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# **OXY GRAND JUNCTION EBUSINESS**

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**CC 697-04-57A  
GRAND VALLEY  
Garfield County , Colorado**

**Cement Surface Casing**  
**26-Mar-2012**

**Post Job Summary**

## The Road to Excellence Starts with Safety

Sold To #: 344034	Ship To #: 344034	Quote #:	Sales Order #: 9340335
Customer: OXY GRAND JUNCTION EBUSINESS	Customer Rep: Adam, Derek		
Well Name: CC	Well #: 697-04-57A	API/UWI #: 05-045-20716	
Field: GRAND VALLEY	City (SAP): PARACHUTE	County/Parish: Garfield	State: Colorado
Lat: N 39.549 deg. OR N 39 deg. 32 min. 55.824 secs.	Long: W 108.23 deg. OR W -109 deg. 46 min. 11.496 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: NICKLE, RYON	MBU ID Emp #: 454759	

## Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BORSZICH, STEPHEN A	18	412388	JENSEN, SHANE Lynn	18	441759	NICKLE, RYON	18	454759
SPARKS, CLIFFORD Paul	18	502476						

## Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10001431	60 mile	10744648C	60 mile	10867304	60 mile	10897797	60 mile
10998054	60 mile	10998508	60 mile	11583934	60 mile		

## Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
3/26/2012	18	6						

**TOTAL** Total is the sum of each column separately

## Job

Formation Name	Top	Bottom	Job	Date	Time	Time Zone
Formation Depth (MD)	0	2830	Called Out	25 - Mar - 2012	10:20	MST
Form Type	BHST	On Location	26 - Mar - 2012	04:00	MST	
Job depth MD	2780. ft	Job Depth TVD	2780. ft	Job Started	26 - Mar - 2012	12:54
Water Depth	Wk Ht Above Floor	4. ft	Job Completed	26 - Mar - 2012	20:05	MST
Perforation Depth (MD)	From	To	Departed Loc	26 - Mar - 2012	22:00	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
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Sales/Rental/3<sup>rd</sup> 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	9.625	14	

## 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	Fresh Water Spacer		10.00	bbl	8.33	.0	.0	2	
2	Gel Water Spacer		20.00	bbl	8.34	.0	.0	2	
0.25 gal/bbl		LGC-36 UC, BULK (101582749)							
3	Fresh Water Spacer		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		211.00	bbl	8.34	.0	.0	8	
7	Top Out Cement	HALCEM (TM) SYSTEM (452986)	92.0	sacks	12.5	1.97	10.96	2	10.96
10.96 Gal		FRESH WATER							
<b>Calculated Values</b>		<b>Pressures</b>		<b>Volumes</b>					
Displacement	211.3	Shut In: Instant		Lost Returns		Cement Slurry	518.4	Pad	
Top Of Cement		5 Min		Cement Returns	9	Actual Displacement	211.3	Treatment	
Frac Gradient		15 Min		Spacers	40	Load and Breakdown		Total Job	770
<b>Rates</b>									
Circulating	RIG	Mixing	6	Displacement	8	Avg. Job	7		
Cement Left In Pipe	Amount	47 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*

<b>Sold To #:</b> 344034	<b>Ship To #:</b> 344034	<b>Quote #:</b>	<b>Sales Order #:</b> 9340335
<b>Customer:</b> OXY GRAND JUNCTION EBUSINESS		<b>Customer Rep:</b> Adam, Derek	
<b>Well Name:</b> CC	<b>Well #:</b> 697-04-57A	<b>API/UWI #:</b> 05-045-20716	
<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 39.549 deg. OR N 39 deg. 32 min. 55.824 secs.		<b>Long:</b> W 108.23 deg. OR W -109 deg. 46 min. 11.496 secs.	
<b>Contractor:</b> OXY	<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> HIMES, JEFFREY	<b>Srv Supervisor:</b> NICKLE, RYON	<b>MBU ID Emp #:</b> 454759	

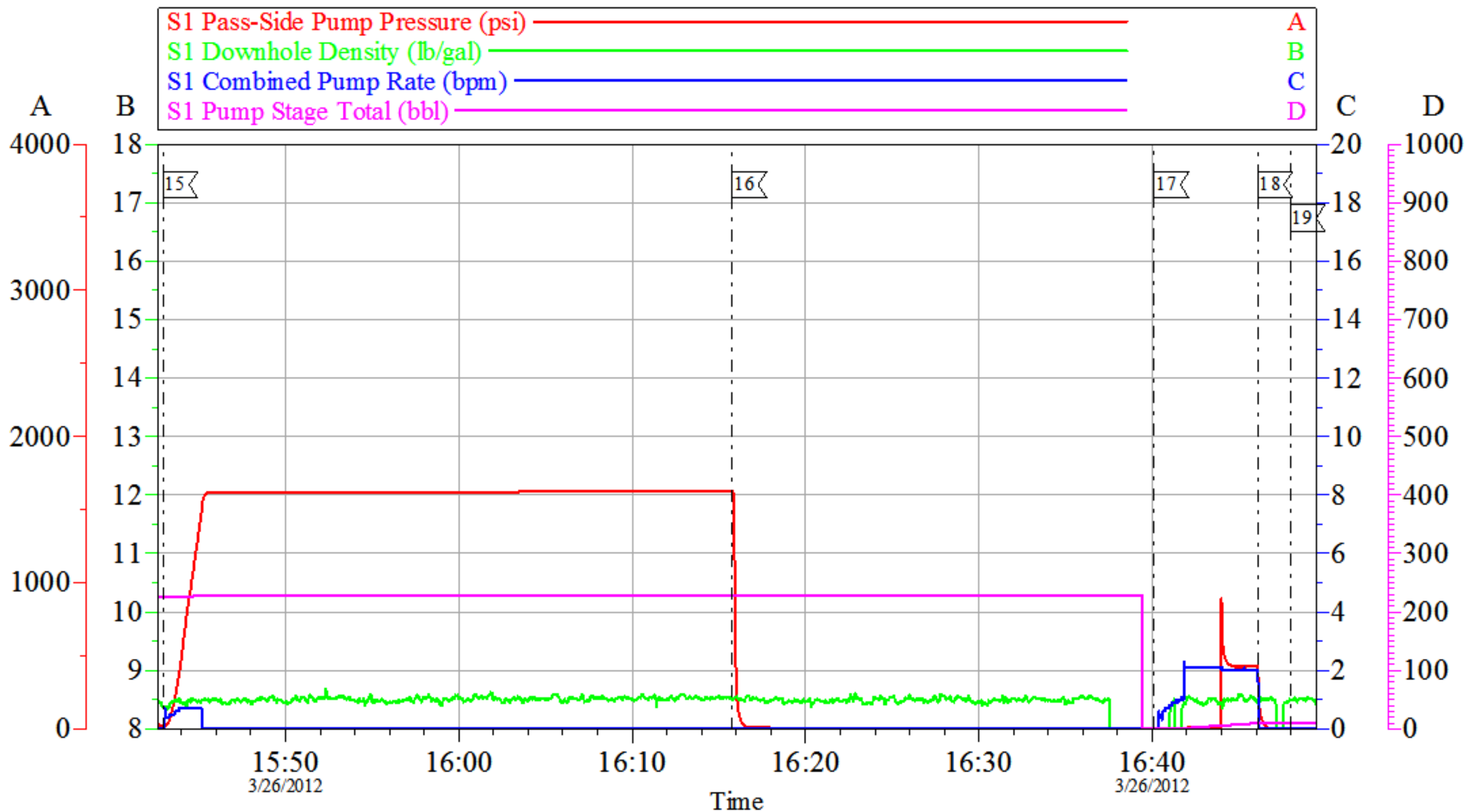
Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	03/25/2012 22:00							HES CEMENT CREW
Pre-Convoy Safety Meeting	03/26/2012 01:15							ALL HES CEMENT CREW
Crew Leave Yard	03/26/2012 01:30							
Arrive At Loc	03/26/2012 04:00							RIG RIGGING UP CASING CREW
Assessment Of Location Safety Meeting	03/26/2012 04:10							ALL HES CEMENT CREW
Other	03/26/2012 07:00							SPOT EQUIPMENT; 1 CEMENTERS F 550, 1 ELITE PUMPING UNIT, 2 660 BULK TRANSPORT
Pre-Rig Up Safety Meeting	03/26/2012 07:20							ALL HES CEMENT CREW
Pre-Job Safety Meeting	03/26/2012 09:40							ALL HES CEMENT CREW, RIG CREW, COMPANY REP, AVAILABLE 3RD PARTY EE'S
Start Job	03/26/2012 12:54							TD- 2831' TP- 2780' SHOE- 47' OH- 14.75" SURFACE CASING- 9.625" 36#/FT J-55 CENTRALIZERS- 14 MUD- 9 PPG
Other	03/26/2012 12:55		2	2			17.0	FILL LINES, FRESH WATER
Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	

Pressure Test	03/26/2012 12:58							STALL OUT @ 1390 PSI, HELD FOR 30 SEC. PRESSURE UP TO 3013 PSI HELD FOR 3 MIN, PRESSURE DROP TO 2967 PSI
Pump Spacer 1	03/26/2012 13:05		4	10			47.0	FRESH WATER
Pump Spacer 2	03/26/2012 13:11		2	20			50.0	GEL SPACER
Pump Spacer 1	03/26/2012 13:21		4	10			130.0	FRESH WATER
Pump Lead Cement	03/26/2012 13:24		6	455			267.0	1190 SKS; 12.3 PPG, 2.15 FT3/SK, 11.83 GAL/SK
Pump Tail Cement	03/26/2012 14:40		6	62.7			248.0	170 SKS; 12.8 PPG, 2.07 FT3/SK, 10.67 GAL/SK
Shutdown	03/26/2012 14:51							WASH UP ON TOP OF PLUG PER CO REP
Drop Top Plug	03/26/2012 14:52							CO REP VERIFIED PLUG LAUNCHED
Pump Displacement	03/26/2012 14:58		6	201.3			832.0	FRESH WATER, NO RETURNS THROUGHOUT DISPLACEMENT
Slow Rate	03/26/2012 15:31		2	10			612.0	
Bump Plug	03/26/2012 15:36						1192. 0	
Check Floats	03/26/2012 15:42							FLOATS HELD, RETURNED 1 BBLS H2O
Pressure Up	03/26/2012 15:42						1568. 0	CASING TEST PER CO REP
Release Casing Pressure	03/26/2012 16:15							
Pump Water	03/26/2012 16:40		2	10			810.0	PUMP 10 BBL H2O MIXED WITH 10 LB SUGAR THROUGH PARASITE
Shutdown	03/26/2012 16:46							
Pump Cement	03/26/2012 17:35		2	32			28.0	TOPOUT CEMENT 92 SKS; 12.5 PPG, 1.97 FT3/SK, 10.96 GAL/SK, 23 BBLS TO BRING TO SURFACE, 9 BBLS TO SURFACE
Activity Description	Date/Time	Cht	Rate bbl/ min	Volume bbl		Pressure psig		Comments

		#		Stage	Total	Tubing	Casing	
Shutdown	03/26/2012 17:57							PER COMPANY REP, CREW TO WAIT 2 HOURS UNTIL 2000, MEASUREMENT WILL BE TAKEN AND CO REP WILL DECIDE IF ADDITIONAL TOP OUT NEEDS TO BE PUMPED
End Job	03/26/2012 20:05							OFFLINE CEMENT JOB, GAINED SHORT BURST OF RETURNS AT 50 BBLS AWAY ON LEAD CEMENT, LOST RETURNS IMMEDIATELY, GAINED RETURNS AGAIN AT 277 BBLS AWAY ON LEAD CEMENT AND MAINTAINED UNTIL SHUTDOWN TO DROP PLUG.
Post-Job Safety Meeting (Pre Rig-Down)	03/26/2012 20:10							ALL HES CEMENT CREW
Pre-Convoy Safety Meeting	03/26/2012 21:15							ALL HES CEMENT CREW
Crew Leave Location	03/26/2012 22:00							THANK YOU FOR USING HALLIBURTON CEMENTING, RYON NICKLE AND CREW

# OXY - CC 697-04-57A

## OFFLINE SURFACE



Customer: OXY GRAND JUNCTION EBUSINESS  
 Well Description: CC 697-04-57A  
 Company Rep: VICTOR BENEVIDES

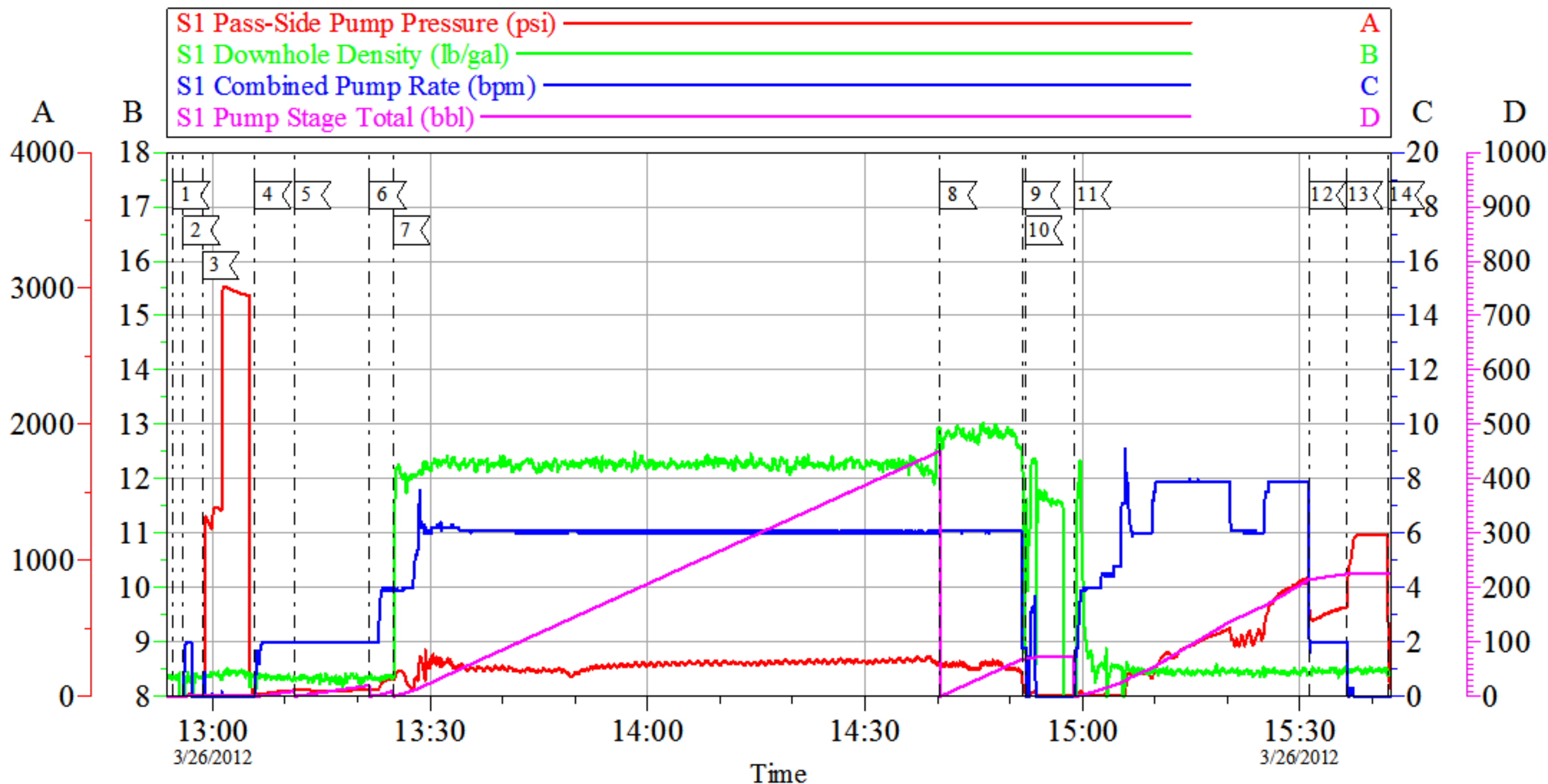
Job Date: 26-Mar-2012  
 Job Type: OFFLINE SURFACE  
 Cement Supervisor: RYON NICKLE

Sales Order #: 9340335  
 ADC Used: YES  
 Elite # / Operator: E6 / STEVE BORSZICH

OptiCem v6.4.10  
 26-Mar-12 17:03

# OXY - CC 697-04-57A

## OFFLINE SURFACE



### Local Event Log

1	START JOB	12:54:30	2	FILL LINES	12:55:55	3	PRESSURE TEST	12:58:34
4	PUMP H2O SPACER	13:05:47	5	PUMP GEL SPACER	13:11:15	6	PUMP H2O SPACER	13:21:38
7	PUMP LEAD CEMENT	13:24:55	8	PUMP TAIL CEMENT	14:40:22	9	SHUTDOWN	14:51:46
10	DROP TOP PLUG	14:52:11	11	PUMP DISPLACEMENT	14:58:52	12	SLOW RATE	15:31:15
13	BUMP PLUG	15:36:21	14	CHECK FLOATS	15:42:07			

Customer: OXY GRAND JUNCTION EBUSINESS  
 Well Description: CC 697-04-57A  
 Company Rep: VICTOR BENEVIDES

Job Date: 26-Mar-2012  
 Job Type: OFFLINE SURFACE  
 Cement Supervisor: RYON NICKLE

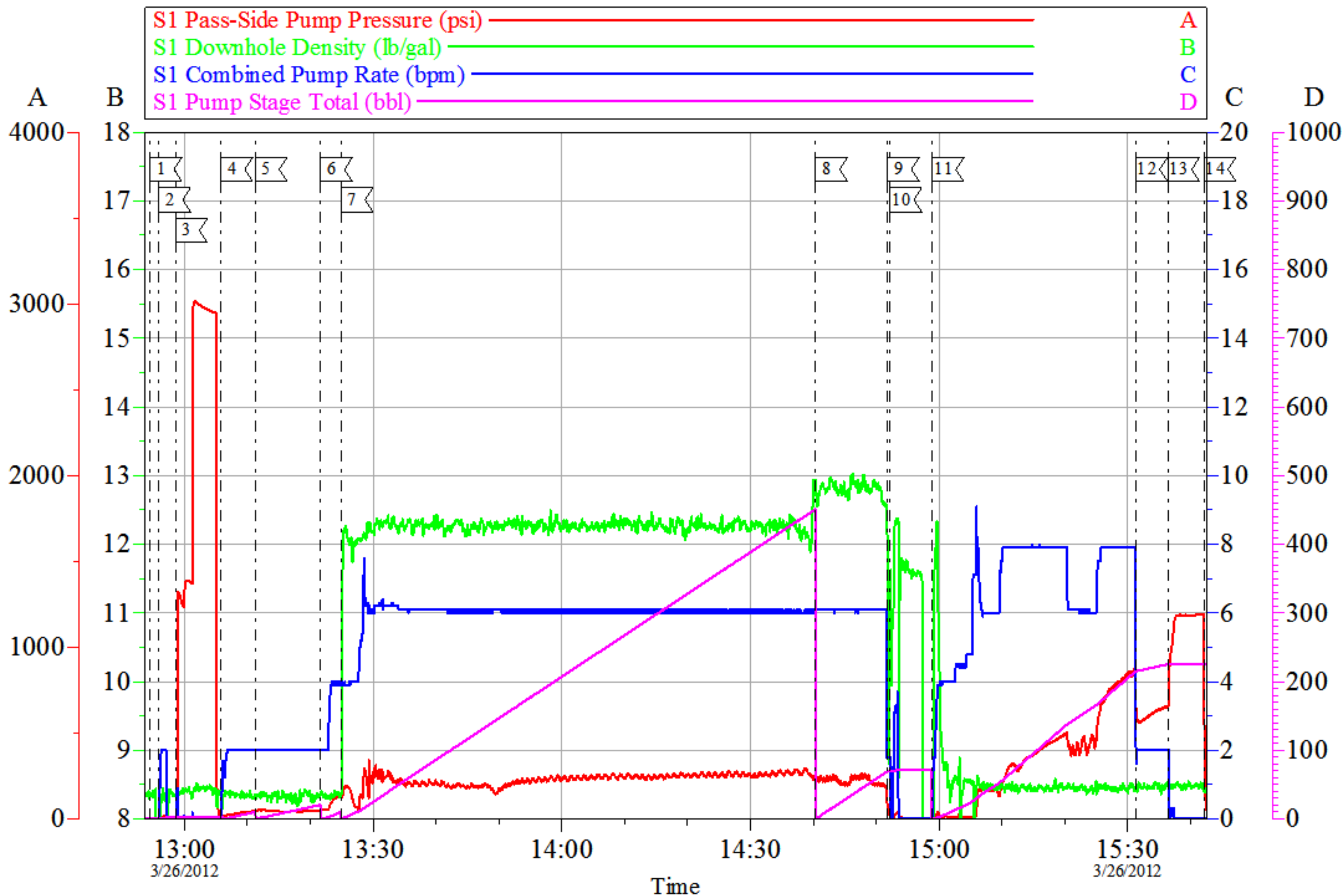
Sales Order #: 9340335  
 ADC Used: YES  
 Elite # / Operator: E6 / STEVE BORSZICH

OptiCem v6.4.10  
 26-Mar-12 17:01



# OXY - CC 697-04-57A

## OFFLINE SURFACE



Customer: OXY GRAND JUNCTION EBUSINESS  
 Well Description: CC 697-04-57A  
 Company Rep: VICTOR BENEVIDES

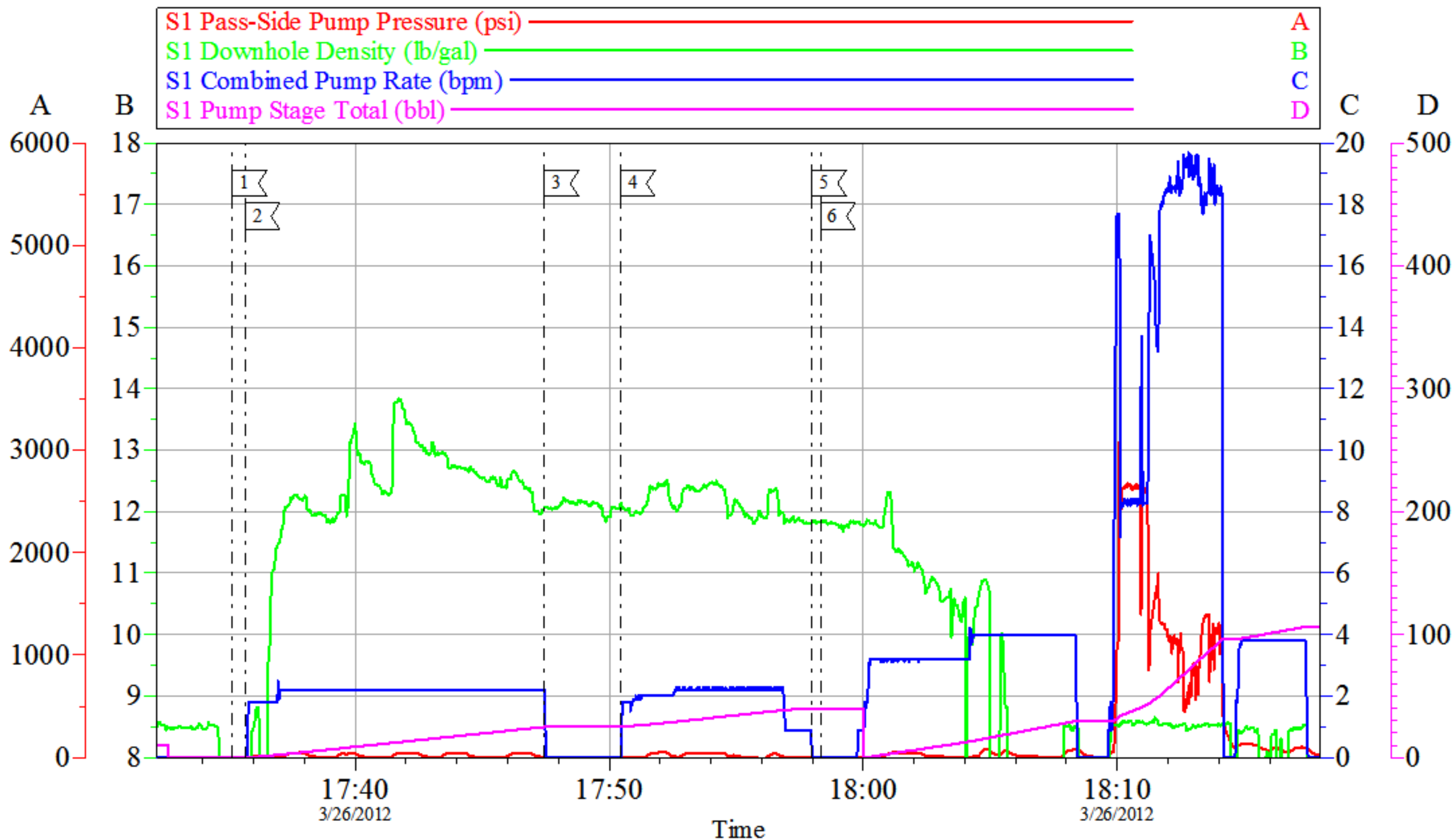
Job Date: 26-Mar-2012  
 Job Type: OFFLINE SURFACE  
 Cement Supervisor: RYON NICKLE

Sales Order #: 9340335  
 ADC Used: YES  
 Elite # / Operator: E6 / STEVE BORSZICH

OptiCem v6.4.10  
 26-Mar-12 17:01

# OXY - CC 697-04-57A

TOP OUT



## Local Event Log

1	START JOB	17:35:10	2	PUMP TOP OUT CEMENT	17:35:40	3	SHUTDOWN	17:47:27
4	PUMP REMAINDER OF TUM	17:50:27	5	SHUTDOWN	17:57:58	6	CLEAN LINES	17:58:19

Customer:

Well Description:

Company Rep:

Job Date:

26-Mar-2012

Job Type:

Cement Supervisor:

Sales Order #:

9340335

ADC Used:

Elite # / Operator:

OptiCem v6.4.10

26-Mar-12 18:34

# HALLIBURTON

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## Water Analysis Report

Company:	<u>OXY</u>	Date:	<u>3/25/2012</u>
Submitted by:	<u>RYON NICKLE</u>	Date Rec.:	<u>3/25/2012</u>
Attention:	<u>LAB</u>	S.O.#	<u>93040335</u>
Lease	<u>H&amp;P 330</u>	Job Type:	<u>SURFACE</u>
Well #	<u>CC 697-04-57A</u>		

Specific Gravity	<i>MAX</i>	<i>1</i>
pH	<i>8</i>	<i>7</i>
Potassium (K)	<i>5000</i>	<i>0</i> Mg / L
Hrdness	<i>500</i>	<i>420</i> Mg / L
Iron (FE2)	<i>300</i>	<i>3</i> Mg / L
Chlorides (Cl)	<i>3000</i>	<i>250</i> Mg / L
Sulfates (SO <sub>4</sub> )	<i>1500</i>	<i>&lt;200</i> Mg / L
Temp	<i>40-80</i>	<i>42</i> Deg
Total Dissolved Solids		<i>460</i> Mg / L

Respectfully: RYON NICKLE

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 repor

<b>Sales Order #:</b> 9340335	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 3/26/2012
<b>Customer:</b> OXY GRAND JUNCTION EBUSINESS		<b>Job Type (BOM):</b> CMT SURFACE CASING BOM
<b>Customer Representative:</b> ADRIAN DEERMAN		<b>API / UWI: (leave blank if unknown)</b> 05-045-20716
<b>Well Name:</b> CC		<b>Well Number:</b> 697-04-57A
<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	3/26/2012
Survey Interviewer	The survey interviewer is the person who initiated the survey.	RYON NICKLE (HB22175)
Customer Participation	Did the customer participate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	ADRIAN DEERMAN
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	

<b>CUSTOMER SIGNATURE</b>
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<b>Sales Order #:</b> 9340335	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 3/26/2012
<b>Customer:</b> OXY GRAND JUNCTION EBUSINESS		<b>Job Type (BOM):</b> CMT SURFACE CASING BOM
<b>Customer Representative:</b> ADRIAN DEERMAN		<b>API / UWI: (leave blank if unknown)</b> 05-045-20716
<b>Well Name:</b> CC		<b>Well Number:</b> 697-04-57A
<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>	3/26/2012
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>	Vertical
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>	12
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
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>	5
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

<b>Sales Order #:</b> 9340335	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 3/26/2012
<b>Customer:</b> OXY GRAND JUNCTION EBUSINESS		<b>Job Type (BOM):</b> CMT SURFACE CASING BOM
<b>Customer Representative:</b> ADRIAN DEERMAN		<b>API / UWI: (leave blank if unknown)</b> 05-045-20716
<b>Well Name:</b> CC		<b>Well Number:</b> 697-04-57A
<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	92.5
<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	92.5
<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