

**APOLLO OPERATING
1538 WAZEE ST #200
DENVER, Colorado**

Hoagland 33-4D

Ensign/Ensign/55

Post Job Summary **Cement Production Casing**

Date Prepared: 5/30/2012
Version: 1

Service Supervisor: FANTASIA, JOSEPH

Submitted by: KENNEDY, HERRON

HALLIBURTON

Wellbore Geometry

Job Tubulars					MD		Shoe Joint Length ft
Type	Description	Size in	ID in	Wt lbm/ft	Top ft	Bottom ft	
Casing	Surface Casing	8.63	8.097	24.00	0.00	733.00	
Open Hole Section	Open Hole		7.875		733.00	7,849.00	
Casing	Production Casing	4.50	4.000	11.60	0.00	7,849.00	14.00

HALLIBURTON

Pumping Schedule

Stage /Plug #	Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Surface Volume	Downhole Volume
1	1	Spacer	Fresh Water Spacer	8.33	20.0 bbl	20.0 bbl
1	2	Spacer	MUD FLUSH III	8.40	24.0 bbl	24.0 bbl
1	3	Spacer	Fresh Water Spacer	8.33	10.0 bbl	10.0 bbl
1	4	Cement Slurry	ExtendaCem 11.3#	11.30	320.0 sacks	320.0 sacks
1	5	Cement Slurry	FracCem B2 13.5#	13.50	200.0 sacks	200.0 sacks
1	6	Spacer	ClayWeb III	8.33	5.0 Gal	5.0 Gal

HALLIBURTON

Service Supervisor Reports

Job Log

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pump		Pressure (psig)	Comments
05/20/2012 19:00		Arrive at Location from Service Center						
05/20/2012 19:45		Assessment Of Location Safety Meeting						
05/20/2012 20:45		Start Job						
05/20/2012 21:02		Test Lines						PRESSURE TEST LINES TO 3500 PSI USING RIG WATER
05/20/2012 21:11		Pump Spacer 1	5	20			454.0	PUMP 20BBL WATER WITH CLAYWEBB ADDED
05/20/2012 21:15		Pump Spacer 2	5	24			460.0	PUMP 24BBL MUDFLUSH USING RIG WATER
05/20/2012 21:19		Pump Spacer 1	5	10			480.0	PUMP 10BBL WATER WITH CLAYWEBB ADDED
05/20/2012 21:21		Pump Lead Cement	8	140.2			498.0	PUMP 320SKS EXTENDCEM MIXED AT 11.3# LEAD CMT USING RIG WATER
05/20/2012 21:44		Pump Tail Cement	8	61.97			246.0	PUMP 200SKS FRACCEM MIXED AT 13.5# TAIL CMT USING RIG WATER
05/20/2012 22:00		Shutdown						
05/20/2012 22:02		Clean Lines						
05/20/2012 22:03		Drop Top Plug						PRE LOADED
05/20/2012 22:04		Pump Displacement	9	121			210.0	GOOD RETURNS THROUGHOUT
05/20/2012 22:23		Bump Plug	3				1202.0	PLU G LANDED AT 1202 PSI AND PRESSURE BROUGHT TO 2300 PSI AND HELD FOR 1 MIN.
05/20/2012 22:25		Check Floats						FLOATS HELD
05/20/2012 22:30		End Job						

The Road to Excellence Starts with Safety

Sold To #: 353960	Ship To #: 2927525	Quote #:	Sales Order #: 9519538
Customer: APOLLO OPERATING		Customer Rep: LIBHART, DON	
Well Name: Hoagland		Well #: 33-4D	API/UWI #: 05-123-34987
Field: WATTENBURG	City (SAP): MEAD	County/Parish: Weld	State: Colorado
Contractor: Ensign		Rig/Platform Name/Num: Ensign 55	
Job Purpose: Cement Production Casing			
Well Type: Development Well		Job Type: Cement Production Casing	
Sales Person: FLING, MATTHEW	Srvc Supervisor: FANTASIA, JOSEPH		MBU ID Emp #: 485445

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BULINSKI, MATTHEW J	4.5	483865	FANTASIA, JOSEPH Brandon	4.5	485445	KUNERT, RANDY Joe	4.5	477850
SMITH, AARON David	4.5	518187						

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
11064046C	25 mile	11142998	25 mile	11338223	25 mile	11398319	25 mile
11410470C	25 mile						

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
TOTAL	Total is the sum of each column separately							

Job

Job Times

Formation Name					Date	Time	Time Zone
Formation Depth (MD)	Top		Bottom		Called Out	20 - May - 2012	15:00 MST
Form Type	BHST				On Location	20 - May - 2012	19:00 MST
Job depth MD	7849. ft	Job Depth TVD	7849. ft	Job Started	20 - May - 2012	21:00	MST
Water Depth		Wk Ht Above Floor		Job Completed	20 - May - 2012	22:30	MST
Perforation Depth (MD)	From		To	Departed Loc	20 - May - 2012	23:30	MST

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
Open Hole				7.875				733.	7849.		
Production Casing	Unknown		4.5	4.	11.6			.	7849.		
Surface Casing	Unknown		8.625	8.097	24.		J-55	.	733.		

Sales/Rental/3rd Party (HES)

Description	Qty	Qty uom	Depth	Supplier
SHOE,FLT,4-1/2 8RD,2-3/4 SSII	1	EA		
CENTRALIZER ASSY - API - 4-1/2 CSG X	30	EA		
CLAMP - LIMIT - 4-1/2 - HINGED -	1	EA		
KIT,HALL WELD-A	1	EA		
CLR,FLT,4-1/2 LG 8RD 9.5-13.5,2-3/4 SSII	1	EA		

Tools and Accessories													
Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer					Top Plug			
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar					Retainer					SSR plug set			
Insert Float										Plug Container			
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	Fresh Water Spacer				20.00	bbl	8.33	.0	.0	.0			
2	MUD FLUSH III	MUD FLUSH III - SBM (528788)			24.00	bbl	8.4	.0	.0	.0			
3	Fresh Water Spacer				10.00	bbl	8.33	.0	.0	.0			
4	ExtendaCem 11.3#	EXTENDACEM (TM) SYSTEM (452981)			320.0	sacks	11.3	2.46	14.17	6.0	14.17		
14.17 Gal		FRESH WATER											
5	FracCem B2 13.5#	FRACCEM (TM) SYSTEM (452963)			200.0	sacks	13.5	1.73	8.24	6.0	8.24		
8.24 Gal		FRESH WATER											
6	ClayWeb III				5.00	Gal	8.33	.0	.0	.0			
2.5 gal/Mgal		CLA-WEB - TOTE (101985045)											
Calculated Values		Pressures		Volumes									
Displacement		Shut In: Instant		Lost Returns		Cement Slurry		Pad					
Top Of Cement		5 Min		Cement Returns		Actual Displacement		Treatment					
Frac Gradient		15 Min		Spacers		Load and Breakdown		Total Job					
Rates													
Circulating		Mixing		Displacement		Avg. Job							
Cement Left In Pipe		Amount	14 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								