
OXY GRAND JUNCTION EBUSINESS

**CC 697-05-47A
GRAND VALLEY
Garfield County , Colorado**

**Cement Surface Casing
05-Nov-2011**

Job Site Documents

The Road to Excellence Starts with Safety

Sold To #: 344034		Ship To #: 344034		Quote #:		Sales Order #: 8554170	
Customer: OXY GRAND JUNCTION EBUSINESS				Customer Rep: Kneese, Jeremy			
Well Name: CC			Well #: 697-05-47A			API/UWI #: 05-045-20377	
Field: GRAND VALLEY		City (SAP): PARACHUTE		County/Parish: Garfield		State: Colorado	
Lat: N 39.555 deg. OR N 39 deg. 33 min. 16.308 secs.				Long: W 108.242 deg. OR W -109 deg. 45 min. 27.684 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: CHASTAIN, DERICK			MBU ID Emp #: 455848	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BROWN, TRAVIS A	10	396848	CHASTAIN, DERICK Allan	10	455848	LESTER, LEVI William	10	474117
SIMINEO, JEROD M	10	479954						

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10551730C	120 mile	10783493	120 mile	10822007	120 mile	10951250	120 mile
10973571	120 mile						

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
11/4/2011	2	0	11/5/2011	8	5			

TOTAL Total is the sum of each column separately

Job

Formation Name	Formation Depth (MD)	Top	Bottom	Form Type	Job depth MD	Water Depth	Perforation Depth (MD)	From	To
				BHST	2710. ft				
					Job Depth TVD	2710. ft			
					Wk Ht Above Floor	2. ft			
							Deparied Loc	05 - Nov - 2011	08:00

Job Times

Date	Time	Time Zone
04 - Nov - 2011	14:00	MST
04 - Nov - 2011	19:00	MST
05 - Nov - 2011	03:23	MST
05 - Nov - 2011	07:16	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
OPEN HOLE				14.75				.	2710.	.	2710.
SURFACE CASING	Unknown		9.625	8.921	36.		J-55	.	2660.	.	2660.

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		
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		

Tools and Accessories

Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer					Top Plug	9 5/8	1	HES
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar					Retainer					SSR plug set			
Insert Float										Plug Container	9 5/8	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 ³ /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	Water Spacer		20.00	bbl	8.33	.0	.0	4	
2	Gel Spacer		20.00	bbl	.	.0	.0	4	
3	Water Spacer		10.00	bbl	.	.0	.0	4	
4	Lead Cement	VERSACEM (TM) SYSTEM (452010)	1050.0	sacks	12.3	2.33	12.62	7	12.62
		12.62 Gal	FRESH WATER						
5	Tail Cement	VERSACEM (TM) SYSTEM (452010)	160.0	sacks	12.8	2.07	10.67	7	10.67
		10.67 Gal	FRESH WATER						
6	Displacement		202.00	bbl	.	.0	.0	6	
7	Topout Cement	HALCEM (TM) SYSTEM (452986)	51.3	sacks	12.5	1.97	10.96	3	10.96
		10.96 Gal	FRESH WATER						
Calculated Values		Pressures		Volumes					
Displacement	202.1	Shut In: Instant		Lost Returns	520	Cement Slurry	495	Pad	
Top Of Cement	SURFACE	5 Min		Cement Returns	0	Actual Displacement	202.1	Treatment	
Frac Gradient		15 Min		Spacers	60	Load and Breakdown		Total Job	757
Rates									
Circulating	6	Mixing		7	Displacement	6	Avg. Job		6
Cement Left In Pipe	Amount	45.9 ft	Reason	Shoe Joint					
Frac Ring # 1 @	ID		Frac ring # 2 @	ID		Frac Ring # 3 @	ID		Frac Ring # 4 @
The Information Stated Herein Is Correct				Customer Representative Signature					

The Road to Excellence Starts with Safety

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Well Name: CC	Well #: 697-05-47A	API/UWI #: 05-045-20377	
Field: GRAND VALLEY	City (SAP): PARACHUTE	County/Parish: Garfield	State: Colorado
Legal Description:			
Lat: N 39.555 deg. OR N 39 deg. 33 min. 16.308 secs.		Long: W 108.242 deg. OR W -109 deg. 45 min. 27.684 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: CHASTAIN, DERICK	MBU ID Emp #: 455848

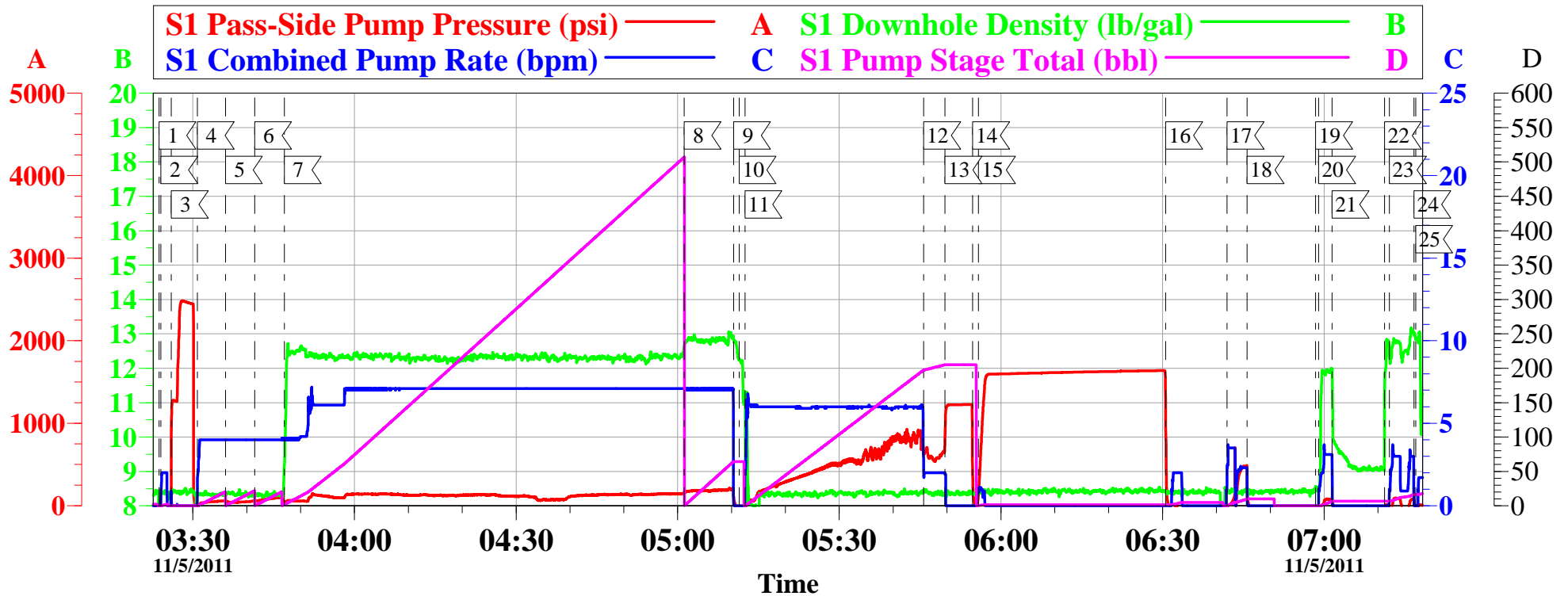
Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	11/04/2011 14:00							
Pre-Convoy Safety Meeting	11/04/2011 17:30							ALL HES EE'S
Arrive At Loc	11/04/2011 19:00							RIG STILL RUNNING
Pre-Rig Up Safety Meeting	11/05/2011 01:20							ALL HES EE'S
Rig-Up Equipment	11/05/2011 01:30							1 HT 400 PUMP, 1 660 BULK TRUCK, 1 BULK STORAGE SILO, 1 F-450 PICK-UP, 1 PLUG CONTAINER
Pre-Job Safety Meeting	11/05/2011 03:00							ALL HES EE'S, RIG CREW AND CO REP
Start Job	11/05/2011 03:23							TD-2710' TP-2660' SJ-45.9' CASING 9 5/8" 36# J-55 HOLE 14 3/4". MUD: 9 PPG, TEMP 84, YP 15, PV 18.
Pump Water	11/05/2011 03:24		2	2			65.0	FRESH H2O TO FILL LINES
Test Lines	11/05/2011 03:26							STAGED TEST AT 1250 PSI THEN TESTED TO 2500 PSI. HELD PSI FOR 2 MIN, NO LEAKS
Pump Spacer 1	11/05/2011 03:30		4	20			60.0	FRESH H2O
Pump Spacer 2	11/05/2011 03:36		4	20			80.0	GEL/H2O. 2.5 GAL PER 10 BBL.
Pump Spacer 1	11/05/2011 03:41		4	20			99.0	FRESH H2O

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Pump Lead Cement	11/05/2011 03:46		7	435.7			180.0	1050 SKS 12.3 PPG 2.33 FT3/SK 12.62 GAL/SK, 7 BOXES TUFF FIBER MIXED INTO DOWN HOLE. MUD SCALES WERE USED TO VERIFY WEIGHT.
Pump Tail Cement	11/05/2011 05:01		7	59			225.0	160 SKS 12.8 PPG 2.07 FT3/SK 10.67 GAL/SK. MUD SCALES WERE USED TO VERIFY WEIGHT.
Shutdown	11/05/2011 05:10							
Drop Top Plug	11/05/2011 05:11							VERIFY PLUG LAUNCHED
Pump Displacement	11/05/2011 05:12		6	202.1			800.0	FRESH H2O DISPLACEMENT, NO RETURNS UNTIL 390 BBLS AWAY OF LEAD. LOST RETURNS AT 132 BBLS AWAY OF DISPLACEMENT, NO CEMENT TO SURFACE
Slow Rate	11/05/2011 05:45		6	192			680.0	10 BBLS PRIOR TO CALCULATED DISPLACEMENT
Bump Plug	11/05/2011 05:49		2	202.1			1225.0	PLUG BUMPED AT 680 PSI PRESSURED UP TO 1225 PSI
Check Floats	11/05/2011 05:54						.0	FLOATS HELD, 1 BBL BACK TO PUMP TRUCK
Pressure Test	11/05/2011 05:55						1500.0	PRESSURE TEST CASING PER CO REP REQUEST, HELD PRESSURE 30 MINS
Release Casing Pressure	11/05/2011 06:05						.0	GOOD TEST.
Pump Water	11/05/2011 06:41		4	10				PUMP SUGAR WATER THRU PARASITE LINE, CIRCULATED AT 350 PSI, FLOW NOTED AT SURFACE 5 BBLS AWAY
Shutdown	11/05/2011 06:45							

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Establish Rate	11/05/2011 06:58						24.0	BOOST CEMENT TO CHECK FOR FLOW
Pump Cement	11/05/2011 06:58		3	6.5			190.0	6.5 BBLS TOPOUT CMT PUMPED, 18.5 SKS, 12.5 PPG 1.97 FT3/SK 10.96 GAL/SK ALREADY PAID FOR AND WAITING ON LOC.
Shutdown	11/05/2011 07:01							HEZITATE. CEMENT FELL BACK.
Establish Rate	11/05/2011 07:11						30.0	BOOST CEMENT TO CHECK FOR FLOW
Pump Cement	11/05/2011 07:12		3	10			125.0	10 BBLS TOPOUT CMT PUMPED, 28.5 SKS 12.5 PPG 1.97 FT3/SK 10.96 GAL/SK, 6 BBLS TO SURFACE. PUMPED 1.5 BBL TO PIT.
Shutdown	11/05/2011 07:16							CEMENT TO SURFACE AND HOLDING
End Job	11/05/2011 07:16							USED 51.3 SKS OF TOP OUT. 550 SKS STILL LEFT IN SILO. USED 10 LBS OF SUGAR, NO DERRICK CHARGE, 2 ADD HOURS.
Pre-Rig Down Safety Meeting	11/05/2011 07:20							ALL HES EE'S
Rig-Down Equipment	11/05/2011 07:30							
Pre-Convoy Safety Meeting	11/05/2011 07:50							ALL HES EE'S
Crew Leave Location	11/05/2011 08:00							THANKS FOR USING HALLIBURTON CEMENT, DERICK CHASTAIN AND CREW

OXY - CC 697-05-47A

SURFACE CASING AND TOP OUT



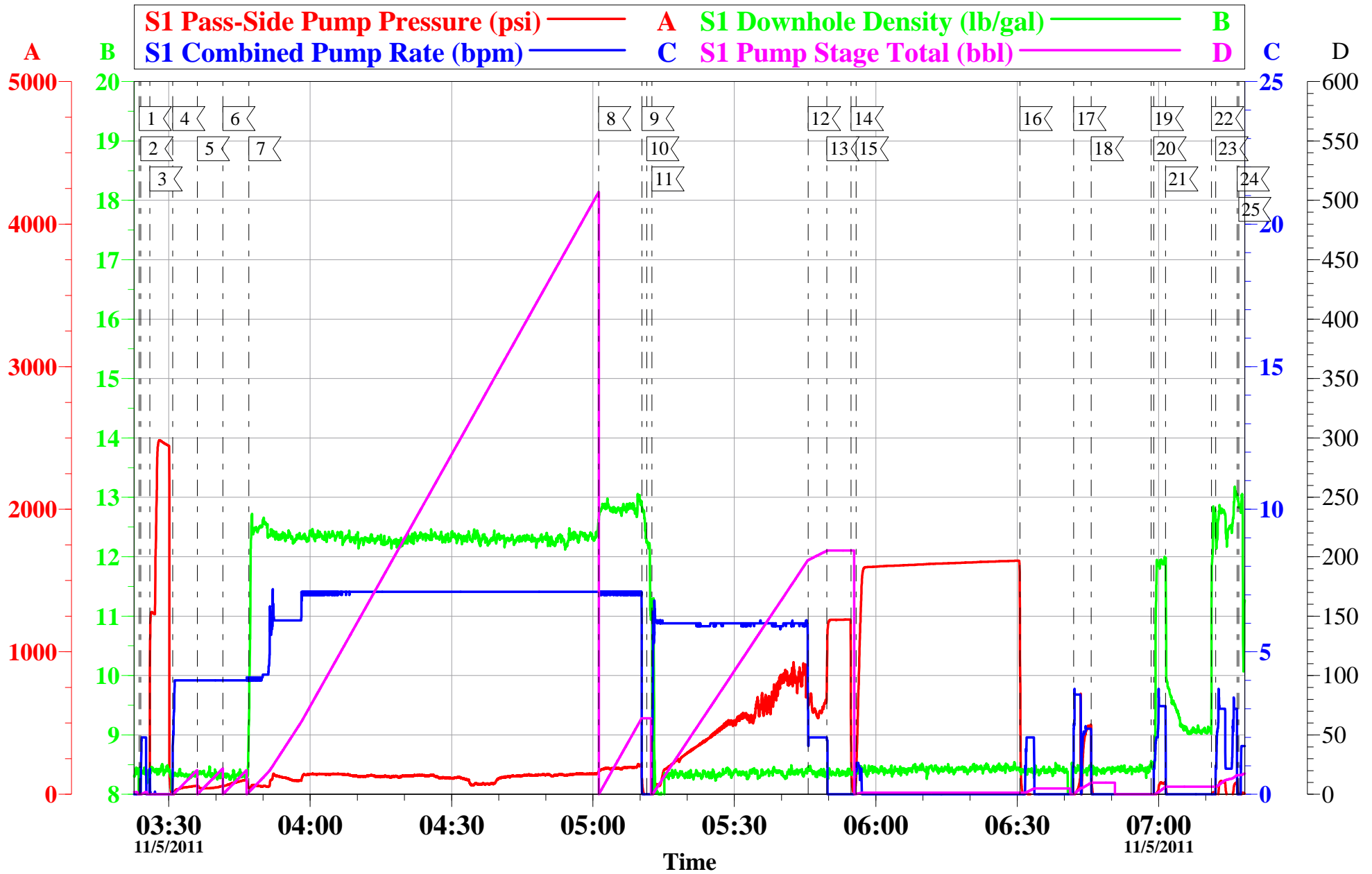
Local Event Log					
1	START JOB	03:23:43	2	FILL LINES	03:24:04
3	TEST LINES	03:26:00	4	PUMP H2O SPACER	03:30:49
5	PUMP GEL SPACER	03:36:03	6	PUMP H2O SPACER	03:41:28
7	PUMP LEAD CEMENT	03:46:58	8	PUMP TAIL CEMENT	05:01:12
9	SHUTDOWN	05:10:23	10	DROP PLUG	05:11:25
11	PUMP DISPLACEMENT	05:12:29	12	SLOW RATE	05:45:39
13	BUMP PLUG	05:49:38	14	CHECK FLOATS	05:54:45
15	TEST CASING	05:55:51	16	RELEASE PRESSURE	06:30:35
17	CLEAR PARASITE	06:41:59	18	SHUT DOWN	06:45:43
19	ESTABLISH FLOW	06:58:26	20	PUMP T/O CEMENT	06:58:59
21	SHUT DOWN	07:01:29	22	ESTABLISH FLOW	07:11:13
23	PUMP T/O CEMENT	07:12:06	24	SHUTDOWN	07:16:40
25	END JOB	07:16:59			

Customer:	OXY	Job Date:	05-Nov-2011	Sales Order #:	8554170
Well Description:	CC 697-05-47A	Job type:	SURFACE	ADC Used:	YES
Customer Rep:	TERRY ROSSER	Service Supervisor:	DERICK CHASTAIN	Operator/ Pump:	TRAVIS BROWN/ELITE 2

OptiCem v6.4.10
05-Nov-11 07:40

OXY - CC 697-05-47A

SURFACE CASING AND TOP OUT



Customer: OXY
Well Description: CC 697-05-47A
Customer Rep: TERRY ROSSER

Job Date: 05-Nov-2011
Job type: SURFACE
Service Supervisor: DERICK CHASTAIN

Sales Order #: 8554170
ADC Used: YES
Operator/ Pump: TRAVIS BROWN/ELITE 2

OptiCem v6.4.10
05-Nov-11 07:40

HALLIBURTON

Water Analysis Report

Company: OXY

Submitted by: DERICK CHASTAIN

Attention: J. Trout

Lease CASCSDE CREEK

Well # 697-05-47A

Date: 11/5/2011

Date Rec.: 11/5/2011

S.O.# 8554170

Job Type: SURFACE

Specific Gravity	<i>MAX</i>	<i>1</i>
pH	<i>8</i>	<i>7</i>
Potassium (K)	<i>5000</i>	<i>200</i> Mg / L
Calcium (Ca)	<i>500</i>	<i>250</i> Mg / L
Iron (FE2)	<i>300</i>	<i>0</i> Mg / L
Chlorides (Cl)	<i>3000</i>	<i>0</i> Mg / L
Sulfates (SO ₄)	<i>1500</i>	<i>below 200</i> Mg / L
Chlorine (Cl ₂)		<i>0</i> Mg / L
Temp	<i>40-80</i>	<i>55</i> Deg
Total Dissolved Solids		<i>410</i> Mg / L

Respectfully: DERICK CHASTAIN

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 #: 8554170	Line Item: 10	Survey Conducted Date: 11/5/2011
Customer: OXY GRAND JUNCTION EBUSINESS		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative: JEREMY KNEESE		API / UWI: (leave blank if unknown) 05-045-20377
Well Name: CC		Well Number: 697-05-47A
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	11/5/2011
Survey Interviewer	The survey interviewer is the person who initiated the survey.	DERICK CHASTAIN (HB23225)
Customer Participation	Did the customer participate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	JEREMY KNEESE
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	NONE

CUSTOMER SIGNATURE

Sales Order #: 8554170	Line Item: 10	Survey Conducted Date: 11/5/2011
Customer: OXY GRAND JUNCTION EBUSINESS		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative: JEREMY KNEESE		API / UWI: (leave blank if unknown) 05-045-20377
Well Name: CC		Well Number: 697-05-47A
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	11/5/2011

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.	5
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.	4
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

Sales Order #: 8554170	Line Item: 10	Survey Conducted Date: 11/5/2011
Customer: OXY GRAND JUNCTION EBUSINESS		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative: JEREMY KNEESE		API / UWI: (leave blank if unknown) 05-045-20377
Well Name: CC		Well Number: 697-05-47A
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	96
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