

BILL BARRETT CORPORATION E-BILL
DO NOT MAIL-1099 18TH ST,STE 2300W
DENVER, Colorado

Hawkins 5-61-21-4956BH

SST 17

Post Job Summary

Cement Intermediate Casing

Date Prepared: 10/3/2013
Version: 1

Service Supervisor: BIRCHELL, DEVIN

Submitted by: LANSDALE, JUSTIN

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	
Casing	9 5/8" Surface Casing	9.63	8.921	36.00	0.00	8,241,400.00			
Open Hole Section	8 3/4" Open Hole		8.750		824.00	6,527.00	824.00	6,115.00	
Casing	7" Intermediate Casing	7.00	6.276	26.00	0.00	7,540.00			42.00

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	TUNED SPACER III	11.50	5.00	40.0 bbl	40.0 bbl
1	2	Cement Slurry	12.5# EconoCem	12.50	6.00	405.0 sacks	405.0 sacks
1	3	Cement Slurry	13.5# FracCem	13.50	5.00	165.0 sacks	165.0 sacks
1	4	Mud	MUD DISPLACEMENT	9.00	7.00	246.0 bbl	246.0 bbl

Fluids Pumped

Stage/Plug # 1 Fluid 1: TUNED SPACER III
 TUNED SPACER III - SBM (483826)
 146.5 Barite
 lbm/bbl

Fluid Density: 11.50 lbm/gal
 Fluid Volume: 40.00 bbl
 5.00 bbl/min

Stage/Plug # 1 Fluid 2: 12.5# EconoCem
 EXTENDACEM (TM) SYSTEM

Fluid Weight: 12.50 lbm/gal
 Slurry Yield: 1.97 ft³/sack
 Total Mixing Fluid: 10.72 Gal
 Surface Volume: 405.0 sacks
 Sacks: 405.0 sacks

Stage/Plug # 1 Fluid 3: 13.5# FracCem
 FRACCEN (TM) SYSTEM

Fluid Weight: 13.50 lbm/gal
 Slurry Yield: 1.74 ft³/sack
 Total Mixing Fluid: 8.30 Gal
 Surface Volume: 165.0 sacks
 Sacks: 165.0 sacks

Stage/Plug # 1 Fluid 4: MUD
 DISPLACEMENT

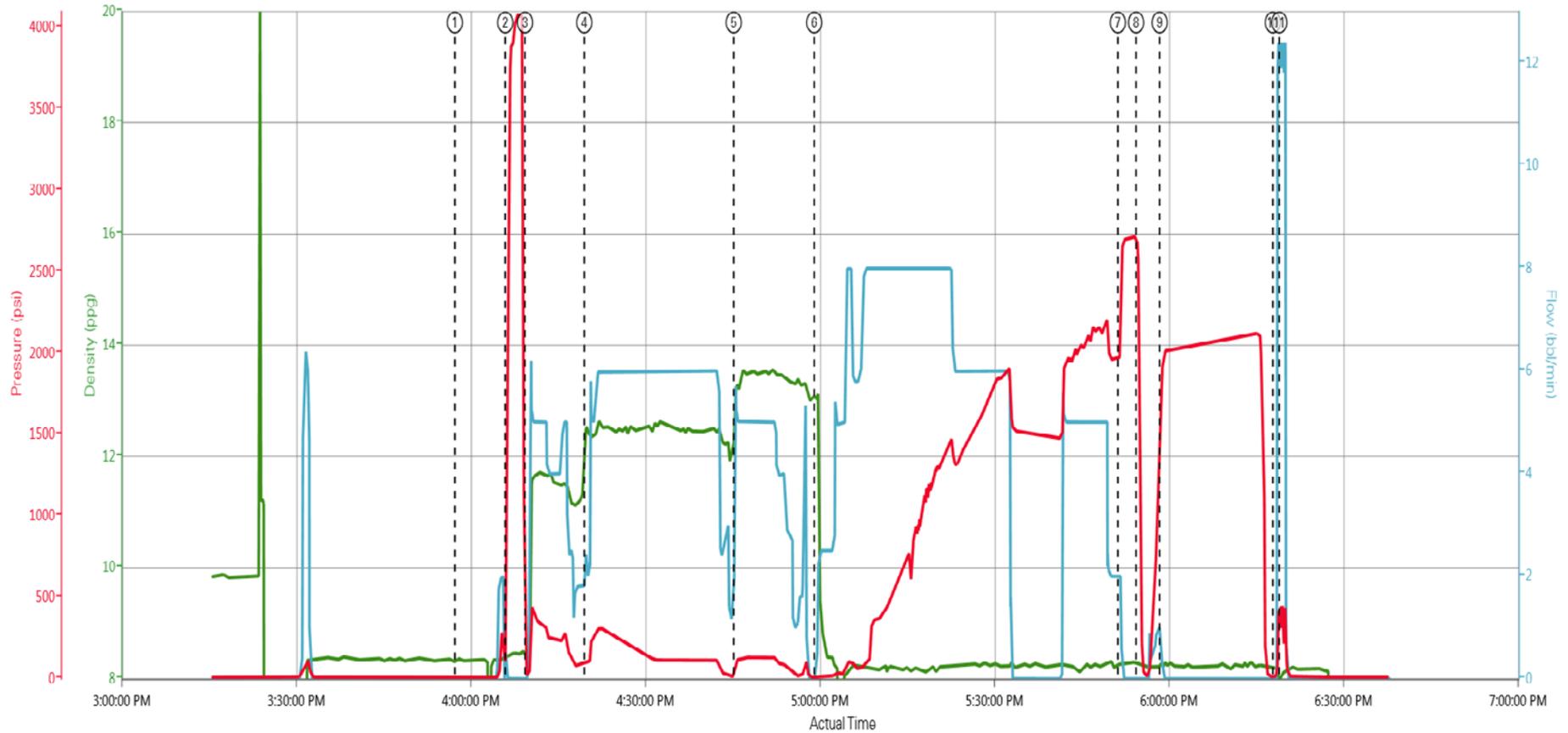
Fluid Volume: 246.00 bbl

Fluid Density: 9.00 lbm/gal

HALLIBURTON

Data Acquisition

Hawkins 5-61-21-4956BH



DH Density (ppg) Comb Pump Rate (bbl/min) PS Pump Press (psi)

- ① Start Job 8.37;0,11 ④ Pump Lead Cement 12.48;2,1,114 ⑦ Bump Plug 8.24;2,2210 ⑩ Job Complete 8.21;0,14
- ② Pressure Test 0.4;0,1320 ⑤ Pump Tail Cement 13.3;5,1;112 ⑧ Check Floats 0.3;0,2354 ⑪ End Job 0.09;12,1;424
- ③ Pump Spacer 1 8.4;0,23 ⑥ Pump Displacement 13.03;0,10 ⑨ Pressure Up 8.19;0,1919

HALLIBURTON

Service Supervisor Reports

Job Log

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pump	Pressure (psig)	Comments
09/28/2013 06:30		Call Out					Called out for Bill Barrett Hawkins 5-61-21-4956BH Intermediate
09/28/2013 08:30		Pre-Convoy Safety Meeting					Discuss road and weather conitions, fatigue adn following distance
09/28/2013 09:00		Depart from Service Center or Other Site					Depart for location
09/28/2013 10:30		Arrive At Loc					Talked with company rep on volumes, depth, and rates
09/28/2013 10:35		Wait on Customer or Customer Sub-Contractor Equip					Casing and rig crew still running casing
09/28/2013 14:25		Casing on Bottom					Casing on Bottom rig will circulate until Halliburton is rigged up
09/28/2013 14:30		Pre-Rig Up Safety Meeting					Discussed rig up, line of fire, slips, and pinch points
09/28/2013 14:35		Rig-Up Equipment					Rig up all HES Equipment
09/28/2013 15:35		Pre-Job Safety Meeting					Discuss pump schedule, procedure, high pressure iron, and emergency plan
09/28/2013 15:45		Other					Stop circulation and stab cement head with 1 top plug pre loaded and verified by tool pusher
09/28/2013 16:04		Other					Fill Lines
09/28/2013 16:06		Pressure Test				4150.0	Pressure test to 4150PSI
09/28/2013 16:10		Pump Spacer	4	40		143.0	Pumped 40 bbls Tuned Spacer III at 11.5 ppg
09/28/2013 16:19		Pump Lead Cement	6	142		276.0	Pump Lead Cement at 12.5PPG Y:1.970ft ³ /sk W: 10.72gal/sk 405sks
09/28/2013 16:44		Slow Rate					Reduced rate to switch out bulk trucks
09/28/2013 16:45		Pump Tail Cement	5	51		134.0	Pump Tail Cement at 13.5PPG Y:1.74ft ³ /sk W: 8.30gal/sk 165sks
09/28/2013 16:58		Shutdown					Shutdown to drop top plug
09/28/2013 16:58		Drop Top Plug					Drop Top Plug, washed up on top of plug.
09/28/2013 16:59		Pump Displacement - Start	5			51.0	Pump Displacement 246BBL water
09/28/2013 17:05		Returns To Surface	8	20		108.0	Returns seen at surface with 20BBLS displacement away
09/28/2013 17:10		Displ Reached Cmnt	8	53		370.0	Displacement reached cement with 53BBLS away
09/28/2013 17:52		Bump Plug	2	246		2000.0	Bumped Plug with 246BBLS away increased to 2706 psi
09/28/2013 17:54		Check Floats					Checked floats, floats held with 1 bbl back to truck
09/28/2013 17:56		Pressure Up				2070.0	Pressure up casing to 2070PSI and hold for 15 minutes
09/28/2013 18:14		Job Complete					Job complete, released pressure and rigged down
09/28/2013 18:20		Pre-Rig Down Safety Meeting					Discuss pressure on teh head, slips, trips, falls, and overhead loads
09/28/2013 18:25		Rig-Down Equipment					Begin rigging down everything but the head
09/28/2013 19:25		Pre-Convoy Safety Meeting					Discuss Fatigue, wildlife, weather, and journey management
09/28/2013 19:30		Depart Location for Service Center or Other Site					Depart for the yard

The Road to Excellence Starts with Safety

Sold To #: 343492	Ship To #: 3108047	Quote #:	Sales Order #: 900774045
Customer: BILL BARRETT CORPORATION E-BILL		Customer Rep: Crow, Cecil	
Well Name: Hawkins		Well #: 5-61-21-4956BH	API/UWI #: 05-123-37750
Field:	City (SAP): KERSEY	County/Parish: Weld	State: Colorado
Lat: N 40.383 deg. OR N 40 deg. 22 min. 58.436 secs.		Long: W 104.223 deg. OR W -105 deg. 46 min. 38.78 secs.	
Job Purpose: Cement Intermediate Casing			
Well Type: Development Well		Job Type: Cement Intermediate Casing	
Sales Person: GREGORY, JON		Srvc Supervisor: BIRCHELL, DEVIN	MBU ID Emp #: 466993

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BIRCHELL, DEVIN Ray	0.0	466993	MARKOVICH, STEVEN Michael	0.0	502964	MYRE, JAMES	0.0	549859

Equipment

HES Unit #	Distance-1 way						
10867419C	45 mile	10972458	45 mile	11019275C	45 mile	11526488	45 mile
11812069C	45 mile	12010171	45 mile				

Job

Job Times

Formation Name	Formation Depth (MD)	Top	Bottom	Called Out	Date	Time	Time Zone
					28 - Sep - 2013	06:30	MST
Form Type			BHST	On Location	28 - Sep - 2013	10:30	MST
Job depth MD	6527. ft		Job Depth TVD	6115. ft	Job Started	28 - Sep - 2013	16:00
Water Depth			Wk Ht Above Floor	5. ft	Job Completed	28 - Sep - 2013	18:20
Perforation Depth (MD)	<i>From</i>		<i>To</i>	Departed Loc	28 - Sep - 2013	19:30	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
8 3/4" Open Hole				8.75				824.	6527.	824.	6115.
7" Intermediate Casing	New		7.	6.276	26.	LTC	HCP110	.	7540.		
9 5/8" Surface Casing	Unknown		9.625	8.921	36.		J-55	.	8241400.		

Sales/Rental/3rd Party (HES)

Description	Qty	Qty uom	Depth	Supplier
CMT CASING EQUIPMENT BOM	1	JOB		
MILEAGE FOR CEMENTING CREW,ZI	90	MI		
ZI FUEL SURCHG-CARS/PICKUPS<1 1/2TON	90	MI		
SHOE,FLT,7 8RD,2-3/4 SS II VLV	1	EA		
CLR,FLT,7 LG 8RD 23-26PPF,2-3/4	1	EA		
PLUG,CMTG,TOP,7,HWE,5.66 MIN/6.54 MAX CS	1	EA		
Description	Qty	Qty uom	Depth	Supplier
CTRLZR ASSY,STR BLD,SLP-ON,AL,7 X 8-1/2	2	EA		
CLAMP - LIMIT - 7 - HINGED -	2	EA		
KIT,HALL WELD-A	1	EA		
CTRZR ASSY,API,7 CSG X 8 3/4HOLE,HNGD	5	EA		

Fluid Data									
Stage/Plug #: 1									
Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft3/sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	TUNED SPACER III	TUNED SPACER III - SBM (483826)	40.00	bbl	11.5	7.21	53.96	5.0	
	146.5 lbm/bbl	BARITE, 100 LB SK (100003680)							
	36.09 gal/bbl	FRESH WATER							
2	12.5# EconoCem	EXTENDACEM (TM) SYSTEM (452981)	405.0	sacks	12.5	1.97	10.72	6.0	10.72
	10.72 Gal	FRESH WATER							
3	13.5# FracCem	FRACCEM (TM) SYSTEM (452963)	165.0	sacks	13.5	1.74	8.3	5.0	8.3
	8.3 Gal	FRESH WATER							
4	MUD DISPLACEMENT		246.00	bbl	9.			7.0	
Rates									
Circulating		Mixing		Displacement		Avg. Job			
Cement Left In Pipe		Amount	42 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					

