
WEXPRO COMPANY E-BILL

**BW Musser 38
POWDER WASH
Moffat County, Colorado**

**Cement Surface Casing
11-Dec-2011**

Post Job Report

The Road to Excellence Starts with Safety

Sold To #: 343491	Ship To #: 2891056	Quote #:	Sales Order #: 9125291
Customer: WEXPRO COMPANY E-BILL		Customer Rep: SST 88, Wexpro	
Well Name: BW Musser		Well #: 38	API/UWI #: 05-081-07618
Field: POWDER WASH	City (SAP): CRAIG	County/Parish: Moffat	State: Colorado
Contractor: Wexpro		Rig/Platform Name/Num: SST 88	
Job Purpose: Cement Surface Casing			
Well Type: Development Well		Job Type: Cement Surface Casing	
Sales Person: VOLNER, THOMAS		Srv Supervisor: DOANE, DION	MBU ID Emp #: 458934

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
DOANE, DION D	7	458934	LEATHAM, NOLAN Robert	7	482961	MADINGER, ROBERT W	7	451816
MARTINEZ, FRANCISCO J	7	458086	MCCOY, STEVE Allen	7	416547	SPINDLER, DAVID Joseph	7	481522

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10714289C	100 mile	10804551	100 mile	10867409	100 mile	10951240	100 mile
11138998	100 mile	11139006	100 mile	11307426	100 mile	11377690	100 mile
11700026	100 mile						

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
12-10-11	2	1	12-11-11	5	2			

TOTAL Total is the sum of each column separately

Job

Formation Name					Date	Time	Time Zone	
Formation Depth (MD)	Top		Bottom		Called Out	10 - Dec - 2011	14:00	MST
Form Type			BHST	101 degF	On Location	10 - Dec - 2011	20:00	MST
Job depth MD	1537 ft		Job Depth TVD		Job Started	11 - Dec - 2011	02:25	MST
Water Depth			Wk Ht Above Floor	4 ft	Job Completed	11 - Dec - 2011	03:27	MST
Perforation Depth (MD)	From		To		Departed Loc	10 - Dec - 2011	04:30	MST

Well Data

Description	Max pressure psig	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
Surface Openhole			12.25				80	1546		
Surface Casing		9.625	8.921	36		J-55		1537		

Sales/Rental/3rd Party (HES)

Description	Qty	Qty uom	Depth	Supplier
MICRO MATRIX RETARDER	2	GAL		
PLUG,CMTG,TOP,9 5/8,HWE,8.16 MIN/9.06 MA	1	EA		

Tools and Accessories

Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer					Top Plug	9.625	1	HES
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar					Retainer					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	

Sold To # : 343491

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Quote # :

Sales Order # : 9125291

SUMMIT Version: 7.2.27

Monday, December 12, 2011 04:44:00

Fluid Data									
Stage/Plug #: 1									
Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft ³ /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	Fresh Water		20.00	bbl	8.33			2	
2	VariCem RS1 Lead	VARICEM (TM) CEMENT (452009)	175.0	sacks	11.5	2.98	18.22	6	18.22
	0.125 lbm	POLY-E-FLAKE (101216940)							
	0.25 lbm	KWIK SEAL, SK (100064010)							
	18.22 Gal	FRESH WATER							
3	Mountain G	CMT - PREMIUM - CLASS G, 94 LB SK (100003685)	265.0	sacks	15.2	1.28	5.81	6	5.81
	94 lbm	CMT - PREMIUM - CLASS G REG OR TYPE V, BULK (100003685)							
	1 %	HALLIBURTON GEL, 50 LB SK (100064040)							
	2 %	CALCIUM CHLORIDE, PELLET, 50 LB (101509387)							
	5.79 Gal	FRESH WATER							
4	Displacement Water		115.00	bbl	8.5			6	
Calculated Values		Pressures		Volumes					
Displacement	115	Shut In: Instant		Lost Returns	0	Cement Slurry	153	Pad	
Top Of Cement	SURFACE	5 Min		Cement Returns	55	Actual Displacement	115	Treatment	
Frac Gradient		15 Min		Spacers	25	Load and Breakdown		Total Job	293
Rates									
Circulating	7	Mixing	6	Displacement	6	Avg. Job	6		
Cement Left in Pipe	Amount	47 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					

Wexpro BW Musser 38 Surface

1. Pressure Test HES Lines

2. Pump Spacer

	Name	Density (lb/gal)	Volume (bbls)	Rate (bpm)	Surfactants
2a.	Fresh Water	8.33	20	4	

3. Pump Cement

	Name	Density (lb/gal)	Slurry Volume (bbls)	Rate (bpm)	Mix Water Required (bbls)
3a.	VariCem RS1-Lead	11.5	92.9	5	75.9
3b.	W1 - Premium-Tail	15.2	60.3	5	36.6
3c.	Holcim Type II-V-Top Out	15.3	33.3		20.1

4. Shutdown, Drop Top Plug

5. Displacement

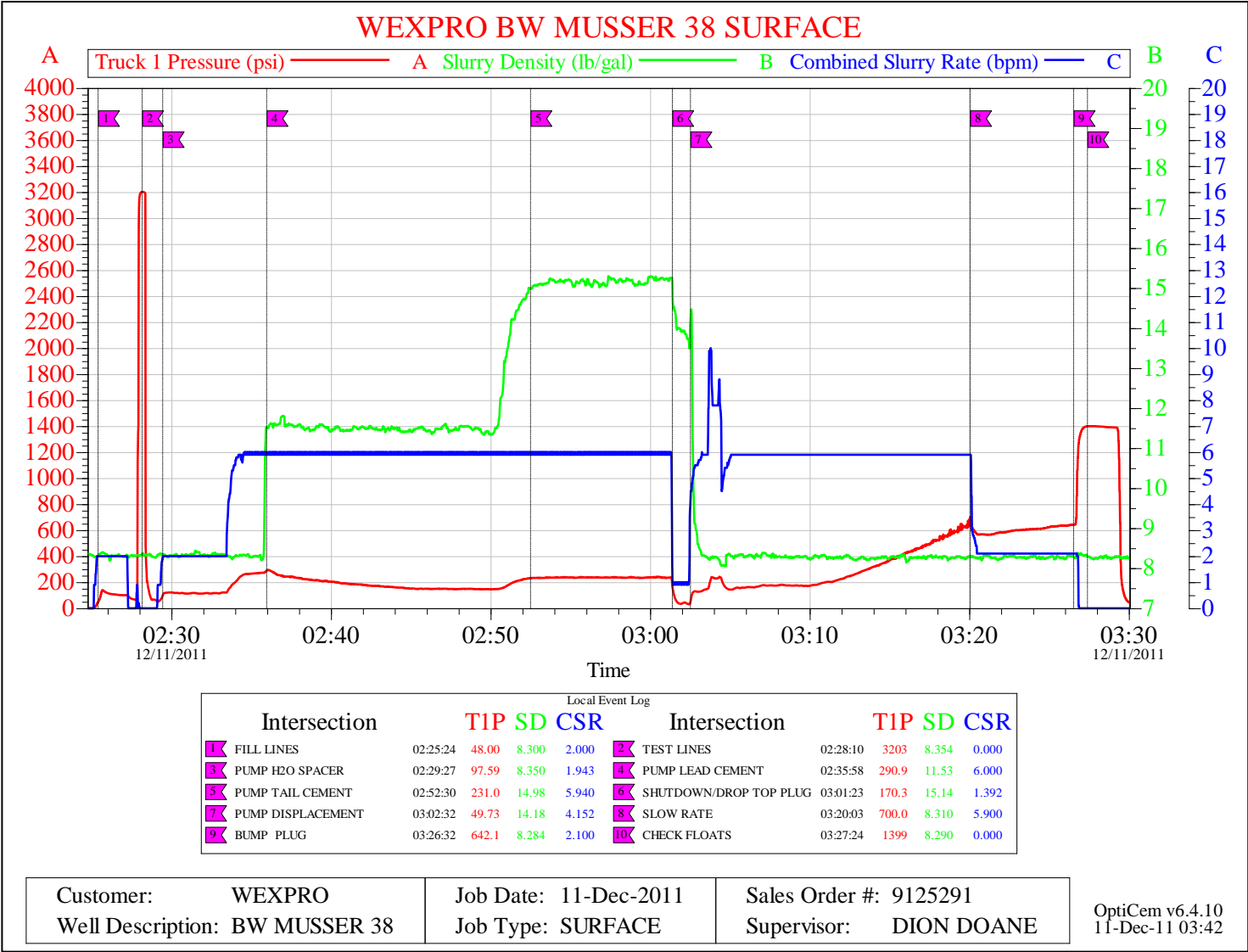
	Name	Density (lb/gal)	Volume (bbls)	Rate (bpm)
5a.	Water	8.33	90.0	3
5b.	Water	8.33	20.0	2

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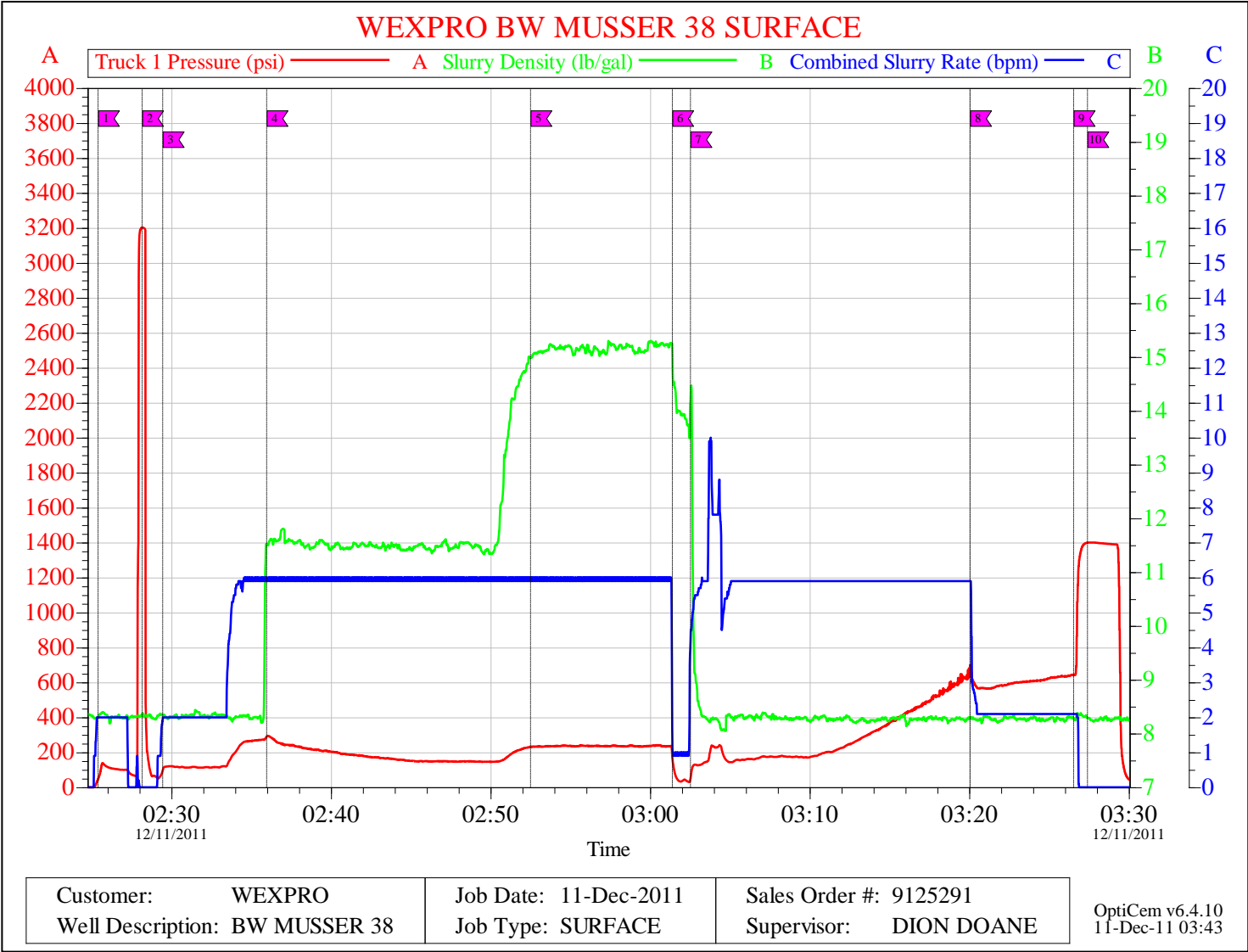
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Customer: WEXPRO COMPANY E-BILL				Customer Rep: SST 88, Wexpro			
Well Name: BW Musser			Well #: 38		API/UWI #: 05-081-07618		
Field: POWDER WASH	City (SAP): CRAIG		County/Parish: Moffat		State: Colorado		
Legal Description:							
Lat: N 0 deg. OR N 0 deg. 0 min. 0 secs.				Long: E 0 deg. OR E 0 deg. 0 min. 0 secs.			
Contractor: Wexpro			Rig/Platform Name/Num: SST 88				
Job Purpose: Cement Surface Casing						Ticket Amount:	
Well Type: Development Well			Job Type: Cement Surface Casing				
Sales Person: VOLNER, THOMAS			Srv Supervisor: DOANE, DION			MBU ID Emp #: 458934	

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	12/10/2011 14:00							CALLED OUT HES CREW @ 1400
Pre-Convoy Safety Meeting	12/10/2011 15:50							DISCUSSED DRIVING HAZARDS
Depart from Service Center or Other Site	12/10/2011 16:00							
Arrive At Loc	12/10/2011 20:00							
Assessment Of Location Safety Meeting	12/10/2011 20:05							
Casing on Bottom	12/11/2011 01:15							RIG CIRCULATED WELL @ 7 BPM 100 PSI NO GAS
Rig-Up Equipment	12/11/2011 01:30							
Pre-Job Safety Meeting	12/11/2011 02:00							
Rig-Up Equipment	12/11/2011 02:15							RIG UP FLOOR
Pump Water	12/11/2011 02:25	1	2	5	5		48.0	FILL LINES
Pressure Test	12/11/2011 02:28	2						GOOD TEST TO 3203 PSI NO LEAKS
Pump Water	12/11/2011 02:29	3	2	20	25		97.0	PUMP WATER SPACER
Pump Lead Cement	12/11/2011 02:35	4	6	93	118		290.0	MIXED & PUMPED 175 SKS VARICEM RS1 at 11.5 PPG, 2.98 FT3/SK, 18.22 GAL/SK
Pump Tail Cement	12/11/2011 02:52	5	6	60	178		231.0	MIXED & PUMPED 265 SKS PREMIUM at 15.2 PPG, 1.28 FT3/SK, 5.81 GAL/SK

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Shutdown	12/11/2011 03:01	6						
Drop Top Plug	12/11/2011 03:01	6						
Pump Displacement	12/11/2011 03:02	7	6	100	278		49.0	PUMPED WATER DISPLACEMENT
Slow Rate	12/11/2011 03:20	8	2	15.6	293.6		700.0	SLOWED RATE
Bump Plug	12/11/2011 03:26	9	2				642.0	BROUGHT UPTO 500 PSI OVER FINAL CIRCULATING PRESSURE WITH 115.6 BBLS AWAY IN DISPLACEMENT
Check Floats	12/11/2011 03:27	10						FLOATS HELD 1 BBL BACK TO TRUCK
Post-Job Safety Meeting (Pre Rig-Down)	12/11/2011 03:35							
Rig-Down Equipment	12/11/2011 03:40							
Pre-Convoy Safety Meeting	12/11/2011 04:50							
Depart Location for Service Center or Other Site	12/11/2011 05:00							
Cement Returns to Surface	12/11/2011 05:01							55 BBLS CEMENT TO SURFACE/GOOD FULL RETURNS THROUGHOUT JOB



Cementing Job Summary



HALLIBURTON

Cementing

Water Analysis Report

COMPANY: WEXPRO SST 88 Date Recorded 12/10/2011
 SUBMITTED BY: D DOANE SO# 9125291
 LEASE: BW MUSSER Job Type SURFACE
 WELL #: 38 Camp Location ROCK SPRINGS WY

CEMENT MIX WATER REQUIREMENTS

Item	Recorded Test Value	Units	Max. Acceptable Limit	Potential Problems in Exceeding Limit
pH	7	----	6.0 - 8.0	Chemicals in the water can cause severe retardation
Chlorides	0	ppm	3000 ppm	Can shorten thickening time of cement
Sulfates	200	ppm	1500 ppm	Will greatly decrease the strength of cement
Total Hardness	120	ppm	500 mg/L	High concentrations will accelerate the set of the cement
Calcium	50	ppm	500 ppm	High concentrations will accelerate the set of the cement
Total Alkalinity	180	ppm	1000 ppm	Cement is greatly retarded to the point where it may not set up at all (typically occurs @ pH ≥ 8.3).
Potassium	0	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	0	ppm	300 ppm	High concentrations will accelerate the set of the cement
Temperature	63	°F	50-80 °F	High temps will accelerate; Low temps may risk freezing in cold weather
Item	Approximate Calculated Value	Units	Max. Acceptable Limit	Potential Problems in Exceeding Limit - Calculation Method
Magnesium	70	ppm	300 ppm	High concentrations will accelerate the set of the cement Calculation Method: Subtract tested "Calcium" value from "Total Hardness" value.