

WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

NER 324-32

Nabors 576

Post Job Summary

Cement Surface Casing

Date Prepared: 07/25/2014

Job Date: 07/22/2014

Submitted by: Kory Hugentobler – Grand Junction Cement Engineer

The Road to Excellence Starts with Safety

Sold To #: 300721	Ship To #: 3123461	Quote #: 0021874033	Sales Order #: 0901525907
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Customer Rep: RICK OAKS	
Well Name: FEDERAL	Well #: NER 324-32	API/UWI #: 05-045-21792-00	
Field: RULISON	City (SAP): RIFLE	County/Parish: GARFIELD	State: COLORADO
Legal Description: 5-7S-93W-127FNL-2575FWL			
Contractor: NABORS DRLG		Rig/Platform Name/Num: NABORS 576	
Job BOM: 7521			
Well Type: DIRECTIONAL GAS			
Sales Person: HALAMERICA\HB50180		Srcv Supervisor: Eric Carter	
Job			

Formation Name	
Formation Depth (MD)	Top 0 FT. Bottom 1133FT.
Form Type	BHST
Job depth MD	1133ft Job Depth TVD
Water Depth	Wk Ht Above Floor 5 FT.
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	3	9.625	9.001	32.3			0	30	0	0
Casing		9.625	9.001	32.3		H-40	0	1133		0
Open Hole Section			13.5				0	1133		0

Tools and Accessories									
Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make	
Guide Shoe					Top Plug	9.625	1	HES	
Float Shoe					Bottom Plug				
Float Collar					SSR plug set				
Insert Float					Plug Container	9.625	1	HES	
Stage Tool					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 ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
1	Fresh Water	Fresh Water	20	barrel	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	VariCem GJ1	VARICEM (TM) CEMENT	125	sack	12.3	2.38	13.75	7		

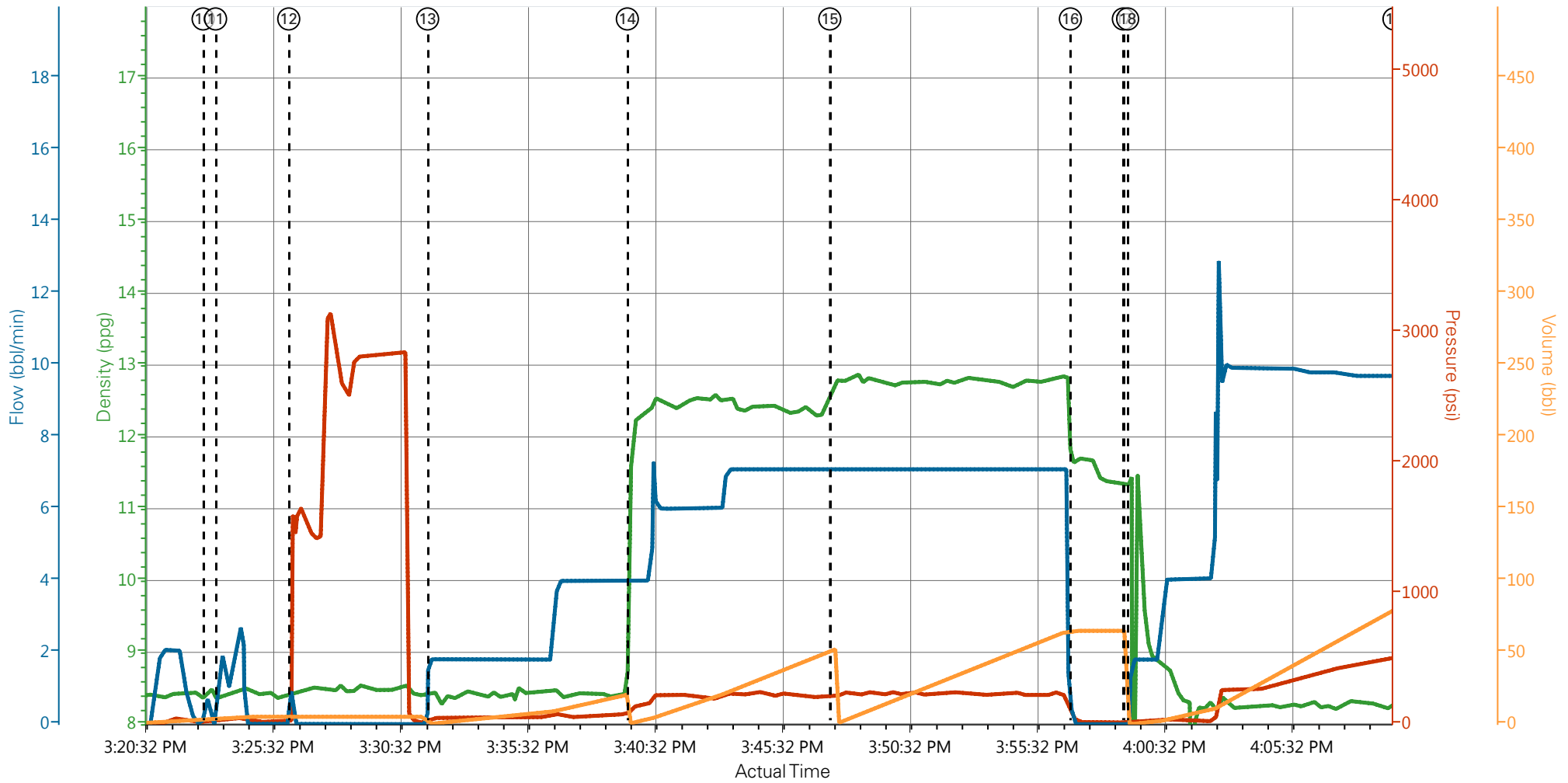
13.70 Gal		FRESH WATER							
0.25 lbm		POLY-E-FLAKE (101216940)							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal
3	VariCem GJ1	VARICEM (TM) CEMENT	175	sack	12.8	2.11	11.75	7	
0.25 lbm		POLY-E-FLAKE (101216940)							
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	Fresh Water Displacement	Fresh Water Displacement	84.7	bbl	8.34			10	
Cement Left In Pipe	Amount	44.12 ft		Reason	Shoe Joint				
Comment									

3.5 Job Event Log

Type	Seq. No.	Graph Label	Date	Time	Source	DH Density (ppg)	PS Pump Press (psi)	Comb Pump Rate (bbl/min)	Pump Stg Tot (bbl)	Comment
Event	1	Call Out	7/22/2014	07:00:00	USER					
Event	2	Depart Yard Safety Meeting	7/22/2014	10:20:00	USER					ATTENDED BY ALL HES CREW
Event	3	Crew Leave Yard	7/22/2014	10:30:00	USER					
Event	4	Arrive At Loc	7/22/2014	12:30:00	USER					RIG RUNNING CASING
Event	5	Assessment Of Location Safety Meeting	7/22/2014	13:30	USER					ATTENDED BY ALL HES CREW
Event	6	Other	7/22/2014	13:40	USER					SPOT EQUIPMENT
Event	7	Pre-Rig Up Safety Meeting	7/22/2014	13:50	USER					ATTENDED BY ALL HES CREW
Event	8	Rig-Up Equipment	7/22/2014	14:00	USER					
Event	9	Pre-Job Safety Meeting	7/22/2014	15:00	USER					ATTENDED BY ALL HES CREW, RIG CREW AND COMPANY REP
Event	10	START JOB	7/22/2014	15:22:55	USER					TP 1090', TD 1133', MW 10.2 PPG, CASING 9.625", 32.3#, H-40, SJ 44.12', LJ 30', HOLE 13.5", RIG CIRCULATED FOR 1.5" HR'S PRIOR TO JOB.
Event	11	Other	7/22/2014	15:23:24	USER	8.34	57	2	2	FILL LINES
Event	12	Test Lines	7/22/2014	15:26:16	USER					PRESSURED UP TO 2850 PSI, PRESSURE HELD
Event	13	Pump Spacer	7/22/2014	15:31:44	USER	8.34	75	4	20	FRESH WATER
Event	14	Pump Lead Cement	7/22/2014	15:39:34	USER	12.3	250	7	53	125 SKS VARICEM MIXED AT 12.3 PPG, 2.38 YIELD, 13.75 GL/SK
Event	15	Pump Tail Cement	7/22/2014	15:47:31	USER	12.8	250	7	65.8	175 SKS VARICEM MIXED AT 12.8 PPG, 2.11 YIELD, 11.75 GL/SK
Event	16	Shutdown	7/22/2014	15:56:57	USER					
Event	17	Drop Top Plug	7/22/2014	15:59:02	USER					PLUG LAUNCHED
Event	18	Pump Displacement	7/22/2014	15:59:12	USER	8.34	480	10	74.7	FRESH WATER
Event	19	Slow Rate	7/22/2014	16:09:39	USER	8.34	280	2	10	
Event	20	Bump Plug	7/22/2014	16:11:09	USER		930			PLUG LANDED

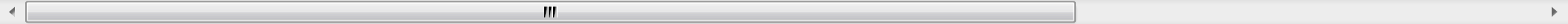
Event	21	Check Floats	7/22/2014	16:13:45	USER	FLOATS HELD
Event	22	End Job	7/22/2014	16:15:20	USER	GOOD CIRCULATION THROUGH OUT JOB, PIPE NOT MOVED DURING JOB, 15 BBLS CEMENT TO SURFACE
Event	24	Post-Job Safety Meeting (Pre Rig-Down)	7/22/2014	16:20	USER	ATTENDED BY ALL HES CREW
Event	25	Rig-Down Equipment	7/22/2014	16:30	USER	
	26	Depart Location Safety Meeting	7/22/2014	16:50	USER	ATTENDED BY ALL HES CREW
	27	Crew Leave Location	7/22/2014	17:00	USER	THANK YOU FOR USING HALLIBURTON CEMENT, ERIC CARTER AND CREW.

WPX - NER 324-32 - SURFACE



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

- | | | | |
|---|---|--------------------------------------|--------------------------------------|
| ① Call Out n/a;n/a;n/a;n/a | ⑥ Other n/a;n/a;n/a;n/a | ⑪ Other 8.37;21;1.2;3.3 | ⑱ Shutdown 11.65;41;0;65 |
| ② Depart Yard Safety Meeting n/a;n/a;n/a;n/a | ⑦ Pre-Rig Up Safety Meeting n/a;n/a;n/a;n/a | ⑫ Test Lines 8.47;1611;0;5.1 | ⑳ Drop Top Plug 11.32;13;0;0 |
| ③ Crew Leave Yard n/a;n/a;n/a;n/a | ⑧ Rig-Up Equipment n/a;n/a;n/a;n/a | ⑬ Pump Spacer 8.44;25;1.8;0.3 | ㉑ Pump Displacement 11.44;16;1.8;0.1 |
| ④ Arrive At Loc n/a;n/a;n/a;n/a | ⑨ Pre-Job Safety Meeting n/a;n/a;n/a;n/a | ⑭ Pump Lead Cement 11.59;101;4;0.7 | ㉒ Slow Rate 8.31;510;9.5;81 |
| ⑤ Assessment Of Location Safety Meeting n/a;n/a;n/a;n/a | ⑩ START JOB 8.42;15;0.7;3 | ⑮ Pump Tail Cement 12.7;216;7.1;51.6 | ㉓ Bump Plug 8.27;842;0;84.2 |
| | | | ㉔ Check Floats 8.19;9;0 |
| | | | ㉕ End Job 8.27;9;0 |
| | | | ㉖ Post-Job Safety |
| | | | ㉗ Rig-Down Equip |



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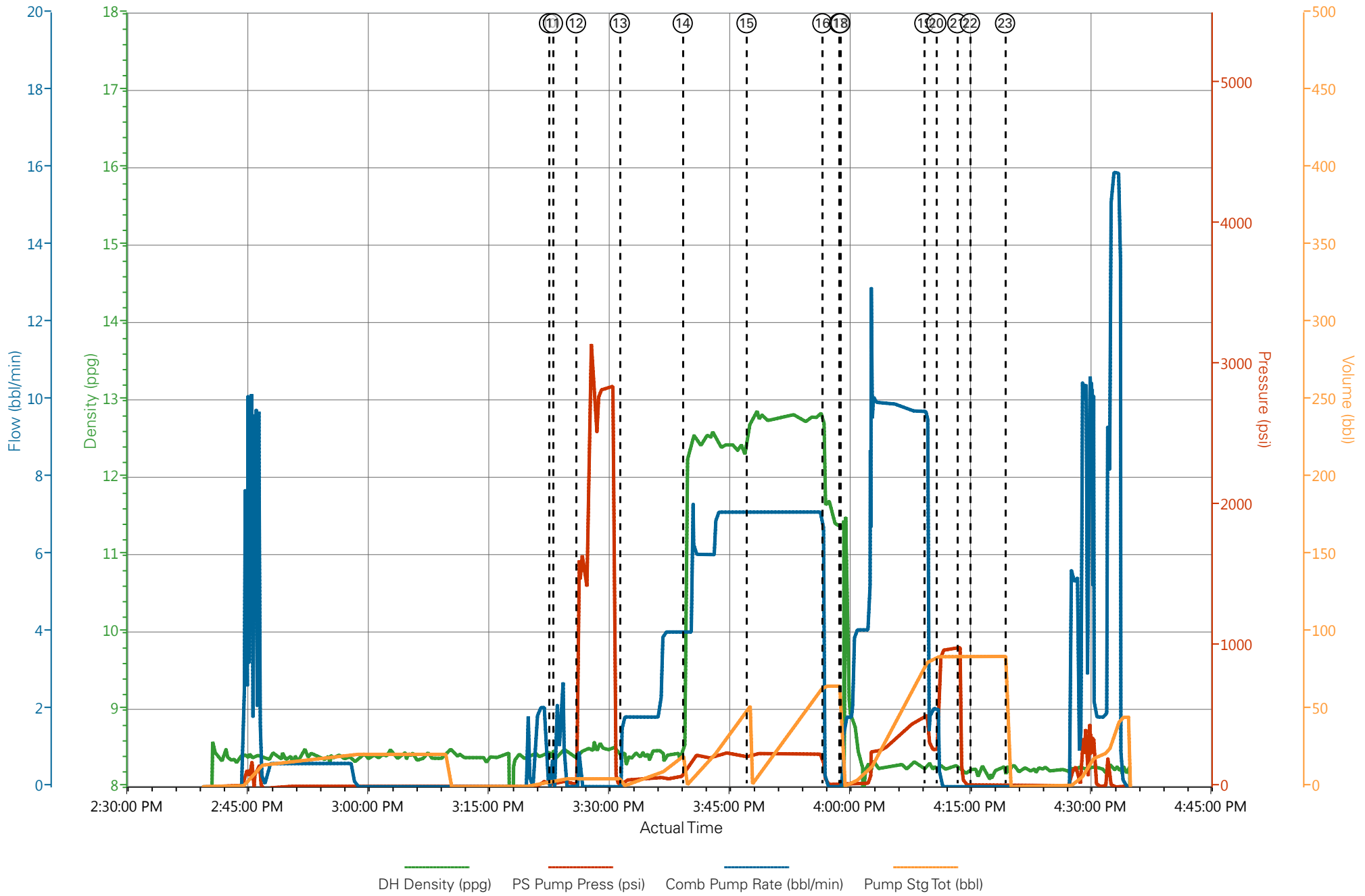
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Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS
 Representative: RICK OAKS

Job Date: 7/22/2014 2:39:03 PM
 Sales Order #: 901525907

Well: NER 324-32
 ERIC CARTER: TRAVIS BROWN/ELITE 2

WPX - NER 324-32 - SURFACE



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

JOB PROCEDURE

NABORS

Pre-Planned Job Procedure Single Stage

EVENT #	EVENT	VOLUME	SACKS	WEIGHT	YIELD	GAL/ SK
1	Start Job		Rate 8 10 2			
6	Test Lines	3000.0				
9	WATER SPACER	20.0				
13	Lead Cement	53.0	125	12.3	2.38	13.75
15	Tail Cement	65.8	175	12.8	2.11	11.75
4	SHUTDOWN					
22	DROP PLUG					
23	Displacement	92.5		Mud Wt.	10.2	
4	Slow Rate	82.5		Casing	9.625	32.3
26	Land Plug	270		Open Hole	13.5	
	Release Psi / Job Over	770				
4	Check Floats					
2	END JOB					
				Disp Fluid	8.4	
			Do Not Overdisplace			
DISPLACEMENT	TOTAL PIPE	SHOE JOINT LENGTH		ANN FACTOR	BBL/FT	H2O REQ.
92.54	1220	44.12		0.0870	0.0787	202.4
PSI to Lift Pipe	457.2	<u>*****Use Mud Scales on Each Tier*****</u>				
Total Displacement	92.54					
CALCULATED DIFFERENTIAL PSI		270		TOTAL FLUID PUMPED		231.3
Collapse	1400	Burst	2270		S.O.#	901525907
HOT	716.0	TOT	473.0	Company Rep: RICK OAKS		
Bbls to Pit	11.8					

HALLIBURTON

Water Analysis Report

Company: WPX
Submitted by: ERIC CARTER
Attention: J.Trout
Lease: NABORS
Well #: NER 324-32

Date: 7/25/2014
Date Rec.: 7/25/2014
S.O.#: 901525907
Job Type: SURFACE

Specific Gravity	<i>MAX</i>	1
pH	<i>8</i>	7
Potassium (K)	<i>5000</i>	0 Mg / L
Hardness	<i>500</i>	120 Mg / L
Iron (FE2)	<i>300</i>	0 Mg / L
Chlorides (Cl)	<i>3000</i>	500 Mg / L
Sulfates (SO ₄)	<i>1500</i>	<200 Mg / L
Temp	<i>40-80</i>	78 Deg
Total Dissolved Solids		330 Mg / L

Respectfully: ERIC CARTER

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 u

Sales Order #: 0901525907	Line Item: 10	Survey Conducted Date: 7/22/2014
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative: RICK OAKS		API / UWI: (leave blank if unknown) 05-045-21792-00
Well Name: FEDERAL		Well Number: 0080125508
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	7/22/2014
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HX15491
Customer Participation	Did the customer participate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	RICK OAKS
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	7/22/2014
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)	3
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

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Well Name: FEDERAL		Well Number: 0080125508
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	98
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	97
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