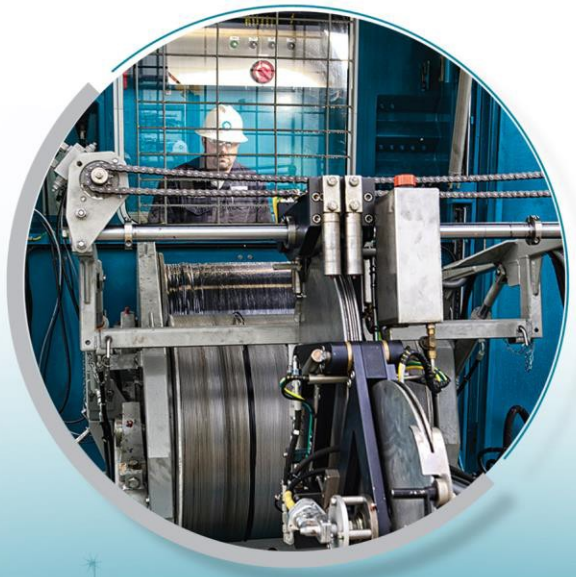
EXPRO

WELL FLOW MANAGEMENT™

Multifinger Caliper Analysis Report



Client:	NAM
Well No.:	ROSSUM WEERSELO - 7
Field:	ROSSUM WEERSELO
Country:	Netherlands
Survey Date:	7th October 2020
Survey Type:	Extended 24-Arm Caliper
Job ID:	DAC667

www.exprogroup.com

Pass no.	Survey Interval (m)	Data Quality	Notes
1	1215 to 0	Good	

Rev	Description	Author	Checked by
0	Report		

The Expro Group Data Analysis Centre

Carnegie Building, Howe Moss Avenue, Dyce, Aberdeen, AB21 0GP

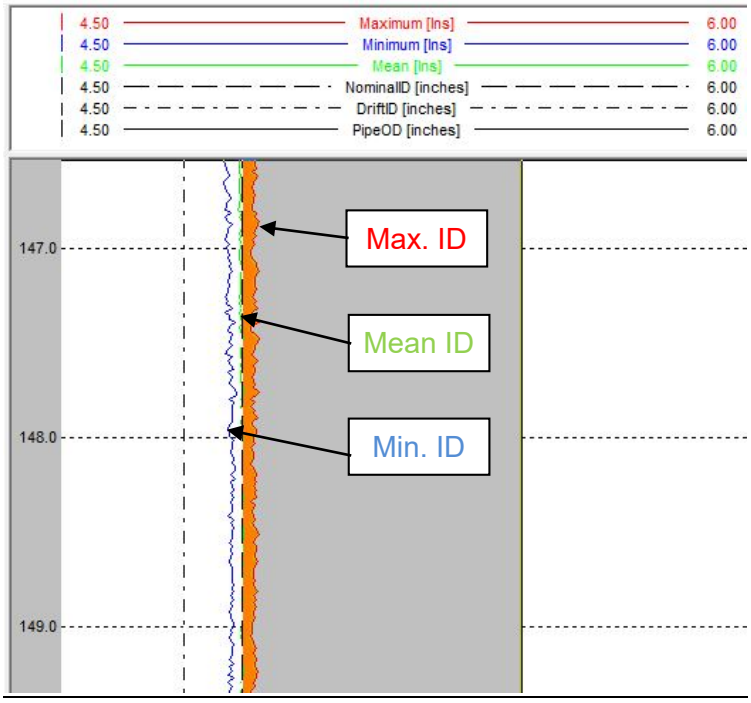
Tel:

Website: www.exprogroup.com

Definitions

Measured IDs

- Each caliper finger records a radius value at each depth sample. For the purposes of calculating metal loss, this value is multiplied by 2, creating an ID value which can be referenced against the nominal ID and OD of the tubular (all ID values quoted are 2* radius values unless otherwise indicated).
- When calculating restrictions within the tubular caused by features such as deposition or deformation, opposite arm radius values are combined to create an ID value.
- At each depth sample the Maximum ID, Minimum ID and Mean ID is recorded. These can then be plotted against the Drift ID and Nominal ID and OD.



Maximum Percentage Penetration

- The maximum percentage penetration is the maximum recorded radius x 2 value referenced against nominal ID and OD
- $Maximum\ percentage\ penetration = 100 * \frac{Max.ID - Nom.ID}{OD - NomID}$

Maximum Percentage Circumferential Wall Loss

- The maximum percentage circumferential wall loss is the sum of the areal metal loss at each depth sample with reference to nominal ID and OD
- $(\frac{100}{N}) * \sum_{i=1}^{i=N}(Si^2 - Nom.ID^2) \div (OD^2 - Nom.ID^2)$
- N: is the number of caliper sensors on the tool, 24, 40, 60.
- Si: is the measured radius value x 2 for each arm.

Report Contents

1. Survey Objectives and Interpretation Summary

Survey Objectives

An extended 24-arm memory multifinger caliper was run to determine the general condition of the 3-1/2″, 10.2 lb/ft tubing within the ROSSUM WEERSELO – 7 well.

Data Analysis

This report highlights the main findings of the analysis. However, for a more detailed view of the tubing condition, the accompanying deliverables (which include the tool data and the MIPS client viewer) can be used to inspect the completion on a joint by joint basis.

Processing:

- Centralised
- Depth corrected – to well completion depths, MD in metres
- Statistical analysis applied

Interpretation Summary

- The 3-1/2″ tubing appears to be in moderate to poor condition, with a maximum recorded ID of 3.280” (equivalent to 61.9% penetration) at 1162.20 m.
- Tubing below approximately 950 m has been affected by scattered pitting.
- There were no clear signs of any significant deposition or restrictions present.

Statistical Data Summary	2020	2019	2018	2017	T.L. Max Difference
Maximum % Penetration	61.9 %	47.2 %	47.2 %	47.8 %	14.7 %
Maximum Penetration Depth	1162.20 m	1162.16 m	1162.16 m	1162.17 m	-
Average Maximum % Penetration	16.2 %	11.7 %	10.3 %	13.8 %	5.9 %
Maximum % Circumferential Wall Loss	11.6 %	6.5 %	6.5 %	-	5.1 %
Maximum % Circumferential Wall Loss Depth	646.51 m	116.57 m	116.57 m	-	-
Average Recorded Mean ID	2.955 inches	3.467 inches	2.921 inches	2.898 inches	0.569 inches
Average Maximum % Circumferential Wall Loss	7.2 %	2.8 %	2.5 %	-	4.7 %
Survey Interval (m)	1214 to surface	2825 to surface	1202 to surface	1214 to surface	-

Note: All values from statistical analysis are based on the maximum, minimum and mean IDs per tubing or casing joint
Note: Caliper measurement tolerance is 0.03"

2. Data Interpretation

3-1/2″, 10.2 lb/ft Tubing Condition

- The 3-1/2″ tubing appears to be in moderate to poor condition, with 5 of the 140 joints logged found to contain maximum recorded percentage penetrations ranging between 30 - 62% of the nominal tubing wall thickness (see Figure 1, Section 3 & Max. Percentage Penetration vs. Depth Plot, Section 4).
- The maximum recorded ID was 3.280″ (equivalent to a 61.9% penetration) at 1162.20 m. This relates to a sharply defined, deeply penetrating pit feature towards the low-side of the tubing wall. This pit was recorded by a single caliper arm (thus is likely no wider than approximately 0.70″) and measured approximately 25 mm in length. However, due to the sharply defined nature of this feature, it is possible that it may in reality be a deeper penetration that the caliper arm has simply been unable to fully extend inside (see Figures 2 & 3, Section 3).
- Many of the tubing joints below approximately 950 m appear to have been affected by intermittent low-side focussed pitting, generally recorded by single caliper sensors, much like the abovementioned maximum recorded penetration (see Figure 4, Section 3).
- In addition to the abovementioned isolated pitting, there is some indication of minor circumferential metal loss within the 3-1/2″ tubing. This is supported by the average recorded mean ID of 2.955″, which is noticeably higher than the manufacturer specified nominal ID of 2.922″. Additionally, the maximum recorded circumferential wall loss was 11.6% at 646.51 m, with a total average value for the surveyed interval of 7.2% (see Measured ID vs. Depth plot, Section 4 & Max. Percentage Circumferential Wall Loss per joint vs. Depth Plot, Section 4).
- There appears to be a very subtle trend of decreasing recorded IDs towards the lower part of the well. This may suggest a slight build-up of smooth circumferentially distributed deposition. Despite this, none of the recorded IDs fall below the manufacturer specified drift ID and there were no clear indications of any significant deposition or restrictions present.

Time-lapse Analysis

- Three 24-arm caliper surveys have been performed previously within this well by Expro, on the 3rd of November 2016, 23rd of November 2017 and 11th of October 2018. Time-lapse analysis has been performed by comparing these previously recorded datasets with data recorded in the current survey (see Time-lapse plots, Section 4).
- Based on the plots, there are no clear indications that the tubing has deteriorated or changed significantly between 2016 and 2018. Most minor differences likely relate to slight differences in tool calibration and variations in the rotational path taken by the tools as they passed through the well. However, this most recent 2020 survey indicates a marked increase in both circumferential metal loss, and the development of previously identified sharply defined pitting.
- The maximum recorded ID of each survey relates to the same sharply defined pit at approximately 1162 m. Furthermore, this appears to have developed from a penetration of 47.2% in 2018 to 61.9% in 2020. As mentioned in the main findings above, it is possible that this pit may even deeper in reality, and at its current rate of deterioration it could potentially become a source of tubing to annulus communication in the near future. It is therefore felt prudent to monitor this feature in particular with subsequent caliper surveys.

3. Caliper Graphics

Figure 1: Survey Overview

Figure 2: Maximum Recorded ID

Figure 3: Maximum Recorded ID (Cross-section)

Client:	NAM	Well No.:	ROSSUM WEERSELO - 7	Field:	ROSSOM WEERSELO
Survey Date:	07/10/2017	Survey	MFC-24 Extended	Job ID:	DAC667

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Figure 1: Survey Overview

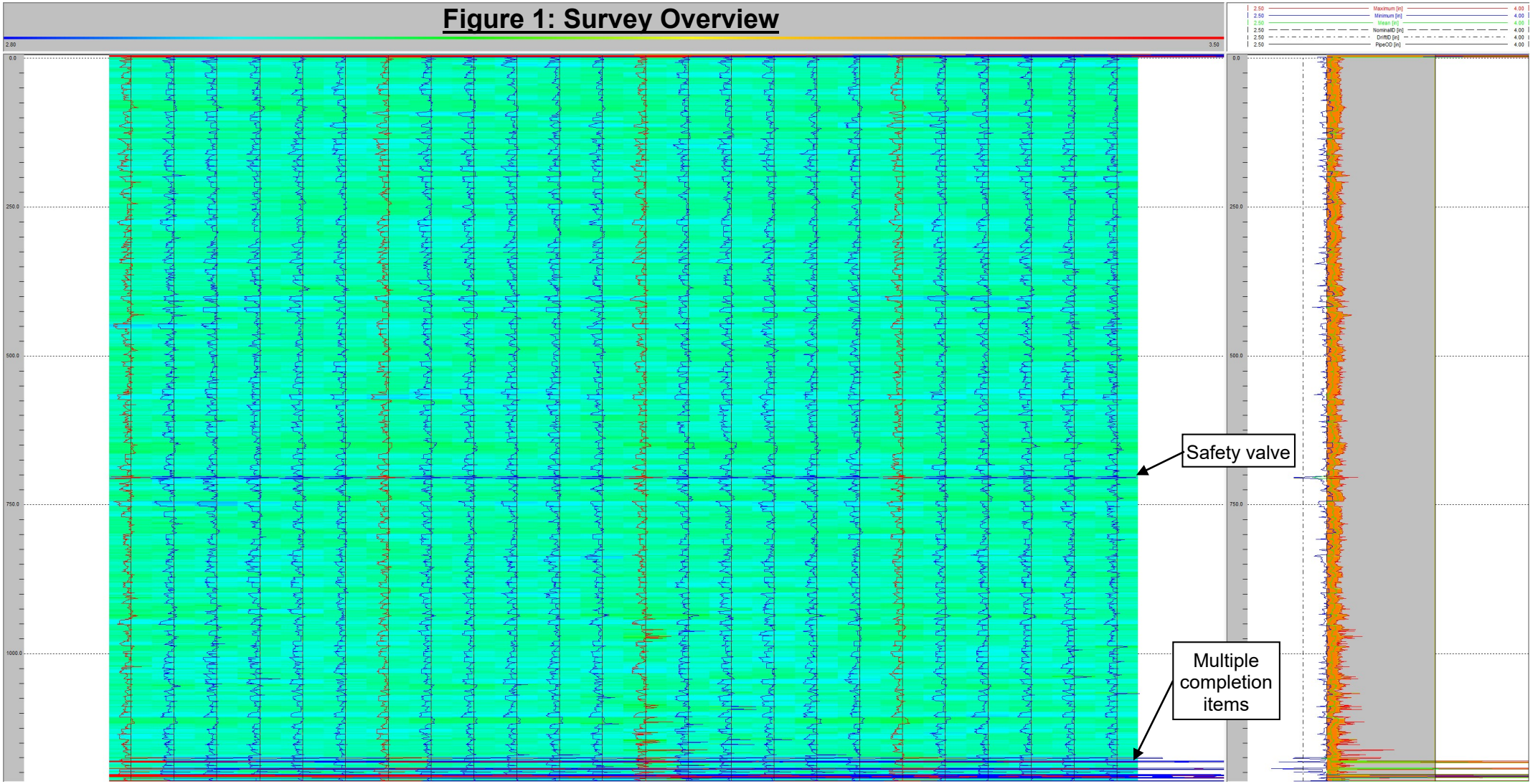

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Figure 2: Maximum Recorded ID

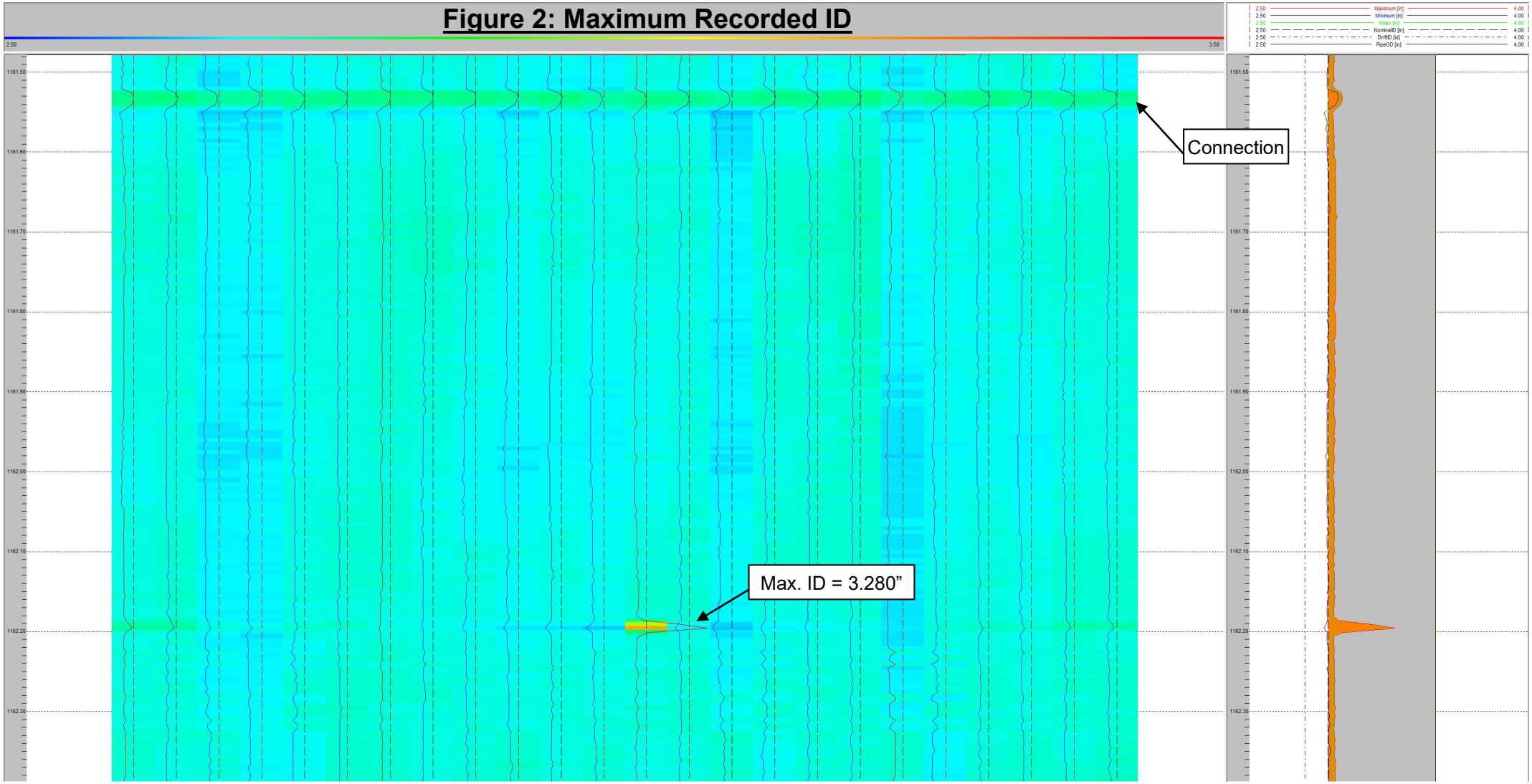
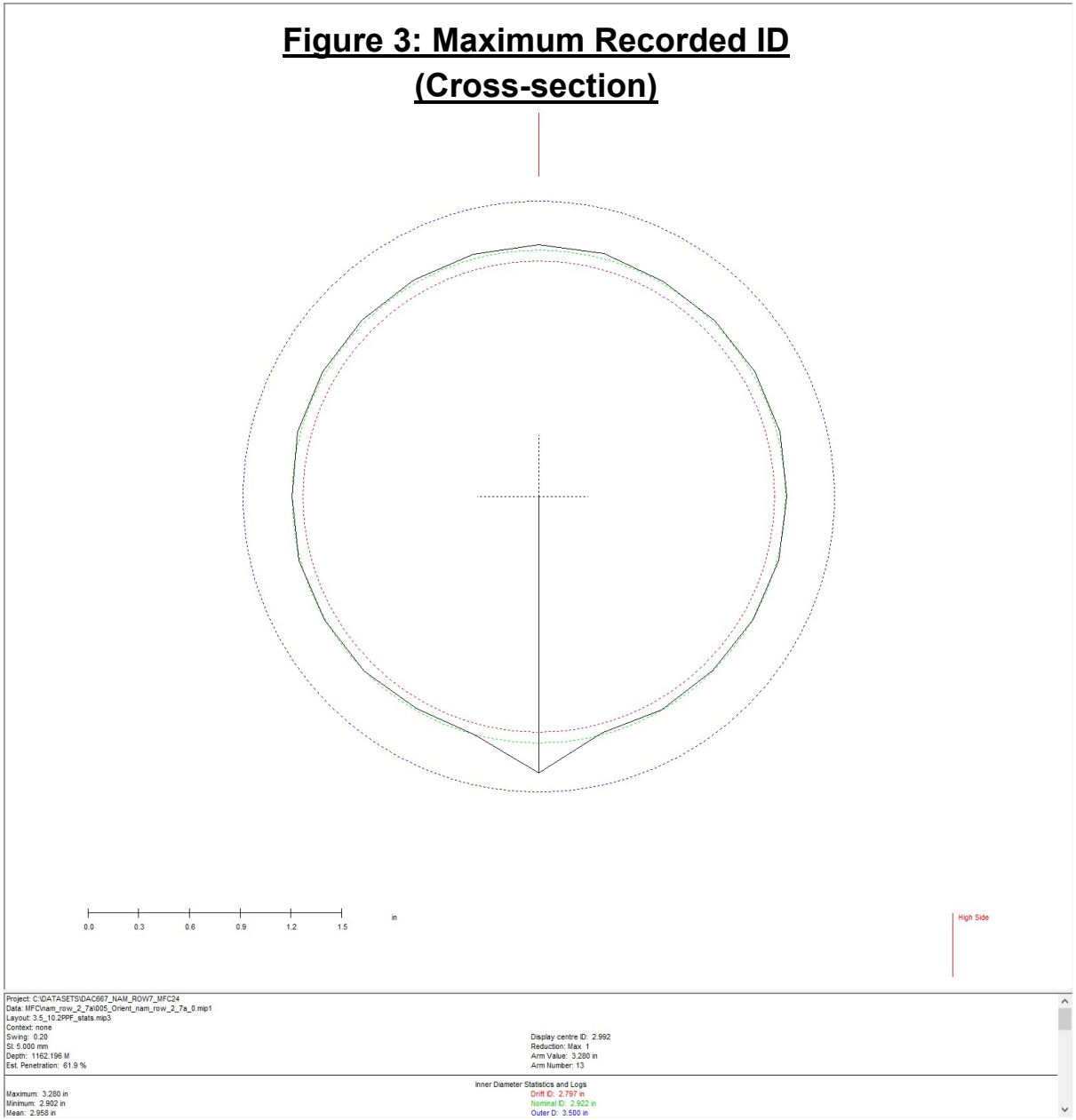


Figure 3: Maximum Recorded ID (Cross-section)



4. Statistical Analysis

Max. Percentage Penetration vs. Depth Plot

Max. Percentage Circumferential Wall Loss vs. Depth plot

Measured ID vs. Depth Plot

Tabulated Data

Time-lapse Percentage Penetration Histogram Plot

Time-lapse Max. Percentage Penetration vs. Depth Plot

Time-lapse Max. Percentage Circumferential Wall Loss vs. Depth Plot

Time-lapse Maximum ID vs. Depth Plot

Time-lapse Mean ID vs. Depth Plot

Time-lapse Minimum ID vs. Depth Plot

(Note: All values from statistical analysis are based on the maximum, mean & minimum recorded ID's from each tubing or casing joint)

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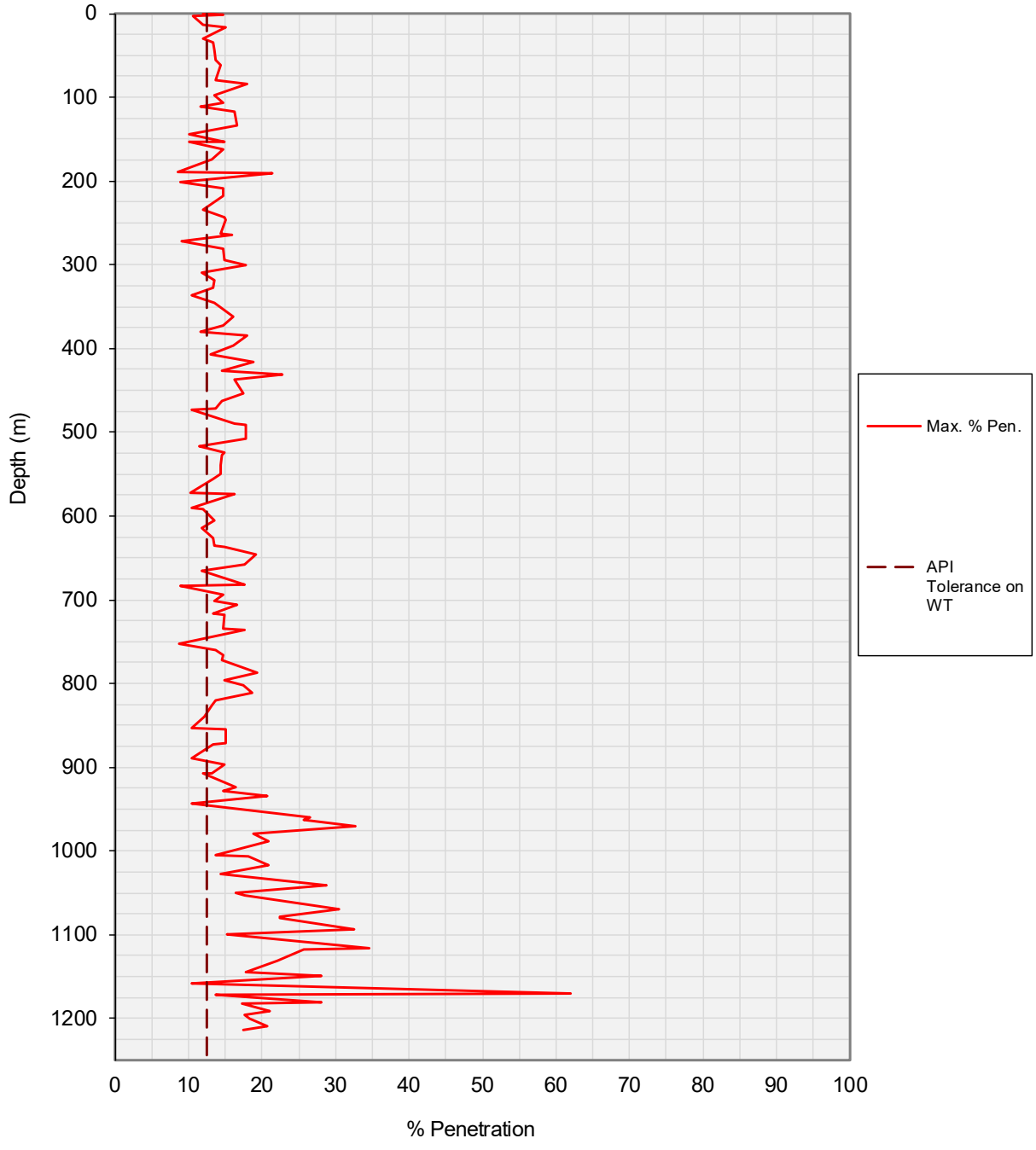
Max. Percentage Penetration per Joint vs. Depth Plot



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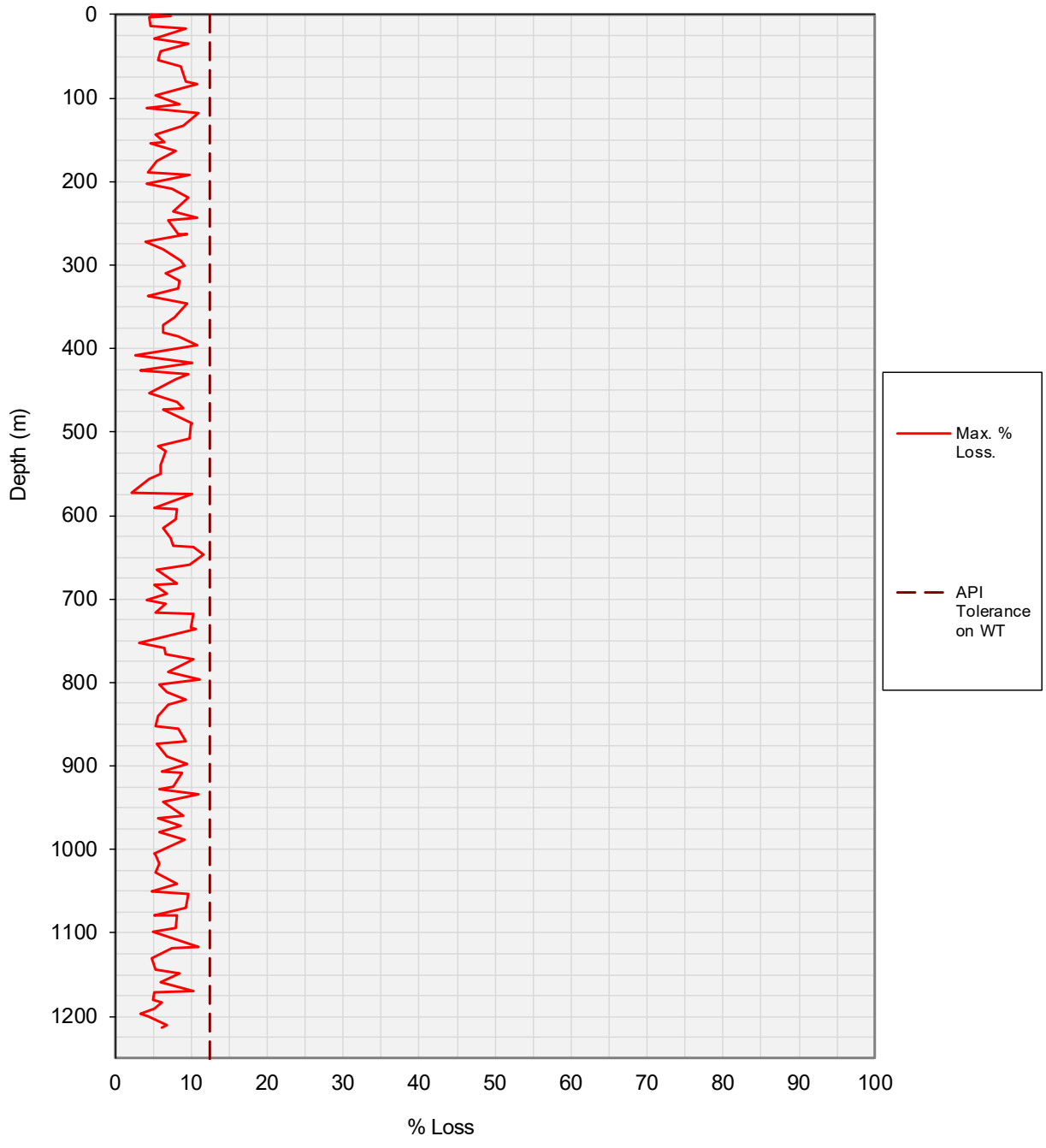
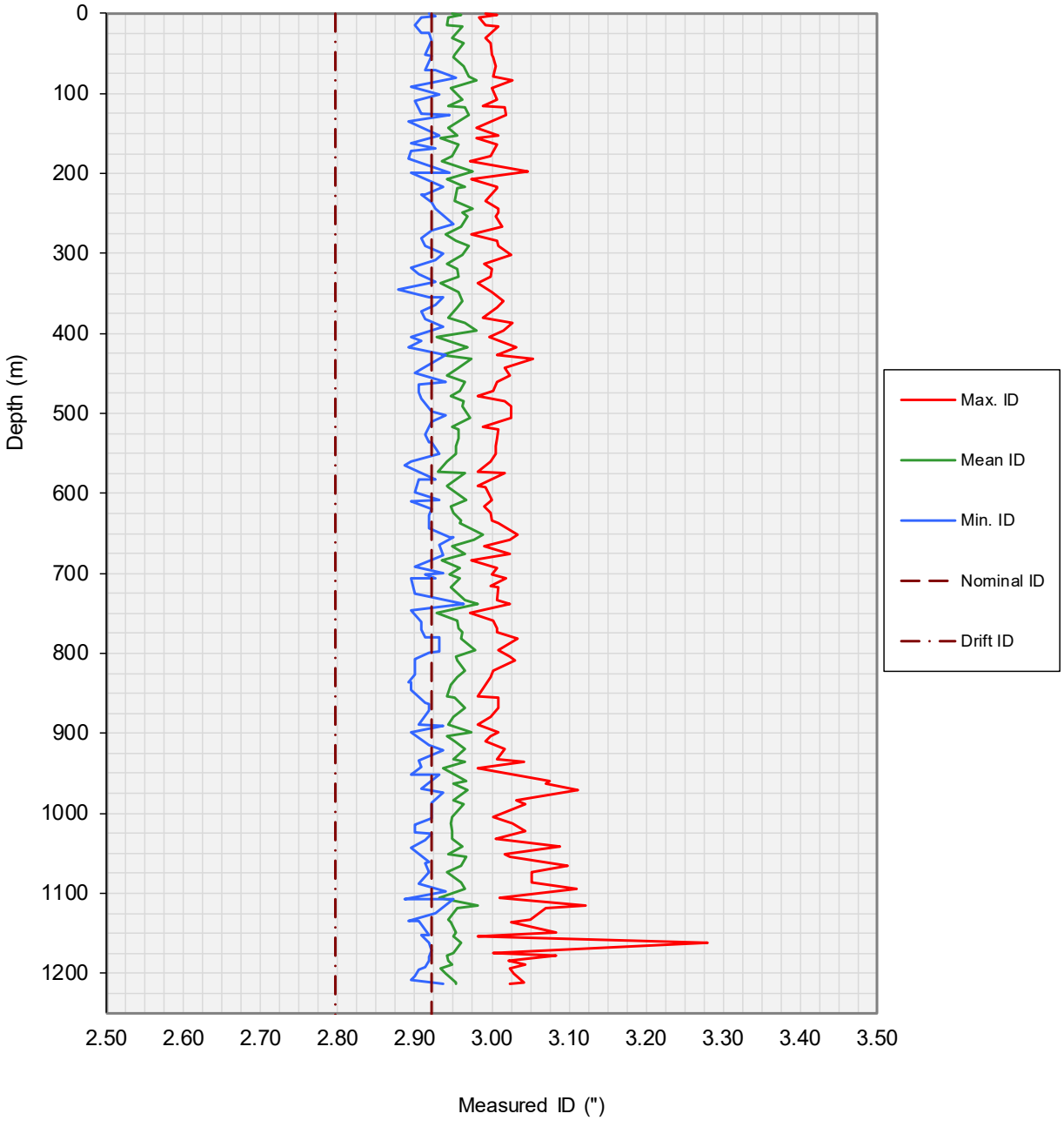
Max. Percentage Circumferntial Wall Loss per Joint vs. Depth Plot



Measured ID per Joint vs. Depth Plot



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Survey Date:	07/10/2017	Survey	MFC-24 Extended	Job ID:	DAC667

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Client: NAM
Well: ROSSUM-WEERSELO-7
Survey Date: 7th October 2020
Tubulars Surveyed: 3-1/2", 10.2 lb/ft **Nom. ID: 2.922** **Drift ID: 2.797** **Nom. OD: 3.500**

Max. % Penetration	0 - 20%	20 - 40%	40 - 50%	50 - 100%
Max. % Circumferential Loss	0 - 10%	10-20 %	20 - 25 %	25 - 100 %

Ref.	Top (m)	Bottom (m)	Length (m)	Max. ID (")	Dep. Max. (m)	Max. Pen. (%)	Max. Loss (%)	Min. ID (")	Dep. Min. (m)	Mean ID (")	Tubular OD (")	Completion Item
1	-1.29	0.97	2.25	2.991	-0.18	11.9	4.7	2.918	0.27	2.948	3.500	Pup joint
2	1.16	2.98	1.83	3.007	2.40	14.7	7.3	2.927	2.55	2.960	3.500	Pup joint
3	3.18	5.57	2.39	2.983	4.34	10.6	4.5	2.909	5.11	2.943	3.500	Pup joint
4	6.00	15.27	9.28	2.991	15.22	11.9	4.6	2.900	15.12	2.942	3.500	
5	15.68	24.29	8.61	3.009	16.33	15.1	9.3	2.909	24.25	2.962	3.500	
6	24.57	33.59	9.03	2.991	30.15	11.9	5.1	2.918	24.88	2.948	3.500	
7	34.01	42.83	8.82	2.999	37.22	13.3	9.6	2.923	34.09	2.964	3.500	
8	43.11	51.73	8.62	3.000	51.68	13.5	5.9	2.914	51.15	2.951	3.500	
9	52.14	61.46	9.32	3.001	54.65	13.7	5.6	2.923	52.24	2.949	3.500	
10	61.75	70.12	8.37	3.005	66.10	14.4	8.6	2.914	70.12	2.964	3.500	
11	70.57	79.61	9.04	3.001	78.16	13.7	9.3	2.927	70.68	2.969	3.500	
12	79.79	88.65	8.86	3.026	82.70	18.0	10.7	2.954	79.82	2.981	3.500	
13	88.87	97.79	8.91	3.000	93.24	13.5	5.4	2.896	90.82	2.947	3.500	
14	98.13	107.36	9.23	3.007	107.10	14.7	8.4	2.932	100.43	2.962	3.500	
15	107.57	116.72	9.15	2.989	116.26	11.6	4.1	2.900	108.40	2.943	3.500	
16	117.13	125.62	8.49	3.016	117.96	16.3	10.9	2.909	125.52	2.965	3.500	
17	125.93	134.50	8.57	3.018	126.03	16.6	8.9	2.945	126.19	2.971	3.500	
18	134.79	143.82	9.03	2.980	143.22	10.0	5.4	2.891	134.79	2.943	3.500	
19	144.15	153.04	8.90	3.008	152.88	14.9	6.4	2.932	152.88	2.955	3.500	
20	153.46	161.96	8.50	2.980	154.93	10.0	4.7	2.896	161.64	2.933	3.500	
21	162.32	170.59	8.28	3.007	163.09	14.7	8.0	2.927	169.08	2.956	3.500	
22	171.00	180.06	9.06	2.998	178.03	13.1	5.4	2.896	171.00	2.948	3.500	
23	180.47	188.94	8.47	2.971	184.97	8.5	4.3	2.891	180.87	2.935	3.500	
24	189.31	198.44	9.14	3.046	197.03	21.5	9.8	2.945	198.29	2.975	3.500	
25	198.79	207.95	9.16	2.973	206.99	8.8	4.2	2.896	198.93	2.942	3.500	
26	208.22	217.40	9.18	3.007	217.37	14.7	7.5	2.936	217.26	2.964	3.500	
27	217.81	226.28	8.47	3.007	218.46	14.7	9.6	2.914	226.26	2.956	3.500	
28	226.69	235.23	8.54	2.991	234.99	11.9	7.6	2.909	226.73	2.951	3.500	

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Ref.	Top (m)	Bottom (m)	Length (m)	Max. ID (")	Dep. Max. (m)	Max. Pen. (%)	Max. Loss (%)	Min. ID (")	Dep. Min. (m)	Mean ID (")	Tubular OD (")	Completion Item
29	235.59	243.88	8.30	3.008	243.88	14.9	10.8	2.923	235.93	2.974	3.500	
30	244.17	253.39	9.21	3.009	248.45	15.1	7.0	2.927	244.50	2.961	3.500	
31	253.71	262.77	9.07	3.005	253.87	14.4	8.2	2.950	262.77	2.968	3.500	
32	263.18	271.33	8.16	3.014	266.41	15.9	9.5	2.923	271.07	2.960	3.500	
33	271.74	280.96	9.22	2.974	275.67	9.0	4.1	2.909	280.71	2.940	3.500	
34	281.31	290.37	9.06	3.007	284.24	14.7	6.3	2.914	290.19	2.954	3.500	
35	290.69	300.07	9.39	3.008	290.78	14.9	8.6	2.936	299.94	2.970	3.500	
36	300.31	309.19	8.88	3.025	302.21	17.8	9.2	2.927	308.12	2.962	3.500	
37	309.60	317.99	8.39	2.990	313.37	11.8	6.6	2.896	317.81	2.941	3.500	
38	318.40	326.74	8.34	3.000	318.93	13.5	8.4	2.905	326.59	2.954	3.500	
39	327.11	335.65	8.54	2.999	329.32	13.3	8.2	2.927	335.41	2.957	3.500	
40	336.06	344.96	8.89	2.982	336.80	10.4	4.2	2.878	344.89	2.933	3.500	
41	345.19	353.97	8.78	3.000	348.81	13.5	9.4	2.918	353.88	2.957	3.500	
42	354.38	363.24	8.86	3.015	359.03	16.1	7.8	2.936	354.86	2.962	3.500	
43	363.65	372.03	8.38	3.007	367.93	14.7	6.3	2.927	363.91	2.955	3.500	
44	372.44	381.05	8.61	2.989	380.70	11.6	6.3	2.909	373.01	2.943	3.500	
45	381.47	390.47	9.00	3.026	386.91	18.0	8.4	2.914	381.49	2.966	3.500	
46	390.88	399.01	8.13	3.015	395.77	16.1	10.7	2.936	390.92	2.979	3.500	
47	399.43	407.88	8.46	2.997	404.67	13.0	2.6	2.896	403.74	2.929	3.500	
48	408.30	417.26	8.97	3.031	417.08	18.9	10.0	2.909	408.50	2.968	3.500	
49	417.67	426.64	8.97	3.006	426.22	14.5	3.4	2.891	417.83	2.935	3.500	
50	426.99	436.24	9.25	3.054	431.08	22.8	9.6	2.941	427.48	2.974	3.500	
51	436.55	444.96	8.41	3.016	443.14	16.3	7.9	2.909	444.96	2.956	3.500	
52	445.24	453.93	8.70	3.023	453.18	17.5	4.4	2.900	449.42	2.942	3.500	
53	454.25	463.45	9.19	3.006	460.03	14.5	8.1	2.941	460.38	2.966	3.500	
54	463.72	472.37	8.65	3.001	472.03	13.7	9.0	2.905	463.97	2.959	3.500	
55	472.79	481.17	8.38	2.982	478.93	10.4	6.3	2.905	472.81	2.947	3.500	
56	481.58	489.99	8.42	3.016	484.97	16.3	10.0	2.909	481.69	2.963	3.500	
57	490.39	498.79	8.40	3.025	491.03	17.8	9.9	2.923	497.99	2.961	3.500	
58	499.04	508.38	9.34	3.025	506.18	17.8	9.8	2.941	501.52	2.972	3.500	
59	508.61	517.54	8.93	2.988	517.44	11.4	5.6	2.923	509.69	2.948	3.500	
60	517.95	526.86	8.92	3.008	520.41	14.9	6.7	2.914	526.86	2.956	3.500	
61	527.17	536.01	8.84	3.006	531.62	14.5	6.4	2.918	535.92	2.957	3.500	
62	536.42	545.11	8.70	3.005	540.24	14.4	6.0	2.923	536.45	2.953	3.500	
63	545.52	554.32	8.80	3.005	550.16	14.4	6.0	2.932	550.54	2.954	3.500	
64	554.72	563.89	9.17	2.999	560.05	13.3	4.5	2.896	560.22	2.941	3.500	

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65	564.31	573.51	9.21	2.981	572.91	10.2	2.2	2.887	564.44	2.929	3.500	
66	573.85	582.14	8.30	3.016	574.35	16.3	10.1	2.927	581.88	2.965	3.500	
67	582.56	590.88	8.33	2.982	590.33	10.4	5.1	2.905	582.57	2.941	3.500	
68	591.19	599.83	8.64	2.991	591.69	11.9	8.2	2.900	599.21	2.943	3.500	
69	600.11	609.21	9.10	3.000	608.53	13.5	7.9	2.932	608.16	2.967	3.500	
70	609.63	618.30	8.67	2.990	615.78	11.8	6.3	2.896	609.75	2.947	3.500	
71	618.71	627.45	8.75	2.999	624.92	13.3	7.3	2.923	618.80	2.950	3.500	
72	627.83	636.15	8.33	3.000	633.70	13.5	7.6	2.918	627.83	2.960	3.500	
73	636.45	644.99	8.54	3.008	637.10	14.9	10.3	2.918	643.99	2.958	3.500	
74	645.35	654.47	9.13	3.033	651.65	19.2	11.6	2.945	654.46	2.988	3.500	
75	654.81	664.03	9.21	3.024	657.45	17.6	9.9	2.950	655.28	2.976	3.500	
76	664.32	672.85	8.53	2.990	666.24	11.8	5.4	2.932	664.45	2.949	3.500	
77	673.26	682.36	9.10	3.024	676.05	17.6	8.1	2.936	677.02	2.964	3.500	
78	682.76	691.11	8.35	2.973	684.30	8.8	5.2	2.900	691.11	2.936	3.500	
79	691.45	700.45	9.00	3.007	693.45	14.7	6.8	2.936	698.92	2.959	3.500	
80	700.66	701.74	1.08	3.000	700.78	13.5	4.2	2.914	701.01	2.944	3.500	Pup joint
81	701.93	703.59	1.66	2.919	701.94	-	-	2.874	703.28	2.887	3.500	Flow coupling
82	703.64	704.32	0.68	3.088	703.84	-	-	2.758	703.92	2.809	3.500	Safety valve
83	704.47	706.14	1.67	2.901	706.12	-	-	2.870	704.67	2.882	3.500	Flow coupling
84	706.21	706.75	0.54	3.018	706.62	16.6	6.6	2.927	706.75	2.959	3.500	Pup joint
85	706.84	716.05	9.21	2.999	715.48	13.3	5.2	2.896	706.84	2.948	3.500	
86	716.41	725.48	9.07	3.008	717.37	14.9	10.3	2.900	725.46	2.947	3.500	
87	725.96	734.41	8.45	3.007	732.73	14.7	9.9	2.909	726.30	2.965	3.500	
88	734.82	743.01	8.19	3.024	738.38	17.6	10.6	2.963	738.92	2.982	3.500	
89	743.35	752.25	8.90	2.972	748.87	8.7	3.1	2.896	745.96	2.928	3.500	
90	752.52	761.60	9.08	3.001	758.51	13.7	6.5	2.909	761.33	2.955	3.500	
91	761.87	770.80	8.93	3.007	768.93	14.7	6.6	2.909	770.68	2.956	3.500	
92	771.21	779.83	8.62	3.006	772.79	14.5	10.2	2.914	779.66	2.961	3.500	
93	780.11	789.13	9.02	3.034	781.43	19.4	7.0	2.932	780.15	2.960	3.500	
94	789.54	798.08	8.55	3.008	796.22	14.9	11.1	2.932	798.03	2.979	3.500	
95	798.49	807.29	8.80	3.023	804.41	17.5	5.8	2.918	798.85	2.954	3.500	
96	807.70	816.65	8.96	3.030	809.00	18.7	6.7	2.900	807.71	2.955	3.500	
97	817.06	826.10	9.04	3.001	821.34	13.7	9.3	2.900	825.99	2.965	3.500	
98	826.44	835.47	9.04	2.998	830.18	13.1	6.9	2.891	835.44	2.955	3.500	
99	835.85	844.90	9.05	2.992	838.73	12.1	5.6	2.896	836.17	2.947	3.500	
100	845.32	853.60	8.29	2.982	853.47	10.4	5.3	2.896	845.56	2.942	3.500	
101	854.02	862.44	8.42	3.009	854.98	15.1	8.2	2.914	862.40	2.952	3.500	
102	862.85	871.07	8.22	3.009	867.76	15.1	9.3	2.918	862.87	2.966	3.500	
103	871.48	880.47	8.99	2.999	879.55	13.3	5.4	2.918	871.80	2.950	3.500	
104	880.88	889.70	8.82	2.982	889.18	10.4	6.7	2.905	889.43	2.943	3.500	
105	890.02	898.28	8.26	3.008	898.24	14.9	9.5	2.936	890.07	2.973	3.500	

Client:	NAM	Well No.:	ROSSUM WEERSELO - 7	Field:	ROSSOM WEERSELO
Survey Date:	07/10/2017	Survey	MFC-24 Extended	Job ID:	DAC667

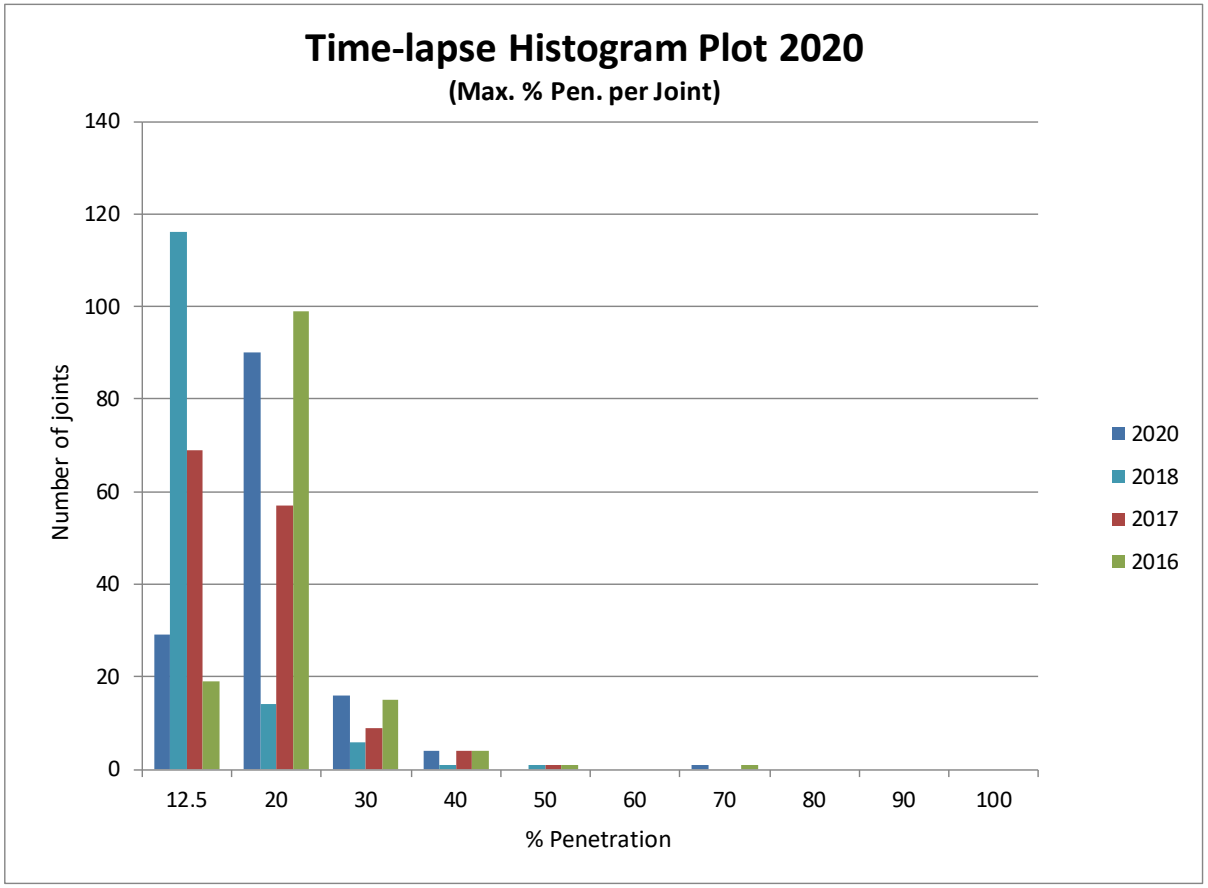
EXPRO

Ref.	Top (m)	Bottom (m)	Length (m)	Max. ID (")	Dep. Max. (m)	Max. Pen. (%)	Max. Loss (%)	Min. ID (")	Dep. Min. (m)	Mean ID (")	Tubular OD (")	Completion Item
106	898.62	906.95	8.33	2.998	902.81	13.1	6.2	2.896	899.03	2.942	3.500	
107	907.36	915.55	8.19	2.991	909.88	11.9	8.8	2.918	915.38	2.952	3.500	
108	915.88	924.44	8.57	3.017	920.28	16.4	7.6	2.936	920.57	2.966	3.500	
109	924.70	933.96	9.26	3.007	931.85	14.7	5.8	2.905	933.73	2.950	3.500	
110	934.19	942.49	8.30	3.042	935.34	20.8	10.9	2.909	942.30	2.965	3.500	
111	942.91	951.78	8.87	2.982	944.40	10.4	6.3	2.896	951.72	2.936	3.500	
112	952.05	960.71	8.66	3.075	959.98	26.5	8.9	2.932	952.10	2.967	3.500	
113	961.13	969.60	8.47	3.070	962.54	25.6	5.6	2.909	969.41	2.950	3.500	
114	969.90	978.35	8.46	3.111	970.98	32.7	8.7	2.936	974.29	2.968	3.500	
115	978.76	987.17	8.41	3.031	983.40	18.9	5.8	2.923	986.86	2.950	3.500	
116	987.56	996.13	8.58	3.043	988.51	20.9	9.1	2.923	996.03	2.964	3.500	
117	996.55	1005.59	9.05	3.001	1004.87	13.7	5.2	2.923	1005.40	2.949	3.500	
118	1006.01	1015.02	9.02	3.027	1013.14	18.2	5.4	2.900	1014.76	2.947	3.500	
119	1015.37	1024.39	9.02	3.043	1022.12	20.9	5.8	2.900	1024.36	2.948	3.500	
120	1024.80	1033.52	8.72	3.005	1032.24	14.4	5.3	2.923	1025.71	2.948	3.500	
121	1033.94	1042.81	8.88	3.088	1041.35	28.7	8.2	2.914	1034.02	2.962	3.500	
122	1043.14	1052.09	8.95	3.017	1050.54	16.4	4.8	2.896	1043.16	2.944	3.500	
123	1052.50	1061.14	8.64	3.024	1054.95	17.6	9.7	2.918	1060.96	2.966	3.500	
124	1061.56	1070.03	8.47	3.098	1066.33	30.4	9.2	2.914	1061.84	2.960	3.500	
125	1070.43	1079.31	8.88	3.052	1073.62	22.5	5.1	2.918	1073.16	2.941	3.500	
126	1079.65	1088.65	9.00	3.052	1087.02	22.5	8.1	2.905	1088.65	2.960	3.500	
127	1089.05	1098.23	9.19	3.110	1093.75	32.5	7.9	2.941	1098.10	2.965	3.500	
128	1098.49	1106.89	8.40	3.010	1105.70	15.2	4.9	2.887	1106.77	2.931	3.500	
129	1107.16	1116.47	9.30	3.122	1115.32	34.6	11.0	2.950	1107.47	2.982	3.500	
130	1116.75	1125.17	8.41	3.070	1117.73	25.6	7.5	2.927	1125.17	2.954	3.500	
131	1125.58	1134.84	9.26	3.050	1133.22	22.1	4.9	2.891	1134.82	2.943	3.500	
132	1135.14	1143.98	8.85	3.025	1136.18	17.8	5.3	2.905	1135.27	2.947	3.500	
133	1144.39	1152.61	8.22	3.084	1148.91	28.0	8.4	2.918	1151.51	2.953	3.500	
134	1153.02	1161.33	8.31	2.982	1154.25	10.4	6.0	2.909	1153.02	2.949	3.500	
135	1161.74	1170.32	8.58	3.280	1162.20	61.9	10.3	2.918	1161.94	2.960	3.500	
136	1170.61	1175.12	4.51	3.001	1175.02	13.7	5.1	2.923	1170.90	2.949	3.500	Pup joint
137	1175.19	1176.11	0.92	3.212	1175.52	-	-	2.762	1176.08	2.918	3.500	SLSD
138	1176.23	1180.65	4.42	3.084	1178.43	28.0	4.9	2.918	1179.74	2.942	3.500	Pup joint
139	1180.79	1182.51	1.72	4.804	1181.84	-	-	2.946	1180.80	3.565	3.500	SPM
140	1182.66	1187.33	4.67	3.022	1185.10	17.3	6.2	2.918	1184.11	2.943	3.500	Pup joint
141	1187.47	1192.16	4.69	3.044	1189.49	21.1	5.1	2.914	1192.14	2.949	3.500	Pup joint
142	1192.28	1193.99	1.72	4.752	1193.34	-	-	2.941	1193.98	3.583	3.500	SPM
143	1194.13	1198.68	4.55	3.024	1194.16	17.6	3.2	2.905	1196.08	2.934	3.500	Pup joint
144	1198.73	1199.00	0.27	3.080	1198.82	-	-	2.762	1198.94	2.873	3.500	Nipple
145	1199.08	1203.62	4.54	3.028	1200.56	18.3	4.3	2.900	1203.62	2.939	3.500	Pup joint
146	1203.87	1208.04	4.17	6.364	1205.38	-	-	2.923	1207.98	5.587	3.500	Packer assembly

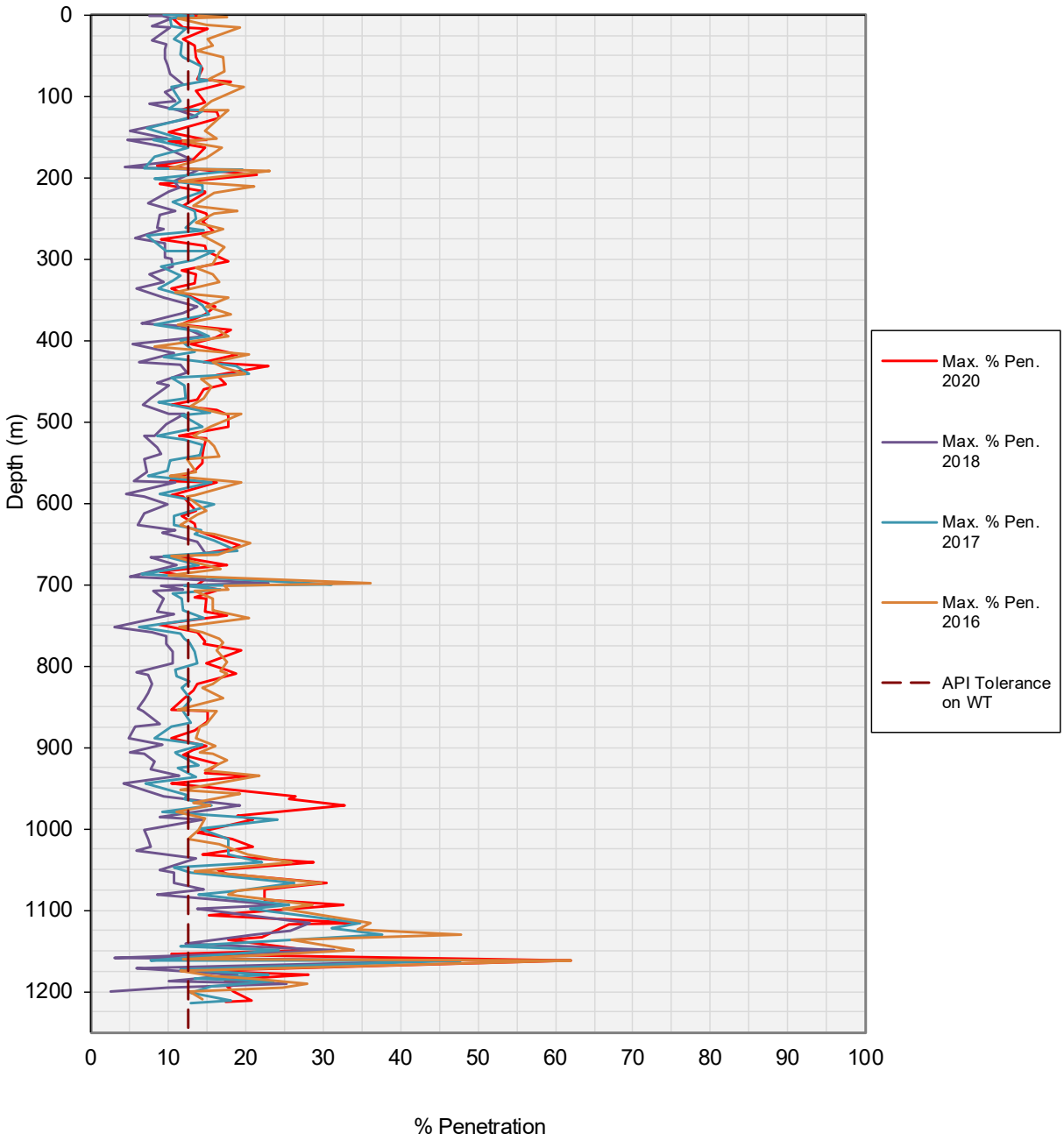
Client:	NAM	Well No.:	ROSSUM WEERSELO - 7	Field:	ROSSOM WEERSELO
Survey Date:	07/10/2017	Survey	MFC-24 Extended	Job ID:	DAC667

Ref.	Top (m)	Bottom (m)	Length (m)	Max. ID (")	Dep. Max. (m)	Max. Pen. (%)	Max. Loss (%)	Min. ID (")	Dep. Min. (m)	Mean ID (")	Tubular OD (")	Completion Item
147	1208.18	1212.71	4.54	3.042	1210.99	20.8	6.7	2.896	1208.18	2.953	3.500	Pup joint
148	1212.82	1213.71	0.89	3.023	1212.99	17.5	6.2	2.936	1213.67	2.953	3.500	Pup joint
149	1213.78	1214.03	0.26	3.125	1213.91	-	-	2.753	1214.00	2.850	3.500	Nipple
150	1214.16	1214.95	0.78	7.649	1214.94	-	-	2.753	1214.30	5.632	3.500	WEG assembly

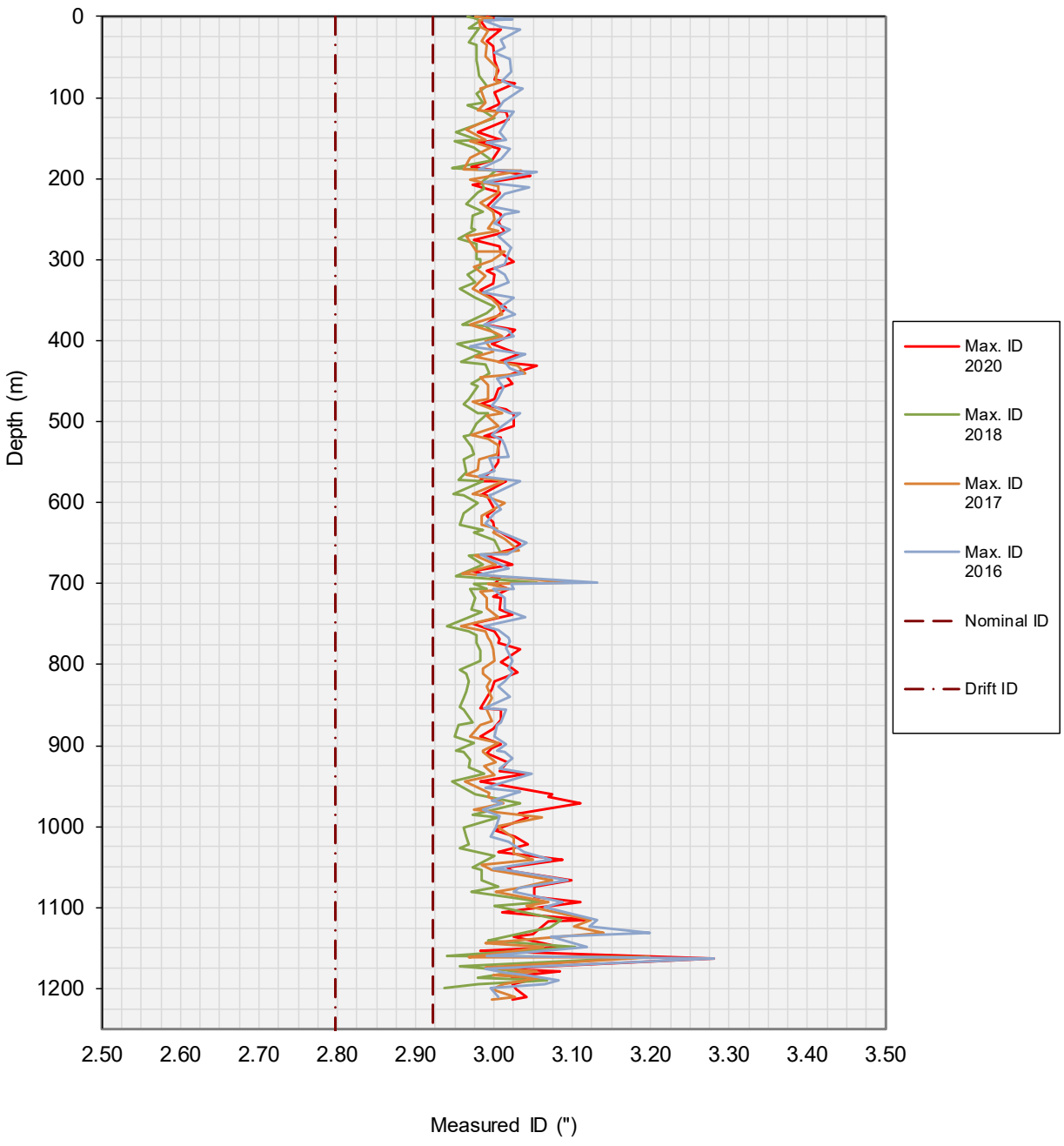
Total number of joints logged: 140					
29	Joints with Max. % Penetrations Between	0	and	13	%
90	Joints with Max. % Penetrations Between	12.5	and	20	%
16	Joints with Max. % Penetrations Between	20	and	30	%
4	Joints with Max. % Penetrations Between	30	and	40	%
0	Joints with Max. % Penetrations Between	40	and	50	%
0	Joints with Max. % Penetrations Between	50	and	60	%
1	Joints with Max. % Penetrations Between	60	and	70	%
0	Joints with Max. % Penetrations Between	70	and	80	%
0	Joints with Max. % Penetrations Between	80	and	90	%
0	Joints with Max. % Penetrations Between	90	and	100	%



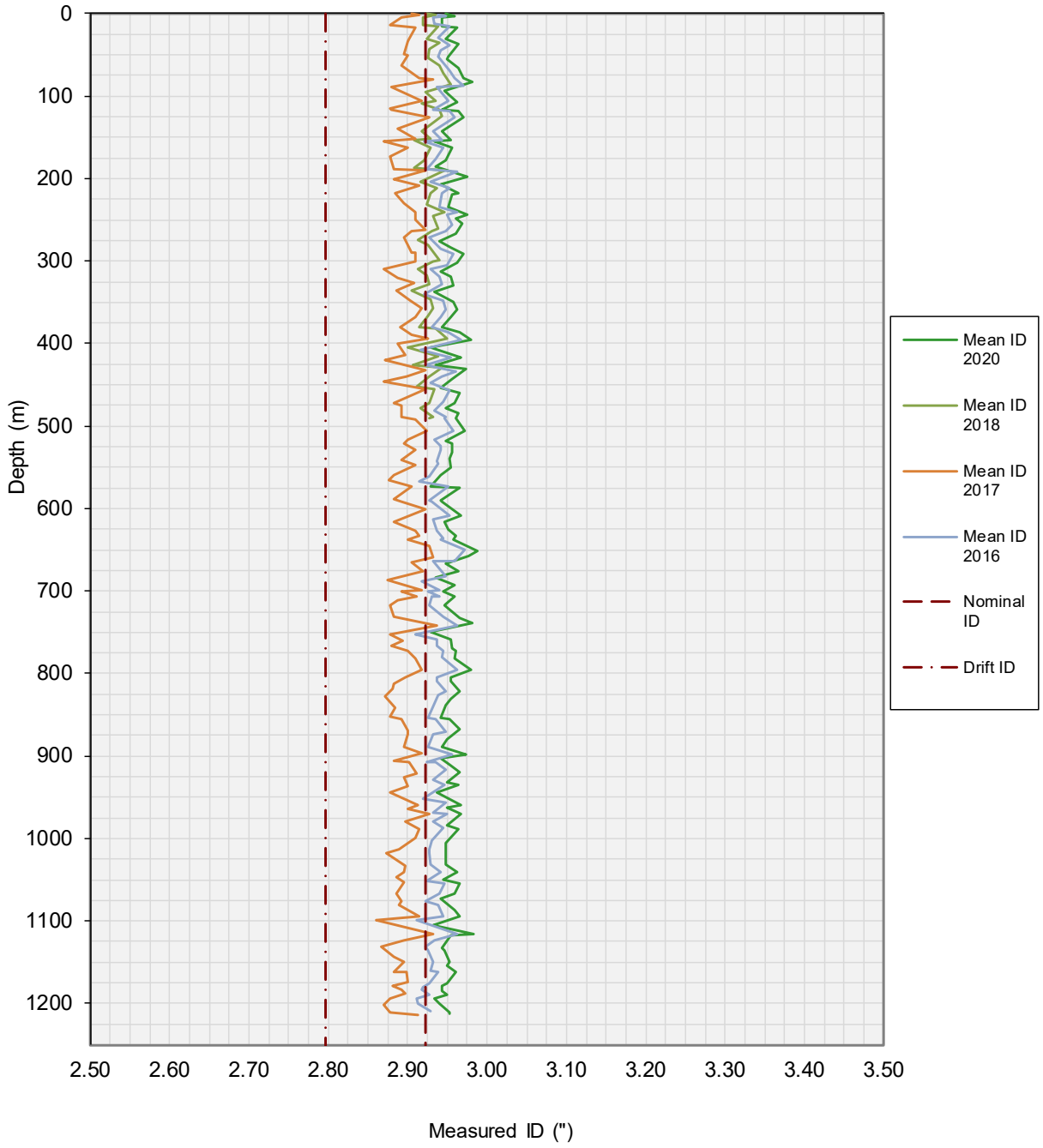
Time-lapse Max. Percentage Penetration per Joint vs. Depth Plot



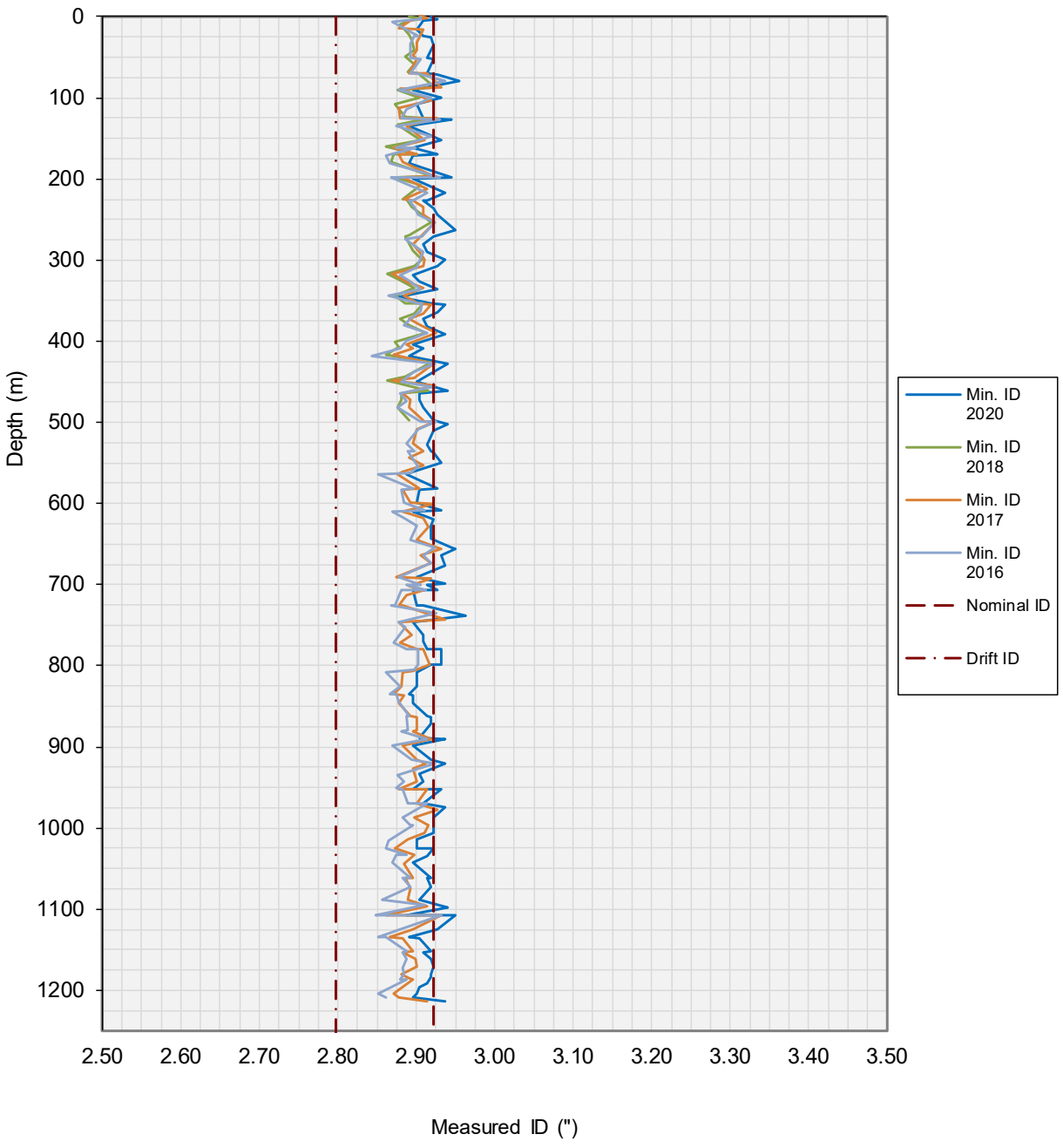
Time-lapse Maximum ID per Joint vs. Depth Plot



Time-lapse Mean ID per Joint vs. Depth Plot

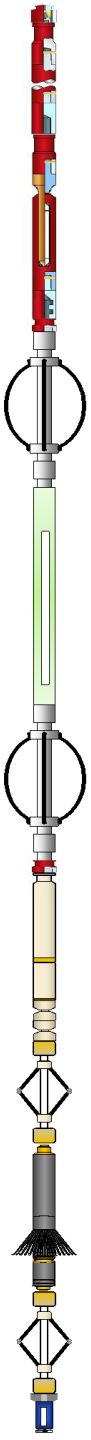


Time-lapse Minimum ID per Joint vs. Depth Plot



5. Well & Survey Information

Client:	NAM	Well No.:	ROSSUM WEERSELO - 7	Field:	ROSSOM WEERSELO
Survey Date:	07/10/2017	Survey	MFC-24 Extended	Job ID:	DAC667

Sensor	Offset (m)	Schematic	Description	Length (m)	O.D. (in)	Weight (lb
			CHD-SLICKLINE ROPE SOCKET (SL_RS001) Expro Slickline Rope Socket - 1.75" F/N	0.15	1.88	5.00
			SBAR-SLWB (000007) Slickline Weight bar	0.91	1.88	27.00
			SPANG-SPANG1875 (000001) SPANG JAR 30 stroke	1.52	1.88	46.00
			SLXO-QuickLock Quick Lock connection	0.10	1.88	3.00
			CEN-Slickline CENT (000006) Springbow CentraliserSlickline Sucker Rod	1.29	1.69	15.00
			Pulse_2-Pulse_2_memory (000001) Pulse_2 Indigo Incl battery module	1.79	1.66	22.00
			CEN-Slickline CENT (000007) Springbow CentraliserSlickline Sucker Rod	1.29	1.69	15.00
			SLXO-QuickLock Quick Lock connection	0.10	1.88	3.00
			MBH-032 (000008) Memory Battery Housing (5CC)_165DEG BATTERY	0.74	1.69	11.00
			UMT-007 (000004) Ultrawire Memory Tool (1GB)	0.32	1.69	6.60
			PKJ-013 (000001) Production Knuckle Joint	0.17	1.69	3.50
			PKJ-013 (000002) Production Knuckle Joint	0.17	1.69	3.50
			PRC-034 (000022) Production Roller Centraliser (4 Arm)	0.84	1.69	13.00
MIT	1.75		MIT-033 (000005) Multifinger Imaging Tool (UW 24F)	1.22	1.69	20.70
			PRC-034 (000023) Production Roller Centraliser (4 Arm)	0.84	1.69	13.00
			BUL-006 (000002) Bullnose Terminator - incl 15/16 SR BOX	0.07	1.69	1.20
			DUMMY-DUMMY_003 Gauges _ NAM _ WIRELINE	0.25	1.25	5.00

Dataset:	Sondex Ultrawire Memory MIT/MTT
Total length:	11.77 m
Total weight:	213.50 lb
O.D.:	1.88 in