

Production Profile Analysis

Company: Utah FORGE
Well: FORGE 16B(78)-32
Field: Forge
County: Beaver
State: Utah

Geoscience & Production Center of Excellence, North America

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Logging Date: 04/27/2024
Report Date: 04/28/2024

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1.0 EXECUTIVE SUMMARY

Well: FORGE 16B(78)-32

Production Profile

Survey date: 27-APR-2024

Well History and Logging Objective

The objective of the PLT is to determine the produced fluid distribution profile from the various perforated intervals. The production fluid for the circulation test is water injected into well 16A(78)-32. The perforated intervals correspond with four frac stages that were pumped and one stage that was perforated but not fracture stimulated on Well 16B(78)-32 in April 2024. The frac stage intervals in well 16B(78)-32 are as follows:

- Stage 1: 9,690 – 9,773 ft MD
- Stage 2: 9,429 – 9,512 ft MD
- Stage 3: 9,265 – 9,393 ft MD
- Stage 4: 8,958 – 9,058 ft MD
- Stage 5: 8,774 – 8,883 ft MD

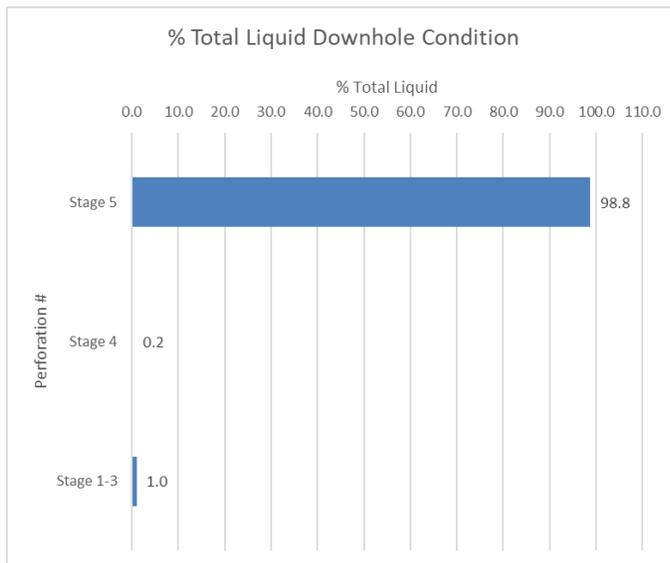
The PLT will be conveyed into the deviated section of the wellbore. Since the 16B(78)-32 will be logged under flowing conditions it is necessary to have conveyance, preferably on a roller bogie/taxi with added weight bars. It is desirable to measure the rate distribution of the produced water from the various frac stage intervals to improve the understanding of connective pathways from the fracture system connection with the 16A(78)-32 well.

Conclusions

Eight continuous passes were recorded during the logging (up and down logging direction) with logging speed of 150, 185, 200, and 225 ft/minutes.

The logging was done under 12.5 BPM (18000 BPD) injection on 16A(78)-32 well.

The flowing survey shows the percentage of the fluid production at downhole condition:



2.0 TABULATED RESULTS

Flowing Survey

The metered rate for the analysis: 12.5 BPM (18000 BPD).

Contributions at Standard Conditions								
Surface Rate Summary		Log Date Test date	Qo (stb/d)	Qw (stb/d)	Qg (Mscf/d)	Qo + Qw (stb/d)	Water Cut	GOR (scf/stb)
Calculated rates (S.C.)		27-Apr-2024	0	18119	0	18119	1.00	N/A
Metered Rates (S.C.)		27-Apr-2024	0	18000	0	18000	1.00	N/A
Layer	Flowing Intervals		Qo (stb/d)	Qw (stb/d)	Qg (Mscf/d)	Qo + Qw (stb/d)	Water Cut	% Liquid Rate
	Top	Bottom						
Stage 5	8774.1	8883.0	0.0	17901.2	0.0	17901.2	1.0	98.8
Stage 4	8958.0	9058.0	0.0	35.2	0.0	35.2	1.0	0.2
Stage 1-3	9265.0	9773.0	0.0	182.0	0.0	182.0	1.0	1.0

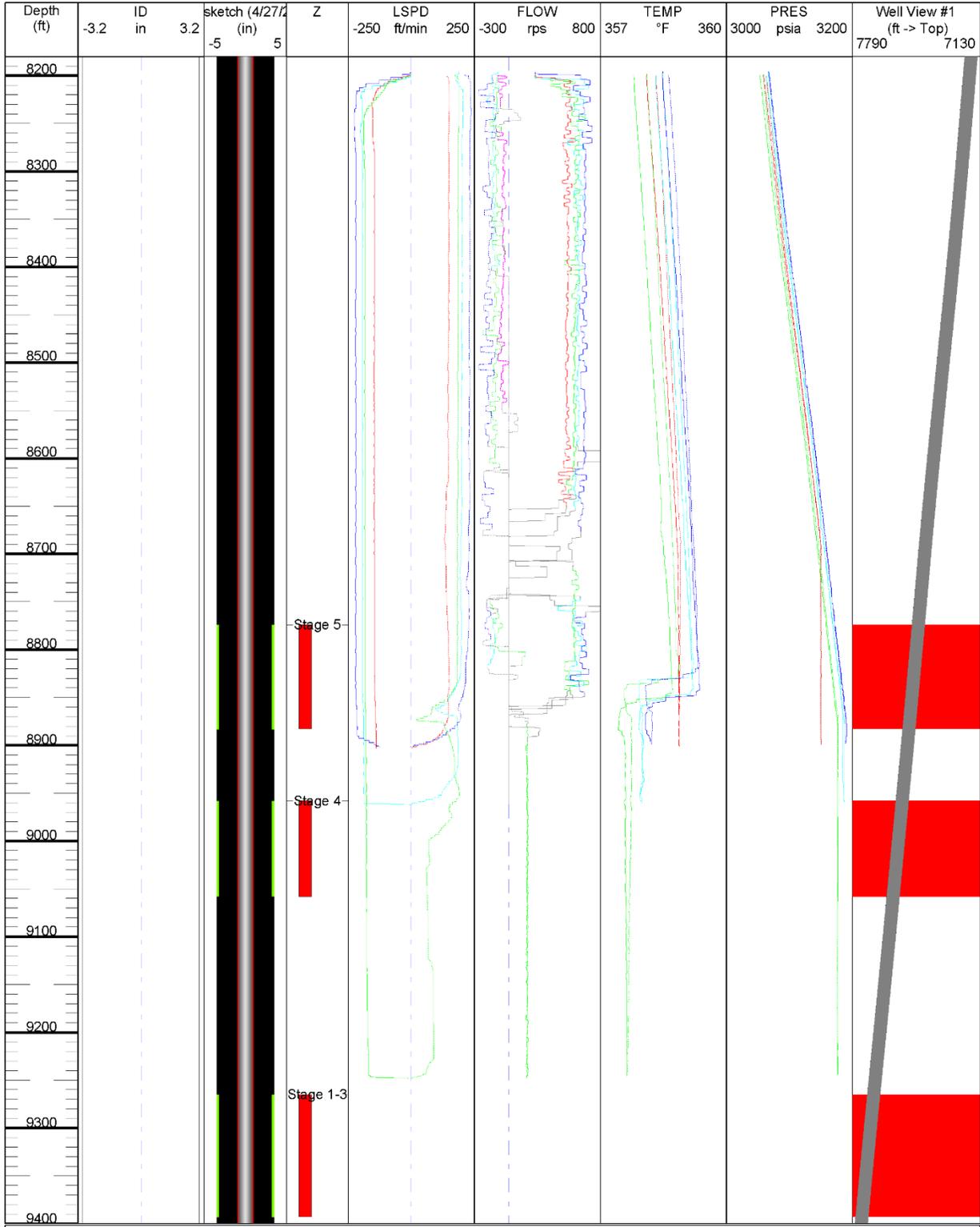
Contributions at Downhole Conditions										
Layer	Flowing Intervals		Qo (bbl/d)	Qw (bbl/d)	Qg (bbl/d)	Qt (bbl/d)	% Total Oil	% Total Water	% Total Gas	% Total Rate
	Top	Bottom								
Stage 5	8774.1	8883.0	0.0	19854.6	0.0	19854.6	0.0	98.8	0.0	98.8
Stage 4	8958.0	9058.0	0.0	39.0	0.0	39.0	0.0	0.2	0.0	0.2
Stage 1-3	9265.0	9773.0	0.0	201.7	0.0	201.7	0.0	1.0	0.0	1.0

Cumulative Rates at Downhole Conditions								
Flowing Intervals		Qo (bbl/d)	Qw (bbl/d)	Qg (bbl/d)	Qt (bbl/d)	Press (psia)	Temp (degF)	Dev (deg)
Top	Bottom							
8774.1	8883.0	0	20096	0	20096	3134.4	358.8	61.3
8958.0	9058.0	0	241	0	241	3182.7	357.8	62.4
9265.0	9773.0	0	202	0	202	3177.4	357.6	61.3

3.0 PRODUCTION LOGGING SURVEY

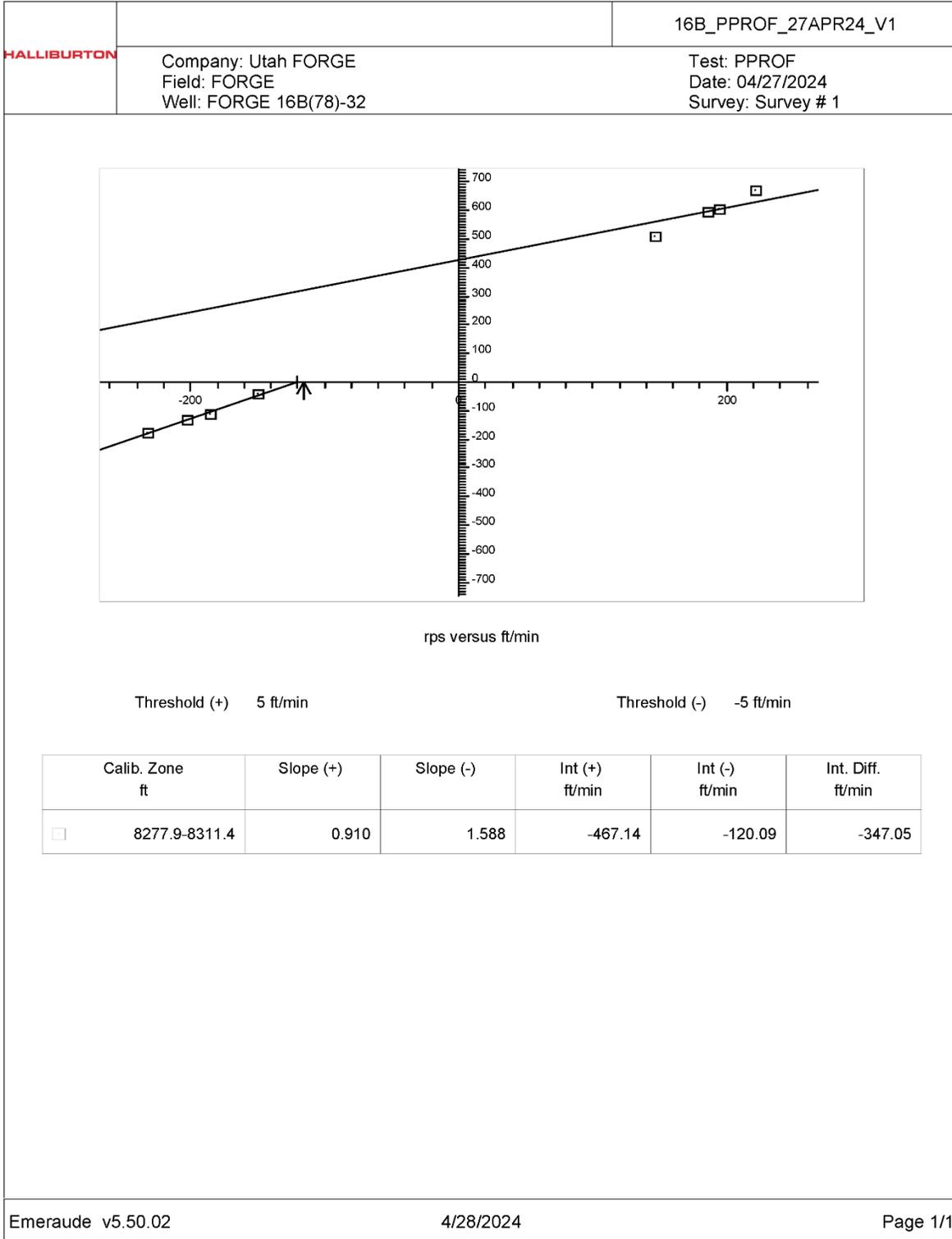
Curve scale:

- ID: Internal Diameter, -3.2 to 3.2 inches.
- LSPD: Line Speed, -250 to 250 ft/min.
- FLOW: Flowmeter Spinner, -300 to 800 RPS.
- TEMP: Temperature, 357-360 degF.
- PRESS: Pressure, 3000-3200 psia.
- Well View (TVD): 7790-7130 ft.



4.0 SPINNER CALIBRATION

Flowing Survey

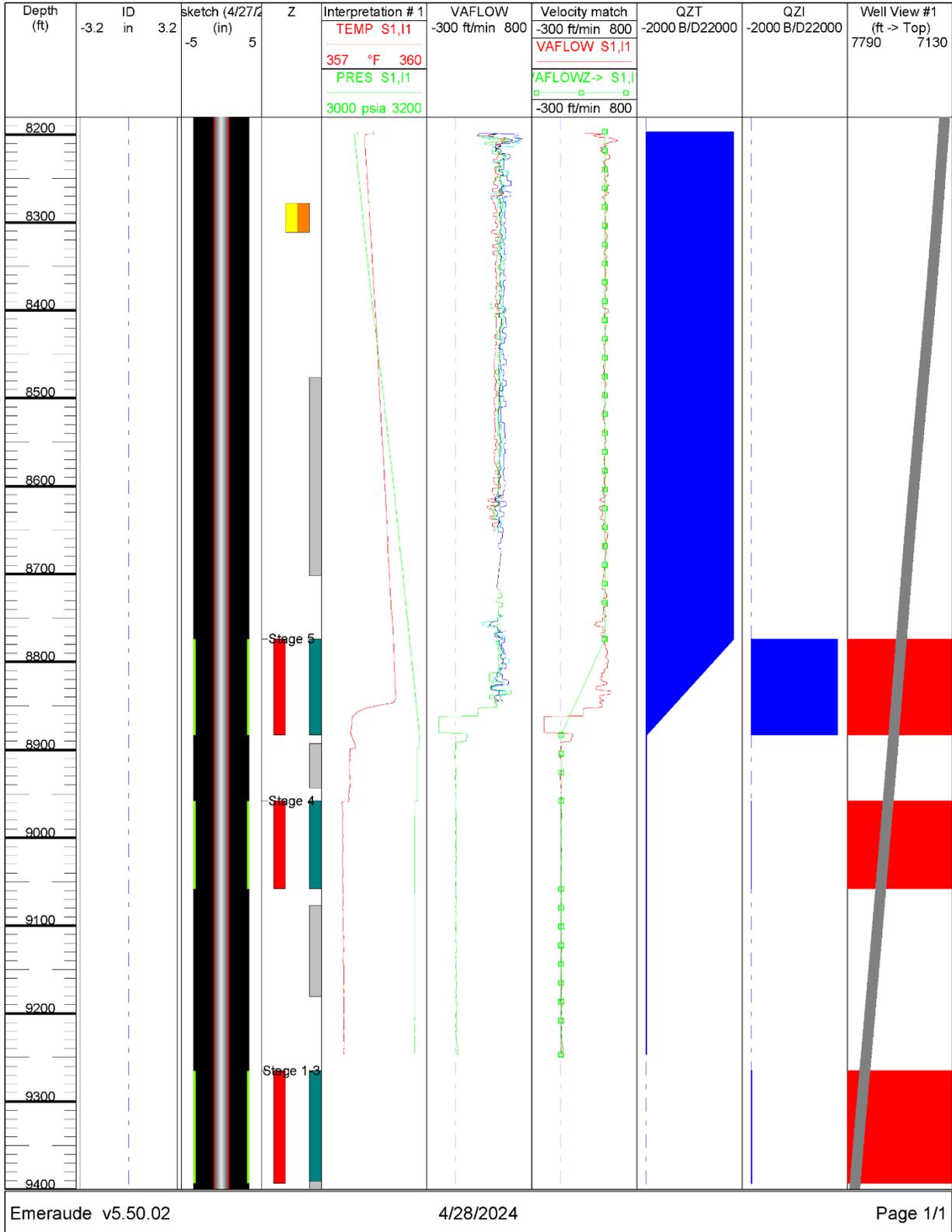




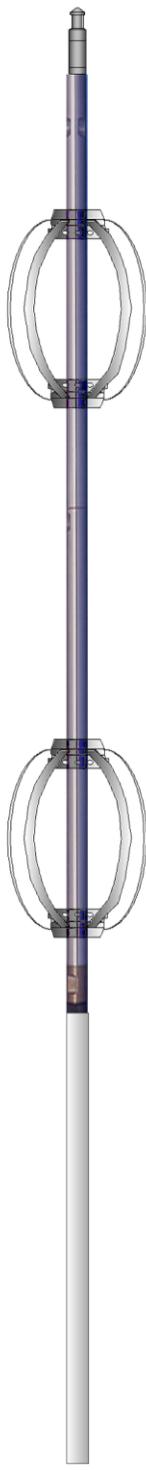
5.0 PVT PARAMETER

	PVT	16B_PPROF_27APR24_V1
HALLIBURTON	Company: Utah FORGE Field: FORGE Well: FORGE 16B(78)-32	Test: PPROF Date: 04/27/2024 Survey: Survey # 1
<p style="text-align: center;"> FLUID TYPE Water Salinity, ppm 10000 Rsw Katz cw Dodson and Standing Muw Van-Wingen+Frick </p>		
Emeraude v5.50.02	4/28/2024	Page 1/1

6.0 PRODUCTION LOG ANALYSIS



7.0 TOOL DIAGRAM

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			CHD-1_69 (1.69) 1.6875 CABLEHEAD	1.00	1.69	
			SLIP-OBC Slip On 3 .625 Dits Centralizer	3.00	3.63	5.00
			WT-1-11/16" 1.6875" WEIGHT BAR	14.00	1.69	84.00
			SLIP-OBC (001) Slip On 3 .625 Dits Centralizer	3.00	3.63	5.00
			KUSTER_PL-PTS (GS5219) Kuster PTSC	6.71	1.75	
PRES	2.58					
TEMP	1.33					
FLOW	0.38					
UTCTIM	0.00					
Dataset: 16b_plt.db: field/well/run1/pass3 Total length: 21.71 ft Total weight: 94.00 lb O.D.: 3.63 in						



End of Report