	0.5	<5	55	1.7	<10
A0797633		<5	<0.5	15.70	668	0.47	1.3	<5	110	2.1	<10
A0797634		<5	<0.5	3.20	50.7	0.20	0.3	<5	27	1.1	<10
A0797635		<5	<0.5	2.75	48.0	0.18	<0.3	<5	25	1.1	10
A0797636		<5	<0.5	2.76	69.9	0.23	<0.3	<5	30	1.3	<10
A0797637		<5	<0.5	15.15	887	0.36	1.1	<5	86	1.6	10
A0797638		<5	<0.5	20.00	1205	0.41	1.4	<5	107	1.8	<10
A0797639		<5	<0.5	10.80	665	0.22	0.9	<5	59	1.3	<10
A0797640		<5	<0.5	8.67	506	0.33	1.2	<5	55	1.8	10
A0797641		<5	<0.5	5.25	273	0.22	<0.3	<5	43	1.5	<10
A0797642		<5	<0.5	16.10	830	0.64	0.3	<5	130	3.6	10
A0797643		<5	<0.5	14.10	494	1.89	1.3	<5	278	9.2	10
A0797644		<5	<0.5	23.4	986	1.21	1.9	<5	219	5.6	10
A0797645		<5	1.5	9.91	258	1.07	2.5	<5	115	5.3	30
A0797646		<5	2.1	3.69	76.7	0.93	2.7	<5	98	5.2	20
A0797647		<5	9.3	11.50	155.0	1.46	13.6	<5	210	5.4	10
A0797648		<5	3.6	3.92	86.6	0.65	8.4	<5	76	3.4	<10





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Sample Description	Method	WEI-21	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h
	Analyte	Recvd Wt.	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nb	Nd	Pr	Rb	Sm
	Units	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	LOD	0.02	3	0.3	0.2	0.2	0.3	1	0.05	3	0.05	1	0.5	0.2	1	0.2
A0797649		6.24	588	9.5	3.2	8.9	24.7	1	1.55	381	0.15	408	178.0	63.8	55	27.9
A0797650		0.16	16	0.4	0.3	0.2	0.8	2	0.14	10	0.11	3	5.2	1.8	2	0.6
A0797651		6.25	788	11.1	4.9	9.4	25.6	<1	2.15	531	0.38	430	225	79.5	59	29.9
A0797652		5.93	1260	38.8	12.5	33.5	93.5	<1	6.34	775	0.70	392	473	149.5	16	105.0
A0797653		5.95	1050	48.5	15.8	37.0	109.5	<1	8.06	625	0.87	500	442	126.0	33	117.0
A0797654		3.74	1360	47.3	16.7	42.2	123.0	<1	7.56	814	0.99	507	569	161.0	28	131.5
A0797655		3.28	1420	52.0	17.5	45.7	128.0	<1	7.86	839	1.11	530	612	169.0	26	143.5
A0797656		6.65	935	43.8	14.9	34.8	96.4	<1	7.00	571	0.90	453	384	108.5	28	98.8
A0797657		6.06	6100	50.4	14.1	56.0	149.5	<1	7.59	4890	0.61	550	1520	548	19	214
A0797658		6.85	23800	38.4	5.8	114.5	267	<1	4.39	19700	0.27	86	5450	2110	5	566
A0797659		6.62	19250	30.5	3.9	87.2	210	<1	3.12	15700	0.10	40	4440	1720	118	464
A0797660		6.58	11150	17.4	2.8	51.8	124.0	<1	1.83	9120	0.15	22	2540	981	35	272
A0797661		6.29	6250	12.9	1.9	35.5	80.7	<1	1.32	5230	0.15	71	1490	557	21	161.0
A0797662		4.81	337	4.4	1.3	5.1	10.8	<1	0.62	245	0.12	19	100.5	34.6	24	14.5
A0797663		2.51	13000	35.7	4.8	83.3	201	<1	3.58	10200	0.25	12	3270	1195	49	392
A0797664		5.56	606	4.6	1.3	6.6	14.7	<1	0.73	412	0.19	36	170.0	59.5	4	25.2
A0797665		0.07	8280	31.8	9.0	39.6	102.0	1	4.68	7470	0.69	335	1560	668	55	159.0
A0797666		6.73	8420	15.8	2.5	41.3	112.0	<1	1.85	6580	0.24	53	2190	789	15	247
A0797667		4.78	3480	9.7	2.4	22.3	51.4	<1	1.06	2470	0.13	17	889	317	10	111.0
A0797668		4.20	25000	48.4	5.9	132.0	331	<1	4.79	19750	0.36	98	6340	2290	16	705
A0797669		6.65	1890	6.7	1.5	12.4	32.6	<1	0.90	1370	0.13	53	571	193.5	12	69.1
A0797670		0.15	151	0.6	0.5	0.7	2.6	1	0.14	116	0.06	2	39.5	15.1	2	4.9
A0797671		5.87	1410	4.2	1.2	8.9	23.2	<1	0.47	960	0.07	37	460	153.5	11	57.3
A0797672		3.37	3170	14.2	3.7	20.8	57.0	<1	2.22	2090	0.39	90	860	304	4	105.5
A0797673		6.71	1390	12.7	2.7	13.9	41.9	<1	1.70	930	0.21	137	454	149.0	1	66.3
A0797674		3.23	3600	11.2	2.7	20.1	54.5	<1	1.59	2310	0.15	75	968	344	1	108.0
A0797675		3.10	3870	11.6	2.8	18.9	59.3	<1	1.59	2490	0.19	77	1050	369	3	123.0
A0797676		7.38	3620	16.5	3.1	44.7	76.6	<1	1.79	2540	0.21	252	980	338	2	131.0
A0797677		6.39	3810	12.1	2.7	29.5	64.0	<1	1.31	2750	0.13	34	987	349	2	124.0
A0797678		7.43	4250	13.3	2.3	35.1	79.3	<1	1.30	3120	0.19	25	1130	395	1	151.5
A0797679		6.26	5190	10.4	2.0	32.6	79.3	<1	1.11	4300	0.12	4	1290	474	5	157.5
A0797680		7.24	2590	6.1	1.1	15.3	37.9	<1	0.66	1775	0.08	5	654	232	2	82.1
A0797681		4.85	7480	25.6	4.1	49.0	122.0	<1	2.63	4680	0.28	37	2210	702	4	279
A0797682		6.50	17500	96.7	16.4	206	374	<1	10.10	11600	0.68	146	4910	1695	7	705
A0797683		6.50	5280	17.1	3.1	29.3	73.2	<1	1.88	3790	0.29	36	1305	447	2	156.5
A0797684		7.18	22200	61.0	11.3	95.9	244	<1	6.97	17650	0.47	337	4710	1855	1	529
A0797685		0.07	8090	34.6	9.0	36.7	87.9	1	4.27	6420	0.61	293	1480	601	50	161.0
A0797686		6.97	12250	30.8	4.6	57.7	136.0	1	3.03	9810	0.24	161	2740	931	1	293
A0797687		6.94	13850	24.7	3.7	51.5	128.0	<1	2.30	11550	0.14	110	2660	1100	1	282
A0797688		7.61	21300	39.9	6.2	86.7	201	<1	4.02	16600	0.24	402	4370	1755	5	454



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		Sn	Ta	Tb	Th	Tm	U	W	Y	Yb	Zr
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		5	0.5	0.05	0.3	0.05	0.3	5	3	0.2	10
A0797649		<5	2.9	2.49	70.4	0.38	3.3	<5	45	2.1	50
A0797650		<5	<0.5	0.08	2.8	0.05	0.4	<5	4	0.4	50
A0797651		<5	4.9	2.93	56.1	0.64	7.0	<5	60	3.2	30
A0797652		<5	3.0	10.70	154.0	1.35	8.0	<5	153	6.5	30
A0797653		<5	3.7	13.05	237	1.55	9.4	<5	192	8.0	20
A0797654		<5	3.6	12.75	276	1.53	10.4	<5	192	7.5	40
A0797655		<5	4.0	14.15	286	1.80	10.7	<5	212	7.3	50
A0797656		<5	3.8	11.20	187.0	1.30	9.1	<5	173	6.7	10
A0797657		<5	4.3	15.05	368	1.29	9.5	<5	172	6.0	10
A0797658		<5	<0.5	18.35	845	0.44	1.4	<5	81	2.0	<10
A0797659		<5	<0.5	13.40	692	0.33	0.9	<5	66	1.5	<10
A0797660		<5	<0.5	8.07	484	0.20	0.5	<5	39	0.9	<10
A0797661		<5	<0.5	5.65	261	0.14	0.4	<5	28	1.0	<10
A0797662		<5	<0.5	1.09	20.3	0.18	0.4	<5	15	1.0	<10
A0797663		<5	<0.5	14.95	1125	0.39	2.8	<5	70	1.8	10
A0797664		<5	<0.5	1.30	27.5	0.21	<0.3	<5	18	1.0	<10
A0797665		<5	1.3	9.47	261	0.91	2.7	<5	111	5.8	30
A0797666		<5	<0.5	6.77	376	0.32	1.4	<5	41	1.3	10
A0797667		<5	<0.5	3.87	193.5	0.16	<0.3	<5	26	1.0	<10
A0797668		<5	0.5	20.9	1235	0.53	1.7	<5	102	1.9	<10
A0797669		<5	<0.5	2.57	146.5	0.19	<0.3	<5	18	0.8	<10
A0797670		<5	<0.5	0.18	11.8	0.05	0.4	<5	3	0.4	50
A0797671		<5	<0.5	1.59	140.5	0.11	<0.3	<5	13	0.4	10
A0797672		<5	<0.5	4.58	636	0.46	2.0	<5	44	2.5	10
A0797673		<5	0.8	4.00	189.5	0.30	1.0	<5	31	1.5	10
A0797674		<5	<0.5	4.25	306	0.21	1.0	<5	33	1.3	10
A0797675		<5	<0.5	4.46	311	0.23	0.8	<5	34	1.1	10
A0797676		<5	1.2	5.82	420	0.24	1.0	<5	33	1.4	10
A0797677		<5	<0.5	4.69	186.0	0.17	0.5	<5	31	1.2	10
A0797678		<5	<0.5	5.69	239	0.18	0.6	<5	29	1.0	10
A0797679		<5	<0.5	5.16	270	0.20	0.7	<5	24	0.9	10
A0797680		<5	<0.5	2.48	149.5	0.07	<0.3	<5	17	0.9	10
A0797681		<5	<0.5	9.14	463	0.37	0.8	<5	50	2.1	10
A0797682		<5	0.5	30.8	749	1.33	2.6	<5	203	6.6	10
A0797683		<5	0.5	5.91	390	0.31	0.6	<5	38	1.8	10
A0797684		<5	0.6	19.45	947	0.92	2.2	<5	135	4.2	10
A0797685		<5	1.3	8.78	247	0.98	2.3	<5	105	5.5	40
A0797686		<5	<0.5	10.75	472	0.36	1.2	<5	58	1.8	20
A0797687		<5	<0.5	9.37	542	0.24	1.4	<5	49	1.3	10
A0797688		<5	0.5	14.70	754	0.39	2.7	<5	79	2.0	10



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		Recvd Wt. kg	Ce ppm	Dy ppm	Er ppm	Eu ppm	Gd ppm	Hf ppm	Ho ppm	La ppm	Lu ppm	Nb ppm	Nd ppm	Pr ppm	Rb ppm	Sm ppm
		0.02	3	0.3	0.2	0.2	0.3	1	0.05	3	0.05	1	0.5	0.2	1	0.2
A0797689		6.62	8200	20.6	4.1	33.7	80.8	<1	2.07	6160	0.20	101	1695	645	1	175.0
A0797690		0.16	175	1.0	0.4	0.7	2.4	1	0.15	132	0.07	4	37.0	14.2	2	4.2
A0797691		7.02	19450	70.2	14.3	92.8	225	<1	8.07	14650	0.64	1070	4250	1680	6	473
A0797692		7.46	22400	58.4	9.4	97.6	226	<1	6.10	18150	0.43	492	4520	1815	2	492
A0797693		7.21	12100	24.8	3.5	55.7	128.0	<1	2.34	9560	0.21	303	2550	969	4	289
A0797694		3.42	13550	27.9	4.0	58.1	132.5	<1	2.52	11450	0.16	310	2580	1030	4	281
A0797695		3.74	26900	58.8	8.7	116.5	274	1	5.81	21900	0.44	493	5380	2170	5	606
A0797696		6.54	14050	32.4	5.5	64.9	154.5	<1	3.29	10800	0.32	267	3010	1190	7	343
A0797697		6.90	11200	16.4	2.3	40.2	96.0	<1	1.72	8550	0.14	88	2240	868	1	228
A0797698		4.52	20600	24.7	2.8	69.6	158.5	<1	2.09	15700	0.17	108	4070	1675	3	392
A0797699		4.88	4990	14.4	2.8	22.4	53.5	<1	1.60	3670	0.16	751	1055	398	15	118.5
A0797700		6.10	11950	24.7	3.0	46.8	115.0	<1	2.32	8820	0.10	402	2520	996	6	263
A0797701		7.15	15400	24.6	3.1	57.4	136.5	1	2.34	11600	0.26	141	3180	1285	2	326
A0797702		6.86	12600	27.3	4.2	45.7	114.0	<1	2.63	9660	0.17	271	2470	1010	18	245
A0797703		6.93	24500	43.1	6.6	80.9	187.0	<1	4.21	19150	0.32	222	4660	1960	7	438
A0797704		6.71	29700	68.4	11.8	110.0	267	<1	7.66	22700	0.46	418	6490	2450	6	600
A0797705		0.07	8190	36.1	9.7	36.7	92.4	1	4.84	6540	0.71	305	1515	611	53	164.0
A0797706		7.24	20000	38.3	6.8	66.6	159.5	<1	3.83	15400	0.28	320	4040	1655	14	385
A0797707		7.36	15450	63.4	13.5	91.4	223	<1	7.38	11300	0.62	401	3490	1330	10	451
A0797708		6.58	8580	78.2	21.5	71.5	184.5	<1	10.55	6100	0.88	1295	2020	706	39	294
A0797709		6.65	10200	35.2	7.3	52.2	136.5	<1	4.44	7230	0.44	151	2420	851	4	287
A0797710		0.16	215	1.1	0.5	1.4	3.2	2	0.18	169	<0.05	6	48.7	17.2	2	5.9
A0797711		4.22	9410	66.5	17.5	90.4	199.0	<1	8.73	7020	0.98	327	2310	783	46	352
A0797712		4.87	1775	43.3	15.2	25.4	64.2	1	6.63	1160	0.98	917	452	151.0	53	79.0
A0797713		3.57	3840	32.0	8.8	26.3	74.7	<1	4.58	2480	0.69	113	1010	341	8	132.0
A0797714		0.16	28	0.7	0.5	0.3	0.9	2	0.13	19	<0.05	4	7.7	2.6	3	1.0
A0797715		5.05	7390	41.6	10.3	76.0	138.0	1	5.26	5510	0.59	1310	1835	621	48	251
A0797716		2.22	1595	21.8	6.6	19.4	42.9	1	2.88	1015	0.36	1550	421	138.0	75	66.4
A0797717		2.09	2110	23.0	6.5	24.6	55.1	1	3.27	1425	0.30	1370	572	176.5	64	83.2



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Sample Description	Method Analyte Units LOD	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	
		Sn	Ta	Tb	Th	Tm	U	W	Y	Yb	Zr
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		5	0.5	0.05	0.3	0.05	0.3	5	3	0.2	10
A0797689		<5	<0.5	6.41	446	0.35	2.1	<5	46	1.7	10
A0797690		<5	<0.5	0.16	11.8	<0.05	0.5	<5	4	0.4	50
A0797691		<5	1.5	20.4	769	1.21	6.3	5	170	5.3	10
A0797692		<5	0.7	19.05	802	0.77	2.2	<5	123	3.7	10
A0797693		<5	0.8	9.39	439	0.25	2.4	<5	50	1.4	10
A0797694		<5	<0.5	9.74	470	0.31	1.2	<5	54	1.9	10
A0797695		<5	0.7	21.0	1000	0.74	2.7	<5	119	3.4	10
A0797696		<5	0.6	11.45	568	0.45	1.9	<5	66	2.2	10
A0797697		<5	<0.5	6.47	349	0.20	1.3	<5	35	1.0	10
A0797698		<5	0.6	10.40	542	0.27	2.4	<5	52	1.2	10
A0797699		<5	5.1	4.46	176.0	0.27	7.4	<5	33	1.3	10
A0797700		<5	2.3	8.56	415	0.23	5.0	<5	45	1.1	10
A0797701		<5	0.6	9.39	487	0.27	1.5	<5	48	1.3	20
A0797702		<5	0.9	8.88	446	0.28	2.2	<5	53	1.5	10
A0797703		<5	0.7	14.80	620	0.53	2.0	<5	85	2.4	10
A0797704		<5	1.1	21.6	842	1.05	3.8	<5	153	4.4	10
A0797705		<5	1.3	9.34	252	0.95	2.5	<5	109	5.6	40
A0797706		<5	1.1	12.15	609	0.53	1.8	<5	80	2.9	10
A0797707		<5	1.0	18.80	622	1.21	3.2	<5	161	5.3	10
A0797708		<5	3.4	19.10	414	1.86	8.4	9	249	8.8	10
A0797709		<5	0.7	11.25	405	0.70	2.1	<5	92	3.9	10
A0797710		<5	<0.5	0.24	16.9	0.06	0.5	<5	4	0.3	50
A0797711		<5	3.2	17.75	278	1.65	8.1	<5	198	9.3	20
A0797712		<5	9.3	8.61	185.5	1.80	24.0	<5	146	8.7	70
A0797713		<5	1.2	7.84	3650	0.95	17.0	<5	104	5.6	20
A0797714		<5	<0.5	0.12	13.5	<0.05	0.6	<5	3	0.5	50
A0797715		6	18.9	11.80	362	0.94	25.0	<5	119	4.8	60
A0797716		<5	22.0	4.95	91.9	0.67	29.0	6	65	3.4	40
A0797717		<5	18.6	5.47	257	0.73	26.1	6	69	3.5	50



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Project: Wicheeda

<b>CERTIFICATE OF ANALYSIS KL19264778</b>
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	CERTIFICATE COMMENTS								
	<b>LABORATORY ADDRESSES</b>								
Applies to Method:	<p>Processed at ALS Kamloops located at 2953 Shuswap Drive, Kamloops, BC, Canada.</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">CRU-31</td> <td style="width: 33%;">CRU-QC</td> <td style="width: 33%;">LOG-21</td> <td style="width: 17%;">LOG-23</td> </tr> <tr> <td>PUL-31</td> <td>PUL-QC</td> <td>SPL-21</td> <td>WEI-21</td> </tr> </table>	CRU-31	CRU-QC	LOG-21	LOG-23	PUL-31	PUL-QC	SPL-21	WEI-21
CRU-31	CRU-QC	LOG-21	LOG-23						
PUL-31	PUL-QC	SPL-21	WEI-21						
Applies to Method:	<p>Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.</p> <p>ME-MS81h</p>								



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**QC CERTIFICATE KL19264778**

Project: Wicheeda

This report is for 109 Drill Core samples submitted to our lab in Kamloops, BC, Canada on 21-OCT-2019.

The following have access to data associated with this certificate:

MO ASMAIL	KRIS RAFFLE
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SAMPLE PREPARATION	
ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
PUL-QC	Pulverizing QC Test
LOG-21	Sample logging - ClientBarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize up to 250g 85% <75 um
LOG-23	Pulp Login - Rcvd with Barcode
CRU-QC	Crushing QC Test

ANALYTICAL PROCEDURES		
ALS CODE	DESCRIPTION	INSTRUMENT
ME-MS81h	High grade REE by fusion/ICPMS	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:**   
 Saa Traxler, General Manager, North Vancouver



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Sample Description	Method Analyte Units LOD	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	
		Ce ppm	Dy ppm	Er ppm	Eu ppm	Gd ppm	Hf ppm	Ho ppm	La ppm	Lu ppm	Nb ppm	Nd ppm	Pr ppm	Rb ppm	Sm ppm	Sn ppm
		3	0.3	0.2	0.2	0.3	1	0.05	3	0.05	1	0.5	0.2	1	0.2	5
<b>STANDARDS</b>																
AMIS0185		41800	27.3	4.8	91.2	137.0	1	2.81	30800	0.25	113	9750	3700	5	543	<5
AMIS0185		42800	26.2	5.0	88.5	145.0	1	2.99	30100	0.22	106	9460	3620	5	557	<5
AMIS0185		41700	28.4	5.1	89.4	144.0	2	2.69	29300	0.30	109	9880	3490	6	553	<5
Target Range - Lower Bound		37900	24.9	4.3	83.9	126.5	<1	2.68	27700	0.15	105	8590	3230	3	517	<5
Upper Bound		43700	29.3	5.3	96.9	146.0	3	3.20	31900	0.36	123	9890	3710	7	595	11
OREAS 146		4850	191.0	81.5	131.5	380	4	35.4	2640	6.41	409	2080	578	29	439	44
OREAS 146		4820	214	85.5	122.0	372	5	34.7	2520	5.88	380	2190	527	27	454	45
Target Range - Lower Bound		4360	208	80.7	118.0	334	2	34.2	2330	5.81	360	2030	509	25	410	35
Upper Bound		5020	240	93.3	136.0	384	6	39.4	2690	6.79	416	2330	587	31	472	57
OREAS-101b		1280	29.0	18.5	8.5	38.0	11	6.26	818	2.38	62	369	133.0	198	49.1	10
OREAS-101b		1420	31.0	19.7	7.4	39.0	12	6.12	762	2.59	59	394	125.0	193	50.0	10
Target Range - Lower Bound		1235	24.8	17.2	7.0	37.8		5.85	731	2.35		351	118.0		44.4	
Upper Bound		1425	29.2	20.2	8.5	44.2		6.83	847	2.81		405	136.0		51.6	
SY-4		122	17.5	14.9	2.0	14.5	13	4.05	58	1.68	14	57.5	15.4	58	13.1	7
SY-4		119	18.8	14.9	2.0	14.5	13	4.36	54	1.99	14	56.0	14.4	54	13.2	8
Target Range - Lower Bound		110	16.6	13.0	1.6	12.7	9	3.95	51	1.90	11	52.5	13.8	50	11.6	<5
Upper Bound		134	19.8	15.4	2.4	15.3	13	4.65	65	2.30	15	61.5	16.3	60	13.8	18
<b>BLANKS</b>																
BLANK		<3	<0.3	<0.2	<0.2	<0.3	<1	<0.05	<3	<0.05	<1	<0.5	<0.2	1	<0.2	<5
BLANK		<3	<0.3	<0.2	<0.2	<0.3	<1	<0.05	<3	<0.05	<1	<0.5	<0.2	<1	<0.2	<5
BLANK		<3	<0.3	<0.2	<0.2	<0.3	<1	<0.05	<3	<0.05	<1	<0.5	<0.2	<1	<0.2	<5
BLANK		<3	<0.3	<0.2	<0.2	<0.3	<1	<0.05	<3	<0.05	<1	<0.5	<0.2	1	<0.2	<5
BLANK		<3	<0.3	<0.2	<0.2	<0.3	1	<0.05	<3	<0.05	<1	<0.5	<0.2	1	<0.2	<5
Target Range - Lower Bound		<3	<0.3	<0.2	<0.2	<0.3	<1	<0.05	<3	<0.05	<1	<0.5	<0.2	<1	<0.2	<5
Upper Bound		6	0.6	0.4	0.4	0.6	2	0.10	6	0.10	2	1.0	0.4	2	0.4	10



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Sample Description	Method Analyte Units LOD	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	
		Ta	Tb	Th	Tm	U	W	Y	Yb	Zr
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		0.5	0.05	0.3	0.05	0.3	5	3	0.2	10
<b>STANDARDS</b>										
AMIS0185		<0.5	10.10	236	0.39	45.9	<5	64	1.7	70
AMIS0185		<0.5	9.64	228	0.40	44.7	<5	58	2.0	70
AMIS0185		<0.5	10.30	214	0.42	43.0	<5	55	2.0	70
Target Range - Lower Bound		<0.5	9.20	211	0.32	42.8	<5	51	1.4	40
Upper Bound		1.2	10.70	243	0.54	49.8	11	65	2.3	80
OREAS 146		3.7	46.6	885	9.42	2.5	28	926	50.5	240
OREAS 146		3.9	44.9	856	9.29	2.4	28	876	52.2	240
Target Range - Lower Bound		3.2	43.8	839	9.16	2.0	18	839	49.6	200
Upper Bound		5.4	50.6	967	10.65	3.3	40	971	57.4	260
OREAS-101b		2.6	5.50	35.7	2.61	388	20	176	17.4	440
OREAS-101b		2.8	5.47	36.8	2.72	382	20	169	18.0	430
Target Range - Lower Bound			4.94	33.6	2.42	360		163		
Upper Bound			5.80	39.2	2.90	414		193		
SY-4		0.6	2.68	1.2	2.10	0.8	<5	127	14.3	640
SY-4		0.8	2.50	1.2	2.30	1.0	<5	110	15.6	620
Target Range - Lower Bound		<0.5	2.37	0.7	2.09	<0.3	<5	108	13.6	550
Upper Bound		1.9	2.83	1.9	2.51	1.4	15	130	16.0	660
<b>BLANKS</b>										
BLANK		<0.5	<0.05	<0.3	<0.05	<0.3	<5	<3	<0.2	<10
BLANK		<0.5	<0.05	<0.3	<0.05	<0.3	<5	<3	<0.2	<10
BLANK		<0.5	<0.05	<0.3	<0.05	<0.3	<5	<3	<0.2	10
BLANK		<0.5	<0.05	<0.3	<0.05	<0.3	<5	<3	<0.2	20
BLANK		<0.5	<0.05	<0.3	<0.05	<0.3	<5	<3	<0.2	20
Target Range - Lower Bound		<0.5	<0.05	<0.3	<0.05	<0.3	<5	<3	<0.2	<10
Upper Bound		1.0	0.10	0.6	0.10	0.6	10	6	0.4	20





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		Ce ppm	Dy ppm	Er ppm	Eu ppm	Gd ppm	Hf ppm	Ho ppm	La ppm	Lu ppm	Nb ppm	Nd ppm	Pr ppm	Rb ppm	Sm ppm	Sn ppm
		3	0.3	0.2	0.2	0.3	1	0.05	3	0.05	1	0.5	0.2	1	0.2	5
<b>DUPLICATES</b>																
A0797618		17550	42.5	6.6	83.7	194.5	<1	3.86	12650	0.23	56	4360	1645	21	465	<5
DUP		17550	41.5	6.4	83.4	194.0	<1	3.95	12600	0.23	56	4380	1630	21	458	<5
Target Range - Lower Bound		16950	40.2	6.1	80.4	187.0	<1	3.72	12200	0.17	53	4220	1580	19	445	<5
Upper Bound		18150	43.8	6.9	86.7	201	2	4.09	13050	0.29	59	4520	1695	23	478	10
A0797654		1360	47.3	16.7	42.2	123.0	<1	7.56	814	0.99	507	569	161.0	28	131.5	<5
DUP		1380	48.6	14.2	41.6	123.0	<1	7.90	816	1.03	505	576	166.5	31	138.5	<5
Target Range - Lower Bound		1320	46.0	14.7	40.2	118.5	<1	7.41	783	0.92	487	552	158.0	27	130.0	<5
Upper Bound		1420	49.9	16.2	43.6	127.5	2	8.05	847	1.10	525	593	169.5	32	140.0	10
A0797686		12250	30.8	4.6	57.7	136.0	1	3.03	9810	0.24	161	2740	931	1	293	<5
DUP		12250	32.1	4.7	58.4	137.5	1	3.08	9760	0.24	161	2720	931	3	296	<5
Target Range - Lower Bound		11800	30.0	4.3	55.8	131.5	<1	2.90	9440	0.18	154	2630	898	<1	284	<5
Upper Bound		12700	32.9	5.0	60.3	142.0	2	3.21	10150	0.30	168	2830	964	3	305	10
A0797690		175	1.0	0.4	0.7	2.4	1	0.15	132	0.07	4	37.0	14.2	2	4.2	<5
DUP		152	0.7	0.3	0.7	2.1	1	0.12	117	<0.05	4	33.2	12.3	2	3.7	<5
Target Range - Lower Bound		155	0.5	<0.2	0.5	1.9	<1	0.08	117	<0.05	3	33.4	12.6	<1	3.6	<5
Upper Bound		172	1.2	0.4	0.9	2.6	2	0.19	132	0.10	5	36.8	13.9	3	4.3	10
A0797717		2110	23.0	6.5	24.6	55.1	1	3.27	1425	0.30	1370	572	176.5	64	83.2	<5
DUP		2180	24.5	7.0	24.9	59.3	1	3.29	1475	0.36	1460	602	181.0	64	87.7	<5
Target Range - Lower Bound		2070	22.6	6.3	23.7	54.9	<1	3.12	1395	0.27	1365	566	172.5	61	82.3	<5
Upper Bound		2220	24.9	7.2	25.8	59.5	2	3.44	1505	0.39	1465	608	185.0	67	88.6	10
<b>PREP DUPLICATES</b>																
A0797664		606	4.6	1.3	6.6	14.7	<1	0.73	412	0.19	36	170.0	59.5	4	25.2	<5
A0797664 PREP DUP		551	5.4	1.2	6.4	13.8	1	0.60	342	0.09	37	160.5	49.8	5	23.6	<5



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Project: Wicheeda

**QC CERTIFICATE OF ANALYSIS KL19264778**

Sample Description	Method Analyte Units LOD	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	
		Ta	Tb	Th	Tm	U	W	Y	Yb	Zr
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		0.5	0.05	0.3	0.05	0.3	5	3	0.2	10
<b>DUPLICATES</b>										
A0797618		<0.5	15.75	770	0.49	0.8	<5	97	2.1	<10
DUP		<0.5	15.75	768	0.52	0.8	<5	96	2.2	<10
Target Range - Lower Bound		<0.5	15.15	742	0.44	0.5	<5	90	1.9	<10
Upper Bound		1.0	16.35	796	0.57	1.1	10	103	2.4	20
A0797654		3.6	12.75	276	1.53	10.4	<5	192	7.5	40
DUP		4.1	12.95	278	1.62	10.6	<5	187	8.3	50
Target Range - Lower Bound		3.2	12.35	267	1.47	9.8	<5	180	7.4	30
Upper Bound		4.5	13.35	287	1.68	11.2	10	199	8.4	60
A0797686		<0.5	10.75	472	0.36	1.2	<5	58	1.8	20
DUP		<0.5	10.65	476	0.41	1.2	<5	58	1.8	30
Target Range - Lower Bound		<0.5	10.30	457	0.32	0.9	<5	53	1.5	<10
Upper Bound		1.0	11.10	491	0.45	1.5	10	63	2.1	40
A0797690		<0.5	0.16	11.8	<0.05	0.5	<5	4	0.4	50
DUP		<0.5	0.23	10.0	<0.05	0.3	<5	3	0.3	40
Target Range - Lower Bound		<0.5	0.14	10.2	<0.05	<0.3	<5	<3	<0.2	30
Upper Bound		1.0	0.25	11.6	0.10	0.6	10	6	0.4	60
A0797717		18.6	5.47	257	0.73	26.1	6	69	3.5	50
DUP		20.0	5.86	266	0.76	27.5	6	70	3.1	50
Target Range - Lower Bound		18.1	5.42	252	0.67	25.6	<5	64	3.0	40
Upper Bound		20.5	5.91	271	0.82	28.0	10	75	3.6	60
<b>PREP DUPLICATES</b>										
A0797664		<0.5	1.30	27.5	0.21	<0.3	<5	18	1.0	<10
A0797664 PREP DUP		<0.5	1.28	25.1	0.17	0.4	<5	16	0.9	20



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**QC CERTIFICATE OF ANALYSIS KL19264778**

### CERTIFICATE COMMENTS

#### LABORATORY ADDRESSES

Applies to Method:	Processed at ALS Kamloops located at 2953 Shuswap Drive, Kamloops, BC, Canada.		
	CRU-31	CRU-QC	LOG-21
	PUL-31	PUL-QC	SPL-21
			LOG-23
			WEI-21
Applies to Method:	Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.		
	ME-MS81h		