

Piceance Energy LLC - EBUS

Piceance 28-11W

**Patterson 306**

## **Post Job Summary**

# **Cement Production**

Date Prepared: 4/01/2015  
Job Date: 3/25/2015

Submitted by: Keven Nye – Grand Junction Cement Engineer

The Road to Excellence Starts with Safety

Sold To #: 344919	Ship To #: 3563325	Quote #:	Sales Order #: 0902251638
Customer: PICEANCE ENERGY LLC - EBUS		Customer Rep: MATT SETTLES	
Well Name: PICEANCE	Well #: 28-11W	API/UWI #: 05-077-10220-00	
Field: VEGA	City (SAP): COLLBRAN	County/Parish: MESA	State: COLORADO
Legal Description: NE SW-28-9S-93W-2515FSL-1608FWL			
Contractor: PATTERSON-UTI ENERGY		Rig/Platform Name/Num: PATTERSON 306	
Job BOM: 7523			
Well Type: DIRECTIONAL GAS		Srv Supervisor: Eric Carter	
Sales Person: HALAMERICA/HX41066		Job	

Formation Name			
Formation Depth (MD)	Top	1520 FT	Bottom 7988 FT
Form Type	BHST		
Job depth MD	7978ft	Job Depth TVD	
Water Depth		Wk Ht Above Floor	4 FT
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		8.625	7.921	32			0	1520		0
Casing		4.5	4	11.6		I-80	0	7978		0
Open Hole Section			7.875				1520	7988	0	0

### Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe					Top Plug	4.5	1	HES
Float Shoe					Bottom Plug	4.5	1	HES
Float Collar					SSR plug set			
Insert Float					Plug Container	4.5	1	HES
Stage Tool					Centralizers			

### 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 ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
1	Tuned Spacer III	Tuned Spacer III	40	bbl	11	4.55		6	
37 gal/bbl		FRESH WATER							
123.25 lbm/bbl		BARITE, BULK (100003681)							



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	VersaCem	VERSACEM (TM) SYSTEM	910	sack	12.8	1.75	8.5	8	
0.25 lbm		POLY-E-FLAKE (101216940)							
6 lbm		KOL-SEAL, BULK (100064233)							
8.50 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
3	ExpandaCem	EXPANDACEM (TM) SYSTEM	413	sack	13.3	1.89	8.66	7	
20 %		SAND-SSA-1 - SILICA FLOUR - 200 MESH, BULK (100003691)							
0.25 lbm		POLY-E-FLAKE (101216940)							
8.66 Gal		FRESH WATER							
6 lbm		KOL-SEAL, BULK (100064233)							
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	Displacement	Displacement	122.9	bbl	8.33			8	
0.05 gal/bbl		CLA-WEB - TOTE (101985045)							
0.01 gal/bbl		MICRO MATRIX CEMENT RETARDER, 5 GAL PAIL (100003781)							
Cement Left In Pipe		Amount 90 ft			Reason		Shoe Joint		
Comment									

## Summary Report



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

Job Start Date: 3/25/2015

Sales Order #: 0902251638

WO #: 0902251638

PO/AFE #: NA

Customer: PICEANCE ENERGY LLC - EBUS

Field: VEGA

Job Type: CMT PRODUCTION

UWI / API Number: 05-077-10220-00

County/Parish: MESA

CASING BOM

Well Name: PICEANCE

State: COLORADO

Service Supervisor: Eric Carter

Well No: 28-11W

Latitude: 39.247810

Longitude: -107.778090

Cust Rep Name: MATT SETTLES

Sect / Twn / Rng: 28/9/93

Cust Rep Phone #:

## Remarks:

The Information Stated Herein Is Correct

Customer Representative Signature

Date

3-25-15

Customer Representative Printed Name

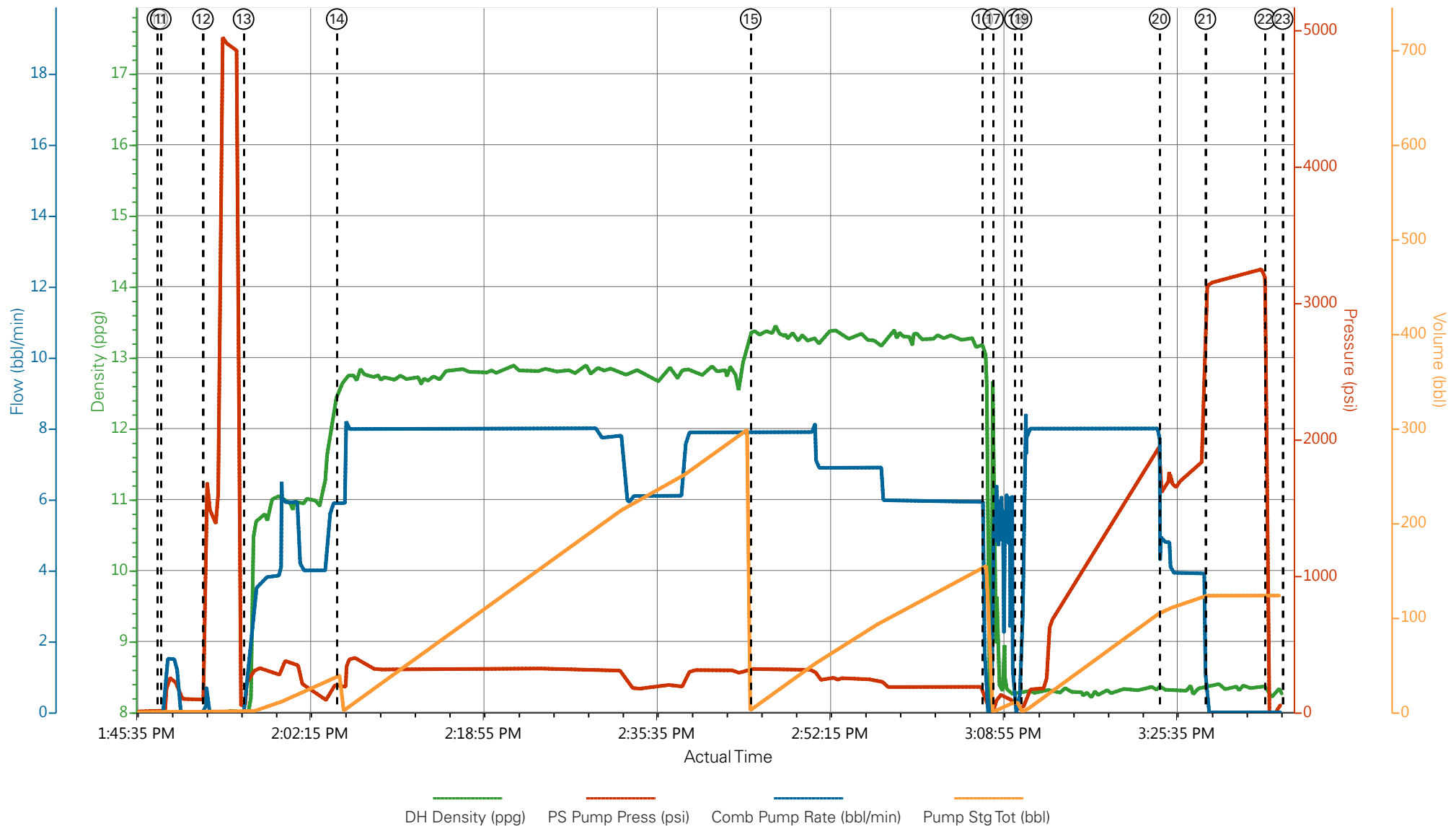
## 1.0 Real-Time Job Summary

## 1.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density (ppg)	PS Pump Press (psi)	Comb Pump Rate (bbl/min)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	Call Out	3/25/2015	07:00:00	USER					
Event	2	Depart Yard Safety Meeting	Depart Yard Safety Meeting	3/25/2015	09:50:00	USER					ATTENDED BY ALL HES CREW
Event	3	Crew Leave Yard	Crew Leave Yard	3/25/2015	10:00:00	USER					
Event	4	Arrive At Loc	Arrive At Loc	3/25/2015	11:30:00	USER					RIG CIRCULATING
Event	5	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	3/25/2015	11:35:00	USER					ATTENDED BY ALL HES CREW
Event	6	Other	Other	3/25/2015	11:40:00	USER					SPOT EQUIPMENT
Event	7	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	3/25/2015	11:45:00	USER					ATTENDED BY ALL HES CREW
Event	8	Rig-Up Equipment	Rig-Up Equipment	3/25/2015	11:50:00	USER					
Event	9	Pre-Job Safety Meeting	Pre-Job Safety Meeting	3/25/2015	13:20:00	USER					ATTENDED BY ALL HES CREW, RIG CREW AND COMPANY REP
Event	10	Other	Start Job	3/25/2015	13:47:52	USER					TP 7977.5', TD 7988', MW 9.8 PPG, CASING 4.5", 11.6#, I-80, SJ 89.74', LJ 17', 120 CENRTRALIZERS, HOLE 7.875", SURFACE CASING 8.625", 24# SET AT 1520', RIG CIRCULATED FOR 2.5 HR'S PRIOR TO JOB
Event	11	Other	Fill Lines	3/25/2015	13:48:11	USER	8.34	260	2	2	FRESH WATER
Event	12	Test Lines	Test Lines	3/25/2015	13:52:15	USER					PRESSURED UP TO 4950 PSI, PRESSURE HELD

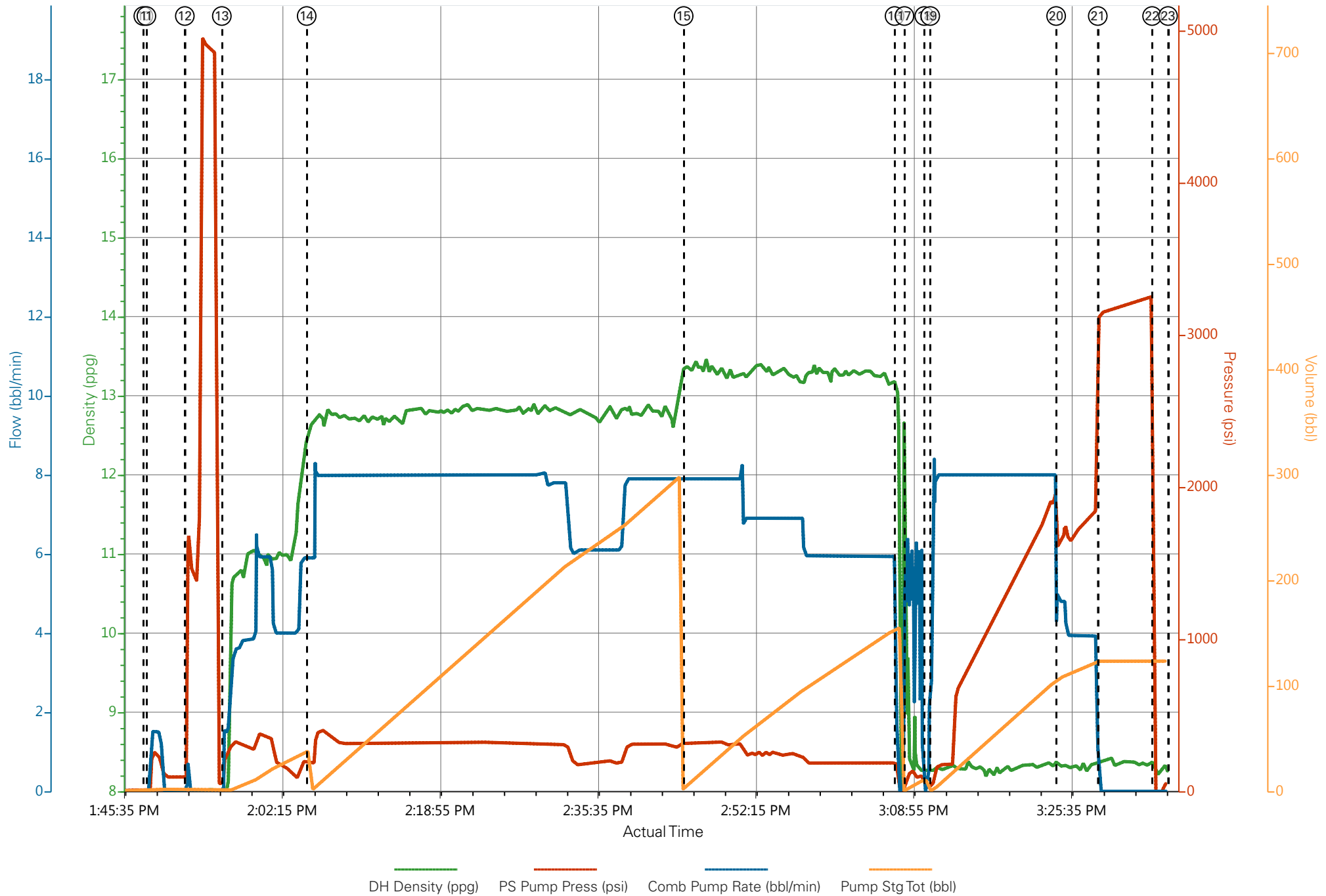
Event	13	Pump Spacer	Pump Spacer	3/25/2015	13:56:09	USER	11	400	6	40	TUNED SPACER III MIXED AT 11 PPG BOTTOM PLUG LAUNCHED
Event	14	Pump Lead Cement	Pump Lead Cement	3/25/2015	14:05:07	USER	12.8	410	8	283.6	910 SKS VERSACEM MIXED AT 12.8 PPG, 1.75 YIELD, 8.5 GL/SK
Event	15	Pump Tail Cement	Pump Tail Cement	3/25/2015	14:44:55	USER	13.3	350	7	139	413 SKS EXPANDACEM MIXED AT 13.3 PPG, 1.89 YIELD, 8.66 GL/SK
Event	16	Shutdown	Shutdown	3/25/2015	15:07:11	USER					
Event	17	Clean Lines	Clean Lines	3/25/2015	15:08:14	USER					CLEANED LINES TO CELLAR
Event	18	Drop Top Plug	Drop Top Plug	3/25/2015	15:10:20	USER					PLUG LAUNCHED
Event	19	Pump Displacement	Pump Displacement	3/25/2015	15:10:57	USER	8.34	1970	8	112.9	FRESH WATER WITH CLAY-WEB
Event	20	Slow Rate	Slow Rate	3/25/2015	15:24:15	USER	8.34	1900	4	10	
Event	21	Bump Plug	Bump Plug	3/25/2015	15:28:39	USER		3100			PLUG LANDED
Event	22	Check Floats	Check Floats	3/25/2015	15:34:23	USER		3250			FLOATS HELD
Event	23	Other	End Job	3/25/2015	15:36:04	USER					GOOD CIRCULATION THROUGHOUT JOB, PIPE NOT MOVED DURING JOB, 20 BBLS TUNED SPACER TO SURFACE
Event	24	Post-Job Safety Meeting (Pre Rig-Down)	Post-Job Safety Meeting (Pre Rig-Down)	3/25/2015	15:40:00	USER					ATTENDED BY ALL HES CREW
Event	25	Rig-Down Equipment	Rig-Down Equipment	3/25/2015	15:450:00	USER					
Event	26	Depart Location Safety Meeting	Depart Location Safety Meeting	3/25/2015	16:20:00	USER					ATTENDED BY ALL HES CREW
Event	27	Crew Leave Location	Crew Leave Location	3/25/2015	16:30:00	USER					THANK YOU FOR USING HALLIBURTON CEMENT, ERIC CARTER AND CREW.

# PICEANCE ENERGY - PICEANCE 28-11W - PRODUCTION



① Call Out n/a;n/a;n/a;n/a	⑥ Other n/a;n/a;n/a;n/a	⑪ Fill Lines 7.87;4;1.5;0	⑯ Shutdown 13;78;0;154.8	21 Bump Plug 8.36;13;0;10.3
② Depart Yard Safety Meeting n/a;n/a;n/a;n/a	⑦ Pre-Rig Up Safety Meeting n/a;n/a;n/a;n/a	⑫ Test Lines 7.86;1682;0.1;1.9	⑰ Clean Lines 9.6;91;6;2	22 Check Floats 8.25;61;5.7;1.6
③ Crew Leave Yard n/a;n/a;n/a;n/a	⑧ Rig-Up Equipment n/a;n/a;n/a;n/a	⑬ Pump Spacer 7.91;245;1.5;0	⑱ Drop Top Plug 8.26;13;0;10.3	23 End Job n/a;n/a;n/a;n/a
④ Arrive At Loc n/a;n/a;n/a;n/a	⑨ Pre-Job Safety Meeting n/a;n/a;n/a;n/a	⑭ Pump Lead Cement 12.65;194;5.9;39.3	⑲ Pump Displacement 8.25;61;5.7;1.6	24 Post-Job Safety Meeting n/a;n/a;n/a;n/a
⑤ Assessment Of Location Safety Meeting n/a;n/a;n/a;n/a	⑩ Start Job 7.87;3;0;0	⑮ Pump Tail Cement 13.36;319;7.9;5.3	20 Slow Rate 8.29;1633;4.8;106.9	25 Rig-Down Equipment n/a;n/a;n/a;n/a

# PICEANCE ENERGY - PICEANCE 28-11W - PRODUCTION





# HALLIBURTON

## Water Analysis Report

Company: PICEANCE ENERGY

Submitted by: ERIC CARTER

Attention: J.Trout

Lease: PATTERSON 306

Well #: PICEANCE 28-11W

Date: 4/1/2015

Date Rec.: 4/1/2015

S.O.#: 902251638

Job Type: PRODUCTION

Specific Gravity	<i>MAX</i>	<i>1</i>
pH	<i>8</i>	<i>7</i>
Potassium (K)	<i>5000</i>	<i>0</i> Mg / L
Hardness	<i>500</i>	<i>250</i> Mg / L
Iron (FE2)	<i>300</i>	<i>0</i> Mg / L
Chlorides (Cl)	<i>3000</i>	<i>500</i> Mg / L
Sulfates (SO <sub>4</sub> )	<i>1500</i>	<i>&lt;200</i> Mg / L
Temp	<i>40-80</i>	<i>54</i> Deg
Total Dissolved Solids		<i>790</i> Mg / L

Respectfully: ERIC CARTER

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 u

<b>Sales Order #:</b> 0902251638	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 3/25/2015
<b>Customer:</b> PICEANCE ENERGY LLC - EBUS		<b>Job Type (BOM):</b> CMT PRODUCTION CASING BOM
<b>Customer Representative:</b> MATT SETTLES		<b>API / UWI: (leave blank if unknown)</b> 05-077-10220-00
<b>Well Name:</b> PICEANCE		<b>Well Number:</b> 0080643265
<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	3/25/2015
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HX15491
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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<b>H2S Present:</b> No	<b>Well State:</b> COLORADO	<b>Well County:</b> MESA

*KEY PERFORMANCE INDICATORS*

General	
<b>Survey Conducted Date</b> The date the survey was conducted	3/25/2015

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.	Deviated
<b>Total Operating Time (hours)</b> Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.	5
<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.	1.5
<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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<b>H2S Present:</b> No	<b>Well State:</b> COLORADO	<b>Well County:</b> MESA

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