

Piceance Energy LLC - EBUS

Gunderson 29-09M

Patterson 306

Post Job Summary

Cement Surface Casing

Date Prepared: 06/19/2015
Job Date: 06/17/2015

Submitted by: Jenna Cook– Grand Junction Cement Engineer

The Road to Excellence Starts with Safety

Sold To #: 344919	Ship To #: 3123908	Quote #:	Sales Order #: 0902497156
Customer: PICEANCE ENERGY LLC - EBUS	Customer Rep: ROGER FOSTER		
Well Name: GUNDERSON	Well #: 29-09M	API/UWI #: 05-077-09763-00	
Field: VEGA	City (SAP): COLLBRAN	County/Parish: MESA	State: COLORADO
Legal Description: SE NE-29-9S-93W-2406FNL-1239FEL			
Contractor: PATTERSON-UTI ENERGY	Rig/Platform Name/Num: PATTERSON 306		
Job BOM: 7521			
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	1577 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		16	15.25	65			0	60		
Casing		8.625	8.097	24		J-55	0	1567		
Open Hole Section			11				60	1577		

Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	8.625	1		1567	Top Plug	8.625	1	HES
Float Shoe	8.625				Bottom Plug	8.625	1	HES
Float Collar	8.625	1		1521.4	SSR plug set	8.625		
Insert Float	8.625				Plug Container	8.625	1	HES
Stage Tool	8.625				Centralizers	8.625		

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	8.33			4		
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/min	Total Mix Fluid Gal
3	VariCem GJ5	VARICEM (TM) CEMENT	114	sack	12.8	2.18		8	12.11
12.05 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
4	Fresh Water Displacement	Fresh Water Displacement	96.7	bbl	8.9			8	
Cement Left In Pipe		Amount	46 ft		Reason			Shoe Joint	
Mix Water:		7 PH	Mix Water Chloride:		0 PPM		Mix Water Temperature:		64 F
Cement Temperature:			Plug Displaced by:		8.9 PPG		Disp. Temperature:		
Plug Bumped?		YES	Bump Pressure:		420 PSI		Floats Held?		YES
Cement Returns:			Returns Density:				Returns Temperature:		
Comment									

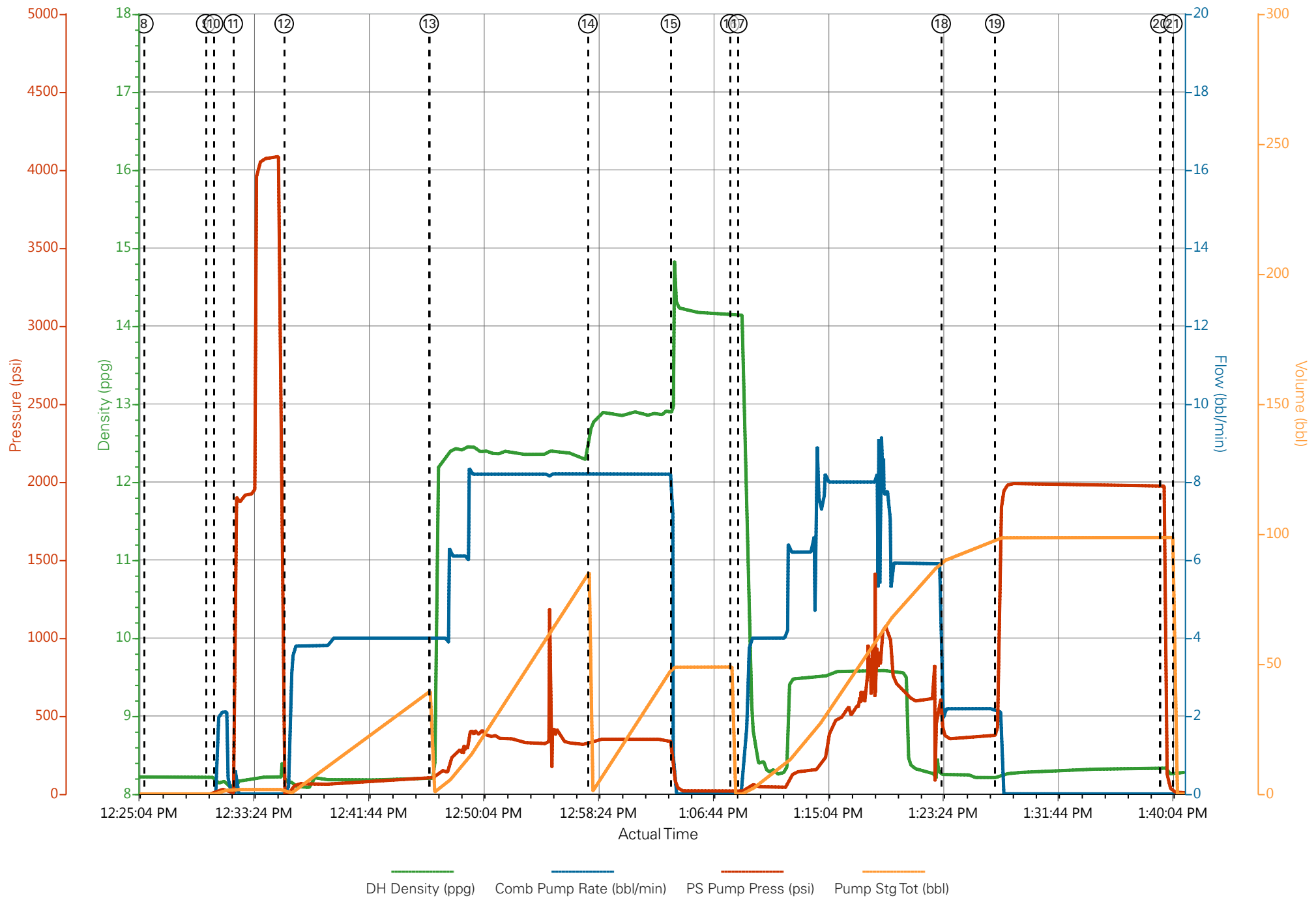
1.0 Real-Time Job Summary

1.1 Job Event Log

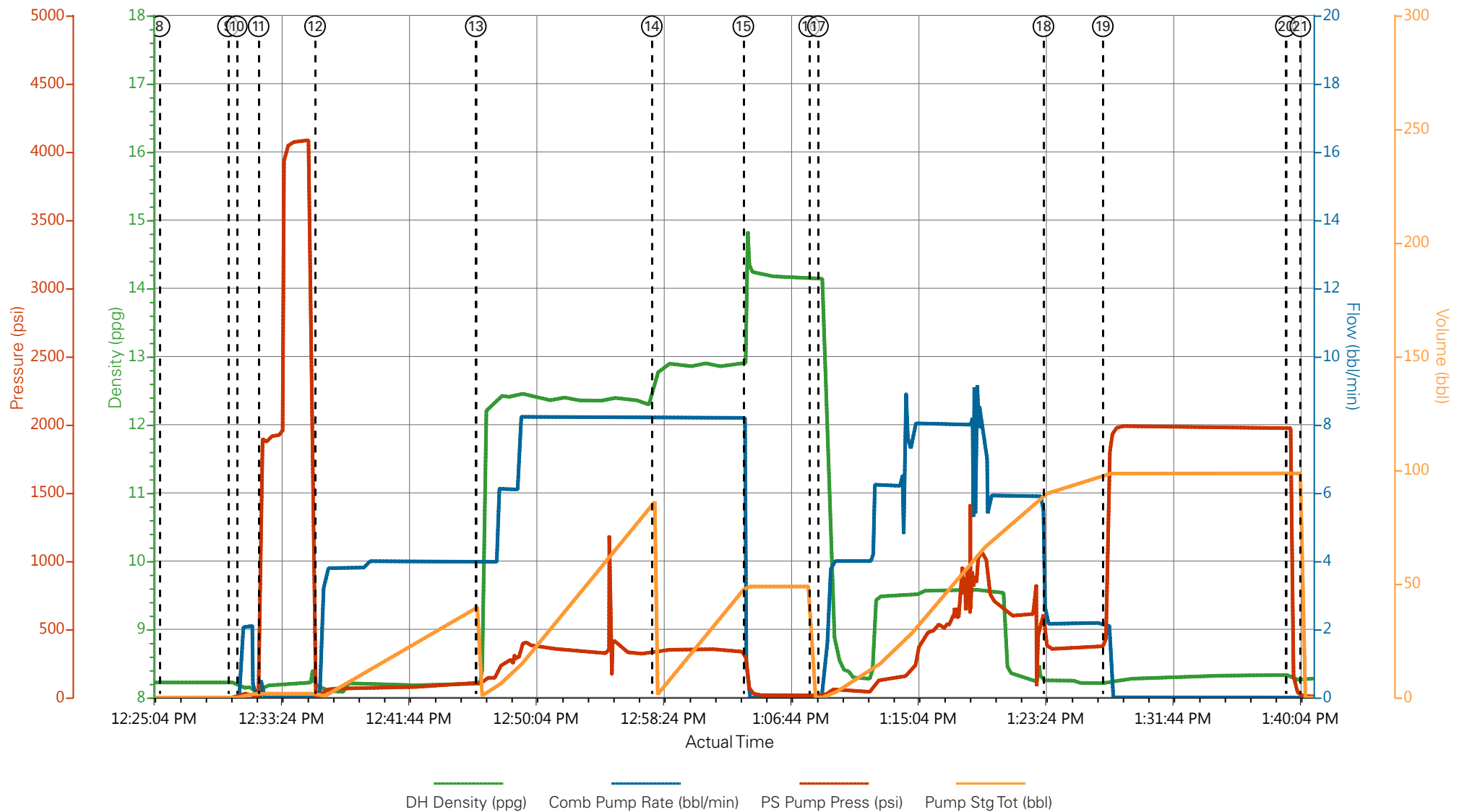
Type	Seq. No.	Activity	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	6/17/2015	03:30:00	USER					ELITE # 4
Event	2	Pre-Convoy Safety Meeting	6/17/2015	05:45:00	USER					ALL HES EMPLOYEES
Event	3	Arrive At Loc	6/17/2015	07:30:00	USER					ARRIVED 2 HOURS EARLY DID NOT START CHARGING HOURS UNTIL REQUESTED ON LOCATION TIME
Event	4	Assessment Of Location Safety Meeting	6/17/2015	07:45:00	USER					ALL HES EMPLOYEES
Event	5	Pre-Rig Up Safety Meeting	6/17/2015	08:00:00	USER					ALL HES EMPLOYEES
Event	6	Rig-Up Equipment	6/17/2015	08:15:00	USER					1 HT-400 PUMP TRUCK (ELITE # 4) 1 660 BULK TRUCK 1 F-550 PICKUP 1 BOOSTER TRAILER
Event	7	Pre-Job Safety Meeting	6/17/2015	12:00:00	USER					ALL HES EMPLOYEES AND RIG CREW RIG CIRULATED FOR 1 HOUR AT 10 BBL/MIN PRIOR TO JOB
Event	8	Start Job	6/17/2015	12:25:37	COM5					TD: 1577 TP: 1567 SJ: 45.54 CSG: 8 5/8 24# J-55 OH: 11 MUD WEIGHT: 8.9 PPG
Event	9	Drop Bottom Plug	6/17/2015	12:30:06	USER					PLUG AWAY NO PROBLEM
Event	10	Prime Pumps	6/17/2015	12:30:40	COM5	8.33	2.0	29	2.0	FILL LINES FRESH WATER
Event	11	Test Lines	6/17/2015	12:32:06	COM5	8.33	0.00	4080	2.0	PRESSURE TEST OK
Event	12	Pump Spacer 1	6/17/2015	12:35:48	COM5	8.33	4.0	102	40.0	40 BBL FRESH WATER

SPACER										
Event	13	Pump Lead Cement	6/17/2015	12:46:19	COM5	12.3	8.0	385	84.1	192 SKS 12.3 PPG 2.46 YIELD 14.17 GAL/SK LEAD CEMENT WEIGHT VERIFIED VIA PRESSURIZED MUD SCALES
Event	14	Pump Tail Cement	6/17/2015	12:57:50	COM5	12.8	8.0	350	44.2	114 SKS 12.8 PPG 2.18 YIELD 12.11 GAL/SK TAIL CEMENT WEIGHT VERIFIED VIA PRESSURIZED MUD SCALES
Event	15	Shutdown	6/17/2015	13:03:49	USER					
Event	16	Drop Top Plug	6/17/2015	13:08:08	USER					PLUG AWAY NO PROBLEMS
Event	17	Pump Displacement	6/17/2015	13:08:42	COM5	8.9	8.0	670	96.7	MUD DISPLACEMENT
Event	18	Slow Rate	6/17/2015	13:23:27	USER	8.9	2.0	377	86.7	SLOW RATE TO BUMP PLUG
Event	19	Bump Plug	6/17/2015	13:27:20	COM5	8.9	2.0	420	96.7	PRESSURE BEFORE BUMPING PLUG AT 420 PSI BUMPED PLUG UP TO 1982 HELD FOR 10 MIN CASING TEST AS PER COMPANY REP
Event	20	Other	6/17/2015	13:39:19	COM5	8.9	0.0	1982	96.7	FLOATS HELD 1 BBL BACK TO TRUCKS TANK
Event	21	End Job	6/17/2015	13:40:16	COM5					GOOD RETURNS THROUGHOUT JOB PIPE WAS STATIC THROUGHOUT JOB 16 BBLS CEMENT CIRCULATED TO SURFACE
Event	22	Pre-Rig Down Safety Meeting	6/17/2015	14:15:00	USER					ALL HES EMPLOYEES
Event	23	Rig-Down Equipment	6/17/2015	14:30:00	USER					
Event	24	Pre-Convoy Safety Meeting	6/17/2015	15:15:00	USER					ALL HES EMPLOYEES
Event	25	Crew Leave Location	6/17/2015	15:30:00	USER					THANK YOU FOR USING HALLIBURTON CEMENT DAVID CAMPBELL AND

PICEANCE - GUNDERSON 29-09M - 8 5/8 SURFACE



PICEANCE - GUNDERSON 29-09M - 8 5/8 SURFACE



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

▼ **HALLIBURTON** | iCem® Service

Created: 2015-06-17 04:55:15, Version: 4.1.107

Edit

Customer: PICEANCE ENERGY LLC - EBUS

Job Date: 6/17/2015 9:00 AM

Well: GUNDERSON 29-09M

Representative: ROGER FOSTER

Sales Order #: 0902497156

ELITE # 4: DAVID CAMPBELL/ JUSTIN BROWN

Sales Order #: 0902497156	Line Item: 10	Survey Conducted Date: 6/17/2015
Customer: PICEANCE ENERGY LLC - EBUS		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative: ROGER FOSTER		API / UWI: (leave blank if unknown) 05-077-09763-00
Well Name: GUNDERSON		Well Number: 0080127643
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	6/17/2015
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	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

Sales Order #: 0902497156	Line Item: 10	Survey Conducted Date: 6/17/2015
Customer: PICEANCE ENERGY LLC - EBUS		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative: ROGER FOSTER		API / UWI: (leave blank if unknown) 05-077-09763-00
Well Name: GUNDERSON		Well Number: 0080127643
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	6/17/2015

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 #: 0902497156	Line Item: 10	Survey Conducted Date: 6/17/2015
Customer: PICEANCE ENERGY LLC - EBUS		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative: ROGER FOSTER		API / UWI: (leave blank if unknown) 05-077-09763-00
Well Name: GUNDERSON		Well Number: 0080127643
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

HALLIBURTON

Water Analysis Report

Company: PICEANCE

Submitted by: DAVID CAMPBELL

Attention:

Lease GUNDERSON

Well # 29-09M

Date: 6/17/2015

Date Rec.: 6/17/2015

S.O.# 902497156

Job Type: SURFACE

Specific Gravity	<i>MAX</i>	1
pH	<i>8</i>	7
Potassium (K)	<i>5000</i>	400 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>	64 Deg
Total Dissolved Solids		340 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