

BONANZA CREEK ENERGY OPERATING CO

Antelope K-O-31HNB

Ensign 136

Post Job Summary
Cement Intermediate Casing

Prepared for:
Date Prepared: 7/15/2013
Version: 1

Service Supervisor: VIGIL, NICHOLAS

Submitted by: FINNEY, SEAN

HALLIBURTON

HALLIBURTON

Wellbore Geometry

Job Tubulars					MD		TVD		Shoe Joint Length ft
Type	Description	Size in	ID in	Wt lbm/ft	Top ft	Bottom ft	Top ft	Bottom ft	
Open Hole Section	8 3/4" Open Hole Section		8.750		436.00	7,034.00	437.00	6,050.00	
Casing	7" Intermediate Casing	7.00	6.276	26.00	0.00	7,023.00	0.00	6,050.00	43.00
Casing	Surface Casing	9.63	8.921	36.00	0.00	437.00			

HALLIBURTON

Pumping Schedule

Stage /Plug #	Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Avg Rate bbl/min	Surface Volume	Downhole Volume
1	1	Spacer	MUD FLUSH III	8.40	6.00	24.0 bbl	24.0 bbl
1	2	Cement Slurry	EconoCem B3	12.50	8.00	560.0 sacks	560.0 sacks
1	3	Cement Slurry	ExpandaCem B1	14.60	8.00	280.0 sacks	280.0 sacks
1	4	Spacer	Mud Displacement	9.90	6.00	400.6 bbl	400.6 bbl

Fluids Pumped

Stage/Plug # 1 Fluid 1: MUD FLUSH III
MUD FLUSH III - SBM (528788)

Fluid Density: 8.40 lbm/gal
Fluid Volume: 24.00 bbl
Pump Rate: 6.00 bbl/min

Stage/Plug # 1 Fluid 2: EconoCem B3
ECONOCEM (TM) SYSTEM
2 % Halliburton Gel

Fluid Weight: 12.50 lbm/gal
Slurry Yield: 1.89 ft³/sack
Total Mixing Fluid: 10.29 Gal
Surface Volume: 560.0 sacks
Sacks: 560.0 sacks

Stage/Plug # 1 Fluid 3: ExpandaCem B1
EXPANDACEM (TM) SYSTEM

Fluid Weight: 14.60 lbm/gal
Slurry Yield: 1.46 ft³/sack
Total Mixing Fluid: 6.08 Gal
Surface Volume: 280.0 sacks
Sacks: 280.0 sacks
Calculated Fill: 1,500.00 ft
Calculated Top of Fluid: 5,000.00 ft

Stage/Plug # 1 Fluid 4: Mud Displacement
DUMMY MUD / FLUSH / SPACER SBC MATERIAL

Fluid Density: 9.90 lbm/gal
Pump Rate: 8.50 bbl/min

HALLIBURTON

Service Supervisor Reports

Job Log

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pump	Pressure (psig)	Comments
07/07/2013 17:15		Arrive At Loc					Well site assesment,Hazard hunt,Water test,Rig up safety meeting,Waited for rig to finish running casing
07/07/2013 19:29		Start Job					Pre job safety meeting
07/07/2013 19:30		Test Lines					Pressure tested lines to 4000 psi
07/07/2013 19:32		Pump Spacer 1	6			378.0	Water
07/07/2013 19:37		Pump Spacer 2	6			369.0	Mud Flush
07/07/2013 19:40		Pump Spacer 1	6			415.0	Water
07/07/2013 19:42		Pump Lead Cement	8	188.5		376.0	12.5 ppg EconoCem (560 sks), weight verified by scale
07/07/2013 20:06		Pump Tail Cement	8	72.8		370.0	14.6 ppg ExpandaCem (280 sks), weight verified by scale
07/07/2013 20:17		Shutdown					
07/07/2013 20:19		Drop Top Plug					Plug was pre loaded
07/07/2013 20:19		Pump Displacement	8.5	140		460.0	9.9 ppg mud
07/07/2013 20:58		Bump Plug	3	266.6		1350.0	Calculated pressure to land plug was 1312 psi + 1000 over
07/07/2013 21:01		Check Floats					Floats held
07/07/2013 21:20		Wait on HES Materials to Arrive - Start Time					We did not get cement to surface so I had to send bulk truck back to yard to get loaded with top out cement
07/08/2013 04:30		Wait on HES Materials to Arrive - End Time					Bulk truck arrived rig stopped running drill pipe and we rigged up to backside
07/08/2013 05:35		Pump Cement	1.5	61			15.8 ppg Neat Cement with 2% Calcium Chloride (300 sks)
07/08/2013 06:05		End Job					Rig down safety meeting

The Road to Excellence Starts with Safety

Sold To #: 324725	Ship To #: 3008514	Quote #:	Sales Order #: 900570488
Customer: BONANZA CREEK ENERGY OPERATING CO		Customer Rep: Mueller, Bob	
Well Name: Antelope		Well #: K-O-31HNB	API/UWI #: 05-123-37286
Field:	City (SAP): KERSEY	County/Parish: Weld	State: Colorado
Lat: N 40.362 deg. OR N 40 deg. 21 min. 44.064 secs.		Long: W 104.371 deg. OR W -105 deg. 37 min. 45.444 secs.	
Contractor: Ensign		Rig/Platform Name/Num: Ensign 136	
Job Purpose: Cement Intermediate Casing			
Well Type: Development Well		Job Type: Cement Intermediate Casing	
Sales Person: FLING, MATTHEW		Srvc Supervisor: VIGIL, NICHOLAS	MBU ID Emp #: 443481

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
CHISLUM, DENNIS	0.0	512130	DEY, JERRY A	0.0	505015	MULLER, MICHEL B	0.0	529830
Soddy, Duke	0.0	499629	VIGIL, NICHOLAS Joseph	0.0	443481			

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10977079	50 mile	11064046C	50 mile	11398490	50 mile	11562544C	50 mile
11633848	50 mile	12010168	50 mile				

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
TOTAL			<i>Total is the sum of each column separately</i>					

Job

Job Times

Formation Name	Formation Depth (MD)	Top	Bottom	Form Type	Job depth MD	Water Depth	Perforation Depth (MD)	From	To	Called Out	On Location	Job Started	Job Completed	Departed Loc	Date	Time	Time Zone								
				BHST	6800. ft						07 - Jul - 2013	07 - Jul - 2013	07 - Jul - 2013	08 - Jul - 2013	08 - Jul - 2013	12:30	17:15	19:29	06:05	07:00	MST	MST	MST	MST	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
8 3/4" Open Hole Section				8.75				436.	7034.	437.	6050.
7" Intermediate Casing	Unknown		7.	6.276	26.		P-110	.	7023.	.	6050.
Surface Casing	Unknown		9.625	8.921	36.		J-55	.	437.		

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)	24.00	bbl	8.4	.0	.0	6.0		
2	EconoCem B3	ECONOCEM (TM) SYSTEM (452992)	560.0	sacks	12.5	1.89	10.29	8.0	10.29	
2 %		HALLIBURTON GEL, 50 LB SK (100064040)								
3	ExpandaCem B1	EXPANDACEM (TM) SYSTEM (452979)	280.0	sacks	14.6	1.46	6.08	8.0	6.08	
6.08 Gal		FRESH WATER								
4	Mud Displacement		400.6	bbl	9.9	.0	.0	8.5		
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	43 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						

