

**SYNERGY RESOURCES CORPORATION  
20203 HIGHWAY 60  
PLATTEVILLE, Colorado**

Avex  
Avex 10ND

Ensign/136

# **Post Job Summary**

## **Cement Production Casing**

Date Prepared: 11/02/2012  
Version: 1

Service Supervisor: SNYDER, JONATHAN

Submitted by: MCKAY, ADAM

**HALLIBURTON**

# HALLIBURTON

## Wellbore Geometry

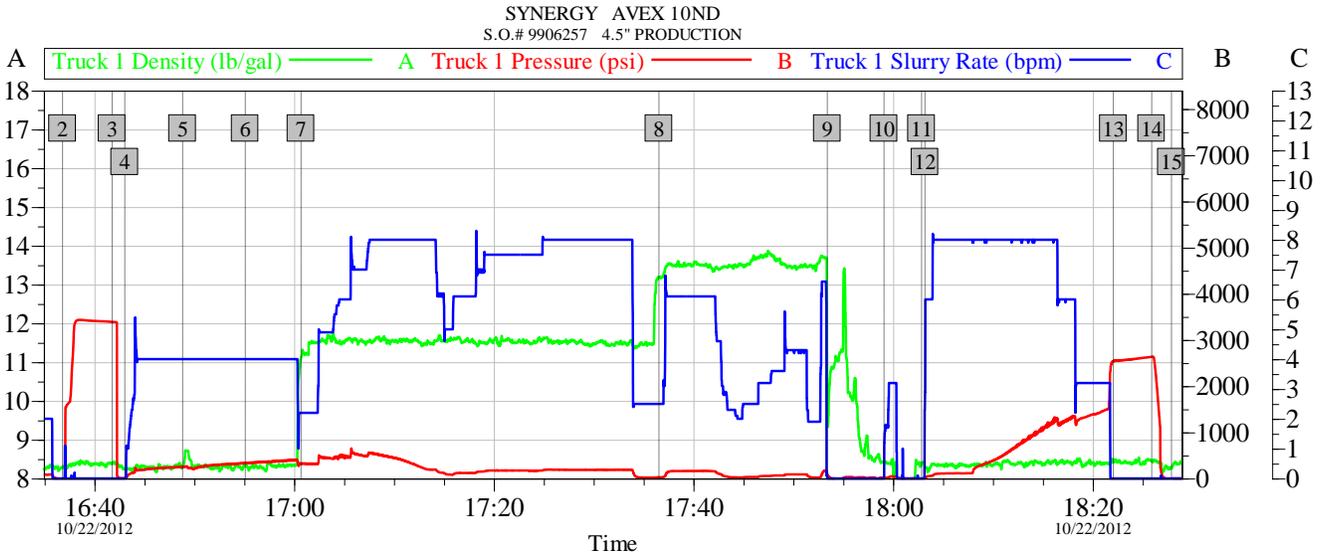
Job Tubulars					MD		Shoe Joint Length ft
Type	Description	Size in	ID in	Wt lbm/ft	Top ft	Bottom ft	
Casing	Production Casing	4.50	4.000	11.60	0.00	7,834.00	15.00
Open Hole Section	Open Hole		7.875		600.00	7,840.00	
Casing	Surface Casing	8.63	8.097	24.00	0.00	600.00	

## 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	4.00	24.0 bbl	24.0 bbl
1	2	Cement Slurry	EXTENDACEM B1	11.50	8.00	570.0 sacks	570.0 sacks
1	3	Cement Slurry	FracCem B2	13.50	5.00	225.0 sacks	225.0 sacks

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## Data Acquisition



Global Event Log							
Intersection	TID	TIP	Intersection	TID	TIP		
1 Starting Job	15:42:14	-0.160	16.00	2 Start Job	16:36:48	8.284	-1.000
3 Test Lines	16:41:46	8.370	3391	4 Pump Water Spacer	16:43:02	8.263	8.000
5 Pump Mud Flush III Spacer	16:48:50	8.282	249.6	6 Pump Water Spacer	16:55:06	8.350	335.4
7 Pump Lead Cement @ 11.5#	17:00:42	11.11	317.3	8 Pump Tail Cement 13.5#	17:36:33	13.20	26.00
9 Shutdown	17:53:25	9.580	81.76	10 Clean Lines	17:59:05	8.410	16.00
11 Drop Top Plug	18:02:51	8.392	-4.000	12 Pump Displacement	18:03:12	8.270	12.58
13 Bump Plug	18:22:04	8.420	2547	14 Check Floats	18:25:54	8.444	2634
15 End Job	18:27:53	8.286	-1.544	16 Ending Job	18:35:09	8.410	1.000

Customer: SYNERGY	Job Date: 22-Oct-2012	Sales Order #: 9906257
Well Description: 4.5" PRODUCTION	UWI: 05-123-36163	
SERVICE SUPERVISOR JONATHAN SNYDER	SERVICE OPERATOR JAMES WILEY	

OptiCem v6.4.10  
22-Oct-12 18:37

# HALLIBURTON

## Service Supervisor Reports

### Job Log

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pump	Pressure (psig)	Comments
10/22/2012 13:30		Arrive at Location from Service Center					ARRIVED AND CONDUCTED A HAZARD HUNT AND FOUND NO HAZARDS THAT CONFLICT WITH US RIGGING UP EQUIPMENT.
10/22/2012 16:00		Pre-Job Safety Meeting					HELD SAFETY MEETING WITH ALL EMPLOYEES AND ALL THIRD PARTY PERSONEL PRIOR TO PUMPING THE CEMENT JOB.
10/22/2012 16:36		Start Job					
10/22/2012 16:41		Test Lines					PRESSURE TEST LINES TO 3391 PSI
10/22/2012 16:43		Pump Spacer 1	4	20		268.0	RIG WATER MIXED W/ CLAYWEB III
10/22/2012 16:48		Pump Spacer 2	4	24		306.0	RIG WATER MIXED W/ MUD FLUSH III
10/22/2012 16:55		Pump Spacer 1	4	20		362.0	RIG WATER MIXED W/ CLAYWEB III
10/22/2012 17:00		Pump Lead Cement	8	233		175.0	570 SKS EXTENDACEM B1 MIXED @ 11.5 PPG W/ RIG WATER
10/22/2012 17:36		Pump Tail Cement	8	69		85.0	225 SKS FRACCEM B2 MIXED @ 13.5 PPG W/ RIG WATER
10/22/2012 17:53		Shutdown					
10/22/2012 17:59		Clean Lines					
10/22/2012 18:02		Drop Top Plug					DROPPED PLUG WHILE OPERATOR WAS WASHING PUMPS AND LINES
10/22/2012 18:03		Pump Displacement	8	121.2		942.0	RIG WATER MIXED W/ CLAYWEB III
10/22/2012 18:22		Bump Plug	24			1524.0	WE GOT WATER SPACER BACK WITH 98 BBLS OF DISPLACEMENT GONE AND WE GOT 3 BBLS OF MUDFLUSH BACK INTO THE PITS.
10/22/2012 18:25		Check Floats				2682.0	FLOATS HELD, GOOD RETURNS THROUGHOUT THE JOB, WE GOT 1 BBL OF WATER BACK IN THE DISPLACEMENT TANKS WHEN WE CHECKED FLOATS.
10/22/2012 18:27		End Job					
10/22/2012 18:35		Pre-Rig Down Safety Meeting					HELD SAFETY MEETING WITH ALL EMPLOYEES PRIOR TO RIGGING DOWN AND DISCUSSED ALL HAZARDS WHILE RIGGING DOWN EQUIPMENT.
10/22/2012 19:30		Depart Location for Service Center or Other Site					HELD SAFETY MEETING PRIOR TO LEAVING LOCATION AND DISCUSSED ALL POTENTIAL HAZARDS WHILE DRIVING BACK TO THE SERVICE CENTER.

# HALLIBURTON

The Road to Excellence Starts with Safety

<b>Sold To #:</b> 359915	<b>Ship To #:</b> 2957396	<b>Quote #:</b>	<b>Sales Order #:</b> 9906257
<b>Customer:</b> SYNERGY RESOURCES CORPORATION		<b>Customer Rep:</b> Montoya, Chris	
<b>Well Name:</b> Avex		<b>Well #:</b> 10ND	<b>API/UWI #:</b> 05-123-36163
<b>Field:</b> WATTENBERG	<b>City (SAP):</b> JOHNSTOWN	<b>County/Parish:</b> Weld	<b>State:</b> Colorado
<b>Contractor:</b> Ensign		<b>Rig/Platform Name/Num:</b> 136	
<b>Job Purpose:</b> Cement Production Casing			
<b>Well Type:</b> Development Well		<b>Job Type:</b> Cement Production Casing	
<b>Sales Person:</b> AARON, WESLEY		<b>Srvc Supervisor:</b> SNYDER, JONATHAN	<b>MBU ID Emp #:</b> 435616

### Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
DODSON, RICHARD Bryan	6.0	518192	HETZLER, JEFFREY Charles	6.0	527677	JEWELL, WILLIAM Uri	6.0	503358
MULLER, MICHEL B	6.0	529830	SINCLAIR, RICHARD	6.0	368195	SNYDER, JONATHAN Leroy	6.0	435616
WILEY, JAMES A	6.0	440080						

### Equipment

HES Unit #	Distance-1 way						
10246780C	30 mile	10248053C	30 mile	10988836C	30 mile	11362287C	30 mile
11518548	30 mile	11633846C	30 mile	11645065	30 mile		

### Job Hours

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

### Job

### Job Times

Formation Name	Formation Depth (MD)	Top	Bottom	Called Out	Date	Time	Time Zone
					22 - Oct - 2012	10:00	MST
<b>Form Type</b>			BHST	<b>On Location</b>	22 - Oct - 2012	13:30	MST
<b>Job depth MD</b>	7834. ft		<b>Job Depth TVD</b>	8156. ft	<b>Job Started</b>	22 - Oct - 2012	16:36
<b>Water Depth</b>			<b>Wk Ht Above Floor</b>	4. ft	<b>Job Completed</b>	22 - Oct - 2012	18:27
<b>Perforation Depth (MD)</b>	<i>From</i>		<i>To</i>		<b>Departed Loc</b>	22 - Oct - 2012	19:30

### 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
Open Hole				7.875				600.	7840.	.	.
Production Casing	Unknown		4.5	4.	11.6			.	7834.	.	.
Surface Casing	Unknown		8.625	8.097	24.			.	600.	.	.

### Tools and Accessories

Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer					Top Plug			
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar					Retainer					SSR plug set			
Insert Float										Plug Container			
Stage Tool										Centralizers			

### Miscellaneous Materials

Gelling Agt	Conc	Surfactant	Conc	Acid Type	Qty	Conc	%
Treatment Fld	Conc	Inhibitor	Conc	Sand Type	Size	Conc	Qty

# HALLIBURTON

Fluid Data										
Stage/Plug #: 1										
Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft <sup>3</sup> /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	.0		
2	EXTENDACEM B1	EXTENDACEM (TM) SYSTEM (452981)	570.0	sacks	11.5	2.3	12.93		12.93	
12.93 Gal		FRESH WATER								
3	FracCem B2	FRACCEN (TM) SYSTEM (452963)	225.0	sacks	13.5	1.74	8.29		8.29	
8.289 Gal		FRESH WATER								
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	15 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				<b>Customer Representative Signature</b>						