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# **OXY GRAND JUNCTION EBUSINESS**

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**CC 697-05-67A  
GRAND VALLEY  
Garfield County , Colorado**

**Cement Surface Casing**  
**30-Apr-2012**

**Post Job Summary**

## The Road to Excellence Starts with Safety

Sold To #: 344034	Ship To #: 344034	Quote #:	Sales Order #: 9474123
Customer: OXY GRAND JUNCTION EBUSINESS	Customer Rep: VILLEGAS, ALEX		
Well Name: CC	Well #: 697-05-67A	API/UWI #: 05-045-20967	
Field: GRAND VALLEY	City (SAP): DEBEQUE	County/Parish: Garfield	State: Colorado
Lat: N 39.544 deg. OR N 39 deg. 32 min. 37.428 secs.	Long: W 108.246 deg. OR W -109 deg. 45 min. 12.816 secs.		
Contractor: H&P 353	Rig/Platform Name/Num: H&P 353		
Job Purpose: Cement Surface Casing			
Well Type: Development Well	Job Type: Cement Surface Casing		
Sales Person: HIMES, JEFFREY	Srv 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 #
ANDREWS, ANTHONY Michael	10	321604	BURKE, BRENDAN Patrick	10	487782	GOWEN, WESLEY M	10	496205
YOUNG, JEREMY R	10	418013						

### Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10867304	120 mile	10867425	120 mile	10897891	120 mile	10998054	120 mile
11259881	120 mile	11560046	120 mile	11808833	120 mile	4901	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
04/29/2012	7	3	04/30/2012	3	2			
TOTAL			Total is the sum of each column separately					

### Job

Formation Name	Formation Depth (MD)	Top	Bottom	Form Type	Job depth MD	Job Depth TVD	Water Depth	Perforation Depth (MD)	From	To
				BHST	2690. ft	2690. ft				

### Job Times

Called Out	Date	Time	Time Zone
	29 - Apr - 2012	11:00	MST
On Location	29 - Apr - 2012	17:00	MST
Job Started	29 - Apr - 2012	22:06	MST
Job Completed	30 - Apr - 2012	01:22	MST
Departed Loc	30 - Apr - 2012	03:00	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
14 3/4" OPEN HOLE				14.75				.	2740.		
9 5/8" SURFACE CASING	Unknown		9.625	8.921	36.		J-55	.	2690.		

### 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	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 <sup>3</sup> /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	4	
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	HalCem Lead Cement	HALCEM (TM) SYSTEM (452986)	1282.0	sacks	12.3	2.15	11.83	6	11.83
11.83 Gal		FRESH WATER							
5	VersaCem Tail Cement	VARICEM (TM) CEMENT (452009)	160.0	sacks	12.8	2.07	10.67	6	10.67
10.67 Gal		FRESH WATER							
6	Fresh Water Displacement	FRESH WATER	204.20	bbl	8.34	.0	.0	6	
Calculated Values		Pressures		Volumes					
Displacement	204.2	Shut In: Instant		Lost Returns	NO	Cement Slurry	450.3	Pad	
Top Of Cement	SURFACE	5 Min		Cement Returns	215	Actual Displacement	204.2	Treatment	
Frac Gradient		15 Min		Spacers	40	Load and Breakdown		Total Job	694.5
Rates									
Circulating		Mixing	6	Displacement	6	Avg. Job	6		
Cement Left In Pipe	Amount	48 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> 9474123
<b>Customer:</b> OXY GRAND JUNCTION EBUSINESS		<b>Customer Rep:</b> VILLEGAS, ALEX	
<b>Well Name:</b> CC	<b>Well #:</b> 697-05-67A	<b>API/UWI #:</b> 05-045-20967	
<b>Field:</b> GRAND VALLEY	<b>City (SAP):</b> DEBEQUE	<b>County/Parish:</b> Garfield	<b>State:</b> Colorado
<b>Legal Description:</b>			
<b>Lat:</b> N 39.544 deg. OR N 39 deg. 32 min. 37.428 secs.		<b>Long:</b> W 108.246 deg. OR W -109 deg. 45 min. 12.816 secs.	
<b>Contractor:</b> H&P 353		<b>Rig/Platform Name/Num:</b> H&P 353	
<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>Srvc Supervisor:</b> YOUNG, JEREMY	<b>MBU ID Emp #:</b> 418013

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	04/29/2012 11:00							
Pre-Convoy Safety Meeting	04/29/2012 13:50							WITH ALL HES PERSONNEL
Crew Leave Yard	04/29/2012 14:00							
Arrive At Loc	04/29/2012 17:00							RIG WAS RUNNING CASING UPON HES ARRIVAL
Assessment Of Location Safety Meeting	04/29/2012 20:30							WITH ALL HES PERSONNEL
Other	04/29/2012 20:40							SPOT EQUIPMENT
Pre-Rig Up Safety Meeting	04/29/2012 20:50							WITH ALL HES PERSONNEL
Rig-Up Equipment	04/29/2012 21:00							
Pre-Job Safety Meeting	04/29/2012 21:50							WITH ALL PERSONNEL ON LOCATION
Start Job	04/29/2012 22:05							TD 2740 FT, TP 2690 FT, SHOE 48 FT, HOLE 14 3/4 IN, MUD WT 9.5 PPG, CSG 9 5/8 IN 36 LB/FT J-55
Other	04/29/2012 22:06		2	2			62.0	FILL LINES WITH FRESH WATER
Test Lines	04/29/2012 22:08							TEST LINES TO 3600 PSI. PRESSURE HOLDING
Pump Spacer 1	04/29/2012 22:15		4	10			160.0	FRESH WATER
Pump Spacer 2	04/29/2012 22:22		4	20			130.0	GEL WATER
Pump Spacer 1	04/29/2012 22:27		4	10			150.0	FRESH WATER

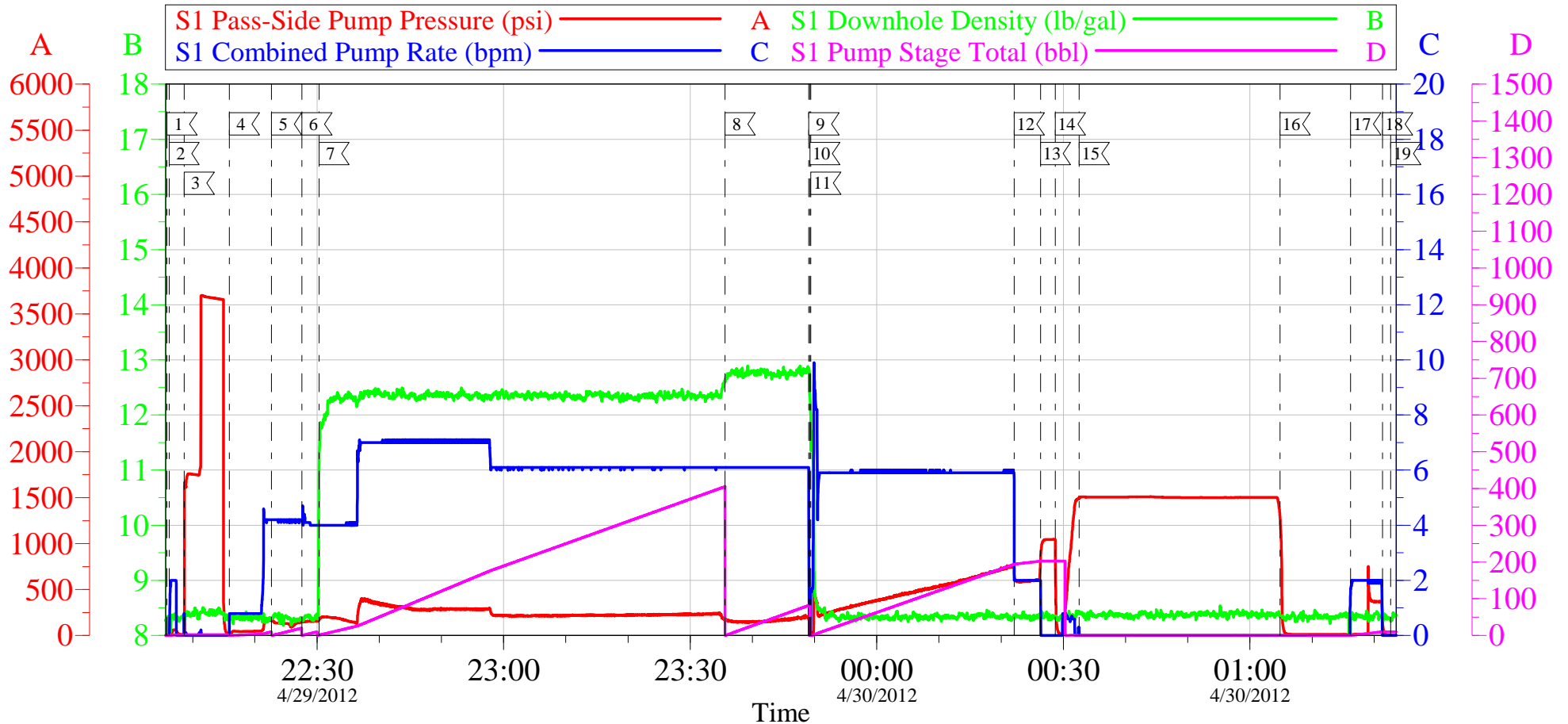
Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Pump Lead Cement	04/29/2012 22:30		6	391.3			350.0	1022 SKS AT 12.3 PPG, 2.15 FT3/SK, 11.83 GAL/SK. 7 BOXES OF TUFF FIBER IN LEAD CEMENT. CUT LEAD SHORT AS PER COMPANY REP
Pump Tail Cement	04/29/2012 23:35		6	59			170.0	160 SKS AT 12.8 PPG, 2.07 FT3/SK, 10.67 GAL/SK
Shutdown	04/29/2012 23:49							
Drop Top Plug	04/29/2012 23:49							PLUG LAUNCHED
Pump Displacement	04/29/2012 23:49		6	194.2			760.0	FRESH WATER
Slow Rate	04/30/2012 00:22		2	10			600.0	SLOW RATE 10 BBLS PRIOR TO CALCULATED DISPLACEMENT
Bump Plug	04/30/2012 00:26		2		204.2		1050.0	PLUG BUMPED
Check Floats	04/30/2012 00:28							FLOATS HOLDING. RETURNED 1 BBL H2O TO PUMP
Pressure Test	04/30/2012 00:32						1500.0	PRESSURE TEST CASING TO 1500 PSI FOR 30 MIN AS PER COMPANY REP
Other	04/30/2012 01:04							RELEASE PRESSURE
Pump Water	04/30/2012 01:16		2	10			730.0	PUMP SUGAR WATER DOWN PARASITE STRING
Shutdown	04/30/2012 01:21							
End Job	04/30/2012 01:22							JOB PUMPED OFFLINE THROUGH PLUG CONTAINER WITH QUICK LATCH. PIPE WAS STATIC DURING JOB. GOOD CIRCULATION THROUGHOUT JOB. HES RETURNED 215 BBL OF CEMENT TO SURFACE
Pre-Rig Down Safety Meeting	04/30/2012 01:30							WITH ALL HES PERSONNEL

## Cementing Job Log

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Rig-Down Equipment	04/30/2012 01:35							
Pre-Convoy Safety Meeting	04/30/2012 02:50							WITH ALL HES PERSONNEL
Crew Leave Location	04/30/2012 03:00							LEFT APPROX 260 SKS OF LEAD CEMENT IN SILO DUE TO CUTTING LEAD SHORE AS PER COMPANY REP. ALL CEMENT HAS BEEN CHARGED FOR. WILL USE ON NEXT WELL
Comment	04/30/2012 03:01							THANK YOU FOR USING HALLIBURTON CEMENT DEPARTMENT. JEREMY YOUNG AND CREW.

# OXY - CC 697-05-67A

9 5/8 SURFACE



## Local Event Log

1 START JOB	4/29/2012 22:05:52	2 FILL LINES	4/29/2012 22:06:13	3 TEST LINES	4/29/2012 22:08:38
4 PUMP H2O SPACER 1	4/29/2012 22:15:54	5 PUMP GEL SPACER	4/29/2012 22:22:41	6 PUMP H2O SPACER 2	4/29/2012 22:27:33
7 PUMP LEAD CEMENT	4/29/2012 22:30:19	8 PUMP TAIL CEMENT	4/29/2012 23:35:37	9 SHUTDOWN	4/29/2012 23:49:05
10 DROP TOP PLUG	4/29/2012 23:49:14	11 PUMP DISPLACEMENT	4/29/2012 23:49:22	12 SLOW RATE	4/30/2012 00:22:06
13 BUMP PLUG	4/30/2012 00:26:19	14 CHECK FLOATS	4/30/2012 00:28:42	15 PRESSURE TEST CASING	4/30/2012 00:32:33
16 RELEASE PRESSURE	4/30/2012 01:04:50	17 FLUSH PARASITE STRING	4/30/2012 01:16:12	18 SHUTDOWN	4/30/2012 01:21:20
19 END JOB	4/30/2012 01:22:38				

Customer: OXY  
Well Description: CC 697-05-67A  
Company Rep: ALEX VALLEGAS

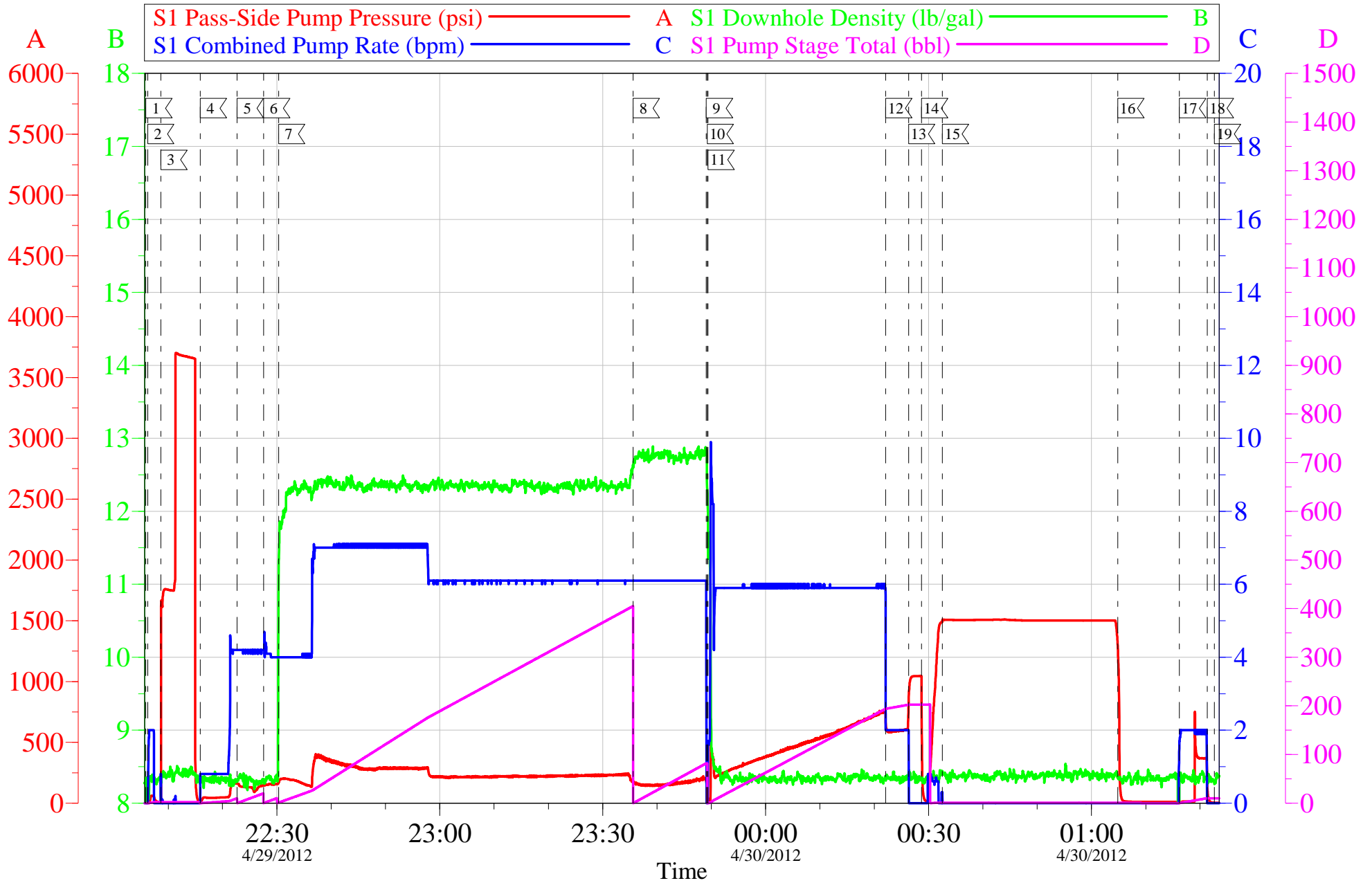
Job Date: 29-Apr-2012  
Job Type: SURFACE  
Cement Supervisor: JEREMY YOUNG

Sales Order #: 9474123  
ADC Used: YES  
Elite #5: BRENDAN BURKE

OptiCem v6.4.10  
30-Apr-12 01:30

# OXY - CC 697-05-67A

9 5/8 SURFACE



Customer: OXY	Job Date: 29-Apr-2012	Sales Order #: 9474123
Well Description: CC 697-05-67A	Job Type: SURFACE	ADC Used: YES
Company Rep: ALEX VALLEGAS	Cement Supervisor: JEREMY YOUNG	Elite #5: BRENDAN BURKE

OptiCem v6.4.10  
30-Apr-12 01:31



# HALLIBURTON

## Water Analysis Report

Company: OXY

Submitted by: JEREMY YOUNG

Attention: LAB

Lease CC

Well # 697-05-67A

Date: 4/29/2012

Date Rec.:

S.O.# 9474123

Job Type: SURFACE

Specific Gravity	<i>MAX</i>	<b>1</b>
pH	<i>8</i>	<b>7</b>
Potassium (K)	<i>5000</i>	<b>200</b> Mg / L
Calcium (Ca)	<i>500</i>	<b>250</b> Mg / L
Iron (FE2)	<i>300</i>	<b>0</b> Mg / L
Chlorides (Cl)	<i>3000</i>	<b>0</b> Mg / L
Sulfates (SO <sub>4</sub> )	<i>1500</i>	<b>UNDER 200</b> Mg / L
Chlorine (Cl <sub>2</sub> )		<b>0</b> Mg / L
Temp	<i>40-80</i>	<b>64</b> Deg
Total Dissolved Solids		<b>830</b> 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.

<b>Sales Order #:</b> 9474123	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 4/30/2012
<b>Customer:</b> OXY GRAND JUNCTION EBUSINESS		<b>Job Type (BOM):</b> CMT SURFACE CASING BOM
<b>Customer Representative:</b> ALEX VALLEGAS		<b>API / UWI: (leave blank if unknown)</b> 05-045-20967
<b>Well Name:</b> CC		<b>Well Number:</b> 697-05-67A
<b>Well Type:</b> Development Well	<b>Well Country:</b> United States of America	
<b>H2S Present:</b> No	<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	4/30/2012
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	ALEX VALLEGAS
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	GREAT JOB

CUSTOMER SIGNATURE

<b>Sales Order #:</b> 9474123	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 4/30/2012
<b>Customer:</b> OXY GRAND JUNCTION EBUSINESS		<b>Job Type (BOM):</b> CMT SURFACE CASING BOM
<b>Customer Representative:</b> ALEX VALLEGAS		<b>API / UWI: (leave blank if unknown)</b> 05-045-20967
<b>Well Name:</b> CC		<b>Well Number:</b> 697-05-67A
<b>Well Type:</b> Development Well	<b>Well Country:</b> United States of America	
<b>H2S Present:</b> No	<b>Well State:</b> Colorado	<b>Well County:</b> Garfield

### KEY PERFORMANCE INDICATORS

General	
<b>Survey Conducted Date</b> The date the survey was conducted	4/30/2012

Cementing KPI Survey	
<b>Type of Job</b> Select the type of job. (Cementing or Non-Cementing)	0
<b>Select the Maximum Deviation range for this Job</b> What is the highest deviation for the job you just completed? This may not be the maximum well deviation.	Vertical
<b>Total Operating Time (hours)</b> Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.	5
<b>HSE Incident, Accident, Injury</b> HSE Incident, Accident, Injury. This should be recordable incidents only.	No
<b>Was the job purpose achieved?</b> Was the job delivered correctly as per customer agreed design?	Yes
<b>Operating Hours (Pumping Hours)</b> Total number of hours pumping fluid on this job. Enter in decimal format.	3.5
<b>Customer Non-Productive Rig Time (hrs)</b> 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
<b>Type of Rig Classification Job Was Performed</b> Type Of Rig (classification) Job Was Performed On	Drilling Rig (Portable)
<b>Number Of JSAs Performed</b> Number Of Jsas Performed	6
<b>Number of Unplanned Shutdowns</b> Unplanned shutdown is when injection stops for any period of time.	0
<b>Was this a Primary Cement Job (Yes / No)</b>	Yes

<b>Sales Order #:</b> 9474123	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 4/30/2012
<b>Customer:</b> OXY GRAND JUNCTION EBUSINESS		<b>Job Type (BOM):</b> CMT SURFACE CASING BOM
<b>Customer Representative:</b> ALEX VALLEGAS		<b>API / UWI: (leave blank if unknown)</b> 05-045-20967
<b>Well Name:</b> CC		<b>Well Number:</b> 697-05-67A
<b>Well Type:</b> Development Well	<b>Well Country:</b> United States of America	
<b>H2S Present:</b> No	<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