

PICEANCE ENERGY LLC - EBUS

Piceance 28-12W

Patterson 306

Post Job Summary

Cement Production Casing

Date Prepared: 03/17/2015

Job Date: 03/10/2015

Submitted by: Aaron Katz – Grand Junction Cement Engineer

The Road to Excellence Starts with Safety

Sold To #: 344919		Ship To #: 3563322		Quote #:		Sales Order #: 0902211168					
Customer: PICEANCE ENERGY LLC - EBUS				Customer Rep: MATT SETTLES							
Well Name: PICEANCE		Well #: 28-12W		API/UWI #: 05-077-10221-00							
Field: VEGA		City (SAP): COLLBRAN		County/Parish: MESA		State: COLORADO					
Legal Description: NE SW-28-9S-93W-2508FSL-1606FWL											
Contractor: PATTERSON-UTI ENERGY				Rig/Platform Name/Num: PATTERSON 306							
Job BOM: 7523											
Well Type: DIRECTIONAL GAS											
Sales Person: HALAMERICA\HB60191				Srvs Supervisor: Dustin Smith							
Job											
Formation Name											
Formation Depth (MD)		Top		Bottom							
Form Type				BHST							
Job depth MD		7910ft		Job Depth TVD							
Water Depth				Wk Ht Above Floor		5 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	1560		0	
Casing		4.5	4	11.6			0	7910		0	
Open Hole Section			7.875				1560	7942	0	0	
Tools and Accessories											
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make		
Guide Shoe	4.5			7910		Top Plug	4.5	1	HES		
Float Shoe	4.5					Bottom Plug	4.5	1	HES		
Float Collar	4.5			7820.4		SSR plug set	4.5		HES		
Insert Float	4.5					Plug Container	4.5		HES		
Stage Tool	4.5					Centralizers	4.5	121	HES		
Miscellaneous Materials											
Gelling Agt		Conc		Surfactant		Conc		Acid Type		Qty	
Treatment Fld		Conc		Inhibitor		Conc		Sand Type		Size	
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		4.0	
37 gal/bbl		FRESH WATER									
123.25 lbm/bbl		BARITE, BULK (100003681)									

Comment

2.0 Real-Time Job Summary

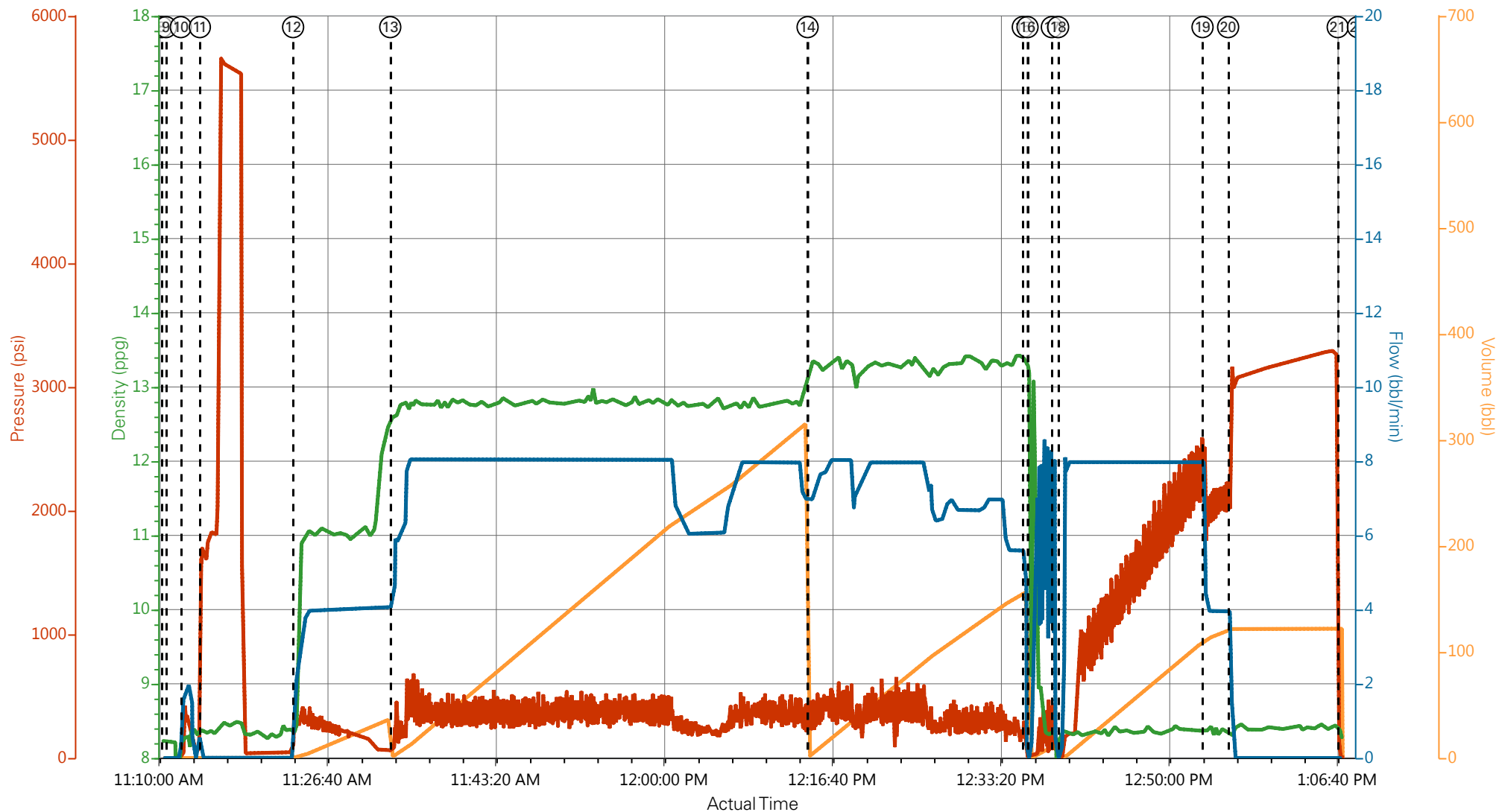
2.1 Job Event Log

Type	Seq. No.	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	3/10/2015	04:00:00	USER					ELITE # 2
Event	2	Pre-Convoy Safety Meeting	3/10/2015	06:00:00	USER					ALL HES EMPLOYEES
Event	3	Arrive At Loc	3/10/2015	07:30:00	USER					ARRIVED ON LOCATION 3 HOURS EARLY DIDNT START CHARGING TIME UNTIL REQUESTED ON LOCATION TIME RIG RUNNING CASING UPON HES ARRIVAL
Event	4	Assessment Of Location Safety Meeting	3/10/2015	08:30:00	USER					ALL HES EMPLOYEES
Event	5	Pre-Rig Up Safety Meeting	3/10/2015	08:45:00	USER					ALL HES EMPLOYEES
Event	6	Rig-Up Equipment	3/10/2015	09:00:00	USER					1 HT-400 PUMP TRUCK (ELITE #2) 2 660 BULK TRUCK 1 BODY LOAD BULK TRUCK 1 SILO 1 F-550 PICKUP
Event	7	Pre-Job Safety Meeting	3/10/2015	11:00:00	USER					ALL HES EMPLOYEES AND RIG CREW RIG CIRCULATED FOR 1 HOUR PRIOR TO THE JOB @ 9 BPM GAS @ 500 PRIOR TO STARTING THE JOB
Event	8	Start Job	3/10/2015	11:10:34	COM5					TD: 7942 TP: 7909.99 SJ: 89.59 CSG: 4 1/2 11.6# I-80 SURFACE CASING @ 1560 8 5/8 24# OH: 7 7/8 MUD WT: 9.7 YP: 12 PV: 20
Event	9	Drop Bottom Plug	3/10/2015	11:11:00	USER					PLUG AWAY NO PROBLEMS
Event	10	Prime Lines	3/10/2015	11:12:28	COM5	8.33	2.0	201	2.0	PRIME LINES WITH 2 BBLS FRESH WATER
Event	13	Test Lines	3/10/2015	11:14:21	COM5	8.33	0.0	5609	2.0	PRESSURE TEST OK
Event	39	Pump Tuned Spacer III	3/10/2015	11:23:35	COM5	11	4.0	375	40	40 BBL TUNED SPACER @ 11 PPG 4.55 YIELD 30 GAL/SK TUNED SPACER WEIGHT VERIFIED VIA PRESSURIZED MUD SCALES
Event	69	Pump Lead Cement	3/10/2015	11:33:12	COM5	12.8	8.0	440	284.2	912 SKS 12.8 PPG 1.75 YIELD 8.5 GAL/SK LEAD CEMENT

WEIGHT VERIFIED VIA PRESSURIZED MUD SCALES

Event	155	Pump Tail Cement	3/10/2015	12:14:31	COM5	13.3	8.0	410	139	413 SKS 13.3 PPG 1.89 YIELD 8.66 GAL/SK TAIL CEMENT WEIGHT VERIFIED VIA PRESSURIZED MUD SCALES
Event	226	Shutdown	3/10/2015	12:35:49	USER					
Event	229	Clean Lines	3/10/2015	12:36:17	COM5	8.33			10	CLEAN PUMPS AND LINES TO CELLAR
Event	230	Drop Top Plug	3/10/2015	12:38:41	USER					PLUG AWAY NO PROBLEMS
Event	232	Pump Displacement	3/10/2015	12:39:19	COM5	8.33	8.0	2330	121.2	FRESH WATER DISPLACEMENT WITH 1 GAL MMCR
Event	233	Slow Rate	3/10/2015	12:53:37	USER	8.33	4.0	2130	111	SLOW RATE TO BUMP PLUG
Event	234	Bump Plug	3/10/2015	12:56:09	USER	8.33	4.0	3293	121.1	PSI BEFORE BUMPING PLUG @ 2130 BUMPED PLUG UP TO 3000 PSI AS PER COMPANY REP AND HELD FOR 10 MINUTES
Event	235	Check Floats	3/10/2015	13:07:00	USER					PRESSURE UP TO 3293 PRIOR TO CHECKING FLOATS - FLOATS HELD 1 1/2 BBLS BACK TO DISPLACEMENT TANKS
Event	236	End Job	3/10/2015	13:09:00	USER					GOOD RETURNS THROUGHOUT THE JOB PIPE STATIC THROUGHOUT JOB RETURNED 40 BBLS OF TUNED SPACER AND 15 BBLS OF CEMENT TO SURFACE
Event	237	Pre-Rig Down Safety Meeting	3/10/2015	13:15:00	USER					ALL HES EMPLOYEES
Event	238	Rig-Down Equipment	3/10/2015	13:30:00	USER					
Event	239	Pre-Convoy Safety Meeting	3/10/2015	14:20:00	USER					ALL HES EMPLOYEES
Event	240	Crew Leave Location	3/10/2015	14:30:00	USER					THANK YOU FOR USING HALLIBURTON CEMENT DUSTIN SMITH AND CREW

PICEANCE ENERGY - PICEANCE 28-12W - 4 1/2 PRODUCTION



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

▼ HALLIBURTON | iCem® Service

Created: 2015-03-10 05:03:45, Version: 4.1.107

Edit

Customer : PICEANCE ENERGY LLC - EBUS

Job Date : 3/10/2015 9:44:55 AM

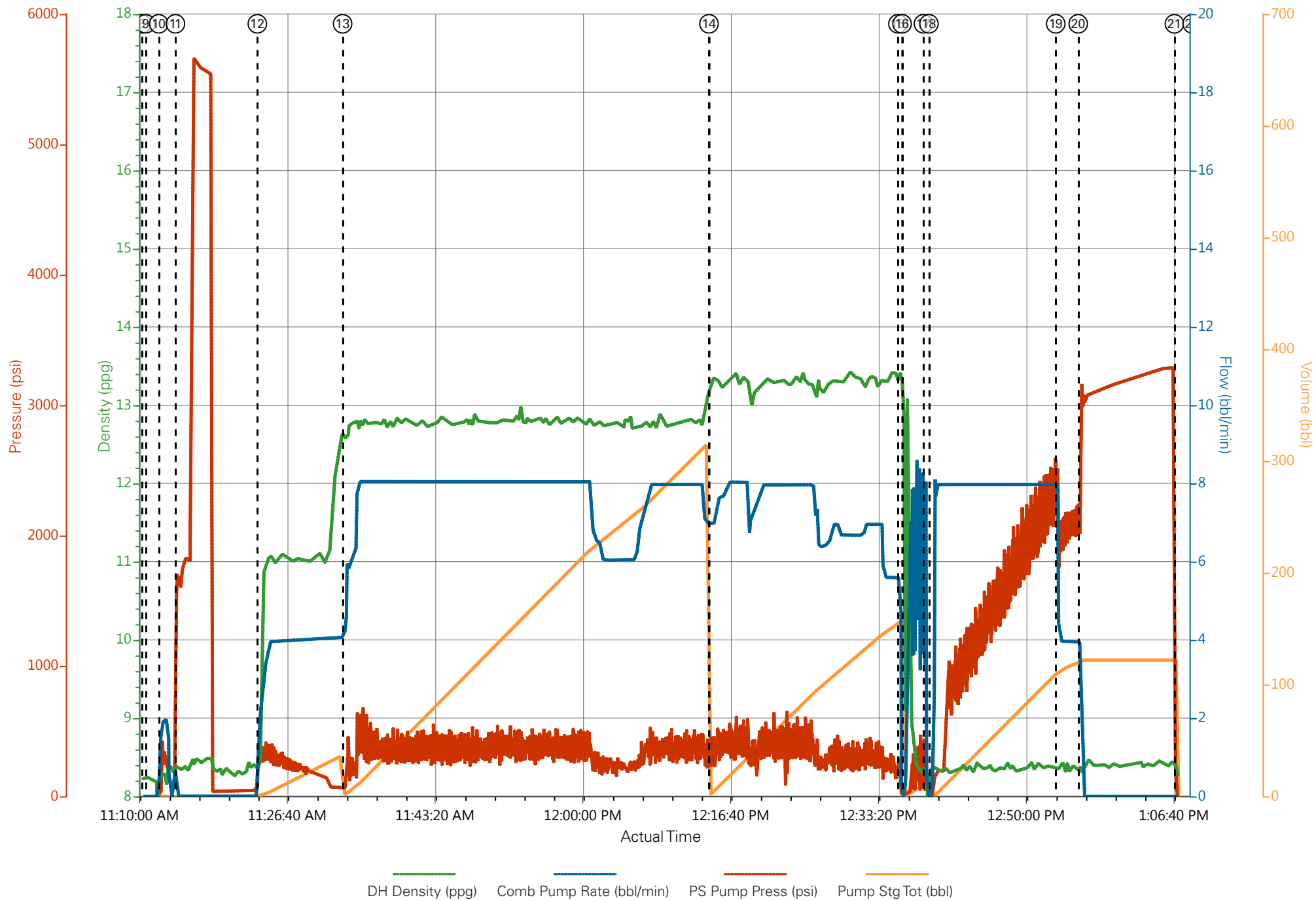
Well : PICEANCE 28-12W

Representative : MATT SETTLES

Sales Order # : 0902211168

ELITE #2 : DUSTIN SMITH / ADAM ANDERSON

PICEANCE ENERGY - PICEANCE 28-12W - 4 1/2 PRODUCTION



HALLIBURTON

Water Analysis Report

Company: PICEANCE ENERGY

Submitted by: DUSTIN SMITH

Attention: LAB

Lease PICEANCE

Well # 28-12W

Date: 3/10/2015

Date Rec.:

S.O.# 902211168

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>	0 Mg / L
Iron (FE2)	<i>300</i>	0 Mg / L
Chlorides (Cl)	<i>3000</i>	0 Mg / L
Sulfates (SO ₄)	<i>1500</i>	UNDER 200 Mg / L
Chlorine (Cl ₂)		0 Mg / L
Temp	<i>40-90</i>	48 Deg
Total Dissolved Solids		380 Mg / L

Respectfully: DUSTIN 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 its

Sales Order #: 0902211168	Line Item: 10	Survey Conducted Date: 3/10/2015
Customer: PICEANCE ENERGY LLC - EBUS		Job Type (BOM): CMT PRODUCTION CASING BOM
Customer Representative: MATT SETTLES		API / UWI: (leave blank if unknown) 05-077-10221-00
Well Name: PICEANCE		Well Number: 0080643260
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	3/10/2015
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HX37079
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	

CUSTOMER SIGNATURE

Sales Order #: 0902211168	Line Item: 10	Survey Conducted Date: 3/10/2015
Customer: PICEANCE ENERGY LLC - EBUS		Job Type (BOM): CMT PRODUCTION CASING BOM
Customer Representative: MATT SETTLES		API / UWI: (leave blank if unknown) 05-077-10221-00
Well Name: PICEANCE		Well Number: 0080643260
Well Type: DIRECTIONAL GAS	Well Country: USA	
H2S Present: No	Well State: COLORADO	Well County: MESA

KEY PERFORMANCE INDICATORS

General	
Survey Conducted Date The date the survey was conducted	3/10/2015

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.	4
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	6
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

Sales Order #: 0902211168	Line Item: 10	Survey Conducted Date: 3/10/2015
Customer: PICEANCE ENERGY LLC - EBUS		Job Type (BOM): CMT PRODUCTION CASING BOM
Customer Representative: MATT SETTLES		API / UWI: (leave blank if unknown) 05-077-10221-00
Well Name: PICEANCE		Well Number: 0080643260
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.	
Was the non productive time or the unplanned shutdown caused by a problem with a piece of equipment? Was the non productive time or the unplanned shutdown caused by a problem with a piece of equipment?	No
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)	Yes
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	90
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	90
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
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