
OXY GRAND JUNCTION EBUSINESS

**CC 697-05-45
GRAND VALLEY
Garfield County , Colorado**

**Cement Surface Casing
11-Jan-2011**

Job Site Documents

The Road to Excellence Starts with Safety

Sold To #: 344034	Ship To #: 344034	Quote #:	Sales Order #: 9107160
Customer: OXY GRAND JUNCTION EBUSINESS	Customer Rep: Wylie, Cal		
Well Name: CC	Well #: 697-05-45	API/UWI #: 05-045-20362	
Field: GRAND VALLEY	City (SAP): ADDISON	County/Parish: Garfield	State: Colorado
Lat: N 39.554 deg. OR N 39 deg. 33 min. 16.092 secs.	Long: W 108.242 deg. OR W -109 deg. 45 min. 27.288 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	Srvc Supervisor: ROSS, CHARLES	MBU ID Emp #: 453128	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BATH, KYLE Thomas	12	477632	BECK, MICHAEL George	12	489151	KUKUS, CARLTON Dean	12	458577
ROSS, CHARLES Raymond	12	453128						

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10744648C	60 mile	10784053	60 mile	10897909	60 mile	10951247	60 mile
10998508	60 mile	11057896	60 mile	4901	60 mile	6543	60 mile

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
JAN 11, 2012	10	8						
TOTAL	Total is the sum of each column separately							

Job

Job Times

Formation Name					Date				Time	Time Zone
Formation Depth (MD)	Top			Bottom		Called Out	10 - Jan - 2012	23:30	MST	
Form Type				BHST		On Location	11 - Jan - 2012	08:30	MST	
Job depth MD	2715. ft			Job Depth TVD	2715. ft	Job Started	11 - Jan - 2012	11:09	MST	
Water Depth				Wk Ht Above Floor		Job Completed	11 - Jan - 2012	18:14	MST	
Perforation Depth (MD)	From			To		Departed Loc	11 - Jan - 2012	20:30	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				.	2715.		
9 5/8" SURFACE CASING	Unknown		9.625	8.921	36.		J-55	.	2698.		

Sales/Rental/3rd 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 5/8"	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 ³ /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	Fresh Water Spacer		20.00	bbl	.	.0	.0	.0	
2	Gel Spacer		20.00	bbl	8.33	.0	.0	5.0	
3	Fresh Water Spacer		20.00	Bbl		0	0	0	
4	VersaCem Lead Cement	VERSACEM (TM) SYSTEM (452010)	1060.0	sacks	12.3	2.33	12.62	6.0	12.62
12.62 Gal		FRESH WATER							
5	VersaCem Tail Cement	VERSACEM (TM) SYSTEM (452010)	160.0	sacks	12.8	2.07	10.67	6.0	10.67
10.67 Gal		FRESH WATER							
6	Displacement		204.00	bbl	8.34	.0	.0	8.0	
Calculated Values		Pressures		Volumes					
Displacement	204.9	Shut In: Instant		Lost Returns	729	Cement Slurry	499	Pad	
Top Of Cement	Surface	5 Min		Cement Returns	1	Actual Displacement	204.9	Treatment	
Frac Gradient		15 Min		Spacers	60	Load and Breakdown		Total Job	764
Rates									
Circulating	4.6	Mixing	6	Displacement	6	Avg. Job	4.2		
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

Sold To #: 344034	Ship To #: 344034	Quote #:	Sales Order #: 9107160
Customer: OXY GRAND JUNCTION EBUSINESS		Customer Rep: Wylie, Cal	
Well Name: CC		Well #: 697-05-45	API/UWI #: 05-045-20362
Field: GRAND VALLEY	City (SAP): ADDISON	County/Parish: Garfield	State: Colorado
Legal Description:			
Lat: N 39.554 deg. OR N 39 deg. 33 min. 16.092 secs.		Long: W 108.242 deg. OR W -109 deg. 45 min. 27.288 secs.	
Contractor: H&P 353		Rig/Platform Name/Num: H&P 353	
Job Purpose: Cement Surface Casing			Ticket Amount:
Well Type: Development Well		Job Type: Cement Surface Casing	
Sales Person: HIMES, JEFFREY		Srv Supervisor: ROSS, CHARLES	MBU ID Emp #: 453128

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	01/10/2012 23:30							
Pre-Convoy Safety Meeting	01/11/2012 03:25							WITH ALL HES EE'S
Depart from Service Center or Other Site	01/11/2012 03:30							
Arrive at Location from Service Center	01/11/2012 08:30							
Assessment Of Location Safety Meeting	01/11/2012 09:10							WITH ALL HES EE'S
Pre-Rig Up Safety Meeting	01/11/2012 09:20							WITH ALL HES EE'S
Rig-Up Equipment	01/11/2012 09:30							1-F450 PICKUP, 1- ELITE PUMP TRUCK, 2- 660 CEMENT BULK TRUCKS, 2-CEMENT SILOS, 1-HARD LINE TO RIG AND WASH UP OUT TO THE CELLAR FROM MANIFOLD, 1- 9 5/8" PLUG CONTAINER.
Pre-Job Safety Meeting	01/11/2012 10:47							WITH ALL HES EE'S AND RIG CREW
Start Job	01/11/2012 11:09							TD 2715, 9 5/8 36# CASING SET @ 2698, SJ 47.01, FC 2651 MW# 9, RIG CIRCULATED 40 MIN PRIOR TO CEMENT JOB, OFFLINE
Pump Water	01/11/2012 11:10		2	2			20.0	FILL LINES, FRESH WATER
Test Lines	01/11/2012 11:12							TEST TO 3000 PSI

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Pump Spacer 1	01/11/2012 11:24		4	20			110.0	FRESH WATER
Pump Spacer 2	01/11/2012 11:35		4	20			120.0	GEL SPACER
Pump Spacer 1	01/11/2012 11:40		4	20			127.0	FRESH WATER
Pump Lead Cement	01/11/2012 11:45		6	439.9			210.0	1060 SKS OF VERSACEM PUMPED @ 12.3 PPG, YIELD 2.33, WATER 12.62
Pump Tail Cement	01/11/2012 13:16		6	59			235.0	160 SKS OF VERSACEM PUMPED @ 12.8 PPG, YIELD 2.07, WATER 10.67
Shutdown	01/11/2012 13:27							
Drop Plug	01/11/2012 13:31							TOP PLUG, PLUG WENT
Pump Displacement	01/11/2012 13:31		6	194			750.0	FRESH WATER
Slow Rate	01/11/2012 14:08		2	10.9			575.0	RATE SLOWED 10 BBL PRIOR TO CALCULATED DISPLACEMENT
Bump Plug	01/11/2012 14:28		2		204.9		600.0	PLUG LANDED
Check Floats	01/11/2012 14:28							FLOATS HELD
Pressure Test	01/11/2012 14:30						1500.0	30 MIN CASING PRESSURE TEST
Pump Water	01/11/2012 15:20		2	10			530.0	SUGAR WATER THROUGH THE PARASITE STRING
End Job	01/11/2012 15:25							GOOD RETURNS FROM 85 BBL PUMPED DISPLACEMENT TO 120 BBL. , NO MOVEMENT OF PIPE THROUGHOUT JOB.
Pre-Job Safety Meeting	01/11/2012 17:25							WITH ALL HES EE'S
Start Job	01/11/2012 17:38							TOP OUT
Pump Cement	01/11/2012 17:41		3	35.1			116.0	100 SKS OF TOP OUT CEMENT PUMPED @ 12.5 PPG, 1.97 YIELD, 10.96 WATER

Cementing Job Log

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Shutdown	01/11/2012 18:14							
End Job	01/11/2012 18:14							
Post-Job Safety Meeting (Pre Rig-Down)	01/11/2012 18:20							WITH ALL HES EE'S
Rig-Down Equipment	01/11/2012 18:25							
Pre-Convoy Safety Meeting	01/11/2012 20:25							WITH ALL HES EE'S
Depart Location for Service Center or Other Site	01/11/2012 20:30							THANKS FOR USING GRAND JUNCTION HALLIBURTON CEMENT DEPARTMENT, CHUCK ROSS AND CREW

HALLIBURTON

Water Analysis Report

Company: OXY
Submitted by: CHUCK ROSS
Attention: JON TROUT
Lease: CASCADE CREEK
Well #: 697-05-45

Date: 1/11/2012
Date Rec.: 1/11/2012
S.O.#: 9107160
Job Type: 9 5/8" SURFACE

Specific Gravity	<i>MAX</i>	<i>1</i>
pH	<i>8</i>	<i>7</i>
Potassium (K)	<i>5000</i>	<i>300</i> Mg / L
Calcium (Ca)	<i>500</i>	Mg / L
Iron (FE2)	<i>300</i>	<i>0</i> Mg / L
Chlorides (Cl)	<i>3000</i>	<i>500</i> Mg / L
Sulfates (SO ₄)	<i>1500</i>	<i><200</i> Mg / L
Chlorine (Cl ₂)		<i>NA</i> Mg / L
Temp	<i>40-80</i>	<i>60</i> Deg
Total Dissolved Solids		<i>910</i> Mg / L

Respectfully: CHUCK ROSS

Title: CEMENTING SUPERVISOR

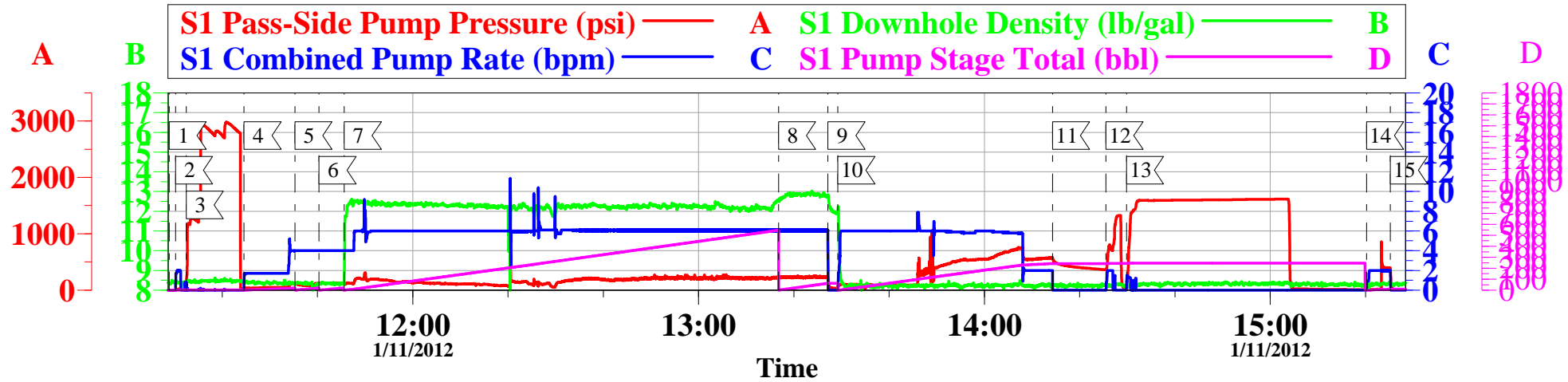
Location: Grand Junction, CO

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 c

Oxy - CC 697-05-45

Surface



Local Event Log

1	START JOB	11:08:53
2	FILL LINES	11:10:13
3	PRESSURE TEST	11:12:28
4	PUMP H2O SPACER	11:24:36
5	PUMP GEL SPACER	11:35:15
6	PUMP H2O SPACER	11:40:20
7	PUMP LEAD CEMENT	11:45:37
8	PUMP TAIL CEMENT	13:16:47
9	SHUT DOWN	13:27:09
10	DROP PLUG / PUMP DISPLACEMENT	13:29:15
11	SHUT DOWN	14:14:19
12	BUMP PLUG / SHUT DOWN	14:25:30
13	CASING PRESSURE TEST	14:29:50
14	PUMP SUGAR WATER THROUGH PARASITE STRING	15:20:12
15	SHUT DOWN / END JOB	15:25:14

Customer: Oxy
Well Description: CC 697-05-45
Customer Rep: Cal Wiley

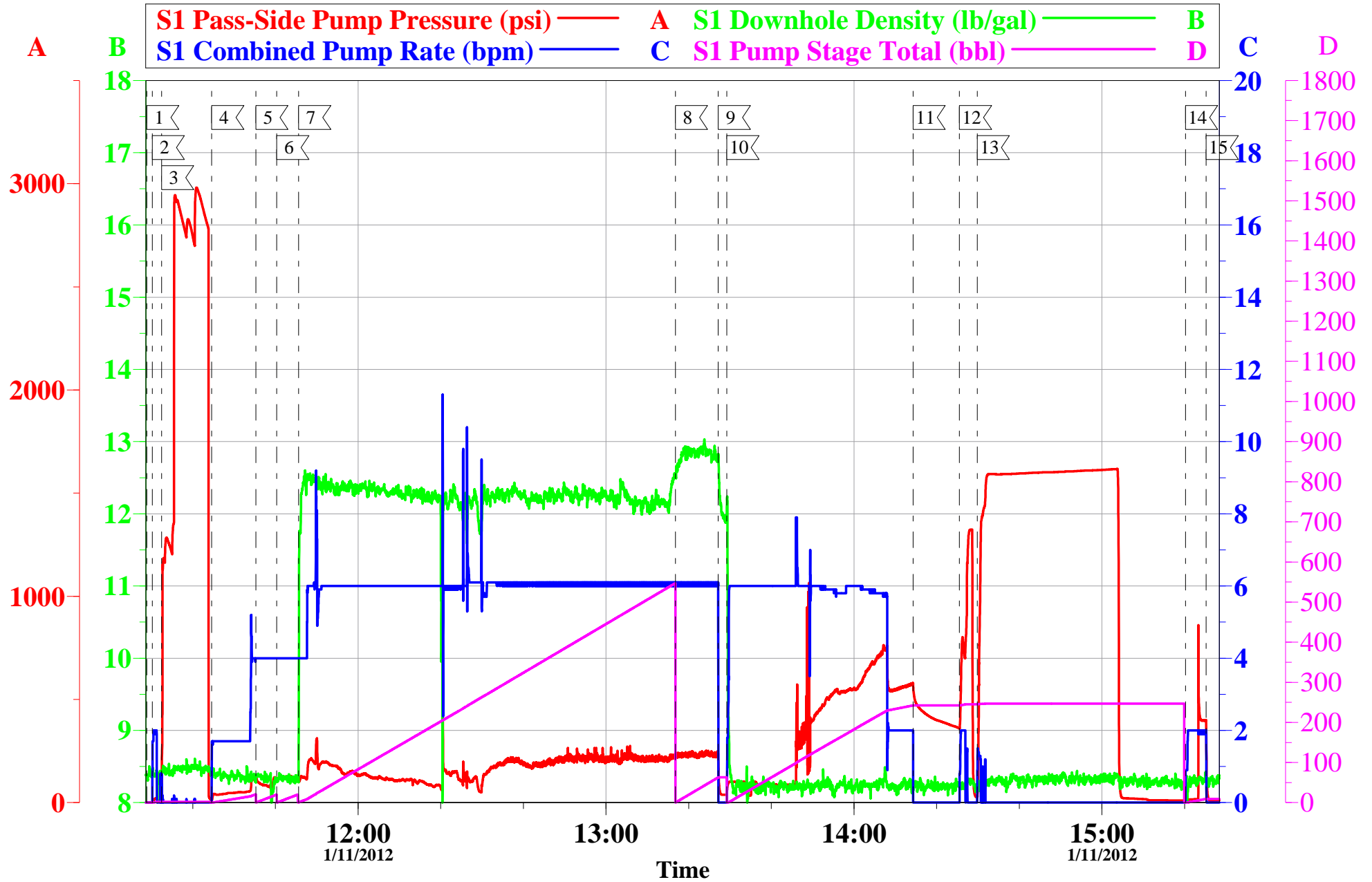
Job Date: 11-Jan-2012
Job type: Surface
Service Supervisor: Chuck Ross

Sales Order #: 9107160
ADC Used: Yes
Operator/ Pump: Carl Kukus / Elite 6

OptiCem v6.4.10
11-Jan-12 16:05

Oxy - CC 697-05-45

Surface

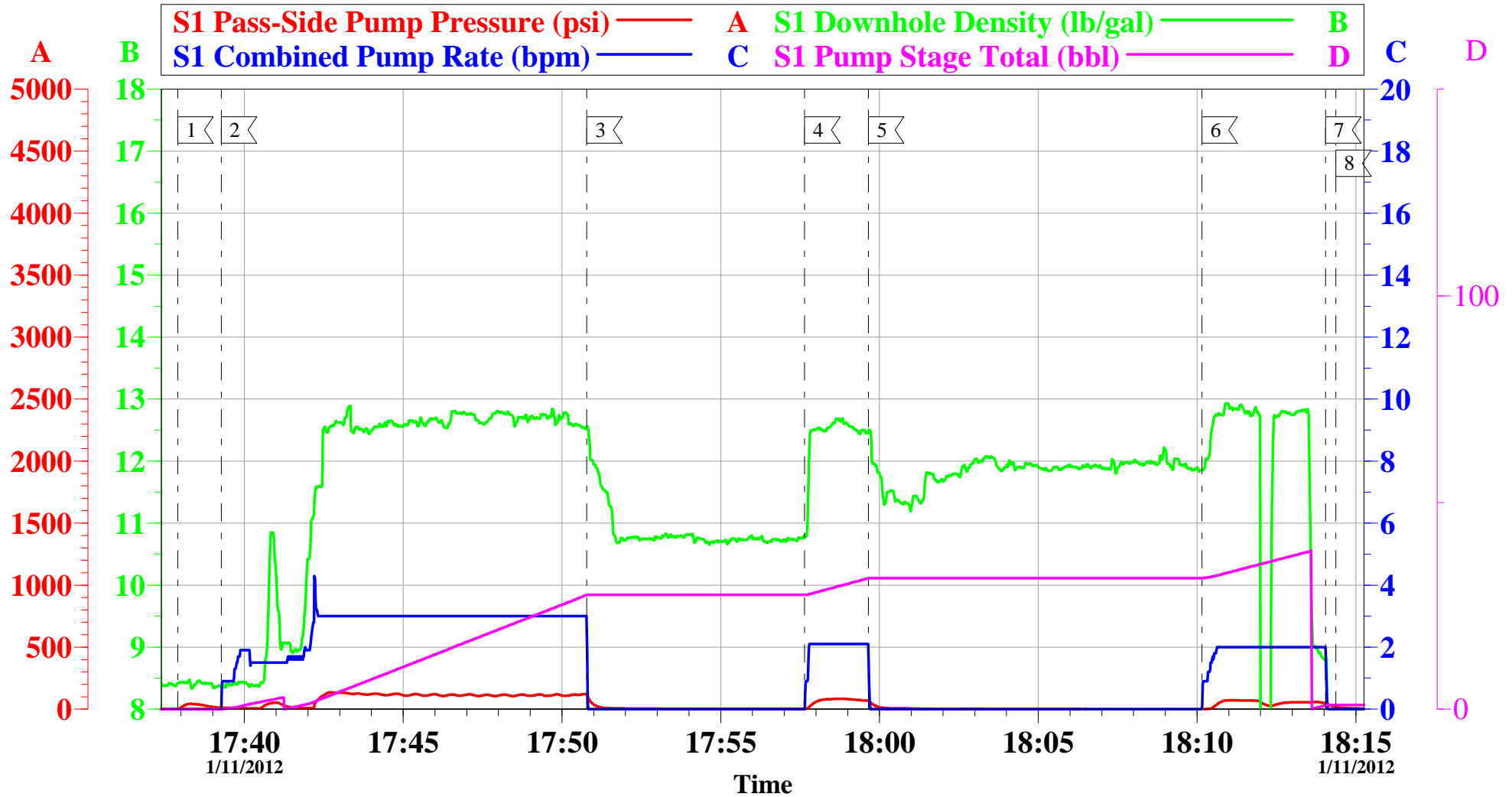


Customer: Oxy	Job Date: 11-Jan-2012	Sales Order #: 9107160
Well Description: CC 697-05-45	Job type: Surface	ADC Used: Yes
Customer Rep: Cal Wiley	Service Supervisor: Chuck Ross	Operator/ Pump: Carl Kukus / Elite 6

OptiCem v6.4.10
11-Jan-12 16:06

Oxy - CC 697-05-45

Top Out



Local Event Log

1	START JOB	17:37:54	2	PUMP CEMENT	17:39:16	3	SHUT DOWN	17:50:47
4	RESUME	17:57:39	5	SHUT DOWN	17:59:39	6	RESUME	18:10:09
7	SHUT DOWN	18:14:03	8	END JOB	18:14:22			

Customer: Oxy
Well Description: CC 697-05-45
Customer Rep: Cal Wylie

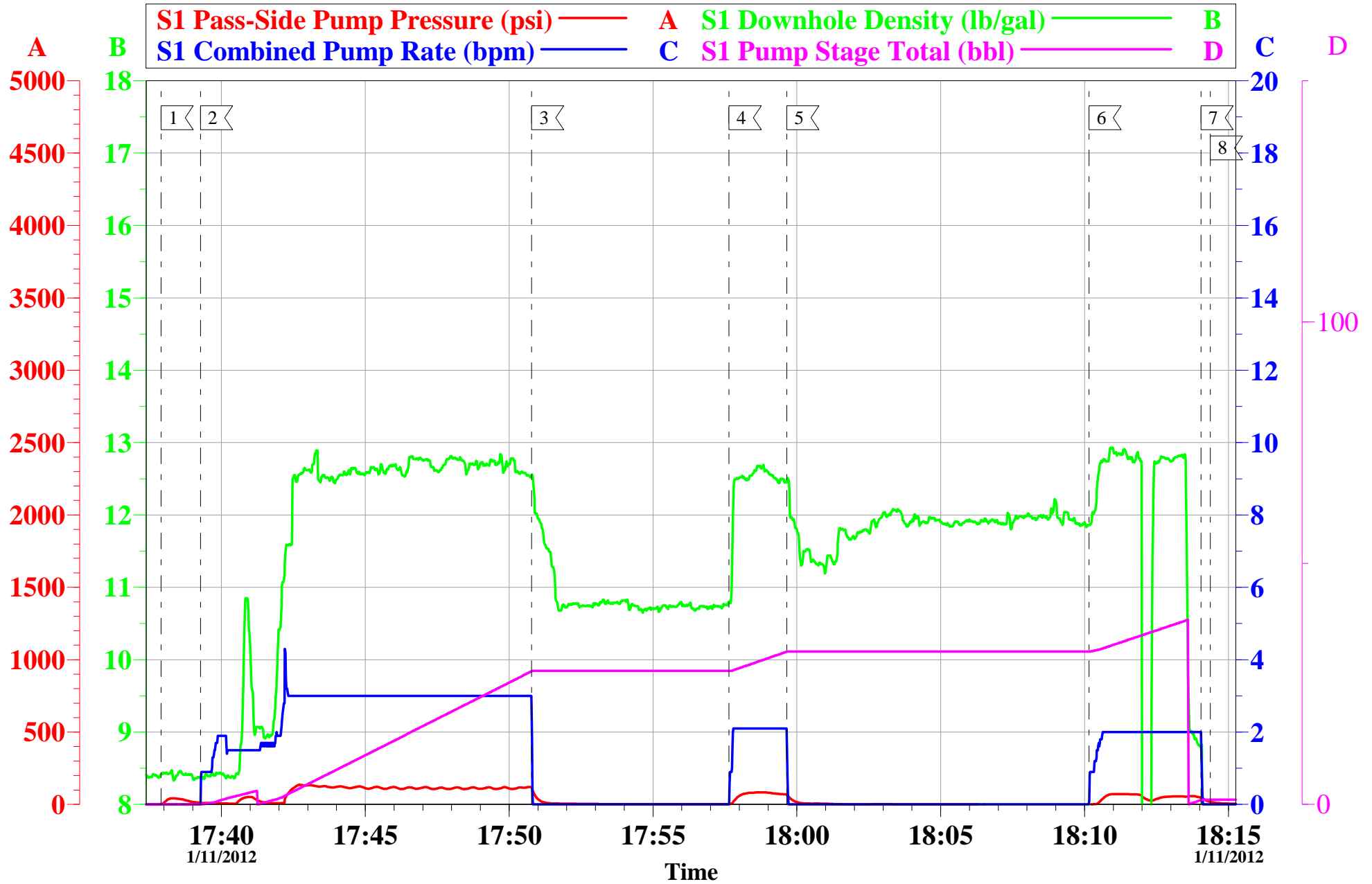
Job Date: 11-Jan-2012
Job type: Top Out
Service Supervisor: Chuck Ross

Sales Order #: 9107160
ADC Used: Yes
Operator/ Pump: Carl Kukus / Elite 6

OptiCem v6.4.10
11-Jan-12 18:47

Oxy - CC 697-05-45

Top Out



Customer: Oxy
Well Description: CC 697-05-45
Customer Rep: Cal Wylie

Job Date: 11-Jan-2012
Job type: Top Out
Service Supervisor: Chuck Ross

Sales Order #: 9107160
ADC Used: Yes
Operator/ Pump: Carl Kukus / Elite 6

OptiCem v6.4.10
11-Jan-12 18:48

Sales Order #: 9107160	Line Item: 10	Survey Conducted Date: 1/11/2012
Customer: OXY GRAND JUNCTION EBUSINESS		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative: CAL WYLIE		API / UWI: (leave blank if unknown) 05-045-20362
Well Name: CC		Well Number: 697-05-45
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	1/11/2012
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	

CUSTOMER SIGNATURE

Sales Order #: 9107160	Line Item: 10	Survey Conducted Date: 1/11/2012
Customer: OXY GRAND JUNCTION EBUSINESS		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative: CAL WYLIE		API / UWI: (leave blank if unknown) 05-045-20362
Well Name: CC		Well Number: 697-05-45
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	1/11/2012

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.	Deviated
Total Operating Time (hours) Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.	11
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.	7.1
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	6
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

Sales Order #: 9107160	Line Item: 10	Survey Conducted Date: 1/11/2012
Customer: OXY GRAND JUNCTION EBUSINESS		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative: CAL WYLIE		API / UWI: (leave blank if unknown) 05-045-20362
Well Name: CC		Well Number: 697-05-45
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