

WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

NER 44-32

Neighbors 576

Post Job Summary

Cement Surface Casing

Date Prepared: 04/13/2013
Version: 1

Service Supervisor: Smith, Christopher

Submitted by: Grand Junction Engineering

The Road to Excellence Starts with Safety

Sold To #: 300721	Ship To #: 3123459	Quote #:	Sales Order #: 0901183358
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Customer Rep: RICK OAKS	
Well Name: FEDERAL	Well #: NER 44-32	API/UWI #: 05-045-21790-00	
Field: RULISON	City (SAP): RIF	County/Parish: GARFIELD	State: COLORADO
Legal Description: 5-7S-93W-182FNL-2602FWL			
Contractor: NABORS DRLG		Rig/Platform Name/Num: NABORS 574	
Job BOM: 7521			
Well Type: DIRECTIONAL GAS			
Sales Person: HALAMERICA\HB50180		Srcv Supervisor: Edward Arnold	
Job			

Formation Name	
Formation Depth (MD)	Top Bottom
Form Type	BHST
Job depth MD	1168ft 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		9.625	9.001	32.3	8 RD	H-40	0	1150	0	0
Open Hole Section			13.5				0	1168	0	0

Tools and Accessories									
Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make	
Guide Shoe	9.625	0			Top Plug	9.625	1	HES	
Float Shoe	9.625	0			Bottom Plug	9.625	0	HES	
Float Collar	9.625	0			SSR plug set	9.625	0	HES	
Insert Float	9.625	0			Plug Container	9.625	1	HES	
Stage Tool	9.625	0			Centralizers	9.625	0	HES	

Miscellaneous Materials													
Gelling Agt	Conc	Surfactant	Conc	Acid Type	Qty	Conc	Treatment Fld	Conc	Inhibitor	Conc	Sand Type	Qty	Conc

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	20	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	Lead Cement	VARICEM (TM) CEMENT	160	Sack/Ton	12.3	2.38		8	13.77	
13.70 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	Tail Cement	VARICEM (TM) CEMENT	160	Sack/Ton	12.8	2.11		8	11.77
11.71 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	Displacement	Displacement	0	bbl	8.34			10	
Cement Left In Pipe		Amount	44 ft		Reason			Shoe Joint	
Comment									

Summary Report



Sales Order #: 0901183358
WO #: 0901183358
PO/AFE #: NA

Crew: _____

Job Start Date: 3/11/2014

Customer:	WPX ENERGY ROCKY MOUNTAIN LLC-EBUS	Field:	RULISON	Job Type:	CMT SURFACE CASING BOM
UWI / API Number:	05-045-21790-00	County/Parish:	GARFIELD	Service Supervisor:	Edward Arnold
Well Name:	FEDERAL	State:	COLORADO		
Well No:	NER 44-32	Latitude:	39.474858	Cust Rep Name:	RICK OAKS
		Longitude:	-107.798807	Cust Rep Phone #:	
		Sect / Twn / Rng:	5/7/93		

Remarks:		
<i>The Information Stated Herein Is Correct</i>	Customer Representative Signature	Date
	Customer Representative Printed Name	

1.1 Water Field Test

Item	Recorded Test Value	Units	Max. Acceptable Limit	Potential Problems in Exceeding Limit
pH		----	6.0 - 8.0	Chemicals in the water can cause severe retardation
Chlorides		ppm	3000 ppm	Can shorten thickening time of cement
Sulfates		ppm	1500 ppm	Will greatly decrease the strength of cement
Total Hardness		ppm	500 mg/L	High concentrations will accelerate the set of the cement
Calcium		ppm	500 ppm	High concentrations will accelerate the set of the cement
Total Alkalinity		ppm	1000 ppm	Cement is greatly retarded to the point where it may not set up at all (typically occurs @ pH ≥ 8.3).
Bicarbonates		ppm	1000 ppm	Cement is greatly retarded to the point where it may not set up at all
Potassium		ppm	5000 ppm	High concentrations will shorten the pump time of cement (indicates the presence of chlorides, therefore if Potassium levels are measured as high, so should the chlorides)
Iron		ppm	300 ppm	High concentrations will accelerate the set of the cement
Temperature		°F	50-80 °F	High temps will accelerate; Low temps may risk freezing in cold weather

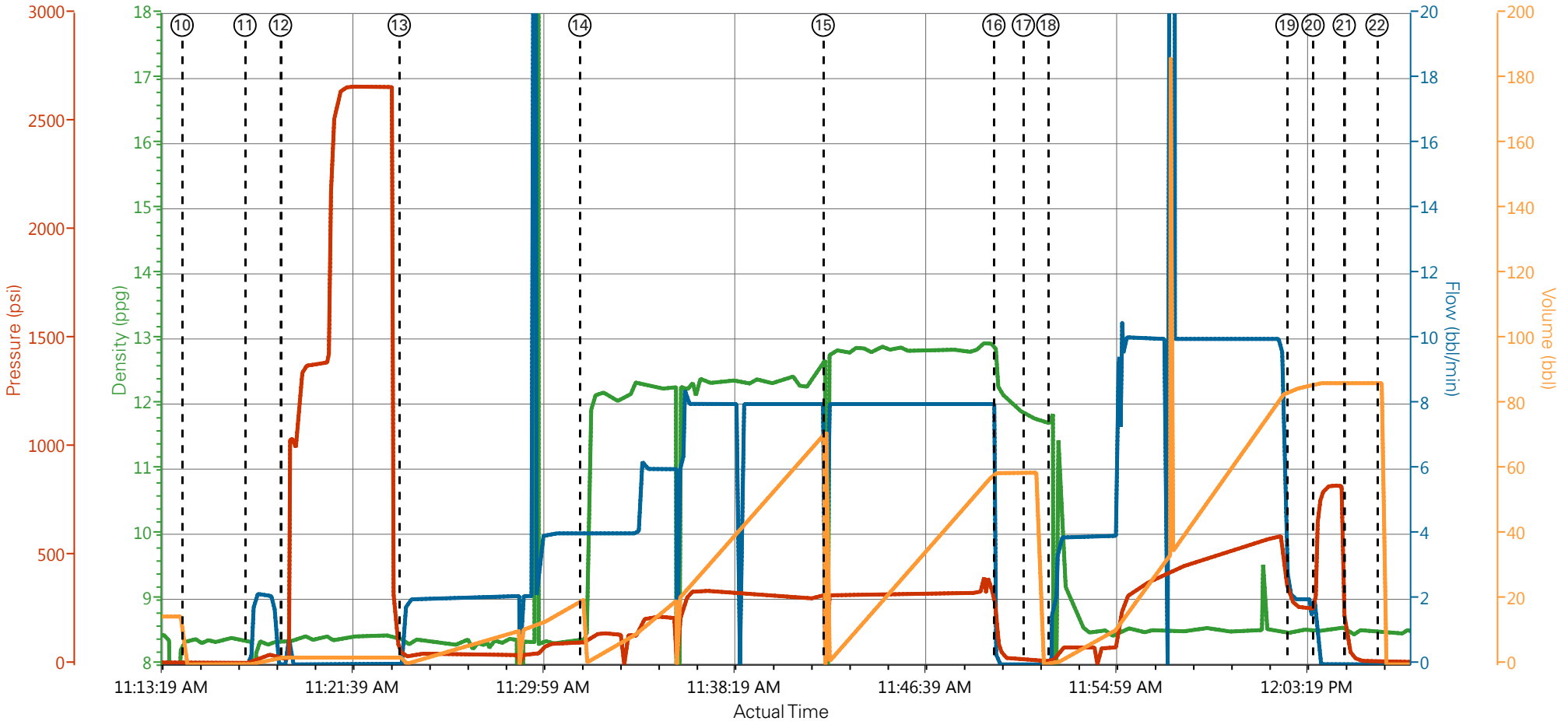
Submitted Respectfully by: _____

1.2 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comment
Event	1	Call Out	Call Out	3/11/2014	01:00:00	USER					CREW WAITING IN FIELD FOR NEXT JOB
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	3/11/2014	04:15:00	USER					DISCUSSED ROUTE HAZARDS AND SAFETY
Event	3	Crew Leave Yard	Crew Leave Yard	3/11/2014	04:30:00	USER					
Event	4	Arrive at Location from Service Center	Arrive at Location from Service Center	3/11/2014	07:00:00	USER					RIG RIGGING UP CASERS
Event	5	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	3/11/2014	10:00:00	USER					
Event	6	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	3/11/2014	10:10:00	USER					
Event	7	Rig-Up Equipment	Rig-Up Equipment	3/11/2014	10:15:00	USER					1 ELITE #4, 1 660 BULK TRUCK, 1 HARD LINE TO FLOOR, 1 LINE TO UPRIGHT, 1 LINE TO RIG TAKN, 1 9 5/8 COMPACT HEAD
Event	8	Rig-Up Completed	Rig-Up Completed	3/11/2014	10:55:00	USER	8.53	0.00	15.00	14.7	
Event	9	Pre-Job Safety Meeting	Pre-Job Safety Meeting	3/11/2014	11:00:00	USER	8.46	0.00	7.00	14.7	TD 1168. TP 1149.5, SJ 43.8, OH 13 1/2, CASING 9 5/8 32.3# H-40, MUD 9.9.
Event	10	Start Job	Start Job	3/11/2014	11:14:22	COM5	8.34	0.00	7.00	0.0	
Event	11	Prime Pumps	Prime Pumps	3/11/2014	11:17:07	COM5	8.34	0.00	7.00	0.0	FILL LINES WITH 2 BBL FRESH WATER.
Event	12	Test Lines	Test Lines	3/11/2014	11:18:40	COM5	8.33	0.00	26.00	2.1	TESTED LINES TO 2663 PSI.
Event	13	Pump Spacer 1	Pump Spacer 1	3/11/2014	11:23:51	COM5	8.39	0.00	42.00	0.0	20 BBL FRESH WATER SPACER.
Event	14	Pump Lead Cement	Pump Lead Cement	3/11/2014	11:31:44	COM5	8.38	4.10	98.00	0.0	160 SKS LEAD CEMENT, 12.3 PPG, 2.38 CF3. 13.77 GAL/SK.
Event	15	Pump Tail Cement	Pump Tail Cement	3/11/2014	11:42:21	COM5	12.72	8.00	321.00	0.1	160 SKS TAIL CEMNT, 12.8 PPG, 2.11 CF3, 11.77 GAL/SK.

Event	16	Shutdown	Shutdown	3/11/2014	11:49:48	USER	12.28	0.00	119.00	58.9	
Event	17	Drop Plug	Drop Plug	3/11/2014	11:51:05	USER	11.83	0.00	18.00	58.9	PLUG LEFT CONTAINER
Event	18	Pump Displacement	Pump Displacement	3/11/2014	11:52:09	COM5	11.70	1.50	17.00	0.0	
Event	19	Slow Rate	Slow Rate	3/11/2014	12:02:35	USER	8.48	2.10	308.00	84.1	SLOW RATE LAST 10 BBL.'S OF DISPLACEMENT PRIOR TO BUMPING THE PLUG.
Event	20	Bump Plug	Bump Plug	3/11/2014	12:03:44	COM5	8.51	1.90	580.00	86.4	
Event	21	Check Floats	Check Floats	3/11/2014	12:05:05	USER	8.51	0.00	86.00	86.4	FLOATS HELD, 1/2 BBL BACK.
Event	22	End Job	End Job	3/11/2014	12:06:31	COM5					
Event	23	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	3/11/2014	12:10:00	USER	8.53	0.00	10.00	0.0	DISCUSSED RIG DOWN AHAZARDS AND SAFETY
Event	24	Rig-Down Equipment	Rig-Down Equipment	3/11/2014	12:15:00	USER					
Event	25	Rig-Down Completed	Rig-Down Completed	3/11/2014	13:03:45	USER					
Event	26	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	3/11/2014	13:15:00	USER					DISCUSSED ROUTE HAZARDS AND SAFETY
Event	27	Crew Leave Location	Crew Leave Location	3/11/2014	13:30:00	USER					THANK YOU FOR USING HALLIBURTON ED ARNOLD AND CREW

WPX - NER 44-32 - 9 5/8 SURFACE



— 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 | ⑨ Pre-Job Safety Meeting 8.46;0;7;14.7 | ⑰ Drop Plug 11.83;0;18;58.9 | 25 Rig-Down Completed n/a;n/a;n/a;n/a |
| ② Pre-Convoy Safety Meeting n/a;n/a;n/a;n/a | ⑩ Start Job 8.35;0;7;0 | ⑱ Pump Displacement 11.69;0.2;15;0 | 26 Pre-Convoy Safety Meeting n/a;n/a;n/a;n/a |
| ③ Crew Leave Yard n/a;n/a;n/a;n/a | ⑪ Prime Pumps 8.34;0;7;0 | ⑲ Slow Rate 8.48;2.1;308;84.1 | 27 Crew Leave Location n/a;n/a;n/a;n/a |
| ④ Arrive at Location from Service Center n/a;n/a;n/a;n/a | ⑫ Test Lines 8.33;0;27;2.1 | 20 Bump Plug 8.51;1.9;580;86.4 | |
| ⑤ Assessment Of Location Safety Meeting n/a;n/a;n/a;n/a | ⑬ Pump Spacer 1 8.39;0;42;0 | 21 Check Floats 8.51;0;86;86.4 | |
| ⑥ Pre-Rig Up Safety Meeting n/a;n/a;n/a;n/a | ⑭ Pump Lead Cement 8.38;4.1;102;19.8 | 22 End Job 8.52;0;12;86.4 | |
| ⑦ Rig-Up Equipment n/a;n/a;n/a;n/a | ⑮ Pump Tail Cement 12.74;8;321;71.5 | 23 Pre-Rig Down Safety Meeting 8.53;0;10;0 | |
| ⑧ Rig-Up Completed 8.53;0;15;14.7 | ⑯ Shutdown 12.28;0;119;58.9 | 24 Rig-Down Equipment n/a;n/a;n/a;n/a | |

▼ **HALLIBURTON** | iCem® Service

Created: 2014-03-11 07:57:07, Version: 3.0.121

Edit

Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

Job Date: 3/11/2014 10:48:27 AM

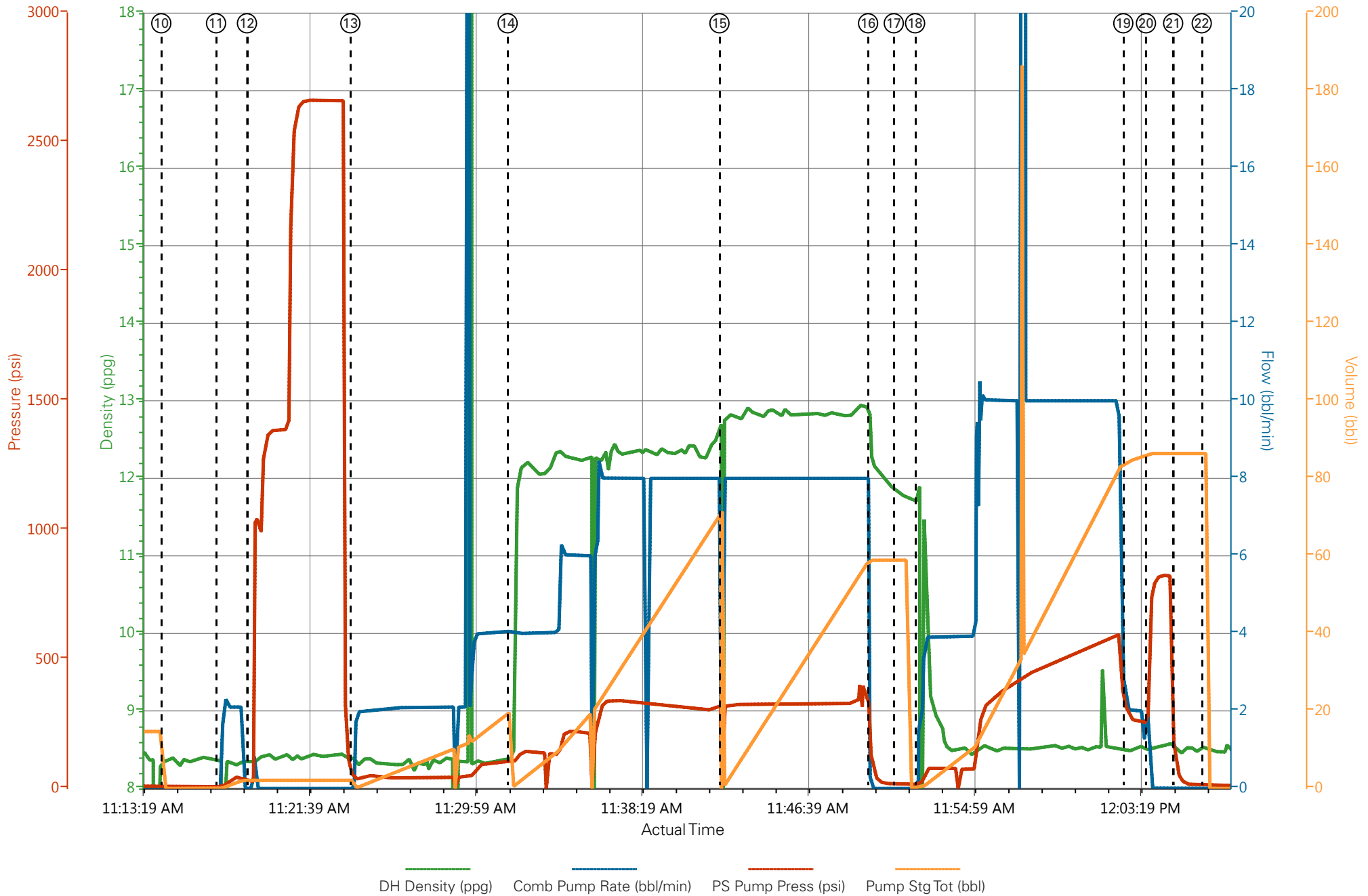
Well: NER 44-32

Representative: RICK OAKS

Sales Order #: 0901183358

ELITE #4: ED ARNOLD / TRAVIS BROWN

WPX - NER 44-32 - 9 5/8 SURFACE



Sales Order #: 0901183358	Line Item: 10	Survey Conducted Date: 3/11/2014
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative:		API / UWI: (leave blank if unknown) 05-045-21790-00
Well Name: FEDERAL		Well Number: 0080125506
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	3/11/2014
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HX46731
Customer Participation	Did the customer participate in this survey? (Y/N)	No
Customer Representative	Enter the Customer representative name	
HSE	Was our HSE performance satisfactory? Circle Y or N	
Equipment	Were you satisfied with our Equipment? Circle Y or N	
Personnel	Were you satisfied with our people? Circle Y or N	
Customer Comment	Customer's Comment	

CUSTOMER SIGNATURE

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Well Type: DIRECTIONAL GAS	Well Country: USA	
H2S Present: No	Well State: COLORADO	Well County: GARFIELD

KEY PERFORMANCE INDICATORS

General	
Survey Conducted Date	3/11/2014
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	Deviated
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?	
Operating Hours (Pumping Hours)	1
Total number of hours pumping fluid on this job. Enter in decimal format.	
Customer Non-Productive Rig Time (hrs)	0
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.	
Type of Rig Classification Job Was Performed	Drilling Rig (Portable)
Type Of Rig (classification) Job Was Performed On	
Number Of JSAs Performed	5
Number Of Jsas Performed	
Number of Unplanned Shutdowns	0
Unplanned shutdown is when injection stops for any period of time.	
Was this a Primary Cement Job (Yes / No)	Yes

Sales Order #: 0901183358	Line Item: 10	Survey Conducted Date: 3/11/2014
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Customer Representative:		API / UWI: (leave blank if unknown) 05-045-21790-00
Well Name: FEDERAL		Well Number: 0080125506
Well Type: DIRECTIONAL GAS	Well Country: USA	
H2S Present: No	Well State: COLORADO	Well County: GARFIELD

Primary Cement Job= Casing job, Liner job, or Tie-back job.	
Did We Run Wiper Plugs? Did We Run Top And Bottom Casing Wiper Plugs?	Top
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	99
Was Automated Density Control Used? Was Automated Density Control (ADC) Used ?	Yes
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	99
Nbr of Remedial Sqz Jobs Rqd - Competition Number Of Remedial Squeeze Jobs Required After Primary Job Performed By Competition	0
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