

Piceance Energy LLC

Piceance Federal 28-19E

**Patterson 306**

## **Post Job Summary**

# **Cement Production Casing**

Date Prepared: 11/02/2015  
Job Date: 10/24/2015

Submitted by: Evan Russell – Grand Junction Cement Engineer

## 1.0 Real-Time Job Summary

### 1.1 Job Event Log

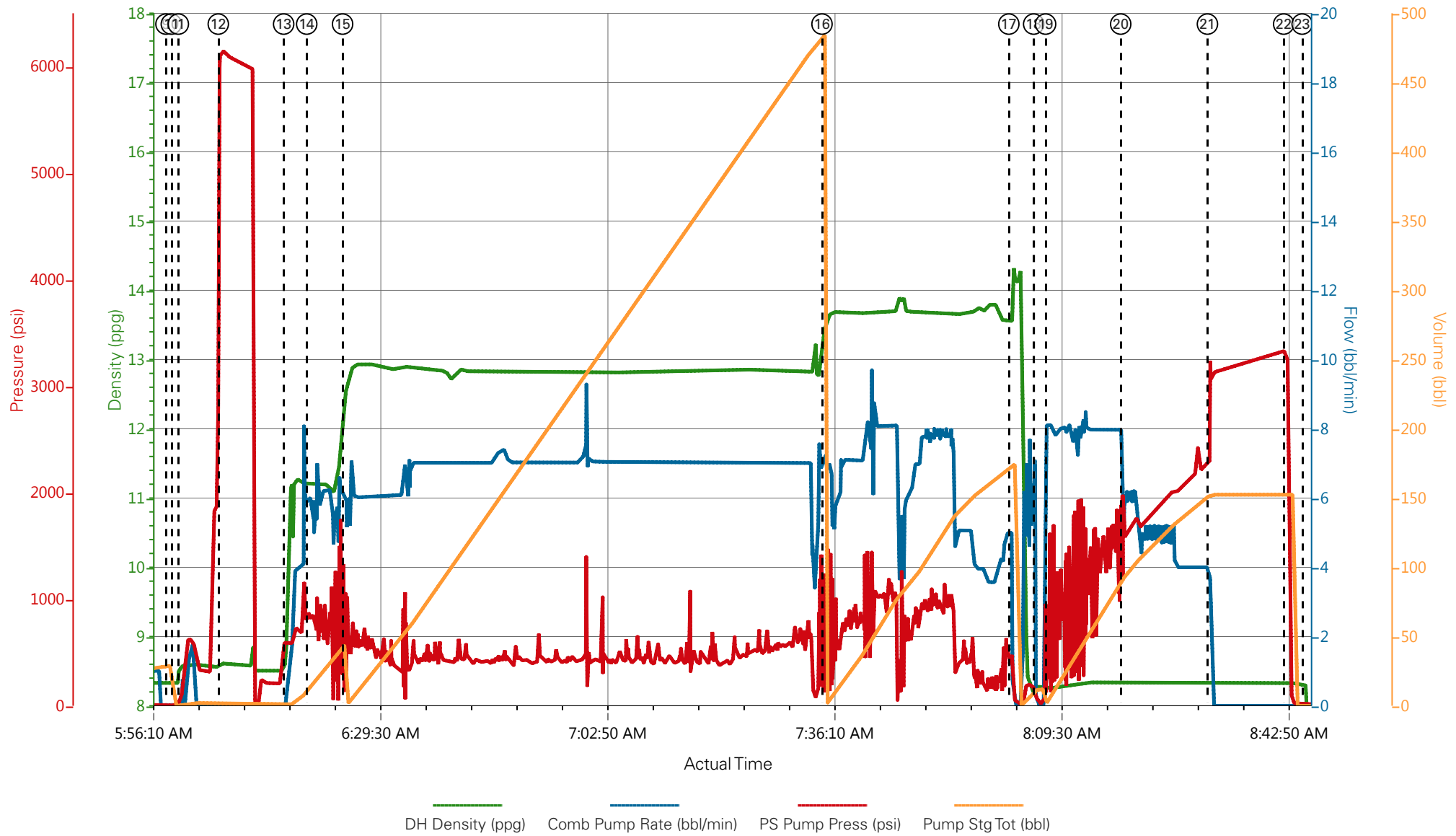
Type	Seq. No.	Activity	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	10/23/2015	12:00:00	USER					ON LOCATION @ 02:00
Event	2	Pre-Convoy Safety Meeting	10/23/2015	13:45:00	USER					CREW PRESENT FOR MEETING. MISSING ONE DRIVER HE WILL BE CALLED OUT AT 18:00
Event	3	Crew Leave Yard	10/23/2015	14:00:00	USER					1 HT 400 PUMP TRUCK E4, 1 660 BULK TRUCK, 1 550 SERVICE PICKUP, BODY LOAD WILL FOLLOW AT CALL OUT
Event	4	Arrive At Loc	10/23/2015	16:00:00	USER					CUSTOMER WAS OFFERED SDS. RIG PULLING DRILL PIPE UPON HES ARRIVAL. DRIVER WITH BODY LOAD ARRIVED ON LOC @ 22:00.
Event	5	Assessment Of Location Safety Meeting	10/24/2015	00:00:00	USER					PERFORMED JSA AND WATER TEST PH 7.5, CHLORIDES 0, TEMP 45 DEGREES. SPOTTED TRUCKS INTO PLACE.
Event	6	Pre-Rig Up Safety Meeting	10/24/2015	00:30:00	USER					ALL HES EMPLOYEES PRESENT

Event	7	Rig-Up Completed	10/24/2015	02:00:00	USER					GROUND RIG UP COMPLETED EXCEPT IN RED ZONE AND FLOOR. RIG STILL RUNNNING CSG
Event	8	Pre-Job Safety Meeting	10/24/2015	05:15:00	USER					ALL RIG CREW AND HES EMPLOYEES PRESENT. FINISHED RIG UP ON GROUND AND FLOOR.
Event	9	Start Job	10/24/2015	05:58:30	COM8					TD 8511', TP 8501' OF 4 1/2" CSG 11.6# I-80, SJ 85.35', OH 7 7/8", 8 5/8" SURFACE CSG 32# J-55 SET @ 1623', MUD 9.4 PPG VIS 38
Event	10	Drop Bottom Plug	10/24/2015	05:59:17	USER					VERIFIED BY TATTLE TAIL
Event	11	Prime Pumps	10/24/2015	06:00:18	COM8	8.33	2.0	650	2	FRESH WATER
Event	12	Test Lines	10/24/2015	06:06:10	COM8			6169		PRESSURE HELD
Event	13	Pump Spacer 1	10/24/2015	06:15:46	COM8	11	6.0	660	40	40 BBLS T.S. III, 11 PPG, 4.55 YIELD, 30 GAL/SK
Event	14	Check Weight	10/24/2015	06:19:09	COM8					BALANCED MUD CUP MATCHED RECIRC
Event	15	Pump Lead Cement	10/24/2015	06:24:25	COM8	12.7	7.0	560	405	1387 SKS ECONOCEM CMT, 12.7 PPG, 1.64 YIELD, 7.96 GAL/SK
Event	16	Pump Tail Cement	10/24/2015	07:34:47	COM8	13.5	8.0	1200	139	446 SKS THERMACEM CMT, 13.5 PPG, 1.75 YIELD, 7.97 GAL/SK

Event	17	Shutdown	10/24/2015	08:02:12	USER					END OF CMT 40 BBL TUNED SPACER III BACK. WASHED UP INTO CELLUR USED 12 BBLs
Event	18	Drop Top Plug	10/24/2015	08:05:51	COM8					VERIFIED BY TATTLE TAIL
Event	19	Pump Displacement	10/24/2015	08:07:36	COM8	8.33	8.0	1530	60	FRESH WATER, 1 GAL MMCR IN FIRST 10 BBLs, 5 GAL CLAY- WEB THROUGHOUT DISPLACEMENT
Event	20	Slow Rate	10/24/2015	08:18:38	USER	8.33	4.0	2000	70	FILLING UP THREE SIDED TANK WITH CMT SLOWED TO LET PEANUT PUMP KEEP UP
Event	21	Bump Plug	10/24/2015	08:31:21	COM8	8.33	4.0	2100	130.4	PLUG BUMPED AT CALCULATED, TOOK PRESSURE TO 3130 PSI FOR 10 MIN. CSG TEST
Event	22	Check Floats	10/24/2015	08:42:33	USER			3330		FLOATS HELD 1.5 BBL FLOW BACK
Event	23	Other	10/24/2015	08:45:16	USER					RETURNS THROUGH JOB. USED 40 LBS SUGAR, 40 BBLs TUNED SPACER BACK AND 130 BBLs CMT BACK

Event	24	Post-Job Safety Meeting (Pre Rig-Down)	10/24/2015	09:00:00	USER	ALL RIG CREW AND HES EMPLOYEES PRESENT
Event	25	Rig-Down Completed	10/24/2015	11:00:00	USER	NO INJURIES TO REPORT
Event	26	Pre-Convoy Safety Meeting	10/24/2015	11:45:00	USER	1 HT 400 PUMP TRUCK E4, 1 660 BULK TRUCK, 1 BODY LOAD, 1 550 SERVICE PICKUP.
Event	27	Crew Leave Location	10/24/2015	12:00:00	USER	THANK YOU FOR USING HALLIBURTON CMT, DUSTIN HYDE AND CREW.

# PICEANCE - PICEANCE FED 28-19E - 4 1/2" PRODUCTION



- |   |                          |                         |   |                              |
|---|--------------------------|-------------------------|---|------------------------------|
| ① Call Out                              | ⑦ Rig-Up Completed       | ⑬ Pump Tuned Spacer III | ⑰ Pump Displacement                       | 25 Rig-Down Completed        |
| ② Pre-Convoy Safety Meeting             | ⑧ Pre-Job Safety Meeting | ⑭ Check weight          | 20 Slow Rate                              | 26 Pre-Convoy Safety Meeting |
| ③ Crew Leave Yard                       | ⑨ Start Job              | ⑮ Pump Lead Cement      | 21 Bump Plug                              | 27 Crew Leave Location       |
| ④ Arrive At Loc                         | ⑩ Drop Bottom Plug       | ⑯ Pump Tail Cement      | 22 Check Floats                           |                              |
| ⑤ Assessment Of Location Safety Meeting | ⑪ Prime Lines            | ⑰ Shutdown              | 23 End Job                                |                              |
| ⑥ Pre-Rig Up Safety Meeting             | ⑫ Test Lines             | ⑱ Drop Top Plug         | 24 Post-Job Safety Meeting (Pre Rig-Down) |                              |

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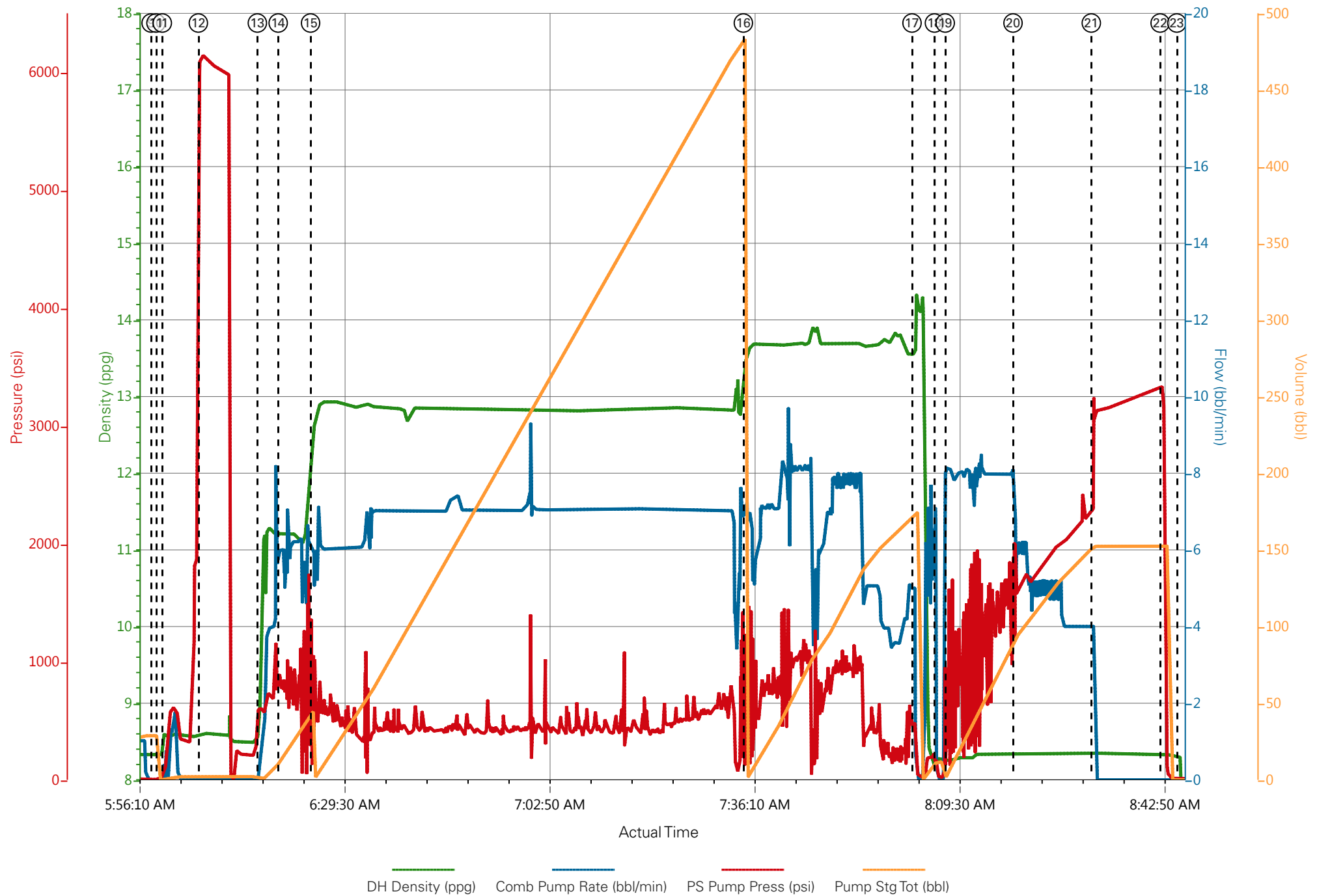
Edit

Customer: PICEANCE ENERGY LLC  
Representative: ROGER FOSTER

Job Date: 10/24/2015  
Sales Order #: 902845254

Well: PICEANCE FED 28-19E  
ELITE 4: DUSTIN HYDE / MAX LOBATO

# PICEANCE - PICEANCE FED 28-19E - 4 1/2" PRODUCTION



<b>Sales Order #:</b> 0902845254	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 10/25/2015
<b>Customer:</b> PICEANCE ENERGY LLC - EBUS		<b>Job Type (BOM):</b> CMT PRODUCTION CASING BOM
<b>Customer Representative:</b> ROGER FOSTER		<b>API / UWI: (leave blank if unknown)</b> 05-077-10254-00
<b>Well Name:</b> PICEANCE FEDERAL		<b>Well Number:</b> 0080739660
<b>Well Type:</b> DIRECTIONAL GAS	<b>Well Country:</b> USA	
<b>H2S Present:</b> No	<b>Well State:</b> COLORADO	<b>Well County:</b> 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	10/25/2015
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HB43597
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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### KEY PERFORMANCE INDICATORS

General	
<b>Survey Conducted Date</b> The date the survey was conducted	10/25/2015

Cementing KPI Survey	
<b>Type of Job</b> Select the type of job. (Cementing or Non-Cementing)	0
<b>Select the Maximum Deviation range for this Job</b> What is the highest deviation for the job you just completed? This may not be the maximum well deviation.	Vertical
<b>Total Operating Time (hours)</b> Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.	6
<b>HSE Incident, Accident, Injury</b> HSE Incident, Accident, Injury. This should be recordable incidents only.	No
<b>Was the job purpose achieved?</b> Was the job delivered correctly as per customer agreed design?	Yes
<b>Pumping Hours</b> Total number of hours pumping fluid on this job. Enter in decimal format.	3
<b>Type of Rig Classification Job Was Performed</b> Type Of Rig (classification) Job Was Performed On	Drilling Rig (Portable)
<b>Number Of JSAs Performed</b> Number Of Jsas Performed	5
<b>Was this a Primary Cement Job (Yes / No)</b> Primary Cement Job= Casing job, Liner job, or Tie-back job.	Yes
<b>Number of Unplanned Shutdowns</b> Unplanned shutdown is when injection stops for any period of time.	0
<b>Customer Non-Productive Rig Time (hrs)</b>	0

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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.	
<b>Was the non productive time or the unplanned shutdown caused by a problem with a piece of equipment?</b> Was the non productive time or the unplanned shutdown caused by a problem with a piece of equipment?	No
<b>Did We Run Wiper Plugs?</b> Did We Run Top And Bottom Casing Wiper Plugs?	Bottom
<b>If a top plug was run, was the plug bumped? (Yes/No/N/A)</b> If a top plug was run, was the plug bumped? (Yes/No/N/A)	Yes
<b>If applicable, was Halliburton float equipment used? (Yes/No/N/A)</b> If applicable, was Halliburton float equipment used? (Yes/No/N/A)	Yes
<b>If applicable, did the floats hold? (Yes/No/N/A)</b> If applicable, did the floats hold? (Yes/No/N/A)	Yes
<b>Mixing Density of Job Stayed in Designed Density Range (0-100%)</b> Density Range defined as +/- .20 ppg. Calculation: Total BBLs cement mixed at designed density divided by total BBLs of cement multiplied by 100	98
<b>Pump Rate (percent) of Job Stayed At Designed Pump Rate</b> 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	97
<b>If applicable, were there returns throughout the job? (Yes/No/N/A)</b> If applicable, were there returns throughout the job? (Yes/No/N/A)	Yes
<b>Nbr of Remedial Plug Jobs Rqd - HES</b> Number Of Remedial Plug Jobs Needed After Primary Plug Pumped By HES	0
<b>Nbr of Remedial Sqz Jobs Rqd - HES</b> Number Of Remedial Squeeze Jobs Required After Primary Job Performed By HES	0