



02054244

Casing & Cement  
Well Name: 696-5C-15SURFACE CASING CEMENT  
AND TOP OUT

045-18392

**Casing Detail:**

Casing Description	Prop Run?	Run Date	Set Depth (ftKB)	Set Depth (TVD) (ftKB)	Set Tension (1000lbf)	Centralizers	Scratchers
Surface	No	2/18/2010 20:00	2,316.1			1	
Wellbore Name	696-5C-15		Original KB Elevation (ft)	Water Depth (ft)	KB-Mud Line Distance (ft)		
			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 (red)	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	
49	Casing Joints	Casing (black)	9 5/8	8.921	36.00	J-55		2,157.27	27.2	2,184.5	
1	Air Collar	Casing (red)	9 5/8	8.921	36.00	J-55		1.60	2,184.5	2,186.1	
1	Casing Joints	Casing (black)	9 5/8	8.921	36.00	J-55		44.67	2,186.1	2,230.8	
1	Float Collar Joints	Casing (black)	9 5/8	8.921	36.00	J-55		40.36	2,230.8	2,271.1	
1	Float Collar	Float collar	9 5/8	8.921	36.00	J-55		1.24	2,271.1	2,272.4	
1	Shoe Joints	Casing (black)	9 5/8	8.921	36.00	J-55		42.06	2,272.4	2,314.4	
1	Float Shoe	Casing shoe	9 5/8	8.921	36.00	J-55		1.67	2,314.4	2,316.1	

**Cementing Job Details:**

String	Description	Type	Cementing Start Date	Cementing End Date	Cementing Company
Surface, 2,316.1ftKB	Surface Casing Cement	casing	2/19/2010 12:00		BJ Services Company

Comment  
No returns. Bumped plug @ 716 psi Floats held OK. Got 1 bbl back. Final lift pressure prior to landing plug - 0 psi. Pumped 5 top outs for a total 650 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		2,316.1		2/19/2010 12:17		2/19/2010 14:45		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		716.0	716.0		
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			0.0			14:45				

Comment  
Primary Cement

**Spacer**

Density (lb/gal)	Class	Amount (sacks)	Yield (ft <sup>3</sup> /sack)	V (bbl)	Mix H2O Ratio (gal/sack)	Water Source	Excess (%)	Pump Start	Pump End
8.34				20.0		Fresh Water - other		2/19/2010 12:17	2/19/2010 12:21

Fluid Type  
Spacer

Add	Type	Conc	Conc Unit	Amount	Amount Units

**Lead**

Density (lb/gal)	Class	Amount (sacks)	Yield (ft <sup>3</sup> /sack)	V (bbl)	Mix H2O 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		2/19/2010 12:28	2/19/2010 13:42

Fluid Type  
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		



**Marathon  
Oil Company**

## Casing & Cement

Well Name: 696-5C-15

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 (ft <sup>3</sup> /sack)	V (bbl)	Mix H2O Ratio (gal/sack)	Water Source	Excess (%)	Pump Start	Pump End
14.20	Type III	150	1.47	39.0	7.35	Fresh Water - other		2/19/2010 13:42	2/19/2010 13:57

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 (ft <sup>3</sup> /sack)	V (bbl)	Mix H2O Ratio (gal/sack)	Water Source	Excess (%)	Pump Start	Pump End
8.33				167.0		Fresh Water - other		2/19/2010 14:06	2/19/2010 14:35

Fluid Type	Comment
Displacement	

Add	Type	Conc	Conc Unit	Amount	Amount Units
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### 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		2,316.1		2/19/2010 07:00		2/20/2010 04:00		5.0			
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 Rei Time		Plug Depth (ftKB)	Drill Out Time	Drill Out Dia (in)
2		2		2								

Comment
Top Out

Density (lb/gal)	Class	Amount (sacks)	Yield (ft <sup>3</sup> /sack)	V (bbl)	Mix H2O Ratio (gal/sack)	Water Source	Excess (%)	Pump Start	Pump End
14.20	Type III	625	1.47	161.0	7.35	Fresh Water - other		2/20/2010 19:05	2/20/2010 04:00

Fluid Type	Comment
Top out	4 top outs - 625 sxs and 7cubic yards of pea gravel.

Add	Type	Conc	Conc Unit	Amount	Amount Units
A-10			%	5,922.0	lb
Salt - fine			lb/sk	300.0	lb
Calcium Chloride	accelerator		%	1,185.0	lb
Static Free	anti-static		lb/sk	25.0	lb

### Cement Stage#3 Description:

Stg No.	Top (ftKB)		Bottom (ftKB)		Pump Start Date		Pump End Date		Cement Volume Return (bbl)		Lost Volume (bbl)	
3	24.0		2,316.1		2/22/2010 22:30		2/22/2010 23:00		5.0			
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)	
2		2		2								

Comment
Top Out

Density (lb/gal)	Class	Amount (sacks)	Yield (ft <sup>3</sup> /sack)	V (bbl)	Mix H2O Ratio (gal/sack)	Water Source	Excess (%)	Pump Start	Pump End
14.20	Type III	25	1.47	6.5	7.35	Fresh Water - other		2/22/2010 22:35	2/22/2010 22:40

Fluid Type	Comment
Top out	Additional top out to bring cement to surface - 1 top out - 25 sxs.

Add	Type	Conc	Conc Unit	Amount	Amount Units
A-10			%	5,922.0	lb
Salt - fine			lb/sk	300.0	lb
Calcium Chloride	accelerator		%	1,185.0	lb
Static Free	anti-static		lb/sk	25.0	lb

### Wellheads

Install Date	Type	Job	Removed Date	Comment
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