

Piceance Energy LLC - EBUS

Piceance 28-06W

Patterson 306

Post Job Summary

Cement Production Casing

Date Prepared: 9/21/2015
Job Date: 9/13/2015

Submitted by: Patrick Ealey – Grand Junction Cement Engineer

The Road to Excellence Starts with Safety

| | | | | | | | |
|--|--|---------------------|---------------|--------------------------------------|--|----------------------------|--|
| Sold To #: 344919 | | Ship To #: 3123919 | | Quote #: | | Sales Order #: 0902740307 | |
| Customer: PICEANCE ENERGY LLC - EBUS | | | | Customer Rep: MATT SETTLES | | | |
| Well Name: PICEANCE | | | Well #: 28-6W | | | API/UWI #: 05-077-09774-00 | |
| Field: VEGA | | City (SAP): COLBRAN | | County/Parish: MESA | | State: COLORADO | |
| Legal Description: SE NW-28-9S-93W-1566FNL-1333FWL | | | | | | | |
| 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 Bottom |
| Form Type | BHST |
| Job depth MD | 7908 FT Job Depth TVD 7894 FT |
| Water Depth | Wk Ht Above Floor 5 FT |
| 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 | 1571 | | |
| Casing | | 4.5 | 4 | 11.6 | 8 RD (LT&C) | L-80 | 0 | 7898 | 0 | 7894 |
| Open Hole Section | | | 7.875 | | | | 1571 | 7908 | 0 | 7894 |

| Tools and Accessories | | | | | | | | | |
|-----------------------|---------|-----|------|----------|--|----------------|---------|-----|------|
| Type | Size in | Qty | Make | Depth ft | | Type | Size in | Qty | Make |
| Guide Shoe | 4.5 | | | 7898 | | Top Plug | 4.5 | 1 | HES |
| Float Shoe | | | | | | Bottom Plug | 4.5 | 1 | HES |
| Float Collar | 4.5 | | | 7818.43 | | 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 | 900 | sack | 12.8 | 1.75 | | 8 | 8.5 |
|---------------------|--------------|--|-------|---------|---------------------------|-------------------|---------------------|---------------------|---------------------------|
| 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 | EXPANDACEM (TM) SYSTEM | 413 | sack | 13.3 | 1.89 | | 8 | 8.66 |
| 0.25 lbm | | POLY-E-FLAKE (101216940) | | | | | | | |
| 8.66 Gal | | FRESH WATER | | | | | | | |
| 6 lbm | | KOL-SEAL, BULK (100064233) | | | | | | | |
| 20 % | | SS-200 - BULK (102240841) | | | | | | | |
| | | | | | | | | | |
| 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 | 121.2 | bbl | 8.4 | | | 8.4 | |
| 0.05 gal/bbl | | CLA-WEB - TOTE (101985045) | | | | | | | |
| 0.01 gal/bbl | | MICRO MATRIX CEMENT RETARDER, 1 GAL PAIL (100003780) | | | | | | | |
| | | | | | | | | | |
| Cement Left In Pipe | | Amount | 80 ft | | Reason | | | Shoe Joint | |

1.0 Real-Time Job Summary

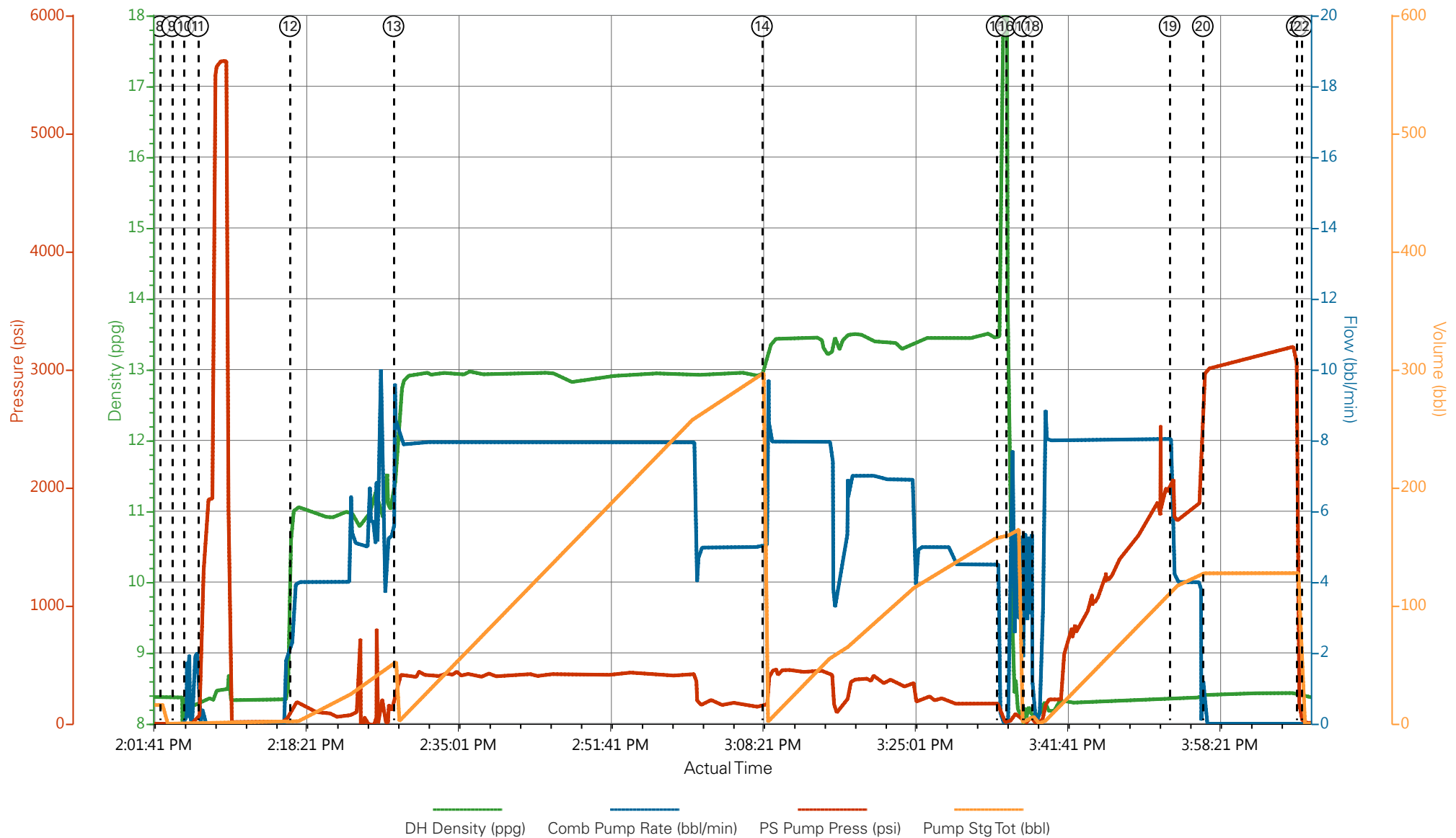
1.1 Job Event Log

| 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 | 9/13/2015 | 08:30:00 | USER | | | | | ELITE # 4 |
| Event | 2 | Pre-Convoy Safety Meeting | 9/13/2015 | 10:30:00 | USER | | | | | ALL HES EMPLOYEES |
| Event | 3 | Arrive At Loc | 9/13/2015 | 11:30:00 | USER | | | | | ARRIVED 2 HOURS EARLY DID NOT START CHARGING ADDITIONAL HOURS UNTIL REQUESTED ON LOCATION TIME |
| Event | 4 | Assessment Of Location Safety Meeting | 9/13/2015 | 11:45:00 | USER | | | | | ALL HES EMPLOYEES |
| Event | 5 | Pre-Rig Up Safety Meeting | 9/13/2015 | 12:00:00 | USER | | | | | ALL HES EMPLOYEES |
| Event | 6 | Rig-Up Equipment | 9/13/2015 | 12:15:00 | USER | | | | | 1 HT-400 PUMP TRUCK (ELITE # 4) 2 660 BULK TRUCKS 1 F-550 PICKUP 1 SILO |
| Event | 7 | Pre-Job Safety Meeting | 9/13/2015 | 14:00:00 | USER | | | | | ALL HES EMPLOYEES AND RIG CREW RIG CIRCULATED FOR 1 HOUR @ 10 BBL/MIN PRIOR TO JOB GAS AT 439 PRIOR TO JOB |
| Event | 8 | Start Job | 9/13/2015 | 14:02:40 | COM5 | | | | | TD: 7908 TVD: 7894 TP: 7894 CSG: 4 1/2 11.6# L-80 SJ: 79.57 OH: 7 7/8 MW: 9.4 PPG SURFACE CSG: 8 5/8 24# SET @ 1571 |
| Event | 9 | Drop Bottom Plug | 9/13/2015 | 14:04:00 | USER | | | | | PLUG AWAY NO PROBLEMS |
| Event | 10 | Prime Pumps | 9/13/2015 | 14:05:19 | COM5 | 8.33 | 2.0 | 159 | 2.0 | FILL LINES FRESH WATER |
| Event | 11 | Test Lines | 9/13/2015 | 14:06:51 | COM5 | 8.33 | 0.00 | 5615 | 2.0 | PRESSURE TEST OK |
| Event | 12 | Pump Spacer 1 | 9/13/2015 | 14:16:54 | COM5 | 11.00 | 4.0 | 65 | 40 | 40 BBLS 11.0 PPG 4.55 YIELD 30.0 GAL/SK TUNED SPACER III WEIGHT VERIFIED VIA PRESSURIZED MUD SCALES |
| Event | 13 | Pump Lead Cement | 9/13/2015 | 14:28:14 | COM5 | 12.8 | 8.0 | 435 | 280.5 | 900 SKS 12.8 PPG 1.75 YIELD 8.5 GAL/SK LEAD CEMENT WEIGHT VERIFIED VIA PRESSURIZED MUD SCALES |
| Event | 14 | Pump Tail Cement | 9/13/2015 | 15:08:33 | COM5 | 13.30 | 8.0 | 456 | 139 | 413 SKS 13.3 PPG 1.89 YIELD 8.66 GAL/SK TAIL CEMENT |

WEIGHT VERIFIED VIA PRESSURIZED MUD SCALES

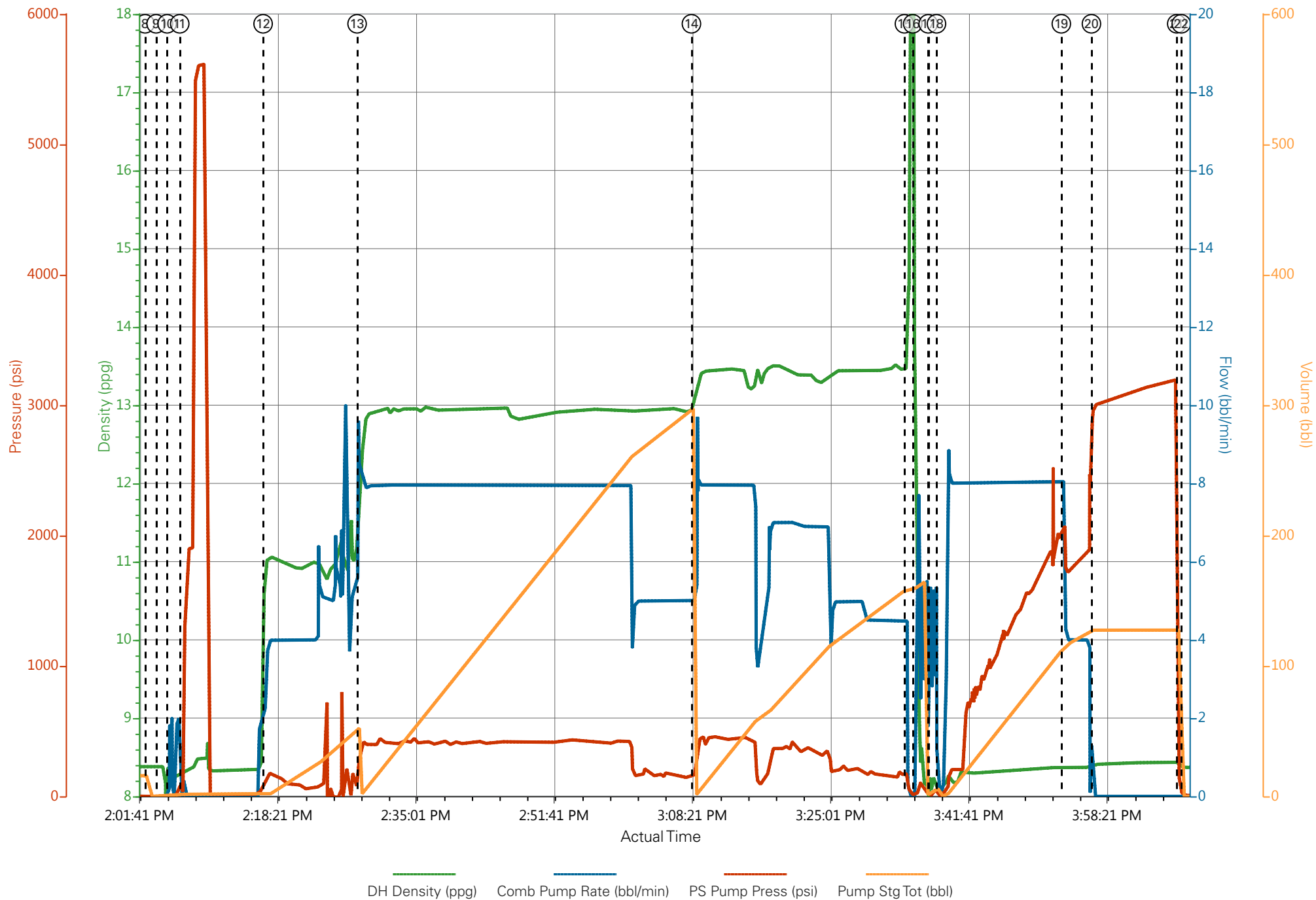
| | | | | | | | | | | | |
|-------|----|-----------------------------|-----------|----------|------|-----|------|------|-------|---|--|
| Event | 15 | Shutdown | 9/13/2015 | 15:34:14 | USER | | | | | | |
| Event | 16 | Clean Lines | 9/13/2015 | 15:35:14 | USER | | | | | CLEAN LINES FRESH WATER | |
| Event | 17 | Drop Top Plug | 9/13/2015 | 15:37:06 | USER | | | | | PLUG AWAY NO PROBLEMS | |
| Event | 18 | Pump Displacement | 9/13/2015 | 15:38:06 | COM5 | 8.4 | 8.0 | 1850 | 121.2 | FRESH WATER DISPLACEMENT 5 GAL CLA-WEB 1 GAL MMCR | |
| Event | 19 | Slow Rate | 9/13/2015 | 15:53:09 | USER | 8.4 | 4.0 | 1750 | 111.2 | SLOW RATE TO BUMP PLUG | |
| Event | 20 | Bump Plug | 9/13/2015 | 15:56:47 | COM5 | 8.4 | 4.0 | 2140 | 121.2 | PRESSURE PRIOR TO BUMPING PLUG AT 2140 BUMPED PLUG UP TO 3186 PSI HELD FOR 10 MIN CASING TEST AS PER COMPANY REP. | |
| Event | 21 | Other | 9/13/2015 | 16:07:04 | COM5 | 8.4 | 0.00 | 3186 | 121.2 | FLOATS HELD 1 1/2 BBLS RETURNED TO TRUCKS TANK | |
| Event | 22 | End Job | 9/13/2015 | 16:07:37 | COM5 | | | | | GOOD RETURNS THROUGHOUT JOB PIPE WAS STATIC THROUGHOUT JOB CIRCUCLATED 40 BBLS TUNED SPACER III TO SURFACE | |
| Event | 23 | Pre-Rig Down Safety Meeting | 9/13/2015 | 16:30:00 | USER | | | | | ALL HES EMPLOYEES | |
| Event | 24 | Rig-Down Equipment | 9/13/2015 | 16:45:00 | USER | | | | | | |
| Event | 25 | Pre-Convoy Safety Meeting | 9/13/2015 | 17:15:00 | USER | | | | | ALL HES EMPLOYEES | |
| Event | 26 | Crew Leave Location | 9/13/2015 | 17:30:00 | USER | | | | | THANK YOU FOR USING HALLIBURTON CEMENT DAVID CAMPBELL AND CREW | |

PICEANCE ENERGY - PICEANCE 28-6W - 4 1/2 PRODUCTION



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

PICEANCE ENERGY - PICEANCE 28-6W - 4 1/2 PRODUCTION



HALLIBURTON

Water Analysis Report

Company: PICEANCE

Submitted by: DAVID CAMPBELL

Attention:

Lease PICEANCE

Well # 28-6W

Date: 9/13/2015

Date Rec.: 9/13/2015

S.O.# 902740307

Job Type: PRODUCTION

| | | |
|-----------------------------|--------------|-------------------------|
| 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 | | 350 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 #: 0902740307 | Line Item: 10 | Survey Conducted Date: 9/13/2015 |
| Customer: PICEANCE ENERGY LLC - EBUS | | Job Type (BOM): CMT PRODUCTION CASING BOM |
| Customer Representative: MATT SETTLES | | API / UWI: (leave blank if unknown) 05-077-09774-00 |
| Well Name: PICEANCE | | Well Number: 0080127654 |
| 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 | 9/13/2015 |
| 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 | MATT SETTLES |
| 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 |
|---------------------------|

| | | |
|---|--------------------------------|---|
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| Customer Representative: MATT SETTLES | | API / UWI: (leave blank if unknown) 05-077-09774-00 |
| Well Name: PICEANCE | | Well Number: 0080127654 |
| 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 | 9/13/2015 |

| 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. | 5 |
| 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. | 3 |
| 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 #: 0902740307 | Line Item: 10 | Survey Conducted Date: 9/13/2015 |
| Customer: PICEANCE ENERGY LLC - EBUS | | Job Type (BOM): CMT PRODUCTION CASING BOM |
| Customer Representative: MATT SETTLES | | API / UWI: (leave blank if unknown) 05-077-09774-00 |
| Well Name: PICEANCE | | Well Number: 0080127654 |
| 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? | Bottom |
| 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 |