

PICEANCE ENERGY LLC - EBUS

Gunderson 29-14E

Patterson 306

Post Job Summary

Cement Surface Casing

Date Prepared: 05/14/2015

Job Date: 05/02/2015

Submitted by: Aaron Katz – Grand Junction Cement Engineer

The Road to Excellence Starts with Safety

| | | | |
|----------------------------------------------------|----------------------|--------------------------------------|----------------------------|
| Sold To #: 344919 | Ship To #: 3624343 | Quote #: | Sales Order #: 0902371684 |
| Customer: PICEANCE ENERGY LLC - EBUS | | Customer Rep: ROGER FOSTER | |
| Well Name: GUNDERSON | | Well #: 29-14E | API/UWI #: 05-077-10230-00 |
| Field: BUZZARD CREEK | City (SAP): COLLBRAN | County/Parish: MESA | State: COLORADO |
| Legal Description: SE NE-29-9S-93W-2407FNL-1168FEL | | | |
| Contractor: PATTERSON-UTI ENERGY | | Rig/Platform Name/Num: PATTERSON 306 | |
| Job BOM: 7521 | | | |
| Well Type: DIRECTIONAL GAS | | | |
| Sales Person: HALAMERICA\HX41066 | | Srv Supervisor: Jesse Slaughter | |

Job

| | |
|------------------------|----------------------|
| Formation Name | |
| Formation Depth (MD) | Top Bottom |
| Form Type | BHST |
| Job depth MD | 1538ft Job Depth TVD |
| Water Depth | Wk Ht Above Floor |
| 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 | STC | J-55 | 0 | 1538 | 0 | 0 |
| Open Hole Section | | | 11 | | | | 60 | 1548 | 0 | 0 |

Tools and Accessories

| Type | Size in | Qty | Make | Depth ft | Type | Size in | Qty | Make |
|--------------|---------|-----|------|----------|----------------|---------|-----|------|
| Guide Shoe | 8.625 | 1 | | 1538 | Top Plug | 8.625 | 1 | HES |
| Float Shoe | 8.625 | 1 | | | Bottom Plug | 8.625 | 1 | HES |
| Float Collar | 8.625 | 1 | | | SSR plug set | 8.625 | | HES |
| Insert Float | 8.625 | 1 | | | Plug Container | 8.625 | 1 | HES |
| Stage Tool | 8.625 | 1 | | | 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 | | | 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 | | 6 | 14.17 |
|---------------------|--------------------------|--------------------------|-------|---------|---------------------------|-------------------|---------------------|---------------------|---------------------------|
| 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/mi n | Total Mix Fluid Gal |
| 3 | VariCem GJ5 | VARICEM (TM) CEMENT | 114 | sack | 12.8 | 2.18 | | 6 | 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/mi n | Total Mix Fluid Gal |
| 4 | Fresh Water Displacement | Fresh Water Displacement | 95 | bbl | 8.3 | | | 9 | |
| | | | | | | | | | |
| Cement Left In Pipe | | Amount | 43 ft | | Reason | | Shoe Joint | | |
| Comment | | | | | | | | | |

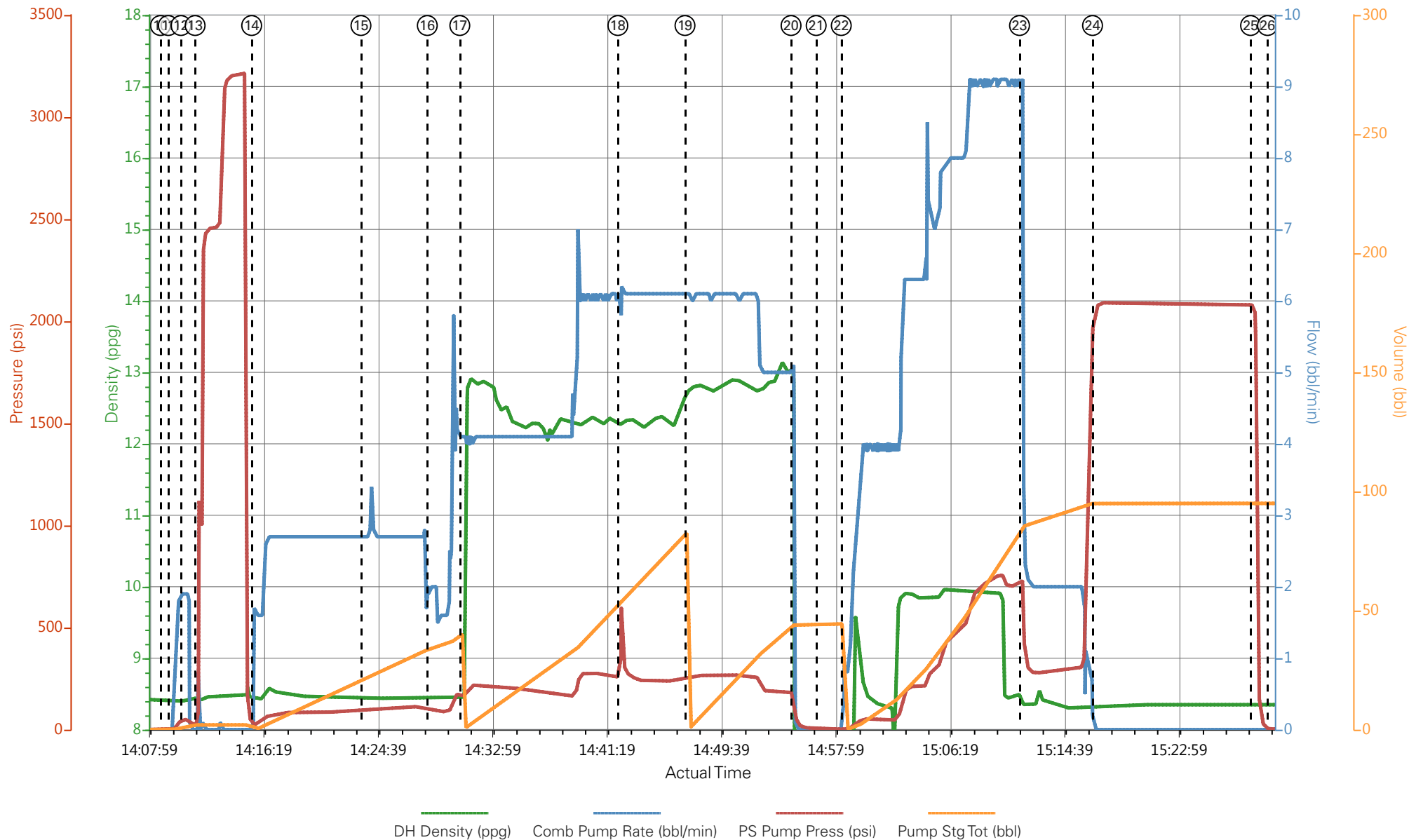
1.0 Real-Time Job Summary

1.1 Job Event Log

| Type | Seq. No. | Graph Label | Date | Time | Source | DH Density (ppg) | Comb Pump Rate (bbl/min) | PS Pump Press (psi) | Pump Stg Tot (bbl) | Comments |
|-------|----------|---------------------------------------|----------|----------|--------|---------------------|-----------------------------|------------------------|-----------------------|-----------------------------------------------------------------------------------------|
| Event | 1 | Call Out | 5/1/2015 | 06:00:00 | USER | | | | | |
| Event | 2 | Pre-Convoy Safety Meeting | 5/1/2015 | 09:20:00 | USER | | | | | WITH ALL HES PERSONNEL |
| Event | 3 | Crew Leave Yard | 5/1/2015 | 09:30:00 | USER | | | | | |
| Event | 4 | Arrive At Loc | 5/1/2015 | 11:00:00 | USER | | | | | RIG WAS RUNNING CASING UPON HES ARRIVAL |
| Event | 5 | Assessment Of Location Safety Meeting | 5/1/2015 | 11:10:00 | USER | | | | | WITH ALL HES PERSONNEL |
| Event | 6 | Spot Equipment | 5/1/2015 | 11:30:00 | USER | | | | | |
| Event | 7 | Pre-Rig Down Safety Meeting | 5/1/2015 | 11:40:00 | USER | | | | | WITH ALL HES PERSONNEL |
| Event | 8 | Rig-Up Equipment | 5/1/2015 | 11:50:00 | USER | | | | | 1 PUMP 2 BULK TRUCKS |
| Event | 9 | Pre-Job Safety Meeting | 5/1/2015 | 13:50:00 | USER | | | | | WITH ALL PERSONNEL |
| Event | 10 | Start Job | 5/1/2015 | 14:09:00 | COM7 | | | | | TD 1548 FT, TP 1537.1 FT, SHOE 43 FT, CSG 8 5/8 IN 24 LB/FT, HOLE 11 IN, MUD WT 9.6 PPG |
| Event | 11 | Prime Pumps | 5/1/2015 | 14:09:34 | USER | 8.33 | 2.0 | 50.0 | 2.0 | FRESH WATER |
| Event | 12 | Drop Bottom Plug | 5/1/2015 | 14:10:29 | USER | | | | | PLUG LAUNCHED |
| Event | 13 | Test Lines | 5/1/2015 | 14:11:31 | COM7 | | | | | TESTED LINES TO 3215 PSI PRESSURE HOLDING |
| Event | 14 | Pump H2O Spacer | 5/1/2015 | 14:15:38 | COM7 | 8.33 | 4.0 | 212.0 | 40.0 | FRESH WATER |
| Event | 15 | Check weight | 5/1/2015 | 14:23:36 | COM7 | | | | | SCALES SHOWING 11.9 PPG |
| Event | 16 | Check weight | 5/1/2015 | 14:28:26 | COM7 | | | | | SCALES SHOWING 12.3 PPG |
| Event | 17 | Pump Lead Cement | 5/1/2015 | 14:30:48 | COM7 | 12.3 | 6.0 | 250.0 | 84.1 | 192 SKS AT 12.3 PPG, 2.46 FT3/SK, 14.17 GAL/SK |
| Event | 18 | Bump Plug | 5/1/2015 | 14:42:18 | USER | | | 650.0 | | BOTTOM PLUG |

| | | | | | | | | | | |
|-------|----|-----------------------------|----------|----------|------|------|-----|--------|------|-------------------------------------------------------------------------------------------------------------------------------|
| Event | 19 | Pump Tail Cement | 5/1/2015 | 14:47:12 | COM7 | 12.8 | 6.0 | 210.0 | 44.3 | 114 SKS AT 12.8 PPG, 2.18 FT3/SK, 12.11 GAL/SK |
| Event | 20 | Shutdown | 5/1/2015 | 14:54:55 | USER | | | | | |
| Event | 21 | Drop Top Plug | 5/1/2015 | 14:56:45 | USER | | | | | PLUG LAUNCHED |
| Event | 22 | Pump Displacement | 5/1/2015 | 14:58:35 | COM7 | 9.6 | 9.0 | 740.0 | 95.0 | WATER BASED MUD |
| Event | 23 | Slow Rate | 5/1/2015 | 15:11:34 | USER | 8.33 | 2.0 | 306.0 | 85.0 | SLOWED RATE 10 BBLS PRIOR TO CALCULATED DISPLACEMENT. |
| Event | 24 | Bump Plug | 5/1/2015 | 15:16:53 | COM7 | | | 2100.0 | | TESTED CASING AS SOON AS PLUG BUMPED AS PER COMPANY REP. FOR 10 MIN. |
| Event | 25 | Check Floats | 5/1/2015 | 15:28:24 | USER | | | | | FLOATS HOLDING. HES RETURNED 1 BBL H2O TO PUMP |
| Event | 26 | End Job | 5/1/2015 | 15:29:37 | COM7 | | | | | PIPE WAS STATIC DURING JOB, GOOD CIRCULATION THROUGHOUT JOB. HES RETURNED 35 BBLS CEMENT TO SURFACE. USED 10 LB SUGAR FOR JOB |
| Event | 27 | Pre-Rig Down Safety Meeting | 5/1/2015 | 15:40:47 | USER | | | | | WITH ALL HES PERSONNEL |
| Event | 28 | Rig-Down Equipment | 5/1/2015 | 15:45:00 | USER | | | | | |
| Event | 29 | Pre-Convoy Safety Meeting | 5/1/2015 | 16:20:00 | USER | | | | | WITH ALL HES PERSONNEL |
| Event | 30 | Crew Leave Location | 5/1/2015 | 16:30:00 | USER | | | | | |
| Event | 31 | Comment | 5/1/2015 | 16:31:00 | USER | | | | | THANK YOU FOR USING HALLIBURTON CEMENT DEPARTMENT. JESSE SLAUGHTER AND CREW. |

BLACK HILLS - GUNDERSON 29-14E - SURFACE



- ① Call Out
- ② Pre-Convoy Safety Meeting
- ③ Crew Leave Yard
- ④ Arrive At Loc
- ⑤ Assessment Of Location Safety Meeting
- ⑥ Spot Equipment
- ⑦ Pre-Rig Down Safety Meeting
- ⑧ Rig-Up Equipment
- ⑨ Pre-Job Safety Meeting
- ⑩ Start Job
- ⑪ Prime Pumps
- ⑫ Drop Bottom Plug
- ⑬ Test Lines
- ⑭ Pump H2O Space

III

HALLIBURTON | iCem® Service

Created: 2015-05-01 07:32:40, Version: 4.1.107

Edit

Customer: PICEANCE ENERGY LLC - EBUS

Job Date: 5/1/2015 12:56:42 PM

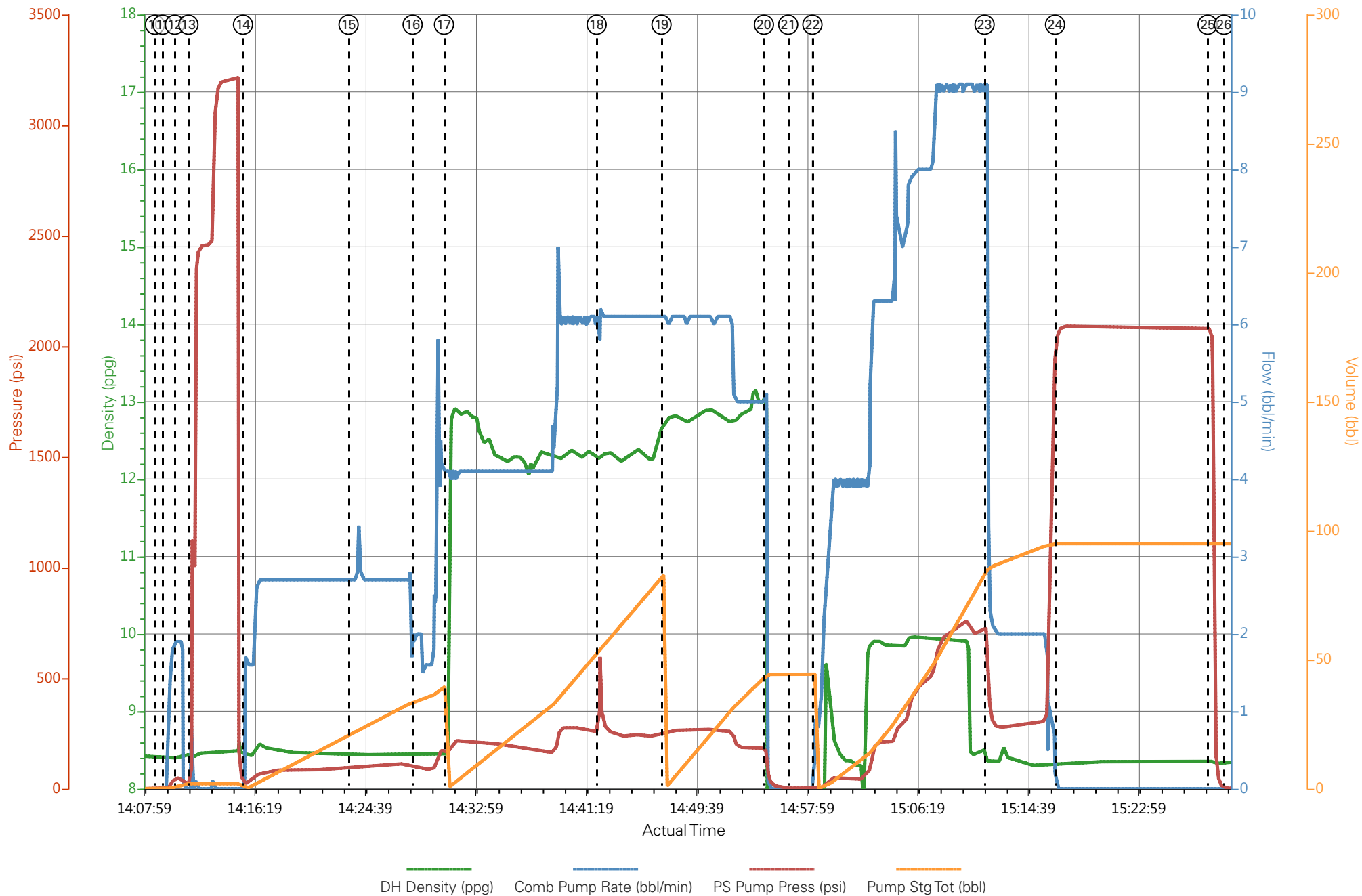
Well: GUNDERSON 29-14E

Representative: ROGER FOSTER

Sales Order #: 902371684

Elite #1: JESSE SLAUGHTER / DIRK
BRENNECKE

BLACK HILLS - GUNDERSON 29-14E - SURFACE



HALLIBURTON

Water Analysis Report

Company: BLACK HILLS

Submitted by: JESSE SLAUGHTER

Attention: LAB

Lease GUNDERSON

Well # 29-14E

Date: 5/1/2015

Date Rec.:

S.O.# 902371684

Job Type: SURFACE

| | | |
|-----------------------------|--------------|-------------------------|
| Specific Gravity | <i>MAX</i> | 1 |
| pH | <i>8</i> | 6 |
| Potassium (K) | <i>5000</i> | 250 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>40-80</i> | 65 Deg |
| Total Dissolved Solids | | 200 Mg / L |

Respectfully: JESSE SLAUGHTER

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 #: 0902371684 | Line Item: 10 | Survey Conducted Date: 5/1/2015 |
| Customer: PICEANCE ENERGY LLC - EBUS | | Job Type (BOM): CMT SURFACE CASING BOM |
| Customer Representative: ROGER FOSTER | | API / UWI: (leave blank if unknown) 05-077-10230-00 |
| Well Name: GUNDERSON | | Well Number: 0080703217 |
| 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 | 5/1/2015 |
| Survey Interviewer | The survey interviewer is the person who initiated the survey. | HB21762 |
| 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 |
|---------------------------|

| | | |
|-------------------------------------------------|--------------------------------|---------------------------------------------------------------|
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| Customer Representative: ROGER FOSTER | | API / UWI: (leave blank if unknown) 05-077-10230-00 |
| Well Name: GUNDERSON | | Well Number: 0080703217 |
| 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 | 5/1/2015 |

| 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 #: 0902371684 | Line Item: 10 | Survey Conducted Date: 5/1/2015 |
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| Customer Representative: ROGER FOSTER | | API / UWI: (leave blank if unknown) 05-077-10230-00 |
| Well Name: GUNDERSON | | Well Number: 0080703217 |
| 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 | 95 |
| 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 | 95 |
| 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 |