

WPX Energy Rocky Mountain LLC - EBUS

PA 332-27

Nabors 576

Post Job Summary

Cement Production Casing

Date Prepared: 11/17/2014

Job Date: 11/02/2014

Submitted by: Patrick Ealey – Grand Junction Cement Engineer

The Road to Excellence Starts with Safety

Sold To #: 300721	Ship To #: 3207526	Quote #:	Sales Order #: 0901794221
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS	Customer Rep:		
Well Name: FEDERAL	Well #: PA 332-27	API/UWI #: 05-045-22240-00	
Field: PARACHUTE	City (SAP): RIFLE	County/Parish: GARFIELD	State: COLORADO
Legal Description: 27-6S-95W-2405FNL-649FEL			
Contractor: NABORS DRLG	Rig/Platform Name/Num: NABORS 576		
Job BOM: 7523			
Well Type: DIRECTIONAL GAS			
Sales Person: HALAMERICA\HB50180	Srv Supervisor: Andrew Brennecke		
Job			

Formation Name	
Formation Depth (MD)	Top Bottom
Form Type	BHST
Job depth MD	8520ft Job Depth TVD
Water Depth	Wk Ht Above Floor 3
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		9.625	9.001	32.3			0	2790		0
Casing		4.5	4	11.6			0	8520		0
Open Hole Section			8.75				2790	8550	0	0

Tools and Accessories									
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make
Guide Shoe	4.5	1		8520		Top Plug	4.5	1	HES
Float Shoe						Bottom Plug			
Float Collar	4.5	1		8490.5		SSR plug set			
Insert Float						Plug Container	4.5	1	HES
Stage Tool						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 ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
1	Fresh Water	Fresh Water	10	bbl	8.34			4	

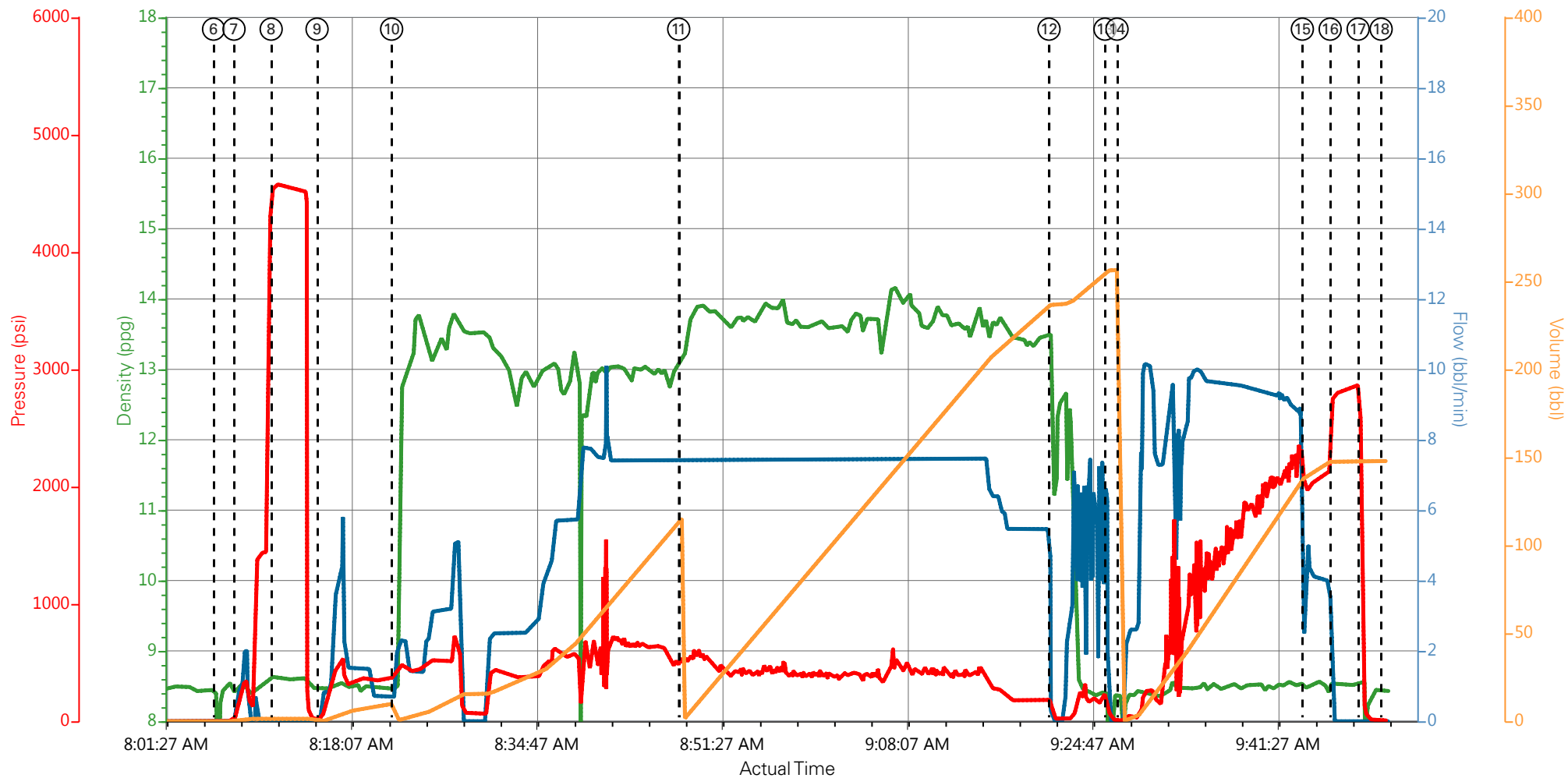
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
2	EconoCem GJ2	ECONOCHEM (TM) SYSTEM	365	sack	12.7	1.66		7.5	8.51

8.69 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	ThermaCem GJ2	THERMACEM (TM) SYSTEM	670	sack	13.5	1.74		7.5	7.61
7.72 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	Fresh Water Displacement	131.6	bbl	8.34			10	
Cement Left In Pipe		Amount	29 ft		Reason		Shoe Joint		
Comment									

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)	Comment
Event	1	Call Out	11/2/2014	00:01:00	USER					CREW HAD JUST BEEN RELEASED FROM OTHER LOCATION
Event	2	Pre-Convoy Safety Meeting	11/2/2014	00:10:00	USER					ALL HES PRESENT
Event	3	Arrive at Location from Other Job or Site	11/2/2014	01:07:55	USER					RIG RUNNING CASING
Event	4	Rig-Up Completed	11/2/2014	04:45:00	USER					1-ELITE, 1-660 BULK TRAILER, 1-1700 SILO, 4.5" PLUG CONTAINER, 2" IRON
Event	5	Pre-Job Safety Meeting	11/2/2014	07:30:00	USER					ALL HES AND RIG CREW PRESENT
Event	6	Start Job	11/2/2014	08:06:00	USER	8.36	0.00	-1.00	0.0	TD- 8550', TP- 8520', CSG - 4.5", 11.6#, SJ- 29.5', OH- 8.75", MUD-11.5PPG, SCSG-2790', 9.625", 32.3#
Event	7	Prime Pumps	11/2/2014	08:07:50	COM5	8.40	2.00	336.00	2.0	FRESH WATER
Event	8	Test Lines	11/2/2014	08:11:10	COM5	8.41	0.30	4574.00	2.1	PRESSURE HELD AT 4574 PSI
Event	9	Pump Spacer 1	11/2/2014	08:15:18	COM5	8.36	4.00	380.00	10.0	FRESH WATER
Event	10	Pump Lead Cement	11/2/2014	08:22:00	COM5	12.7	7.50	399.00	107.9	365SKS, 12.7PPG, 1.66CF/SK, 8.51GAL/SK
Event	11	Pump Tail Cement	11/2/2014	08:47:49	COM5	13.5	7.50	515.00	207.6	670SKS, 13.5PPG, 1.74CF/SK, 7.61GAL/SK
Event	12	Shutdown	11/2/2014	09:21:07	COM5					
Event	13	Drop Top Plug	11/2/2014	09:26:09	COM5					PLUG DROP VERIFIED BY TATTLE TALE
Event	14	Pump Displacement	11/2/2014	09:27:14	COM5	8.43	10.00	2307.00	121.6	1 GAL MMCR, 3-1LB BE6, KCL WATER
Event	15	Slow Rate	11/2/2014	09:43:54	USER	8.41	4.00	1968.00	10.0	SLOW RATE FOR LAST 10 BBLS
Event	16	Bump Plug	11/2/2014	09:46:24	COM5	8.42	4.00	2185.00	131.6	PLUG BUMPED
Event	17	Check Floats	11/2/2014	09:48:55	USER	8.40	0.00	2873.00	131.6	FLOATS HELD 1.5 BBLS BACK TO DISPLACEMENT TANK
Event	18	End Job	11/2/2014	09:51:00	USER	8.44	0.00	7.00	131.6	GOOD RETURNS THROUGH OUT JOB
Event	19	Crew Leave Location	11/2/2014	12:00:00	USER					THANK YOU FOR CHOOSING HALLIBURTON, ANDREW BRENNECKE AND CREW

WPX - PA 332-27 - 4.5" PRODUCTION



— 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	⑦ Prime Pumps 8.45;0.8;111;0.2	⑬ Drop Top Plug 3.55;0;104.66;256.4	⑰ Crew Leave Location n/a;n/a;n/a;n/a
② Pre-Convoy Safety Meeting n/a;n/a;n/a;n/a	⑧ Test Lines 8.56;0;4574;1.4	⑭ Pump Displacement 8.33;0;4;93.76	
③ Arrive at Location from Other Job or Site n/a;n/a;n/a;n/a	⑨ Pump Spacer 1 8.45;0.9;14;0	⑮ Slow Rate 8.48;3.6;1968;139	
④ Rig-Up Completed n/a;n/a;n/a;n/a	⑩ Pump Lead Cement 8.46;1.4;399;0	⑯ Bump Plug 8.58;0;2778.19;147.9	
⑤ Pre-Job Safety Meeting 8.49;0;2;0	⑪ Pump Tail Cement 13.18;7.5;515;0.1	⑰ Check Floats 8.51;0;1781;147.9	
⑥ Start Job 6.72;0;-1;0	⑫ Shutdown 11.2;0;50;237	⑱ End Job 8.44;0;7;147.9	

▼ **HALLIBURTON** | iCem® Service

Created: 2014-11-02 01:06:18, Version: 4.0.248

Edit

Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

Job Date: 11/2/2014 4:46:00 AM

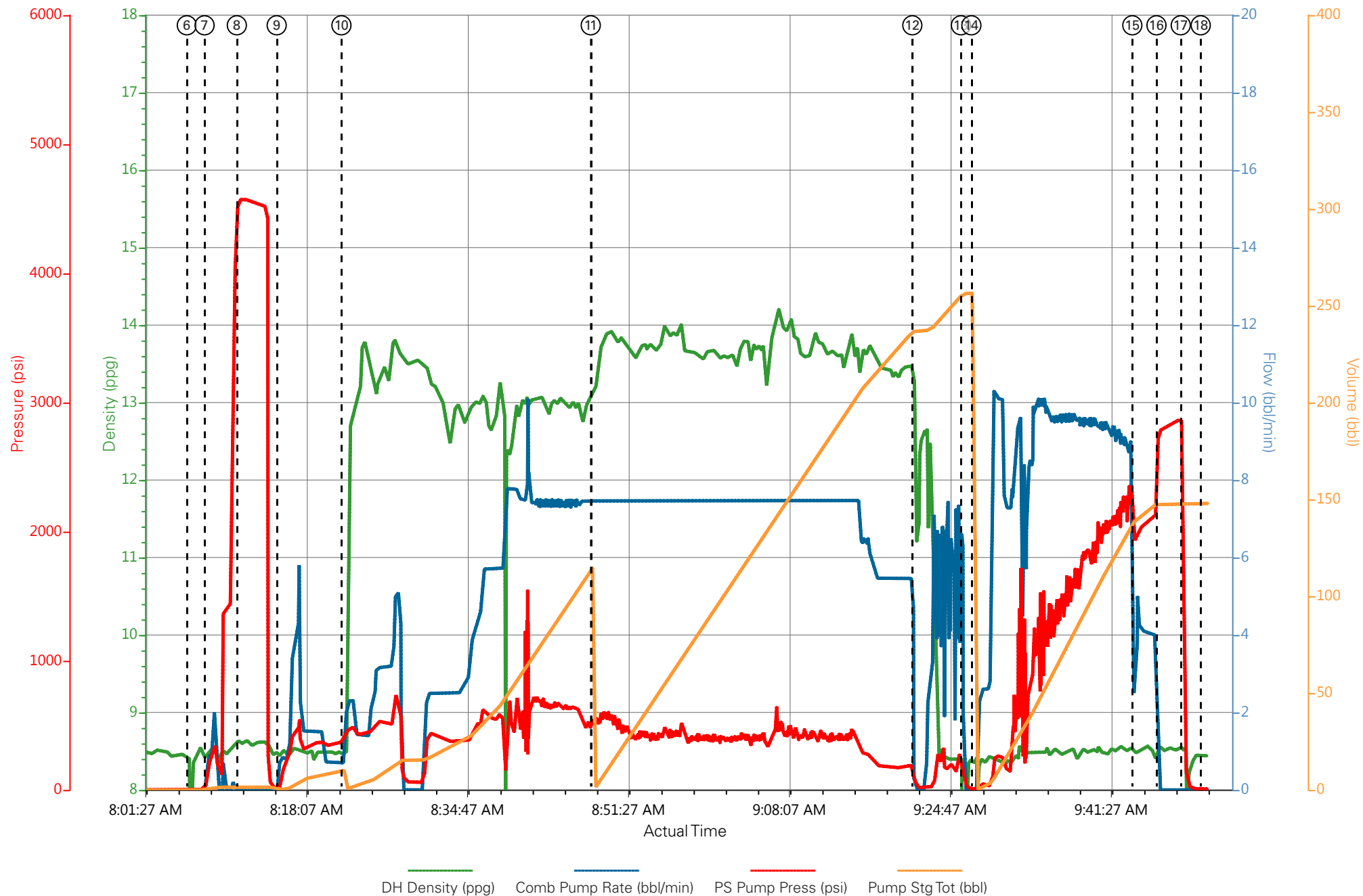
Well: PA 333-27

Representative: AL HARTLE

Sales Order #: 901794221

ELITE#3: A.BRENNECKE/B.ROSE

WPX - PA 332-27 - 4.5" PRODUCTION



HALLIBURTON

Water Analysis Report

Company: WPX
Submitted by: A.BRENNECKE
Attention: E.RUSSEL
Lease: PA
Well #: 333-27

Date: 11/2/2014
Date Rec.: 11/2/2014
S.O.#: 901794221
Job Type: PRODUCTION

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>	50 Deg
Total Dissolved Solids		510 Mg / L

Respectfully: A.BRENNECKE

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 use

Sales Order #: 0901794221	Line Item: 10	Survey Conducted Date: 11/3/2014
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Job Type (BOM): CMT PRODUCTION CASING BOM
Customer Representative: AL HARTLE		API / UWI: (leave blank if unknown) 05-045-22240-00
Well Name: FEDERAL		Well Number: 0080244782
Well Type: DIRECTIONAL GAS	Well Country: USA	
H2S Present: No	Well State: COLORADO	Well County: GARFIELD

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	11/3/2014
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HB58348
Customer Participation	Did the customer participate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	AL HARTLE
HSE	Was our HSE performance satisfactory? Circle Y or N	No
Equipment	Were you satisfied with our Equipment? Circle Y or N	No
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	
Survey Conducted Date The date the survey was conducted	11/3/2014

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	5
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

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Well Name: FEDERAL		Well Number: 0080244782
Well Type: DIRECTIONAL GAS	Well Country: USA	
H2S Present: No	Well State: COLORADO	Well County: GARFIELD

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.	
Did We Run Wiper Plugs? Did We Run Top And Bottom Casing Wiper Plugs?	Top
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)	NA
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	7
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