

# PHASE 2 INITIAL BOREHOLE DRILLING AND TESTING, IGNACE AREA

*WP03 Data Report – Geological and Geotechnical  
Core Logging, Photography and Sampling for  
IG\_BH02*

**APM-REP-01332-0249**

**November 2020**

**Golder Associates Ltd.**

**nwmo**

NUCLEAR WASTE  
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SOCIÉTÉ DE GESTION  
DES DÉCHETS  
NUCLÉAIRES



**Nuclear Waste Management Organization**  
22 St. Clair Avenue East, 4<sup>th</sup> Floor  
Toronto, Ontario  
M4T 2S3  
Canada

Tel: 416-934-9814  
Web: [www.nwmo.ca](http://www.nwmo.ca)



**REPORT**

# PHASE 2 INITIAL BOREHOLE DRILLING AND TESTING, IGNACE AREA

*WP03 Data Report - Geological and Geotechnical Core Logging,  
Photography and Sampling for IG\_BH02*

Submitted to:

**Nuclear Waste Management Organization**

4th Floor  
22 St. Clair Avenue East  
Toronto, Ontario, M4T 2S3

Submitted by:

**Golder Associates Ltd.**

6925 Century Avenue, Suite #100, Mississauga, Ontario, L5N 7K2, Canada  
+1 (905) 567-4444

1671632 (3301)  
NWMO Report: APM-REP-01332-0249

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## **WP03 DATA REPORT GEOLOGICAL AND GEOTECHNICAL CORE LOGGING, PHOTOGRAPHY AND SAMPLING FOR IG\_BH02**

### **CLIENT INFORMATION**

Project Name: Phase 2 Initial Borehole Drilling and Testing, Ignace Area

Project Number: 1671632

Client PO Number: 01559 A-TGS

Document Name: 1671632 (3301) ig\_bh02\_wp3\_report\_r1 02nov2020.docx

Client: Nuclear Waste Management Organization (NWMO)  
22 St. Clair Avenue East, Sixth Floor  
Toronto, Ontario  
M4T 2S3

Client Contact: Andrew Parmenter, Warwick Watt, and Maria Sánchez-Rico Castejón

Email: [aparmenter@nwmo.ca](mailto:aparmenter@nwmo.ca), [wwatt@nwmo.ca](mailto:wwatt@nwmo.ca), and [msanchez@nwmo.ca](mailto:msanchez@nwmo.ca)

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## Record of Issue/Revision Index

Issue Code	Revision					Revision Details
	No	By	Rev'd.	App.	Date	
RR	0a	KF/CM	IL	JC	September 2 2020	Draft released for review and comment
RR	1	KF/CM	IL	JC	October 9, 2020	Released for review and comment
RI	1b	KF/CM	IL	JC	November 2, 2020	Released for information – updated figure

Issue Codes: RR = Released for Review and Comments, RI = Released for Information.

### SIGNATURES

Prepared by:

Kimberlee Falkenstein, M.A.Sc. – Mining & Rock Engineering Group

Prepared by:

Claire MacCallum, B.Sc. (Eng) – Mining & Rock Engineering Group

Reviewed by:

Iris Lenauer, Ph.D., P.Geo., Mining & Rock Engineering Group

Approved by:

Joe Carvalho, Ph.D., P.Eng. – Mining & Rock Engineering – Principal

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Geological and Geotechnical Core Logging Procedures Manual for IG\_BH03 and IG\_BH02

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### **APPENDIX C**

Record of Core Logging

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## 1.0 INTRODUCTION

The Initial Borehole Drilling and Testing project in the Wabigoon and Ignace Area, Ontario is part of Phase 2 Geoscientific Preliminary Field Investigations of the Nuclear Waste Management Organization (NWMO)'s Adaptive Phased Management (APM) Site Selection Phase.

This project involves the drilling and testing of the third of three deep boreholes within the northern portion of the Revell batholith. The third borehole, IG\_BH02, is located a direct distance of approximately 21 km southeast of the Wabigoon Lake Ojibway Nation and a direct distance of 44 km northwest of the Town of Ignace. Access to the IG\_BH02 drill site is via Highway 17 and primary logging roads, as shown on Figure 1.

The project was carried out by a team led by Golder Associates Ltd. (Golder) on behalf of the NWMO. This report describes the methodology, activities and results for Work Package 3 (WP03): Geological and Geotechnical Core Logging, Photography, and Sampling for IG\_BH02.

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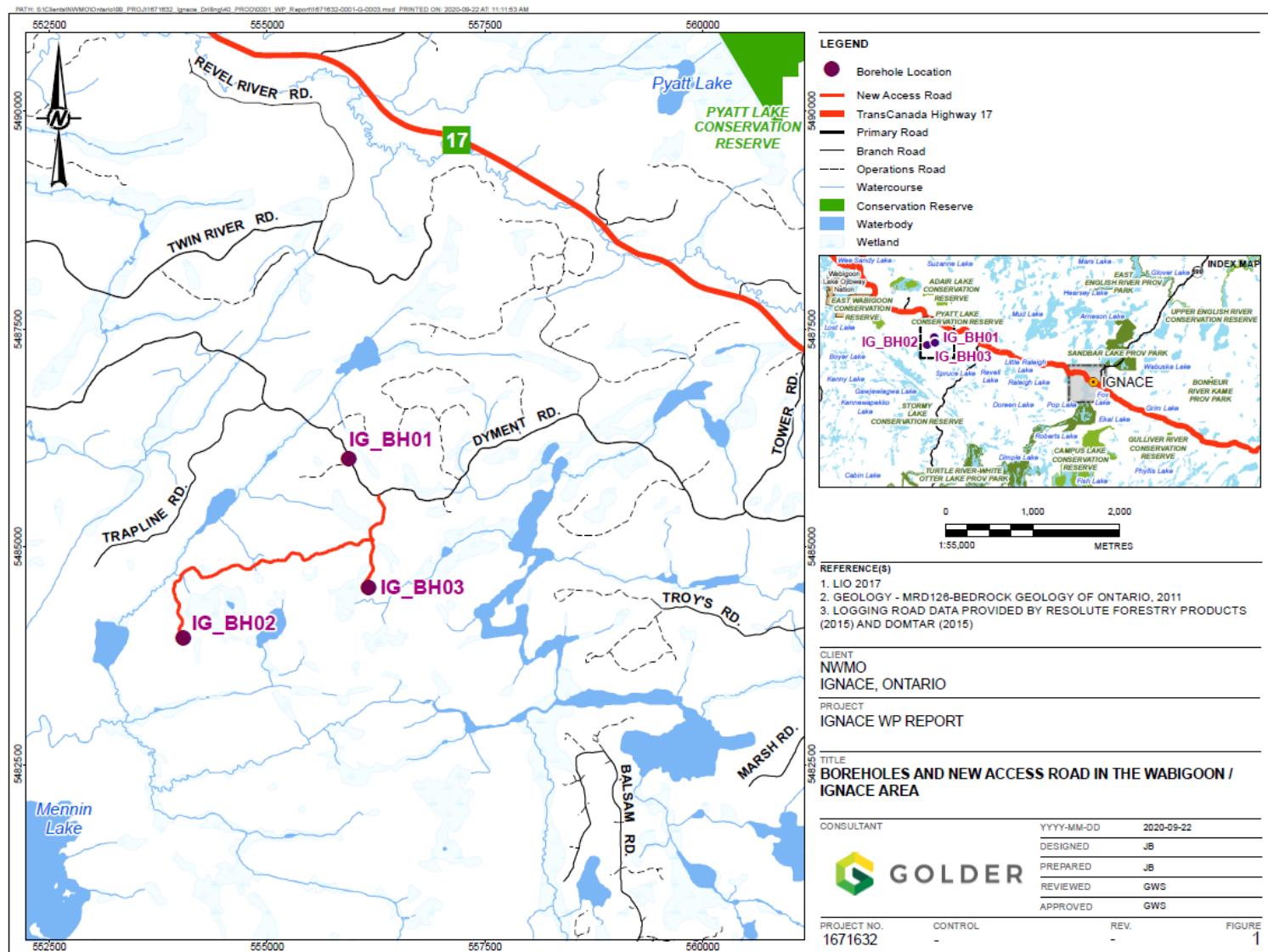


Figure 1 : Location of IG\_BH02 in Relation to the Wabigoon / Ignace Area

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## 2.0 BACKGROUND INFORMATION

### 2.1 Geological Setting

The approximately 2.7 billion year old Revell batholith is located in the western part of the Wabigoon Subprovince of the Archean Superior Province. The batholith is roughly elliptical in shape trending northwest, is approximately 40 km in length, 15 km in width, and covers an area of approximately 455 km<sup>2</sup>. Based on geophysical modelling, the batholith is approximately 2 km to 3 km thick through the center of the northern portion (SGL, 2015). The batholith is surrounded by supracrustal rocks of the Raleigh Lake (to the north and east) and Bending Lake (to the southwest) greenstone belts (Figure 2).

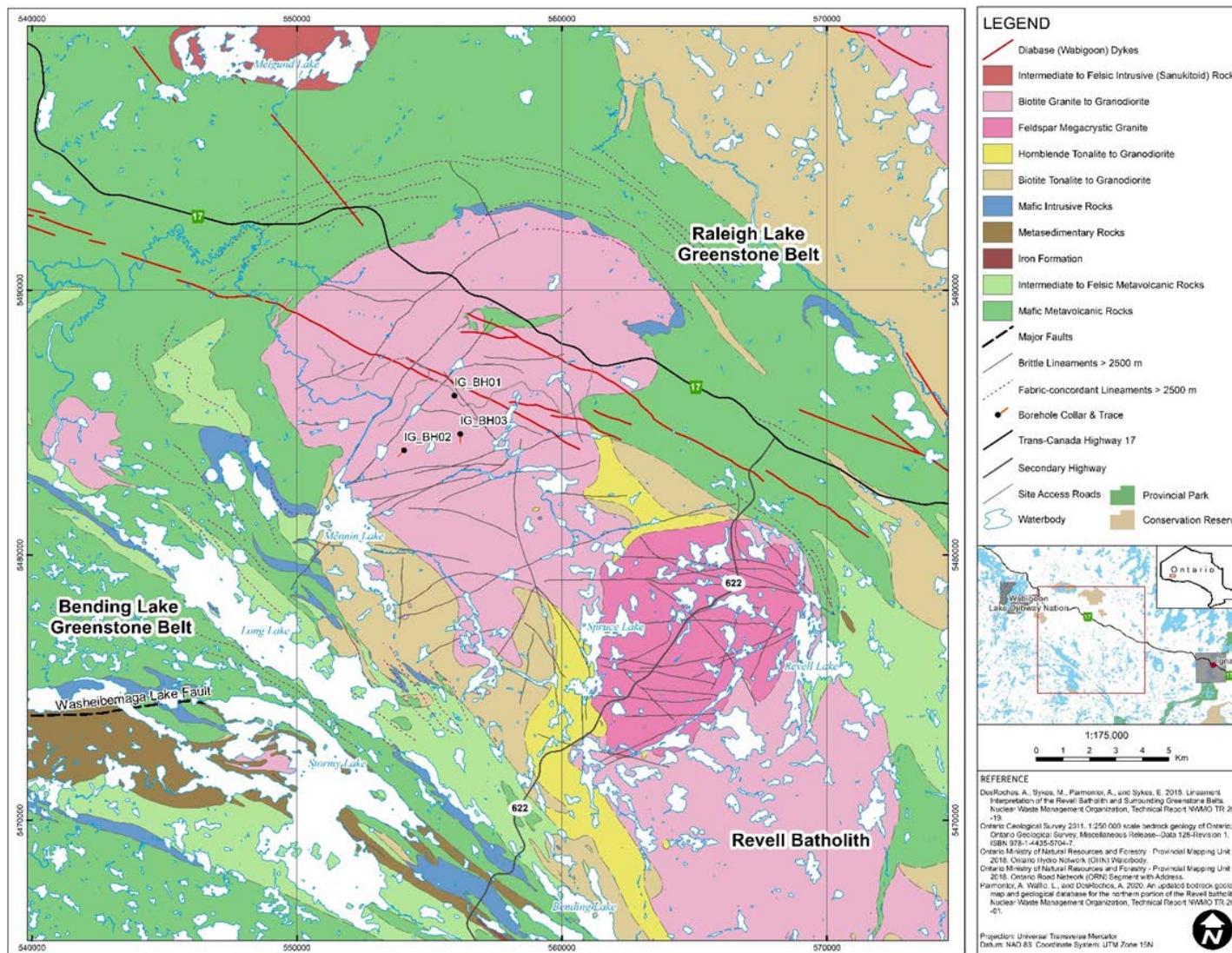
Borehole IG\_BH02 is located within an investigation area of approximately 19 km<sup>2</sup> in size, situated in the northern portion of the Revell batholith. Bedrock exposure in the area is generally very good due to minimal overburden, few water bodies, and relatively recent logging activities. Ground elevations generally range from 400 to 450 m above sea level. The ground surface broadly slopes towards the northwest as indicated by the flow direction of the main rivers in the area. Local water courses tend to flow to the southwest towards Mennin Lake (Figure 1).

Four main rock units are identified in the supracrustal rock group: mafic metavolcanic rocks, intermediate to felsic metavolcanic rocks, metasedimentary rocks, and mafic intrusive rocks (Figure 2). Sedimentation within the supracrustal rock assemblage was largely synvolcanic, although sediment deposition in the Bending Lake area may have continued past the volcanic period (Stone, 2009; Stone, 2010a; Stone, 2010b). All supracrustal rocks are affected, to varying degrees, by penetrative brittle-ductile to ductile deformation under greenschist- to amphibolite-facies metamorphic conditions (Blackburn and Hinz, 1996; Stone et al., 1998). In some locations, primary features, such as pillow basalt or bedding in sedimentary rocks are preserved, in other locations, primary relationships are completely masked by penetrative deformation. Uranium-lead (U-Pb) geochronological analysis of the supracrustal rocks produced ages that range between 2734.6 +/- 1.1 Ma and 2725 +/- 5 Ma (Stone et al., 2010).

Three main suites of plutonic rock are recognized in the Revell batholith, including, from oldest to youngest: a Biotite Tonalite to Granodiorite suite, a Hornblende Tonalite to Granodiorite suite, and a Biotite Granite to Granodiorite suite (Figure 2). Plutonic rocks of the Biotite Tonalite to Granodiorite suite occur along the southwestern and northeastern margins of the Revell batholith. The principal type of rock within this suite is a white to grey, medium-grained, variably massive to foliated or weakly gneissic, biotite tonalite to granodiorite. One sample of foliated and medium-grained biotite tonalite produced a U-Pb age of 2734.2 +/- 0.8 Ma (Stone et al., 2010). The Hornblende Tonalite to Granodiorite suite occurs in two irregularly-shaped zones surrounding the central core of the Revell batholith. Rocks of the Hornblende Tonalite to Granodiorite suite range compositionally from tonalite through granodiorite to granite and also include significant proportions of quartz diorite and quartz monzodiorite. One sample of coarse-grained grey mesocratic hornblende tonalite produced a U-Pb age of 2732.3 +/- 0.8 Ma (Stone et al., 2010). Rocks of the Biotite Granite to Granodiorite suite underlie most of the northern, central and southern portions of the Revell batholith. Rocks of this suite are typically coarse-grained, massive to weakly foliated, and white to pink in colour. The Biotite Granite to Granodiorite suite ranges compositionally from granite through granodiorite to tonalite. A distinct potassium (K)-Feldspar Megacrystic Granite phase of the Biotite Granite to Granodiorite suite occurs as an oval-shaped body in the central portion of the Revell batholith (Figure 2). One sample of coarse-grained, pink, massive K-feldspar megacrystic biotite granite produced a U-Pb age of 2694.0 +/- 0.9 Ma (Stone et al., 2010).

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**Figure 2 : Geological Setting of the Northern Portion of the Revell Batholith**

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The bedrock surrounding IG\_BH02 is composed mainly of massive to weakly foliated felsic intrusive rocks that vary in composition between granodiorite and tonalite, and together form a relatively homogeneous intrusive complex. Bedrock identified as tonalite transitions gradationally into granodiorite and no distinct contact relationships between these two rock types are typically observed (SRK and Golder, 2015; Golder and PGW, 2017). Massive to weakly foliated granite is identified at the ground surface to the northwest of the feldspar-megacrystic granite. The granite is observed to intrude into the granodiorite-tonalite bedrock, indicating it is distinct from, and younger than, the intrusive complex (Golder and PGW, 2017).

West-northwest trending mafic dykes interpreted from aeromagnetic data extend across the northern portion of the Revell batholith and into the surrounding greenstone belts. One mafic dyke occurrence, located to the northwest of IG\_BH01, is approximately 15-20 m wide (). All of these mafic dykes have a similar character and are interpreted to be part of the Wabigoon dyke swarm. One sample from the same Wabigoon swarm produced a U-Pb age of 1887+/-13 Ma (Stone et al., 2010), indicating that these mafic dykes are Proterozoic in age. It is assumed based on surface measurements that these mafic dykes are sub-vertical (Golder and PGW, 2017).

Long, narrow valleys are located along the western and southern limits of the investigation area (Figure 2). These local valleys host creeks and small lakes that drain to the southwest and may represent the surface expression of structural features that extend into the bedrock. A broad valley is located along the eastern limits of the investigation area and hosts a more continuous, un-named water body that flows to the south. The linear and segmented nature of this waterbody's shorelines may also represent the surface expression of structural features that extend into the bedrock.

Regional observations from mapping have indicated that structural features are widely spaced (typical 30 to 500 cm spacing range) and dominantly comprised of sub-vertical joints with two dominant orientations, northeast and northwest trending (Golder and PGW, 2017). Interpreted bedrock lineaments generally follow these same dominant orientations in the northern portion of the Revell batholith (Figure 2; DesRoches et al., 2018). Minor sub-horizontal joints have been observed with minimal alteration, suggesting they are younger and perhaps related to glacial unloading. One mapped regional-scale fault, the Washeibemaga Lake fault, trends east and is located to the west of the Revell batholith (Figure 2). Ductile lineaments, also shown on Figure 2, follow the trend of foliation mapped in the surrounding greenstone belts. Additional details of the lithological units and structures found at surface within the investigation area are reported in Golder and PGW (2017).

## 2.2 Technical Objectives

The technical objectives of WP03 were to:

- Photograph, and undertake geological and geotechnical core logging for the entire length of core recovered from the borehole;
- Provide high quality, properly preserved core samples for conducting laboratory core testing; and
- Provide a dataset to aid in the assessment and delineation of initial subsurface geological and geotechnical domains, and for comparison with surface-based information (e.g., geological mapping and lineament interpretation) as a foundation for the development of an initial three-dimensional conceptual geological model.

The data collected during logging, and reported on herein, was provided to NWMO as an acQuire core logging database.

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### 3.0 DESCRIPTION OF ACTIVITIES

The WP03 activities were carried out in parallel with WP02 (Borehole Drilling and Coring) activities between September 26, 2019 and November 26, 2019. Full details of drilling progress are documented in the WP02 Data Report (Golder, 2020a).

Work Package WP03 included several activities, which together implemented the safe, efficient, comprehensive and traceable handling and initial visual investigation and documentation of continuous core recovered from IG\_BH02 at Ignace, Ontario from geological and geotechnical standpoints. This section of the report provides an overview of the WP03 activities. Additional details relating to specific guidance and procedures followed for the geological and geotechnical logging are provided in Appendix A. BH02 was planned to a plunge of 70° and azimuth of 225°. The length of the hole was 1000.41 m (meters along the borehole), and the full length of recovered core was 997.70 m to a true depth of 883.40 meters below ground surface (-448.2 meters elevation). All depths reported in this document are as meters depth along the core axis.

Golder had a qualified person monitoring and supervising the borehole drilling and coring activities (drilling supervisor), and the retrieval of HQ3-sized rock core from the core barrel. A second qualified person undertook the core logging, photography and sampling (core logger). When the drill was not in operation, the drilling supervisor provided support for core logging, photography and sampling, as required.

After the core was retrieved from the borehole by the drillers and extracted from the core tube, the run of core was carried by the drillers in a split tube to the core logging trailer for WP03 activities, where it was received by the core logger.

A dedicated trailer for WP03 activities was located immediately outside the fenced drill rig area, providing easy and clear access from the drill and the core extraction point (where the core is extracted from the inner tube). The core was transferred to the logging trailer as soon as it was extracted, both to avoid cluttering the drill rig area and to meet the requirements of time-sensitive sampling that was done as part of the core logging activity, as described further below. The drilling supervisor recorded the depth of the drill string and time that each core run was retrieved from the borehole. They relayed the depth and retrieval time to the core logger, to establish the logging depth and time deadline for time-sensitive sampling, which must occur as soon as possible after core retrieval from the borehole.

The core logging trailer had allocated areas for the logging bench, photography and sampling. The trailer also had climatic control, with adequate space and lighting, and was set up to maximize efficient logging and minimize hazards, including ergonomically awkward actions.

An overview of the workflow that was followed during the geological and geotechnical core logging, photography and sampling activities is shown below (Figure 3). Geological and geotechnical logging, photography and sampling was carried out at the same time as the drilling, on a 24/7 basis, using two core loggers working on two 12-hour cross-shifts (dayshift and nightshift). Shift cross-over occurred at site and provided the two core loggers time to exchange any relevant logging learnings. Shifts were shortened to manage fatigue up to twice per week where the number of site hours was reduced to 20 for a 24 hour period (i.e. 10 hour day and night shifts). The Golder site supervisors (WP01) were on site during this 4 hour window, however the drillers also adhered to the fatigue management schedule. At each shift change, the incoming core logger first undertook a quality check of the geological and geotechnical logging, photography and sampling that was completed during the previous shift and examined the sampling plan, reproduced in Appendix B, to identify if time-sensitive tasks would be required during that shift.

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Sampling frequency was increased while drilling between 425 – 640 m depth during which time one additional staff member was added to both the day and night shifts to assist the core loggers. Minor adjustments to the sampling plan were made throughout the drilling program, based on availability of intact core suitable for sampling near targeted depths. The actual depth of core samples from BH02 along the borehole is presented in Appendix B.

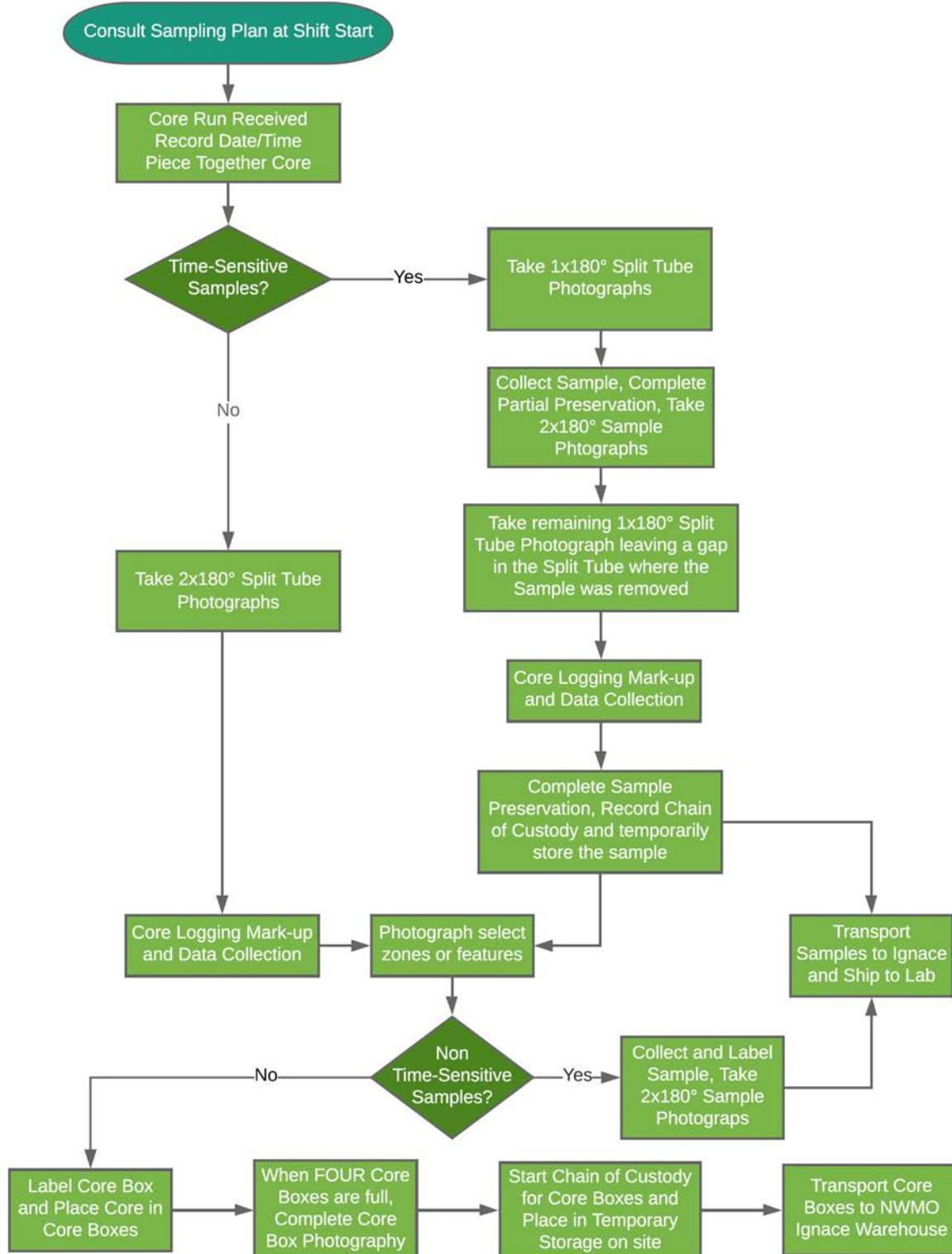


Figure 3 : IG\_BH02 WP03 Workflow

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Once the core is retrieved by the Core Logger, the main activities for this work package are as follows:

- Review upcoming sampling requirements;
- Record time received for the core run;
- Piece together core;
- If no sampling is required in a core run, photograph the full length and both front and back (2x180° split tube photography);
- When time-sensitive samples are required to be taken from a core run, first complete 1x180° photography, then collect the sample and complete sample photography and preservation, package and store sample according to the preservation and chain of custody requirements, then complete a second 1x180° photography leaving gaps where samples were removed;
- Mark-up, log, and collect core data into NWMO's acQuire database. Logging details are expanded in the following section and in Appendix A;
- Photograph core detailed features where pertinent;
- Place core into core box(es), label and photograph boxes; At this stage, complete non-time sensitive sampling and complete preservation, sample photography, packaging, and storage according to the preservation and chain of custody requirements; and
- Transport core boxes and samples to Ignace one to two times per week, for shipment to appropriate laboratory, or store in the warehouse, according to the chain of custody requirements.

### **3.1 Health and Safety**

The drilling and testing program conformed to applicable health and safety standards for the duration of the program.

Health and safety toolbox meetings were held at the beginning of each shift (day and night), where attendance of all site personnel was mandatory. The meeting reviewed all activities to be completed during that shift and identified the hazards and mitigation efforts to reduce risk of injury. Any visitors on site, who did not participate in the toolbox meetings, were required to review and acknowledge the toolbox report before allowed to perform work on site.

### **3.2 Quality Confirmation**

Cross-shifts between the day shift and night shift core loggers were carried out to transfer knowledge and information from the previous shift. These meetings were typically 10-15 minutes in duration, but occasionally longer when more specific knowledge needed to be relayed. Cross-shifts were also carried out between crews switching rotations and typically involved spending an entire shift together to ensure consistency in the procedures.

During ongoing core logging activities, a quality confirmation process was employed for each shift, such that the core logger on duty would perform quality confirmation of the previous shift work before commencing core logging activities for their shift. NWMO participated in the review process by providing comments based on the daily

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interim data deliveries. This quality confirmation process was documented in the daily quality confirmation reports, submitted as part of the WP03 Data Delivery.

Following completion of the core logging program, the acQuire database was reviewed by Golder, in collaboration with NWMO, to provide quality assurance for the entire dataset. All updates to the database, made to ensure quality and consistency in the final data product, were documented for quality control purposes.

All stitched core run, detailed structure, core box, and core sample photographs were submitted in draft on a day-by-day basis throughout the duration of logging. All photographs were reviewed for clarity, lighting, photo labeling and file naming and were corrected if needed. A final suite of all photographs was provided to NWMO in the WP03 data delivery. WP03 data delivery was delivered to NWMO in draft, reviewed and accepted prior to writing this report.

## 4.0 SUMMARY OF DATA COLLECTION

A total of 1000.41 m of bedrock core was drilled with 997.70 m of recovery starting at 2.71 m depth along borehole. The 356 core runs were recovered from the plunging borehole IG\_BH02 targeting 70° to 225° and logged as part of WP03. Locations of rock types and structures are referred to as depth along borehole throughout this section. This section provides a summary of the core logging observations. Information on the lithology encountered and logged in IG\_BH02 is presented first (Section 4.1), followed by the presentation of weathering and alteration information (Section 4.2), geotechnical information (Section 4.3) and structural information (Section 4.4) logging observations.

The core logging data for the entire borehole is presented in a comprehensive strip log in Appendix C. Lists of the photographs taken during the logging and sampling activities are included within separate tables in Appendix D, including core box (Table D-1), core run (Table D-2), core sample (Table D-3) and core feature (Table D-4) photographs. A detailed list of all core samples is presented in Table D-5.

The descriptions presented in these sections are based on an initial visual inspection of the core, as captured in the acQuire database. Supplemental investigations, including laboratory petrographic and geochemical analyses, as well as the integration with WP05 (Geophysical Borehole Logging) data may ultimately refine the understanding, particularly in relation to the types and abundances of rock and mineral phases identified.

### 4.1 Lithology

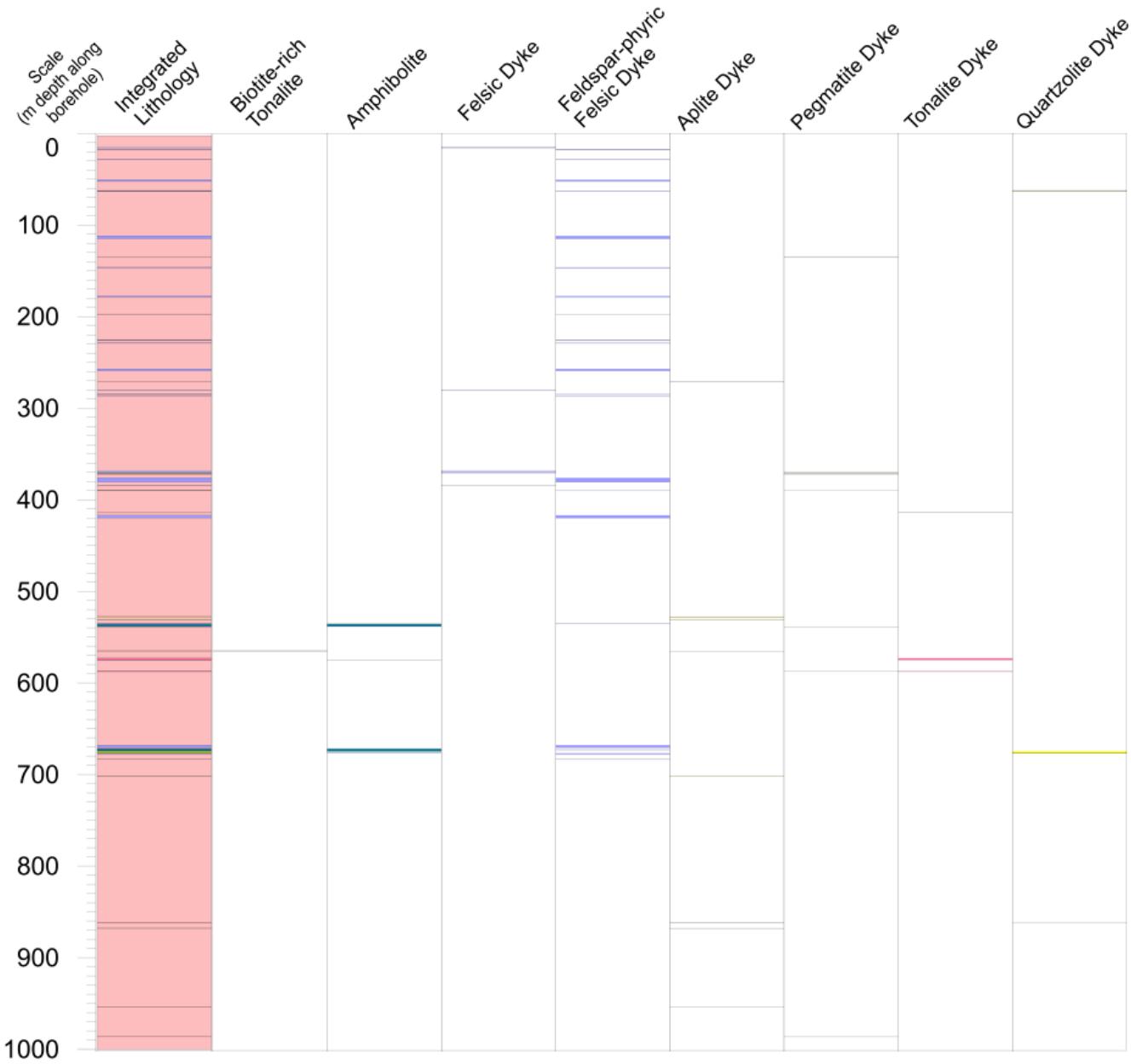
Lithology was logged continuously during core logging activities, with all units greater than 5 cm in width described by their unique rock type and associated characteristics including texture, fabric and grain size. A gamma ray spectrometry spot analysis was utilized to help distinguish between the three felsic granitoid phases likely to be encountered along IG\_BH02, including: tonalite, granodiorite and granite. The spot analysis was performed once per run for runs without lithological variation. No measurements were taken within or near amphibolites or dykes.

The distribution of the distinct rock units encountered in IG\_BH02 is shown in Figure 4 and Table 1. Note that each rock unit occurrence includes two contacts (upper and lower), and the total number of contacts identified during logging as broken or intact/partially intact for each rock unit is presented in Table 1. In 15 occurrences (14%) the contact was logged as broken, while in the remaining 89 occurrences (86%) the contact was logged as intact or partially intact. The predominant rock type encountered was biotite tonalite, including a distinct biotite-rich tonalite sub-unit (Section 4.1.1), followed by amphibolite, and several distinct suites of dykes including: felsic dykes, feldspar-phyric felsic dykes, aplite, pegmatite, quartzolite and tonalite dykes (Section 4.1.2). The horizontal

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lines in each column in Figure 4 indicate the depths along the borehole of the logged contacts for each rock unit occurrence, except for the predominant biotite tonalite unit which was logged along the majority of the length of the borehole and is represented by the pink shading in the leftmost column in Figure 4. The leftmost column in Figure 4 also provides an integrated overview of the distribution of all other rock units in IG\_BH02.



**Figure 4 : Summary of Lithology by Rock Type and by Depth along borehole as logged in IG\_BH02**

Note – Leftmost Column is a Composite of all Other Columns

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**Table 1 : Summary of Rock Types Encountered in IG\_BH02**

<b>Rock Type</b>	<b>Texture</b>	<b>Fabric</b>	<b>Grain Size (mm)</b>	<b># Occurrences (# Broken Contacts, # Intact/Partially Intact Contacts)</b>	<b>Total Logged Width (m)</b>	<b>% of Recovered Core</b>
Biotite Tonalite	Equigranular	Massive to weakly foliated	1-5	Throughout recovered core	954.41	95
Feldspar-phyric felsic dykes	Inequigranular	Foliated to massive	<1	22 (9, 35)	24.02	2
Amphibolite	Granoblastic	Foliated	<1	5 (2, 8)	5.95	<1
Felsic dykes	Inequigranular to Equigranular	Foliated	<1	5 (3, 7)	4.22	<1
Aplite dykes	Equigranular	Massive	<1	9 (0, 18)	3.01	<1
Tonalite dykes	Equigranular	Massive	<1	3 (1, 5)	2.42	<1
Quartzolite dykes	Equigranular	Massive	<1	5 (3, 7)	2.29	<1
Pegmatite dykes	Inequigranular	Massive	5-50	9 (1, 17)	0.92	<1
Biotite-rich tonalite sub-unit	Equigranular	Massive	1-5	1 (0, 2)	0.46	<1

Note – Percentages are in relation to the length of recovered core (997.70 m)

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#### 4.1.1 Biotite Tonalite

The predominant rock type encountered in IG\_BH02 is a biotite tonalite, comprising 954.41 m (95%) of the total recovered core. The biotite tonalite is light to medium white-grey and equigranular with mineral size tending towards the upper range of medium-grained (1-5 mm). Its main mineral phases include quartz, plagioclase, and biotite, with the latter comprising up to 15% of the matrix by visual inspection (Figure 5a).

Another biotite tonalite rock unit, herein distinguished as biotite-rich tonalite, is present as a distinct sub-unit of the biotite tonalite. The biotite-rich tonalite is characterized by a visual increase in biotite content to approximately 20 - 25% and a darker grey appearance (Figure 5b). The biotite-rich tonalite exhibits an equigranular, medium-grained (1-5 mm) and massive fabric, with main mineral phases of quartz, plagioclase, and biotite. The biotite-rich tonalite was logged in one occurrence, with a width of 0.46 m, representing less than 1% of the recovered core. The contact between the biotite tonalite and the biotite-rich subtype was intact and sharp.

The confidence in identifying biotite tonalite as the main unit in IG\_BH02 is based on the visual lack of K-feldspar, and the incorporation of the results from gamma ray spectrometry spot analysis undertaken on biotite tonalite once per run of recovered core. In total, 349 gamma ray spectrometry measurements were made. The typical K values ranged between 0.7 and 0.8% K, indicative of a granitoid rock in the tonalite field. Uranium (U) and Thorium (Th) content typically ranged from 0.5 to 0.7 ppm (U) and from 3.3 to 3.6 ppm (Th).

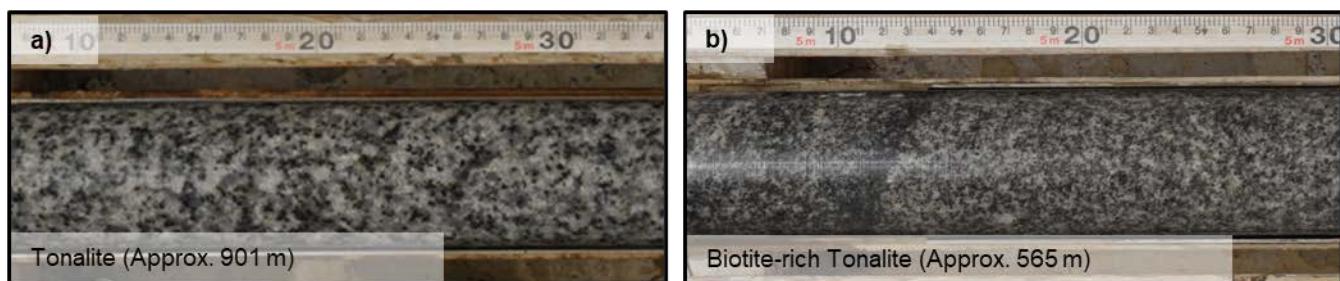


Figure 5 : Biotite Tonalite types observed in IG\_BH02: a) Biotite Tonalite (901 m), and b) Biotite-Rich Tonalite (565 m)

#### 4.1.2 Additional Rock Types Encountered in IG\_BH02

In IG\_BH02, the remaining rock types encountered represent a combined total of 5% of the total in the recovered core (Table 1). Examples of each rock type are shown on Figure 6, and their distribution along the length of the borehole is shown on Figure 4. All the additional rock types, along with their main characteristics, are described below.

- **Feldspar-phyric Felsic dykes:** Feldspar-phyric felsic dykes (Figure 4) were logged in twenty-two occurrences. They exhibit distinct, medium-grained feldspar phenocrysts, within a very fine-grained dark gray-black matrix (Figure 6a). These dykes range in width from 0.06 m to 4.51 m and have a combined total length of 24.06 m, representing less than 2.5% of the recovered core. The feldspar-phyric felsic dykes exhibit sharp contacts with the adjacent biotite tonalite. Nine contacts (20%) were identified as broken. Contact orientations are highly variable, ranging from 10° to 80° to the core axis. The textures of the felsic dykes vary between massive and strongly foliated, with a well-defined foliation is present in ten occurrences (45%). The orientation of the foliation within the feldspar-phyric felsic dykes is consistently oriented between 50° and 60° to the core axis.

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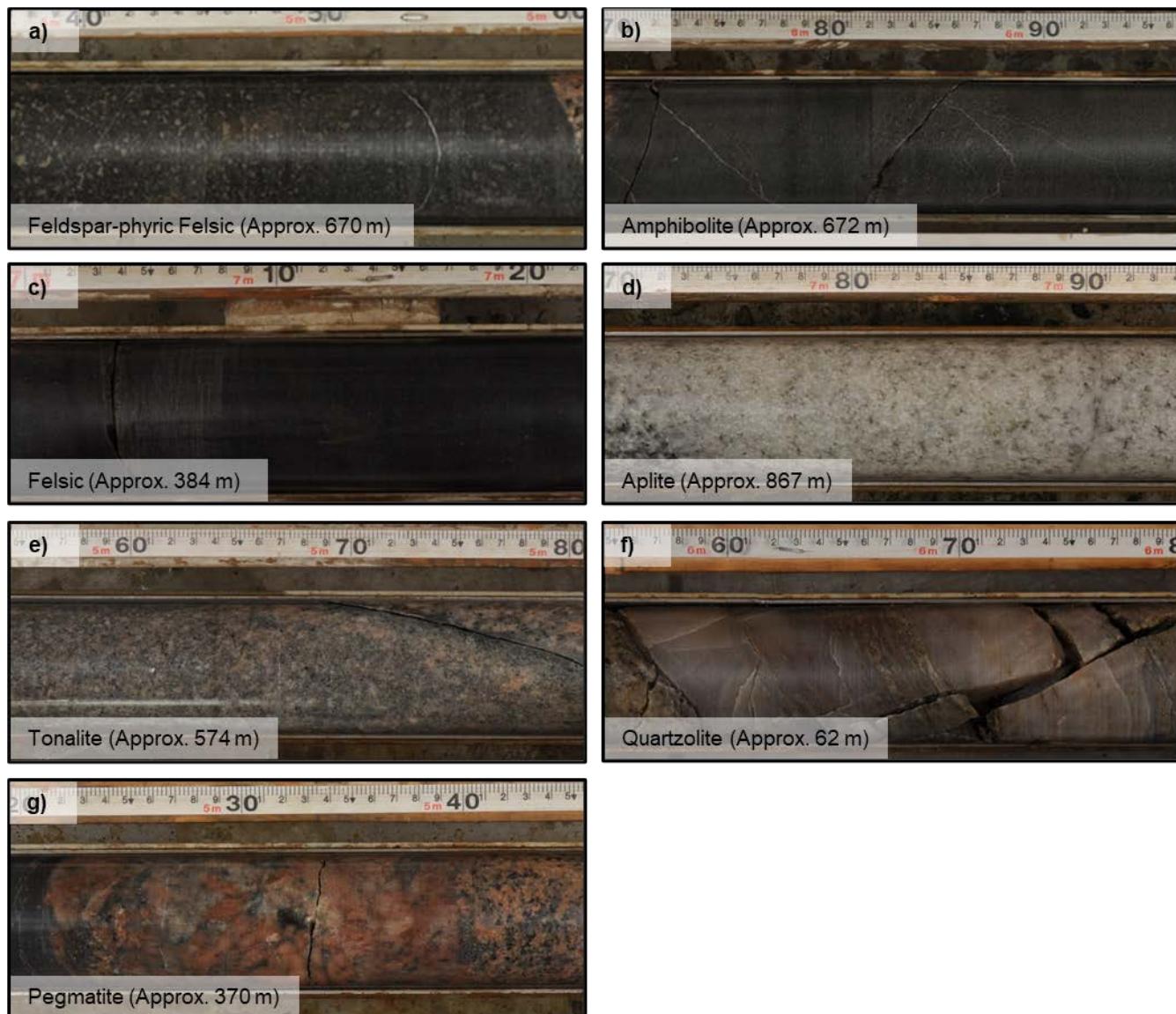
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- **Amphibolite:** Five occurrences of amphibolite were logged in IG\_BH02, accounting for <1% (5.95 m) of the total recovered core. The amphibolite occurrences range in width from 0.07 m to 2.83 m. All amphibolite occurrences were identified between 530 - 680 m depth (Figure 4). The amphibolite in IG\_BH02 is dark grey-green, equigranular, granoblastic and usually fine-grained (<1 mm) (Figure 6b). The main mineral phases are plagioclase, hornblende, and biotite, with varying amounts chlorite. Veining in the amphibolite is predominantly calcite. The amphibolite consistently exhibits a well-defined foliation and sharp contacts with the adjacent biotite tonalite. Two amphibolite-tonalite contacts are broken (20%). Contact orientations are generally observed to align with the internal foliation fabric.
- **Felsic dykes:** Fine-grained felsic dykes were logged in five occurrences between 0 – 400 m depth (Figure 4). These dykes range in width from 0.22 m to 2.17 m and have a combined total length of 4.22 m, representing less than 0.5% of the recovered core. These dykes are characteristically dark grey-black with a very fine-grained matrix composed of quartz and plagioclase, with lesser biotite (Figure 6c). Four occurrences (80%) of felsic dykes are logged as foliated. The felsic dykes exhibit sharp contacts with the adjacent biotite tonalite. Fine-grained felsic dyke-tonalite contacts were identified as broken in three occurrences (30%). The dyke contacts are oriented 40° to 60° to the core axis. The internal foliation is predominantly parallel to the dyke contacts.
- **Aplite dykes:** Nine aplite dykes (Figure 4), ranging in width between 0.05 m and 1.09 m, represent a combined total length of 3.01 m (<0. 5%) of the recovered core. Aplite dykes in IG\_BH02 are primarily located between 520 m and 870 m depth. The aplite dykes are light white-grey, equigranular to inequigranular and fine-grained (<1 mm) (Figure 6d). They exhibit an average grain size that is larger, and are lighter in colour, than the fine-grained felsic dykes described above. In four occurrences the dykes exhibit medium-grained phenocrysts. The aplite dykes are felsic in composition with main mineral phases of plagioclase, quartz, and biotite. Their contacts with the adjacent biotite tonalite are consistently sharp and oriented oblique to the core axis. All aplite dyke contacts were intact adjacent to the biotite tonalite with no contacts identified as broken (0%). Aplite also occurs in widths < 5 cm; these occurrences are logged as structural data, specifically as veins with granitic infill.
- **Tonalite dykes:** Three tonalite dykes (Figure 4), ranging in width between 0.10 and 1.84 m, represent a combined total length of 2.42 m (<0.5%) of the recovered core. These dykes are light grey-off white, massive to foliated, equigranular and fine-grained (<1 mm), with main mineral phases of quartz, plagioclase, and biotite (Figure 6e). These tonalite dykes exhibit sharp to gradational and mostly intact contacts adjacent to the biotite tonalite, one contact is identified as broken (17%). Contacts are oriented at moderate to low angles relative to the core axis. Tonalite also occurs in widths < 5 cm; these occurrences are logged as structural data, specifically as veins with granitic infill.
- **Quartzolite dykes:** Five quartzolite dykes, ranging in width between 0.07 and 1.19 m, represent a combined total length of 2.29 m (<0.5%) of the recovered core. Quartzolite dykes were observed in the recovered core primarily clustered at 63 m and 675 m (Figure 4). These dykes are white, massive to foliated, and fine-grained (<1 mm) and composed almost entirely of quartz, with lesser plagioclase, chlorite, hornblende, biotite, and calcite (Figure 6f). The quartzolite dyke occurrences exhibit sharp and consistently intact contacts adjacent to the biotite tonalite, three contacts are identified as broken (30%). These contacts are oriented oblique to the core axis. Quartz also occurs in widths < 5 cm; these occurrences are logged as structural data, specifically as veins with quartz infill.

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- Pegmatite dykes:** Nine pegmatite dykes (Figure 4) ranging in width from 0.05 m to 0.18 m, represent a combined total length of 0.92 m (<0.5%) of the recovered core. Pegmatite dykes primarily occur around 380 m depth in the borehole IG\_BH02. The pegmatite dykes are light grey-pink, massive and inequigranular with distinct, coarse-grained (5-10 mm), square-edged, K-feldspar crystals within a fine- to medium-grained (<1 - 5 mm) matrix of quartz and plagioclase (Figure 6f). The pegmatite dykes exhibit sharp and intact contacts adjacent to the biotite tonalite, one contact is identified as broken (6%). The contacts are oriented oblique to the core axis. Pegmatite also occurs in widths < 5 cm; these occurrences are logged as structural data, specifically as veins with granitic infill.



**Figure 6 :** Examples of the additional Rock Types observed in IG\_BH02: a) Feldspar-phyric Felsic dyke (670 m), b) Felsic dyke (384 m), c) Amphibolite (672 m), d) Aplite dyke (867 m), e) Tonalite dyke (574 m), f) Quartzolite dyke (62 m), g) Pegmatite dyke (370 m)

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## 4.2 Weathering and Alteration

Weathering and alteration of the rock mass were logged, where present, along the entire length of recovered core using the ISRM (1981) alteration index and weathering classification (Appendix A). Regarding weathering specifically, only a single narrow 0.05 m wide zone of rock, at approximately 2.7 m depth in the borehole, was described as slightly weathered (Figure 7). Throughout the rest of the recovered core the rock mass is uniformly described as fresh. The remainder of this section will focus on the alteration features that were observed in the recovered core.



**Figure 7 : Slightly weathered horizon at approximately 2.7 m depth observed in IG\_BH02**

Slightly less than a fifth of the recovered core (19%; 190.88 m) exhibited no visual indication of alteration. Approximately 81% (806.82 m) of the recovered core was identified as altered, with the majority (48%; 477.50 m) logged as slightly altered, 310.55 m (31%) logged as moderately altered, and the remainder (18.77 m; 2%) logged as highly altered. Seven alteration types were logged based on the alteration mineral assemblages. Potassic alteration, silicification, hematization and were the dominant alteration types. Lesser occurrences of chloritization, bleaching, sericitization, and carbonatization were also observed. The main characteristics of each alteration type are described below, and typical example photographs are presented in Figure 8. The distribution of each alteration type along the length of the borehole IG\_BH02 is shown in Figure 9.

- **Potassic:** Potassic alteration, identified in 52 occurrences, is the most prevalent alteration type encountered in the recovered core. Approximately 55% (557.11 m) of the recovered core by length is logged as showing potassic alteration. The rock mass with potassic alteration was primarily described as slightly altered (29%, 289.32 m), with 26% moderately altered (258.97 m), and <1% highly altered (8.82 m). Individual occurrences of potassic alteration range in widths from hairline to 67.82 m. An increase in the prevalence of potassic alteration was observed above 300 m, and between 500 m to 700 m depth. The pink colour of potassic alteration was used as the main differentiating feature from hematization (Figure 8b).
- **Silicification:** Silicification was identified in 79 occurrences representing approximately 30% (307.02 m) of the recovered core. Silicification was primarily described as slightly altered (27%, 269.70 m), with 3% as moderately altered (31.03 m), and <1% as highly altered (6.29 m). This alteration is characterized by a grey discolouration of the rock mass and associated reduction in the clarity of the grain boundaries of the biotite tonalite (Figure 8c). There is a slight increase in silicification above 120 m depth, and between 350 m to 580 m depth. Individual occurrences range in width from 0.01 to 26.98 m.
- **Hematization:** Hematization was observed in 43 occurrences. Approximately 16% (156.95 m) of the core was logged with some degree of hematite alteration, including 12% described as slightly altered (122.18), 3% described as moderately altered (31.11 m), and <1% as highly altered (3.66 m). The distribution of hematization ranged from hairline alteration zones to broader intervals of the core up to 17.09 m in width. It is characterized by red, brown, or rusty staining of the rock and/or coating around mineral grains that is

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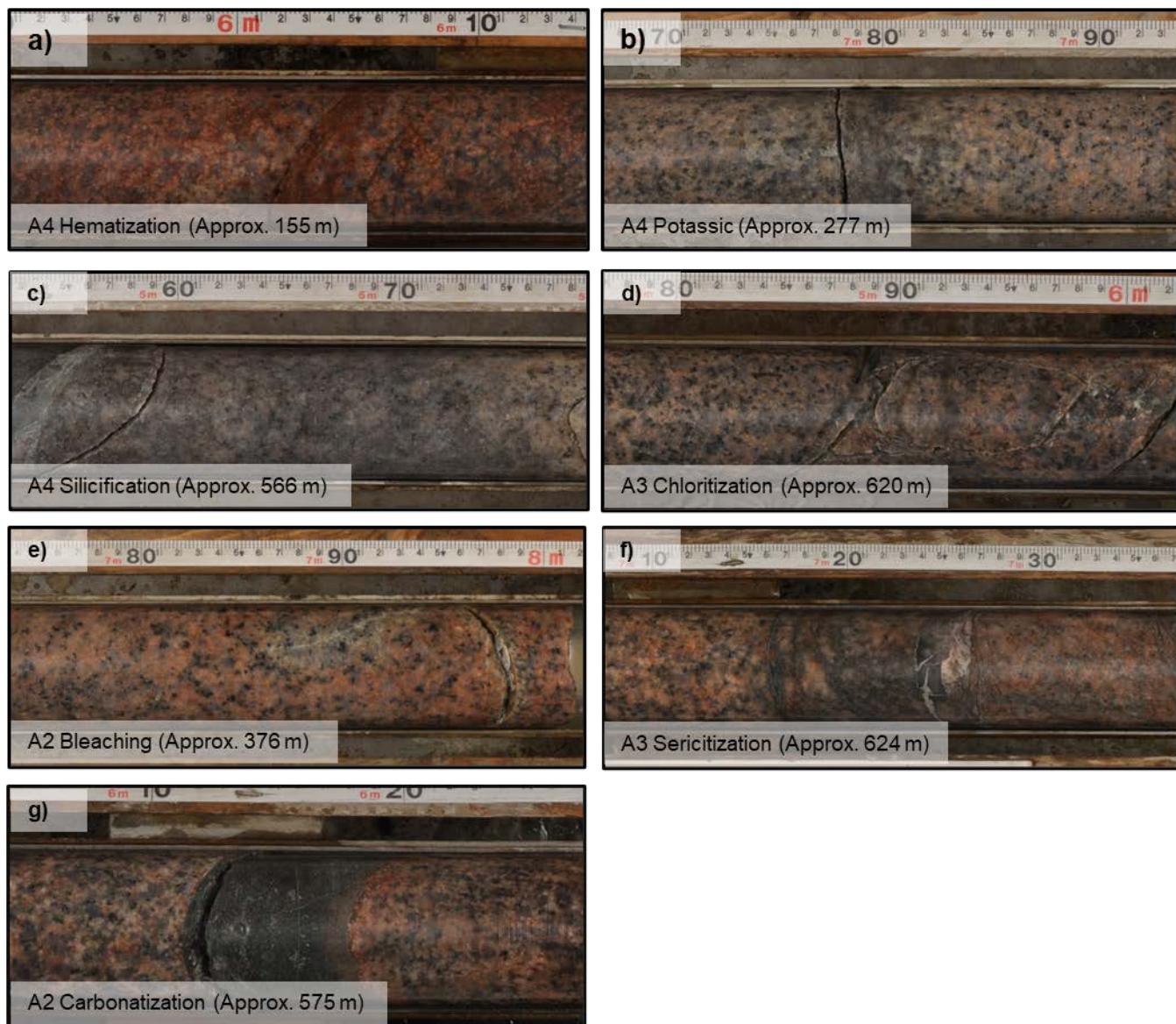
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interpreted as hematite (Figure 8a). There was a slightly increased tendency for hematization in the upper 70 m of the borehole.

- **Chloritization:** Chloritization was identified in 28 occurrences, representing 5% (54.72 m) of the recovered core. Individual occurrences of chloritization range in width from hairline zones to 12 m and are located throughout the borehole from 60 m to 978 m depth along the borehole. The appearance of green-grey chlorite was the main diagnostic of this alteration type. The rock mass was described as slightly altered (5%, 53.33 m) and moderately altered (<1%, 1.39 m) (Figure 8d).
- **Bleaching:** Bleaching was observed to slightly alter the biotite tonalite in 29 occurrences, representing 1% (11.1 m) of the recovered core. Individual occurrences of bleaching range in width from hairline zones to 2.4 m. An increase in the prevalence of bleaching was observed above 70 m. The rock mass altered by bleaching was primarily described as slightly altered (1%, 8.35 m) and moderately altered (<1%, 2.75 m). Bleaching was identified by a whitening of the altered rock mass, especially around structures (Figure 8e).
- **Sericitization:** Sericitization was observed to slightly alter the biotite tonalite in seven occurrences, ranging in width from 0.15 to 3.11 m, representing a combined total length of 5.16 m (<1%) of the recovered core. Sericite alteration occurs in the upper 70 m and sporadically below 490 m. The rock mass altered by sericitization ranges from slightly (4.18 m) to moderately altered (0.98 m). Sericitization imparts a white to grey colour to the altered rock (Figure 8f).
- **Carbonatization:** Carbonatization was observed in a single 0.15 m slightly altered occurrence in the recovered core. Carbonatization is characterized by the formation of carbonate minerals such as calcite and dolomite (Figure 8g). It was observed in association with an amphibolite occurrence at a depth of 575 m.

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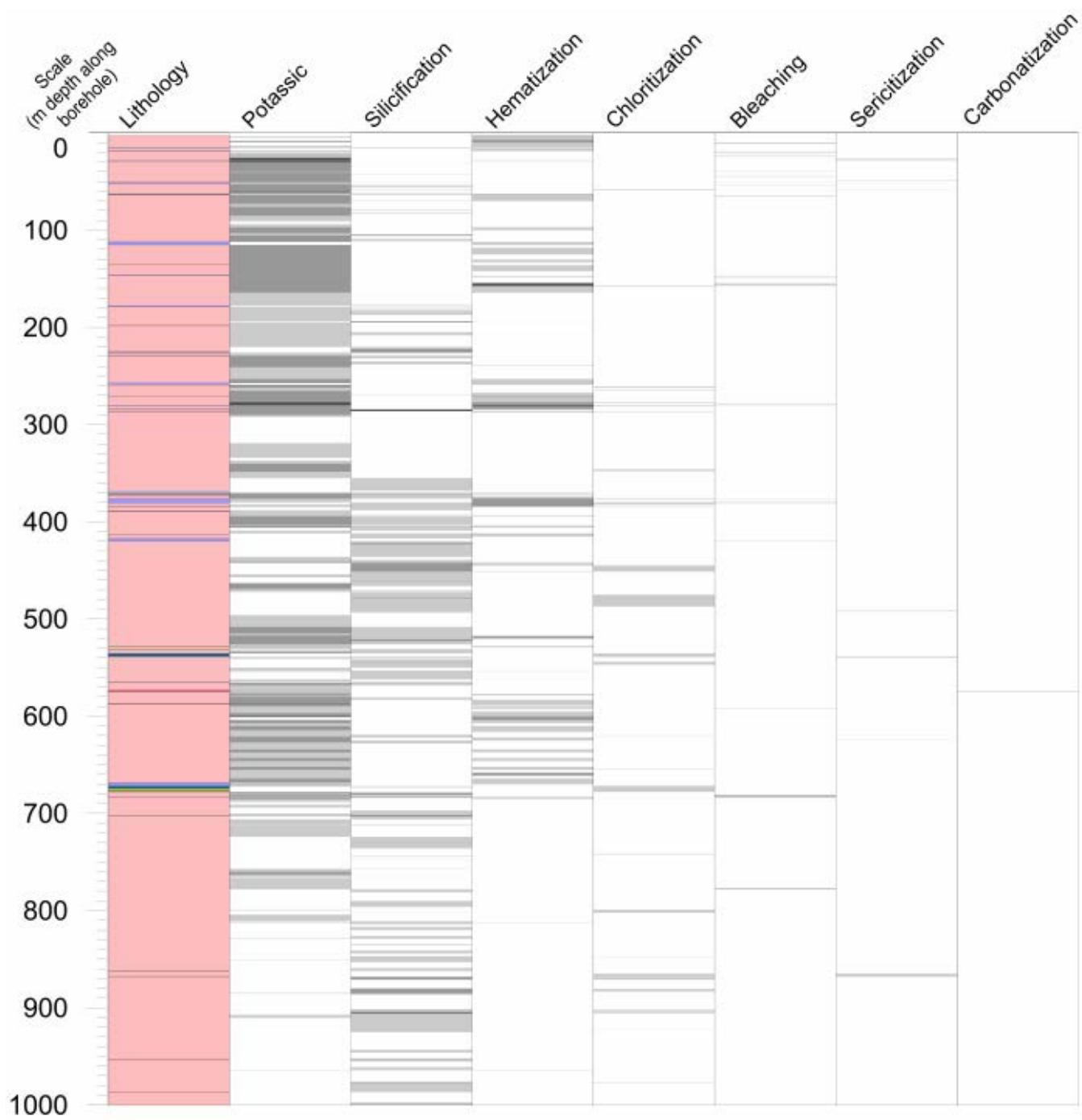
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**Figure 8 :** Examples of the Different Types of Alteration observed in IG\_BH02, a) Hematization (A4 – 155 m), b) Potassic (A4 – 277 m), c) Silicification (A4 – 566 m), d) Chloritization (A3 – 620 m), e) Bleaching (A2 – 376 m), f) Sericitization (A3 – 624 m), g) Carbonatization (A2 – 575 m)

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**Figure 9 : Summary of Alteration and by Type by Depth along borehole as logged in IG\_BH02**

Note – Grayscale indicates alteration intensity (Slightly altered – light gray, moderately altered – medium gray, highly altered – dark gray)

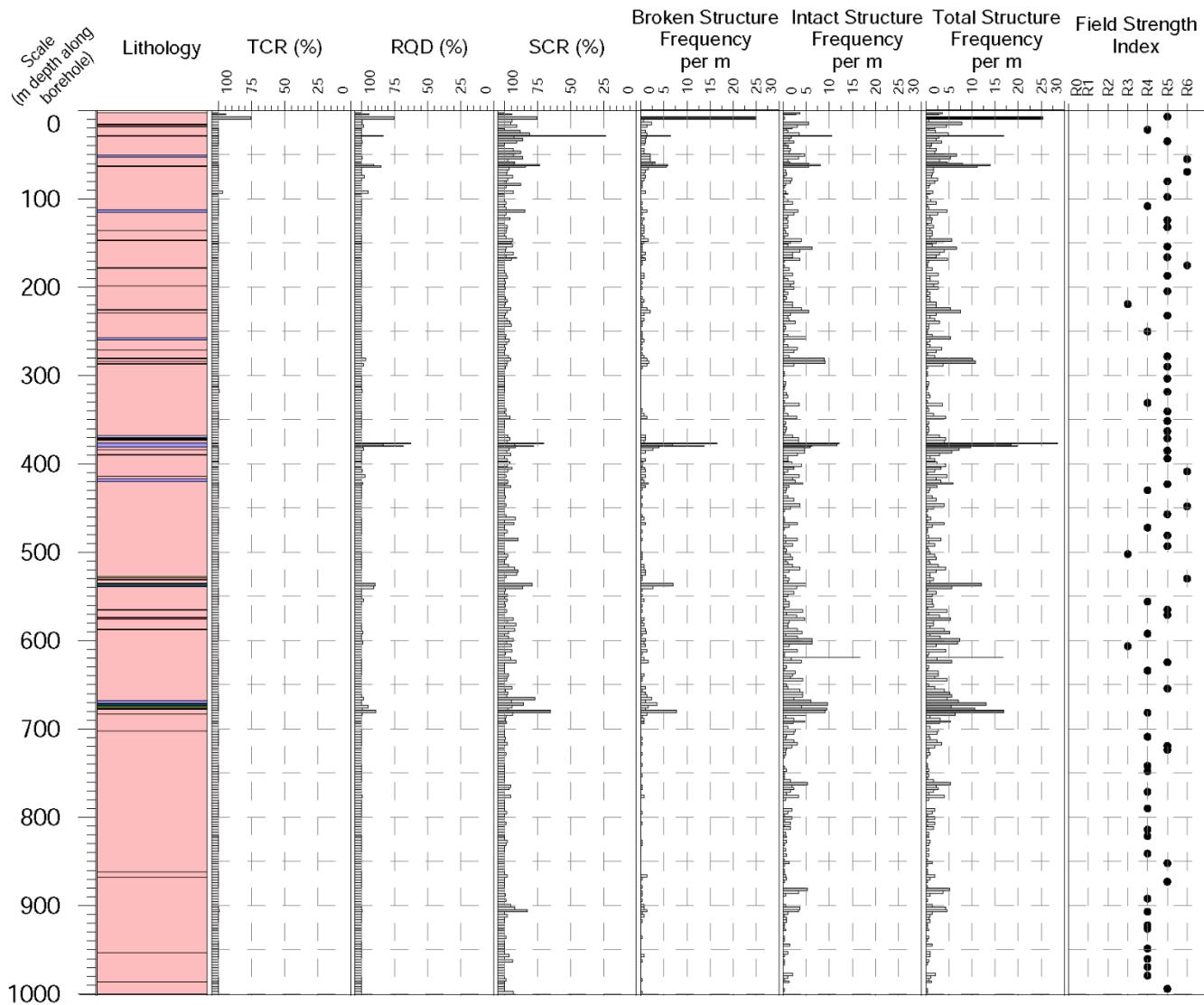
### 4.3 Geotechnical Logging

A suite of geotechnical parameters was logged in all core runs of the recovered core including: total core recovery (TCR), solid core recovery (SCR) and rock quality designation (RQD). In addition, the structure count per meter

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was determined for each core run, based on the number of logged broken and intact structures (described further in Section 4.4). Field hammer tests also provided initial strength index ratings, taken opportunistically along the length of the borehole (as further discussed in Section 4.3.3). The summary of results from these geotechnical assessments for IG\_BH02 is described below and presented on Figure 10.



**Figure 10 : Summary of Geotechnical Parameters by Depth along borehole as logged in IG\_BH02**

#### 4.3.1 TCR, SCR, and RQD

TCR, which measures the total amount of core recovered divided by the measured length of rock drilled, was uniformly very high along the entire length of the borehole. More than 98% of the core runs logged had complete core recovery (TCR = 100%) and the lowest recorded TCR was 75% at approximately 7 m depth (Figure 10).

SCR is a measure of the cumulative length of all full axial diameter core pieces in one core run divided by the total run length. Approximately 94% of the core runs recorded a measured SCR of 90% or higher. Nearly half (48%) of

the intervals below 90% SCR are above 90 m drillhole depth, generally ranging between 23% and 90%. The lowest SCR was recorded in a run at approximately 29 m depth (Figure 10).

RQD records the total cumulative length of pieces of recovered core greater than 10 cm in length measured from midpoint to midpoint between adjacent broken fractures and along the centre line axis of the core, divided by the length of the core run. The results for IG\_BH02 indicate that overall, the rock quality is excellent, averaging 99% RQD, and ranging between 63% and 100% (Figure 10). The lowest RQDs are recorded near surface, in runs at approximately 377 m depth, in runs that intersect a zone of water loss and feldspar-phyric felsic dykes.

#### **4.3.2 Structure Frequency**

Individual brittle structures of any type (i.e., joints, veins and faults) were logged at their mid-point depth in all core runs and characterized as ‘intact’, ‘partially intact’ or ‘broken’ based on the degree of continuity across the structure. These observations provided a count of broken and intact (including partially intact) structures for each core run, which was then expressed as counts of structures per metre for each core (Figure 10). Structure types will be further discussed in Section 4.4.

Typically, throughout the core, broken structures, including broken core zones (BCZ), were recorded as one to none per meter, especially below a borehole depth of 70 m. A broken structure frequency greater than 2 per m was observed in 4% of the core by length, while 4.86 m of core (approximately 0.5% by length) has broken structure frequency greater than 10 per m. The highest logged broken structure count was 25 per m, encountered near surface at 7 m depth.

The broken structure frequency is highest in the upper 60 m of the borehole; however, zones of greater broken structure frequency are interspersed within zones of lesser broken fracture frequency along the length of the borehole. In general, the core runs containing lithological contacts have an increased broken structure count. However, it should be noted that aplite and pegmatite dykes are characterized by intact contacts and are not commonly associated with increased fracture frequency.

Of the intact structures, 18% of the core by length has an intact structure frequency of greater than 3 per m, with the highest logged intact structure frequency of 16.7 per m. Typically intact structures were recorded approximately once per metre. Alternating zones of greater and lesser frequency persist along the length of the borehole, following the broken structure frequency trends.

#### **4.3.3 Strength**

Discrete field strength index measurements were taken opportunistically while breaking the core with a hammer for sampling and for fitting core into the core boxes. A total of 69 field strength index measurements were made during the logging of IG\_BH02 (Figure 10). All but one of these tests were carried out on the tonalite.

Overall, the tonalite was mostly classified as strong (R4) (26 occurrences, 38%) to very strong (R5) (33 occurrences, 49%) rock, with an increased relative amount of R4 values in the lower half of the borehole and R5 dominating in the upper half of the borehole (Figure 10). Medium strong (R3) was measured in three occurrences (4%), and extremely strong (R6) in 6 occurrences (9%). One strength index measurement was collected within a felsic dyke at approximately 371 m depth, resulting in R5 (very strong rock).

### **4.4 Structural Data**

A total of 2756 features were logged during the collection of structural data for IG\_BH02. A breakdown of logged structures, distinguished by their unique structure type, is summarized in Table 2 below. The list below includes the information recorded, where applicable, for each identified structure. The complete guidance for recording this

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structural information is described in detail in Appendix A and a comprehensive reproduction of the collected dataset is included in Appendix C.

- Depth;
- Type (of structure);
- Sub-Type;
- Broken/Intact/Partially Intact;
- Intensity;
- Infill Character;
- Infill Type;
- Infill Thickness;
- Weathering;
- Shape;
- Roughness;
- Alpha Angle, Beta Angle, Gamma Angle, Delta Angle;
- Aperture;
- Lineation Subtype and Mineralogy;
- Defining Minerals; and
- Width.

**Table 2 : Summary of Structure type, by number of occurrences, observed in IG\_BH02**

Structure Type	# Occurrences Logged in IG_BH02
Joint (JN)	1424
Mechanical Break (MB)	584
Vein (VN)	377
Fault (FLT)	166
Brittle-Ductile Shear Zone (SHR)	66
Ductile Shear Zone (SHRD)	64
Primary Igneous Structure (IPS)	36
Foliation (FO)	25
Broken Core Zone (BCZ)	10
Mylonite (MYL)	2
Fold Axial Plane (FAX)	1
Lost Core Zone (LCZ)	1
<b>Total</b>	<b>2756</b>

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The recovered core was not oriented during the coring process. Therefore, the orientation measurements were recorded as alpha angle between 0 and 90 degrees relative to the core axis for dip and beta angle between 0 and 359 degrees relative to an arbitrary reference line marked along the long axis of each core run for dip direction. For lineations, the gamma angle was recorded for linear plunge and the delta angle was recorded for linear trend.

A subsequent step in the analysis of structures involves the integration of the core logged structures with structures interpreted from the analysis of optical and acoustic televiewer datasets collected as part of the geophysical logging activity (WP05) (Golder, 2020b). This step of integration allows, in many instances, for the correction to true dip and dip direction, or trend and plunge, of logged planar and linear structures. The structure summary presented here is based on the unoriented dataset, so no orientation information is included. The results from the integration of structural information between WP03 and WP05 form the integrated structure log for IG\_BH02.

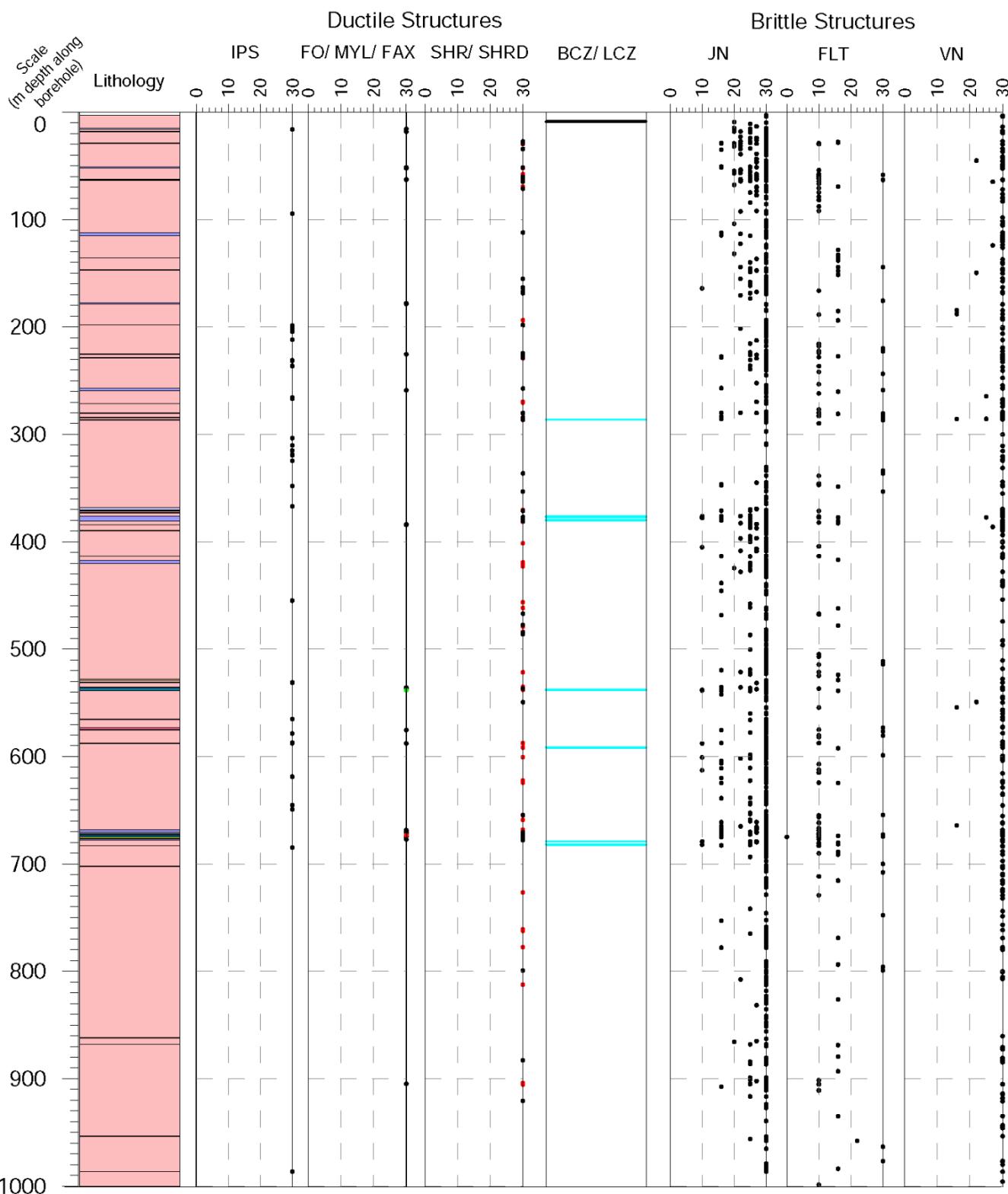
Mechanical breaks occur during drilling, for example when core breaks due to stresses from the drilling action, or when the driller or core logger is handling the core. The determination that a structure is mechanical is based on the experienced judgement of the core logger. If the genesis of a specific feature is in doubt, the core logger will adopt a conservative approach and log it as a natural feature. Mechanical breaks identified in the core are characterized by clean, fresh, irregular surface that are usually oriented perpendicular to the core axis. A total of 584 features (or zones) were identified and logged as being mechanically broken (Table 2). If any of the logged mechanical breaks, lost core zones or broken core zones are identified within the televiewer dataset during the step of structure integration they will be reclassified as clean joints or broken core zones, where appropriate, in the integrated structure log for IG\_BH02.

The description of the results from the structural core logging portion of the WP03 activity is separated below into sections that focus on: primary igneous structures and ductile structures (Section 4.4.1) and brittle structures (Section 4.4.2).

A compilation of the distribution of broken and lost core zones, and ductile and brittle structures along the length of the borehole is shown in Figure 11. The logging characteristics (described in detail in Appendix A) such as intactness, aperture, weathering, shape, roughness, infill character and infill type, are used to provide a joint condition rating (JCR) for all structures. The details regarding how JCR is assigned to each structure is described in Appendix A. The JCR rating ranges from 0 for structures with low frictional strength up to 30 for intact structures. The JCR rating is plotted on the horizontal axis for all structures on Figure 11.

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**Figure 11 : Summary of the Distribution of Structures by Depth along borehole and Joint Condition Rating (JCR) as logged in IG\_BH02**

Note - Structure Types: Primary Igneous Structure (IPS, black). Ductile Structures – Foliation (FO, black), Mylonite (MYL, green), Fold Axial Plane (FAX, red). Shear Zone Brittle-Ductile (SHR, red), and Shear Zone Ductile (SHRD, black). Broken Core Zone (BCZ, blue). Lost Core Zone (LCZ, black). Brittle Structures – Joint (JN), Fault (FLT), and Vein (VN).

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#### 4.4.1 Primary Igneous Structures and Ductile Structures

This section describes the core logging observations of primary igneous structures and ductile structures. Primary igneous structures include features interpreted to have originated with the formation or emplacement of the igneous rock. In IG\_BH02, these features were occasionally identified. A total of 36 occurrences were logged as primary igneous structures, including 32 occurrences of primary igneous layering and 4 occurrences of igneous flow foliation. Primary igneous structures are characterized by sharp to gradational changes in concentrations of mineral components or grain size (Figure 12a).

Ductile structures identified during core logging include occurrences of foliation, ductile shear zones, and brittle-ductile shear zones. Some of the shear zone and foliation occurrences also included an associated mineral lineation. A total of 25 occurrences of foliation (FO) were logged in IG\_BH02 (Figure 11). The foliation is described as weakly developed and characterized by the preferred alignment of biotite or plagioclase in tonalite (Figure 12b) and alignment of hornblende in amphibolite occurrences. Mineral lineation associated with foliation was observed in four instances, where it was defined by chlorite (50%), biotite (25%), and hornblende (25%).

A total of 64 ductile shear zones (SHRD) were logged throughout the borehole, with occurrences from 27 m to 920 m depth along the borehole with the majority of the occurrences (77%) distributed between the top of the borehole and 400 m depth (Figure 11). Individual ductile shear zones range in width from hairline (<1 mm) to up to 100 cm and were commonly observed as cm-scale deformation zones (Figure 12c). Ductile shear zones were all observed to be intact or partially intact (JCR = 30). Quartz is the most common mineral phase associated with the brittle-ductile shear zones, logged as primary or secondary defining mineral in 39 occurrences (61%). Few occurrences of hematite/iron oxide (31%), calcite (22%), chlorite (18%), epidote (17%), muscovite (15%), biotite (12%), plagioclase (6%), and amphibole (1%) as defining mineral were also recognized. Two occurrences (3%) of lineations were observed, defined by quartz and epidote, and are oriented oblique to the shear zone plane. Ductile shear zones were commonly observed within, or localized along the contacts of, logged amphibolite occurrences and feldspar-phyric felsic dykes.

A total of 66 brittle-ductile shear zones (SHR) were logged throughout the borehole, with occurrences from 29 m to 906 m depth. The majority of the occurrences (86%) are distributed between 269 and 906 m depth (Figure 11). All brittle-ductile shear zones were observed to be intact or partially intact (JCR = 30), ranging in width from cm-scale to up to 82 cm (Figure 12d). Quartz is the most common mineral phase associated with the brittle-ductile shear zones, logged as primary or secondary mineral in 43 (65%) occurrences. Fewer occurrences of hematite/iron oxide (29%), muscovite (26%), calcite (21%), chlorite (20%), epidote (17%), biotite (5%), plagioclase (5%), and magnetite (2%) were also recognized locally within brittle-ductile shear zones. Two occurrences (3%) of lineations were observed defined by chlorite and calcite and are oriented oblique to the shear zone plane. Brittle-ductile shear zones were commonly localized within logged amphibolite occurrences and felsic dykes, or along their contacts with the surrounding biotite tonalite.

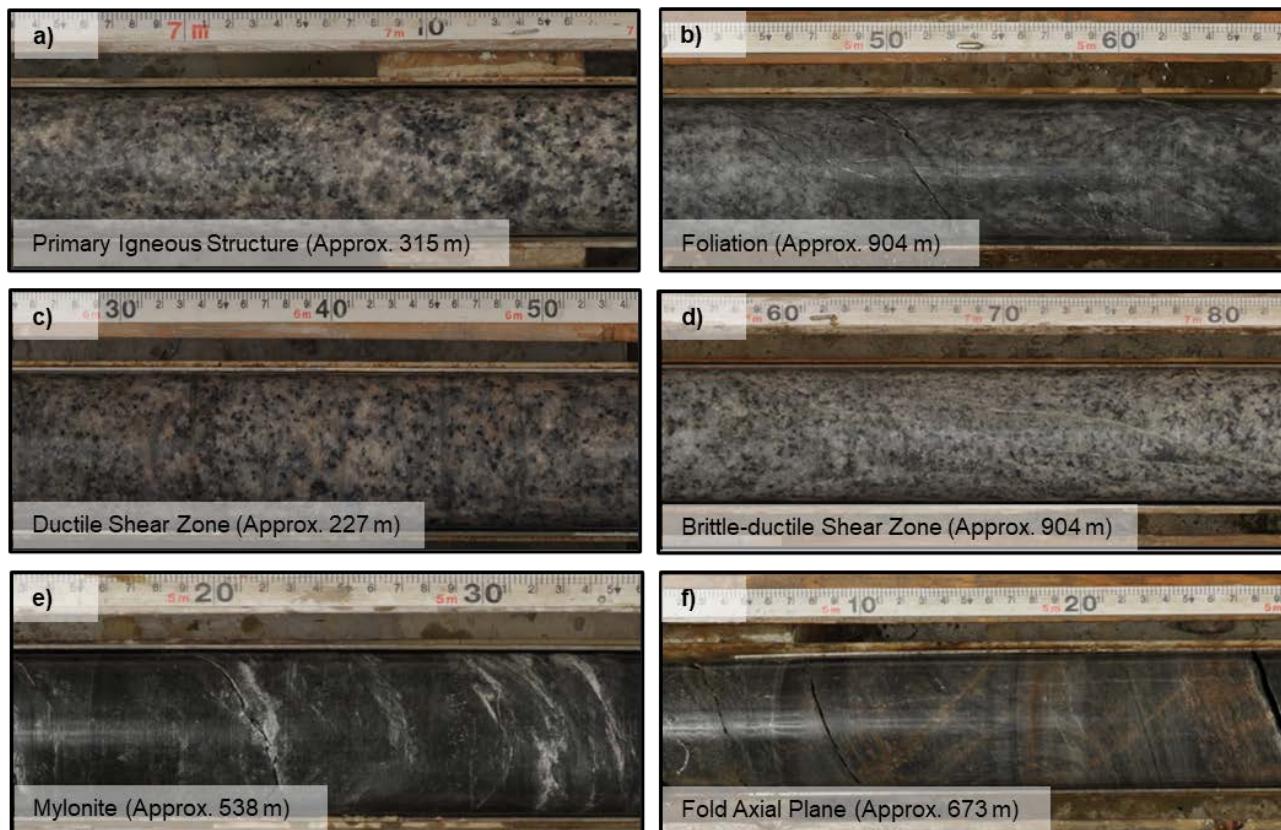
Two mylonite (MYL) occurrences were logged throughout the borehole. One occurrence was logged in amphibolite at 538 m depth and one occurrence was logged in a feldspar-phyric felsic dyke at 673 m depth. The width of the mylonite occurrences are in the cm-scale range (Figure 12e). Both mylonite occurrences are observed associated with chlorite lineations.

One fold axial plane (FAX) was logged in the borehole at 673 m depth. The fold was observed within the feldspar-phyric felsic dyke (Figure 12f). The fold has a symmetric geometry and the fold axial plane is oriented at a high

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angle to the core axis. The orientation of the fold axis could not be determined. The wavelength of the fold is in the order of several cm.



**Figure 12 : Ductile Structures and Primary Igneous Structures, observed in IG\_BH02:** a) Primary Igneous Structure (315 m), b) Foliation (904 m), c) Ductile Shear Zone (227 m), d) Brittle-Ductile Shear Zone (904 m), e) Mylonite (538 m), f) Fold Axial Plane (673 m).

#### 4.4.2 Brittle Structures

Brittle structures identified during logging of IG\_BH02 include features described as broken core zones and lost core zones, as well as all fracture types including joints (JN), faults (FLT) and veins (VN). Figure 11 shows the summary of the distribution of all logged brittle structures along the depth of the borehole, along with their unique JCR number on the horizontal axis for each structure type. For further description of the logging characteristics, see Appendix A.

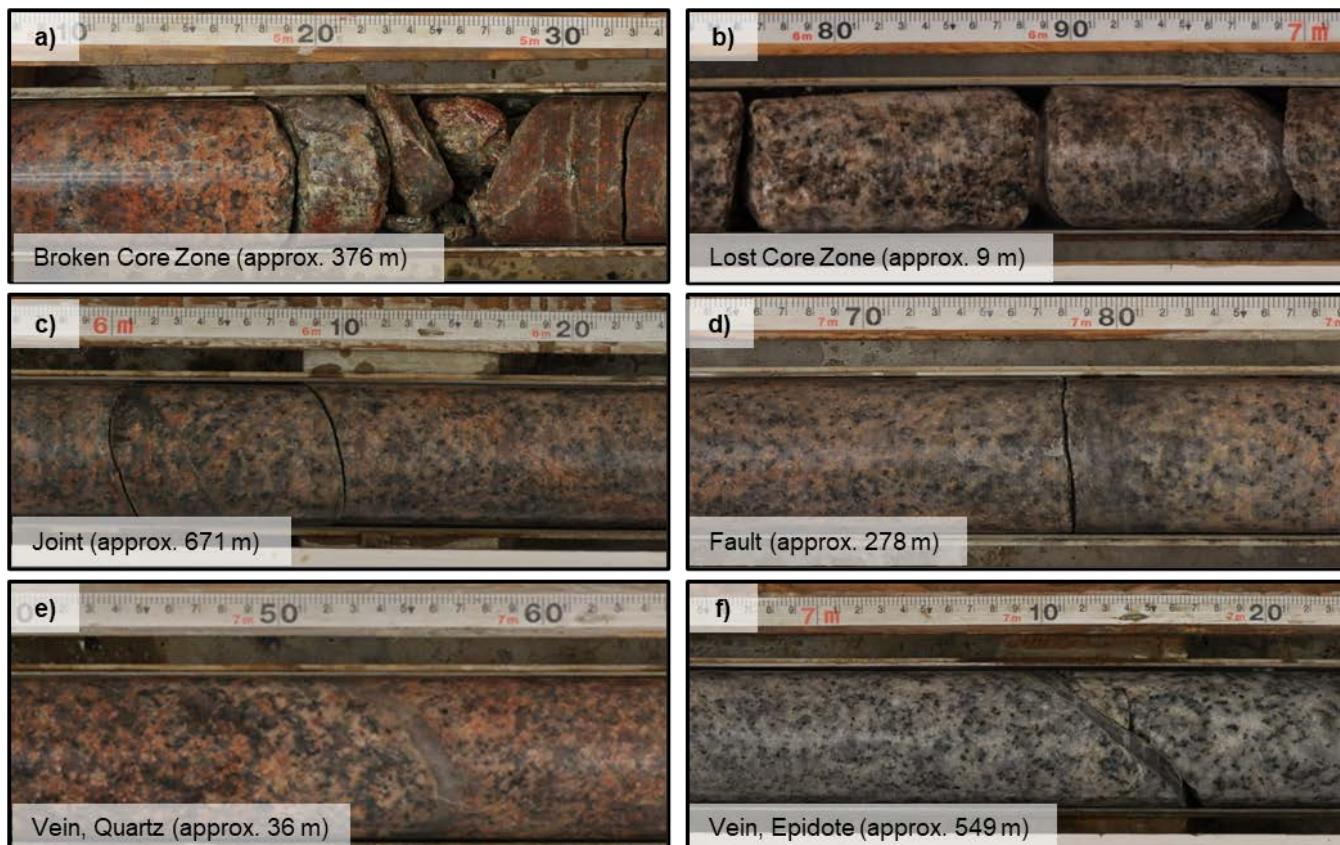
Broken core zones are intervals of gravel- to cobble-sized core, generally angular, that do not contribute to solid core recovery (SCR, full circumferential segments). A total of 10 broken core zones were logged in the recovered core and their occurrences were observed between 280 and 690 m depth (Figure 11). Broken core zones range between 2 and 13 cm in logged width. Typical broken core zones (Figure 13a) are not associated with infill minerals and generally are the result of intersecting broken structures. The broken core zones observed at 377 m depth, are spatially associated with a permeable zone. There is some uncertainty as to whether or not these broken core zones are natural features or mechanically-induced breaks. This uncertainty will be addressed during the step of integration with the televiewer datasets. If any of the broken core zones identified during core logging

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are not also identified in either of the optical or acoustic televiewer datasets, they will then be classified as mechanical breaks and excluded from the broken fracture frequency count.

Lost core zones are intervals characterized by incomplete recovery and may be related to mechanical grinding or to soft natural materials that are washed out in the drilling process. One lost core zone was logged in IG\_BH02, at 9 m depth (Figure 11, Figure 13b). The width of the zone of lost core was estimated to be 74 cm by the core logger. There is some uncertainty as to whether or not intervals of lost core are natural features of the rock mass or mechanically-induced features. This uncertainty will be addressed during the step of integration with the televiewer datasets. If any of the lost core zones identified during core logging are not also identified in either of the optical or acoustic televiewer datasets they will then be classified as mechanical features. Inversely, if any of the lost core zones are identified in the televiewer datasets their width will be confirmed or revised based on observed televiewer width.



**Figure 13 : Examples of Brittle Structure Types observed in IG\_BH02:** a) Typical Broken Core Zone (376 m), b) Lost Core Zone (9 m), c) Joint (671 m), e) Fault (278 m), f) Quartz Vein (36 m), g) Epidote Vein (549 m)

A total of 1424 joints were logged in IG\_BH02 and their occurrences are distributed along the entire length of the borehole (Figure 11). In 299 occurrences (21%) the joints were observed to be broken, while the remaining 1125 (79%) joints were intact or partially intact (e.g., Figure 13c, showing both broken and intact joints). The latter were assigned JCR values of 30, while the broken joints were assigned JCR values ranging between 0 and 30. The majority of the logged joints (98%) exhibited zero aperture. In the remaining occurrences mm- to cm-scale apertures were logged. Of the total logged joints, 21 were logged as clean (1%), elsewhere the surface condition was logged as stained, slightly altered, coated, or infilled. The most common mineral phase associated with

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logged joints was quartz, identified in 504 occurrences (35%), followed by calcite in 269 occurrences (19%), epidote in 203 occurrences (14%), muscovite in 148 occurrences (10%), iron oxide (hematite) in 139 occurrences (10%), chlorite in 109 occurrences (8%), and plagioclase in 15 occurrences (1%). The remaining observed infill types (16 occurrences, 1%) include clay, biotite, talc, granitic infill (comprising aplite, pegmatite, and tonalite infill material), alkali-feldspar, and soft gouge derived from adjacent wall rock.

A total of 166 faults were logged in IG\_BH02. The fault occurrences are distributed along the entire length of the borehole (Figure 11). The main diagnostic criteria used to identify a fault in the recovered core was the presence of slickenlines on the fault surface. The majority of the logged faults (79%) were broken, allowing the full plane to be observed. For intact faults, the slickensided fault surface was observed when the core broke along the fault plane during handling. Intact and partially intact fault received a JCR of 30, with the remainder having assigned JCR values ranging between 0 and 22. 149 of the logged faults (90%) were identified as hairline structures with no aperture (e.g., Figure 13d). The remaining 17 faults had a mm- to cm-scale aperture. A mineral phase was observed to infill, coat or stain all fault surfaces (100%). The most common mineral phase associated with logged faults was chlorite, identified in 72 occurrences (43%), followed by 43 occurrences of epidote (26%), 19 occurrences of quartz (11%), 15 occurrences of calcite (9%), 4 occurrences of muscovite (2%), and 4 occurrences of iron oxide or hematite (2%). The remaining infill types included 9 occurrences (<1%) compromising clay, soft and stiff gouge and broken rock derived from the adjacent wall rock. 158 faults (96%) were observed to be associated with lineations, most of which were oriented oblique to the fault plane. 22 slickenlines (13%) were measured within 15° of the strike of the fault plane and would thereby characterize strike-slip faults. 16 slickenlines (10% of the faults) were identified as dip-slip, with a linear plunge within 15° of the fault plane dip. The defining minerals are chlorite in 73 instances (46%), epidote in 41 instances (26%), quartz in 12 instances (8%), calcite in 12 instances (8%), iron oxide or hematite in 11 instances (7%), muscovite in 5 instances (3%), and 3 occurrences of biotite (2%). The one remaining undefined ("N/A") lineation mineral (<1%) could not be uniquely identified by the core logger.

A total of 377 veins were logged in IG\_BH02 and these occurrences were distributed along the entire length of the borehole (Figure 11). The majority of the logged veins (96%) were intact or partially intact. The primary vein mineral is plotted by vein thickness in Figure 14. The distribution shows the prevalence of quartz-filled veins (Figure 13e) with 152 occurrences (40%), followed by 101 occurrences of granitic infill (i.e. tonalite, aplite, or pegmatite) (27%), 61 occurrences of calcite (16%), 26 occurrences of epidote (Figure 13f) (7%), 17 occurrences of iron oxide (hematite) (5%), 10 occurrences of chlorite (3%), 4 occurrences of "Other" (1%), 2 occurrences of plagioclase (<1%), and 1 occurrence (<1%) each of alkali-feldspar and muscovite. The "Other" infill types refer to mineral phases which could not be identified by the core logger. Most of the veins logged have an infill thickness of 10 mm or less (81%). There were 39 occurrences where the veins were logged with an infill thickness between 10 mm and 20 mm (10%), and 34 occurrences where the veins were logged with an infill thickness greater than 20 mm (9%).

The mineral phases in filled joints, veins, and faults (1944 out of a total of 1967 structures), are compiled in Figure 15 to show their distribution along the length of the borehole. The horizontal axis for each column of data also identifies the JCR value of the associated structure. The structures identified as clean or exhibiting no mineral phase, are also plotted. Where a feature was identified as intact or partially intact, there is more uncertainty associated with identification of mineral phase(s), as the observation is limited to the exposed portion of the structure surface. The mineral phases identified as a stain, slight alteration, coat or infill on the surface of logged joints, veins and faults included 675 occurrences of quartz (34%), 345 occurrences of calcite (18%), 272

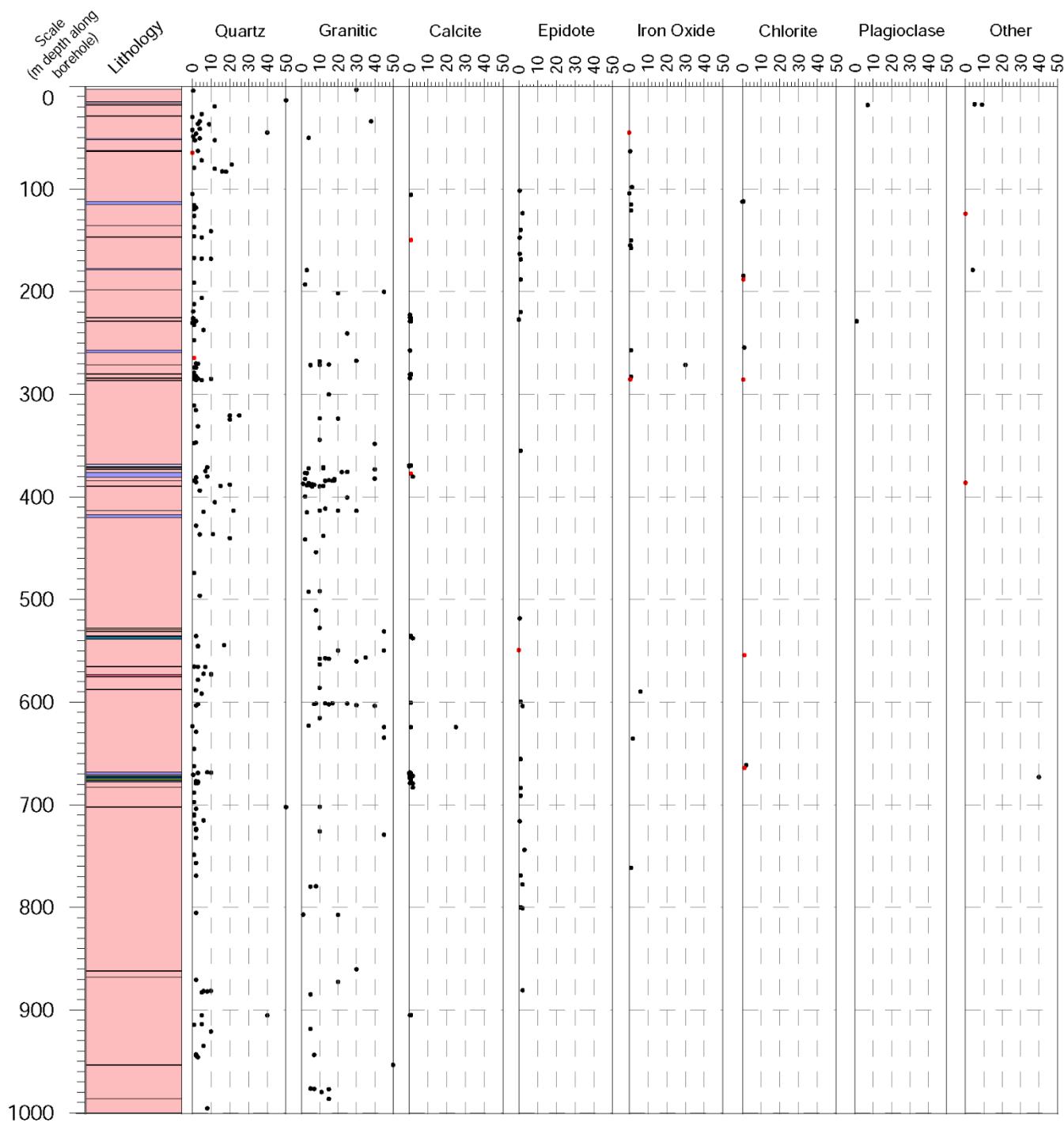
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occurrences of epidote (14%), 191 occurrences of chlorite (10%), 160 occurrences of iron oxide (hematite) (8%), 153 occurrences of muscovite (8%), 102 occurrences of granitic infill (5%), 17 occurrences of plagioclase (<1%), 9 occurrences of clay (<1%), 5 occurrences of biotite (<1%), and 15 occurrences (<1%) comprising alkali-feldspar, stiff and soft gouge, talc, and broken rock derived from the adjacent wall rock. The 4 occurrences of "Other" infill types refer to mineral phases which could not be identified by the core logger. Of the combined joints, veins, and faults, 23 occurrences (1%) were logged with clean surfaces or where no mineral phase was observed along an intact or partially intact structure surface. In general, clean structures and structures with the following mineral infill show high JCR values (average JCR between 27 and 30): quartz, calcite, feldspar, muscovite, biotite, and iron oxide (hematite) infill. Chlorite mineral infill yield slightly wider ranges of JCR (ranging from 0 to 30, with an average of 19), while lower JCR ratings, ranging mostly from 10 to 16, are associated with soft or slick mineral infills (clay, average JCR = 15; soft gouge, average JCR = 12; talc, average JCR = 16; and broken rock, average JCR = 10).

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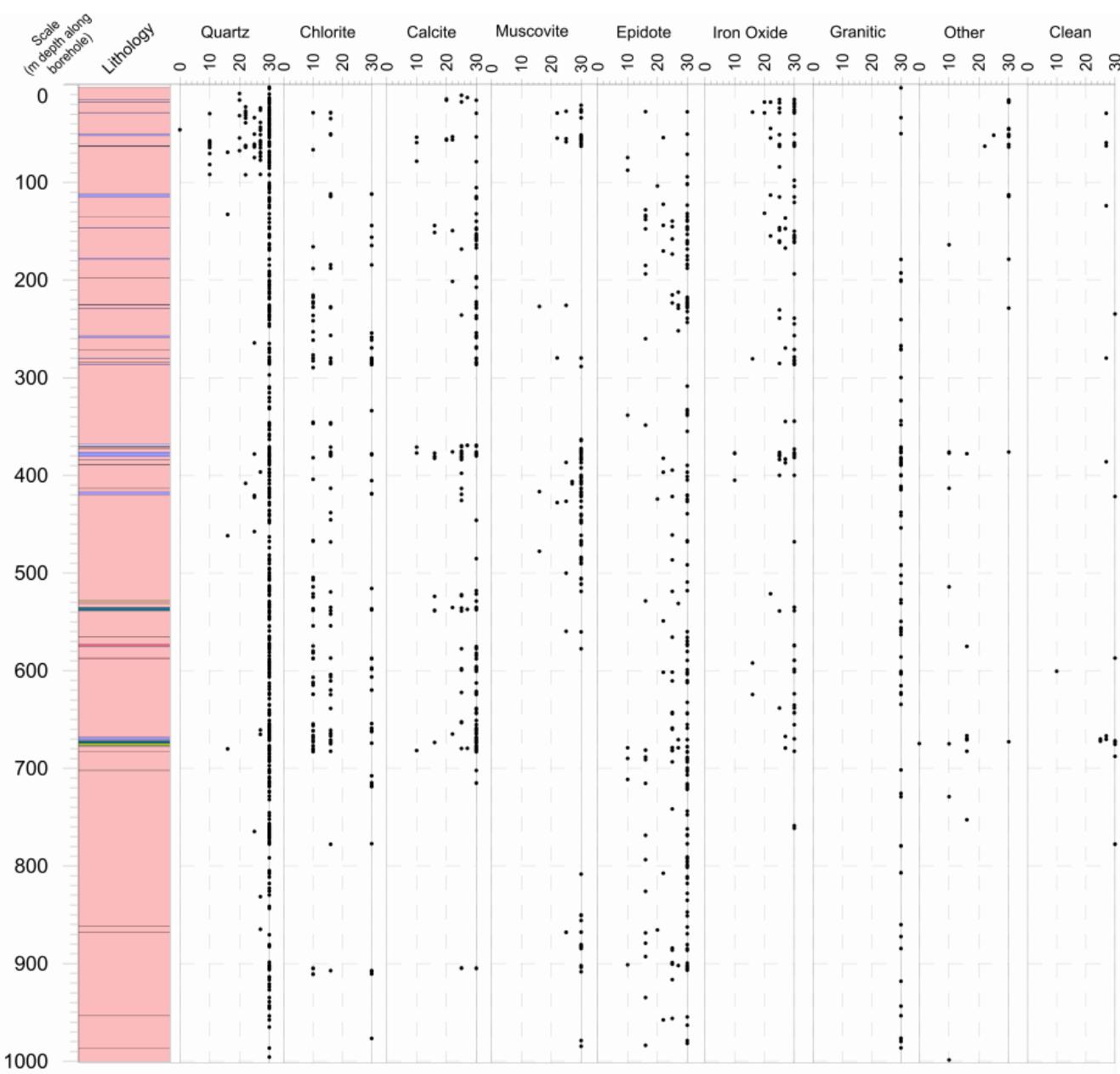


**Figure 14 : Summary of Primary Vein Type by Vein Thickness (mm) and by Depth along borehole as logged in IG\_BH02**

Note – Intact and partially intact veins are represented in black and broken veins are represented in red.

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**Figure 15 : Summary of Primary Infill Mineral Information for all Joint, Vein and Fault Surfaces by Joint Condition Rating (JCR) and by Depth along borehole as logged in IG\_BH02**

## 5.0 LABORATORY SAMPLING

Core samples were collected during the logging activity for laboratory assessment of certain geomechanical, petrophysical and porewater characteristics of the intact core. In addition, some samples were collected and archived, including test-specific archived samples and a 'general archive' sample set, as a precautionary measure in the event additional testing was deemed required. Some samples were also collected for research and development activities that occurred outside of the scope of WP03, specifically microbiology and sorption studies. The sampling activities, including sample-specific preservation, storage and transportation requirements, were designed so that the collected core samples would remain, to the extent possible, representative of in-situ conditions. Time-sensitive samples (porewater extraction, petrophysical, sorption, effective diffusion, noble gas, microbiology or general archive) are sensitive to exposure and contamination, and the workflow (Section 3) is designed to optimize sample preservation. Details of the sampling procedures for each test type are documented in the Test Plan for WP03. A suite of reports, documenting the results from the laboratory analyses, will ultimately be produced as part of the documentation for IG\_BH02.

Table 3 lists the number of samples collected and shipped to specific laboratories for each test type, as well as the number of archived samples. Figure 16 provides an overview of the depths along the borehole at which each sample for each test type was collected. A table of planned and actual sample depths is provided in Appendix B. The complete list of all core samples is provided in Appendix D-5.

All samples were individually photographed (front side, back side, and packaged). The complete list of sample photographs is included in Appendix D-3. The samples were then packaged according to the sample-specific preservation requirements. An example of a packaged sample is shown in Figure 17a and an example of a cooler packed with preserved samples prepared for shipping is shown in Figure 17b. All unshipped samples were sent to the NWMO's Ignace warehouse for archiving and custody of these samples was transferred to the NWMO. Samples specifically collected as 'archive' for the porewater extraction tests were all shipped to Hydroisotop, rather than transferred custody to the NWMO, to address the potential risk associated with damage to the sample and/or preservation during shipment. Custody was transferred to the NWMO for all samples collected for microbiology and sorption testing, to coordinate all associated laboratory and shipping activities. All Chain of Custody forms for the sample shipments were provided in the WP03 Data Delivery.

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**Table 3 : Summary of Rock Core samples in IG\_BH02**

<b>Core Testing Type</b>	<b>Test Type</b>	<b>Number of Samples Collected</b>	<b>Number of Samples Shipped to Laboratory for Core Testing</b>	<b>Laboratory</b>
Geomechanical	Uniaxial Compressive Strength	3	3	CANMET Bells Corners Lab
	Indirect Tensile Strength (Brazilian)	3	3	
Porewater Extraction and Analysis	Porewater Extraction and Analysis	23	23 <sup>1</sup>	Hydroisotop GmbH
	Aqueous Extraction	12	12	
Petrophysical	Effective Diffusion Coefficient	10	N/A <sup>2</sup>	N/A <sup>2</sup>
	Petrophysical Suite	9	N/A <sup>2</sup>	N/A <sup>2</sup>
Microbiology		6	N/A <sup>2</sup>	N/A <sup>2</sup>
Sorption		3 (10 cm) 1 (20 cm)	N/A <sup>2</sup>	N/A <sup>2</sup>
Specific Surface Area and Cation Exchange Capacity		4	N/A <sup>2</sup>	N/A <sup>2</sup>
Noble Gas		10	N/A <sup>2</sup>	N/A <sup>2</sup>
General Archive		20	N/A <sup>2</sup>	N/A <sup>2</sup>

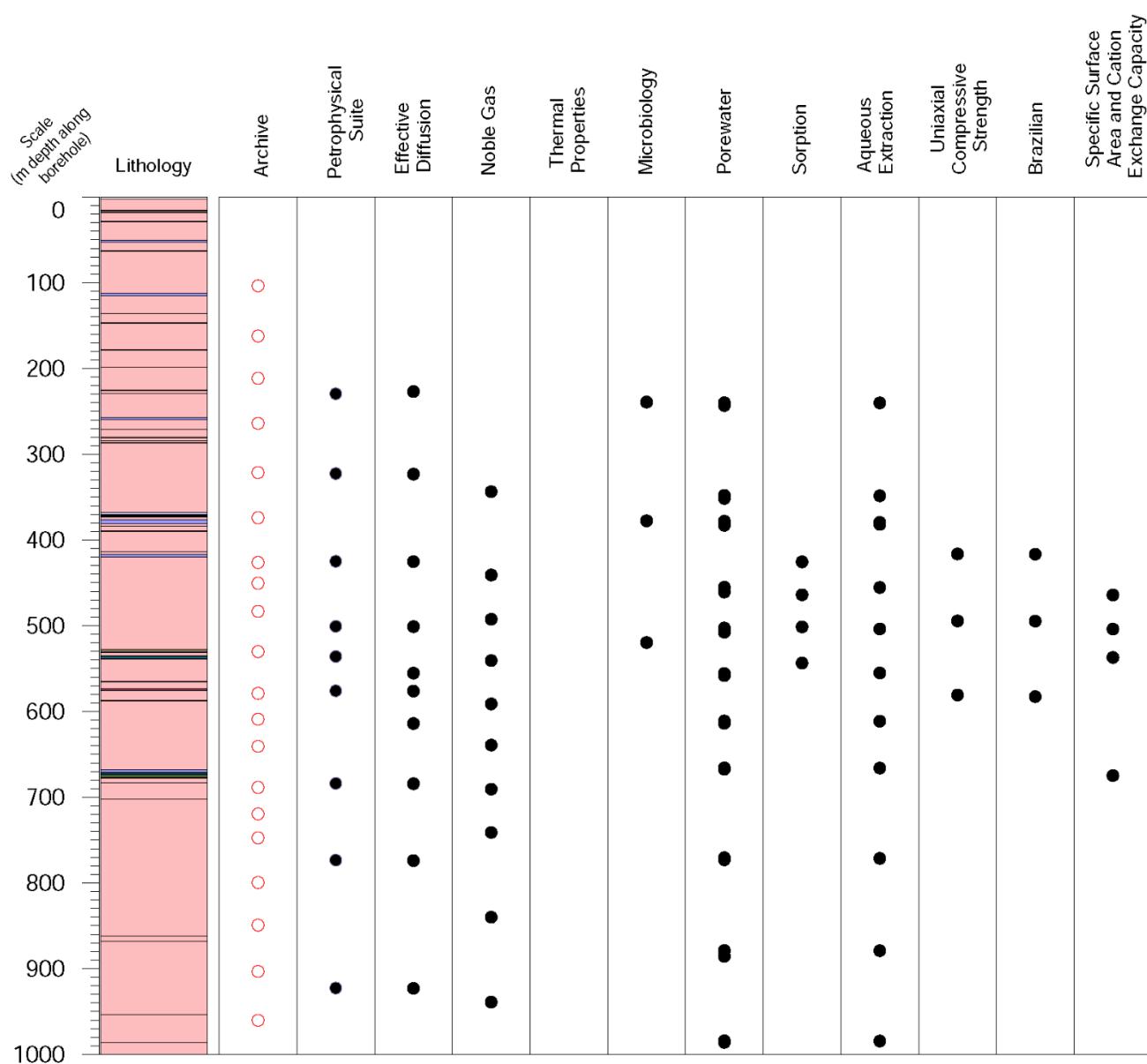
Note:

1) All 'archive' Porewater Extraction samples (13) were sent to Hydroisotop GmbH.

2) Golder Transferred custody of all Effective Diffusion Coefficient, Petrophysical Suite, Microbiology, Sorption, Specific Surface Area and Cation Exchange Capacity, Noble Gas, and General Archive samples to NWMO and shipped all of these samples to NWMO's Ignace Warehouse.

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**Figure 16 : Summary Showing the Distribution Core Samples Collected in IG\_BH02 by Sample Test Type and by Depth along borehole**

Note: Samples shipped to labs for initial testing or to NWMO Warehouse - filled black circle, samples archived at NWMO Warehouse - unfilled red circle

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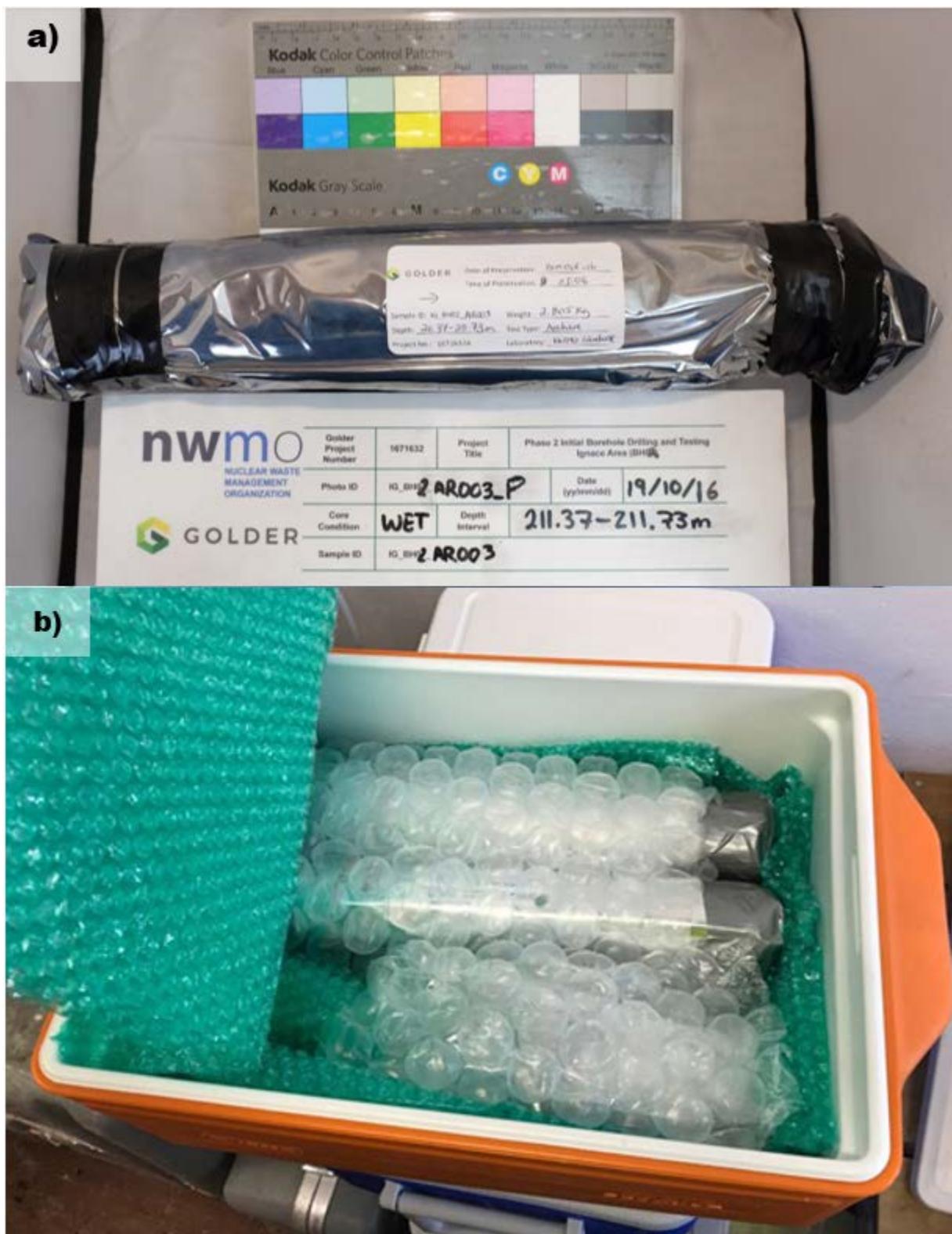


Figure 17 : Examples of Sample Preservation Methods: a) Example photograph of a preserved Archive (AR) rock core sample (IG\_BH02\_AR003), b) Example photograph of a preserved rock core samples ready for laboratory shipment

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**APPENDIX A**

**Geological and Geotechnical Core  
Logging Procedures Manual for  
IG\_BH03 and IG\_BH02**



# Geological and Geotechnical Core Logging Procedures Manual for IG\_BH03 and IG\_BH02

Submitted to:

Nuclear Waste Management Organization  
6th Floor  
22 St. Clair Ave. East  
Toronto, Ontario, M4T 2S3

Submitted by:

**Golder Associates Ltd.**

6925 Century Avenue, Suite #100 Mississauga, Ontario, L5N 7K2 Canada

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August 2019

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August 2019

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## Distribution List

e-copy - NWMO

e-copy - Golder Associates

e-copy - Rodren Drilling

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## 1.0 PURPOSE OF THE MANUAL

This manual has been prepared for the guidance of Golder Associates' personnel involved in the NWMO Drilling Program. This manual describes procedures for geological and geotechnical core logging. The geological logging, including collection of lithological and structural information, will provide the first subsurface information of bedrock characteristics for the northern portion of the Revell batholith, where borehole IG\_BH03 and IG\_BH02 are located. The geotechnical logging procedures described herein provide direct inputs to the NGI Q-System and the RMR classification systems, as is common practice on mining and tunnel geotechnical projects.

The procedures for photography, sampling as well as core boxing and storage are covered in the WP3 Test Plan for IG\_BH03 and IG\_BH02 and will not be repeated in this manual. The purpose of this manual is to establish a common standard for the marking and logging of lithological, structural and geotechnical characteristics within the core recovered from IG\_BH03 and IG\_BH02.

All of the fields that will be available for data collection during logging, and the available picks within those fields, are described below. Standardized pick lists are utilized in order to maintain consistency between users and reduce data entry errors. Consistency in descriptions and records by all Core Loggers is essential to avoid misunderstanding or incorrect interpretation of actual conditions and to minimize the differences in logging practices between Core Loggers.

### 1.1 Overview of Geology of the Area around IG\_BH03 and IG\_BH02

The following overview of the geology of the area around IG\_BH03 and IG\_BH02 provides a general guide to the types of lithological units and structures that may likely be encountered within the borehole itself.

Boreholes IG\_BH03 and IG\_BH02 are located within the northern portion of the approximately 2.732 to 2.694 billion year old Revell batholith. The Revell batholith is roughly rectangular in shape trending northwest, is approximately 40 km in length, and covers an area of approximately 455 km<sup>2</sup>. The shape of the plan-view gravity anomaly across the Revell batholith suggests that the depth of the intrusion may be relatively uniform, being deepest in the south. It is likely that the batholith is approximately 2 km to 3 km thick through the center of the northern portion.

The northern portion of the Revell batholith is underlain mainly of granodiorite and tonalite, which together form a relatively homogeneous intrusive granitoid complex. The granodiorite is massive to weakly foliated, with a variable equigranular to inequigranular, locally porphyritic texture. The granodiorite matrix is most commonly medium-grained (1-5 mm). The tonalite is massive to weakly foliated, with a medium-grained (1-5 mm), locally porphyritic, texture. Overall, the tonalite transitions gradationally into granodiorite and no distinct contact relationships between these two rock types are typically observed. It is likely that these will be the most common rock types encountered in IG\_BH03 and IG\_BH02. There is also a younger granite intrusion, which is observed primarily in the south-eastern portion of the northern portion of the Revell batholith. The granite post-dates and intrudes into the granodiorite-tonalite intrusive complex. Granodiorite xenoliths are observed locally within the granite. The granite is massive to weakly foliated with a matrix that varies between fine-grained (0.5-1 mm) and medium-grained (1-5 mm).

Mafic dykes were observed in several locations across the northern portion of the Revell batholith area, including but not limited to areas where mafic dykes of the Wabigoon dyke swarm were previously mapped. All of the mafic dykes observed during detailed geological mapping in the Revell batholith area are similar in character and they are interpreted to be part of the Wabigoon dyke swarm. It is assumed, based on surface measurements that these mafic dykes are sub-vertical. The mapped locations of the mafic dyke segments, to the northeast of borehole IG\_BH03, suggest that they will not likely be encountered in the borehole.

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A few occurrences of diorite/quartz diorite, mafic metavolcanic rocks and schist have also been observed, primarily in the eastern half of the batholith. It is less likely that these minor lithological units will be encountered in IG\_BH03 and IG\_BH02.

The following summary of structural observations provides an indication of the types of structures that may be encountered in IG\_BH03 and IG\_BH02.

Igneous flow foliation tends to parallel the curved northwestern boundary of the Revell batholith. There is a good correlation between foliation trajectories documented by Stone et al. (2011) and nearby measurements of tectonic foliation made during detailed mapping, with both suggesting an overall east-west trend, with local variability.

Subvertical joints, dipping greater than 65°, are the most common structural feature at the outcrop scale across the Revell candidate area. Two broad orientation peaks highlight the dominant northeast and northwest trends of observed subvertical joints. Subhorizontal joints, dipping less than 25°, show minimal evidence of secondary mineralization or alteration and the majority are interpreted as unloading structures. More than 50% of all joint spacings measured in the Revell batholith area range between 30 and 500 cm.

The majority of ductile and brittle-ductile shear zones occurrences are observed throughout the eastern portion of the Revell candidate area. Shear zones primarily strike east-northeast, north, south-southeast or east-southeast. Shear zones dip moderately to steeply and are most commonly observed as centimetre to decimetre wide structures. Quartz is locally observed to infill shear zones. Kinematic indicators suggest multiple episodes of shearing occurred on similarly oriented structures throughout the deformation history.

The majority of fault occurrences are observed throughout the eastern portion of the Revell candidate area. Dominant strike orientations for faults are north-northeast, northeast, east-southeast and south-southeast. Faults primarily dip steeply and often exhibit shallowly-plunging to sub-horizontal slickenlines suggesting a history of strike-slip motion. The observed damage to bedrock due to faulting, primarily in the form of tighter joint spacing or increased number of evident joint orientation families, is generally concentrated between 5 and 10 m beyond fault core zones. Epidote, chlorite, hematite and quartz occur locally as mineral infill in faults.

## 2.0 ROCK CORE LOGGING PROCEDURES

All rock core logging will be captured in an acQuire database customized for this project. All required fields (highlighted in red) must be entered for every run in order for acQuire to 'accept' the run data. Many fields of entry have been pre-populated with drop-down lists of options to choose from and have been set up to include the features/parameters most likely to be encountered during the drilling of IG\_BH03 and IG\_BH02. This standardization of the database results in consistency in the type and level of data recorded in the field.

Geological and geotechnical logging of recovered core will be performed on site in the core logging trailer and immediately after completion of the 2x180° split tube core photography.

Core logging will generally follow the following procedures on a per run basis:

- Marking the Core
- Core Run (including Reference Line Orientation) Data Collection (acQuire Forms)
- Structure Data Collection (acQuire Form)
- Lithology Data Collection (acQuire Form)
- Contact Data Collection (acQuire Form)
- Alteration Data Collection (acQuire Form)

- Weathering Data Collection (acQuire Form)
- Rock Strength Data Collection (acQuire Form)

All rock logging and depth measuring will be recorded in metric units (metres, centimetres, millimetres). Depths will be recorded to the nearest centimetre. Drillhole depths will be recorded as distance down hole.

Time sensitive sampling and photography will occur prior to undertaking the procedures listed above, when required. Otherwise, all sampling and photography will be completed after the core logging is completed, consistent with the WP3 workflow shown in Figure 2 in the main document.

The applicable acQuire data collection fields for core logging, photography and sampling, and their pick lists, are described in detail below in the appropriate sub-sections for each of the procedures to be completed during the logging.

## 2.1 Marking the Core

Core marking will take place after the 2x180° core photography, and time-sensitive sampling (if applicable), has been completed. These markings will highlight many of the geological and geotechnical features in the core that will be subsequently logged. The Core Logger will mark the run of core following a standard set of procedures that are listed below and then described in detail, including:

- Draw Reference Line
- Mark Run Depths
- Identify and Mark Mechanical Breaks
- Identify and Mark Broken Structures
- Identify and Mark Intact and Partially Intact Structures

### **Draw Reference Line**

All pieces of core will be properly positioned such that all broken features fit together as if they were not broken or the core pieces were not rotated out of position. Then a reference line will be drawn on the aligned core, throughout the whole run, in **Red**. The reference line will include arrows on each piece of core pointing towards the downhole direction. These are included for ease of re-alignment when handling the core. A long angled aluminum bar (~1m) will be used in order to help maintain a continuously straight line along the core, when marking.

Marking of the core will occur such that the reference line is visible in the photographs of boxed core, which are taken after the core logging has been completed. The line will be carried to all subsequent runs whenever possible; if a broken core section makes continuing this line impossible, then a new line will be started.

### **Mark Run Depths**

Run depths corresponding to the depth at the end-of-run marker are written on the core every 25 centimetres in **Black** china marker. If there are lost core intervals in the run, the Core Logger will attempt to position the lost core interval in the run and replace it with a wood or PVC spacer that is marked with the correct depth range for the lost core it replaces.

### **Identify and Mark Mechanical breaks**

One of the important steps in geotechnical core logging is to identify and separate the natural fractures from the mechanical breaks.

Mechanical breaks can occur during drilling, when the core breaks due to stresses from the drilling action. The break can occur through intact rock, along a pre-existing plane of weakness or along an otherwise intact fracture. Mechanical breaks can also occur when the driller or Core Logger is handling the core. For example, if the core is weak and friable material, or when the core is being boxed after logging and must be broken into pieces small enough to fit into the core box. As noted below in Section 2.3, fractures identified in the field as mechanical breaks will be logged as part of the structural data collection.

Clean, fresh, irregular surfaces that are oriented at close to 90° to the core axis and/or that can be rejoined with only a hair-line separation are typically considered to be a mechanical break (Figure 1). Surfaces that are stained, weathered, contain infilling or coatings, occur at some angle other than near-perpendicular to the core axis, or cannot be rejoined cleanly are characteristics common to natural fractures. It is sometimes difficult to distinguish natural fractures from mechanical breaks, if in doubt, the feature will be identified as a natural fracture.

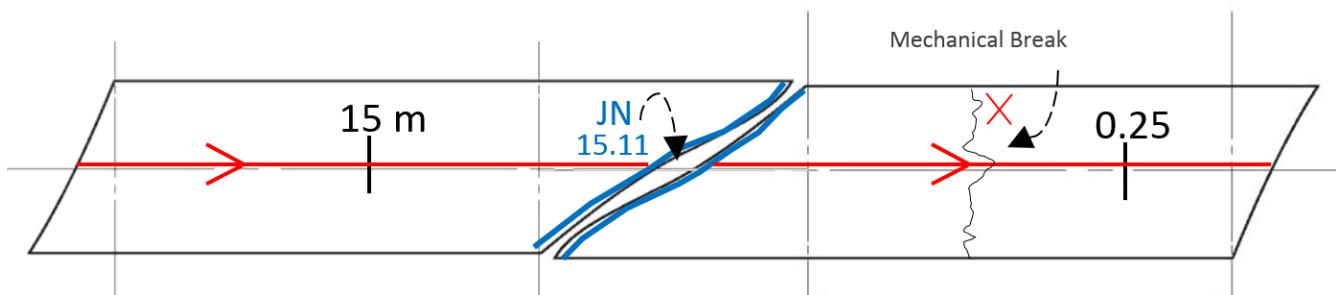
Mechanical breaks in the core, based on the judgement of the Core Logger, will be marked using a **Red** china marker with X's next to the break (Figure 2). The "X" marks will be visible in the boxed core photographs.



**Figure 1: Example of Mechanical Break**

### ***Identify and Mark Broken Structures***

BROKEN structures, in the context of geotechnical characterization, refer to all natural fractures that break the core into separate pieces. They are non-cohesive. BROKEN structures will be identified as such on the core using a **Blue** china marker (Figure 2). The Core Logger will identify and label the structure using its unique structure type code (e.g., JN, joint; see Section 2.3 below for a full list of structure type codes). The core logger will trace both sides of the structure, using solid lines, if it has an identifiable width or aperture. Depth values will be measured, and marked, at the midpoint of the natural fracture along core axis or midpoint of the identified zone (Figure 2). The final assessment of the dip and dip direction of natural, broken, fractures will be completed in association with analysis of the televiewer data (collected as part of WP5), for those fractures that are apparent in both the core and the televiewer data. It is possible that some natural, broken, fractures may not be apparent in the televiewer data. It is also possible that some fractures, initially logged as mechanical breaks, will be re-interpreted as natural fractures if they are identified in the televiewer image.



**Figure 2: Example of Reference Line (red with arrows) and Marking of Natural and Mechanical Breaks. Note that JN is the structure code for Joint in the acQuire database. See Section 2.3 below for a full list of structure type codes.**

### **Identify and Mark Intact and Partially Intact Structures**

The Core Logger will also identify intact structures in the core run. In the context of geotechnical characterization, intact refers to natural fractures that are cohesive, and these fractures may be completely intact or partially intact, and this distinction will be captured in the acQuire database. The intact structures are marked similarly to natural fractures, i.e., on the core in Blue china marker, with the exception that the traced lines marking both sides of the feature are dashed. The initial interpretation that partially intact structures are grouped with intact structures implies that the broken portion of an otherwise intact fracture is the result of a mechanical process. The validity of this assumption will be ultimately determined by re-assessment of all logged partially intact structures in association with analysis of the televiewer data (collected as part of WP5).

## **2.2 Core Run and Reference Line Data Collection**

The following Core run data is recorded, in the order listed below, in the Core Run tab within the acQuire database:

- Drilled From:To (Depth)
- (Core) Run Number
- Retrieval Time (of Core)
- Logged By, Photos By, Sampled By
- Total Core Recovery (TCR)
- Rock Quality Designation (RQD) Length
- Solid Core Recovery (SCR) Length
- Count of Fractures

Core run data will be recorded in its entirety as one entry regardless of lithological, alteration, weathering, or other geotechnical changes occurring throughout the run. The Core Logger will not break up the run into multiple geotechnical intervals. Figure 3a shows the screen in the acQuire database for inputting the Core Run data. Figure 3b shows the screen in the acQuire database for inputting the accompanying Reference Line data.

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## Core Run

**Short Cuts**

F9 = Accept

F7 = Previous Sheet

F11 = Change Entry Mode

F8 = Next Sheet

**Insert Mode**Borehole ID  
IG\_BH00Community  
IGNACE

Drilled From (m)

Drilled To (m)

Run Number  
CR001Front Photo File Name  
IG\_BH00CR001\_F.jpg

Retrieval Time (24hr)

Logged By

Photo By

Back Photo File Name  
IG\_BH00CR001\_B.jpg

TCR (m)

RQD Length (m)

SCR Length (m)

Count of Fractures

&lt;-- DISCREPANCY --&gt;

0

The number of fractures logged on the Structures tab for this Core Run

TCR (%)

RQD (%)

SCR (%)

Fractures / m

Comments

Accept (F9)

Cancel

## Reference Line

**Short Cuts**

F9 = Accept

F7 = Previous Sheet

F11 = Change Entry Mode

F8 = Next Sheet

**Insert Mode**Borehole ID  
IG\_BH00Community  
IGNACE

Drilled From (m)

Drilled To (m)

Reference Line  
Run Number  
RL001Reference Line  
Orientation (deg)

NOTE: If Reference Line is a continuation of previous, select the last record and update the "Drilled To (m)" field accordingly.

Comments

Accept (F9)

Cancel

**Figure 3: acQuire input page for Core Run data (top, 3a) and for Reference Line data (bottom, 3b)**

AcQuire automatically generates values for TCR (%), RQD (%), SCR (%) and fractures/m based on core logger inputs. AcQuire also automatically generates file names for both front and back core run (stitched) photographs. The core logger, separately, will rename the photograph in the camera to be consistent with this automatically generated photograph name.

### Record Drilled From and To Depths

Depth data is entered in meters to the nearest centimeter for both the top (from) and bottom (to) of the drilled run length. It is important to always enter the drilled depth (according to the total length of the rod string in the ground and stick-up) and not necessarily the recovered depths in these input fields.

### Record Core Run Number

Intervals are numbered starting from the first core run into bedrock. The acQuire logging template will automatically generate a run number once the depths of the top and bottom of each run are inputted. It is important to enter all runs in sequential order as the acQuire system will assign run numbers based on the entry sequence not the depth sequence.

## **Record Core Retrieval Timestamp**

The first data to be entered into the core run data sheet in acQuire is the Date and Time the core run was retrieved from the ground (and subsequently delivered to the core shack). This data is important as it provides a way to ensure time-sensitive lab samples are collected within their required timing.

## **Record Logged By, Photos By, Sampled By Information**

The Core Logger that will be inputting the geological and geotechnical logging information into acQuire will input his or her unique two letter initial code, based on the loggers first and last name.

## **Measure and Record TCR, SCR, RQD**

Total core recovery (TCR), solid core recovery (SCR) and rock quality designation (RQD) will be recorded as length in metres, which is compared to the length of the run drilled. TCR, SCR, and RQD will be generated automatically as a percentage of the total run length in acQuire once the core run data entry is accepted.

### **Total Core Recovery (TCR)**

TCR records the total amount of core recovered over the measured length drilled for each core run.

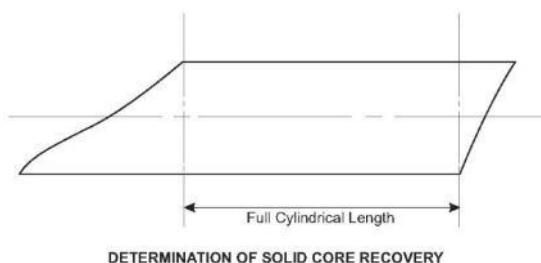
The length of any broken core or gouge must be estimated as its true length in the rock mass (not as it appears spread out in the split tube) and is included in the total recovery length. When the core is highly fragmented, the length of such portions will be estimated by assembling the fragments and estimating the length of core that the fragments appear to represent.

Core losses are an important indication of potentially poor geotechnical conditions, since they most commonly occur in weak or highly fractured zones, which may be important for determining rock mass properties.

Rubble or slough which has fallen into the drillhole and is recovered at the top of a core lift is not counted as recovered core and will be discarded or clearly labeled to avoid subsequent misclassification.

### **Solid Core Recovery (SCR)**

SCR is another measure of core quality. It involves recording the cumulative length of all core pieces, regardless of individual length, that are recovered at full axial diameter (full circumference), as shown in Figure 4. If there is a vertical fracture running through the entire run, the solid core recovery is 0%.



**Figure 4: Determination of SCR**

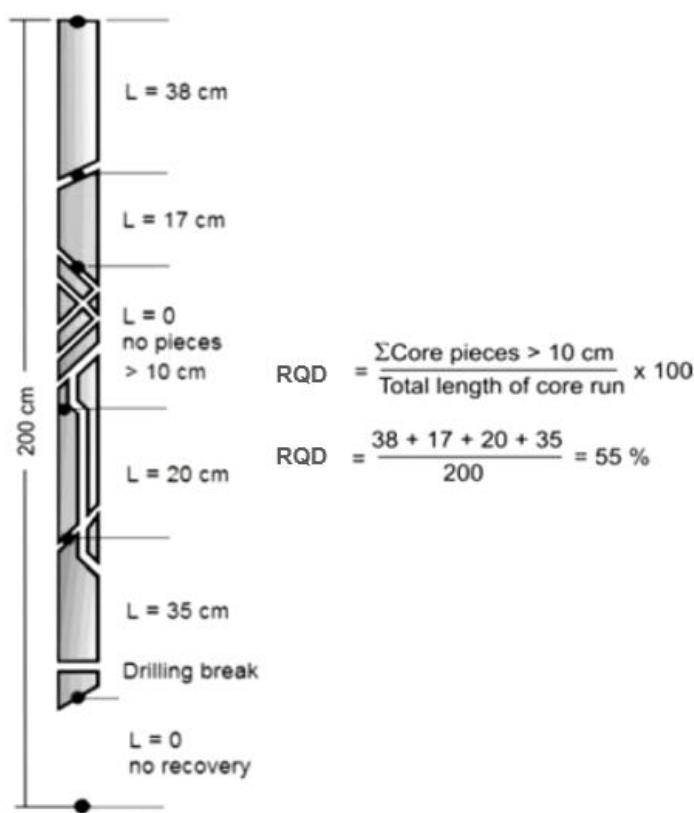
## **Rock Quality Designation (RQD)**

RQD is a quantitative index of rock quality based on the total cumulative length of sound core recovered in lengths greater than 10 cm (4 inches), as measured from midpoint to midpoint of natural BROKEN discontinuities (including the midpoint of the sub-parallel discontinuities), along the centre line axis of the core, as shown in Figure 5.

RQD is estimated by measuring the length of only those pieces of hard, sound core that is longer than 100 millimetres. Therefore, RQD value is obtained by summing the pieces of core which are 100 millimetres or greater in length, as follows:

$$RQD(\%) = \frac{100 \times \text{length of core in pieces } 100 \text{ mm or longer}}{\text{length of core run}}$$

If there is a joint running along the core axis or natural break running through the entire run, the RQD of that run is 100% (where the SCR is 0%).



**Figure 5: Determination of RQD (AFTER Deere, 1989)**

### Record Count of Fractures

A fracture count is simply a count of the number of naturally occurring non-cohesive (completely broken) fractures over the length of the run and includes broken core zones and lost core zones, but does not include mechanical breaks, intact or partially intact fractures in the count.

Note that for broken and lost core zones, if the individual fractures cannot be seen or estimated, the maximum number of fractures that will be recorded is 1 fracture per 1 cm of broken or lost core. For example if there is a 34 cm zone of broken core which cannot be pieced back together, this will be recorded as 34 fractures. If the core logger is able to piece together a broken core zone or there is some indication as to the true number of fractures that existed in the core, the true or estimated value will be recorded instead of the default of 1 fracture per cm.

Acquire will automatically create a Fracture Spacing (fracs/m) based on the recorded Fracture Count. A QA step included in acQuire is the ability to check and confirm that the total number of broken structures logged in

the Structure Tab (see below) is consistent with the count of fractures made in the Core Run tab. This QA step ensures a high degree of consistency in the data collection process.

### **Recording Reference Line**

The reference line marked onto each core run provides a relative marker from which to measure the orientation of planar and linear structures in the core. The acoustic televiewer data, collected as part of the geophysical well logging activity (WP5), will be used to orient the reference line and correct the orientation of all structures, including those structures not identified in the geophysical survey, to their true orientations. This will provide a final corrected structural dataset. The procedure that will be followed to undertake this correction is described in the test plan for WP5. As part of the correction, the angle (0 – 360°) between the reference line and true north, which is a known orientation in the televiewer dataset, will be determined and captured in acQuire.

In order to facilitate the process of structural correction, a Reference Line Tab is included in acQuire to capture each individual reference line (Figure 3b). The top and bottom depth for each unique reference line will be captured in the Reference Line tab within the acQuire database. A new, unique, reference line is entered into acQuire when the extracted core cannot be confidently fit together with the broken end of the core from the previous run. Each unique reference line is then automatically sequentially numbered in acQuire (e.g., RL001, RL\_002, etc.). If the adjacent core runs can be fit together, the same reference line is continued, with only the ‘Drilled To (m)’ depth updated to reflect the continuation of the same reference line. The reference line orientation field is filled in during the later stage of structural integration.

## **2.3 Structure Data Collection**

The following Structure data is recorded in the Core Run tab within the acQuire database (where applicable):

- Structure Depth
- Type (of structure)
- Sub-Type<sup>1,2</sup>
- Broken/Intact/Partially Intact<sup>1,2,3</sup>
- Intensity
- Width
- Alpha Angle, Beta Angle
- Defining Mineral(s)
- Aperture<sup>3</sup>
- Rock Wall Hardness<sup>3</sup>
- Shape<sup>1,3</sup>
- Roughness<sup>1,3</sup>
- Infill Character<sup>1,2,3</sup>
- Infill Type<sup>2,3</sup>
- Infilling Thickness<sup>2</sup>
- Lineation (with subtype, Gamma and Delta angles)<sup>4</sup>

<sup>1</sup>Inputs for Joint Roughness (Jr) Number determination

<sup>2</sup>Inputs for Joint Alteration (Ja) Number determination

<sup>3</sup>Inputs for Joint Condition Rating (JCR) Number determination

<sup>4</sup>Logger will enter lineation information (when applicable) as part of the characterization of each planar structure

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AcQuire will automatically determine several geotechnical parameters using information entered into a subset of the fields listed above, including inputs for determination of Joint Roughness (Jr) number, Joint Alteration (Ja) number and Joint Condition Rating (JCR) number. The relationships employed to determine these numbers are based on the Norwegian Geotechnical Institute (NGI) Q-system (NGI, 2015) and rock Mass Rating (RMR) number (Bienawski, 1989), which are current best practice classification systems for rock masses with respect to stability of underground openings. Derivation of these geotechnical parameters is discussed further towards the end of this section.

Detailed photographs of specific structures not captured in any of the other photograph products are captured directly in the Structure tab. Primarily this feature will be used to document structures that are not visible on the outer surface of the core and already captured by one of the other types of photograph. For example, lineations or mineral infill preserved on planar surfaces. AcQuire will automatically generate photograph names for detailed structural photos. The core logger, separately, will rename the photograph in the camera to be consistent with this automatically generated photograph name.

Figure 6 shows the acQuire input fields for the Structure data.

Figure 6: acQuire input page for Structure data

### **Identify and Record Structure Type, Sub-Type and Broken/Intact/Partially Intact**

The following structures listed below are those that may be characterized in borehole IG\_BH03 and IG\_BH02. It is likely that joints and foliation will be the most common structure types encountered.

- **FOLIATION (FO)**
- **CLEAVAGE (CL)**

- SCHISTOSITY (SCH)
- GNEISSOSITY (GNS)
- IGNEOUS PRIMARY STRUCTURE (IPS)
- MYLONITE ZONE (MYL)
- SHEAR ZONE DUCTILE (SHRD)
- SHEAR ZONE BRITTLE-DUCTILE (SHR)
- FOLD AXIAL PLANE (FAX)
- LINEATION (LIN)
- VEIN (VN, Broken, Intact or Partially Intact)
- JOINT (JN, Broken, Intact or Partially Intact )
- FAULT (FLT, Broken, Intact or Partially Intact )
- BROKEN CORE ZONE (BCZ, Broken)
- INTACT FRACTURE ZONE (IFZ, Intact or Partially Intact)
- LOST CORE ZONE (LCZ, Broken)
- MECHANICAL BREAK (MB, Broken)

These structures are defined below in Table 1 along with *Sub-Type* descriptors also noted below, where applicable. Brittle structures (e.g., joint, fault, broken core zone) and contacts are also characterized as either Broken, Intact or Partially Intact, as applicable.

In addition, the table below indicates the Structural Data acQuire inputs for each Structure Type. The circumstances and procedures for measuring or assigning these different inputs are described in further detail later in this section.

*Table 1: Classification of Structure Type*

Structure Type (acQuire Code)	Description
FOLIATION (FO)	<p>Planar preferred orientation of mineral grains. <b>No Sub-Type.</b></p> <p><b>Note:</b></p> <ol style="list-style-type: none"> <li>1. <i>Depth</i> is recorded, where structure intercepts the core-axis.</li> <li>2. <i>Intensity</i> will be assigned.</li> <li>3. Mineral(s) defining this foliation type will be entered in <i>Defining Mineral(1/2)</i>, as applicable.</li> <li>4. <i>Alpha</i> and <i>Beta</i> angles will be entered.</li> <li>5. Any associated <i>lineation (incl. subtype, gamma and delta angles, defining mineral)</i> will be captured.</li> </ol>
CLEAVAGE (CL)  <i>Type of Foliation</i>	<p>A locally planar fabric in fine-grained rock of low metamorphic grade (e.g., slate or phyllite) that is defined by the tendency to split in a particular direction. Cleavage is a penetrative, non-primary, structure distinguishing it from non-penetrative fractures and from bedding. <b>No Sub-Type.</b></p> <p><b>Note:</b></p> <ol style="list-style-type: none"> <li>1. <i>Depth</i> is recorded, where structure intercepts the core-axis.</li> <li>2. <i>Intensity</i> will be assigned.</li> </ol>

	<ul style="list-style-type: none"> <li>3. Mineral(s) defining this foliation type will be entered in <i>Defining Mineral(1/2)</i>, as applicable.</li> <li>4. <i>Alpha</i> and <i>Beta</i> angles will be entered.</li> <li>5. <i>Any associated lineation (incl. subtype, gamma and delta angles, defining mineral) will be captured.</i></li> </ul>
<b>SCHISTOSITY (SCH)</b> <i>Type of Foliation</i>	<p>Foliation in schist or other medium- to coarse-grained, crystalline rock defined by the parallel alignment of platy mineral grains (mica) or inequant crystals of other minerals. <b>No Sub-Type.</b></p> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>1. <i>Depth</i> is recorded, where structure intercepts the core-axis.</li> <li>2. <i>Intensity</i> will be assigned.</li> <li>3. Mineral(s) defining this foliation type will be entered in <i>Defining Mineral(1/2)</i>, as applicable.</li> <li>4. <i>Alpha</i> and <i>Beta</i> angles will be entered.</li> <li>5. <i>Any associated lineation (incl. subtype, gamma and delta angles, defining mineral) will be captured .</i></li> </ul>
<b>GNEISSOSITY (GNY)</b> <i>Type of Foliation</i>	<p>Foliation in coarse-grained, medium- or high-grade, metamorphic rock defined by a planar grain-shape fabric or by compositional layering/banding. Alternating dark (mafic) and light (felsic or silicic) layers (bands) are common. <b>No Sub-Type.</b></p> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>1. <i>Depth</i> is recorded, where structure intercepts the core-axis.</li> <li>2. <i>Intensity</i> will be assigned.</li> <li>3. Mineral(s) defining this foliation type will be entered in <i>Defining Mineral(1/2)</i>, as applicable.</li> <li>4. <i>Alpha</i> and <i>Beta</i> angles will be entered.</li> <li>5. <i>Any associated lineation (incl. subtype, gamma and delta angles, defining mineral) will be captured .</i></li> </ul>
<b>IGNEOUS PRIMARY STRUCTURE (IPS)</b>	<p>A structure in an igneous rock that originated contemporaneously with the formation or emplacement of the rock, but before its final consolidation. For example, the preferred orientation of phenocrysts with no evidence of solid state deformation of the groundmass minerals. <b>Sub-Type:</b> Igneous Layering; Igneous Flow Foliation</p> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>1. <i>Depth</i> is recorded, where structure intercepts the core-axis.</li> <li>2. <i>Intensity</i> will be assigned.</li> <li>3. Mineral(s) defining this foliation type will be entered in <i>Defining Mineral(1/2)</i>, as applicable.</li> <li>4. <i>Alpha</i> and <i>Beta</i> angles will be entered.</li> <li>5. <i>Any associated lineation (incl. subtype, gamma and delta angles, defining mineral) will be captured .</i></li> </ul>

<b>MYLONITE ZONE (MYL)</b>	<p>A strongly deformed rock from a ductile shear zone produced by crystalplastic flow of the rock matrix, giving the appearance of a 'flowing' texture. A mylonite may or may not have a macroscopic foliation. <b>No Sub-Type.</b></p> <p><b>Note:</b></p> <ol style="list-style-type: none"> <li>1. <i>Depth</i> is recorded, where the mid-point of the zone intercepts the core-axis.</li> <li>2. Mineral(s) defining this zone will be entered in <i>Defining Mineral(1/2)</i>, as applicable.</li> <li>3. Width of zone, in cm, will be entered.</li> <li>4. <i>Alpha</i> and <i>Beta</i> angles will be entered.</li> <li>5. <i>Any associated lineation (incl. subtype, gamma and delta angles, defining mineral) will be captured .</i></li> </ol>
<b>SHEAR ZONE DUCTILE (SHRD)</b>	<p>A planar zone of strong deformation surrounded by rocks with a lower state of finite strain. The deformed zone exhibits only ductile characteristics.</p> <p><b>Sub-Type:</b> Unknown slip; dextral (right-lateral) ; sinistral (left-lateral) ; normal; reverse</p> <p><b>Note:</b></p> <ol style="list-style-type: none"> <li>1. <i>Depth</i> is recorded at the mid-point of where the SHRD is identified, and <i>Width</i> is SHRD thickness measured perpendicular to the planes that define the zone.</li> <li>2. Mineral(s) defining this zone will be entered in <i>Defining Mineral(1/2)</i>, as applicable.</li> <li>3. Width of zone, in cm, will be entered.</li> <li>4. <i>Alpha</i> and <i>Beta</i> angles will be entered.</li> <li>5. <i>Any associated lineation (incl. subtype, gamma and delta angles, defining mineral) will be captured.</i> presentative Alpha and Beta angles will be entered, as applicable.</li> </ol>
<b>SHEAR ZONE BRITTLE-DUCTILE (SHR)</b>	<p>A planar zone of strong deformation surrounded by rocks with a lower state of finite strain. The deformed zone exhibits brittle and ductile characteristics.</p> <p><b>Sub-Type:</b> Unknown slip; dextral (right-lateral); sinistral (left-lateral); normal; reverse.</p> <p><b>Note:</b></p> <ol style="list-style-type: none"> <li>1. <i>Depth</i> is recorded at the mid-point of where the SHR is identified, and <i>Width</i> is SHR thickness measured perpendicular to the planes that define the zone.</li> <li>2. If the <i>Width</i> of a SHR is greater than 5 cm, it will be classified as a FLT.</li> <li>3. Mineral(s) defining this zone will be entered in <i>Defining Mineral(1/2)</i>, as applicable.</li> <li>4. Width of zone, in cm, will be entered.</li> <li>5. <i>Alpha</i> and <i>Beta</i> angles will be entered.</li> </ol>

	<p>6. Any associated lineation (incl. subtype, gamma and delta angles, defining mineral) will be captured.</p>
<b>FOLD AXIAL PLANE (FAX)</b>	<p>A surface that connects the hinge lines of a fold. The axial plane may be vertical, horizontal, or inclined. <b>Sub-Type:</b> S-asymmetry; Z-asymmetry; U-symmetric; Undefined.</p> <p><b>Note:</b></p> <ol style="list-style-type: none"> <li>1. Depth is recorded, where structure intercepts the core-axis.</li> <li>2. Mineral(s) defining FAX will be entered in <i>Defining Mineral (1/2)</i>, as applicable.</li> <li>3. Alpha and Beta angles will be entered.</li> <li>4. If possible, lineation (subtype = fold axis, gamma and delta angles) associated with the fold structure will be captured.</li> <li>5. If possible, fold wavelength will be recorded (in cm) in the Comments field.</li> </ol>
<b>LINEATION (LIN)</b>	<p>A linear structure or fabric in a rock. <b>Sub-Type:</b> Mineral; Stretching; Intersection; Slickenline.</p> <p><i>In the case of a penetrative lineation that occurs within the rock mass without an associated planar structure (i.e., an L-tectonite), the Lineation information is captured in the same way as other structure types.</i></p> <p><i>When a planar structure also hosts a (e.g., slickenlines on a fault surface), the lineation information, including applicable sub-type and both gamma and delta angles, is recorded as part of the data collected for that planar structure. The 'Lineation' fields become active and available for data entry when logging any planar structure.</i></p> <p>.</p>
<b>VEIN (VN, Broken, Intact or Partially Intact)</b>	<p>A feature 5 cm or less in width and containing a mineral infilling. <b>No Sub-Type.</b></p> <p><b>Note:</b></p> <ol style="list-style-type: none"> <li>1. Depth is recorded at the mid-point of where the VN is identified.</li> <li>2. Alpha and Beta angles will be entered.</li> <li>3. If Broken, Aperture, Rock Wall Hardness, Shape and Roughness will be entered.</li> <li>4. Mineral Infill Character and Infill Type will be entered.</li> <li>5. Mineral Infilling Thickness (in mm) will be entered. .</li> </ol>
<b>JOINT (JN, Broken, Intact or Partially Intact)</b>	<p>A fracture on which there is no measurable fracture plane parallel displacement. A group of joints having the same general orientation is termed a set. Joints sets intersect to form a joint system. <b>No Sub-Type.</b></p> <p><b>Note:</b></p>

	<ol style="list-style-type: none"> <li>1. <i>Depth</i> is recorded, where structure intercepts the core-axis.</li> <li>2. <i>Alpha and Beta</i> angles will be entered.</li> <li>3. <i>If Broken, Aperture, Rock Wall Hardness, Shape and Roughness</i> will be entered.</li> <li>4. Mineral Infill Character and Infill Type will be entered.</li> </ol>
<b>FAULT (FLT, Broken, Intact or Partially Intact)</b>	<p>A fracture or a zone of fractures that occurs as a result of brittle deformation and within which there is relative displacement parallel to the fracture surfaces. <b>Sub-Type:</b> Unknown slip; dextral (right-lateral); sinistral (left-lateral); normal; reverse.</p> <p><b>Note:</b></p> <ol style="list-style-type: none"> <li>1. <i>Depth</i> is recorded at the mid-point of where the FLT is identified, and <i>Width, also recorded</i>, is FLT thickness measured perpendicular to the plane(s) that define the fault or fault zone.</li> <li>2. If FLT is greater than 0.3 m wide, a Lithology Change is triggered and CO Structures are taken, in addition to a FLT Structure.</li> <li>3. <i>Alpha and Beta</i> angles will be entered.</li> <li>4. <i>If Broken, Aperture, Rock Wall Hardness, Shape and Roughness</i> will be entered.</li> <li>5. Mineral Infill Character and Infill Type will be entered.</li> <li>6. Mineral Infilling Thickness (in mm) will be entered. .</li> </ol>
<b>BROKEN CORE ZONE (BCZ, Broken)</b>	<p>Naturally-occurring feature characterized by core pieces that do not form full circumferential segments (e.g., not disks or cylinders). Broken core generally consists of angular fragments. The broken core generally has the same intact rock strength as the surrounding core. <b>No Sub-Type.</b></p> <p><b>Note:</b></p> <ol style="list-style-type: none"> <li>1. <i>Depth</i> is recorded at the mid-point of where the BCZ is identified, and <i>Width</i> is BCZ thickness.</li> <li>2. If BCZ is greater than 0.3 m, a <i>Lithology Change</i> is triggered and CO Structures are taken, in addition to a BCZ Structure.</li> <li>3. <i>Alpha and Beta angles</i> will be entered, if possible.</li> <li>4. <i>Aperture, Rock Wall Hardness, Shape and Roughness</i> will be entered, if possible</li> <li>5. Mineral Infill Character and Infill Type will be entered.</li> <li>6. Mineral Infilling Thickness (in mm) will be entered.</li> </ol>
<b>INTACT FRACTURE ZONE (IFZ, Intact or Partially Intact)</b>	<p>A brittle high-strain zone composed of a network of intact fractures. <b>Sub-Type:</b> None; Minor: spacing more than 100 mm; Moderate: spacing 10 to 100 mm; Heavy: spacing &lt;10 mm</p> <p><b>Note:</b></p> <ol style="list-style-type: none"> <li>1. <i>Depth</i> is recorded at the mid-point of where the IFZ is identified, and <i>Width</i> is IFZ thickness.</li> <li>2. <i>Alpha and Beta</i> angles will be entered.</li> </ol>

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	<p>3. Mineral Infill Character and Infill Type will be entered.</p> <p>4. Mineral Infilling Thickness (in mm) will be entered.</p>
<b>LOST CORE ZONE (LCZ)</b>	<p>Naturally-occurring feature characterized by missing blocks or zones of core, where the pieces recovered do not fit together cleanly. Lost core can occur in zones of unconsolidated material (i.e., sand seams, clay beds), highly broken zones, fault zones, and zones where the core has been mechanically degraded from the drilling process (i.e., bit change zones, redrilled core, etc.). Zones of 'lost core' may also occur due to natural voids in the subsurface encountered during drilling. <b>No Sub-Type</b>.</p> <p><b>Note:</b></p> <ol style="list-style-type: none"> <li>1. <i>Depth</i> is recorded at the mid-point of where the LCZ is identified, and <i>Width</i> is LCZ thickness.</li> <li>2. Identify a <i>Depth Confidence</i> (<i>Low, Moderate, High</i>) in the Comments based on Core Loggers ability to accurately place the location of the LCZ.</li> </ol>
<b>MECHANICAL BREAK (MB, Broken)</b>	<p>Mechanical breaks are unnatural breaks observed in the core, determined based on the judgement of the Core Logger <b>Sub-Type</b>: N/A; MB - Broken Core Zone; MB – Lost Core Zone</p> <p><b>Note:</b></p> <ol style="list-style-type: none"> <li>1. <i>Depth</i> is recorded, where break intercepts the center-axis.</li> <li>2. <i>Width</i> is recorded for subtypes MB – Broken Core Zone and MB – Lost Core Zone.</li> </ol>

### **Record Intensity (Foliation and Primary Igneous Structures Only)**

The intensity of foliation (including all types listed above) and primary igneous structures will be captured, where applicable, as either weak or strong. This characteristic will be determined by visual assessment of the degree of development and clarity of the foliation.

### **Record Defining Minerals**

Defining Minerals (1/2) will capture characteristic or distinctive minerals that are identified in the fabric of the identified structure, as applicable. For example, the alignment of biotite or hornblende may define the foliation plane. Defining minerals will be captured for all foliation and both shear zone types, as well as for mylonite zones.

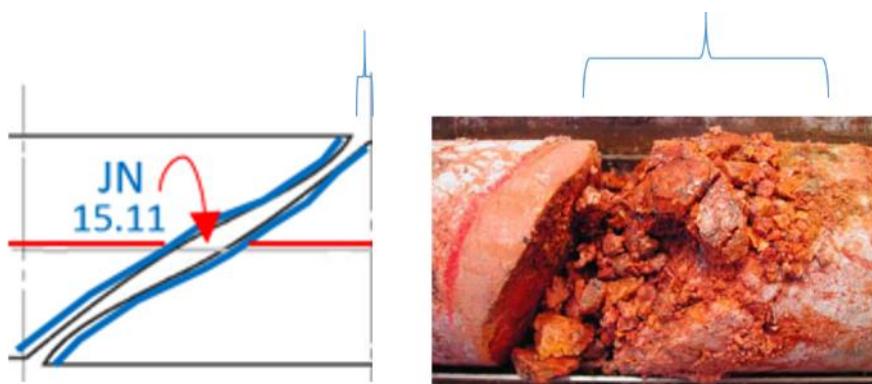
The full list of minerals that can be picked are indicated below; and those most likely to be encountered in the Ignace area are shaded in gray.

- Alkali-feldspar
- Amphibole
- Quartz

- Biotite
- Hornblende
- Magnetite
- Muscovite
- Plagioclase
- Chlorite
- Pyroxene
- Olivine
- Phlogopite
- Calcite
- Cordierite
- Cordierite – Pinite
- Graphite
- Garnet
- Kyanite
- Sillimanite
- Andalusite
- Talc
- Tourmaline
- Titanite
- Apatite
- Olivine
- Other

### **Record Aperture**

Aperture is the separation between competent rock wall surfaces along a broken structure, as seen in Figure 7, measured in millimetres (mm). If an infilling behaves like a soil (Strength Rating, R0; See Section 2.6 below) the infill thickness will be included as an aperture.



**Figure 7: Examples of Aperture**

### **Record Rock Wall Hardness**

The rock wall hardness (strength) of each natural fracture refers to the hardness of the wall of the fracture itself (not infill or mineral coatings). This information will record qualitatively whether the rock at the fracture wall is weaker relative to the rock mass away from the fracture wall. A weaker or altered fracture wall will be denoted as SOFT, and an unaltered fracture wall will be denoted as HARD. The distinction between SOFT and HARD is related to the softening behaviour of the rock wall mineral(s) and is based Moh's scale of mineral hardness, where any mineral with a Moh's hardness of 1 or 2 is considered SOFT and any mineral higher on

the scale is considered HARD. Note that this usage of hardness, for fracture wall characterization, is independent of the scale employed in the Field Estimation of Rock Hardness described below .

### ***Record Discontinuity Shape and Roughness***

The shape and roughness of each natural discontinuity (e.g., fracture or broken contact, etc.) will be described using the abbreviations shown below in Table 2, when possible. Examples of discontinuity Shape and Roughness character are provided in Figure 8.

**Table 2: Discontinuity Shape and Roughness**

<b>Shape</b>	<b>Roughness</b>
PL – Planar	K – Slickensided
UN – Undulated	PO – Polished
CU – Curved	SM – Smooth
ST – Stepped	RO – Rough
	VR – Very Rough



**Figure 8: Examples of Discontinuity Shape and Roughness**

#### **Record Infill Character, Infill Type and Infill Thickness**

Where present, the infill character, mineral type and thickness will be captured for Broken, Intact and Partially Intact structures. The infill character and infill type will be described using the appropriate abbreviations listed in Table 3 and Table 4. The infill thickness will be entered as a measurement perpendicular to the structure plane, in mm, for any infill that is 1 mm in thickness or greater.

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**Table 3: Infill Character**

Character	Description
CL	Clean
ST	Staining only – no apparent change to frictional properties
SA	Slightly altered – through chemical processes the joint wall rock has been altered to an apparently weaker mineral assemblage.
CT	Continuous coating < 1 mm - mineral coating is thin enough that joint wall asperities are in contact
IN	Continuous infill > 1 mm - mineral infills joint completely thereby apparently minimizing the frictional influence of joint wall asperities. <b>Record value for Infill Thickness (mm)</b>

**Table 4: Infill Type (Infill Type 1/2)**

Infill Type	Description		Typical Occurrence
Cl	Clay	SOFT	Common Alteration Mineral
Go_Sw	Clay Gouge (Swelling)	SOFT	Associated with shear or fault zones (Infill material, IN only)
Go_So	Clay Gouge (Soft)	SOFT	Associated with shear or fault zones (Infill material, IN only)
Go_St	Clay Gouge (Stiff)	SOFT	Associated with shear or fault zones (Infill material, IN only)
Br	Broken Rock	HARD	Crushed rock, often associated with shear or fault zones (Infill material, IN only)
Chl Talc	Chlorite Talc	SOFT	Commonly found in veins or broken joints
Ca	Calcite	HARD	Commonly found in veins
Qz Afs Bt Hbl Ms Ol Pl Px Am	Quartz Alkali-Feldspar Biotite Hornblende Muscovite Olivine Plagioclase Pyroxene Amphibole	HARD	Commonly found in veins

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Infill Type	Description		Typical Occurrence
Phl And Ap Crd Crd-P Grt Gr Ky Mag Sil Tur	Phlogopite Andalusite Apatite Cordierite Cordierite (Pinite) Garnet Graphite Kyanite Magnetite Sillimanite Tourmaline		
Bc	Breccia	HARD	Associated with shear or fault zones (Infill material, IN only)
Fe	Iron Oxide	HARD	Sometimes found on discontinuities, appears as rust as FeOx (iron oxide). Specific mineralogy (e.g., hematite) will be included in the comment field
Ep	Epidote	HARD	Commonly found in veins or broken joints
Gt Pg	Granitic Pegmatitic	HARD	Commonly found in igneous rocks. Pegmatitic is coarse-grained equivalent to granitic vein infill.

Note: Any additional infilling minerals identified during logging will be noted in the Comment field of the Structure Tab.

### ***Derived Discontinuity Properties (Jr, Ja, JCR)***

AcQuire will automatically derive several geotechnical parameters using information entered into a subset of the fields described above, including inputs for determination of Joint Roughness (Jr) number and Joint Alteration (Ja) number.

The relationships employed to determine these numbers are based on the Norwegian Geotechnical Institute (NGI) Q-system (Barton et al. 1974; NGI, 2015) and Rock Mass Rating (RMR) number (Bieniawski, 1989), which are current best practice classification systems for rock masses with respect to stability of underground openings.

A Jr value will be derived for all natural fractures using the information recorded for

- Intact/Broken sub-type
- Shape
- Roughness
- Infill Character

The values for Jr range between 0.5 and 4, and are derived as indicated in Table 5.

The value of Ja, for each fracture, will be derived using the information recorded for:

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- Intact/Broken sub-type
- Infill Character
- Infill Type
- Infilling Thickness

The derived Ja logging values are described in Table 6.

In addition, according to the Bieniawski criteria, the general condition of the natural fractures or series of natural discontinuities within a recorded interval are assigned a particular Joint Condition Rating (JCR) number according to information recorded for:

- Intact/Broken sub-type
- Aperture
- Rock Wall Strength
- Shape
- Roughness
- Infill Character
- Infill Type

The derived JCR logging values are described in

**Table 7.**

**Table 5: Joint Roughness, Jr (after Barton et. al. 1974)**

Intact/Broken	Shape	Roughness	Infill Character	Jr
IN <i>(Intact)</i>	Any, incl. null	Any, incl. null	Any, incl. null	4
PIN <i>(Partially Intact)</i>	Any, incl. null	Any, incl. null	Any, incl. null	4
Broken	PL	K, PO	CL, ST, SA, CT	0.5
	PL	SM	CL, ST, SA, CT	1
	PL	RO	CL, ST, SA, CT	1.5
	PL	VR	CL, ST, SA, CT	2
	UN, CU, ST	K, PO	CL, ST, SA, CT	1.5
	UN, CU, ST	SM	CL, ST, SA, CT	2
	UN, CU, ST	RO, VR	CL, ST, SA, CT	3
	ANY	ANY	IN	1

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**Table 6: Joint Alteration, Ja (after Barton et al. 1974)**

Intact/Broken	Infill Character	Infill Type	Infill Thickness	Ja
IN ( <i>Intact</i> )	Any, incl. null	<i>Soft &amp; Hard Mineral</i>	any	0.75
PIN ( <i>Partially Intact</i> )	Any, incl. null	<i>Soft &amp; Hard Mineral</i>	any	0.75
BR ( <i>Broken</i> )	IN ( <i>Continuous Infill</i> )	<i>Clay Gouge (Swelling)</i>	>5mm	20
		<i>Clay Gouge (Soft)</i>	> 5mm	13
		<i>Clay Gouge (Stiff)</i>	> 5mm	10
		<i>Soft Mineral (Not Clay Gouge)</i>	> 5mm	6
		<i>Hard Mineral</i>	> 1mm	3
		<i>Clay Gouge (Swelling)</i>	≤5mm, >1mm	12
		<i>Clay Gouge (Soft)</i>	≤5mm, >1mm	8
		<i>Clay Gouge (Stiff)</i>	≤5mm, >1mm	6
		<i>Soft Mineral (Not Clay Gouge)</i>	≤5mm, >1mm	4
		<i>CT (Continuous Coating)</i>	≤1mm	4
SA ( <i>Slightly Altered</i> )	<i>CT (Continuous Coating)</i>	<i>Hard Mineral</i>	≤1mm	3
		<i>Soft Mineral</i>	<1mm	3
	<i>ST</i>	ANY	<1mm	1
	<i>CL</i>	null	<1mm	1

Note: "Soft" Minerals (Strain softening coatings) see Table 4.

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**Table 7: Joint Condition Rating (RMR 1989)**

Intact/ Broken	Aperture	Rock Wall Strength	Shape	Roughness	Infill Character	Infill Type	JCR
IN <i>(Intact)</i>	Any, incl. null	Any, incl. null	Any, incl. null	Any, incl. null	Any, incl. null	<i>Soft &amp; Hard Mineral</i>	30
PIN <i>(Partially Intact)</i>	Any, incl. null	Any, incl. null	Any, incl. null	Any, incl. null	Any, incl. null	<i>Soft &amp; Hard Mineral</i>	30
BR <i>(Broken)</i>	≥ 5mm	ANY	ANY	ANY	ANY	ANY	0
	1-<5mm						10
	< 1 mm	S <i>(Soft)</i>	ANY	K, PO	ANY	ANY	10
				SM, RO, VR			16
	H <i>(Hard)</i>		PL	K, PO	ANY	ANY	10
				SM	IN	<i>Soft Mineral (Not Clay Gouge)</i>	16
						<i>Hard Mineral</i>	20
				CT		<i>Soft Mineral</i>	16
						<i>Hard Mineral</i>	20
				SA	ANY	ANY	20
				CL, ST	ANY	ANY	22
				RO	IN	<i>Soft Mineral (Not Clay Gouge)</i>	16
						<i>Hard Mineral</i>	20
				CT		<i>Soft Mineral</i>	20
						<i>Hard Mineral</i>	22
				SA	ANY	ANY	22
				CL, ST	ANY	ANY	25
				VR	IN	<i>Soft Mineral (Not Clay Gouge)</i>	16
						<i>Hard Mineral</i>	20

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Intact/ Broken	Aperture	Rock Wall Strength	Shape	Roughness	Infill Character	Infill Type	JCR
					CT	<i>Soft Mineral</i>	22
						<i>Hard Mineral</i>	25
					SA	ANY	25
					CL, ST	ANY	27
				UN, CU, ST	K, PO	ANY	16
					SM	IN	<i>Soft Mineral (Not Clay Gouge)</i>
							<i>Hard Mineral</i>
					CT	<i>Soft Mineral</i>	20
						<i>Hard Mineral</i>	22
					SA	ANY	22
				RO	CL, ST	ANY	25
					IN	<i>Soft Mineral (Not Clay Gouge)</i>	16
						<i>Hard Mineral</i>	20
					CT	<i>Soft Mineral</i>	22
						<i>Hard Mineral</i>	25
					SA	ANY	25
				VR	CL, ST	ANY	27
					IN	<i>Soft Mineral (Not Clay Gouge)</i>	16
						<i>Hard Mineral</i>	20
					CT	<i>Soft Mineral</i>	25
						<i>Hard Mineral</i>	27
					SA	ANY	27
					CL, ST	ANY	30

Note:

“Soft” Minerals (Strain softening coatings) see Table 4.

## **Measure and Record Discontinuity Orientation (Alpha, Beta, Gamma and Delta Angles)**

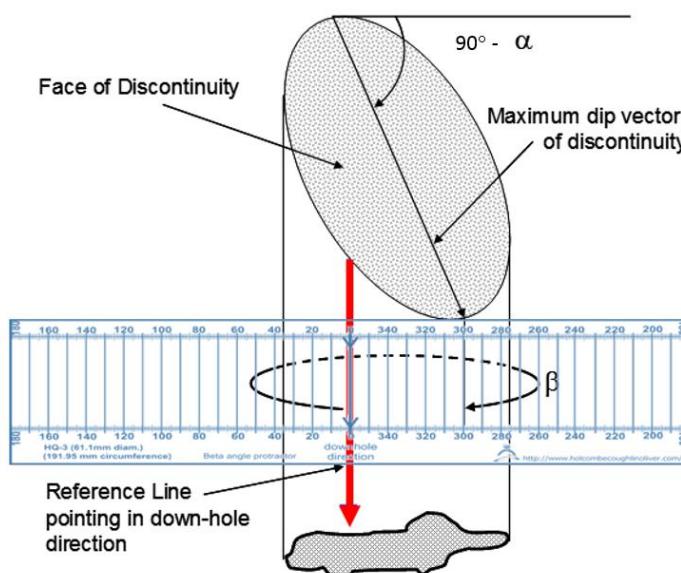
Planar and linear structural orientations will be measured during the core logging. The core will not be oriented and so the measurements will be made relative to the core axis and the reference line that will be drawn on the core (See Section 2.1 above). Two angles (Alpha –  $\alpha$  and Beta –  $\beta$ ,) are measured to describe the dip magnitude and dip direction of planar structures, with respect to the core axis and the reference line. Two angles (Gamma –  $\gamma$  and Delta –  $\delta$ ) are measured to describe the plunge and trend of linear structures, with respect to the core axis and the reference line. Alpha and Beta will be recorded for all structures in Table 1 except for Lost Core Zone and Lineation. It is understood that for intact structures the orientation of planar structures will be approximate. Gamma and Delta will be recorded for all lineations. It is understood that for intact structure lineations may not be measureable.

The Alpha angle is measured as the acute angle of the structure, relative to the core axis. An Alpha angle of 90° indicates an orientation perpendicular to the core axis; a measured angle of 0° indicates an orientation parallel to the core axis. This angle will be measured in single degree increments using a Carpenter's Protractor. The example shown in Figure 9 would be recorded as Alpha = 59°.



**Figure 9: Alpha Angle Measurement**

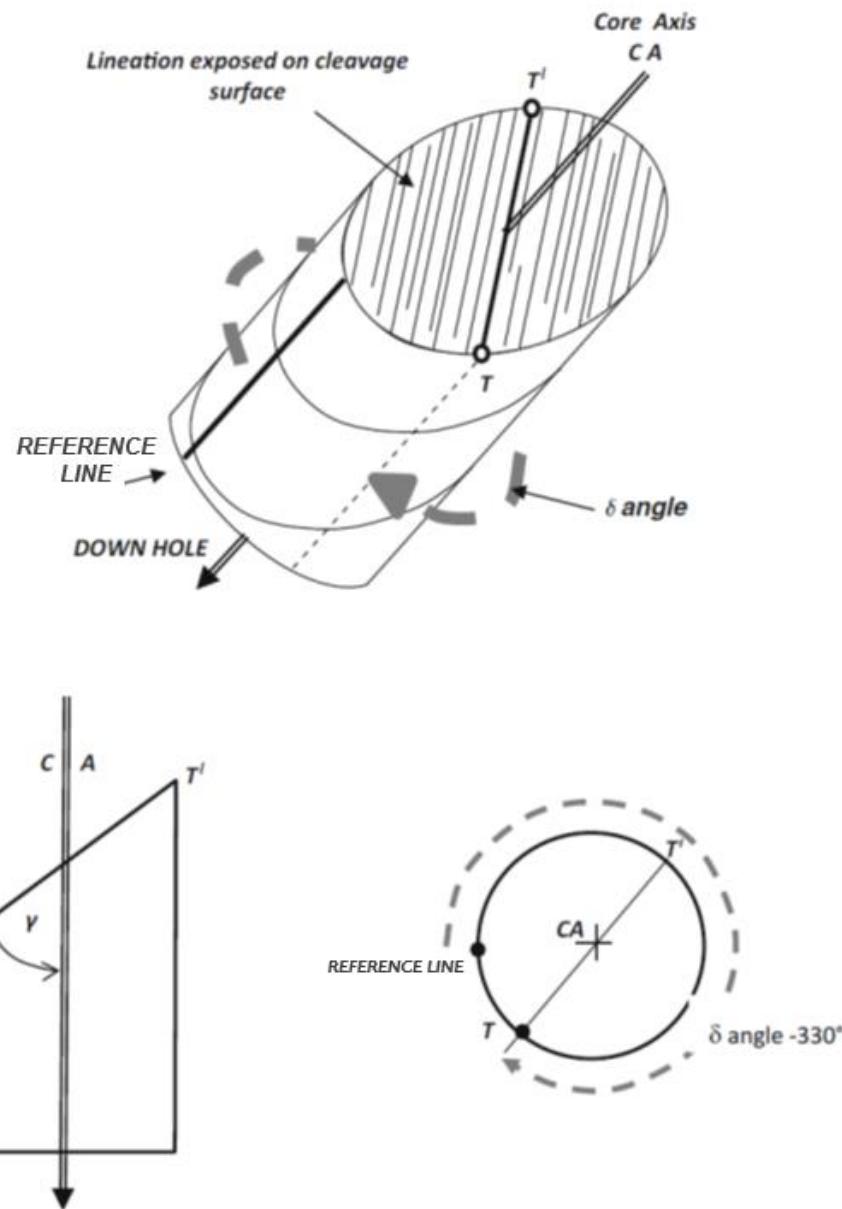
The Beta angle is the circumferential angle measured from the reference line drawn on the core to the line of "maximum dip" of the structure. The Beta angle is measured in 5 degree increments with a linear protractor around the circumference of the core. The convention for defining the Beta angle is to measure in a clockwise direction from the reference line to the point where the maximum dip vector of the discontinuity intersects the side of the core, when looking in a down hole direction. The example shown in Figure 10 would be recorded as Beta = 300°.



**Figure 10: Beta Measurement**

The Gamma angle is measured as the acute angle of the lineation in the direction of its plunge, relative to the core axis. A Gamma angle of  $0^\circ$  indicates a lineation parallel to the core axis; a Gamma angle of  $90^\circ$  indicates a lineation that is perpendicular to core axis. This angle will be measured in single degree increments using a Carpenter's Protractor.

The Delta angle is another circumferential angle measured from the reference line drawn on the core to the line of trend of the lineation. The Delta angle is measured in 5 degree increments with a linear protractor. The convention for measuring Delta is to measure from the reference line in the clockwise direction to the point of the lower intersection between the lineation and the edge of the core, as indicated in Figure 11 below. The example shown in Figure 11 below would be recorded as Delta =  $330^\circ$ .



**Figure 11: Gamma and Delta Measurement**

### Record Width

A Width is recorded for applicable structures that are not a singular discontinuity, but extend over an interval. Widths are recorded in cm and are measured perpendicular to the contact orientation of the structure.

**Note:** Where applicable, all structure descriptors (Shape, Roughness, Infill, Alpha, Beta, etc.) will be measured at the **TOP** margin of the zone. If the orientations are measurable at the **BOTTOM** margin of the zone and it is different from those measured at the **TOP** margin of the zone, the **BOTTOM** margin orientations will be recorded as a new Structure (same Type/Sub-Type), but record the *Depth* of the **BOTTOM** margin. Record a *Width = 0* and a note in the *Comments* indicating that it was measured from the same feature.

## 2.4 Lithology Data Collection

A lithology entry will be recorded for EVERY core run recovered during drilling and every distinct lithological unit within a core run will be logged, with the following single exception. Felsic, intermediate or mafic intrusions will be identified and recorded as a distinct "Dyke" lithology only if they exceed a minimum width of 5 cm. If they do not exceed 5 cm in width, they will not be identified as a distinct lithology and will only be identified as vein structures (See Section 2.3 above). If there is a high frequency of cm-scale lithological units of similar composition within a single core run they can also be described as a single interval of occurrence rather than individually logged.

Figure 3 shows the screen in the acQuire database for inputting the Lithology data. Also included on the Lithology Tab are the fields to collection information about geological contacts. Contacts represents the boundary between two different rock types, including dyke contact(s) with adjacent rock. Contact sub-types include: Chilled; Gradational; Sharp. The contact information fields are made available for data entry in any case where the logger enters a rock type that is different from the previous entry. In other words, if two adjacent core runs are logged as the same 'tonalite', then there is no requirement to define or characterize a geological contact. However, if 'biotite-rich tonalite' is entered as a rock type subsequent to a 'tonalite' being logged, the logger will be required to fill the contact fields. In all instances, it will be the uppermost (top) contact that will be characterized. AcQuire will auto-generate the rock above field with the previously logged rock type. The logger will enter a suitable sub-type, along with measured alpha and beta angles of the top contact. Note that if any type of structure is coincident with the contact, for example a shear zone or fault, that structure is logged independently of the contact in the Structure Tab. The contact depth will be aligned to the 'From (m)' depth.

To aid in distinguishing between felsic granitoid phases that are likely to be encountered in the borehole the core logger will undertake one Gamma Ray Spectrometry spot analysis per core run on the single most persistent felsic granitoid unit evident in the core run. The spot analysis will be done over a 180 second interval. If no felsic component is identified in the core run, then no measurement is taken. For example if an entire run is characterised as amphibolite. The measurement will be done in the 'Assay' mode of the device, with a sampling time of three minutes. The core logger will record the total count, %K, ppm U, ppm Th and Dose Rate (R units) from the device directly into the appropriate fields on the Lithology Tab (Figure 12), along with the depth at which the measurement was taken in the core run. As needed, the logger will then use the Gamma Ray Spectrometry result is aid in assigning a correct Rock Type based on the received %K value with pre-defined bin ranges of %K (0 – 1.7 %K = tonalite; >1.7 – 3 %K = granodiorite; >3 %K = granite).

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**Lithology**

**Short Cuts**  
F9 = Accept  
F11 = Change Entry Mode  
F7 = Previous Sheet  
F8 = Next Sheet  
Insert Mode

Borehole ID	From (m)	To (m)	Core Run			
IG_BH00						
<b>ROCK TYPE</b>		<b>TEXTURES</b>		<b>MINERALS</b>		<b>TOP CONTACT</b>
Rock Class	Rock Type	Rock Fabric	Metamorphic	Igneous	Mineral 1	Percentage (%)
<b>GROUND MASS GRAIN SIZE</b>		<b>COLOURS</b>				
Grain Size 1	Grain Size 2	Colour 1	Intensity 1	Mineral 2		Rock Above
<b>PHENOCRYST/POPHYROBLAST GRAIN SIZE</b>		Colour 2	Intensity 2	Mineral 3	Total:	Broken/Intact
Grain Size 1	Grain Size 2					
						Sub Type
						Alpha Angle
						Beta Angle
<b>GAMMA</b>		Assay #	Dose Rate (TBD)	K (%)	Th (ppm)	U (ppm)
Gamma readings collected?						
Comments						
<span style="border: 1px solid black; padding: 2px 10px;">Accept (F9)</span> <span style="border: 1px solid black; padding: 2px 10px; margin-left: 10px;">Cancel</span>						

**Figure 12: acQuire input for Lithology data**

Each lithologic unit description will include the following descriptions:

- Rock Class & Rock Type;
- Rock Fabric
- Textures (Igneous; Metamorphic);
- Grain Size (Ground Mass; Phenocryst/Porphyroblast);
- Defining Minerals (including estimate percent of rock mass)
- Colour and Intensity

### Identify and Record Rock Class and Rock Type

The complete list of picks for Rock Class and Rock Type, along with specific logging guidance are included below in Table 8.

The Revell batholith area are primarily granodiorites (55%), tonalites (36%) and granites (18%), with possible inclusions of diorite or quartz diorite, mafic meta-igneous rocks or schists. The more likely rock types that will be encountered in borehole IG\_BH03 and IG\_BH02, based on surface mapping, are highlighted in grey shading.

**Table 8: Classification of Rock Class and Rock Type**

Rock Class	Project Definition	Rock Type	Logging Guidance
<b>Igneous</b>	A rock that crystallized from molten or partly molten material (i.e., from magma).	Tonalite Biotite(Bt)-rich Tonalite <sup>1</sup> Granodiorite Granite Alkali-feldspar granite Diorite Quartz Diorite Monzodiorite Quartz monzodiorite Quartz monzonite Syenite Gabbro Anorthosite Dunite Other	Refer to the <b>Igneous Rock</b> Classification Diagram, included below as Figure 13.  A visual estimate of the percentage of the cumulative area of each of quartz, alkali feldspar, plagioclase feldspar and mafic minerals will be included in the Comments field of the Lithology Tab, for each Igneous rock type identified in the core run.
<b>Metamorphic</b>	A rock derived from pre-existing rocks by mineralogical, chemical or structural changes, essentially in the solid-state, in response to marked changes in temperature, pressure, shearing stress, or chemical environment.	Mafic meta-igneous Schist Gneiss Amphibolite Metasedimentary Felsic meta-igneous Granofels Hornfels Skarn Other	Metamorphic rocks will be defined by their texture (e.g., schistose or gneissose), their composition (e.g., mafic or felsic) and defining minerals.  Where a sedimentary protolith can be determined, the relevant metasedimentary rock type will be included in the Comments field (e.g., psammite, pelite, etc.).
<b>Dyke (Igneous)</b>	A planar injection of magmatic or sedimentary material at least 5 cm in width that cuts across the pre-existing fabric of a rock.	Granitic Aplitic Pegmatite Gabbro Diabase Amphibolite Quartzolite Tonalite Feldspar(Fsp)-phyric Tonalite <sup>1</sup> Very fine-grain (VFG) Tonalite <sup>1</sup> Feldspar(Fsp)-phyric Felsic <sup>1</sup> Granodiorite Mafic Felsic Lamprophyre Other	Injected (intrusive) material will be described as a 'Dyke' if its measured width is greater than 5 cm. Otherwise no lithology is captured for this feature and it is only described in the Structure Tab as a 'Vein'  <b>Pegmatites</b> are coarse-grained dykes (crystals several centimeters to several meters in length) of mafic or felsic composition  <b>Aplites</b> are fine-grained dykes (crystal size ≤ 1 mm) of granite or granitic composition with very little to

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Rock Class	Project Definition	Rock Type	Logging Guidance
			<p>no mafic minerals and a granular texture.</p> <p><b>Gabbro</b> is a coarse-grained mafic intrusive igneous rock composed principally of calcic plagioclase and clinopyroxene, and often olivine (see Figure 13B)</p> <p><b>Quartzolites are composed primarily of quartz (&gt;90 %)</b></p> <p><b>Diabase</b> is a mafic intrusive rock with the same composition as gabbro and with characteristic lath-shaped plagioclase grains, interstitial, anhedral, pyroxene, and often olivine.</p> <p><b>Lamprophyres</b> are dark-coloured, porphyritic igneous rocks composed of mafic minerals (e.g., biotite, hornblende, pyroxene) that occur as phenocrysts within a fine-grained crystalline groundmass.</p> <p>A visual estimate of the percentage of the cumulative area of each of quartz, alkali feldspar, plagioclase feldspar and mafic minerals will be included in the Comments field of the Lithology Tab, for each Igneous (Dyke) rock type identified in the core run.</p>

<sup>1</sup>Rock sub-types added to Rock Type list herein and in acQuire based on experience from IG\_BH01 to aid the Core Logger during lithology characterization.

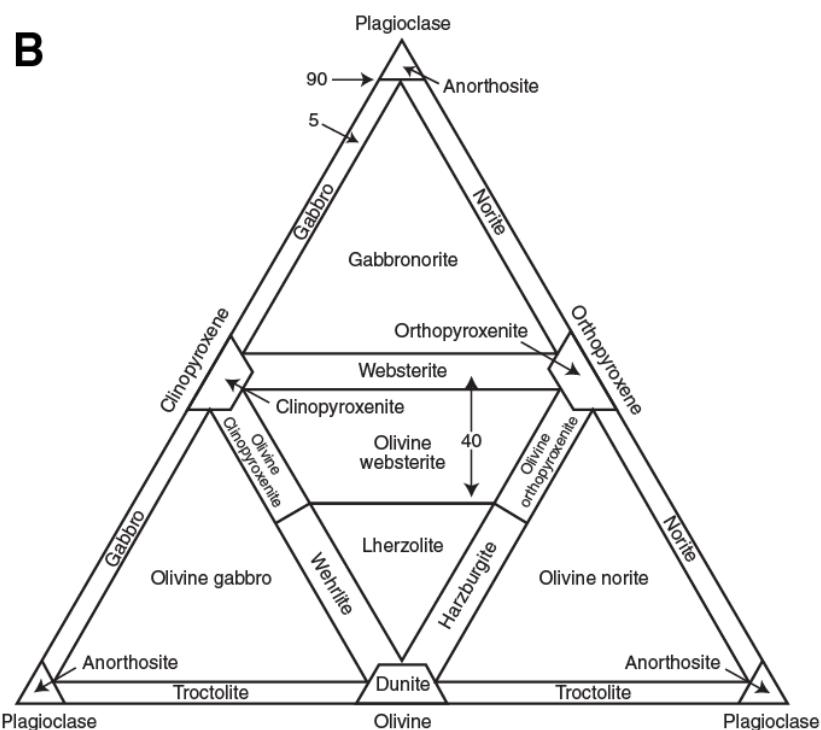
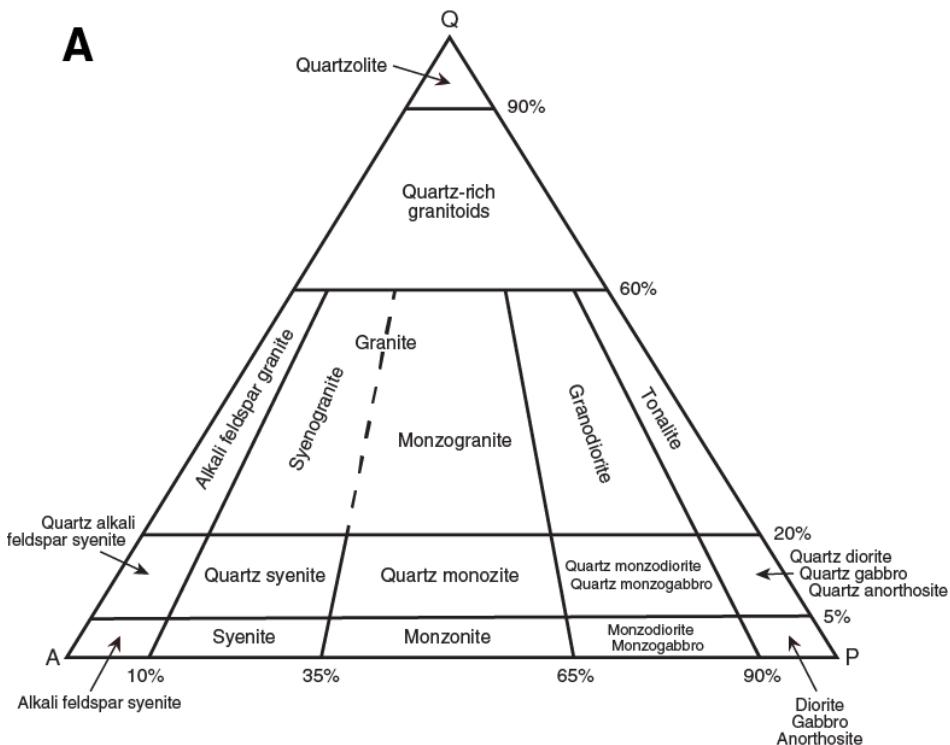


Figure 13: Igneous Rock Classification Diagrams. A) Q-A-P Diagram for Felsic Rocks. B) Plagioclase-Clinopyroxene-Orthopyroxene-Olivine Diagram for Mafic and Ultramafic Rocks.

### **Identify and Record Rock Fabric**

The fabric of the rock describes the nature of mineral alignment, or lack thereof, within the rock unit. The main fabric types most likely to encounter in rock types identified during the geological core logging of IG\_BH03 and IG\_BH02 are described below in Table 9.

**Table 9: Classification of Rock Fabric**

Fabric	Description
Massive	Having no distinctive planar or linear arrangement of mineral grains in any one particular direction.
Foliated	Having a planar preferred orientation of mineral grains. Schistose and gneissose are foliation subtypes that will be assigned, instead of this generic descriptor, when applicable.
Schistose	Having a foliation characterized by the parallel alignment of medium- to coarse-grained platy minerals (e.g., mica) or inequant crystals of other minerals.
Gneissose	Having a foliation characterized by the parallel alignment of medium- to coarse-grained platy minerals (e.g., mica) or inequant crystals of other minerals.

### **Record Rock Texture**

The rock texture refers to the sizes and shapes of grains, the relationships between neighboring grains, and the orientation of grains within a rock. The main Metamorphic and Igneous textures types likely to encounter during logging, are described below in Table 10 and Table 11, respectively.

**Table 10: Classification of Metamorphic Rock Textures**

Metamorphic Texture	Description
<u>Porphyroblastic</u>	Consisting of large grains that grew in the solid state (porphyroblasts) surrounded by a fine-grained matrix of other minerals.
<u>Granoblastic</u>	Consisting of mineral grains relatively of uniform size and dimension, with well sutured or interlocked boundaries.
<u>Augen</u> (Porphyroclastic)	Consisting of large, lenticular mineral grains (porphyroclasts) or mineral aggregates, within a fine-grained matrix, having the shape of an eye in cross-section.

**Table 11: Classification of Igneous Rock Textures**

Igneous Texture	Description
Equigranular	Consisting of grains roughly equal in size.
Inequigranular	Consisting of grains exhibiting a range in grain size.
Vari-Texture	Consisting of more than one texture within the rock mass.

Igneous Texture	Description
Porphyritic	Consisting of larger crystals (phenocrysts) set in a finer-grained groundmass, which may be crystalline or glassy or both.
Graphic	Consisting of an intergrowth of triangular or linear-angular quartz grains within larger alkali feldspar grains.

### Record Grain or Crystal Size

Grain size is defined separately for the groundmass phase (or rock matrix) and the phenocryst phase. Figure 14 indicates the distinction between groundmass and phenocryst phases. The phenocryst size field(s) can also be used to describe the size of porphyroblasts and porphyroclasts in metamorphic rocks.

Two grain size fields are provided for each phase: Grain Size 1; Grain Size 2. Where there is more than one crystal size within the phase, the more dominant grain size will be recorded as Grain Size 1. If only one grain size is identified, Grain Size 2 can be left empty.

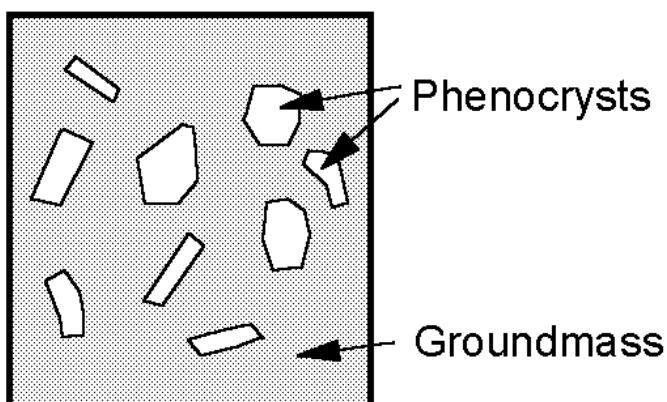


Figure 14: Example of groundmass vs. phenocryst mineral phases

The size of visible grains or crystals will be selected, in accordance with the grain-size classes indicated below in Table 12 for all identified rock types.

Table 12: Grain Size Class Terminology

Grain Size	Description
Fine-grained	<1mm
Medium-grained	1-5mm
Coarse grained	5-10mm
Very coarse-grained	10-50mm
Extremely coarse-grained	>50mm

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### **Record Any Characteristic Minerals**

There are three fields (Mineral 1, Mineral 2, Mineral 3) within which to capture any characteristic or distinctive minerals that are identified in the rock. Note that the main rock forming minerals in the matrix of the felsic igneous rocks (e.g., quartz, plagioclase, alkali-feldspar) are not to be picked unless they occur as a phenocryst phase (e.g., alkali-feldspar phenocrysts within a granite).

Where there are multiple distinctive minerals identified, record them in order of abundance (i.e. % of Mineral 1 > % of Mineral 2 > % of Mineral 3), and capture the percentage of each. Note that the total % of all minerals can be less than but not greater than 100 %.

The full list of minerals that can be picked are indicated below; and those most likely to be encountered in the Ignace area are shaded in gray.

- Alkali-feldspar
- Amphibole
- Quartz
- Biotite
- Hornblende
- Magnetite
- Muscovite
- Plagioclase
- Chlorite
- Pyroxene
- Olivine
- Phlogopite
- Calcite
- Cordierite
- Cordierite – Pinite
- Graphite
- Garnet
- Kyanite
- Sillimanite
- Andalusite
- Talc
- Tourmaline
  
- Titanite
- Apatite
- Olivine
- Other
- Alkali-feldspar

### **Record Colour and Intensity**

The colour of the WET rock core will be described. In some cases the colour of the rock may be of importance to the overall understanding of the origin, classification, or performance of a given rock type. Colour (of the rock) is assigned using two fields: Colour 1; Colour 2. Where two colours are identified, the more dominant colouring is recorded as Colour 1 and secondary colour is recorded as Colour 2.

Intensity is an additional descriptor for each assigned colour field, to better define the overall colour characteristic of the rock. Colour 1 is associated with Intensity 1; Colour 2 is associated with Intensity 2.

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<b>Colour</b>	<b>Intensity</b>
■ White	■ Very light
■ Off white	■ Light
■ Pink	■ Normal
■ Red	■ Dark
■ Rust	■ Very Dark
■ Orange	
■ Green	
■ Beige	
■ Brown	
■ Grey	
■ Black	
■ Other	

## 2.5 Alteration Data Collection

Characteristics associated with the Alteration of the rock mass will be logged in acQuire using the Alteration input sheet shown in Figure 15. Alteration characteristics will be assigned to all structural features entered into the Structure data input sheet (see Section 2.3) that exhibit evidence of alteration. Alteration refers to any change in the mineralogical composition of a rock brought about by the action of hydrothermal solutions. Alteration is distinct from weathering (described in Section 2.6), which is a destructive process by which rock, on exposure to atmospheric agents at or near the Earth's surface, is changed in colour, texture, composition or form.

Alteration characterization includes two steps, including:

- Record Alteration State
- Assign Alteration Assemblage

Alteration				Short Cuts	
Borehole ID	From (m)	To (m)	Core Run	F9 = Accept	F7 = Previous Sheet
IG_BH00				F11 = Change Entry Mode	F8 = Next Sheet
Index	Alteration Assemblage 1		Colour	Insert Mode	
	Alteration Assemblage 2				
	Alteration Assemblage 3				
Comments				Accept (F9)	Cancel

Figure 15: acQuire input for Alteration data

### **Record Alteration State**

Alteration is only recorded when an altered zone, or discrete altered structure, has been identified. Where alteration is not recorded it is implied that the rock mass is not altered. The alteration state, or degree of alteration, is recorded in correspondence with the alteration index descriptions shown in Table 13. These descriptions are indicative of how the mechanical properties of the rock mass are affected by the physical and chemical changes to the rock forming minerals, and are also based on the presence (or lack thereof) of secondary mineralization in structures such as fractures or shear zones. The comments field will be used to describe the colour of the alteration, if not adequately captured in another field.

**Table 13: Alteration Index (ISRM, 1981)**

Term	Symbol	Description
Slightly altered	A2	Generally alteration is confined to veins and/or veinlets; little or no penetration of alteration beyond vein/veinlet boundaries; no discernible effect on the strength properties of the parent rock type
Moderately altered	A3	Alteration is controlled by veins and may penetrate wallrock as narrow vein selvages or envelopes; alteration may be pervasive; alteration results in slightly lower rock strength, but rock may still be hard and brittle.
Highly altered	A4	Pervasive alteration of rock forming minerals and rock mass to assemblages that significantly decrease the strength properties of the parent rock type such as sericite, chlorite, ankerite, graphite, kaolinite, talc, gypsum, or anhydrite; obvious degradation of rock strength; some individual veinlet control is still visible; fracture surfaces and vein selvages, where noted, may be friable.
Completely altered	A5	Intense, pervasive, complete alteration of rock forming minerals to weaker mineral assemblages such as sericite, chlorite, ankerite, graphite, kaolinite, talc, gypsum, or anhydrite; rock mass may be friable, or 'rotten'; rock mass may resemble soil as in the case of fault gouge; inter-crystalline bonds are destroyed; no perceptible individual veinlet control; any alteration assemblage that results in the nearly complete, or complete, degradation of rock strength relative to the parent rock type.

### **Assign Alteration Assemblage**

The alteration that has been identified will be distinguished and characterized based on the mineral assemblage that defines it. Table 14 below provides the list of mineral assemblages and their descriptions that will be used for this characterization.

**Table 14: Alteration Assemblages**

Alteration Type	Alteration Assemblage Description
<b>Albitization</b>	Replacement of calcium rich plagioclase or K-feldspar by calcium poor plagioclase (albite).

Alteration Type	Alteration Assemblage Description
<b>Advanced Argillization</b>	Formation of kaolinite, pyrophyllite, or dickite (depending on the temperature) and alunite together with lesser quartz, topaz, and tourmaline.
<b>Argillization</b>	Formation of clay minerals, including kaolinite and the smectite group (mainly montmorillonite). Mainly affects plagioclase feldspar.
<b>Carbonatization</b>	Formation of carbonate minerals (calcite, dolomite, magnesite, siderite, etc.) during alteration of a rock.
<b>Chloritization</b>	Formation of chlorite, epidote and actinolite. Mainly affects mafic minerals.
<b>Hematization</b>	Associated with oxidizing fluids and the formation of minerals with a high Fe <sup>3+</sup> /Fe <sup>2+</sup> ratio (e.g., Hematite), with associated K-feldspar, sericite, chlorite, and epidote.
<b>Potassic</b>	Formation of new K-feldspar and/or biotite, usually together with minor muscovite (sericite), chlorite, and quartz.
<b>Propyilitic</b>	Formation of chlorite, epidote and albite, plus addition of calcite. Affects intermediate and mafic rocks.
<b>Sericitization</b>	Conversion of feldspar into sericite.
<b>Silicification</b>	Formation of new quartz or amorphous silica minerals in a rock during alteration of a rock.
<b>Bleaching</b>	Not characterized by any specific mineral assemblage, but rather recognized by a color change between altered and unaltered rock.

## 2.6 Weathering Data Collection

### *Record Weathering State*

Weathering is only recorded when a weathered zone is identified (i.e., not fresh) within the rock mass and will be logged in acQuire using the Weathering input sheet (Figure 16). When weathering is not recorded it is implied that the rock mass has not experienced weathering. The degree of weathering is recorded in correspondence with the classification described below in Table 15. This characteristic provides a qualitative measure of the degree of weathering for the original rock mass. The comments field will be used to describe weathering colouring and any interpretations, if not adequately captured in another field.

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**Weathering**

**Short Cuts**  
 F9 = Accept      F7 = Previous Sheet  
 F11 = Change Entry Mode      F8 = Next Sheet      Insert Mode

Borehole ID IG_BH00	From (m)	To (m)	Core Run
Weathering			
Comments			
<input type="button" value="Accept (F9)"/> <input type="button" value="Cancel"/>			

**Figure 16:** acQuire input for Weathering data**Table 15:** Weathering Classification (after ISRM 1981)

Term	Symbol	Description	Discoloration Extent	Fracture Condition	Surface Characteristics
Residual soil	W6	All rock material is converted to soil. The mass structure and material fabric are destroyed. There is a large change in volume, but the soil has not been significantly transported.	Throughout	n/a	Resembles soil
Completely weathered	W5	100% of rock material is decomposed and/or disintegrated to soil. The original mass structure is still largely intact.	Throughout	Filled with alteration minerals	Resembles soil
Highly weathered	W4	More than 50% of the rock material is decomposed and/or disintegrated to a soil. Fresh or discoloured rock is present either as a discontinuous framework or as corestones.	Throughout	Filled with alteration minerals	Friable and possibly pitted

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Term	Symbol	Description	Discoloration Extent	Fracture Condition	Surface Characteristics
Moderately weathered	W3	Less than 50% of the rock material is decomposed and/or disintegrated to a soil. Fresh or discoloured rock is present either as a discontinuous framework or as corestones. Visible texture of the host rock still preserved. Surface planes are weathered (oxidized or carbonate filling) even when breaking the "intact rock".	>20% of fracture spacing on both sides of fracture	Discoloured, may contain thick filling	Partial to complete discolouration, not friable except poorly cemented rocks
Slightly weathered	W2	Discoloration indicates weathering of rock material on discontinuity surfaces (usually oxidized). Less than 5% of rock mass altered.	<20% of fracture spacing on both sides of fracture	Discoloured, may contain thin filling	Partial discolouration

## 2.7 Rock Strength Data Collection

### Record Strength of Intact Rock

The acQquire rock strength data input sheet is shown below in Figure 17. The field estimation of intact rock strength undertaken for IG\_BH03 and IG\_BH02 will be based on the International Society of Rock Mechanics (ISRM, 1981) guidelines as shown in Table 16.

Confirming the strength rating by hammer blows will be carried out opportunistically, when breaking the core for sampling and for fitting the core pieces into the core boxes. This approach is taken in order to preserve the integrity of the core as much as possible. However, whenever a change in strength is suspected, the full range of tests will be performed to determine hardness, including hitting the core with a rock hammer, scraping or peeling with a knife and scratching with your thumbnail, as per the procedures described in Table 16.

**Rock Strength**

			<b>Short Cuts</b>		
Borehole ID	Depth (m)	Core Run	F9 = Accept	F7 = Previous Sheet	
IG_BH00			F11 = Change Entry Mode	F8 = Next Sheet	<b>Insert Mode</b>
Strength Index	Test Rock Type				
<input type="button" value="▼"/>	<input type="button" value="▼"/>				
Comments	<input type="text"/>			<input type="button" value="Accept (F9)"/>	<input type="button" value="Cancel"/>

Figure 17: acQuire input for Rock Strength data

**Table 16: Field Estimation of Rock Hardness (ISRM, 1981)**

Term	Symbol	Field Identification	Approx. UCS Range (MPa)
Extremely weak rock	R0	Indented by thumbnail.	0.25 -1
Very weak rock	R1	Material can be shaped with a pocket knife or can be peeled by a pocket knife. Crumbles under firm blows of pick (or point) of geological hammer.	1.0 – 5.0
Weak rock	R2	Knife cuts material but too hard to shape into triaxial specimens or material can be peeled by a pocket knife with difficulty. Shallow indentations (< 5 mm) made by firm blow with pick (or point) of geological hammer.	5.0 – 25
Medium strong rock	R3	Cannot be scraped or peeled with a pocket knife. Hand held specimens can be fractured with <i>single</i> firm blow of geological hammer.	25 – 50
Strong rock	R4	Hand held specimen requires more than one blow of geological hammer to fracture it.	50 – 100
Very strong rock	R5	Specimen requires many blows of geological hammer to break intact rock specimens (or to fracture it).	100 – 250
Extremely strong rock	R6	Specimen can only be chipped under repeated hammer blows, rings when hit.	>250

**NOTES:**

1. Hand held specimens should have height  $\cong$  2 times the diameter.
2. Materials having a uniaxial compressive strength of less than about 0.5 MPa and cohesionless materials should be classified using soil classification systems.
3. Rocks with a uniaxial compressive strength below 25 MPa (i.e., below R2) are likely to yield highly ambiguous results under point load testing.

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### 3.0 REFERENCES

- Barton, N.R., Lien, R. and Lunde, J. 1974. Engineering classification of rock masses for the design of tunnel support. *Rock Mech.* 6(4), 189-239.
- Bieniawski, Z.T. 1989. *Engineering rock mass classifications*. New York: Wiley.
- Deere, D.U. 1989. Rock quality designation (RQD) after 20 years. U.S. Army Corps Engrs Contract Report GL-89-1. Vicksburg, MS: Waterways Experimental Station.
- ISRM (1981). *Rock Characterization Testing and Monitoring - ISRM Suggested Methods*, Pergamon Press, London, England, p. 32, ed. Brown, E.T.
- NGI (Norwegian Geological Institute), 2015. *Using the Q-System – Rock Mass Classification and Support Design*. NGI Publication, Oslo.



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**APPENDIX B**

**Sampling Schedule Table**

TABLE B-1: IG\_BH02 SAMPLING SCHEDULE

	Planned Sample Depth			Actual Sample Depth			Opportunistic Amphibolite Samples			Planned Repository Horizon		
Test Type	Petrophysics	UCS	Brazilian	Eff. Diffusion	Porewater	Aqueous	Sorption	CEC/BET	Microbiology	Noble Gas	Archived	Totals
# of planned samples	8	3	3	10	20	10	4	2	6	10	20	96
# of samples	9	3	3	10	23	12	4	4	6	10	20	104
Additional amphibolite samples	2	0	0	0	0	0	0	2	0	0	0	4
BH #	BH02	BH02	BH02	BH02	BH02	BH02	BH02	BH02	BH02	BH02	BH02	BH #
Length along borehole												Length along borehole
0												0
3												3
6												6
9												9
12												12
15												15
18												18
21												21
24												24
27												27
30												30
33												33
36												36
39												39
42												42
45												45
48												48
51												51
54												54
57												57
60												60
63												63
66												66
69												69
72												72
75												75
78												78
81												81
84												84
87												87
90												90
93												93
96												96
99												99
102												102
105											AR001 103.42 - 103.79	105
108												108
111												111
114												114
117												117
120												120
123												123
126												126
129												129
132												132
135												135
138												138
141												141
144												144
147												147
150												150
153												153
156												156
159												159
162											AR002 162.05 - 162.45	162
165												165
168												168
171												171
174												174
177												177
180												180
183												183
186												186
189												189

TABLE B-1: IG\_BH02 SAMPLING SCHEDULE

TABLE B-1: IG\_BH02 SAMPLING SCHEDULE

TABLE B-1: IG\_BH02 SAMPLING SCHEDULE

570											570
573											573
576	PS006 575.81 - 576.17			ED006 576.17 - 576.47							576
579										AR011 578.79 - 579.17	579
582		UC003 580.73 - 581.02	BR003 582.67 - 582.91								582
585											585
588											588
591									NG005 591.11 - 591.39		591
594											594
597											597
600											600
603											603
606											606
609									AR012 608.94 - 609.31		609
612			Planned ED	PW014 610.98 - 611.35	AQ008 611.35 - 611.48						612
615			ED007 614.04 - 614.33	PW015 613.66 - 614.04							615
618											618
621											621
624											624
627											627
630											630
633											633
636											636
639									NG006 639.17 - 639.45		639
642									AR013 640.51 - 640.88		642
645											645
648											648
651											651
654											654
657											657
660											660
663											663
666				PW016 665.64 - 666.01	AQ009 666.01 - 666.16						666
669				PW017 667.32 - 667.54							669
672								SA004 674.7b - 674.92			672
675	Planned PS		Planned ED								675
678											678
681											681
684	PS007 683.80 - 684.19		ED008 684.19 - 684.53								684
687									NG007 690.54 - 690.79	AR014 689.39 - 688.79	687
690											690
693											693
696											696
699											699
702											702
705											705
708											708
711											711
714											714
717											717
720									AR015 719.37 - 719.84		720
723											723
726											726
729											729
732											732
735											735
738											738
741									NG008 741.02 - 741.30		741
744									AR016 747.30 - 747.67		744
747											747
750											750
753											753
756											756
759											759
762											762
765											765
768											768

TABLE B-1: IG\_BH02 SAMPLING SCHEDULE

771					PW018 770.41 - 770.78	AQ010 771.38 - 771.51							771
774	PS008 773.29 - 773.63			ED009 773.85 - 774.19	PW019 772.88 - 773.29								774
777													777
780													780
783													783
786													786
789													789
792													792
795													795
798													798
801												AR017 799.37 - 799.76	801
804													804
807													807
810													810
813													813
816													816
819													819
822													822
825													825
828													828
831													831
834													834
837													837
840											NG009 839.86 - 840.14		840
843													843
846													846
849												AR018 849.07 - 849.45	849
852													852
855													855
858													858
861													861
864													864
867													867
870													870
873													873
876													876
879					PW020 878.60 - 878.96	AQ011 878.96 - 879.11							879
882					Planned PW Duplicate								882
885					PW021 885.41 - 885.80								885
888													888
891													891
894													894
897													897
900													900
903											AR019 903.09 - 903.47		903
906													906
909													909
912													912
915													915
918													918
921													921
924	PS009 922.46 - 922.83			ED010 922.83 - 923.17									924
927													927
930													930
933													933
936											NG010 938.91 - 939.22		936
939													939
942													942
945													945
948													948
951													951
954													954
957													957
960											AR020 960.00 - 960.39		960
963													963
966													966
969													969
972													972
975													975
978													978
981													981
984					PW022 984.02 - 984.40	AQ012 984.40 - 984.53							984

TABLE B-1: IG\_BH02 SAMPLING SCHEDULE

987					PW023 985.74 - 986.12							987
990												990
993												993
996												996
999												999

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**APPENDIX C**

**Record of Core Logging**

## IG\_BH02

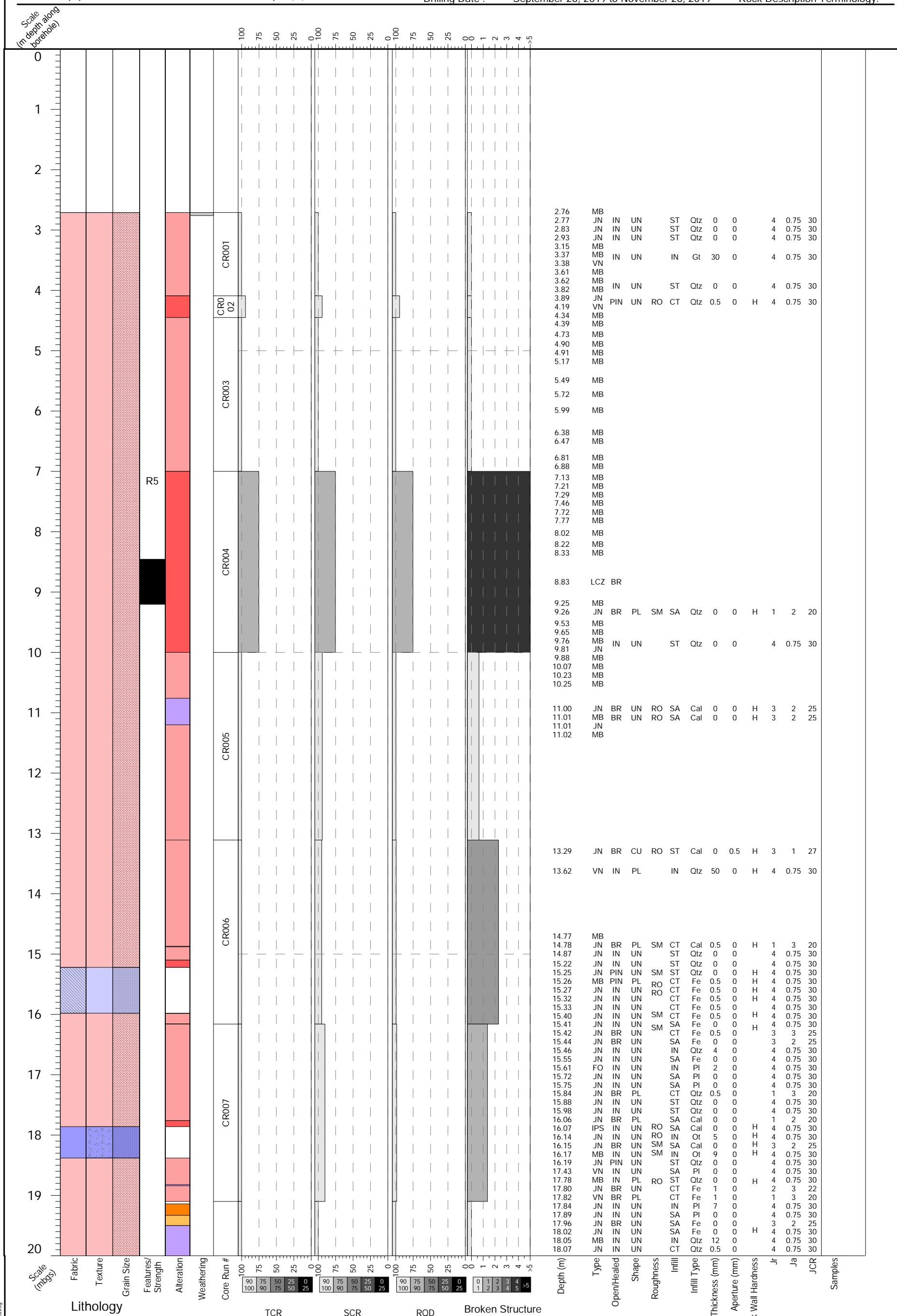
Northing (m) : 5483950.29  
Easting (m) : 554033.97  
Elevation (m) : 435.16

Collar Azimuth (°) : 225.0  
Collar Dip (°) : -70.4  
Hole Depth (m) : 1000.41

Loggers : CM, KF, EJ, AC, KG, SL  
Contractor : Rodren Drilling Ltd.  
Drill Core Size : HQ3  
Drilling Date : September 26, 2019 to November 26, 2019

Note: For legend, abbreviations, symbols, and description refer to the Lithological and Geotechnical Rock Description Terminology.

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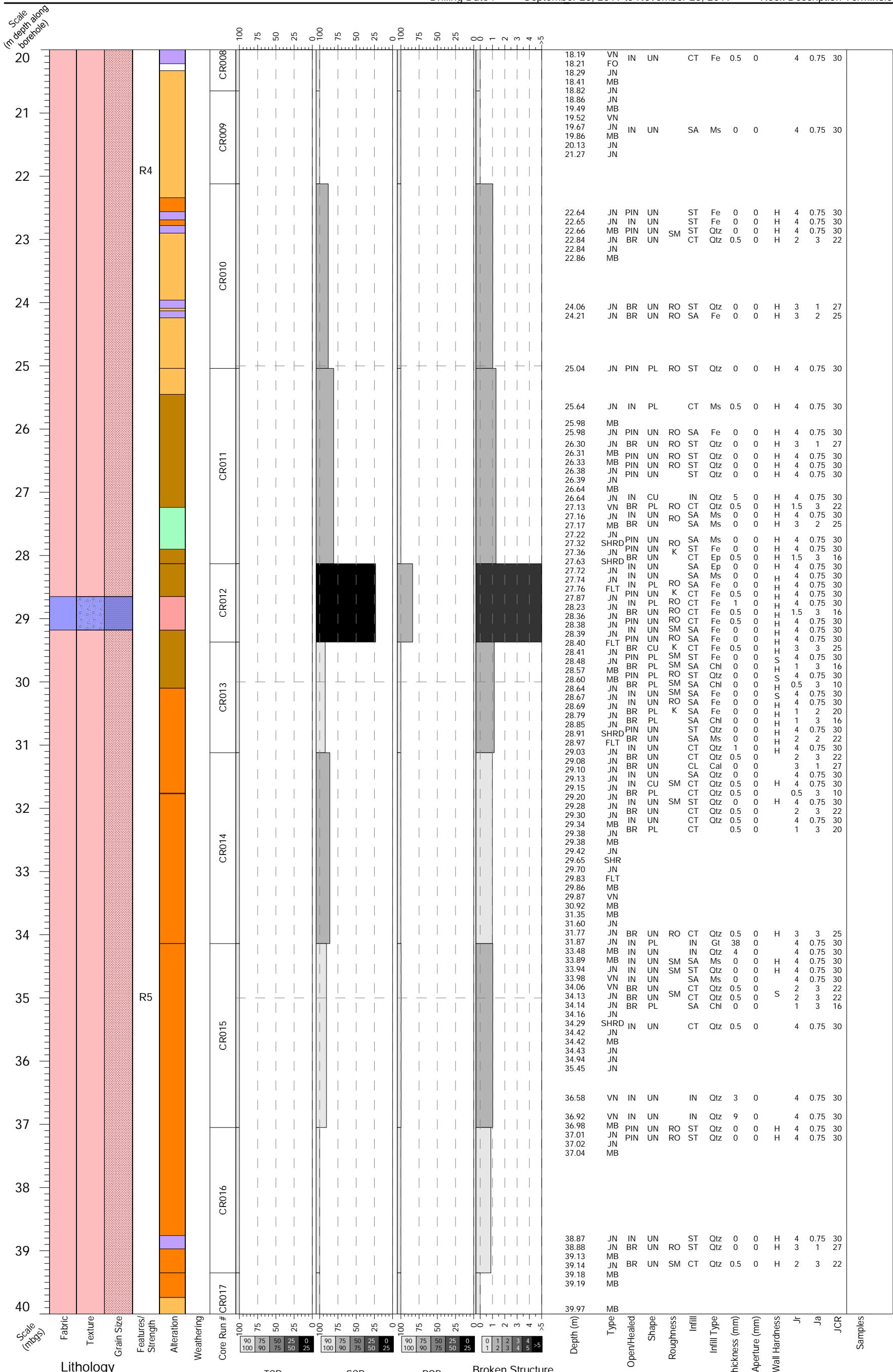
## IG\_BH02

Northing (m) : 5483950.29  
 Easting (m) : 554033.97  
 Elevation (m) : 435.16

Collar Azimuth (°) : 225.0  
 Collar Dip (°) : -70.4  
 Hole Depth (m) : 1000.41

Loggers : CM, KF, EJ, AC, KG, SL  
 Contractor : Rodren Drilling Ltd.  
 Drill Core Size : HQ3  
 Drilling Date : September 26, 2019 to November 26, 2019

Note: For legend, abbreviations, symbols, and description refer to the Lithological and Geotechnical Rock Description Terminology.



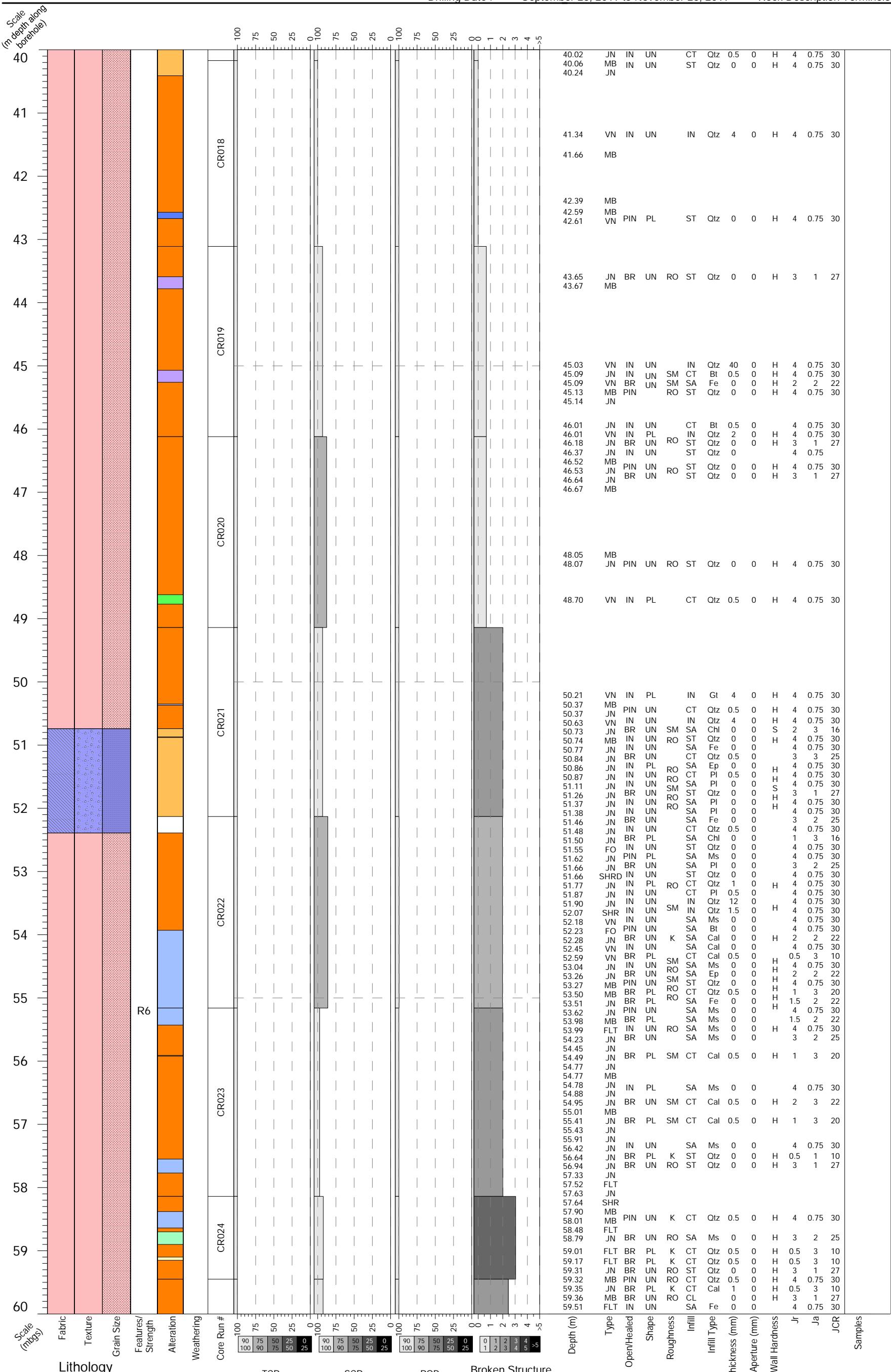
## IG\_BH02

Northing (m) : 5483950.29  
 Easting (m) : 554033.97  
 Elevation (m) : 435.16

Collar Azimuth (°) : 225.0  
 Collar Dip (°) : -70.4  
 Hole Depth (m) : 1000.41

Loggers : CM, KF, EJ, AC, KG, SL  
 Contractor : Rodren Drilling Ltd.  
 Drill Core Size : HQ3  
 Drilling Date : September 26, 2019 to November 26, 2019

**Note:** For legend, abbreviations, symbols, and description refer to the Lithological and Geotechnical Rock Description Terminology.



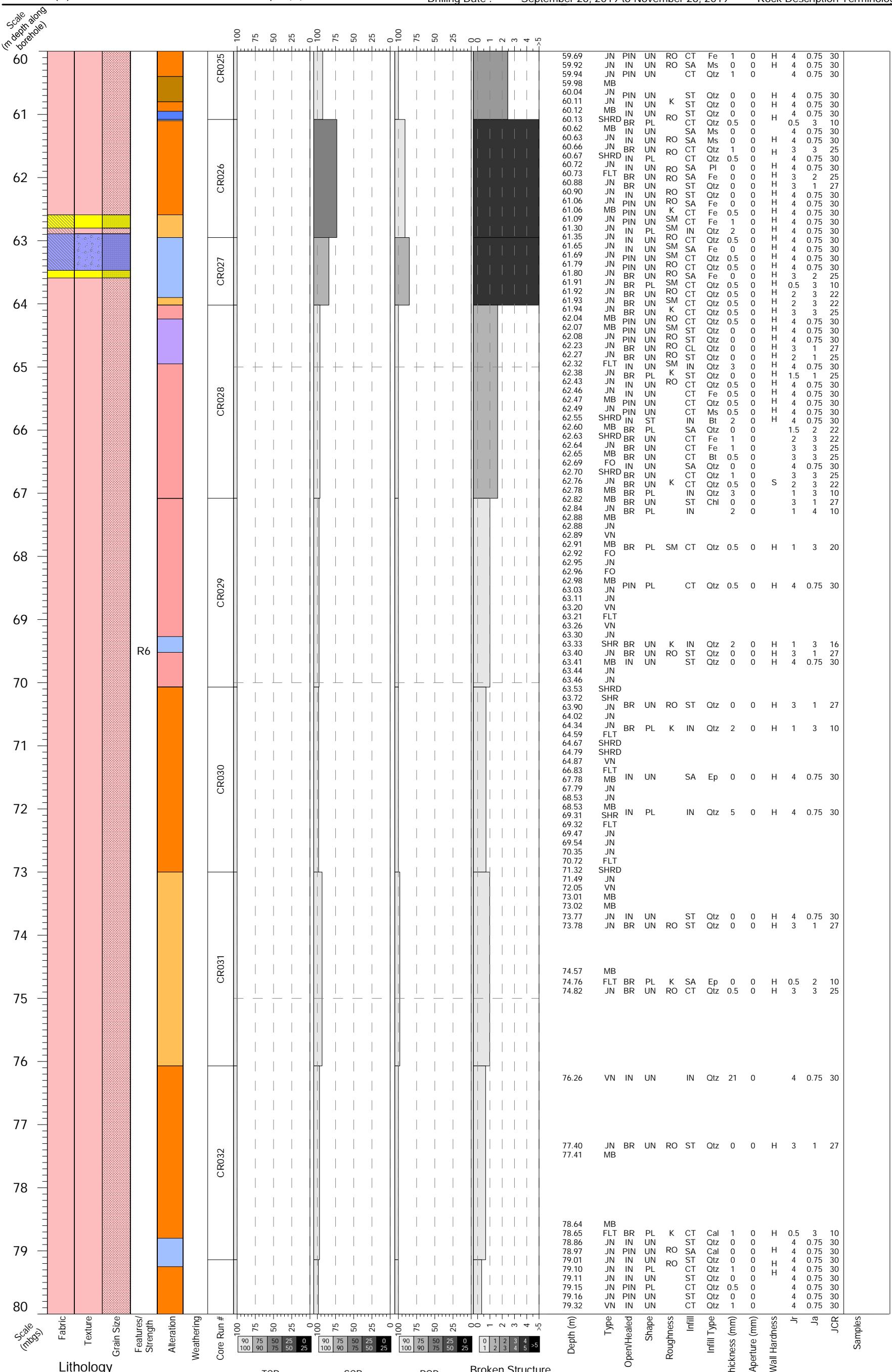
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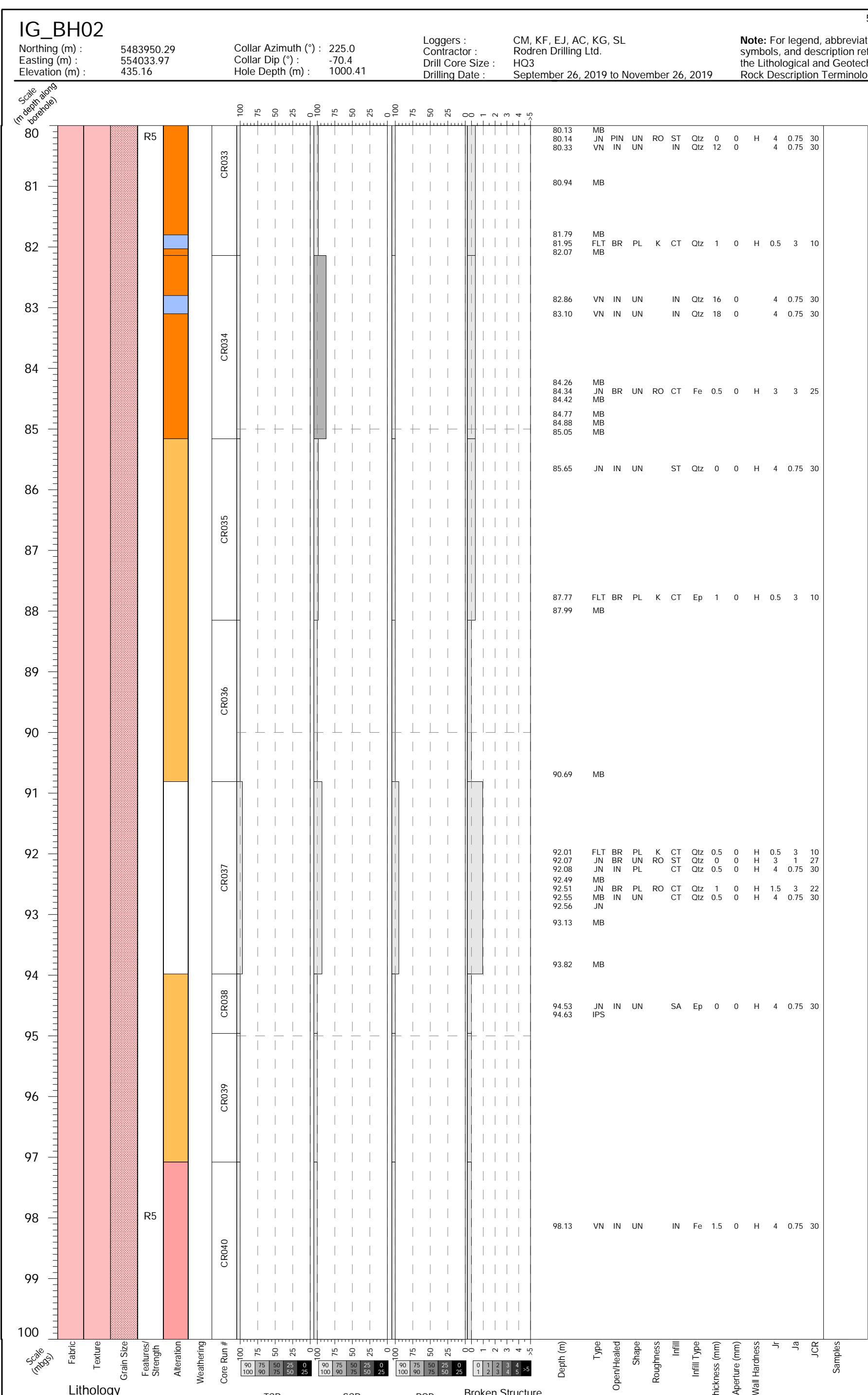
Northing (m) : 5483950.29  
 Easting (m) : 554033.97  
 Elevation (m) : 435.16

Collar Azimuth (°) : 225.0  
 Collar Dip (°) : -70.4  
 Hole Depth (m) : 1000.41

Loggers : CM, KF, EJ, AC, KG, SL  
 Contractor : Rodren Drilling Ltd.  
 Drill Core Size : HQ3  
 Drilling Date : September 26, 2019 to November 26, 2019

Note: For legend, abbreviations, symbols, and description refer to the Lithological and Geotechnical Rock Description Terminology.





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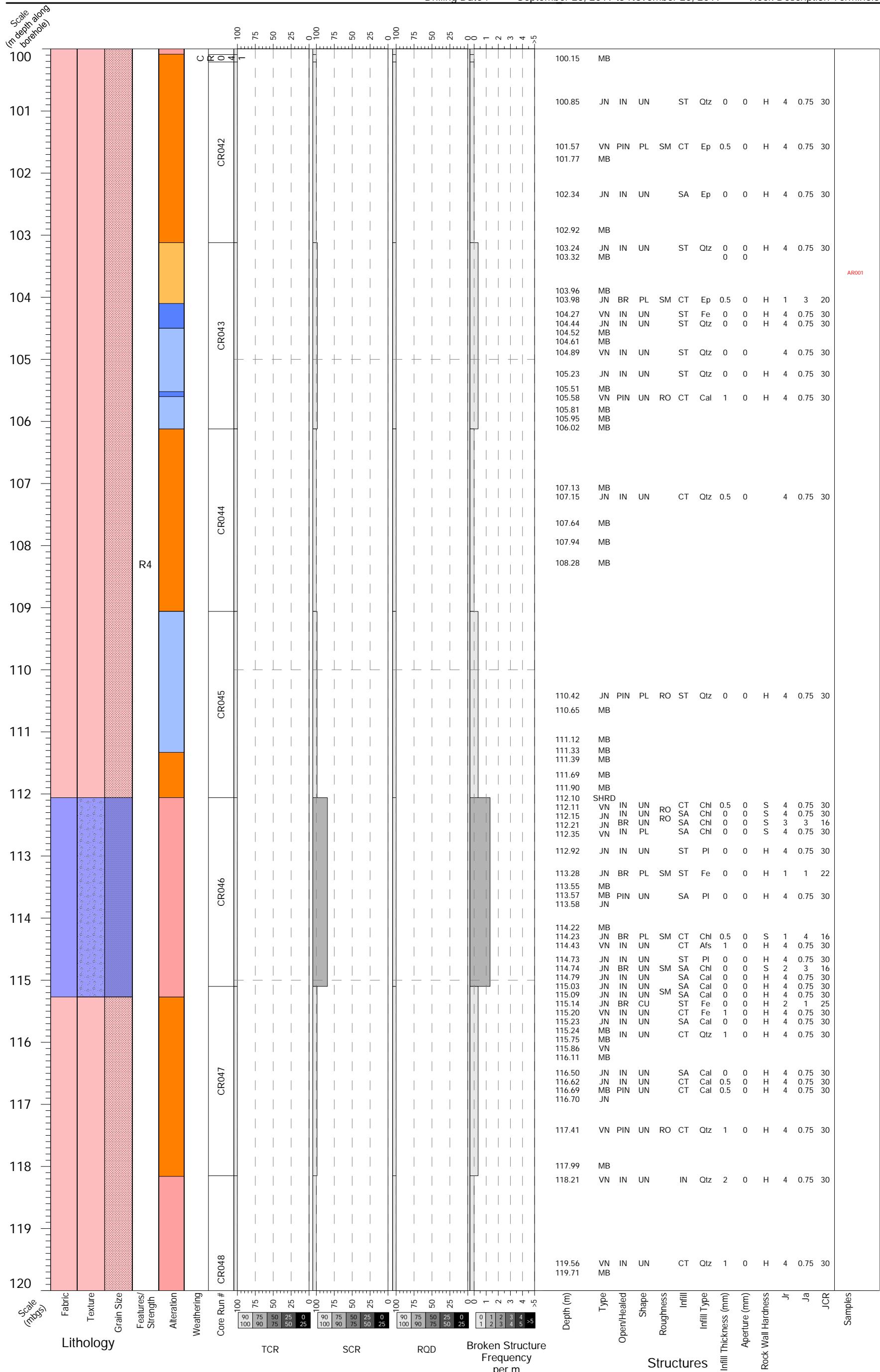
## IG\_BH02

Northing (m) : 5483950.29  
 Easting (m) : 554033.97  
 Elevation (m) : 435.16

Collar Azimuth (°) : 225.0  
 Collar Dip (°) : -70.4  
 Hole Depth (m) : 1000.41

Loggers : CM, KF, EJ, AC, KG, SL  
 Contractor : Rodren Drilling Ltd.  
 Drill Core Size : HQ3  
 Drilling Date : September 26, 2019 to November 26, 2019

Note: For legend, abbreviations, symbols, and description refer to the Lithological and Geotechnical Rock Description Terminology.



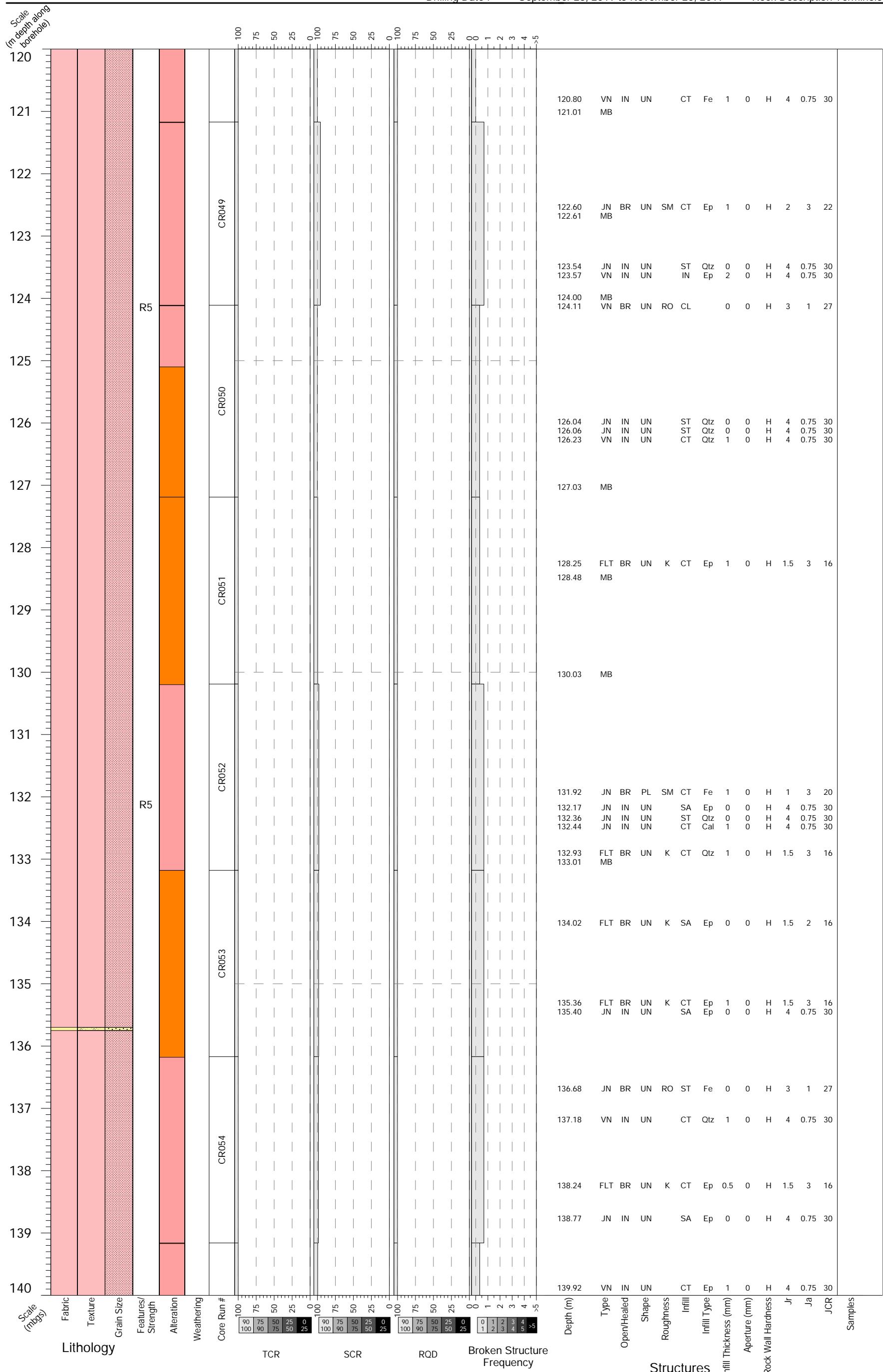
## IG\_BH02

Northing (m) : 5483950.29  
 Easting (m) : 554033.97  
 Elevation (m) : 435.16

Collar Azimuth (°) : 225.0  
 Collar Dip (°) : -70.4  
 Hole Depth (m) : 1000.41

Loggers : CM, KF, EJ, AC, KG, SL  
 Contractor : Rodren Drilling Ltd.  
 Drill Core Size : HQ3  
 Drilling Date : September 26, 2019 to November 26, 2019

**Note:** For legend, abbreviations, symbols, and description refer to the Lithological and Geotechnical Rock Description Terminology.



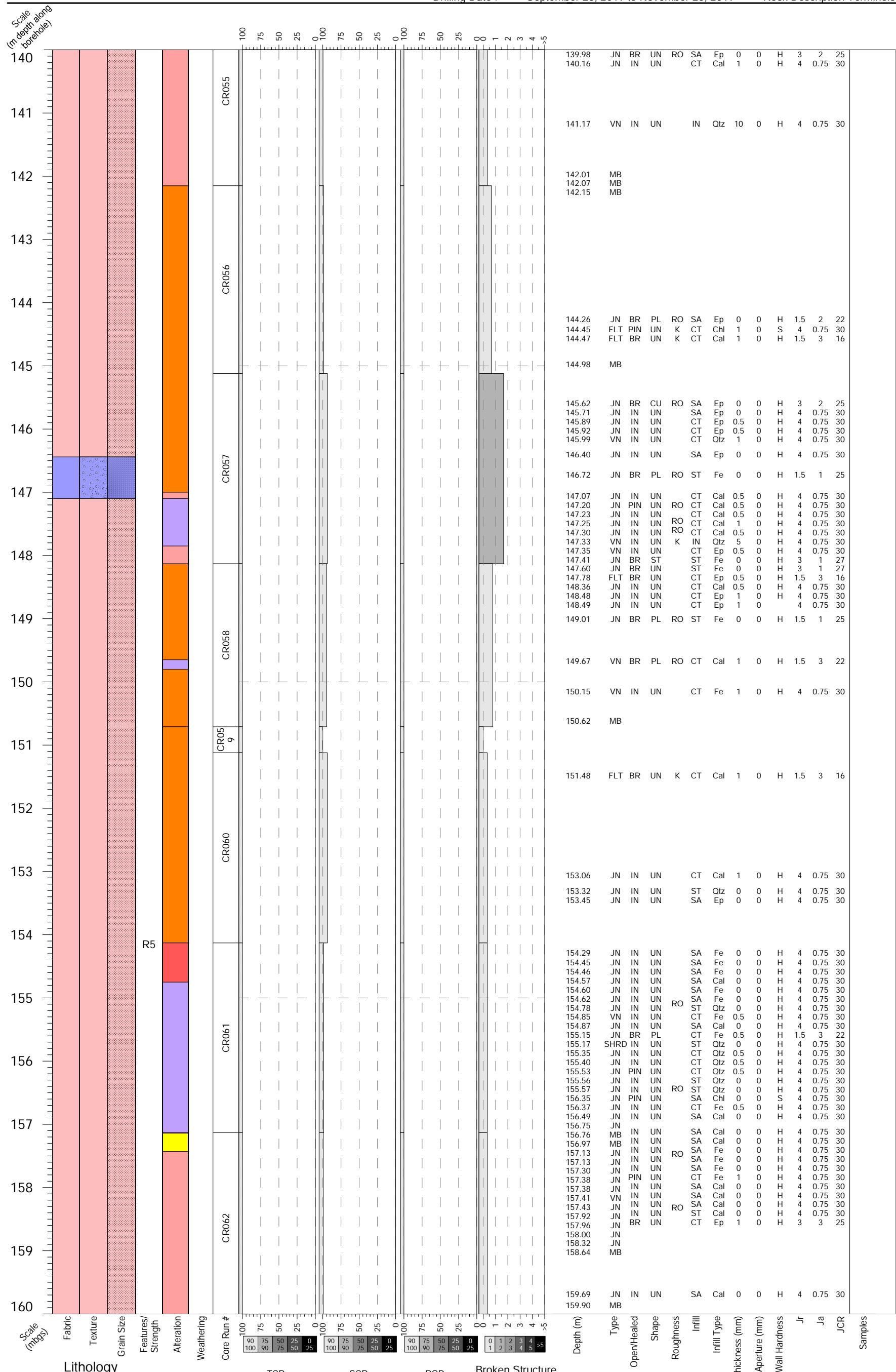
## IG\_BH02

Northing (m) : 5483950.29  
 Easting (m) : 554033.97  
 Elevation (m) : 435.16

Collar Azimuth (°) : 225.0  
 Collar Dip (°) : -70.4  
 Hole Depth (m) : 1000.41

Loggers : CM, KF, EJ, AC, KG, SL  
 Contractor : Rodren Drilling Ltd.  
 Drill Core Size : HQ3  
 Drilling Date : September 26, 2019 to November 26, 2019

Note: For legend, abbreviations, symbols, and description refer to the Lithological and Geotechnical Rock Description Terminology.



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CLIENT

NWMO Ignace Drilling  
 Record of Core Logging

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DRAWN/REV

KF/CM

PROJECT NO.

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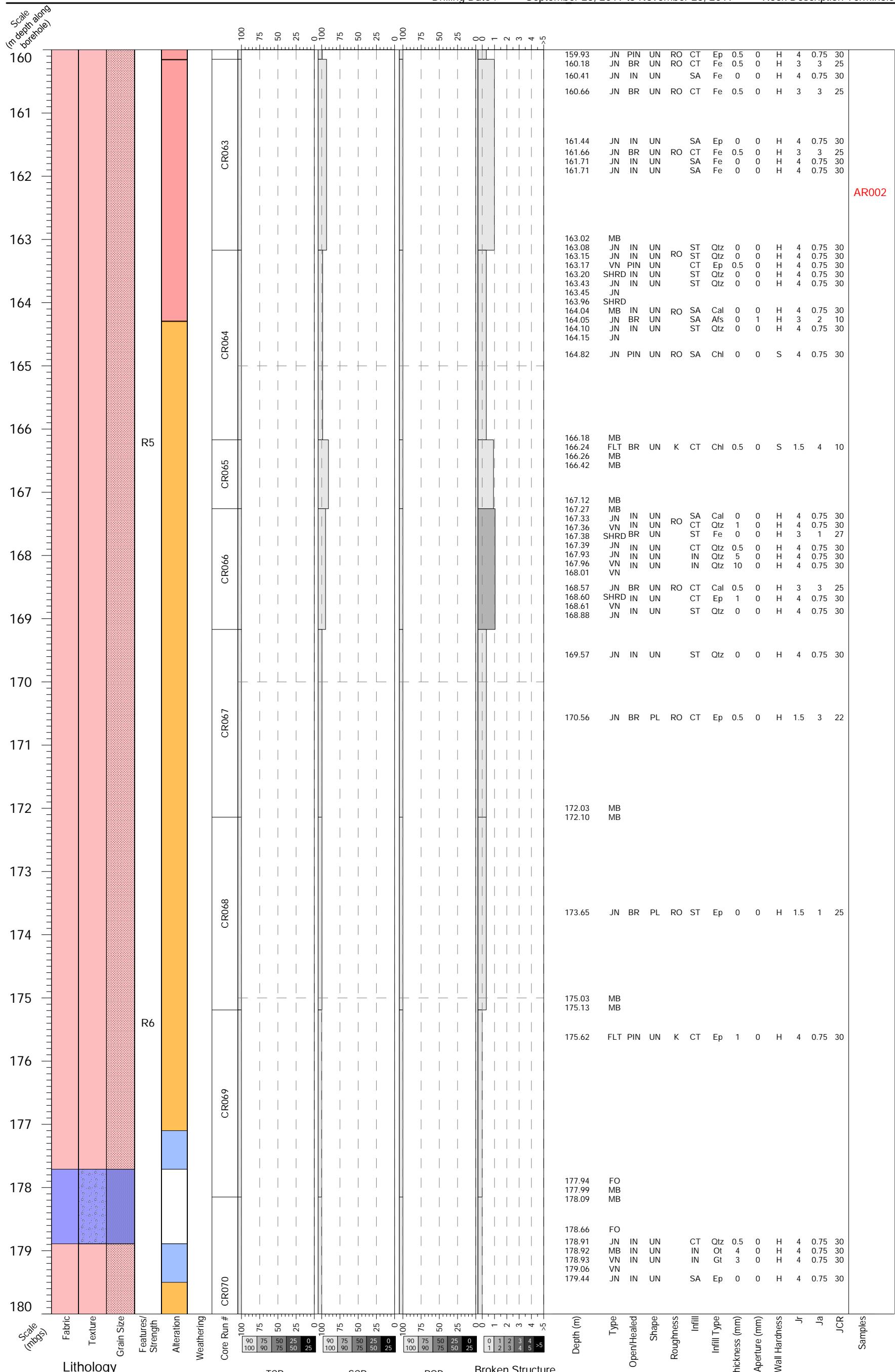
## IG\_BH02

Northing (m) : 5483950.29  
 Easting (m) : 554033.97  
 Elevation (m) : 435.16

Collar Azimuth (°) : 225.0  
 Collar Dip (°) : -70.4  
 Hole Depth (m) : 1000.41

Loggers : CM, KF, EJ, AC, KG, SL  
 Contractor : Rodren Drilling Ltd.  
 Drill Core Size : HQ3  
 Drilling Date : September 26, 2019 to November 26, 2019

Note: For legend, abbreviations, symbols, and description refer to the Lithological and Geotechnical Rock Description Terminology.



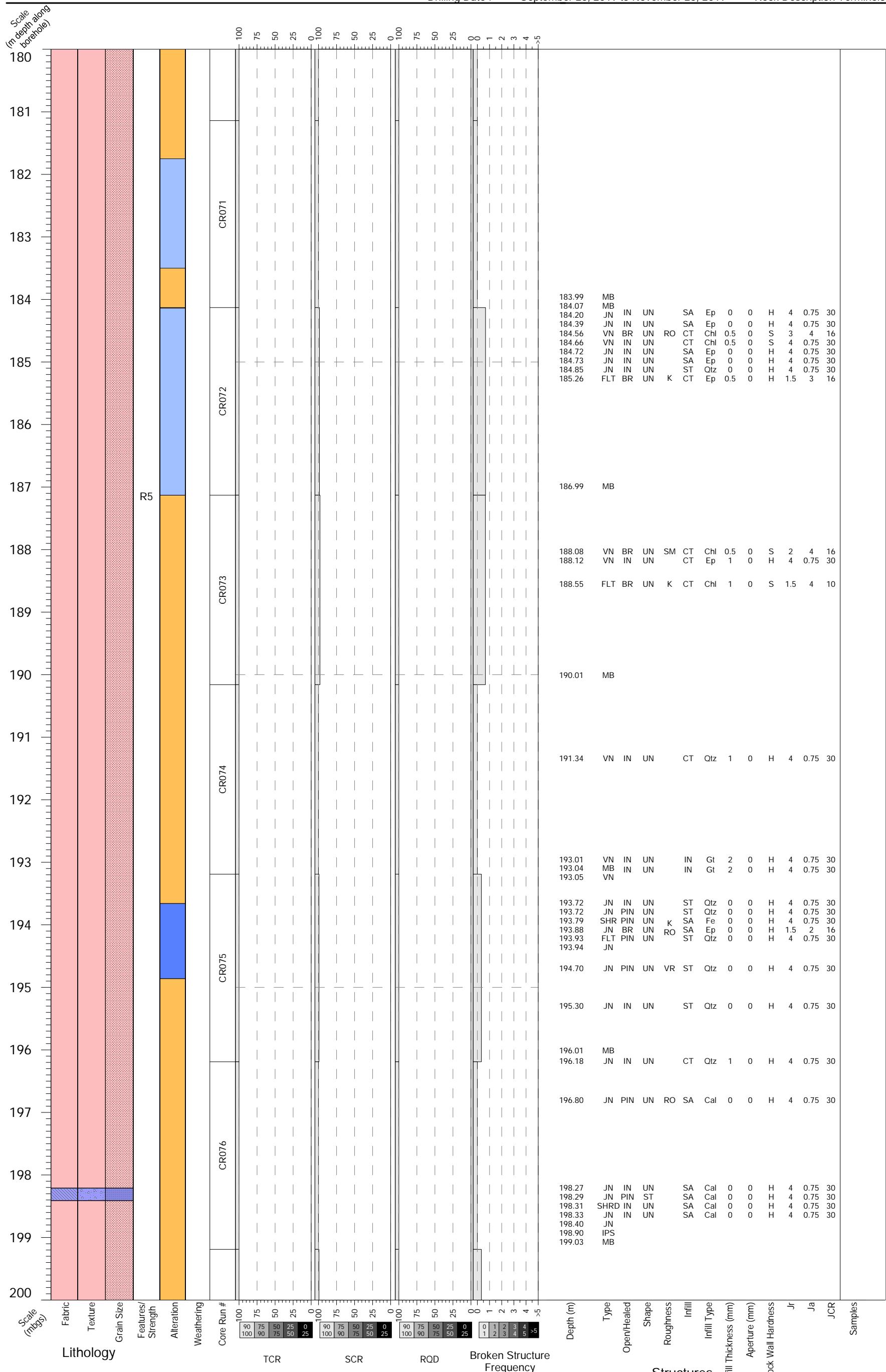
## IG\_BH02

Northing (m) : 5483950.29  
 Easting (m) : 554033.97  
 Elevation (m) : 435.16

Collar Azimuth (°) : 225.0  
 Collar Dip (°) : -70.4  
 Hole Depth (m) : 1000.41

Loggers : CM, KF, EJ, AC, KG, SL  
 Contractor : Rodren Drilling Ltd.  
 Drill Core Size : HQ3  
 Drilling Date : September 26, 2019 to November 26, 2019

**Note:** For legend, abbreviations, symbols, and description refer to the Lithological and Geotechnical Rock Description Terminology.



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NWMO Ignace Drilling

TITLE

Record of Core Logging

YYYY-MM-DD

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DRAWN/REV

KF/CM

PROJECT NO.

1671632A (3301)

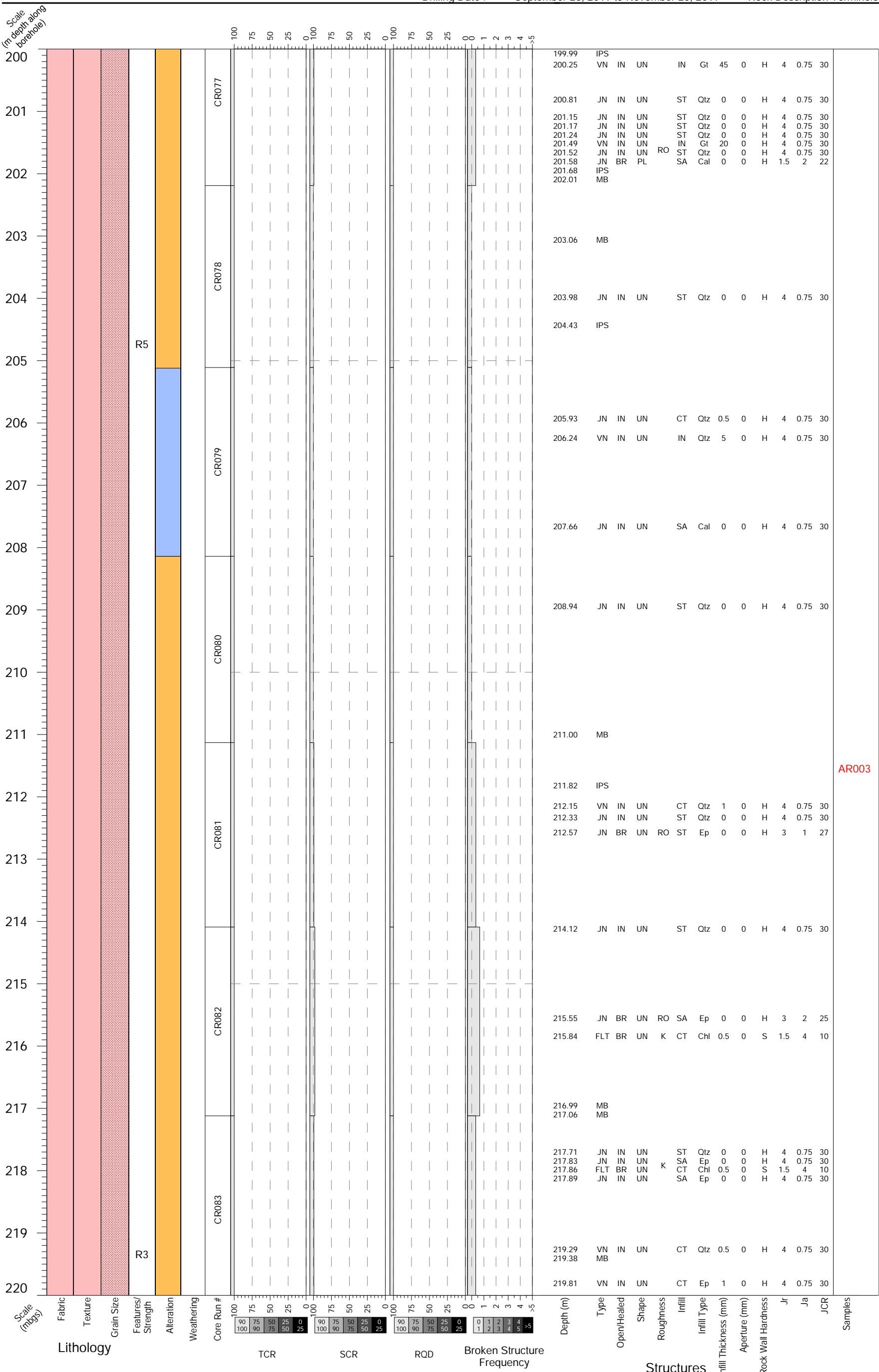
## IG\_BH02

Northing (m) : 5483950.29  
 Easting (m) : 554033.97  
 Elevation (m) : 435.16

Collar Azimuth (°) : 225.0  
 Collar Dip (°) : -70.4  
 Hole Depth (m) : 1000.41

Loggers : CM, KF, EJ, AC, KG, SL  
 Contractor : Rodren Drilling Ltd.  
 Drill Core Size : HQ3  
 Drilling Date : September 26, 2019 to November 26, 2019

**Note:** For legend, abbreviations, symbols, and description refer to the Lithological and Geotechnical Rock Description Terminology.



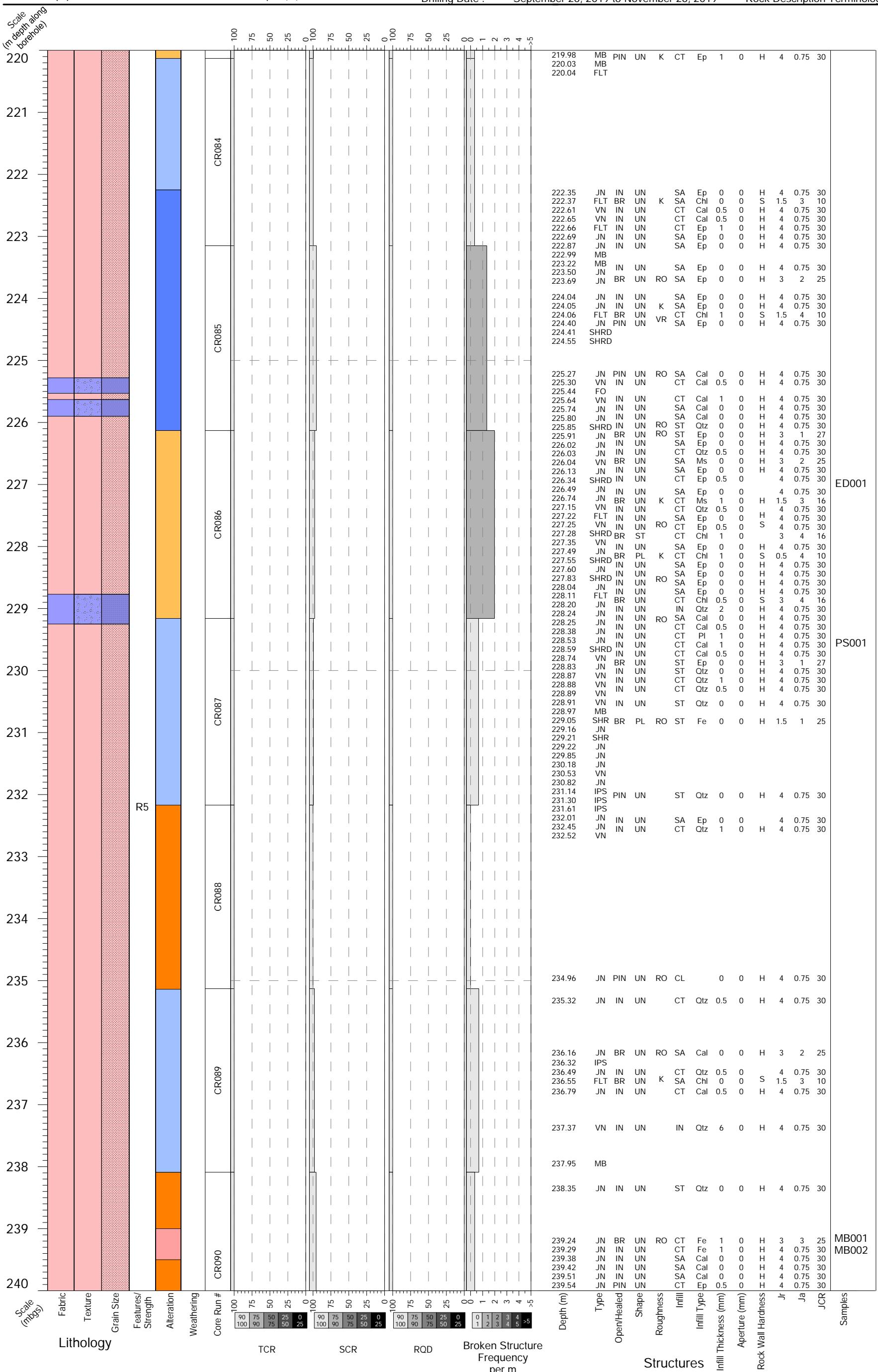
IG\_BH02

Northing (m) : 5483950.29  
Easting (m) : 554033.97  
Elevation (m) : 435.16

Collar Azimuth (°) : 225.0  
Collar Dip (°) : -70.4  
Hole Depth (m) : 1000.41

Loggers : CM, KF, EJ, AC, KG, SL  
Contractor : Rodren Drilling Ltd.  
Drill Core Size : HQ3  
Drilling Date : September 26, 2019 to N

**Note:** For legend, abbreviations, symbols, and description refer to the Lithological and Geotechnical Rock Description Terminology.



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CONSULTANT



GOLDEN

CLIENT

**CLIENT**  
**NWMO Ignace Drilling**  
**TITLE**

YYYY-MM-DD

2020-09-02

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DRAWN/REV

KF/CM

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PROJECT NO.

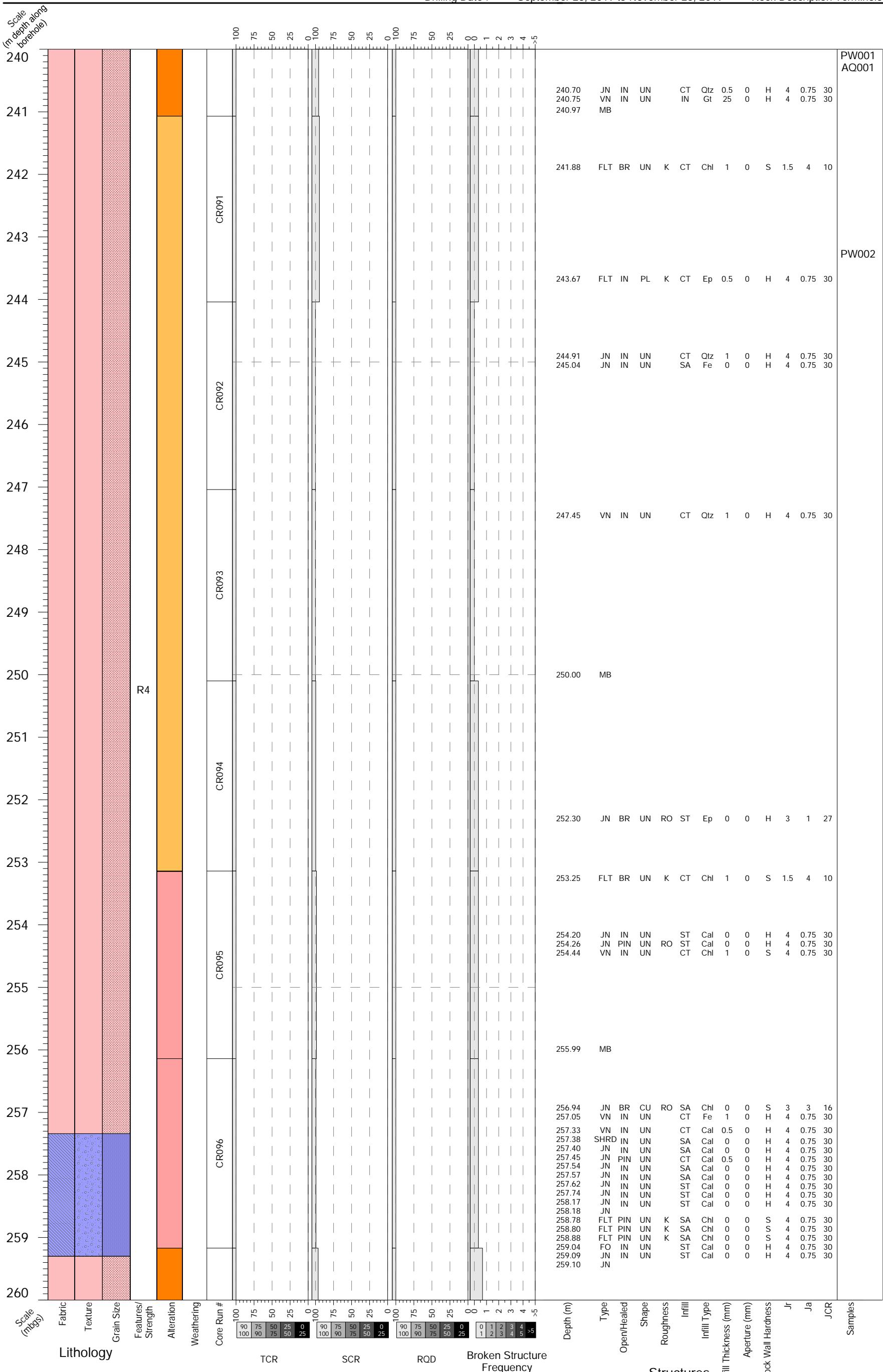
## IG\_BH02

Northing (m) : 5483950.29  
 Easting (m) : 554033.97  
 Elevation (m) : 435.16

Collar Azimuth (°) : 225.0  
 Collar Dip (°) : -70.4  
 Hole Depth (m) : 1000.41

Loggers : CM, KF, EJ, AC, KG, SL  
 Contractor : Rodren Drilling Ltd.  
 Drill Core Size : HQ3  
 Drilling Date : September 26, 2019 to November 26, 2019

**Note:** For legend, abbreviations, symbols, and description refer to the Lithological and Geotechnical Rock Description Terminology.



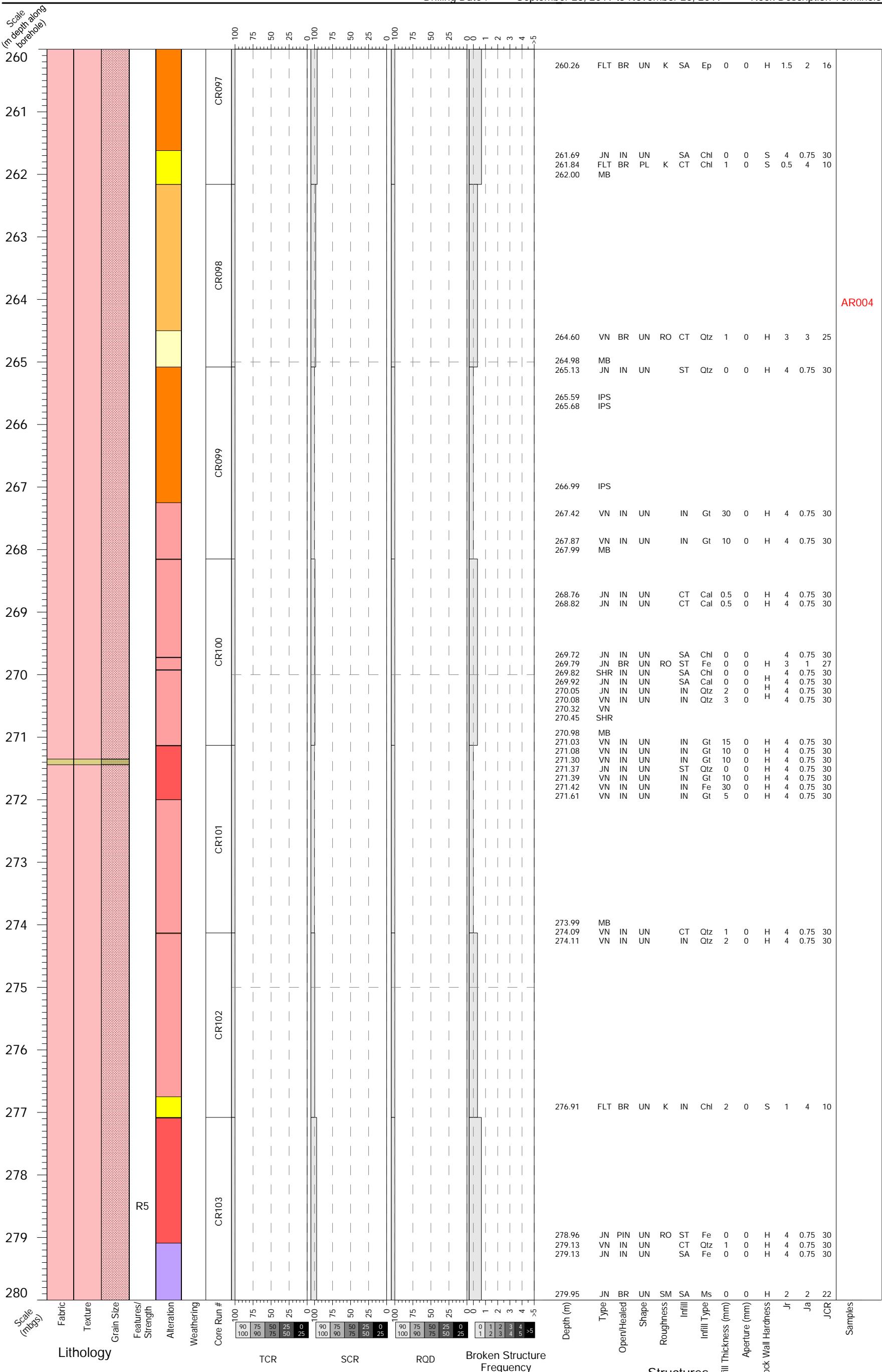
## IG\_BH02

Northing (m) : 5483950.29  
 Easting (m) : 554033.97  
 Elevation (m) : 435.16

Collar Azimuth (°) : 225.0  
 Collar Dip (°) : -70.4  
 Hole Depth (m) : 1000.41

Loggers : CM, KF, EJ, AC, KG, SL  
 Contractor : Rodren Drilling Ltd.  
 Drill Core Size : HQ3  
 Drilling Date : September 26, 2019 to November 26, 2019

**Note:** For legend, abbreviations, symbols, and description refer to the Lithological and Geotechnical Rock Description Terminology.



CONSULTANT	CLIENT	DD
 GOLDER	NWMO Ignace Drilling	2020-09-22
	TITLE	DRAWN/REV
	Record of Core Logging	KF/CM
		PROJECT NO.
		1671632A (3301)

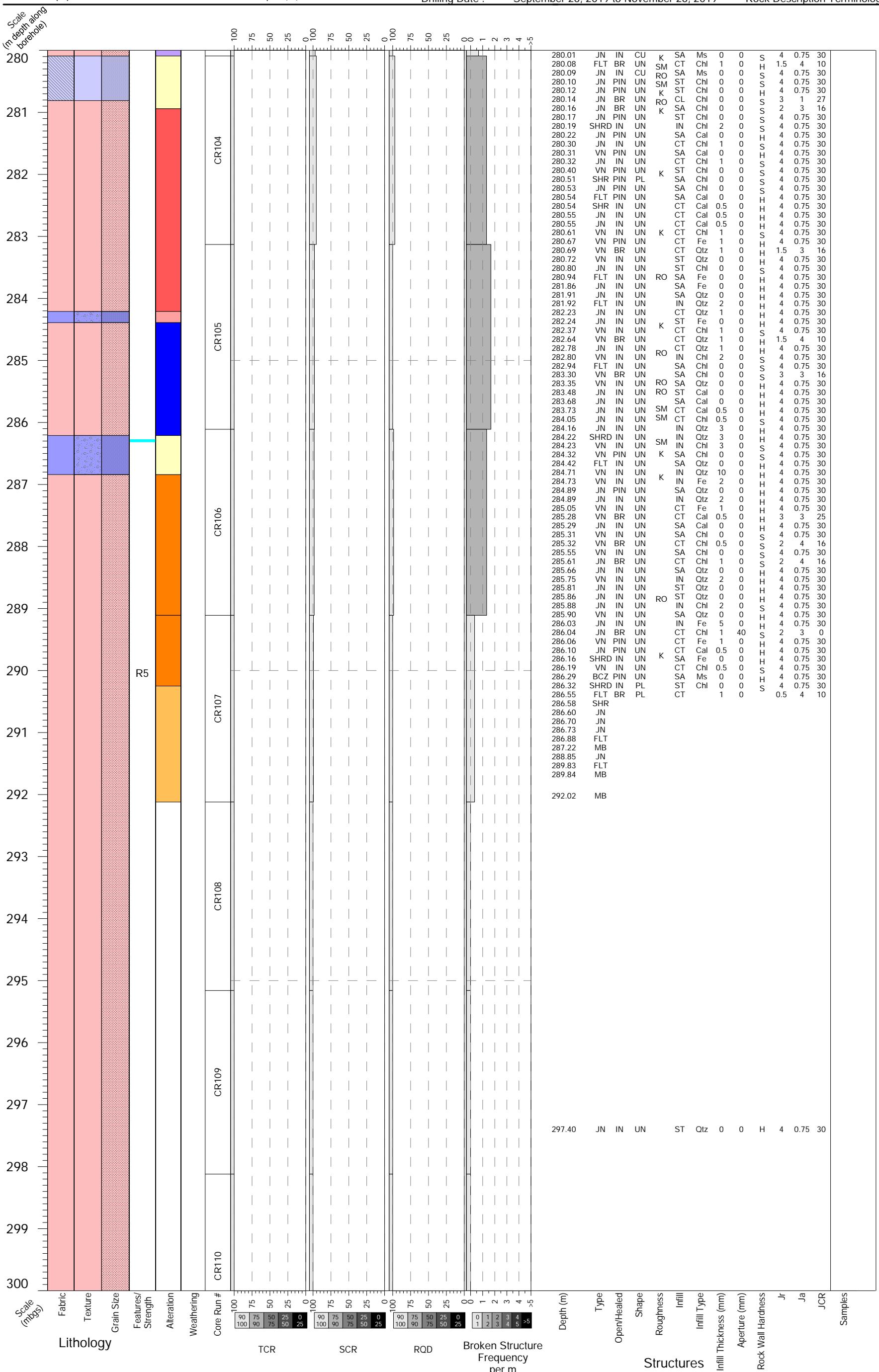
IG\_BH02

Northing (m) : 5483950.29  
Easting (m) : 554033.97  
Elevation (m) : 435.16

Collar Azimuth (°) : 225.0  
Collar Dip (°) : -70.4  
Hole Depth (m) : 1000.41

Loggers : CM, KF, EJ, AC, KG, SL  
Contractor : Rodren Drilling Ltd.  
Drill Core Size : HQ3  
Drilling Date : September 26, 2019 to N

**Note:** For legend, abbreviations, symbols, and description refer to the Lithological and Geotechnical Rock Description Terminology.



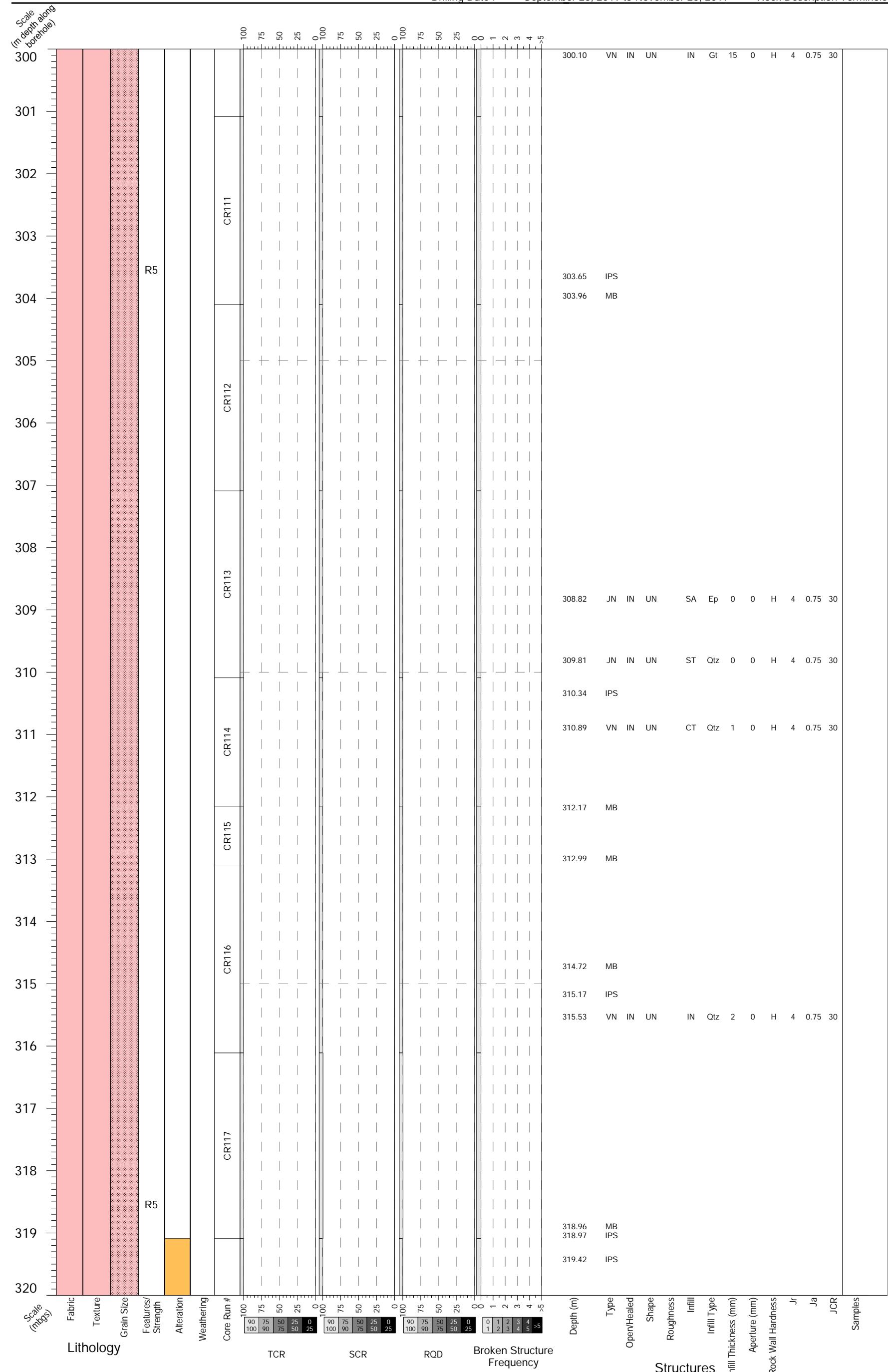
## IG\_BH02

Northing (m) : 5483950.29  
 Easting (m) : 554033.97  
 Elevation (m) : 435.16

Collar Azimuth (°) : 225.0  
 Collar Dip (°) : -70.4  
 Hole Depth (m) : 1000.41

Loggers : CM, KF, EJ, AC, KG, SL  
 Contractor : Rodren Drilling Ltd.  
 Drill Core Size : HQ3  
 Drilling Date : September 26, 2019 to November 26, 2019

**Note:** For legend, abbreviations, symbols, and description refer to the Lithological and Geotechnical Rock Description Terminology.



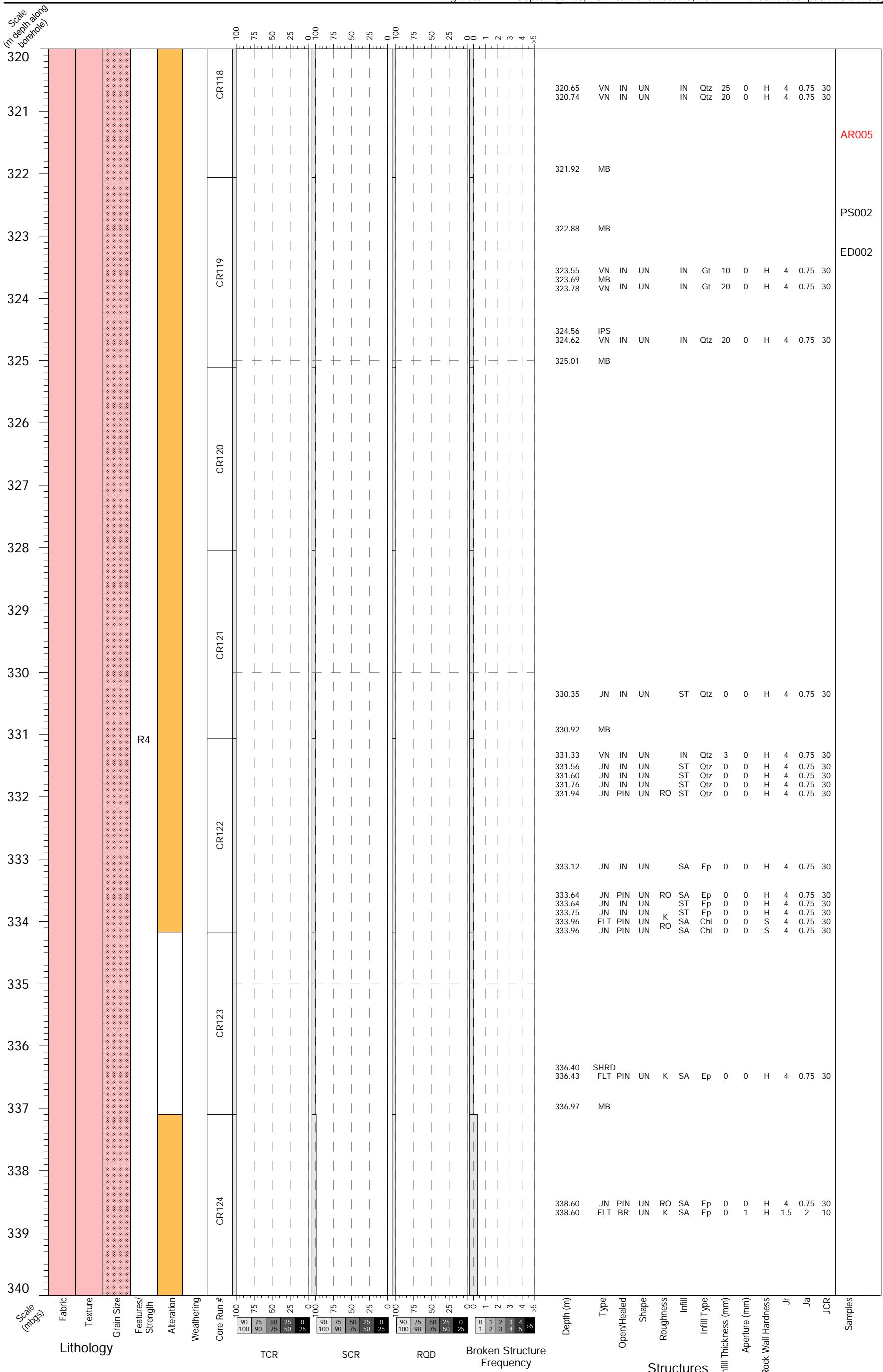
IG\_BH02

Northing (m) : 5483950.29  
Easting (m) : 554033.97  
Elevation (m) : 435.16

Collar Azimuth (°) : 225.0  
Collar Dip (°) : -70.4  
Hole Depth (m) : 1000.41

Loggers : CM, KF, EJ, AC, KG, SL  
Contractor : Rodren Drilling Ltd.  
Drill Core Size : HQ3  
Drilling Date : September 26, 2019 to N

**Note:** For legend, abbreviations, symbols, and description refer to the Lithological and Geotechnical Rock Description Terminology.



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CLIENT  
NWMO Ignite Drilling

## NWMO Ignace Drilling

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DRAWN/REV

KF/CM

PROJECT NO.

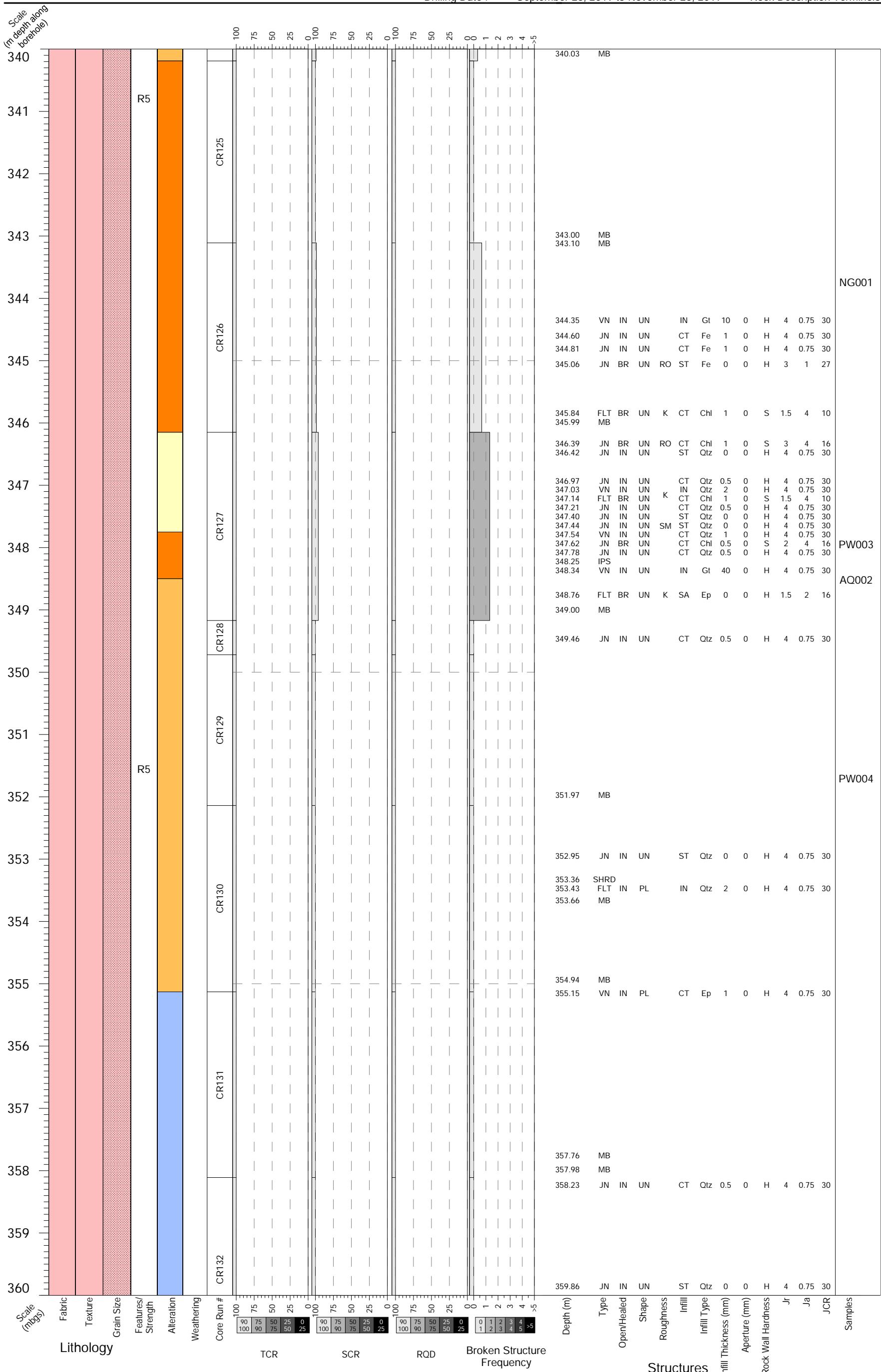
## IG\_BH02

Northing (m) : 5483950.29  
 Easting (m) : 554033.97  
 Elevation (m) : 435.16

Collar Azimuth (°) : 225.0  
 Collar Dip (°) : -70.4  
 Hole Depth (m) : 1000.41

Loggers : CM, KF, EJ, AC, KG, SL  
 Contractor : Rodren Drilling Ltd.  
 Drill Core Size : HQ3  
 Drilling Date : September 26, 2019 to November 26, 2019

**Note:** For legend, abbreviations, symbols, and description refer to the Lithological and Geotechnical Rock Description Terminology.



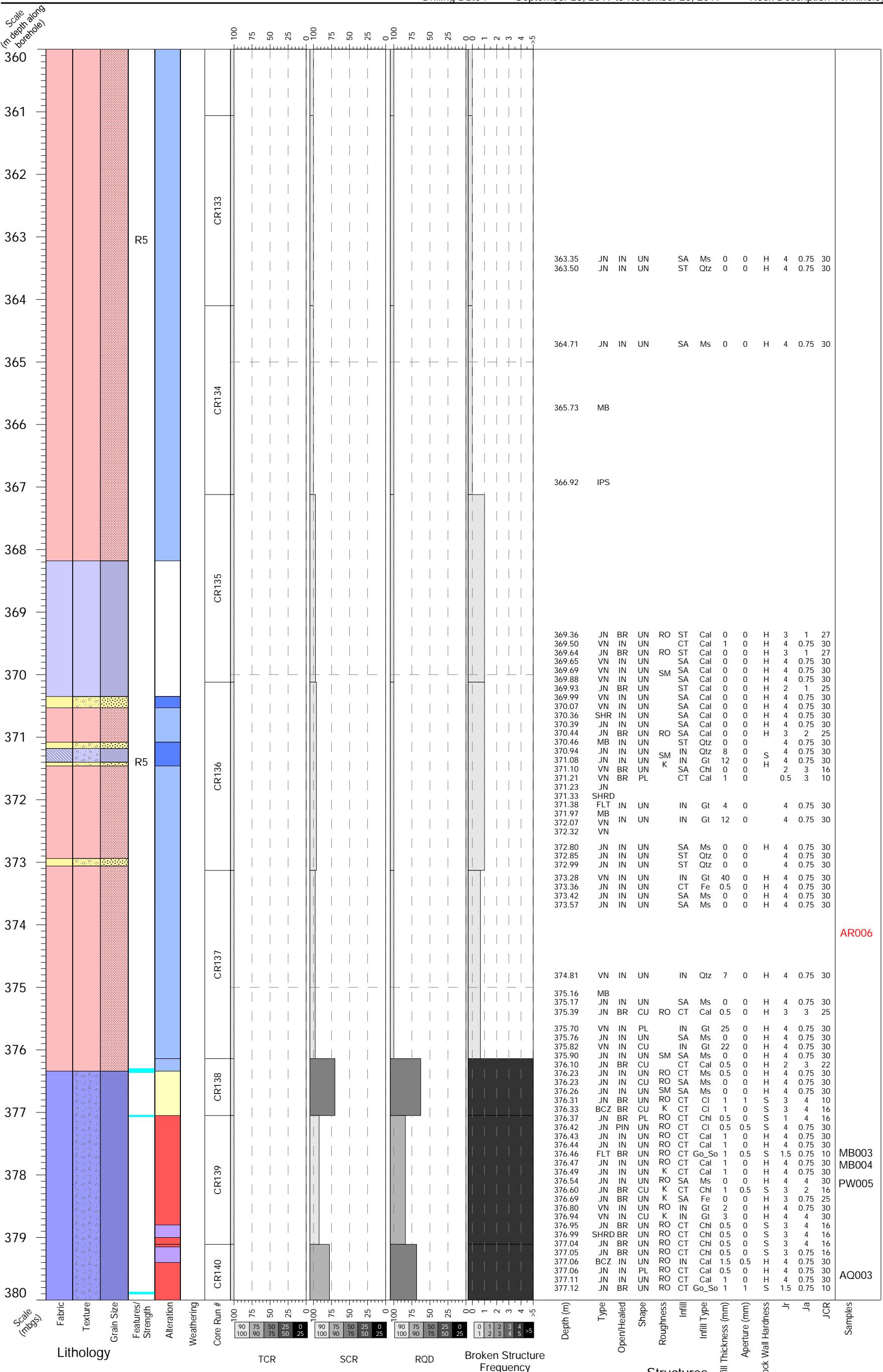
## IG\_BH02

Northing (m) : 5483950.29  
 Easting (m) : 554033.97  
 Elevation (m) : 435.16

Collar Azimuth (°) : 225.0  
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Loggers : CM, KF, EJ, AC, KG, SL  
 Contractor : Rodren Drilling Ltd.  
 Drill Core Size : HQ3  
 Drilling Date : September 26, 2019 to November 26, 2019

**Note:** For legend, abbreviations, symbols, and description refer to the Lithological and Geotechnical Rock Description Terminology.



CONSULTANT	CLIENT	PROJECT NO.
 GOLDER	NWMO Ignace Drilling Record of Core Logging	1671632A (3301)

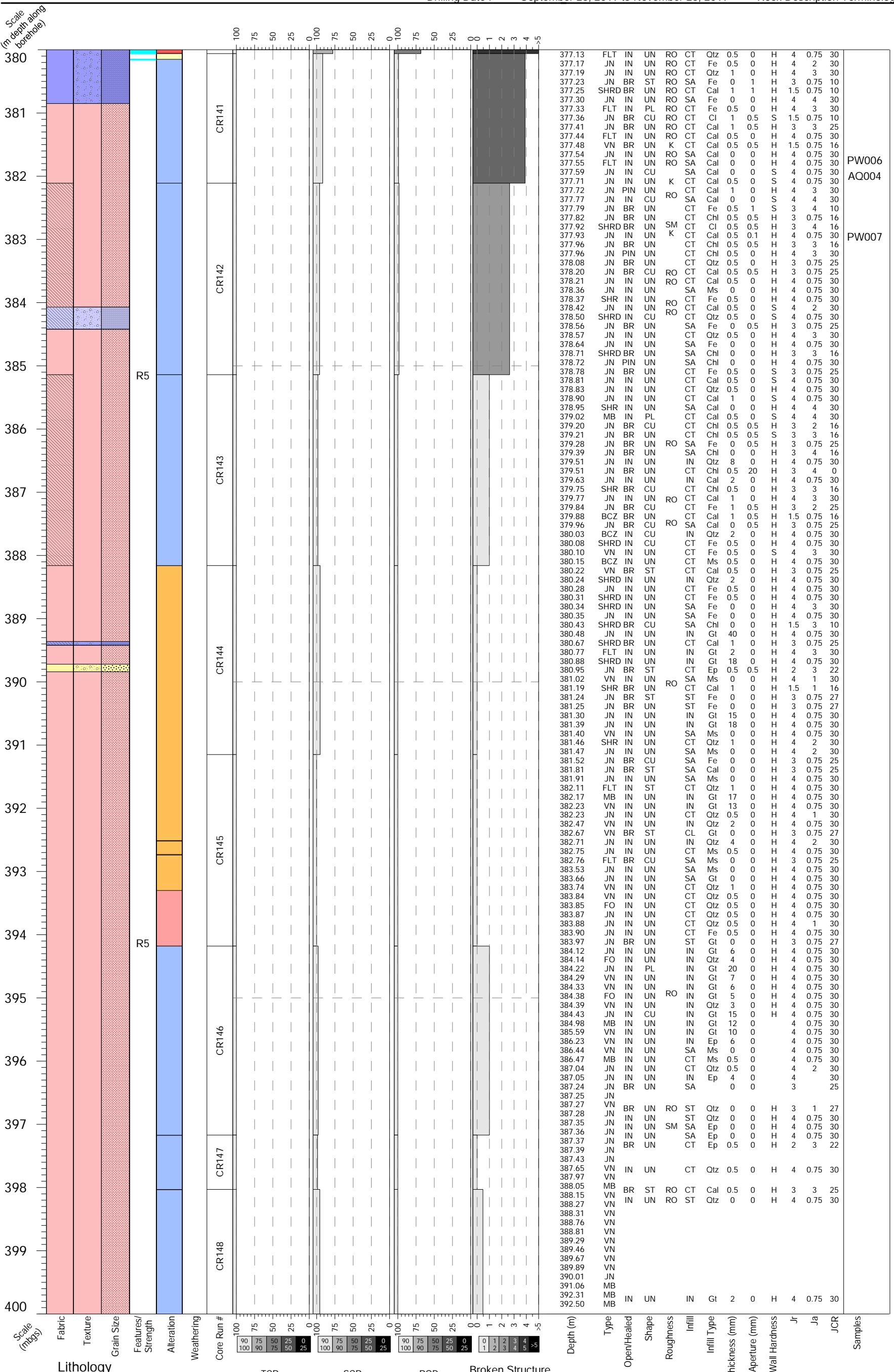
## IG\_BH02

Northing (m) : 5483950.29  
 Easting (m) : 554033.97  
 Elevation (m) : 435.16

Collar Azimuth (°) : 225.0  
 Collar Dip (°) : -70.4  
 Hole Depth (m) : 1000.41

Loggers : CM, KF, EJ, AC, KG, SL  
 Contractor : Rodren Drilling Ltd.  
 Drill Core Size : HQ3  
 Drilling Date : September 26, 2019 to November 26, 2019

Note: For legend, abbreviations, symbols, and description refer to the Lithological and Geotechnical Rock Description Terminology.





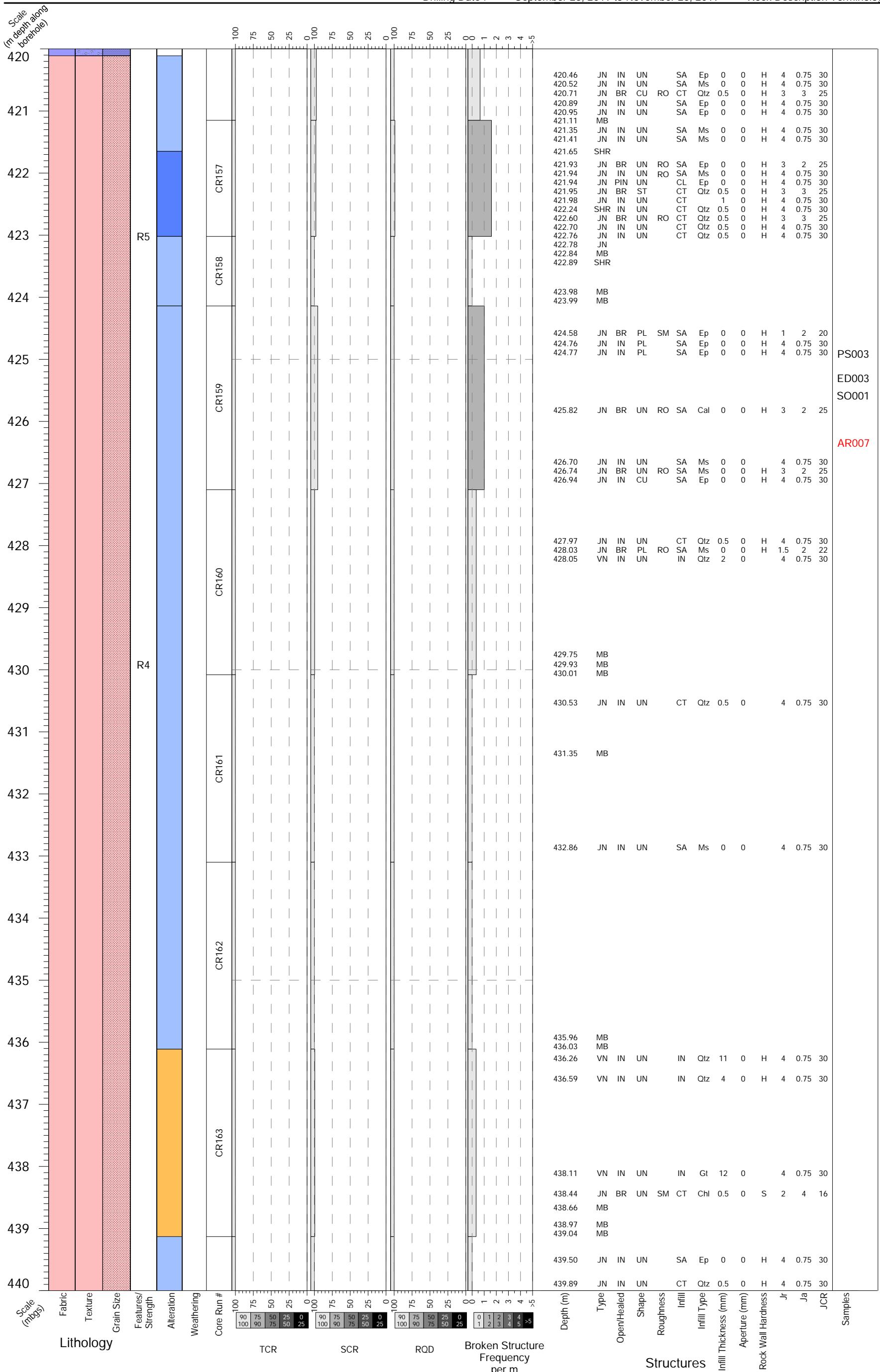
## IG\_BH02

Northing (m) : 5483950.29  
 Easting (m) : 554033.97  
 Elevation (m) : 435.16

Collar Azimuth (°) : 225.0  
 Collar Dip (°) : -70.4  
 Hole Depth (m) : 1000.41

Loggers : CM, KF, EJ, AC, KG, SL  
 Contractor : Rodren Drilling Ltd.  
 Drill Core Size : HQ3  
 Drilling Date : September 26, 2019 to November 26, 2019

**Note:** For legend, abbreviations, symbols, and description refer to the Lithological and Geotechnical Rock Description Terminology.



CONSULTANT



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NWMO Ignace Drilling

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Record of Core Logging

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DRAWN/REV

KF/CM

PROJECT NO.

1671632A (3301)

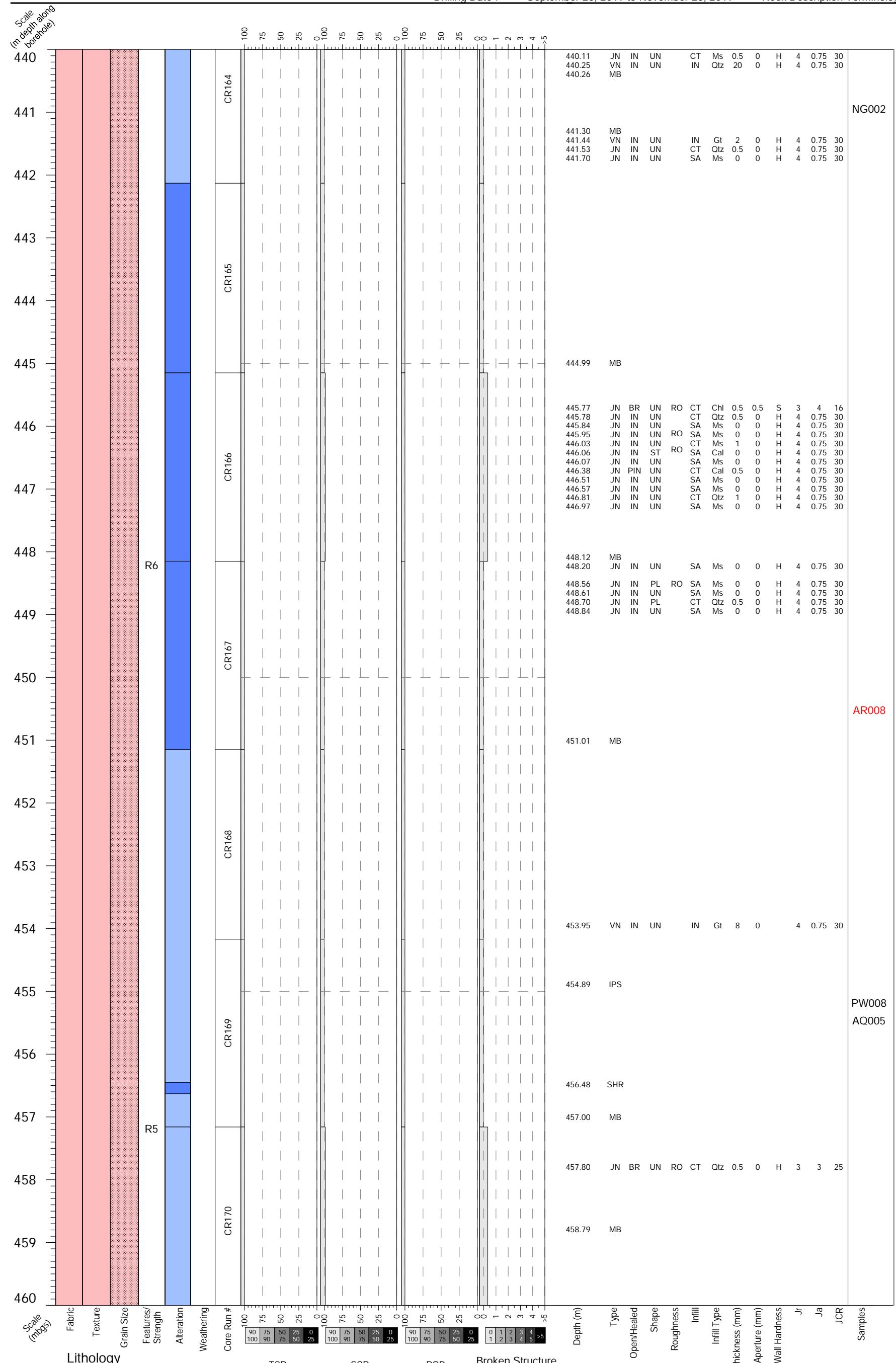
## IG\_BH02

Northing (m) : 5483950.29  
 Easting (m) : 554033.97  
 Elevation (m) : 435.16

Collar Azimuth (°) : 225.0  
 Collar Dip (°) : -70.4  
 Hole Depth (m) : 1000.41

Loggers : CM, KF, EJ, AC, KG, SL  
 Contractor : Rodren Drilling Ltd.  
 Drill Core Size : HQ3  
 Drilling Date : September 26, 2019 to November 26, 2019

**Note:** For legend, abbreviations, symbols, and description refer to the Lithological and Geotechnical Rock Description Terminology.



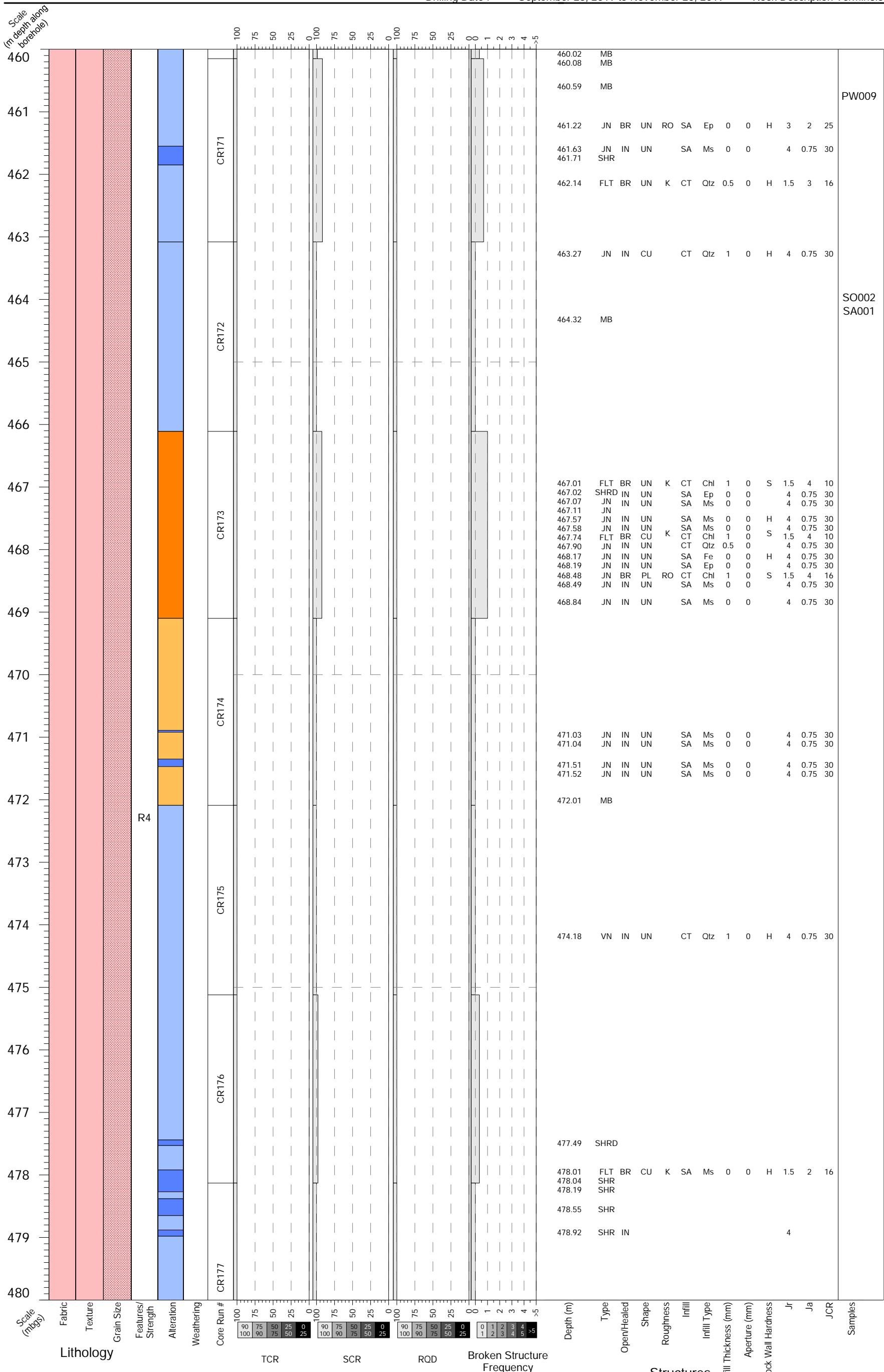
## IG\_BH02

Northing (m) : 5483950.29  
 Easting (m) : 554033.97  
 Elevation (m) : 435.16

Collar Azimuth (°) : 225.0  
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 Hole Depth (m) : 1000.41

Loggers : CM, KF, EJ, AC, KG, SL  
 Contractor : Rodren Drilling Ltd.  
 Drill Core Size : HQ3  
 Drilling Date : September 26, 2019 to November 26, 2019

**Note:** For legend, abbreviations, symbols, and description refer to the Lithological and Geotechnical Rock Description Terminology.



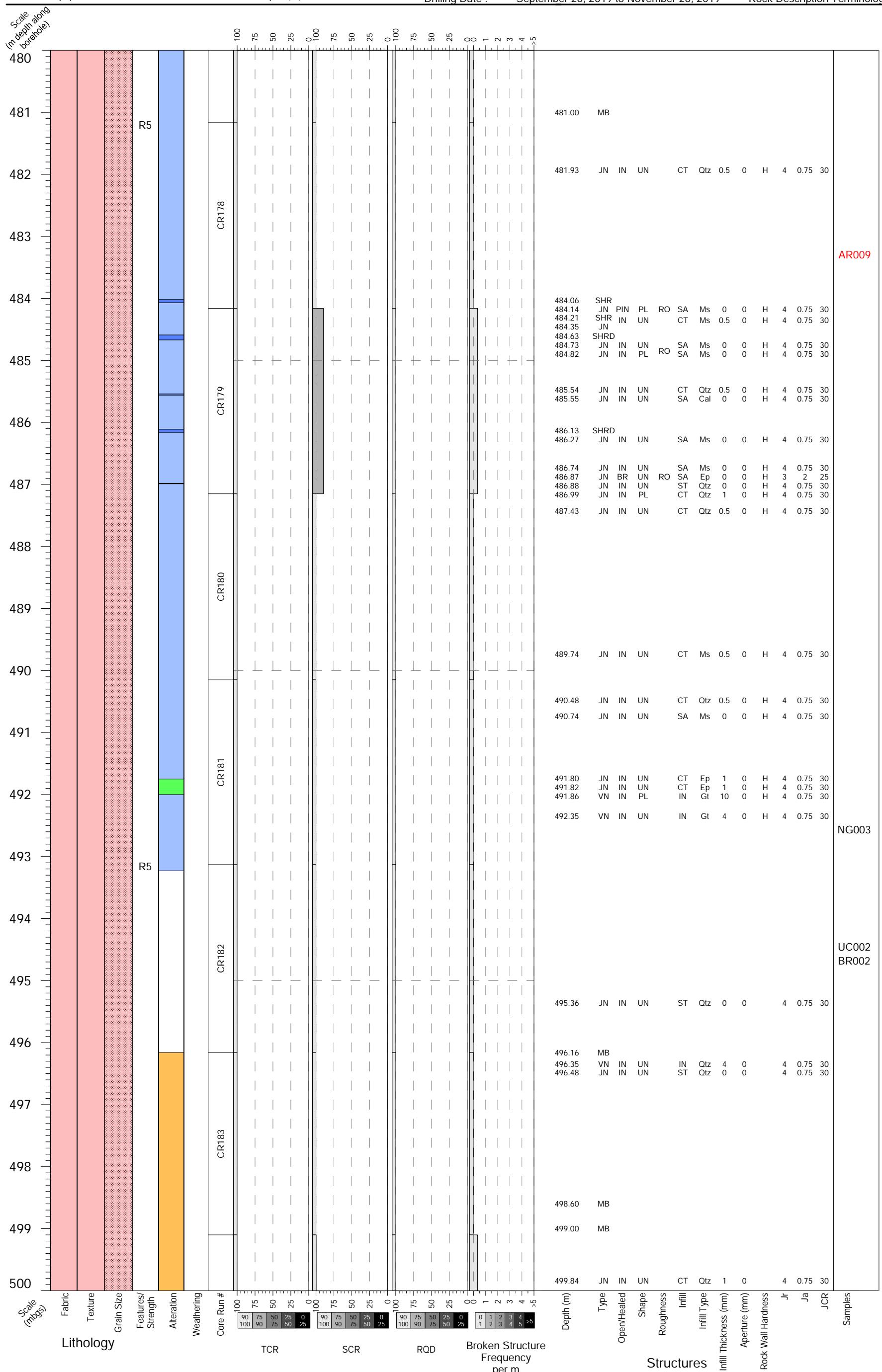
IG\_BH02

Northing (m) : 5483950.29  
Easting (m) : 554033.97  
Elevation (m) : 435.16

Collar Azimuth (°) : 225.0  
 Collar Dip (°) : -70.4  
 Hole Depth (m) : 1000.41

Loggers : CM, KF, EJ, AC, KG, SL  
Contractor : Rodren Drilling Ltd.  
Drill Core Size : HQ3  
Drilling Date : September 26, 2019 to N

**Note:** For legend, abbreviations, symbols, and description refer to the Lithological and Geotechnical Rock Description Terminology.



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NWMO Ignace Drilling

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DRAWN/REV

KF/CM

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PROJECT NO.

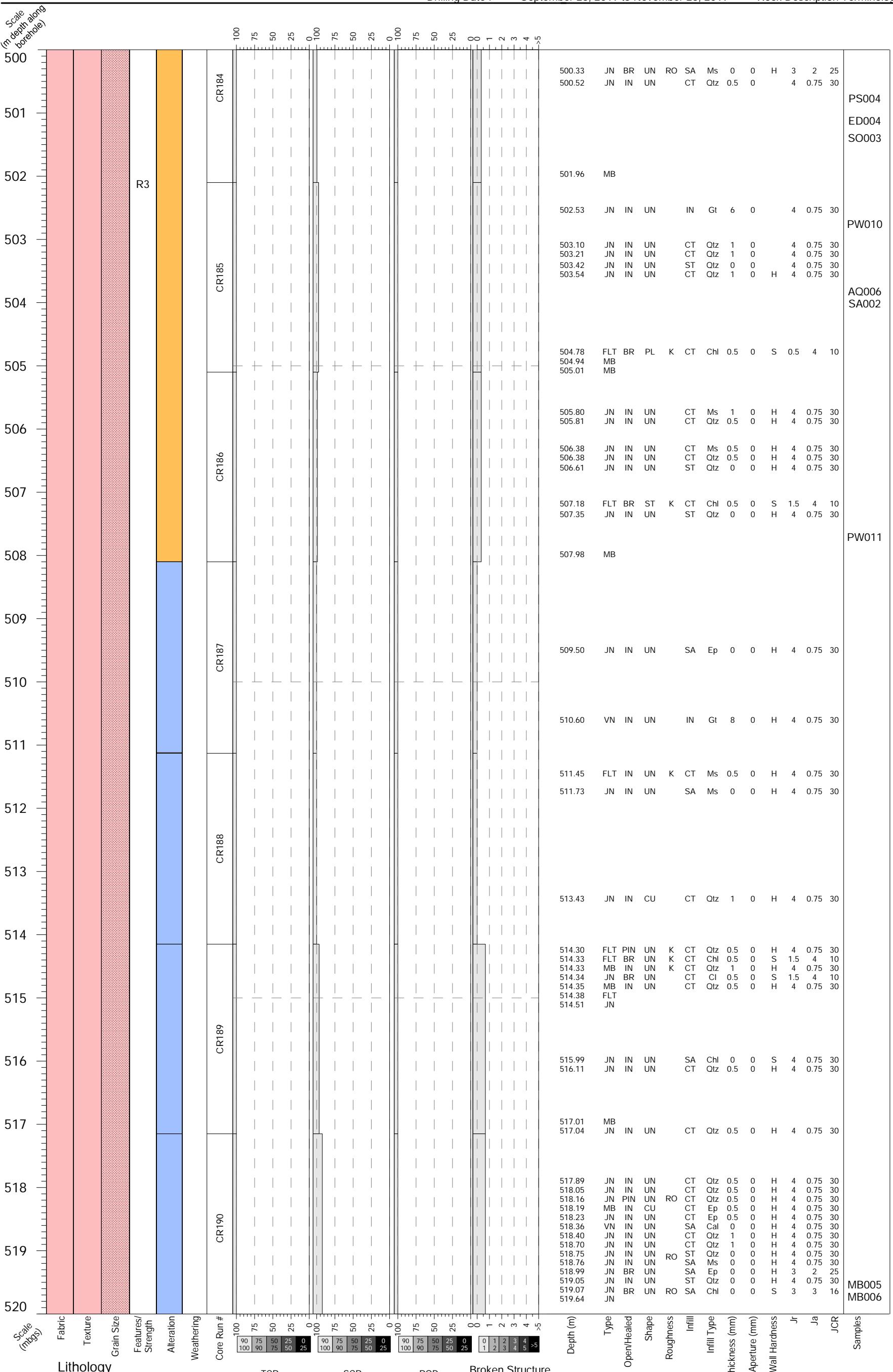
## IG\_BH02

Northing (m) : 5483950.29  
 Easting (m) : 554033.97  
 Elevation (m) : 435.16

Collar Azimuth (°) : 225.0  
 Collar Dip (°) : -70.4  
 Hole Depth (m) : 1000.41

Loggers : CM, KF, EJ, AC, KG, SL  
 Contractor : Rodren Drilling Ltd.  
 Drill Core Size : HQ3  
 Drilling Date : September 26, 2019 to November 26, 2019

**Note:** For legend, abbreviations, symbols, and description refer to the Lithological and Geotechnical Rock Description Terminology.



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NWMO Ignace Drilling

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KF/CM

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1671632A (3301)

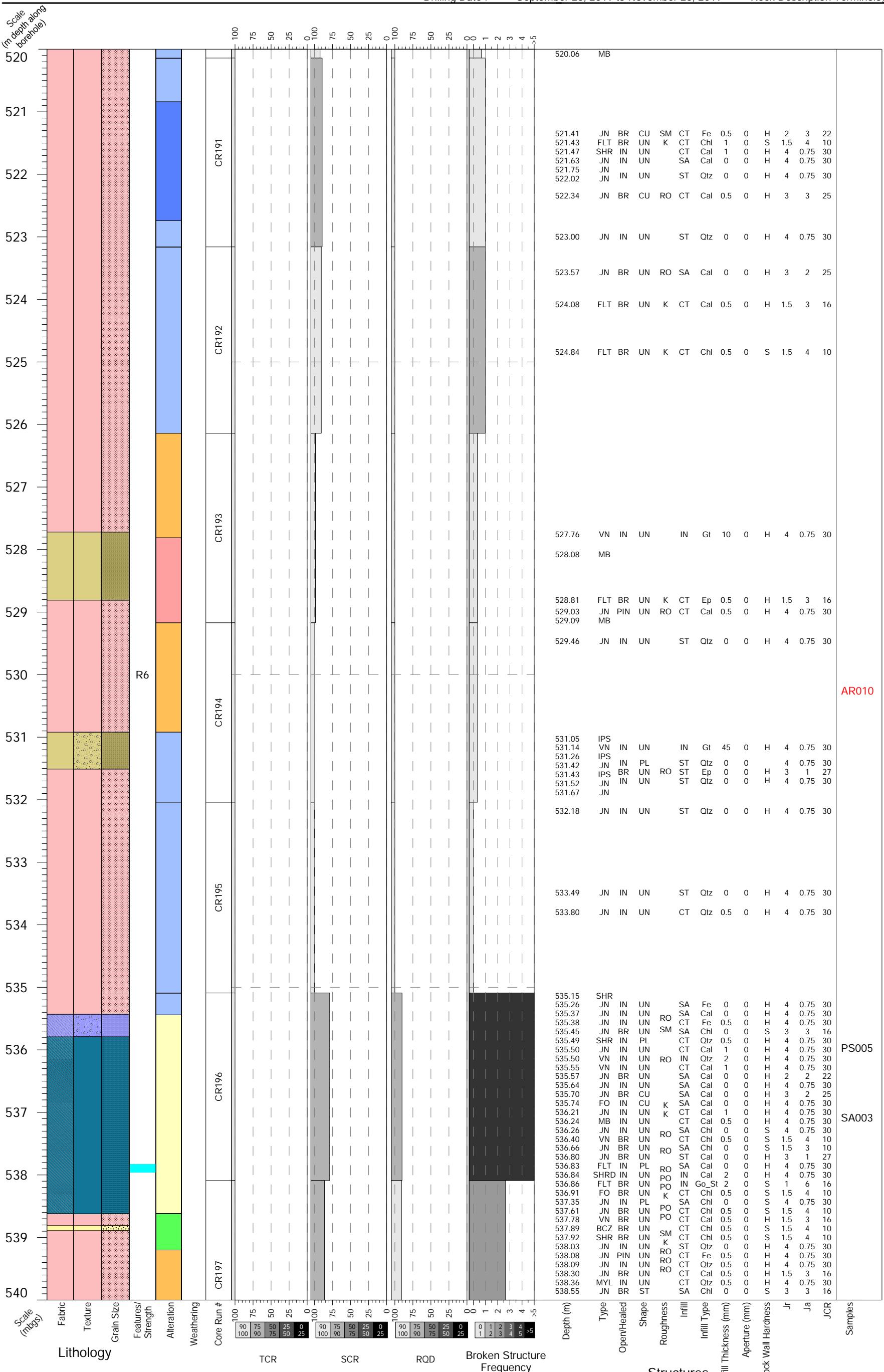
## IG\_BH02

Northing (m) : 5483950.29  
 Easting (m) : 554033.97  
 Elevation (m) : 435.16

Collar Azimuth (°) : 225.0  
 Collar Dip (°) : -70.4  
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Loggers : CM, KF, EJ, AC, KG, SL  
 Contractor : Rodren Drilling Ltd.  
 Drill Core Size : HQ3  
 Drilling Date : September 26, 2019 to November 26, 2019

**Note:** For legend, abbreviations, symbols, and description refer to the Lithological and Geotechnical Rock Description Terminology.



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NWMO Ignace Drilling

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Record of Core Logging

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2020-09-02

DRAWN/REV

KF/CM

PROJECT NO.

1671632A (3301)



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**TITLE**

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2020-09-02

DRAWN/REV  
KE/GM

RF/CM

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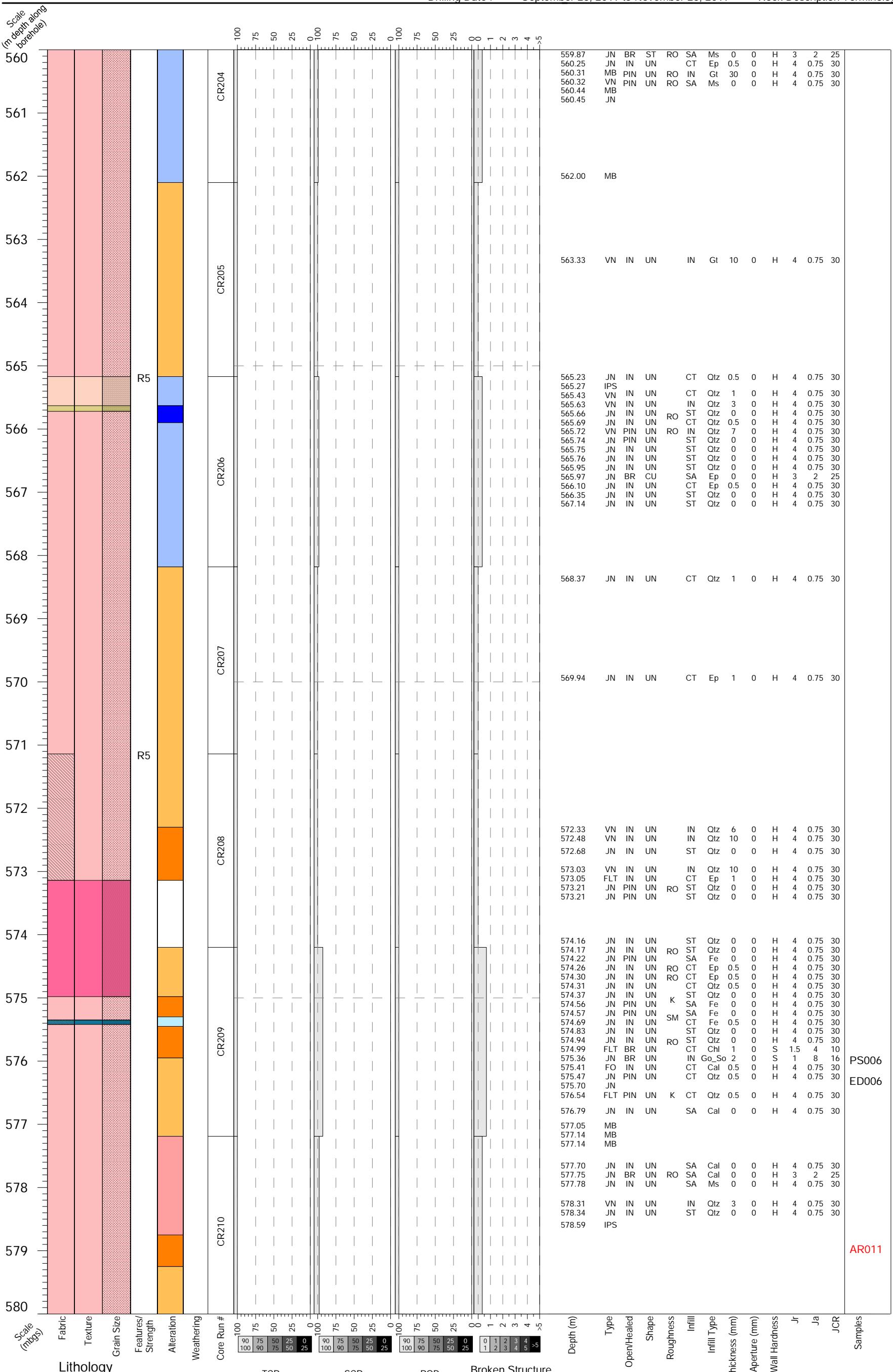
## IG\_BH02

Northing (m) : 5483950.29  
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 Hole Depth (m) : 1000.41

Loggers : CM, KF, EJ, AC, KG, SL  
 Contractor : Rodren Drilling Ltd.  
 Drill Core Size : HQ3  
 Drilling Date : September 26, 2019 to November 26, 2019

Note: For legend, abbreviations, symbols, and description refer to the Lithological and Geotechnical Rock Description Terminology.



CONSULTANT



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NWMO Ignace Drilling

TITLE

Record of Core Logging

YYYY-MM-DD

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DRAWN/REV

KF/CM

PROJECT NO.

1671632A (3301)

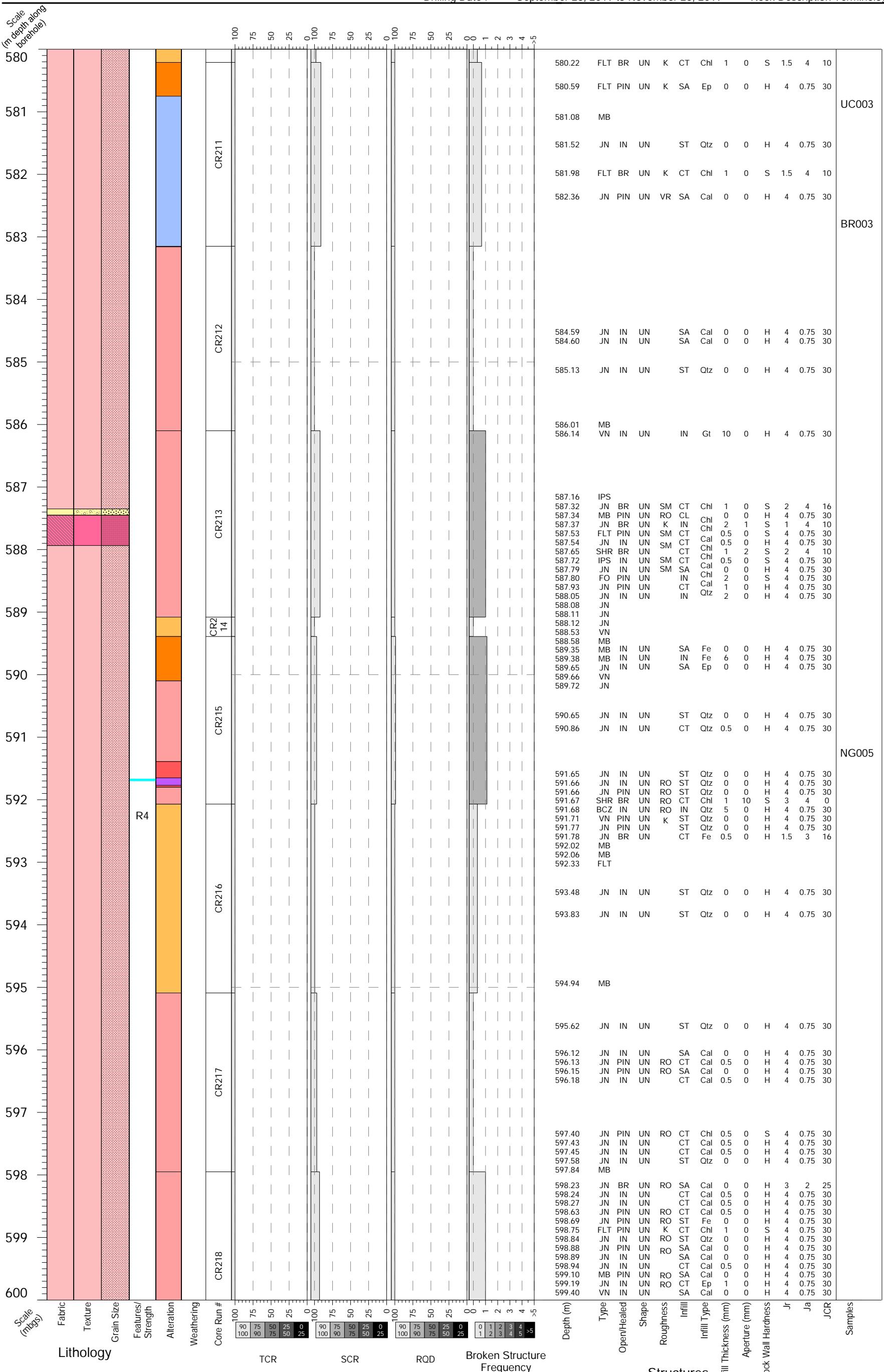
## IG\_BH02

Northing (m) : 5483950.29  
 Easting (m) : 554033.97  
 Elevation (m) : 435.16

Collar Azimuth (°) : 225.0  
 Collar Dip (°) : -70.4  
 Hole Depth (m) : 1000.41

Loggers : CM, KF, EJ, AC, KG, SL  
 Contractor : Rodren Drilling Ltd.  
 Drill Core Size : HQ3  
 Drilling Date : September 26, 2019 to November 26, 2019

Note: For legend, abbreviations, symbols, and description refer to the Lithological and Geotechnical Rock Description Terminology.



CONSULTANT



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NWMO Ignace Drilling  
Record of Core Logging

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DRAWN/REV

KF/CM

PROJECT NO.

1671632A (3301)

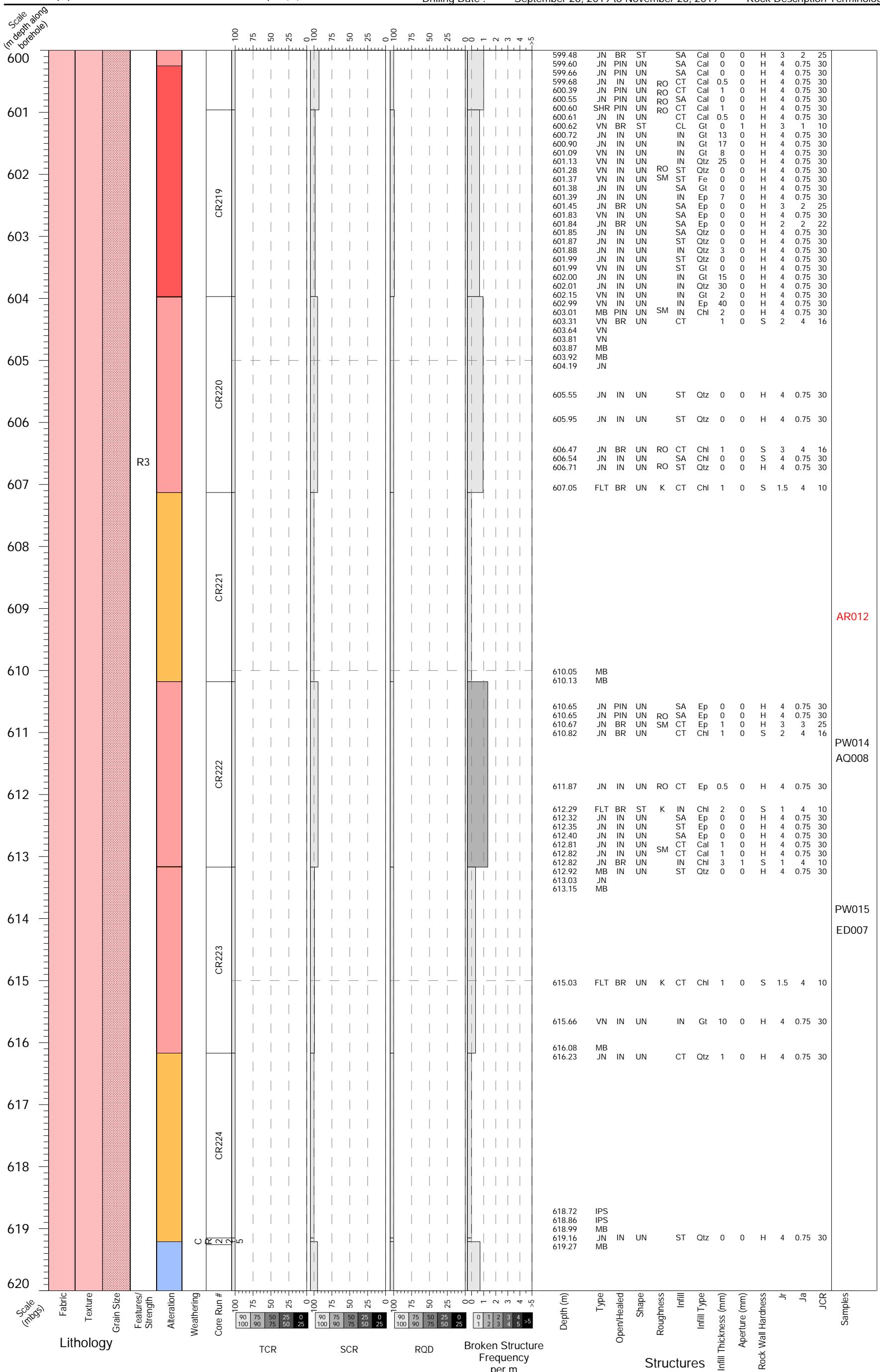
IG\_BH02

Northing (m) : 5483950.29  
Easting (m) : 554033.97  
Elevation (m) : 435.16

Collar Azimuth (°) : 225.0  
 Collar Dip (°) : -70.4  
 Hole Depth (m) : 1000.41

Loggers : CM, KF, EJ, AC, KG, SL  
Contractor : Rodren Drilling Ltd.  
Drill Core Size : HQ3  
Drilling Date : September 26, 2019 to N

**Note:** For legend, abbreviations, symbols, and description refer to the Lithological and Geotechnical Rock Description Terminology.



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CLIENT  
NWMO Long-term Drilling

## NWMO Ignace Drilling

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2020 RELEASE UNDER E.O. 14176

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2020-09-02

KF/CM

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PROJECT NO.

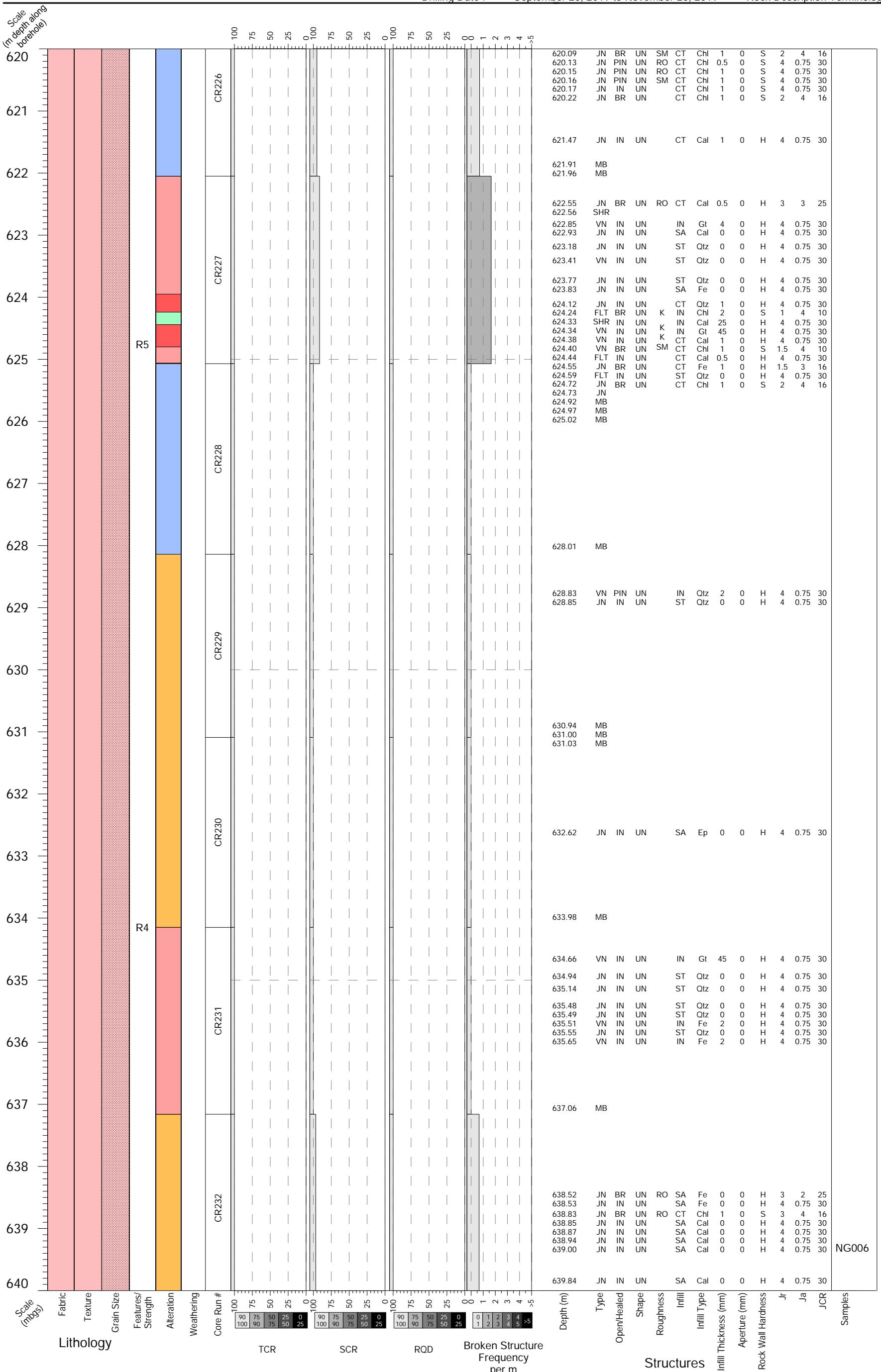
IG\_BH02

Northing (m) : 5483950.29  
Easting (m) : 554033.97  
Elevation (m) : 435.16

Collar Azimuth (°) : 225.0  
Collar Dip (°) : -70.4  
Hole Depth (m) : 1000.41

Loggers : CM, KF, EJ, AC, KG, SL  
Contractor : Rodren Drilling Ltd.  
Drill Core Size : HQ3  
Drilling Date : September 26, 2019 to N

**Note:** For legend, abbreviations, symbols, and description refer to the Lithological and Geotechnical Rock Description Terminology.



GOI D E P

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NWMO Long-term Drilling

## NWMO Ignace Drilling

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2020-09-02

KF/CM

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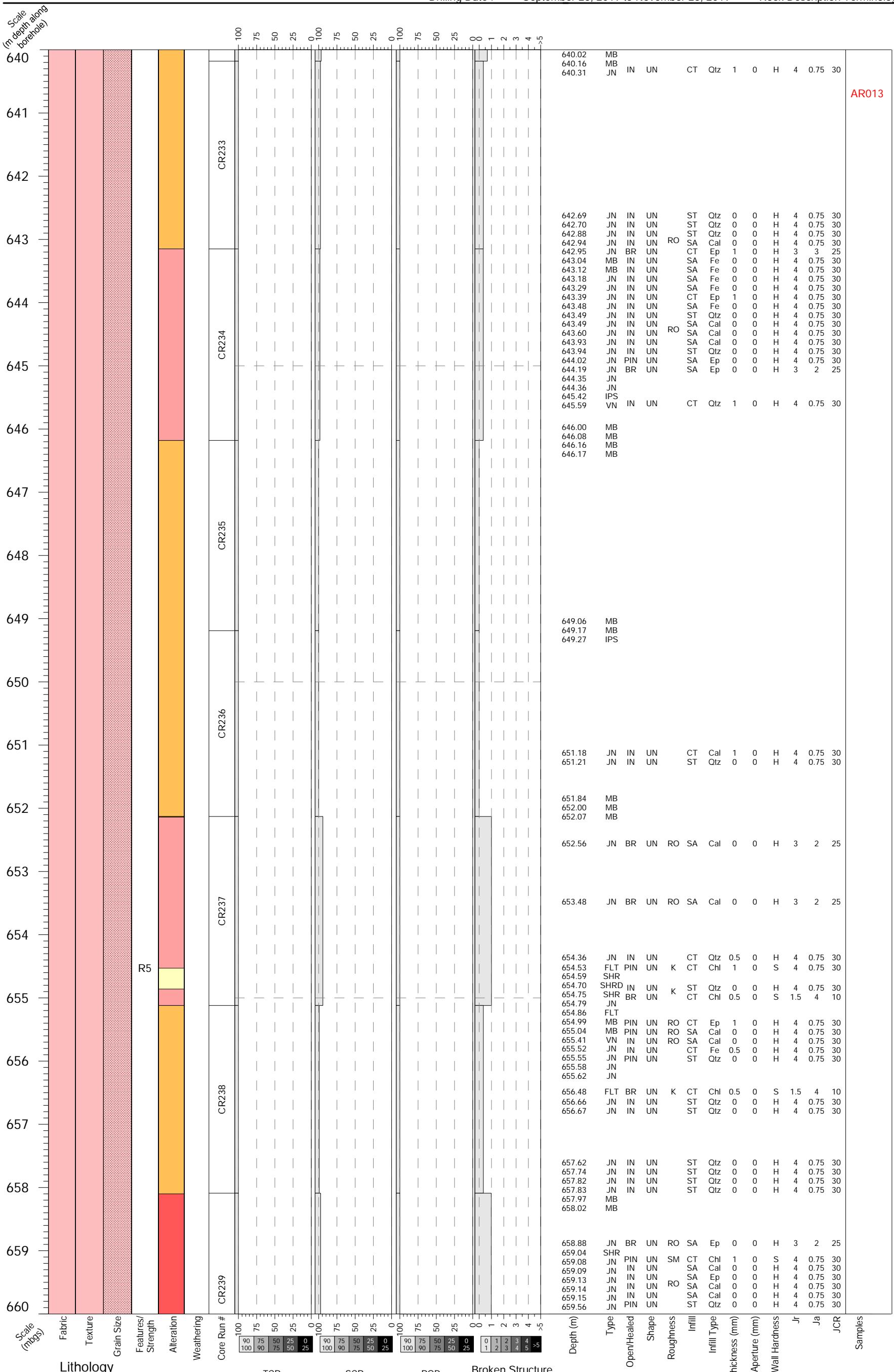
## IG\_BH02

Northing (m) : 5483950.29  
 Easting (m) : 554033.97  
 Elevation (m) : 435.16

Collar Azimuth (°) : 225.0  
 Collar Dip (°) : -70.4  
 Hole Depth (m) : 1000.41

Loggers : CM, KF, EJ, AC, KG, SL  
 Contractor : Rodren Drilling Ltd.  
 Drill Core Size : HQ3  
 Drilling Date : September 26, 2019 to November 26, 2019

Note: For legend, abbreviations, symbols, and description refer to the Lithological and Geotechnical Rock Description Terminology.



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NWMO Ignace Drilling  
Record of Core Logging

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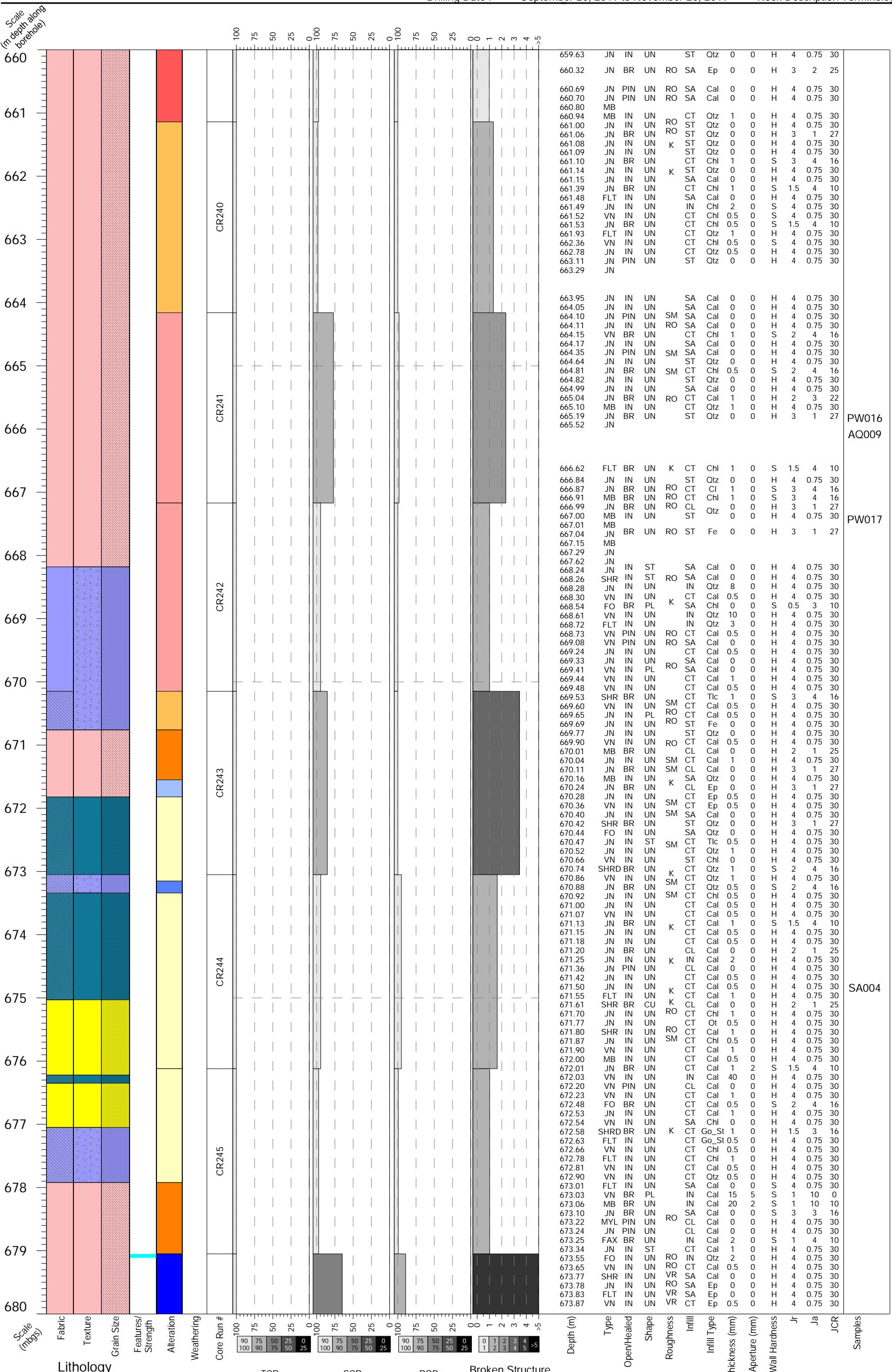
## IG\_BH02

Northing (m) : 5483950.29  
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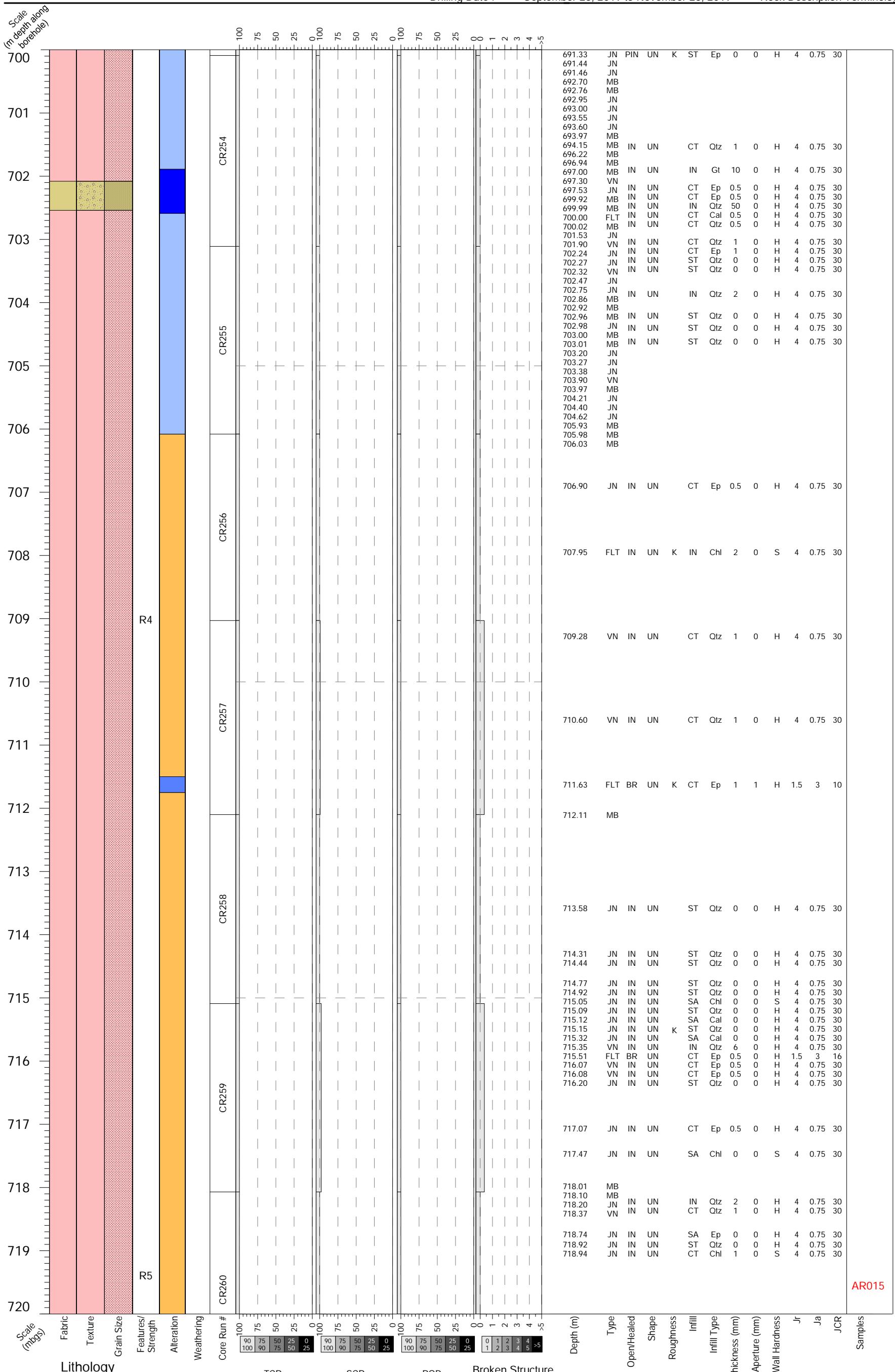
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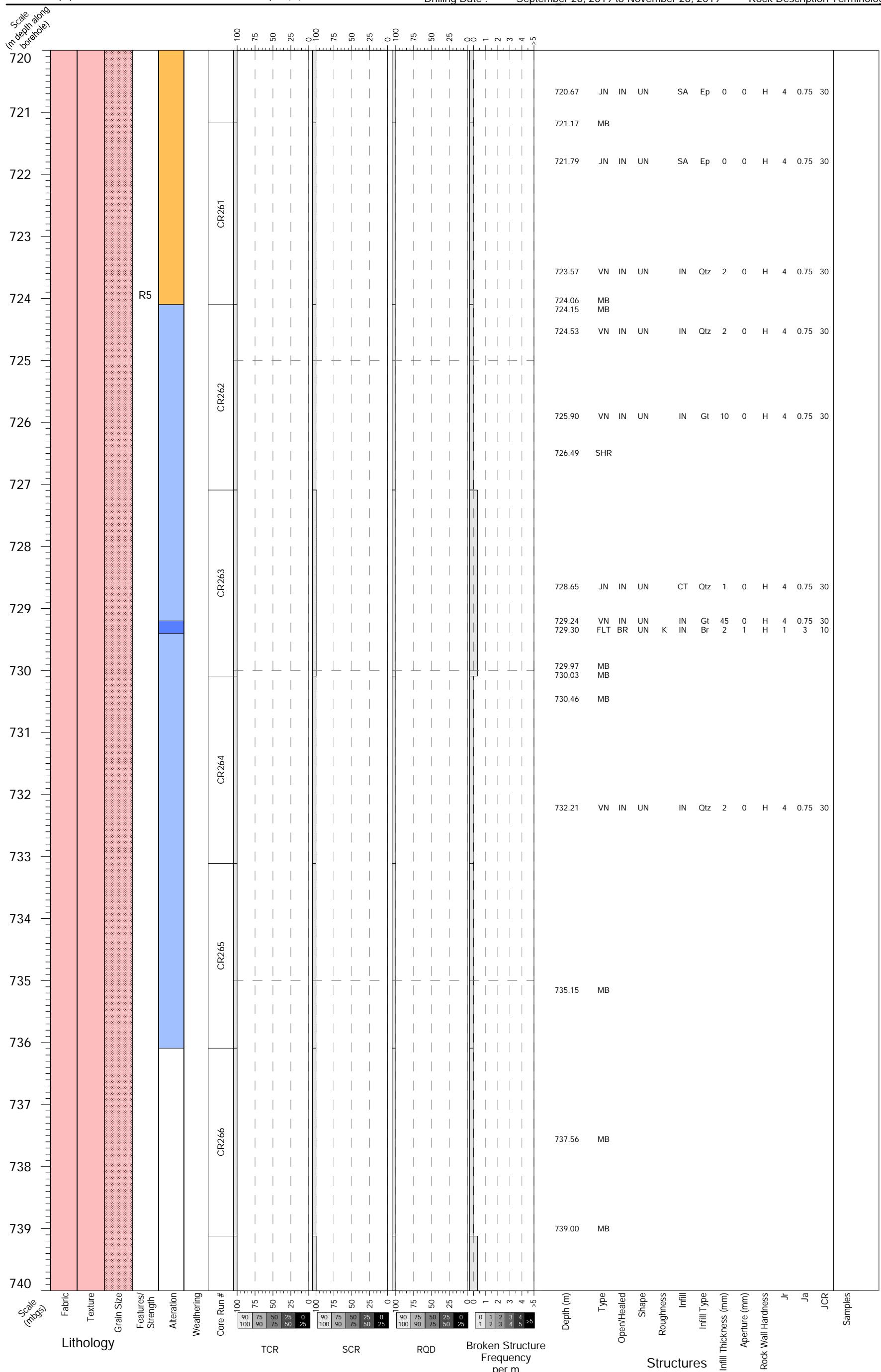
IG\_BH02

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**Note:** For legend, abbreviations, symbols, and description refer to the Lithological and Geotechnical Rock Description Terminology.



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NWMO Ignite Drilling

## NWMO Ignace Drilling

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KF/CM

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# IG\_BH02

Northing (m) :	5483950.29	Collar Azimuth (°) :	225.0	Loggers :	CM, KF, EJ, AC, KG, SL	Note: For legend, abbreviations, symbols, and description refer to the Lithological and Geotechnical Rock Description Terminology.
Easting (m) :	554033.97	Collar Dip (°) :	-70.4	Contractor :	Rodren Drilling Ltd.	
Elevation (m) :	435.16	Hole Depth (m) :	1000.41	Drill Core Size :	HQ3	
				Drilling Date :	September 26, 2019 to November 26, 2019	

Scale (m depth along borehole)

Fabric      Texture      Grain Size      Features/Strength      Alteration      Weathering      Core Run #

Lithology

TCR      SCR      RQD      Broken Structure Frequency per m

Depth (m)

Type

Open/Helical

Shape

Roughness

Infill

Infill Type

Infill Thickness (mm)

Aperture (mm)

Rock Wall Hardness

Jr      Ja      JCR

Samples

740

741

742

743

744

745

746

747

748

749

750

751

752

753

754

755

756

757

758

759

760

741.82      JN      BR      UN      RO      CT      Ep      0.5      0      H      3      3      25

742.04      MB

743.99      VN      IN      UN      SM      IN      Ep      3      0      H      4      0.75      30

745.05      MB

745.14      MB

745.82      JN      IN      UN      ST      Qtz      0      0      H      4      0.75      30

747.86      FLT      IN      UN      K      CT      Ep      0.5      0      H      4      0.75      30

748.04      MB

748.09      MB

748.75      VN      IN      UN      CT      Qtz      1      0      H      4      0.75      30

750.98      MB

751.06      MB

752.31      JN      IN      UN      CT      Qtz      1      0      H      4      0.75      30

752.84      JN      BR      UN      SM      CT      CI      0.5      0      S      2      4      16

754.18      MB

756.87      VN      IN      UN      IN      Qtz      2      0      H      4      0.75      30

757.87      MB

758.63      JN      IN      UN      ST      Qtz      0      0      H      4      0.75      30

758.89      JN      IN      UN      CT      Fe      0.5      0      H      4      0.75      30

758.95      JN      PIN      UN      VR      ST      Qtz      0      0      H      4      0.75      30

759.40      JN      IN      UN      ST      Qtz      0      0      H      4      0.75      30

759.49      JN      IN      UN      ST      Qtz      0      0      H      4      0.75      30

NG008

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GOLDER

Page 1

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**TITLE**

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PROJECT NO.

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**IG\_BH02**

Northing (m) : 5483950.29  
 Easting (m) : 554033.97  
 Elevation (m) : 435.16

Collar Azimuth (°) : 225.0  
 Collar Dip (°) : -70.4  
 Hole Depth (m) : 1000.41

Loggers : CM, KF, EJ, AC, KG, SL  
 Contractor : Rodren Drilling Ltd.  
 Drill Core Size : HQ3  
 Drilling Date : September 26, 2019 to November 26, 2019

**Note:** For legend, abbreviations, symbols, and description refer to the Lithological and Geotechnical Rock Description Terminology.

The figure is a geological log for cores CR274 through CR280. The vertical axis represents depth in meters, ranging from 760 m to 880 m. The horizontal axis represents various parameters: TCR (Top Cut Ratio), SCR (Side Cut Ratio), RQD (Rock Quality Declivity), and Broken Structure Frequency per m. The log is divided into several distinct lithological units, each with its own color and texture pattern. Key features include:

- Core CR274:** Depth 760-763 m, light grey, low TCR/SCR, high RQD, low broken structures.
- Core CR275:** Depth 763-765 m, light grey, low TCR/SCR, high RQD, low broken structures.
- Core CR276:** Depth 765-766 m, light grey, low TCR/SCR, high RQD, low broken structures.
- Core CR277:** Depth 766-770 m, light grey, low TCR/SCR, high RQD, low broken structures.
- Core CR278:** Depth 770-775 m, light grey, low TCR/SCR, high RQD, low broken structures.
- Core CR279:** Depth 775-880 m, light grey, low TCR/SCR, high RQD, low broken structures.

**Weathering:** A vertical column on the left shows weathering levels (W1-W5) across the depth range. A large area labeled "R4" is present between depths 760-770 m.

**Geotechnical Properties:** A legend at the bottom defines symbols for fabric, texture, grain size, features/strength, alteration, and weathering. Other columns include Type, Open/Healed, Shape, Roughness, Infill, Infill Type, Infill Thickness (mm), Aperture (mm), Rock Wall Hardness, and Samples.

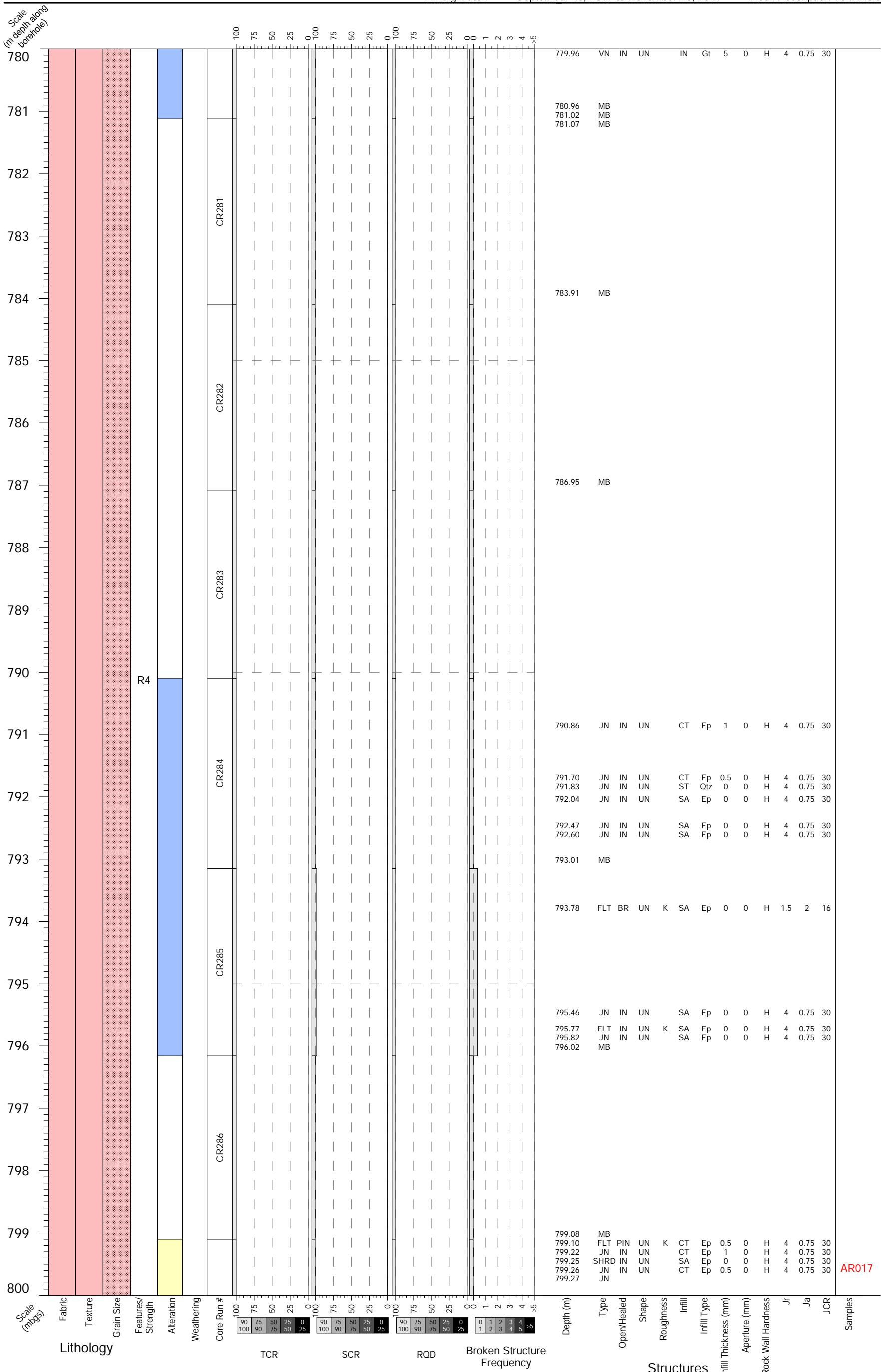
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1671632A (3301)

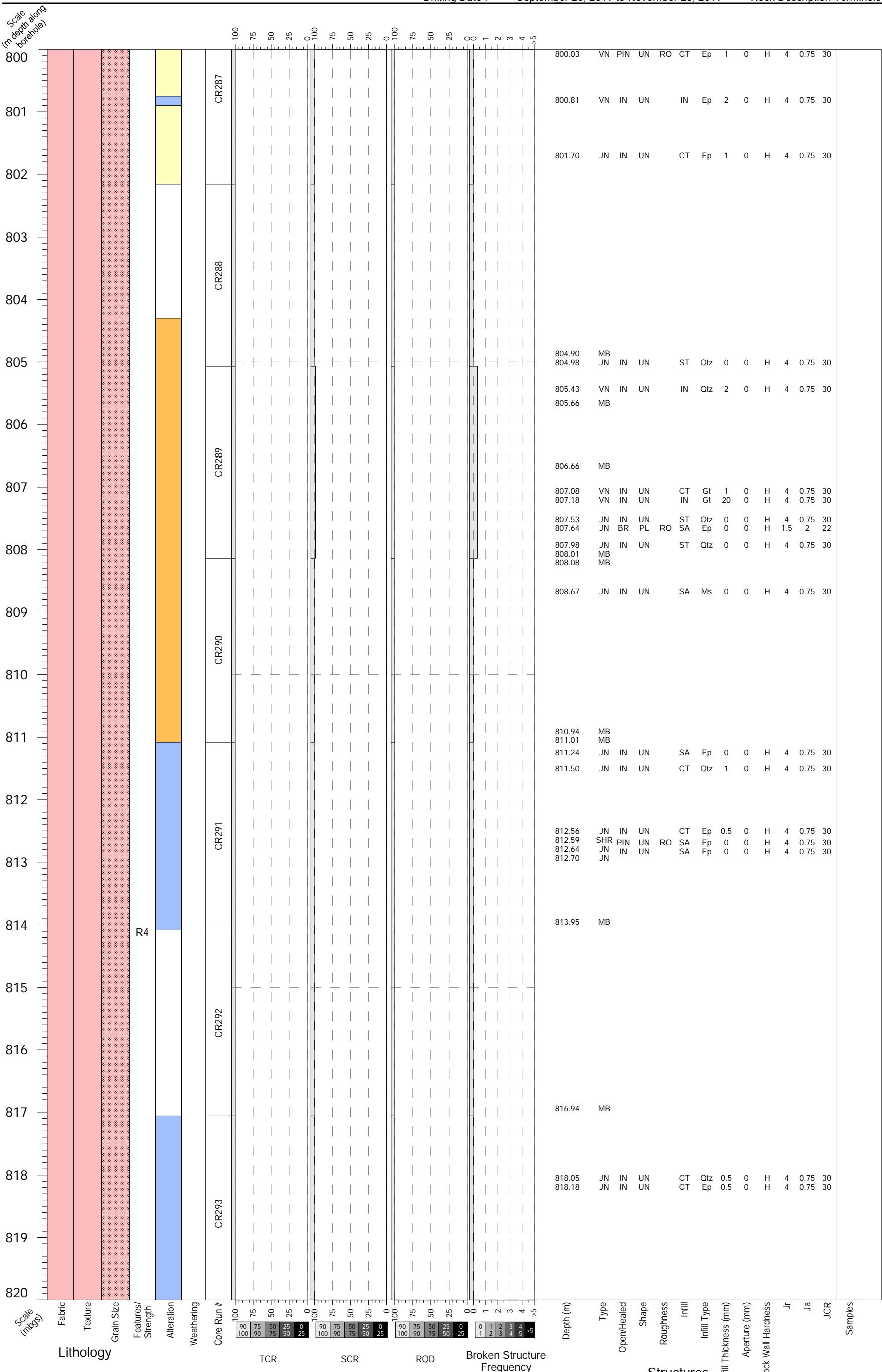
## IG\_BH02

Northing (m) : 5483950.29  
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**Note:** For legend, abbreviations, symbols, and description refer to the Lithological and Geotechnical Rock Description Terminology.



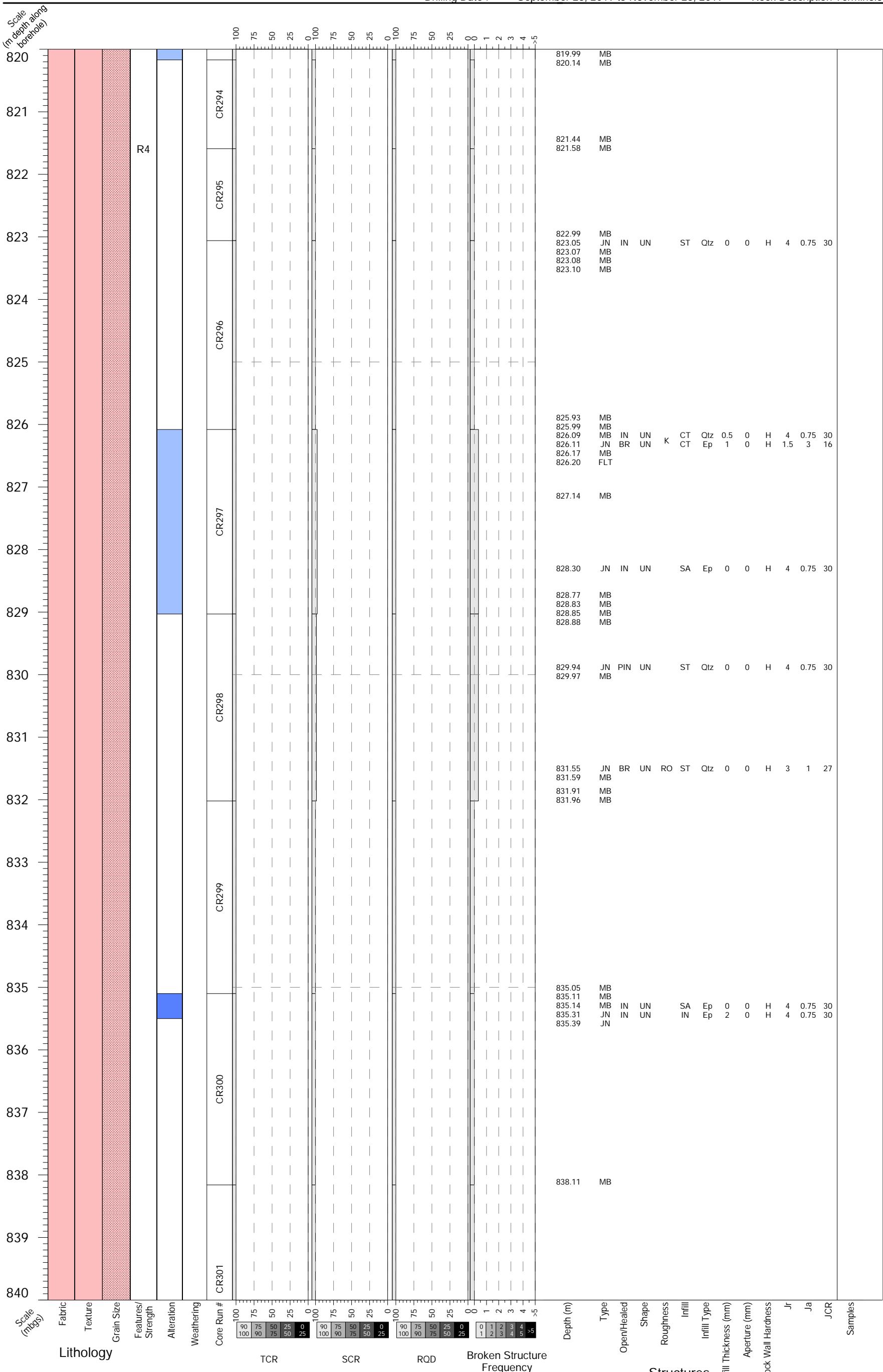
## IG\_BH02

Northing (m) : 5483950.29  
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**Note:** For legend, abbreviations, symbols, and description refer to the Lithological and Geotechnical Rock Description Terminology.



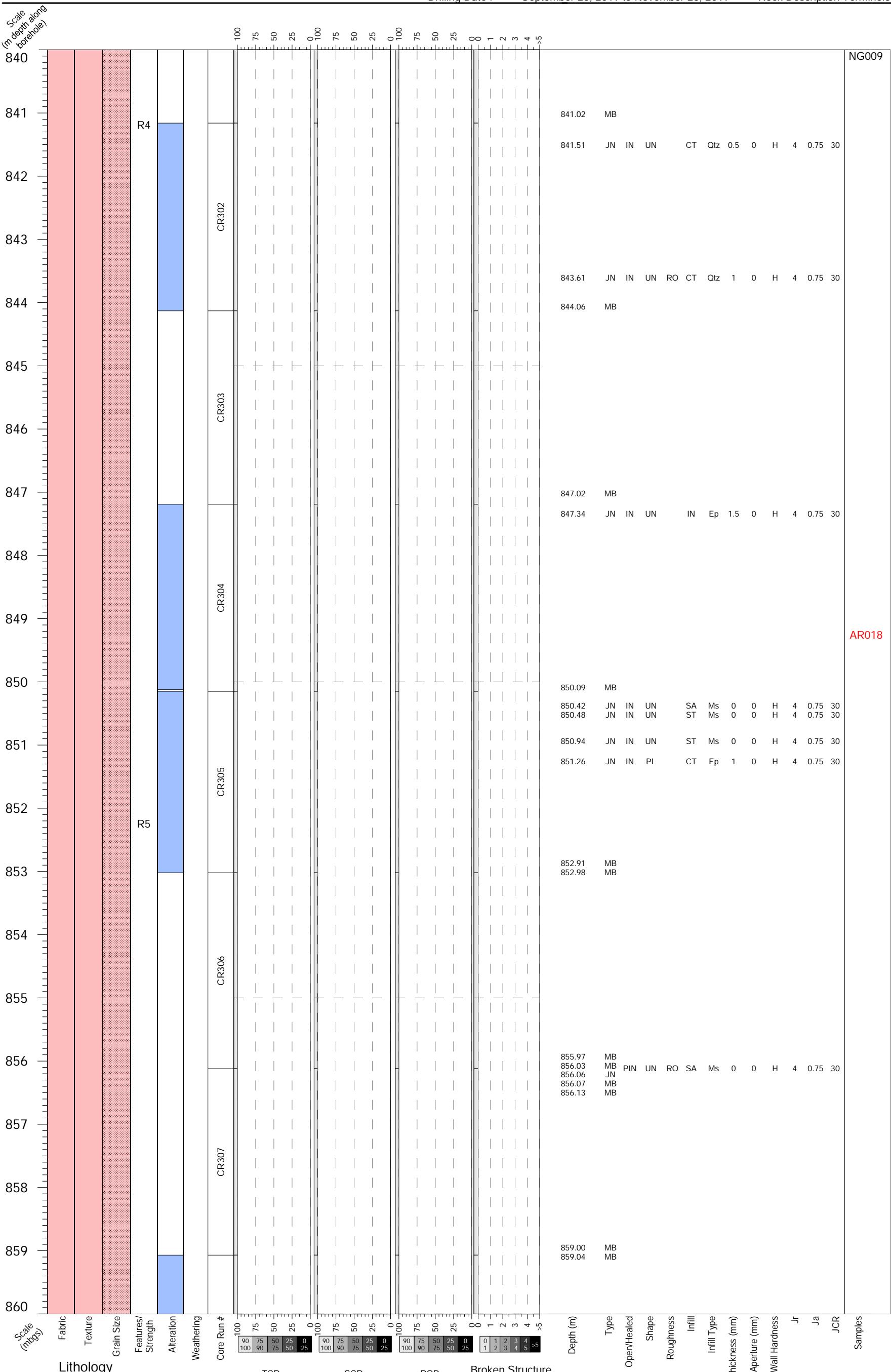
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Northing (m) : 5483950.29  
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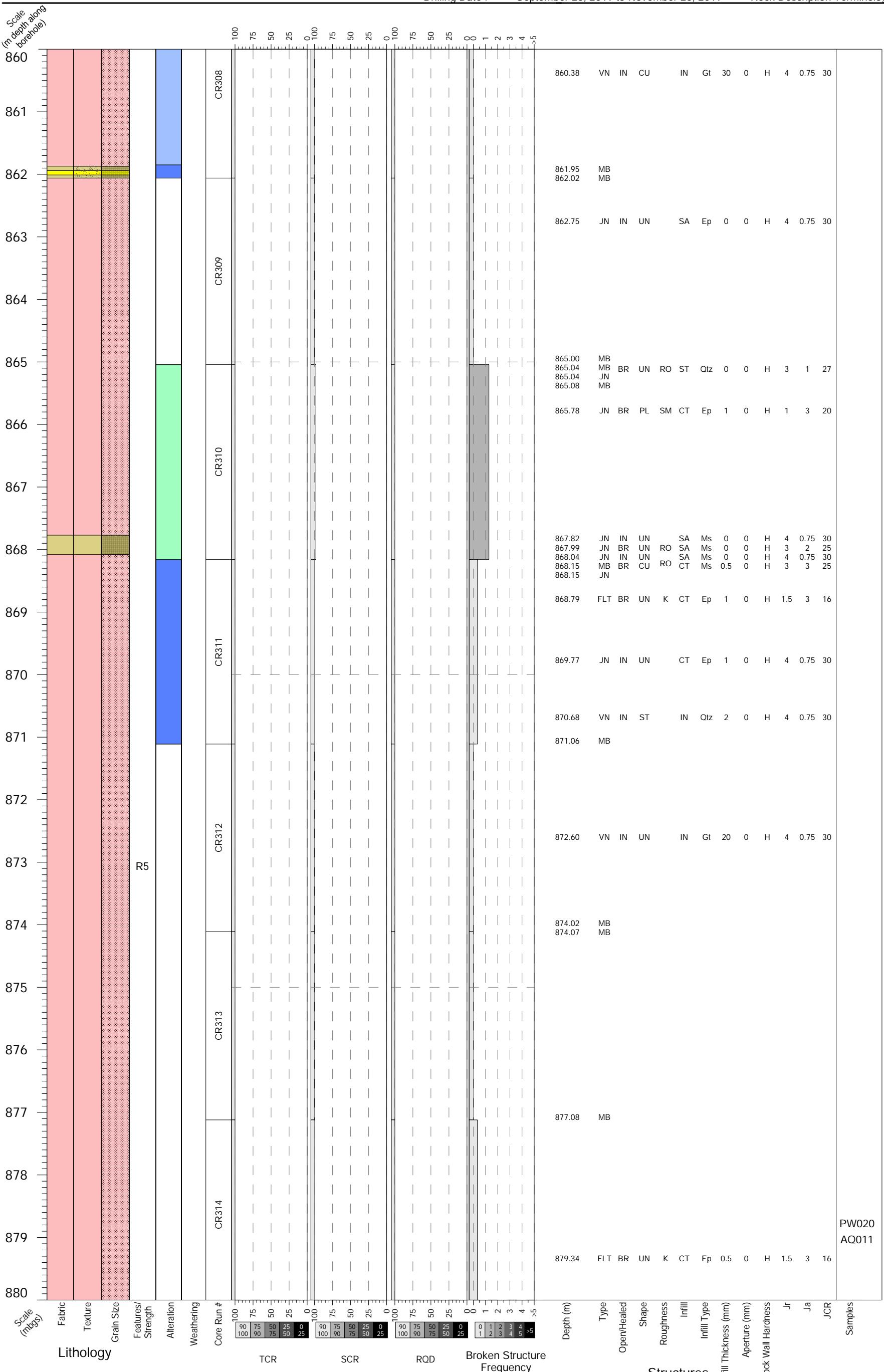
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 Drill Core Size : HQ3  
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NWMO Ignace Drilling

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Record of Core Logging

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KF/CM

PROJECT NO.

1671632A (3301)

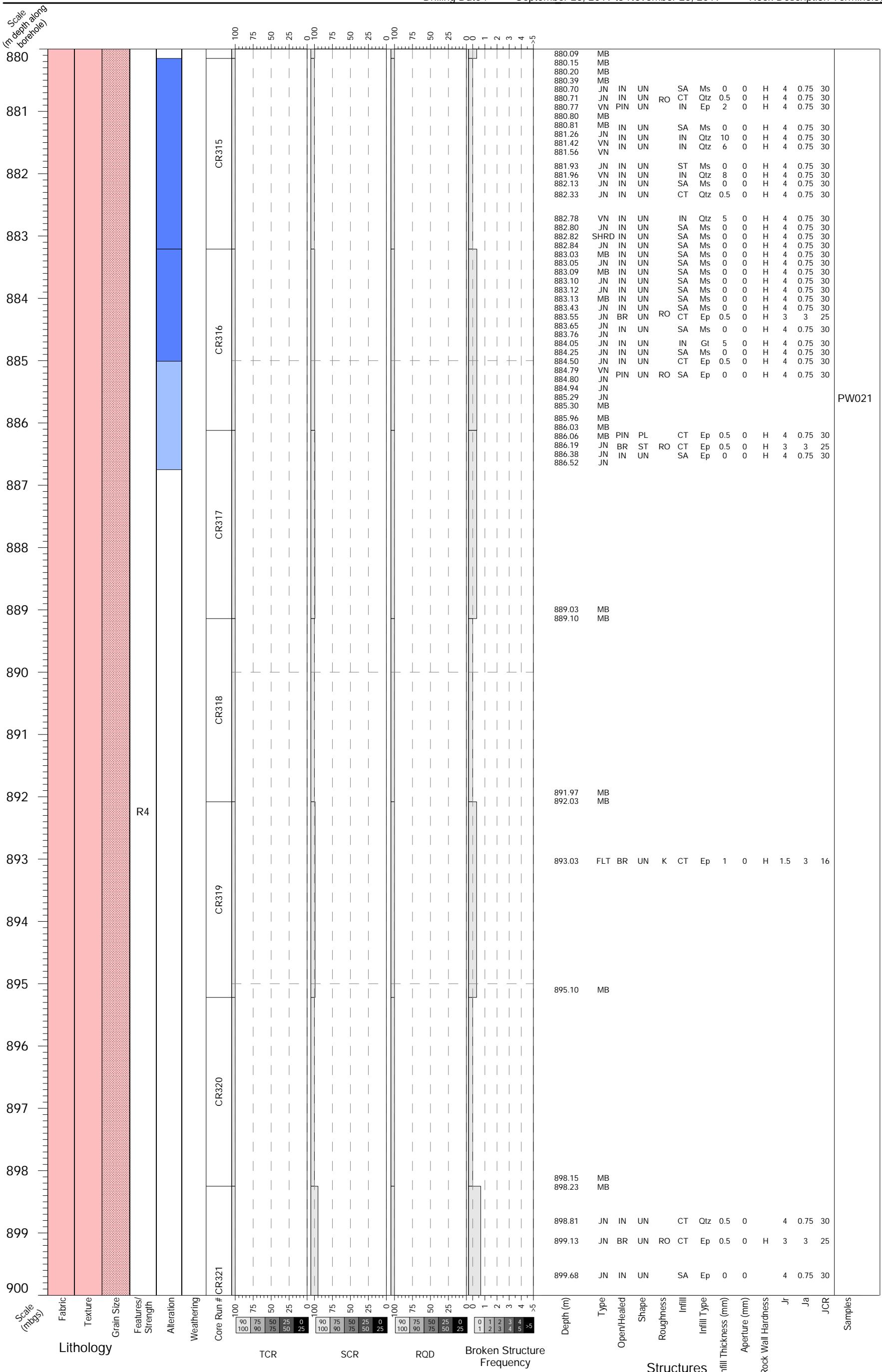
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Northing (m) : 5483950.29  
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 Contractor : Rodren Drilling Ltd.  
 Drill Core Size : HQ3  
 Drilling Date : September 26, 2019 to November 26, 2019

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NWMO Ignace Drilling  
 Record of Core Logging

YYYY-MM-DD

2020-09-02

DRAWN/REV

KF/CM

PROJECT NO.

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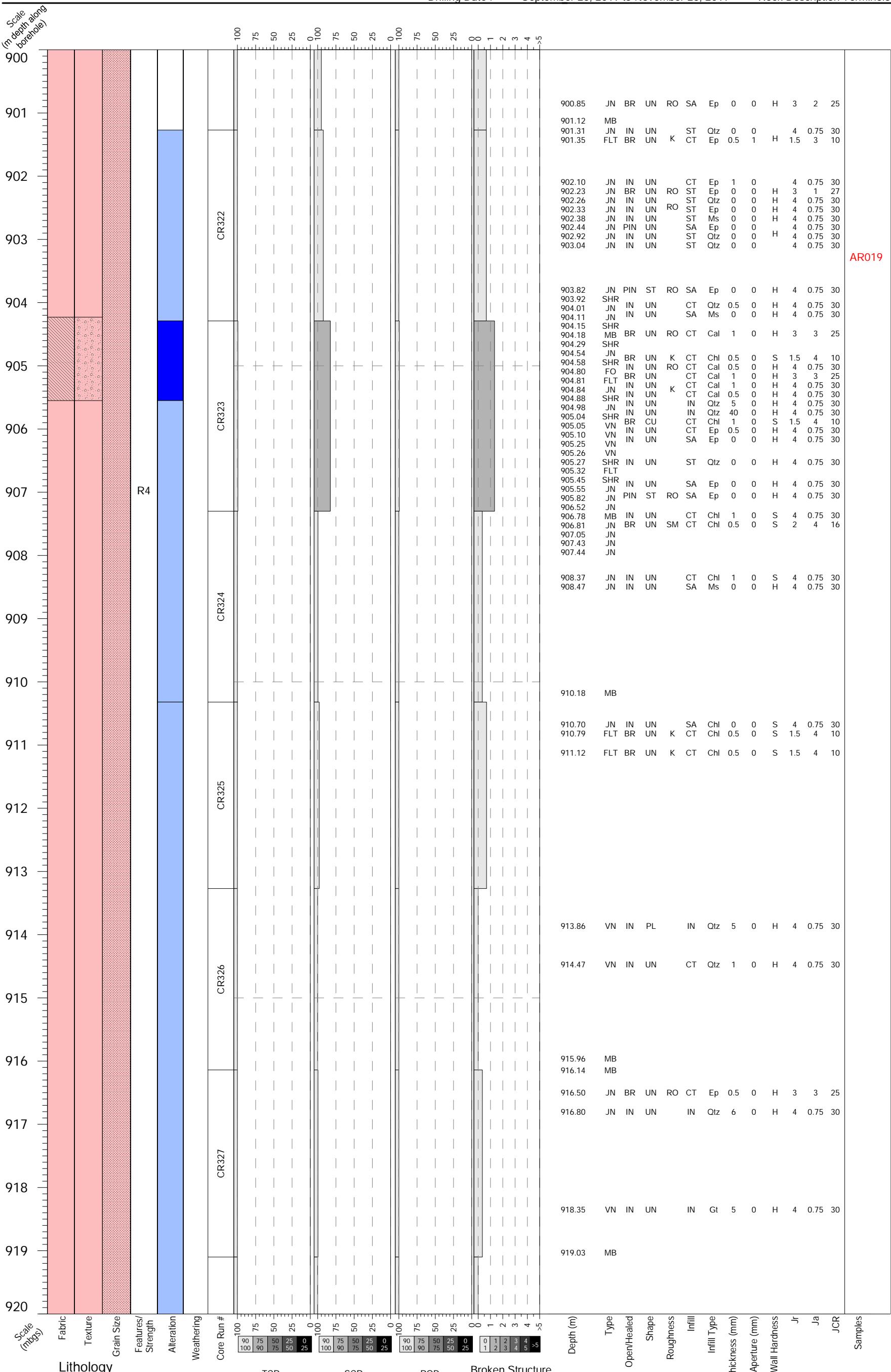
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 Easting (m) : 554033.97  
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NWMO Ignace Drilling  
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 Record of Core Logging

YYYY-MM-DD

2020-09-02

DRAWN/REV

KF/CM

PROJECT NO.

1671632A (3301)

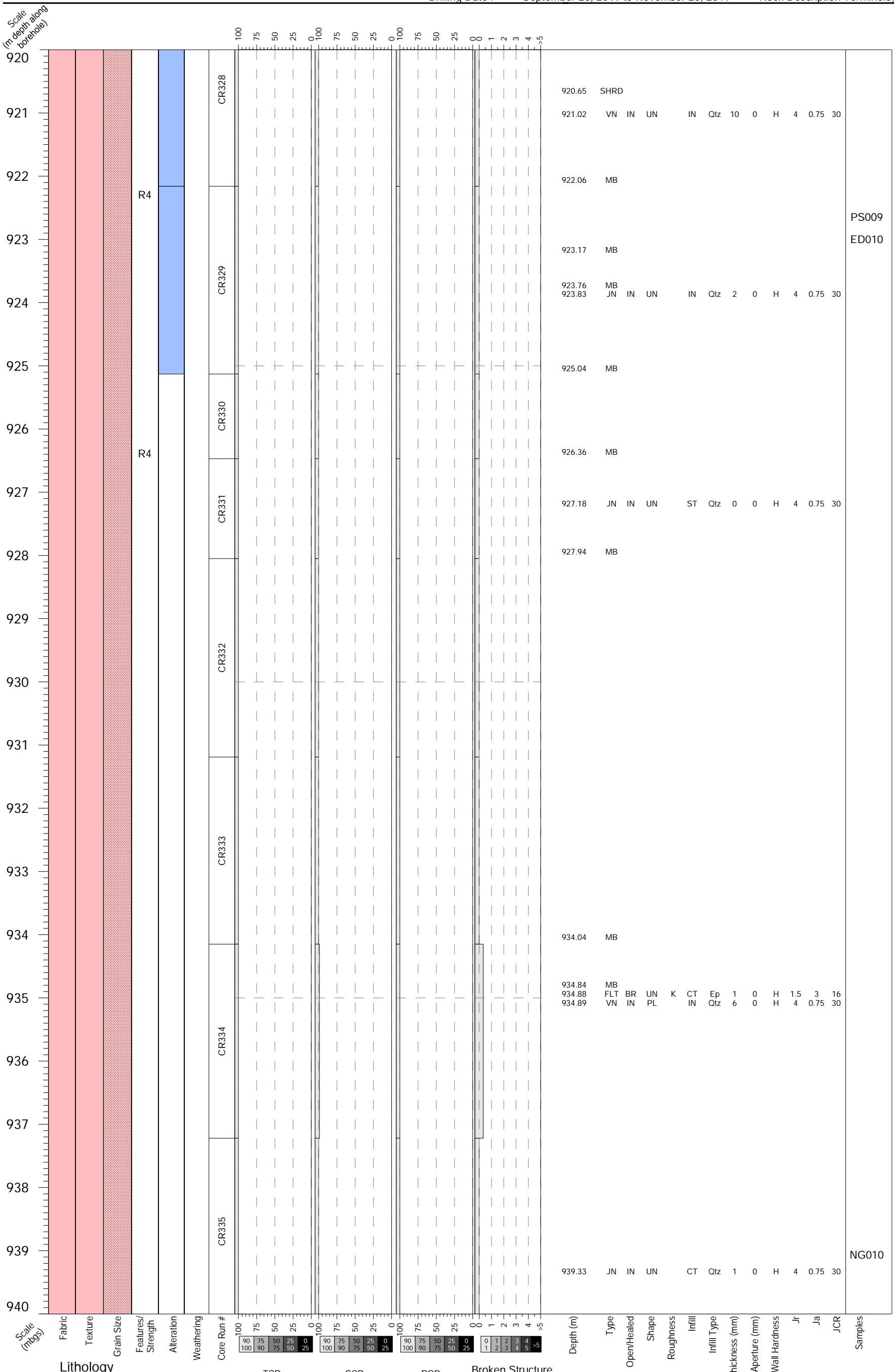
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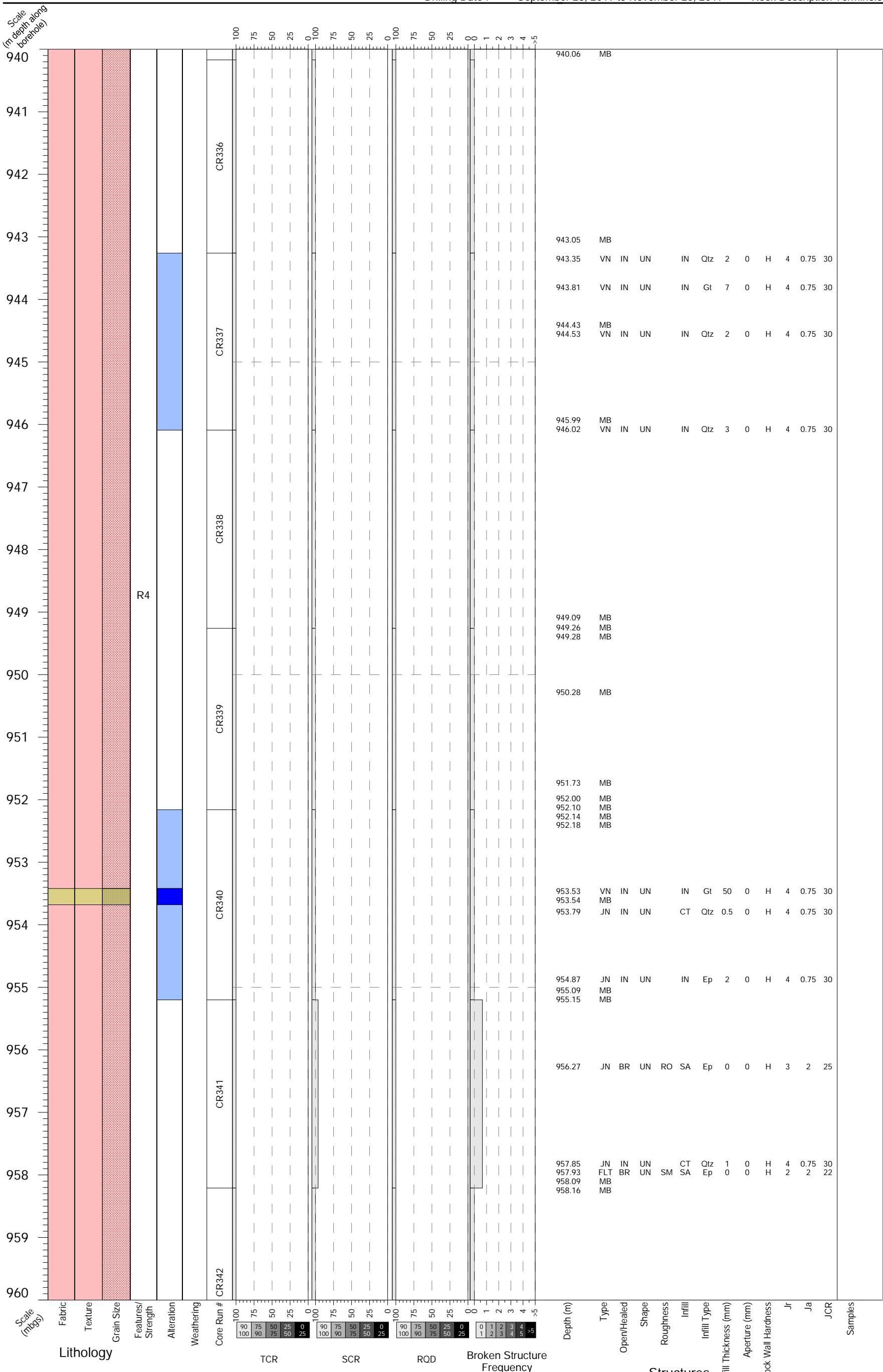
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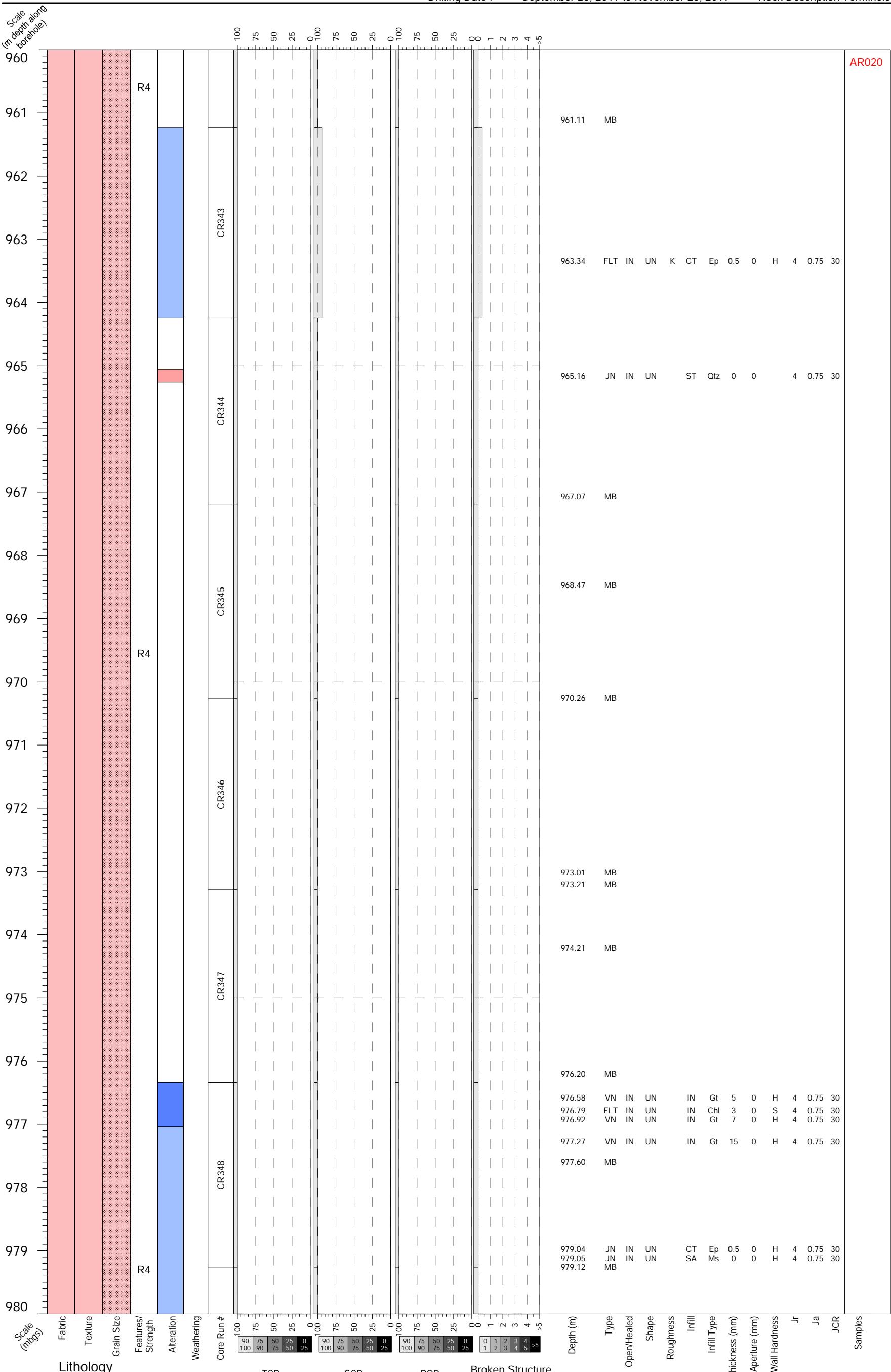
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NWMO Ignace Drilling

TITLE

Record of Core Logging

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2020-09-02

DRAWN/REV

KF/CM

PROJECT NO.

1671632A (3301)

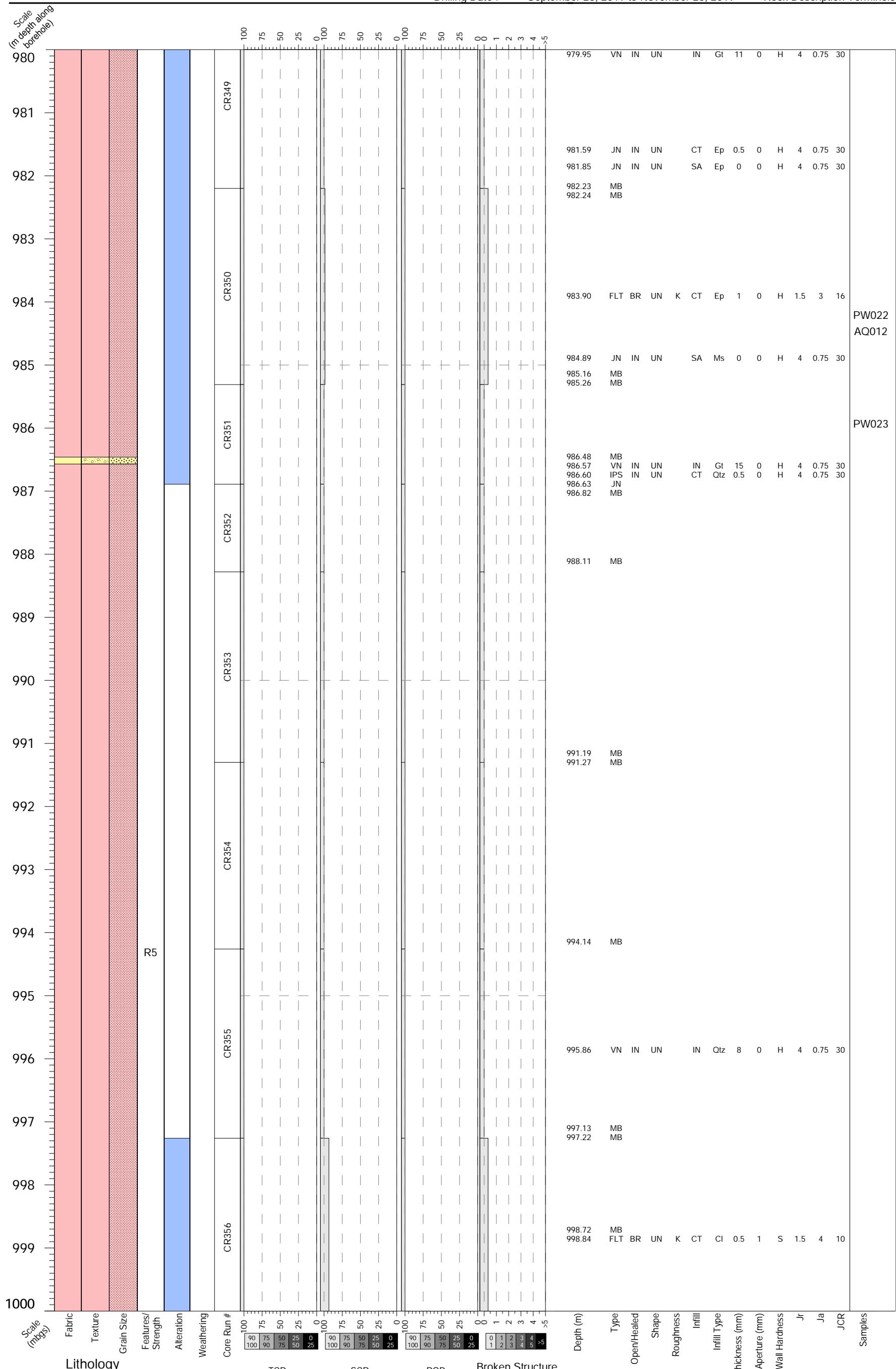
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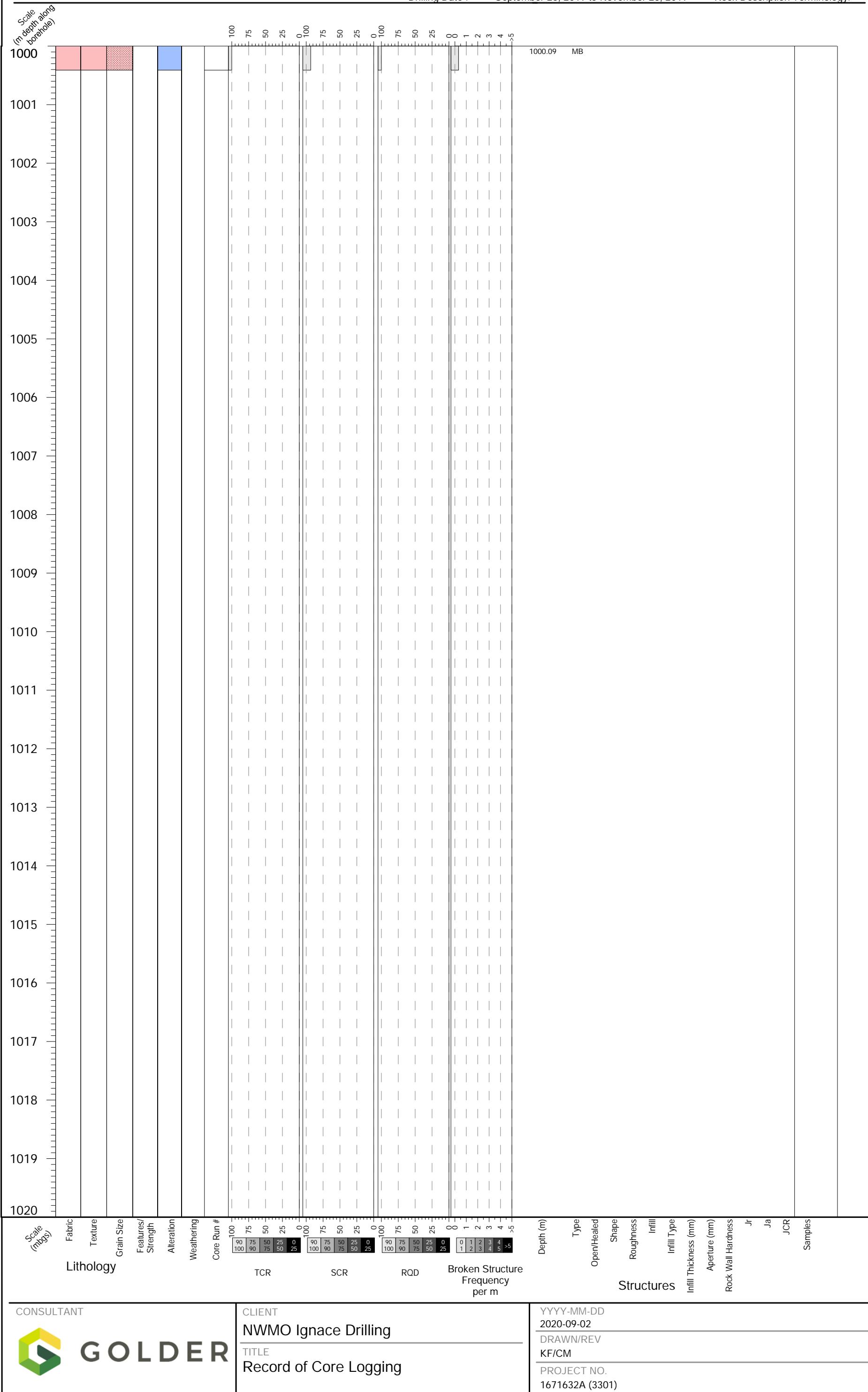
**IG\_BH02**

Northing (m) : 5483950.29  
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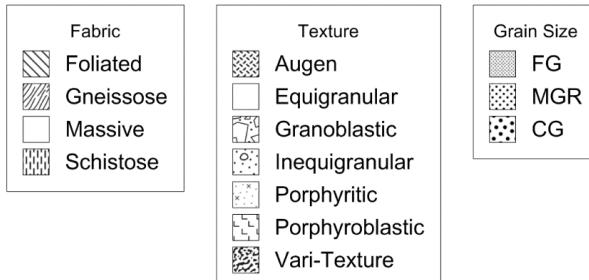
# Lithological and Geotechnical Rock Description Terminology

Full logging details are provided in the Appendix A: Geological and Geotechnical Core Logging Procedures Manual.

## Lithology



## Fabric, Texture and Grain Size



## Features

- Broken Core Zone (BCZ)
- Lost Core Zone (BCZ)

## Strength

- |    |                       |
|----|-----------------------|
| R1 | Very weak rock        |
| R2 | Weak rock             |
| R3 | Medium strong rock    |
| R4 | Strong rock           |
| R5 | Very strong rock      |
| R6 | Extremely strong rock |

## Alteration and Weathering

Carbonatization	Bleaching	Chloritization	Hematization	Potassic	Sericitization	Silicification	Weathering
A2	A2	A2	A2	A2	A2	A2	W2
A3	A3	A3	A3	A3	A3	A3	W3
A4	A4	A4	A4	A4	A4	A4	W4
A5	A5	A5	A5	A5	A5	A5	W5

Note that the alteration rating A1 is considered unaltered and is not displayed on the logs. The weathering rating W1 is considered unweathered and is not displayed on the logs.

## Core Condition

TCR	Total Core Recovery: Records the total amount of core recovered over the measured length drilled for each core run, and is expressed as a percentage.
SCR	Solid Core Recovery: Defined as the length of full axial diameter (full circumference) core recovered per run and is expressed as a percentage. The full diameter is defined as the pieces of core not intersected by any fractures.
RQD	Rock Quality Designation : Based on the total cumulative length of sound core recovered in lengths greater than 10 cm (4 inches) as measured along the center line axis of the core from the mid-point of one natural fracture to the mid-point of the next natural fracture. It is expressed as a percentage of the core run length.
Broken Structure Frequency	Broken Structure Frequency per m refers to broken features logged per core run and does not include intact structures.

## Structure Type

JN	Joint	MYL	Mylonite	LIN	Lineation
FO	Foliation	SCH	Schistosity	FAX	Fold Axial Plane
FLT	Fault	GNY	Gneissosity	VN	Vein
CL	Cleavage	SHR	Shear (Brittle-Ductile)	SHRD	Shear (Ductile)
MB	Mechanical Break	IPS	Igneous Primary Structure		

## Open/Healed

BR	Broken (Open)	IN	Intact	PIN	Partially Intact
----	---------------	----	--------	-----	------------------

## Shape

CU	Curved	ST	Stepped
PL	Planar	UN	Undulating

## Roughness

K	Slickensided	SM	Smooth	RO	Rough
PO	Polished	VR	Very Rough		

## Infill

CL	Clean	SA	Slightly Altered	IN	Continuous Infill
CT	Continuous Coating	ST	Staining Only		

## Infill Type

Afs	Alkali-feldspar	Ap	Aplite	Br	Broken Rock
Bt	Biotite	Cal	Calcite	Chl	Chlorite
Cl	Clay	Ep	Epidote	Fe	Iron Oxide
Go_So	Soft Gouge	Go_St	Stiff Gouge	Gp	Graphite
Gt	Granite	Hbl	Hornblende	Ms	Muscovite
Ot	Other	Pl	Plagioclase	Qtz	Quartz
Tlc	Talc				

## Rock Wall Hardness

H	Hard	S	Soft
---	------	---	------

## Joint Ratings

Jr	Joint Roughness: Describes the small-scale geometry of the joint surface (Barton, 1974).
Ja	Joint Alteration: Rating based on the presence or absence of alteration minerals, such as clay, on the discontinuity surfaces (Barton, 1974).
JCR	Joint Condition Rating: A numeral description used in RMR <sub>89</sub> (Bieniawski, 1989) ranging from 0 to 30 based on the shape, roughness, and infill character observed in a discontinuity.

## Samples

AQ	Aqueous Extraction	AR	General Archive
BR	Brazilian (Indirect Tensile Strength)	ED	Effective Diffusion
MB	Microbiology	NG	Noble Gas
PS	Petrophysical Suite	PW	Porewater
SA	Specific Surface Area and Cation Exchange Capacity	SO	Sorption
TH	Thermal Properties	UC	Uniaxial Compression Strength

Note that all red sample labels represent archive samples.

November 2, 2020

1671632 (3301)

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**APPENDIX D**

**Photography Tables**

Table D-1: IG\_BH02 Core Box Photography Details

1671632 (3301)

Photo Name	Photo Description
IG_BH02_BCD_2.71_12.96.jpg	Dry Core Box Photo from 2.21 to 12.96 m
IG_BH02_BCD_12.96_24.71.jpg	Dry Core Box Photo from 12.96 to 24.71 m
IG_BH02_BCD_24.71_36.28.jpg	Dry Core Box Photo from 24.71 to 36.28 m
IG_BH02_BCD_36.28_47.87.jpg	Dry Core Box Photo from 36.28 to 47.87 m
IG_BH02_BCD_47.87_59.45.jpg	Dry Core Box Photo from 47.87 to 59.45 m
IG_BH02_BCD_59.45_71.06.jpg	Dry Core Box Photo from 59.45 to 71.06 m
IG_BH02_BCD_71.06_82.96.jpg	Dry Core Box Photo from 71.06 to 82.96 m
IG_BH02_BCD_82.96_94.77.jpg	Dry Core Box Photo from 82.96 to 94.77 m
IG_BH02_BCD_94.77_106.64.jpg	Dry Core Box Photo from 94.77 to 106.64 m
IG_BH02_BCD_106.64_118.53.jpg	Dry Core Box Photo from 106.64 to 118.53 m
IG_BH02_BCD_118.53_130.57.jpg	Dry Core Box Photo from 118.53 to 130.57 m
IG_BH02_BCD_130.57_142.53.jpg	Dry Core Box Photo from 130.57 to 142.53 m
IG_BH02_BCD_142.53_154.4.jpg	Dry Core Box Photo from 142.53 to 154.40 m
IG_BH02_BCD_154.4_166.28.jpg	Dry Core Box Photo from 154.40 to 166.28 m
IG_BH02_BCD_166.28_178.09.jpg	Dry Core Box Photo from 166.28 to 178.09 m
IG_BH02_BCD_178.09_189.92.jpg	Dry Core Box Photo from 178.09 to 189.92 m
IG_BH02_BCD_189.92_201.73.jpg	Dry Core Box Photo from 189.92 to 201.73 m
IG_BH02_BCD_201.73_213.49.jpg	Dry Core Box Photo from 201.73 to 213.49 m
IG_BH02_BCD_213.49_225.17.jpg	Dry Core Box Photo from 213.49 to 225.17 m
IG_BH02_BCD_225.17_236.92.jpg	Dry Core Box Photo from 225.17 to 236.92 m
IG_BH02_BCD_236.92_248.75.jpg	Dry Core Box Photo from 236.92 to 248.75 m
IG_BH02_BCD_248.75_260.49.jpg	Dry Core Box Photo from 248.75 to 260.49 m
IG_BH02_BCD_260.49_272.35.jpg	Dry Core Box Photo from 260.49 to 272.35 m
IG_BH02_BCD_272.35_284.21.jpg	Dry Core Box Photo from 272.35 to 284.21 m
IG_BH02_BCD_284.21_296.03.jpg	Dry Core Box Photo from 284.21 to 296.03 m
IG_BH02_BCD_296.03_307.9.jpg	Dry Core Box Photo from 296.03 to 307.90 m
IG_BH02_BCD_307.9_319.85.jpg	Dry Core Box Photo from 307.90 to 319.85 m
IG_BH02_BCD_319.85_331.82.jpg	Dry Core Box Photo from 319.85 to 331.82 m
IG_BH02_BCD_331.82_343.61.jpg	Dry Core Box Photo from 331.82 to 343.61 m
IG_BH02_BCD_343.61_355.46.jpg	Dry Core Box Photo from 343.61 to 355.46 m
IG_BH02_BCD_355.46_367.44.jpg	Dry Core Box Photo from 355.46 to 367.44 m
IG_BH02_BCD_367.44_379.39.jpg	Dry Core Box Photo from 367.44 to 379.39 m
IG_BH02_BCD_379.39_391.06.jpg	Dry Core Box Photo from 379.39 to 391.06 m
IG_BH02_BCD_391.06_402.87.jpg	Dry Core Box Photo from 391.06 to 402.87 m
IG_BH02_BCD_402.87_414.59.jpg	Dry Core Box Photo from 402.87 to 414.59 m
IG_BH02_BCD_414.59_426.56.jpg	Dry Core Box Photo from 414.59 to 426.56 m
IG_BH02_BCD_426.56_438.44.jpg	Dry Core Box Photo from 426.56 to 438.44 m
IG_BH02_BCD_438.44_450.33.jpg	Dry Core Box Photo from 438.44 to 450.33 m
IG_BH02_BCD_450.33_461.94.jpg	Dry Core Box Photo from 450.33 to 461.94 m
IG_BH02_BCD_461.94_473.76.jpg	Dry Core Box Photo from 461.94 to 473.76 m
IG_BH02_BCD_473.76_485.46.jpg	Dry Core Box Photo from 473.76 to 485.46 m
IG_BH02_BCD_485.46_497.26.jpg	Dry Core Box Photo from 485.46 to 497.26 m
IG_BH02_BCD_497.26_509.17.jpg	Dry Core Box Photo from 497.26 to 509.17 m
IG_BH02_BCD_509.17_520.97.jpg	Dry Core Box Photo from 509.17 to 520.97 m
IG_BH02_BCD_520.97_532.96.jpg	Dry Core Box Photo from 520.97 to 532.96 m
IG_BH02_BCD_532.96_544.52.jpg	Dry Core Box Photo from 532.96 to 544.52 m
IG_BH02_BCD_544.52_556.36.jpg	Dry Core Box Photo from 544.52 to 556.36 m
IG_BH02_BCD_556.36_568.29.jpg	Dry Core Box Photo from 556.36 to 568.29 m

Table D-1: IG\_BH02 Core Box Photography Details

1671632 (3301)

Photo Name	Photo Description
IG_BH02_BCD_568.29_580.21.jpg	Dry Core Box Photo from 568.29 to 580.21 m
IG_BH02_BCD_580.21_592.16.jpg	Dry Core Box Photo from 580.21 to 592.16 m
IG_BH02_BCD_592.16_603.97.jpg	Dry Core Box Photo from 592.16 to 603.97 m
IG_BH02_BCD_603.97_615.79.jpg	Dry Core Box Photo from 603.97 to 615.79 m
IG_BH02_BCD_615.79_627.63.jpg	Dry Core Box Photo from 615.79 to 627.63 m
IG_BH02_BCD_627.63_639.59.jpg	Dry Core Box Photo from 627.63 to 639.59 m
IG_BH02_BCD_639.59_651.51.jpg	Dry Core Box Photo from 639.59 to 651.51 m
IG_BH02_BCD_651.51_663.29.jpg	Dry Core Box Photo from 651.51 to 663.29 m
IG_BH02_BCD_663.29_674.92.jpg	Dry Core Box Photo from 663.29 to 674.92 m
IG_BH02_BCD_674.92_686.55.jpg	Dry Core Box Photo from 674.92 to 686.55 m
IG_BH02_BCD_686.55_698.42.jpg	Dry Core Box Photo from 686.55 to 698.42 m
IG_BH02_BCD_698.42_710.33.jpg	Dry Core Box Photo from 698.42 to 710.33 m
IG_BH02_BCD_710.33_722.27.jpg	Dry Core Box Photo from 710.33 to 722.27 m
IG_BH02_BCD_722.27_734.18.jpg	Dry Core Box Photo from 722.27 to 734.18 m
IG_BH02_BCD_734.18_746.16.jpg	Dry Core Box Photo from 734.18 to 746.16 m
IG_BH02_BCD_746.16_758.13.jpg	Dry Core Box Photo from 746.16 to 758.13 m
IG_BH02_BCD_758.13_769.83.jpg	Dry Core Box Photo from 758.13 to 769.83 m
IG_BH02_BCD_769.83_781.88.jpg	Dry Core Box Photo from 769.83 to 781.88 m
IG_BH02_BCD_781.88_793.78.jpg	Dry Core Box Photo from 781.88 to 793.78 m
IG_BH02_BCD_793.78_805.73.jpg	Dry Core Box Photo from 793.78 to 805.73 m
IG_BH02_BCD_805.73_817.67.jpg	Dry Core Box Photo from 805.73 to 817.67 m
IG_BH02_BCD_817.67_829.64.jpg	Dry Core Box Photo from 817.67 to 829.64 m
IG_BH02_BCD_829.64_841.64.jpg	Dry Core Box Photo from 829.64 to 841.64 m
IG_BH02_BCD_841.64_853.57.jpg	Dry Core Box Photo from 841.64 to 853.57 m
IG_BH02_BCD_853.57_865.56.jpg	Dry Core Box Photo from 853.57 to 865.56 m
IG_BH02_BCD_865.56_877.42.jpg	Dry Core Box Photo from 865.56 to 877.42 m
IG_BH02_BCD_877.42_889.21.jpg	Dry Core Box Photo from 877.42 to 889.21 m
IG_BH02_BCD_889.21_901.12.jpg	Dry Core Box Photo from 889.21 to 901.12 m
IG_BH02_BCD_901.12_912.95.jpg	Dry Core Box Photo from 901.12 to 912.95 m
IG_BH02_BCD_912.95_924.74.jpg	Dry Core Box Photo from 912.95 to 924.74 m
IG_BH02_BCD_924.74_936.72.jpg	Dry Core Box Photo from 924.74 to 936.72 m
IG_BH02_BCD_936.72_948.63.jpg	Dry Core Box Photo from 936.72 to 948.63 m
IG_BH02_BCD_948.63_960.6.jpg	Dry Core Box Photo from 948.63 to 960.60 m
IG_BH02_BCD_960.6_972.53.jpg	Dry Core Box Photo from 960.60 to 972.53 m
IG_BH02_BCD_972.53_984.4.jpg	Dry Core Box Photo from 972.53 to 984.40 m
IG_BH02_BCD_984.4_996.26.jpg	Dry Core Box Photo from 984.40 to 996.26 m
IG_BH02_BCD_996.26_1000.41.jpg	Dry Core Box Photo from 996.26 to 1000.41 m
IG_BH02_BCW_2.71_12.96.jpg	Wet Core Box Photo from 2.21 to 12.96 m
IG_BH02_BCW_12.96_24.71.jpg	Wet Core Box Photo from 12.96 to 24.71 m
IG_BH02_BCW_24.71_36.28.jpg	Wet Core Box Photo from 24.71 to 36.28 m
IG_BH02_BCW_36.28_47.87.jpg	Wet Core Box Photo from 36.28 to 47.87 m
IG_BH02_BCW_47.87_59.45.jpg	Wet Core Box Photo from 47.87 to 59.45 m
IG_BH02_BCW_59.45_71.06.jpg	Wet Core Box Photo from 59.45 to 71.06 m
IG_BH02_BCW_71.06_82.96.jpg	Wet Core Box Photo from 71.06 to 82.96 m
IG_BH02_BCW_82.96_94.77.jpg	Wet Core Box Photo from 82.96 to 94.77 m
IG_BH02_BCW_94.77_106.64.jpg	Wet Core Box Photo from 94.77 to 106.64 m
IG_BH02_BCW_106.64_118.53.jpg	Wet Core Box Photo from 106.64 to 118.53 m
IG_BH02_BCW_118.53_130.57.jpg	Wet Core Box Photo from 118.53 to 130.57 m

Table D-1: IG\_BH02 Core Box Photography Details

1671632 (3301)

Photo Name	Photo Description
IG_BH02_BCW_130.57_142.53.jpg	Wet Core Box Photo from 130.57 to 142.53 m
IG_BH02_BCW_142.53_154.4.jpg	Wet Core Box Photo from 142.53 to 154.40 m
IG_BH02_BCW_154.4_166.28.jpg	Wet Core Box Photo from 154.40 to 166.28 m
IG_BH02_BCW_166.28_178.09.jpg	Wet Core Box Photo from 166.28 to 178.09 m
IG_BH02_BCW_178.09_189.92.jpg	Wet Core Box Photo from 178.09 to 189.92 m
IG_BH02_BCW_189.92_201.73.jpg	Wet Core Box Photo from 189.92 to 201.73 m
IG_BH02_BCW_201.73_213.49.jpg	Wet Core Box Photo from 201.73 to 213.49 m
IG_BH02_BCW_213.49_225.17.jpg	Wet Core Box Photo from 213.49 to 225.17 m
IG_BH02_BCW_225.17_236.92.jpg	Wet Core Box Photo from 225.17 to 236.92 m
IG_BH02_BCW_236.92_248.75.jpg	Wet Core Box Photo from 236.92 to 248.75 m
IG_BH02_BCW_248.75_260.49.jpg	Wet Core Box Photo from 248.75 to 260.49 m
IG_BH02_BCW_260.49_272.35.jpg	Wet Core Box Photo from 260.49 to 272.35 m
IG_BH02_BCW_272.35_284.21.jpg	Wet Core Box Photo from 272.35 to 284.21 m
IG_BH02_BCW_284.21_296.03.jpg	Wet Core Box Photo from 284.21 to 296.03 m
IG_BH02_BCW_296.03_307.9.jpg	Wet Core Box Photo from 296.03 to 307.90 m
IG_BH02_BCW_307.9_319.85.jpg	Wet Core Box Photo from 307.90 to 319.85 m
IG_BH02_BCW_319.85_331.82.jpg	Wet Core Box Photo from 319.85 to 331.82 m
IG_BH02_BCW_331.82_343.61.jpg	Wet Core Box Photo from 331.82 to 343.61 m
IG_BH02_BCW_343.61_355.46.jpg	Wet Core Box Photo from 343.61 to 355.46 m
IG_BH02_BCW_355.46_367.44.jpg	Wet Core Box Photo from 355.46 to 367.44 m
IG_BH02_BCW_367.44_379.39.jpg	Wet Core Box Photo from 367.44 to 379.39 m
IG_BH02_BCW_379.39_391.06.jpg	Wet Core Box Photo from 379.39 to 391.06 m
IG_BH02_BCW_391.06_402.87.jpg	Wet Core Box Photo from 391.06 to 402.87 m
IG_BH02_BCW_402.87_414.59.jpg	Wet Core Box Photo from 402.87 to 414.59 m
IG_BH02_BCW_414.59_426.56.jpg	Wet Core Box Photo from 414.59 to 426.56 m
IG_BH02_BCW_426.56_438.44.jpg	Wet Core Box Photo from 426.56 to 438.44 m
IG_BH02_BCW_438.44_450.33.jpg	Wet Core Box Photo from 438.44 to 450.33 m
IG_BH02_BCW_450.33_461.94.jpg	Wet Core Box Photo from 450.33 to 461.94 m
IG_BH02_BCW_461.94_473.76.jpg	Wet Core Box Photo from 461.94 to 473.76 m
IG_BH02_BCW_473.76_485.46.jpg	Wet Core Box Photo from 473.76 to 485.46 m
IG_BH02_BCW_485.46_497.26.jpg	Wet Core Box Photo from 485.46 to 497.26 m
IG_BH02_BCW_497.26_509.17.jpg	Wet Core Box Photo from 497.26 to 509.17 m
IG_BH02_BCW_509.17_520.97.jpg	Wet Core Box Photo from 509.17 to 520.97 m
IG_BH02_BCW_520.97_532.96.jpg	Wet Core Box Photo from 520.97 to 532.96 m
IG_BH02_BCW_532.96_544.52.jpg	Wet Core Box Photo from 532.96 to 544.52 m
IG_BH02_BCW_544.52_556.36.jpg	Wet Core Box Photo from 544.52 to 556.36 m
IG_BH02_BCW_556.36_568.29.jpg	Wet Core Box Photo from 556.36 to 568.29 m
IG_BH02_BCW_568.29_580.21.jpg	Wet Core Box Photo from 568.29 to 580.21 m
IG_BH02_BCW_580.21_592.16.jpg	Wet Core Box Photo from 580.21 to 592.16 m
IG_BH02_BCW_592.16_603.97.jpg	Wet Core Box Photo from 592.16 to 603.97 m
IG_BH02_BCW_603.97_615.79.jpg	Wet Core Box Photo from 603.97 to 615.79 m
IG_BH02_BCW_615.79_627.63.jpg	Wet Core Box Photo from 615.79 to 627.63 m
IG_BH02_BCW_627.63_639.59.jpg	Wet Core Box Photo from 627.63 to 639.59 m
IG_BH02_BCW_639.59_651.51.jpg	Wet Core Box Photo from 639.59 to 651.51 m
IG_BH02_BCW_651.51_663.29.jpg	Wet Core Box Photo from 651.51 to 663.29 m
IG_BH02_BCW_663.29_674.92.jpg	Wet Core Box Photo from 663.29 to 674.92 m
IG_BH02_BCW_674.92_686.55.jpg	Wet Core Box Photo from 674.92 to 686.55 m
IG_BH02_BCW_686.55_698.42.jpg	Wet Core Box Photo from 686.55 to 698.42 m

Table D-1: IG\_BH02 Core Box Photography Details

1671632 (3301)

<b>Photo Name</b>	<b>Photo Description</b>
IG_BH02_BCW_698.42_710.33.jpg	Wet Core Box Photo from 698.42 to 710.33 m
IG_BH02_BCW_710.33_722.27.jpg	Wet Core Box Photo from 710.33 to 722.27 m
IG_BH02_BCW_722.27_734.18.jpg	Wet Core Box Photo from 722.27 to 734.18 m
IG_BH02_BCW_734.18_746.16.jpg	Wet Core Box Photo from 734.18 to 746.16 m
IG_BH02_BCW_746.16_758.13.jpg	Wet Core Box Photo from 746.16 to 758.13 m
IG_BH02_BCW_758.13_769.83.jpg	Wet Core Box Photo from 758.13 to 769.83 m
IG_BH02_BCW_769.83_781.88.jpg	Wet Core Box Photo from 769.83 to 781.88 m
IG_BH02_BCW_781.88_793.78.jpg	Wet Core Box Photo from 781.88 to 793.78 m
IG_BH02_BCW_793.78_805.73.jpg	Wet Core Box Photo from 793.78 to 805.73 m
IG_BH02_BCW_805.73_817.67.jpg	Wet Core Box Photo from 805.73 to 817.67 m
IG_BH02_BCW_817.67_829.64.jpg	Wet Core Box Photo from 817.67 to 829.64 m
IG_BH02_BCW_829.64_841.64.jpg	Wet Core Box Photo from 829.64 to 841.64 m
IG_BH02_BCW_841.64_853.57.jpg	Wet Core Box Photo from 841.64 to 853.57 m
IG_BH02_BCW_853.57_865.56.jpg	Wet Core Box Photo from 853.57 to 865.56 m
IG_BH02_BCW_865.56_877.42.jpg	Wet Core Box Photo from 865.56 to 877.42 m
IG_BH02_BCW_877.42_889.21.jpg	Wet Core Box Photo from 877.42 to 889.21 m
IG_BH02_BCW_889.21_901.12.jpg	Wet Core Box Photo from 889.21 to 901.12 m
IG_BH02_BCW_901.12_912.95.jpg	Wet Core Box Photo from 901.12 to 912.95 m
IG_BH02_BCW_912.95_924.74.jpg	Wet Core Box Photo from 912.95 to 924.74 m
IG_BH02_BCW_924.74_936.72.jpg	Wet Core Box Photo from 924.74 to 936.72 m
IG_BH02_BCW_936.72_948.63.jpg	Wet Core Box Photo from 936.72 to 948.63 m
IG_BH02_BCW_948.63_960.6.jpg	Wet Core Box Photo from 948.63 to 960.60 m
IG_BH02_BCW_960.6_972.53.jpg	Wet Core Box Photo from 960.60 to 972.53 m
IG_BH02_BCW_972.53_984.4.jpg	Wet Core Box Photo from 972.53 to 984.40 m
IG_BH02_BCW_984.4_996.26.jpg	Wet Core Box Photo from 984.40 to 996.26 m
IG_BH02_BCW_996.26_1000.41.jpg	Wet Core Box Photo from 996.26 to 1000.41 m

Table D-2: IG\_BH02 Core Run Photography Details

1671632 (3301)

Photo Name	Photo Description
IG_BH02CR001_B.jpg	Split Tube Photo Back of Core Run ID CR001
IG_BH02CR001_F.jpg	Split Tube Photo Front of Core Run ID CR001
IG_BH02CR002_B.jpg	Split Tube Photo Back of Core Run ID CR002
IG_BH02CR002_F.jpg	Split Tube Photo Front of Core Run ID CR002
IG_BH02CR003_B.jpg	Split Tube Photo Back of Core Run ID CR003
IG_BH02CR003_F.jpg	Split Tube Photo Front of Core Run ID CR003
IG_BH02CR004_B.jpg	Split Tube Photo Back of Core Run ID CR004
IG_BH02CR004_F.jpg	Split Tube Photo Front of Core Run ID CR004
IG_BH02CR005_B.jpg	Split Tube Photo Back of Core Run ID CR005
IG_BH02CR005_F.jpg	Split Tube Photo Front of Core Run ID CR005
IG_BH02CR006_B.jpg	Split Tube Photo Back of Core Run ID CR006
IG_BH02CR006_F.jpg	Split Tube Photo Front of Core Run ID CR006
IG_BH02CR007_B.jpg	Split Tube Photo Back of Core Run ID CR007
IG_BH02CR007_F.jpg	Split Tube Photo Front of Core Run ID CR007
IG_BH02CR008_B.jpg	Split Tube Photo Back of Core Run ID CR008
IG_BH02CR008_F.jpg	Split Tube Photo Front of Core Run ID CR008
IG_BH02CR009_B.jpg	Split Tube Photo Back of Core Run ID CR009
IG_BH02CR009_F.jpg	Split Tube Photo Front of Core Run ID CR009
IG_BH02CR010_B.jpg	Split Tube Photo Back of Core Run ID CR010
IG_BH02CR010_F.jpg	Split Tube Photo Front of Core Run ID CR010
IG_BH02CR011_B.jpg	Split Tube Photo Back of Core Run ID CR011
IG_BH02CR011_F.jpg	Split Tube Photo Front of Core Run ID CR011
IG_BH02CR012_B.jpg	Split Tube Photo Back of Core Run ID CR012
IG_BH02CR012_F.jpg	Split Tube Photo Front of Core Run ID CR012
IG_BH02CR013_B.jpg	Split Tube Photo Back of Core Run ID CR013
IG_BH02CR013_F.jpg	Split Tube Photo Front of Core Run ID CR013
IG_BH02CR014_B.jpg	Split Tube Photo Back of Core Run ID CR014
IG_BH02CR014_F.jpg	Split Tube Photo Front of Core Run ID CR014
IG_BH02CR015_B.jpg	Split Tube Photo Back of Core Run ID CR015
IG_BH02CR015_F.jpg	Split Tube Photo Front of Core Run ID CR015
IG_BH02CR016_B.jpg	Split Tube Photo Back of Core Run ID CR016
IG_BH02CR016_F.jpg	Split Tube Photo Front of Core Run ID CR016
IG_BH02CR017_B.jpg	Split Tube Photo Back of Core Run ID CR017
IG_BH02CR017_F.jpg	Split Tube Photo Front of Core Run ID CR017
IG_BH02CR018_B.jpg	Split Tube Photo Back of Core Run ID CR018
IG_BH02CR018_F.jpg	Split Tube Photo Front of Core Run ID CR018
IG_BH02CR019_B.jpg	Split Tube Photo Back of Core Run ID CR019
IG_BH02CR019_F.jpg	Split Tube Photo Front of Core Run ID CR019
IG_BH02CR020_B.jpg	Split Tube Photo Back of Core Run ID CR020
IG_BH02CR020_F.jpg	Split Tube Photo Front of Core Run ID CR020
IG_BH02CR021_B.jpg	Split Tube Photo Back of Core Run ID CR021
IG_BH02CR021_F.jpg	Split Tube Photo Front of Core Run ID CR021
IG_BH02CR022_B.jpg	Split Tube Photo Back of Core Run ID CR022
IG_BH02CR022_F.jpg	Split Tube Photo Front of Core Run ID CR022
IG_BH02CR023_B.jpg	Split Tube Photo Back of Core Run ID CR023
IG_BH02CR023_F.jpg	Split Tube Photo Front of Core Run ID CR023
IG_BH02CR024_B.jpg	Split Tube Photo Back of Core Run ID CR024
IG_BH02CR024_F.jpg	Split Tube Photo Front of Core Run ID CR024

Table D-2: IG\_BH02 Core Run Photography Details

1671632 (3301)

<b>Photo Name</b>	<b>Photo Description</b>
IG_BH02CR025_B.jpg	Split Tube Photo Back of Core Run ID CR025
IG_BH02CR025_F.jpg	Split Tube Photo Front of Core Run ID CR025
IG_BH02CR026_B.jpg	Split Tube Photo Back of Core Run ID CR026
IG_BH02CR026_F.jpg	Split Tube Photo Front of Core Run ID CR026
IG_BH02CR027_B.jpg	Split Tube Photo Back of Core Run ID CR027
IG_BH02CR027_F.jpg	Split Tube Photo Front of Core Run ID CR027
IG_BH02CR028_B.jpg	Split Tube Photo Back of Core Run ID CR028
IG_BH02CR028_F.jpg	Split Tube Photo Front of Core Run ID CR028
IG_BH02CR029_B.jpg	Split Tube Photo Back of Core Run ID CR029
IG_BH02CR029_F.jpg	Split Tube Photo Front of Core Run ID CR029
IG_BH02CR030_B.jpg	Split Tube Photo Back of Core Run ID CR030
IG_BH02CR030_F.jpg	Split Tube Photo Front of Core Run ID CR030
IG_BH02CR031_B.jpg	Split Tube Photo Back of Core Run ID CR031
IG_BH02CR031_F.jpg	Split Tube Photo Front of Core Run ID CR031
IG_BH02CR032_B.jpg	Split Tube Photo Back of Core Run ID CR032
IG_BH02CR032_F.jpg	Split Tube Photo Front of Core Run ID CR032
IG_BH02CR033_B.jpg	Split Tube Photo Back of Core Run ID CR033
IG_BH02CR033_F.jpg	Split Tube Photo Front of Core Run ID CR033
IG_BH02CR034_B.jpg	Split Tube Photo Back of Core Run ID CR034
IG_BH02CR034_F.jpg	Split Tube Photo Front of Core Run ID CR034
IG_BH02CR035_B.jpg	Split Tube Photo Back of Core Run ID CR035
IG_BH02CR035_F.jpg	Split Tube Photo Front of Core Run ID CR035
IG_BH02CR036_B.jpg	Split Tube Photo Back of Core Run ID CR036
IG_BH02CR036_F.jpg	Split Tube Photo Front of Core Run ID CR036
IG_BH02CR037_B.jpg	Split Tube Photo Back of Core Run ID CR037
IG_BH02CR037_F.jpg	Split Tube Photo Front of Core Run ID CR037
IG_BH02CR038_B.jpg	Split Tube Photo Back of Core Run ID CR038
IG_BH02CR038_F.jpg	Split Tube Photo Front of Core Run ID CR038
IG_BH02CR039_B.jpg	Split Tube Photo Back of Core Run ID CR039
IG_BH02CR039_F.jpg	Split Tube Photo Front of Core Run ID CR039
IG_BH02CR040_B.jpg	Split Tube Photo Back of Core Run ID CR040
IG_BH02CR040_F.jpg	Split Tube Photo Front of Core Run ID CR040
IG_BH02CR041_B.jpg	Split Tube Photo Back of Core Run ID CR041
IG_BH02CR041_F.jpg	Split Tube Photo Front of Core Run ID CR041
IG_BH02CR042_B.jpg	Split Tube Photo Back of Core Run ID CR042
IG_BH02CR042_F.jpg	Split Tube Photo Front of Core Run ID CR042
IG_BH02CR043_B.jpg	Split Tube Photo Back of Core Run ID CR043
IG_BH02CR043_F.jpg	Split Tube Photo Front of Core Run ID CR043
IG_BH02CR044_B.jpg	Split Tube Photo Back of Core Run ID CR044
IG_BH02CR044_F.jpg	Split Tube Photo Front of Core Run ID CR044
IG_BH02CR045_B.jpg	Split Tube Photo Back of Core Run ID CR045
IG_BH02CR045_F.jpg	Split Tube Photo Front of Core Run ID CR045
IG_BH02CR046_B.jpg	Split Tube Photo Back of Core Run ID CR046
IG_BH02CR046_F.jpg	Split Tube Photo Front of Core Run ID CR046
IG_BH02CR047_B.jpg	Split Tube Photo Back of Core Run ID CR047
IG_BH02CR047_F.jpg	Split Tube Photo Front of Core Run ID CR047
IG_BH02CR048_B.jpg	Split Tube Photo Back of Core Run ID CR048
IG_BH02CR048_F.jpg	Split Tube Photo Front of Core Run ID CR048

Table D-2: IG\_BH02 Core Run Photography Details

1671632 (3301)

Photo Name	Photo Description
IG_BH02CR049_B.jpg	Split Tube Photo Back of Core Run ID CR049
IG_BH02CR049_F.jpg	Split Tube Photo Front of Core Run ID CR049
IG_BH02CR050_B.jpg	Split Tube Photo Back of Core Run ID CR050
IG_BH02CR050_F.jpg	Split Tube Photo Front of Core Run ID CR050
IG_BH02CR051_B.jpg	Split Tube Photo Back of Core Run ID CR051
IG_BH02CR051_F.jpg	Split Tube Photo Front of Core Run ID CR051
IG_BH02CR052_B.jpg	Split Tube Photo Back of Core Run ID CR052
IG_BH02CR052_F.jpg	Split Tube Photo Front of Core Run ID CR052
IG_BH02CR053_B.jpg	Split Tube Photo Back of Core Run ID CR053
IG_BH02CR053_F.jpg	Split Tube Photo Front of Core Run ID CR053
IG_BH02CR054_B.jpg	Split Tube Photo Back of Core Run ID CR054
IG_BH02CR054_F.jpg	Split Tube Photo Front of Core Run ID CR054
IG_BH02CR055_B.jpg	Split Tube Photo Back of Core Run ID CR055
IG_BH02CR055_F.jpg	Split Tube Photo Front of Core Run ID CR055
IG_BH02CR056_B.jpg	Split Tube Photo Back of Core Run ID CR056
IG_BH02CR056_F.jpg	Split Tube Photo Front of Core Run ID CR056
IG_BH02CR057_B.jpg	Split Tube Photo Back of Core Run ID CR057
IG_BH02CR057_F.jpg	Split Tube Photo Front of Core Run ID CR057
IG_BH02CR058_B.jpg	Split Tube Photo Back of Core Run ID CR058
IG_BH02CR058_F.jpg	Split Tube Photo Front of Core Run ID CR058
IG_BH02CR059_B.jpg	Split Tube Photo Back of Core Run ID CR059
IG_BH02CR059_F.jpg	Split Tube Photo Front of Core Run ID CR059
IG_BH02CR060_B.jpg	Split Tube Photo Back of Core Run ID CR060
IG_BH02CR060_F.jpg	Split Tube Photo Front of Core Run ID CR060
IG_BH02CR061_B.jpg	Split Tube Photo Back of Core Run ID CR061
IG_BH02CR061_F.jpg	Split Tube Photo Front of Core Run ID CR061
IG_BH02CR062_B.jpg	Split Tube Photo Back of Core Run ID CR062
IG_BH02CR062_F.jpg	Split Tube Photo Front of Core Run ID CR062
IG_BH02CR063_B.jpg	Split Tube Photo Back of Core Run ID CR063
IG_BH02CR063_F.jpg	Split Tube Photo Front of Core Run ID CR063
IG_BH02CR064_B.jpg	Split Tube Photo Back of Core Run ID CR064
IG_BH02CR064_F.jpg	Split Tube Photo Front of Core Run ID CR064
IG_BH02CR065_B.jpg	Split Tube Photo Back of Core Run ID CR065
IG_BH02CR065_F.jpg	Split Tube Photo Front of Core Run ID CR065
IG_BH02CR066_B.jpg	Split Tube Photo Back of Core Run ID CR066
IG_BH02CR066_F.jpg	Split Tube Photo Front of Core Run ID CR066
IG_BH02CR067_B.jpg	Split Tube Photo Back of Core Run ID CR067
IG_BH02CR067_F.jpg	Split Tube Photo Front of Core Run ID CR067
IG_BH02CR068_B.jpg	Split Tube Photo Back of Core Run ID CR068
IG_BH02CR068_F.jpg	Split Tube Photo Front of Core Run ID CR068
IG_BH02CR069_B.jpg	Split Tube Photo Back of Core Run ID CR069
IG_BH02CR069_F.jpg	Split Tube Photo Front of Core Run ID CR069
IG_BH02CR070_B.jpg	Split Tube Photo Back of Core Run ID CR070
IG_BH02CR070_F.jpg	Split Tube Photo Front of Core Run ID CR070
IG_BH02CR071_B.jpg	Split Tube Photo Back of Core Run ID CR071
IG_BH02CR071_F.jpg	Split Tube Photo Front of Core Run ID CR071
IG_BH02CR072_B.jpg	Split Tube Photo Back of Core Run ID CR072
IG_BH02CR072_F.jpg	Split Tube Photo Front of Core Run ID CR072

Table D-2: IG\_BH02 Core Run Photography Details

1671632 (3301)

Photo Name	Photo Description
IG_BH02CR073_B.jpg	Split Tube Photo Back of Core Run ID CR073
IG_BH02CR073_F.jpg	Split Tube Photo Front of Core Run ID CR073
IG_BH02CR074_B.jpg	Split Tube Photo Back of Core Run ID CR074
IG_BH02CR074_F.jpg	Split Tube Photo Front of Core Run ID CR074
IG_BH02CR075_B.jpg	Split Tube Photo Back of Core Run ID CR075
IG_BH02CR075_F.jpg	Split Tube Photo Front of Core Run ID CR075
IG_BH02CR076_B.jpg	Split Tube Photo Back of Core Run ID CR076
IG_BH02CR076_F.jpg	Split Tube Photo Front of Core Run ID CR076
IG_BH02CR077_B.jpg	Split Tube Photo Back of Core Run ID CR077
IG_BH02CR077_F.jpg	Split Tube Photo Front of Core Run ID CR077
IG_BH02CR078_B.jpg	Split Tube Photo Back of Core Run ID CR078
IG_BH02CR078_F.jpg	Split Tube Photo Front of Core Run ID CR078
IG_BH02CR079_B.jpg	Split Tube Photo Back of Core Run ID CR079
IG_BH02CR079_F.jpg	Split Tube Photo Front of Core Run ID CR079
IG_BH02CR080_B.jpg	Split Tube Photo Back of Core Run ID CR080
IG_BH02CR080_F.jpg	Split Tube Photo Front of Core Run ID CR080
IG_BH02CR081_B.jpg	Split Tube Photo Back of Core Run ID CR081
IG_BH02CR081_F.jpg	Split Tube Photo Front of Core Run ID CR081
IG_BH02CR082_B.jpg	Split Tube Photo Back of Core Run ID CR082
IG_BH02CR082_F.jpg	Split Tube Photo Front of Core Run ID CR082
IG_BH02CR083_B.jpg	Split Tube Photo Back of Core Run ID CR083
IG_BH02CR083_F.jpg	Split Tube Photo Front of Core Run ID CR083
IG_BH02CR084_B.jpg	Split Tube Photo Back of Core Run ID CR084
IG_BH02CR084_F.jpg	Split Tube Photo Front of Core Run ID CR084
IG_BH02CR085_B.jpg	Split Tube Photo Back of Core Run ID CR085
IG_BH02CR085_F.jpg	Split Tube Photo Front of Core Run ID CR085
IG_BH02CR086_B.jpg	Split Tube Photo Back of Core Run ID CR086
IG_BH02CR086_F.jpg	Split Tube Photo Front of Core Run ID CR086
IG_BH02CR087_B.jpg	Split Tube Photo Back of Core Run ID CR087
IG_BH02CR087_F.jpg	Split Tube Photo Front of Core Run ID CR087
IG_BH02CR088_B.jpg	Split Tube Photo Back of Core Run ID CR088
IG_BH02CR088_F.jpg	Split Tube Photo Front of Core Run ID CR088
IG_BH02CR089_B.jpg	Split Tube Photo Back of Core Run ID CR089
IG_BH02CR089_F.jpg	Split Tube Photo Front of Core Run ID CR089
IG_BH02CR090_B.jpg	Split Tube Photo Back of Core Run ID CR090
IG_BH02CR090_F.jpg	Split Tube Photo Front of Core Run ID CR090
IG_BH02CR091_B.jpg	Split Tube Photo Back of Core Run ID CR091
IG_BH02CR091_F.jpg	Split Tube Photo Front of Core Run ID CR091
IG_BH02CR092_B.jpg	Split Tube Photo Back of Core Run ID CR092
IG_BH02CR092_F.jpg	Split Tube Photo Front of Core Run ID CR092
IG_BH02CR093_B.jpg	Split Tube Photo Back of Core Run ID CR093
IG_BH02CR093_F.jpg	Split Tube Photo Front of Core Run ID CR093
IG_BH02CR094_B.jpg	Split Tube Photo Back of Core Run ID CR094
IG_BH02CR094_F.jpg	Split Tube Photo Front of Core Run ID CR094
IG_BH02CR095_B.jpg	Split Tube Photo Back of Core Run ID CR095
IG_BH02CR095_F.jpg	Split Tube Photo Front of Core Run ID CR095
IG_BH02CR096_B.jpg	Split Tube Photo Back of Core Run ID CR096
IG_BH02CR096_F.jpg	Split Tube Photo Front of Core Run ID CR096

Table D-2: IG\_BH02 Core Run Photography Details

1671632 (3301)

Photo Name	Photo Description
IG_BH02CR097_B.jpg	Split Tube Photo Back of Core Run ID CR097
IG_BH02CR097_F.jpg	Split Tube Photo Front of Core Run ID CR097
IG_BH02CR098_B.jpg	Split Tube Photo Back of Core Run ID CR098
IG_BH02CR098_F.jpg	Split Tube Photo Front of Core Run ID CR098
IG_BH02CR099_B.jpg	Split Tube Photo Back of Core Run ID CR099
IG_BH02CR099_F.jpg	Split Tube Photo Front of Core Run ID CR099
IG_BH02CR100_B.jpg	Split Tube Photo Back of Core Run ID CR100
IG_BH02CR100_F.jpg	Split Tube Photo Front of Core Run ID CR100
IG_BH02CR101_B.jpg	Split Tube Photo Back of Core Run ID CR101
IG_BH02CR101_F.jpg	Split Tube Photo Front of Core Run ID CR101
IG_BH02CR102_B.jpg	Split Tube Photo Back of Core Run ID CR102
IG_BH02CR102_F.jpg	Split Tube Photo Front of Core Run ID CR102
IG_BH02CR103_B.jpg	Split Tube Photo Back of Core Run ID CR103
IG_BH02CR103_F.jpg	Split Tube Photo Front of Core Run ID CR103
IG_BH02CR104_B.jpg	Split Tube Photo Back of Core Run ID CR104
IG_BH02CR104_F.jpg	Split Tube Photo Front of Core Run ID CR104
IG_BH02CR105_B.jpg	Split Tube Photo Back of Core Run ID CR105
IG_BH02CR105_F.jpg	Split Tube Photo Front of Core Run ID CR105
IG_BH02CR106_B.jpg	Split Tube Photo Back of Core Run ID CR106
IG_BH02CR106_F.jpg	Split Tube Photo Front of Core Run ID CR106
IG_BH02CR107_B.jpg	Split Tube Photo Back of Core Run ID CR107
IG_BH02CR107_F.jpg	Split Tube Photo Front of Core Run ID CR107
IG_BH02CR108_B.jpg	Split Tube Photo Back of Core Run ID CR108
IG_BH02CR108_F.jpg	Split Tube Photo Front of Core Run ID CR108
IG_BH02CR109_B.jpg	Split Tube Photo Back of Core Run ID CR109
IG_BH02CR109_F.jpg	Split Tube Photo Front of Core Run ID CR109
IG_BH02CR110_B.jpg	Split Tube Photo Back of Core Run ID CR110
IG_BH02CR110_F.jpg	Split Tube Photo Front of Core Run ID CR110
IG_BH02CR111_B.jpg	Split Tube Photo Back of Core Run ID CR111
IG_BH02CR111_F.jpg	Split Tube Photo Front of Core Run ID CR111
IG_BH02CR112_B.jpg	Split Tube Photo Back of Core Run ID CR112
IG_BH02CR112_F.jpg	Split Tube Photo Front of Core Run ID CR112
IG_BH02CR113_B.jpg	Split Tube Photo Back of Core Run ID CR113
IG_BH02CR113_F.jpg	Split Tube Photo Front of Core Run ID CR113
IG_BH02CR114_B.jpg	Split Tube Photo Back of Core Run ID CR114
IG_BH02CR114_F.jpg	Split Tube Photo Front of Core Run ID CR114
IG_BH02CR115_B.jpg	Split Tube Photo Back of Core Run ID CR115
IG_BH02CR115_F.jpg	Split Tube Photo Front of Core Run ID CR115
IG_BH02CR116_B.jpg	Split Tube Photo Back of Core Run ID CR116
IG_BH02CR116_F.jpg	Split Tube Photo Front of Core Run ID CR116
IG_BH02CR117_B.jpg	Split Tube Photo Back of Core Run ID CR117
IG_BH02CR117_F.jpg	Split Tube Photo Front of Core Run ID CR117
IG_BH02CR118_B.jpg	Split Tube Photo Back of Core Run ID CR118
IG_BH02CR118_F.jpg	Split Tube Photo Front of Core Run ID CR118
IG_BH02CR119_B.jpg	Split Tube Photo Back of Core Run ID CR119
IG_BH02CR119_F.jpg	Split Tube Photo Front of Core Run ID CR119
IG_BH02CR120_B.jpg	Split Tube Photo Back of Core Run ID CR120
IG_BH02CR120_F.jpg	Split Tube Photo Front of Core Run ID CR120

Table D-2: IG\_BH02 Core Run Photography Details

1671632 (3301)

Photo Name	Photo Description
IG_BH02CR121_B.jpg	Split Tube Photo Back of Core Run ID CR121
IG_BH02CR121_F.jpg	Split Tube Photo Front of Core Run ID CR121
IG_BH02CR122_B.jpg	Split Tube Photo Back of Core Run ID CR122
IG_BH02CR122_F.jpg	Split Tube Photo Front of Core Run ID CR122
IG_BH02CR123_B.jpg	Split Tube Photo Back of Core Run ID CR123
IG_BH02CR123_F.jpg	Split Tube Photo Front of Core Run ID CR123
IG_BH02CR124_B.jpg	Split Tube Photo Back of Core Run ID CR124
IG_BH02CR124_F.jpg	Split Tube Photo Front of Core Run ID CR124
IG_BH02CR125_B.jpg	Split Tube Photo Back of Core Run ID CR125
IG_BH02CR125_F.jpg	Split Tube Photo Front of Core Run ID CR125
IG_BH02CR126_B.jpg	Split Tube Photo Back of Core Run ID CR126
IG_BH02CR126_F.jpg	Split Tube Photo Front of Core Run ID CR126
IG_BH02CR127_B.jpg	Split Tube Photo Back of Core Run ID CR127
IG_BH02CR127_F.jpg	Split Tube Photo Front of Core Run ID CR127
IG_BH02CR128_B.jpg	Split Tube Photo Back of Core Run ID CR128
IG_BH02CR128_F.jpg	Split Tube Photo Front of Core Run ID CR128
IG_BH02CR129_B.jpg	Split Tube Photo Back of Core Run ID CR129
IG_BH02CR129_F.jpg	Split Tube Photo Front of Core Run ID CR129
IG_BH02CR130_B.jpg	Split Tube Photo Back of Core Run ID CR130
IG_BH02CR130_F.jpg	Split Tube Photo Front of Core Run ID CR130
IG_BH02CR131_B.jpg	Split Tube Photo Back of Core Run ID CR131
IG_BH02CR131_F.jpg	Split Tube Photo Front of Core Run ID CR131
IG_BH02CR132_B.jpg	Split Tube Photo Back of Core Run ID CR132
IG_BH02CR132_F.jpg	Split Tube Photo Front of Core Run ID CR132
IG_BH02CR133_B.jpg	Split Tube Photo Back of Core Run ID CR133
IG_BH02CR133_F.jpg	Split Tube Photo Front of Core Run ID CR133
IG_BH02CR134_B.jpg	Split Tube Photo Back of Core Run ID CR134
IG_BH02CR134_F.jpg	Split Tube Photo Front of Core Run ID CR134
IG_BH02CR135_B.jpg	Split Tube Photo Back of Core Run ID CR135
IG_BH02CR135_F.jpg	Split Tube Photo Front of Core Run ID CR135
IG_BH02CR136_B.jpg	Split Tube Photo Back of Core Run ID CR136
IG_BH02CR136_F.jpg	Split Tube Photo Front of Core Run ID CR136
IG_BH02CR137_B.jpg	Split Tube Photo Back of Core Run ID CR137
IG_BH02CR137_F.jpg	Split Tube Photo Front of Core Run ID CR137
IG_BH02CR138_B.jpg	Split Tube Photo Back of Core Run ID CR138
IG_BH02CR138_F.jpg	Split Tube Photo Front of Core Run ID CR138
IG_BH02CR139_B.jpg	Split Tube Photo Back of Core Run ID CR139
IG_BH02CR139_F.jpg	Split Tube Photo Front of Core Run ID CR139
IG_BH02CR140_B.jpg	Split Tube Photo Back of Core Run ID CR140
IG_BH02CR140_F.jpg	Split Tube Photo Front of Core Run ID CR140
IG_BH02CR141_B.jpg	Split Tube Photo Back of Core Run ID CR141
IG_BH02CR141_F.jpg	Split Tube Photo Front of Core Run ID CR141
IG_BH02CR142_B.jpg	Split Tube Photo Back of Core Run ID CR142
IG_BH02CR142_F.jpg	Split Tube Photo Front of Core Run ID CR142
IG_BH02CR143_B.jpg	Split Tube Photo Back of Core Run ID CR143
IG_BH02CR143_F.jpg	Split Tube Photo Front of Core Run ID CR143
IG_BH02CR144_B.jpg	Split Tube Photo Back of Core Run ID CR144
IG_BH02CR144_F.jpg	Split Tube Photo Front of Core Run ID CR144

Table D-2: IG\_BH02 Core Run Photography Details

1671632 (3301)

Photo Name	Photo Description
IG_BH02CR145_B.jpg	Split Tube Photo Back of Core Run ID CR145
IG_BH02CR145_F.jpg	Split Tube Photo Front of Core Run ID CR145
IG_BH02CR146_B.jpg	Split Tube Photo Back of Core Run ID CR146
IG_BH02CR146_F.jpg	Split Tube Photo Front of Core Run ID CR146
IG_BH02CR147_B.jpg	Split Tube Photo Back of Core Run ID CR147
IG_BH02CR147_F.jpg	Split Tube Photo Front of Core Run ID CR147
IG_BH02CR148_B.jpg	Split Tube Photo Back of Core Run ID CR148
IG_BH02CR148_F.jpg	Split Tube Photo Front of Core Run ID CR148
IG_BH02CR149_B.jpg	Split Tube Photo Back of Core Run ID CR149
IG_BH02CR149_F.jpg	Split Tube Photo Front of Core Run ID CR149
IG_BH02CR150_B.jpg	Split Tube Photo Back of Core Run ID CR150
IG_BH02CR150_F.jpg	Split Tube Photo Front of Core Run ID CR150
IG_BH02CR151_B.jpg	Split Tube Photo Back of Core Run ID CR151
IG_BH02CR151_F.jpg	Split Tube Photo Front of Core Run ID CR151
IG_BH02CR152_B.jpg	Split Tube Photo Back of Core Run ID CR152
IG_BH02CR152_F.jpg	Split Tube Photo Front of Core Run ID CR152
IG_BH02CR153_B.jpg	Split Tube Photo Back of Core Run ID CR153
IG_BH02CR153_F.jpg	Split Tube Photo Front of Core Run ID CR153
IG_BH02CR154_B.jpg	Split Tube Photo Back of Core Run ID CR154
IG_BH02CR154_F.jpg	Split Tube Photo Front of Core Run ID CR154
IG_BH02CR155_B.jpg	Split Tube Photo Back of Core Run ID CR155
IG_BH02CR155_F.jpg	Split Tube Photo Front of Core Run ID CR155
IG_BH02CR156_B.jpg	Split Tube Photo Back of Core Run ID CR156
IG_BH02CR156_F.jpg	Split Tube Photo Front of Core Run ID CR156
IG_BH02CR157_B.jpg	Split Tube Photo Back of Core Run ID CR157
IG_BH02CR157_F.jpg	Split Tube Photo Front of Core Run ID CR157
IG_BH02CR158_B.jpg	Split Tube Photo Back of Core Run ID CR158
IG_BH02CR158_F.jpg	Split Tube Photo Front of Core Run ID CR158
IG_BH02CR159_B.jpg	Split Tube Photo Back of Core Run ID CR159
IG_BH02CR159_F.jpg	Split Tube Photo Front of Core Run ID CR159
IG_BH02CR160_B.jpg	Split Tube Photo Back of Core Run ID CR160
IG_BH02CR160_F.jpg	Split Tube Photo Front of Core Run ID CR160
IG_BH02CR161_B.jpg	Split Tube Photo Back of Core Run ID CR161
IG_BH02CR161_F.jpg	Split Tube Photo Front of Core Run ID CR161
IG_BH02CR162_B.jpg	Split Tube Photo Back of Core Run ID CR162
IG_BH02CR162_F.jpg	Split Tube Photo Front of Core Run ID CR162
IG_BH02CR163_B.jpg	Split Tube Photo Back of Core Run ID CR163
IG_BH02CR163_F.jpg	Split Tube Photo Front of Core Run ID CR163
IG_BH02CR164_B.jpg	Split Tube Photo Back of Core Run ID CR164
IG_BH02CR164_F.jpg	Split Tube Photo Front of Core Run ID CR164
IG_BH02CR165_B.jpg	Split Tube Photo Back of Core Run ID CR165
IG_BH02CR165_F.jpg	Split Tube Photo Front of Core Run ID CR165
IG_BH02CR166_B.jpg	Split Tube Photo Back of Core Run ID CR166
IG_BH02CR166_F.jpg	Split Tube Photo Front of Core Run ID CR166
IG_BH02CR167_B.jpg	Split Tube Photo Back of Core Run ID CR167
IG_BH02CR167_F.jpg	Split Tube Photo Front of Core Run ID CR167
IG_BH02CR168_B.jpg	Split Tube Photo Back of Core Run ID CR168
IG_BH02CR168_F.jpg	Split Tube Photo Front of Core Run ID CR168

Table D-2: IG\_BH02 Core Run Photography Details

1671632 (3301)

<b>Photo Name</b>	<b>Photo Description</b>
IG_BH02CR169_B.jpg	Split Tube Photo Back of Core Run ID CR169
IG_BH02CR169_F.jpg	Split Tube Photo Front of Core Run ID CR169
IG_BH02CR170_B.jpg	Split Tube Photo Back of Core Run ID CR170
IG_BH02CR170_F.jpg	Split Tube Photo Front of Core Run ID CR170
IG_BH02CR171_B.jpg	Split Tube Photo Back of Core Run ID CR171
IG_BH02CR171_F.jpg	Split Tube Photo Front of Core Run ID CR171
IG_BH02CR172_B.jpg	Split Tube Photo Back of Core Run ID CR172
IG_BH02CR172_F.jpg	Split Tube Photo Front of Core Run ID CR172
IG_BH02CR173_B.jpg	Split Tube Photo Back of Core Run ID CR173
IG_BH02CR173_F.jpg	Split Tube Photo Front of Core Run ID CR173
IG_BH02CR174_B.jpg	Split Tube Photo Back of Core Run ID CR174
IG_BH02CR174_F.jpg	Split Tube Photo Front of Core Run ID CR174
IG_BH02CR175_B.jpg	Split Tube Photo Back of Core Run ID CR175
IG_BH02CR175_F.jpg	Split Tube Photo Front of Core Run ID CR175
IG_BH02CR176_B.jpg	Split Tube Photo Back of Core Run ID CR176
IG_BH02CR176_F.jpg	Split Tube Photo Front of Core Run ID CR176
IG_BH02CR177_B.jpg	Split Tube Photo Back of Core Run ID CR177
IG_BH02CR177_F.jpg	Split Tube Photo Front of Core Run ID CR177
IG_BH02CR178_B.jpg	Split Tube Photo Back of Core Run ID CR178
IG_BH02CR178_F.jpg	Split Tube Photo Front of Core Run ID CR178
IG_BH02CR179_B.jpg	Split Tube Photo Back of Core Run ID CR179
IG_BH02CR179_F.jpg	Split Tube Photo Front of Core Run ID CR179
IG_BH02CR180_B.jpg	Split Tube Photo Back of Core Run ID CR180
IG_BH02CR180_F.jpg	Split Tube Photo Front of Core Run ID CR180
IG_BH02CR181_B.jpg	Split Tube Photo Back of Core Run ID CR181
IG_BH02CR181_F.jpg	Split Tube Photo Front of Core Run ID CR181
IG_BH02CR182_B.jpg	Split Tube Photo Back of Core Run ID CR182
IG_BH02CR182_F.jpg	Split Tube Photo Front of Core Run ID CR182
IG_BH02CR183_B.jpg	Split Tube Photo Back of Core Run ID CR183
IG_BH02CR183_F.jpg	Split Tube Photo Front of Core Run ID CR183
IG_BH02CR184_B.jpg	Split Tube Photo Back of Core Run ID CR184
IG_BH02CR184_F.jpg	Split Tube Photo Front of Core Run ID CR184
IG_BH02CR185_B.jpg	Split Tube Photo Back of Core Run ID CR185
IG_BH02CR185_F.jpg	Split Tube Photo Front of Core Run ID CR185
IG_BH02CR186_B.jpg	Split Tube Photo Back of Core Run ID CR186
IG_BH02CR186_F.jpg	Split Tube Photo Front of Core Run ID CR186
IG_BH02CR187_B.jpg	Split Tube Photo Back of Core Run ID CR187
IG_BH02CR187_F.jpg	Split Tube Photo Front of Core Run ID CR187
IG_BH02CR188_B.jpg	Split Tube Photo Back of Core Run ID CR188
IG_BH02CR188_F.jpg	Split Tube Photo Front of Core Run ID CR188
IG_BH02CR189_B.jpg	Split Tube Photo Back of Core Run ID CR189
IG_BH02CR189_F.jpg	Split Tube Photo Front of Core Run ID CR189
IG_BH02CR190_B.jpg	Split Tube Photo Back of Core Run ID CR190
IG_BH02CR190_F.jpg	Split Tube Photo Front of Core Run ID CR190
IG_BH02CR191_B.jpg	Split Tube Photo Back of Core Run ID CR191
IG_BH02CR191_F.jpg	Split Tube Photo Front of Core Run ID CR191
IG_BH02CR192_B.jpg	Split Tube Photo Back of Core Run ID CR192
IG_BH02CR192_F.jpg	Split Tube Photo Front of Core Run ID CR192

Table D-2: IG\_BH02 Core Run Photography Details

1671632 (3301)

Photo Name	Photo Description
IG_BH02CR193_B.jpg	Split Tube Photo Back of Core Run ID CR193
IG_BH02CR193_F.jpg	Split Tube Photo Front of Core Run ID CR193
IG_BH02CR194_B.jpg	Split Tube Photo Back of Core Run ID CR194
IG_BH02CR194_F.jpg	Split Tube Photo Front of Core Run ID CR194
IG_BH02CR195_B.jpg	Split Tube Photo Back of Core Run ID CR195
IG_BH02CR195_F.jpg	Split Tube Photo Front of Core Run ID CR195
IG_BH02CR196_B.jpg	Split Tube Photo Back of Core Run ID CR196
IG_BH02CR196_F.jpg	Split Tube Photo Front of Core Run ID CR196
IG_BH02CR197_B.jpg	Split Tube Photo Back of Core Run ID CR197
IG_BH02CR197_F.jpg	Split Tube Photo Front of Core Run ID CR197
IG_BH02CR198_B.jpg	Split Tube Photo Back of Core Run ID CR198
IG_BH02CR198_F.jpg	Split Tube Photo Front of Core Run ID CR198
IG_BH02CR199_B.jpg	Split Tube Photo Back of Core Run ID CR199
IG_BH02CR199_F.jpg	Split Tube Photo Front of Core Run ID CR199
IG_BH02CR200_B.jpg	Split Tube Photo Back of Core Run ID CR200
IG_BH02CR200_F.jpg	Split Tube Photo Front of Core Run ID CR200
IG_BH02CR201_B.jpg	Split Tube Photo Back of Core Run ID CR201
IG_BH02CR201_F.jpg	Split Tube Photo Front of Core Run ID CR201
IG_BH02CR202_B.jpg	Split Tube Photo Back of Core Run ID CR202
IG_BH02CR202_F.jpg	Split Tube Photo Front of Core Run ID CR202
IG_BH02CR203_B.jpg	Split Tube Photo Back of Core Run ID CR203
IG_BH02CR203_F.jpg	Split Tube Photo Front of Core Run ID CR203
IG_BH02CR204_B.jpg	Split Tube Photo Back of Core Run ID CR204
IG_BH02CR204_F.jpg	Split Tube Photo Front of Core Run ID CR204
IG_BH02CR205_B.jpg	Split Tube Photo Back of Core Run ID CR205
IG_BH02CR205_F.jpg	Split Tube Photo Front of Core Run ID CR205
IG_BH02CR206_B.jpg	Split Tube Photo Back of Core Run ID CR206
IG_BH02CR206_F.jpg	Split Tube Photo Front of Core Run ID CR206
IG_BH02CR207_B.jpg	Split Tube Photo Back of Core Run ID CR207
IG_BH02CR207_F.jpg	Split Tube Photo Front of Core Run ID CR207
IG_BH02CR208_B.jpg	Split Tube Photo Back of Core Run ID CR208
IG_BH02CR208_F.jpg	Split Tube Photo Front of Core Run ID CR208
IG_BH02CR209_B.jpg	Split Tube Photo Back of Core Run ID CR209
IG_BH02CR209_F.jpg	Split Tube Photo Front of Core Run ID CR209
IG_BH02CR210_B.jpg	Split Tube Photo Back of Core Run ID CR210
IG_BH02CR210_F.jpg	Split Tube Photo Front of Core Run ID CR210
IG_BH02CR211_B.jpg	Split Tube Photo Back of Core Run ID CR211
IG_BH02CR211_F.jpg	Split Tube Photo Front of Core Run ID CR211
IG_BH02CR212_B.jpg	Split Tube Photo Back of Core Run ID CR212
IG_BH02CR212_F.jpg	Split Tube Photo Front of Core Run ID CR212
IG_BH02CR213_B.jpg	Split Tube Photo Back of Core Run ID CR213
IG_BH02CR213_F.jpg	Split Tube Photo Front of Core Run ID CR213
IG_BH02CR214_B.jpg	Split Tube Photo Back of Core Run ID CR214
IG_BH02CR214_F.jpg	Split Tube Photo Front of Core Run ID CR214
IG_BH02CR215_B.jpg	Split Tube Photo Back of Core Run ID CR215
IG_BH02CR215_F.jpg	Split Tube Photo Front of Core Run ID CR215
IG_BH02CR216_B.jpg	Split Tube Photo Back of Core Run ID CR216
IG_BH02CR216_F.jpg	Split Tube Photo Front of Core Run ID CR216

Table D-2: IG\_BH02 Core Run Photography Details

1671632 (3301)

Photo Name	Photo Description
IG_BH02CR217_B.jpg	Split Tube Photo Back of Core Run ID CR217
IG_BH02CR217_F.jpg	Split Tube Photo Front of Core Run ID CR217
IG_BH02CR218_B.jpg	Split Tube Photo Back of Core Run ID CR218
IG_BH02CR218_F.jpg	Split Tube Photo Front of Core Run ID CR218
IG_BH02CR219_B.jpg	Split Tube Photo Back of Core Run ID CR219
IG_BH02CR219_F.jpg	Split Tube Photo Front of Core Run ID CR219
IG_BH02CR220_B.jpg	Split Tube Photo Back of Core Run ID CR220
IG_BH02CR220_F.jpg	Split Tube Photo Front of Core Run ID CR220
IG_BH02CR221_B.jpg	Split Tube Photo Back of Core Run ID CR221
IG_BH02CR221_F.jpg	Split Tube Photo Front of Core Run ID CR221
IG_BH02CR222_B.jpg	Split Tube Photo Back of Core Run ID CR222
IG_BH02CR222_F.jpg	Split Tube Photo Front of Core Run ID CR222
IG_BH02CR223_B.jpg	Split Tube Photo Back of Core Run ID CR223
IG_BH02CR223_F.jpg	Split Tube Photo Front of Core Run ID CR223
IG_BH02CR224_B.jpg	Split Tube Photo Back of Core Run ID CR224
IG_BH02CR224_F.jpg	Split Tube Photo Front of Core Run ID CR224
IG_BH02CR225_B.jpg	Split Tube Photo Back of Core Run ID CR225
IG_BH02CR225_F.jpg	Split Tube Photo Front of Core Run ID CR225
IG_BH02CR226_B.jpg	Split Tube Photo Back of Core Run ID CR226
IG_BH02CR226_F.jpg	Split Tube Photo Front of Core Run ID CR226
IG_BH02CR227_B.jpg	Split Tube Photo Back of Core Run ID CR227
IG_BH02CR227_F.jpg	Split Tube Photo Front of Core Run ID CR227
IG_BH02CR228_B.jpg	Split Tube Photo Back of Core Run ID CR228
IG_BH02CR228_F.jpg	Split Tube Photo Front of Core Run ID CR228
IG_BH02CR229_B.jpg	Split Tube Photo Back of Core Run ID CR229
IG_BH02CR229_F.jpg	Split Tube Photo Front of Core Run ID CR229
IG_BH02CR230_B.jpg	Split Tube Photo Back of Core Run ID CR230
IG_BH02CR230_F.jpg	Split Tube Photo Front of Core Run ID CR230
IG_BH02CR231_B.jpg	Split Tube Photo Back of Core Run ID CR231
IG_BH02CR231_F.jpg	Split Tube Photo Front of Core Run ID CR231
IG_BH02CR232_B.jpg	Split Tube Photo Back of Core Run ID CR232
IG_BH02CR232_F.jpg	Split Tube Photo Front of Core Run ID CR232
IG_BH02CR233_B.jpg	Split Tube Photo Back of Core Run ID CR233
IG_BH02CR233_F.jpg	Split Tube Photo Front of Core Run ID CR233
IG_BH02CR234_B.jpg	Split Tube Photo Back of Core Run ID CR234
IG_BH02CR234_F.jpg	Split Tube Photo Front of Core Run ID CR234
IG_BH02CR235_B.jpg	Split Tube Photo Back of Core Run ID CR235
IG_BH02CR235_F.jpg	Split Tube Photo Front of Core Run ID CR235
IG_BH02CR236_B.jpg	Split Tube Photo Back of Core Run ID CR236
IG_BH02CR236_F.jpg	Split Tube Photo Front of Core Run ID CR236
IG_BH02CR237_B.jpg	Split Tube Photo Back of Core Run ID CR237
IG_BH02CR237_F.jpg	Split Tube Photo Front of Core Run ID CR237
IG_BH02CR238_B.jpg	Split Tube Photo Back of Core Run ID CR238
IG_BH02CR238_F.jpg	Split Tube Photo Front of Core Run ID CR238
IG_BH02CR239_B.jpg	Split Tube Photo Back of Core Run ID CR239
IG_BH02CR239_F.jpg	Split Tube Photo Front of Core Run ID CR239
IG_BH02CR240_B.jpg	Split Tube Photo Back of Core Run ID CR240
IG_BH02CR240_F.jpg	Split Tube Photo Front of Core Run ID CR240

Table D-2: IG\_BH02 Core Run Photography Details

1671632 (3301)

Photo Name	Photo Description
IG_BH02CR241_B.jpg	Split Tube Photo Back of Core Run ID CR241
IG_BH02CR241_F.jpg	Split Tube Photo Front of Core Run ID CR241
IG_BH02CR242_B.jpg	Split Tube Photo Back of Core Run ID CR242
IG_BH02CR242_F.jpg	Split Tube Photo Front of Core Run ID CR242
IG_BH02CR243_B.jpg	Split Tube Photo Back of Core Run ID CR243
IG_BH02CR243_F.jpg	Split Tube Photo Front of Core Run ID CR243
IG_BH02CR244_B.jpg	Split Tube Photo Back of Core Run ID CR244
IG_BH02CR244_F.jpg	Split Tube Photo Front of Core Run ID CR244
IG_BH02CR245_B.jpg	Split Tube Photo Back of Core Run ID CR245
IG_BH02CR245_F.jpg	Split Tube Photo Front of Core Run ID CR245
IG_BH02CR246_B.jpg	Split Tube Photo Back of Core Run ID CR246
IG_BH02CR246_F.jpg	Split Tube Photo Front of Core Run ID CR246
IG_BH02CR247_B.jpg	Split Tube Photo Back of Core Run ID CR247
IG_BH02CR247_F.jpg	Split Tube Photo Front of Core Run ID CR247
IG_BH02CR248_B.jpg	Split Tube Photo Back of Core Run ID CR248
IG_BH02CR248_F.jpg	Split Tube Photo Front of Core Run ID CR248
IG_BH02CR249_B.jpg	Split Tube Photo Back of Core Run ID CR249
IG_BH02CR249_F.jpg	Split Tube Photo Front of Core Run ID CR249
IG_BH02CR250_B.jpg	Split Tube Photo Back of Core Run ID CR250
IG_BH02CR250_F.jpg	Split Tube Photo Front of Core Run ID CR250
IG_BH02CR251_B.jpg	Split Tube Photo Back of Core Run ID CR251
IG_BH02CR251_F.jpg	Split Tube Photo Front of Core Run ID CR251
IG_BH02CR252_B.jpg	Split Tube Photo Back of Core Run ID CR252
IG_BH02CR252_F.jpg	Split Tube Photo Front of Core Run ID CR252
IG_BH02CR253_B.jpg	Split Tube Photo Back of Core Run ID CR253
IG_BH02CR253_F.jpg	Split Tube Photo Front of Core Run ID CR253
IG_BH02CR254_B.jpg	Split Tube Photo Back of Core Run ID CR254
IG_BH02CR254_F.jpg	Split Tube Photo Front of Core Run ID CR254
IG_BH02CR255_B.jpg	Split Tube Photo Back of Core Run ID CR255
IG_BH02CR255_F.jpg	Split Tube Photo Front of Core Run ID CR255
IG_BH02CR256_B.jpg	Split Tube Photo Back of Core Run ID CR256
IG_BH02CR256_F.jpg	Split Tube Photo Front of Core Run ID CR256
IG_BH02CR257_B.jpg	Split Tube Photo Back of Core Run ID CR257
IG_BH02CR257_F.jpg	Split Tube Photo Front of Core Run ID CR257
IG_BH02CR258_B.jpg	Split Tube Photo Back of Core Run ID CR258
IG_BH02CR258_F.jpg	Split Tube Photo Front of Core Run ID CR258
IG_BH02CR259_B.jpg	Split Tube Photo Back of Core Run ID CR259
IG_BH02CR259_F.jpg	Split Tube Photo Front of Core Run ID CR259
IG_BH02CR260_B.jpg	Split Tube Photo Back of Core Run ID CR260
IG_BH02CR260_F.jpg	Split Tube Photo Front of Core Run ID CR260
IG_BH02CR261_B.jpg	Split Tube Photo Back of Core Run ID CR261
IG_BH02CR261_F.jpg	Split Tube Photo Front of Core Run ID CR261
IG_BH02CR262_B.jpg	Split Tube Photo Back of Core Run ID CR262
IG_BH02CR262_F.jpg	Split Tube Photo Front of Core Run ID CR262
IG_BH02CR263_B.jpg	Split Tube Photo Back of Core Run ID CR263
IG_BH02CR263_F.jpg	Split Tube Photo Front of Core Run ID CR263
IG_BH02CR264_B.jpg	Split Tube Photo Back of Core Run ID CR264
IG_BH02CR264_F.jpg	Split Tube Photo Front of Core Run ID CR264

Table D-2: IG\_BH02 Core Run Photography Details

1671632 (3301)

<b>Photo Name</b>	<b>Photo Description</b>
IG_BH02CR265_B.jpg	Split Tube Photo Back of Core Run ID CR265
IG_BH02CR265_F.jpg	Split Tube Photo Front of Core Run ID CR265
IG_BH02CR266_B.jpg	Split Tube Photo Back of Core Run ID CR266
IG_BH02CR266_F.jpg	Split Tube Photo Front of Core Run ID CR266
IG_BH02CR267_B.jpg	Split Tube Photo Back of Core Run ID CR267
IG_BH02CR267_F.jpg	Split Tube Photo Front of Core Run ID CR267
IG_BH02CR268_B.jpg	Split Tube Photo Back of Core Run ID CR268
IG_BH02CR268_F.jpg	Split Tube Photo Front of Core Run ID CR268
IG_BH02CR269_B.jpg	Split Tube Photo Back of Core Run ID CR269
IG_BH02CR269_F.jpg	Split Tube Photo Front of Core Run ID CR269
IG_BH02CR270_B.jpg	Split Tube Photo Back of Core Run ID CR270
IG_BH02CR270_F.jpg	Split Tube Photo Front of Core Run ID CR270
IG_BH02CR271_B.jpg	Split Tube Photo Back of Core Run ID CR271
IG_BH02CR271_F.jpg	Split Tube Photo Front of Core Run ID CR271
IG_BH02CR272_B.jpg	Split Tube Photo Back of Core Run ID CR272
IG_BH02CR272_F.jpg	Split Tube Photo Front of Core Run ID CR272
IG_BH02CR273_B.jpg	Split Tube Photo Back of Core Run ID CR273
IG_BH02CR273_F.jpg	Split Tube Photo Front of Core Run ID CR273
IG_BH02CR274_B.jpg	Split Tube Photo Back of Core Run ID CR274
IG_BH02CR274_F.jpg	Split Tube Photo Front of Core Run ID CR274
IG_BH02CR275_B.jpg	Split Tube Photo Back of Core Run ID CR275
IG_BH02CR275_F.jpg	Split Tube Photo Front of Core Run ID CR275
IG_BH02CR276_B.jpg	Split Tube Photo Back of Core Run ID CR276
IG_BH02CR276_F.jpg	Split Tube Photo Front of Core Run ID CR276
IG_BH02CR277_B.jpg	Split Tube Photo Back of Core Run ID CR277
IG_BH02CR277_F.jpg	Split Tube Photo Front of Core Run ID CR277
IG_BH02CR278_B.jpg	Split Tube Photo Back of Core Run ID CR278
IG_BH02CR278_F.jpg	Split Tube Photo Front of Core Run ID CR278
IG_BH02CR279_B.jpg	Split Tube Photo Back of Core Run ID CR279
IG_BH02CR279_F.jpg	Split Tube Photo Front of Core Run ID CR279
IG_BH02CR280_B.jpg	Split Tube Photo Back of Core Run ID CR280
IG_BH02CR280_F.jpg	Split Tube Photo Front of Core Run ID CR280
IG_BH02CR281_B.jpg	Split Tube Photo Back of Core Run ID CR281
IG_BH02CR281_F.jpg	Split Tube Photo Front of Core Run ID CR281
IG_BH02CR282_B.jpg	Split Tube Photo Back of Core Run ID CR282
IG_BH02CR282_F.jpg	Split Tube Photo Front of Core Run ID CR282
IG_BH02CR283_B.jpg	Split Tube Photo Back of Core Run ID CR283
IG_BH02CR283_F.jpg	Split Tube Photo Front of Core Run ID CR283
IG_BH02CR284_B.jpg	Split Tube Photo Back of Core Run ID CR284
IG_BH02CR284_F.jpg	Split Tube Photo Front of Core Run ID CR284
IG_BH02CR285_B.jpg	Split Tube Photo Back of Core Run ID CR285
IG_BH02CR285_F.jpg	Split Tube Photo Front of Core Run ID CR285
IG_BH02CR286_B.jpg	Split Tube Photo Back of Core Run ID CR286
IG_BH02CR286_F.jpg	Split Tube Photo Front of Core Run ID CR286
IG_BH02CR287_B.jpg	Split Tube Photo Back of Core Run ID CR287
IG_BH02CR287_F.jpg	Split Tube Photo Front of Core Run ID CR287
IG_BH02CR288_B.jpg	Split Tube Photo Back of Core Run ID CR288
IG_BH02CR288_F.jpg	Split Tube Photo Front of Core Run ID CR288

Table D-2: IG\_BH02 Core Run Photography Details

1671632 (3301)

Photo Name	Photo Description
IG_BH02CR289_B.jpg	Split Tube Photo Back of Core Run ID CR289
IG_BH02CR289_F.jpg	Split Tube Photo Front of Core Run ID CR289
IG_BH02CR290_B.jpg	Split Tube Photo Back of Core Run ID CR290
IG_BH02CR290_F.jpg	Split Tube Photo Front of Core Run ID CR290
IG_BH02CR291_B.jpg	Split Tube Photo Back of Core Run ID CR291
IG_BH02CR291_F.jpg	Split Tube Photo Front of Core Run ID CR291
IG_BH02CR292_B.jpg	Split Tube Photo Back of Core Run ID CR292
IG_BH02CR292_F.jpg	Split Tube Photo Front of Core Run ID CR292
IG_BH02CR293_B.jpg	Split Tube Photo Back of Core Run ID CR293
IG_BH02CR293_F.jpg	Split Tube Photo Front of Core Run ID CR293
IG_BH02CR294_B.jpg	Split Tube Photo Back of Core Run ID CR294
IG_BH02CR294_F.jpg	Split Tube Photo Front of Core Run ID CR294
IG_BH02CR295_B.jpg	Split Tube Photo Back of Core Run ID CR295
IG_BH02CR295_F.jpg	Split Tube Photo Front of Core Run ID CR295
IG_BH02CR296_B.jpg	Split Tube Photo Back of Core Run ID CR296
IG_BH02CR296_F.jpg	Split Tube Photo Front of Core Run ID CR296
IG_BH02CR297_B.jpg	Split Tube Photo Back of Core Run ID CR297
IG_BH02CR297_F.jpg	Split Tube Photo Front of Core Run ID CR297
IG_BH02CR298_B.jpg	Split Tube Photo Back of Core Run ID CR298
IG_BH02CR298_F.jpg	Split Tube Photo Front of Core Run ID CR298
IG_BH02CR299_B.jpg	Split Tube Photo Back of Core Run ID CR299
IG_BH02CR299_F.jpg	Split Tube Photo Front of Core Run ID CR299
IG_BH02CR300_B.jpg	Split Tube Photo Back of Core Run ID CR300
IG_BH02CR300_F.jpg	Split Tube Photo Front of Core Run ID CR300
IG_BH02CR301_B.jpg	Split Tube Photo Back of Core Run ID CR301
IG_BH02CR301_F.jpg	Split Tube Photo Front of Core Run ID CR301
IG_BH02CR302_B.jpg	Split Tube Photo Back of Core Run ID CR302
IG_BH02CR302_F.jpg	Split Tube Photo Front of Core Run ID CR302
IG_BH02CR303_B.jpg	Split Tube Photo Back of Core Run ID CR303
IG_BH02CR303_F.jpg	Split Tube Photo Front of Core Run ID CR303
IG_BH02CR304_B.jpg	Split Tube Photo Back of Core Run ID CR304
IG_BH02CR304_F.jpg	Split Tube Photo Front of Core Run ID CR304
IG_BH02CR305_B.jpg	Split Tube Photo Back of Core Run ID CR305
IG_BH02CR305_F.jpg	Split Tube Photo Front of Core Run ID CR305
IG_BH02CR306_B.jpg	Split Tube Photo Back of Core Run ID CR306
IG_BH02CR306_F.jpg	Split Tube Photo Front of Core Run ID CR306
IG_BH02CR307_B.jpg	Split Tube Photo Back of Core Run ID CR307
IG_BH02CR307_F.jpg	Split Tube Photo Front of Core Run ID CR307
IG_BH02CR308_B.jpg	Split Tube Photo Back of Core Run ID CR308
IG_BH02CR308_F.jpg	Split Tube Photo Front of Core Run ID CR308
IG_BH02CR309_B.jpg	Split Tube Photo Back of Core Run ID CR309
IG_BH02CR309_F.jpg	Split Tube Photo Front of Core Run ID CR309
IG_BH02CR310_B.jpg	Split Tube Photo Back of Core Run ID CR310
IG_BH02CR310_F.jpg	Split Tube Photo Front of Core Run ID CR310
IG_BH02CR311_B.jpg	Split Tube Photo Back of Core Run ID CR311
IG_BH02CR311_F.jpg	Split Tube Photo Front of Core Run ID CR311
IG_BH02CR312_B.jpg	Split Tube Photo Back of Core Run ID CR312
IG_BH02CR312_F.jpg	Split Tube Photo Front of Core Run ID CR312

Table D-2: IG\_BH02 Core Run Photography Details

1671632 (3301)

Photo Name	Photo Description
IG_BH02CR313_B.jpg	Split Tube Photo Back of Core Run ID CR313
IG_BH02CR313_F.jpg	Split Tube Photo Front of Core Run ID CR313
IG_BH02CR314_B.jpg	Split Tube Photo Back of Core Run ID CR314
IG_BH02CR314_F.jpg	Split Tube Photo Front of Core Run ID CR314
IG_BH02CR315_B.jpg	Split Tube Photo Back of Core Run ID CR315
IG_BH02CR315_F.jpg	Split Tube Photo Front of Core Run ID CR315
IG_BH02CR316_B.jpg	Split Tube Photo Back of Core Run ID CR316
IG_BH02CR316_F.jpg	Split Tube Photo Front of Core Run ID CR316
IG_BH02CR317_B.jpg	Split Tube Photo Back of Core Run ID CR317
IG_BH02CR317_F.jpg	Split Tube Photo Front of Core Run ID CR317
IG_BH02CR318_B.jpg	Split Tube Photo Back of Core Run ID CR318
IG_BH02CR318_F.jpg	Split Tube Photo Front of Core Run ID CR318
IG_BH02CR319_B.jpg	Split Tube Photo Back of Core Run ID CR319
IG_BH02CR319_F.jpg	Split Tube Photo Front of Core Run ID CR319
IG_BH02CR320_B.jpg	Split Tube Photo Back of Core Run ID CR320
IG_BH02CR320_F.jpg	Split Tube Photo Front of Core Run ID CR320
IG_BH02CR321_B.jpg	Split Tube Photo Back of Core Run ID CR321
IG_BH02CR321_F.jpg	Split Tube Photo Front of Core Run ID CR321
IG_BH02CR322_B.jpg	Split Tube Photo Back of Core Run ID CR322
IG_BH02CR322_F.jpg	Split Tube Photo Front of Core Run ID CR322
IG_BH02CR323_B.jpg	Split Tube Photo Back of Core Run ID CR323
IG_BH02CR323_F.jpg	Split Tube Photo Front of Core Run ID CR323
IG_BH02CR324_B.jpg	Split Tube Photo Back of Core Run ID CR324
IG_BH02CR324_F.jpg	Split Tube Photo Front of Core Run ID CR324
IG_BH02CR325_B.jpg	Split Tube Photo Back of Core Run ID CR325
IG_BH02CR325_F.jpg	Split Tube Photo Front of Core Run ID CR325
IG_BH02CR326_B.jpg	Split Tube Photo Back of Core Run ID CR326
IG_BH02CR326_F.jpg	Split Tube Photo Front of Core Run ID CR326
IG_BH02CR327_B.jpg	Split Tube Photo Back of Core Run ID CR327
IG_BH02CR327_F.jpg	Split Tube Photo Front of Core Run ID CR327
IG_BH02CR328_B.jpg	Split Tube Photo Back of Core Run ID CR328
IG_BH02CR328_F.jpg	Split Tube Photo Front of Core Run ID CR328
IG_BH02CR329_B.jpg	Split Tube Photo Back of Core Run ID CR329
IG_BH02CR329_F.jpg	Split Tube Photo Front of Core Run ID CR329
IG_BH02CR330_B.jpg	Split Tube Photo Back of Core Run ID CR330
IG_BH02CR330_F.jpg	Split Tube Photo Front of Core Run ID CR330
IG_BH02CR331_B.jpg	Split Tube Photo Back of Core Run ID CR331
IG_BH02CR331_F.jpg	Split Tube Photo Front of Core Run ID CR331
IG_BH02CR332_B.jpg	Split Tube Photo Back of Core Run ID CR332
IG_BH02CR332_F.jpg	Split Tube Photo Front of Core Run ID CR332
IG_BH02CR333_B.jpg	Split Tube Photo Back of Core Run ID CR333
IG_BH02CR333_F.jpg	Split Tube Photo Front of Core Run ID CR333
IG_BH02CR334_B.jpg	Split Tube Photo Back of Core Run ID CR334
IG_BH02CR334_F.jpg	Split Tube Photo Front of Core Run ID CR334
IG_BH02CR335_B.jpg	Split Tube Photo Back of Core Run ID CR335
IG_BH02CR335_F.jpg	Split Tube Photo Front of Core Run ID CR335
IG_BH02CR336_B.jpg	Split Tube Photo Back of Core Run ID CR336
IG_BH02CR336_F.jpg	Split Tube Photo Front of Core Run ID CR336

Table D-2: IG\_BH02 Core Run Photography Details

1671632 (3301)

<b>Photo Name</b>	<b>Photo Description</b>
IG_BH02CR337_B.jpg	Split Tube Photo Back of Core Run ID CR337
IG_BH02CR337_F.jpg	Split Tube Photo Front of Core Run ID CR337
IG_BH02CR338_B.jpg	Split Tube Photo Back of Core Run ID CR338
IG_BH02CR338_F.jpg	Split Tube Photo Front of Core Run ID CR338
IG_BH02CR339_B.jpg	Split Tube Photo Back of Core Run ID CR339
IG_BH02CR339_F.jpg	Split Tube Photo Front of Core Run ID CR339
IG_BH02CR340_B.jpg	Split Tube Photo Back of Core Run ID CR340
IG_BH02CR340_F.jpg	Split Tube Photo Front of Core Run ID CR340
IG_BH02CR341_B.jpg	Split Tube Photo Back of Core Run ID CR341
IG_BH02CR341_F.jpg	Split Tube Photo Front of Core Run ID CR341
IG_BH02CR342_B.jpg	Split Tube Photo Back of Core Run ID CR342
IG_BH02CR342_F.jpg	Split Tube Photo Front of Core Run ID CR342
IG_BH02CR343_B.jpg	Split Tube Photo Back of Core Run ID CR343
IG_BH02CR343_F.jpg	Split Tube Photo Front of Core Run ID CR343
IG_BH02CR344_B.jpg	Split Tube Photo Back of Core Run ID CR344
IG_BH02CR344_F.jpg	Split Tube Photo Front of Core Run ID CR344
IG_BH02CR345_B.jpg	Split Tube Photo Back of Core Run ID CR345
IG_BH02CR345_F.jpg	Split Tube Photo Front of Core Run ID CR345
IG_BH02CR346_B.jpg	Split Tube Photo Back of Core Run ID CR346
IG_BH02CR346_F.jpg	Split Tube Photo Front of Core Run ID CR346
IG_BH02CR347_B.jpg	Split Tube Photo Back of Core Run ID CR347
IG_BH02CR347_F.jpg	Split Tube Photo Front of Core Run ID CR347
IG_BH02CR348_B.jpg	Split Tube Photo Back of Core Run ID CR348
IG_BH02CR348_F.jpg	Split Tube Photo Front of Core Run ID CR348
IG_BH02CR349_B.jpg	Split Tube Photo Back of Core Run ID CR349
IG_BH02CR349_F.jpg	Split Tube Photo Front of Core Run ID CR349
IG_BH02CR350_B.jpg	Split Tube Photo Back of Core Run ID CR350
IG_BH02CR350_F.jpg	Split Tube Photo Front of Core Run ID CR350
IG_BH02CR351_B.jpg	Split Tube Photo Back of Core Run ID CR351
IG_BH02CR351_F.jpg	Split Tube Photo Front of Core Run ID CR351
IG_BH02CR352_B.jpg	Split Tube Photo Back of Core Run ID CR352
IG_BH02CR352_F.jpg	Split Tube Photo Front of Core Run ID CR352
IG_BH02CR353_B.jpg	Split Tube Photo Back of Core Run ID CR353
IG_BH02CR353_F.jpg	Split Tube Photo Front of Core Run ID CR353
IG_BH02CR354_B.jpg	Split Tube Photo Back of Core Run ID CR354
IG_BH02CR354_F.jpg	Split Tube Photo Front of Core Run ID CR354
IG_BH02CR355_B.jpg	Split Tube Photo Back of Core Run ID CR355
IG_BH02CR355_F.jpg	Split Tube Photo Front of Core Run ID CR355
IG_BH02CR356_B.jpg	Split Tube Photo Back of Core Run ID CR356
IG_BH02CR356_F.jpg	Split Tube Photo Front of Core Run ID CR356

## Table D-3: IG\_BH02 Core Sample Photography Details

1671632 (3301)

<b>Photo Name</b>	<b>Photo Description</b>
IG_BH02_AQ001_B.jpg	Sample AQ001 Photo, Back
IG_BH02_AQ001_F.jpg	Sample AQ001 Photo, Front
IG_BH02_AQ001_P.jpg	Sample AQ001 Photo, Package
IG_BH02_AQ002_B.jpg	Sample AQ002 Photo, Back
IG_BH02_AQ002_F.jpg	Sample AQ002 Photo, Front
IG_BH02_AQ002_P.jpg	Sample AQ002 Photo, Package
IG_BH02_AQ003_B.jpg	Sample AQ003 Photo, Back
IG_BH02_AQ003_F.jpg	Sample AQ003 Photo, Front
IG_BH02_AQ003_P.jpg	Sample AQ003 Photo, Package
IG_BH02_AQ004_B.jpg	Sample AQ004 Photo, Back
IG_BH02_AQ004_F.jpg	Sample AQ004 Photo, Front
IG_BH02_AQ004_P.jpg	Sample AQ004 Photo, Package
IG_BH02_AQ005_B.jpg	Sample AQ005 Photo, Back
IG_BH02_AQ005_F.jpg	Sample AQ005 Photo, Front
IG_BH02_AQ005_P.jpg	Sample AQ005 Photo, Package
IG_BH02_AQ006_B.jpg	Sample AQ006 Photo, Back
IG_BH02_AQ006_F.jpg	Sample AQ006 Photo, Front
IG_BH02_AQ006_P.jpg	Sample AQ006 Photo, Package
IG_BH02_AQ007_B.jpg	Sample AQ007 Photo, Back
IG_BH02_AQ007_F.jpg	Sample AQ007 Photo, Front
IG_BH02_AQ007_P.jpg	Sample AQ007 Photo, Package
IG_BH02_AQ008_B.jpg	Sample AQ008 Photo, Back
IG_BH02_AQ008_F.jpg	Sample AQ008 Photo, Front
IG_BH02_AQ008_P.jpg	Sample AQ008 Photo, Package
IG_BH02_AQ009_B.jpg	Sample AQ009 Photo, Back
IG_BH02_AQ009_F.jpg	Sample AQ009 Photo, Front
IG_BH02_AQ009_P.jpg	Sample AQ009 Photo, Package
IG_BH02_AQ010_B.jpg	Sample AQ010 Photo, Back
IG_BH02_AQ010_F.jpg	Sample AQ010 Photo, Front
IG_BH02_AQ010_P.jpg	Sample AQ010 Photo, Package
IG_BH02_AQ011_B.jpg	Sample AQ011 Photo, Back
IG_BH02_AQ011_F.jpg	Sample AQ011 Photo, Front
IG_BH02_AQ011_P.jpg	Sample AQ011 Photo, Package
IG_BH02_AQ012_B.jpg	Sample AQ012 Photo, Back
IG_BH02_AQ012_F.jpg	Sample AQ012 Photo, Front
IG_BH02_AQ012_P.jpg	Sample AQ012 Photo, Package
IG_BH02_AR001_B.jpg	Sample AR001 Photo, Back
IG_BH02_AR001_F.jpg	Sample AR001 Photo, Front
IG_BH02_AR001_P.jpg	Sample AR001 Photo, Package
IG_BH02_AR002_B.jpg	Sample AR002 Photo, Back
IG_BH02_AR002_F.jpg	Sample AR002 Photo, Front
IG_BH02_AR002_P.jpg	Sample AR002 Photo, Package
IG_BH02_AR003_B.jpg	Sample AR003 Photo, Back
IG_BH02_AR003_F.jpg	Sample AR003 Photo, Front
IG_BH02_AR003_P.jpg	Sample AR003 Photo, Package
IG_BH02_AR004_B.jpg	Sample AR004 Photo, Back
IG_BH02_AR004_F.jpg	Sample AR004 Photo, Front
IG_BH02_AR004_P.jpg	Sample AR004 Photo, Package

## Table D-3: IG\_BH02 Core Sample Photography Details

1671632 (3301)

<b>Photo Name</b>	<b>Photo Description</b>
IG_BH02_AR005_B.jpg	Sample AR005 Photo, Back
IG_BH02_AR005_F.jpg	Sample AR005 Photo, Front
IG_BH02_AR005_P.jpg	Sample AR005 Photo, Package
IG_BH02_AR006_B.jpg	Sample AR006 Photo, Back
IG_BH02_AR006_F.jpg	Sample AR006 Photo, Front
IG_BH02_AR006_P.jpg	Sample AR006 Photo, Package
IG_BH02_AR007_B.jpg	Sample AR007 Photo, Back
IG_BH02_AR007_F.jpg	Sample AR007 Photo, Front
IG_BH02_AR007_P.jpg	Sample AR007 Photo, Package
IG_BH02_AR008_B.jpg	Sample AR008 Photo, Back
IG_BH02_AR008_F.jpg	Sample AR008 Photo, Front
IG_BH02_AR008_P.jpg	Sample AR008 Photo, Package
IG_BH02_AR009_B.jpg	Sample AR009 Photo, Back
IG_BH02_AR009_F.jpg	Sample AR009 Photo, Front
IG_BH02_AR009_P.jpg	Sample AR009 Photo, Package
IG_BH02_AR010_B.jpg	Sample AR010 Photo, Back
IG_BH02_AR010_F.jpg	Sample AR010 Photo, Front
IG_BH02_AR010_P.jpg	Sample AR010 Photo, Package
IG_BH02_AR011_B.jpg	Sample AR011 Photo, Back
IG_BH02_AR011_F.jpg	Sample AR011 Photo, Front
IG_BH02_AR011_P.jpg	Sample AR011 Photo, Package
IG_BH02_AR012_B.jpg	Sample AR012 Photo, Back
IG_BH02_AR012_F.jpg	Sample AR012 Photo, Front
IG_BH02_AR012_P.jpg	Sample AR012 Photo, Package
IG_BH02_AR013_B.jpg	Sample AR013 Photo, Back
IG_BH02_AR013_F.jpg	Sample AR013 Photo, Front
IG_BH02_AR013_P.jpg	Sample AR013 Photo, Package
IG_BH02_AR014_B.jpg	Sample AR014 Photo, Back
IG_BH02_AR014_F.jpg	Sample AR014 Photo, Front
IG_BH02_AR014_P.jpg	Sample AR014 Photo, Package
IG_BH02_AR015_B.jpg	Sample AR015 Photo, Back
IG_BH02_AR015_F.jpg	Sample AR015 Photo, Front
IG_BH02_AR015_P.jpg	Sample AR015 Photo, Package
IG_BH02_AR016_B.jpg	Sample AR016 Photo, Back
IG_BH02_AR016_F.jpg	Sample AR016 Photo, Front
IG_BH02_AR016_P.jpg	Sample AR016 Photo, Package
IG_BH02_AR017_B.jpg	Sample AR017 Photo, Back
IG_BH02_AR017_F.jpg	Sample AR017 Photo, Front
IG_BH02_AR017_P.jpg	Sample AR017 Photo, Package
IG_BH02_AR018_B.jpg	Sample AR018 Photo, Back
IG_BH02_AR018_F.jpg	Sample AR018 Photo, Front
IG_BH02_AR018_P.jpg	Sample AR018 Photo, Package
IG_BH02_AR019_B.jpg	Sample AR019 Photo, Back
IG_BH02_AR019_F.jpg	Sample AR019 Photo, Front
IG_BH02_AR019_P.jpg	Sample AR019 Photo, Package
IG_BH02_AR020_B.jpg	Sample AR020 Photo, Back
IG_BH02_AR020_F.jpg	Sample AR020 Photo, Front
IG_BH02_AR020_P.jpg	Sample AR020 Photo, Package

## Table D-3: IG\_BH02 Core Sample Photography Details

1671632 (3301)

Photo Name	Photo Description
IG_BH02_BR001_B.jpg	Sample BR001 Photo, Back
IG_BH02_BR001_F.jpg	Sample BR001 Photo, Front
IG_BH02_BR001_P.jpg	Sample BR001 Photo, Package
IG_BH02_BR002_B.jpg	Sample BR002 Photo, Back
IG_BH02_BR002_F.jpg	Sample BR002 Photo, Front
IG_BH02_BR002_P.jpg	Sample BR002 Photo, Package
IG_BH02_BR003_B.jpg	Sample BR003 Photo, Back
IG_BH02_BR003_F.jpg	Sample BR003 Photo, Front
IG_BH02_BR003_P.jpg	Sample BR003 Photo, Package
IG_BH02_ED001_B.jpg	Sample ED001 Photo, Back
IG_BH02_ED001_F.jpg	Sample ED001 Photo, Front
IG_BH02_ED001_P.jpg	Sample ED001 Photo, Package
IG_BH02_ED002_B.jpg	Sample ED002 Photo, Back
IG_BH02_ED002_F.jpg	Sample ED002 Photo, Front
IG_BH02_ED002_P.jpg	Sample ED002 Photo, Package
IG_BH02_ED003_B.jpg	Sample ED003 Photo, Back
IG_BH02_ED003_F.jpg	Sample ED003 Photo, Front
IG_BH02_ED003_P.jpg	Sample ED003 Photo, Package
IG_BH02_ED004_B.jpg	Sample ED004 Photo, Back
IG_BH02_ED004_F.jpg	Sample ED004 Photo, Front
IG_BH02_ED004_P.jpg	Sample ED004 Photo, Package
IG_BH02_ED005_B.jpg	Sample ED005 Photo, Back
IG_BH02_ED005_F.jpg	Sample ED005 Photo, Front
IG_BH02_ED005_P.jpg	Sample ED005 Photo, Package
IG_BH02_ED006_B.jpg	Sample ED006 Photo, Back
IG_BH02_ED006_F.jpg	Sample ED006 Photo, Front
IG_BH02_ED006_P.jpg	Sample ED006 Photo, Package
IG_BH02_ED007_B.jpg	Sample ED007 Photo, Back
IG_BH02_ED007_F.jpg	Sample ED007 Photo, Front
IG_BH02_ED007_P.jpg	Sample ED007 Photo, Package
IG_BH02_ED008_B.jpg	Sample ED008 Photo, Back
IG_BH02_ED008_F.jpg	Sample ED008 Photo, Front
IG_BH02_ED008_P.jpg	Sample ED008 Photo, Package
IG_BH02_ED009_B.jpg	Sample ED009 Photo, Back
IG_BH02_ED009_F.jpg	Sample ED009 Photo, Front
IG_BH02_ED009_P.jpg	Sample ED009 Photo, Package
IG_BH02_ED010_B.jpg	Sample ED010 Photo, Back
IG_BH02_ED010_F.jpg	Sample ED010 Photo, Front
IG_BH02_ED010_P.jpg	Sample ED010 Photo, Package
IG_BH02_MB001_B.jpg	Sample MB001 Photo, Back
IG_BH02_MB001_F.jpg	Sample MB001 Photo, Front
IG_BH02_MB001_P.jpg	Sample MB001 Photo, Package
IG_BH02_MB002_B.jpg	Sample MB002 Photo, Back
IG_BH02_MB002_F.jpg	Sample MB002 Photo, Front
IG_BH02_MB002_P.jpg	Sample MB002 Photo, Package
IG_BH02_MB003_B.jpg	Sample MB003 Photo, Back
IG_BH02_MB003_F.jpg	Sample MB003 Photo, Front
IG_BH02_MB003_P.jpg	Sample MB003 Photo, Package

## Table D-3: IG\_BH02 Core Sample Photography Details

1671632 (3301)

Photo Name	Photo Description
IG_BH02_MB004_B.jpg	Sample MB004 Photo, Back
IG_BH02_MB004_F.jpg	Sample MB004 Photo, Front
IG_BH02_MB004_P.jpg	Sample MB004 Photo, Package
IG_BH02_MB005_B.jpg	Sample MB005 Photo, Back
IG_BH02_MB005_F.jpg	Sample MB005 Photo, Front
IG_BH02_MB005_P.jpg	Sample MB005 Photo, Package
IG_BH02_MB006_B.jpg	Sample MB006 Photo, Back
IG_BH02_MB006_F.jpg	Sample MB006 Photo, Front
IG_BH02_MB006_P.jpg	Sample MB006 Photo, Package
IG_BH02_NG001_B.jpg	Sample NG001 Photo, Back
IG_BH02_NG001_F.jpg	Sample NG001 Photo, Front
IG_BH02_NG001_P.jpg	Sample NG001 Photo, Package
IG_BH02_NG002_B.jpg	Sample NG002 Photo, Back
IG_BH02_NG002_F.jpg	Sample NG002 Photo, Front
IG_BH02_NG002_P.jpg	Sample NG002 Photo, Package
IG_BH02_NG003_B.jpg	Sample NG003 Photo, Back
IG_BH02_NG003_F.jpg	Sample NG003 Photo, Front
IG_BH02_NG003_P.jpg	Sample NG003 Photo, Package
IG_BH02_NG004_B.jpg	Sample NG004 Photo, Back
IG_BH02_NG004_F.jpg	Sample NG004 Photo, Front
IG_BH02_NG004_P.jpg	Sample NG004 Photo, Package
IG_BH02_NG005_B.jpg	Sample NG005 Photo, Back
IG_BH02_NG005_F.jpg	Sample NG005 Photo, Front
IG_BH02_NG005_P.jpg	Sample NG005 Photo, Package
IG_BH02_NG006_B.jpg	Sample NG006 Photo, Back
IG_BH02_NG006_F.jpg	Sample NG006 Photo, Front
IG_BH02_NG006_P.jpg	Sample NG006 Photo, Package
IG_BH02_NG007_B.jpg	Sample NG007 Photo, Back
IG_BH02_NG007_F.jpg	Sample NG007 Photo, Front
IG_BH02_NG007_P.jpg	Sample NG007 Photo, Package
IG_BH02_NG008_B.jpg	Sample NG008 Photo, Back
IG_BH02_NG008_F.jpg	Sample NG008 Photo, Front
IG_BH02_NG008_P.jpg	Sample NG008 Photo, Package
IG_BH02_NG009_B.jpg	Sample NG009 Photo, Back
IG_BH02_NG009_F.jpg	Sample NG009 Photo, Front
IG_BH02_NG009_P.jpg	Sample NG009 Photo, Package
IG_BH02_NG010_B.jpg	Sample NG010 Photo, Back
IG_BH02_NG010_F.jpg	Sample NG010 Photo, Front
IG_BH02_NG010_P.jpg	Sample NG010 Photo, Package
IG_BH02_PS001_B.jpg	Sample PS001 Photo, Back
IG_BH02_PS001_F.jpg	Sample PS001 Photo, Front
IG_BH02_PS001_P.jpg	Sample PS001 Photo, Package
IG_BH02_PS002_B.jpg	Sample PS002 Photo, Back
IG_BH02_PS002_F.jpg	Sample PS002 Photo, Front
IG_BH02_PS002_P.jpg	Sample PS002 Photo, Package
IG_BH02_PS003_B.jpg	Sample PS003 Photo, Back
IG_BH02_PS003_F.jpg	Sample PS003 Photo, Front
IG_BH02_PS003_P.jpg	Sample PS003 Photo, Package

## Table D-3: IG\_BH02 Core Sample Photography Details

1671632 (3301)

Photo Name	Photo Description
IG_BH02_PS004_B.jpg	Sample PS004 Photo, Back
IG_BH02_PS004_F.jpg	Sample PS004 Photo, Front
IG_BH02_PS004_P.jpg	Sample PS004 Photo, Package
IG_BH02_PS005_B.jpg	Sample PS005 Photo, Back
IG_BH02_PS005_F.jpg	Sample PS005 Photo, Front
IG_BH02_PS005_P.jpg	Sample PS005 Photo, Package
IG_BH02_PS006_B.jpg	Sample PS006 Photo, Back
IG_BH02_PS006_F.jpg	Sample PS006 Photo, Front
IG_BH02_PS006_P.jpg	Sample PS006 Photo, Package
IG_BH02_PS007_B.jpg	Sample PS007 Photo, Back
IG_BH02_PS007_F.jpg	Sample PS007 Photo, Front
IG_BH02_PS007_P.jpg	Sample PS007 Photo, Package
IG_BH02_PS008_B.jpg	Sample PS008 Photo, Back
IG_BH02_PS008_F.jpg	Sample PS008 Photo, Front
IG_BH02_PS008_P.jpg	Sample PS008 Photo, Package
IG_BH02_PS009_B.jpg	Sample PS009 Photo, Back
IG_BH02_PS009_F.jpg	Sample PS009 Photo, Front
IG_BH02_PS009_P.jpg	Sample PS009 Photo, Package
IG_BH02_PW001_B.jpg	Sample PW001 Photo, Back
IG_BH02_PW001_F.jpg	Sample PW001 Photo, Front
IG_BH02_PW001_P.jpg	Sample PW001 Photo, Package
IG_BH02_PW002_B.jpg	Sample PW002 Photo, Back
IG_BH02_PW002_F.jpg	Sample PW002 Photo, Front
IG_BH02_PW002_P.jpg	Sample PW002 Photo, Package
IG_BH02_PW003_B.jpg	Sample PW003 Photo, Back
IG_BH02_PW003_F.jpg	Sample PW003 Photo, Front
IG_BH02_PW003_P.jpg	Sample PW003 Photo, Package
IG_BH02_PW004_B.jpg	Sample PW004 Photo, Back
IG_BH02_PW004_F.jpg	Sample PW004 Photo, Front
IG_BH02_PW004_P.jpg	Sample PW004 Photo, Package
IG_BH02_PW005_B.jpg	Sample PW005 Photo, Back
IG_BH02_PW005_F.jpg	Sample PW005 Photo, Front
IG_BH02_PW005_P.jpg	Sample PW005 Photo, Package
IG_BH02_PW006_B.jpg	Sample PW006 Photo, Back
IG_BH02_PW006_F.jpg	Sample PW006 Photo, Front
IG_BH02_PW006_P.jpg	Sample PW006 Photo, Package
IG_BH02_PW007_B.jpg	Sample PW007 Photo, Back
IG_BH02_PW007_F.jpg	Sample PW007 Photo, Front
IG_BH02_PW007_P.jpg	Sample PW007 Photo, Package
IG_BH02_PW008_B.jpg	Sample PW008 Photo, Back
IG_BH02_PW008_F.jpg	Sample PW008 Photo, Front
IG_BH02_PW008_P.jpg	Sample PW008 Photo, Package
IG_BH02_PW009_B.jpg	Sample PW009 Photo, Back
IG_BH02_PW009_F.jpg	Sample PW009 Photo, Front
IG_BH02_PW009_P.jpg	Sample PW009 Photo, Package
IG_BH02_PW010_B.jpg	Sample PW010 Photo, Back
IG_BH02_PW010_F.jpg	Sample PW010 Photo, Front
IG_BH02_PW010_P.jpg	Sample PW010 Photo, Package

## Table D-3: IG\_BH02 Core Sample Photography Details

1671632 (3301)

Photo Name	Photo Description
IG_BH02_PW011_B.jpg	Sample PW011 Photo, Back
IG_BH02_PW011_F.jpg	Sample PW011 Photo, Front
IG_BH02_PW011_P.jpg	Sample PW011 Photo, Package
IG_BH02_PW012_B.jpg	Sample PW012 Photo, Back
IG_BH02_PW012_F.jpg	Sample PW012 Photo, Front
IG_BH02_PW012_P.jpg	Sample PW012 Photo, Package
IG_BH02_PW013_B.jpg	Sample PW013 Photo, Back
IG_BH02_PW013_F.jpg	Sample PW013 Photo, Front
IG_BH02_PW013_P.jpg	Sample PW013 Photo, Package
IG_BH02_PW014_B.jpg	Sample PW014 Photo, Back
IG_BH02_PW014_F.jpg	Sample PW014 Photo, Front
IG_BH02_PW014_P.jpg	Sample PW014 Photo, Package
IG_BH02_PW015_B.jpg	Sample PW015 Photo, Back
IG_BH02_PW015_F.jpg	Sample PW015 Photo, Front
IG_BH02_PW015_P.jpg	Sample PW015 Photo, Package
IG_BH02_PW016_B.jpg	Sample PW016 Photo, Back
IG_BH02_PW016_F.jpg	Sample PW016 Photo, Front
IG_BH02_PW016_P.jpg	Sample PW016 Photo, Package
IG_BH02_PW017_B.jpg	Sample PW017 Photo, Back
IG_BH02_PW017_F.jpg	Sample PW017 Photo, Front
IG_BH02_PW017_P.jpg	Sample PW017 Photo, Package
IG_BH02_PW018_B.jpg	Sample PW018 Photo, Back
IG_BH02_PW018_F.jpg	Sample PW018 Photo, Front
IG_BH02_PW018_P.jpg	Sample PW018 Photo, Package
IG_BH02_PW019_B.jpg	Sample PW019 Photo, Back
IG_BH02_PW019_F.jpg	Sample PW019 Photo, Front
IG_BH02_PW019_P.jpg	Sample PW019 Photo, Package
IG_BH02_PW020_B.jpg	Sample PW020 Photo, Back
IG_BH02_PW020_F.jpg	Sample PW020 Photo, Front
IG_BH02_PW020_P.jpg	Sample PW020 Photo, Package
IG_BH02_PW021_B.jpg	Sample PW021 Photo, Back
IG_BH02_PW021_F.jpg	Sample PW021 Photo, Front
IG_BH02_PW021_P.jpg	Sample PW021 Photo, Package
IG_BH02_PW022_B.jpg	Sample PW022 Photo, Back
IG_BH02_PW022_F.jpg	Sample PW022 Photo, Front
IG_BH02_PW022_P.jpg	Sample PW022 Photo, Package
IG_BH02_PW023_B.jpg	Sample PW023 Photo, Back
IG_BH02_PW023_F.jpg	Sample PW023 Photo, Front
IG_BH02_PW023_P.jpg	Sample PW023 Photo, Package
IG_BH02_SA001_B.jpg	Sample SA001 Photo, Back
IG_BH02_SA001_F.jpg	Sample SA001 Photo, Front
IG_BH02_SA001_P.jpg	Sample SA001 Photo, Package
IG_BH02_SA002_B.jpg	Sample SA002 Photo, Back
IG_BH02_SA002_F.jpg	Sample SA002 Photo, Front
IG_BH02_SA002_P.jpg	Sample SA002 Photo, Package
IG_BH02_SA003_B.jpg	Sample SA003 Photo, Back
IG_BH02_SA003_F.jpg	Sample SA003 Photo, Front
IG_BH02_SA003_P.jpg	Sample SA003 Photo, Package

Table D-3: IG\_BH02 Core Sample Photography Details

1671632 (3301)

<b>Photo Name</b>	<b>Photo Description</b>
IG_BH02_SA004_B.jpg	Sample SA004 Photo, Back
IG_BH02_SA004_F.jpg	Sample SA004 Photo, Front
IG_BH02_SA004_P.jpg	Sample SA004 Photo, Package
IG_BH02_SO001_B.jpg	Sample SO001 Photo, Back
IG_BH02_SO001_F.jpg	Sample SO001 Photo, Front
IG_BH02_SO001_P.jpg	Sample SO001 Photo, Package
IG_BH02_SO002_B.jpg	Sample SO002 Photo, Back
IG_BH02_SO002_F.jpg	Sample SO002 Photo, Front
IG_BH02_SO002_P.jpg	Sample SO002 Photo, Package
IG_BH02_SO003_B.jpg	Sample SO003 Photo, Back
IG_BH02_SO003_F.jpg	Sample SO003 Photo, Front
IG_BH02_SO003_P.jpg	Sample SO003 Photo, Package
IG_BH02_SO004_B.jpg	Sample SO004 Photo, Back
IG_BH02_SO004_F.jpg	Sample SO004 Photo, Front
IG_BH02_SO004_P.jpg	Sample SO004 Photo, Package
IG_BH02_UC001_B.jpg	Sample UC001 Photo, Back
IG_BH02_UC001_F.jpg	Sample UC001 Photo, Front
IG_BH02_UC001_P.jpg	Sample UC001 Photo, Package
IG_BH02_UC002_B.jpg	Sample UC002 Photo, Back
IG_BH02_UC002_F.jpg	Sample UC002 Photo, Front
IG_BH02_UC002_P.jpg	Sample UC002 Photo, Package
IG_BH02_UC003_B.jpg	Sample UC003 Photo, Back
IG_BH02_UC003_F.jpg	Sample UC003 Photo, Front
IG_BH02_UC003_P.jpg	Sample UC003 Photo, Package

Table D-4: IG\_BH02 Core Feature Photography Details

1671632 (3301)

Photo Name	Photo Description
IG_BH02_ST_18.02_1.jpg	Detailed Photo #1 of Structure at Depth 18.02 m
IG_BH02_ST_27.76_1.jpg	Detailed Photo #1 of Structure at Depth 27.76 m
IG_BH02_ST_28.4_1.jpg	Detailed Photo #1 of Structure at Depth 28.4 m
IG_BH02_ST_29.83_1.jpg	Detailed Photo #1 of Structure at Depth 29.83 m
IG_BH02_ST_53.99_1.jpg	Detailed Photo #1 of Structure at Depth 53.99 m
IG_BH02_ST_57.52_1.jpg	Detailed Photo #1 of Structure at Depth 57.52 m
IG_BH02_ST_58.48_1.jpg	Detailed Photo #1 of Structure at Depth 58.48 m
IG_BH02_ST_59.01_1.jpg	Detailed Photo #1 of Structure at Depth 59.01 m
IG_BH02_ST_59.17_1.jpg	Detailed Photo #1 of Structure at Depth 59.17 m
IG_BH02_ST_59.51_1.jpg	Detailed Photo #1 of Structure at Depth 59.51 m
IG_BH02_ST_60.73_1.jpg	Detailed Photo #1 of Structure at Depth 60.73 m
IG_BH02_ST_62.32_1.jpg	Detailed Photo #1 of Structure at Depth 62.32 m
IG_BH02_ST_63.21_1.jpg	Detailed Photo #1 of Structure at Depth 63.21 m
IG_BH02_ST_64.59_1.jpg	Detailed Photo #1 of Structure at Depth 64.59 m
IG_BH02_ST_64.59_2.jpg	Detailed Photo #2 of Structure at Depth 64.59 m
IG_BH02_ST_66.83_1.jpg	Detailed Photo #1 of Structure at Depth 66.83 m
IG_BH02_ST_66.83_2.jpg	Detailed Photo #2 of Structure at Depth 66.83 m
IG_BH02_ST_69.32_1.jpg	Detailed Photo #1 of Structure at Depth 69.32 m
IG_BH02_ST_70.72_1.jpg	Detailed Photo #1 of Structure at Depth 70.72 m
IG_BH02_ST_81.95_1.jpg	Detailed Photo #1 of Structure at Depth 81.95 m
IG_BH02_ST_87.77_1.jpg	Detailed Photo #1 of Structure at Depth 87.77 m
IG_BH02_ST_92.01_1.jpg	Detailed Photo #1 of Structure at Depth 92.01 m
IG_BH02_ST_128.25_1.jpg	Detailed Photo #1 of Structure at Depth 128.25 m
IG_BH02_ST_132.93_1.jpg	Detailed Photo #1 of Structure at Depth 132.93 m
IG_BH02_ST_134.02_1.jpg	Detailed Photo #1 of Structure at Depth 134.02 m
IG_BH02_ST_135.36_1.jpg	Detailed Photo #1 of Structure at Depth 135.36 m
IG_BH02_ST_138.24_1.jpg	Detailed Photo #1 of Structure at Depth 138.24 m
IG_BH02_ST_144.47_1.jpg	Detailed Photo #1 of Structure at Depth 144.47 m
IG_BH02_ST_147.78_1.jpg	Detailed Photo #1 of Structure at Depth 147.78 m
IG_BH02_ST_151.48_1.jpg	Detailed Photo #1 of Structure at Depth 151.48 m
IG_BH02_ST_166.24_1.jpg	Detailed Photo #1 of Structure at Depth 166.24 m
IG_BH02_ST_175.62_1.jpg	Detailed Photo #1 of Structure at Depth 175.62 m
IG_BH02_ST_185.26_1.jpg	Detailed Photo #1 of Structure at Depth 185.26 m
IG_BH02_ST_188.55_1.jpg	Detailed Photo #1 of Structure at Depth 188.55 m
IG_BH02_ST_193.93_1.jpg	Detailed Photo #1 of Structure at Depth 193.93 m
IG_BH02_ST_215.84_1.jpg	Detailed Photo #1 of Structure at Depth 215.84 m
IG_BH02_ST_217.86_1.jpg	Detailed Photo #1 of Structure at Depth 217.86 m
IG_BH02_ST_220.04_1.jpg	Detailed Photo #1 of Structure at Depth 220.04 m
IG_BH02_ST_222.37_1.jpg	Detailed Photo #1 of Structure at Depth 222.37 m
IG_BH02_ST_224.06_1.jpg	Detailed Photo #1 of Structure at Depth 224.06 m
IG_BH02_ST_227.22_1.jpg	Detailed Photo #1 of Structure at Depth 227.22 m
IG_BH02_ST_228.11_1.jpg	Detailed Photo #1 of Structure at Depth 228.11 m
IG_BH02_ST_236.55_1.jpg	Detailed Photo #1 of Structure at Depth 236.55 m
IG_BH02_ST_241.88_1.jpg	Detailed Photo #1 of Structure at Depth 241.88 m
IG_BH02_ST_243.67_1.jpg	Detailed Photo #1 of Structure at Depth 243.67 m
IG_BH02_ST_253.25_1.jpg	Detailed Photo #1 of Structure at Depth 253.25 m
IG_BH02_ST_258.88_1.jpg	Detailed Photo #1 of Structure at Depth 258.88 m
IG_BH02_ST_260.26_1.jpg	Detailed Photo #1 of Structure at Depth 260.26 m

Table D-4: IG\_BH02 Core Feature Photography Details

1671632 (3301)

Photo Name	Photo Description
IG_BH02_ST_261.84_1.jpg	Detailed Photo #1 of Structure at Depth 261.84 m
IG_BH02_ST_276.91_1.jpg	Detailed Photo #1 of Structure at Depth 276.91 m
IG_BH02_ST_280.085_1.jpg	Detailed Photo #1 of Structure at Depth 280.085 m
IG_BH02_ST_280.54_1.jpg	Detailed Photo #1 of Structure at Depth 280.54 m
IG_BH02_ST_280.94_1.jpg	Detailed Photo #1 of Structure at Depth 280.94 m
IG_BH02_ST_281.92_1.jpg	Detailed Photo #1 of Structure at Depth 281.92 m
IG_BH02_ST_282.94_1.jpg	Detailed Photo #1 of Structure at Depth 282.94 m
IG_BH02_ST_284.42_1.jpg	Detailed Photo #1 of Structure at Depth 284.42 m
IG_BH02_ST_286.88_1.jpg	Detailed Photo #1 of Structure at Depth 286.88 m
IG_BH02_ST_289.83_1.jpg	Detailed Photo #1 of Structure at Depth 289.83 m
IG_BH02_ST_333.96_1.jpg	Detailed Photo #1 of Structure at Depth 333.96 m
IG_BH02_ST_336.43_1.jpg	Detailed Photo #1 of Structure at Depth 336.43 m
IG_BH02_ST_338.6_1.jpg	Detailed Photo #1 of Structure at Depth 338.6 m
IG_BH02_ST_345.84_1.jpg	Detailed Photo #1 of Structure at Depth 345.84 m
IG_BH02_ST_347.14_1.jpg	Detailed Photo #1 of Structure at Depth 347.14 m
IG_BH02_ST_348.76_1.jpg	Detailed Photo #1 of Structure at Depth 348.76 m
IG_BH02_ST_371.38_1.jpg	Detailed Photo #1 of Structure at Depth 371.38 m
IG_BH02_ST_376.31_1.jpg	Detailed Photo #1 of Structure at Depth 376.31 m
IG_BH02_ST_376.37_1.jpg	Detailed Photo #1 of Structure at Depth 376.37 m
IG_BH02_ST_376.42_1.jpg	Detailed Photo #1 of Structure at Depth 376.42 m
IG_BH02_ST_376.46_1.jpg	Detailed Photo #1 of Structure at Depth 376.46 m
IG_BH02_ST_376.6_1.jpg	Detailed Photo #1 of Structure at Depth 376.6 m
IG_BH02_ST_376.95_1.jpg	Detailed Photo #1 of Structure at Depth 376.95 m
IG_BH02_ST_377.045_1.jpg	Detailed Photo #1 of Structure at Depth 377.045 m
IG_BH02_ST_377.13_1.jpg	Detailed Photo #1 of Structure at Depth 377.13 m
IG_BH02_ST_377.33_1.jpg	Detailed Photo #1 of Structure at Depth 377.33 m
IG_BH02_ST_377.44_1.jpg	Detailed Photo #1 of Structure at Depth 377.44 m
IG_BH02_ST_377.55_1.jpg	Detailed Photo #1 of Structure at Depth 377.55 m
IG_BH02_ST_377.92_1.jpg	Detailed Photo #1 of Structure at Depth 377.92 m
IG_BH02_ST_380.48_1.jpg	Detailed Photo #1 of Structure at Depth 380.48 m
IG_BH02_ST_380.48_2.jpg	Detailed Photo #2 of Structure at Depth 380.48 m
IG_BH02_ST_380.77_1.jpg	Detailed Photo #1 of Structure at Depth 380.77 m
IG_BH02_ST_382.11_1.jpg	Detailed Photo #1 of Structure at Depth 382.11 m
IG_BH02_ST_382.71_1.jpg	Detailed Photo #1 of Structure at Depth 382.71 m
IG_BH02_ST_382.76_1.jpg	Detailed Photo #1 of Structure at Depth 382.76 m
IG_BH02_ST_404.31_1.jpg	Detailed Photo #1 of Structure at Depth 404.31 m
IG_BH02_ST_413.45_1.jpg	Detailed Photo #1 of Structure at Depth 413.45 m
IG_BH02_ST_416.91_1.jpg	Detailed Photo #1 of Structure at Depth 416.91 m
IG_BH02_ST_462.14_1.jpg	Detailed Photo #1 of Structure at Depth 462.14 m
IG_BH02_ST_467.01_1.jpg	Detailed Photo #1 of Structure at Depth 467.01 m
IG_BH02_ST_467.74_1.jpg	Detailed Photo #1 of Structure at Depth 467.74 m
IG_BH02_ST_504.78_1.jpg	Detailed Photo #1 of Structure at Depth 504.78 m
IG_BH02_ST_507.18_1.jpg	Detailed Photo #1 of Structure at Depth 507.18 m
IG_BH02_ST_511.45_1.jpg	Detailed Photo #1 of Structure at Depth 511.45 m
IG_BH02_ST_511.45_2.jpg	Detailed Photo #2 of Structure at Depth 511.45 m
IG_BH02_ST_514.3_1.jpg	Detailed Photo #1 of Structure at Depth 514.3 m
IG_BH02_ST_514.33_1.jpg	Detailed Photo #1 of Structure at Depth 514.33 m
IG_BH02_ST_514.38_1.jpg	Detailed Photo #1 of Structure at Depth 514.38 m

Table D-4: IG\_BH02 Core Feature Photography Details

1671632 (3301)

Photo Name	Photo Description
IG_BH02_ST_518.23_1.jpg	Detailed Photo #1 of Structure at Depth 518.23 m
IG_BH02_ST_518.36_1.jpg	Detailed Photo #1 of Structure at Depth 518.36 m
IG_BH02_ST_521.43_1.jpg	Detailed Photo #1 of Structure at Depth 521.43 m
IG_BH02_ST_521.43_2.jpg	Detailed Photo #2 of Structure at Depth 521.43 m
IG_BH02_ST_524.08_1.jpg	Detailed Photo #1 of Structure at Depth 524.08 m
IG_BH02_ST_524.84_1.jpg	Detailed Photo #1 of Structure at Depth 524.84 m
IG_BH02_ST_528.81_1.jpg	Detailed Photo #1 of Structure at Depth 528.81 m
IG_BH02_ST_536.83_1.jpg	Detailed Photo #1 of Structure at Depth 536.83 m
IG_BH02_ST_536.86_1.jpg	Detailed Photo #1 of Structure at Depth 536.86 m
IG_BH02_ST_538.93_1.jpg	Detailed Photo #1 of Structure at Depth 538.93 m
IG_BH02_ST_554.39_1.jpg	Detailed Photo #1 of Structure at Depth 554.39 m
IG_BH02_ST_574.985_1.jpg	Detailed Photo #1 of Structure at Depth 574.985 m
IG_BH02_ST_576.54_1.jpg	Detailed Photo #1 of Structure at Depth 576.54 m
IG_BH02_ST_581.98_1.jpg	Detailed Photo #1 of Structure at Depth 581.98 m
IG_BH02_ST_587.53_1.jpg	Detailed Photo #1 of Structure at Depth 587.53 m
IG_BH02_ST_592.33_1.jpg	Detailed Photo #1 of Structure at Depth 592.33 m
IG_BH02_ST_598.75_1.jpg	Detailed Photo #1 of Structure at Depth 598.75 m
IG_BH02_ST_607.05_1.jpg	Detailed Photo #1 of Structure at Depth 607.05 m
IG_BH02_ST_612.29_1.jpg	Detailed Photo #1 of Structure at Depth 612.29 m
IG_BH02_ST_615.03_1.jpg	Detailed Photo #1 of Structure at Depth 615.03 m
IG_BH02_ST_624.24_1.jpg	Detailed Photo #1 of Structure at Depth 624.24 m
IG_BH02_ST_624.44_1.jpg	Detailed Photo #1 of Structure at Depth 624.44 m
IG_BH02_ST_624.59_1.jpg	Detailed Photo #1 of Structure at Depth 624.59 m
IG_BH02_ST_654.86_1.jpg	Detailed Photo #1 of Structure at Depth 654.86 m
IG_BH02_ST_656.48_1.jpg	Detailed Photo #1 of Structure at Depth 656.48 m
IG_BH02_ST_661.48_1.jpg	Detailed Photo #1 of Structure at Depth 661.48 m
IG_BH02_ST_661.48_2.jpg	Detailed Photo #2 of Structure at Depth 661.48 m
IG_BH02_ST_668.72_1.jpg	Detailed Photo #1 of Structure at Depth 668.72 m
IG_BH02_ST_673.01_1.jpg	Detailed Photo #1 of Structure at Depth 673.01 m
IG_BH02_ST_674.94_1.jpg	Detailed Photo #1 of Structure at Depth 674.94 m
IG_BH02_ST_677.045_1.jpg	Detailed Photo #1 of Structure at Depth 677.045 m
IG_BH02_ST_680.23_1.jpg	Detailed Photo #1 of Structure at Depth 680.23 m
IG_BH02_ST_683.15_1.jpg	Detailed Photo #1 of Structure at Depth 683.15 m
IG_BH02_ST_688.79_1.jpg	Detailed Photo #1 of Structure at Depth 688.79 m
IG_BH02_ST_691.31_1.jpg	Detailed Photo #1 of Structure at Depth 691.31 m
IG_BH02_ST_700_1.jpg	Detailed Photo #1 of Structure at Depth 700 m
IG_BH02_ST_707.95_1.jpg	Detailed Photo #1 of Structure at Depth 707.95 m
IG_BH02_ST_711.63_1.jpg	Detailed Photo #1 of Structure at Depth 711.63 m
IG_BH02_ST_715.51_1.jpg	Detailed Photo #1 of Structure at Depth 715.51 m
IG_BH02_ST_729.3_1.jpg	Detailed Photo #1 of Structure at Depth 729.3 m
IG_BH02_ST_747.86_1.jpg	Detailed Photo #1 of Structure at Depth 747.86 m
IG_BH02_ST_768.8_1.jpg	Detailed Photo #1 of Structure at Depth 768.8 m
IG_BH02_ST_793.78_1.jpg	Detailed Photo #1 of Structure at Depth 793.78 m
IG_BH02_ST_795.77_1.jpg	Detailed Photo #1 of Structure at Depth 795.77 m
IG_BH02_ST_799.095_1.jpg	Detailed Photo #1 of Structure at Depth 799.095 m
IG_BH02_ST_826.2_1.jpg	Detailed Photo #1 of Structure at Depth 826.2 m
IG_BH02_ST_868.79_1.jpg	Detailed Photo #1 of Structure at Depth 868.79 m
IG_BH02_ST_879.34_1.jpg	Detailed Photo #1 of Structure at Depth 879.34 m

Table D-4: IG\_BH02 Core Feature Photography Details

1671632 (3301)

Photo Name	Photo Description
IG_BH02_ST_893.03_1.jpg	Detailed Photo #1 of Structure at Depth 893.03 m
IG_BH02_ST_901.35_1.jpg	Detailed Photo #1 of Structure at Depth 901.35 m
IG_BH02_ST_904.58_1.jpg	Detailed Photo #1 of Structure at Depth 904.58 m
IG_BH02_ST_904.81_1.jpg	Detailed Photo #1 of Structure at Depth 904.81 m
IG_BH02_ST_904.88_1.jpg	Detailed Photo #1 of Structure at Depth 904.88 m
IG_BH02_ST_905.32_1.jpg	Detailed Photo #1 of Structure at Depth 905.32 m
IG_BH02_ST_910.79_1.jpg	Detailed Photo #1 of Structure at Depth 910.79 m
IG_BH02_ST_911.12_1.jpg	Detailed Photo #1 of Structure at Depth 911.12 m
IG_BH02_ST_934.885_1.jpg	Detailed Photo #1 of Structure at Depth 934.885 m
IG_BH02_ST_957.93_1.jpg	Detailed Photo #1 of Structure at Depth 957.93 m
IG_BH02_ST_963.34_1.jpg	Detailed Photo #1 of Structure at Depth 963.34 m
IG_BH02_ST_983.9_1.jpg	Detailed Photo #1 of Structure at Depth 983.9 m
IG_BH02_ST_998.84_1.jpg	Detailed Photo #1 of Structure at Depth 998.84 m
IG_BH02_ST_998.84_2.jpg	Detailed Photo #2 of Structure at Depth 998.84 m

Table D-5: IG\_BH02 Core Sample Details

1671632 (3301)

Sample Name	Depth From (m)	Depth To (m)	Sample Type	Archive (Y/N)	Location
IG_BH02_AQ001	240.14	240.25	Aqueous Extraction	N	Hydroisotop
IG_BH02_AQ002	348.44	348.6	Aqueous Extraction	N	Hydroisotop
IG_BH02_AQ003	379.51	379.69	Aqueous Extraction	N	Hydroisotop
IG_BH02_AQ004	381.93	382.06	Aqueous Extraction	N	Hydroisotop
IG_BH02_AQ005	455.39	455.54	Aqueous Extraction	N	Hydroisotop
IG_BH02_AQ006	503.76	503.89	Aqueous Extraction	N	Hydroisotop
IG_BH02_AQ007	555.04	555.18	Aqueous Extraction	N	Hydroisotop
IG_BH02_AQ008	611.35	611.48	Aqueous Extraction	N	Hydroisotop
IG_BH02_AQ009	666.01	666.16	Aqueous Extraction	N	Hydroisotop
IG_BH02_AQ010	771.38	771.51	Aqueous Extraction	N	Hydroisotop
IG_BH02_AQ011	878.96	879.11	Aqueous Extraction	N	Hydroisotop
IG_BH02_AQ012	984.4	984.53	Aqueous Extraction	N	Hydroisotop
IG_BH02_AR001	103.42	103.79	Archive	Y	NWMO Warehouse
IG_BH02_AR002	162.05	162.45	Archive	Y	NWMO Warehouse
IG_BH02_AR003	211.37	211.73	Archive	Y	NWMO Warehouse
IG_BH02_AR004	263.87	264.23	Archive	Y	NWMO Warehouse
IG_BH02_AR005	321.18	321.57	Archive	Y	NWMO Warehouse
IG_BH02_AR006	373.93	374.32	Archive	Y	NWMO Warehouse
IG_BH02_AR007	426.13	426.56	Archive	Y	NWMO Warehouse
IG_BH02_AR008	450.33	450.71	Archive	Y	NWMO Warehouse
IG_BH02_AR009	483.1	483.49	Archive	Y	NWMO Warehouse
IG_BH02_AR010	530.06	530.45	Archive	Y	NWMO Warehouse
IG_BH02_AR011	578.79	579.17	Archive	Y	NWMO Warehouse
IG_BH02_AR012	608.94	609.31	Archive	Y	NWMO Warehouse
IG_BH02_AR013	640.51	640.88	Archive	Y	NWMO Warehouse
IG_BH02_AR014	688.39	688.79	Archive	Y	NWMO Warehouse
IG_BH02_AR015	719.37	719.74	Archive	Y	NWMO Warehouse
IG_BH02_AR016	747.3	747.67	Archive	Y	NWMO Warehouse
IG_BH02_AR017	799.37	799.76	Archive	Y	NWMO Warehouse
IG_BH02_AR018	849.07	849.45	Archive	Y	NWMO Warehouse
IG_BH02_AR019	903.09	903.47	Archive	Y	NWMO Warehouse
IG_BH02_AR020	960	960.39	Archive	Y	NWMO Warehouse
IG_BH02_BR001	416.49	416.74	Brazilian	N	CANMET
IG_BH02_BR002	494.57	494.8	Brazilian	N	CANMET
IG_BH02_BR003	582.67	582.91	Brazilian	N	CANMET
IG_BH02_ED001	226.83	227.13	Effective Diffusion Coefficient	N	Transferred to NWMO Custody
IG_BH02_ED002	323.08	323.43	Effective Diffusion Coefficient	N	Transferred to NWMO Custody
IG_BH02_ED003	425.12	425.5	Effective Diffusion Coefficient	N	Transferred to NWMO Custody
IG_BH02_ED004	500.96	501.28	Effective Diffusion Coefficient	N	Transferred to NWMO Custody
IG_BH02_ED005	555.18	555.55	Effective Diffusion Coefficient	N	Transferred to NWMO Custody

Table D-5: IG\_BH02 Core Sample Details

1671632 (3301)

Sample Name	Depth From (m)	Depth To (m)	Sample Type	Archive (Y/N)	Location
IG_BH02_ED006	576.17	576.47	Effective Diffusion Coefficient	N	Transferred to NWMO Custody
IG_BH02_ED007	614.04	614.33	Effective Diffusion Coefficient	N	Transferred to NWMO Custody
IG_BH02_ED008	684.19	684.53	Effective Diffusion Coefficient	N	Transferred to NWMO Custody
IG_BH02_ED009	773.85	774.19	Effective Diffusion Coefficient	N	Transferred to NWMO Custody
IG_BH02_ED010	922.83	923.17	Effective Diffusion Coefficient	N	Transferred to NWMO Custody
IG_BH02_MB001	239.13	239.24	Microbiology	N	Transferred to NWMO Custody
IG_BH02_MB002	239.24	239.39	Microbiology	N	Transferred to NWMO Custody
IG_BH02_MB003	377.56	377.76	Microbiology	N	Transferred to NWMO Custody
IG_BH02_MB004	377.76	377.9	Microbiology	N	Transferred to NWMO Custody
IG_BH02_MB005	519.52	519.64	Microbiology	N	Transferred to NWMO Custody
IG_BH02_MB006	519.64	519.73	Microbiology	N	Transferred to NWMO Custody
IG_BH02_NG001	343.61	343.88	Noble Gas	N	Transferred to NWMO Custody
IG_BH02_NG002	440.81	441.08	Noble Gas	N	Transferred to NWMO Custody
IG_BH02_NG003	492.42	492.71	Noble Gas	N	Transferred to NWMO Custody
IG_BH02_NG004	540.59	540.9	Noble Gas	N	Transferred to NWMO Custody
IG_BH02_NG005	591.11	591.39	Noble Gas	N	Transferred to NWMO Custody
IG_BH02_NG006	639.17	639.45	Noble Gas	N	Transferred to NWMO Custody
IG_BH02_NG007	690.54	690.79	Noble Gas	N	Transferred to NWMO Custody
IG_BH02_NG008	741.02	741.3	Noble Gas	N	Transferred to NWMO Custody
IG_BH02_NG009	839.86	840.14	Noble Gas	N	Transferred to NWMO Custody
IG_BH02_NG010	938.91	939.22	Noble Gas	N	Transferred to NWMO Custody
IG_BH02_PS001	229.37	229.74	Petrophysical Suite	N	Transferred to NWMO Custody

Table D-5: IG\_BH02 Core Sample Details

1671632 (3301)

Sample Name	Depth From (m)	Depth To (m)	Sample Type	Archive (Y/N)	Location
IG_BH02_PS002	322.42	322.83	Petrophysical Suite	N	Transferred to NWMO Custody
IG_BH02_PS003	424.71	425.12	Petrophysical Suite	N	Transferred to NWMO Custody
IG_BH02_PS004	500.58	500.96	Petrophysical Suite	N	Transferred to NWMO Custody
IG_BH02_PS005	535.82	536.12	Petrophysical Suite	N	Transferred to NWMO Custody
IG_BH02_PS006	575.81	576.17	Petrophysical Suite	N	Transferred to NWMO Custody
IG_BH02_PS007	683.8	684.19	Petrophysical Suite	N	Transferred to NWMO Custody
IG_BH02_PS008	773.29	773.63	Petrophysical Suite	N	Transferred to NWMO Custody
IG_BH02_PS009	922.46	922.83	Petrophysical Suite	N	Transferred to NWMO Custody
IG_BH02_PW001	239.79	240.14	Pore Water	N	Hydroisotop
IG_BH02_PW002	243.09	243.46	Pore Water	N	Hydroisotop
IG_BH02_PW003	347.77	348.13	Pore Water	N	Hydroisotop
IG_BH02_PW004	351.52	351.9	Pore Water	N	Hydroisotop
IG_BH02_PW005	377.96	378.31	Pore Water	N	Hydroisotop
IG_BH02_PW006	381.56	381.93	Pore Water	N	Hydroisotop
IG_BH02_PW007	382.76	383.16	Pore Water	N	Hydroisotop
IG_BH02_PW008	454.98	455.39	Pore Water	N	Hydroisotop
IG_BH02_PW009	460.56	460.93	Pore Water	N	Hydroisotop
IG_BH02_PW010	502.57	502.94	Pore Water	N	Hydroisotop
IG_BH02_PW011	507.54	507.88	Pore Water	N	Hydroisotop
IG_BH02_PW012	555.55	555.94	Pore Water	N	Hydroisotop
IG_BH02_PW013	558.09	558.44	Pore Water	N	Hydroisotop
IG_BH02_PW014	610.98	611.35	Pore Water	N	Hydroisotop
IG_BH02_PW015	613.66	614.04	Pore Water	N	Hydroisotop
IG_BH02_PW016	665.64	666.01	Pore Water	N	Hydroisotop
IG_BH02_PW017	667.32	667.54	Pore Water	N	Hydroisotop
IG_BH02_PW018	770.41	770.78	Pore Water	N	Hydroisotop
IG_BH02_PW019	772.88	773.29	Pore Water	N	Hydroisotop
IG_BH02_PW020	878.6	878.96	Pore Water	N	Hydroisotop
IG_BH02_PW021	885.41	885.8	Pore Water	N	Hydroisotop
IG_BH02_PW022	984.02	984.4	Pore Water	N	Hydroisotop
IG_BH02_PW023	985.74	986.12	Pore Water	N	Hydroisotop
IG_BH02_SA001	464.05	464.32	Specific Surface Area and Cation Exchange Capacity	N	Transferred to NWMO Custody
IG_BH02_SA002	503.89	504.15	Specific Surface Area and Cation Exchange Capacity	N	Transferred to NWMO Custody

Table D-5: IG\_BH02 Core Sample Details

1671632 (3301)

Sample Name	Depth From (m)	Depth To (m)	Sample Type	Archive (Y/N)	Location
IG_BH02_SA003	536.98	537.19	Specific Surface Area and Cation Exchange Capacity	N	Transferred to NWMO Custody
IG_BH02_SA004	674.76	674.92	Specific Surface Area and Cation Exchange Capacity	N	Transferred to NWMO Custody
IG_BH02_SO001	425.5	425.67	Sorption	N	Transferred to NWMO Custody
IG_BH02_SO002	463.88	464.05	Sorption	N	Transferred to NWMO Custody
IG_BH02_SO003	501.28	501.51	Sorption	N	Transferred to NWMO Custody
IG_BH02_SO004	543.5	543.64	Sorption	N	Transferred to NWMO Custody
IG_BH02_UC001	416.24	416.49	Uniaxial Compressive Strength	N	CANMET
IG_BH02_UC002	494.34	494.57	Uniaxial Compressive Strength	N	CANMET
IG_BH02_UC003	580.73	581.02	Uniaxial Compressive Strength	N	CANMET

**Note:**

Golder collected Petrophysical, Sorption, Specific Surface Area and Cation Exchange Capacity, Effective Diffusion Coefficient, Noble Gas and Microbiology samples as part of the core logging activities for WP3, but was not involved in the sample testing. Petrophysical, Sorption, Specific Surface Area and Cation Exchange Capacity, Effective Diffusion Coefficient, Noble Gas and Microbiology core samples were transferred to NWMO custody for sample testing coordination. The other laboratory sampling will be discussed in the WP4 (Core Testing) Report.



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