

HALLIBURTON

CHEVRON - MID-CONTINENT EBIZ

Fee 162Y
RANGELY
Rio Blanco County , Colorado

Cement Production Casing
29-Nov-2012

Job Site Documents

The Road to Excellence Starts with Safety

Sold To #: 338668	Ship To #: 2967640	Quote #:	Sales Order #: 900070509
Customer: CHEVRON - MID-CONTINENT EBIZ		Customer Rep: Garza, Travis	
Well Name: Fee	Well #: 162Y	API/UWI #: 05-103-11945	
Field: RANGELY	City (SAP): RIO BLANCO	County/Parish: Rio Blanco	State: Colorado
Legal Description: Section 28 Township 2N Range 102W			
Lat: N 40.12 deg. OR N 40 deg. 7 min. 11.1 secs.		Long: W 108.844 deg. OR W -109 deg. 9 min. 21.539 secs.	
Contractor: NABORS		Rig/Platform Name/Num: M-11	
Job Purpose: Cement Production Casing			
Well Type: Development Well		Job Type: Cement Production Casing	
Sales Person: GROFF, THEODORE	Srvc Supervisor: ASHBY, ANDREW	MBU ID Emp #: 450544	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
ASHBY, ANDREW A	15	450544	CLARK, SHAUN Cameron	15	527195	ELDER, CHRISTOPHER Ray	15	528100
SHIFLETT, JESSE Amos	15	469551						

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10783493	45 mile	10897817	45 mile	10951248	45 mile	11062230	45 mile
11076824	45 mile	11305357	45 mile	11526494	45 mile	6616	45 mile
6647	45 mile	D0645	45 mile				

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
14 Dec 2012	15	2.5						
TOTAL			Total is the sum of each column separately					

Job

Job Times

Formation Name	Formation Depth (MD)	Top	Bottom	Called Out	Date	Time	Time Zone
Form Type			BHST	On Location	13 - Dec - 2012	21:00	MST
Job depth MD	6677. ft		Job Depth TVD	Job Started	14 - Dec - 2012	00:30	MST
Water Depth			Wk Ht Above Floor	Job Completed	14 - Dec - 2012	11:00	MST
Perforation Depth (MD)	From		To	Job Completed	29 - Nov - 2012	13:30	GMT
				Departed Loc	14 - Dec - 2012	15:30	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
8-3/4" Hole				8.75				2000.	6677.		
7" Casing	Unknown		7.	6.366	23.			.	6677.		
9-5/8" Casing	New		9.625	8.921	36.		H-40	.	2000.	.	2000.

Sales/Rental/3rd Party (HES)

Description	Qty	Qty uom	Depth	Supplier
PLUG,CMTG,TOP,7,HWE,5.66 MIN/6.54 MAX CS	1	EA		
SUGAR - GRANULATED	40	LB		

Tools and Accessories

Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe		0			Packer		0			Top Plug		1	
Float Shoe		1			Bridge Plug		0			Bottom Plug		1	
Float Collar		1			Retainer		0			SSR plug set		0	
Insert Float		0								Plug Container		1	
Stage Tool		0								Centralizers		30	

Miscellaneous Materials

Gelling Agt	Conc	Surfactant	Conc	Acid Type	Qty	Conc	%
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Treatment Fld	Conc	Inhibitor	Conc	Sand Type	Size	Qty			
Fluid Data									
Stage/Plug #: 1									
Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft ³ /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	Tuned Spacer III	TUNED SPACER III - SBM (483826)	30.00	bbl	11.	6.02	39.38	.0	
	36.83 gal/bbl	FRESH WATER							
	117.665 lbm/bbl	BARITE, BULK (100003681)							
	1 lbm/bbl	D-AIR 3000 (101007446)							
2	Tuned Light Lead Cement	TUNED LIGHT (TM) SYSTEM (452984)	460.0	sacks	11.3	2.0	9.21		9.21
	1 lbm	GRANULITE TR 1/4, 50 LB SK (100064073)							
	0.125 lbm	POLY-E-FLAKE (101216940)							
	9.206 Gal	FRESH WATER							
3	Tuned Light Tail Cement	TUNED LIGHT (TM) SYSTEM (452984)	425.0	sacks	12.5	1.61	6.73		6.73
	0.125 lbm	POLY-E-FLAKE (101216940)							
	6.73 Gal	FRESH WATER							
4	Displacement		260.00	bbl	8.3	.0	.0	.0	
Calculated Values		Pressures		Volumes					
Displacement	260.3	Shut In: Instant		Lost Returns	No	Cement Slurry	286	Pad	
Top Of Cement	Surface	5 Min		Cement Returns	90	Actual Displacement	260.7	Treatment	
Frac Gradient		15 Min		Spacers	30	Load and Breakdown		Total Job	
Rates									
Circulating	3.5	Mixing	6 bpm	Displacement	6 bpm	Avg. Job	6 bpm		
Cement Left In Pipe	Amount 90 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					

The Road to Excellence Starts with Safety

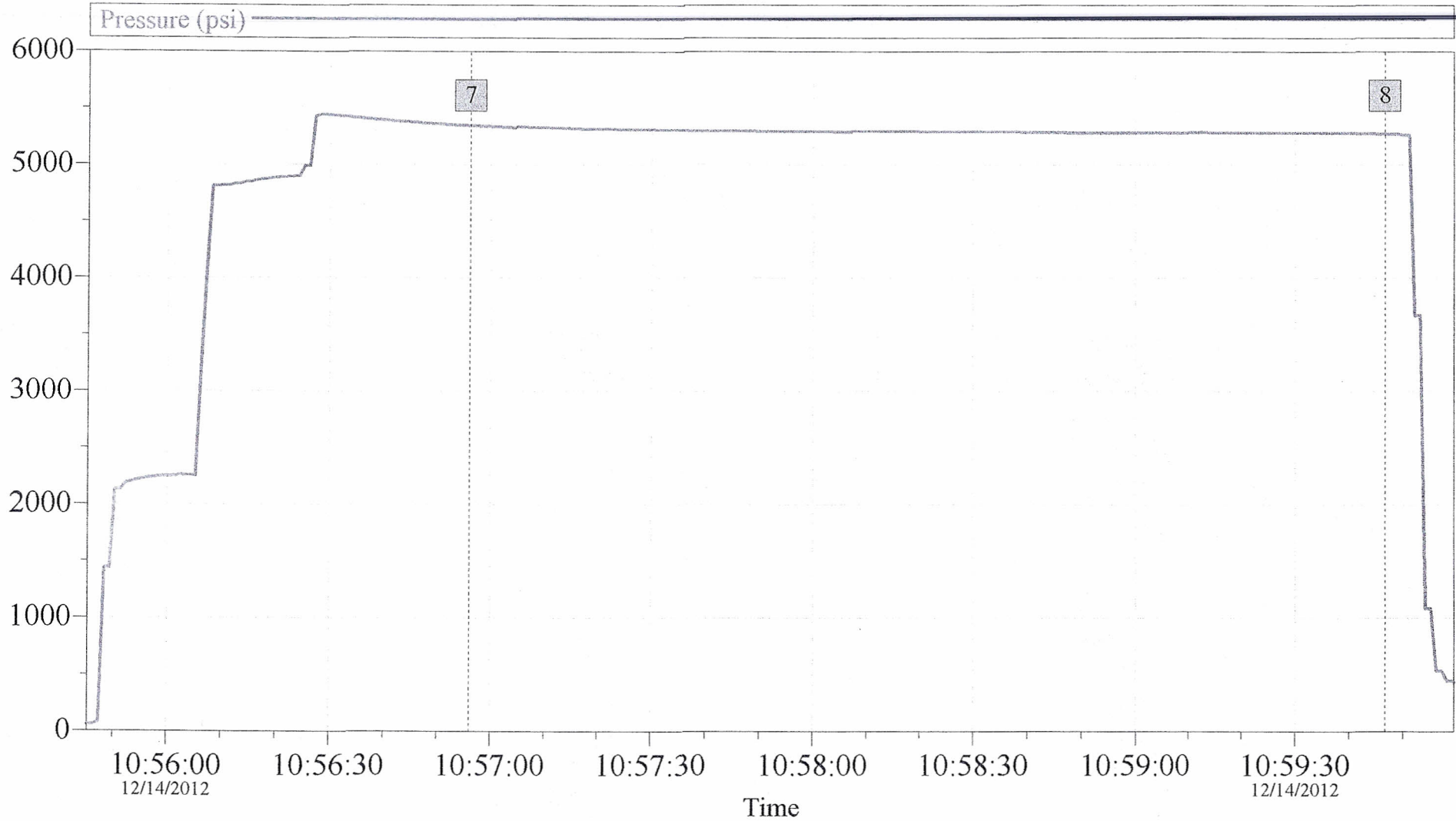
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Job Purpose: Cement Production Casing			Ticket Amount:
Well Type: Development Well		Job Type: Cement Production Casing	
Sales Person: GROFF, THEODORE		Srvc Supervisor: ASHBY, ANDREW	MBU ID Emp #: 450544

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	12/13/2012 21:00							Crew Called out for Job.
Pre-Convoy Safety Meeting	12/13/2012 23:00							Met w/crew to discuss safety and hazards of travel to location
Depart from Service Center or Other Site	12/13/2012 23:30							Entered into Journey Management.
Arrive At Loc	12/14/2012 00:30							Ended Journey Management. [Casing being ran - 2600 ft left]
Assessment Of Location Safety Meeting	12/14/2012 00:45							Met w/crew to discuss hazards of site, location of materials and safety precautions.
Other	12/14/2012 01:00							Spot Equipment
Pre-Rig Up Safety Meeting	12/14/2012 01:15							Met w/crew to discuss the best way to rig up, safety and hazards involved.
Rig-Up Equipment	12/14/2012 01:20							Rig up Ground & Standpipe
Other	12/14/2012 05:45							Almost on bottom, well took a gas kick (CO2) approx 25 bbls, rig circulated the well to get the gas out.
Other	12/14/2012 09:00							Gas out, ready to finish rigging up cement crew.
Pre-Job Safety Meeting	12/14/2012 09:10							Met w/Rig Crew, Co. Rep, and our crew to discuss job procedures, contingencies, and safety measures.
Rig-Up Equipment	12/14/2012 09:30							Rig-up the rig floor.

Cementing Job Log

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Other	12/14/2012 10:42		2	2				Fill Lines to pressure test.
Test Lines	12/14/2012 10:56						5350.0	Pressure Test (5000 psi) - lost 73 psi over 3 min.
Pump Spacer	12/14/2012 11:09		6	30			350.0	28 sks Tuned Spacer @ 11.0 lbm/gal, 6.02 cuft/sk, 39.38 gal/sk
Shutdown	12/14/2012 11:14							Shutdown / Mix Cement / Drop Bottom Plug
Pump Lead Cement	12/14/2012 11:22		6	164			521.0	460 sks Tuned Light Lead @ 11.3 lbm/gal, 2.00 cuft/sk, 9.21 gal/sk
Pump Tail Cement	12/14/2012 12:02		6	130			305.0	425 sks Tuned Light Tail @ 12.5 lbm/gal, 1.61 cuft/sk, 6.73 gal/sk
Shutdown	12/14/2012 12:30							Shutdown / Drop Plug
Clean Lines	12/14/2012 12:31							Wash pump & lines to the pit.
Pump Displacement	12/14/2012 12:36		6	260			144.0	Displacement = water, getting good returns.
Displ Reached Cmmt	12/14/2012 12:40		6				520.0	Displacement reached Cement
Slow Rate	12/14/2012 13:17		3		250		1925.0	Slow rate to bump plug.
Bump Plug	12/14/2012 13:21		3		260		2421.0	1000 psi over final circulating pressure (1654 psi)
Check Floats	12/14/2012 13:24						2642.0	Floats held - 2.5 bbls back
End Job	12/14/2012 13:30							Job Complete - approx 90 bbls Cement to surface.
Post-Job Safety Meeting (Pre Rig-Down)	12/14/2012 13:35							Met w/crew to discuss rigging down safely.
Rig-Down Equipment	12/14/2012 13:45							Rig everything down.
Pre-Convoy Safety Meeting	12/14/2012 15:20							Met w/crew to discuss fit-for-duty, safety and hazards of travel back.
Depart Location for Service Center or Other Site	12/14/2012 15:30							Entered into Journey Management.
Other	12/14/2012 15:30							Thanks for using Halliburton!!!

Chevron - Fee# 162Y - Intermediate Pressure Test

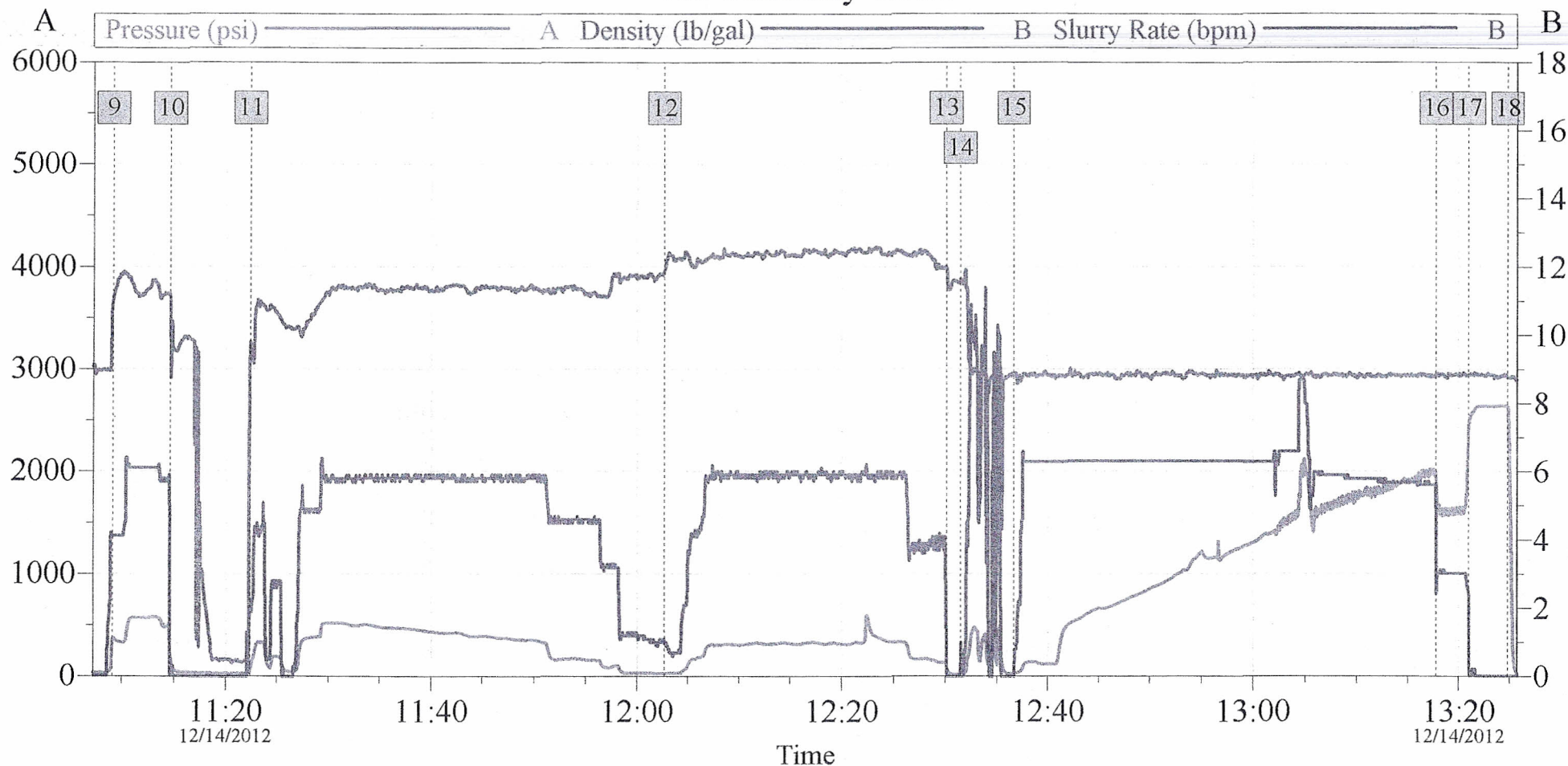


Global Event Log			
Intersection		PSI	
7	Start Pressure Test	10:56:56	5352
8	End Pressure Test	10:59:47	5279

Customer:	Chevron	Job Date:	14-Dec-2012	Sales Order #:	900070509
Job Description:	7" Intermediate	UWI:	05-103-11945	Elite #:	11076824
Service Supervisor:	Andrew Ashby	Service Operator:	Shaun Clark	Service Leader:	n/a

Chevron - Fee# 162Y - Intermediate

Job Summary Chart



Global Event Log

9	Pump Tuned Spacer	11:09:07	10	Shutdown / Drop Plug	11:14:35	11	Pump Lead Cement	11:22:24
12	Pump Tail Cement	12:02:40	13	Shutdown / Drop Plug	12:30:08	14	Clean Lines	12:31:29
15	Pump Displacement	12:36:41	16	Slow Rate	13:17:48	17	Bump Plug	13:21:03
18	Check Floats	13:24:47						

Customer: Chevron
 Job Description: 7" Intermediate
 Service Supervisor: Andrew Ashby

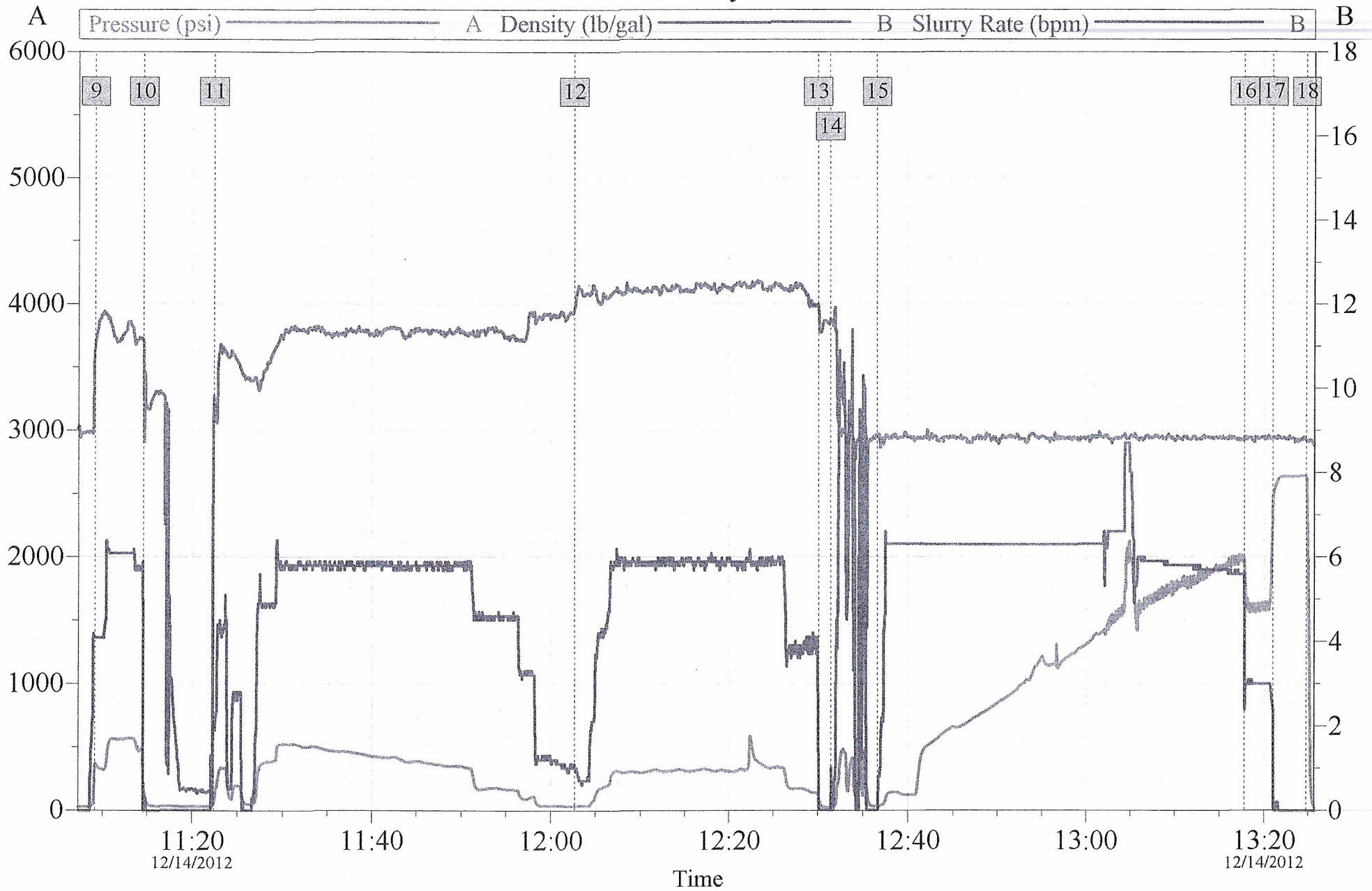
Job Date: 14-Dec-2012
 UWI: 05-103-11945
 Service Operator: Shaun Clark

Sales Order #: 900070509
 Elite #: 11076824
 Service Leader: n/a

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 14-Dec-12 14:19

Chevron - Fee# 162Y - Intermediate

Job Summary Chart



Customer: Chevron
 Job Description: 7" Intermediate
 Service Supervisor: Andrew Ashby

Job Date: 14-Dec-2012
 UWI: 05-103-11945
 Service Operator: Shaun Clark

Sales Order #: 900070509
 Elite #: 11076824
 Service Leader: n/a

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