

Piceance Energy LLC- EBUS

Gunderson 29-09M

Patterson 306

Post Job Summary

Cement Production Casing

Date Prepared: 06/24/2015

Job Date: 06/21/2015

Submitted by: Evan Russell – Grand Junction Cement Engineer

The Road to Excellence Starts with Safety

Sold To #: 344919	Ship To #: 3123908	Quote #:	Sales Order #: 0902505204
Customer: PICEANCE ENERGY LLC - EBUS		Customer Rep:	
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: 7523			
Well Type: DIRECTIONAL GAS			
Sales Person: HALAMERICA\HX41066		Srvc Supervisor: Cliff Sparks	
Job			

HOT 3424', TOT 4510', LEAD TO SURFACE. GREAT RETURNS THROUGHOUT JOB. GOT 40 BBLs TUNED SPACER AND 25 BBLs LEAD CEMENT TO SURFACE

Formation Name			
Formation Depth (MD)	Top	Bottom	
Form Type		BHST	
Job depth MD	7934ft	Job Depth TVD	7934ft
Water Depth		Wk Ht Above Floor	3ft
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	1567	0	1567
Casing		4.5	4	11.6	LTC	L-80	0	7934	0	7934
Open Hole Section			8.875				1567	7944	1567	7944

Tools and Accessories									
Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make	
Guide Shoe	4.5	1		7934	Top Plug	4.5	1	HES	
Float Shoe	4.5				Bottom Plug	4.5	1	HES	
Float Collar	4.5	1		7843.8	SSR plug set	4.5			
Insert Float	4.5				Plug Container	4.5			
Stage Tool	4.5				Centralizers	4.5			

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 ft ³ /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/mi n	Total Mix Fluid Gal
2	VersaCem	VERSACEM (TM) SYSTEM	916	sack	12.8	1.75	8.5	4	
	0.25 lbm	POLY-E-FLAKE (101216940)							
	6 lbm	KOL-SEAL, BULK (100064233)							
	8.50 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	ExpandaCem GJ4	EXPANDACEM (TM) SYSTEM	413	sack	13.3	1.89	8.66	4	
	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 ft3/sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal
4	Displacement	Displacement	121.6	bbl	8.33			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			

1.0 Real-Time Job Summary

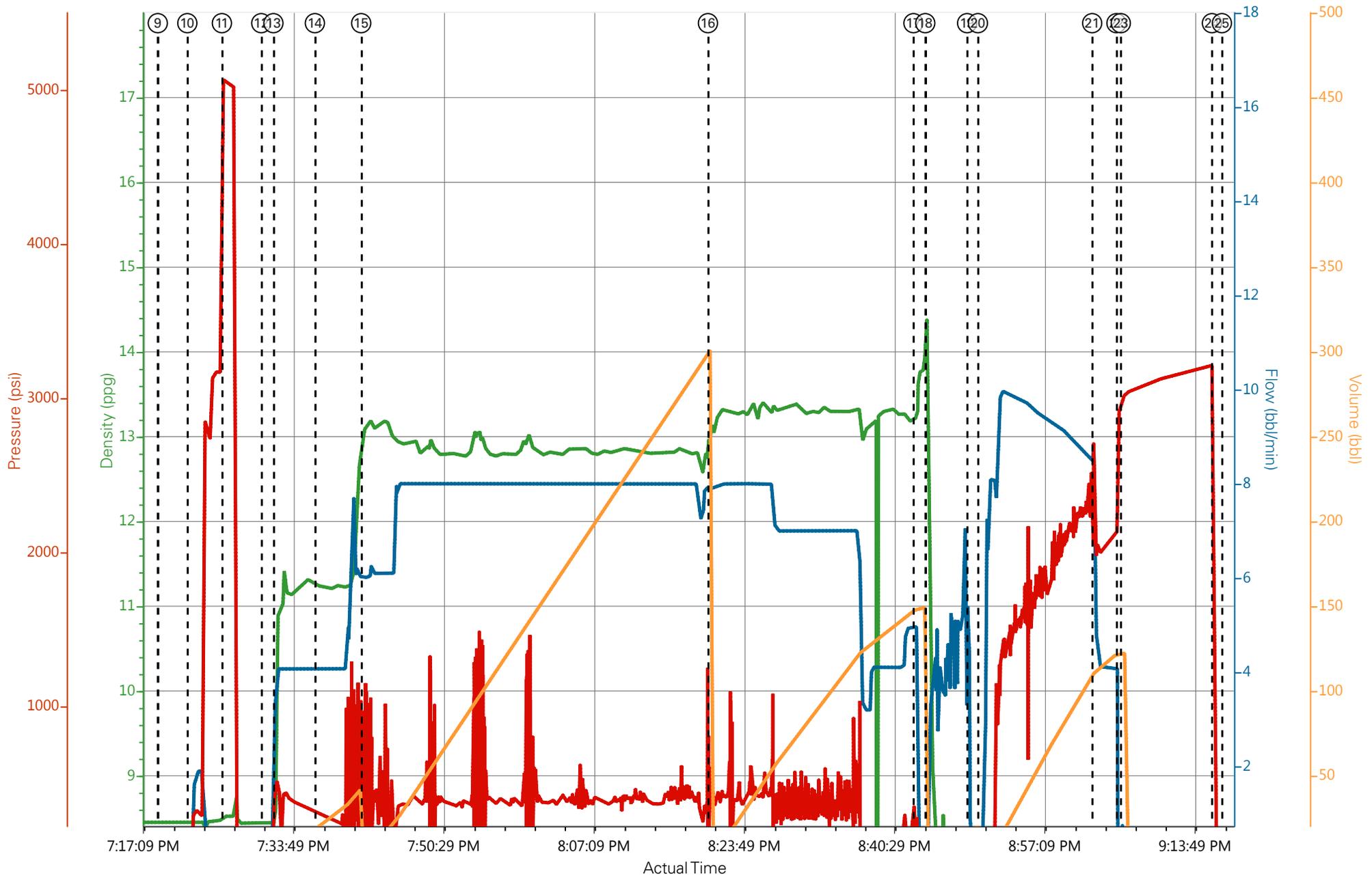
1.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density <i>(ppg)</i>	Comb Pump Rate <i>(bbl/min)</i>	PS Pump Press <i>(psi)</i>	Pump Stg Tot <i>(bbl)</i>	Comments
Event	1	Call Out	Call Out	6/20/2015	11:00:00	USER					ON LOCATION TIME 1730
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	6/20/2015	12:45:00	USER					ALL HES PRESENT
Event	3	Crew Leave Yard	Crew Leave Yard	6/20/2015	13:00:00	USER					1-550, 2-660'S AND 1 ELITE PUMP. ALL TRUCKS LEFT THE YARD TOGETHER
Event	4	Arrive At Loc	Arrive At Loc	6/20/2015	15:00:00	USER					ARRIVED 2 HOURS EARLY CREW STILL RUNNING CASING.
Event	5	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	6/20/2015	15:15:00	USER					TALKED WITH CO REP AND DID A WALKAROUND OF LOCATION. TOOK WATER SAMPLE
Event	6	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	6/20/2015	18:00:00	USER					CASING CREW IN THE WAY WHERE WE NEED TO RIG UP SO WE HAD TO WAIT UNTIL THEY WERE RIGGED DOWN AND MOVED OUT OF THE WAY
Event	7	Rig-up Lines	Rig-up Lines	6/20/2015	18:15:00	USER					
Event	8	Pre-Job Safety Meeting	Pre-Job Safety Meeting	6/20/2015	19:00:00	USER					ALL HES AND RIG CREW PRESENT
Event	9	Start Job	Start Job	6/20/2015	19:19:03	COM5					TD 7944', TP 7934, SC 8.625" @ 1567', 4.5" 11.6# L-80, SJ 90.22', HOLE 7.875", MW 9.3#
Event	10	Prime Pumps	Prime Pumps	6/20/2015	19:22:20	COM5	8.4	2	350	2	2 BBLs FRESH WATER

Event	11	Test Lines	Test Lines	6/20/2015	19:26:10	COM5			5080	2	TESTED TO 5080. TESTED GOOD, KO'S FUNCTIONING
Event	12	Drop Bottom Plug	Drop Bottom Plug	6/20/2015	19:30:32	USER					PLUG WENT
Event	13	Pump Spacer 1	Pump Spacer 1	6/20/2015	19:31:53	COM5	11	4	350	40	40 BBLS TUNED SPACER 11PPG, 4.55 FT3/SK, 30 GAL/SK
Event	14	Check Weight	Check weight	6/20/2015	19:36:29	COM5	11	4	317	20	11 PPG VERIFIED WITH MUD SCALES. ADJUSTED DOWNHOLE
Event	15	Pump Lead Cement	Pump Lead Cement	6/20/2015	19:41:37	COM5	12.8	8	400	285.5	916 SKS (285.5 BBLS) 12.8 PPG, 1.75 FT3/SK, 8.5 GAL/SK
Event	16	Pump Tail Cement	Pump Tail Cement	6/20/2015	20:20:05	COM5	13.3	8	455	139	413 SKS (139 BBLS) 13.3 PPG, 1.89 FT3/SK, 8.66 GAL/SK
Event	17	Shutdown	Shutdown	6/20/2015	20:42:53	USER					END OF CEMENT
Event	18	Clean Lines	Clean Lines	6/20/2015	20:44:11	USER	8.4	4	48.00	10	10 BBLS FRESH WATER
Event	19	Drop Top Plug	Drop Top Plug	6/20/2015	20:48:50	COM5					PLUG WENT
Event	20	Pump Displacement	Pump Displacement	6/20/2015	20:50:02	COM5	8.4	9	2200	121.6	121.6 BBLS FRESH WATER.
Event	21	Slow Rate	Slow Rate	6/20/2015	21:02:42	USER	8.4	4	2100	111	4 BBLS MIN 10 BBLS OUT
Event	22	Bump Plug	Bump Plug	6/20/2015	21:05:24	COM5					LANDED AT 2100 AND PRESSURED UP TO 3000 PSI FOR 10 MIN. CASING TEST
Event	23	Other	Casing Test	6/20/2015	21:05:53	USER			3022.00		TESTED GOOD 3022-3210 PSI
Event	24	Check Floats	Check Floats	6/20/2015	21:16:00	USER					FLOATS HELD 1.5 BBLS BACK TO TRUCK
Event	25	End Job	End Job	6/20/2015	21:17:06	COM5					GREAT RETURNS THROUGHOUT 40 BBLS TUNED SPACER AND 25 BBLS CEMENT TO SURFACE

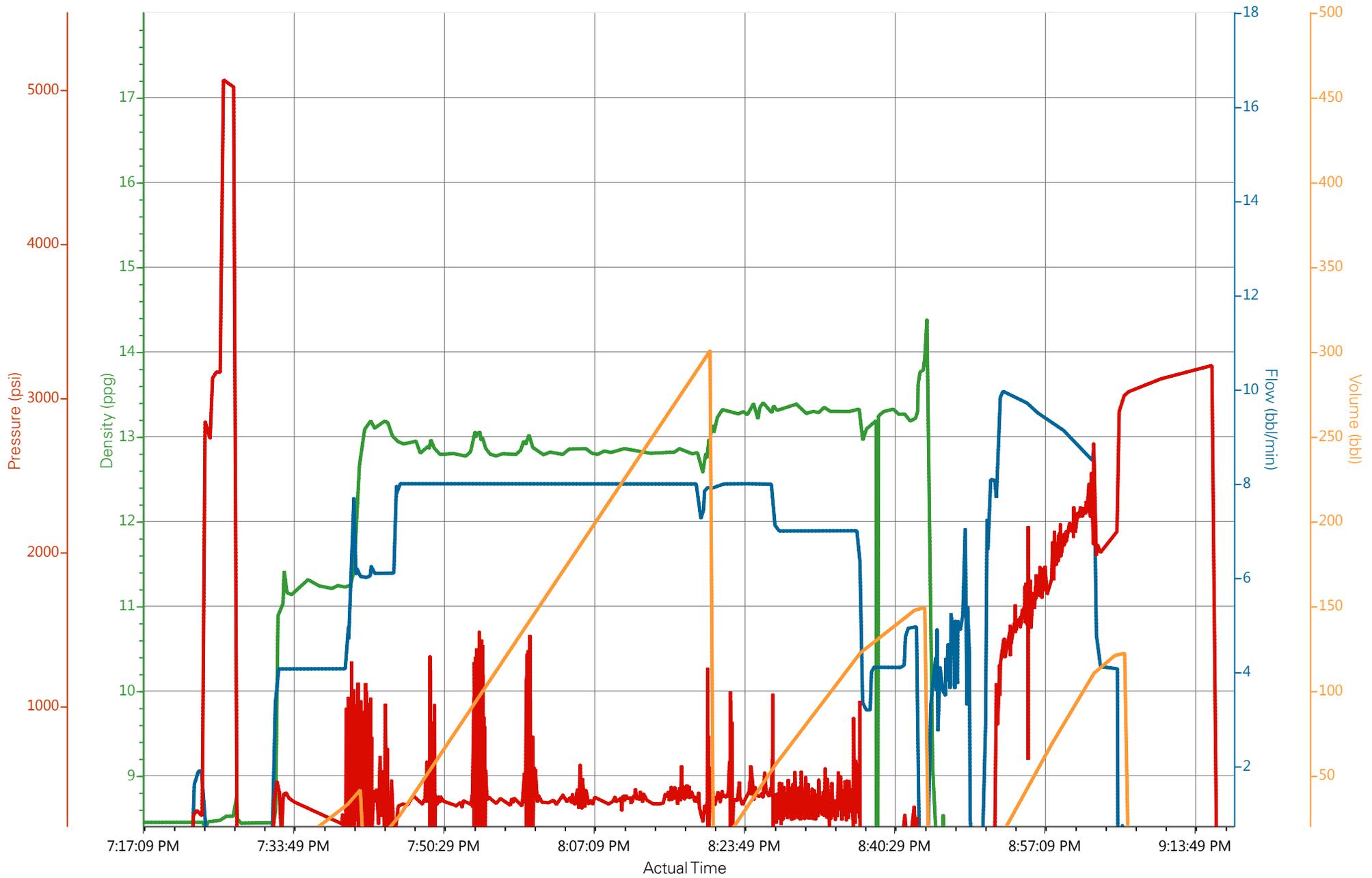
Event	26	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	6/20/2015	21:20:00	USER	ALL HES PRESENT
Event	27	Rig Down Lines	Rig Down Lines	6/20/2015	21:30:00	USER	
Event	28	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	6/20/2015	22:15:00	USER	ALL HES PRESENT
Event	29	Crew Leave Location	Crew Leave Location	6/20/2015	22:30:00	USER	THANK YOU FOR USING HALLIBURTON CEMENT. CLIFF SPARKS AND CREW

PICEANCE GUNDERSON 29-09M 4.5" PRODUCTION



DH Density (ppg) 8.19 Comb Pump Rate (bbl/min) 9.6 PS Pump Press (psi) 293 Pump Stg Tot (bbl) 18.7

PICEANCE GUNDERSON 29-09M 4.5" PRODUCTION



DH Density (ppg) 8.19 Comb Pump Rate (bbl/min) 9.6 PS Pump Press (psi) 293 Pump Stg Tot (bbl) 18.7

HALLIBURTON

Water Analysis Report

Company:	<u>PICEANCE</u>	Date:	<u>6/20/2015</u>
Submitted by:	<u>CLIFF SPARKS</u>	Date Rec.:	<u>6/20/2015</u>
Attention:	<u>DALLAS SCOTT</u>	S.O.#	<u>902505204</u>
Lease	<u>GUNDERSON</u>	Job Type:	<u>PRODUCTION</u>
Well #	<u>29-09M</u>		

Specific Gravity	<i>MAX</i>	1
pH	<i>8</i>	7
Potassium (K)	<i>5000</i>	200 Mg / L
Hardness	<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>	65 Deg
Total Dissolved Solids		250 Mg / L

Respectfully: CLIFF SPARKS
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 i

Sales Order #: 0902505204	Line Item: 10	Survey Conducted Date: 6/21/2015
Customer: PICEANCE ENERGY LLC - EBUS		Job Type (BOM): CMT PRODUCTION 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	6/21/2015
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HB74155
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	N/A

CUSTOMER SIGNATURE

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

KEY PERFORMANCE INDICATORS

General	
Survey Conducted Date	6/21/2015
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	Deviated
What is the highest deviation for the job you just completed? This may not be the maximum well deviation.	
Total Operating Time (hours)	4
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?	No
Was the job delivered correctly as per customer agreed design?	
Pumping Hours	1.5
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

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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)	Not Available
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