

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

Avex  
Avex 42-10 D

Ensign/136

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

Date Prepared: 10/01/2012  
Version: 1

Service Supervisor: ROSALES, MATTHEW

Submitted by: MCKAY, ADAM

**HALLIBURTON**

# HALLIBURTON

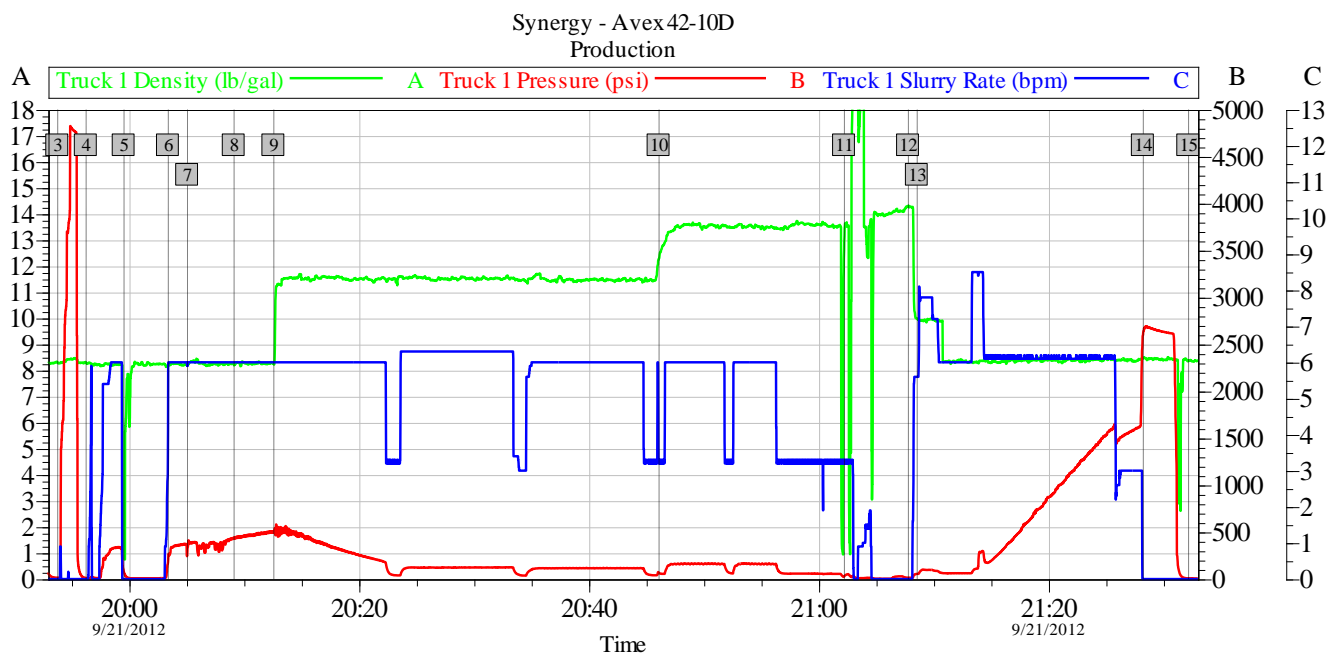
## ***Wellbore Geometry***

Job Tubulars					MD		TVD		Excess %	Shoe Joint Length ft
Type	Description	Size in	ID in	Wt lbm/ft	Top ft	Bottom ft	Top ft	Bottom ft		
Casing	Production Casing	4.50	4.000	11.60	0.00	7,795.00	0.00	0.00		18.00
Open Hole Section	Open Hole		7.875		614.00	7,833.00	0.00	0.00		
Casing	Surface Casing	8.63	8.097	24.00	0.00	614.00	0.00	0.00		

## ***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	6.00	24.0 bbl	24.0 bbl
1	2	Cement Slurry	EXTENDACEM B1	11.50	6.00	480.0 sacks	480.0 sacks
1	3	Cement Slurry	FracCem B2	13.50	6.00	250.0 sacks	250.0 sacks

## Data Acquisition



Global Event Log			
3	Test Lines	19:53:47	4 Pump Water Spacer
5	Shutdown Plug Container Leaking	19:59:33	6 Resume Pumping
7	Pump Mudflush	20:05:05	8 Pump Water Spacer
9	Pump Extendacem Lead 11.5#/gal Cement	20:12:35	10 Pump Fracem Tail 13.5#/gal Cement
11	Shutdown/ Clean Lines	21:02:14	12 Drop Latch Down Plug
13	Pump Displacement	21:08:34	14 Bump Plug
15	End Job	21:32:11	

Customer: Synergy	Job Date: 21-Sep-2012	Sales Order #: 9830278
Well Description: Avex 42-10D	UWI: 05-123-34998-00	
Halliburton Service Supervisor: Matthew J. Rosales	Halliburton Operator: Jerome Chavez	

OptiCem v6.4.10  
21-Sep-12 21:41

## Service Supervisor Reports

### Job Log

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pump	Pressure (psig)	Comments
09/21/2012 15:00		Arrive At Loc					RIG IS RUNNING CASING
09/21/2012 18:40		Pre-Rig Up Safety Meeting					PINCH POINTS, HOUSEKEEPING, IRON LAYOUT, TEAMWORK
09/21/2012 18:50		Pre-Job Safety Meeting					PUMP SCHEDULE, LOCATION OF EMERGENCY STATIONS, OFF LIMIT AREAS, MUSTER POINT, JSA, TEAMWORK
09/21/2012 19:53		Start Job					
09/21/2012 19:53		Test Lines	0.5	0.5		4000.0	
09/21/2012 19:56		Pump Spacer 2	6	20		400.0	WATER SPACER
09/21/2012 19:59		Shutdown					PLUG CONTAINER LEAKING SHUTDOWN AND FIX
09/21/2012 20:03		Resume					PLUG CONTAINER TIGHTEND RESUME WATER SPACER
09/21/2012 20:05		Pump Spacer 1	6	24		376.0	MUDFLUSH
09/21/2012 20:09		Pump Spacer 2	6	20		550.0	WATER SPACER
09/21/2012 20:12		Pump Lead Cement	6	196.6		500.0	EXTENDACEM: 480SKS, 1104CUFT, 2.3CUFT/SK, 12.93GAL/SK, 11.5#/GAL, MIXED WITH WATER PROVIDED BY ENSIGN 136
09/21/2012 20:46		Pump Tail Cement	6	77.4		250.0	FRACCEM TAIL CEMENT: 250SKS, 435CUFT, 1.74CUFT/SK, 8.29GAL/SK, 13.5#/GAL, MIXED WITH WATER PROVIDED BY ENSIGN 136
09/21/2012 21:02		Shutdown					
09/21/2012 21:02		Clean Lines					
09/21/2012 21:07		Drop Top Plug					LATCH DOWN PLUG LOADED WHILE WASHING PUMPS AND LINES
09/21/2012 21:08		Pump Displacement	6	116.1		1687.0	FRESH WATER DISPLACEMENT, GOOD RETURNS THROUGH OUT JOB
09/21/2012 21:28		Bump Plug	3			2675.0	
09/21/2012 21:32		Check Floats					FLOATS HELD
09/21/2012 21:32		End Job					
09/21/2012 21:35		Pre-Rig Down Safety Meeting					PINCH POINTS, HOUSEKEEPING, IRON LAYOUT, TEAMWORK
09/21/2012 21:40		Depart Location for Service Center or Other Site					SAFETY SEND OFF, JOURNEY MANAGMENT

# HALLIBURTON

## The Road to Excellence Starts with Safety

<b>Sold To #:</b> 359915		<b>Ship To #:</b> 2951866		<b>Quote #:</b>		<b>Sales Order #:</b> 9830278	
<b>Customer:</b> SYNERGY RESOURCES CORPORATION				<b>Customer Rep:</b> Weitzel, Charlie			
<b>Well Name:</b> Avex			<b>Well #:</b> 42-10 D			<b>API/UWI #:</b> 05-123-34998-00	
<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> ROSALES, MATTHEW			<b>MBU ID Emp #:</b> 392095	

### Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BANUELOS, GUADALUPE	7.5	372277	BELL, ROBERT Preston	7.5	437060	CHAVEZ, JEROME Christophe	7.5	458298
HETZLER, JEFFREY Charles	7.5	527677	ROSALES, MATTHEW John	7.5	392095			

### Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10025030	31 mile	10866493C	31 mile	11036301	31 mile	11532305	31 mile
11562562	31 mile	11605598	31 mile	11812069C	31 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

### Job Times

Formation Name					Called Out	Date	Time	Time Zone
Formation Depth (MD)	Top		Bottom		21 - Sep - 2012	10:00	MST	
Form Type	BHST				On Location	21 - Sep - 2012	15:00	MST
Job depth MD	7833. ft				Job Started	21 - Sep - 2012	19:53	MST
Water Depth	Wk Ht Above Floor				Job Completed	21 - Sep - 2012	21:32	MST
Perforation Depth (MD)	From		To		Departed Loc	21 - Sep - 2012	22:30	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				614.	7833.	.	.
Production Casing	Unknown		4.5	4.	11.6			.	7795.	.	.
Surface Casing	Unknown		8.625	8.097	24.			.	614.	.	.

### 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)	480.0	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)	250.0	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						