

Piceance Energy LLC - EBUS

Piceance Fed 28-04M

**Patterson 306**

## **Post Job Summary**

# **Cement Surface Casing**

Date Prepared: 08/19/2015

Job Date: 08/15/2015

Submitted by: Keven Nye – Grand Junction Cement Engineer

## The Road to Excellence Starts with Safety

The Road to Excellence Starts with Safety

Sold To #: 344919	Ship To #: 3672998	Quote #:	Sales Order #: 0902664022
Customer: PICEANCE ENERGY LLC - EBUS	Customer Rep: MATT SETTLES		
Well Name: PICEANCE FED	Well #: 28-04M	API/UWI #: 05-077-10237-00	
Field: VEGA	City (SAP): COLBRAN	County/Parish: MESA	State: COLORADO
Legal Description: SW NW-28-9S-93W-1568FNL-1218FWL			
Contractor: PATTERSON-UTI ENERGY		Rig/Platform Name/Num: PATTERSON 306	
Job BOM: 7521			
Well Type: DIRECTIONAL GAS			
Sales Person: HALAMERICA\HX41066		Srv Supervisor: Dustin Hyde	

## Job

Formation Name	
Formation Depth (MD)	Top Bottom
Form Type	BHST
Job depth MD	1572ft 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		16	15.25	65			0	60	0	60
Casing	3	8.625	8.097	24	STC	J-55	0	1572	0	1572
Open Hole Section			11				60	1582	60	1582

## Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	8.625	1		1572	Top Plug	8.625	1	HES
Float Shoe	8.625	1			Bottom Plug	8.625	1	HES
Float Collar	8.625	1		1525	SSR plug set	8.625		
Insert Float	8.625	1			Plug Container	8.625	1	HES
Stage Tool	8.625	1			Centralizers	8.625	18	HES

## Miscellaneous Materials

Gelling Agt	Conc	Surfactant	Conc	Acid Type	Qty	Conc
Treatment Fld	Conc	Inhibitor	Conc	Sand Type	Size	Qty

## Fluid Data

Stage/Plug #: 1									
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
1	Fresh Water	Fresh Water	40	bbl	8.33			6	

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
2	VariCem GJ5	VARICEM (TM) CEMENT	192	sack	12.3	2.46		8	14.17
14.17 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
3	VariCem GJ5	VARICEM (TM) CEMENT	120	sack	12.8	2.18		8	12.11
12.05 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	Fresh Water Displacement	Fresh Water Displacement	97	bbl	8.3			8	
Cement Left In Pipe		Amount	47 ft		Reason		Shoe Joint		
Comment									



## Summary Report



Crew: \_\_\_\_\_

Job Start Date: 8/15/2015

Sales Order #: 0902664022

WO #: 0902664022

PO/AFE #: 15-132

Customer:	PICEANCE ENERGY LLC - EBUS	Field:	VEGA	Job Type:	CMT SURFACE
UWI / API Number:	05-077-10237-00	County/Parish:	MESA	Service Supervisor:	CASING BOM
Well Name:	PICEANCE FED	State:	COLORADO		
Well No:	28-04M	Latitude:	39.251039	Cust Rep Name:	MATT SETTLES
		Longitude:	-107.779486	Cust Rep Phone #:	
		Sect / Twn / Rng:	28/9/93		

## Remarks:

The Information Stated Herein Is Correct	Customer Representative Signature	Date  8-15-16
	Customer Representative Printed Name	

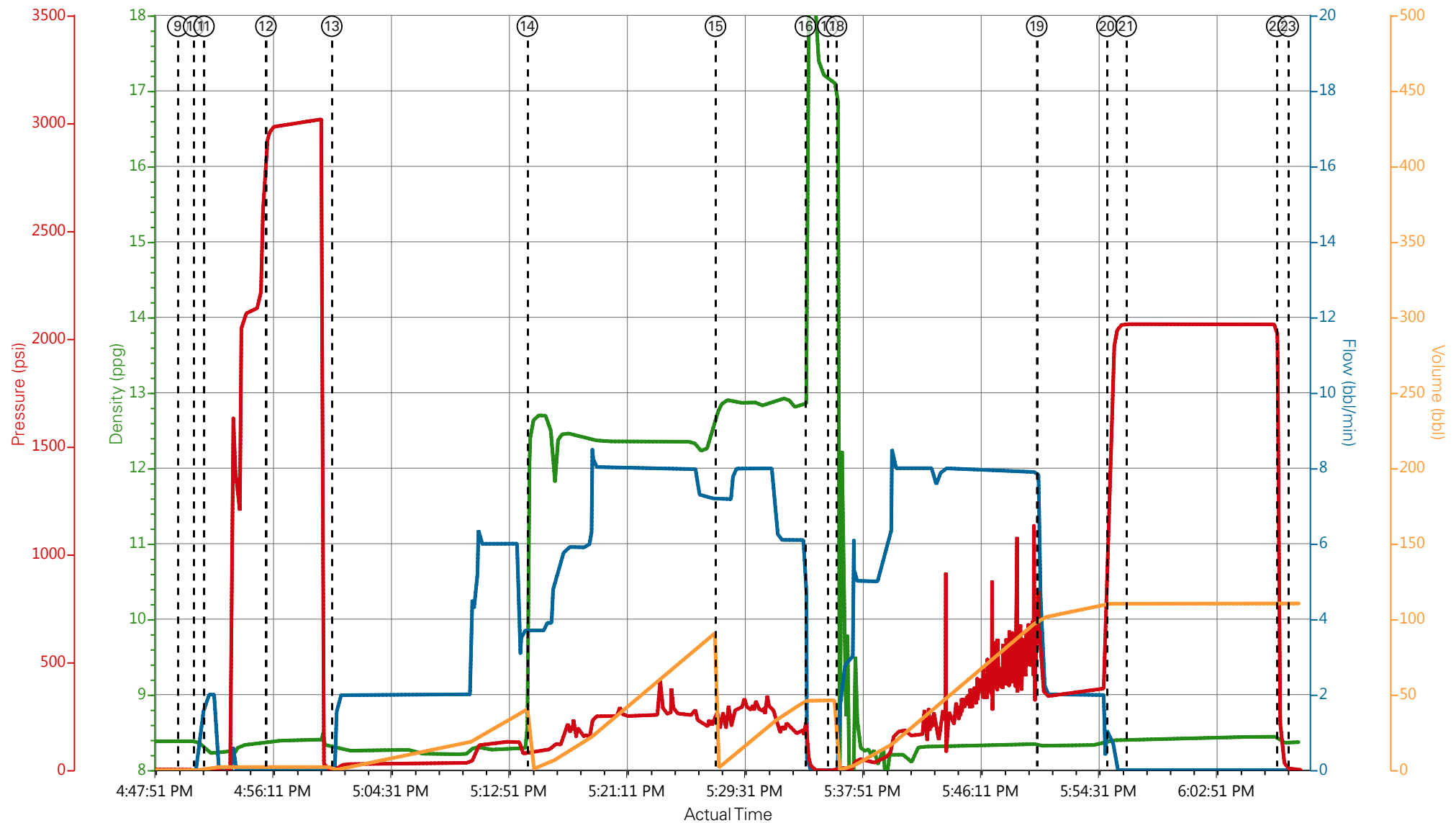
## 1.0 Real-Time Job Summary

## 1.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	Call Out	8/15/2015	07:00:00	USER					CREW CALLED FOR JOB O/L 1300
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	8/15/2015	10:00:00	USER					ALL HES CREW ATTENDED
Event	3	Crew Leave Yard	Crew Leave Yard	8/15/2015	10:30:00	USER					1 HT 400 PUMP TRUCK, 1 IRON TRUCK, 1 660 BULK TRUCK, 1 550 SERVICE PICKUP
Event	4	Arrive At Loc	Arrive At Loc	8/15/2015	12:00:00	USER					RIG RUNNING CSG UPON HES ARRIVAL
Event	5	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	8/15/2015	12:15:00	USER					PERFORMED JSA AND WATER TEST
Event	6	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	8/15/2015	12:45:00	USER					SPOTTED EQUIPMENT AND HAD SAFETY MEETING
Event	7	Rig-Up Equipment	Rig-Up Equipment	8/15/2015	13:00:00	USER					1 HT 400 PUMP TRUCK, 1 660 BULK TRUCK, 1 550 SERVICE PICKUP
Event	8	Pre-Job Safety Meeting	Pre-Job Safety Meeting	8/15/2015	16:00:00	USER					ALL RIG AND HES CREW ATTENDED
Event	9	Start Job	Start Job	8/15/2015	16:49:40	COM8					TD 1582', TP 1572', SJ 47', OH 11", CSG 8 5/8" 24# J-55, MUD 9.4 PPG
Event	10	Prime Pumps	Prime Lines	8/15/2015	16:50:47	COM8	8.33	2.0	13	2	FRESH WATER
Event	11	Drop Bottom Plug	Drop Bottom Plug	8/15/2015	16:51:31	USER					VERIFIED BY TATTLE TALE
Event	12	Test Lines	Test Lines	8/15/2015	16:55:54	COM8			3015		PRESSURE HELD

Event	13	Pump Spacer 1	Pump H2O Spacer	8/15/2015	17:00:33	COM8	8.33	6.0	52	40	FRESH WATER
Event	14	Pump Lead Cement	Pump Lead Cement	8/15/2015	17:14:22	COM8	12.3	8.0	260	84	192 SKS OF VARICEM CMT 12.3 PPG, 2.46 YIELD, 14.17 GAL/SK
Event	15	Pump Tail Cement	Pump Tail Cement	8/15/2015	17:27:39	COM8	12.8	8.0	280	47	120 SKS OF VARICEM CMT 12.8PPG, 2.18 YIELD, 12.11 GAL/SK
Event	16	Shutdown	Shutdown	8/15/2015	17:34:01	USER					WASHUP ON TOP OF PLUG
Event	17	Drop Top Plug	Drop Top Plug	8/15/2015	17:35:36	USER					VARIFIED BY CO. REP.
Event	18	Pump Displacement	Pump Displacement	8/15/2015	17:36:12	COM8	8.33	8.0	450	87	FRESH WATER
Event	19	Slow Rate	Slow Rate	8/15/2015	17:50:21	USER	8.33	2.0	356	10	SLOWED TO BUMP PLUG
Event	20	Bump Plug	Bump Plug	8/15/2015	17:55:19	COM8	8.33	2.0	400	97	PLUG BUMPED
Event	21	Pressure Test	Pressure Test on Casing	8/15/2015	17:56:40	USER				2069	TESTED CASING FOR 10 MIN. PRESSURE HELD
Event	22	Check Floats	Check Floats	8/15/2015	18:07:19	USER				2069	FLOATS HELD
Event	23	End Job	End Job	8/15/2015	18:08:07	COM8					25 BBL OF CMT TO SURFACE
Event	24	Post-Job Safety Meeting (Pre Rig-Down)	Post-Job Safety Meeting (Pre Rig-Down)	8/15/2015	18:30:00	USER					ALL HES CREW ATTENDED
Event	25	Rig-Down Completed	Rig-Down Completed	8/15/2015	20:00:00	USER					NO INJURIES TO REPORT
Event	26	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	8/15/2015	20:30:00	USER					1 HT 400 PUMP TRUCK, 1 660 BULK TRUCK, 1 550 SERVICE PICKUP
Event	27	Crew Leave Location	Crew Leave Location	8/15/2015	20:45:00	USER					THANK YOU FOR USING HALLIBURTON CMT

# PICEANCE ENERGY PICEANCE FED 28-04M 8 5/8" SURFACE



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

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

▼ HALLIBURTON | iCem® Service

Created: 2015-08-15 12:58:03, Version: 4.1.107

Edit

Customer : PICEANCE ENERGY LLC

Job Date : 8/15/2015

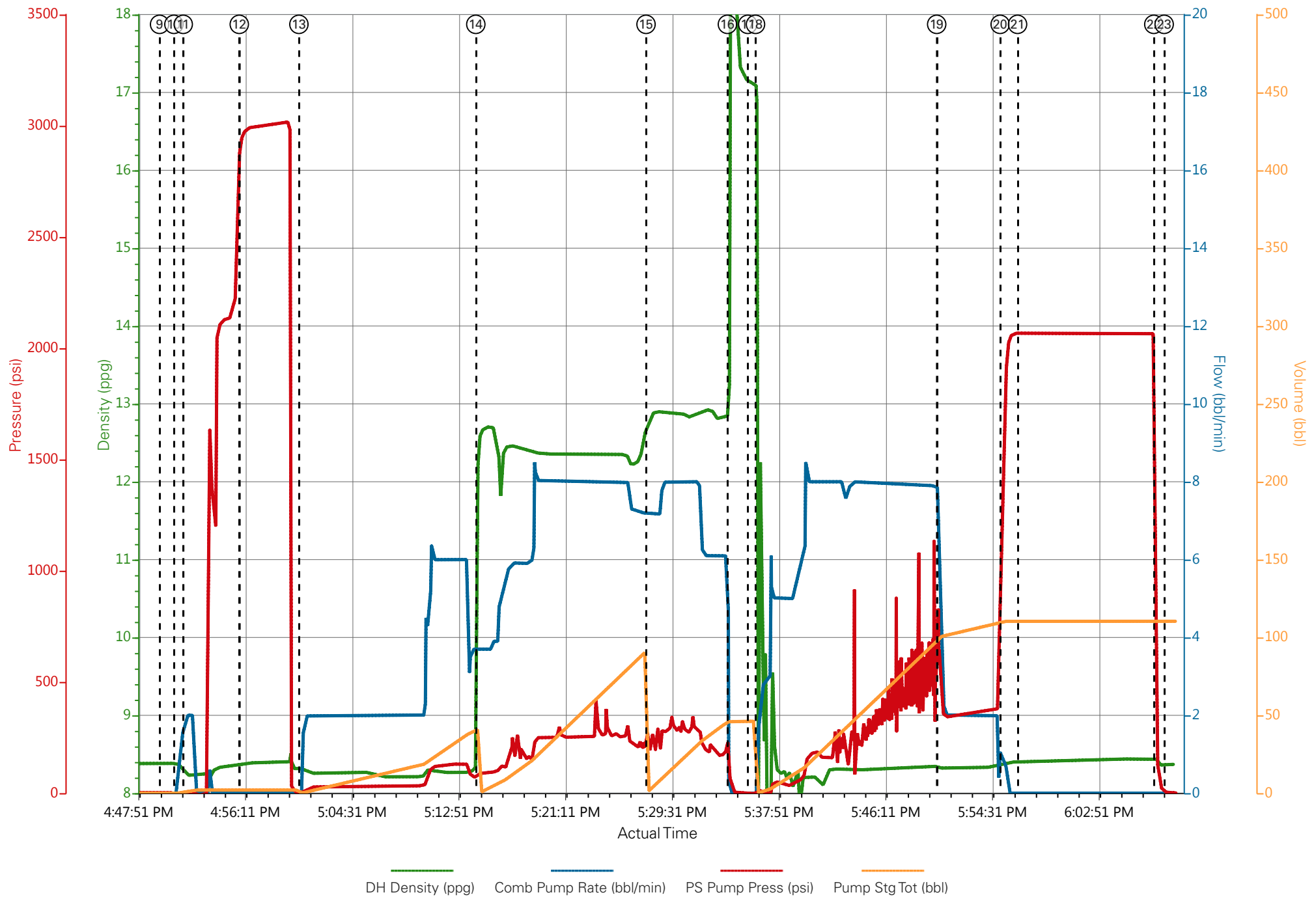
Well : PICEANCE FED 28-04M

Representative : MATT SETTLES

Sales Order # : 902664022

ELITE 8 : DUSTIN HYDE / MATT SETTLES

# PICEANCE ENERGY PICEANCE FED 28-04M 8 5/8" SURFACE





# HALLIBURTON

## Water Analysis Report

Company: PICEANCE

Submitted by: Dustin Hyde

Attention: J.TROUT

Lease PICEANCE FED

Well # 28-04M

Date: 8/15/2015

Date Rec.: 8/15/2015

S.O.# 902664022

Job Type: SURFACE

Specific Gravity	<i>MAX</i>	<b>1</b>
pH	<i>8</i>	<b>6.5</b>
Potassium (K)	<i>5000</i>	<b>200</b> Mg / L
Calcium (Ca)	<i>500</i>	<b>120</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;200</b> Mg / L
Temp	<i>40-80</i>	<b>76</b> Deg
Total Dissolved Solids		<b>60</b> Mg / L

Respectfully: Dustin Hyde

Title: Cement 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 i

<b>Sales Order #:</b> 0902664022	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 8/15/2015
<b>Customer:</b> PICEANCE ENERGY LLC - EBUS		<b>Job Type (BOM):</b> CMT SURFACE CASING BOM
<b>Customer Representative:</b> MATT SETTLES		<b>API / UWI: (leave blank if unknown)</b> 05-077-10237-00
<b>Well Name:</b> PICEANCE FED		<b>Well Number:</b> 0080734103
<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	8/15/2015
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	MATT SETTLES
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> The date the survey was conducted	8/15/2015

Cementing KPI Survey	
<b>Type of Job</b> Select the type of job. (Cementing or Non-Cementing)	0
<b>Select the Maximum Deviation range for this Job</b> What is the highest deviation for the job you just completed? This may not be the maximum well deviation.	Vertical
<b>Total Operating Time (hours)</b> Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.	4
<b>HSE Incident, Accident, Injury</b> HSE Incident, Accident, Injury. This should be recordable incidents only.	No
<b>Was the job purpose achieved?</b> Was the job delivered correctly as per customer agreed design?	Yes
<b>Pumping Hours</b> Total number of hours pumping fluid on this job. Enter in decimal format.	2
<b>Type of Rig Classification Job Was Performed</b> Type Of Rig (classification) Job Was Performed On	Drilling Rig (Portable)
<b>Number Of JSAs Performed</b> Number Of Jsas Performed	5
<b>Was this a Primary Cement Job (Yes / No)</b> Primary Cement Job= Casing job, Liner job, or Tie-back job.	Yes
<b>Number of Unplanned Shutdowns</b> Unplanned shutdown is when injection stops for any period of time.	0
<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	97
<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	96
<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