

Piceance Energy LLC - EBUS

Sup & Shep 25-11W

Patterson 306

Post Job Summary

Cement Production Casing

Date Prepared: 11/21/2014

Job Date: 10/23/2014

Submitted by: Patrick Ealey – Grand Junction Cement Engineer

The Road to Excellence Starts with Safety

Sold To #: 344919	Ship To #: 3560733	Quote #:	Sales Order #: 0901769450
Customer: PICEANCE ENERGY LLC - EBUS	Customer Rep: Roger Foster		
Well Name: SUP & SHEP FEDERAL	Well #: 25-11W	API/UWI #: 05-077-10218-00	
Field: BUZZARD CREEK	City (SAP): COLLBRAN	County/Parish: MESA	State: COLORADO
Legal Description: NE SW-25-9S-93W-2505FSL-1939FWL			
Contractor: PATTERSON-UTI ENERGY	Rig/Platform Name/Num: PATTERSON 306		
Job BOM: 7523			
Well Type: DIRECTIONAL GAS			
Sales Person: HALAMERICA\HX41066	Srv Supervisor: Edward Deussen		
Job			

Formation Name	
Formation Depth (MD)	Top Bottom
Form Type	BHST
Job depth MD	8634.34 ft 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		8.625	7.921	32			0	1555		0
Casing		4.5	4	11.6	LTC	I-80	0	8634.34		0
Open Hole Section			7.875				1555	8635	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	4.54		5.5		
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	

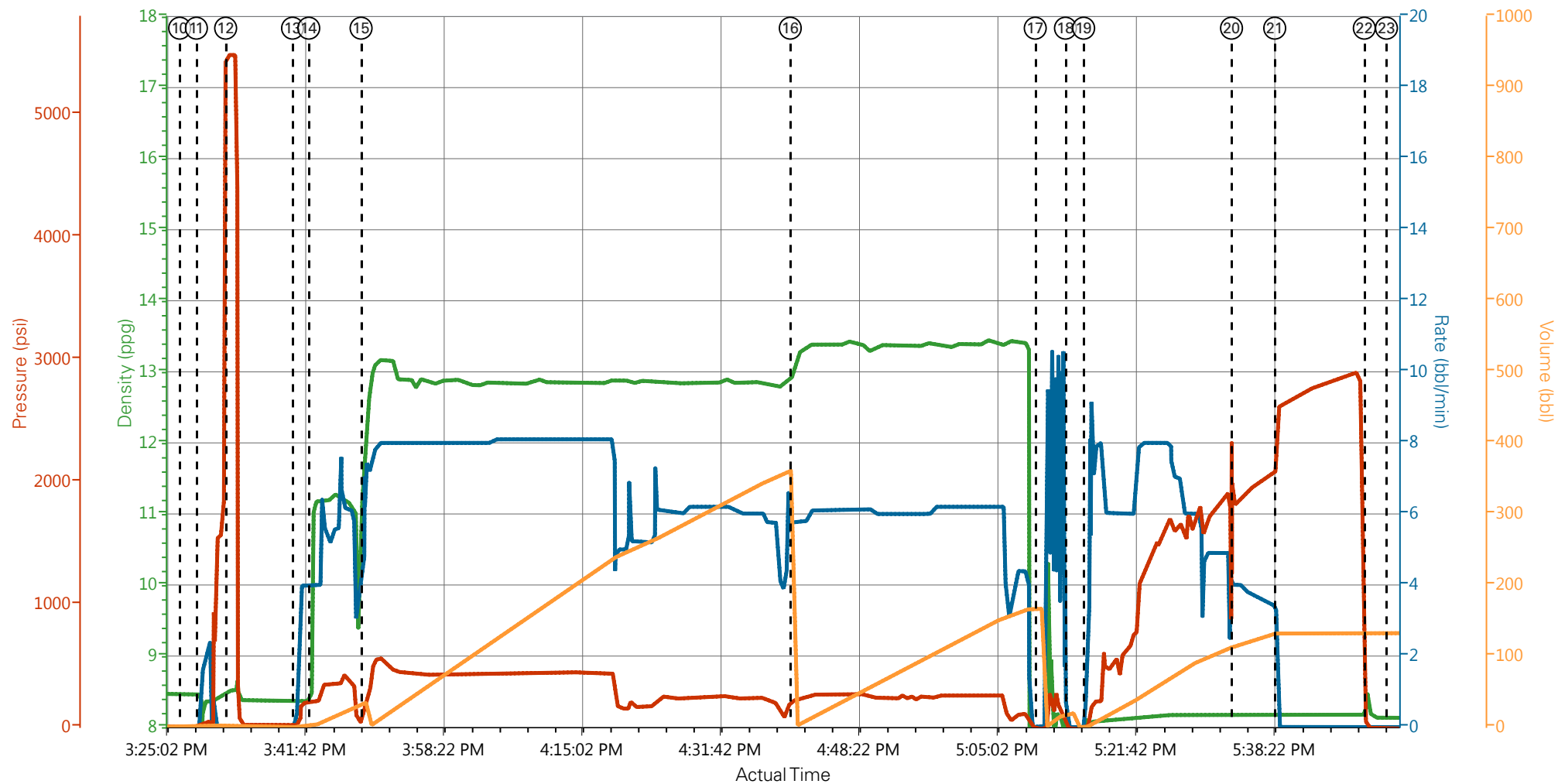
2	VersaCem	VERSACEM (TM) SYSTEM	1056	sack	12.8	1.75		8.0	8.48
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
3	ExpandaCem	EXPANDACEM (TM) SYSTEM	404	sack	13.3	1.89		6.2	8.64
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
4	Displacement	Displacement	132.5	bbl	8.34			8.0	
Cement Left In Pipe		Amount	88.36 ft		Reason		Shoe Joint		
Comment									

3.1 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)	Comment
Event	1	Call Out	10/23/2014	08:00:00	USER					O/L time ASAP
Event	2	Pre-Convoy Safety Meeting	10/23/2014	10:15:00	USER					
Event	3	Crew Leave Yard	10/23/2014	10:30:00	USER					1 Elite, 3 660s, 1 pickup
Event	4	Arrive At Loc	10/23/2014	12:00:00	USER					Rig just finishing casing
Event	5	Assessment Of Location Safety Meeting	10/23/2014	12:15:00	USER					JSA performed
Event	6	Pre-Rig Up Safety Meeting	10/23/2014	12:45:00	USER					
Event	7	Rig-Up Equipment	10/23/2014	13:00:00	USER					1 hard line w/ standpipe to floor, manifold on ground, hardline to cellar, water hoses to upright and day tank, bulk hoses to 660s and silo
Event	8	Rig-Up Completed	10/23/2014	14:00:00	USER					
Event	9	Pre-Job Safety Meeting	10/23/2014	14:15:00	USER					Mud 9.5 ppg
Event	10	Start Job	10/23/2014	15:27:00	COM5					TD 8635', TP 8634.34', SJ 88.36', 8 5/8" Surf csg @ 1555', 7 7/8" OH, 4 1/2" 11.6# I-80 csg
Event	11	Prime Pumps	10/23/2014	15:29:00	COM5	8.33	2.0	51	2.0	Fresh water
Event	12	Test Lines	10/23/2014	15:32:32	COM5			5492		Pressure held well
Event	13	Pump Spacer 1	10/23/2014	15:40:35	COM5	8.33	4.0	190	5.0	Dropped bottom plug
Event	14	Pump Tuned Spacer	10/23/2014	15:42:32	COM5	11.0	5.5	247	40.0	11.0 ppg
Event	15	Pump Lead Cement	10/23/2014	15:48:50	COM5	12.8	8.0	560	329.1	1056 sks, 12.8 ppg, 1.75 yield, 8.48 gal/sk
Event	16	Pump Tail Cement	10/23/2014	16:40:30	COM5	13.3	6.2	278	136.0	404 sks, 13.3 ppg, 1.89 yield, 8.64 gal/sk
Event	17	Shutdown	10/23/2014	17:10:00	USER					Wash lines to cellar
Event	18	Drop Top Plug	10/23/2014	17:13:38	COM5					

Event	19	Pump Displacement	10/23/2014	17:15:49	COM5	8.33	8.0	1960	132.5	Fresh Water w/ 1 gal MMCR
Event	20	Slow Rate	10/23/2014	17:33:37	USER	8.33	3.5	2070	10.0	Good returns throughout most of job – saw approx 10 bbls Tuned Spacer come to surface, lost returns w/20 bls to pump
Event	21	Bump Plug	10/23/2014	17:38:49	COM5			2089		
Event	22	Check Floats	10/23/2014	17:49:37	COM5			2685		Floats held – 1 bbl flowback
Event	23	End Job	10/23/2014	17:52:17	COM5					
Event	24	Pre-Rig Down Safety Meeting	10/23/2014	18:15:00	USER					
Event	25	Rig-Down Equipment	10/23/2014	18:30:00	USER					
Event	26	Rig-Down Completed	10/23/2014	19:30:00	USER					
Event	27	Pre-Convoy Safety Meeting	10/23/2014	19:45:00	USER					
Event	28	Crew Leave Location	10/23/2014	19:55:00	USER					Thank you for using Halliburton

PICEANCE ENERGY - SUP & SHEP 25-11W 4 1/2" PRODUCTION



DH Density (ppg) 8.13 Comb Pump Rate (bbl/min) 0 PS Pump Press (psi) -15 Pump Stg Tot (bbl) 132.3

- | | | | |
|---|-------------------------------------|--|--|
| ① Call Out n/a;n/a;n/a;n/a | ⑧ Rig-Up Completed 0;0;10;0.5 | ⑮ Pump Lead Cement 11.86;6.2;156;33.6 | 22 Check Floats 8.25;0;-1;132.3 |
| ② Pre-Convoy Safety Meeting n/a;n/a;n/a;n/a | ⑨ Pre-Job Safety Meeting 8.42;0;8;0 | ⑯ Pump Tail Cement 13.01;5.8;220.47;182.27 | 23 End Job 8.13;0;-14;132.3 |
| ③ Crew Leave Yard n/a;n/a;n/a;n/a | ⑩ Start Job 8.46;0;4;0 | ⑰ Shutdown 0.76;0;-12;166.5 | 24 Pre-Rig Down Safety Meeting n/a;n/a;n/a;n/a |
| ④ Arrive At Location n/a;n/a;n/a;n/a | ⑪ Prime Lines 8.46;0;5;0 | ⑱ Drop Top Plug -0.1;0;-15;19.4 | 25 Rig-Down Equipment n/a;n/a;n/a;n/a |
| ⑤ Assessment Of Location Safety Meeting n/a;n/a;n/a;n/a | ⑫ Test Lines 8.51;0;5492;2.2 | ⑲ Pump Displacement 6.55;2.2;5;0.4 | 26 Rig-Down Completed n/a;n/a;n/a;n/a |
| ⑥ Pre-Rig Up Safety Meeting n/a;n/a;n/a;n/a | ⑬ Pump Water Ahead 8.39;0;10;0 | 20 Slow Rate 8.18;4;1807;113.9 | 27 Pre-Convoy Safety Meeting n/a;n/a;n/a;n/a |
| ⑦ Rig-Up Equipment n/a;n/a;n/a;n/a | ⑭ Pump Tuned Spacer 10;4;196;1.6 | 21 Bump Plug 8.2;0;2604;132.3 | 28 Crew Leave Location n/a;n/a;n/a;n/a |

▼ **HALLIBURTON** | iCem® Service

Created: 2014-10-23 13:29:29, Version: 3.0.121

Edit

Customer: PICEANCE ENERGY LLC EBUSINESS

Job Date: 10/23/2014 1:31:07 PM

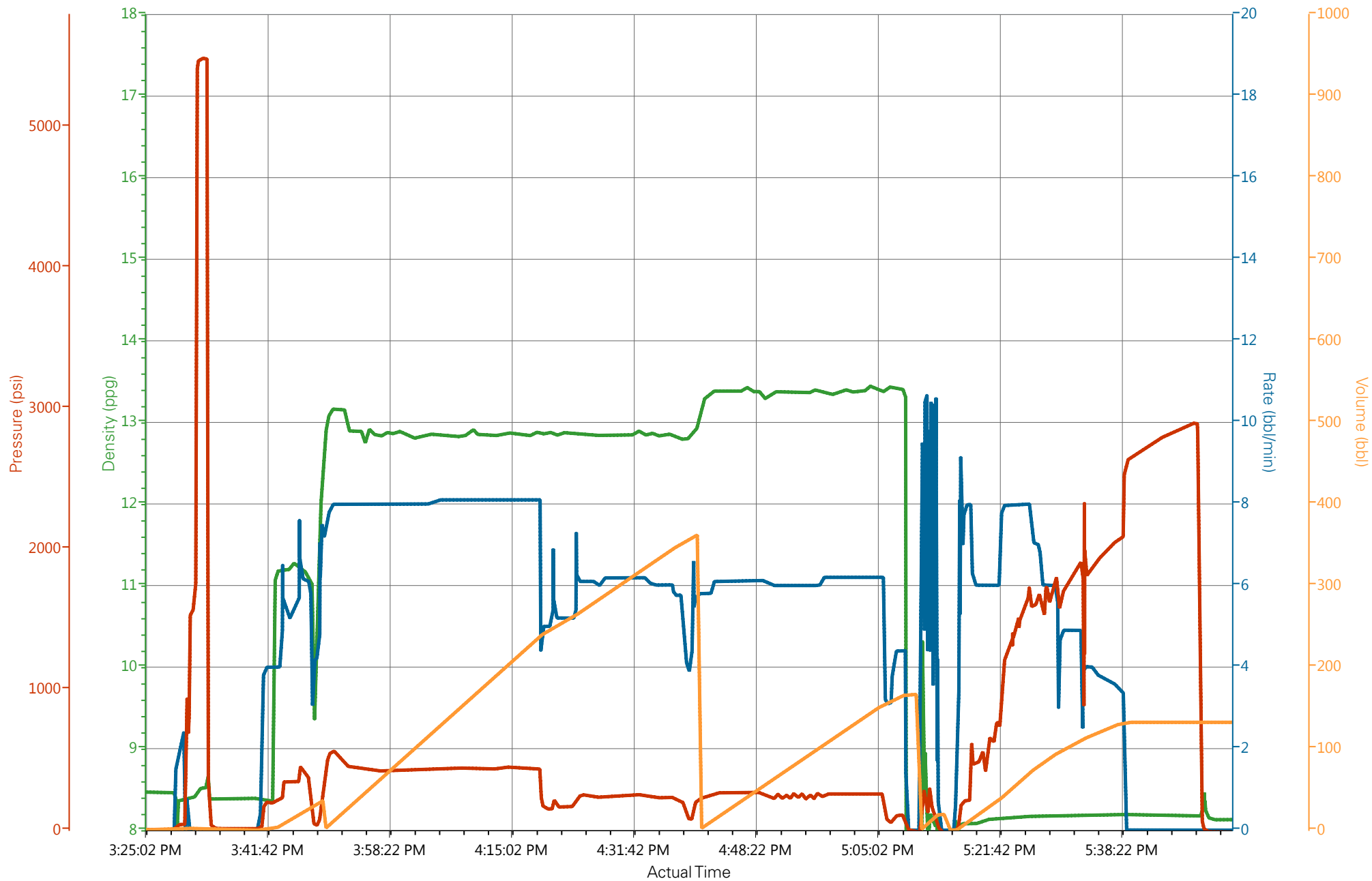
Well: SUP & SHEP 25-11W

Representative: Roger Foster

Sales Order #: 901769450

Elite #7: Ed Deussen / Brent Banks

PICEANCE ENERGY - SUP & SHEP 25-11W 4 1/2" PRODUCTION



DH Density (ppg) 8.13 Comb Pump Rate (bbl/min) 0 PS Pump Press (psi) -14 Pump Stg Tot (bbl) 132.3

HALLIBURTON

Water Analysis Report

Company: PICEANCE ENERGY

Submitted by: ED DEUSSEN

Attention: J.TROUT

Lease FED SUP & SHEP

Well # 25-11W

Date: 10/23/2014

Date Rec.: 10/23/2014

S.O.# 901769450

Job Type: PRODUCTION

Specific Gravity	<i>MAX</i>	1
pH	<i>8</i>	7
Potassium (K)	<i>5000</i>	200 Mg / L
Calcium (Ca)	<i>500</i>	250 Mg / L
Iron (FE2)	<i>300</i>	0 Mg / L
Chlorides (Cl)	<i>3000</i>	0 Mg / L
Sulfates (SO ₄)	<i>1500</i>	<200 Mg / L
Temp	<i>40-80</i>	55 Deg
Total Dissolved Solids		110 Mg / L

Respectfully: ED DEUSSEN

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 use

Sales Order #: 0901769450	Line Item: 10	Survey Conducted Date: 10/23/2014
Customer: PICEANCE ENERGY LLC - EBUS		Job Type (BOM): CMT PRODUCTION CASING BOM
Customer Representative: ROGER FOSTER		API / UWI: (leave blank if unknown) 05-077-10218-00
Well Name: SUP & SHEP FEDERAL		Well Number: 0080641306
Well Type: DIRECTIONAL GAS	Well Country: USA	
H2S Present: No	Well State: COLORADO	Well County: 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	10/23/2014
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HB57194
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	

CUSTOMER SIGNATURE

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H2S Present: No	Well State: COLORADO	Well County: MESA

KEY PERFORMANCE INDICATORS

General	
Survey Conducted Date The date the survey was conducted	10/23/2014

Cementing KPI Survey	
Type of Job Select the type of job. (Cementing or Non-Cementing)	0
Select the Maximum Deviation range for this Job What is the highest deviation for the job you just completed? This may not be the maximum well deviation.	Vertical
Total Operating Time (hours) Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.	6
HSE Incident, Accident, Injury HSE Incident, Accident, Injury. This should be recordable incidents only.	No
Was the job purpose achieved? Was the job delivered correctly as per customer agreed design?	Yes
Pumping Hours Total number of hours pumping fluid on this job. Enter in decimal format.	2
Type of Rig Classification Job Was Performed Type Of Rig (classification) Job Was Performed On	Drilling Rig (Portable)
Number Of JSAs Performed Number Of Jsas Performed	5
Was this a Primary Cement Job (Yes / No) Primary Cement Job= Casing job, Liner job, or Tie-back job.	Yes
Number of Unplanned Shutdowns Unplanned shutdown is when injection stops for any period of time.	0
Customer Non-Productive Rig Time (hrs)	0

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Well Type: DIRECTIONAL GAS	Well Country: USA	
H2S Present: No	Well State: COLORADO	Well County: 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.	
Did We Run Wiper Plugs? Did We Run Top And Bottom Casing Wiper Plugs?	Both
If a top plug was run, was the plug bumped? (Yes/No/N/A) If a top plug was run, was the plug bumped? (Yes/No/N/A)	Yes
If applicable, was Halliburton float equipment used? (Yes/No/N/A) If applicable, was Halliburton float equipment used? (Yes/No/N/A)	N/A
If applicable, did the floats hold? (Yes/No/N/A) If applicable, did the floats hold? (Yes/No/N/A)	Yes
Mixing Density of Job Stayed in Designed Density Range (0-100%) Density Range defined as +/- .20 ppg. Calculation: Total BBLs cement mixed at designed density divided by total BBLs of cement multiplied by 100	99
Pump Rate (percent) of Job Stayed At Designed Pump Rate 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	99
If applicable, were there returns throughout the job? (Yes/No/N/A) If applicable, were there returns throughout the job? (Yes/No/N/A)	YES UNTIL VERY END
Nbr of Remedial Plug Jobs Rqd - HES Number Of Remedial Plug Jobs Needed After Primary Plug Pumped By HES	0
Nbr of Remedial Sqz Jobs Rqd - HES Number Of Remedial Squeeze Jobs Required After Primary Job Performed By HES	0