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BOREHOLE: BQLA-03

		Position:	Lower Reservoir	Sheet	1 of 6
Project:	Pioneer-Burdekin PHES	Coords:	658768.8 m E 7662380.0 m N MGA2020-55		
Location:	Netherdale/Dalrymple Heights	Surface RL:	191.0 m AHD	Date Started:	5/10/2023
Client:	Queensland Hydro	Contractor:	Twin Hills Engineering & Drilling Drill Rig: Hanjin D&B-8DTM	Date Completed:	10/10/2023
Job No.:	PS138693	Inclination:	-87° Direction: 168°	Logged:	AV

Drilling					Sampling		Field Material Description					
METHOD	PENETRATION RESISTANCE	WATER	DEPTH (metres)	DEPTH RL	SAMPLE OR FIELD TEST	RECOVERED	GRAPHIC LOG	GROUP SYMBOL	SOIL/ROCK MATERIAL DESCRIPTION	MOISTURE CONDITION	CONSISTENCY DENSITY	STRUCTURE AND ADDITIONAL OBSERVATIONS
AD/T	F	Groundwater Not Encountered	0	191.05				GW	Sandy GRAVEL: fine to coarse, sub-rounded, dark brown, sand is medium to coarse grained; with granite boulders; with granite cobbles.	D	L - MD	COLLUVIAL SOIL
WB	F-H		1									0.60: Auger refusal on boulder
			2									
			3	3.00					Continued as Cored Borehole			
			4									
			5									
			6									
			7									
			8									
			9									
			10									

Comments

Checked GEM

Date 20/10/2024

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BOREHOLE: BQLA-03

Project:	Pioneer-Burdekin PHES	Position:	Lower Reservoir	Sheet	2 OF 6
Location:	Netherdale/Dalrymple Heights	Coords:	658768.8 m E 7662380.0 m N MGA2020-55		
Client:	Queensland Hydro	Surface RL:	191.0 m AHD	Date Started:	5/10/2023
Job No.:	PS138693	Contractor:	Twin Hills Engineering & Drilling Drill Rig: Hanjin D&B-8DTM	Date Completed:	10/10/2023
		Inclination:	-87° Direction: 168°	Logged:	AV

Drilling						Field Material Description					Defect Information	
METHOD	WATER	TCR	RQD	DEPTH (metres)	DEPTH RL	GRAPHIC LOG	ROCK / SOIL MATERIAL DESCRIPTION	WEATHERING	INFERRED STRENGTH (MPa) ■ - UCS VL<2 L 2-5 M 5-20 H 20-80 VH 80-200 EH>200	DEFECT DESCRIPTION & Additional Observations (Core partings shown - refer to Detailed Defect Descriptions table for all logged features)	AVERAGE DEFECT SPACING (mm) 10 30 100 300 1000 3000
				0							
				1							
				2							
				3	3.00		Continuation from non-cored borehole				
HQ3	16/10/2024, VWP1	53	0		188.05		BOULDERS: dark grey, grey and pale grey, various igneous, with subrounded to subangular cobbles; with coarse grained, subrounded to subangular gravel.				
					3.60						
					187.45		NO CORE 0.58m (3.60-4.18)				
				4	4.18						
		100	0		186.87		Gravelly Sandy COBBLES: sub-rounded to sub-angular, dark grey, grey and pale grey, various igneous, sand is brown, fine to medium grained; gravel is coarse grained, subrounded to subangular; with subrounded to subangular boulders.				
				5	5.30						
		56	0		185.75		NO CORE 0.30m (5.30-5.60)				
					5.60						
					185.45		COBBLES: sub-rounded to sub-angular, dark grey, grey and pale grey, various igneous, with brown, fine to medium grained sand.				
				6	6.06						
		22	0		184.99		NO CORE 1.17m (6.06-7.23)				
				7	7.23						
					183.82		Clayey GRAVEL: fine to medium, sub-rounded to sub-angular, dark grey, grey and pale grey, various igneous, clay is medium plasticity; with brown, fine to medium grained sand; trace subrounded to subangular cobbles.				
					7.83						
		40	0	8	183.23		NO CORE 0.90m (7.83-8.73)				
					8.73						
					182.33		Clayey GRAVEL: fine to medium, sub-rounded to sub-angular, dark grey, grey and pale grey, various igneous, clay is medium plasticity; with brown, fine to medium grained sand; trace subrounded to subangular cobbles.				
				9	9.11						
		73	0		181.95						
					9.44		Clayey Gravelly SAND: medium to coarse grained, brown, gravel is fine grained; clay is medium plasticity.	XW			
					181.62		GRANITE: medium to coarse grained, grey brown white black, crystalline, massive, recovered as Sandy GRAVEL, fine to medium grained; sand is medium to				
					9.83						
				10	181.23						

Comments

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BOREHOLE: BQLA-03

Project:	Pioneer-Burdekin PHES	Position:	Lower Reservoir	Sheet	3 OF 6
Location:	Netherdale/Dalrymple Heights	Coords:	658768.8 m E 7662380.0 m N MGA2020-55		
Client:	Queensland Hydro	Surface RL:	191.0 m AHD	Date Started:	5/10/2023
Job No.:	PS138693	Contractor:	Twin Hills Engineering & Drilling Drill Rig: Hanjin D&B-8DTM	Date Completed:	10/10/2023
		Inclination:	-87° Direction: 168°	Logged:	AV

Drilling						Field Material Description					Defect Information	
METHOD	WATER	TCR	RQD	DEPTH (metres)	DEPTH RL	GRAPHIC LOG	ROCK / SOIL MATERIAL DESCRIPTION	WEATHERING	INFERRED STRENGTH (MPa) ■ - UCS VL -2 L -5 M -20 H -80 VH -200 EH	DEFECT DESCRIPTION & Additional Observations (Core partings shown - refer to Detailed Defect Descriptions table for all logged features)	AVERAGE DEFECT SPACING (mm) 10 30 100 300 1000 3000
HQ3		73	0	10	10.31		coarse grained; with low plasticity silt. NO CORE 0.48m (9.83-10.31)				
		46	0	11	180.75 / 11.00		GRANITE: medium to coarse grained, grey brown white black, crystalline, massive, recovered as Sandy GRAVEL, fine to medium grained; sand is medium to coarse grained; with low plasticity silt.	XW			
		82	0	12	180.06 / 12.00		NO CORE 1.00m (11.00-12.00)				
		40	0	13	179.06 / 13.23		GRANITE: medium to coarse grained, grey brown white black, crystalline, massive, recovered as intact core and Sandy GRAVEL, fine to medium grained; sand is medium to coarse grained; with low plasticity silt.	XW		13.23-13.68: SPT 2,8,27 N=35	
		58	0	14	177.83 / 14.13		NO CORE 0.90m (13.23-14.13)				
		78	0	15	176.93 / 15.60		GRANITE: medium to coarse grained, grey brown white black, crystalline, massive, recovered as Sandy GRAVEL, fine to medium grained; sand is medium to coarse grained; with low plasticity silt.	XW		14.73-15.13: SPT 10,39,35/97mm N=R	
		65	0	16	175.47 / 16.21		NO CORE 0.61m (15.60-16.21)				
		19	0	17	174.86 / 17.40		GRANITE: medium to coarse grained, grey brown white black, crystalline, massive, recovered as Sandy GRAVEL, fine to medium grained; sand is medium to coarse grained; with low plasticity silt.	XW		16.23-16.62: SPT 8,24,28/90mm N=R	
					173.67 / 17.73		NO CORE 0.33m (17.40-17.73)				
				18	173.34 / 18.70		GRANITE: medium to coarse grained, grey brown white black, crystalline, massive, recovered as Sandy GRAVEL, fine to medium grained; sand is medium to coarse grained; with low plasticity silt.	XW		17.73-18.18: SPT 25,26,30/20 mm (HB) N=R	
				19	172.37		NO CORE 1.75m (18.70-20.45)			19.23-19.33: SPT 35/95mm N=R	
				20							

Comments

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BOREHOLE: BQLA-03

		Position:	Lower Reservoir	Sheet	4 OF 6
Project:	Pioneer-Burdekin PHES	Coords:	658768.8 m E 7662380.0 m N MGA2020-55		
Location:	Netherdale/Dalrymple Heights	Surface RL:	191.0 m AHD	Date Started:	5/10/2023
Client:	Queensland Hydro	Contractor:	Twin Hills Engineering & Drilling Drill Rig: Hanjin D&B-8DTM	Date Completed:	10/10/2023
Job No.:	PS138693	Inclination:	-87° Direction: 168°	Logged:	AV

Drilling						Field Material Description					Defect Information	
METHOD	WATER	TCR	RQD	DEPTH (metres)	DEPTH RL	GRAPHIC LOG	ROCK / SOIL MATERIAL DESCRIPTION	WEATHERING	INFERRED STRENGTH (MPa) ■ - UCS		DEFECT DESCRIPTION & Additional Observations (Core partings shown - refer to Detailed Defect Descriptions table for all logged features)	AVERAGE DEFECT SPACING (mm)
HQ3		19	0	20	20.45		NO CORE 1.75m (18.70-20.45)					
					170.62 / 20.73		GRANITE: medium to coarse grained, grey brown white black, crystalline, massive, recovered as Sandy GRAVEL, fine to medium grained; sand is medium to coarse grained; with low plasticity silt.	XW				
		0	0	21	170.34		NO CORE 1.50m (20.73-22.23)					
				22	22.23							
		100	0	23	168.85 / 23.73		GRANITE: medium to coarse grained, grey brown white black, crystalline, massive, recovered as intact core and Sandy GRAVEL, fine to medium grained; sand is medium to coarse grained; with low plasticity silt.	XW				
		30	0	24	167.35 / 24.30		NO CORE 0.57m (23.73-24.30)					
					166.78 / 24.55		GRANITE: medium to coarse grained, grey brown white black, crystalline, massive, recovered as Sandy GRAVEL, fine to medium grained; sand is medium to coarse grained; with low plasticity silt.	XW				
		0	0	25	166.53		NO CORE 3.84m (24.55-28.39)					
		0	0									
		0	0	26								
		0	0	27								
		0	0	28	28.39							
		89	9	29	162.69		GRANITE: medium to coarse grained, grey brown white black, crystalline, massive, recovered as intact core and Sandy GRAVEL, fine to medium grained; sand is medium to coarse grained; with low plasticity silt.	XW / SW / XW - HW				
		100	0	30				XW				

Comments

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BOREHOLE: BQLA-03

		Position:	Lower Reservoir	Sheet	5 OF 6
Project:	Pioneer-Burdekin PHES	Coords:	658768.8 m E 7662380.0 m N MGA2020-55		
Location:	Netherdale/Dalrymple Heights	Surface RL:	191.0 m AHD	Date Started:	5/10/2023
Client:	Queensland Hydro	Contractor:	Twin Hills Engineering & Drilling Drill Rig: Hanjin D&B-8DTM	Date Completed:	10/10/2023
Job No.:	PS138693	Inclination:	-87° Direction: 168°	Logged:	AV

Drilling

METHOD	WATER	TCR	RQD	DEPTH (metres)	DEPTH RL
HQ3		100	0	30	
				31	31.30 / 159.79
		29	19	32	32.30 / 158.79
		100	97	33	
		100	86	34	
		100	45	35	
		100	80	36	36.90 / 154.20
		100	30	37	37.50 / 153.60
		100	36	38	
		100	85	39	40

Field Material Description

GRAPHIC LOG	ROCK / SOIL MATERIAL DESCRIPTION	WEATHERING	INFERRED STRENGTH (MPa) ■ - UCS (VL -2, L -5, M -20, H -60, VH -200, EH)
	GRANITE: medium to coarse grained, grey brown white black, crystalline, massive, recovered as intact core and Sandy GRAVEL, fine to medium grained; sand is medium to coarse grained; with low plasticity silt.	XW - HW	
		XW	
	NO CORE 1.00m (31.30-32.30)		
	GRANITE: medium to coarse grained, grey white black, crystalline, massive, slightly altered.	XW / SW	■
	Pink grey black.		
	Grey white black.		

Defect Information

DEFECT DESCRIPTION & Additional Observations (Core partings shown - refer to Detailed Defect Descriptions table for all logged features)	AVERAGE DEFECT SPACING (mm) (10, 30, 100, 300, 1000, 3000)
32.40: J, 15°, CN, PR, RF	
32.45-32.73: PLT(A) Is50 = 3.4 MPa (W)	
32.45: J, 0°, CN, PR, RF	
32.96: J, 30°, CN, UN, RF	
33.35: J, 10°, CT, UN, RF	
33.63: J, 10°, SN, PR, RF	
33.70: J, 20°, CT, PR, SM	
34.35: J, 70°, CU, SM	
34.78: J, 50°, SN, PR, RF	
35.04: J, 5°, CN, UN, RF	
35.15: J, 5°, CN, IR, RF	
35.26: J, 30°, CN, PR, RF	
35.37: J, 20°, CN, PR, SM	
36.14: J, 40°, CN, ST, RF	
36.86-37.00: PLT(A) Is50 = 2.1 MPa (W); PLT(D) Is50 = 7.3 MPa (W)	
36.86: J, 30°, CN, PR, SM, 30 to 40 deg x 2 sets	
36.93: J, 20 - 40°, CN, UN, RF	
37.10: J, 50°, SN, PR, RF, Qtz clasts	
37.21: J, 25°, SN, UN, RF	
37.33: J, 10 - 35°, SN, ST, RF	
37.43: J, 5°, SN, PR, RF	
37.58: J, 50°, CN, PR, RF	
37.88: J, 15°, SN, PR, RF	
38.10: J, 10°, SN, IR, RF	
38.18: J, 15°, SN, IR, RF	
38.32: J, 30°, CN, UN, RF	
38.40: J, 5 - 15°, CN, UN, RF	
38.44: J, 5 - 15°, CN, IR, RF	
38.52: J, 10°, SN, UN, RF	
38.60: J, 15°, SN, UN, RF	
38.70: J, 5 - 15°, CN, UN, RF	
38.78: J, 25°, SN, UN, SM	
38.88: J, 25°, CN, PR, SM	
38.92: J, 20°, SN, PR, RF	
39.24: J, 20°, CN, UN, RF	
39.30: J, 0 - 20°, SN, IR, RF	
39.50: J, 60°, SN, PR, SM	

Comments

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BOREHOLE: BQLA-03

		Position:	Lower Reservoir	Sheet	6 OF 6
Project:	Pioneer-Burdekin PHES	Coords:	658768.8 m E 7662380.0 m N MGA2020-55		
Location:	Netherdale/Dalrymple Heights	Surface RL:	191.0 m AHD	Date Started:	5/10/2023
Client:	Queensland Hydro	Contractor:	Twin Hills Engineering & Drilling Drill Rig: Hanjin D&B-8DTM	Date Completed:	10/10/2023
Job No.:	PS138693	Inclination:	-87° Direction: 168°	Logged:	AV

Drilling						Field Material Description					Defect Information	
METHOD	WATER	TCR	RQD	DEPTH (metres)	DEPTH RL	GRAPHIC LOG	ROCK / SOIL MATERIAL DESCRIPTION	WEATHERING	INFERRED STRENGTH (MPa) ■ - UCS VL -2 L -5 M -20 H -60 VH -200 EH	DEFECT DESCRIPTION & Additional Observations (Core partings shown - refer to Detailed Defect Descriptions table for all logged features)	AVERAGE DEFECT SPACING (mm) 10 30 100 300 1000 3000
		100	85	40	40.20	+ +	Grey white black.	SW		40.10: J, 20°, CN, PR, RF	
					150.90		Hole Terminated at 40.20 m Target depth. Vibrating Wire Piezometer Installed.				
				41							
				42							
				43							
				44							
				45							
				46							
				47							
				48							
				49							
				50							

Comments

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Pioneer-Burdekin Pumped Hydro Energy Scheme: Tranche 1 – BQLA-03 Defects List

Refer to Explanatory Notes sheets for abbreviation definitions

PointID	Depth	Bottom	Fracture Set	Defect Number	Type	Type Suffix	Dip Minimum (degrees)	Dip Maximum (degrees)	Infilling Material	Aperture Observation	Planarity	Roughness	Aperture Measurement Sign	Aperture Measurement	Aperture	Spacing	Remark
BQLA-03	32.39	32.44			hJ		50		gy mi		PR			3			pk to or alteration halo 10 mm
BQLA-03	32.40				J		15			CN	PR	RF					
BQLA-03	32.45				J		0			CN	PR	RF					
BQLA-03	32.60				hJ		70		rd and gr mi		PR						
BQLA-03	32.84				hJ		70		gy mi		UN						
BQLA-03	32.96				J		30			CN	UN	RF					
BQLA-03	33.02	33.45			hJ	x2	80				PR						pk to or alteration halo 10 mm
BQLA-03	33.31	33.50			hJ		60		gy mi		UN						pk to or alteration halo 10 mm
BQLA-03	33.35				J		10			CT	UN	RF					
BQLA-03	33.63				J		10			SN	PR	RF					
BQLA-03	33.70				J		20			CT	PR	SM					
BQLA-03	33.93	34.12			hJ	x3	70	90			UN						pk to or alteration halo 20 mm
BQLA-03	34.35				hJ		60	70	gy mi		UN						
BQLA-03	34.46				hJ	x2	70	80			CU						
BQLA-03	34.78				J		50			SN	PR	RF					pk to or alteration halo 20 mm
BQLA-03	35.04				J		5			CN	UN	RF					
BQLA-03	35.15				J		5		pk and gy mi	SN	IR	RF					
BQLA-03	35.26				J		30		gn mi	CN	PR	RF					
BQLA-03	35.37				J		20			CN	PR	SM					
BQLA-03	35.38	36.70			hJ	x14	60	90	gy mi		PR- UN		<	3			multiple healed defects, generally high angle, 30-100 mm spacing
BQLA-03	35.58				hJ	x2	10		gy mi		PR			2			
BQLA-03	36.14				J		40			CN	ST	RF					
BQLA-03	36.41				J		0				IR	RF					
BQLA-03	36.82				J		30			CN	PR	SM					30 to 40 deg x 2 sets
BQLA-03	36.86				hJ		30		gy and pk mi		CU						
BQLA-03	36.93				J		20	40		CN	IR	RF					
BQLA-03	36.98	37.25			hJ	x4	50		gy mi		PR			2			
BQLA-03	37.10				J		50			SN	PR	RF					Qtz clasts
BQLA-03	37.21				J		25			SN	UN	RF					
BQLA-03	37.26	37.35			hJ	x2	15		gy mi		PR						
BQLA-03	37.30	37.40			hJ		80		gy mi		PR			1			
BQLA-03	37.33				J		35			SN	ST	RF					
BQLA-03	37.43				J		5		pk mi	SN	UN	RF					
BQLA-03	37.50	37.60			J		60		pk and gn mi	SN	PR	RF					
BQLA-03	37.60	37.84			hJ	x4	65	70	gy mi		PR		<	5			30-100 mm spacing
BQLA-03	37.82	37.95			hJ		60		gy mi		PR			3			
BQLA-03	37.84				MB												
BQLA-03	37.88				J		15			SN	PR	RF					
BQLA-03	38.00	38.40			hJ		80	90	gy mi		UN			2			
BQLA-03	38.10				J		10			SN	IR	RF					
BQLA-03	38.18				J		15			SN	IR	RF					
BQLA-03	38.32				J		30			CN	UN	RF					
BQLA-03	38.36	38.60			J		80		pk mi	SN	UN	RF					
BQLA-03	38.40				J		5	15		CN	UN	RF					
BQLA-03	38.44				J		5	15		CN	IR	RF					
BQLA-03	38.52				J		10			SN	UN	RF					
BQLA-03	38.60				J		15		pk mi	SN	UN	RF					
BQLA-03	38.61	38.80			hJ	x3	70		gy mi		PR			5			0-30 mm spacing
BQLA-03	38.70				J		5	15		CN	UN	RF					
BQLA-03	38.78				J		25			SN	UN	SM					
BQLA-03	38.88				J		25			CN	PR	SM					
BQLA-03	38.92				J		20			SN	PR	RF					
BQLA-03	39.00	39.24			hJ	x2	60		gy to gn mi		PR			2			100 mm spacing
BQLA-03	39.05	39.22			hJ		70	80	gy to gn mi		UN			2			
BQLA-03	39.21	39.40			hJ	x3	70		gy to gn mi		PR			3			10-30 mm spacing
BQLA-03	39.24				J		20			CN	UN	RF					
BQLA-03	39.30				J		0	20		SN	IR	RF					
BQLA-03	39.50				J		60		pk to gn	SN	PR	SM					50 mm pk alteration halo
BQLA-03	40.10				J		20			CN	PR	RF					

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PointID : BQLA-03 Depth Range: 3.00 - 7.00 m

PointID : BQLA-03 Depth Range: 7.00 - 11.00 m

wsp	TITLE Queensland Hydro Netherdale/Dalrymple Heights Pioneer-Burdekin PHES Core Photo - BQLA-03	DRAWN RC	DATE 14/10/2024
		CHECKED GEM	DATE 16/10/2024
		SCALE Not To Scale	A4
		PROJECT No PS138693	FIGURE No 1/5

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PointID : BQLA-03 Depth Range: 11.00 - 15.00 m

PointID : BQLA-03 Depth Range: 15.00 - 19.00 m

wsp	TITLE Queensland Hydro Netherdale/Dalrymple Heights Pioneer-Burdekin PHES Core Photo - BQLA-03	DRAWN RC	DATE 14/10/2024
		CHECKED GEM	DATE 16/10/2024
		SCALE Not To Scale	A4
		PROJECT No PS138693	FIGURE No 2/5

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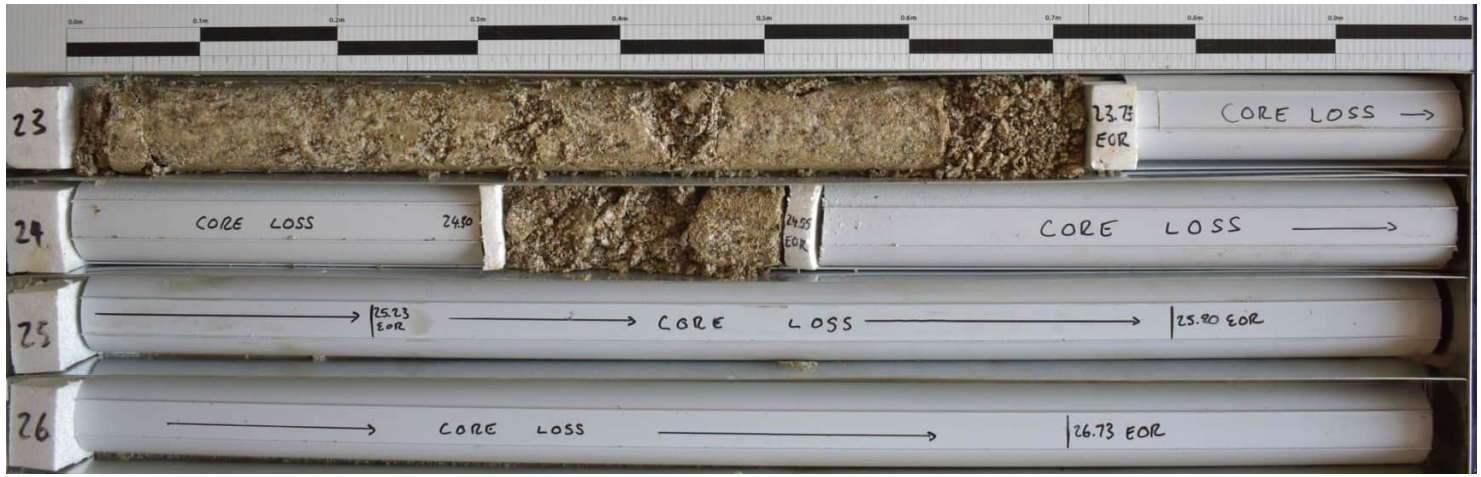
PointID : BQLA-03 Depth Range: 19.00 - 23.00 m



PointID : BQLA-03 Depth Range: 23.00 - 27.00 m

wsp	TITLE Queensland Hydro Netherdale/Dalrymple Heights Pioneer-Burdekin PHES Core Photo - BQLA-03	DRAWN RC	DATE 14/10/2024
		CHECKED GEM	DATE 16/10/2024
		SCALE Not To Scale	A4
		PROJECT No PS138693	FIGURE No 3/5

WSP-AU 5.07.3 LIB.GLB GrfcTbl PHOTO CORE 2 PER PAGE VERT A4L PIONEER_NIP_20240619_BQLA-03_RC.GPJ <<DrawingFile>> 2024/10/14 11:45 10.03.00.09 Datgel Lab and In Situ Tool - DGD | Lib: WSP 5.07.3 2023-12-04 Prj: WSP 5.04.1 2023-06-14

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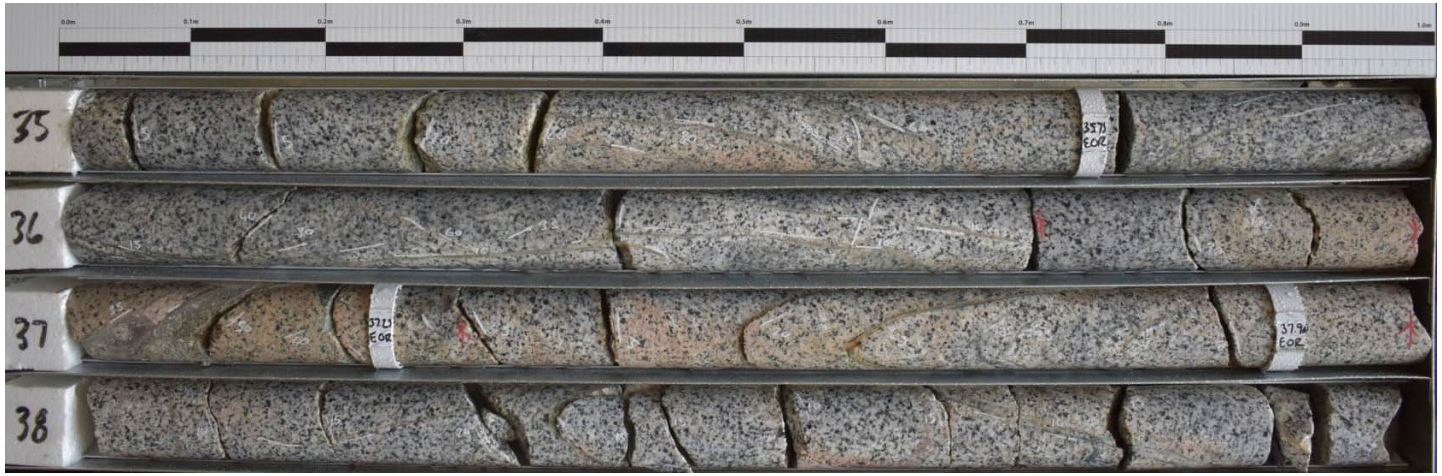
PointID : BQLA-03 Depth Range: 27.00 - 31.00 m

PointID : BQLA-03 Depth Range: 31.00 - 35.00 m

wsp	TITLE Queensland Hydro Netherdale/Dalrymple Heights Pioneer-Burdekin PHES Core Photo - BQLA-03	DRAWN RC	DATE 14/10/2024
		CHECKED GEM	DATE 16/10/2024
		SCALE Not To Scale	A4
		PROJECT No PS138693	FIGURE No 4/5

WSP-AU 5.07.3 LIB.GLB GrfcTbl PHOTO CORE 2 PER PAGE VERT A4L PIONEER_NIP_20240619_BQLA-03_RC.GPJ <<DrawingFile>> 2024/10/14 11:45 10.03.00.09 Datgel Lab and In Situ Tool - DGD | Lib: WSP 5.07.3 2023-12-04 Prj: WSP 5.04.1 2023-06-14



PointID : BQLA-03 Depth Range: 35.00 - 39.00 m

PointID : BQLA-03 Depth Range: 39.00 - 40.20 m

wsp	TITLE Queensland Hydro Netherdale/Dalrymple Heights Pioneer-Burdekin PHES Core Photo - BQLA-03	DRAWN RC	DATE 14/10/2024
		CHECKED GEM	DATE 16/10/2024
		SCALE Not To Scale	A4
		PROJECT No PS138693	FIGURE No 5/5

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BQLA-03 Structural Log

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WSP Australia Pty Limited
Level 12, 900 Ann Street
Fortitude Valley
QLD 4006
Australia

GEOPHYSICAL RECORD OF BOREHOLE: BQLA-03

PROJECT:	Pioneer-Burdekin PHES	JOB #	PS138693
CLIENT:	Queensland Hydro	DATE:	14/11/2023

BOREHOLE DETAILS

LOCATION:	Lower Reservoir	BH DEPTH:	40.25 m
EASTING:	658768.795 m	BH DIAMETER:	96 mm (HQ)
NORTHING:	7662379.995 m	BH AZIMUTH:	168°
ELEVATION:	191.045 m	BH PLUNGE:	-87°
COORD SYSTEM:	MGA2020-55	CASING DEPTH:	13.54 m
LOGGING DATUM:	Ground Level	CASING TYPE:	HWT

DOCUMENT DETAILS

LOGGED BY:	GH
LOGGED DATE:	11-12/10/2023
DRAWN BY:	SB
REVIEWED BY:	GH
FILE:	BQLA-03_Struct_RevC
LOGGED DEPTH:	39.32 m

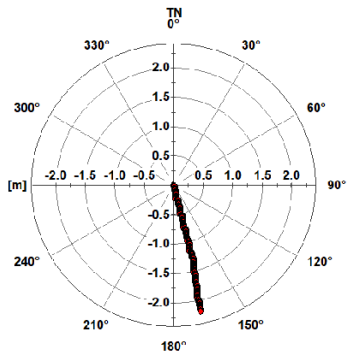
NOTES

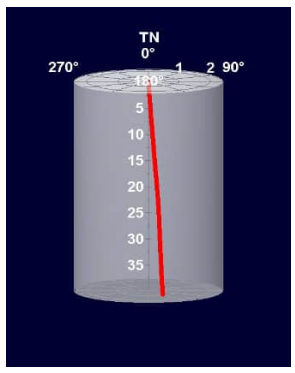
Image logs are oriented relative to high side. Final structures corrected to true north using magnetic declination of 8.2 deg East.

Mechanical calliper log used for structure dip corrections.

All logs zeroed to ground level. Cased section assumed straight for deviation calculations.

BOREHOLE DEVIATION

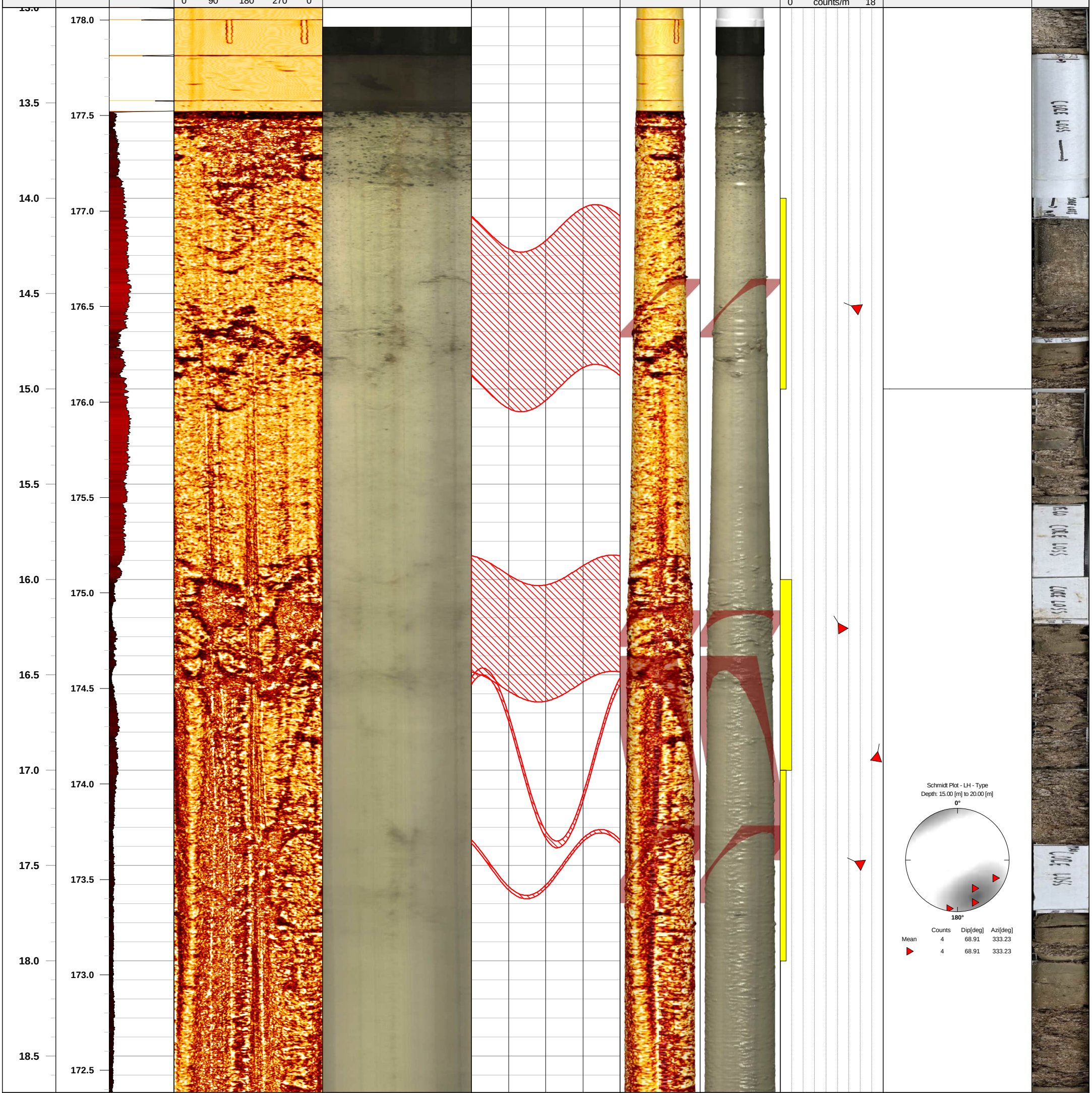




INTERPRETED STRUCTURES

Contact | Crushed Seam | Extremely Weathered Seam | Joint | Vein | Healed Joint

BQLA-03



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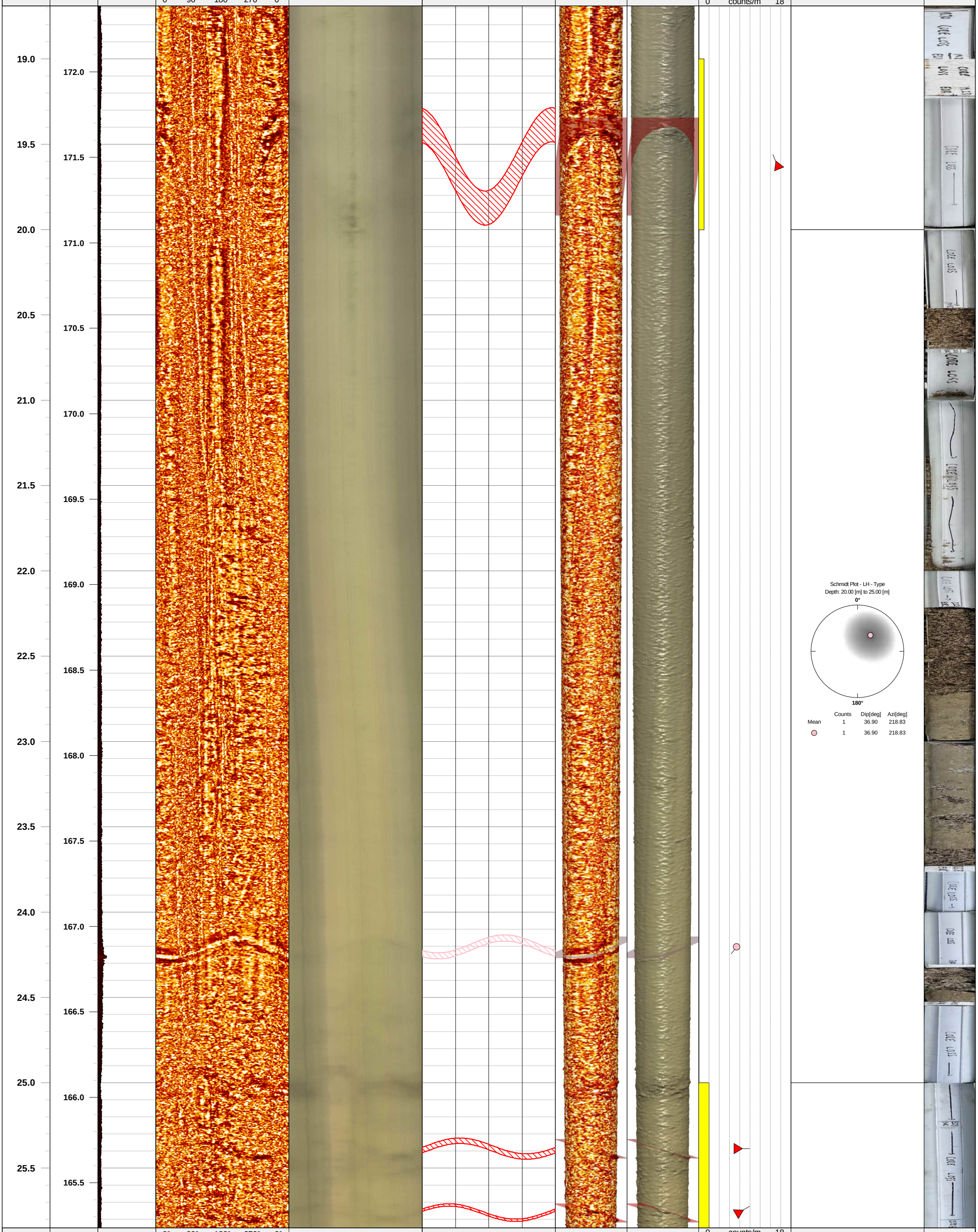
BQLA-03

Depth		Image Logs			Structural Data					Core
Depth 1m:20m	RL m AHD	Reflectivity 0 9000	Amplitude-HS Normalised 0 6000 0° 90° 180° 270° 0°	Image-HS 0° 90° 180° 270° 0°	Apparent Structures 0° 90° 180° 270° 0°	3D ATV 0°	3D OTV -0°	Structures - TN 0 90 Freq/metre 0 counts/m 18	Stereoplots Schmidt Plot - LH - Type	Core Photo



Depth		Image Logs			Structural Data					Core
1m:20m Depth	AHD RL m	0 9000 Reflectivity	0° 90° 180° 270° 0° 0 6000 Amplitude-HS Normalised	0° 90° 180° 270° 0° Image-HS	0° 90° 180° 270° 0° Apparent Structures	0° 3D ATV	-0° 3D OTV	0 counts/m 18 Freq/metre 0 90 Structures - TN	Schmidt Plot - LH - Type Stereoplots	Core Photo

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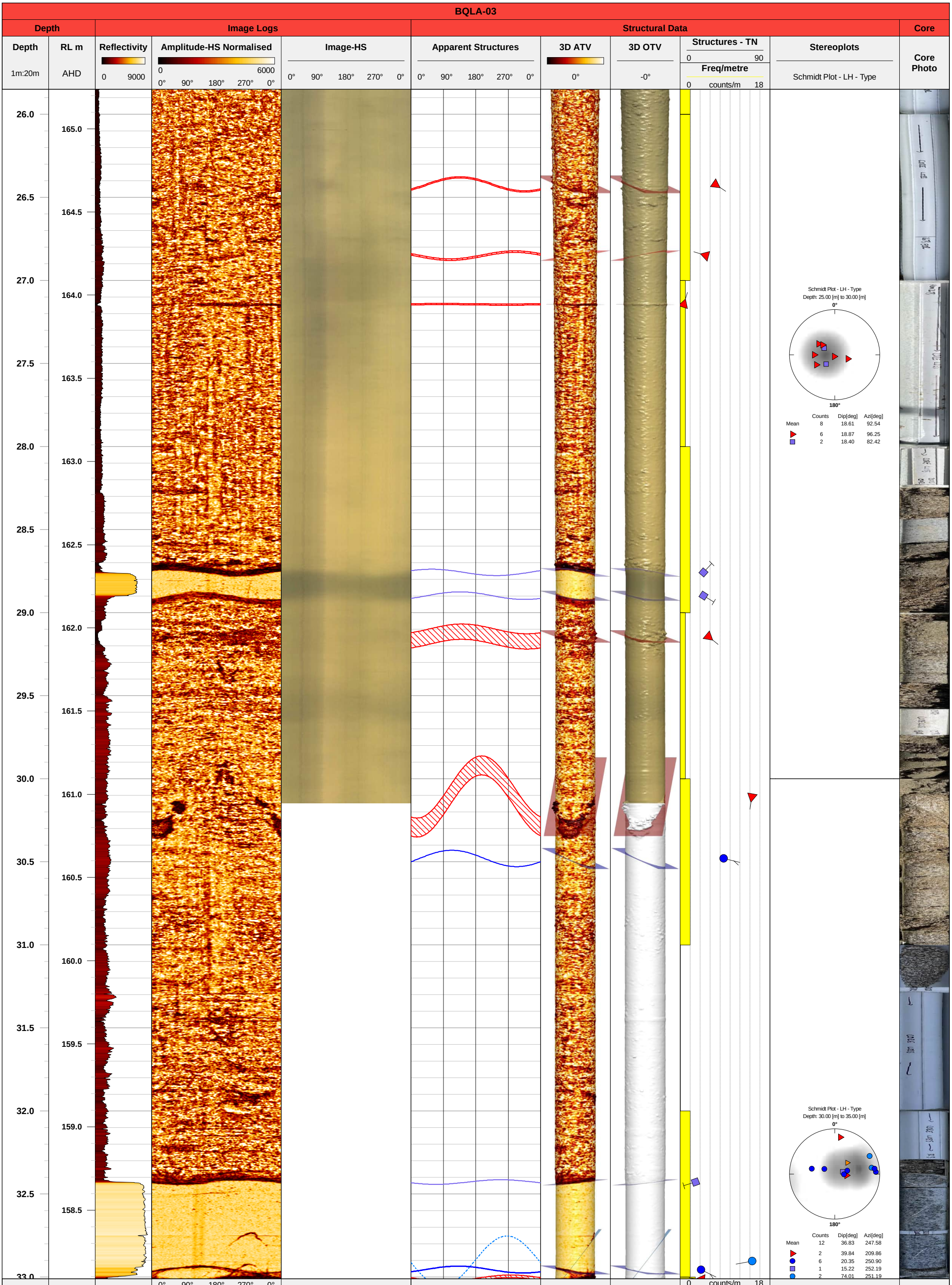

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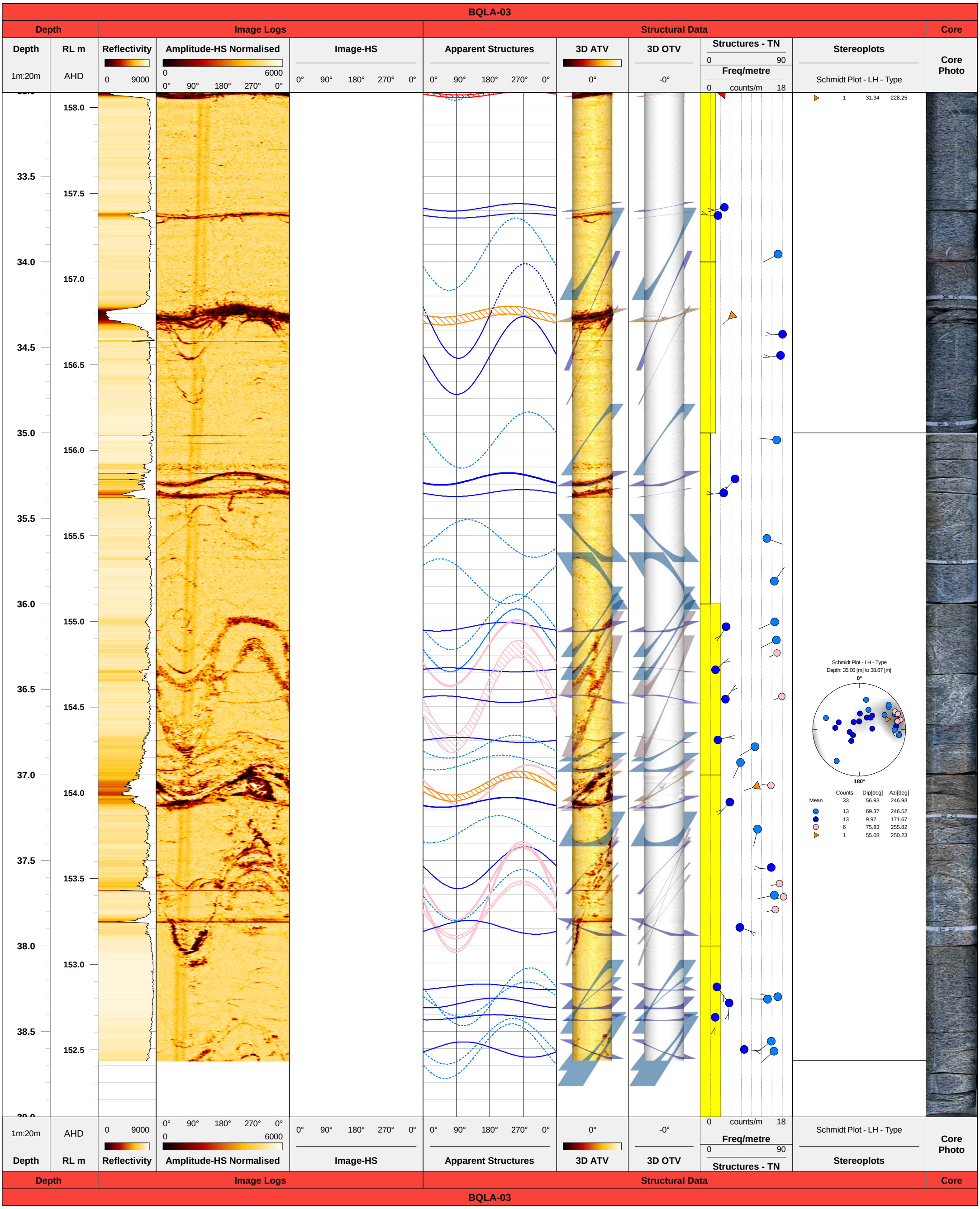

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BQLA-03 Composite Log

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Fortitude Valley
QLD 4006
Australia

GEOPHYSICAL RECORD OF BOREHOLE: BQLA-03

PROJECT:	Pioneer-Burdekin PHES	JOB #	PS138693
CLIENT:	Queensland Hydro	DATE:	14/11/2023

BOREHOLE DETAILS

LOCATION:	Lower Reservoir	BH DEPTH:	40.25 m
EASTING:	658768.795 m	BH DIAMETER:	96 mm (HQ)
NORTHING:	7662379.995 m	BH AZIMUTH:	168°
ELEVATION:	191.045 m	BH PLUNGE:	-87°
COORD SYSTEM:	MGA2020-55	CASING DEPTH:	13.54 m
LOGGING DATUM:	Ground Level	CASING TYPE:	HWT

DOCUMENT DETAILS

LOGGED BY:	GH
LOGGED DATE:	11-12/10/2023
DRAWN BY:	SB
REVIEWED BY:	GH
FILE:	BQLA-03_Comp_RevC
LOGGED DEPTH:	39.32 m

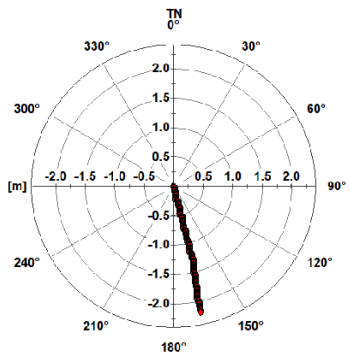
NOTES

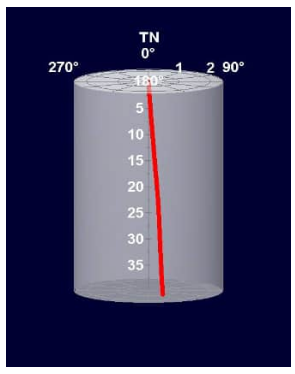
Image logs are oriented relative to high side. Final structures corrected to true north using magnetic declination of 8.2 deg East.

Mechanical calliper log used for structure dip corrections.

All logs zeroed to ground level. Cased section assumed straight for deviation calculations.

BOREHOLE DEVIATION

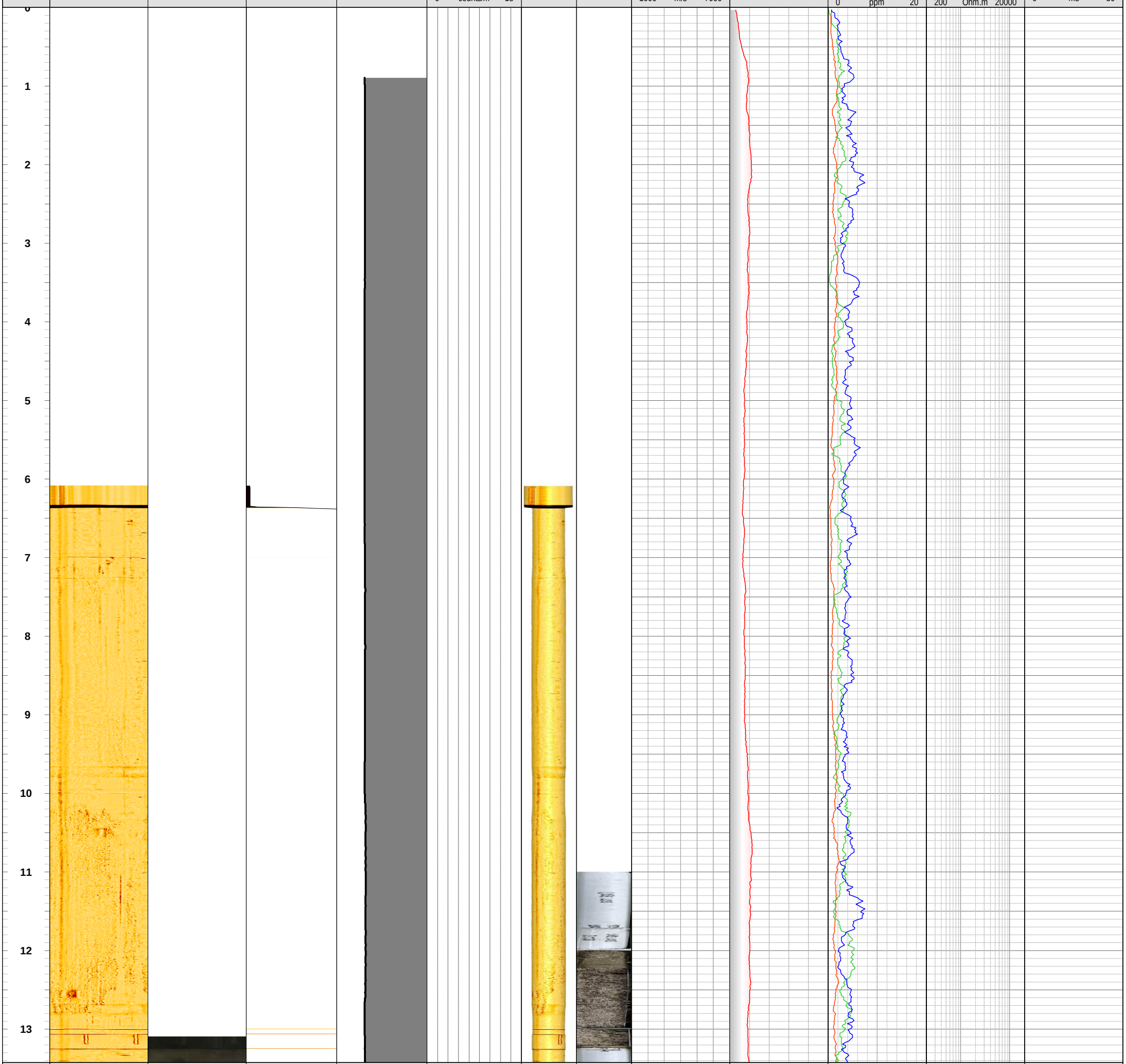




INTERPRETED STRUCTURES

Contact | Crushed Seam | Extremely Weathered Seam | Joint | Vein | Healed Joint

BQLA-03



BQLA-03

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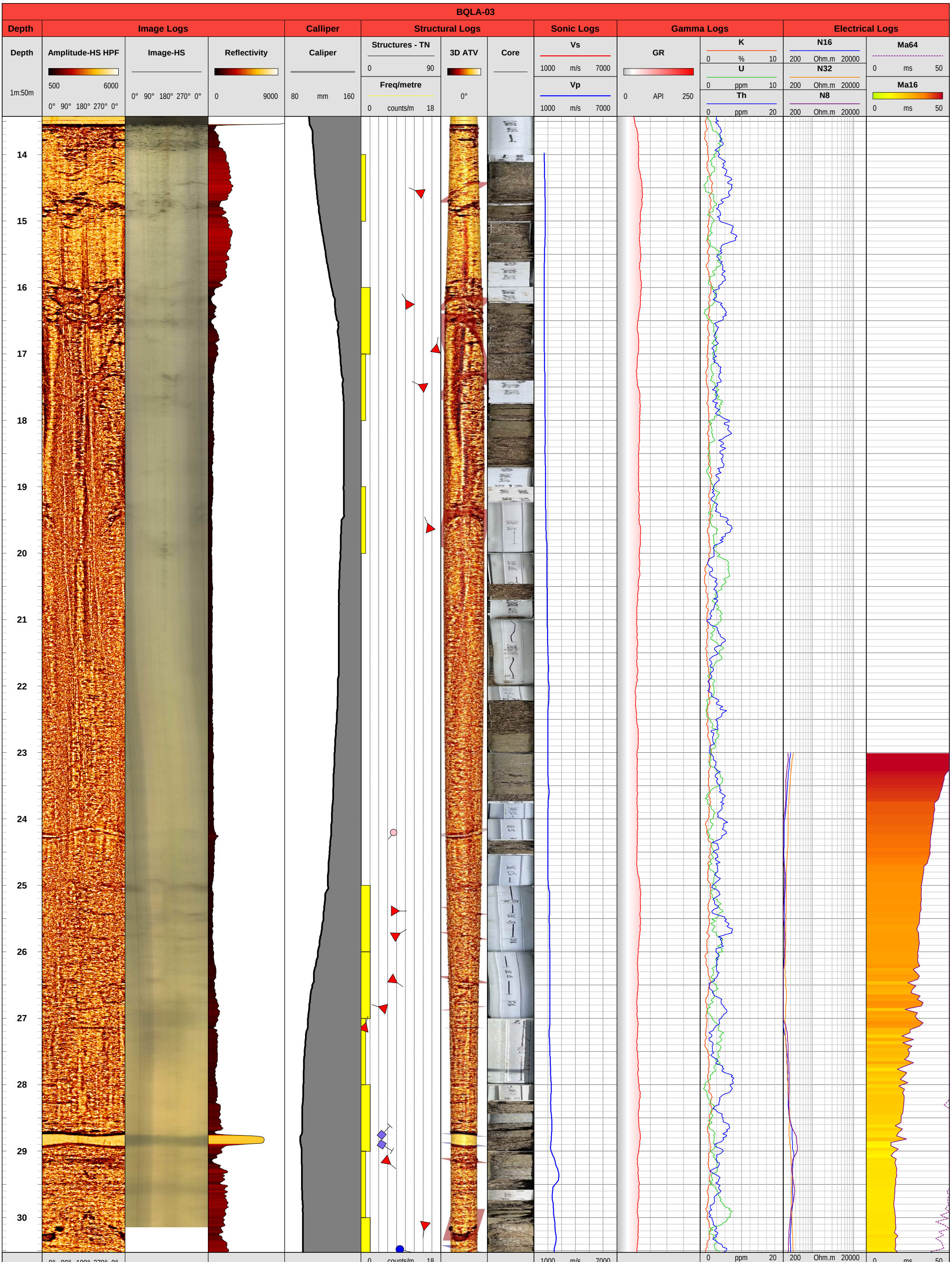

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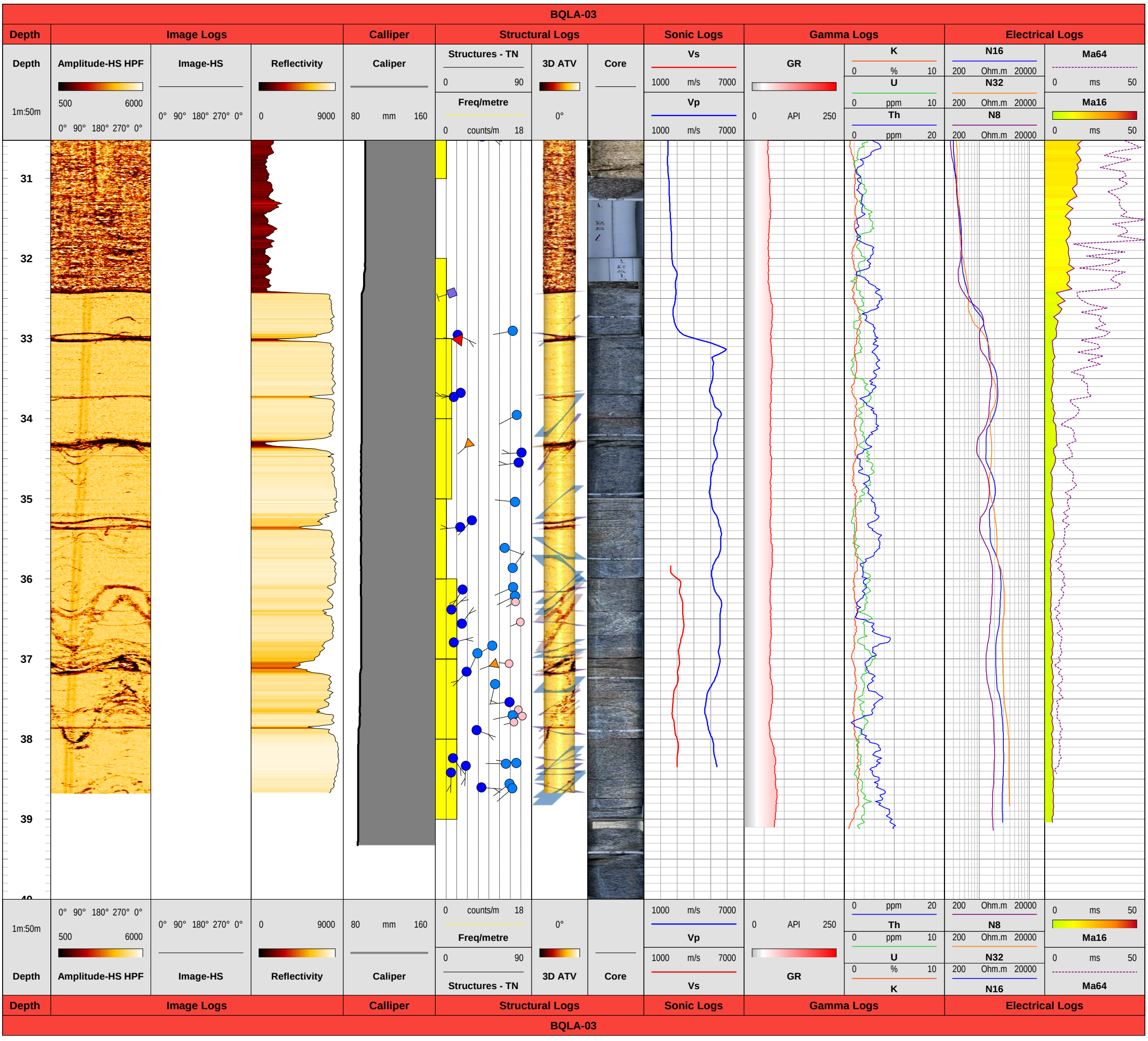

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