Marathon Oil Company

02054236

Casing & Cement
Well Name: 696-6A-43

SURFACE CASING CEMENT TOP OUT

045-18395

Casing Detail:

Casing Description	Prop Run?	Run Date	Set Depth (ftKB)	Set Depth (TVD) (ftKB)	Set Tension (1000lbf)	Centralizers	Scratchers
Surface	No	2/16/2010 00:00	2,309.4				

Wellbore Name	Original KB Elevation (ft)	Water Depth (ft)	KB-Mud Line Distance (ft)
696-6A-43	8,153.00		

Comment

Casing Components

Joints	Item Description	Icon	OD (in)	ID (in)	Wt (lbs/ft)	Grade	Top Thread	Length (ft)	Top (ftKB)	Bottom (ftKB)	Comment
0	Landing Joint	Casing (black)	9 5/8	8.921	36.00	J-55		0.00	24.0	24.0	
1	Casing Hanger	Casing hanger	9 5/8	8.921	36.00	J-55		3.18	24.0	27.2	
48	Casing Joints	Casing (black)	9 5/8	8.921	36.00	J-55		2,148.14	27.2	2,175.3	
1	Air Collar	Casing (red)	9 5/8	8.921	36.00	J-55		1.60	2,175.3	2,176.9	
1	Casing Joints	Casing (black)	9 5/8	8.921	36.00	J-55		45.88	2,176.9	2,222.8	
1	Float Collar Joints	Casing (black)	9 5/8	8.921	36.00	J-55		40.30	2,222.8	2,263.1	
1	Float Collar	Float collar	9 5/8	8.921	36.00	J-55		1.24	2,263.1	2,264.3	
1	Shoe Joints	Casing (black)	9 5/8	8.921	36.00	J-55		43.34	2,264.3	2,307.7	
1	Float Shoe	Casing shoe	9 5/8	8.921	36.00	J-55		1.67	2,307.7	2,309.4	

Cementing Job Details:

String	Description	Type	Cementing Start Date	Cementing End Date	Cementing Company
Surface, 2,309.4ftKB	Surface Casing Cement	casing	2/16/2010 22:50	2/17/2010 15:30	BJ Services Company

Comment
No returns. Final lift pressure prior to bumping the plug - 115 psi. Bumped plug @ 1200 psi Floats held OK. Got 1 bbl back. Pumped 3 top outs for a total 415 sxs and 7 cubic yards of pea gravel.

Cement Stage#1 Description:

Stg No.	Top (ftKB)	Bottom (ftKB)	Pump Start Date	Pump End Date	Cement Volume Return (bbl)	Lost Volume (bbl)
1	24.0	2,309.4	2/16/2010 22:50	2/17/2010 01:59	0.0	

Float Failed?	Plug Failed?	Full Return?	Pipe Reciprocated?	Pipe Rotated?	Top Plug?	Bottom Plug?	Plug Bump Pressure (psi)	Pressure Held (psi)
No	No	No	No	No	No	Yes	1,200.0	1,200.0

Initial Pump Rate (bbl/min)	Final Pump Rate (bbl/min)	Average Pump Rate (bbl/min)	Final Pump Pressure (psi)	Pres Rel Time	Plug Depth (ftKB)	Drill Out Time	Drill Out Dia (in)
5	3	5	115.0	02:05			

Comment
Primary Cement

Spacer

Density (lb/gal)	Class	Amount (sacks)	Yield (ft³/sack)	V (bbl)	Mix H20 Ratio (gal/sack)	Water Source	Excess (%)	Pump Start	Pump End
8.34				20.0		Fresh Water - other		2/16/2010 22:55	2/16/2010 23:00

Fluid Type	Comment
Spacer	

Add	Type	Conc	Conc Unit	Amount	Amount Units

Lead

Density (lb/gal)	Class	Amount (sacks)	Yield (ft³/sack)	V (bbl)	Mix H20 Ratio (gal/sack)	Water Source	Excess (%)	Pump Start	Pump End
12.30	Type III	1,088	2.09	405.0	11.62	Fresh Water - other		2/16/2010 23:05	2/17/2010 00:57

Fluid Type	Comment
Lead	

Add	Type	Conc	Conc Unit	Amount	Amount Units
Calcium Chloride	accelerator	1.0	%BWOC		
Static Free	anti-static	0.05	lb/sk		
Bentonite	extender	8.0	%BWOC		

Add	Type	Conc	Conc Unit	Amount	Amount Units
FP-13L	foam preventer	1.0	lb/100 sk		

Tail

Density (lb/gal)	Class	Amount (sacks)	Yield (ft³/sack)	V (bbl)	Mix H20 Ratio (gal/sack)	Water Source	Excess (%)	Pump Start	Pump End
14.20	Type III	150	1.47	39.0	7.35	Fresh Water - other		2/17/2010 00:58	2/17/2010 01:10

Fluid Type	Comment
Tail	

Add	Type	Conc	Conc Unit	Amount	Amount Units
Calcium Chloride	accelerator	1.0	%BWOC		
Static Free	anti-static	0.05	lb/sk		
FP-13L	foam preventer	1.0	gal/100 sk		

Displacement

Density (lb/gal)	Class	Amount (sacks)	Yield (ft³/sack)	V (bbl)	Mix H20 Ratio (gal/sack)	Water Source	Excess (%)	Pump Start	Pump End
8.33				166.0		Fresh Water - other		2/17/2010 01:17	2/17/2010 01:59

Fluid Type	Comment
Displacement	

Add	Type	Conc	Conc Unit	Amount	Amount Units

Cement Stage#2 Description:

Stg No.	Top (ftKB)	Bottom (ftKB)	Pump Start Date	Pump End Date	Cement Volume Return (bbl)	Lost Volume (bbl)
2	24.0	2,309.4	2/17/2010 07:10	2/17/2010 13:10	4.0	

Float Failed?	Plug Failed?	Full Return?	Pipe Reciprocated?	Pipe Rotated?	Top Plug?	Bottom Plug?	Plug Bump Pressure (psi)	Pressure Held (psi)
No	No	No	No	No	No	No		

Initial Pump Rate (bbl/min)	Final Pump Rate (bbl/min)	Average Pump Rate (bbl/min)	Final Pump Pressure (psi)	Pres Rel Time	Plug Depth (ftKB)	Drill Out Time	Drill Out Dia (in)
1	2	1					

Comment
Top Out

Top out

Density (lb/gal)	Class	Amount (sacks)	Yield (ft³/sack)	V (bbl)	Mix H20 Ratio (gal/sack)	Water Source	Excess (%)	Pump Start	Pump End
14.20	Type III	415	1.68	124.0	7.38	Fresh Water - other		2/17/2010 07:10	2/17/2010 13:10

Fluid Type	Comment
Top out	3 top outs for a total 415 sxs and 7 cubic yards of pea gravel.

Add	Type	Conc	Conc Unit	Amount	Amount Units
A-10		10.0	%		
Calcium Chloride	accelerator	2.0	%		
Static Free	anti-static	0.04	lb/sk		

Wellheads

Install Date	Type	Job	Removed Date	Comment
2/16/2010	WEATHERFORD W	ORIGINAL DRILLING, 2/13/2010 18:00		11" WFT-RL-R07 5,000 # WP