

WPX Rocky Mountain LLC - EBUS

RGU 31-26-198

Aztec 1000

Post Job Summary

Cement Surface Casing

Date Prepared: 09/08/2014

Job Date: 08/28/2014

Submitted by: Patrick Ealey – Grand Junction Cement Engineer

The Road to Excellence Starts with Safety

Sold To #: 300721		Ship To #: 3124449		Quote #:		Sales Order #: 0901611266	
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS				Customer Rep: JOSH GARIBAY			
Well Name: FEDERAL			Well #: RGU 31-26-198			API/UWI #: 05-103-11974-00	
Field: SULPHUR CREEK		City (SAP): MEEKER		County/Parish: RIO BLANCO		State: COLORADO	
Legal Description: 23-1S-98W-1025FSL-663FEL							
Contractor:				Rig/Platform Name/Num: Aztec 1000			
Job BOM: 392189							
Well Type: DIRECTIONAL GAS							
Sales Person: HALAMERICA\HB50180				Srvc Supervisor: Bill Jamison			

Job

FRIST STAGE NO CEMENT WAS CIRCULATED OFF DV TOOL NO CEMENT TO SURFACE 2ND STAGE TOP OFF WELL WITH 300 SKS TOP OUT CEMENT

Formation Name			
Formation Depth (MD)	Top		Bottom
Form Type	BHST		
Job depth MD	3912ft		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
Open Hole Section			13.5				1700	3927		0
Open Hole Section			14.75				0	1700		
Casing		9.625	9.001	32.3	8 RD	K-55	0	3912	0	0

Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	9.625	1		3912	Top Plug			
Float Shoe	9.625	1			Bottom Plug			
Float Collar	9.625	1		3868.09	SSR plug set			
Insert Float	9.625	1			Plug Container	9.625	1	HES
Stage Tool	9.625	1		1756.89	Centralizers			

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 ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
1	Top Out Cement	Type I-II Cement	300	sack	15.6	1.19		2	5.23
5.39 Gal		FRESH WATER							
2 %		CALCIUM CHLORIDE, PELLET, 50 LB (101509387)							
94 lbm		TYPE I / II CEMENT, BULK (101439798)							

Cement Left In Pipe	Amount	43.91 ft	Reason	Shoe Joint					
Fluid Data									
Stage/Plug #: 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
1	Fresh Water	Fresh Water	20	bbl	8.34			6	
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 (TM) System	VERSACEM (TM) SYSTEM	480	sack	12.8	1.77		8	9.31
9.33 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	VersaCem (TM) System	VARICEM (TM) CEMENT	395	sack	12.8	1.96		8	10.93
10.91 Gal		FRESH WATER							
94 lbm		TYPE I / II CEMENT, BULK (101439798)							
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	Displacement	Displacement	304	bbl	8.34				
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
5	Fresh Water Spacer	Fresh Water Spacer	20	bbl	9.34				
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
6	VersaCem (TM) System	VERSACEM (TM) SYSTEM	910	sack	12.8	1.96		8	10.93
10.91 Gal		FRESH WATER							
Cement Left In Pipe	Amount	ft	Reason	Shoe Joint					
Comment									

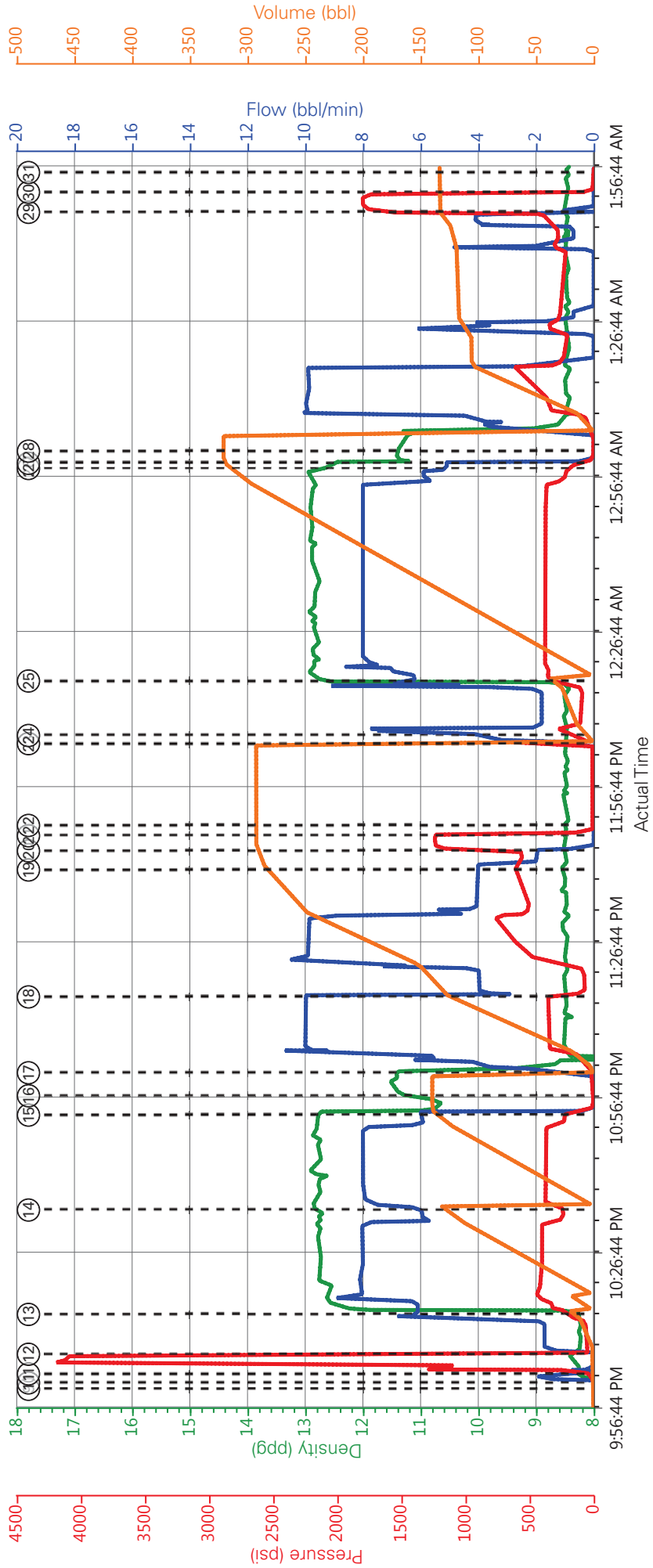
4.1 Job Event Log

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	8/26/2014	00:01:00	USER					TD 3937 TP 3912 SJ 43.91 DV TOOL SET @ 1756.89 MUD 9.3 14.75 OPEN HOLE TO 1700 13.5 OPEN HOLE TO 3927 CASING 9.625 K-55 32.3
Event	2	Crew Leave Yard	8/26/2014	03:00:00	USER					
Event	3	Arrive At Loc	8/26/2014	06:00:00	USER					
Event	4	Assessment Of Location Safety Meeting	8/26/2014	06:30:00	USER					
Event	5	Wait on Customer or Customer Sub- Contractor Equip - Start Time	8/26/2014	07:00:00	USER					CASING STUCK IN WELL
Event	6	Wait on Customer or Customer Sub- Contractor Equipment - End Time	8/27/2014	20:00:00	USER					
Event	7	Pre-Rig Up Safety Meeting	8/27/2014	20:20:00	USER					
Event	8	Pre-Job Safety Meeting	8/27/2014	21:20:00	USER					
Event	9	Start Job	8/27/2014	22:01:00	COM2					
Event	10	Prime Pumps	8/27/2014	22:02:14	COM2	8.4	2	61	2	FRESH WATER
Event	11	Test Lines	8/27/2014	22:03:57	COM2			4200		
Event	12	Pump Spacer 1	8/27/2014	22:07:46	COM2	8.4	6	218	20	FRESH WATER
Event	13	Pump Lead Cement	8/27/2014	22:15:28	COM2	12.8	8	455	151.3	480 SKS 12.8 YIELD 1.77 WAT/REQ 9.31
Event	14	Pump Tail Cement	8/27/2014	22:35:39	COM2	12.8	8	388	138	395 SKS 12.8 YIELD 1.96 WAT/REQ 10.93
Event	15	Shutdown	8/27/2014	22:54:00	USER					
Event	16	Drop Top Plug	8/27/2014	22:57:44	COM2					
Event	17	Pump Displacement	8/27/2014	23:02:11	COM2	8.4	10	78		
Event	18	Slow Rate	8/27/2014	23:16:51	USER	8.4	4	69	138	PASS THRU DV TOOL

Event	19	Slow Rate	8/27/2014	23:41:23	USER	8.4	2	580	290	
Event	20	Bump Plug	8/27/2014	23:45:04	COM2	8.58	0.00	560	302	PRESSURED UP TO 1240 PSI
Event	21	Check Floats	8/27/2014	23:48:00	USER					FLOATS HELD
Event	22	Drop Opening Device For Multiple Stage Cementer	8/27/2014	23:50:00	USER					
Event	23	Open Multiple Stage Cementer	8/28/2014	00:05:48	COM2	8.4	3.40	108.00	1.3	DV TOOL OPEN AND CIRCULATING
Event	24	Pump Water	8/28/2014	00:07:23	USER	8.4	6	205	30	FRESH WATER
Event	25	Pump Tail Cement	8/28/2014	00:17:55	COM2	12.8	8	388	138.3	910 SKS 12.8 YIELD 1.96 WAT/REQ 10.93
Event	26	Shutdown	8/28/2014	00:59:00	USER					
Event	27	Drop Top Plug	8/28/2014	01:00:00	COM2					
Event	28	Pump Displacement	8/28/2014	01:02:20	COM2	8.4	10			FRESH WATER
Event	29	Bump Plug	8/28/2014	01:48:31	COM2	8.4	4	388	138	PRESSURED UP TO 1802 TO CLOSE DV TOOL
Event	30	Check Floats	8/28/2014	01:52:23	USER					DV TOOL CLOSED AND HOLDING
Event	31	End Job	8/28/2014	01:56:12	COM2					LOST RETURNS ON FRIST STAGE @ 240 AWAY ON DISPLACEMENT NO CEMENT CIRCULATED OFF DV TOOL GOOD RETURNS ON 2ND STAGE NO CEMENT TO SURFACE

4.1 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	Start Job	8/28/2014	05:41:30	COM2					TOP OUT 220 FT
Event	2	Prime Pumps	8/28/2014	05:42:35	COM2	8.4	2	23	3	
Event	3	Pump Lead Cement	8/28/2014	05:56:29	COM2	15.6	2.	117	21	
Event	4	Shutdown	8/28/2014	06:35:09	USER					
Event	5	Clean Lines	8/28/2014	06:43:35	USER					
Event	6	Pump Cap Cement	8/28/2014	07:43:19	USER	15.6	2	143	21	100 SKS YIELD 1.19 WATER/REQ 5.23
Event	7	Pump Cap Cement	8/28/2014	07:59:04	USER	15.6	2	140	21	100 SKS YIELD 1.19 WATER/REQ 5.23
Event	8	Pump Cap Cement	8/28/2014	08:33:22	USER	15.6	1	138	21	100 SKS YIELD 1.19 WATER/REQ 5.23
Event	9	End Job	8/28/2014	08:49:42	COM2					
Event	10	Post-Job Safety Meeting (Pre Rig- Down)	8/28/2014	08:50:00	USER					
Event	11	Depart Location Safety Meeting	8/28/2014	09:50:00	USER					
Event	12	Crew Leave Location	8/28/2014	10:00:00	USER					THANKS FOR USING HALLIBURTON BILL JAMISON & CREW



- 31 E

① Call Out n/a;n/a;n/a

② Depart Yard Safety Meeting n/a;n/a;n/a

③ Arrive At Loc n/a;n/a;n/a

④ Assessment Of Location Safety Meeting n/a;n/a;n/a

⑤ Wait on Customer or Customer Sub-Contractor Equip - Start Time n/a;n/a;n/a

⑥ Wait on Customer or Customer Sub-Contractor Equipment - End Time n/a;n/a;n/a

⑦ Pre-Rig Up Safety Meeting n/a;n/a;n/a

⑧ Pre-Job Safety Meeting 8.43;0;0

⑨ Start Job -0.25;0;-2.0

⑩ Prime Pumps -0.19;1.8;-1;0.1

⑪ Test Lines 8.21;0.8;252;2.1

⑫ Pump Spacer 1 8.26;1.7;29;0.1

⑬ Pump Lead Cement 8.93;6.1;224;0.6

⑭ Pump Tail Cement 12.87;7.4;315;132

⑮ Shutdown 12.75;1.8;164;139.9

⑯ Drop Top Plug 11.42;0;6;139.9

⑰ Pump Displacement 9.54;2.3;18;1.4

⑱ Slow Rate 8.49;3.8;86;129.3

⑲ Slow Rate 8.49;4;608;285.1

20 Bump Plug 8.58;0;1229;292.4

21 Check Floats 8.4;0;56;292.4

22 Drop Opening Device For Multiple Stage Cementer 8.42;0;0;292.4

23 Open Multiple Stage Cementer 8.44;3.4;108;1.3

24 Pump Water 8.45;6.2;225;8

25 Pump Tail Cement 12.76;6.2;361;39.2

26 Shutdown 12.59;5.1;154;318.1

27 Drop Top Plug 11.35;0;10;320.7

28 Pump Displacement 11.39;0;1;320.7

29 Bump Plug 8.51;0;1785;133.5

30 Check Floats 8.42;0;1;133.5
- HALLIBURTON

iCem® Service

Customer : WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

Representative : JOSH GARIBAY

Job Date : 8/27/2014 8:51:46 PM

Sales Order # : 901611266

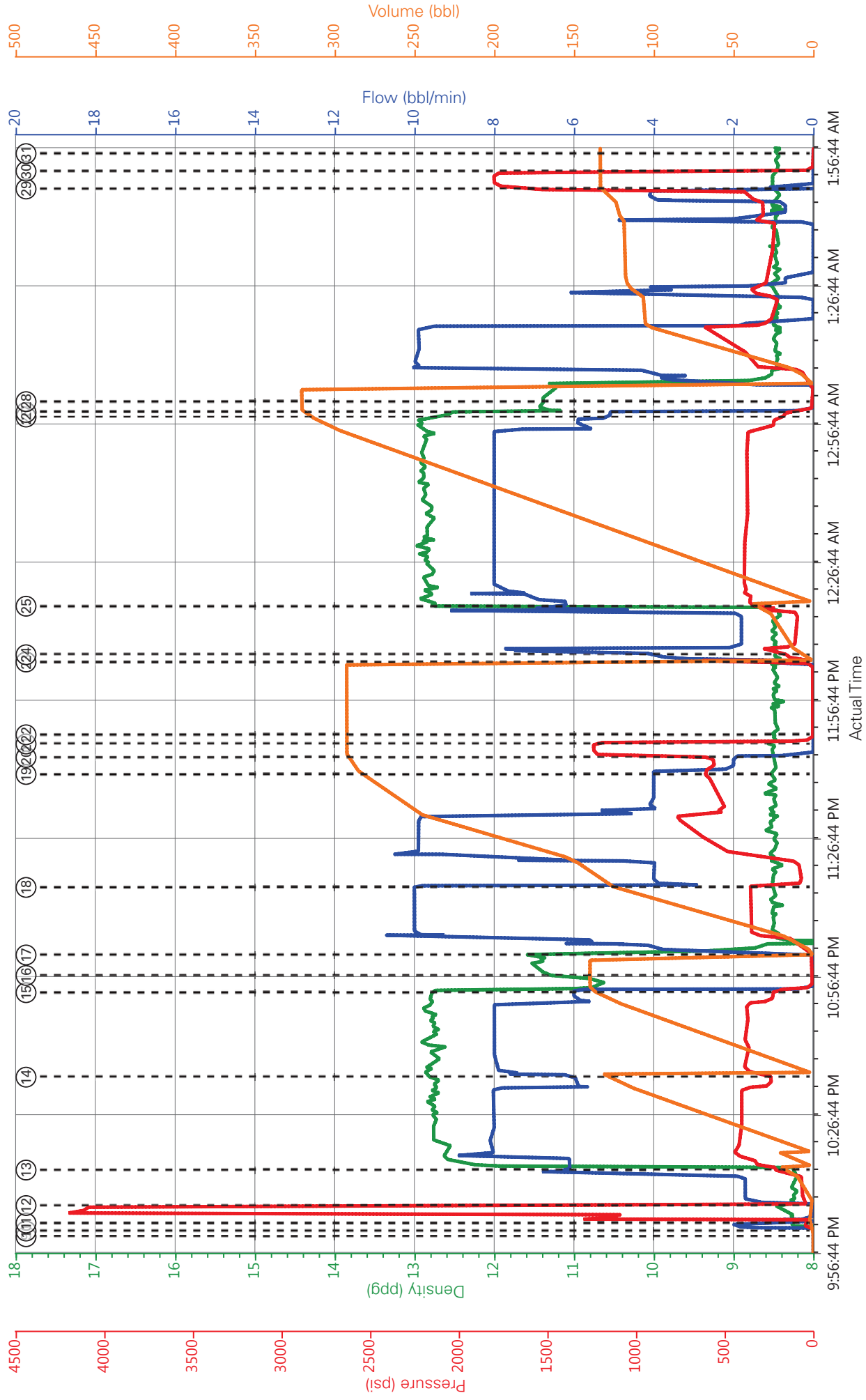
Well RGU 31-26-198 : FEDERAL

Supervisor/Operator : Bill Jamison/Max Lobato

Created: 2014-08-26 09:29:59, Version: 4.0.248

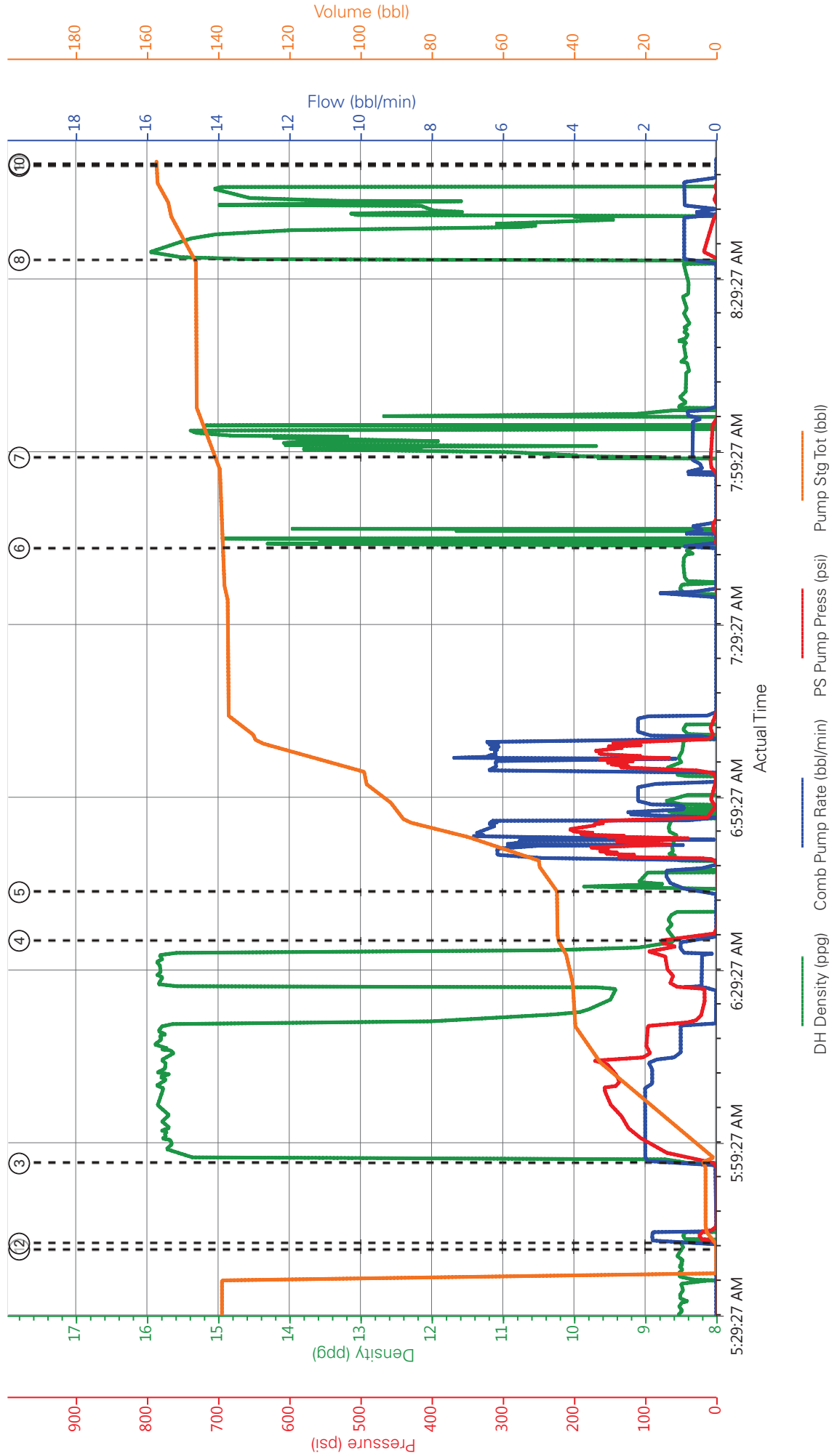
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WPX FEDERAL RGU 31-26-198 2 STAGE SURFACE 9.625



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

WPX FEDERAL RGU 31-26-198 TOP OUT



- ① Start Job 8.49;0;-2;0
- ② Prime Pumps 7.24;1.8;14;0.5
- ③ Pump Top out cement 8.49;2;30;0
- ④ Shutdown 8.6;0;37;44.6
- ⑤ Clean Lines 8.59;0.9;-2;45.1
- ⑥ Pump Cap Cement 12.65;0.4;4;138.6
- ⑦ Pump Cap Cement 10.63;0.7;6;140.9
- ⑧ Pump Cap Cement 15.66;0.9;4;147
- ⑨ End Job -0.07;0;-4;157.3
- ⑩ Post-Job Safety Meeting (Pre Rig-Down) -0.06;0;-4;157.3
- ⑪ Depart Location Safety Meeting n/a;n/a;n/a;n/a
- ⑫ Crew Leave Location n/a;n/a;n/a;n/a

▼ **HALLIBURTON** | iCem® Service

Created: 2014-08-28 04:15:54, Version: 4.0.248

Edit

Customer : WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

Job Date : 8/28/2014 4:18:57 AM

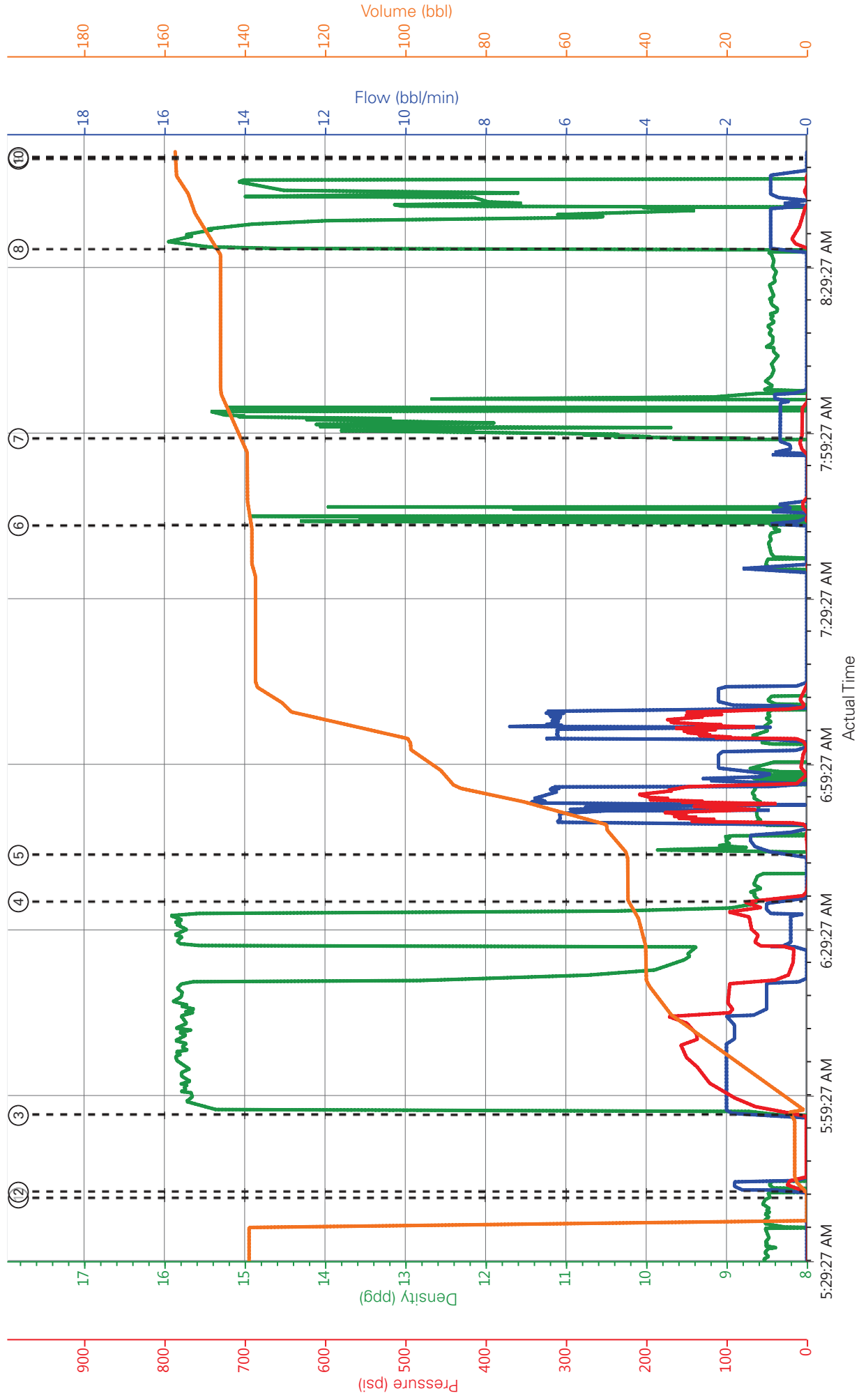
Well RGU 31-26-198 : FEDERAL

Representative : JOSH GARIBAY

Sales Order # : 901611266

Supervisor/Operator : Bill Jamison/Max Lobato

WPX FEDERAL RGU 31-26-198 TOP OUT



HALLIBURTON

Water Analysis Report

Company: WPX
Submitted by: BILL JAMISON
Attention: DALLAS SCOTT
Lease: FEDERAL RGU 31-26-198
Well #:

Date: 8/26/2014
Date Rec.: 8/26/2014
S.O.#: 901611266
Job Type: 2 STAGE SURFACE

Specific Gravity	<i>MAX</i>	1
pH	<i>8</i>	7.5
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>	200 Mg / L
Chlorine (Cl ₂)		0 Mg / L
Temp	<i>40-80</i>	60 Deg
Total Dissolved Solids		370 Mg / L

Respectfully: BILL JAMISON

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 #: 0901611266	Line Item: 10	Survey Conducted Date: 8/28/2014
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Job Type (BOM): CMT MULTIPLE STAGES BOM
Customer Representative: JOSH GARIBAY		API / UWI: (leave blank if unknown) 05-103-11974-00
Well Name: FEDERAL		Well Number: 0080129277
Well Type: DIRECTIONAL GAS	Well Country: USA	
H2S Present: No	Well State: COLORADO	Well County: RIO BLANCO

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	8/28/2014
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HAL9235
Customer Participation	Did the customer participate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	JOSH GARIBAY
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	NONE

CUSTOMER SIGNATURE

Sales Order #: 0901611266	Line Item: 10	Survey Conducted Date: 8/28/2014
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Job Type (BOM): CMT MULTIPLE STAGES BOM
Customer Representative: JOSH GARIBAY		API / UWI: (leave blank if unknown) 05-103-11974-00
Well Name: FEDERAL		Well Number: 0080129277
Well Type: DIRECTIONAL GAS	Well Country: USA	
H2S Present: No	Well State: COLORADO	Well County: RIO BLANCO

KEY PERFORMANCE INDICATORS

General	
Survey Conducted Date The date the survey was conducted	8/28/2014

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.	Deviated
Total Operating Time (hours) Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.	13
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.	10
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

Sales Order #: 0901611266	Line Item: 10	Survey Conducted Date: 8/28/2014
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Job Type (BOM): CMT MULTIPLE STAGES BOM
Customer Representative: JOSH GARIBAY		API / UWI: (leave blank if unknown) 05-103-11974-00
Well Name: FEDERAL		Well Number: 0080129277
Well Type: DIRECTIONAL GAS	Well Country: USA	
H2S Present: No	Well State: COLORADO	Well County: RIO BLANCO

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)	NO
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	98
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	98
If applicable, were there returns throughout the job? (Yes/No/N/A) If applicable, were there returns throughout the job? (Yes/No/N/A)	NO
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