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**CHEVRON - MID-CONTINENT EBIZ**

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**Skinner Ridge 589-08-BV-02  
SKINNER RIDGE  
Garfield County , Colorado**

**Cement Production Casing**  
18-Sep-2013

**Job Site Documents**

*The Road to Excellence Starts with Safety*

<b>Sold To #:</b> 338668	<b>Ship To #:</b> 3097910	<b>Quote #:</b>	<b>Sales Order #:</b> 900741350
<b>Customer:</b> CHEVRON - MID-CONTINENT EBIZ		<b>Customer Rep:</b> Geiser, Greg	
<b>Well Name:</b> Skinner Ridge		<b>Well #:</b> 589-08-BV-02	<b>API/UWI #:</b> 05-045-22132
<b>Field:</b> SKINNER RIDGE	<b>City (SAP):</b> PARACHUTE	<b>County/Parish:</b> Garfield	<b>State:</b> Colorado
<b>Lat:</b> N 39.622 deg. OR N 39 deg. 37 min. 18.109 secs.		<b>Long:</b> W 108.414 deg. OR W -109 deg. 35 min. 8.959 secs.	
<b>Contractor:</b> ENSIGN		<b>Rig/Platform Name/Num:</b> 122	
<b>Job Purpose:</b> Cement Production Casing			
<b>Well Type:</b> Development Well		<b>Job Type:</b> Cement Production Casing	
<b>Sales Person:</b> GROFF, THEODORE		<b>Srvc Supervisor:</b> PONDER, THOMAS	<b>MBU ID Emp #:</b> 427112

**Job Personnel**

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BRENNECKE, ANDREW Bailey	28.0	486345	CAMPBELL, DAVID Arthur	28	544403	CARTER, ERIC Earl	9	345598
LINN, PAUL Andrew	9	479143	PONDER, THOMAS Lynn	28	427112	ROMKEE, DALE Alan	18	488215
SCHANZ, ANDREW Jacob	9	544399	SINCLAIR, DAN J	9	338784	WOLFE, JON P	28	485217

**Equipment**

HES Unit #	Distance-1 way						
10867094	120 mile	10872429	120 mile	11360883	120 mile	11583931	120 mile
11808833	120 mile						

**Job Hours**

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
9/16/2013	18	0	9/17/2013	11	0	9/18/2013	7	4
<b>TOTAL</b>	<i>Total is the sum of each column separately</i>							

**Job**

**Job Times**

Formation Name	Formation Depth (MD)	Form Type	Job depth MD	Water Depth	Perforation Depth (MD)	Date	Time	Time Zone
	Top	BHST	4666. ft	Wk Ht Above Floor	From	15 - Sep - 2013	21:00	MST
	Bottom		4666. ft	3. ft	To	16 - Sep - 2013	01:00	MST
						18 - Sep - 2013	02:38	MST
						18 - Sep - 2013	04:35	MST
						17 - Sep - 2013	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
7-7/8" Open Hole				7.875				1000.	4500.	1000.	4500.
4-1/2" Production Casing	New		4.5	4.	11.6		N-80	.	4500.	.	4500.
8-5/8" Surface Casing	New		8.625	8.097	24.		J-55	.	1000.		

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

Description	Qty	Qty uom	Depth	Supplier
CMT CASING EQUIPMENT BOM	1	JOB		
CLR,FLT,4-1/2,BTC,11.6-15.1PPF,P-110,2-3	1	EA		
SHOE,FLT,4-1/2 8RD,2-3/4 SSII	1	EA		
CLAMP - LIMIT - 4-1/2 - HINGED -	2	EA		
CENTRALIZER ASSY - API - 4-1/2 CSG X	55	EA		
KIT,HALL WELD-A	1	EA		

**Tools and Accessories**

Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer					Top Plug	4.5	1	HES
Float Shoe	4.5	1	HES	4666	Bridge Plug					Bottom Plug			

Float Collar	4.5	1	HES	4622	Retainer						SSR plug set				
Insert Float											Plug Container	4.5	1	HES	
Stage Tool											Centralizers				
<b>Miscellaneous Materials</b>															
Gelling Agt			Conc		Surfactant		Conc		Acid Type		Qty		Conc	%	
Treatment Fld			Conc		Inhibitor		Conc		Sand Type		Size		Qty		
<b>Fluid Data</b>															
<b>Stage/Plug #: 1</b>															
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	Tuned Spacer III	TUNED SPACER III - SBM (483826)			40.00	bbl	11.	3.41	22.38	4.0					
	35.13 gal/bbl	FRESH WATER													
	130.5 lbm/bbl	BARITE, BULK (100003681)													
2	50/50 Poz Premium	VARICEM (TM) CEMENT (452009)			565.0	sacks	12.8	1.64	7.45	6.0	7.45				
	6 lbm	KOL-SEAL, 50 LB BAG (100064232)													
	0.125 lbm	POLY-E-FLAKE (101216940)													
	7.45 Gal	FRESH WATER													
3	50/50 Poz Premium	VARICEM (TM) CEMENT (452009)			385.0	sacks	13.2	1.51	6.45	6.0	6.45				
	6 lbm	KOL-SEAL, 50 LB BAG (100064232)													
	0.125 lbm	POLY-E-FLAKE (101216940)													
	6.45 Gal	FRESH WATER													
4	2% KCl				72.00	bbl	8.43			8.0					
<b>Calculated Values</b>			<b>Pressures</b>			<b>Volumes</b>									
Displacement	71.7	Shut In: Instant			Lost Returns			Cement Slurry			268.5	Pad			
Top Of Cement	SURFACE	5 Min			Cement Returns			70	Actual Displacement			71.7	Treatment		
Frac Gradient		15 Min			Spacers			40	Load and Breakdown			Total Job			
<b>Rates</b>															
Circulating	RIG	Mixing			6	Displacement			6	Avg. Job			6		
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						<b>Customer Representative Signature</b>									

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<b>Well Type:</b> Development Well		<b>Job Type:</b> Cement Production Casing	
<b>Sales Person:</b> GROFF, THEODORE		<b>Srvc Supervisor:</b> PONDER, THOMAS	<b>MBU ID Emp #:</b> 427112

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	09/15/2013 21:00							
Crew Leave Yard	09/15/2013 23:00							PRE CONVOY SAFETY MEETING WITH CREW, ERIC CARTER, ANDREW LINN, ANDREW SCHANZ, DAN SINCLAIR, AND DALE ROMKEE
Arrive At Loc	09/16/2013 01:00							RIG WAS STILL RUNNING WIPER TRIP WHEN CREW ARRIVED ON LOCATION
Call Out	09/16/2013 06:00							SENCODN CREW CALLED OUT FOR RELIEF
Crew Leave Yard	09/16/2013 08:00							PRE CONVOY SAFETY MEETING WITH CREW, THOMAS PONDER, ANDREW BRENNECKE, JON WOLFE, DAVID CAMPBELL
Activity Description	Date/Time	Cht #	Rate bbl/min	Stage	Total	Tubing	Casing	Comments

Arrive At Loc	09/16/2013 10:00							RIG HAD JUST FINISHED PULLING DRILL PIPE OUT OF THE HOLE WHEN THE SECOND CREW ARRIVED ON LOCATION, TD- 4692', TP- 4666', SJ- 41', WF- 9.3 PPG WATER BASED MUD, SURFACE CASING - 8 5/8" 24# K-55 SET @ 1018', PRODUCTION CASING - 4 1/2" 11.6# N-80
Comment	09/16/2013 19:00							RIG WAS HAVING PROBLEMS RUNNING CASING WITH THEIR RUN IN TOOL ON THE TOP DRIVE, RAN IN APPROX 420' OF CASING BEFORE DECIDING THAT THEY WERE EITHER GOING TO RUN A DIFFERENT CRT OR GET A DIFFERENT CASING OUT TO LOCATION, RELEASED THE CREW @ 1900
Call Out	09/17/2013 10:00							
Crew Leave Yard	09/17/2013 11:00							ALL HES PRESENT FOR PRE-CONVOY SAFETY HUDDLE
Arrive At Loc	09/17/2013 13:00							RIG WAS STILL RUNNING CASING, COSTUMER ASKED TO BE ON LOCATION AT 1400
Assessment Of Location Safety Meeting	09/18/2013 00:00							JSA COMPLETED FOR HAZARDS BEFORE SPOTTING EQUIPMENT
Rig-Up Equipment	09/18/2013 00:30							1-550 PICKUP, 1-ELITE PUMP, 1-660 CUFT BULK TRUCK, 1-1600 CUFT STORAGE BIN
Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	

Safety Meeting	09/18/2013 02:00							ALL HES PRESENT, RIG CREW PRESENT, RIG STARTED CIRCULATING ON BOTTOM @ 2300. WAITED ON A SUCK TRUCK TO ARRIVE ON LOCATION BEFORE STARTING JOB
Start Job	09/18/2013 02:38							FILL LINES
Test Lines	09/18/2013 02:50		0.5	0.5				PRESSURED LINES 5493, NO LEAKS IN LINES
Pump Spacer 1	09/18/2013 03:00		6	40			380.0	TUNED SPACER III
Pump Lead Cement	09/18/2013 03:08		6	165			173.0	565SKS 12.8 PPG 1.64 FT3/SK 7.45 GAL/SK
Pump Tail Cement	09/18/2013 03:40		6	103.5			495.0	385 SKS 13.2 PPG 1.52 FT3/SK 6.45 GAL/SK
Shutdown	09/18/2013 04:00							
Clean Lines	09/18/2013 04:02							WASHED UP PUMPS AND LINES TO PIT
Drop Plug	09/18/2013 04:08							PLUG DROP VERIFIED VIA TATTLE TELL BY CUSTOMER REP
Pump Displacement	09/18/2013 04:10		8	61.7			1197. 0	FRESH WATER, 2%KCL
Slow Rate	09/18/2013 04:20		2	10	71.7		1009. 0	GOOD RETURNS THROUGH OUT JOB, CIRCULATED 70 BBL CEMENT BACK TO SURFACE
Bump Plug	09/18/2013 04:24						1537. 0	PLUG BUMPED. CUSTOMER USED 120 LBS SUGAR
Check Floats	09/18/2013 04:31							FLOATS HELD, .5 BBL BACK TO THE DISPLACEMENT TANKS
End Job	09/18/2013 04:35							THANK YOU FOR CHOOSING HALLIBURTON, THOMAS PONDER AND CREW

# HALLIBURTON

iCem<sup>®</sup> Service

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

**For: GREG GEISER**

Date: Wednesday, September 18, 2013

**SKR 598-08-BV-02**

Case 1

Sincerely,

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1.0 Real-Time Job Summary

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1.1 Stage Summary - Liquid Volume, Density, & Design Shutdown

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1.2 Stage Summary - Pump Pressure & ECD

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1.3 Stage Summary - Pump Rate & Nitrogen Rate

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1.4 Shutdown Summary

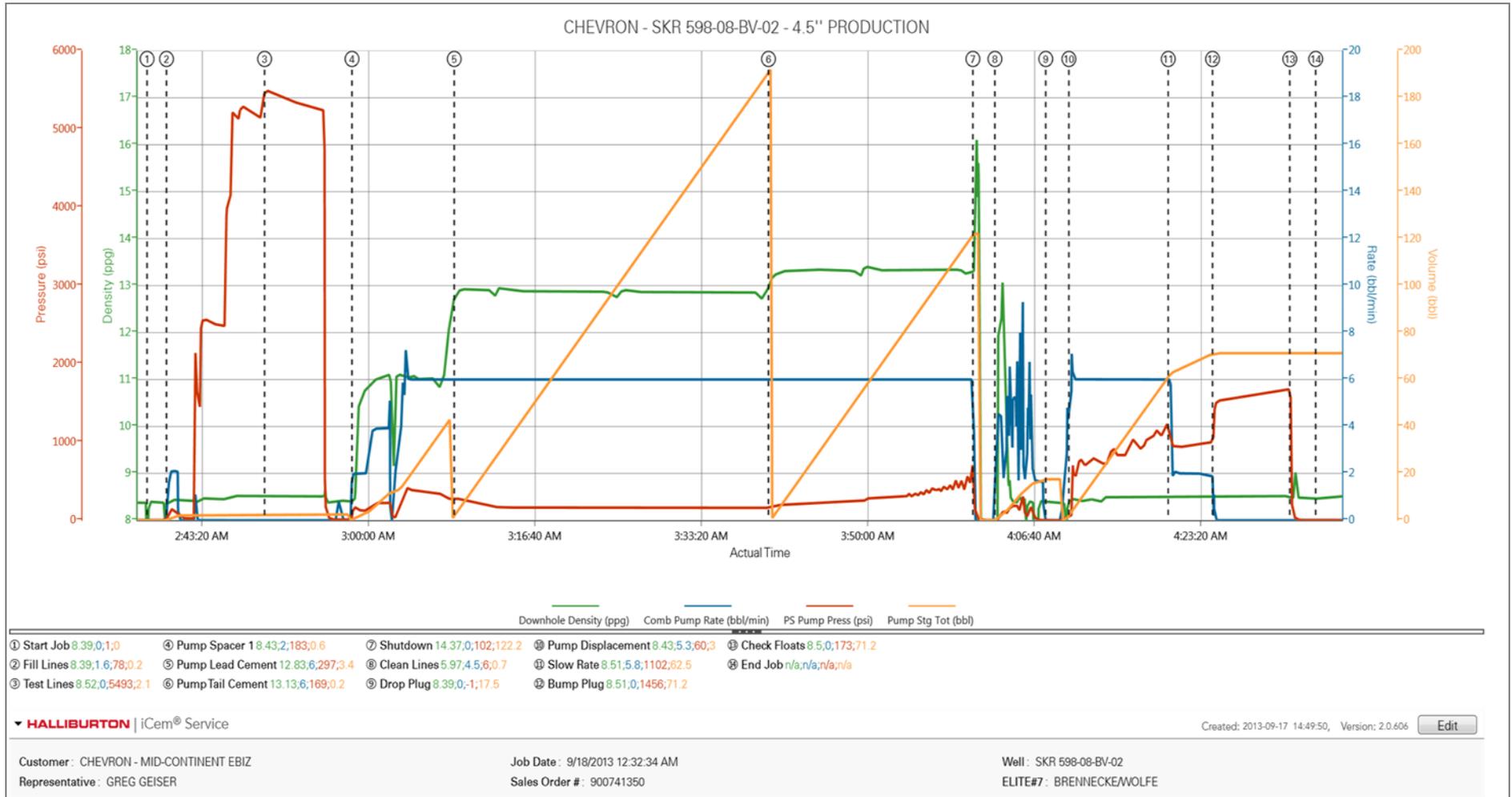
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1.5 Job Event Log

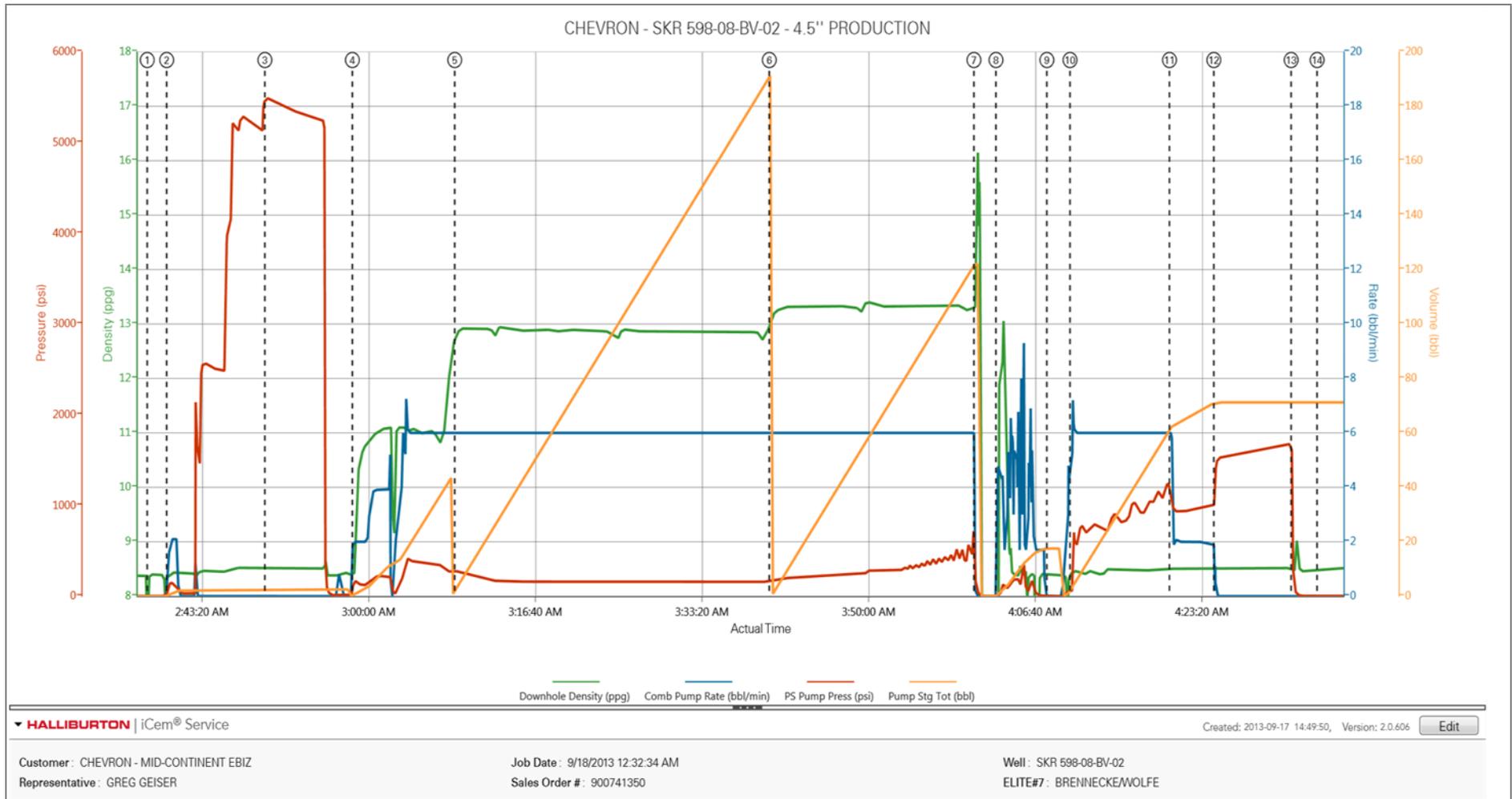
Time	Description	Graph Label	Downhole Density (ppg)	Combined Pump Rate (bbl/min)	Pass-Side Pump Pressure (psi)	Pump Stage Total (bbl)	Comment
02:38:03	Start Job	Start Job	8.39	0.00	1.00	0.00	
02:40:00	Other	Fill Lines	8.39	1.60	78.00	0.20	
02:49:49	Test Lines	Test Lines	8.52	0.00	5493.00	2.10	
02:58:34	Pump Spacer 1	Pump Spacer 1	8.43	2.00	183.00	0.60	
03:08:48	Pump Lead Cement	Pump Lead Cement	12.83	6.00	298.00	3.30	
03:40:15	Pump Tail Cement	Pump Tail Cement	13.12	6.00	166.00	0.10	
04:00:43	Shutdown	Shutdown	14.37	0.00	102.00	122.20	
04:02:55	Clean Lines	Clean Lines	5.97	4.50	6.00	0.70	
04:08:01	Drop Plug	Drop Plug	8.39	0.00	-1.00	17.50	
04:10:20	Pump Displacement	Pump Displacement	8.43	5.30	60.00	3.00	
04:20:16	Slow Rate	Slow Rate	8.51	5.80	1102.00	62.50	
04:24:43	Bump Plug	Bump Plug	8.51	0.00	1456.00	71.20	
04:32:26	Other	Check Floats	8.50	0.00	173.00	71.20	
04:35:02	End Job	End Job					

2.0 Attachments

2.1 CHART WITH EVENTS.png

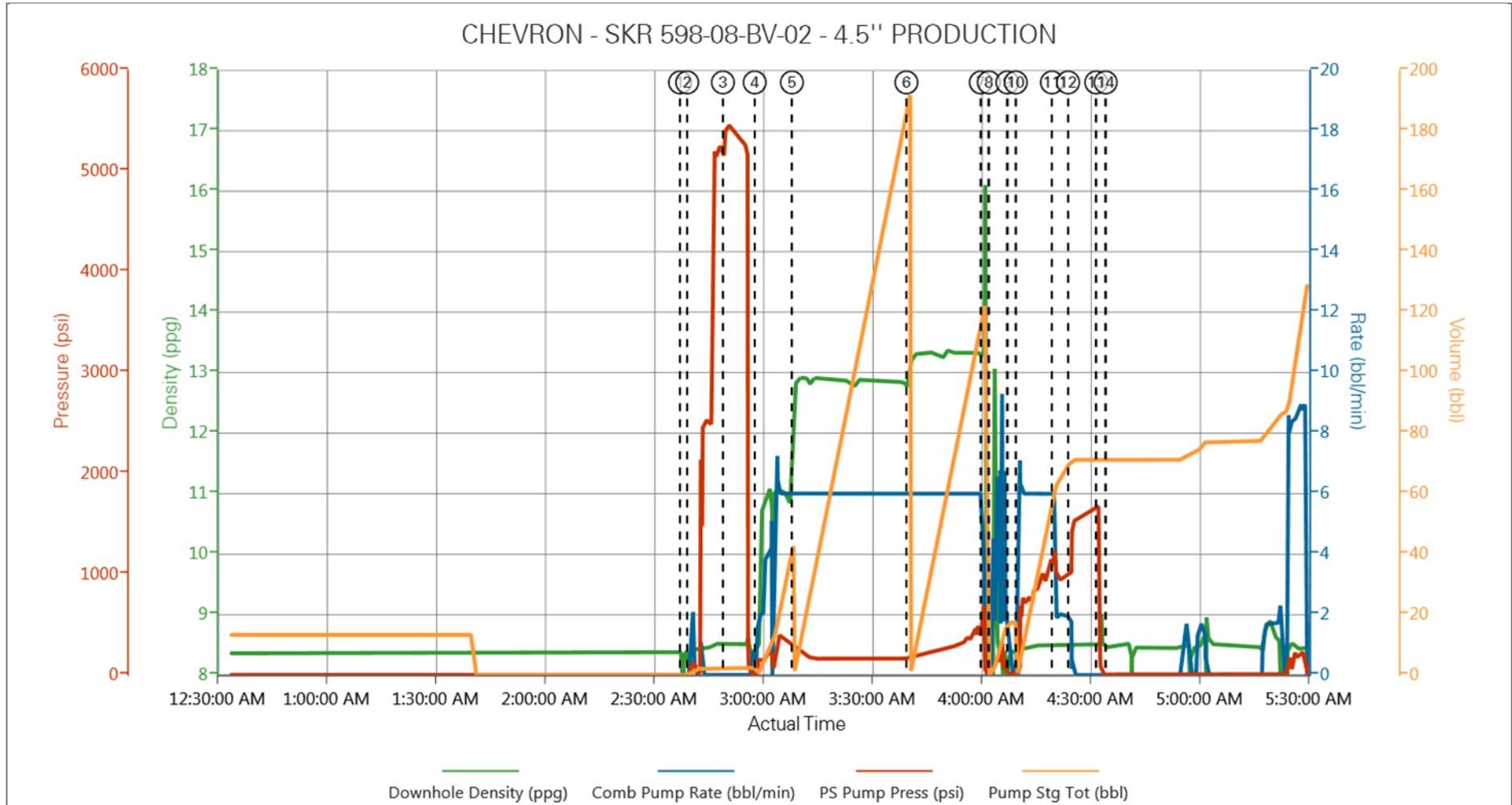


2.2 CHART WITH OUT EVENTS.png



3.0 Custom Graphs

3.1 Custom Graph



4.0 Appendix

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4.1 One-Minutes Real-Time Data Listing

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