HALLIBURTON

WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

PA 413-12
PARACHUTE
Garfield County , Colorado

Cement Surface Casing

10-Sep-2013

Post Job Report

HALLIBURTON

Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 300721	**Ship To #:** 3104743	**Quote #:**	**Sales Order #:** 900736300
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		**Customer Rep:** Wilson, W.C	
Well Name: PA	**Well #:** 413-12		**API/UWI #:** 05-045-20636
Field: PARACHUTE	**City (SAP):** PARACHUTE	**County/Parish:** Garfield	**State:** Colorado
Lat: N 39.452 deg. OR N 39 deg. 27 min. 7.528 secs.		**Long:** W 107.95 deg. OR W -108 deg. 3 min. 0.324 secs.	
Contractor: NABORS 577	**Rig/Platform Name/Num:** NABORS 577		
Job Purpose: Cement Surface Casing			
Well Type: Development Well	**Job Type:** Cement Surface Casing		
Sales Person: MAYO, MARK	**Srvc Supervisor:** ARNOLD, EDWARD	**MBU ID Emp #:** 439784	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
ANDERSON, RICHARD Clifton	4.5	553025	ARNOLD, EDWARD John	4.5	439784	LAULAINEN, ROGER Edward	4.5	524413
LINN, PAUL Andrew	4.5	479143						

Equipment

HES Unit #	*Distance-1 way*	HES Unit #	*Distance-1 way*	HES Unit #	*Distance-1 way*	HES Unit #	*Distance-1 way*
10297346	60 mile	10567589C	60 mile	10951249	60 mile	10973571	60 mile
11808847	60 mile						

Job Hours

Date	*On Location Hours*	Operating Hours	Date	*On Location Hours*	Operating Hours	Date	*On Location Hours*	Operating Hours
2013-09-10	3.5	2.5	2013-09-11	1	1			
TOTAL		*Total is the sum of each column separately*						

Job

Formation Name			
Formation Depth (MD)	**Top**		**Bottom**
Form Type		**BHST**	
Job depth MD	950. ft	**Job Depth TVD**	950. ft
Water Depth		**Wk Ht Above Floor**	3. ft
Perforation Depth (MD)	*From*		**To**

Job Times

	Date	Time	Time Zone
Called Out	10 - Sep - 2013	16:30	MST
On Location	10 - Sep - 2013	20:30	MST
Job Started	10 - Sep - 2013	22:38	MST
Job Completed	10 - Sep - 2013	23:30	MST
Departed Loc	11 - Sep - 2013	01:00	MST

Well Data

Description	New / Used	Max pressure psig	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft

Tools and Accessories

Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					**Packer**					**Top Plug**	9 5/8”	1	HES
Float Shoe					**Bridge Plug**					**Bottom Plug**			
Float Collar					**Retainer**					**SSR plug set**			
Insert Float										**Plug Container**	9 5/8”	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/sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk

Stage/Plug #: 1

Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density uom	Yield uom	Mix Fluid uom	Rate uom	Total Mix Fluid uom

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Stage/Plug #: 1									
Fluid #	**Stage Type**	**Fluid Name**	**Qty**	**Qty uom**	**Mixing Density lbm/gal**	**Yield ft3/sk**	**Mix Fluid Gal/sk**	**Rate bbl/min**	**Total Mix Fluid Gal/sk**
1	**Fresh Water Spacer**		**20.00**	**bbl**	**.**	**.0**	**.0**	**4**	
2	**VariCem GJ1 Tail Cement**	**VARICEM (TM) CEMENT (452009)**	**270.0**	**sacks**	**12.8**	**2.11**	**11.75**	**7**	**11.75**
	11.75 Gal	FRESH WATER							
3	**Fresh Water Displacement**		**68.00**	**bbl**	**.**	**.0**	**.0**	**9**	

Calculated Values		**Pressures**		**Volumes**					
Displacement	68.3	**Shut In: Instant**		**Lost Returns**		*Cement Slurry*	101.4	**Pad**	
Top Of Cement	SURFACE	**5 Min**		**Cement Returns**	18	**Actual Displacement**	68.3	**Treatment**	
Frac Gradient		**15 Min**		**Spacers**	20	**Load and Breakdown**		**Total Job**	**189.7**

Rates							
Circulating	*RIG*	*Mixing*	7	*Displacement*	9	**Avg. Job**	8

Cement Left In Pipe	**Amount**	***44 FT***	*Reason*	***Shoe Joint***

Frac Ring # 1 @		*ID*		*Frac ring # 2 @*		*ID*		*Frac Ring # 3 @*		*ID*		*Frac Ring # 4 @*		*ID*	

The Information Stated Herein Is Correct	***Customer Representative Signature***

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Cementing Job Log

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Well Name: PA	**Well #:** 413-12		**API/UWI #:** 05-045-20636
Field: PARACHUTE	**City (SAP):** PARACHUTE	**County/Parish:** Garfield	**State:** Colorado
Legal Description:			
Lat: N 39.452 deg. OR N 39 deg. 27 min. 7.528 secs.		**Long:** W 107.95 deg. OR W -108 deg. 3 min. 0.324 secs.	
Contractor: NABORS 577	**Rig/Platform Name/Num:** NABORS 577		
Job Purpose: Cement Surface Casing			**Ticket Amount:**
Well Type: Development Well	**Job Type:** Cement Surface Casing		
Sales Person: MAYO, MARK	**Srvc Supervisor:** ARNOLD, EDWARD		**MBU ID Emp #:** 439784

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	09/10/2013 16:30							
Pre-Convoy Safety Meeting	09/10/2013 18:15							Including entire cement crew.
Crew Leave Yard	09/10/2013 18:30							
Arrive At Loc	09/10/2013 20:30							Rig still Running casing.
Assessment Of Location Safety Meeting	09/10/2013 20:45							Water; PH 7.5; KCL 250; So4 <200; Fe 0; Calcium 120; Chlorides 0; Temp 75; TDS 310.
Pre-Rig Up Safety Meeting	09/10/2013 20:50							Including entire cement crew.
Rig-Up Equipment	09/10/2013 20:55							1 Elite # 3; 1 660 bulk truck; 1 hard line to floor; 1 line to upright; 1 line to rig tank. 9.625" compact head.
Rig-Up Completed	09/10/2013 21:30							
Pre-Job Safety Meeting	09/10/2013 22:20							Including everyone on location.
Start Job	09/10/2013 22:38							TD 950; TP 940; SJ 44; OH 13 1/2"; Casing 9.625" 32.3# H-40; Mud 9.4 ppg.
Pump Water	09/10/2013 22:39		2	2			40.0	Fill lines with fresh water.
Test Lines	09/10/2013 22:41					2990.0		Good pressure test, no leaks.
Pump Spacer 1	09/10/2013 22:47		4	20			130.0	20 BBL fresh water spacer.
Pump Tail Cement	09/10/2013 22:55		7	101.4			267.0	240 sks Tail Cement, 12.8 ppg, 2.11 cf3, 11.75 gal/sk.

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Cementing Job Log

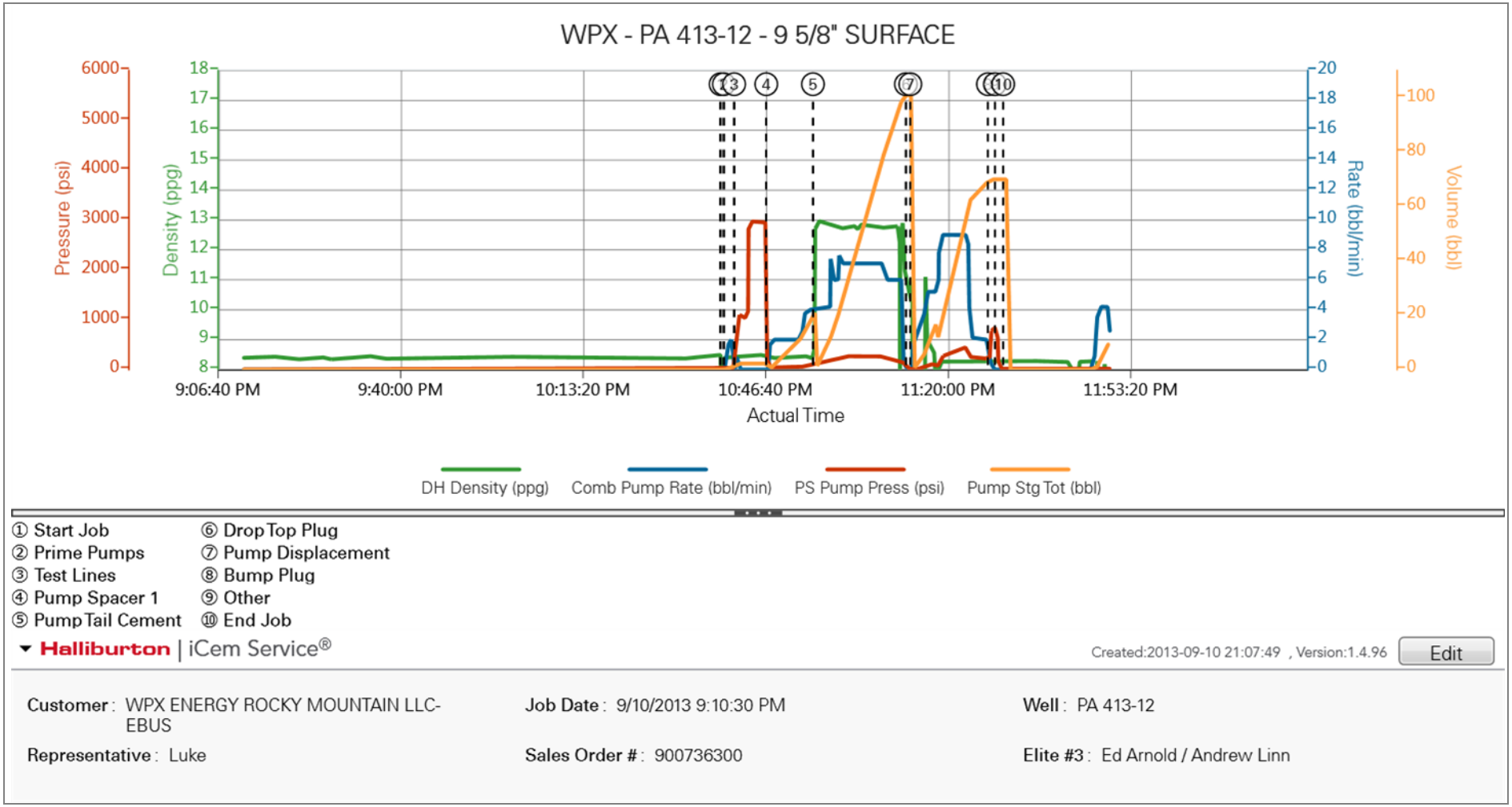
Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Shutdown	09/10/2013 23:11							
Drop Plug	09/10/2013 23:12							Plug left container.
Pump Displacement	09/10/2013 23:13		10	58.3			462.0	Fresh water displacement.
Slow Rate	09/10/2013 23:23		2	10			240.0	Slow rate 10 BBL's prior to bumping the plug.
Bump Plug	09/10/2013 23:27				68.3		845.0	Bumped plug, took 500 PSI over.
Check Floats	09/10/2013 23:28							Floats held, .75 BBL back. 18 BBL.'s good cement to surface.
End Job	09/10/2013 23:30							
Pre-Rig Down Safety Meeting	09/10/2013 23:35							Including entire cement crew.
Rig-Down Equipment	09/10/2013 23:40							
Rig-Down Completed	09/11/2013 00:30							
Pre-Convoy Safety Meeting	09/11/2013 00:45							Including entire cement crew.
Crew Leave Location	09/11/2013 01:00							Crew leave location for Service Center or another location.
Other	09/11/2013 01:00							Thank You for using Halliburton. Ed Arnold and Crew.

1.5 Job Event Log

Time	Description	Graph Label	Downhole Density (ppg)	Combined Pump Rate (bbl/min)	Pass-Side Pump Pressure (psi)	Pump Stage Total (bbl)	Comment
10:38:43	Start Job	Start Job	8.33	0.00	2.00	0.00	
10:39:18	Prime Pumps	Prime Pumps	8.44	0.00	3.00	0.00	
10:41:11	Test Lines	Test Lines	8.39	0.90	36.00	2.10	
10:47:03	Pump Spacer 1	Pump Spacer 1	8.42	0.00	45.00	0.00	
10:55:35	Pump Tail Cement	Pump Tail Cement	12.86	4.00	125.00	21.10	
11:12:33	Drop Top Plug	Drop Top Plug	10.83	0.00	12.00	101.00	
11:13:21	Pump Displacement	Pump Displacement	1.35	0.90	14.00	0.10	
11:27:32	Bump Plug	Bump Plug	8.29	0.60	540.00	70.00	
11:28:48	Other	Other	8.26	0.00	815.00	70.00	
11:30:18	End Job	End Job	8.26	0.00	3.00	70.00	

2.0 Custom Graphs

2.1 Custom Graph



HALLIBURTON

Water Analysis Report

Company:	WPX	**Date:**	9/10/2013
Submitted by:	ED ARNOLD	**Date Rec.:**	9/10/2013
Attention:	J.TROUT	**S.O.#**	900736300
Lease	PA	**Job Type:**	SURFACE
Well #	413-12		

Specific Gravity	*MAX*	1	
pH	*8*	7.5	
Potassium (K)	*5000*	250	Mg / L
Calcium (Ca)	*500*	120	Mg / L
Iron (FE2)	*300*	0	Mg / L
Chlorides (Cl)	*3000*	0	Mg / L
Sulfates (SO_4)	*1500*	<200	Mg / L
Chlorine (Cl_2)		0	Mg / L
Temp	*40-80*	75	Deg
Total Dissolved Solids		310	Mg / L

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Respectfully: ED ARNOLD

Title: CEMENTING SUPERVISOR

Location: Grand Junction, CO

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CUSTOMER SURVEY

Sales Order #:	**Line Item:**	**Survey Conducted Date:**
900736300	10	9/11/2013
Customer:		**Job Type (BOM):**
WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		CMT SURFACE CASING BOM
Customer Representative:		**API / UWI: (leave blank if unknown)**
LUKE		05-045-20636
Well Name:		**Well Number:**
PA		413-12
Well Type:	**Well Country:**	
Development Well	United States of America	
H2S Present:	**Well State:**	**Well County:**
	Colorado	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**	**9/11/2013**
Survey Interviewer	**The survey interviewer is the person who initiated the survey.**	**EDWARD ARNOLD (HX46731)**
Customer Participation	**Did the customer partipcipate in this survey? (Y/N)**	**Yes**
Customer Representative	**Enter the Customer representative name**	**LUKE**
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**	**GOOD JOB**

CUSTOMER SIGNATURE

HALLIBURTON

CUSTOMER SURVEY

Sales Order #:	**Line Item:**	**Survey Conducted Date:**
900736300	10	9/11/2013
Customer:		**Job Type (BOM):**
WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		CMT SURFACE CASING BOM
Customer Representative:		**API / UWI: (leave blank if unknown)**
LUKE		05-045-20636
Well Name:		**Well Number:**
PA		413-12
Well Type:	**Well Country:**	
Development Well	United States of America	
H2S Present:	**Well State:**	**Well County:**
	Colorado	Garfield

KEY PERFORMANCE INDICATORS

General	
Survey Conducted Date The date the survey was conducted	9/11/2013

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
Operating Hours (Pumping Hours) Total number of hours pumping fluid on this job. Enter in decimal format.	2
Customer Non-Productive Rig Time (hrs) 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.	0
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
Number of Unplanned Shutdowns Unplanned shutdown is when injection stops for any period of time.	0
Was this a Primary Cement Job (Yes / No)	Yes

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CUSTOMER SURVEY

Sales Order #:	**Line Item:**	**Survey Conducted Date:**
900736300	10	9/11/2013
Customer:		**Job Type (BOM):**
WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		CMT SURFACE CASING BOM
Customer Representative:		**API / UWI: (leave blank if unknown)**
LUKE		05-045-20636
Well Name:		**Well Number:**
PA		413-12
Well Type:	**Well Country:**	
Development Well	United States of America	
H2S Present:	**Well State:**	**Well County:**
	Colorado	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 cment 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	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