

Piceance Energy LLC- EBUS

Piceance 28-10W

Patterson 306

Post Job Summary

Cement Production Casing

Date Prepared: 07/28/2015
Job Date: 07/23/2015

Submitted by: Evan Russell – Grand Junction Cement Engineer

The Road to Excellence Starts with Safety

Sold To #: 344919	Ship To #: 3123922	Quote #:	Sales Order #: 0902593216
Customer: PICEANCE ENERGY LLC - EBUS	Customer Rep: PRICE HERNANDEZ		
Well Name: PICEANCE	Well #: 28-10W	API/UWI #: 05-077-09778-00	
Field: VEGA	City (SAP): COLLBRAN	County/Parish: MESA	State: COLORADO
Legal Description: SW NW-28-9S-93W-1612FNL-1242FWL			
Contractor: PATTERSON-UTI ENERGY	Rig/Platform Name/Num: PATTERSON 306		
Job BOM: 7523			
Well Type: DIRECTIONAL GAS			
Sales Person: HALAMERICA\HX41066	Srvc Supervisor: DAVID CAMPBELL		

Job

Formation Name	
Formation Depth (MD)	Top
Form Type	BHST
Job depth MD	7861 FT
Water Depth	
Perforation Depth (MD)	From

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	8.097	24			0	1558		0
Casing		4.5	4	11.6			0	7851	0	7792
Open Hole Section			7.875				1558	7861	0	7792

Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	4.5			7851	Top Plug	4.5	1	HES
Float Shoe					Bottom Plug	4.5	1	HES
Float Collar	4.5			7761.3	SSR plug set			
Insert Float					Plug Container	4.5	1	HES
Stage Tool					Centralizers			

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	30	4		
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	898	sack	12.8	1.75		8	8.5	
0.25 lbm		POLY-E-FLAKE (101216940)								
6 lbm		KOL-SEAL, BULK (100064233)								
8.53 Gal		FRESH WATER								
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
3	ExpandaCem GJ4	EXPANDACEM (TM) SYSTEM	413	sack	13.3	1.89		8	8.66	
20 %		SS-200 - BULK (102240841)								
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 ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
4	Displacement	Displacement	120.3	bbl	8.34			8		
0.01 gal/bbl		MICRO MATRIX CEMENT RETARDER, 1 GAL PAIL (100003780)								
0.05 gal/bbl		CLA-WEB - TOTE (101985045)								
Cement Left In Pipe		Amount	90 ft			Reason		Shoe Joint		
Mix Water:		7 PH	Mix Water Chloride:			0 PPM		Mix Water Temperature:		63 F
Cement Temperature:			Plug Displaced by:			8.4 PPG		Disp. Temperature:		63 F
Plug Bumped?		YES	Bump Pressure:			2460 PSI		Floats Held?		YES
Cement Returns:			Returns Density:					Returns Temperature:		
Comment										

1.0 Real-Time Job Summary

1.1 Job Event Log

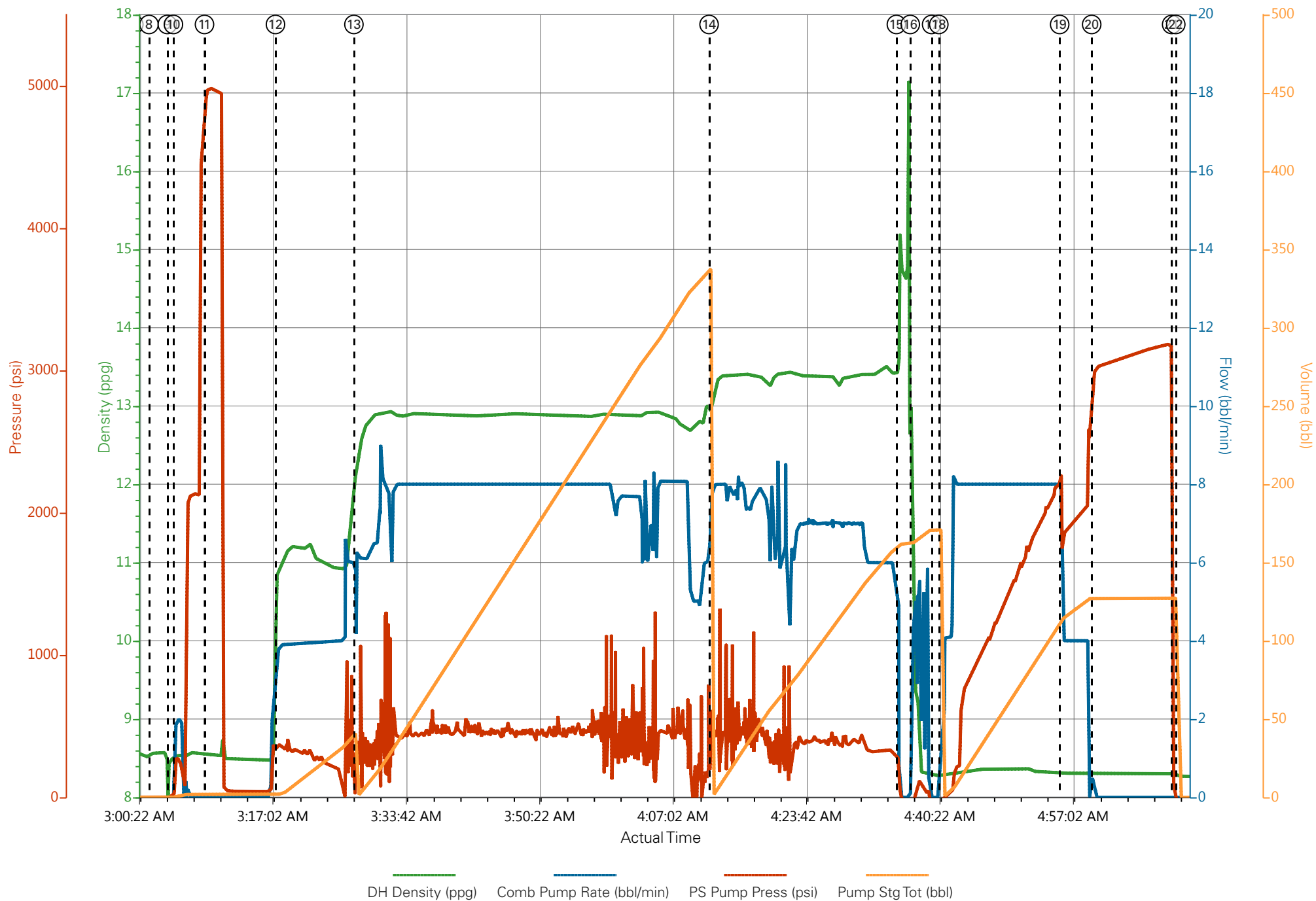
Type	Seq. No.	Activity	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	7/22/2015	19:00:00	USER					ELITE # 4
Event	2	Pre-Convoy Safety Meeting	7/22/2015	21:30:00	USER					ALL HES EMPLOYEES
Event	3	Arrive At Loc	7/22/2015	23:30:00	USER					ARRIVED 1 HOUR EARLY DID NOT START CHARGING HOURS UNTIL REQUESTED ON LOCATION TIME
Event	4	Assessment Of Location Safety Meeting	7/22/2015	23:45:00	USER					ALL HES EMPLOYEES
Event	5	Pre-Rig Up Safety Meeting	7/23/2015	00:30:00	USER					ALL HES EMPLOYEES
Event	6	Rig-Up Equipment	7/23/2015	00:45:00	USER					HT-400 PUMP TRUCK (ELITE #4) 2 660 BULK TRUCKS 1 F-550 PICKUP 1 IRON TRAILER
Event	7	Pre-Job Safety Meeting	7/23/2015	03:00:00	USER					ALL HES EMPLOYEES AND RIG CREW RIG CIRULATED FOR 1 HOUR AT 10 BBL/MIN PRIOR TO JOB GAS AT 794 PRIOR TO JOB
Event	8	Start Job	7/23/2015	03:01:54	COM5					TD: 7861 TP: 7851 TVD: 7792 CSG: 4 1/2 11.6# L-80 SJ: 89.66 OH: 7 7/8 MUD WEIGHT: 9.8 PPG SURFACE CSG: 8 5/8 24# @ 1558
Event	9	Drop Bottom Plug	7/23/2015	03:04:10	USER					PLUG AWAY NO PROBLEM
Event	10	Prime Pumps	7/23/2015	03:04:56	COM5	8.33	2.0	292	2.0	PRIME LINES FRESH WATER

Event	11	Test Lines	7/23/2015	03:08:49	COM5	8.33	0.0	4989	2.0	PRESSURE TEST OK
Event	12	Pump Spacer 1	7/23/2015	03:17:41	COM5	11.0	4.0	255	40.0	40 BBL 11.0 PPG 4.55 YIELD 30 GAL/SK TUNED SPACER III WEIGHT CHECKED VIA PRESSURIZED MUD SCALES
Event	13	Pump Lead Cement	7/23/2015	03:27:29	COM5	12.8	8.0	470	279.8	898 SKS 12.8 PPG 1.75 YIELD 8.5 GAL/SK LEAD CEMENT WEIGHT CHECKED VIA PRESSURIZED MUD SCALES
Event	14	Pump Tail Cement	7/23/2015	04:11:51	COM5	13.30	8.0	442	139.0	413 SKS 13.3 PPG 1.89 YIELD 8.66 GAL/SK TAIL CEMENT WEIGHT CHECKED VIA PRESSURIZED MUD SCALES
Event	15	Other	7/23/2015	04:35:15	COM5					
Event	16	Clean Lines	7/23/2015	04:36:59	USER					CLEAN LINES FRESH WATER
Event	17	Drop Top Plug	7/23/2015	04:39:39	USER					PLUG AWAY NO PROBLEMS
Event	18	Pump Displacement	7/23/2015	04:40:33	COM5	8.4	8.0	2220	120.3	FRESH WATER DISPLACEMENT 5 GAL CLA- WEB 1 GAL MMCR
Event	19	Slow Rate	7/23/2015	04:55:39	USER	8.4	4.0	2060	110.3	SLOW RATE TO BUMP PLUG
Event	20	Bump Plug	7/23/2015	04:59:39	COM5	8.4	4.0	2460	120.3	PRESSURE PRIOR TO BUMPING PLUG @ 2460 BUMPED PLUG UP TO 3185 PSI AND HELD FOR 10 MIN CASING TEST AS PER COMPANY REP.
Event	21	Other	7/23/2015	05:09:39	COM5	8.4	0.0	3185	120.3	FLOATS HELD 1 1/2 BBLS RETURNED BACK TO TRUCKS TANK
Event	22	End Job	7/23/2015	05:10:09	COM5					GOOD RETURNS THROUGHOUT JOB PIPE WAS STATIC THROUGHOUT JOB CIRULATED 40 BBLS

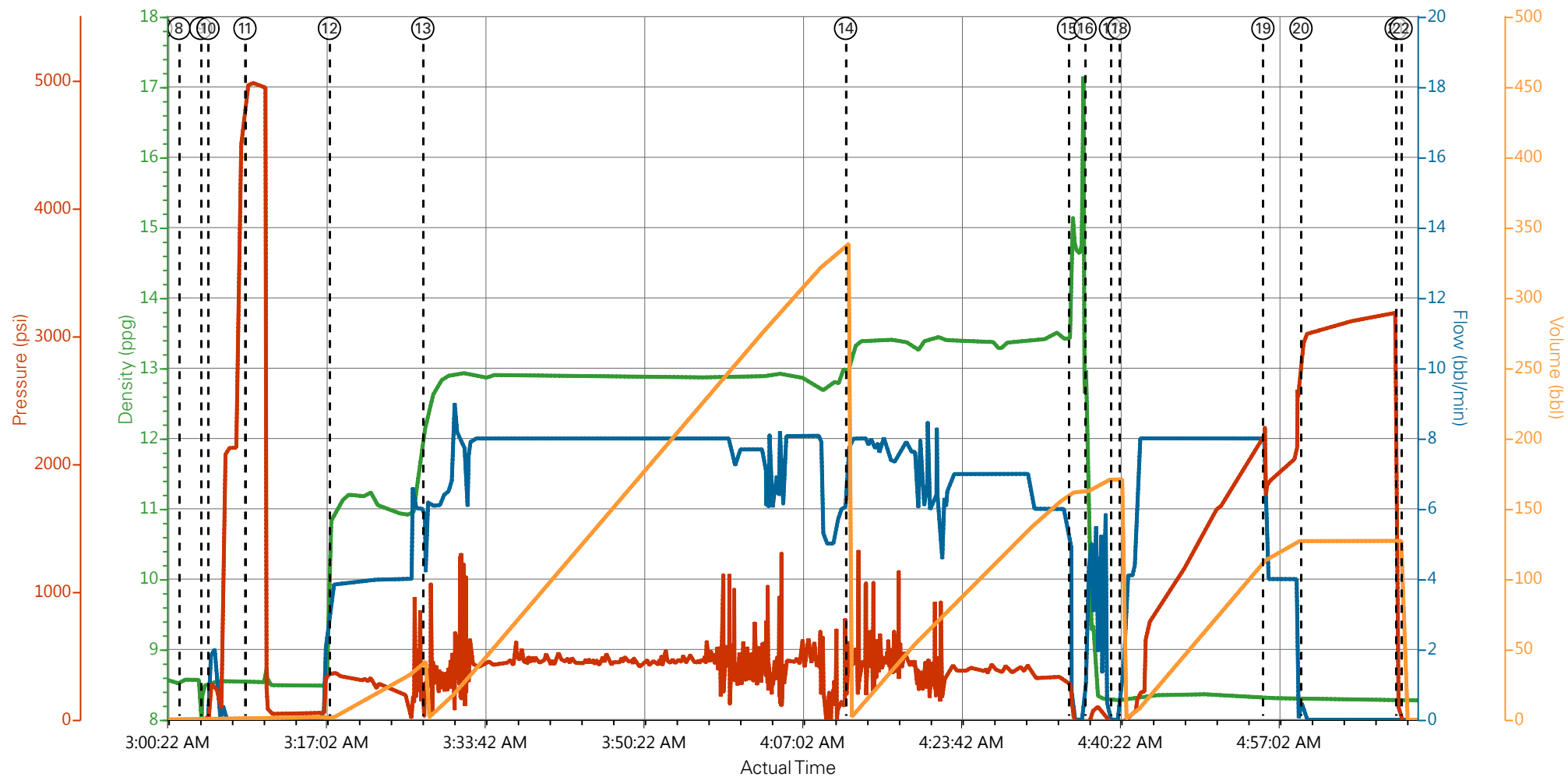
TUNED SPACER III AND
TRACE AMOUNTS OF
CEMENT TO SURFACE

Event	23	Pre-Rig Down Safety Meeting	7/23/2015	05:45:00	USER	ALL HES EMPLOYEES
Event	24	Rig-Down Equipment	7/23/2015	06:00:00	USER	
Event	25	Pre-Convoy Safety Meeting	7/23/2015	06:45:00	USER	ALL HES EMPLOYEES
Event	26	Crew Leave Location	7/23/2015	07:00:00	USER	THANK YOU FOR USING HALLIBURTON CEMENT DAVID CAMPBELL AND CREW

PICEANCE ENERGY - PICEANCE 28-10W - 4 1/2 PRODUCTION



PICEANCE ENERGY - PICEANCE 28-10W - 4 1/2 PRODUCTION



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

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

▼ **HALLIBURTON** | iCem® Service

Created: 2015-07-22 20:56:29, Version: 4.1.107

Edit

Customer : PICEANCE ENERGY LLC - EBUS

Job Date : 7/23/2015 1:09:04 AM

Well : PICEANCE 28-10W

Representative : PRICE HERNANDEZ

Sales Order # : 0902593216

ELITE # 4 : DAVID CAMPBELL / RYAN MARTIN

HALLIBURTON

Water Analysis Report

Company: PICEANCE

Submitted by: DAVID CAMPBELL

Attention:

Lease PICEANCE

Well # 28-10W

Date: 7/22/2015

Date Rec.: 7/22/2015

S.O.# 902593216

Job Type: PRODUCTION

Specific Gravity	<i>MAX</i>	1
pH	<i>8</i>	7
Potassium (K)	<i>5000</i>	300 Mg / L
Calcium (Ca)	<i>500</i>	120 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>	63 Deg
Total Dissolved Solids		310 Mg / L

Respectfully: DAVID CAMPBELL

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 #: 0902593216	Line Item: 10	Survey Conducted Date: 7/23/2015
Customer: PICEANCE ENERGY LLC - EBUS		Job Type (BOM): CMT PRODUCTION CASING BOM
Customer Representative:		API / UWI: (leave blank if unknown) 05-077-09778-00
Well Name: PICEANCE		Well Number: 0080127658
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	7/23/2015
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HX37079
Customer Participation	Did the customer participate in this survey? (Y/N)	No
Customer Representative	Enter the Customer representative name	
HSE	Was our HSE performance satisfactory? Circle Y or N	
Equipment	Were you satisfied with our Equipment? Circle Y or N	
Personnel	Were you satisfied with our people? Circle Y or N	
Customer Comment	Customer's Comment	

CUSTOMER SIGNATURE

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KEY PERFORMANCE INDICATORS

General	
Survey Conducted Date	7/23/2015
The date the survey was conducted	

Cementing KPI Survey	
Type of Job	0
Select the type of job. (Cementing or Non-Cementing)	
Select the Maximum Deviation range for this Job	Vertical
What is the highest deviation for the job you just completed? This may not be the maximum well deviation.	
Total Operating Time (hours)	5
Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.	
HSE Incident, Accident, Injury	No
HSE Incident, Accident, Injury. This should be recordable incidents only.	
Was the job purpose achieved?	Yes
Was the job delivered correctly as per customer agreed design?	
Pumping Hours	3
Total number of hours pumping fluid on this job. Enter in decimal format.	
Type of Rig Classification Job Was Performed	Drilling Rig (Portable)
Type Of Rig (classification) Job Was Performed On	
Number Of JSAs Performed	6
Number Of Jsas Performed	
Was this a Primary Cement Job (Yes / No)	Yes
Primary Cement Job= Casing job, Liner job, or Tie-back job.	
Number of Unplanned Shutdowns	0
Unplanned shutdown is when injection stops for any period of time.	
Customer Non-Productive Rig Time (hrs)	0

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Customer Representative:		API / UWI: (leave blank if unknown) 05-077-09778-00
Well Name: PICEANCE		Well Number: 0080127658
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