
OXY GRAND JUNCTION EBUSINESS

**CC 697-05-38A
GRAND VALLEY
Garfield County , Colorado**

Cement Surface Casing
09-Nov-2011

Job Site Documents

The Road to Excellence Starts with Safety

Sold To #: 344034	Ship To #: 344034	Quote #:	Sales Order #: 8559377
Customer: OXY GRAND JUNCTION EBUSINESS		Customer Rep: Coombs, Henry	
Well Name: CC		Well #: 697-05-38A	API/UWI #: 05-045-20372
Field: GRAND VALLEY	City (SAP): ADDISON	County/Parish: Garfield	State: Colorado
Lat: N 39.555 deg. OR N 39 deg. 33 min. 16.452 secs.		Long: W 108.242 deg. OR W -109 deg. 45 min. 27.792 secs.	
Contractor: H&P Drilling		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: 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 #
BURKE, BRENDAN Patrick	20.5	487782	CARTER, ERIC Earl	20.5	345598	MILLER, KEVIN Paul	6	443040
NICKLE, RYON	20.5	454759	PARKER, BRANDON	20.5	503646			

Equipment

HES Unit #	Distance-1 way						
10784080	240 mile	10804579	240 mile	10872429	240 mile	10951249	240 mile
11259885	240 mile	11360883	240 mile				

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
11/08/2011	16	4.5	11/09/2011	4.5	2			
TOTAL			<i>Total is the sum of each column separately</i>					

Job

Job Times

Formation Name	Formation Depth (MD)	Top	Bottom	Called Out	Date	Time	Time Zone
		0	2710		08 - Nov - 2011	01:00	MST
Form Type		BHST		On Location	08 - Nov - 2011	08:00	MST
Job depth MD	2710. ft	Job Depth TVD	2710. ft	Job Started	08 - Nov - 2011	17:00	MST
Water Depth		Wk Ht Above Floor	. ft	Job Completed	09 - Nov - 2011	02:29	MST
Perforation Depth (MD)	From	To		Departed Loc	09 - Nov - 2011	0430	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, HW, 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		13	

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	

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	Water Spacer		10.00	bbl	8.33	.0	.0	4	
2	Gel Spacer		20.00	bbl	.	.0	.0	6	
3	Water Spacer		10.00	bbl	.	.0	.0	6	
4	VersaCem Lead Cement	VERSACEM (TM) SYSTEM (452010)	1050.0	sacks	12.3	2.33	12.62	8	12.62
	12.62 Gal	FRESH WATER							
5	VersaCem Tail Cement	VERSACEM (TM) SYSTEM (452010)	165.0	sacks	12.8	2.07	10.67	8	10.67
	10.67 Gal	FRESH WATER							
6	Displacement		201.00	bbl	.	.0	.0	8	
6	Top Out Cement		362.00	sacks	12.5	1.97	10.96.0	2	
Calculated Values		Pressures		Volumes					
Displacement	201.8	Shut In: Instant		Lost Returns	yes	Cement Slurry	617.1	Pad	
Top Of Cement	surface	5 Min		Cement Returns	yes	Actual Displacement	201.8	Treatment	
Frac Gradient		15 Min		Spacers	60	Load and Breakdown		Total Job	878.9
Rates									
Circulating rig		Mixing	6	Displacement	8	Avg. Job	7		
Cement Left In Pipe	Amount	46 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 #: 8559377
Customer: OXY GRAND JUNCTION EBUSINESS		Customer Rep: Coombs, Henry	
Well Name: CC		Well #: 697-05-38A	API/UWI #: 05-045-20372
Field: GRAND VALLEY	City (SAP): ADDISON	County/Parish: Garfield	State: Colorado
Legal Description:			
Lat: N 39.555 deg. OR N 39 deg. 33 min. 16.452 secs.		Long: W 108.242 deg. OR W -109 deg. 45 min. 27.792 secs.	
Contractor: H&P Drilling		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		Srvc Supervisor: NICKLE, RYON	MBU ID Emp #: 454759

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Arrive at Location from Other Job or Site	11/08/2011 08:00							COMPANY REP REQUESTED THAT HES EQUIPMENT RETURN TO LOCATION AT 1300,
Assessment Of Location Safety Meeting	11/08/2011 12:50							ALL HES PERSONEL; COMPLETED PERMIT TO WORK FOR OXY AND CREW DISPOSITION SHEET.
Pre-Rig Up Safety Meeting	11/08/2011 13:10							ATTENDED BY ALL HES CREW
Rig-Up Equipment	11/08/2011 13:20							BULK HOSES CHECKED FOR BACKING OFF OR ANY IRREGULARITY.
Pre-Job Safety Meeting	11/08/2011 16:25							ALL HES PERSONEL, 3RD PARTY OXY CONTRACTORS AND RIG CREW
Start Job	11/08/2011 17:00							TD-2710', TP- 2690', SJ - 46', CSG- 9.625" 36#, OH- 14.75", MUD- 9.1# **OFF LINE CEMENT JOB
Other	11/08/2011 17:01		2	2			51.0	FILL LINES
Pressure Test	11/08/2011 17:03							ALL LINES HELD PRESSURE AT 3114 PSI
Pump Spacer 1	11/08/2011 17:07		4	20			104.0	FRESH WATER
Pump Spacer 2	11/08/2011 17:12		6	20			104.0	GEL SPACER; 1 - 5 GAL BUCKETT PER 20 BBLs H2O

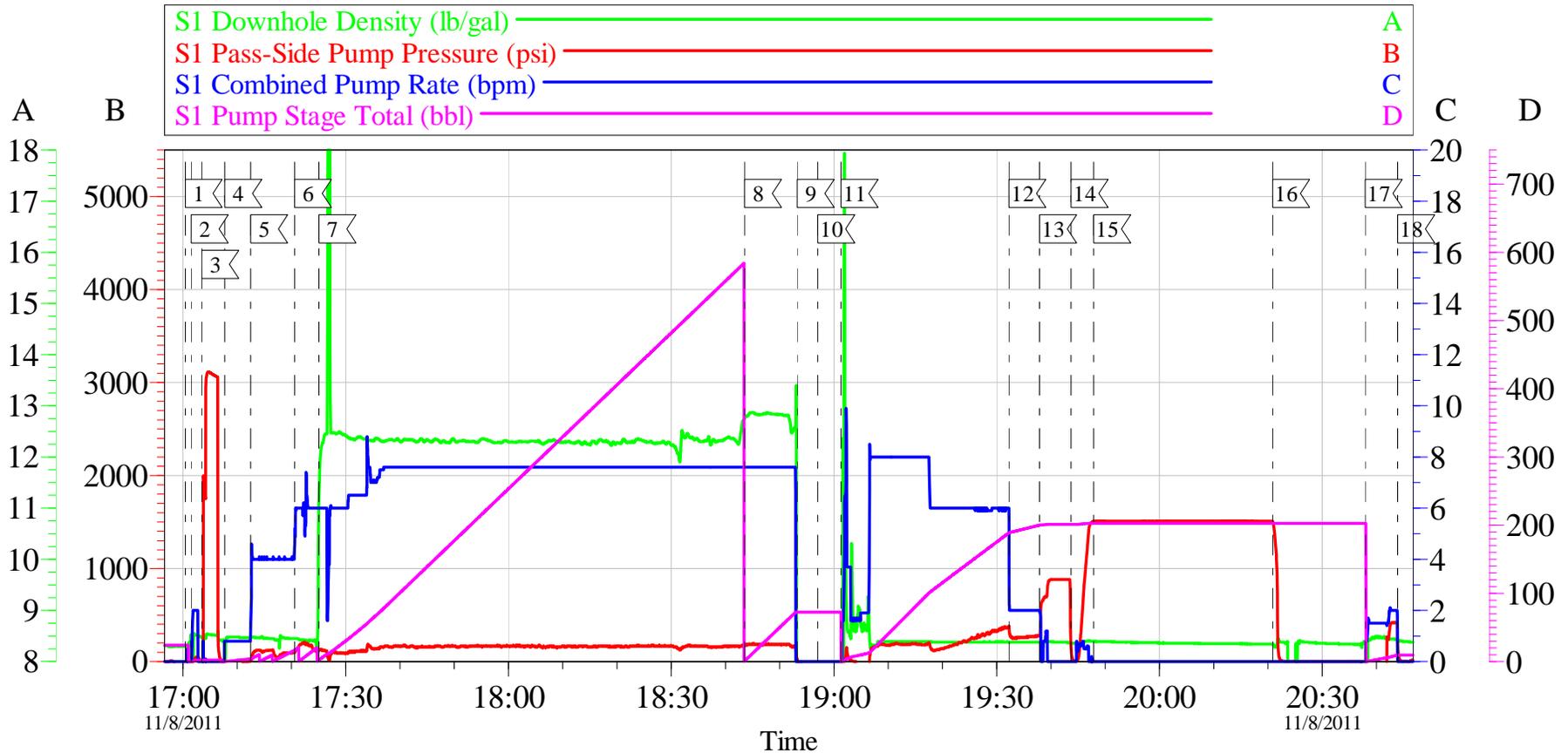
Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Pump Spacer 1	11/08/2011 17:20		6	20			100.0	FRESH WATER
Pump Lead Cement	11/08/2011 17:25		6	435.7			203.0	1050SK, 12.3 PPG, 2.33FT3/SK, 12.62 GAL/SK, PUMPS CAVITATED DUE TO LCM IN CMT, CHART REFLECTS 7.6 BBLS/ MIN, GAL / MIN RELECTED 6 BBL/MIN DOWNHOLE. BULK HOSES CHECKED FOR BACKING OFF OR ANY IRREGULARITY THROUGHOUT LEAD PUMP.
Pump Tail Cement	11/08/2011 18:43		6	58.9			215.0	160SKS, 12.8 PPG, 2.07 FT3/SK, 10.67 GAL/SK. BULK HOSES CHECKED FOR BACKING OFF OR ANY IRREGULARITY THROUGHOUT TAIL PUMP.
Shutdown	11/08/2011 18:53							
Drop Top Plug	11/08/2011 18:57							CO REP VERIFIED PLUG LAUNCHED
Pump Displacement	11/08/2011 19:01		8	191.7			376.0	FRESH WATER
Slow Rate	11/08/2011 19:32		2	10			276.0	SLOWED RATE TO 2 BBL/MIN AT 191.7 AWAY
Bump Plug	11/08/2011 19:37						882.0	PLUG LANDED
Check Floats	11/08/2011 19:43							FLOATS HELD, NO RETURNS THROUGHOUT JOB
Pressure Up	11/08/2011 19:47						1515.0	CASING PRESSURE TEST, PRESSURE UP CASING TO 1515 PSI, HOLD FOR 30 MINUTES.
Release Casing Pressure	11/08/2011 20:20							
Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	

Other	11/08/2011 20:37		2	10				PUMP SUGAR WATER THROUGH PARASITE LINE. 20 LBS SUGAR PER 10 BBLs OF H2O. TOP PRESSURE 440#.
Shutdown	11/08/2011 20:43							
Pump Cement	11/08/2011 22:01		2	50			71.0	143 SKS TOP OUT CEMENT ON WELL CC 697-05-38A; ALL TOP OUT CEMENT: 12.5 PPG, 1.97 YIELD, 10.96 GPS
Shutdown	11/08/2011 22:30							
Pump Cement	11/08/2011 22:35		2	1			75.0	3 SKS TOP OUT CEMENT ON WELL CC697-05-47B
Shutdown	11/08/2011 22:36							
Pump Cement	11/08/2011 22:40		2	20			70.0	72 SKS TOP OUT CEMENT ON WELL CC 697-05-38A
Shutdown	11/08/2011 22:53							215 SKS TOTAL PUMPED FOR TOP OUT 1, BULK HOSES CHECKED FOR BACKING OFF OR ANY IRREGULARITY THROUGHOUT TOP OUT 1 PUMP.
Crew Leave Location	11/09/2011 00:43							THANK YOU FOR CHOOSING HALLIBURTON, RYON NICKLE AND CREW
Pump Cement	11/09/2011 02:00		2	42			71.0	119 SKS TOP OUT CEMENT ON WELL CC 697-05-38A; CEMENT TO SURFACE
Shutdown	11/09/2011 02:20							CEMENT RETURNS TO SURFACE, HESITATE TO VIEW FALL BACK
Pump Cement	11/09/2011 02:23		2	9.5			68.0	27 SKS TOP OUT CEMENT ON WELL CC 697-05-38A
Shutdown	11/09/2011 02:29							146 SKS TOTAL PUMPED FOR TOP OUT 2, BULK HOSES CHECKED FOR BACKING OFF OR ANY IRREGULARITY THROUGHOUT TOP OUT 2 PUMP.

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
End Job	11/09/2011 02:29							
Post-Job Safety Meeting (Pre Rig-Down)	11/09/2011 02:32							ATTENDED BY ALL HES CREW
Depart Location Safety Meeting	11/09/2011 04:20							

OXY

SURFACE - CC 697-05-38A

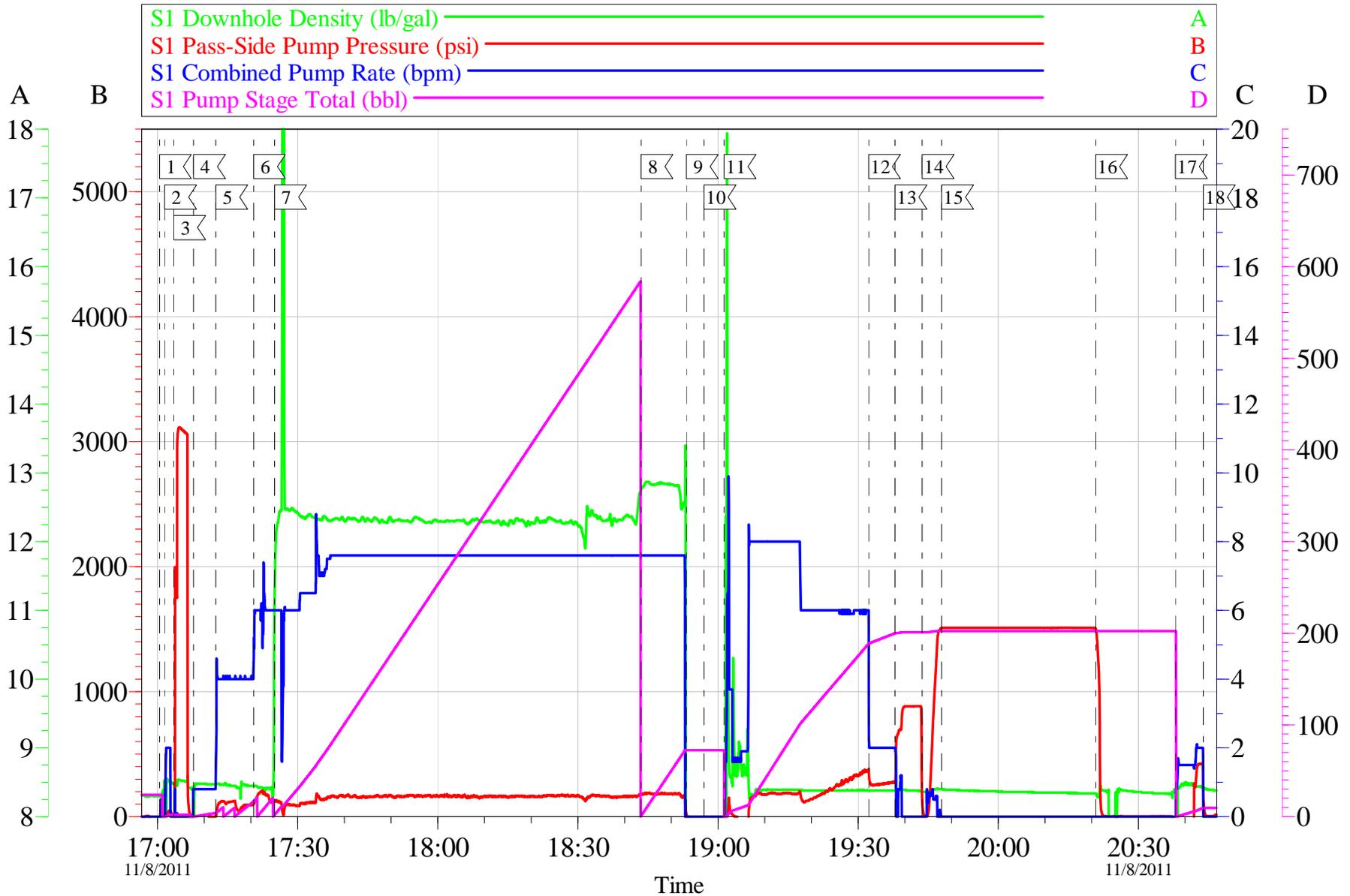


LOCAL EVENT LOG			
1 START JOB	17:00:25	2 FILL LINES	17:01:32
4 PUMP H2O SPACER	17:07:42	5 PUMP GELL SPACER	17:12:29
7 LEAD CEMENT	17:25:05	8 TAIL CEMENT	18:43:32
10 DROP TOP PLUG	18:57:01	11 PUMP DISPLACEMENT	19:01:18
13 BUMP PLUG	19:37:54	14 CHECK FLOATS	19:43:42
16 RELEASE PRESSURE	20:20:51	17 PUMP THROUGH PARASITE	20:37:56
		3 PRESSURE TEST	17:03:26
		6 PUMP H2O SPACER	17:20:33
		9 SHUT DOWN	18:53:13
		12 SLOW RATE	19:32:14
		15 CASING TEST	19:47:52
		18 SHUT DOWN	20:43:55

Customer: OXY GRAND JUNCTION EBUSINESS	Job Date: 08-Nov-2011	Sales Order #: 8559377
Well Description: CC 697-05-38A	UWI: 05-045-20372	ADC Used: YES
Company Rep: HENRY COOMBS	Service Supervisor: RYON NICKLE	Elite # / Operator: #7 BRENDAN BURKE

OXY

SURFACE - CC 697-05-38A

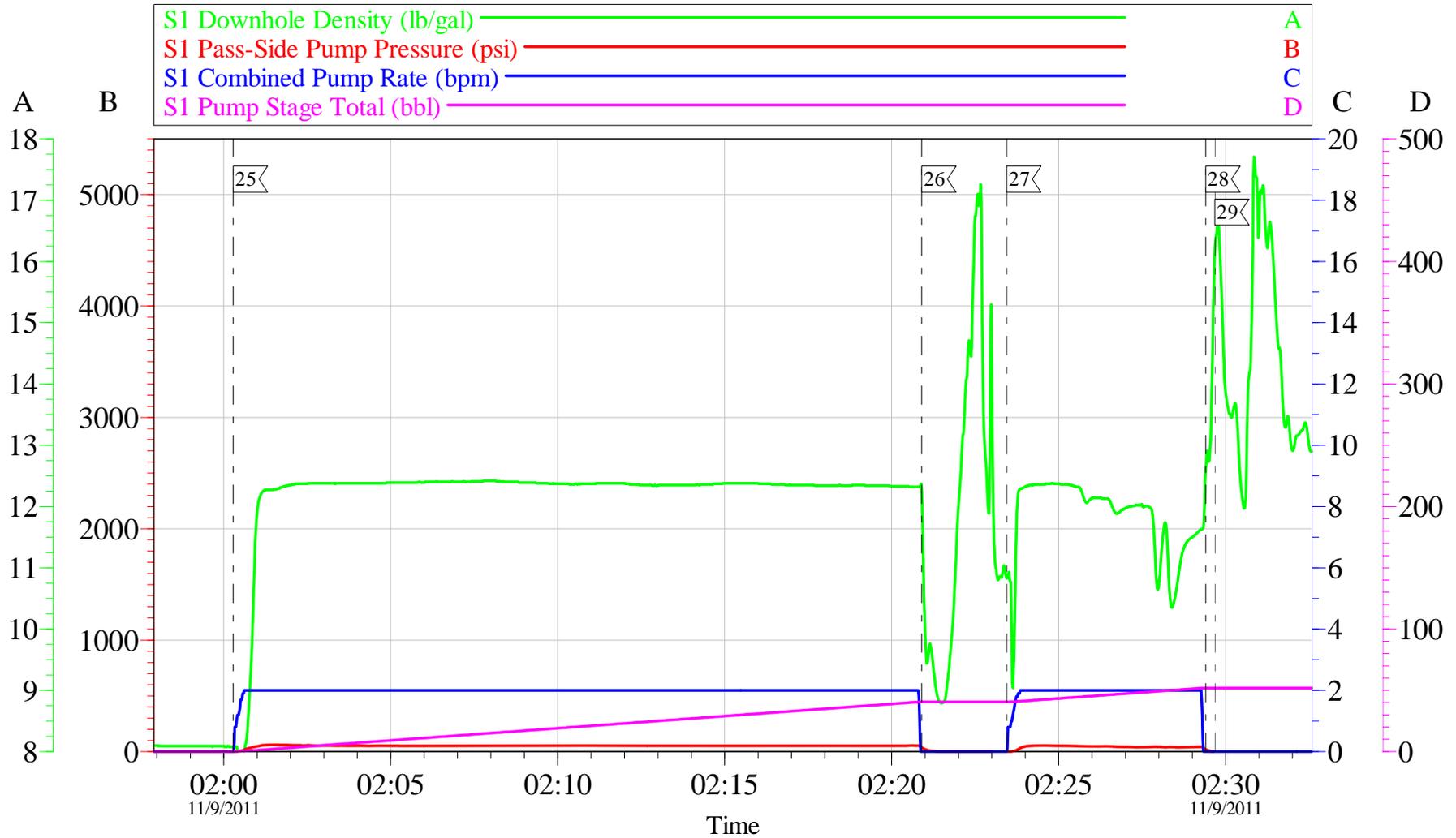


Customer: OXY GRAND JUNCTION EBUSINESS	Job Date: 08-Nov-2011	Sales Order #: 8559377
Well Description: CC 697-05-38A	UWI: 05-045-20372	ADC Used: YES
Company Rep: HENRY COOMBS	Service Supervisor: RYON NICKLE	Elite # / Operator: #7 BRENDAN BURKE

OptiCem v6.4.10
08-Nov-11 23:15

OXY

SURFACE - CC 697-05-38A



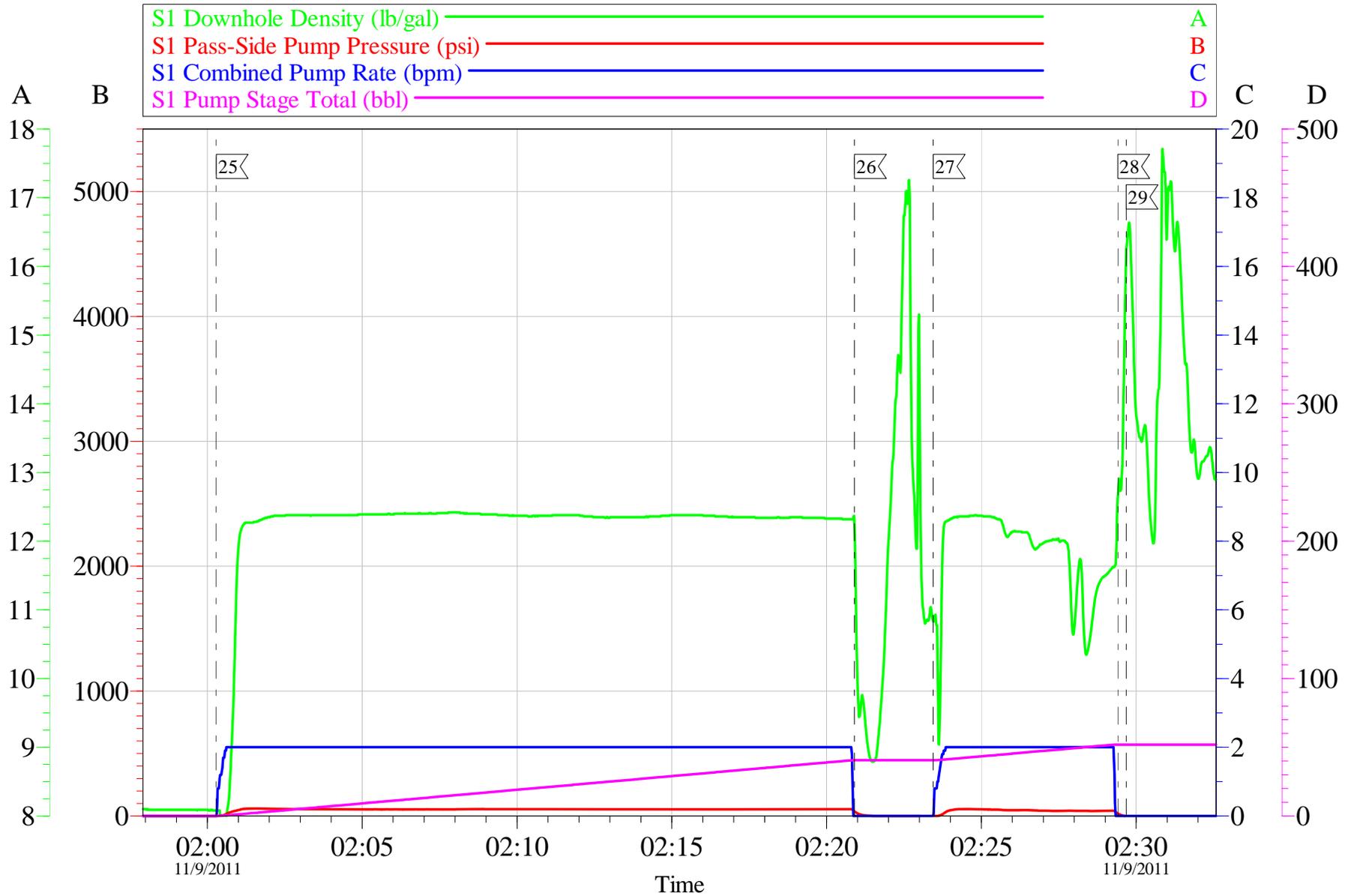
LOCAL EVENT LOG			
<u>25</u> PUMP TOP OUT CEMENT	02:00:17	<u>26</u> SHUT DOWN / HESITATE	02:20:54
		<u>27</u> PUMP TOP OUT CEMENT	02:23:27
<u>28</u> SHUT DOWN	02:29:24	<u>29</u> END JOB	02:29:40

Customer: OXY GRAND JUNCTION EBUSINESS	Job Date: 08-Nov-2011	Sales Order #: 8559377
Well Description: CC 697-05-38A	UWI: 05-045-20372	ADC Used: YES
Company Rep: HENRY COOMBS	Service Supervisor: RYON NICKLE	Elite # / Operator: #7 BRENDAN BURKE

OptiCem v6.4.10
09-Nov-11 02:43

OXY

SURFACE - CC 697-05-38A

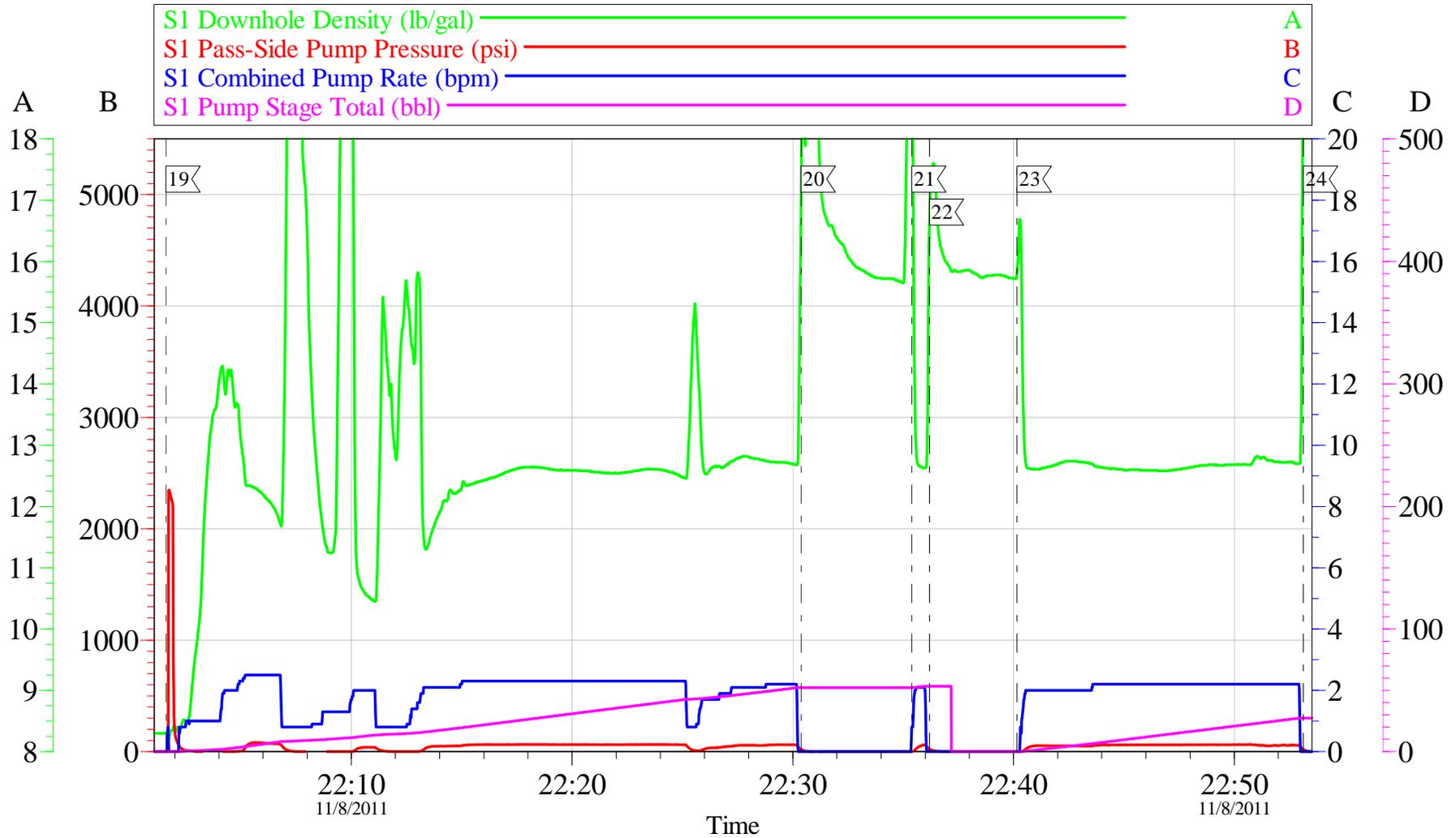


Customer: OXY GRAND JUNCTION EBUSINESS	Job Date: 08-Nov-2011	Sales Order #: 8559377
Well Description: CC 697-05-38A	UWI: 05-045-20372	ADC Used: YES
Company Rep: HENRY COOMBS	Service Supervisor: RYON NICKLE	Elite # / Operator: #7 BRENDAN BURKE

OptiCem v6.4.10
09-Nov-11 02:43

OXY

SURFACE - CC 697-05-38A

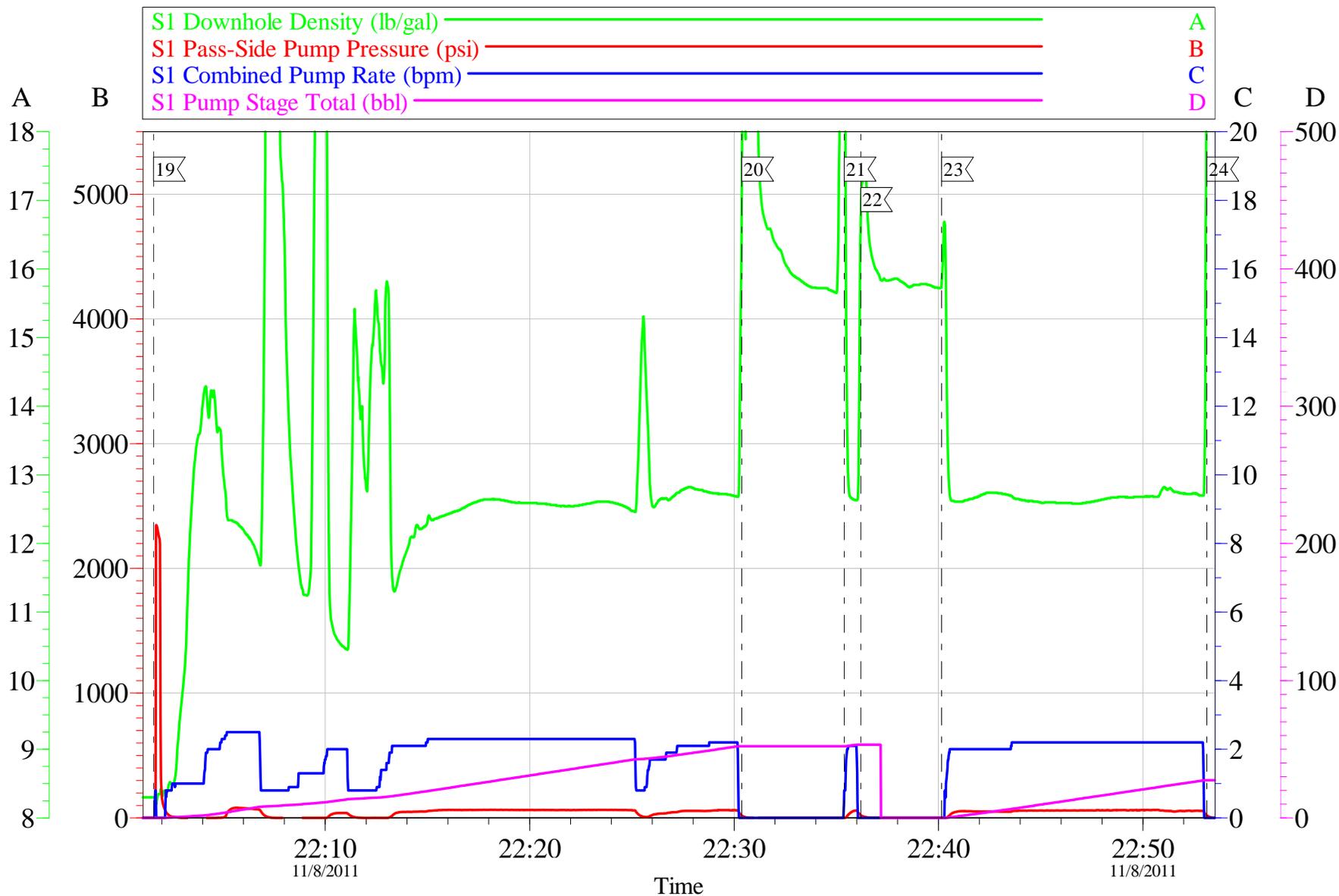


LOCAL EVENT LOG			
19	PUMP TOP OUT CEMENT	22:01:36	20
			SHUT DOWN
			22:30:22
			21
			PUMP TOP OUT CEMENT
			22:35:23
22	SHUT DOWN	22:36:11	23
			PUMP TOP OUT CEMENT
			22:40:09
			24
			SHUT DOWN
			22:53:08

Customer: OXY GRAND JUNCTION EBUSINESS	Job Date: 08-Nov-2011	Sales Order #: 8559377
Well Description: CC 697-05-38A	UWI: 05-045-20372	ADC Used: YES
Company Rep: HENRY COOMBS	Service Supervisor: RYON NICKLE	Elite # / Operator: #7 BRENDAN BURKE

OXY

SURFACE - CC 697-05-38A



Customer: OXY GRAND JUNCTION EBUSINESS	Job Date: 08-Nov-2011	Sales Order #: 8559377
Well Description: CC 697-05-38A	UWI: 05-045-20372	ADC Used: YES
Company Rep: HENRY COOMBS	Service Supervisor: RYON NICKLE	Elite # / Operator: #7 BRENDAN BURKE

OptiCem v6.4.10
08-Nov-11 23:27

HALLIBURTON

Water Analysis Report

Company: OXY

Date: 11/8/2011

Submitted by: RYON NICKLE

Date Rec.: 11/8/2011

Attention: LAB

S.O.# 8559377

Lease CC

Job Type: SURFACE

Well # 697-05-38A

Specific Gravity	<i>MAX</i>	1
pH	<i>8</i>	6
Potassium (K)	<i>5000</i>	250 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>	<200 Mg / L
Chlorine (Cl ₂)		0 Mg / L
Temp	<i>40-80</i>	45 Deg
Total Dissolved Solids		140 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 report or

Sales Order #: 8559377	Line Item: 10	Survey Conducted Date: 11/9/2011
Customer: OXY GRAND JUNCTION EBUSINESS		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative: HENRY COOMBS		API / UWI: (leave blank if unknown) 05-045-20372
Well Name: CC		Well Number: 697-05-38A
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	11/9/2011
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	HENRY COOMBS
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 #: 8559377	Line Item: 10	Survey Conducted Date: 11/9/2011
Customer: OXY GRAND JUNCTION EBUSINESS		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative: HENRY COOMBS		API / UWI: (leave blank if unknown) 05-045-20372
Well Name: CC		Well Number: 697-05-38A
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	11/9/2011
The date the survey was conducted	

Cementing KPI Survey	
Type of Job	0
Select the type of job. (Cementing or Non-Cementing)	
Select the Maximum Deviation range for this Job	Vertical
What is the highest deviation for the job you just completed? This may not be the maximum well deviation.	
Total Operating Time (hours)	10
Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.	
HSE Incident, Accident, Injury	No
HSE Incident, Accident, Injury. This should be recordable incidents only.	
Was the job purpose achieved?	Yes
Was the job delivered correctly as per customer agreed design?	
Operating Hours (Pumping Hours)	6
Total number of hours pumping fluid on this job. Enter in decimal format.	
Customer Non-Productive Rig Time (hrs)	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.	
Type of Rig Classification Job Was Performed	Drilling Rig (Portable)
Type Of Rig (classification) Job Was Performed On	
Number Of JSAs Performed	7
Number Of Jsas Performed	
Number of Unplanned Shutdowns	0
Unplanned shutdown is when injection stops for any period of time.	
Was this a Primary Cement Job (Yes / No)	Yes

Sales Order #: 8559377	Line Item: 10	Survey Conducted Date: 11/9/2011
Customer: OXY GRAND JUNCTION EBUSINESS		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative: HENRY COOMBS		API / UWI: (leave blank if unknown) 05-045-20372
Well Name: CC		Well Number: 697-05-38A
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	90
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	90
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