

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

Avex  
Avex 21-2D

Midcontinent/226

## **Post Job Summary** **Cement Production Casing**

Date Prepared: 10/16/2012  
Version: 1

Service Supervisor: SNYDER, JONATHAN

Submitted by: MCKAY, ADAM

**HALLIBURTON**

# HALLIBURTON

## Wellbore Geometry

---

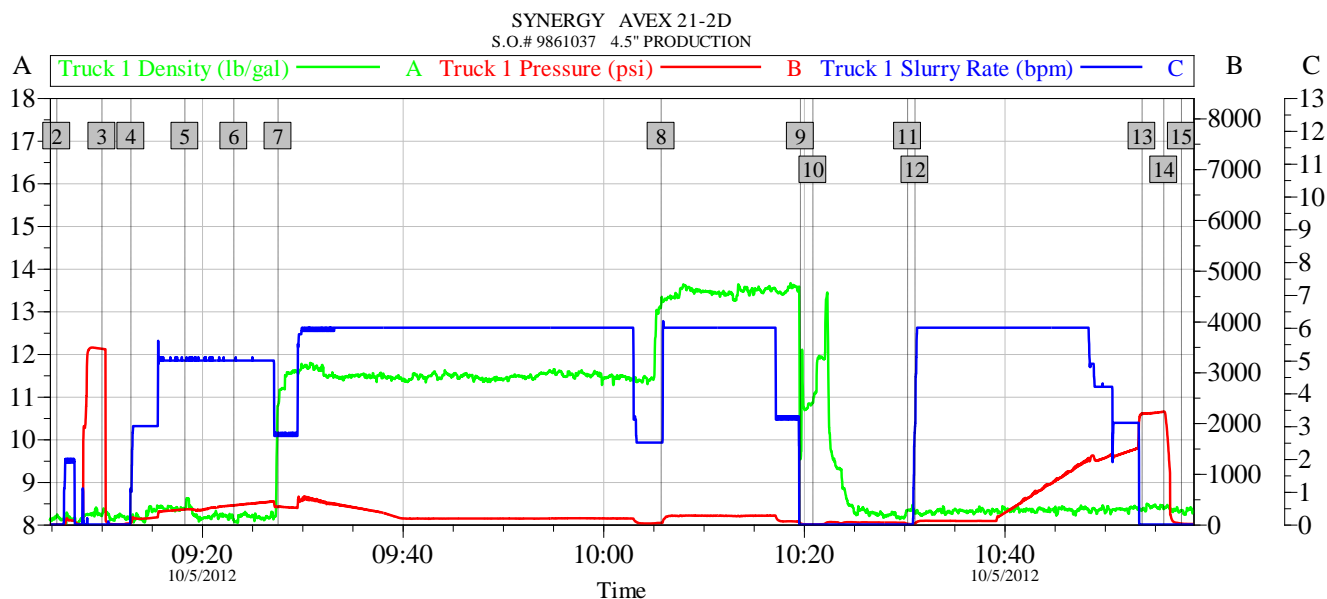
Job Tubulars					MD		Excess	Shoe Joint Length ft
Type	Description	Size in	ID in	Wt lbm/ft	Top ft	Bottom ft	%	
Casing	Production Casing	4.50	4.000	11.60	0.00	7,805.00		24.00
Open Hole Section	Open Hole		7.875		604.00	7,821.00		
Casing	Surface Casing	8.63	8.097	24.00	0.00	604.00		

## 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	5.00	24.0 bbl	24.0 bbl
1	2	Cement Slurry	EXTENDACEM B1	11.50	6.00	495.0 sacks	495.0 sacks
1	3	Cement Slurry	FracCem B2	13.50	6.00	245.0 sacks	245.0 sacks

## Data Acquisition



Global Event Log					
Intersection		TID	TIP	Intersection	
2 Start Job	09:05:32	8.203	1.000	3 Test Lines	09:10:03 8.209 3460
4 Pump Water Spacer	09:12:56	8.101	27.96	5 Pump Mud Flush III Spacer	09:18:19 8.372 298.0
6 Pump Water Spacer	09:23:11	8.096	377.6	7 Pump Lead Cement @ 11.5#	09:27:36 10.79 353.0
8 Pump Tail Cement @ 13.5#	10:05:47	13.14	34.00	9 Shutdown	10:19:40 9.533 25.81
10 Clean Lines	10:20:55	10.86	4.000	11 Drop Top Plug	10:30:21 8.330 14.11
12 Pump Displacement	10:31:05	8.300	27.00	13 Bump Plug	10:53:43 8.350 2183
14 Check Floats	10:55:53	8.374	2223	15 End Job	10:57:39 8.324 19.63

Customer: SYNERGY	Job Date: 05-Oct-2012	Sales Order #: 9861037
Well Description: 4.5" PRODUCTION	UWI: 05-123-35224-00	
SERVICE SUPERVISOR JONATHAN SNYDER	SERVICE OPERATOR JAMES WILEY	

OptiCem v6.4.10  
05-Oct-12 11:08

## Service Supervisor Reports

### Job Log

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pump		Pressure (psig)	Comments
10/05/2012 06:30		Arrive at Location from Service Center						ARRIVED AND CONDUCTED A HAZARD HUNT AND FOUND NO HAZARDS THAT CONFLICT WITH US RIGGING UP EQUIPMENT.
10/05/2012 08:30		Pre-Job Safety Meeting						HELD SAFETY MEETING WITH ALL EMPLOYEES AND ALL THIRD PARTY PERSONEL PRIOR TO PUMPING THE CEMENT JOB.
10/05/2012 09:05		Start Job						
10/05/2012 09:10		Test Lines						PRESSURE TEST LINES TO 3779 PSI
10/05/2012 09:12		Pump Spacer 1	5	20			257.0	RIG WATER MIXED W/ CLAYWEB III
10/05/2012 09:18		Pump Spacer 2	5	24			330.0	RIG WATER MIXED W/ MUD FLUSH III
10/05/2012 09:23		Pump Spacer 1	5	20			418.0	RIG WATER MIXED W/ CLAYWEB III
10/05/2012 09:27		Pump Lead Cement	6	202			125.0	495 SKS EXTENDACEM B1 MIXED @ 11.5 PPG W/ RIG WATER
10/05/2012 10:05		Pump Tail Cement	6	76			175.0	245 SKS FRACCEM CEMENT MIXED @ 13.5 PPG W/ RIG WATER
10/05/2012 10:19		Shutdown						
10/05/2012 10:20		Clean Lines						
10/05/2012 10:30		Drop Top Plug						PLUG PRELOADED, DROPPED PLUG WHILE OPERATOR WAS CLEANING PUMPS AND LINES
10/05/2012 10:31		Pump Displacement	6	121			948.0	RIG WATER MIXED W/ CLAYWEB III
10/05/2012 10:53		Bump Plug	3				1508.0	
10/05/2012 10:55		Check Floats					2223.0	FLOATS HELD, GOOD RETURNS THROUGHOUT THE JOB
10/05/2012 10:57		End Job						
10/05/2012 11:00		Pre-Rig Down Safety Meeting						HELD SAFETY MEETING WITH ALL EMPLOYEES PRIOR TO RIGGING DOWN AND DISCUSSED ALL HAZARDS WHILE RIGGING DOWN EQUIPMENT.
10/05/2012 12:00		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> 2953754		<b>Quote #:</b>		<b>Sales Order #:</b> 9861037	
<b>Customer:</b> SYNERGY RESOURCES CORPORATION				<b>Customer Rep:</b> Weitzel, Craig			
<b>Well Name:</b> Avex			<b>Well #:</b> 21-2D			<b>API/UWI #:</b> 05-123-35224-00	
<b>Field:</b> WATTENBERG		<b>City (SAP):</b> JOHNSTOWN		<b>County/Parish:</b> Weld		<b>State:</b> Colorado	
<b>Contractor:</b> Midcontinent			<b>Rig/Platform Name/Num:</b> 226				
<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>Srv 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 #
BAMMER, JORDAN Blaine	5.5	526575	BELL, ROBERT Preston	5.5	437060	SMITH, AARON David	5.5	518187
SNYDER, JONATHAN Leroy	5.5	435616	WILEY, JAMES A	5.5	440080			

### Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10248062C	32 mile	11362287C	32 mile	11518548	32 mile	11562546C	32 mile
11566182	32 mile	11748359	32 mile	NA	32 mile		

### Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours

**TOTAL** Total is the sum of each column separately

### Job

Formation Name	Formation Depth (MD)	Top	Bottom	Form Type	Job depth MD	Job Depth TVD	Water Depth	Perforation Depth (MD)	From	To
				BHST	7805. ft	8161. ft	4. ft			

### Job Times

Called Out	Date	Time	Time Zone
On Location	05 - Oct - 2012	03:00	MST
Job Started	05 - Oct - 2012	06:30	MST
Job Completed	05 - Oct - 2012	09:05	MST
Job Completed	05 - Oct - 2012	10:57	MST
Departed Loc	05 - Oct - 2012	12:00	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
Open Hole				7.875				604.	7821.	.	.
Production Casing	Unknown		4.5	4.	11.6			.	7805.	.	.
Surface Casing	Unknown		8.625	8.097	24.			.	604.	.	.

### 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	Qty	

### Fluid Data

# HALLIBURTON

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					
2	EXTENDACEM B1	EXTENDACEM (TM) SYSTEM (452981)	495.0	sacks	11.5	2.3	12.95		12.95	
0.2 %		SUPER CBL, 50 LB PAIL (100003668)								
12.95 Gal		FRESH WATER								
3	FracCem B2	FRACCEN (TM) SYSTEM (452963)	245.0	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	24 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						