

Piceance Energy LLC- EBUS

Piceance 28-12W

Patterson 306

Post Job Summary

Cement Surface Casing

Date Prepared: 03/08/2015

Job Date: 03/06/2015

Submitted by: Jenna Cook – Grand Junction Cement Engineer

The Road to Excellence Starts with Safety

Sold To #: 344919	Ship To #: 3563322	Quote #:	Sales Order #: 0902207390
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: 7521			
Well Type: DIRECTIONAL GAS			
Sales Person: HALAMERICA\HX41066	Srvc Supervisor: Carlton Kukus		

Job

Formation Name	
Formation Depth (MD)	Top
Form Type	BHST
Job depth MD	1560ft
Water Depth	Wk Ht Above Floor 5ft
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		16	15.25	65			0	60		
Casing	3	8.625	8.097	24	8 RD (LT&C)	J-55	0	1560	0	1560
Open Hole Section			11				60	1570	60	1570

Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	8.625	1		1560	Top Plug	8.625	1	HES
Float Shoe	8.625	1			Bottom Plug	8.625	1	HES
Float Collar	8.625	1		1517	SSR plug set	8.625		HES
Insert Float	8.625				Plug Container	8.625	1	HES
Stage Tool	8.625				Centralizers	8.625		HES

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			2		
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	2.45	14.17	6	
14.12 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	12.11	6	
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	Water Based Mud Displacement	96.5	bbl	9.4			4.5	
Cement Left In Pipe		Amount	43 ft		Reason		Shoe Joint		
Comment 28 BBLs OF CEMENT TO SURFACE, RIG USED 10 POUNDS OF SUGAR									

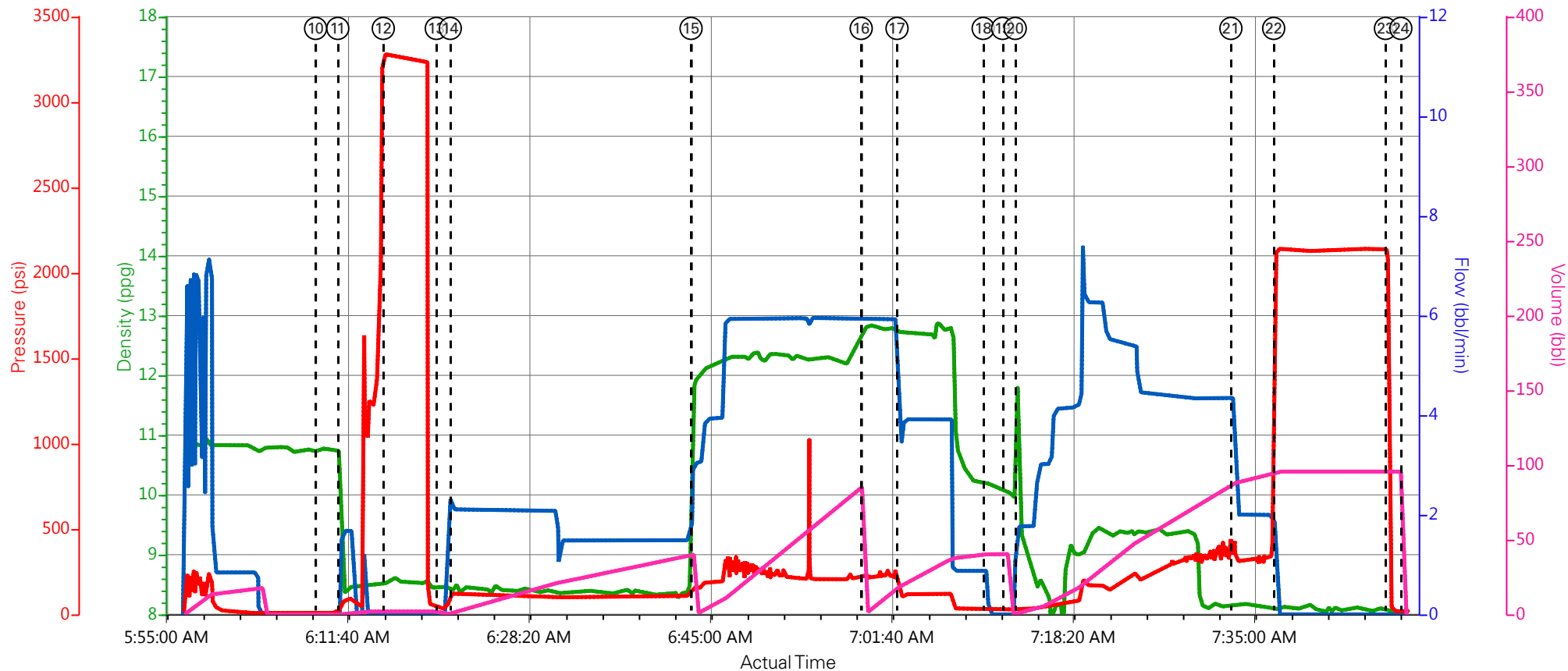
1.0 Real-Time Job Summary

1.1 Job Event Log

Event	6	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	3/6/2015	02:30:00	USER						ALL HES
Event	7	Rig-Up Equipment	Rig-Up Equipment	3/6/2015	02:45:00	USER						RIG UP IRON TO THE STAND PIPE, WATER HOSES TO UPRIGHT, MUD HOSES TO RIG PUMP HOUSE AND BULK EQUIPMENT TO PUMP TRUCK
Event	8	Rig-Up Completed	Rig-Up Completed	3/6/2015	03:45:00	USER						COMPLETED
Event	9	Pre-Job Safety Meeting	Pre-Job Safety Meeting	3/6/2015	05:45:00	USER						ALL HES AND RIG CREW TO DISCUSS JOB PROCEDURES
Event	15	Start Job	Start Job	3/6/2015	06:09:00	USER						TD: 1570FT TP: 1560FT SJ: 42.92FT OH: 11 CSG: 8.625 24# J-55 MUD WT: 9.4
Event	16	Prime Pumps	Fill Lines	3/6/2015	06:11:02	USER	8.34	2	93	2		FILL LINES TO PRESSURE TEST
Event	21	Test Lines	Test Lines	3/6/2015	06:15:13	RTD Import	8.34		3278	2		PRESSURE TEST LINES TO 3000 PSI, PRESSURE TEST OK
Event	22	Drop Bottom Plug	Drop Bottom Plug	3/6/2015	06:20:05	USER						PLUG AWAY NO PROBLEMS
Event	23	Pump Spacer 1	Fresh Water Spacer	3/6/2015	06:21:22	RTD Import	8.43	2	120	40		40 BBLS FRESH WATER SPACER
Event	35	Pump Lead Cement	Pump Lead Cement	3/6/2015	06:43:30	RTD Import	12.3	6	270	83.7		192 SKS OF VARICEM CEMENT 12.3PPG 2.45YIELD 14.17GAL/SK WEIGHT OF CEMENT VERIFIED VIA MUD SCALES THROUGHOUT CEMENT
Event	52	Pump Tail Cement	Pump Tail Cement	3/6/2015	06:59:08	RTD Import	12.8	6	215	20		114 SKS OF VARICEM CEMENT 12.8PPG 2.18YIELD 12.11GAL/SK WEIGHT OF CEMENT VERIFIED VIA MUD SCALES THROUGHOUT CEMENT
Event	59	Slow Rate	Slow Rate	3/6/2015	07:02:25	USER	12.8	4	122	24.3		SLOWED RATE TO END ON CEMENT
Event	72	Shutdown	Shutdown	3/6/2015	07:10:20	USER						SHUTDOWN END OF CEMENT
Event	73	Drop Top Plug	Drop Top Plug	3/6/2015	07:12:07	USER						PLUG AWAY NO PROBLEMS

Event	74	Pump Displacement	Pump Displacement*	3/6/2015	07:13:17	RTD Import	9.4	4.5	391	86.5	MUD DISPLACEMENT
Event	79	Slow Rate	Slow Rate	3/6/2015	07:33:06	USER	8.34	2	335	10	SLOW RATE TO BUMP PLUG
Event	80	Bump Plug	Bump Plug	3/6/2015	07:37:02	RTD Import	8.34		345	96.5	BUMPED PLUG AT 345 PSI, TOOK PRESSURE STRAIGHT TO 2000 PSI FOR 10 MINUTE CASING TEST
Event	81	Release Annulus Pressure	Release Casing Pressure/Check Floats	3/6/2015	07:47:18	USER	8.34		2140	96.5	FLOATS HELD 1 BBL BACK TO TANKS
Event	82	End Job	End Job	3/6/2015	07:48:42	USER					THERE WERE GOOD RETURNS THROUGHOUT CEMENT JOB, 28 BBLS OF CEMENT WAS BROUGHT TO SURFACE, RIG USED 20 POUNDS OF SUGAR
Event	85	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	3/6/2015	08:00:00	USER					ALL HES
Event	86	Rig-Down Equipment	Rig-Down Equipment	3/6/2015	08:10:00	USER					WASHED UP AND BLEW DOWN PUMP TRUCK
Event	87	Rig-Down Completed	Rig-Down Completed	3/6/2015	09:30:00	USER					COMPLETED
Event	88	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	3/6/2015	09:45:00	USER					JOURNED CREATED, ALL HES INCLUDED
Event	89	Crew Leave Location	Crew Leave Location	3/6/2015	10:00:00	USER					1-F-550 PICKUP WITHO BOOSTER TRAILER, 1-ELITE PUMP TRUCK, 2-660 BULK TRUCKS
Event	90	Other	Other	3/6/2015	10:01:00	USER					THANK YOU FOR CHOOSING HALLIBURTON CEMENT CARL KUKUS AND CREW

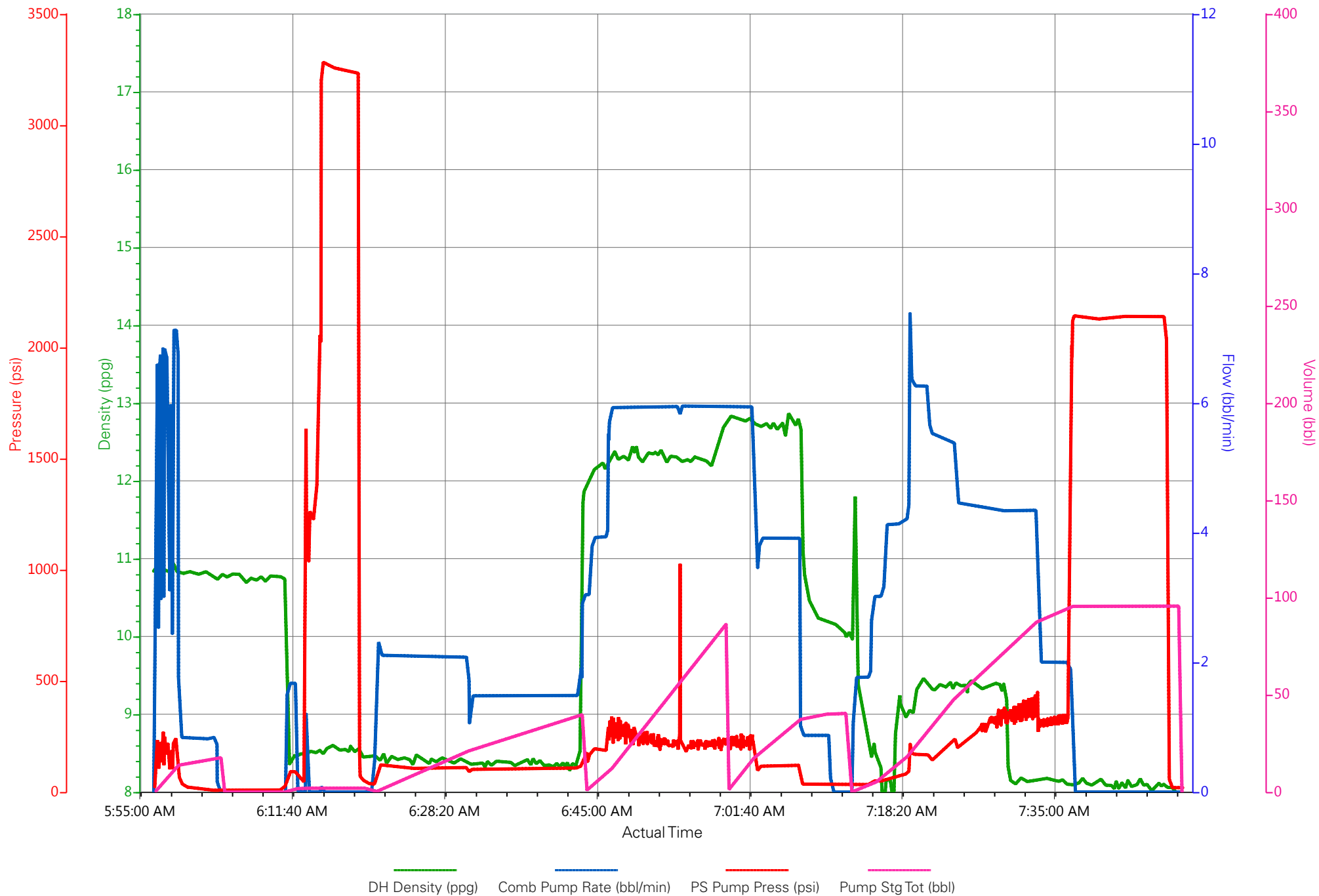
PICEANCE ENERGY/PICEANCE 28-12W/SURFACE



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

- | | | |
|---|--|--|
| ① Call Out n/a;n/a;n/a;n/a | ⑫ Test Lines 8.57;0;3272.87;1.95 | ⑳ Release Casing Pressure/Check Floats 8.1;0;1347.21;95.59 |
| ② Pre-Convoy Safety Meeting n/a;n/a;n/a;n/a | ⑬ Drop Bottom Plug 8.45;0;36.57;1.95 | ㉑ End Job 7.97;0;20.63;95.59 |
| ③ Crew Leave Yard n/a;n/a;n/a;n/a | ⑭ Fresh Water Spacer 8.43;2.1;120.94;1.3 | ㉒ Pre-Rig Down Safety Meeting n/a;n/a;n/a;n/a |
| ④ Arrive At Loc n/a;n/a;n/a;n/a | ⑮ Pump Lead Cement 11.85;3.04;180.95;40.32 | ㉓ Rig-Down Equipment n/a;n/a;n/a;n/a |
| ⑤ Assessment Of Location Safety Meeting n/a;n/a;n/a;n/a | ⑯ Pump Tail Cement 12.78;5.94;215.63;0.05 | ㉔ Rig-Down Completed n/a;n/a;n/a;n/a |
| ⑥ Pre-Rig Up Safety Meeting n/a;n/a;n/a;n/a | ⑰ Slow Rate 12.72;4.2;118.13;19.09 | ㉕ Pre-Convoy Safety Meeting n/a;n/a;n/a;n/a |
| ⑦ Rig-Up Equipment n/a;n/a;n/a;n/a | ⑱ Shutdown 10.18;0.88;31.88;40.31 | ㉖ Crew Leave Location n/a;n/a;n/a;n/a |
| ⑧ Rig-Up Completed n/a;n/a;n/a;n/a | ㉒ Drop Top Plug 9.98;0;30.01;40.4 | ㉗ Other n/a;n/a;n/a;n/a |
| ⑨ Pre-Job Safety Meeting n/a;n/a;n/a;n/a | ㉓ Pump Displacement* 10.4;1.76;40.32;0.63 | |
| ⑩ Start Job 10.75;0;11.25;0 | ㉔ Slow Rate 8.11;4.34;407.82;87.94 | |
| ⑪ Fill Lines 10.71;1.5;41.26;0.04 | ㉕ Bump Plug 8.09;0;2141.29;95.59 | |

PICEANCE ENERGY/PICEANCE 28-12W/SURFACE



HALLIBURTON

Water Analysis Report

Company: Piceance Energy

Submitted by: Carl Kukus

Attention: J.Trout

Lease Piceance

Well # 28-12W

Date: 3/6/2015

Date Rec.: 3/6/2015

S.O.# 902207390

Job Type: Surface

Specific Gravity	<i>MAX</i>	1
pH	<i>8</i>	7
Potassium (K)	<i>5000</i>	200 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>	200 Mg / L
Chlorine (Cl ₂)		0 Mg / L
Temp	<i>40-80</i>	43 Deg
Total Dissolved Solids		380 Mg / L

Respectfully: Carl Kukus

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