

Piceance Energy LLC

Piceance Federal 28-18E

**Patterson 306**

## **Post Job Summary**

# **Cement Surface Casing**

Date Prepared: 11/02/2015  
Job Date: 10/25/2015

Submitted by: Evan Russell – Grand Junction Cement Engineer

## 1.0 Real-Time Job Summary

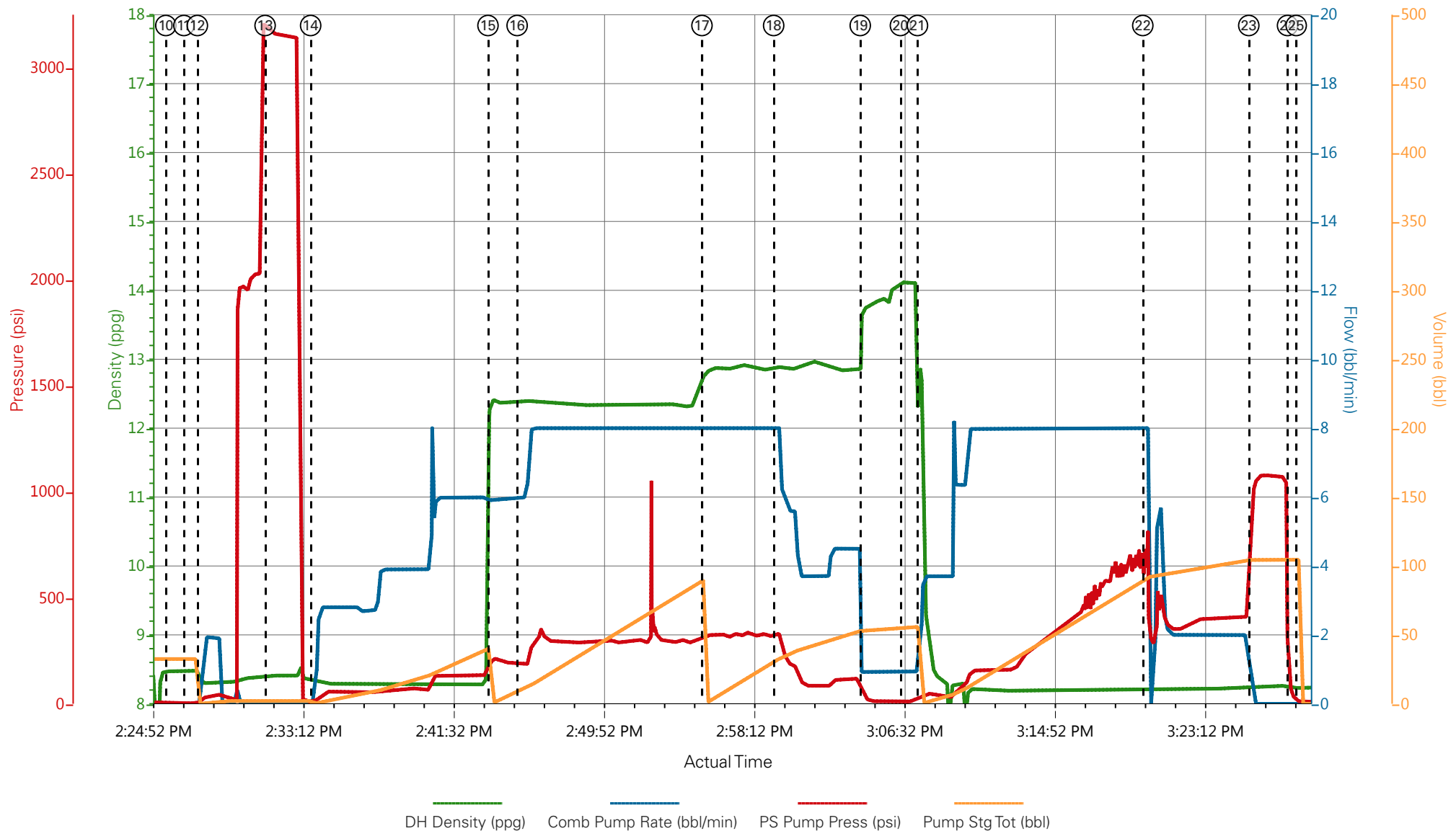
## 1.1 Job Event Log

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	10/25/2015	00:00:00	USER					WAT IN FIELD CALL OUT 03:30 ON LOCATION @10:00
Event	2	Pre-Convoy Safety Meeting	10/25/2015	01:45:00	USER					ALL HES EMPLOYEES PRESENT
Event	3	Crew Leave Yard	10/25/2015	02:00:00	USER					1 HT 400 PUMP TRUCK E4 (WAITING IN FIELD), 1 660 BULK TRUCK, 1 550 SERVICE PICKUP
Event	4	Arrive At Loc	10/25/2015	04:00:00	USER					RIG STARTED RUNNING CSG @ 08:30
Event	5	Assessment Of Location Safety Meeting	10/25/2015	09:00:00	USER					PERFORMED JSA
Event	6	Other	10/25/2015	09:45:00	USER					1 HT 400 PUMP TRUCK E4, 1 660 BULK TRUCK, 1 550 SERVICE PICKUP
Event	7	Pre-Rig Up Safety Meeting	10/25/2015	10:00:00	USER					ALL HES EMPLOYEES PRESENT

Event	8	Rig-Up Completed	10/25/2015	11:00:00	USER	GROUND RIG-UP COMPLETE TO THE REDZONE. WILL COMPLETE FLOOR AND THE REST OF GROUND ONCE CASERS ARE RIGGED DOWN. CASERS RIGGED DOWN @ 12:30. FINISHED GROUND RIG-UP AND BROUGHT HEAD AND BAIL BASKET TO FLOOR.				
Event	9	Pre-Job Safety Meeting	10/25/2015	14:00:00	USER	WATER TEST: PH 7.5, CLORIDES 0, TEMP 47 DEGREES				
Event	10	Other	10/25/2015	14:25:44	USER	TD 1647' OF 11" OH, TP 1637' OF 8 5/8" CASING 24# J-55, SJ 44', MUD 9.3 PPG 36 VIS				
Event	11	Drop Bottom Plug	10/25/2015	14:26:44	USER	VERIFIED BY TATTLE TAIL				
Event	12	Prime Pumps	10/25/2015	14:27:29	COM8	8.33	2.0	46	2	FRESH WATER
Event	13	Test Lines	10/25/2015	14:31:14	COM8			3180		PRESSURE HELD
Event	14	Pump Spacer 1	10/25/2015	14:33:46	COM8	8.33	6.0	130	40	FRESH WATER
Event	15	Pump Lead Cement	10/25/2015	14:43:36	COM8	12.3	8.0	314	84	192 SKS VARICEM CMT, 12.3 PPG, 2.46 YIELD, 14.17 GAL / SK
Event	16	Check Weight	10/25/2015	14:45:13	COM8					BALANCED MUD CUP MATCHED RICIRC
Event	17	Pump Tail Cement	10/25/2015	14:55:28	COM8	12.8	8.0	330	41	131 SKS OF VARICEM CMT, 12.8 PPG, 2.18 YIELD, 12.11 GAL / SK

Event	18	Slow Rate	10/25/2015	14:59:27	USER	12,8	6.0	200	11	SLOWED TO END CMT
Event	19	Shutdown	10/25/2015	15:04:15	USER					END OF CMT WASHING UP ON TOP OF PLUG
Event	20	Drop Top Plug	10/25/2015	15:06:28	COM8					VERIFIED BY TATTLE TAIL
Event	21	Pump Displacement	10/25/2015	15:07:25	COM8	8.33	8.0	590	91	FRESH WATER
Event	22	Slow Rate	10/25/2015	15:19:55	USER	8.33	2.0	450	10	SLOWED TO BUMP PLUG
Event	23	Bump Plug	10/25/2015	15:25:47	COM8	8.33	2.0	460	101	PLUG BUMPED
Event	24	Drop Ball	10/25/2015	15:27:56	COM8			1080		FLOATS HELD .25 BBL FLOW BACK
Event	25	End Job	10/25/2015	15:28:25	USER					20 BBLS CMT TO SURFACE. USED 20 LBS SUGAR AND 12 BBLS FOR WASHUP
Event	26	Post-Job Safety Meeting (Pre Rig- Down)	10/25/2015	15:38:00	USER					ALL HES EMPLOYEES ATTENDED
Event	27	Rig-Down Completed	10/25/2015	17:00:00	USER					NO INJURIES TO REPORT
Event	28	Pre-Convoy Safety Meeting	10/25/2015	17:45:00	USER					NO EQUIPMENT LEFT ON LOCATION
Event	29	Crew Leave Location	10/25/2015	18:00:00	USER					THANK YOU FOR USING HALLIBURTON

# PICEANCE - PICEANCE FED 28-18E - 8 5/8" SURFACE



- |   |                             |                    |                      |   |
|---|-----------------------------|--------------------|----------------------|---|
| ① Call Out                              | ⑦ Pre-Rig Up Safety Meeting | ⑬ Test Lines       | ⑲ Shutdown           | 25 End Job                                |
| ② Pre-Convoy Safety Meeting             | ⑧ Rig-Up Completed          | ⑭ Pump H2O Spacer  | 20 Drop Top Plug     | 26 Post-Job Safety Meeting (Pre Rig-Down) |
| ③ Crew Leave Yard                       | ⑨ Pre-Job Safety Meeting    | ⑮ Pump Lead Cement | 21 Pump Displacement | 27 Rig-Down Completed                     |
| ④ Arrive At Loc                         | ⑩ Start Job                 | ⑯ Check weight     | 22 Slow Rate         | 28 Pre-Convoy Safety Meeting              |
| ⑤ Assessment Of Location Safety Meeting | ⑪ Drop Bottom Plug          | ⑰ Pump Tail Cement | 23 Bump Plug         | 29 Crew Leave Location                    |
| ⑥ Spot Equipment                        | ⑫ Prime Lines               | ⑱ Slow Rate        | 24 Check Floats      |   |

▼ **HALLIBURTON** | iCem® Service

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Edit

Customer: PICEANCE ENERGY LLC  
Representative: ROGER FOSTER

Job Date: 10/25/2015  
Sales Order #: 902854899

Well: PICEANCE FED 28-18E  
ELITE 4: DUSTIN HYDE / MAX LOBATO

<b>Sales Order #:</b> 0902854899	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 10/25/2015
<b>Customer:</b> PICEANCE ENERGY LLC - EBUS		<b>Job Type (BOM):</b> CMT SURFACE CASING BOM
<b>Customer Representative:</b> ROGER FOSTER		<b>API / UWI: (leave blank if unknown)</b> 05-077-10258-00
<b>Well Name:</b> PICEANCE FEDERAL		<b>Well Number:</b> 0080739659
<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> MESA

Dear Customer,

We hope that you were satisfied with the service quality of this job performed by Halliburton. It is the 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 be as critical as possible to ensure we constantly improve our service. Your comments are of great value to us 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	10/25/2015
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HB43597
Customer Participation	Did the customer participate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	ROGER FOSTER
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>	10/25/2015
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>	4
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>	1.5
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>	5
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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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?	Both
<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)	Yes
<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	97
<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)	Yes
<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