

HALLIBURTON

iCem[®] Service

Post Job Report

SYNERGY RESOURCES CORPORATION

For: Dennis Geiss

Date: Thursday, June 12, 2014

Hawkstone 29-30 DD

Howkstone

Case 1

Sincerely,

Derek Trier

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1.1 Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the **Hawkstone 29-30DD** cement **Surface** 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

	Date	Time	Time Zone
Requested Time On Location	6/12/14	1530	MST
Called Out	6/12/14	1200	MST
On Location	6/12/14	1530	MST
Job Started	6/12/14	1645	MST
Job Completed	6/12/14	1715	MST
Departed Location	6/12/14	1830	MST

1.2 Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 359915	Ship To #: 3360765	Quote #: 0021880640	Sales Order #: 0901420395							
Customer: SYNERGY RESOURCES CORPORATION		Customer Rep: DENNIS GEISS								
Well Name: HAWKSTONE	Well #: 29-30 DD	API/UWI #: 05-123-39048-00								
Field: WATTENBERG	City (SAP): EATON	County/Parish: WELD	State: COLORADO							
Legal Description: SW SW-29-7N-65W-684FSL-240FWL										
Contractor:		Rig/Platform Name/Num: Kauffman #2								
Job BOM: 7521										
Well Type: DIRECTIONAL GAS										
Sales Person: HALAMERICA\HX38199		Srvc Supervisor: Eric Fuchs								
Job										
Formation Name										
Formation Depth (MD)	Top	Bottom								
Form Type	BHST									
Job depth MD	650ft	Job Depth TVD								
Water Depth	Wk Ht Above Floor									
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		8.625	8.097	24			0	650		
Open Hole Section			12.25				0	650		
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make		
Guide Shoe	8.625			650	Top Plug	8.625		HES		
Float Shoe	8.625	1			Bottom Plug	8.625		HES		
Float Collar	8.625				SSR plug set	8.625		HES		
Insert Float	8.625				Plug Container	8.625	1	HES		
Stage Tool	8.625				Centralizers	8.625		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	SwiftCem B2	SWIFTCM (TM) SYSTEM	215	sack	13.4	1.79		4	9.48	
9.48 Gal		FRESH WATER								
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	

last updated on 6/12/2014 6:21:12 PM

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2	Displacement		39	bbl	8.33			
Cement Left In Pipe		Amount	42 ft	Reason			Shoe Joint	
Comment								

SIGNATURE



1.3 Job Overview

		Units	Description
1	Surface temperature at time of job	°F	81
2	Mud type (OBM, WBM, SBM, Water, Brine)	-	WBM
3	Actual mud density	lb/gal	9
4	Actual mud Plastic Viscosity (PV)	cP	
5	Actual mud Yield Point (YP)	lb _f /100ft ²	
6	Actual mud 30 min Gel Strength	lb _f /100ft ²	
7	Time circulated before job	HH:MM	A Long Time
8	Mud volume circulated	Bbls	
9	Rate at which well was circulated	Bpm	6
10	Pipe movement during hole circulation	Y/N	Y
11	Rig pressure while circulating	Psi	100
12	Time from end mud circulation to start of job	HH:MM	20
13	Pipe movement during cementing	Y/N	N
14	Calculated displacement	Bbls	39
15	Job displaced by	Rig/HES	HES
16	Annular flow before job	Y/N	N
17	Annular flow after job	Y/N	N
18	Length of rat hole	Ft	9
19	Units of gas detected while circulating	Units	
20	Was lost circulation experienced at any time?	Y/N	N

1.4 Water Field Test

Item	Recorded Test Value	Units	Max. Acceptable Limit	Potential Problems in Exceeding Limit
pH	7	----	6.0 - 8.0	Chemicals in the water can cause severe retardation
Chlorides	60	ppm	3000 ppm	Can shorten thickening time of cement
Sulfates	0	ppm	1500 ppm	Will greatly decrease the strength of cement
Total Hardness		ppm	500 mg/L	High concentrations will accelerate the set of the cement
Calcium		ppm	500 ppm	High concentrations will accelerate the set of the cement
Total Alkalinity		ppm	1000 ppm	Cement is greatly retarded to the point where it may not set up at all (typically occurs @ pH ≥ 8.3).
Bicarbonates		ppm	1000 ppm	Cement is greatly retarded to the point where it may not set up at all
Potassium		ppm	5000 ppm	High concentrations will shorten the pump time of cement (indicates the presence of chlorides, therefore if Potassium levels are measured as high, so should the chlorides)
Iron	0	ppm	300 ppm	High concentrations will accelerate the set of the cement
Temperature	70	°F	50-80 °F	High temps will accelerate; Low temps may risk freezing in cold weather

Submitted Respectfully by: _____

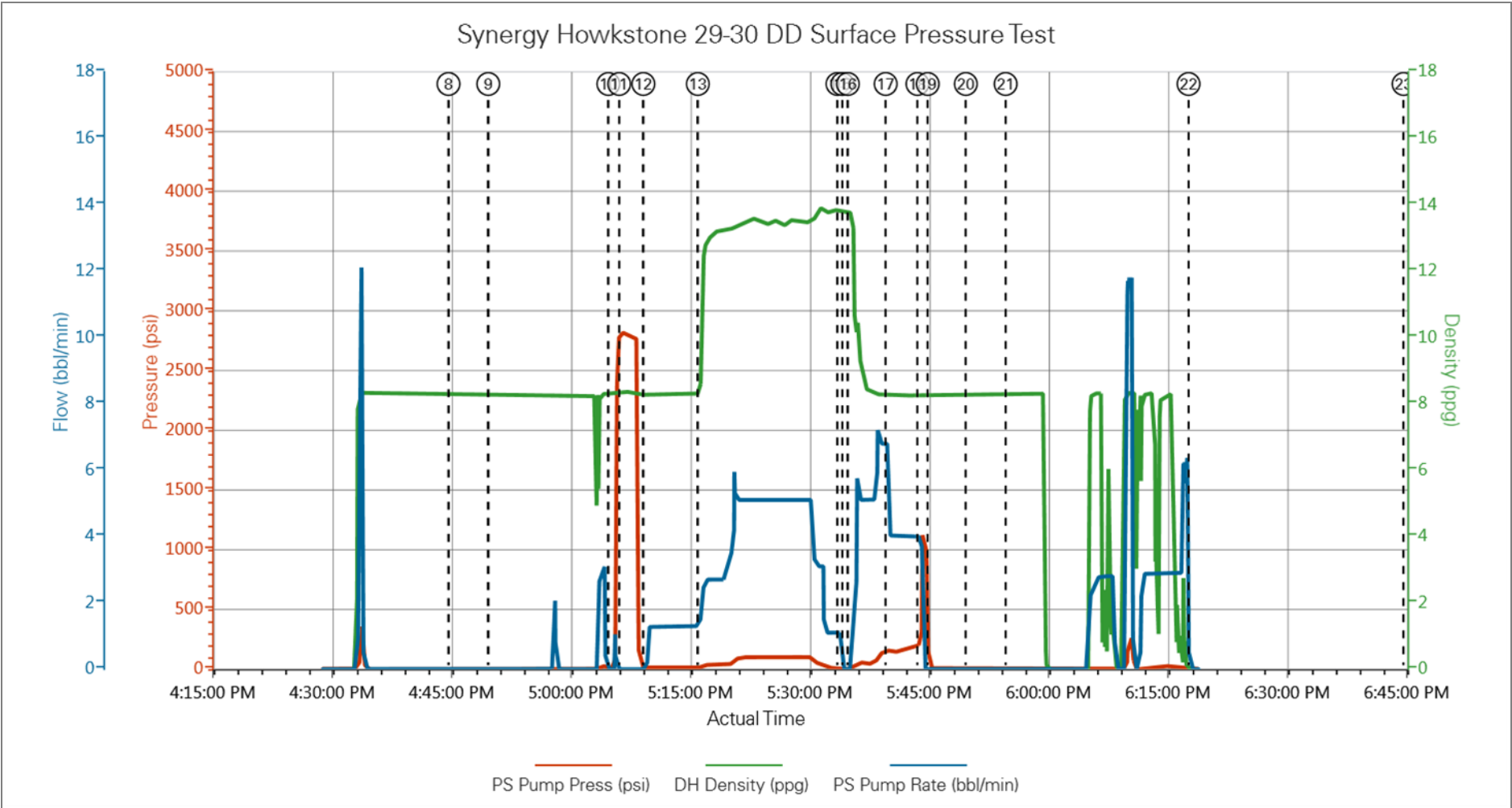
1.5 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Pass-Side Pump Pressure (psi)	Downhole Density (ppg)	Pass-Side Pump Rate (bbl/min)	Comment
Event	1	Call Out	Call Out	6/12/2014	12:00:00	USER				CREW CALLED OUT
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	6/12/2014	14:00:00	USER				CREW HAS PRE CONVOY SAFETY MEETING
Event	3	Depart from Service Center or Other Site	Depart from Service Center or Other Site	6/12/2014	14:15:00	USER				CREW LEAVES THE YARD
Event	4	Arrive at Location from Other Job or Site	Arrive at Location from Other Job or Site	6/12/2014	15:30:00	USER				CREW ARRIVES AT LOCATION
Event	5	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	6/12/2014	15:35:00	USER				CREW ASSESSES LOCAITON
Event	6	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	6/12/2014	15:40:00	USER				CREW HAS PRE RIG UP SAFETY MEETING
Event	7	Rig-Up Equipment	Rig-Up Equipment	6/12/2014	15:50:00	USER				CREW RIGS UP
Event	8	Rig-Up Completed	Rig-Up Completed	6/12/2014	16:45:00	USER	2.00	8.27	0.00	CREW DONE RIGGING UP
Event	9	Pre-Job Safety Meeting	Pre-Job Safety Meeting	6/12/2014	16:50:00	USER	1.00	8.27	0.00	CREW HAS PRE JOB SAFETY MEETING WITH RIG CREW AND CO REP
Event	10	Start Job	Start Job	6/12/2014	17:05:05	COM14	7.00	8.34	0.00	START JOB
Event	11	Test Lines	Test Lines	6/12/2014	17:06:26	COM14	2812.00	8.31	0.00	TEST LINES TO 3000 PSI
Event	12	Pump Spacer 1	Pump Spacer 1	6/12/2014	17:09:28	COM14	5.00	8.30	1.10	PUMP 10 BBLS RED DYE WATER
Event	13	Pump Cement	Pump Cement	6/12/2014	17:16:19	COM14	16.00	10.89	1.60	PUMP 69 BBLS CEMENT 215 SKS 13.4 # 1.79 YEILD 9.48 GAL/SK
Event	14	Shutdown	Shutdown	6/12/2014	17:33:52	USER	5.00	13.71	0.00	SHUTDOWN WASH UP ON TOP OF PLUG
Event	15	Drop Top Plug	Drop Top Plug	6/12/2014	17:34:28	USER	0.00	13.80	0.00	DROP THE TOP PLUG
Event	16	Pump Displacement	Pump Displacement	6/12/2014	17:35:10	COM14	0.00	13.76	0.40	PUMP 39 BBLS WATER DISPLACEMENT
Event	17	Slow Rate	Slow Rate	6/12/2014	17:39:55	USER	145.00	8.21	4.00	SLOW RATE TO BUMP THE PLUG
Event	18	Bump Plug	Bump Plug	6/12/2014	17:43:55	USER	200.00	8.32	4.00	BUMP PLUG AT 200 PSI GOT 11 BBLS OF CEMENT TO SURFACE
Event	19	Check Floats	Check Floats	6/12/2014	17:45:12	USER	4.00	8.27	0.00	CHECKED THE FLOATS AND GOT .5 BBLS BACK

Event	20	Post-Job Safety Meeting (Pre Rig-Down)	Post-Job Safety Meeting (Pre Rig-Down)	6/12/2014	17:50:00	USER	-2.00	8.32	0.00	CREW HAS POST JOB SAFETY MEETING
Event	21	Rig-Down Equipment	Rig-Down Equipment	6/12/2014	17:55:00	USER	0.00	8.34	0.00	CERW RIGS DOWN
Event	22	End Job	End Job	6/12/2014	18:17:59	COM14				
Event	23	Rig-Down Completed	Rig-Down Completed	6/12/2014	18:45:00	USER				CREW DONE RIGGING DOWN
Event	24	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	6/12/2014	19:00:00	USER				CREW HAS PRE CONVOY SAFETY MEETING
Event	25	Depart Location for Service Center or Other Site	Depart Location for Service Center or Other Site	6/12/2014	19:15:00	USER				CREW LEAVES LOCATION

2.0 Custom Graphs

2.1 Custom Graph



3.0 Appendix
