

# HALLIBURTON

iCem<sup>®</sup> Service

## **SYNERGY RESOURCES CORPORATION**

Date: Sunday, July 10, 2016

### **Evans 24N-14C-L**

Surface

Job Date: Tuesday, June 28, 2016

Sincerely,

**Justin Lansdale**

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## 1.0 Cementing Job Summary

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### 1.1 Executive Summary

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Halliburton appreciates the opportunity to perform the cementing services on the **Evans 24N-14C-L 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 [Fort Lupton]**

## HALLIBURTON

## Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 359915	Ship To #: 3666078	Quote #:	Sales Order #: 0903386130
Customer: SYNERGY RESOURCES CORPORATION		Customer Rep: KENT	
Well Name: EVANS	Well #: 24N-14C-L	API/UWI #: 05-123-41475-00	
Field: WATTENBERG	City (SAP): EVANS	County/Parish: WELD	State: COLORADO
Legal Description: SW NE-26-5N-66W-1976FNL-2590FEL			
Contractor: PRECISION DRLG		Rig/Platform Name/Num: PRECISION 462	
Job BOM: 7521			
Well Type: HORIZONTAL OIL			
Sales Person: HALAMERICA\HB71271		Srcv Supervisor: Joseph Scileppi	
Job			

Formation Name			
Formation Depth (MD)	Top	0	Bottom
			1736
Form Type	BHST		
Job depth MD	1736ft		Job Depth TVD
			1736
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	3	16	15.376	55			0	40	0	40
Casing		9.625	8.921	36			0	1736	0	1736
Open Hole Section			13.5				40	1755	40	1755

Tools and Accessories									
Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make	
Guide Shoe	9.625			1736	Top Plug	9.625		HES	
Float Shoe	9.625				Bottom Plug	9.625		HES	
Float Collar	9.625				SSR plug set	9.625		HES	
Insert Float	9.625				Plug Container	9.625		HES	
Stage Tool	9.625				Centralizers	9.625		HES	

Fluid Data										
Stage/Plug #: 1										
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
1	Mud Flush III (Powder)	Mud Flush III	20	bbl	8.4					
			42 gal/bbl	FRESH WATER						
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
2	SwiftCem B2	SWIFTCEM (TM) SYSTEM	565	sack	13.4	1.78		4	9.45	

last updated on 6/28/2016 11:53:03 PM

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*Cementing Job Summary*

9.45 Gal		FRESH WATER							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
3	Displacement	Displacement	130.7	bbl	8.33				
<b>Cement Left In Pipe</b>		<b>Amount</b>	<b>Reason</b>		<b>Shoe Joint</b>				
Mix Water: pH ##		Mix Water Chloride: ## ppm			Mix Water Temperature: ## °F °C				
Cement Temperature: ## °F °C		Plug Displaced by: ## lb/gal kg/m <sup>3</sup> XXXX			Disp. Temperature: ## °F °C				
Plug Bumped? Yes/No		Bump Pressure: ### psi MPa			Floats Held? Yes/No				
Cement Returns: ## bbl m <sup>3</sup>		Returns Density: ## lb/gal kg/m <sup>3</sup>			Returns Temperature: ## °F °C				
Comment GOT 10 BBLs OF CMT TO SURFACE									

## 2.0 Real-Time Job Summary

### 2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Comments
Event	1	Call Out	Call Out	6/28/2016	16:00:00	USER	CALLOUT FOR ON LOCATION AT 2000
Event	2	Crew Leave Yard	Crew Leave Yard	6/28/2016	19:00:00	USER	PRE JOURNEY JSA W/ CREW
Event	3	Arrive At Loc	Arrive At Loc	6/28/2016	20:00:00	USER	UPON ARRIVAL RIG HAD 15 JOINTS LEFT TO RUN, MET W/ COMPANY REP TO DISCUSS JOB PROCEDURE
Event	4	Rig-Up Equipment	Rig-Up Equipment	6/28/2016	20:45:00	USER	PRE RIG UP HAZARD HUNT JSA W/ CREW
Event	5	Other	Other	6/28/2016	20:50:00	USER	FIELD MIX WATER ANALYSIS: TEMP-67, PH-7, CHLORIDES-0
Event	6	Pre-Job Safety Meeting	Pre-Job Safety Meeting	6/28/2016	21:45:00	USER	JSA W/ ALL INVOLVED PERSONNEL
Event	7	Start Job	Start Job	6/28/2016	21:53:33	COM5	
Event	8	Prime Pumps	Prime Pumps	6/28/2016	21:53:53	COM5	
Event	9	Test Lines	Test Lines	6/28/2016	21:59:01	COM5	TESTED LINES TO 2500 PSI FOR 5 MIN, NO VISIBLE LEAKS
Event	10	Pump Spacer 1	Pump Spacer 1	6/28/2016	22:03:34	COM5	PUMPED 10 BBLS OF DYE WATER AT 4 BPM AND 23 PSI
Event	11	Pump Spacer 2	Pump Spacer 2	6/28/2016	22:07:10	COM5	PUMPED 20 BBLS MUD FLUSH AT 5 BPM AND 33 PSI
Event	12	Pump Spacer 1	Pump Spacer 1	6/28/2016	22:11:33	COM5	PUMPED 10 BBLS H2O AT 5 BPM AND 33 PSI

Event	13	Pump Cement	Pump Cement	6/28/2016	22:13:41	COM5	PUMPED 565 SKS OR 179 BBLS OF 13.4 CMT AT 6 BPM AND 76 PSI
Event	14	Shutdown	Shutdown	6/28/2016	22:47:41	COM5	
Event	15	Drop Top Plug	Drop Top Plug	6/28/2016	22:52:39	COM5	PLUG PRE LOADED AND WITNESSED BY COMPANY REP
Event	16	Pump Displacement	Pump Displacement	6/28/2016	22:52:51	COM5	PUMPED 130.7 BBLS OF H2O AT 6 BPM AND 350 PSI, GOT 10 BBLS OF CMT BACK TO SURFACE
Event	17	Bump Plug	Bump Plug	6/28/2016	23:17:36	COM5	FINAL CIRCULATING PRESSURE WAS 520 PSI AND PLUG BUMPED AT 994 PSI
Event	18	Other	Other	6/28/2016	23:20:48	COM5	CHECKED FLOATS, THEY HELD AND GOT .25 BBL BACK
Event	19	End Job	End Job	6/28/2016	23:21:08	COM5	

2.2 Custom Graph

