

WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

RWF 531-23

Nabors 577

Post Job Summary

Cement Production Casing

Date Prepared: 2/01/2015

Job Date: 01/15/2015

Submitted by: Aaron Katz – Grand Junction Cement Engineer

The Road to Excellence Starts with Safety

Sold To #: 300721	Ship To #: 3122907	Quote #: 0021985121	Sales Order #: 0902023015
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Customer Rep: LUKE HUBBARD	
Well Name: MEAD -RWF-		Well #: 531-23	API/UWI #: 05-045-20051-00
Field: RULISON	City (SAP): RIFLE	County/Parish: GARFIELD	State: COLORADO
Legal Description: NE SE-23-6S-94W-2303FSL-226FEL			
Contractor: NABORS DRLG		Rig/Platform Name/Num: NABORS 577	
Job BOM: 7523			
Well Type: DIRECTIONAL GAS			
Sales Person: HALAMERICA\HB50180		Srvc Supervisor: Dustin Smith	

Job

Formation Name	
Formation Depth (MD)	Top
Form Type	BHST
Job depth MD	9242ft
Water Depth	
Perforation Depth (MD)	From

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	1230		0
Casing		4.5	4	11.6		I-80	0	9242		0
Open Hole Section			8.75				1230	9252	0	0

Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	4.5	1		9242	Top Plug	4.5	1	HES
Float Shoe	4.5	1			Bottom Plug			
Float Collar	4.5	1		9212	SSR plug set			
Insert Float	4.5	1			Plug Container	4.5	1	HES
Stage Tool	4.5	1			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			4.0		
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	

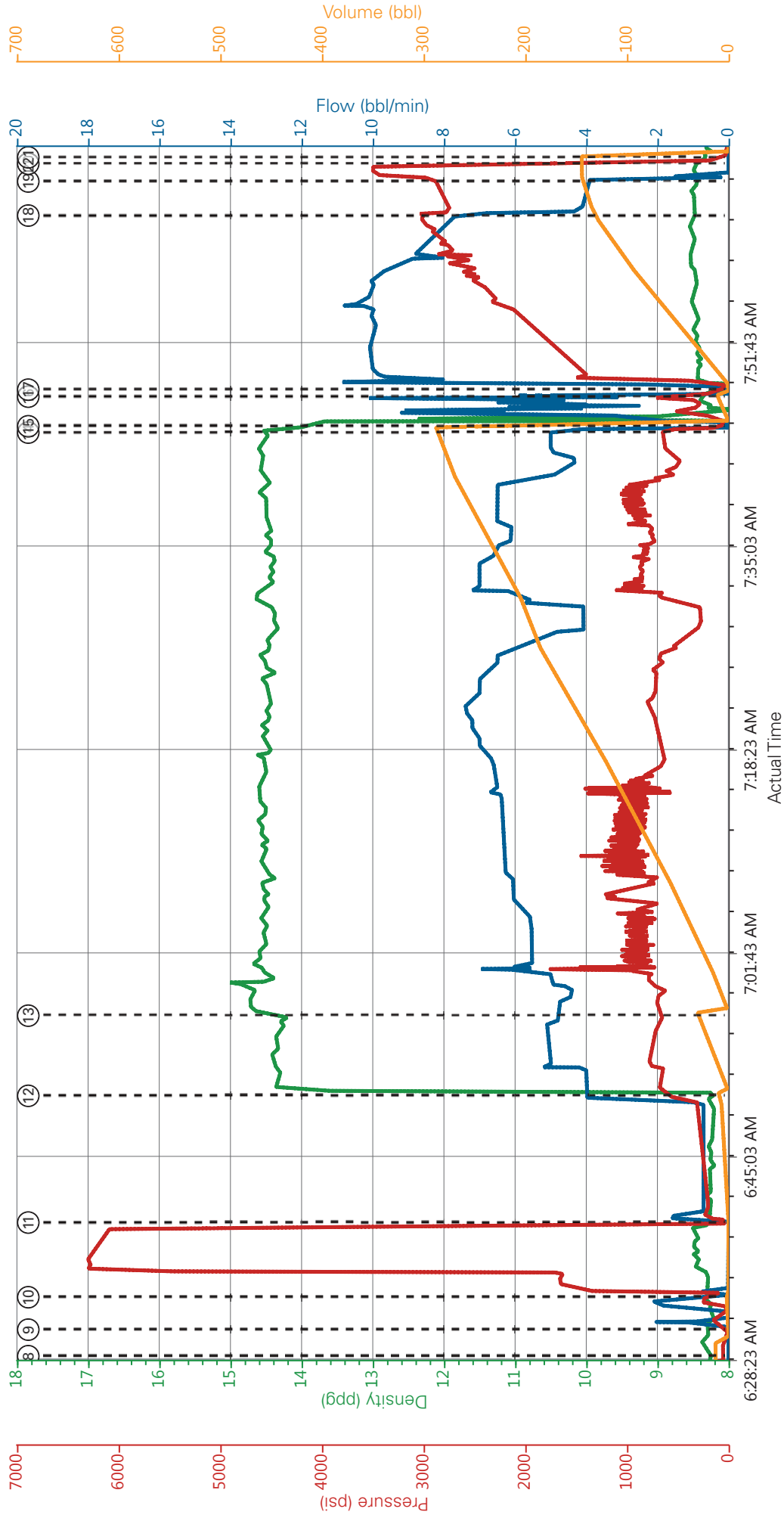
2	14.2 lb/gal Tuned Spacer III	Tuned Spacer III	40	bbl	14.2	1.85		5.0	
302 lbm/bbl		BARITE, BULK (100003681)							
32.07 gal/bbl		FRESH WATER							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal
3	VariCem GJ6	VARICEM (TM) CEMENT	1430	sack	14.5	1.24		7	5.22
5.69 Gal		FRESH WATER							
0.20 %		HR-5, 50 LB SK (100005050)							
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	142.8	bbl	8.4			10	
Cement Left In Pipe		Amount	30 ft		Reason		Shoe Joint		
Comment									

1.1 Job Event Log

Type	Seq. No.	Graph Label	Date	Time	Source	DH Density (ppg)	Comb Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	1/15/2015	03:00:00	USER					ELITE # 9
Event	2	Pre-Convoy Safety Meeting	1/15/2015	03:10:00	USER					ALL HES EMPLOYEES
Event	3	Arrive At Loc	1/15/2015	04:30:00	USER					ARRIVED ON LOCATION 1/2 HOUR EARLY DIDNT START CHARGING TIME UNTIL REQUESTED ON LOCATION TIME RELIEVED CREW THAT WAS ALREADY ON LOCATION RIG ON BOTTOM CIRCULATING SINCE 0200
Event	4	Assessment Of Location Safety Meeting	1/15/2015	04:45:00	USER					ALL HES EMPLOYEES
Event	5	Pre-Rig Up Safety Meeting	1/15/2015	04:50:00	USER					ALL HES EMPLOYEES
Event	6	Rig-Up Equipment	1/15/2015	05:00:00	USER					1 HT-400 PUMP TRUCK (ELITE #9) 1 660 BULK TRUCK 1 BODY LOAD BULK TRUCK 1 SILO 1 F-550 PICKUP
Event	7	Pre-Job Safety Meeting	1/15/2015	06:00:00	USER					ALL HES EMPLOYEES AND RIG RIG CIRCULATED FOR 4 HOURS PRIOR TO THE JOB @ 10 BPM
Event	8	Start Job	1/15/2015	06:29:00	USER					TD: 9252 TP: 9242 SJ: 30 CSG: 4 1/2 11.6 I-80 OH: 8 3/4 SURFACE CASING @ 1230 MUD WT: 13.6 PPG TOG: 6460
Event	9	Prime Lines	1/15/2015	06:31:10	COM5	8.33	2.0	258	2.0	PRIME LINES WITH 2 BBLS FRESH WATER
Event	10	Test Lines	1/15/2015	06:33:49	COM5	8.33	0.0	6270	2.0	PRESSURE TEST OK
Event	11	Pump Fresh Water Spacer	1/15/2015	06:39:56	COM5	8.33	4.0	560	10	PUMP 10 BBL FRESH WATER SPACER
Event	12	Pump Tuned Spacer III	1/15/2015	06:50:19	COM5	14.2	5.0	738	40	PUMP 40 BBL TUNED SPACER 14.2 PPG 1.85 YIELD 10.6 GAL/SK

Event	13	Pump Tail Cement	1/15/2015	06:56:53	COM5	14.5	7.0	1200	315.8	1430 SKS 14.5 PPG 1.24 YIELD 5.22 GAL/SK TAIL CEMENT WEIGHT VERIFIED VIA PRESSURIZED MUD SCALES
Event	14	Shutdown	1/15/2015	07:44:39	USER					
Event	15	Clean Lines	1/15/2015	07:45:10	COM5					CLEAN PUMPS AND LINES TO THE PIT
Event	16	Drop Top Plug	1/15/2015	07:47:36	USER					PLUG AWAY NO PROBLEMS
Event	17	Pump Displacement	1/15/2015	07:48:10	COM5	8.4	10.0	3050	142.8	1 GAL MMCR 3#S BE-6 1 BAG/10 BBL KCL DISPLACEMENT
Event	18	Slow Rate	1/15/2015	08:02:26	USER	8.4	4.0	2890	132.0	SLOW RATE TO BUMP PLUG
Event	19	Bump Plug	1/15/2015	08:05:13	COM5	8.4	4.0	3450	142.8	PSI BEFORE BUMPING PLUG @ 2890 BUMPED PLUG UP TO 3450 PSI
Event	20	Check Floats	1/15/2015	08:06:41	USER					FLOATS HELD 2 BBLs BACK TO DISPLACEMENT TANKS
Event	21	End Job	1/15/2015	08:07:12	COM5					GOOD RETURNS THROUGHOUT THE JOB PIPE STATIC THROUGHOUT THE JOB
Event	22	Pre-Rig Down Safety Meeting	1/15/2015	08:15:00	USER					ALL HES EMPLOYEES
Event	23	Rig-Down Equipment	1/15/2015	08:25:00	USER					
Event	24	Pre-Convoy Safety Meeting	1/15/2015	09:45:00	USER					ALL HES EMPLOYEES
Event	25	Crew Leave Location	1/15/2015	10:00:00	USER					THANK YOU FOR USING HALLIBURTON CEMENT DUSTIN SMITH AND CREW

WPX - RWF 531-23 - 4 1/2 PRODUCTION



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

▼ **HALLIBURTON** | iCem® Service

Created: 2015-01-15 01:27:33, Version: 4.1.85

Edit

Customer : WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

Job Date : 1/15/2015 5:38:28 AM

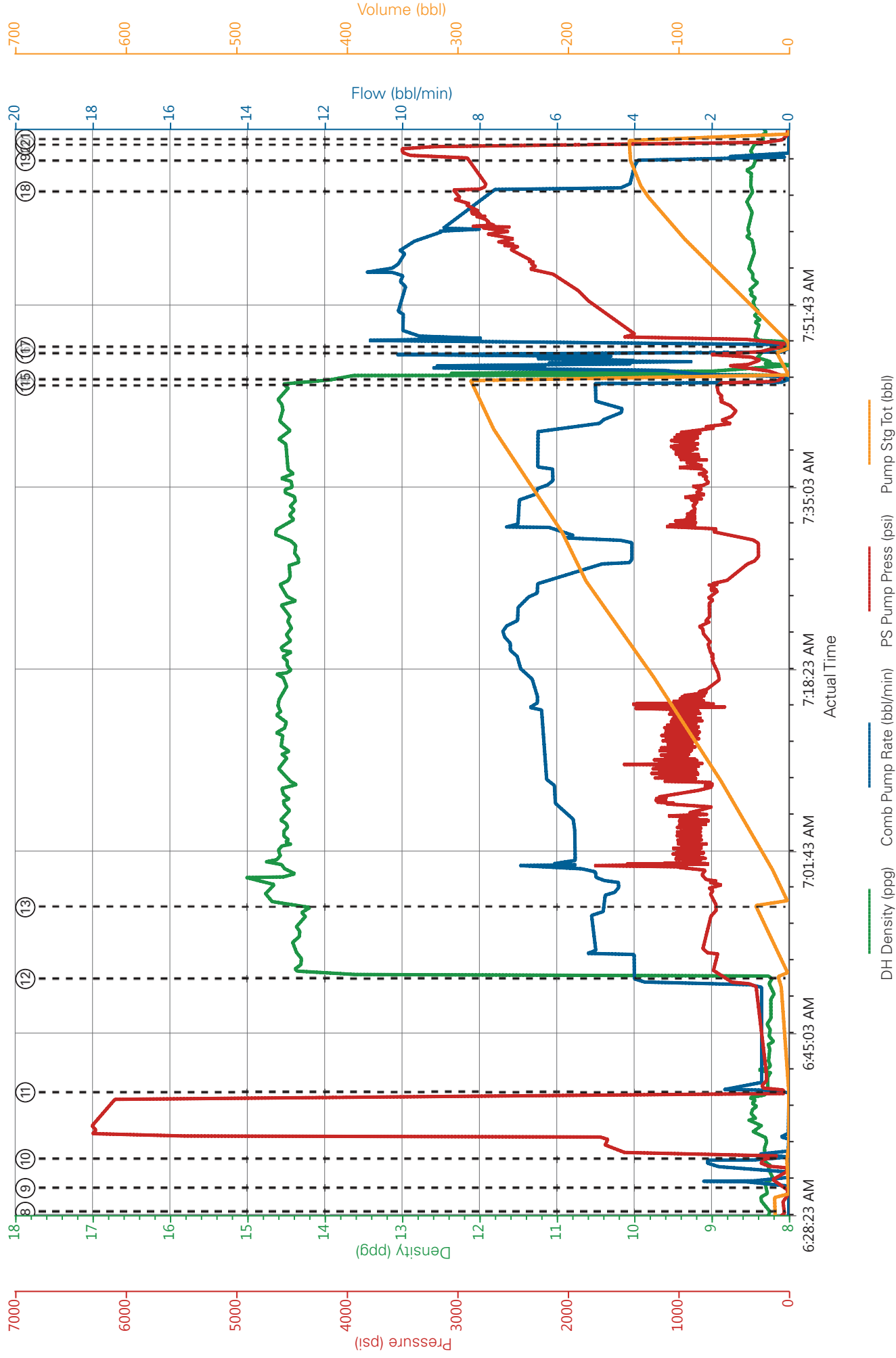
Well : RWF 531-23

Representative : LUKE HUBBARD

Sales Order # : 0902023015

ELITE #9 : DUSTIN SMITH / ADAM ANDERSON

WPX - RWF 531-23 - 4 1/2 PRODUCTION



HALLIBURTON

Water Analysis Report

Company: WPX

Submitted by: DUSTIN SMITH

Attention:

Lease RWF

Well # 531-23

Date: 1/15/2015

Date Rec.:

S.O.# 902023015

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>	UNDER 200 Mg / L
Chlorine (Cl ₂)		0 Mg / L
Temp	<i>40-90</i>	85 Deg
Total Dissolved Solids		890 Mg / L

Respectfully: DUSTIN SMITH

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

Sales Order #: 0902023015	Line Item: 10	Survey Conducted Date: 1/15/2015
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Job Type (BOM): CMT PRODUCTION CASING BOM
Customer Representative: LUKE HUBBARD		API / UWI: (leave blank if unknown) 05-045-20051-00
Well Name: MEAD -RWF-		Well Number: 0080124704
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	1/15/2015
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	LUKE HUBBARD
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**

Survey Conducted Date	1/15/2015
The date the survey was conducted	

Cementing KPI Survey

Type of Job	0
Select the type of job. (Cementing or Non-Cementing)	
Select the Maximum Deviation range for this Job	Vertical
What is the highest deviation for the job you just completed? This may not be the maximum well deviation.	
Total Operating Time (hours)	4
Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.	
HSE Incident, Accident, Injury	No
HSE Incident, Accident, Injury. This should be recordable incidents only.	
Was the job purpose achieved?	Yes
Was the job delivered correctly as per customer agreed design?	
Pumping Hours	1.5
Total number of hours pumping fluid on this job. Enter in decimal format.	
Type of Rig Classification Job Was Performed	Drilling Rig (Portable)
Type Of Rig (classification) Job Was Performed On	
Number Of JSAs Performed	6
Number Of Jsas Performed	
Was this a Primary Cement Job (Yes / No)	Yes
Primary Cement Job= Casing job, Liner job, or Tie-back job.	
Number of Unplanned Shutdowns	0
Unplanned shutdown is when injection stops for any period of time.	
Customer Non-Productive Rig Time (hrs)	0

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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.	
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?	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)	Not Available
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