HALLIBURTON

WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

PA 511-11
RULISON
Garfield County , Colorado

Cement Surface Casing

28-Mar-2013

Post Job Summary

HALLIBURTON

Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 300721	**Ship To #:** 2989285	**Quote #:**	**Sales Order #:** 900324015
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		**Customer Rep:** Dunihoo, Al	
Well Name: PA	**Well #:** 511-11		**API/UWI #:**
Field: RULISON	**City (SAP):** PARACHUTE	**County/Parish:** Garfield	**State:** Colorado
Contractor: Cylcone Drilling	**Rig/Platform Name/Num:** Cyclone 17		
Job Purpose: Cement Surface Casing			
Well Type: Development Well	**Job Type:** Cement Surface Casing		
Sales Person: MAYO, MARK	**Srvc Supervisor:** KUKUS, CHRISTOPHER	**MBU ID Emp #:** 413952	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
GOWEN, WESLEY M	7.5	496205	KUKUS, CHRISTOPHER A	7.5	413952	ROSE, BENJAMIN Keith	7.5	487022

Equipment

HES Unit #	*Distance-1 way*	HES Unit #	*Distance-1 way*	HES Unit #	*Distance-1 way*	HES Unit #	*Distance-1 way*
10567589C	50 mile	10784064	50 mile	11006314	50 mile	11583931	50 mile
11808829	50 mile						

Job Hours

Date	*On Location Hours*	Operating Hours	Date	*On Location Hours*	Operating Hours	Date	*On Location Hours*	Operating Hours
03/28/2013	7.5	3						
TOTAL				*Total is the sum of each column separately*				

Job

Formation Name			
Formation Depth (MD)	**Top**	**Bottom**	
Form Type		**BHST**	
Job depth MD	1028.5 ft	**Job Depth TVD**	1028.5 ft
Water Depth		**Wk Ht Above Floor**	5. ft
Perforation Depth (MD)	*From*	**To**	

Job Times

	Date	Time	Time Zone
Called Out	28 - Mar - 2013	03:30	MST
On Location	28 - Mar - 2013	07:00	MST
Job Started	28 - Mar - 2013	12:24	MST
Job Completed	28 - Mar - 2013	13:18	MST
Departed Loc	28 - Mar - 2013	14:30	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
OPEN HOLE				12.25				.	1045.		
SURFACE CASING	New		9.625	9.001	32.3		I-80	.	1028.5		

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	9 5/8	1		1028.46	**Bridge Plug**					**Bottom Plug**			
Float Collar	9 5/8	1		981.81	**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

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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	8.33	.0	.0	4	
2	VersaCem Lead Cement	VERSACEM (TM) SYSTEM (452010)	110.0	sacks	12.3	2.38	13.75	6	13.75
	13.75 Gal	FRESH WATER							
3	VersaCem Tail Cement	VERSACEM (TM) SYSTEM (452010)	160.0	sacks	12.8	2.11	11.75	6	11.75
	11.75 Gal	FRESH WATER							
4	Fresh Water Displacement		77.30	bbl	8.33	.0	.0	10	

Calculated Values		Pressures		Volumes					
Displacement	77.3	**Shut In: Instant**		**Lost Returns**	0	*Cement Slurry*	106.7	**Pad**	
Top Of Cement	SURFACE	**5 Min**		**Cement Returns**	20	**Actual Displacement**	77.3	**Treatment**	
Frac Gradient		**15 Min**		**Spacers**	20	**Load and Breakdown**		**Total Job**	**204**

Rates							
Circulating		*Mixing*	6	*Displacement*	10	**Avg. Job**	7

Cement Left In Pipe		**Amount**	***46.6 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

The Road to Excellence Starts with Safety

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Well Name: PA	**Well #:** 511-11		**API/UWI #:**
Field: RULISON	**City (SAP):** PARACHUTE	**County/Parish:** Garfield	**State:** Colorado
Legal Description:			
Lat:		**Long:**	
Contractor: Cylcone Drilling	**Rig/Platform Name/Num:** Cyclone 17		
Job Purpose: Cement Surface Casing			**Ticket Amount:**
Well Type: Development Well	**Job Type:** Cement Surface Casing		
Sales Person: MAYO, MARK	**Srvc Supervisor:** KUKUS, CHRISTOPHER		**MBU ID Emp #:** 413952

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl Stage	Volume bbl Total	Pressure psig Tubing	Pressure psig Casing	Comments
Call Out	03/28/2013 03:30							ELITE # 3
Depart Yard Safety Meeting	03/28/2013 05:30							ALL HES EMPLOYEES
Arrive At Loc	03/28/2013 07:00							RIG PULLING DRILL PIPE HES CREW ARRIVED 30 MINS EARLY AND WAS ASKED TO SPOT EQUIPMENT AND RIG UIP PER CO REP REQUEST
Assessment Of Location Safety Meeting	03/28/2013 07:10							ALL HES EMPLOYEES
Pre-Rig Up Safety Meeting	03/28/2013 07:20							ALL HES EMPLOYEES
Rig-Up Equipment	03/28/2013 07:30							1 F-550 PICKUP 1 HT-400 PUMP TRUCK 1 660 BULK TRUCK IRON TO STAND PIPE, SUCTION HOSE TO FRESH WATER SOURCE, BULK HOSE TO BULK TRUCK
Pre-Job Safety Meeting	03/28/2013 12:15							ALL HES EMPLOYEES AND RIG CREW
Start Job	03/28/2013 12:24							TD: 1045 TP: 1028.46 SJ: 46.65 CSG: 9 5/8 32.3# OH: 13 1/2 MUD WT 10.4 VISC: 50 RIG TO CIRCULATE 1 HOUR BEFORE CEMENT JOB
Test Lines	03/28/2013 12:26					4515.0		PRESSURE TEST OK

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Cementing Job Log

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl Stage	Volume bbl Total	Pressure psig Tubing	Pressure psig Casing	Comments
Pump Spacer	03/28/2013 12:31		4	10	10		88.0	FRESH WATER SPACER
Pump Lead Cement	03/28/2013 12:39		6	46.6	46.6		230.0	110 SKS 12.3 PPG 2.38 YEILD 13.75 GAL / SK LEAD CEMENT WEIGHT VERIFIED VIA MUD SCALES THROUGH OUT LEAD CEMENT
Pump Tail Cement	03/28/2013 12:46		6	60.1	60.1		243.0	160 SKS 12.8 PPG 2.11 YEILD 11.75 GAL / SK TAIL CEMENT WEIGHT VERIFIED VIA MUD SCALES THROUGH OUT TAIL CEMENT
Shutdown	03/28/2013 12:57							SHUTDOWN AT END OF CEMENT / READY TUB FOR DISPLACEMENT
Drop Plug	03/28/2013 12:58							PLUG AWAY NO PROBLEMS
Pump Displacement	03/28/2013 13:00		10	67.3	67.3		553.0	FRESH WATER DISPLACEMENT HES WASH UP ON TOP OF PLUG PER CO-REP REQUEST
Slow Rate	03/28/2013 13:09		2	10	10		209.0	SLOW RATE TO BUMP PLUG
Bump Plug	03/28/2013 13:13		2	77.3	77.3		239.0	BUMP PLUG @ 239 AND TOOK PRESSURE UP TO 877 PSI
Check Floats	03/28/2013 13:16							FLOATS HELD .5 BBL BACK TO DISPLACEMENT TANKS
End Job	03/28/2013 13:18							WELL HAD GOOD CIRCULATION THROUGH OUT CEMENT JOB GOT 20 BBLS OF CEMENT TO SURFACE RIG USED 40LBS OF SUGAR TICKET CHANGE: NO ADD HOURS, NO DERRICK CHARGE, SUGAR TO 40 LBS
Pre-Rig Down Safety Meeting	03/28/2013 13:30							ALL HES EMPLOYEES

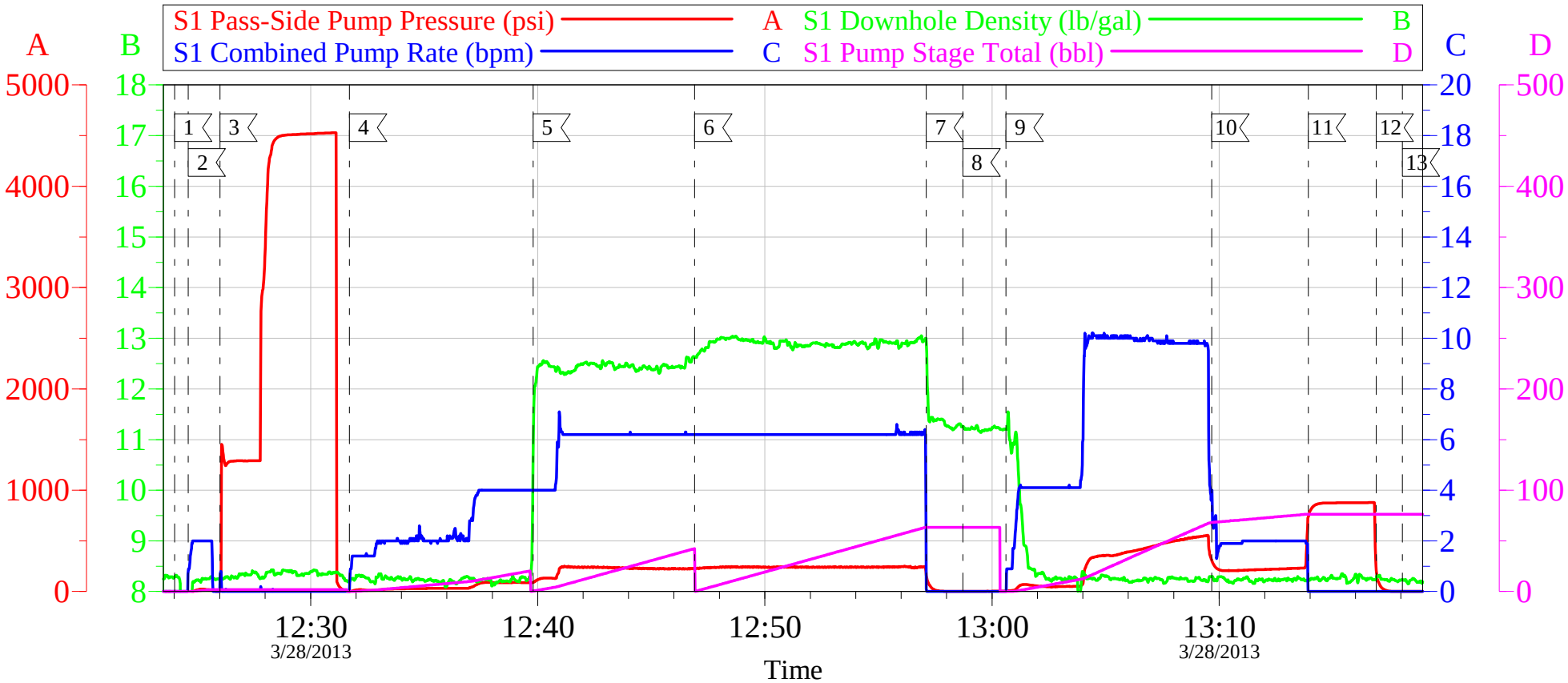
HALLIBURTON

Cementing Job Log

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Rig-Down Equipment	03/28/2013 13:40							RIG FLOOR, IRON FROM STAND PIPE, SUCTION HOSE, BULK HOSE, WASH UP & BLOW DOWN PUMP
Pre-Convoy Safety Meeting	03/28/2013 14:20							ALL HES EMPLOYEES
Crew Leave Location	03/28/2013 14:30							THANKS FOR USING HALLIBURTON CEMENT CHRIS KUKUS AND CREW

WPX ENERGY / PA 511-11

9 5/8 SURFACE



Local Event Log

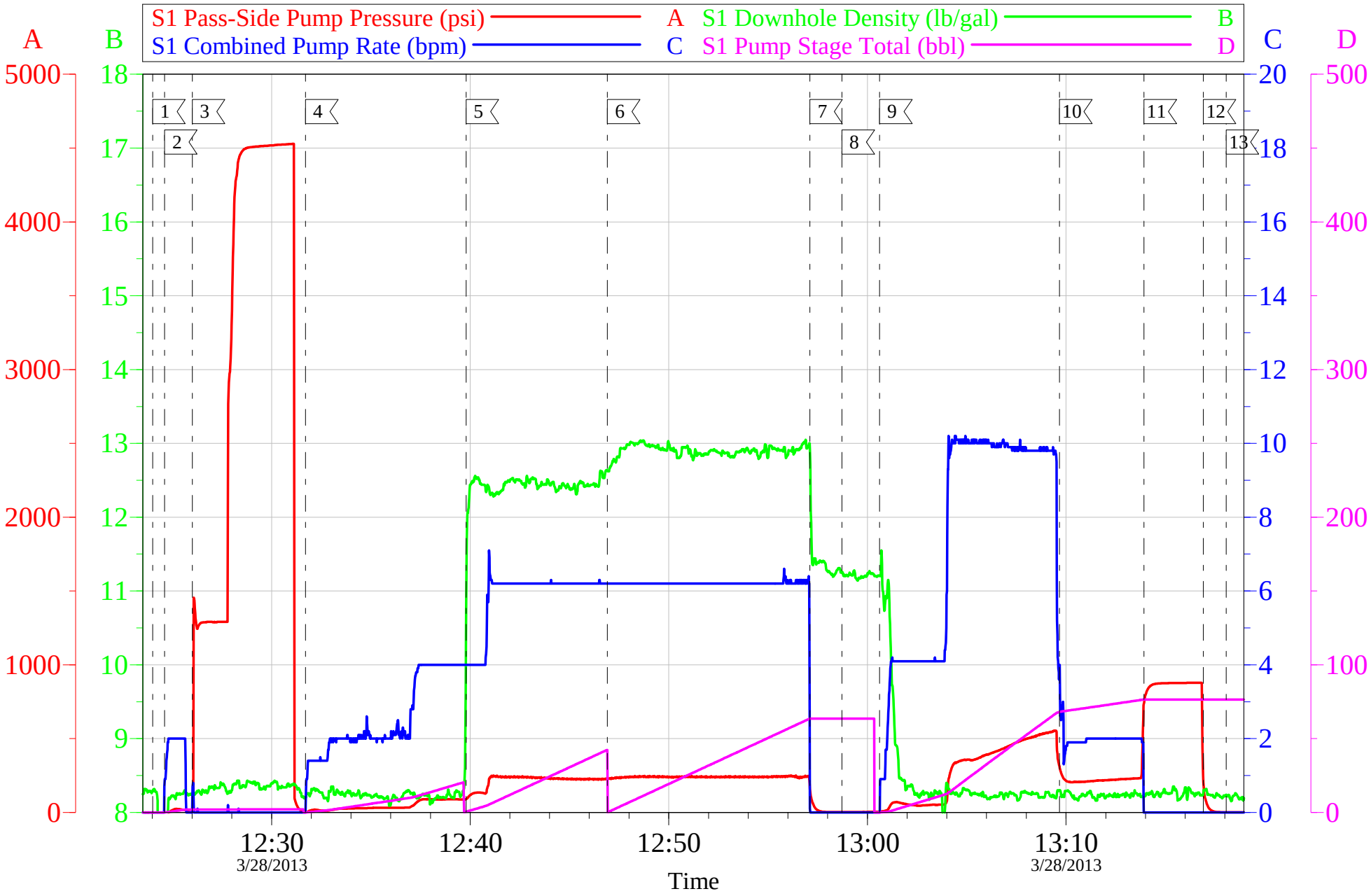
1	START JOB	12:24:01	2	FILL LINES	12:24:37
3	TEST LINES	12:26:01	4	PUMP FRESH WATER SPACER	12:31:43
5	PUMP LEAD CEMENT	12:39:48	6	PUMP TAIL CEMENT	12:46:55
7	SHUTDOWN	12:57:06	8	DROP PLUG	12:58:43
9	PUMP FRESH WATER DISPLACEMENT	13:00:37	10	SLOW RATE	13:09:41
11	BUMP PLUG	13:13:56	12	CHECK FLOATS	13:16:55
13	END JOB	13:18:04			

Customer:	WPX ENERGY	Job Date:	28-Mar-2013	Sales Order #:	900324015
Well Description:	PA 511-11	Job Type:	SURFACE	ADC Used:	YES
Company Rep:	AL DUNIHOO	Cement Supervisor:	CHRIS KUKUS	Elite # 3:	WESLEY GOWEN

OptiCem v6.4.10
28-Mar-13 13:21

WPX ENERGY / PA 511-11

9 5/8 SURFACE



Customer:	WPX ENERGY	Job Date:	28-Mar-2013	Sales Order #:	900324015
Well Description:	PA 511-11	Job Type:	SURFACE	ADC Used:	YES
Company Rep:	AL DUNIHOO	Cement Supervisor:	CHRIS KUKUS	Elite # 3:	WESLEY GOWEN

OptiCem v6.4.10
28-Mar-13 13:21

HALLIBURTON

Water Analysis Report

Company:	WPX	**Date:**	3/28/2013
Submitted by:	CHRIS KUKUS	**Date Rec.:**	3/28/2013
Attention:	J. TROUT/C.MARTINEZ	**S.O.#**	900324015
Lease	PA	**Job Type:**	SURFACE
Well #	511-11		

Specific Gravity	*MAX*	1	
pH	*8*	7	
Potassium (K)	*5000*	0	Mg / L
Calcium (Ca)	*500*	120	Mg / L
Iron (FE2)	*300*	0	Mg / L
Chlorides (Cl)	*3000*	0	Mg / L
Sulfates (SO_4)	*1500*	UNDER 200	Mg / L
Chlorine (Cl_2)		0	Mg / L
Temp	*40-80*	50	Deg
Total Dissolved Solids		370	Mg / L

Respectfully: CHRIS KUKUS

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

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CUSTOMER SURVEY

Sales Order #:	**Line Item:**	**Survey Conducted Date:**
900324015	10	3/28/2013
Customer:		**Job Type (BOM):**
WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		CMT SURFACE CASING BOM
Customer Representative:		**API / UWI: (leave blank if unknown)**
AL DUIHOO		AFEYS2NTBHKT0FLPAAA
Well Name:		**Well Number:**
PA		511-11
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**	**3/28/2013**
Survey Interviewer	**The survey interviewer is the person who initiated the survey.**	**CHRISTOPHER KUKUS (HX35027)**
Customer Participation	**Did the customer partipcipate in this survey? (Y/N)**	**Yes**
Customer Representative	**Enter the Customer representative name**	**AL DUIHOO**
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 MEN !**

CUSTOMER SIGNATURE

HALLIBURTON

CUSTOMER SURVEY

Sales Order #:	**Line Item:**	**Survey Conducted Date:**
900324015	10	3/28/2013
Customer:		**Job Type (BOM):**
WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		CMT SURFACE CASING BOM
Customer Representative:		**API / UWI: (leave blank if unknown)**
AL DUIHOO		AFEYS2NTBHKT0FLPAAA
Well Name:		**Well Number:**
PA		511-11
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	3/28/2013

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.	3
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.	1.5
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	6
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:**
900324015	10	3/28/2013
Customer:		**Job Type (BOM):**
WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		CMT SURFACE CASING BOM
Customer Representative:		**API / UWI: (leave blank if unknown)**
AL DUIHOO		AFEYS2NTBHKT0FLPAAA
Well Name:		**Well Number:**
PA		511-11
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	90
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	90
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