Well Completion Report

Cam 19

PL 277

Document No: PRJ-WCR-CAM-019-01

UWI No: 100000744838

Issued Date: 22-12-2013

Originator:
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Approved Geology:
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1 WELL DATA CARD

Well Name	**Cam 19**		
Well Type	CSG Appraisal	**Rig**	TCL 1 (12 ¼" Surface Hole) Saxon 166 (8 ½" Production Hole)
Licence	PL 277		
Joint Venture	QGC Pty Ltd BGI (Aus) Pty Ltd Toyota Tsusho CBM Qld Pty Ltd CNOOC CSG Co Pty Ltd Tokyo Gas QCLNG Pty Ltd	**Ground Level**	323.05m
		Rotary Table	327.55m
		Spud Date (12 ¼" Section)	09:00 hours on the 07-03-2013
		Rig Release (12 ¼" Section)	18:00 hours on the 07-03-2013
Latitude	26° 12' 43.5402" S	**Start 8 ½" Section**	17:15 hours on the 18-11-2013
Longitude	149° 42' 23.6847" E	**Final TD (m MDRT)**	1204.50 (Driller); 1204.50(Logger)
Easting	770 441.642 m	**TD Date**	03:30 hours on the 25-11-2013
Northing	7 098 004.907 m	**Rig Release (8 ½"Section)**	15:30 hours on the 01-12-2013
Map Zone/Sheet	55 (GDA-94)/Wandoan (8845)	**Status at Rig Release**	Suspended

Well Summary

Cam 19 is a Coal Seam Gas Appraisal - Deviated well operated by QGC Pty Limited (QGC), in Petroleum Lease, PL 277 (Refer *Figure 1*). The aim of the well was to target, evaluate and produce coal seam gas out of the Walloon Subgroup Coal Measures. The 12 ¼" section was drilled to 83.50mMDGL by TCL Rig 1 from 09:00, 07-03-2013 with rig released at 18:00, 07-03-2013. Saxon 166 commenced drilling the 8 ½" section (and subsequent 6 1/8" section) at 17:15, 18-11-2013. Coals of the Walloon Subgroup were encountered with TD reached at 1204.50mMDRT (775.72mTVDRT) with an inclination of 78.44° at TD. Two wireline runs were performed post drilling. The well was cased and suspended.

Hole and Casing Design (Drillers Depths) - *Refer to Figure.2* | **Drilling Fluid**

Type	Hole Size	Depth (m MDRT)	Casing Size	Shoe (m MDRT)	Shoe (m TVDRT)	Hole Size	Mud Type
Conductor	17"	10.00	14"	10.00	10.00	17"	Not recorded
Surface	12 ¼"	88.00	9 ⅝"	87.00	87.00	12 ¼"	Not Recorded
Intermediate	8 ½"	765.00	7"	763.00	663.65	8 ½"	KCl / Polymer
Production	6 ⅛"	1204.50	4 ½"	1204.50	775.72	6 ⅛"	KCl / Polymer

Stratigraphy - Formation Tops (Loggers Depths)

Formation	Depth mMDRT	Depth m TVDRT	Depth mTVDGL
Gubberamunda Sandstone	4.50	4.50	0.00
Westbourne Formation	45.04	45.04	40.54
Norwood Mudstone	128.52	128.52	124.02
Springbok Sandstone	210.40	210.40	205.90
Upper Juandah Coal Measures	301.64	301.41	296.91
Lower Juandah Coal Measures	442.19	436.71	432.21
Tangalooma Sandstone	583.24	554.24	549.74
Taroom Coal Measures	782.60	673.70	669.20
Eurombah Formation	1190.67	772.95	768.45

Formation Evaluation

Run	Measurement	Depth Interval From (mMDRT)	Depth Interval To (mMDRT)
1	GR-MAI-MDN-MPD-MSS	1192.98	50.00
2	CMI-CXD	1197.00	764.00

Mud Logging

Cuttings were monitored and sampled at 10m intervals from 270.00m MDRT to 310.00m MDRT and at 5m intervals from 310.00m MDRT to TD. Samples were collected and stored for the Department of Natural Resources and Mines.

Formation Testing

None

Coring

None

Under-Reaming

None

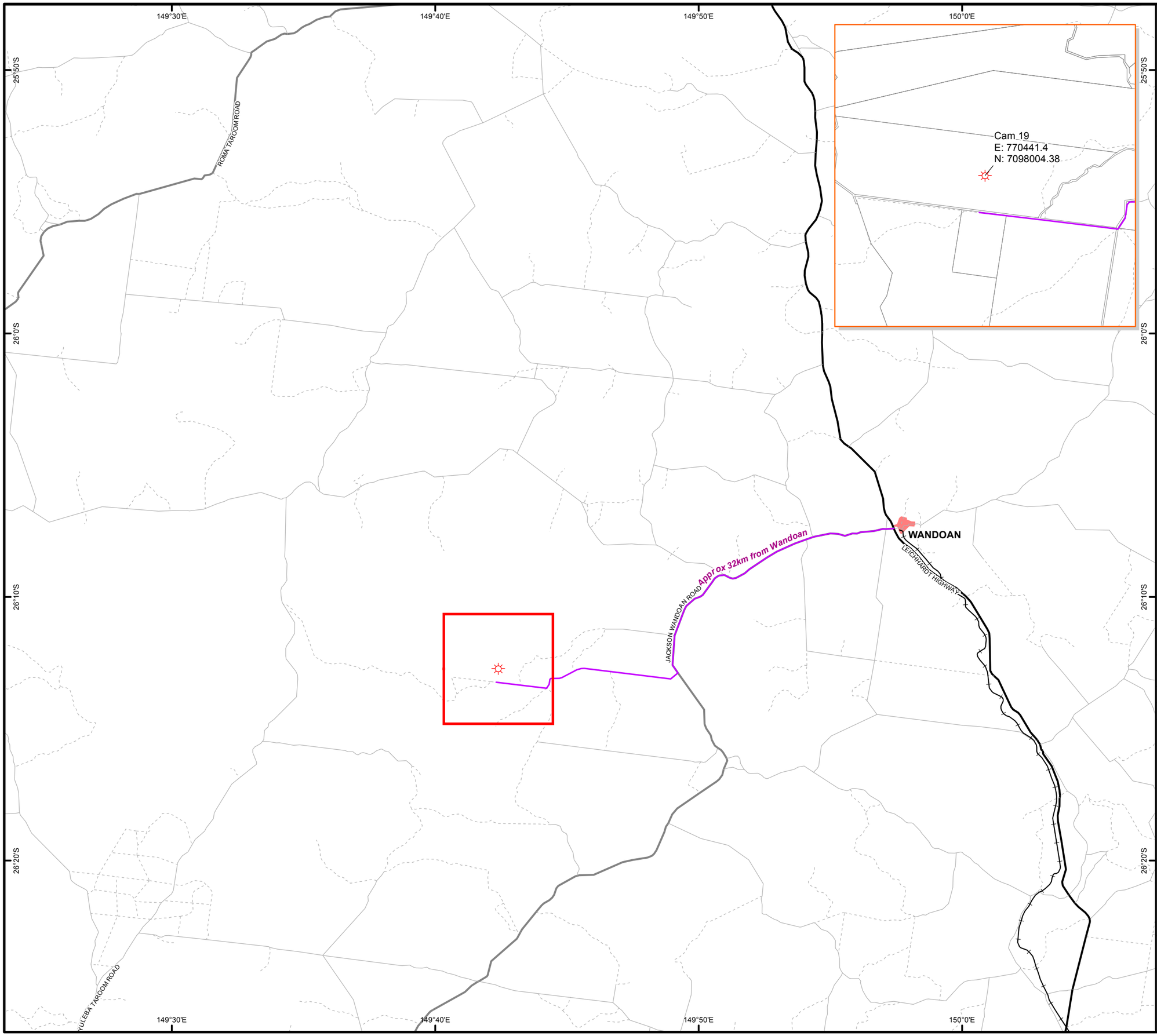
Completion

Cased with 7" casing from surface to 763.00mMDRT. 4 ½" Pre-perforated GRE casing was placed from 746.30mMDRT to the casing shoe at 1204.50mMDRT. A Downhole Retrievable Packer (to act as a plug) was set within the 7" casing from 402.18mMDRT to 501.60mMDRT.

Other Information / Remarks

None

Mud Map of Selected Cam Well from Wandoan



- Well location
- Route to Town
- Railway
- Principal Road
- Secondary Road
- Minor Road
- Track
- Built Up Area

Pre-drill Locations

DATE:	02/05/2012	**MAP NO:**	M_16078_01
CREATED BY:	WP	**REV NO:**	A
CHECKED BY:		**MAP TYPE:**	v4 Other
PLAN REF:			

N

0 5 10

Kilometres

Map Projection: GDA 94 SCALE: 1:250,000 (A3)

DATA SOURCE:

Tenements - DME

Note: Every effort has been made to ensure this information is spatially accurate. The location of this information should not be relied on as the exact field location.

QGC
A BG Group business

3. WELL SCHEMATIC AND SUMMARY

Well Schematic and Summary for Cam 19

On location : 07-03-2013 | **Rig : Saxon 166**

Spud Date : 07-03-2013 | **Permit : PL 277**

GL : +323.05m | **RT : +327.55m**

Proposed TD : 1331.00m MDRT | **Longitude : 149° 42' 23.6847" E**

Actual TD : 1204.50m MDRT | **Latitude : 26° 12' 43.5402" S**

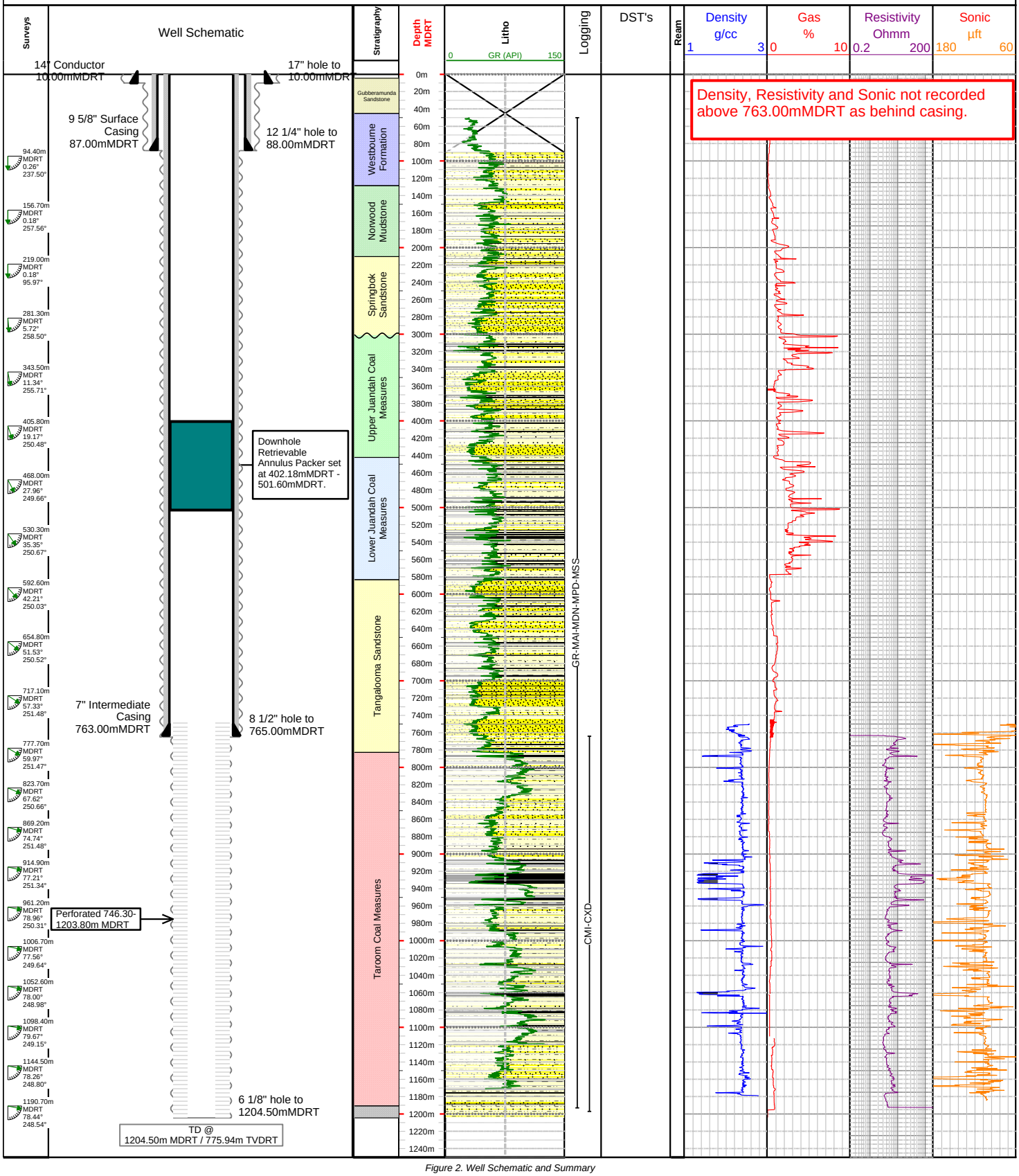


Figure 2. Well Schematic and Summary

2 DRILLING DATA

2.1 Drill Bit Record

Bit Number	Size	Make	Type	Serial No.	In (m MDRT)	Out (m MDRT)	Meters Drilled	Drilled Hours	ROP (m/hr)	Bit Dull Grading
1	12 1/2"	Not Recorded			10.00	88.00	78.00	5.50	14.2	Not Recorded
2	8 1/2"	Smith	PDC	JH5851	88.00	105.38	17.38	1.25	13.9	3-2-BT-C-X-0-RO-BHA
3	8 1/2"	Smith	PDC	JH5657	105.38	576.80	471.42	19.75	14.9	1-1-WT-A-X-I-NO-BHA
3	8 1/2"	Smith	PDC	JH5657	576.80	765.00	188.20	13.00	14.5	1-1-WT-A-X-I-NO-TD
4	6 1/8"	Smith	PDC	JH5496	765.00	1204.50	439.50	28.75	15.3	1-1-WT-A-X-I-NO-TD

The 12 ¼" section was drilled by TCL 1 with GL depths recorded in Daily Drilling Reports. The depths used in the above table are based on the 4.50m RT of Saxon 166.

2.2 Drilling Mud Data

Top (m MDRT)	Base (m MDRT)	Hole Size	Mud Type	Mud Weight (ppg)	Viscosity (s/qt)	Additives
10.00	88.00	12 1/4"	Not Recorded			
88.00	765.00	8 1/2"	KCl / Polymer	8.6 - 9.2	27 - 39	KCl, Polymer
765.00	1204.50	6 1/8"	KCl / Polymer	8.8 - 9.1	31 - 37	KCl, Polymer

2.3 Deviation / Surveys

Depth (m MDRT)	Inclination (°)	Azimuth (°)	m TVDRT	m TVDSS
94.40	0.26	237.50	94.40	233.15
106.90	0.35	230.20	106.90	220.65
119.40	0.35	232.59	119.40	208.15
131.80	0.26	242.12	131.80	195.75
144.20	0.26	243.81	144.20	183.35
156.70	0.18	257.56	156.70	170.85
169.10	0.18	243.78	169.10	158.45
181.60	0.18	244.12	181.60	145.95
194.10	0.09	292.36	194.10	133.45
206.50	0.09	202.36	206.50	121.05
219.00	0.18	95.97	219.00	108.55
231.40	0.18	87.54	231.40	96.15
243.90	1.08	233.49	243.90	83.65
256.40	3.17	246.79	256.39	71.16
268.80	4.92	255.71	268.76	58.79
281.30	5.72	258.50	281.20	46.35
293.70	6.60	260.77	293.53	34.02
306.20	7.74	260.60	305.93	21.62
318.60	8.62	258.67	318.21	9.34
331.10	9.76	256.10	330.55	-3.00
343.50	11.34	255.71	342.74	-15.19
355.90	12.49	256.18	354.87	-27.32
368.40	13.91	257.12	367.04	-39.49
380.90	15.39	255.22	379.13	-51.58
393.30	17.15	252.62	391.04	-63.49
405.80	19.17	250.48	402.91	-75.36
418.20	20.84	250.53	414.56	-87.01
430.70	22.60	250.48	426.18	-98.63
443.20	24.62	250.75	437.63	-110.08

Depth (m MDRT)	Inclination (°)	Azimuth (°)	m TVDRT	m TVDSS
455.60	26.29	249.99	448.83	-121.28
468.00	27.96	249.66	459.86	-132.31
480.50	29.55	249.35	470.82	-143.27
492.90	31.22	249.87	481.52	-153.97
505.40	32.98	249.87	492.10	-164.55
517.80	34.65	250.20	502.41	-174.86
530.30	35.35	250.67	512.65	-185.10
542.80	36.67	250.74	522.76	-195.21
555.20	38.08	250.65	532.61	-205.06
567.70	39.13	250.38	542.38	-214.83
580.10	40.89	250.41	551.88	-224.33
592.60	42.21	250.03	561.23	-233.68
605.10	44.14	249.40	570.35	-242.80
617.50	46.17	249.40	579.09	-251.54
629.90	48.10	249.44	587.53	-259.98
642.40	50.03	249.36	595.71	-268.16
654.80	51.53	250.52	603.56	-276.01
667.30	53.46	250.31	611.17	-283.62
679.70	55.13	250.52	618.40	-290.85
692.20	56.37	251.75	625.44	-297.89
704.70	57.07	251.68	632.30	-304.75
717.10	57.33	251.48	639.01	-311.46
729.60	57.42	251.13	645.75	-318.20
742.10	57.33	251.23	652.49	-324.94
746.40	57.60	251.19	654.80	-327.25
768.10	58.12	250.56	666.35	-338.80
777.70	59.97	251.47	671.29	-343.74
787.20	61.91	251.57	675.90	-348.35
796.20	63.49	251.96	680.03	-352.48
805.40	64.90	251.64	684.03	-356.48
814.50	66.30	251.37	687.79	-360.24
823.70	67.62	250.66	691.39	-363.84
832.70	68.85	250.79	694.73	-367.18
841.60	70.17	251.08	697.85	-370.30
850.70	71.75	250.99	700.81	-373.26
859.90	73.16	251.44	703.59	-376.04
869.20	74.74	251.48	706.16	-378.61
878.50	76.24	252.31	708.49	-380.94
887.40	76.24	252.31	710.61	-383.06
896.60	76.06	251.87	712.81	-385.26
905.90	77.03	251.24	714.97	-387.42
914.90	77.21	251.34	716.98	-389.43
924.20	77.03	251.53	719.05	-391.50
933.40	77.12	251.10	721.11	-393.56
942.70	78.61	250.74	723.06	-395.51
951.90	78.70	250.54	724.87	-397.32
961.20	78.96	250.31	726.67	-399.12
970.30	78.52	250.55	728.45	-400.90
979.40	78.52	249.71	730.26	-402.71
988.70	78.17	249.45	732.14	-404.59
997.60	77.91	249.34	733.99	-406.44

Depth (m MDRT)	Inclination (°)	Azimuth (°)	m TVDRT	m TVDSS
1006.70	77.56	249.64	735.92	-408.37
1016.00	77.38	249.37	737.94	-410.39
1025.20	79.05	248.74	739.82	-412.27
1034.30	78.88	249.24	741.56	-414.01
1043.50	78.35	249.07	743.37	-415.82
1052.60	78.00	248.98	745.24	-417.69
1061.90	78.00	248.89	747.17	-419.62
1071.10	78.00	248.45	749.08	-421.53
1080.20	77.82	247.92	750.99	-423.44
1089.30	78.61	248.71	752.85	-425.30
1098.40	79.67	249.15	754.56	-427.01
1107.70	79.32	249.51	756.26	-428.71
1116.80	78.79	249.59	757.99	-430.44
1126.00	78.79	248.98	759.78	-432.23
1135.10	78.35	248.63	761.58	-434.03
1144.50	78.26	248.80	763.48	-435.93
1153.30	78.52	248.28	765.26	-437.71
1162.60	78.17	248.54	767.13	-439.58
1171.90	78.08	248.19	769.05	-441.50
1181.20	77.73	248.45	771.00	-443.45
1190.70	78.44	248.54	772.96	-445.41

2.4 Under-Reaming

None

2.5 Perforations

Top (m MDRT)	Base (m MDRT)	Net Pay (m)	Comments
746.30	1203.80	22.30	Pre-perforated

2.6 Casing and Cementing

Casing Interval	OD	Shoe (m MDRT)	Weight (lbs/ft)	Grade	Thread
Conductor	14"	10.00	Composition: Steel; Grade: X42: Type: API		
Surface	9 5/8"	87.00	36lbs/ft	K55	BTC
Intermediate	7"	763.00	23lbs/ft	K55	BTC
Production	4 1/2"	1204.50	2.68lbs/ft	GRE	N/A

Cementing Interval	Class	Slurry Volume (bbls)	Weight (ppg)	Additives	Displacement Water Volume (bbls)	Cement Returns Volume (bbls)	Cemented By
Surface	Not Recorded					Cement tagged at 77.96mMDRT	TCL
Production	A	89.4	12.5	Antifoam - 3gal Dispersant - 240.3lbs Extender - 1245lbs Fluid Loss Preventer - 144.8lbs Lost Circulation Material – 50lbs Spacer – 12bbls	97.0	32.0	Schlumberger

**Refer to Appendices for Cementing Report*

3 GEOLOGY AND EVALUATION

3.1 Surat Basin Setting

The Surat Basin is a large intracratonic basin of Mesozoic age covering approximately 300,000km² of south-eastern Queensland and northern New South Wales. The basin forms part of the larger Great Australian Basin, and interfingers westward across the Nebine Ridge with the Eromanga Basin, and eastward across the Kumbarilla Ridge with the Clarence-Moreton Basin. Basement blocks consisting of the Central West Fold Belt and the New England Fold Belt limit the basin to the south, while in the north the basin has been eroded and unconformably overlies Triassic and Permian sediments of the Bowen Basin. The Surat Basin contains up to 2500m of sedimentary rocks deposited during the Latest Triassic to Early Cretaceous periods (Figure 3). The Latest Triassic to Earliest Cretaceous succession in the basin consists of five fining-upwards sedimentary cycles dominated by fluvio-lacustrine deposits. The lower part of each cycle typically comprises coarse-grained mature sandstone, grading up into more labile sandstone and siltstone, mudstone and coal in the upper part. In the Cretaceous, inundation of the land through an increase in sea level led to deposition of predominantly coastal plain and shallow marine sediments in two cycles.

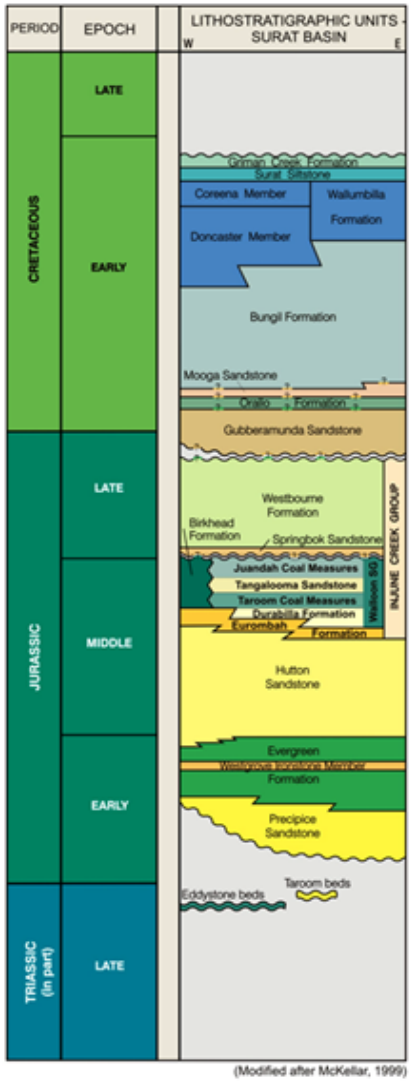


Figure 3. Stratigraphy Surat Basin

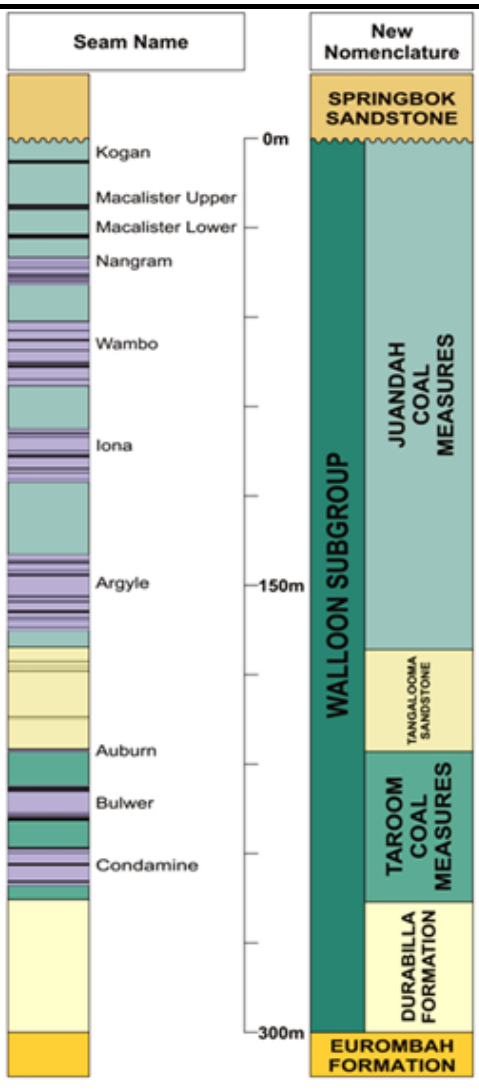


Figure 4. Stratigraphy - Walloon Subgroup

Structurally the Surat Basin is relatively simple, with the area of maximum deposition, the Mimosa Syncline, overlying the thickest Permian-Triassic rocks in the Taroom Trough of the underlying Bowen Basin. Major faulting within the basin predominantly mirrors basinal boundary faults of the underlying Bowen Basin. There is substantial folding across the basin, which is due to compaction and draping, as well as some rejuvenation of older pre-Jurassic structures and faults. Formations outcrop along the northern erosional boundary and dip gently to the south and southwest at less than 5°.

The middle Jurassic Walloon Subgroup forms part of the Injune Creek Group and is developed throughout the Surat Basin, ranging in thickness from less than 50m to greater than 700m. It comprises very-fine to medium grained, argillaceous sandstone, siltstone, mudstone and coal with minor calcareous sandstone, impure limestone and ironstone. In the northeast Surat Basin, the formation is divided into the Taroom Coal Measures, Tangalooma Sandstone and Juandah Coal Measures.

The Juandah Coal Measures generally comprise six named coal groups or seams. In descending stratigraphic order these are the Kogan, Macalister, Nangram, Wambo, Iona and Argyle Seams (Figure 4). The Macalister Seam can occur as two distinctive intervals and have been informally referred to as the Macalister Upper and Macalister Lower Seams by QGC. The Taroom Coal Measures generally comprises three coal groups or seams, informally referred to by QGC as the Auburn, Bulwer and Condamine Seams. The section of the Walloon Subgroup beneath the Taroom Coal Measures is defined by QGC as the Durabilla Formation, from exploration work by QGC.

References

SCOTT, S., ANDERSON, B., CROSDALE, P., DINGWALL, J. AND LEBLANG G., 2004: Revised geology and coal seam gas characteristics of the Walloon Subgroup - Surat Basin, Queensland. In: Boult, P.J., Johns, D.R. and Lang, S.C. (Eds), Eastern Australasian Basins Symposium II, Petroleum Exploration Society of Australia, Special Publication, 345-355.

3.2 Stratigraphic Units Drilled

Age	Unit	Depth (m MDRT)	Depth (m TVDSS)	Thickness (mMD)	Net Coal (m)
Late Jurassic	Gubberamunda Sandstone	4.50	323.05	40.54	0.00
Late Jurassic	Westbourne Formation	45.04	282.51	83.48	0.00
Late Jurassic	Norwood Mudstone	128.52	199.03	81.88	0.00
Late Jurassic	Springbok Sandstone	210.40	117.15	91.24	0.00
Middle Jurassic	Upper Juandah Coal Measures	301.64	26.14	140.55	0.00
Middle Jurassic	Lower Juandah Coal Measures	442.19	-109.16	141.05	0.00
Middle Jurassic	Tangalooma Sandstone	583.24	-226.69	199.36	0.00
Middle Jurassic	Taroom Coal Measures	782.60	-346.15	408.07	22.30
Middle Jurassic	Eurombah Formation	1190.67	-445.40	13.83	0.00
TD		1204.50	775.72	-	

3.3 Mudlogging

Ditch gas was monitored and recorded constantly from a gas trap via a Pason gas detection system. The Pason data is recorded and presented in the Wellsite Lithology Log (Appendix 5) and Final Composite Log (Appendix 4). Ditch cuttings were monitored from 270.00m MDRT to total depth and described as required. Washed and dried samples were collected and stored for The Department of Natural Resources and Mines. Cuttings descriptions are recorded in the Wellsite Lithology Log (Appendix 5) and Final Composite Log (Appendix 4).

3.4 Wireline Logs

Run	Date	Measurement	From (m MDRT)	To (m MDRT)	BHT (degC)	Time since last circulation	Contractor
1	26-11-2013	GR-MAI-MDN-MPD-MSS	1192.98	50.00	51°C	20:00	Weatherford
2	27-11-2013	CMI-CXD	1197.00	764.00	49°C	59:30	Weatherford

3.5 Formation Test (DST / Wireline)

None

LIST OF APPENDICES

LIST OF ENCLOSURES

APPENDIX 1

SURVEY LOCATION PLAN

4100/-16-/
4100/-36-/1

WARNING – PLAN MAY BE ROLLED – A FOLDED OR MUTILATED PLAN WILL NOT BE ACCEPTED

SURVEY PLAN

Fyfe Pty Ltd (ACN 008 116 130) hereby certify that I have/the Company has surveyed the location of the petroleum well as shown on this plan, that the survey was performed in accordance with the Petroleum and Gas (Production and Safety) Act 2004 and the Survey and Mapping Infrastructure Act 2003 and associated Regulations and Standards and achieves the accuracies of the Standards and the survey was completed on 18/10/2012.

Authorised Delegate

28/11/12
Date

Catalogued:	Examined:	Registered:
...../...../.....	...../...../.....	...../...../.....
		Chief Surveyor

Corners and boundaries have not been reinstated. Connections have been made to the marks shown on this plan only.

Co–ordinates and Levels obtained by RTK GPS traverse from OPM 183530

Bench Marks are deep driven Iron Star Pickets with Witness posts unless otherwise noted.

DISTANCES ARE GRID.

N

40 AB226 Parish of Golden 35 AB226 153 FTY829 42 FT829 ROAD Parish of Sollow

WELDONS ROAD 43 FT828

County of Aberdeen County of Fortescue

Locality of Wandoan Locality of Woleebee 159

159 FTY793

Locality of Bundi Locality of Woleebee

CAM 127 8 CAM 138 7 CAM 147 9 CAM 146 6 ROAD

FTY793 No O Mk Intsn fences 39 CAM 154 26 FT165

SEE SHEET 2 10 89°00'12" 4525·223 PL277 (8–18) 279°16'30" (6512·533) 27 FT132 CAM 153 40 42 CAM 155 43 SEE SHEET 4 19 FT60

25 AB130 26 AB131

SEE CAM 159 11 13 CAM 160 CAM 161 14 15 CAM 169 45 44 CAM 163 CAM 164 47

CAM 166 36 SHEET 3

CAM 18 20 19 CAM 19 17 CAM 168 CAM 175 21 16 FT132 CREEK WANDOAN 21 FT669

SEE SHEET 5 Parish of Hinchley SUNDOWN ROAD

CAM 183 35 CAM 193 34 23 Parish CAM 194 CAM 204 56 FT264

PL276 SEE

Horse Creek (East Branch)

CAM 213 32 CAM 212 30 33 of Woleebee 1 FT87 3 FT87

SHEET 6

CAM 220 28 29 27 26 GADSBYS ROAD

18 AB53 19 AB53 10 FT87

For Derived M.G.A Co–ordinates Tables See Sheet 2.

For Geographic Co–ordinates Tables See Sheet 3.

For Permanent Mark Tables See Sheet 4.

Scale 1:50000 – Lengths are in Metres.

500 0 500 1000 1500 2000 2500 3000 3500 4000 4500 5000 5500 6000 6500 7000

0 50 mm 100 mm 150 mm

MINING RESOURCES

Plan of PWL of CAM 18,19,127,138,146, 147,153–155,159–161,163,164,166,168,169, 175,183,193,194,204,212,213 & 220

PARISH: **HINCHLEY/SOLLOW** COUNTY: **Aberdeen** / **Fortescue**

LOCALITY: *WOLEEBEE* LOCAL AUTHORITY: *WESTERN DOWNS R.C*

Drawn by:	Meridian:
CWW	*MGA Zone 55 by GPS*

Field Notes: *NO*

SCALE: *1:50000*

Mining District: *Dalby*

MP39973

Sheet 1 of 6

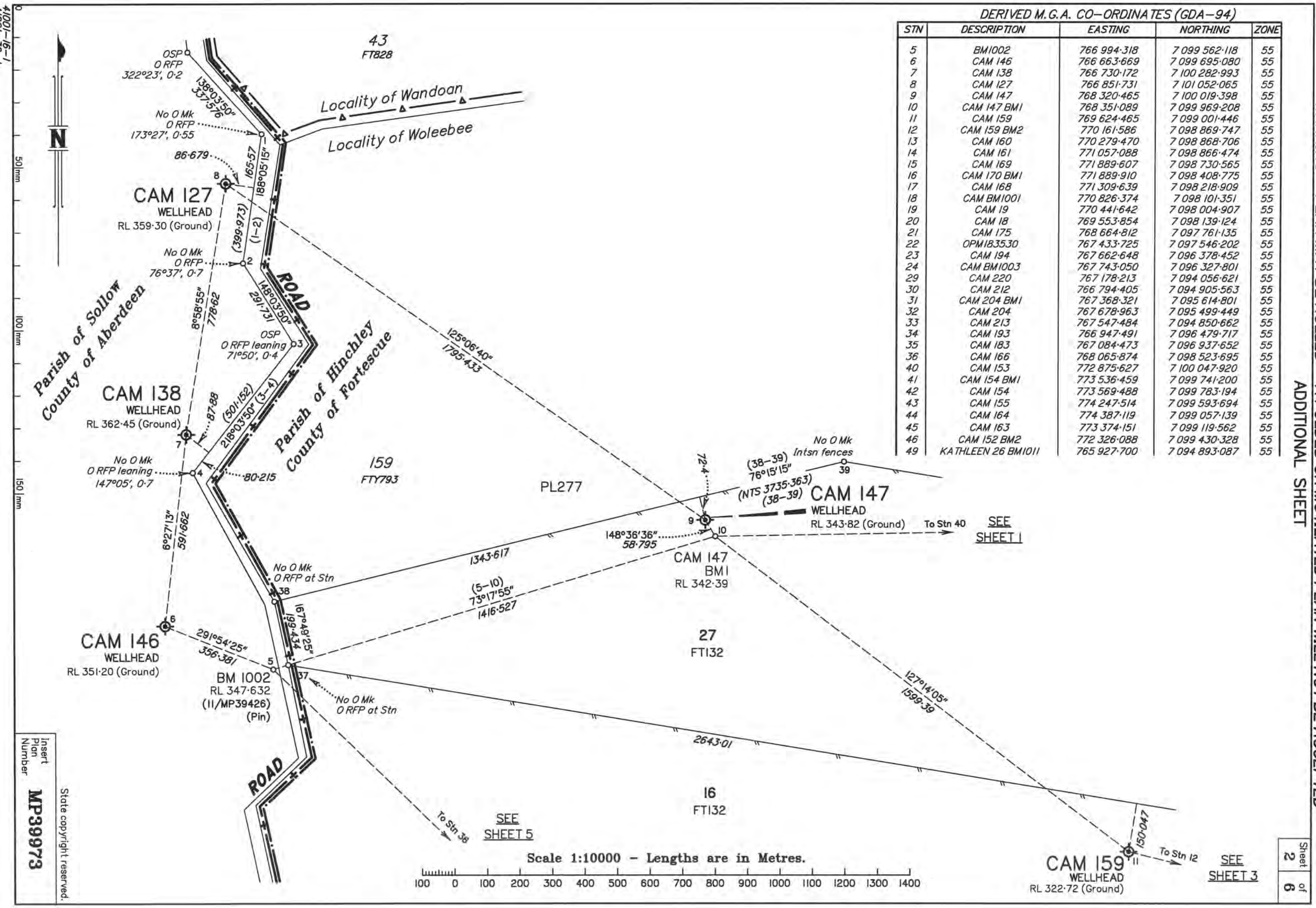
4100/-16-1
4100/-36-1

WARNING – PLAN MAY BE ROLLED – A FOLDED OR MUTILATED PLAN WILL NOT BE ACCEPTED

ADDITIONAL SHEET

DERIVED M.G.A. CO-ORDINATES (GDA-94)

STN	DESCRIPTION	EASTING	NORTHING	ZONE
5	BM1002	766 994·318	7 099 562·118	55
6	CAM 146	766 663·669	7 099 695·080	55
7	CAM 138	766 730·172	7 100 282·993	55
8	CAM 127	766 851·731	7 101 052·065	55
9	CAM 147	768 320·465	7 100 019·398	55
10	CAM 147 BM1	768 351·089	7 099 969·208	55
11	CAM 159	769 624·465	7 099 001·446	55
12	CAM 159 BM2	770 161·586	7 098 869·747	55
13	CAM 160	770 279·470	7 098 868·706	55
14	CAM 161	771 057·088	7 098 866·474	55
15	CAM 169	771 889·607	7 098 730·565	55
16	CAM 170 BM1	771 889·910	7 098 408·775	55
17	CAM 168	771 309·639	7 098 218·909	55
18	CAM BM1001	770 826·374	7 098 101·351	55
19	CAM 19	770 441·642	7 098 004·907	55
20	CAM 18	769 553·854	7 098 139·124	55
21	CAM 175	768 664·812	7 097 761·135	55
22	OPM183530	767 433·725	7 097 546·202	55
23	CAM 194	767 662·648	7 096 378·452	55
24	CAM BM1003	767 743·050	7 096 327·801	55
29	CAM 220	767 178·213	7 094 056·621	55
30	CAM 212	766 794·405	7 094 905·563	55
31	CAM 204 BM1	767 368·321	7 095 614·801	55
32	CAM 204	767 678·963	7 095 499·449	55
33	CAM 213	767 547·484	7 094 850·662	55
34	CAM 193	766 947·491	7 096 479·717	55
35	CAM 183	767 084·473	7 096 937·652	55
36	CAM 166	768 065·874	7 098 523·695	55
40	CAM 153	772 875·627	7 100 047·920	55
41	CAM 154 BM1	773 536·459	7 099 741·200	55
42	CAM 154	773 569·488	7 099 783·194	55
43	CAM 155	774 247·514	7 099 593·694	55
44	CAM 164	774 387·119	7 099 057·139	55
45	CAM 163	773 374·151	7 099 119·562	55
46	CAM 152 BM2	772 326·088	7 099 430·328	55
49	KATHLEEN 26 BM1011	765 927·700	7 094 893·087	55



Insert Plan Number **MP39973**

4100/-16-1
4100/-36-1

WARNING – PLAN MAY BE ROLLED – A FOLDED OR MUTILATED PLAN WILL NOT BE ACCEPTED

ADDITIONAL SHEET

GEOGRAPHIC CO-ORDINATES (GDA-94)

STN	DESCRIPTION	LATITUDE	LONGITUDE
6	CAM 146	S 26°11'51·2020"	E 149°40'06·4356"
7	CAM 138	S 26°11'32·0672"	E 149°40'08·3938"
8	CAM 127	S 26°11'07·0133"	E 149°40'12·1992"
9	CAM 147	S 26°11'39·5607"	E 149°41'05·8270"
11	CAM 159	S 26°12'11·7354"	E 149°41'53·5223"
13	CAM 160	S 26°12'15·6024"	E 149°42'17·1983"
14	CAM 161	S 26°12'15·1473"	E 149°42'45·1897"
15	CAM 169	S 26°12'18·9939"	E 149°43'15·2579"
17	CAM 168	S 26°12'36·0021"	E 149°42'54·7682"
19	CAM 19	S 26°12'43·5402"	E 149°42'23·6847"
20	CAM 18	S 26°12'39·7830"	E 149°41'51·6266"
21	CAM 175	S 26°12'52·6563"	E 149°41'19·9062"
23	CAM 194	S 26°13'38·2270"	E 149°40'44·8593"
29	CAM 220	S 26°14'53·9439"	E 149°40'29·1451"
30	CAM 212	S 26°14'26·6352"	E 149°40'14·6940"
32	CAM 204	S 26°14'06·7580"	E 149°40'46·1013"
33	CAM 213	S 26°14'27·9129"	E 149°40'41·8505"
34	CAM 193	S 26°13'35·4184"	E 149°40'19·0368"
35	CAM 183	S 26°13'20·4571"	E 149°40'23·6283"
36	CAM 166	S 26°12'28·2984"	E 149°40'57·7775"
40	CAM 153	S 26°11'35·5469"	E 149°43'49·7503"
42	CAM 154	S 26°11'43·6675"	E 149°44'14·9234"
43	CAM 155	S 26°11'49·3551"	E 149°44'39·4702"
44	CAM 164	S 26°12'06·6807"	E 149°44'44·9036"
45	CAM 163	S 26°12'05·3490"	E 149°44'08·3970"

27
FT132

SEE SHEET 2

To Stn 10

150·047

667·836

CAM 159
WELLHEAD
RL 322·72 (Ground)

11

103°46'36"
553·031

12

CAM 159
BM2
RL 324·21

13

175·483

CAM 160
WELLHEAD
RL 322·91 (Ground)

90°09'52"
777·621

14

CAM 161
WELLHEAD
RL 315·86 (Ground)

767·81

52·354

843·54

99°16'18"
843·591

90°30'21"
117·889

PL277

To Stn 46

SEE SHEET 4

52·307

To Stn 45

15

CAM 169
WELLHEAD
RL 306·56 (Ground)

179°58'46"
321·79

16

CAM 170
BM1
RL 317·642
(16/MP39946)

16
FT132

251°52'54"
610·544

17

CAM 168
WELLHEAD
RL 319·00 (Ground)

256°19'40"
497·358

18

CAM
BM 1001
RL 323·878
(Pin)

255°55'38"
396·636

19

CAM 19
WELLHEAD
RL 323·05 (Ground)

278°35'49"
897·876

20

To Stn 21

CAM 18
WELLHEAD
RL 330·72 (Ground)

SEE SHEET 5

Scale 1:10000 – Lengths are in Metres.

100 0 100 200 300 400 500 600 700 800 900 1000 1100 1200 1300 1400

Insert Plan Number
MP39973

Sheet 3 of 6

4100I-16-1
4100I-36-1

0
50 mm
100 mm
150 mm

CONTROL COORDINATES MGA ZONE 55

PM	EASTING	NORTHING	RL
OPM183530	767 433·725	7 097 546·202	347·941

CAM 153
WELLHEAD
RL 327·93 (Ground)

To Stn 10

SEE SHEET 1

40

114°53'55" / 728·544

CAM 154
WELLHEAD
RL 322·02 (Ground)

42

41°39'45" / 826·688

CAM 154 41
BM1
RL 322·25

38°11'10" / 53·427

105°36'54" / 704·01

CAM 155
WELLHEAD
RL 309·05 (Ground)

43

46

CAM 152
BM2
RL 314·728
(11/MP39946)

27
FT132

165°24'57" / 554·419

CAM 163
WELLHEAD
RL 301·85 (Ground)

45

273°31'35" / 1014·89

44

CAM 164
WELLHEAD
RL 292·52 (Ground)

31°57'15" / 824·733

255°19'01" / 1534·663

PL277

52·307

To Stn 14

15

CAM 169
WELLHEAD
RL 306·56 (Ground)

1590·338

SEE SHEET 3

179°56'45" / 321·79

No O Mk
Cen RFP
47

CREEK

WANDOAN

19
FT60

16

To Stn 17

CAM 170
BM1
RL 317·642
(16/MP39946)

21
FT669

Scale 1:10000 – Lengths are in Metres.

100 0 100 200 300 400 500 600 700 800 900 1000 1100 1200 1300 1400

Insert Plan Number
MP39973

ADDITIONAL SHEET

Sheet 4 of 6

WARNING – PLAN MAY BE ROLLED – A FOLDED OR MUTILATED PLAN WILL NOT BE ACCEPTED

ADDITIONAL SHEET

Sheet 5 of 6

SEE SHEET 2

SEE SHEET 2

To Stn 10

To Stn 6

27
FT132

BM 1002
RL 347·632
(11/MP39426)
(Pin)

314°06'01"
1492·164

ROAD

36 CAM 166
WELLHEAD
RL 332·20 (Ground)

CAM 18
WELLHEAD
RL 330·72 (Ground)

To Stn 19

20

SEE SHEET 3

16
FT132

PL277

32°53'27"
1164·09

246°58'
NTS 966·06

21 CAM 175
WELLHEAD
RL 332·75 (Ground)

260°05'48"
1249·709

County of Fortescue
Parish of Hinchley

County of Aberdeen
Parish of Sollow

48

22

No O Mk
Cen SFP
OPM

OPM183530
RL 347·941

26
AB131

SUNDOWN ROAD

295°51'07"
701·648

Parish of Woleebee

PL276

/
FT87

35 CAM 183
WELLHEAD
RL 340·35 (Ground)

168°54'31"
1189·977

164°13'50"
(1274·83)

16°39'13"
477·984

65·14

72·17

34 CAM 193
WELLHEAD
RL 334·26 (Ground)

CAM 194
WELLHEAD
RL 343·80 (Ground)

23

24

25 SEE DIAG

122°12'35"
95·026

CAM
BM 1003
RL 344·982
(36/MP39972)
(Pin)

To Stn 32

To Stn 26

To Stn 31

SEE SHEET 6

DIAGRAM
Not to Scale

To Stn 23

/
FT87

No O Mk
O RFP

24

25

CAM
BM 1003
RL 344·982
(36/MP39972)
(Pin)

26
AB131

To Stn 32

To Stn 26

County of Fortescue
Parish of Woleebee

County of Aberdeen
Parish of Sollow

Scale 1:10000 – Lengths are in Metres.

100 0 100 200 300 400 500 600 700 800 900 1000 1100 1200 1300 1400

0 50|mm 100|mm 150|mm

Insert Plan Number **MP39973**

41001–16–1
41001–36–1

WARNING – PLAN MAY BE ROLLED – A FOLDED OR MUTILATED PLAN WILL NOT BE ACCEPTED

ADDITIONAL SHEET

Sheet 6 of 6

SEE SHEET 5

To Stn 35

To Stn 22

CAM 193
WELLHEAD
RL 334·26 (Ground)
34

CAM 194
WELLHEAD
RL 343·80 (Ground)
23

65·14

SEE DIAG SHEET 5

122°12'35"
95·026
24
25

CAM
BM 1003
(36/MP39972)
RL 344·982
(Pin)

PL276

PL277

334°03'16"
961·862

184°25'26"
830·827

913·995
148°13'50"

CAM 204
BM1
RL 343·18
31

110°22'18"
331·368
32

CAM 204
WELLHEAD
RL 354·93 (Ground)

26
AB131

38°58'47"
912·359

191°27'22"
661·975

175°01'25"
2780·819

County of Aberdeen
Parish of Sollow

County of Fortescue
Parish of Woleebee

KATHLEEN 26
BM 1011
(15/MP39972)
RL 328·94
(Pin)
49

CAM 212
WELLHEAD
RL 336·89 (Ground)
30

CAM 213
WELLHEAD
RL 344·90 (Ground)
33

1
FT87

303°46'43"
1504·479

335°40'20"
931·671

204°56'27"
875·707

Locality of Woleebee

CAM 220
WELLHEAD
RL 356·60 (Ground)
29

28 Cen RFP at Stn

(1711·496)
1457·946
275°03'05"
(27–28)

175·465

253·55

27
Cen RFP at Stn

297°58'20"
646·326

26
Cen RFP at Stn

Locality of Bundi

19
AB53

GADSBYS ROAD

10
FT87

Scale 1:10000 – Lengths are in Metres.

100 0 100 200 300 400 500 600 700 800 900 1000 1100 1200 1300 1400

0 50|mm 100|mm 150|mm

Insert Plan Number **MP39973**

41001–16–1
41001–36–1

APPENDIX 2a

DAILY DRILLING REPORTS (12 ¼" Surface Section)

DAILY DRILLING REPORT

Cam_19

TRC:

Report Start Date: 7/03/2013

Report #: 1

UWI	Well PID	Tenure	Field Name	State/Province	Country
100000744838	CAM_WH019	PL 277	Cam	Queensland	AUS

Well Type	Well Configuration Type	Spud Date	Job Start Date	Job End Date
Appraisal	Vertical	7/03/2013 09:00	7/03/2013 06:15	7/03/2013 18:00

JOB DETAILS

AFE Number	Total AFE + Supp Amount (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)	Daily Mud Field Est (Cost)	Cum Mud Field Est (Cost)
01	657,142.00	0.00			

Target Formation	Cum Time Log Days (days)	Problem Time Hours (hr)	Cum Problem Time Hours (hr)	Percent Problem Time (%)	Cum Percent Problem Time (%)
Juandah and Taroom	0.50	0.00	0.00	0.00	0.00

DAILY OPERATIONS

Ground Elevation (m)	Latitude (°)	Longitude (°)
323.60	26° 12' 43.558" S	149° 42' 23.676" E

Rig (Names)	Planned TD (mKB)	End Depth (mKB)	Weather
TCL 1	825.00	88.00	

HSSE

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)

Type	Number of Reports

HSE INCIDENTS

Date	Type	Sub Type	Severity	Comment

SAFETY CHECK SUMMARY

Type	Last Date	Days Last Chk (days)	Next Date

DAILY CONTACTS

Contact Name	Title	Mobile

POB

Company	Job Title	Count

DAILY REPORT

Last 24hr Op's Summary

Rig Moved In. Drilled to TD, backreamed and cased.

Summary 00:00 - 06:00

WOD

Planned Op's

Drill and case

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00

Start Time	End Time	Dur (hr)	Class	NPT (hr)	Phase	Op	Act Desc
00:00	06:00	6.00	P			WOD	WOD
06:00	06:15	0.25	P		RMO	SM	WOD
06:15	08:15	2.00	P		RMO	RM	Rig moved From Cam 189 to Cam 19
08:15	09:00	0.75	P		RMO	RU	Rigged up on Cam 19
09:00	14:30	5.50	P		RMO	RDR	Drilled ahead with 12.25" Pdc to 83.5m GL
14:30	15:00	0.50	P		RMO	CIC	Circulated hole till clean and held TT
15:00	16:15	1.25	P		RMO	RW	Backreamed hole to surface worked tight spots
16:15	16:45	0.50	P		RMO	RRC	Rigged up to run casing
16:45	17:30	0.75	P		RMO	RC	Run 14 joints of 9.625" casing with a 6m shoe track
17:30	18:00	0.50	P		RMO	CIC	Installed well head circulated and landed same
18:00	00:00	6.00	P			WOD	Wait on daylight

CASING STRINGS

Csg Des	OD (in)	SD (mKB)
Conductor	14	10.00
Surface Casing	9 5/8	87.00

MUD PUMP

 # 1, Gardner-Denver, PZ-8

Pump Rating (hp)	Rod Diameter (in)	Stroke Length (in)
750.0	2.2441	7.99

Liner Size (in)	Volume Per Stroke Override (bbl/stk)
6 1/2	

Pressure (psi)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)

DRILL STRING AND BIT INFORMATION

BHA #1, Surface Hole

Bit Run	Size (in)	Make	Model	IADC Codes	Serial Number	Length (m)
1RR	12 1/4	NOV	S519	___		

Nozzles (1/32")	Bit Total Fluid Area (nozzles) (in²)	IADC Bit Dull
		-------

Drill String Length (m)	BHA Weight in Air (1000lbf)	BHA ROP (m/hr)
76.80	15	14.2

String Components

NOV S519, Bit, Bit Sub w/Float, Drill Collar, Drill Collar, Drill Collar, Drill Collar, HWDP, HWDP, HWDP, HWDP

DAILY DRILLING REPORT

Cam_19

TRC:

Report Start Date: 7/03/2013

Report #: 1

DRILLING PARAMETERS

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth Drilled (m)	Drilling Time (hr)	Cum Drilling Time (hr)	Interval ROP (m/hr)	Flow Rate (gpm)
Original Hole	10.00	88.00	78.00	5.50	5.50	14.2	
Weight on Bit (1000lbf)	**Surface RPM (rpm)**	**SPP (psi)**	**Drill Str Wt (1000lbf)**	**PU Str Wt (1000lbf)**	**SO Str Wt (1000lbf)**	**Drilling Torque (ft•lb)**	**Off Bottom Torque (ft•lb)**

APPENDIX 2b

DAILY DRILLING REPORTS (8 ½" and 6 ⅛" Sections)

DAILY DRILLING REPORT

Cam_19

TRC: 405.00

Report Start Date: 16/11/2013

Report #: 1

UWI	Well PID	Tenure	Field Name	Well Type	State/Province	Country
100000744838	CAM_WH019	PL 277	Cam	Appraisal	Queensland	AUS
Well Configuration Type	**Well Status**	**Well Sub-Status**	**Spud Date**	**Rig Release Date**	**Job Start Date**	**Job End Date**
Vertical	Available		7/03/2013 09:00	1/12/2013 15:30	16/11/2013 08:00	2/12/2013 11:30

JOB DETAILS

AFE Number	Total AFE + Supp Amount (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)	Daily Mud Field Est (Cost)	Cum Mud Field Est (Cost)
01	1,361,055.00	180,604.79	180,604.79		
Target Formation	**Cum Time Log Days (days)**	**Problem Time Hours (hr)**	**Cum Problem Time Hours (hr)**	**Percent Problem Time (%)**	**Cum Percent Problem Time (%)**
Juandah and Taroom	0.67	5.50	5.50	34.38	34.38

DAILY OPERATIONS

Most Likely Duration (no plan ch...	Original KB/RT Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)	Latitude (°)	Longitude (°)
9.21	328.10	323.60	4.50	26° 12' 43.558" S	149° 42' 23.676" E

Rig (Names)	Planned TD (mKB)	TD (max) (mKB)	End Depth (m...	Depth Progress (m)	Weather
Saxon 166	1,331.00	1,204.50	0.00		Sunny

HSSE

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
405.00	405.00

Safety Observations

Type	# Rpts
Inductions	1
Good Observations	3
STOP Cards	13
PTW	4

SAFETY CHECK SUMMARY

Type	Last Date	Days Last Chk (days)	Next Date
BOP Connection Test			
Drills/Exercise			
ESD Test			
Kick Drills			
Mast Inspection			
Permit to Work	16/11/2013	0	17/11/2013
Pre-Job Meetings			
Pre-Tour Meetings	16/11/2013	0	17/11/2013
Safety Meetings	16/11/2013	0	17/11/2013
Site Inductions			
Toolbox Talk			
Weekly Safety Meeting			

DAILY CONTACTS

Contact Name	Title	Mobile
Arfa Chiha	IPM-Drilling Super	0467785174
Ahmed Gabry	Wellsite Supervisor	0448155134
Cory Ursulak	Rig Manager	0419938581
Ben Marshall	Geologist	

POB

Company	Job Title	Count
Schlumberger IPM	WSS	1
QGC	Geologist	1
Saxon	Rig Crew	17
Tresed	Vacuum Truck Driver	2
ECM	Caterers	3
DMW	Welder	1
NMT	Truck drivers	2

DAILY REPORT

Last 24hr Op's Summary

HSSE : No incidents, accidents, environmental or land access issues.

R/D & Moved Main camp from Ross 174 to CAM camp site (56km). R/U camp. Move rig carrier and main loads from Ross 174 to CAM 19 (move 45km). Spot rig loads on CAM 19. Wait on daylight.

Summary 00:00 - 06:00

Wait on daylight to complete rigmove.

Planned Op's

R/D & move mini camp & loose items loads from ROSS 174 to CAM 19. R/U ops. Complete rig up. Spud in the well CAM 19. N/U & perform full P/T BOP & choke manifold.

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00

Start Time	End Time	Dur (hr)	Class	NPT (hr)	Phase	Op	Act Desc
08:00	13:00	5.00	P		RMI	RM	Mobilized Rig carrier from Ross 174 to CAM 19. Move Distance = 45km. PJSM. R/D Main camp. Loaded and moved to CAM camp site (QGC Well Engineering Asset). Move Distance = 56km. 8 loads. 8 trailers & Loader & 1 winch truck. Loaded & moved 1 load pipe trailer.

DAILY DRILLING REPORT

Cam_19

TRC: 405.00

Report Start Date: 16/11/2013

Report #: 1

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00

Start Time	End Time	Dur (hr)	Class	NPT (hr)	Phase	Op	Act Desc
13:00	15:30	2.50	P		RMI	RM	PJSM. R/U Main camp. Trucks back to Ross 174. Continued load and move rig loads : Mud tank, Mud pump & loose items load, Doghouse, MCC/Koomey unit, pipe trailer, chemicals, Daytank, Tool shack. Spot Rig carrier overwell center
15:30	18:30	3.00	P		RMI	RM	Moved and spot all Rig loads. Filled up Mud tanks with water.
18:30	00:00	5.50	TP	5.50	RMI	WOD	Wait on day light to complete rig move (mini camp, Floc tank, loose items). Continued loading trailers in Ross 174 with loose items. Continued R/U walkways in main camp. ROSS 174 : 3 POB. 1 of PM rig crew.

CASING STRINGS

Csg Des	OD (in)	SD (mKB)
Conductor	14	10.00
Surface Casing	9 5/8	87.00

MUD PROPERTIES

Mud Type	Time	Depth (mKB)	Weight (lb/gal)	Funnel Viscosity (s/qt)

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)

MUD PUMP

 # 1, Gardner-Denver, PZ-8

Pump Rating (hp)	Rod Diameter (in)	Stroke Length (in)
750.0		7.99

Liner Size (in)	Volume Per Stroke Override (bbl/stk)

Pressure (psi)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)

FORMATIONS (LAST 5)

Formation Name	Prog Top MD (mKB)	Drill Top MD (mKB)

LEASE FLUIDS

Fluid	To Lease (bbl)	Source	From Lease (bbl)	Dest	BS&W (%)	Carrier	Ref #	Note
Drilling Water	220.0	WCK POND		Water storage tank		NMT		
Treated water	250.0	MI plant		Mud tank		Tresed		
Treated water	220.0	MI plant		Water storage tank		Tresed		

JOB SUPPLIES

Supply Item Des	Unit Label	Loc	Vendor	Received	Consumed	Cum On Loc
Diesel Fuel : Rig	L	Rig	IOR	1,850.0	500.0	1,350.0
Diesel Fuel : mini camp	L	Rig	IOR	450.0	100.0	350.0
Diesel Fuel: camp	L	Camp	IOR	4,000.0	100.0	3,900.0
Diesel fuel: Vehicles	L	Rig	DN CROSS	0.0	140.0	-140.0
Potable Water	L	Camp	DN CROSS	8,000.0	2,000.0	6,000.0
Potable Water, mini camp	L	Rig	DN CROSS	4,000.0	1,400.0	2,600.0

DRILL STRING AND BIT INFORMATION

BHA #<stringno>, <des>

Bit Run	Size (in)	Make	Model	IADC Codes	Serial Number	Length (m)

Nozzles (1/32")	Bit Total Fluid Area (nozzles) (in²)	IADC Bit Dull

Drill String Length (m)	BHA Weight in Air (1000lbf)	BHA ROP (m/hr)

String Components

DRILLING PARAMETERS

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth Drilled (m)	Drilling Time (hr)	Cum Drilling Time (hr)	Interval ROP (m/hr)	Flow Rate (gpm)

Weight on Bit (1000lbf)	Surface RPM (rpm)	SPP (psi)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Drilling Torque (ft•lb)	Off Bottom Torque (ft•lb)

ANNULAR VELOCITIES (DP & DC)

Inner Bound	Sz Inner Bound (in)	Outer Boundary	Sz Outer Bound (in)	Top (mKB)	Btm (mKB)	AV (m/min)

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

UNDERREAMING INTERVALS

Top (mKB)	Btm (mKB)	OD (in)	Com

DAILY DRILLING REPORT

Cam_19

TRC: 406.00

Report Start Date: 17/11/2013

Report #: 2

UWI	Well PID	Tenure	Field Name	Well Type	State/Province	Country
100000744838	CAM_WH019	PL 277	Cam	Appraisal	Queensland	AUS
Well Configuration Type	**Well Status**	**Well Sub-Status**	**Spud Date**	**Rig Release Date**	**Job Start Date**	**Job End Date**
Vertical	Available		7/03/2013 09:00	1/12/2013 15:30	16/11/2013 08:00	2/12/2013 11:30

JOB DETAILS

AFE Number	Total AFE + Supp Amount (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)	Daily Mud Field Est (Cost)	Cum Mud Field Est (Cost)
01	1,361,055.00	32,973.95	213,578.74		
Target Formation	**Cum Time Log Days (days)**	**Problem Time Hours (hr)**	**Cum Problem Time Hours (hr)**	**Percent Problem Time (%)**	**Cum Percent Problem Time (%)**
Juandah and Taroom	1.67	5.50	11.00	22.92	27.50

DAILY OPERATIONS

Most Likely Duration (no plan ch...	Original KB/RT Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)	Latitude (°)	Longitude (°)
9.21	328.10	323.60	4.50	26° 12' 43.558" S	149° 42' 23.676" E

Rig (Names)	Planned TD (mKB)	TD (max) (mKB)	End Depth (m...	Depth Progress (m)	Weather
Saxon 166	1,331.00	1,204.50	0.00		Cloudy, late showers

HSSE

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
406.00	406.00

Safety Observations

Type	# Rpts
Good Observations	4
STOP Cards	10
Leadership Visits	1
Inductions	4

SAFETY CHECK SUMMARY

Type	Last Date	Days Last Chk (days)	Next Date
BOP Connection Test	17/11/2013	0	18/11/2013
Drills/Exercise			
ESD Test	17/11/2013	0	18/11/2013
Kick Drills			
Mast Inspection	17/11/2013	0	18/11/2013
Permit to Work	17/11/2013	0	18/11/2013
Pre-Job Meetings			
Pre-Tour Meetings	17/11/2013	0	18/11/2013
Safety Meetings	17/11/2013	0	18/11/2013
Site Inductions			
Toolbox Talk			
Weekly Safety Meeting	17/11/2013	0	18/11/2013

DAILY CONTACTS

Contact Name	Title	Mobile
Arfa Chiha	IPM-Drilling Super	0467785174
Ahmed Gabry	Wellsite Supervisor	0448155134
Cory Ursulak	Rig Manager	0419938581
Ben Marshall	Geologist	

POB

Company	Job Title	Count
Schlumberger IPM	WSS	1
QGC	Geologist	1
Saxon	Rig Crew	17
Tresed	Vacuum Truck Driver	2
ECM	Caterers	3
NMT	Truck drivers	2
Path Finder	DD & LWD engineers	4
Mi-Swaco	Mud Engineer	1
DMW	Welder	1

DAILY REPORT

Last 24hr Op's Summary

HSSE : No incidents, accidents, environmental or land access issues.

R/D & move mini camp & loose items loads from ROSS 174 to CAM 19. R/U ops. Completed rig up. Prespud meeting. Spud in the well CAM 19 @21:15 Nov. 17th 2013. N/U 11" 5K BOP. P/T Adapter @250psi/1500psi. Full P/T BOP in progress.

Summary 00:00 - 06:00

P/T BOP & choke manifold on going. Repeated Test #1 (blind rams), Test #2 (Annular), Test #3 in progress

Planned Op's

Cont. P/T BOP & choke manifold. P/U & M/U 8 1/2" slick BHA. RIH to 80m. Wash dow to TOC. Drill out cement & floats, wash rathole. Drill 3m new formation. Perform LOT. Drill 15m. POOH & RIH w/ 8 1/2" Dir BHA. Drill to 250m (KOP).

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00

Start Time	End Time	Dur (hr)	Class	NPT (hr)	Phase	Op	Act Desc
00:00	05:30	5.50	TP	5.50	RMI	WOD	Wait on daylight to complete rig move

DAILY DRILLING REPORT

Cam_19

TRC: 406.00

Report Start Date: 17/11/2013

Report #: 2

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00

Start Time	End Time	Dur (hr)	Class	NPT (hr)	Phase	Op	Act Desc
05:30	07:00	1.50	P		RMI	RM	PJSM. Loaded loose items (6 loads) and moved to CAM 19. R/D mini camp & loaded on trailers (4 loads). Last load left location @7:00AM Cont. fill up Mud tank & day tank.
07:00	10:00	3.00	P		RMI	RM	Moved & spot mini camp. Spot floc tanks & loose items.
10:00	15:30	5.50	P		RMI	RU	Cont. spot rig loads. R/U Hyd, air, fuel, water & power lines. Inspected, dropped object register & Mast pre raise checklist completed. * Held Weekly safety meeting.
15:30	16:30	1.00	P		RMI	RU	PJSM. Raised Doghouse & raised Mast.
16:30	20:00	3.50	P		RMI	RU	R/U Rig floor & cat walk. N/U BOP on 9 5/8" wellhead (surface hole predrilled), Lock Down Flange. cont. fill up tanks. Mixed 150bbl Mud(KCL 6%). Offloaded Path finder tools, tubulars and spot & R/U unit.
20:00	20:45	0.75	P		RMI	RU	Function tested ESDs. Conducted final inspection and completed pre spud check list. Rig accepted @ 20:45
20:45	21:15	0.50	P		RMI	SM	Conducted hazards hunt. Pre spud safety meeting with Rig crew & service companies, reviewed land access rules, well program and driller's instructions, safety issues, hazards hunt findings. Spud in the well CAM 19 at 21:15 on 17-11-2013
21:15	23:00	1.75	P		BOP	BOP	Pressure tested STS adaptor seals to 250/1500psi, 5/10min. Cont. N/U BOP. Connected choke, kill lines. Installed flare line, degasser line.
23:00	00:00	1.00	P		BOP	BOP	PJSM. Function tested BOP & performed Accumulator unit drawdown test. Started Full P/T BOP & choke manifold @ 250/1500 psi , 5/10min. : 1st Test hig pressure blind rams x csg xHCR failed.

CASING STRINGS

Csg Des	OD (in)	SD (mKB)
Conductor	14	10.00
Surface Casing	9 5/8	87.00

MUD PROPERTIES

Mud Type	Time	Depth (mKB)	Weight (lb/gal)	Funnel Viscosity (s/qt)
Water/KCL	23:45	92.50	8.60	27

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)
Potassium Chloride	sacks	MI-Swaco	768.0	51.0	717.0	
Xanthan Gum D	sacks	MI-Swaco	48.0	0.0	48.0	

MUD PUMP

 # 1, Gardner-Denver, PZ-8

Pump Rating (hp)	Rod Diameter (in)	Stroke Length (in)
750.0		7.99

Liner Size (in)	Volume Per Stroke Override (bbl/stk)

Pressure (psi)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)

FORMATIONS (LAST 5)

Formation Name	Prog Top MD (mKB)	Drill Top MD (mKB)

LEASE FLUIDS

Fluid	To Lease (bbl)	Source	From Lease (bbl)	Dest	BS&W (%)	Carrier	Ref #	Note
Drilling Water	310.0	WCK pond		Day tank & mud tank		Tresed		
Treated water	190.0	MI plant		Mud tank		Tresed		

JOB SUPPLIES

Supply Item Des	Unit Label	Loc	Vendor	Received	Consumed	Cum On Loc
Diesel Fuel : Rig	L	Rig	IOR	0.0	750.0	600.0
Diesel Fuel : mini camp	L	Rig	IOR	0.0	100.0	250.0
Diesel Fuel: camp	L	Camp	IOR	0.0	50.0	3,850.0
Diesel fuel: Vehicles	L	Rig	DN CROSS	0.0	0.0	-140.0
Potable Water	L	Camp	DN CROSS	0.0	3,000.0	3,000.0
Potable Water, mini camp	L	Rig	DN CROSS	0.0	1,400.0	1,200.0

DAILY DRILLING REPORT

Cam_19

TRC: 406.00

Report Start Date: 17/11/2013

Report #: 2

DRILL STRING AND BIT INFORMATION

BHA #<stringno>, <des>

Bit Run	Size (in)	Make	Model	IADC Codes	Serial Number	Length (m)

Nozzles (1/32")	Bit Total Fluid Area (nozzles) (in²)	IADC Bit Dull

Drill String Length (m)	BHA Weight in Air (1000lbf)	BHA ROP (m/hr)

String Components

DRILLING PARAMETERS

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth Drilled (m)	Drilling Time (hr)	Cum Drilling Time (hr)	Interval ROP (m/hr)	Flow Rate (gpm)

Weight on Bit (1000lbf)	Surface RPM (rpm)	SPP (psi)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Drilling Torque (ft•lb)	Off Bottom Torque (ft•lb)

ANNULAR VELOCITIES (DP & DC)

Inner Bound	Sz Inner Bound (in)	Outer Boundary	Sz Outer Bound (in)	Top (mKB)	Btm (mKB)	AV (m/min)

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

UNDERREAMING INTERVALS

Top (mKB)	Btm (mKB)	OD (in)	Com

DAILY DRILLING REPORT

Cam_19

TRC: 407.00

Report Start Date: 18/11/2013

Report #: 3

UWI	Well PID	Tenure	Field Name	Well Type	State/Province	Country
100000744838	CAM_WH019	PL 277	Cam	Appraisal	Queensland	AUS
Well Configuration Type	**Well Status**	**Well Sub-Status**	**Spud Date**	**Rig Release Date**	**Job Start Date**	**Job End Date**
Vertical	Available		7/03/2013 09:00	1/12/2013 15:30	16/11/2013 08:00	2/12/2013 11:30

JOB DETAILS

AFE Number	Total AFE + Supp Amount (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)	Daily Mud Field Est (Cost)	Cum Mud Field Est (Cost)
01	1,361,055.00	53,909.85	267,488.59		
Target Formation	**Cum Time Log Days (days)**	**Problem Time Hours (hr)**	**Cum Problem Time Hours (hr)**	**Percent Problem Time (%)**	**Cum Percent Problem Time (%)**
Juandah and Taroom	2.67	5.00	16.00	20.83	25.00

DAILY OPERATIONS

Most Likely Duration (no plan ch...	Original KB/RT Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)	Latitude (°)	Longitude (°)
9.21	328.10	323.60	4.50	26° 12' 43.558" S	149° 42' 23.676" E

Rig (Names)	Planned TD (mKB)	TD (max) (mKB)	End Depth (m...	Depth Progress (m)	Weather
Saxon 166	1,331.00	1,204.50	105.38	17.38	Sunny

HSSE

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
407.00	407.00

Safety Observations

Type	# Rpts
Good Observations	2
Leadership Visits	2
STOP Cards	18
Inductions	0

SAFETY CHECK SUMMARY

Type	Last Date	Days Last Chk (days)	Next Date
BOP Connection Test	17/11/2013	1	18/11/2013
Drills/Exercise			
ESD Test	17/11/2013	1	18/11/2013
Kick Drills	18/11/2013	0	19/11/2013
Mast Inspection	17/11/2013	1	18/11/2013
Permit to Work	18/11/2013	0	19/11/2013
Pre-Job Meetings	18/11/2013	0	19/11/2013
Pre-Tour Meetings	18/11/2013	0	19/11/2013
Safety Meetings	17/11/2013	1	18/11/2013
Site Inductions			
Toolbox Talk	18/11/2013	0	19/11/2013
Weekly Safety Meeting	17/11/2013	1	18/11/2013

DAILY CONTACTS

Contact Name	Title	Mobile
Arfa Chiha	IPM-Drilling Super	0467785174
Ahmed Gabry	Wellsite Supervisor	0448155134
Abel Eduardo Aguirre	Drilling Engineer	0448149324
Cory Ursulak	Rig Manager	0419938581
Ben Marshall	Geologist	

POB

Company	Job Title	Count
Schlumberger IPM	WSS	1
Schlumberger IPM	Drilling Engineer	1
QGC	Geologist	1
Saxon	Rig Crew	17
Tresed	Vacuum Truck Driver	2
ECM	Caterers	3
Path Finder	DD & LWD engineers	4
MI-SWACO	Mud Engineer	1

DAILY REPORT

Last 24hr Op's Summary

HSSE : No incidents, accidents, environmental or land access issues.

Performed P/T BOPs & choke manifold @ 250psi/1500psi 5/10min. P/U and M/U 8 1/2" slick BHA, washed down and tagged TOC at 77.96m. D/O cement, float equipment and shoe, rat hole to 88m. Performed LOT to 41psi (EMW11.2ppg). Drilled 8-1/2" hole to 105.38m. Circulated hole clean and POOH slick BHA. P/U & M/U 8 1/2" Pathfinder Dir BHA in progress.

Summary 00:00 - 06:00

Cont. M/U & RIH Pathfinder Dir BHA & drill to 37m. Cont. RIH Dir BHA to 92m. Wash down to 105m. Changed shakers screens (mud polymer not sheared yet, over flowing), tested MWD tool. Drilled f/105m to 128m. Reprogrammed MWD tool and got 1st survey.

Planned Op's

Cont. drill 8 1/2" hole section to KOP 250m. Drill, steer and survey as per Path finder DD to section TD at +/- 791 m MD.

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00

Start Time	End Time	Dur (hr)	Class	NPT (hr)	Phase	Op	Act Desc
00:00	02:00	2.00	TP	2.00	BOP	RR	NPT-Rig . Repeated Test Blind rams x 9 5/8" csg x mud pump x surface line valves3,4,8,9,10,12 @ 250psi/1500psi 5/10min Ok.

DAILY DRILLING REPORT

Cam_19

TRC: 407.00

Report Start Date: 18/11/2013

Report #: 3

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00

Start Time	End Time	Dur (hr)	Class	NPT (hr)	Phase	Op	Act Desc
02:00	03:00	1.00	P		BOP	BOP	P/U & M/U Tester plug & set tester plug. Installed Stab in valvle, FOSV. P/T Annular , pressure not holding.
03:00	04:00	1.00	TP	1.00	BOP	BOP	Pull the tester plug, changed plug seals.
04:00	06:00	2.00	P		BOP	BOP	re P/T Annular x choke manifold valves 5,6,7,15, IBOP @ 250psi /1500psi 5/10min, several times (manifold valves) till get it accepted.
06:00	08:30	2.50	P		BOP	BOP	Continued with pressure testing BOP (test #3, Test #4, Test #5) & choke manifold valves, std pipe valve, stab-in valve, kelly cock valve. P/T Std pipe & suface lines to 250psi/2130psi 5/10min : Ok
08:30	10:30	2.00	P		BOP	BOP	Removed tester plug. Install Bell nipple & flow line, centred BOP.
10:30	12:30	2.00	TP	2.00	BOP	RR	NPT-Replaced HPU pump#2.
12:30	14:30	2.00	P		IH1	HBH	PJSM. M/U & RIH 8-1/2" hole BHA. Bit : 8 1/2" PDC, 1RR3, S519 VBPX, SN JH5851, Nozzles 5x12, 7 x 6 1/2"DCs, X/O, HWDP, RIH to 68m
14:30	15:00	0.50	P		IH1	ED	Performed Muster drill & BOP drill. Well secured in 15sec. Discussed operational procedure and kick signs, detection and shut in procedure, crew duties.
15:00	15:15	0.25	P		IH1	HBH	Washed down (290GPM, 260psi) from 68m and tag cement @ 77.96m.
15:15	17:15	2.00	P		IH1	DFS	Drilled out cement, top plug, float collar, cement, shoe from 77.96m to 87m. Wash down rat hole to 88.0m, w/5-7 klbs, 200GPM, 120psi, 50-80RPM, 1-1.8 ft.klbs.
17:15	18:00	0.75	P		IH1	RDR	Drilled 8 1/2" hole f/88 m to 91m. 80RPM, WOB 5klbs, TQ 1.2kftlb, 290GPM, SPP 280psi
18:00	19:00	1.00	P		IH1	LOT	Circulated hole clean, condition mud to MW in=MWout = 8.65 ppg. PJSM. Conducted Leak off Test (41psi) to EMW 11.2 ppg. Open well. Flow check : Ok.
19:00	20:00	1.00	P		IH1	RDR	Drilled 8 1/2" hole f/91 m to 105m (as per DD request to have MWD tools in open hole). 80RPM, WOB 5klbs, TQ 1.6kftlb, 360GPM, SPP 460psi
20:00	20:15	0.25	P		IH1	CIC	Circulated hole clean. 360GPM 470psi 40RPM.
20:15	21:00	0.75	P		IH1	TO	POOH & L/D 8 1/2" slick BHA. Bit dull grading 3-2-BT-C-X-I-RO-BHA
21:00	21:30	0.50	P		IH1	TBT	PJSM with Pathfinder and rig crew for directional drilling operations. Reviewed WI P/U DIR BHA. Discussed instructions.
21:30	00:00	2.50	P		IH1	HBH	P/U & M/U 8 1/2" bit 1R new MDI616LBPX S/N JH5657 (M/U to iPzig LXM / 6.75" PDM (1.5deg bent)), X/O, 8 1/2" STB, X/O, FS, iPZIG UXM, DPM, X/O, HDS, X/O, 6 3/4" NMDC. Scribe in BHA.

CASING STRINGS

Csg Des	OD (in)	SD (mKB)
Conductor	14	10.00
Surface Casing	9 5/8	87.00

MUD PROPERTIES

Mud Type	Time	Depth (mKB)	Weight (lb/gal)	Funnel Viscosity (s/qt)
KCl/Polymer	17:30	91.00	8.70	28
KCl/Polymer	20:00	105.00	8.70	27
KCl/Polymer	21:00	105.00	8.65	30
KCl/Polymer	23:45	105.00	8.65	31

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)
Potassium Chloride	sacks	MI-Swaco	0.0	151.0	566.0	
Xanthan Gum D	sacks	MI-Swaco	0.0	5.0	43.0	

MUD PUMP

 # 1, Gardner-Denver, PZ-8

Pump Rating (hp)	Rod Diameter (in)	Stroke Length (in)
750.0		7.99

Liner Size (in)	Volume Per Stroke Override (bbl/stk)

Pressure (psi)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)

FORMATIONS (LAST 5)

Formation Name	Prog Top MD (mKB)	Drill Top MD (mKB)

LEASE FLUIDS

Fluid	To Lease (bbl)	Source	From Lease (bbl)	Dest	BS&W (%)	Carrier	Ref #	Note
Contaminated Mud/cem		Rig tanks	310.0	ROSS 8 sump		Tresed		
Drilling Water	310.0	MI Swaco Dewatering facility		Rig tanks		Tresed		

DAILY DRILLING REPORT

Cam_19

TRC: 407.00

Report Start Date: 18/11/2013

Report #: 3

JOB SUPPLIES

Supply Item Des	Unit Label	Loc	Vendor	Received	Consumed	Cum On Loc
Diesel Fuel : Rig	L	Rig	IOR	0.0	850.0	-250.0
Diesel Fuel : mini camp	L	Rig	IOR	0.0	100.0	150.0
Diesel Fuel: camp	L	Camp	IOR	0.0	100.0	3,750.0
Diesel fuel: Vehicles	L	Rig	DN CROSS	0.0	0.0	-140.0
Potable Water	L	Camp	DN CROSS	17,500.0	3,000.0	17,500.0
Potable Water, mini camp	L	Rig	DN CROSS	3,000.0	200.0	4,000.0

DRILL STRING AND BIT INFORMATION

BHA #1, Slick

Bit Run	Size (in)	Make	Model	IADC Codes	Serial Number	Length (m)
1RR3	8 1/2	Smith	S519	___	JH5851	0.23

Nozzles (1/32")	Bit Total Fluid Area (nozzles) (in²)	IADC Bit Dull
12/12/12/12/12	0.55	3-2-BT-C-X-0-RO-BHA

Drill String Length (m)	BHA Weight in Air (1000lbf)	BHA ROP (m/hr)
80.85	23	13.9

String Components

Smith S519, Bit Sub w/Float, Drill Collar, XO Sub, HWDP

DRILLING PARAMETERS

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth Drilled (m)	Drilling Time (hr)	Cum Drilling Time (hr)	Interval ROP (m/hr)	Flow Rate (gpm)
Original Hole	88.00	105.38	17.38	1.25	1.25	13.9	350

Weight on Bit (1000lbf)	Surface RPM (rpm)	SPP (psi)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Drilling Torque (ft•lb)	Off Bottom Torque (ft•lb)
5	80	460.0	22			1,200	500

ANNULAR VELOCITIES (DP & DC)

Inner Bound	Sz Inner Bound (in)	Outer Boundary	Sz Outer Bound (in)	Top (mKB)	Btm (mKB)	AV (m/min)

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

UNDERREAMING INTERVALS

Top (mKB)	Btm (mKB)	OD (in)	Com

DAILY DRILLING REPORT

Cam_19

TRC: 408.00

Report Start Date: 19/11/2013

Report #: 4

UWI	Well PID	Tenure	Field Name	Well Type	State/Province	Country
100000744838	CAM_WH019	PL 277	Cam	Appraisal	Queensland	AUS
Well Configuration Type	**Well Status**	**Well Sub-Status**	**Spud Date**	**Rig Release Date**	**Job Start Date**	**Job End Date**
Vertical	Available		7/03/2013 09:00	1/12/2013 15:30	16/11/2013 08:00	2/12/2013 11:30

JOB DETAILS

AFE Number	Total AFE + Supp Amount (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)	Daily Mud Field Est (Cost)	Cum Mud Field Est (Cost)
01	1,361,055.00	47,568.55	315,057.14		
Target Formation	**Cum Time Log Days (days)**	**Problem Time Hours (hr)**	**Cum Problem Time Hours (hr)**	**Percent Problem Time (%)**	**Cum Percent Problem Time (%)**
Juandah and Taroom	3.67	2.00	18.00	8.33	20.45

DAILY OPERATIONS

Most Likely Duration (no plan ch...	Original KB/RT Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)	Latitude (°)	Longitude (°)
9.21	328.10	323.60	4.50	26° 12' 43.558" S	149° 42' 23.676" E

Rig (Names)	Planned TD (mKB)	TD (max) (mKB)	End Depth (m...	Depth Progress (m)	Weather
Saxon 166	1,331.00	1,204.50	390.11	284.73	Sunny

HSSE

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
408.00	408.00

Safety Observations

Type	# Rpts
Safety Meetings	3
Inductions	2
STOP Cards	5
PTW	1

SAFETY CHECK SUMMARY

Type	Last Date	Days Last Chk (days)	Next Date
BOP Connection Test	17/11/2013	2	18/11/2013
Drills/Exercise			
ESD Test	17/11/2013	2	18/11/2013
Kick Drills	18/11/2013	1	19/11/2013
Mast Inspection	17/11/2013	2	18/11/2013
Permit to Work	19/11/2013	0	20/11/2013
Pre-Job Meetings	18/11/2013	1	19/11/2013
Pre-Tour Meetings	19/11/2013	0	20/11/2013
Safety Meetings	17/11/2013	2	18/11/2013
Site Inductions	19/11/2013	0	20/11/2013
Toolbox Talk	18/11/2013	1	19/11/2013
Weekly Safety Meeting	17/11/2013	2	18/11/2013

DAILY CONTACTS

Contact Name	Title	Mobile
Arfa Chiha	IPM-Drilling Super	0467785174
Ahmed Gabry	Wellsite Supervisor	0448155134
Abel Eduardo Aguirre	Drilling Engineer	0448149324
Cory Ursulak	Rig Manager	0419938581
Ben Marshall	Geologist	

POB

Company	Job Title	Count
Schlumberger IPM	WSS	1
Schlumberger IPM	Drilling Engineer	1
QGC	Geologist	1
Saxon	Rig Crew	17
Tresed	Vacuum Truck Driver	2
ECM	Caterers	3
Path Finder	DD & LWD engineers	4
MI-SWACO	Mud Engineer	1

DAILY REPORT

Last 24hr Op's Summary

HSSE : No incidents, accidents, environmental or land access issues.

Cont. M/U & RIH Pathfinder Dir BHA to 37m. Cont. RIH Dir BHA to 92m. Wash down to 105.38m. Tested MWD tool. Drilled 8 1/2" hole section f/105.38m to KOP at 240.71m. Drilled & steer & survey as per PathFinder DD instructions to 390.11m MD, achieved 13.91deg Incl (368.40m MD survey)

Summary 00:00 - 06:00

Cont. drill, steer and survey as per Pathfinder DD instructions to 461.59m MD (last survey : 430.7m MD incl 22.60deg).

Planned Op's

Cont. drill 8 1/2" hole section to TD at +/- 791 m MD.

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00

Start Time	End Time	Dur (hr)	Class	NPT (hr)	Phase	Op	Act Desc
00:00	01:15	1.25	P		IH1	HBH	Cont. M/U 8 1/2" Dir BHA.
01:15	02:00	0.75	P		IH1	HBH	Cont. M/U & RIH 8 1/2" Dir BHA w/HWDP to 93m. Wash down to 105.38m.
02:00	02:15	0.25	P		IH1	SRY	Tested MWD tool.

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00

Start Time	End Time	Dur (hr)	Class	NPT (hr)	Phase	Op	Act Desc
02:15	03:30	1.25	P		IH1	CIR	Circulated and shear DUO-VIS/KCL mud. changed screens to 140 mesh. Shakers still overflowing. Arranged for recycling mud, and plan to limit FVis to 35.
03:30	04:00	0.50	P		IH1	RDR	Resumed rotary drilling f/105.38m to 116.19m as per DD instructions. 380GPM 680psi 40 RPM TQ1.5klb-ft
04:00	04:30	0.50	P		IH1	SRY	Got 1st survey (difficulties to get it, pulsation dampener setting pressure and magnetic interference with csg string) MD94.4 Inc 0.26 AZI 237.5 TVD 94.4
04:30	05:00	0.50	P		IH1	RDR	Drilled rotary f/116.19m to 128.66m as per DD instructions. 380GPM 680psi 40 RPM TQ1.5klb-ft
05:00	06:00	1.00	P		IH1	SRY	Reprogrammed MWD tool for low rate 0.6 to 0.8 pulse/sec.
06:00	11:00	5.00	P		IH1	RDR	Drilled rotary f/128.66m to 240.71m as per DD instructions (inst up to ROP 60m/hr, Diff press 175-225psi). 420GPM 1040psi 50 RPM TQ 2.5klb-ft. Avg ROP 22m/h.
11:00	12:15	1.25	P		IH1	SDR	Slided 8 1/2" hole as per Directional Drillers instructions from KOP @ 240.71mMD to 259.17mMD.
12:15	15:15	3.00	P		IH1	RDR	Rotary drill & slide as per DD instructions f/259.17m MD to 315.46m MD, Diff press 100-270psi, 425GPM, 930-1050psi 50 RPM TQ 5.0klb-ft. Avg ROP 19m/h.
15:15	16:00	0.75	TP	0.75	IH1	WTH	@ 315.46m MD while started sliding the single, held and got 10kls OP, no rotation, full circulation/normal pressure, worked string to recover rotary. Pulled up to 20klbs. string free. Reamed last 2m. 60RPM 425GPM 940psi Got few coals caving (up to 5cm) on shakers. MW 8.8ppg FVis 30sec.
16:00	17:15	1.25	P		IH1	RDR	Rotary drill & slide as per DD instructions f/315.36m MD to 340.28m MD, Diff press 160-290psi, 420GPM 1120psi 50 RPM TQ 4.8klb-ft.
17:15	17:30	0.25	TP	0.25	IH1	WTH	@340.28m MD. held and got 10kls OP, no rotation, full circulation/normal pressure, worked string, recover rotary.
17:30	18:30	1.00	P		IH1	CIR	Condition mud, (raising Viscosity). POOH to 320m MD while changing shakers screens to 3x120mesh screens (top shaker)
18:30	20:15	1.75	P		IH1	RDR	Rotary drill & slide as per DD instructions f/340.28m MD to 360.00m MD, diff press 180psi, 420GPM 1020psi 40 RPM TQ 3.7klb-ft. Avg ROP 11m/h.
20:15	21:00	0.75	TP	0.75	IH1	RO	Troubleshoot communication problem pason-Pathfinder, not tracking bit depth. Meahwhile reciprocated bit & circul 425GPM 910psi
21:00	22:00	1.00	P		IH1	RDR	Rotary drill & slide as per DD instructions f/360.00m MD to 377.61m MD, diff press 190psi, 420GPM 1000psi 40 RPM TQ 2.0klb-ft.
22:00	22:30	0.50	TP	0.25	IH1	RO	Troubleshoot communication problem pason-Pathfinder, not tracking bit depth. Meahwhile reciprocated bit & circul 425GPM 910psi
22:30	00:00	1.50	P		IH1	RDR	Rotary drill & slide as per DD instructions f/377.61m MD to 390.11m MD. Diff press 150psi, 420GPM 1030psi 40 RPM TQ 2.4klb-ft. Avg ROP 8m/h. At midnight : Distance from line at target : 0.3m above plan, 2m right of plan Last survey 368m MD, 367m TVD, Incl 13.89deg, Azi 257.12deg. Sliding 23.86 % (67.95m), Survey/Conn : 3.42hrs Sliding ROP :13.68m/h Rotating ROP : 31.55m/h MAX DLS : 5.33 deg/30m Motor RPM : 120RPM (420GPM) PDM lobes 7/8 stages 5 max diff press 1125psi stall torque 15.7klb-ft Pumping 5bbl Hivis pill (FV60sec) evry 3 connections. Take survey every connection.

CASING STRINGS

Csg Des	OD (in)	SD (mKB)
Conductor	14	10.00
Surface Casing	9 5/8	87.00

MUD PROPERTIES

Mud Type	Time	Depth (mKB)	Weight (lb/gal)	Funnel Viscosity (s/qt)
KCl/Polymer	06:00	160.00	8.65	35
KCl/Polymer	11:30	240.00	8.80	31
KCl/Polymer	18:00	348.00	8.80	34
KCl/Polymer	23:45	390.11	8.90	35

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)
Potassium Chloride	sacks	MI-Swaco	0.0	35.0	531.0	
Xanthan Gum D	sacks	MI-Swaco	0.0	15.0	28.0	

MUD PUMP

 # 1, Gardner-Denver, PZ-8

Pump Rating (hp)	Rod Diameter (in)	Stroke Length (in)
750.0		7.99

DAILY DRILLING REPORT

Cam_19

TRC: 408.00

Report Start Date: 19/11/2013

Report #: 4

Liner Size (in)		Volume Per Stroke Override (bbl/stk)	
Pressure (psi)	**Slow Speed Check?**	**Strokes (spm)**	**Volumetric Efficiency (%)**
400.0	Yes	48	97

FORMATIONS (LAST 5)

Formation Name	Prog Top MD (mKB)	Drill Top MD (mKB)
Springbok Sandstone	217.00	210.40
Upper Juandah Coal Measures	310.00	310.37

LEASE FLUIDS

Fluid	To Lease (bbl)	Source	From Lease (bbl)	Dest	BS&W (%)	Carrier	Ref #	Note
Drilling Water	150.0	WCK pond		Rig day tank		Tresed		

JOB SUPPLIES

Supply Item Des	Unit Label	Loc	Vendor	Received	Consumed	Cum On Loc
Diesel Fuel : Rig	L	Rig	IOR	13,070.0	408.0	12,412.0
Diesel Fuel : mini camp	L	Rig	IOR	3,100.0	100.0	3,150.0
Diesel Fuel: camp	L	Camp	IOR	0.0	100.0	3,650.0
Diesel fuel: Vehicles	L	Rig	DN CROSS	0.0	125.0	-265.0
Potable Water	L	Camp	DN CROSS	0.0	7,500.0	10,000.0
Potable Water, mini camp	L	Rig	DN CROSS	0.0	734.0	3,266.0

DRILL STRING AND BIT INFORMATION

BHA #2, Steerable

Bit Run	Size (in)	Make	Model	IADC Codes	Serial Number	Length (m)
2R	8 1/2	Smith	MDi616 LBPX	___	JH5657	0.23

Nozzles (1/32")	Bit Total Fluid Area (nozzles) (in²)	IADC Bit Dull
12/12/12/12/12/12	0.66	1-1-WT-A-X-I-NO-BHA

Drill String Length (m)	BHA Weight in Air (1000lbf)	BHA ROP (m/hr)
390.22	23	14.9

String Components

Smith MDi616 LBPX, 8 1/2" Bit, LXM, Mud Motor - Bent Sub, XO Sub, String Stabilizer, XO Sub, MWD Float Sub, Pressure module uxm, DPM, HDS-1 (DIR + GR), XO Sub, NMDC, XO Sub, HWDP, Drill Pipe

DRILLING PARAMETERS

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth Drilled (m)	Drilling Time (hr)	Cum Drilling Time (hr)	Interval ROP (m/hr)	Flow Rate (gpm)
Original Hole	105.38	390.11	284.73	11.84	11.84	24.0	420

Weight on Bit (1000lbf)	Surface RPM (rpm)	SPP (psi)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Drilling Torque (ft•lb)	Off Bottom Torque (ft•lb)
5	40	1,030.0	41	42	39	1,500	1,000

ANNULAR VELOCITIES (DP & DC)

Inner Bound	Sz Inner Bound (in)	Outer Boundary	Sz Outer Bound (in)	Top (mKB)	Btm (mKB)	AV (m/min)

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)
19/11/2013 23:45	0.00	0.00	0.00	0.00
19/11/2013 23:45	94.40	0.26	237.50	94.40
19/11/2013 23:45	106.90	0.35	230.20	106.90
19/11/2013 23:45	119.40	0.35	232.59	119.40
19/11/2013 23:45	131.80	0.26	242.12	131.80
19/11/2013 23:45	144.20	0.26	243.81	144.20
19/11/2013 23:45	156.70	0.18	257.56	156.70
19/11/2013 23:45	169.10	0.18	243.78	169.10
19/11/2013 23:45	181.60	0.18	244.12	181.60
19/11/2013 23:45	194.10	0.09	202.36	194.10
19/11/2013 23:45	206.50	0.09	90.77	206.50
19/11/2013 23:45	219.00	0.18	95.97	219.00
19/11/2013 23:45	231.40	0.18	87.54	231.40
19/11/2013 23:45	243.90	1.08	223.49	243.90
19/11/2013 23:45	256.40	3.17	246.79	256.39
19/11/2013 23:45	268.80	4.91	255.71	268.76
19/11/2013 23:45	281.30	5.72	258.50	281.20
19/11/2013 23:45	293.70	6.60	260.77	293.53
19/11/2013 23:45	306.20	7.74	260.60	305.93
19/11/2013 23:45	318.60	8.62	258.67	318.21
19/11/2013 23:45	331.10	9.76	256.10	330.55
19/11/2013 23:45	343.50	11.34	255.71	342.74
19/11/2013 23:45	355.90	12.49	256.18	354.87
19/11/2013 23:45	368.40	13.91	257.12	367.04

UNDERREAMING INTERVALS

Top (mKB)	Btm (mKB)	OD (in)	Com

DAILY DRILLING REPORT

Cam_19

TRC: 409.00

Report Start Date: 20/11/2013

Report #: 5

UWI	Well PID	Tenure	Field Name	Well Type	State/Province	Country
100000744838	CAM_WH019	PL 277	Cam	Appraisal	Queensland	AUS
Well Configuration Type	**Well Status**	**Well Sub-Status**	**Spud Date**	**Rig Release Date**	**Job Start Date**	**Job End Date**
Vertical	Available		7/03/2013 09:00	1/12/2013 15:30	16/11/2013 08:00	2/12/2013 11:30

JOB DETAILS

AFE Number	Total AFE + Supp Amount (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)	Daily Mud Field Est (Cost)	Cum Mud Field Est (Cost)
01	1,361,055.00	53,105.72	368,162.86		
Target Formation	**Cum Time Log Days (days)**	**Problem Time Hours (hr)**	**Cum Problem Time Hours (hr)**	**Percent Problem Time (%)**	**Cum Percent Problem Time (%)**
Juandah and Taroom	4.67	4.25	22.25	17.71	19.87

DAILY OPERATIONS

Most Likely Duration (no plan ch...	Original KB/RT Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)	Latitude (°)	Longitude (°)
9.21	328.10	323.60	4.50	26° 12' 43.558" S	149° 42' 23.676" E

Rig (Names)	Planned TD (mKB)	TD (max) (mKB)	End Depth (m...	Depth Progress (m)	Weather
Saxon 166	1,331.00	1,204.50	576.80	186.69	Sunny

HSSE

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
409.00	409.00

Safety Observations

Type	# Rpts
Safety Meetings	3
STOP Cards	12

SAFETY CHECK SUMMARY

Type	Last Date	Days Last Chk (days)	Next Date
BOP Connection Test	17/11/2013	3	18/11/2013
Drills/Exercise			
ESD Test	17/11/2013	3	18/11/2013
Kick Drills	18/11/2013	2	19/11/2013
Mast Inspection	17/11/2013	3	18/11/2013
Permit to Work	19/11/2013	1	20/11/2013
Pre-Job Meetings	18/11/2013	2	19/11/2013
Pre-Tour Meetings	20/11/2013	0	21/11/2013
Safety Meetings	17/11/2013	3	18/11/2013
Site Inductions	19/11/2013	1	20/11/2013
Toolbox Talk	20/11/2013	0	21/11/2013
Weekly Safety Meeting	17/11/2013	3	18/11/2013

DAILY CONTACTS

Contact Name	Title	Mobile
Arfa Chiha	IPM-Drilling Super	0467785174
Ahmed Gabry	Wellsite Supervisor	0448155134
Abel Eduardo Aguirre	Drilling Engineer	0448149324
Andy Hillier	Rig Manager	0419938581
Ben Marshall	Geologist	

POB

Company	Job Title	Count
Schlumberger IPM	WSS	1
Schlumberger IPM	Drilling Engineer	1
QGC	Geologist	1
Saxon	Rig Crew	17
Tresed	Vacuum Truck Driver	2
ECM	Caterers	3
Path Finder	DD & LWD engineers	4
MI-SWACO	Mud Engineer	1

DAILY REPORT

Last 24hr Op's Summary

HSSE : No incidents, accidents, environmental or land access issues.

Drilled & steer & survey as per PathFinder DD instructions to 576.8m MD, (last survey : 555.2m MD incl 38.08deg, 250.65 deg Azimuth). Poor motor yield and not achieving required DLS in last four slides, stabilizer believed to be hanging up during slide. Current position 3.5m below & 4m right of target. Circulate hole clean & POOH to remove 8-1/2" string stabilizer.

Summary 00:00 - 06:00

Lay out 8-1/2" stabilizer, re scribe BHA. Check bit gauge, in gauge. RIH BHA to 500m.

Planned Op's

Drill 8-1/2" hole section from 576.8m MD to TD at +/- 791 m MD.

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00

Start Time	End Time	Dur (hr)	Class	NPT (hr)	Phase	Op	Act Desc
00:00	10:00	10.00	P		IH1	RDR	Rotary drill & slide as per DD instructions f/390.11m MD to 515m MD. Diff press 150psi, 420GPM 1100psi 40 RPM TQ 2.4klb-ft. Avg ROP 12.5m/h.

DAILY DRILLING REPORT

Cam_19

TRC: 409.00

Report Start Date: 20/11/2013

Report #: 5

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00

Start Time	End Time	Dur (hr)	Class	NPT (hr)	Phase	Op	Act Desc
10:00	19:45	9.75	P		IH1	RDR	Rotary drill & slide as per DD instructions f/515m MD to 576.8m MD. Diff press 150psi, 420GPM 1130psi 40 RPM TQ 2.4klb-ft. Avg ROP 6.3 m/h. Had difficulties to slide from 515m MD (8 1/2" stb hanging). BHA not achieving required DLS to reach target. Decide to POOH and remove 8-1/2" string stabiliser. At 19:45 : Distance from line at target : 3.5m below target, 4.6m right of target Last survey 555.2m MD, 562.5m TVD, Incl 38.08deg, Azi 250.65deg. Sliding 38 % (179.24m), Sliding ROP :15.4m/h Rotating ROP : 32.1m/h MAX DLS : 5.10 deg/30m Motor RPM : 120RPM (420GPM) PDM lobes 7/8 stages 5 max diff press 1125psi stall torque 15.7klb-ft Pumping 5bbl Hivis pill (FV60sec) evry 3 connections. Take survey every connection.
19:45	20:45	1.00	TP	1.00	IH1	CIC	Circulate hole clean, pump high vis pill (vis 45 sec). Flow check, well static
20:45	23:45	3.00	TP	3.00	IH1	TO	POOH f/576.8m to surface, hole in good condition.
23:45	00:00	0.25	TP	0.25	IH1	FC	Flow check, well static.

CASING STRINGS

Csg Des	OD (in)	SD (mKB)
Conductor	14	10.00
Surface Casing	9 5/8	87.00

MUD PROPERTIES

Mud Type	Time	Depth (mKB)	Weight (lb/gal)	Funnel Viscosity (s/qt)
KCl/Polymer	06:00		9.00	38
KCl/Polymer	12:00		9.20	39
KCl/Polymer	18:00		9.10	34

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)
Potassium Chloride	sacks	MI-Swaco	0.0	70.0	461.0	
Xanthan Gum D	sacks	MI-Swaco	0.0	9.0	19.0	

MUD PUMP

 # 1, Gardner-Denver, PZ-8

Pump Rating (hp)	Rod Diameter (in)	Stroke Length (in)
750.0		7.99

Liner Size (in)	Volume Per Stroke Override (bbl/stk)

Pressure (psi)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)

FORMATIONS (LAST 5)

Formation Name	Prog Top MD (mKB)	Drill Top MD (mKB)
Springbok Sandstone	217.00	210.40
Upper Juandah Coal Measures	310.00	310.37
Lower Juandah Coal Measures	433.00	441.89
Tangalooma	594.00	557.81

LEASE FLUIDS

Fluid	To Lease (bbl)	Source	From Lease (bbl)	Dest	BS&W (%)	Carrier	Ref #	Note
Drilling Water		Floc Tank	130.0	MISWACO Treatment Plant		Tresed		
Pond Water	150.0	WCK Ponds		Active System		Tresed		

JOB SUPPLIES

Supply Item Des	Unit Label	Loc	Vendor	Received	Consumed	Cum On Loc
Diesel Fuel : Rig	L	Rig	IOR	0.0	3,512.0	8,900.0
Diesel Fuel : mini camp	L	Rig	IOR	0.0	150.0	3,000.0
Diesel Fuel: camp	L	Camp	IOR	0.0	150.0	3,500.0
Diesel fuel: Vehicles	L	Rig	DN CROSS	0.0	0.0	-265.0
Potable Water	L	Camp	DN CROSS	8,000.0	4,000.0	14,000.0
Potable Water, mini camp	L	Rig	DN CROSS	0.0	500.0	2,766.0

DAILY DRILLING REPORT

Cam_19

TRC: 409.00

Report Start Date: 20/11/2013

Report #: 5

DRILL STRING AND BIT INFORMATION

BHA #2, Steerable

Bit Run	Size (in)	Make	Model	IADC Codes	Serial Number	Length (m)
2R	8 1/2	Smith	MDi616 LBPX	___	JH5657	0.23

Nozzles (1/32")	Bit Total Fluid Area (nozzles) (in²)	IADC Bit Dull
12/12/12/12/12/12	0.66	1-1-WT-A-X-I-NO-BHA

Drill String Length (m)	BHA Weight in Air (1000lbf)	BHA ROP (m/hr)
390.22	23	14.9

String Components

Smith MDi616 LBPX, 8 1/2" Bit, LXM, Mud Motor - Bent Sub, XO Sub, String Stabilizer, XO Sub, MWD Float Sub, Pressure module uxm, DPM, HDS-1 (DIR + GR), XO Sub, NMDC, XO Sub, HWDP, Drill Pipe

DRILLING PARAMETERS

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth Drilled (m)	Drilling Time (hr)	Cum Drilling Time (hr)	Interval ROP (m/hr)	Flow Rate (gpm)
Original Hole	390.11	576.80	471.42	19.75	31.59	9.5	420

Weight on Bit (1000lbf)	Surface RPM (rpm)	SPP (psi)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Drilling Torque (ft•lb)	Off Bottom Torque (ft•lb)
5	40	1,130.0	41	47	44	2,000	1,500

ANNULAR VELOCITIES (DP & DC)

Inner Bound	Sz Inner Bound (in)	Outer Boundary	Sz Outer Bound (in)	Top (mKB)	Btm (mKB)	AV (m/min)

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)
20/11/2013 23:45	393.30	17.15	252.62	391.03
20/11/2013 23:45	405.80	19.17	250.48	402.90
20/11/2013 23:45	418.20	20.84	250.53	414.56
20/11/2013 23:45	430.70	22.60	250.48	426.17
20/11/2013 23:45	443.20	24.62	250.75	437.62
20/11/2013 23:45	455.60	26.29	249.99	448.82
20/11/2013 23:45	468.00	27.96	249.66	459.85
20/11/2013 23:45	480.50	29.55	249.35	470.81
20/11/2013 23:45	492.90	31.22	249.87	481.51
20/11/2013 23:45	505.40	32.98	249.53	492.10
20/11/2013 23:45	517.80	34.65	250.20	502.40
20/11/2013 23:45	530.30	35.35	250.67	512.64
20/11/2013 23:45	542.80	36.67	250.74	522.75
20/11/2013 23:45	555.20	38.08	250.65	532.60
20/11/2013 23:45	567.00	39.13	250.38	541.82

UNDERREAMING INTERVALS

Top (mKB)	Btm (mKB)	OD (in)	Com

DAILY DRILLING REPORT

Cam_19

TRC: 410.00

Report Start Date: 21/11/2013

Report #: 6

UWI	Well PID	Tenure	Field Name	Well Type	State/Province	Country
100000744838	CAM_WH019	PL 277	Cam	Appraisal	Queensland	AUS
Well Configuration Type	**Well Status**	**Well Sub-Status**	**Spud Date**	**Rig Release Date**	**Job Start Date**	**Job End Date**
Vertical	Available		7/03/2013 09:00	1/12/2013 15:30	16/11/2013 08:00	2/12/2013 11:30

JOB DETAILS

AFE Number	Total AFE + Supp Amount (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)	Daily Mud Field Est (Cost)	Cum Mud Field Est (Cost)
01	1,361,055.00	56,342.32	424,505.18		
Target Formation	**Cum Time Log Days (days)**	**Problem Time Hours (hr)**	**Cum Problem Time Hours (hr)**	**Percent Problem Time (%)**	**Cum Percent Problem Time (%)**
Juandah and Taroom	5.67	6.25	28.50	26.04	20.96

DAILY OPERATIONS

Most Likely Duration (no plan ch...	Original KB/RT Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)	Latitude (°)	Longitude (°)
9.21	328.10	323.60	4.50	26° 12' 43.558" S	149° 42' 23.676" E

Rig (Names)	Planned TD (mKB)	TD (max) (mKB)	End Depth (m...	Depth Progress (m)	Weather
Saxon 166	1,331.00	1,204.50	765.00	188.20	Light showers, lighting

HSSE

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
410.00	410.00

Safety Observations

Type	# Rpts
STOP Cards	9
Leadership Visits	1
Good Observations	3
Safety Meeting	4

SAFETY CHECK SUMMARY

Type	Last Date	Days Last Chk (days)	Next Date
BOP Connection Test	17/11/2013	4	18/11/2013
Drills/Exercise			
ESD Test	17/11/2013	4	18/11/2013
Kick Drills	18/11/2013	3	19/11/2013
Mast Inspection	17/11/2013	4	18/11/2013
Permit to Work	19/11/2013	2	20/11/2013
Pre-Job Meetings	18/11/2013	3	19/11/2013
Pre-Tour Meetings	20/11/2013	1	21/11/2013
Safety Meetings	17/11/2013	4	18/11/2013
Site Inductions	19/11/2013	2	20/11/2013
Toolbox Talk	20/11/2013	1	21/11/2013
Weekly Safety Meeting	17/11/2013	4	18/11/2013

DAILY CONTACTS

Contact Name	Title	Mobile
Arfa Chiha	IPM-Drilling Super	0467785174
Ahmed Gabry	Wellsite Supervisor	0448155134
Andy Hillier	Rig Manager	0419938581
Ben Marshall	Geologist	

POB

Company	Job Title	Count
Schlumberger IPM	WSS	1
Schlumberger IPM	Drilling Engineer	0
QGC	Geologist	1
Saxon	Rig Crew	17
Tresed	Vacuum Truck Driver	2
ECM	Caterers	3
Path Finder	DD & LWD engineers	4
MI-SWACO	Mud Engineer	1

DAILY REPORT

Last 24hr Op's Summary

POOH DIR BHA, L/D S.Stab. RIH back to BTM. Drilled & oriented 8 1/2" hole F/576m T/765m. POOH for wiper trip F/765m T/436m

Summary 00:00 - 06:00

Cont. POOH 8 1/2" hole F/436m T/98m. Circ BTM-UP. RIH back to BTM & circulate hole clean. POOH T/660m

Planned Op's

POOH T/surface, L/D BHA. Run 7" CSG& cement same

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00

Start Time	End Time	Dur (hr)	Class	NPT (hr)	Phase	Op	Act Desc
00:00	01:00	1.00	TP	1.00	IH1	HBH	Cont. POOH 8-1/2" dir BHA. Lay down 8-1/2" string stabilizer.
01:00	03:30	2.50	TP	2.50	IH1	HBH	M/U 8-1/2" directional BHA. 8 1/2" bit 2RR1 MDI616LBPX S/N JH5657 (M/U to iPzig LXM / 6.75" PDM (1.5deg bent)), FS, iPZIG UXM, DPM, HDS, X/O, 6 3/4" NMDC. aligned MWD with TF
03:30	06:15	2.75	TP	2.75	IH1	TI	RIH W/8 1/2" dir BHA T/576.80m *Hole in good conditions
06:15	12:00	5.75	P		IH1	SDR	Oriented & drilled 8 1/2" hole F/576.80m T/648m *Pumped 5 bbls high vis pill every 3 connections

DAILY DRILLING REPORT

Cam_19

TRC: 410.00

Report Start Date: 21/11/2013

Report #: 6

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00

Start Time	End Time	Dur (hr)	Class	NPT (hr)	Phase	Op	Act Desc
12:00	12:45	0.75	P		IH1	CIC	Conditioned mud & circulate
12:45	20:00	7.25	P		IH1	SDR	Oriented & drilled 8 1/2" hole F/648m T/765m *Pumped 5 bbls high vis pill every 3 connections *Pumping time 15.53hrs *Sliding 42.49%. 79.98m, 16.42 m/hr *Rotating 57.51%, 3.73 hrs, 108.24m, ROP 29.02 hrs
20:00	21:30	1.50	P		IH1	CIC	Circulate hole clean & conditioned mud Mud weight in=out =9.1 ppg, vis 33 sec's
21:30	21:45	0.25	P		IH1	FC	Flow check-Well static
21:45	00:00	2.25	P		IH1	WT	POOH 8 1/2" BHA F/765m T/436m *Hole in good conditions

CASING STRINGS

Csg Des	OD (in)	SD (mKB)
Conductor	14	10.00
Surface Casing	9 5/8	87.00

MUD PROPERTIES

Mud Type	Time	Depth (mKB)	Weight (lb/gal)	Funnel Viscosity (s/qt)
KCl/Polymer	06:00	596.00	9.10	35
KCl/Polymer	12:00	648.00	9.20	38
KCl/Polymer	18:00	730.00	9.20	35

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)
Potassium Chloride	sacks	MI-Swaco	0.0	80.0	381.0	
Xanthan Gum D	sacks	MI-Swaco	0.0	4.0	15.0	

MUD PUMP

 # 1, Gardner-Denver, PZ-8

Pump Rating (hp)	Rod Diameter (in)	Stroke Length (in)
750.0		7.99

Liner Size (in)	Volume Per Stroke Override (bbl/stk)
7	0.092

Pressure (psi)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)

FORMATIONS (LAST 5)

Formation Name	Prog Top MD (mKB)	Drill Top MD (mKB)
Springbok Sandstone	217.00	210.40
Upper Juandah Coal Measures	310.00	310.37
Lower Juandah Coal Measures	433.00	441.89
Tangalooma	594.00	557.81
Taroom Coal Measures	819.00	674.00

LEASE FLUIDS

Fluid	To Lease (bbl)	Source	From Lease (bbl)	Dest	BS&W (%)	Carrier	Ref #	Note
Drilling Water	315.0	MI-Plant	425.0	315 bbls T/Ross 8 sumps, 125 bbls to Mi -plant		Tresed		

JOB SUPPLIES

Supply Item Des	Unit Label	Loc	Vendor	Received	Consumed	Cum On Loc
Diesel Fuel : Rig	L	Rig	IOR	0.0	2,950.0	5,950.0
Diesel Fuel : mini camp	L	Rig	IOR	0.0	150.0	2,850.0
Diesel Fuel: camp	L	Camp	IOR	0.0	150.0	3,350.0
Diesel fuel: Vehicles	L	Rig	DN CROSS	0.0	0.0	-265.0
Potable Water	L	Camp	DN CROSS	0.0	4,000.0	10,000.0
Potable Water, mini camp	L	Rig	DN CROSS	0.0	750.0	2,016.0

DRILL STRING AND BIT INFORMATION

BHA #3, Steerable

Bit Run	Size (in)	Make	Model	IADC Codes	Serial Number	Length (m)
3RR2	8 1/2	Smith	MDi616 LBPX	___	JH5657	0.23

Nozzles (1/32")	Bit Total Fluid Area (nozzles) (in²)	IADC Bit Dull
12/12/12/12/12/12	0.66	1-1-WT-A-X-I-NO-TD

Drill String Length (m)	BHA Weight in Air (1000lbf)	BHA ROP (m/hr)
390.22	23	14.5

String Components

Smith MDi616 LBPX, 8 1/2" Bit, LXM, Mud Motor - Bent Sub, XO Sub, String Stabilizer, XO Sub, MWD Float Sub, Pressure module uxm, DPM, HDS-1 (DIR + GR), XO Sub, NMDC, XO Sub, HWDP, Drill Pipe

DAILY DRILLING REPORT

Cam_19

TRC: 410.00

Report Start Date: 21/11/2013

Report #: 6

DRILLING PARAMETERS

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth Drilled (m)	Drilling Time (hr)	Cum Drilling Time (hr)	Interval ROP (m/hr)	Flow Rate (gpm)
Original Hole	576.80	765.00	188.20	13.00	13.00	14.5	420

Weight on Bit (1000lbf)	Surface RPM (rpm)	SPP (psi)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Drilling Torque (ft•lb)	Off Bottom Torque (ft•lb)
8	50	1,250.0	60	65	55	4,600	2,000

ANNULAR VELOCITIES (DP & DC)

Inner Bound	Sz Inner Bound (in)	Outer Boundary	Sz Outer Bound (in)	Top (mKB)	Btm (mKB)	AV (m/min)

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)
21/11/2013 23:45	580.10	40.89	250.41	551.86
21/11/2013 23:45	592.60	42.21	250.03	561.21
21/11/2013 23:45	605.10	44.14	249.40	570.33
21/11/2013 23:45	617.50	46.17	249.38	579.07
21/11/2013 23:45	642.40	50.03	249.36	595.70
21/11/2013 23:45	654.80	51.53	249.45	603.54
21/11/2013 23:45	667.30	53.46	250.31	611.15
21/11/2013 23:45	679.70	55.13	250.52	618.38
21/11/2013 23:45	692.20	56.37	251.75	625.42
21/11/2013 23:45	704.70	57.07	251.68	632.28
21/11/2013 23:45	717.00	57.33	251.48	638.94
21/11/2013 23:45	729.60	57.42	251.13	645.73
21/11/2013 23:45	742.10	57.33	251.23	652.47
21/11/2013 23:45	746.40	57.60	251.19	654.79
21/11/2013 23:45	765.00	57.60	251.19	664.75

UNDERREAMING INTERVALS

Top (mKB)	Btm (mKB)	OD (in)	Com

DAILY DRILLING REPORT

Cam_19

TRC: 411.00

Report Start Date: 22/11/2013

Report #: 7

UWI	Well PID	Tenure	Field Name	Well Type	State/Province	Country
100000744838	CAM_WH019	PL 277	Cam	Appraisal	Queensland	AUS
Well Configuration Type	**Well Status**	**Well Sub-Status**	**Spud Date**	**Rig Release Date**	**Job Start Date**	**Job End Date**
Vertical	Available		7/03/2013 09:00	1/12/2013 15:30	16/11/2013 08:00	2/12/2013 11:30

JOB DETAILS

AFE Number	Total AFE + Supp Amount (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)	Daily Mud Field Est (Cost)	Cum Mud Field Est (Cost)
01	1,361,055.00	149,402.35	573,907.53		
Target Formation	**Cum Time Log Days (days)**	**Problem Time Hours (hr)**	**Cum Problem Time Hours (hr)**	**Percent Problem Time (%)**	**Cum Percent Problem Time (%)**
Juandah and Taroom	6.67	0.00	28.50	0.00	17.81

DAILY OPERATIONS

Most Likely Duration (no plan ch...	Original KB/RT Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)	Latitude (°)	Longitude (°)
9.21	328.10	323.60	4.50	26° 12' 43.558" S	149° 42' 23.676" E

Rig (Names)	Planned TD (mKB)	TD (max) (mKB)	End Depth (m...	Depth Progress (m)	Weather
Saxon 166	1,331.00	1,204.50	765.00	0.00	Showers-Cloudy

HSSE

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
411.00	411.00

Safety Observations

Type	# Rpts
Good Observations	1
STOP Cards	13
Safety Meetings	5
WPTW	2

SAFETY CHECK SUMMARY

Type	Last Date	Days Last Chk (days)	Next Date
BOP Connection Test	17/11/2013	5	18/11/2013
Drills/Exercise			
ESD Test	17/11/2013	5	18/11/2013
Kick Drills	18/11/2013	4	19/11/2013
Mast Inspection	17/11/2013	5	18/11/2013
Permit to Work	19/11/2013	3	20/11/2013
Pre-Job Meetings	18/11/2013	4	19/11/2013
Pre-Tour Meetings	20/11/2013	2	21/11/2013
Safety Meetings	17/11/2013	5	18/11/2013
Site Inductions	19/11/2013	3	20/11/2013
Toolbox Talk	20/11/2013	2	21/11/2013
Weekly Safety Meeting	17/11/2013	5	18/11/2013

DAILY CONTACTS

Contact Name	Title	Mobile
Arfa Chiha	IPM-Drilling Super	0467785174
Ahmed Gabry	Wellsite Supervisor	0448155134
Andy Hillier	Rig Manager	0419938581
Ben Marshall	Geologist	

POB

Company	Job Title	Count
Schlumberger IPM	WSS	1
QGC	Geologist	1
Saxon	Rig Crew	17
Tresed	Vacuum Truck Driver	2
ECM	Caterers	3
Path Finder	DD & LWD engineers	4
MI-SWACO	Mud Engineer	1

DAILY REPORT

Last 24hr Op's Summary

Performed wiper trip, circulate hole clean. POOH to surface & L/D BHA. Run 7" casing, cemented & pressure tested same as per program.

Summary 00:00 - 06:00

Rig Repair, changed out pump liner to 51/2" liner

Planned Op's

RIH W/6 1/8" BHA, LOT. drill 6 1/8" hole as per program

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00

Start Time	End Time	Dur (hr)	Class	NPT (hr)	Phase	Op	Act Desc
00:00	01:15	1.25	P		IH1	TO	Cont. POOH 81/2" drilling string F/436m T/98m
01:15	01:30	0.25	P		IH1	FC	Circulate hole clean Flow check, well static
01:30	04:00	2.50	P		IH1	WT	RIH F/98m T/765m, washed down last 2 singles. Hole is in good conditions
04:00	04:45	0.75	P		IH1	CIC	Circulate hole clean Flow check-well static
04:45	07:15	2.50	P		IH1	TO	POOH 81/2" drilling string F/765m T/110m Flow check-well static

DAILY DRILLING REPORT

Cam_19

TRC: 411.00

Report Start Date: 22/11/2013

Report #: 7

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00

Start Time	End Time	Dur (hr)	Class	NPT (hr)	Phase	Op	Act Desc
07:15	09:45	2.50	P		IH1	TO	POOH 81/2" drilling BHA F/110m T/surface. L/D BHA Bit 1-1-WT-A-X-I-NO-TD
09:45	10:15	0.50	P		PC1	RRC	PJSM, R/UP for 7" casing
10:15	17:00	6.75	P		PC1	RC	Run 7" casing, K-55, 23#, BTC F/surface T/757.66 m *M/UP shoe track and applied thread lock for first 3 connections. *Hole in good conditions *Break circulation @ 250m, 500m and 757m *Centralization as per program *CSG running speed 45 sec's/jt
17:00	17:30	0.50	P		PC1	WH	P/UP & M/UP 7" CSG hanger, drained BOP's & washed hanger seat. Lowered hanger and landed casing in 9 5/8" STS well head. P/U 65klb S/O 52lb. Shoe at 763m in hole Float shoe-1X7" CSGJT, Float collar, 66X7" CSG jts Hanger SN PB13003.2.3
17:30	18:00	0.50	P		PC1	WHT	Tested 7" STS hanger seals to 300/1500psi – 5/10min
18:00	18:30	0.50	P		PC1	SM	PJSM with SLB cementers
18:30	19:00	0.50	P		PC1	RU	RU CMT head & cement lines
19:00	19:30	0.50	P		PC1	PT	Pumped 6 bbls's mud push spacer II, pressure tested cement lines to 3000 psi, pressure holding. pumped 6 bbls mudpush spacer II. Total spacer volume 12 bbls
19:30	22:15	2.75	P		PC1	CMC	Dropped BTM plug, mixed & pumped 89.40 bbls of CBMlite, 12.50 ppg @ rate of 3.50 bbls/min. Dropped top plug and displaced cement with 97.0 bbls of 9.20 ppg KCL/Polymer mud. FCP 600 psi. Pumped down plug & pressure tested 7" casing T/2000 psi. observed 100 psi pressure drop due to leak between cement head X.Over& landing joint coupling. Got 32 bbls cement return @ surface CMT returns stored on lease due to wet roads conditions
22:15	23:00	0.75	P		PC1	RD	R/D cement head & lines. Flushed cement lines to cellar. Back out & L/D landing joint
23:00	00:00	1.00	P		PC1	WOC	WOC, meanwhile; Prepared 6 1/8" Dir BHA

CASING STRINGS

Csg Des	OD (in)	SD (mKB)
Conductor	14	10.00
Surface Casing	9 5/8	87.00
Production Casing/Liner (1)	7	763.00

MUD PROPERTIES

Mud Type	Time	Depth (mKB)	Weight (lb/gal)	Funnel Viscosity (s/qt)
KCl/Polymer	06:00	765.00	9.10	35
KCl/Polymer	18:00		9.00	33

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)

MUD PUMP

 # 1, Gardner-Denver, PZ-8

Pump Rating (hp)	Rod Diameter (in)	Stroke Length (in)
750.0		7.99

Liner Size (in)	Volume Per Stroke Override (bbl/stk)
5 1/2	0.059

Pressure (psi)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)

FORMATIONS (LAST 5)

Formation Name	Prog Top MD (mKB)	Drill Top MD (mKB)
Springbok Sandstone	217.00	210.40
Upper Juandah Coal Measures	310.00	310.37
Lower Juandah Coal Measures	433.00	441.89
Tangalooma	594.00	557.81
Taroom Coal Measures	819.00	674.00

LEASE FLUIDS

Fluid	To Lease (bbl)	Source	From Lease (bbl)	Dest	BS&W (%)	Carrier	Ref #	Note
	315.0		425.0			Tresed		

JOB SUPPLIES

Supply Item Des	Unit Label	Loc	Vendor	Received	Consumed	Cum On Loc
Diesel Fuel : Rig	L	Rig	IOR	9,000.0	2,807.0	12,143.0
Diesel Fuel : mini camp	L	Rig	IOR	0.0	100.0	2,750.0
Diesel Fuel: camp	L	Camp	IOR	0.0	150.0	3,200.0
Diesel fuel: Vehicles	L	Rig	DN CROSS	0.0	0.0	-265.0

DAILY DRILLING REPORT

Cam_19

TRC: 411.00

Report Start Date: 22/11/2013

Report #: 7

JOB SUPPLIES

Supply Item Des	Unit Label	Loc	Vendor	Received	Consumed	Cum On Loc
Potable Water	L	Camp	DN CROSS	10,000.0	6,000.0	14,000.0
Potable Water, mini camp	L	Rig	DN CROSS	1,000.0	750.0	2,266.0

DRILL STRING AND BIT INFORMATION

BHA #<stringno>, <des>

Bit Run	Size (in)	Make	Model	IADC Codes	Serial Number	Length (m)

Nozzles (1/32")	Bit Total Fluid Area (nozzles) (in²)	IADC Bit Dull

Drill String Length (m)	BHA Weight in Air (1000lbf)	BHA ROP (m/hr)

String Components

DRILLING PARAMETERS

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth Drilled (m)	Drilling Time (hr)	Cum Drilling Time (hr)	Interval ROP (m/hr)	Flow Rate (gpm)

Weight on Bit (1000lbf)	Surface RPM (rpm)	SPP (psi)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Drilling Torque (ft•lb)	Off Bottom Torque (ft•lb)

ANNULAR VELOCITIES (DP & DC)

Inner Bound	Sz Inner Bound (in)	Outer Boundary	Sz Outer Bound (in)	Top (mKB)	Btm (mKB)	AV (m/min)

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

UNDERREAMING INTERVALS

Top (mKB)	Btm (mKB)	OD (in)	Com

DAILY DRILLING REPORT

Cam_19

TRC: 412.00

Report Start Date: 23/11/2013

Report #: 8

UWI	Well PID	Tenure	Field Name	Well Type	State/Province	Country
100000744838	CAM_WH019	PL 277	Cam	Appraisal	Queensland	AUS
Well Configuration Type	**Well Status**	**Well Sub-Status**	**Spud Date**	**Rig Release Date**	**Job Start Date**	**Job End Date**
Vertical	Available		7/03/2013 09:00	1/12/2013 15:30	16/11/2013 08:00	2/12/2013 11:30

JOB DETAILS

AFE Number	Total AFE + Supp Amount (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)	Daily Mud Field Est (Cost)	Cum Mud Field Est (Cost)
01	1,361,055.00	47,491.60	621,399.13		
Target Formation	**Cum Time Log Days (days)**	**Problem Time Hours (hr)**	**Cum Problem Time Hours (hr)**	**Percent Problem Time (%)**	**Cum Percent Problem Time (%)**
Juandah and Taroom	7.67	0.75	29.25	3.13	15.90

DAILY OPERATIONS

Most Likely Duration (no plan ch...	Original KB/RT Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)	Latitude (°)	Longitude (°)
9.21	328.10	323.60	4.50	26° 12' 43.558" S	149° 42' 23.676" E

Rig (Names)	Planned TD (mKB)	TD (max) (mKB)	End Depth (m...	Depth Progress (m)	Weather
Saxon 166	1,331.00	1,204.50	814.00	49.00	Cloudy

HSSE

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
412.00	412.00

Safety Observations

Type	# Rpts
STOP Cards	4
Good Observations	2
Safety Meetings	5

SAFETY CHECK SUMMARY

Type	Last Date	Days Last Chk (days)	Next Date
BOP Connection Test	17/11/2013	6	18/11/2013
Drills/Exercise			
ESD Test	17/11/2013	6	18/11/2013
Kick Drills	23/11/2013	0	24/11/2013
Mast Inspection	17/11/2013	6	18/11/2013
Permit to Work	19/11/2013	4	20/11/2013
Pre-Job Meetings	18/11/2013	5	19/11/2013
Pre-Tour Meetings	20/11/2013	3	21/11/2013
Safety Meetings	17/11/2013	6	18/11/2013
Site Inductions	19/11/2013	4	20/11/2013
Toolbox Talk	20/11/2013	3	21/11/2013
Weekly Safety Meeting	17/11/2013	6	18/11/2013

DAILY CONTACTS

Contact Name	Title	Mobile
Arfa Chiha	IPM-Drilling Super	0467785174
Ahmed Gabry	Wellsite Supervisor	0448155134
Andy Hillier	Rig Manager	0419938581
Ben Marshall	Geologist	

POB

Company	Job Title	Count
Schlumberger IPM	WSS	1
Schlumberger IPM	WSE	3
QGC	Geologist	1
Saxon	Rig Crew	17
Tresed	Vacuum Truck Driver	2
ECM	Caterers	3
Path Finder	DD & LWD engineers	4
MI-SWACO	Mud Engineer	1

DAILY REPORT

Last 24hr Op's Summary

WOC. M/U & RIH Pathfinder Dir BHA to 47m. P/U3-1/2" DP & RIH to 737m. BOP drill. Wash down to 750.40m. Drilled 7" casing shoe track T/763.30m, Drilled 6 1/8" hole section f/766m T/ 770m. Performed LOT to 106psi (EMW 10.0 ppg). Oriented & drilled 61/8" hole as per PathFinder DD instructions to 814m MD, achieved 63.49deg Inc (796.2m MD survey)

Summary 00:00 - 06:00

Continue orienting & drilled 6 1/8" hole as per DD instruction T/870m, achieved 71.75 deg Inc (850.7md survey)

Planned Op's

Cont to drill 6 1/8" hole section to TD at +/- 1331m MD. Circulate hole clean. POOH to 7" casing shoe. Perform wiper trip to TD. Log 6 1/8" hole as per program.

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00

Start Time	End Time	Dur (hr)	Class	NPT (hr)	Phase	Op	Act Desc
00:00	06:00	6.00	P		PC1	WOC	Wait on cement to reach 500psi compressive strength. Meanwhile; change mud pump liners & pistons from 7" to 5-1/2", adjusted PRV to 2500 psi & function tested same. Redressed iron rouchneck and pipe arm die bodies for 3-1/2" drill pipe.

DAILY DRILLING REPORT

Cam_19

TRC: 412.00

Report Start Date: 23/11/2013

Report #: 8

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00

Start Time	End Time	Dur (hr)	Class	NPT (hr)	Phase	Op	Act Desc
06:00	08:00	2.00	P		IH2	HBH	P/U & M/U 6-1/8" directional BHA w 6-1/8" bit (MDi613 LBPX, SN: J5498) dressed with 3x16 nozzles, M/U to iPzig LXM / 4 3/4" PDM (1.5deg bent), FS, 4 3/4 " data link, HDS, 4 3/4" NMDC, 2x 31/2" HWDP. aligned MWD with TF.
08:00	15:00	7.00	P		IH2	TI	RIH with 3 1/2" DP from 47.29m T/ 737m MD. New tool joints, M/U-B/O-M/U each connection.
15:00	15:15	0.25	P		IH2	ED	Held kick drill, hard shut in procedures followed. Crew responce good. Well secured in 19 sec's
15:15	15:30	0.25	P		IH2	RDR	Washed down (112GPM, 420psi) from 745m and tag cement @ 749.38m.
15:30	17:15	1.75	P		IH2	DFS	Drilled out cement, top plug, float collar, cement, shoe from 750.40m to 763.3m. Wash down rat hole to 766m, w/3-5 klbs, 150GPM, 500-700psi, 60-70RPM, 1.6-2.5 ft.klbs.
17:15	18:00	0.75	P		IH2	RDR	Drilled 6 1/8" hole f765/ m to 770m. 60-70RPM, WOB 3-6klbs, TQ 1.5-2kftlb, 196GPM, SPP 800-1000psi
18:00	19:30	1.50	P		IH2	LOT	Circulated hole clean, condition mud to MW in=MWout = 9.1 ppg. PJSM. Conducted Leak off Test (106psi) to EMW 10.0 ppg. Open well. Flow check : Ok.
19:30	22:15	2.75	P		IH2	RDR	Oriented & drilled 6 1/8" hole f/770 m to 800m 60RPM, WOB 5klbs, TQ 1.6kftlb, 360GPM, SPP 460psi *Pumped 5 bbls hi vis every 5 connections.
22:15	23:00	0.75	TP	0.75	IH2	RDR	After drilling joint down noticed washed out box end on 3-1/2" DP jnt# 79. Layed out joint & P/U jnt #80.
23:00	00:00	1.00	P		IH2	RDR	Oriented & drilled 6 1/8" hole f/800 m to 814m 60RPM, WOB 5klbs, TQ 1.6kftlb, 360GPM, SPP 460psi. *Pumped high vis pill every 5 connections.

CASING STRINGS

Csg Des	OD (in)	SD (mKB)
Conductor	14	10.00
Surface Casing	9 5/8	87.00
Production Casing/Liner (1)	7	763.00

MUD PROPERTIES

Mud Type	Time	Depth (mKB)	Weight (lb/gal)	Funnel Viscosity (s/qt)
KCl/Polymer	16:45	750.00	9.00	33
KCl/Polymer	19:15	770.00	9.10	34
KCl/Polymer	20:30	782.00	9.10	35
KCl/Polymer	21:15	790.00	9.00	35
KCl/Polymer	23:45	810.00	9.10	35

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)

MUD PUMP

 # 1, Gardner-Denver, PZ-8

Pump Rating (hp)	Rod Diameter (in)	Stroke Length (in)
750.0		7.99

Liner Size (in)	Volume Per Stroke Override (bbl/stk)
5 1/2	0.059

Pressure (psi)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)

FORMATIONS (LAST 5)

Formation Name	Prog Top MD (mKB)	Drill Top MD (mKB)
Springbok Sandstone	217.00	210.40
Upper Juandah Coal Measures	310.00	310.37
Lower Juandah Coal Measures	433.00	441.89
Tangalooma	594.00	557.81
Taroom Coal Measures	819.00	674.00

LEASE FLUIDS

Fluid	To Lease (bbl)	Source	From Lease (bbl)	Dest	BS&W (%)	Carrier	Ref #	Note
	120.0		150.0			Tresed		

JOB SUPPLIES

Supply Item Des	Unit Label	Loc	Vendor	Received	Consumed	Cum On Loc
Diesel Fuel : Rig	L	Rig	IOR	0.0	1,105.0	11,038.0
Diesel Fuel : mini camp	L	Rig	IOR	0.0	100.0	2,650.0
Diesel Fuel: camp	L	Camp	IOR	0.0	400.0	2,800.0
Diesel fuel: Vehicles	L	Rig	DN CROSS	0.0	0.0	-265.0

DAILY DRILLING REPORT

Cam_19

TRC: 412.00

Report Start Date: 23/11/2013

Report #: 8

JOB SUPPLIES

Supply Item Des	Unit Label	Loc	Vendor	Received	Consumed	Cum On Loc
Potable Water	L	Camp	DN CROSS	0.0	5,000.0	9,000.0
Potable Water, mini camp	L	Rig	DN CROSS	0.0	500.0	1,766.0

DRILL STRING AND BIT INFORMATION

BHA #4, Steerable

Bit Run	Size (in)	Make	Model	IADC Codes	Serial Number	Length (m)
4R	6 1/8	Smith	MDi613 LBPX	___	J5496	0.19

Nozzles (1/32")	Bit Total Fluid Area (nozzles) (in²)	IADC Bit Dull
16/16/16	0.59	1-1-WT-A-X-I-NO-TD

Drill String Length (m)	BHA Weight in Air (1000lbf)	BHA ROP (m/hr)
1,158.00		15.3

String Components

Smith MDi613 LBPX, 6 1/8" Bit, Mud Motor - Bent Sub, MWD Float Sub, DPM, 4.75" Data Link Pin Pin, HDS-1 (DIR + GR), NMDC, HWDP, Drill Pipe, HWDP

DRILLING PARAMETERS

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth Drilled (m)	Drilling Time (hr)	Cum Drilling Time (hr)	Interval ROP (m/hr)	Flow Rate (gpm)
Original Hole	765.00	814.00	49.00	3.75	3.75	13.1	230

Weight on Bit (1000lbf)	Surface RPM (rpm)	SPP (psi)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Drilling Torque (ft•lb)	Off Bottom Torque (ft•lb)
8	60	1,200.0	30	42	36	2,500	1,250

ANNULAR VELOCITIES (DP & DC)

Inner Bound	Sz Inner Bound (in)	Outer Boundary	Sz Outer Bound (in)	Top (mKB)	Btm (mKB)	AV (m/min)

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)
23/11/2013 23:45	768.10	58.12	250.50	666.40
23/11/2013 23:45	777.70	59.97	251.47	671.34
23/11/2013 23:45	787.20	61.91	251.47	675.95
23/11/2013 23:45	796.20	63.47	251.96	680.08

UNDERREAMING INTERVALS

Top (mKB)	Btm (mKB)	OD (in)	Com

DAILY DRILLING REPORT

Cam_19

TRC: 413.00

Report Start Date: 24/11/2013

Report #: 9

UWI	Well PID	Tenure	Field Name	Well Type	State/Province	Country
100000744838	CAM_WH019	PL 277	Cam	Appraisal	Queensland	AUS
Well Configuration Type	**Well Status**	**Well Sub-Status**	**Spud Date**	**Rig Release Date**	**Job Start Date**	**Job End Date**
Vertical	Available		7/03/2013 09:00	1/12/2013 15:30	16/11/2013 08:00	2/12/2013 11:30

JOB DETAILS

AFE Number	Total AFE + Supp Amount (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)	Daily Mud Field Est (Cost)	Cum Mud Field Est (Cost)
01	1,361,055.00	50,146.88	671,546.01		
Target Formation	**Cum Time Log Days (days)**	**Problem Time Hours (hr)**	**Cum Problem Time Hours (hr)**	**Percent Problem Time (%)**	**Cum Percent Problem Time (%)**
Juandah and Taroom	8.67	0.00	29.25	0.00	14.06

DAILY OPERATIONS

Most Likely Duration (no plan ch...	Original KB/RT Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)	Latitude (°)	Longitude (°)
9.21	328.10	323.60	4.50	26° 12' 43.558" S	149° 42' 23.676" E

Rig (Names)	Planned TD (mKB)	TD (max) (mKB)	End Depth (m...	Depth Progress (m)	Weather
Saxon 166	1,331.00	1,204.50	1,158.30	344.30	Partly Cloudy

HSSE

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
413.00	413.00

Safety Observations

Type	# Rpts
Good Observations	1
STOP Cards	15
Safety Meetings	4

SAFETY CHECK SUMMARY

Type	Last Date	Days Last Chk (days)	Next Date
BOP Connection Test	17/11/2013	7	18/11/2013
Drills/Exercise	24/11/2013	0	25/11/2013
ESD Test	17/11/2013	7	18/11/2013
Kick Drills	23/11/2013	1	24/11/2013
Mast Inspection	17/11/2013	7	18/11/2013
Permit to Work	19/11/2013	5	20/11/2013
Pre-Job Meetings	18/11/2013	6	19/11/2013
Pre-Tour Meetings	20/11/2013	4	21/11/2013
Safety Meetings	24/11/2013	0	25/11/2013
Site Inductions	19/11/2013	5	20/11/2013
Toolbox Talk	20/11/2013	4	21/11/2013
Weekly Safety Meeting	24/11/2013	0	25/11/2013

DAILY CONTACTS

Contact Name	Title	Mobile
Arfa Chiha	IPM-Drilling Super	0467785174
Ahmed Gabry	Wellsite Supervisor	0448155134
Andy Hillier	Rig Manager	0419938581
Ben Marshall	Geologist	

POB

Company	Job Title	Count
Schlumberger IPM	WSS	1
Schlumberger IPM	WSE	3
QGC	Geologist	1
Saxon	Rig Crew	17
Tresed	Vacuum Truck Driver	2
ECM	Caterers	3
Path Finder	DD & LWD engineers	4
MI-SWACO	Mud Engineer	1

DAILY REPORT

Last 24hr Op's Summary

Orientated & drilled 6 1/8" hole as per DD instruction F/ 870m T/ 1158.3m. Final survey at 1153.3mMD, 78.52deg Inc, 248.28 azimuth.

Summary 00:00 - 06:00

Orientated & drilled 6 1/8" hole to TD at 1204.5mMD at 78.4 deg Inc, 248.54 azimuth (775.72m TVD). Pumped high vis pill & circulated hole clean, orientated bit to high side & POOH dry to 1050m.

Planned Op's

POOH to 7" casing shoe. Perform wiper trip to TD. Log 6 1/8" hole as per program with WFD.

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00

Start Time	End Time	Dur (hr)	Class	NPT (hr)	Phase	Op	Act Desc
00:00	07:00	7.00	P		IH2	RDR	Oriented & drilled 6 1/8" hole F/814m T/883.25m 50 RPM, WOB4-8 klbs, TQ 1.8-2.5 kftlb, 200-240GPM, SPP 1000-1400psi. *Pumped high vis sweepevery three connections.
07:00	08:00	1.00	P		IH2	RDR	Drilled 6 1/8" hole F/883.25m T/901.39m 50 RPM, WOB4-8 klbs, TQ 1.8-2.5 kftlb, 200-240GPM, SPP 1000-1400psi. *Worked each joint twice to maintain ECD below 9.8ppg.

DAILY DRILLING REPORT

Cam_19

TRC: 413.00

Report Start Date: 24/11/2013

Report #: 9

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00

Start Time	End Time	Dur (hr)	Class	NPT (hr)	Phase	Op	Act Desc
08:00	08:30	0.50	P		IH2	RDR	Oriented & drilled 6 1/8" hole F/901.39m T/910.61m 50 RPM, WOB4-8 klbs, TQ 1.8-2.5 kftlb, 200-240GPM, SPP 1000-1400psi.
08:30	09:00	0.50	P		IH2	CIC	Worked connection & circulated 5bbl high vis pill to maintain ECD below 9.8ppg.
09:00	10:15	1.25	P		IH2	RDR	Drilled 6 1/8" hole F/910.61m T/938.19m 50 RPM, WOB4-8 klbs, TQ 1.8-2.5 kftlb, 200-240GPM, SPP 1000-1400psi. *Worked each joint twice to maintain ECD below 9.8ppg.
10:15	11:00	0.75	P		IH2	RDR	Oriented & drilled 6 1/8" hole F938.19m to 947.14m 50 RPM, WOB 5-10 klbs, TQ 1.8-2.5 kftlb, 200-250GPM, SPP 1000-1400psi. *Worked connection twice to maintain ECD below 9.8ppg.
11:00	15:00	4.00	P		IH2	RDR	Drilled 6 1/8" hole F/947.14m T1022.52 50 RPM, WOB8-12 klbs, TQ 2.0-3.1 kftlb, 240-260GPM, SPP 1200-1600psi. *Worked each connection 2-4 times to keep ECDbelow 9.8ppg
15:00	15:45	0.75	P		IH2	RDR	Oriented & drilled 6 1/8" hole F/1022.52m T/1029.28m 50 RPM, WOB 5-10 klbs, TQ 2-3.6 kftlb, 200-250GPM, SPP 1400-1650psi.
15:45	16:30	0.75	P		IH2	CIC	Worked connection & circulated 5bbl high vis pill. 240gpm, SPP 1580 - 1400psi.
16:30	20:00	3.50	P		IH2	RDR	Drilled 6 1/8" hole F/1029.28m T/1085.08 RPM, WOB8-12 klbs, TQ 2.0-3.1 kftlb, 240-260GPM, SPP 1600-1800psi. *Worked each connection 2-4 times to keep ECDbelow 9.8ppg
20:00	21:00	1.00	P		IH2	RDR	Oriented & drilled 6 1/8" hole F/1085.08m T/1103.22m 50 RPM, WOB 5-10 klbs, TQ 3-4.8 kftlb, 250GPM, SPP 1600-1850psi. *Worked each connection 2-4 times.
21:00	22:00	1.00	P		IH2	RDR	Drilled 6 1/8" hole F/1103.22m T/1130.32 RPM, WOB8-12 klbs, TQ 2.0-4.3 kftlb, 240-260GPM, SPP 1600-1850psi. *Worked each connection 2-4 times to keep ECDbelow 9.8ppg
22:00	22:30	0.50	P		IH2	CIC	Worked connection & circulated 5bbl high vis pill. 240gpm, SPP 1800 - 1600psi.
22:30	00:00	1.50	P		IH2	RDR	Drilled 6 1/8" hole F/1130.32m T/1158.3 RPM, WOB8-12 klbs, TQ 3.0-4.3 kftlb, 240-260GPM, SPP 1600-1950psi. *Worked each connection 2-4 times to keep ECD below 9.8ppg

CASING STRINGS

Csg Des	OD (in)	SD (mKB)
Conductor	14	10.00
Surface Casing	9 5/8	87.00
Production Casing/Liner (1)	7	763.00

MUD PROPERTIES

Mud Type	Time	Depth (mKB)	Weight (lb/gal)	Funnel Viscosity (s/qt)
KCl/Polymer	06:00	874.00	9.00	37
KCl/Polymer	12:00	980.00	9.05	33
KCl/Polymer	17:00	1,035.00	9.00	33

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)
Potassium Chloride	sacks	MI-Swaco	0.0	14.0	367.0	
Xanthan Gum D	sacks	MI-Swaco	0.0	6.0	9.0	

MUD PUMP

 # 1, Gardner-Denver, PZ-8

Pump Rating (hp)	Rod Diameter (in)	Stroke Length (in)
750.0		7.99

Liner Size (in)	Volume Per Stroke Override (bbl/stk)
5 1/2	0.059

Pressure (psi)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)

FORMATIONS (LAST 5)

Formation Name	Prog Top MD (mKB)	Drill Top MD (mKB)
Springbok Sandstone	217.00	210.40
Upper Juandah Coal Measures	310.00	310.37
Lower Juandah Coal Measures	433.00	441.89
Tangalooma	594.00	557.81
Taroom Coal Measures	819.00	674.00

LEASE FLUIDS

Fluid	To Lease (bbl)	Source	From Lease (bbl)	Dest	BS&W (%)	Carrier	Ref #	Note
	120.0		150.0			Tresed		

DAILY DRILLING REPORT

Cam_19

TRC: 413.00

Report Start Date: 24/11/2013

Report #: 9

JOB SUPPLIES

Supply Item Des	Unit Label	Loc	Vendor	Received	Consumed	Cum On Loc
Diesel Fuel : Rig	L	Rig	IOR	0.0	2,550.0	8,488.0
Diesel Fuel : mini camp	L	Rig	IOR	0.0	100.0	2,550.0
Diesel Fuel: camp	L	Camp	IOR	0.0	200.0	2,600.0
Diesel fuel: Vehicles	L	Rig	DN CROSS	0.0	200.0	-465.0
Potable Water	L	Camp	DN CROSS	11,000.0	5,000.0	15,000.0
Potable Water, mini camp	L	Rig	DN CROSS	7,000.0	1,200.0	7,566.0

DRILL STRING AND BIT INFORMATION

BHA #4, Steerable

Bit Run	Size (in)	Make	Model	IADC Codes	Serial Number	Length (m)
4R	6 1/8	Smith	MDi613 LBPX	___	J5496	0.19

Nozzles (1/32")	Bit Total Fluid Area (nozzles) (in²)	IADC Bit Dull
16/16/16	0.59	1-1-WT-A-X-I-NO-TD

Drill String Length (m)	BHA Weight in Air (1000lbf)	BHA ROP (m/hr)
1,158.00		15.3

String Components

Smith MDi613 LBPX, 6 1/8" Bit, Mud Motor - Bent Sub, MWD Float Sub, DPM, 4.75" Data Link Pin Pin, HDS-1 (DIR + GR), NMDC, HWDP, Drill Pipe, HWDP

DRILLING PARAMETERS

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth Drilled (m)	Drilling Time (hr)	Cum Drilling Time (hr)	Interval ROP (m/hr)	Flow Rate (gpm)
Original Hole	814.00	1,158.30	393.30	22.25	26.00	15.5	240

Weight on Bit (1000lbf)	Surface RPM (rpm)	SPP (psi)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Drilling Torque (ft•lb)	Off Bottom Torque (ft•lb)
10	60	1,800.0	30	42	36	2,500	1,250

ANNULAR VELOCITIES (DP & DC)

Inner Bound	Sz Inner Bound (in)	Outer Boundary	Sz Outer Bound (in)	Top (mKB)	Btm (mKB)	AV (m/min)

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)
24/11/2013 00:30	805.40	64.90	251.64	684.09
24/11/2013 01:15	814.50	66.30	251.37	687.85
24/11/2013 02:15	823.70	67.62	250.66	691.45
24/11/2013 03:15	832.70	68.85	250.79	694.79
24/11/2013 04:15	841.60	70.17	251.08	697.90
24/11/2013 05:15	850.70	71.75	250.99	700.87
24/11/2013 06:00	850.99	71.70	251.08	700.96
24/11/2013 07:00	869.20	74.74	251.48	706.22
24/11/2013 07:30	878.50	76.24	252.31	708.55
24/11/2013 08:00	887.40	76.24	252.24	710.66
24/11/2013 09:00	896.60	76.06	251.87	712.87
24/11/2013 09:30	905.90	77.03	251.34	715.03
24/11/2013 10:00	914.90	77.21	251.59	717.04
24/11/2013 10:30	924.20	77.03	251.53	719.11
24/11/2013 11:00	933.40	77.12	251.10	721.17
24/11/2013 11:30	942.70	78.61	250.74	723.12
24/11/2013 12:15	951.90	78.70	250.54	724.93
24/11/2013 12:45	961.20	78.96	250.31	726.73
24/11/2013 13:30	979.40	78.52	249.71	730.29
24/11/2013 14:00	988.70	78.17	249.45	732.17
24/11/2013 14:30	997.60	77.91	249.34	734.01
24/11/2013 15:00	1,006.70	77.56	249.64	735.94
24/11/2013 16:30	1,016.00	77.38	249.37	737.96
24/11/2013 17:00	1,025.20	79.05	248.74	739.84
24/11/2013 17:30	1,034.30	78.88	249.24	741.58
24/11/2013 18:15	1,043.50	78.35	249.07	743.40
24/11/2013 18:45	1,052.60	78.00	248.98	745.26
24/11/2013 19:30	1,061.90	78.00	248.89	747.20
24/11/2013 19:30	1,071.10	78.00	248.45	749.11
24/11/2013 19:30	1,080.20	77.82	247.92	751.02
24/11/2013 19:30	1,089.30	78.61	248.71	752.87
24/11/2013 19:30	1,098.40	79.67	249.15	754.59
24/11/2013 19:30	1,107.70	79.32	249.51	756.28
24/11/2013 19:30	1,116.80	78.79	249.59	758.01
24/11/2013 19:30	1,126.00	78.79	248.98	759.80
24/11/2013 19:30	1,135.10	78.35	248.63	761.60
24/11/2013 19:30	1,144.50	78.26	248.80	763.51

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)
24/11/2013 19:30	1,153.30	78.52	248.28	765.28
24/11/2013 19:30	1,162.60	78.17	248.54	767.16
24/11/2013 19:30	1,162.60	78.17	248.54	767.16
24/11/2013 19:30	1,171.90	78.08	248.19	769.07

UNDERREAMING INTERVALS

Top (mKB)	Btm (mKB)	OD (in)	Com

DAILY DRILLING REPORT

Cam_19

TRC: 414.00

Report Start Date: 25/11/2013

Report #: 10

UWI	Well PID	Tenure	Field Name	Well Type	State/Province	Country
100000744838	CAM_WH019	PL 277	Cam	Appraisal	Queensland	AUS
Well Configuration Type	**Well Status**	**Well Sub-Status**	**Spud Date**	**Rig Release Date**	**Job Start Date**	**Job End Date**
Vertical	Available		7/03/2013 09:00	1/12/2013 15:30	16/11/2013 08:00	2/12/2013 11:30

JOB DETAILS

AFE Number	Total AFE + Supp Amount (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)	Daily Mud Field Est (Cost)	Cum Mud Field Est (Cost)
01	1,361,055.00	98,996.60	770,542.61		
Target Formation	**Cum Time Log Days (days)**	**Problem Time Hours (hr)**	**Cum Problem Time Hours (hr)**	**Percent Problem Time (%)**	**Cum Percent Problem Time (%)**
Juandah and Taroom	9.67	0.00	29.25	0.00	12.61

DAILY OPERATIONS

Most Likely Duration (no plan ch...	Original KB/RT Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)	Latitude (°)	Longitude (°)
9.21	328.10	323.60	4.50	26° 12' 43.558" S	149° 42' 23.676" E

Rig (Names)	Planned TD (mKB)	TD (max) (mKB)	End Depth (m...	Depth Progress (m)	Weather
Saxon 166	1,331.00	1,204.50	1,204.50	46.20	Sunny

HSSE

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
414.00	414.00

Safety Observations

Type	# Rpts
Inductions	8
STOP Cards	6
Safety Meetings	3

SAFETY CHECK SUMMARY

Type	Last Date	Days Last Chk (days)	Next Date
BOP Connection Test	17/11/2013	8	18/11/2013
Drills/Exercise	24/11/2013	1	25/11/2013
ESD Test	17/11/2013	8	18/11/2013
Kick Drills	23/11/2013	2	24/11/2013
Mast Inspection	17/11/2013	8	18/11/2013
Permit to Work	19/11/2013	6	20/11/2013
Pre-Job Meetings	25/11/2013	0	26/11/2013
Pre-Tour Meetings	20/11/2013	5	21/11/2013
Safety Meetings	24/11/2013	1	25/11/2013
Site Inductions	19/11/2013	6	20/11/2013
Toolbox Talk	20/11/2013	5	21/11/2013
Weekly Safety Meeting	24/11/2013	1	25/11/2013

DAILY CONTACTS

Contact Name	Title	Mobile
Arfa Chiha	IPM-Drilling Super	0467785174
Ahmed Gabry	Wellsite Supervisor	0448155134
Andy Hillier	Rig Manager	0419938581
Ben Marshall	Geologist	

POB

Company	Job Title	Count
Schlumberger IPM	WSS	1
Schlumberger IPM	WSE	3
QGC	Geologist	1
Saxon	Rig Crew	17
Tresed	Vacuum Truck Driver	2
ECM	Caterers	3
Path Finder	DD & LWD engineers	4
MI-SWACO	Mud Engineer	1

DAILY REPORT

Last 24hr Op's Summary

Drilled from 1158.3m to TD at 1204.5mat 78.4 deg Inc, 248.54 azimuth (775.72m TVD). Pumped high vis sweep & circulated hole clean. POOH to intermediate casing shoe. Conducted wiper trip to TD. POOH & Lay down 6-1/8" directional BHA. Rig Weatherford tubing conveyed logging tools and RIH to 396m.

Summary 00:00 - 06:00

RIH & tag TD at 1204.5m

Planned Op's

Pick up to 1155m and deploy tool string. Log 6-1/8" hole Run # 1MDL-MSS-MDN-MPD-MGS from 1204.5m. Wiper trip to TD. Log hole Run # 2 CMI-MSS-MDN-MPD-MGS.

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00

Start Time	End Time	Dur (hr)	Class	NPT (hr)	Phase	Op	Act Desc
00:00	02:00	2.00	P		IH2	RDR	Drilled 6 1/8" hole F/1158.3m T/1189.68 RPM, WOB8-12 klbs, TQ 3.0-4.3 kftlb, 240-260GPM, SPP 1600-1950psi. *Worked each connection 2-4 times to keep ECD below 9.8ppg
02:00	02:45	0.75	TP		IH2	CIC	SPP jumped from 1800 to 2100psi while rotary drilling, PRV discharged. increased PRV limit to 3000psi, pumped 5bbl high vis sweep & worked joint. SPP reduced below 1800psi and balling worked free.

DAILY DRILLING REPORT

Cam_19

TRC: 414.00

Report Start Date: 25/11/2013

Report #: 10

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00

Start Time	End Time	Dur (hr)	Class	NPT (hr)	Phase	Op	Act Desc
02:45	03:30	0.75	P		IH2	RDR	Drilled 6 1/8" hole F/1189.68m T/1204.5 RPM, WOB8-12 klbs, TQ 3.0-4.3 kftlb, 240-260GPM, SPP 1600-1950psi. *Worked each connection 2-4 times to keep ECD below 9.8ppg
03:30	04:15	0.75	P		IH2	CIC	Pumped 5bbl high vis sweep &circulated hole clean. Mud: 8.9ppg 33vis in/out.
04:15	07:15	3.00	P		IH2	TO	Set tool face to high side. Flow check. POOH dry from TD to 7" casing shoe at 763m. String weight 49Klb, Pick up weight 61Klb, Slack off weight 39Klb, Rotating weight 49Klb.
07:15	07:30	0.25	P		IH2	FC	Flow check at casing shoe. Well static
07:30	10:00	2.50	P		PCO	WT	Wiper trip to TD at 1204.5m
10:00	11:00	1.00	P		PCO	CIC	Pumped 5bbl high vis sweep, circulate hole clean; 243GPM, 1540psi
11:00	17:00	6.00	P		PCO	TO	Flow check. POOH 6-1/8" directional BHA dry from TD to surface.
17:00	19:00	2.00	P		PCO	HBH	B/O & L/D 6-1/8" directional BHA.
19:00	19:30	0.50	P		ELS	SM	PJSM with Weatherford tubing conveyed loggers. Discussed HARC, lifting plan & running procedure.
19:30	22:00	2.50	P		ELS	HT	P/U logging deployment BHA. Load tool string for run # 1: MDL-MSS-MDN-MPD-MGS & source, pressure test seals & function test data logger.
22:00	00:00	2.00	P		ELS	LOG	Trip in tubing conveyed logging tools to 396m.

CASING STRINGS

Csg Des	OD (in)	SD (mKB)
Conductor	14	10.00
Surface Casing	9 5/8	87.00
Production Casing/Liner (1)	7	763.00

MUD PROPERTIES

Mud Type	Time	Depth (mKB)	Weight (lb/gal)	Funnel Viscosity (s/qt)
KCl/Polymer	02:00	1,187.39	8.90	31
Mud Type	Time	Depth (mKB)	Weight (lb/gal)	Funnel Viscosity (s/qt)
KCl/Polymer	06:00	1,204.50	9.00	33

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)

MUD PUMP

 # 1, Gardner-Denver, PZ-8

Pump Rating (hp)	Rod Diameter (in)	Stroke Length (in)
750.0		7.99

Liner Size (in)	Volume Per Stroke Override (bbl/stk)
5 1/2	0.059

Pressure (psi)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)

FORMATIONS (LAST 5)

Formation Name	Prog Top MD (mKB)	Drill Top MD (mKB)
Springbok Sandstone	217.00	210.40
Upper Juandah Coal Measures	310.00	310.37
Lower Juandah Coal Measures	433.00	441.89
Tangalooma	594.00	557.81
Taroom Coal Measures	819.00	674.00

LEASE FLUIDS

Fluid	To Lease (bbl)	Source	From Lease (bbl)	Dest	BS&W (%)	Carrier	Ref #	Note
	120.0		150.0			Tresed		

JOB SUPPLIES

Supply Item Des	Unit Label	Loc	Vendor	Received	Consumed	Cum On Loc
Diesel Fuel : Rig	L	Rig	IOR	0.0	2,188.0	6,300.0
Diesel Fuel : mini camp	L	Rig	IOR	0.0	150.0	2,400.0
Diesel Fuel: camp	L	Camp	IOR	0.0	100.0	2,500.0
Diesel fuel: Vehicles	L	Rig	DN CROSS	0.0	100.0	-565.0
Potable Water	L	Camp	DN CROSS	0.0	4,000.0	11,000.0
Potable Water, mini camp	L	Rig	DN CROSS	0.0	1,000.0	6,566.0

DAILY DRILLING REPORT

Cam_19

TRC: 414.00

Report Start Date: 25/11/2013

Report #: 10

DRILL STRING AND BIT INFORMATION

BHA #4, Steerable

Bit Run	Size (in)	Make	Model	IADC Codes	Serial Number	Length (m)
4R	6 1/8	Smith	MDi613 LBPX	___	J5496	0.19

Nozzles (1/32")	Bit Total Fluid Area (nozzles) (in²)	IADC Bit Dull
16/16/16	0.59	1-1-WT-A-X-I-NO-TD

Drill String Length (m)	BHA Weight in Air (1000lbf)	BHA ROP (m/hr)
1,158.00		15.3

String Components

Smith MDi613 LBPX, 6 1/8" Bit, Mud Motor - Bent Sub, MWD Float Sub, DPM, 4.75" Data Link Pin Pin, HDS-1 (DIR + GR), NMDC, HWDP, Drill Pipe, HWDP

DRILLING PARAMETERS

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth Drilled (m)	Drilling Time (hr)	Cum Drilling Time (hr)	Interval ROP (m/hr)	Flow Rate (gpm)
Original Hole	1,158.30	1,204.50	439.50	2.75	28.75	16.8	240

Weight on Bit (1000lbf)	Surface RPM (rpm)	SPP (psi)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Drilling Torque (ft•lb)	Off Bottom Torque (ft•lb)
10	60	1,800.0	30	42	36	2,500	1,250

ANNULAR VELOCITIES (DP & DC)

Inner Bound	Sz Inner Bound (in)	Outer Boundary	Sz Outer Bound (in)	Top (mKB)	Btm (mKB)	AV (m/min)

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)
25/11/2013 01:15	1,181.20	77.73	248.45	771.02
25/11/2013 00:30	1,181.20	77.73	248.45	771.02
25/11/2013 02:30	1,190.70	78.44	248.54	772.98

UNDERREAMING INTERVALS

Top (mKB)	Btm (mKB)	OD (in)	Com

DAILY DRILLING REPORT

Cam_19

TRC: 415.00

Report Start Date: 26/11/2013

Report #: 11

UWI	Well PID	Tenure	Field Name	Well Type	State/Province	Country
100000744838	CAM_WH019	PL 277	Cam	Appraisal	Queensland	AUS
Well Configuration Type	**Well Status**	**Well Sub-Status**	**Spud Date**	**Rig Release Date**	**Job Start Date**	**Job End Date**
Vertical	Available		7/03/2013 09:00	1/12/2013 15:30	16/11/2013 08:00	2/12/2013 11:30

JOB DETAILS

AFE Number	Total AFE + Supp Amount (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)	Daily Mud Field Est (Cost)	Cum Mud Field Est (Cost)
01	1,361,055.00	45,761.60	816,304.21		
Target Formation	**Cum Time Log Days (days)**	**Problem Time Hours (hr)**	**Cum Problem Time Hours (hr)**	**Percent Problem Time (%)**	**Cum Percent Problem Time (%)**
Juandah and Taroom	10.67	0.00	29.25	0.00	11.43

DAILY OPERATIONS

Most Likely Duration (no plan ch...	Original KB/RT Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)	Latitude (°)	Longitude (°)
9.21	328.10	323.60	4.50	26° 12' 43.558" S	149° 42' 23.676" E

Rig (Names)	Planned TD (mKB)	TD (max) (mKB)	End Depth (m...	Depth Progress (m)	Weather
Saxon 166	1,331.00	1,204.50	1,204.50	0.00	Sunny

HSSE

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
415.00	415.00

Safety Observations

Type	# Rpts
STOP Cards	5
Inductions	2
Safety Meetings	3

SAFETY CHECK SUMMARY

Type	Last Date	Days Last Chk (days)	Next Date
BOP Connection Test	17/11/2013	9	18/11/2013
Drills/Exercise	24/11/2013	2	25/11/2013
ESD Test	17/11/2013	9	18/11/2013
Kick Drills	23/11/2013	3	24/11/2013
Mast Inspection	17/11/2013	9	18/11/2013
Permit to Work	19/11/2013	7	20/11/2013
Pre-Job Meetings	25/11/2013	1	26/11/2013
Pre-Tour Meetings	26/11/2013	0	27/11/2013
Safety Meetings	24/11/2013	2	25/11/2013
Site Inductions	19/11/2013	7	20/11/2013
Toolbox Talk	26/11/2013	0	27/11/2013
Weekly Safety Meeting	24/11/2013	2	25/11/2013

DAILY CONTACTS

Contact Name	Title	Mobile
Arfa Chiha	IPM-Drilling Super	0467785174
Ahmed Gabry	Wellsite Supervisor	0448155134
Andy Hillier	Rig Manager	0419938581
Ivan McCarehy	Geologist	

POB

Company	Job Title	Count
Schlumberger IPM	WSS	1
Schlumberger IPM	WSE	3
QGC	Geologist	1
Saxon	Rig Crew	17
Tresed	Vacuum Truck Driver	2
ECM	Caterers	3
Path Finder	DD & LWD engineers	4
MI-SWACO	Mud Engineer	1

DAILY REPORT

Last 24hr Op's Summary

Triped in WFD tubing conveyed logging tools f/396m to TD at 1204.5m. Spaced out logging string 50m off bottom & deployed tools(MDL-MSS-MDN-MPD-MGS). Tripped & logged out of hole. Laid down WFD logging tools. P/U &RIH 6-1/8" directional BHA. RIH to 993m.
*Dumped logging memory data

Summary 00:00 - 06:00

Cont. RIH F/993m T/1140m, drillstring dropped downhole from TDS. Pick up 3-1/2" HWDP & RIH to tag fish. Tagged, screwed in and torqued up to fish (top of fish at 60m RKB, fish on bottom). Flow check POOH BHA to surface. No circulation as per Pathfinder DD instructions. Currently at 740m.

Planned Op's

Log 6-1/8" hole Run # 2: CMI-CXD-MGS.

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00

Start Time	End Time	Dur (hr)	Class	NPT (hr)	Phase	Op	Act Desc
00:00	06:15	6.25	P		ELS	LOG	Trip in tubing conveyed logging tools f/396m to TD at 1204.5m
06:15	07:00	0.75	P		ELS	LOG	Spaced out BHA 50m from bottom to 1155m & deployed WFD tool string: MDL-MSS-MDN-MPD-MGS
07:00	15:00	8.00	P		ELS	LOG	Log out of hole Run # 1 MDL-MSS-MDN-MPD from TD to 763m, MGS from TD to surface.
15:00	16:30	1.50	P		ELS	HT	B/O & L/D logging tools.

DAILY DRILLING REPORT

Cam_19

TRC: 415.00

Report Start Date: 26/11/2013

Report #: 11

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00

Start Time	End Time	Dur (hr)	Class	NPT (hr)	Phase	Op	Act Desc
16:30	18:15	1.75	P		ELS	HBH	P/U & M/U 6-1/8" directional BHA # 4. Scribe tools & orientate bit to high side. *Meanwhile dumped logging data.
18:15	00:00	5.75	P		ELS	WT	RIH wiper trip to 993m

CASING STRINGS

Csg Des	OD (in)	SD (mKB)
Conductor	14	10.00
Surface Casing	9 5/8	87.00
Production Casing/Liner (1)	7	763.00

MUD PROPERTIES

Mud Type	Time	Depth (mKB)	Weight (lb/gal)	Funnel Viscosity (s/qt)
KCl/Polymer	06:00		8.90	33
KCl/Polymer	17:00		8.90	33
KCl/Polymer	21:30		8.80	33

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)

MUD PUMP

 # 1, Gardner-Denver, PZ-8

Pump Rating (hp)	Rod Diameter (in)	Stroke Length (in)
750.0		7.99

Liner Size (in)	Volume Per Stroke Override (bbl/stk)
5 1/2	0.059

Pressure (psi)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)

FORMATIONS (LAST 5)

Formation Name	Prog Top MD (mKB)	Drill Top MD (mKB)
Springbok Sandstone	217.00	210.40
Upper Juandah Coal Measures	310.00	310.37
Lower Juandah Coal Measures	433.00	441.89
Tangalooma	594.00	557.81
Taroom Coal Measures	819.00	674.00

LEASE FLUIDS

Fluid	To Lease (bbl)	Source	From Lease (bbl)	Dest	BS&W (%)	Carrier	Ref #	Note
						Tresed		

JOB SUPPLIES

Supply Item Des	Unit Label	Loc	Vendor	Received	Consumed	Cum On Loc
Diesel Fuel : Rig	L	Rig	IOR	5,000.0	1,842.0	9,458.0
Diesel Fuel : mini camp	L	Rig	IOR	0.0	100.0	2,300.0
Diesel Fuel: camp	L	Camp	IOR	0.0	200.0	2,300.0
Diesel fuel: Vehicles	L	Rig	DN CROSS	0.0	60.0	-625.0
Potable Water	L	Camp	DN CROSS	15,000.0	6,000.0	20,000.0
Potable Water, mini camp	L	Rig	DN CROSS	5,000.0	850.0	10,716.0

DRILL STRING AND BIT INFORMATION

BHA #4, Steerable

Bit Run	Size (in)	Make	Model	IADC Codes	Serial Number	Length (m)
4R	6 1/8	Smith	MDi613 LBPX	___	J5496	0.19

Nozzles (1/32")	Bit Total Fluid Area (nozzles) (in²)	IADC Bit Dull
16/16/16	0.59	1-1-WT-A-X-I-NO-TD

Drill String Length (m)	BHA Weight in Air (1000lbf)	BHA ROP (m/hr)
1,158.00		15.3

String Components

Smith MDi613 LBPX, 6 1/8" Bit, Mud Motor - Bent Sub, MWD Float Sub, DPM, 4.75" Data Link Pin Pin, HDS-1 (DIR + GR), NMDC, HWDP, Drill Pipe, HWDP

DRILLING PARAMETERS

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth Drilled (m)	Drilling Time (hr)	Cum Drilling Time (hr)	Interval ROP (m/hr)	Flow Rate (gpm)
Original Hole	1,204.50	1,204.50	439.50	0.00	28.75		0

Weight on Bit (1000lbf)	Surface RPM (rpm)	SPP (psi)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Drilling Torque (ft•lb)	Off Bottom Torque (ft•lb)
0	0	0.0	55	63	50	0	0

ANNULAR VELOCITIES (DP & DC)

Inner Bound	Sz Inner Bound (in)	Outer Boundary	Sz Outer Bound (in)	Top (mKB)	Btm (mKB)	AV (m/min)

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

UNDERREAMING INTERVALS

Top (mKB)	Btm (mKB)	OD (in)	Com

DAILY DRILLING REPORT

Cam_19

TRC: 416.00

Report Start Date: 27/11/2013

Report #: 12

UWI	Well PID	Tenure	Field Name	Well Type	State/Province	Country
100000744838	CAM_WH019	PL 277	Cam	Appraisal	Queensland	AUS
Well Configuration Type	**Well Status**	**Well Sub-Status**	**Spud Date**	**Rig Release Date**	**Job Start Date**	**Job End Date**
Vertical	Available		7/03/2013 09:00	1/12/2013 15:30	16/11/2013 08:00	2/12/2013 11:30

JOB DETAILS

AFE Number	Total AFE + Supp Amount (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)	Daily Mud Field Est (Cost)	Cum Mud Field Est (Cost)
01	1,361,055.00	45,660.30	861,964.51		
Target Formation	**Cum Time Log Days (days)**	**Problem Time Hours (hr)**	**Cum Problem Time Hours (hr)**	**Percent Problem Time (%)**	**Cum Percent Problem Time (%)**
Juandah and Taroom	11.67	1.00	30.25	4.17	10.80

DAILY OPERATIONS

Most Likely Duration (no plan ch...	Original KB/RT Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)	Latitude (°)	Longitude (°)
9.21	328.10	323.60	4.50	26° 12' 43.558" S	149° 42' 23.676" E

Rig (Names)	Planned TD (mKB)	TD (max) (mKB)	End Depth (m...	Depth Progress (m)	Weather
Saxon 166	1,331.00	1,204.50	1,204.50	0.00	Sunny

HSSE

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
416.00	416.00

Safety Observations

Type	# Rpts
STOP Cards	9
Good Observations	2
Safety Meetings	4
PTW	2

SAFETY CHECK SUMMARY

Type	Last Date	Days Last Chk (days)	Next Date
BOP Connection Test	17/11/2013	10	18/11/2013
Drills/Exercise	24/11/2013	3	25/11/2013
ESD Test	17/11/2013	10	18/11/2013
Kick Drills	23/11/2013	4	24/11/2013
Mast Inspection	17/11/2013	10	18/11/2013
Permit to Work	19/11/2013	8	20/11/2013
Pre-Job Meetings	27/11/2013	0	28/11/2013
Pre-Tour Meetings	26/11/2013	1	27/11/2013
Safety Meetings	24/11/2013	3	25/11/2013
Site Inductions	19/11/2013	8	20/11/2013
Toolbox Talk	26/11/2013	1	27/11/2013
Weekly Safety Meeting	24/11/2013	3	25/11/2013

DAILY CONTACTS

Contact Name	Title	Mobile
Arfa Chiha	IPM-Drilling Super	0467785174
Ahmed Gabry	Wellsite Supervisor	0448155134
Andy Hillier	Rig Manager	0419938581
Ben Marshall	Geologist	

POB

Company	Job Title	Count
Schlumberger IPM	WSS	1
Schlumberger IPM	WSE	2
QGC	Geologist	1
Saxon	Rig Crew	14
Tresed	Vacuum Truck Driver	2
ECM	Caterers	3
Path Finder	DD & LWD engineers	2
Weatherford	Logging Crew	4

DAILY REPORT

Last 24hr Op's Summary

Cont. RIH F/993m T/1140m, drillstring dropped downhole from TDS. RIH W/ 3-1/2" OEHWDP & RIH to tag fish. Stab in & engaged fish. POOH BHA to surface. RIH WFD compact well shuttle (impulse) logging tools & recorded logging as per program.

Summary 00:00 - 06:00

Logged 6 1/8" hole F/ 1058.7m T/305m

Planned Op's

POOH logging string T/ Surface. R/D loggers, perform wiper trip to TD for running 4 1/2" liner

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00

Start Time	End Time	Dur (hr)	Class	NPT (hr)	Phase	Op	Act Desc
00:00	01:00	1.00	P		ELS	WT	Cont. wiper trip from 993m to 1140m
01:00	02:00	1.00	TP	1.00	ELS	F	String dropped from topdrive downhole. P/UP 3-1/2" OEHWDP; RIH & tagged fish. Stab in & engage fish, confirmed same with torque & hook load (top of fish at 60mrkb, fish on bottom).
02:00	09:15	7.25	P		ELS	TO	POOH from TD to sufrace. L/D Jnt# 116. *Pathfinder DD recomended to POOH & check tools (no circulation) * Changed out 3-1/2" TDS saver sub

DAILY DRILLING REPORT

Cam_19

TRC: 416.00

Report Start Date: 27/11/2013

Report #: 12

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00

Start Time	End Time	Dur (hr)	Class	NPT (hr)	Phase	Op	Act Desc
09:15	10:45	1.50	P		ELS	HBH	L/D Pathfinder directional tools *@ surface function tested motor, rotating good, measured bearing clearance-in range, no bearing noise. *DD confirmed that motor is ok for the next wiper trip *Found 2X31/2" DP bended
10:45	11:00	0.25	P		ELS	RU	Prepared rig floor for logging operations
11:00	12:00	1.00	P		ELS	HBH	Prepared BHA for Logging run #2
12:00	12:30	0.50	P		ELS	SM	Safety meeting with WFD crew briefing logging operations *Discussed operations procedures *HARC and risk assessment
12:30	15:15	2.75	P		ELS	HT	P/U & M/UP logging string deployment BHA, run # 2: (MGS-CXD-CMI), pressure tested seals & function tested data logger.
15:15	21:45	6.50	P		ELS	TI	RIH W/ compact well shuttle (impulse) weatherford logging tools to TD and tagged btm at 1204.94m.
21:45	22:30	0.75	P		ELS	LOG	Spaced out BHA 28m from bottom to 1177m & deployed WFD tool string: (MGS-CXD-CMI)
22:30	00:00	1.50	P		ELS	LOG	Logging while POOH, Run # 2 (MGS-CXD-CMI) F/ TD T/ 1058.7m

CASING STRINGS

Csg Des	OD (in)	SD (mKB)
Conductor	14	10.00
Surface Casing	9 5/8	87.00
Production Casing/Liner (1)	7	763.00

MUD PROPERTIES

Mud Type	Time	Depth (mKB)	Weight (lb/gal)	Funnel Viscosity (s/qt)
KCl/Polymer	06:30	1,204.00	8.80	33
KCl/Polymer	17:00	1,204.00	8.80	33
KCl/Polymer	21:30	1,204.00	8.80	33

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)

MUD PUMP

 # 1, Gardner-Denver, PZ-8

Pump Rating (hp)	Rod Diameter (in)	Stroke Length (in)
750.0		7.99

Liner Size (in)	Volume Per Stroke Override (bbl/stk)
5 1/2	0.059

Pressure (psi)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)

FORMATIONS (LAST 5)

Formation Name	Prog Top MD (mKB)	Drill Top MD (mKB)
Springbok Sandstone	217.00	210.40
Upper Juandah Coal Measures	310.00	310.37
Lower Juandah Coal Measures	433.00	441.89
Tangalooma	594.00	557.81
Taroom Coal Measures	819.00	674.00

LEASE FLUIDS

Fluid	To Lease (bbl)	Source	From Lease (bbl)	Dest	BS&W (%)	Carrier	Ref #	Note
	120.0		150.0			Tresed		

JOB SUPPLIES

Supply Item Des	Unit Label	Loc	Vendor	Received	Consumed	Cum On Loc
Diesel Fuel : Rig	L	Rig	IOR	0.0	1,875.0	7,583.0
Diesel Fuel : mini camp	L	Rig	IOR	0.0	100.0	2,200.0
Diesel Fuel: camp	L	Camp	IOR	0.0	200.0	2,100.0
Diesel fuel: Vehicles	L	Rig	DN CROSS	0.0	0.0	-625.0
Potable Water	L	Camp	DN CROSS	7,000.0	6,000.0	21,000.0
Potable Water, mini camp	L	Rig	DN CROSS	0.0	980.0	9,736.0

DAILY DRILLING REPORT

Cam_19

TRC: 416.00

Report Start Date: 27/11/2013

Report #: 12

DRILL STRING AND BIT INFORMATION

BHA #4, Steerable

Bit Run	Size (in)	Make	Model	IADC Codes	Serial Number	Length (m)
4R	6 1/8	Smith	MDi613 LBPX	___	J5496	0.19

Nozzles (1/32")	Bit Total Fluid Area (nozzles) (in²)	IADC Bit Dull
16/16/16	0.59	1-1-WT-A-X-I-NO-TD

Drill String Length (m)	BHA Weight in Air (1000lbf)	BHA ROP (m/hr)
1,158.00		15.3

String Components

Smith MDi613 LBPX, 6 1/8" Bit, Mud Motor - Bent Sub, MWD Float Sub, DPM, 4.75" Data Link Pin Pin, HDS-1 (DIR + GR), NMDC, HWDP, Drill Pipe, HWDP

DRILLING PARAMETERS

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth Drilled (m)	Drilling Time (hr)	Cum Drilling Time (hr)	Interval ROP (m/hr)	Flow Rate (gpm)
Original Hole	1,204.50	1,204.50	439.50	0.00	28.75		0

Weight on Bit (1000lbf)	Surface RPM (rpm)	SPP (psi)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Drilling Torque (ft•lb)	Off Bottom Torque (ft•lb)
0	0	0.0	55	63	50	0	0

ANNULAR VELOCITIES (DP & DC)

Inner Bound	Sz Inner Bound (in)	Outer Boundary	Sz Outer Bound (in)	Top (mKB)	Btm (mKB)	AV (m/min)

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

UNDERREAMING INTERVALS

Top (mKB)	Btm (mKB)	OD (in)	Com

DAILY DRILLING REPORT

Cam_19

TRC: 417.00

Report Start Date: 28/11/2013

Report #: 13

UWI	Well PID	Tenure	Field Name	Well Type	State/Province	Country
100000744838	CAM_WH019	PL 277	Cam	Appraisal	Queensland	AUS
Well Configuration Type	**Well Status**	**Well Sub-Status**	**Spud Date**	**Rig Release Date**	**Job Start Date**	**Job End Date**
Vertical	Available		7/03/2013 09:00	1/12/2013 15:30	16/11/2013 08:00	2/12/2013 11:30

JOB DETAILS

AFE Number	Total AFE + Supp Amount (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)	Daily Mud Field Est (Cost)	Cum Mud Field Est (Cost)
01	1,361,055.00	42,571.60	904,536.11		
Target Formation	**Cum Time Log Days (days)**	**Problem Time Hours (hr)**	**Cum Problem Time Hours (hr)**	**Percent Problem Time (%)**	**Cum Percent Problem Time (%)**
Juandah and Taroom	12.67	0.00	30.25	0.00	9.95

DAILY OPERATIONS

Most Likely Duration (no plan ch...	Original KB/RT Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)	Latitude (°)	Longitude (°)
9.21	328.10	323.60	4.50	26° 12' 43.558" S	149° 42' 23.676" E

Rig (Names)	Planned TD (mKB)	TD (max) (mKB)	End Depth (m...	Depth Progress (m)	Weather
Saxon 166	1,331.00	1,204.50	1,204.50		Sunny

HSSE

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
417.00	417.00

Safety Observations

Type	# Rpts
STOP Cards	5
Safety Meetings	3
Inductions	2

SAFETY CHECK SUMMARY

Type	Last Date	Days Last Chk (days)	Next Date
BOP Connection Test	17/11/2013	11	18/11/2013
Drills/Exercise	24/11/2013	4	25/11/2013
ESD Test	17/11/2013	11	18/11/2013
Kick Drills	23/11/2013	5	24/11/2013
Mast Inspection	17/11/2013	11	18/11/2013
Permit to Work	19/11/2013	9	20/11/2013
Pre-Job Meetings	27/11/2013	1	28/11/2013
Pre-Tour Meetings	26/11/2013	2	27/11/2013
Safety Meetings	24/11/2013	4	25/11/2013
Site Inductions	19/11/2013	9	20/11/2013
Toolbox Talk	26/11/2013	2	27/11/2013
Weekly Safety Meeting	24/11/2013	4	25/11/2013

DAILY CONTACTS

Contact Name	Title	Mobile
Arfa Chiha	IPM-Drilling Super	0467785174
Ahmed Gabry	Wellsite Supervisor	0448155134
Andy Hillier	Rig Manager	0419938581
Ben Marshall	Geologist	

POB

Company	Job Title	Count
Schlumberger IPM	WSS	1
Schlumberger IPM	WSE	2
QGC	Geologist	1
Saxon	Rig Crew	14
Tresed	Vacuum Truck Driver	2
ECM	Caterers	3
Path Finder	DD & LWD engineers	2
Weatherford	Logging Crew	4

DAILY REPORT

Last 24hr Op's Summary

Continued to log hole with WFD TCL (MGS-CXD-CMI). POOH & L/D logging tools. P/U 6-1/8" directional BHA, performed wiper trip to TD. Circulate hole clean. POOH F/ TD to surface. B/O & L/D 6 1/8" directional BHA

Summary 00:00 - 06:00

L/D 6-1/8" directional BHA. RIH 4 1/2" GRE slotted liner to 50m.

Planned Op's

RIH GRE slotted liner on 3-1/2" drill pipe to TD. Drop ball & back off, POOH DP. P/U & RIH PLS packer to 400m, Set packer & P/T from above. Install BPV & N/D BOP.

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00

Start Time	End Time	Dur (hr)	Class	NPT (hr)	Phase	Op	Act Desc
00:00	08:00	8.00	P		ELS	LOG	Continued logging while POOH, Run # 2 (MGS-CXD-CMI); CXD-CMI F/ 1058.7 T/ 763m, MGS F/1058.7 T/surface.
08:00	10:00	2.00	P		ELS	HT	B/O & L/D logging tools.
10:00	12:00	2.00	P		PCO	HBH	P/U & M/U 6-1/8" directional BHA # 4. Scribe tools & orientate bit to high side. *Meanwhile dumped logging data.
12:00	17:45	5.75	P		PCO	WT	RIH wiper trip to TD at 1204.5m
17:45	19:00	1.25	P		PCO	CIC	Circulate 10 bbl high vis sweep & circulate hole clean.

DAILY DRILLING REPORT

Cam_19

TRC: 417.00

Report Start Date: 28/11/2013

Report #: 13

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00

Start Time	End Time	Dur (hr)	Class	NPT (hr)	Phase	Op	Act Desc
19:00	23:30	4.50	P		PCO	TO	Flow check. POOH wiper trip BHA from TD to surface.
23:30	00:00	0.50	P		PCO	HBH	B/O & L/D 6-1/8" directional BHA.

CASING STRINGS

Csg Des	OD (in)	SD (mKB)
Conductor	14	10.00
Surface Casing	9 5/8	87.00
Production Casing/Liner (1)	7	763.00
Production Casing/Liner (2)	4 1/2	1,204.50

MUD PROPERTIES

Mud Type	Time	Depth (mKB)	Weight (lb/gal)	Funnel Viscosity (s/qt)
KCl/Polymer	06:30	1,204.00	8.90	33
KCl/Polymer	17:00	1,204.00	8.80	33
KCl/Polymer	21:30	1,204.00	8.80	33

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)

MUD PUMP

 # 1, Gardner-Denver, PZ-8

Pump Rating (hp)	Rod Diameter (in)	Stroke Length (in)
750.0		7.99

Liner Size (in)	Volume Per Stroke Override (bbl/stk)
5 1/2	0.059

Pressure (psi)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)

FORMATIONS (LAST 5)

Formation Name	Prog Top MD (mKB)	Drill Top MD (mKB)
Springbok Sandstone	217.00	210.40
Upper Juandah Coal Measures	310.00	310.37
Lower Juandah Coal Measures	433.00	441.89
Tangalooma	594.00	557.81
Taroom Coal Measures	819.00	674.00

LEASE FLUIDS

Fluid	To Lease (bbl)	Source	From Lease (bbl)	Dest	BS&W (%)	Carrier	Ref #	Note
	120.0		150.0			Tresed		

JOB SUPPLIES

Supply Item Des	Unit Label	Loc	Vendor	Received	Consumed	Cum On Loc
Diesel Fuel : Rig	L	Rig	IOR	0.0	1,490.0	6,093.0
Diesel Fuel : mini camp	L	Rig	IOR	0.0	150.0	2,050.0
Diesel Fuel: camp	L	Camp	IOR	0.0	200.0	1,900.0
Diesel fuel: Vehicles	L	Rig	DN CROSS	0.0	100.0	-725.0
Potable Water	L	Camp	DN CROSS	7,000.0	4,000.0	24,000.0
Potable Water, mini camp	L	Rig	DN CROSS	0.0	1,000.0	8,736.0

DRILL STRING AND BIT INFORMATION

BHA #4, Steerable

Bit Run	Size (in)	Make	Model	IADC Codes	Serial Number	Length (m)
4R	6 1/8	Smith	MDi613 LBPX	___	J5496	0.19

Nozzles (1/32")	Bit Total Fluid Area (nozzles) (in²)	IADC Bit Dull
16/16/16	0.59	1-1-WT-A-X-I-NO-TD

Drill String Length (m)	BHA Weight in Air (1000lbf)	BHA ROP (m/hr)
1,158.00		15.3

String Components

Smith MDi613 LBPX, 6 1/8" Bit, Mud Motor - Bent Sub, MWD Float Sub, DPM, 4.75" Data Link Pin Pin, HDS-1 (DIR + GR), NMDC, HWDP, Drill Pipe, HWDP

DRILLING PARAMETERS

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth Drilled (m)	Drilling Time (hr)	Cum Drilling Time (hr)	Interval ROP (m/hr)	Flow Rate (gpm)
Original Hole	1,204.50	1,204.50	439.50	0.00	28.75		0

Weight on Bit (1000lbf)	Surface RPM (rpm)	SPP (psi)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Drilling Torque (ft•lb)	Off Bottom Torque (ft•lb)
0	0	0.0	55	63	50	0	0

ANNULAR VELOCITIES (DP & DC)

Inner Bound	Sz Inner Bound (in)	Outer Boundary	Sz Outer Bound (in)	Top (mKB)	Btm (mKB)	AV (m/min)

DAILY DRILLING REPORT

Cam_19

TRC: 417.00

Report Start Date: 28/11/2013

Report #: 13

DRILLING PARAMETERS

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth Drilled (m)	Drilling Time (hr)	Cum Drilling Time (hr)	Interval ROP (m/hr)	Flow Rate (gpm)
Original Hole	1,204.50			0.00	28.75		0

Weight on Bit (1000lbf)	Surface RPM (rpm)	SPP (psi)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Drilling Torque (ft•lb)	Off Bottom Torque (ft•lb)
0	0	0.0	55	63	50	0	0

ANNULAR VELOCITIES (DP & DC)

Inner Bound	Sz Inner Bound (in)	Outer Boundary	Sz Outer Bound (in)	Top (mKB)	Btm (mKB)	AV (m/min)

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

UNDERREAMING INTERVALS

Top (mKB)	Btm (mKB)	OD (in)	Com

DAILY DRILLING REPORT

Cam_19

TRC: 418.00

Report Start Date: 29/11/2013

Report #: 14

UWI	Well PID	Tenure	Field Name	Well Type	State/Province	Country
100000744838	CAM_WH019	PL 277	Cam	Appraisal	Queensland	AUS
Well Configuration Type	**Well Status**	**Well Sub-Status**	**Spud Date**	**Rig Release Date**	**Job Start Date**	**Job End Date**
Vertical	Available		7/03/2013 09:00	1/12/2013 15:30	16/11/2013 08:00	2/12/2013 11:30

JOB DETAILS

AFE Number	Total AFE + Supp Amount (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)	Daily Mud Field Est (Cost)	Cum Mud Field Est (Cost)
01	1,361,055.00	42,571.60	947,107.71		
Target Formation	**Cum Time Log Days (days)**	**Problem Time Hours (hr)**	**Cum Problem Time Hours (hr)**	**Percent Problem Time (%)**	**Cum Percent Problem Time (%)**
Juandah and Taroom	13.67	0.25	30.50	1.04	9.30

DAILY OPERATIONS

Most Likely Duration (no plan ch...	Original KB/RT Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)	Latitude (°)	Longitude (°)
9.21	328.10	323.60	4.50	26° 12' 43.558" S	149° 42' 23.676" E

Rig (Names)	Planned TD (mKB)	TD (max) (mKB)	End Depth (m...	Depth Progress (m)	Weather
Saxon 166	1,331.00	1,204.50	1,204.50		Heavy rains-dark cloudy

HSSE

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
418.00	418.00

Safety Observations

Type	# Rpts
Safety Meeting	3
STOP Cards	5
Permit to work	1

SAFETY CHECK SUMMARY

Type	Last Date	Days Last Chk (days)	Next Date
BOP Connection Test	17/11/2013	12	18/11/2013
Drills/Exercise	24/11/2013	5	25/11/2013
ESD Test	17/11/2013	12	18/11/2013
Kick Drills	23/11/2013	6	24/11/2013
Mast Inspection	17/11/2013	12	18/11/2013
Permit to Work	19/11/2013	10	20/11/2013
Pre-Job Meetings	27/11/2013	2	28/11/2013
Pre-Tour Meetings	26/11/2013	3	27/11/2013
Safety Meetings	24/11/2013	5	25/11/2013
Site Inductions	19/11/2013	10	20/11/2013
Toolbox Talk	26/11/2013	3	27/11/2013
Weekly Safety Meeting	24/11/2013	5	25/11/2013

DAILY CONTACTS

Contact Name	Title	Mobile
Arfa Chiha	IPM-Drilling Super	0467785174
Ahmed Gabry	Wellsite Supervisor	0448155134
Andy Hillier	Rig Manager	0419938581
Ben Marshall	Geologist	

POB

Company	Job Title	Count
Schlumberger IPM	WSS	1
Schlumberger IPM	WSE	2
QGC	Geologist	1
Saxon	Rig Crew	14
Tresed	Vacuum Truck Driver	2
ECM	Caterers	3
Path Finder	DD & LWD engineers	2
Weatherford	Logging Crew	4

DAILY REPORT

Last 24hr Op's Summary

RIH GRE slotted liner on 3-1/2" drill pipe to TD. Drop ball & back off, top of liner set at 745.73m. POOH DP.

Summary 00:00 - 06:00

Cont. POOH to surface with DP. P/U & RIH 3 1/2" PLS packer tail pipe.

Planned Op's

RIH PLS packer on 3 1/2" tbg to 400m, Set packer & P/T from above. Disengage on/off tool & POOH tbg. Install BPV & N/D BOP. Rig down and prepare for rig move.

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00

Start Time	End Time	Dur (hr)	Class	NPT (hr)	Phase	Op	Act Desc
00:00	02:00	2.00	P		PCO	HBH	Cont. B/O & L/D 6-1/8" directional BHA.
02:00	16:30	14.50	P		PC2	RC	Run 4 1/2" casing, 2.68 lb/ft GRE, EUE F/surface T/423m *M/UP mule shoe to last GRE casing joint. *Difficult to M/U GRE joints due to extremely fine threads prone to cross threading. *Damaged box thread of 2Jnts while M/U, torque exceeded 800ft.lb *Difficult to M/U to top drive due to flexible joints, had to M/U & saver sub on pipe rack for every connection.
16:30	16:45	0.25	TP	0.25	PC2	WOW	Heavy rain, wait on weather to continue operations.

DAILY DRILLING REPORT

Cam_19

TRC: 418.00

Report Start Date: 29/11/2013

Report #: 14

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00

Start Time	End Time	Dur (hr)	Class	NPT (hr)	Phase	Op	Act Desc
16:45	17:45	1.00	P		PC2	RC	Cont. Run 4 1/2" casing, 2.68 lb/ft GRE, EUE F/423m T/459m *Total in hole: 54 Joints
17:45	18:00	0.25	P		PC2	RC	M/U Back off sub & X/O to joint#54.
18:00	20:00	2.00	P		PC2	TI	M/U Back off sub to 3 1/2" DP & RIH with 3 1/2" DP F/459m T/ 773m
20:00	20:15	0.25	P		PC2	RS	Rig Service, changed out grabber box dies.
20:15	23:00	2.75	P		PC2	TI	Continue RIH with 3 1/2" DP F/773m T/1204.5m *Confirmed bottom by slack off 5Klb & pipe tally.
23:00	23:30	0.50	P		PC2	RC	PJSM. Land liner, fill pipe & establish base line circulating pressure. Drop closing ball and pressure up to 500 psi. Pressure not holding, ball seat leaking. Backed off at back off sub with right hand rotation. *Confirmed liner release by SPP drop to baseline circulating pressure & 3Klb hook load. Top of liner set at 745.73m.
23:30	00:00	0.50	P		PC2	TO	POOH OEDP T/658m

CASING STRINGS

Csg Des	OD (in)	SD (mKB)
Conductor	14	10.00
Surface Casing	9 5/8	87.00
Production Casing/Liner (1)	7	763.00
Production Casing/Liner (2)	4 1/2	1,204.50

MUD PROPERTIES

Mud Type	Time	Depth (mKB)	Weight (lb/gal)	Funnel Viscosity (s/qt)

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)

MUD PUMP

 # 1, Gardner-Denver, PZ-8

Pump Rating (hp)	Rod Diameter (in)	Stroke Length (in)
750.0		7.99

Liner Size (in)	Volume Per Stroke Override (bbl/stk)
5 1/2	0.059

Pressure (psi)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)

FORMATIONS (LAST 5)

Formation Name	Prog Top MD (mKB)	Drill Top MD (mKB)
Springbok Sandstone	217.00	210.40
Upper Juandah Coal Measures	310.00	310.37
Lower Juandah Coal Measures	433.00	441.89
Tangalooma	594.00	557.81
Taroom Coal Measures	819.00	674.00

LEASE FLUIDS

Fluid	To Lease (bbl)	Source	From Lease (bbl)	Dest	BS&W (%)	Carrier	Ref #	Note
	120.0		150.0			Tresed		

JOB SUPPLIES

Supply Item Des	Unit Label	Loc	Vendor	Received	Consumed	Cum On Loc
Diesel Fuel : Rig	L	Rig	IOR	0.0	1,491.0	4,602.0
Diesel Fuel : mini camp	L	Rig	IOR	0.0	150.0	1,900.0
Diesel Fuel: camp	L	Camp	IOR	0.0	200.0	1,700.0
Diesel fuel: Vehicles	L	Rig	DN CROSS	0.0	100.0	-825.0
Potable Water	L	Camp	DN CROSS	0.0	3,000.0	21,000.0
Potable Water, mini camp	L	Rig	DN CROSS	0.0	950.0	7,786.0

DRILL STRING AND BIT INFORMATION

BHA #<stringno>, <des>

Bit Run	Size (in)	Make	Model	IADC Codes	Serial Number	Length (m)

Nozzles (1/32")	Bit Total Fluid Area (nozzles) (in²)	IADC Bit Dull

Drill String Length (m)	BHA Weight in Air (1000lbf)	BHA ROP (m/hr)

String Components

DAILY DRILLING REPORT

Cam_19

TRC: 418.00

Report Start Date: 29/11/2013

Report #: 14

DRILLING PARAMETERS

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth Drilled (m)	Drilling Time (hr)	Cum Drilling Time (hr)	Interval ROP (m/hr)	Flow Rate (gpm)
Weight on Bit (1000lbf)	**Surface RPM (rpm)**	**SPP (psi)**	**Drill Str Wt (1000lbf)**	**PU Str Wt (1000lbf)**	**SO Str Wt (1000lbf)**	**Drilling Torque (ft•lb)**	**Off Bottom Torque (ft•lb)**

ANNULAR VELOCITIES (DP & DC)

Inner Bound	Sz Inner Bound (in)	Outer Boundary	Sz Outer Bound (in)	Top (mKB)	Btm (mKB)	AV (m/min)

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

UNDERREAMING INTERVALS

Top (mKB)	Btm (mKB)	OD (in)	Com

DAILY DRILLING REPORT

Cam_19

TRC: 419.00

Report Start Date: 30/11/2013

Report #: 15

UWI	Well PID	Tenure	Field Name	Well Type	State/Province	Country
100000744838	CAM_WH019	PL 277	Cam	Appraisal	Queensland	AUS
Well Configuration Type	**Well Status**	**Well Sub-Status**	**Spud Date**	**Rig Release Date**	**Job Start Date**	**Job End Date**
Vertical	Available		7/03/2013 09:00	1/12/2013 15:30	16/11/2013 08:00	2/12/2013 11:30

JOB DETAILS

AFE Number	Total AFE + Supp Amount (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)	Daily Mud Field Est (Cost)	Cum Mud Field Est (Cost)
01	1,361,055.00	42,571.60	989,679.31		
Target Formation	**Cum Time Log Days (days)**	**Problem Time Hours (hr)**	**Cum Problem Time Hours (hr)**	**Percent Problem Time (%)**	**Cum Percent Problem Time (%)**
Juandah and Taroom	14.67	0.00	30.50	0.00	8.66

DAILY OPERATIONS

Most Likely Duration (no plan ch...	Original KB/RT Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)	Latitude (°)	Longitude (°)
9.21	328.10	323.60	4.50	26° 12' 43.558" S	149° 42' 23.676" E

Rig (Names)	Planned TD (mKB)	TD (max) (mKB)	End Depth (m...	Depth Progress (m)	Weather
Saxon 166	1,331.00	1,204.50	1,204.50		Sunny

HSSE

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
419.00	419.00

Safety Observations

Type	# Rpts
STOP Cards	5
Safety Meetings	3

SAFETY CHECK SUMMARY

Type	Last Date	Days Last Chk (days)	Next Date
BOP Connection Test	17/11/2013	13	18/11/2013
Drills/Exercise	24/11/2013	6	25/11/2013
ESD Test	17/11/2013	13	18/11/2013
Kick Drills	23/11/2013	7	24/11/2013
Mast Inspection	17/11/2013	13	18/11/2013
Permit to Work	19/11/2013	11	20/11/2013
Pre-Job Meetings	27/11/2013	3	28/11/2013
Pre-Tour Meetings	26/11/2013	4	27/11/2013
Safety Meetings	24/11/2013	6	25/11/2013
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Weekly Safety Meeting	24/11/2013	6	25/11/2013

DAILY CONTACTS

Contact Name	Title	Mobile
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Ahmed Gabry	Wellsite Supervisor	0448155134
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Ben Marshall	Geologist	

POB

Company	Job Title	Count
Schlumberger IPM	WSS	1
Schlumberger IPM	WSE	3
QGC	Geologist	1
Saxon	Rig Crew	14
Tresed	Vacuum Truck Driver	2
ECM	Caterers	3

DAILY REPORT

Last 24hr Op's Summary

Cont. POOH to surface with DP. P/U & RIH PLS packer on 3 1/2" tbg to 400m. Attempted to set PLS packer, unsuccessful ; bottom slips engaging down, upper slips not engaging. POOH tbg to tail pipe at100m, B/D packer assembly and change out PLS packer.

Summary 00:00 - 06:00

P/U & RIH PLS packer on 3 1/2" tbg, set packer at 402m.

Planned Op's

P/T packer seal from above to 250/1500psi. Disconect on/off tool & POOH tbg. set BPV & N/D BOP.

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00

Start Time	End Time	Dur (hr)	Class	NPT (hr)	Phase	Op	Act Desc
00:00	03:30	3.50	P		PC2	TO	POOH OEDP F/658m to surface. B/O & L/D Wagner back off sub.
03:30	05:00	1.50	P		PC2	RU	M/U 4"FHx3 1/2" EUE saver sub. *Prepare 3 1/2" tubing string.
05:00	07:00	2.00	P		SUS	INP	RIH 10jnts of 3 1/2" tubing tail pipe (blind). *Fill each joint while make connection with 2" hose.

DAILY DRILLING REPORT

Cam_19

TRC: 419.00

Report Start Date: 30/11/2013

Report #: 15

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00

Start Time	End Time	Dur (hr)	Class	NPT (hr)	Phase	Op	Act Desc
07:00	09:00	2.00	TP		SUS	INP	P/U & M/U PLS packer assembly; * 10' pup Jnt * J-slot On/Off tool * Slick Jnt * Tubing drain (700psi) * Haliburton PLS packer * Tubing drain (1400psi) * 10' pup Jnt
09:00	15:30	6.50	TP		SUS	INP	RIH PLS packer assembly with 42 Jnts 3 1/2" tbg with controlled speed to avoid surge pressures. *Safety clamp used while running in *Top of slick Jnt @ 402.54m *Middle of packer element @ 403.51m *EOT @ 501.6m *Fill tubing every 10 Jnts
15:30	17:15	1.75	TP		SUS	INP	Tried to set PLS packer, unable to set packer, upper slips not holding. * Attempted several times with no success
17:15	18:00	0.75	TP		SUS	TO	POOH to surface to check PLS packer. Maintain controlled pulling speed to avoid swab pressures.
18:00	18:30	0.50	P		SUS	RS	Rig service, serviced iron roughneck.
18:30	19:30	1.00	TP		SUS	TO	Continue POOH to surface to check PLS packer. Maintain controlled pulling speed to avoid swab pressures.
19:30	20:45	1.25	TP		SUS	RS	Troubleshoot iron roughneck hydraulic fitting.
20:45	23:15	2.50	TP		SUS	TO	Continue POOH to surface to check PLS packer. Maintain controlled pulling speed to avoid swab pressures.
23:15	00:00	0.75	TP		SUS	HBH	B/O damaged PLS packer assembly, M/U new PLS packer to on/off tool & tubing drains.

CASING STRINGS

Csg Des	OD (in)	SD (mKB)
Conductor	14	10.00
Surface Casing	9 5/8	87.00
Production Casing/Liner (1)	7	763.00
Production Casing/Liner (2)	4 1/2	1,204.50

MUD PROPERTIES

Mud Type	Time	Depth (mKB)	Weight (lb/gal)	Funnel Viscosity (s/qt)

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)

MUD PUMP

 # 1, Gardner-Denver, PZ-8

Pump Rating (hp)	Rod Diameter (in)	Stroke Length (in)
750.0		7.99

Liner Size (in)	Volume Per Stroke Override (bbl/stk)
5 1/2	0.059

Pressure (psi)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)

FORMATIONS (LAST 5)

Formation Name	Prog Top MD (mKB)	Drill Top MD (mKB)
Springbok Sandstone	217.00	210.40
Upper Juandah Coal Measures	310.00	310.37
Lower Juandah Coal Measures	433.00	441.89
Tangalooma	594.00	557.81
Taroom Coal Measures	819.00	674.00

LEASE FLUIDS

Fluid	To Lease (bbl)	Source	From Lease (bbl)	Dest	BS&W (%)	Carrier	Ref #	Note
						Tresed		

JOB SUPPLIES

Supply Item Des	Unit Label	Loc	Vendor	Received	Consumed	Cum On Loc
Diesel Fuel : Rig	L	Rig	IOR	0.0	1,316.0	3,286.0
Diesel Fuel : mini camp	L	Rig	IOR	0.0	100.0	1,800.0
Diesel Fuel: camp	L	Camp	IOR	0.0	450.0	1,250.0
Diesel fuel: Vehicles	L	Rig	DN CROSS	0.0	100.0	-925.0

DAILY DRILLING REPORT

Cam_19

TRC: 419.00

Report Start Date: 30/11/2013

Report #: 15

JOB SUPPLIES

Supply Item Des	Unit Label	Loc	Vendor	Received	Consumed	Cum On Loc
Potable Water	L	Camp	DN CROSS		5,000.0	16,000.0
Potable Water, mini camp	L	Rig	DN CROSS	0.0	800.0	6,986.0

DRILL STRING AND BIT INFORMATION

BHA #<stringno>, <des>

Bit Run	Size (in)	Make	Model	IADC Codes	Serial Number	Length (m)

Nozzles (1/32")	Bit Total Fluid Area (nozzles) (in²)	IADC Bit Dull

Drill String Length (m)	BHA Weight in Air (1000lbf)	BHA ROP (m/hr)

String Components

DRILLING PARAMETERS

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth Drilled (m)	Drilling Time (hr)	Cum Drilling Time (hr)	Interval ROP (m/hr)	Flow Rate (gpm)

Weight on Bit (1000lbf)	Surface RPM (rpm)	SPP (psi)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Drilling Torque (ft•lb)	Off Bottom Torque (ft•lb)

ANNULAR VELOCITIES (DP & DC)

Inner Bound	Sz Inner Bound (in)	Outer Boundary	Sz Outer Bound (in)	Top (mKB)	Btm (mKB)	AV (m/min)

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

UNDERREAMING INTERVALS

Top (mKB)	Btm (mKB)	OD (in)	Com

DAILY DRILLING REPORT

Cam_19

TRC: 420.00

Report Start Date: 1/12/2013

Report #: 16

UWI	Well PID	Tenure	Field Name	Well Type	State/Province	Country
100000744838	CAM_WH019	PL 277	Cam	Appraisal	Queensland	AUS
Well Configuration Type	**Well Status**	**Well Sub-Status**	**Spud Date**	**Rig Release Date**	**Job Start Date**	**Job End Date**
Vertical	Available		7/03/2013 09:00	1/12/2013 15:30	16/11/2013 08:00	2/12/2013 11:30

JOB DETAILS

AFE Number	Total AFE + Supp Amount (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)	Daily Mud Field Est (Cost)	Cum Mud Field Est (Cost)
01	1,361,055.00	42,571.60	1,032,250.91		
Target Formation	**Cum Time Log Days (days)**	**Problem Time Hours (hr)**	**Cum Problem Time Hours (hr)**	**Percent Problem Time (%)**	**Cum Percent Problem Time (%)**
Juandah and Taroom	15.67	6.50	37.00	27.08	9.84

DAILY OPERATIONS

Most Likely Duration (no plan ch...	Original KB/RT Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)	Latitude (°)	Longitude (°)
9.21	328.10	323.60	4.50	26° 12' 43.558" S	149° 42' 23.676" E

Rig (Names)	Planned TD (mKB)	TD (max) (mKB)	End Depth (m...	Depth Progress (m)	Weather
Saxon 166	1,331.00	1,204.50	1,204.50		Clear

HSSE

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
420.00	420.00

Safety Observations

Type	# Rpts
Safety Meetings	3
STOP Cards	5

SAFETY CHECK SUMMARY

Type	Last Date	Days Last Chk (days)	Next Date
BOP Connection Test	17/11/2013	14	18/11/2013
Drills/Exercise	24/11/2013	7	25/11/2013
ESD Test	17/11/2013	14	18/11/2013
Kick Drills	23/11/2013	8	24/11/2013
Mast Inspection	17/11/2013	14	18/11/2013
Permit to Work	19/11/2013	12	20/11/2013
Pre-Job Meetings	27/11/2013	4	28/11/2013
Pre-Tour Meetings	26/11/2013	5	27/11/2013
Safety Meetings	24/11/2013	7	25/11/2013
Site Inductions	19/11/2013	12	20/11/2013
Toolbox Talk	26/11/2013	5	27/11/2013
Weekly Safety Meeting	24/11/2013	7	25/11/2013

DAILY CONTACTS

Contact Name	Title	Mobile
Arfa Chiha	IPM-Drilling Super	0467785174
Ahmed Gabry	Wellsite Supervisor	0448155134
Andy Hillier	Rig Manager	0419938581
Ben Marshall	Geologist	

POB

Company	Job Title	Count
Schlumberger IPM	WSS	1
Schlumberger IPM	WSE	2
QGC	Geologist	1
Saxon	Rig Crew	14
Tresed	Vacuum Truck Driver	2
ECM	Caterers	3

DAILY REPORT

Last 24hr Op's Summary

P/U & RIH PLS packer on 3 1/2" tbg to 402m. Set packer slips with 20Klb down & 6Klb up, packer element at 403.51m, top of on/off slick Jt at 402.18m. P/T packer seal from above to 250/1500psi. Disconected on/off tool & POOH tbg. Set BPV & N/D BOP. Rig released on 01-Dec-2013 @ 1530hrs. R/D rig & equipment, prepare for rig move to WCK 108

Summary 00:00 - 06:00

WOD prepare for camp move.

Planned Op's

Move camp to WCK pad off of Gasby road. Move rig & equipment to WCK_108 on 03-12-13

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00

Start Time	End Time	Dur (hr)	Class	NPT (hr)	Phase	Op	Act Desc
00:00	00:30	0.50	P		SUS	INP	P/U & M/U PLS packer assembly; * 10' pup Jnt * J-slot On/Off tool * Slick Jnt * Tubing drain (700psi) * Haliburton PLS packer * Tubing drain (1400psi) * 10' pup Jnt
00:30	05:45	5.25	P		SUS	INP	RIH W/PLS packer on 3 1/2" TBG F/102.59m T/502.6m. * Each Jt P/U 1m before RIH to ensure lower J-slot in run position. *Disconnected TDs and top fill tbg w 0 psi, every 10 jts

DAILY DRILLING REPORT

Cam_19

TRC: 420.00

Report Start Date: 1/12/2013

Report #: 16

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00

Start Time	End Time	Dur (hr)	Class	NPT (hr)	Phase	Op	Act Desc
05:45	07:30	1.75	P		SUS	INP	Set Haliburton PLS packer at 402.83m, slacked off 20Klb, 6Klb over pull. Element at 403.51m, top of slick Jt at 402.18m. *Hyd TDS preventing ease of J-slot manipulation *Set packer by pick up 6" rotate to right & slack off 6", confirmed set with 10Klb over & 20Klb on lower slips.
07:30	08:30	1.00	P		SUS	PT	Pressure tested PLS packer to 250/1500psi 10 min each. good test. Bleed off.
08:30	10:00	1.50	P		SUS	INP	Reconnect TDS, P/U to 2Klb down on PLS packer. Rotate 1/2 turn at surface to the left and P/U. On/Off tool released. Confirmed release with 2Klb drop in string weight & fluid drop in string and free circulation with 0 SPP. *Could not confirm disconnect w free rotation due to limitation of HYD TDS. *Initial attempts to disconnect result in 10Klb over & 20Klb on PLS packer without vertical travel of the on/off J-slot, left hand rotation & P/U with no affect. *Worked tbg 10Klb over & under to loosen overshot/slick joint connection, recovered vertical movement of on/off tool.
10:00	12:00	2.00	P		SUS	TO	POOH 3 1/2" TBG F/402.54m to 314m.
12:00	12:15	0.25	P		SUS	SM	Weekly Safety Meeting
12:15	14:00	1.75	P		SUS	TO	Continue POOH 3 1/2" TBG F/314m T/surface.
14:00	14:30	0.50	P		SUS	BOP	Install 6 5/16" BPV
14:30	15:30	1.00	P		SUS	BOP	N/D kill line, chock line and BOP w/Adapter. Installed hanger sub spacer. Installed vent line & debris cover. *Rig released on 01-Dec-2013 @1530 hrs
15:30	17:30	2.00	P		RMO	RD	Rig down remaining surface equipment and prepare for camp/rig move.
17:30	00:00	6.50	P	6.50	RMO	WOD	Wait on day light for rig move.

CASING STRINGS

Csg Des	OD (in)	SD (mKB)
Conductor	14	10.00
Surface Casing	9 5/8	87.00
Production Casing/Liner (1)	7	763.00
Production Casing/Liner (2)	4 1/2	1,204.50

MUD PROPERTIES

Mud Type	Time	Depth (mKB)	Weight (lb/gal)	Funnel Viscosity (s/qt)

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)

MUD PUMP

 # 1, Gardner-Denver, PZ-8

Pump Rating (hp)	Rod Diameter (in)	Stroke Length (in)
750.0		7.99

Liner Size (in)	Volume Per Stroke Override (bbl/stk)
5 1/2	0.059

Pressure (psi)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)

FORMATIONS (LAST 5)

Formation Name	Prog Top MD (mKB)	Drill Top MD (mKB)
Springbok Sandstone	217.00	210.40
Upper Juandah Coal Measures	310.00	310.37
Lower Juandah Coal Measures	433.00	441.89
Tangalooma	594.00	557.81
Taroom Coal Measures	819.00	674.00

LEASE FLUIDS

Fluid	To Lease (bbl)	Source	From Lease (bbl)	Dest	BS&W (%)	Carrier	Ref #	Note
						Tresed		

JOB SUPPLIES

Supply Item Des	Unit Label	Loc	Vendor	Received	Consumed	Cum On Loc
Diesel Fuel : Rig	L	Rig	IOR	0.0	1,895.0	1,391.0
Diesel Fuel : mini camp	L	Rig	IOR	0.0	200.0	1,600.0
Diesel Fuel: camp	L	Camp	IOR	0.0	250.0	1,000.0
Diesel fuel: Vehicles	L	Rig	DN CROSS	0.0	0.0	-925.0
Potable Water	L	Camp	DN CROSS	0.0	6,000.0	10,000.0
Potable Water, mini camp	L	Rig	DN CROSS	3,000.0	800.0	9,186.0

DAILY DRILLING REPORT

Cam_19

TRC: 420.00

Report Start Date: 1/12/2013

Report #: 16

DRILL STRING AND BIT INFORMATION

BHA #<stringno>, <des>

Bit Run	Size (in)	Make	Model	IADC Codes	Serial Number	Length (m)

Nozzles (1/32")	Bit Total Fluid Area (nozzles) (in²)	IADC Bit Dull

Drill String Length (m)	BHA Weight in Air (1000lbf)	BHA ROP (m/hr)

String Components

DRILLING PARAMETERS

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth Drilled (m)	Drilling Time (hr)	Cum Drilling Time (hr)	Interval ROP (m/hr)	Flow Rate (gpm)

Weight on Bit (1000lbf)	Surface RPM (rpm)	SPP (psi)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Drilling Torque (ft•lb)	Off Bottom Torque (ft•lb)

ANNULAR VELOCITIES (DP & DC)

Inner Bound	Sz Inner Bound (in)	Outer Boundary	Sz Outer Bound (in)	Top (mKB)	Btm (mKB)	AV (m/min)

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

UNDERREAMING INTERVALS

Top (mKB)	Btm (mKB)	OD (in)	Com

DAILY DRILLING REPORT

Cam_19

TRC: 421.00

Report Start Date: 2/12/2013

Report #: 17

UWI	Well PID	Tenure	Field Name	Well Type	State/Province	Country
100000744838	CAM_WH019	PL 277	Cam	Appraisal	Queensland	AUS
Well Configuration Type	**Well Status**	**Well Sub-Status**	**Spud Date**	**Rig Release Date**	**Job Start Date**	**Job End Date**
Vertical	Available		7/03/2013 09:00	1/12/2013 15:30	16/11/2013 08:00	2/12/2013 11:30

JOB DETAILS

AFE Number	Total AFE + Supp Amount (Cost)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)	Daily Mud Field Est (Cost)	Cum Mud Field Est (Cost)
01	1,361,055.00	42,571.60	1,074,822.51		
Target Formation	**Cum Time Log Days (days)**	**Problem Time Hours (hr)**	**Cum Problem Time Hours (hr)**	**Percent Problem Time (%)**	**Cum Percent Problem Time (%)**
Juandah and Taroom	16.15	6.00	43.00	52.17	11.10

DAILY OPERATIONS

Most Likely Duration (no plan ch...	Original KB/RT Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)	Latitude (°)	Longitude (°)
9.21	328.10	323.60	4.50	26° 12' 43.558" S	149° 42' 23.676" E

Rig (Names)	Planned TD (mKB)	TD (max) (mKB)	End Depth (m...	Depth Progress (m)	Weather
Saxon 166	1,331.00	1,204.50	1,204.50		Sunny

HSSE

Days Since Lost Time Incident (days)	Days Since Recordable Incident (days)
421.00	421.00

Safety Observations

Type	# Rpts
PTW	1
Safety Meetings	3
STOP Cards	2

SAFETY CHECK SUMMARY

Type	Last Date	Days Last Chk (days)	Next Date
BOP Connection Test	17/11/2013	14	19/11/2013
Drills/Exercise	24/11/2013	7	26/11/2013
ESD Test	17/11/2013	14	19/11/2013
Kick Drills	23/11/2013	8	25/11/2013
Mast Inspection	17/11/2013	14	19/11/2013
Permit to Work	19/11/2013	12	21/11/2013
Pre-Job Meetings	27/11/2013	4	29/11/2013
Pre-Tour Meetings	26/11/2013	5	28/11/2013
Safety Meetings	24/11/2013	7	26/11/2013
Site Inductions	19/11/2013	12	21/11/2013
Toolbox Talk	26/11/2013	5	28/11/2013
Weekly Safety Meeting	24/11/2013	7	26/11/2013

DAILY CONTACTS

Contact Name	Title	Mobile
Arfa Chiha	IPM-Drilling Super	0467785174
Ahmed Gabry	Wellsite Supervisor	0448155134
Andy Hillier	Rig Manager	0419938581
Ben Marshall	Geologist	

POB

Company	Job Title	Count
Schlumberger IPM	WSS	1
Schlumberger IPM	WSE	2
QGC	Geologist	1
Saxon	Rig Crew	14
Tresed	Vacuum Truck Driver	2
ECM	Caterers	3

DAILY REPORT

Last 24hr Op's Summary

WOD for rig move, Trucks on location. Load material to be sent back. Preparation for rig move from CAM#19 T/WCK#108. Hold PJSM with NMT. First load left location @11:30 hrs 2-Dec-2013. Job End.

Summary 00:00 - 06:00

Planned Op's

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00

Start Time	End Time	Dur (hr)	Class	NPT (hr)	Phase	Op	Act Desc
00:00	06:00	6.00	P	6.00	RMO	WOD	Wait on daylight to move camp/rig. Meanwhile continue rigging down all equipment.
06:00	09:00	3.00	P		RMO	RM	Moved the camp from CAM site to Woleebee Creek. Meanwhile: continue rig down and preparation for rig move. Cleaned out mud tanks. Back loaded Materials: - 45 x 3 1/2" HWDP, NC38 PIN X BOX with metal thread protectors PIN & BOX, 25.81, all used - 105 x 3 1/2" DP, NC38 PIN X BOX with metal thread protectors PIN & BOX, 13.30, all used (2 bended pipes) - X.O 4 1/2" IF Pin x 4" FH Box

DAILY DRILLING REPORT

Cam_19

TRC: 421.00

Report Start Date: 2/12/2013

Report #: 17

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00

Start Time	End Time	Dur (hr)	Class	NPT (hr)	Phase	Op	Act Desc
09:00	11:30	2.50	P		RMO	RM	Trucks on location. Prepare first loads to move rig from Well Cam 19 to Well WCK 108. Hold PJSM with NMT for rig move. First load left location @11:30 hrs 2-Dec-2013. Job End, Last report. Rig Move 75%

CASING STRINGS

Csg Des	OD (in)	SD (mKB)
Conductor	14	10.00
Surface Casing	9 5/8	87.00
Production Casing/Liner (1)	7	763.00
Production Casing/Liner (2)	4 1/2	1,204.50

MUD PROPERTIES

Mud Type	Time	Depth (mKB)	Weight (lb/gal)	Funnel Viscosity (s/qt)

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)

MUD PUMP

 # 1, Gardner-Denver, PZ-8

Pump Rating (hp)	Rod Diameter (in)	Stroke Length (in)
750.0		7.99

Liner Size (in)	Volume Per Stroke Override (bbl/stk)
5 1/2	0.059

Pressure (psi)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)

FORMATIONS (LAST 5)

Formation Name	Prog Top MD (mKB)	Drill Top MD (mKB)
Springbok Sandstone	217.00	210.40
Upper Juandah Coal Measures	310.00	310.37
Lower Juandah Coal Measures	433.00	441.89
Tangalooma	594.00	557.81
Taroom Coal Measures	819.00	674.00

LEASE FLUIDS

Fluid	To Lease (bbl)	Source	From Lease (bbl)	Dest	BS&W (%)	Carrier	Ref #	Note
						Tresed		

JOB SUPPLIES

Supply Item Des	Unit Label	Loc	Vendor	Received	Consumed	Cum On Loc

DRILL STRING AND BIT INFORMATION

BHA #<stringno>, <des>

Bit Run	Size (in)	Make	Model	IADC Codes	Serial Number	Length (m)

Nozzles (1/32")	Bit Total Fluid Area (nozzles) (in²)	IADC Bit Dull

Drill String Length (m)	BHA Weight in Air (1000lbf)	BHA ROP (m/hr)

String Components

DRILLING PARAMETERS

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth Drilled (m)	Drilling Time (hr)	Cum Drilling Time (hr)	Interval ROP (m/hr)	Flow Rate (gpm)

Weight on Bit (1000lbf)	Surface RPM (rpm)	SPP (psi)	Drill Str Wt (1000lbf)	PU Str Wt (1000lbf)	SO Str Wt (1000lbf)	Drilling Torque (ft•lb)	Off Bottom Torque (ft•lb)

ANNULAR VELOCITIES (DP & DC)

Inner Bound	Sz Inner Bound (in)	Outer Boundary	Sz Outer Bound (in)	Top (mKB)	Btm (mKB)	AV (m/min)

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

UNDERREAMING INTERVALS

Top (mKB)	Btm (mKB)	OD (in)	Com

APPENDIX 3

DAILY GEOLOGY REPORTS

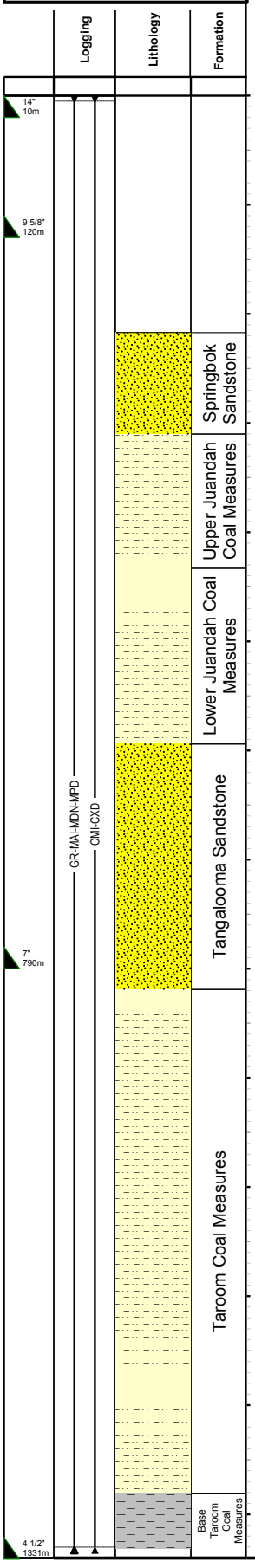
Daily Geological Report #1 for 18-11-2013

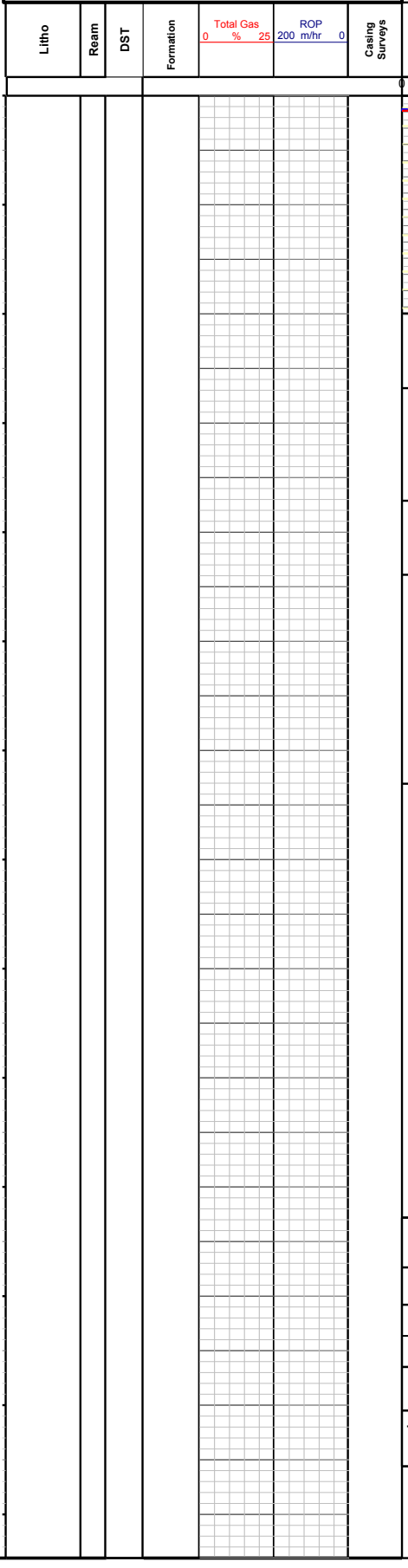
Cam 19 **Surat Basin** CSG Appraisal well	**LICENCE** PL 277	**MIDNIGHT DEPTH** 92.5 mMDRT	**06:00am DEPTH** mMDRT
		Operations Status at Midnight: Full function BOP pressure test.	

ON LOCATION : 16-11-2013		RIG	: Saxon 166
SPUD DATE	: 07-02-2013	TD DATE	:
GL	: +323.60m	RT	: +328.10m
PLAN TD	: 1331 m	LONGITUDE	: 149°42'23.68"E
ACTUAL TD	: m	LATITUDE	: -26°12'43.56"S

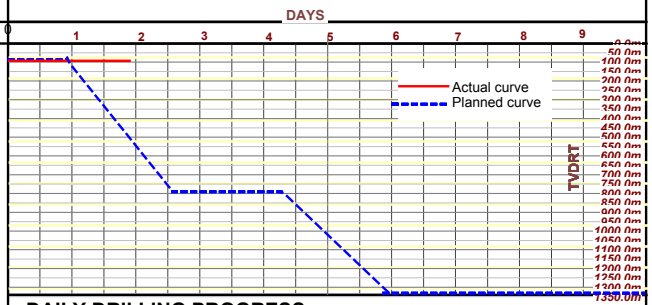
WELLSITE GEOLOGIST : Ben Marshall

PROGNOSIS | **ACTUAL**





PROGRESS CHART



DAILY DRILLING PROGRESS:

FROM: 0 m TO: 92.5 mMDRT; 24Hrs Progress: 92.5 m

SUMMARY OF LAST 24 HOURS :

Mobilise Saxon Rig 166 from Ross 174 to Cam 19. Rig up Saxon 166. Pre-spud meeting and hazard hunt. Nipple up and perform full function BOP pressure test.

CURRENT OPERATION :

Full function BOP pressure test.

24 HOUR FORECAST :

Complete full function BOP pressure test. Make up 8 ½" slick BHA, RIH and drill out cement track and casing shoe. Drill 3.00m of new formation and perform LOT. Drill a further 20.00m of 8 ½" hole, circulate hole clean and POOH. Make-up 8 ½" LWD/Directional BHA, RIH and drill ahead production hole to 250.00m MDRT/TVDRT. Circulate hole clean. Kick off and drill ahead 8 1/2"hole directionally to section TD of +/- 790.00m MDRT (665.00m TVDRT).

COMMENTS :

Cam 19 was spud at 09:00hrs on 07/02/2013.

All vehicles require a copy of land access rules. The max speed limit is 40km/hr, which drops to 20km/hr within 200m of any dwelling and 5km/hr close to livestock.

Surface hole drilled, cased and cemented prior to Saxon 166 arrival.

MI Swaco Mud Engineer and Pathfinder LWD/Directional crew on location.

Wireline logging programme to be performed by Weatherford (CWS) in 2 runs;
Run 1: GR-MAI-MDN-MPD (HRes)
Run 2: CMI - CXD

No DST's, FRT's or under-reaming required.

PDHG required.

LOG RUNS

Run	Log suite	Start	End
1	GR-MAI-MDN-MPD (HiRes)	m	m
2	CMI-CXD	m	m

DST

Test No.	Unit/Seam Tested	From (mRT)	To (mRT)	Shut In Times (mins)	Flow Times (min)	Recovery (Formation Fluid)

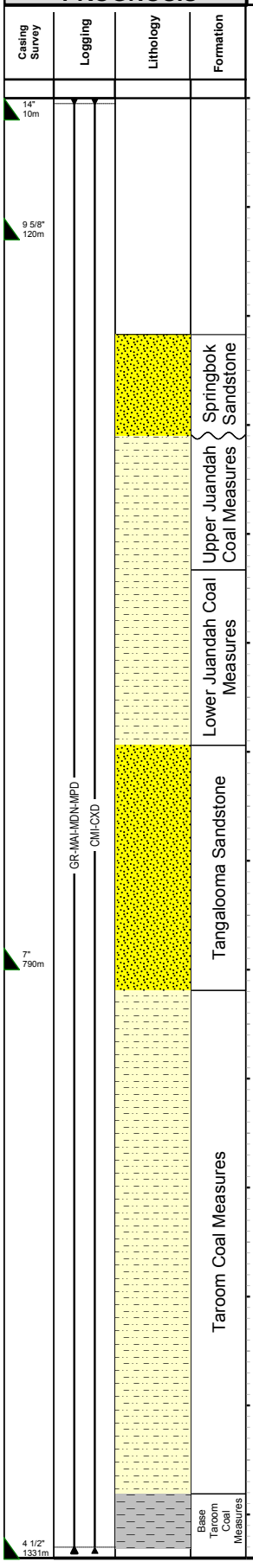
Daily Geological Report #2 for 19-11-2013

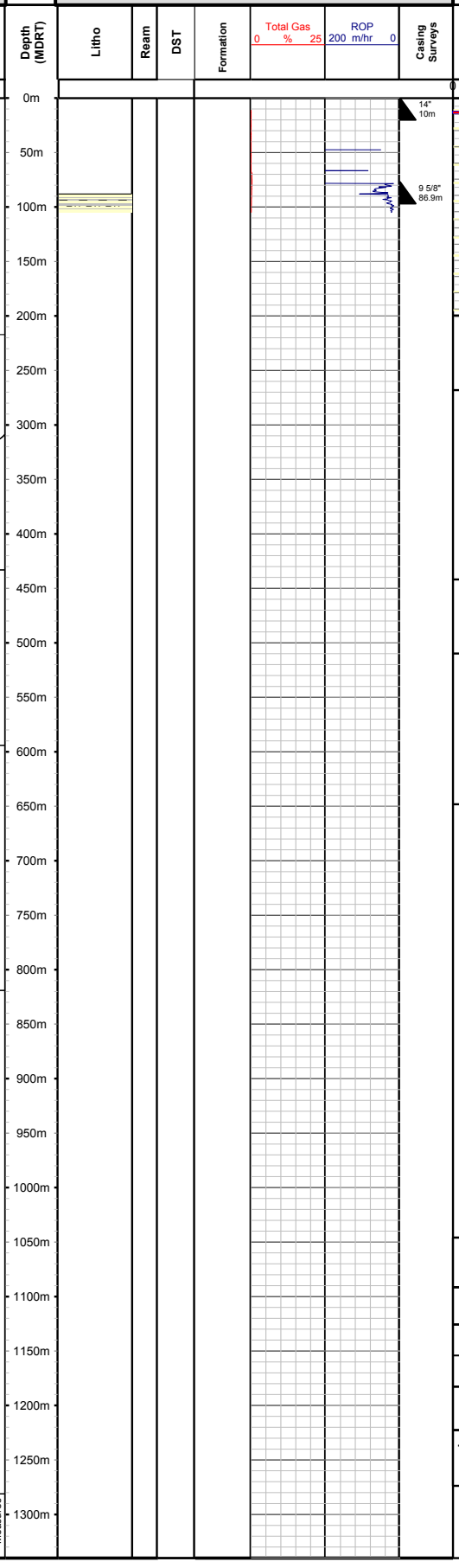
Cam 19 **Surat Basin** CSG Appraisal well	**LICENCE** PL 277	**MIDNIGHT DEPTH** 105.38 mMDRT	**06:00am DEPTH** 153.52 mMDRT
		Operations Status at Midnight: Make-up 8 ½" LWD/Directional BHA.	

ON LOCATION : 16-11-2013		RIG	: Saxon 166
SPUD DATE	: 07-02-2013	TD DATE	:
GL	: +323.60m	RT	: +328.10m
PLAN TD	: 1331 m	LONGITUDE	: 149°42'23.68"E
ACTUAL TD	: m	LATITUDE	: -26°12'43.56"S

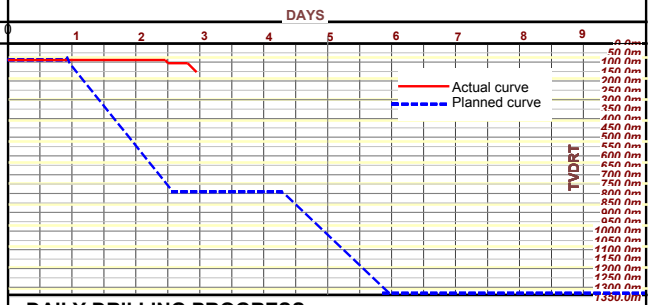
WELLSITE GEOLOGIST : Ben Marshall

PROGNOSIS | **ACTUAL**





PROGRESS CHART



DAILY DRILLING PROGRESS:

FROM: 88 m TO: 105.38 mMDRT; 24Hrs Progress: 17.38 m

SUMMARY OF LAST 24 HOURS :

Complete full function BOP pressure test. Trouble shoot and repair mud pump. Comms box installed by PASON technician for Pathfinder services. Make up 8 ½" slick BHA, RIH and drill out cement track and casing shoe. Drill 3.00m of new formation and perform LOT(@ 41 psi). Drill a further 20.00m of 8 ½" hole, circulate hole clean and POOH. Make-up 8 ½" LWD/Directional BHA, RIH and drill ahead 8 ½" production hole.

CURRENT OPERATION :

Drill ahead 8 ½" hole.

24 HOUR FORECAST :

Drill ahead 8 ½" production hole to 250.00m MDRT/TVDRT. Circulate hole clean. Kick off and drill ahead 8 ½" production hole directionally to section TD of +/- 790.00m MDRT at +/- 66° target inclination (665.00m TVDRT). Circulate hole clean and POOH. Rig up and RIH 7" casing.

COMMENTS :

Cam 19 was spud at 09:00hrs on 07/02/2013.

All vehicles require a copy of land access rules. The max speed limit is 40km/hr, which drops to 20km/hr within 200m of any dwelling and 5km/hr close to livestock.

Surface hole drilled, cased and cemented prior to Saxon 166 arrival.

MI Swaco Mud Engineer and Pathfinder LWD/Directional crew on location.

Wireline logging programme to be performed by Weatherford (CWS) in 2 runs;
Run 1: GR-MAI-MDN-MPD (HRes)
Run 2: CMI - CXD

No DST's, FRT's or under-reaming required.

PDHG required.

LOG RUNS

Run	Log suite	Start	End
1	GR-MAI-MDN-MPD (HiRes)	m	m
2	CMI-CXD	m	m

DST

Test No.	Unit/Seam Tested	From (mRT)	To (mRT)	Shut In Times (mins)	Flow Times (min)	Recovery (Formation Fluid)

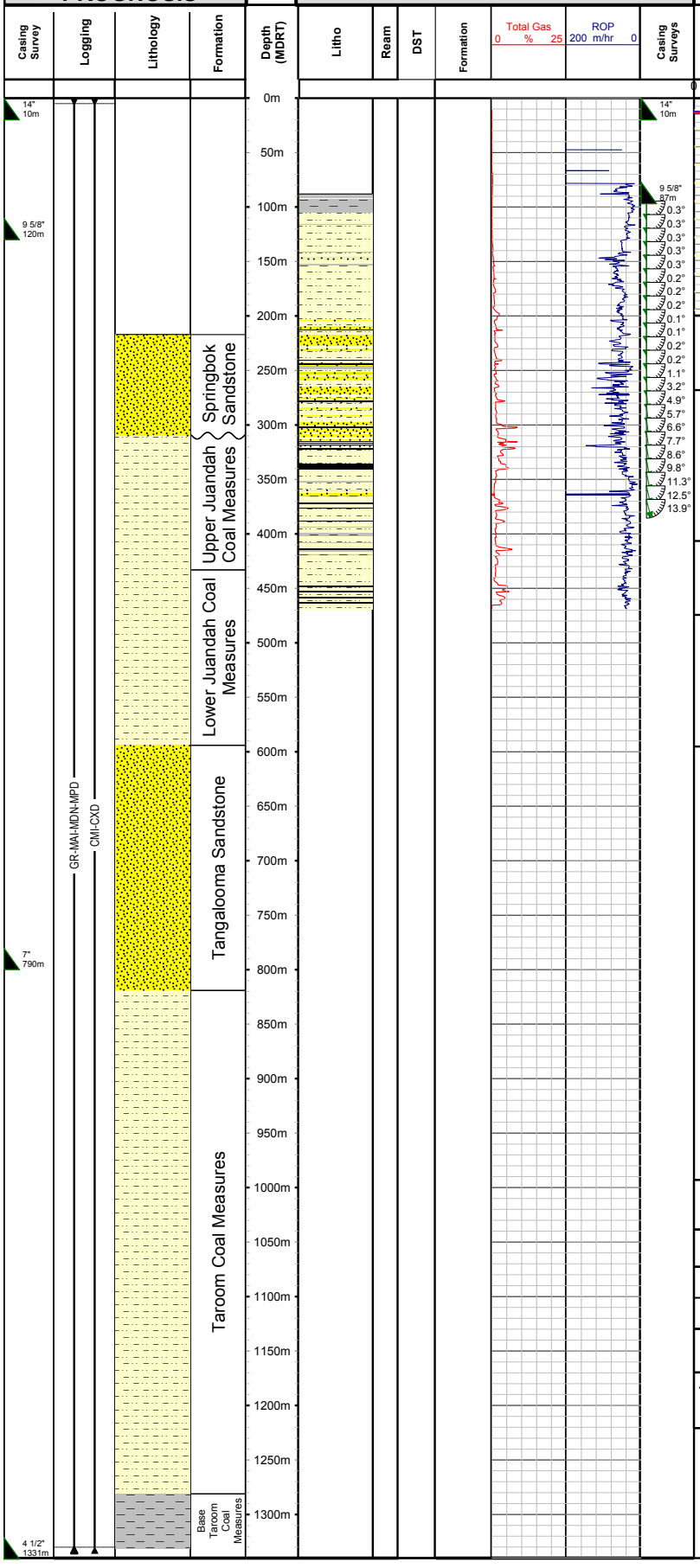
Daily Geological Report #3 for 20-11-2013

Cam 19 **Surat Basin** CSG Appraisal well	**LICENCE** PL 277	**MIDNIGHT DEPTH** 390.11 mMDRT	**06:00am DEPTH** 471.23 mMDRT
		Operations Status at Midnight: Drill ahead 8 ½" production hole.	

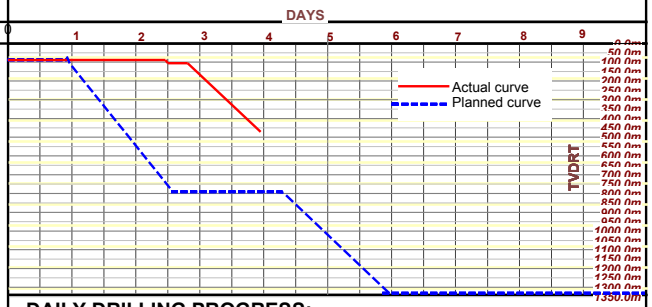
ON LOCATION : 16-11-2013		RIG	: Saxon 166
SPUD DATE	: 07-02-2013	TD DATE	:
GL	: +323.60m	RT	: +328.10m
PLAN TD	: 1331 m	LONGITUDE	: 149°42'23.68"E
ACTUAL TD	: m	LATITUDE	: -26°12'43.56"S

WELLSITE GEOLOGIST : Ben Marshall

PROGNOSIS | **ACTUAL**



PROGRESS CHART



DAILY DRILLING PROGRESS:

FROM: 105.38 m TO: 390.11 mMDRT; 24Hrs Progress: 284.73 m

SUMMARY OF LAST 24 HOURS :

Drill ahead 8 ½" production hole vertically to 250.00m MDRT/TVDRT. Circulate hole clean. Kick off and drill ahead 8 ½" production hole (combination of sliding and rotary) directionally. Trouble shoot PASON and Pathfinder depth tracking communication. Continue to drill ahead.

CURRENT OPERATION :

Drill ahead 8 ½" production hole.

24 HOUR FORECAST :

Drill ahead 8 ½" production hole to section TD of +/- 790.00m MDRT at +/- 66° target inclination (665.00m TVDRT). Circulate hole clean and POOH. Perform wiper trip. Rig up and RIH 7" casing.

COMMENTS :

Cam 19 was spud at 21:15hrs on 17/11/2013.

All vehicles require a copy of land access rules. The max speed limit is 40km/hr, which drops to 20km/hr within 200m of any dwelling and 5km/hr close to livestock.

Surface hole drilled, cased and cemented prior to Saxon 166 arrival.

MI Swaco Mud Engineer and Pathfinder LWD/Directional crew on location.

Wireline logging programme to be performed by Weatherford (CWS) in 2 runs;

Run 1: GR-MAI-MDN-MPD (HRes)
Run 2: CMI - CXD

No DST's, FRT's or under-reaming required.

PDHG required.

LOG RUNS

Run	Log suite	Start	End
1	GR-MAI-MDN-MPD (HiRes)	m	m
2	CMI-CXD	m	m

DST

Test No.	Unit/Seam Tested	From (mRT)	To (mRT)	Shut In Times (mins)	Flow Times (min)	Recovery (Formation Fluid)

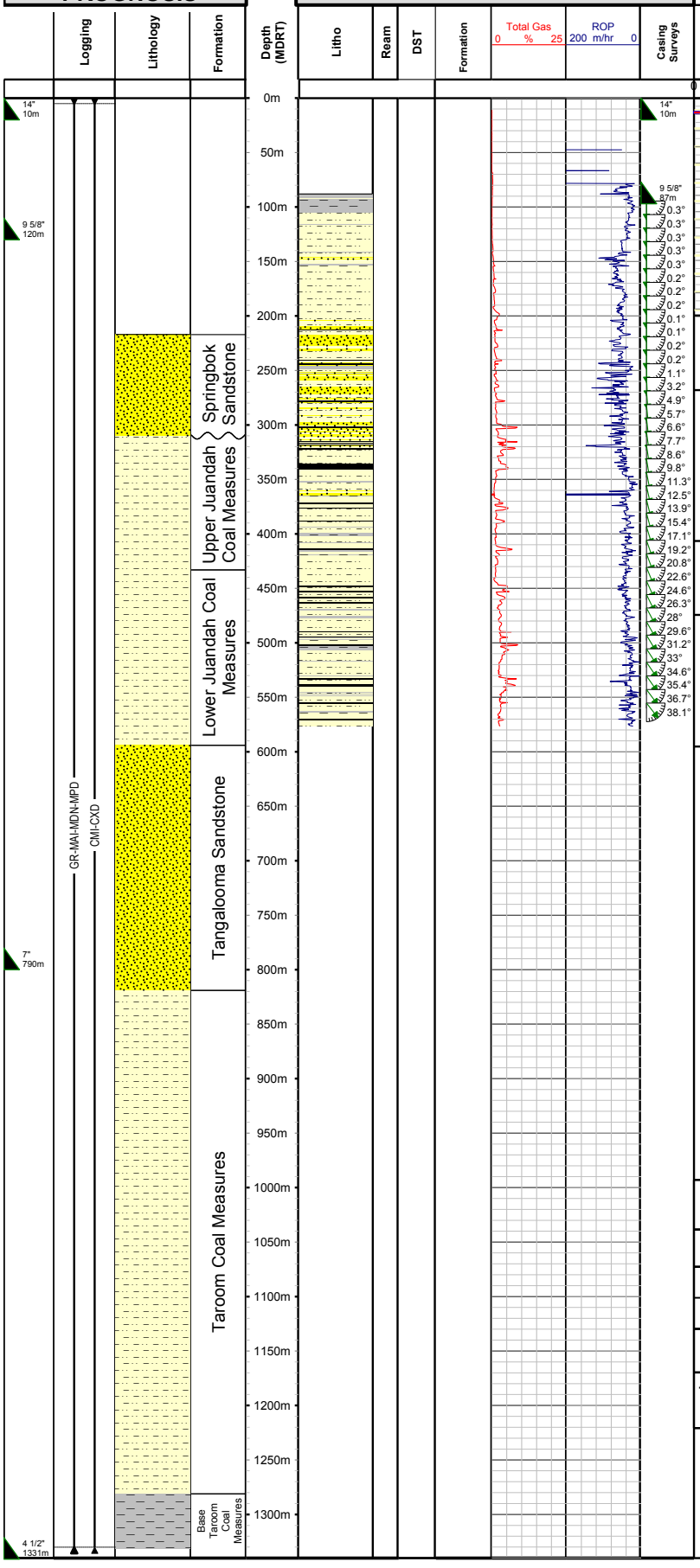
Daily Geological Report #4 for 21-11-2013

Cam 19 **Surat Basin** CSG Appraisal well	**LICENCE** PL 277	**MIDNIGHT DEPTH** 576.8 mMDRT	**06:00am DEPTH** 581.01 mMDRT
		Operations Status at Midnight: POOH 8 1/2" BHA.	

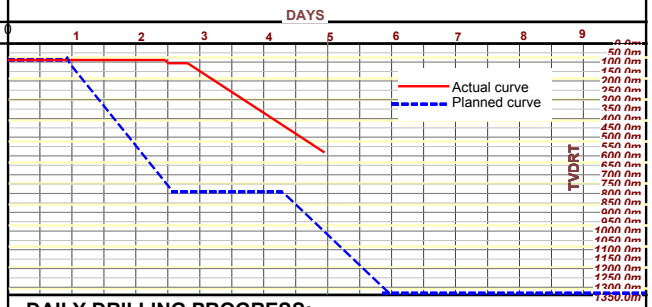
ON LOCATION : 16-11-2013		RIG	: Saxon 166
SPUD DATE	: 07-02-2013	TD DATE	:
GL	: +323.60m	RT	: +328.10m
PLAN TD	: 1331 m	LONGITUDE	: 149°42'23.68"E
ACTUAL TD	: m	LATITUDE	: -26°12'43.56"S

WELLSITE GEOLOGIST : Ben Marshall

PROGNOSIS | **ACTUAL**



PROGRESS CHART



DAILY DRILLING PROGRESS:

FROM: 390.11 m TO: 576.8 mMDRT; 24Hrs Progress: 186.69 m

SUMMARY OF LAST 24 HOURS :

Drill ahead 8 ½" production hole to 576.80m MD. Slow ROP and not achieving the required DLS to reach target due to stabliliser hanging on formation while building angle. POOH and break out stabiliser from BHA. Make-up BHA, re-scribe mud motor and RIH. Drill ahead 8 ½" production hole.

CURRENT OPERATION :

Drill ahead 8 ½" production hole.

24 HOUR FORECAST :

Drill ahead 8 ½" production hole section TD of +/- 790.00m MDRT at +/- 66° target inclination (665.00m TVDRT). Circulate hole clean and POOH. Perform wiper trip. Rig up and RIH 7" casing.

COMMENTS :

Cam 19 was spud at 21:15hrs on 17/11/2013.

All vehicles require a copy of land access rules. The max speed limit is 40km/hr, which drops to 20km/hr within 200m of any dwelling and 5km/hr close to livestock.

Surface hole drilled, cased and cemented prior to Saxon 166 arrival.

MI Swaco Mud Engineer and Pathfinder LWD/Directional crew on location.

Wireline logging programme to be performed by Weatherford (CWS) in 2 runs;

Run 1: GR-MAI-MDN-MPD (HRes)
Run 2: CMI - CXD

No DST's, FRT's or under-reaming required.

PDHG required.

LOG RUNS

Run	Log suite	Start	End
1	GR-MAI-MDN-MPD (HiRes)	m	m
2	CMI-CXD	m	m

DST

Test No.	Unit/Seam Tested	From (mRT)	To (mRT)	Shut In Times (mins)	Flow Times (min)	Recovery (Formation Fluid)

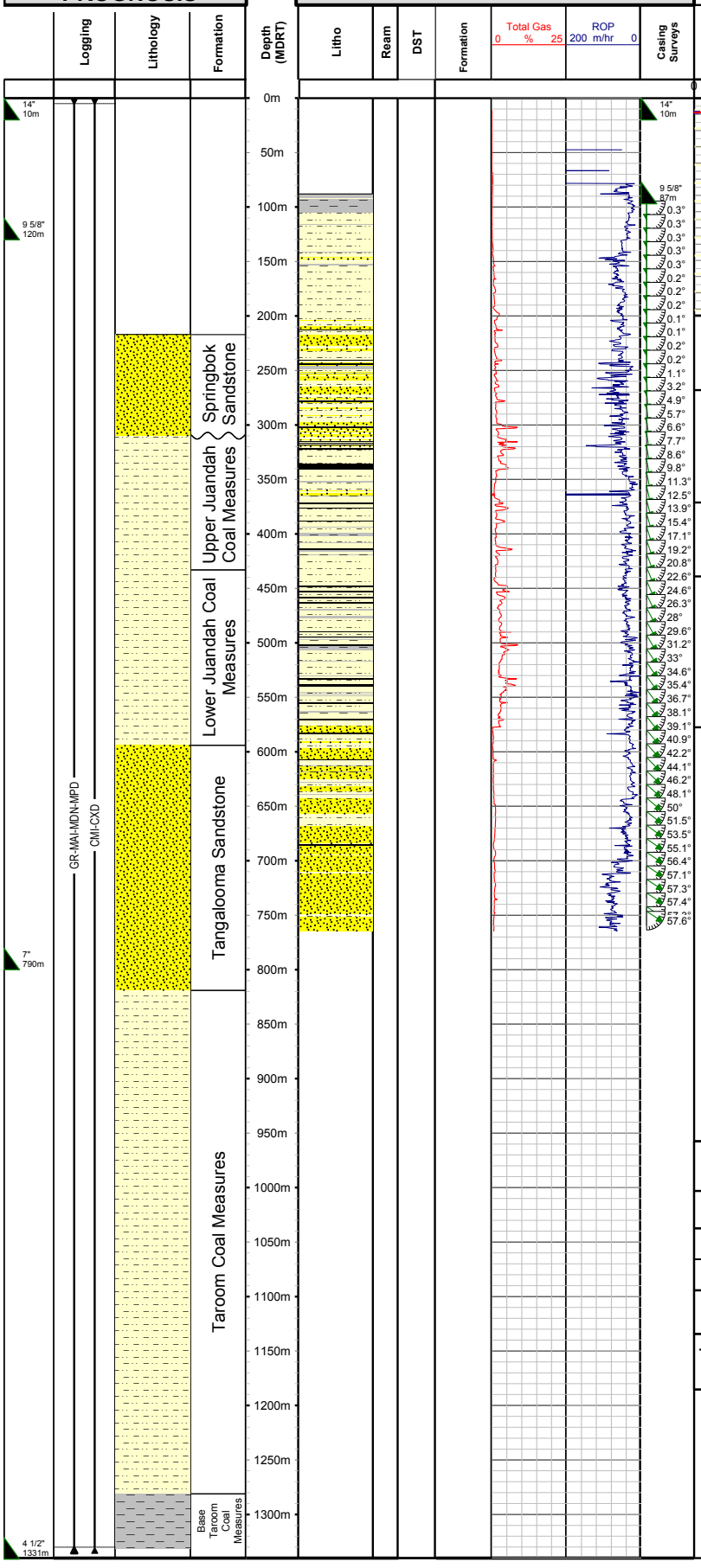
Daily Geological Report #5 for 22-11-2013

Cam 19 **Surat Basin** CSG Appraisal well	**LICENCE** PL 277	**MIDNIGHT DEPTH** 765 mMDRT	**06:00am DEPTH** 765 mMDRT
		Operations Status at Midnight: POOH 8 1/2" BHA.	

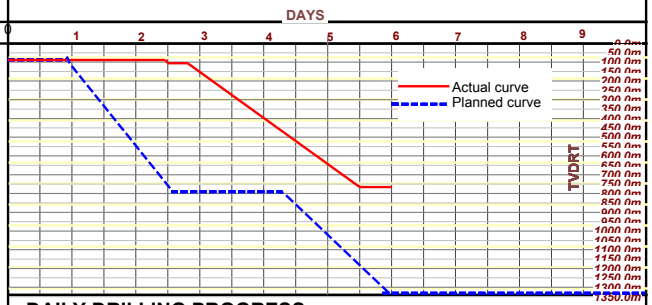
ON LOCATION : 16-11-2013		RIG	: Saxon 166
SPUD DATE	: 07-02-2013	TD DATE	:
GL	: +323.60m	RT	: +328.10m
PLAN TD	: 1331 m	LONGITUDE	: 149°42'23.68"E
ACTUAL TD	: m	LATITUDE	: -26°12'43.56"S

WELLSITE GEOLOGIST : Ben Marshall

PROGNOSIS | **ACTUAL**



PROGRESS CHART



DAILY DRILLING PROGRESS:

FROM: 576.8 m TO: 765 mMDRT; 24Hrs Progress: 188.2 m

SUMMARY OF LAST 24 HOURS :

Drill ahead 8 ½" production hole section TD of 765.00m MDRT/665.00m TVD at 58° inclination. Circulate hole clean and POOH. Perform wiper trip.

CURRENT OPERATION :

Wiper trip operations.

24 HOUR FORECAST :

Rig up and RIH 7" casing. Rig SLB cement unit and complete cementing programme. Make-up 6 1/8" LWD/Directional BHA, RIH and drill out cement track and casing shoe. Drill ahead directionally and intercept the targeted Taroom coal seams to TD of +/- 1331m MD /800.00m TVD at 77° inclination.

COMMENTS :

7" casing shoe depth at 763.06m MDRT.

Cam 19 was spud at 21:15hrs on 17/11/2013.

All vehicles require a copy of land access rules. The max speed limit is 40km/hr, which drops to 20km/hr within 200m of any dwelling and 5km/hr close to livestock.

MI Swaco Mud Engineer and Pathfinder LWD/Directional crew on location.

Wireline logging programme to be performed by Weatherford (CWS) in 2 runs;

Run 1: GR-MAI-MDN-MPD (HRes)
Run 2: CMI - CXD

No DST's, FRT's or under-reaming required.

PDHG required.

LOG RUNS

Run	Log suite	Start	End
1	GR-MAI-MDN-MPD (HiRes)	m	m
2	CMI-CXD	m	m

DST

Test No.	Unit/Seam Tested	From (mRT)	To (mRT)	Shut In Times (mins)	Flow Times (min)	Recovery (Formation Fluid)

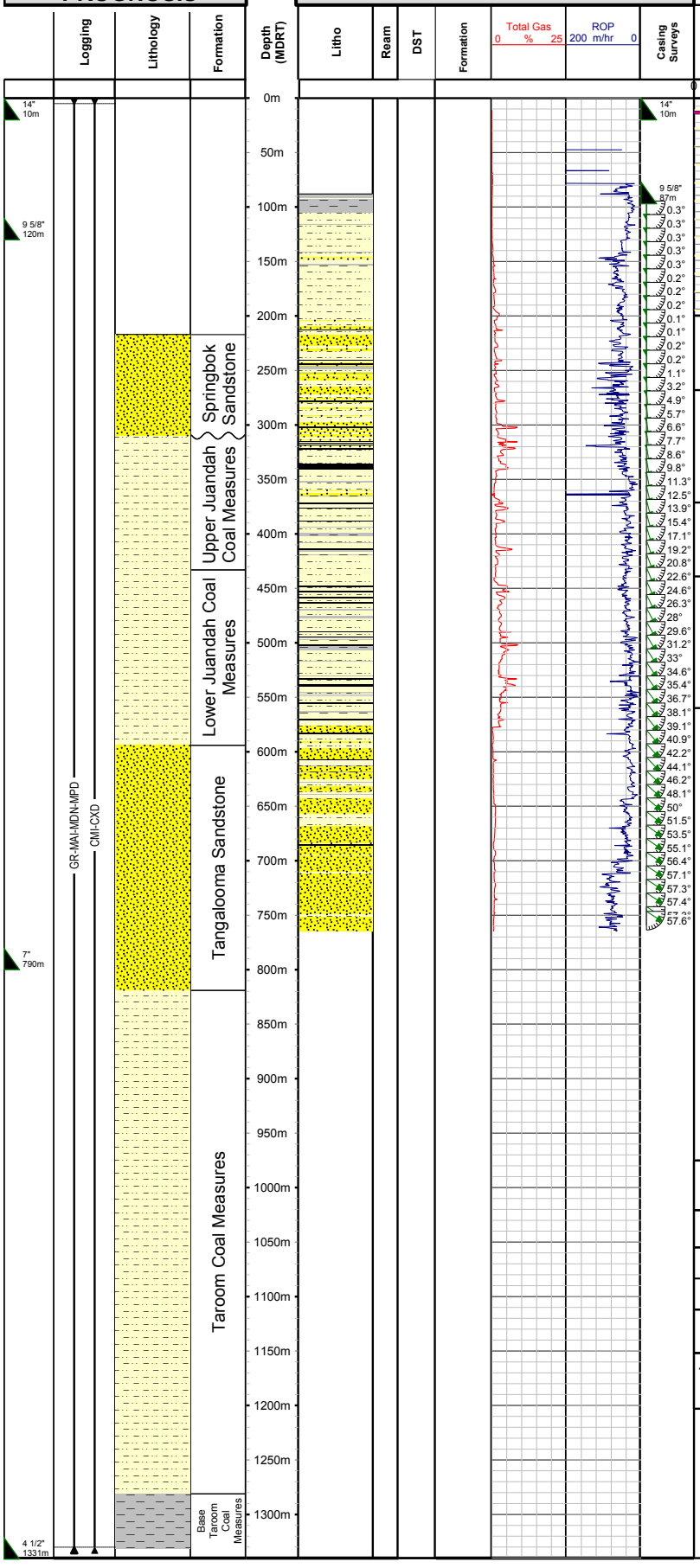
Daily Geological Report #6 for 23-11-2013

Cam 19 **Surat Basin** CSG Appraisal well	**LICENCE** PL 277	**MIDNIGHT DEPTH** 765 mMDRT	**06:00am DEPTH** 765 mMDRT
		Operations Status at Midnight: Rig down SLB cement unit.	

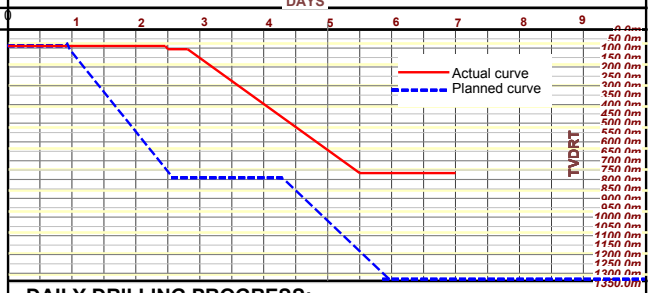
ON LOCATION : 16-11-2013		RIG	: Saxon 166
SPUD DATE	: 07-02-2013	TD DATE	:
GL	: +323.60m	RT	: +328.10m
PLAN TD	: 1331 m	LONGITUDE	: 149°42'23.68"E
ACTUAL TD	: m	LATITUDE	: -26°12'43.56"S

WELLSITE GEOLOGIST : Ben Marshall

PROGNOSIS | **ACTUAL**



PROGRESS CHART



DAILY DRILLING PROGRESS:

FROM: 765 m TO: 765 mMDRT; 24Hrs Progress: 0 m

SUMMARY OF LAST 24 HOURS :

Complete wiper trip. Rig up and RIH 7" casing. Rig up SLB cement unit and complete cementing programme. Make-up 6 1/8" LWD/Directional BHA and RIH.

CURRENT OPERATION :

RIH 6 1/8" BHA.

24 HOUR FORECAST :

RIH 6 1/8" BHA. Wait on Weather for water truck. Drill out cement track and casing shoe. Drill ahead 6 1/8" hole directionally and intercept the targeted Taroom coal seams to TD of +/- 1331m MD /800.00m TVD at 77° inclination.

COMMENTS :

Cam 19 was spud at 21:15hrs on 17/11/2013.

All vehicles require a copy of land access rules. The max speed limit is 40km/hr, which drops to 20km/hr within 200m of any dwelling and 5km/hr close to livestock.

Heavy overnight rainfall has left access roads and lease slippery and hazardous - drive with caution and to the conditions.

MI Swaco Mud Engineer and Pathfinder LWD/Directional crew on location.

Wireline logging programme to be performed by Weatherford (CWS) in 2 runs;

Run 1: GR-MAI-MDN-MPD (HRes)
Run 2: CMI - CXD

No DST's, FRT's or under-reaming required.

PDHG required.

LOG RUNS

Run	Log suite	Start	End
1	GR-MAI-MDN-MPD (HiRes)	m	m
2	CMI-CXD	m	m

DST

Test No.	Unit/Seam Tested	From (mRT)	To (mRT)	Shut In Times (mins)	Flow Times (min)	Recovery (Formation Fluid)

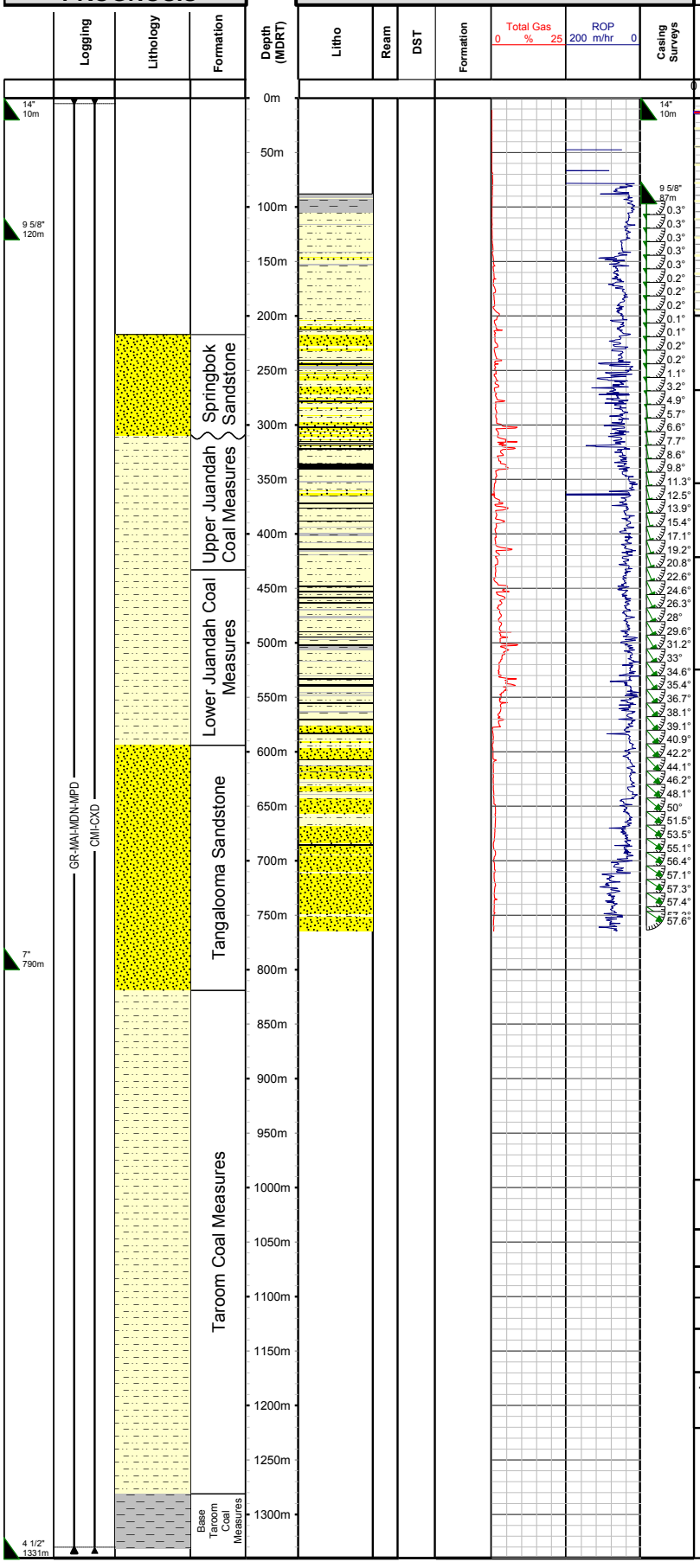
Daily Geological Report #7 for 24-11-2013

Cam 19 **Surat Basin** CSG Appraisal well	**LICENCE** PL 277	**MIDNIGHT DEPTH** 813.91 mMDRT	**06:00am DEPTH** 883.25 mMDRT
		Operations Status at Midnight: Drill ahead 6 1/8" hole.	

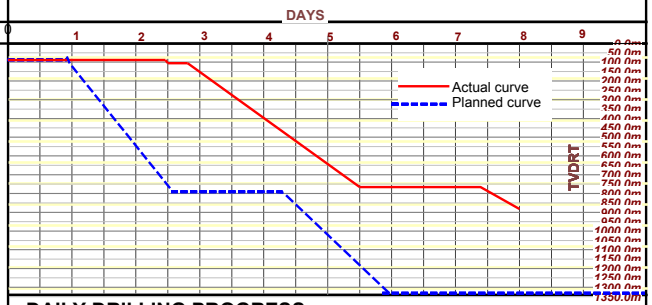
ON LOCATION : 16-11-2013		RIG	: Saxon 166
SPUD DATE	: 07-02-2013	TD DATE	:
GL	: +323.60m	RT	: +328.10m
PLAN TD	: 1331 m	LONGITUDE	: 149°42'23.68"E
ACTUAL TD	: m	LATITUDE	: -26°12'43.56"S

WELLSITE GEOLOGIST : Ben Marshall

PROGNOSIS | **ACTUAL**



PROGRESS CHART



DAILY DRILLING PROGRESS:

FROM: 765 m TO: 813.91 mMDRT; 24Hrs Progress: 48.91 m

SUMMARY OF LAST 24 HOURS :

RIH 6 1/8" BHA. Drill out cement track and casing shoe. LOT (@106 psi). Drill ahead 6 1/8" hole.

CURRENT OPERATION :

Drill ahead 6 1/8" hole.

24 HOUR FORECAST :

Drill ahead 6 1/8" hole directionally and intercept the targeted Taroom coal seams to TD of +/- 1331m MD /800.00m TVD at 77° inclination.

COMMENTS :

PASON gas detection system failure - recording very low values. Field technician scheduled to service and repair today.

Cam 19 was spud at 21:15hrs on 17/11/2013.

All vehicles require a copy of land access rules. The max speed limit is 40km/hr, which drops to 20km/hr within 200m of any dwelling and 5km/hr close to livestock.

Heavy overnight rainfall has left access roads and lease slippery and hazardous - drive with caution and to the conditions.

MI Swaco Mud Engineer and Pathfinder LWD/Directional crew on location.

Wireline logging programme to be performed by Weatherford (CWS) in 2 runs;

Run 1: GR-MAI-MDN-MPD (HRes)
Run 2: CMI - CXD

No DST's, FRT's or under-reaming required.

PDHG required.

LOG RUNS

Run	Log suite	Start	End
1	GR-MAI-MDN-MPD (HiRes)	m	m
2	CMI-CXD	m	m

DST

Test No.	Unit/Seam Tested	From (mRT)	To (mRT)	Shut In Times (mins)	Flow Times (min)	Recovery (Formation Fluid)

Daily Geological Report #8 for 25-11-2013

QGC A BG Group business

Cam 19
Surat Basin
CSG Appraisal well

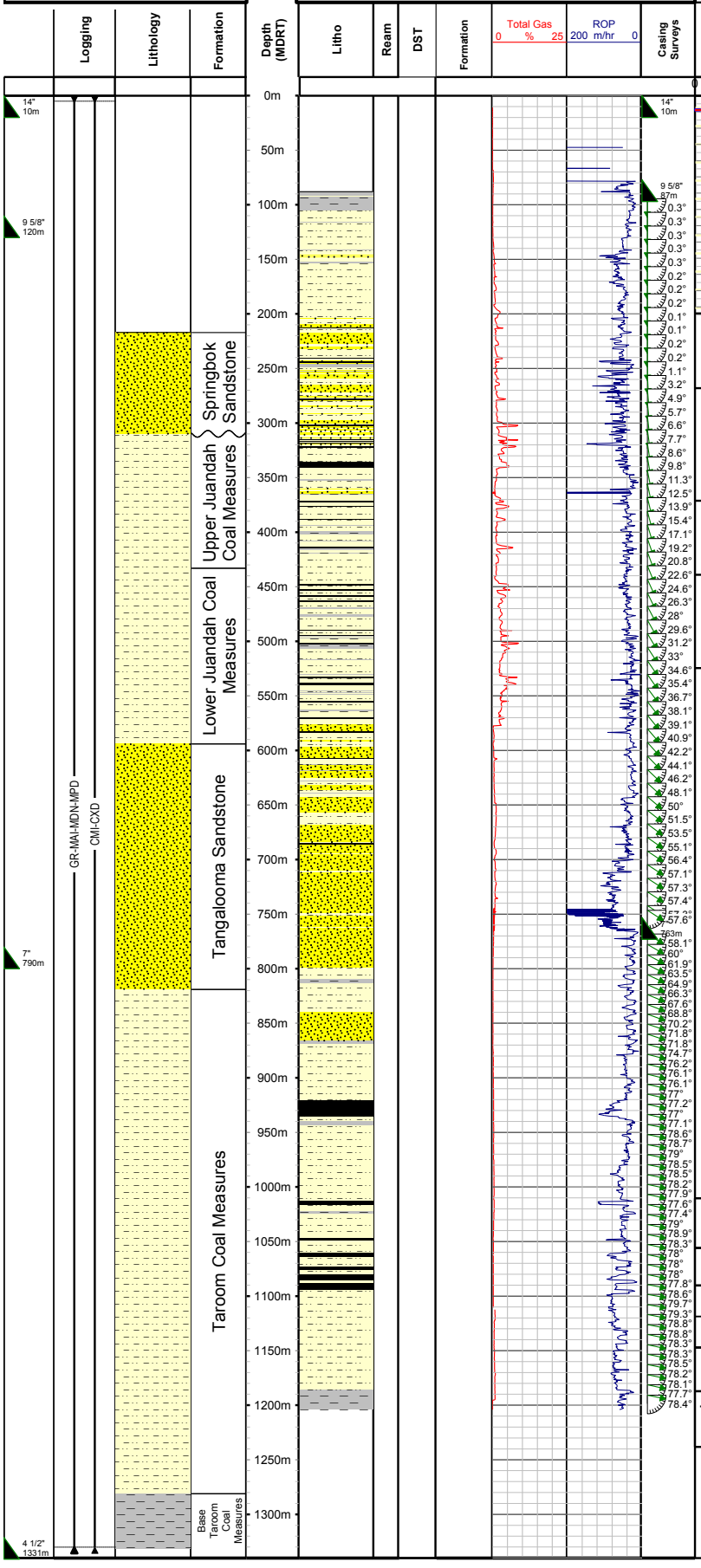
LICENCE	MIDNIGHT DEPTH	06:00am DEPTH
PL 277	1158.3 mMDRT	1204.5 mMDRT

Operations Status at Midnight:
Drill ahead 6 1/8" hole.

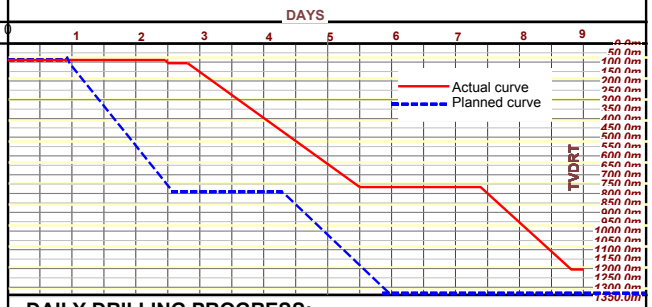
ON LOCATION	: 16-11-2013	RIG	: Saxon 166
SPUD DATE	: 07-02-2013	TD DATE	: 25-11-2013
GL	: +323.60m	RT	: +328.10m
PLAN TD	: 1331 m	LONGITUDE	: 149°42'23.68"E
ACTUAL TD	: 1204.50m	LATITUDE	: -26°12'43.56"S

WELLSITE GEOLOGIST : Ben Marshall

PROGNOSIS | ACTUAL



PROGRESS CHART



DAILY DRILLING PROGRESS:

FROM: 813.91 m TO: 1158.3 mMDRT; 24Hrs Progress: 344.39 m

SUMMARY OF LAST 24 HOURS :

Drill ahead 6 1/8" hole directionally and intercept the targeted Taroom coal seams to TD of 1204.50m MD /775.72m TVD at 78.44° inclination. Pump HiVis and circulate hole clean. POOH.

CURRENT OPERATION :

POOH 6 1/8" BHA.

24 HOUR FORECAST :

POOH 6 1/8" BHA. Perform wiper trip. Rig up Weatherford logging unit and commence CWS logging programme.

COMMENTS :

PASON gas detection system failure - technician couldn't repair.

Water truck driver pumped sewerage into the mud system thinking it was water.

Cam 19 was spud at 21:15hrs on 17/11/2013.

All vehicles require a copy of land access rules. The max speed limit is 40km/hr, which drops to 20km/hr within 200m of any dwelling and 5km/hr close to livestock.

MI Swaco Mud Engineer and Pathfinder LWD/Directional crew on location.

Wireline logging programme to be performed by Weatherford (CWS) in 2 runs;
Run 1: GR-MAI-MDN-MPD (HRes)
Run 2: CMI - CXD

Logging tools are currently on location with logging crew scheduled to arrive midday today.

No DST's, FRT's or under-reaming required.

PDHG required.

LOG RUNS

Run	Log suite	Start	End
1	GR-MAI-MDN-MPD (HiRes)	m	m
2	CMI-CXD	m	m

DST

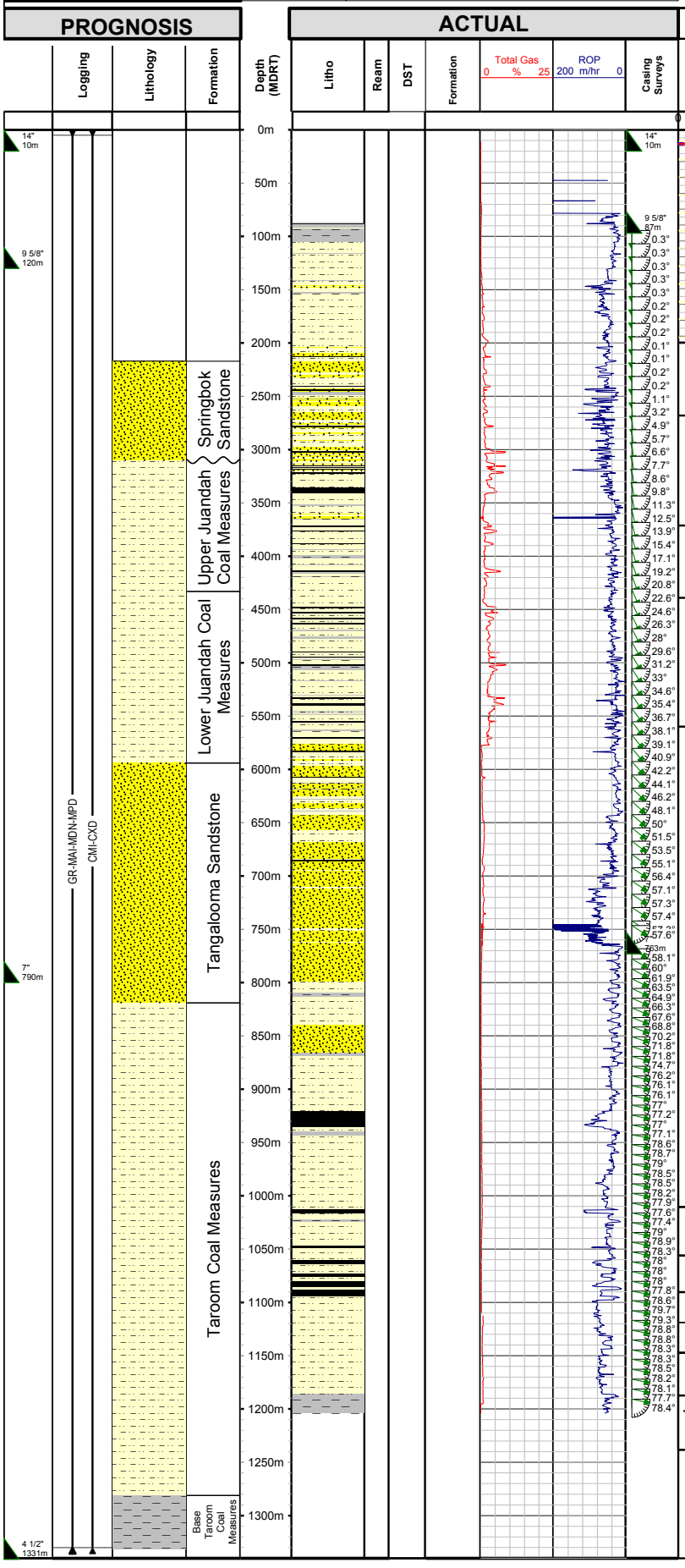
Test No.	Unit/Seam Tested	From (mRT)	To (mRT)	Shut In Times (mins)	Flow Times (min)	Recovery (Formation Fluid)

Daily Geological Report #9 for 26-11-2013

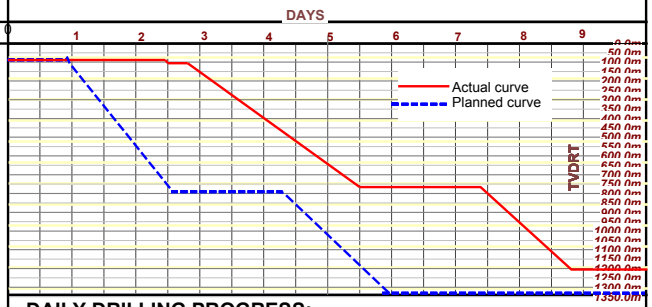
Cam 19 **Surat Basin** CSG Appraisal well	**LICENCE** PL 277	**MIDNIGHT DEPTH** 1204.5 mMDRT	**06:00am DEPTH** 1204.5 mMDRT
		Operations Status at Midnight: RIH CWS logging suite.	

ON LOCATION : 16-11-2013		RIG	: Saxon 166
SPUD DATE	: 07-02-2013	TD DATE	: 25-11-2013
GL	: +323.60m	RT	: +328.10m
PLAN TD	: 1331 m	LONGITUDE	: 149°42'23.68"E
ACTUAL TD	: 1204.50m	LATITUDE	: -26°12'43.56"S

WELLSITE GEOLOGIST : Ben Marshall



PROGRESS CHART



DAILY DRILLING PROGRESS:

FROM: 1158.3 m TO: 1204.5 mMDRT; 24Hrs Progress: 46.2 m

SUMMARY OF LAST 24 HOURS :

POOH 6 1/8" BHA. Perform wiper trip. Rig up Weatherford logging unit and make up CWS tool string on 6 1/8" pipe. RIH and Complete CWS logging run 1 (GR-MAI-MDN-MPD (HRes)).

CURRENT OPERATION :

CWS logging run 1

24 HOUR FORECAST :

Complete CWS logging run 1 (GR-MAI-MDN-MPD (HRes)). Perform wiper trip. Make up CWS tool string on 6 1/8" pipe. RIH and complete CWS logging run 2 (CMI - CXD) Rig down and release Weatheford logging crew.

COMMENTS :

Cam 19 was spud at 21:15hrs on 17/11/2013.

All vehicles require a copy of land access rules. The max speed limit is 40km/hr, which drops to 20km/hr within 200m of any dwelling and 5km/hr close to livestock.

MI Swaco Mud Engineer and Pathfinder LWD/Directional crew on location.

Wireline logging programme to be performed by Weatherford (CWS) in 2 runs;

Run 1: GR-MAI-MDN-MPD (HRes)
Run 2: CMI - CXD

Logging tools are currently on location with logging crew scheduled to arrive midday today.

No DST's, FRT's or under-reaming required.

Ben Marshall to outgoing for days off today, with Ivan McCarthy incoming for days on.

PDHG required.

LOG RUNS

Run	Log suite	Start	End
1	GR-MAI-MDN-MPD (HiRes)	m	m
2	CMI-CXD	m	m

DST

Test No.	Unit/Seam Tested	From (mRT)	To (mRT)	Shut In Times (mins)	Flow Times (min)	Recovery (Formation Fluid)

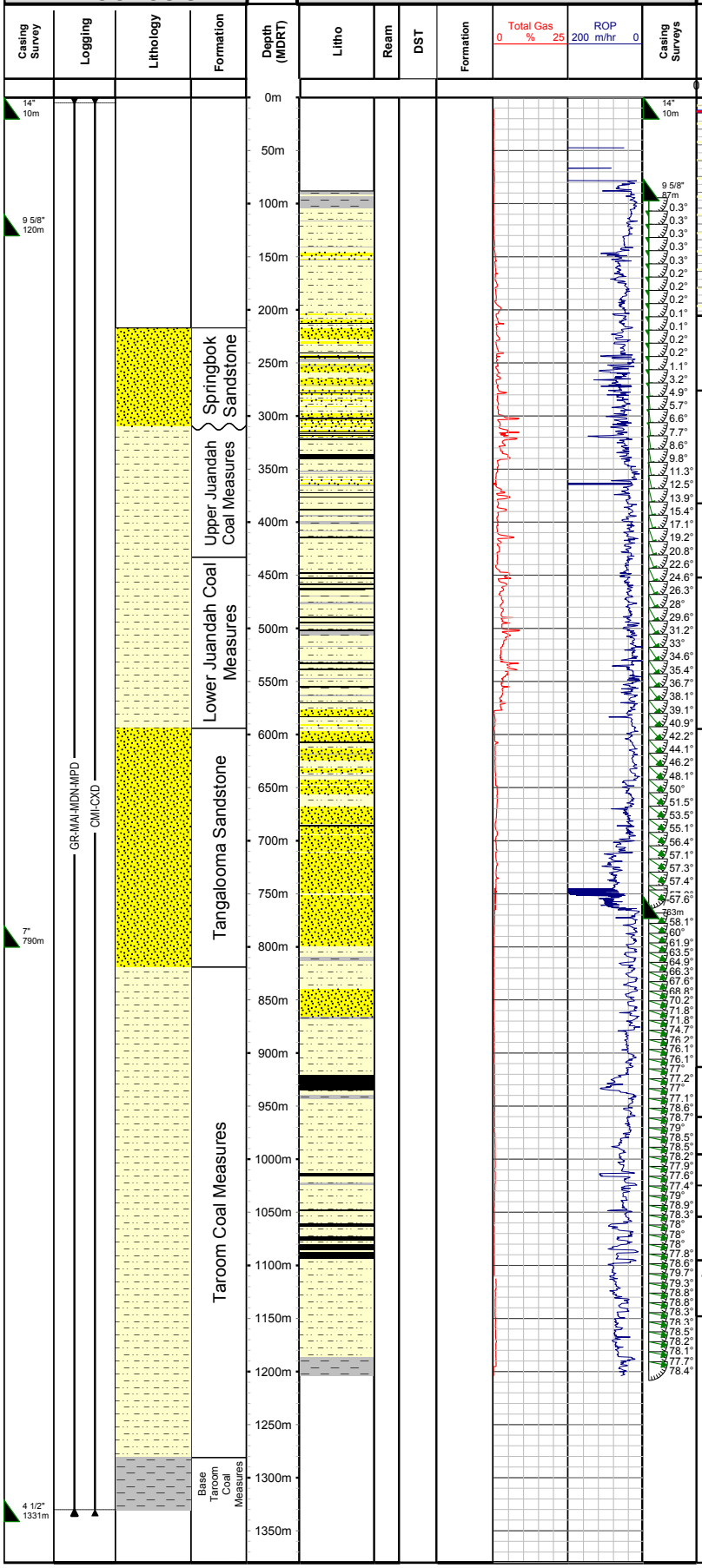
Daily Geological Report #10 for 27-11-2013

Cam 19 **Surat Basin** CSG Appraisal well	**LICENCE** PL 277	**MIDNIGHT DEPTH** 1204.5 mMDRT	**06:00am DEPTH** 1204.5 mMDRT
		Operations Status at Midnight: Continue to RIH for wiper trip.	

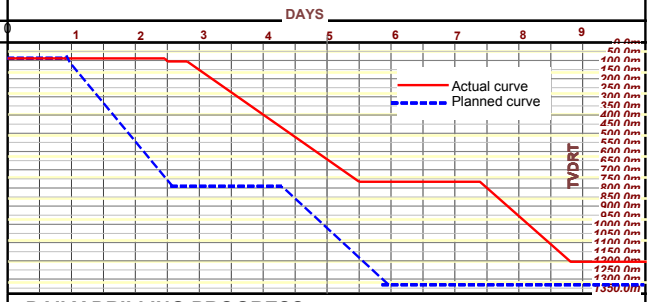
ON LOCATION : 16-11-2013		RIG	: Saxon 166
SPUD DATE	: 07-02-2013	TD DATE	: 25-11-2013
GL	: +323.60m	RT	: +328.10m
PLAN TD	: 1331 m	LONGITUDE	: 149°42'23.68"E
ACTUAL TD	: 1204.50m	LATITUDE	: -26°12'43.56"S

WELLSITE GEOLOGIST : Ivan McCarthy

PROGNOSIS | **ACTUAL**



PROGRESS CHART



DAILY DRILLING PROGRESS:

FROM: 1204.5 m TO: 1204.5 mMDRT; 24Hrs Progress: 0 m

SUMMARY OF LAST 24 HOURS :

Complete CWS logging run 1 (GR-MAI-MDN-MPD (HRes)). POOH, B/O and L/O tools. P/U amd M/U 6 1/8" BHA, RIH to perform wiper trip. Circulate hole clean. POOH.

CURRENT OPERATION :

Continue to POOH to surface.

24 HOUR FORECAST :

POOH and L/O BHA. Make up CWS tool string on 6 1/8" pipe. RIH and complete CWS logging run 2 (CMI - CXD) POOH and rig down, process data and release Weatheford logging crew. P/U and M/U 6 1/8" BHA, RIH to perform wiper trip. Circulate hole clean. POOH. Rig up to run fibreglass liner.

COMMENTS :

All vehicles require a copy of land access rules. The max speed limit is 40km/hr, which drops to 20km/hr within 200m of any dwelling and 5km/hr close to livestock.

MI Swaco Mud Engineer and Pathfinder LWD/Directional crew on location.

Wireline logging programme to be performed by Weatherford (CWS) in 2 runs;

Run 1: GR-MAI-MDN-MPD (HRes) -Complete
Run 2: CMI - CXD

No DST's, FRT's or under-reaming required.

LOG RUNS

Run	Log suite	Start	End
1	GR-MAI-MDN-MPD (HiRes)	m	m
2	CMI-CXD	m	m

DST

Test No.	Unit/Seam Tested	From (mRT)	To (mRT)	Shut In Times (mins)	Flow Times (min)	Recovery (Formation Fluid)

Daily Geological Report #11 for 28-11-2013

Cam 19
Surat Basin
CSG Appraisal well

LICENCE PL 277

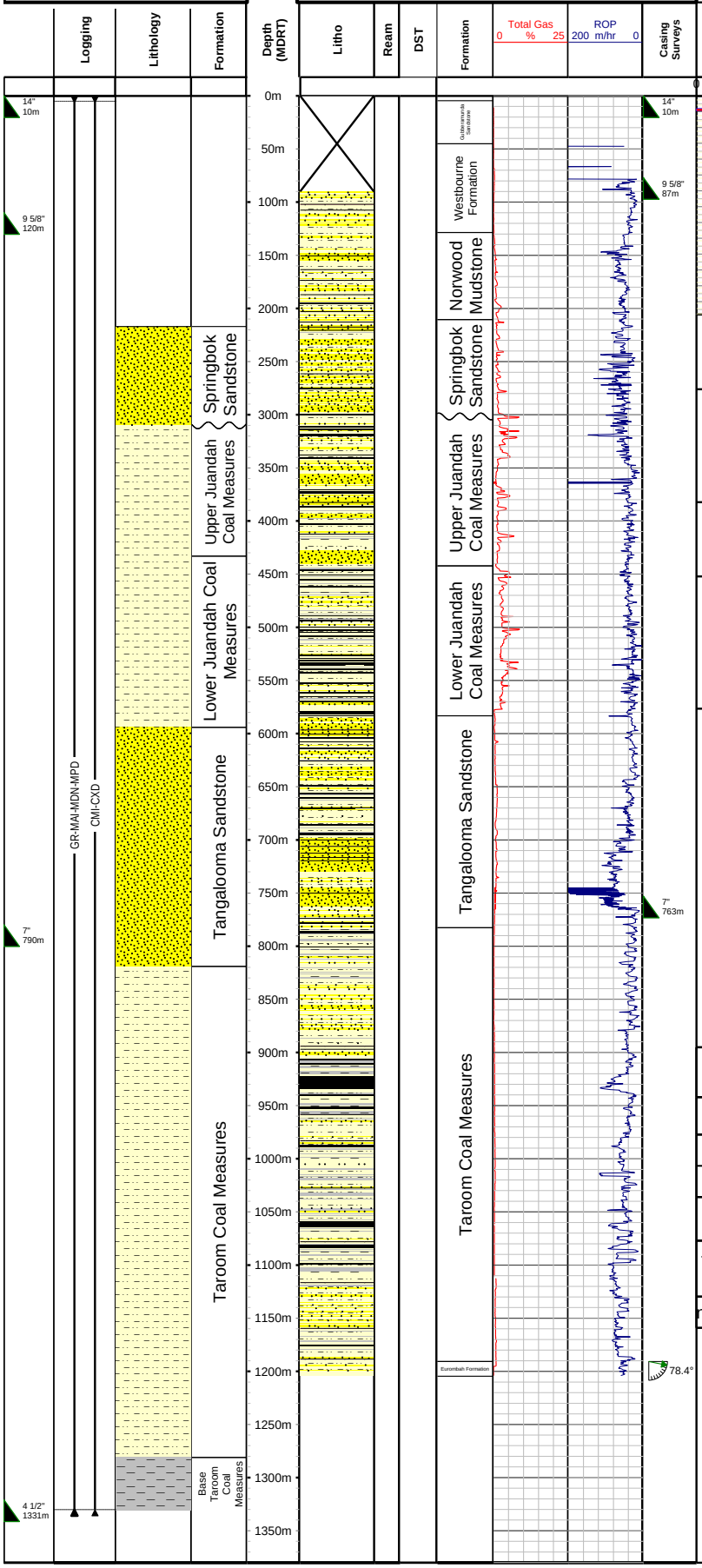
MIDNIGHT DEPTH	06:00am DEPTH
1204.5 mMDRT	1204.5 mMDRT

Operations Status at Midnight:
POOH while logging.

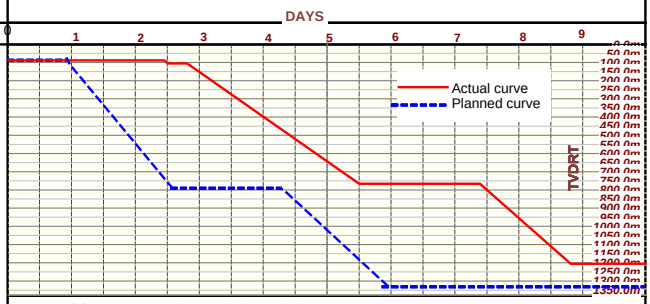
ON LOCATION : 16-11-2013		RIG	: Saxon 166
SPUD DATE	: 07-02-2013	TD DATE	: 25-11-2013
GL	: +323.60m	RT	: +328.10m
PLAN TD	: 1331 m	LONGITUDE	: 149°42'23.68"E
ACTUAL TD	: 1204.50m	LATITUDE	: -26°12'43.56"S

WELLSITE GEOLOGIST : Ivan McCarthy

PROGNOSIS | **ACTUAL**



PROGRESS CHART



DAILY DRILLING PROGRESS:

FROM: 1204.5 m TO: 1204.5 mMDRT; 24Hrs Progress: 0 m

SUMMARY OF LAST 24 HOURS :

POOH after wiper trip and L/O BHA. Make up CWS tool string on 6 1/8" pipe. RIH and conduct CWS logging run 2 (CMI - CXD).

CURRENT OPERATION :

Continue CWS logging run 2 (CMI - CXD).

24 HOUR FORECAST :

Complete CWS logging run 2 (CMI - CXD). POOH and rig down, process data and release Weatheford logging crew. P/U and M/U 6 1/8" BHA, RIH to perform wiper trip. Circulate hole clean. POOH. Rig up to run fibreglass liner.

COMMENTS :

All vehicles require a copy of land access rules. The max speed limit is 40km/hr, which drops to 20km/hr within 200m of any dwelling and 5km/hr close to livestock.

MI Swaco Mud Engineer and Pathfinder LWD/Directional crew on location.

Wireline logging programme to be performed by Weatherford (CWS) in 2 runs;
Run 1: GR-MAI-MDN-MPD (HRes) -Complete
Run 2: CMI - CXD

No DST's, FRT's or under-reaming required.

LOG RUNS

Run	Log suite	Start	End
1	GR-MAI-MDN-MPD (HiRes)	1192.98m	50.00m
2	CMI-CXD	m	m

DST

Test No.	Unit/Seam Tested	From (mRT)	To (mRT)	Shut In Times (mins)	Flow Times (min)	Recovery (Formation Fluid)
none						

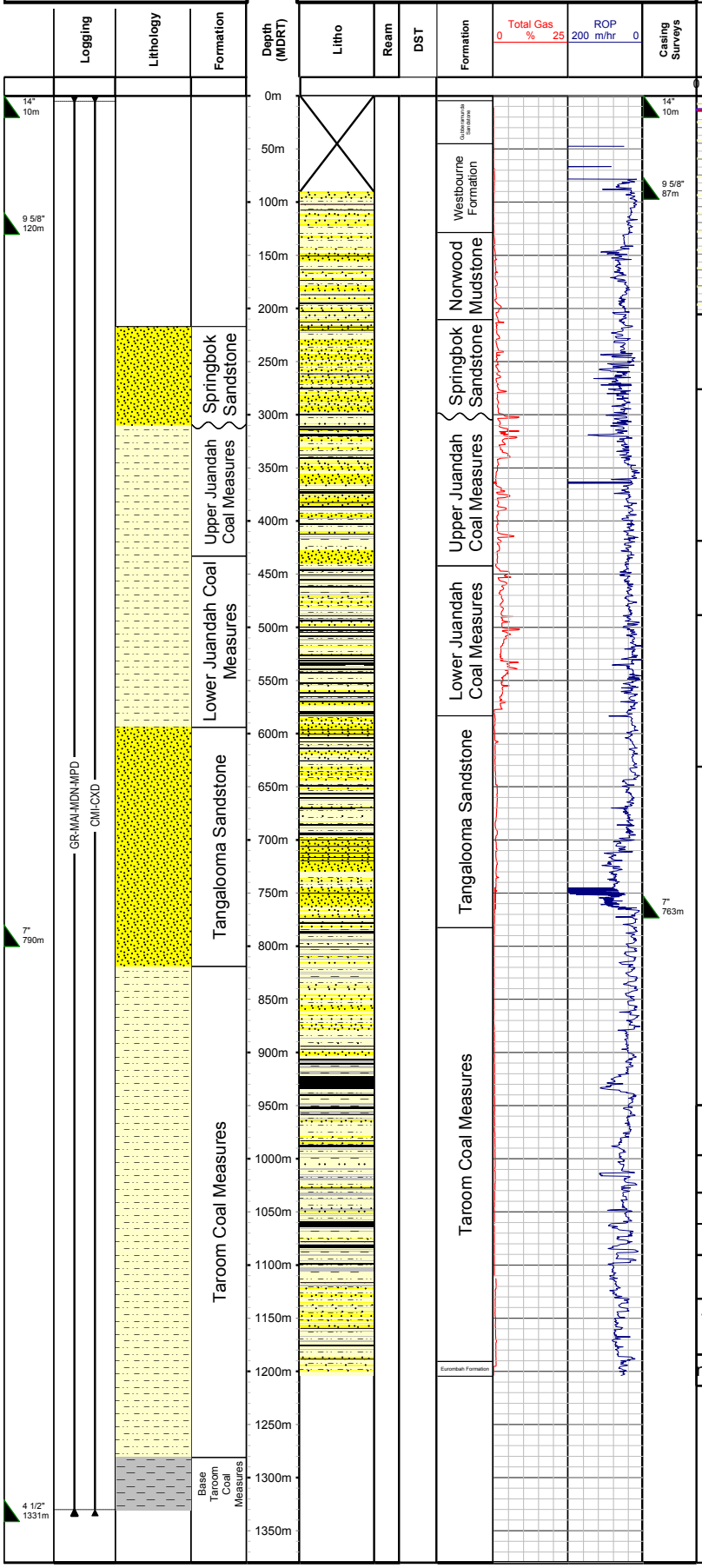
Daily Geological Report #12 for 29-11-2013

Cam 19 **Surat Basin** CSG Appraisal well	**LICENCE** PL 277	**MIDNIGHT DEPTH** 1204.5 mMDRT	**06:00am DEPTH** 1204.5 mMDRT
		Operations Status at Midnight: B/O and L/O BHA.	

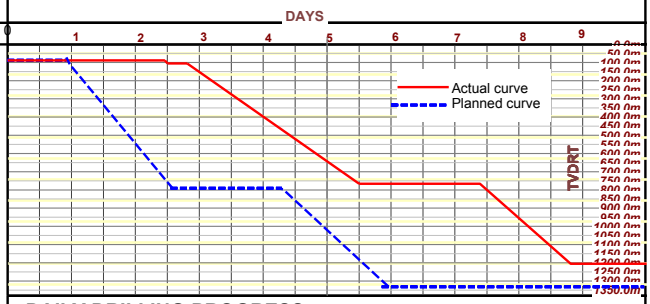
ON LOCATION : 16-11-2013		RIG	: Saxon 166
SPUD DATE	: 07-02-2013	TD DATE	: 25-11-2013
GL	: +323.60m	RT	: +328.10m
PLAN TD	: 1331 m	LONGITUDE	: 149°42'23.68"E
ACTUAL TD	: 1204.50m	LATITUDE	: -26°12'43.56"S

WELLSITE GEOLOGIST : Ivan McCarthy

PROGNOSIS | **ACTUAL**



PROGRESS CHART



DAILY DRILLING PROGRESS:

FROM: 1204.5 m TO: 1204.5 mMDRT; 24Hrs Progress: 0 m

SUMMARY OF LAST 24 HOURS :

Complete CWS logging run 2 (CMI - CXD). POOH and rig down, process data and release Weatherford logging crew. P/U and M/U 6 1/8" BHA, RIH to perform wiper trip. Circulate hole clean. POOH. Rig up to run GRE liner. Start running 4 1/2" GRE liner.

CURRENT OPERATION :

RIH with GRE liner.

24 HOUR FORECAST :

Continue to run 4 ½" pre-slotted GRE liner across the Taroom Coal Measures. Drop ball and back off. P/U and RIH with PLS packer to 400m, set packer and P/T from above. Install BPV. Nipple down BOPs. Start general rig down of Cam 19. WOD before moving to next location.

COMMENTS :

All vehicles require a copy of land access rules. The max speed limit is 40km/hr, which drops to 20km/hr within 200m of any dwelling and 5km/hr close to livestock.

MI Swaco Mud Engineer and Pathfinder LWD/Directional crew on location.

Wireline logging programme to be performed by Weatherford (CWS) in 2 runs;

Run 1: GR-MAI-MDN-MPD (HRes) -Complete
Run 2: CMI - CXD- Complete

No DST's, FRT's or under-reaming required.

LOG RUNS

Run	Log suite	Start	End
1	GR-MAI-MDN-MPD (HiRes)	1192.98m	50.00m
2	CMI-CXD	1192.98m	763.00m

DST

Test No.	Unit/Seam Tested	From (mRT)	To (mRT)	Shut In Times (mins)	Flow Times (min)	Recovery (Formation Fluid)
none						

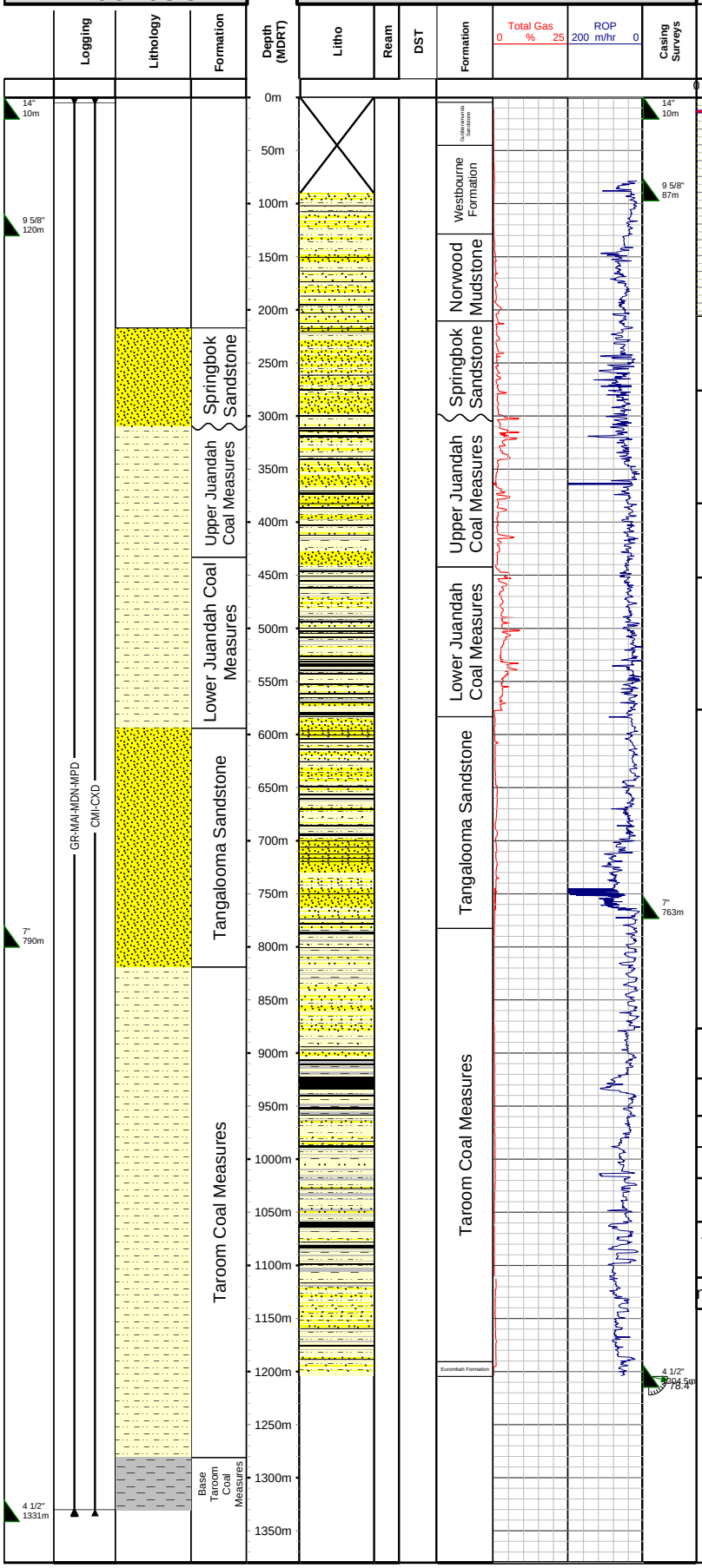
Daily Geological Report #13 for 30-11-2013

Cam 19 **Surat Basin** CSG Appraisal well	**LICENCE** PL 277	**MIDNIGHT DEPTH** 1204.5 mMDRT	**06:00am DEPTH** 1204.5 mMDRT
		Operations Status at Midnight: POOH.	

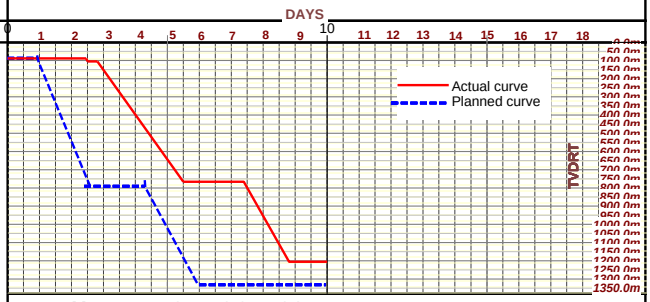
ON LOCATION : 16-11-2013		RIG	: Saxon 166
SPUD DATE	: 07-02-2013	TD DATE	: 25-11-2013
GL	: +323.60m	RT	: +328.10m
PLAN TD	: 1331 m	LONGITUDE	: 149°42'23.68"E
ACTUAL TD	: 1204.50m	LATITUDE	: -26°12'43.56"S

WELLSITE GEOLOGIST : Ivan McCarthy

PROGNOSIS | **ACTUAL**



PROGRESS CHART



DAILY DRILLING PROGRESS:

FROM: 1204.5 m TO: 1204.5 mMDRT; 24Hrs Progress: 0 m

SUMMARY OF LAST 24 HOURS :

Continue to run 4 ½" pre-slotted GRE liner across the Taroom Coal Measures. Drop ball and back off. POOH to surface with DP. P/U and RIH with 3 1/2" PLS packer.

CURRENT OPERATION :

Continue to RIH with 3 1/2" packer.

24 HOUR FORECAST :

Continue to RIH with PLS packer to +/- 400m set packer and P/T from above. POOH to surface. Install BPV. Nipple down BOPs. Start general rig down of Cam 19. WOD before moving to next location.

COMMENTS :

All vehicles require a copy of land access rules. The max speed limit is 40km/hr, which drops to 20km/hr within 200m of any dwelling and 5km/hr close to livestock.

Wireline logging programme to be performed by Weatherford (CWS) in 2 runs;

Run 1: GR-MAI-MDN-MPD (HRes) -Complete
Run 2: CMI - CXD- Complete

No DST's, FRT's or under-reaming required.

Woleebee Creek 108 is the next well.

LOG RUNS

Run	Log suite	Start	End
1	GR-MAI-MDN-MPD (HiRes)	1192.98m	50.00m
2	CMI-CXD	1192.98m	763.00m

DST

Test No.	Unit/Seam Tested	From (mRT)	To (mRT)	Shut In Times (mins)	Flow Times (min)	Recovery (Formation Fluid)
none						

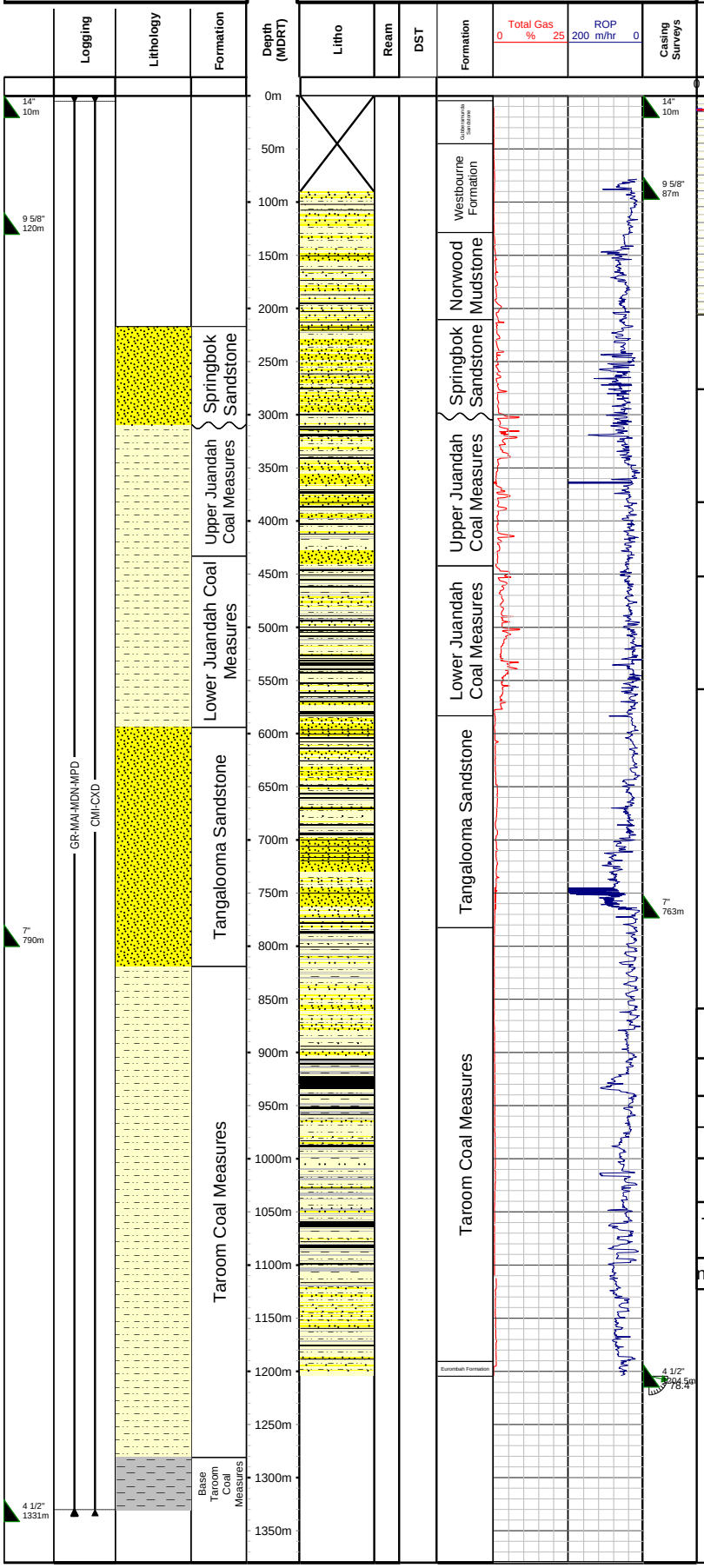
Daily Geological Report #14 for 01-12-2013

Cam 19 **Surat Basin** CSG Appraisal well	**LICENCE** **PL 277**	**MIDNIGHT DEPTH** 1204.5 mMDRT	**06:00am DEPTH** 1204.5 mMDRT
		Operations Status at Midnight: Change out packer.	

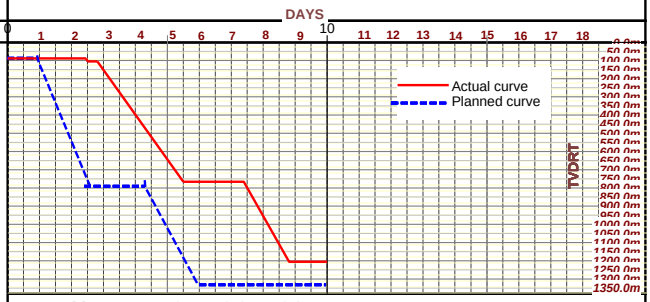
ON LOCATION : 16-11-2013		RIG	: Saxon 166
SPUD DATE	: 07-02-2013	TD DATE	: 25-11-2013
GL	: +323.60m	RT	: +328.10m
PLAN TD	: 1331 m	LONGITUDE	: 149°42'23.68"E
ACTUAL TD	: 1204.50m	LATITUDE	: -26°12'43.56"S

WELLSITE GEOLOGIST : Ivan McCarthy

PROGNOSIS | **ACTUAL**



PROGRESS CHART



DAILY DRILLING PROGRESS:

FROM: 1204.5 m TO: 1204.5 mMDRT; 24Hrs Progress: 0 m

SUMMARY OF LAST 24 HOURS :

Continue to RIH with PLS packer. Try to set packer and P/T from above. Packer failed to set. POOH to change out packer. Change out packer. RIH to re-set packer. Set packer.

CURRENT OPERATION :

Attempt to set packer.

24 HOUR FORECAST :

Set packer. Install BPV. Nipple down BOPs and release rig. Start general rig down of Cam 19. WOD before moving to next location.

COMMENTS :

All vehicles require a copy of land access rules. The max speed limit is 40km/hr, which drops to 20km/hr within 200m of any dwelling and 5km/hr close to livestock.

Wireline logging programme to be performed by Weatherford (CWS) in 2 runs;

Run 1: GR-MAI-MDN-MPD (HRes) -Complete
Run 2: CMI - CXD- Complete

No DST's, FRT's or under-reaming required.

Woleebee Creek 108 is the next well.

LOG RUNS

Run	Log suite	Start	End
1	GR-MAI-MDN-MPD (HiRes)	1192.98m	50.00m
2	CMI-CXD	1192.98m	763.00m

DST

Test No.	Unit/Seam Tested	From (mRT)	To (mRT)	Shut In Times (mins)	Flow Times (min)	Recovery (Formation Fluid)
none						

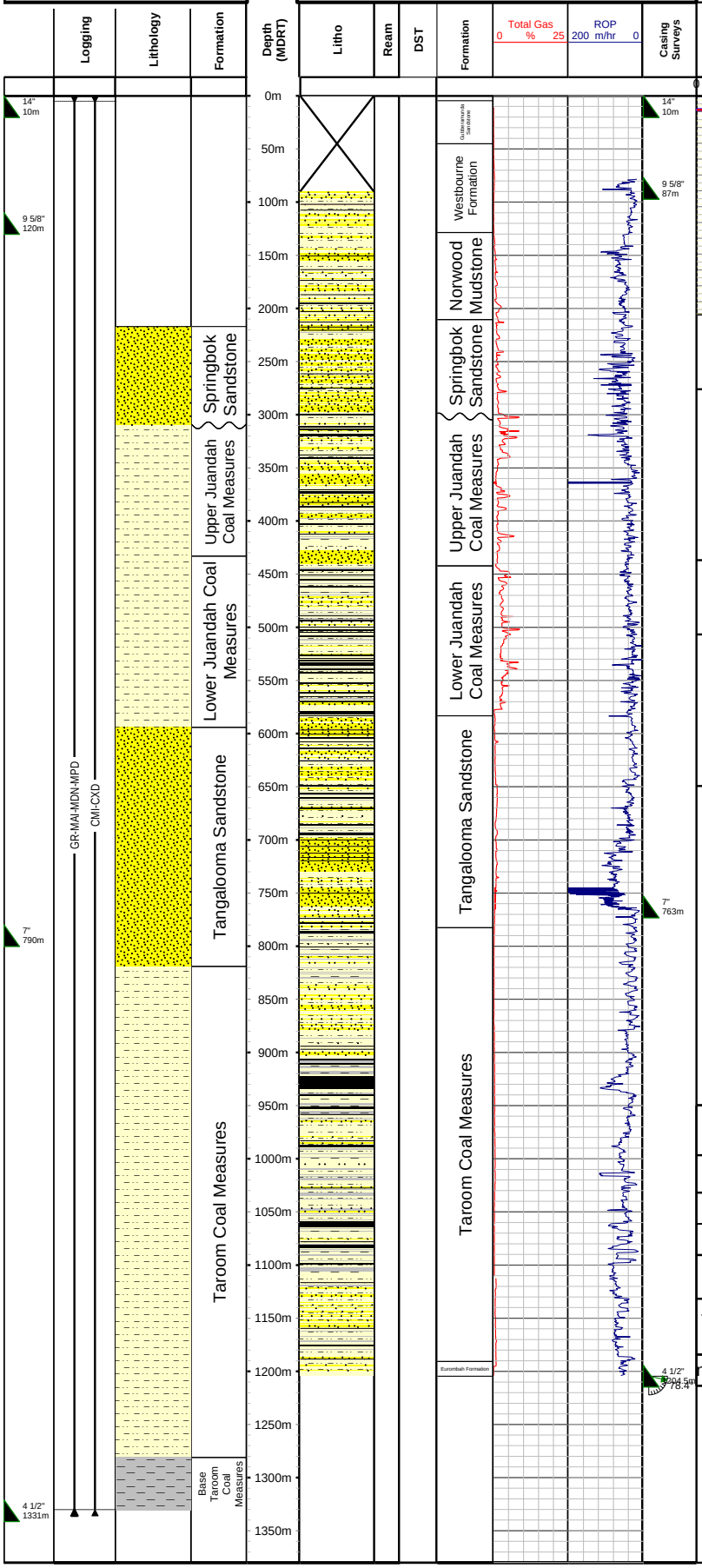
Daily Geological Report #15 for 02-12-2013

Cam 19 **Surat Basin** CSG Appraisal well	**LICENCE** **PL 277**	**MIDNIGHT DEPTH** 1204.5 mMDRT	**06:00am DEPTH** 1204.5 mMDRT
		Operations Status at Midnight: Wait on daylight.	

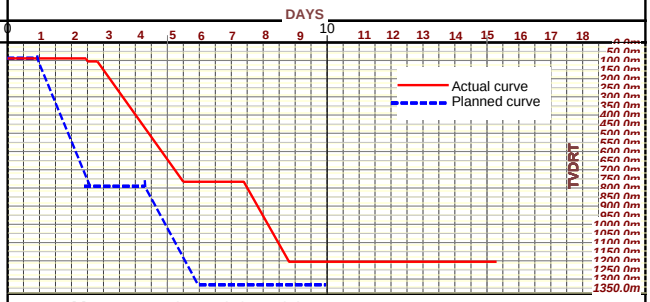
ON LOCATION : 16-11-2013		RIG	: Saxon 166
SPUD DATE	: 17-11-2013	TD DATE	: 25-11-2013
GL	: +323.60m	RT	: +328.10m
PLAN TD	: 1331 m	LONGITUDE	: 149°42'23.68"E
ACTUAL TD	: 1204.50m	LATITUDE	: -26°12'43.56"S

WELLSITE GEOLOGIST : Ivan McCarthy

PROGNOSIS | **ACTUAL**



PROGRESS CHART



DAILY DRILLING PROGRESS:

FROM: 1204.5 m TO: 1204.5 mMDRT; 24Hrs Progress: 0 m

SUMMARY OF LAST 24 HOURS :

Set packer. Pressure test packer and release packer. POOH and install BPV. Nipple down BOPs and release rig. Start general rig down of Cam 19. WOD before camp moving to next location. Continue rig down of Cam 19. Clean equipment for self weed declaration. Conduct minor rig maintenace. Prepare for camp move.

CURRENT OPERATION :

Prepare for camp move to new location.

24 HOUR FORECAST :

Prepare for camp move. Complete camp rig down. Spot all loads and move to new location. Rig up camp site. Continue rig down of Cam 19. Clean equipment for self weed declaration. Conduct minor rig maintenace. WOD before moving rig to Woleebee Creek 108.

COMMENTS :

All vehicles require a copy of land access rules. The max speed limit is 40km/hr, which drops to 20km/hr within 200m of any dwelling and 5km/hr close to livestock.

Wireline logging programme to be performed by Weatherford (CWS) in 2 runs;

Run 1: GR-MAI-MDN-MPD (HRes) -Complete
Run 2: CMI - CXD- Complete

No DST's, FRT's or under-reaming required.

Woleebee Creek 108 is the next well.

LOG RUNS

Run	Log suite	Start	End
1	GR-MAI-MDN-MPD (HiRes)	1192.98m	50.00m
2	CMI-CXD	1192.98m	763.00m

DST

Test No.	Unit/Seam Tested	From (mRT)	To (mRT)	Shut In Times (mins)	Flow Times (min)	Recovery (Formation Fluid)
none						

APPENDIX 4

COMPOSITE LOG

Cam 19

QGC

Composite Well Log

Well Name:	Cam 19
Status:	Suspended
Area:	Southwest Queensland
Basin:	Surat
Location:	Wandoan
PID:	CAM_WH019
UWI:	100000744838

Partners:

- QGC Pty Ltd
- BGI (Aus) Pty Ltd
- Toyota Tsusho CBM Queensland Pty Ltd
- CNOOC CSG Co Pty Ltd
- Tokyo Gas QCLNG Pty Ltd

Contractors:

Drilling	TCL / Saxon
Geology	Fossil Energy Services
LWD	Pathfinder
Directional Drilling	Pathfinder
Drilling Fluids	MI Swaco
Wireline	Weatherford
Cementing	Schlumberger

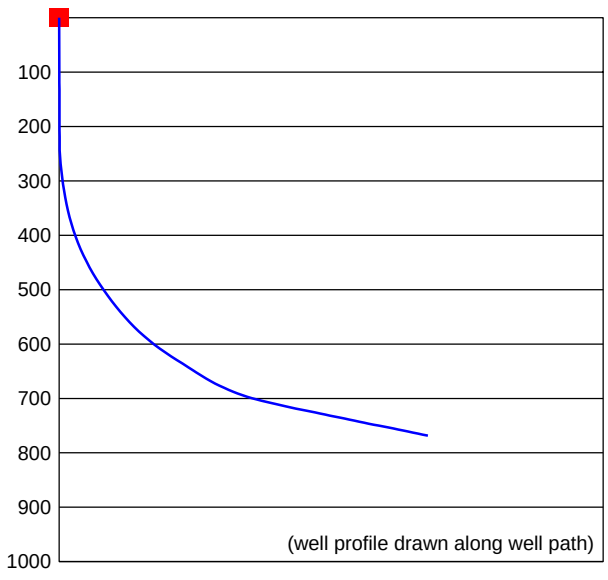
Rig:	TCL 1 (12 1/4" Hole), Saxon 166 (8 1/2" and 6 1/8" Hole)	
Latitude:	26° 12' 43.5402" S	7 098 004.907 m
Longitude:	149° 42' 23.6847" E	770 441.642 m
Spud Date:	07-03-2013	(TCL1)
TD Date:	25-11-2013	
Rig Release Date:	01-12-2013	
Depth Datum:	AHD	
RT Elevation:	327.55m (Saxon 166)	
GL Elevation:	323.05m	
Total Depth:	1204.50 m MDRT (Driller)	
	1204.50 m MDRT (Logger)	

Wellsite Geologists:
Ben Marshall

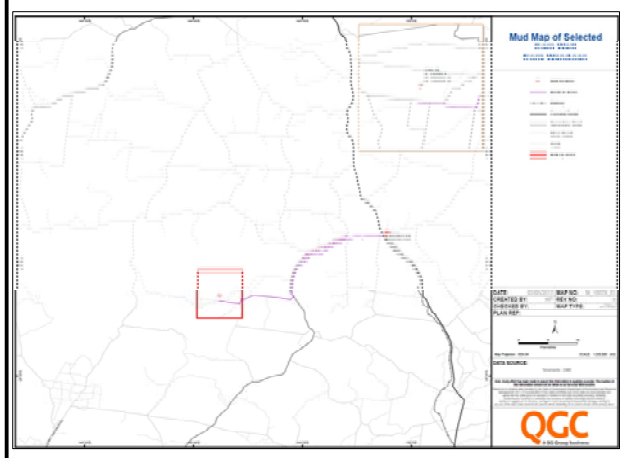
Prepared by:
Ben Marshall

Check:
Imanto Sidik

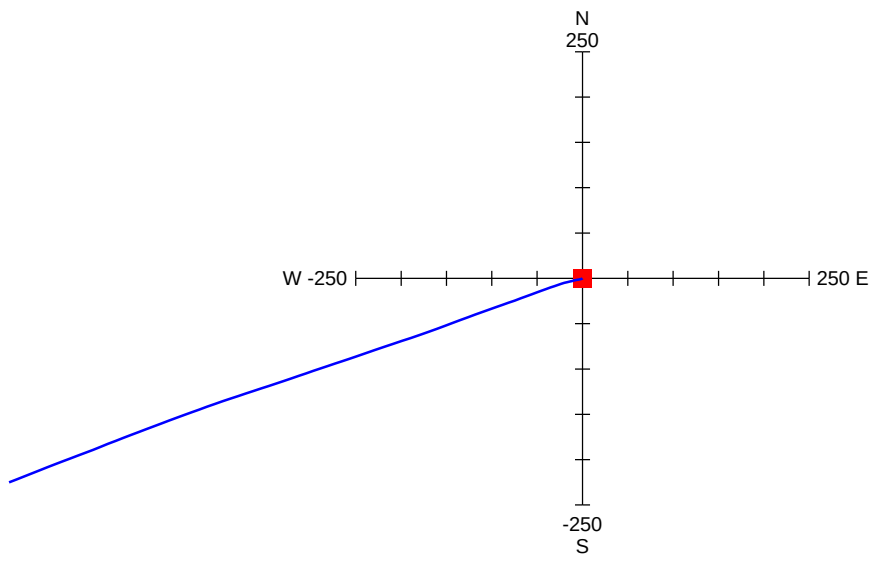
Profile View of Well Path



Location Map



Plan View of Well Path



Well Configuration

Hole and Casing Details

Bit Size (Inch)	Hole depth (mMDRT) (mTVD)	Casing Size (Inch)	Shoe depth (mMDRT) (mTVD)	Hanger (mMDRT)	Comments
17"	10.00 10.00	**14"**	10.00 10.00		
12 1/4"	88.00 88.00	**9 5/8"**	87.00 87.00		
8 1/2"	765.00 664.71	**7"**	763.00 663.65		
6 1/8"	1204.50 775.94	**4 1/2"**		1204.50 775.94	Slotted GRE Casing run from 746.30mMDRT to TD.

Wireline Logging Summary

Run	Hole/Casing Size	Suite	Date(s)	Interval (m MD)	Max Temp	Comments
1	6 1/8"	**GR-MAI-MDN-MPD-MSS**	26-11-2013	1192.98 - 50.00	51°C	Weatherford
2	6 1/8"	**CMI-CXD**	27-11-2013	1197.00 - 764.00	49°C	Weatherford

Key

- Breccia
- Conglomerate
- Sand/Sandstone
- Silt/Siltstone
- Clay/Claystone
- Marl
- Shale
- Tuff
- Volcanics
- Limestone
- Dolomitic Limestone
- Dolomite
- Calcareous Dolomite
- Chert
- Anhydrite
- Halite
- Polyhalite
- Coal/Lignite
- B Boundstone
- G Grainstone
- M Mudstone
- P Packstone
- W Wackestone
- Silty
- Argillaceous
- Calcareous
- Dolomitic
- Brecciated LMST
- Carbonaceous
- Bituminous
- Oolitic
- Chalky
- Glauconitic
- Mic Micaceous
- Pyritic
- Spicules
- Fossils
- Sideritic
- 1 Cored Interval (wireline depths)
- (no recovery)
- 1 Cored Interval (drilled depths)
- (no recovery)
- Sidewall Core
- (no recovery)
- Casing Shoe
- Liner Hanger
- Bridge Plug
- External Casing Packer (ECP)
- DST
- Perforated Interval
- RCI
- (failed)
- (sample taken)
- Survey Point
- <<<<< Lost Circulation
- Cement Plug
- Plain Casing

Depth Range: 0m - 1230m MD

Scale 1:500

Date: 10/12/2013

STRAT | GAMMA RAY | DEPTH (m) | LITHOLOGY | GAS | RESISTIVITY | POROSITY | DESCRIPTION

FORMATION / UNIT

ROP 200 m/hr 0

Calliper 2 (CALI) inches 12

Gamma Ray 0 (GR) API 150

m MD / m TVD

Total Gas 0 % 10

Shallow Laterolog (RLA2) 0.2 ohm metres 200

Deep Laterolog (RLA5) 0.2 ohm metres 200

Limestone Neutron Por. 0.45 (TNPH) v/v (m3/m3) -0.15

Density Correction -0.25 (HDRA) grams/cc 0.25

Compensated Density 1 (RHO8) grams/cc 3

PE 0 (PEF8) barns/electron 10

3-5' Compensated Sonic 240 (DT) microsec/foot 40

0m

Gubberamunda Sandstone 4.5mMD

Gubberamunda Sandstone

14" @ 10m

Density, Resistivity and Sonic not run above 763mMDRT as was in cased hole.

25m

Westbourne Formation 45.04mMD

Westbourne Formation

50m

9 5/8" @ 87m

75m

100m

Norwood Mudstone

Springbok Sandstone

125m

150m

175m

200m

225m

250m

275m

300m

Norwood Mudstone 128.52mMD

Springbok Sandstone 210.4mMD

SILSTONE: Light to medium grey, soft to firm, arenaceous, subblocky, common carbonaceous fragements.

SANDSTONE: Light grey, off white, frosted, fine to medium, moderately well sorted, sub-rounded to sub-angular, common weak siliceous cement, occasional silty matrix, abundant loose grains with common soft friable aggregates, occasional carbonaceous specks.

SANDSTONE: Pale grey, off white, frosted, translucent, fine to coarse, very poorly sorted, predominantly sub-angular, common off white siliceous cement, abundant loose grains with common soft friable aggregates, common coarse QUARTZ grains, occasional carbonaceous specks.

COAL: Black, vitreous to subvitreous, firm, brittle, subfissile to subblocky, uneven fracture.

Upper Juandah Coal Measures 301.64mMD

SILSTONE: Medium blueish grey, soft to firm, arenaceous and argillaceous, subblocky, common carbonaceous laminae and fragements, rare creamy subblocky LIMESTONE fragments.

SILSTONE: Medium medium grey, soft to firm, arenaceous, subblocky, common carbonaceous fragments.

COAL: Black, vitreous to subvitreous, earthy in part, firm, brittle, subfissile to subblocky, uneven fracture, interbedded with medium grey SILTSTONE laminae.

Upper Juandah Coal Measures

325m

350m

375m

400m

425m

450m

475m

500m

525m

SILSTONE: Medium grey, firm, occasionally hard, arenaceous, subblocky, occasional carbonaceous specks, grading to SANDY SILTSTONE.

SILSTONE: Light to edium grey, soft to firm, arenaceous, subblocky, common carbonaceous specks and laminae.

SANDSTONE: Pale tannish grey, frosted, fine to medium, moderately poorly sorted, sub-rounded to sub-angular, common calcareous cement - highly reactive, abundant loose grains with common firm to friable aggregates, occasional carbonaceous specks.

SANDSTONE: Light grey, frosted, fine to medium, moderately poorly sorted, sub-rounded to subangular, occasional friable siliceous cement, predominantly loose grains with occasional soft aggregates, common carbonaceous specks.

SANDSTONE: Medium to light grey, frosted, fine to medium, moderately poorly sorted, sub-rounded to subangular, argillaceous matrix, abundant loose grains, abundant carbonaceous specks.

SANDSTONE: Medium to light grey, frosted, fine to medium, moderately poorly sorted, sub-rounded to subangular, argillaceous matrix, abundant loose grains, abundant carbonaceous specks.

SANDSTONE: Light grey, frosted, very fine to fine, well sorted, sub-rounded loose grains, occasional argillaceous matrix, common carbonaceous specks, grading to ARGILLACEOUS SANDSTONE.

SANDSTONE: Light grey, frosted, fine to medium, moderately poorly sorted, predominantly sub-angular, occasional friable siliceous cement, predominantly loose grains with occasional soft aggregates, common carbonaceous specks.

CLAYSTONE: Medium brownish grey, very soft to washing out, dispersive, amorphous, common carbonaceous specks.

CLAYSTONE: Medium brownish grey, very soft to washing out, dispersive, amorphous, common carbonaceous specks, grading to ARGILLACEOUS SANDSTONE.

CLAYSTONE: Light tannish grey, arenaceous, very soft to washing out, dispersive, amorphous, common carbonaceous specks, grading to ARGILLACEOUS SANDSTONE.

Lower Juandah Coal Measures 442.19mMD

Downhole Retrievable Annulus Packer set at 402.18mMDRT to 501.60mMDRT.

SANDSTONE: Dark to medium brownish grey, mottled, fine to medium, moderately well sorted, argillaceous and carbonaceous matrix, abundant sub-rounded loose grains, abundant carbonaceous specks.

CLAYSTONE: Light tannish grey, arenaceous, very soft to washing out, dispersive, amorphous, common carbonaceous specks.

CLAYSTONE: Light grey, arenaceous, very soft to washing out, dispersive, amorphous, common carbonaceous specks, grading to very fine ARGILLACEOUS SANDSTONE.

SANDSTONE: Dark to medium brownish grey, mottled, very fine to fine, moderately well sorted, argillaceous matrix, abundant sub-rounded loose grains, abundant carbonaceous specks, grading to ARGILLACEOUS SANDSTONE

SANDSTONE: Dark to medium brownish grey, mottled, very fine to fine, moderately well sorted, argillaceous matrix, abundant sub-rounded loose grains, abundant carbonaceous specks, grading to ARGILLACEOUS SANDSTONE

COAL: Black, subvitreous, firm, brittle, subfissile, angular fracture.

SILTSTONE: Light to medium grey, argillaceous, subblocky, common carbonaceous specks.

SILTSTONE: Light to medium grey, argillaceous, subblocky, common carbonaceous laminae and specks.

SILTSTONE: Light to medium grey, argillaceous and arenaceous, subblocky, common carbonaceous laminae and specks, grading to SANDY SILSTONE.

Lower Juandah Coal Measures

Lower

550m
575m
525m
550m

COAL: Black, subvitreous, lignitic, firm, brittle, subfissile, angular fracture.

SILTSTONE: Light to medium grey, soft to firm, arenaceous, occasional carbonaceous specks, occasional tan, very hard, shard like SIDERITE fragments.

SILTSTONE: Light grey, firm, arenaceous, subblocky, occasional carbonaceous specks, grading to SANDY SILTSTONE, occasional tan, very hard, shard like SIDERITE fragments.

COAL: Black, subvitreous to vitreous, firm to hard, brittle, subfissile to subblocky, angular fracture, interbedded with SILSTONE.

Tangalooma Sandstone 583.24mMD

600m
625m
575m
600m

SANDSTONE: Medium grey, frosted, predominanltly medium, moderately sorted, common off white argillaceous matrix, abundant sub-rounded to sub- angular loose grains, abundant carbonaceous specks.

SANDSTONE: Medium grey, frosted, fine to medium, moderately sorted, common argillaceous matrix, occasionally silty, abundant predominantly sub-rounded loose grains, abundant carbonaceous specks and fragments.

SILTSTONE: Light to medium grey, firm, arenaceous, subblocky, occasional carbonaceous specks, grading to SANDY SILTSTONE.

SILTSTONE: Light to medium grey, firm, arenaceous and argillaceous, subblocky to subfissile, occasional carbonaceous specks and laminae.

SANDSTONE: Medium grey, frosted, mottled, translucent in part, fine to medium, moderately well sorted, common argillaceous matrix, abundant sub-rounded to sub-angular loose grains, occasional carbonaceous specks and fragments.

SILTSTONE: Medium grey, soft, subblocky to subfissile, common carbonaceous specks.

SILTSTONE: Medium grey, soft, arenaceous and argillaceous, subblocky, common carbonaceous specks, grading to SANDY SILTSTONE.

Tangalooma Sandstone

675m
700m
725m
650m

CLAYSTONE: Medium olive grey, very soft to dispersive, amorphous, sticky.

COAL: Black, subvitreous to vitreous, firm to hard, brittle, subfissile to subblocky, uneven angular fracture.

SILTSTONE: Medium grey, occasionally light olive grey, soft to firm, subblocky to subfissile, rare carbonaceous specks and laminae.

SANDSTONE: Light grey, frosted, mottled, fine to medium, moderately poorly sorted, sub-rounded to subangular, abundant off white siliceous cement, moderate calcareous reaction, predominantly soft to firm aggregates with occasional loose grains, occasional carbonaceous specks.

SANDSTONE: Light grey, frosted, fine to medium, moderately sorted, sub-rounded, abundant loose grains, occasional carbonaceous specks.

SANDSTONE: Light grey, frosted, fine to medium, moderately sorted, sub-rounded, silty matrix, occasional siliceous cement, occasional soft aggregates wtih abundant loose grains, occasional carbonaceous specks, common off white lithics.

SANDSTONE: Light grey, frosted, fine to medium, moderately sorted, sub-rounded, silty matrix, occasional siliceous cement, occasional soft aggregates wtih abundant loose grains, common carbonaceous specks, common off white lithics.

746.30m

SANDSTONE: Light grey, frosted, fine, moderately well sorted, sub-rounded, sitly in part, abundant loose grains, rare carbonaceous specks, common off white lithics.

7" @ 763m

SANDSTONE: Pale grey, frosted, off white, very fine to fine, moderately well sorted, sub-rounded, abundant loose grains, rare carbonaceous specks, common off white lithics.

Taroom Coal Measures 782.6mMD

SANDSTONE: Light tannish grey, frosted, fine, moderately well sorted, sub-rounded to sub-angular, argillaceous matrix, highly reactive calcareous reaction, abundant loose grains.

SANDSTONE: Light grey, frosted, fine to medium, moderately well sorted, sub-rounded to sub-angular, silty matrix, abundant loose grains, occasional carbonaceous specks.

SILTSTONE: Medium grey, soft to firm, brittle, subfissile to subblocky, occasional carbonaceous laminae.

CLAYSTONE: Olive grey, very soft to washing out, amorphous, sticky.

SILTSTONE: Medium olive grey, arenaceous, soft to firm, subfissile to subblocky.

SILTSTONE: Medium tannish grey, arenaceous, soft to firm, subfissile to subblocky, grading to SANDY SILTSTONE.

SILTSTONE: Medium to dark grey, arenaceous, soft to firm, subfissile to subblocky.

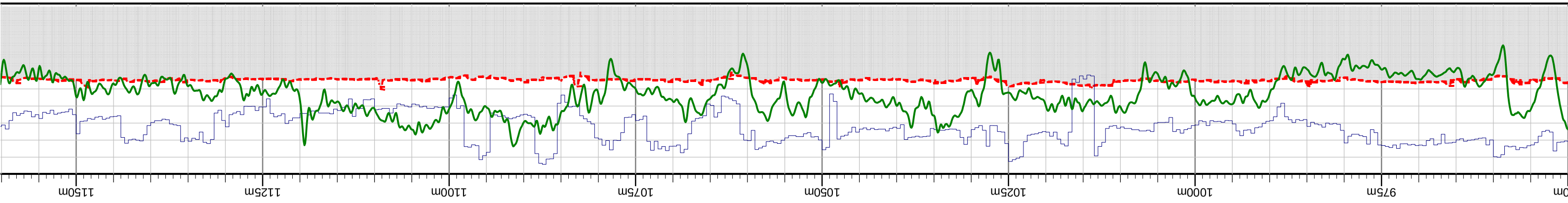
SANDSTONE: Light to medium grey, frosted, fine to medium, moderately well sorted, sub-rounded, argillaceous matrix, abundant loose grains, grading to ARGILLACEOUS SANDSTONE.

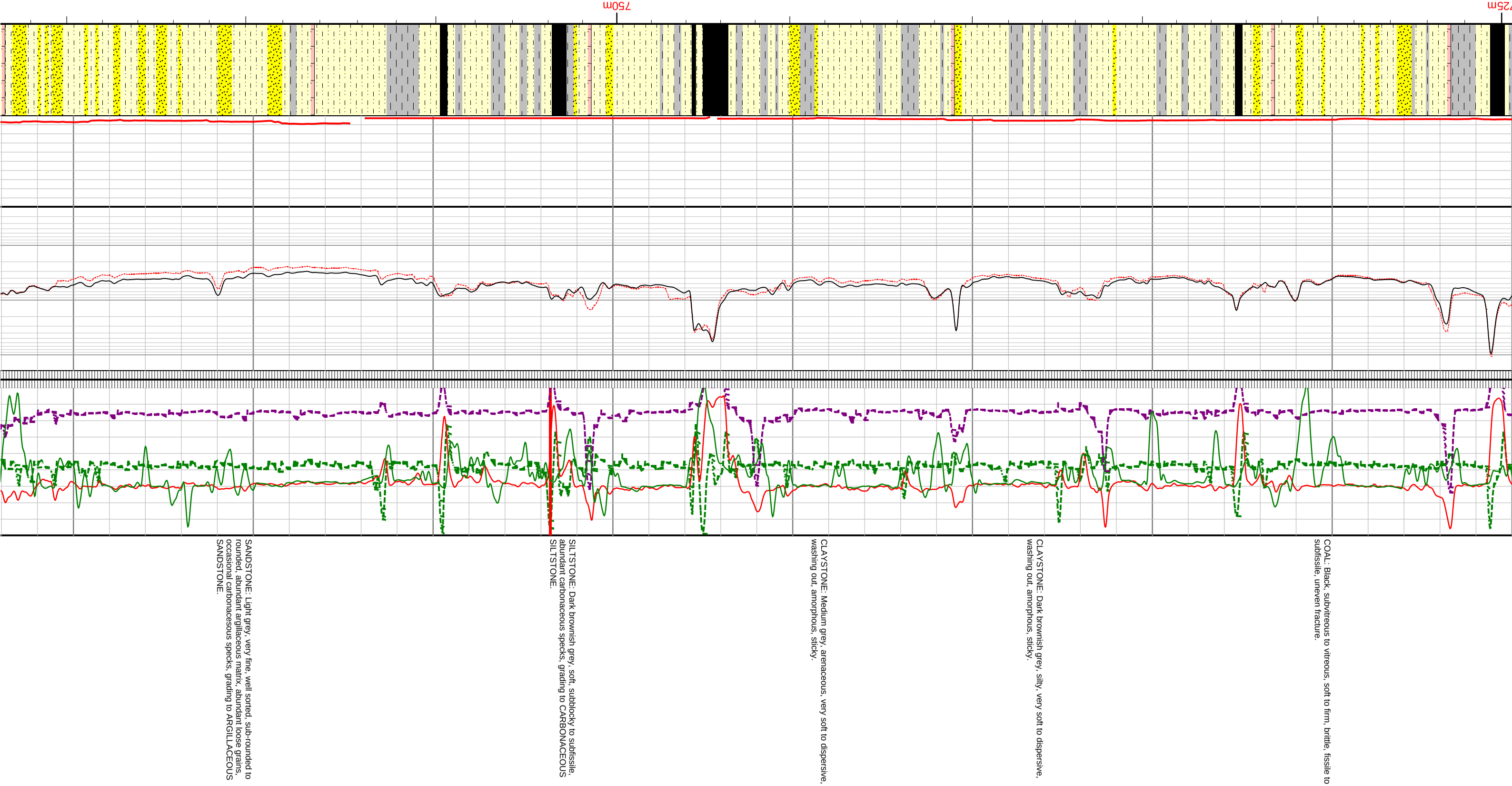
SANDSTONE: Medium brownish grey, off white, mottled, fine to medium, moderately well sorted, sub-rounded, common argillaceous matrix, sitly in part, abundant loose grains, sticky.

CLAYSTONE: Olive brown, dispersive, washing out, amorphous, common carbonaceous specks.

750m
775m
800m
825m
850m
875m
900m
925m
675m
700m

Taroom Coal Measures





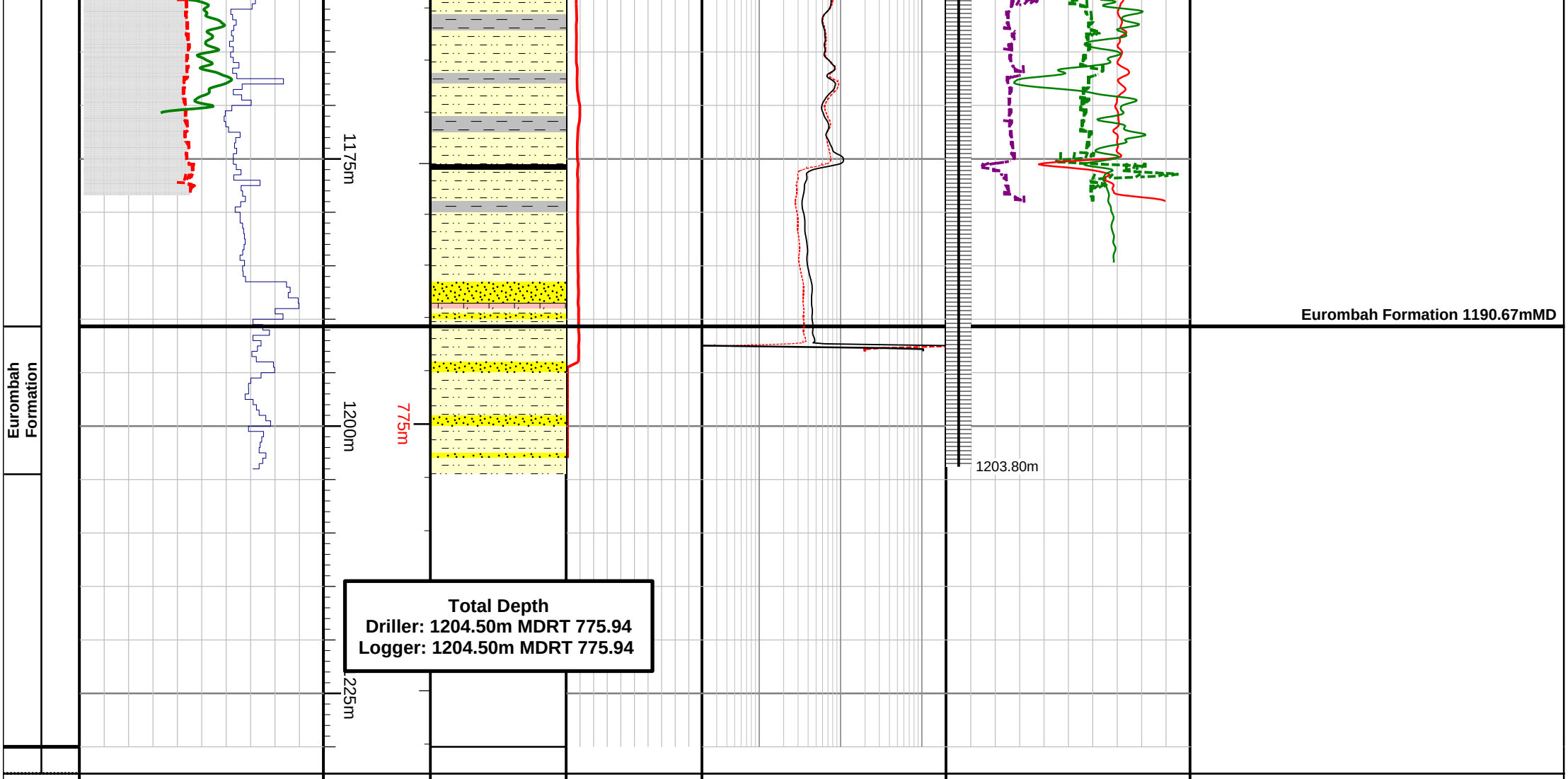
SANDSTONE: Light grey, very fine, well sorted, sub-rounded to rounded, abundant argillaceous matrix, abundant loose grains, occasional carbonacesous specks, grading to ARGILLACEOUS SANDSTONE.

SILTSTONE: Dark brownish grey, soft, subblocky to subfissile, abundant carbonaceous specks, grading to CARBONACEOUS SILTSTONE.

CLAYSTONE: Medium grey, arenaceous, very soft to dispersive, washing out, amorphous, sticky.

CLAYSTONE: Dark brownish grey, silty, very soft to dispersive, washing out, amorphous, sticky.

COAL: Black, subvitreous to vitreous, soft to firm, brittle, fissile to subfissile, uneven fracture.



STRAT	Gamma Ray 0 (GR) API 150 Calliper 2 (CALI) inches 12 ROP 200 m/hr 0 GAMMA RAY - ROP - CALIPER	DEPTH	LITHOLOGY	Total Gas 0 % 10 GAS	Deep Laterolog (RLA5) 0.2 ohm metres 200 Shallow Laterolog (RLA2) 0.2 ohm metres 200 RESISTIVITY	Limestone Neutron Por. 0.45 (TNPH) v/v (m3/m3) -0.15 Density Correction -0.25 (HDRA) grams/cc 0.25 Compensated Density 1 (RHO8) grams/cc 3 PE 0 (PEF8) barns/electron 10 3-5' Compensated Sonic 240 (DT) microsec/foot 40	DESCRIPTION

Cam 19

APPENDIX 5

LITHOLOGY LOG

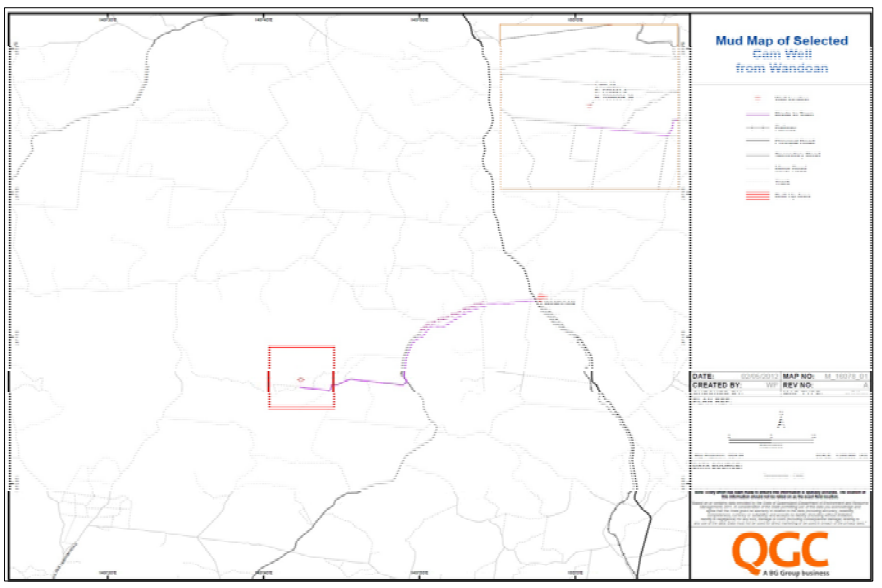
Wellsite Lithology Log (MD)

QGC A BG Group business	**Cam 19**	**PARTNERS** QGC Pty Ltd, BGI (Aus) Pty Ltd, Toyota Tsusho CBM Queensland Pty Ltd, CNOOC CSG Co Pty Ltd, Tokyo Gas QCLNG Pty Ltd	**PERMIT** PL 277 **OPERATOR** QGC

GENERAL WELL DATA

DRILLING RIG	:	TCL 1 and Saxon 166	GL	:	323.05m
DATE ON LOC	:	07-03-2013	RT	:	327.55m (Saxon 166)
SPUD DATE	:	07-03-2013	TARGET DEPTH	:	1331.00mMDRT
RELEASE DATE	:	01-12-2013	DRILLER DEPTH	:	1204.50mMDRT
LAT	:	26° 12' 43.5402" S	LOGGER DEPTH	:	1204.50mMDRT
LONG	:	149° 42' 23.6847" E			
LAT (DEC)	:	-26.2121	WELLSITE GEO	:	Ben Marshall
LONG (DEC)	:	149.7065		:	
BASIN	:	Surat	OPERATIONS GEO	:	Imanto Sidik

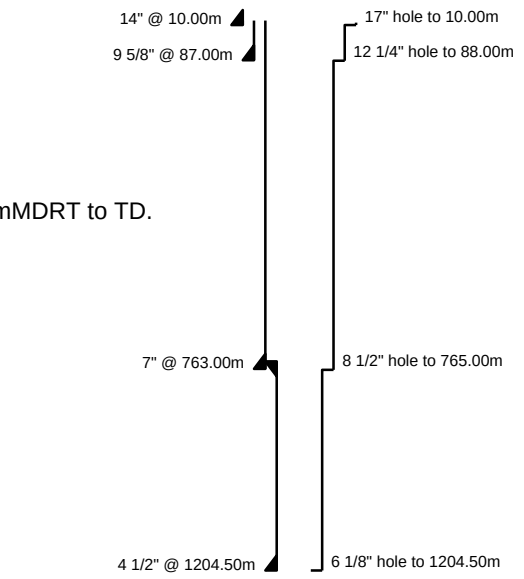
LOCATION MAP



HOLE AND CASING DATA

Hole Size	Hole TD (m) Driller	Hole TD (m) TVD	Casing Diameter	Shoe Depth (m) MD	Shoe Depth (m) TVD	Comments
17"	10.00	10.00	**14"**	10.00	10.00	Drilled by TCL 1
12 1/4"	88.00	88.00	**9 5/8"**	87.00	87.00	Drilled by Saxon 166
8 1/2"	765.00	664.71	**7"**	763.00	663.65	Drilled by Saxon 166
6 1/8"	1204.50	775.72	**4 1/2"**	1204.50	775.72	Drilled by Saxon 166. Slotted GRE Casing run from 746.30mMDRT to TD.

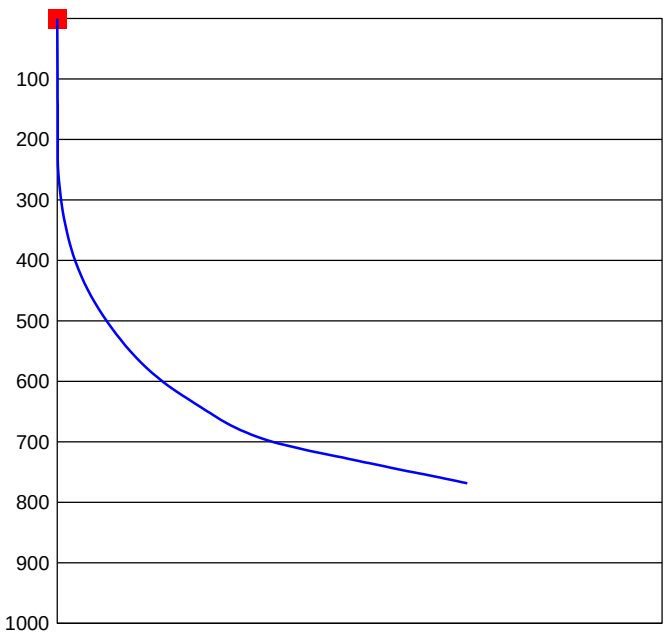
WELL STRUCTURE



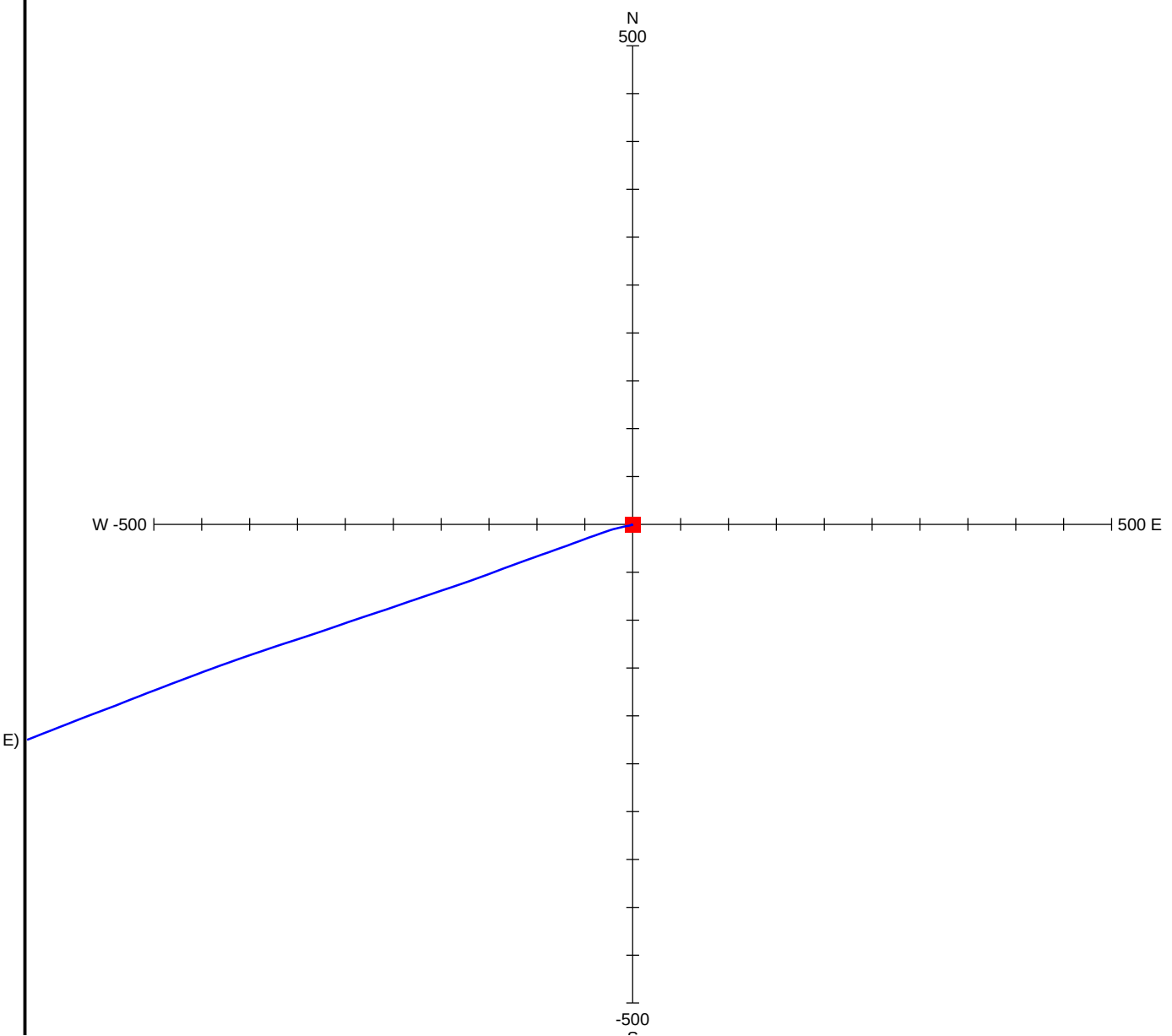
CONTRACTORS

Drilling	TCL / Saxon
Geology	Fossil Energy Services
LWD	Pathfinder
Directional Drilling	Pathfinder
Drilling Fluids	MI Swaco
Wireline	Weatherford
Cementing	Schlumberger

Well Profile view



Plan view



Events and Remarks

Date(s)	Depth(s)	Event / Remark
07-03-2013	10.00	Rig up TCL 1 on Cam 19. Drill 12 1/4" hole. Run Casing.
16-11-2013	92.50	Mobilise Saxon Rig 166 from Ross 174 to Cam 19.
17-11-2013	92.50	Mobilise Saxon Rig 166 mini camp from Ross 174 to Cam 19. Rig up Saxon 166. Pre-spud meeting and hazard hunt. Nipple up BOP stack.
18-11-2013	105.38	Perform full function BOP pressure test. Repair mud pump. PASON comms box for Pathfinder services installed by PASON technician. Make up 8 ½" slick BHA, RIH and drill out cement track and casing shoe and into new formation and perform LOT. Drill to 105.38m, circulate hole clean and POOH slick BHA. M/U 8 1/2" Pathefinder BHA.
19-11-2013	390.11	Continue to M/U and RIH with Pathfinder BHA. Test MWD tools. Drilled 8 12/" hole to KOP at 240.71m. Drill, steer and survey as per Pathfinder DD instructions.
20-11-2013	576.80	Drill, steer and survey as per Pathfinder instructions to 576.80m MDRT. Poor motor yield. Not achieving DSL. Circulate hole clean and POOH.
21-11-2013	765.00	Lay out 8 1/2" stabalizer, re-scribe BHA. RIH to bottom. Drilled, steered and surveyed 8 1/2" hole to 765m. POOH for wiper trip.
22-11-2013	765.00	Conduct wiper trip, circulate hole clean, POOH to surface. Run 7" casing and cement same. Pressure test casing.
23-11-2013	814.00	WOC. M/U and RIH with Pathfinder DD BHA. Drilled casing shoe track. Drilled 6 1/8" hole section to 770m. Performed LOT. Oriented and drilled 6 1/8" hole as per Pathfinder DD instructions.
24-11-2013	1158.30	Continue to drill, steer and survey 6 1/8" section to 1158.30m MD.
25-11-2013	1204.50	Continue to drill, steer and survey 6 1/8" hole to TD. Circulate hole clean. POOH to intermediate casing shoe and conduct wiper trip to TD. POOH and L/O 6 1/8" BHA. Rig up Weatherford tubing conveyed logging tools and RIH.
26-11-2013	1204.50	Continue to RIH with Weatherford tubing conveyed logging tools. Conduct CWS Run 1. Tripped and logged out of hole. L/O Weatherford Logging tools. P/U and RIH with 6 1/8" directional BHA. Conduct wiper trip.
27-11-2013	1204.50	Complete wiper trip. Rig up and run WFD CMI-CXD logging tool. Conduct well log number 2.
28-11-2013	1204.50	Continue to log hole with WFD CMI-CXD tool. POOH and L/O logging tools. P/U 6 1/8" directional BHA and conduct wiper trip. Circulate hole clean. POOH, B/O and L/O directional BHA.
29-11-2013	1204.50	RIH with GRE slotted liner on 3 1/2" drill pipe. Drop ball and back off. POOH with drill pipe.
30-11-2013	1204.50	Continue to POOH with drill pipe. P/U and RIH with PLS packer on 3 1/2" tubing. Attempted to set PLS packer- unsuccessful. POOH tubing and change out packer assembly.
01-12-2013	1204.50	RIH with PLS packer. Set packer.Pressure test packer and POOH with 3 1/2" tubing. Set BPV and N/D BOP. Release rig. Start general rig down of Cam 19. Prepare for rig move to next location.

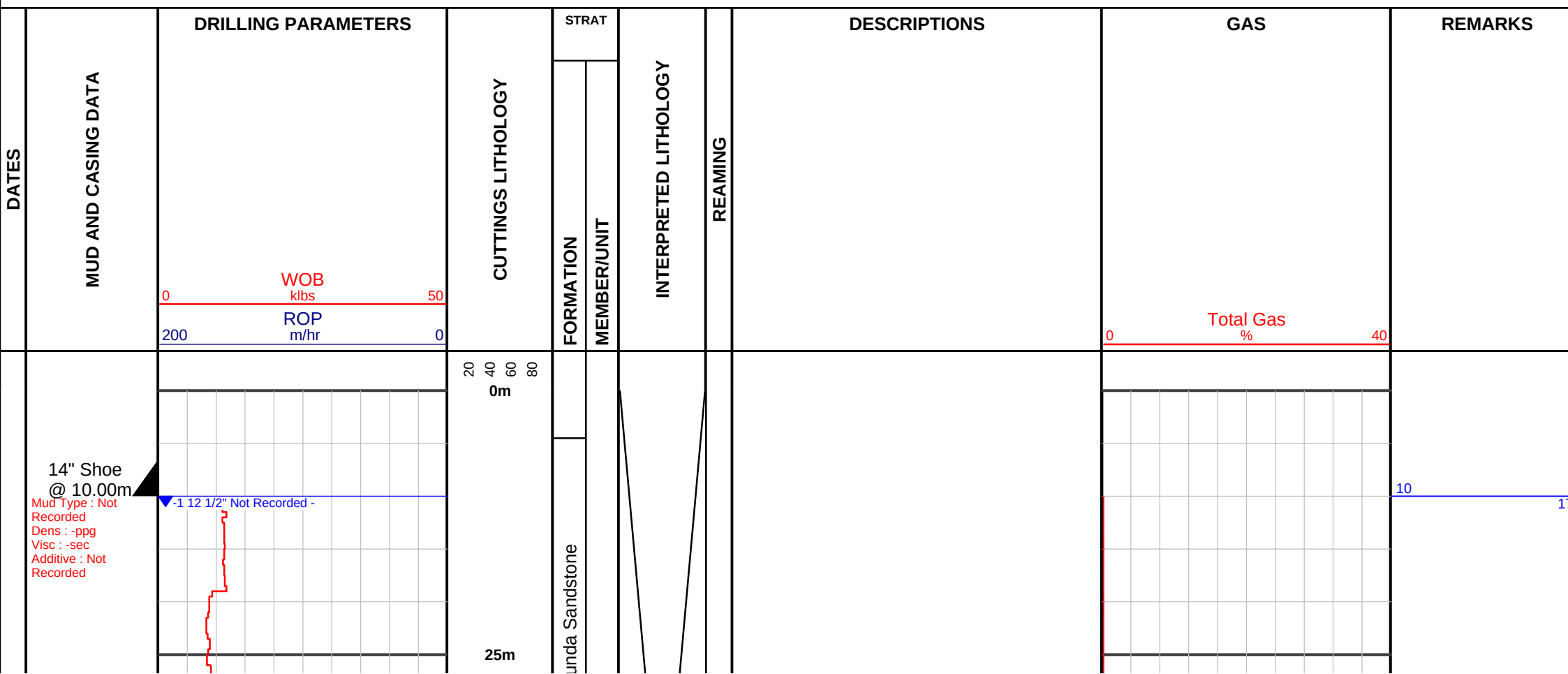
GEOLOGICAL SYMBOLS

Breccia	Clay/Claystone	Limestone	Lignite/Coal	PolyHalite
Conglomerate	Marl	Dolomitic LImestone	Chert	Tuff
Sand/Sandstone	Shale	Dolomite	Anhydrite	Volcanics
Silt\Siltstone	Limestone (Chalky)	Calcareous Dolomite	Halite	Cement

QUALIFIERS, ACCESSORIES AND FOSSILS

B Boundstone	W Wackestone	Calcareous	Oolitic	Pyritic
G Grainstone	Silty	Brecciated LMST	Chalky	Spicules
M Mudstone	Argillaceous	Carbonaceous	Glauconitic	Fossils
P Packstone	Sandy	Bituminous	Mic Micaceous	Sideritic

Depth Range 0m - 1230m MD — Cam 19 — Wellsite Lithology Log at 1 / 500



Gubberamunda Sandstone

Westbourne Formation

Norwood Mudstone

50m

75m

100m

125m

150m

175m

200m

225m

9 5/8" Shoe
@ 87.00m

Mud Type : KCl / Polymer
Dens : 8.6 - 9.2ppg
Visc : 27 - 39sec
Additive : KCl, Polymer

-1 made 78.00m in 5.50hrs
RR32 8 1/2" Smith PDC

RR32 made 17.38m in 1.25hrs
R3 8 1/2" Smith PDC

88
12 1/4

94.400m
94.4m TVDBRT
Inc: 0.26°
Azi: 237.5°

106.900m
106.899m TVDBRT
Inc: 0.35°
Azi: 230.2°

119.400m
119.399m TVDBRT
Inc: 0.35°
Azi: 232.59°

131.800m
131.799m TVDBRT
Inc: 0.26°
Azi: 242.12°

144.200m
144.199m TVDBRT
Inc: 0.26°
Azi: 243.81°

156.700m
156.699m TVDBRT
Inc: 0.18°
Azi: 257.56°

169.100m
169.099m TVDBRT
Inc: 0.18°
Azi: 243.78°

181.600m
181.599m TVDBRT
Inc: 0.18°
Azi: 244.12°

194.100m
194.099m TVDBRT
Inc: 0.09°
Azi: 292.36°

206.500m
206.499m TVDBRT
Inc: 0.09°
Azi: 202.36°

219.000m
218.999m TVDBRT
Inc: 0.18°
Azi: 95.97°

231.400m
231.399m TVDBRT
Inc: 0.18°
Azi: 87.54°

250m
275m
300m
325m
350m
375m
400m
425m
Springbok Sandstone
Upper Juandah Coal Measures

SILSTONE: Light to medium grey, soft to firm, arenaceous, subblocky, common carbonaceous fragements.

SANDSTONE: Light grey, off white, frosted, fine to medium, moderately well sorted, sub-rounded to sub-angular, common weak siliceous cement, occasional silty matrix, abundant loose grains with common soft friable aggregates, occasional carbonaceous specks.

SANDSTONE: Pale grey, off white, frosted, translucent, fine to coarse, very poorly sorted, predominantly sub-angular, common off white siliceous cement, abundant loose grains with common soft friable aggregates, common coarse QUARTZ grains, occasional carbonaceous specks.

COAL: Black, vitreous to subvitreous, firm, brittle, subfissile to subblocky, uneven fracture.

SILSTONE: Medium blueish grey, soft to firm, arenaceous and argillaceous, subblocky, common carbonaceous laminae and fragements, rare creamy subblocky LIMESTONE fragments.

SILSTONE: Medium medium grey, soft to firm, arenaceous, subblocky, common carbonaceous fragments.

COAL: Black, vitreous to subvitreous, earthy in part, firm, brittle, subfissile to subblocky, uneven fracture, interbedded with medium grey SILTSTONE laminae.

SILSTONE: Medium grey, firm, occasionally hard, arenaceous, subblocky, occasional carbonaceous specks, grading to SANDY SILTSTONE.

SILSTONE: Light to edium grey, soft to firm, arenaceous, subblocky, common carbonaceous specks and laminae.

SANDSTONE: Pale tannish grey, frosted, fine to medium, moderately poorly sorted, sub-rounded to sub-angular, common calcareous cement - highly reactive, abundant loose grains with common firm to friable aggregates, occasional carbonaceous specks.

SANDSTONE: Light grey, frosted, fine to medium, moderately poorly sorted, sub-rounded to subangular, occasional friable siliceous cement, predominantly loose grains with occasional soft aggregates, common carbonaceous specks.

SANDSTONE: Medium to light grey, frosted, fine to medium, moderately poorly sorted, sub-rounded to subangular, argillaceous matrix, abundant loose grains, abundant carbonaceous specks.

SANDSTONE: Medium to light grey, frosted, fine to medium, moderately poorly sorted, sub-rounded to subangular, argillaceous matrix, abundant loose grains, abundant carbonaceous specks.

SANDSTONE: Light grey, frosted, very fine to fine, well sorted, sub-rounded loose grains, occasional argillaceous matrix, common carbonaceous specks, grading to ARGILLACEOUS SANDSTONE.

SANDSTONE: Light grey, frosted, fine to medium, moderately poorly sorted, predominantly sub-angular, occasional friable siliceous cement, predominantly loose grains with occasional soft aggregates, common carbonaceous specks.

CLAYSTONE: Medium brownish grey, very soft to washing out, dispersive, amorphous, common carbonaceous specks.

CLAYSTONE: Medium brownish grey, very soft to washing out, dispersive, amorphous, common carbonaceous specks, grading to ARGILLACEOUS SANDSTONE.

CLAYSTONE: Light tannish grey, arenaceous, very soft to washing out, dispersive, amorphous, common carbonaceous specks, grading to ARGILLACEOUS SANDSTONE.

3.3%
8.5%
5%
8.6%
5%
7.9%
3.9%
5%
5.6%
3.6%
5.4%
4.3%
6.9%
5.2%

243.900m
243.898m TVDBRT
Inc: 1.08°
Azi: 233.49°

256.400m
256.389m TVDBRT
Inc: 3.17°
Azi: 246.79°

268.800m
268.757m TVDBRT
Inc: 4.92°
Azi: 255.71°

281.300m
281.204m TVDBRT
Inc: 5.72°
Azi: 258.5°

293.700m
293.532m TVDBRT
Inc: 6.6°
Azi: 260.77°

306.200m
305.934m TVDBRT
Inc: 7.74°
Azi: 260.6°

318.600m
318.208m TVDBRT
Inc: 8.62°
Azi: 258.67°

331.100m
330.547m TVDBRT
Inc: 9.76°
Azi: 256.1°

343.500m
342.737m TVDBRT
Inc: 11.34°
Azi: 255.71°

355.900m
354.87m TVDBRT
Inc: 12.49°
Azi: 256.18°

368.400m
367.039m TVDBRT
Inc: 13.91°
Azi: 257.12°

380.900m
379.132m TVDBRT
Inc: 15.39°
Azi: 255.22°

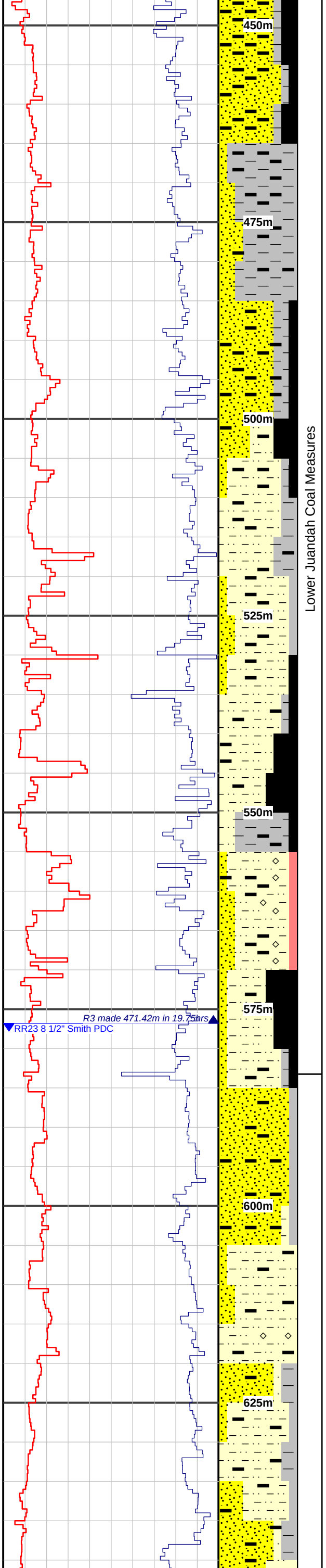
393.300m
391.036m TVDBRT
Inc: 17.15°
Azi: 252.62°

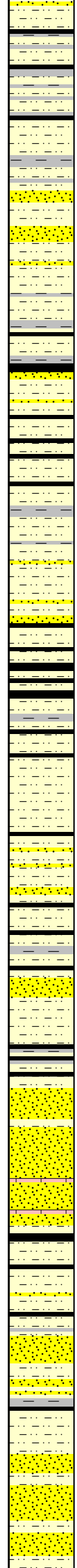
405.800m
402.912m TVDBRT
Inc: 19.17°
Azi: 250.48°

418.200m
414.564m TVDBRT
Inc: 20.84°
Azi: 250.53°

430.700m
426.176m TVDBRT
Inc: 22.6°
Azi: 250.48°

443.200m
437.629m TVDBRT
Inc: 24.62°
Azi: 250.75°





SANDSTONE: Dark to medium brownish grey, mottled, fine to medium, moderately well sorted, argillaceous and carbonaceous matrix, abundant sub-rounded loose grains, abundant carbonaceous specks.

CLAYSTONE: Light tannish grey, arenaceous, very soft to washing out, dispersive, amorphous, common carbonaceous specks.

CLAYSTONE: Light grey, arenaceous, very soft to washing out, dispersive, amorphous, common carbonaceous specks, grading to very fine ARGILLACEOUS SANDSTONE.

SANDSTONE: Dark to medium brownish grey, mottled, very fine to fine, moderately well sorted, argillaceous matrix, abundant sub-rounded loose grains, abundant carbonaceous specks, grading to ARGILLACEOUS SANDSTONE

SANDSTONE: Dark to medium brownish grey, mottled, very fine to fine, moderately well sorted, argillaceous matrix, abundant sub-rounded loose grains, abundant carbonaceous specks, grading to ARGILLACEOUS SANDSTONE

COAL: Black, subvitreous, firm, brittle, subfissile, angular fracture.

SILTSTONE: Light to medium grey, argillaceous, subblocky, common carbonaceous specks.

SILTSTONE: Light to medium grey, argillaceous, subblocky, common carbonaceous laminae and specks.

SILTSTONE: Light to medium grey, argillaceous and arenaceous, subblocky, common carbonaceous laminae and specks, grading to SANDY SILTSTONE.

COAL: Black, subvitreous, lignitic, firm, brittle, subfissile, angular fracture.

SILTSTONE: Light to medium grey, soft to firm, arenaceous, occasional carbonaceous specks, occasional tan, very hard, shard like SIDERITE fragments.

SILTSTONE: Light grey, firm, arenaceous, subblocky, occasional carbonaceous specks, grading to SANDY SILTSTONE, occasional tan, very hard, shard like SIDERITE fragments.

COAL: Black, subvitreous to vitreous, firm to hard, brittle, subfissile to subblocky, angular fracture, interbedded with SILTSTONE.

SANDSTONE: Medium grey, frosted, predominanltly medium, moderately sorted, common off white argillaceous matrix, abundant sub-rounded to sub- angular loose grains, abundant carbonaceous specks.

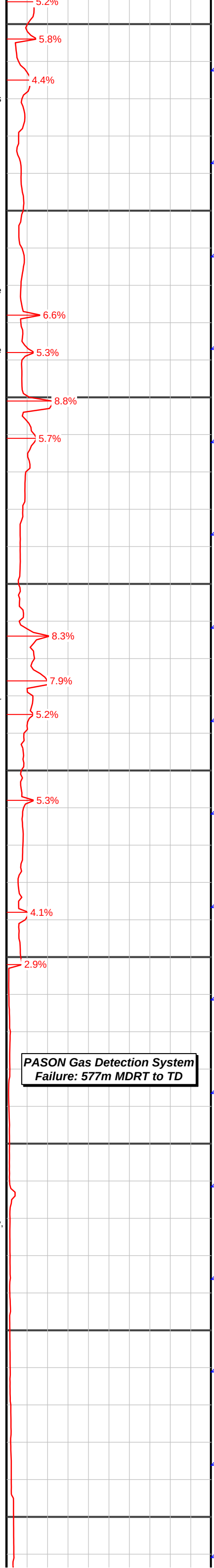
SANDSTONE: Medium grey, frosted, fine to medium, moderately sorted, common argillaceous matrix, occasionally silty, abundant predominantly sub-rounded loose grains, abundant carbonaceous specks and fragments.

SILTSTONE: Light to medium grey, firm, arenaceous, subblocky, occasional carbonaceous specks, grading to SANDY SILTSTONE.

SILTSTONE: Light to medium grey, firm, arenaceous and argillaceous, subblocky to subfissile, occasional carbonaceous specks and laminae.

SANDSTONE: Medium grey, frosted, mottled, translucent in part, fine to medium, moderately well sorted, common argillaceous matrix, abundant sub-rounded to sub-angular loose grains, occasional carbonaceous specks and fragments.

SILTSTONE: Medium grey, soft, subblocky to subfissile, common carbonaceous specks.



455.600m
448.825m TVDBRT
Inc: 26.29°
Azi: 249.99°

468.000m
459.861m TVDBRT
Inc: 27.96°
Azi: 249.66°

480.500m
470.819m TVDBRT
Inc: 29.55°
Azi: 249.35°

492.900m
481.515m TVDBRT
Inc: 31.22°
Azi: 249.87°

505.400m
492.104m TVDBRT
Inc: 32.98°
Azi: 249.87°

517.800m
502.406m TVDBRT
Inc: 34.65°
Azi: 250.2°

530.300m
512.645m TVDBRT
Inc: 35.35°
Azi: 250.67°

542.800m
522.757m TVDBRT
Inc: 36.67°
Azi: 250.74°

555.200m
532.61m TVDBRT
Inc: 38.08°
Azi: 250.65°

567.700m
542.379m TVDBRT
Inc: 39.13°
Azi: 250.38°

580.100m
551.876m TVDBRT
Inc: 40.89°
Azi: 250.41°

592.600m
561.23m TVDBRT
Inc: 42.21°
Azi: 250.03°

605.100m
570.346m TVDBRT
Inc: 44.14°
Azi: 249.4°

617.500m
579.09m TVDBRT
Inc: 46.17°
Azi: 249.4°

629.900m
587.525m TVDBRT
Inc: 48.1°
Azi: 249.44°

642.400m
595.714m TVDBRT
Inc: 50.03°
Azi: 249.36°

654.800m
603.555m TVDBRT
Inc: 51.53°

Tangalooma Sandstone

675m
700m
725m
750m
775m
800m
825m
850m

4 1/2" Hanger
@ 746.30m

7" Shoe
@ 763.00m

RR23 made 188.20m in 13.00hrs
R4 6 1/8" Smith PDC

Mud Type : KCl / Polymer
Dens : 8.8 - 9.1ppg
Visc : 31 - 37sec
Additive : KCl, Polymer

SILTSTONE: Medium grey, soft, arenaceous and argillaceous, subblocky, common carbonaceous specks, grading to SANDY SILTSTONE.

CLAYSTONE: Medium olive grey, very soft to dispersive, amorphous, sticky.

COAL: Black, subvitreous to vitreous, firm to hard, brittle, subfissile to subblocky, uneven angular fracture.

SILTSTONE: Medium grey, occasionally light olive grey, soft to firm, subblocky to subfissile, rare carbonaceous specks and laminae.

SANDSTONE: Light grey, frosted, mottled, fine to medium, moderately poorly sorted, sub-rounded to subangular, abundant off white siliceous cement, moderate calcareous reaction, predominantly soft to firm aggregates with occasional loose grains, occasional carbonaceous specks.

SANDSTONE: Light grey, frosted, fine to medium, moderately sorted, sub-rounded, abundant loose grains, occasional carbonaceous specks.

SANDSTONE: Light grey, frosted, fine to medium, moderately sorted, sub-rounded, silty matrix, occasional siliceous cement, occasional soft aggregates wtih abundant loose grains, occasional carbonaceous specks, common off white lithics.

SANDSTONE: Light grey, frosted, fine to medium, moderately sorted, sub-rounded, silty matrix, occasional siliceous cement, occasional soft aggregates wtih abundant loose grains, common carbonaceous specks, common off white lithics.

SANDSTONE: Light grey, frosted, fine, moderately well sorted, sub-rounded, sitly in part, abundant loose grains, rare carbonaceous specks, common off white lithics.

SANDSTONE: Pale grey, frosted, off white, very fine to fine, moderately well sorted, sub-rounded, abundant loose grains, rare carbonaceous specks, common off white lithics.

SANDSTONE: Light tannish grey, frosted, fine, moderately well sorted, sub-rounded to sub-angular, argillaceous matrix, highly reactive calcareous reaction, abundant loose grains.

SANDSTONE: Light grey, frosted, fine to medium, moderately well sorted, sub-rounded to sub-angular, silty matrix, abundant loose grains, occasional carbonaceous specks.

SILTSTONE: Medium grey, soft to firm, brittle, subfissile to subblocky, occasional carbonaceous laminae.

CLAYSTONE: Olive grey, very soft to washing out, amorphous, sticky.

SILTSTONE: Medium olive grey, arenaceous, soft to firm, subfissile to subblocky.

SILTSTONE: Medium tannish grey, arenaceous, soft to firm, subfissile to subblocky, grading to SANDY SILTSTONE.

SILTSTONE: Medium to dark grey, arenaceous, soft to firm, subfissile to subblocky.

PASON Gas Detection System Failure: 577m MDRT to TD

PASON Gas Detection System Failure: 577m MDRT to TD

Azi: 250.52°

667.300m
611.165m TVDBRT
Inc: 53.46°
Azi: 250.31°

679.700m
618.401m TVDBRT
Inc: 55.13°
Azi: 250.52°

692.200m
625.436m TVDBRT
Inc: 56.37°
Azi: 251.75°

704.700m
632.295m TVDBRT
Inc: 57.07°
Azi: 251.68°

717.100m
639.013m TVDBRT
Inc: 57.33°
Azi: 251.48°

729.600m
645.752m TVDBRT
Inc: 57.42°
Azi: 251.13°

742.100m
652.491m TVDBRT
Inc: 57.33°
Azi: 251.23°

746.400m
654.804m TVDBRT
Inc: 57.6°
Azi: 251.19°

765
8 1/2

768.100m
666.348m TVDBRT
Inc: 58.12°
Azi: 250.56°

777.700m
671.286m TVDBRT
Inc: 59.97°
Azi: 251.47°

787.200m
675.9m TVDBRT
Inc: 61.91°
Azi: 251.57°

796.200m
680.028m TVDBRT
Inc: 63.49°
Azi: 251.96°

805.400m
684.032m TVDBRT
Inc: 64.9°
Azi: 251.64°

814.500m
687.792m TVDBRT
Inc: 66.3°
Azi: 251.37°

823.700m
691.392m TVDBRT
Inc: 67.62°
Azi: 250.66°

832.700m
694.729m TVDBRT
Inc: 68.85°
Azi: 250.79°

841.600m
697.845m TVDBRT
Inc: 70.17°
Azi: 251.08°

850.700m
700.813m TVDBRT
Inc: 71.75°
Azi: 250.99°

859.900m
703.587m TVDBRT
Inc: 73.16°
Azi: 251.44°

875m
900m
925m
950m
975m
1000m
1025m
1050m
1075m

Taroom Coal Measures

SANDSTONE: Light to medium grey, frosted, fine to medium, moderately well sorted, sub-rounded, argillaceous matrix, abundant loose grains, grading to ARGILLACEOUS SANDSTONE.

SANDSTONE: Medium brownish grey, off white, mottled, fine to medium, moderately well sorted, sub-rounded, common argillaceous matrix, sitly in part, abundant loose grains, sticky.

CLAYSTONE: Olive brown, dispersive, washing out, amorphous, common carbonaceous specks.

COAL: Black, subvitreous to vitreous, soft to firm, brittle, fissile to subfissile, uneven fracture.

CLAYSTONE: Dark brownish grey, silty, very soft to dispersive, washing out, amorphous, sticky.

CLAYSTONE: Medium grey, arenaceous, very soft to dispersive, washing out, amorphous, sticky.

PASON Gas Detection System Failure: 577m MDRT to TD

869.200m
706.158m TVDBRT
Inc: 74.74°
Azi: 251.48°

878.500m
708.488m TVDBRT
Inc: 76.24°
Azi: 252.31°

887.400m
710.605m TVDBRT
Inc: 76.24°
Azi: 252.31°

896.600m
712.807m TVDBRT
Inc: 76.06°
Azi: 251.87°

905.900m
714.971m TVDBRT
Inc: 77.03°
Azi: 251.24°

914.900m
716.977m TVDBRT
Inc: 77.21°
Azi: 251.34°

924.200m
719.05m TVDBRT
Inc: 77.03°
Azi: 251.53°

933.400m
721.108m TVDBRT
Inc: 77.12°
Azi: 251.1°

942.700m
723.063m TVDBRT
Inc: 78.61°
Azi: 250.74°

951.900m
724.873m TVDBRT
Inc: 78.7°
Azi: 250.54°

961.200m
726.674m TVDBRT
Inc: 78.96°
Azi: 250.31°

970.300m
728.451m TVDBRT
Inc: 78.52°
Azi: 250.55°

979.400m
730.262m TVDBRT
Inc: 78.52°
Azi: 249.71°

988.700m
732.141m TVDBRT
Inc: 78.17°
Azi: 249.45°

997.600m
733.985m TVDBRT
Inc: 77.91°
Azi: 249.34°

1006.700m
735.919m TVDBRT
Inc: 77.56°
Azi: 249.64°

1016.000m
737.936m TVDBRT
Inc: 77.38°
Azi: 249.37°

1025.200m
739.815m TVDBRT
Inc: 79.05°
Azi: 248.74°

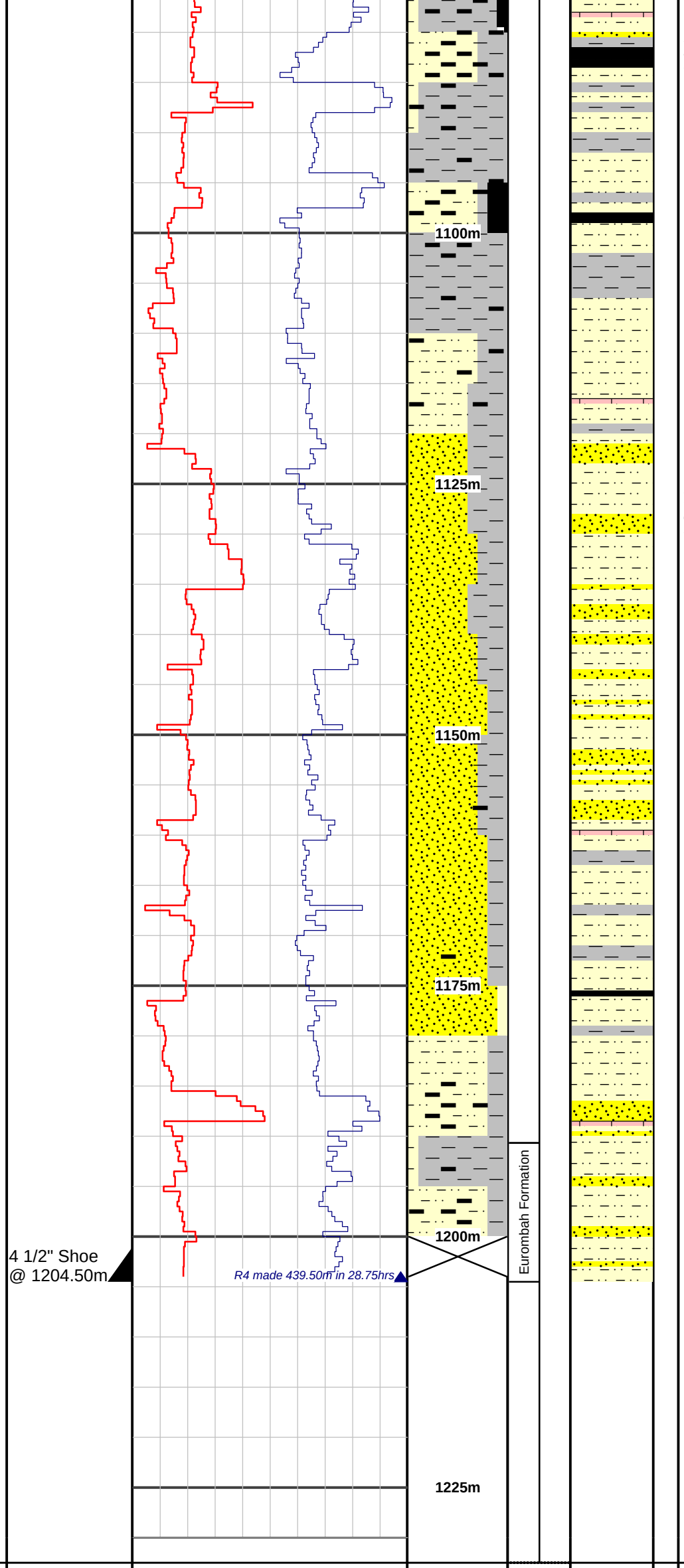
1034.300m
741.557m TVDBRT
Inc: 78.88°
Azi: 249.24°

1043.500m
743.373m TVDBRT
Inc: 78.35°
Azi: 249.07°

1052.600m
745.238m TVDBRT
Inc: 78°
Azi: 248.98°

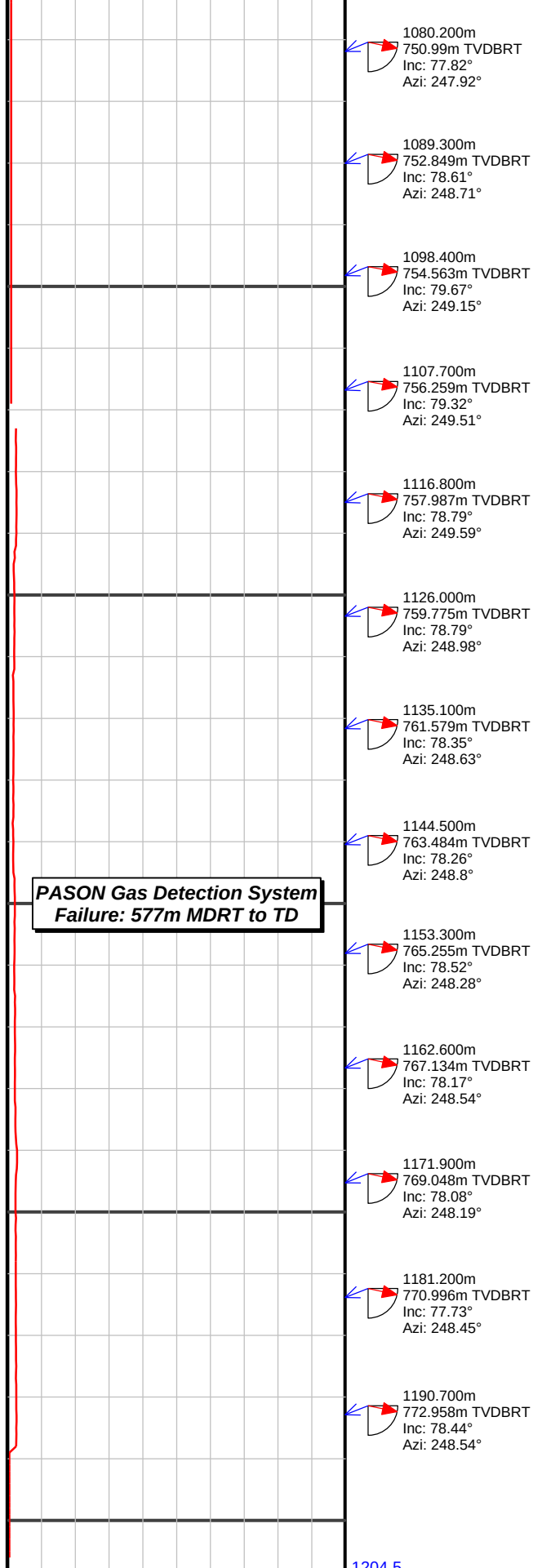
1061.900m
747.172m TVDBRT
Inc: 78°
Azi: 248.89°

1071.100m
749.084m TVDBRT
Inc: 78°
Azi: 248.45°



SILTSTONE: Dark brownish grey, soft, subblocky to subfissile, abundant carbonaceous specks, grading to CARBONACEOUS SILTSTONE.

SANDSTONE: Light grey, very fine, well sorted, sub-rounded to rounded, abundant argillaceous matrix, abundant loose grains, occasional carbonacesous specks, grading to ARGILLACEOUS SANDSTONE.



DATES

MUD AND CASING DATA

DRILLING PARAMETERS

ROP
200 m/hr 0

WOB
0 klbs 50

CUTTINGS LITHOLOGY

FORMATION MEMBER / UNIT

INTERPRETATED LITHOLOGY

REAMING

DESCRIPTIONS

GAS

Total Gas
0 % 40

REMARKS

Cam 19

BIT SUMMARY TABLE

BHA No	BIT No	BIT STATUS	MAKE	TYPE	SIZE	TFA / JETS	DEPTH IN (m)	PROGRESS MADE	ROTATING HOURS	AVERAGE ROP	GRADING	REMARKS
1	1	-	Not Recorded	-	12 1/2"	-	10.00	78.00	5.50	14.2	Not Recorded	Drilled by TCL 1
2	2	RR3	Smith	PDC	8 1/2"	5x12 / 0.55	88.00	17.38	1.25	13.9	3-2-BT-C-X-0-RO-BHA	Slick BHA. Drilled by Saxon 166

3	3	R	Smith	PDC	8 1/2"	6x12 / 0.66	105.38	471.42	19.75	14.9	1-1-WT-A-X-I-NO-BHA	Steerable BHA. Drilled by Saxon 166
4	3	RR2	Smith	PDC	8 1/2"	6x12 / 0.66	576.80	188.20	13.00	14.5	1-1-WT-A-X-I-NO-TD	Steerable BHA. Drilled by Saxon 166
5	4	R	Smith	PDC	6 1/8"	3x16 / 0.59	765.00	439.50	28.75	15.3	1-1-WT-A-X-I-NO-TD	Steerable BHA. Drilled by Saxon 166

LOGS SUMMARY

Run	Measurement	Dates	Hole Size	Start Depth	End Depth	Max Temperature	Contractor
1	GR-MAI-MDN-MPD-MSS	26-11-2013	6 1/8"	1192.98	50.00	51°C	Weatherford
2	CMI-CXD	27-11-2013	6 1/8"	1197.00	764.00	49°C	Weatherford

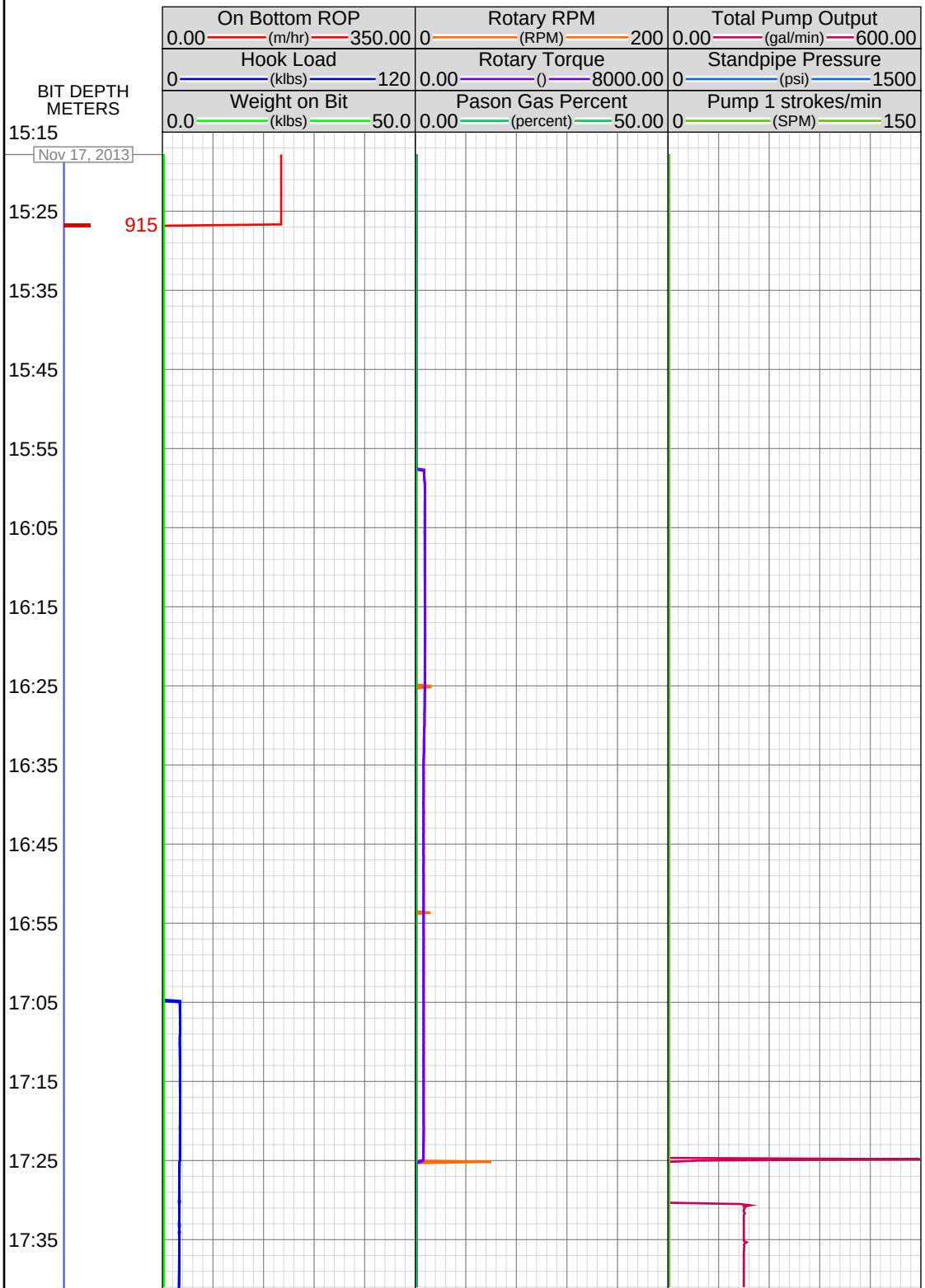
APPENDIX 6

PASON LOG

DataHub EDR Log

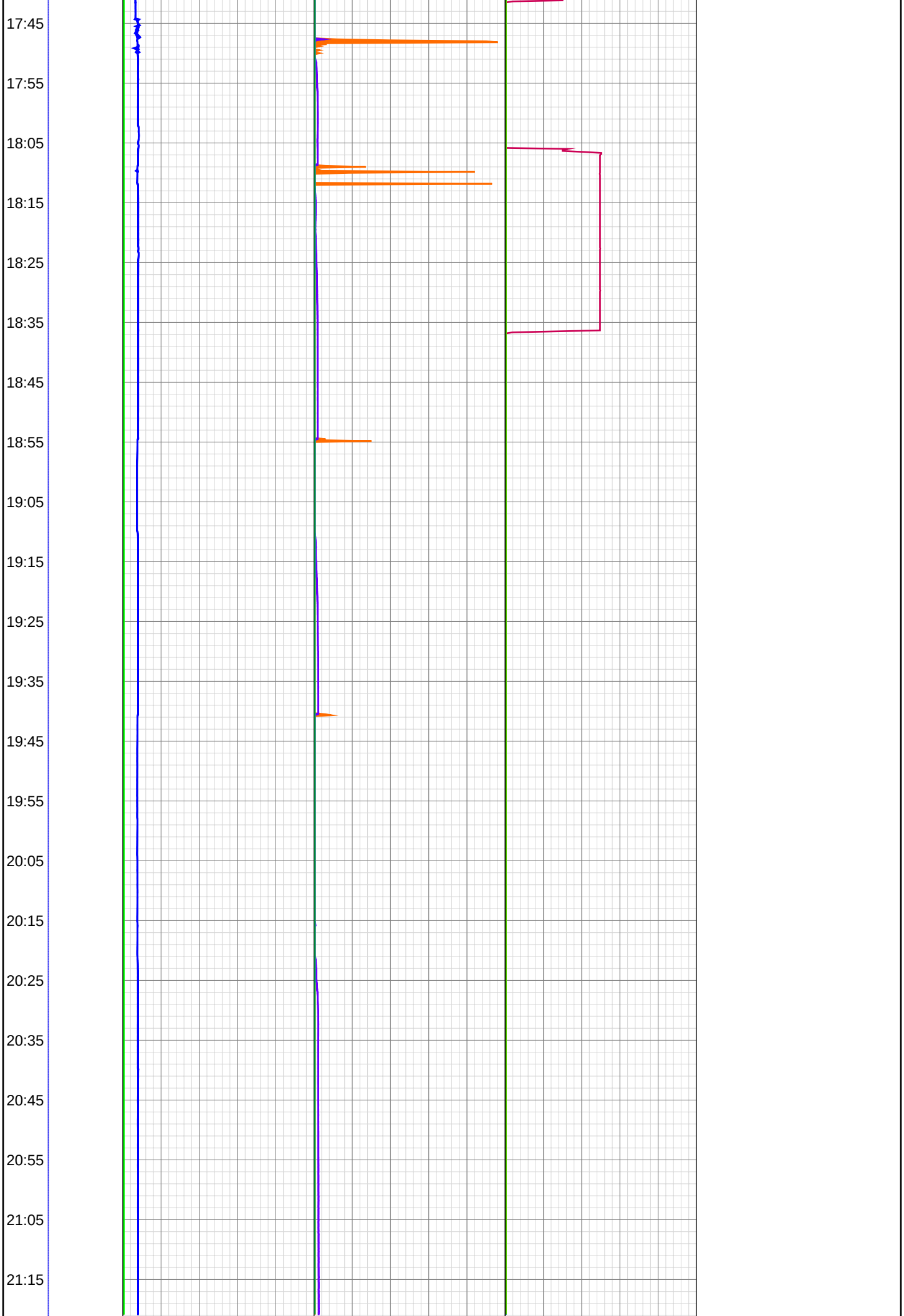
Sun Dec 01, 2013 16:26:49
Well Dossier 1384665905
Ivan McCarthy

OPERATOR:	QGC	**CONTRACTOR:**	Saxon Energy Services Australia Pty Ltd
WELL:	CAM 19	**UNIQUE WELL ID:**	
FIELD:		**SPUD DATE:**	Nov 17, 2013 20:30
LOCATION:		**RELEASE DATE:**	Dec 01, 2013 15:30
COUNTRY:	Australia Metric	**FROM DATE:**	Nov 17, 2013 00:00
RIG:	Saxon Australia 166	**TO DATE:**	Dec 02, 2013 23:59



11/17 15:26:35: ATTEMPTED TO ZERO TOTAL STROKES
ATTEMPTED TO SET HOLE DEPTH TO 0.00 meters

11/17 17:26:17: HGAS_031: Hazardous Gas Alarm System not approved in billing system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18:05
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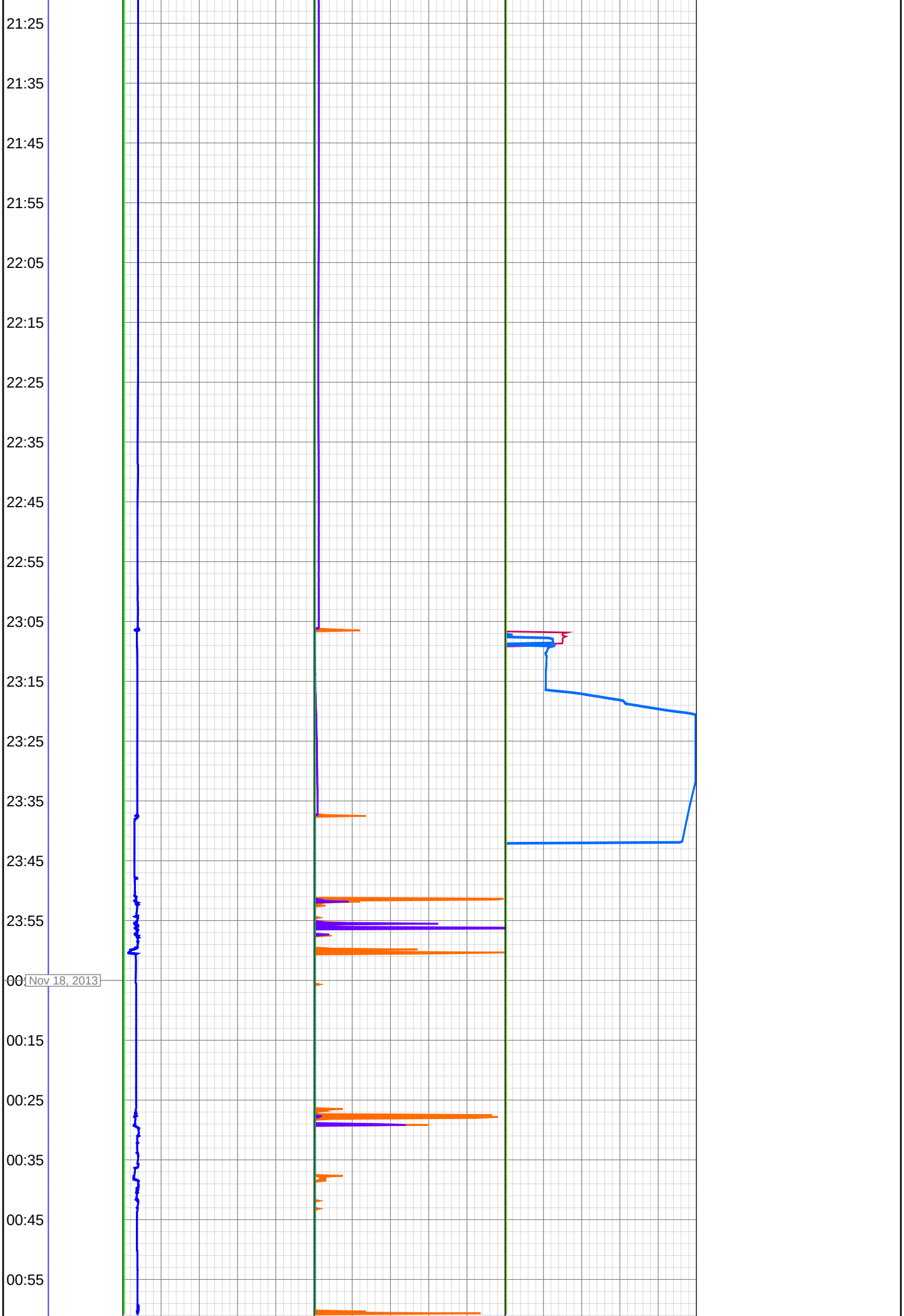
20:55
21:05
21:15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Nov 18, 2013
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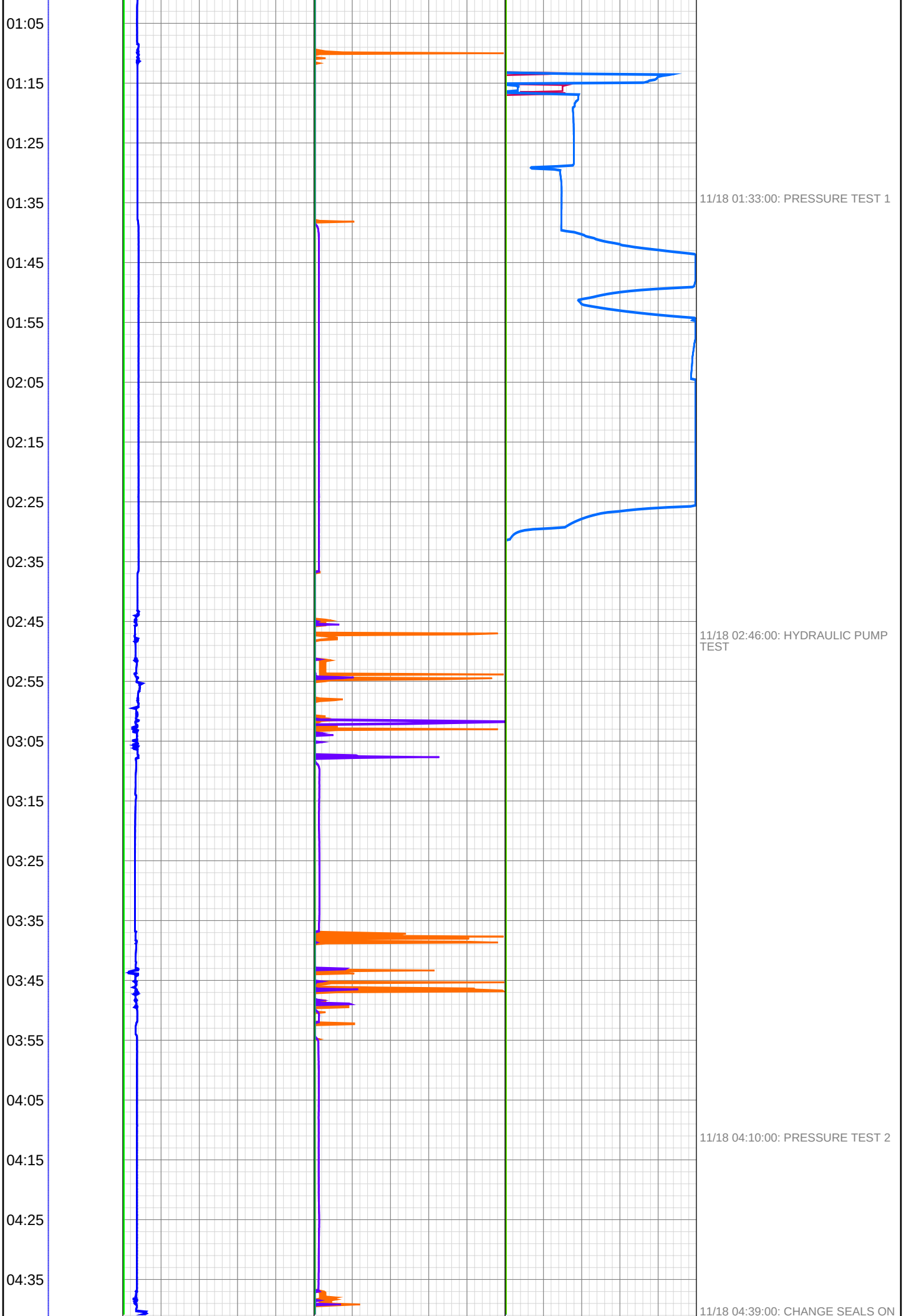
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03:05
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03:45
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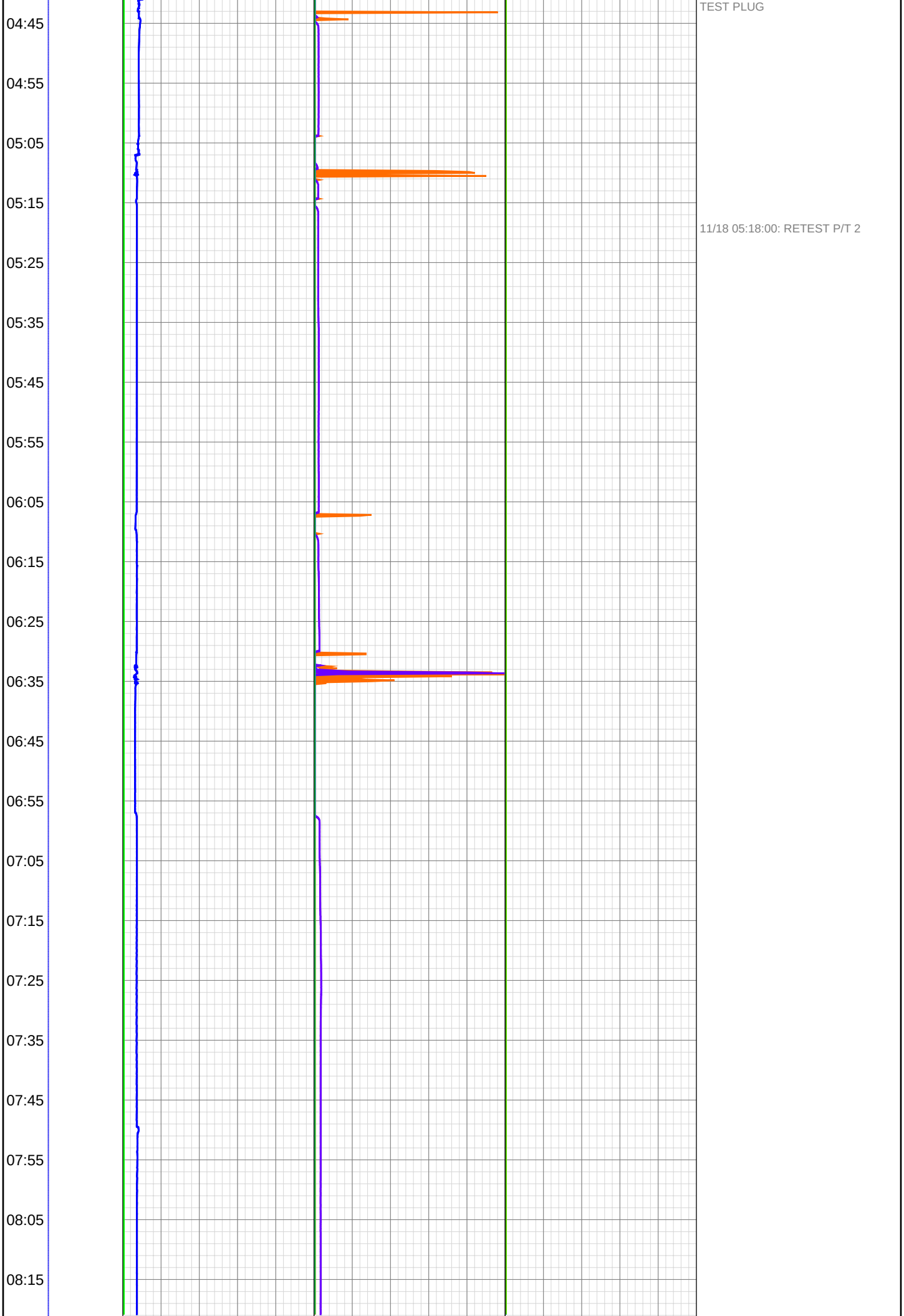
04:05
04:15
04:25
04:35
11/18 01:33:00: PRESSURE TEST 1
11/18 02:46:00: HYDRAULIC PUMP TEST
11/18 04:10:00: PRESSURE TEST 2
11/18 04:39:00: CHANGE SEALS ON


04:45
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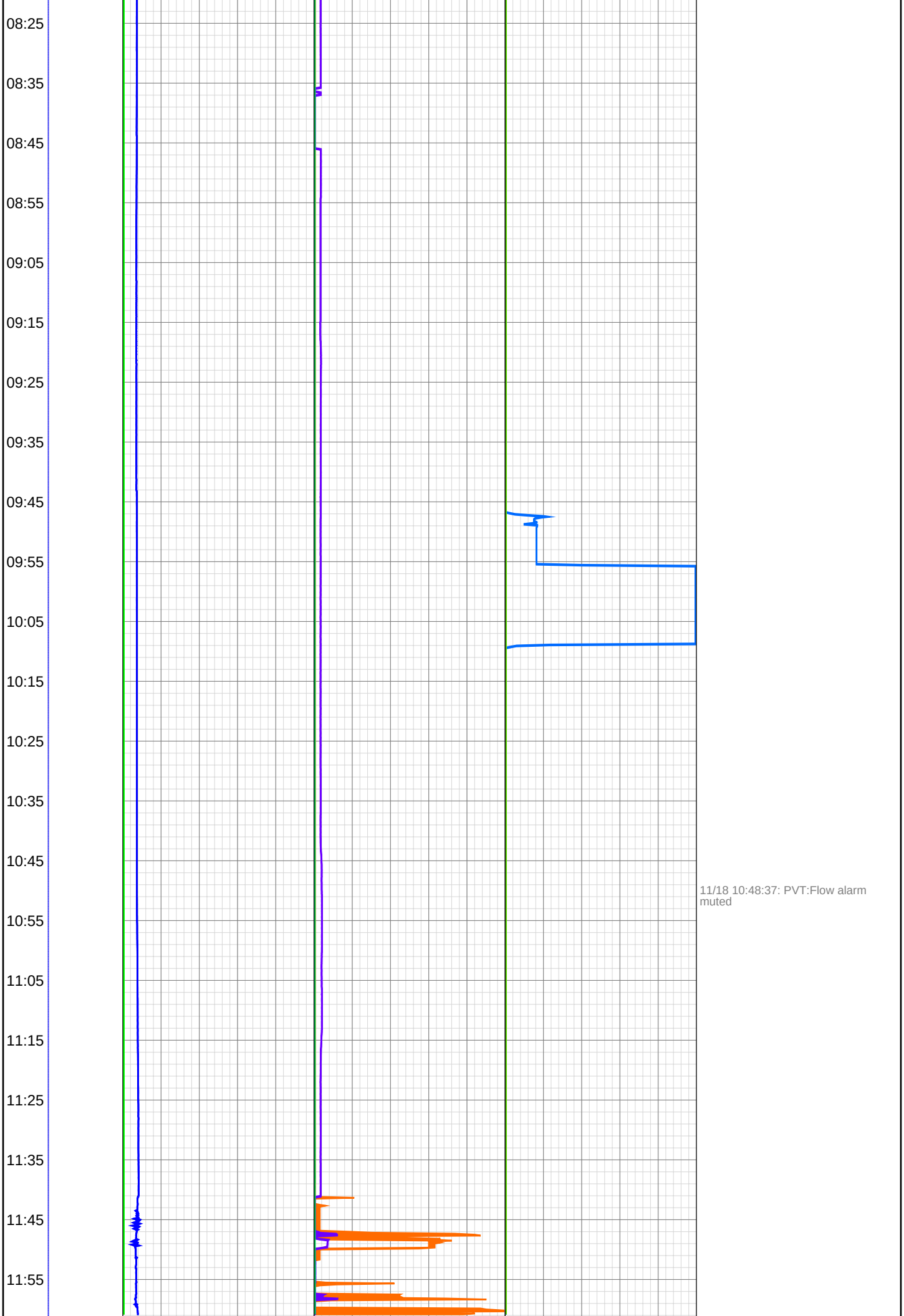
07:55
08:05
08:15
TEST PLUG
11/18 05:18:00: RETEST P/T 2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10:25
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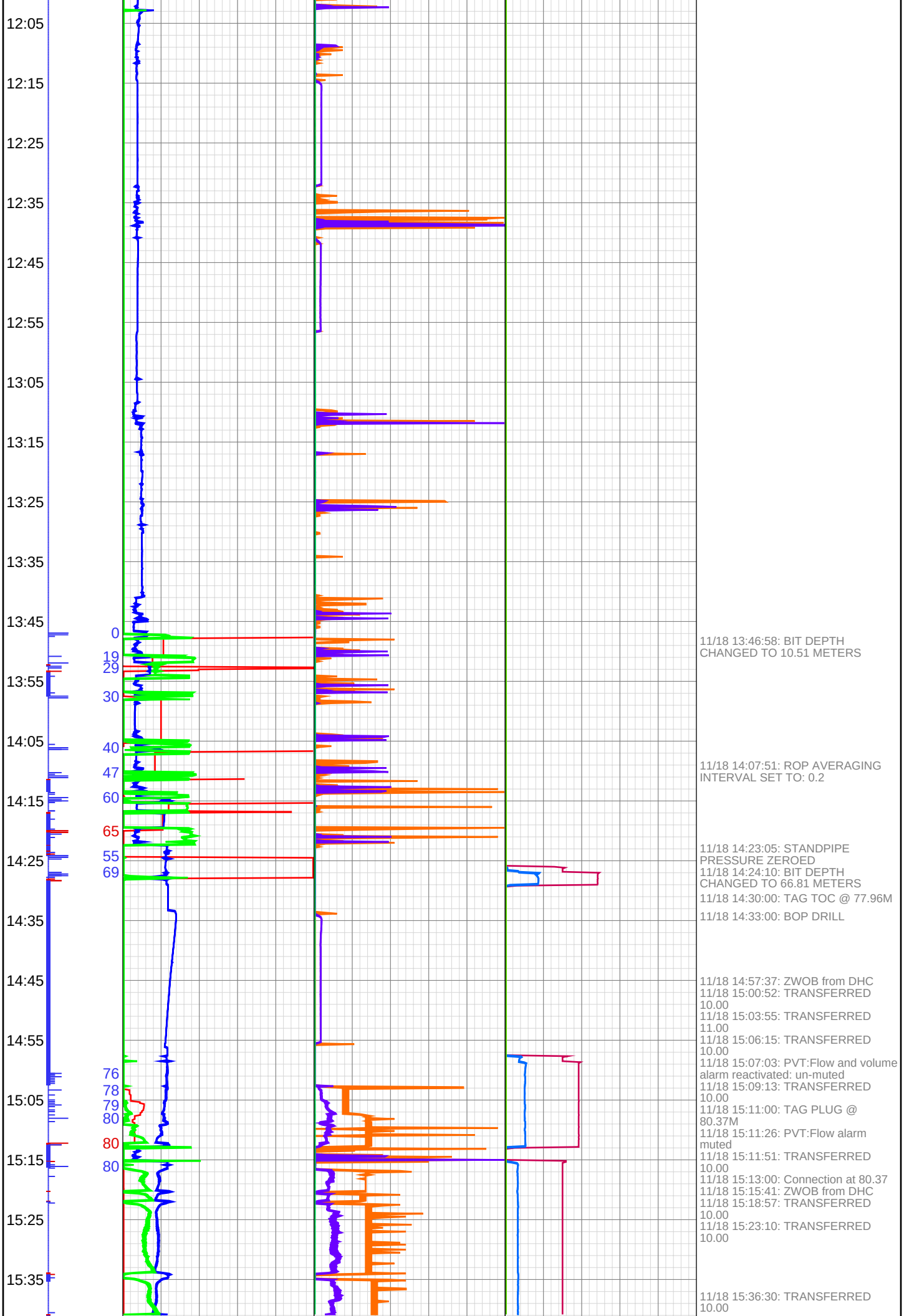
11:05
11:15
11:25
11:35
11:45
11:55
11/18 10:48:37: PVT:Flow alarm muted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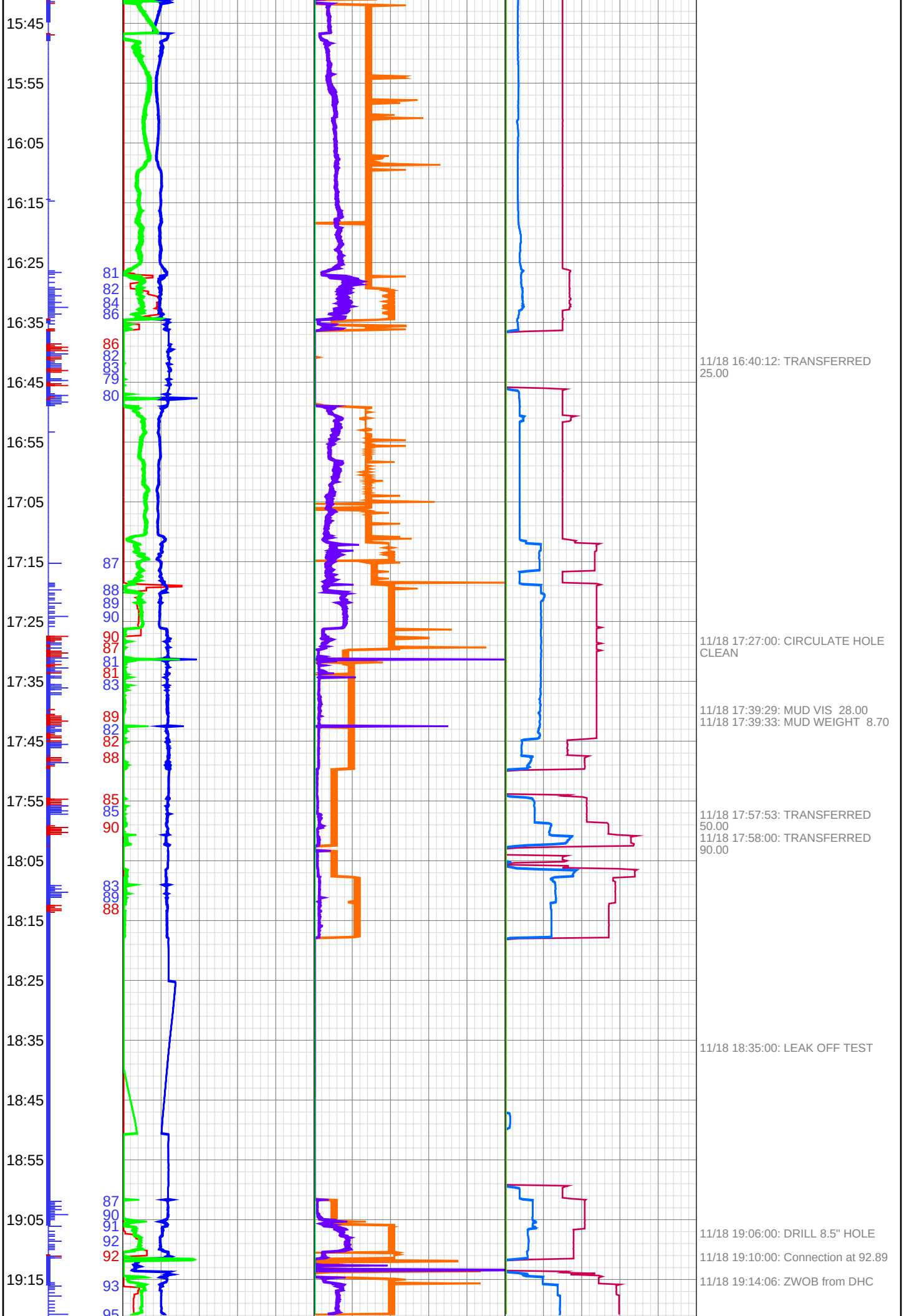
15:35
0
19
29
30
40
47
60
65
55
69
76
78
79
80
80
80
11/18 13:46:58: BIT DEPTH CHANGED TO 10.51 METERS
11/18 14:07:51: ROP AVERAGING INTERVAL SET TO: 0.2
11/18 14:23:05: STANDPIPE PRESSURE ZEROED
11/18 14:24:10: BIT DEPTH CHANGED TO 66.81 METERS
11/18 14:30:00: TAG TOC @ 77.96M
11/18 14:33:00: BOP DRILL
11/18 14:57:37: ZWOB from DHC
11/18 15:00:52: TRANSFERRED 10.00
11/18 15:03:55: TRANSFERRED 11.00
11/18 15:06:15: TRANSFERRED 10.00
11/18 15:07:03: PVT:Flow and volume alarm reactivated: un-muted
11/18 15:09:13: TRANSFERRED 10.00
11/18 15:11:00: TAG PLUG @ 80.37M
11/18 15:11:26: PVT:Flow alarm muted
11/18 15:11:51: TRANSFERRED 10.00
11/18 15:13:00: Connection at 80.37
11/18 15:15:41: ZWOB from DHC
11/18 15:18:57: TRANSFERRED 10.00
11/18 15:23:10: TRANSFERRED 10.00
11/18 15:36:30: TRANSFERRED 10.00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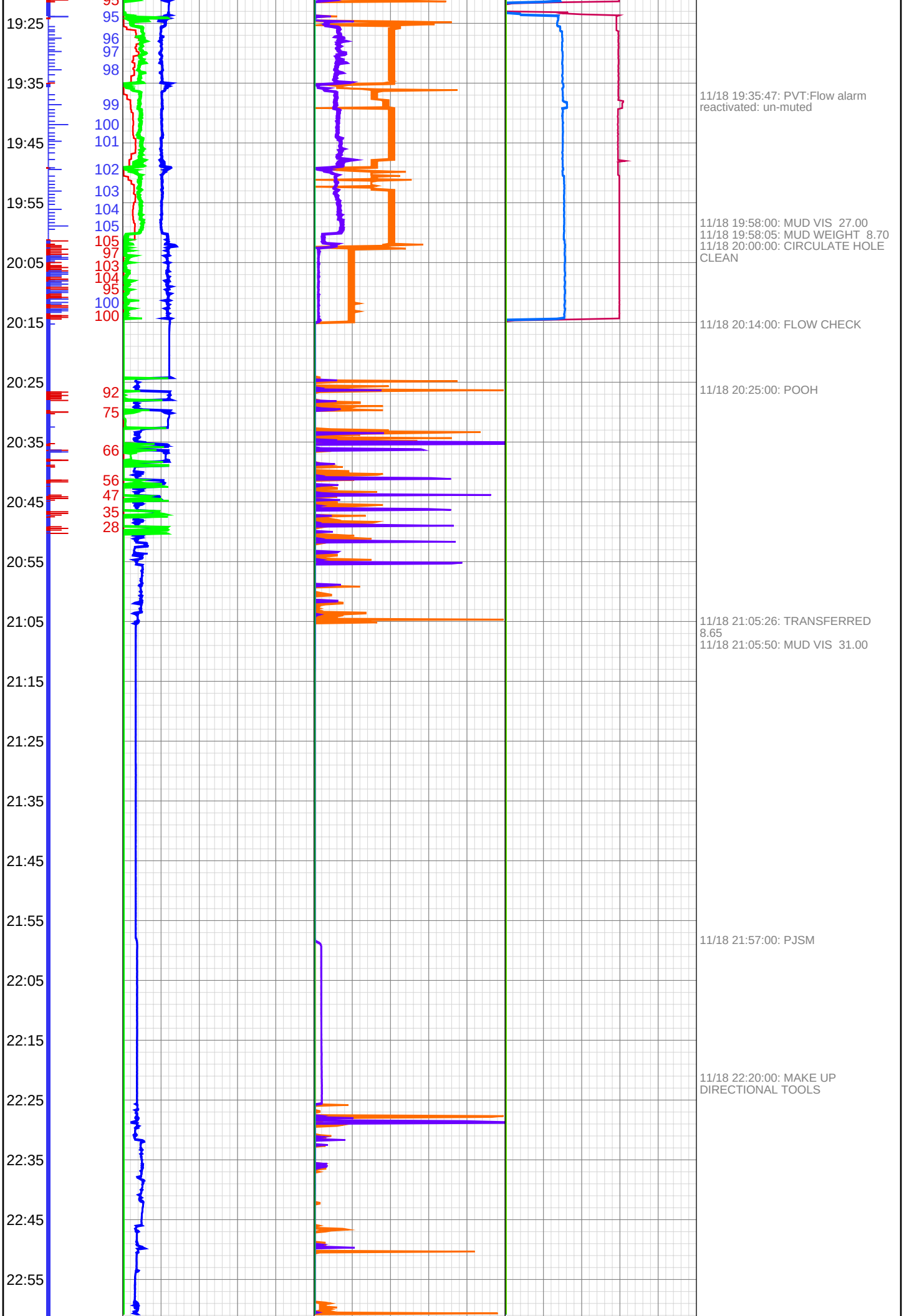
11/18 16:40:12: TRANSFERRED 25.00
11/18 17:27:00: CIRCULATE HOLE CLEAN
11/18 17:39:29: MUD VIS 28.00
11/18 17:39:33: MUD WEIGHT 8.70
11/18 17:57:53: TRANSFERRED 50.00
11/18 17:58:00: TRANSFERRED 90.00
11/18 18:35:00: LEAK OFF TEST
11/18 19:06:00: DRILL 8.5" HOLE
11/18 19:10:00: Connection at 92.89
11/18 19:14:06: ZWOB from DHC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95
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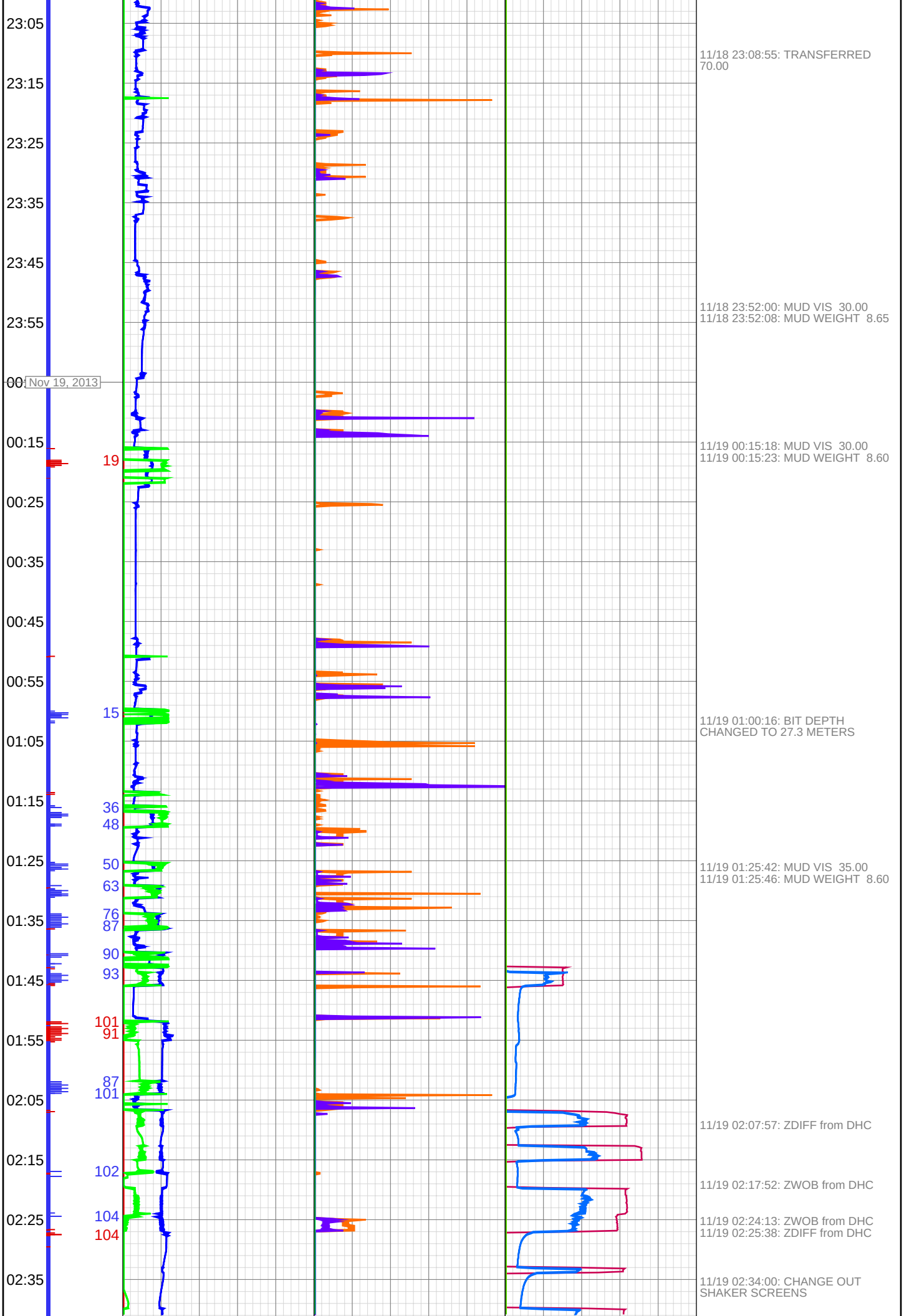
100
92
75
66
56
47
35
28
11/18 19:35:47: PVT:Flow alarm reactivated: un-muted
11/18 19:58:00: MUD VIS 27.00
11/18 19:58:05: MUD WEIGHT 8.70
11/18 20:00:00: CIRCULATE HOLE CLEAN
11/18 20:14:00: FLOW CHECK
11/18 20:25:00: POOH
11/18 21:05:26: TRANSFERRED 8.65
11/18 21:05:50: MUD VIS 31.00
11/18 21:57:00: PJSM
11/18 22:20:00: MAKE UP DIRECTIONAL TOOLS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Nov 19, 2013
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63
76
87
90
93
101
91
87
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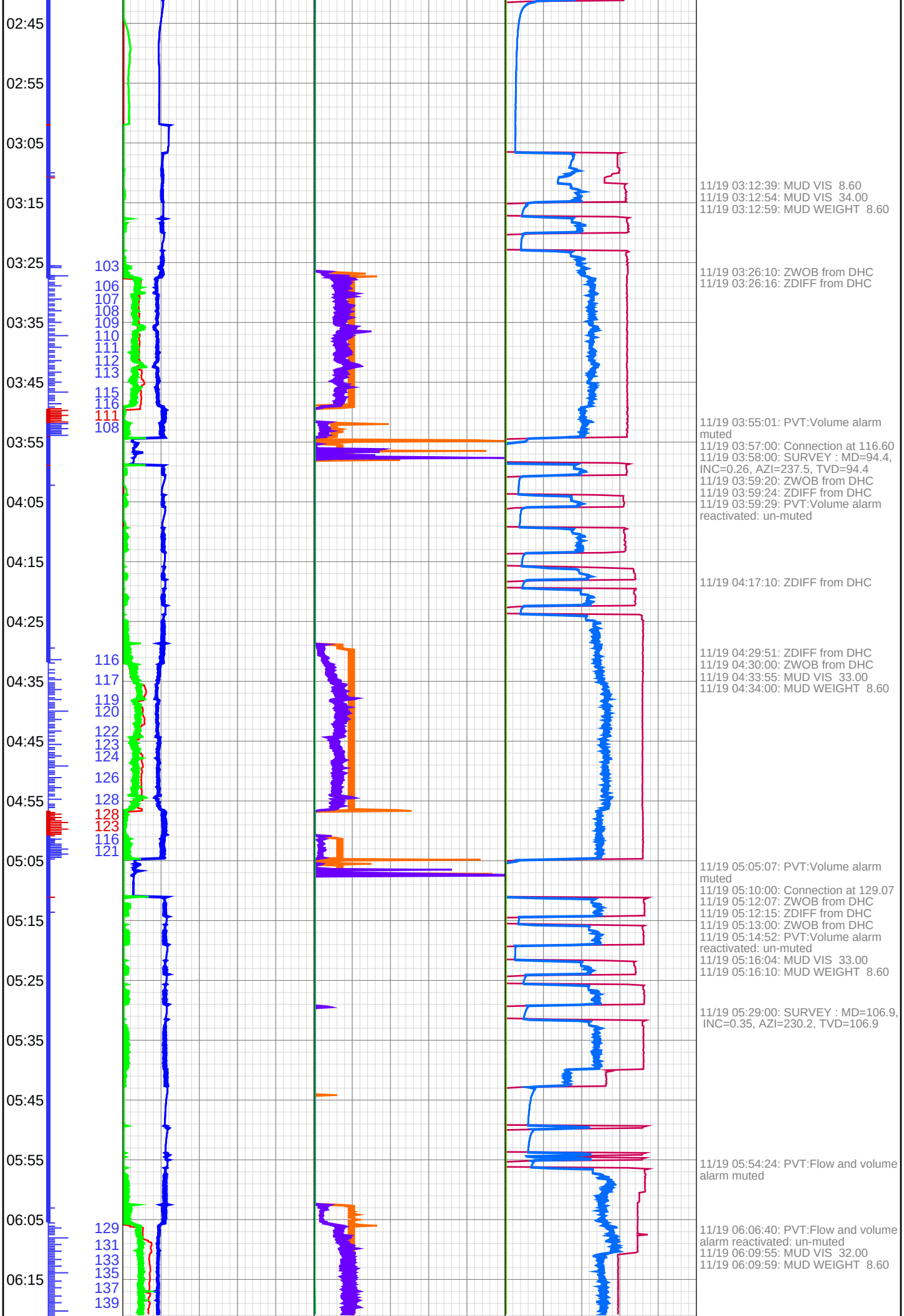
104
104
11/18 23:08:55: TRANSFERRED 70.00
11/18 23:52:00: MUD VIS 30.00
11/18 23:52:08: MUD WEIGHT 8.65
11/19 00:15:18: MUD VIS 30.00
11/19 00:15:23: MUD WEIGHT 8.60
11/19 01:00:16: BIT DEPTH CHANGED TO 27.3 METERS
11/19 01:25:42: MUD VIS 35.00
11/19 01:25:46: MUD WEIGHT 8.60
11/19 02:07:57: ZDIFF from DHC
11/19 02:17:52: ZWOB from DHC
11/19 02:24:13: ZWOB from DHC
11/19 02:25:38: ZDIFF from DHC
11/19 02:34:00: CHANGE OUT SHAKER SCREENS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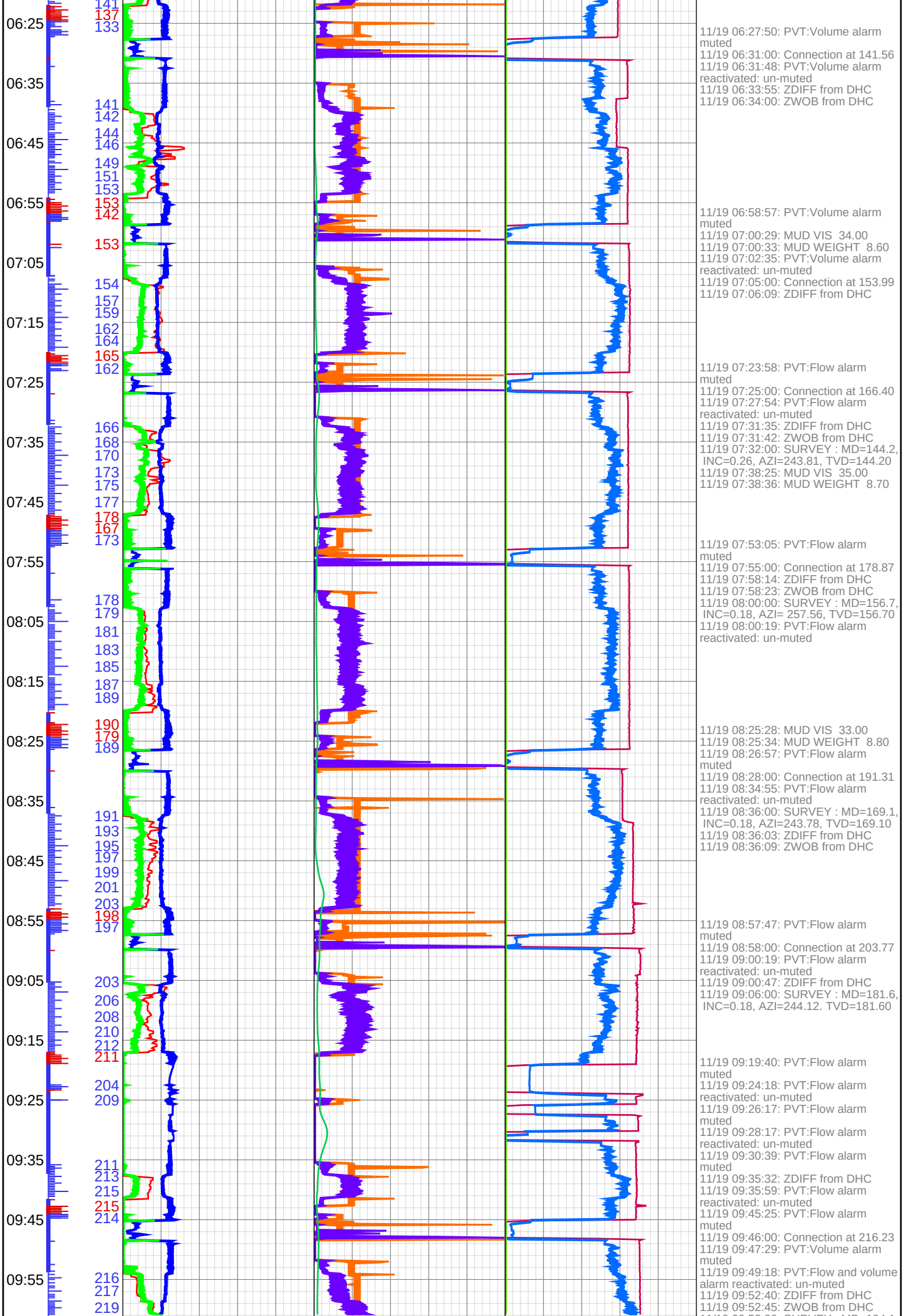
11/19 03:12:39: MUD VIS 8.60
11/19 03:12:54: MUD VIS 34.00
11/19 03:12:59: MUD WEIGHT 8.60
11/19 03:26:10: ZWOB from DHC
11/19 03:26:16: ZDIFF from DHC
11/19 03:55:01: PVT:Volume alarm muted
11/19 03:57:00: Connection at 116.60
11/19 03:58:00: SURVEY : MD=94.4, INC=0.26, AZI=237.5, TVD=94.4
11/19 03:59:20: ZWOB from DHC
11/19 03:59:24: ZDIFF from DHC
11/19 03:59:29: PVT:Volume alarm reactivated: un-muted
11/19 04:17:10: ZDIFF from DHC
11/19 04:29:51: ZDIFF from DHC
11/19 04:30:00: ZWOB from DHC
11/19 04:33:55: MUD VIS 33.00
11/19 04:34:00: MUD WEIGHT 8.60
11/19 05:05:07: PVT:Volume alarm muted
11/19 05:10:00: Connection at 129.07
11/19 05:12:07: ZWOB from DHC
11/19 05:12:15: ZDIFF from DHC
11/19 05:13:00: ZWOB from DHC
11/19 05:14:52: PVT:Volume alarm reactivated: un-muted
11/19 05:16:04: MUD VIS 33.00
11/19 05:16:10: MUD WEIGHT 8.60
11/19 05:29:00: SURVEY : MD=106.9, INC=0.35, AZI=230.2, TVD=106.9
11/19 05:54:24: PVT:Flow and volume alarm muted
11/19 06:06:40: PVT:Flow and volume alarm reactivated: un-muted
11/19 06:09:55: MUD VIS 32.00
11/19 06:09:59: MUD WEIGHT 8.60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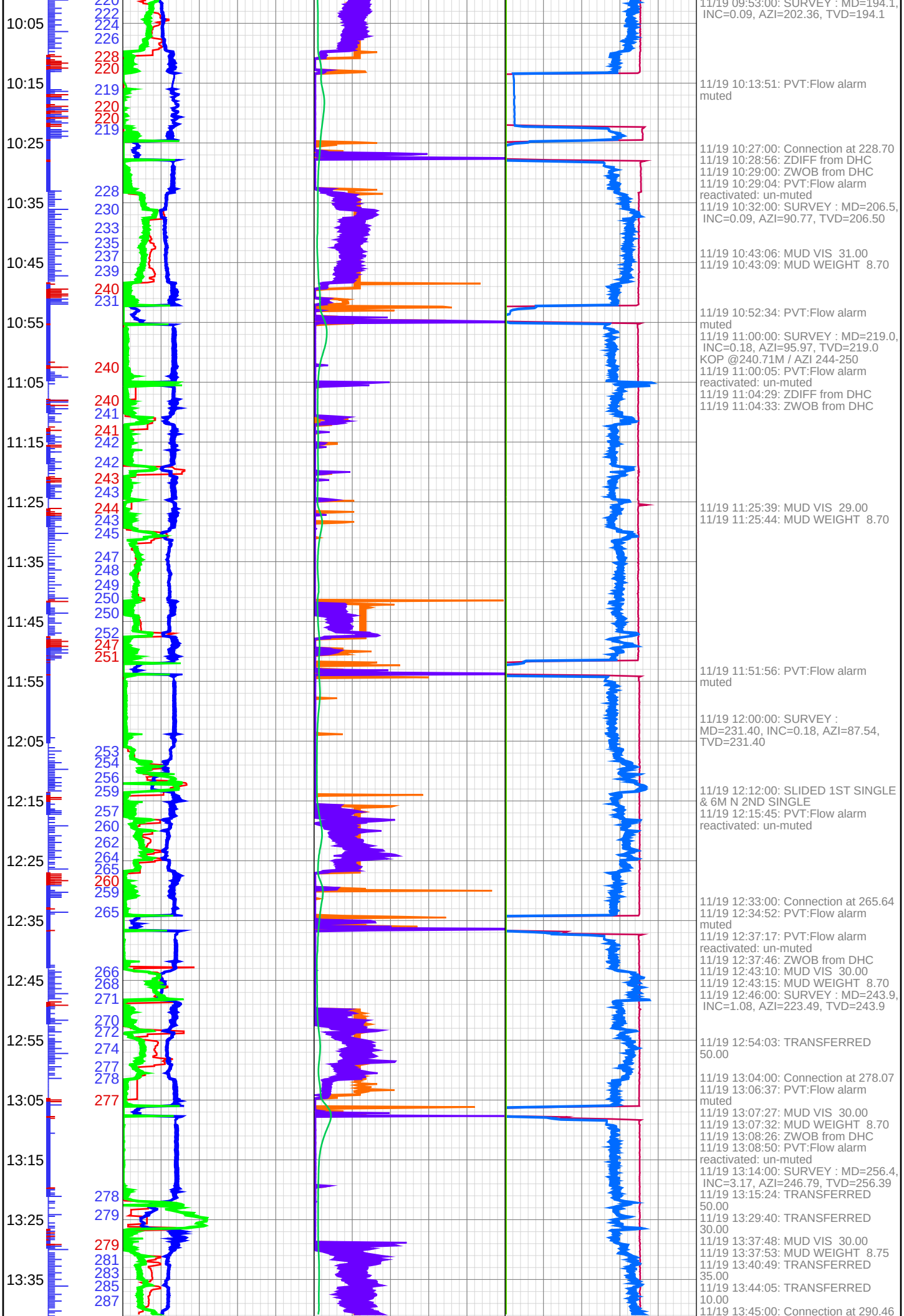
11/19 06:27:50: PVT:Volume alarm muted
11/19 06:31:00: Connection at 141.56
11/19 06:31:48: PVT:Volume alarm reactivated: un-muted
11/19 06:33:55: ZDIFF from DHC
11/19 06:34:00: ZWOB from DHC
11/19 06:58:57: PVT:Volume alarm muted
11/19 07:00:29: MUD VIS 34.00
11/19 07:00:33: MUD WEIGHT 8.60
11/19 07:02:35: PVT:Volume alarm reactivated: un-muted
11/19 07:05:00: Connection at 153.99
11/19 07:06:09: ZDIFF from DHC
11/19 07:23:58: PVT:Flow alarm muted
11/19 07:25:00: Connection at 166.40
11/19 07:27:54: PVT:Flow alarm reactivated: un-muted
11/19 07:31:35: ZDIFF from DHC
11/19 07:31:42: ZWOB from DHC
11/19 07:32:00: SURVEY : MD=144.2, INC=0.26, AZI=243.81, TVD=144.20
11/19 07:38:25: MUD VIS 35.00
11/19 07:38:36: MUD WEIGHT 8.70
11/19 07:53:05: PVT:Flow alarm muted
11/19 07:55:00: Connection at 178.87
11/19 07:58:14: ZDIFF from DHC
11/19 07:58:23: ZWOB from DHC
11/19 08:00:00: SURVEY : MD=156.7, INC=0.18, AZI= 257.56, TVD=156.70
11/19 08:00:19: PVT:Flow alarm reactivated: un-muted
11/19 08:25:28: MUD VIS 33.00
11/19 08:25:34: MUD WEIGHT 8.80
11/19 08:26:57: PVT:Flow alarm muted
11/19 08:28:00: Connection at 191.31
11/19 08:34:55: PVT:Flow alarm reactivated: un-muted
11/19 08:36:00: SURVEY : MD=169.1, INC=0.18, AZI=243.78, TVD=169.10
11/19 08:36:03: ZDIFF from DHC
11/19 08:36:09: ZWOB from DHC
11/19 08:57:47: PVT:Flow alarm muted
11/19 08:58:00: Connection at 203.77
11/19 09:00:19: PVT:Flow alarm reactivated: un-muted
11/19 09:00:47: ZDIFF from DHC
11/19 09:06:00: SURVEY : MD=181.6, INC=0.18, AZI=244.12. TVD=181.60
11/19 09:19:40: PVT:Flow alarm muted
11/19 09:24:18: PVT:Flow alarm reactivated: un-muted
11/19 09:26:17: PVT:Flow alarm muted
11/19 09:28:17: PVT:Flow alarm reactivated: un-muted
11/19 09:30:39: PVT:Flow alarm muted
11/19 09:35:32: ZDIFF from DHC
11/19 09:35:59: PVT:Flow alarm reactivated: un-muted
11/19 09:45:25: PVT:Flow alarm muted
11/19 09:46:00: Connection at 216.23
11/19 09:47:29: PVT:Volume alarm muted
11/19 09:49:18: PVT:Flow and volume alarm reactivated: un-muted
11/19 09:52:40: ZDIFF from DHC
11/19 09:52:45: ZWOB from DHC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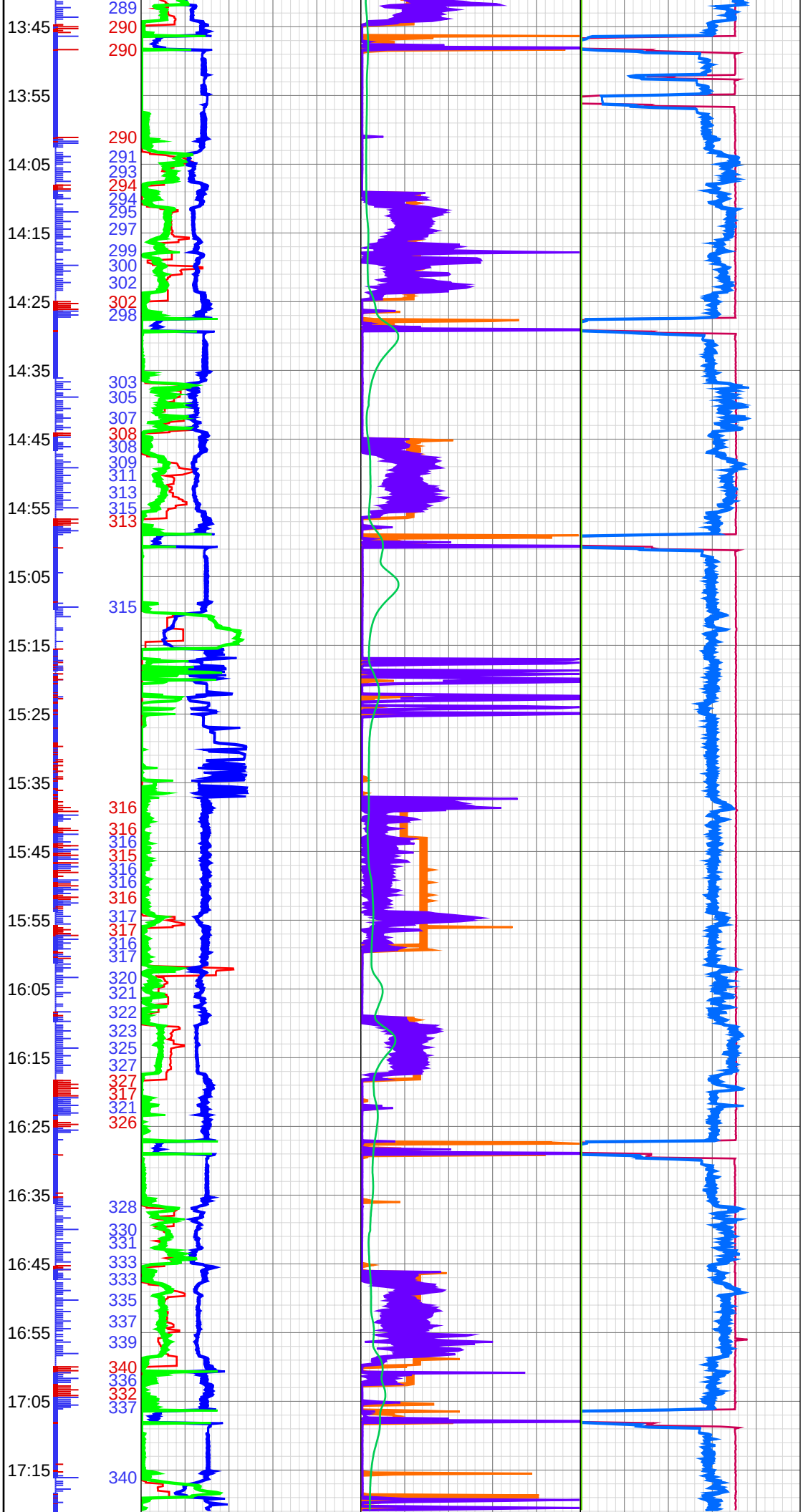
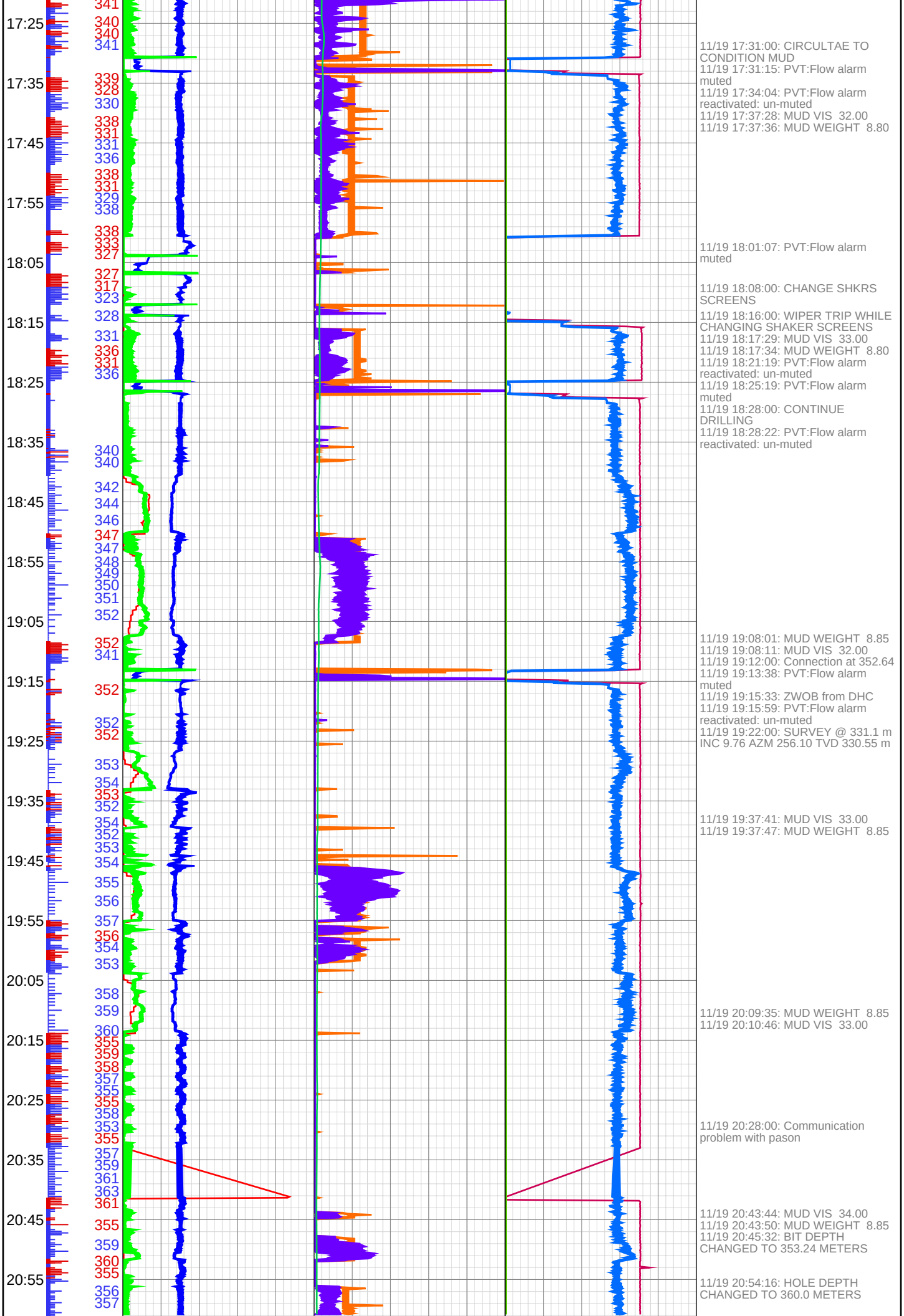
11/19 09:53:00: SURVEY : MD=194.1, INC=0.09, AZI=202.36, TVD=194.1
11/19 10:13:51: PVT:Flow alarm muted
11/19 10:27:00: Connection at 228.70
11/19 10:28:56: ZDIFF from DHC
11/19 10:29:00: ZWOB from DHC
11/19 10:29:04: PVT:Flow alarm reactivated: un-muted
11/19 10:32:00: SURVEY : MD=206.5, INC=0.09, AZI=90.77, TVD=206.50
11/19 10:43:06: MUD VIS 31.00
11/19 10:43:09: MUD WEIGHT 8.70
11/19 10:52:34: PVT:Flow alarm muted
11/19 11:00:00: SURVEY : MD=219.0, INC=0.18, AZI=95.97, TVD=219.0
KOP @240.71M / AZI 244-250
11/19 11:00:05: PVT:Flow alarm reactivated: un-muted
11/19 11:04:29: ZDIFF from DHC
11/19 11:04:33: ZWOB from DHC
11/19 11:25:39: MUD VIS 29.00
11/19 11:25:44: MUD WEIGHT 8.70
11/19 11:51:56: PVT:Flow alarm muted
11/19 12:00:00: SURVEY : MD=231.40, INC=0.18, AZI=87.54, TVD=231.40
11/19 12:12:00: SLIDED 1ST SINGLE & 6M N 2ND SINGLE
11/19 12:15:45: PVT:Flow alarm reactivated: un-muted
11/19 12:33:00: Connection at 265.64
11/19 12:34:52: PVT:Flow alarm muted
11/19 12:37:17: PVT:Flow alarm reactivated: un-muted
11/19 12:37:46: ZWOB from DHC
11/19 12:43:10: MUD VIS 30.00
11/19 12:43:15: MUD WEIGHT 8.70
11/19 12:46:00: SURVEY : MD=243.9, INC=1.08, AZI=223.49, TVD=243.9
11/19 12:54:03: TRANSFERRED 50.00
11/19 13:04:00: Connection at 278.07
11/19 13:06:37: PVT:Flow alarm muted
11/19 13:07:27: MUD VIS 30.00
11/19 13:07:32: MUD WEIGHT 8.70
11/19 13:08:26: ZWOB from DHC
11/19 13:08:50: PVT:Flow alarm reactivated: un-muted
11/19 13:14:00: SURVEY : MD=256.4, INC=3.17, AZI=246.79, TVD=256.39
11/19 13:15:24: TRANSFERRED 50.00
11/19 13:29:40: TRANSFERRED 30.00
11/19 13:37:48: MUD VIS 30.00
11/19 13:37:53: MUD WEIGHT 8.75
11/19 13:40:49: TRANSFERRED 35.00
11/19 13:44:05: TRANSFERRED 10.00
11/19 13:45:00: Connection at 290.46



11/19 13:46:55: PVT:Flow alarm muted
11/19 13:49:26: PVT:Flow alarm reactivated: un-muted
11/19 13:52:22: PVT:Flow alarm muted
11/19 13:53:00: SCR @ 48SPM - 340PSI, 60SPM - 410PSI
11/19 13:57:00: ZWOB from DHC SURVEY : MD=268.8, INC=255.71, AZI=268.76, TVD=268.76
11/19 13:57:23: PVT:Flow alarm reactivated: un-muted
11/19 14:02:39: MUD VIS 30.00
11/19 14:02:46: MUD WEIGHT 8.75
11/19 14:03:00: CORRECTED SURVEY : MD=268.8, INC=4.92, AZI=255.71, TVD=268.7
11/19 14:04:26: TRANSFERRED 30.00
11/19 14:16:34: TRANSFERRED 50.00
11/19 14:23:00: Connection at 302.94
11/19 14:27:58: PVT:Flow alarm muted
11/19 14:29:43: ZWOB from DHC
11/19 14:30:25: PVT:Flow alarm reactivated: un-muted
11/19 14:31:59: MUD VIS 30.00
11/19 14:32:03: MUD WEIGHT 8.80
11/19 14:35:00: SURVEY : MD=281.3, INC=5.72, AZI=258.5, TVD=281.20
11/19 14:40:40: TRANSFERRED 30.00
11/19 14:53:53: TRANSFERRED 30.00
11/19 14:55:00: Connection at 315.36
11/19 14:59:00: SURVEY CORRECTION: MD=293.7, INC=6.60, AZI=260.77, TVD=293.5
11/19 14:59:23: PVT:Flow alarm muted
11/19 15:01:15: ZWOB from DHC
11/19 15:01:54: PVT:Flow alarm reactivated: un-muted
11/19 15:06:00: SURVEY : MD=293.7, INC=60.60, AZI=260.77, TVD=293.53
11/19 15:12:31: MUD VIS 30.00
11/19 15:12:37: MUD WEIGHT 8.80
11/19 15:14:00: TRANSFERRED 30.00
11/19 15:31:47: MUD VIS 34.00
11/19 15:31:53: MUD WEIGHT 8.80
11/19 15:32:18: TRANSFERRED 30.00
11/19 15:43:00: OP 10KLS NO ROTATION..WORK STRING
11/19 15:50:23: TRANSFERRED 30.00
11/19 16:04:00: CNT DRLG
11/19 16:06:50: TRANSFERRED 30.00
11/19 16:11:00: MUD VIS 31.00
11/19 16:11:06: MUD WEIGHT 8.75
11/19 16:23:14: TRANSFERRED 30.00
11/19 16:26:00: Connection at 327.85
11/19 16:27:44: PVT:Flow alarm muted
11/19 16:29:38: ZWOB from DHC
11/19 16:30:17: PVT:Flow alarm reactivated: un-muted
11/19 16:33:23: MUD VIS 31.00
11/19 16:33:30: MUD WEIGHT 8.80
11/19 16:35:00: SURVEY : MD=306.20, INC=7.74, AZI=260.60, TVD=305.93
11/19 16:37:16: TRANSFERRED 30.00
11/19 16:54:09: TRANSFERRED 30.00
11/19 16:59:00: Connection at 340.28
11/19 17:06:47: PVT:Flow alarm muted
11/19 17:08:47: ZWOB from DHC
11/19 17:09:24: PVT:Flow alarm reactivated: un-muted
11/19 17:13:00: SURVEY : MD=318.6, INC=8.62, AZI=258.67, TVD=318.21
11/19 17:13:04: MUD VIS 32.00
11/19 17:13:08: MUD WEIGHT 8.80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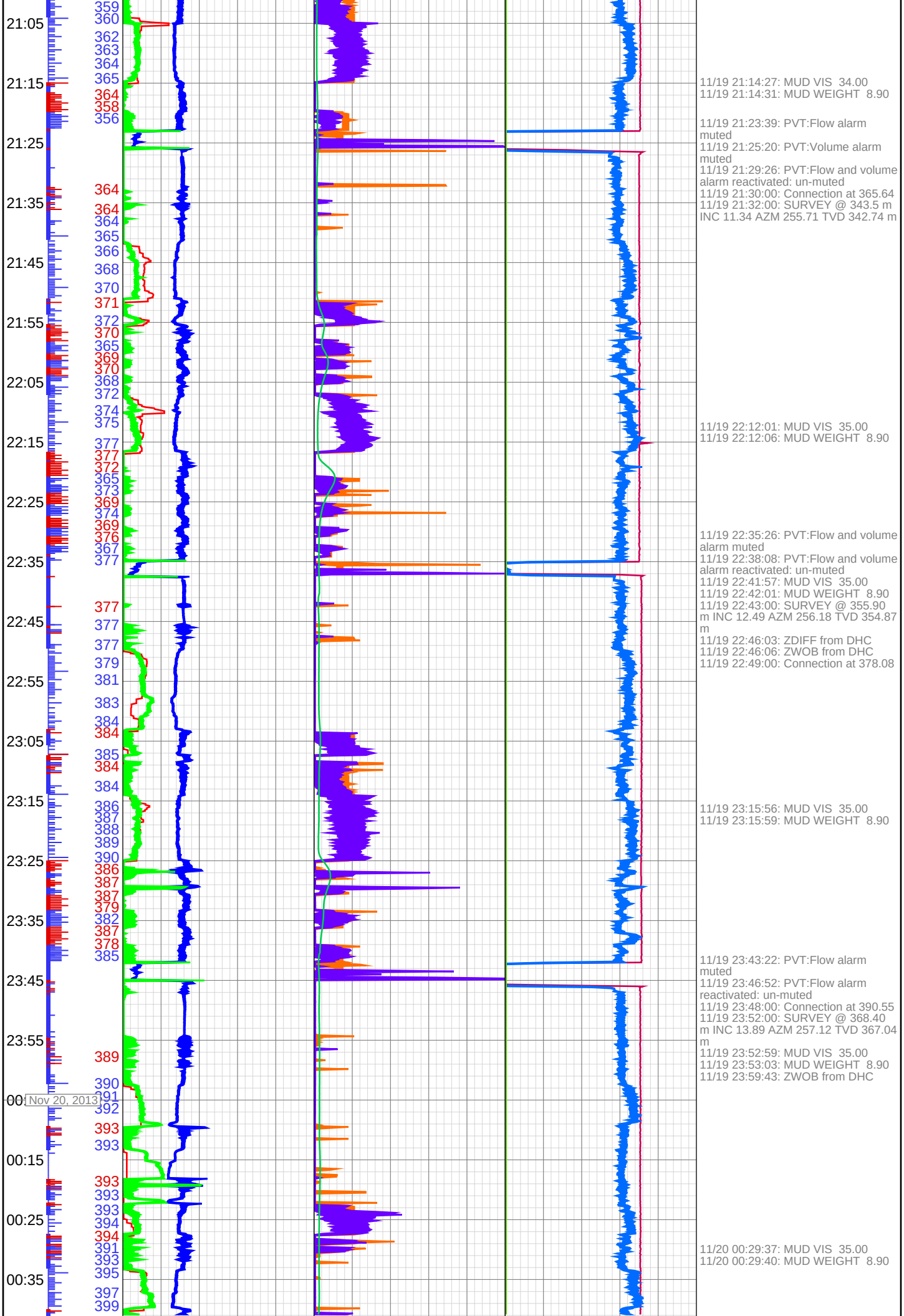
11/19 17:31:00: CIRCULTAE TO CONDITION MUD
11/19 17:31:15: PVT:Flow alarm muted
11/19 17:34:04: PVT:Flow alarm reactivated: un-muted
11/19 17:37:28: MUD VIS 32.00
11/19 17:37:36: MUD WEIGHT 8.80
11/19 18:01:07: PVT:Flow alarm muted
11/19 18:08:00: CHANGE SHKRS SCREENS
11/19 18:16:00: WIPER TRIP WHILE CHANGING SHAKER SCREENS
11/19 18:17:29: MUD VIS 33.00
11/19 18:17:34: MUD WEIGHT 8.80
11/19 18:21:19: PVT:Flow alarm reactivated: un-muted
11/19 18:25:19: PVT:Flow alarm muted
11/19 18:28:00: CONTINUE DRILLING
11/19 18:28:22: PVT:Flow alarm reactivated: un-muted
11/19 19:08:01: MUD WEIGHT 8.85
11/19 19:08:11: MUD VIS 32.00
11/19 19:12:00: Connection at 352.64
11/19 19:13:38: PVT:Flow alarm muted
11/19 19:15:33: ZWOB from DHC
11/19 19:15:59: PVT:Flow alarm reactivated: un-muted
11/19 19:22:00: SURVEY @ 331.1 m INC 9.76 AZM 256.10 TVD 330.55 m
11/19 19:37:41: MUD VIS 33.00
11/19 19:37:47: MUD WEIGHT 8.85
11/19 20:09:35: MUD WEIGHT 8.85
11/19 20:10:46: MUD VIS 33.00
11/19 20:28:00: Communication problem with pason
11/19 20:43:44: MUD VIS 34.00
11/19 20:43:50: MUD WEIGHT 8.85
11/19 20:45:32: BIT DEPTH CHANGED TO 353.24 METERS
11/19 20:54:16: HOLE DEPTH CHANGED TO 360.0 METERS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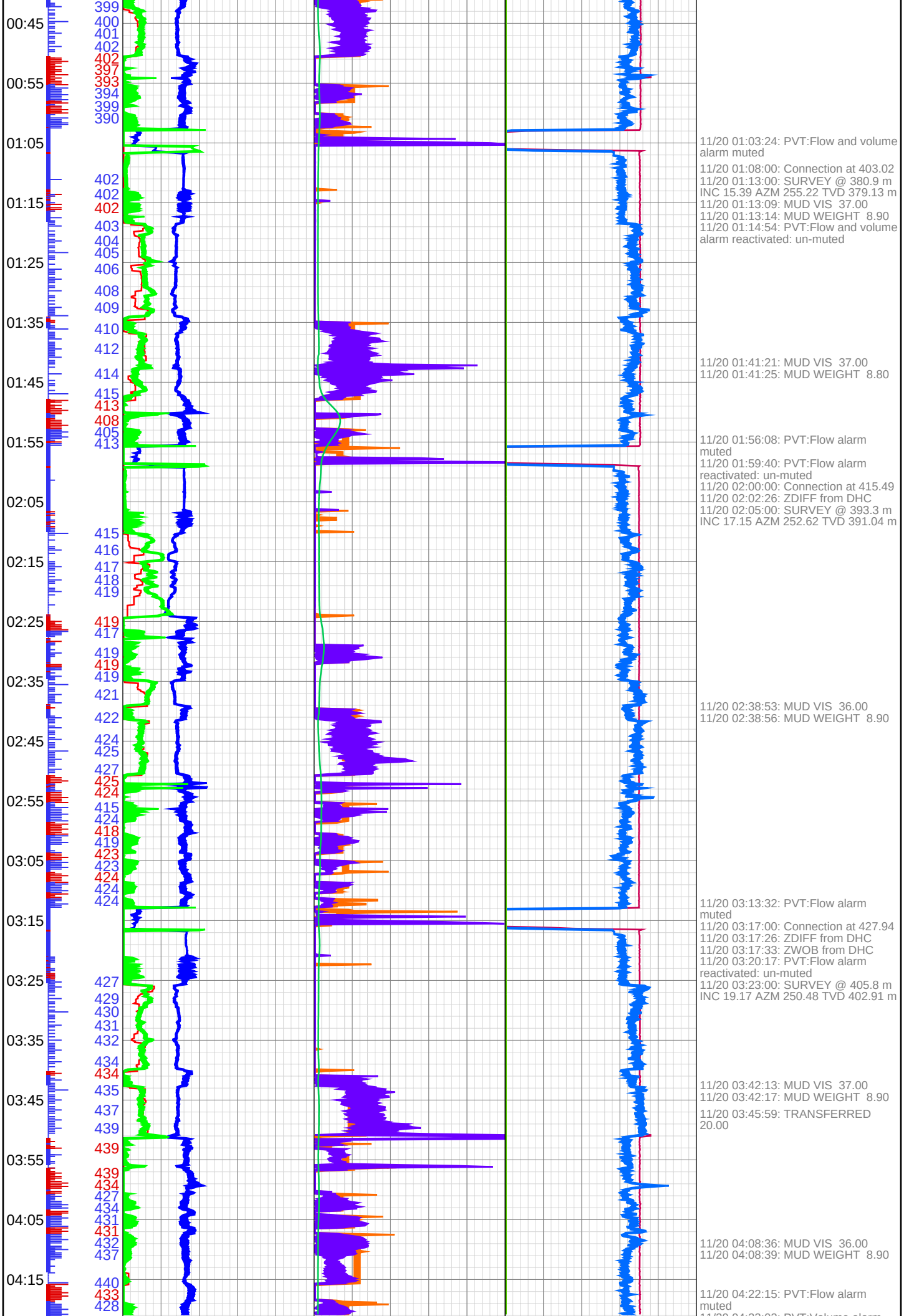
11/19 21:14:27: MUD VIS 34.00
11/19 21:14:31: MUD WEIGHT 8.90
11/19 21:23:39: PVT:Flow alarm muted
11/19 21:25:20: PVT:Volume alarm muted
11/19 21:29:26: PVT:Flow and volume alarm reactivated: un-muted
11/19 21:30:00: Connection at 365.64
11/19 21:32:00: SURVEY @ 343.5 m INC 11.34 AZM 255.71 TVD 342.74 m
11/19 22:12:01: MUD VIS 35.00
11/19 22:12:06: MUD WEIGHT 8.90
11/19 22:35:26: PVT:Flow and volume alarm muted
11/19 22:38:08: PVT:Flow and volume alarm reactivated: un-muted
11/19 22:41:57: MUD VIS 35.00
11/19 22:42:01: MUD WEIGHT 8.90
11/19 22:43:00: SURVEY @ 355.90 m INC 12.49 AZM 256.18 TVD 354.87 m
11/19 22:46:03: ZDIFF from DHC
11/19 22:46:06: ZWOB from DHC
11/19 22:49:00: Connection at 378.08
11/19 23:15:56: MUD VIS 35.00
11/19 23:15:59: MUD WEIGHT 8.90
11/19 23:43:22: PVT:Flow alarm muted
11/19 23:46:52: PVT:Flow alarm reactivated: un-muted
11/19 23:48:00: Connection at 390.55
11/19 23:52:00: SURVEY @ 368.40 m INC 13.89 AZM 257.12 TVD 367.04 m
11/19 23:52:59: MUD VIS 35.00
11/19 23:53:03: MUD WEIGHT 8.90
11/19 23:59:43: ZWOB from DHC
11/20 00:29:37: MUD VIS 35.00
11/20 00:29:40: MUD WEIGHT 8.90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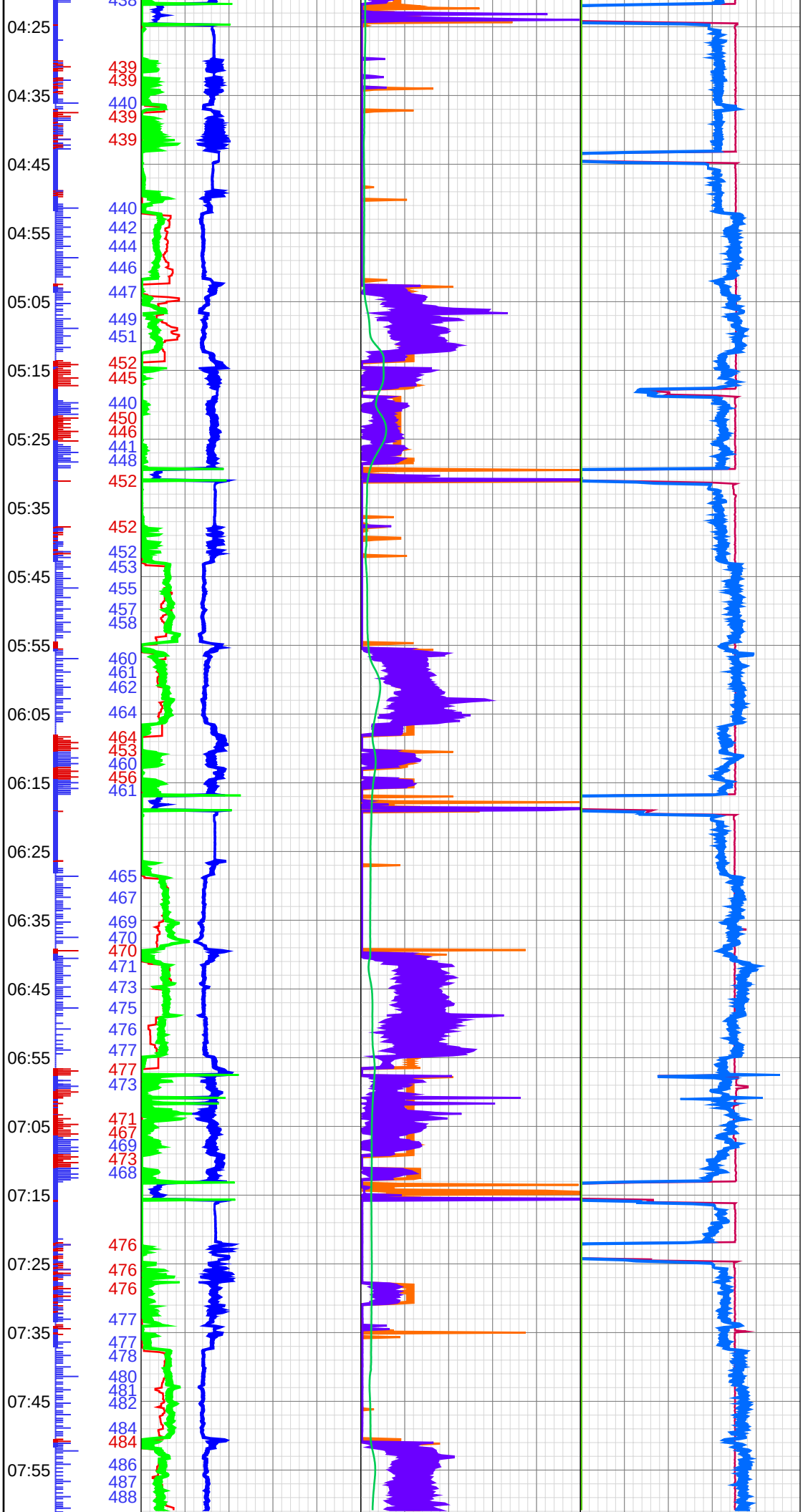
11/20 01:03:24: PVT:Flow and volume alarm muted
11/20 01:08:00: Connection at 403.02
11/20 01:13:00: SURVEY @ 380.9 m INC 15.39 AZM 255.22 TVD 379.13 m
11/20 01:13:09: MUD VIS 37.00
11/20 01:13:14: MUD WEIGHT 8.90
11/20 01:14:54: PVT:Flow and volume alarm reactivated: un-muted
11/20 01:41:21: MUD VIS 37.00
11/20 01:41:25: MUD WEIGHT 8.80
11/20 01:56:08: PVT:Flow alarm muted
11/20 01:59:40: PVT:Flow alarm reactivated: un-muted
11/20 02:00:00: Connection at 415.49
11/20 02:02:26: ZDIFF from DHC
11/20 02:05:00: SURVEY @ 393.3 m INC 17.15 AZM 252.62 TVD 391.04 m
11/20 02:38:53: MUD VIS 36.00
11/20 02:38:56: MUD WEIGHT 8.90
11/20 03:13:32: PVT:Flow alarm muted
11/20 03:17:00: Connection at 427.94
11/20 03:17:26: ZDIFF from DHC
11/20 03:17:33: ZWOB from DHC
11/20 03:20:17: PVT:Flow alarm reactivated: un-muted
11/20 03:23:00: SURVEY @ 405.8 m INC 19.17 AZM 250.48 TVD 402.91 m
11/20 03:42:13: MUD VIS 37.00
11/20 03:42:17: MUD WEIGHT 8.90
11/20 03:45:59: TRANSFERRED 20.00
11/20 04:08:36: MUD VIS 36.00
11/20 04:08:39: MUD WEIGHT 8.90
11/20 04:22:15: PVT:Flow alarm muted



11/20 04:23:02: PVT:Volume alarm muted
11/20 04:28:00: Connection at 440.41
11/20 04:29:34: PVT:Flow and volume alarm reactivated: un-muted
11/20 04:30:00: SURVEY @ 418.20 m INC 20.84 AZM 250.53 TVD 414.57 m
11/20 04:35:20: PVT:Flow and volume alarm muted
11/20 04:35:58: PVT:Flow and volume alarm reactivated: un-muted
11/20 04:37:25: PVT:Flow and volume alarm muted
11/20 04:38:27: MUD VIS 36.00
11/20 04:38:30: MUD WEIGHT 8.90
11/20 04:50:41: ZWOB from DHC

11/20 04:55:19: PVT:Flow and volume alarm reactivated: un-muted

11/20 05:18:10: PVT:Flow alarm muted
11/20 05:19:00: SCR @ 48SPM - 400PSI, 60SPM - 470PSI

11/20 05:28:00: Connection at 452.42
11/20 05:31:27: ZWOB from DHC
11/20 05:32:29: PVT:Flow alarm reactivated: un-muted
11/20 05:35:56: TRANSFERRED 10.00
11/20 05:37:00: SURVEY @ 430.7 m INC 22.60 AZM 250.48 TVD 426.18 m
11/20 05:41:15: TRANSFERRED 30.00

11/20 05:55:47: TRANSFERRED 30.00
11/20 05:59:01: MUD VIS 38.00
11/20 05:59:07: MUD WEIGHT 8.95

11/20 06:07:00: Connection at 464.89

11/20 06:13:07: TRANSFERRED 30.00
11/20 06:17:19: PVT:Flow alarm muted
11/20 06:19:42: ZWOB from DHC
11/20 06:20:00: SURVEY : MD=443.2, INC=24.62, AZI=250.75, TVD=437.63
11/20 06:20:19: PVT:Flow alarm reactivated: un-muted

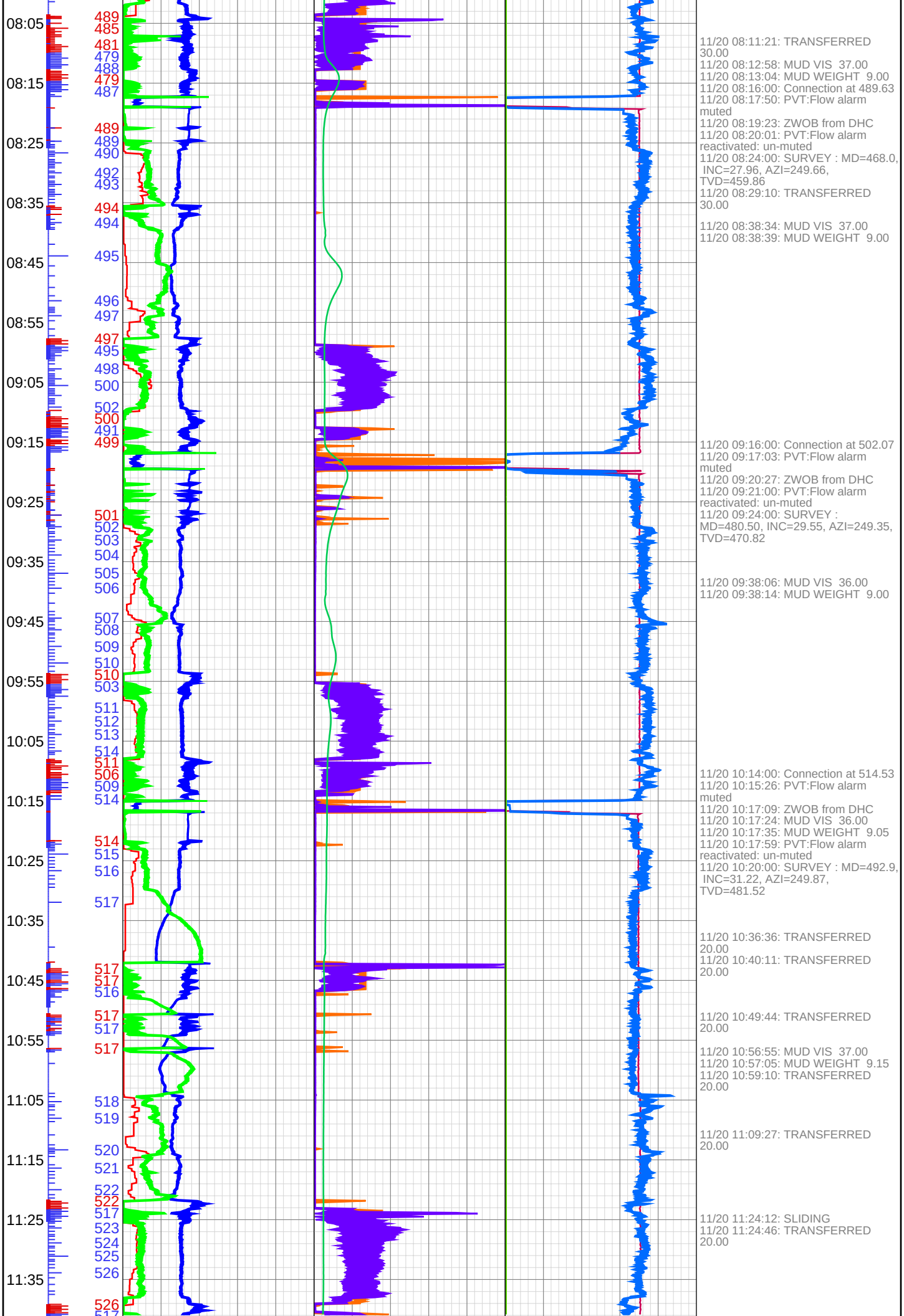
11/20 06:33:31: TRANSFERRED 30.00
11/20 06:35:51: MUD WEIGHT 8.95
11/20 06:35:59: MUD VIS 38.00

11/20 06:49:08: TRANSFERRED 30.00

11/20 06:55:00: Connection at 477.30
11/20 06:57:00: TIGHT SPOT
11/20 06:58:08: PVT:Flow alarm muted

11/20 07:07:14: PVT:Flow alarm reactivated: un-muted
11/20 07:13:34: PVT:Flow alarm muted
11/20 07:14:02: TRANSFERRED 30.00
11/20 07:16:31: ZWOB from DHC
11/20 07:16:53: PVT:Flow alarm reactivated: un-muted
11/20 07:18:00: SURVEY : MD=455.6, INC=26.29, AZI=249.99, TVD=448.83
11/20 07:22:25: PVT:Flow alarm muted
11/20 07:25:38: PVT:Flow alarm reactivated: un-muted
11/20 07:33:42: TRANSFERRED 30.00
11/20 07:37:03: MUD VIS 38.00
11/20 07:37:09: MUD WEIGHT 9.00

11/20 07:48:45: TRANSFERRED 30.00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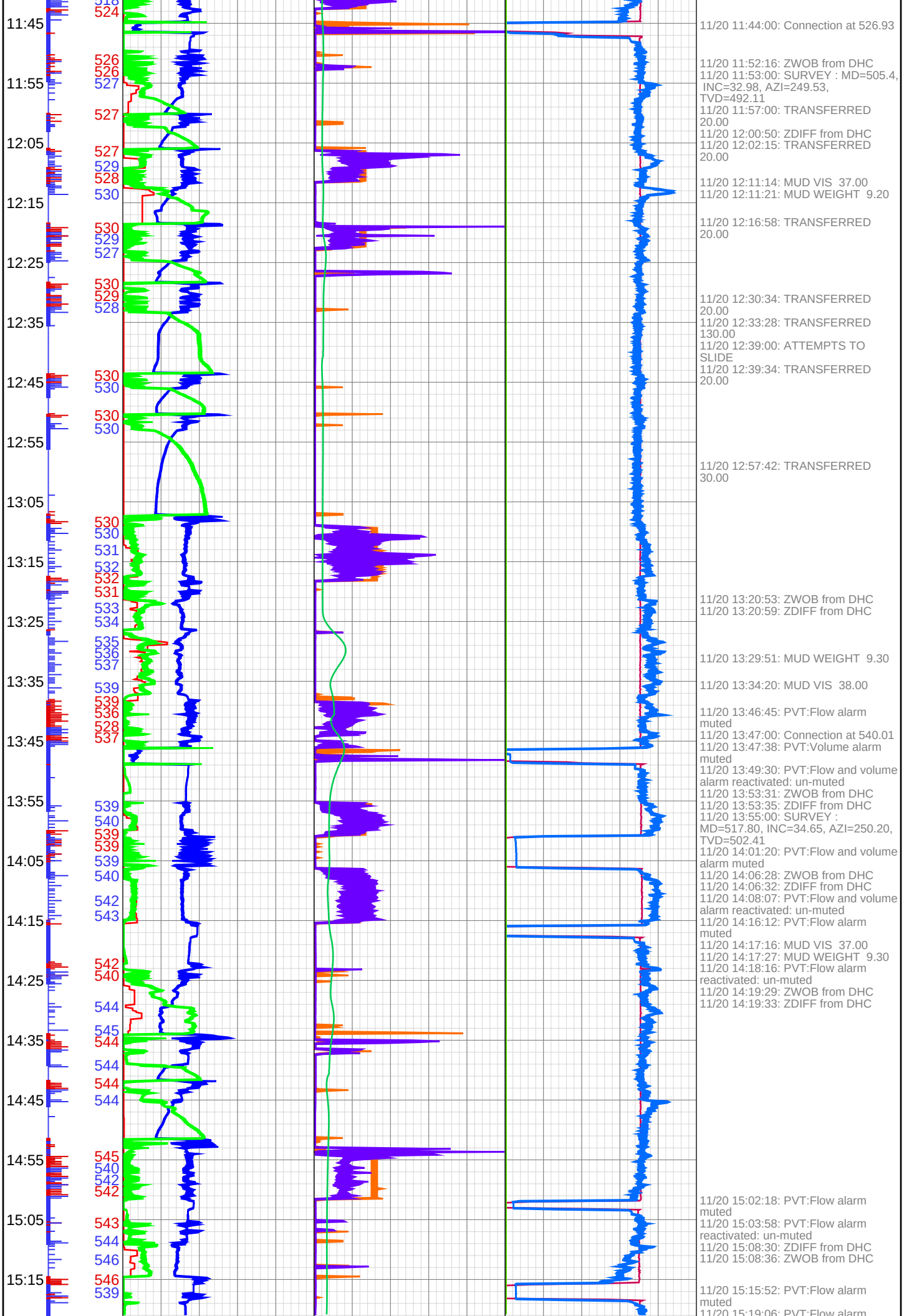
11/20 08:11:21: TRANSFERRED 30.00
11/20 08:12:58: MUD VIS 37.00
11/20 08:13:04: MUD WEIGHT 9.00
11/20 08:16:00: Connection at 489.63
11/20 08:17:50: PVT:Flow alarm muted
11/20 08:19:23: ZWOB from DHC
11/20 08:20:01: PVT:Flow alarm reactivated: un-muted
11/20 08:24:00: SURVEY : MD=468.0, INC=27.96, AZI=249.66, TVD=459.86
11/20 08:29:10: TRANSFERRED 30.00
11/20 08:38:34: MUD VIS 37.00
11/20 08:38:39: MUD WEIGHT 9.00
11/20 09:16:00: Connection at 502.07
11/20 09:17:03: PVT:Flow alarm muted
11/20 09:20:27: ZWOB from DHC
11/20 09:21:00: PVT:Flow alarm reactivated: un-muted
11/20 09:24:00: SURVEY : MD=480.50, INC=29.55, AZI=249.35, TVD=470.82
11/20 09:38:06: MUD VIS 36.00
11/20 09:38:14: MUD WEIGHT 9.00
11/20 10:14:00: Connection at 514.53
11/20 10:15:26: PVT:Flow alarm muted
11/20 10:17:09: ZWOB from DHC
11/20 10:17:24: MUD VIS 36.00
11/20 10:17:35: MUD WEIGHT 9.05
11/20 10:17:59: PVT:Flow alarm reactivated: un-muted
11/20 10:20:00: SURVEY : MD=492.9, INC=31.22, AZI=249.87, TVD=481.52
11/20 10:36:36: TRANSFERRED 20.00
11/20 10:40:11: TRANSFERRED 20.00
11/20 10:49:44: TRANSFERRED 20.00
11/20 10:56:55: MUD VIS 37.00
11/20 10:57:05: MUD WEIGHT 9.15
11/20 10:59:10: TRANSFERRED 20.00
11/20 11:09:27: TRANSFERRED 20.00
11/20 11:24:12: SLIDING
11/20 11:24:46: TRANSFERRED 20.00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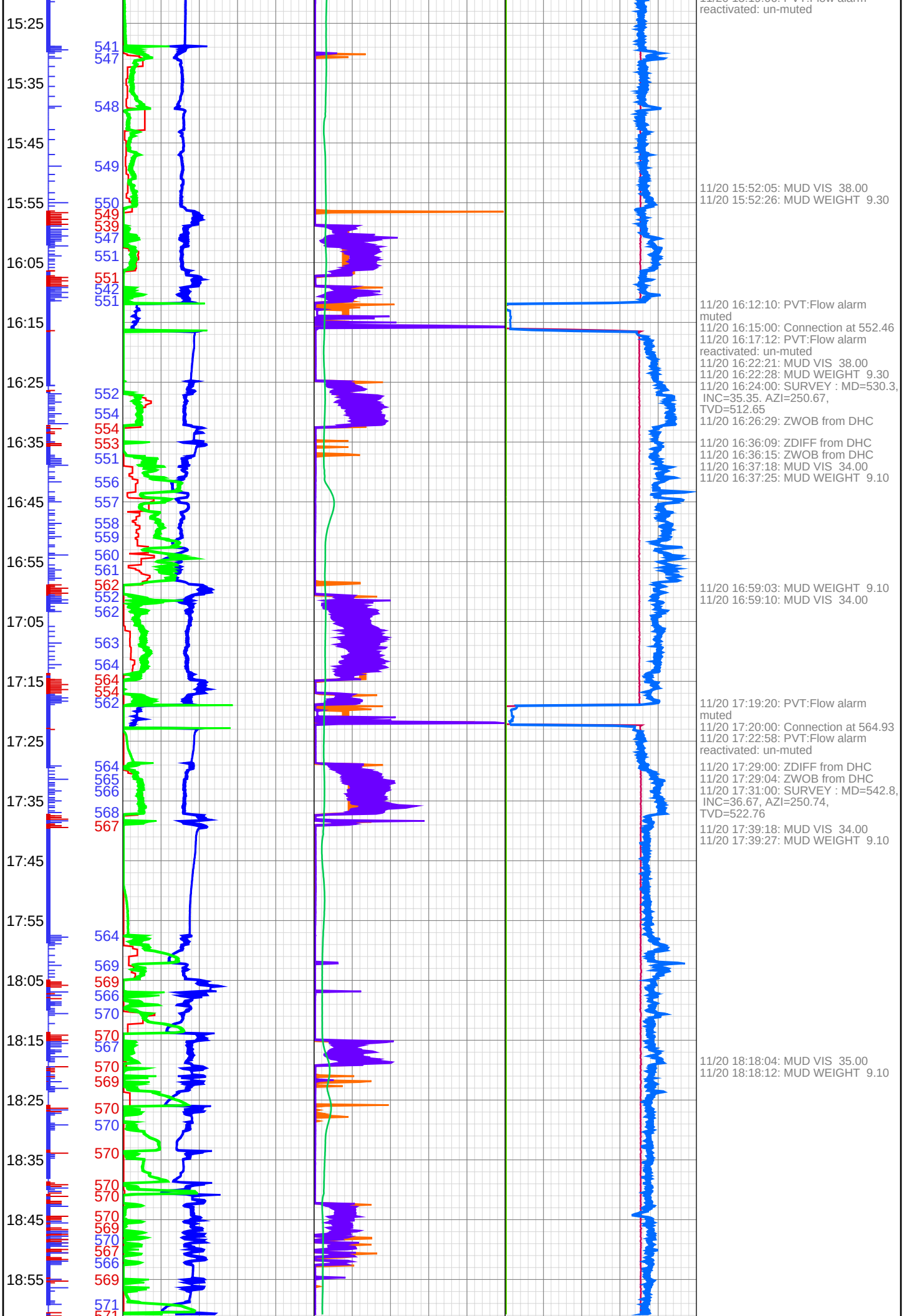
11/20 11:44:00: Connection at 526.93
11/20 11:52:16: ZWOB from DHC
11/20 11:53:00: SURVEY : MD=505.4, INC=32.98, AZI=249.53, TVD=492.11
11/20 11:57:00: TRANSFERRED 20.00
11/20 12:00:50: ZDIFF from DHC
11/20 12:02:15: TRANSFERRED 20.00
11/20 12:11:14: MUD VIS 37.00
11/20 12:11:21: MUD WEIGHT 9.20
11/20 12:16:58: TRANSFERRED 20.00
11/20 12:30:34: TRANSFERRED 20.00
11/20 12:33:28: TRANSFERRED 130.00
11/20 12:39:00: ATTEMPTS TO SLIDE
11/20 12:39:34: TRANSFERRED 20.00
11/20 12:57:42: TRANSFERRED 30.00
11/20 13:20:53: ZWOB from DHC
11/20 13:20:59: ZDIFF from DHC
11/20 13:29:51: MUD WEIGHT 9.30
11/20 13:34:20: MUD VIS 38.00
11/20 13:46:45: PVT:Flow alarm muted
11/20 13:47:00: Connection at 540.01
11/20 13:47:38: PVT:Volume alarm muted
11/20 13:49:30: PVT:Flow and volume alarm reactivated: un-muted
11/20 13:53:31: ZWOB from DHC
11/20 13:53:35: ZDIFF from DHC
11/20 13:55:00: SURVEY : MD=517.80, INC=34.65, AZI=250.20, TVD=502.41
11/20 14:01:20: PVT:Flow and volume alarm muted
11/20 14:06:28: ZWOB from DHC
11/20 14:06:32: ZDIFF from DHC
11/20 14:08:07: PVT:Flow and volume alarm reactivated: un-muted
11/20 14:16:12: PVT:Flow alarm muted
11/20 14:17:16: MUD VIS 37.00
11/20 14:17:27: MUD WEIGHT 9.30
11/20 14:18:16: PVT:Flow alarm reactivated: un-muted
11/20 14:19:29: ZWOB from DHC
11/20 14:19:33: ZDIFF from DHC
11/20 15:02:18: PVT:Flow alarm muted
11/20 15:03:58: PVT:Flow alarm reactivated: un-muted
11/20 15:08:30: ZDIFF from DHC
11/20 15:08:36: ZWOB from DHC
11/20 15:15:52: PVT:Flow alarm muted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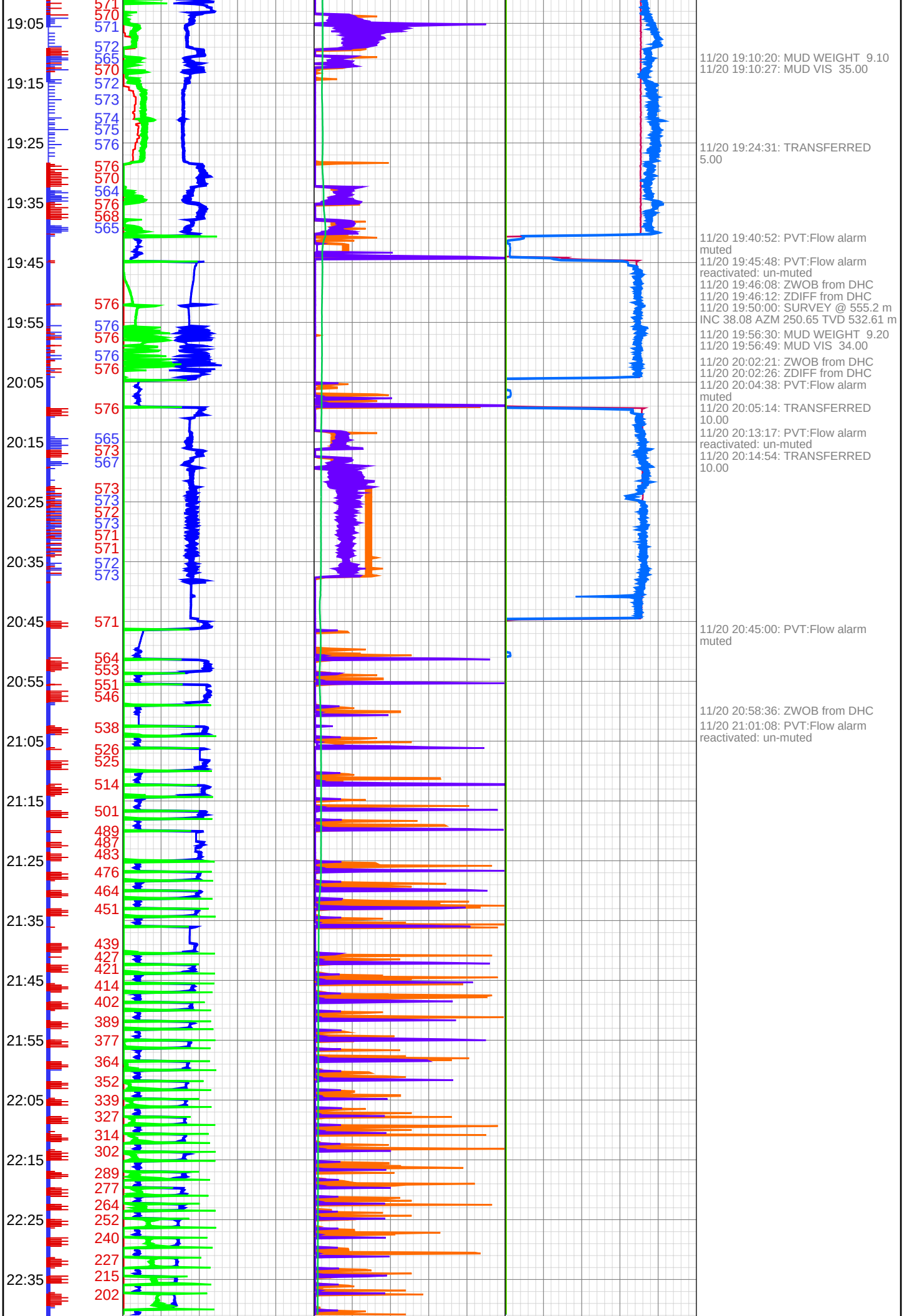
11/20 15:52:05: MUD VIS 38.00
11/20 15:52:26: MUD WEIGHT 9.30
11/20 16:12:10: PVT:Flow alarm muted
11/20 16:15:00: Connection at 552.46
11/20 16:17:12: PVT:Flow alarm reactivated: un-muted
11/20 16:22:21: MUD VIS 38.00
11/20 16:22:28: MUD WEIGHT 9.30
11/20 16:24:00: SURVEY : MD=530.3, INC=35.35. AZI=250.67, TVD=512.65
11/20 16:26:29: ZWOB from DHC
11/20 16:36:09: ZDIFF from DHC
11/20 16:36:15: ZWOB from DHC
11/20 16:37:18: MUD VIS 34.00
11/20 16:37:25: MUD WEIGHT 9.10
11/20 16:59:03: MUD WEIGHT 9.10
11/20 16:59:10: MUD VIS 34.00
11/20 17:19:20: PVT:Flow alarm muted
11/20 17:20:00: Connection at 564.93
11/20 17:22:58: PVT:Flow alarm reactivated: un-muted
11/20 17:29:00: ZDIFF from DHC
11/20 17:29:04: ZWOB from DHC
11/20 17:31:00: SURVEY : MD=542.8, INC=36.67, AZI=250.74, TVD=522.76
11/20 17:39:18: MUD VIS 34.00
11/20 17:39:27: MUD WEIGHT 9.10
11/20 18:18:04: MUD VIS 35.00
11/20 18:18:12: MUD WEIGHT 9.10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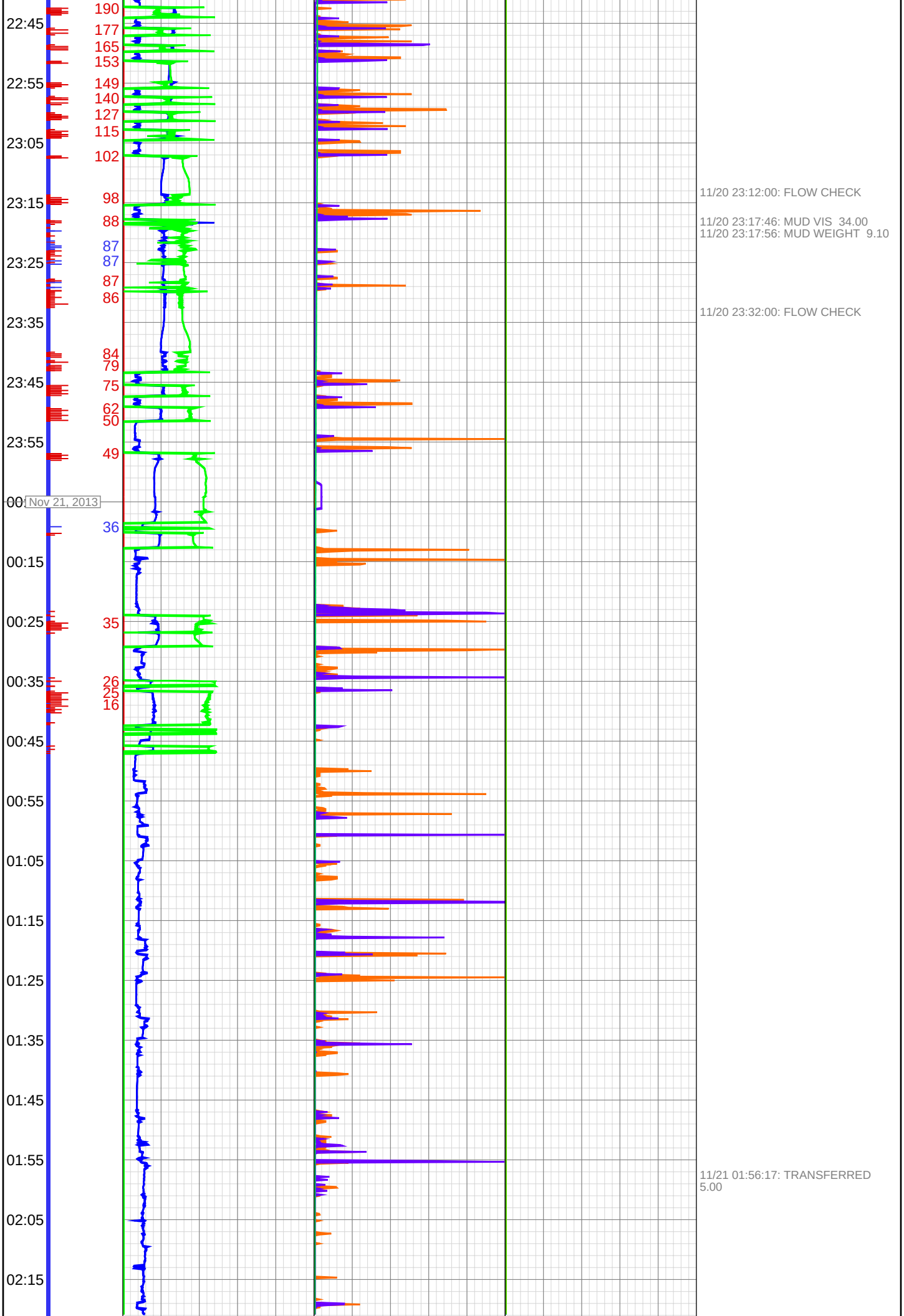
11/20 19:10:20: MUD WEIGHT 9.10
11/20 19:10:27: MUD VIS 35.00
11/20 19:24:31: TRANSFERRED 5.00
11/20 19:40:52: PVT:Flow alarm muted
11/20 19:45:48: PVT:Flow alarm reactivated: un-muted
11/20 19:46:08: ZWOB from DHC
11/20 19:46:12: ZDIFF from DHC
11/20 19:50:00: SURVEY @ 555.2 m INC 38.08 AZM 250.65 TVD 532.61 m
11/20 19:56:30: MUD WEIGHT 9.20
11/20 19:56:49: MUD VIS 34.00
11/20 20:02:21: ZWOB from DHC
11/20 20:02:26: ZDIFF from DHC
11/20 20:04:38: PVT:Flow alarm muted
11/20 20:05:14: TRANSFERRED 10.00
11/20 20:13:17: PVT:Flow alarm reactivated: un-muted
11/20 20:14:54: TRANSFERRED 10.00
11/20 20:45:00: PVT:Flow alarm muted
11/20 20:58:36: ZWOB from DHC
11/20 21:01:08: PVT:Flow alarm reactivated: un-muted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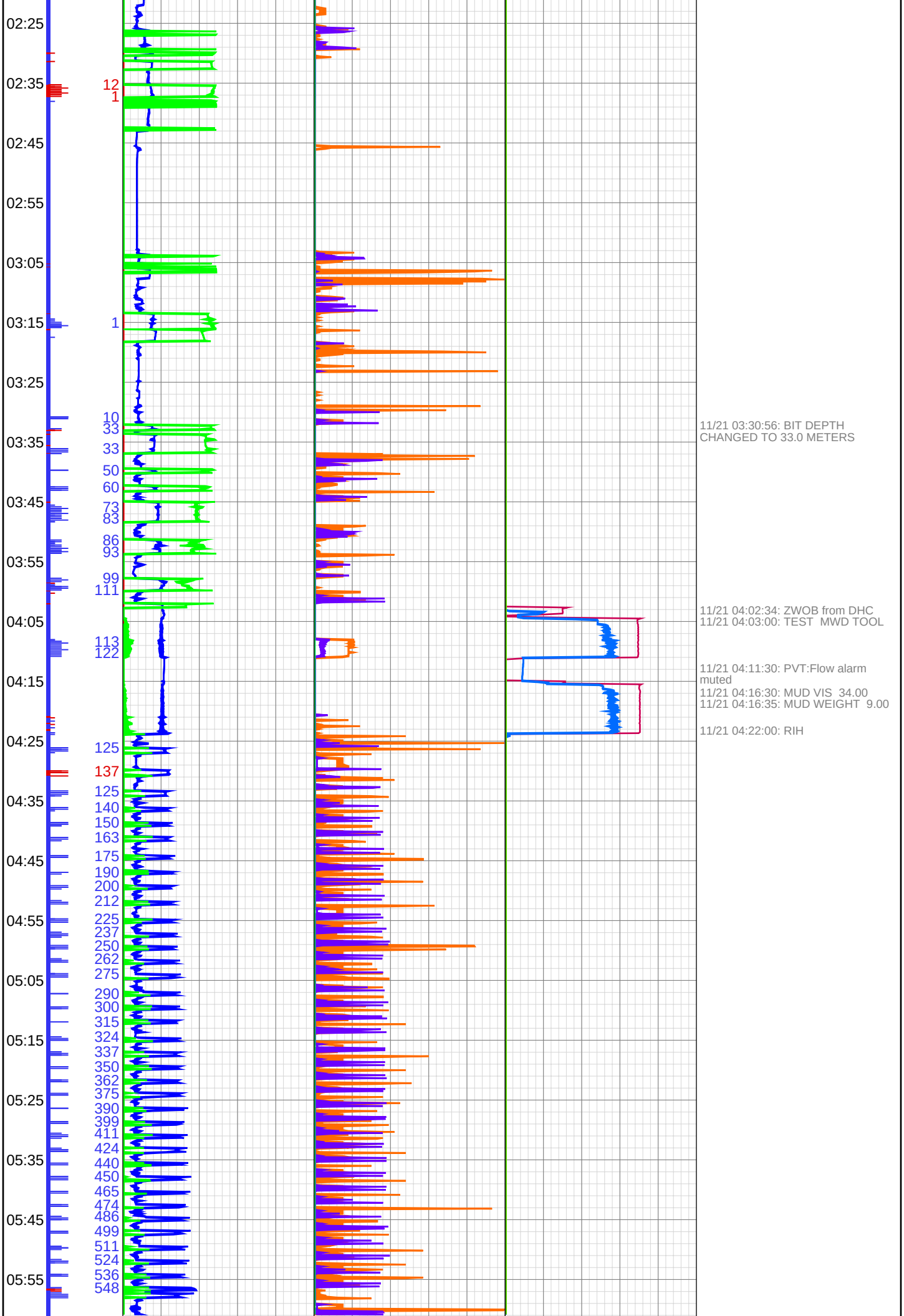
11/20 23:12:00: FLOW CHECK
11/20 23:17:46: MUD VIS 34.00
11/20 23:17:56: MUD WEIGHT 9.10
11/20 23:32:00: FLOW CHECK
11/21 01:56:17: TRANSFERRED
5.00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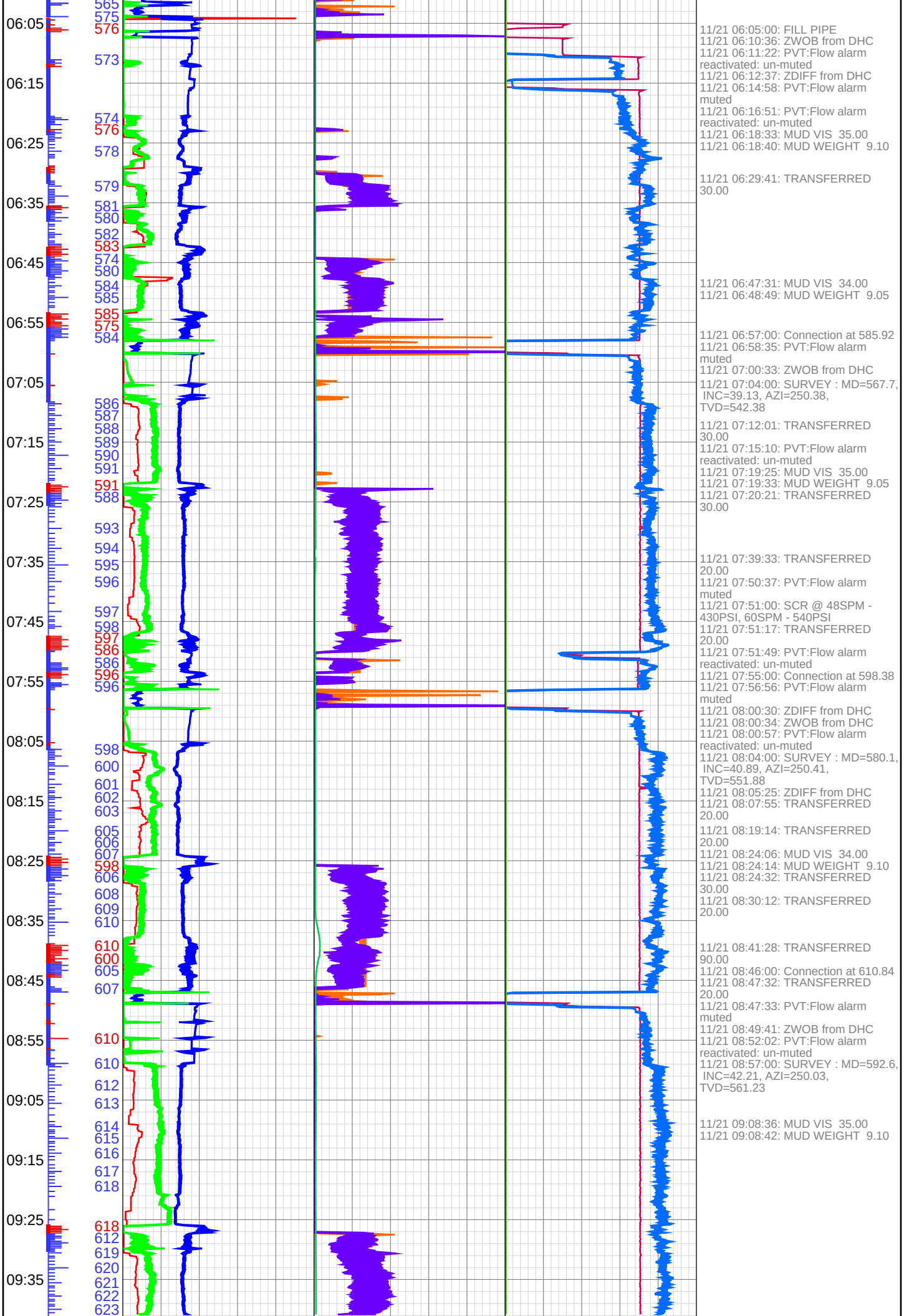
11/21 03:30:56: BIT DEPTH CHANGED TO 33.0 METERS
11/21 04:02:34: ZWOB from DHC
11/21 04:03:00: TEST MWD TOOL
11/21 04:11:30: PVT:Flow alarm muted
11/21 04:16:30: MUD VIS 34.00
11/21 04:16:35: MUD WEIGHT 9.00
11/21 04:22:00: RIH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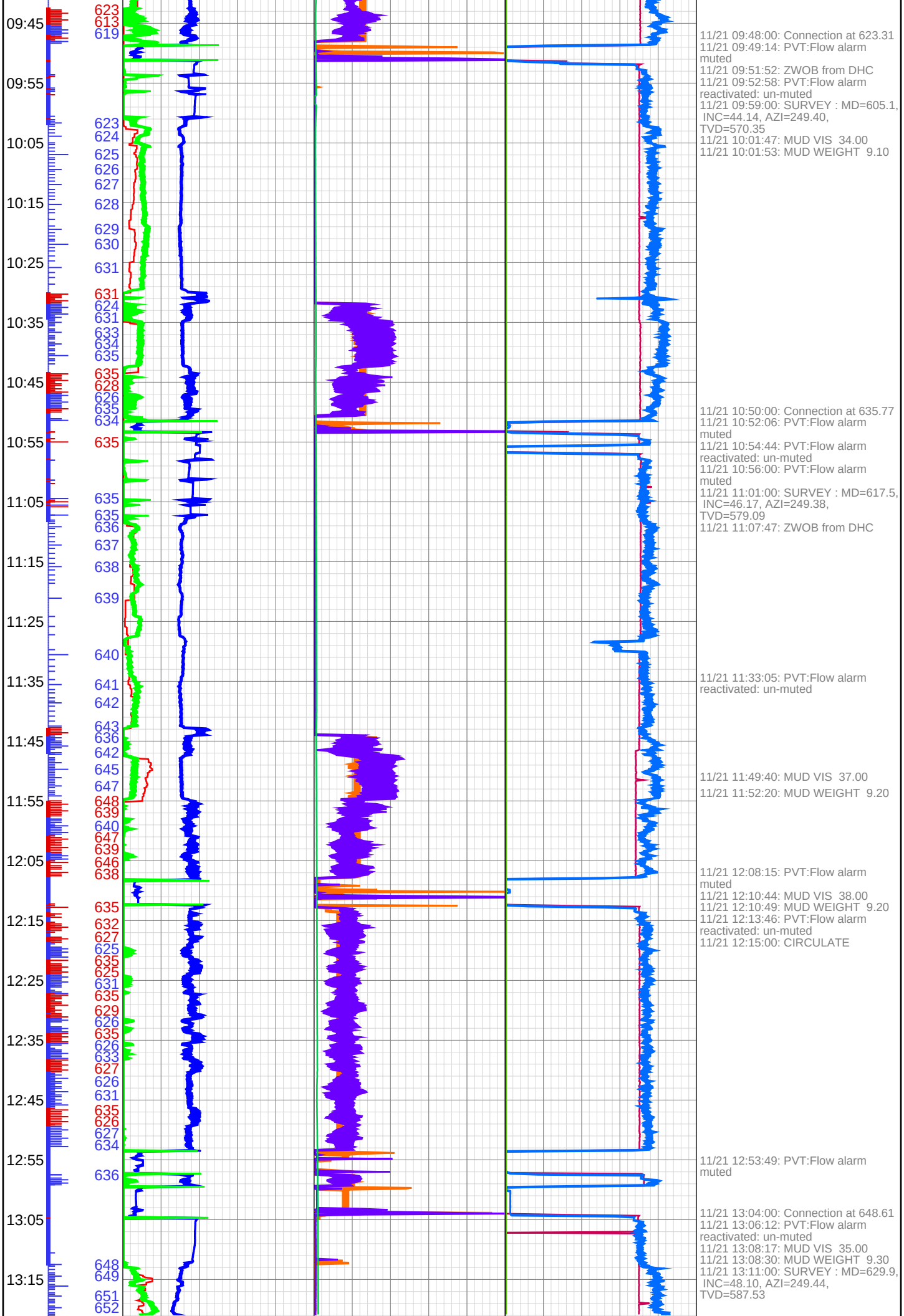
11/21 06:05:00: FILL PIPE
11/21 06:10:36: ZWOB from DHC
11/21 06:11:22: PVT:Flow alarm reactivated: un-muted
11/21 06:12:37: ZDIFF from DHC
11/21 06:14:58: PVT:Flow alarm muted
11/21 06:16:51: PVT:Flow alarm reactivated: un-muted
11/21 06:18:33: MUD VIS 35.00
11/21 06:18:40: MUD WEIGHT 9.10
11/21 06:29:41: TRANSFERRED 30.00
11/21 06:47:31: MUD VIS 34.00
11/21 06:48:49: MUD WEIGHT 9.05
11/21 06:57:00: Connection at 585.92
11/21 06:58:35: PVT:Flow alarm muted
11/21 07:00:33: ZWOB from DHC
11/21 07:04:00: SURVEY : MD=567.7, INC=39.13, AZI=250.38, TVD=542.38
11/21 07:12:01: TRANSFERRED 30.00
11/21 07:15:10: PVT:Flow alarm reactivated: un-muted
11/21 07:19:25: MUD VIS 35.00
11/21 07:19:33: MUD WEIGHT 9.05
11/21 07:20:21: TRANSFERRED 30.00
11/21 07:39:33: TRANSFERRED 20.00
11/21 07:50:37: PVT:Flow alarm muted
11/21 07:51:00: SCR @ 48SPM - 430PSI, 60SPM - 540PSI
11/21 07:51:17: TRANSFERRED 20.00
11/21 07:51:49: PVT:Flow alarm reactivated: un-muted
11/21 07:55:00: Connection at 598.38
11/21 07:56:56: PVT:Flow alarm muted
11/21 08:00:30: ZDIFF from DHC
11/21 08:00:34: ZWOB from DHC
11/21 08:00:57: PVT:Flow alarm reactivated: un-muted
11/21 08:04:00: SURVEY : MD=580.1, INC=40.89, AZI=250.41, TVD=551.88
11/21 08:05:25: ZDIFF from DHC
11/21 08:07:55: TRANSFERRED 20.00
11/21 08:19:14: TRANSFERRED 20.00
11/21 08:24:06: MUD VIS 34.00
11/21 08:24:14: MUD WEIGHT 9.10
11/21 08:24:32: TRANSFERRED 30.00
11/21 08:30:12: TRANSFERRED 20.00
11/21 08:41:28: TRANSFERRED 90.00
11/21 08:46:00: Connection at 610.84
11/21 08:47:32: TRANSFERRED 20.00
11/21 08:47:33: PVT:Flow alarm muted
11/21 08:49:41: ZWOB from DHC
11/21 08:52:02: PVT:Flow alarm reactivated: un-muted
11/21 08:57:00: SURVEY : MD=592.6, INC=42.21, AZI=250.03, TVD=561.23
11/21 09:08:36: MUD VIS 35.00
11/21 09:08:42: MUD WEIGHT 9.10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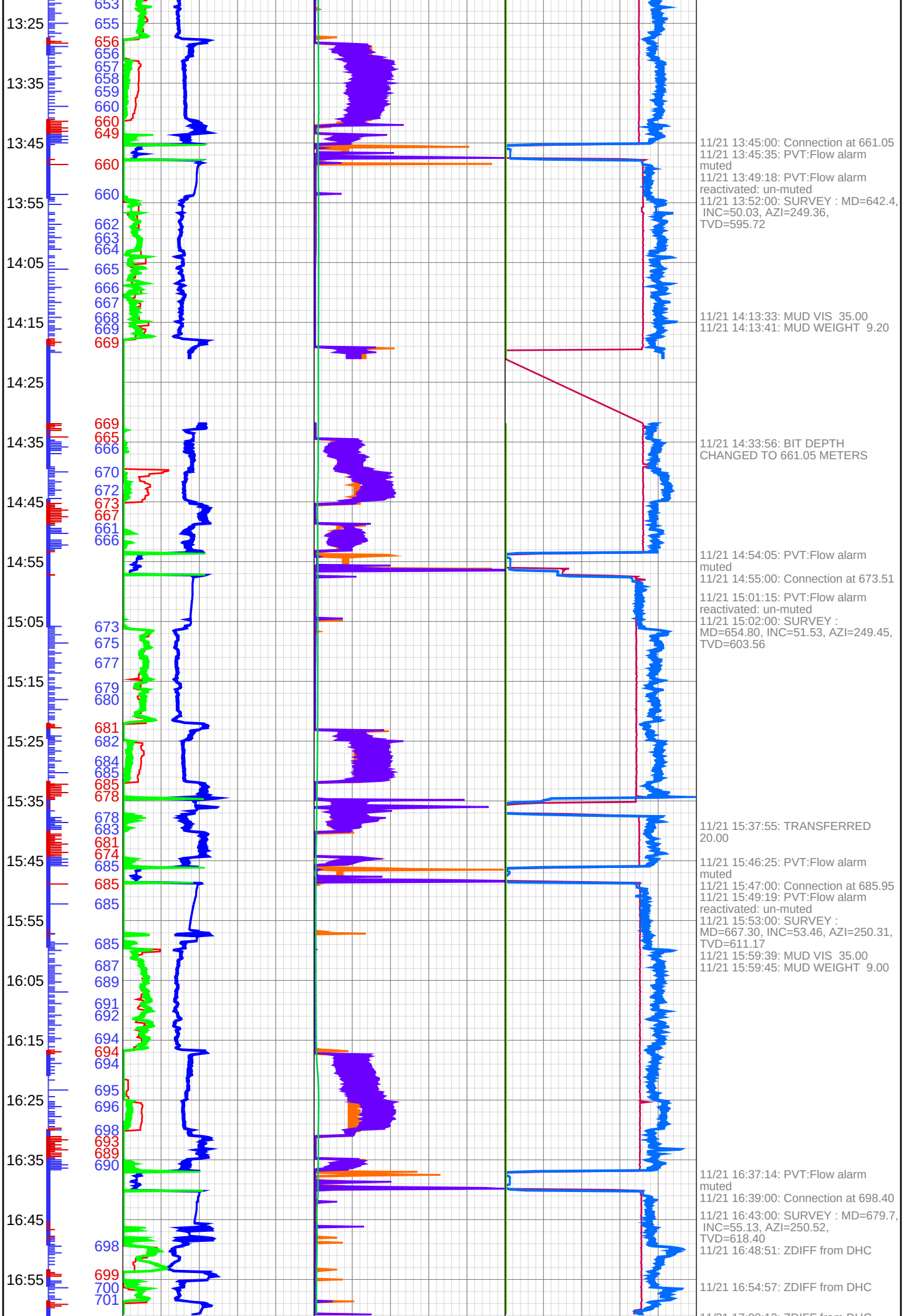
11/21 09:48:00: Connection at 623.31
11/21 09:49:14: PVT:Flow alarm muted
11/21 09:51:52: ZWOB from DHC
11/21 09:52:58: PVT:Flow alarm reactivated: un-muted
11/21 09:59:00: SURVEY : MD=605.1, INC=44.14, AZI=249.40, TVD=570.35
11/21 10:01:47: MUD VIS 34.00
11/21 10:01:53: MUD WEIGHT 9.10
11/21 10:50:00: Connection at 635.77
11/21 10:52:06: PVT:Flow alarm muted
11/21 10:54:44: PVT:Flow alarm reactivated: un-muted
11/21 10:56:00: PVT:Flow alarm muted
11/21 11:01:00: SURVEY : MD=617.5, INC=46.17, AZI=249.38, TVD=579.09
11/21 11:07:47: ZWOB from DHC
11/21 11:33:05: PVT:Flow alarm reactivated: un-muted
11/21 11:49:40: MUD VIS 37.00
11/21 11:52:20: MUD WEIGHT 9.20
11/21 12:08:15: PVT:Flow alarm muted
11/21 12:10:44: MUD VIS 38.00
11/21 12:10:49: MUD WEIGHT 9.20
11/21 12:13:46: PVT:Flow alarm reactivated: un-muted
11/21 12:15:00: CIRCULATE
11/21 12:53:49: PVT:Flow alarm muted
11/21 13:04:00: Connection at 648.61
11/21 13:06:12: PVT:Flow alarm reactivated: un-muted
11/21 13:08:17: MUD VIS 35.00
11/21 13:08:30: MUD WEIGHT 9.30
11/21 13:11:00: SURVEY : MD=629.9, INC=48.10, AZI=249.44, TVD=587.53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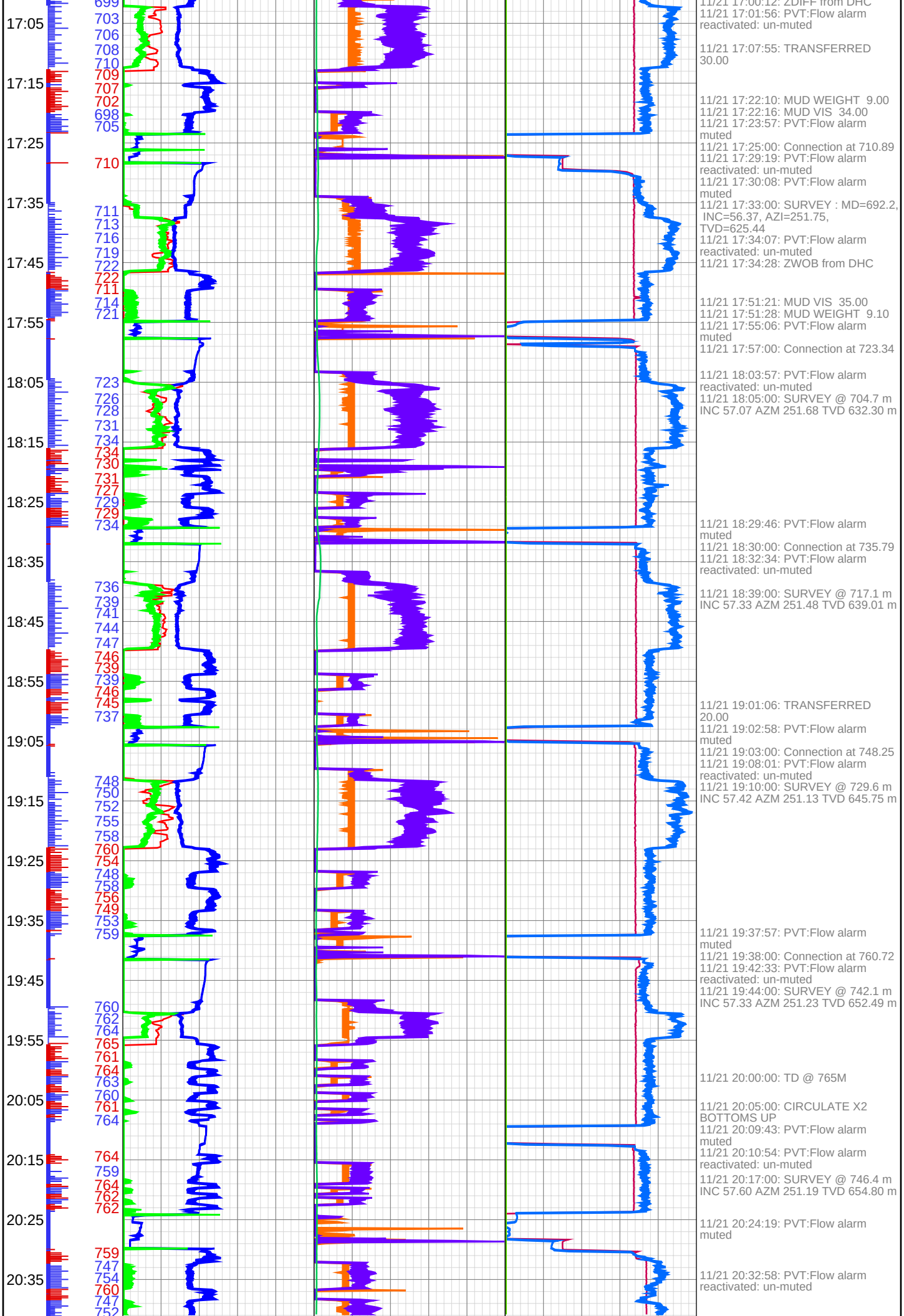
11/21 13:45:00: Connection at 661.05
11/21 13:45:35: PVT:Flow alarm muted
11/21 13:49:18: PVT:Flow alarm reactivated: un-muted
11/21 13:52:00: SURVEY : MD=642.4, INC=50.03, AZI=249.36, TVD=595.72
11/21 14:13:33: MUD VIS 35.00
11/21 14:13:41: MUD WEIGHT 9.20
11/21 14:33:56: BIT DEPTH CHANGED TO 661.05 METERS
11/21 14:54:05: PVT:Flow alarm muted
11/21 14:55:00: Connection at 673.51
11/21 15:01:15: PVT:Flow alarm reactivated: un-muted
11/21 15:02:00: SURVEY : MD=654.80, INC=51.53, AZI=249.45, TVD=603.56
11/21 15:37:55: TRANSFERRED 20.00
11/21 15:46:25: PVT:Flow alarm muted
11/21 15:47:00: Connection at 685.95
11/21 15:49:19: PVT:Flow alarm reactivated: un-muted
11/21 15:53:00: SURVEY : MD=667.30, INC=53.46, AZI=250.31, TVD=611.17
11/21 15:59:39: MUD VIS 35.00
11/21 15:59:45: MUD WEIGHT 9.00
11/21 16:37:14: PVT:Flow alarm muted
11/21 16:39:00: Connection at 698.40
11/21 16:43:00: SURVEY : MD=679.7, INC=55.13, AZI=250.52, TVD=618.40
11/21 16:48:51: ZDIFF from DHC
11/21 16:54:57: ZDIFF from DHC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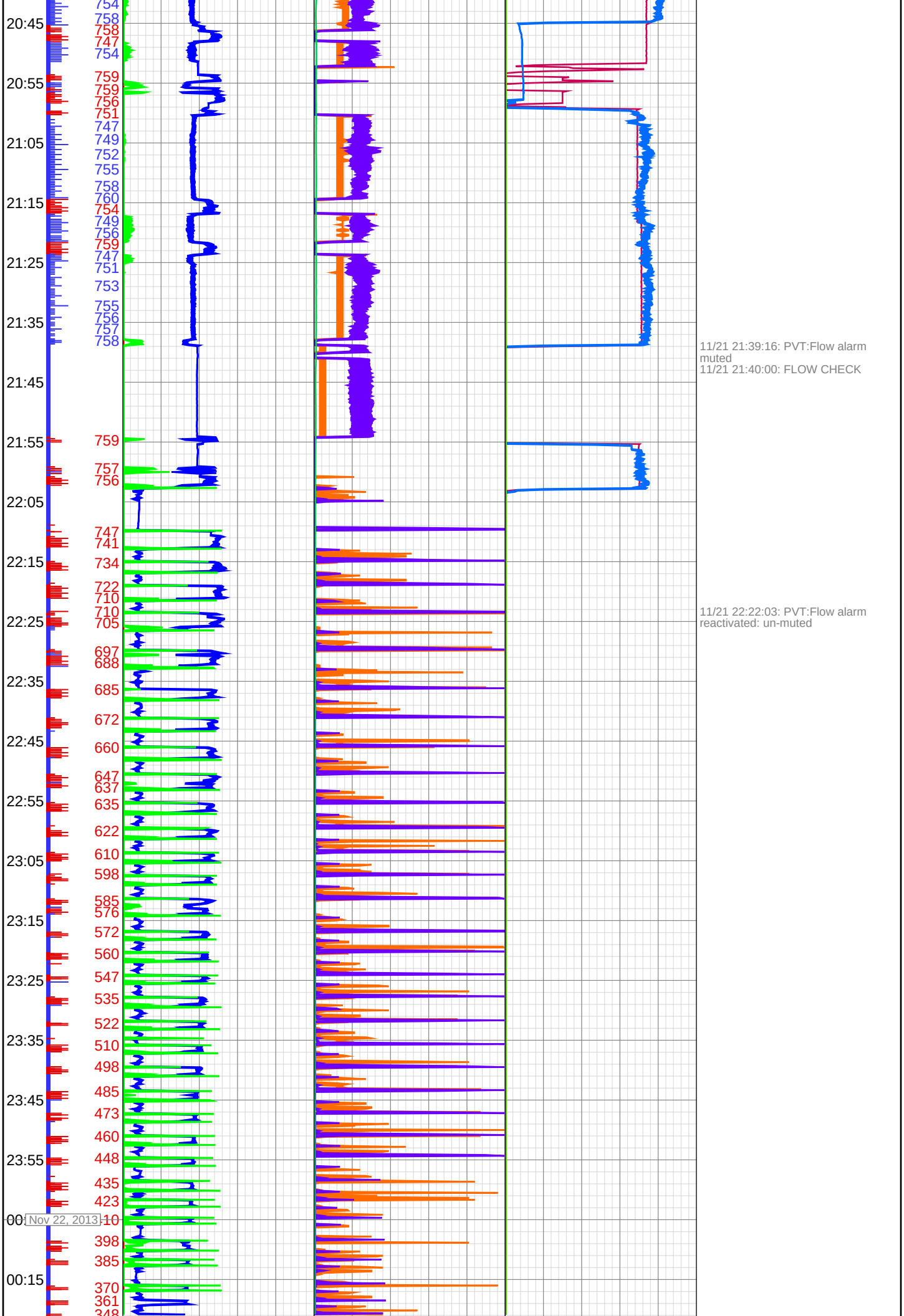
11/21 17:00:12: ZDIFF from DHC
11/21 17:01:56: PVT:Flow alarm reactivated: un-muted
11/21 17:07:55: TRANSFERRED 30.00
11/21 17:22:10: MUD WEIGHT 9.00
11/21 17:22:16: MUD VIS 34.00
11/21 17:23:57: PVT:Flow alarm muted
11/21 17:25:00: Connection at 710.89
11/21 17:29:19: PVT:Flow alarm reactivated: un-muted
11/21 17:30:08: PVT:Flow alarm muted
11/21 17:33:00: SURVEY : MD=692.2, INC=56.37, AZI=251.75, TVD=625.44
11/21 17:34:07: PVT:Flow alarm reactivated: un-muted
11/21 17:34:28: ZWOB from DHC
11/21 17:51:21: MUD VIS 35.00
11/21 17:51:28: MUD WEIGHT 9.10
11/21 17:55:06: PVT:Flow alarm muted
11/21 17:57:00: Connection at 723.34
11/21 18:03:57: PVT:Flow alarm reactivated: un-muted
11/21 18:05:00: SURVEY @ 704.7 m INC 57.07 AZM 251.68 TVD 632.30 m
11/21 18:29:46: PVT:Flow alarm muted
11/21 18:30:00: Connection at 735.79
11/21 18:32:34: PVT:Flow alarm reactivated: un-muted
11/21 18:39:00: SURVEY @ 717.1 m INC 57.33 AZM 251.48 TVD 639.01 m
11/21 19:01:06: TRANSFERRED 20.00
11/21 19:02:58: PVT:Flow alarm muted
11/21 19:03:00: Connection at 748.25
11/21 19:08:01: PVT:Flow alarm reactivated: un-muted
11/21 19:10:00: SURVEY @ 729.6 m INC 57.42 AZM 251.13 TVD 645.75 m
11/21 19:37:57: PVT:Flow alarm muted
11/21 19:38:00: Connection at 760.72
11/21 19:42:33: PVT:Flow alarm reactivated: un-muted
11/21 19:44:00: SURVEY @ 742.1 m INC 57.33 AZM 251.23 TVD 652.49 m
11/21 20:00:00: TD @ 765M
11/21 20:05:00: CIRCULATE X2 BOTTOMS UP
11/21 20:09:43: PVT:Flow alarm muted
11/21 20:10:54: PVT:Flow alarm reactivated: un-muted
11/21 20:17:00: SURVEY @ 746.4 m INC 57.60 AZM 251.19 TVD 654.80 m
11/21 20:24:19: PVT:Flow alarm muted
11/21 20:32:58: PVT:Flow alarm reactivated: un-muted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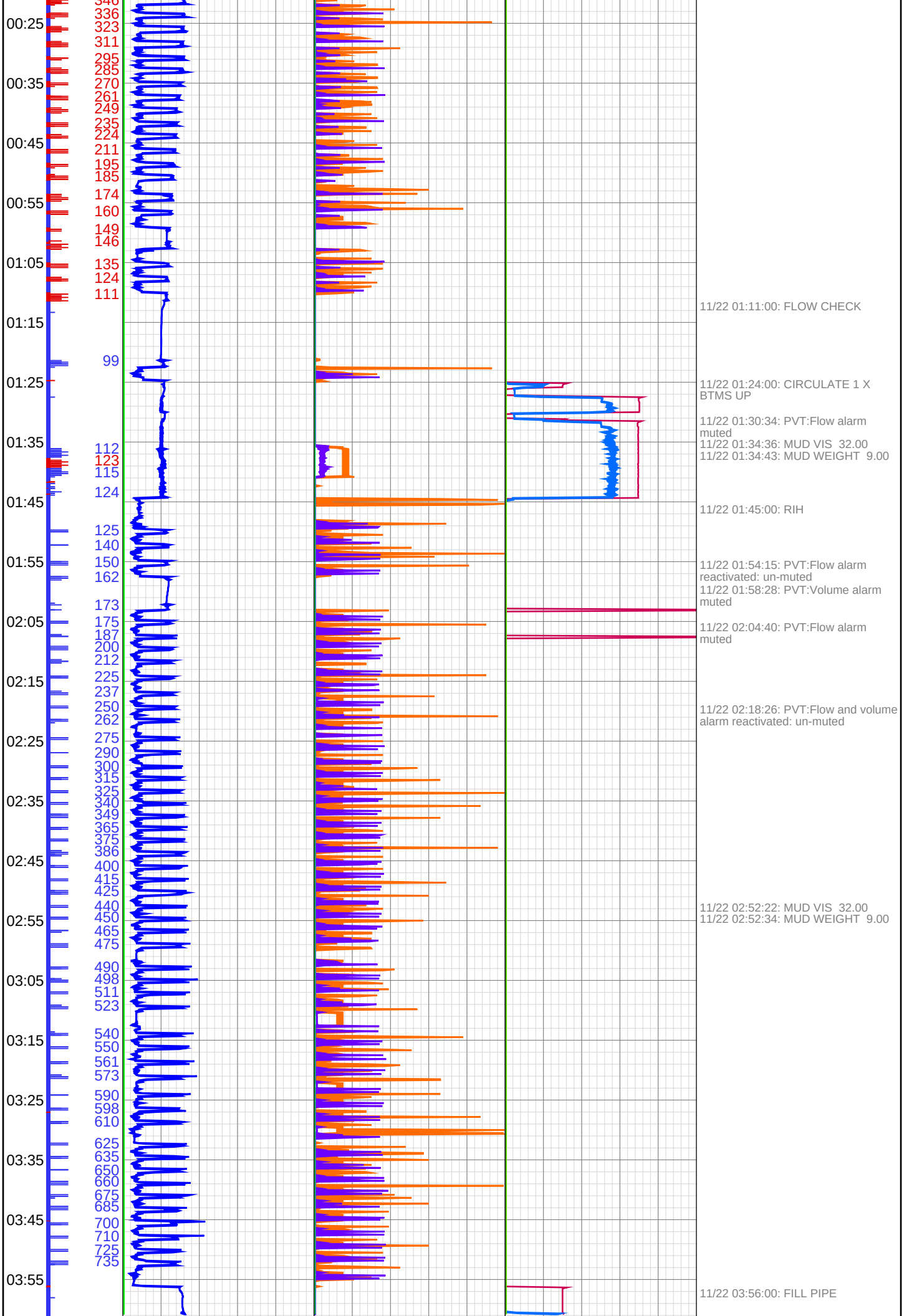
11/21 21:39:16: PVT:Flow alarm muted
11/21 21:40:00: FLOW CHECK
11/21 22:22:03: PVT:Flow alarm reactivated: un-muted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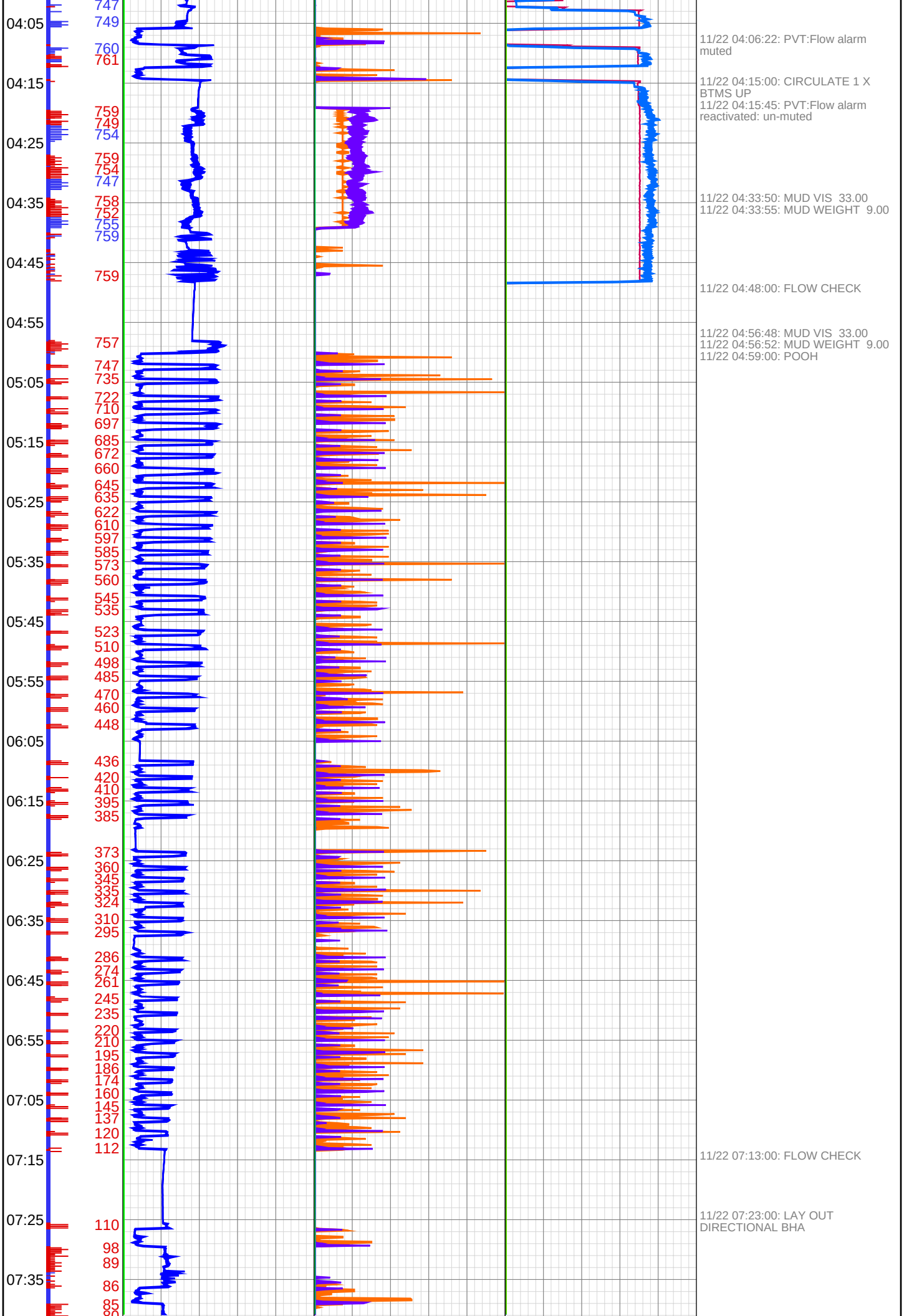
11/22 01:11:00: FLOW CHECK
11/22 01:24:00: CIRCULATE 1 X BTMS UP
11/22 01:30:34: PVT:Flow alarm muted
11/22 01:34:36: MUD VIS 32.00
11/22 01:34:43: MUD WEIGHT 9.00
11/22 01:45:00: RIH
11/22 01:54:15: PVT:Flow alarm reactivated: un-muted
11/22 01:58:28: PVT:Volume alarm muted
11/22 02:04:40: PVT:Flow alarm muted
11/22 02:18:26: PVT:Flow and volume alarm reactivated: un-muted
11/22 02:52:22: MUD VIS 32.00
11/22 02:52:34: MUD WEIGHT 9.00
11/22 03:56:00: FILL PIPE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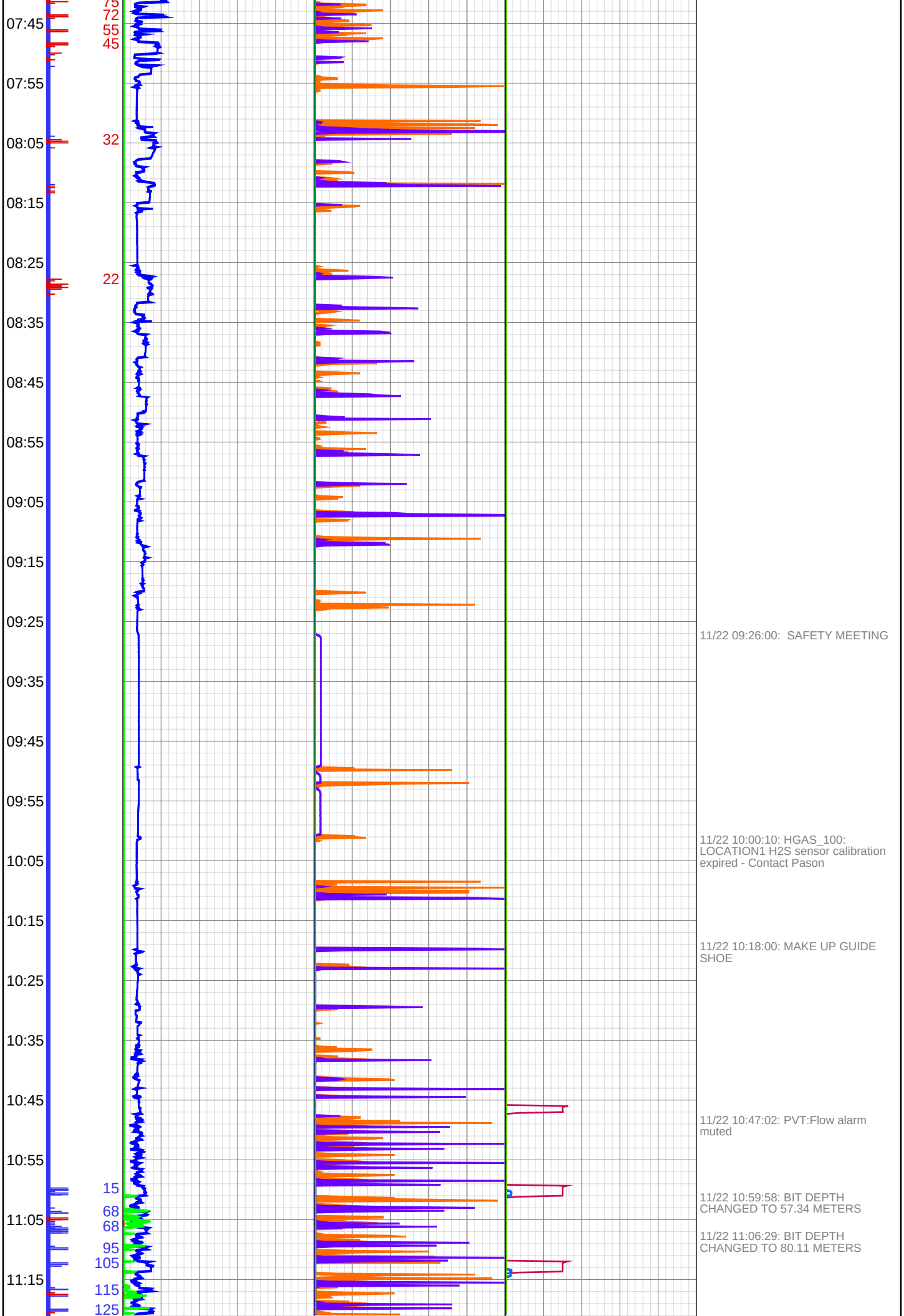
11/22 04:06:22: PVT:Flow alarm muted
11/22 04:15:00: CIRCULATE 1 X BTMS UP
11/22 04:15:45: PVT:Flow alarm reactivated: un-muted
11/22 04:33:50: MUD VIS 33.00
11/22 04:33:55: MUD WEIGHT 9.00
11/22 04:48:00: FLOW CHECK
11/22 04:56:48: MUD VIS 33.00
11/22 04:56:52: MUD WEIGHT 9.00
11/22 04:59:00: POOH
11/22 07:13:00: FLOW CHECK
11/22 07:23:00: LAY OUT DIRECTIONAL BHA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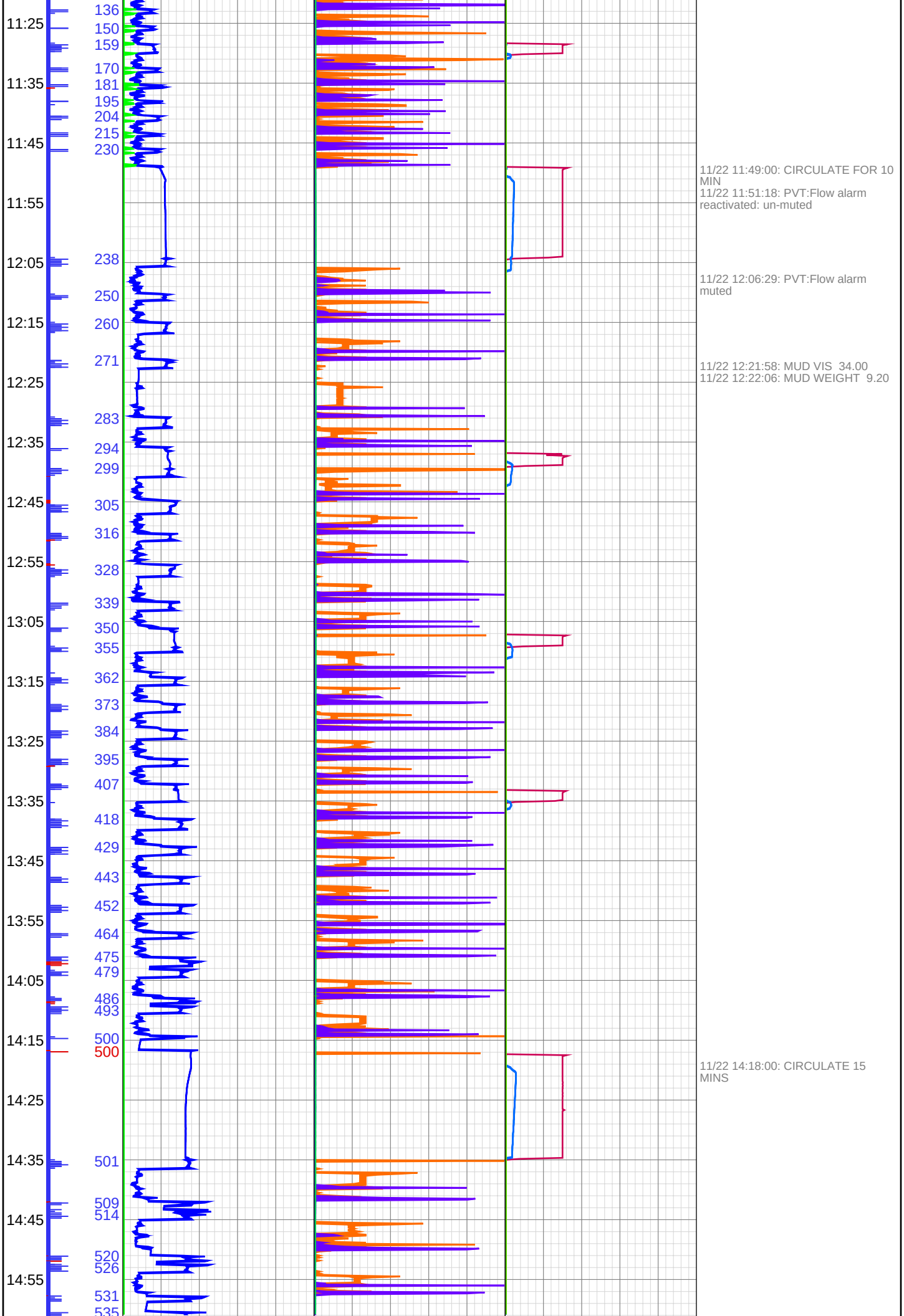
11/22 09:26:00: SAFETY MEETING
11/22 10:00:10: HGAS_100: LOCATION1 H2S sensor calibration expired - Contact Pason
11/22 10:18:00: MAKE UP GUIDE SHOE
11/22 10:47:02: PVT:Flow alarm muted
11/22 10:59:58: BIT DEPTH CHANGED TO 57.34 METERS
11/22 11:06:29: BIT DEPTH CHANGED TO 80.11 METERS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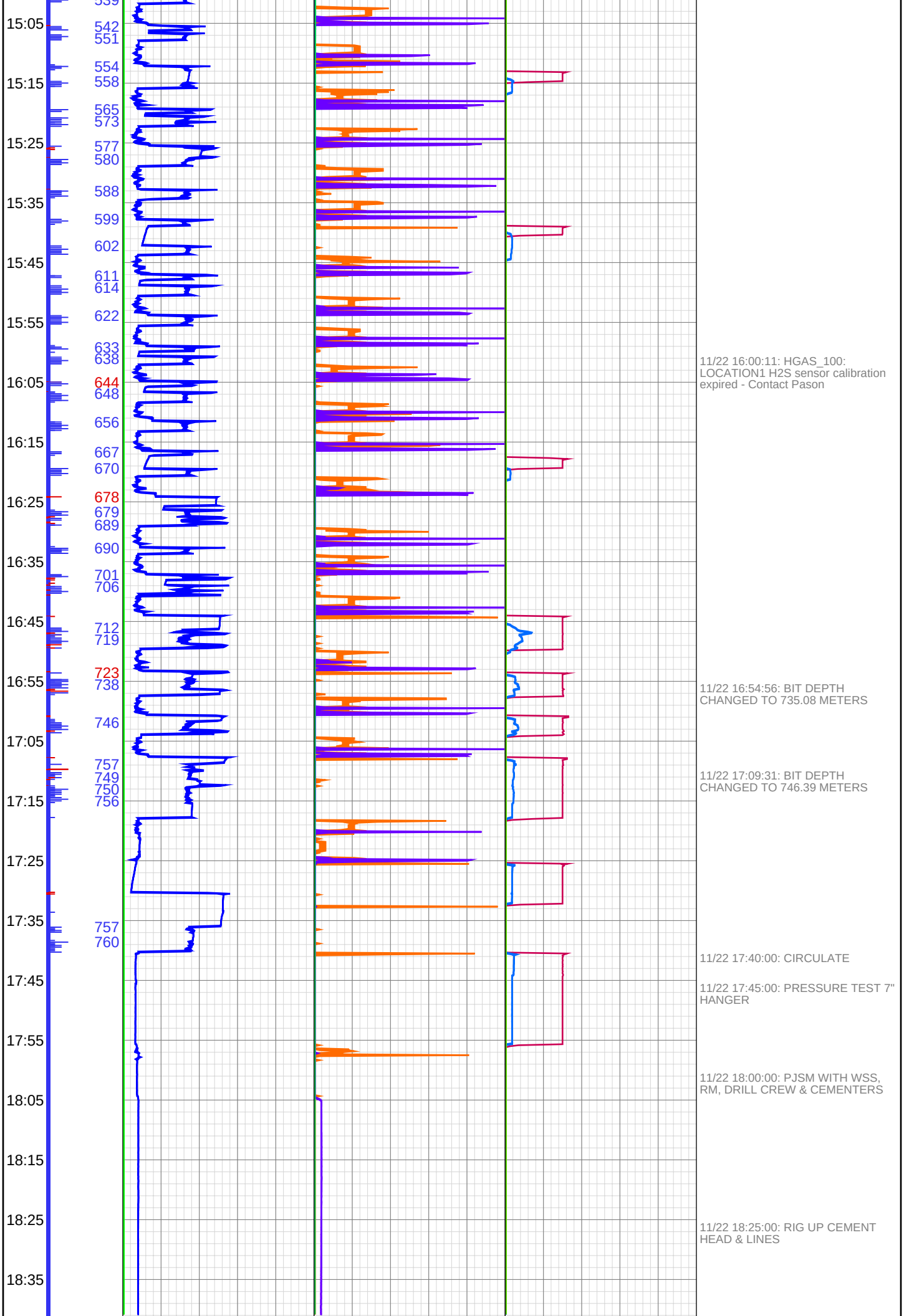
11/22 11:49:00: CIRCULATE FOR 10 MIN
11/22 11:51:18: PVT:Flow alarm reactivated: un-muted
11/22 12:06:29: PVT:Flow alarm muted
11/22 12:21:58: MUD VIS 34.00
11/22 12:22:06: MUD WEIGHT 9.20
11/22 14:18:00: CIRCULATE 15 MINS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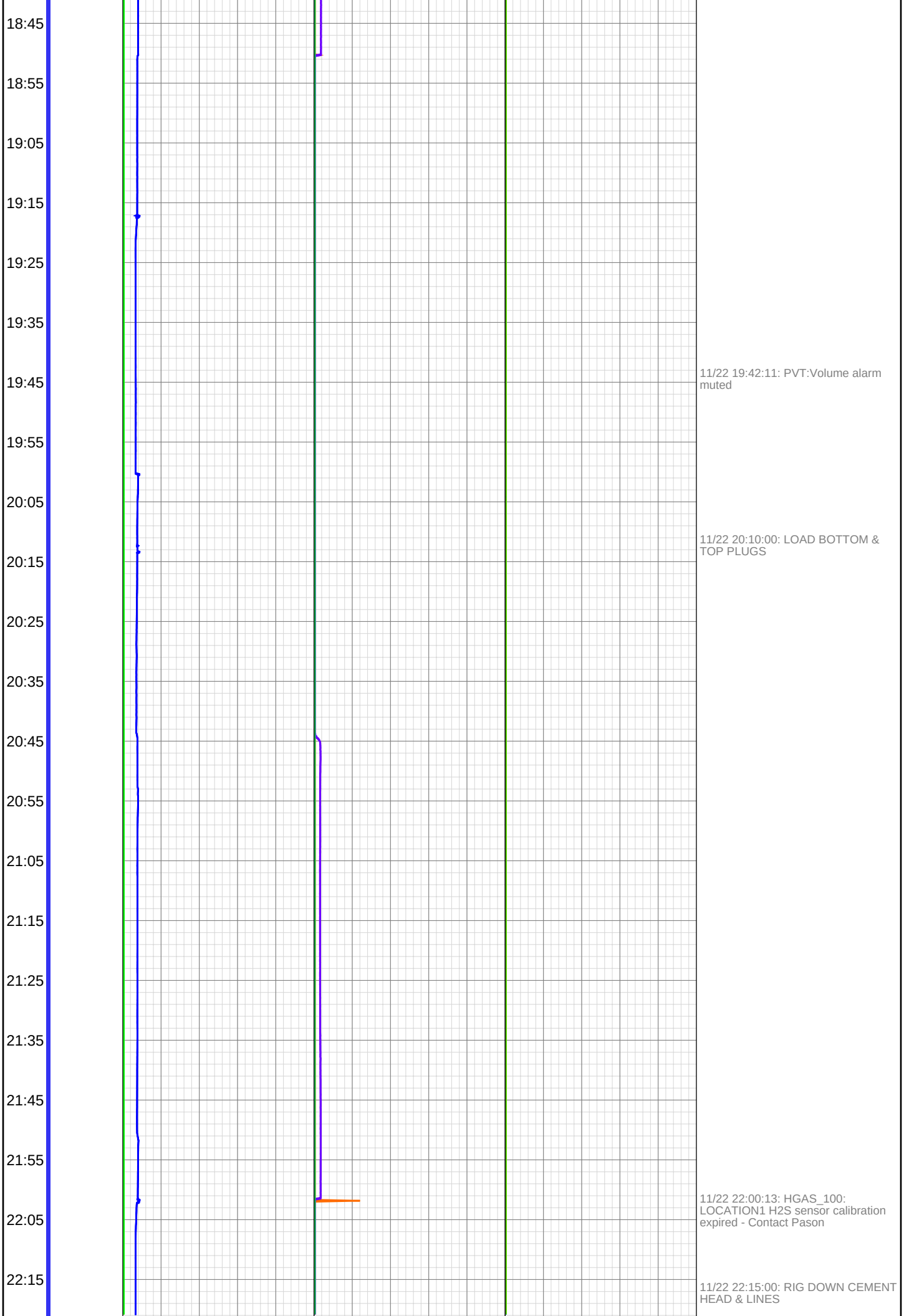
11/22 16:00:11: HGAS_100: LOCATION1 H2S sensor calibration expired - Contact Pason
11/22 16:54:56: BIT DEPTH CHANGED TO 735.08 METERS
11/22 17:09:31: BIT DEPTH CHANGED TO 746.39 METERS
11/22 17:40:00: CIRCULATE
11/22 17:45:00: PRESSURE TEST 7" HANGER
11/22 18:00:00: PJSM WITH WSS, RM, DRILL CREW & CEMENTERS
11/22 18:25:00: RIG UP CEMENT HEAD & LINES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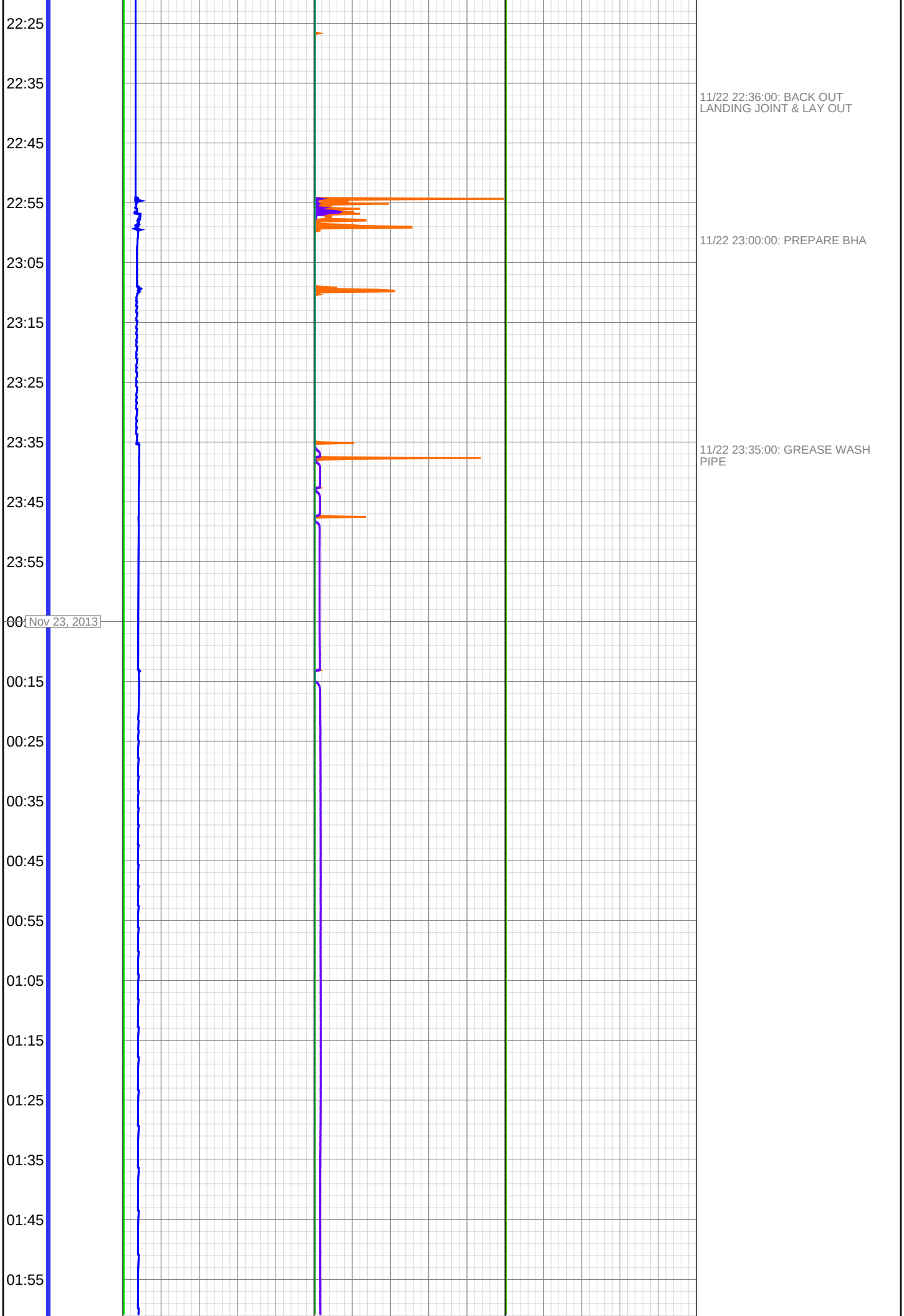
11/22 19:42:11: PVT:Volume alarm muted
11/22 20:10:00: LOAD BOTTOM & TOP PLUGS
11/22 22:00:13: HGAS_100: LOCATION1 H2S sensor calibration expired - Contact Pason
11/22 22:15:00: RIG DOWN CEMENT HEAD & LINES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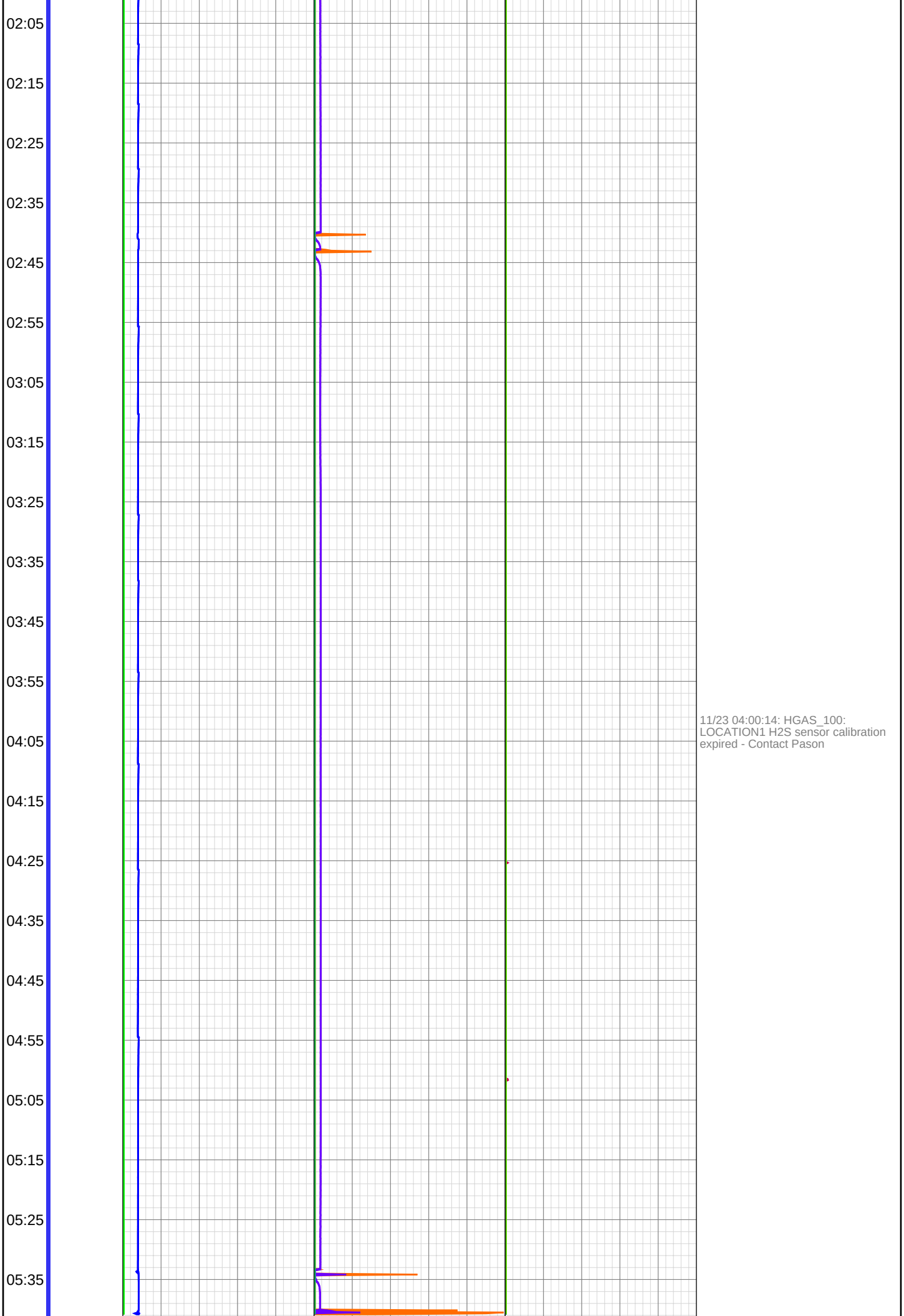
11/22 22:36:00: BACK OUT LANDING JOINT & LAY OUT
11/22 23:00:00: PREPARE BHA
11/22 23:35:00: GREASE WASH PIPE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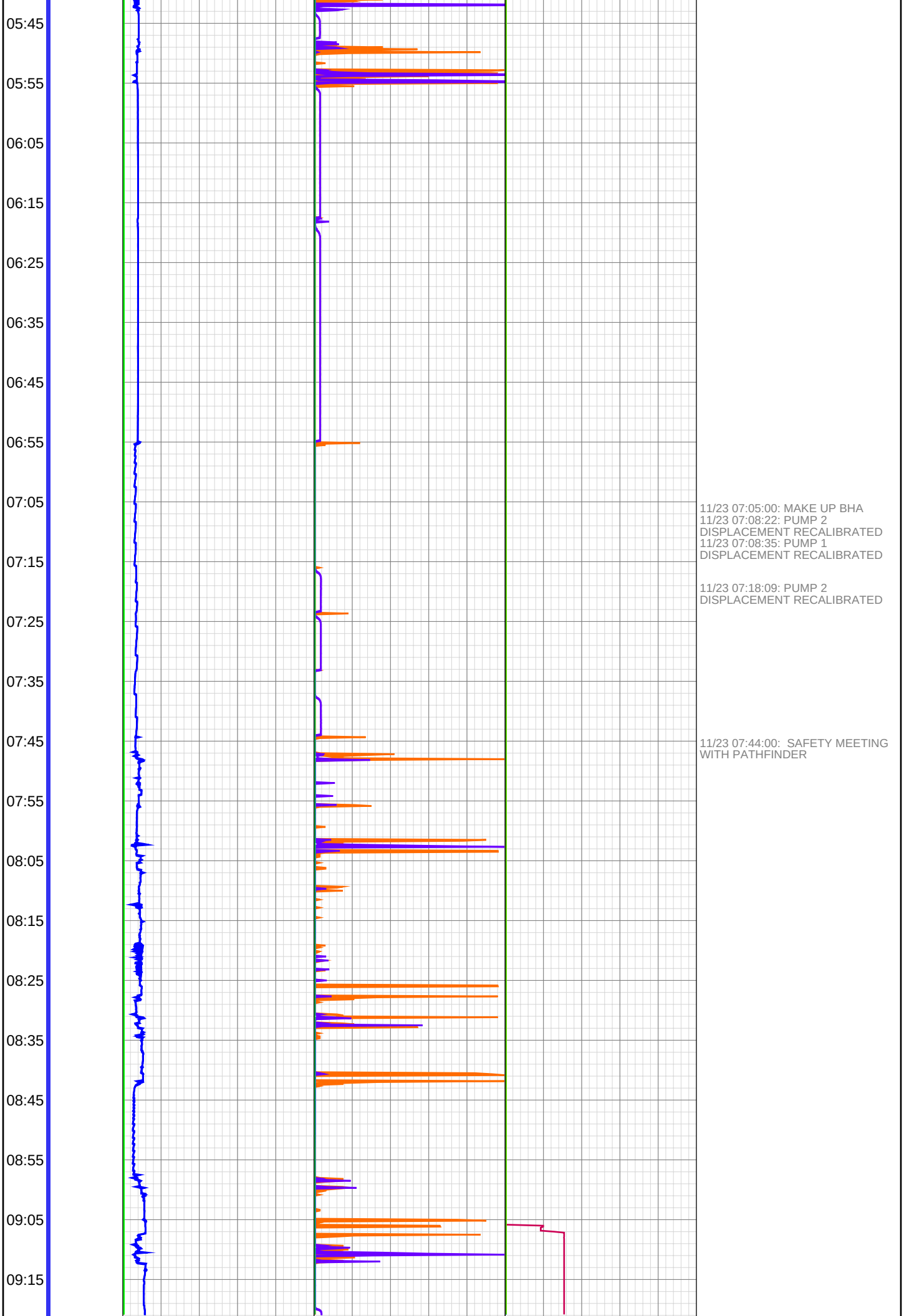
11/23 04:00:14: HGAS_100: LOCATION1 H2S sensor calibration expired - Contact Pason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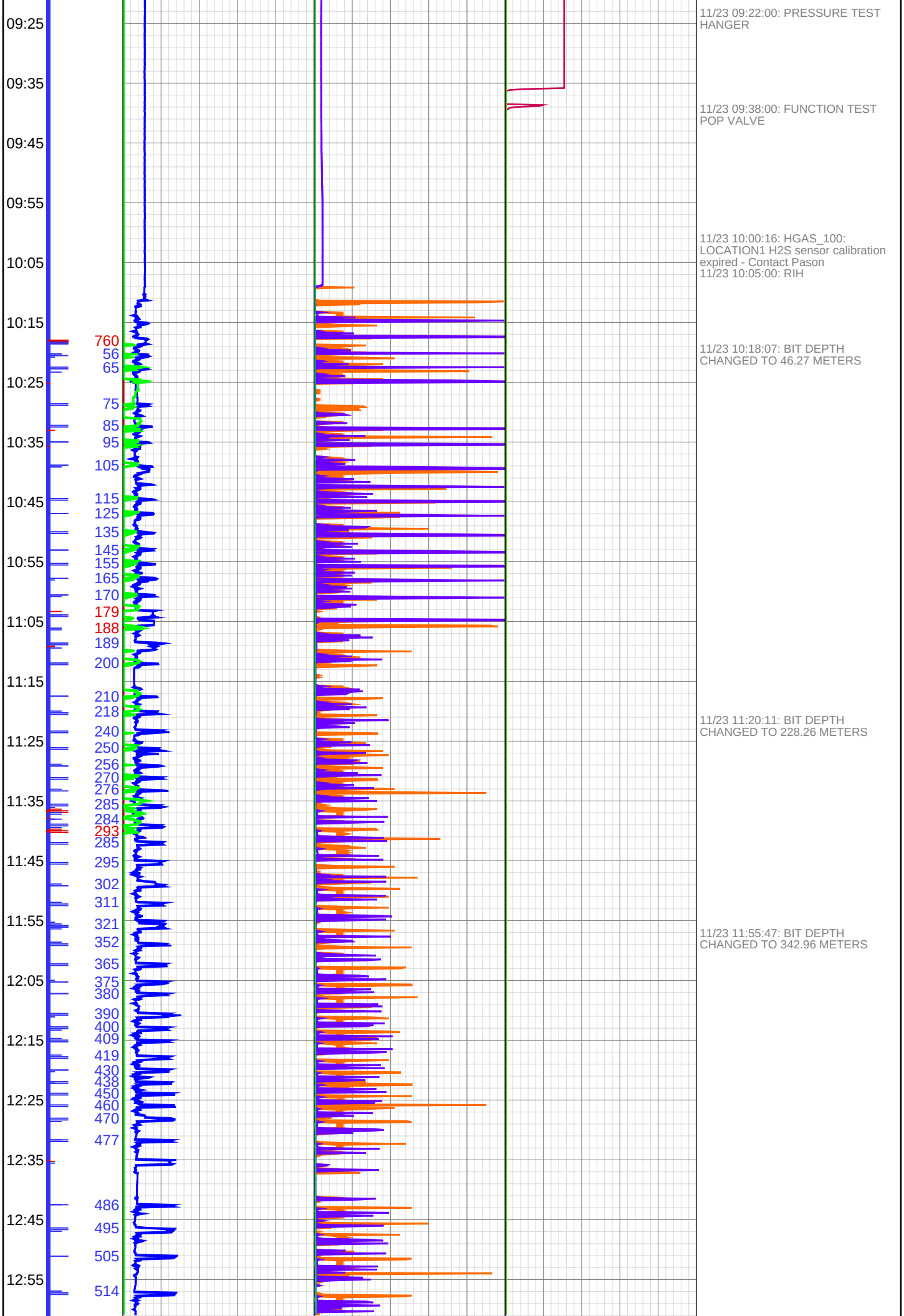
11/23 07:05:00: MAKE UP BHA
11/23 07:08:22: PUMP 2 DISPLACEMENT RECALIBRATED
11/23 07:08:35: PUMP 1 DISPLACEMENT RECALIBRATED
11/23 07:18:09: PUMP 2 DISPLACEMENT RECALIBRATED
11/23 07:44:00: SAFETY MEETING WITH PATHFINDER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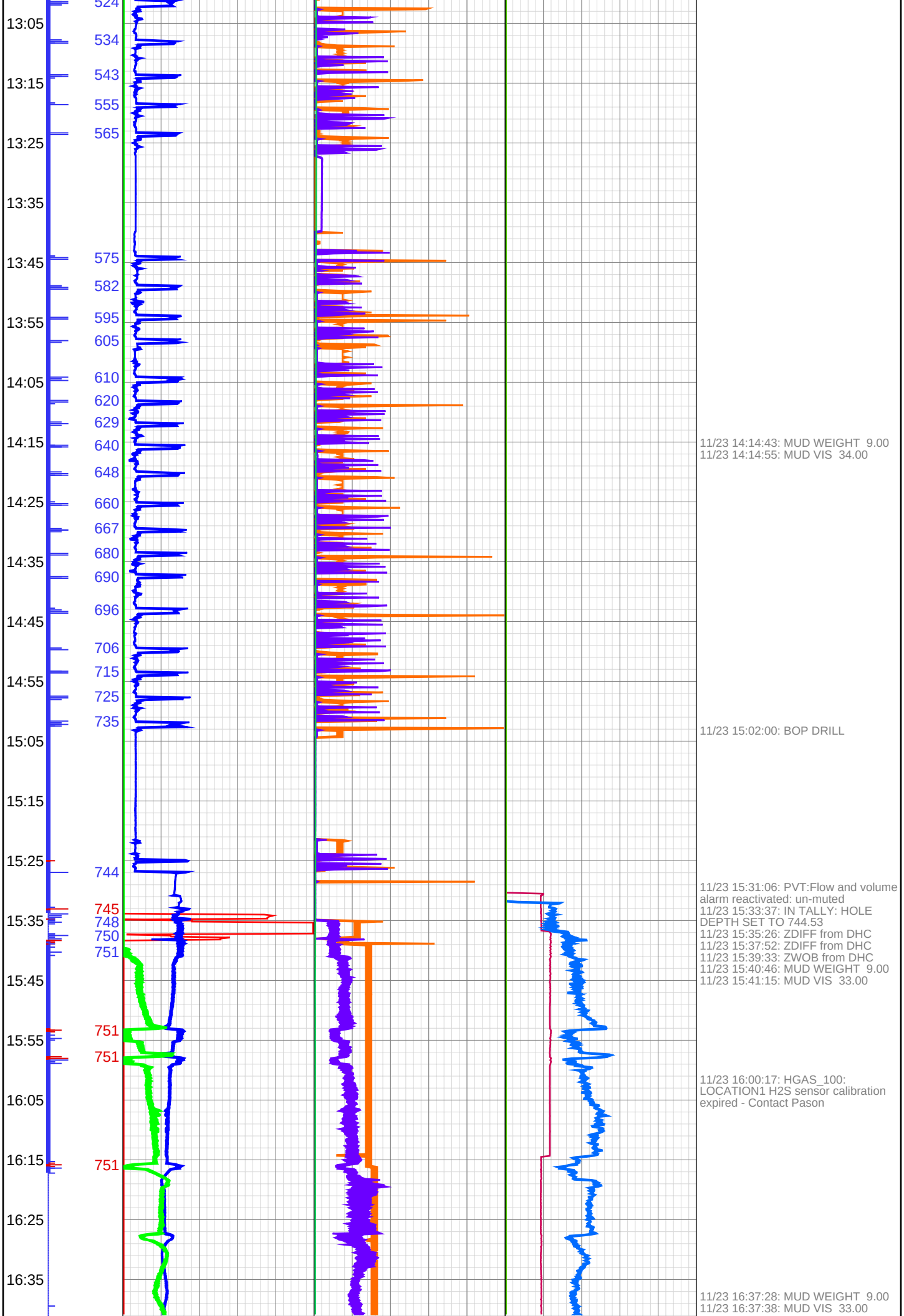
11/23 09:22:00: PRESSURE TEST HANGER
11/23 09:38:00: FUNCTION TEST POP VALVE
11/23 10:00:16: HGAS_100: LOCATION1 H2S sensor calibration expired - Contact Pason
11/23 10:05:00: RIH
11/23 10:18:07: BIT DEPTH CHANGED TO 46.27 METERS
11/23 11:20:11: BIT DEPTH CHANGED TO 228.26 METERS
11/23 11:55:47: BIT DEPTH CHANGED TO 342.96 METERS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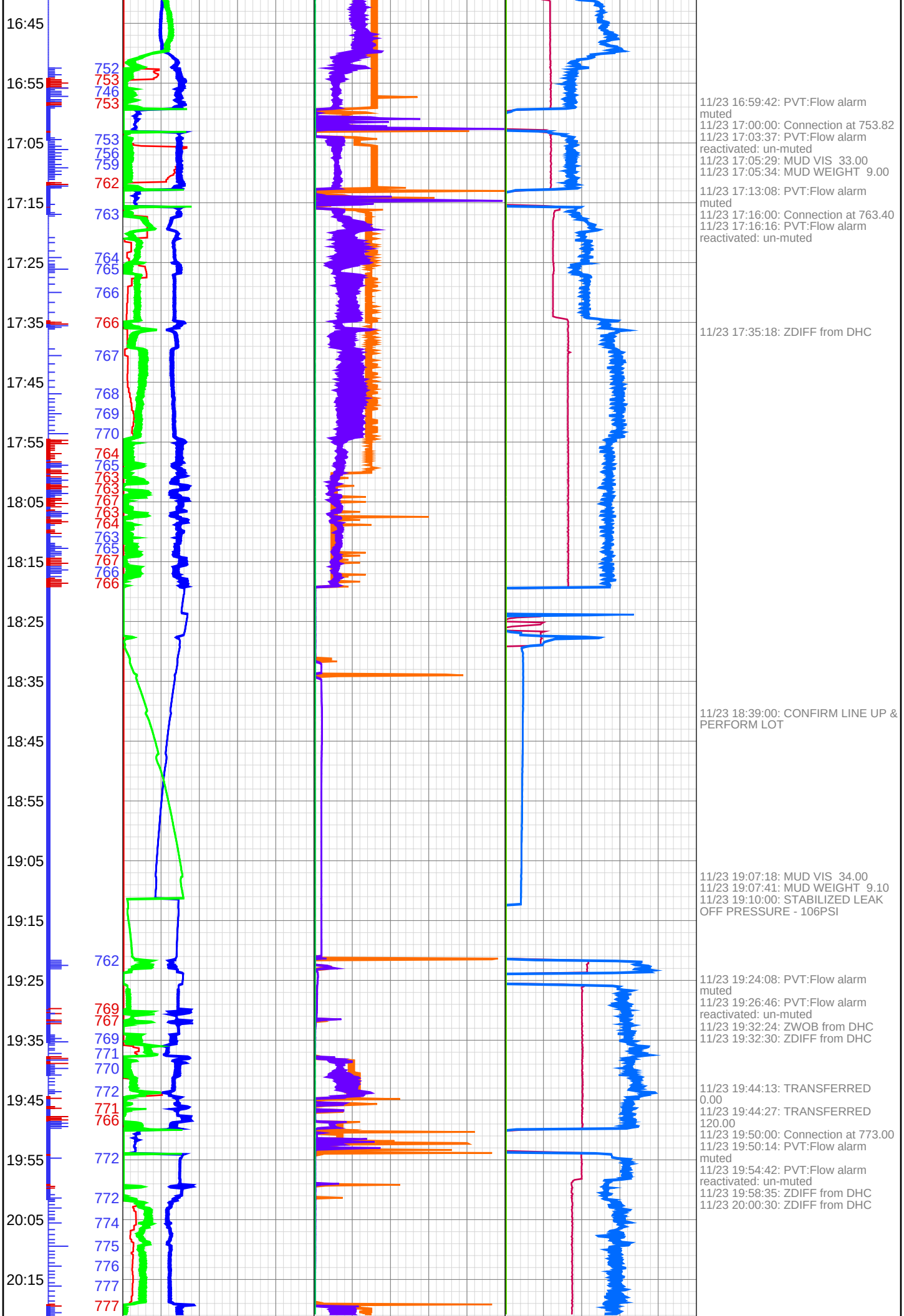
11/23 14:14:43: MUD WEIGHT 9.00
11/23 14:14:55: MUD VIS 34.00
11/23 15:02:00: BOP DRILL
11/23 15:31:06: PVT:Flow and volume alarm reactivated: un-muted
11/23 15:33:37: IN TALLY: HOLE DEPTH SET TO 744.53
11/23 15:35:26: ZDIFF from DHC
11/23 15:37:52: ZDIFF from DHC
11/23 15:39:33: ZWOB from DHC
11/23 15:40:46: MUD WEIGHT 9.00
11/23 15:41:15: MUD VIS 33.00
11/23 16:00:17: HGAS_100: LOCATION1 H2S sensor calibration expired - Contact Pason
11/23 16:37:28: MUD WEIGHT 9.00
11/23 16:37:38: MUD VIS 33.00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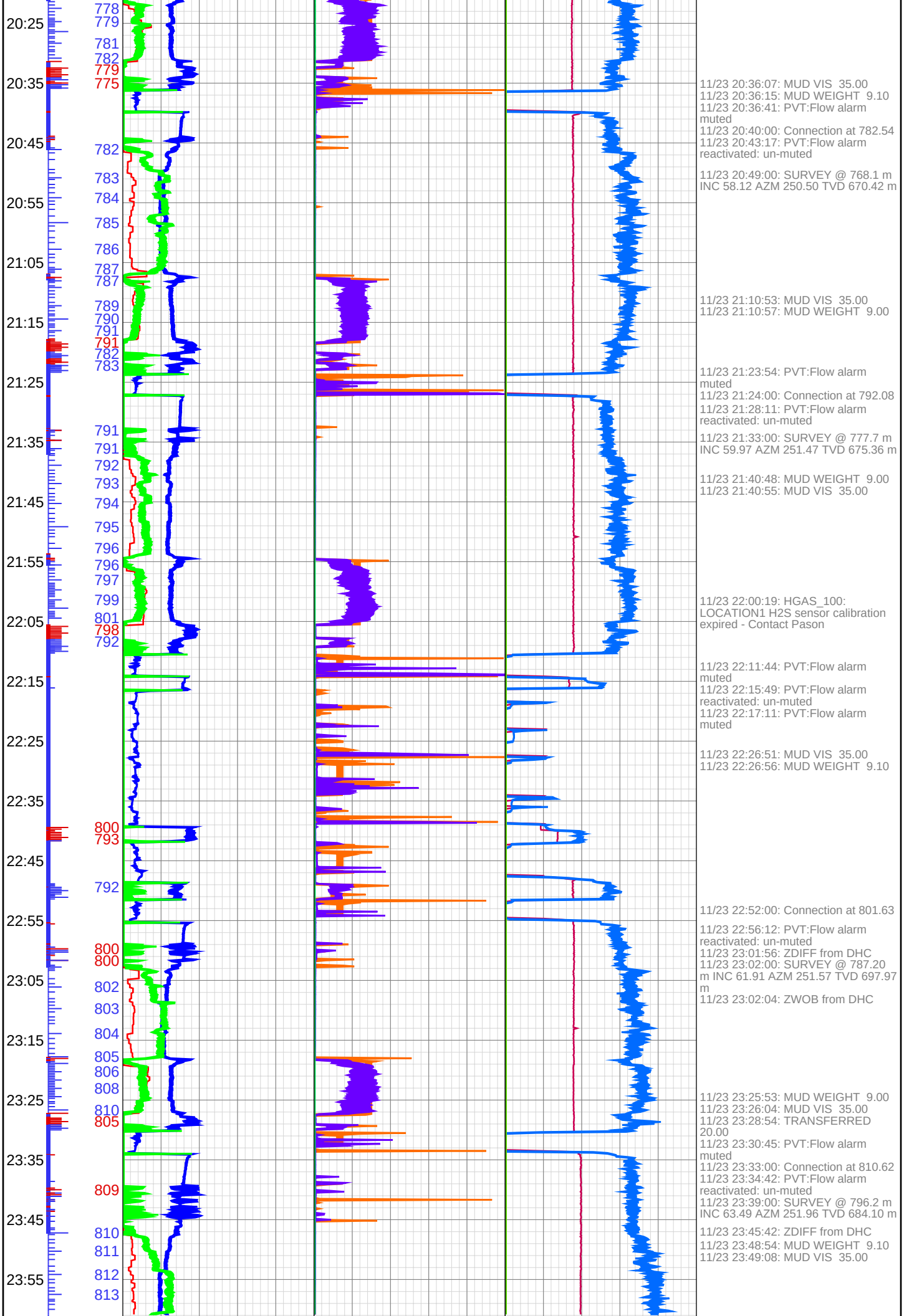
11/23 16:59:42: PVT:Flow alarm muted
11/23 17:00:00: Connection at 753.82
11/23 17:03:37: PVT:Flow alarm reactivated: un-muted
11/23 17:05:29: MUD VIS 33.00
11/23 17:05:34: MUD WEIGHT 9.00
11/23 17:13:08: PVT:Flow alarm muted
11/23 17:16:00: Connection at 763.40
11/23 17:16:16: PVT:Flow alarm reactivated: un-muted
11/23 17:35:18: ZDIFF from DHC
11/23 18:39:00: CONFIRM LINE UP & PERFORM LOT
11/23 19:07:18: MUD VIS 34.00
11/23 19:07:41: MUD WEIGHT 9.10
11/23 19:10:00: STABILIZED LEAK OFF PRESSURE - 106PSI
11/23 19:24:08: PVT:Flow alarm muted
11/23 19:26:46: PVT:Flow alarm reactivated: un-muted
11/23 19:32:24: ZWOB from DHC
11/23 19:32:30: ZDIFF from DHC
11/23 19:44:13: TRANSFERRED 0.00
11/23 19:44:27: TRANSFERRED 120.00
11/23 19:50:00: Connection at 773.00
11/23 19:50:14: PVT:Flow alarm muted
11/23 19:54:42: PVT:Flow alarm reactivated: un-muted
11/23 19:58:35: ZDIFF from DHC
11/23 20:00:30: ZDIFF from DHC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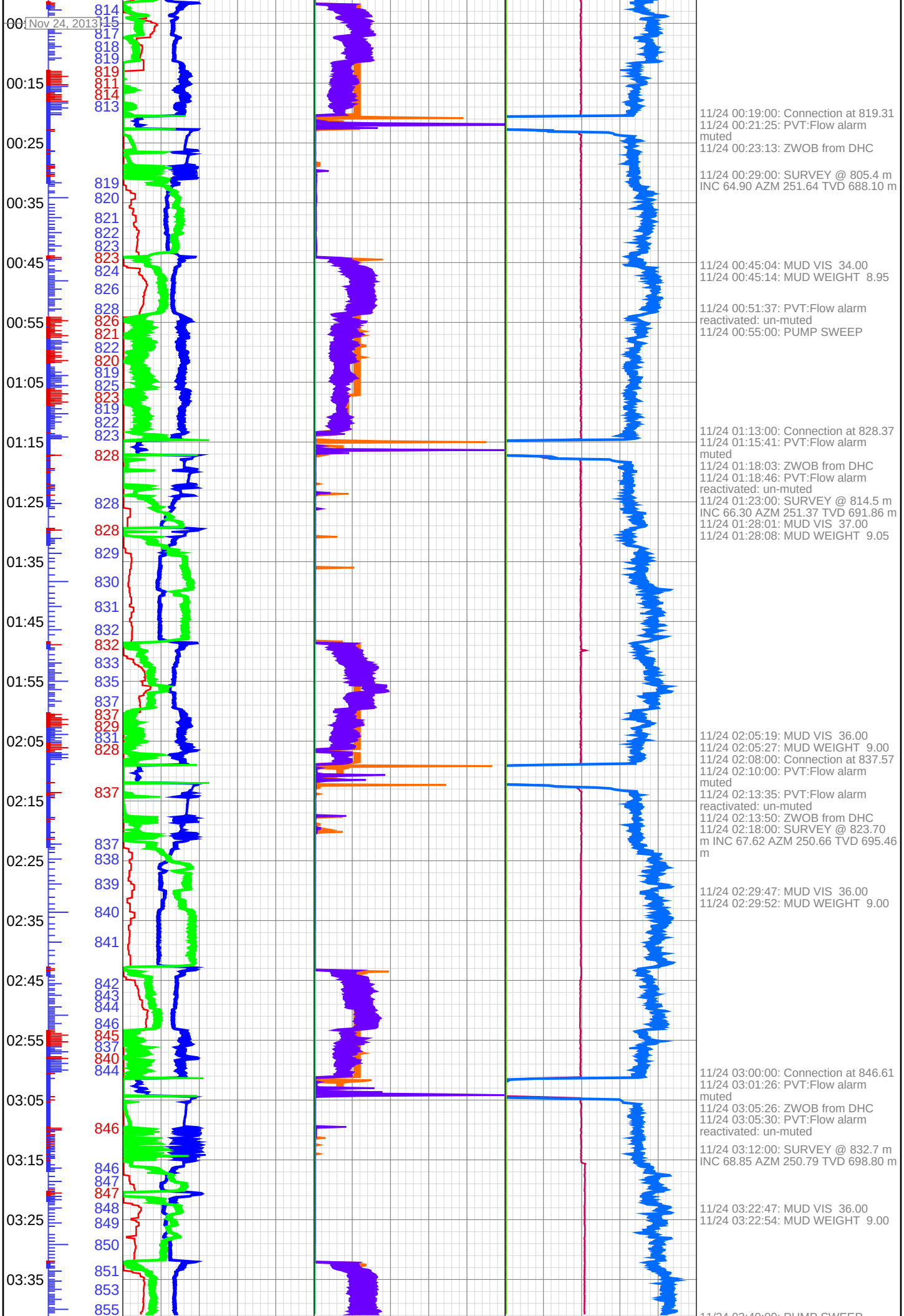
11/23 20:36:07: MUD VIS 35.00
11/23 20:36:15: MUD WEIGHT 9.10
11/23 20:36:41: PVT:Flow alarm muted
11/23 20:40:00: Connection at 782.54
11/23 20:43:17: PVT:Flow alarm reactivated: un-muted
11/23 20:49:00: SURVEY @ 768.1 m INC 58.12 AZM 250.50 TVD 670.42 m
11/23 21:10:53: MUD VIS 35.00
11/23 21:10:57: MUD WEIGHT 9.00
11/23 21:23:54: PVT:Flow alarm muted
11/23 21:24:00: Connection at 792.08
11/23 21:28:11: PVT:Flow alarm reactivated: un-muted
11/23 21:33:00: SURVEY @ 777.7 m INC 59.97 AZM 251.47 TVD 675.36 m
11/23 21:40:48: MUD WEIGHT 9.00
11/23 21:40:55: MUD VIS 35.00
11/23 22:00:19: HGAS_100: LOCATION1 H2S sensor calibration expired - Contact Pason
11/23 22:11:44: PVT:Flow alarm muted
11/23 22:15:49: PVT:Flow alarm reactivated: un-muted
11/23 22:17:11: PVT:Flow alarm muted
11/23 22:26:51: MUD VIS 35.00
11/23 22:26:56: MUD WEIGHT 9.10
11/23 22:52:00: Connection at 801.63
11/23 22:56:12: PVT:Flow alarm reactivated: un-muted
11/23 23:01:56: ZDIFF from DHC
11/23 23:02:00: SURVEY @ 787.20 m INC 61.91 AZM 251.57 TVD 697.97 m
11/23 23:02:04: ZWOB from DHC
11/23 23:25:53: MUD WEIGHT 9.00
11/23 23:26:04: MUD VIS 35.00
11/23 23:28:54: TRANSFERRED 20.00
11/23 23:30:45: PVT:Flow alarm muted
11/23 23:33:00: Connection at 810.62
11/23 23:34:42: PVT:Flow alarm reactivated: un-muted
11/23 23:39:00: SURVEY @ 796.2 m INC 63.49 AZM 251.96 TVD 684.10 m
11/23 23:45:42: ZDIFF from DHC
11/23 23:48:54: MUD WEIGHT 9.10
11/23 23:49:08: MUD VIS 35.00


Nov 24, 2013
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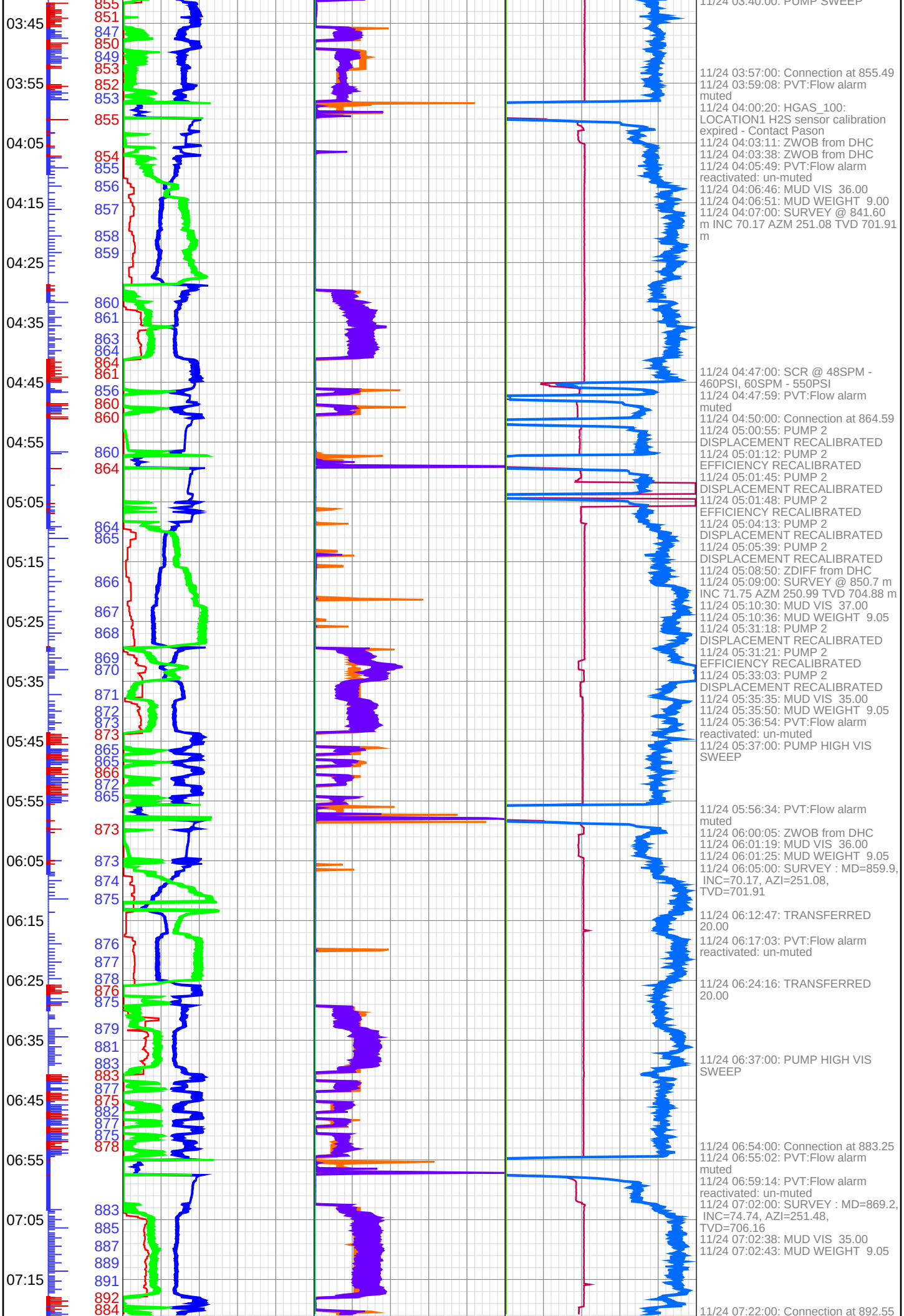
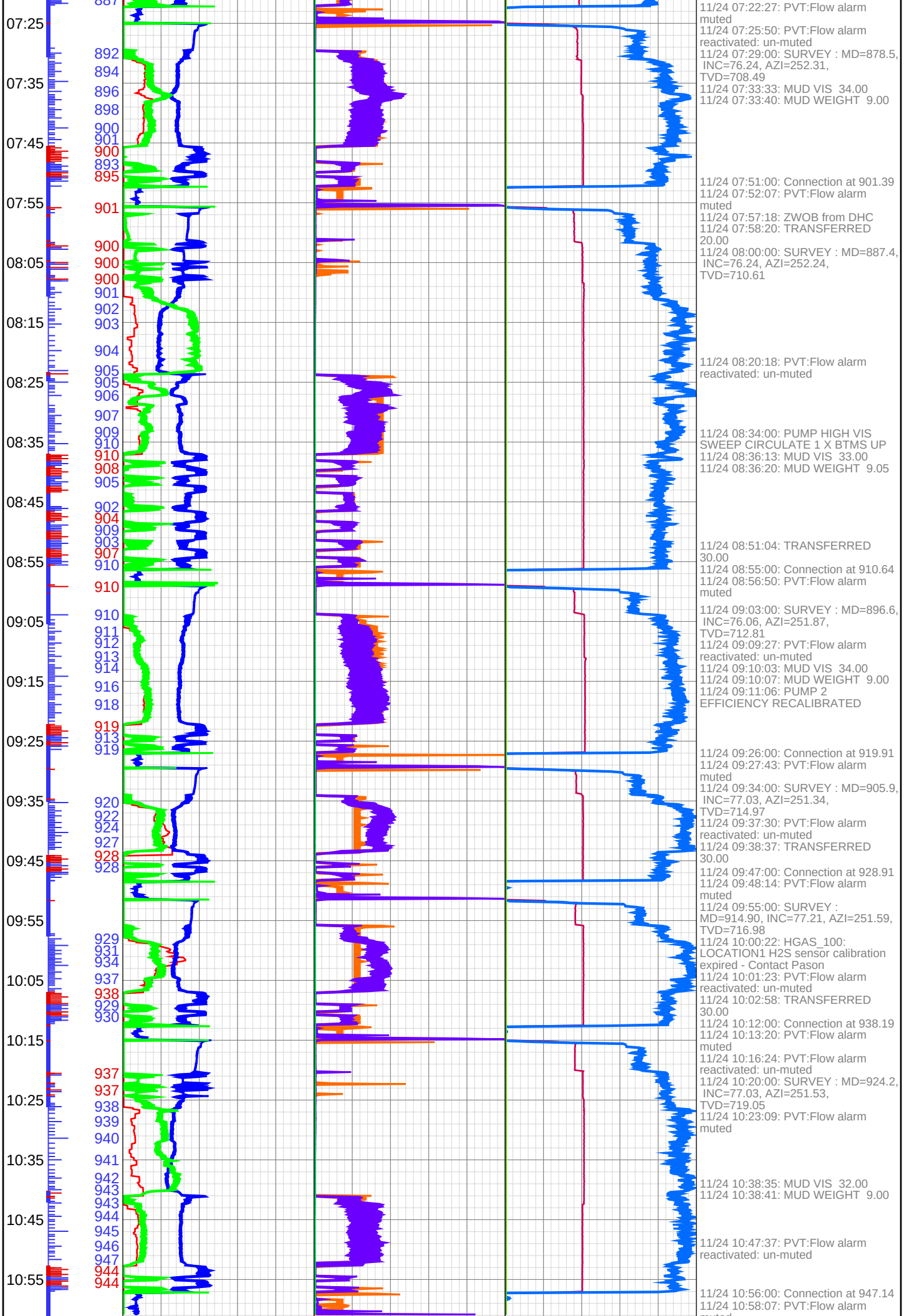
11/24 00:19:00: Connection at 819.31
11/24 00:21:25: PVT:Flow alarm muted
11/24 00:23:13: ZWOB from DHC
11/24 00:29:00: SURVEY @ 805.4 m INC 64.90 AZM 251.64 TVD 688.10 m
11/24 00:45:04: MUD VIS 34.00
11/24 00:45:14: MUD WEIGHT 8.95
11/24 00:51:37: PVT:Flow alarm reactivated: un-muted
11/24 00:55:00: PUMP SWEEP
11/24 01:13:00: Connection at 828.37
11/24 01:15:41: PVT:Flow alarm muted
11/24 01:18:03: ZWOB from DHC
11/24 01:18:46: PVT:Flow alarm reactivated: un-muted
11/24 01:23:00: SURVEY @ 814.5 m INC 66.30 AZM 251.37 TVD 691.86 m
11/24 01:28:01: MUD VIS 37.00
11/24 01:28:08: MUD WEIGHT 9.05
11/24 02:05:19: MUD VIS 36.00
11/24 02:05:27: MUD WEIGHT 9.00
11/24 02:08:00: Connection at 837.57
11/24 02:10:00: PVT:Flow alarm muted
11/24 02:13:35: PVT:Flow alarm reactivated: un-muted
11/24 02:13:50: ZWOB from DHC
11/24 02:18:00: SURVEY @ 823.70 m INC 67.62 AZM 250.66 TVD 695.46 m
11/24 02:29:47: MUD VIS 36.00
11/24 02:29:52: MUD WEIGHT 9.00
11/24 03:00:00: Connection at 846.61
11/24 03:01:26: PVT:Flow alarm muted
11/24 03:05:26: ZWOB from DHC
11/24 03:05:30: PVT:Flow alarm reactivated: un-muted
11/24 03:12:00: SURVEY @ 832.7 m INC 68.85 AZM 250.79 TVD 698.80 m
11/24 03:22:47: MUD VIS 36.00
11/24 03:22:54: MUD WEIGHT 9.00


11/24 03:40:00: PUMP SWEEP
11/24 03:57:00: Connection at 855.49
11/24 03:59:08: PVT:Flow alarm muted
11/24 04:00:20: HGAS_100: LOCATION1 H2S sensor calibration expired - Contact Pason
11/24 04:03:11: ZWOB from DHC
11/24 04:03:38: ZWOB from DHC
11/24 04:05:49: PVT:Flow alarm reactivated: un-muted
11/24 04:06:46: MUD VIS 36.00
11/24 04:06:51: MUD WEIGHT 9.00
11/24 04:07:00: SURVEY @ 841.60 m INC 70.17 AZM 251.08 TVD 701.91 m
11/24 04:47:00: SCR @ 48SPM - 460PSI, 60SPM - 550PSI
11/24 04:47:59: PVT:Flow alarm muted
11/24 04:50:00: Connection at 864.59
11/24 05:00:55: PUMP 2 DISPLACEMENT RECALIBRATED
11/24 05:01:12: PUMP 2 EFFICIENCY RECALIBRATED
11/24 05:01:45: PUMP 2 DISPLACEMENT RECALIBRATED
11/24 05:01:48: PUMP 2 EFFICIENCY RECALIBRATED
11/24 05:04:13: PUMP 2 DISPLACEMENT RECALIBRATED
11/24 05:05:39: PUMP 2 DISPLACEMENT RECALIBRATED
11/24 05:08:50: ZDIFF from DHC
11/24 05:09:00: SURVEY @ 850.7 m INC 71.75 AZM 250.99 TVD 704.88 m
11/24 05:10:30: MUD VIS 37.00
11/24 05:10:36: MUD WEIGHT 9.05
11/24 05:31:18: PUMP 2 DISPLACEMENT RECALIBRATED
11/24 05:31:21: PUMP 2 EFFICIENCY RECALIBRATED
11/24 05:33:03: PUMP 2 DISPLACEMENT RECALIBRATED
11/24 05:35:35: MUD VIS 35.00
11/24 05:35:50: MUD WEIGHT 9.05
11/24 05:36:54: PVT:Flow alarm reactivated: un-muted
11/24 05:37:00: PUMP HIGH VIS SWEEP
11/24 05:56:34: PVT:Flow alarm muted
11/24 06:00:05: ZWOB from DHC
11/24 06:01:19: MUD VIS 36.00
11/24 06:01:25: MUD WEIGHT 9.05
11/24 06:05:00: SURVEY : MD=859.9, INC=70.17, AZI=251.08, TVD=701.91
11/24 06:12:47: TRANSFERRED 20.00
11/24 06:17:03: PVT:Flow alarm reactivated: un-muted
11/24 06:24:16: TRANSFERRED 20.00
11/24 06:37:00: PUMP HIGH VIS SWEEP
11/24 06:54:00: Connection at 883.25
11/24 06:55:02: PVT:Flow alarm muted
11/24 06:59:14: PVT:Flow alarm reactivated: un-muted
11/24 07:02:00: SURVEY : MD=869.2, INC=74.74, AZI=251.48, TVD=706.16
11/24 07:02:38: MUD VIS 35.00
11/24 07:02:43: MUD WEIGHT 9.05
11/24 07:22:00: Connection at 892.55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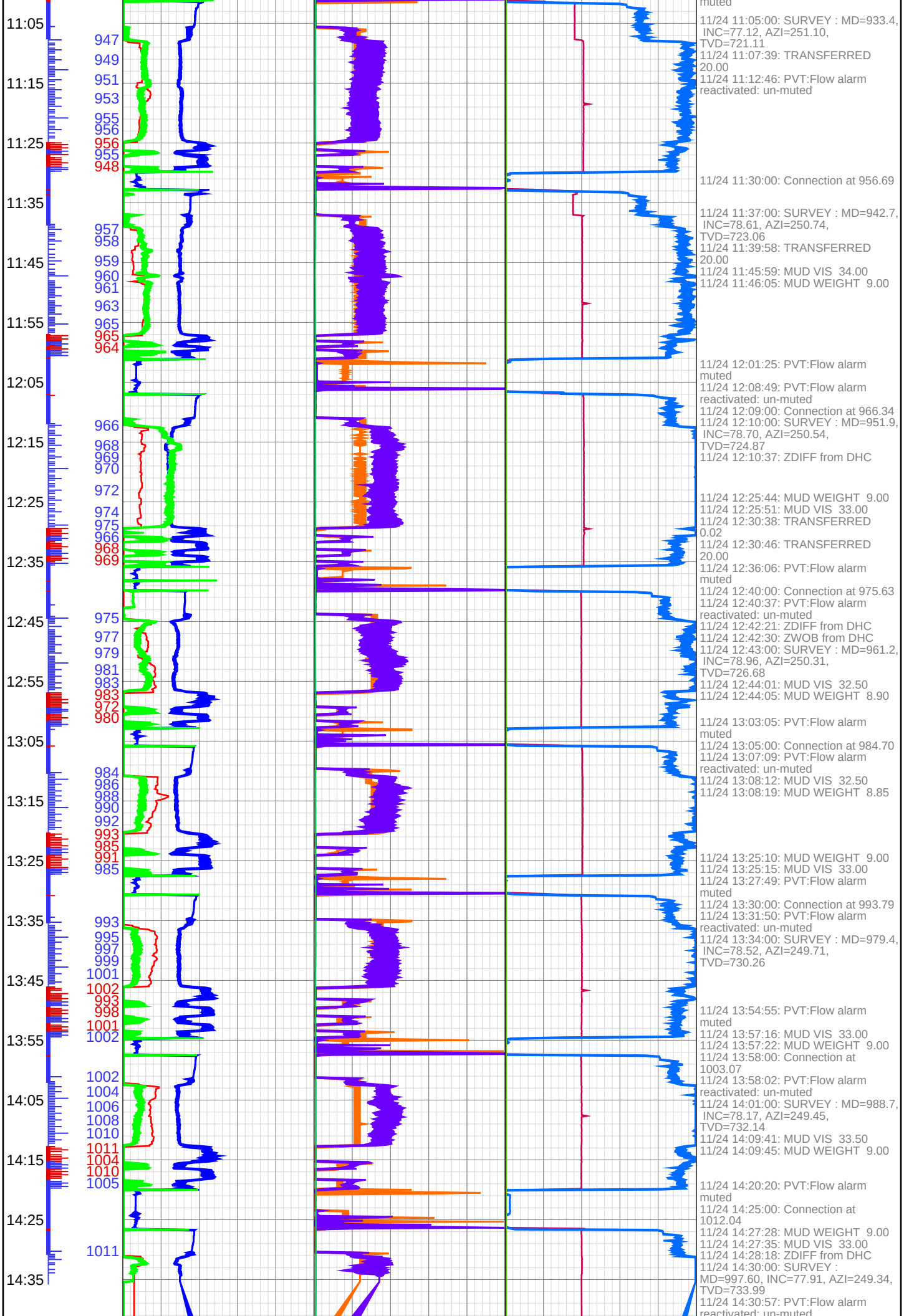
11/24 07:22:27: PVT:Flow alarm muted
11/24 07:25:50: PVT:Flow alarm reactivated: un-muted
11/24 07:29:00: SURVEY : MD=878.5, INC=76.24, AZI=252.31, TVD=708.49
11/24 07:33:33: MUD VIS 34.00
11/24 07:33:40: MUD WEIGHT 9.00
11/24 07:51:00: Connection at 901.39
11/24 07:52:07: PVT:Flow alarm muted
11/24 07:57:18: ZWOB from DHC
11/24 07:58:20: TRANSFERRED 20.00
11/24 08:00:00: SURVEY : MD=887.4, INC=76.24, AZI=252.24, TVD=710.61
11/24 08:20:18: PVT:Flow alarm reactivated: un-muted
11/24 08:34:00: PUMP HIGH VIS SWEEP CIRCULATE 1 X BTMS UP
11/24 08:36:13: MUD VIS 33.00
11/24 08:36:20: MUD WEIGHT 9.05
11/24 08:51:04: TRANSFERRED 30.00
11/24 08:55:00: Connection at 910.64
11/24 08:56:50: PVT:Flow alarm muted
11/24 09:03:00: SURVEY : MD=896.6, INC=76.06, AZI=251.87, TVD=712.81
11/24 09:09:27: PVT:Flow alarm reactivated: un-muted
11/24 09:10:03: MUD VIS 34.00
11/24 09:10:07: MUD WEIGHT 9.00
11/24 09:11:06: PUMP 2 EFFICIENCY RECALIBRATED
11/24 09:26:00: Connection at 919.91
11/24 09:27:43: PVT:Flow alarm muted
11/24 09:34:00: SURVEY : MD=905.9, INC=77.03, AZI=251.34, TVD=714.97
11/24 09:37:30: PVT:Flow alarm reactivated: un-muted
11/24 09:38:37: TRANSFERRED 30.00
11/24 09:47:00: Connection at 928.91
11/24 09:48:14: PVT:Flow alarm muted
11/24 09:55:00: SURVEY : MD=914.90, INC=77.21, AZI=251.59, TVD=716.98
11/24 10:00:22: HGAS_100: LOCATION1 H2S sensor calibration expired - Contact Pason
11/24 10:01:23: PVT:Flow alarm reactivated: un-muted
11/24 10:02:58: TRANSFERRED 30.00
11/24 10:12:00: Connection at 938.19
11/24 10:13:20: PVT:Flow alarm muted
11/24 10:16:24: PVT:Flow alarm reactivated: un-muted
11/24 10:20:00: SURVEY : MD=924.2, INC=77.03, AZI=251.53, TVD=719.05
11/24 10:23:09: PVT:Flow alarm muted
11/24 10:38:35: MUD VIS 32.00
11/24 10:38:41: MUD WEIGHT 9.00
11/24 10:47:37: PVT:Flow alarm reactivated: un-muted
11/24 10:56:00: Connection at 947.14
11/24 10:58:07: PVT:Flow alarm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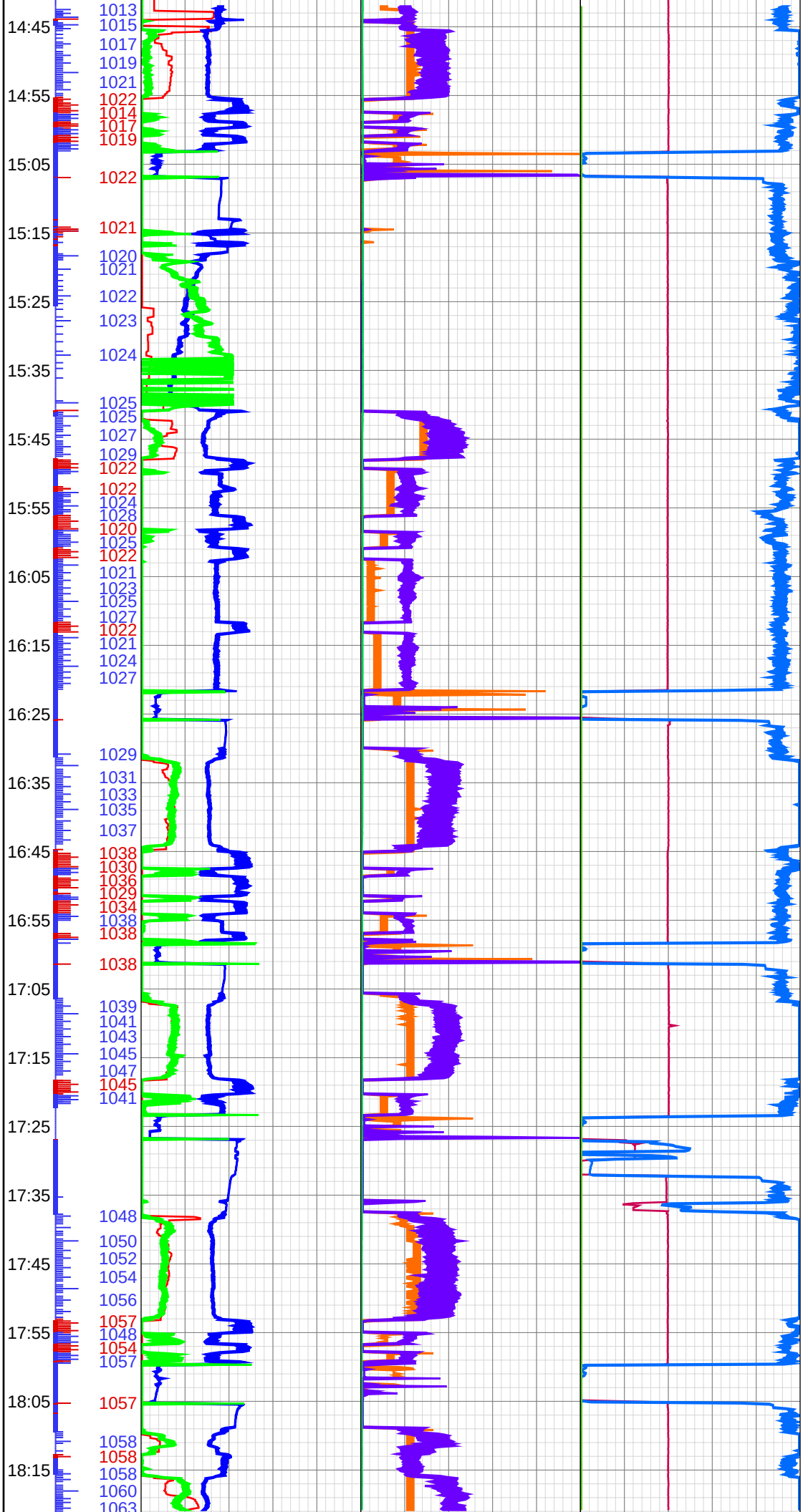
muted
11/24 11:05:00: SURVEY : MD=933.4, INC=77.12, AZI=251.10, TVD=721.11
11/24 11:07:39: TRANSFERRED 20.00
11/24 11:12:46: PVT:Flow alarm reactivated: un-muted
11/24 11:30:00: Connection at 956.69
11/24 11:37:00: SURVEY : MD=942.7, INC=78.61, AZI=250.74, TVD=723.06
11/24 11:39:58: TRANSFERRED 20.00
11/24 11:45:59: MUD VIS 34.00
11/24 11:46:05: MUD WEIGHT 9.00
11/24 12:01:25: PVT:Flow alarm muted
11/24 12:08:49: PVT:Flow alarm reactivated: un-muted
11/24 12:09:00: Connection at 966.34
11/24 12:10:00: SURVEY : MD=951.9, INC=78.70, AZI=250.54, TVD=724.87
11/24 12:10:37: ZDIFF from DHC
11/24 12:25:44: MUD WEIGHT 9.00
11/24 12:25:51: MUD VIS 33.00
11/24 12:30:38: TRANSFERRED 0.02
11/24 12:30:46: TRANSFERRED 20.00
11/24 12:36:06: PVT:Flow alarm muted
11/24 12:40:00: Connection at 975.63
11/24 12:40:37: PVT:Flow alarm reactivated: un-muted
11/24 12:42:21: ZDIFF from DHC
11/24 12:42:30: ZWOB from DHC
11/24 12:43:00: SURVEY : MD=961.2, INC=78.96, AZI=250.31, TVD=726.68
11/24 12:44:01: MUD VIS 32.50
11/24 12:44:05: MUD WEIGHT 8.90
11/24 13:03:05: PVT:Flow alarm muted
11/24 13:05:00: Connection at 984.70
11/24 13:07:09: PVT:Flow alarm reactivated: un-muted
11/24 13:08:12: MUD VIS 32.50
11/24 13:08:19: MUD WEIGHT 8.85
11/24 13:25:10: MUD WEIGHT 9.00
11/24 13:25:15: MUD VIS 33.00
11/24 13:27:49: PVT:Flow alarm muted
11/24 13:30:00: Connection at 993.79
11/24 13:31:50: PVT:Flow alarm reactivated: un-muted
11/24 13:34:00: SURVEY : MD=979.4, INC=78.52, AZI=249.71, TVD=730.26
11/24 13:54:55: PVT:Flow alarm muted
11/24 13:57:16: MUD VIS 33.00
11/24 13:57:22: MUD WEIGHT 9.00
11/24 13:58:00: Connection at 1003.07
11/24 13:58:02: PVT:Flow alarm reactivated: un-muted
11/24 14:01:00: SURVEY : MD=988.7, INC=78.17, AZI=249.45, TVD=732.14
11/24 14:09:41: MUD VIS 33.50
11/24 14:09:45: MUD WEIGHT 9.00
11/24 14:20:20: PVT:Flow alarm muted
11/24 14:25:00: Connection at 1012.04
11/24 14:27:28: MUD WEIGHT 9.00
11/24 14:27:35: MUD VIS 33.00
11/24 14:28:18: ZDIFF from DHC
11/24 14:30:00: SURVEY : MD=997.60, INC=77.91, AZI=249.34, TVD=733.99
11/24 14:30:57: PVT:Flow alarm reactivated: un-muted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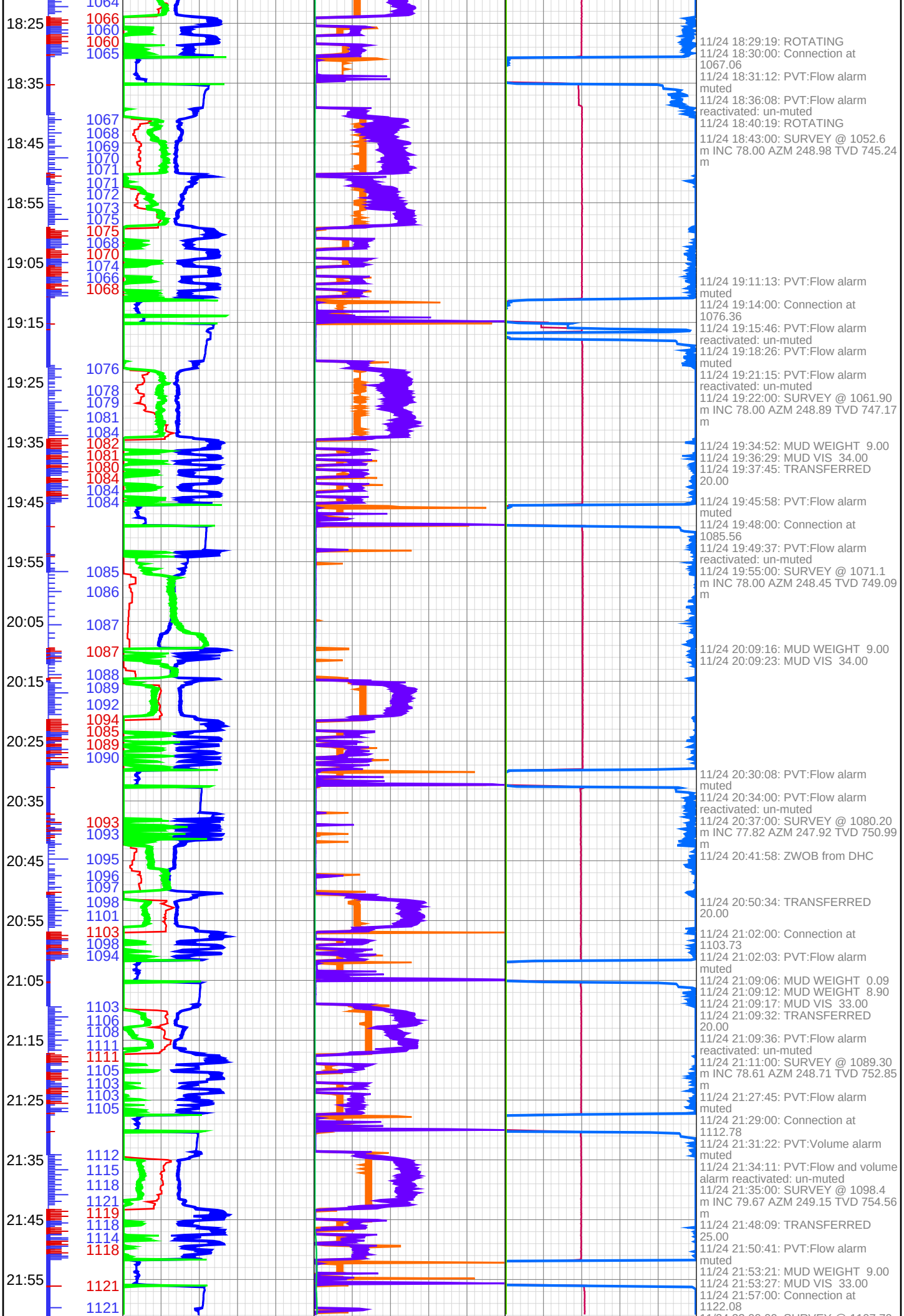
11/24 14:42:00: TRANSFERRED 20.00
11/24 14:44:04: ZWOB from DHC
11/24 14:50:09: MUD VIS 34.00
11/24 14:50:13: MUD WEIGHT 9.00
11/24 15:03:36: PVT:Flow alarm muted
11/24 15:04:33: MUD WEIGHT 8.90
11/24 15:04:43: MUD VIS 33.50
11/24 15:12:00: SURVEY : MD=1006.7, INC=77.56, AZI=249.64, TVD=735.92
11/24 15:15:49: PVT:Flow alarm reactivated: un-muted
11/24 15:16:56: ZDIFF from DHC
11/24 15:25:07: MUD WEIGHT 9.00
11/24 15:25:14: MUD VIS 34.00
11/24 15:43:46: TRANSFERRED 25.00
11/24 15:44:21: MUD WEIGHT 8.90
11/24 15:44:27: MUD VIS 33.00
11/24 16:00:23: HGAS_100: LOCATION1 H2S sensor calibration expired - Contact Pason
11/24 16:03:25: MUD VIS 34.00
11/24 16:03:35: MUD WEIGHT 9.00
11/24 16:16:10: MUD VIS 33.00
11/24 16:16:16: MUD WEIGHT 9.00
11/24 16:21:58: PVT:Flow alarm muted
11/24 16:26:00: Connection at 1030.37
11/24 16:28:38: MUD VIS 33.00
11/24 16:28:44: MUD WEIGHT 9.00
11/24 16:28:57: PVT:Flow alarm reactivated: un-muted
11/24 16:30:00: SURVEY : MD=1016.0, INC=77.38, AZI=249.37, TVD=737.94
11/24 16:30:51: ZWOB from DHC
11/24 16:31:32: TRANSFERRED 20.00
11/24 16:43:19: MUD WEIGHT 9.00
11/24 16:43:28: MUD VIS 33.00
11/24 16:58:40: PVT:Flow alarm muted
11/24 16:59:00: Connection at 1039.59
11/24 17:03:39: PVT:Flow alarm reactivated: un-muted
11/24 17:05:00: SURVEY : MD=1025.2, INC=79.05, AZI=248.74, TVD=739.82
11/24 17:11:11: MUD VIS 34.00
11/24 17:11:16: MUD WEIGHT 9.00
11/24 17:13:30: TRANSFERRED 40.00
11/24 17:23:56: PVT:Flow alarm muted
11/24 17:25:00: Connection at 1048.69
11/24 17:28:13: PVT:Volume alarm muted
11/24 17:35:22: PVT:Flow and volume alarm reactivated: un-muted
11/24 17:36:00: SURVEY : MD=1034.3, INC=78.88, AZI=249.24, TVD=741.56
11/24 17:54:53: HGAS_006: LOCATION1 H2S Sensor disconnected, Press Mute to acknowledge
11/24 18:00:29: PVT:Flow alarm muted
11/24 18:06:12: MUD WEIGHT 9.00
11/24 18:06:17: MUD VIS 34.00
11/24 18:08:55: PVT:Flow alarm reactivated: un-muted
11/24 18:08:56: HGAS_018: Disconnected Sensors Acknowledged
11/24 18:10:00: SURVEY @ 1043.5 m INC 78.35 AZM 249.07 TVD 743.37 m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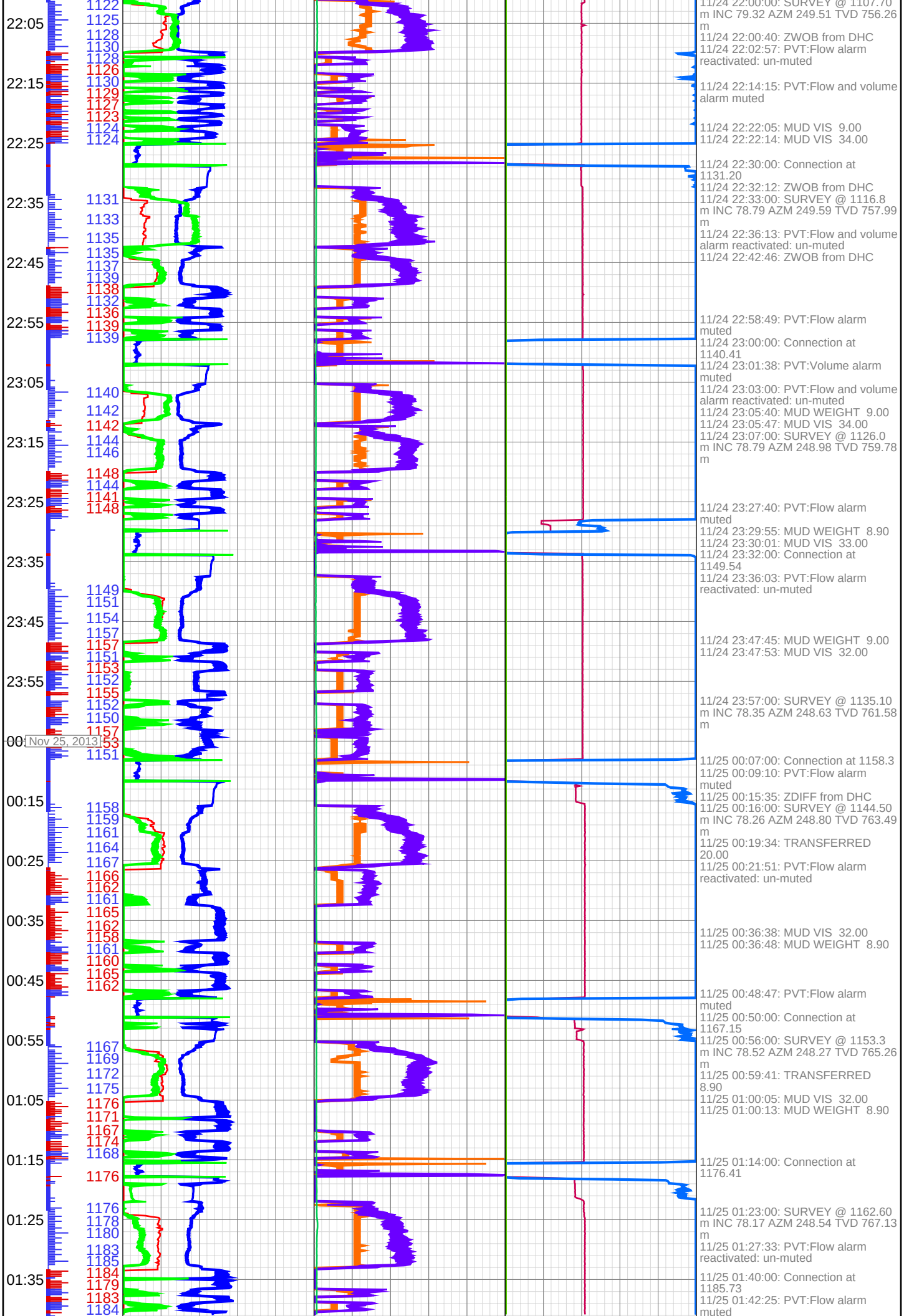
11/24 18:29:19: ROTATING
11/24 18:30:00: Connection at 1067.06
11/24 18:31:12: PVT:Flow alarm muted
11/24 18:36:08: PVT:Flow alarm reactivated: un-muted
11/24 18:40:19: ROTATING
11/24 18:43:00: SURVEY @ 1052.6 m INC 78.00 AZM 248.98 TVD 745.24 m
11/24 19:11:13: PVT:Flow alarm muted
11/24 19:14:00: Connection at 1076.36
11/24 19:15:46: PVT:Flow alarm reactivated: un-muted
11/24 19:18:26: PVT:Flow alarm muted
11/24 19:21:15: PVT:Flow alarm reactivated: un-muted
11/24 19:22:00: SURVEY @ 1061.90 m INC 78.00 AZM 248.89 TVD 747.17 m
11/24 19:34:52: MUD WEIGHT 9.00
11/24 19:36:29: MUD VIS 34.00
11/24 19:37:45: TRANSFERRED 20.00
11/24 19:45:58: PVT:Flow alarm muted
11/24 19:48:00: Connection at 1085.56
11/24 19:49:37: PVT:Flow alarm reactivated: un-muted
11/24 19:55:00: SURVEY @ 1071.1 m INC 78.00 AZM 248.45 TVD 749.09 m
11/24 20:09:16: MUD WEIGHT 9.00
11/24 20:09:23: MUD VIS 34.00
11/24 20:30:08: PVT:Flow alarm muted
11/24 20:34:00: PVT:Flow alarm reactivated: un-muted
11/24 20:37:00: SURVEY @ 1080.20 m INC 77.82 AZM 247.92 TVD 750.99 m
11/24 20:41:58: ZWOB from DHC
11/24 20:50:34: TRANSFERRED 20.00
11/24 21:02:00: Connection at 1103.73
11/24 21:02:03: PVT:Flow alarm muted
11/24 21:09:06: MUD WEIGHT 0.09
11/24 21:09:12: MUD WEIGHT 8.90
11/24 21:09:17: MUD VIS 33.00
11/24 21:09:32: TRANSFERRED 20.00
11/24 21:09:36: PVT:Flow alarm reactivated: un-muted
11/24 21:11:00: SURVEY @ 1089.30 m INC 78.61 AZM 248.71 TVD 752.85 m
11/24 21:27:45: PVT:Flow alarm muted
11/24 21:29:00: Connection at 1112.78
11/24 21:31:22: PVT:Volume alarm muted
11/24 21:34:11: PVT:Flow and volume alarm reactivated: un-muted
11/24 21:35:00: SURVEY @ 1098.4 m INC 79.67 AZM 249.15 TVD 754.56 m
11/24 21:48:09: TRANSFERRED 25.00
11/24 21:50:41: PVT:Flow alarm muted
11/24 21:53:21: MUD WEIGHT 9.00
11/24 21:53:27: MUD VIS 33.00
11/24 21:57:00: Connection at 1122.08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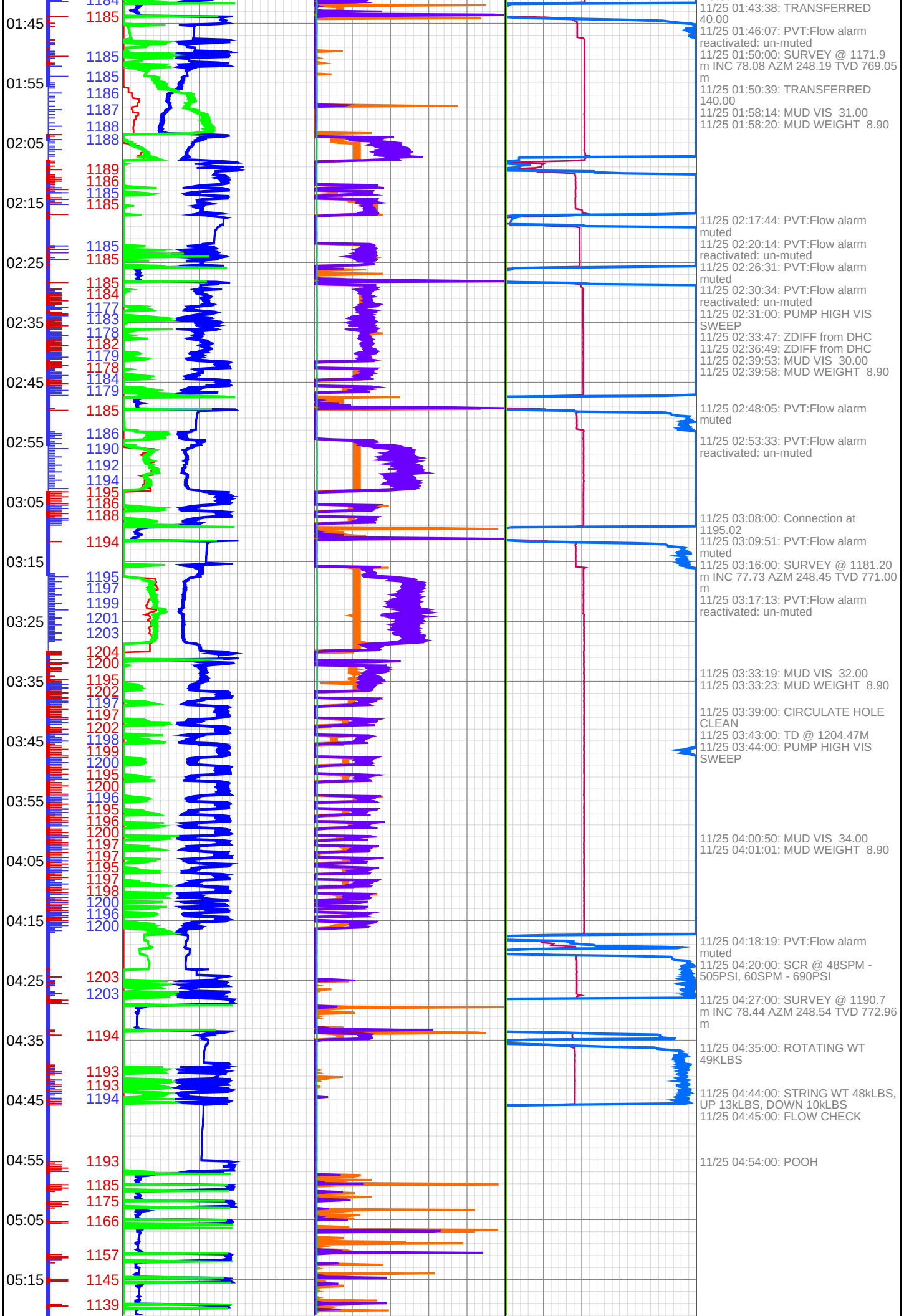
11/24 22:00:00: SURVEY @ 1107.70 m INC 79.32 AZM 249.51 TVD 756.26 m
11/24 22:00:40: ZWOB from DHC
11/24 22:02:57: PVT:Flow alarm reactivated: un-muted
11/24 22:14:15: PVT:Flow and volume alarm muted
11/24 22:22:05: MUD VIS 9.00
11/24 22:22:14: MUD VIS 34.00
11/24 22:30:00: Connection at 1131.20
11/24 22:32:12: ZWOB from DHC
11/24 22:33:00: SURVEY @ 1116.8 m INC 78.79 AZM 249.59 TVD 757.99 m
11/24 22:36:13: PVT:Flow and volume alarm reactivated: un-muted
11/24 22:42:46: ZWOB from DHC
11/24 22:58:49: PVT:Flow alarm muted
11/24 23:00:00: Connection at 1140.41
11/24 23:01:38: PVT:Volume alarm muted
11/24 23:03:00: PVT:Flow and volume alarm reactivated: un-muted
11/24 23:05:40: MUD WEIGHT 9.00
11/24 23:05:47: MUD VIS 34.00
11/24 23:07:00: SURVEY @ 1126.0 m INC 78.79 AZM 248.98 TVD 759.78 m
11/24 23:27:40: PVT:Flow alarm muted
11/24 23:29:55: MUD WEIGHT 8.90
11/24 23:30:01: MUD VIS 33.00
11/24 23:32:00: Connection at 1149.54
11/24 23:36:03: PVT:Flow alarm reactivated: un-muted
11/24 23:47:45: MUD WEIGHT 9.00
11/24 23:47:53: MUD VIS 32.00
11/24 23:57:00: SURVEY @ 1135.10 m INC 78.35 AZM 248.63 TVD 761.58 m
11/25 00:07:00: Connection at 1158.3
11/25 00:09:10: PVT:Flow alarm muted
11/25 00:15:35: ZDIFF from DHC
11/25 00:16:00: SURVEY @ 1144.50 m INC 78.26 AZM 248.80 TVD 763.49 m
11/25 00:19:34: TRANSFERRED 20.00
11/25 00:21:51: PVT:Flow alarm reactivated: un-muted
11/25 00:36:38: MUD VIS 32.00
11/25 00:36:48: MUD WEIGHT 8.90
11/25 00:48:47: PVT:Flow alarm muted
11/25 00:50:00: Connection at 1167.15
11/25 00:56:00: SURVEY @ 1153.3 m INC 78.52 AZM 248.27 TVD 765.26 m
11/25 00:59:41: TRANSFERRED 8.90
11/25 01:00:05: MUD VIS 32.00
11/25 01:00:13: MUD WEIGHT 8.90
11/25 01:14:00: Connection at 1176.41
11/25 01:23:00: SURVEY @ 1162.60 m INC 78.17 AZM 248.54 TVD 767.13 m
11/25 01:27:33: PVT:Flow alarm reactivated: un-muted
11/25 01:40:00: Connection at 1185.73
11/25 01:42:25: PVT:Flow alarm muted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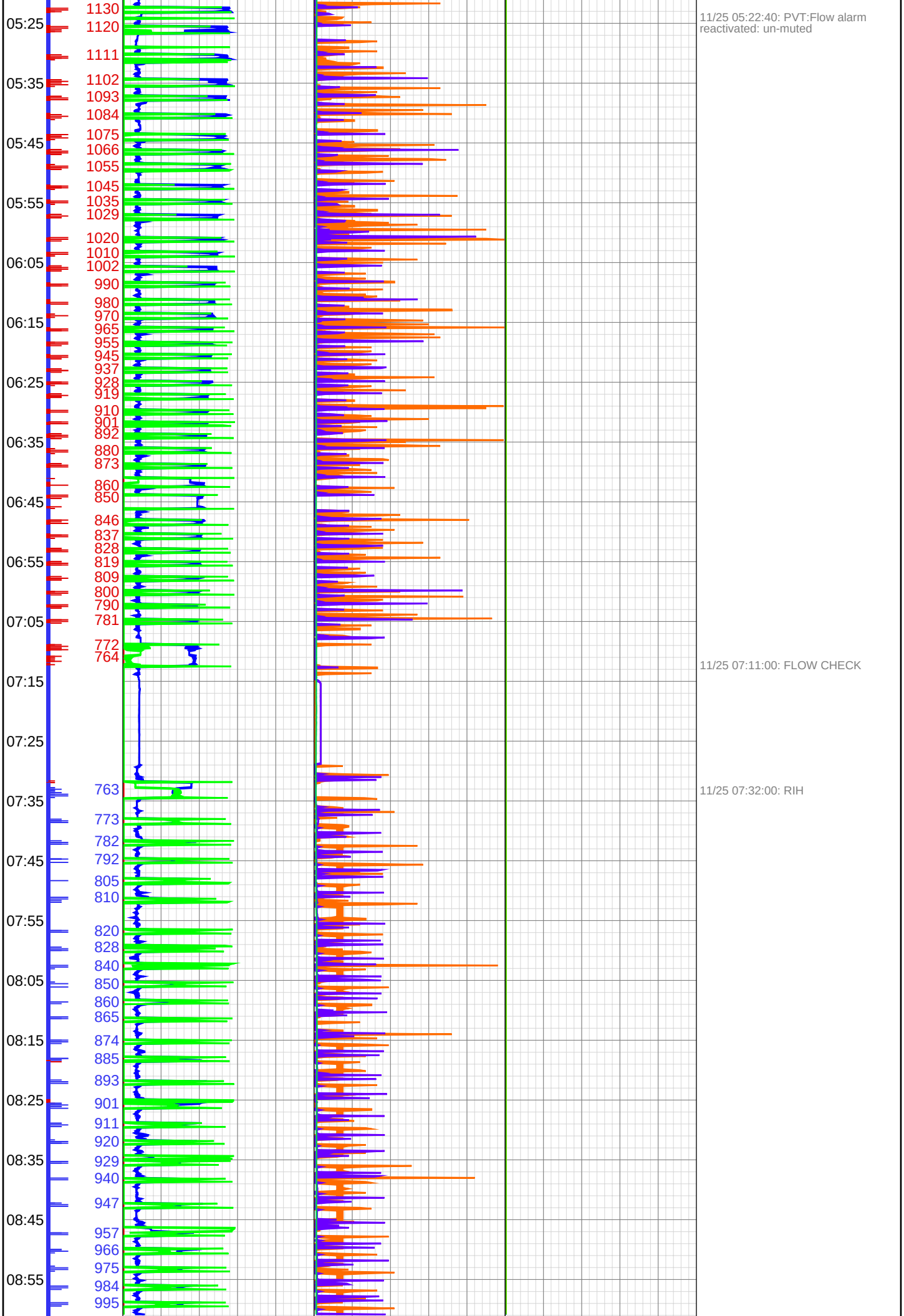
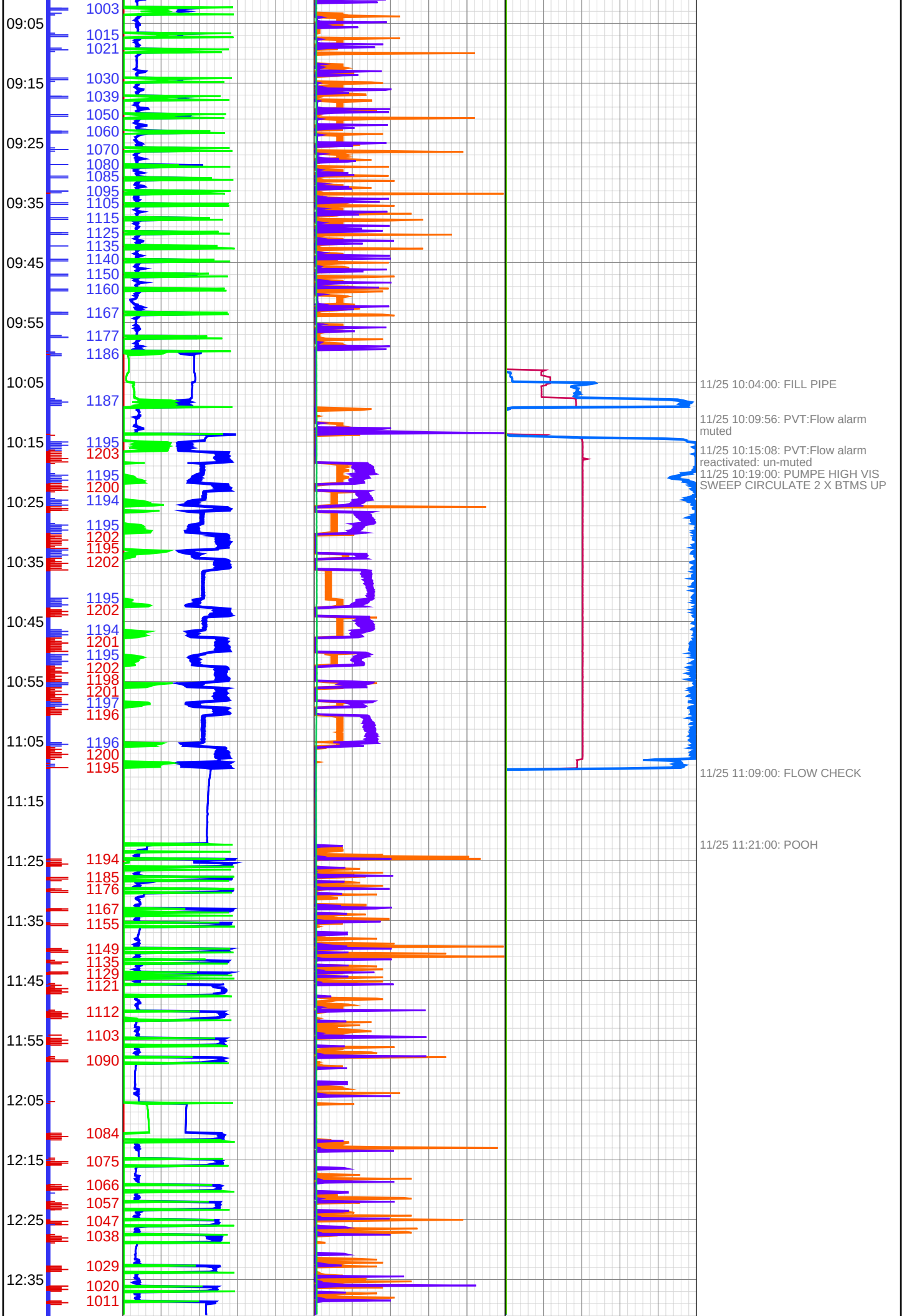
11/25 01:43:38: TRANSFERRED 40.00
11/25 01:46:07: PVT:Flow alarm reactivated: un-muted
11/25 01:50:00: SURVEY @ 1171.9 m INC 78.08 AZM 248.19 TVD 769.05 m
11/25 01:50:39: TRANSFERRED 140.00
11/25 01:58:14: MUD VIS 31.00
11/25 01:58:20: MUD WEIGHT 8.90
11/25 02:17:44: PVT:Flow alarm muted
11/25 02:20:14: PVT:Flow alarm reactivated: un-muted
11/25 02:26:31: PVT:Flow alarm muted
11/25 02:30:34: PVT:Flow alarm reactivated: un-muted
11/25 02:31:00: PUMP HIGH VIS SWEEP
11/25 02:33:47: ZDIFF from DHC
11/25 02:36:49: ZDIFF from DHC
11/25 02:39:53: MUD VIS 30.00
11/25 02:39:58: MUD WEIGHT 8.90
11/25 02:48:05: PVT:Flow alarm muted
11/25 02:53:33: PVT:Flow alarm reactivated: un-muted
11/25 03:08:00: Connection at 1195.02
11/25 03:09:51: PVT:Flow alarm muted
11/25 03:16:00: SURVEY @ 1181.20 m INC 77.73 AZM 248.45 TVD 771.00 m
11/25 03:17:13: PVT:Flow alarm reactivated: un-muted
11/25 03:33:19: MUD VIS 32.00
11/25 03:33:23: MUD WEIGHT 8.90
11/25 03:39:00: CIRCULATE HOLE CLEAN
11/25 03:43:00: TD @ 1204.47M
11/25 03:44:00: PUMP HIGH VIS SWEEP
11/25 04:00:50: MUD VIS 34.00
11/25 04:01:01: MUD WEIGHT 8.90
11/25 04:18:19: PVT:Flow alarm muted
11/25 04:20:00: SCR @ 48SPM - 505PSI, 60SPM - 690PSI
11/25 04:27:00: SURVEY @ 1190.7 m INC 78.44 AZM 248.54 TVD 772.96 m
11/25 04:35:00: ROTATING WT 49KLBS
11/25 04:44:00: STRING WT 48kLBS, UP 13kLBS, DOWN 10kLBS
11/25 04:45:00: FLOW CHECK
11/25 04:54:00: POOH


11/25 05:22:40: PVT:Flow alarm reactivated: un-muted
11/25 07:11:00: FLOW CHECK
11/25 07:32:00: RIH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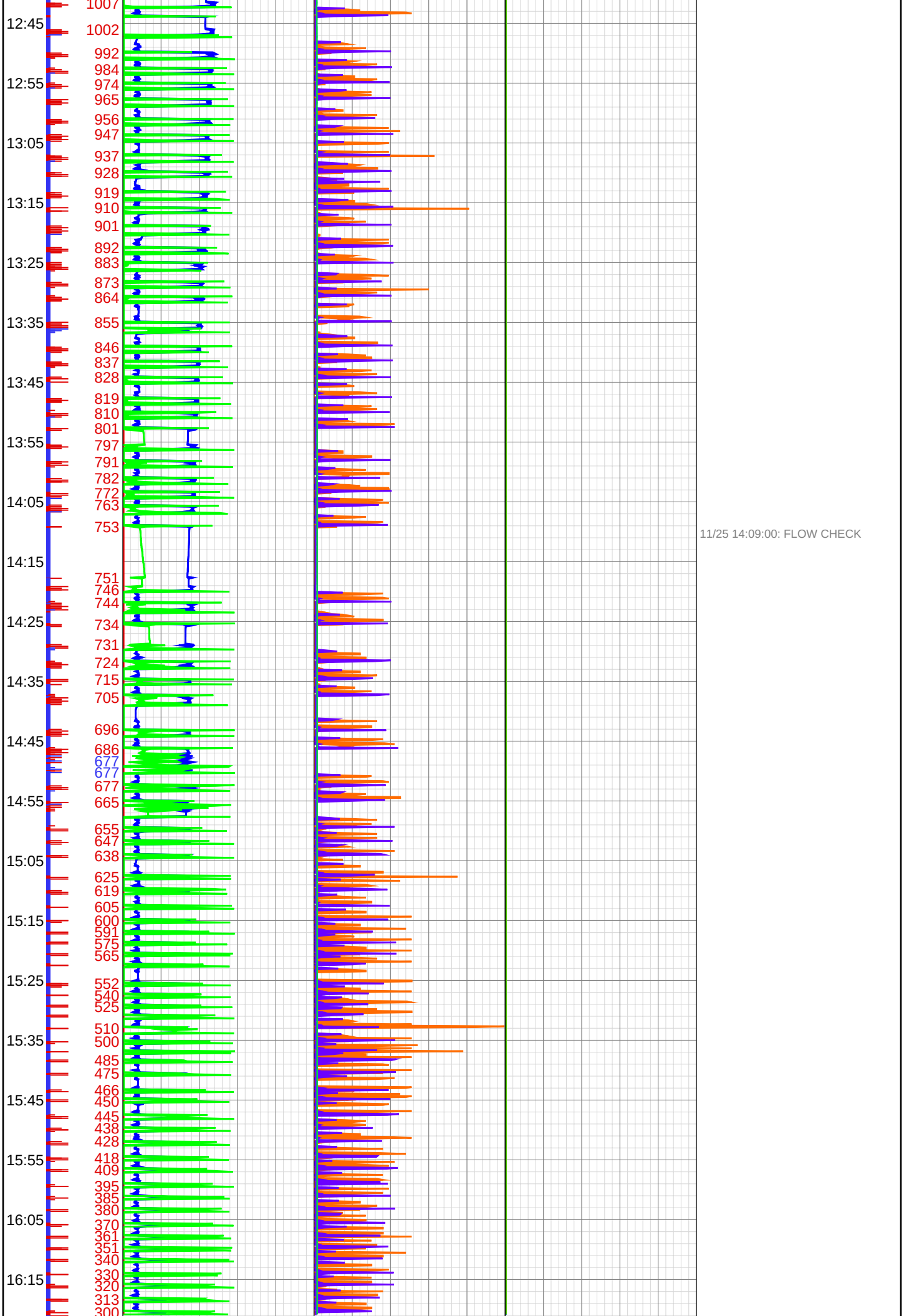
11/25 10:04:00: FILL PIPE
11/25 10:09:56: PVT:Flow alarm muted
11/25 10:15:08: PVT:Flow alarm reactivated: un-muted
11/25 10:19:00: PUMPE HIGH VIS SWEEP CIRCULATE 2 X BTMS UP
11/25 11:09:00: FLOW CHECK
11/25 11:21:00: POOH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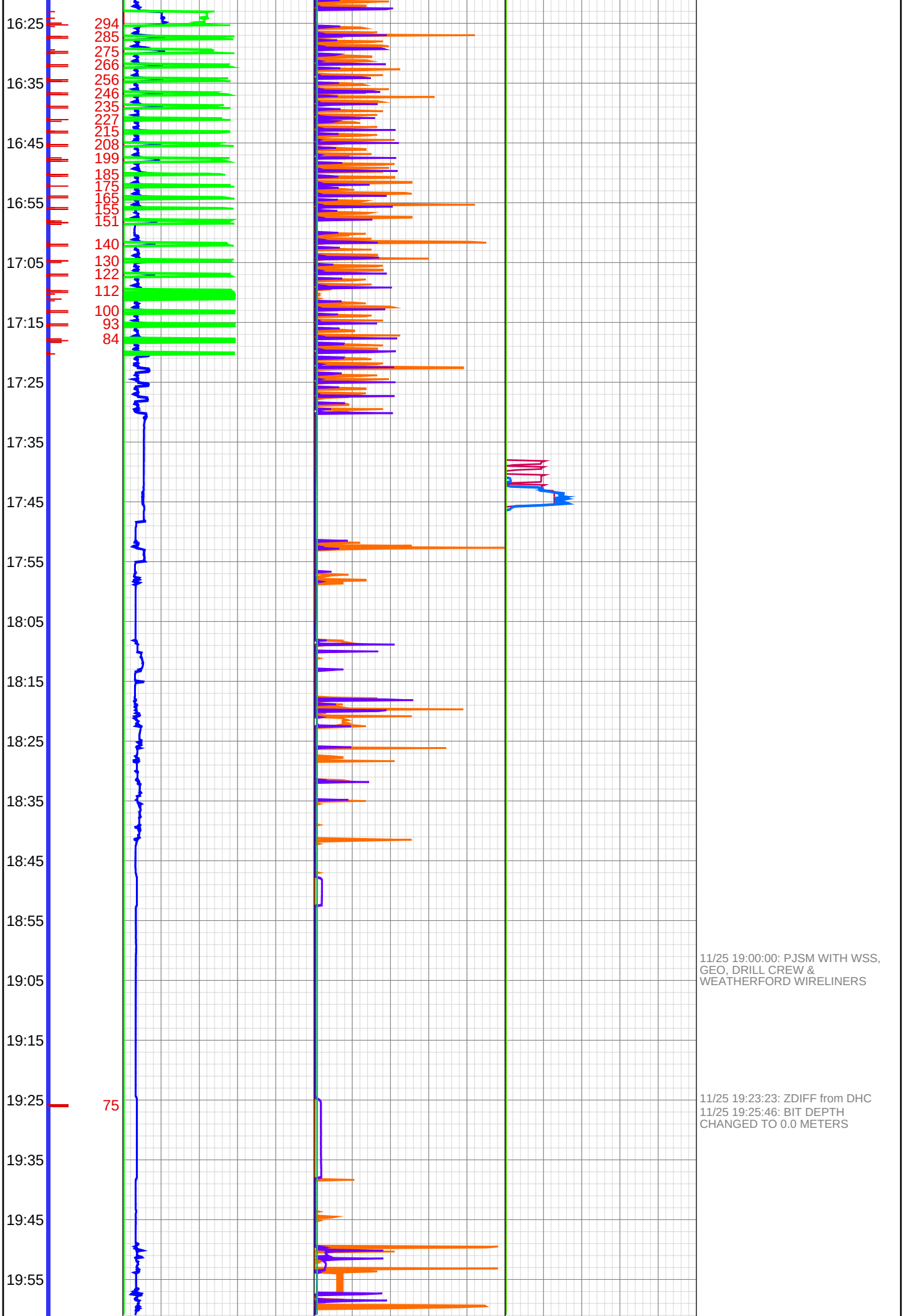
300
11/25 14:09:00: FLOW CHECK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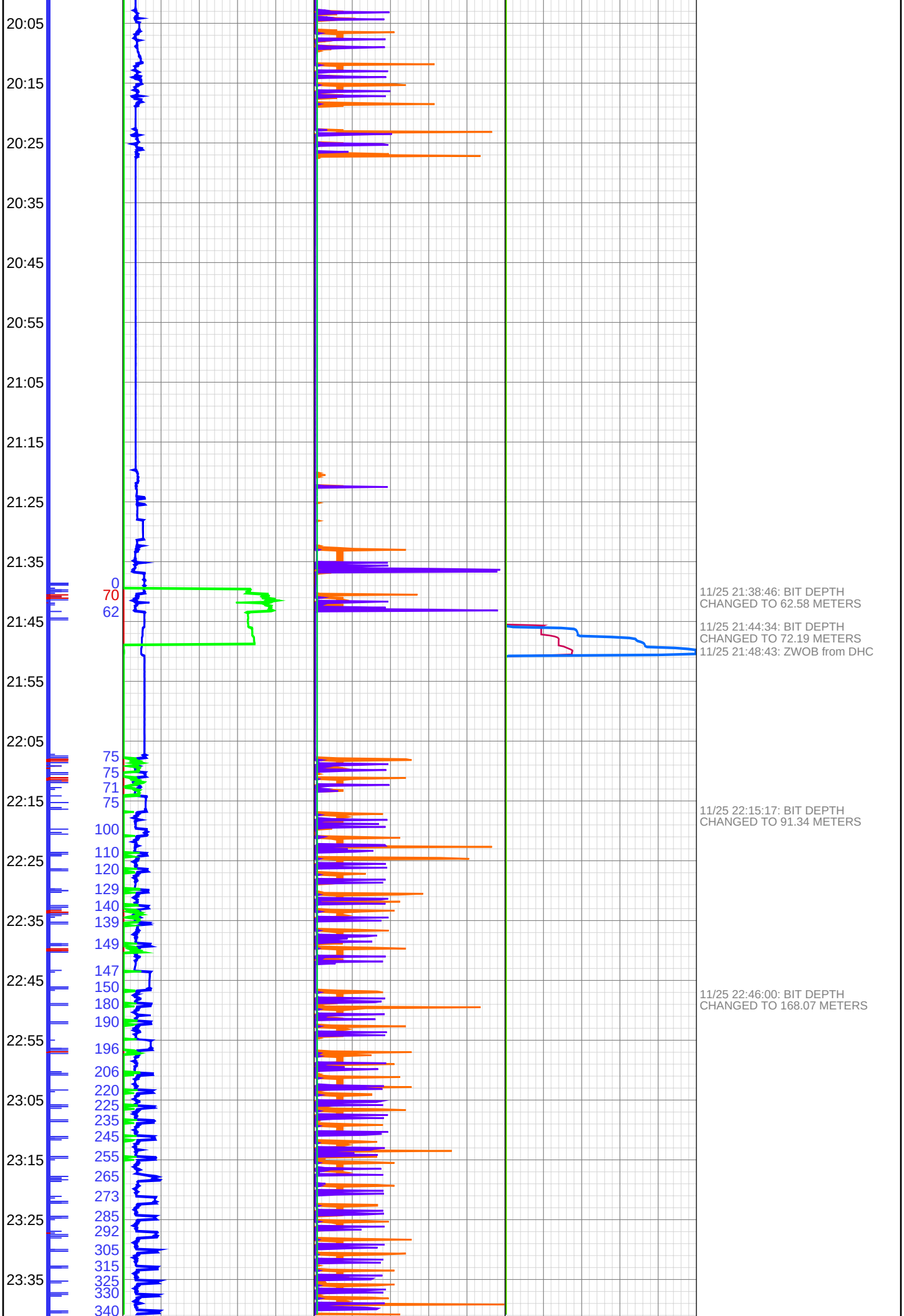
11/25 19:00:00: PJSM WITH WSS, GEO, DRILL CREW & WEATHERFORD WIRELINERS
11/25 19:23:23: ZDIFF from DHC
11/25 19:25:46: BIT DEPTH CHANGED TO 0.0 METERS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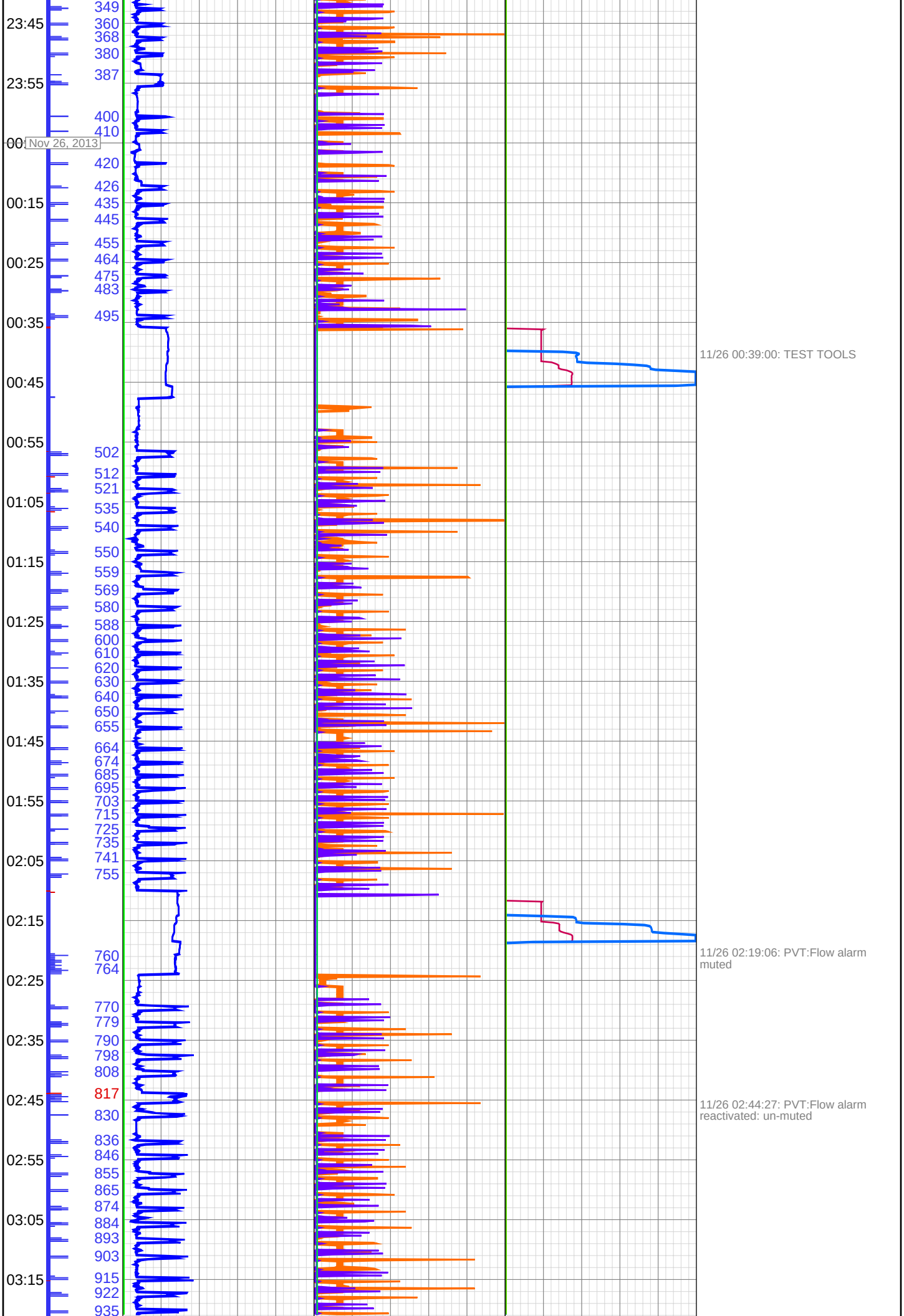
11/25 21:38:46: BIT DEPTH CHANGED TO 62.58 METERS
11/25 21:44:34: BIT DEPTH CHANGED TO 72.19 METERS
11/25 21:48:43: ZWOB from DHC
11/25 22:15:17: BIT DEPTH CHANGED TO 91.34 METERS
11/25 22:46:00: BIT DEPTH CHANGED TO 168.07 METERS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Nov 26, 2013
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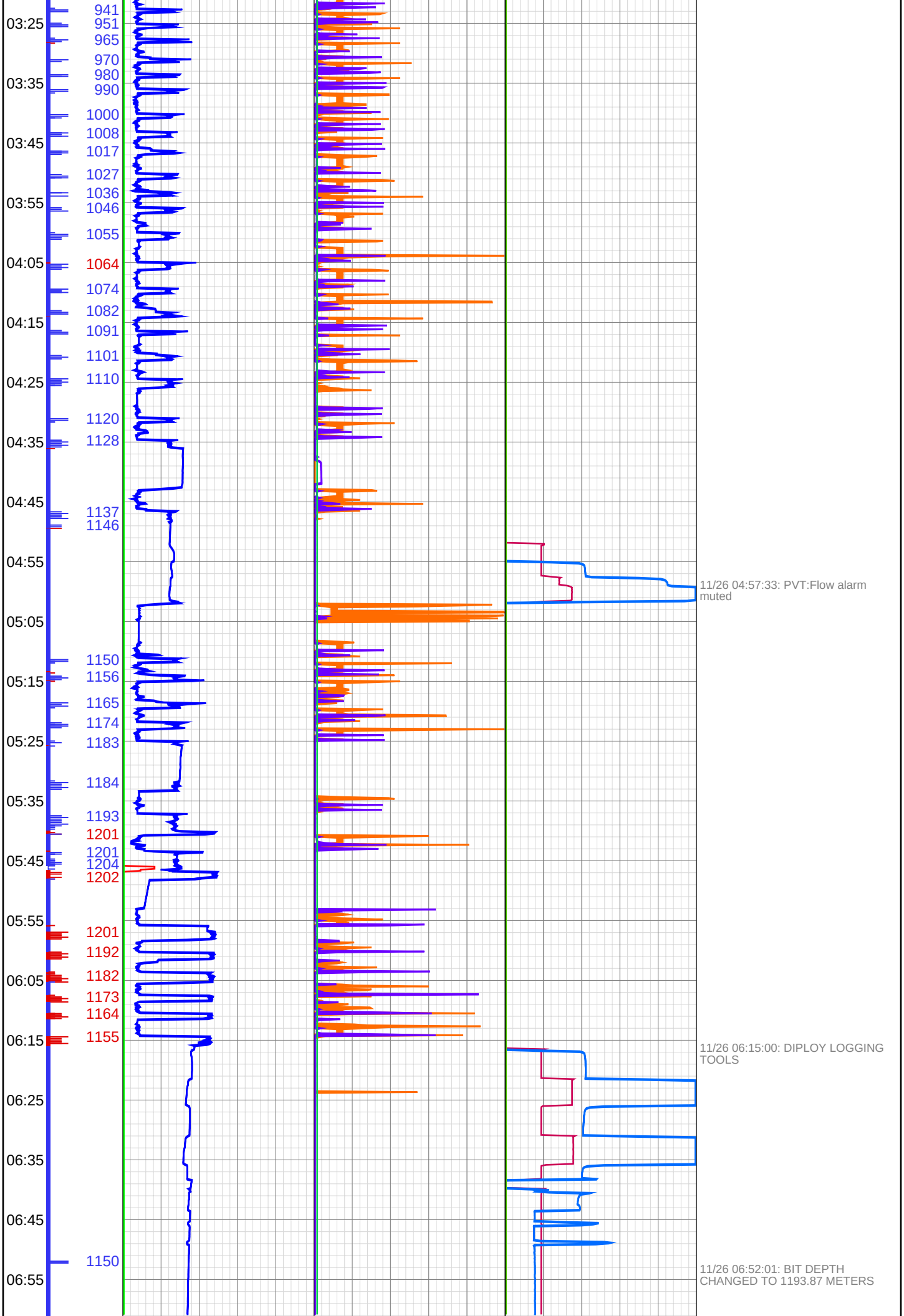
11/26 00:39:00: TEST TOOLS
11/26 02:19:06: PVT:Flow alarm muted
11/26 02:44:27: PVT:Flow alarm reactivated: un-muted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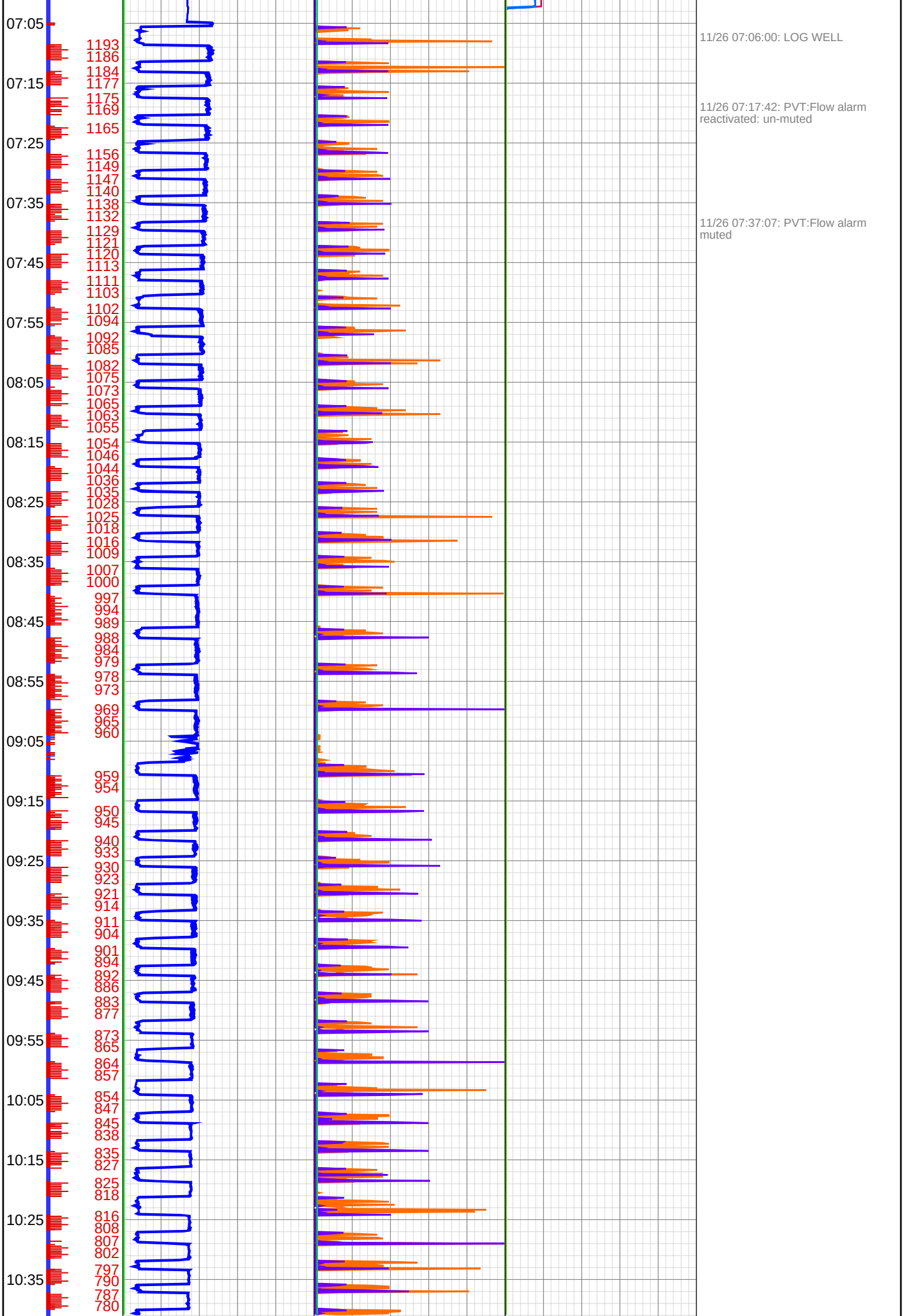
11/26 04:57:33: PVT:Flow alarm muted
11/26 06:15:00: DIPLOY LOGGING TOOLS
11/26 06:52:01: BIT DEPTH CHANGED TO 1193.87 METERS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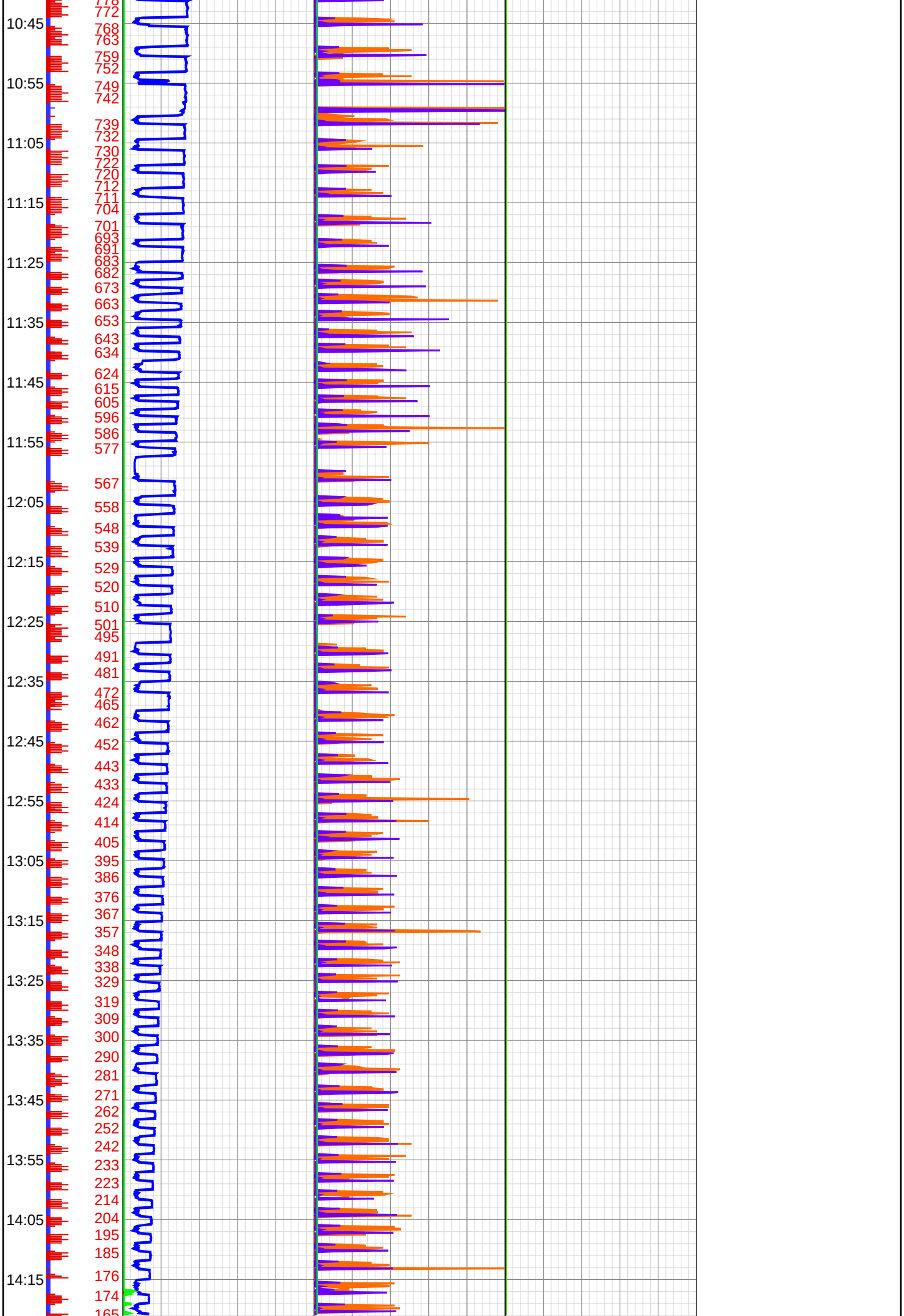
11/26 07:06:00: LOG WELL
11/26 07:17:42: PVT:Flow alarm reactivated: un-muted
11/26 07:37:07: PVT:Flow alarm muted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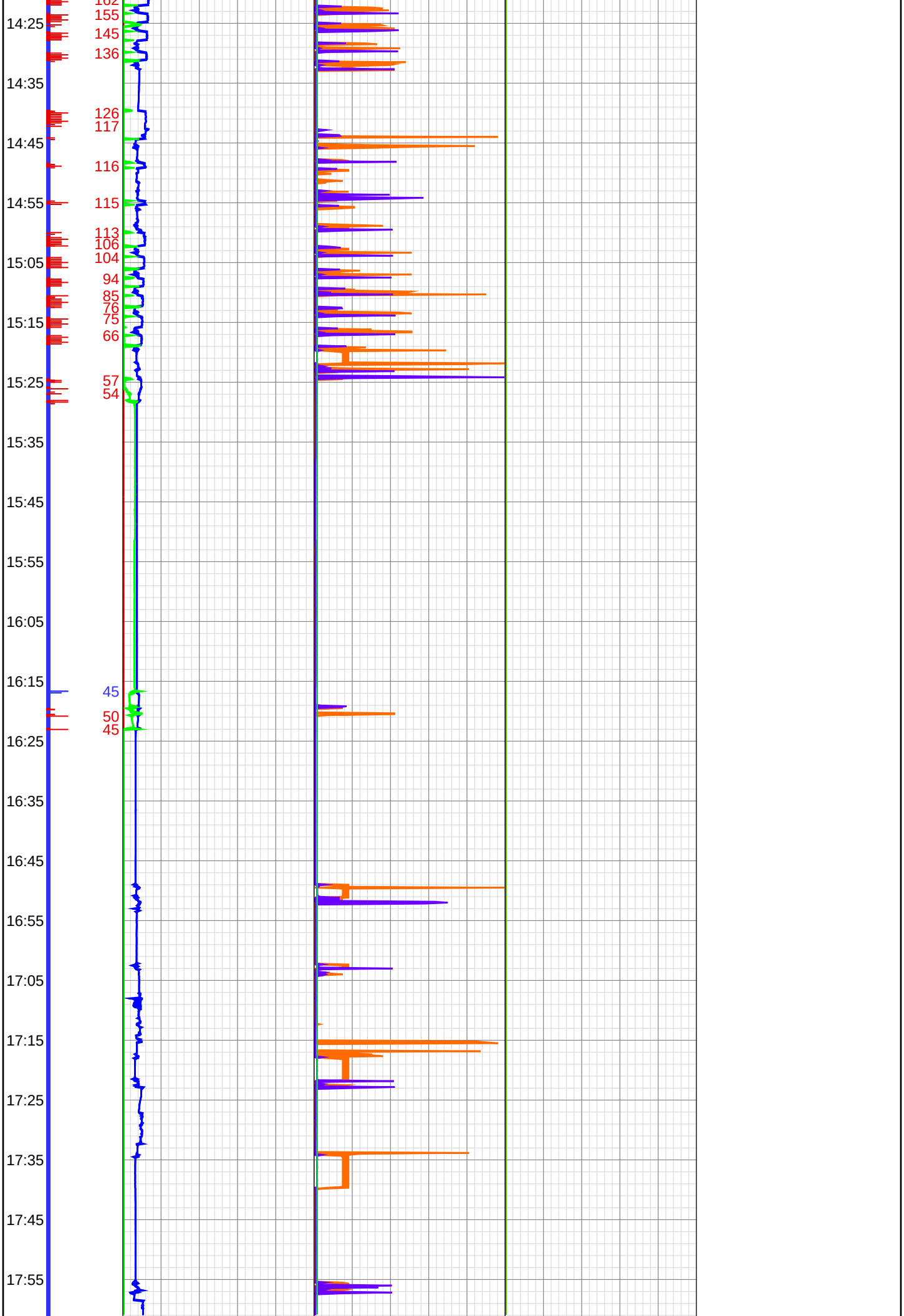
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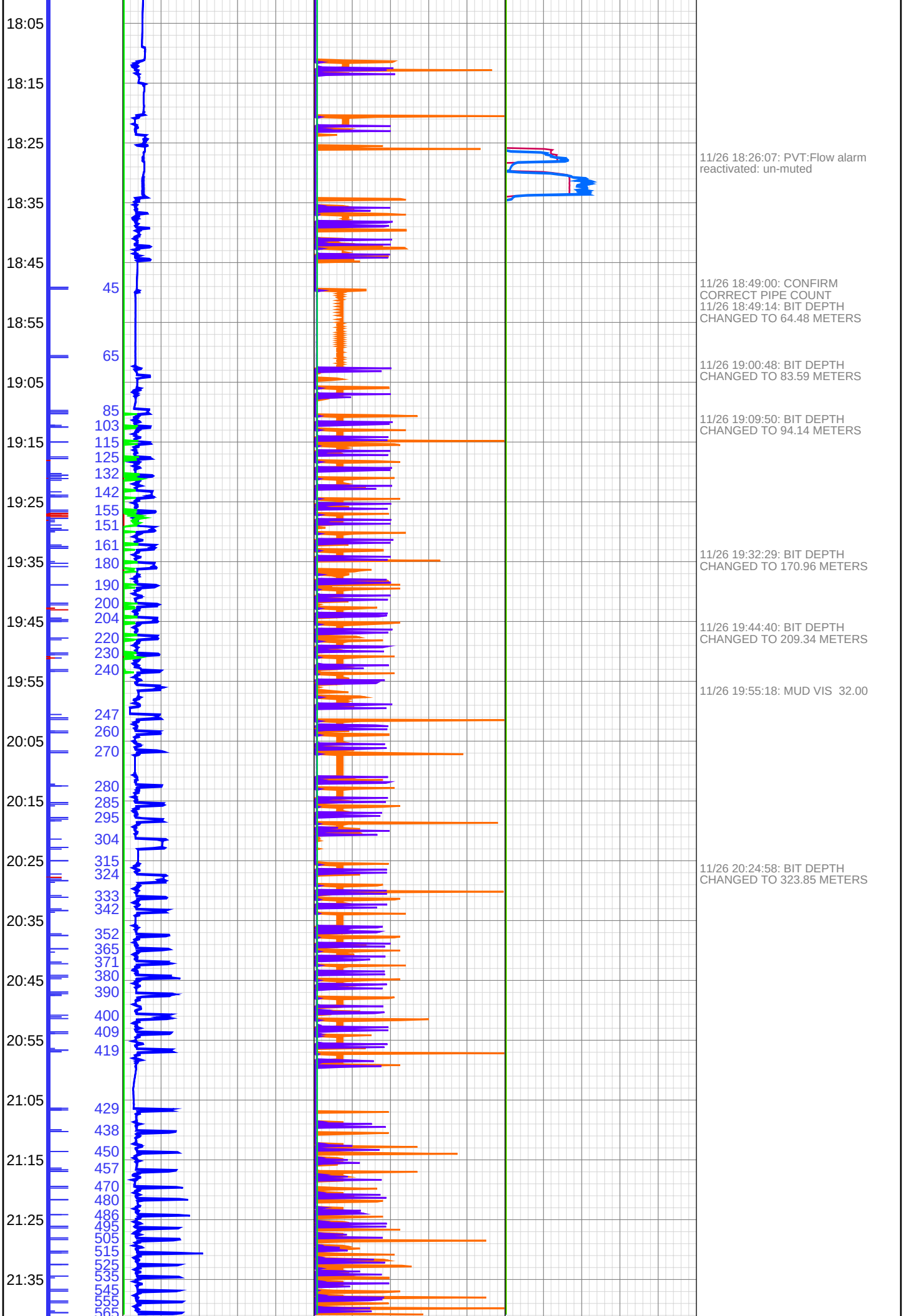
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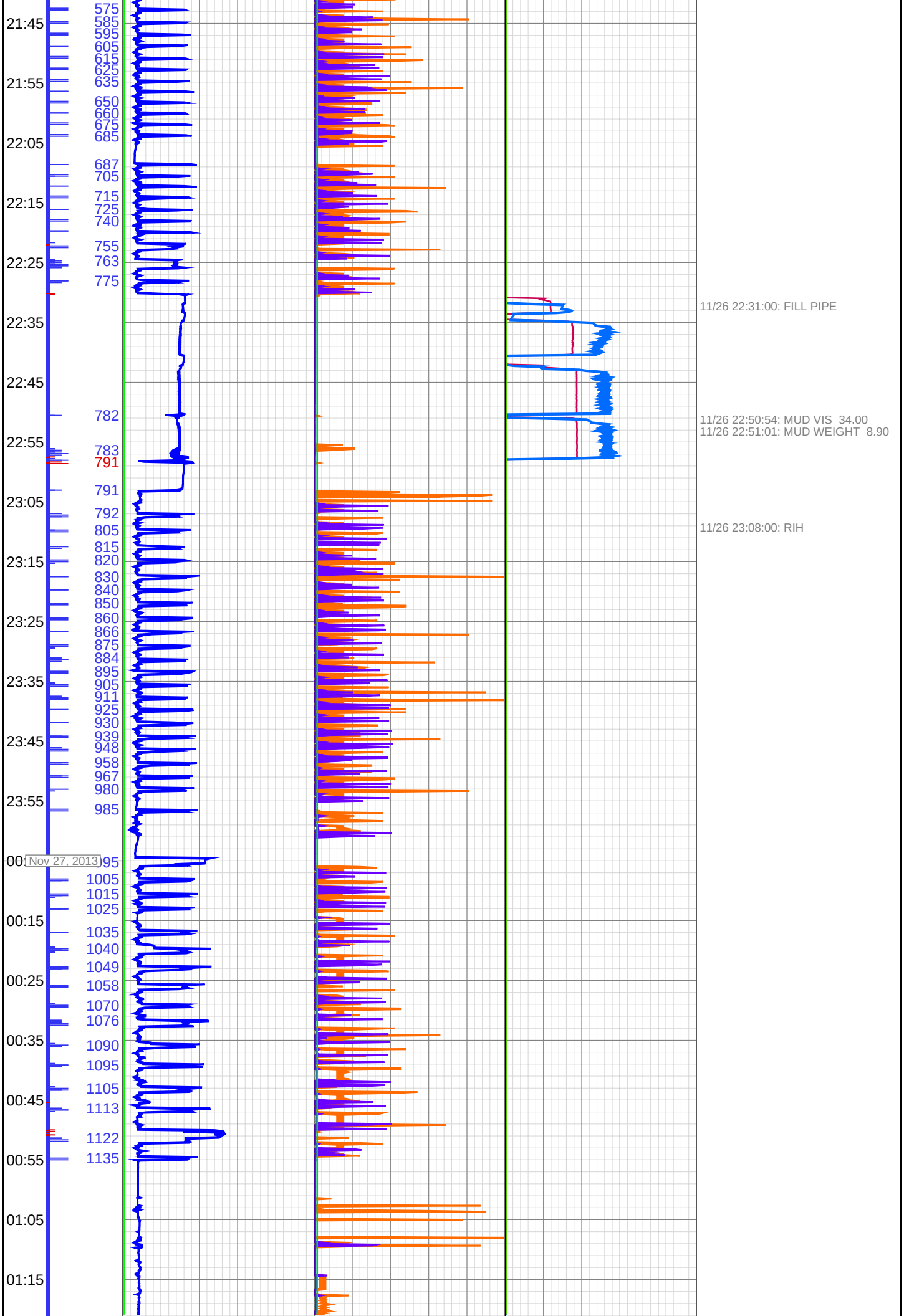
11/26 18:26:07: PVT:Flow alarm reactivated: un-muted
11/26 18:49:00: CONFIRM CORRECT PIPE COUNT
11/26 18:49:14: BIT DEPTH CHANGED TO 64.48 METERS
11/26 19:00:48: BIT DEPTH CHANGED TO 83.59 METERS
11/26 19:09:50: BIT DEPTH CHANGED TO 94.14 METERS
11/26 19:32:29: BIT DEPTH CHANGED TO 170.96 METERS
11/26 19:44:40: BIT DEPTH CHANGED TO 209.34 METERS
11/26 19:55:18: MUD VIS 32.00
11/26 20:24:58: BIT DEPTH CHANGED TO 323.85 METERS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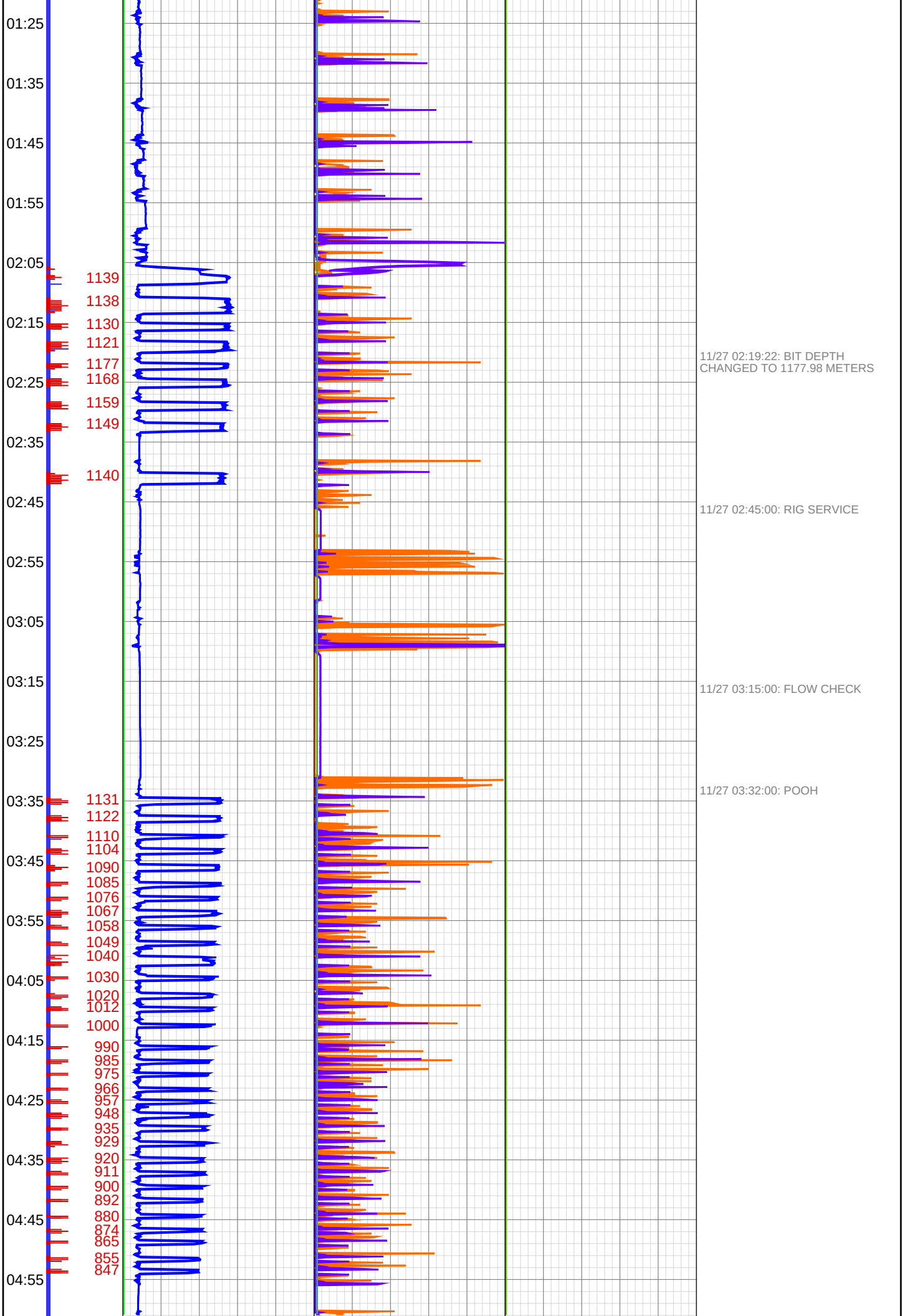
Nov 27, 2013
11/26 22:31:00: FILL PIPE
11/26 22:50:54: MUD VIS 34.00
11/26 22:51:01: MUD WEIGHT 8.90
11/26 23:08:00: RIH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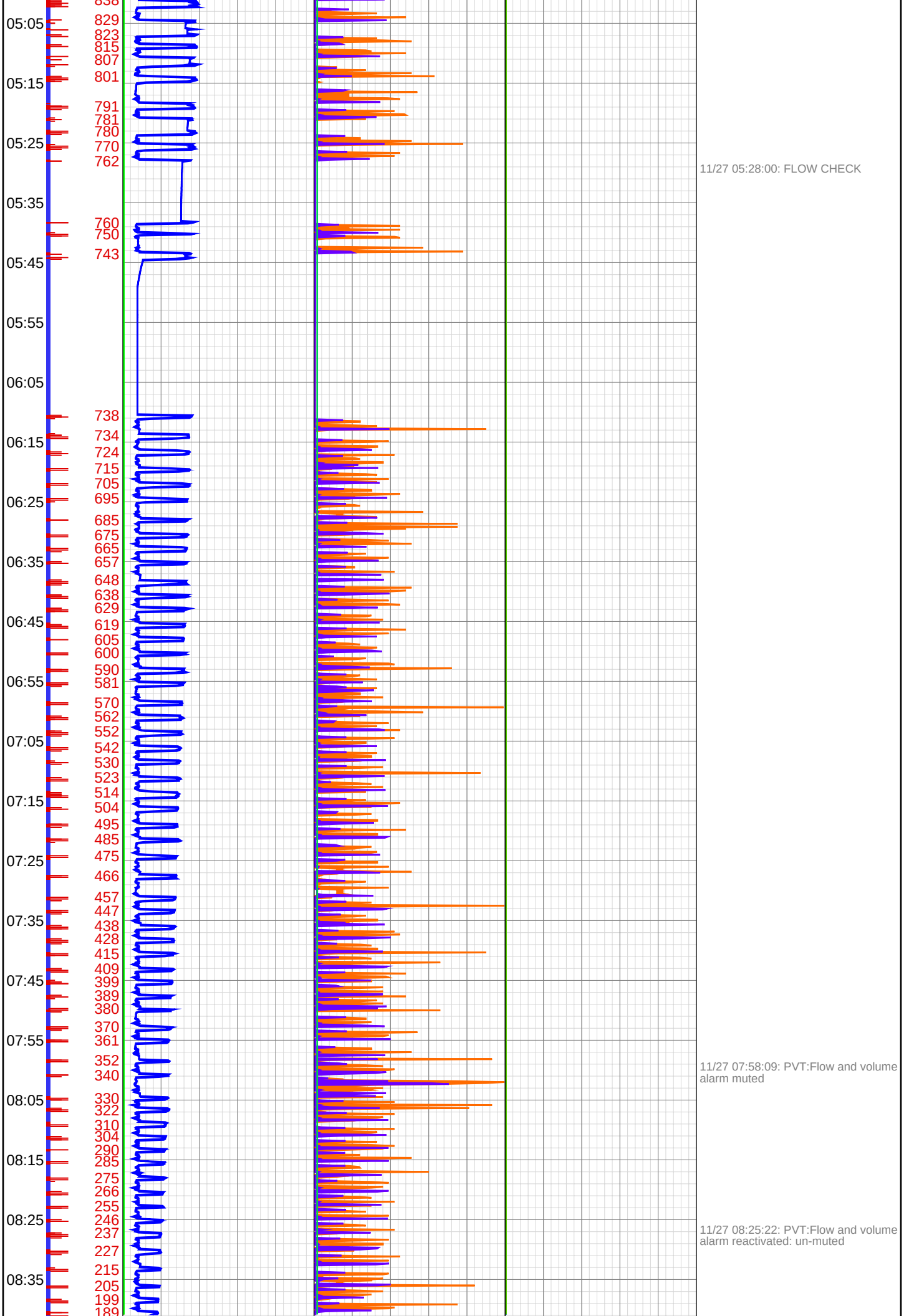
11/27 02:19:22: BIT DEPTH CHANGED TO 1177.98 METERS
11/27 02:45:00: RIG SERVICE
11/27 03:15:00: FLOW CHECK
11/27 03:32:00: POOH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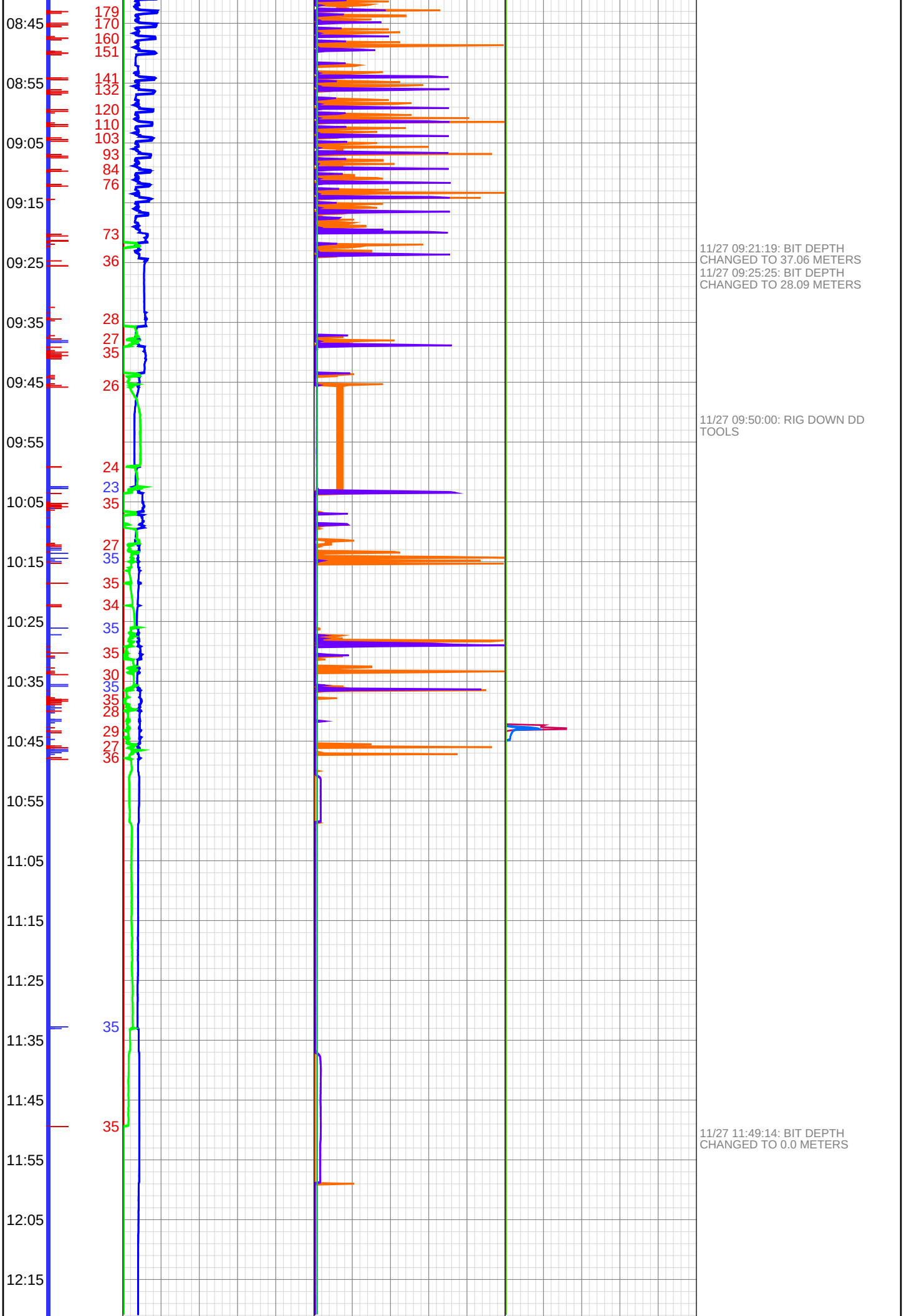
11/27 05:28:00: FLOW CHECK
11/27 07:58:09: PVT:Flow and volume alarm muted
11/27 08:25:22: PVT:Flow and volume alarm reactivated: un-muted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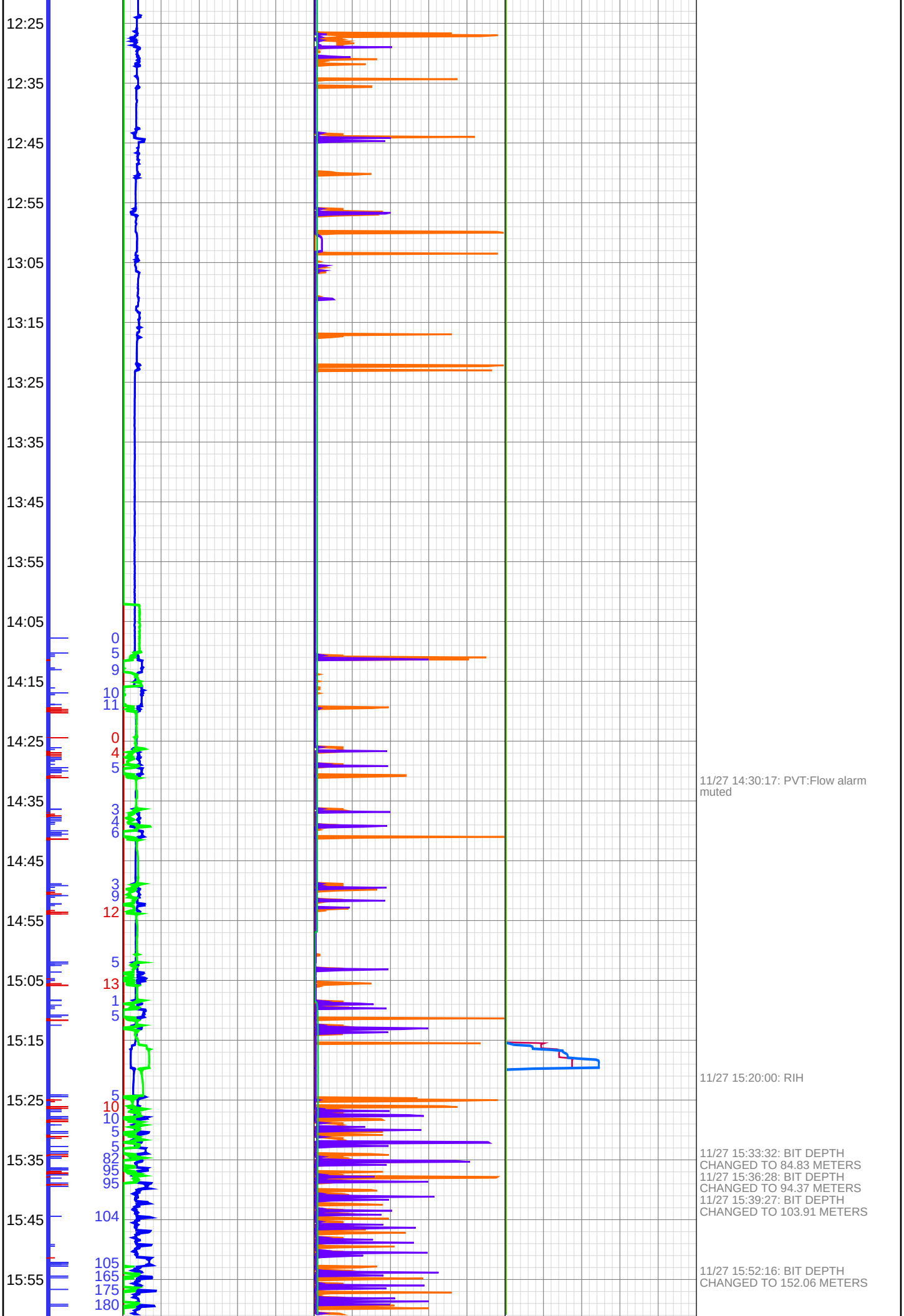
11/27 09:21:19: BIT DEPTH CHANGED TO 37.06 METERS
11/27 09:25:25: BIT DEPTH CHANGED TO 28.09 METERS
11/27 09:50:00: RIG DOWN DD TOOLS
11/27 11:49:14: BIT DEPTH CHANGED TO 0.0 METERS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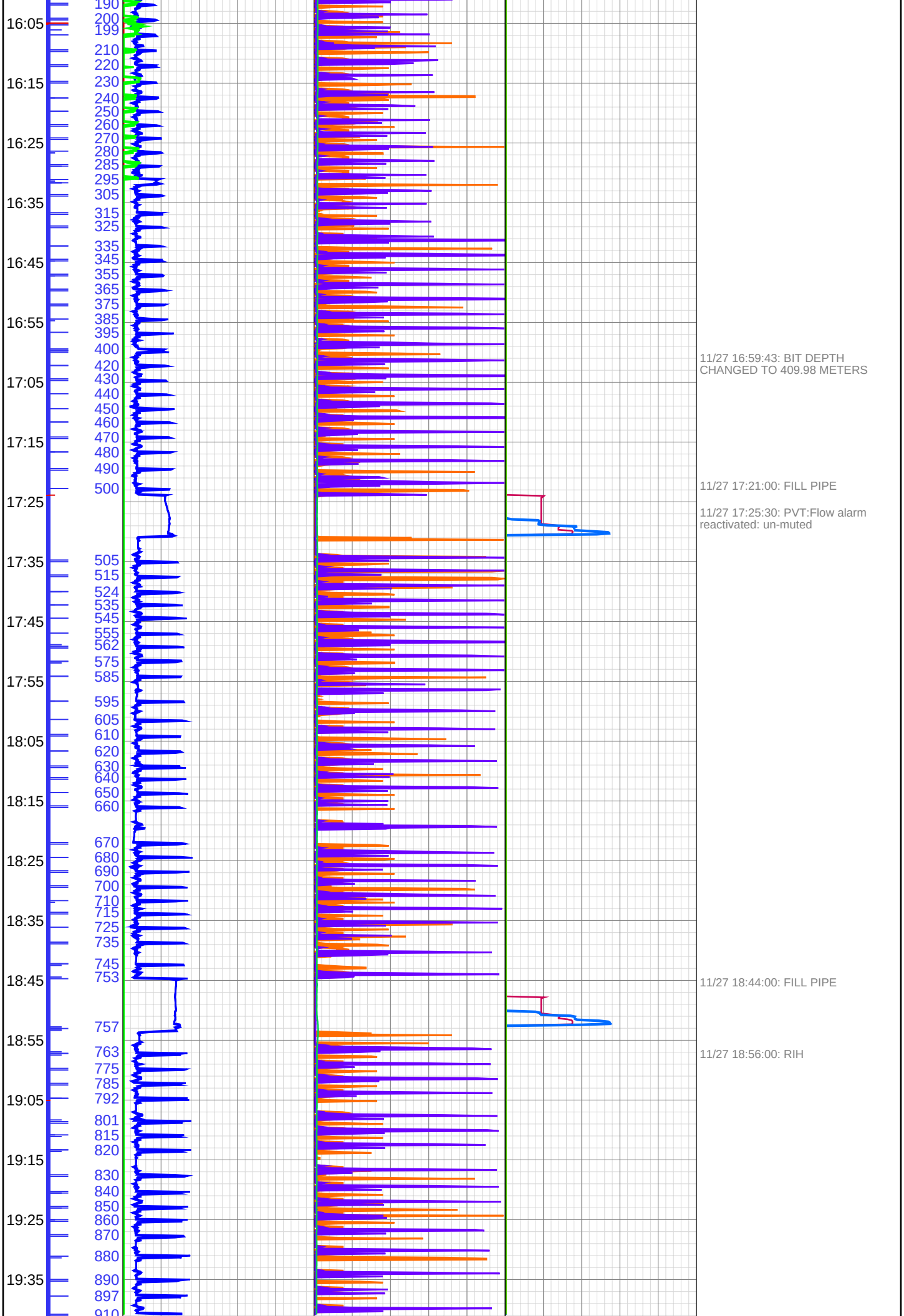
11/27 14:30:17: PVT:Flow alarm muted
11/27 15:20:00: RIH
11/27 15:33:32: BIT DEPTH CHANGED TO 84.83 METERS
11/27 15:36:28: BIT DEPTH CHANGED TO 94.37 METERS
11/27 15:39:27: BIT DEPTH CHANGED TO 103.91 METERS
11/27 15:52:16: BIT DEPTH CHANGED TO 152.06 METERS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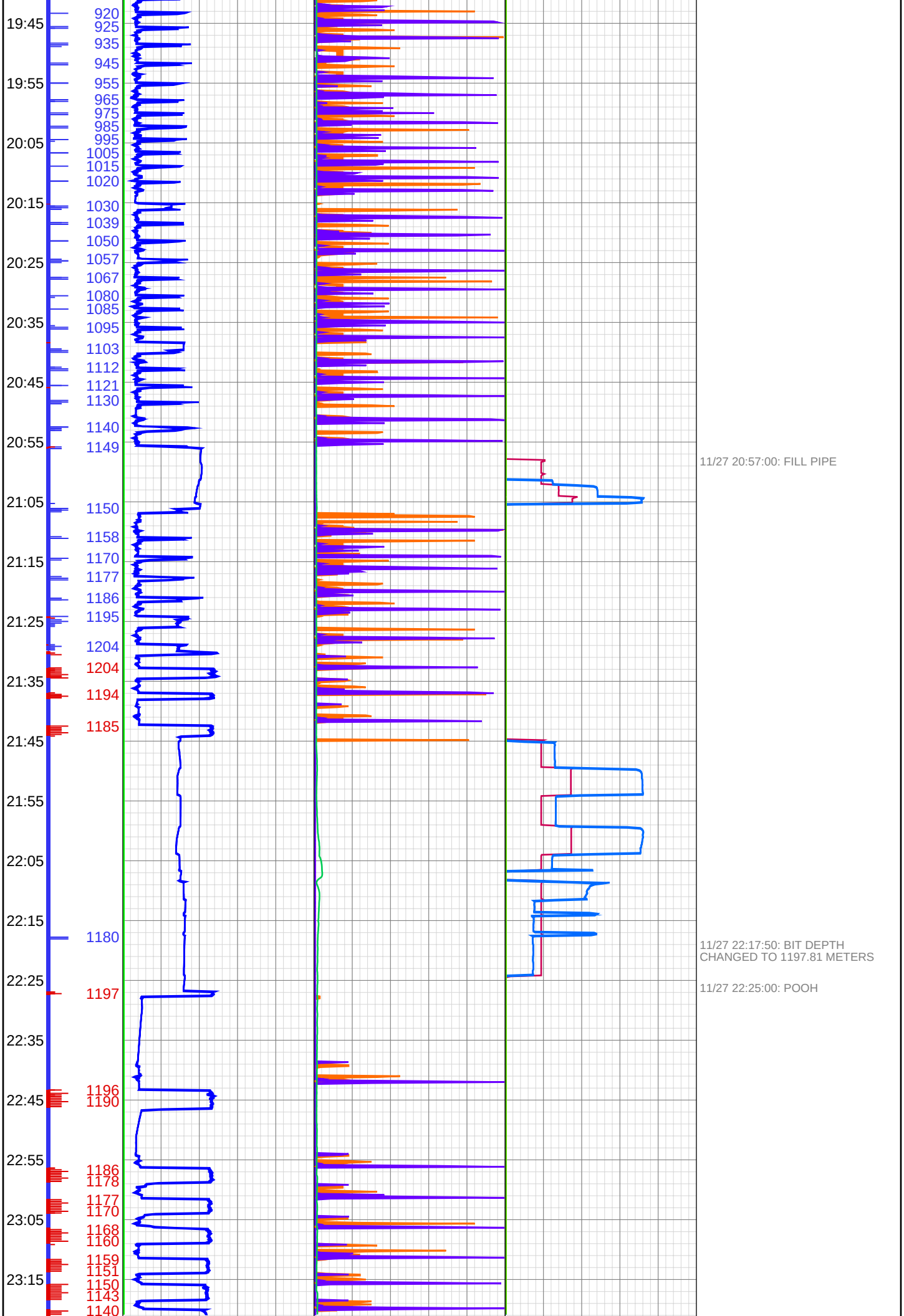
11/27 16:59:43: BIT DEPTH CHANGED TO 409.98 METERS
11/27 17:21:00: FILL PIPE
11/27 17:25:30: PVT:Flow alarm reactivated: un-muted
11/27 18:44:00: FILL PIPE
11/27 18:56:00: RIH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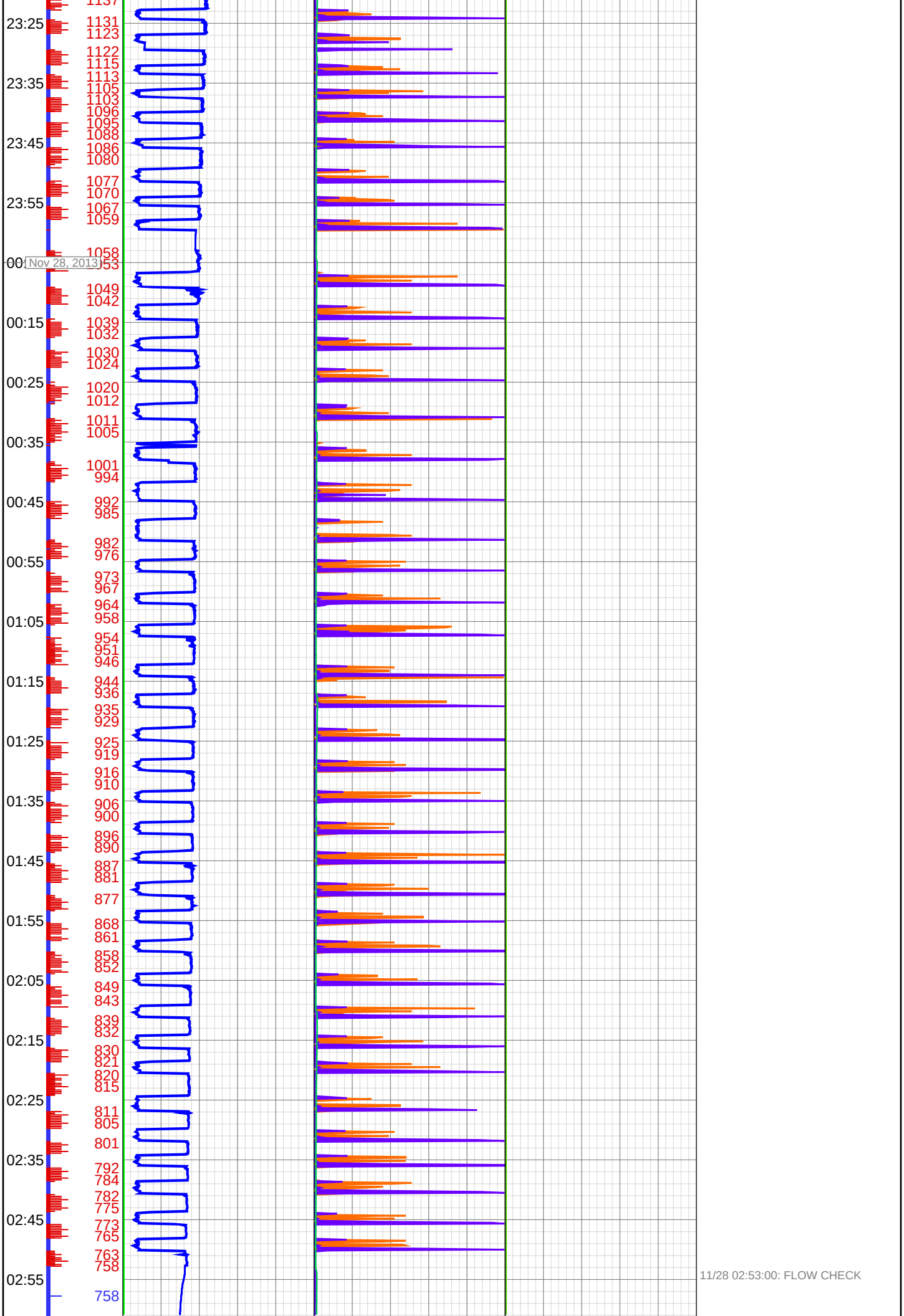
11/27 20:57:00: FILL PIPE
11/27 22:17:50: BIT DEPTH CHANGED TO 1197.81 METERS
11/27 22:25:00: POOH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Nov 28, 2013
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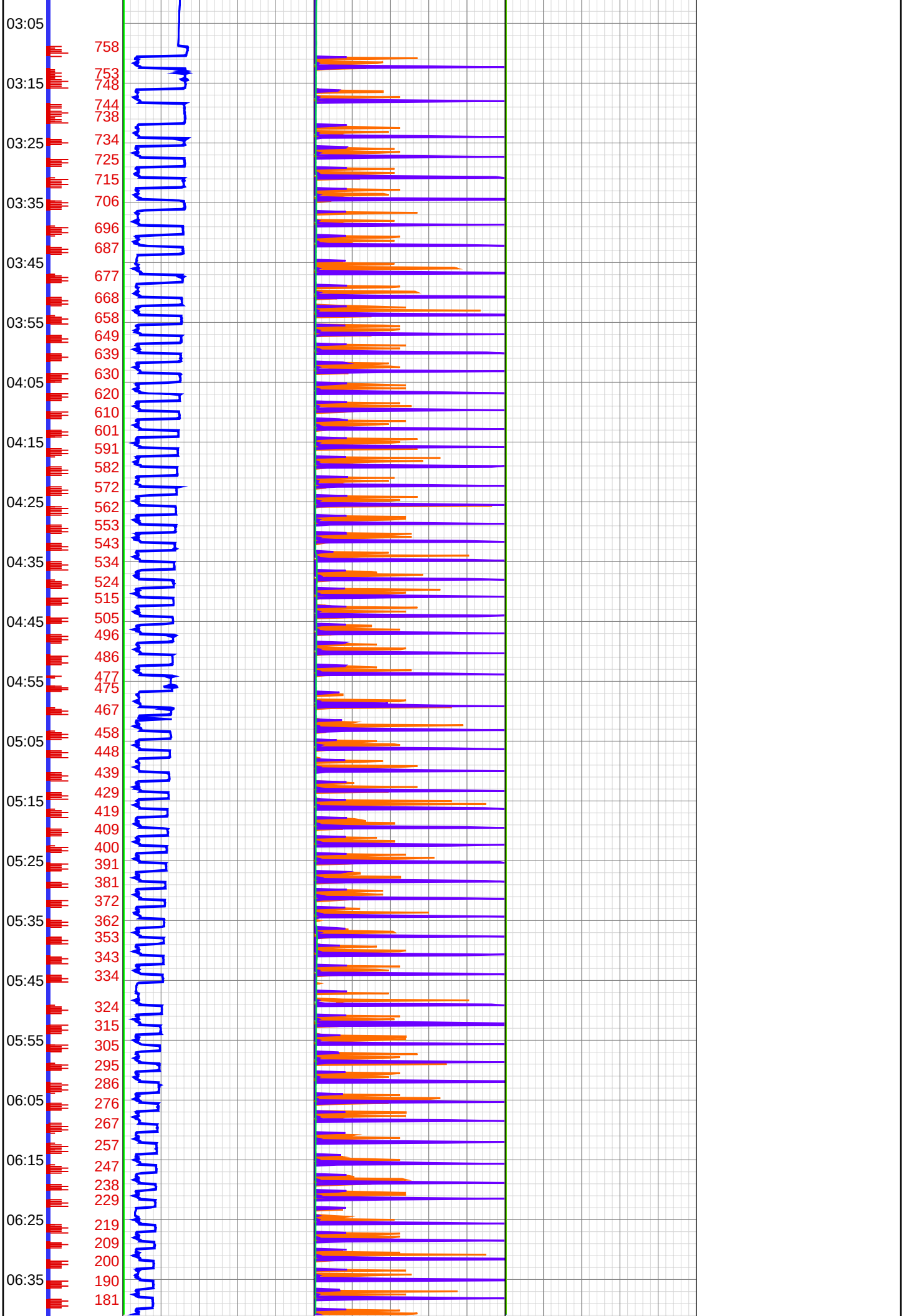
11/28 02:53:00: FLOW CHECK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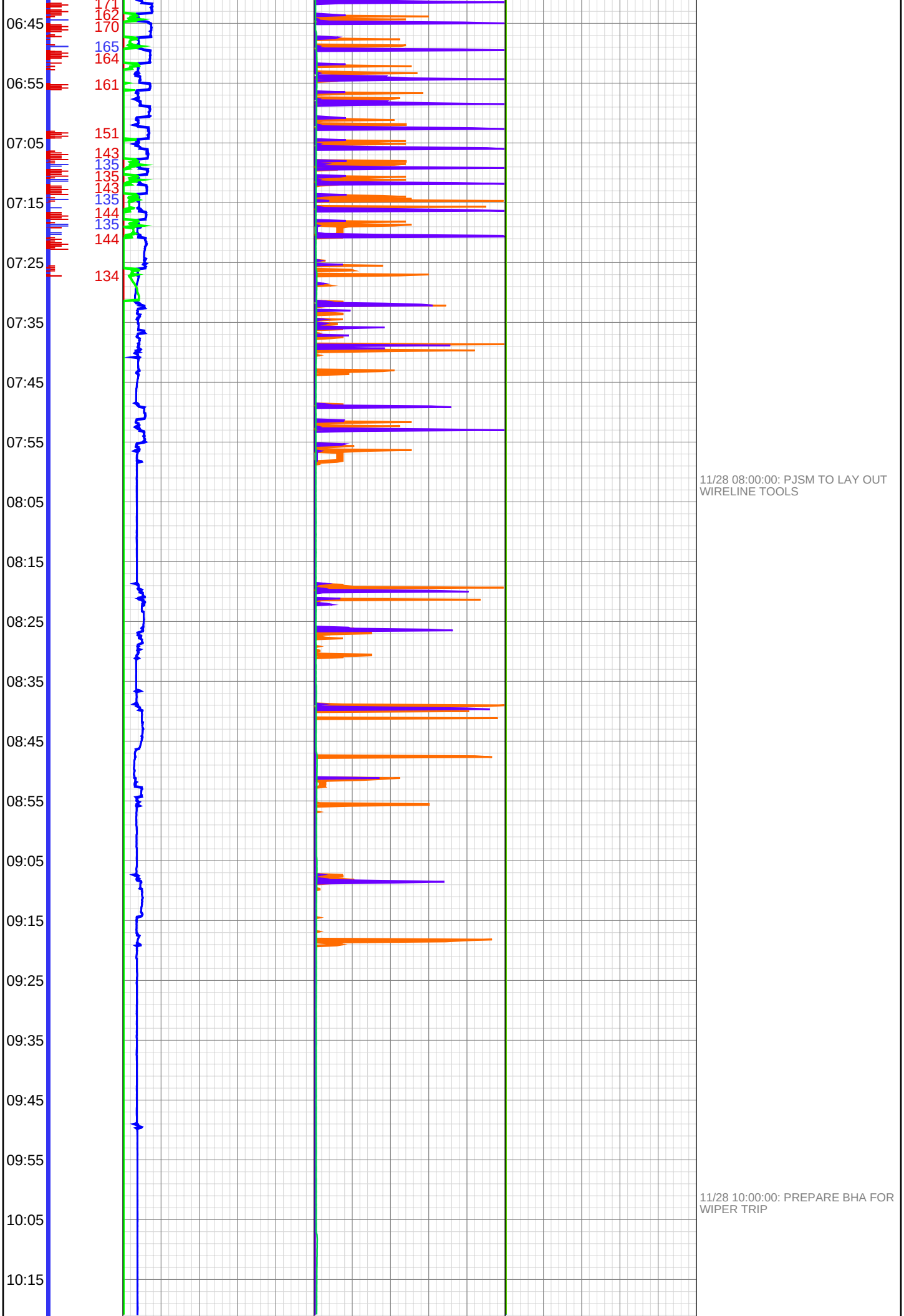
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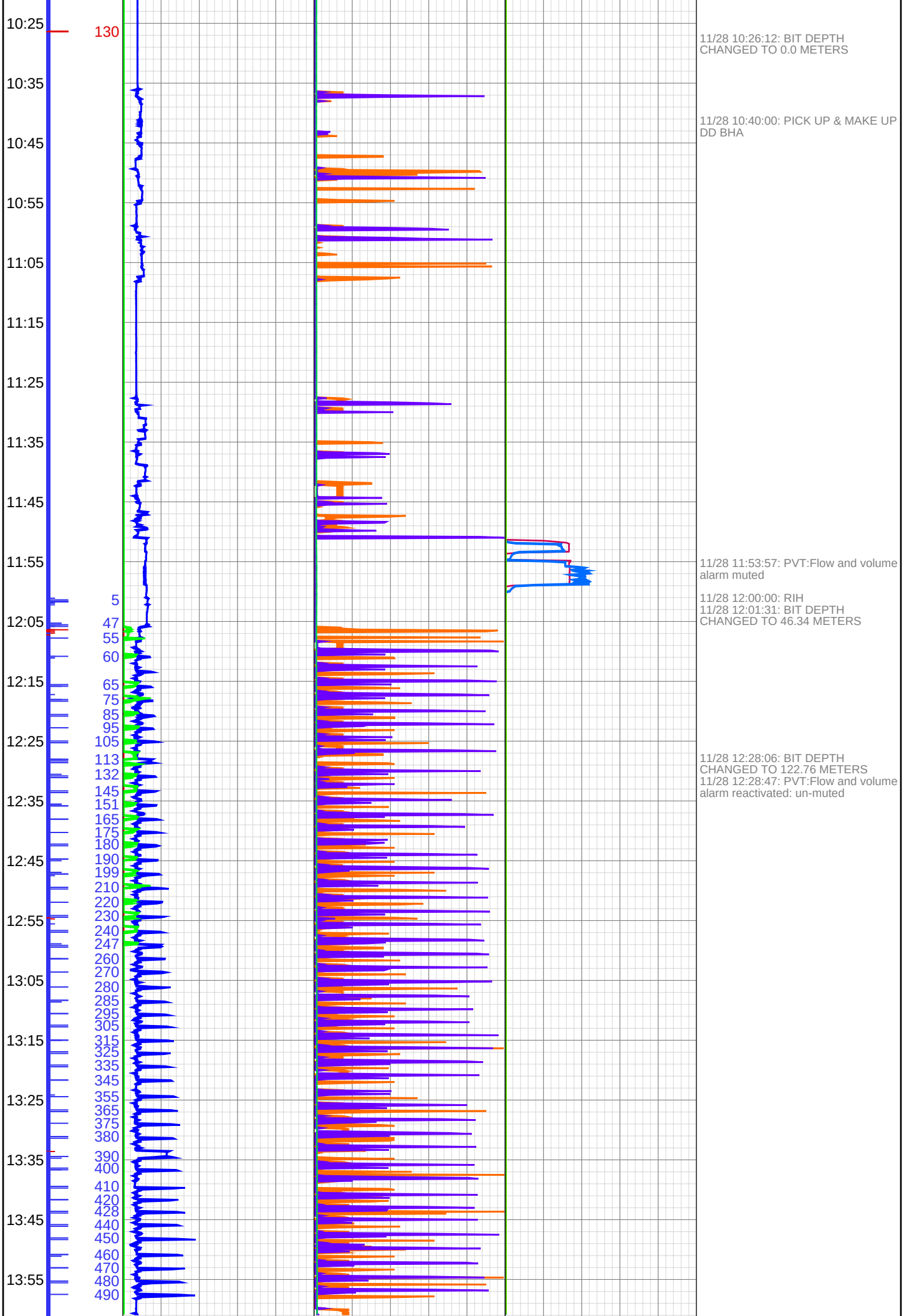
11/28 08:00:00: PJSM TO LAY OUT WIRELINE TOOLS
11/28 10:00:00: PREPARE BHA FOR WIPER TRIP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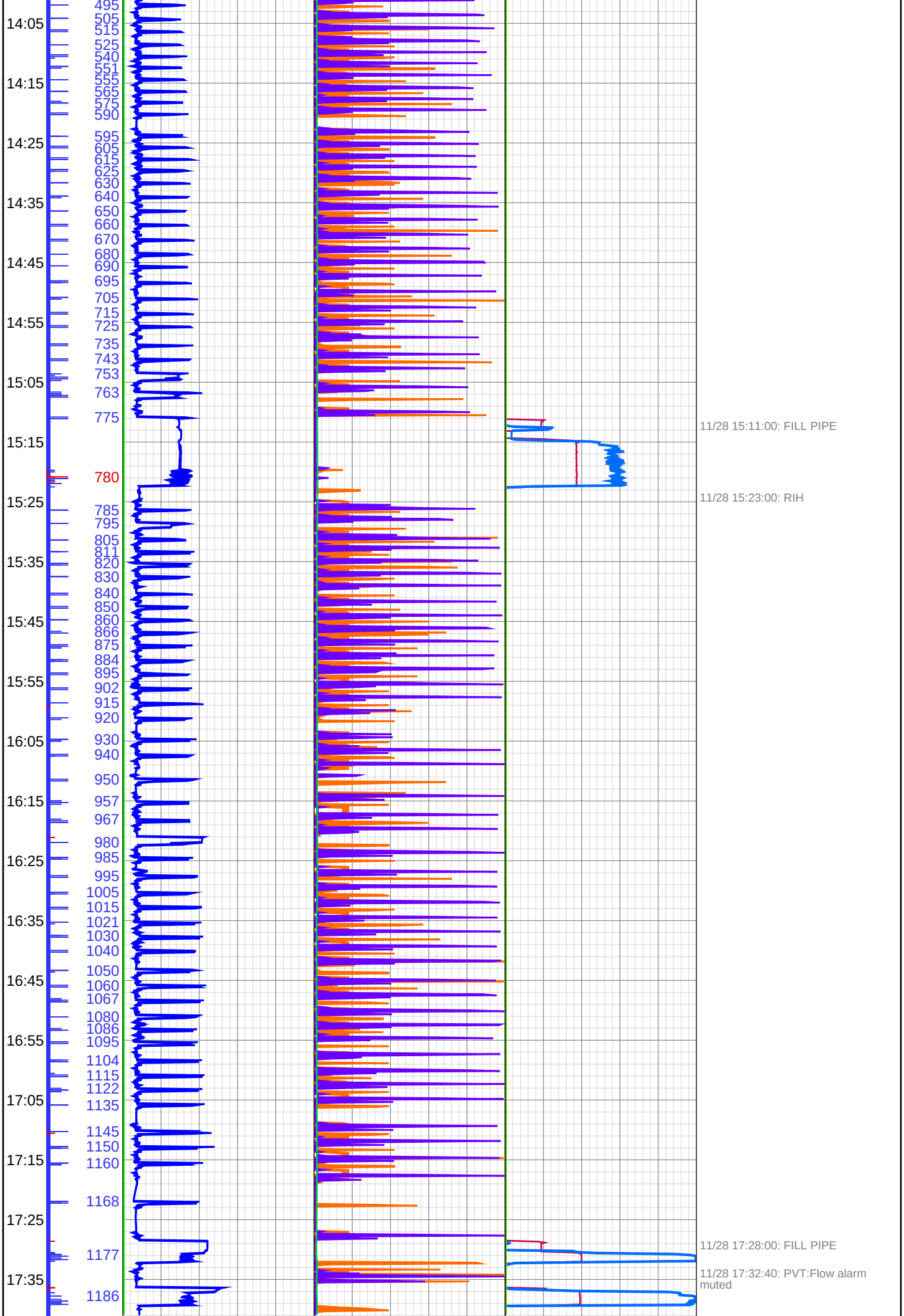
11/28 10:26:12: BIT DEPTH CHANGED TO 0.0 METERS
11/28 10:40:00: PICK UP & MAKE UP DD BHA
11/28 11:53:57: PVT:Flow and volume alarm muted
11/28 12:00:00: RIH
11/28 12:01:31: BIT DEPTH CHANGED TO 46.34 METERS
11/28 12:28:06: BIT DEPTH CHANGED TO 122.76 METERS
11/28 12:28:47: PVT:Flow and volume alarm reactivated: un-muted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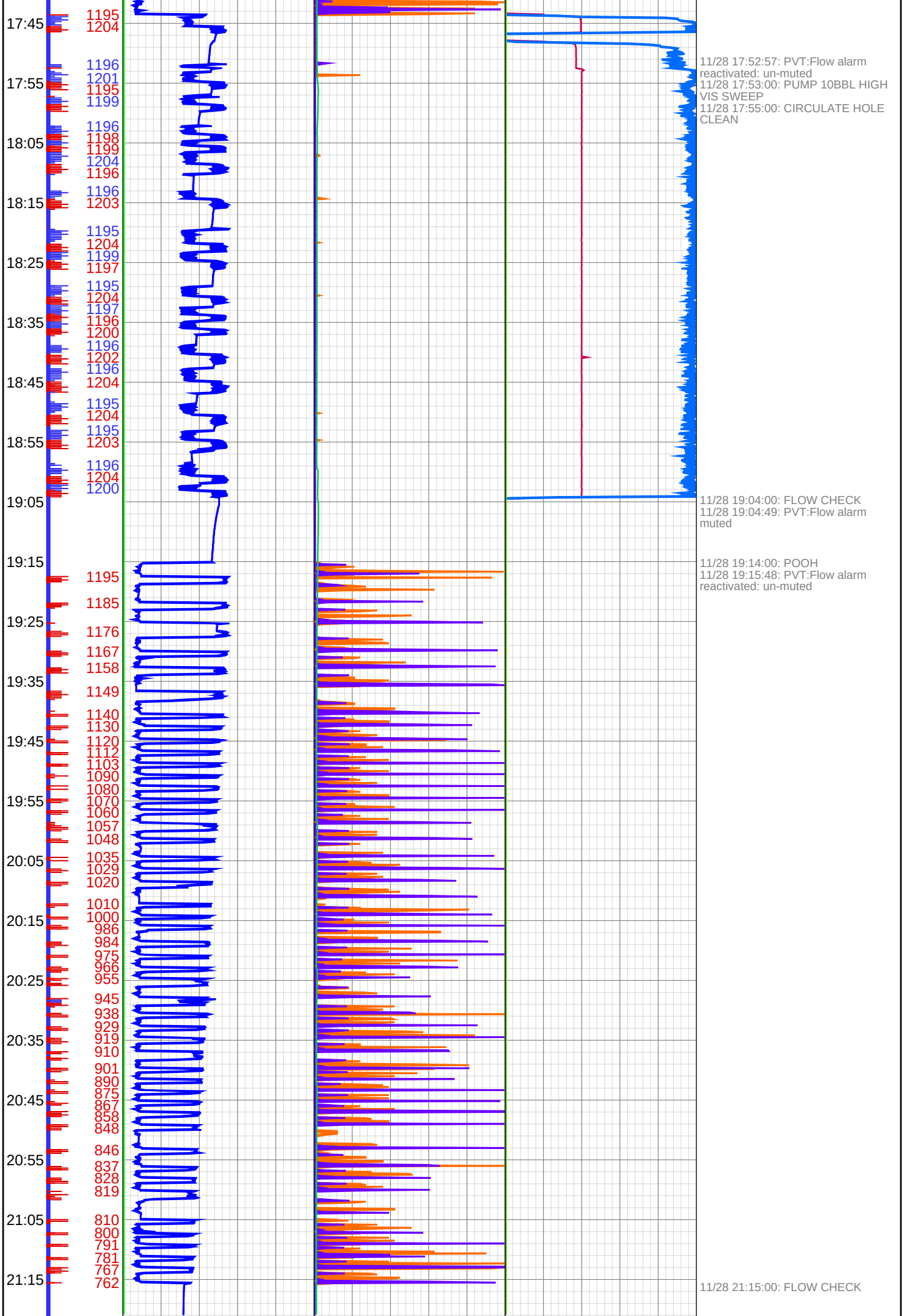
11/28 15:11:00: FILL PIPE
11/28 15:23:00: RIH
11/28 17:28:00: FILL PIPE
11/28 17:32:40: PVT:Flow alarm muted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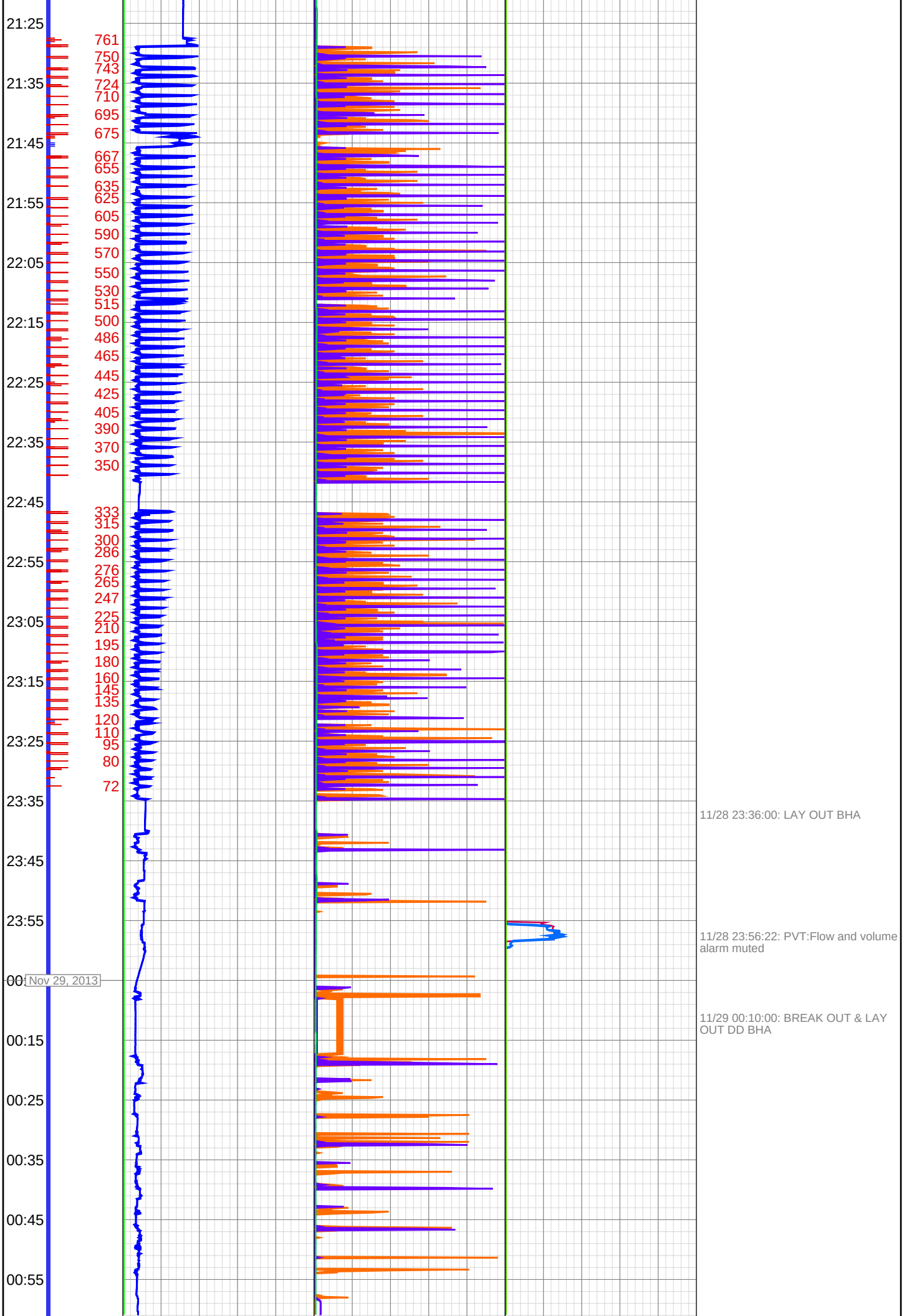
11/28 17:52:57: PVT:Flow alarm reactivated: un-muted
11/28 17:53:00: PUMP 10BBL HIGH VIS SWEEP
11/28 17:55:00: CIRCULATE HOLE CLEAN
11/28 19:04:00: FLOW CHECK
11/28 19:04:49: PVT:Flow alarm muted
11/28 19:14:00: POOH
11/28 19:15:48: PVT:Flow alarm reactivated: un-muted
11/28 21:15:00: FLOW CHECK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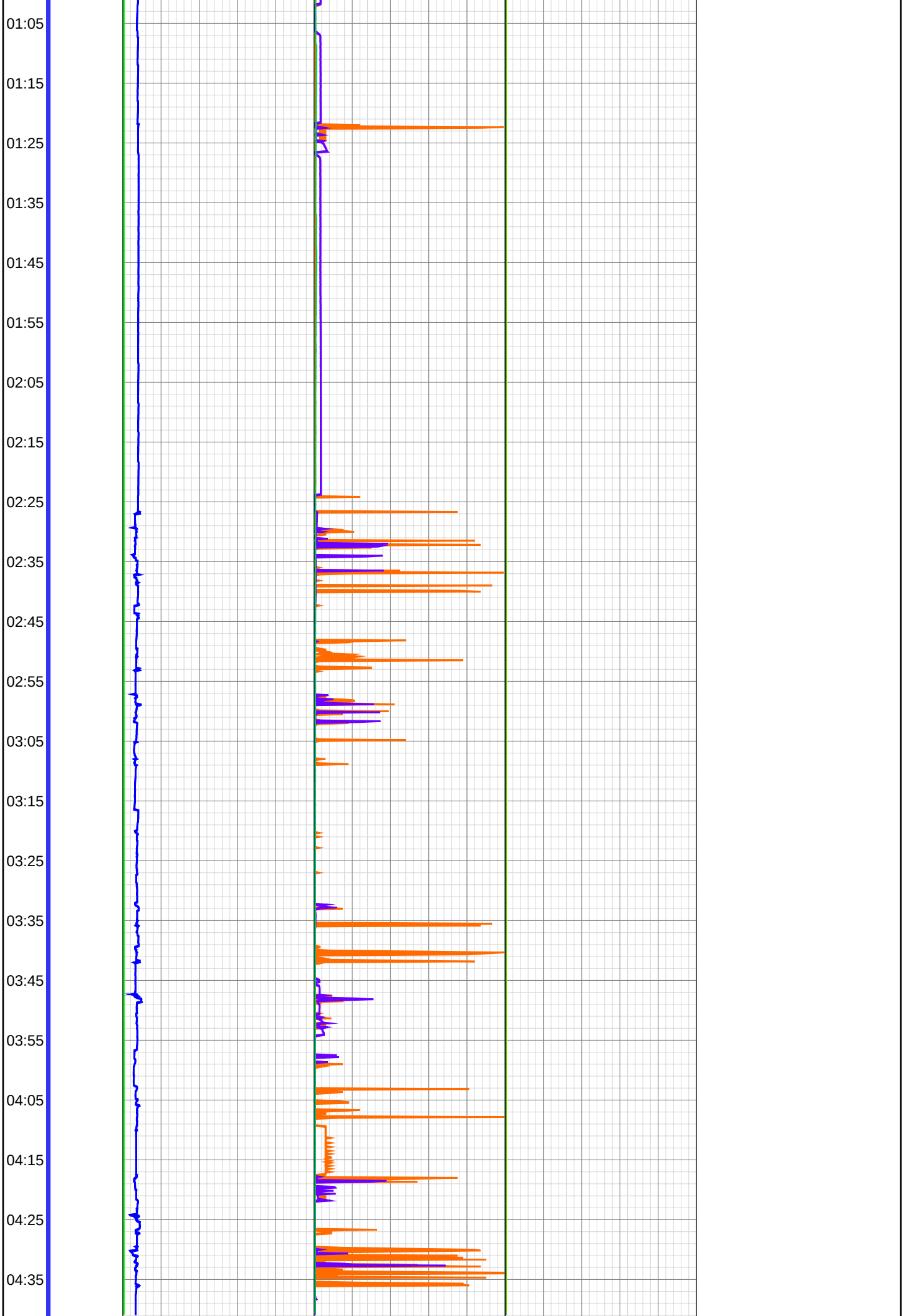
Nov 29, 2013
11/28 23:36:00: LAY OUT BHA
11/28 23:56:22: PVT:Flow and volume alarm muted
11/29 00:10:00: BREAK OUT & LAY OUT DD BHA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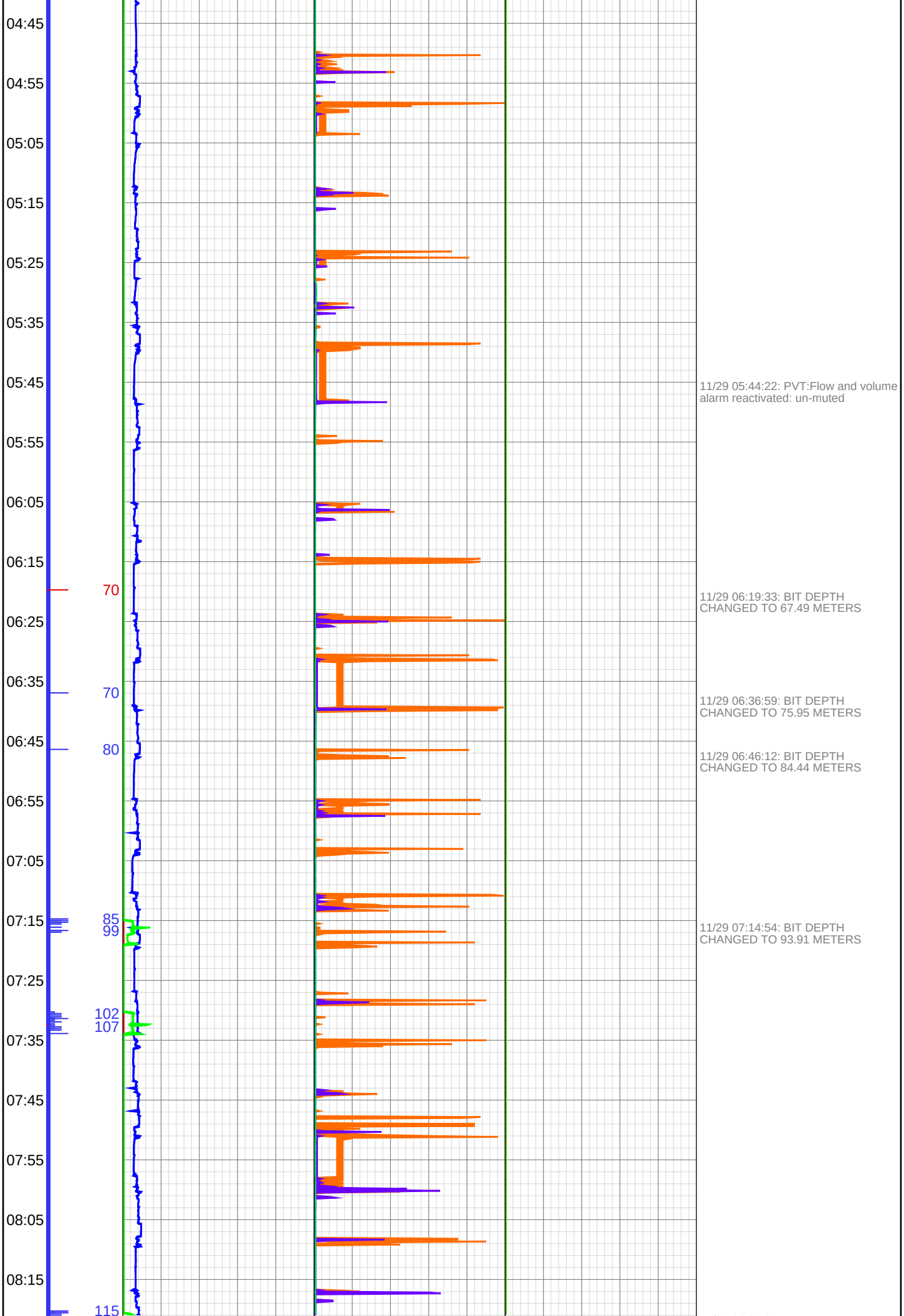
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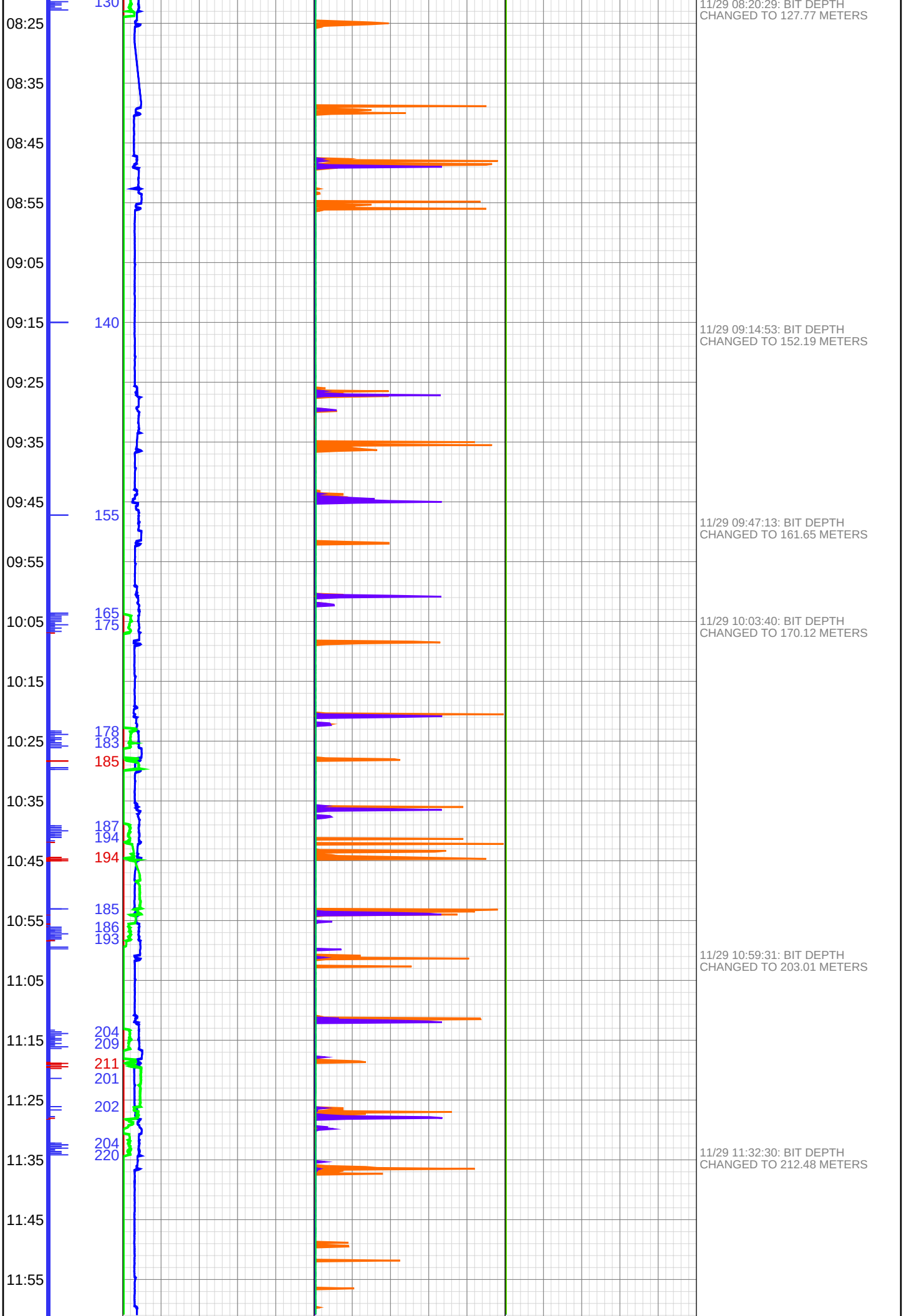
11/29 05:44:22: PVT:Flow and volume alarm reactivated: un-muted
11/29 06:19:33: BIT DEPTH CHANGED TO 67.49 METERS
11/29 06:36:59: BIT DEPTH CHANGED TO 75.95 METERS
11/29 06:46:12: BIT DEPTH CHANGED TO 84.44 METERS
11/29 07:14:54: BIT DEPTH CHANGED TO 93.91 METERS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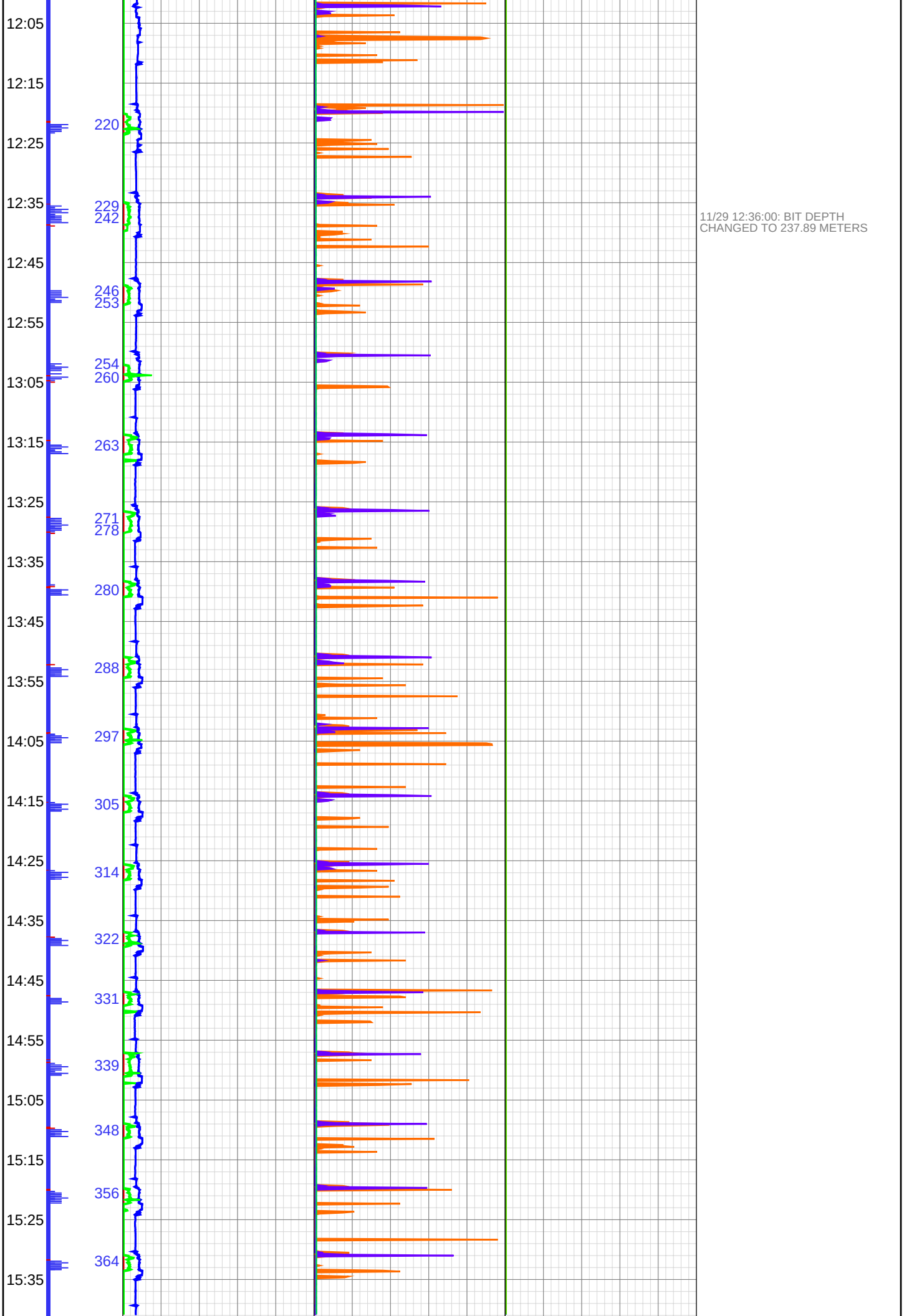
11/29 08:20:29: BIT DEPTH CHANGED TO 127.77 METERS
11/29 09:14:53: BIT DEPTH CHANGED TO 152.19 METERS
11/29 09:47:13: BIT DEPTH CHANGED TO 161.65 METERS
11/29 10:03:40: BIT DEPTH CHANGED TO 170.12 METERS
11/29 10:59:31: BIT DEPTH CHANGED TO 203.01 METERS
11/29 11:32:30: BIT DEPTH CHANGED TO 212.48 METERS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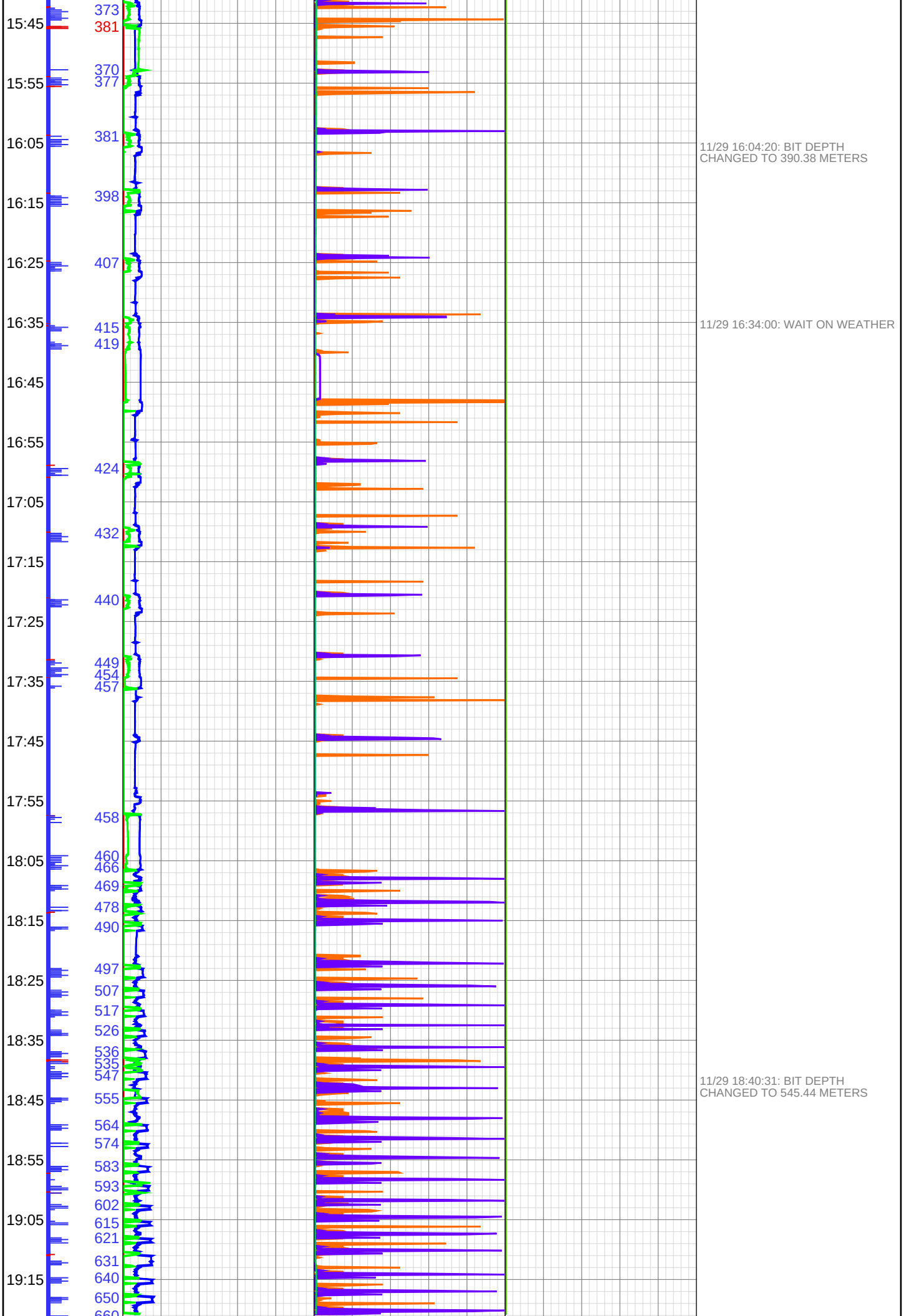
11/29 12:36:00: BIT DEPTH CHANGED TO 237.89 METERS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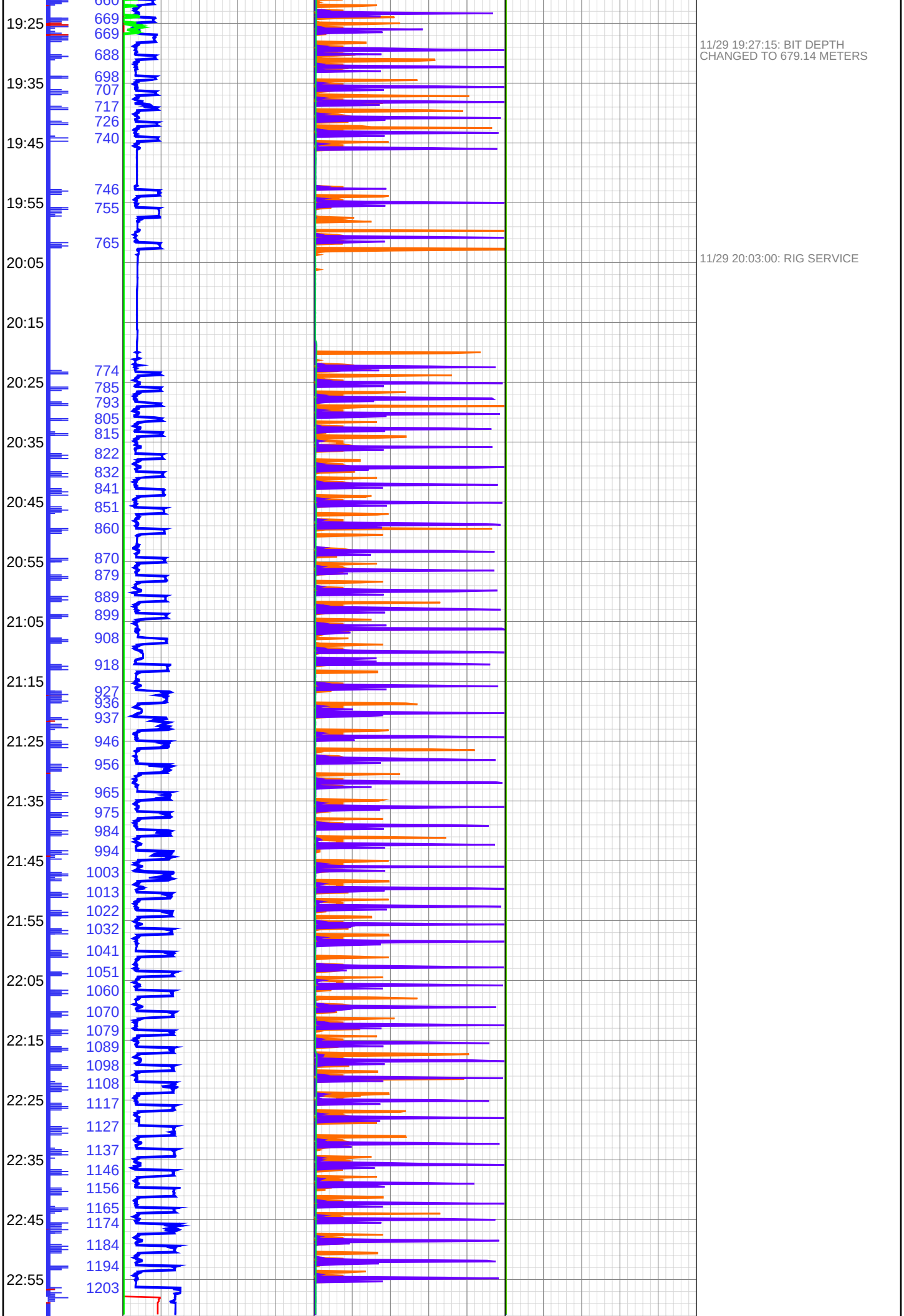
11/29 16:04:20: BIT DEPTH CHANGED TO 390.38 METERS
11/29 16:34:00: WAIT ON WEATHER
11/29 18:40:31: BIT DEPTH CHANGED TO 545.44 METERS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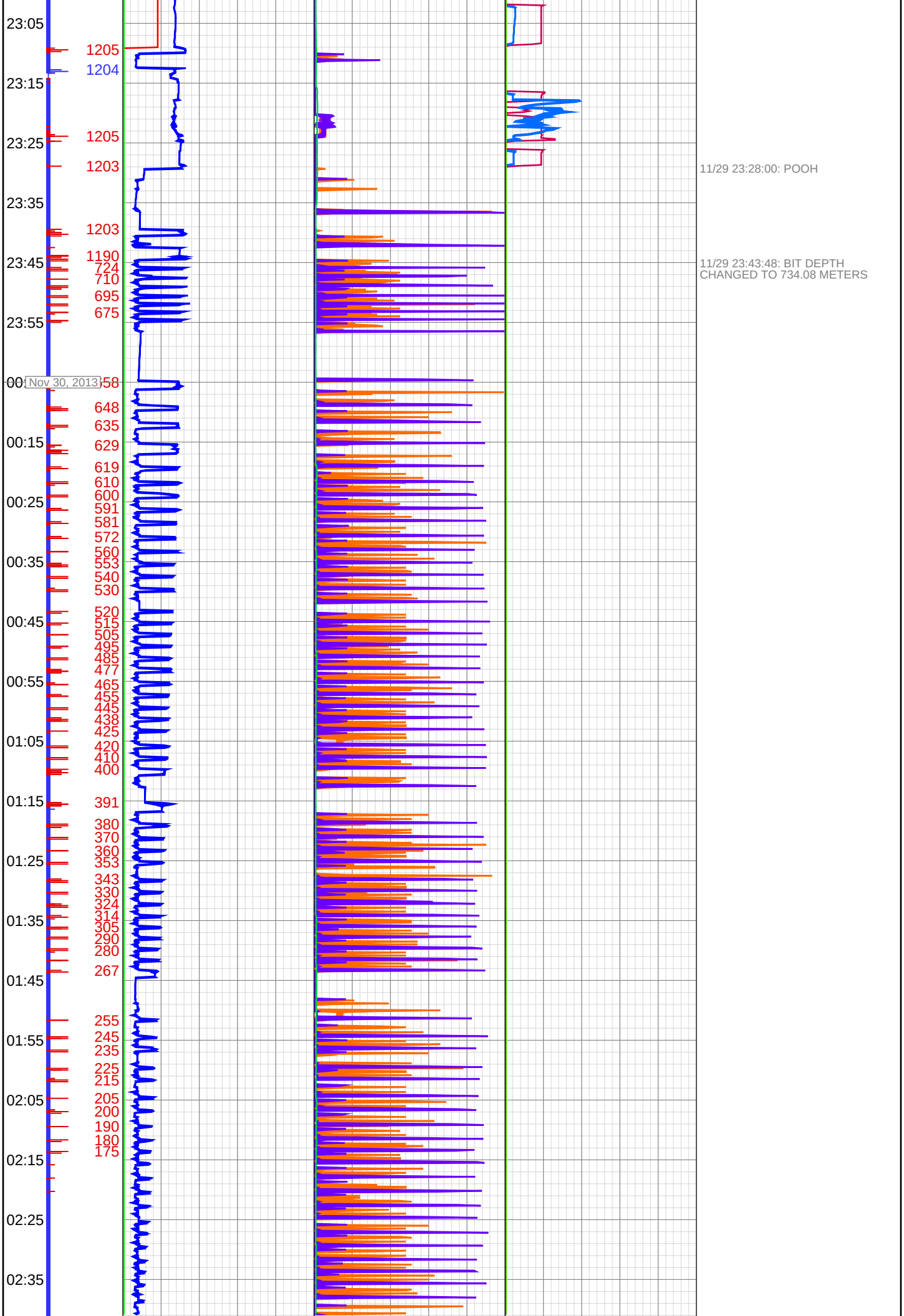
11/29 19:27:15: BIT DEPTH CHANGED TO 679.14 METERS
11/29 20:03:00: RIG SERVICE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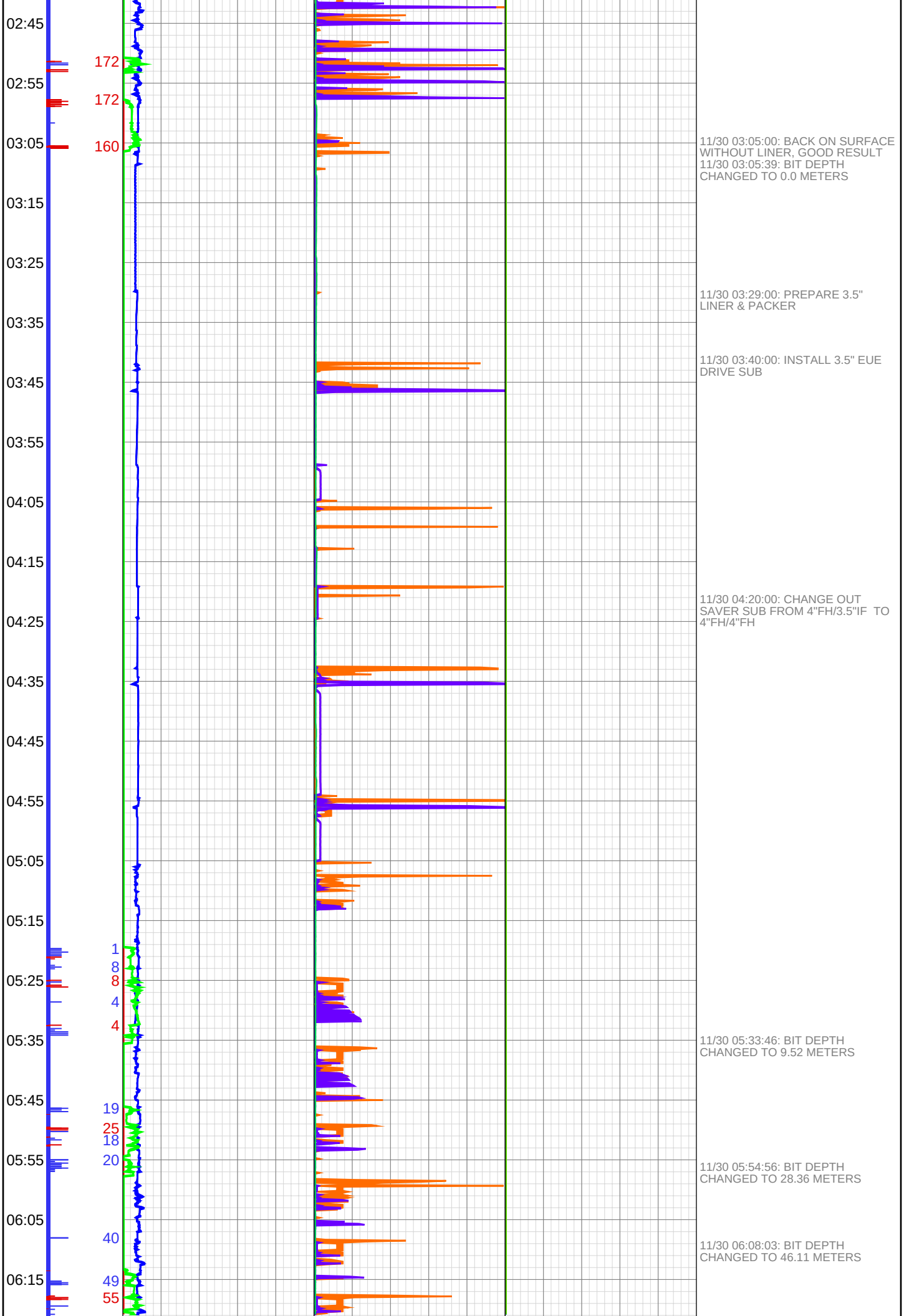
11/29 23:28:00: POOH
11/29 23:43:48: BIT DEPTH CHANGED TO 734.08 METERS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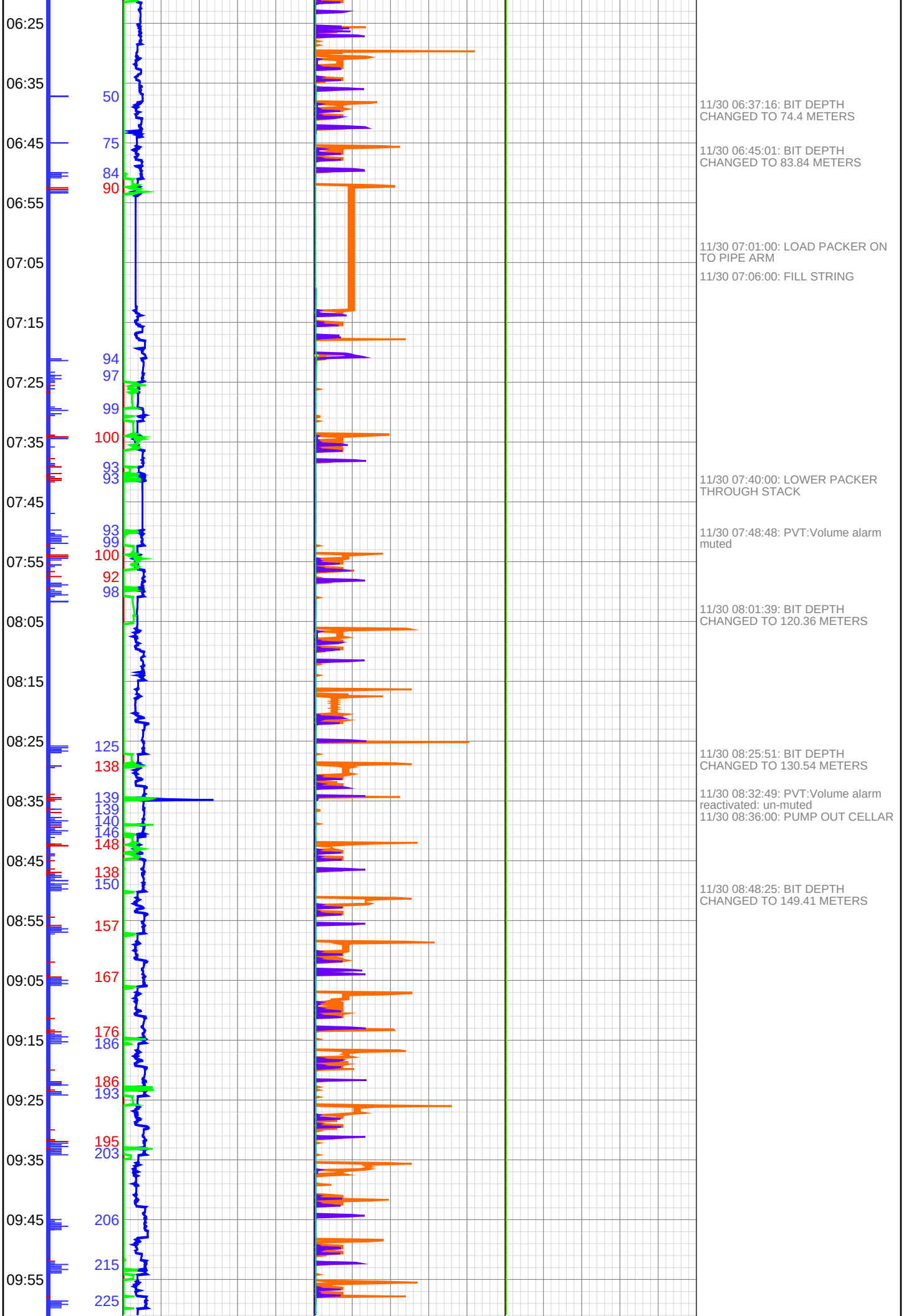
11/30 03:05:00: BACK ON SURFACE WITHOUT LINER, GOOD RESULT
11/30 03:05:39: BIT DEPTH CHANGED TO 0.0 METERS
11/30 03:29:00: PREPARE 3.5" LINER & PACKER
11/30 03:40:00: INSTALL 3.5" EUE DRIVE SUB
11/30 04:20:00: CHANGE OUT SAVER SUB FROM 4"FH/3.5"IF TO 4"FH/4"FH
11/30 05:33:46: BIT DEPTH CHANGED TO 9.52 METERS
11/30 05:54:56: BIT DEPTH CHANGED TO 28.36 METERS
11/30 06:08:03: BIT DEPTH CHANGED TO 46.11 METERS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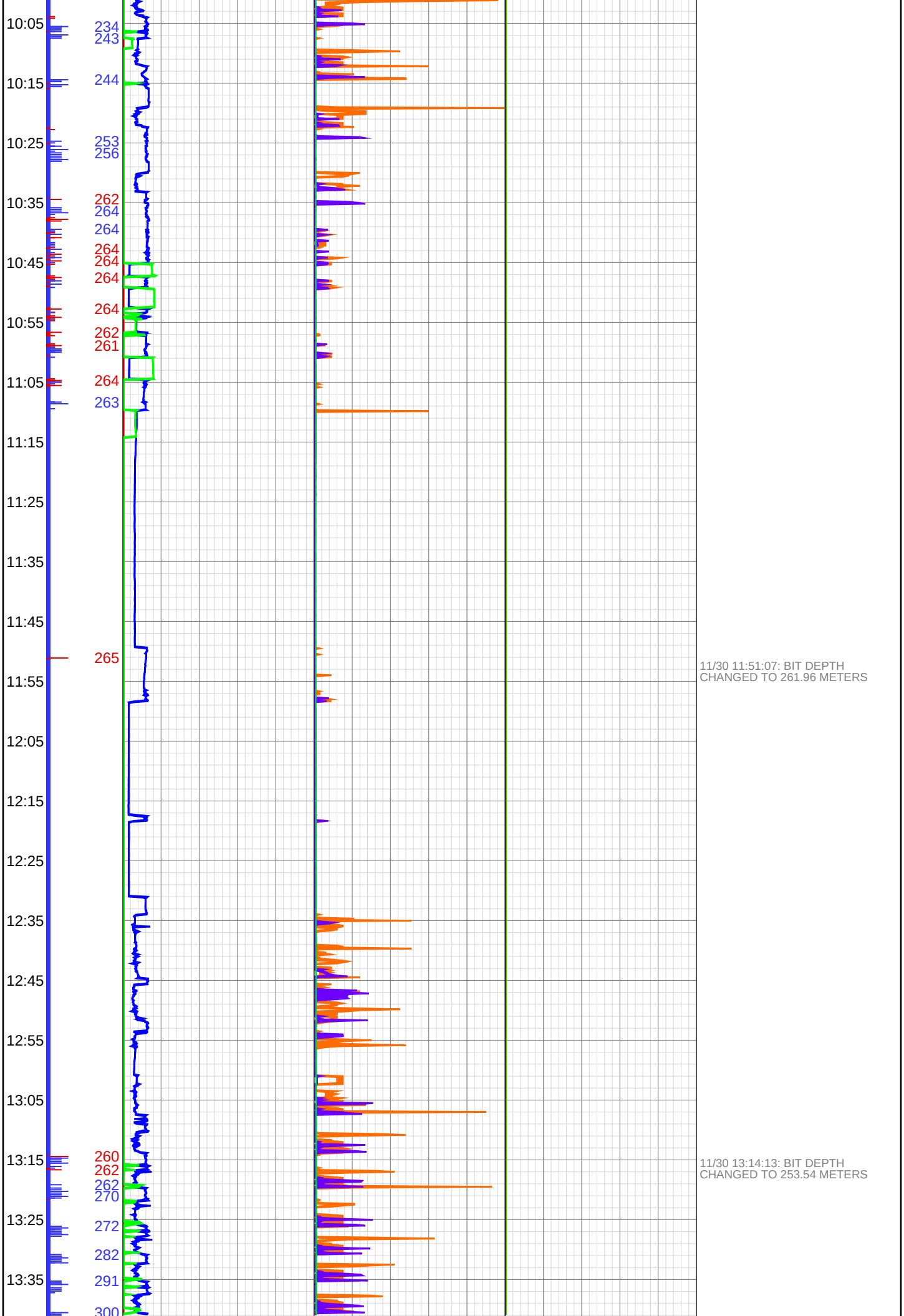
11/30 06:37:16: BIT DEPTH CHANGED TO 74.4 METERS
11/30 06:45:01: BIT DEPTH CHANGED TO 83.84 METERS
11/30 07:01:00: LOAD PACKER ON TO PIPE ARM
11/30 07:06:00: FILL STRING
11/30 07:40:00: LOWER PACKER THROUGH STACK
11/30 07:48:48: PVT:Volume alarm muted
11/30 08:01:39: BIT DEPTH CHANGED TO 120.36 METERS
11/30 08:25:51: BIT DEPTH CHANGED TO 130.54 METERS
11/30 08:32:49: PVT:Volume alarm reactivated: un-muted
11/30 08:36:00: PUMP OUT CELLAR
11/30 08:48:25: BIT DEPTH CHANGED TO 149.41 METERS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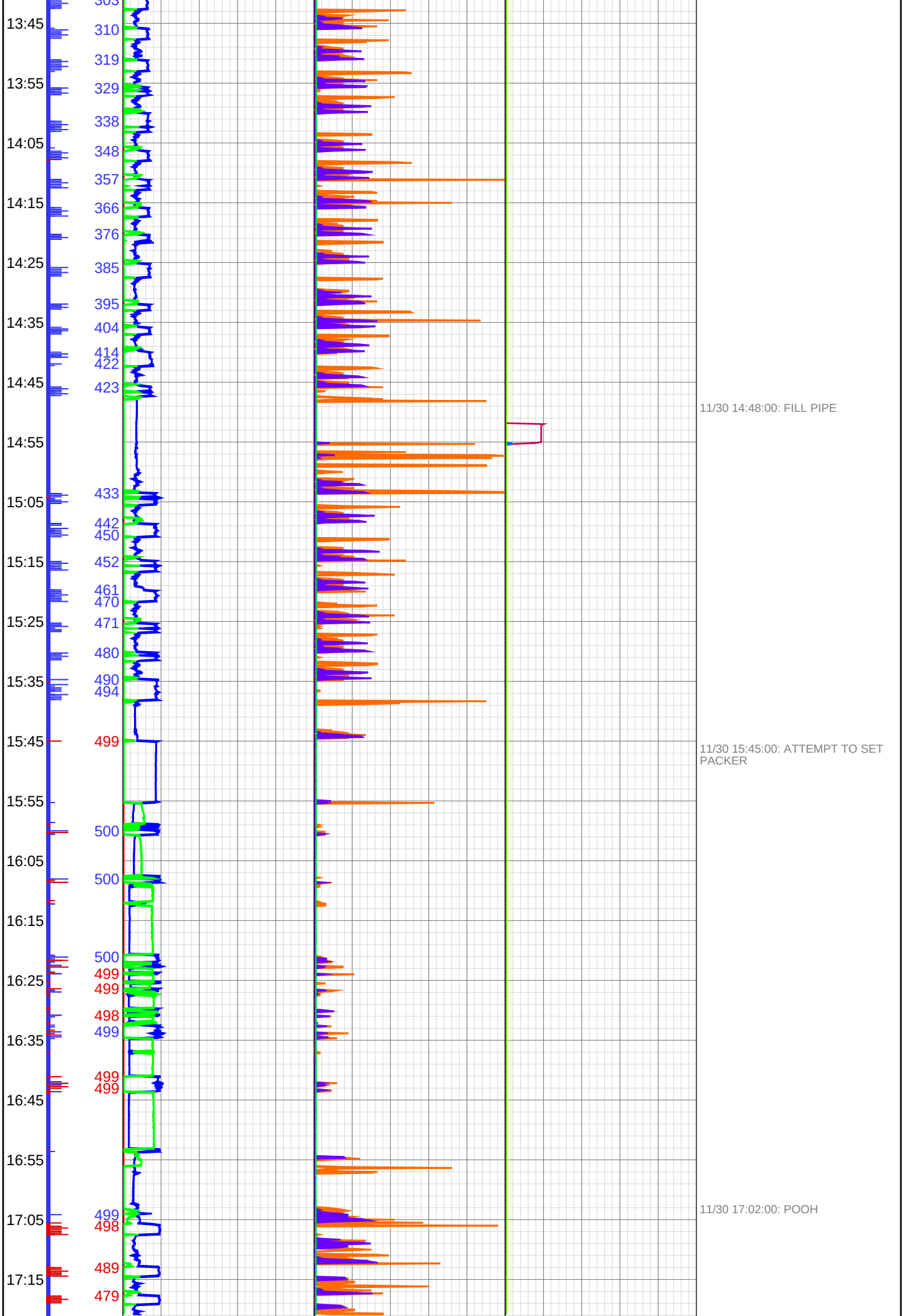
11/30 11:51:07: BIT DEPTH CHANGED TO 261.96 METERS
11/30 13:14:13: BIT DEPTH CHANGED TO 253.54 METERS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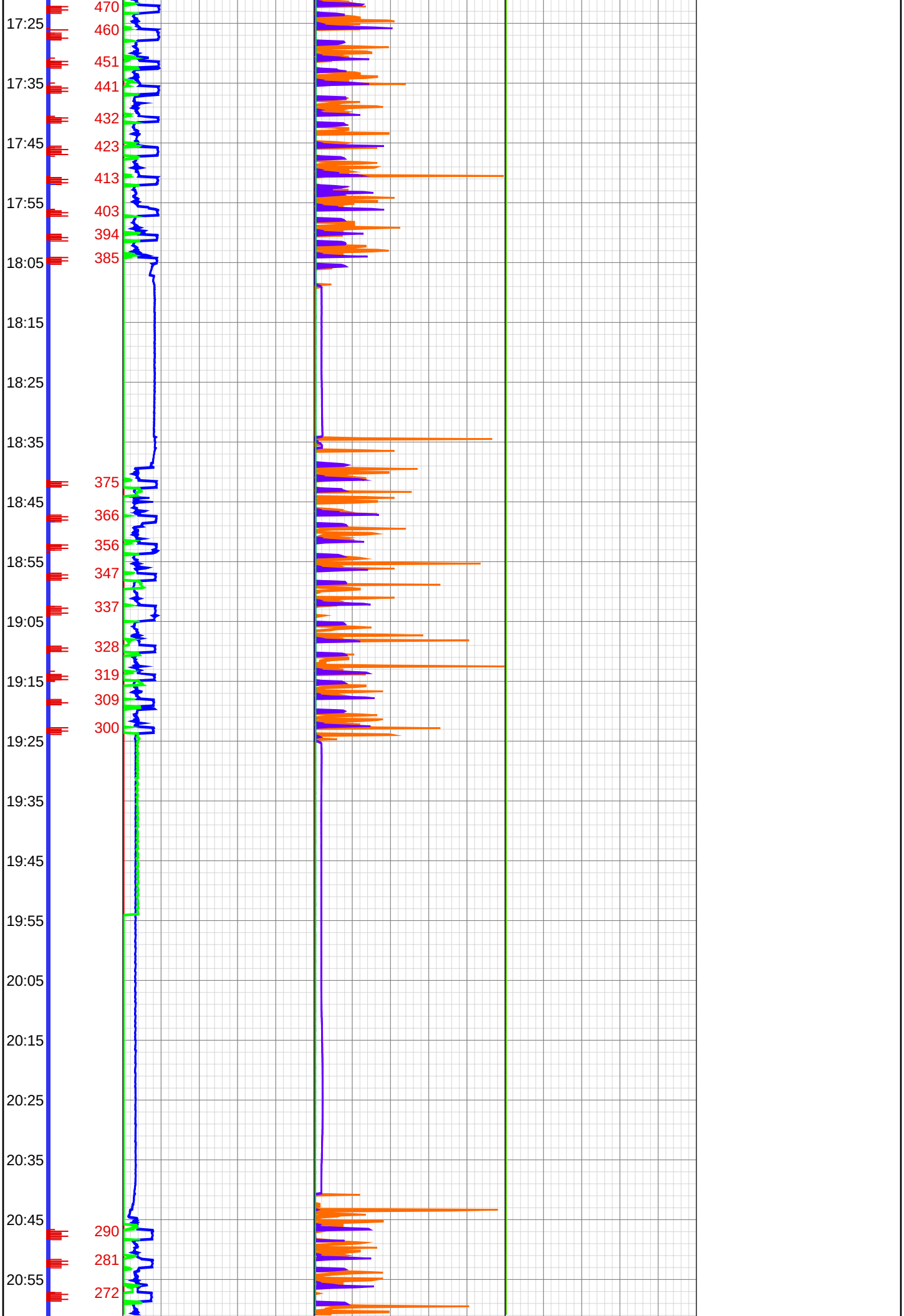
11/30 14:48:00: FILL PIPE
11/30 15:45:00: ATTEMPT TO SET PACKER
11/30 17:02:00: POOH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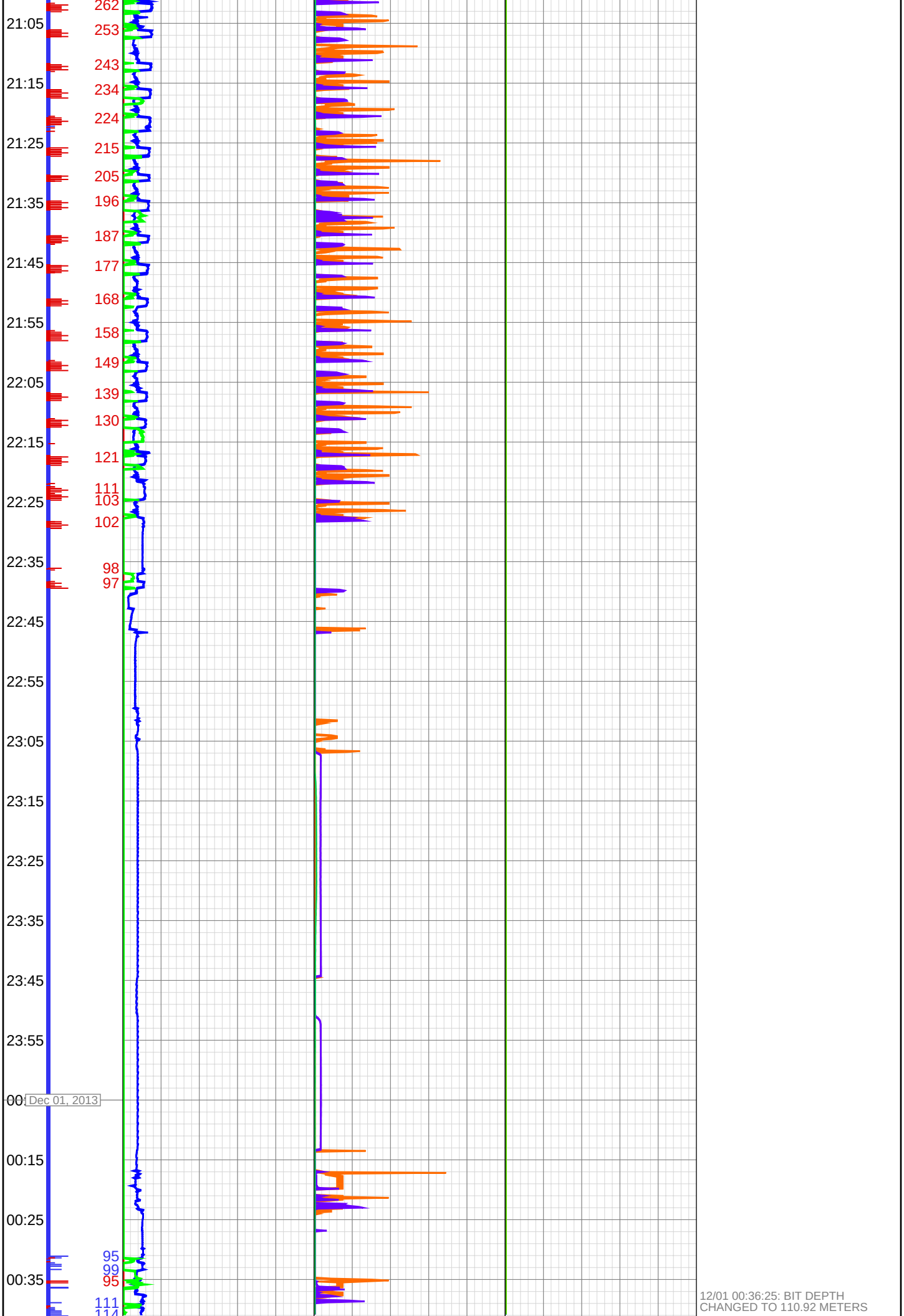
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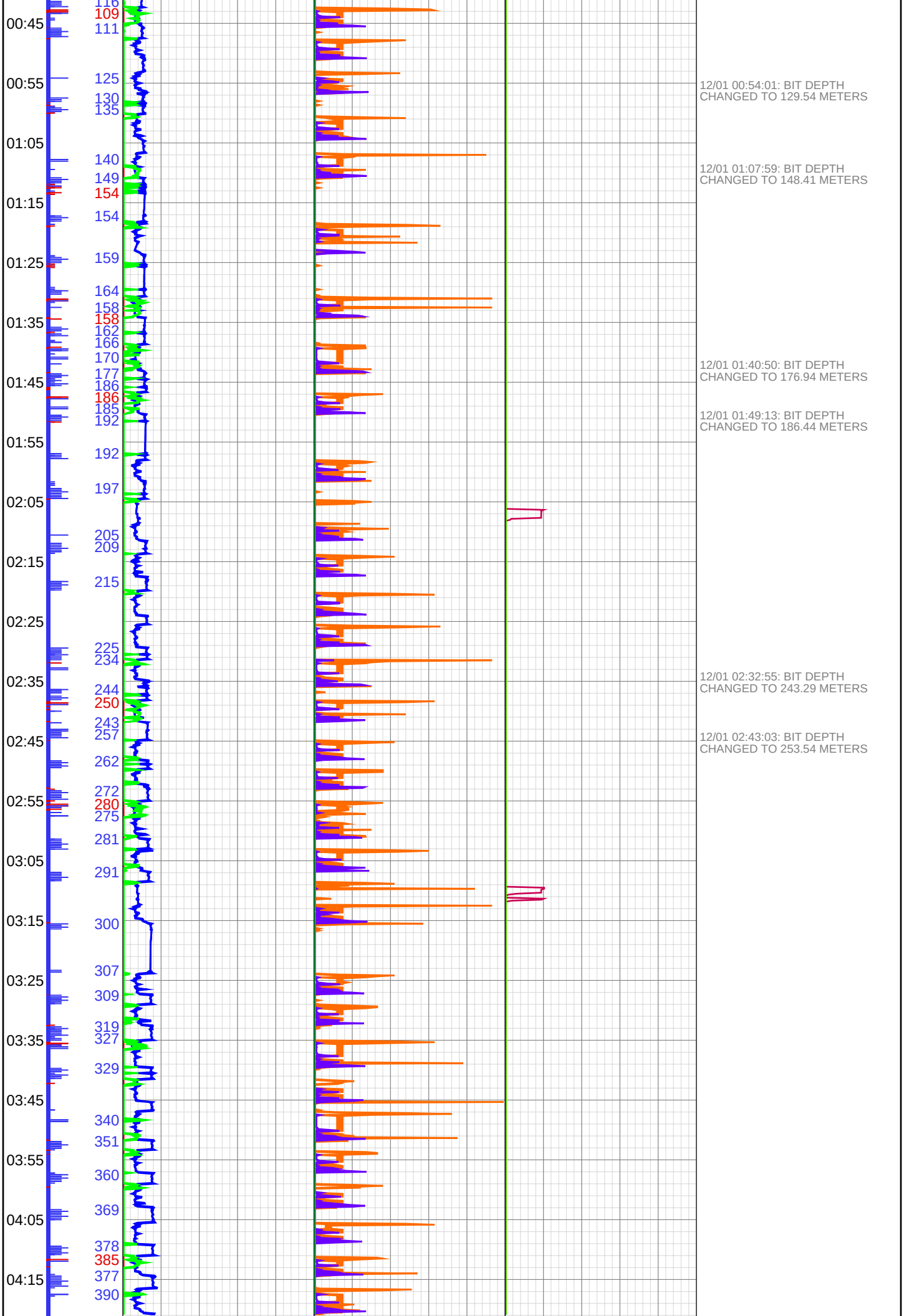
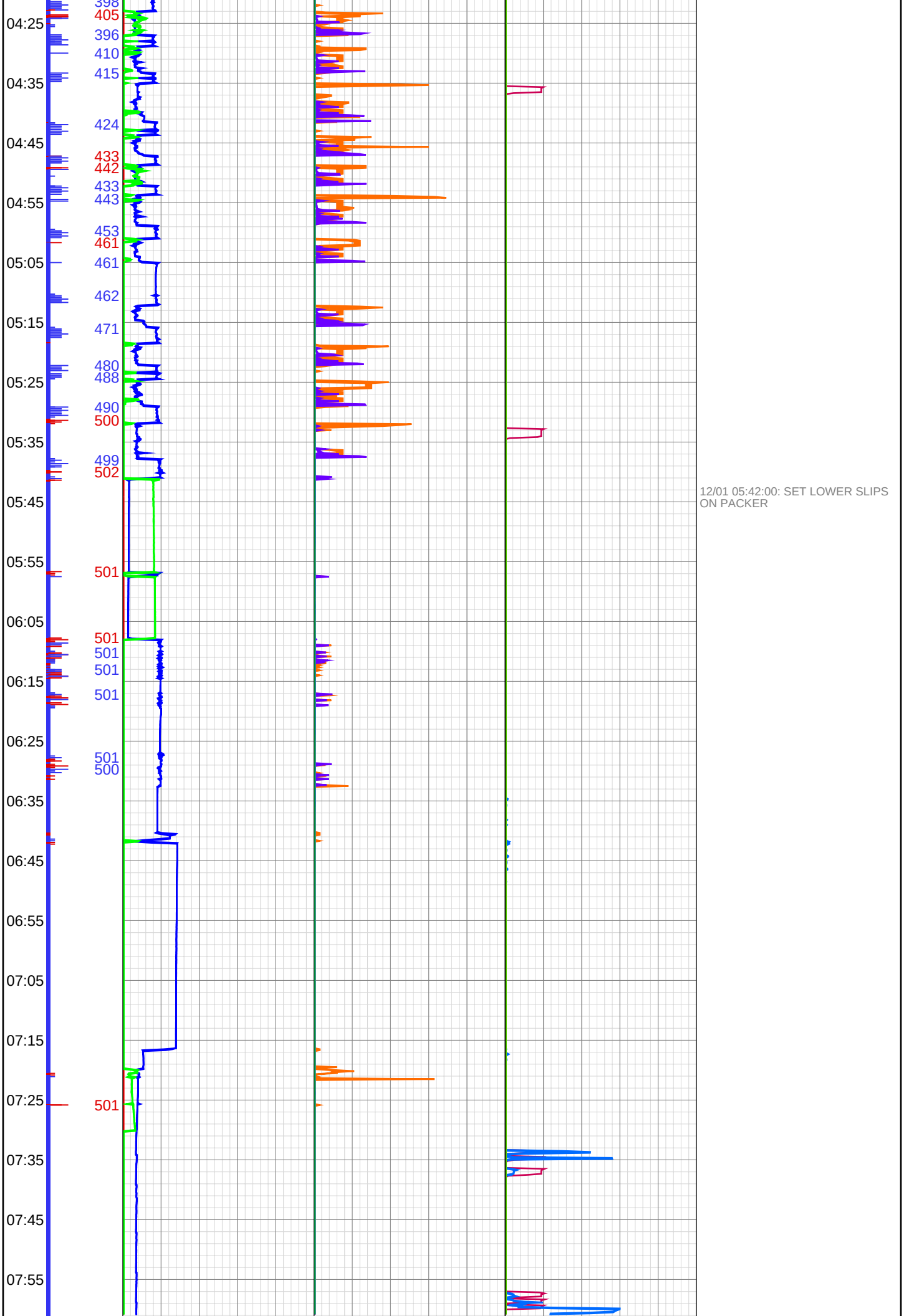
12/01 00:36:25: BIT DEPTH
CHANGED TO 110.92 METERS


12/01 00:54:01: BIT DEPTH CHANGED TO 129.54 METERS
12/01 01:07:59: BIT DEPTH CHANGED TO 148.41 METERS
12/01 01:40:50: BIT DEPTH CHANGED TO 176.94 METERS
12/01 01:49:13: BIT DEPTH CHANGED TO 186.44 METERS
12/01 02:32:55: BIT DEPTH CHANGED TO 243.29 METERS
12/01 02:43:03: BIT DEPTH CHANGED TO 253.54 METERS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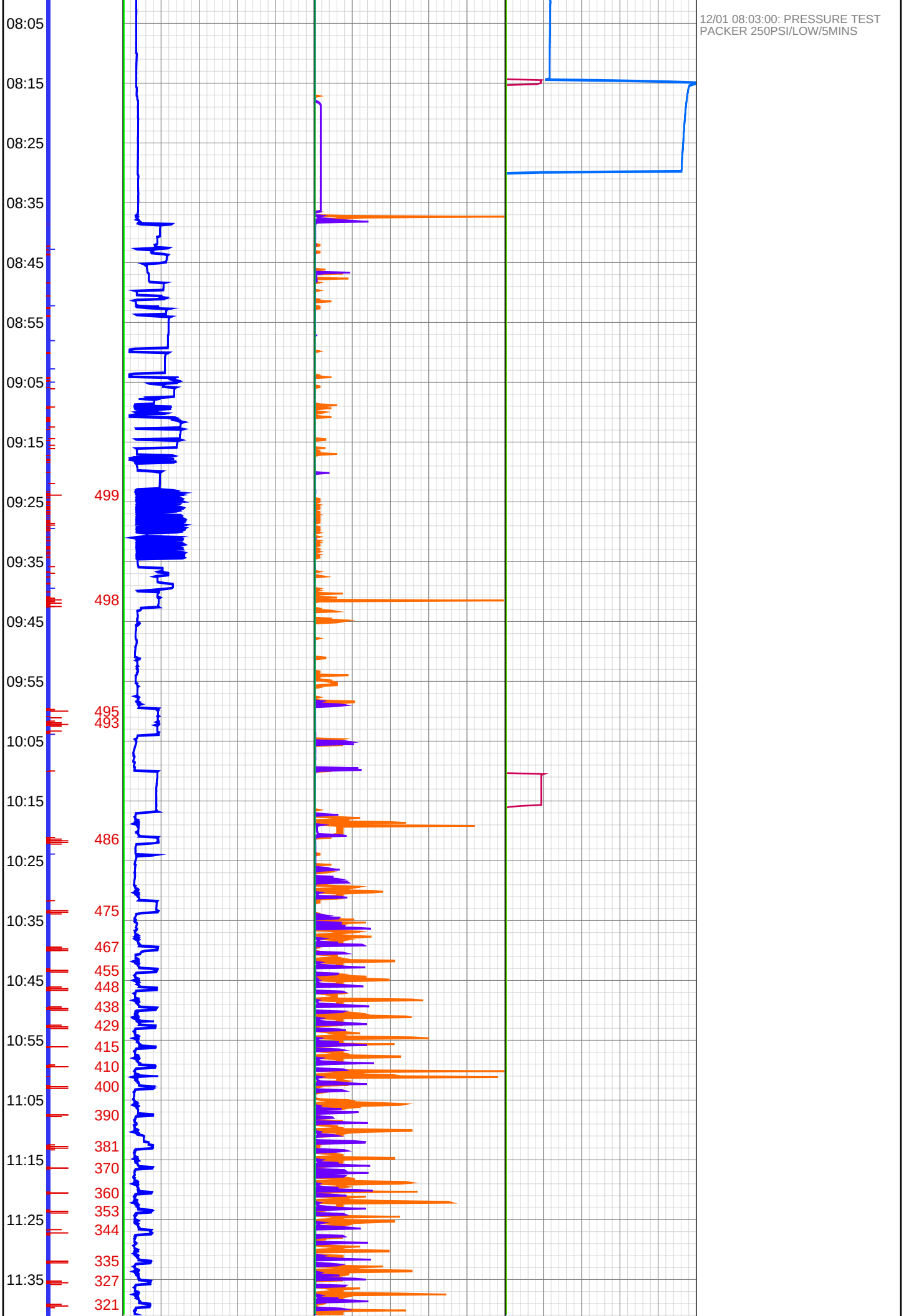
12/01 05:42:00: SET LOWER SLIPS ON PACKER


12/01 08:03:00: PRESSURE TEST
PACKER 250PSI/LOW/5MINS
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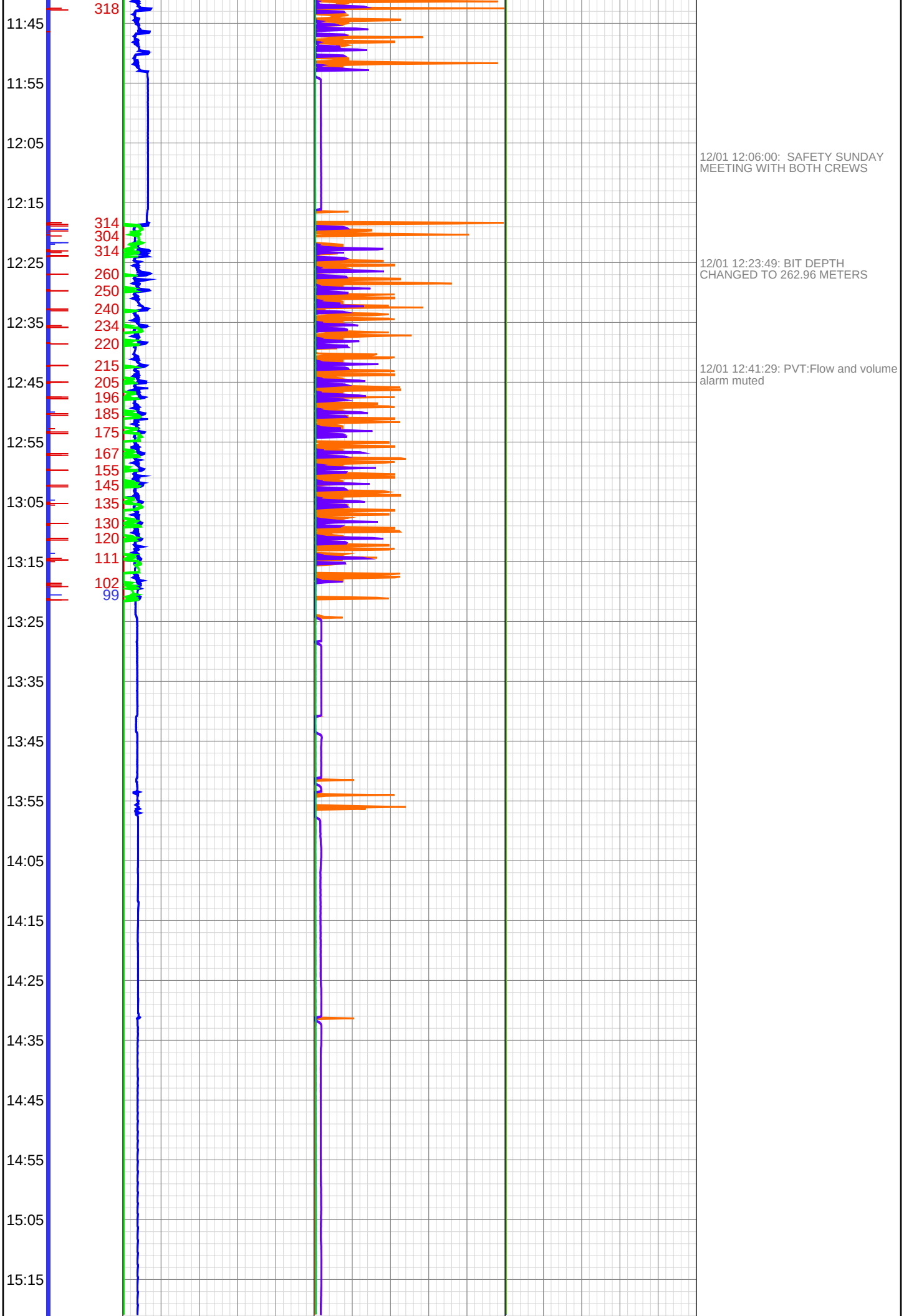
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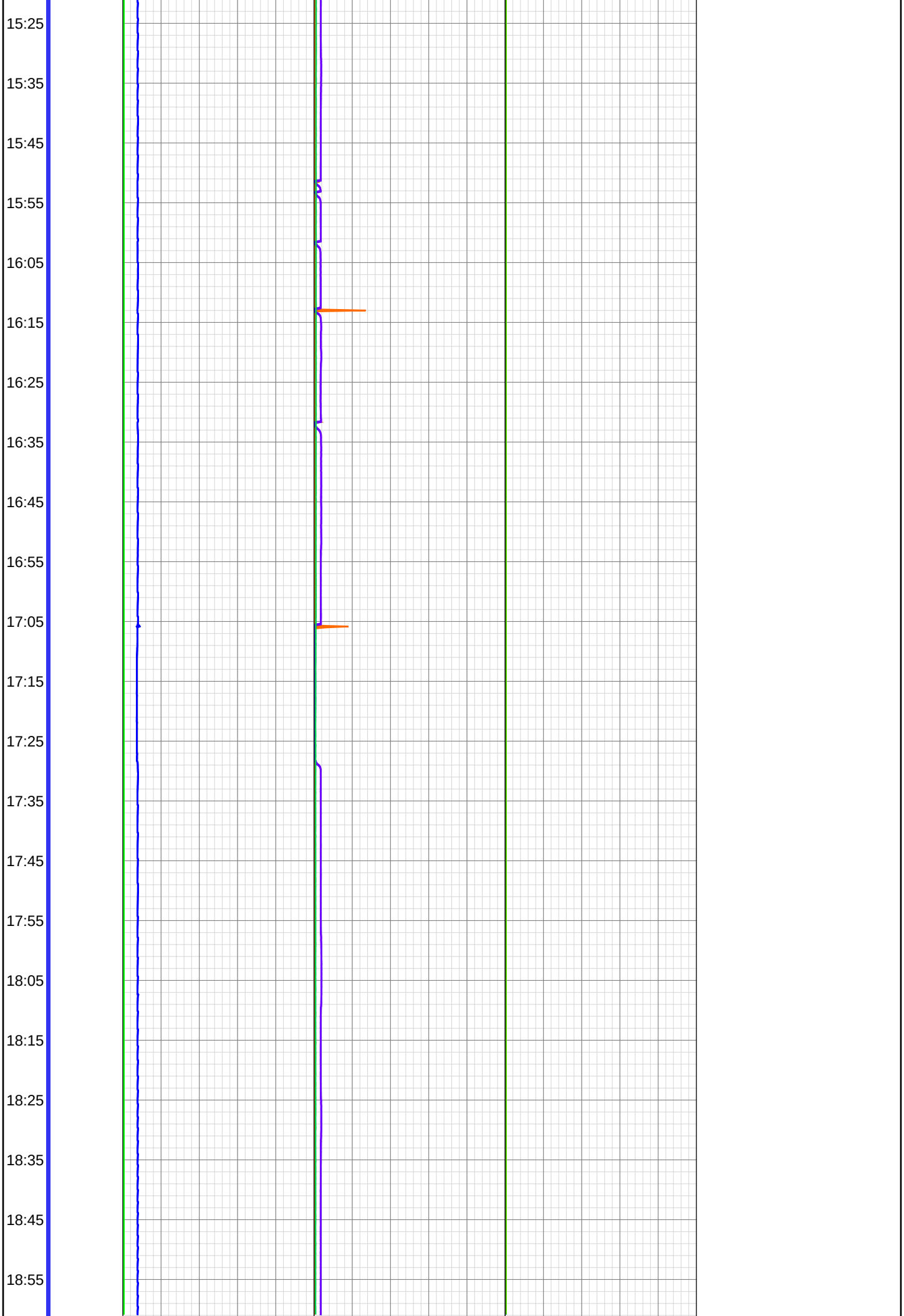
12/01 12:06:00: SAFETY SUNDAY MEETING WITH BOTH CREWS
12/01 12:23:49: BIT DEPTH CHANGED TO 262.96 METERS
12/01 12:41:29: PVT:Flow and volume alarm muted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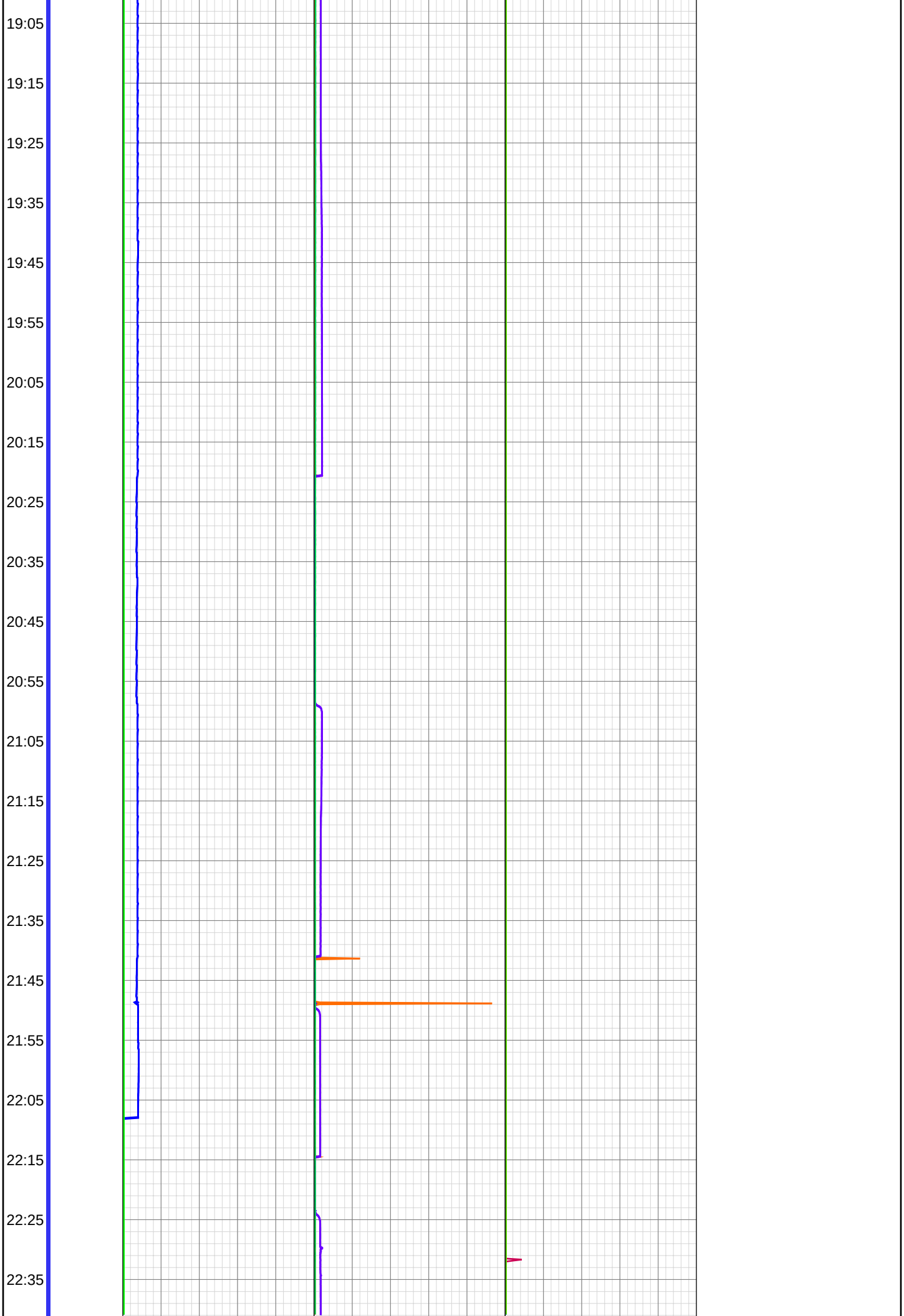
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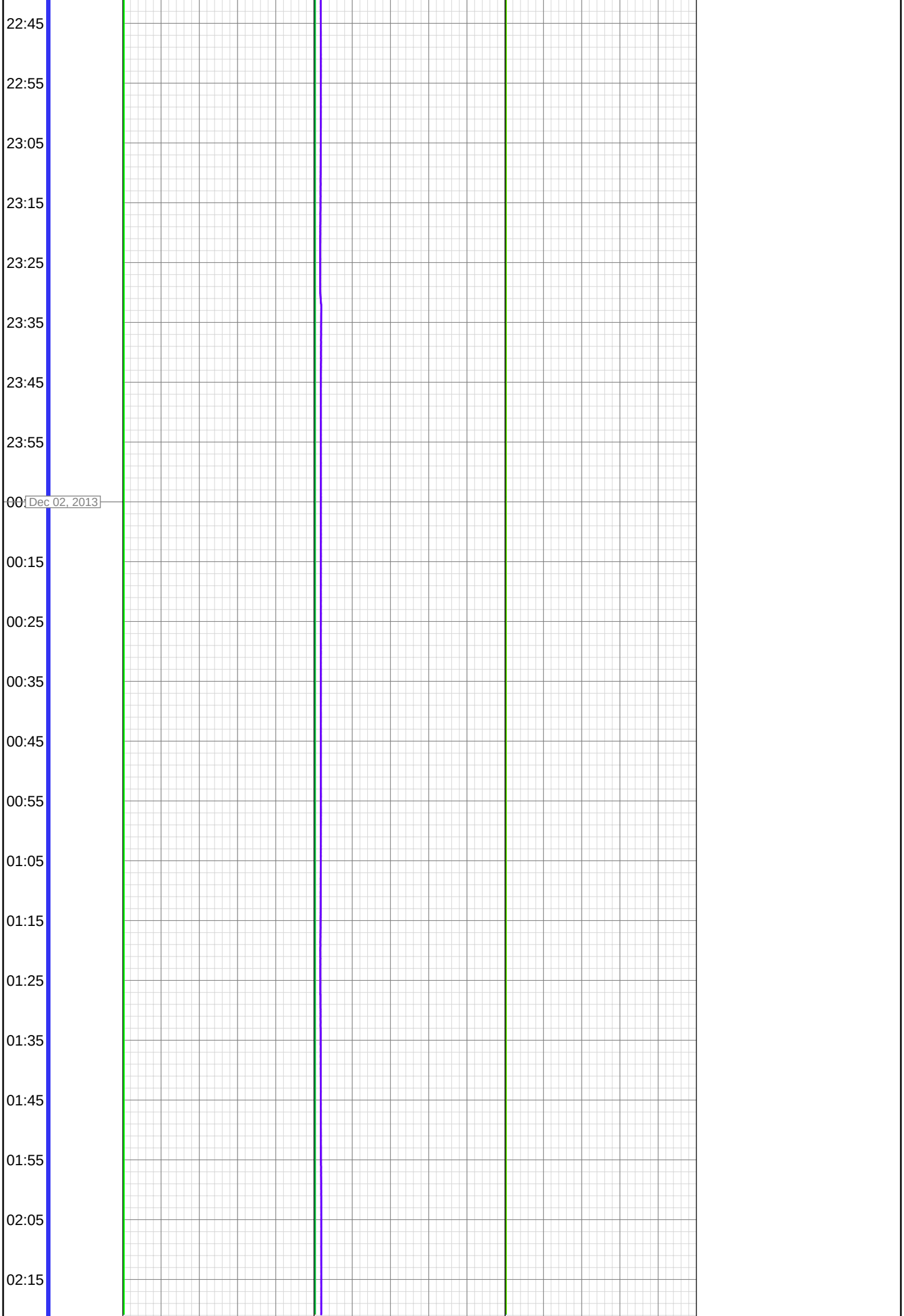
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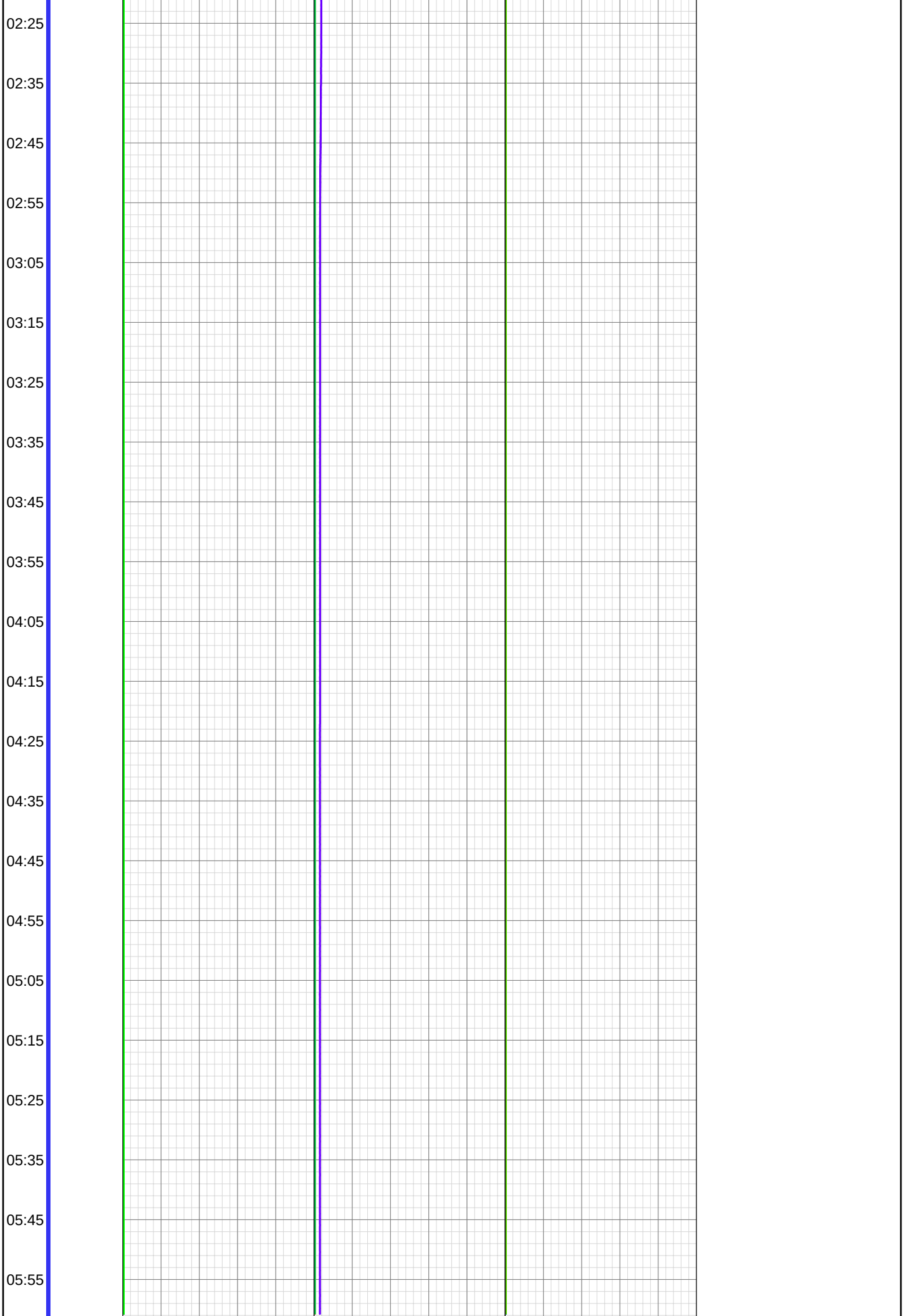
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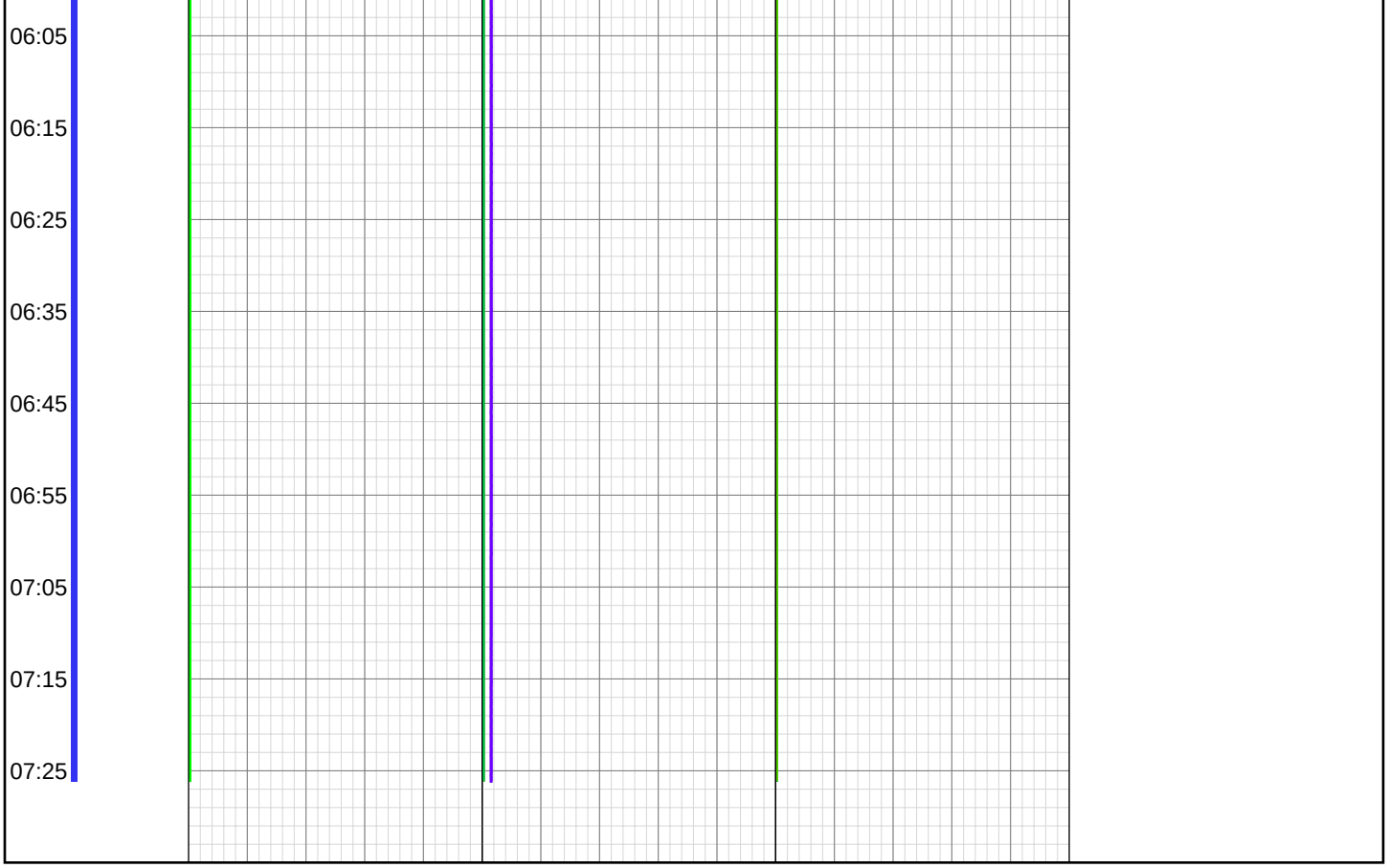
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APPENDIX 7

CEMENTING REPORT

Template updated: 09 February 2013

DISTRICT	STATION	TYPE SERVICE:	COMPANY	Schlumberger
ASA	APG	Cement 7" Intermediate	IPM/QGC	

RIG	TYPE OF WELL	FIELD	WELL No.	SERVICE REPORT
Saxon 166	CBM	Cam	19	

TIME AND DATE JOB STARTED	TOTAL DEPTH	SIZE HOLE	DEVIATION	BHST	BHCT	FTL NUMBER
22 November 2013 18:30	770	8.5"	Vertical	28 Deg C	35 Deg C	BWG3-00169

TIME & DATE JOB COMPLETED	DRILL FLUID	MUD CIRCULATION PRE JOB	FORMATION	i-District NUMBER
22 November 2013 21:49	WBM (Type) 9.0 (Wt (lb/gal))	60 Minutes	Coal	0

CASING				Float Collar		STAGE TOOL	CEMENT HEAD	PREVIOUS CASING		
7 Size (In)	763 Depth (m)	K55 Type	23 Wt. (lb/ft)	750.88 Depth (m)	Float Type	NA Depth (m)	SCHLUMBERGER	9 5/8 Size (In)	87 Depth (m)	36 Wt. (lb/ft)

	SPACER			LEAD SLURRY			TAIL SLURRY			CEMENT RETURNS
CPF-573 Pump Unit S/No.	8.6 Wt (ppg)	12.0 Vol (bbl)	MUDPUSH II Type	NA Wt. (ppg)	NA Vol.	NA Fill	12.5 Wt. (ppg)	89.6 Vol.(bbl)	FW Fill	32.0 BBLS

LEAD SLURRY
N/A

TAIL SLURRY
12.5ppg
CBMlite Blend
D047 Antifoam 0.01 gal/sk
D202 Dispersant 1.0% BWOC
D154 Extender 4.3% BWOB
D112 Fluid Loss 0.5% BWOB
D095 Lost Circulation Material

MATERIALS USED

D910 Cement Blend	13.1	MT	361.92 sacks
D047 Antifoam	3.0	gal	
D202 Dispersant	240.3	lb	
D154 Extender	1245	lb	
D112 Fluid Loss	144.8	lb	
D095 LCM	50.0	lb	
MUDPUSH II Spacer	12.0	BBL	

	PRESSURE (psi)	VOLUME BBL	VOLUME BPM	Fluid	RECORD OF SERVICE
					7 in Casing
15:30:00					Arrive at Rig Site
17:00:00					Rig Ready for Cementing
9:20:00					Load plugs into casing and cement head
18:30:00					Rig Up Complete
18:30:00					Safety Meeting
19:23:41		6.0	3.5	Spacer	Pump 6 bbl of MUDPUSH II spacer
19:26:18	3000			Spacer	Start Pressure Test
19:33:53				Spacer	End Pressure Test - Positive
19:35:04		6.0	3.5	Spacer	Pump 6 bbl of MUDPUSH II spacer (total spacer: 12 bbl)
19:46:01				Water	Clean out tanks and lines and flush to cellar
20:01:33					Install wiper plugs into cement head
20:21:43				Cement	Start Mixing Slurry
20:23:19				Cement	Start Pumping Slurry
20:50:59		89.4	4.2	Cement	End Slurry
20:55:05					Drop top plug
20:59:19				Mud	Start Displacement
21:31:40	2000	97.0	3.5	Mud	Bump top plug
21:49:50		0.7			Bleed off and gauge returns - 0.7 bbl returns
22:00:00					Rig down equipment
1:00:00					Leave rig site

STEM1 DONE? YES X NO | TOTAL LOST TIME 0 min | TOTAL OPERATING TIME 3:19 Hrs:min

No. OF SLB PERSONNEL ON JOB

SUP [ ] F.S. [0]
MECH [ ] F.E. [2] HEL [1]

CUSTOMER COMMENTS

Time from finishing circulating to start pumping =

QUALITY OF SERVICE GOOD [ ] SATISFACTORY [ ] POOR [ ]

SLB WCS REPRESENTATIVE

E. Merrick

Eamon Merrick

CUSTOMER REPRESENTATIVE

Ahmed Gabry

Materials / Service received
Well Site Supervisor - Rig 166

Date: 23../11..../..2013

Name: ..Ahmed..GABRY.....

Signature: .....

APPENDIX 8

MWD REPORT

PATHFINDER
A Schlumberger Company

[CAM 19] Actual Survey Survey Report

(Non-Def Survey)

Report Date:	November 25, 2013 - 04:34 AM	**Survey / DLS Computation:**	Minimum Curvature / Lubinski
Client:	QGC	**Vertical Section Azimuth:**	250.000 ° (Grid North)
Field:	CAM	**Vertical Section Origin:**	0.000 m, 0.000 m
Structure / Slot:	CAM 19 / CAM 19	**TVD Reference Datum:**	RKB
Well:	CAM 19	**TVD Reference Elevation:**	328.110 m above MSL
Borehole:	CAM 19	**Seabed / Ground Elevation:**	323.610 m above MSL
UWI / API#:	Unknown / Unknown	**Magnetic Declination:**	9.687 °
Survey Name:	[CAM 19] Actual Survey	**Total Gravity Field Strength:**	998.2402mgn (9.80665 Based)
Survey Date:	September 05, 2013	**Gravity Model:**	GARM
Tort / AHD / DDI / ERD Ratio:	99.116 ° / 685.234 m / 5.539 / 0.883	**Total Magnetic Field Strength:**	52927.061 nT
Coordinate Reference System:	GDA94/MGA94 Zone 55	**Magnetic Dip Angle:**	-56.564 °
Location Lat / Long:	S 26° 12' 43.55754", E 149° 42' 23.67644"	**Declination Date:**	September 05, 2013
Location Grid N/E Y/X:	N 7098004.378 m, E 770441.401 m	**Magnetic Declination Model:**	BGGM 2013
CRS Grid Convergence Angle:	-1.1962 °	**North Reference:**	Grid North
Grid Scale Factor:	1.00050313	**Grid Convergence Used:**	-1.1962 °
Version / Patch:	2.7.998.0	**Total Corr Mag North->Grid North:**	10.8828 °
		Local Coord Referenced To:	Structure Reference Point

Comments	MD (m)	Incl (°)	Azim Grid (°)	TVD (m)	VSEC (m)	NS (N/S m)	EW (E/W m)	Closure (m)	Closure Azimuth (°)	DLS (°/30m)
CAM 19 Tie-In	0.00	0.00	0.00	0.00	0.00	N 0.00	E 0.00	0.00	0.00	N/A
9 5/8 Casing Shoe	*86.90*	*0.24*	*237.50*	*86.90*	*0.18*	*S 0.10*	*W 0.15*	*0.18*	*237.50*	*0.08*
	94.40	0.26	237.50	94.40	0.21	S 0.12	W 0.18	0.21	237.50	0.08
	106.90	0.35	230.20	106.90	0.27	S 0.15	W 0.23	0.28	236.51	0.23
	119.40	0.35	232.59	119.40	0.35	S 0.20	W 0.29	0.36	235.42	0.04
	131.80	0.26	242.12	131.80	0.41	S 0.24	W 0.35	0.42	235.61	0.25
	144.20	0.26	243.81	144.20	0.46	S 0.26	W 0.40	0.48	236.47	0.02
	156.70	0.18	257.56	156.70	0.51	S 0.28	W 0.44	0.52	237.64	0.23
	169.10	0.18	243.78	169.10	0.55	S 0.29	W 0.48	0.56	238.53	0.10
	181.60	0.18	244.12	181.60	0.59	S 0.31	W 0.52	0.60	238.88	0.00
	194.10	0.09	202.36	194.10	0.62	S 0.33	W 0.54	0.63	238.51	0.31
	206.50	0.09	90.77	206.50	0.61	S 0.34	W 0.53	0.63	237.51	0.36
Springbok	*210.40*	*0.12*	*93.24*	*210.40*	*0.61*	*S 0.34*	*W 0.52*	*0.62*	*237.14*	*0.22*
	219.00	0.18	95.97	219.00	0.59	S 0.34	W 0.50	0.61	235.85	0.22
	231.40	0.18	87.54	231.40	0.55	S 0.34	W 0.46	0.57	233.58	0.06
	243.90	1.08	223.49	243.90	0.64	S 0.43	W 0.52	0.67	230.89	2.92
	256.40	3.17	246.79	256.39	1.09	S 0.65	W 0.92	1.13	234.94	5.33
	268.80	4.92	255.71	268.76	1.96	S 0.91	W 1.75	1.98	242.47	4.49
	281.30	5.72	258.50	281.20	3.11	S 1.17	W 2.88	3.11	247.90	2.02
	293.70	6.60	260.77	293.53	4.42	S 1.41	W 4.19	4.42	251.44	2.21
Walloon Coal Measure	*301.60*	*7.32*	*260.66*	*301.37*	*5.36*	*S 1.56*	*W 5.14*	*5.37*	*253.08*	*2.74*
	306.20	7.74	260.60	305.93	5.95	S 1.66	W 5.73	5.97	253.84	2.74
	318.60	8.62	258.67	318.21	7.69	S 1.98	W 7.47	7.72	255.15	2.23
	331.10	9.76	256.10	330.55	9.67	S 2.42	W 9.41	9.72	255.59	2.91
	343.50	11.34	255.71	342.74	11.93	S 2.97	W 11.62	11.99	255.65	3.83
	355.90	12.49	256.18	354.87	14.48	S 3.59	W 14.10	14.55	255.70	2.79
	368.40	13.89	257.12	367.04	17.31	S 4.25	W 16.87	17.40	255.86	3.40
	380.90	15.39	255.22	379.13	20.45	S 5.01	W 19.94	20.56	255.90	3.78
	393.30	17.15	252.62	391.04	23.92	S 5.97	W 23.28	24.03	255.61	4.61
	405.80	19.17	250.48	402.91	27.81	S 7.21	W 26.97	27.92	255.03	5.10
	418.20	20.84	250.53	414.57	32.05	S 8.63	W 30.97	32.15	254.44	4.04
	430.70	22.60	250.48	426.18	36.68	S 10.17	W 35.33	36.76	253.94	4.22
	443.20	24.62	250.75	437.63	41.68	S 11.83	W 40.05	41.76	253.54	4.85
Lower Juandah Coal Measure	*447.90*	*25.25*	*250.45*	*441.89*	*43.66*	*S 12.49*	*W 41.92*	*43.74*	*253.41*	*4.12*
	455.60	26.29	249.99	448.83	47.01	S 13.62	W 45.07	47.08	253.18	4.12
	468.00	27.96	249.66	459.86	52.67	S 15.57	W 50.38	52.73	252.82	4.06
	480.50	29.55	249.35	470.82	58.68	S 17.68	W 56.01	58.73	252.48	3.83
	492.90	31.22	249.87	481.52	64.95	S 19.86	W 61.89	65.00	252.21	4.09
	505.40	32.98	249.53	492.11	71.59	S 22.17	W 68.12	71.63	251.97	4.25
	517.80	34.65	250.20	502.41	78.49	S 24.54	W 74.60	78.53	251.79	4.14
	530.30	35.35	250.67	512.65	85.66	S 26.94	W 81.35	85.70	251.68	1.80
	542.80	36.67	250.74	522.76	93.01	S 29.37	W 88.29	93.05	251.60	3.17
	555.20	38.08	250.65	532.61	100.54	S 31.86	W 95.39	100.57	251.53	3.41
	567.60	39.13	250.38	542.30	108.27	S 34.44	W 102.69	108.31	251.46	2.57
	580.10	40.89	250.41	551.88	116.31	S 37.14	W 110.26	116.34	251.39	4.22
Tangalooma Sandstone	*588.00*	*41.72*	*250.17*	*557.81*	*121.52*	*S 38.90*	*W 115.17*	*121.56*	*251.34*	*3.23*
	592.60	42.21	250.03	561.23	124.60	S 39.94	W 118.06	124.63	251.31	3.23
	605.10	44.14	249.40	570.35	133.15	S 42.91	W 126.08	133.18	251.21	4.75
	617.50	46.17	249.38	579.09	141.94	S 46.00	W 134.31	141.97	251.09	4.91
	629.90	48.10	249.44	587.52	151.03	S 49.20	W 142.82	151.05	250.99	4.67
	642.40	50.03	249.36	595.71	160.47	S 52.52	W 151.66	160.49	250.90	4.63
	654.80	51.53	249.45	603.55	170.08	S 55.90	W 160.65	170.10	250.81	3.63
	667.30	53.46	250.31	611.16	179.99	S 59.31	W 169.96	180.01	250.76	4.91
	679.70	55.13	250.52	618.40	190.06	S 62.69	W 179.44	190.08	250.74	4.06
	692.20	56.37	251.75	625.44	200.39	S 66.03	W 189.22	200.41	250.76	3.85
	704.70	57.07	251.68	632.30	210.84	S 69.30	W 199.14	210.86	250.81	1.69
	717.00	57.33	251.48	638.96	221.17	S 72.57	W 208.95	221.20	250.85	0.76
	729.60	57.42	251.13	645.75	231.78	S 75.97	W 219.01	231.81	250.87	0.73
	742.10	57.33	251.23	652.49	242.31	S 79.37	W 228.97	242.34	250.88	0.30
	746.40	57.60	251.19	654.80	245.93	S 80.54	W 232.40	245.96	250.89	1.90
7" Casing Shoe	*763.00*	*58.00*	*250.71*	*663.65*	*259.98*	*S 85.12*	*W 245.68*	*260.01*	*250.89*	*1.03*
	768.10	58.12	250.56	666.35	264.30	S 86.56	W 249.76	264.34	250.89	1.03
	777.70	59.97	251.47	671.29	272.53	S 89.23	W 257.55	272.57	250.89	6.27
Taroom Coal	*783.22*	*61.10*	*251.53*	*674.00*	*277.34*	*S 90.76*	*W 262.10*	*277.37*	*250.90*	*6.13*
	787.20	61.91	251.57	675.90	280.84	S 91.87	W 265.42	280.87	250.91	6.13
	796.20	63.49	251.96	680.03	288.83	S 94.37	W 273.02	288.87	250.93	5.39
	805.40	64.90	251.64	684.03	297.11	S 96.96	W 280.89	297.15	250.96	4.69
	814.50	66.30	251.37	687.79	305.39	S 99.58	W 288.75	305.44	250.97	4.69
	823.70	67.62	250.66	691.39	313.86	S 102.34	W 296.75	313.90	250.97	4.80
	832.70	68.85	250.79	694.73	322.21	S 105.10	W 304.64	322.26	250.97	4.12
	841.60	70.17	251.08	697.84	330.55	S 107.82	W 312.52	330.60	250.97	4.54
	850.70	71.75	250.99	700.81	339.15	S 110.62	W 320.65	339.20	250.97	5.22
	859.90	73.16	251.44	703.59	347.92	S 113.44	W 328.96	347.97	250.97	4.81
	869.20	74.74	251.45	706.16	356.85	S 116.28	W 337.43	356.91	250.99	5.10
	878.50	76.24	252.31	708.49	365.85	S 119.08	W 345.99	365.91	251.01	5.53

Comments	MD (m)	Incl (°)	Azim Grid (°)	TVD (m)	VSEC (m)	NS (N/S m)	EW (E/W m)	Closure (m)	Closure Azimuth (°)	DLS (°/30m)
	887.40	76.24	252.24	710.60	374.49	S 121.72	W 354.22	374.55	251.04	0.23
	896.60	76.06	251.87	712.81	383.42	S 124.47	W 362.72	383.48	251.06	1.31
	905.90	77.03	251.34	714.97	392.46	S 127.32	W 371.30	392.53	251.07	3.54
	914.90	77.21	251.59	716.98	401.23	S 130.11	W 379.62	401.30	251.08	1.01
	924.20	77.03	251.53	719.05	410.29	S 132.98	W 388.22	410.37	251.09	0.61
	933.40	77.12	251.10	721.11	419.26	S 135.85	W 396.72	419.33	251.10	1.40
	942.70	78.61	250.74	723.06	428.35	S 138.82	W 405.31	428.42	251.09	4.94
	951.90	78.70	250.54	724.87	437.37	S 141.81	W 413.82	437.44	251.08	0.70
	961.20	78.96	250.34	726.67	446.49	S 144.87	W 422.42	446.57	251.07	1.05
	970.30	78.52	250.55	728.45	455.41	S 147.86	W 430.83	455.49	251.06	1.60
	979.40	78.52	249.71	730.26	464.33	S 150.89	W 439.21	464.41	251.04	2.71
	988.70	78.17	249.45	732.14	473.44	S 154.06	W 447.75	473.51	251.01	1.40
	997.60	77.91	249.34	733.98	482.15	S 157.13	W 455.90	482.22	250.98	0.95
	1006.70	77.56	249.64	735.92	491.04	S 160.24	W 464.23	491.11	250.96	1.51
	1016.00	77.38	249.37	737.94	500.12	S 163.42	W 472.73	500.18	250.93	1.03
	1025.20	79.05	248.74	739.81	509.12	S 166.64	W 481.14	509.18	250.90	5.81
	1034.30	78.88	249.24	741.56	518.05	S 169.84	W 489.48	518.11	250.86	1.71
	1043.50	78.35	249.07	743.37	527.07	S 173.05	W 497.91	527.12	250.83	1.81
	1052.60	78.00	248.98	745.24	535.97	S 176.24	W 506.22	536.03	250.80	1.19
	1061.90	78.00	248.89	747.17	545.07	S 179.51	W 514.71	545.12	250.77	0.28
	1071.10	78.00	248.45	749.08	554.07	S 182.79	W 523.10	554.11	250.74	1.40
	1080.20	77.82	247.92	750.99	562.96	S 186.09	W 531.36	563.00	250.70	1.81
	1089.30	78.61	248.71	752.85	571.86	S 189.38	W 539.63	571.90	250.66	3.64
	1098.40	79.67	249.15	754.56	580.80	S 192.60	W 547.97	580.83	250.63	3.77
	1107.70	79.32	249.51	756.26	589.94	S 195.82	W 556.53	589.98	250.61	1.61
	1116.80	78.79	249.59	757.99	598.88	S 198.95	W 564.90	598.91	250.60	1.77
	1126.00	78.79	248.98	759.77	607.90	S 202.14	W 573.34	607.93	250.58	1.95
	1135.10	78.35	248.63	761.58	616.82	S 205.36	W 581.66	616.85	250.55	1.84
	1144.50	78.26	248.80	763.48	626.02	S 208.70	W 590.24	626.05	250.53	0.60
	1153.30	78.52	248.28	765.25	634.64	S 211.86	W 598.26	634.66	250.50	1.95
	1162.60	78.17	248.54	767.13	643.74	S 215.21	W 606.73	643.76	250.47	1.40
	1171.90	78.08	248.19	769.05	652.84	S 218.56	W 615.19	652.86	250.44	1.14
	1181.20	77.73	248.45	771.00	661.93	S 221.92	W 623.64	661.95	250.41	1.40
	1190.70	78.44	248.54	772.96	671.22	S 225.33	W 632.28	671.24	250.39	2.26
Straight line projection to Bit	1204.50	78.44	248.54	775.72	684.74	S 230.28	W 644.87	684.75	250.35	0.00

Survey Type: Non-Def Survey

Survey Error Model: ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7955 sigma

Survey Program:

Description	Part	MD From (m)	MD To (m)	EOU Freq (m)	Hole Size (in)	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	1	0.000	4.500	Act Stns	12.250	9.625	SLB_MWD-STD-Depth Only	CAM 19 / [CAM 19] Actual Survey
	1	4.500	1204.500	Act Stns	12.250	9.625	SLB_MWD-STD	CAM 19 / [CAM 19] Actual Survey