

CAERUS OIL AND GAS LLC - EBUS

Puckett 33A-1

**H&P 330**

## **Post Job Summary**

# **Cement Surface Casing**

Date Prepared: 10/20/2015

Job Date: 10/15/15

Submitted by: Aaron Katz - Cement Engineer

The Road to Excellence Starts with Safety

Sold To #: 360446	Ship To #: 3665992	Quote #:	Sales Order #: 0902824756
Customer: CAERUS OIL AND GAS LLC - EBUS		Customer Rep: GEORGE URBAN	
Well Name: PUCKETT	Well #: 33A-1	API/UWI #: 05-045-22850-00	
Field: GRAND VALLEY	City (SAP): PARACHUTE	County/Parish: GARFIELD	State: COLORADO
Legal Description: 1-7S-97W-2088FNL-1346FWL			
Contractor: H & P DRLG		Rig/Platform Name/Num: H & P 330	
Job BOM: 7521			
Well Type: DIRECTIONAL GAS			
Sales Person: HALAMERICA\HB80977		Srcv Supervisor: Christopher Smith	

**Job**

Formation Name	
Formation Depth (MD)	Top Bottom
Form Type	BHST
Job depth MD	2515ft Job Depth TVD
Water Depth	Wk Ht Above Floor
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		9.625	8.921	36			0	2515	0	2515
Open Hole Section			14.75				0	2550	0	2550

**Tools and Accessories**

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	9.625	1		2515	Top Plug	9.625	1	HES
Float Shoe	9.625				Bottom Plug	9.625		
Float Collar	9.625	1		2471	SSR plug set	9.625		
Insert Float	9.625				Plug Container	9.625	1	HES
Stage Tool	9.625				Centralizers	9.625		

**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/mi n	Total Mix Fluid Gal	
3	Water	Water	10	bbl	8.34			2		
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/mi n	Total Mix Fluid Gal	
4	Lead Cement	VARICEM (TM) CEMENT	243	sack	11	3.65		7	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/mi n	Total Mix Fluid Gal	
5	Tail Cement	VARICEM (TM) CEMENT	62	sack	12.8	2.18		7	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/mi n	Total Mix Fluid Gal	
6	Displacement	Displacement	191	bbl	8.34			8		
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal	
7	Super Flush 101	Super Flush 101	10	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/mi n	Total Mix Fluid Gal	
8	Top Out	REVERCEM (TM) CEMENT	300	sack	12.8	2.12		3	11.15	
11.15 Gal FRESH WATER										
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal	
9	Top Out	HALCEM (TM) SYSTEM	0	sack	15.6	1.184			5.27	
5.17 Gal FRESH WATER										
<b>Cement Left In Pipe</b>		<b>Amount</b>	43.65 ft		<b>Reason</b>			Shoe Joint		

## 1.0 Real-Time Job Summary

### 1.1 Job Event Log

Type	Seq. No.	Graph Label	Date	Time	Source	Pass-Side Pump Pressure (psi)	Downhole Density (ppg)	Combined Pump Rate (bbl/min)	Pump Stage Total (bbl)	Comments
Event	1	Call Out	10/14/2015	08:00:00	USER					
Event	2	Pre-Convoy Safety Meeting	10/14/2015	12:00:00	USER					ALL HES PRESENT
Event	3	Crew Leave Yard	10/14/2015	12:15:00	USER					1-F550, 1-ELITE, 1-660 BULK TRUCK, 1-410 BODY LOAD, 1-SUPERFLUSH TRANSPORT
Event	4	Arrive at Location	10/14/2015	14:00:00	USER					ALL HES PRESENT
Event	5	Assessment Of Location Safety Meeting	10/14/2015	14:15:00	USER					ALL HES PRESENT, JSA FILLED OUT AND REVIEWED
Event	6	Pre-Rig Up Safety Meeting	10/14/2015	14:25:00	USER					ALL HES PRESENT
Event	7	Rig-Up Equipment	10/14/2015	14:30:00	USER					ALL HES PRESENT
Event	26	Pre-Job Safety Meeting	10/14/2015	16:35:00	USER					ALL HES PRESENT
Event	32	Start Job	10/14/2015	16:58:00	RTD Import					TD-2540' TP-2515' SJ-43.65" OH-14.75' CSG-9.625" 36# MUD-8.8 PPG
Event	33	Fill Lines	10/14/2015	17:01:11	USER	67.56	8.33		2.0	FILL LINES WITH 6X5 (LOW PRESSURE PUMP)
Event	41	Test Lines	10/14/2015	17:05:51	RTD Import	3757.62	8.33	0.50	0.50	ALL LINES HELD PRESSURE
Event	43	Pump Spacer 1*	10/14/2015	17:11:25	RTD Import	80.69	8.32	1.99	10.00	FRESH H2O SPACER

Event	44	Pump Spacer2*	10/14/2015	17:16:19	RTD Import	89.13	9.94	1.99	20.00	SUPER FLUSH 101
Event	45	Pump Spacer 1*	10/14/2015	17:22:28	RTD Import	77.88	8.25	2.00	10.00	FRESH H2O SPACER
Event	56	Mud Cup Sample Pulled	10/14/2015	17:25:17	RTD Import					MUD CUP SAMPLE, DENSITY @ 11 PPG
Event	65	Pump Lead Cement*	10/14/2015	17:30:57	RTD Import	248.50	11.10	5.92	243.8	VARICEM CEMENT 375 SKS, 11 PPG, 3.65 FT3/SK, 23.08 GAL/SK
Event	77	Pump Tail Cement*	10/14/2015	18:08:09	RTD Import	297.25	12.94	6.04	62.0	VARICEM CEMENT 160 SKS, 12.8 PPG, 12.11 FT3/SK, 12.11 GAL/SK
Event	105	Shutdown	10/14/2015	18:16:20	USER					WASH UP ON TOP OF PLUG
Event	126	Drop Top Plug	10/14/2015	18:19:33	RTD Import					PLUG WENT
Event	128	Pump Displacement*	10/14/2015	18:22:41	RTD Import	450.88	8.38	8.00	181.00	FRESH H2O
Event	129	Slow Rate	10/14/2015	18:30:05	USER	400.94	8.32	4.00	10.00	SLOWED RATE FOR RIGS CELLAR PUMP
Event	130	Bump Plug	10/14/2015	19:05:31	RTD Import	1046.33	8.38	2.00	191.0	PLUG BUMPED
Event	134	Check Floats	10/14/2015	19:11:11	USER					FLOATS HELD
Event	135	Pressure Up Casing	10/14/2015	19:13:31	USER	1596.65	8.40	0.00	0.50	TEST CASING
Event	137	Clear Parasite String	10/14/2015	19:23:39	RTD Import	63.81	8.34	2.01	10.0	SUGAR H2O
Event	145	End Job	10/14/2015	19:32:00	USER					SMALL, SPARATIC RETURNS DURING DISPLACEMENT
Event	146	ANNULAR FILL	10/14/2015	23:30:00	USER					REVERCEM CEMENT- 300 SKS, 12.8 PPG, 2.12 FT3/SK, 11.15 GAL/SK.
Event	147	Post-Job Safety Meeting (Pre Rig-	10/15/2015	00:56:00	USER					ALL HES PRESENT

Down)

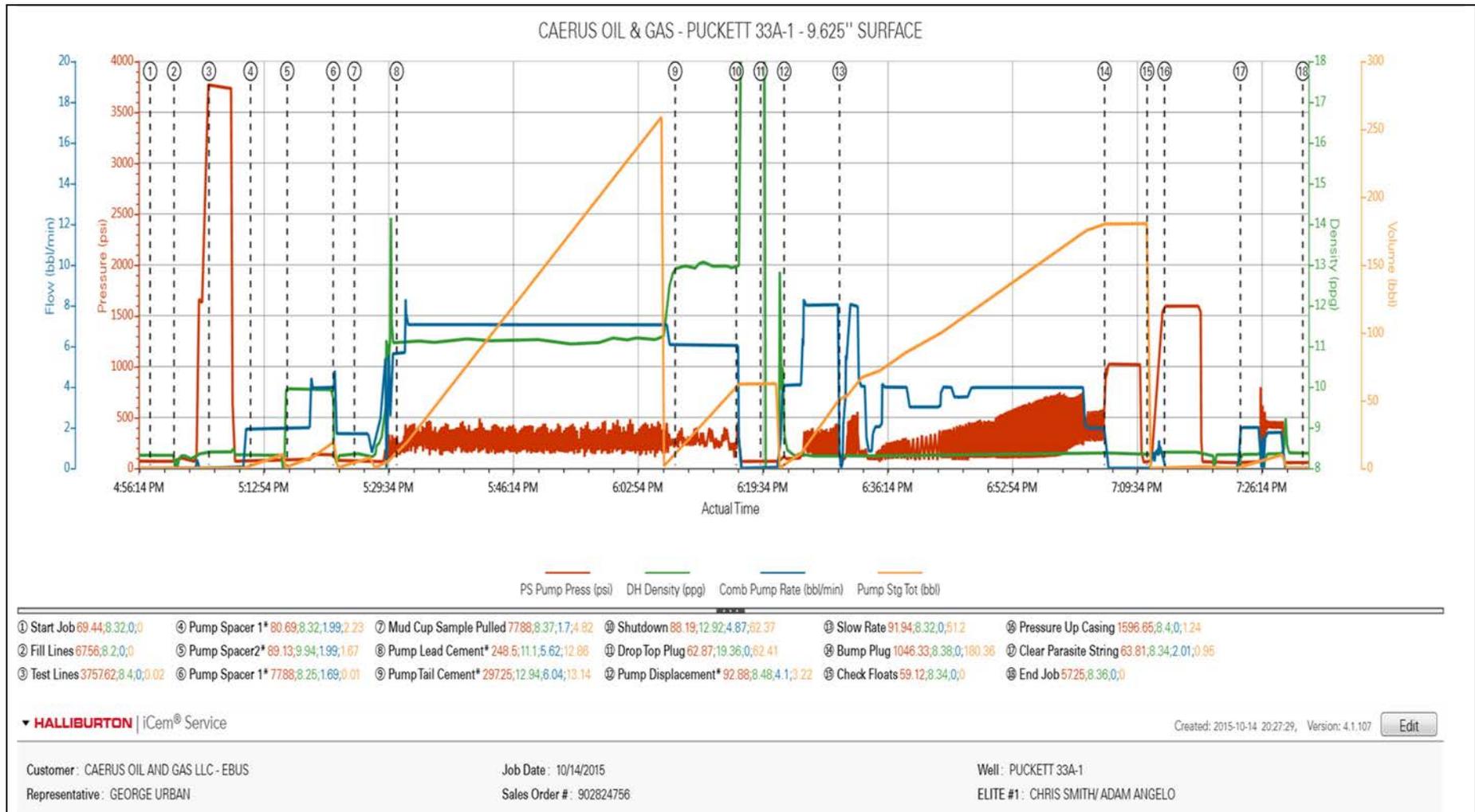
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Event	148	Rig-Down Equipment	10/15/2015	01:00:00	USER	ALL HES PRESENT
Event	149	Rig-Down Completed	10/15/2015	01:45:00	USER	ALL HES PRESENT
Event	150	Pre-Convoy Safety Meeting	10/15/2015	02:00:00	USER	ALL HES PRESENT
Event	151	Crew Leave Location	10/15/2015	02:10:00	USER	THANK YOU FOR CHOOSING HALLIBURTON, CHRIS SMITH AND CREW.

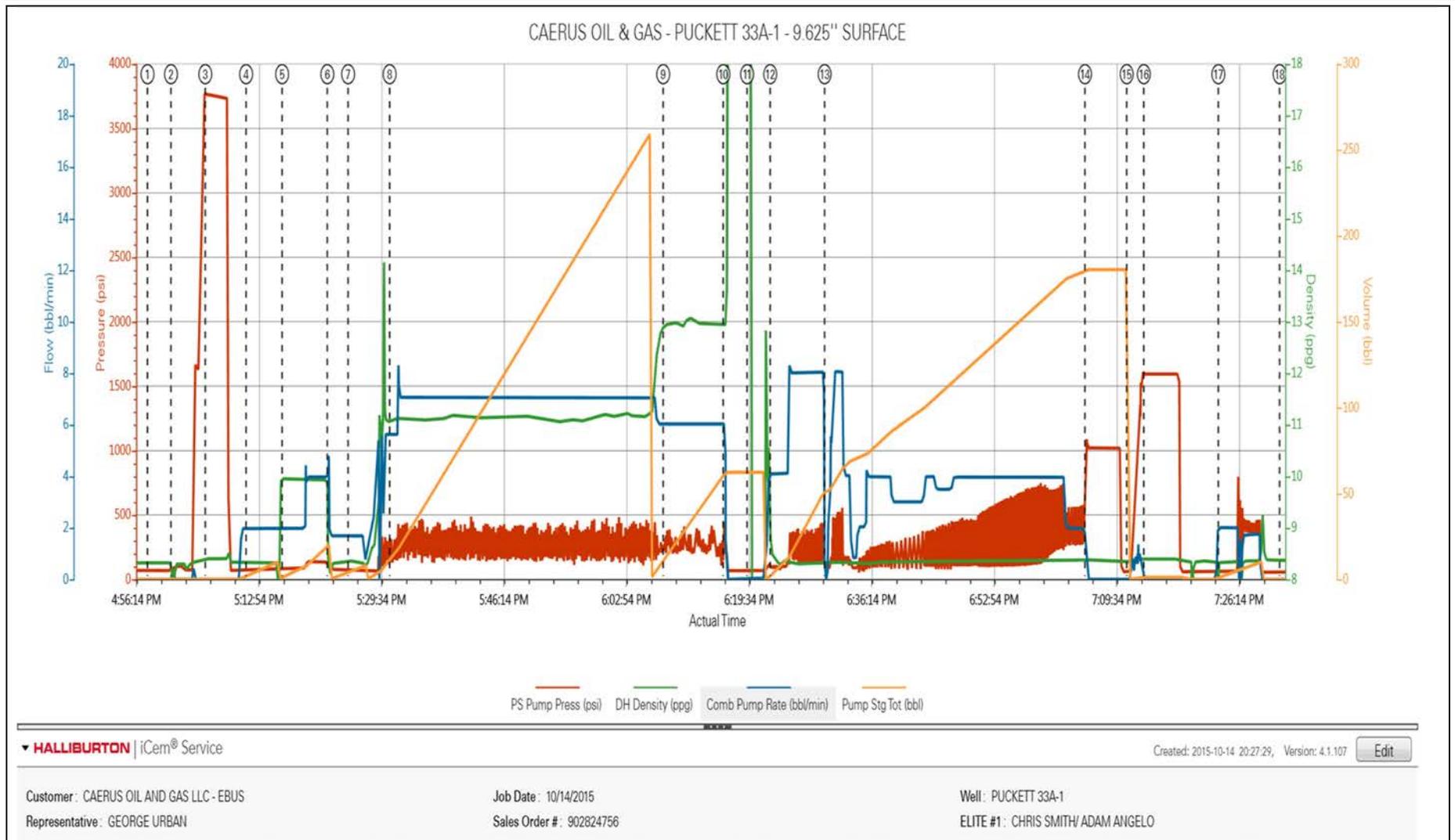
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## 2.0 Attachments

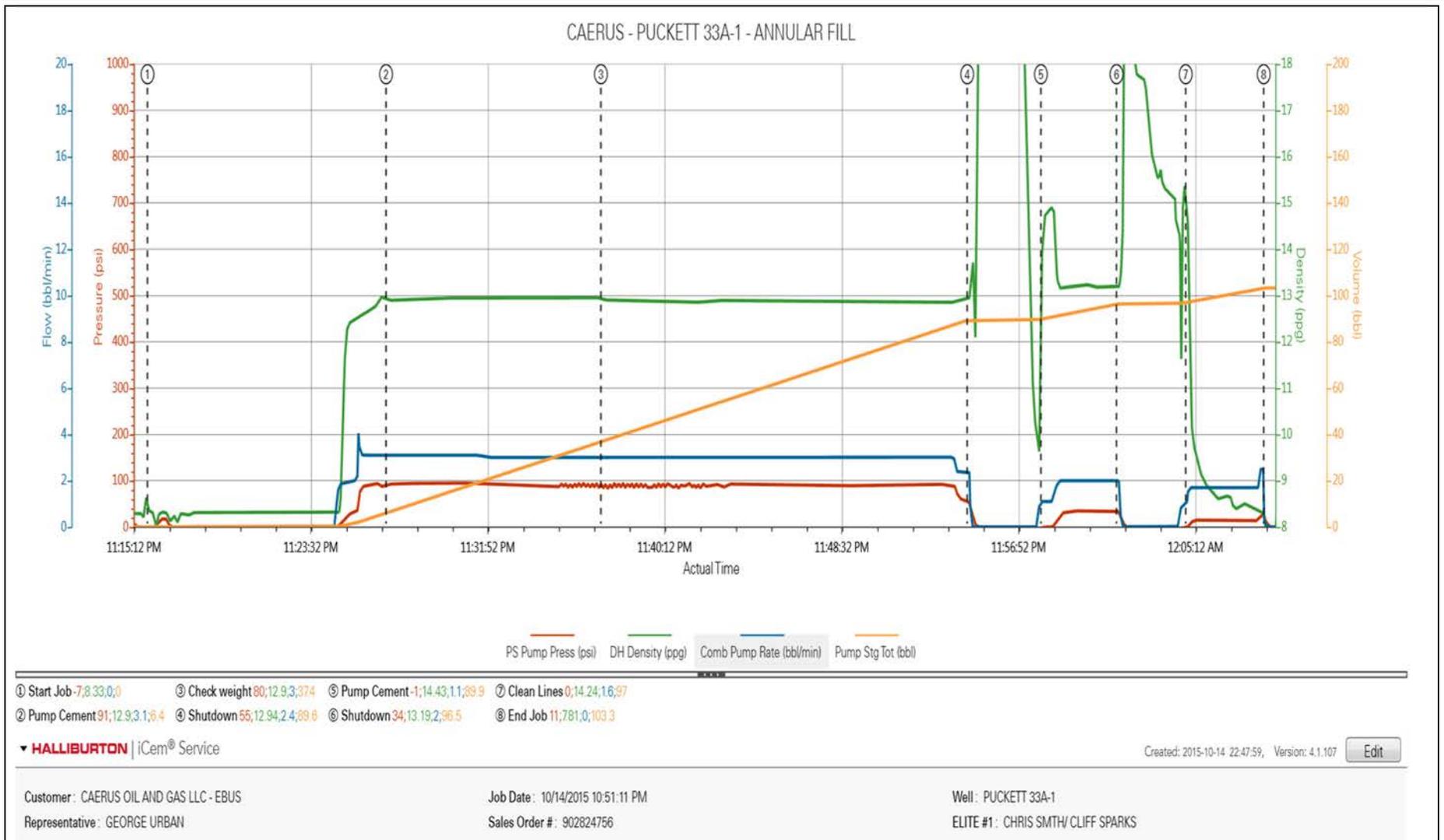
### 2.1 SURFACE- PRIMARY JOB.png



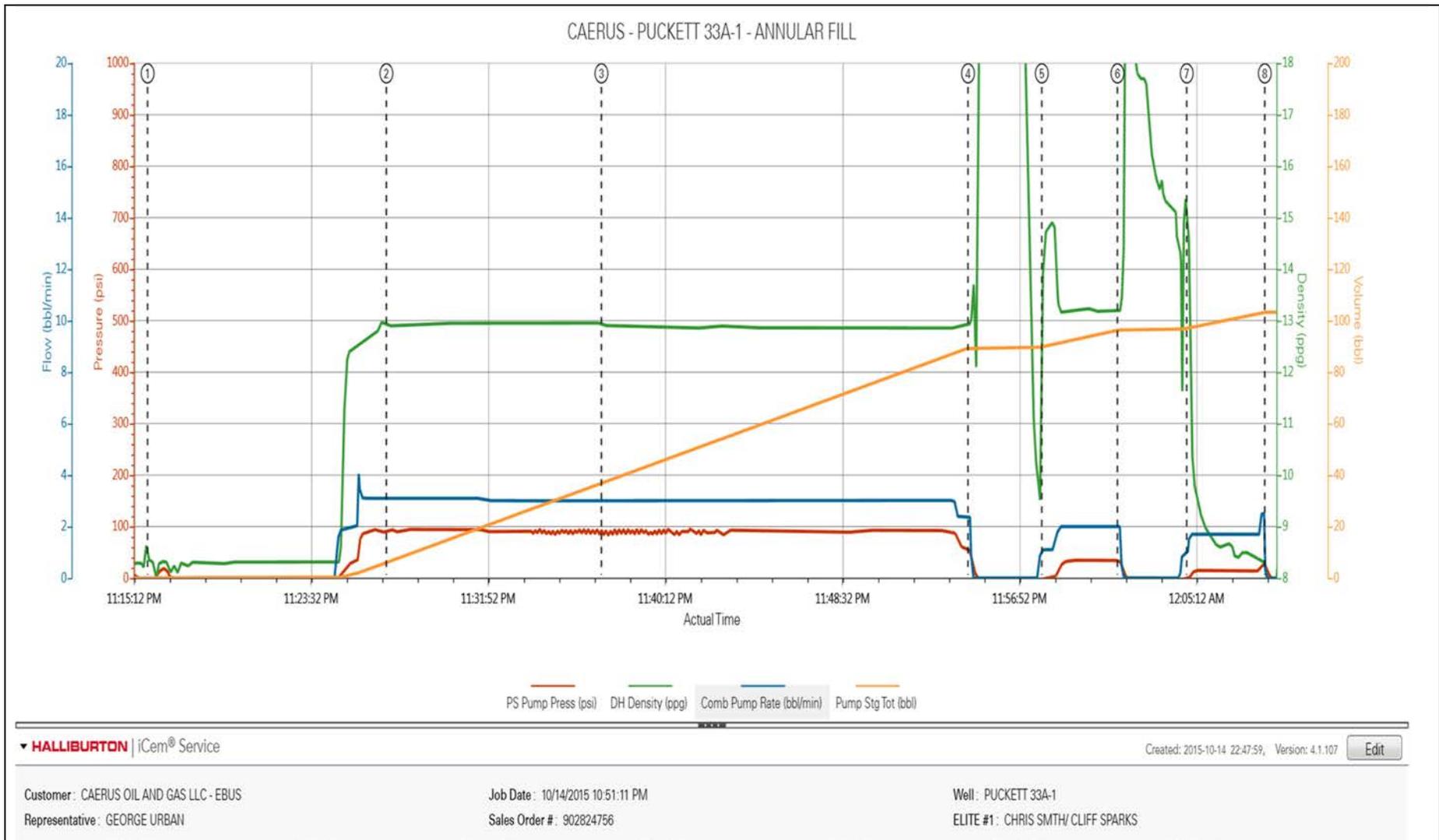
2.2 SURFACE- PRIMARY- NO LEGEND.png



2.3 ANNULAR FILL.png



2.4 ANNULAR FILL- NO LEGEND.png



# HALLIBURTON

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## Water Analysis Report

Company: WPX

Submitted by: CHRIS SMITH

Attention: Dallas Scott

Lease: H&P 330

Well #: PUCKETT 33A-1

Date: 10/20/2015

Date Rec.: 10/20/2015

S.O.#: 902824756

Job Type: Surface

Specific Gravity	<i>MAX</i>	<b>1</b>
pH	<i>8</i>	<b>7</b>
Potassium (K)	<i>5000</i>	<b>250</b> Mg / L
Hardness	<i>500</i>	<b>250</b> Mg / L
Iron (FE2)	<i>300</i>	<b>0</b> Mg / L
Chlorides (Cl)	<i>3000</i>	<b>0</b> Mg / L
Sulfates (SO <sub>4</sub> )	<i>1500</i>	<b>&lt;400</b> Mg / L
Temp	<i>40-80</i>	<b>65</b> Deg
Total Dissolved Solids		<b>175</b> Mg / L

Respectfully: CHRIS SMITH

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 it

<b>Sales Order #:</b> 0902824756	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 10/15/2015
<b>Customer:</b> CAERUS OIL AND GAS LLC - EBUS		<b>Job Type (BOM):</b> CMT SURFACE CASING BOM
<b>Customer Representative:</b> GEORGE URBAN		<b>API / UWI: (leave blank if unknown)</b> 05-045-22850-00
<b>Well Name:</b> PUCKETT		<b>Well Number:</b> 0080729998
<b>Well Type:</b> DIRECTIONAL GAS	<b>Well Country:</b> USA	
<b>H2S Present:</b> No	<b>Well State:</b> COLORADO	<b>Well County:</b> GARFIELD

Dear Customer,

We hope that you were satisfied with the service quality of this job performed by Halliburton. Our aim of our management and service personnel to deliver equipment and service of a standard unmatched in the service sector of the energy industry.

Please take the time to let us know if our performance met with your satisfaction. Please, as possible to ensure we constantly improve our service. Your comments are of great value and are intended for the exclusive use of Halliburton.

### CUSTOMER SATISFACTION SURVEY

CATEGORY	CUSTOMER SATISFACTION RESPONSE	
Survey Conducted Date	The date the survey was conducted	10/15/2015
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HB20137
Customer Participation	Did the customer participate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	GEORGE URBAN
HSE	Was our HSE performance satisfactory? Circle Y or N	Yes
Equipment	Were you satisfied with our Equipment? Circle Y or N	Yes
Personnel	Were you satisfied with our people? Circle Y or N	Yes
Customer Comment	Customer's Comment	

<b>CUSTOMER SIGNATURE</b>
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### KEY PERFORMANCE INDICATORS

General	
<b>Survey Conducted Date</b>	10/15/2015
The date the survey was conducted	

Cementing KPI Survey	
<b>Type of Job</b>	0
Select the type of job. (Cementing or Non-Cementing)	
<b>Select the Maximum Deviation range for this Job</b>	Vertical
What is the highest deviation for the job you just completed? This may not be the maximum well deviation.	
<b>Total Operating Time (hours)</b>	10.5
Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.	
<b>HSE Incident, Accident, Injury</b>	No
HSE Incident, Accident, Injury. This should be recordable incidents only.	
<b>Was the job purpose achieved?</b>	Yes
Was the job delivered correctly as per customer agreed design?	
<b>Pumping Hours</b>	5
Total number of hours pumping fluid on this job. Enter in decimal format.	
<b>Type of Rig Classification Job Was Performed</b>	Drilling Rig (Portable)
Type Of Rig (classification) Job Was Performed On	
<b>Number Of JSAs Performed</b>	7
Number Of Jsas Performed	
<b>Was this a Primary Cement Job (Yes / No)</b>	Yes
Primary Cement Job= Casing job, Liner job, or Tie-back job.	
<b>Number of Unplanned Shutdowns</b>	0
Unplanned shutdown is when injection stops for any period of time.	
<b>Customer Non-Productive Rig Time (hrs)</b>	0

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<b>H2S Present:</b> No	<b>Well State:</b> COLORADO	<b>Well County:</b> GARFIELD

Lost time due to Halliburton in the start, execution, or completion of an ordered service or product, or delays in a follow-on service. Enter in decimal format. 0 if none.	
<b>Was the non productive time or the unplanned shutdown caused by a problem with a piece of equipment?</b> Was the non productive time or the unplanned shutdown caused by a problem with a piece of equipment?	No
<b>Did We Run Wiper Plugs?</b> Did We Run Top And Bottom Casing Wiper Plugs?	Top
<b>If a top plug was run, was the plug bumped? (Yes/No/N/A)</b> If a top plug was run, was the plug bumped? (Yes/No/N/A)	Yes
<b>If applicable, was Halliburton float equipment used? (Yes/No/N/A)</b> If applicable, was Halliburton float equipment used? (Yes/No/N/A)	Not Available
<b>If applicable, did the floats hold? (Yes/No/N/A)</b> If applicable, did the floats hold? (Yes/No/N/A)	Yes
<b>Mixing Density of Job Stayed in Designed Density Range (0-100%)</b> Density Range defined as +/- .20 ppg. Calculation: Total BBLs cement mixed at designed density divided by total BBLs of cement multiplied by 100	98
<b>Pump Rate (percent) of Job Stayed At Designed Pump Rate</b> Pump Rate range defined as +/- 1bbl/min. Calculation: Total BBLs of fluid pumped at the designed rate divided by Total BBLs of fluid pumped, multiplied by 100	98
<b>If applicable, were there returns throughout the job? (Yes/No/N/A)</b> If applicable, were there returns throughout the job? (Yes/No/N/A)	No
<b>Nbr of Remedial Plug Jobs Rqd - HES</b> Number Of Remedial Plug Jobs Needed After Primary Plug Pumped By HES	0
<b>Nbr of Remedial Sqz Jobs Rqd - HES</b> Number Of Remedial Squeeze Jobs Required After Primary Job Performed By HES	0