HALLIBURTON

OXY GRAND JUNCTION EBUSINESS

CC 697-08-18
GRAND VALLEY
Garfield County , Colorado

Cement Surface Casing

05-Mar-2012

Post Job Report

HALLIBURTON

Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 344034	**Ship To #:** 344034	**Quote #:**	**Sales Order #:** 9325075
Customer: OXY GRAND JUNCTION EBUSINESS		**Customer Rep:** Vallegas, Alex	
Well Name: CC	**Well #:** 697-08-18		**API/UWI #:** 05-045-20971
Field: GRAND VALLEY	**City (SAP):** ADDISON	**County/Parish:** Garfield	**State:** Colorado
Lat: N 39.544 deg. OR N 39 deg. 32 min. 36.996 secs.		**Long:** W 108.246 deg. OR W -109 deg. 45 min. 12.924 secs.	
Contractor: H&P 353	**Rig/Platform Name/Num:** H&P 353		
Job Purpose: Cement Surface Casing			
Well Type: Disposal Well	**Job Type:** Cement Surface Casing		
Sales Person: HIMES, JEFFREY	**Srvc Supervisor:** HUGENTOBLER, LOGAN	**MBU ID Emp #:** 447333	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
courtney, Trevor	31	509351	HUGENTOBLER, LOGAN Mark	31	447333	SILVERTHORN, AARON Jacob	31	491305
WOLFE, JON P	31	485217						

Equipment

HES Unit #	*Distance-1 way*	HES Unit #	*Distance-1 way*	HES Unit #	*Distance-1 way*	HES Unit #	*Distance-1 way*
10616651C	120 mile	10867304	120 mile	10951246	120 mile	10998054	120 mile
11808827	120 mile						

Job Hours

Date	*On Location Hours*	Operating Hours	Date	*On Location Hours*	Operating Hours	Date	*On Location Hours*	Operating Hours
3/4/12	23	8	3/5/12	8	4			
TOTAL			*Total is the sum of each column separately*					

Job

Formation Name			
Formation Depth (MD)	**Top**		**Bottom**
Form Type		**BHST**	
Job depth MD	2705. ft	**Job Depth TVD**	2705. ft
Water Depth		**Wk Ht Above Floor**	1. ft
Perforation Depth (MD)	*From*		**To**

Job Times

	Date	Time	Time Zone
Called Out	03 - Mar - 2012	18:00	MST
On Location	04 - Mar - 2012	01:00	MST
Job Started	04 - Mar - 2012	05:37	MST
Job Completed	05 - Mar - 2012	04:50	MST
Departed Loc	05 - Mar - 2012	07:30	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

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**	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 ft3/sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk

HALLIBURTON

Cementing Job Summary

Stage/Plug #: 1									
Fluid #	**Stage Type**	**Fluid Name**	**Qty**	**Qty uom**	**Mixing Density lbm/gal**	**Yield ft3/sk**	**Mix Fluid Gal/sk**	**Rate bbl/min**	**Total Mix Fluid Gal/sk**
1	**Fresh Water Spacer**		**20.00**	**bbl**	**8.33**	**.0**	**.0**	**.0**	
2	**Gel Water Spacer**		**20.00**	**bbl**	**8.34**	**.0**	**.0**	**.0**	
	0.25 gal/bbl	LGC-36 UC, BULK (101582749)							
3	**Fresh Water Spacer**		**20.00**	**bbl**	**8.33**	**.0**	**.0**	**.0**	
4	**HalCem Lead Cement**	**HALCEM (TM) SYSTEM (452986)**	**1060.0**	**sacks**	**12.3**	**2.15**	**11.83**	**.0**	**11.83**
	11.83 Gal	FRESH WATER							
5	**VariCem Tail Cement**	**VARICEM (TM) CEMENT (452009)**	**160.0**	**sacks**	**12.8**	**2.07**	**10.67**	**.0**	**10.67**
	10.67 Gal	FRESH WATER							
6	**Fresh Water Displacement**		**204.00**	**bbl**	**8.34**	**.0**	**.0**	**.0**	

Calculated Values		**Pressures**		**Volumes**					
Displacement	204	**Shut In: Instant**		**Lost Returns**		*Cement Slurry*		**Pad**	
Top Of Cement	SURFACE	**5 Min**		**Cement Returns**		**Actual Displacement**		**Treatment**	
Frac Gradient		**15 Min**		**Spacers**	60	**Load and Breakdown**		**Total Job**	

Rates							
Circulating		*Mixing*	6	*Displacement*	6	**Avg. Job**	6

Cement Left In Pipe	**Amount**	***47ft***	*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***

HALLIBURTON

Cementing Job Log

The Road to Excellence Starts with Safety

Sold To #: 344034	**Ship To #:** 344034	**Quote #:**	**Sales Order #:** 9325075
Customer: OXY GRAND JUNCTION EBUSINESS		**Customer Rep:** Vallegas, Alex	
Well Name: CC	**Well #:** 697-08-18		**API/UWI #:** 05-045-20971
Field: GRAND VALLEY	**City (SAP):** ADDISON	**County/Parish:** Garfield	**State:** Colorado
Legal Description:			
Lat: N 39.544 deg. OR N 39 deg. 32 min. 36.996 secs.		**Long:** W 108.246 deg. OR W -109 deg. 45 min. 12.924 secs.	
Contractor: H&P 353	**Rig/Platform Name/Num:** H&P 353		
Job Purpose: Cement Surface Casing			**Ticket Amount:**
Well Type: Disposal Well	**Job Type:** Cement Surface Casing		
Sales Person: HIMES, JEFFREY	**Srvc Supervisor:** HUGENTOBLER, LOGAN		**MBU ID Emp #:** 447333

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	03/03/2012 18:00							
Pre-Convoy Safety Meeting	03/03/2012 21:00							ALL HES EMPLOYEES
Arrive At Loc	03/04/2012 01:00							RIG STILL RUNNING CASING
Assessment Of Location Safety Meeting	03/04/2012 01:20							ALL HES EMPLOYEES
Rig-Up Equipment	03/04/2012 01:30							1 HT 400 PUMP TRUCK, 1 660 BULK TRUCK, 1 9.625 QUICK LATCH PLUG CONTAINER, 1 F550 P/U, 2 FIELD SILOS
Pre-Job Safety Meeting	03/04/2012 05:15							ALL HES EMPLOYEES, RIG CREW, CO REP.
Start Job	03/04/2012 05:37							TP 2685', TD 2685', FC 2638', HOLE 14.75", MUD WT 9.0 PPG, 800 BBLS OF H2O ON LOCATION, WATER SAMPLE SUBMITTED.
Pump Water	03/04/2012 05:42		2	2			18.0	FILL LINES
Pressure Test	03/04/2012 05:45							NO LEAKS
Pump Spacer 1	03/04/2012 05:53		2	20			56.0	FRESH WATER
Pump Spacer	03/04/2012 05:56		6	20			89.0	PUMP GEL WATER SPACER
Pump Water	03/04/2012 06:00		6	20			76.0	PUMP WATER
Activity Description	**Date/Time**	**Cht #**	**Rate bbl/ min**	**Volume bbl**		**Pressure psig**		**Comments**
				Stage	**Total**	**Tubing**	**Casing**	

HALLIBURTON

Cementing Job Log

Pump Lead Cement	03/04/2012 06:13		6	406			179.0	1060 SKS VARICEM CCMT TO BE MIXED AT 12.3 PPG, 2.33 YIELD, 12.62 GAL/SK, CMT TO BE WEIGHED VIA PRESSURE BALANCED MUD SCALES. WET AND DRY SAMPLES SUBMITTED.
Pump Tail Cement	03/04/2012 07:20		6	59			120.0	160 SKS VARICEM CCMT TO BE MIXED AT 12.8 PPG, 2.07 YIELD, 10.67 GAL/SK, CMT TO BE WEIGHED VIA PRESSURE BALANCED MUD SCALES. WET AND DRY SAMPLES SUBMITTED.
Shutdown	03/04/2012 07:32							FOR NO MORE THEN 5 MINUTES,
Drop Plug	03/04/2012 07:33							PLUG LAUNCH
Pump Displacement	03/04/2012 07:36		6	204			302.0	FRESH WATER, NO RETURNS ENTIRE JOB
Slow Rate	03/04/2012 08:13		2				874.0	10 BBLS PRIOR TO CALCULATED DISPLACEMENT
Bump Plug	03/04/2012 08:16							PLUG LANDED HOLD FOR TWO MINUTES
Check Floats	03/04/2012 08:20							FLOATS HOLDING, NO ANNULAR FLOW
Pressure Test	03/04/2012 08:22							PRESSURE TEST CASING 1500 PSI FOR 30 MIN. NO LEAKS
Pump Spacer	03/04/2012 09:18							PUMPED 10BBLS SUGAR WATER THROUGH PARASITE STRING
Pump Cement	03/04/2012 11:32		3	54		84.0		TOPOUT 154 SKS HALCEM CCMT TO BE MIXED AT 12.5 PPG, 1.97 YIELD, 10.96 GAL/SK, CMT TO BE WEIGHED VIA PRESSURE BALANCED MUD SCALES. WET AND DRY SAMPLES SUBMITTED.
Activity Description	**Date/Time**	**Cht**	**Rate bbl/ min**	**Volume bbl**		**Pressure psig**		**Comments**

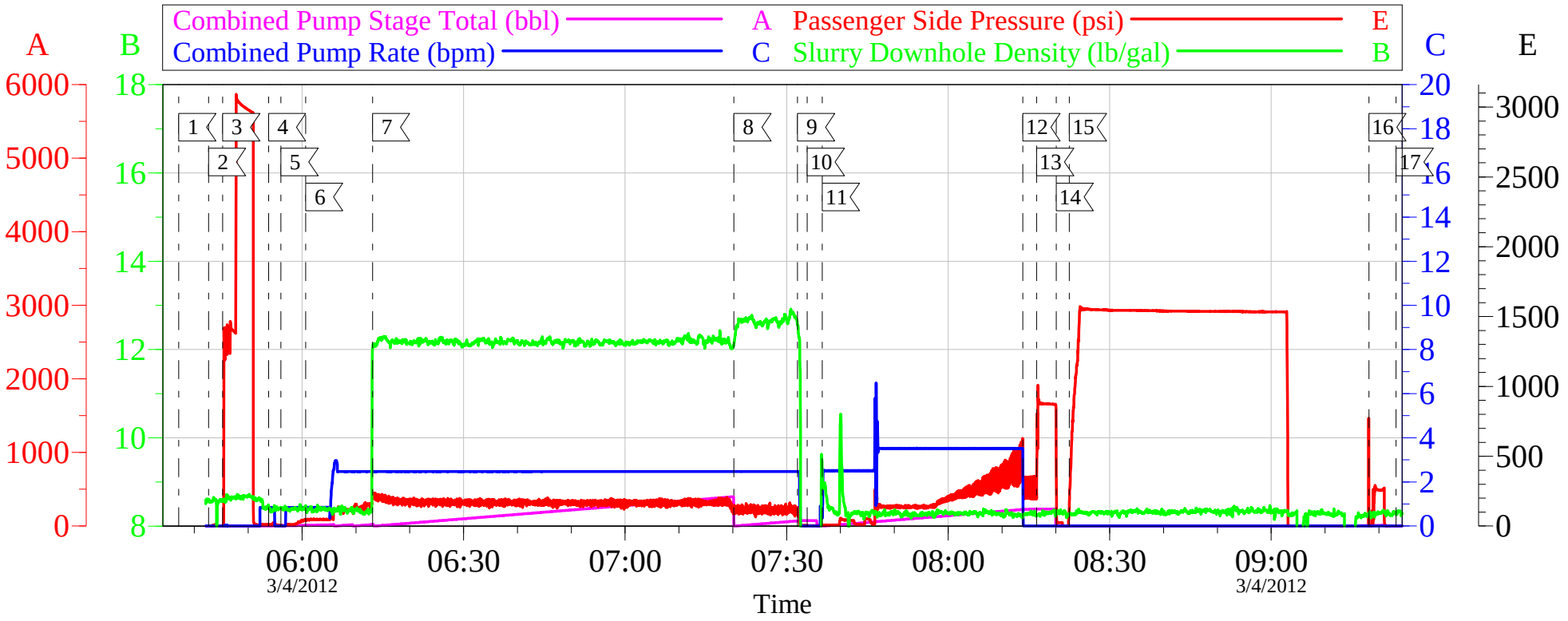
HALLIBURTON

Cementing Job Log

		#		Stage	Total	Tubing	Casing	
Pump Cement	03/04/2012 16:00		3	35		92.0		TOPOUT 100 SKS HALCEM CCMT TO BE MIXED AT 12.5 PPG, 1.97 YIELD, 10.96 GAL/SK, CMT TO BE WEIGHED VIA PRESSURE BALANCED MUD SCALES. WET AND DRY SAMPLES SUBMITTED., ORDERED 500 SKS OF TOP-OUT CEMENT
Pump Cement	03/05/2012 00:56		3	60		96.0		TOPOUT 171 SKS HALCEM CCMT TO BE MIXED AT 12.5 PPG, 1.97 YIELD, 10.96 GAL/SK, CMT TO BE WEIGHED VIA PRESSURE BALANCED MUD SCALES. WET AND DRY SAMPLES SUBMITTED.
Pump Cement	03/05/2012 03:58		3	41		104.0		TOPOUT 117 SKS HALCEM CCMT TO BE MIXED AT 12.5 PPG, 1.97 YIELD, 10.96 GAL/SK, CMT TO BE WEIGHED VIA PRESSURE BALANCED MUD SCALES. WET AND DRY SAMPLES SUBMITTED.
End Job	03/05/2012 04:50							THANK YOU FOR USING HES FROM LOGAN HUGENTOBLER AND CREW. CEMENT TO SURFACE
Post-Job Safety Meeting (Pre Rig-Down)	03/05/2012 04:55							ALL HES EMPLOYEES
Rig-Down Equipment	03/05/2012 05:00							SAFELY
Pre-Convoy Safety Meeting	03/05/2012 07:25							ALL HES EMPLOYEES
Crew Leave Location	03/05/2012 07:30							SITE WAS AS CLEAN AS WHEN WE ARRIVED

OXY-CC697-08-81

SURFACE



Local Event Log

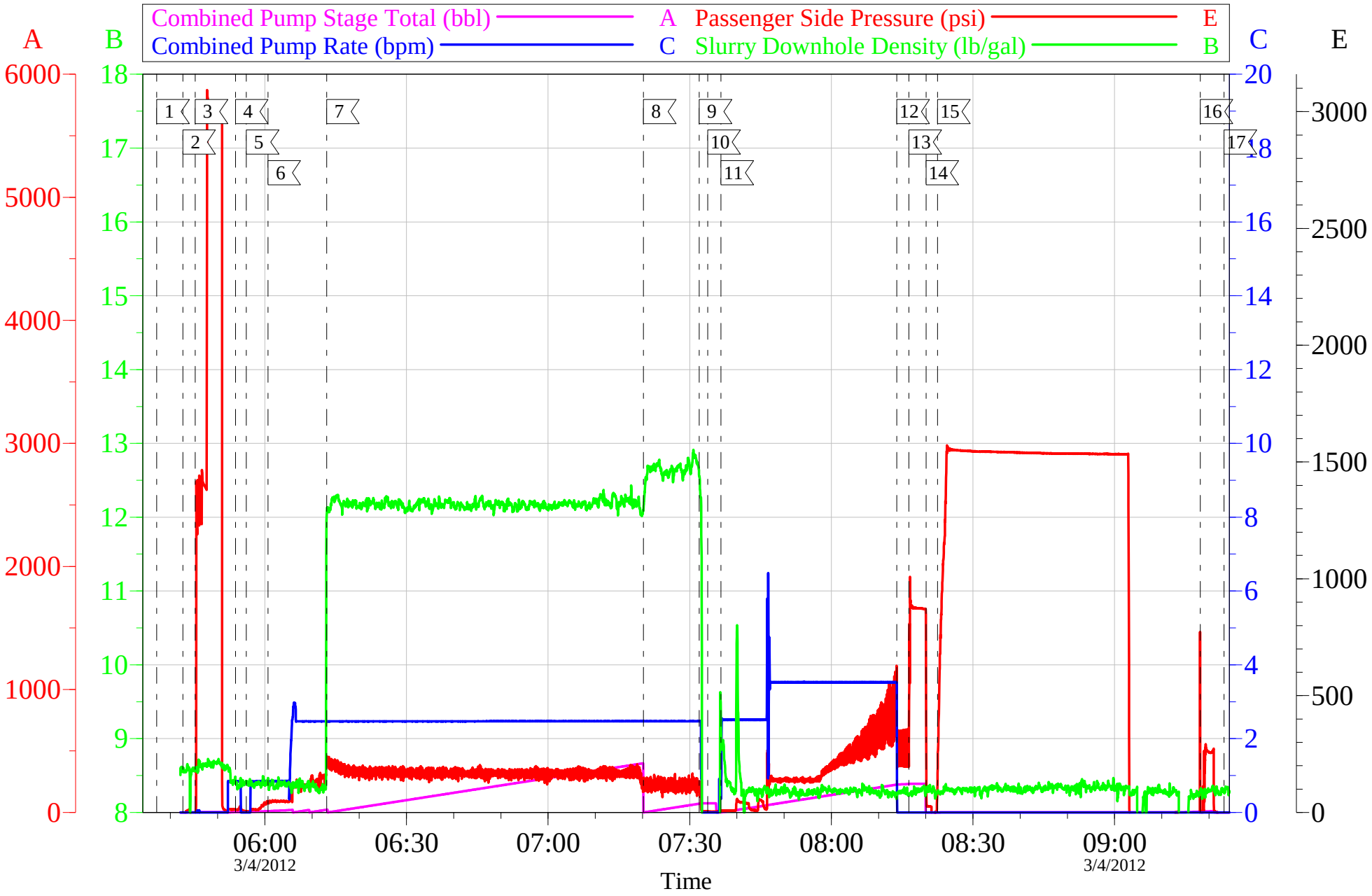
1	START JOB	05:37:06	2	PRIME LINES	05:42:39
3	PRESSURE TEST	05:45:15	4	PUMP H2O SPACER	05:53:46
5	PUMP GEL SPACER	05:56:04	6	PUMP H2O SPACER	06:00:40
7	PUMP LEAD CEMENT	06:13:07	8	PUMP TAIL CEMENT	07:20:13
9	SHUTDOWN	07:32:01	10	DROP PLUG	07:33:49
11	PUMP DISPLACEMENT	07:36:37	12	SLOW RATE	08:13:52
13	BUMP PLUG	08:16:25	14	CHECK FLOATS	08:20:04
15	PRESSURE TEST CASING	08:22:31	16	PUMP SUGAR WATER IN PARASITE	09:18:08
17	END JOB	09:23:11			

Customer:	Halliburton	Job Date:	04-Mar-2012	Sales Order #:	9325075
Well Description:	CC697-08-18	Job Type:	SURFACE	ADC Used:	YES
Company Rep:	ALEX VALLEGAS	Cement Supervisor:	LOGAN HUGENTOBLER	Elite #4:	AARON SILVERTHORN

OptiCem v6.4.10
05-Mar-12 03:36

OXY-CC697-08-81

SURFACE

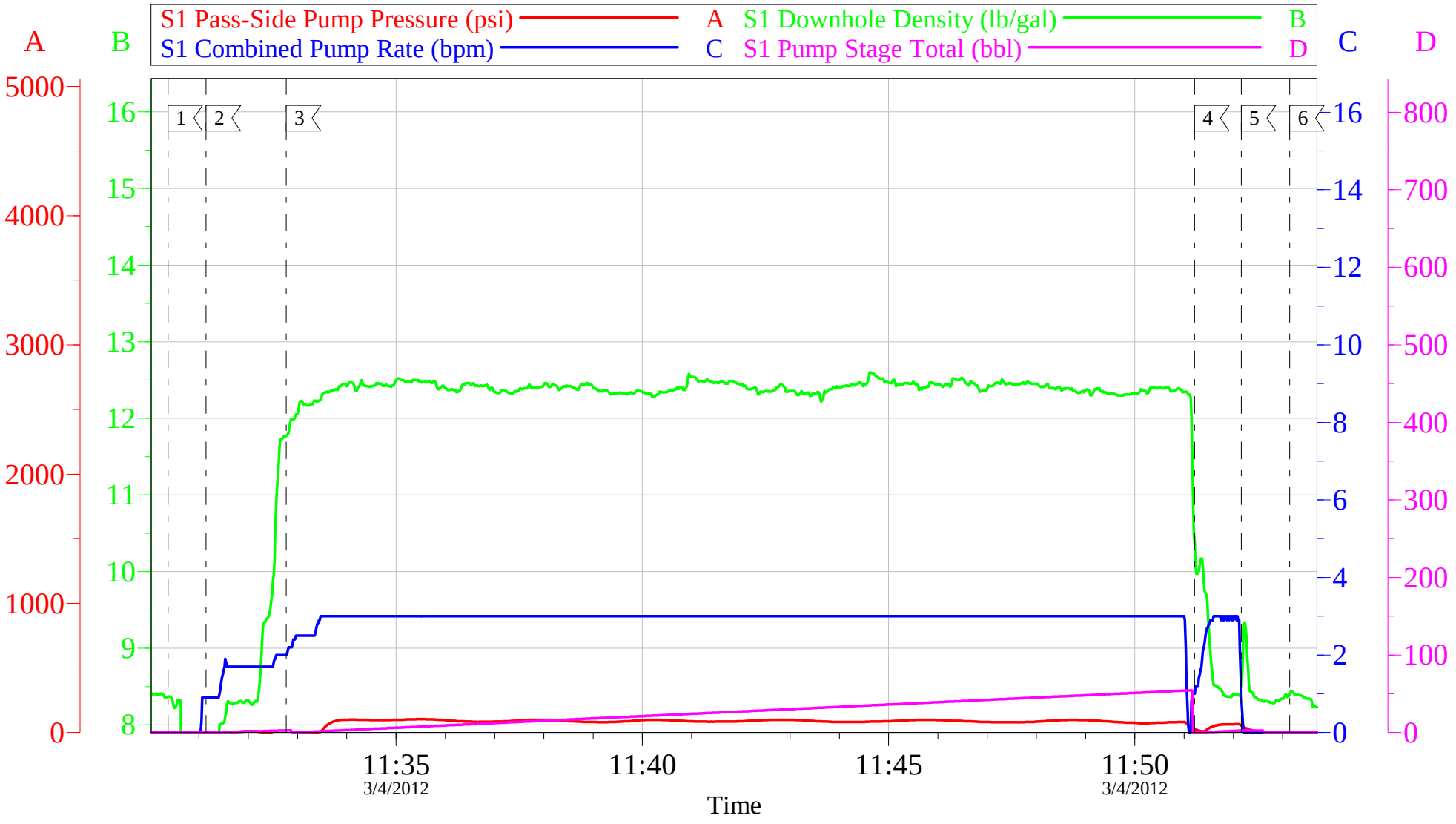


Customer:	Halliburton	Job Date:	04-Mar-2012	Sales Order #:	9325075
Well Description:	CC697-08-18	Job Type:	SURFACE	ADC Used:	YES
Company Rep:	ALEX VALLEGAS	Cement Supervisor:	LOGAN HUGENTOBLER	Elite #4:	AARON SILVERTHORN

OptiCem v6.4.10
05-Mar-12 03:37

OXY- CC697-08-18

TOP-OUT#1



Local Event Log

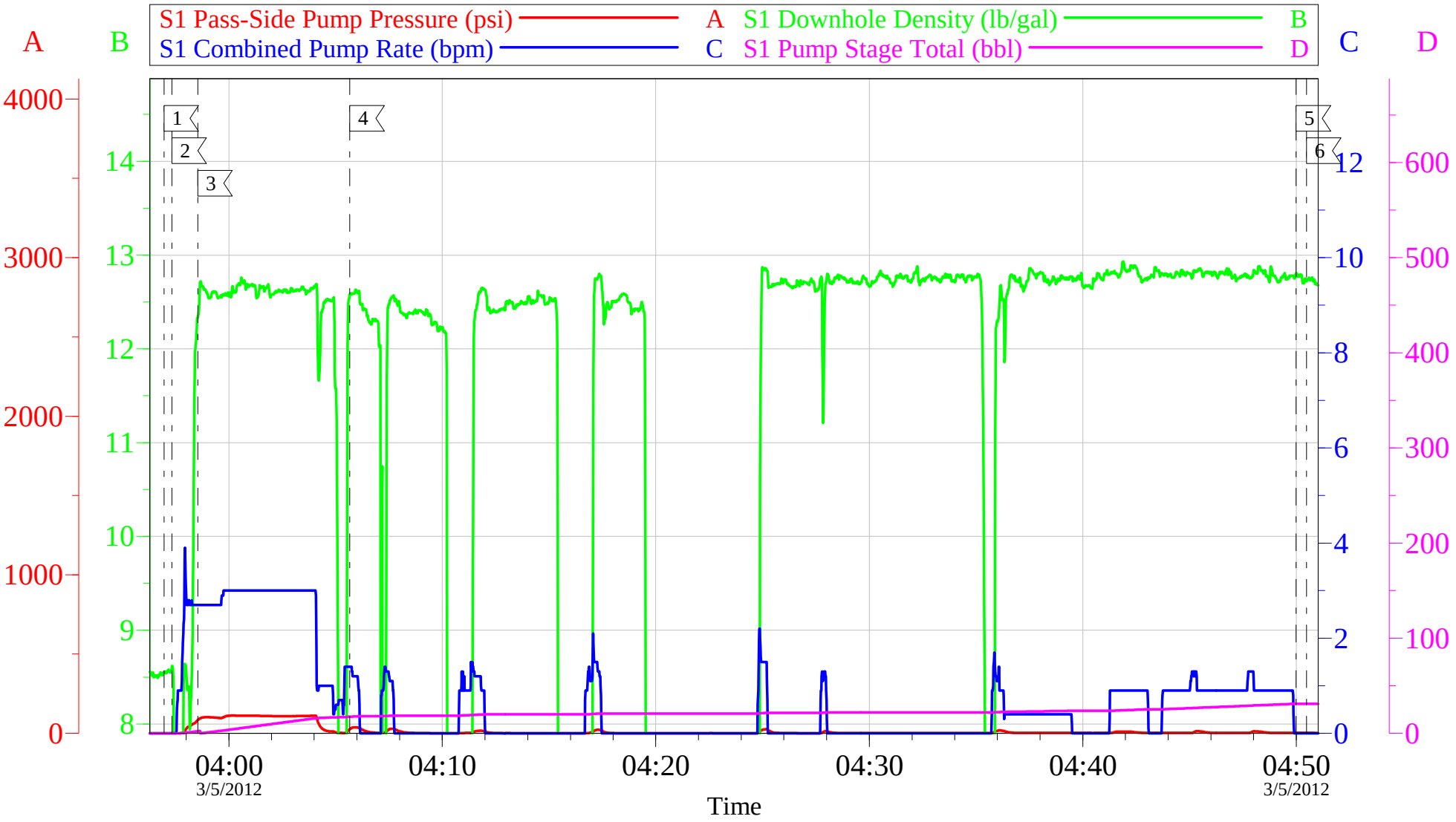
1	START JOB	11:30:22	2	H2O AHEAD	11:31:09	3	PUMP CEMENT	11:32:46
4	H2O BEHIND	11:51:13	5	SHUTDOWN	11:52:09	6	END JOB	11:53:09

Customer:	OXY	Job Date:	04-Mar-2012	Sales Order #:	9325075
Well Description:	CC697-08-18	Job Type:	TOP-OUT#1	ADC Used:	YES
Company Rep:	ALEX VALLEGS	Cement Supervisor:	LOGAN HUGENTOBLER	Elite #4:	AARON SILVERTHORN

OptiCem v6.4.10
04-Mar-12 12:11

OXY- CC697-08-18

TOP-OUT#4



Local Event Log

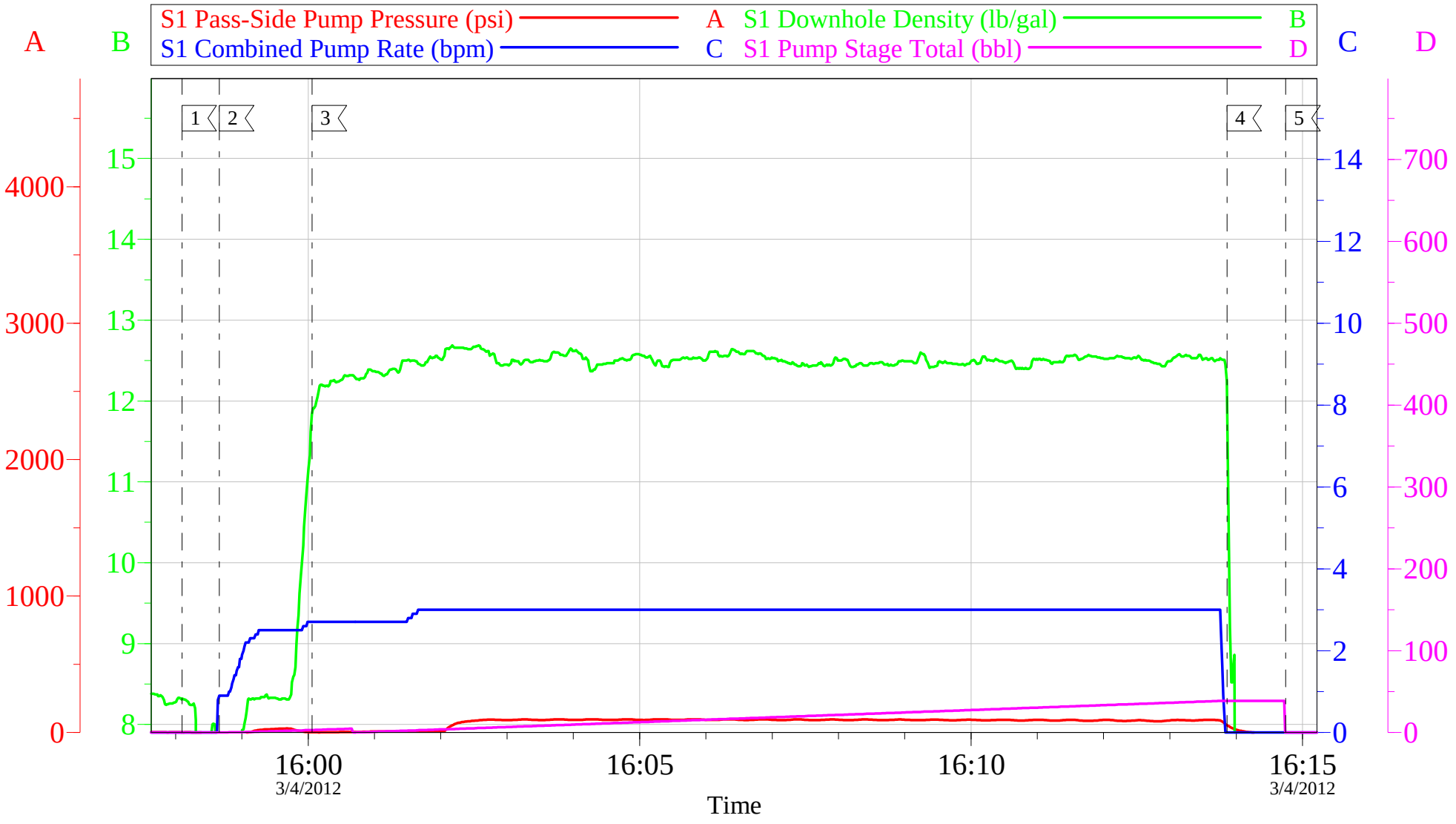
1	START JOB	03:56:58	2	PUMP H2O AHEAD	03:57:20	3	PUMP CEMENT	03:58:33
4	HESITATE CEMENT	04:05:40	5	SHUTDOWN	04:50:00	6	END JOB	04:50:28

Customer:	OXY	Job Date:	05-Mar-2012	Sales Order #:	9325075
Well Description:	CC697-08-18	Job Type:	TOP-OUT#4	ADC Used:	YES
Company Rep:	ALEX VALLEGAS	Cement Supervisor:	LOGAN HUGENTOBLER	Elite #4:	AARON SILVERTHORN

OptiCem v6.4.10
05-Mar-12 05:59

OXY-CC 697-08-18

TOP-OUT#2



Local Event Log

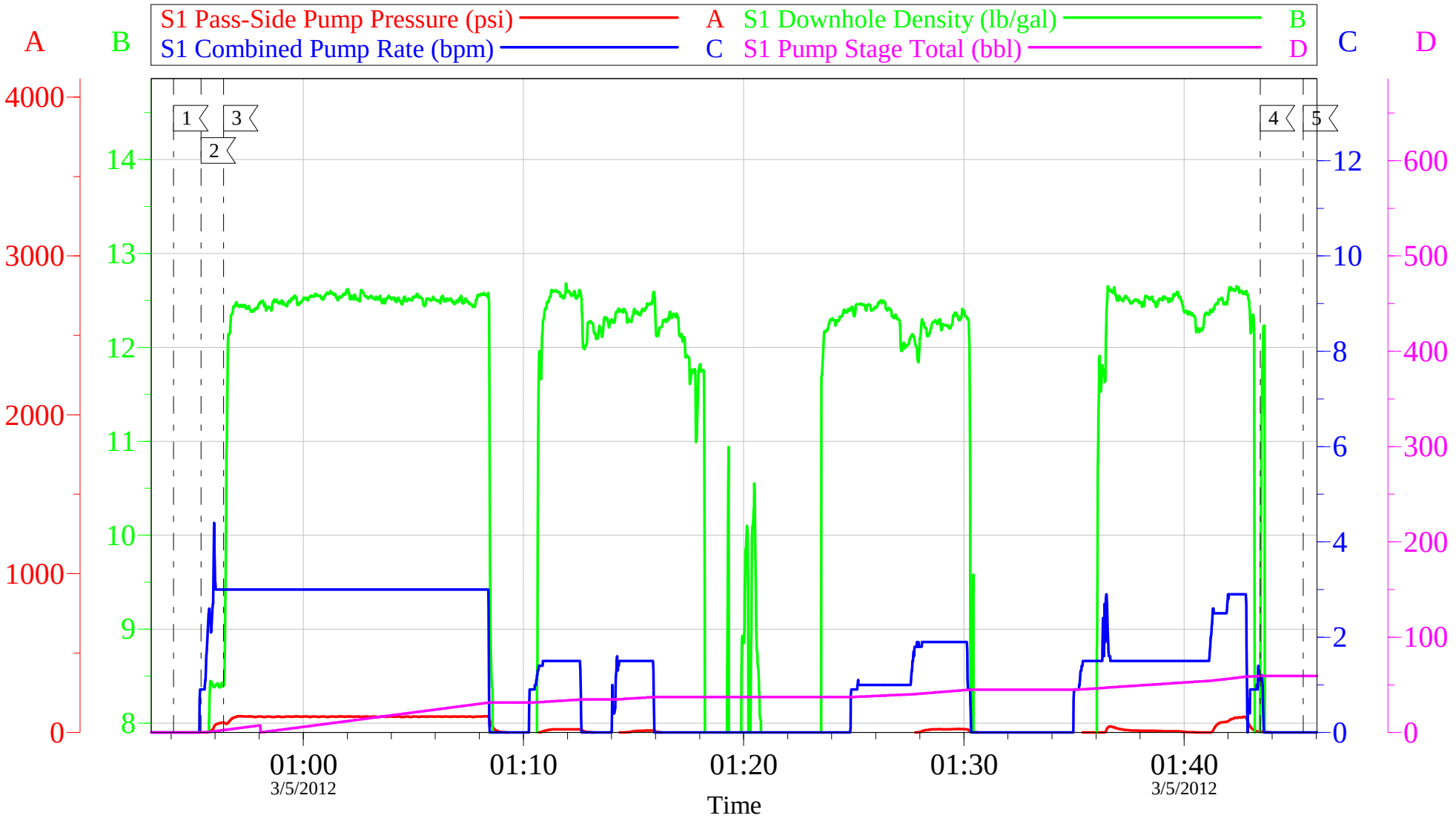
1	START JOB	15:58:06	2	H2O AHEAD	15:58:40	3	PUMP CEMENT 16:00:04
4	SHUTDOWN	16:13:52	5	END JOB	16:14:45		

Customer:	OXY	Job Date:	04-Mar-2012	Sales Order #:	9325075
Well Description:	CC 697-08-18	Job Type:	TOP-OUT#3	ADC Used:	YES
Company Rep:	ALEX V.	Cement Supervisor:	LOGAN HUGENTOBLER	Elite #4:	AARON SILVERTHORNE

OptiCem v6.4.10
04-Mar-12 16:27

OXY-CC697-08-18

TOP-OUT#3



Local Event Log

1	START JOB	00:54:07	2	PUMP H2O AHEAD	00:55:21	3	PUMP CEMENT	00:56:23
4	SHUTDOWN	01:43:28	5	END JOB	01:45:25			

Customer:	OXY	Job Date:	05-Mar-2012	Sales Order #:	9325075
Well Description:	CC697-08-18	Job Type:	TOP=OUT#3	ADC Used:	YES
Company Rep:	ALEX VALLEGAS	Cement Supervisor:	LOGAN HUGENTOBLER	Elite #4:	AARON SILVERTHORN

OptiCem v6.4.10
05-Mar-12 02:14

HALLIBURTON

Water Analysis Report

Company:	**OXY**	**Date:**	**3/17/2012**
Submitted by:	**LOGAN HUGENTOBLER**	**Date Rec.:**	**3/17/2012**
Attention:		**S.O.#**	**9325075**
Lease	**CC**	**Job Type:**	**9.625 SURFACE**
Well #	**697-08-18**		

Specific Gravity	***MAX***	**1**	
pH	***8***	**7**	
Potassium (K)	***5000***	**0**	**Mg / L**
Calcium (Ca)	***500***	**175**	**Mg / L**
Iron (FE2)	***300***	**0**	**Mg / L**
Chlorides (Cl)	***3000***	**0**	**Mg / L**
Sulfates (SO_4)	***1500***	**below 200**	**Mg / L**
Chlorine (Cl_2)		**0**	**Mg / L**
Temp	***40-80***	**70**	**Deg**
Total Dissolved Solids		**300**	**Mg / L**

Respectfully: **LOGAN HUGENTOBLER**

Title: **CEMENTING SUPERVISOR**

Location: **Grand Junction, CO**

HALLIBURTON

CUSTOMER SURVEY

Sales Order #:	**Line Item:**	**Survey Conducted Date:**
9325075	10	3/5/2012
Customer:		**Job Type (BOM):**
OXY GRAND JUNCTION EBUSINESS		CMT SURFACE CASING BOM
Customer Representative:		**API / UWI: (leave blank if unknown)**
ALEX VALLEGAS		05-045-20971
Well Name:		**Well Number:**
CC		697-08-18
Well Type:	**Well Country:**	
Disposal Well	United States of America	
H2S Present:	**Well State:**	**Well County:**
	Colorado	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**	**3/5/2012**
Survey Interviewer	**The survey interviewer is the person who initiated the survey.**	**LOGAN HUGENTOBLER (HB15210)**
Customer Participation	**Did the customer partipcipate 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**	**GUYS DID A GREAT JOB, THANKS**

CUSTOMER SIGNATURE

HALLIBURTON

CUSTOMER SURVEY

Sales Order #:	**Line Item:**	**Survey Conducted Date:**
9325075	10	3/5/2012
Customer:		**Job Type (BOM):**
OXY GRAND JUNCTION EBUSINESS		CMT SURFACE CASING BOM
Customer Representative:		**API / UWI: (leave blank if unknown)**
ALEX VALLEGAS		05-045-20971
Well Name:		**Well Number:**
CC		697-08-18
Well Type:	**Well Country:**	
Disposal Well	United States of America	
H2S Present:	**Well State:**	**Well County:**
	Colorado	Garfield

KEY PERFORMANCE INDICATORS

General	
Survey Conducted Date The date the survey was conducted	3/5/2012

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.	18
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.	10
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	8
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

HALLIBURTON

CUSTOMER SURVEY

Sales Order #:	**Line Item:**	**Survey Conducted Date:**
9325075	10	3/5/2012
Customer:		**Job Type (BOM):**
OXY GRAND JUNCTION EBUSINESS		CMT SURFACE CASING BOM
Customer Representative:		**API / UWI: (leave blank if unknown)**
ALEX VALLEGAS		05-045-20971
Well Name:		**Well Number:**
CC		697-08-18
Well Type:	**Well Country:**	
Disposal Well	United States of America	
H2S Present:	**Well State:**	**Well County:**
	Colorado	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 cment 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