
OXY GRAND JUNCTION EBUSINESS

**CC 697-04-84A
GRANDVALLEY
Garfield County , Colorado**

**Cement Surface Casing
31-Mar-2012**

Post Job Summary

The Road to Excellence Starts with Safety

Sold To #: 344034		Ship To #: 2918575		Quote #:		Sales Order #: 9340319	
Customer: OXY GRAND JUNCTION EBUSINESS				Customer Rep: Benevides, Victor			
Well Name: CC			Well #: 697-04-84A			API/UWI #: 05-045-20715	
Field: GRANDVALLEY		City (SAP): PArachute		County/Parish: Garfield		State: Colorado	
Lat: N 39.549 deg. OR N 39 deg. 32 min. 55.716 secs.				Long: W 108.23 deg. OR W -109 deg. 46 min. 11.532 secs.			
Contractor: OXY			Rig/Platform Name/Num: H&P 330				
Job Purpose: Cement Surface Casing							
Well Type: Development Well			Job Type: Cement Surface Casing				
Sales Person: HIMES, JEFFREY			Srvc Supervisor: YOUNG, JEREMY			MBU ID Emp #: 418013	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BURKE, BRENDAN Patrick	16	487782	GOWEN, WESLEY M	16	496205	JENSEN, SHANE Lynn	5.5	441759
VANALSTYNE, TROY L	16	420256	YOUNG, JEREMY R	16	418013			

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10533645	120 mile	10784080	120 mile	10804579	120 mile	10872429	120 mile
11139328	120 mile	11259881	120 mile	11808847	120 mile	4904	120 mile
6374L	120 mile						

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
03/31/2012	16	8						

TOTAL Total is the sum of each column separately

Job

Formation Name	Top	Bottom	Called Out	Date	Time	Time Zone
Formation Depth (MD)			On Location	31 - Mar - 2012	06:30	MST
Form Type		BHST	Job Started	31 - Mar - 2012	11:38	MST
Job depth MD	2740.3 ft	Job Depth TVD	Job Completed	31 - Mar - 2012	21:00	MST
Water Depth		Wk Ht Above Floor	Departed Loc	31 - Mar - 2012	22:30	MST
Perforation Depth (MD)	From	To				

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
14 3/4" OPEN HOLE				14.75				.	2791.		
9 5/8" SURFACE CASING	Unknown		9.625	8.921	36.		J-55	.	2740.3		

Sales/Rental/3rd Party (HES)

Description	Qty	Qty uom	Depth	Supplier
R/A DENSOMETER W/CHART RECORDER,/JOB,ZI	1	JOB		
PORT. DATA ACQUIS. W/OPTICEM RT W/HES	1	EA		
ADC (AUTO DENSITY CTRL) SYS, /JOB,ZI	1	JOB		
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	9.625	1	HES
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar					Retainer					SSR plug set			
Insert Float										Plug Container	9.625	1	HES
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 ³ /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	Fresh Water Spacer	FRESH WATER	10.00	bbl	8.33	.0	.0	2	
2	Gel Water Spacer	GEL WATER	20.00	bbl	8.34	.0	.0	4	
0.25 gal/bbl		LGC-36 UC, BULK (101582749)							
3	Fresh Water Spacer	FRESH WATER	10.00	bbl	8.33	.0	.0	4	
4	Lead Cement	HALCEM (TM) SYSTEM (452986)	1190.0	sacks	12.3	2.15	11.83	6	11.83
11.83 Gal		FRESH WATER							
5	Tail Cement	VERSACEM (TM) SYSTEM (452010)	170.0	sacks	12.8	2.07	10.67	6	10.67
10.67 Gal		FRESH WATER							
6	Fresh Water Displacement	FRESH WATER	208.10	bbl	8.34	.0	.0	8	
7	Topout Cement	HALCEM™ SYSTEM (452986)	314	sacks	12.5	1.97	10.96	3	

Calculated Values		Pressures		Volumes					
Displacement	208.1	Shut In: Instant		Lost Returns	YES	Cement Slurry	628.6	Pad	
Top Of Cement	SURFACE	5 Min		Cement Returns	1	Actual Displacement	208.1	Treatment	
Frac Gradient		15 Min		Spacers	40	Load and Breakdown		Total Job	876.7

Rates									
Circulating		Mixing		6	Displacement		8	Avg. Job	7
Cement Left In Pipe	Amount	48.7 ft	Reason	Shoe Joint					
Frac Ring # 1 @	ID		Frac ring # 2 @	ID		Frac Ring # 3 @	ID		Frac Ring # 4 @

The Information Stated Herein Is Correct	Customer Representative Signature
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The Road to Excellence Starts with Safety

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Field: GRANDVALLEY		City (SAP): PArachute		County/Parish: Garfield		State: Colorado	
Legal Description:							
Lat: N 39.549 deg. OR N 39 deg. 32 min. 55.716 secs.				Long: W 108.23 deg. OR W -109 deg. 46 min. 11.532 secs.			
Contractor: OXY			Rig/Platform Name/Num: H&P 330				
Job Purpose: Cement Surface Casing						Ticket Amount:	
Well Type: Development Well			Job Type: Cement Surface Casing				
Sales Person: HIMES, JEFFREY			Srvc Supervisor: YOUNG, JEREMY			MBU ID Emp #: 418013	

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	03/31/2012 00:20							
Pre-Convoy Safety Meeting	03/31/2012 03:50							WITH ALL HES PERSONNEL
Crew Leave Yard	03/31/2012 04:00							
Arrive At Loc	03/31/2012 06:30							RIG WAS RUNNING CASING UPON HES ARRIVAL
Assessment Of Location Safety Meeting	03/31/2012 10:00							WITH ALL HES PERSONNEL
Other	03/31/2012 10:10							SPOT EQUIPMENT
Pre-Rig Up Safety Meeting	03/31/2012 10:20							WITH ALL HES PERSONNEL
Rig-Up Equipment	03/31/2012 10:30							
Pre-Job Safety Meeting	03/31/2012 11:20							WITH ALL PERSONNEL ON LOCATION
Start Job	03/31/2012 11:38							TD 2791 FT, TP 2740.3 FT, SHOE 48.7 FT, HOLE 14 3/4 IN, MUD WT 9.3 PPG, CSG 9 5/8 IN 36 LB/FT J-55
Other	03/31/2012 11:39		2	2			15.0	FILL LINES WITH FRESH WATER
Test Lines	03/31/2012 11:41							TEST LINES TO 3400 PSI. PRESSURE HOLDING
Pump Spacer 1	03/31/2012 11:47		2	10			25.0	FRESH WATER
Pump Spacer 2	03/31/2012 11:55		4	20			70.0	GEL WATER
Pump Spacer 1	03/31/2012 12:01		4	10			110.0	FRESH WATER

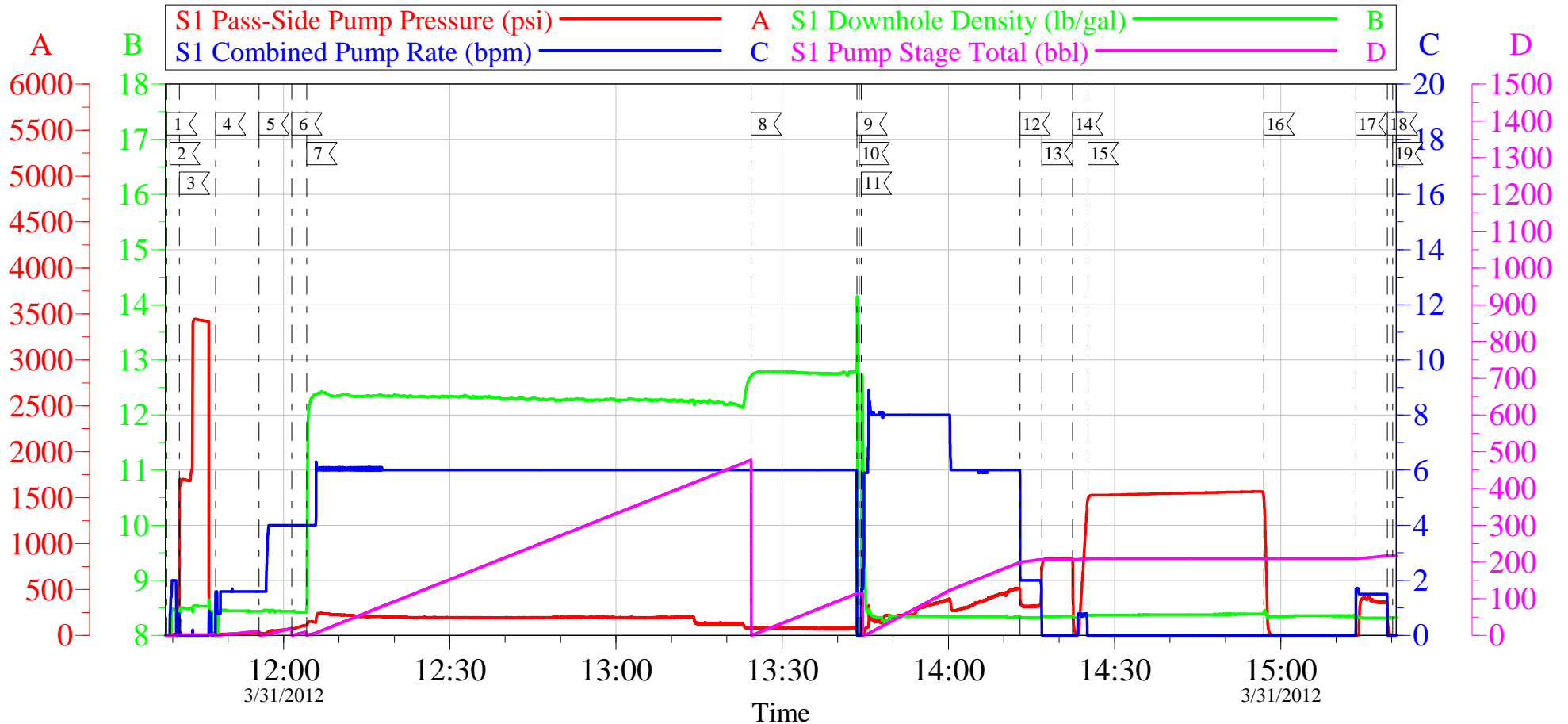
Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Pump Lead Cement	03/31/2012 12:04		6	455.7			200.0	1190 SKS AT 12.3 PPG, 2.15 FT3/SK, 11.83 GAL/SK. 7 BOXES OF TUFF FIBER IN LEAD CEMENT
Pump Tail Cement	03/31/2012 13:24		6	62.7			80.0	170 SKS AT 12.8 PPG, 2.07 FT3/SK, 10.67 GAL/SK
Shutdown	03/31/2012 13:43							
Drop Top Plug	03/31/2012 13:43							PLUG LAUNCHED
Pump Displacement	03/31/2012 13:44		8	198.1			500.0	FRESH WATER
Slow Rate	03/31/2012 14:12		2	10			350.0	SLOW RATE 10 BBLS PRIOR TO CALCULATED DISPLACEMENT
Bump Plug	03/31/2012 14:16		2		208.1		840.0	PLUG BUMPED
Check Floats	03/31/2012 14:22							FLOATS HOLDING. RETURNED 0.75 BBL H2O TO PUMP
Pressure Test	03/31/2012 14:25						1500. 0	PRESSURE TEST CASING TO 1500 PSI FOR 30 MIN AS PER COMPANY REP
Release Casing Pressure	03/31/2012 14:56							
Pump Water	03/31/2012 15:13		1.5	10		420.0		PUMP SUGAR WATER DOWN PARASITE STRING
Shutdown	03/31/2012 15:19							
Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	

End Job	03/31/2012 15:20							JOB WAS PUMPED OFFLINE THROUGH PLUG CONTAINER WITH QUICK LATCH. PIPE WAS STATIC DURING JOB. NO CIRCULATION TO START JOB. CIRCULATION CAME AT 50 BBL LEAD CMT AWAY AND LOST CIRCULATION AGAIN AT 140 BBL LEAD CMT AWAY. HES RETURNED NO CEMENT TO SURFACE.
Start Job	03/31/2012 16:21							TOPOUT #1
Pump Water	03/31/2012 16:22		1	1		5.0		PUMP WATER AHEAD TO ENSURE LINES ARE CLEAR
Shutdown	03/31/2012 16:23							SHUTDOWN TO MIX UP CEMENT
Pump Cement	03/31/2012 16:28		3	55.1		100.0		157 SKS AT 12.5 PPG, 1.97 FT3/SK, 10.96 GAL/SK
Pump Water	03/31/2012 16:48		3	1		70.0		PUMP WATER BEHIND TO CLEAR LINES
Shutdown	03/31/2012 16:48							
End Job	03/31/2012 16:49							HES RETURNED NO CEMENT TO SURFACE
Start Job	03/31/2012 18:52							TOPOUT #2
Pump Water	03/31/2012 18:53		1	1		5.0		PUMP WATER AHEAD TO ENSURE LINES ARE CLEAR
Shutdown	03/31/2012 18:54							SHUTDOWN TO MIX UP CEMENT
Pump Cement	03/31/2012 18:59		3	55.1		90.0		157 SKS AT 12.5 PPG, 1.97 FT3/SK, 10.96 GAL/SK
Shutdown	03/31/2012 19:39							HES HESITATED CEMENT WHEN RETURNS CAME TO SURFACE 4 TIMES TO SEE IF CEMENT WOULD FALL.
End Job	03/31/2012 19:40							CREW HELD ON LOCATION TO SEE IF CEMENT WOULD FALL BACK.

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Comment	03/31/2012 21:00							CREW RELEASED FROM LOCATION AT 21:00 AFTER CEMENT DID NOT FALL BACK. HES RETURNED 1 BBL CMT TO SURFACE
Pre-Rig Down Safety Meeting	03/31/2012 21:15							WITH ALL HES PERSONNEL
Rig-Down Equipment	03/31/2012 21:20							
Pre-Convoy Safety Meeting	03/31/2012 22:20							WITH ALL HES PERSONNEL
Crew Leave Location	03/31/2012 22:30							
Comment	03/31/2012 22:31							THANK YOU FOR USING HALLIBURTON CEMENT DEPARTMENT. JEREMY YOUNG AND CREW.

OXY - CC 697-04-84A

9 5/8 SURFACE



Local Event Log

1 START JOB	11:38:54	2 FILL LINES	11:39:28	3 TEST LINES	11:41:11
4 PUMP H2O SPACER 1	11:47:43	5 PUMP GEL SPACER	11:55:33	6 PUMP H2O SPACER 2	12:01:29
7 PUMP LEAD CEMENT	12:04:10	8 PUMP TAIL CEMENT	13:24:23	9 SHUTDOWN	13:43:29
10 DROP TOP PLUG	13:43:53	11 PUMP DISPLACEMENT	13:44:16	12 SLOW RATE	14:12:55
13 BUMP PLUG	14:16:51	14 CHECK FLOATS	14:22:25	15 PRESSURE TEST CASING	14:25:12
16 RELEASE PRESSURE	14:56:57	17 PUMP DOWN PARASITE STRING	15:13:32	18 SHUTDOWN	15:19:13
19 END JOB	15:20:11				

Customer: OXY
Well Description: CC 697-04-84A
Company Rep: VICTOR BENEVIDES

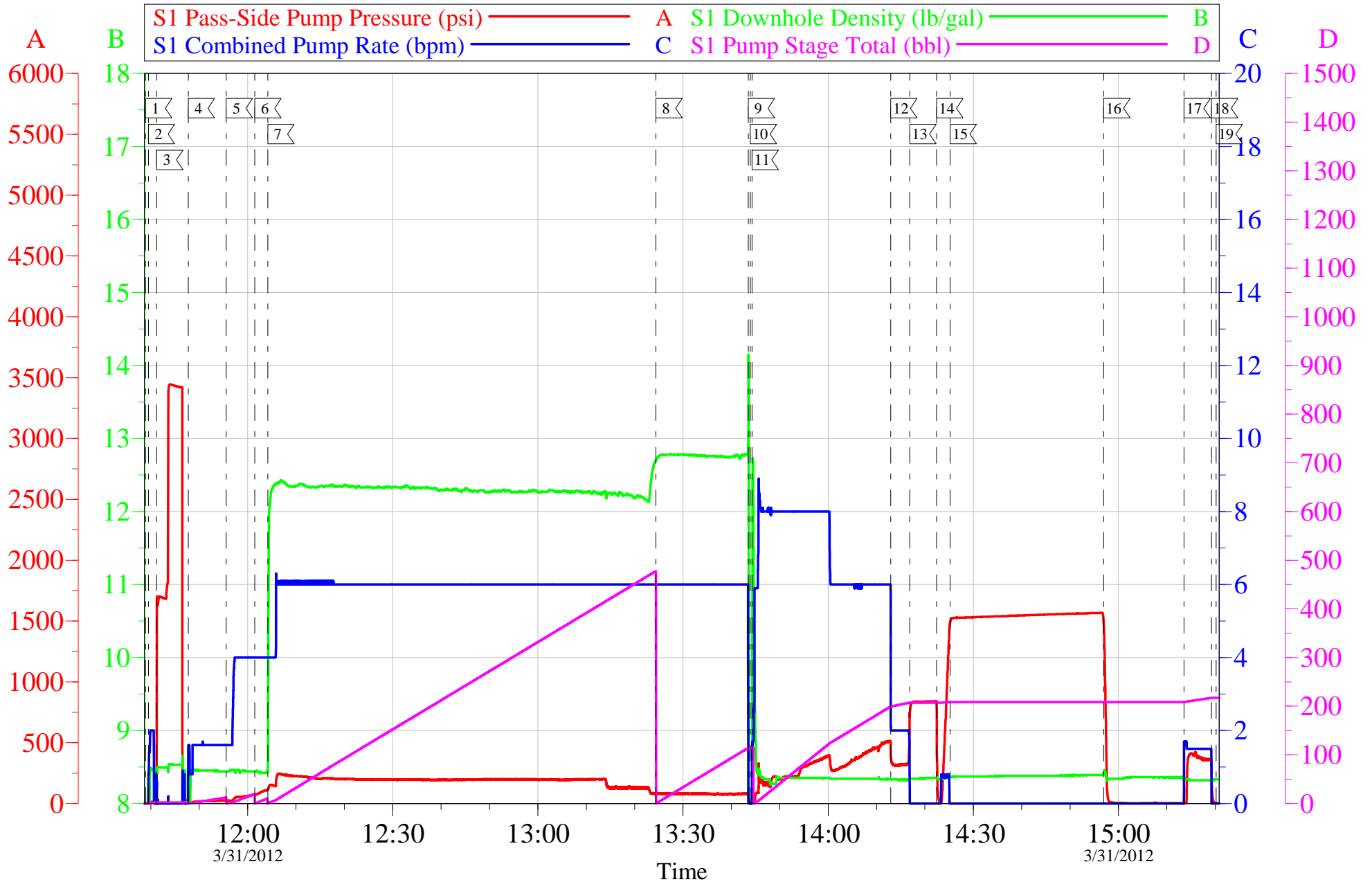
Job Date: 31-Mar-2012
Job Type: SURFACE
Cement Supervisor: JEREMY YOUNG

Sales Order #: 9340319
ADC Used: YES
Elite #7: BRENDAN BURKE

OptiCem v6.4.10
31-Mar-12 15:25

OXY - CC 697-04-84A

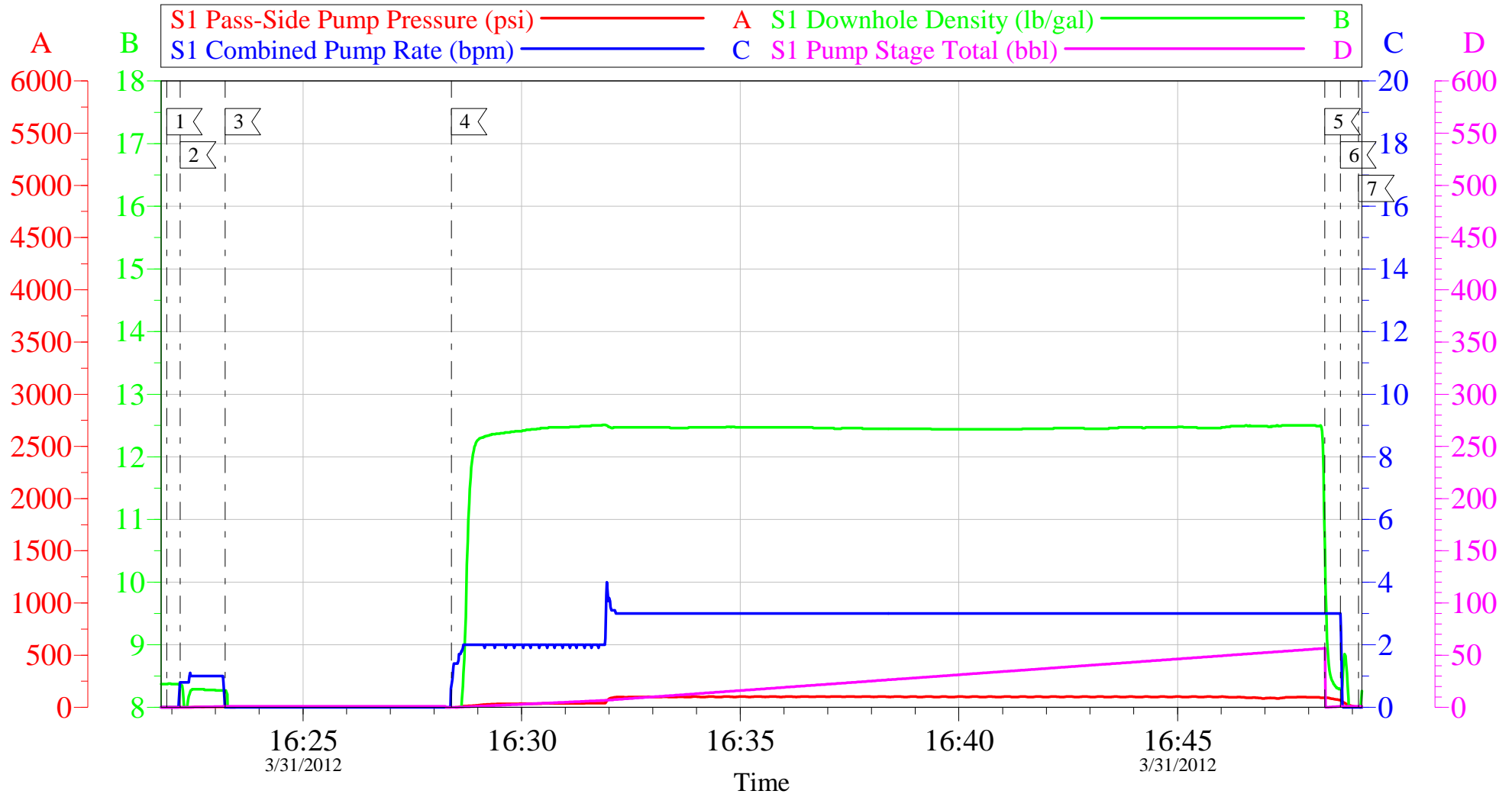
9 5/8 SURFACE



Customer: OXY	Job Date: 31-Mar-2012	Sales Order #: 9340319
Well Description: CC 697-04-84A	Job Type: SURFACE	ADC Used: YES
Company Rep: VICTOR BENEVIDES	Cement Supervisor: JEREMY YOUNG	Elite #7: BRENDAN BURKE

OXY - CC 697-04-84A

TOPOUT #1



Local Event Log

1 START JOB	16:21:53	2 PUMP WATER AHEAD	16:22:12	3 SHUTDOWN	16:23:13
4 PUMP CEMENT	16:28:24	5 PUMP WATER BEHIND	16:48:22	6 SHUTDOWN	16:48:44
7 END JOB	16:49:08				

Customer: OXY
Well Description: CC 697-04-84A
Company Rep: VICTOR BENEVIDES

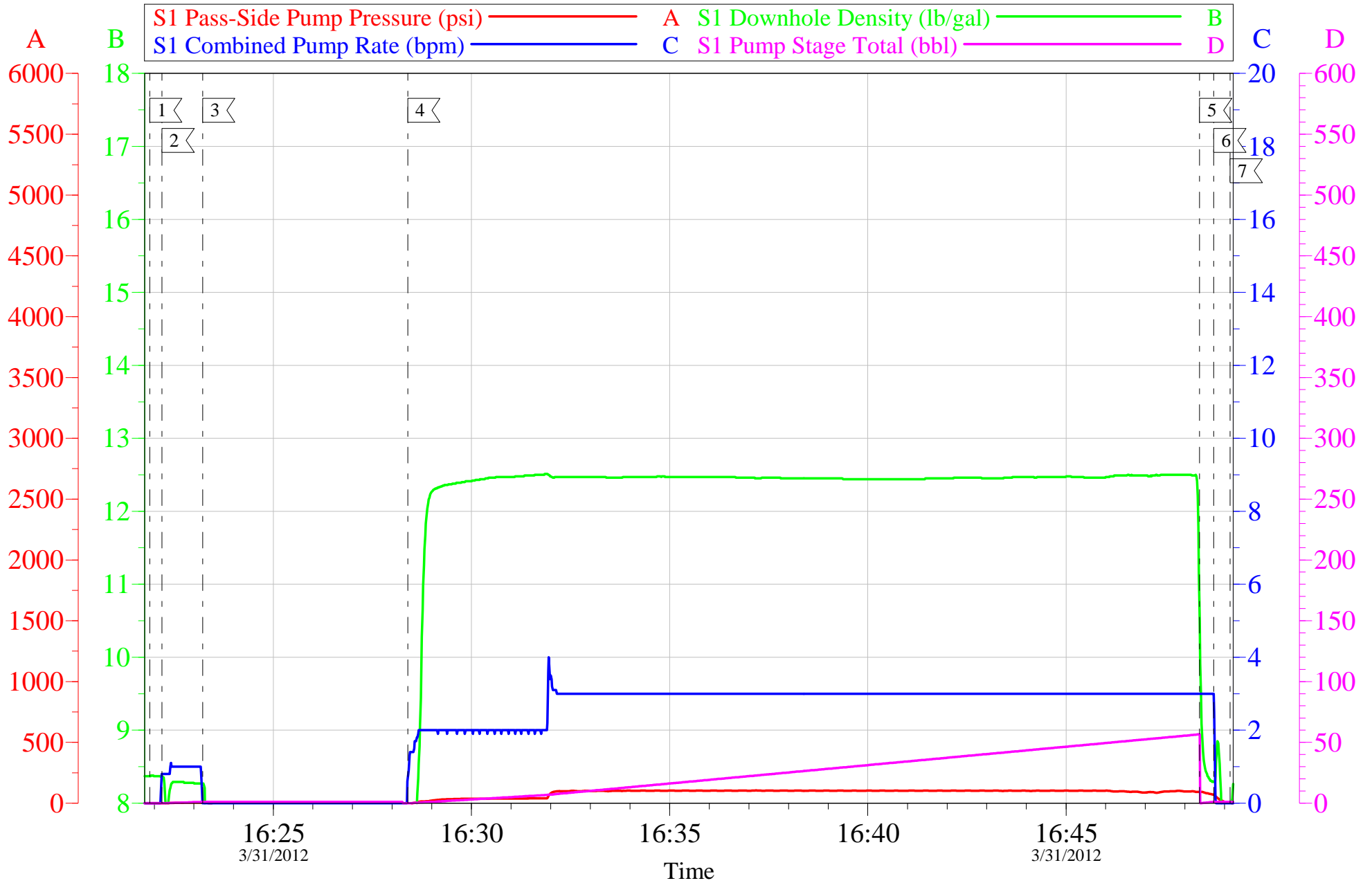
Job Date: 31-Mar-2012
Job Type: TOPOUT
Cement Supervisor: JEREMY YOUNG

Sales Order #: 9340319
ADC Used: YES
Elite #7: BRENDAN BURKE

OptiCem v6.4.10
31-Mar-12 16:54

OXY - CC 697-04-84A

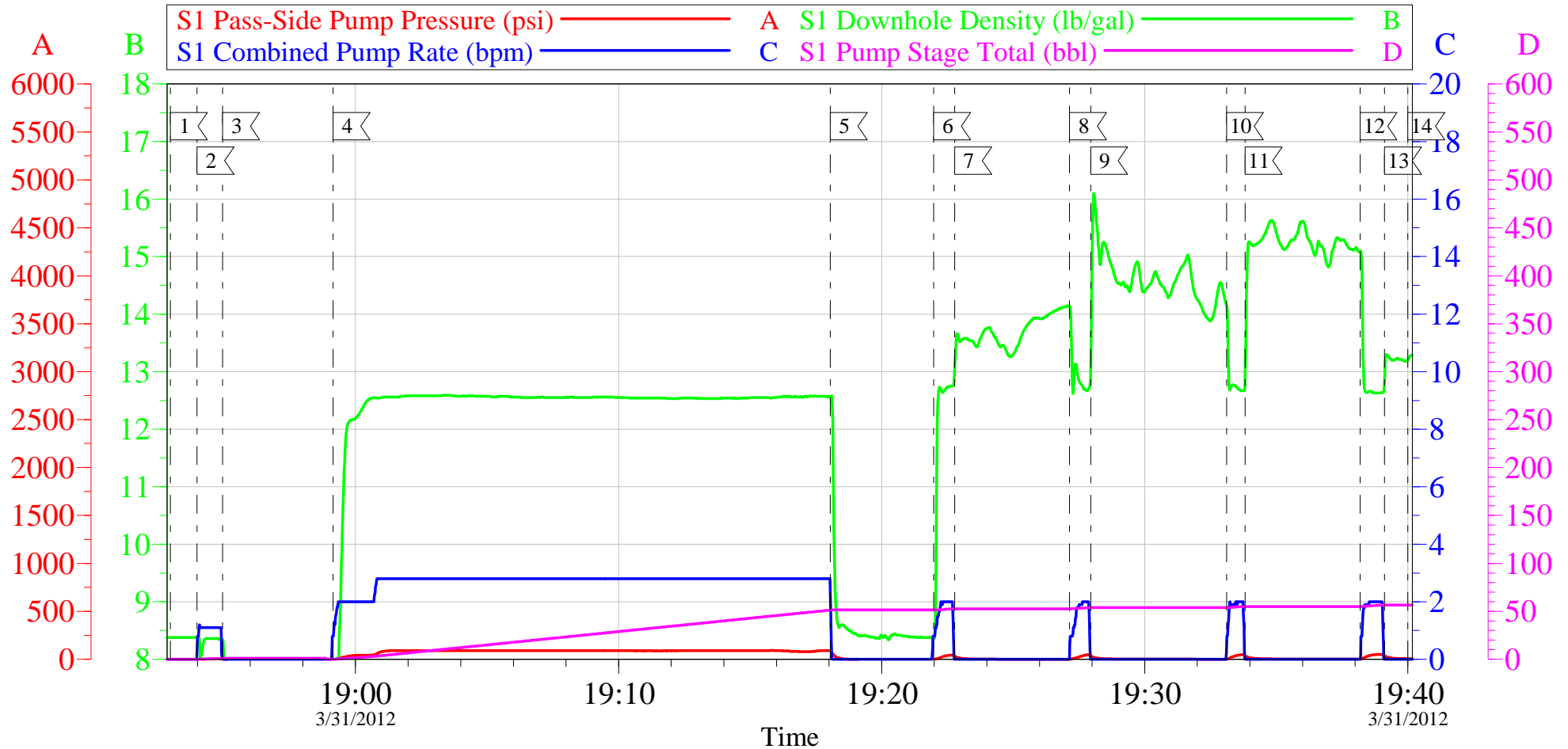
TOPOUT #1



Customer: OXY	Job Date: 31-Mar-2012	Sales Order #: 9340319
Well Description: CC 697-04-84A	Job Type: TOPOUT	ADC Used: YES
Company Rep: VICTOR BENEVIDES	Cement Supervisor: JEREMY YOUNG	Elite #7: BRENDAN BURKE

OXY - CC 697-04-84A

TOPOUT #2



Local Event Log

1 START JOB	18:52:58	2 PUMP WATER AHEAD	18:53:59	3 SHUTDOWN	18:54:57
4 PUMP CEMENT	18:59:09	5 SHUTDOWN	19:18:03	6 RESUME PUMPING	19:21:59
7 SHUTDOWN	19:22:47	8 RESUME PUMPING	19:27:09	9 SHUTDOWN	19:27:57
10 RESUME PUMPING	19:33:07	11 SHUTDOWN	19:33:49	12 RESUMP PUMPING	19:38:11
13 SHUTDOWN	19:39:07	14 END JOB	19:40:00		

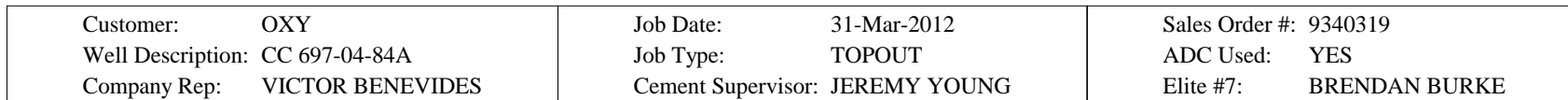
Customer: OXY
Well Description: CC 697-04-84A
Company Rep: VICTOR BENEVIDES

Job Date: 31-Mar-2012
Job Type: TOPOUT
Cement Supervisor: JEREMY YOUNG

Sales Order #: 9340319
ADC Used: YES
Elite #7: BRENDAN BURKE

OptiCem v6.4.10
31-Mar-12 19:52

TOPOUT #2



OptiCem v6.4.10
31-Mar-12 19:52

HALLIBURTON

Water Analysis Report

Company: OXY

Submitted by: JEREMY YOUNG

Attention: LAB

Lease CC

Well # 697-04-84A

Date: 3/31/2012

Date Rec.:

S.O.# 9340319

Job Type: SURFACE

Specific Gravity	<i>MAX</i>	1
pH	<i>8</i>	8
Potassium (K)	<i>5000</i>	200 Mg / L
Calcium (Ca)	<i>500</i>	120 Mg / L
Iron (FE2)	<i>300</i>	0 Mg / L
Chlorides (Cl)	<i>3000</i>	0 Mg / L
Sulfates (SO ₄)	<i>1500</i>	UNDER 200 Mg / L
Chlorine (Cl ₂)		0 Mg / L
Temp	<i>40-80</i>	63 Deg
Total Dissolved Solids		470 Mg / L

Respectfully: JEREMY YOUNG

Title: CEMENTING SUPERVISOR

Location: Grand Junction, CO

NOTICE:

This report is limited to the described sample tested. Any person using or relying on this report agrees that Halliburton shall not be liable for any loss or damage whether due to act or omission resulting from such report or its use.

Sales Order #: 9340319	Line Item: 10	Survey Conducted Date: 3/31/2012
Customer: OXY GRAND JUNCTION EBUSINESS		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative: GRAHAM FLAGG		API / UWI: (leave blank if unknown) 05-045-20715
Well Name: CC		Well Number: 697-04-84A
Well Type: Development Well	Well Country: United States of America	
H2S Present:	Well State: Colorado	Well County: 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	3/31/2012
Survey Interviewer	The survey interviewer is the person who initiated the survey.	JEREMY YOUNG (HX37077)
Customer Participation	Did the customer participate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	GRAHAM FLAGG
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	

CUSTOMER SIGNATURE

Sales Order #: 9340319	Line Item: 10	Survey Conducted Date: 3/31/2012
Customer: OXY GRAND JUNCTION EBUSINESS		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative: GRAHAM FLAGG		API / UWI: (leave blank if unknown) 05-045-20715
Well Name: CC		Well Number: 697-04-84A
Well Type: Development Well	Well Country: United States of America	
H2S Present:	Well State: Colorado	Well County: Garfield

KEY PERFORMANCE INDICATORS

General	
Survey Conducted Date The date the survey was conducted	3/31/2012

Cementing KPI Survey	
Type of Job Select the type of job. (Cementing or Non-Cementing)	0
Select the Maximum Deviation range for this Job What is the highest deviation for the job you just completed? This may not be the maximum well deviation.	Vertical
Total Operating Time (hours) Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.	8
HSE Incident, Accident, Injury HSE Incident, Accident, Injury. This should be recordable incidents only.	No
Was the job purpose achieved? Was the job delivered correctly as per customer agreed design?	Yes
Operating Hours (Pumping Hours) Total number of hours pumping fluid on this job. Enter in decimal format.	6
Customer Non-Productive Rig Time (hrs) 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.	0
Type of Rig Classification Job Was Performed Type Of Rig (classification) Job Was Performed On	Drilling Rig (Portable)
Number Of JSAs Performed Number Of Jsas Performed	10
Number of Unplanned Shutdowns Unplanned shutdown is when injection stops for any period of time.	0
Was this a Primary Cement Job (Yes / No)	Yes

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Customer Representative: GRAHAM FLAGG		API / UWI: (leave blank if unknown) 05-045-20715
Well Name: CC		Well Number: 697-04-84A
Well Type: Development Well	Well Country: United States of America	
H2S Present:	Well State: Colorado	Well County: Garfield

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