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PHILLIPS RIVER PROJECT

FEASIBILITY GEOTECHNICAL ASSESSMENT
KUNDIP DEPOSITS

REPORT 09053D

Prepared for:

Tectonic Resources NL
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December 2010

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1.0 Introduction

This report presents a feasibility level geotechnical assessment of ground conditions influencing the stability of proposed open pits and underground mines at the Kaolin, Hillsborough, Harbour View and Flag Deposits (Kundip Deposits) at Tectonic Resources NL (Tectonic), Phillips River Project, located between Ravensthorpe and Hopetoun, Western Australia.

Recommendations are provided to enable mine designs to be prepared including:

- Bench heights, batter angles, berm widths and overall slope angles for the open pits.
- Stope and pillar dimensions and development ground support requirements for the underground mines.

The work was carried out at the request of Mr Bruce Armstrong, Senior Project Geologist, for Tectonic.

1.1 Sources of Information

Comments and recommendations provided in this report are based on:

- Discussions and correspondence variously and severally with Messrs Steven Norregaard, Managing Director; Andy Czerw, Operations Director and Bruce Armstrong, Senior Project Geologist all of Tectonic and Geoffrey Davidson, Principal Mining Engineer of Mining and Cost Engineering Pty Ltd (M&C Engineering), Mining Consultant to Tectonic.
- Review of internal Tectonic documents concerning:
  - Previous mining experience within the original underground mines at Kundip (Phillips River). This document [1] was prepared by Mr Robert Walker (formerly of Tectonic) and was available from a previous mining study.
  - Proposed mining strategy [2] for the Phillips River Deposits.
- Consideration of the findings and recommendations of previous geotechnical assessments [1, .2] of ground conditions and mining at Phillips River. The geotechnical data collected from these previous assessments by Peter O'Bryan & Associates (POB) and Tectonic were combined with the current assessments into a series of Microsoft EXCEL spreadsheets.
- Summary geotechnical logging of selected portions of surface exploration and geotechnical boreholes to assess fundamental geotechnical conditions, and variations thereof, within the proposed open pit walls and underground mining areas.
- Stereographic analysis of rock defect data collected by Tectonic Exploration Geologists (provided in electronic format). Analysis was carried out using the DIPS [5] software program.
- Assessment, based on borehole cores, of rock mass quality and competence using the:
  - The Rock Mass Rating [6] (RMR) and the Mining Rock Mass Rating Scheme [7] (MRMR) to characterise ground within proposed open pit walls. A method [8] based on the MRMR scheme was used to assess base case wall design parameters.
  - Q System developed by the Norwegian Geotechnical Institute [9, 10]. The Modified Stability Graph Method [11], which utilises a modified Q-Value, was used to make a preliminary estimate of potential stable stope spans.
- Review of digital photographs and hardcopy prints of borehole core supplied by Tectonic.
- Results[12] of Uniaxial Compressive Strength testing undertaken on borehole cores recovered from the most recent diamond drilling campaign. The testing was performed by Fenixx Australia Pty Ltd, Perth.

- A series of cross sections and longsections at 1:500 scale for each of the deposits showing:
  - Diamond drill hole traces with Rock Quality Designation (RQD), fracture frequency, rock strength and hardness per metre interval plotted.
  - The interpreted weathering profile and positions of ore lodes.
  - Open pit optimisations from the previous mining study
- On-screen review in SURPAC of preliminary open pit and underground mine designs for the current study.
- Review of a consultant's hydrological investigation report [13] provided by Tectonic.
- Consideration of previous experience in investigation, assessment and review of stability performance of open pit walls and underground opening in similar ground conditions to those found at Phillips River.

2.0 Kaolin and Hillsborough

2.1 Geology

The following summary of the Kaolin and Hillsborough local geology is based on information supplied by Tectonic [2].

> *The Kaolin deposit is hosted within altered felsic rocks which form part of the Annabelle Volcanics. The sequence in this area is dominated by dacite tuffs and porphyries. The intense kaolin alteration that occurs in the upper levels of the deposit is thought to have resulted from the intrusion of the Kundip Granodiorite. This intense alteration has destroyed much of the primary rock textures. Numerous raft / sill like bodies have been intersected in the drilling with the bottom of many of the deeper holes terminating in the granodiorite.*
>
> *East-west striking, southerly dipping granitic rocks have been intersected in boreholes at depths of 90 to 200m in the Gem and Hillsborough areas. The nature and relationship of these granitic occurrences is not known. Microdiorite (and dolerite) dykes crop out near the Beryl Mine. These dykes have been intersected by diamond drilling along the Harbour View line and are not considered to be co-magmatic to the volcanic dykes, as they postdate the granitic rocks.*
>
> *There are four main stacked lodes at Kaolin with numerous other less extensive lodes also identified. The lodes dip at between 20-40° toward the South. The mineralisation is almost always associated with some form of dilation quartz vein and encapsulating alteration halo. There is some evidence from the trial mining in the oxide zone that supergene effects have spread lower grade gold values outside of these primary alteration halos.*
>
> *Kaolin alteration dominates the country rock in the upper levels of the deposit, which is thought to have resulted from the intrusion of a large granodiorite at depth.*

2.2 Previous Mining

Observations of general mine and stope stability performance in existing underground workings in the Kundip (Phillips River) area are summarised in a document [1] prepared by Mr Robert Walker (formerly) of Tectonic. Mr Walker has actual mining experience (as Miner-Mine Owner) at Kundip between 1969 and the mid-1990s. During this period Mr Walker inspected the majority of the old mine workings in the area, some of which date back to the early 1900s.

Key observations listed in the Tectonic document relating to Kaolin are that:

- The lodes are generally narrow and occur within annealed fault/ shear zones.
- Ground conditions are generally favourable; however wedge style failure did occur locally due to the unfavourable intersection of geological structures.
- The lodes mined were typically < 50m along strike, and tended to *pinch and swell*.
- Stoping blocks of up to ~ 30m long were mined by Tributers in the 1940s. These miners did not install timbers to support stope hangingwalls.
- Observations made during more recent mining (1987-89) found that voids left by Tributers remained open.

2.3 Proposed Mining

Tectonic is planning to develop an ~ 900m long x 300m wide open pit on the Kaolin and Hillsborough Lodes (Figure 1). The mining will be undertaken in two stages commencing with excavation of an ~ 90m to 100m deep open pit at Kaolin. The Hillsborough Open Pit will be commenced toward the end of mining on Kaolin, and will be excavated to a depth of ~ 60m to 80m below surface (mbs).

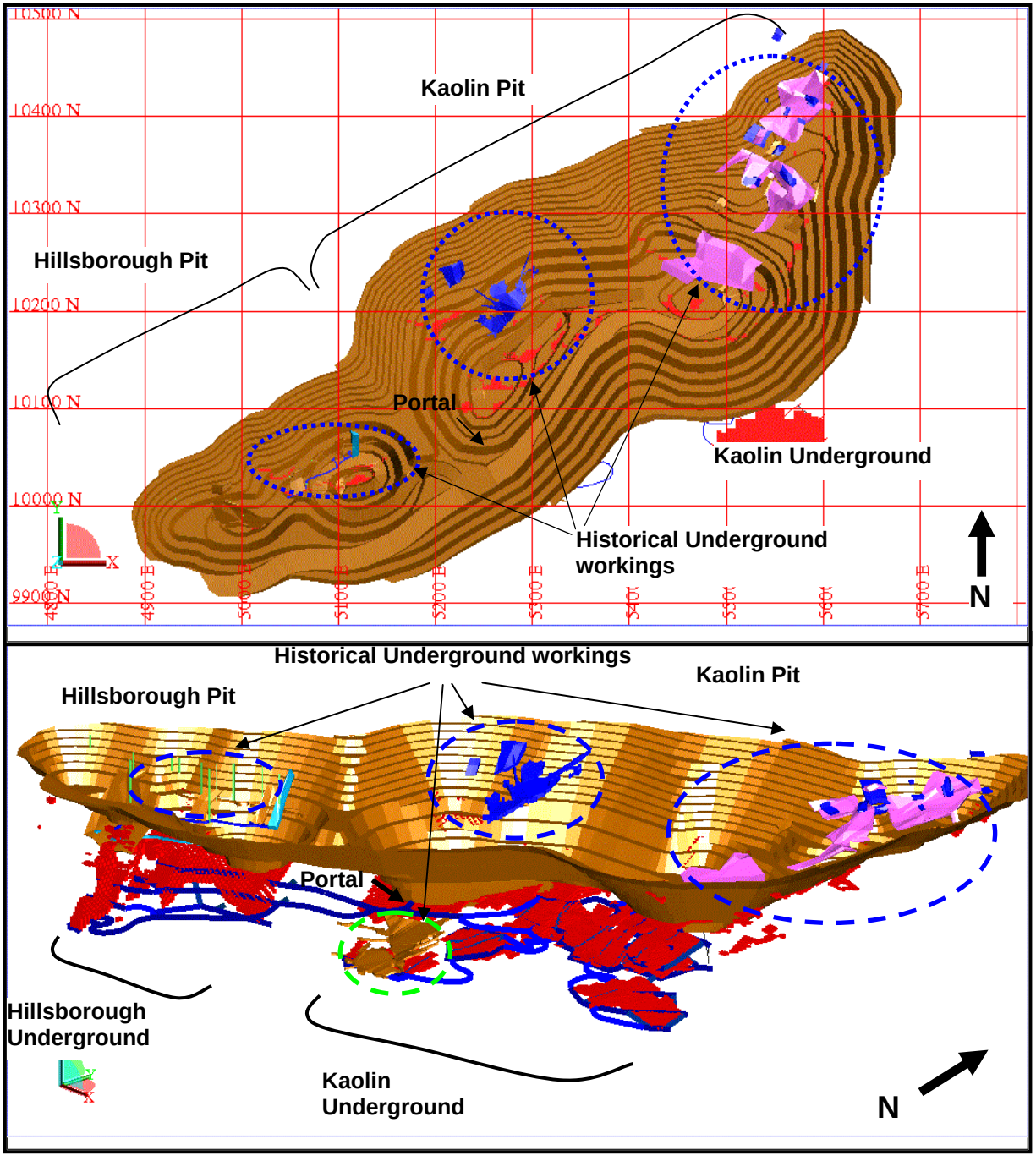

Figure 1 Proposed Mine Designs for Kaolin and Hillsborough

The proposed underground will be accessed via a Portal developed into the 915-930mRL batter in the south-western corner of the Kaolin Open Pit. Decline development is planned to be advanced towards the north-east and south-west to access the Kaolin and Hillsborough Lodes respectively. The uppermost sector of the decline will be within the hangingwall of the lodes, however, it will cross the mine sequence into the footwall rocks at several places to optimise access to the lodes.

The steeply dipping Hillsborough Lode is planned to be extracted by longhole open stoping (LHOS) methods while the shallow to moderate dipping Kaolin Lode is planned to be extracted by room and pillar mining, predominantly via hand held mining techniques.

Tectonic is currently planning to exhaust mine air at the Kaolin end of the open pit via a sub-horizontal ventilation drive that will intersect the 925– 940mRL batter in the north-eastern sector of the open pit. The Hillsborough stoping area is designed to be exhausted by an ~ 60m long shaft designed to intersect the 955mRL berm on the open pit northern wall.

Development sizes and ground support specifications proposed by Tectonic for Kaolin and the other underground mines are as listed in Table 1.

Table 1 Proposed Development Sizes and Minimum Ground Support Specifications

Development Type	Dimensions Width x Height	Ground Support Specifications
Declines & Ore Accesses	4.0m x 4.0m	3.0m x 2.4m weld mesh sheets & 2.4m long, 46mm diameter friction bolts
Ore Drives – Jumbo	3.0m x 3.5m	3.0m x 2.4m weld mesh sheets & 1.8m long, 46mm diameter friction bolts
Ore Drives - Handheld	2.0m x 2.0m	3.0m x 2.4m weld mesh sheets as required & 1.5m long, 33mm diameter friction bolts

Tectonic is planning to use resin anchored gewie bars in addition to the above ground support to reinforce large rock slabs/ wedges.

2.4 Ground Conditions

2.4.1 Geotechnical Logging

Summary geotechnical logging to obtain parameters for assessments was undertaken on the borehole core intervals listed in Table 2.

Table 2 Borehole Core Intervals Assessed for Kaolin and Hillsborough

Borehole No.	Mine	Interval (m)	Borehole No.	Mine	Interval (m)
DD04KP342	OC	0 – 110	DD09KP751	OC	0 - 55
DD04KP343	OC	0 – 110	BD015	UG	80 – 133
DD04KP344	OC	0 – 110	BD016	UG	70 – 120
DD05KP473	OC / UG	100 - 117	BD024	UG	80 – 130
DD05KP474	OC / UG	70 – 86	BD025	UG	80 – 130
DD08KP510	OC	45 – 86	BD026	UG	60 – 120
DD09KP748	OC	0 - 115	BD030	UG	60 – 120
DD09KP749 *	OC	0 – 126	BD034	UG	83 – 132
DD09KP750 *	OC	0 – 72	BD035	UG	90 – 140

Note: * = Hillsborough Boreholes all others Kaolin.

Important points to note regarding the assessed borehole cores are that:

- The DD04KP – DD09KP prefixed series of boreholes were drilled by Tectonic between 2004 and 2009 with the later boreholes drilled primarily for the current assessment of open pit slope stability at Kaolin and Hillsborough.
- Boreholes BD015 – BD035 were drilled by Norseman Gold Mines in the 1980s for exploration purposes. Check geotechnical logging of these boreholes was undertaken to collect additional information about ground conditions within potential underground mining areas at Kaolin.

  Core quality observed during the check logging and previous rock mass characterisation results suggest that these borehole cores provide a reasonable indication of ground conditions.
- For the Kaolin underground assessment geotechnical data from these boreholes was combined with data from Boreholes DD05KP473 and DD05KP474.

2.4.2 Rock Weathering

The rock weathering profile within the proposed open pits varies as follows:

Kaolin

The rock mass can be generally described as highly weathered to a depth of ~ 50mbs (rangeing from ~ 42m to 55mbs). From this depth the rock mass weathering rapidly transitions from slightly weathered to fresh.

An exception to the general weathering profile may occur on the proposed southern pit wall where Borehole DD09KP749 indicates that the rock mass becomes reasonably fresh (slightly weathered) at a depth of ~ 15mbs. It is envisaged that this type of weathering irregularity could be present along other wall sectors of the proposed open pit.

Hillsborough

The proposed ~ 80m deep Hillsborough Open Pit will be excavated within extremely to moderately weathered rock mass to ~ 42mbs. The base (~ 38m) of the open pit will be within slightly weathered to fresh rocks. The weathering profile corresponds with that at the western end of the Kaolin Open Pit, as defined by Borehole DD09KP748.

2.4.3 Rock Quality

For this assessment Tectonic supplied EXCEL spreadsheets containing Rock Quality Designation (RQD) and fracture counts per metre of core from the assessed boreholes. The data are presented in Appendix A. Where the intensity of fracturing exceeded 25 fractures per metre, Tectonic geologists recorded the fracture frequency as > 25 f/m, hence this is the maximum fracture frequency. The RQD and fracture frequency data were assessed according to Quartile values with best and worst case results summarised in Table 3.

Table 3 Fracture Frequency & RQD Ranges According to Weathering for Kaolin and Hillsborough

Mining Domain	Rock Mass Domain	Fracture Frequency (f/m)		RQD (%)	
		1st Quartile (Worst)	4th Quartile (Best)	1st Quartile (Worst)	4th Quartile (Best)
Open Pit	Highly Weathered to Moderately Weathered	25	9	12	100
	Slightly Weathered to Fresh Rock	25	9	18	100
Underground	Fresh Rock	25	8	21	100

The results overall show that the within the proposed open pit underground mining areas the rock mass is characterised by well developed fracturing which can be expected to be detrimental for wall stability.

2.4.4 Rock Strength

Manual index testing, according to the International Society of Rock Mechanics (ISRM) guidelines, was undertaken during geotechnical logging to estimate intact rock strength. The results of this testing are presented in Appendix A for (each 1m interval along) the boreholes logged.

A program [12] of rock property testing were also undertaken on representative samples of borehole core from within the deposit by Fenixx Australia Pty Ltd, Perth with results summarised in Table 4.

Table 4 Summary of Rock Property Results for Kaolin and Hillsborough

Rock Type	UCS (MPa) A+C			UCS (MPa) Total		
	Mean	Std Dev	No Samples	Mean	Std	No Samples
Dacite	252	20	3	252	20	3
Diorite	172	129	2	172	129	2
Granitoid (Undifferentiated)	-	-	-	17.9	-	1
Intermediate Lapilli Tuff	72	-	1	72	-	1

Notes-
UCS = Uniaxial Compressive Strength normalised for 50mm core diameter.
UCS_{A+C} = Uniaxial Compressive Strength data from core that failed either due to axial splitting (A) or multiple cracking (C).
UCS_{TOTAL} = Total Uniaxial Compressive Strength data including shear failure.

Based on the results of the manual strength testing and the laboratory based Uniaxial Compressive Strength (UCS) testing following comments are provided:

- The weathered rocks at Kaolin and Hillsborough typically range from 1 MPa to 50 MPa (worst and best cases).
- For slightly weathered to fresh rocks, UCS values of 250 MPa and 70 MPa are considered to be representative of the best case (highest) and worst case rock strength values respectively. The current results indicate that the rocks at Kaolin and Hillsborough are stronger than those found at Harbour View and Flag Deposits.

2.4.5 Rock Stress

No *in situ* stress measurements have been undertaken to date at Kundip.

Given the shallow depth (≤150m) of mining it is expected, however that rock stresses will be low to moderate. Experience at other Australian mines suggests that stress magnitudes would not likely be sufficient to adversely affect the stability of openings until mining proceeds to depths greater than ~ 550m below surface. On the basis of experience at other mines, the virgin stress field at Kundip is assumed to be defined as:

$\sigma_{vertical}$ (σ_3) = 0.028h MPa where h is the depth below surface (m).

$\sigma_{north\ south}$ (σ_1) = 2.5 x $\sigma_{vertical}$ MPa

$\sigma_{East\text{-}West}$ (σ_2) = 1.5 x $\sigma_{vertical}$ MPa

2.4.6 Hydrogeology

The most recent hydrological investigation [13] of the proposed Kundip mining area was undertaken in 2004 by Rockwater Pty Ltd. Key findings from that investigation were that:

- The Archean rocks of the Kundip area have low permeability.
- Previous groundwater inflows into the historical underground working could be up to 500m^3 per day.
- Flag is probably the wettest mine, followed Harbour View and then Beryl (Kaolin).
- Groundwater occurs in localised fracture zones most of which are probably related to mineralised zones.
- The groundwater drilling program consisted of six boreholes of which four intersected groundwater. Only one of the boreholes intersected significant water inflow (~ 60m^3/day).
- The water table at Kundip dips gently to the south south-east. The water level generally ranges between ~ 25m and 40mbs.

2.4.7 Rock Defects

Rock defect orientations and characteristics were collected by the Tectonic Exploration Department personnel from the oriented sections of the borehole cores.

Stereographic analysis of the rock defect data was carried out using the DIPS [5] software code with results (relative to AMG) for the individual boreholes summarised in Table 5 Appendix B contains pole and major plane plots of assessments.

Table 5 Major Defect Sets Identified According to Borehole for Kaolin & Hillsborough

Borehole	Defect Set	Major Defect Set
DD04KP342	1	50° / 238°
	2	49° / 011°
	3	45° / 149°
	4	64° / 206°
	5	71° / 312°
DD04KP343	1	20° / 274°
	2	25° / 014°
	3	34° / 158°
DD04KP344	1	33° / 271°
	2	17° / 043°
	3	47° / 144°
	4	68° / 202°
DD05KP473	4	59° / 186°
DD05KP474	1	26° / 249°
	2	12° /018°
	3	40° / 163°
	4	70° / 205°
DD09KP702	1	30° / 204°
	6	51° / 106°

DD09KP710	**2**	**14° / 087°**
DD09KP748	**1**	**37° / 288°**
	2	**52° / 360°**
DD09KP749	**1**	**33° / 242°**
	3	**61° / 168°**
	4	**67° / 197°**
DD09KP750	**Insufficient Data**	
DD09KP751	**Insufficient Data**	

From these assessments the major rock defect orientations were delineated for the Kaolin Deposit with results summarised in Table 6.

Table 6 Summary of Major Defect Set Orientations Identified at Kaolin and Hillsborough

Major Defect Set No.	Dip / Dip Direction
1	**30° / 240°**
2	**20° / 030°**
3	**45° / 155°**
4	**60° / 202°**
5	**71° / 312°**
6	**51° / 106°**

The results indicate that Major Defect Sets 1, 2, 3 and 4 are well developed throughout the deposits while the remaining sets 5 and 6 are not prevalent.

Wall stability is expected to be predominantly controlled by the orientation and shear strength of geological structures exposed in or located close behind future walls. Based on the major defect sets delineated (Table 6) the assessed potential wall failure modes (should walls be mined at too steep an angle for prevailing ground conditions) are provided in Table 7.

Within slightly weathered to fresh rock the highest potential for wall stability will be from Major Defect Set 3 which is a well developed joint set at Kundip.

Table 7 Potential Modes of Wall Failure at Kaolin and Hillsborough

Wall Location	Mode of Failure	Defect Set	Comments
North Wall	Sliding	3	Sliding on moderate South Southeast dipping defects with release on Defect 4 & 5.
	Toppling	5	Toppling on steep Northwest dipping defects.
	Wedge	3-4-5	Wedge sliding out on Defect 3
South Wall	Sliding	2	Possible sliding on steeper outliers of North Northeast dipping defects with release from Defect 4.
	Sliding	5	Localised sliding on steep Northwest dipping defects with release from Defect 6
	Toppling	3	Possible toppling on steeper Outliers of South southeast dipping defects
	Wedge	3-4-5	Wedge sliding out on Defect 5
	Wedge	4-5-6	Wedge sliding out on Defect 5
East Wall	Sliding	1	Sliding on moderate West Southwest dipping defects with potential release from multiple defects.
	Wedge	1-5	Sliding out along Defect Intersection
West Wall	Sliding	2	Possible sliding on steeper outliers of North Northeast dipping defects with release from Defects 1 & 4.
	Sliding	6	Sliding on East Southeast dipping defects with release from multiple defects.

2.4.8 Mining Rock Mass Rating Scheme

The Mining Rock Mass Rating (MRMR) [7] classification was introduced as a development of the CSIR Geomechanics Classification System (RMR) [6] with the aim of predicting how the rock mass will behave in a mining environment. The system is based on adjustments to the RMR for weathering, mining induced stresses, joint orientation, and blasting effects:

$$MRMR = RMR \times Adjust\ Factors_{(Weathering \times Joints \times Blasting \times Stress)}$$

The Mining Rock Mass Rating (MRMR) classification originally developed by Laubscher [7] and subsequently adapted by Haines and Terbrugge [8] was used to assess suitable overall wall angles that could reasonably be mined within rocks exhibiting variable degrees of weathering and competence.

The relationship between MRMR values and stable pit walls is empirically based, but has been shown by experience in Africa, Australia and South America to provide a realistic assessment of maximum wall angles that may be safely mined in rock masses of variable quality [8].

Input into the MRMR classifications comprises typical intact rock material strengths, fracture frequency (FF) values, and defect characteristics for the different rock mass domains at Kundip. 'Damp' ground conditions were assumed, as were the presence of at least three (3) inclined defect sets **locally** within all parts of the rock mass. Good conventional blasting practices during mining were also assumed to be relevant.

A summary of the results obtained from the MRMR rock mass classification system and derived slope angles obtained from geotechnical borehole data, is provided in Table 8 with calculation shown in Appendix C.

In all cases, results are applicable to slopes that do not contain major geological structures such as faults that are oriented in a manner which could adversely influence wall stability.

2.4.9 Q-System Classification

The Q-System [9, 10], an empirical rock mass classification scheme has been used to characterise ground conditions for the Kaolin lodes occurring within the potential underground mining area. For these assessments Q-Values were estimated using data derived from the borehole core for geometrical domains, the boundaries of which are based on proximity to the Kaolin Lode and Kaolin Footwall Lode orebodies. The domains assessed are defined in Table 9 and illustrated in Figure 2.

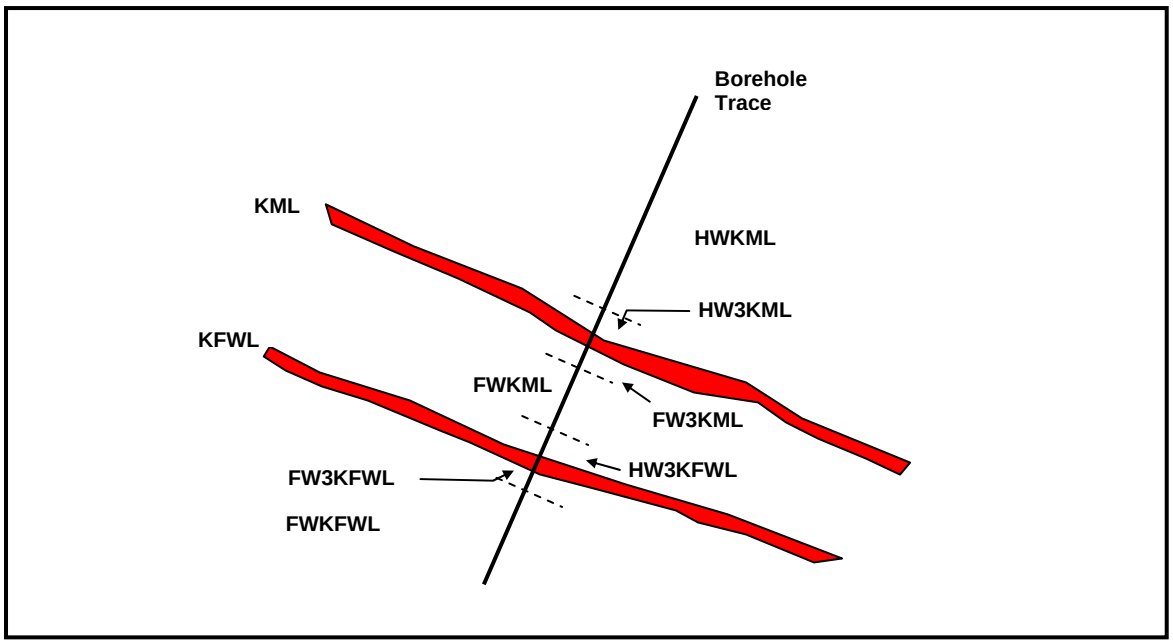

Figure 2 Schematic Diagram Showing Geometric Domains at Kaolin Deposit

Q Values were calculated in the following manner:

- The core was divided into *rock units* based on lithology, intensity of fracturing and faulting, fracture characteristics (such as alteration and infill) and estimated intact rock strength.
- RQD values were measured for <u>*each*</u> one metre interval. This data was predominantly supplied by Tectonic.
- Jn values were assigned based on the number of defect sets identified within the borehole core. Assessments were made for each *rock unit*. Defects that were not well defined were categorised as random. The orientation line was used to assess the number of sets present. When the core was not oriented and/or cut for sampling a best estimate of the number of defect sets was made.
- The Jr, Ja, Jw and SRF values were assigned for each *rock unit* according to the Q-System[3].
- Stress Reduction Factor (SRF) selected according to influence of structure otherwise a value of one (1) was assigned.
- Q-System parameters were assessed for each *rock unit* and assigned to <u>*each*</u> one metre interval within the unit.
- Q-Values were then calculated using the measured RQD and assessed Q-System parameters for <u>*each*</u> one metre interval.

Since Q-Values are non-linear, conventional measures of dispersion (such as standard deviation) are inappropriate. For this assessment the distribution of the Q Values and Modified Q Values has been described using quartile values. To obtain a general understanding of ground conditions at the Kaolin quartiles were calculated for each of the geometrical domains identified in Table 9 with results presented in Table 10.

Table 8 Summary of Mining Rock Mass Rating Assessment of Kaolin and Hillsborough Open Pit Walls

Domain	Case	IRS Value	FF Value	JRC Parameters				JRC Value	Adjustment Parameters			MRMR	Slope Angle
				A	B	C	D	(40 X A x B x C)	Weathering	Joints	Blasting		
Moderate to Highly Weathered Rock	Best	6	11	0.8	0.90	1.0	0.75	21.6	0.86	0.8	0.94	25.0	42.5°
	Worse	1	5	0.7	0.55	1.0	0.2	3.1	0.86	0.8	0.94	5.9	33.0°
Slightly Weathered to Fresh Rock	Best	20	11	0.8	0.90	1.0	0.75	21.6	1.0	0.8	0.94	39.5	49.8°
	Worse	8	4	0.70	0.60	1.0	0.2	3.4	1.0	0.8	0.94	11.6	36.0°

Table 9 Geotechnical Domains Assessed for Kaolin using the Q-System

Domain Code	Description
HWKML	Far field country rocks overlying the shallow dipping lodes at Kaolin.
HW3KML	Hangingwall rock mass, immediately overlying (within 3m) of the shallow dipping Kaolin Main Lode.
KML	Kaolin Main Lode, minimum mining width 3m.
FW3KML	Footwall rock mass, immediately underlying (within 3m) of the shallow dipping Kaolin Main Lode.
FWKML	Rock mass located between Kaolin Main Lode and Kaolin Footwall Lodes.
HW3KFWL	Hangingwall rock mass, immediately overlying (within 3m) of the shallow dipping Kaolin Footwall Lode.
KFWL	Kaolin Footwall Lode, minimum mining width 3m.
FW3KFWL	Footwall rock mass, immediately underlying (within 3m) of the shallow dipping Kaolin Footwall Lode.
FWKFWL	Far field country rocks underlying the shallow dipping lodes at Kaolin.

Ground Support According to Q-System

Barton *et al* [1] developed the Equivalent Dimension concept which relates Q-Values to tunnel support requirements on the basis of purpose and service life of development.

The Equivalent Dimension (De) is obtained by dividing the span, diameter, or the wall height of the excavation by a value called the Excavation Span Ratio (ESR).

The ESR is related to the planned use of the excavation and the degree of safety required. ESR values for various excavation types are defined by Barton *et al* [1], and summarised in an Equivalent Dimension and Q-Value diagram which indicates (nominal) ground support recommendations. More recent work by Grimstad *et al* [10] refined this system by including the application of shotcrete, fibrecrete and rockbolts.

According to the enhanced Q-System Rock Reinforcement Design Chart [10], the different types and sizes of development proposed for Kaolin will require the reinforcement systems shown in Table 11.

Although this support estimate suggests that development would require *spot bolting* only, current guidelines require installation of surface support to within ≤ 3.5m of the floors of access openings. Accordingly, *spot bolting* is not recommended.

To comply with current industry guidelines and provide adequate support in actual conditions, the recommended *minimum* support and reinforcement requirements for drives should be based on **F51 (or equivalent) galvanized weld mesh installed on drive backs and shoulders with pattern bolting of backs and sidewalls.**

Maximum Unsupported Spans

Barton et al [9] developed a relationship between Q-Values and excavation span ratios (ESR) to estimate maximum unsupported spans for development:

$$\text{Maximum Unsupported Span} = 2 \times \text{ESR} \times Q^{0.4}$$

The maximum unsupported span for the immediate hangingwall rock mass of Kaolin Main Lode and Kaolin Footwall Lode using the 2nd Quartile Q-Values (Table 10) and an ESR value of 2.0 were calculated to be 9.9m and 9.5m respectively. These spans should be considered to be the maximum hangingwall spans under which personnel can undertake stoping activities.

Modified Stability Graph

The Modified Stability Graph Method [11] developed by Potvin (1988) and comprehensively described by Hutchinson and Diederichs (1996) has been used to make a preliminary assessment of stable stope spans. The key input parameters and formulae for determining the stability of a stope is summarised below:

Modified Q:

$$Q' = \frac{RQD}{Jn} \times \frac{Jr}{Ja}$$

Modified Stability Number, N ':

$$N' = Q' \times A \times B \times C$$

A - Factor relating to rock strength and induced stresses.

B - Measure of relative orientation of dominant jointing to excavation surface.

C - Measure of influence of gravity on the stability of the stope face.

Hydraulic Radius, HR:

HR (m) = Area (m^2) ÷ Perimeter (m)

Table 10 Summary of Quartile Q' and Q-Values for Kaolin Domains

Domain	Q'-Value				Q-Value				Rock Class
	1st Quartile	2nd Quartile	3rd Quartile	4th Quartile	1st Quartile	2nd Quartile	3rd Quartile	4th Quartile	
HWKML	0.8	2.2	6.5	35.6	0.2	0.7	5.9	35.6	***Very Poor – Good***
HW3KML	2.8	9.7	13.5	25.0	1.1	9.7	13.5	25.0	***Poor – Good***
KML	1.3	4.0	15.4	25.0	0.7	3.8	15.4	25.0	***Very Poor – Good***
FW3KML	5.0	9.3	22.8	25.0	5.0	9.3	22.8	25.0	***Fair – Good***
FWKML	2.6	6.4	8.3	25.0	2.6	6.4	8.3	25.0	***Fair – Good***
HW3KFWL	5.8	8.8	12.9	23.2	5.8	8.8	12.9	23.3	***Fair - Good***
KFWL	6.0	8.4	13.0	24.3	5.2	8.1	13.0	24.25	***Fair – Good***
FW3KFWL	7.0	9.3	14.7	25.0	5.1	9.3	14.7	25.0	***Fair – Good***
FWKFWL	3.5	8.6	15.5	25.0	3.5	8.6	15.5	25.0	***Poor – Good***

Table 11 Indicated Ground Support Requirements for Kaolin According to Q-System Design Chart

Development Type	ESR	Domain	2nd Quartile Q-Value	Q-System Ground Support Requirements
Decline 4.0m W x 4.0m H	1.3	HWKML	0.7	45mm thick fibrecrete (=mesh) and rock bolts on a 1.5m x 1.5m pattern
		FWKFWL	8.6	Spot Bolting
Ore Accesses 4.0m W x 4.0m H	1.6	FWKFWL	8.6	Spot Bolting
		FW3KML	6.4	Spot Bolting
Ore Drive – Kaolin Footwall Lode 3.0m W x 3.5m H - Jumbo 2.0m W x 2.0m H – Handheld	1.6	KFWL	8.1	Spot Bolting
Ore Drive – Kaolin Main Lode 3.0m W x 3.5m H - Jumbo 2.0m W x 2.0m H - Handheld	1.6	KML	3.8	Spot Bolting

The input parameters for the assessments and the resulting Modified Stability Number, N are shown in Appendix D. Table 12 shows theoretical achievable HR values for unsupported and supported stopes according to the Potvin (1988) and Nickson (1992) databases.

Table 12 Summary of Modified Stability Graph Results for Kaolin

Orebody	Q' Value	A	B	C	N'	Unsupported		Supported	
						HR (m)	(Dip Span x Length)	HR (m)	(Dip Span x Length)
Kaolin Main Lode	9.7	1.0	0.25	2.9	7.0	6.5	40m x 19m (1 sublevel)	10.5	40m x 44m (2 sublevels)
Kaolin Footwall Lode	8.8	1.0	0.25	2.9	6.4	6.1	40m x 17m (2 sublevels)	10.3	40m x 42m (2 sublevels)

The HR values shown in Table 12 represent theoretical maximum spans achievable during the retreat phase of mining of the shallow dipping lodes at Kaolin.

2.5 Open Pit Mining

On the basis of the foregoing assessment, design parameters for a short to medium life 100m deep open pit wall at Kaolin and Hillsborough are shown in Table 13.

Batters within that sector (or sectors) of the pit which strikes sub-parallel with stratigraphy will need to follow stratigraphy, that is, be mined at ~ 30° overall angle. Such development is inferred necessary to facilitate extraction to the lode; hence no economic penalty is expected in this respect.

Table 13 *Base case* slope design parameters (inferred likely rock mass conditions) for Kaolin and Hillsborough Open Pits

Wall Location/s	Rock Type Domain	Depth Below Surface	Batter Angle (°)	Berm Width (m)	Bench Height (m)	Inter-ramp angle ()
North Wall (Follow Footwall)	Completely Weathered to Moderately Weathered	0m to 60m	65°	4.2m	5m	37°
	Slightly Weathered to Fresh Rock	60m to 100m	60°	7m	15m	44°
South, East & West Walls	Completely Weathered to Moderately Weathered	0m to 30m	50°	7m	10m	33°
		30m to 60m	60°	7m	10m	38°
	Slightly Weathered to Fresh Rock	60m to 90m	60°	7m	15m	44°
		90m to 100m	75°	-	10m	75°

2.6 Underground Mining

2.6.1 Mining Methods

The geotechnical assessments indicate that ground conditions at Kaolin are generally suitable for both LHOS and room and pillar mining. It is expected that LHOS will not be suitable for sectors of the lode dipping at ≤35° as blasted ore will tend to accumulate on the stope footwall rather than rill down to the bottom ore drive for recovery.

The absence of borehole cores within the proposed underground mining area at Hillsborough has prevented a geotechnical assessment being undertaken for these steeper dipping lodes. To enable this work to be completed to feasibility standard a diamond drilling program would be required to enable geotechnical data to be collected from the recovered borehole cores for characterisation of rock mass conditions for mine design purposes.

2.6.2 Room and Pillar Mining

The Q System has been used to assess the theoretically possible spans within the potential room and pillar mining areas. The methods assume that rock mass conditions are *uniform with few structural geology and rock type complications*. Results must be closely reviewed and applied with great care.

Based on operational experience and results of the Q-System assessments it is recommended that during the initial stages of mining within Kaolin Main Lode and Footwall Lodes stopes that spans not exceed 8m, measured diagonally between adjacent pillars. A conservative approach to design is considered mandatory for this entry method of stoping. During the retreat phase of mining it may be possible to recovery some of the pillars by increasing the level of hangingwall support installed including the use of closely spaced (2m x 2m) wooden props. The degree of wooden prop deformation (bending) occurring can also provide early warning of pending hangingwall failure.

2.6.3 Longhole Open Stoping

On-screen review in SURPAC of the Kaolin Lodes indicates that the majority of the lodes are too shallow dipping to implement LHOS. If steeper dipping sections of both lodes are identified then it is recommended for initial design purposes that stope spans are limited to:

HR = 6.1m (for example, 17m strike span x 40m dip span)

2.6.4 Pillar Design

General experience suggests that pillars should typically have not less than a 1:1 "aspect ratio" (width : height) to be stable in the expected low stress environment at Kaolin. When pillars are used in room and pillar mining and LHOS they should be staggered and uniformly distributed to prevent large, continuous dip spans being formed.

If sill pillars are left they should have a minimum thickness of ~ 1.5 times the width of the orebody. Ground conditions will need to be assessed for each situation where a sill pillar is planned to be formed.

Where economic mineralisation in Kaolin Main Lode and Footwall Lodes occurs in close proximity (≤10m????), it will be important to ensure that the pillars are aligned (superimposed) to maintain stability.

2.6.5 Mine Infrastructure

Comments about major mine infrastructure are provided:

Main Decline

Where the Main Decline occurs within the hangingwall of the lode/s it should be kept at least 15m vertically above the future stope voids to minimise the risk of a large scale stope hangingwall failure compromising decline stability. If this is not feasible then a *decline pillar* should be left within the underlying section of the lode/s. The size of the pillar would need to be assessed prior to commencement of stoping however for preliminary design purposes it is recommended that the pillar extend at least 5m laterally from the sidewalls of the decline.

Ventilation Shafts and Drives

The current proposal to develop shafts and drives into the lower parts of the open pit for ventilation purposes is endorsed as ground conditions are expected to be more favourable due to the rock mass being predominantly fresh. Alternatively, development of shafts through to the original land surface would require higher levels of ground support (fibrecrete/ steel lining) and reinforcement to ensure shaft stability within the inherently unstable clay rich weathered rocks.

Additional comments about the current ventilation shaft and drive development are provided:

- The rock mass within the currently proposed shaft location should be predominantly fresh. If the ventilation shaft is raisebored at a diameter up to ~3m it is expected that shaft sidewalls should be self supporting. Alternatively if the shaft is developed by handheld mining methods there will be a requirement to systematically rock bolt and mesh the shaft sidewalls during its excavation.
- The ventilation drive/s and associated portal can be supported with weld mesh and friction bolts.

2.6.6 Ground Support and Reinforcement

This section will discuss ground support and reinforcement requirements for development and stoping areas at Kaolin. Appendix E contains recommended minimum ground support designs for Kundip mines.

Portal and Adjacent Batters

The loose rock scree that has accumulated on the batters and berms between the portal position and the overlying sector of the open pit ramp must be cleaned away before commencing any ground support activities.

The recommended rock reinforcement and support for the Portal Batters is shown in Appendix E, and should consist of:

Wire Mesh Curtain

A free hanging wire mesh curtain should be hung from the berm directly overlying the Portal. The mesh curtain should extend at least 10m either side of the Portal.

Fibrecrete and Rock Bolts

The rock surrounding the immediate (within ~5m) Portal entrance should be systematically supported with a 75mm thick layer of fibrecrete and 3.0m long full column grouted gewie bars.

Short 2.0m length development cuts should be taken in the first 3 or 4 cuts. Ground support consisting of 2.4m long friction bolts and galvanised mesh should be installed to the face after each cut. The friction bolts within the Portal entrance area will also require cement grouting to increase there strength (from ~4 tonnes/m to ~20 tonnes/m) and corrosion resistance.

Having advanced ~10m, cable bolting of the Portal backs will be required. Cable bolt ring spacing should be 2.0m, with four, 6m length twin strand bulbed cables per ring.

Development

Ground support designs for the development are summarised in Table 14 and discussed in the following sections.

Main Decline & Accesses

- The Main Decline and accesses will encounter ground conditions that will range from ***very poor*** to ***good***.
- ***Fair*** to ***good*** quality rock is anticipated within ~50% of decline and access development. An appropriate minimum ground support standard would be to install, ≥2.4m long friction bolts and weld mesh over the backs and shoulders of this development.
- The poorer quality rock mass is typically highly structured (≥3 defect set) and is expected to be exposed within ~50% of decline and access development. Where highly structured (jointed) rock mass is encounter the most appropriate ground control strategy would be to install ≥ 2.4m long friction bolts and mesh over the development backs and sidewalls to within at least 2.0m of floor level.

Ore Drives

- Ground conditions within the Kaolin Main Lode range from ***very poor*** to ***good***, however the assessments indicate that ***poor*** or worse quality rock may account for 50% of ore drive development. Within the remaining ~50% of ore drive development ground conditions are expected to be ***fair*** or better rock quality.
- Ground conditions within the Footwall Lode are rated as ***fair*** to ***good*** rock quality which indicates that overall ground conditions are better than those anticipated within the Kaolin Main Lode.
- Within the poorer (highly structured) ground conditions it is recommended that as a minimum standard:
  - Mechanised ore drives (3m wide x 3.5m high) are supported with ≥1.8m long friction bolts and mesh installed over drive backs and sidewalls to within ~1.5m of floor level.
  - Handheld ore drives (2m wide x 2m high) are supported with weld mesh and ≥1.5m long friction bolts installed over the drive backs and shoulders.
- Within the ore drive development expected to be of ***fair*** or better rock quality it is recommended that as a minimum ground support standard:
  - Mechanised ore drives are supported with ≥1.8m long friction bolts and mesh installed over drive backs and shoulders.
  - The backs of handheld developed ore drives are reinforced with ≥1.5m long friction bolts installed in 1.5m spaced rings with each ring containing three (3) friction bolts.

Intersection Spans

- The current assessments indicate that ~50% of decline and access development will potentially occur in blocky/ structured ground conditions. This strongly suggests that it would be prudent to systematically reinforce all decline and access intersections or similar size spans (≥6m wide) with ≥6m long twin strand cable bolts installed on a 2m x 2m pattern throughout the wide span. The cable bolts would be in addition to the standard drive development ground support installed.
- Within smaller size intersection spans such as those formed between accesses and ore drives an appropriate reinforcement would be to install ≥3m long, ~20 tonne capacity full column grouted gewie bars installed on a ~1.5m x 1.5m pattern throughout the wide span. Alternatively cable bolts installed on a 2.0m x 2.0m pattern could also be used for the purpose.

Stopes Spans

- Within room and pillar stoping areas the types of ground support that can be installed will be largely dependent on stope heights:
  - Stopes ≤1.5m high, wooden props installed on a maximum spacing of 2m x 2m would be an appropriate hangingwall support.
  - Stopes ≥ 1.5m high, ≥1.5m long resin grouted gewie bars installed on a 1.5m x 1.5m pattern into the stope hangingwall.

Table 14 Summary of Ground Support Specifications for Kaolin

Development Type	Dimensions	Ground Conditions	Drawing	Minimum Ground Support Specification
Decline and Ore Accesses	4.0mW x 4.0mH	Weakly to Moderately Structured Rock Mass (Fair to Good)	A2	≥2.4m long friction bolts and mesh (3.0m x 2.4m) installed over the backs and shoulders to within ~3.0m of floor level.
		Highly Structured (Blocky) Rock Mass (Very Poor to Poor)	A3	2.4m long friction bolts and mesh (3.0m x 2.4m) installed over the backs and shoulders to within ~1.5m of floor level.
Mechanised Ore Drives	3.0mW x 3.5mH	Weakly to Moderately Structured Rock Mass (Fair to Good)	A4	1.8m long friction bolts and mesh (3.0m x 2.4m) installed over the backs and shoulders to within ~3.0m of floor level.
		Highly Structured (Blocky) Rock Mass (Very Poor to Poor)	A5	1.8m long friction bolts and mesh (3.0m x 2.4m) installed over the backs and sidewalls to within ~1.5m of floor level.
Handheld Ore Drives	2.0mW x 2.0mH	Weakly to Moderately Structured Rock Mass (Fair to Good)	A6	1.5m long friction bolts installed in 1.5m spaced rings. 3 friction bolts per ring.
		Highly Structured (Blocky) Rock Mass (Very Poor to Poor)	A7	1.5m long friction bolts and mesh (3.0m x 2.4m) installed over the backs and sidewalls to within ~1.2m of floor level.
Handheld Room and Pillar Stopes	Stopes ≤ 1.5m High	All Conditions	-	Wooden props installed on a maximum spacing of 2m x 2m under the stope hangingwall..
	Stopes ≥ 1.5m high	All Conditions	-	≥1.5m long resin grouted gewie bars installed on a 1.5m x 1.5m pattern into the stope hangingwall.
Intersection Spans	≥ 6m Wide Spans	All Conditions	-	≥6m long twin strand cable bolts installed on a 2m x 2m pattern throughout wide span.
	4-6m Wide Spans	All Conditions	-	≥3m long, 20mm diameter full column grouted gewie bars installed on a 1.5m x 1.5m pattern throughout wide span.

3.0 Harbour View

3.1 Geology

The following summary of the Harbour View and Harbour View North local geology is based on information [2] supplied by Tectonic:

> *The mineralisation at Harbour View and Harbour View North is hosted predominantly within dacitic and to a lesser extent andesitic volcanic rocks of the Annabelle Volcanics. Within the deposit area the volcanic dip steeply (~75°) towards the northeast.*
>
> *This sequence of bedded volcanics has been intruded by aphanitic to fine-medium-grained dacites and dacite porphyries (containing feldspar phenocrysts). Most of the intrusives occur in discordant broadly tabular bodies that dip toward the south east. The dacite intrusives and dacitic volcanics (lapilli and breccia tuffs) appear to be comagmatic (similar source).*
>
> *South dipping granitic rocks have been intersected in boreholes at depths of 90 to 200m in the South Harbour View areas. The nature and relationship of these granitic occurrences is not known. Dolerite dykes that are interpreted to post date the granitic rocks outcrop along the southwestern side of Harbour View.*
>
> *The rock mass immediately adjacent (within 4m) to mineralised quartz veins exhibits intense chlorite alteration and typically contains both disseminated and stringer sulphides.*

3.2 Previous Mining Experience

Accessible areas of the Harbour View mining area were inspected[1] in the 1980s with comments summarised:

- The ore shoots stoped are ~ 20m to 30m long.
- The upper stope voids have been backfilled with development mullock.
- Within the lower mining areas the hangingwall has been supported with timber stulls.
- The hangingwall exposed within these lower stopes is quite regular and smooth. Where the hangingwall has been undercut, localised "slabbiness" occurs, however no large scale failures have occurred.
- Within the Harbour View South mining area a large hangingwall failure occurred within an ~ 20m long x ~ 40m high stope. This failure penetrated ~ 5m into the hangingwall.

3.3 Proposed Mining

Figure 3 illustrates the spatial relationships between the proposed open pits and underground mining areas at Harbour View Deposit.

Tectonic are planning to develop a ~500m long x 150m wide x 50-60m deep open pit on the Harbour View and Harbour View North Lodes (Harbour View Open Pit). Two smaller open pits, the Maydon and Harbour View South, both approximately 150m long x 100m wide and respectively 60m and 45m deep will also be excavated at the same time.

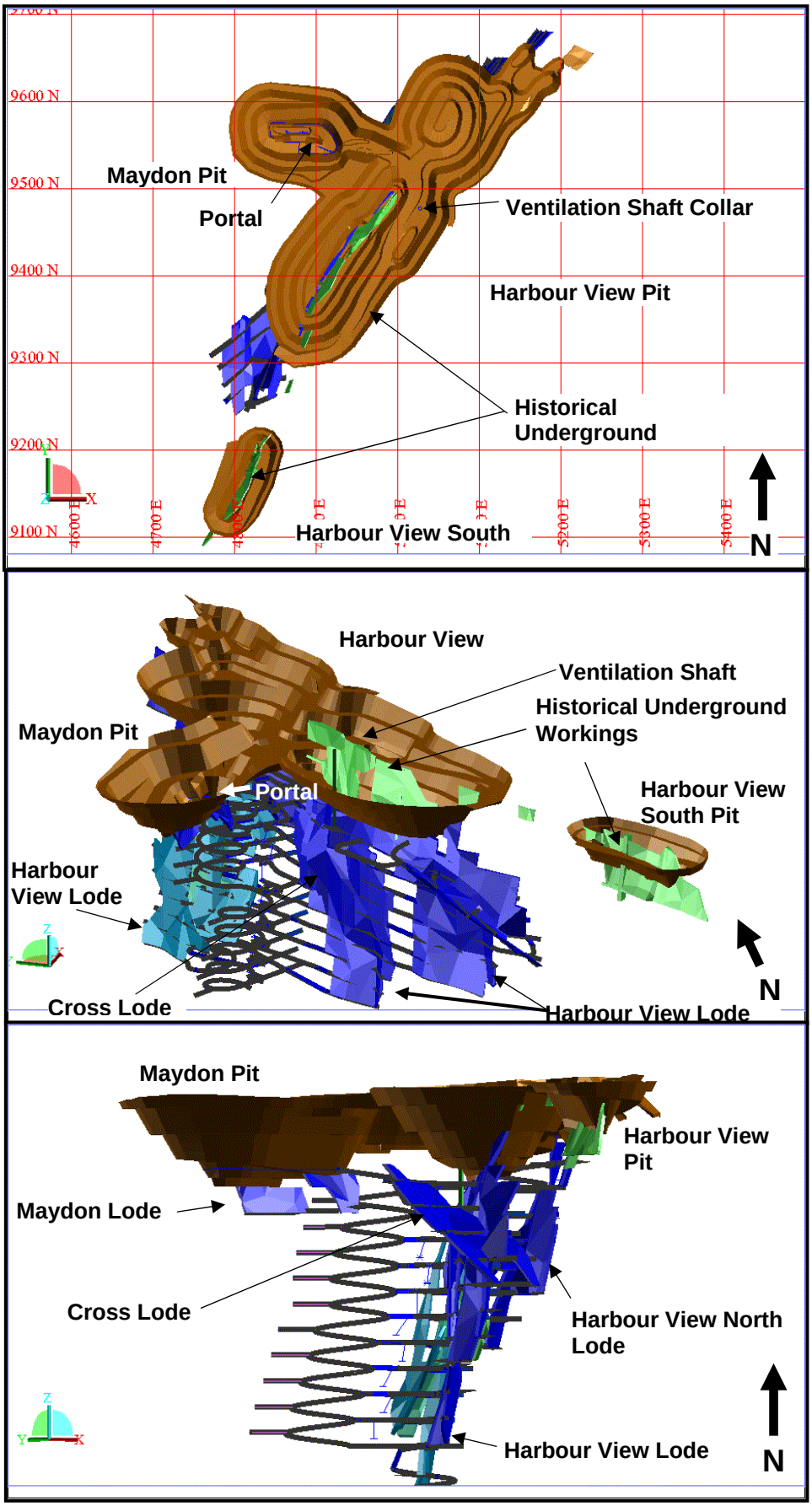

Figure 3 Proposed Mine Designs for Harbour View and Maydon

Toward the end of open pit mining, Tectonic are proposing to establish a Portal at ~940mRL on the southern wall of the Maydon Open Pit to enable development of a mechanised decline mine to extract primarily the Harbour View Lode and Harbour View North Lodes to ~750mRL (~150mbs). A small amount of stoping is planned on the Maydon Lode directly beneath the open pit and the 2401 Cross Lode (Cross Lode) that occurs at the southern end of the deposit.

The decline is currently designed to occur within the mine hangingwall opposite a low grade sector of the lodes that is currently not planned for extraction From this approximately central decline location ore accesses at 15-20m vertical intervals will be developed to intersect the Harbour View Lode structure. On each sublevel ore drives will be developed on the Harbour View Lode to the North and South.

The Harbour View North Lode which occurs at the Northern end of the deposit will be accessed on each sublevel via a cross cut developed from the adjacent sub-parallel Harbour View Lode ore drive. The Cross Lode transgresses across the Harbour View Lode ore drive; hence this lode will be driven directly from the original ore drive.

It is currently planned to extract the lodes by the LHOS, in a top down direction (overhand manner) utilising pillars to maintain stope void stability. The stopes will range from 2-7m wide.

Mine air will be exhausted via rises/ shafts off set between sublevels. The upper most shaft interval is designed between ~930mRL underground workings and a wide flat area located on the eastern wall of the Harbour View Open Pit at ~960mmRL (~40mbs).

Development sizes and ground support specifications proposed by Tectonic are shown in Table 1.

3.4 Ground Conditions

3.4.1 Geotechnical Logging

Summary geotechnical logging to obtain parameters for assessments was undertaken on the borehole core intervals listed in Table 1.

Table 15 Borehole Core Intervals Assessed for Harbour View

Borehole No.	Mine	Interval (m)	Borehole No.	Mine	Interval (m)
DD03KP005	UG	210 – 280	DD10KP725	UG	130 – 191
DD03KP029	UG	175 – 234	DD10KP727	UG	176 – 246
DD03KP032	OC	75 – 98	DD10KP731	OC / UG	0 – 135
DD03KP089	UG	165 – 210	DD10KP733	OC	0 – 73
DD03KP091	UG	90 – 120	DD10KP736A	UG	174 – 228
DD04KP345	OC / UG	0 – 101	DD10KP739	OC	0 – 160
DD04KP346	OC	0 – 90	DD10KP740	OC	0 – 110
DD08KP481	UG	220 – 322	DD10KP742	UG	70 - 120
DD08KP500	UG	152 – 185	K1N1*	UG	100 – 160
DD08KP511	UG	220 – 320	K1N2*	UG	60 – 110
DD08KP512	UG	152 – 211	K2N1*	UG	70 – 150
DD10KP720	UG	240 – 311	K2N2*	UG	170 – 220

Note: * Borehole core not utilised in assessments.

Important points regarding the borehole cores reviewed include:

- With the exception of the K series of boreholes that were drilled by the Hollandia and Unimin Joint Venture in 1970s, all borehole cores check-logged were from Tectonic drilling programs undertaken between 2003 and 2010. The DD10KP series of boreholes was designed by Tectonic to specifically assess ground conditions within potential pit walls and underground workings at Harbour View.
- Check-logging of the K series boreholes found the core to be strongly fractured (rubble) over long intervals (≥10m to 20m). It appears that the ***poor*** condition of the core is probably related to breakages induced by drilling, handling and sampling. A Q-System assessment of the borehole core produced anomalously low Q-Values compared to results from the more recently drilled and logged borehole cores.
- Due to the above concerns about core quality, the K series boreholes were not included in characterisation of ground conditions at Harbour View.

3.4.2 Rock Weathering

The rock mass can be generally described as highly weathered to a depth of ~ 35mbs (ranging from ~ 30m to 40mbs). From this depth the rock mass weathering grades gradually from slightly weathered to fresh. The top of fresh rock (TOFR) generally occurs within the interval of 40m to 60mbs.

3.4.3 Rock Quality

The RQD and fracture frequency data collected by the Tectonic Geology Department from the boreholes cores were assessed according to quartile values, with best and worst case results summarised in Table 16.

Table 16 Fracture Frequency & RQD Ranges According to Weathering for Harbour View

Mining Domain	Rock Mass Domain	Fracture Frequency (f/m)		RQD (%)	
		1st Quartile (Worst)	4th Quartile (Best)	1st Quartile (Worst)	4th Quartile (Best)
Open Pit	Highly Weathered to Moderately Weathered	25	11	10	100
	Slightly Weathered to Fresh Rock	25	12	10	95
Underground	Fresh Rock	25	5	50	100

The results shown in Table 16 indicate that weathered and fresh rocks within the anticipated pit walls are expected to be strongly fractured which will be unfavourable for batter and berm crest stability.

Within the proposed underground mining area rock mass fracturing tends to decrease with increasing depth below surface which is inferred to be related to the reduced effects of weathering.

3.4.4 Rock Strength

Manual index testing, according to the International Society of Rock Mechanics (ISRM) guidelines, was undertaken during geotechnical logging to estimate intact rock strength. The results of this testing are presented in Appendix A for (each 1m interval along) the boreholes logged.

A program [12] of rock property testing were also undertaken on representative samples of borehole core found within the deposit by Fenixx Australia Pty Ltd, Perth with results summarised in Table 17.

Table 17 Summary of Rock Property Results for Harbour View

Rock Type	UCS (MPa) A+C			UCS (MPa) Total		
	Mean	Std Dev	No Samples	Mean	Std	No Samples
Dacite	131	72	2	97	62	4
Intermediate Lapilli Tuff	111	50	3	85	51	5
Granite	246	42	2	246	42	2
Intermediate Porphyry	97	7	2	97	7	2

Notes-
UCS = Uniaxial Compressive Strength normalised for 50mm core diameter.
UCS_{A+C} = Uniaxial Compressive Strength data from core that failed either due to axial splitting (A) or multiple cracking (C).
UCS_{TOTAL} = Total Uniaxial Compressive Strength data including shear failure.

Based on the results of the manual strength testing and the laboratory based Uniaxial Compressive Strength (UCS) testing following comments are provided:

- The weathered rocks at Harbour View Deposit typically range from ~ 1 MPa to 50 MPa (worst and best cases).
- For slightly weathered to fresh rocks, UCS values of ~ 120 MPa and 80 MPa are considered to be representative of the best case (highest) and worst case rock strength values respectively for the volcanic rocks (Dacite, Intermediate Lapilli Tuff and Porphyry).
- Granitic rocks at Harbour View can be classified as ***extremely strong***.

3.4.5 Rock Stress

No *in situ* stress measurements have been undertaken to date at Kundip.

Given the shallow depth (≤150m) of mining it is expected, however that rock stresses will be low. On the basis of experience at other mines, the virgin stress field at Kundip is assumed to be defined as:

$\sigma_{vertical}$ (σ_3) = 0.028h MPa where h is the depth below surface (m).

$\sigma_{north\ south}$ (σ_1) = 2.5 x $\sigma_{vertical}$ MPa

$\sigma_{East\text{-}West}$ (σ_2) = 1.5 x $\sigma_{vertical}$ MPa

General experience at other Australian mines suggests that stress magnitudes may be sufficient to adversely affect the stability of openings if mining proceeds to depths greater than ~ 550m below surface.

3.4.6 Hydrogeology

To our knowledge no specific hydrogeological investigations have been performed for Harbour View.

It is inferred that the findings of the 2004 Rockwater investigation for Kaolin will also apply (in a generalised sense) to Harbour View.

3.4.7 Rock Defects

Stereographic analysis of the rock defect data was carried out using the DIPS [5] software code with results (relative to AMG) for the individual boreholes summarised in Table 18 Appendix B contains pole and major plane plots of assessments.

Table 18 Major Defect Sets Identified According to Borehole for Harbour View

Borehole	Defect Set	Major Defect Set
DD03KP005	7	76° / 258°
DD03KP089	1	87° / 317°
	3	60° / 010°
	5	45° / 232°
DD03KP091	1	81° / 291°
DD04KP345	5	51° / 170°
DD04KP346	5	42° / 224°
DD08KP481	1	74° / 294°
	2	49° / 300°
	3	48° / 006°
	5	45° / 222°
DD08KP500	1	71° / 302°
	5	40° / 223°
DD08KP511	1	75° / 284°
	2	23° / 358°
	3	69° / 007°
	5	46° / 205°
	6	37° / 139°
DD10KP725	1	68° / 293°
	2	23° / 332°
	3	52° / 341°
DD10KP731	1	81° / 313°
	2	37° / 324°
	3	47° / 007°
	4	28° / 055°
DD10KP733	1	83° / 109°
	5	26° / 228°
	6	55° / 166°
DD10KP736A	1	77° / 304°
	2	37° / 326°
	4	22° / 043°
DD10KP739	1	73° / 305°
	2	27° / 319°
	3	69° / 354°
	4	32° / 041°
DD10KP740	1	89° / 307°
	5	30° / 220°
	6	48° / 157°
DD10KP742	1	74° / 293°
	2	48° / 315°
	3	54° / 341°
	4	21° / 088°

Major rock defect orientations defined for the Harbour View Deposit are summarised in Table 19.

Table 19 Summary of Major Rock Defect Orientations Identified at Harbour View

Defect Set No.	Dip / Dip Direction
1	73° / 300°
2	23° / 329°
3	63° / 001°
4	24° / 072°
5	41° / 225°
6	50° / 160°

The results indicate that Major Defect Sets 1, 2, 3 and 5 are well developed throughout the deposit while the remaining Defect Sets 4 and 6 are not as prevalent. Defect Set 7 (Table 19) was identified only within Borehole DD05KP005 and hence is considered to be a minor set.

Wall stability is expected to be predominantly controlled by geological structures. Based on the major defect sets delineated (Table 19) the assessed potential wall failure modes (should walls be mined at too steep an angle for prevailing ground conditions) are provided in Table 20.

Table 20 Potential Modes of Wall Failure at Harbour View

Wall Location	Mode of Failure	Defect Set	Comments
North Wall	Sliding	5	Sliding on moderate South Southwest dipping defects with potential release from multiple defects.
	Wedge	1-6	Sliding out on Defect intersection.
		5-6	Wedge sliding out on Defect 5.
		1-5	Wedge sliding out on Defect 5.
		3-5-6	Wedge sliding out on Defect 3
South Wall	Sliding	4	Possible sliding on steeper outliers of East Northeast dipping defects with release from Defect 5.
	Wedge	1-6	Wedge sliding out along defect intersection
		3-4	Wedge sliding out on steeper outliers, along defect intersection.
East Wall	Sliding	2	Possible sliding on steeper outliers of Northwest dipping defects with release from multiple defects.
	Toppling	6	Possible localised toppling on steeper outliers of Defect 6
	Wedge	2-3	Potential wedge sliding out on steeper outliers of Defects
		2-5	Potential wedge sliding out on steeper outliers of Defects
		3-5	Sliding out along intersection of defects.
West Wall	Sliding	6	Sliding on moderate South southeast dipping defects with potential release from multiple defects.
	Toppling	1	Toppling on steep Northwest dipping defects.
	Wedge	3-4	Sliding out along Defect 4.
		4-6	Sliding out along defect intersection.
		3-6	Potential wedge sliding out on steeper outliers, along defect intersection.

3.4.8 Mining Rock Mass Rating Scheme

A summary of the results obtained from the MRMR rock mass classification system and derived slope angles obtained from geotechnical borehole data, is provided in Table 21 with calculation shown in Appendix C

Table 21 Summary of Mining Rock Mass Rating Assessment for Harbour View Open Pit Walls

Domain	Case	IRS Value	FF Value	JRC Parameters				JRC Value	Adjustment Parameters			MRMR	Slope Angle
				A	B	C	D	(40 X A x B x C)	Weathering	Joints	Blasting		
Moderate to Highly Weathered Rock	Best	6	10	0.8	0.90	1.0	0.75	21.6	0.86	0.8	0.94	24.3	42.0°
	Worse	1	3	0.7	0.60	1.0	0.2	3.4	0.86	0.8	0.94	4.8	32.4°
Slightly Weathered to Fresh Rock	Best	12	9	0.8	0.90	1.0	0.75	21.6	1.0	0.8	0.94	32.05	46°
	Worse	8	2	0.70	0.60	1.0	0.2	3.4	1.0	0.8	0.94	10.0	35°

3.4.9 Q-System Classification

The Q-System [9, 10], an empirical rock mass classification scheme has been used to characterise ground conditions within the potential underground mining areas at Harbour View.

For these assessments Q-Values were estimated using data derived from the borehole core for geometrical domains, the boundaries of which are based on proximity to the Harbour View and Harbour View North Lodes. The domains assessed are defined in Table 22 and illustrated by Figure 4.

Table 22 Geotechnical Domains Assessed for Harbour View using the Q-System

Domain Code	Description
HWHVL	Far field country rocks located to the west of Harbour View Lode.
HW3HVL	Immediate west wall rock mass, within 3m of Harbour View Lode stope wall.
HVL	Harbour View Lode, minimum mining width 3m.
FW3HVL	Immediate east wall rock mass, within 3m of stope wall.
FWHVL	Rock mass located between Harbour View and Harbour View North Lodes.
HW3HVNL	Immediate west wall rock mass, within 3m of Harbour View North Lode stope wall.
HVNL	Harbour View North Lode, minimum mining width 3m.
FW3HVNL	Immediate east wall rock mass, within 3m of Harbour View North stope wall.
FWHVNL	Far field country rocks located to the east of Harbour View And Harbour View North Lodes.

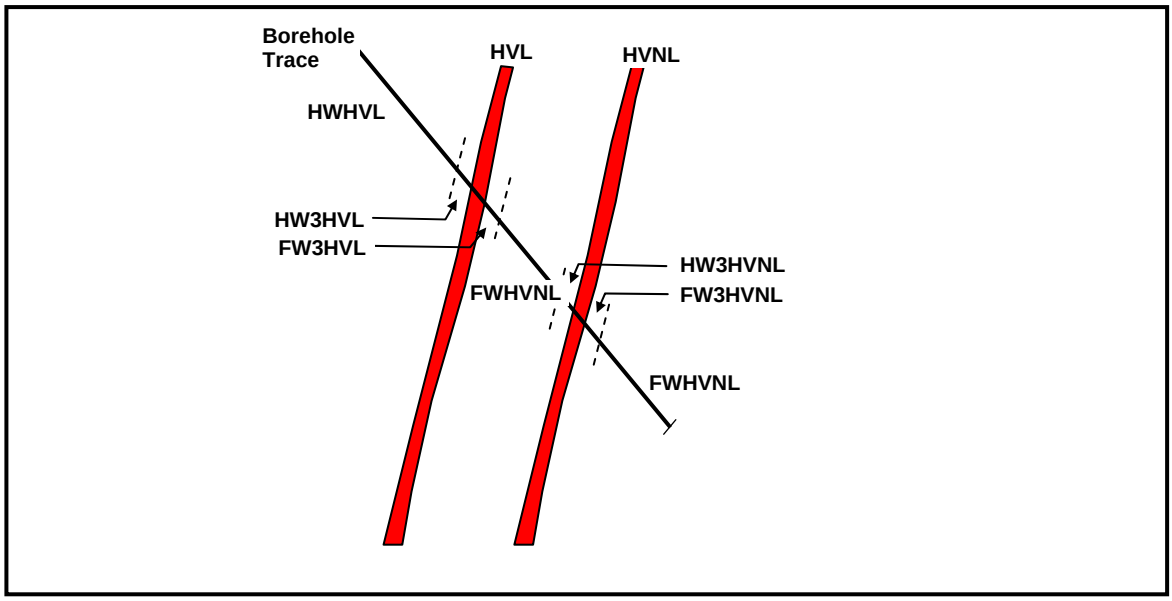

Figure 4 Schematic Diagram Showing Geometric Domains at Harbour View Deposit

The methodology used to calculated Q-Values is explained in Section 2.4.9. To obtain a general understanding of ground conditions at the Harbour View Deposit quartiles were calculated for each of the geometrical domains identified in Table 22 with results presented in Table 23.

Ground Support According to Q-System

According to the enhanced Q-System Rock Reinforcement Design Chart [9], the different types and sizes of development proposed for Harbour View Deposit will require the reinforcement systems shown in Table 24.

Although this support estimate suggests that development would require *spot bolting* only, current guidelines require installation of surface support to within ≤ 3.5m of the floors of openings. Accordingly, *spot bolting* is not recommended.

Table 23 Summary of Quartile Q' and Q-Values for Harbour View Domains

Domain	Q'-Value				Q-Value				Rock Class
	1st Quartile	2nd Quartile	3rd Quartile	4th Quartile	1st Quartile	2nd Quartile	3rd Quartile	4th Quartile	
HWHVL	2.2	13.3	28.5	100.0	1.3	13.3	28.5	100.0	***Very Poor** – **Very Good***
HW3HVL	1.6	6.8	23.7	56.3	0.3	6.8	23.7	56.3	***Very Poor** – **Very Good***
HVL	2.1	16.3	33.8	100.0	0.5	16.3	33.8	100.0	**Very Poor** – ***Very Good***
FW3HVL	1.8	10.0	21.3	75.0	1.5	10.0	21.3	75.0	***Poor** – **Very Good***
FWHVL	6.7	12.2	23.8	100.0	6.7	12.2	23.8	100.0	***Fair** – **Very Good***
HW3HVNL	4.4	16.7	24.5	37.5	3.5	16.7	24.5	37.5	***Poor** - **Good***
HVNL	0.8	11.7	24.5	37.5	0.4	11.7	24.5	37.5	***Very Poor** – **Good***
FW3HVNL	0.4	14.9	31.3	48.0	0.1	14.9	31.3	48.0	***Extremely Poor** – **Very Good***
FWHVNL	14.0	33.8	38.3	100.0	14.0	33.8	38.3	100.0	***Good** – **Very Good***

Table 24 Indicated Ground Support Requirements for Harbour View According to Q-System Design Chart

Development Type	ESR	Domain	2nd Quartile Q-Value	Q-System Ground Support Requirements
Decline 4.0m W x 4.0m H	1.3	HWHVL	13.3	Spot Bolting
Ore Accesses Harbour View Lode 4.0m W x 4.0m H	1.6	HWHVL	13.3	Spot Bolting
Ore Accesses Harbour View North Lode 4.0m W x 4.0m H	1.6	FWHVL	12.2	Spot Bolting
Ore Drive – Harbour View Lode 3.0m W x 3.5m H	1.6	HVL	16.3	Spot Bolting
Ore Drive – Harbour View North Lode 3.0m W x 3.5m H	1.6	HVNL	11.7	Spot Bolting

Modified Stability Graph

The Modified Stability Graph Method[11] as described in Section 2.4.9 has been used to make a preliminary assessment of stable stope spans at Harbour View.

The input parameters for the assessments and the resulting Modified Stability Number, N are shown in Appendix D with results summarised in Table 25.

Table 25 Summary of Modified Stability Graph Results for Harbour View

Orebody	Q' Value	A	B	C	N'	Unsupported		Supported	
						HR (m)	(Dip Span x Length)	HR (m)	(Dip Span x Length)
Harbour View Lode	6.8	0.54	0.3	6.4	7.0	6.5	20m x 37m (1 sublevel)	10.5	35m x 53m (2 sublevels)
Harbour View North Lode	16.7	0.54	0.3	6.4	17.3	8.8	35m x 36m (2 sublevels)	12.5	35m x 88m (2 sublevels)

3.5 Open Pit Mining

On the basis of the foregoing assessment, design parameters for a short to medium life 60m deep open pit wall at Harbour View are shown in Table 26.

Table 26 *Base case* wall design parameters (inferred likely rock mass conditions) for Harbour View Open Pit

Wall Location	Rock Mass Description	Depth Below Surface	Batter Angle (°)	Berm Width (m)	Bench Height (m)	Inter-ramp angle (°)
North, South and East Walls	Completely to Moderately Weathered	0m to 45m	55°	8	15	39°
	Slightly Weathered to Fresh	45m to 60m	65°	-	15	65°
West Wall (Follow Footwall)	Completely to Moderately Weathered	0m to 45m	55°	8	15	39°
	Slightly Weathered to Fresh	45m to 60m	60°	-	15	60°

3.6 Underground Mining

3.6.1 Mining Methods

From a geotechnical viewpoint two stoping methods could be considered for extraction of the Harbour View and Harbour View North Lodes:

1. LHOS with pillars
2. Bench Stoping (Benching) with rock fill.

The Modified Stability Graph assessments and operational experience at other Western Australian mines indicates that LHOS with pillars should be geotechnical feasible for Harbour View ground conditions. If ground conditions are found to less favourable than expected, Bench Stoping with rock fill could be readily implemented. Preliminary mine design parameters for Harbour View and Harbour View North Lodes will be outlined in the following sections.

The absence of borehole cores within the proposed underground mining areas on the Maydon and Cross Lodes has prevented a geotechnical assessment being undertaken for these two lodes. Any future geotechnical assessment would require diamond drilling programs to be undertaken for the purpose of collection of geotechnical data.

3.6.2 Longhole Open Stoping

It is recommended that a conservative approach to stope design be initially adopted at Harbour View. The following design criteria are recommended for LHOS stopes:

Harbour View	HR = 6.5	20m high x 37m long	(~1 Sublevel)
Harbour View North	HR = 8.8	35m high x 36m long	(~2 Sublevels)

Where economic sectors of the sub-parallel Harbour View Lode and Harbour View North Lodes occur in close proximity (≤5m), consideration should be given to:

- Combining the lodes to form a single (bulk) stope to avoid formation of a slender stope separation pillar that will become increasingly unstable as the size of the adjacent stope voids increase. At some point during extraction it would be expected that the pillar would collapse into the stope voids.
- Extracting the highest grade lode and then undertaking limited (≤ 50% (?)) extraction of the remaining lode.
- Undertaking selective backfilling of stope voids with development mullock and/ or cemented rock fill to limit stope spans and assist in maintaining pillar stability. This would probably require adoption of bench stoping in the affected areas of the mine.

As the separation distance between the potential adjacent parallel stope voids increases the risk of pillar instability will progressively decrease. It is envisaged that pillars ≥10m wide should remain reasonably stable provided pillars within the adjacent stopes are aligned.

3.6.3 Pillar Design

General experience suggests that rib pillars should typically have not less than a 1:1 "aspect ratio" (width : height) to be stable in the expected low stress environment at Harbour View. When rib pillars are used they should be staggered and uniformly distributed to prevent large, continuous dip spans being formed.

Typically in a top down stoping sequence, the amount of wall rock dilution progressively increases as each subsequent sublevel is extracted. At some point the amount of dilution necessitates leaving of a sill pillar to prevent ingress of wall rock dilution into the planned underlying stopes. For the Harbour View and Harbour View North Lode stopes it is suggested that for preliminary planning purposes that sill pillars are left at approximately 80m vertical intervals. If sill pillars are left they should have a minimum thickness of ~ 1.5 times the width of the proposed underlying stope void.

3.6.4 Mine Infrastructure

Decline and Accesses

Decline and lode access development will predominantly occur within ***good*** – ***very good*** quality rock. The proposed location of the decline and accesses opposite an uneconomic sector of the lodes means that this development is unlikely to be affected by stope instability. As a precautionary measure the decline should be kept ≥30m from the Harbour View Lode structure in case economic mineralisation is identified at a later stage.

The decline should preferably be oriented approximately northwest-southeast so that it intersects foliation planes present within the rock mass at an angle ≥30° the aim being to reduce the extent of decline sidewall overbreak.

Ventilation Shaft

The currently proposed ventilation shaft collar position within the Harbour View Open Pit at ~40mbs is endorsed as it will most likely eliminate development of the shaft through inherently unstable clay rich weathered rocks.

Below 40mbs the shaft will occur within slightly weathered to predominantly fresh rock. If the shaft is excavated by handheld mining methods it is expected that shaft sidewalls could be adequately supported with rock bolts (friction bolts and gewie bars) and mesh.

3.6.5 Ground Support and Reinforcement

The minimum ground support designs are contained in Appendix E and summarised in Table 27. Important aspects of the designs are as follows:

Portal and Adjacent Batters

The Portal entrance into the Harbour View Underground Mine is planned to be developed at a depth of ~ 40mbs from the southern wall of the Maydon Open Pit. At this depth the rock mass is expected to be slightly weathered hence a similar approach to ground support can be adopted for the Portal and adjacent Open Pit Batters to that described in Section 2.6.6 for Kaolin.

Main Decline and Accesses

- ***Good to very good*** quality rock is anticipated within the majority (~75%) of Main Decline and ore access development. An appropriate minimum ground support standard would be to install, ≥2.4m long friction bolts and weld mesh over the backs and shoulders of this development.
- ***Poor*** quality rock is anticipated within the remaining ~25% of development. This blocky/ jointed rock mass will require installation of mesh to within 1.5m of floor level.

Ore Drives

- Ground conditions within the Harbour View and Harbour View North Lode ore drives should be predominantly (up to 75%) ***good***. For these favourable ground conditions the minimum ground support standard should be to install 1.8m long friction bolts and mesh across the drive backs and shoulders.
- The remaining 25% of lode development may encounter ***poor*** quality rock that will probably necessitate installation of additional sidewall mesh to within ~1.5m of floor level.

Intersection Spans

- All wide spans formed at the intersection of large size (≥4m wide) development, in particular decline intersections should be systematically reinforced with ≥6m long twin strand cable bolts installed on a 2m x 2m pattern throughout the wide span. The cable bolts would be in addition to the standard drive development ground support installed.

- Within lesser intersection spans, such as those formed between accesses and ore drives, an appropriate reinforcement would be to install ≥3m long, ~ 20 tonne capacity full-column grouted gewie bars on a ~ 1.5m x 1.5m pattern throughout the span. Alternatively cable bolts installed on a 2.0m x 2.0m pattern could be used.

Stope Spans

- The sidewalls of the Harbour View and Harbour View North Ore Drives are expected to intersect unfavourably orientated geological structures and/ or blocky rock mass conditions in places. In an effort to improve stope wall stability it is recommended that these sector of ore drive be reinforced with 2-2.5m spaced rings of ≥4m long twin strand cable bolts, with each ring containing two (2) plated and tensioned cable bolts.
- For costing purposes it is suggested that an allowance be made for 25% of ore drive sidewalls to be cable bolted.

Table 27 Summary of Ground Support Specifications for Harbour View

Development Type	Dimensions	Ground Conditions	Drawing	Minimum Ground Support Specification
Decline and Ore Accesses	4.0mW x 4.0mH	Weakly to Moderately Structured Rock Mass (Fair to Good)	A2	≥2.4m long friction bolts and mesh (3.0m x 2.4m) installed over the backs and shoulders to within ~3.0m of floor level.
		Highly Structured (Blocky) Rock Mass (Very Poor to Poor)	A3	2.4m long friction bolts and mesh (3.0m x 2.4m) installed over the backs and shoulders to within ~1.5m of floor level.
Ore Drives	3.0mW x 3.5mH	Weakly to Moderately Structured Rock Mass (Fair to Good)	A4	1.8m long friction bolts and mesh (3.0m x 2.4m) installed over the backs and shoulders to within ~3.0m of floor level.
		Highly Structured (Blocky) Rock Mass (Very Poor to Poor)	A5	1.8m long friction bolts and mesh (3.0m x 2.4m) installed over the backs and sidewalls to within ~1.5m of floor level.
Intersection Spans	≥ 6m Wide Spans	All Conditions	-	≥6m long twin strand cable bolts installed on a 2m x 2m pattern throughout wide span.
	4-6m Wide Spans	All Conditions	-	≥3m long, 20mm diameter full column grouted gewie bars installed on a 1.5m x 1.5m pattern throughout wide span.
Stope Spans	-	Highly Structured (Blocky) Rock Mass and/ or unfavourably orientated structures.	A7	≥4m long, twin stand cable bolts installed in 2-2.5m spaced rings with each ring containing two (2) plated and tensioned cable bolts.

4.0 Flag Deposit

4.1 Geology

A brief description of the Flag Deposit local geology based on information[2] provided by Tectonic is provided below:

> *The Flag Deposit occurs at the southern end of the mineral field predominantly within dacitic lavas and tuffs of the Annabelle Volcanics. The Flag Main Lode dips at between 40-60° toward the South. The lode has been displaced ~10-15m laterally by a moderately (60°) south east dipping fault that contains economic mineralisation (Cross Fault Lode). At the far western end of the deposit the lodes are hosted within a moderate (~ 45°) south west dipping granite that overlies dacitic lavas.*
>
> *Proterozoic cover, consisting of quartzite and conglomerate from the Mount Barren Group, cover the western end of the Flag Deposit. This contact unconformably overlies sections of the Annabelle Volcanics and is believed to be the main reason why some of the lode extensions, beneath the Mount Barren Group, were not exploited by historical mining.*

4.2 Previous Mining Experience

Important points about previous mining at Harbour View based on information[1] supplied by Tectonic are summarised:

- The ore shoots are similar in dimensions to those at the other Kundip Deposits.
- The Main Lode stope, which is located within ~ 90m of surface, was partially backfilled during the original phases of mining in the 1900s. The unfilled areas show no signs of rock mass failure.
- During the late 1980s mining recommenced with deepening of the main shaft, followed by development and stoping of the Main Lode. Ground conditions continued to be favourable.
- The Flag mine experienced notably higher water inflows than did the adjacent mines.

4.3 Proposed Mining

Figure 5 illustrates the spatial relationships between the proposed open pits and underground mining areas at Flag Deposit.

Mining will commence with excavation of the Stage One, Main Pit which is designed to be approximately 500m long x 80m wide x 40m deep. Stage Two of the excavation entails deepening of the western half of the Main Pit to a designed final depth of ~70mbs.

The approximately 250m long x 150m wide x 60m deep East Pit is planned to be mined following completion of the Main Pit. Tectonic are planning to use waste rock from the East Pit to construct a ramp within the eastern half of the Main Pit. This backfill ramp will be used to re-access the western end of the Main Pit for the purpose of developing a Portal.

The Portal for the mechanised underground mine is currently designed for the northwest corner of the Main Pit at ~925mRL. A ~800m long decline straight will be developed from the Portal entrance area to the main stoping area which occurs underneath the western half of the Main Pit. From this central location a spiral decline will be developed to access the sublevel levels between ~860mRL and 760mRL (~230mbs). The stope blocks delineated above ~860mRL will be accessed by a series of inclines developed from the long decline straight.

Stope blocks occurring at the eastern end of the deposit, below the East Pit will be accessed by an incline ramp developed from the centrally located spiral decline. At the western end of the deposit the upper stopes are designed with a typical sublevel layout (accesses and ore drives) while an in-ore decline is proposed for the lower stope blocks.

Tectonics intention is to utilise LHOS, in a top down direction (overhand manner) utilising pillars to maintain stope void stability. The sublevel intervals are planned to be between 15-20m apart vertically. The exception being the in-ore decline planned for the bottom section of the western stope

block. It is expected that the in-ore decline will necessitate use of a cut and fill mining method for this block.

Mine air will be exhausted from:

- The centrally located Main Shaft which was used during the previous phase of mining at Flag. This shaft extends from surface to the bottom level (~870mRL) of the historical underground working on Flag Main Lode.
- Shafts located at the eastern and western ends of the mine. It is currently proposed to develop the Eastern Ventilation Shaft between underground development at ~920mRL and the East Pit ramp at ~955mRL. The uppermost interval of the Western Ventilation Shaft will extend from development at ~910m RL to the 935mRL berm located in the southwestern corner of the Flag Main Pit.

Development sizes and ground support specifications proposed by Tectonic are shown in Table 1.

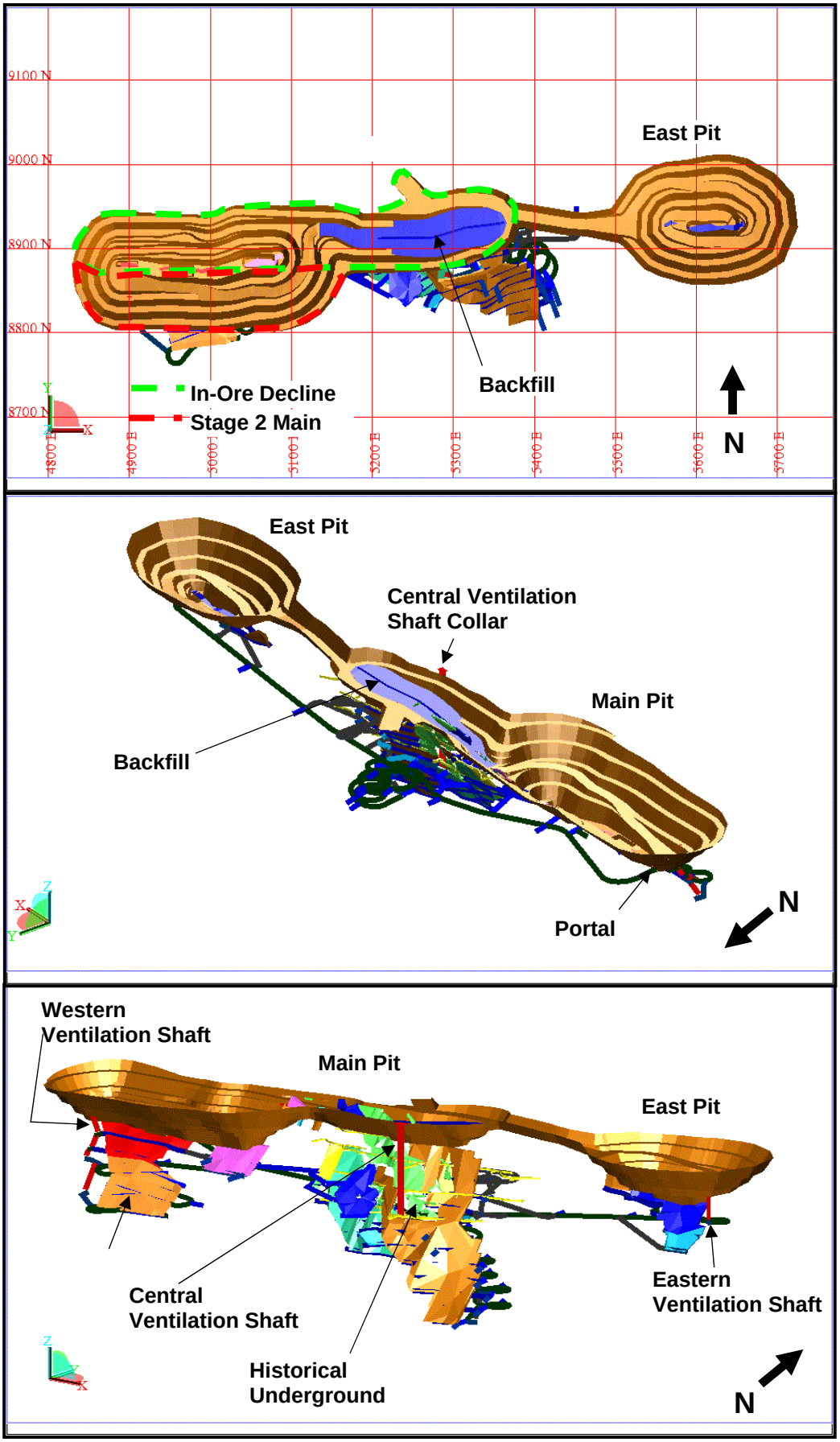

Figure 5 Proposed Mine Design for Flag

4.4 Ground Conditions

4.4.1 Geotechnical Logging

The borehole cores geotechnically checked logged for the assessment of ground conditions at Flag are shown in Table 28.

Table 28 Borehole Core Intervals Assessed for Flag

Borehole No.	Mine	Interval (m)	Borehole No.	Mine	Interval (m)
DD05KP432	UG	105 – 130	DD10KP788	OC	0 – 69
DD05KP459	UG	110 – 132	DD10KP789	OC	0 – 85
DD05KP471	UG	210 – 233	DD10KP798	UG	125 - 195
DD08KP482	UG	150 – 183	DD10KP800	UG	53 - 100
DD08KP488	UG	105 - 160	FD008*	UG	100 – 162
DD08KP520	UG	150 – 180	FD012*	UG	110 – 180
DD010KP786A	OC	0 – 60	FD016*	UG	50 -97
DD10KP787	OC	0 – 60	FD024*	UG	120 - 190

Note: * Boreholes not included in assessment

Important points about the check logging program:

- The FD series of boreholes were drilled by Norseman Gold Mines in the late 1980's with the remaining boreholes drilled by Tectonic between 2005 and 2010.
- A Q-Value comparison found that the results derived from the Norseman Gold Mines borehole cores were lower than those calculated from the more recent borehole cores. The Q-Values were significantly lower for the Flag Main Lode and immediately adjacent rock mass due to degradation of the core over time, and induced fracturing resulting from handling and cutting of the core for assaying.
- No borehole core intersects the Cross Fault Lode.
- It was decided to utilise only the geotechnical data collected from the Tectonic borehole cores as they are more likely to be representative of ground conditions at Flag.

4.4.2 Rock Weathering

The borehole information indicates that the weathering profile within the long and narrow width Flag Open Pits is variable.

The southern wall of the pit will occur within weathered rock to ~24-27mbs, where the rock grades into slightly weathered rock. The top of fresh rock occurs on the southern wall occurs at between ~41-51mbs.

Along the western half of the pits north wall the weathering profile is relatively shallow with slightly weathered rock occurring from 6mbs to 38mbs (top of fresh rock).

At the eastern end of the north wall the rock mass is weathered to ~60mbs. The top of fresh rock is interpreted to occur just below ~85mbs.

4.4.3 Rock Quality

The RQD and fracture frequency data collected by the Tectonic Geology Department from the boreholes cores were assessed according to Quartile values with best and worst case result summarised in Table 29.

Table 29 Fracture Frequency & RQD Ranges According to Weathering

Mining Domain	Rock Mass Domain	Fracture Frequency (f/m)		RQD (%)	
		1st Quartile (Worst)	4th Quartile (Best)	1st Quartile (Worst)	4th Quartile (Best)
Open Pit	Highly Weathered to Moderately Weathered	25	5	10	80
	Slightly Weathered to Fresh Rock	25	7	29	100
Underground	Fresh Rock	25	5	50	100

The results shown in Table 29 indicate that rock mass fracturing at Flag is less than that assessed for Kaolin and Harbour View Deposits. The rock mass will most likely be predominantly moderately blocky.

4.4.4 Rock Strength

Manual index testing, according to the International Society of Rock Mechanics (ISRM) guidelines, was undertaken during geotechnical logging to estimate intact rock strength. The results of this testing are presented in Appendix A for (each 1m interval along) the boreholes logged. Uniaxial compressive strength testing was also undertaken on a selection of borehole cores with results summarised in Table 30.

Table 30 Summary of Rock Property Results for Flag

Rock Type	UCS (MPa) A+C			UCS (MPa) Total		
	Mean	Std Dev	No Samples	Mean	Std	No Samples
Dacite	103	1	2	80	28	4
Intermediate Volcanic	-	-	-	37	-	1
Granite	208	11	2	208	11	2

Notes-
UCS = Uniaxial Compressive Strength normalised for 50mm core diameter.
UCS_{A+C} = Uniaxial Compressive Strength data from core that failed either due to axial splitting (A) or multiple cracking (C).
UCS_{TOTAL} = Total Uniaxial Compressive Strength data including shear failure.

Based on the results of the manual strength testing and the laboratory based Uniaxial Compressive Strength (UCS) testing following comments are provided:

- The weathered rocks at Flag Deposit typically range from 1-50 MPa (worse and best case).
- For slightly weathered to fresh rocks, UCS values of 103 MPa and 80 MPa are considered to be representative of the best case (highest) and worse case rock strength values respectively for the volcanic rocks (Dacite and Intermediate Lapilli Tuff).
- Granitic rocks at Flag can be classified as ***extremely strong***.

4.4.5 Rock Stress

No *in situ* stress measurements have been undertaken to date at Kundip.

Given the shallow depth (≤150m) of mining it is expected, however that rock stresses will be low. On the basis of experience at other mines, the virgin stress field at Kundip is assumed to be defined as:

$\sigma_{vertical}$ (σ_3) = 0.028h MPa where h is the depth below surface (m).

$\sigma_{north\ south}$ (σ_1) = 2.5 x $\sigma_{vertical}$ MPa

$\sigma_{East\text{-}West}$ (σ_2) = 1.5 x $\sigma_{vertical}$ MPa

General experience at other Australian mines suggests that stress magnitudes may be sufficient to adversely affect the stability of openings if mining proceeds to depths greater than ~ 550m below surface.

4.4.6 Hydrology

To our knowledge no specific hydrogeological investigations have been performed for the Flag deposit.

At this stage it is inferred that the findings of the 2004 Rockwater investigation for Kaolin will also apply (in a generalised sense) to Flag.

4.4.7 Rock Defects

Stereographic analysis of the rock defect data was carried out using the DIPS [5] software code with results (relative to AMG) for the individual boreholes summarised in Table 31 Appendix B contains pole and major plane plots of assessments.

Table 31 Major Defect Sets Identified According to Borehole for Flag

Borehole	Defect Set	Major Defect Set
DD05KP432	1	42° / 210°
	2	75° / 184°
	3	43° / 140°
DD05KP433	1	41° / 223°
	2	86° / 004°
	3	57° / 157°
	4	52° / 299°
	6	33° / 064°
DD05KP459	1	49° / 204°
	2	84° / 187°
	3	59° / 135°
	4	12° / 316°
DD05KP471	1	43° / 193°
	2	81° / 199°
	3	53° / 154°
	4	25° / 335°
	5	58° / 056°
DD05KP472	1	40° / 199°
	2	81° / 185°
	3	48° / 140°
	5	59° / 057°
DD08KP482	1	40° / 217°
	4	25° / 318°
DD08KP488	1	27° / 217°
	3	53° / 148°
DD08KP520	1	35° / 222°
	3	44° / 165°
DD10KP786A	1	31° / 208°
	2	78° / 202°
DD10KP787	2	89° / 009°
	3	55° / 027°
	4	31° / 286°
	6	24° / 111°
DD10KP788	1	48° / 203°
	2	79° / 202°
DD10KP789	6	34° / 081°
DD10KP798	1	47° / 209°
DD10KP800	1	49° / 210°
	4	39° / 278°

From these assessments the major rock defect orientations were delineated for the Flag Deposit with results summarised in Table 32. The results indicate that Major Rock Defect Sets 1, 2, 3 and 4 are well developed throughout the deposit while the remaining Defect Sets 5 and 6 are not as prevalent.

Table 32 Summary of Major Rock Defect Orientations Identified at Flag

Defect Set No.	Dip / Dip Direction
1	41° / 206°
2	85° / 194°
3	52° / 145°
4	30° / 310°
5	58° / 056°
6	30° / 090°

Table 33 Potential Modes of Wall Failure at Flag

Wall Location	Mode of Failure	Defect Set	Comments
North Wall	Sliding	1	Sliding on moderate South Southwest dipping defects with release from Defect 2.
	Toppling	2	Toppling on steep North dipping variants of steep South Southwest dipping defects.
	Wedge	1-3	Potential wedge sliding out along defect intersection.
South Wall	Toppling	2	Toppling on steep South Southeast dipping defects.
	Wedge	4-5	Potential wedge on steeper outliers, sliding out along defect intersection.
East Wall	Sliding	4	Possible sliding on steeper variants of Northwest dipping defects with release from multiple defects.
	Wedge	2-4	Sliding out on Defect 4.
		1-4	Sliding out on steeper variants of Defect 4.
West Wall	Sliding	6	Potential sliding on steeper variants of East dipping defects with release from Defect 4..
	Wedge	3-5	Wedge sliding out along defect intersection.
		2-5	Wedge sliding out along Defect 5.
		2-3	Wedge sliding out along Defect 3.
		3-6	Wedge sliding out along Defect 6.
		5-6	Wedge sliding out along Defect 6.

4.4.8 Mining Rock Mass Rating Scheme

A summary of the results obtained from the MRMR rock mass classification system and derived slope angles obtained from geotechnical borehole data, is provided in Table 34 with calculation shown in Appendix C

Table 34 Summary of Mining Rock Mass Rating Assessment for Flag Open Pit Walls

Domain	Case	IRS Value	FF Value	JRC Parameters				JRC Value	Adjustment Parameters			MRMR	Slope Angle
				A	B	C	D	(40 X A x B x C)	Weathering	Joints	Blasting		
Moderate to Highly Weathered Rock	Best	6	15	0.8	0.90	1.0	0.75	21.6	0.86	0.8	0.94	27.7	43.8°
	Worse	1	3	0.7	0.60	1.0	0.2	3.4	0.86	0.8	0.94	4.8	32.4°
Slightly Weathered to Fresh Rock	Best	10	12	0.8	0.90	1.0	0.75	21.6	1.0	0.8	0.94	32.7	46.3°
	Worse	8	2	0.70	0.60	1.0	0.2	3.4	1.0	0.8	0.94	10.0	35.0°

4.4.9 Q-System Classification

The Q-System [9,10] has been used to characterise ground conditions at Flag according to the geometrical domain defined in Table 35 and illustrated by Figure 6. The methodology used to characterise ground conditions within borehole cores is the same as that described in Section 2.4.9 for Kaolin.

Table 35 Geotechnical Domains Assessed using the Q-System for Flag

Domain Code	Description
HWFML	Far field country rocks located to the south of Flag Main Lode.
HW3FML	Immediate south wall rock mass, within 3m of stope wall.
FML	Flag Main Lode, minimum mining width 3m.
FW3FML	Immediate north wall rock mass, within 3m of stope wall.
FWFML	Far field country rocks located to the north of Flag Main Lode.

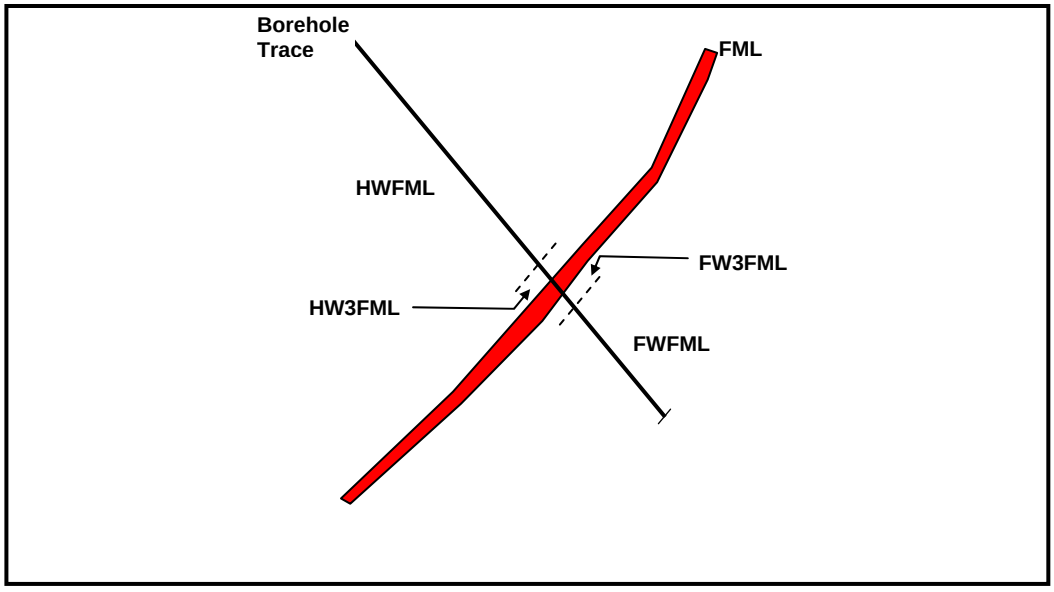

Figure 6 Schematic Diagram Showing Geometric Domains at Flag

To obtain a general understanding of ground conditions at the Flag Deposit quartiles were calculated for each of the geometrical domains identified in Table 35 with Q Values and Modified Q Values results presented in Table 36.

Ground Support According to Q-System

According to the enhanced Q-System Rock Reinforcement Design Chart [10], the different types and sizes of development proposed for Flag Deposit will require the reinforcement systems shown in Table 26. The results indicate that spot bolting of development should be adequate, however to comply with current industry guidelines the development should be supported as a minimum with **F51 (or equivalent) galvanized weld mesh installed on drive backs and shoulders with pattern bolting of backs and sidewalls.**

Maximum Unsupported Spans

Barton et al [9] developed a relationship between Q-Values and excavation span ratios (ESR) to estimate maximum unsupported spans for development:

$$\text{Maximum Unsupported Span} = 2 \times ESR \times Q^{0.4}$$

The maximum unsupported span for the immediate hangingwall rock mass of Flag Main Lode using the 2nd Quartile Q-Value (9.2) and an ESR value of 2.0 was calculated to be 9.2m.

Modified Stability Graph

The Modified Stability Graph Method [11] described in Section 2.4.9 has been used to make a preliminary assessment of stable stope spans. The key input parameters for the Flag stope stability assessment and result are summarised in Table 38 with calculations presented in Appendix D.

Table 36 Summary of Quartile Q' and Q-Values for Flag Domains

Domain	Q'-Value				Q-Value				Rock Class
	1st Quartile	2nd Quartile	3rd Quartile	4th Quartile	1st Quartile	2nd Quartile	3rd Quartile	4th Quartile	
HWFML	3.8	10.3	22.5	39.0	3.8	10.3	22.5	39.0	***Poor – Good***
HW3FML	6.7	9.2	21.8	28.3	6.7	9.2	21.8	28.3	***Fair – Good***
FML	8.3	13.1	22.0	44.5	8.3	13.1	22.0	44.5	***Fair – Very Good***
FW3FML	13.6	18.0	22.3	25.0	13.6	18.0	22.3	25.0	***Good***
FWFML	19.8	23.8	25.0	75.0	19.8	23.8	25.0	75.0	***Good – Very Good***

Table 37 Indicated Ground Support Requirements for Flag According to Q-System Design Chart

Development Type	ESR	Domain	2nd Quartile Q-Value	Q-System Ground Support Requirements
Decline 4.0m W x 4.0m H	1.3	FWFML	23.8	Spot Bolting
Ore Accesses Flag Main Lode 4.0m W x 4.0m H	1.6	FWFML	23.8	Spot Bolting
Ore Drive – Flag Main Lode 3.0m W x 3.5m H	1.6	FML	13.1	Spot Bolting

Table 38 Summary of Modified Stability Graph Results for Flag

Orebody	Q' Value	A	B	C	N'	Unsupported		Supported	
						HR (m)	(Dip Span x Length)	HR (m)	(Dip Span x Length)
Main Lode	9.2	0.79	0.3	3.3	7.2	6.7	20m x 40m (1 sublevel)	10.8	35m x 57m (2 sublevels)

4.5 Open Pit Mining

Table 39 *Base case* wall design parameters (inferred likely rock mass conditions) for Flag Open Pit

Wall Location	Rock Mass Description	Depth Below Surface (m)	Batter Angle (°)	Berm Width (m)	Bench Height (m)	Inter-ramp angle (°)
North	Completely to Slightly Weathered	0 - 60	60°	7	15	44°
South, East and West Walls	Slightly Weathered to Fresh	0 – 30	60°	7	15	44°
		30 – 60	65°	7	15	47

4.6 Underground Mining

4.6.1 Mining Methods

Tectonics plan to utilise LHOS with pillars to extract Flag Main Lode is considered to be geotechnically feasible based on current interpretations of ground conditions. Cut and fill mining proposed for the bottom portion of the western ore block will add further conservatism to the mine design. If ground conditions are found to less favourable in the LHOS areas than expected, Bench Stoping with rock fill would be the preferred alternative mining method.

The absence of borehole cores that intersect the Cross Fault Lode has prevented a geotechnical assessment being undertaken for this lode. For a feasibility level geotechnical assessment to be undertaken diamond drill core would be required for the purpose of collection of geotechnical data.

Preliminary mine design parameters for Flag Main Lode will be outlined in the following sections.

4.6.2 Longhole Open Stoping

It is recommended that a conservative HR value be initially adopted for Flag Main Lode Stopes:

Flag Main Lode HR = 6.7m 20m high x 40m long (~1 sub-level)

4.6.3 Pillar Design

General experience suggests that rib pillars should typically have not less than a 1:1 "aspect ratio" (width : height) to be stable in the expected low stress environment at Flag. When rib pillars are used they should be staggered and uniformly distributed to prevent large, continuous dip spans being formed.

As discussed in Section 3.6.3 it is considered advisable to leave sill pillars where top-down open stoping is applied, the aim being to prevent the downward flow of wall rock dilution into the underlying stoping areas. The sill pillars should be strategically positioned, preferably where the strike length of a stope blocks is smallest and/or low grade ore occurs. For Flag stopes it is suggested that sill pillars are spaced no more than 80m vertically apart and that they have a minimum thickness of ~ 1.5 times the width of the proposed underlying stope void.

It is also strongly recommended that allowance be made for pillars (ribs and sills) to be left around the perimeters of the historical stopes. The pillars should aim to prevent the most likely unstable and collapsed historical stopes from compromising the stability and ore recovery from the proposed new stopes at Flag.

4.6.4 Mine Infrastructure

Comments about major mine infrastructure are provided:

Decline and Accesses

The mine footwall sequence in which the decline and access development will be positioned is composed of ***good*** – ***very good*** quality rock. Within this favourable rock mass the decline should be kept ≥25m from potential stope voids.

Ventilation Shafts

Both the Eastern and Western Ventilation Shafts are expected to be predominantly developed through fresh rock. Shafts of up to 3m diameter should be reasonably self supporting if raisebored however installation of mesh and rock bolts will require if developed by handheld drill and blast techniques.

No comments can be provided about the condition of the original Flag Main Shaft that Tectonic intends to also use to exhaust mine air.

4.6.5 Ground Support and Reinforcement

The minimum ground support designs are contained in Appendix E and summarised in Table 40. Important aspects of the designs will be discussed.

Portal and Adjacent Batters

The Portal entrance into the Flag Underground Mine is planned to be developed at a depth of ~50mbs in the north-western corner of the Flag Main Pit. At this depth the rock mass is expected to be slightly weathered to fresh. A similar approach to ground support can be adopted for the Portal and adjacent Open Pit Batters to that described in Section 2.6.6 for Kaolin.

Main Decline and Accesses

- ***Good to very good*** quality rock is anticipated within the majority of Main Decline and ore access development. An appropriate minimum ground support standard would be to install, ≥2.4m long friction bolts and weld mesh over the backs and shoulders of this development.
- The assessments indicate that zones of ***poor*** quality rock are not prevalent, however for budgeting purposes it is suggested that it would be prudent to allow for at least 10% of the development to be meshed to within 1.5m of floor level.

Ore Drives

- Ground conditions within the Flag ore drives should be predominantly ***fair*** to ***good***. For these favourable ground conditions the minimum ground support standard should be to install 1.8m long friction bolts and mesh across the drive backs and shoulders.
- For budgeting purposes it is recommended that an allowance be made for 10% of ore drive development to be meshed to within ~1.5m of floor level.

Intersection Spans

- All wide spans formed at the intersection of large size (≥4m wide) development, in particular decline intersections should be systematically reinforced with ≥6m long twin strand cable bolts installed on a 2m x 2m pattern throughout the wide span. The cable bolts would be in addition to the standard drive development ground support installed.
- Within smaller size intersection spans such as those formed between accesses and ore drives an appropriate reinforcement would be to install ≥3m long, ~20 tonne capacity full column grouted gewie bars on a ~1.5m x 1.5m pattern throughout the span. Alternatively cable bolts installed on a 2.0m x 2.0m pattern could also be used.

Stope Spans

- For costing purposes it is suggested that an allowance be made for 25% of ore drive hangingwalls to be reinforced with 2-2.5m spaced rings of ≥4m long twin strand cable bolts, with each ring containing two (2) plated and tensioned cable bolts.

Table 40 Summary of Ground Support Specifications for Flag

Development Type	Dimensions	Ground Conditions	Drawing	Minimum Ground Support Specification
Decline and Ore Accesses	4.0mW x 4.0mH	Weakly to Moderately Structured Rock Mass (Fair to Good)	A2	≥2.4m long friction bolts and mesh (3.0m x 2.4m) installed over the backs and shoulders to within ~3.0m of floor level.
		Highly Structured (Blocky) Rock mass (Very Poor to Poor)	A3	2.4m long friction bolts and mesh (3.0m x 2.4m) installed over the backs and shoulders to within ~1.5m of floor level.
Ore Drives	3.0mW x 3.5mH	Weakly to Moderately Structured Rock Mass (Fair to Good)	A4	1.8m long friction bolts and mesh (3.0m x 2.4m) installed over the backs and shoulders to within ~3.0m of floor level.
		Highly Structured (Blocky) Rock mass (Very Poor to Poor)	A5	1.8m long friction bolts and mesh (3.0m x 2.4m) installed over the backs and sidewalls to within ~1.5m of floor level.
Intersection Spans	≥ 6m Wide Spans	All Conditions	-	≥6m long twin strand cable bolts installed on a 2m x 2m pattern throughout wide span.
	4-6m Wide Spans	All Conditions	-	≥3m long, 20mm diameter full column grouted gewie bars installed on a 1.5m x 1.5m pattern throughout wide span.
Stope Spans	-	Highly Structured (Blocky) Rock Mass and/ or unfavourably orientated structures.	A7	≥4m long, twin stand cable bolts installed in 2-2.5m spaced rings with each ring containing two (2) plated and tensioned cable bolts.

5.0 Further Work

This section briefly discusses areas that require additional attention:

5.1 Additional Geotechnical Assessment

Tectonic have developed underground mine designs for several lodes that could not be geotechnically assessed for the current report. For additional assessment to be undertaken to feasibility standard, borehole core from additional diamond drilling would be required for geotechnical logging.

The lodes identified as requiring assessment will be discussed.

Kaolin and Hillsborough Deposit

For the proposed Hillsborough underground mining area it is recommended that at least seven (7) additional borehole cores be drilled to intersect the main Hillsborough Lode and adjacent sub-parallel lodes. It is suggested that these boreholes be drilled on ~40-50m spaced sections with 2-3 drillholes per section to provide good coverage of the lodes dip extent within the proposed underground mining area. Some (2-3) of the drillholes should be extended to provide coverage of the mine stratigraphy for the purpose of characterising ground conditions and optimising the location of decline and access development.

Harbour View Deposit

At the Harbour View Deposit the smaller secondary lodes of Maydon and Cross Lode may require a small number of boreholes to characterise ground conditions for development and stoping purposes.

Two small stoping blocks that are ~30-40m long and with dip extents of ~10-20m occur directly below the floor of the proposed Maydon Open Pit. These lodes could be geotechnically characterised by undertaking geotechnical window mapping within the bottom parts of the proposed Maydon Open Pit. If there is possibility that the size of these Maydon Lodes could increase particularly in dip extent then it is suggested that two geotechnical boreholes be drilled into each stope block to test ground conditions.

The Cross Lode which is located at the southern end of the Harbour View Deposit is a moderate (~45°) southeast dipping lode that has a strike length of ~70m and dip extent of ~50-70m. This lode warrants drilling of four (4) boreholes preferably on two type sections spaced ~30-40m apart. Each section should have two (2) boreholes positioned to provide even coverage of the lodes dip extent.

Flag Deposit

The moderate (50°) southeast dipping Cross Fault Lode at Flag Deposit has a strike length of ~20-40m and dip extent of ~50m. This irregular strike length lode may warrant investigation with three (3) boreholes that intersect the lode at 20-30m spacings apart.

5.2 Monitoring

Monitoring will be required for:

- Open pit access stability assessment.
- Stability of slopes overlying and adjacent to the portal.
- Stope stability, particularly hangingwall stability. Use of simple (short) borehole extensometers (tell-tales) will be required (at least locally).
- Groundwater inflows and/or chemistry may also need to be checked to assess potential for corrosion of steel reinforcing (grouted and ungrouted) and support elements.

5.3 Ground Control Management Plan

To comply with Section 10.28 of the Western Australian Mines Safety and Inspection Regulations 1995, development of a formal Ground Control Management Plan (GCMP) is required.

The GCMP describes the ground conditions encountered and/or anticipated in the mine, and justifies the mining methods in use or proposed. It identifies likely failure mechanisms and the means by which these will be precluded or avoided to permit safe development and production.

The physical and management procedures to be used to ensure appropriate mine design and use of safe mining practices are also described.

From a geotechnical perspective, the document **must** show nominal design sections and plans for layouts of each type of reinforcement/support profile and/or pattern and **must** include a written description of the nominal specifications.

The derivations of *base case* reinforcement and support designs are provided by this report. The GCMP must also, however, detail how site by site variations to reinforcement and/or support are determined and justified, particularly where reductions in *base case* support levels are proposed. Additionally, the manner in which further structural geological and geotechnical data will be gathered and analysed and reviewed, and designs confirmed or amended in practice must also be documented.

5.4 Geotechnical Review

Regular geotechnical review of stability conditions during mining operations is recommended. Such reviews should be conducted at ≤ 50m vertical increments in decline development, depending on assessment of actual conditions by Tectonic.

6.0 Closure

The foregoing recommendations assume that appropriate techniques are used, and carried out at a consistently high standard, in all aspects of underground development and stoping, and in ground reinforcement and support installation, in all future Phillips River mines.

We trust that the information provided meets your current requirements. Should there be any need for further explanation, please do not hesitate to contact us.

PETER O'BRYAN *& Associates*
per:

John Keogh
Associate

Peter O'Bryan
Principal

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APPENDIX A

RQD, FRACTURE FREQUENCY, WEATHERING AND HARDNESS DATA

KUNDIP DEPOSITS

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Flag	DD05KP433	105	106	90	Not Collected	W1	Not Collected
Flag	DD05KP433	106	107	90	Not Collected	W1	Not Collected
Flag	DD05KP433	107	108	90	Not Collected	W1	Not Collected
Flag	DD05KP433	108	109	90	Not Collected	W1	Not Collected
Flag	DD05KP433	109	110	90	Not Collected	W1	Not Collected
Flag	DD05KP433	110	111	50	Not Collected	W1	Not Collected
Flag	DD05KP433	111	112	50	Not Collected	W1	Not Collected
Flag	DD05KP433	112	113	50	Not Collected	W1	Not Collected
Flag	DD05KP433	113	114	50	Not Collected	W1	Not Collected
Flag	DD05KP433	114	115	50	Not Collected	W1	Not Collected
Flag	DD05KP433	115	116	50	Not Collected	W1	Not Collected
Flag	DD05KP433	116	117	50	Not Collected	W1	Not Collected
Flag	DD05KP433	117	118	50	Not Collected	W1	Not Collected
Flag	DD05KP433	118	119	50	Not Collected	W1	Not Collected
Flag	DD05KP433	119	120	95	Not Collected	W1	Not Collected
Flag	DD05KP433	120	121	95	Not Collected	W1	Not Collected
Flag	DD05KP433	121	122	95	Not Collected	W1	Not Collected
Flag	DD05KP433	122	123	95	Not Collected	W1	Not Collected
Flag	DD05KP433	123	124	95	Not Collected	W1	Not Collected
Flag	DD05KP433	124	125	95	Not Collected	W1	Not Collected
Flag	DD05KP433	125	126	95	Not Collected	W1	Not Collected
Flag	DD05KP433	126	127	95	Not Collected	W1	Not Collected
Flag	DD05KP433	127	128	95	Not Collected	W1	Not Collected
Flag	DD05KP433	128	129	95	Not Collected	W1	Not Collected
Flag	DD05KP433	129	130	95	Not Collected	W1	Not Collected

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Flag	DD05KP459	110	111	87	Not Collected	W1	Not Collected
Flag	DD05KP459	111	112	87	Not Collected	W1	Not Collected
Flag	DD05KP459	112	113	87	Not Collected	W1	Not Collected
Flag	DD05KP459	113	114	87	Not Collected	W1	Not Collected
Flag	DD05KP459	114	115	87	Not Collected	W1	Not Collected
Flag	DD05KP459	115	116	87	Not Collected	W1	Not Collected
Flag	DD05KP459	116	117	78	Not Collected	W1	Not Collected
Flag	DD05KP459	117	118	72	Not Collected	W1	Not Collected
Flag	DD05KP459	118	119	72	Not Collected	W1	Not Collected
Flag	DD05KP459	119	120	69	Not Collected	W1	Not Collected
Flag	DD05KP459	120	121	69	Not Collected	W1	Not Collected
Flag	DD05KP459	121	122	68	Not Collected	W1	Not Collected
Flag	DD05KP459	122	123	68	Not Collected	W1	Not Collected
Flag	DD05KP459	123	124	68	Not Collected	W1	Not Collected
Flag	DD05KP459	124	125	68	Not Collected	W1	Not Collected
Flag	DD05KP459	125	126	68	Not Collected	W1	Not Collected
Flag	DD05KP459	126	127	68	Not Collected	W1	Not Collected
Flag	DD05KP459	127	128	68	Not Collected	W1	Not Collected
Flag	DD05KP459	128	129	68	Not Collected	W1	Not Collected
Flag	DD05KP459	129	130	68	Not Collected	W1	Not Collected
Flag	DD05KP459	130	131	68	Not Collected	W1	Not Collected
Flag	DD05KP459	131	132	34	Not Collected	W1	Not Collected

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Flag	DD05KP471	210	211	40	Not Collected	W1	Not Collected
Flag	DD05KP471	211	212	40	Not Collected	W1	Not Collected
Flag	DD05KP471	212	213	40	Not Collected	W1	Not Collected
Flag	DD05KP471	213	214	40	Not Collected	W1	Not Collected
Flag	DD05KP471	214	215	40	Not Collected	W1	Not Collected
Flag	DD05KP471	215	216	40	Not Collected	W1	Not Collected
Flag	DD05KP471	216	217	40	Not Collected	W1	Not Collected
Flag	DD05KP471	217	218	77	Not Collected	W1	Not Collected
Flag	DD05KP471	218	219	89	Not Collected	W1	Not Collected
Flag	DD05KP471	219	220	89	Not Collected	W1	Not Collected
Flag	DD05KP471	220	221	89	Not Collected	W1	Not Collected
Flag	DD05KP471	221	222	89	Not Collected	W1	Not Collected
Flag	DD05KP471	222	223	89	Not Collected	W1	Not Collected
Flag	DD05KP471	223	224	89	Not Collected	W1	Not Collected
Flag	DD05KP471	224	225	89	Not Collected	W1	Not Collected
Flag	DD05KP471	225	226	89	Not Collected	W1	Not Collected
Flag	DD05KP471	226	227	89	Not Collected	W1	Not Collected
Flag	DD05KP471	227	228	89	Not Collected	W1	Not Collected
Flag	DD05KP471	228	229	93	Not Collected	W1	Not Collected
Flag	DD05KP471	229	230	93	Not Collected	W1	Not Collected
Flag	DD05KP471	230	231	93	Not Collected	W1	Not Collected
Flag	DD05KP471	231	232	93	Not Collected	W1	Not Collected
Flag	DD05KP471	232	233	93	Not Collected	W1	Not Collected

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Flag	DD08KP482	150	151	70	Not Collected	W1	Not Collected
Flag	DD08KP482	151	152	73	Not Collected	W1	Not Collected
Flag	DD08KP482	152	153	92	Not Collected	W1	Not Collected
Flag	DD08KP482	153	154	44	Not Collected	W1	Not Collected
Flag	DD08KP482	154	155	69	Not Collected	W1	Not Collected
Flag	DD08KP482	155	156	55	Not Collected	W1	Not Collected
Flag	DD08KP482	156	157	88	Not Collected	W1	Not Collected
Flag	DD08KP482	157	158	90	Not Collected	W1	Not Collected
Flag	DD08KP482	158	159	74	Not Collected	W1	Not Collected
Flag	DD08KP482	159	160	75	Not Collected	W1	Not Collected
Flag	DD08KP482	160	161	68	Not Collected	W1	Not Collected
Flag	DD08KP482	161	162	44	Not Collected	W1	Not Collected
Flag	DD08KP482	162	163	10	Not Collected	W1	Not Collected
Flag	DD08KP482	163	164	12	Not Collected	W1	Not Collected
Flag	DD08KP482	164	165	59	Not Collected	W1	Not Collected
Flag	DD08KP482	165	166	78	Not Collected	W1	Not Collected
Flag	DD08KP482	166	167	94	Not Collected	W1	Not Collected
Flag	DD08KP482	167	168	69	Not Collected	W1	Not Collected
Flag	DD08KP482	168	169	81	Not Collected	W1	Not Collected
Flag	DD08KP482	169	170	82	Not Collected	W1	Not Collected
Flag	DD08KP482	170	171	80	Not Collected	W1	Not Collected
Flag	DD08KP482	171	172	80	Not Collected	W1	Not Collected
Flag	DD08KP482	172	173	94	Not Collected	W1	Not Collected
Flag	DD08KP482	173	174	96	Not Collected	W1	Not Collected
Flag	DD08KP482	174	175	30	Not Collected	W1	Not Collected
Flag	DD08KP482	175	176	60	Not Collected	W1	Not Collected
Flag	DD08KP482	176	177	99	Not Collected	W1	Not Collected
Flag	DD08KP482	177	178	95	Not Collected	W1	Not Collected
Flag	DD08KP482	178	179	52	Not Collected	W1	Not Collected
Flag	DD08KP482	179	180	40	Not Collected	W1	Not Collected
Flag	DD08KP482	180	181	92	Not Collected	W1	Not Collected
Flag	DD08KP482	181	182	100	Not Collected	W1	Not Collected
Flag	DD08KP482	182	183	95	Not Collected	W1	Not Collected

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Flag	DD08KP488	105	106	60	Not Collected	W1	Not Collected
Flag	DD08KP488	106	107	98	Not Collected	W1	Not Collected
Flag	DD08KP488	107	108	67	Not Collected	W1	Not Collected
Flag	DD08KP488	108	109	57	Not Collected	W1	Not Collected
Flag	DD08KP488	109	110	62	Not Collected	W1	Not Collected
Flag	DD08KP488	110	111	47	Not Collected	W1	Not Collected
Flag	DD08KP488	111	112	33	Not Collected	W1	Not Collected
Flag	DD08KP488	112	113	40	Not Collected	W1	Not Collected
Flag	DD08KP488	113	114	45	Not Collected	W1	Not Collected
Flag	DD08KP488	114	115	58	Not Collected	W1	Not Collected
Flag	DD08KP488	115	116	33	Not Collected	W1	Not Collected
Flag	DD08KP488	116	117	20	Not Collected	W1	Not Collected
Flag	DD08KP488	117	118	65	Not Collected	W1	Not Collected
Flag	DD08KP488	118	119	42	Not Collected	W1	Not Collected
Flag	DD08KP488	119	120	66	Not Collected	W1	Not Collected
Flag	DD08KP488	120	121	49	Not Collected	W1	Not Collected
Flag	DD08KP488	121	122	70	Not Collected	W1	Not Collected
Flag	DD08KP488	122	123	80	Not Collected	W1	Not Collected
Flag	DD08KP488	123	124	99	Not Collected	W1	Not Collected
Flag	DD08KP488	124	125	92	Not Collected	W1	Not Collected
Flag	DD08KP488	125	126	95	Not Collected	W1	Not Collected
Flag	DD08KP488	126	127	100	Not Collected	W1	Not Collected
Flag	DD08KP488	127	128	100	Not Collected	W1	Not Collected
Flag	DD08KP488	128	129	92	Not Collected	W1	Not Collected
Flag	DD08KP488	129	130	77	Not Collected	W1	Not Collected
Flag	DD08KP488	130	131	43	Not Collected	W1	Not Collected
Flag	DD08KP488	131	132	100	Not Collected	W1	Not Collected
Flag	DD08KP488	132	133	71	Not Collected	W1	Not Collected
Flag	DD08KP488	133	134	72	Not Collected	W1	Not Collected
Flag	DD08KP488	134	135	75	Not Collected	W1	Not Collected
Flag	DD08KP488	135	136	78	Not Collected	W1	Not Collected
Flag	DD08KP488	136	137	82	Not Collected	W1	Not Collected
Flag	DD08KP488	137	138	90	Not Collected	W1	Not Collected
Flag	DD08KP488	138	139	100	Not Collected	W1	Not Collected
Flag	DD08KP488	139	140	100	Not Collected	W1	Not Collected
Flag	DD08KP488	140	141	97	Not Collected	W1	Not Collected
Flag	DD08KP488	141	142	91	Not Collected	W1	Not Collected
Flag	DD08KP488	142	143	70	Not Collected	W1	Not Collected
Flag	DD08KP488	143	144	72	Not Collected	W1	Not Collected
Flag	DD08KP488	144	145	94	Not Collected	W1	Not Collected
Flag	DD08KP488	145	146	94	Not Collected	W1	Not Collected
Flag	DD08KP488	146	147	93	Not Collected	W1	Not Collected
Flag	DD08KP488	147	148	91	Not Collected	W1	Not Collected
Flag	DD08KP488	148	149	55	Not Collected	W1	Not Collected
Flag	DD08KP488	149	150	87	Not Collected	W1	Not Collected
Flag	DD08KP488	150	151	79	Not Collected	W1	Not Collected
Flag	DD08KP488	151	152	51	Not Collected	W1	Not Collected
Flag	DD08KP488	152	153	87	Not Collected	W1	Not Collected
Flag	DD08KP488	153	154	87	Not Collected	W1	Not Collected
Flag	DD08KP488	154	155	80	Not Collected	W1	Not Collected
Flag	DD08KP488	155	156	73	Not Collected	W1	Not Collected
Flag	DD08KP488	156	157	84	Not Collected	W1	Not Collected
Flag	DD08KP488	157	158	50	Not Collected	W1	Not Collected
Flag	DD08KP488	158	159	90	Not Collected	W1	Not Collected
Flag	DD08KP488	159	160	56	Not Collected	W1	Not Collected

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Flag	DD08KP520	150	151	78	Not Collected	W1	Not Collected
Flag	DD08KP520	151	152	75	Not Collected	W1	Not Collected
Flag	DD08KP520	152	153	27	Not Collected	W1	Not Collected
Flag	DD08KP520	153	154	29	Not Collected	W1	Not Collected
Flag	DD08KP520	154	155	48	Not Collected	W1	Not Collected
Flag	DD08KP520	155	156	86	Not Collected	W1	Not Collected
Flag	DD08KP520	156	157	56	Not Collected	W1	Not Collected
Flag	DD08KP520	157	158	46	Not Collected	W1	Not Collected
Flag	DD08KP520	158	159	54	Not Collected	W1	Not Collected
Flag	DD08KP520	159	160	60	Not Collected	W1	Not Collected
Flag	DD08KP520	160	161	63	Not Collected	W1	Not Collected
Flag	DD08KP520	161	162	71	Not Collected	W1	Not Collected
Flag	DD08KP520	162	163	30	Not Collected	W1	Not Collected
Flag	DD08KP520	163	164	50	Not Collected	W1	Not Collected
Flag	DD08KP520	164	165	79	Not Collected	W1	Not Collected
Flag	DD08KP520	165	166	100	Not Collected	W1	Not Collected
Flag	DD08KP520	166	167	96	Not Collected	W1	Not Collected
Flag	DD08KP520	167	168	98	Not Collected	W1	Not Collected
Flag	DD08KP520	168	169	92	Not Collected	W1	Not Collected
Flag	DD08KP520	169	170	64	Not Collected	W1	Not Collected
Flag	DD08KP520	170	171	87	Not Collected	W1	Not Collected
Flag	DD08KP520	171	172	100	Not Collected	W1	Not Collected
Flag	DD08KP520	172	173	84	Not Collected	W1	Not Collected
Flag	DD08KP520	173	174	100	Not Collected	W1	Not Collected
Flag	DD08KP520	174	175	100	Not Collected	W1	Not Collected
Flag	DD08KP520	175	176	100	Not Collected	W1	Not Collected
Flag	DD08KP520	176	177	100	Not Collected	W1	Not Collected
Flag	DD08KP520	177	178	95	Not Collected	W1	Not Collected
Flag	DD08KP520	178	179	93	Not Collected	W1	Not Collected
Flag	DD08KP520	179	180	86	Not Collected	W1	Not Collected

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Flag	DD10KP786A	0	1	Not Recorded	Not Collected	W5	S5
Flag	DD10KP786A	1	2	Not Recorded	Not Collected	W5	S5
Flag	DD10KP786A	2	3	Not Recorded	Not Collected	W5	S5
Flag	DD10KP786A	3	4	Not Recorded	Not Collected	W5	S5
Flag	DD10KP786A	4	5	Not Recorded	Not Collected	W5	S5
Flag	DD10KP786A	5	6	Not Recorded	Not Collected	W5	S5
Flag	DD10KP786A	6	7	Not Recorded	Not Collected	W5	S5
Flag	DD10KP786A	7	8	Not Recorded	Not Collected	W5	S5
Flag	DD10KP786A	8	9	Not Recorded	Not Collected	W4	R2
Flag	DD10KP786A	9	10	Not Recorded	Not Collected	W4	R2
Flag	DD10KP786A	10	11	Not Recorded	Not Collected	W4	R2
Flag	DD10KP786A	11	12	Not Recorded	Not Collected	W4	R2
Flag	DD10KP786A	12	13	Not Recorded	Not Collected	W4	R2
Flag	DD10KP786A	13	14	Not Recorded	Not Collected	W4	R2
Flag	DD10KP786A	14	15	Not Recorded	Not Collected	W4	R1
Flag	DD10KP786A	15	16	Not Recorded	Not Collected	W4	R1
Flag	DD10KP786A	16	17	Not Recorded	Not Collected	W4	R1
Flag	DD10KP786A	17	18	Not Recorded	Not Collected	W4	R1
Flag	DD10KP786A	18	19	Not Recorded	Not Collected	W4	R2
Flag	DD10KP786A	19	20	Not Recorded	Not Collected	W4	R2
Flag	DD10KP786A	20	21	Not Recorded	Not Collected	W4	R1
Flag	DD10KP786A	21	22	Not Recorded	Not Collected	W4	R1
Flag	DD10KP786A	22	23	Not Recorded	Not Collected	W4	R1
Flag	DD10KP786A	23	24	Not Recorded	Not Collected	W4	R1
Flag	DD10KP786A	24	25	25	9	W4	R1
Flag	DD10KP786A	25	26	0	25	W4	R1
Flag	DD10KP786A	26	27			W3	R4
Flag	DD10KP786A	27	28			W3	R4
Flag	DD10KP786A	28	29			W3	R4
Flag	DD10KP786A	29	30	10	10	W3	R5
Flag	DD10KP786A	30	31	55	10	W2	R5
Flag	DD10KP786A	31	32	46	13	W2	R5
Flag	DD10KP786A	32	33	60	10	W2	R5
Flag	DD10KP786A	33	34	26	20	W2	R5
Flag	DD10KP786A	34	35	36	25	W2	R5
Flag	DD10KP786A	35	36	59	15	W2	R5
Flag	DD10KP786A	36	37	61	8	W2	R5
Flag	DD10KP786A	37	38	20	11	W2	R5
Flag	DD10KP786A	38	39	54	11	W2	R5
Flag	DD10KP786A	39	40	65	9	W2	R5
Flag	DD10KP786A	40	41	66	9	W2	R5
Flag	DD10KP786A	41	42	63	12	W2	R5
Flag	DD10KP786A	42	43	62	8	W2	R5
Flag	DD10KP786A	43	44	70	12	W2	R5
Flag	DD10KP786A	44	45	71	8	W2	R5
Flag	DD10KP786A	45	46	70	10	W2	R5
Flag	DD10KP786A	46	47	39	15	W2	R5
Flag	DD10KP786A	47	48	32	25	W2	R5
Flag	DD10KP786A	48	49	40	25	W1	R6
Flag	DD10KP786A	49	50	100	1	W1	R6
Flag	DD10KP786A	50	51	73	12	W1	R6
Flag	DD10KP786A	51	52	80	8	W1	R6
Flag	DD10KP786A	52	53	25	15	W1	R6
Flag	DD10KP786A	53	54	57	9	W1	R6
Flag	DD10KP786A	54	55	68	9	W1	R6
Flag	DD10KP786A	55	56	73	8	W1	R6
Flag	DD10KP786A	56	57	60	11	W1	R6
Flag	DD10KP786A	57	58	100	5	W1	R6
Flag	DD10KP786A	58	59	73	7	W1	R6
Flag	DD10KP786A	59	60	95	4	W1	R6
Flag	DD10KP786A	60	61	90	9	W1	R6
Flag	DD10KP786A	61	62	100	7	W1	R6
Flag	DD10KP786A	62	63	85	8	W1	R6

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Flag	DD10KP787	0	1			W5	S5
Flag	DD10KP787	1	2			W5	S5
Flag	DD10KP787	2	3	47		W3	R3
Flag	DD10KP787	3	4	26	25	W3	R3
Flag	DD10KP787	4	5	76	7	W3	R3
Flag	DD10KP787	5	6	67	10	W3	R3
Flag	DD10KP787	6	7	60	10	W2	R4
Flag	DD10KP787	7	8	60	10	W2	R4
Flag	DD10KP787	8	9	54	10	W2	R4
Flag	DD10KP787	9	10	23	25	W2	R4
Flag	DD10KP787	10	11	68	11	W2	R5
Flag	DD10KP787	11	12	75	9	W2	R5
Flag	DD10KP787	12	13	79	7	W2	R5
Flag	DD10KP787	13	14	56	9	W2	R5
Flag	DD10KP787	14	15	90	5	W2	R5
Flag	DD10KP787	15	16	65	10	W2	R5
Flag	DD10KP787	16	17	88	7	W2	R5
Flag	DD10KP787	17	18	67	10	W2	R5
Flag	DD10KP787	18	19	90	5	W2	R5
Flag	DD10KP787	19	20	74	7	W2	R5
Flag	DD10KP787	20	21	63	7	W2	R5
Flag	DD10KP787	21	22	100	1	W2	R5
Flag	DD10KP787	22	23	97	4	W2	R5
Flag	DD10KP787	23	24	100	2	W2	R5
Flag	DD10KP787	24	25	92	8	W2	R5
Flag	DD10KP787	25	26	42	12	W2	R5
Flag	DD10KP787	26	27	100	4	W2	R5
Flag	DD10KP787	27	28	87	5	W2	R5
Flag	DD10KP787	28	29	100	5	W2	R5
Flag	DD10KP787	29	30	82	7	W2	R5
Flag	DD10KP787	30	31	75	10	W2	R5
Flag	DD10KP787	31	32	100	3	W2	R5
Flag	DD10KP787	32	33	90	6	W2	R5
Flag	DD10KP787	33	34	94	4	W2	R5
Flag	DD10KP787	34	35	90	5	W2	R5
Flag	DD10KP787	35	36	100	4	W2	R5
Flag	DD10KP787	36	37	91	5	W2	R5
Flag	DD10KP787	37	38	100	2	W2	R5
Flag	DD10KP787	38	39	90	7	W2	R5
Flag	DD10KP787	39	40	73	8	W2	R5
Flag	DD10KP787	40	41	45	25	W2	R5
Flag	DD10KP787	41	42	72	9	W2	R5
Flag	DD10KP787	42	43	60	9	W2	R5
Flag	DD10KP787	43	44	95	7	W2	R5
Flag	DD10KP787	44	45	56	11	W2	R5
Flag	DD10KP787	45	46	58	11	W2	R5
Flag	DD10KP787	46	47	74	8	W2	R5
Flag	DD10KP787	47	48	34	15	W2	R4
Flag	DD10KP787	48	49	87	4	W2	R4
Flag	DD10KP787	49	50	23	25	W2	R4
Flag	DD10KP787	50	51	66	10	W1	R5
Flag	DD10KP787	51	52	86	6	W1	R5
Flag	DD10KP787	52	53	65	8	W1	R5
Flag	DD10KP787	53	54	64	12	W1	R5
Flag	DD10KP787	54	55	76	4	W1	R5
Flag	DD10KP787	55	56	77	8	W1	R5
Flag	DD10KP787	56	57	47	13	W1	R5
Flag	DD10KP787	57	58	69	8	W1	R5
Flag	DD10KP787	58	59	47	14	W1	R5
Flag	DD10KP787	59	60	48	25	W1	R5

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Flag	DD10KP788	0	1			W5	S5
Flag	DD10KP788	1	2			W5	S5
Flag	DD10KP788	2	3			W5	S5
Flag	DD10KP788	3	4	0	25	W5	S5
Flag	DD10KP788	4	5	36	25	W5	S5
Flag	DD10KP788	5	6	25	25	W4	R2
Flag	DD10KP788	6	7	11	25	W4	R1
Flag	DD10KP788	7	8	0	25	W4	R1
Flag	DD10KP788	8	9		25	W4	R1
Flag	DD10KP788	9	10		25	W4	R1
Flag	DD10KP788	10	11	11	25	W4	R1
Flag	DD10KP788	11	12	23	25	W4	R1
Flag	DD10KP788	12	13	10	25	W4	R1
Flag	DD10KP788	13	14		4	W4	R1
Flag	DD10KP788	14	15		25	W4	R1
Flag	DD10KP788	15	16		25	W4	R1
Flag	DD10KP788	16	17		25	W4	R1
Flag	DD10KP788	17	18		25	W4	R1
Flag	DD10KP788	18	19	35	25	W4	R1
Flag	DD10KP788	19	20	57	25	W4	R1
Flag	DD10KP788	20	21	29	12	W4	R2
Flag	DD10KP788	21	22	13	25	W4	R2
Flag	DD10KP788	22	23	34	25	W4	R2
Flag	DD10KP788	23	24	71	9	W4	R2
Flag	DD10KP788	24	25	71	25	W4	R2
Flag	DD10KP788	25	26	24	25	W3	R3
Flag	DD10KP788	26	27	56	11	W3	R3
Flag	DD10KP788	27	28	75	8	W3	R3
Flag	DD10KP788	28	29	60	15	W3	R3
Flag	DD10KP788	29	30	49	25	W3	R3
Flag	DD10KP788	30	31	52	25	W3	R3
Flag	DD10KP788	31	32	65	7	W3	R3
Flag	DD10KP788	32	33	68	15	W3	R3
Flag	DD10KP788	33	34	39	11	W3	R3
Flag	DD10KP788	34	35	80	6	W3	R3
Flag	DD10KP788	35	36	50	8	W3	R3
Flag	DD10KP788	36	37	20	11	W3	R3
Flag	DD10KP788	37	38	34	25	W3	R3
Flag	DD10KP788	38	39	0	25	W4	R1
Flag	DD10KP788	39	40	0	25	W4	R1
Flag	DD10KP788	40	41	17	25	W4	R1
Flag	DD10KP788	41	42	34	25	W3	R4
Flag	DD10KP788	42	43	16	25	W3	R4
Flag	DD10KP788	43	44	0	15	W3	R4
Flag	DD10KP788	44	45	25	25	W3	R4
Flag	DD10KP788	45	46	21	25	W3	R4
Flag	DD10KP788	46	47	34	25	W3	R4
Flag	DD10KP788	47	48	0	25	W4	R1
Flag	DD10KP788	48	49	0	25	W4	R1
Flag	DD10KP788	49	50	10	25	W4	R1
Flag	DD10KP788	50	51	14	25	W4	R1
Flag	DD10KP788	51	52	0	25	W4	R2
Flag	DD10KP788	52	53	0	25	W4	R2
Flag	DD10KP788	53	54	4	20	W4	R2
Flag	DD10KP788	54	55	42	15	W3	R4
Flag	DD10KP788	55	56	80	6	W3	R4
Flag	DD10KP788	56	57	25	25	W3	R4
Flag	DD10KP788	57	58	0	25	W3	R3
Flag	DD10KP788	58	59	35	25	W3	R3
Flag	DD10KP788	59	60	13	10	W3	R3
Flag	DD10KP788	60	61	11	25	W3	R3
Flag	DD10KP788	61	62	0	25	W3	R3
Flag	DD10KP788	62	63	11	25	W3	R3
Flag	DD10KP788	63	64	44	25	W3	R3
Flag	DD10KP788	64	65	63	14	W3	R3
Flag	DD10KP788	65	66	0	16	W3	R3
Flag	DD10KP788	66	67	0	25	W3	R3
Flag	DD10KP788	67	68	0	25	W3	R3
Flag	DD10KP788	68	69	0	25	W3	R3

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Flag	DD10KP789	0	1	0	25	W5	R1
Flag	DD10KP789	1	2	50	6	W5	R1
Flag	DD10KP789	2	3	34	10	W5	R1
Flag	DD10KP789	3	4	30	9	W5	R1
Flag	DD10KP789	4	5	0	10	W5	R1
Flag	DD10KP789	5	6	9	8	W5	R1
Flag	DD10KP789	6	7	4	25	W5	R1
Flag	DD10KP789	7	8	15	25	W5	R1
Flag	DD10KP789	8	9	0	25	W5	R2
Flag	DD10KP789	9	10	0	18	W4	R2
Flag	DD10KP789	10	11	30	12	W4	R2
Flag	DD10KP789	11	12	26	14	W4	R2
Flag	DD10KP789	12	13	0	25	W4	R1
Flag	DD10KP789	13	14	0	25	W4	R1
Flag	DD10KP789	14	15	0	25	W4	R1
Flag	DD10KP789	15	16	0	25	W4	R1
Flag	DD10KP789	16	17	43	13	W4	R1
Flag	DD10KP789	17	18	9	25	W4	R1
Flag	DD10KP789	18	19	0	25	W4	R1
Flag	DD10KP789	19	20	0	25	W4	R1
Flag	DD10KP789	20	21	0	25	W4	R1
Flag	DD10KP789	21	22	0	25	W4	R1
Flag	DD10KP789	22	23	0	25	W4	R1
Flag	DD10KP789	23	24	0	25	W4	R1
Flag	DD10KP789	24	25	20	25	W4	R1
Flag	DD10KP789	25	26	17	25	W4	R1
Flag	DD10KP789	26	27	10	25	W4	R1
Flag	DD10KP789	27	28	64	11	W4	R1
Flag	DD10KP789	28	29	0	25	W4	R1
Flag	DD10KP789	29	30	0	25	W4	R1
Flag	DD10KP789	30	31	42	25	W4	R1
Flag	DD10KP789	31	32	0	25	W4	R1
Flag	DD10KP789	32	33	0	25	W4	R1
Flag	DD10KP789	33	34	0	25	W4	R1
Flag	DD10KP789	34	35	26	25	W4	R1
Flag	DD10KP789	35	36	0	25	W4	R1
Flag	DD10KP789	36	37	20	25	W4	R1
Flag	DD10KP789	37	38	0	25	W4	R1
Flag	DD10KP789	38	39	0	25	W4	R1
Flag	DD10KP789	39	40	11	15	W4	R1
Flag	DD10KP789	40	41	13	15	W4	R1
Flag	DD10KP789	41	42	50	5	W4	R1
Flag	DD10KP789	42	43	8	9	W4	R1
Flag	DD10KP789	43	44	40	3	W4	R1
Flag	DD10KP789	44	45	43	9	W4	R1
Flag	DD10KP789	45	46	34	12	W4	R1
Flag	DD10KP789	46	47	47	10	W4	R1
Flag	DD10KP789	47	48	51	10	W4	R1
Flag	DD10KP789	48	49	31	5	W4	R1
Flag	DD10KP789	49	50	18	7	W4	R1
Flag	DD10KP789	50	51	36	4	W4	R1
Flag	DD10KP789	51	52	26	9	W4	R2
Flag	DD10KP789	52	53	37	12	W4	R2
Flag	DD10KP789	53	54	32	8	W4	R2
Flag	DD10KP789	54	55	0	15	W4	R2
Flag	DD10KP789	55	56	10	12	W4	R2
Flag	DD10KP789	56	57	12	8	W4	R2
Flag	DD10KP789	57	58	11	10	W4	R2
Flag	DD10KP789	58	59	0	15	W4	R2
Flag	DD10KP789	59	60	0	20	W4	R2
Flag	DD10KP789	60	61	0	25	W3	R3
Flag	DD10KP789	61	62	76	10	W3	R3
Flag	DD10KP789	62	63	0	25	W3	R3
Flag	DD10KP789	63	64	0	25	W3	R3
Flag	DD10KP789	64	65	33	10	W3	R3
Flag	DD10KP789	65	66	79	7	W3	R3
Flag	DD10KP789	66	67	28	20	W3	R3
Flag	DD10KP789	67	68	27	6	W3	R3
Flag	DD10KP789	68	69	24	15	W3	R3
Flag	DD10KP789	69	70	0	6	W3	R3
Flag	DD10KP789	70	71	0	11	W3	R3
Flag	DD10KP789	71	72	0	8	W3	R3
Flag	DD10KP789	72	73	8	8	W3	R3
Flag	DD10KP789	73	74	17	8	W3	R3
Flag	DD10KP789	74	75	20	9	W3	R3
Flag	DD10KP789	75	76	39	12	W2	R5
Flag	DD10KP789	76	77	44	12	W2	R5
Flag	DD10KP789	77	78	27	13	W2	R5
Flag	DD10KP789	78	79	34	15	W2	R5
Flag	DD10KP789	79	80	80	12	W2	R5
Flag	DD10KP789	80	81	10	15	W2	R3
Flag	DD10KP789	81	82	15	5	W2	R3
Flag	DD10KP789	82	83	0	10	W2	R3
Flag	DD10KP789	83	84	29	7	W2	R3
Flag	DD10KP789	84	85	0	25	W2	R3

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Flag	DD10KP798	125	126	70	6	W1	R6
Flag	DD10KP798	126	127	52	14	W1	R6
Flag	DD10KP798	127	128	46	15	W1	R6
Flag	DD10KP798	128	129	77	14	W1	R6
Flag	DD10KP798	129	130	65	9	W1	R6
Flag	DD10KP798	130	131	28	10	W1	R6
Flag	DD10KP798	131	132	25	20	W1	R6
Flag	DD10KP798	132	133	53	14	W1	R6
Flag	DD10KP798	133	134	70	11	W1	R6
Flag	DD10KP798	134	135	30	18	W1	R6
Flag	DD10KP798	135	136	36	15	W1	R6
Flag	DD10KP798	136	137	72	8	W1	R6
Flag	DD10KP798	137	138	87	4	W1	R6
Flag	DD10KP798	138	139	33	14	W1	R6
Flag	DD10KP798	139	140	48	15	W1	R6
Flag	DD10KP798	140	141	63	12	W1	R6
Flag	DD10KP798	141	142	79	10	W1	R6
Flag	DD10KP798	142	143	70	6	W1	R6
Flag	DD10KP798	143	144	70	8	W1	R6
Flag	DD10KP798	144	145	78	4	W1	R6
Flag	DD10KP798	145	146	67	9	W1	R6
Flag	DD10KP798	146	147	60	13	W1	R6
Flag	DD10KP798	147	148	82	8	W1	R6
Flag	DD10KP798	148	149	65	12	W1	R6
Flag	DD10KP798	149	150	100	3	W1	R6
Flag	DD10KP798	150	151	100	1	W1	R6
Flag	DD10KP798	151	152	100	3	W1	R6
Flag	DD10KP798	152	153	56	8	W1	R6
Flag	DD10KP798	153	154	74	6	W1	R6
Flag	DD10KP798	154	155	90	6	W1	R6
Flag	DD10KP798	155	156	91	6	W1	R6
Flag	DD10KP798	156	157	100	3	W1	R6
Flag	DD10KP798	157	158	76	9	W1	R6
Flag	DD10KP798	158	159	90	5	W1	R6
Flag	DD10KP798	159	160	88	5	W1	R6
Flag	DD10KP798	160	161	92	5	W1	R6
Flag	DD10KP798	161	162	100	4	W1	R6
Flag	DD10KP798	162	163	100	4	W1	R6
Flag	DD10KP798	163	164	100	4	W1	R6
Flag	DD10KP798	164	165	100	4	W1	R6
Flag	DD10KP798	165	166	48	12	W1	R6
Flag	DD10KP798	166	167	100	5	W1	R6
Flag	DD10KP798	167	168	90	5	W1	R6
Flag	DD10KP798	168	169	90	3	W1	R6
Flag	DD10KP798	169	170	50	13	W1	R6
Flag	DD10KP798	170	171	40	20	W1	R6
Flag	DD10KP798	171	172	83	5	W1	R6
Flag	DD10KP798	172	173	86	6	W1	R6
Flag	DD10KP798	173	174	100	3	W1	R6
Flag	DD10KP798	174	175	96	5	W1	R6
Flag	DD10KP798	175	176	100	3	W1	R6
Flag	DD10KP798	176	177	92	5	W1	R6
Flag	DD10KP798	177	178	76	5	W1	R6
Flag	DD10KP798	178	179	100	3	W1	R6
Flag	DD10KP798	179	180	100	6	W1	R6
Flag	DD10KP798	180	181	100	2	W1	R6
Flag	DD10KP798	181	182	90	9	W1	R6
Flag	DD10KP798	182	183	73	10	W1	R6
Flag	DD10KP798	183	184	100	2	W1	R6
Flag	DD10KP798	184	185	89	6	W1	R6
Flag	DD10KP798	185	186	70	10	W1	R6
Flag	DD10KP798	186	187	96	3	W1	R6
Flag	DD10KP798	187	188	100	2	W1	R6
Flag	DD10KP798	188	189	98	5	W1	R6
Flag	DD10KP798	189	190	95	7	W1	R6
Flag	DD10KP798	190	191	65	12	W1	R6
Flag	DD10KP798	191	192	57	14	W1	R6
Flag	DD10KP798	192	193	90	5	W1	R6
Flag	DD10KP798	193	194	97	2	W1	R6
Flag	DD10KP798	194	195	75	7	W1	R6

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Flag	DD10KP800	53	54	0	17	W2	R5
Flag	DD10KP800	54	55	52	30	W2	R5
Flag	DD10KP800	55	56	17	25	W2	R5
Flag	DD10KP800	56	57	0	25	W2	R5
Flag	DD10KP800	57	58	12	25	W2	R5
Flag	DD10KP800	58	59	27	9	W2	R5
Flag	DD10KP800	59	60	77	20	W2	R5
Flag	DD10KP800	60	61	58	25	W1	R6
Flag	DD10KP800	61	62	0	25	W1	R6
Flag	DD10KP800	62	63	0	25	W1	R6
Flag	DD10KP800	63	64	0	25	W1	R6
Flag	DD10KP800	64	65	0	25	W1	R6
Flag	DD10KP800	65	66	0	25	W1	R6
Flag	DD10KP800	66	67	40	13	W1	R6
Flag	DD10KP800	67	68	50	14	W1	R6
Flag	DD10KP800	68	69	0	22	W1	R6
Flag	DD10KP800	69	70	67	10	W1	R6
Flag	DD10KP800	70	71	30	16	W1	R6
Flag	DD10KP800	71	72	60	8	W1	R6
Flag	DD10KP800	72	73	10	20	W1	R6
Flag	DD10KP800	73	74	12	25	W1	R6
Flag	DD10KP800	74	75	0	25	W1	R6
Flag	DD10KP800	75	76	13	25	W1	R6
Flag	DD10KP800	76	77	11	25	W1	R6
Flag	DD10KP800	77	78	23	25	W1	R6
Flag	DD10KP800	78	79	0	25	W1	R6
Flag	DD10KP800	79	80	0	25	W1	R6
Flag	DD10KP800	80	81	0	25	W1	R6
Flag	DD10KP800	81	82	0	25	W1	R6
Flag	DD10KP800	82	83	0	25	W1	R6
Flag	DD10KP800	83	84	40	10	W1	R6
Flag	DD10KP800	84	85	58	10	W1	R6
Flag	DD10KP800	85	86	85	7	W1	R6
Flag	DD10KP800	86	87	65	9	W1	R6
Flag	DD10KP800	87	88	68	9	W1	R6
Flag	DD10KP800	88	89	76	9	W1	R6
Flag	DD10KP800	89	90	37	14	W1	R6
Flag	DD10KP800	90	91	100	4	W1	R6
Flag	DD10KP800	91	92	62	10	W1	R6
Flag	DD10KP800	92	93	63	10	W1	R6
Flag	DD10KP800	93	94	92	7	W1	R6
Flag	DD10KP800	94	95	100	3	W1	R6
Flag	DD10KP800	95	96	100	3	W1	R6
Flag	DD10KP800	96	97	100	4	W1	R6
Flag	DD10KP800	97	98	88	7	W1	R6
Flag	DD10KP800	98	99	100	3	W1	R6
Flag	DD10KP800	99	100	97	6	W1	R6

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Kaolin	DD04KP342	0	1	25	Not Collected	W5	Not Collected
Kaolin	DD04KP342	1	2	12	Not Collected	W5	Not Collected
Kaolin	DD04KP342	2	3	12	Not Collected	W5	Not Collected
Kaolin	DD04KP342	3	4	12	Not Collected	W5	Not Collected
Kaolin	DD04KP342	4	5	12	Not Collected	W5	Not Collected
Kaolin	DD04KP342	5	6	30	Not Collected	W5	Not Collected
Kaolin	DD04KP342	6	7	24	Not Collected	W5	Not Collected
Kaolin	DD04KP342	7	8	24	Not Collected	W5	Not Collected
Kaolin	DD04KP342	8	9	24	Not Collected	W5	Not Collected
Kaolin	DD04KP342	9	10	24	Not Collected	W5	Not Collected
Kaolin	DD04KP342	10	11	24	Not Collected	W5	Not Collected
Kaolin	DD04KP342	11	12	24	Not Collected	W5	Not Collected
Kaolin	DD04KP342	12	13	24	Not Collected	W5	Not Collected
Kaolin	DD04KP342	13	14	24	Not Collected	W5	Not Collected
Kaolin	DD04KP342	14	15	24	Not Collected	W5	Not Collected
Kaolin	DD04KP342	15	16	24	Not Collected	W5	Not Collected
Kaolin	DD04KP342	16	17	24	Not Collected	W5	Not Collected
Kaolin	DD04KP342	17	18	24	Not Collected	W5	Not Collected
Kaolin	DD04KP342	18	19	24	Not Collected	W5	Not Collected
Kaolin	DD04KP342	19	20	42	Not Collected	W5	Not Collected
Kaolin	DD04KP342	20	21	42	Not Collected	W5	Not Collected
Kaolin	DD04KP342	21	22	42	Not Collected	W5	Not Collected
Kaolin	DD04KP342	22	23	42	Not Collected	W5	Not Collected
Kaolin	DD04KP342	23	24	42	Not Collected	W5	Not Collected
Kaolin	DD04KP342	24	25	42	Not Collected	W5	Not Collected
Kaolin	DD04KP342	25	26	40	Not Collected	W5	Not Collected
Kaolin	DD04KP342	26	27	32	Not Collected	W5	Not Collected
Kaolin	DD04KP342	27	28	32	Not Collected	W5	Not Collected
Kaolin	DD04KP342	28	29	32	Not Collected	W5	Not Collected
Kaolin	DD04KP342	29	30	32	Not Collected	W5	Not Collected
Kaolin	DD04KP342	30	31	32	Not Collected	W5	Not Collected
Kaolin	DD04KP342	31	32	32	Not Collected	W5	Not Collected
Kaolin	DD04KP342	32	33	61	Not Collected	W5	Not Collected
Kaolin	DD04KP342	33	34	84	Not Collected	W5	Not Collected
Kaolin	DD04KP342	34	35	84	Not Collected	W5	Not Collected
Kaolin	DD04KP342	35	36	84	Not Collected	W5	Not Collected
Kaolin	DD04KP342	36	37	84	Not Collected	W5	Not Collected
Kaolin	DD04KP342	37	38	84	Not Collected	W5	Not Collected
Kaolin	DD04KP342	38	39	84	Not Collected	W5	Not Collected
Kaolin	DD04KP342	39	40	30	Not Collected	W5	Not Collected
Kaolin	DD04KP342	40	41	30	Not Collected	W5	Not Collected
Kaolin	DD04KP342	41	42	30	Not Collected	W5	Not Collected
Kaolin	DD04KP342	42	43	30	Not Collected	W5	Not Collected
Kaolin	DD04KP342	43	44	24	Not Collected	W5	Not Collected
Kaolin	DD04KP342	44	45	24	Not Collected	W5	Not Collected
Kaolin	DD04KP342	45	46	24	Not Collected	W5	Not Collected
Kaolin	DD04KP342	46	47	67	Not Collected	W5	Not Collected
Kaolin	DD04KP342	47	48	26	Not Collected	W5	Not Collected
Kaolin	DD04KP342	48	49	26	Not Collected	W5	Not Collected
Kaolin	DD04KP342	49	50	26	Not Collected	W5	Not Collected
Kaolin	DD04KP342	50	51	26	Not Collected	W5	Not Collected
Kaolin	DD04KP342	51	52	26	Not Collected	W5	Not Collected
Kaolin	DD04KP342	52	53	60	Not Collected	W5	Not Collected
Kaolin	DD04KP342	53	54	60	Not Collected	W5	Not Collected
Kaolin	DD04KP342	54	55	60	Not Collected	W5	Not Collected
Kaolin	DD04KP342	55	56	10	Not Collected	W5	Not Collected
Kaolin	DD04KP342	56	57	71	Not Collected	W5	Not Collected
Kaolin	DD04KP342	57	58	71	Not Collected	W5	Not Collected
Kaolin	DD04KP342	58	59	71	Not Collected	W5	Not Collected
Kaolin	DD04KP342	59	60	72	Not Collected	W5	Not Collected
Kaolin	DD04KP342	60	61	72	Not Collected	W5	Not Collected

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Kaolin	DD04KP342	61	62	72	Not Collected	W5	Not Collected
Kaolin	DD04KP342	62	63	34	Not Collected	W5	Not Collected
Kaolin	DD04KP342	63	64	34	Not Collected	W5	Not Collected
Kaolin	DD04KP342	64	65	34	Not Collected	W5	Not Collected
Kaolin	DD04KP342	65	66	34	Not Collected	W5	Not Collected
Kaolin	DD04KP342	66	67	34	Not Collected	W5	Not Collected
Kaolin	DD04KP342	67	68	42	Not Collected	W2	Not Collected
Kaolin	DD04KP342	68	69	42	Not Collected	W2	Not Collected
Kaolin	DD04KP342	69	70	42	Not Collected	W2	Not Collected
Kaolin	DD04KP342	70	71	42	Not Collected	W2	Not Collected
Kaolin	DD04KP342	71	72	42	Not Collected	W2	Not Collected
Kaolin	DD04KP342	72	73	18	Not Collected	W5	Not Collected
Kaolin	DD04KP342	73	74	18	Not Collected	W1	Not Collected
Kaolin	DD04KP342	74	75	70	Not Collected	W1	Not Collected
Kaolin	DD04KP342	75	76	70	Not Collected	W1	Not Collected
Kaolin	DD04KP342	76	77	70	Not Collected	W1	Not Collected
Kaolin	DD04KP342	77	78	70	Not Collected	W1	Not Collected
Kaolin	DD04KP342	78	79	70	Not Collected	W1	Not Collected
Kaolin	DD04KP342	79	80	70	Not Collected	W1	Not Collected
Kaolin	DD04KP342	80	81	70	Not Collected	W1	Not Collected
Kaolin	DD04KP342	81	82	70	Not Collected	W1	Not Collected
Kaolin	DD04KP342	82	83	70	Not Collected	W1	Not Collected
Kaolin	DD04KP342	83	84	70	Not Collected	W1	Not Collected
Kaolin	DD04KP342	84	85	70	Not Collected	W1	Not Collected
Kaolin	DD04KP342	85	86	70	Not Collected	W1	Not Collected
Kaolin	DD04KP342	86	87	70	Not Collected	W1	Not Collected
Kaolin	DD04KP342	87	88	70	Not Collected	W1	Not Collected
Kaolin	DD04KP342	88	89	70	Not Collected	W1	Not Collected
Kaolin	DD04KP342	89	90	70	Not Collected	W1	Not Collected
Kaolin	DD04KP342	90	91	70	Not Collected	W1	Not Collected
Kaolin	DD04KP342	91	92	90	Not Collected	W1	Not Collected
Kaolin	DD04KP342	92	93	90	Not Collected	W1	Not Collected
Kaolin	DD04KP342	93	94	17	Not Collected	W1	Not Collected
Kaolin	DD04KP342	94	95	17	Not Collected	W1	Not Collected
Kaolin	DD04KP342	95	96	17	Not Collected	W1	Not Collected
Kaolin	DD04KP342	96	97	17	Not Collected	W1	Not Collected
Kaolin	DD04KP342	97	98	17	Not Collected	W1	Not Collected
Kaolin	DD04KP342	98	99	52	Not Collected	W1	Not Collected
Kaolin	DD04KP342	99	100	52	Not Collected	W1	Not Collected
Kaolin	DD04KP342	100	101	52	Not Collected	W1	Not Collected
Kaolin	DD04KP342	101	102	52	Not Collected	W1	Not Collected
Kaolin	DD04KP342	102	103	52	Not Collected	W1	Not Collected
Kaolin	DD04KP342	103	104	52	Not Collected	W1	Not Collected
Kaolin	DD04KP342	104	105	56	Not Collected	W1	Not Collected
Kaolin	DD04KP342	105	106	86	Not Collected	W1	Not Collected
Kaolin	DD04KP342	106	107	86	Not Collected	W1	Not Collected
Kaolin	DD04KP342	107	108	86	Not Collected	W1	Not Collected
Kaolin	DD04KP342	108	109	86	Not Collected	W1	Not Collected
Kaolin	DD04KP342	109	110	86	Not Collected	W1	Not Collected

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Kaolin	DD04KP343	0	1	36	Not Collected	W5	Not Collected
Kaolin	DD04KP343	1	2	41	Not Collected	W5	Not Collected
Kaolin	DD04KP343	2	3	41	Not Collected	W5	Not Collected
Kaolin	DD04KP343	3	4	41	Not Collected	W5	Not Collected
Kaolin	DD04KP343	4	5	41	Not Collected	W5	Not Collected
Kaolin	DD04KP343	5	6	41	Not Collected	W5	Not Collected
Kaolin	DD04KP343	6	7	41	Not Collected	W5	Not Collected
Kaolin	DD04KP343	7	8	41	Not Collected	W5	Not Collected
Kaolin	DD04KP343	8	9	41	Not Collected	W5	Not Collected
Kaolin	DD04KP343	9	10	41	Not Collected	W5	Not Collected
Kaolin	DD04KP343	10	11	41	Not Collected	W5	Not Collected
Kaolin	DD04KP343	11	12	41	Not Collected	W5	Not Collected
Kaolin	DD04KP343	12	13	41	Not Collected	W5	Not Collected
Kaolin	DD04KP343	13	14	41	Not Collected	W5	Not Collected
Kaolin	DD04KP343	14	15	41	Not Collected	W5	Not Collected
Kaolin	DD04KP343	15	16	41	Not Collected	W5	Not Collected
Kaolin	DD04KP343	16	17	58	Not Collected	W5	Not Collected
Kaolin	DD04KP343	17	18	58	Not Collected	W5	Not Collected
Kaolin	DD04KP343	18	19	16	Not Collected	W5	Not Collected
Kaolin	DD04KP343	19	20	16	Not Collected	W5	Not Collected
Kaolin	DD04KP343	20	21	16	Not Collected	W5	Not Collected
Kaolin	DD04KP343	21	22	16	Not Collected	W5	Not Collected
Kaolin	DD04KP343	22	23	16	Not Collected	W5	Not Collected
Kaolin	DD04KP343	23	24	70	Not Collected	W5	Not Collected
Kaolin	DD04KP343	24	25	70	Not Collected	W5	Not Collected
Kaolin	DD04KP343	25	26	70	Not Collected	W5	Not Collected
Kaolin	DD04KP343	26	27	70	Not Collected	W5	Not Collected
Kaolin	DD04KP343	27	28	33	Not Collected	W5	Not Collected
Kaolin	DD04KP343	28	29	33	Not Collected	W5	Not Collected
Kaolin	DD04KP343	29	30	33	Not Collected	W5	Not Collected
Kaolin	DD04KP343	30	31	33	Not Collected	W5	Not Collected
Kaolin	DD04KP343	31	32	33	Not Collected	W5	Not Collected
Kaolin	DD04KP343	32	33	56	Not Collected	W5	Not Collected
Kaolin	DD04KP343	33	34	56	Not Collected	W5	Not Collected
Kaolin	DD04KP343	34	35	56	Not Collected	W5	Not Collected
Kaolin	DD04KP343	35	36	56	Not Collected	W5	Not Collected
Kaolin	DD04KP343	36	37	56	Not Collected	W5	Not Collected
Kaolin	DD04KP343	37	38	67	Not Collected	W5	Not Collected
Kaolin	DD04KP343	38	39	67	Not Collected	W5	Not Collected
Kaolin	DD04KP343	39	40	67	Not Collected	W5	Not Collected
Kaolin	DD04KP343	40	41	67	Not Collected	W5	Not Collected
Kaolin	DD04KP343	41	42	67	Not Collected	W5	Not Collected
Kaolin	DD04KP343	42	43	100	Not Collected	W2	Not Collected
Kaolin	DD04KP343	43	44	100	Not Collected	W2	Not Collected
Kaolin	DD04KP343	44	45	38	Not Collected	W5	Not Collected
Kaolin	DD04KP343	45	46	38	Not Collected	W5	Not Collected
Kaolin	DD04KP343	46	47	38	Not Collected	W5	Not Collected
Kaolin	DD04KP343	47	48	27	Not Collected	W5	Not Collected
Kaolin	DD04KP343	48	49	27	Not Collected	W5	Not Collected
Kaolin	DD04KP343	49	50	27	Not Collected	W5	Not Collected
Kaolin	DD04KP343	50	51	27	Not Collected	W5	Not Collected
Kaolin	DD04KP343	51	52	27	Not Collected	W5	Not Collected
Kaolin	DD04KP343	52	53	27	Not Collected	W5	Not Collected
Kaolin	DD04KP343	53	54	27	Not Collected	W5	Not Collected
Kaolin	DD04KP343	54	55	26	Not Collected	W2	Not Collected
Kaolin	DD04KP343	55	56	26	Not Collected	W2	Not Collected
Kaolin	DD04KP343	56	57	26	Not Collected	W2	Not Collected
Kaolin	DD04KP343	57	58	19	Not Collected	W2	Not Collected
Kaolin	DD04KP343	58	59	19	Not Collected	W2	Not Collected
Kaolin	DD04KP343	59	60	19	Not Collected	W2	Not Collected
Kaolin	DD04KP343	60	61	19	Not Collected	W2	Not Collected
Kaolin	DD04KP343	61	62	19	Not Collected	W2	Not Collected

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Kaolin	DD04KP343	62	63	19	Not Collected	W2	Not Collected
Kaolin	DD04KP343	63	64	10	Not Collected	W2	Not Collected
Kaolin	DD04KP343	64	65	10	Not Collected	W2	Not Collected
Kaolin	DD04KP343	65	66	30	Not Collected	W5	Not Collected
Kaolin	DD04KP343	66	67	10	Not Collected	W2	Not Collected
Kaolin	DD04KP343	67	68	34	Not Collected	W1	Not Collected
Kaolin	DD04KP343	68	69	18	Not Collected	W1	Not Collected
Kaolin	DD04KP343	69	70	18	Not Collected	W1	Not Collected
Kaolin	DD04KP343	70	71	18	Not Collected	W1	Not Collected
Kaolin	DD04KP343	71	72	18	Not Collected	W1	Not Collected
Kaolin	DD04KP343	72	73	56	Not Collected	W1	Not Collected
Kaolin	DD04KP343	73	74	56	Not Collected	W1	Not Collected
Kaolin	DD04KP343	74	75	56	Not Collected	W1	Not Collected
Kaolin	DD04KP343	75	76	55	Not Collected	W1	Not Collected
Kaolin	DD04KP343	76	77	55	Not Collected	W1	Not Collected
Kaolin	DD04KP343	77	78	55	Not Collected	W1	Not Collected
Kaolin	DD04KP343	78	79	55	Not Collected	W1	Not Collected
Kaolin	DD04KP343	79	80	43	Not Collected	W1	Not Collected
Kaolin	DD04KP343	80	81	62	Not Collected	W1	Not Collected
Kaolin	DD04KP343	81	82	62	Not Collected	W1	Not Collected
Kaolin	DD04KP343	82	83	95	Not Collected	W1	Not Collected
Kaolin	DD04KP343	83	84	95	Not Collected	W1	Not Collected
Kaolin	DD04KP343	84	85	95	Not Collected	W1	Not Collected
Kaolin	DD04KP343	85	86	90	Not Collected	W1	Not Collected
Kaolin	DD04KP343	86	87	90	Not Collected	W1	Not Collected
Kaolin	DD04KP343	87	88	90	Not Collected	W1	Not Collected
Kaolin	DD04KP343	88	89	90	Not Collected	W1	Not Collected
Kaolin	DD04KP343	89	90	90	Not Collected	W1	Not Collected
Kaolin	DD04KP343	90	91	90	Not Collected	W1	Not Collected
Kaolin	DD04KP343	91	92	90	Not Collected	W1	Not Collected
Kaolin	DD04KP343	92	93	90	Not Collected	W1	Not Collected
Kaolin	DD04KP343	93	94	90	Not Collected	W1	Not Collected
Kaolin	DD04KP343	94	95	100	Not Collected	W1	Not Collected
Kaolin	DD04KP343	95	96	100	Not Collected	W1	Not Collected
Kaolin	DD04KP343	96	97	80	Not Collected	W1	Not Collected
Kaolin	DD04KP343	97	98	80	Not Collected	W1	Not Collected
Kaolin	DD04KP343	98	99	80	Not Collected	W1	Not Collected
Kaolin	DD04KP343	99	100	80	Not Collected	W1	Not Collected
Kaolin	DD04KP343	100	101	80	Not Collected	W1	Not Collected
Kaolin	DD04KP343	101	102	86	Not Collected	W1	Not Collected
Kaolin	DD04KP343	102	103	86	Not Collected	W1	Not Collected
Kaolin	DD04KP343	103	104	100	Not Collected	W1	Not Collected
Kaolin	DD04KP343	104	105	100	Not Collected	W1	Not Collected
Kaolin	DD04KP343	105	106	34	Not Collected	W1	Not Collected
Kaolin	DD04KP343	106	107	34	Not Collected	W1	Not Collected
Kaolin	DD04KP343	107	108	34	Not Collected	W1	Not Collected
Kaolin	DD04KP343	108	109	34	Not Collected	W1	Not Collected
Kaolin	DD04KP343	109	110	68	Not Collected	W1	Not Collected

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Kaolin	DD04KP344	0	1	39	Not Collected	W5	Not Collected
Kaolin	DD04KP344	1	2	39	Not Collected	W5	Not Collected
Kaolin	DD04KP344	2	3	39	Not Collected	W5	Not Collected
Kaolin	DD04KP344	3	4	39	Not Collected	W5	Not Collected
Kaolin	DD04KP344	4	5	39	Not Collected	W5	Not Collected
Kaolin	DD04KP344	5	6	39	Not Collected	W5	Not Collected
Kaolin	DD04KP344	6	7	39	Not Collected	W5	Not Collected
Kaolin	DD04KP344	7	8	80	Not Collected	W5	Not Collected
Kaolin	DD04KP344	8	9	80	Not Collected	W5	Not Collected
Kaolin	DD04KP344	9	10	80	Not Collected	W5	Not Collected
Kaolin	DD04KP344	10	11	23	Not Collected	W5	Not Collected
Kaolin	DD04KP344	11	12	12	Not Collected	W5	Not Collected
Kaolin	DD04KP344	12	13	12	Not Collected	W5	Not Collected
Kaolin	DD04KP344	13	14	12	Not Collected	W5	Not Collected
Kaolin	DD04KP344	14	15	12	Not Collected	W5	Not Collected
Kaolin	DD04KP344	15	16	12	Not Collected	W5	Not Collected
Kaolin	DD04KP344	16	17	12	Not Collected	W5	Not Collected
Kaolin	DD04KP344	17	18	12	Not Collected	W5	Not Collected
Kaolin	DD04KP344	18	19	12	Not Collected	W5	Not Collected
Kaolin	DD04KP344	19	20	12	Not Collected	W5	Not Collected
Kaolin	DD04KP344	20	21	12	Not Collected	W5	Not Collected
Kaolin	DD04KP344	21	22	12	Not Collected	W5	Not Collected
Kaolin	DD04KP344	22	23	12	Not Collected	W5	Not Collected
Kaolin	DD04KP344	23	24	63	Not Collected	W5	Not Collected
Kaolin	DD04KP344	24	25	63	Not Collected	W5	Not Collected
Kaolin	DD04KP344	25	26	63	Not Collected	W5	Not Collected
Kaolin	DD04KP344	26	27	31	Not Collected	W5	Not Collected
Kaolin	DD04KP344	27	28	31	Not Collected	W5	Not Collected
Kaolin	DD04KP344	28	29	31	Not Collected	W5	Not Collected
Kaolin	DD04KP344	29	30	31	Not Collected	W5	Not Collected
Kaolin	DD04KP344	30	31	63	Not Collected	W5	Not Collected
Kaolin	DD04KP344	31	32	63	Not Collected	W5	Not Collected
Kaolin	DD04KP344	32	33	63	Not Collected	W5	Not Collected
Kaolin	DD04KP344	33	34	13	Not Collected	W5	Not Collected
Kaolin	DD04KP344	34	35	13	Not Collected	W5	Not Collected
Kaolin	DD04KP344	35	36	13	Not Collected	W5	Not Collected
Kaolin	DD04KP344	36	37	13	Not Collected	W5	Not Collected
Kaolin	DD04KP344	37	38	57	Not Collected	W5	Not Collected
Kaolin	DD04KP344	38	39	57	Not Collected	W5	Not Collected
Kaolin	DD04KP344	39	40	57	Not Collected	W5	Not Collected
Kaolin	DD04KP344	40	41	57	Not Collected	W5	Not Collected
Kaolin	DD04KP344	41	42	57	Not Collected	W5	Not Collected
Kaolin	DD04KP344	42	43	85	Not Collected	W2	Not Collected
Kaolin	DD04KP344	43	44	85	Not Collected	W2	Not Collected
Kaolin	DD04KP344	44	45	85	Not Collected	W2	Not Collected
Kaolin	DD04KP344	45	46	85	Not Collected	W2	Not Collected
Kaolin	DD04KP344	46	47	78	Not Collected	W5	Not Collected
Kaolin	DD04KP344	47	48	78	Not Collected	W5	Not Collected
Kaolin	DD04KP344	48	49	78	Not Collected	W5	Not Collected
Kaolin	DD04KP344	49	50	50	Not Collected	W5	Not Collected
Kaolin	DD04KP344	50	51	76	Not Collected	W5	Not Collected
Kaolin	DD04KP344	51	52	76	Not Collected	W5	Not Collected
Kaolin	DD04KP344	52	53	76	Not Collected	W5	Not Collected
Kaolin	DD04KP344	53	54	76	Not Collected	W5	Not Collected
Kaolin	DD04KP344	54	55	76	Not Collected	W5	Not Collected
Kaolin	DD04KP344	55	56	76	Not Collected	W5	Not Collected
Kaolin	DD04KP344	56	57	76	Not Collected	W5	Not Collected
Kaolin	DD04KP344	57	58	76	Not Collected	W5	Not Collected
Kaolin	DD04KP344	58	59	97	Not Collected	W2	Not Collected
Kaolin	DD04KP344	59	60	25	Not Collected	W2	Not Collected
Kaolin	DD04KP344	60	61	25	Not Collected	W2	Not Collected
Kaolin	DD04KP344	61	62	25	Not Collected	W2	Not Collected
Kaolin	DD04KP344	62	63	25	Not Collected	W2	Not Collected
Kaolin	DD04KP344	63	64	25	Not Collected	W2	Not Collected
Kaolin	DD04KP344	64	65	25	Not Collected	W2	Not Collected
Kaolin	DD04KP344	65	66	25	Not Collected	W2	Not Collected
Kaolin	DD04KP344	66	67	25	Not Collected	W2	Not Collected

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Kaolin	DD04KP344	67	68	70	Not Collected	W2	Not Collected
Kaolin	DD04KP344	68	69	70	Not Collected	W2	Not Collected
Kaolin	DD04KP344	69	70	69	Not Collected	W1	Not Collected
Kaolin	DD04KP344	70	71	23	Not Collected	W1	Not Collected
Kaolin	DD04KP344	71	72	10	Not Collected	W1	Not Collected
Kaolin	DD04KP344	72	73	38	Not Collected	W1	Not Collected
Kaolin	DD04KP344	73	74	38	Not Collected	W1	Not Collected
Kaolin	DD04KP344	74	75	38	Not Collected	W1	Not Collected
Kaolin	DD04KP344	75	76	38	Not Collected	W1	Not Collected
Kaolin	DD04KP344	76	77	45	Not Collected	W1	Not Collected
Kaolin	DD04KP344	77	78	14	Not Collected	W1	Not Collected
Kaolin	DD04KP344	78	79	14	Not Collected	W1	Not Collected
Kaolin	DD04KP344	79	80	14	Not Collected	W1	Not Collected
Kaolin	DD04KP344	80	81	14	Not Collected	W1	Not Collected
Kaolin	DD04KP344	81	82	11	Not Collected	W1	Not Collected
Kaolin	DD04KP344	82	83	11	Not Collected	W1	Not Collected
Kaolin	DD04KP344	83	84	11	Not Collected	W1	Not Collected
Kaolin	DD04KP344	84	85	11	Not Collected	W1	Not Collected
Kaolin	DD04KP344	85	86	11	Not Collected	W1	Not Collected
Kaolin	DD04KP344	86	87	11	Not Collected	W1	Not Collected
Kaolin	DD04KP344	87	88	11	Not Collected	W1	Not Collected
Kaolin	DD04KP344	88	89	11	Not Collected	W1	Not Collected
Kaolin	DD04KP344	89	90	11	Not Collected	W1	Not Collected
Kaolin	DD04KP344	90	91	11	Not Collected	W1	Not Collected
Kaolin	DD04KP344	91	92	38	Not Collected	W1	Not Collected
Kaolin	DD04KP344	92	93	38	Not Collected	W1	Not Collected
Kaolin	DD04KP344	93	94	38	Not Collected	W1	Not Collected
Kaolin	DD04KP344	94	95	26	Not Collected	W1	Not Collected
Kaolin	DD04KP344	95	96	26	Not Collected	W1	Not Collected
Kaolin	DD04KP344	96	97	26	Not Collected	W1	Not Collected
Kaolin	DD04KP344	97	98	26	Not Collected	W1	Not Collected
Kaolin	DD04KP344	98	99	10	Not Collected	W1	Not Collected
Kaolin	DD04KP344	99	100	32	Not Collected	W1	Not Collected
Kaolin	DD04KP344	100	101	32	Not Collected	W1	Not Collected
Kaolin	DD04KP344	101	102	76	Not Collected	W1	Not Collected
Kaolin	DD04KP344	102	103	76	Not Collected	W1	Not Collected
Kaolin	DD04KP344	103	104	76	Not Collected	W1	Not Collected
Kaolin	DD04KP344	104	105	88	Not Collected	W1	Not Collected
Kaolin	DD04KP344	105	106	45	Not Collected	W1	Not Collected
Kaolin	DD04KP344	106	107	45	Not Collected	W1	Not Collected
Kaolin	DD04KP344	107	108	59	Not Collected	W1	Not Collected
Kaolin	DD04KP344	108	109	59	Not Collected	W1	Not Collected
Kaolin	DD04KP344	109	110	59	Not Collected	W1	Not Collected

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Kaolin	DD05KP473	100	101	40	Not Collected	W1	Not Collected
Kaolin	DD05KP473	101	102	40	Not Collected	W1	Not Collected
Kaolin	DD05KP473	102	103	40	Not Collected	W1	Not Collected
Kaolin	DD05KP473	103	104	40	Not Collected	W1	Not Collected
Kaolin	DD05KP473	104	105	40	Not Collected	W1	Not Collected
Kaolin	DD05KP473	105	106	40	Not Collected	W1	Not Collected
Kaolin	DD05KP473	106	107	40	Not Collected	W1	Not Collected
Kaolin	DD05KP473	107	108	30	Not Collected	W1	Not Collected
Kaolin	DD05KP473	108	109	30	Not Collected	W1	Not Collected
Kaolin	DD05KP473	109	110	89	Not Collected	W1	Not Collected
Kaolin	DD05KP473	110	111	89	Not Collected	W1	Not Collected
Kaolin	DD05KP473	111	112	89	Not Collected	W1	Not Collected
Kaolin	DD05KP473	112	113	89	Not Collected	W1	Not Collected
Kaolin	DD05KP473	113	114	80	Not Collected	W1	Not Collected
Kaolin	DD05KP473	114	115	95	Not Collected	W1	Not Collected
Kaolin	DD05KP473	115	116	95	Not Collected	W1	Not Collected
Kaolin	DD05KP473	116	117	95	Not Collected	W1	Not Collected

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Kaolin	DD05KP474	70	71	60	Not Collected	W1	Not Collected
Kaolin	DD05KP474	71	72	60	Not Collected	W1	Not Collected
Kaolin	DD05KP474	72	73	60	Not Collected	W1	Not Collected
Kaolin	DD05KP474	73	74	60	Not Collected	W1	Not Collected
Kaolin	DD05KP474	74	75	60	Not Collected	W1	Not Collected
Kaolin	DD05KP474	75	76	60	Not Collected	W1	Not Collected
Kaolin	DD05KP474	76	77	60	Not Collected	W1	Not Collected
Kaolin	DD05KP474	77	78	60	Not Collected	W1	Not Collected
Kaolin	DD05KP474	78	79	60	Not Collected	W1	Not Collected
Kaolin	DD05KP474	79	80	60	Not Collected	W1	Not Collected
Kaolin	DD05KP474	80	81	60	Not Collected	W1	Not Collected
Kaolin	DD05KP474	81	82	30	Not Collected	W1	Not Collected
Kaolin	DD05KP474	82	83	30	Not Collected	W1	Not Collected
Kaolin	DD05KP474	83	84	30	Not Collected	W1	Not Collected
Kaolin	DD05KP474	84	85	30	Not Collected	W1	Not Collected
Kaolin	DD05KP474	85	86	30	Not Collected	W1	Not Collected

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Kaolin	DD05KP510	45	46	10	Not Collected	W5	Not Collected
Kaolin	DD05KP510	46	47	10	Not Collected	W5	Not Collected
Kaolin	DD05KP510	47	48	10	Not Collected	W5	Not Collected
Kaolin	DD05KP510	48	49	10	Not Collected	W5	Not Collected
Kaolin	DD05KP510	49	50	10	Not Collected	W5	Not Collected
Kaolin	DD05KP510	50	51	10	Not Collected	W5	Not Collected
Kaolin	DD05KP510	51	52	10	Not Collected	W5	Not Collected
Kaolin	DD05KP510	52	53	10	Not Collected	W5	Not Collected
Kaolin	DD05KP510	53	54	10	Not Collected	W5	Not Collected
Kaolin	DD05KP510	54	55	10	Not Collected	W5	Not Collected
Kaolin	DD05KP510	55	56	10	Not Collected	W5	Not Collected
Kaolin	DD05KP510	56	57	10	Not Collected	W5	Not Collected
Kaolin	DD05KP510	57	58	100	Not Collected	W5	Not Collected
Kaolin	DD05KP510	58	59	100	Not Collected	W5	Not Collected
Kaolin	DD05KP510	59	60	100	Not Collected	W2	Not Collected
Kaolin	DD05KP510	60	61	100	Not Collected	W2	Not Collected
Kaolin	DD05KP510	61	62	69	Not Collected	W2	Not Collected
Kaolin	DD05KP510	62	63	10	Not Collected	W2	Not Collected
Kaolin	DD05KP510	63	64	17	Not Collected	W1	Not Collected
Kaolin	DD05KP510	64	65	50	Not Collected	W1	Not Collected
Kaolin	DD05KP510	65	66	61	Not Collected	W1	Not Collected
Kaolin	DD05KP510	66	67	10	Not Collected	W1	Not Collected
Kaolin	DD05KP510	67	68	55	Not Collected	W1	Not Collected
Kaolin	DD05KP510	68	69	76	Not Collected	W1	Not Collected
Kaolin	DD05KP510	69	70	92	Not Collected	W1	Not Collected
Kaolin	DD05KP510	70	71	97	Not Collected	W1	Not Collected
Kaolin	DD05KP510	71	72	23	Not Collected	W1	Not Collected
Kaolin	DD05KP510	72	73	11	Not Collected	W1	Not Collected
Kaolin	DD05KP510	73	74	10	Not Collected	W1	Not Collected
Kaolin	DD05KP510	74	75	10	Not Collected	W1	Not Collected
Kaolin	DD05KP510	75	76	10	Not Collected	W1	Not Collected
Kaolin	DD05KP510	76	77	10	Not Collected	W1	Not Collected
Kaolin	DD05KP510	77	78	10	Not Collected	W1	Not Collected
Kaolin	DD05KP510	78	79	10	Not Collected	W1	Not Collected
Kaolin	DD05KP510	79	80	10	Not Collected	W1	Not Collected
Kaolin	DD05KP510	80	81	11	Not Collected	W1	Not Collected
Kaolin	DD05KP510	81	82	10	Not Collected	W1	Not Collected
Kaolin	DD05KP510	82	83	10	Not Collected	W1	Not Collected
Kaolin	DD05KP510	83	84	14	Not Collected	W1	Not Collected
Kaolin	DD05KP510	84	85	14	Not Collected	W1	Not Collected
Kaolin	DD05KP510	85	86	14	Not Collected	W1	Not Collected

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Kaolin	DD09KP748	0	1			W5	R1
Kaolin	DD09KP748	1	2			W5	R1
Kaolin	DD09KP748	2	3			W5	R1
Kaolin	DD09KP748	3	4			W5	R1
Kaolin	DD09KP748	4	5			W5	R1
Kaolin	DD09KP748	5	6			W5	R1
Kaolin	DD09KP748	6	7			W5	R1
Kaolin	DD09KP748	7	8			W5	R1
Kaolin	DD09KP748	8	9			W4	R1
Kaolin	DD09KP748	9	10	60	7	W4	R1
Kaolin	DD09KP748	10	11			W4	R1
Kaolin	DD09KP748	11	12	13	12	W4	R2
Kaolin	DD09KP748	12	13	33	8	W4	R2
Kaolin	DD09KP748	13	14			W4	R2
Kaolin	DD09KP748	14	15	0	15	W4	R2
Kaolin	DD09KP748	15	16	40	12	W4	R2
Kaolin	DD09KP748	16	17	80	7	W4	R2
Kaolin	DD09KP748	17	18	63	8	W4	R2
Kaolin	DD09KP748	18	19	12	12	W4	R2
Kaolin	DD09KP748	19	20	66	6	W4	R2
Kaolin	DD09KP748	20	21	12	12	W4	R2
Kaolin	DD09KP748	21	22	14	14	W4	R2
Kaolin	DD09KP748	22	23	62	12	W4	R2
Kaolin	DD09KP748	23	24	30	12	W4	R2
Kaolin	DD09KP748	24	25	14	16	W4	R2
Kaolin	DD09KP748	25	26	33	15	W4	R2
Kaolin	DD09KP748	26	27	55	13	W4	R2
Kaolin	DD09KP748	27	28	0	18	W4	R2
Kaolin	DD09KP748	28	29	0	21	W4	R2
Kaolin	DD09KP748	29	30	48	17	W4	R2
Kaolin	DD09KP748	30	31	0	25	W4	R2
Kaolin	DD09KP748	31	32	74	10	W4	R2
Kaolin	DD09KP748	32	33	87	10	W4	R2
Kaolin	DD09KP748	33	34	46	13	W4	R2
Kaolin	DD09KP748	34	35	0	25	W4	R2
Kaolin	DD09KP748	35	36	40	25	W4	R2
Kaolin	DD09KP748	36	37	73	7	W4	R2
Kaolin	DD09KP748	37	38	76	6	W4	R2
Kaolin	DD09KP748	38	39	78	5	W4	R2
Kaolin	DD09KP748	39	40	47	4	W4	R2
Kaolin	DD09KP748	40	41	100	1	W4	R3
Kaolin	DD09KP748	41	42	95	7	W4	R3
Kaolin	DD09KP748	42	43	54	13	W4	R3
Kaolin	DD09KP748	43	44	12	9	W4	R3
Kaolin	DD09KP748	44	45	45	12	W4	R3
Kaolin	DD09KP748	45	46	77	7	W4	R3
Kaolin	DD09KP748	46	47	55	8	W4	R3
Kaolin	DD09KP748	47	48	65	5	W4	R3
Kaolin	DD09KP748	48	49	60	8	W4	R3
Kaolin	DD09KP748	49	50	12	20	W3	R3
Kaolin	DD09KP748	50	51	11	13	W3	R3
Kaolin	DD09KP748	51	52	0	14	W3	R3
Kaolin	DD09KP748	52	53	33	11	W3	R3
Kaolin	DD09KP748	53	54	28	25	W3	R3
Kaolin	DD09KP748	54	55	36	25	W3	R3
Kaolin	DD09KP748	55	56	0	20	W3	R3
Kaolin	DD09KP748	56	57	12	20	W3	R3
Kaolin	DD09KP748	57	58	0	25	W3	R3
Kaolin	DD09KP748	58	59	26	20	W3	R3
Kaolin	DD09KP748	59	60	0	25	W3	R3
Kaolin	DD09KP748	60	61	15	25	W3	R3
Kaolin	DD09KP748	61	62	13	25	W3	R3
Kaolin	DD09KP748	62	63	34	22	W3	R3
Kaolin	DD09KP748	63	64	47	15	W3	R3
Kaolin	DD09KP748	64	65	43	19	W3	R3
Kaolin	DD09KP748	65	66	45	18	W3	R3
Kaolin	DD09KP748	66	67	17	25	W3	R3
Kaolin	DD09KP748	67	68	37	20	W3	R3
Kaolin	DD09KP748	68	69	33	21	W3	R3
Kaolin	DD09KP748	69	70	30	16	W3	R3
Deposit	**Borehole**	**From (m)**	**To (m)**	**RQD (%)**	**Fracture Frequency (Fractures/metre)**	**Weathering**	**Hardness**
Kaolin	DD09KP748	70	71	40	18	W2	R4
Kaolin	DD09KP748	71	72	12	22	W2	R4

Kaolin	DD09KP748	72	73	36	17	W2	R4
Kaolin	DD09KP748	73	74	18	20	W2	R4
Kaolin	DD09KP748	74	75	70	12	W1	R5
Kaolin	DD09KP748	75	76	90	4	W1	R5
Kaolin	DD09KP748	76	77	86	5	W1	R5
Kaolin	DD09KP748	77	78	100	5	W1	R5
Kaolin	DD09KP748	78	79	38	11	W1	R5
Kaolin	DD09KP748	79	80	55	12	W1	R5
Kaolin	DD09KP748	80	81	50	11	W1	R5
Kaolin	DD09KP748	81	82	87	7	W1	R5
Kaolin	DD09KP748	82	83	50	14	W1	R5
Kaolin	DD09KP748	83	84	90	4	W1	R5
Kaolin	DD09KP748	84	85	85	4	W1	R5
Kaolin	DD09KP748	85	86	100	3	W1	R5
Kaolin	DD09KP748	86	87	97	4	W1	R5
Kaolin	DD09KP748	87	88	80	6	W1	R5
Kaolin	DD09KP748	88	89	65	14	W1	R5
Kaolin	DD09KP748	89	90	70	11	W1	R5
Kaolin	DD09KP748	90	91	56	10	W1	R5
Kaolin	DD09KP748	91	92	18	15	W1	R5
Kaolin	DD09KP748	92	93	100	2	W1	R5
Kaolin	DD09KP748	93	94	39	12	W1	R5
Kaolin	DD09KP748	94	95	55	15	W1	R5
Kaolin	DD09KP748	95	96	58	11	W1	R5
Kaolin	DD09KP748	96	97	41	16	W1	R5
Kaolin	DD09KP748	97	98	90	7	W1	R5
Kaolin	DD09KP748	98	99	88	6	W1	R5
Kaolin	DD09KP748	99	100	76	8	W1	R5
Kaolin	DD09KP748	100	101	100	2	W1	R5
Kaolin	DD09KP748	101	102	100	2	W1	R5
Kaolin	DD09KP748	102	103	90	6	W1	R5
Kaolin	DD09KP748	103	104	84	9	W1	R5
Kaolin	DD09KP748	104	105	38	13	W1	R5
Kaolin	DD09KP748	105	106	53	20	W1	R5
Kaolin	DD09KP748	106	107	54	13	W1	R5
Kaolin	DD09KP748	107	108	70	12	W1	R5
Kaolin	DD09KP748	108	109	0	25	W1	R5
Kaolin	DD09KP748	109	110	12	25	W1	R5
Kaolin	DD09KP748	110	111	74	9	W1	R5
Kaolin	DD09KP748	111	112	27	20	W1	R5
Kaolin	DD09KP748	112	113	16	21	W1	R5
Kaolin	DD09KP748	113	114	35	22	W1	R5
Kaolin	DD09KP748	114	115	60	8	W1	R5
Kaolin	DD09KP748	115	116	100	3	W1	R5

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Kaolin	DD09KP749	0	1	Not Collected	Not Collected	W5	R1
Kaolin	DD09KP749	1	2	Not Collected	Not Collected	W5	R1
Kaolin	DD09KP749	2	3	Not Collected	Not Collected	W5	R2
Kaolin	DD09KP749	3	4	Not Collected	Not Collected	W5	R3
Kaolin	DD09KP749	4	5	Not Collected	Not Collected	W5	R3
Kaolin	DD09KP749	5	6	Not Collected	Not Collected	W5	R2
Kaolin	DD09KP749	6	7	Not Collected	Not Collected	W5	R2
Kaolin	DD09KP749	7	8	Not Collected	Not Collected	W5	R2
Kaolin	DD09KP749	8	9	Not Collected	Not Collected	W5	R2
Kaolin	DD09KP749	9	10	Not Collected	Not Collected	W3	R2
Kaolin	DD09KP749	10	11	Not Collected	Not Collected	W3	R4
Kaolin	DD09KP749	11	12	Not Collected	Not Collected	W3	R4
Kaolin	DD09KP749	12	13	Not Collected	Not Collected	W3	R4
Kaolin	DD09KP749	13	14	Not Collected	Not Collected	W3	R4
Kaolin	DD09KP749	14	15	Not Collected	Not Collected	W3	R4
Kaolin	DD09KP749	15	16	Not Collected	Not Collected	W2	R5
Kaolin	DD09KP749	16	17	Not Collected	Not Collected	W2	R5
Kaolin	DD09KP749	17	18	Not Collected	Not Collected	W2	R5
Kaolin	DD09KP749	18	19	Not Collected	Not Collected	W2	R5
Kaolin	DD09KP749	19	20	Not Collected	Not Collected	W2	R5
Kaolin	DD09KP749	20	21	Not Collected	Not Collected	W2	R5
Kaolin	DD09KP749	21	22	Not Collected	Not Collected	W2	R5
Kaolin	DD09KP749	22	23	Not Collected	Not Collected	W2	R5
Kaolin	DD09KP749	23	24	Not Collected	Not Collected	W2	R5
Kaolin	DD09KP749	24	25	Not Collected	Not Collected	W2	R5
Kaolin	DD09KP749	25	26	Not Collected	Not Collected	W2	R5
Kaolin	DD09KP749	26	27	Not Collected	Not Collected	W2	R5
Kaolin	DD09KP749	27	28	Not Collected	Not Collected	W2	R5
Kaolin	DD09KP749	28	29	Not Collected	Not Collected	W2	R5
Kaolin	DD09KP749	29	30	Not Collected	Not Collected	W2	R5
Kaolin	DD09KP749	30	31	Not Collected	Not Collected	W2	R5
Kaolin	DD09KP749	31	32	Not Collected	Not Collected	W2	R5
Kaolin	DD09KP749	32	33	Not Collected	Not Collected	W2	R5
Kaolin	DD09KP749	33	34	Not Collected	Not Collected	W2	R5
Kaolin	DD09KP749	34	35	Not Collected	Not Collected	W2	R5
Kaolin	DD09KP749	35	36	Not Collected	Not Collected	W2	R5
Kaolin	DD09KP749	36	37	Not Collected	Not Collected	W2	R5
Kaolin	DD09KP749	37	38	Not Collected	Not Collected	W2	R5
Kaolin	DD09KP749	38	39	Not Collected	Not Collected	W2	R5
Kaolin	DD09KP749	39	40	Not Collected	Not Collected	W2	R5
Kaolin	DD09KP749	40	41	Not Collected	Not Collected	W2	R5
Kaolin	DD09KP749	41	42	Not Collected	Not Collected	W2	R5
Kaolin	DD09KP749	42	43	Not Collected	Not Collected	W2	R5
Kaolin	DD09KP749	43	44	Not Collected	Not Collected	W2	R5
Kaolin	DD09KP749	44	45	Not Collected	Not Collected	W2	R5
Kaolin	DD09KP749	45	46	Not Collected	Not Collected	W2	R5
Kaolin	DD09KP749	46	47	Not Collected	Not Collected	W2	R5
Kaolin	DD09KP749	47	48	Not Collected	Not Collected	W2	R5
Kaolin	DD09KP749	48	49	Not Collected	Not Collected	W2	R5
Kaolin	DD09KP749	49	50	Not Collected	Not Collected	W2	R5
Kaolin	DD09KP749	50	51	Not Collected	Not Collected	W2	R5
Kaolin	DD09KP749	51	52	Not Collected	Not Collected	W2	R5
Kaolin	DD09KP749	52	53	Not Collected	Not Collected	W2	R5
Kaolin	DD09KP749	53	54	Not Collected	Not Collected	W2	R5
Kaolin	DD09KP749	54	55	0	20	W2	R5
Kaolin	DD09KP749	55	56	0	25	W2	R5
Kaolin	DD09KP749	56	57	11	22	W2	R5
Kaolin	DD09KP749	57	58	46	10	W2	R5
Kaolin	DD09KP749	58	59	69	9	W2	R5
Kaolin	DD09KP749	59	60	42	12	W1	R5
Kaolin	DD09KP749	60	61	48	12	W1	R5
Kaolin	DD09KP749	61	62	81	7	W1	R5
Kaolin	DD09KP749	62	63	0	25	W1	R5
Kaolin	DD09KP749	63	64	0	25	W1	R5
Kaolin	DD09KP749	64	65	0	25	W1	R5
Kaolin	DD09KP749	65	66	11	25	W1	R5
Kaolin	DD09KP749	66	67	14	25	W1	R5
Kaolin	DD09KP749	67	68	10	25	W1	R5
Kaolin	DD09KP749	68	69	38	25	W1	R5
Kaolin	DD09KP749	69	70	0	25	W1	R5

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Kaolin	DD09KP749	70	71	0	25	W1	R5
Kaolin	DD09KP749	71	72	22	18	W1	R5
Kaolin	DD09KP749	72	73	18	25	W1	R5
Kaolin	DD09KP749	73	74	11	25	W1	R5
Kaolin	DD09KP749	74	75	0	25	W1	R5
Kaolin	DD09KP749	75	76	23	25	W1	R5
Kaolin	DD09KP749	76	77	18	25	W1	R5
Kaolin	DD09KP749	77	78	70	25	W1	R5
Kaolin	DD09KP749	78	79	10	25	W1	R5
Kaolin	DD09KP749	79	80	12	25	W1	R5
Kaolin	DD09KP749	80	81	0	25	W1	R5
Kaolin	DD09KP749	81	82	10	25	W1	R5
Kaolin	DD09KP749	82	83	22	25	W1	R5
Kaolin	DD09KP749	83	84	30	16	W1	R5
Kaolin	DD09KP749	84	85	10	25	W1	R5
Kaolin	DD09KP749	85	86	95	4	W1	R5
Kaolin	DD09KP749	86	87	100	4	W1	R5
Kaolin	DD09KP749	87	88	90	4	W1	R5
Kaolin	DD09KP749	88	89	80	25	W1	R5
Kaolin	DD09KP749	89	90	25	25	W1	R5
Kaolin	DD09KP749	90	91	10	15	W1	R5
Kaolin	DD09KP749	91	92	55	12	W1	R5
Kaolin	DD09KP749	92	93	50	6	W1	R5
Kaolin	DD09KP749	93	94	45	16	W1	R5
Kaolin	DD09KP749	94	95	25	15	W1	R5
Kaolin	DD09KP749	95	96	48	16	W1	R5
Kaolin	DD09KP749	96	97	40	14	W1	R5
Kaolin	DD09KP749	97	98	14	22	W1	R5
Kaolin	DD09KP749	98	99	90	7	W1	R5
Kaolin	DD09KP749	99	100	85	8	W1	R5
Kaolin	DD09KP749	100	101	50	18	W1	R5
Kaolin	DD09KP749	101	102	20	25	W1	R5
Kaolin	DD09KP749	102	103	30	25	W1	R5
Kaolin	DD09KP749	103	104	0	25	W1	R5
Kaolin	DD09KP749	104	105	10	25	W1	R5
Kaolin	DD09KP749	105	106	0	25	W1	R5
Kaolin	DD09KP749	106	107	25	25	W1	R5
Kaolin	DD09KP749	107	108	75	6	W1	R5
Kaolin	DD09KP749	108	109	55	12	W1	R5
Kaolin	DD09KP749	109	110	65	11	W1	R5
Kaolin	DD09KP749	110	111	65	10	W1	R5
Kaolin	DD09KP749	111	112	49	9	W1	R5
Kaolin	DD09KP749	112	113	30	16	W1	R5
Kaolin	DD09KP749	113	114	20	25	W1	R5
Kaolin	DD09KP749	114	115	35	15	W1	R5
Kaolin	DD09KP749	115	116	12	25	W1	R5
Kaolin	DD09KP749	116	117	23	18	W1	R5
Kaolin	DD09KP749	117	118	55	13	W1	R5
Kaolin	DD09KP749	118	119	60	11	W1	R5
Kaolin	DD09KP749	119	120	56	14	W1	R5
Kaolin	DD09KP749	120	121	21	25	W1	R5
Kaolin	DD09KP749	121	122	70	10	W1	R5
Kaolin	DD09KP749	122	123	56	12	W1	R5
Kaolin	DD09KP749	123	124	58	10	W1	R5
Kaolin	DD09KP749	124	125	68	16	W1	R5
Kaolin	DD09KP749	125	126	65	14	W1	R5

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Hillsborough	DD09KP750	0	1	0	25	W5	S5
Hillsborough	DD09KP750	1	2	10	25	W5	S5
Hillsborough	DD09KP750	2	3	15	25	W5	S5
Hillsborough	DD09KP750	3	4	28	20	W5	S5
Hillsborough	DD09KP750	4	5	0	25	W5	S5
Hillsborough	DD09KP750	5	6	0	25	W5	R1
Hillsborough	DD09KP750	6	7	0	25	W5	R1
Hillsborough	DD09KP750	7	8	17	25	W5	R1
Hillsborough	DD09KP750	8	9	13	25	W5	R1
Hillsborough	DD09KP750	9	10	68	8	W5	R1
Hillsborough	DD09KP750	10	11	50	15	W5	R1
Hillsborough	DD09KP750	11	12	24	10	W5	R1
Hillsborough	DD09KP750	12	13	45	10	W5	R1
Hillsborough	DD09KP750	13	14	16	25	W5	S5
Hillsborough	DD09KP750	14	15	0	25	W5	S5
Hillsborough	DD09KP750	15	16	0	25	W5	S5
Hillsborough	DD09KP750	16	17	0	25	W5	S5
Hillsborough	DD09KP750	17	18	10	25	W5	S5
Hillsborough	DD09KP750	18	19	0	25	W5	S5
Hillsborough	DD09KP750	19	20	0	25	W5	S5
Hillsborough	DD09KP750	20	21	0	25	W5	S5
Hillsborough	DD09KP750	21	22	14	25	W5	S5
Hillsborough	DD09KP750	22	23	0	25	W5	S5
Hillsborough	DD09KP750	23	24	0	25	W5	S5
Hillsborough	DD09KP750	24	25	0	25	W5	S5
Hillsborough	DD09KP750	25	26	0	25	W5	S5
Hillsborough	DD09KP750	26	27	12	25	W5	S5
Hillsborough	DD09KP750	27	28	0	25	W5	S5
Hillsborough	DD09KP750	28	29	0	25	W5	S5
Hillsborough	DD09KP750	29	30	18	25	W5	S5
Hillsborough	DD09KP750	30	31	0	12	W5	S5
Hillsborough	DD09KP750	31	32	30	25	W5	S5
Hillsborough	DD09KP750	32	33	0	25	W5	S5
Hillsborough	DD09KP750	33	34	0	25	W5	S5
Hillsborough	DD09KP750	34	35	0	25	W5	S5
Hillsborough	DD09KP750	35	36	40	25	W5	S5
Hillsborough	DD09KP750	36	37	16	25	W5	S5
Hillsborough	DD09KP750	37	38	0	25	W5	S5
Hillsborough	DD09KP750	38	39	0	25	W5	S5
Hillsborough	DD09KP750	39	40	0	25	W5	S5
Hillsborough	DD09KP750	40	41	0	25	W5	S5
Hillsborough	DD09KP750	41	42	10	25	W5	S5
Hillsborough	DD09KP750	42	43	0	25	W5	S5
Hillsborough	DD09KP750	43	44	40	25	W4	R1
Hillsborough	DD09KP750	44	45	10	25	W4	R1
Hillsborough	DD09KP750	45	46	20	25	W4	R1
Hillsborough	DD09KP750	46	47	25	25	W4	R1
Hillsborough	DD09KP750	47	48	40	25	W4	R1
Hillsborough	DD09KP750	48	49	0	25	W4	R1
Hillsborough	DD09KP750	49	50	34	25	W4	R1
Hillsborough	DD09KP750	50	51	0	25	W4	R1
Hillsborough	DD09KP750	51	52	60	25	W3	R2
Hillsborough	DD09KP750	52	53	25	25	W3	R2
Hillsborough	DD09KP750	53	54	10	25	W3	R2
Hillsborough	DD09KP750	54	55	15	25	W3	R3
Hillsborough	DD09KP750	55	56	95	5	W3	R3
Hillsborough	DD09KP750	56	57	10	25	W2	R5
Hillsborough	DD09KP750	57	58	24	15	W2	R5
Hillsborough	DD09KP750	58	59	10	25	W2	R5
Hillsborough	DD09KP750	59	60	25	20	W2	R5
Hillsborough	DD09KP750	60	61	17	11	W2	R5
Hillsborough	DD09KP750	61	62	35	20	W1	R5
Hillsborough	DD09KP750	62	63	15	20	W1	R5
Hillsborough	DD09KP750	63	64	40	10	W1	R5
Hillsborough	DD09KP750	64	65	40	12	W1	R5
Hillsborough	DD09KP750	65	66	40	18	W1	R5
Hillsborough	DD09KP750	66	67	38	15	W1	R5
Hillsborough	DD09KP750	67	68	60	8	W1	R5
Hillsborough	DD09KP750	68	69	15	16	W1	R5
Hillsborough	DD09KP750	69	70	17	25	W1	R5
Hillsborough	DD09KP750	70	71	54	10	W1	R5
Hillsborough	DD09KP750	71	72	25	13	W1	R5

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Hillsborough	DD09KP751	0	1	56	8	W5	R1
Hillsborough	DD09KP751	1	2	95	7	W5	R1
Hillsborough	DD09KP751	2	3	10	25	W5	S5
Hillsborough	DD09KP751	3	4	20	25	W5	S5
Hillsborough	DD09KP751	4	5	40	20	W5	S5
Hillsborough	DD09KP751	5	6	10	25	W5	S5
Hillsborough	DD09KP751	6	7	50	15	W5	S5
Hillsborough	DD09KP751	7	8	0	25	W5	S5
Hillsborough	DD09KP751	8	9	0	25	W5	S5
Hillsborough	DD09KP751	9	10	0	25	W5	S5
Hillsborough	DD09KP751	10	11	0	25	W5	S5
Hillsborough	DD09KP751	11	12	0	25	W5	S5
Hillsborough	DD09KP751	12	13	30	25	W5	S5
Hillsborough	DD09KP751	13	14	0	25	W5	S5
Hillsborough	DD09KP751	14	15	0	25	W5	S5
Hillsborough	DD09KP751	15	16	0	25	W5	S5
Hillsborough	DD09KP751	16	17	0	25	W5	S5
Hillsborough	DD09KP751	17	18	0	25	W5	S5
Hillsborough	DD09KP751	18	19	0	25	W5	S5
Hillsborough	DD09KP751	19	20	0	25	W5	S5
Hillsborough	DD09KP751	20	21	10	25	W5	S5
Hillsborough	DD09KP751	21	22	0	25	W5	S5
Hillsborough	DD09KP751	22	23	20	25	W5	S5
Hillsborough	DD09KP751	23	24	0	25	W5	S5
Hillsborough	DD09KP751	24	25	0	25	W5	S5
Hillsborough	DD09KP751	25	26	0	25	W5	S5
Hillsborough	DD09KP751	26	27	0	25	W5	S5
Hillsborough	DD09KP751	27	28	30	25	W5	S5
Hillsborough	DD09KP751	28	29	0	25	W5	S5
Hillsborough	DD09KP751	29	30	13	25	W5	S5
Hillsborough	DD09KP751	30	31	0	25	W5	S5
Hillsborough	DD09KP751	31	32	10	25	W5	S5
Hillsborough	DD09KP751	32	33	50	25	W5	S5
Hillsborough	DD09KP751	33	34	0	25	W5	S5
Hillsborough	DD09KP751	34	35	0	25	W5	S5
Hillsborough	DD09KP751	35	36	0	25	W5	S5
Hillsborough	DD09KP751	36	37	0	25	W5	S5
Hillsborough	DD09KP751	37	38	14	25	W4	R1
Hillsborough	DD09KP751	38	39	0	25	W4	R1
Hillsborough	DD09KP751	39	40	16	25	W4	R1
Hillsborough	DD09KP751	40	41	0	25	W4	R1
Hillsborough	DD09KP751	41	42	0	25	W4	R1
Hillsborough	DD09KP751	42	43	55	25	W4	R1
Hillsborough	DD09KP751	43	44	35	12	W4	R1
Hillsborough	DD09KP751	44	45	20	25	W4	R1
Hillsborough	DD09KP751	45	46	40	25	W4	R1
Hillsborough	DD09KP751	46	47	35	10	W3	R3
Hillsborough	DD09KP751	47	48	45	25	W3	R3
Hillsborough	DD09KP751	48	49	0	25	W3	R3
Hillsborough	DD09KP751	49	50	10	25	W2	R5
Hillsborough	DD09KP751	50	51	55	10	W2	R5
Hillsborough	DD09KP751	51	52	40	20	W2	R5
Hillsborough	DD09KP751	52	53	33	20	W2	R5
Hillsborough	DD09KP751	53	54	30	25	W2	R5
Hillsborough	DD09KP751	54	55	70	15	W2	R5

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Kaolin	BD015	80	81	0	15	W1	R5
Kaolin	BD015	81	82	49	8	W1	R5
Kaolin	BD015	82	83	0	25	W1	R5
Kaolin	BD015	83	84	13	25	W1	R5
Kaolin	BD015	84	85	0	25	W1	R5
Kaolin	BD015	85	86	27	25	W1	R5
Kaolin	BD015	86	87	15	25	W1	R5
Kaolin	BD015	87	88	12	20	W1	R5
Kaolin	BD015	88	89	17	12	W1	R5
Kaolin	BD015	89	90	14	13	W1	R5
Kaolin	BD015	90	91	21	14	W1	R5
Kaolin	BD015	91	92	43	11	W1	R5
Kaolin	BD015	92	93	25	13	W1	R5
Kaolin	BD015	93	94	54	15	W1	R5
Kaolin	BD015	94	95	43	10	W1	R5
Kaolin	BD015	95	96	50	10	W1	R5
Kaolin	BD015	96	97	60	10	W1	R5
Kaolin	BD015	97	98	42	7	W1	R5
Kaolin	BD015	98	99	8	12	W1	R5
Kaolin	BD015	99	100	26	15	W1	R5
Kaolin	BD015	100	101	71	9	W1	R5
Kaolin	BD015	101	102	52	17	W1	R5
Kaolin	BD015	102	103	30	15	W1	R5
Kaolin	BD015	103	104	29	17	W1	R5
Kaolin	BD015	104	105	0	20	W1	R5
Kaolin	BD015	105	106	0	20	W1	R5
Kaolin	BD015	106	107	38	12	W1	R5
Kaolin	BD015	107	108	16	16	W1	R5
Kaolin	BD015	108	109	48	8	W1	R5
Kaolin	BD015	109	110	63	8	W1	R5
Kaolin	BD015	110	111	25	20	W1	R5
Kaolin	BD015	111	112	0	25	W1	R5
Kaolin	BD015	112	113	0	25	W1	R5
Kaolin	BD015	113	114	30	16	W1	R5
Kaolin	BD015	114	115	13	17	W1	R5
Kaolin	BD015	115	116	42	15	W1	R5
Kaolin	BD015	116	117	22	20	W1	R5
Kaolin	BD015	117	118	43	14	W1	R5
Kaolin	BD015	118	119	64	11	W1	R5
Kaolin	BD015	119	120	48	7	W1	R5
Kaolin	BD015	120	121	43	9	W1	R5
Kaolin	BD015	121	122	35	12	W1	R5
Kaolin	BD015	122	123	11	13	W1	R5
Kaolin	BD015	123	124	23	10	W1	R5
Kaolin	BD015	124	125	11	16	W1	R5
Kaolin	BD015	125	126	22	20	W1	R5
Kaolin	BD015	126	127	35	23	W1	R5
Kaolin	BD015	127	128	37	17	W1	R5
Kaolin	BD015	128	129	67	13	W1	R5
Kaolin	BD015	129	130	21	5	W1	R5
Kaolin	BD015	130	131	22	15	W1	R5
Kaolin	BD015	131	132	13	25	W1	R5
Kaolin	BD015	132	133	33	18	W1	R5

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Kaolin	**BD016**	**70**	**71**	**86**	**5**	**W1**	**R5**
Kaolin	BD016	71	72	65	8	W1	R5
Kaolin	BD016	72	73	72	7	W1	R5
Kaolin	BD016	73	74	83	6	W1	R5
Kaolin	BD016	74	75	50	11	W1	R5
Kaolin	BD016	75	76	80	10	W1	R5
Kaolin	BD016	76	77	62	11	W1	R5
Kaolin	BD016	77	78	52	9	W1	R5
Kaolin	BD016	78	79	66	9	W1	R5
Kaolin	BD016	79	80	42	12	W1	R5
Kaolin	BD016	80	81	57	8	W1	R5
Kaolin	BD016	81	82	54	11	W1	R5
Kaolin	BD016	82	83	19	20	W1	R5
Kaolin	BD016	83	84	100	4	W1	R5
Kaolin	BD016	84	85	100	2	W1	R5
Kaolin	BD016	85	86	100	2	W1	R5
Kaolin	BD016	86	87	100	6	W1	R5
Kaolin	BD016	87	88	100	5	W1	R5
Kaolin	BD016	88	89	100	4	W1	R5
Kaolin	BD016	89	90	70	10	W1	R5
Kaolin	BD016	90	91	100	5	W1	R5
Kaolin	BD016	91	92	93	5	W1	R5
Kaolin	BD016	92	93	90	6	W1	R5
Kaolin	BD016	93	94	100	3	W1	R5
Kaolin	BD016	94	95	100	4	W1	R5
Kaolin	BD016	95	96	100	6	W1	R5
Kaolin	BD016	96	97	87	4	W1	R5
Kaolin	BD016	97	98	89	3	W1	R5
Kaolin	BD016	98	99	90	4	W1	R5
Kaolin	BD016	99	100	72	7	W1	R5
Kaolin	BD016	100	101	72	5	W1	R5
Kaolin	BD016	101	102	89	6	W1	R5
Kaolin	BD016	102	103	100	4	W1	R5
Kaolin	BD016	103	104	90	6	W1	R5
Kaolin	BD016	104	105	37	10	W1	R5
Kaolin	BD016	105	106	53	11	W1	R5
Kaolin	BD016	106	107	62	9	W1	R5
Kaolin	BD016	107	108	57	9	W1	R5
Kaolin	BD016	108	109	100	5	W1	R5
Kaolin	BD016	109	110	97	5	W1	R5
Kaolin	BD016	110	111	67	9	W1	R5
Kaolin	BD016	111	112	87	5	W1	R5
Kaolin	BD016	112	113	90	4	W1	R5
Kaolin	BD016	113	114	70	8	W1	R5
Kaolin	BD016	114	115	81	8	W1	R5
Kaolin	BD016	115	116	68	7	W1	R5
Kaolin	BD016	116	117	100	7	W1	R5
Kaolin	BD016	117	118	100	5	W1	R5
Kaolin	BD016	118	119	61	8	W1	R5
Kaolin	BD016	119	120	81	4	W1	R5

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Kaolin	**BD024**	**80**	**81**	0	25	**W1**	**R5**
Kaolin	BD024	81	82	28	20	W1	R5
Kaolin	BD024	82	83	20	12	W1	R5
Kaolin	BD024	83	84	29	16	W1	R5
Kaolin	BD024	84	85	35	12	W1	R5
Kaolin	BD024	85	86	35	10	W1	R5
Kaolin	BD024	86	87	0	25	W1	R5
Kaolin	BD024	87	88	12	25	W1	R5
Kaolin	BD024	88	89	13	25	W1	R5
Kaolin	BD024	89	90	0	25	W1	R5
Kaolin	BD024	90	91	0	25	W1	R5
Kaolin	BD024	91	92	0	25	W1	R5
Kaolin	BD024	92	93	25	17	W1	R5
Kaolin	BD024	93	94	13	25	W1	R5
Kaolin	BD024	94	95	0	25	W1	R5
Kaolin	BD024	95	96	12	17	W1	R5
Kaolin	BD024	96	97	0	17	W1	R5
Kaolin	BD024	97	98	16	20	W1	R5
Kaolin	BD024	98	99	61	8	W1	R5
Kaolin	BD024	99	100	0	25	W1	R5
Kaolin	BD024	100	101	0	25	W1	R5
Kaolin	BD024	101	102	0	25	W1	R5
Kaolin	BD024	102	103	0	25	W1	R5
Kaolin	BD024	103	104	0	25	W1	R5
Kaolin	BD024	104	105	31	25	W1	R5
Kaolin	BD024	105	106	0	25	W1	R5
Kaolin	BD024	106	107	56	10	W1	R5
Kaolin	BD024	107	108	35	14	W1	R5
Kaolin	BD024	108	109	50	9	W1	R5
Kaolin	BD024	109	110	11	15	W1	R5
Kaolin	BD024	110	111	100	6	W1	R5
Kaolin	BD024	111	112	72	7	W1	R5
Kaolin	BD024	112	113	65	11	W1	R5
Kaolin	BD024	113	114	57	12	W1	R5
Kaolin	BD024	114	115	56	8	W1	R5
Kaolin	BD024	115	116	60	8	W1	R5
Kaolin	BD024	116	117	46	7	W1	R5
Kaolin	BD024	117	118	70	6	W1	R5
Kaolin	BD024	118	119	38	11	W1	R5
Kaolin	BD024	119	120	65	7	W1	R5
Kaolin	BD024	120	121	48	11	W1	R5
Kaolin	BD024	121	122	65	5	W1	R5
Kaolin	BD024	122	123	56	9	W1	R5
Kaolin	BD024	123	124	64	7	W1	R5
Kaolin	BD024	124	125	58	8	W1	R5
Kaolin	BD024	125	126	23	11	W1	R5
Kaolin	BD024	126	127	45	9	W1	R5
Kaolin	BD024	127	128	34	10	W1	R5
Kaolin	BD024	128	129	45	11	W1	R5
Kaolin	BD024	129	130	66	9	W1	R5

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Kaolin	BD025	80	81	11	25		R5
Kaolin	BD025	81	82	0	25	W1	R5
Kaolin	BD025	82	83	36	15	W1	R5
Kaolin	BD025	83	84	36	25	W1	R5
Kaolin	BD025	84	85	5	25	W1	R5
Kaolin	BD025	85	86	0	25	W1	R5
Kaolin	BD025	86	87	26	19	W1	R5
Kaolin	BD025	87	88	25	14	W1	R5
Kaolin	BD025	88	89	66	13	W1	R5
Kaolin	BD025	89	90	74	6	W1	R5
Kaolin	BD025	90	91	78	10	W1	R5
Kaolin	BD025	91	92	72	9	W1	R5
Kaolin	BD025	92	93	41	15	W1	R5
Kaolin	BD025	93	94	0	15	W1	R5
Kaolin	BD025	94	95	30	14	W1	R5
Kaolin	BD025	95	96	63	6	W1	R5
Kaolin	BD025	96	97	52	14	W1	R5
Kaolin	BD025	97	98	40	10	W1	R5
Kaolin	BD025	98	99	77	8	W1	R5
Kaolin	BD025	99	100	31	13	W1	R5
Kaolin	BD025	100	101	73	10	W1	R5
Kaolin	BD025	101	102	43	7	W1	R5
Kaolin	BD025	102	103	25	16	W1	R5
Kaolin	BD025	103	104	24	20	W1	R5
Kaolin	BD025	104	105	26	25	W1	R5
Kaolin	BD025	105	106	12	25	W1	R5
Kaolin	BD025	106	107	0	25	W1	R5
Kaolin	BD025	107	108	9	25	W1	R5
Kaolin	BD025	108	109	14	20	W1	R5
Kaolin	BD025	109	110	14	17	W1	R5
Kaolin	BD025	110	111	0	25	W1	R5
Kaolin	BD025	111	112	36	16	W1	R5
Kaolin	BD025	112	113	27	17	W1	R5
Kaolin	BD025	113	114	30	8	W1	R5
Kaolin	BD025	114	115	16	16	W1	R5
Kaolin	BD025	115	116	50	17	W1	R5
Kaolin	BD025	116	117	50	13	W1	R5
Kaolin	BD025	117	118	72	8	W1	R5
Kaolin	BD025	118	119	21	12	W1	R5
Kaolin	BD025	119	120	27	7	W1	R5
Kaolin	BD025	120	121	32	9	W1	R5
Kaolin	BD025	121	122	42	10	W1	R5
Kaolin	BD025	122	123	53	14	W1	R5
Kaolin	BD025	123	124	52	14	W1	R5
Kaolin	BD025	124	125	28	12	W1	R5
Kaolin	BD025	125	126	55	8	W1	R5
Kaolin	BD025	126	127	31	11	W1	R5
Kaolin	BD025	127	128	73	7	W1	R5
Kaolin	BD025	128	129	79	8	W1	R5
Kaolin	BD025	129	130	47	10	W1	R5

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Kaolin	**BD026**	**60**	**61**	**34**	**18**	**W1**	**R5**
Kaolin	BD026	61	62	28	25	W1	R5
Kaolin	BD026	62	63	0	25	W1	R5
Kaolin	BD026	63	64	11	25	W1	R5
Kaolin	BD026	64	65	0	25	W1	R5
Kaolin	BD026	65	66	0	20	W1	R5
Kaolin	BD026	66	67	63	9	W1	R5
Kaolin	BD026	67	68	70	9	W1	R5
Kaolin	BD026	68	69	45	9	W1	R5
Kaolin	BD026	69	70	25	11	W1	R5
Kaolin	BD026	70	71	47	9	W1	R5
Kaolin	BD026	71	72	76	7	W1	R5
Kaolin	BD026	72	73	40	10	W1	R5
Kaolin	BD026	73	74	28	10	W1	R5
Kaolin	BD026	74	75	73	8	W1	R5
Kaolin	BD026	75	76	88	6	W1	R5
Kaolin	BD026	76	77	69	6	W1	R5
Kaolin	BD026	77	78	78	4	W1	R5
Kaolin	BD026	78	79	95	6	W1	R5
Kaolin	BD026	79	80	68	8	W1	R5
Kaolin	BD026	80	81	69	10	W1	R5
Kaolin	BD026	81	82	100	4	W1	R5
Kaolin	BD026	82	83	100	5	W1	R5
Kaolin	BD026	83	84	100	2	W1	R5
Kaolin	BD026	84	85	92	5	W1	R5
Kaolin	BD026	85	86	100	4	W1	R5
Kaolin	BD026	86	87	93	5	W1	R5
Kaolin	BD026	87	88	70	8	W1	R5
Kaolin	BD026	88	89	64	7	W1	R5
Kaolin	BD026	89	90	60	8	W1	R5
Kaolin	BD026	90	91	100	2	W1	R5
Kaolin	BD026	91	92	67	7	W1	R5
Kaolin	BD026	92	93	87	5	W1	R5
Kaolin	BD026	93	94	81	8	W1	R5
Kaolin	BD026	94	95	72	6	W1	R5
Kaolin	BD026	95	96	81	6	W1	R5
Kaolin	BD026	96	97	100	5	W1	R5
Kaolin	BD026	97	98	93	6	W1	R5
Kaolin	BD026	98	99	38	12	W1	R5
Kaolin	BD026	99	100	93	5	W1	R5
Kaolin	BD026	100	101	82	7	W1	R5
Kaolin	BD026	101	102	72	9	W1	R5
Kaolin	BD026	102	103	55	12	W1	R5
Kaolin	BD026	103	104	69	9	W1	R5
Kaolin	BD026	104	105	33	9	W1	R5
Kaolin	BD026	105	106	92	7	W1	R5
Kaolin	BD026	106	107	75	9	W1	R5
Kaolin	BD026	107	108	70	7	W1	R5
Kaolin	BD026	108	109	92	6	W1	R5
Kaolin	BD026	109	110	74	7	W1	R5
Kaolin	BD026	110	111	71	7	W1	R5
Kaolin	BD026	111	112	100	5	W1	R5
Kaolin	BD026	112	113	100	4	W1	R5
Kaolin	BD026	113	114	100	4	W1	R5
Kaolin	BD026	114	115	100	3	W1	R5
Kaolin	BD026	115	116	93	6	W1	R5
Kaolin	BD026	116	117	92	4	W1	R5
Kaolin	BD026	117	118	50	7	W1	R5
Kaolin	BD026	118	119	70	9	W1	R5
Kaolin	BD026	119	120	77	8	W1	R5

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Kaolin	**BD030**	**60**	**61**	**41**	**14**	**W1**	**R5**
Kaolin	BD030	61	62	15	25	W1	R5
Kaolin	BD030	62	63	30	25	W1	R5
Kaolin	BD030	63	64	0	25	W1	R5
Kaolin	BD030	64	65	0	25	W1	R5
Kaolin	BD030	65	66	10	25	W1	R5
Kaolin	BD030	66	67	11	20	W1	R5
Kaolin	BD030	67	68	13	20	W1	R5
Kaolin	BD030	68	69	0	25	W1	R5
Kaolin	BD030	69	70	0	15	W1	R5
Kaolin	BD030	70	71	0	15	W1	R5
Kaolin	BD030	71	72	0	15	W1	R5
Kaolin	BD030	72	73	14	20	W1	R5
Kaolin	BD030	73	74	0	23	W1	R5
Kaolin	BD030	74	75	30	20	W1	R5
Kaolin	BD030	75	76	26	20	W1	R5
Kaolin	BD030	76	77	54	13	W1	R5
Kaolin	BD030	77	78	13	12	W1	R5
Kaolin	BD030	78	79	33	17	W1	R5
Kaolin	BD030	79	80	17	25	W1	R5
Kaolin	BD030	80	81	11	18	W1	R5
Kaolin	BD030	81	82	54	12	W1	R5
Kaolin	BD030	82	83	22	17	W1	R5
Kaolin	BD030	83	84	39	12	W1	R5
Kaolin	BD030	84	85	13	25	W1	R5
Kaolin	BD030	85	86	0	25	W1	R5
Kaolin	BD030	86	87	0	25	W1	R5
Kaolin	BD030	87	88	0	25	W1	R5
Kaolin	BD030	88	89	0	25	W1	R5
Kaolin	BD030	89	90	12	25	W1	R5
Kaolin	BD030	90	91	11	25	W1	R5
Kaolin	BD030	91	92	0	25	W1	R5
Kaolin	BD030	92	93	11	25	W1	R5
Kaolin	BD030	93	94	24	25	W1	R5
Kaolin	BD030	94	95	0	25	W1	R5
Kaolin	BD030	95	96	0	25	W1	R5
Kaolin	BD030	96	97	0	20	W1	R5
Kaolin	BD030	97	98	0	20	W1	R5
Kaolin	BD030	98	99	23	5	W1	R5
Kaolin	BD030	99	100	11	25	W1	R5
Kaolin	BD030	100	101	18	25	W1	R5
Kaolin	BD030	101	102	23	25	W1	R5
Kaolin	BD030	102	103	65	7	W1	R5
Kaolin	BD030	103	104	38	9	W1	R5
Kaolin	BD030	104	105	37	12	W1	R5
Kaolin	BD030	105	106	96	5	W1	R5
Kaolin	BD030	106	107	97	6	W1	R5
Kaolin	BD030	107	108	27	13	W1	R5
Kaolin	BD030	108	109	88	6	W1	R5
Kaolin	BD030	109	110	69	10	W1	R5
Kaolin	BD030	110	111	50	9	W1	R5
Kaolin	BD030	111	112	90	8	W1	R5
Kaolin	BD030	112	113	41	13	W1	R5
Kaolin	BD030	113	114	66	8	W1	R5
Kaolin	BD030	114	115	36	14	W1	R5
Kaolin	BD030	115	116	51	10	W1	R5
Kaolin	BD030	116	117	58	11	W1	R5
Kaolin	BD030	117	118	100	4	W1	R5
Kaolin	BD030	118	119	100	4	W1	R5
Kaolin	BD030	119	120	62	6	W1	R5

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Kaolin	BD034	83	84	51	11	W1	R5
Kaolin	BD034	84	85	15	20	W1	R5
Kaolin	BD034	85	86	0	21	W1	R5
Kaolin	BD034	86	87	12	15	W1	R5
Kaolin	BD034	87	88	0	18	W1	R5
Kaolin	BD034	88	89	11	16	W1	R5
Kaolin	BD034	89	90	0	14	W1	R5
Kaolin	BD034	90	91	23	12	W1	R5
Kaolin	BD034	91	92	36	12	W1	R5
Kaolin	BD034	92	93	45	11	W1	R5
Kaolin	BD034	93	94	59	7	W1	R5
Kaolin	BD034	94	95	0	9	W1	R5
Kaolin	BD034	95	96	19	15	W1	R5
Kaolin	BD034	96	97	41	16	W1	R5
Kaolin	BD034	97	98	63	8	W1	R5
Kaolin	BD034	98	99	12	12	W1	R5
Kaolin	BD034	99	100	20	12	W1	R5
Kaolin	BD034	100	101	85	8	W1	R5
Kaolin	BD034	101	102	44	12	W1	R5
Kaolin	BD034	102	103	93	5	W1	R5
Kaolin	BD034	103	104	84	10	W1	R5
Kaolin	BD034	104	105	58	11	W1	R5
Kaolin	BD034	105	106	50	12	W1	R5
Kaolin	BD034	106	107	24	20	W1	R5
Kaolin	BD034	107	108	24	25	W1	R5
Kaolin	BD034	108	109	90	9	W1	R5
Kaolin	BD034	109	110	70	7	W1	R5
Kaolin	BD034	110	111	36	13	W1	R5
Kaolin	BD034	111	112	40	16	W1	R5
Kaolin	BD034	112	113	80	9	W1	R5
Kaolin	BD034	113	114	47	10	W1	R5
Kaolin	BD034	114	115	18	12	W1	R5
Kaolin	BD034	115	116	55	13	W1	R5
Kaolin	BD034	116	117	37	10	W1	R5
Kaolin	BD034	117	118	62	10	W1	R5
Kaolin	BD034	118	119	75	12	W1	R5
Kaolin	BD034	119	120	50	15	W1	R5
Kaolin	BD034	120	121	54	13	W1	R5
Kaolin	BD034	121	122	42	11	W1	R5
Kaolin	BD034	122	123	60	8	W1	R5
Kaolin	BD034	123	124	52	9	W1	R5
Kaolin	BD034	124	125	37	15	W1	R5
Kaolin	BD034	125	126	96	4	W1	R5
Kaolin	BD034	126	127	51	11	W1	R5
Kaolin	BD034	127	128	20	13	W1	R5
Kaolin	BD034	128	129	63	11	W1	R5
Kaolin	BD034	129	130	19	15	W1	R5
Kaolin	BD034	130	131	11	10	W1	R5
Kaolin	BD034	131	132	25	16	W1	R5

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Kaolin	BD035	90	91	30	25	W1	R5
Kaolin	BD035	91	92	20	25	W1	R5
Kaolin	BD035	92	93	32	8	W1	R5
Kaolin	BD035	93	94	43	15	W1	R5
Kaolin	BD035	94	95	99	6	W1	R5
Kaolin	BD035	95	96	0	25	W1	R5
Kaolin	BD035	96	97	40	14	W1	R5
Kaolin	BD035	97	98	24	25	W1	R5
Kaolin	BD035	98	99	70	9	W1	R5
Kaolin	BD035	99	100	95	5	W1	R5
Kaolin	BD035	100	101	43	12	W1	R5
Kaolin	BD035	101	102	58	14	W1	R5
Kaolin	BD035	102	103	100	16	W1	R5
Kaolin	BD035	103	104	63	12	W1	R5
Kaolin	BD035	104	105	58	10	W1	R5
Kaolin	BD035	105	106	48	15	W1	R5
Kaolin	BD035	106	107	44	9	W1	R5
Kaolin	BD035	107	108	23	18	W1	R5
Kaolin	BD035	108	109	38	14	W1	R5
Kaolin	BD035	109	110	22	21	W1	R5
Kaolin	BD035	110	111	70	13	W1	R5
Kaolin	BD035	111	112	30	15	W1	R5
Kaolin	BD035	112	113	10	15	W1	R5
Kaolin	BD035	113	114	0	20	W1	R5
Kaolin	BD035	114	115	40	17	W1	R5
Kaolin	BD035	115	116	70	8	W1	R5
Kaolin	BD035	116	117	27	12	W1	R5
Kaolin	BD035	117	118	80	7	W1	R5
Kaolin	BD035	118	119	50	15	W1	R5
Kaolin	BD035	119	120	56	9	W1	R5
Kaolin	BD035	120	121	20	18	W1	R5
Kaolin	BD035	121	122	20	18	W1	R5
Kaolin	BD035	122	123	60	13	W1	R5
Kaolin	BD035	123	124	20	25	W1	R5
Kaolin	BD035	124	125	0	25	W1	R5
Kaolin	BD035	125	126	0	25	W1	R5
Kaolin	BD035	126	127	72	11	W1	R5
Kaolin	BD035	127	128	80	7	W1	R5
Kaolin	BD035	128	129	30	14	W1	R5
Kaolin	BD035	129	130	85	5	W1	R5
Kaolin	BD035	130	131	65	25	W1	R5
Kaolin	BD035	131	132	0	25	W1	R5
Kaolin	BD035	132	133	65	15	W1	R5
Kaolin	BD035	133	134	22	15	W1	R5
Kaolin	BD035	134	135	17	20	W1	R5
Kaolin	BD035	135	136	30	20	W1	R5
Kaolin	BD035	136	137	50	11	W1	R5
Kaolin	BD035	137	138	11	25	W1	R5
Kaolin	BD035	138	139	10	25	W1	R5
Kaolin	BD035	139	140	55	13	W1	R5

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Harbour View	DD03KP005	210	211	100	Not Collected	W1	Not Collected
Harbour View	DD03KP005	211	212	100	Not Collected	W1	Not Collected
Harbour View	DD03KP005	212	213	100	Not Collected	W1	Not Collected
Harbour View	DD03KP005	213	214	100	Not Collected	W1	Not Collected
Harbour View	DD03KP005	214	215	100	Not Collected	W1	Not Collected
Harbour View	DD03KP005	215	216	100	Not Collected	W1	Not Collected
Harbour View	DD03KP005	216	217	100	Not Collected	W1	Not Collected
Harbour View	DD03KP005	217	218	100	Not Collected	W1	Not Collected
Harbour View	DD03KP005	218	219	100	Not Collected	W1	Not Collected
Harbour View	DD03KP005	219	220	100	Not Collected	W1	Not Collected
Harbour View	DD03KP005	220	221	100	Not Collected	W1	Not Collected
Harbour View	DD03KP005	221	222	100	Not Collected	W1	Not Collected
Harbour View	DD03KP005	222	223	100	Not Collected	W1	Not Collected
Harbour View	DD03KP005	223	224	89	Not Collected	W1	Not Collected
Harbour View	DD03KP005	224	225	89	Not Collected	W1	Not Collected
Harbour View	DD03KP005	225	226	90	Not Collected	W1	Not Collected
Harbour View	DD03KP005	226	227	90	Not Collected	W1	Not Collected
Harbour View	DD03KP005	227	228	90	Not Collected	W1	Not Collected
Harbour View	DD03KP005	228	229	87	Not Collected	W1	Not Collected
Harbour View	DD03KP005	229	230	87	Not Collected	W1	Not Collected
Harbour View	DD03KP005	230	231	87	Not Collected	W1	Not Collected
Harbour View	DD03KP005	231	232	87	Not Collected	W1	Not Collected
Harbour View	DD03KP005	232	233	87	Not Collected	W1	Not Collected
Harbour View	DD03KP005	233	234	87	Not Collected	W1	Not Collected
Harbour View	DD03KP005	234	235	87	Not Collected	W1	Not Collected
Harbour View	DD03KP005	235	236	87	Not Collected	W1	Not Collected
Harbour View	DD03KP005	260	261	90	Not Collected	W1	Not Collected
Harbour View	DD03KP005	261	262	90	Not Collected	W1	Not Collected
Harbour View	DD03KP005	262	263	90	Not Collected	W1	Not Collected
Harbour View	DD03KP005	263	264	90	Not Collected	W1	Not Collected
Harbour View	DD03KP005	264	265	90	Not Collected	W1	Not Collected
Harbour View	DD03KP005	265	266	90	Not Collected	W1	Not Collected
Harbour View	DD03KP005	266	267	90	Not Collected	W1	Not Collected
Harbour View	DD03KP005	267	268	90	Not Collected	W1	Not Collected
Harbour View	DD03KP005	268	269	90	Not Collected	W1	Not Collected
Harbour View	DD03KP005	269	270	90	Not Collected	W1	Not Collected
Harbour View	DD03KP005	270	271	90	Not Collected	W1	Not Collected
Harbour View	DD03KP005	271	272	90	Not Collected	W1	Not Collected
Harbour View	DD03KP005	272	273	90	Not Collected	W1	Not Collected
Harbour View	DD03KP005	273	274	90	Not Collected	W1	Not Collected
Harbour View	DD03KP005	274	275	90	Not Collected	W1	Not Collected
Harbour View	DD03KP005	275	276	90	Not Collected	W1	Not Collected
Harbour View	DD03KP005	276	277	90	Not Collected	W1	Not Collected
Harbour View	DD03KP005	277	278	90	Not Collected	W1	Not Collected
Harbour View	DD03KP005	278	279	75	Not Collected	W1	Not Collected
Harbour View	DD03KP005	279	280	75	Not Collected	W1	Not Collected

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Harbour View	DD03KP029	175	176	66	Not Collected	W1	Not Collected
Harbour View	DD03KP029	176	177	16	Not Collected	W1	Not Collected
Harbour View	DD03KP029	177	178	16	Not Collected	W1	Not Collected
Harbour View	DD03KP029	178	179	16	Not Collected	W1	Not Collected
Harbour View	DD03KP029	179	180	20	Not Collected	W1	Not Collected
Harbour View	DD03KP029	180	181	20	Not Collected	W1	Not Collected
Harbour View	DD03KP029	181	182	20	Not Collected	W1	Not Collected
Harbour View	DD03KP029	182	183	20	Not Collected	W1	Not Collected
Harbour View	DD03KP029	183	184	20	Not Collected	W1	Not Collected
Harbour View	DD03KP029	184	185	20	Not Collected	W1	Not Collected
Harbour View	DD03KP029	185	186	43	Not Collected	W1	Not Collected
Harbour View	DD03KP029	186	187	43	Not Collected	W1	Not Collected
Harbour View	DD03KP029	187	188	95	Not Collected	W1	Not Collected
Harbour View	DD03KP029	188	189	95	Not Collected	W1	Not Collected
Harbour View	DD03KP029	189	190	100	Not Collected	W1	Not Collected
Harbour View	DD03KP029	190	191	71	Not Collected	W1	Not Collected
Harbour View	DD03KP029	191	192	75	Not Collected	W1	Not Collected
Harbour View	DD03KP029	192	193	75	Not Collected	W1	Not Collected
Harbour View	DD03KP029	193	194	75	Not Collected	W1	Not Collected
Harbour View	DD03KP029	194	195	35	Not Collected	W1	Not Collected
Harbour View	DD03KP029	195	196	35	Not Collected	W1	Not Collected
Harbour View	DD03KP029	196	197	35	Not Collected	W1	Not Collected
Harbour View	DD03KP029	197	198	35	Not Collected	W1	Not Collected
Harbour View	DD03KP029	198	199	72	Not Collected	W1	Not Collected
Harbour View	DD03KP029	199	200	72	Not Collected	W1	Not Collected
Harbour View	DD03KP029	200	201	72	Not Collected	W1	Not Collected
Harbour View	DD03KP029	201	202	77	Not Collected	W1	Not Collected
Harbour View	DD03KP029	215	216	73	Not Collected	W1	Not Collected
Harbour View	DD03KP029	216	217	65	Not Collected	W1	Not Collected
Harbour View	DD03KP029	217	218	65	Not Collected	W1	Not Collected
Harbour View	DD03KP029	218	219	65	Not Collected	W1	Not Collected
Harbour View	DD03KP029	219	220	65	Not Collected	W1	Not Collected
Harbour View	DD03KP029	220	221	60	Not Collected	W1	Not Collected
Harbour View	DD03KP029	221	222	60	Not Collected	W1	Not Collected
Harbour View	DD03KP029	222	223	60	Not Collected	W1	Not Collected
Harbour View	DD03KP029	223	224	60	Not Collected	W1	Not Collected
Harbour View	DD03KP029	224	225	60	Not Collected	W1	Not Collected
Harbour View	DD03KP029	225	226	60	Not Collected	W1	Not Collected
Harbour View	DD03KP029	226	227	60	Not Collected	W1	Not Collected
Harbour View	DD03KP029	227	228	91	Not Collected	W1	Not Collected
Harbour View	DD03KP029	228	229	88	Not Collected	W1	Not Collected
Harbour View	DD03KP029	229	230	88	Not Collected	W1	Not Collected
Harbour View	DD03KP029	230	231	88	Not Collected	W1	Not Collected
Harbour View	DD03KP029	231	232	88	Not Collected	W1	Not Collected
Harbour View	DD03KP029	232	233	90	Not Collected	W1	Not Collected
Harbour View	DD03KP029	233	234	90	Not Collected	W1	Not Collected

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Harbour View	DD03KP032	75	76	17	Not Collected	W1	Not Collected
Harbour View	DD03KP032	76	77	17	Not Collected	W1	Not Collected
Harbour View	DD03KP032	77	78	17	Not Collected	W1	Not Collected
Harbour View	DD03KP032	78	79	17	Not Collected	W1	Not Collected
Harbour View	DD03KP032	79	80	17	Not Collected	W1	Not Collected
Harbour View	DD03KP032	80	81	17	Not Collected	W1	Not Collected
Harbour View	DD03KP032	81	82	10	Not Collected	W1	Not Collected
Harbour View	DD03KP032	82	83	10	Not Collected	W1	Not Collected
Harbour View	DD03KP032	83	84	10	Not Collected	W1	Not Collected
Harbour View	DD03KP032	84	85	10	Not Collected	W1	Not Collected
Harbour View	DD03KP032	85	86	10	Not Collected	W1	Not Collected
Harbour View	DD03KP032	86	87	10	Not Collected	W1	Not Collected
Harbour View	DD03KP032	87	88	10	Not Collected	W1	Not Collected
Harbour View	DD03KP032	88	89	10	Not Collected	W1	Not Collected
Harbour View	DD03KP032	89	90	10	Not Collected	W1	Not Collected
Harbour View	DD03KP032	90	91	10	Not Collected	W1	Not Collected
Harbour View	DD03KP032	91	92	10	Not Collected	W1	Not Collected
Harbour View	DD03KP032	92	93	10	Not Collected	W1	Not Collected
Harbour View	DD03KP032	93	94	10	Not Collected	W1	Not Collected
Harbour View	DD03KP032	94	95	10	Not Collected	W1	Not Collected
Harbour View	DD03KP032	95	96	10	Not Collected	W1	Not Collected
Harbour View	DD03KP032	96	97	25	Not Collected	W1	Not Collected
Harbour View	DD03KP032	97	98	25	Not Collected	W1	Not Collected

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Harbour View	DD03KP089	165	166	100	Not Collected	W1	Not Collected
Harbour View	DD03KP089	166	167	100	Not Collected	W1	Not Collected
Harbour View	DD03KP089	167	168	100	Not Collected	W1	Not Collected
Harbour View	DD03KP089	168	169	100	Not Collected	W1	Not Collected
Harbour View	DD03KP089	169	170	100	Not Collected	W1	Not Collected
Harbour View	DD03KP089	170	171	100	Not Collected	W1	Not Collected
Harbour View	DD03KP089	171	172	100	Not Collected	W1	Not Collected
Harbour View	DD03KP089	172	173	85	Not Collected	W1	Not Collected
Harbour View	DD03KP089	173	174	85	Not Collected	W1	Not Collected
Harbour View	DD03KP089	174	175	85	Not Collected	W1	Not Collected
Harbour View	DD03KP089	175	176	94	Not Collected	W1	Not Collected
Harbour View	DD03KP089	176	177	94	Not Collected	W1	Not Collected
Harbour View	DD03KP089	177	178	94	Not Collected	W1	Not Collected
Harbour View	DD03KP089	178	179	62	Not Collected	W1	Not Collected
Harbour View	DD03KP089	179	180	62	Not Collected	W1	Not Collected
Harbour View	DD03KP089	180	181	62	Not Collected	W1	Not Collected
Harbour View	DD03KP089	181	182	62	Not Collected	W1	Not Collected
Harbour View	DD03KP089	182	183	62	Not Collected	W1	Not Collected
Harbour View	DD03KP089	183	184	62	Not Collected	W1	Not Collected
Harbour View	DD03KP089	184	185	62	Not Collected	W1	Not Collected
Harbour View	DD03KP089	185	186	77	Not Collected	W1	Not Collected
Harbour View	DD03KP089	186	187	77	Not Collected	W1	Not Collected
Harbour View	DD03KP089	187	188	77	Not Collected	W1	Not Collected
Harbour View	DD03KP089	188	189	77	Not Collected	W1	Not Collected
Harbour View	DD03KP089	189	190	77	Not Collected	W1	Not Collected
Harbour View	DD03KP089	190	191	73	Not Collected	W1	Not Collected
Harbour View	DD03KP089	191	192	73	Not Collected	W1	Not Collected
Harbour View	DD03KP089	192	193	73	Not Collected	W1	Not Collected
Harbour View	DD03KP089	193	194	73	Not Collected	W1	Not Collected
Harbour View	DD03KP089	194	195	73	Not Collected	W1	Not Collected
Harbour View	DD03KP089	195	196	73	Not Collected	W1	Not Collected
Harbour View	DD03KP089	196	197	73	Not Collected	W1	Not Collected
Harbour View	DD03KP089	197	198	73	Not Collected	W1	Not Collected
Harbour View	DD03KP089	198	199	73	Not Collected	W1	Not Collected
Harbour View	DD03KP089	199	200	73	Not Collected	W1	Not Collected
Harbour View	DD03KP089	200	201	73	Not Collected	W1	Not Collected
Harbour View	DD03KP089	201	202	73	Not Collected	W1	Not Collected
Harbour View	DD03KP089	202	203	73	Not Collected	W1	Not Collected
Harbour View	DD03KP089	203	204	73	Not Collected	W1	Not Collected
Harbour View	DD03KP089	204	205	73	Not Collected	W1	Not Collected
Harbour View	DD03KP089	205	206	73	Not Collected	W1	Not Collected
Harbour View	DD03KP089	206	207	73	Not Collected	W1	Not Collected
Harbour View	DD03KP089	207	208	73	Not Collected	W1	Not Collected
Harbour View	DD03KP089	208	209	73	Not Collected	W1	Not Collected
Harbour View	DD03KP089	209	210	73	Not Collected	W1	Not Collected

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Harbour View	DD03KP091	90	91	16	Not Collected	W1	Not Collected
Harbour View	DD03KP091	91	92	16	Not Collected	W1	Not Collected
Harbour View	DD03KP091	92	93	16	Not Collected	W1	Not Collected
Harbour View	DD03KP091	93	94	16	Not Collected	W1	Not Collected
Harbour View	DD03KP091	94	95	16	Not Collected	W1	Not Collected
Harbour View	DD03KP091	95	96	41	Not Collected	W1	Not Collected
Harbour View	DD03KP091	96	97	41	Not Collected	W1	Not Collected
Harbour View	DD03KP091	97	98	41	Not Collected	W1	Not Collected
Harbour View	DD03KP091	98	99	41	Not Collected	W1	Not Collected
Harbour View	DD03KP091	99	100	80	Not Collected	W1	Not Collected
Harbour View	DD03KP091	100	101	47	Not Collected	W1	Not Collected
Harbour View	DD03KP091	101	102	47	Not Collected	W1	Not Collected
Harbour View	DD03KP091	102	103	63	Not Collected	W1	Not Collected
Harbour View	DD03KP091	103	104	63	Not Collected	W1	Not Collected
Harbour View	DD03KP091	104	105	63	Not Collected	W1	Not Collected
Harbour View	DD03KP091	105	106	63	Not Collected	W1	Not Collected
Harbour View	DD03KP091	106	107	38	Not Collected	W1	Not Collected
Harbour View	DD03KP091	107	108	10	Not Collected	W1	Not Collected
Harbour View	DD03KP091	108	109	10	Not Collected	W1	Not Collected
Harbour View	DD03KP091	109	110	63	Not Collected	W1	Not Collected
Harbour View	DD03KP091	110	111	63	Not Collected	W1	Not Collected
Harbour View	DD03KP091	111	112	63	Not Collected	W1	Not Collected
Harbour View	DD03KP091	112	113	63	Not Collected	W1	Not Collected
Harbour View	DD03KP091	113	114	40	Not Collected	W1	Not Collected
Harbour View	DD03KP091	114	115	40	Not Collected	W1	Not Collected
Harbour View	DD03KP091	115	116	40	Not Collected	W1	Not Collected
Harbour View	DD03KP091	116	117	40	Not Collected	W1	Not Collected
Harbour View	DD03KP091	117	118	40	Not Collected	W1	Not Collected
Harbour View	DD03KP091	118	119	40	Not Collected	W1	Not Collected
Harbour View	DD03KP091	119	120	40	Not Collected	W1	Not Collected

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Harbour View	DD04KP345	0	1	51	Not Collected	W5	Not Collected
Harbour View	DD04KP345	1	2	51	Not Collected	W5	Not Collected
Harbour View	DD04KP345	2	3	51	Not Collected	W5	Not Collected
Harbour View	DD04KP345	3	4	51	Not Collected	W5	Not Collected
Harbour View	DD04KP345	4	5	41	Not Collected	W5	Not Collected
Harbour View	DD04KP345	5	6	41	Not Collected	W5	Not Collected
Harbour View	DD04KP345	6	7	10	Not Collected	W5	Not Collected
Harbour View	DD04KP345	7	8	10	Not Collected	W5	Not Collected
Harbour View	DD04KP345	8	9	10	Not Collected	W5	Not Collected
Harbour View	DD04KP345	9	10	10	Not Collected	W5	Not Collected
Harbour View	DD04KP345	10	11	10	Not Collected	W5	Not Collected
Harbour View	DD04KP345	11	12	10	Not Collected	W5	Not Collected
Harbour View	DD04KP345	12	13	10	Not Collected	W5	Not Collected
Harbour View	DD04KP345	13	14	10	Not Collected	W5	Not Collected
Harbour View	DD04KP345	14	15	10	Not Collected	W5	Not Collected
Harbour View	DD04KP345	15	16	10	Not Collected	W5	Not Collected
Harbour View	DD04KP345	16	17	10	Not Collected	W5	Not Collected
Harbour View	DD04KP345	17	18	10	Not Collected	W5	Not Collected
Harbour View	DD04KP345	18	19	23	Not Collected	W5	Not Collected
Harbour View	DD04KP345	19	20	10	Not Collected	W5	Not Collected
Harbour View	DD04KP345	20	21	10	Not Collected	W5	Not Collected
Harbour View	DD04KP345	21	22	10	Not Collected	W5	Not Collected
Harbour View	DD04KP345	22	23	15	Not Collected	W5	Not Collected
Harbour View	DD04KP345	23	24	30	Not Collected	W5	Not Collected
Harbour View	DD04KP345	24	25	20	Not Collected	W5	Not Collected
Harbour View	DD04KP345	25	26	30	Not Collected	W5	Not Collected
Harbour View	DD04KP345	26	27	40	Not Collected	W5	Not Collected
Harbour View	DD04KP345	27	28	15	Not Collected	W5	Not Collected
Harbour View	DD04KP345	28	29	10	Not Collected	W5	Not Collected
Harbour View	DD04KP345	29	30	25	Not Collected	W5	Not Collected
Harbour View	DD04KP345	30	31	10	Not Collected	W5	Not Collected
Harbour View	DD04KP345	31	32	65	Not Collected	W5	Not Collected
Harbour View	DD04KP345	32	33	20	Not Collected	W5	Not Collected
Harbour View	DD04KP345	33	34	20	Not Collected	W5	Not Collected
Harbour View	DD04KP345	34	35	65	Not Collected	W2	Not Collected
Harbour View	DD04KP345	35	36	10	Not Collected	W2	Not Collected
Harbour View	DD04KP345	36	37	15	Not Collected	W2	Not Collected
Harbour View	DD04KP345	37	38	10	Not Collected	W2	Not Collected
Harbour View	DD04KP345	38	39	10	Not Collected	W2	Not Collected
Harbour View	DD04KP345	39	40	10	Not Collected	W2	Not Collected

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Harbour View	DD04KP345	40	41	10	Not Collected	W2	Not Collected
Harbour View	DD04KP345	41	42	80	Not Collected	W2	Not Collected
Harbour View	DD04KP345	42	43	10	Not Collected	W2	Not Collected
Harbour View	DD04KP345	43	44	20	Not Collected	W2	Not Collected
Harbour View	DD04KP345	44	45	45	Not Collected	W2	Not Collected
Harbour View	DD04KP345	45	46	20	Not Collected	W2	Not Collected
Harbour View	DD04KP345	46	47	55	Not Collected	W2	Not Collected
Harbour View	DD04KP345	47	48	10	Not Collected	W5	Not Collected
Harbour View	DD04KP345	48	49	10	Not Collected	W5	Not Collected
Harbour View	DD04KP345	49	50	10	Not Collected	W5	Not Collected
Harbour View	DD04KP345	50	51	10	Not Collected	W5	Not Collected
Harbour View	DD04KP345	51	52	20	Not Collected	W5	Not Collected
Harbour View	DD04KP345	52	53	40	Not Collected	W5	Not Collected
Harbour View	DD04KP345	53	54	30	Not Collected	W5	Not Collected
Harbour View	DD04KP345	54	55	70	Not Collected	W5	Not Collected
Harbour View	DD04KP345	55	56	44	Not Collected	W5	Not Collected
Harbour View	DD04KP345	56	57	20	Not Collected	W5	Not Collected
Harbour View	DD04KP345	57	58	51	Not Collected	W5	Not Collected
Harbour View	DD04KP345	58	59	10	Not Collected	W5	Not Collected
Harbour View	DD04KP345	59	60	10	Not Collected	W5	Not Collected
Harbour View	DD04KP345	60	61	10	Not Collected	W5	Not Collected
Harbour View	DD04KP345	61	62	10	Not Collected	W1	Not Collected
Harbour View	DD04KP345	62	63	10	Not Collected	W1	Not Collected
Harbour View	DD04KP345	63	64	10	Not Collected	W1	Not Collected
Harbour View	DD04KP345	64	65	10	Not Collected	W1	Not Collected
Harbour View	DD04KP345	65	66	10	Not Collected	W1	Not Collected
Harbour View	DD04KP345	66	67	10	Not Collected	W1	Not Collected
Harbour View	DD04KP345	67	68	10	Not Collected	W1	Not Collected
Harbour View	DD04KP345	68	69	25	Not Collected	W1	Not Collected
Harbour View	DD04KP345	69	70	22	Not Collected	W1	Not Collected
Harbour View	DD04KP345	70	71	25	Not Collected	W1	Not Collected
Harbour View	DD04KP345	71	72	65	Not Collected	W1	Not Collected
Harbour View	DD04KP345	72	73	10	Not Collected	W1	Not Collected
Harbour View	DD04KP345	73	74	15	Not Collected	W1	Not Collected
Harbour View	DD04KP345	74	75	15	Not Collected	W1	Not Collected
Harbour View	DD04KP345	75	76	10	Not Collected	W1	Not Collected
Harbour View	DD04KP345	76	77	10	Not Collected	W1	Not Collected
Harbour View	DD04KP345	77	78	81	Not Collected	W1	Not Collected
Harbour View	DD04KP345	78	79	30	Not Collected	W1	Not Collected
Harbour View	DD04KP345	79	80	30	Not Collected	W1	Not Collected
Harbour View	DD04KP345	80	81	15	Not Collected	W1	Not Collected
Harbour View	DD04KP345	81	82	35	Not Collected	W1	Not Collected
Harbour View	DD04KP345	82	83	20	Not Collected	W1	Not Collected
Harbour View	DD04KP345	83	84	70	Not Collected	W1	Not Collected
Harbour View	DD04KP345	84	85	10	Not Collected	W1	Not Collected
Harbour View	DD04KP345	85	86	43	Not Collected	W1	Not Collected
Harbour View	DD04KP345	86	87	10	Not Collected	W1	Not Collected
Harbour View	DD04KP345	87	88	30	Not Collected	W1	Not Collected
Harbour View	DD04KP345	88	89	15	Not Collected	W1	Not Collected
Harbour View	DD04KP345	89	90	10	Not Collected	W1	Not Collected
Harbour View	DD04KP345	90	91	20	Not Collected	W1	Not Collected
Harbour View	DD04KP345	91	92	30	Not Collected	W1	Not Collected
Harbour View	DD04KP345	92	93	90	Not Collected	W1	Not Collected
Harbour View	DD04KP345	93	94	95	Not Collected	W1	Not Collected
Harbour View	DD04KP345	94	95	60	Not Collected	W1	Not Collected
Harbour View	DD04KP345	95	96	25	Not Collected	W1	Not Collected
Harbour View	DD04KP345	96	97	10	Not Collected	W1	Not Collected
Harbour View	DD04KP345	97	98	10	Not Collected	W1	Not Collected
Harbour View	DD04KP345	98	99	80	Not Collected	W1	Not Collected
Harbour View	DD04KP345	99	100	80	Not Collected	W1	Not Collected
Harbour View	DD04KP345	100	101	50	Not Collected	W1	Not Collected

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Harbour View	DD04KP346	0	1	10	Not Collected	W5	Not Collected
Harbour View	DD04KP346	1	2	10	Not Collected	W5	Not Collected
Harbour View	DD04KP346	2	3	10	Not Collected	W5	Not Collected
Harbour View	DD04KP346	3	4	10	Not Collected	W5	Not Collected
Harbour View	DD04KP346	4	5	10	Not Collected	W5	Not Collected
Harbour View	DD04KP346	5	6	10	Not Collected	W5	Not Collected
Harbour View	DD04KP346	6	7	10	Not Collected	W5	Not Collected
Harbour View	DD04KP346	7	8	10	Not Collected	W5	Not Collected
Harbour View	DD04KP346	8	9	10	Not Collected	W5	Not Collected
Harbour View	DD04KP346	9	10	10	Not Collected	W4	Not Collected
Harbour View	DD04KP346	10	11	10	Not Collected	W4	Not Collected
Harbour View	DD04KP346	11	12	10	Not Collected	W4	Not Collected
Harbour View	DD04KP346	12	13	10	Not Collected	W4	Not Collected
Harbour View	DD04KP346	13	14	10	Not Collected	W4	Not Collected
Harbour View	DD04KP346	14	15	10	Not Collected	W4	Not Collected
Harbour View	DD04KP346	15	16	10	Not Collected	W4	Not Collected
Harbour View	DD04KP346	16	17	10	Not Collected	W4	Not Collected
Harbour View	DD04KP346	17	18	10	Not Collected	W4	Not Collected
Harbour View	DD04KP346	18	19	10	Not Collected	W4	Not Collected
Harbour View	DD04KP346	19	20	10	Not Collected	W4	Not Collected
Harbour View	DD04KP346	20	21	30	Not Collected	W4	Not Collected
Harbour View	DD04KP346	21	22	10	Not Collected	W4	Not Collected
Harbour View	DD04KP346	22	23	50	Not Collected	W4	Not Collected
Harbour View	DD04KP346	23	24	10	Not Collected	W4	Not Collected
Harbour View	DD04KP346	24	25	40	Not Collected	W3	Not Collected
Harbour View	DD04KP346	25	26	10	Not Collected	W3	Not Collected
Harbour View	DD04KP346	26	27	10	Not Collected	W3	Not Collected
Harbour View	DD04KP346	27	28	35	Not Collected	W3	Not Collected
Harbour View	DD04KP346	28	29	20	Not Collected	W3	Not Collected
Harbour View	DD04KP346	29	30	40	Not Collected	W3	Not Collected
Harbour View	DD04KP346	30	31	10	Not Collected	W3	Not Collected
Harbour View	DD04KP346	31	32	10	Not Collected	W3	Not Collected
Harbour View	DD04KP346	32	33	10	Not Collected	W3	Not Collected
Harbour View	DD04KP346	33	34	15	Not Collected	W3	Not Collected
Harbour View	DD04KP346	34	35	70	Not Collected	W3	Not Collected
Harbour View	DD04KP346	35	36	40	Not Collected	W3	Not Collected
Harbour View	DD04KP346	36	37	80	Not Collected	W3	Not Collected
Harbour View	DD04KP346	37	38	90	Not Collected	W3	Not Collected
Harbour View	DD04KP346	38	39	50	Not Collected	W3	Not Collected
Harbour View	DD04KP346	39	40	70	Not Collected	W3	Not Collected
Harbour View	DD04KP346	40	41	30	Not Collected	W3	Not Collected
Harbour View	DD04KP346	41	42	20	Not Collected	W3	Not Collected
Harbour View	DD04KP346	42	43	10	Not Collected	W3	Not Collected
Harbour View	DD04KP346	43	44	45	Not Collected	W3	Not Collected
Harbour View	DD04KP346	44	45	41	Not Collected	W3	Not Collected
Harbour View	DD04KP346	45	46	20	Not Collected	W3	Not Collected
Harbour View	DD04KP346	46	47	15	Not Collected	W3	Not Collected
Harbour View	DD04KP346	47	48	70	Not Collected	W3	Not Collected
Harbour View	DD04KP346	48	49	15	Not Collected	W2	Not Collected
Harbour View	DD04KP346	49	50	35	Not Collected	W2	Not Collected
Harbour View	DD04KP346	50	51	30	Not Collected	W2	Not Collected
Harbour View	DD04KP346	51	52	10	Not Collected	W2	Not Collected
Harbour View	DD04KP346	52	53	10	Not Collected	W1	Not Collected
Harbour View	DD04KP346	53	54	10	Not Collected	W1	Not Collected
Harbour View	DD04KP346	54	55	10	Not Collected	W1	Not Collected
Harbour View	DD04KP346	55	56	10	Not Collected	W1	Not Collected
Harbour View	DD04KP346	56	57	10	Not Collected	W1	Not Collected
Harbour View	DD04KP346	57	58	10	Not Collected	W1	Not Collected
Harbour View	DD04KP346	58	59	10	Not Collected	W1	Not Collected
Harbour View	DD04KP346	59	60	10	Not Collected	W1	Not Collected
Harbour View	DD04KP346	60	61	10	Not Collected	W1	Not Collected
Harbour View	DD04KP346	61	62	10	Not Collected	W1	Not Collected
Harbour View	DD04KP346	62	63	10	Not Collected	W1	Not Collected
Harbour View	DD04KP346	63	64	10	Not Collected	W1	Not Collected
Harbour View	DD04KP346	64	65	10	Not Collected	W1	Not Collected
Harbour View	DD04KP346	65	66	10	Not Collected	W1	Not Collected
Harbour View	DD04KP346	66	67	10	Not Collected	W1	Not Collected
Harbour View	DD04KP346	67	68	10	Not Collected	W1	Not Collected
Harbour View	DD04KP346	68	69	10	Not Collected	W1	Not Collected
Harbour View	DD04KP346	69	70	55	Not Collected	W1	Not Collected
Harbour View	DD04KP346	70	71	90	Not Collected	W1	Not Collected
Harbour View	DD04KP346	71	72	25	Not Collected	W1	Not Collected
Harbour View	DD04KP346	72	73	10	Not Collected	W1	Not Collected
Harbour View	DD04KP346	73	74	10	Not Collected	W1	Not Collected
Harbour View	DD04KP346	74	75	10	Not Collected	W1	Not Collected
Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Harbour View	DD04KP346	75	76	10	Not Collected	W1	Not Collected
Harbour View	DD04KP346	76	77	25	Not Collected	W1	Not Collected
Harbour View	DD04KP346	77	78	15	Not Collected	W1	Not Collected
Harbour View	DD04KP346	78	79	19	Not Collected	W1	Not Collected
Harbour View	DD04KP346	79	80	30	Not Collected	W1	Not Collected
Harbour View	DD04KP346	80	81	60	Not Collected	W1	Not Collected
Harbour View	DD04KP346	81	82	45	Not Collected	W1	Not Collected
Harbour View	DD04KP346	82	83	25	Not Collected	W1	Not Collected
Harbour View	DD04KP346	83	84	20	Not Collected	W1	Not Collected
Harbour View	DD04KP346	84	85	10	Not Collected	W1	Not Collected
Harbour View	DD04KP346	85	86	10	Not Collected	W1	Not Collected
Harbour View	DD04KP346	86	87	10	Not Collected	W1	Not Collected
Harbour View	DD04KP346	87	88	10	Not Collected	W1	Not Collected
Harbour View	DD04KP346	88	89	10	Not Collected	W1	Not Collected
Harbour View	DD04KP346	89	90	10	Not Collected	W1	Not Collected

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Harbour View	DD08KP481	220	221	90	Not Collected	W1	Not Collected
Harbour View	DD08KP481	221	222	90	Not Collected	W1	Not Collected
Harbour View	DD08KP481	222	223	100	Not Collected	W1	Not Collected
Harbour View	DD08KP481	223	224	90	Not Collected	W1	Not Collected
Harbour View	DD08KP481	224	225	75	Not Collected	W1	Not Collected
Harbour View	DD08KP481	225	226	95	Not Collected	W1	Not Collected
Harbour View	DD08KP481	226	227	60	Not Collected	W1	Not Collected
Harbour View	DD08KP481	227	228	80	Not Collected	W1	Not Collected
Harbour View	DD08KP481	228	229	90	Not Collected	W1	Not Collected
Harbour View	DD08KP481	229	230	80	Not Collected	W1	Not Collected
Harbour View	DD08KP481	230	231	100	Not Collected	W1	Not Collected
Harbour View	DD08KP481	231	232	90	Not Collected	W1	Not Collected
Harbour View	DD08KP481	232	233	95	Not Collected	W1	Not Collected
Harbour View	DD08KP481	233	234	90	Not Collected	W1	Not Collected
Harbour View	DD08KP481	234	235	70	Not Collected	W1	Not Collected
Harbour View	DD08KP481	235	236	80	Not Collected	W1	Not Collected
Harbour View	DD08KP481	236	237	65	Not Collected	W1	Not Collected
Harbour View	DD08KP481	237	238	80	Not Collected	W1	Not Collected
Harbour View	DD08KP481	238	239	65	Not Collected	W1	Not Collected
Harbour View	DD08KP481	239	240	100	Not Collected	W1	Not Collected

Harbour View	DD08KP481	240	241	95	Not Collected	W1	Not Collected
Harbour View	DD08KP481	241	242	50	Not Collected	W1	Not Collected
Harbour View	DD08KP481	242	243	80	Not Collected	W1	Not Collected
Harbour View	DD08KP481	243	244	100	Not Collected	W1	Not Collected
Harbour View	DD08KP481	244	245	100	Not Collected	W1	Not Collected
Harbour View	DD08KP481	245	246	90	Not Collected	W1	Not Collected
Harbour View	DD08KP481	246	247	100	Not Collected	W1	Not Collected
Harbour View	DD08KP481	247	248	100	Not Collected	W1	Not Collected
Harbour View	DD08KP481	248	249	70	Not Collected	W1	Not Collected
Harbour View	DD08KP481	249	250	90	Not Collected	W1	Not Collected
Harbour View	DD08KP481	250	251	100	Not Collected	W1	Not Collected
Harbour View	DD08KP481	251	252	70	Not Collected	W1	Not Collected
Harbour View	DD08KP481	252	253	60	Not Collected	W1	Not Collected
Harbour View	DD08KP481	253	254	95	Not Collected	W1	Not Collected
Harbour View	DD08KP481	254	255	90	Not Collected	W1	Not Collected
Harbour View	DD08KP481	255	256	90	Not Collected	W1	Not Collected
Harbour View	DD08KP481	256	257	90	Not Collected	W1	Not Collected
Harbour View	DD08KP481	257	258	85	Not Collected	W1	Not Collected
Harbour View	DD08KP481	258	259	90	Not Collected	W1	Not Collected
Harbour View	DD08KP481	259	260	90	Not Collected	W1	Not Collected
Harbour View	DD08KP481	260	261	80	Not Collected	W1	Not Collected
Harbour View	DD08KP481	261	262	100	Not Collected	W1	Not Collected
Harbour View	DD08KP481	262	263	90	Not Collected	W1	Not Collected
Harbour View	DD08KP481	263	264	80	Not Collected	W1	Not Collected
Harbour View	DD08KP481	264	265	80	Not Collected	W1	Not Collected
Harbour View	DD08KP481	265	266	70	Not Collected	W1	Not Collected
Harbour View	DD08KP481	266	267	80	Not Collected	W1	Not Collected
Harbour View	DD08KP481	267	268	80	Not Collected	W1	Not Collected
Harbour View	DD08KP481	268	269	80	Not Collected	W1	Not Collected
Harbour View	DD08KP481	269	270	90	Not Collected	W1	Not Collected
Harbour View	DD08KP481	270	271	95	Not Collected	W1	Not Collected
Harbour View	DD08KP481	271	272	95	Not Collected	W1	Not Collected
Harbour View	DD08KP481	272	273	85	Not Collected	W1	Not Collected
Harbour View	DD08KP481	273	274	80	Not Collected	W1	Not Collected
Harbour View	DD08KP481	274	275	100	Not Collected	W1	Not Collected
Harbour View	DD08KP481	275	276	100	Not Collected	W1	Not Collected
Harbour View	DD08KP481	276	277	90	Not Collected	W1	Not Collected

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Harbour View	DD08KP481	277	278	95	Not Collected	W1	Not Collected
Harbour View	DD08KP481	278	279	90	Not Collected	W1	Not Collected
Harbour View	DD08KP481	279	280	95	Not Collected	W1	Not Collected
Harbour View	DD08KP481	280	281	90	Not Collected	W1	Not Collected
Harbour View	DD08KP481	281	282	100	Not Collected	W1	Not Collected
Harbour View	DD08KP481	282	283	100	Not Collected	W1	Not Collected
Harbour View	DD08KP481	283	284	100	Not Collected	W1	Not Collected
Harbour View	DD08KP481	284	285	90	Not Collected	W1	Not Collected
Harbour View	DD08KP481	285	286	90	Not Collected	W1	Not Collected
Harbour View	DD08KP481	286	287	100	Not Collected	W1	Not Collected
Harbour View	DD08KP481	287	288	80	Not Collected	W1	Not Collected
Harbour View	DD08KP481	288	289	100	Not Collected	W1	Not Collected
Harbour View	DD08KP481	289	290	95	Not Collected	W1	Not Collected
Harbour View	DD08KP481	290	291	95	Not Collected	W1	Not Collected
Harbour View	DD08KP481	291	292	95	Not Collected	W1	Not Collected
Harbour View	DD08KP481	292	293	100	Not Collected	W1	Not Collected
Harbour View	DD08KP481	293	294	100	Not Collected	W1	Not Collected
Harbour View	DD08KP481	294	295	100	Not Collected	W1	Not Collected
Harbour View	DD08KP481	295	296	100	Not Collected	W1	Not Collected
Harbour View	DD08KP481	296	297	100	Not Collected	W1	Not Collected
Harbour View	DD08KP481	297	298	95	Not Collected	W1	Not Collected
Harbour View	DD08KP481	298	299	80	Not Collected	W1	Not Collected
Harbour View	DD08KP481	299	300	90	Not Collected	W1	Not Collected
Harbour View	DD08KP481	300	301	100	Not Collected	W1	Not Collected
Harbour View	DD08KP481	301	302	100	Not Collected	W1	Not Collected
Harbour View	DD08KP481	302	303	100	Not Collected	W1	Not Collected
Harbour View	DD08KP481	303	304	100	Not Collected	W1	Not Collected
Harbour View	DD08KP481	304	305	100	Not Collected	W1	Not Collected
Harbour View	DD08KP481	305	306	100	Not Collected	W1	Not Collected
Harbour View	DD08KP481	306	307	100	Not Collected	W1	Not Collected
Harbour View	DD08KP481	307	308	100	Not Collected	W1	Not Collected
Harbour View	DD08KP481	308	309	90	Not Collected	W1	Not Collected
Harbour View	DD08KP481	309	310	100	Not Collected	W1	Not Collected
Harbour View	DD08KP481	310	311	95	Not Collected	W1	Not Collected
Harbour View	DD08KP481	311	312	90	Not Collected	W1	Not Collected
Harbour View	DD08KP481	312	313	90	Not Collected	W1	Not Collected
Harbour View	DD08KP481	313	314	90	Not Collected	W1	Not Collected
Harbour View	DD08KP481	314	315	100	Not Collected	W1	Not Collected
Harbour View	DD08KP481	315	316	90	Not Collected	W1	Not Collected
Harbour View	DD08KP481	316	317	95	Not Collected	W1	Not Collected
Harbour View	DD08KP481	317	318	80	Not Collected	W1	Not Collected
Harbour View	DD08KP481	318	319	85	Not Collected	W1	Not Collected
Harbour View	DD08KP481	319	320	75	Not Collected	W1	Not Collected
Harbour View	DD08KP481	320	321	90	Not Collected	W1	Not Collected
Harbour View	DD08KP481	321	322	90	Not Collected	W1	Not Collected

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Harbour View	DD08KP500	152	153	44	Not Collected	W1	Not Collected
Harbour View	DD08KP500	153	154	67	Not Collected	W1	Not Collected
Harbour View	DD08KP500	154	155	72	Not Collected	W1	Not Collected
Harbour View	DD08KP500	155	156	36	Not Collected	W1	Not Collected
Harbour View	DD08KP500	156	157	75	Not Collected	W1	Not Collected
Harbour View	DD08KP500	157	158	65	Not Collected	W1	Not Collected
Harbour View	DD08KP500	158	159	94	Not Collected	W1	Not Collected
Harbour View	DD08KP500	159	160	80	Not Collected	W1	Not Collected
Harbour View	DD08KP500	160	161	84	Not Collected	W1	Not Collected
Harbour View	DD08KP500	161	162	61	Not Collected	W1	Not Collected
Harbour View	DD08KP500	162	163	43	Not Collected	W1	Not Collected
Harbour View	DD08KP500	163	164	78	Not Collected	W1	Not Collected
Harbour View	DD08KP500	164	165	87	Not Collected	W1	Not Collected
Harbour View	DD08KP500	165	166	73	Not Collected	W1	Not Collected
Harbour View	DD08KP500	166	167	23	Not Collected	W1	Not Collected
Harbour View	DD08KP500	167	168	80	Not Collected	W1	Not Collected
Harbour View	DD08KP500	168	169	64	Not Collected	W1	Not Collected
Harbour View	DD08KP500	169	170	83	Not Collected	W1	Not Collected
Harbour View	DD08KP500	170	171	97	Not Collected	W1	Not Collected
Harbour View	DD08KP500	171	172	99	Not Collected	W1	Not Collected
Harbour View	DD08KP500	172	173	98	Not Collected	W1	Not Collected
Harbour View	DD08KP500	173	174	100	Not Collected	W1	Not Collected
Harbour View	DD08KP500	174	175	94	Not Collected	W1	Not Collected
Harbour View	DD08KP500	175	176	92	Not Collected	W1	Not Collected
Harbour View	DD08KP500	176	177	96	Not Collected	W1	Not Collected
Harbour View	DD08KP500	177	178	76	Not Collected	W1	Not Collected
Harbour View	DD08KP500	178	179	20	Not Collected	W1	Not Collected
Harbour View	DD08KP500	179	180	32	Not Collected	W1	Not Collected
Harbour View	DD08KP500	180	181	89	Not Collected	W1	Not Collected
Harbour View	DD08KP500	181	182	67	Not Collected	W1	Not Collected
Harbour View	DD08KP500	182	183	92	Not Collected	W1	Not Collected
Harbour View	DD08KP500	183	184	86	Not Collected	W1	Not Collected
Harbour View	DD08KP500	184	185	99	Not Collected	W1	Not Collected

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Harbour View	DD08KP511	220	221	49	Not Collected	W1	Not Collected
Harbour View	DD08KP511	221	222	59	Not Collected	W1	Not Collected
Harbour View	DD08KP511	222	223	73	Not Collected	W1	Not Collected
Harbour View	DD08KP511	223	224	92	Not Collected	W1	Not Collected
Harbour View	DD08KP511	224	225	93	Not Collected	W1	Not Collected
Harbour View	DD08KP511	225	226	97	Not Collected	W1	Not Collected
Harbour View	DD08KP511	226	227	91	Not Collected	W1	Not Collected
Harbour View	DD08KP511	227	228	92	Not Collected	W1	Not Collected
Harbour View	DD08KP511	228	229	100	Not Collected	W1	Not Collected
Harbour View	DD08KP511	229	230	69	Not Collected	W1	Not Collected
Harbour View	DD08KP511	230	231	100	Not Collected	W1	Not Collected
Harbour View	DD08KP511	231	232	100	Not Collected	W1	Not Collected
Harbour View	DD08KP511	232	233	76	Not Collected	W1	Not Collected
Harbour View	DD08KP511	233	234	92	Not Collected	W1	Not Collected
Harbour View	DD08KP511	234	235	83	Not Collected	W1	Not Collected
Harbour View	DD08KP511	235	236	48	Not Collected	W1	Not Collected
Harbour View	DD08KP511	236	237	87	Not Collected	W1	Not Collected
Harbour View	DD08KP511	237	238	38	Not Collected	W1	Not Collected
Harbour View	DD08KP511	238	239	87	Not Collected	W1	Not Collected
Harbour View	DD08KP511	239	240	89	Not Collected	W1	Not Collected
Harbour View	DD08KP511	240	241	80	Not Collected	W1	Not Collected
Harbour View	DD08KP511	241	242	41	Not Collected	W1	Not Collected
Harbour View	DD08KP511	242	243	40	Not Collected	W1	Not Collected
Harbour View	DD08KP511	243	244	35	Not Collected	W1	Not Collected
Harbour View	DD08KP511	244	245	100	Not Collected	W1	Not Collected
Harbour View	DD08KP511	245	246	85	Not Collected	W1	Not Collected
Harbour View	DD08KP511	246	247	100	Not Collected	W1	Not Collected
Harbour View	DD08KP511	247	248	93	Not Collected	W1	Not Collected
Harbour View	DD08KP511	248	249	61	Not Collected	W1	Not Collected
Harbour View	DD08KP511	249	250	88	Not Collected	W1	Not Collected
Harbour View	DD08KP511	250	251	98	Not Collected	W1	Not Collected
Harbour View	DD08KP511	251	252	100	Not Collected	W1	Not Collected
Harbour View	DD08KP511	252	253	84	Not Collected	W1	Not Collected
Harbour View	DD08KP511	253	254	64	Not Collected	W1	Not Collected
Harbour View	DD08KP511	254	255	80	Not Collected	W1	Not Collected
Harbour View	DD08KP511	255	256	98	Not Collected	W1	Not Collected
Harbour View	DD08KP511	256	257	82	Not Collected	W1	Not Collected
Harbour View	DD08KP511	257	258	84	Not Collected	W1	Not Collected
Harbour View	DD08KP511	258	259	88	Not Collected	W1	Not Collected
Harbour View	DD08KP511	259	260	89	Not Collected	W1	Not Collected
Harbour View	DD08KP511	260	261	90	Not Collected	W1	Not Collected
Harbour View	DD08KP511	261	262	80	Not Collected	W1	Not Collected
Harbour View	DD08KP511	262	263	82	Not Collected	W1	Not Collected
Harbour View	DD08KP511	263	264	57	Not Collected	W1	Not Collected
Harbour View	DD08KP511	264	265	95	Not Collected	W1	Not Collected
Harbour View	DD08KP511	265	266	70	Not Collected	W1	Not Collected
Harbour View	DD08KP511	266	267	82	Not Collected	W1	Not Collected
Harbour View	DD08KP511	267	268	77	Not Collected	W1	Not Collected
Harbour View	DD08KP511	268	269	95	Not Collected	W1	Not Collected
Harbour View	DD08KP511	269	270	85	Not Collected	W1	Not Collected
Harbour View	DD08KP511	270	271	95	Not Collected	W1	Not Collected
Harbour View	DD08KP511	271	272	100	Not Collected	W1	Not Collected
Harbour View	DD08KP511	272	273	100	Not Collected	W1	Not Collected
Harbour View	DD08KP511	273	274	100	Not Collected	W1	Not Collected
Harbour View	DD08KP511	274	275	91	Not Collected	W1	Not Collected
Harbour View	DD08KP511	275	276	100	Not Collected	W1	Not Collected
Harbour View	DD08KP511	276	277	90	Not Collected	W1	Not Collected
Harbour View	DD08KP511	277	278	100	Not Collected	W1	Not Collected
Harbour View	DD08KP511	278	279	100	Not Collected	W1	Not Collected
Harbour View	DD08KP511	279	280	100	Not Collected	W1	Not Collected
Harbour View	DD08KP511	280	281	68	Not Collected	W1	Not Collected
Harbour View	DD08KP511	281	282	54	Not Collected	W1	Not Collected
Harbour View	DD08KP511	282	283	91	Not Collected	W1	Not Collected
Harbour View	DD08KP511	283	284	100	Not Collected	W1	Not Collected
Harbour View	DD08KP511	284	285	100	Not Collected	W1	Not Collected
Harbour View	DD08KP511	285	286	100	Not Collected	W1	Not Collected
Harbour View	DD08KP511	286	287	73	Not Collected	W1	Not Collected
Harbour View	DD08KP511	287	288	100	Not Collected	W1	Not Collected
Harbour View	DD08KP511	288	289	100	Not Collected	W1	Not Collected
Harbour View	DD08KP511	289	290	77	Not Collected	W1	Not Collected
Harbour View	DD08KP511	290	291	60	Not Collected	W1	Not Collected
Harbour View	DD08KP511	291	292	94	Not Collected	W1	Not Collected
Harbour View	DD08KP511	292	293	100	Not Collected	W1	Not Collected
Harbour View	DD08KP511	293	294	100	Not Collected	W1	Not Collected
Harbour View	DD08KP511	294	295	100	Not Collected	W1	Not Collected
Harbour View	DD08KP511	295	296	100	Not Collected	W1	Not Collected
Harbour View	DD08KP511	296	297	86	Not Collected	W1	Not Collected
Harbour View	DD08KP511	297	298	93	Not Collected	W1	Not Collected
Harbour View	DD08KP511	298	299	32	Not Collected	W1	Not Collected
Harbour View	DD08KP511	299	300	90	Not Collected	W1	Not Collected
Harbour View	DD08KP511	300	301	100	Not Collected	W1	Not Collected
Harbour View	DD08KP511	301	302	100	Not Collected	W1	Not Collected
Harbour View	DD08KP511	302	303	80	Not Collected	W1	Not Collected
Harbour View	DD08KP511	303	304	60	Not Collected	W1	Not Collected
Harbour View	DD08KP511	304	305	74	Not Collected	W1	Not Collected
Harbour View	DD08KP511	305	306	87	Not Collected	W1	Not Collected
Harbour View	DD08KP511	306	307	77	Not Collected	W1	Not Collected
Harbour View	DD08KP511	307	308	75	Not Collected	W1	Not Collected
Harbour View	DD08KP511	308	309	76	Not Collected	W1	Not Collected
Harbour View	DD08KP511	309	310	94	Not Collected	W1	Not Collected
Harbour View	DD08KP511	310	311	84	Not Collected	W1	Not Collected
Harbour View	DD08KP511	311	312	88	Not Collected	W1	Not Collected
Harbour View	DD08KP511	312	313	100	Not Collected	W1	Not Collected
Harbour View	DD08KP511	313	314	100	Not Collected	W1	Not Collected
Harbour View	DD08KP511	314	315	100	Not Collected	W1	Not Collected
Harbour View	DD08KP511	315	316	74	Not Collected	W1	Not Collected
Harbour View	DD08KP511	316	317	35	Not Collected	W1	Not Collected
Harbour View	DD08KP511	317	318	80	Not Collected	W1	Not Collected
Harbour View	DD08KP511	318	319	58	Not Collected	W1	Not Collected
Harbour View	DD08KP511	319	320	63	Not Collected	W1	Not Collected

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Harbour View	DD08KP512	152	153	40	Not Collected	W1	Not Collected
Harbour View	DD08KP512	153	154	55	Not Collected	W1	Not Collected
Harbour View	DD08KP512	154	155	74	Not Collected	W1	Not Collected
Harbour View	DD08KP512	155	156	100	Not Collected	W1	Not Collected
Harbour View	DD08KP512	156	157	75	Not Collected	W1	Not Collected
Harbour View	DD08KP512	157	158	91	Not Collected	W1	Not Collected
Harbour View	DD08KP512	158	159	100	Not Collected	W1	Not Collected
Harbour View	DD08KP512	159	160	76	Not Collected	W1	Not Collected
Harbour View	DD08KP512	160	161	63	Not Collected	W1	Not Collected
Harbour View	DD08KP512	161	162	22	Not Collected	W1	Not Collected
Harbour View	DD08KP512	162	163	46	Not Collected	W1	Not Collected
Harbour View	DD08KP512	163	164	35	Not Collected	W1	Not Collected
Harbour View	DD08KP512	164	165	10	Not Collected	W1	Not Collected
Harbour View	DD08KP512	165	166	40	Not Collected	W1	Not Collected
Harbour View	DD08KP512	166	167	39	Not Collected	W1	Not Collected
Harbour View	DD08KP512	167	168	65	Not Collected	W1	Not Collected
Harbour View	DD08KP512	168	169	57	Not Collected	W1	Not Collected
Harbour View	DD08KP512	169	170	100	Not Collected	W1	Not Collected
Harbour View	DD08KP512	170	171	60	Not Collected	W1	Not Collected
Harbour View	DD08KP512	171	172	95	Not Collected	W1	Not Collected
Harbour View	DD08KP512	172	173	64	Not Collected	W1	Not Collected
Harbour View	DD08KP512	173	174	62	Not Collected	W1	Not Collected
Harbour View	DD08KP512	174	175	88	Not Collected	W1	Not Collected
Harbour View	DD08KP512	175	176	30	Not Collected	W1	Not Collected
Harbour View	DD08KP512	176	177	10	Not Collected	W1	Not Collected
Harbour View	DD08KP512	177	178	20	Not Collected	W1	Not Collected
Harbour View	DD08KP512	178	179	44	Not Collected	W1	Not Collected
Harbour View	DD08KP512	179	180	10	Not Collected	W1	Not Collected
Harbour View	DD08KP512	180	181	17	Not Collected	W1	Not Collected
Harbour View	DD08KP512	181	182	60	Not Collected	W1	Not Collected
Harbour View	DD08KP512	182	183	43	Not Collected	W1	Not Collected
Harbour View	DD08KP512	183	184	66	Not Collected	W1	Not Collected
Harbour View	DD08KP512	184	185	44	Not Collected	W1	Not Collected
Harbour View	DD08KP512	185	186	48	Not Collected	W1	Not Collected
Harbour View	DD08KP512	186	187	47	Not Collected	W1	Not Collected
Harbour View	DD08KP512	187	188	25	Not Collected	W1	Not Collected
Harbour View	DD08KP512	188	189	46	Not Collected	W1	Not Collected
Harbour View	DD08KP512	189	190	47	Not Collected	W1	Not Collected
Harbour View	DD08KP512	190	191	81	Not Collected	W1	Not Collected
Harbour View	DD08KP512	191	192	38	Not Collected	W1	Not Collected
Harbour View	DD08KP512	192	193	52	Not Collected	W1	Not Collected
Harbour View	DD08KP512	193	194	22	Not Collected	W1	Not Collected
Harbour View	DD08KP512	194	195	20	Not Collected	W1	Not Collected
Harbour View	DD08KP512	195	196	55	Not Collected	W1	Not Collected
Harbour View	DD08KP512	196	197	16	Not Collected	W1	Not Collected
Harbour View	DD08KP512	197	198	57	Not Collected	W1	Not Collected
Harbour View	DD08KP512	198	199	54	Not Collected	W1	Not Collected
Harbour View	DD08KP512	199	200	51	Not Collected	W1	Not Collected
Harbour View	DD08KP512	200	201	77	Not Collected	W1	Not Collected
Harbour View	DD08KP512	201	202	100	Not Collected	W1	Not Collected
Harbour View	DD08KP512	202	203	34	Not Collected	W1	Not Collected
Harbour View	DD08KP512	203	204	46	Not Collected	W1	Not Collected
Harbour View	DD08KP512	204	205	35	Not Collected	W1	Not Collected
Harbour View	DD08KP512	205	206	68	Not Collected	W1	Not Collected
Harbour View	DD08KP512	206	207	69	Not Collected	W1	Not Collected
Harbour View	DD08KP512	207	208	57	Not Collected	W1	Not Collected
Harbour View	DD08KP512	208	209	96	Not Collected	W1	Not Collected
Harbour View	DD08KP512	209	210	48	Not Collected	W1	Not Collected
Harbour View	DD08KP512	210	211	47	Not Collected	W1	Not Collected

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Harbour View	DD10KP720	240	241	100	Not Collected	W1	Not Collected
Harbour View	DD10KP720	241	242	98	Not Collected	W1	Not Collected
Harbour View	DD10KP720	242	243	100	Not Collected	W1	Not Collected
Harbour View	DD10KP720	243	244	94	Not Collected	W1	Not Collected
Harbour View	DD10KP720	244	245	90	Not Collected	W1	Not Collected
Harbour View	DD10KP720	245	246	100	Not Collected	W1	Not Collected
Harbour View	DD10KP720	246	247	100	Not Collected	W1	Not Collected
Harbour View	DD10KP720	247	248	70	Not Collected	W1	Not Collected
Harbour View	DD10KP720	248	249	83	Not Collected	W1	Not Collected
Harbour View	DD10KP720	249	250	100	Not Collected	W1	Not Collected
Harbour View	DD10KP720	250	251	58	Not Collected	W1	Not Collected
Harbour View	DD10KP720	251	252	58	Not Collected	W1	Not Collected
Harbour View	DD10KP720	252	253	80	Not Collected	W1	Not Collected
Harbour View	DD10KP720	253	254	66	Not Collected	W1	Not Collected
Harbour View	DD10KP720	254	255	63	Not Collected	W1	Not Collected
Harbour View	DD10KP720	255	256	70	Not Collected	W1	Not Collected
Harbour View	DD10KP720	256	257	67	Not Collected	W1	Not Collected
Harbour View	DD10KP720	257	258	90	Not Collected	W1	Not Collected
Harbour View	DD10KP720	258	259	90	Not Collected	W1	Not Collected
Harbour View	DD10KP720	259	260	95	Not Collected	W1	Not Collected
Harbour View	DD10KP720	260	261	70	Not Collected	W1	Not Collected
Harbour View	DD10KP720	261	262	60	Not Collected	W1	Not Collected
Harbour View	DD10KP720	262	263	70	Not Collected	W1	Not Collected
Harbour View	DD10KP720	263	264	77	Not Collected	W1	Not Collected
Harbour View	DD10KP720	264	265	100	Not Collected	W1	Not Collected
Harbour View	DD10KP720	265	266	74	Not Collected	W1	Not Collected
Harbour View	DD10KP720	266	267	100	Not Collected	W1	Not Collected
Harbour View	DD10KP720	267	268	91	Not Collected	W1	Not Collected
Harbour View	DD10KP720	268	269	100	Not Collected	W1	Not Collected
Harbour View	DD10KP720	269	270	88	Not Collected	W1	Not Collected
Harbour View	DD10KP720	270	271	83	Not Collected	W1	Not Collected
Harbour View	DD10KP720	271	272	100	Not Collected	W1	Not Collected
Harbour View	DD10KP720	272	273	97	Not Collected	W1	Not Collected
Harbour View	DD10KP720	273	274	100	Not Collected	W1	Not Collected
Harbour View	DD10KP720	274	275	95	Not Collected	W1	Not Collected
Harbour View	DD10KP720	275	276	100	Not Collected	W1	Not Collected
Harbour View	DD10KP720	276	277	86	Not Collected	W1	Not Collected
Harbour View	DD10KP720	277	278	95	Not Collected	W1	Not Collected
Harbour View	DD10KP720	278	279	92	Not Collected	W1	Not Collected
Harbour View	DD10KP720	279	280	66	Not Collected	W1	Not Collected
Harbour View	DD10KP720	280	281	90	Not Collected	W1	Not Collected
Harbour View	DD10KP720	281	282	100	Not Collected	W1	Not Collected
Harbour View	DD10KP720	282	283	82	Not Collected	W1	Not Collected
Harbour View	DD10KP720	283	284	100	Not Collected	W1	Not Collected
Harbour View	DD10KP720	284	285	90	Not Collected	W1	Not Collected
Harbour View	DD10KP720	285	286	94	Not Collected	W1	Not Collected
Harbour View	DD10KP720	286	287	100	Not Collected	W1	Not Collected
Harbour View	DD10KP720	287	288	82	Not Collected	W1	Not Collected
Harbour View	DD10KP720	288	289	92	Not Collected	W1	Not Collected
Harbour View	DD10KP720	289	290	54	Not Collected	W1	Not Collected
Harbour View	DD10KP720	290	291	60	Not Collected	W1	Not Collected
Harbour View	DD10KP720	291	292	85	Not Collected	W1	Not Collected
Harbour View	DD10KP720	292	293	94	Not Collected	W1	Not Collected
Harbour View	DD10KP720	293	294	60	Not Collected	W1	Not Collected
Harbour View	DD10KP720	294	295	59	Not Collected	W1	Not Collected
Harbour View	DD10KP720	295	296	37	Not Collected	W1	Not Collected
Harbour View	DD10KP720	296	297	15	Not Collected	W1	Not Collected
Harbour View	DD10KP720	297	298	65	Not Collected	W1	Not Collected
Harbour View	DD10KP720	298	299	100	Not Collected	W1	Not Collected
Harbour View	DD10KP720	299	300	90	Not Collected	W1	Not Collected
Harbour View	DD10KP720	300	301	100	Not Collected	W1	Not Collected
Harbour View	DD10KP720	301	302	100	Not Collected	W1	Not Collected
Harbour View	DD10KP720	302	303	100	Not Collected	W1	Not Collected
Harbour View	DD10KP720	303	304	90	Not Collected	W1	Not Collected
Harbour View	DD10KP720	304	305	100	Not Collected	W1	Not Collected
Harbour View	DD10KP720	305	306	95	Not Collected	W1	Not Collected
Harbour View	DD10KP720	306	307	94	Not Collected	W1	Not Collected
Harbour View	DD10KP720	307	308	70	Not Collected	W1	Not Collected
Harbour View	DD10KP720	308	309	100	Not Collected	W1	Not Collected
Harbour View	DD10KP720	309	310	96	Not Collected	W1	Not Collected
Harbour View	DD10KP720	310	311	49	Not Collected	W1	Not Collected

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Harbour View	DD10KP725	130	131	100	Not Collected	W1	R5
Harbour View	DD10KP725	131	132	85	Not Collected	W1	R5
Harbour View	DD10KP725	132	133	90	Not Collected	W1	R5
Harbour View	DD10KP725	133	134	100	Not Collected	W1	R5
Harbour View	DD10KP725	134	135	85	Not Collected	W1	R5
Harbour View	DD10KP725	135	136	90	Not Collected	W1	R5
Harbour View	DD10KP725	136	137	90	Not Collected	W1	R5
Harbour View	DD10KP725	137	138	90	Not Collected	W1	R5
Harbour View	DD10KP725	138	139	90	Not Collected	W1	R5
Harbour View	DD10KP725	139	140	100	Not Collected	W1	R5
Harbour View	DD10KP725	140	141	90	Not Collected	W1	R5
Harbour View	DD10KP725	141	142	100	Not Collected	W1	R5
Harbour View	DD10KP725	142	143	90	Not Collected	W1	R5
Harbour View	DD10KP725	143	144	90	Not Collected	W1	R5
Harbour View	DD10KP725	144	145	100	Not Collected	W1	R5
Harbour View	DD10KP725	145	146	84	9	W1	R5
Harbour View	DD10KP725	146	147	87	8	W1	R5
Harbour View	DD10KP725	147	148	86	6	W1	R5
Harbour View	DD10KP725	148	149	66	7	W1	R5
Harbour View	DD10KP725	149	150	100	3	W1	R5
Harbour View	DD10KP725	150	151	79	7	W1	R5
Harbour View	DD10KP725	151	152	71	8	W1	R5
Harbour View	DD10KP725	152	153	53	11	W1	R5
Harbour View	DD10KP725	153	154	80	9	W1	R5
Harbour View	DD10KP725	154	155	85	9	W1	R5
Harbour View	DD10KP725	155	156	96	5	W1	R5
Harbour View	DD10KP725	156	157	70	11	W1	R5
Harbour View	DD10KP725	157	158	65	11	W1	R5
Harbour View	DD10KP725	158	159	71	9	W1	R5
Harbour View	DD10KP725	159	160	54	10	W1	R5
Harbour View	DD10KP725	160	161	78	9	W1	R5
Harbour View	DD10KP725	161	162	100	6	W1	R6
Harbour View	DD10KP725	162	163	58	9	W1	R6
Harbour View	DD10KP725	163	164	100	2	W1	R6
Harbour View	DD10KP725	164	165	84	4	W1	R6
Harbour View	DD10KP725	165	166	89	4	W1	R6
Harbour View	DD10KP725	166	167	49	13	W1	R6
Harbour View	DD10KP725	167	168	60	9	W1	R6
Harbour View	DD10KP725	168	169	91	4	W1	R6
Harbour View	DD10KP725	169	170	89	4	W1	R6
Harbour View	DD10KP725	170	171	75	8	W1	R6
Harbour View	DD10KP725	171	172	73	6	W1	R6
Harbour View	DD10KP725	172	173	88	5	W1	R6
Harbour View	DD10KP725	173	174	90	4	W1	R6
Harbour View	DD10KP725	174	175	88	4	W1	R6
Harbour View	DD10KP725	175	176	100	3	W1	R6
Harbour View	DD10KP725	176	177	91	3	W1	R6
Harbour View	DD10KP725	177	178	100	1	W1	R6
Harbour View	DD10KP725	178	179	100	1	W1	R6
Harbour View	DD10KP725	179	180	100	2	W1	R6
Harbour View	DD10KP725	180	181	100	1	W1	R6
Harbour View	DD10KP725	181	182	100	4	W1	R6
Harbour View	DD10KP725	182	183	71	5	W1	R6
Harbour View	DD10KP725	183	184	93	4	W1	R6
Harbour View	DD10KP725	184	185	100	2	W1	R6
Harbour View	DD10KP725	185	186	100	4	W1	R6
Harbour View	DD10KP725	186	187	100	4	W1	R6
Harbour View	DD10KP725	187	188	89	3	W1	R6
Harbour View	DD10KP725	188	189	100	2	W1	R6
Harbour View	DD10KP725	189	190	100	1	W1	R6
Harbour View	DD10KP725	190	191	88	5	W1	R6

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Harbour View	DD10KP727	176	177	87	Not Collected	W1	Not Collected
Harbour View	DD10KP727	177	178	40	Not Collected	W1	Not Collected
Harbour View	DD10KP727	178	179	100	Not Collected	W1	Not Collected
Harbour View	DD10KP727	179	180	100	Not Collected	W1	Not Collected
Harbour View	DD10KP727	180	181	67	Not Collected	W1	Not Collected
Harbour View	DD10KP727	181	182	62	Not Collected	W1	Not Collected
Harbour View	DD10KP727	182	183	43	Not Collected	W1	Not Collected
Harbour View	DD10KP727	183	184	55	Not Collected	W1	Not Collected
Harbour View	DD10KP727	184	185	72	Not Collected	W1	Not Collected
Harbour View	DD10KP727	185	186	85	Not Collected	W1	Not Collected
Harbour View	DD10KP727	186	187	84	Not Collected	W1	Not Collected
Harbour View	DD10KP727	187	188	100	Not Collected	W1	Not Collected
Harbour View	DD10KP727	188	189	92	Not Collected	W1	Not Collected
Harbour View	DD10KP727	189	190	100	Not Collected	W1	Not Collected
Harbour View	DD10KP727	190	191	80	Not Collected	W1	Not Collected
Harbour View	DD10KP727	191	192	72	Not Collected	W1	Not Collected
Harbour View	DD10KP727	192	193	82	Not Collected	W1	Not Collected
Harbour View	DD10KP727	193	194	22	Not Collected	W1	Not Collected
Harbour View	DD10KP727	194	195	62	Not Collected	W1	Not Collected
Harbour View	DD10KP727	195	196	73	Not Collected	W1	Not Collected
Harbour View	DD10KP727	196	197	60	Not Collected	W1	Not Collected
Harbour View	DD10KP727	197	198	68	Not Collected	W1	Not Collected
Harbour View	DD10KP727	198	199	90	Not Collected	W1	Not Collected
Harbour View	DD10KP727	199	200	100	Not Collected	W1	Not Collected
Harbour View	DD10KP727	200	201	61	Not Collected	W1	Not Collected
Harbour View	DD10KP727	201	202	77	Not Collected	W1	Not Collected
Harbour View	DD10KP727	202	203	94	Not Collected	W1	Not Collected
Harbour View	DD10KP727	203	204	75	Not Collected	W1	Not Collected
Harbour View	DD10KP727	204	205	70	Not Collected	W1	Not Collected
Harbour View	DD10KP727	205	206	85	Not Collected	W1	Not Collected
Harbour View	DD10KP727	206	207	40	Not Collected	W1	Not Collected
Harbour View	DD10KP727	207	208	100	Not Collected	W1	Not Collected
Harbour View	DD10KP727	208	209	60	Not Collected	W1	Not Collected
Harbour View	DD10KP727	209	210	80	Not Collected	W1	Not Collected
Harbour View	DD10KP727	210	211	40	Not Collected	W1	Not Collected
Harbour View	DD10KP727	211	212	88	Not Collected	W1	Not Collected
Harbour View	DD10KP727	212	213	84	Not Collected	W1	Not Collected
Harbour View	DD10KP727	213	214	84	Not Collected	W1	Not Collected
Harbour View	DD10KP727	214	215	59	Not Collected	W1	Not Collected
Harbour View	DD10KP727	215	216	76	Not Collected	W1	Not Collected
Harbour View	DD10KP727	216	217	100	Not Collected	W1	Not Collected
Harbour View	DD10KP727	217	218	100	Not Collected	W1	Not Collected
Harbour View	DD10KP727	218	219	100	Not Collected	W1	Not Collected
Harbour View	DD10KP727	219	220	100	Not Collected	W1	Not Collected
Harbour View	DD10KP727	220	221	100	Not Collected	W1	Not Collected
Harbour View	DD10KP727	221	222	93	Not Collected	W1	Not Collected
Harbour View	DD10KP727	222	223	83	Not Collected	W1	Not Collected
Harbour View	DD10KP727	223	224	67	Not Collected	W1	Not Collected
Harbour View	DD10KP727	224	225	95	Not Collected	W1	Not Collected
Harbour View	DD10KP727	225	226	87	Not Collected	W1	Not Collected
Harbour View	DD10KP727	226	227	100	Not Collected	W1	Not Collected
Harbour View	DD10KP727	227	228	92	Not Collected	W1	Not Collected
Harbour View	DD10KP727	228	229	98	Not Collected	W1	Not Collected
Harbour View	DD10KP727	229	230	90	Not Collected	W1	Not Collected
Harbour View	DD10KP727	230	231	60	Not Collected	W1	Not Collected
Harbour View	DD10KP727	231	232	92	Not Collected	W1	Not Collected
Harbour View	DD10KP727	232	233	65	Not Collected	W1	Not Collected
Harbour View	DD10KP727	233	234	56	Not Collected	W1	Not Collected
Harbour View	DD10KP727	234	235	60	Not Collected	W1	Not Collected
Harbour View	DD10KP727	235	236	66	Not Collected	W1	Not Collected
Harbour View	DD10KP727	236	237	78	Not Collected	W1	Not Collected
Harbour View	DD10KP727	237	238	80	Not Collected	W1	Not Collected
Harbour View	DD10KP727	238	239	86	Not Collected	W1	Not Collected
Harbour View	DD10KP727	239	240	92	Not Collected	W1	Not Collected
Harbour View	DD10KP727	240	241	70	Not Collected	W1	Not Collected
Harbour View	DD10KP727	241	242	83	Not Collected	W1	Not Collected
Harbour View	DD10KP727	242	243	96	Not Collected	W1	Not Collected
Harbour View	DD10KP727	243	244	100	Not Collected	W1	Not Collected
Harbour View	DD10KP727	244	245	100	Not Collected	W1	Not Collected
Harbour View	DD10KP727	245	246	95	Not Collected	W1	Not Collected

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Harbour View	DD10KP731	**0**	**1**	**10**	25	W4	R2
Harbour View	DD10KP731	1	2	10	25	W4	R2
Harbour View	DD10KP731	2	3	10	12	W4	R2
Harbour View	DD10KP731	3	4	10	12	W4	R2
Harbour View	DD10KP731	4	5	10	25	W4	R2
Harbour View	DD10KP731	5	6	10	25	W4	R2
Harbour View	DD10KP731	6	7	10	25	W4	R2
Harbour View	DD10KP731	7	8	10	15	W4	R2
Harbour View	DD10KP731	8	9	10	25	W4	R2
Harbour View	DD10KP731	9	10	10	25	W4	R2
Harbour View	DD10KP731	10	11	10	25	W4	R2
Harbour View	DD10KP731	11	12	10	25	W4	R2
Harbour View	DD10KP731	12	13	10	25	W4	R2
Harbour View	DD10KP731	13	14	10	25	W4	R2
Harbour View	DD10KP731	14	15	10	25	W4	R2
Harbour View	DD10KP731	15	16	10	25	W4	R2
Harbour View	DD10KP731	16	17	10	25	W3	R3
Harbour View	DD10KP731	17	18	10	25	W3	R3
Harbour View	DD10KP731	18	19	10	25	W3	R3
Harbour View	DD10KP731	19	20	10	25	W3	R3
Harbour View	DD10KP731	20	21	10	25	W3	R3
Harbour View	DD10KP731	21	22	10	25	W3	R3
Harbour View	DD10KP731	22	23	10	25	W3	R3
Harbour View	DD10KP731	23	24	10	25	W3	R3
Harbour View	DD10KP731	24	25	10	25	W3	R3
Harbour View	DD10KP731	25	26	30	25	W3	R4
Harbour View	DD10KP731	26	27	65	15	W2	R4
Harbour View	DD10KP731	27	28	41	25	W2	R4
Harbour View	DD10KP731	28	29	10	25	W2	R4
Harbour View	DD10KP731	29	30	20	25	W2	R4
Harbour View	DD10KP731	30	31	10	25	W2	R4
Harbour View	DD10KP731	31	32	10	25	W2	R4
Harbour View	DD10KP731	32	33	10	25	W2	R4
Harbour View	DD10KP731	33	34	10	25	W2	R4
Harbour View	DD10KP731	34	35	10	25	W2	R4
Harbour View	DD10KP731	35	36	10	25	W2	R4
Harbour View	DD10KP731	36	37	10	25	W2	R4
Harbour View	DD10KP731	37	38	10	25	W2	R4
Harbour View	DD10KP731	38	39	11	25	W2	R4
Harbour View	DD10KP731	39	40	53	13	W2	R4
Harbour View	DD10KP731	40	41	15	20	W2	R4
Harbour View	DD10KP731	41	42	10	25	W2	R4
Harbour View	DD10KP731	42	43	10	25	W2	R4
Harbour View	DD10KP731	43	44	14	25	W2	R4
Harbour View	DD10KP731	44	45	11	25	W2	R4
Harbour View	DD10KP731	45	46	10	25	W2	R4
Harbour View	DD10KP731	46	47	17	25	W2	R4
Harbour View	DD10KP731	47	48	10	25	W2	R4
Harbour View	DD10KP731	48	49	10	25	W2	R4
Harbour View	DD10KP731	49	50	13	25	W2	R4
Harbour View	DD10KP731	50	51	10	25	W2	R4
Harbour View	DD10KP731	51	52	10	25	W2	R4
Harbour View	DD10KP731	52	53	10	25	W2	R4
Harbour View	DD10KP731	53	54	10	25	W2	R4
Harbour View	DD10KP731	54	55	10	25	W2	R4
Harbour View	DD10KP731	55	56	10	25	W2	R4
Harbour View	DD10KP731	56	57	20	25	W2	R4
Harbour View	DD10KP731	57	58	22	25	W2	R4
Harbour View	DD10KP731	58	59	10	25	W2	R4
Harbour View	DD10KP731	59	60	13	25	W3	R4
Harbour View	DD10KP731	60	61	10	25	W3	R2
Harbour View	DD10KP731	61	62	10	25	W3	R2
Harbour View	DD10KP731	62	63	10	25	W3	R2
Harbour View	DD10KP731	63	64	10	25	W3	R2
Harbour View	DD10KP731	64	65	10	25	W3	R2
Harbour View	DD10KP731	65	66	15	25	W1	R4
Harbour View	DD10KP731	66	67	29	25	W1	R4
Harbour View	DD10KP731	67	68	10	25	W1	R4
Harbour View	DD10KP731	68	69	10	25	W1	R4
Harbour View	DD10KP731	69	70	10	25	W1	R4
Harbour View	DD10KP731	70	71	25	25	W1	R4
Harbour View	DD10KP731	71	72	35	15	W1	R4
Harbour View	DD10KP731	72	73	20	25	W1	R4
Harbour View	DD10KP731	73	74	70	5	W1	R4
Harbour View	DD10KP731	74	75	85	6	W1	R4
Harbour View	DD10KP731	75	76	85	4	W1	R4
Harbour View	DD10KP731	76	77	40	25	W1	R4
Harbour View	DD10KP731	77	78	10	25	W1	R4
Harbour View	DD10KP731	78	79	40	10	W1	R4
Harbour View	DD10KP731	79	80	60	12	W1	R4
Harbour View	DD10KP731	80	81	20	25	W1	R4
Harbour View	DD10KP731	81	82	80	4	W1	R4
Harbour View	DD10KP731	82	83	50	5	W1	R4
Harbour View	DD10KP731	83	84	20	25	W1	R4
Harbour View	DD10KP731	84	85	10	25	W1	R4
Harbour View	DD10KP731	85	86	10	25	W1	R4
Harbour View	DD10KP731	86	87	70	13	W1	R5
Harbour View	DD10KP731	87	88	85	5	W1	R5
Harbour View	DD10KP731	88	89	80	7	W1	R5
Harbour View	DD10KP731	89	90	80	4	W1	R5
Harbour View	DD10KP731	90	91	90	4	W1	R5
Harbour View	DD10KP731	91	92	95	6	W1	R5
Harbour View	DD10KP731	92	93	95	3	W1	R5
Harbour View	DD10KP731	93	94	100	3	W1	R5
Harbour View	DD10KP731	94	95	70	6	W1	R5
Harbour View	DD10KP731	95	96	95	3	W1	R5
Harbour View	DD10KP731	96	97	90	5	W1	R5
Harbour View	DD10KP731	97	98	65	8	W1	R5
Harbour View	DD10KP731	98	99	82	4	W1	R5
Harbour View	DD10KP731	99	100	85	4	W1	R5
Harbour View	DD10KP731	100	101	45	6	W1	R5

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Harbour View	DD10KP731	101	102	95	4	W1	R5
Harbour View	DD10KP731	102	103	90	3	W1	R5
Harbour View	DD10KP731	103	104	80	4	W1	R5
Harbour View	DD10KP731	104	105	95	3	W1	R5
Harbour View	DD10KP731	105	106	88	3	W1	R5
Harbour View	DD10KP731	106	107	85	10	W1	R5
Harbour View	DD10KP731	107	108	88	6	W1	R5
Harbour View	DD10KP731	108	109	55	25	W1	R5
Harbour View	DD10KP731	109	110	50	7	W1	R5
Harbour View	DD10KP731	110	111	68	9	W1	R5
Harbour View	DD10KP731	111	112	85	6	W1	R5
Harbour View	DD10KP731	112	113	52	10	W1	R5
Harbour View	DD10KP731	113	114	100	3	W1	R5
Harbour View	DD10KP731	114	115	95	6	W1	R5
Harbour View	DD10KP731	115	116	80	6	W1	R5
Harbour View	DD10KP731	116	117	50	6	W1	R5
Harbour View	DD10KP731	117	118	80	4	W1	R5
Harbour View	DD10KP731	118	119	100	1	W1	R5
Harbour View	DD10KP731	119	120	100	2	W1	R5
Harbour View	DD10KP731	120	121	20	25	W1	R5
Harbour View	DD10KP731	121	122	10	25	W1	R5
Harbour View	DD10KP731	122	123	65	16	W1	R5
Harbour View	DD10KP731	123	124	30	20	W1	R5
Harbour View	DD10KP731	124	125	65	25	W1	R5
Harbour View	DD10KP731	125	126	22	25	W1	R5
Harbour View	DD10KP731	126	127	45	25	W1	R5
Harbour View	DD10KP731	127	128	13	25	W1	R5
Harbour View	DD10KP731	128	129	10	25	W1	R5
Harbour View	DD10KP731	129	130	10	25	W1	R5
Harbour View	DD10KP731	130	131	15	25	W1	R5
Harbour View	DD10KP731	131	132	10	25	W1	R5
Harbour View	DD10KP731	132	133	60	15	W1	R5
Harbour View	DD10KP731	133	134	70	10	W1	R5
Harbour View	DD10KP731	134	135	95	5	W1	R5

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Harbour View	DD10KP733	**0**	**1**	**10**	25	W4	R2
Harbour View	DD10KP733	1	2	10	25	W4	R2
Harbour View	DD10KP733	2	3	10	25	W4	R2
Harbour View	DD10KP733	3	4	10	25	W4	R2
Harbour View	DD10KP733	4	5	10	8	W4	R2
Harbour View	DD10KP733	5	6	10	9	W4	R2
Harbour View	DD10KP733	6	7	10	25	W4	R2
Harbour View	DD10KP733	7	8	10	25	W4	R2
Harbour View	DD10KP733	8	9	10	6	W4	R2
Harbour View	DD10KP733	9	10	10	25	W4	R2
Harbour View	DD10KP733	10	11	10	25	W4	R2
Harbour View	DD10KP733	11	12	10	25	W4	R2
Harbour View	DD10KP733	12	13	10	25	W3	R3
Harbour View	DD10KP733	13	14	10	10	W3	R3
Harbour View	DD10KP733	14	15	10	7	W3	R3
Harbour View	DD10KP733	15	16	75	8	W3	R3
Harbour View	DD10KP733	16	17	100	5	W3	R3
Harbour View	DD10KP733	17	18	31	9	W3	R3
Harbour View	DD10KP733	18	19	85	25	W3	R3
Harbour View	DD10KP733	19	20	47	25	W3	R3
Harbour View	DD10KP733	20	21	63	25	W3	R3
Harbour View	DD10KP733	21	22	58	25	W3	R3
Harbour View	DD10KP733	22	23	39	25	W3	R3
Harbour View	DD10KP733	23	24	79	9	W3	R3
Harbour View	DD10KP733	24	25	61	25	W3	R3
Harbour View	DD10KP733	25	26	74	8	W3	R3
Harbour View	DD10KP733	26	27	64	12	W3	R3
Harbour View	DD10KP733	27	28	90	10	W3	R3
Harbour View	DD10KP733	28	29	100	5	W3	R3
Harbour View	DD10KP733	29	30	65	25	W3	R3
Harbour View	DD10KP733	30	31	72	25	W3	R3
Harbour View	DD10KP733	31	32	11	25	W3	R3
Harbour View	DD10KP733	32	33	50	25	W3	R3
Harbour View	DD10KP733	33	34	90	25	W3	R3
Harbour View	DD10KP733	34	35	87	25	W3	R3
Harbour View	DD10KP733	35	36	38	25	W3	R3
Harbour View	DD10KP733	36	37	53	10	W3	R3
Harbour View	DD10KP733	37	38	16	25	W3	R3
Harbour View	DD10KP733	38	39	28	20	W3	R3
Harbour View	DD10KP733	39	40	51	15	W3	R3
Harbour View	DD10KP733	40	41	73	25	W3	R3
Harbour View	DD10KP733	41	42	49	25	W3	R3
Harbour View	DD10KP733	42	43	88	25	W3	R4
Harbour View	DD10KP733	43	44	52	25	W3	R4
Harbour View	DD10KP733	44	45	50	15	W3	R4
Harbour View	DD10KP733	45	46	48	20	W3	R4
Harbour View	DD10KP733	46	47	46	15	W3	R4
Harbour View	DD10KP733	47	48	33	11	W3	R4
Harbour View	DD10KP733	48	49	70	7	W3	R4
Harbour View	DD10KP733	49	50	38	13	W3	R4
Harbour View	DD10KP733	50	51	57	8	W3	R4
Harbour View	DD10KP733	51	52	67	10	W3	R4
Harbour View	DD10KP733	52	53	81	8	W3	R4
Harbour View	DD10KP733	53	54	33	11	W3	R4
Harbour View	DD10KP733	54	55	67	10	W3	R4
Harbour View	DD10KP733	55	56	47	9	W3	R5
Harbour View	DD10KP733	56	57	61	8	W2	R5
Harbour View	DD10KP733	57	58	36	14	W2	R5
Harbour View	DD10KP733	58	59	39	16	W2	R5
Harbour View	DD10KP733	59	60	50	17	W2	R5
Harbour View	DD10KP733	60	61	62	10	W2	R5
Harbour View	DD10KP733	61	62	42	15	W2	R5
Harbour View	DD10KP733	62	63	63	12	W2	R5
Harbour View	DD10KP733	63	64	40	15	W2	R5
Harbour View	DD10KP733	64	65	41	25	W2	R5
Harbour View	DD10KP733	65	66	10	25	W2	R5
Harbour View	DD10KP733	66	67	11	25	W2	R5
Harbour View	DD10KP733	67	68	10	25	W2	R5
Harbour View	DD10KP733	68	69	57	14	W2	R5
Harbour View	DD10KP733	69	70	10	15	W2	R5
Harbour View	DD10KP733	70	71	46	15	W2	R5
Harbour View	DD10KP733	71	72	30	25	W2	R5
Harbour View	DD10KP733	72	73	56	15	W2	R5

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Harbour View	DD10KP736A	170	171	Not Recorded	Not Collected	W1	R5
Harbour View	DD10KP736A	171	172	Not Recorded	Not Collected	W1	R5
Harbour View	DD10KP736A	172	173	Not Recorded	Not Collected	W1	R5
Harbour View	DD10KP736A	173	174	Not Recorded	Not Collected	W1	R5
Harbour View	DD10KP736A	174	175	100	3	W1	R5
Harbour View	DD10KP736A	175	176	95	4	W1	R5
Harbour View	DD10KP736A	176	177	70	11	W1	R5
Harbour View	DD10KP736A	177	178	90	9	W1	R5
Harbour View	DD10KP736A	178	179	100	4	W1	R5
Harbour View	DD10KP736A	179	180	95	6	W1	R5
Harbour View	DD10KP736A	180	181	70	7	W1	R5
Harbour View	DD10KP736A	181	182	75	5	W1	R5
Harbour View	DD10KP736A	182	183	90	4	W1	R5
Harbour View	DD10KP736A	183	184	85	2	W1	R5
Harbour View	DD10KP736A	184	185	30	18	W1	R5
Harbour View	DD10KP736A	185	186	35	13	W1	R5
Harbour View	DD10KP736A	186	187	50	13	W1	R5
Harbour View	DD10KP736A	187	188	15	16	W1	R5
Harbour View	DD10KP736A	188	189	30	17	W1	R5
Harbour View	DD10KP736A	189	190	30	12	W1	R5
Harbour View	DD10KP736A	190	191	10	21	W1	R5
Harbour View	DD10KP736A	191	192	25	20	W1	R5
Harbour View	DD10KP736A	192	193	30	25	W1	R5
Harbour View	DD10KP736A	193	194	36	19	W1	R5
Harbour View	DD10KP736A	194	195	0	25	W1	R5
Harbour View	DD10KP736A	195	196	60	12	W1	R5
Harbour View	DD10KP736A	196	197	80	8	W1	R5
Harbour View	DD10KP736A	197	198	48	16	W1	R5
Harbour View	DD10KP736A	198	199	0	25	W1	R5
Harbour View	DD10KP736A	199	200	15	25	W1	R5
Harbour View	DD10KP736A	200	201	65	9	W1	R6
Harbour View	DD10KP736A	201	202	60	14	W1	R6
Harbour View	DD10KP736A	202	203	55	16	W1	R5
Harbour View	DD10KP736A	203	204	40	16	W1	R5
Harbour View	DD10KP736A	204	205	17	24	W1	R5
Harbour View	DD10KP736A	205	206	50	13	W1	R5
Harbour View	DD10KP736A	206	207	30	18	W1	R5
Harbour View	DD10KP736A	207	208	40	22	W1	R5
Harbour View	DD10KP736A	208	209	45	20	W1	R5
Harbour View	DD10KP736A	209	210	40	16	W1	R5
Harbour View	DD10KP736A	210	211	50	12	W1	R5
Harbour View	DD10KP736A	211	212	90	8	W1	R5
Harbour View	DD10KP736A	212	213	28	20	W1	R5
Harbour View	DD10KP736A	213	214	0	33	W1	R5
Harbour View	DD10KP736A	214	215	80	12	W1	R5
Harbour View	DD10KP736A	215	216	80	9	W1	R5
Harbour View	DD10KP736A	216	217	70	11	W1	R5
Harbour View	DD10KP736A	217	218	75	12	W1	R5
Harbour View	DD10KP736A	218	219	95	7	W1	R5
Harbour View	DD10KP736A	219	220	100	3	W1	R5
Harbour View	DD10KP736A	220	221	65	10	W1	R5
Harbour View	DD10KP736A	221	222	95	6	W1	R5
Harbour View	DD10KP736A	222	223	82	5	W1	R5
Harbour View	DD10KP736A	223	224	87	4	W1	R5
Harbour View	DD10KP736A	224	225	90	5	W1	R5
Harbour View	DD10KP736A	225	226	97	4	W1	R5
Harbour View	DD10KP736A	226	227	100	3	W1	R5
Harbour View	DD10KP736A	227	228	80	5	W1	R5

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Harbour View	DD10KP725	130	131	100	Not Collected	W1	R5
Harbour View	DD10KP725	131	132	85	Not Collected	W1	R5
Harbour View	DD10KP725	132	133	90	Not Collected	W1	R5
Harbour View	DD10KP725	133	134	100	Not Collected	W1	R5
Harbour View	DD10KP725	134	135	85	Not Collected	W1	R5
Harbour View	DD10KP725	135	136	75	Not Collected	W1	R5
Harbour View	DD10KP725	136	137	90	Not Collected	W1	R5
Harbour View	DD10KP725	137	138	90	Not Collected	W1	R5
Harbour View	DD10KP725	138	139	90	Not Collected	W1	R5
Harbour View	DD10KP725	139	140	100	Not Collected	W1	R5
Harbour View	DD10KP725	140	141	90	Not Collected	W1	R5
Harbour View	DD10KP725	141	142	100	Not Collected	W1	R5
Harbour View	DD10KP725	142	143	90	Not Collected	W1	R5
Harbour View	DD10KP725	143	144	90	Not Collected	W1	R5
Harbour View	DD10KP725	144	145	100	Not Collected	W1	R5
Harbour View	DD10KP725	145	146	84	9	W1	R5
Harbour View	DD10KP725	146	147	87	8	W1	R5
Harbour View	DD10KP725	147	148	86	6	W1	R5
Harbour View	DD10KP725	148	149	66	7	W1	R5
Harbour View	DD10KP725	149	150	100	3	W1	R5
Harbour View	DD10KP725	150	151	79	7	W1	R5
Harbour View	DD10KP725	151	152	71	8	W1	R5
Harbour View	DD10KP725	152	153	53	11	W1	R5
Harbour View	DD10KP725	153	154	80	9	W1	R5
Harbour View	DD10KP725	154	155	85	9	W1	R5
Harbour View	DD10KP725	155	156	96	5	W1	R5
Harbour View	DD10KP725	156	157	70	11	W1	R5
Harbour View	DD10KP725	157	158	65	11	W1	R5
Harbour View	DD10KP725	158	159	71	9	W1	R5
Harbour View	DD10KP725	159	160	54	10	W1	R5
Harbour View	DD10KP725	160	161	78	9	W1	R5
Harbour View	DD10KP725	161	162	100	6	W1	R6
Harbour View	DD10KP725	162	163	58	9	W1	R6
Harbour View	DD10KP725	163	164	100	2	W1	R6
Harbour View	DD10KP725	164	165	84	4	W1	R6
Harbour View	DD10KP725	165	166	89	4	W1	R6
Harbour View	DD10KP725	166	167	49	13	W1	R6
Harbour View	DD10KP725	167	168	60	9	W1	R6
Harbour View	DD10KP725	168	169	91	4	W1	R6
Harbour View	DD10KP725	169	170	89	4	W1	R6
Harbour View	DD10KP725	170	171	75	8	W1	R6
Harbour View	DD10KP725	171	172	73	6	W1	R6
Harbour View	DD10KP725	172	173	88	5	W1	R6
Harbour View	DD10KP725	173	174	90	4	W1	R6
Harbour View	DD10KP725	174	175	88	4	W1	R6
Harbour View	DD10KP725	175	176	100	3	W1	R6
Harbour View	DD10KP725	176	177	91	3	W1	R6
Harbour View	DD10KP725	177	178	100	1	W1	R6
Harbour View	DD10KP725	178	179	100	1	W1	R6
Harbour View	DD10KP725	179	180	100	2	W1	R6
Harbour View	DD10KP725	180	181	100	1	W1	R6
Harbour View	DD10KP725	181	182	100	4	W1	R6
Harbour View	DD10KP725	182	183	71	5	W1	R6
Harbour View	DD10KP725	183	184	93	4	W1	R6
Harbour View	DD10KP725	184	185	100	2	W1	R6
Harbour View	DD10KP725	185	186	100	4	W1	R6
Harbour View	DD10KP725	186	187	100	4	W1	R6
Harbour View	DD10KP725	187	188	89	3	W1	R6
Harbour View	DD10KP725	188	189	100	2	W1	R6
Harbour View	DD10KP725	189	190	100	1	W1	R6
Harbour View	DD10KP725	190	191	88	5	W1	R6

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Harbour View	DD10KP731	0	1	0	25	W4	R2
Harbour View	DD10KP731	1	2	40	25	W4	R2
Harbour View	DD10KP731	2	3	40	12	W4	R2
Harbour View	DD10KP731	3	4	50	12	W4	R2
Harbour View	DD10KP731	4	5	14	25	W4	R2
Harbour View	DD10KP731	5	6	60	25	W4	R2
Harbour View	DD10KP731	6	7	30	25	W4	R2
Harbour View	DD10KP731	7	8	65	15	W4	R2
Harbour View	DD10KP731	8	9	35	25	W4	R2
Harbour View	DD10KP731	9	10	60	25	W4	R2
Harbour View	DD10KP731	10	11	25	25	W4	R2
Harbour View	DD10KP731	11	12	13	25	W4	R2
Harbour View	DD10KP731	12	13	25	25	W4	R2
Harbour View	DD10KP731	13	14	0	25	W4	R2
Harbour View	DD10KP731	14	15	0	25	W4	R2
Harbour View	DD10KP731	15	16	0	25	W4	R2
Harbour View	DD10KP731	16	17	10	25	W3	R3
Harbour View	DD10KP731	17	18	0	25	W3	R3
Harbour View	DD10KP731	18	19	0	25	W3	R3
Harbour View	DD10KP731	19	20	0	25	W3	R3
Harbour View	DD10KP731	20	21	0	25	W3	R3
Harbour View	DD10KP731	21	22	0	25	W3	R3
Harbour View	DD10KP731	22	23	0	25	W3	R3
Harbour View	DD10KP731	23	24	0	25	W3	R3
Harbour View	DD10KP731	24	25	0	25	W3	R3
Harbour View	DD10KP731	25	26	30	25	W3	R4
Harbour View	DD10KP731	26	27	65	15	W2	R4
Harbour View	DD10KP731	27	28	41	25	W2	R4
Harbour View	DD10KP731	28	29	10	25	W2	R4
Harbour View	DD10KP731	29	30	20	25	W2	R4
Harbour View	DD10KP731	30	31	0	25	W2	R4
Harbour View	DD10KP731	31	32	0	25	W2	R4
Harbour View	DD10KP731	32	33	0	25	W2	R4
Harbour View	DD10KP731	33	34	0	25	W2	R4
Harbour View	DD10KP731	34	35	0	25	W2	R4
Harbour View	DD10KP731	35	36	0	25	W2	R4
Harbour View	DD10KP731	36	37	0	25	W2	R4
Harbour View	DD10KP731	37	38	0	25	W2	R4
Harbour View	DD10KP731	38	39	11	25	W2	R4
Harbour View	DD10KP731	39	40	53	13	W2	R4
Harbour View	DD10KP731	40	41	15	20	W2	R4
Harbour View	DD10KP731	41	42	0	25	W2	R4
Harbour View	DD10KP731	42	43	0	25	W2	R4
Harbour View	DD10KP731	43	44	14	25	W2	R4
Harbour View	DD10KP731	44	45	11	25	W2	R4
Harbour View	DD10KP731	45	46	0	25	W2	R4
Harbour View	DD10KP731	46	47	17	25	W2	R4
Harbour View	DD10KP731	47	48	0	25	W2	R4
Harbour View	DD10KP731	48	49	0	25	W2	R4
Harbour View	DD10KP731	49	50	13	25	W2	R4
Harbour View	DD10KP731	50	51	0	25	W2	R4
Harbour View	DD10KP731	51	52	10	25	W2	R4
Harbour View	DD10KP731	52	53	0	25	W2	R4
Harbour View	DD10KP731	53	54	0	25	W2	R4
Harbour View	DD10KP731	54	55	0	25	W2	R4
Harbour View	DD10KP731	55	56	0	25	W2	R4
Harbour View	DD10KP731	56	57	20	25	W2	R4
Harbour View	DD10KP731	57	58	22	25	W2	R4
Harbour View	DD10KP731	58	59	0	25	W2	R4
Harbour View	DD10KP731	59	60	13	25	W3	R4
Harbour View	DD10KP731	60	61	0	25	W3	R2
Harbour View	DD10KP731	61	62	0	25	W3	R2
Harbour View	DD10KP731	62	63	0	25	W3	R2
Harbour View	DD10KP731	63	64	0	25	W3	R2
Harbour View	DD10KP731	64	65	10	25	W3	R2
Harbour View	DD10KP731	65	66	15	25	W1	R4
Harbour View	DD10KP731	66	67	29	25	W1	R4
Harbour View	DD10KP731	67	68	0	25	W1	R4
Harbour View	DD10KP731	68	69	0	25	W1	R4
Harbour View	DD10KP731	69	70	0	25	W1	R4
Harbour View	DD10KP731	70	71	25	25	W1	R4
Harbour View	DD10KP731	71	72	35	15	W1	R4
Harbour View	DD10KP731	72	73	20	25	W1	R4
Harbour View	DD10KP731	73	74	70	5	W1	R4
Harbour View	DD10KP731	74	75	85	6	W1	R4
Harbour View	DD10KP731	75	76	85	4	W1	R4
Harbour View	DD10KP731	76	77	40	25	W1	R4
Harbour View	DD10KP731	77	78	0	25	W1	R4
Harbour View	DD10KP731	78	79	40	10	W1	R4
Harbour View	DD10KP731	79	80	60	12	W1	R4
Harbour View	DD10KP731	80	81	20	25	W1	R4
Harbour View	DD10KP731	81	82	80	4	W1	R4
Harbour View	DD10KP731	82	83	50	5	W1	R4
Harbour View	DD10KP731	83	84	20	25	W1	R4
Harbour View	DD10KP731	84	85	0	25	W1	R4
Harbour View	DD10KP731	85	86	0	25	W1	R4
Harbour View	DD10KP731	86	87	70	13	W1	R5
Harbour View	DD10KP731	87	88	85	5	W1	R5
Harbour View	DD10KP731	88	89	80	7	W1	R5
Harbour View	DD10KP731	89	90	80	4	W1	R5
Harbour View	DD10KP731	90	91	90	4	W1	R5
Harbour View	DD10KP731	91	92	95	6	W1	R5
Harbour View	DD10KP731	92	93	95	3	W1	R5
Harbour View	DD10KP731	93	94	100	3	W1	R5
Harbour View	DD10KP731	94	95	70	6	W1	R5
Harbour View	DD10KP731	95	96	95	3	W1	R5
Harbour View	DD10KP731	96	97	90	5	W1	R5
Harbour View	DD10KP731	97	98	65	8	W1	R5
Harbour View	DD10KP731	98	99	82	4	W1	R5
Harbour View	DD10KP731	99	100	85	4	W1	R5
Harbour View	DD10KP731	100	101	45	6	W1	R5
Harbour View	DD10KP731	101	102	95	4	W1	R5
Harbour View	DD10KP731	102	103	90	3	W1	R5
Harbour View	DD10KP731	103	104	80	4	W1	R5
Harbour View	DD10KP731	104	105	95	3	W1	R5
Harbour View	DD10KP731	105	106	88	3	W1	R5
Harbour View	DD10KP731	106	107	85	10	W1	R5
Harbour View	DD10KP731	107	108	88	6	W1	R5
Harbour View	DD10KP731	108	109	55	25	W1	R5
Harbour View	DD10KP731	109	110	50	7	W1	R5
Harbour View	DD10KP731	110	111	68	9	W1	R5
Harbour View	DD10KP731	111	112	85	6	W1	R5
Harbour View	DD10KP731	112	113	52	10	W1	R5
Deposit	**Borehole**	**From (m)**	**To (m)**	**RQD (%)**	**Fracture Frequency (Fractures/metre)**	**Weathering**	**Hardness**
Harbour View	DD10KP731	113	114	100	3	W1	R5

Harbour View	DD10KP731	114	115	95	6	W1	R5
Harbour View	DD10KP731	115	116	80	6	W1	R5
Harbour View	DD10KP731	116	117	50	6	W1	R5
Harbour View	DD10KP731	117	118	80	4	W1	R5
Harbour View	DD10KP731	118	119	100	1	W1	R5
Harbour View	DD10KP731	119	120	100	2	W1	R5
Harbour View	DD10KP731	120	121	20	25	W1	R5
Harbour View	DD10KP731	121	122	0	25	W1	R5
Harbour View	DD10KP731	122	123	65	16	W1	R5
Harbour View	DD10KP731	123	124	30	20	W1	R5
Harbour View	DD10KP731	124	125	65	25	W1	R5
Harbour View	DD10KP731	125	126	22	25	W1	R5
Harbour View	DD10KP731	126	127	45	25	W1	R5
Harbour View	DD10KP731	127	128	13	25	W1	R5
Harbour View	DD10KP731	128	129	0	25	W1	R5
Harbour View	DD10KP731	129	130	0	25	W1	R5
Harbour View	DD10KP731	130	131	15	25	W1	R5
Harbour View	DD10KP731	131	132	0	25	W1	R5
Harbour View	DD10KP731	132	133	60	15	W1	R5
Harbour View	DD10KP731	133	134	70	10	W1	R5
Harbour View	DD10KP731	134	135	95	5	W1	R5

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Harbour View	DD10KP733	0	1	27	25	W4	R2
Harbour View	DD10KP733	1	2	0	25	W4	R2
Harbour View	DD10KP733	2	3	0	25	W4	R2
Harbour View	DD10KP733	3	4	20	25	W4	R2
Harbour View	DD10KP733	4	5	38	8	W4	R2
Harbour View	DD10KP733	5	6	61	9	W4	R2
Harbour View	DD10KP733	6	7	34	25	W4	R2
Harbour View	DD10KP733	7	8	0	25	W4	R2
Harbour View	DD10KP733	8	9	82	6	W4	R2
Harbour View	DD10KP733	9	10	37	25	W4	R2
Harbour View	DD10KP733	10	11	19	25	W4	R2
Harbour View	DD10KP733	11	12	25	25	W4	R2
Harbour View	DD10KP733	12	13	30	25	W3	R3
Harbour View	DD10KP733	13	14	70	10	W3	R3
Harbour View	DD10KP733	14	15	65	7	W3	R3
Harbour View	DD10KP733	15	16	75	8	W3	R3
Harbour View	DD10KP733	16	17	100	5	W3	R3
Harbour View	DD10KP733	17	18	31	9	W3	R3
Harbour View	DD10KP733	18	19	85	25	W3	R3
Harbour View	DD10KP733	19	20	47	25	W3	R3
Harbour View	DD10KP733	20	21	63	25	W3	R3
Harbour View	DD10KP733	21	22	58	25	W3	R3
Harbour View	DD10KP733	22	23	39	25	W3	R3
Harbour View	DD10KP733	23	24	79	9	W3	R3
Harbour View	DD10KP733	24	25	61	25	W3	R3
Harbour View	DD10KP733	25	26	74	8	W3	R3
Harbour View	DD10KP733	26	27	64	12	W3	R3
Harbour View	DD10KP733	27	28	90	10	W3	R3
Harbour View	DD10KP733	28	29	100	5	W3	R3
Harbour View	DD10KP733	29	30	65	25	W3	R3
Harbour View	DD10KP733	30	31	72	25	W3	R3
Harbour View	DD10KP733	31	32	11	25	W3	R3
Harbour View	DD10KP733	32	33	50	25	W3	R3
Harbour View	DD10KP733	33	34	90	25	W3	R3
Harbour View	DD10KP733	34	35	87	25	W3	R3
Harbour View	DD10KP733	35	36	38	25	W3	R3
Harbour View	DD10KP733	36	37	53	10	W3	R3
Harbour View	DD10KP733	37	38	16	25	W3	R3
Harbour View	DD10KP733	38	39	28	20	W3	R3
Harbour View	DD10KP733	39	40	51	15	W3	R3
Harbour View	DD10KP733	40	41	73	25	W3	R3
Harbour View	DD10KP733	41	42	49	25	W3	R3
Harbour View	DD10KP733	42	43	88	25	W3	R4
Harbour View	DD10KP733	43	44	52	25	W3	R4
Harbour View	DD10KP733	44	45	50	15	W3	R4
Harbour View	DD10KP733	45	46	48	20	W3	R4
Harbour View	DD10KP733	46	47	46	15	W3	R4
Harbour View	DD10KP733	47	48	33	11	W3	R4
Harbour View	DD10KP733	48	49	70	7	W3	R4
Harbour View	DD10KP733	49	50	38	13	W3	R4
Harbour View	DD10KP733	50	51	57	8	W3	R4
Harbour View	DD10KP733	51	52	67	10	W3	R4
Harbour View	DD10KP733	52	53	81	8	W3	R4
Harbour View	DD10KP733	53	54	33	11	W3	R4
Harbour View	DD10KP733	54	55	67	10	W3	R4
Harbour View	DD10KP733	55	56	47	9	W3	R5
Harbour View	DD10KP733	56	57	61	8	W2	R5
Harbour View	DD10KP733	57	58	36	14	W2	R5
Harbour View	DD10KP733	58	59	39	16	W2	R5
Harbour View	DD10KP733	59	60	50	17	W2	R5
Harbour View	DD10KP733	60	61	62	10	W2	R5
Harbour View	DD10KP733	61	62	42	15	W2	R5
Harbour View	DD10KP733	62	63	63	12	W2	R5
Harbour View	DD10KP733	63	64	40	15	W2	R5
Harbour View	DD10KP733	64	65	41	25	W2	R5
Harbour View	DD10KP733	65	66	0	25	W2	R5
Harbour View	DD10KP733	66	67	11	25	W2	R5
Harbour View	DD10KP733	67	68	10	25	W2	R5
Harbour View	DD10KP733	68	69	57	14	W2	R5
Harbour View	DD10KP733	69	70	0	15	W2	R5
Harbour View	DD10KP733	70	71	46	15	W2	R5
Harbour View	DD10KP733	71	72	30	25	W2	R5
Harbour View	DD10KP733	72	73	56	15	W2	R5
Harbour View	DD10KP733	73	74	26	10	W2	R5

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Harbour View	DD10KP739	0	1	0	Not Collected	W5	S5
Harbour View	DD10KP739	1	2	0	Not Collected	W5	S5
Harbour View	DD10KP739	2	3	0	Not Collected	W5	S5
Harbour View	DD10KP739	3	4	0	Not Collected	W5	S5
Harbour View	DD10KP739	4	5	0	Not Collected	W5	S5
Harbour View	DD10KP739	5	6	0	Not Collected	W4	R1
Harbour View	DD10KP739	6	7	0	Not Collected	W4	R1
Harbour View	DD10KP739	7	8	0	Not Collected	W4	R1
Harbour View	DD10KP739	8	9	12	25	W4	R1
Harbour View	DD10KP739	9	10	20	25	W4	R1
Harbour View	DD10KP739	10	11	11	25	W4	R1
Harbour View	DD10KP739	11	12	0	25	W4	R1
Harbour View	DD10KP739	12	13	26	25	W4	R1
Harbour View	DD10KP739	13	14	29	25	W4	R1
Harbour View	DD10KP739	14	15	0	25	W4	R1
Harbour View	DD10KP739	15	16	16	25	W4	R1
Harbour View	DD10KP739	16	17	13	25	W4	R1
Harbour View	DD10KP739	17	18	43	10	W4	R1
Harbour View	DD10KP739	18	19	34	25	W3	R1
Harbour View	DD10KP739	19	20	73	10	W3	R1
Harbour View	DD10KP739	20	21	22	20	W3	R3
Harbour View	DD10KP739	21	22	24	25	W3	R3
Harbour View	DD10KP739	22	23	21	13	W3	R3
Harbour View	DD10KP739	23	24	53	8	W3	R3
Harbour View	DD10KP739	24	25	59	9	W3	R3
Harbour View	DD10KP739	25	26	80	6	W3	R3
Harbour View	DD10KP739	26	27	64	25	W3	R3
Harbour View	DD10KP739	27	28	62	9	W3	R4
Harbour View	DD10KP739	28	29	50	12	W3	R4
Harbour View	DD10KP739	29	30	45	8	W3	R4
Harbour View	DD10KP739	30	31	26	20	W3	R4
Harbour View	DD10KP739	31	32	25	13	W3	R4
Harbour View	DD10KP739	32	33	73	9	W3	R4
Harbour View	DD10KP739	33	34	72	11	W3	R4
Harbour View	DD10KP739	34	35	54	17	W2	R4
Harbour View	DD10KP739	35	36	75	8	W2	R5
Harbour View	DD10KP739	36	37	85	4	W2	R5
Harbour View	DD10KP739	37	38	78	7	W2	R5
Harbour View	DD10KP739	38	39	25	14	W2	R5
Harbour View	DD10KP739	39	40	30	12	W2	R5
Harbour View	DD10KP739	40	41	34	12	W2	R5
Harbour View	DD10KP739	41	42	12	13	W2	R5
Harbour View	DD10KP739	42	43	40	14	W2	R5
Harbour View	DD10KP739	43	44	41	7	W2	R5
Harbour View	DD10KP739	44	45	58	20	W2	R5
Harbour View	DD10KP739	45	46	43	20	W2	R5
Harbour View	DD10KP739	46	47	14	20	W2	R5
Harbour View	DD10KP739	47	48	0	8	W2	R5
Harbour View	DD10KP739	48	49	11	20	W2	R5
Harbour View	DD10KP739	49	50	36	17	W2	R5
Harbour View	DD10KP739	50	51	25	18	W1	R5
Harbour View	DD10KP739	51	52	0	25	W1	R5
Harbour View	DD10KP739	52	53	0	25	W1	R5
Harbour View	DD10KP739	53	54	11	25	W1	R5
Harbour View	DD10KP739	54	55	0	25	W1	R5
Harbour View	DD10KP739	55	56	0	25	W1	R5
Harbour View	DD10KP739	56	57	17	25	W1	R5
Harbour View	DD10KP739	57	58	26	25	W1	R5
Harbour View	DD10KP739	58	59	12	25	W1	R5
Harbour View	DD10KP739	59	60	0	25	W1	R5
Harbour View	DD10KP739	60	61	13	25	W1	R5
Harbour View	DD10KP739	61	62	0	25	W1	R5
Harbour View	DD10KP739	62	63	0	25	W1	R5
Harbour View	DD10KP739	63	64	41	20	W1	R5
Harbour View	DD10KP739	64	65	16	25	W1	R5
Harbour View	DD10KP739	65	66	0	25	W1	R5
Harbour View	DD10KP739	66	67	16	25	W1	R5
Harbour View	DD10KP739	67	68	0	13	W1	R5
Harbour View	DD10KP739	68	69	15	8	W1	R5
Harbour View	DD10KP739	69	70	0	25	W1	R5
Harbour View	DD10KP739	70	71	11	25	W1	R5
Harbour View	DD10KP739	71	72	10	25	W1	R5
Harbour View	DD10KP739	72	73	0	25	W1	R5
Harbour View	DD10KP739	73	74	0	25	W1	R5
Harbour View	DD10KP739	74	75	11	25	W1	R5
Harbour View	DD10KP739	75	76	12	25	W1	R5
Harbour View	DD10KP739	76	77	11	25	W1	R5
Harbour View	DD10KP739	77	78	0	25	W1	R5
Harbour View	DD10KP739	78	79	0	20	W1	R5
Harbour View	DD10KP739	79	80	16	25	W1	R5
Harbour View	DD10KP739	80	81	58	15	W1	R5
Harbour View	DD10KP739	81	82	11	12	W1	R5
Harbour View	DD10KP739	82	83	44	15	W1	R5
Harbour View	DD10KP739	83	84	25	15	W1	R5
Harbour View	DD10KP739	84	85	19	15	W1	R5
Harbour View	DD10KP739	85	86	53	13	W1	R5
Harbour View	DD10KP739	86	87	48	7	W1	R5
Harbour View	DD10KP739	87	88	45	12	W1	R5
Harbour View	DD10KP739	88	89	60	15	W1	R5
Harbour View	DD10KP739	89	90	39	8	W1	R5
Harbour View	DD10KP739	90	91	83	8	W1	R5
Harbour View	DD10KP739	91	92	82	6	W1	R5
Harbour View	DD10KP739	92	93	51	9	W1	R5
Harbour View	DD10KP739	93	94	81	10	W1	R5
Harbour View	DD10KP739	94	95	55	25	W1	R5
Harbour View	DD10KP739	95	96	32	14	W1	R5
Harbour View	DD10KP739	96	97	86	6	W1	R5
Harbour View	DD10KP739	97	98	38	9	W1	R5
Harbour View	DD10KP739	98	99	50	8	W1	R5
Harbour View	DD10KP739	99	100	38	25	W1	R5
Harbour View	DD10KP739	100	101	84	25	W1	R5
Harbour View	DD10KP739	101	102	71	15	W1	R5
Harbour View	DD10KP739	102	103	25	15	W1	R5
Harbour View	DD10KP739	103	104	26	12	W1	R5
Harbour View	DD10KP739	104	105	55	9	W1	R5
Harbour View	DD10KP739	105	106	48	15	W1	R5
Harbour View	DD10KP739	106	107	76	6	W1	R5
Harbour View	DD10KP739	107	108	54	10	W1	R5
Harbour View	DD10KP739	108	109	60	8	W1	R5
Harbour View	DD10KP739	109	110	56	8	W1	R5
Harbour View	DD10KP739	110	111	76	6	W1	R5
Harbour View	DD10KP739	111	112	48	9	W1	R5
Harbour View	DD10KP739	112	113	62	9	W1	R5
Deposit	**Borehole**	**From (m)**	**To (m)**	**RQD (%)**	**Fracture Frequency (Fractures/metre)**	**Weathering**	**Hardness**
Harbour View	DD10KP739	113	114	75	8	W1	R5

Harbour View	DD10KP739	114	115	69	12	W1	R5
Harbour View	DD10KP739	115	116	65	6	W1	R5
Harbour View	DD10KP739	116	117	80	7	W1	R5
Harbour View	DD10KP739	117	118	75	6	W1	R5
Harbour View	DD10KP739	118	119	92	2	W1	R5
Harbour View	DD10KP739	119	120	50	7	W1	R5
Harbour View	DD10KP739	120	121	42	13	W1	R5
Harbour View	DD10KP739	121	122	57	10	W1	R5
Harbour View	DD10KP739	122	123	45	8	W1	R5
Harbour View	DD10KP739	123	124	20	9	W1	R5
Harbour View	DD10KP739	124	125	46	10	W1	R5
Harbour View	DD10KP739	125	126	93	4	W1	R5
Harbour View	DD10KP739	126	127	39	25	W1	R5
Harbour View	DD10KP739	127	128	30	25	W1	R5
Harbour View	DD10KP739	128	129	100	2	W1	R5
Harbour View	DD10KP739	129	130	73	6	W1	R5
Harbour View	DD10KP739	130	131	14	10	W1	R5
Harbour View	DD10KP739	131	132	50	25	W1	R5
Harbour View	DD10KP739	132	133	70	7	W1	R5
Harbour View	DD10KP739	133	134	86	5	W1	R5
Harbour View	DD10KP739	134	135	48	10	W1	R5
Harbour View	DD10KP739	135	136	86	6	W1	R5
Harbour View	DD10KP739	136	137	49	12	W1	R5
Harbour View	DD10KP739	137	138	39	20	W1	R5
Harbour View	DD10KP739	138	139	50	15	W1	R5
Harbour View	DD10KP739	139	140	23	20	W1	R5
Harbour View	DD10KP739	140	141	19	19	W1	R5
Harbour View	DD10KP739	141	142	55	10	W1	R5
Harbour View	DD10KP739	142	143	73	8	W1	R5
Harbour View	DD10KP739	143	144	61	12	W1	R5
Harbour View	DD10KP739	144	145	64	4	W1	R5
Harbour View	DD10KP739	145	146	96	3	W1	R5
Harbour View	DD10KP739	146	147	72	7	W1	R5
Harbour View	DD10KP739	147	148	83	5	W1	R5
Harbour View	DD10KP739	148	149	74	8	W1	R5
Harbour View	DD10KP739	149	150	68	8	W1	R5
Harbour View	DD10KP739	150	151	79	4	W1	R5
Harbour View	DD10KP739	151	152	90	7	W1	R5
Harbour View	DD10KP739	152	153	95	6	W1	R5
Harbour View	DD10KP739	153	154	96	4	W1	R5
Harbour View	DD10KP739	154	155	93	6	W1	R5
Harbour View	DD10KP739	155	156	88	4	W1	R5
Harbour View	DD10KP739	156	157	93	6	W1	R5
Harbour View	DD10KP739	157	158	82	5	W1	R5
Harbour View	DD10KP739	158	159	98	4	W1	R5
Harbour View	DD10KP739	159	160	100	2	W1	R5

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Harbour View	DD10KP740	0	1	Not Recorded	Not Collected	W5	S5
Harbour View	DD10KP740	1	2	0	25	W4	R1
Harbour View	DD10KP740	2	3	0	25	W4	R1
Harbour View	DD10KP740	3	4	50	25	W4	R1
Harbour View	DD10KP740	4	5	0	25	W4	R1
Harbour View	DD10KP740	5	6	0	25	W4	R1
Harbour View	DD10KP740	6	7	11	25	W4	R1
Harbour View	DD10KP740	7	8	0	25	W4	R1
Harbour View	DD10KP740	8	9	30	20	W4	R1
Harbour View	DD10KP740	9	10	13	25	W4	R1
Harbour View	DD10KP740	10	11	62	12	W3	R3
Harbour View	DD10KP740	11	12	26	25	W3	R3
Harbour View	DD10KP740	12	13	64	15	W3	R3
Harbour View	DD10KP740	13	14	53	10	W3	R3
Harbour View	DD10KP740	14	15	46	14	W3	R3
Harbour View	DD10KP740	15	16	50	13	W3	R3
Harbour View	DD10KP740	16	17	22	20	W3	R3
Harbour View	DD10KP740	17	18	55	10	W3	R3
Harbour View	DD10KP740	18	19	90	5	W3	R3
Harbour View	DD10KP740	19	20	15	19	W3	R3
Harbour View	DD10KP740	20	21	13	18	W2	R4
Harbour View	DD10KP740	21	22	45	12	W2	R4
Harbour View	DD10KP740	22	23	33	14	W2	R4
Harbour View	DD10KP740	23	24	50	12	W2	R4
Harbour View	DD10KP740	24	25	54	10	W2	R4
Harbour View	DD10KP740	25	26	0	20	W2	R4
Harbour View	DD10KP740	26	27	29	17	W2	R4
Harbour View	DD10KP740	27	28	12	25	W2	R4
Harbour View	DD10KP740	28	29	36	9	W2	R4
Harbour View	DD10KP740	29	30	35	17	W3	R4
Harbour View	DD10KP740	30	31	24	17	W3	R4
Harbour View	DD10KP740	31	32	63	14	W3	R4
Harbour View	DD10KP740	32	33	0	5	W2	R4
Harbour View	DD10KP740	33	34	28	13	W2	R4
Harbour View	DD10KP740	34	35	0	25	W2	R4
Harbour View	DD10KP740	35	36	25	20	W2	R4
Harbour View	DD10KP740	36	37	53	15	W2	R4
Harbour View	DD10KP740	37	38	48	20	W2	R3
Harbour View	DD10KP740	38	39	0	25	W2	R3
Harbour View	DD10KP740	39	40	57	4	W2	R3
Harbour View	DD10KP740	40	41	50	16	W2	R3
Harbour View	DD10KP740	41	42	66	20	W2	R3
Harbour View	DD10KP740	42	43	73	9	W2	R3
Harbour View	DD10KP740	43	44	88	5	W2	R3
Harbour View	DD10KP740	44	45	63	25	W2	R3
Harbour View	DD10KP740	45	46	59	25	W2	R4
Harbour View	DD10KP740	46	47	33	13	W2	R4
Harbour View	DD10KP740	47	48	44	20	W2	R4
Harbour View	DD10KP740	48	49	90	3	W2	R4
Harbour View	DD10KP740	49	50	38	17	W2	R4
Harbour View	DD10KP740	50	51	79	9	W1	R5
Harbour View	DD10KP740	51	52	94	4	W1	R5
Harbour View	DD10KP740	52	53	85	6	W1	R5
Harbour View	DD10KP740	53	54	91	5	W1	R5
Harbour View	DD10KP740	54	55	95	5	W1	R5
Harbour View	DD10KP740	55	56	86	6	W1	R5
Harbour View	DD10KP740	56	57	93	6	W1	R5
Harbour View	DD10KP740	57	58	70	5	W1	R5
Harbour View	DD10KP740	58	59	80	7	W1	R5
Harbour View	DD10KP740	59	60	58	25	W1	R5

Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Harbour View	DD10KP740	60	61	8	25	W1	R5
Harbour View	DD10KP740	61	62	25	25	W1	R5
Harbour View	DD10KP740	62	63	0	25	W1	R5
Harbour View	DD10KP740	63	64	26	25	W1	R5
Harbour View	DD10KP740	64	65	16	25	W1	R5
Harbour View	DD10KP740	65	66	20	25	W1	R5
Harbour View	DD10KP740	66	67	16	25	W1	R5
Harbour View	DD10KP740	67	68	26	20	W1	R5
Harbour View	DD10KP740	68	69	30	20	W1	R5
Harbour View	DD10KP740	69	70	68	15	W1	R5
Harbour View	DD10KP740	70	71	23	18	W1	R5
Harbour View	DD10KP740	71	72	61	12	W1	R5
Harbour View	DD10KP740	72	73	30	22	W1	R5
Harbour View	DD10KP740	73	74	24	17	W1	R5
Harbour View	DD10KP740	74	75	29	18	W1	R5
Harbour View	DD10KP740	75	76	11	25	W1	R5
Harbour View	DD10KP740	76	77	26	17	W1	R5
Harbour View	DD10KP740	77	78	31	20	W1	R5
Harbour View	DD10KP740	78	79	12	25	W1	R5
Harbour View	DD10KP740	79	80	46	20	W1	R5
Harbour View	DD10KP740	80	81	54	13	W1	R5
Harbour View	DD10KP740	81	82	60	12	W1	R5
Harbour View	DD10KP740	82	83	55	11	W1	R5
Harbour View	DD10KP740	83	84	62	25	W1	R5
Harbour View	DD10KP740	84	85	88	14	W1	R5
Harbour View	DD10KP740	85	86	78	10	W1	R5
Harbour View	DD10KP740	86	87	86	5	W1	R5
Harbour View	DD10KP740	87	88	75	12	W1	R5
Harbour View	DD10KP740	88	89	61	8	W1	R5
Harbour View	DD10KP740	89	90	35	15	W1	R5
Harbour View	DD10KP740	90	91	24	25	W1	R5
Harbour View	DD10KP740	91	92	47	25	W1	R5
Harbour View	DD10KP740	92	93	63	13	W1	R5
Harbour View	DD10KP740	93	94	50	12	W1	R5
Harbour View	DD10KP740	94	95	40	17	W1	R5
Harbour View	DD10KP740	95	96	28	25	W1	R5
Harbour View	DD10KP740	96	97	10	25	W1	R5
Harbour View	DD10KP740	97	98	33	25	W1	R5
Harbour View	DD10KP740	98	99	0	25	W1	R5
Harbour View	DD10KP740	99	100	6	25	W1	R5
Harbour View	DD10KP740	100	101	20	25	W1	R5
Harbour View	DD10KP740	101	102	28	16	W1	R5
Harbour View	DD10KP740	102	103	63	15	W1	R5
Harbour View	DD10KP740	103	104	39	20	W1	R5
Harbour View	DD10KP740	104	105	80	5	W1	R5
Harbour View	DD10KP740	105	106	56	14	W1	R5
Harbour View	DD10KP740	106	107	36	20	W1	R5
Harbour View	DD10KP740	107	108	68	7	W1	R5
Harbour View	DD10KP740	108	109	72	6	W1	R5
Harbour View	DD10KP740	109	110	95	10	W1	R5
Harbour View	DD10KP740	110	111	60	7	W1	R5

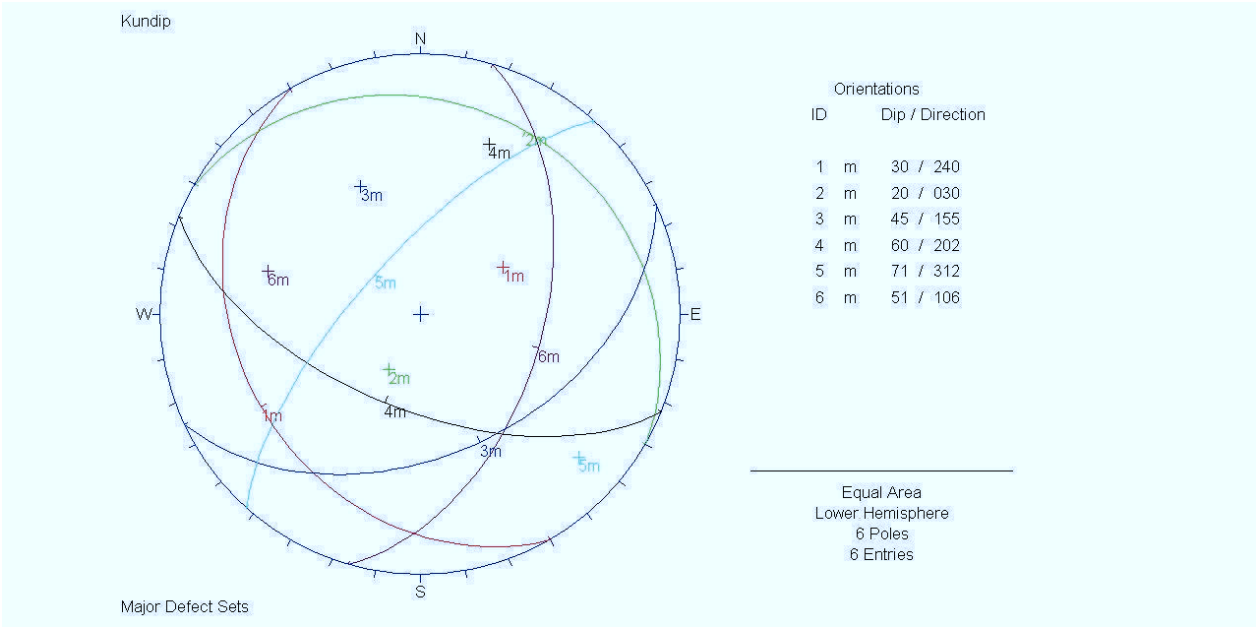
Deposit	Borehole	From (m)	To (m)	RQD (%)	Fracture Frequency (Fractures/metre)	Weathering	Hardness
Harbour View	DD10KP742	60	61	Not Recorded	Not Collected	W1	R5
Harbour View	DD10KP742	61	62	Not Recorded	Not Collected	W1	R5
Harbour View	DD10KP742	62	63	Not Recorded	Not Collected	W1	R5
Harbour View	DD10KP742	63	64	Not Recorded	Not Collected	W1	R5
Harbour View	DD10KP742	64	65	Not Recorded	Not Collected	W1	R5
Harbour View	DD10KP742	65	66	Not Recorded	Not Collected	W1	R5
Harbour View	DD10KP742	66	67	Not Recorded	Not Collected	W1	R5
Harbour View	DD10KP742	67	68	Not Recorded	Not Collected	W1	R5
Harbour View	DD10KP742	68	69	Not Recorded	Not Collected	W1	R5
Harbour View	DD10KP742	69	70	Not Recorded	Not Collected	W1	R5
Harbour View	DD10KP742	70	71	15	25	W1	R5
Harbour View	DD10KP742	71	72	26	25	W1	R5
Harbour View	DD10KP742	72	73	12	25	W1	R5
Harbour View	DD10KP742	73	74	36	25	W1	R5
Harbour View	DD10KP742	74	75	35	25	W1	R5
Harbour View	DD10KP742	75	76	61	25	W1	R5
Harbour View	DD10KP742	76	77	52	25	W1	R5
Harbour View	DD10KP742	77	78	10	25	W1	R5
Harbour View	DD10KP742	78	79	13	25	W1	R5
Harbour View	DD10KP742	79	80	78	8	W1	R5
Harbour View	DD10KP742	80	81	49	15	W1	R5
Harbour View	DD10KP742	81	82	0	25	W1	R5
Harbour View	DD10KP742	82	83	35	25	W1	R5
Harbour View	DD10KP742	83	84	37	20	W1	R5
Harbour View	DD10KP742	84	85	10	20	W1	R5
Harbour View	DD10KP742	85	86	32	25	W1	R5
Harbour View	DD10KP742	86	87	0	25	W1	R5
Harbour View	DD10KP742	87	88	61	10	W1	R5
Harbour View	DD10KP742	88	89	97	5	W1	R5
Harbour View	DD10KP742	89	90	100	4	W1	R5
Harbour View	DD10KP742	90	91	85	9	W1	R5
Harbour View	DD10KP742	91	92	50	11	W1	R5
Harbour View	DD10KP742	92	93	56	12	W1	R5
Harbour View	DD10KP742	93	94	22	20	W1	R5
Harbour View	DD10KP742	94	95	38	25	W1	R5
Harbour View	DD10KP742	95	96	10	25	W1	R5
Harbour View	DD10KP742	96	97	90	5	W1	R5
Harbour View	DD10KP742	97	98	100	2	W1	R5
Harbour View	DD10KP742	98	99	85	6	W1	R5
Harbour View	DD10KP742	99	100	95	6	W1	R5
Harbour View	DD10KP742	100	101	54	25	W1	R5
Harbour View	DD10KP742	101	102	0	25	W1	R5
Harbour View	DD10KP742	102	103	13	25	W1	R5
Harbour View	DD10KP742	103	104	0	25	W1	R5
Harbour View	DD10KP742	104	105	0	25	W1	R5
Harbour View	DD10KP742	105	106	13	25	W1	R6
Harbour View	DD10KP742	106	107	0	25	W1	R6
Harbour View	DD10KP742	107	108	79	6	W1	R6
Harbour View	DD10KP742	108	109	100	3	W1	R6
Harbour View	DD10KP742	109	110	100	4	W1	R6
Harbour View	DD10KP742	110	111	76	9	W1	R6
Harbour View	DD10KP742	111	112	100	4	W1	R6
Harbour View	DD10KP742	112	113	90	3	W1	R6
Harbour View	DD10KP742	113	114	100	2	W1	R6
Harbour View	DD10KP742	114	115	70	12	W1	R6
Harbour View	DD10KP742	115	116	70	10	W1	R6
Harbour View	DD10KP742	116	117	90	5	W1	R6
Harbour View	DD10KP742	117	118	78	7	W1	R6
Harbour View	DD10KP742	118	119	78	8	W1	R6
Harbour View	DD10KP742	119	120	40	20	W1	R6

APPENDIX B

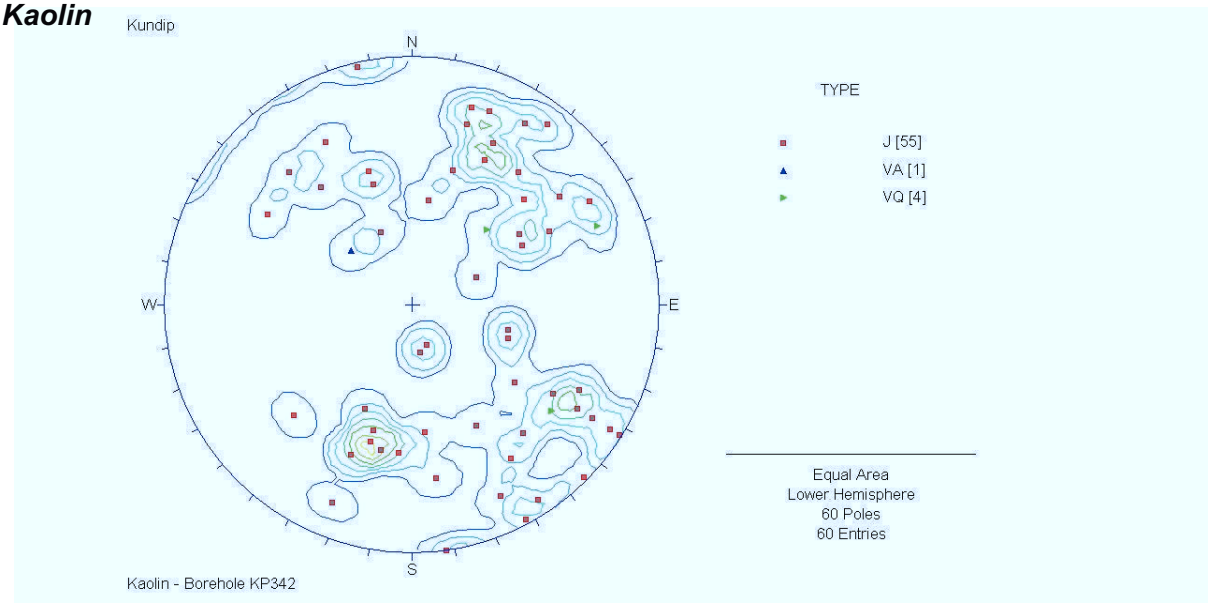
STEREOGRAPHIC PLOTS

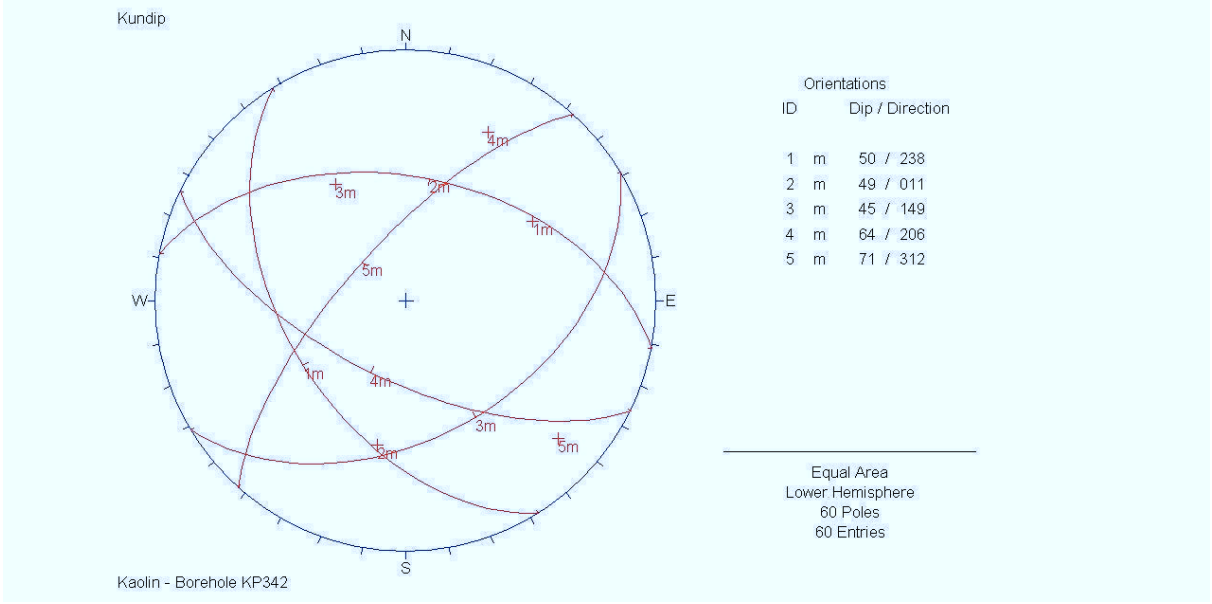
KUNDIP DEPOSITS

Kaolin

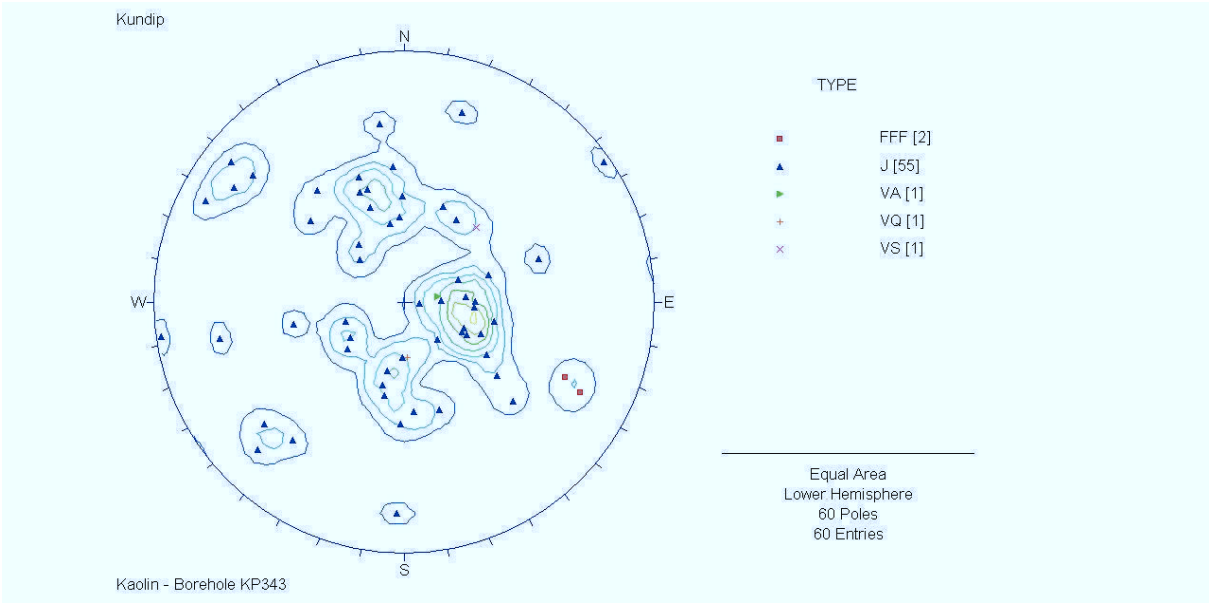

Kundip
N
E
S
W
4m
2m
3m
6m
5m
1m
2m
6m
1m
4m
3m
5m
Major Defect Sets
Orientations
ID Dip / Direction
1 m 30 / 240
2 m 20 / 030
3 m 45 / 155
4 m 60 / 202
5 m 71 / 312
6 m 51 / 106
Equal Area
Lower Hemisphere
6 Poles
6 Entries

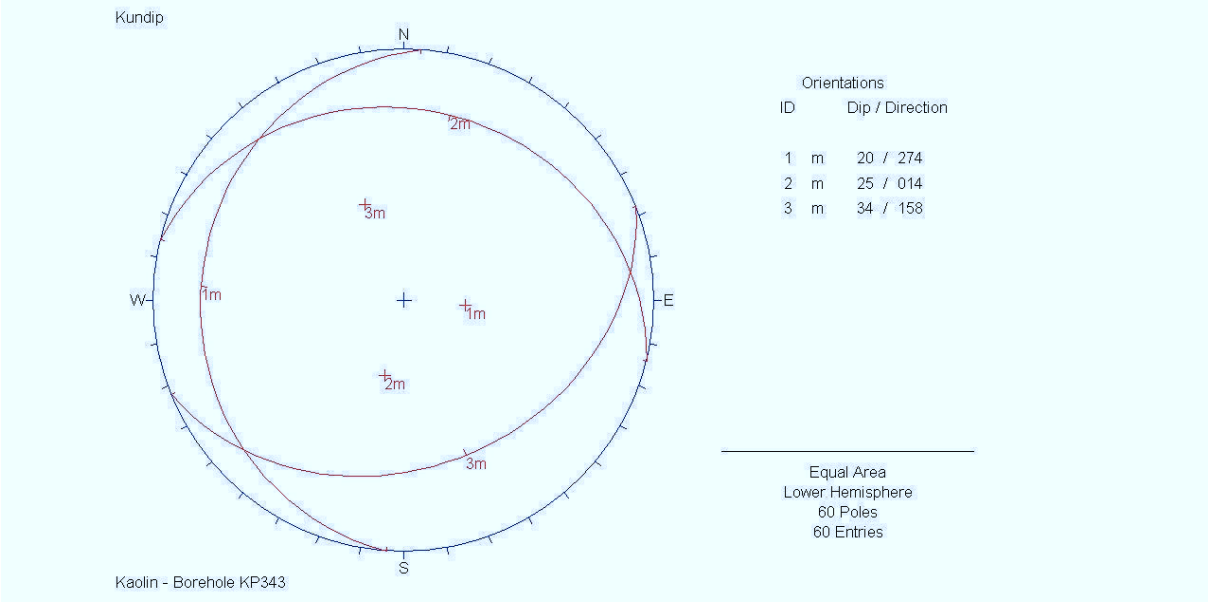
Kaolin


Kundip
N
W
E
S
TYPE
J [55]
VA [1]
VQ [4]
Equal Area
Lower Hemisphere
60 Poles
60 Entries
Kaolin - Borehole KP342

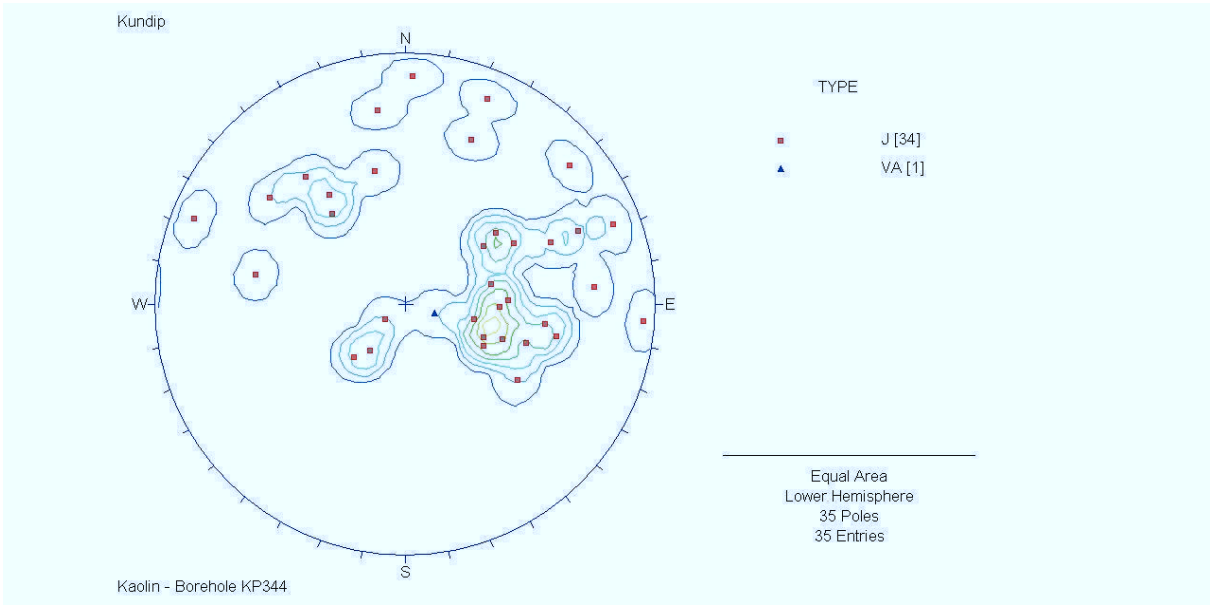

Kundip
N
W
E
S
4m
3m
2m
1m
5m
1m
4m
3m
5m
5m
Orientations
ID Dip / Direction
1 m 50 / 238
2 m 49 / 011
3 m 45 / 149
4 m 64 / 206
5 m 71 / 312
Equal Area
Lower Hemisphere
60 Poles
60 Entries
Kaolin - Borehole KP342

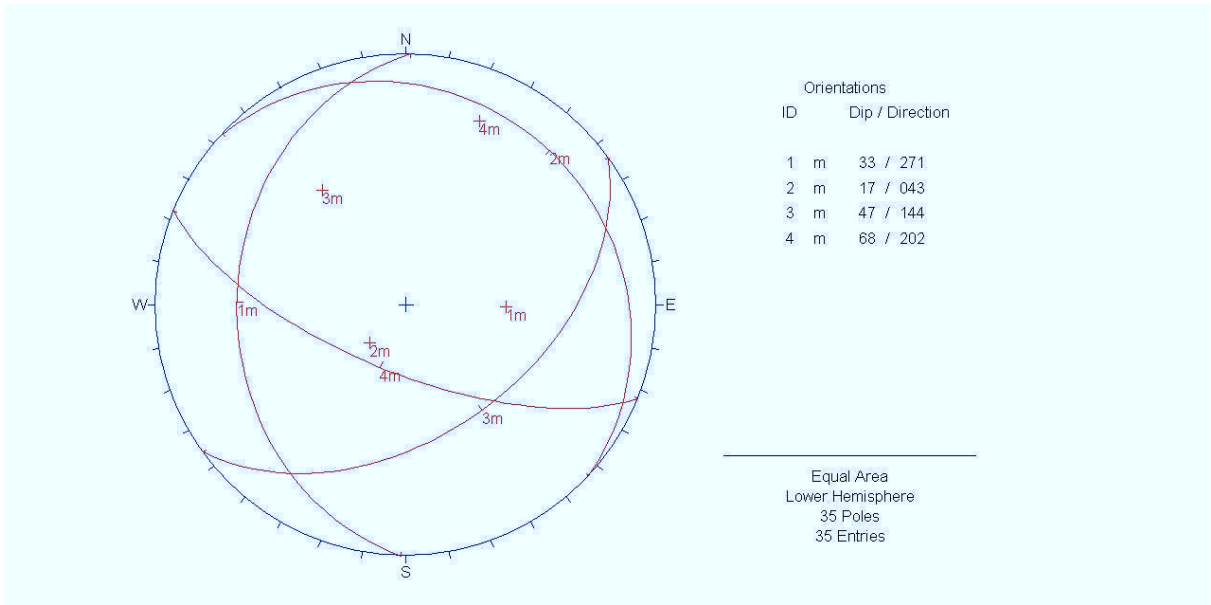
Kaolin


Kundip
N
W
E
S
TYPE
FFF [2]
J [55]
VA [1]
VQ [1]
VS [1]
Equal Area
Lower Hemisphere
60 Poles
60 Entries
Kaolin - Borehole KP343

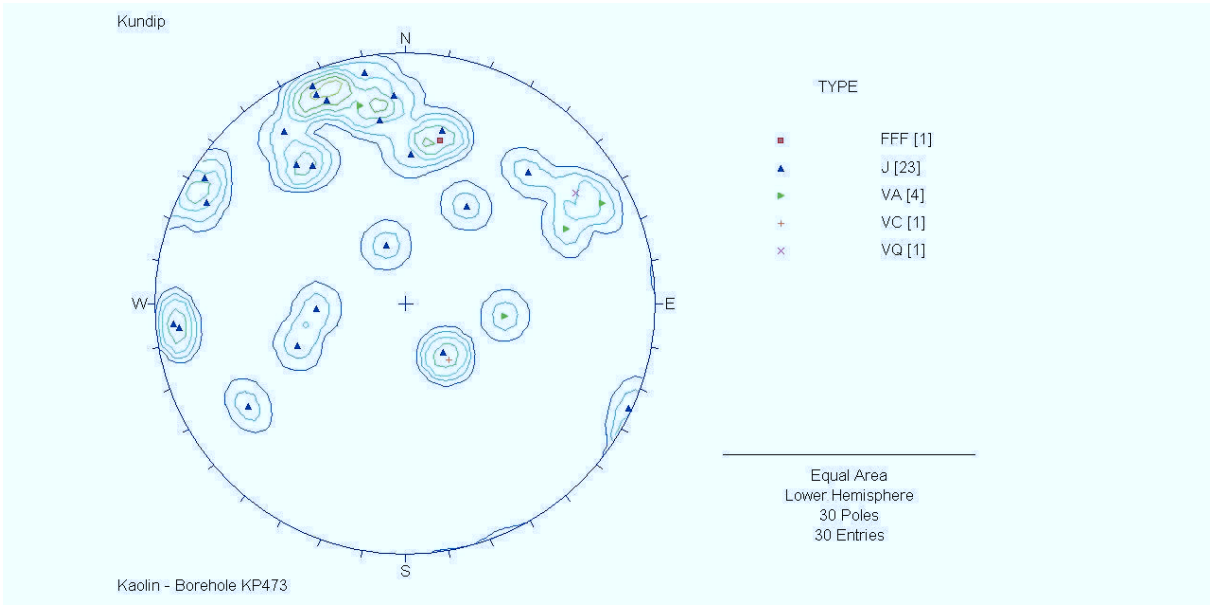

Kundip
N
W
E
S
2m
3m
1m
1m
2m
3m
Orientations
ID
Dip / Direction
1 m 20 / 274
2 m 25 / 014
3 m 34 / 158
Equal Area
Lower Hemisphere
60 Poles
60 Entries
Kaolin - Borehole KP343

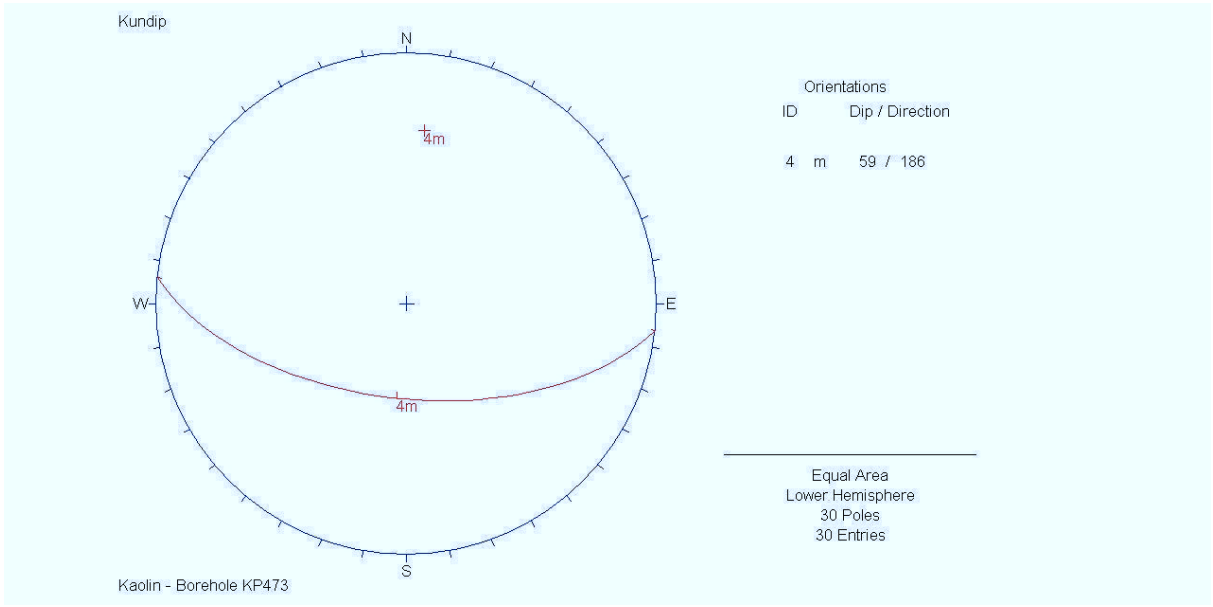
Kaolin


Kundip
N
W
E
S
TYPE
J [34]
VA [1]
Equal Area
Lower Hemisphere
35 Poles
35 Entries
Kaolin - Borehole KP344

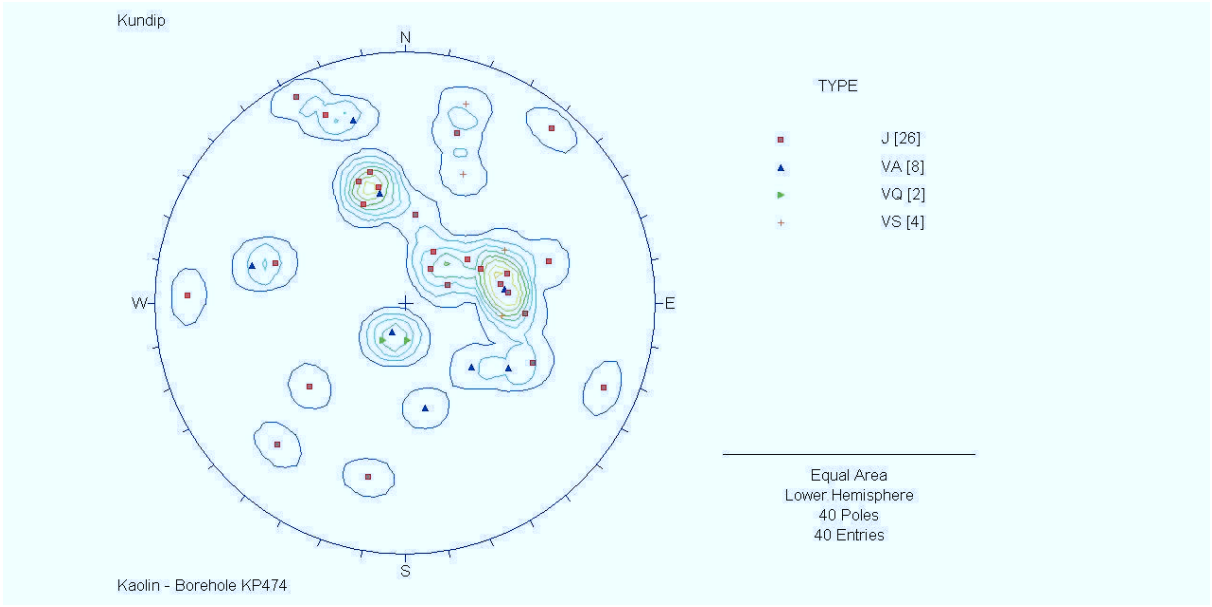

N
W
E
S
4m
2m
3m
1m
1m
2m
4m
3m
Orientations
ID
Dip / Direction
1 m 33 / 271
2 m 17 / 043
3 m 47 / 144
4 m 68 / 202
Equal Area
Lower Hemisphere
35 Poles
35 Entries

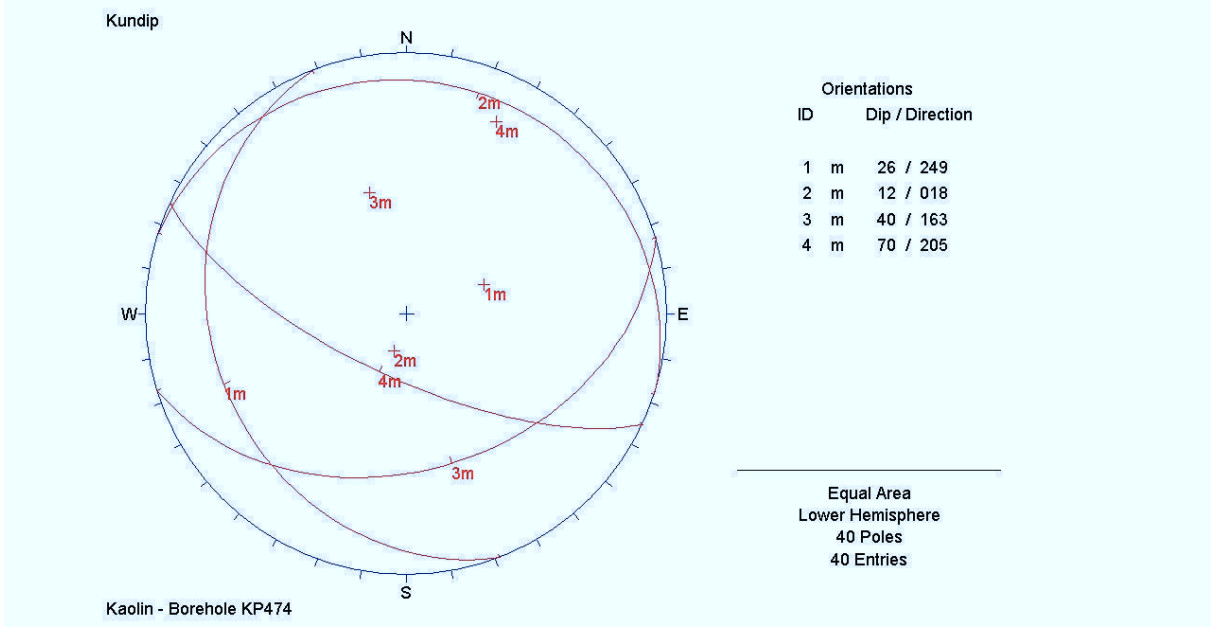
Kaolin


Kundip
N
W
E
S
TYPE
FFF [1]
J [23]
VA [4]
VC [1]
VQ [1]
Equal Area
Lower Hemisphere
30 Poles
30 Entries
Kaolin - Borehole KP473

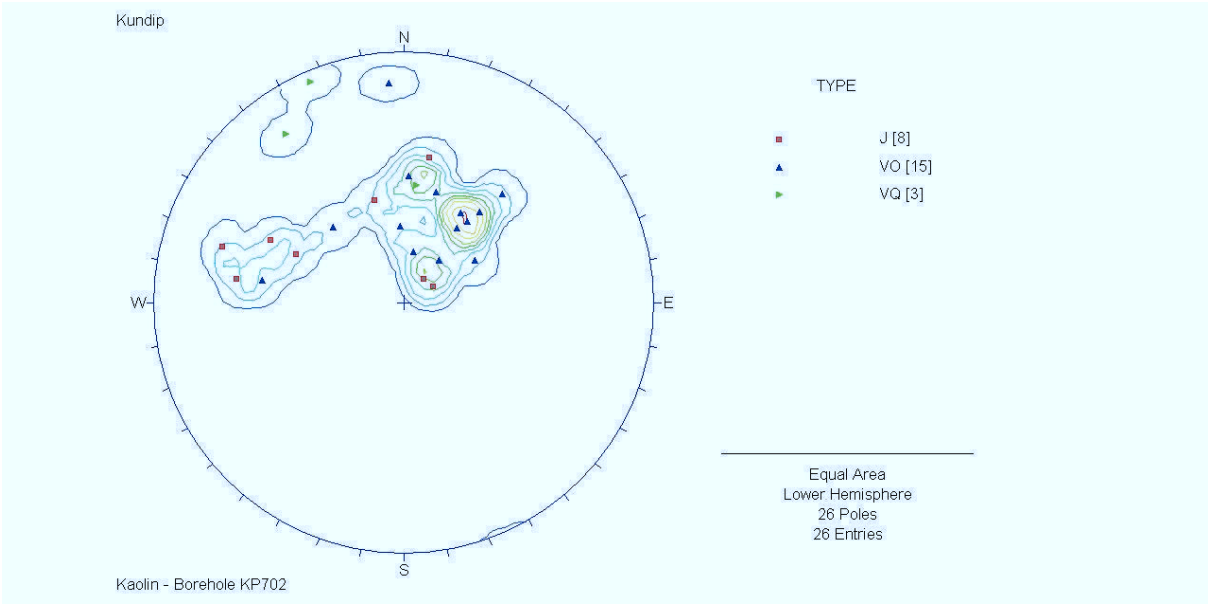

Kundip
N
W
E
S
4m
4m
Orientations
ID
Dip / Direction
4 m 59 / 186
Equal Area
Lower Hemisphere
30 Poles
30 Entries
Kaolin - Borehole KP473

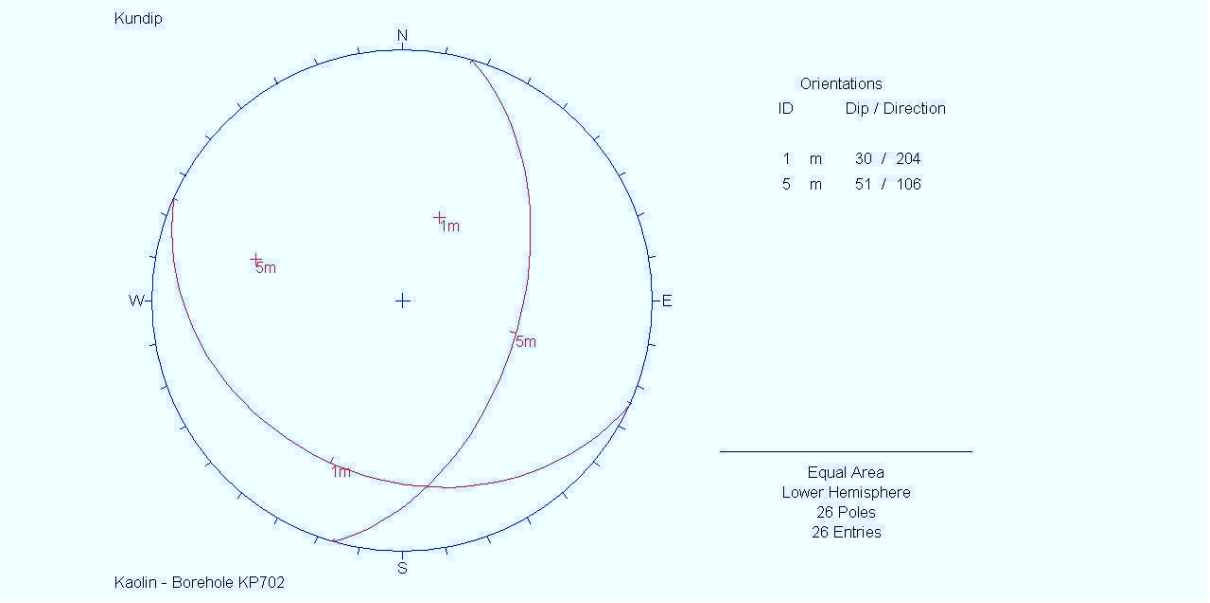
Kaolin


Kundip
N
W
E
S
TYPE
J [26]
VA [8]
VQ [2]
VS [4]
Equal Area
Lower Hemisphere
40 Poles
40 Entries
Kaolin - Borehole KP474

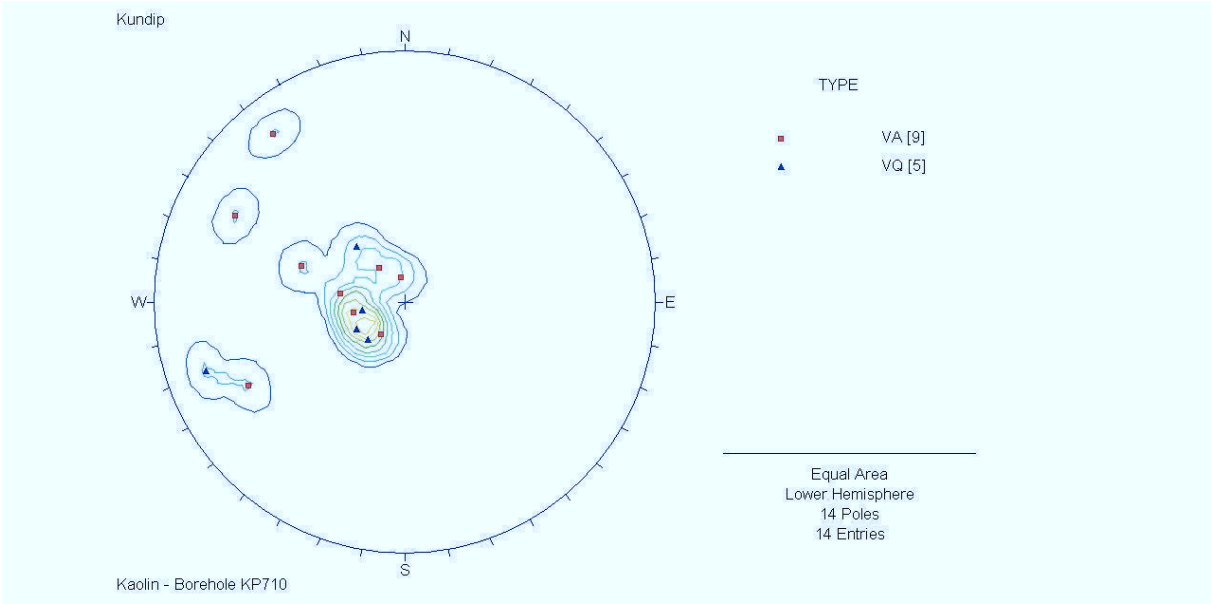

Kundip
N
W
E
S
2m
4m
3m
1m
2m
4m
1m
3m
Orientations
ID Dip / Direction
1 m 26 / 249
2 m 12 / 018
3 m 40 / 163
4 m 70 / 205
Equal Area
Lower Hemisphere
40 Poles
40 Entries
Kaolin - Borehole KP474

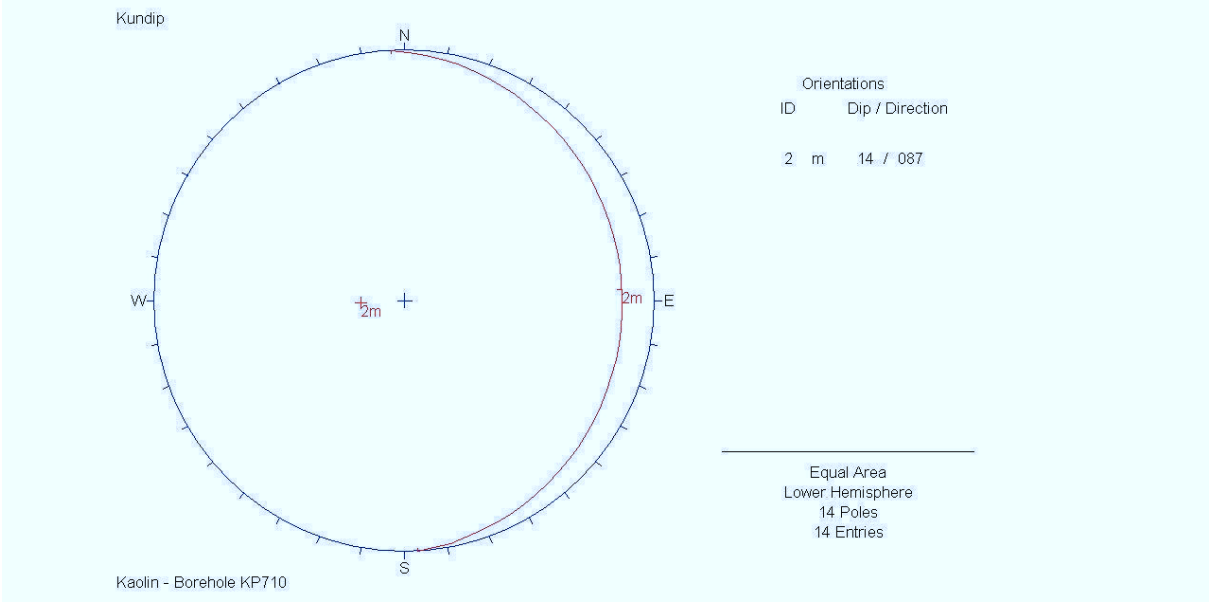
Kaolin


Kundip
N
W
E
S
TYPE
J [8]
VO [15]
VQ [3]
Equal Area
Lower Hemisphere
26 Poles
26 Entries
Kaolin - Borehole KP702

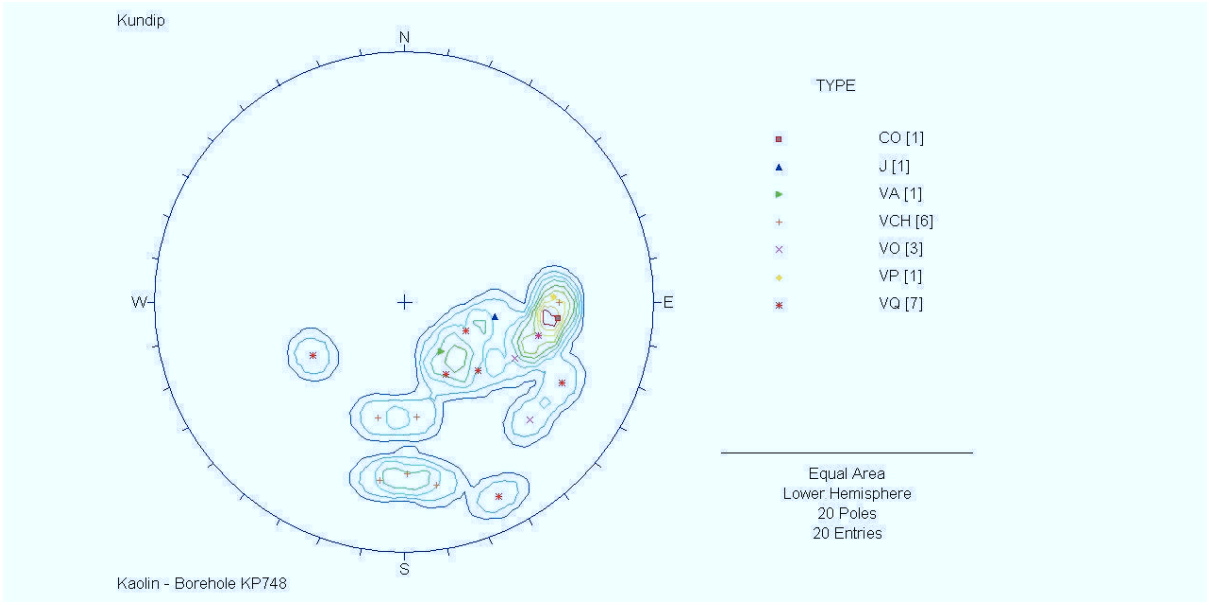

Kundip
N
W
E
S
1m
5m
5m
1m
Orientations
ID Dip / Direction
1 m 30 / 204
5 m 51 / 106
Equal Area
Lower Hemisphere
26 Poles
26 Entries
Kaolin - Borehole KP702

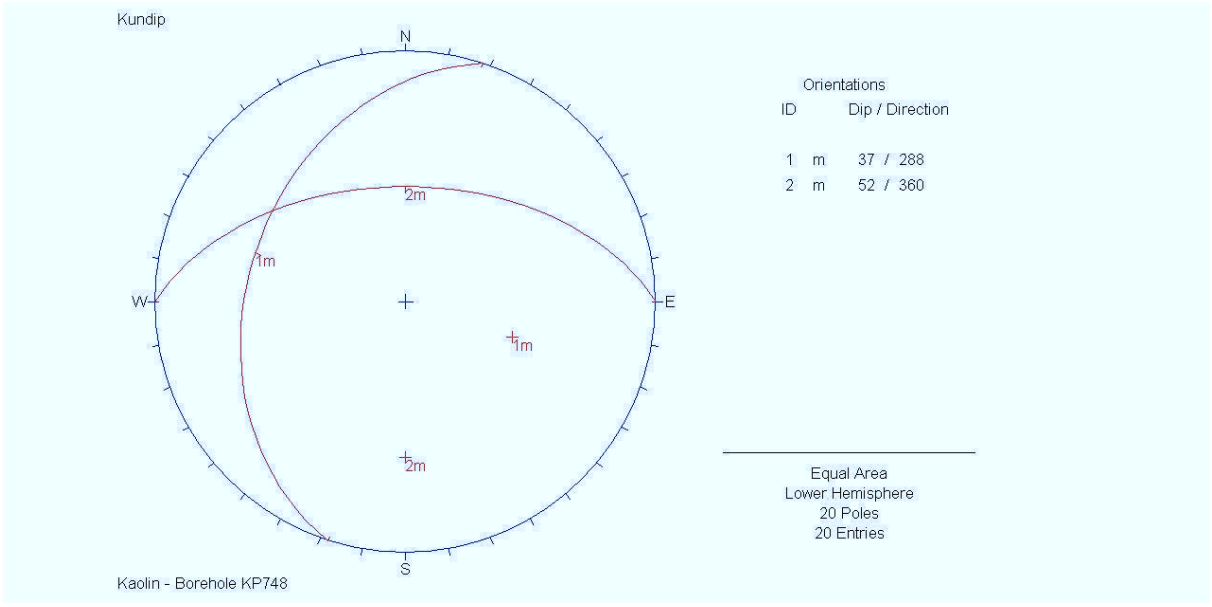
Kaolin


Kundip
N
W
E
S
TYPE
VA [9]
VQ [5]
Equal Area
Lower Hemisphere
14 Poles
14 Entries
Kaolin - Borehole KP710

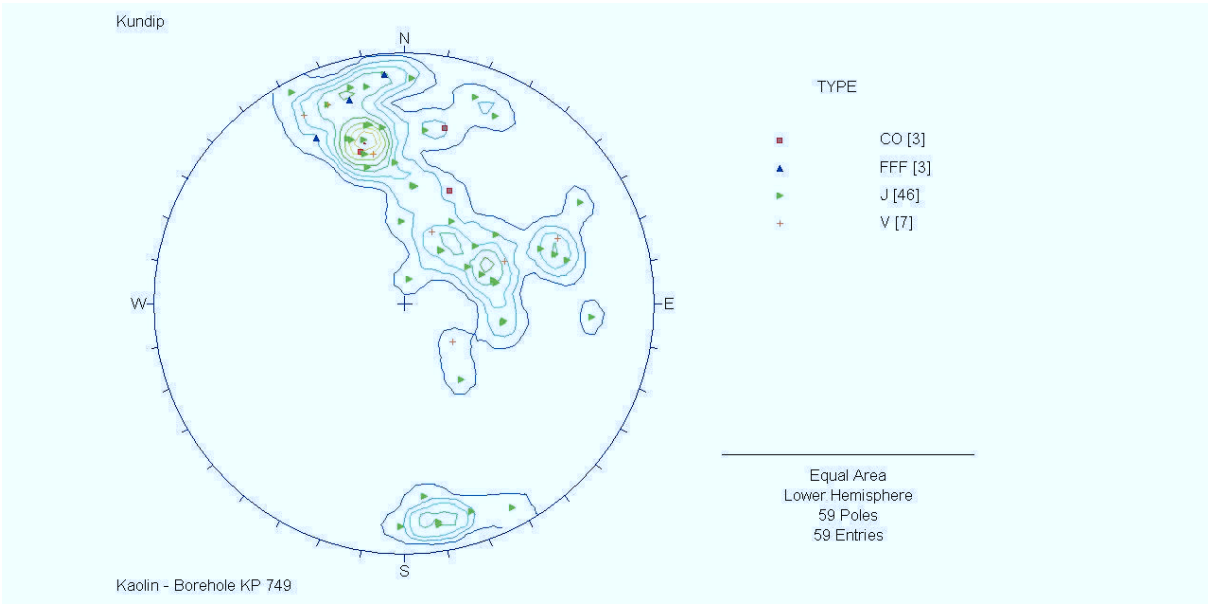

Kundip
N
W
E
S
2m
2m
Orientations
ID
Dip / Direction
2 m 14 / 087
Equal Area
Lower Hemisphere
14 Poles
14 Entries
Kaolin - Borehole KP710

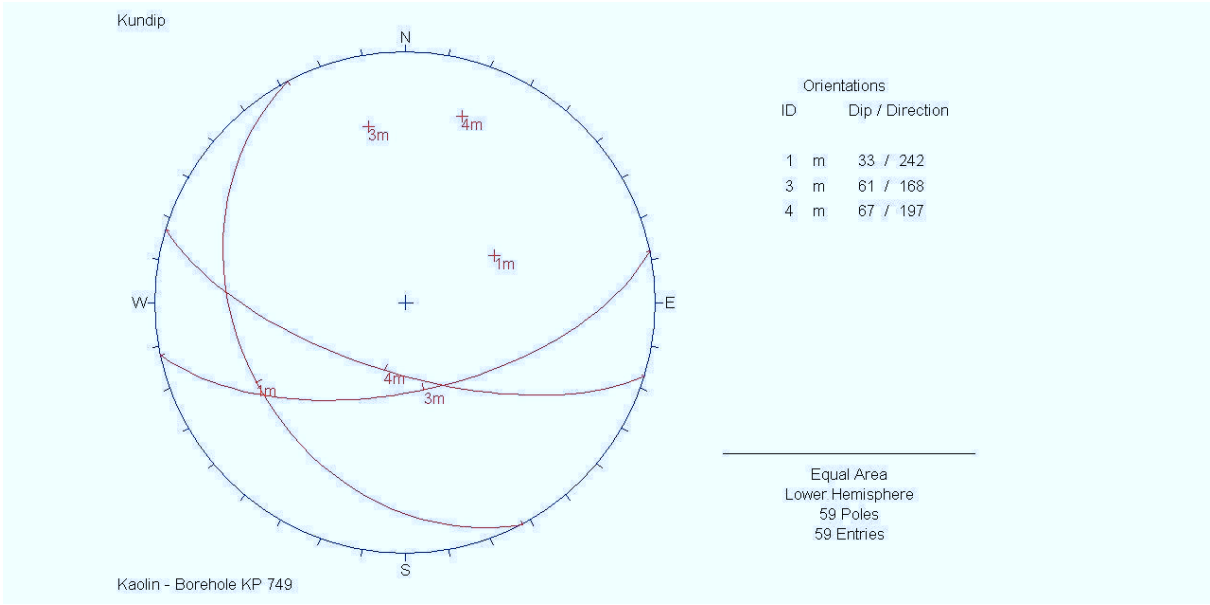
Kaolin


Kundip
N
W
E
S
TYPE
CO [1]
J [1]
VA [1]
VCH [6]
VO [3]
VP [1]
VQ [7]
Equal Area
Lower Hemisphere
20 Poles
20 Entries
Kaolin - Borehole KP748

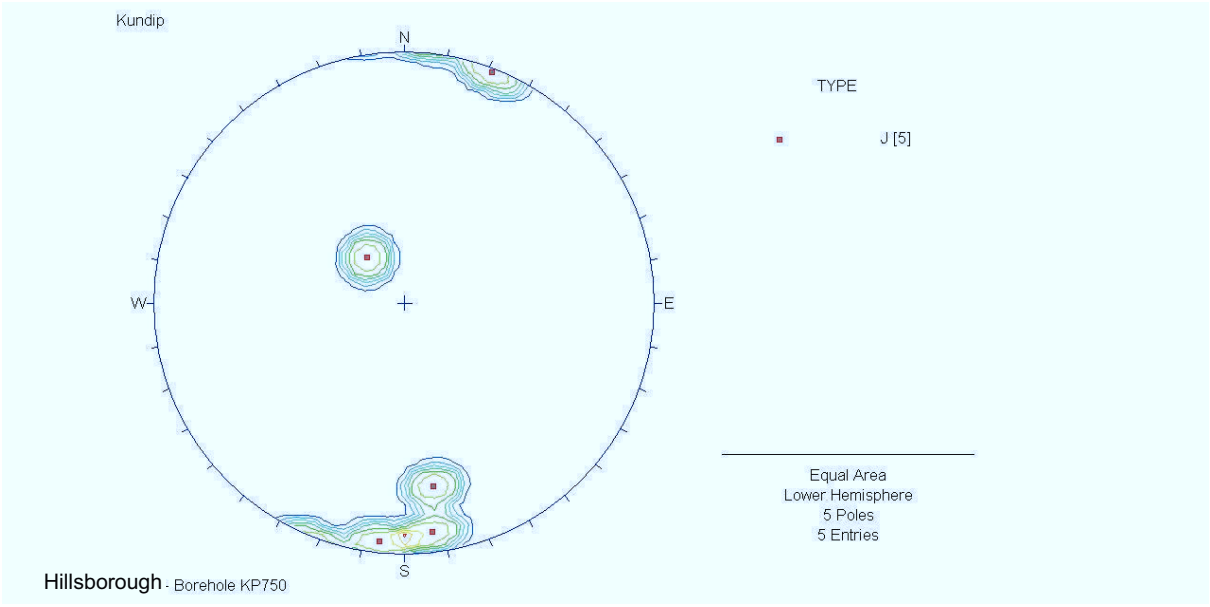

Kundip
N
W
E
S
2m
1m
1m
2m
Orientations
ID Dip / Direction
1 m 37 / 288
2 m 52 / 360
Equal Area
Lower Hemisphere
20 Poles
20 Entries
Kaolin - Borehole KP748

Kaolin

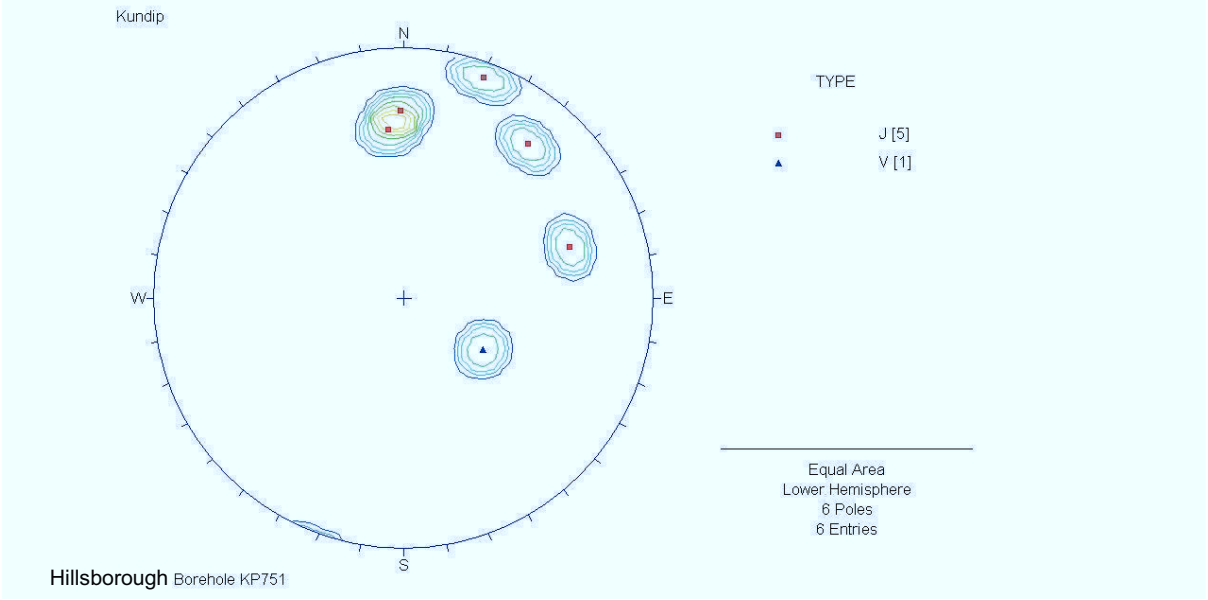

Kundip
N
W
E
S
TYPE
CO [3]
FFF [3]
J [46]
V [7]
Equal Area
Lower Hemisphere
59 Poles
59 Entries
Kaolin - Borehole KP 749


Kundip
N
W
E
S
3m
4m
1m
1m
4m
3m
Orientations
ID Dip / Direction
1 m 33 / 242
3 m 61 / 168
4 m 67 / 197
Equal Area
Lower Hemisphere
59 Poles
59 Entries
Kaolin - Borehole KP 749

Hillsborough

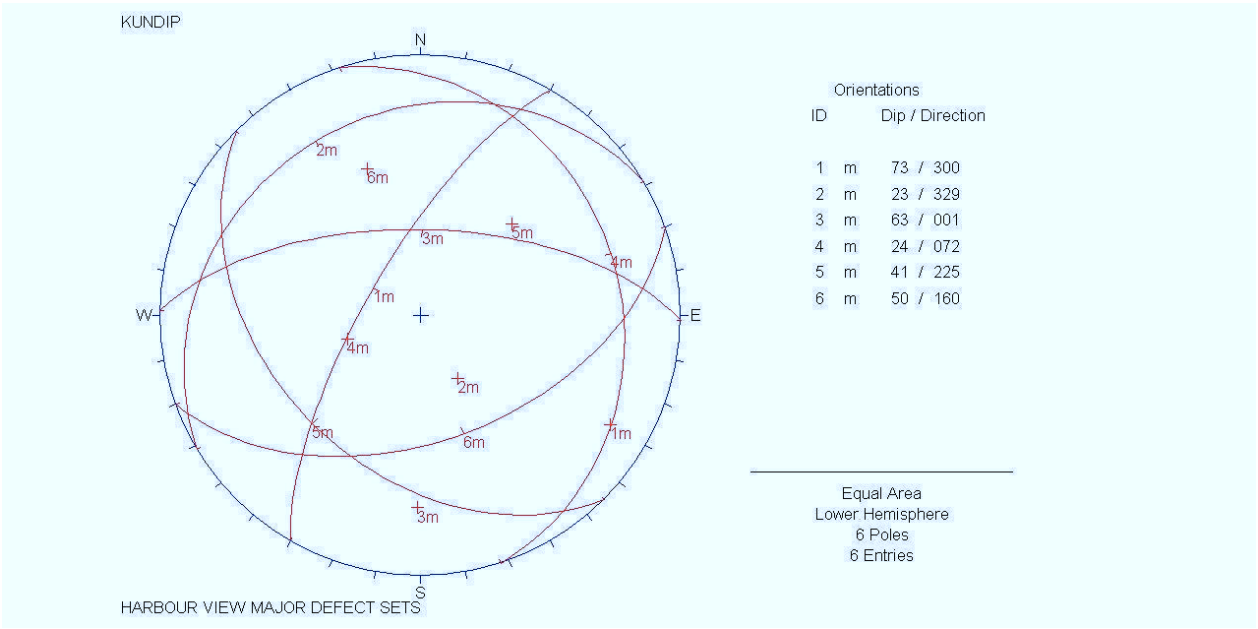


Hillsborough - Borehole KP750

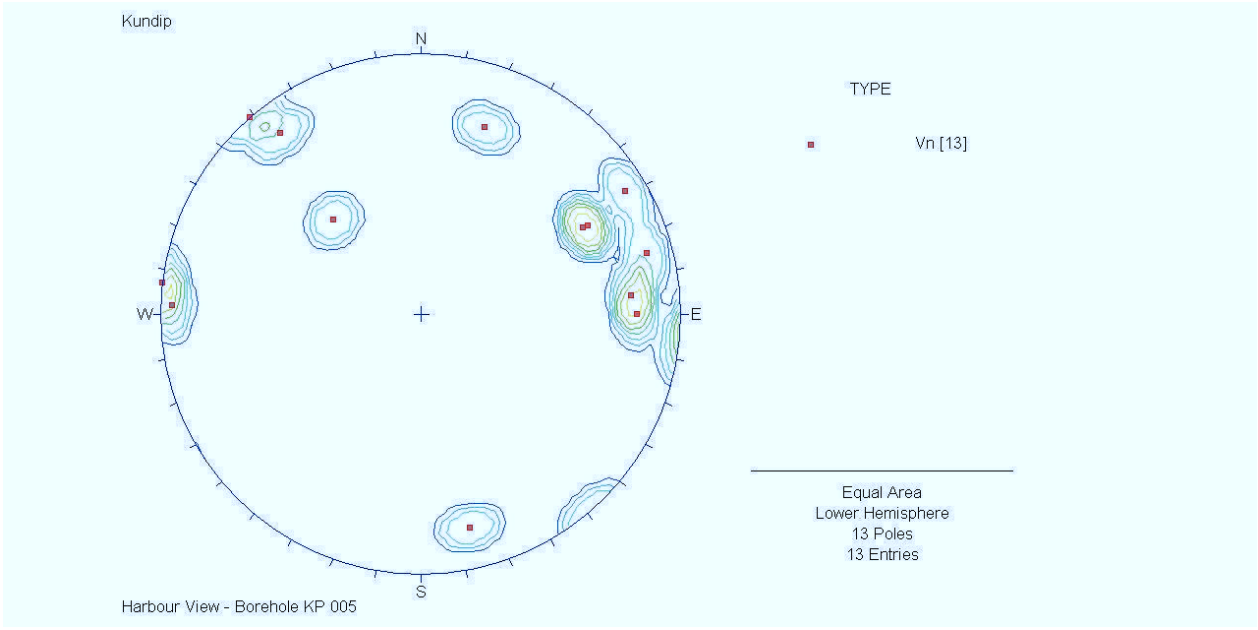


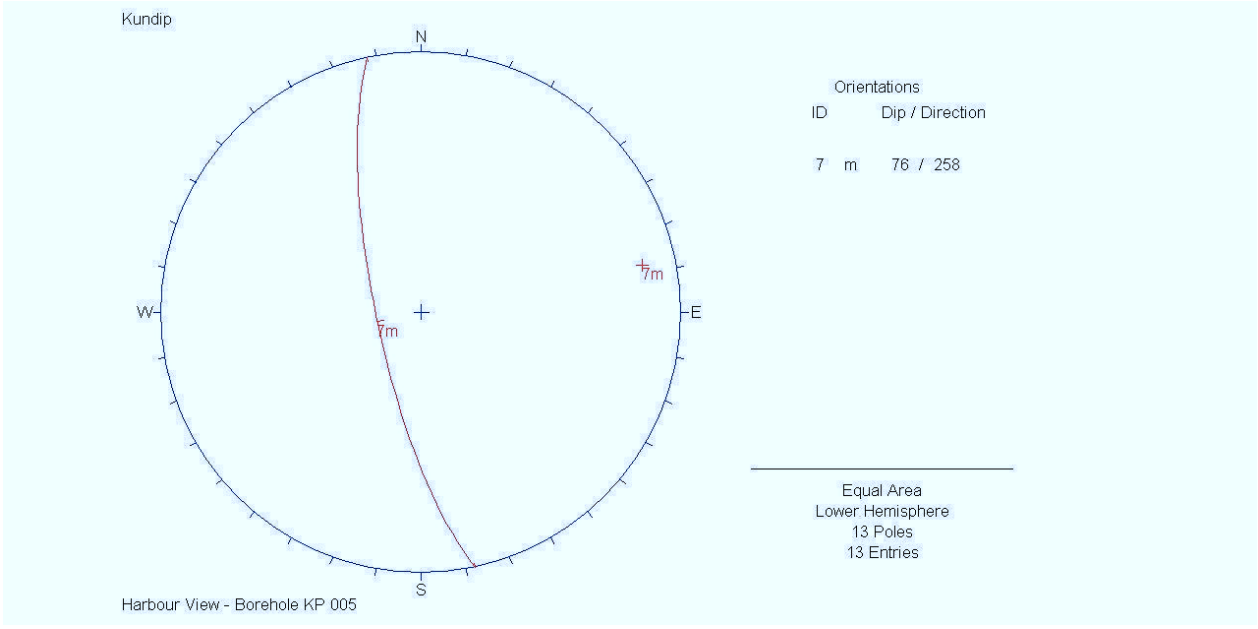
Hillsborough Borehole KP751

Harbour View

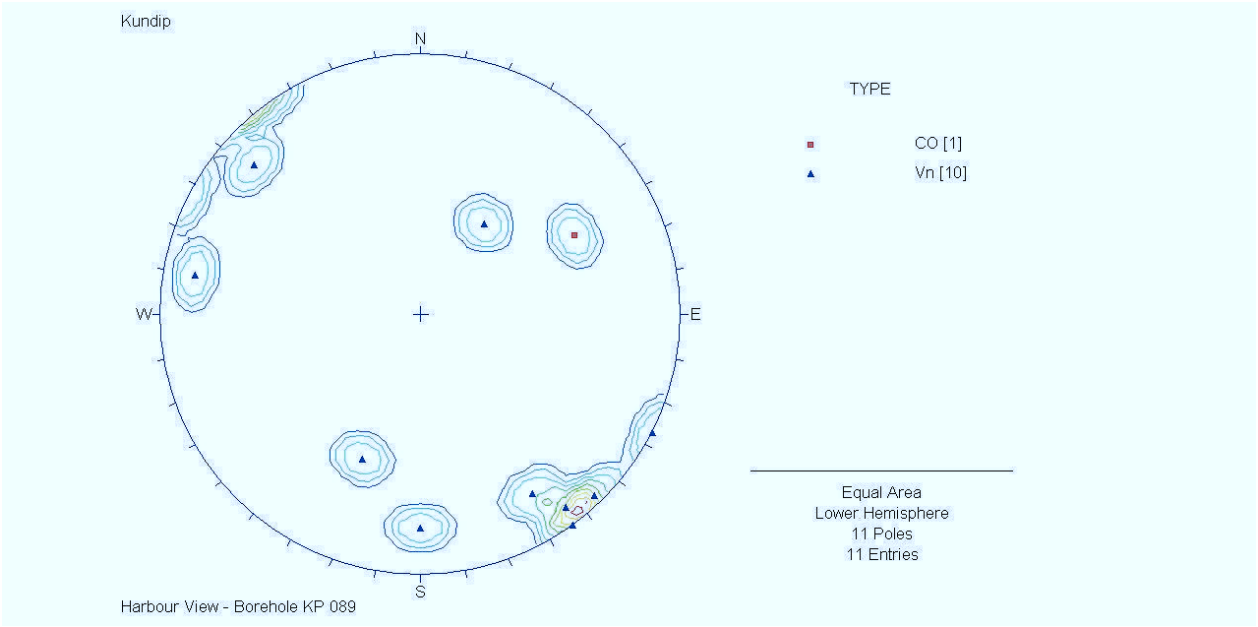


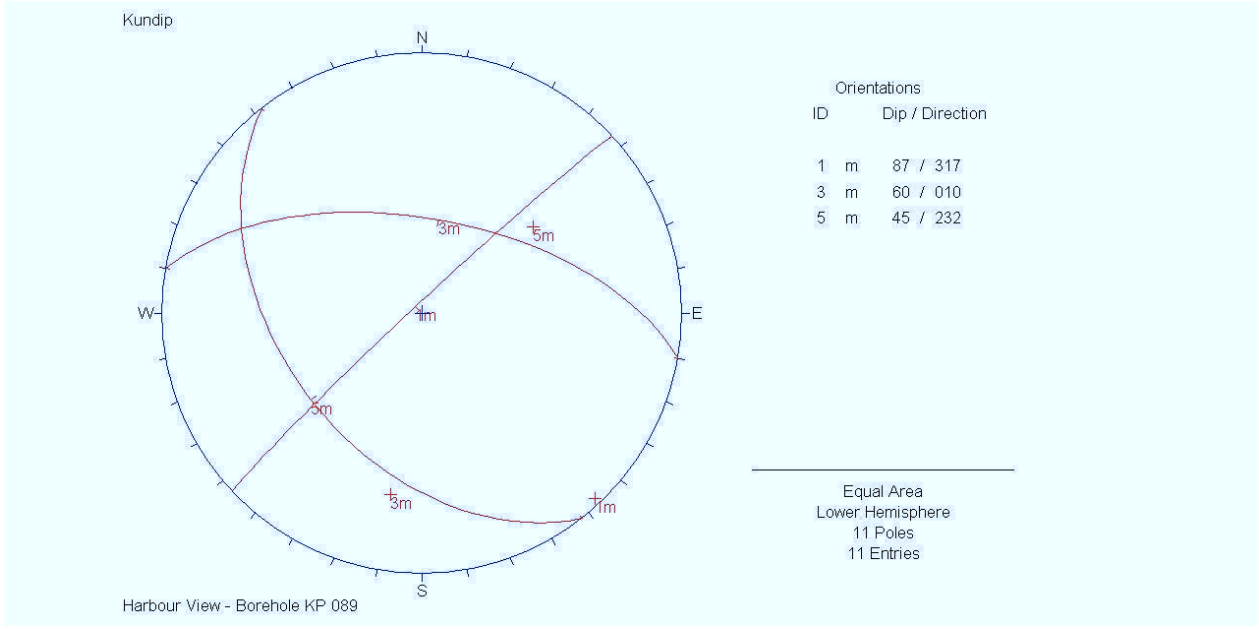
Harbour View



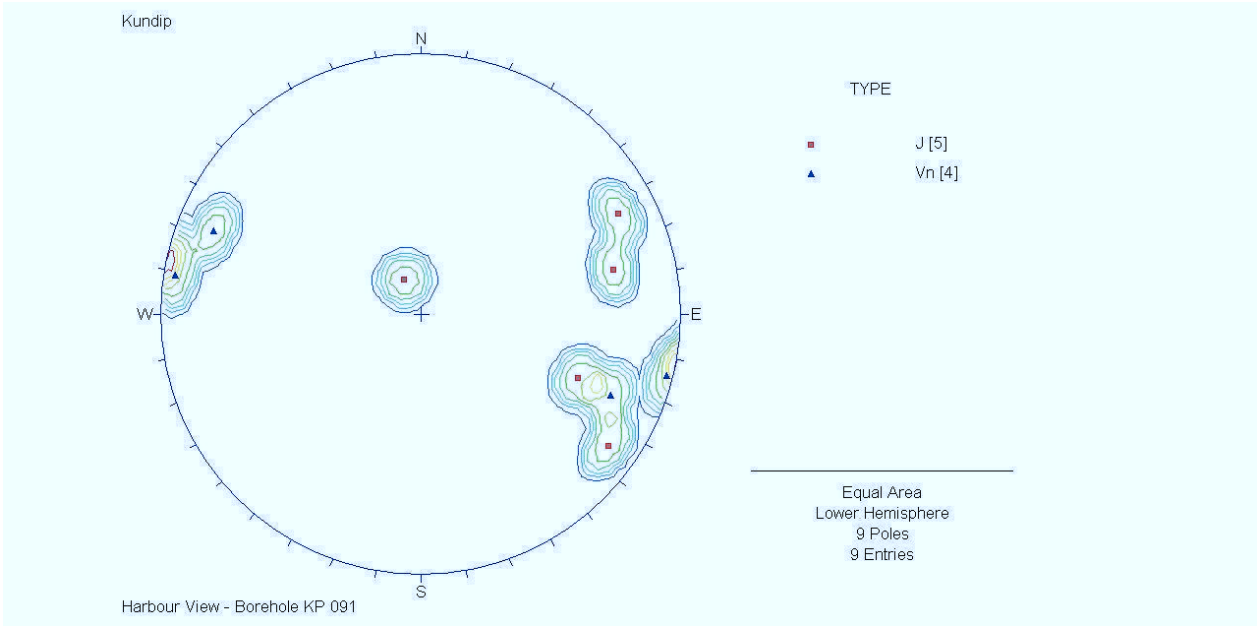


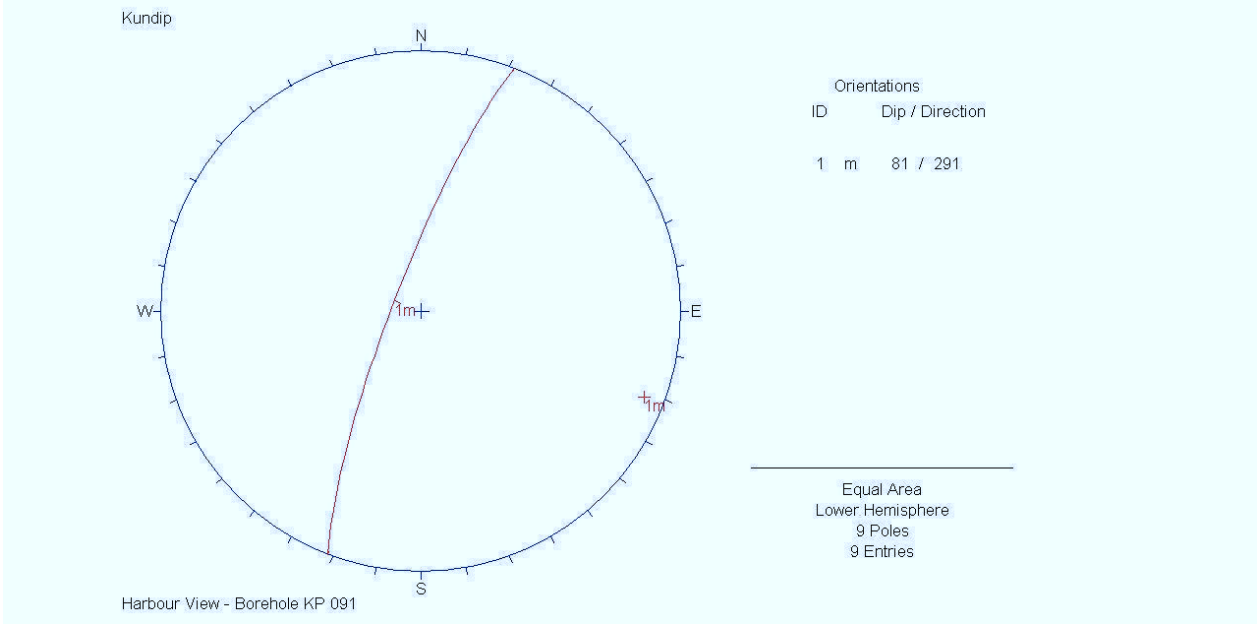
Harbour View



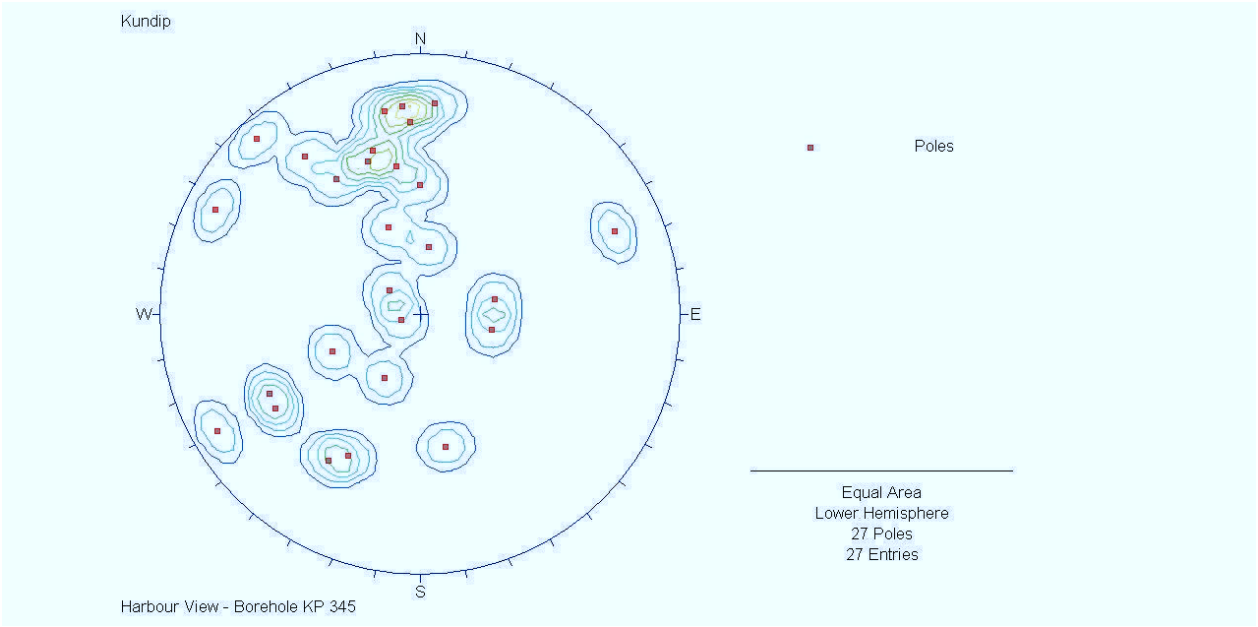


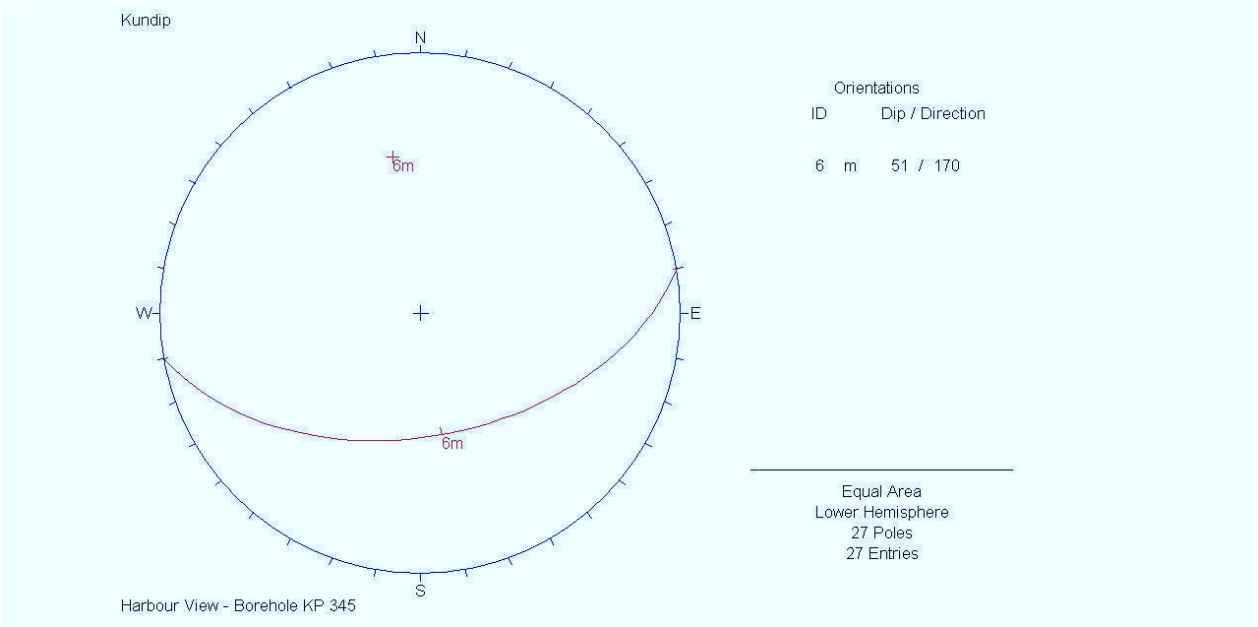
Harbour View



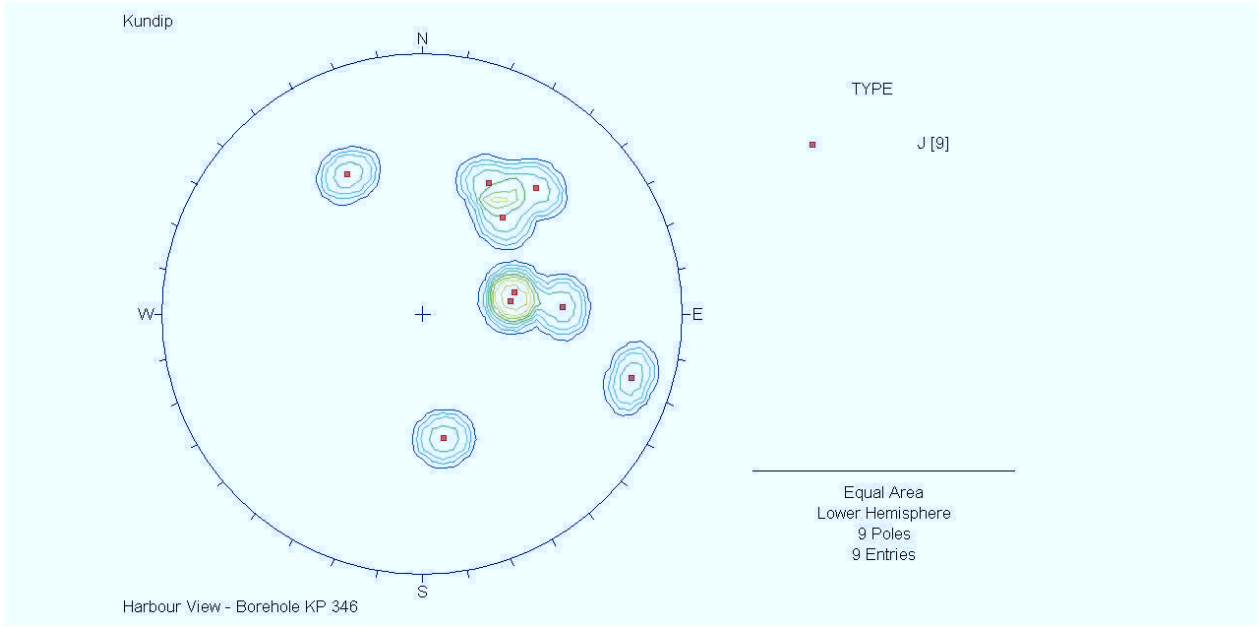


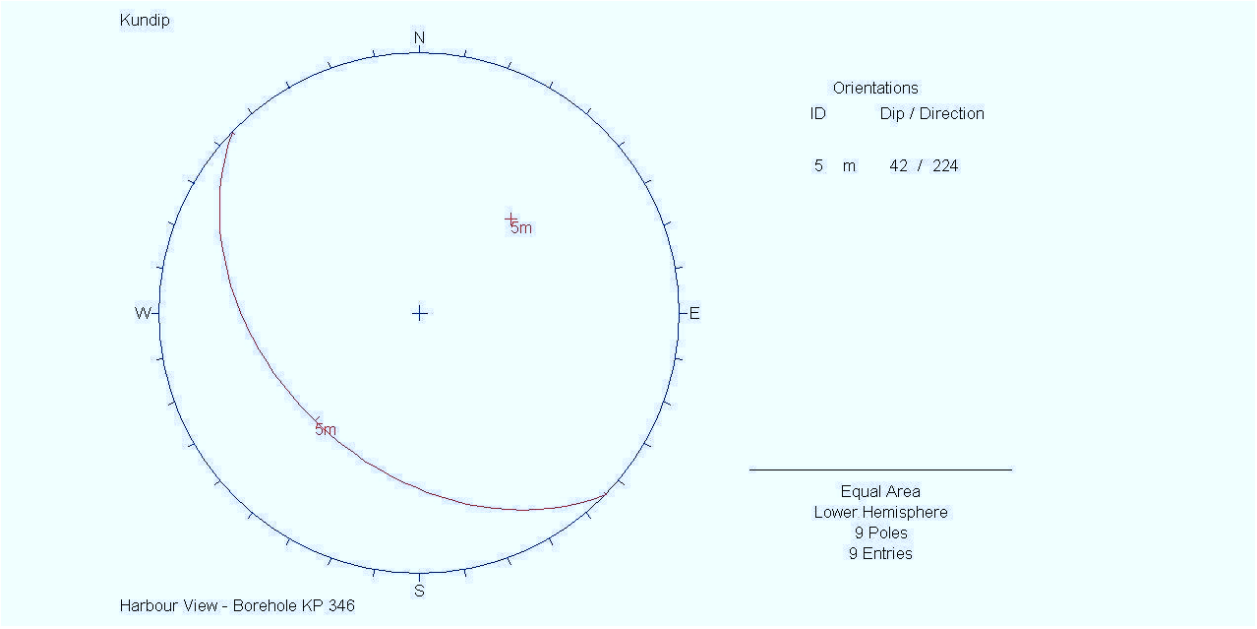
Harbour View



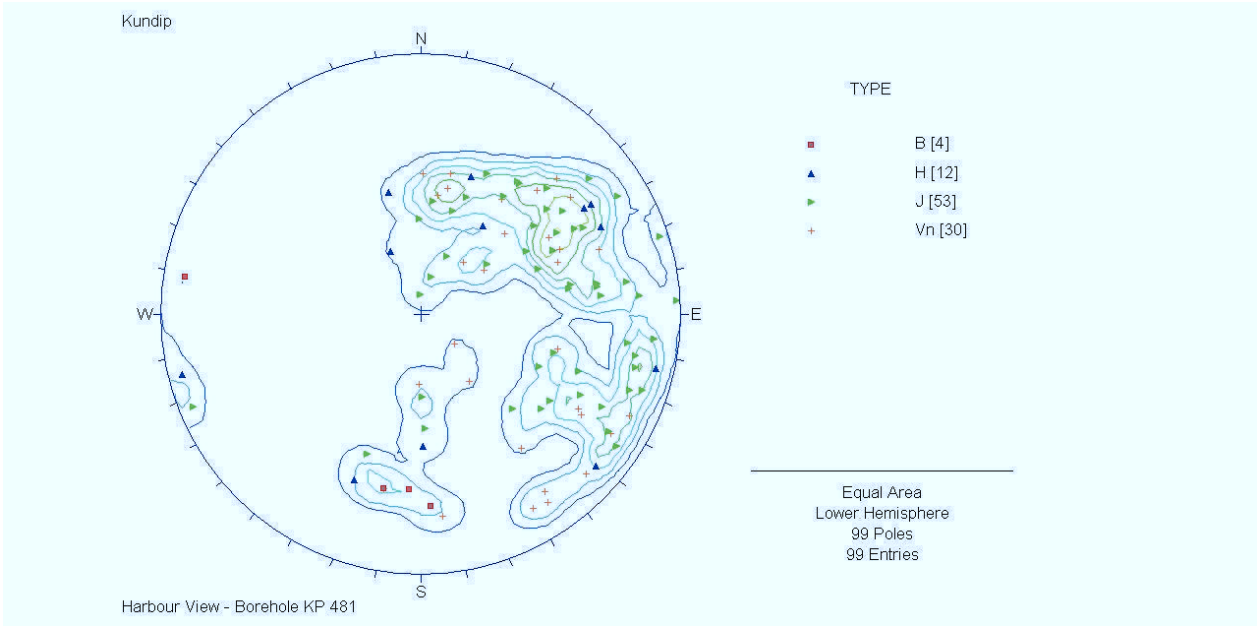


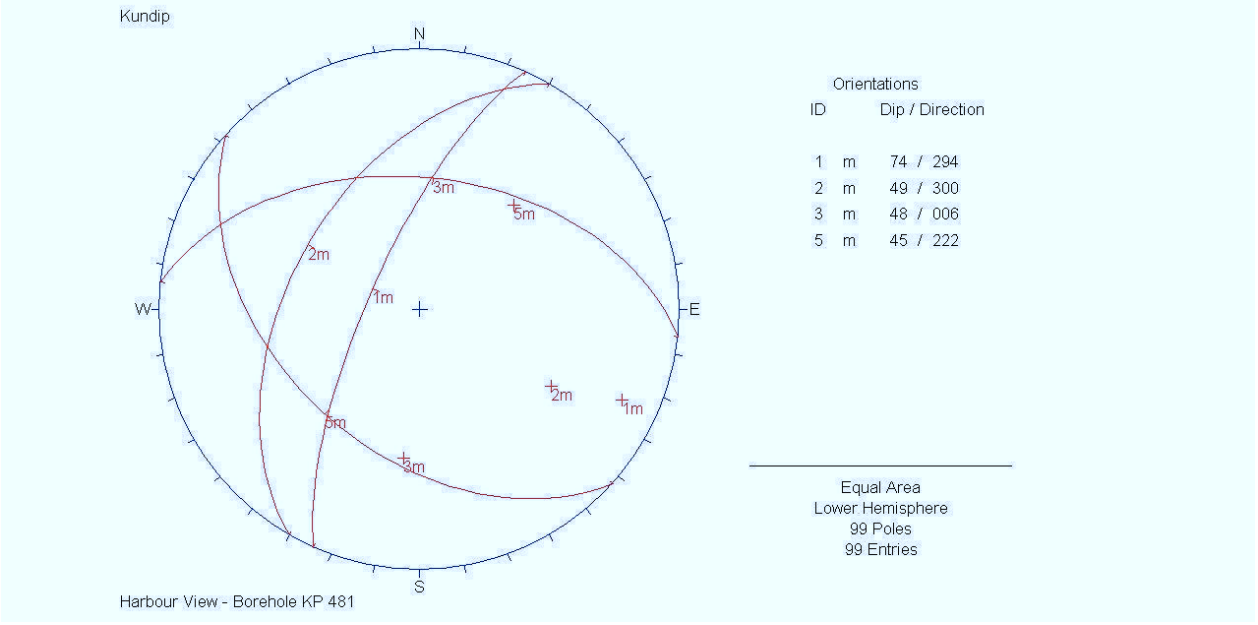
Harbour View



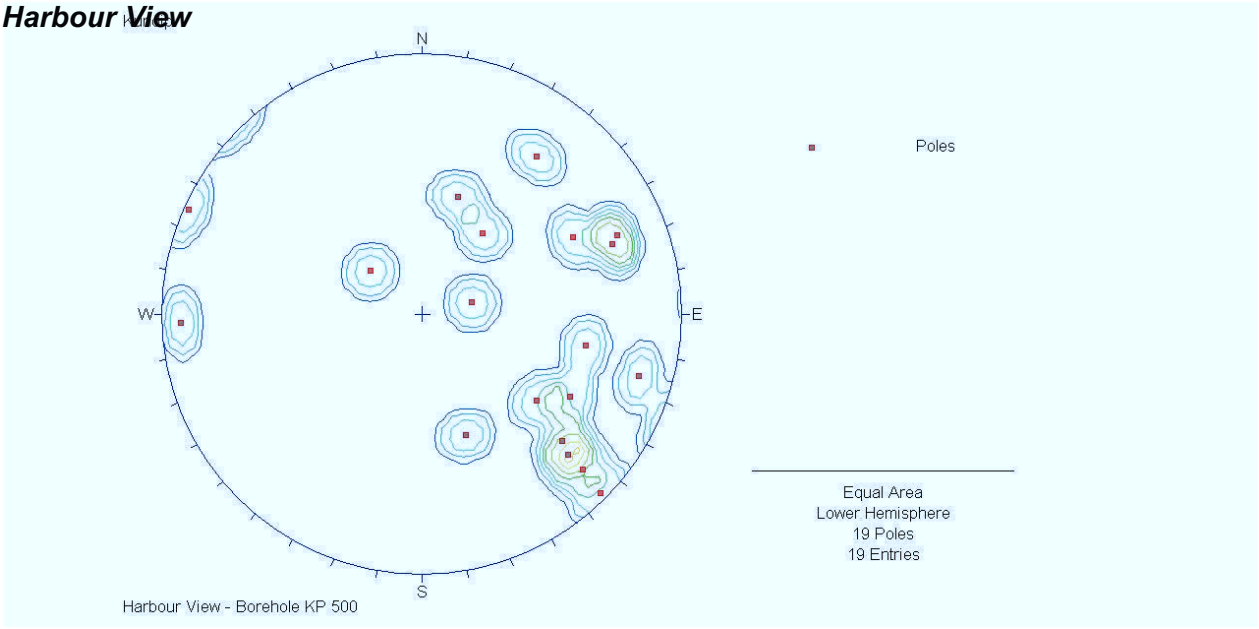


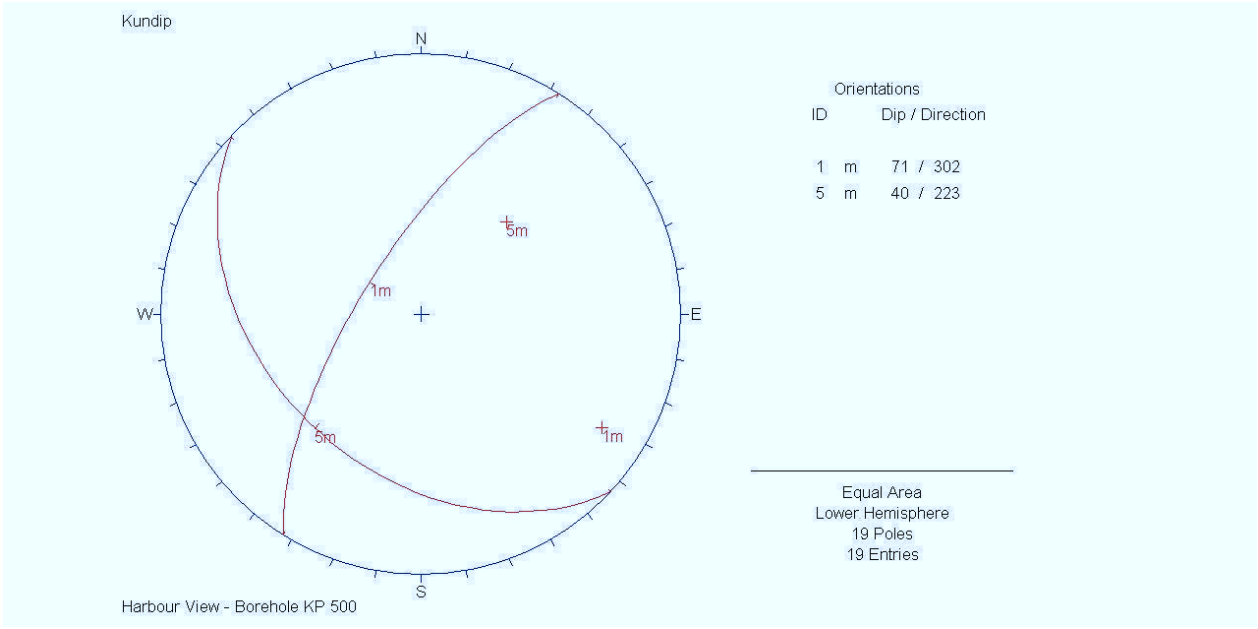
Harbour View



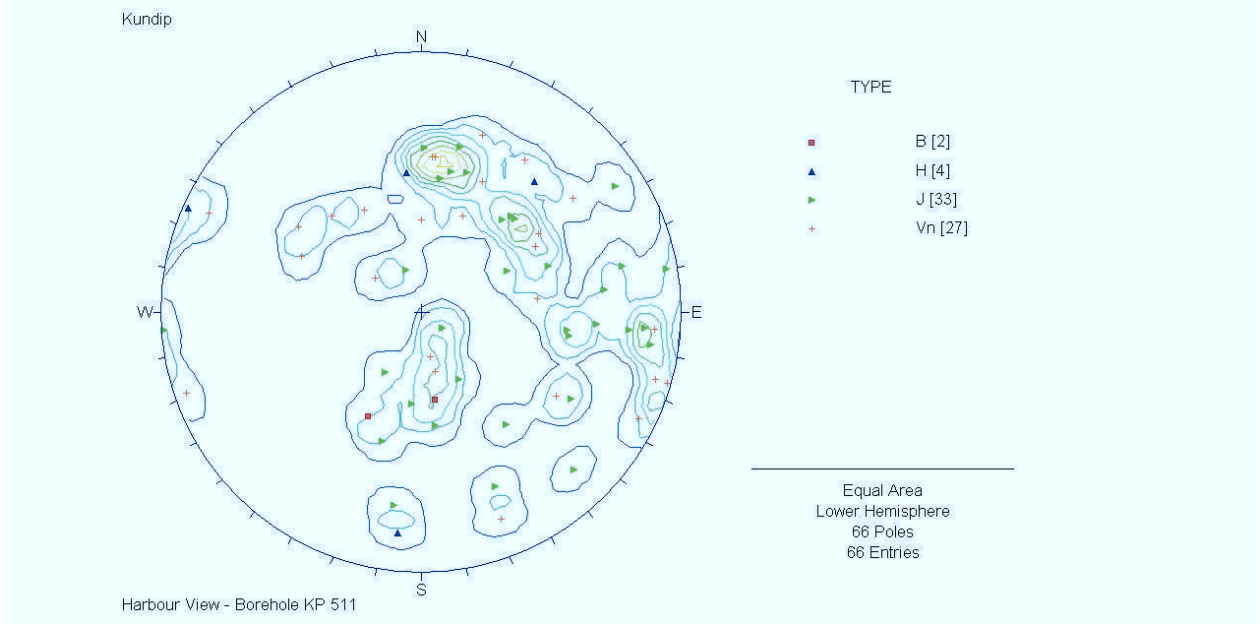


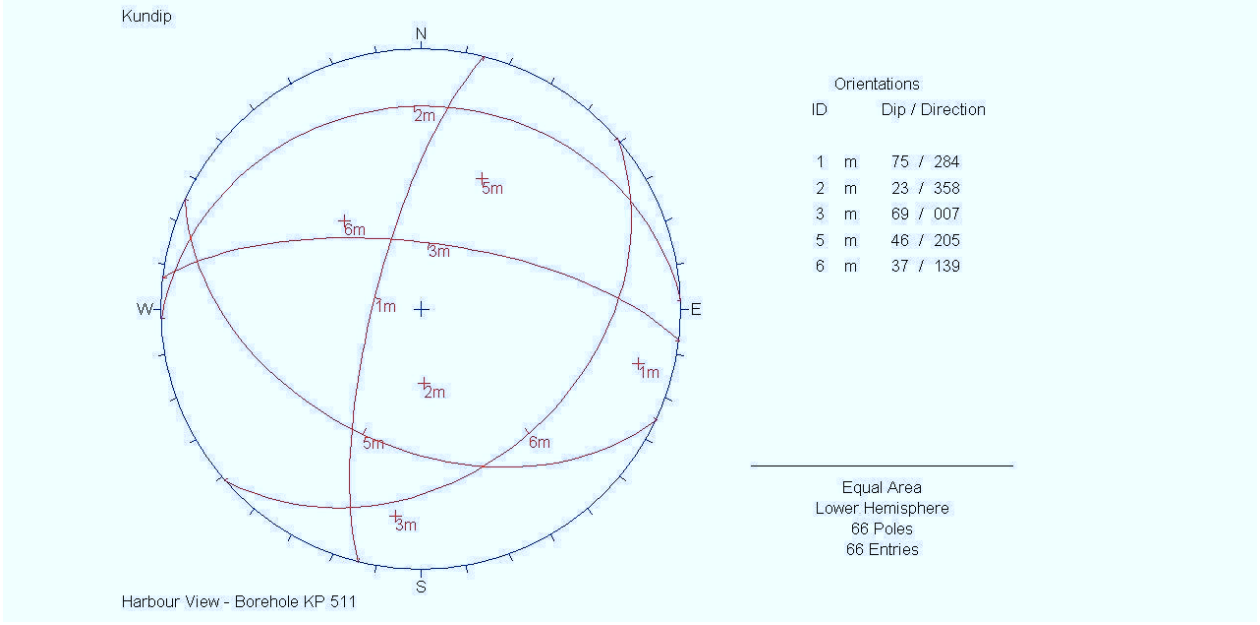
Harbour View



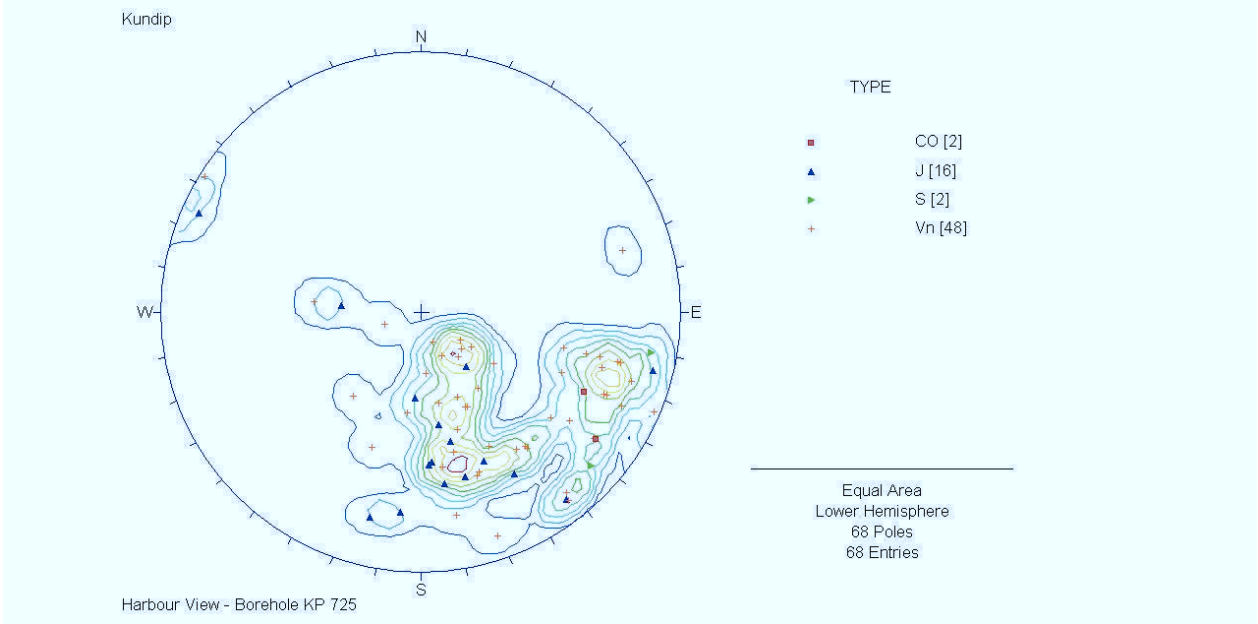


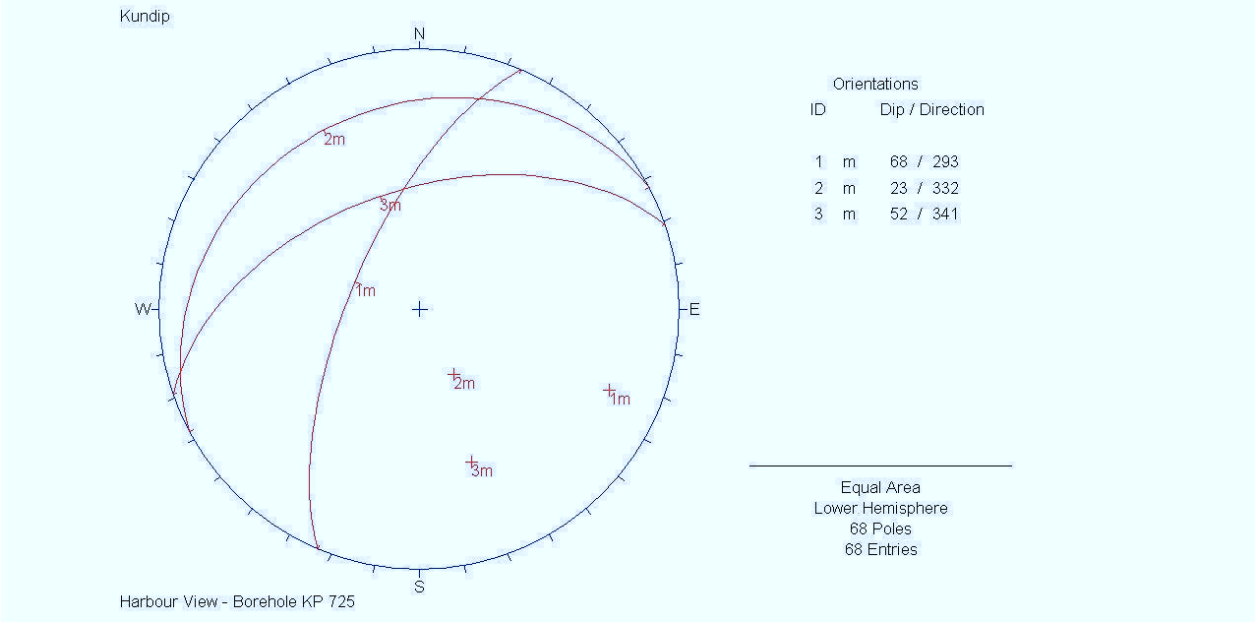
Harbour View



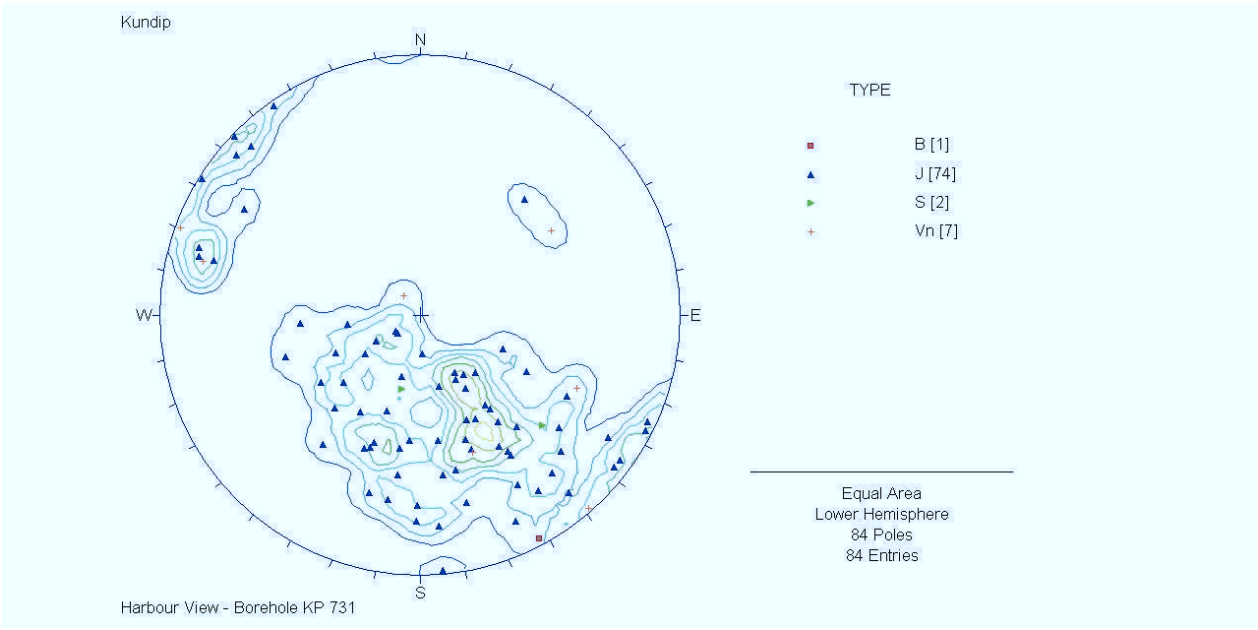


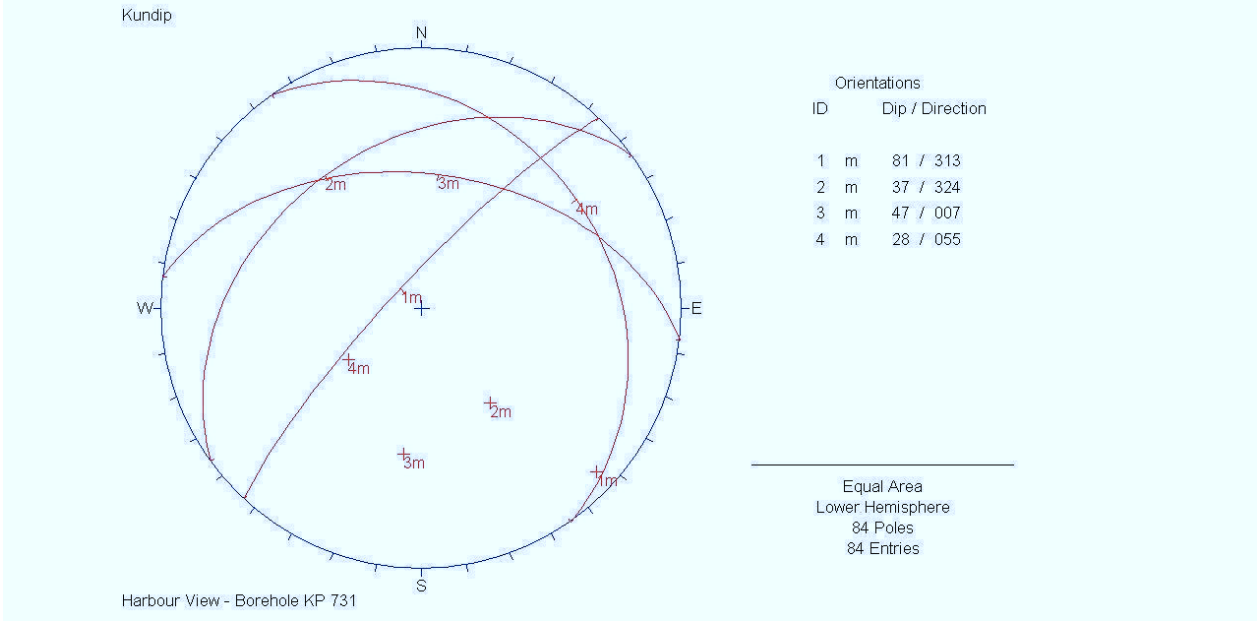
Harbour View



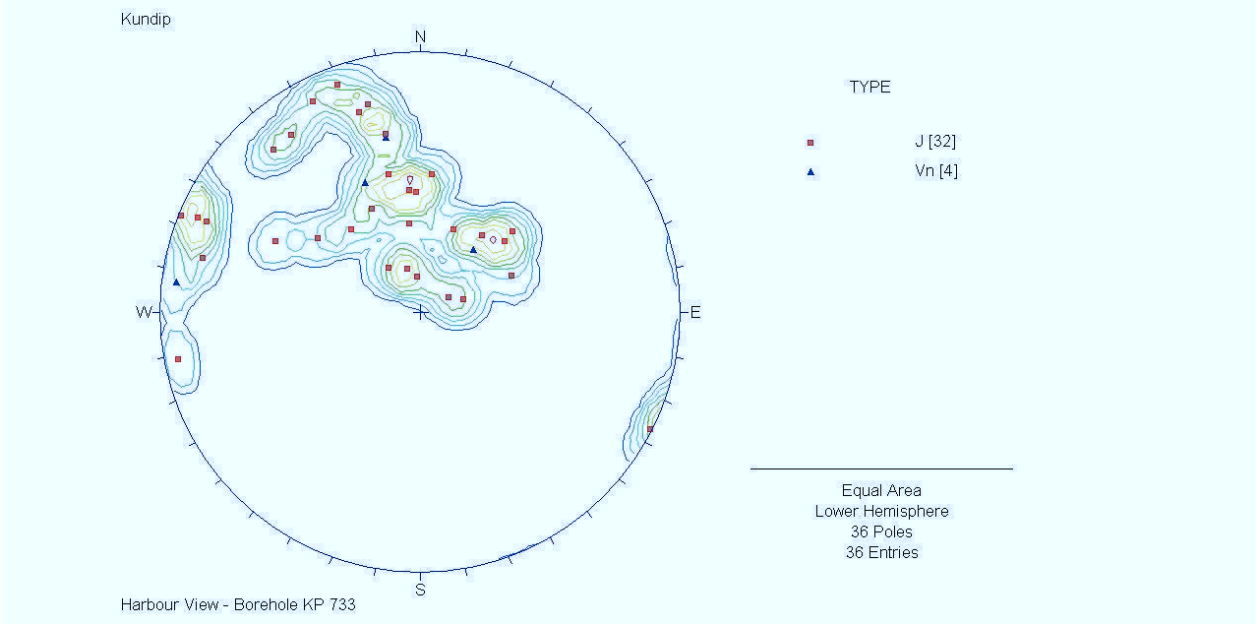


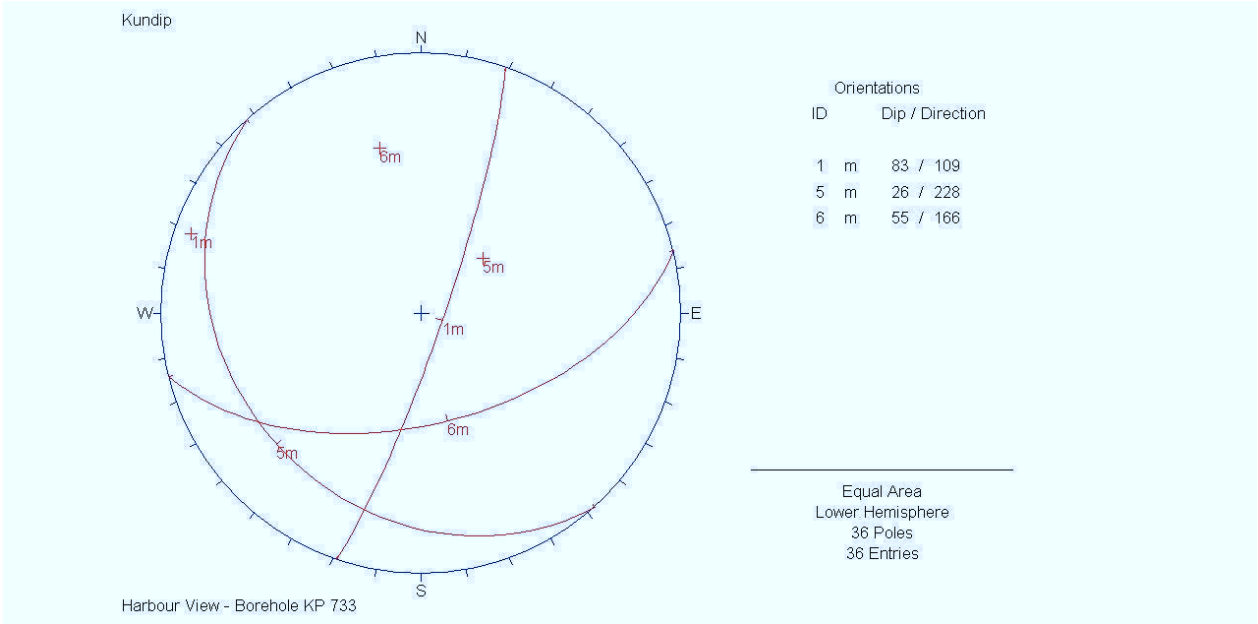
Harbour View



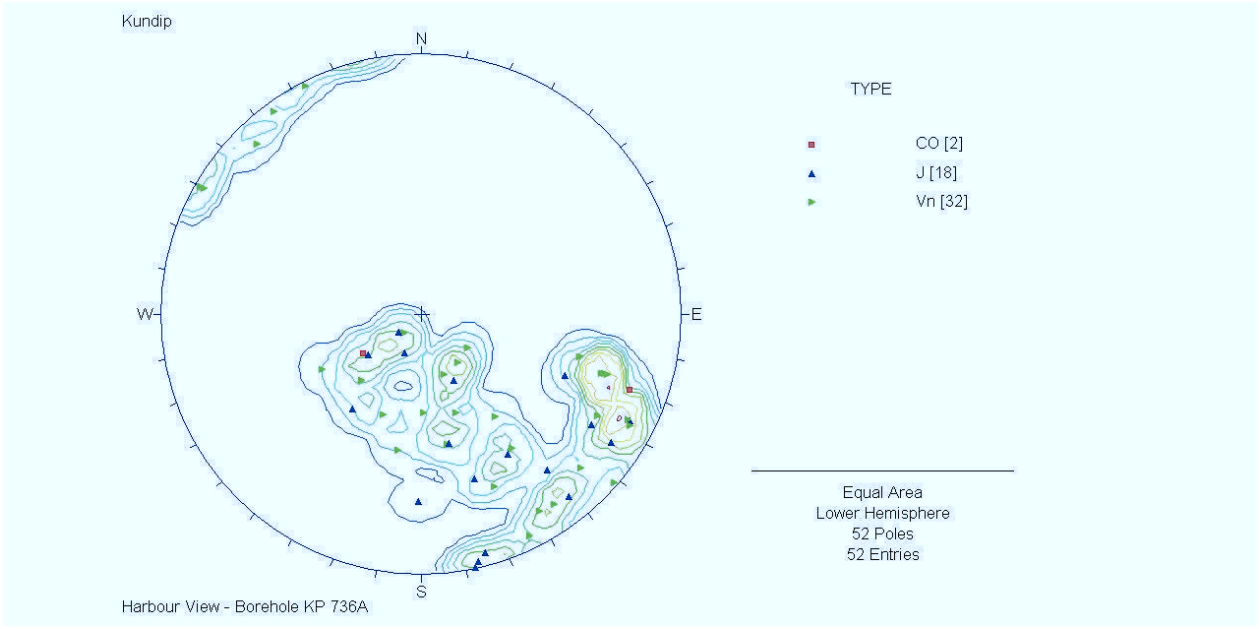


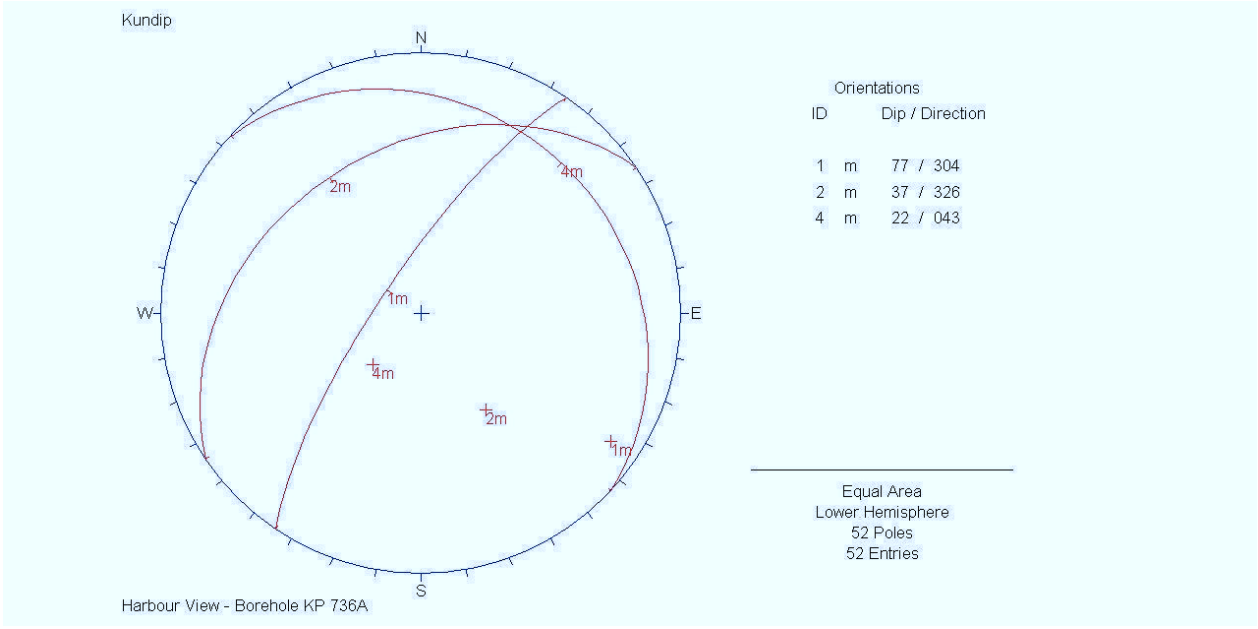
Harbour View



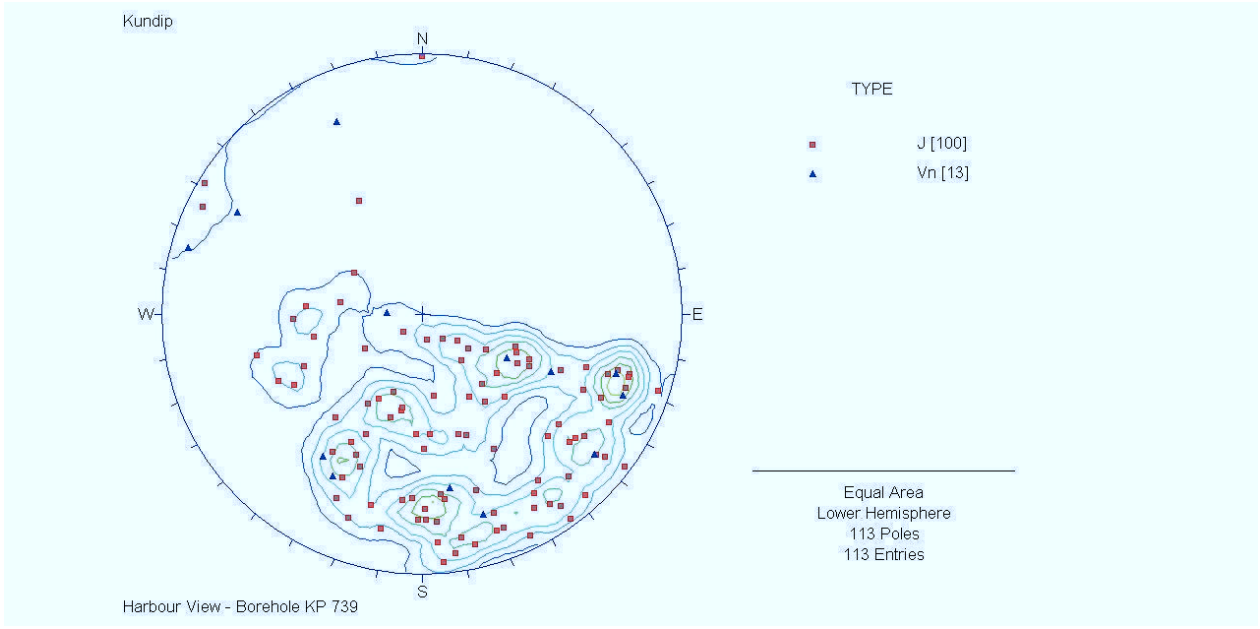


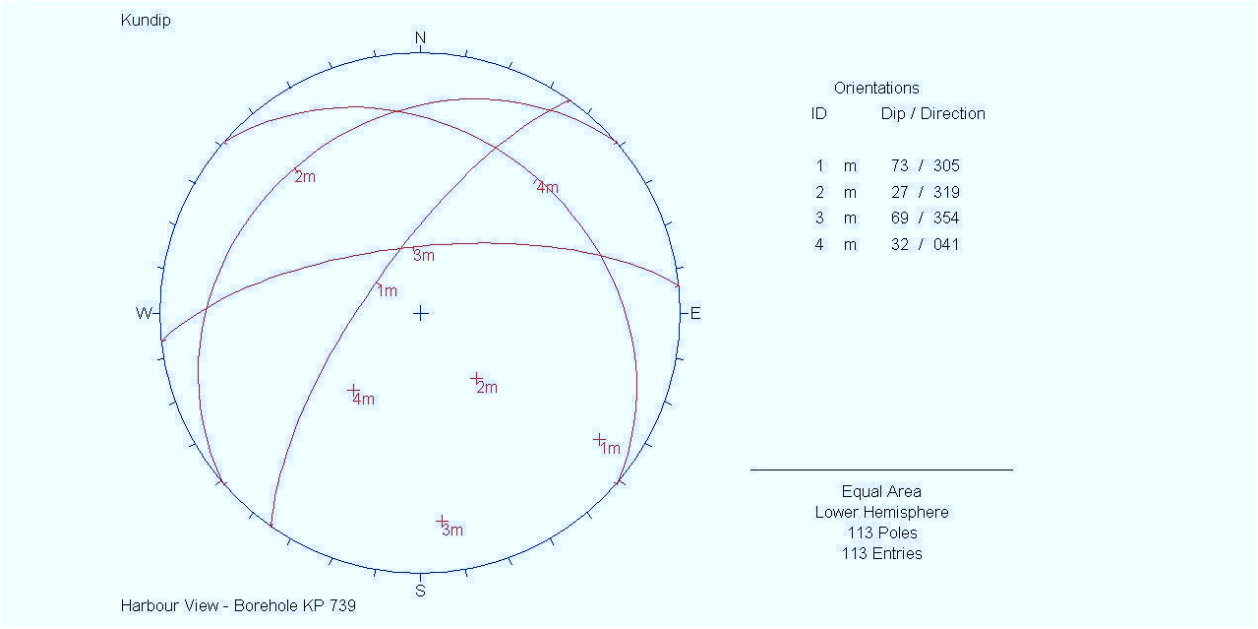
Harbour View



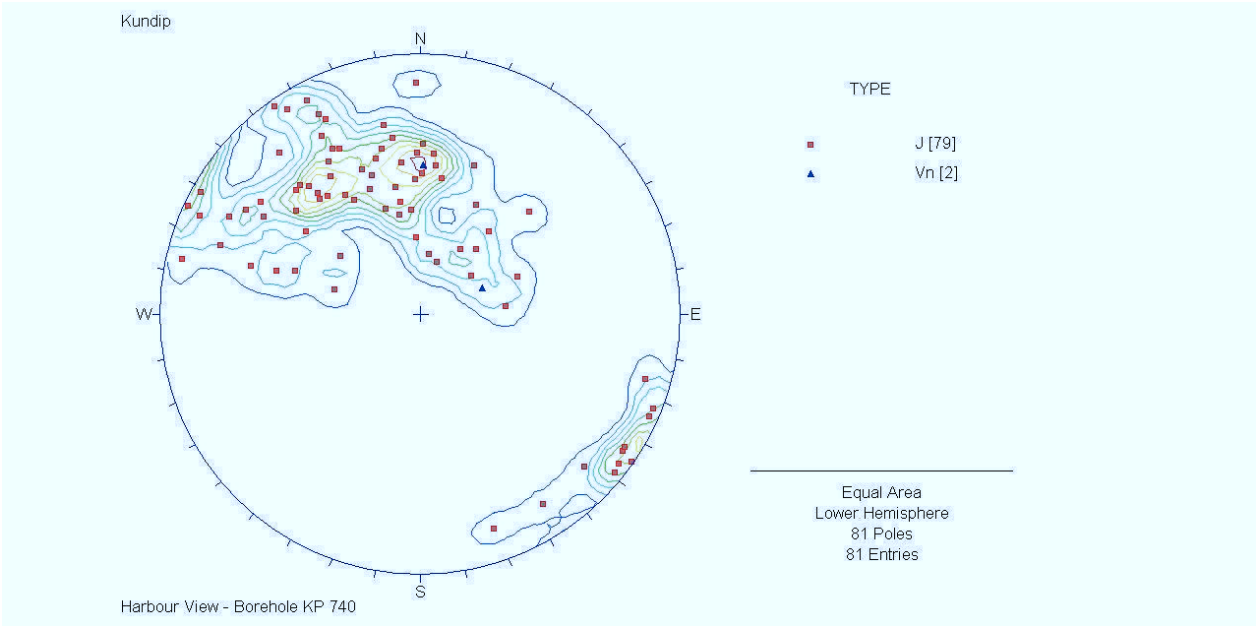


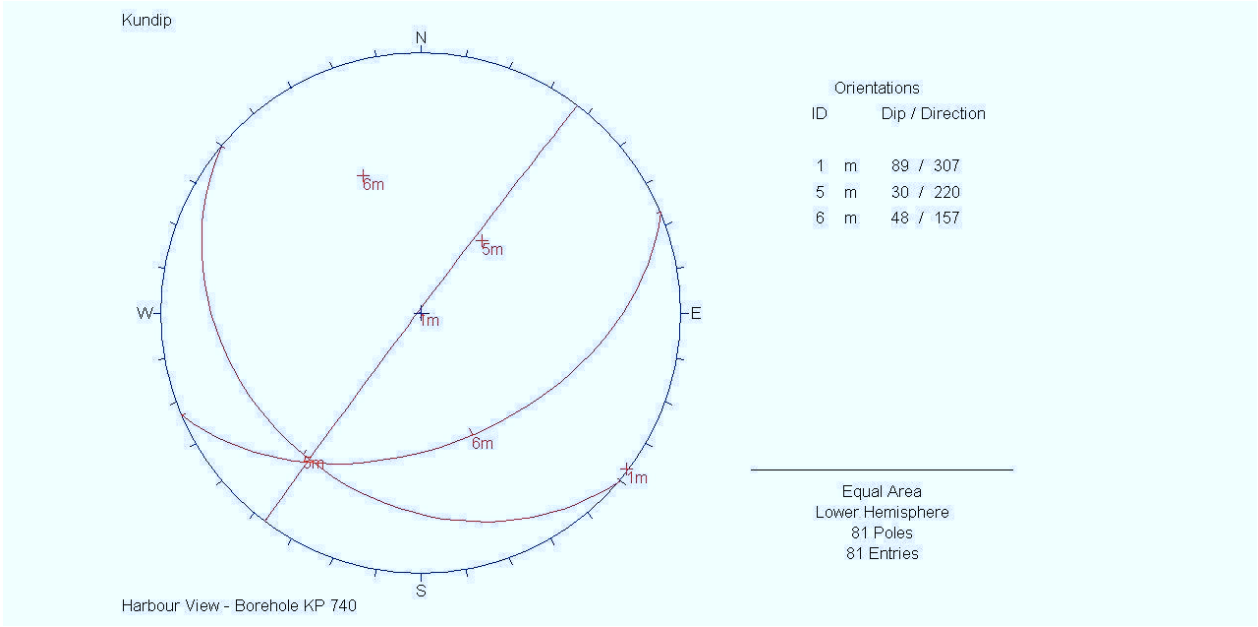
Harbour View



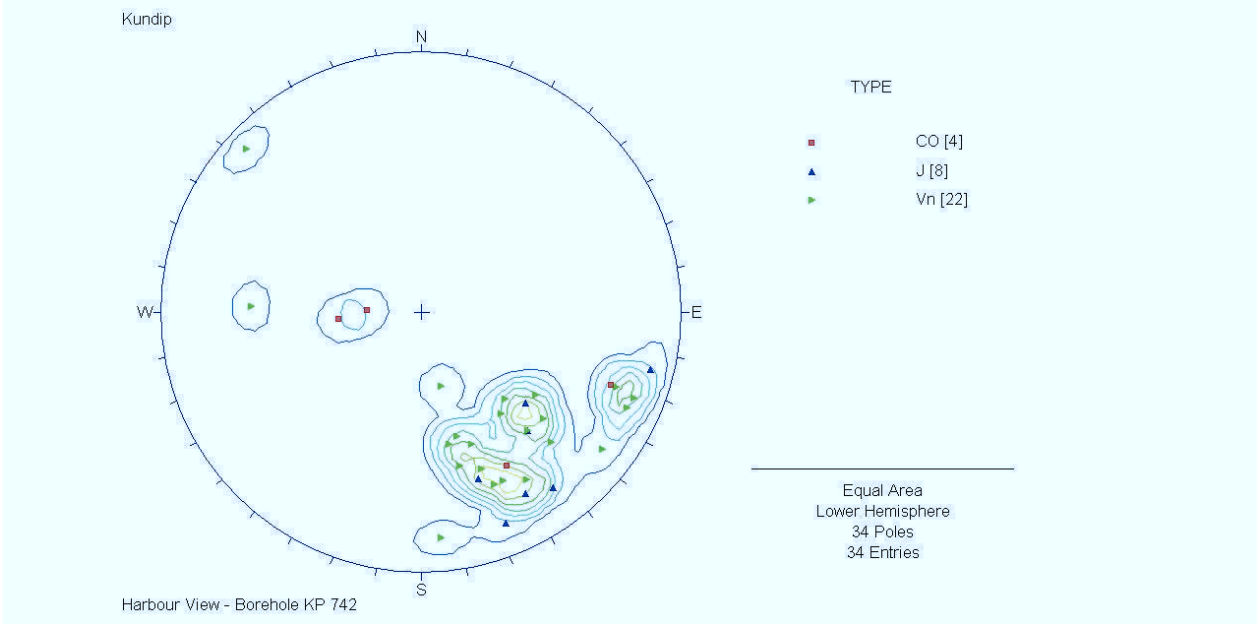


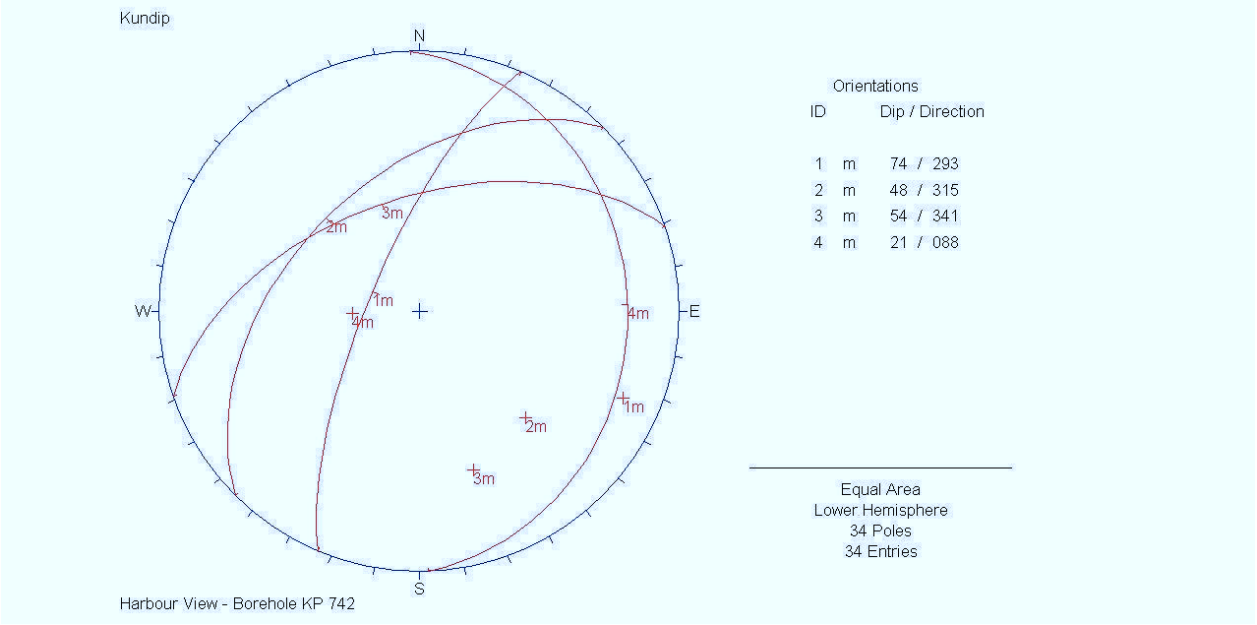
Harbour View



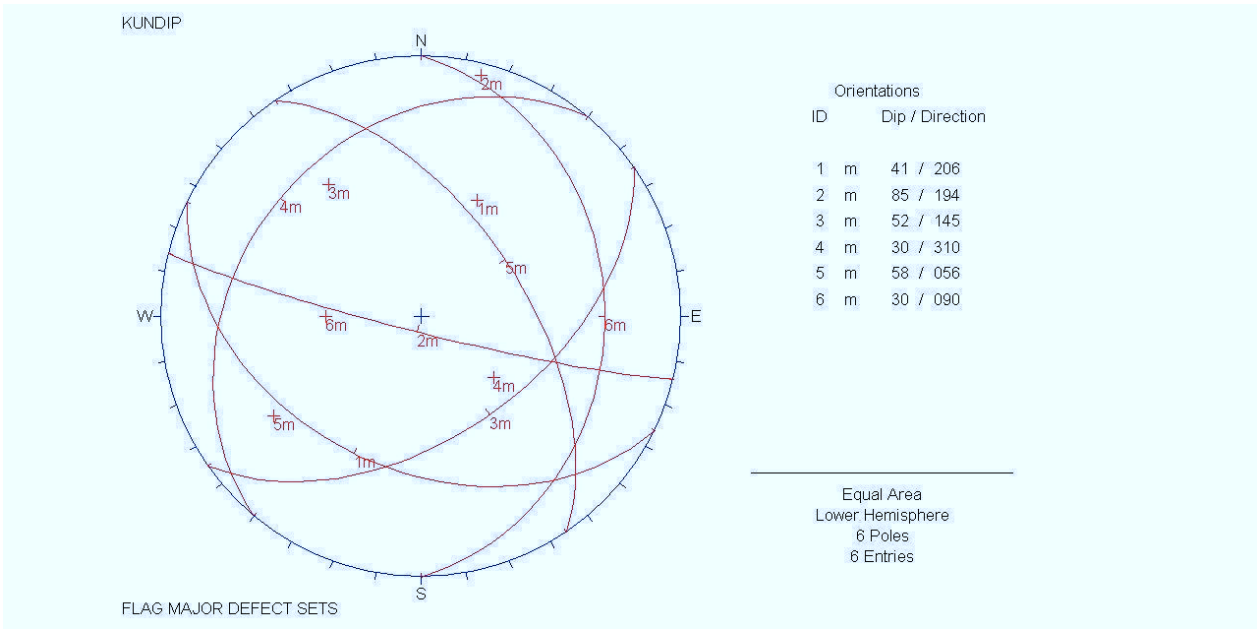


Harbour View

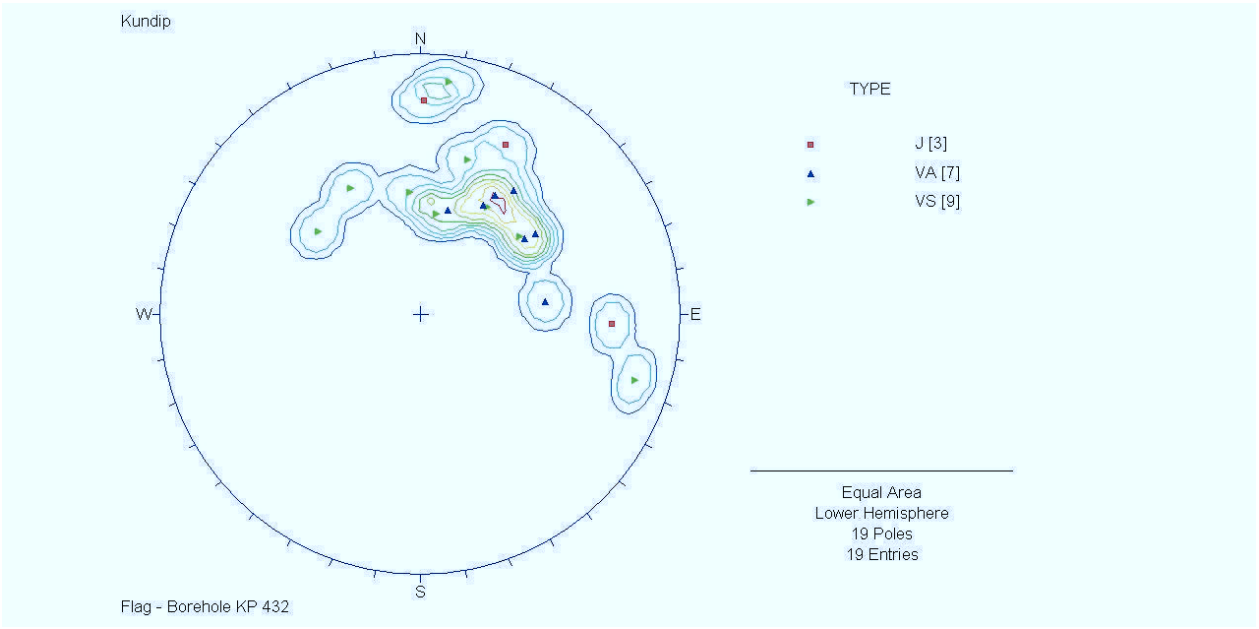


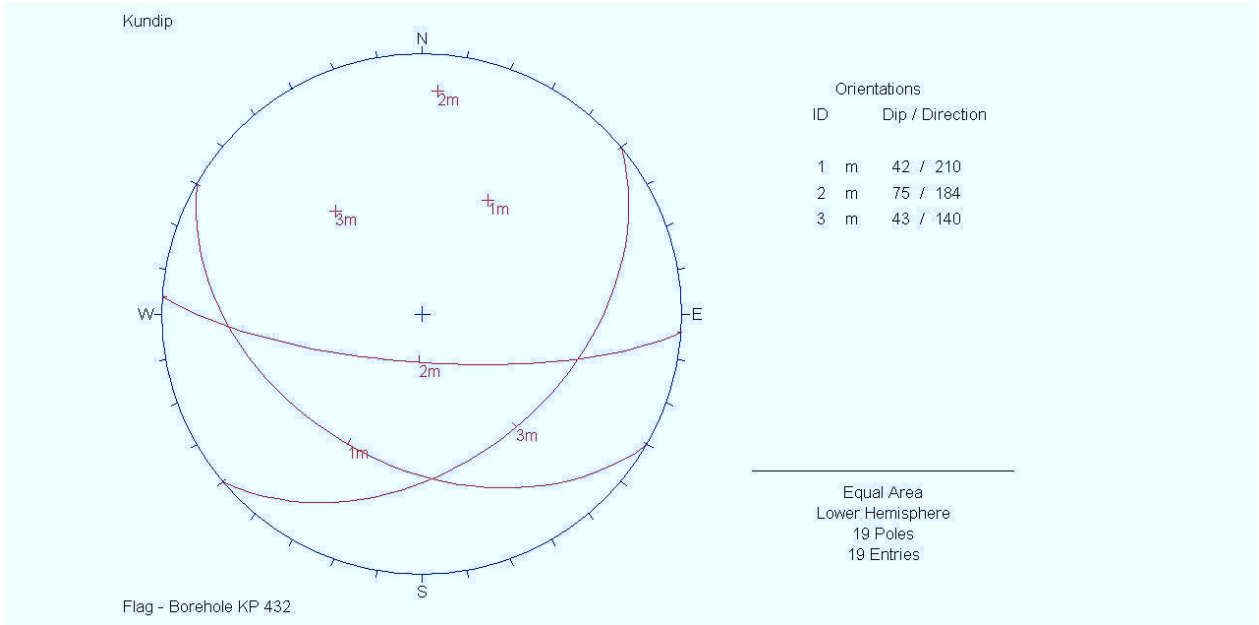


Flag

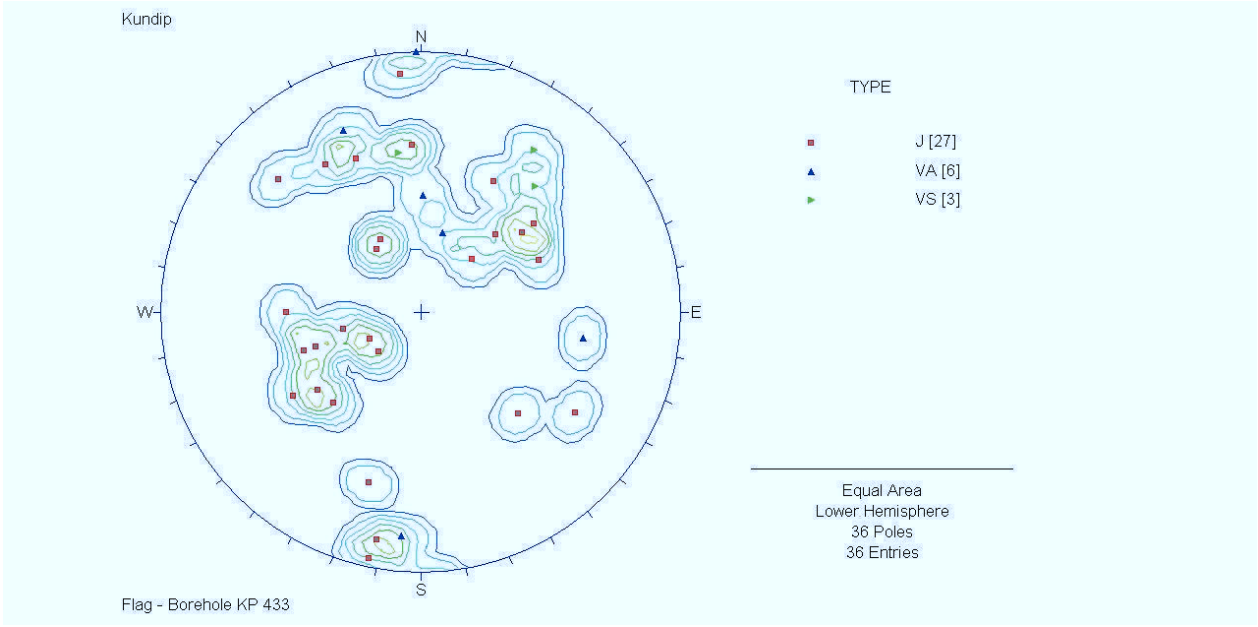

KUNDIP
N
E
S
W
5m
3m
4m
1m
5m
6m
2m
6m
4m
5m
3m
1m
FLAG MAJOR DEFECT SETS
Orientations
ID Dip / Direction
1 m 41 / 206
2 m 85 / 194
3 m 52 / 145
4 m 30 / 310
5 m 58 / 056
6 m 30 / 090
Equal Area
Lower Hemisphere
6 Poles
6 Entries

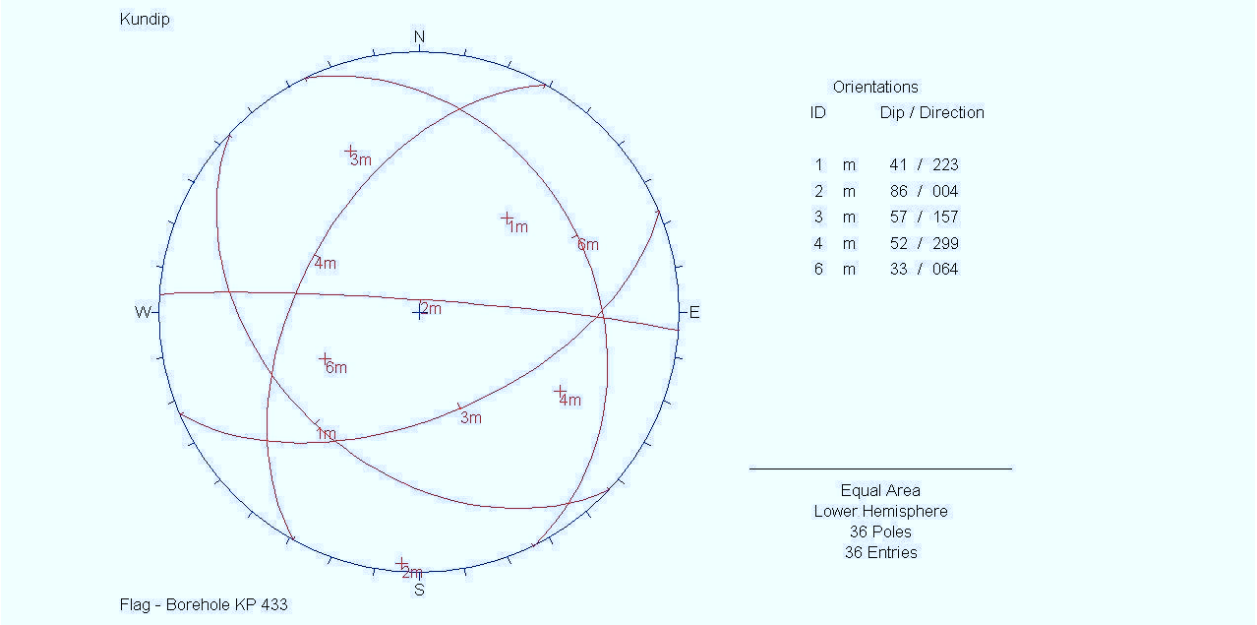
Flag


Kundip
N
W
E
S
TYPE
J [3]
VA [7]
VS [9]
Equal Area
Lower Hemisphere
19 Poles
19 Entries
Flag - Borehole KP 432

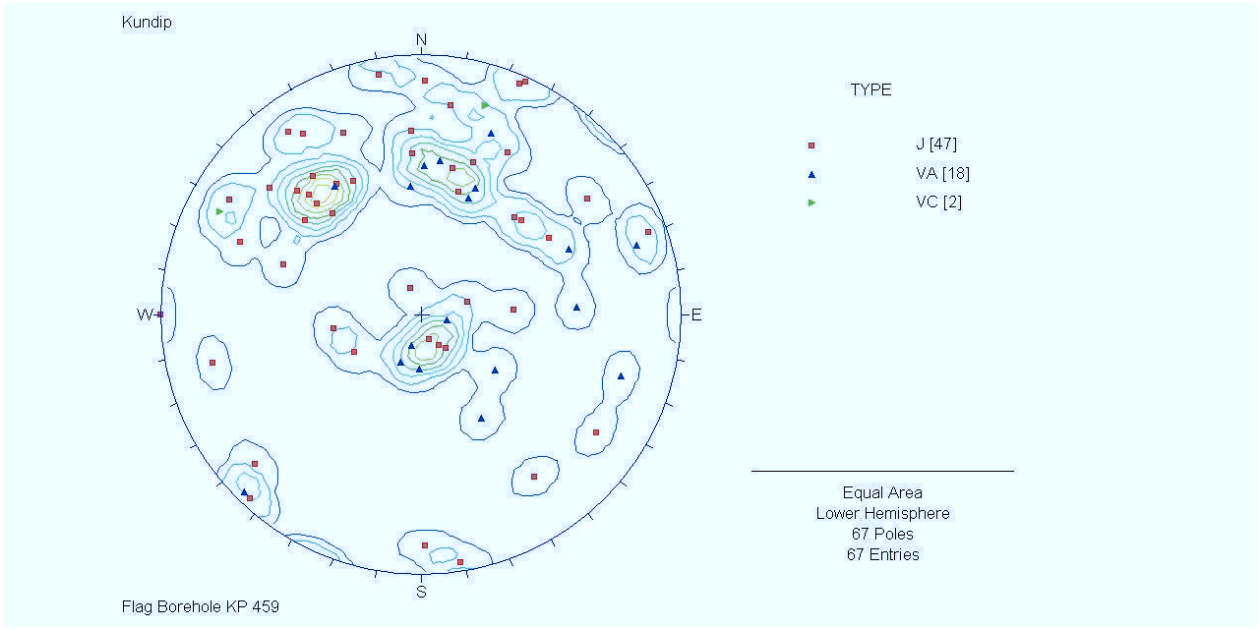

Kundip
N
W
E
S
2m
3m
1m
2m
1m
3m
Orientations
ID Dip / Direction
1 m 42 / 210
2 m 75 / 184
3 m 43 / 140
Equal Area
Lower Hemisphere
19 Poles
19 Entries
Flag - Borehole KP 432

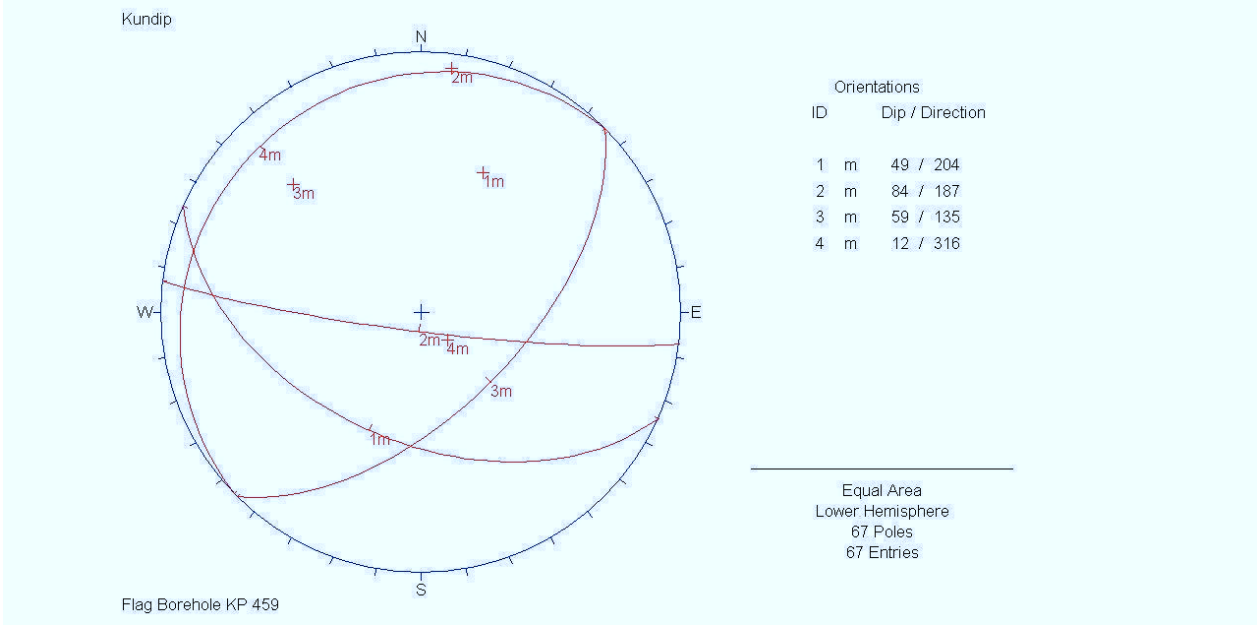
Flag


Kundip
N
W
E
S
TYPE
J [27]
VA [6]
VS [3]
Equal Area
Lower Hemisphere
36 Poles
36 Entries
Flag - Borehole KP 433

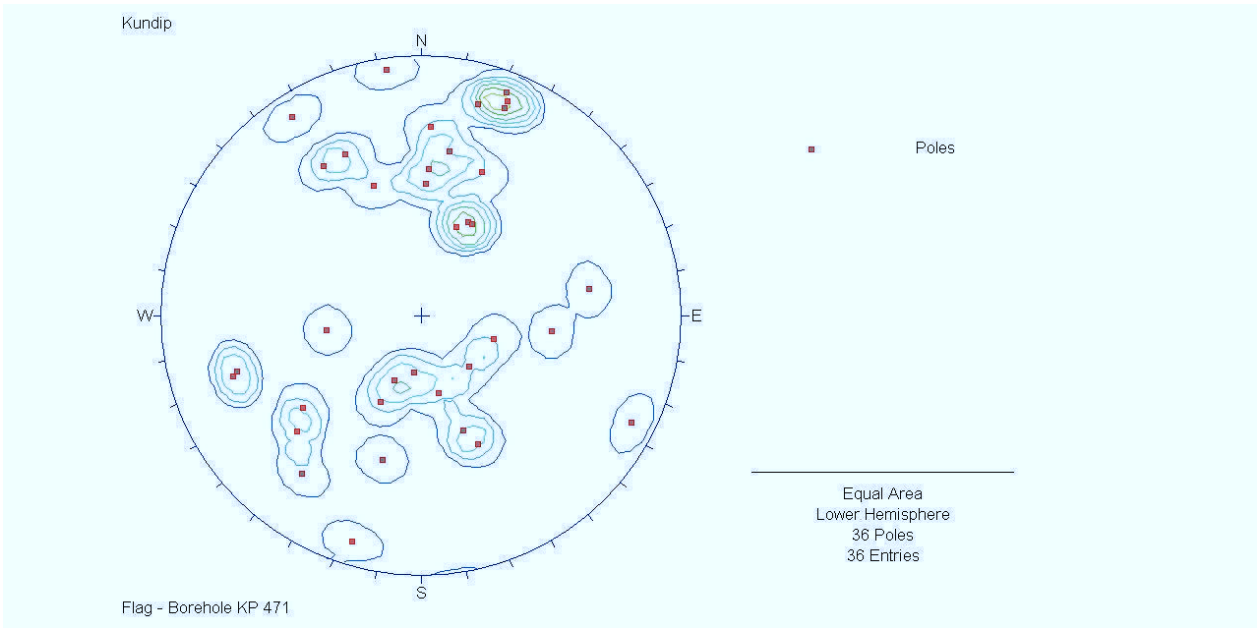

Kundip
N
W
E
S
3m
1m
6m
4m
2m
6m
4m
3m
1m
2m
Orientations
ID Dip / Direction
1 m 41 / 223
2 m 86 / 004
3 m 57 / 157
4 m 52 / 299
6 m 33 / 064
Equal Area
Lower Hemisphere
36 Poles
36 Entries
Flag - Borehole KP 433

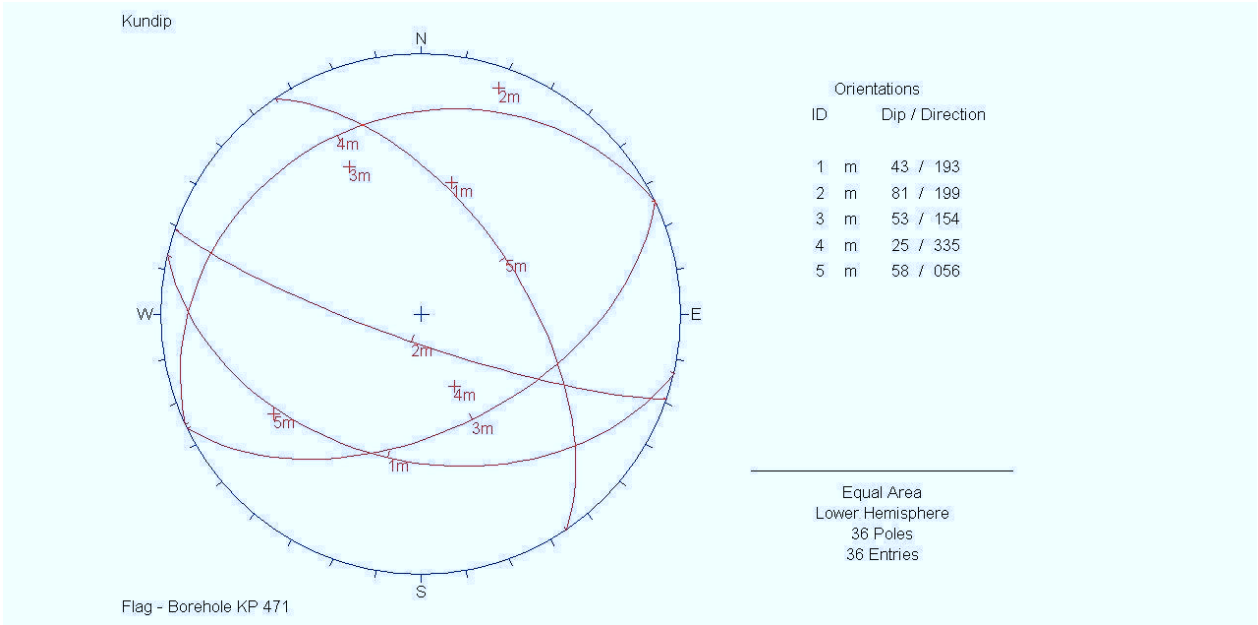
Flag


Kundip
N
W
E
S
TYPE
J [47]
VA [18]
VC [2]
Equal Area
Lower Hemisphere
67 Poles
67 Entries
Flag Borehole KP 459

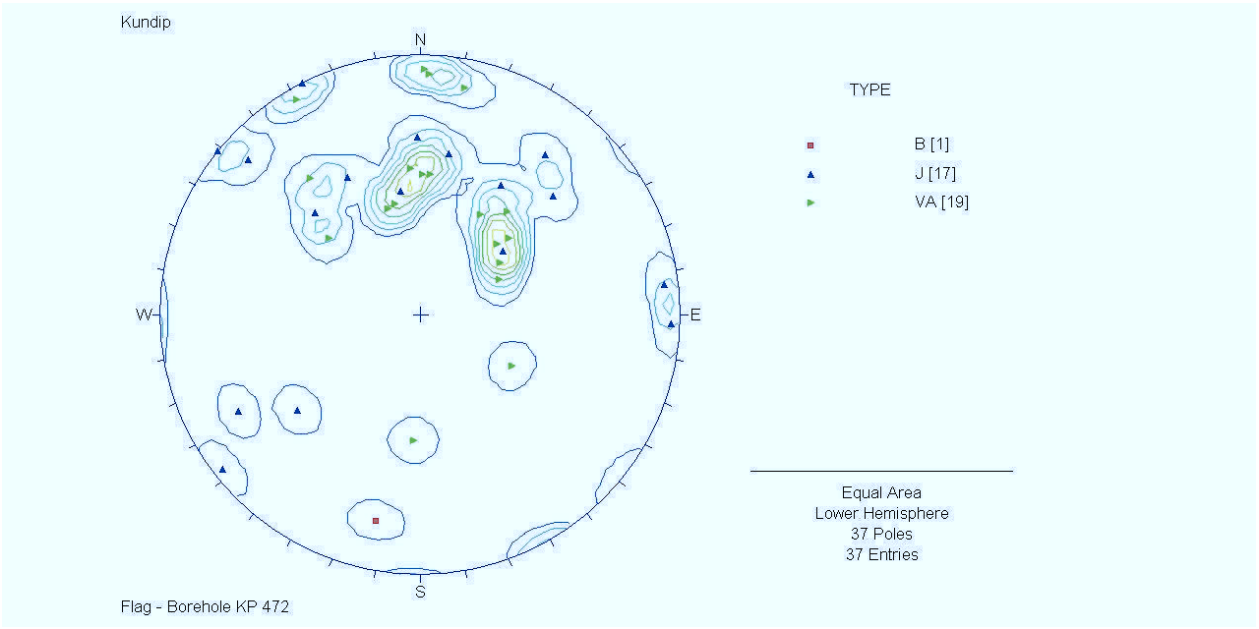

Kundip
N
W
E
S
2m
4m
3m
1m
Orientations
ID
Dip / Direction
1 m 49 / 204
2 m 84 / 187
3 m 59 / 135
4 m 12 / 316
Equal Area
Lower Hemisphere
67 Poles
67 Entries
Flag Borehole KP 459

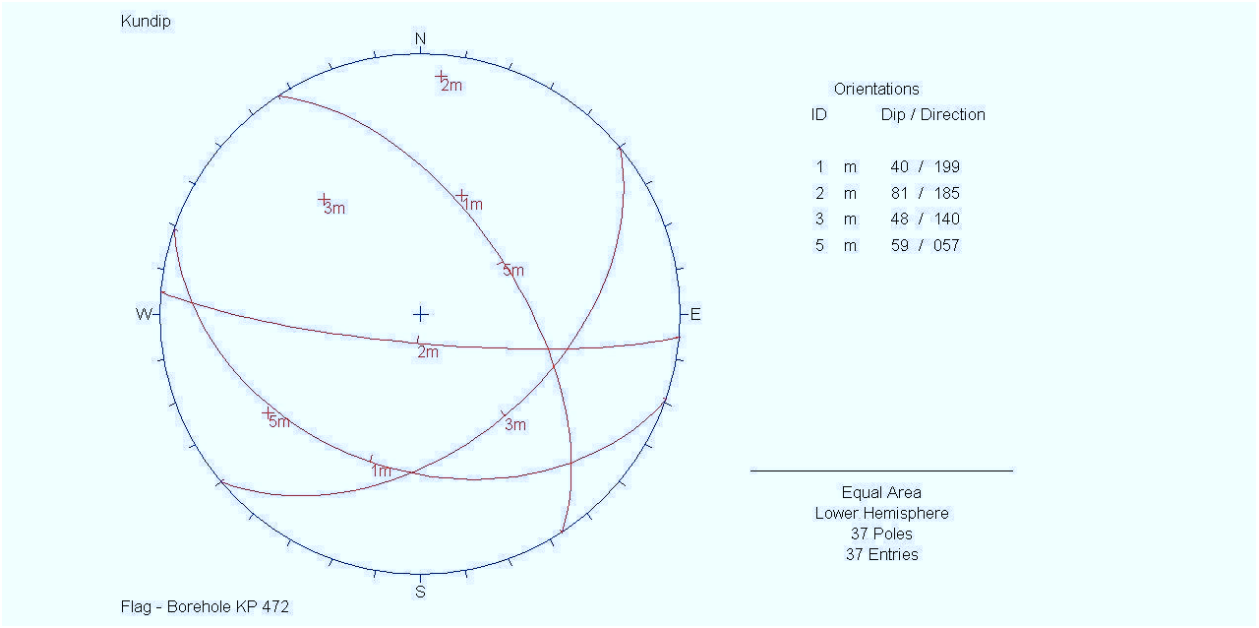
Flag


Kundip
N
W
E
S
Poles
Equal Area
Lower Hemisphere
36 Poles
36 Entries
Flag - Borehole KP 471

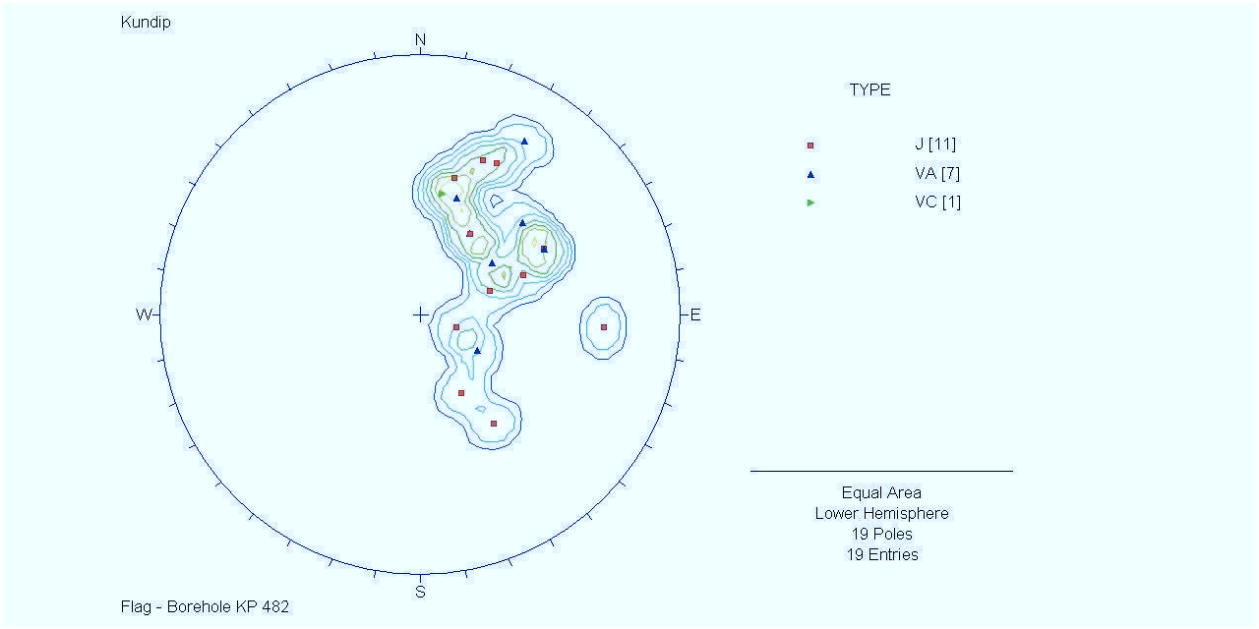

Kundip
N
W
E
S
2m
4m
3m
1m
5m
2m
4m
5m
3m
1m
Orientations
ID Dip / Direction
1 m 43 / 193
2 m 81 / 199
3 m 53 / 154
4 m 25 / 335
5 m 58 / 056
Equal Area
Lower Hemisphere
36 Poles
36 Entries
Flag - Borehole KP 471

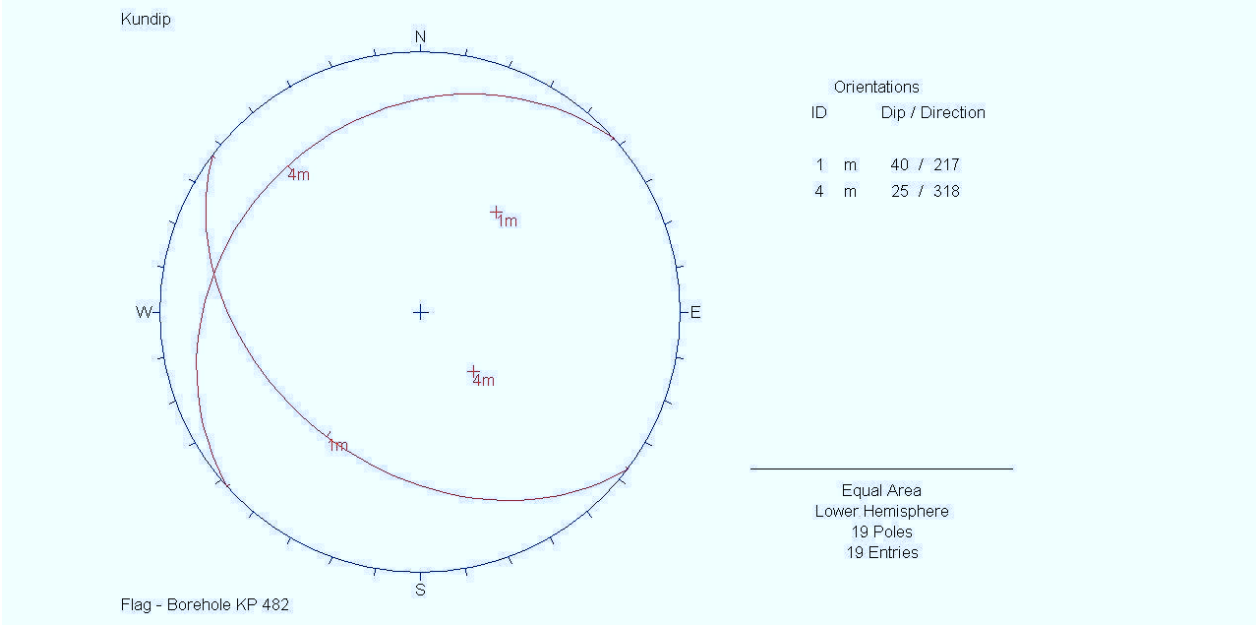
Flag


Kundip
N
W
E
S
TYPE
B [1]
J [17]
VA [19]
Equal Area
Lower Hemisphere
37 Poles
37 Entries
Flag - Borehole KP 472

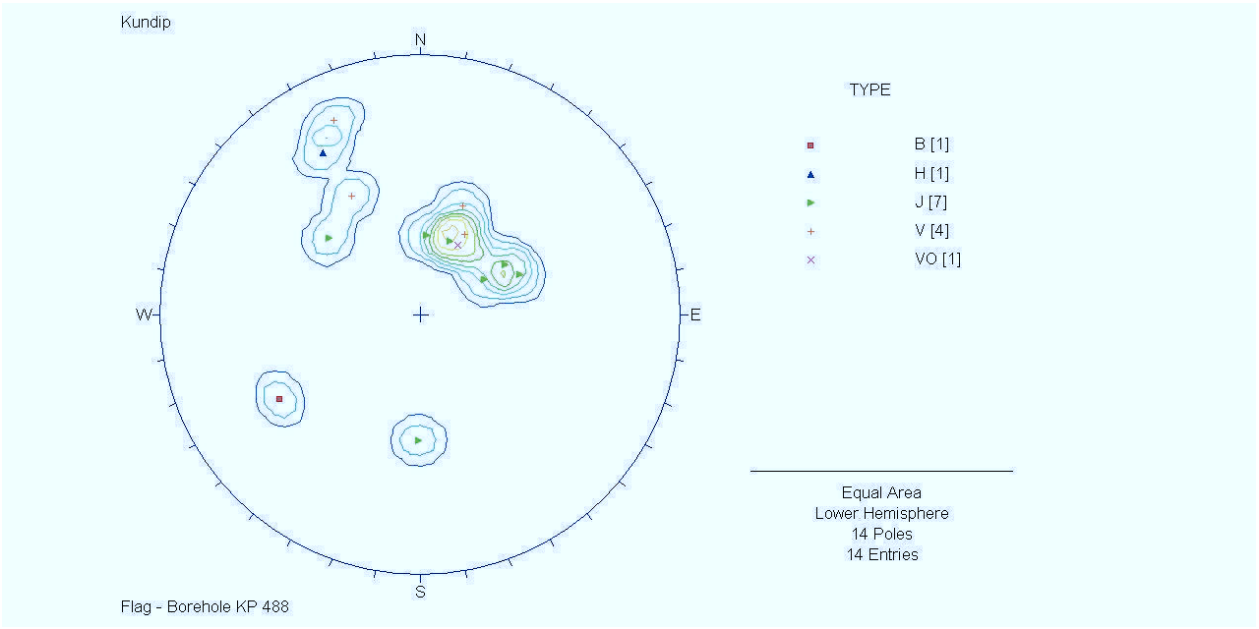

Kundip
N
W
E
S
2m
3m
1m
5m
2m
5m
3m
1m
Orientations
ID Dip / Direction
1 m 40 / 199
2 m 81 / 185
3 m 48 / 140
5 m 59 / 057
Equal Area
Lower Hemisphere
37 Poles
37 Entries
Flag - Borehole KP 472

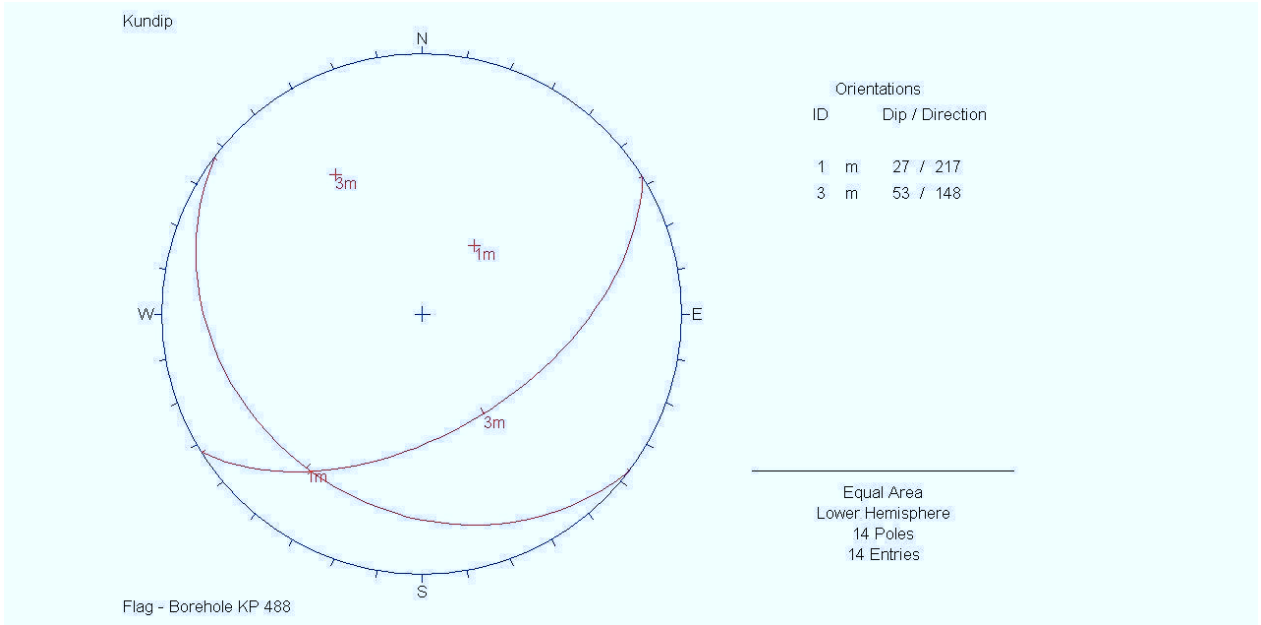
Flag


Kundip
N
W
E
S
TYPE
J [11]
VA [7]
VC [1]
Equal Area
Lower Hemisphere
19 Poles
19 Entries
Flag - Borehole KP 482

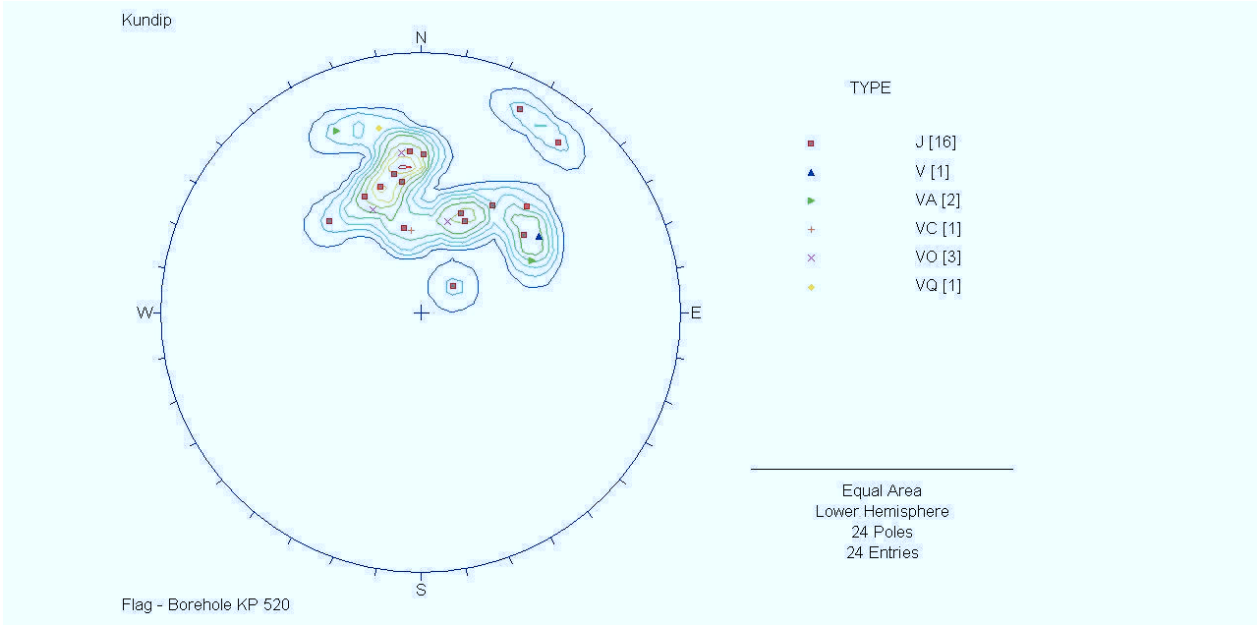

Kundip
N
W
E
S
4m
1m
4m
1m
Orientations
ID Dip / Direction
1 m 40 / 217
4 m 25 / 318
Equal Area
Lower Hemisphere
19 Poles
19 Entries
Flag - Borehole KP 482

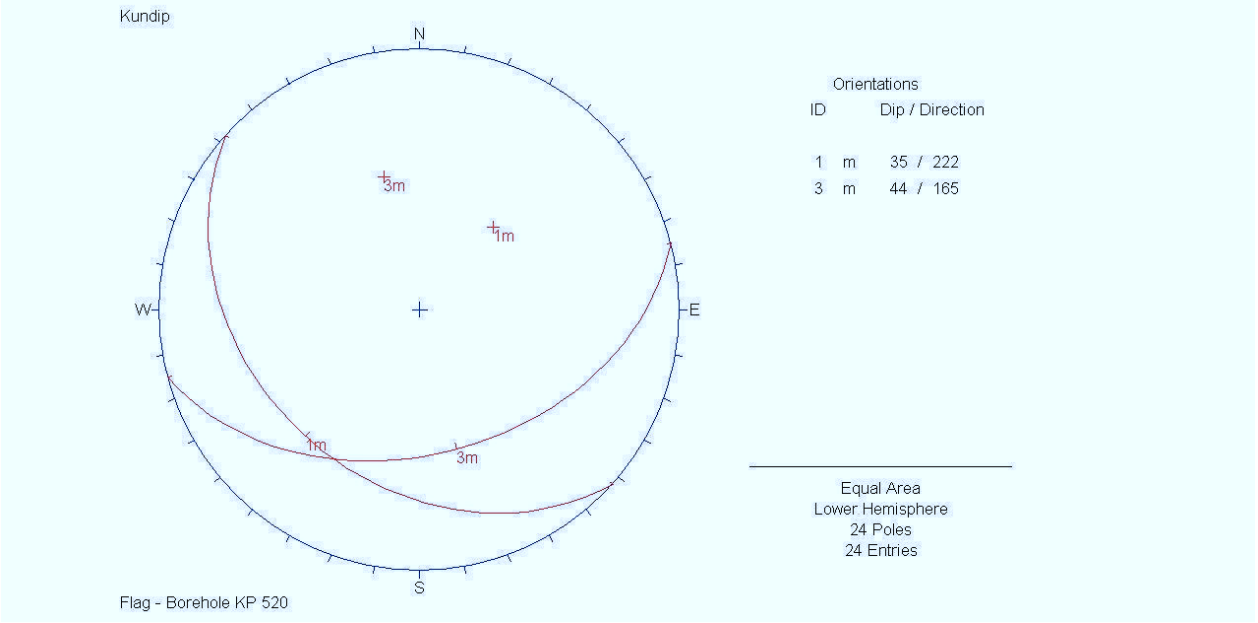
Flag


Kundip
N
W
E
S
TYPE
B [1]
H [1]
J [7]
V [4]
VO [1]
Equal Area
Lower Hemisphere
14 Poles
14 Entries
Flag - Borehole KP 488

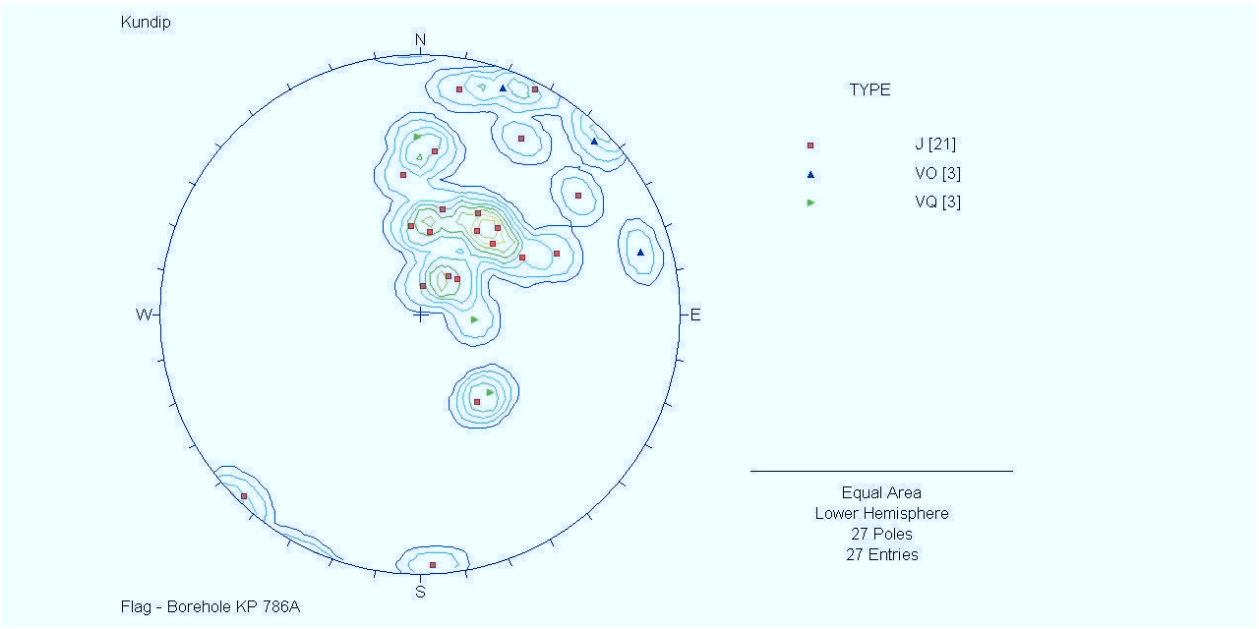

Kundip
N
W
E
S
3m
1m
3m
1m
Orientations
ID Dip / Direction
1 m 27 / 217
3 m 53 / 148
Equal Area
Lower Hemisphere
14 Poles
14 Entries
Flag - Borehole KP 488

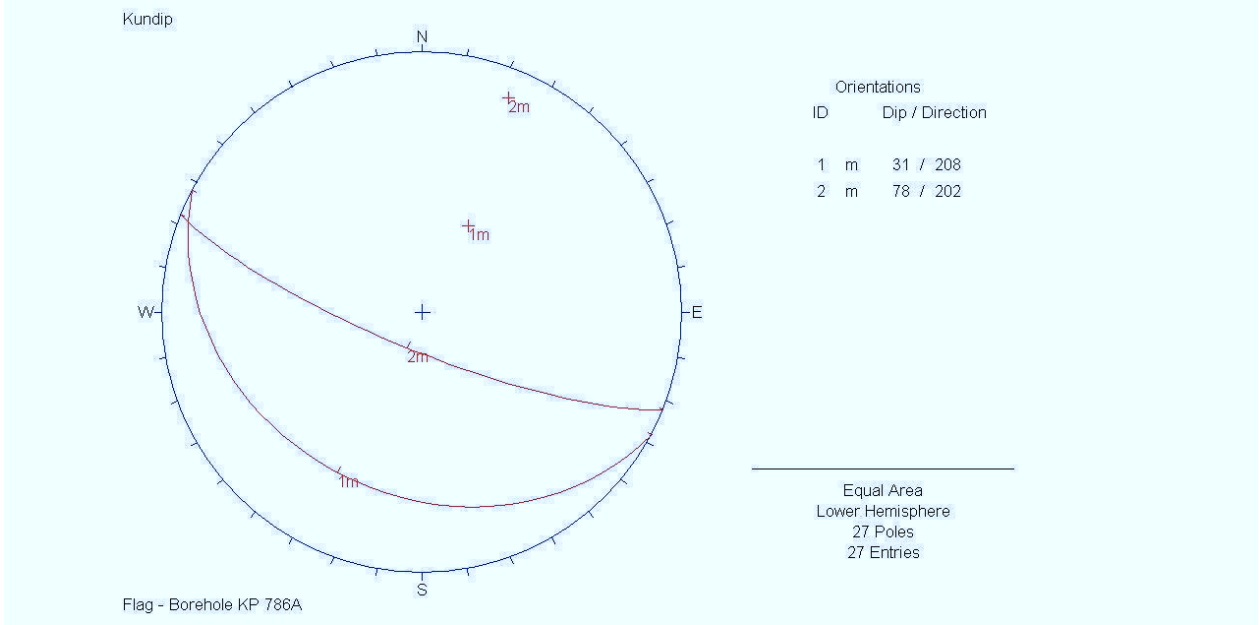
Flag


Kundip
N
W
E
S
TYPE
J [16]
V [1]
VA [2]
VC [1]
VO [3]
VQ [1]
Equal Area
Lower Hemisphere
24 Poles
24 Entries
Flag - Borehole KP 520

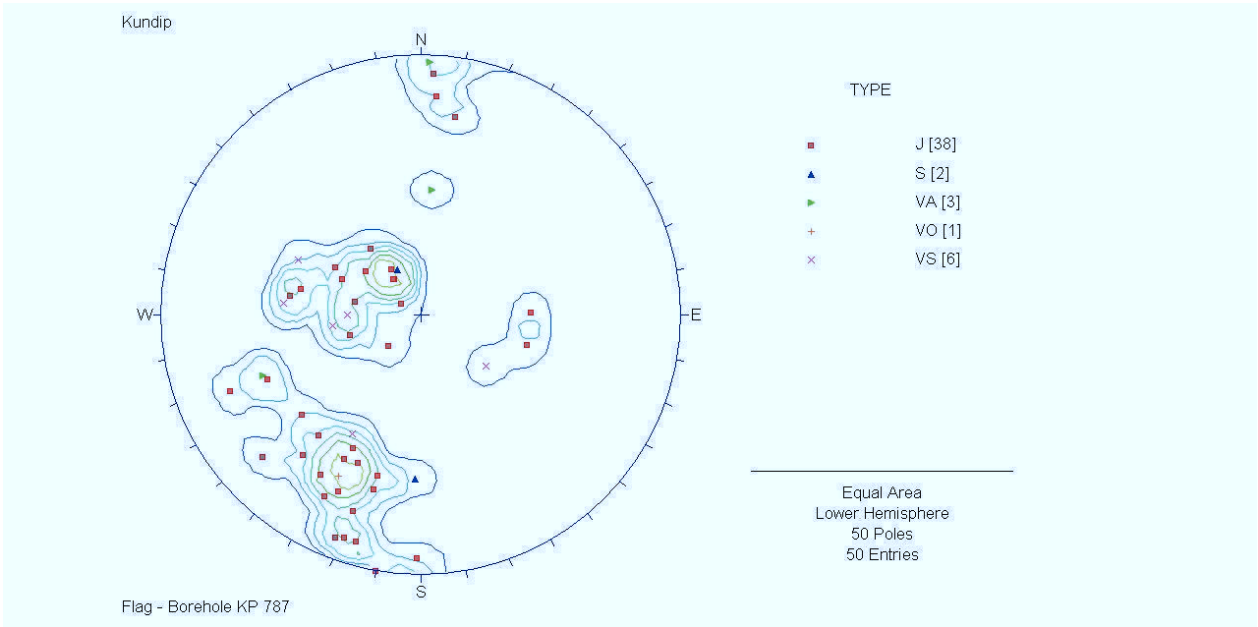

Kundip
N
W
E
S
3m
1m
1m
3m
Orientations
ID Dip / Direction
1 m 35 / 222
3 m 44 / 165
Equal Area
Lower Hemisphere
24 Poles
24 Entries
Flag - Borehole KP 520

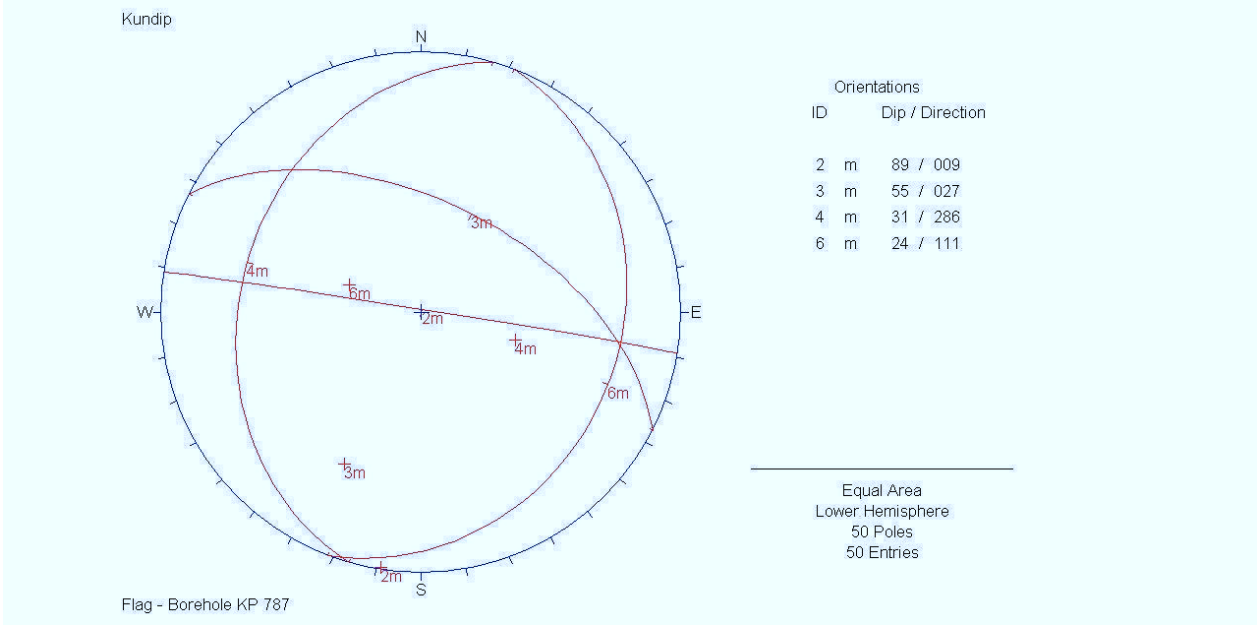
Flag


Kundip
N
W
E
S
TYPE
J [21]
VO [3]
VQ [3]
Equal Area
Lower Hemisphere
27 Poles
27 Entries
Flag - Borehole KP 786A

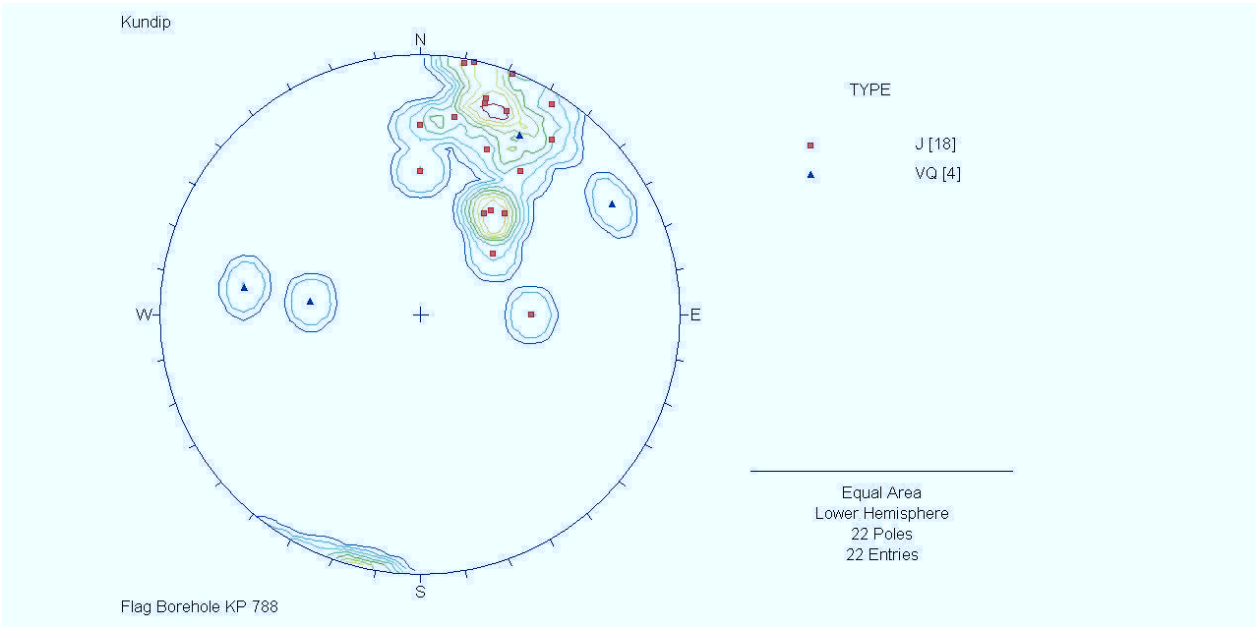

Kundip
N
W
E
S
2m
1m
2m
1m
Orientations
ID Dip / Direction
1 m 31 / 208
2 m 78 / 202
Equal Area
Lower Hemisphere
27 Poles
27 Entries
Flag - Borehole KP 786A

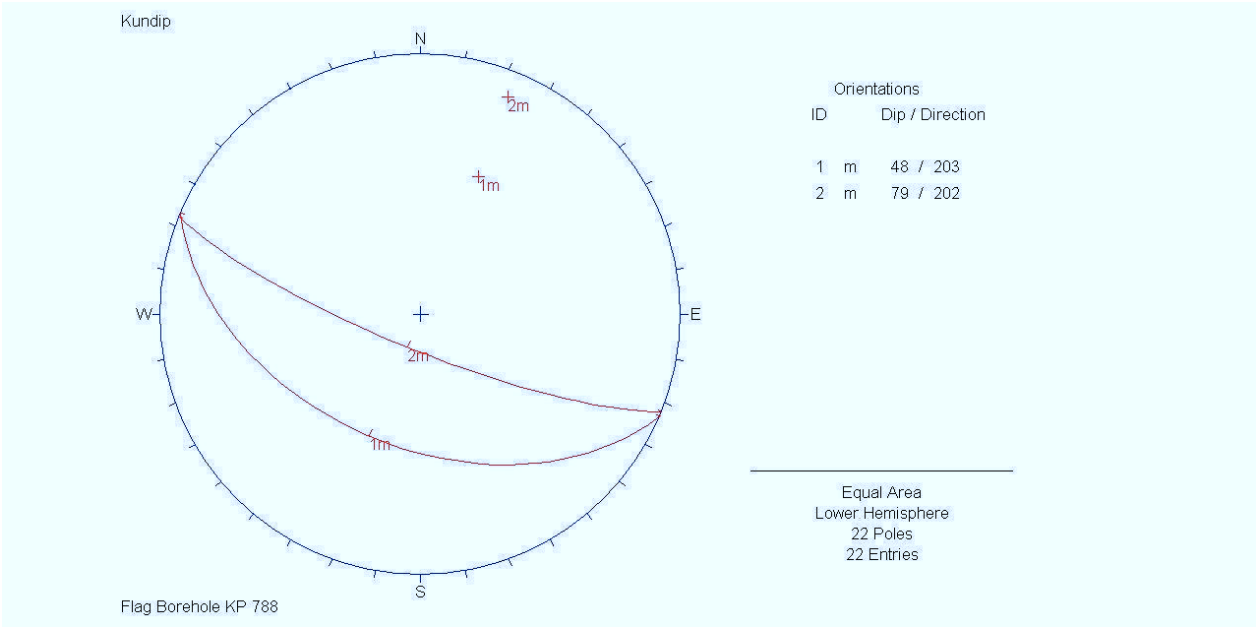
Flag


Kundip
N
W
E
S
TYPE
J [38]
S [2]
VA [3]
VO [1]
VS [6]
Equal Area
Lower Hemisphere
50 Poles
50 Entries
Flag - Borehole KP 787

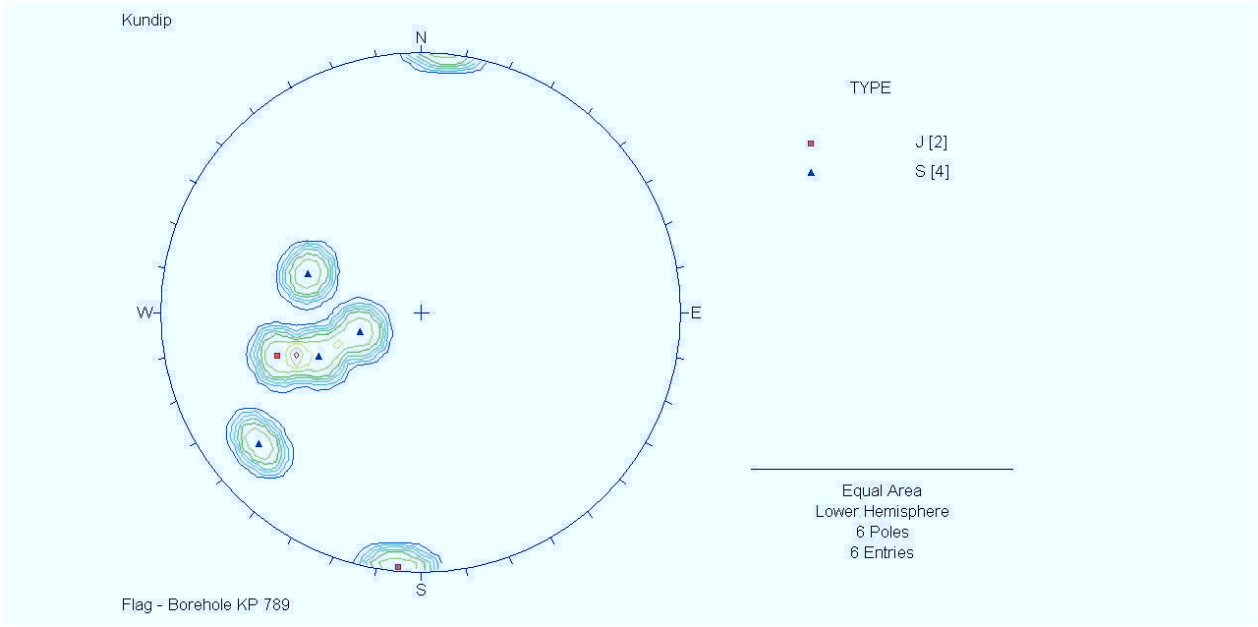

Kundip
N
W
E
S
3m
4m
6m
2m
4m
6m
3m
2m
Orientations
ID Dip / Direction
2 m 89 / 009
3 m 55 / 027
4 m 31 / 286
6 m 24 / 111
Equal Area
Lower Hemisphere
50 Poles
50 Entries
Flag - Borehole KP 787

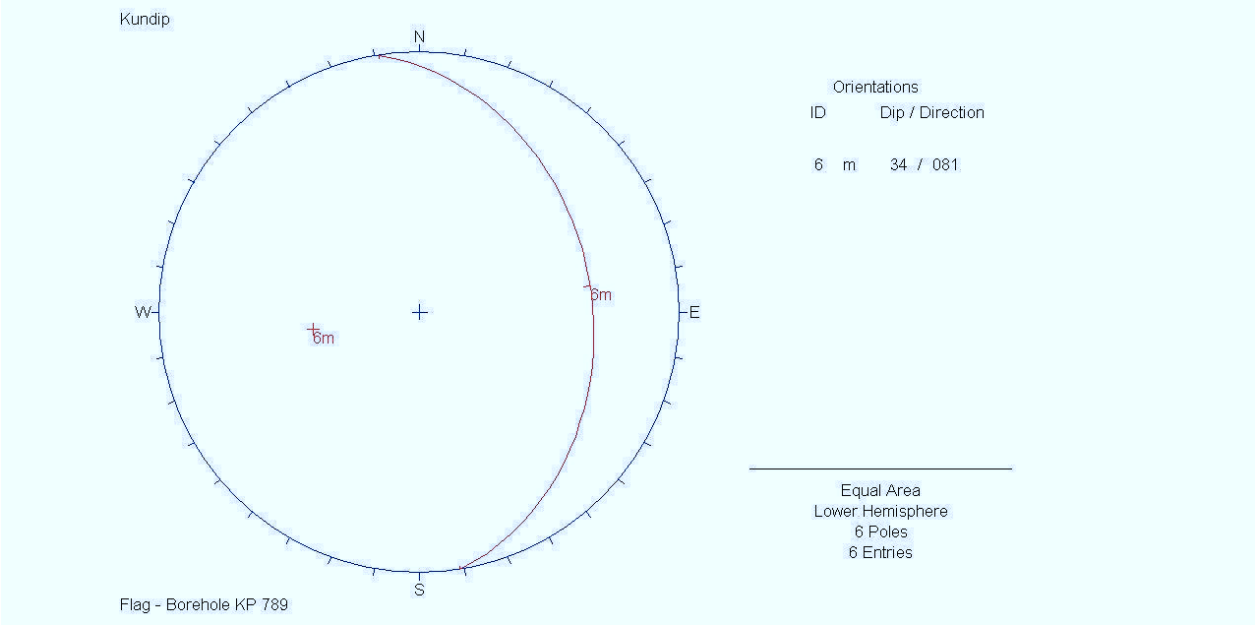
Flag


Kundip
N
W
E
S
TYPE
J [18]
VQ [4]
Equal Area
Lower Hemisphere
22 Poles
22 Entries
Flag Borehole KP 788

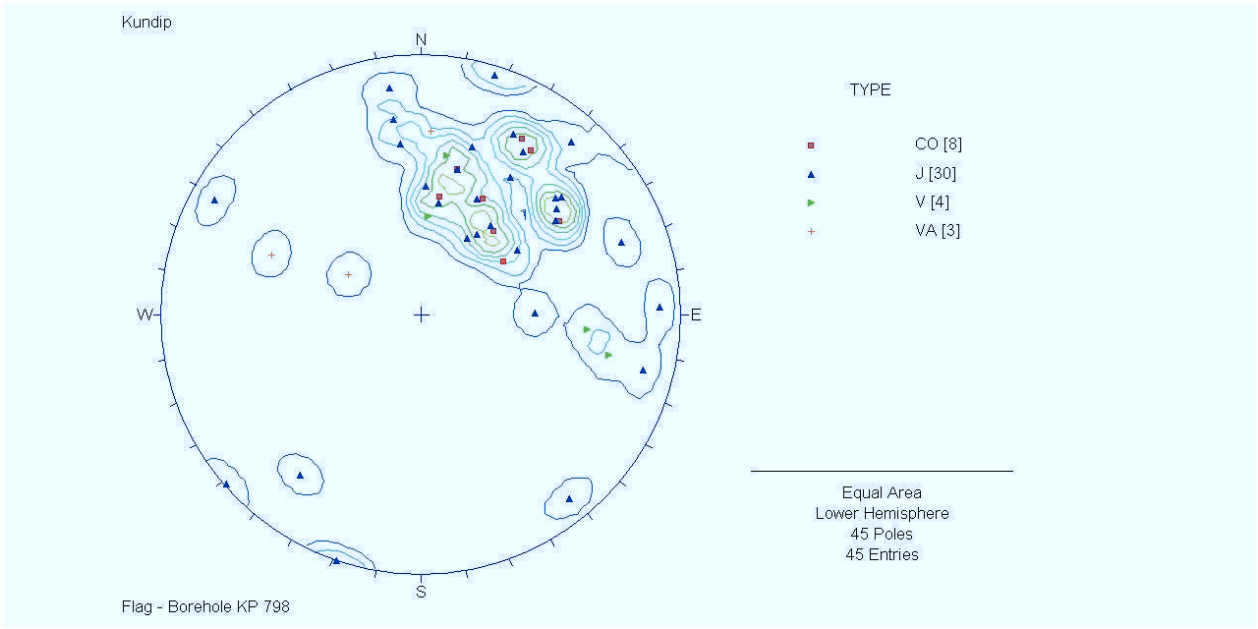

Kundip
N
W
E
S
2m
1m
2m
1m
Orientations
ID Dip / Direction
1 m 48 / 203
2 m 79 / 202
Equal Area
Lower Hemisphere
22 Poles
22 Entries
Flag Borehole KP 788

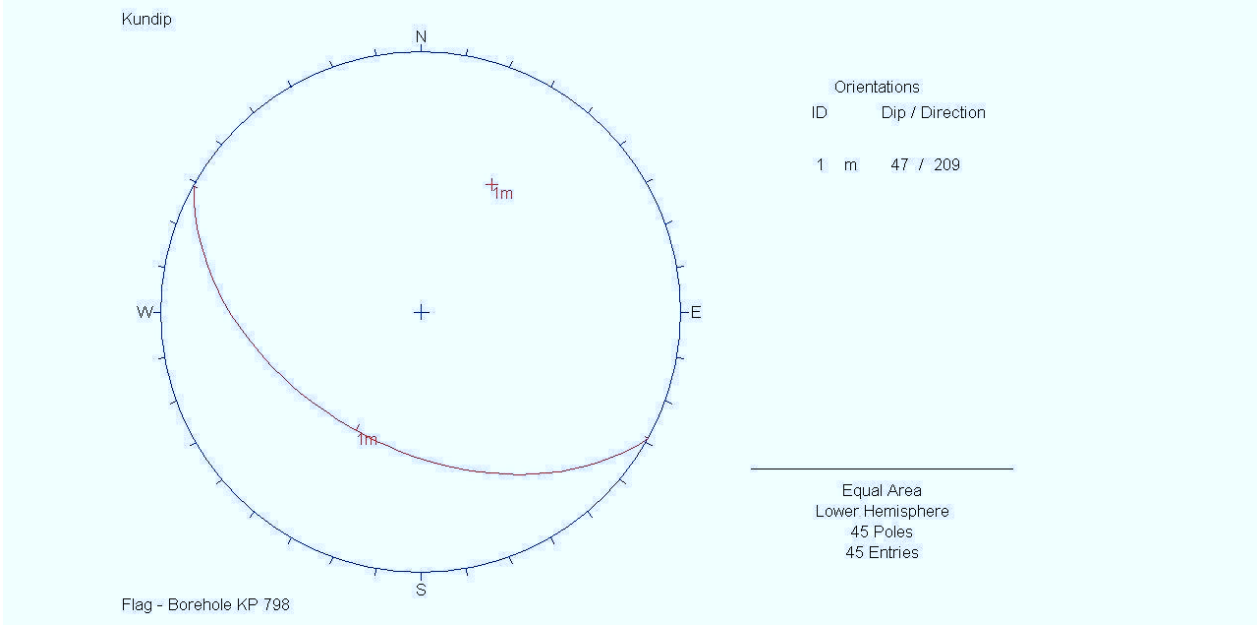
Flag


Kundip
N
W
E
S
TYPE
J [2]
S [4]
Equal Area
Lower Hemisphere
6 Poles
6 Entries
Flag - Borehole KP 789

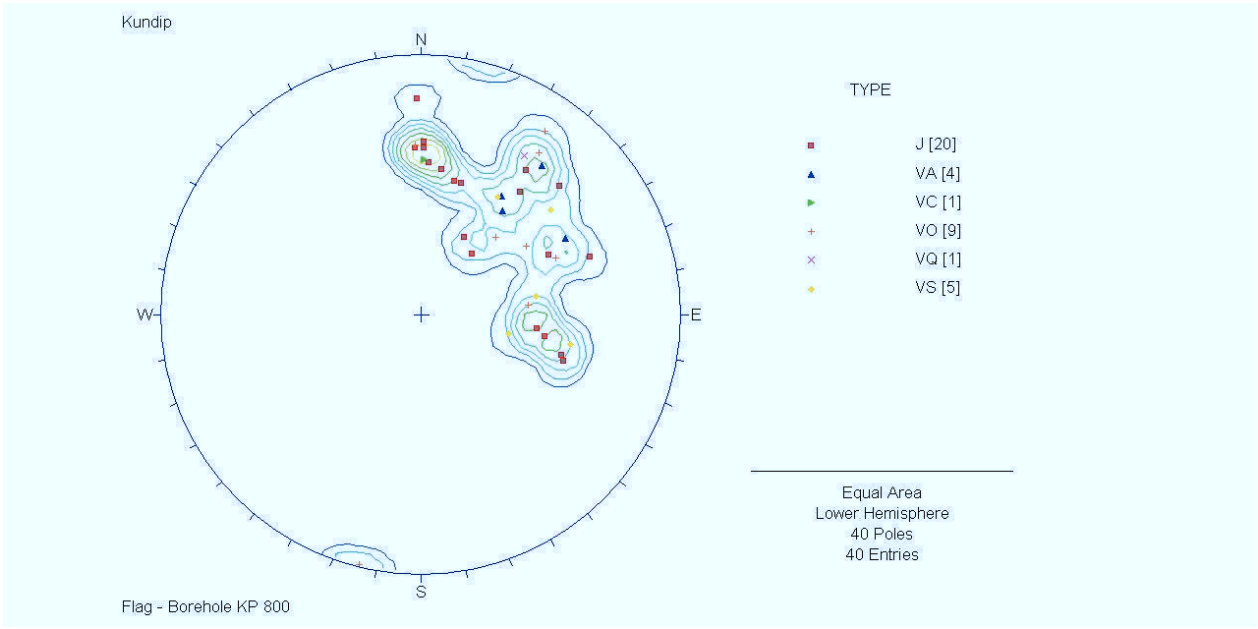

Kundip
N
W
E
S
6m
6m
Orientations
ID
Dip / Direction
6 m 34 / 081
Equal Area
Lower Hemisphere
6 Poles
6 Entries
Flag - Borehole KP 789

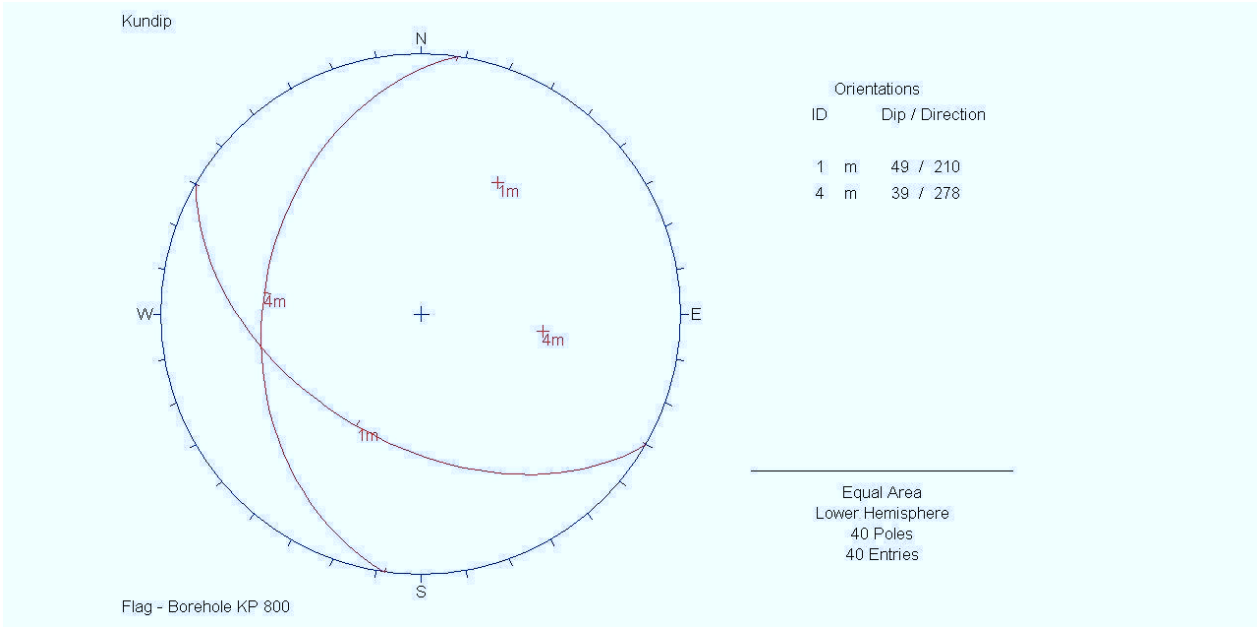
Flag


Kundip
N
W
E
S
TYPE
CO [8]
J [30]
V [4]
VA [3]
Equal Area
Lower Hemisphere
45 Poles
45 Entries
Flag - Borehole KP 798


Kundip
N
W
E
S
1m
1m
Orientations
ID Dip / Direction
1 m 47 / 209
Equal Area
Lower Hemisphere
45 Poles
45 Entries
Flag - Borehole KP 798

Flag


Kundip
N
W
E
S
TYPE
J [20]
VA [4]
VC [1]
VO [9]
VQ [1]
VS [5]
Equal Area
Lower Hemisphere
40 Poles
40 Entries
Flag - Borehole KP 800


Kundip
N
W
E
S
1m
4m
4m
1m
Orientations
ID Dip / Direction
1 m 49 / 210
4 m 39 / 278
Equal Area
Lower Hemisphere
40 Poles
40 Entries
Flag - Borehole KP 800

APPENDIX C

MRMR AND SLOPE CALCULATIONS

KUNDIP DEPOSITS

Kaolin and Hillsborough

Mining Rock Mass Rating (MRMR) parameters and calculations for ***moderately*** to ***strongly weathered*** siltstones:

Intact Rock Strength , IRS

UCS $_{Best}$ = 50 MPa = 6.0	from Table	IRS $_{Best}$ rating
UCS $_{Worse}$ = 1MPa = 1.0	from Table	IRS $_{Worse}$ rating

Spacing of Fractures and Joints, RQD+JS or FF

FF $_{Best}$ = 8 f/m = 11.0	3 Joints present	from Table	FF $_{Best}$ rating
FF $_{Worse}$ = 25 f/m = 5.0	4 Joints present	from Table	FF $_{Worse}$ rating

Joint Condition and Water, JRC

Accumulative % adjustment of possible rating of 40%.

Rock mass conditions described as damp.

JRC $_{Best}$

Large scale joint expression = 0.80 for curved.

Small scale joint expression = 0.90 for irregular rough.

Joint wall alteration = 1.00 wall rock not weaker than fill.

Joint filling = 0.75 fine non softening.

Rating = 40 x (0.80 x 0.90 x 1.00 x 0.75) JRC $_{Best}$ rating
= 21.6

JRC $_{Worse}$

Large scale joint expression = 0.70 for planar.

Small scale joint expression = 0.55 for planar smooth.

Joint wall alteration = 1.00 wall rock not weaker than fill.

Joint filling = 0.20 gouge thickness > amplitude of irregularities.

Rating = 40 x (0.70 x 0.55 x 1.00 x 0.2) JRC $_{Worse}$ rating
= 3.1

Rock Mass Rating, RMR

RMR $_{Best}$= 6.0 +11.0 + 21.6 = 38.6	RMR $_{Best}$ rating
RMR $_{Worse}$ = 1.0 + 5.0 + 3.1 = 9.1.	RMR $_{Worse}$ rating

Mining Rock Mass Rating, MRMR

Adjustments to RMR.

Weathering = 0.86 moderate weathering, pit life 2 years.

Number of joints = 0.8, 3 joint forming blocks.

Stress = 1.00, negligible stresses expected at shallow depth.

Blasting = 0.94, good conventional blasting.

MRMR = RMR × Adjustments

$MRMR_{Best}$ = 38.6 x 0.86 x 0.8 x 1.0 x 0.94 = 25.0 $MRMR_{Best}$ rating

$MRMR_{Worse}$ = 9.1 x 0.86 x 0.8 x 1.0 x 0.94 = 5.9 $MRMR_{Worse}$ rating

Kaolin and Hillsborough

Slope Angle.

$$\text{Slope angle} = \frac{MRMR}{2} + 30$$

$$\text{Slope angle}_{Best} = \frac{24.7}{2} + 30 \qquad = 42.5°$$

$$\text{Slope angle}_{Worse} = \frac{5.8}{2} + 30 \qquad = 33°.$$

Kaolin and Hillsborough

Mining Rock Mass Rating (MRMR) parameters and calculations for ***slightly weathered to fresh rock.***

Intact Rock Strength , IRS

UCS $_{Best}$ = 200 MPa = **20.0**		from Table	IRS $_{Best}$ rating
UCS $_{Worse}$ = 80 MPa = 8.0		from Table	IRS $_{Worse}$ rating

Spacing of Fractures and Joints, RQD+JS or FF

FF $_{Best}$ = 9 f/m = 11.0	2 Joints present	from Table	FF $_{Best}$ rating
FF $_{Worse}$ = 25 f/m = 4.0	3 Joints present	from Table	FF $_{Worse}$ rating

Joint Condition and Water, JRC

Accumulative % adjustment of possible rating of 40%.

Rock mass conditions described as damp.

JRC $_{Best}$

Large scale joint expression = 0.80 for curved.

Small scale joint expression = 0.90 for irregular rough.

Joint wall alteration = 1.00 wall rock not weaker than fill.

Joint filling = 0.75 for fine non softening.

Rating = 40 x (0.80 x 0.90 x 1.00 x 0.75) JRC $_{Best}$ rating
= 21.6.

JRC $_{Worse}$

Large scale joint expression = 0.70 for straight.

Small scale joint expression = 0.60 for planar rough.

Joint wall alteration = 1.00 wall rock not weaker than fill.

Joint filling = 0.20 gouge thickness > amplitude of irregularities.

Rating = 40 x (0.70 x 0.60 x 1.00 x 0.2) JRC $_{Worse}$ rating
= 3.4

Rock Mass Rating, RMR

RMR $_{Best}$= 20.0 +11.0 + 21.6 = 52.6	RMR $_{Best}$ rating
RMR $_{Worse}$ = 8.0 + 4.0 + 3.4 = 15.4	RMR $_{Worse}$ rating

Mining Rock Mass Rating, MRMR

Adjustments to RMR.

Weathering = 1.0 no weathering expected.

Number of joints = 0.8, 3 joint forming blocks.

Stress = 1.00, negligible stresses expected at shallow depth.

Blasting = 0.94, good conventional blasting.

MRMR = RMR × Adjustments

$MRMR_{Best}$ = 52.6 x.1.0 x 0.8 x 1.0 x 0.94 = 39.5 $MRMR_{Best}$ rating

$MRMR_{Worse}$ = 15.4 x 1.0 x 0.8 x 1.0 x 0.94 = 11.6 $MRMR_{Worse}$ rating

Kaolin and Hillsborough

Slope Angle.

$$\text{Slope angle} = \frac{MRMR}{2} + 30$$

$$\text{Slope angle}_{Best} = \frac{39.5}{2} + 30 = 49.8°$$

$$\text{Slope angle}_{Worse} = \frac{11.6}{2} + 30 = 36.0°.$$

Harbour View

Mining Rock Mass Rating (MRMR) parameters and calculations for ***moderately*** to ***strongly weathered*** siltstones:

Intact Rock Strength , IRS

UCS_{Best} = 50 MPa = 6.0	from Table	IRS_{Best} rating
UCS_{Worse} = 1MPa = 1.0	from Table	IRS_{Worse} rating

Spacing of Fractures and Joints, RQD+JS or FF

FF_{Best} = 11 f/m = 10.0	3 Joints present	from Table	FF_{Best} rating
FF_{Worse} = 25 f/m = 3.0	4 Joints present	from Table	FF_{Worse} rating

Joint Condition and Water, JRC

Accumulative % adjustment of possible rating of 40%.

Rock mass conditions described as damp.

JRC_{Best}

Large scale joint expression = 0.80 for curved.

Small scale joint expression = 0.90 for irregular rough.

Joint wall alteration = 1.00 wall rock not weaker than fill.

Joint filling = 0.75 fine non softening.

Rating = 40 x (0.80 x 0.90 x 1.00 x 0.75) = 21.6 — JRC_{Best} rating

JRC_{Worse}

Large scale joint expression = 0.70 for planar.

Small scale joint expression = 0.60 for planar rough.

Joint wall alteration = 1.00 wall rock not weaker than fill.

Joint filling = 0.20 gouge thickness > amplitude of irregularities.

Rating = 40 x (0.70 x 0.60 x 1.00 x 0.2) = 3.4 — JRC_{Worse} rating

Rock Mass Rating, RMR

RMR_{Best}= 6.0 +10.0 + 21.6 = 37.6	RMR_{Best} rating
RMR_{Worse} = 1.0 + 3.0 + 3.4 = 7.4.	RMR_{Worse} rating

Mining Rock Mass Rating, MRMR

Adjustments to RMR.

Weathering = 0.86 moderate weathering, pit life 2 years.

Number of joints = 0.8, 3 joint forming blocks.

Stress = 1.00, negligible stresses expected at shallow depth.

Blasting = 0.94, good conventional blasting.

MRMR = RMR × Adjustments

$MRMR_{Best}$ = 37.6 x 0.86 x 0.8 x 1.0 x 0.94 = 24.3 $MRMR_{Best}$ rating

$MRMR_{Worse}$ = 7.4 x 0.86 x 0.8 x 1.0 x 0.94 = 4.8 $MRMR_{Worse}$ rating

Harbour View

Slope Angle.

$$\text{Slope angle} = \frac{MRMR}{2} + 30$$

$$\text{Slope angle}_{Best} = \frac{24.3}{2} + 30 = 42.0°$$

$$\text{Slope angle}_{Worse} = \frac{4.8}{2} + 30 = 32.4°.$$

Harbour View

Mining Rock Mass Rating (MRMR) parameters and calculations for ***slightly weathered to fresh rock.***

Intact Rock Strength , IRS

UCS_{Best} = 120 MPa = 12.0		from Table	IRS_{Best} rating
UCS_{Worse} = 80 MPa = 8.0		from Table	IRS_{Worse} rating

Spacing of Fractures and Joints, RQD+JS or FF

FF_{Best} = 12 f/m = 9.0	3 Joints present	from Table	FF_{Best} rating
FF_{Worse} = 25 f/m = 2.0	4 Joints present	from Table	FF_{Worse} rating

Joint Condition and Water, JRC

Accumulative % adjustment of possible rating of 40%.

Rock mass conditions described as damp.

JRC_{Best}

Large scale joint expression = 0.80 for curved.

Small scale joint expression = 0.90 for irregular rough.

Joint wall alteration = 1.00 wall rock not weaker than fill.

Joint filling = 0.75 for fine non softening.

Rating = 40 x (0.80 x 0.90 x 1.00 x 0.75) = 21.6. JRC_{Best} rating

JRC_{Worse}

Large scale joint expression = 0.70 for straight.

Small scale joint expression = 0.60 for planar rough.

Joint wall alteration = 1.00 wall rock not weaker than fill.

Joint filling = 0.20 gouge thickness > amplitude of irregularities.

Rating = 40 x (0.70 x 0.60 x 1.00 x 0.2) = 3.4 JRC_{Worse} rating

Rock Mass Rating, RMR

RMR_{Best}= 12.0 +9.0 + 21.6 = 42.6	RMR_{Best} rating
RMR_{Worse} = 8.0 + 2.0 + 3.4 = 13.4	RMR_{Worse} rating

Mining Rock Mass Rating, MRMR

Adjustments to RMR.

Weathering = 1.0 no weathering expected.

Number of joints = 0.8, 3 joint forming blocks.

Stress = 1.00, negligible stresses expected at shallow depth.

Blasting = 0.94, good conventional blasting.

MRMR = RMR × Adjustments

$MRMR_{Best}$ = 42.6 x.1.0 x 0.8 x 1.0 x 0.94 $MRMR_{Best}$ rating
= 32.0

$MRMR_{Worse}$ = 13.4 x 1.0 x 0.8 x 1.0 x 0.94 $MRMR_{Worse}$ rating
= 10.0

Harbour View

Slope Angle.

$$\text{Slope angle} = \frac{MRMR}{2} + 30$$

$$\text{Slope angle}_{Best} = \frac{32.0}{2} + 30 \qquad = 46.0°$$

$$\text{Slope angle}_{Worse} = \frac{10.0}{2} + 30 \qquad = 35.0°.$$

FLAG

Mining Rock Mass Rating (MRMR) parameters and calculations for ***moderately*** to ***strongly weathered*** siltstones:

Intact Rock Strength , IRS

UCS_{Best} = 50 MPa = 6.0	from Table	IRS_{Best} rating
UCS_{Worse} = 1MPa = 1.0	from Table	IRS_{Worse} rating

Spacing of Fractures and Joints, RQD+JS or FF

FF_{Best} = 5 f/m = 15.0	3 Joints present	from Table	FF_{Best} rating
FF_{Worse} = 25 f/m = 3.0	4 Joints present	from Table	FF_{Worse} rating

Joint Condition and Water, JRC

Accumulative % adjustment of possible rating of 40%.

Rock mass conditions described as damp.

JRC_{Best}

Large scale joint expression = 0.80 for curved.

Small scale joint expression = 0.90 for irregular rough.

Joint wall alteration = 1.00 wall rock not weaker than fill.

Joint filling = 0.75 fine non softening.

Rating = 40 x (0.80 x 0.90 x 1.00 x 0.75) = 21.6 — JRC_{Best} rating

JRC_{Worse}

Large scale joint expression = 0.70 for planar.

Small scale joint expression = 0.60 for planar rough.

Joint wall alteration = 1.00 wall rock not weaker than fill.

Joint filling = 0.20 gouge thickness > amplitude of irregularities.

Rating = 40 x (0.70 x 0.60 x 1.00 x 0.2) = 3.4 — JRC_{Worse} rating

Rock Mass Rating, RMR

RMR_{Best}= 6.0 +15.0 + 21.6 = 42.6	RMR_{Best} rating
RMR_{Worse} = 1.0 + 3.0 + 3.4 = 7.4.	RMR_{Worse} rating

Mining Rock Mass Rating, MRMR

Adjustments to RMR.

Weathering = 0.86 moderate weathering, pit life 2 years.

Number of joints = 0.8, 3 joint forming blocks.

Stress = 1.00, negligible stresses expected at shallow depth.

Blasting = 0.94, good conventional blasting.

MRMR = RMR × Adjustments

$MRMR_{Best}$ = 42.6 x 0.86 x 0.8 x 1.0 x 0.94 = 27.7 $MRMR_{Best}$ rating

$MRMR_{Worse}$ = 7.4 x 0.86 x 0.8 x 1.0 x 0.94 = 4.8 $MRMR_{Worse}$ rating

FLAG

Slope Angle.

$$\text{Slope angle} = \frac{MRMR}{2} + 30$$

$$\text{Slope angle}_{Best} = \frac{27.7}{2} + 30 = 43.8°$$

$$\text{Slope angle}_{Worse} = \frac{4.8}{2} + 30 = 32.4°.$$

FLAG

Mining Rock Mass Rating (MRMR) parameters and calculations for ***slightly weathered to fresh rock.***

Intact Rock Strength , IRS

UCS_{Best} = 103 MPa = 10.0		from Table	IRS_{Best} rating
UCS_{Worse} = 70 MPa = 8.0		from Table	IRS_{Worse} rating

Spacing of Fractures and Joints, RQD+JS or FF

FF_{Best} = 7 f/m = 12.0	3 Joints present	from Table	FF_{Best} rating
FF_{Worse} = 25 f/m = 2.0	4 Joints present	from Table	FF_{Worse} rating

Joint Condition and Water, JRC

Accumulative % adjustment of possible rating of 40%.

Rock mass conditions described as damp.

JRC_{Best}

Large scale joint expression = 0.80 for curved.

Small scale joint expression = 0.90 for irregular rough.

Joint wall alteration = 1.00 wall rock not weaker than fill.

Joint filling = 0.75 for fine non softening.

Rating = 40 x (0.80 x 0.90 x 1.00 x 0.75) = 21.6. JRC_{Best} rating

JRC_{Worse}

Large scale joint expression = 0.70 for straight.

Small scale joint expression = 0.60 for planar rough.

Joint wall alteration = 1.00 wall rock not weaker than fill.

Joint filling = 0.20 gouge thickness > amplitude of irregularities.

Rating = 40 x (0.70 x 0.60 x 1.00 x 0.2) = 3.4 JRC_{Worse} rating

Rock Mass Rating, RMR

RMR_{Best}= 10.0 +12.0 + 21.6 = 43.6	RMR_{Best} rating
RMR_{Worse} = 8.0 + 2.0 + 3.4 = 13.4	RMR_{Worse} rating

Mining Rock Mass Rating, MRMR

Adjustments to RMR.

Weathering = 1.0 no weathering expected.

Number of joints = 0.8, 3 joint forming blocks.

Stress = 1.00, negligible stresses expected at shallow depth.

Blasting = 0.94, good conventional blasting.

MRMR = RMR × Adjustments

$MRMR_{Best}$ = 43.6 x.1.0 x 0.8 x 1.0 x 0.94 = 32.7 — $MRMR_{Best}$ rating

$MRMR_{Worse}$ = 13.4 x 1.0 x 0.8 x 1.0 x 0.94 = 10.0 — $MRMR_{Worse}$ rating

Slope Angle.

$$\text{Slope angle} = \frac{MRMR}{2} + 30$$

$$\text{Slope angle}_{Best} = \frac{32.0}{2} + 30 = 46.3°$$

$$\text{Slope angle}_{Worse} = \frac{10.0}{2} + 30 = 35.0°.$$

APPENDIX D

MODIFIED STABILITY GRAPH CALCULATIONS

KUNDIP DEPOSITS

This Appendix contains Modified Stability Graph Method calculations for the proposed Harbour View, Flag and Kaolin Underground Mines at thebPhillips River Project.

Key characteristics of each mining block are summarised in Table D1.

Table D1 Summary Table of Key Input Parameters for Modified Stability Graph Assessment

Mine	Orebody	Dip of Orebody	Mid Orebody Depth (mbs)	Design Q'-Value	Critical Defect Orientation (Dip/DipDirection)	UCS (MPa)
Harbour View	Harbour View Lode	75° NW	150m	6.8	73° / 300°	120
	Harbour View North Lode	75° NW	150m	16.7	73° / 300°	120
Flag	Main Lode	40° SSE	150m	9.2	41° / 206°	103
Kaolin	Main Lode	30° S	100m	9.7	45° / 155°	180
	Footwall Lode	30° S	100m	8.8	45° / 155°	180

Important points about the background information are:

- The orebody dips were measured from a set of 1:500 scale geological cross sections provided by Tectonic.
- The results of the 2nd Quartile (mean) Q' Values assessments for the immediate (HW3) rocks of the orebodies where used in the assessment.
- The Uniaxial Compressive Strength (UCS) values selected are based on the mean results for failure through intact rock for volcanic rocks (Dacite and Lapilli Tuffs and Intermediate Volcanics) found at the deposits.

Rock Stress Factor, A:

The following stress depth relationships and orientations have been applied at Phillips River:

Major Principal Stress (σ_1)	$\approx 2.5 \times \sigma_3$	North-South
Intermediate Principal Stress (σ_2)	$\approx 1.5 \times \sigma_3$	East-West
Minor Principal Stress (σ_3)	$\approx 0.028 \times$ Depth below surface	Vertical

Stope walls at Harbour View and Flag will most likely be affected by the Major and Intermediate stresses respectively acting. To estimate the mining induced stresses acting on stope walls the pre-mining principal stresses were concentrated by a factor of 2, with results shown below:

Harbour View Maximum Mining Induced Stress (Harbour View σ_{Max}) = 21 MPa

Flag Maximum Mining Induced Stress (Flag σ_{Max}) = 13 MPa

Kaolin Maximum Mining Induced Stress (Kaolin σ_{Max}) = 8.4 MPa

Estimated average intact rock strength of 150MPa has been assigned.

The rock stress factor for the stope hangingwalls are:

$A_{\text{Harbour View}}$	=	$\sigma_c / \sigma_{Max} = 5.7$	Factor A derived from chart = 0.54
A_{Flag}	=	$\sigma_c / \sigma_{Max} = 7.9$	Factor A derived from chart = 0.79
A_{Kaolin}		$\sigma_c / \sigma_{Max} = 21.4$	Factor A derived from chart = 1.0

Critical Joint Factor, B:

According to stereographic projections of major planes the critical joint for hangingwall stability at Harbour View and Flag:

$B_{\text{Harbour View}}$	B = 0.30	Defects (73°/300°) sub-parallel to orebody dip.
B_{Flag}	B = 0.30	Defects (41°/206°) sub-parallel to orebody dip.
B_{Kaolin}	B = 0.25	Defects (45°/155°) slightly acute to orebody dip.

Face Inclination Factor, C:

$C_{\text{Harbour View}}$ =	6.4	Slabbing on sub-vertical foliation. Dip of stop e 75°.
C_{Flag} =	3.3	Slabbing on moderate dipping defects. Dip of stope 40°.
C_{Kaolin} =	2.9	Slabbing on moderate dipping defects. Dip of stope 30°.

Modified Stability Number, N' & Hydraulic Radius, HR:

N' = Q' x A x B x C

The input parameters for the assessments and the resulting Modified Stability Number, N are shown in Table D2.

From the Potvin (1988) and Nickson (1992) databases of unsupported stopes the following hydraulic radius are theoretically achievable.

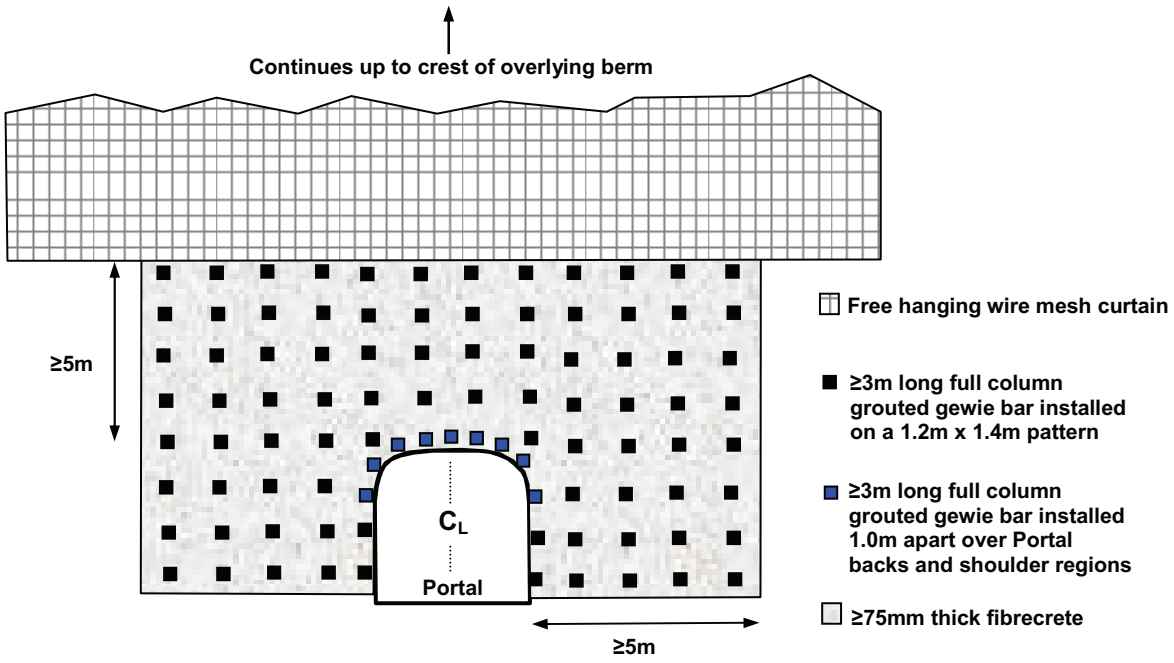
Table D2 Modified Stability Graph Assessment Input Parameters and HR Results for Unsupported and Supported Stopes

Orebody	Q' Value	A	B	C	N'	Unsupported		Supported	
						HR (m)	(Dip Span x Length)	HR (m)	(Dip Span x Length)
Harbour View Lode	6.8	0.54	0.3	6.4	7.0	6.5	20m x 37m (1 sublevel)	10.5	35m x 53m (2 sublevels)
Harbour View North Lode	16.7	0.54	0.3	6.4	17.3	8.8	35m x 36m (2 sublevels)	12.5	35m x 88m (2 sublevels)
Flag Main Lode	9.2	0.79	0.3	3.3	7.2	6.7	20m x 40m (1 sublevel)	10.8	35m x 57m (2 sublevels)
Kaolin Main Lode	9.7	1.00	0.25	2.9	7.0	6.5	40m x 19m (1 sublevel)	10.5	40m x 44m (1 sublevel)
Kaolin Footwall Lode	8.8	1.00	0.25	2.9	6.4	6.1	40m x 17m (1 sublevel)	10.3	40m x 42m (1 sublevel)

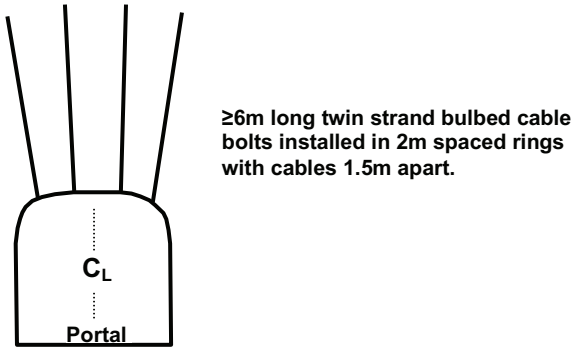
APPENDIX E

GROUND SUPPORT AND REINFORCEMENT DESIGNS

KUNDIP DEPOSITS



a. Ground support and reinforcement for Portal Entrance Open Pit batter



b. Cable Bolt reinforcement for first 10m of decline development

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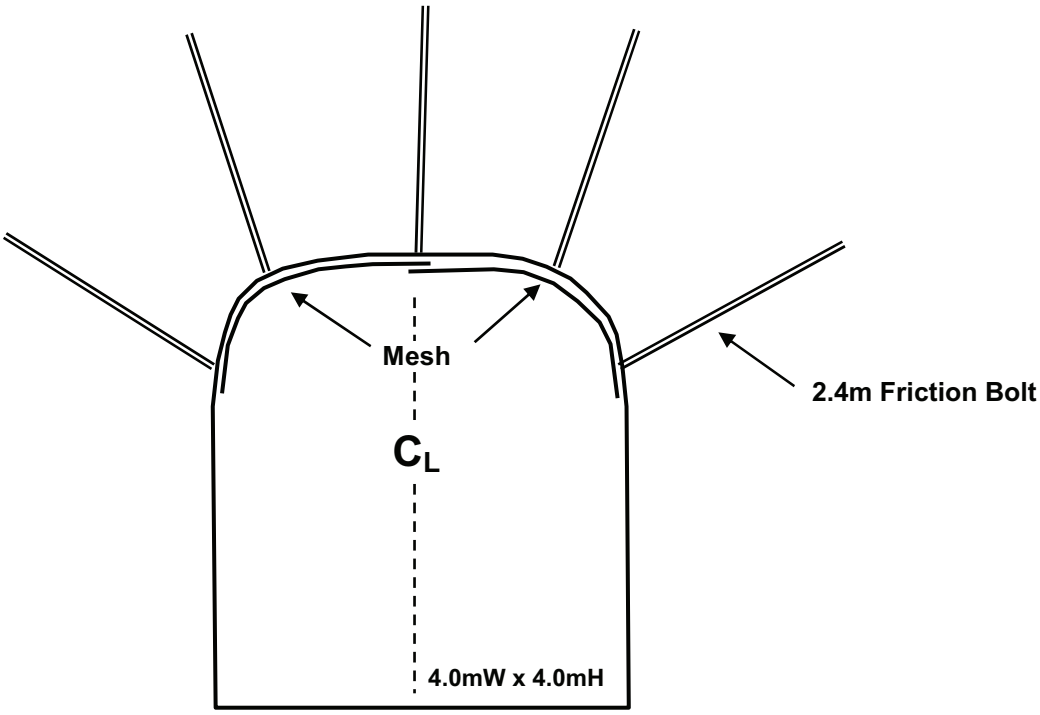
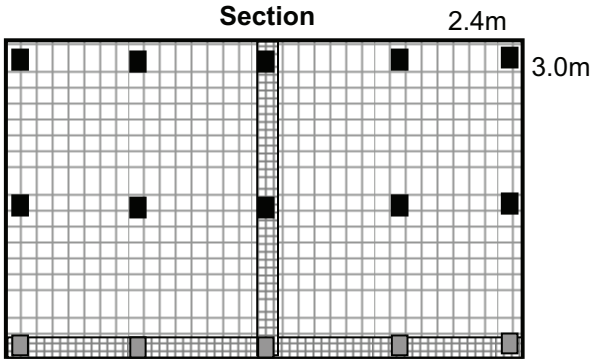
Figure A1 Portal and Surrounding Batter Ground Support and Reinforcement.

Job: 09053D	Drawn: JTK	Check: POB	Date: Dec 2010





Note
0.6m Friction Bolts inserted **into the 2.4m Friction Bolts,** located along the mesh overlap of the previous cut

Expanded Plan View of Friction Bolts and Mesh

■ 2.4m Friction Bolt

▪ 0.6m Friction Bolt

Specifications

Mesh:	F51, Galvanised 3.0m x 2.4m sheets. 0.2 – 0.4m overlap
Friction Bolts:	Galvanised 0.6m long, 46mm diameter in overlap 2.4 m long 46mm diameter elsewhere 1.2 – 1.5m spacing
Friction Bolt Plates:	Galvanised 150mm x 150mm x 6mm domed plate Butterfly plate

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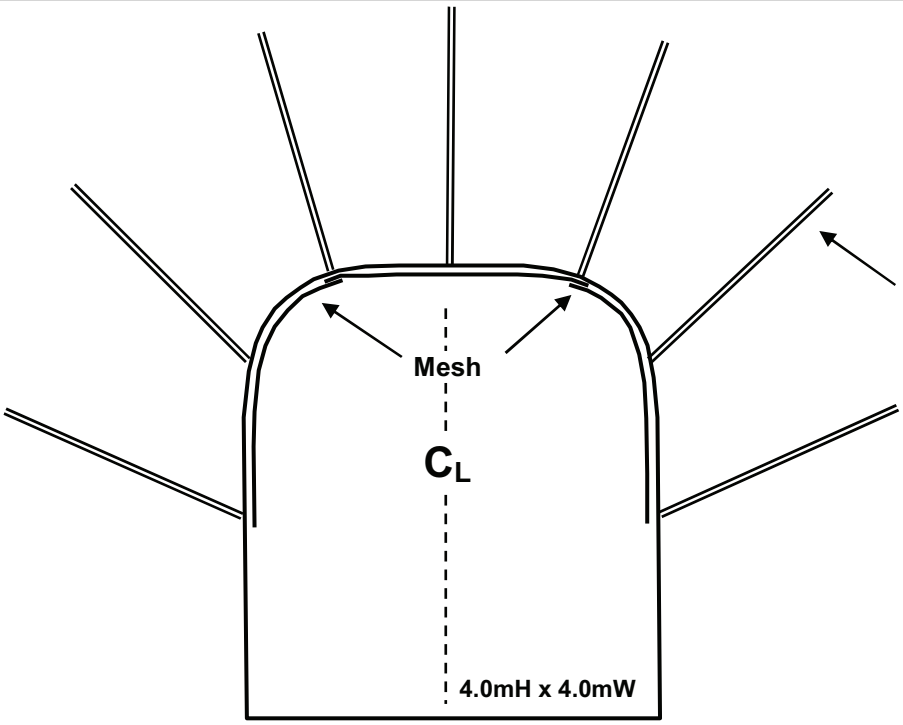
Figure A2 Decline and Ore Access Ground Support in Weakly to Moderately Structured Rock Mass.

Job: 09053D	Drawn: JTK	Check: POB	Date: Dec2010



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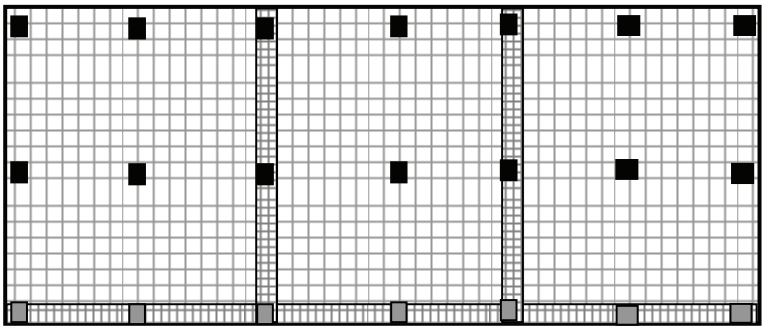

Note
0.6m Friction Bolts inserted **into the 2.4m Friction Bolts,** located along the mesh overlap of the previous cut.

Expanded Plan View of Friction Bolts and Mesh

■ 2.4m Friction Bolt

▫ 0.6m Friction Bolt

Specifications

Mesh:	F51, Galvanised 3.0m x 2.4m sheets. 0.2 – 0.4m overlap
Friction Bolts:	Galvanised 0.6m long, 46mm diameter in overlap 2.4 m long 46mm diameter elsewhere 1.2 – 1.5m spacing
Friction Bolt Plates:	Galvanised 150mm x 150mm x 6mm domed plate Butterfly plate

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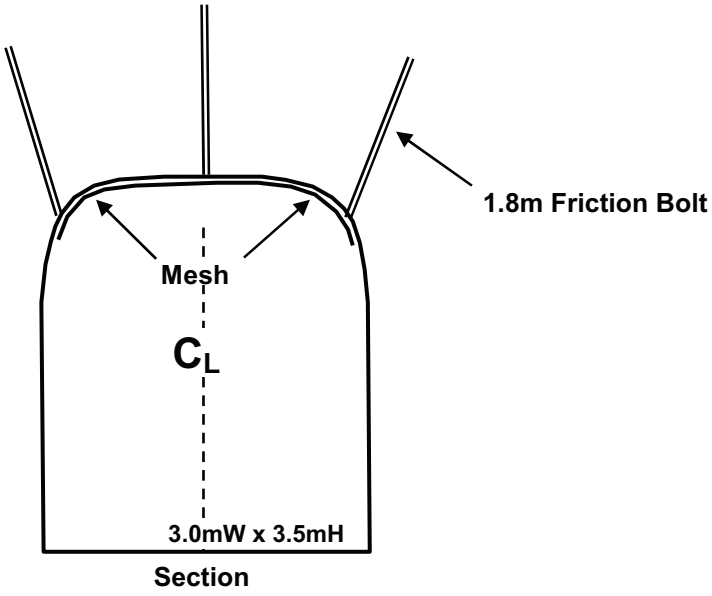
Figure A3 Decline and Ore Access Ground Support in Highly Structured (Blocky) Rock Mass.

Job: 09053D	Drawn: JTK	Check: POB	Date: Dec 2010



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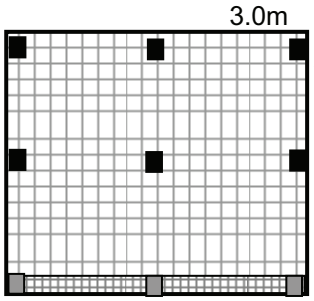

Note
0.6m Friction Bolts inserted **into the 2.4m Friction Bolts,** located along the mesh overlap of the previous cut

Expanded Plan View of Friction Bolts and Mesh

- 1.8m Friction Bolt
- 0.6m Friction Bolt

Specifications

Mesh:	F51, Galvanised 3.0m x 2.4m sheets 0.2 – 0.4m overlap
Friction Bolts:	Galvanised 0.6m long, 46mm diameter in overlap 1.8 m long 46mm diameter elsewhere 1.2 – 1.5m spacing .
Friction Bolt Plates:	Galvanised 150mm x 150mm x 6mm domed plate Butterfly plate

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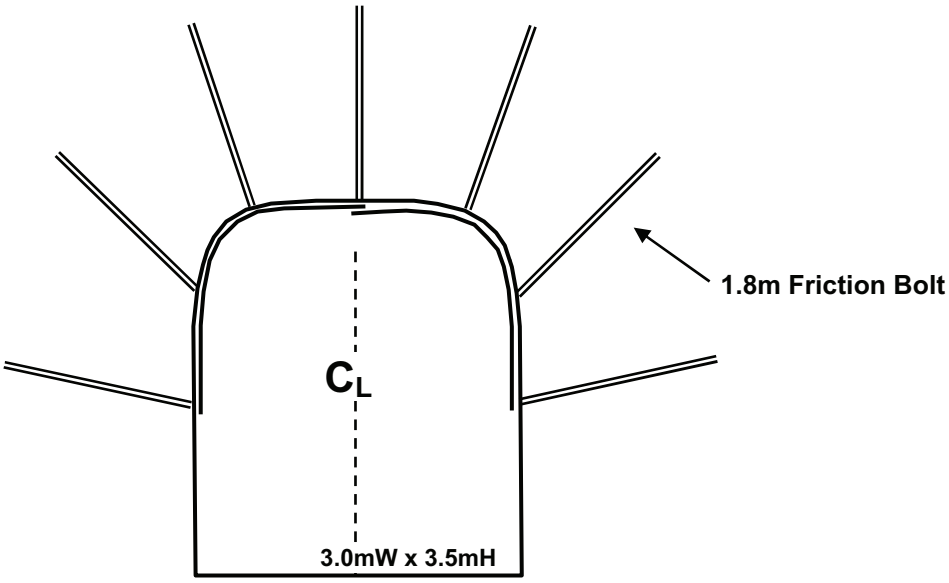
Figure A3 Mechanised Ore Drive in Weak to Moderately Structured Rock Mass

Job: 09053D	Drawn: JTK	Check: POB	Date: Dec 2010



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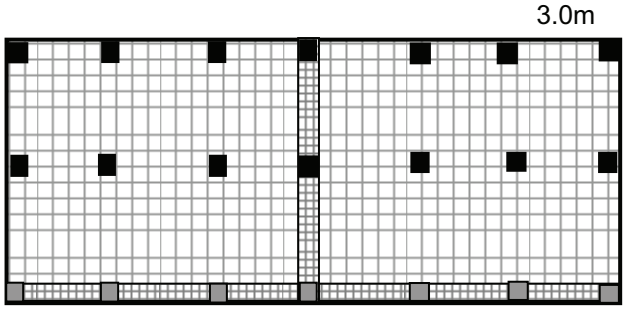

Note
0.6m Friction Bolts inserted **into the 2.4m Friction Bolts,** located along the mesh overlap of the previous cut

Expanded Plan View of Friction Bolts and Mesh

- 1.8m Friction Bolt
- 0.6m Friction Bolt

Specifications

Mesh:	F51, Galvanised 3.0m x 2.4m sheets 0.2 – 0.4m overlap
Friction Bolts:	Galvanised 0.6m long, 46mm diameter in overlap 1.8 m long 46mm diameter elsewhere 1.2 – 1.5m spacing .
Friction Bolt Plates:	Galvanised 150mm x 150mm x 6mm domed plate Butterfly plate

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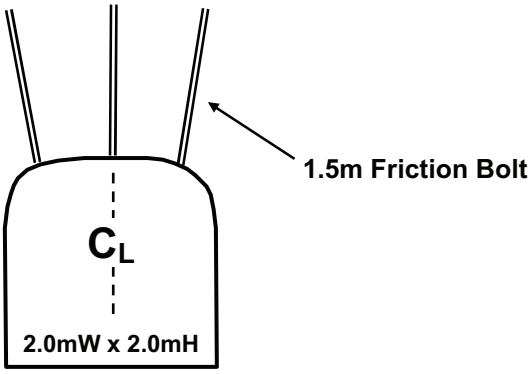
Figure A4 Mechanised Ore Drive in Highly Structured (Blocky) Rock Mass.

Job: 09053D	Drawn: JTK	Check: POB	Date: Dec 2010



Section

Specifications

Friction Bolts:	Galvanised 1.5 m long 33mm diameter 1.2 – 1.5m spacing
Friction Bolt Plates:	Galvanised 150mm x 150mm x 6mm domed plate Butterfly plate

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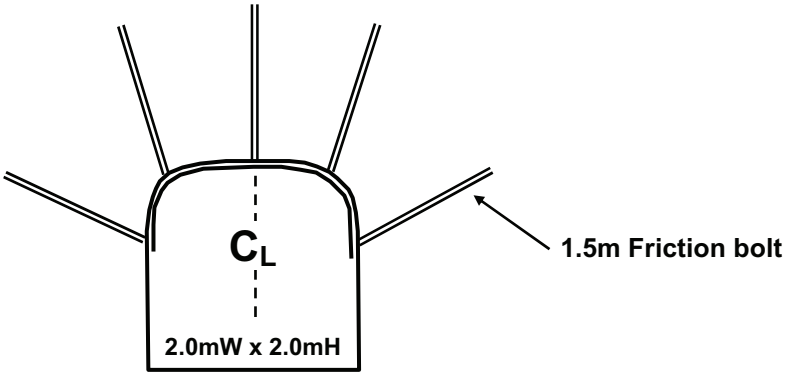
Figure A5 Handheld Ore Drive in Weak to Moderately Structured Rock Mass.

Job: 09053D	Drawn: JTK	Check: POB	Date: Dec 2010



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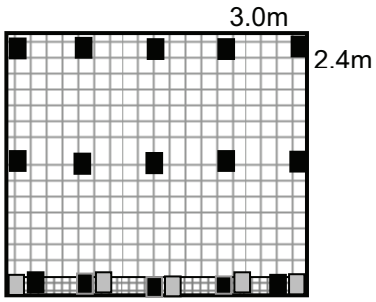

Expanded Plan View of Friction Bolts and Mesh

- Previous Cuts 1.5m Friction Bolt
- 1.5m Friction Bolt on overlap

Specifications

Mesh:	F51, Galvanised 3.0m x 2.4m sheets 0.2 – 0.4m overlap
Friction Bolts:	Galvanised 1.5 m long 33mm diameter 1.2 – 1.5m spacing
Friction Bolt Plates:	Galvanised 150mm x 150mm x 6mm domed plate Butterfly plate

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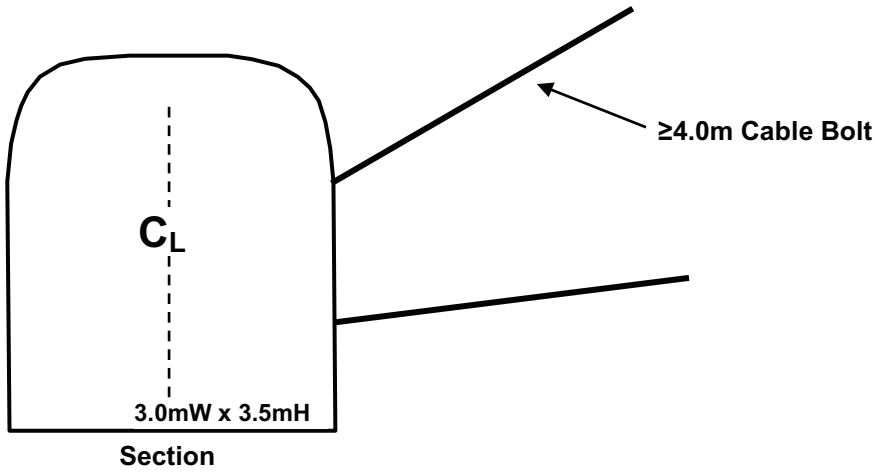
Figure A6 Handheld Ore Drive in Highly Structured (Blocky) Rock Mass.

Job: 09053D	Drawn: JTK	Check: POB	Date: Dec 2010



Section

Specifications

Ring Spacing:	2-2.5m apart
Cable Spacing:	1.5m apart
Cables:	≥ 4m long twin strand cable
Plates:	200mm x 200mm x 10mm
Barrel and Wedge:	One strand only.

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Figure A7 Stope Wall Reinforcement Highly Structured (Blocky) Rock Mass.

Job: 09053C	Drawn: JTK	Check: POB	Date: Dec 2010