

**WPX ENERGY ROCKY MOUNTAIN LLC-EBUS**

RGU 44-24-198

**Cyclone 29**

**Post Job Summary**  
**Cement Production Casing**

Date Prepared: 08/01/2014  
Job Date: 07/31/2014

Submitted by: Kory Hugentobler – Grand Junction Cement Engineer

The Road to Excellence Starts with Safety

Sold To #: 300721	Ship To #: 3276460	Quote #:	Sales Order #: 0901376665
Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		Customer Rep: TOM BOWEN	
Well Name: FEDERAL	Well #: RGU 44-24-198	API/UWI #: 05-103-12083-00	
Field: SULPHUR CREEK	City (SAP): MEEKER	County/Parish: RIO BLANCO	State: COLORADO
Legal Description: 24-1S-98W-2111FSL-1673FEL			
Contractor:		Rig/Platform Name/Num:	
Job BOM: 7523			
Well Type: DIRECTIONAL GAS			
Sales Person: HALAMERICA\HAL7171		Srcv Supervisor: Bill Jamison	

**CALCULATED TO OF CEMENT SCAVENGER SURFACE TOP OF LEAD 5693 TOP OF TAIL 7612. LOST RETURNS AT 160 BBLs AWAY ON TAIL CEMENT LOST 287 BBLs**

Formation Name			
Formation Depth (MD)	Top		Bottom
Form Type			BHST
Job depth MD	12946ft		Job Depth TVD
Water Depth			Wk Ht Above Floor 3
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	8.921	36			0	3945		0
Casing		4.5	4	11.6			0	12946		0
Open Hole Section			8.75				3945	10134	0	0
Open Hole Section			7.875				10134	12956		

**Tools and Accessories**

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	4.5	1		12946	Top Plug			
Float Shoe					Bottom Plug			
Float Collar	4.5	1		12917	SSR plug set			
Insert Float					Plug Container	4.5	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 ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
1	Water Spacer	Water Spacer	100	bbl	8.33			6	

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	
2	ExtendaCem Scavenger	EXTENDACEM (TM) SYSTEM	670	sack	11	2.75		8	16.07	
	1 lbm	PHENO SEAL MEDIUM, 40 LB BAG (101307743)								
	16.07 Gal	FRESH WATER								
	1 lbm	WALL-NUT COARSE - 50 LB BAG(201097)								
	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	EconoCem Lead	ECONOCEM (TM) SYSTEM	310	sack	12.7	1.91		8	10.07	
	0.10 %	HALAD(R)-344, 50 LB (100003670)								
	0.25 lbm	POLY-E-FLAKE (101216940)								
	10.07 Gal	FRESH WATER								
	0.70 %	HR-601, 50 LB BAG (101328348)								
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	ThermaCem Tail	THERMACEM (TM) SYSTEM	810	sack	13.5	1.75		8	8.23	
	0.25 lbm	POLY-E-FLAKE (101216940)								
	8.32 Gal	FRESH WATER								
	0.20 %	SUPER CBL, 50 LB PAIL (100003668)								
	0.30 %	HR-601, 50 LB BAG (101328348)								
	20 %	SS-200 - BULK (102240841)								
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	
5										
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	
6	KCL Displacement	KCL Displacement	200	bbl	8.5			10		
Cement Left In Pipe		Amount	29 ft		Reason			Shoe Joint		
Comment										

# HALLIBURTON

WPX ENERGY ROCKY MOUNTAIN LLC-EBUS  
901376665  
WPX FEDERAL RGU 44-24-198

## 4.1 Job Event Log

Type	Seq No.	Graph Label	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bb/min)	PS Pump Press (psi)	Pump Stg Tot (bb)	Comment
Event	1	Call Out	7/30/2014	20:00:00	USER					TD 12956 TP 12946 SJ 29 CASING 4.5 11.6 P110 SURFACE SET @ 3945 9.625 36 # J-55 8.75 OPEN HOLE TO 10134 7.875 OPEN HOLE TO 12956 MUD 9.8 PPG
Event	2	Depart Location for Service Center or Other Site	7/30/2014	22:00:00	USER					
Event	3	Arrive At Loc	7/31/2014	01:30:00	USER					
Event	4	Assessment Of Location Safety Meeting	7/31/2014	04:00:00	USER					
Event	5	Pre-Rig Up Safety Meeting	7/31/2014	04:15:00	USER					
Event	6	Pre-Job Safety Meeting	7/31/2014	06:55:00	USER					
Event	7	Start Job	7/31/2014	07:15:08	COM2					
Event	8	Prime Pumps	7/31/2014	07:17:12	USER	8.4	2	406	3	FRESH WATER
Event	9	Test Lines	7/31/2014	07:19:14	COM2			5058		
Event	10	Pump Spacer 1	7/31/2014	07:24:57	COM2	8.4	6	850	100	FRESH WATER
Event	11	Pump Spacer 2	7/31/2014	07:45:29	COM2	11	8	1144	328	SCAVENGER CEMENT 11.0 PPG YIELD 2.75 WAT/REQ 16.07 670 SKS
Event	12	Pump Lead Cement	7/31/2014	08:41:06	COM2	12.7	8	530	105.5	310 SKS YIELD 1.91 WAT/REQ 10.07
Event	13	Pump Tail Cement	7/31/2014	08:54:01	COM2	13.5	8	623	252.5	810 SKS YIELD 1.75 WAT/REQ 8.23
Event	14	Shutdown	7/31/2014	09:26:30	USER					
Event	15	Clean Lines	7/31/2014	09:28:08	COM2					
Event	16	Drop Plug	7/31/2014	09:33:50	USER					
Event	17	Pump Displacement	7/31/2014	09:35:53	COM2	8.5	10.00	426.00	190	FRESH WATER W/KCL
Event	18	Slow Rate	7/31/2014	09:55:10	USER	8.5	4.00	1778.00	10	

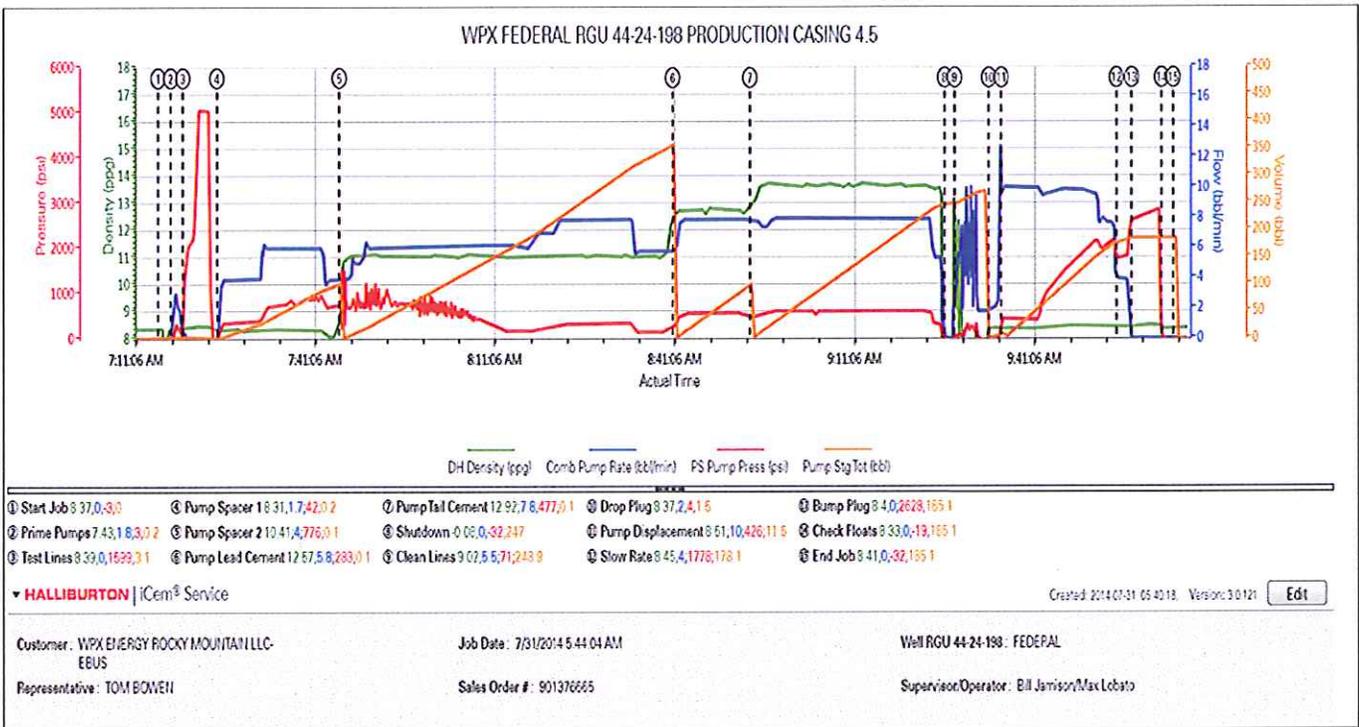
# HALLIBURTON

WPX ENERGY ROCKY MOUNTAIN LLC-EBUS  
901376665  
WPX FEDERAL RGU 44-24-198

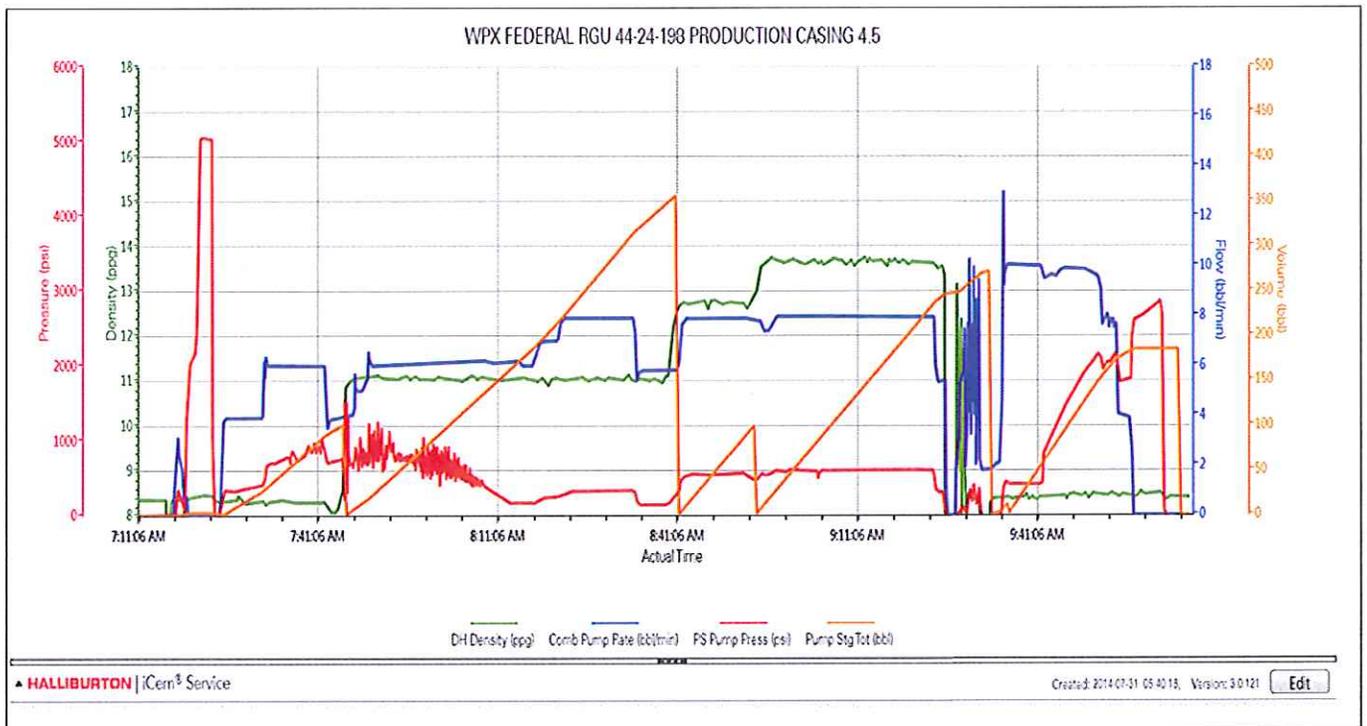
Event	19	Bump Plug	7/31/2014	09:57:42	COM2	8.5	4	1865	200	PRESSURED UP TO 2850 PSI
Event	20	Check Floats	7/31/2014	10:02:40	USER					FLOATS HELD
Event	21	End Job	7/31/2014	10:04:36	COM2					LOST RETURNS AT 160 ON TAIL CEMENT LOST 287 BBLs
Event	22	Post-Job Safety Meeting (Pre Rig-Down)	7/31/2014	10:10:00	USER					CASING WAS BEING WORKED
Event	23	Depart Location Safety Meeting	7/31/2014	11:50:00	USER					
Event	24	Crew Leave Location	7/31/2014	12:00:00	USER					THANKS FOR USING HALLIBURTON BILL JAMISON & CREW

5.0 Attachments

5.1 WPX FEDERAL RGU 44-24-198 PRODUCTION CASING.png



5.2 WPX FEDERAL RGU 44-24-198 PRODUCTION CASING.png



# HALLIBURTON

## Water Analysis Report

Company: WPX  
Submitted by: BILL JAMISON  
Attention: DALLAS SCOTT  
Lease: FED  
Well #: RGU 44-24-198

Date: 7/31/2014  
Date Rec.: 7/31/2014  
S.O.#: 901376665  
Job Type: 4.5 PRODUCTION

Specific Gravity	<i>MAX</i>	1
pH	8	8
Potassium (K)	<i>5000</i>	400 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 <sub>4</sub> )	<i>1500</i>	-200 Mg / L
Chlorine (Cl <sub>2</sub> )		0 Mg / L
Temp	<i>40-80</i>	68 Deg
Total Dissolved Solids		210 Mg / L

Respectfully: BILL JAMISON

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

<b>Sales Order #:</b> 0901376665	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 7/31/2014
<b>Customer:</b> WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		<b>Job Type (BOM):</b> CMT PRODUCTION CASING BOM
<b>Customer Representative:</b> TOM BOWEN		<b>API / UWI: (leave blank if unknown)</b> 05-103-12083-00
<b>Well Name:</b> FEDERAL		<b>Well Number:</b> 80359360
<b>Well Type:</b> DIRECTIONAL GAS	<b>Well Country:</b> USA	
<b>H2S Present:</b> No	<b>Well State:</b> COLORADO	<b>Well County:</b> RIO BLANCO

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	7/31/2014
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HAL9235
Customer Participation	Did the customer participate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	TOM BOWEN
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	NONE

CUSTOMER SIGNATURE

<b>Sales Order #:</b> 0901376665	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 7/31/2014
<b>Customer:</b> WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		<b>Job Type (BOM):</b> CMT PRODUCTION CASING BOM
<b>Customer Representative:</b> TOM BOWEN		<b>API / UWI: (leave blank if unknown)</b> 05-103-12083-00
<b>Well Name:</b> FEDERAL		<b>Well Number:</b> 80359360
<b>Well Type:</b> DIRECTIONAL GAS	<b>Well Country:</b> USA	
<b>H2S Present:</b> No	<b>Well State:</b> COLORADO	<b>Well County:</b> RIO BLANCO

### KEY PERFORMANCE INDICATORS

General	
<b>Survey Conducted Date</b> The date the survey was conducted	7/31/2014

Cementing KPI Survey	
<b>Type of Job</b> Select the type of job. (Cementing or Non-Cementing)	0
<b>Select the Maximum Deviation range for this Job</b> What is the highest deviation for the job you just completed? This may not be the maximum well deviation.	Deviated
<b>Total Operating Time (hours)</b> Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.	5
<b>HSE Incident, Accident, Injury</b> HSE Incident, Accident, Injury. This should be recordable incidents only.	No
<b>Was the job purpose achieved?</b> Was the job delivered correctly as per customer agreed design?	Yes
<b>Pumping Hours</b> Total number of hours pumping fluid on this job. Enter in decimal format.	3
<b>Type of Rig Classification Job Was Performed</b> Type Of Rig (classification) Job Was Performed On	Drilling Rig (Portable)
<b>Number Of JSAs Performed</b> Number Of Jsas Performed	5
<b>Was this a Primary Cement Job (Yes / No)</b> Primary Cement Job= Casing job, Liner job, or Tie-back job.	Yes
<b>Number of Unplanned Shutdowns</b> Unplanned shutdown is when injection stops for any period of time.	0
<b>Customer Non-Productive Rig Time (hrs)</b>	0

<b>Sales Order #:</b> 0901376665	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 7/31/2014
<b>Customer:</b> WPX ENERGY ROCKY MOUNTAIN LLC-EBUS		<b>Job Type (BOM):</b> CMT PRODUCTION CASING BOM
<b>Customer Representative:</b> TOM BOWEN		<b>API / UWI: (leave blank if unknown)</b> 05-103-12083-00
<b>Well Name:</b> FEDERAL		<b>Well Number:</b> 80359360
<b>Well Type:</b> DIRECTIONAL GAS	<b>Well Country:</b> USA	
<b>H2S Present:</b> No	<b>Well State:</b> COLORADO	<b>Well County:</b> RIO BLANCO

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.	
<b>Did We Run Wiper Plugs?</b>	Top
Did We Run Top And Bottom Casing Wiper Plugs?	
<b>If a top plug was run, was the plug bumped? (Yes/No/N/A)</b>	Yes
If a top plug was run, was the plug bumped? (Yes/No/N/A)	
<b>If applicable, was Halliburton float equipment used? (Yes/No/N/A)</b>	N/A
If applicable, was Halliburton float equipment used? (Yes/No/N/A)	
<b>If applicable, did the floats hold? (Yes/No/N/A)</b>	Yes
If applicable, did the floats hold? (Yes/No/N/A)	
<b>Mixing Density of Job Stayed in Designed Density Range (0-100%)</b>	98
Density Range defined as +/- .20 ppg. Calculation: Total BBLs cement mixed at designed density divided by total BBLs of cement multiplied by 100	
<b>Pump Rate (percent) of Job Stayed At Designed Pump Rate</b>	98
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	
<b>If applicable, were there returns throughout the job? (Yes/No/N/A)</b>	0
If applicable, were there returns throughout the job? (Yes/No/N/A)	
<b>Nbr of Remedial Plug Jobs Rqd - HES</b>	0
Number Of Remedial Plug Jobs Needed After Primary Plug Pumped By HES	
<b>Nbr of Remedial Sqz Jobs Rqd - HES</b>	0
Number Of Remedial Squeeze Jobs Required After Primary Job Performed By HES	