

**1.1 Executive Summary**

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Halliburton appreciates the opportunity to perform the cementing services on the **Horsetail 30F 1942** cement **Intermediate** casing job. A pre-job safety meeting was held before the job where details of the job were discussed, potential safety hazards were reviewed, and environmental compliance procedures were outlined.

Halliburton maintains a continuous quality improvement process and appreciates any comments or suggestions that you may have. Halliburton again thanks you for the opportunity to perform service work on this well. We hope to be your solutions provider for future projects.

Respectfully,

**Halliburton [Brighton]**

**Job Times**

	<b>Date</b>	<b>Time</b>	<b>Time Zone</b>
<b>Called Out</b>	10/17/2014	1200	MST
<b>On Location</b>	10/17/2014	1800	
<b>Job Started</b>	10/17/2014	2322	
<b>Job Completed</b>	10/18/2014	0224	
<b>Departed Location</b>	10/18/2014	0430	

## 1.2 Cementing Job Summary

**HALLIBURTON**

## Cementing Job Summary

*The Road to Excellence Starts with Safety*

Sold To #: 368960		Ship To #: 3276747		Quote #: 0021904087		Sales Order #: 0901750687				
Customer: WHITING OIL & GAS CORP - EBUS				Customer Rep:						
Well Name: HORSETAIL		Well #: 30F-1942		API/UWI #: 05-123-38740-00						
Field: WILDCAT		City (SAP): RAYMER		County/Parish: WELD		State: COLORADO				
Legal Description: SE NW-30-10N-57W-2323FNL-1890FWL										
Contractor: XTREME DRLG				Rig/Platform Name/Num: XTREME 18						
Job BOM: 7522										
Well Type: HORIZONTAL OIL				Intermediate Casing Cement						
Sales Person: HALAMERICA\HX46524				Srv Supervisor:						
Job										
Formation Name										
Formation Depth (MD)		Top		Bottom						
Form Type				BHST		225 degF				
Job depth MD		6065ft		Job Depth TVD						
Water Depth				Wk Ht Above Floor		4 ft				
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	0	10.75	10.05	40.5	BTC	J-55	0	1550	0	
Casing	0	7.625	6.875	29.7	BTC	P-110	0	6065		0
Open Hole Section			9.875				1550	6080		0
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Guide Shoe	7.625	1		6065		Top Plug	7.625	1	HES	
Float Shoe	7.625	1				Bottom Plug	7.625	1	HES	
Float Collar	7.625	1		6018		SSR plug set	7.625	1	HES	
Insert Float	7.625	1				Plug Container	7.625	1	HES	
Stage Tool	7.625	1				Centralizers	7.625	1	HES	
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 ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
1	10.5 lb/gal Tuned Spacer III	Tuned Spacer III	40	bbl	10.5	6.11		6		
37.58 gal/bbl		FRESH WATER								
91.07 lbm/bbl		BARITE, BULK (100003681)								

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Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
2	Lead Cement	ECONOCHEM (TM) SYSTEM	649	sack	12.7	1.89		6	9.97
9.97 Gal		FRESH WATER							
61.10 lbm		TYPE I / II CEMENT, BULK (101439798)							
218 bbls									
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
3	Tail Cement	EXPANDACHEM (TM) SYSTEM	212	sack	13.8	1.67		6	7.71
7.71 Gal		FRESH WATER							
63 bbls									
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
4	Displacement	Displacement	267	bbl	8.33				
Cement Left In Pipe		Amount	47 ft	Reason			Shoe Joint		
Comment									

## 2.0 Custom Graphs

### 2.1 Custom Graph

