

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

Avex  
Avex 31-10D

Ensign/136

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

Date Prepared: 10/26/2012  
Version: 1

Service Supervisor: CLEMONS, WILLIAM

Submitted by: MCKAY, ADAM

**HALLIBURTON**

# HALLIBURTON

## Wellbore Geometry

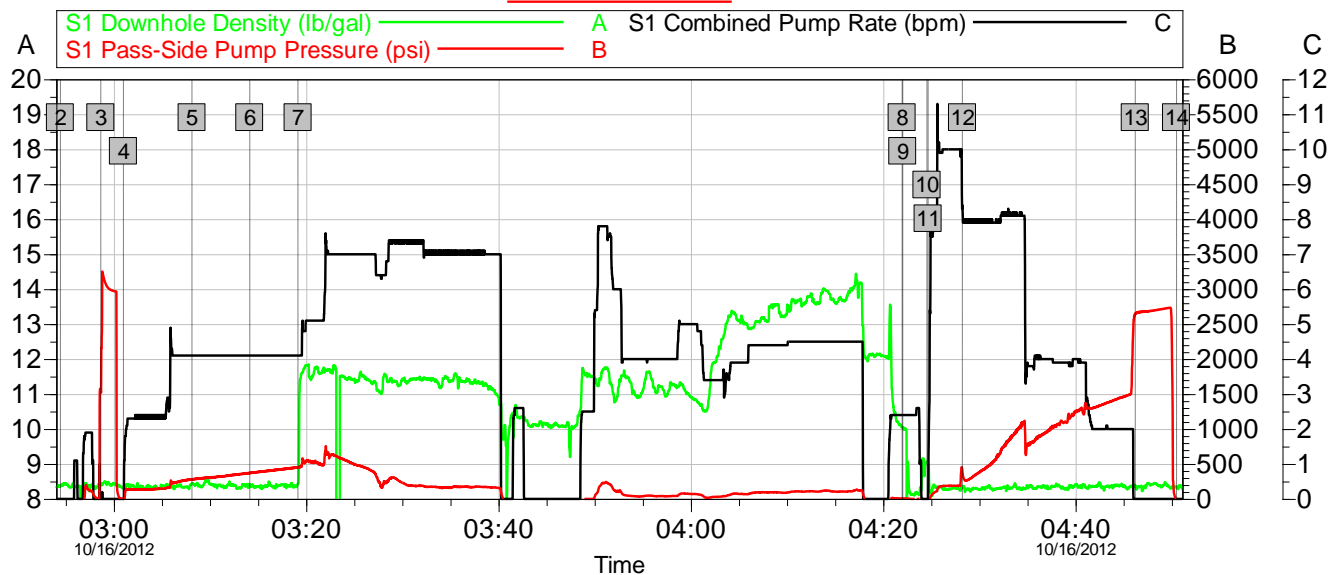
Job Tubulars					MD		Excess %	Shoe Joint Length ft
Type	Description	Size in	ID in	Wt lbm/ft	Top ft	Bottom ft		
Casing	Production Casing	4.50	4.000	11.60	0.00	7,800.00		18.00
Open Hole Section	Open Hole		7.875		607.00	7,816.00		
Casing	Surface Casing	8.63	8.097	24.00	0.00	607.00		

## 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	7.00	554.0 sacks	554.0 sacks
1	3	Cement Slurry	FracCem B2	13.50	4.00	234.0 sacks	234.0 sacks

## Data Acquisition

### SYNERGY 31-10D PRODUCTION



#### Global Event Log

2 Start Job	02:54:26	3 Test Lines	02:58:38	4 Pump Spacer 1	03:00:59
5 Pump Spacer 2	03:08:07	6 Pump Spacer 2	03:14:07	7 Pump Lead Cement	03:19:08
8 Shutdown	04:21:57	9 Clean Lines	04:22:01	10 Drop Top Plug	04:24:32
11 Pump Displacement	04:24:39	12 Displ Reached Cmnt	04:28:14	13 Bump Plug	04:46:12
14 End Job	04:50:29				

Customer: SYNERGY  
Well Description: 31-10D

Job Date: 16-Oct-2012  
JOB TYPE: PRODUCTION

Sales Order #: 9893436  
SUPERVISOR: BILL CLEMONS

OptiCem v6.4.21  
16-Oct-12 05:24

## ***Service Supervisor Reports***

---

### **Job Log**

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pump		Pressure (psig)	Comments
10/16/2012 02:54		Start Job	2	2			60.0	
10/16/2012 02:58		Pressure Test					3200.0	
10/16/2012 03:00		Pump Spacer	4	18			136.0	PUMP H2O
10/16/2012 03:08		Pump Spacer	4	24				PUMP MUDFLUSH
10/16/2012 03:14		Pump Spacer	4	20				PUMP H2O
10/16/2012 03:19		Pump Cement	6	304				PUMP 554 SACKS OF 11.5 EXTENDACEM AND 234 OF 13.5 PPG FRACCEM
10/16/2012 04:21		Shutdown						
10/16/2012 04:22		Clean Lines						
10/16/2012 04:24		Drop Top Plug						
10/16/2012 04:24		Pump Displacement	10	30			180.0	DISPLACED WITH H3O
10/16/2012 04:28		Displ Reached Cmmt	6	87				REACHED CEMENT WITH 30 BBLS AWAY
10/16/2012 04:46		Bump Plug					1500.0	BUMP LATCHDOWN PLUG
10/16/2012 04:50		End Job						RIG-DOWN AND LEAVE LOCATION

# HALLIBURTON

## The Road to Excellence Starts with Safety

<b>Sold To #:</b> 359915	<b>Ship To #:</b> 2956332	<b>Quote #:</b>	<b>Sales Order #:</b> 9893436
<b>Customer:</b> SYNERGY RESOURCES CORPORATION		<b>Customer Rep:</b>	
<b>Well Name:</b> Avex		<b>Well #:</b> 31-10D	<b>API/UWI #:</b>
<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> CLEMONS, WILLIAM	<b>MBU ID Emp #:</b> 407973

### Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
CLEMONS, WILLIAM Edward	0.0	407973	HINKLE, BRADLEY Dean	0.0	512123	MEADOWS, DANIEL Graham	0.0	500668
MILLER, GEOFFREY Alan	0.0	460232	RICHEY, JESSICA L	0.0	525703	SINCLAIR, RICHARD	0.0	368195

### Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10025030	40 mile	10679720C	40 mile	10822531C	40 mile	11142999	40 mile
11562544C	40 mile	11562562	40 mile	11633848	40 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	7873.5 ft	7873.5 ft				

### Job Times

Called Out	Date	Time	Time Zone
15 - Oct - 2012	00:00	MST	
On Location	16 - Oct - 2012	00:01	MST
Job Started	16 - Oct - 2012	02:54	MST
Job Completed	16 - Oct - 2012	04:50	MST
Departed Loc	16 - Oct - 2012	07:00	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				607.	7816.	.	.
Production Casing	Unknown		4.5	4.	11.6			.	7800.	.	.
Surface Casing	Unknown		8.625	8.097	24.			.	607.	.	.

### 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	.0	.0	.0		
2	EXTENDACEM B1	EXTENDACEM (TM) SYSTEM (452981)	554.0	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)	234.0	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	18 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						