

Caerus Oil and Gas LLC

Puckett 32A-1

H&P 330

Post Job Analysis

Cement Surface Casing

Date Prepared: 10/08/2015
Job Date: 10/4/2015

Submitted by: Jenna Cook – Grand Junction Cement Engineer

The Road to Excellence Starts with Safety

Sold To #: 360446		Ship To #: 3665983		Quote #:		Sales Order #: 0902800141	
Customer: CAERUS OIL AND GAS LLC - EBUS				Customer Rep: BOYD COTTAM			
Well Name: PUCKETT			Well #: 32A-1			API/UWI #: 05-045-22852-00	
Field: GRAND VALLEY		City (SAP): PARACHUTE		County/Parish: GARFIELD		State: COLORADO	
Legal Description: SE NW-1-7S-97W-2067FNL-1358FWL							
Contractor: H & P DRLG				Rig/Platform Name/Num: H & P 330			
Job BOM: 7521							
Well Type: DIRECTIONAL GAS							
Sales Person: HALAMERICA\HB80977				Srvc Supervisor: Jesse Slaughter			

Job

Formation Name	
Formation Depth (MD)	Top
Form Type	BHST
Job depth MD	2515ft
Water Depth	Wk Ht Above Floor 2ft
Perforation Depth (MD)	From
	To

Well Data

Description	New / Used	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
Casing	3	20	19.124	94			0	128	0	0
Casing		9.625	8.921	36	8 RD (LT&C)		0	2515		0
Open Hole Section			14.75				128	2520	0	0

Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	9.625			2515	Top Plug	9.625	1	HES
Float Shoe	9.625				Bottom Plug	9.625		HES
Float Collar	9.625				SSR plug set	9.625		HES
Insert Float	9.625				Plug Container	9.625	1	HES
Stage Tool	9.625				Centralizers	9.625		HES

Fluid Data

Stage/Plug #: 1

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
1	Fresh Water	Fresh Water	10	bbl	8.34			4	

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
2	Super Flush 101	Super Flush 101	20	bbl	9.17			4	
21 gal/bbl		FRESH WATER							

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
3	Water	Water	10	bbl	8.34			4	
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
4	Lead Cement	VARICEM (TM) CEMENT	375	sack	11	3.65		6	23.08
23.08 Gal		FRESH WATER							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
5	Tail Cement	VARICEM (TM) CEMENT	160	sack	12.8	2.18		6	12.11
12.11 Gal		FRESH WATER							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
6	Displacement	Displacement	190.9	bbl	8.34			8	
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
7	Super Flush 101	Super Flush 101	20	bbl	9.17				
21 gal/bbl		FRESH WATER							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
8	Top Out	REVERCEM (TM) CEMENT	273	sack	12.8	2.12		2	11.15
11.15 Gal		FRESH WATER							
Cement Left In Pipe		Amount	46 ft		Reason			Shoe Joint	
Comment									

1.0 Real-Time Job Summary

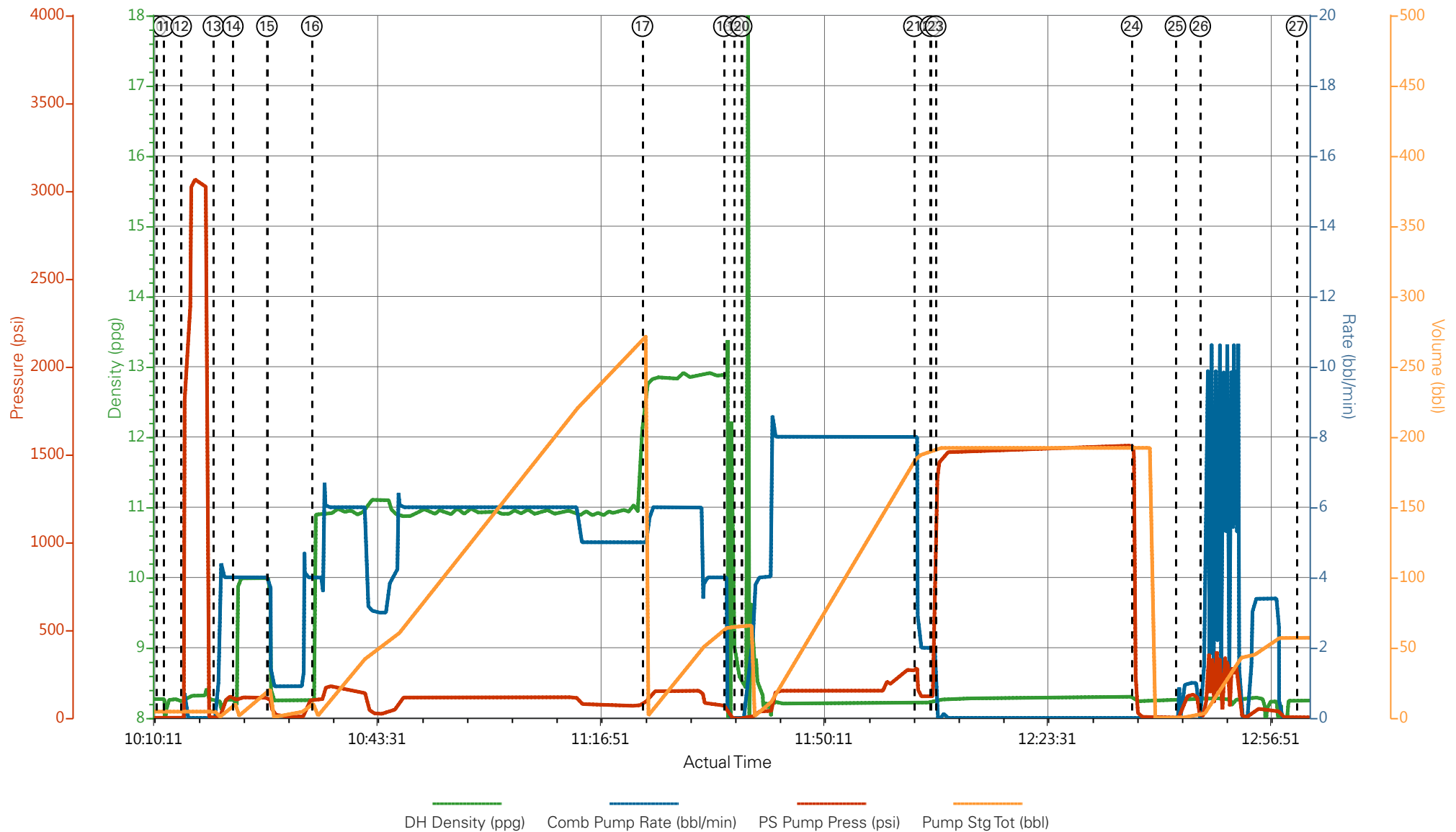
1.1 Job Event Log

Type	Seq. No.	Activity	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	10/3/2015	03:00:00	USER					
Event	2	Pre-Convoy Safety Meeting	10/3/2015	05:50:00	USER					WITH ALL HES PERSONNEL
Event	3	Crew Leave Yard	10/3/2015	06:00:00	USER					
Event	4	Arrive At Loc	10/3/2015	08:30:00	USER					RIG WAS RUNNING CASING UPON HES ARRIVAL
Event	5	Assessment Of Location Safety Meeting	10/3/2015	08:40:00	USER					WITH ALL HES PERSONNEL
Event	6	Other	10/3/2015	08:50:00	USER					
Event	7	Pre-Rig Up Safety Meeting	10/3/2015	08:55:00	USER					WITH ALL HES PERSONNEL
Event	8	Rig-Up Equipment	10/3/2015	09:00:00	USER					1 PUMP, 2 BULK TRUCKS, 1 SILO. RIGGED UP OFFLINE
Event	9	Pre-Job Safety Meeting	10/3/2015	09:30:00	USER					WITH ALL PERSONNEL
Event	10	Start Job	10/3/2015	10:11:00	COM5					TD 2520 FT, TP 2515 FT, SHOE 45.73 FT, CSG 9 5/8 IN 36 LB/FT, HOLE 14 3/4 IN, MUD WT 9.3 PPG
Event	11	Prime Pumps	10/3/2015	10:12:05	COM5	8.33	2.0	18	2.0	FRESH WATER
Event	12	Test Lines	10/3/2015	10:14:43	COM5					TESTED LINES TO 3085 PSI PRESSURE HOLDING
Event	13	Pump Spacer 1	10/3/2015	10:19:32	COM5	8.33	4.0	100.0	10.0	FRESH WATER
Event	14	Pump Spacer 1	10/3/2015	10:22:26	COM5	9.17	4.0	111.0	20.0	SUPERFLUSH 101
Event	15	Pump Spacer 1	10/3/2015	10:27:31	COM5	8.33	4.0	103.0	10.0	FRESH WATER

Event	16	Pump Lead Cement	10/3/2015	10:34:13	COM5	11.0	6.0	235.0	243.7	375 SKS AT 11.0 PPG, 3.65 FT3/SK, 23.08 GAL/SK
Event	17	Pump Tail Cement	10/3/2015	11:23:33	COM5	12.8	6.0	150.0	62.1	160 SKS AT 12.8 PPG, 2.18 FT3/SK, 12.11 GAL/SK
Event	18	Shutdown	10/3/2015	11:35:42	USER					
Event	19	Drop Top Plug	10/3/2015	11:37:14	COM5					PLUG LAUNCHED
Event	20	Pump Displacement	10/3/2015	11:38:21	COM5	8.33	8.0	285.0	190.9	FRESH WATER
Event	21	Slow Rate	10/3/2015	12:04:03	USER	8.33	2.0	120.0	180.9	SLOWED RATE 10 BBLS PRIOR TO CALCULATED DISPLACEMENT
Event	22	Bump Plug	10/3/2015	12:06:31	COM5			1520.0		
Event	23	Pressure Test	10/3/2015	12:07:18	USER					TESTED CASING FOR 30 MIN. AT 1500 PSI AS PER COMPANY REP
Event	24	Check Floats	10/3/2015	12:36:32	USER					FLOATS HOLDING. HES RETURNED 1 BBL H2O
Event	25	Pump Spacer 1	10/3/2015	12:43:05	COM5	8.33	1.0	108.0	6.0	SUGAR WATER DOWN PARASITE STRING
Event	26	Clean Lines	10/3/2015	12:46:47	USER					CLEANED LINES TO CUTTINGS PIT
Event	27	End Job	10/3/2015	13:01:10	COM5					PIPE WAS STATIC DURING PRIMARY JOB, NO RETURNS FOR PRIMARY JOB. COMPANY REP HAS HES WAIT 4 HOURS UNTIL TOPOUT.
Event	28	Start Job	10/3/2015	16:38:56	COM5					TOPOUT
Event	29	Prime Pumps	10/3/2015	16:40:46	COM5	8.33	1.0	18.0	1.0	FRESH WATER
Event	30	Pump Cement	10/3/2015	16:44:27	COM5	12.8	2.0	35.0	89.0	273 SKS AT 12.8 PPG, 2.12 FT3/SK, 11.15 GAL/SK
Event	31	Shutdown	10/3/2015	17:19:31	USER					SHUTDOWN TO OBSERVE

										CEMENT
Event	32	Resume	10/3/2015	17:20:56	USER	12.8	2.0	32.0	4.0	RESUMED PUMPING CEMENT
Event	33	Shutdown	10/3/2015	17:32:03	USER					
Event	34	Pump Water	10/3/2015	17:35:37	USER	8.33	2.0	35.0	2.0	FRESH WATER
Event	35	Shutdown	10/3/2015	17:40:00	USER					
Event	36	End Job	10/3/2015	17:42:00	COM5					HES RETURNED 2 BBLS CEMENT TO SURFACE. USED 40 LB SUGAR FOR JOB. CHARGED 3 ADD HOURS FOR JOB
Event	37	Pre-Rig Down Safety Meeting	10/3/2015	17:45:00	USER					WITH ALL HES PERSONNEL
Event	38	Rig-Down Equipment	10/3/2015	17:50:00	USER					
Event	39	Pre-Convoy Safety Meeting	10/3/2015	18:50:00	USER					WITH ALL HES PERSONNEL
Event	40	Crew Leave Location	10/3/2015	19:00:00	USER					
Event	41	Comment	10/3/2015	19:01:00	USER					THANK YOU FOR USING HALLIBURTON CEMENT DEPARTMENT. JESSE SLAUGHTER AND CREW

CAERUS OIL AND GAS - PUCKETT 32A-1 - SURFACE



- | | | | | | | |
|-----------------------------|---|-----------------------------|---------------|--------------------------|--------------------|----------------------|
| ① Call Out | ④ Arrive At Loc | ⑦ Pre-Rig Up Safety Meeting | ⑩ Start Job | ⑬ Pump H2O Spacer | ⑯ Pump Lead Cement | ⑲ Drop Top Plug |
| ② Pre-Convoy Safety Meeting | ⑤ Assessment Of Location Safety Meeting | ⑧ Rig-Up Equipment | ⑪ Prime Pumps | ⑭ Pump Superflush Spacer | ⑰ Pump Tail Cement | 20 Pump Displacement |
| ③ Crew Leave Yard | ⑥ Spot Equipment | ⑨ Pre-Job Safety Meeting | ⑫ Test Lines | ⑮ Pump H2O Spacer | ⑱ Shutdown | 21 Slow Rate |

III

▼ **HALLIBURTON** | iCem® Service

Created: 2015-10-03 05:49:30, Version: 4.1.107

Edit

Customer: CAERUS OIL AND GAS LLC - EBUS

Job Date: 10/3/2015 9:21:38 AM

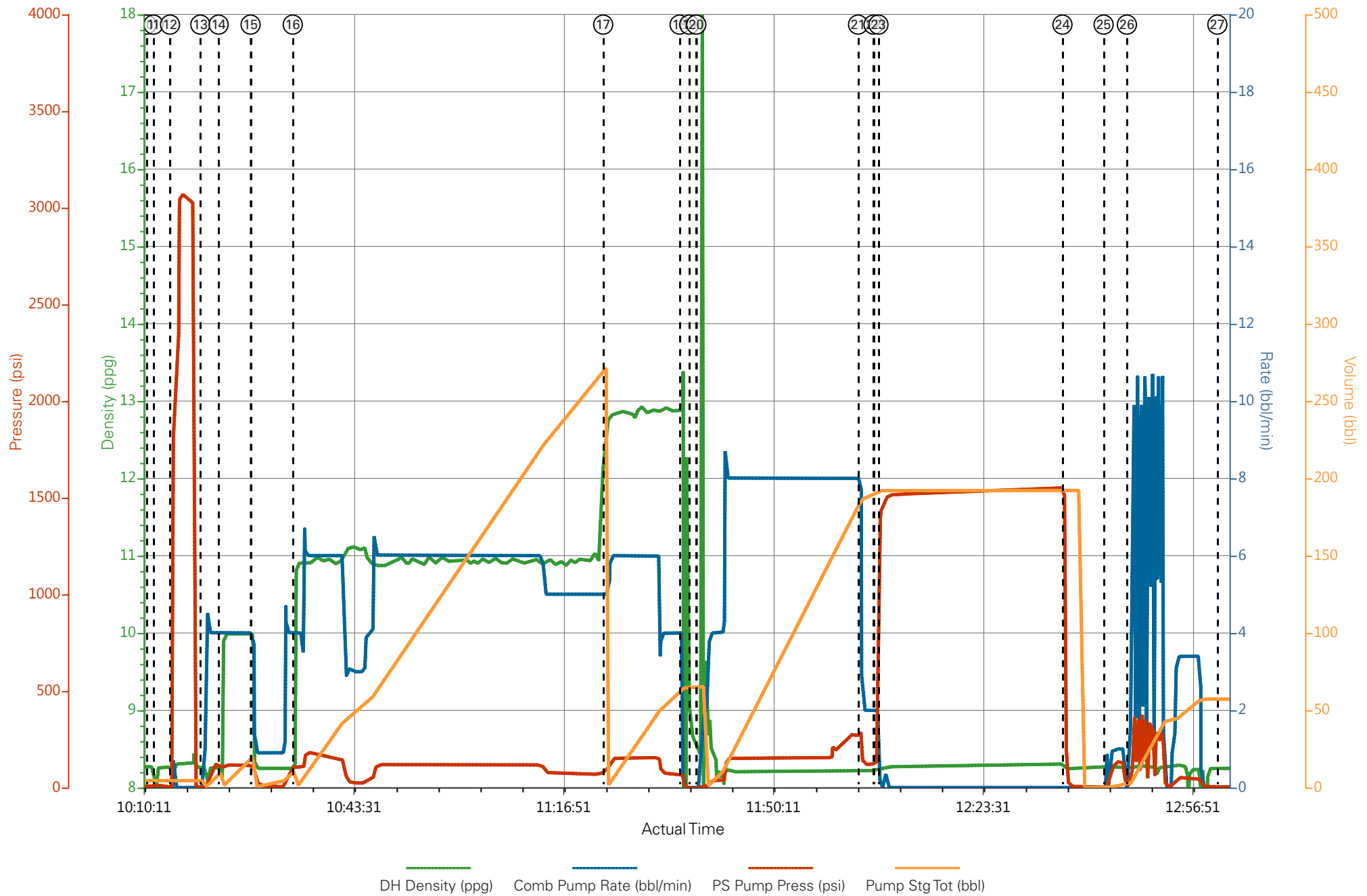
Well: PUCKETT 32A-1

Representative: BOYD COTTAM

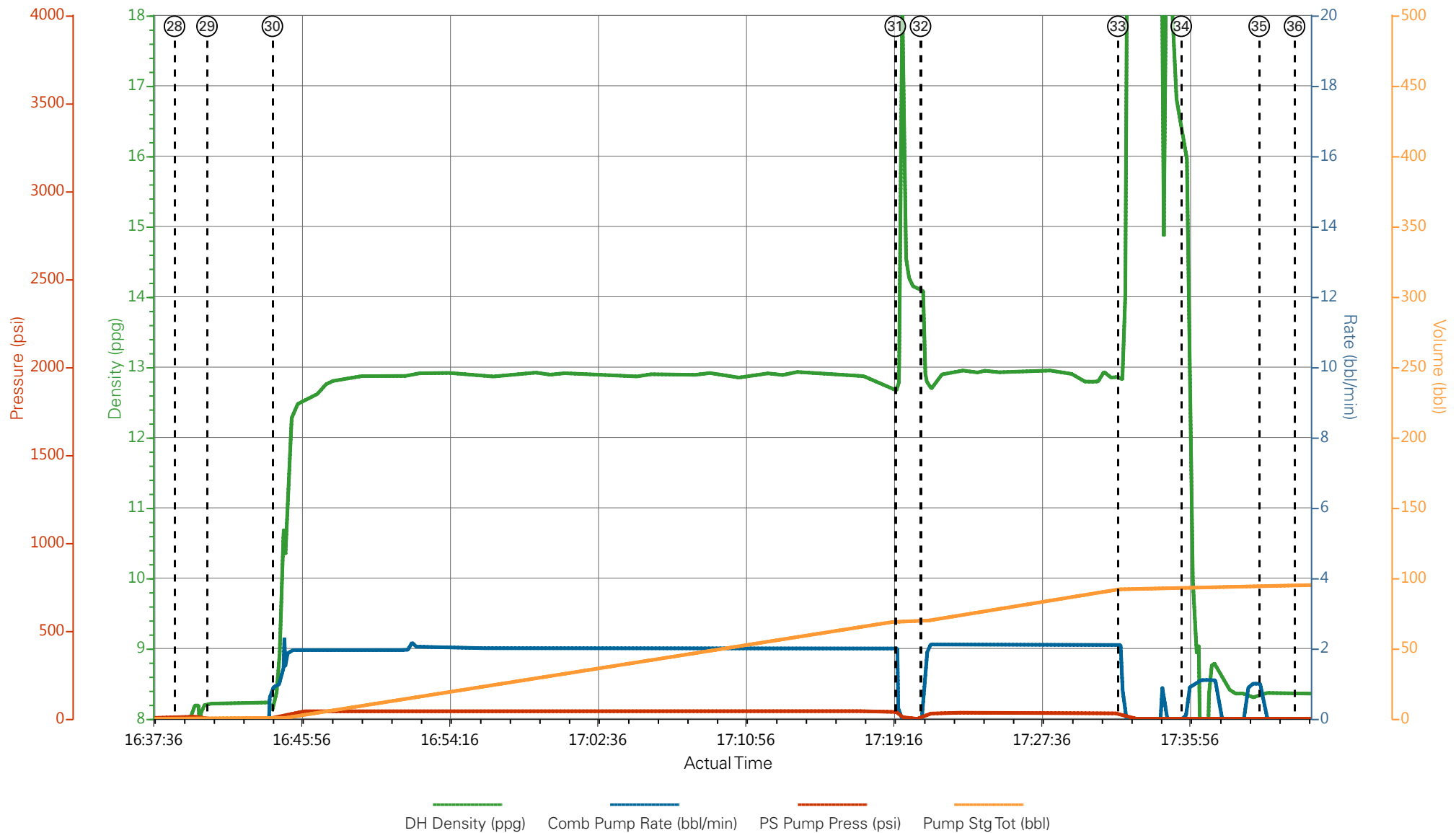
Sales Order #: 902800141

Elite #4: JESSE SLAUGHTER / SHAUN BLOSSOM

CAERUS OIL AND GAS - PUCKETT 32A-1 - SURFACE



CAERUS OIL AND GAS - PUCKETT 32A-1 - SURFACE



- | | | | | | | |
|-----------------------------|---|-----------------------------|---------------|--------------------------|--------------------|----------------------|
| ① Call Out | ④ Arrive At Loc | ⑦ Pre-Rig Up Safety Meeting | ⑩ Start Job | ⑬ Pump H2O Spacer | ⑯ Pump Lead Cement | ⑲ Drop Top Plug |
| ② Pre-Convoy Safety Meeting | ⑤ Assessment Of Location Safety Meeting | ⑧ Rig-Up Equipment | ⑪ Prime Pumps | ⑭ Pump Superflush Spacer | ⑰ Pump Tail Cement | 20 Pump Displacement |
| ③ Crew Leave Yard | ⑥ Spot Equipment | ⑨ Pre-Job Safety Meeting | ⑫ Test Lines | ⑮ Pump H2O Spacer | ⑱ Shutdown | 21 Slow Rate |

III

HALLIBURTON | iCem® Service

Created: 2015-10-03 05:49:30, Version: 4.1.107

Edit

Customer: CAERUS OIL AND GAS LLC - EBUS

Job Date: 10/3/2015 9:21:38 AM

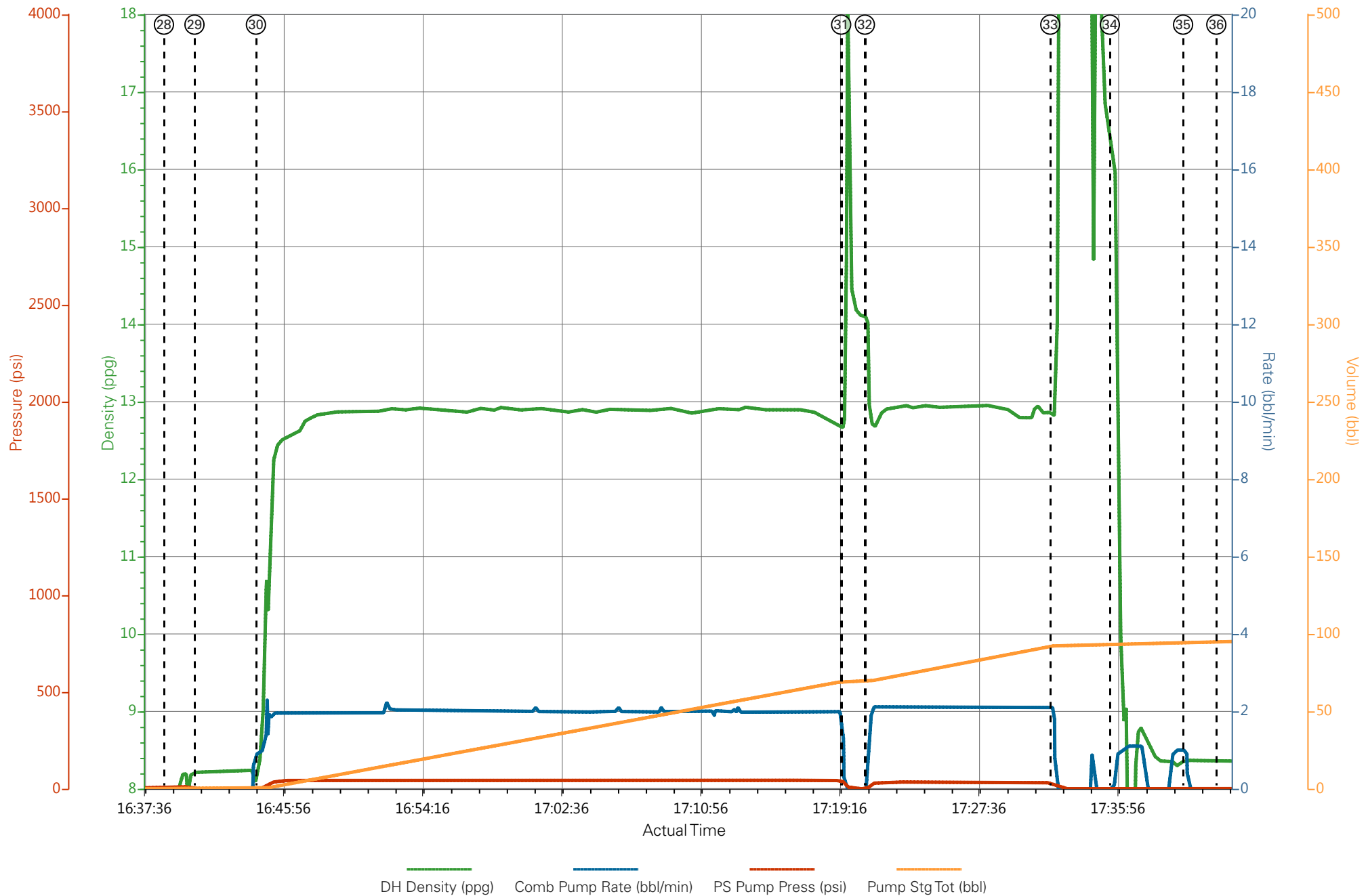
Well: PUCKETT 32A-1

Representative: BOYD COTTAM

Sales Order #: 902800141

Elite #4: JESSE SLAUGHTER / SHAUN BLOSSOM

CAERUS OIL AND GAS - PUCKETT 32A-1 - SURFACE



DH Density (ppg) Comb Pump Rate (bbl/min) PS Pump Press (psi) Pump Stg Tot (bbl)

HALLIBURTON

Water Analysis Report

Company: CAERUS OILAND GAS

Submitted by: JESSE SLAUGHTER

Attention: LAB

Lease PUCKETT

Well # 32A-1

Date: 10/3/2015

Date Rec.:

S.O.# 902800141

Job Type: SURFACE

Specific Gravity	<i>MAX</i>	1
pH	<i>8</i>	6
Potassium (K)	<i>5000</i>	250 Mg / L
Calcium (Ca)	<i>500</i>	120 Mg / L
Iron (FE2)	<i>300</i>	0 Mg / L
Chlorides (Cl)	<i>3000</i>	0 Mg / L
Sulfates (SO ₄)	<i>1500</i>	UNDER 200 Mg / L
Chlorine (Cl ₂)		0 Mg / L
Temp	<i>40-80</i>	60 Deg
Total Dissolved Solids		200 Mg / L

Respectfully: JESSE SLAUGHTER

Title: CEMENTING SUPERVISOR

Location: Grand Junction, CO

NOTICE: This report is limited to the described sample tested. Any person using or relying on this report agrees that Halliburton shall not be liable for any loss or damage whether due to act or omission resulting from such report or its