

OXY GRAND JUNCTION EBUSINESS  
DO NOT MAIL - PO BOX 1767  
ADDISON, Texas

CC 697-16-15C

**H&P 353**

## **Post Job Summary** **Cement Surface Casing**

Prepared for: CAL WYLIE  
Date Prepared: AUGUST 3, 2011  
Version: 1

Service Supervisor: ROSS, CHARLES

Submitted by:

**HALLIBURTON**

*The Road to Excellence Starts with Safety*

<b>Sold To #:</b> 344034	<b>Ship To #:</b> 2869802	<b>Quote #:</b>	<b>Sales Order #:</b> 8322948
<b>Customer:</b> OXY GRAND JUNCTION EBUSINESS		<b>Customer Rep:</b> WYLIE, CAL	
<b>Well Name:</b> CC		<b>Well #:</b> 697-16-15C	<b>API/UWI #:</b> 05-045-20573
<b>Field:</b> GRAND VALLEY	<b>City (SAP):</b> PARACHUTE	<b>County/Parish:</b> Garfield	<b>State:</b> Colorado
<b>Contractor:</b> H&P 330		<b>Rig/Platform Name/Num:</b> H&P 330	
<b>Job Purpose:</b> Cement Surface Casing			
<b>Well Type:</b> Development Well		<b>Job Type:</b> Cement Surface Casing	
<b>Sales Person:</b> ROYSTER, JACOB		<b>Srvc Supervisor:</b> ROSS, CHARLES	<b>MBU ID Emp #:</b> 453128

**Job Personnel**

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
DOUT, JACOB J	12	430298	KUKUS, CHRISTOPHER A	12	413952	LYNGSTAD, FREDRICK D	12	403742
OTOOLE, SHAWN	12	496661	REEVES, BRANDON W	12	287883	ROSS, CHARLES Raymond	12	453128

**Equipment**

HES Unit #	Distance-1 way						
10025118	120 mile	10567589C	120 mile	10741259	120 mile	10783473	120 mile
10988964	120 mile	11259883	120 mile	6543	120 mile		

**Job Hours**

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
8/3/2011	9	7						
<b>TOTAL</b>			<i>Total is the sum of each column separately</i>					

**Job**

**Job Times**

Formation Name				Date	Time	Time Zone
<b>Formation Depth (MD)</b>	<b>Top</b>	<b>Bottom</b>		<b>Called Out</b>	02 - Aug - 2011	10:00 MST
<b>Form Type</b>	BHST			<b>On Location</b>	02 - Aug - 2011	16:55 MST
<b>Job depth MD</b>	2715. ft	<b>Job Depth TVD</b>	2715. ft	<b>Job Started</b>	02 - Aug - 2011	21:05 MST
<b>Water Depth</b>		<b>Wk Ht Above Floor</b>	5. ft	<b>Job Completed</b>	03 - Aug - 2011	03:14 MST
<b>Perforation Depth (MD)</b>	<b>From</b>	<b>To</b>		<b>Departed Loc</b>	03 - Aug - 2011	04:30 MST

**Well Data**

Description	New / Used	Max pressure psig	Size in	ID in	Weight lbf/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
14 3/4" OPEN HOLE				14.75				.	2715.		
9 5/8" SURFACE CASING	New		9.625	8.921	36.		J-55	.	2687.7		

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

Description	Qty	Qty uom	Depth	Supplier
PLUG,CMTG, TOP,9 5/8,HWE,8.16 MIN/9.06 MA	1	EA		

**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	9.625	1	
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**

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	Water Spacer		20.00	bbl	8.33	.0	.0	.0	
2	Gel Spacer		20.00	bbl	.	.0	.0	.0	
3	Water Spacer		20.00	bbl	.	.0	.0	.0	
4	Lead Cement	VERSACEM (TM) SYSTEM (452010)	1055.0	sacks	12.3	2.33	12.62		12.62
	12.62 Gal	FRESH WATER							
5	Tail Cement	VERSACEM (TM) SYSTEM (452010)	146.0	sacks	12.8	2.07	10.67		10.67
	10.67 Gal	FRESH WATER							
6	Displacement		205.00	bbl	.	.0	.0	.0	
7	Topout Cement	HALCEM (TM) SYSTEM (452986)		sacks	12.5	1.97	10.96		10.96
	10.96 Gal	FRESH WATER							
Calculated Values		Pressures		Volumes					
Displacement	204.1	Shut In: Instant		Lost Returns	757	Cement Slurry	492	Pad	
Top Of Cement	SURF	5 Min		Cement Returns	6	Actual Displacement	204.1	Treatment	
Frac Gradient		15 Min		Spacers	60	Load and Breakdown		Total Job	757
Rates									
Circulating	6	Mixing	6	Displacement	6	Avg. Job	6		
Cement Left In Pipe	Amount	47.2 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					

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<b>Customer:</b> OXY GRAND JUNCTION EBUSINESS		<b>Customer Rep:</b> WYLIE, CAL	
<b>Well Name:</b> CC	<b>Well #:</b> 697-16-15C	<b>API/UWI #:</b> 05-045-20573	
<b>Field:</b> GRAND VALLEY	<b>City (SAP):</b> PARACHUTE	<b>County/Parish:</b> Garfield	<b>State:</b> Colorado
<b>Legal Description:</b>			
<b>Lat:</b> N 0 deg. OR N 0 deg. 0 min. 0 secs.		<b>Long:</b> E 0 deg. OR E 0 deg. 0 min. 0 secs.	
<b>Contractor:</b> H&P 330		<b>Rig/Platform Name/Num:</b> H&P 330	
<b>Job Purpose:</b> Cement Surface Casing			<b>Ticket Amount:</b>
<b>Well Type:</b> Development Well		<b>Job Type:</b> Cement Surface Casing	
<b>Sales Person:</b> ROYSTER, JACOB		<b>Srvc Supervisor:</b> ROSS, CHARLES	<b>MBU ID Emp #:</b> 453128

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	08/02/2011 10:00							
Pre-Convoy Safety Meeting	08/02/2011 12:30							WITH ALL HES EE'S
Depart from Service Center or Other Site	08/02/2011 12:40							
Arrive at Location from Service Center	08/02/2011 16:55							
Assessment Of Location Safety Meeting	08/02/2011 17:20							WITH ALL HES EE'S
Pre-Rig Up Safety Meeting	08/02/2011 17:25							WITH ALL HES EE'S
Rig-Up Equipment	08/02/2011 17:30							1-F550 PICKUP, 1-ELITE PUMP TRUCK, 1-660 CEMENT BULK TRUCK, 1-CEMENT SILO, 1-CEMENT BULK STORAGE BIN, 1-HARD LINE TO RIG AND WASH UP OUT TO THE PIT FROM MANIFOLD, AND 1-HARD LINE TO THE PARASITE FROM MANIFOLD, 1-9 5/8" PLUG CONTAINER.
Pre-Job Safety Meeting	08/02/2011 20:45							WITH ALL HES EE'S AND RIG CREW
Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	

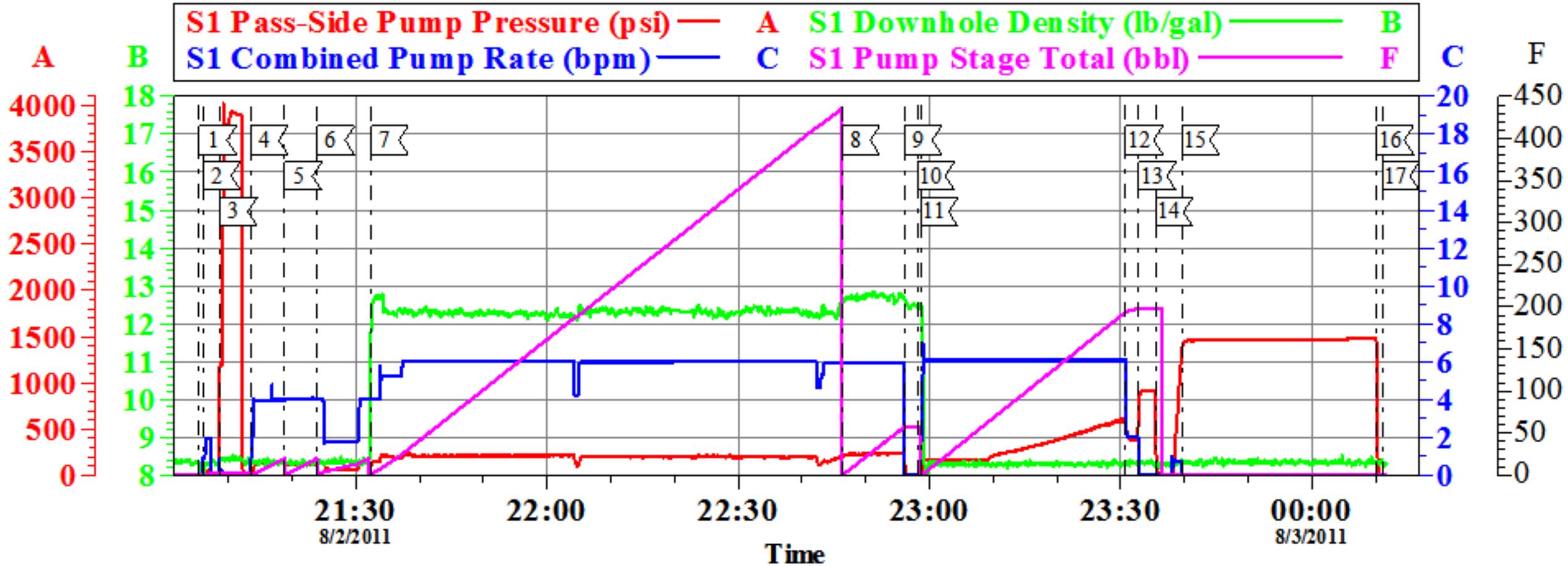
Start Job	08/02/2011 21:05							TD 2715, 9 5/8 36# CASING SET @ 2687.7, SJ 47.2, FC 2640.5 MW# 9.1, RIG CIRCULATED 50 MIN PRIOR TO CEMENT JOB, HEAD AND CASING CHAINED DOWN BECAUSE OF PSI TO LIFT
Pump Water	08/02/2011 21:06		2	2			56.0	FILL LINES, FRESH WATER
Test Lines	08/02/2011 21:08							TEST TO 4000 PSI
Pump Spacer 1	08/02/2011 21:12		4	20			140.0	FRESH WATER
Pump Spacer 2	08/02/2011 21:19		4	20			110.0	GEL SPACER
Pump Spacer 1	08/02/2011 21:23		4	20			140.0	FRESH WATER
Pump Lead Cement	08/02/2011 21:31		6	437.8			230.0	1055 SKS OF VERSACEM PUMPED @ 12.3 PPG, YIELD 2.33, WATER 12.62
Pump Tail Cement	08/02/2011 22:46		6	53.8			250.0	146 SKS OF VERSACEM PUMPED @ 12.8 PPG, YIELD 2.07, WATER 10.67
Shutdown	08/02/2011 22:56							
Drop Plug	08/02/2011 22:59							TOP PLUG, PLUG WENT
Pump Displacement	08/02/2011 22:59		6	204.1			620.0	FRESH WATER
Slow Rate	08/02/2011 23:29		2	194			400.0	RATE SLOWED 10 BBL PRIOR TO CALCULATED DISPLACEMENT
Bump Plug	08/02/2011 23:33		2	204.1			440.0	PLUG LANDED. PRESSURED UP TO 940 PSI.
Check Floats	08/02/2011 23:35							FLOATS HELD
Pressure Up Well	08/02/2011 23:38						1500. 0	30 MIN. PRESSURED UP TO PSI
Release Casing Pressure	08/03/2011 00:10							
Pump Water	08/03/2011 00:30		2	10			350.0	SUGAR WATER TO CLEAN PARASITE STRING
Pre-Rig Up Safety Meeting	08/03/2011 01:15							

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Rig-Up Equipment	08/03/2011 01:20							TOP OUT. 1-F550 PICKUP, 1-ELITE PUMP TRUCK, 1-660 CEMENT BULK TRUCK, 1-HARD LINE TO 1" TOP OUT SWAGE AND 1-HARD LINE TO THE PIT FROM MANIFOLD. CLEAN LINES IN CELLAR. WASH UP IN THE PIT.
Pre-Job Safety Meeting	08/03/2011 02:00							
Start Job	08/03/2011 02:09							
Pump Cement	08/03/2011 02:11		2	8				22.8 SKS OF HALCEM PUMPED @ 12.5 PPG, 1.97 YIELD, 10.96 WATER.
Shutdown	08/03/2011 02:12							WAITING TO SEE IF CEMENT FALLS BACK
Resume	08/03/2011 02:17							
Shutdown	08/03/2011 02:19							WAITING TO SEE IF CEMENT FALLS BACK
Resume	08/03/2011 02:23							
Shutdown	08/03/2011 02:25							6 BBLS CEMENT PUMPED TO SURFACE = 17 SKS
Clean Lines	08/03/2011 02:28							
Comment	08/03/2011 02:35							WASH UP TRUCK. WAITING TO SEE IF CEMENT FALLS BACK.
End Job	08/03/2011 03:14							NO RETURNS THROUGHOUT INITIAL SURFACE JOB, NO MOVEMENT OF PIPE THROUGHOUT JOB, NO BBLS OF CEMENT CIRCULATED TO THE PIT DURING INITIAL SURFACE JOB. 6 BBLS OF CEMENT CIRCULATED TO THE PIT ON TOP OUT.

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Post-Job Safety Meeting (Pre Rig-Down)	08/03/2011 03:20							WITH ALL HES EE'S
Rig-Down Equipment	08/03/2011 03:25							
Pre-Convoy Safety Meeting	08/03/2011 04:25							WITH ALL HES EE'S
Depart Location for Service Center or Other Site	08/03/2011 04:30							THANKS FOR USING GRAND JUNCTION HALLIBURTON CEMENT DEPARTMENT, CHUCK ROSS AND CREW

# OXY

## CEMENT 9 5/8" SURFACE CASING CC 697-16-15C

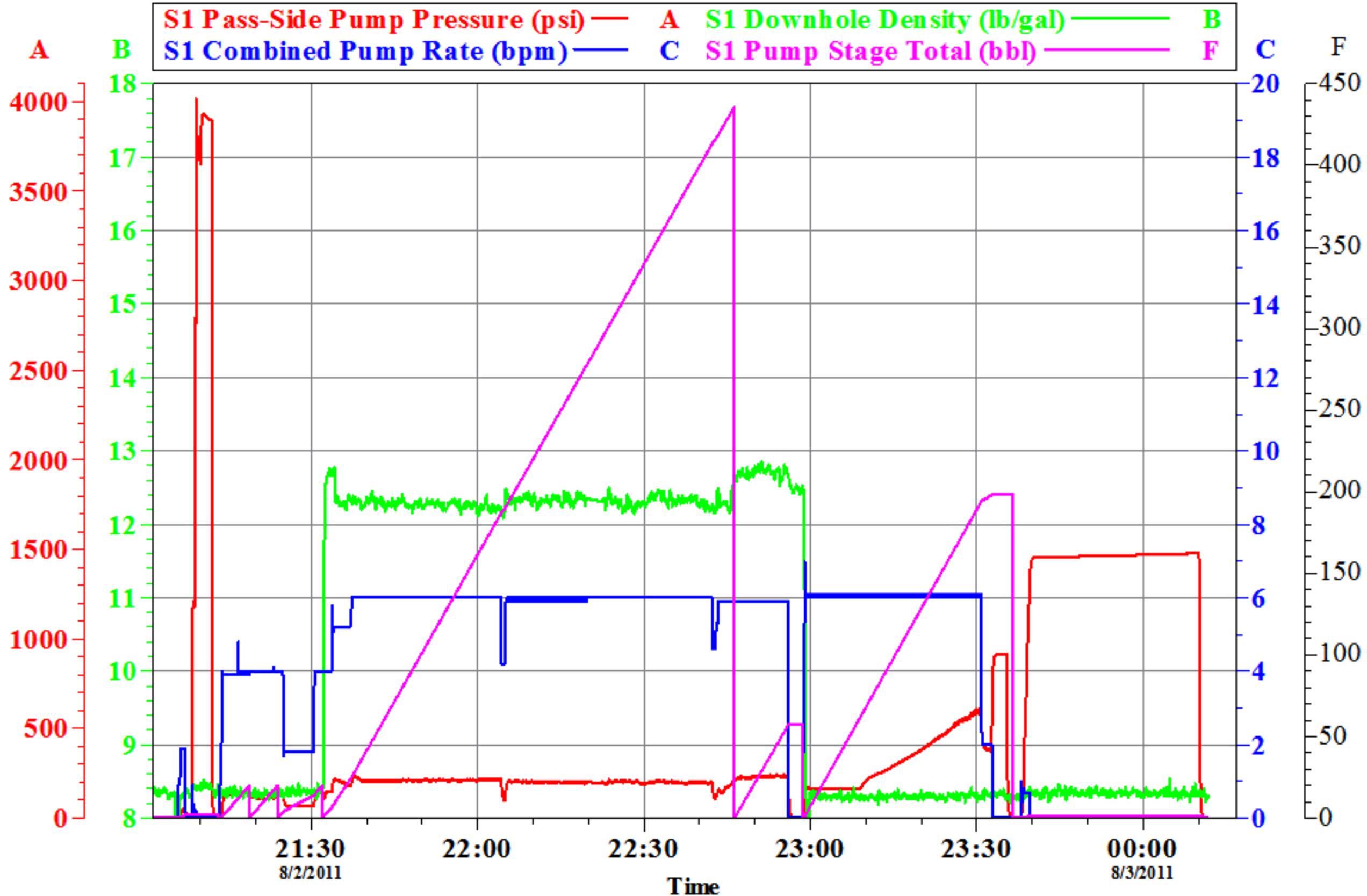


		Local Event Log					
		Maximum	SPPP	Maximum	SPPP		
1	START JOB	8/2/2011 21:05:26	-5.000	2	FILL LINES	8/2/2011 21:06:03	724.9
3	TEST LINES	8/2/2011 21:08:39	4020	4	PUMP H2O SPACER	8/2/2011 21:13:31	141.0
5	PUMP GEL H2O SPACER	8/2/2011 21:18:49	140.0	6	PUMP H2O SPACER	8/2/2011 21:23:56	148.0
7	PUMP LEAD CEMENT	8/2/2011 21:32:24	237.0	8	PUMP TAIL CEMENT	8/2/2011 22:46:20	243.0
9	SHUT DOWN	8/2/2011 22:56:04	229.0	10	DROP TOP PLUG	8/2/2011 22:58:07	4.207
11	PUMP DISPLACEMENT	8/2/2011 22:58:38	617.0	12	SLOW RATE	8/2/2011 23:30:49	747.6
13	LAND PLUG	8/2/2011 23:32:52	917.0	14	CHECK FLOATS	8/2/2011 23:35:28	1363
15	PRESSURE TEST THE CASING	8/2/2011 23:39:38	1481	16	RELEASE CASING PRESSURE	8/3/2011 00:10:10	1424
17	END JOB	8/3/2011 00:11:04	-2.000				

Customer: OXY	Job Date: 02-Aug-2011	Sales Order #: 8322948
Well Description: CC 697-16-15C	Job type: SURFACE	ADC Used: YES
Customer Rep: CAL WYLIE	Service Supervisor: CHUCK ROSS	Operator/ Pump: JACOB DOUT

# OXY

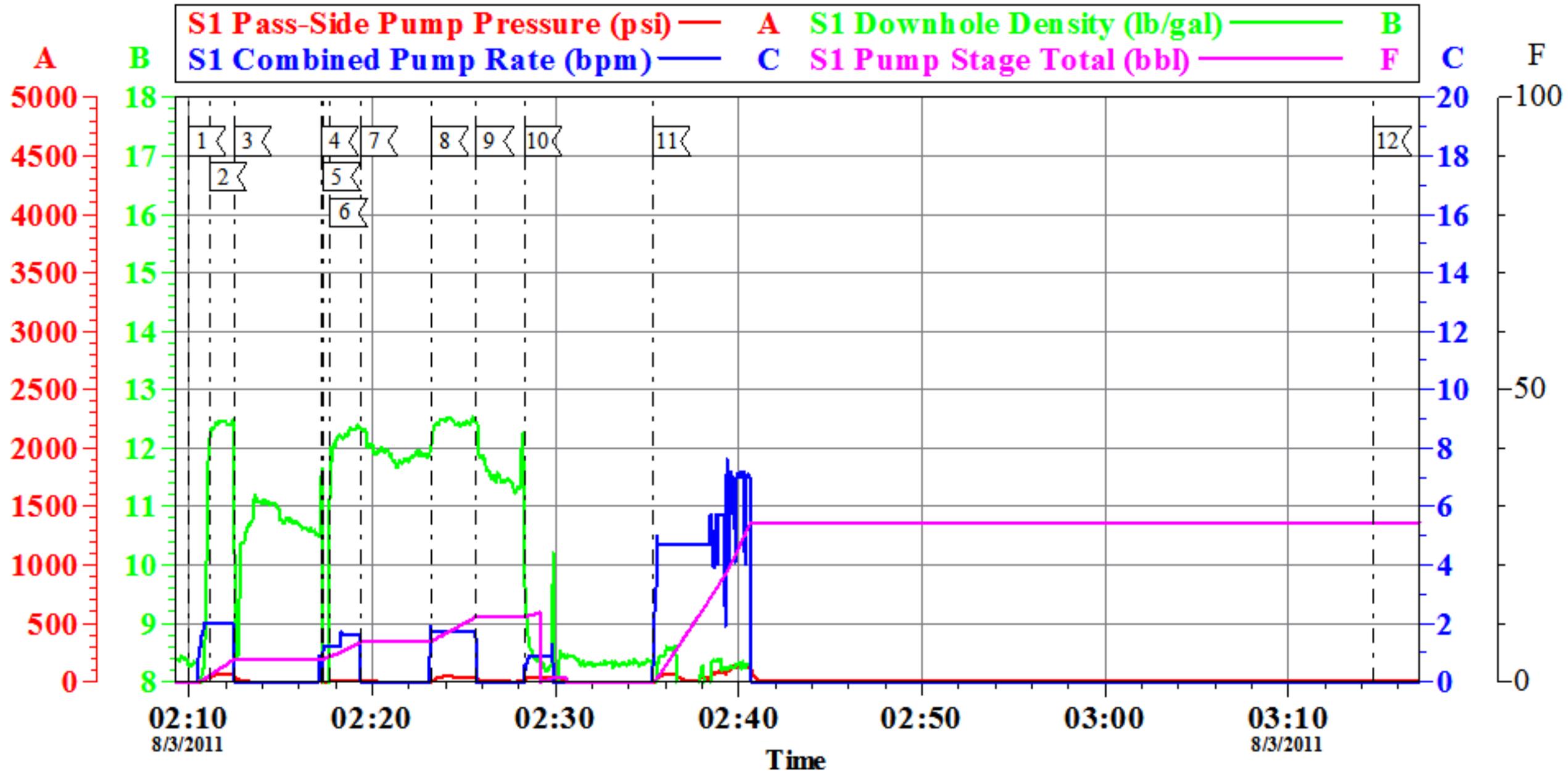
## CEMENT 9 5/8" SURFACE CASING CC 697-16-15C



Customer: OXY	Job Date: 02-Aug-2011	Sales Order #: 8322948
Well Description: CC 697-16-15C	Job type: SURFACE	ADC Used: YES
Customer Rep: CAL WYLIE	Service Supervisor: CHUCK ROSS	Operator/ Pump: JACOB DOUT

# OXY

## TOP OUT 9 5/8" SURFACE CASING CC 697-16-15C

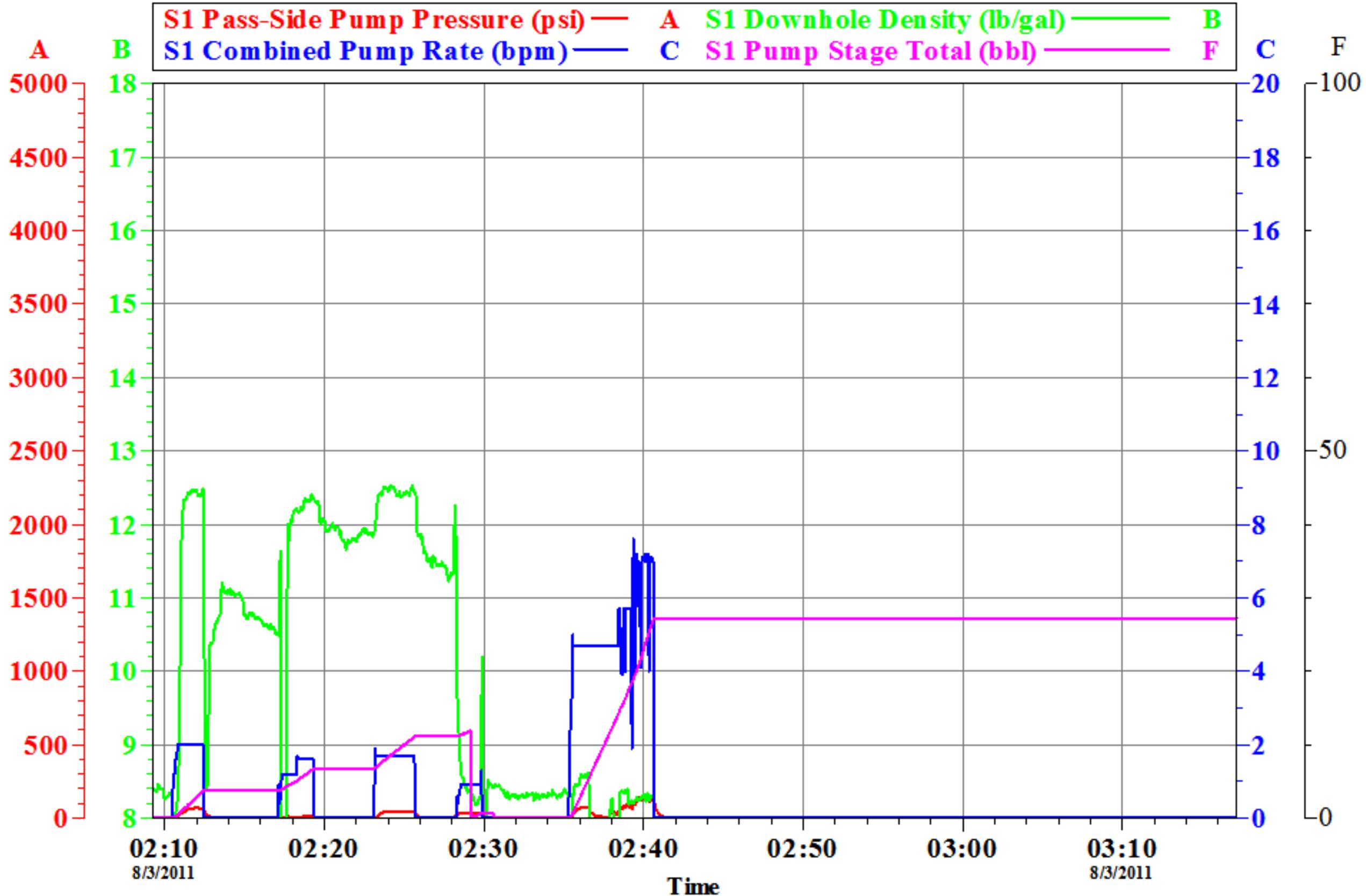


Local Event Log											
	Maximum	SPPP		Maximum	SPPP		Maximum	SPPP			
1	START JOB	02:09:59	38.50	2	PUMP TOP OUT	02:11:08	70.00	3	SHUT DOWN	02:12:28	61.00
4	RESUME	02:17:13	0.000	5	LOST PRIME	02:17:20	12.00	6	RESUME	02:17:43	12.00
7	SHUT DOWN	02:19:21	12.00	8	RESUME	02:23:15	46.00	9	SHUT DOWN	02:25:41	37.00
10	CLEAN LINES	02:28:19	39.00	11	WASH UP	02:35:20	148.0	12	END JOB	03:14:41	3.000

Customer: OXY	Job Date: 03-Aug-2011	Sales Order #: 8322948
Well Description: CC 697-16-15C	Job type: TOP OUT	ADC Used: YES
Customer Rep: CAL WYLIE	Service Supervisor: CHUCK ROSS	Operator/ Pump: JACOB DOUT

# OXY

## TOP OUT 9 5/8" SURFACE CASING CC 697-16-15C



Customer: OXY  
Well Description: CC 697-16-15C  
Customer Rep: CAL WYLIE

Job Date: 03-Aug-2011  
Job type: TOP OUT  
Service Supervisor: CHUCK ROSS

Sales Order #: 8322948  
ADC Used: YES  
Operator/ Pump: JACOB DOUT

Opti Cem v6.4.10  
03-Aug-11 03:39

<b>Sales Order #:</b> 8322948	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 8/3/2011
<b>Customer:</b> OXY GRAND JUNCTION EBUSINESS		<b>Job Type (BOM):</b> CMT SURFACE CASING BOM
<b>Customer Representative:</b> CAL WYLIE		<b>API / UWI: (leave blank if unknown)</b> 05-045-20573
<b>Well Name:</b> CC		<b>Well Number:</b> 697-16-15C
<b>Well Type:</b> Development Well	<b>Well Country:</b> United States of America	
<b>H2S Present:</b>	<b>Well State:</b> Colorado	<b>Well County:</b> Garfield

Dear Customer,

We hope that you were satisfied with the service quality of this job performed by Halliburton. It is the aim of our management and service personnel to deliver equipment and service of a standard unmatched in the service sector of the energy industry.

Please take the time to let us know if our performance met with your satisfaction. Please be as critical as possible to ensure we constantly improve our service. Your comments are of great value to us and are intended for the exclusive use of Halliburton.

### CUSTOMER SATISFACTION SURVEY

CATEGORY	CUSTOMER SATISFACTION RESPONSE	
Survey Conducted Date	The date the survey was conducted	8/3/2011
Survey Interviewer	The survey interviewer is the person who initiated the survey.	CHARLES ROSS (HB20648)
Customer Participation	Did the customer participate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	CAL WYLIE
HSE	Was our HSE performance satisfactory? Circle Y or N	Yes
Equipment	Were you satisfied with our Equipment? Circle Y or N	Yes
Personnel	Were you satisfied with our people? Circle Y or N	Yes
Customer Comment	Customer's Comment	EXCELLENT WORK!
Job DVA	Did we provide job DVA above our normal service today? Circle Y or N	No
Time	Please enter hours in decimal format to nearest quarter hour.	
Other	Enter short text for other efficiencies gained.	
Customer Initials	Customer's Initials	
Please provide details	Please describe how the job efficiencies were gained.	

<b>CUSTOMER SIGNATURE</b>
---------------------------

<b>Sales Order #:</b> 8322948	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 8/3/2011
<b>Customer:</b> OXY GRAND JUNCTION EBUSINESS		<b>Job Type (BOM):</b> CMT SURFACE CASING BOM
<b>Customer Representative:</b> CAL WYLIE		<b>API / UWI: (leave blank if unknown)</b> 05-045-20573
<b>Well Name:</b> CC		<b>Well Number:</b> 697-16-15C
<b>Well Type:</b> Development Well	<b>Well Country:</b> United States of America	
<b>H2S Present:</b>	<b>Well State:</b> Colorado	<b>Well County:</b> Garfield

### KEY PERFORMANCE INDICATORS

General	
<b>Survey Conducted Date</b>	8/3/2011
The date the survey was conducted	

Cementing KPI Survey	
<b>Type of Job</b>	0
Select the type of job. (Cementing or Non-Cementing)	
<b>Select the Maximum Deviation range for this Job</b>	Deviated
What is the highest deviation for the job you just completed? This may not be the maximum well deviation.	
<b>Total Operating Time (hours)</b>	10.92
Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.	
<b>HSE Incident, Accident, Injury</b>	No
HSE Incident, Accident, Injury. This should be recordable incidents only.	
<b>Was the job purpose achieved?</b>	Yes
Was the job delivered correctly as per customer agreed design?	
<b>Operating Hours (Pumping Hours)</b>	6.15
Total number of hours pumping fluid on this job. Enter in decimal format.	
<b>Customer Non-Productive Rig Time (hrs)</b>	0
Lost time due to Halliburton in the start, execution, or completion of an ordered service or product, or delays in a follow-on service. Enter in decimal format. 0 if none.	
<b>Type of Rig Classification Job Was Performed</b>	Drilling Rig (Portable)
Type Of Rig (classification) Job Was Performed On	
<b>Number Of JSAs Performed</b>	6
Number Of Jsas Performed	
<b>Number of Unplanned Shutdowns</b>	0
Unplanned shutdown is when injection stops for any period of time.	
<b>Was this a Primary Cement Job (Yes / No)</b>	Yes

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<b>Customer Representative:</b> CAL WYLIE		<b>API / UWI: (leave blank if unknown)</b> 05-045-20573
<b>Well Name:</b> CC		<b>Well Number:</b> 697-16-15C
<b>Well Type:</b> Development Well	<b>Well Country:</b> United States of America	
<b>H2S Present:</b>	<b>Well State:</b> Colorado	<b>Well County:</b> Garfield

Primary Cement Job= Casing job, Liner job, or Tie-back job.	
<b>Did We Run Wiper Plugs?</b> Did We Run Top And Bottom Casing Wiper Plugs?	Top
<b>Mixing Density of Job Stayed in Designed Density Range (0-100%)</b> Density Range defined as +/- .20 ppg. Calculation: Total BBLs cement mixed at designed density divided by total BBLs of cement multiplied by 100	98
<b>Was Automated Density Control Used?</b> Was Automated Density Control (ADC) Used ?	Yes
<b>Pump Rate (percent) of Job Stayed At Designed Pump Rate</b> Pump Rate range defined as +/- 1bbl/min. Calculation: Total BBLs of fluid pumped at the designed rate divided by Total BBLs of fluid pumped, multiplied by 100	98
<b>Nbr of Remedial Sqz Jobs Rqd - Competition</b> Number Of Remedial Squeeze Jobs Required After Primary Job Performed By Competition	0
<b>Nbr of Remedial Plug Jobs Rqd - HES</b> Number Of Remedial Plug Jobs Needed After Primary Plug Pumped By HES	0
<b>Nbr of Remedial Sqz Jobs Rqd - HES</b> Number Of Remedial Squeeze Jobs Required After Primary Job Performed By HES	0