
WEXPRO COMPANY E-BILL

**Carl Allen 37
POWDER WASH
Moffat County , Colorado**

**Cement Production Casing
31-Dec-2011**

Post Job Report

The Road to Excellence Starts with Safety

Sold To #: 343491		Ship To #: 2891057		Quote #:		Sales Order #: 9157959	
Customer: WEXPRO COMPANY E-BILL				Customer Rep: SST-88, Wexpro			
Well Name: Carl Allen			Well #: 37		API/UWI #: 05-081-07617		
Field: POWDER WASH		City (SAP): CRAIG		County/Parish: Moffat		State: Colorado	
Legal Description: Section 4 Township 11N Range 97W							
Contractor: Wexpro			Rig/Platform Name/Num: SST 88				
Job Purpose: Cement Production Casing							
Well Type: Development Well			Job Type: Cement Production Casing				
Sales Person: VOLNER, THOMAS			Srvc 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 #
BAIR, DAVID Ray	7	509987	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

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10713218	mile	10714289C	mile	10951240	mile	11139004	mile
11139006	mile	11165709	mile	11377690	mile		

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
12/31/11	7	4						

TOTAL	Total is the sum of each column separately							
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Job

Formation Name	Top	Bottom	Called Out	Date	Time	Time Zone
Formation Depth (MD)			On Location	31 - Dec - 2011	15:30	MST
Form Type		BHST	Job Started	31 - Dec - 2011	20:43	MST
Job depth MD	9125. ft	Job Depth TVD	Job Completed	31 - Dec - 2011	22:48	MST
Water Depth		Wk Ht Above Floor	Departed Loc	31 - Dec - 2011	23:59	MST
Perforation Depth (MD)	From	To				

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
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Sales/Rental/3rd Party (HES)

Description	Qty	Qty uom	Depth	Supplier
MICRO MATRIX RETARDER	2	GAL		
PLUG,CMTG,TOP,4 1/2,HWE,3.65 MIN/4.14 MA	1	EA		
PLUG,CMTG,BOT,4 1/2,HWE,3.65 MIN/4.14 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	4.5	1	HES
Float Shoe					Bridge Plug					Bottom Plug	4.5	1	HES
Float Collar					Retainer					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 ³ /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	MUD FLUSH III	MUD FLUSH III - SBM (528788)	20.00	bbl	8.4	.0	.0	4	
	42 gal/bbl	FRESH WATER							
	0.25 gal/bbl	D-AIR 3000L, 5 GAL PAIL (101007444)							
2	ExtendaCem RS1	EXTENDACEM (TM) SYSTEM (452981)	480.0	sacks	11.5	2.63	15.50	7	15.50
	0.5 %	HR-7 (100005055)							
	0.3 %	D-AIR 5000, 50 LB SACK (102068797)							
	0.125 lbm	POLY-E-FLAKE (101216940)							
	0.25 lbm	KWIK SEAL, SK (100064010)							
	15.374 Gal	FRESH WATER							
3	EconoCem RS-13	HALCEM (TM) SYSTEM (452986)	1170.0	sacks	14.2	1.26	5.52	7	5.52
	1 %	HALLIBURTON GEL, 50 LB SK (100064040)							
	0.125 lbm	HALAD(R)-344, 50 LB (100003670)							
	0.5 %	HR-5, 50 LB SK (100005050)							
	0.125 lbm	POLY-E-FLAKE (101216940)							
	5.731 Gal	FRESH WATER							
	0.2 %	HR-5, 50 LB SK (100005050)							
	0.125 lbm	POLY-E-FLAKE (101216940)							
	3 lbm	SILICALITE - COMPACTED, 50 LB SK (100012223)							
	0.25 lbm	KWIK SEAL, SK (100064010)							
	4.781 Gal	FRESH WATER							
4	Displacement		136.00	bbl	8.4	.0	.0	7	
	0.1 gal/bbl	CLAYFIX 3, TOTETANK (101583425)							
Calculated Values		Pressures		Volumes					
Displacement	136	Shut In: Instant		Lost Returns	0	Cement Slurry	487	Pad	
Top Of Cement	SURFACE	5 Min		Cement Returns	25	Actual Displacement	136	Treatment	
Frac Gradient		15 Min		Spacers	20	Load and Breakdown		Total Job	643
Rates									
Circulating	7	Mixing	7	Displacement	7	Avg. Job	7		
Cement Left In Pipe	Amount	14.73 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					

PLANNED PUMPING SCHEDULE

Wexpro Carl Allen 37 Production Casing

1. Pressure Test HES Lines

2. Pump Spacer

	Name	Density (lb/gal)	Volume (bbls)	Rate (bpm)	Surfactants
2a.	Mud Flush III	8.4	20	3	

3. Pump Cement

	Name	Density (lb/gal)	Slurry Volume (bbls)	Rate (bpm)	Mix Water Required (bbls)
3a.	ExtendaCem RS1-Lead	11.5	225.2	5	177.2
3b.	EconoCem RS13-Tail	14.2	262.4	5	153.8

4. Shutdown, Wash Pumps and Lines, Drop Top Plug

5. Displacement

	Name	Density (lb/gal)	Volume (bbls)	Rate (bpm)
5a.	Clayfix Water	8.34	120.0	5
5b.	Clayfix Water	8.34	15.4	2

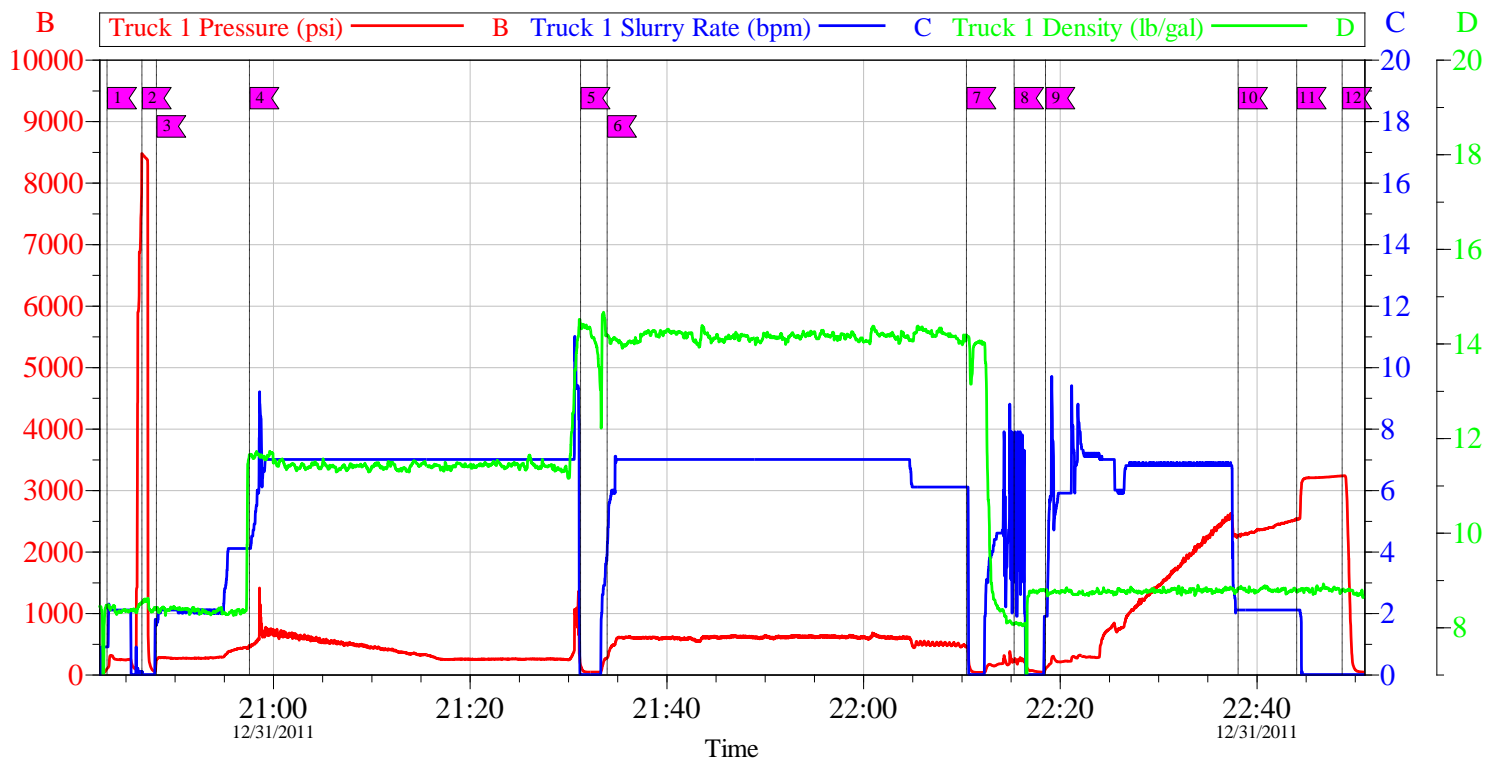
The Road to Excellence Starts with Safety

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Customer: WEXPRO COMPANY E-BILL		Customer Rep: SST-88, Wexpro	
Well Name: Carl Allen	Well #: 37	API/UWI #: 05-081-07617	
Field: POWDER WASH	City (SAP): CRAIG	County/Parish: Moffat	State: Colorado
Legal Description: Section 4 Township 11N Range 97W			
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 Production Casing			Ticket Amount:
Well Type: Development Well		Job Type: Cement Production Casing	
Sales Person: VOLNER, THOMAS		Srvc 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	12/31/2011 10:30							HES CREW CALLED OUT @ 1030 TO WEXPRO SST 88 CARL ALLEN 37 PRODUCTION
Pre-Convoy Safety Meeting	12/31/2011 11:20							DICUSS DRIVING HAZARDS
Crew Leave Yard	12/31/2011 11:30							DEPART SERVICE CENTER
Arrive At Loc	12/31/2011 15:30							ARRIVE AT LOCATION @ 1530
Assessment Of Location Safety Meeting	12/31/2011 15:35							ASSESS LOCATION
Wait on Customer or Customer Sub-Contractor Equip	12/31/2011 15:45							ON BOTTOM @ 1930 CIRCULATING @ 7 BPM @ 704 PSI WITH 409 UNITS OF GAS WITH NO LOSSES
Rig-Up Equipment	12/31/2011 19:45							RIG UP
Pre-Job Safety Meeting	12/31/2011 20:15							SAFETY MEETING WITH CO MAN AND RIG CREW
Rig-Up Equipment	12/31/2011 20:30							RIG UP FLOOR
Start Job	12/31/2011 20:43	1	2	5	5		94.0	FILL LINES
Pressure Test	12/31/2011 20:46	2						GOOD PRESSURE TEST TO 8473 PSI, NO LEAKS
Pump Spacer	12/31/2011 20:48	3	4	20	20		238.0	PUMP MUD FLUSH III @ 8.4 PPG
Pump Lead Cement	12/31/2011 20:57	4	7	225	225		462.0	PUMP 480 SKS OF EXTENDA CEM RS1 @ 11.5 PPG, 2.63 YIELD, 15.50 GAL/SK

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Shutdown	12/31/2011 21:31	5						HAD TO SHUTDOWN BECAUSE TUB POWDERED OFF WHEN STARTED TAIL CEMENT
Pump Tail Cement	12/31/2011 21:33	6	7	262	487		154.0	PUMP 1170 SKS OF ECONOCEM RS13 @ 14.2 PPG, 1.26 YIELD, 5.52 GAL/SK
Shutdown	12/31/2011 22:10	7/8						WASH PUMPS AND LINES
Drop Plug	12/31/2011 22:10	7/8						WITNESSED BY CoMAN
Pump Displacement	12/31/2011 22:18	9	7	120	120		90.0	PUMP CLAYSURF EZ
Slow Rate	12/31/2011 22:38	10	2	16	136		2267.0	PUMP CLAYSURF EZ
Bump Plug	12/31/2011 22:44	11					2529.0	BROUGHT FINAL CIRCULATING 3232 PSI TO
Check Floats	12/31/2011 22:48	12						FLOATS HELD, 1.5 BBLS BACK TO THE PUMP
Pre-Rig Down Safety Meeting	12/31/2011 22:50							DISCUSS RIG DOWN HAZARDS
Rig-Down Equipment	12/31/2011 23:00							RIG DOWN
Pre-Convoy Safety Meeting	12/31/2011 23:50							DISCUSS DERIVING HAZARDS
Crew Leave Location	12/31/2011 23:59							THANKS FROM HES CREW
Other	12/31/2011 23:59							GOOD FULL RETURNS THROUGHOUT JOB WITH 25 BBLS OF GOOD CEMENT BACK TO SURFACE
Other	12/31/2011 23:59							FINAL CIRCULATING PRESSURE @ 2529 PSI WITH 1.5 BBLS BACK TO TRUCK

WEXPRO SST88 CARL ALLEN 37 PRODUCTION

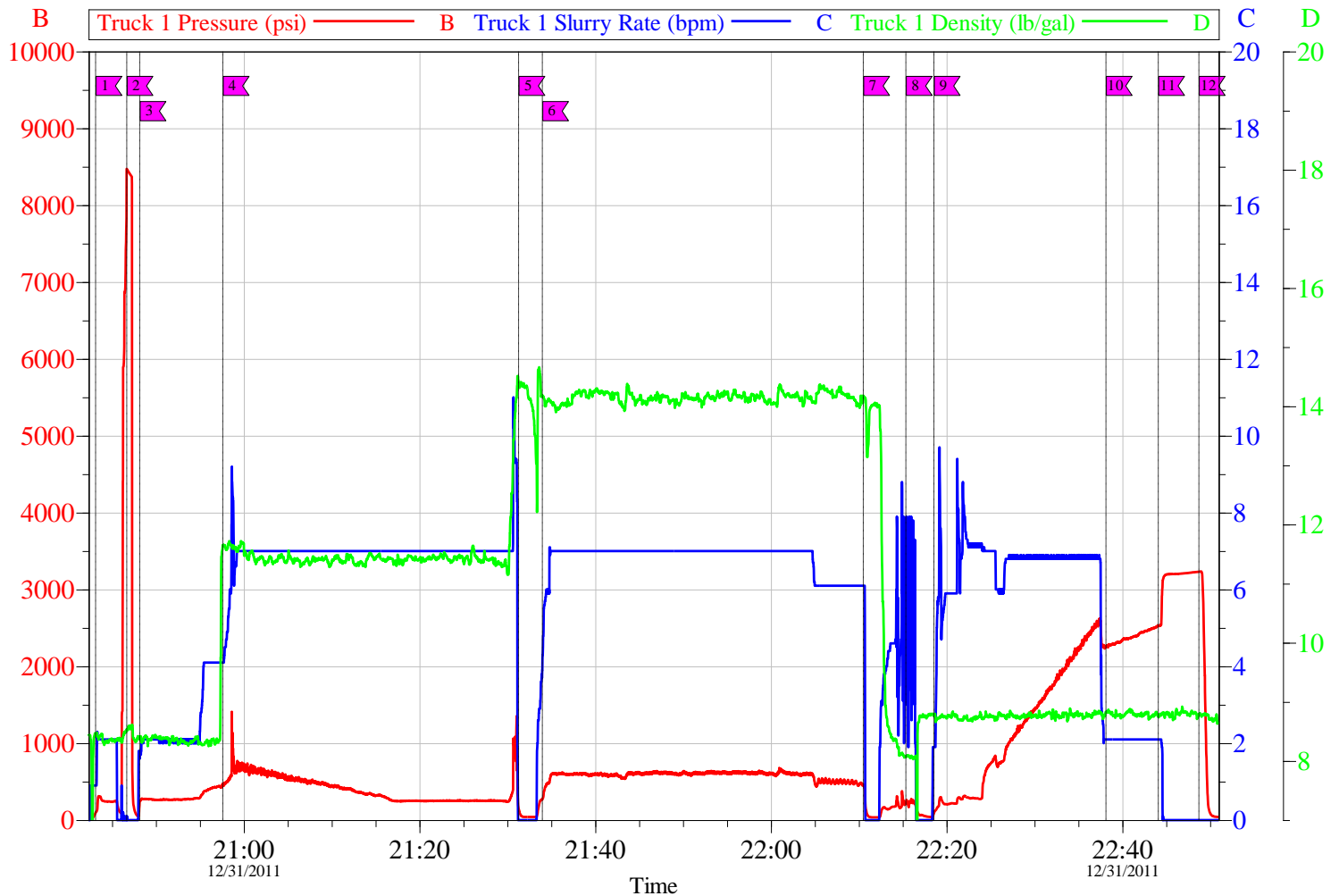


Local Event Log											
Intersection			TID	TIP	TISR	Intersection			TID	TIP	TISR
1	FILL LINES	20:43:07	8.451	94.58	0.900	2	PRESSURE TEST	20:46:40	8.536	8473	0.064
3	PUMP MUD FLUSH	20:48:08	8.397	238.2	1.614	4	PUMP LEAD CEMENT	20:57:37	11.65	462.9	4.100
5	SHUTDOWN / TUB POWDERED OFF	21:31:17	14.41	154.0	0.000	6	PUMP TAIL CEMENT	21:33:59	14.19	269.1	3.911
7	SHUTDOWN / DROP PLUG	22:10:31	14.16	461.2	6.100	8	WASH PUMPS AND LINES	22:15:22	8.061	212.8	3.977
9	PUMP DISPLACEMENT	22:18:33	8.760	90.36	1.900	10	SLOW RATE	22:38:08	8.830	2267	2.100
11	BUMP PLUG	22:44:05	8.750	2529	2.100	12	CHECK FLOATS	22:48:42	8.789	3232	0.000

Customer: WEXPRO	Job Date: 31-Dec-2011	Sales Order #: 9157959
Well Description: CARL ALLEN 37	SUPERVISOR D DOANE	JOB TYPE PRODUCTION

OptiCem v6.4.10
31-Dec-11 23:02

WEXPRO SST88 CARL ALLEN 37 PRODUCTION



Customer: WEXPRO	Job Date: 31-Dec-2011	Sales Order #: 9157959
Well Description: CARL ALLEN 37	SUPERVISOR D DOANE	JOB TYPE PRODUCTION

OptiCem v6.4.10
31-Dec-11 23:03

HALLIBURTON

Cementing

Water Analysis Report

COMPANY: WEXPRO Date Recorded 12/31/2011

SUBMITTED BY: D DOANE SO# 9157959

LEASE: CARL ALLEN Job Type PRODUCTION

WELL #: 37 Camp Location ROCK SPRINGS

CEMENT MIX WATER REQUIREMENTS

Item	Recorded Test Value	Units	Max. Acceptable Limit	Potential Problems in Exceeding Limit
pH	6	----	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	25	ppm	500 ppm	High concentrations will accelerate the set of the cement
Total Alkalinity	80	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	73	°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	95	ppm	300 ppm	High concentrations will accelerate the set of the cement Calculation Method: Subtract tested "Calcium" value from "Total Hardness" value.