

# HALLIBURTON

iCem<sup>®</sup> Service

## **SYNERGY RESOURCES CORPORATION**

Date: Friday, July 15, 2016

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

Surface

Job Date: Friday, July 01, 2016

Sincerely,  
Lauren Roberts

## Legal Notice

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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-14B-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.

**5 bbl. of cement returned to surface.**

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 [Ft. Lupton]**

*The Road to Excellence Starts with Safety*

<b>Sold To #:</b> 359915		<b>Ship To #:</b> 3666067		<b>Quote #:</b>		<b>Sales Order #:</b> 0903386601				
<b>Customer:</b> SYNERGY RESOURCES CORPORATION						<b>Customer Rep:</b> Steve Wilson				
<b>Well Name:</b> EVANS			<b>Well #:</b> 24N-14B-L			<b>API/UWI #:</b> 05-123-41465-00				
<b>Field:</b> WATTENBERG		<b>City (SAP):</b> EVANS		<b>County/Parish:</b> WELD		<b>State:</b> COLORADO				
<b>Legal Description:</b> SW NE-26-5N-66W-1957FNL-2130FEL										
<b>Contractor:</b> PRECISION DRLG					<b>Rig/Platform Name/Num:</b> PRECISION 462					
<b>Job BOM:</b> 7521										
<b>Well Type:</b> HORIZONTAL OIL										
<b>Sales Person:</b> HALAMERICA\HB71271					<b>Srv Supervisor:</b> Vaughn Oteri					
<b>Job</b>										
<b>Formation Name</b>										
<b>Formation Depth (MD)</b>		<b>Top</b>		<b>Bottom</b>						
<b>Form Type</b>				<b>BHST</b>						
<b>Job depth MD</b>		1770ft		<b>Job Depth TVD</b>						
<b>Water Depth</b>				<b>Wk Ht Above Floor</b>						
<b>Perforation Depth (MD)</b>		<b>From</b>		<b>To</b>						
<b>Well Data</b>										
<b>Description</b>	<b>New / Used</b>	<b>Size in</b>	<b>ID in</b>	<b>Weight lbm/ft</b>	<b>Thread</b>	<b>Grade</b>	<b>Top MD ft</b>	<b>Bottom MD ft</b>	<b>Top TVD ft</b>	<b>Bottom TVD ft</b>
Casing	3	16	15.376	55			0	40	0	40
Casing		9.625	8.921	36			0	1753	0	1753
Open Hole Section			13.5				40	1770	40	1770
<b>Tools and Accessories</b>										
<b>Type</b>	<b>Size in</b>	<b>Qty</b>	<b>Make</b>	<b>Depth ft</b>		<b>Type</b>	<b>Size in</b>	<b>Qty</b>	<b>Make</b>	
Guide Shoe	9.625					Top Plug	9.625			
Float Shoe	9.625			1753		Bottom Plug	9.625			
Float Collar	9.625			1707		SSR plug set	9.625			
Insert Float	9.625					Plug Container	9.625	1	HES	
Stage Tool	9.625					Centralizers	9.625			
<b>Fluid Data</b>										
<b>Stage/Plug #: 1</b>										
<b>Fluid #</b>	<b>Stage Type</b>	<b>Fluid Name</b>		<b>Qty</b>	<b>Qty UoM</b>	<b>Mixing Density lbm/gal</b>	<b>Yield ft3/sack</b>	<b>Mix Fluid Gal</b>	<b>Rate bbl/min</b>	<b>Total Mix Fluid Gal</b>

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 ft3/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
9.45 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
3	Displacement	Displacement	0	bbl	8.33				
Cement Left In Pipe		Amount	46 ft		Reason			Shoe Joint	
Comment 5bbl of cement back to surface									

## 2.0 Real-Time Job Summary

## 2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	PS Pump Press (psi)	DH Density (ppg)	PS Pump Rate (bbl/min)	DS Pump Rate (bbl/min)	Comments
Event	1	Call Out	Call Out	7/1/2016	14:00:00	USER					Call out from Arc hub
Event	2	Arrive At Loc	Arrive At Loc	7/1/2016	16:00:00	USER					Arrived on location met with company rep to discuss job process and concerns
Event	3	Other	Other	7/1/2016	16:10:00	USER					TD-1770 TP-1753 FC1707 Mud-8.3 Casing 9.65 36# OH-13.5
Event	4	Test Lines	Test Lines	7/1/2016	21:44:37	COM4	-6.00	8.42	0.00	0.00	Pressure tested pumps and lines with fresh water
Event	5	Pump Spacer 1	Pump Spacer 1	7/1/2016	21:48:35	COM4	-3.00	8.41	0.00	0.00	Pumped 20bbl of fresh water with Red tracer dye at 3.0bpm 47psi
Event	6	Check Weight	Check weight	7/1/2016	21:51:13	COM4	42.00	8.35	2.00	2.00	Confirm weight of 13.4ppg on scales
Event	7	Pump Spacer 2	Pump Spacer 2	7/1/2016	21:52:15	COM4	45.00	8.34	2.00	2.00	Mixed 20bbl of mud flush at 4.0bpm 44psi
Event	8	Pump Cement	Pump Cement	7/1/2016	21:57:43	COM4	46.00	11.46	2.00	2.00	Mixed 179bbl or 565sks of 13.4ppg Y-1.78 g/sk-9.45 SwiftCem at 8.0bpm 134psi
Event	9	Shutdown	Shutdown	7/1/2016	22:21:41	COM4	77.00	13.44	0.00	0.00	
Event	10	Drop Top Plug	Drop Top Plug	7/1/2016	22:21:47	COM4	47.00	2.41	0.00	0.00	Released plug witnessed by company rep
Event	11	Pump Displacement	Pump Displacement	7/1/2016	22:24:05	COM4	-10.00	-0.24	0.00	0.00	Pumped 132bbl of fresh water to displace cement
Event	12	Bump Plug	Bump Plug	7/1/2016	22:48:53	COM4	793.00	7.92	0.00	0.00	Bumped plug 500psi over final pump pressure
Event	13	Other	Other	7/1/2016	22:49:56	COM4	790.00	7.92	0.00	0.00	Released pressure back to pump truck to check floats, Floats held good .5bbl back
Event	14	Pressure Up Well	Pressure Up Well	7/1/2016	22:51:07	COM4	-5.00	7.90	0.00	0.00	Pressure up well to test casing 15min 2500psi
Event	15	End Job	End Job	7/1/2016	23:09:17	COM4	-4.00	7.90	0.00	0.00	5bbl of cement back to surface

## 3.0 Attachments

### 3.1 Case 1-Custom Results.png

