

Piceance Energy LLC - EBUS

Gunderson 29-11E

Patterson 306

Post Job Summary

Cement Surface Casing

Date Prepared: 4/12/2015

Job Date: 4/1/2015

Submitted by: Patrick Ealey – Grand Junction Cement Engineer

The Road to Excellence Starts with Safety

Sold To #: 344919	Ship To #: 3123913	Quote #:	Sales Order #: 0902276422
Customer: PICEANCE ENERGY LLC - EBUS		Customer Rep: Matt Settles	
Well Name: GUNDERSON	Well #: 29-11E	API/UWI #: 05-077-09768-00	
Field: VEGA	City (SAP): COLLBRAN	County/Parish: MESA	State: COLORADO
Legal Description: SE NE-29-9S-93W-2401FNL-1119FEL			
Contractor: PATTERSON-UTI ENERGY		Rig/Platform Name/Num: PATTERSON 306	
Job BOM: 7521			
Well Type: DIRECTIONAL GAS			
Sales Person: HALAMERICA\HX41066		Srvc Supervisor: Bill Jamison	

Job

CEMENT TO SURFACE 17 BBLs

Formation Name			
Formation Depth (MD)	Top		Bottom
Form Type			BHST
Job depth MD	1568ft		Job Depth TVD 1556
Water Depth			Wk Ht Above Floor 4
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
Open Hole Section			11				0	1556		0
Casing		8.625	8.097	24	8 RD	J-55	0	1568		0

Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	8.625	1		1556	Top Plug	8.625	1	HES
Float Shoe					Bottom Plug	8.625	1	HES
Float Collar	8.625	1		1511	SSR plug set			
Insert Float					Plug Container	8.625	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	Fresh Water	Fresh Water	40	bbl	8.4			6	

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	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	114	sack	12.8	2.184			12.11
12.11 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	96.9	bbl	8.4			8	
Cement Left In Pipe	Amount	44.48ft		Reason				Shoe Joint	

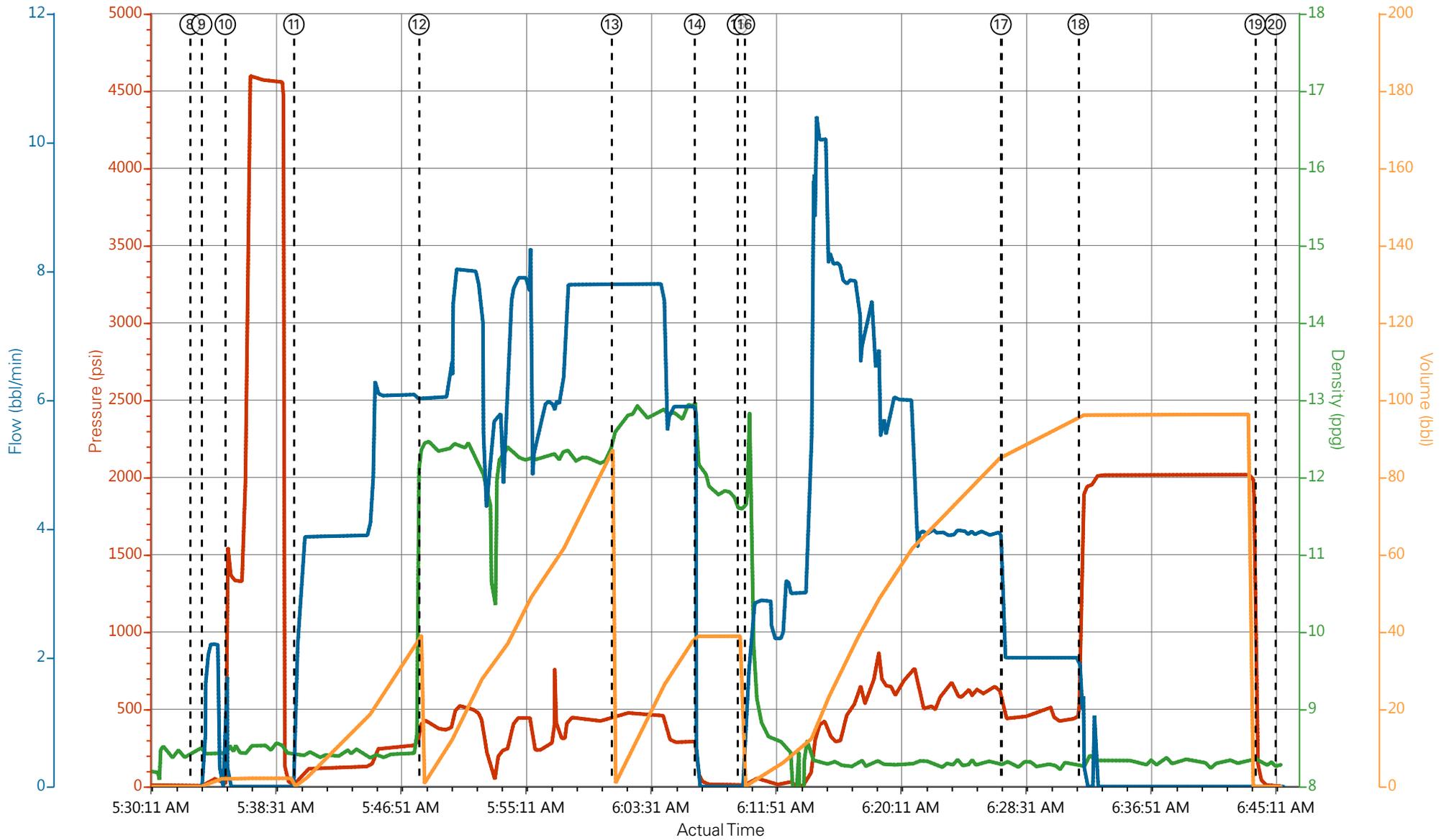
2.0 Real-Time Job Summary

2.1 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	4/1/2015	00:01:00	USER					TD 1556 TP 1568 SJ 44.48 CASING 8.625 24# J-55 HOLE SIZE 11.0 MUD 9.3
Event	2	Depart Yard Safety Meeting	4/1/2015	01:50:00	USER					HAD TO SLOW RATE WHILE ON DISPLACEMENT DO TO PRESSURE AND WELL SEEM TO TRY TO PACK OFF
Event	3	Crew Leave Yard	4/1/2015	02:00:00	USER					
Event	4	Arrive At Loc	4/1/2015	03:30:00	USER					
Event	5	Assessment Of Location Safety Meeting	4/1/2015	03:40:00	USER					
Event	6	Pre-Rig Up Safety Meeting	4/1/2015	04:00:00	USER					
Event	7	Pre-Job Safety Meeting	4/1/2015	05:00:00	USER					
Event	8	Start Job	4/1/2015	05:33:00	COM2					
Event	9	Prime Pumps	4/1/2015	05:33:46	COM2	8.4	2	52	2	FRESH WATER
Event	10	Test Lines	4/1/2015	05:35:20	COM2			4600		
Event	11	Pump Spacer 1	4/1/2015	05:39:55	COM2	8.4	6	265	40	FRESH WATER
Event	12	Pump Lead Cement	4/1/2015	05:48:15	COM2	12.3	8	520	84	192 SKS YIELD 2.46 WAT/REQ 14.17
Event	13	Pump Tail Cement	4/1/2015	06:01:05	COM2	12.8	8	460	44.3	114 SKS YIELD 2.18 WAT/REQ 12.11
Event	14	Shutdown	4/1/2015	06:06:37	USER					

Event	15	Drop Top Plug	4/1/2015	06:09:29	COM2					
Event	16	Pump Displacement	4/1/2015	06:09:56	COM2	8.4	8	700	86	FRESH WATER
Event	17	Slow Rate	4/1/2015	06:27:03	USER	8.4	2	450	10.9	
Event	18	Bump Plug	4/1/2015	06:32:12	COM2	8.29	1.50	450	96.9	PRESSURED UP TO 2000 PSI 10 MIN CASING TEST
Event	19	Check Floats	4/1/2015	06:44:00	USER					FLOATS HELD
Event	20	End Job	4/1/2015	06:45:20	COM2					GOOD CIRCULATION THROUGHOUT JOB
Event	21	Post-Job Safety Meeting (Pre Rig-Down)	4/1/2015	06:50:00	USER					CEMENT TO SURFACE 17 BBLS
Event	22	Depart Location Safety Meeting	4/1/2015	07:50:00	USER					CASING WAS NOT MOVED THROUGHOUT JOB
Event	23	Crew Leave Location	4/1/2015	08:00:00	USER					THANKS FOR USING HALLIBURTON BILL JAMISON & CREW

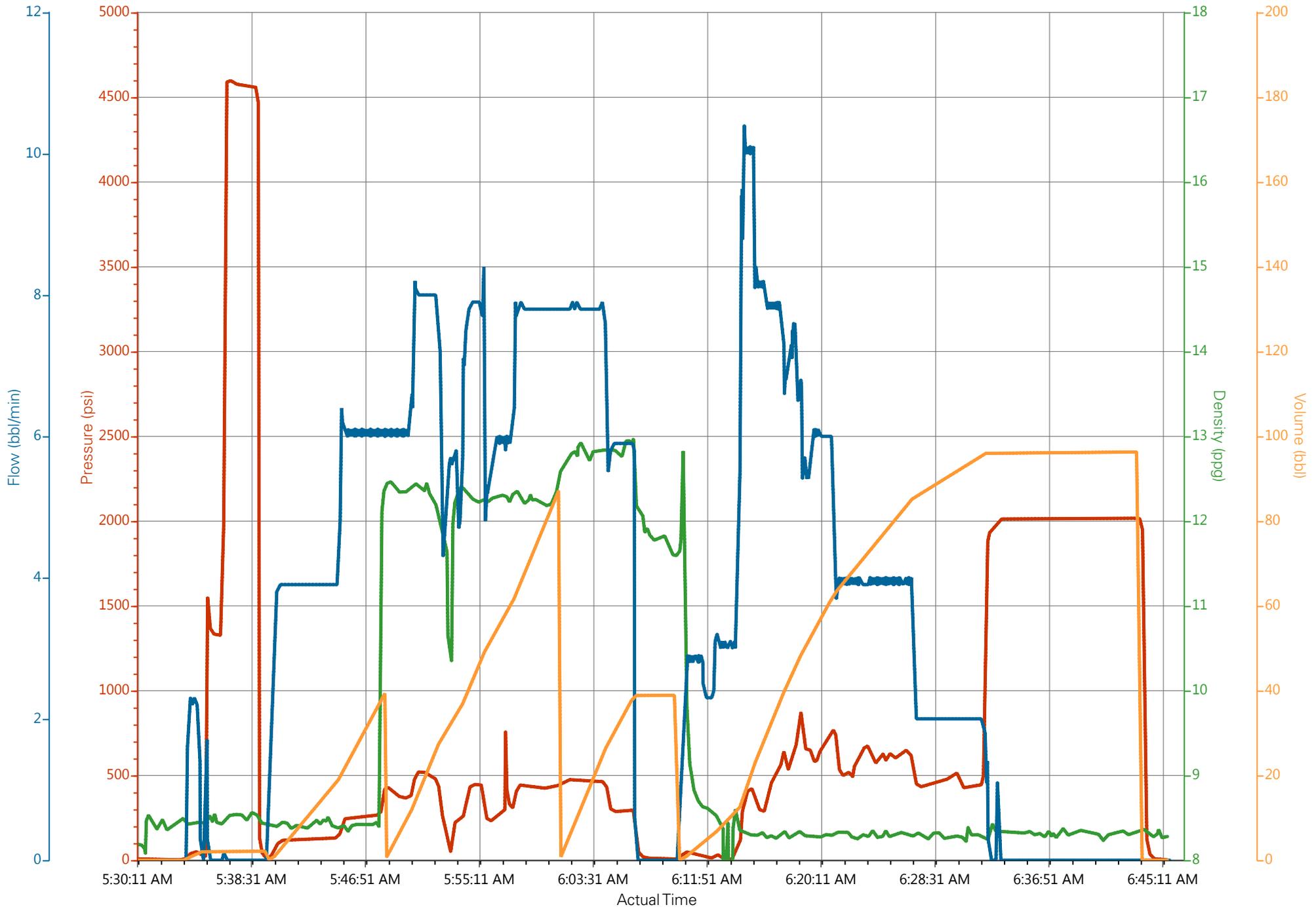
Gunderson 29-11E Surface



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

- | | | | |
|--|---|---|---|
| ① Call Out <i>n/a;n/a;n/a;n/a</i> | ⑦ Pre-Job Safety Meeting <i>21;8.2;0;0</i> | ⑬ Pump Tail Cement <i>446;12.57;78;0.7</i> | ⑰ Check Floats <i>106;8.33;0;0</i> |
| ② Depart Yard Safety Meeting <i>n/a;n/a;n/a;n/a</i> | ⑧ Start Job <i>2;8.5;0;0</i> | ⑭ Shutdown <i>99;12.18;0;38.9</i> | ⑳ End Job <i>2;8.25;0;0</i> |
| ③ Crew Leave Yard <i>n/a;n/a;n/a;n/a</i> | ⑨ Prime Pumps <i>15;8.44;0;0</i> | ⑮ Drop Top Plug <i>7;11.57;0;38.9</i> | ㉑ Post-Job Safety Meeting (Pre Rig-Down) <i>n/a;n/a;n/a;n/a</i> |
| ④ Arrive At Loc <i>n/a;n/a;n/a;n/a</i> | ⑩ Test Lines <i>1478;8.58;0;2</i> | ⑯ Pump Displacement <i>22;12.41;1.8;0.2</i> | ㉒ Depart Location Safety Meeting <i>n/a;n/a;n/a;n/a</i> |
| ⑤ Assessment Of Location Safety Meeting <i>n/a;n/a;n/a;n/a</i> | ⑪ Pump Spacer 1 <i>22;8.43;1.8;0.2</i> | ⑱ Slow Rate <i>460;8.34;2;85.8</i> | ㉓ Crew Leave Location <i>n/a;n/a;n/a;n/a</i> |
| ⑥ Pre-Rig Up Safety Meeting <i>n/a;n/a;n/a;n/a</i> | ⑫ Pump Lead Cement <i>430;12.45;6.1;0.1</i> | ⑲ Bump Plug <i>1427;8.29;1.5;96</i> | |

Gunderson 29-11E Surface



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

HALLIBURTON

Water Analysis Report

Company: PICEANCE ENERGY

Date: 4/1/2015

Submitted by: BILL JAMISON

Date Rec.: 4/1/2015

Attention: DALLAS SCOTT

S.O.# 902276422

Lease GUNDERSON

Job Type: SURFACE

Well # 29-11E

Specific Gravity	<i>MAX</i>	1
pH	<i>8</i>	7.5
Potassium (K)	<i>5000</i>	0 Mg / L
Calcium (Ca)	<i>500</i>	50 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
Chlorine (Cl ₂)		0 Mg / L
Temp	<i>40-80</i>	40 Deg
Total Dissolved Solids		410 Mg / L

Respectfully: BILL JAMISON

Title: CEMENTING SUPERVISOR

Location: WILLISTON ND

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 #: 0902276422	Line Item: 10	Survey Conducted Date: 4/1/2015
Customer: PICEANCE ENERGY LLC - EBUS		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative: MATT SETTELS		API / UWI: (leave blank if unknown) 05-077-09768-00
Well Name: GUNDERSON		Well Number: 0080127648
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	4/1/2015
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HAL9235
Customer Participation	Did the customer participate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	MATT SETTELS
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	NONE

CUSTOMER SIGNATURE

Sales Order #: 0902276422	Line Item: 10	Survey Conducted Date: 4/1/2015
Customer: PICEANCE ENERGY LLC - EBUS		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative: MATT SETTELS		API / UWI: (leave blank if unknown) 05-077-09768-00
Well Name: GUNDERSON		Well Number: 0080127648
Well Type: DIRECTIONAL GAS	Well Country: USA	
H2S Present: No	Well State: COLORADO	Well County: MESA

KEY PERFORMANCE INDICATORS

General	
Survey Conducted Date	4/1/2015
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)	3
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	1
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	5
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

Sales Order #: 0902276422	Line Item: 10	Survey Conducted Date: 4/1/2015
Customer: PICEANCE ENERGY LLC - EBUS		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative: MATT SETTELS		API / UWI: (leave blank if unknown) 05-077-09768-00
Well Name: GUNDERSON		Well Number: 0080127648
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	98
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	98
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