

**HALLIBURTON**

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## **CHEVRON - MID-CONTINENT EBIZ**

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**McLaughlin 9X33  
RANGELY  
Rio Blanco County , Colorado**

**Squeeze Perfs  
17-Feb-2012**

**Job Site Documents**

### The Road to Excellence Starts with Safety

Sold To #: 338668	Ship To #: 2909447	Quote #:	Sales Order #: 9292114
Customer: CHEVRON - MID-CONTINENT EBIZ	Customer Rep:		
Well Name: McLaughlin	Well #: 9X33	API/UWI #:	
Field:	City (SAP): RANGELY	County/Parish: Rio Blanco	State: Colorado
Legal Description: Section 30 Township 02N Range 102W			
Contractor: WORKOVER	Rig/Platform Name/Num: workover		
Job Purpose: Squeeze Perfs			
Well Type: Producing Well	Job Type: Squeeze Perfs		
Sales Person: SPENCER, WESTON	Srvc Supervisor: FUCHS, BENJAMIN	MBU ID Emp #: 470584	

#### Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BONE, JEFFERSON Eldon	9.0	491216	ESTEP, KENNETH	6.0	121420	FUCHS, BENJAMIN Reinhard	9.0	470584
WILLIAMS, CAMERON Kent	9.0	438405						

#### Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10948685	45 mile	10982742	45 mile	11211506	45 mile	11263211	45 mile
11360879	45 mile	11512092	45 mile				

#### Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
2/17/2012	9	6						

TOTAL	Total is the sum of each column separately							
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#### Job

Formation Name							Date	Time	Time Zone		
Formation Depth (MD)		Top	Bottom			Called Out	17 - Feb - 2012	03:00	MST		
Form Type		BHST		120 degF		On Location	17 - Feb - 2012	06:00	MST		
Job depth MD		1050. ft		Job Depth TVD		1050. ft		Job Started	17 - Feb - 2012	08:54	MST
Water Depth		Wk Ht Above Floor <td colspan="2">3. ft</td> <th>Job Completed</th> <td>17 - Feb - 2012</td> <td>13:00</td> <td>MST</td> <td></td>		3. ft		Job Completed	17 - Feb - 2012	13:00	MST		
Perforation Depth (MD)		From	850.00 ft		To	1,055.00 ft		Departed Loc	0	15:00	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
Squeeze Interval	Unknown		7.	6.366	23.		J-55	850.	1055.6500.		
Production Casing	Unknown										
Tubing	Unknown		2.875	2.441	6.4		J-55		1070.		

#### Sales/Rental/3<sup>rd</sup> Party (HES)

Description	Qty	Qty uom	Depth	Supplier
SUGAR - GRANULATED	40	LB		

#### 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****Cementing Job Summary**

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	Fresh Water Ahead		10	bbl	8.34	.0	.0	5.0	
2	SqueezeCem	SQUEEZECM (TM) SYSTEM (452971)	80	sacks	12.5	.9	4.76	5.0	4.76
		4.761 Gal							
		FRESH WATER							
3	Field Water Displacement		4	bbl	8.43	.0	.0	3.0	
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	0 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					



**HALLIBURTON****Cementing Job Log****The Road to Excellence Starts with Safety**

<b>Sold To #:</b> 338668	<b>Ship To #:</b> 2909447	<b>Quote #:</b>	<b>Sales Order #:</b> 9292114
<b>Customer:</b> CHEVRON - MID-CONTINENT EBIZ		<b>Customer Rep:</b>	
<b>Well Name:</b> McLaughlin	<b>Well #:</b> 9X33	<b>API/UWI #:</b>	
<b>Field:</b>	<b>City (SAP):</b> RANGELY	<b>County/Parish:</b> Rio Blanco	<b>State:</b> Colorado
<b>Legal Description:</b> Section 30 Township 02N Range 102W			
<b>Lat:</b>		<b>Long:</b>	
<b>Contractor:</b> WORKOVER		<b>Rig/Platform Name/Num:</b> workover	
<b>Job Purpose:</b> Squeeze Perfs			<b>Ticket Amount:</b>
<b>Well Type:</b> Producing Well		<b>Job Type:</b> Squeeze Perfs	
<b>Sales Person:</b> SPENCER, WESTON		<b>Srvc Supervisor:</b> FUCHS, BENJAMIN	<b>MBU ID Emp #:</b> 470584

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	02/17/2012 03:00							Crew called out for job
Safety Meeting - Departing Location	02/17/2012 04:45							Discuss all travel related safety issues with crew
Crew Leave Yard	02/17/2012 05:00							Convoy to location for safety
Arrive at Location from Service Center	02/17/2012 06:00							Customer not on location when we arrived
Safety Meeting - Assessment of Location	02/17/2012 07:00							Identify and discuss all jobsite hazards and equipment layout
Other	02/17/2012 07:15							Spot equipment using spotter(s) and make sure hand signals are understood by all parties
Safety Meeting - Pre Rig-Up	02/17/2012 07:30							Discuss all rig up related safety issues with crew, discuss 602/1502 union issues
Rig-Up Equipment	02/17/2012 07:45							Be careful, no one gets hurt
Safety Meeting - Pre Job	02/17/2012 08:45							Discuss all job related safety issues and pump schedule with crew and rig crew, discuss pressure testing procedure
Start Job	02/17/2012 08:54	1						Everyone get equipment ready for job
Pump Water	02/17/2012 08:58	2	2.6	3	3		44.0	Fill lines with 3 bbls water
Pressure Test	02/17/2012 09:01	3					3176.0	Test lines to 3000 psi establish good test/check for leaks, honk horn once when starting test

Sold To # : 338668

Ship To # :2909447

Quote # :

Sales Order # : 9292114

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Bleeding Tubing Or Casing	02/17/2012 09:04	4					2970.0	Bleed pressure off lines, honk horn twice when psi is off lines
Pump Water	02/17/2012 09:09	5	1.1	10	13		27.0	Pump 10 bbls water ahead to clean hole and establish circulation
Pump Cement	02/17/2012 09:20	6	2.5	12.8	25.8		21.0	Pump 12.8 bbls cement mixed @ 12.5 ppg .9 yield 4.76 gal/sk (80 sks)
Shutdown	02/17/2012 09:24	7						Stopped pumping to finish mixing cement (delivery issues)
Pump Displacement	02/17/2012 09:28	8	1	4	29.8		44.0	Pump 4 bbls water displacement to balance plug
Shutdown	02/17/2012 09:31	9					23.0	Plug is set
Other	02/17/2012 09:31	10						Rig crew pulling tubing out of hole
Clean Lines	02/17/2012 09:39	11						Wash pumps and lines to the pit
Pressure Up	02/17/2012 09:58	12	1	2	31.8		30.0	Pressure up on cement plug to squeeze
Shutdown	02/17/2012 10:01	13					338.0	Pressure bleeding off, hesitate per company man request
Pressure Up	02/17/2012 10:04	14	0.2	0.5	32.3		204.0	Pressure up on cement plug to squeeze
Shutdown	02/17/2012 10:05	15					307.0	Pressure bleeding off, hesitate per company man request
Pressure Up	02/17/2012 10:29	16	0.2	0.5	32.8		125.0	Pressure up on cement plug to squeeze
Shutdown	02/17/2012 10:29	17					208.0	Pressure bleeding off, hesitate per company man request
Pressure Up	02/17/2012 11:02	18	0.8	0.2	33		102.0	Pressure up on cement plug to squeeze
Shutdown	02/17/2012 11:03	19					342.0	Pressure bleeding off, hesitate per company man request
Pressure Up	02/17/2012 11:33	20	0.7	0.5	33.5		114.0	Pressure up on cement plug to squeeze
Shutdown	02/17/2012 11:34	21					348.0	Pressure bleeding off, hesitate per company man request
Pressure Up	02/17/2012 12:19	22	0.4	0.5	34		107.0	Pressure up on cement plug to squeeze

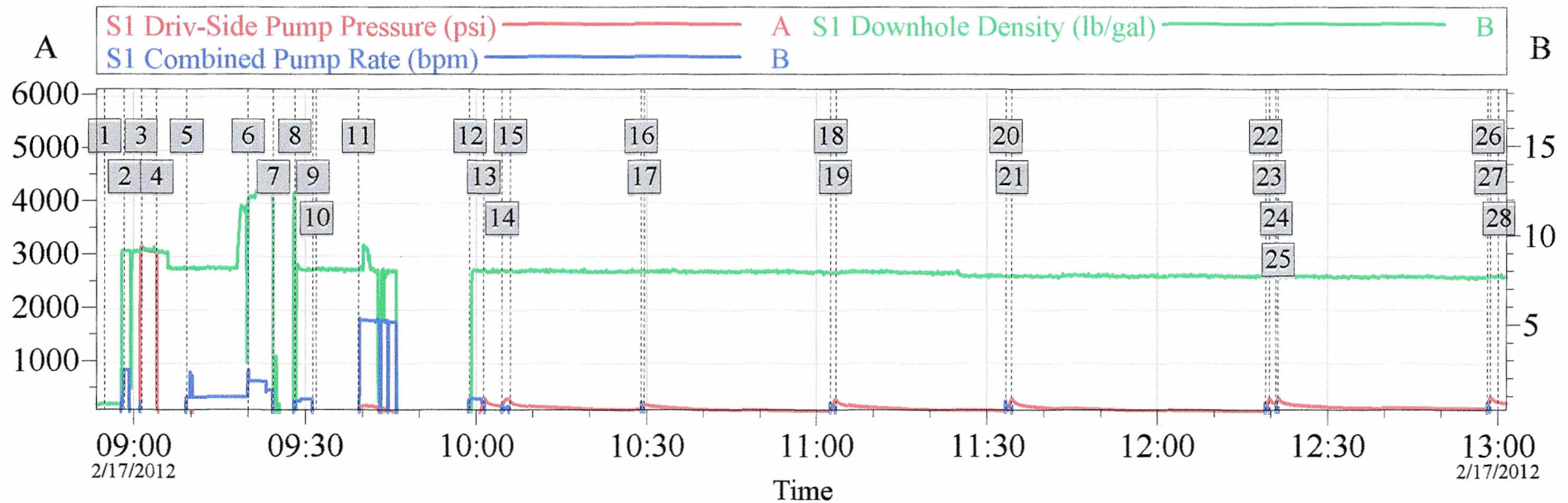


***Cementing Job Log***

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Shutdown	02/17/2012 12:19	23					345.0	Pressure bleeding off, hesitate per company man request
Pressure Up	02/17/2012 12:20	24	0.3	0.5	34.5		255.0	Pressure up on cement plug to squeeze
Shutdown	02/17/2012 12:21	25					342.0	Pressure bleeding off, hesitate per company man request
Pressure Up	02/17/2012 12:58	26	0.7	0.5	35		161.0	Pressure up on cement plug to squeeze
Shutdown	02/17/2012 12:58	27					356.0	Final squeeze pressure, shut in well @ BOP
End Job	02/17/2012 13:00	28						Pumping job complete
Safety Meeting - Pre Rig- Down	02/17/2012 13:05							Discuss all rig down related safety issues with crew
Rig-Down Equipment	02/17/2012 13:15							Be careful, no one gets hurt
Safety Meeting - Departing Location	02/17/2012 14:45							Discuss all travel related safety issues with crew
Crew Leave Location	02/17/2012 15:00							Convoy to yard for safety, Thank you for your business!

# Chevron McLaughlin 9X33 Squeeze

## Job Summary Chart



## Global Event Log

1 Starting Job	08:54:54	2 Fill Lines	08:58:22	3 Test Lines	09:01:20
4 Bleed Off Pressure	09:04:03	5 Pump Water	09:09:16	6 Pump Lead Cement	09:20:00
7 Shutdown	09:24:23	8 Pump Displacement	09:28:07	9 Shutdown	09:31:18
10 Pull Tubing	09:31:55	11 Clean Lines	09:39:18	12 Pressure Up	09:58:53
13 Shutdown	10:01:20	14 Pressure Up	10:04:31	15 Shutdown	10:05:59
16 Pressure Up	10:29:03	17 Shutdown	10:29:33	18 Pressure Up	11:02:25
19 Shutdown	11:03:19	20 Pressure Up	11:33:17	21 Shutdown	11:34:20
22 Pressure Up	12:19:02	23 Shutdown	12:19:42	24 Pressure Up	12:20:55
25 Shutdown	12:21:15	26 Pressure Up	12:58:08	27 Shutdown	12:58:35
28 Ending Job	13:00:04				

Customer: Chevron  
Job Description: Squeeze

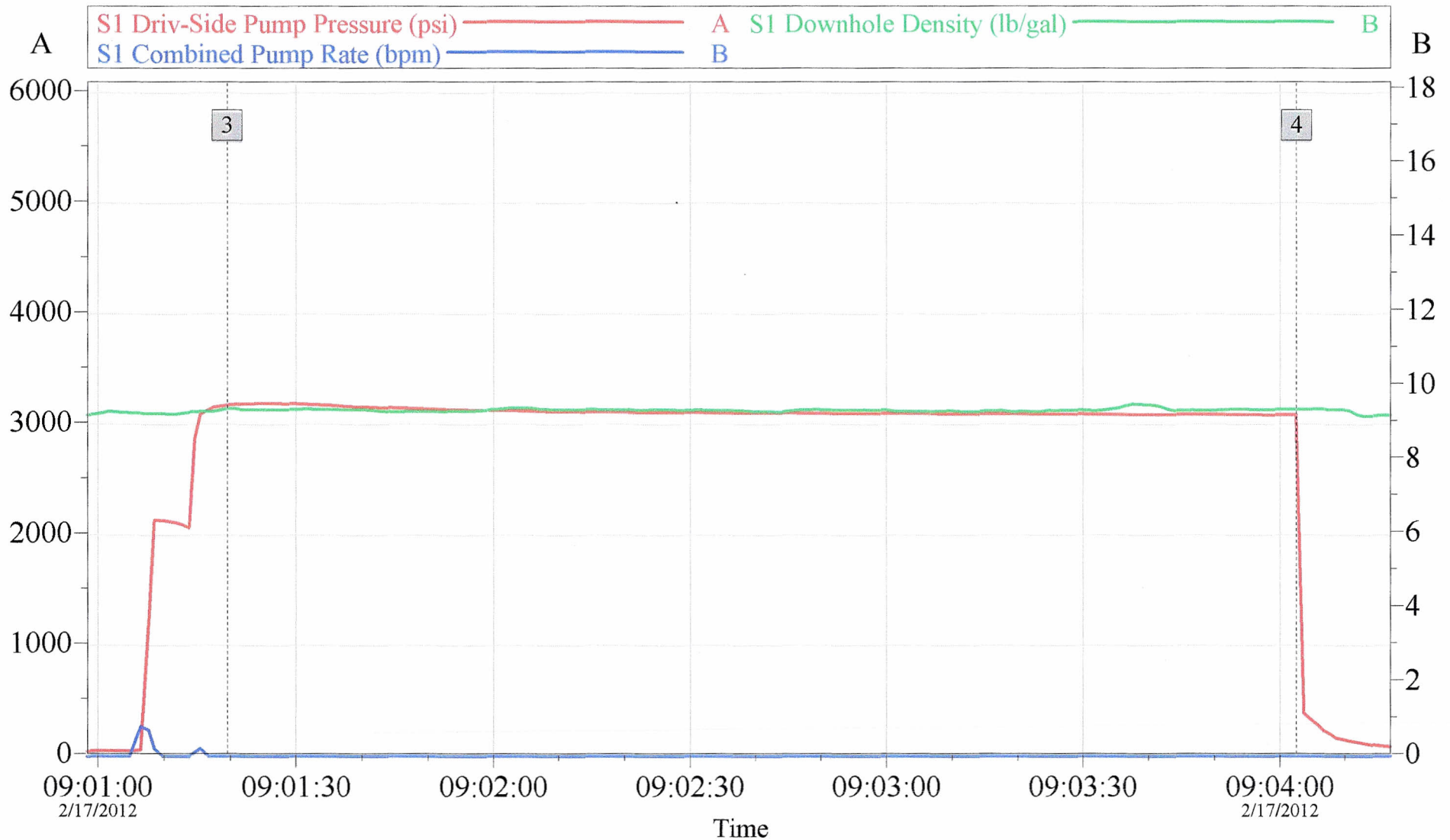
Job Date: 17-Feb-2012  
API#:

Sales Order #: 9292114  
Elite #: 11512092

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17-Feb-12 13:19

# Cheveron McLaughlin 9X33 Squeeze

## Pressure Test



### Global Event Log

3 Test Lines 09:01:20 4 Bleed Off Pressure 09:04:03

Customer: Cheveron  
Job Description: Squeeze

Job Date: 17-Feb-2012  
API#:

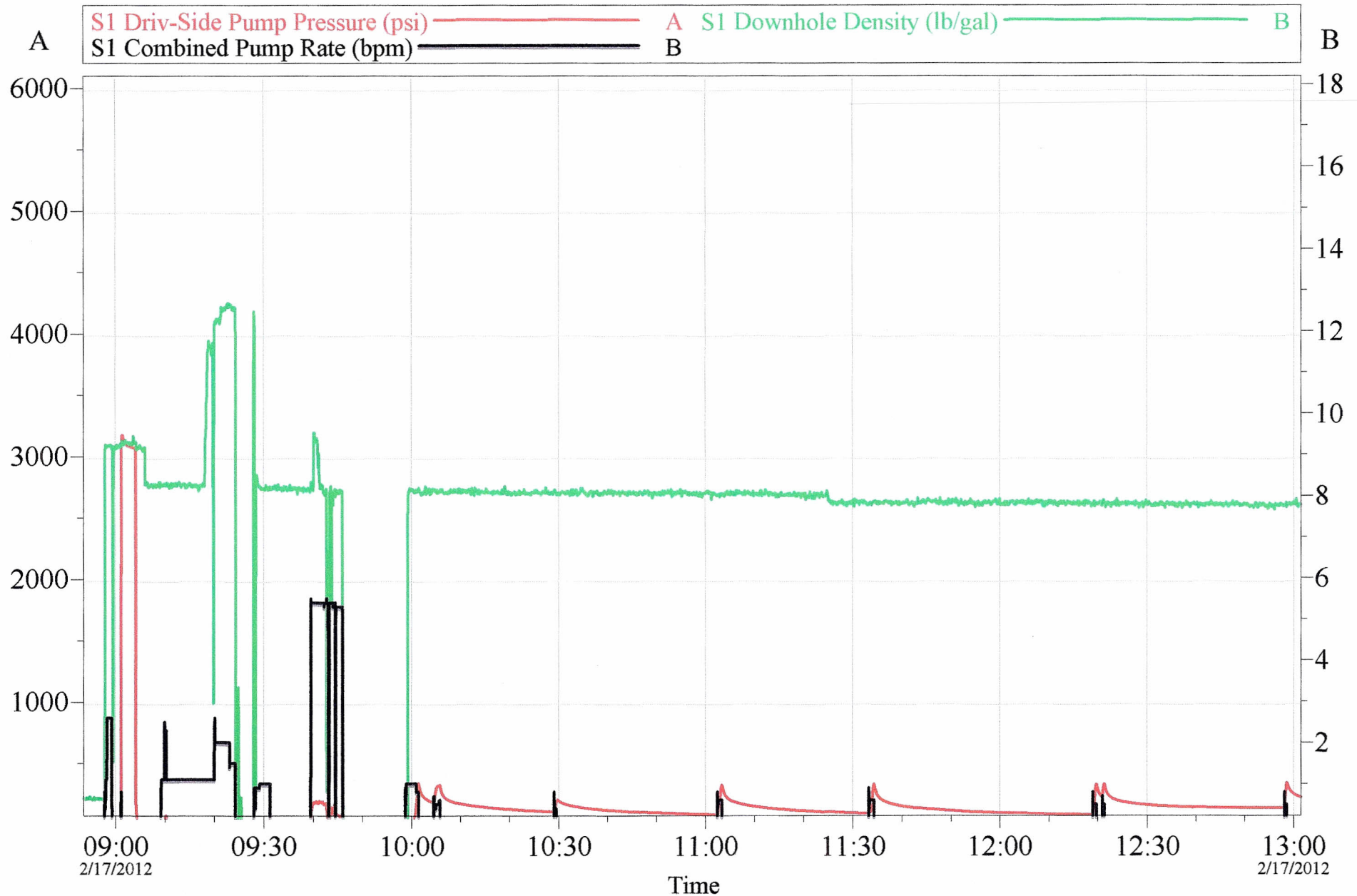
Sales Order #: 9292114  
Elite #: 11512092

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17-Feb-12 13:21



# Cheveron McLaughlin 9X33 Squeeze

Job Summary Chart No Events



Customer: Cheveron  
Job Description: Squeeze

Job Date: 17-Feb-2012  
API#:

Sales Order #: 9292114  
Elite #: 11512092

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17-Feb-12 13:17