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# **OXY GRAND JUNCTION EBUSINESS**

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**CC 697-05-55A  
GRAND VALLEY  
Garfield County , Colorado**

**Cement Surface Casing  
03-Nov-2011**

**Job Site Documents**

### The Road to Excellence Starts with Safety

Sold To #: 344034		Ship To #: 344034		Quote #:		Sales Order #: 8554160	
Customer: OXY GRAND JUNCTION EBUSINESS				Customer Rep: Vallegas, Alex			
Well Name: CC			Well #: 697-05-55A			API/UWI #: 05-045-20376	
Field: GRAND VALLEY		City (SAP): ADDISON		County/Parish: Garfield		State: Colorado	
Lat: N 39.555 deg. OR N 39 deg. 33 min. 16.2 secs.				Long: W 108.242 deg. OR W -109 deg. 45 min. 27.576 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 #
CARTER, ERIC Earl	27	345598	NICKLE, RYON	27	454759	SILVERTHORN, AARON Jacob	27	491305
SIMINEO, JEROD M	27	479954	TRIPLETT, MICHAEL J	27	419994			

### Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10533645	120 mile	10872429	120 mile	11021972	120 mile	11027039	120 mile
11139328	120 mile	11259885	120 mile	11360883	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
11/2/11	14	0	11/3/11	13	6.5			

**TOTAL** Total is the sum of each column separately

### Job

Formation Name	Formation Depth (MD)	Top	Bottom	Job depth MD	Water Depth	Perforation Depth (MD)	From	To
		0	2740	2740. ft				
<b>Form Type</b>		<b>BHST</b>		<b>Job Depth TVD</b>	2740. ft	<b>Wk Ht Above Floor</b>		. ft
<b>Job Started</b>	02 - Nov - 2011	03:00	MST	<b>Job Completed</b>	03 - Nov - 2011	12:43	MST	
<b>Deparied Loc</b>	03 - Nov - 2011	14:30	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
OPEN HOLE				14.75				.	2740.		
SURFACE CASING	Unknown		9.625	.	36.		J-55	.	2683.5		

### 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	Water Spacer		20.00	bbl	8.33	.0	.0	4	
2	Gel Spacer		20.00	bbl	.	.0	.0	4	
3	Water Spacer		20.00	bbl	.	.0	.0	4	
4	Lead Cement	VERSACEM (TM) SYSTEM (452010)	1060.0	sacks	12.3	2.33	12.62	6	12.62
		12.62 Gal	FRESH WATER						
5	Tail Cement	VERSACEM (TM) SYSTEM (452010)	150.0	sacks	12.8	2.07	10.67	6	10.67
		10.67 Gal	FRESH WATER						
6	Displacement		203.90	bbl	.	.0	.0	6	
7	Topout Cement	HALCEM (TM) SYSTEM (452986)	0	sacks	12.5	1.97	10.96	0	10.96
		10.96 Gal	FRESH WATER						
Calculated Values		Pressures		Volumes					
Displacement	203.9	Shut In: Instant		Lost Returns		Cement Slurry	495.1	Pad	
Top Of Cement	SURFACE	5 Min		Cement Returns	150	Actual Displacement	203.9	Treatment	
Frac Gradient		15 Min		Spacers	60	Load and Breakdown		Total Job	759
Rates									
Circulating	RIG	Mixing	6	Displacement	6	Avg. Job	6		
Cement Left In Pipe	Amount	46.22 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*

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<b>Customer:</b> OXY GRAND JUNCTION EBUSINESS		<b>Customer Rep:</b> Vallegas, Alex	
<b>Well Name:</b> CC		<b>Well #:</b> 697-05-55A	<b>API/UWI #:</b> 05-045-20376
<b>Field:</b> GRAND VALLEY	<b>City (SAP):</b> ADDISON	<b>County/Parish:</b> Garfield	<b>State:</b> Colorado
<b>Legal Description:</b>			
<b>Lat:</b> N 39.555 deg. OR N 39 deg. 33 min. 16.2 secs.		<b>Long:</b> W 108.242 deg. OR W -109 deg. 45 min. 27.576 secs.	
<b>Contractor:</b> H&P Drilling		<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>Srv Supervisor:</b> NICKLE, RYON	<b>MBU ID Emp #:</b> 454759

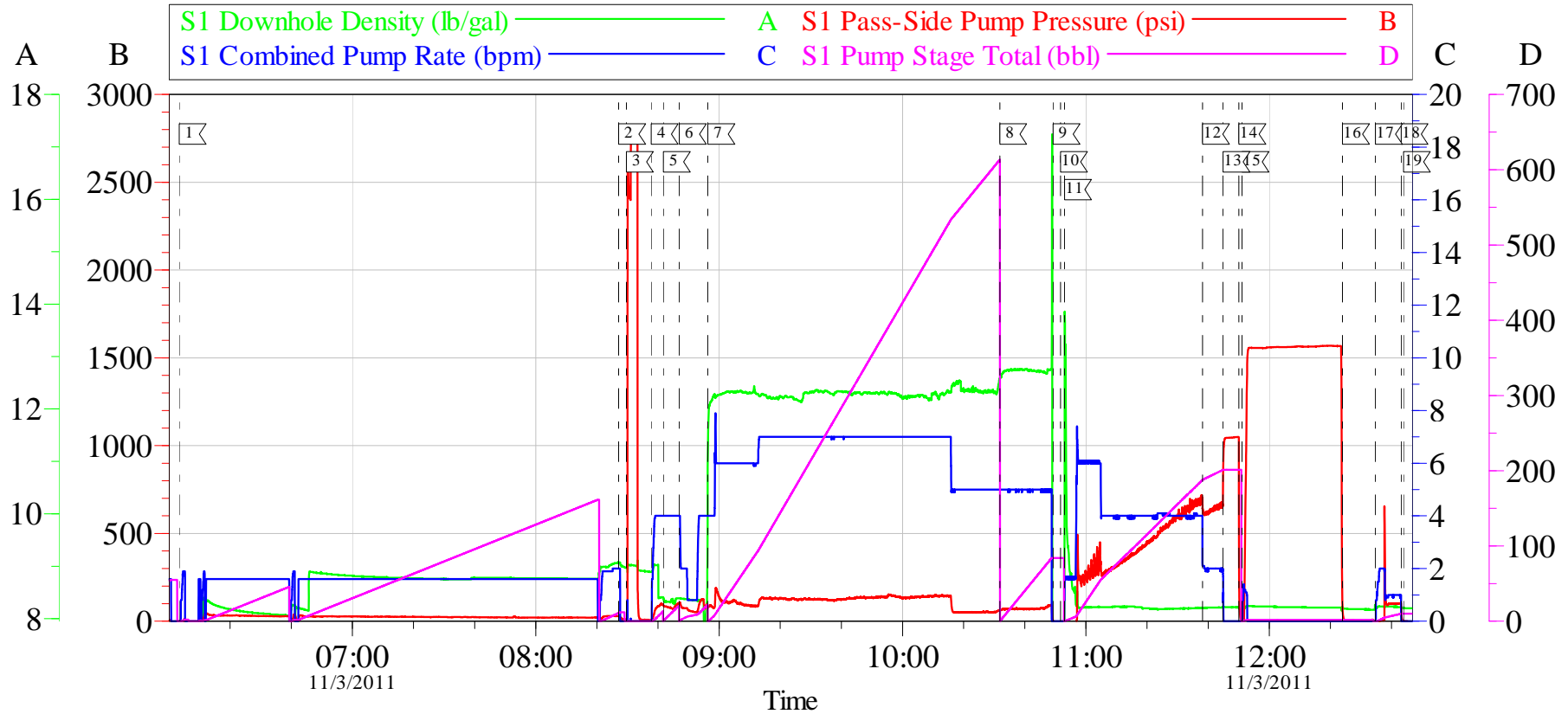
Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	11/02/2011 03:00							
Depart Yard Safety Meeting	11/02/2011 05:50							ATTENDED BY ALL HES CREW
Crew Leave Yard	11/02/2011 06:00							
Arrive At Loc	11/02/2011 11:00							RIG WAS RUNNING WIPER TRIP UPON ARRIVAL
Assessment Of Location Safety Meeting	11/02/2011 23:30							ATTENDED BY ALL HES CREW
Other	11/02/2011 23:45							SPOT EQUIPMENT
Pre-Rig Up Safety Meeting	11/02/2011 23:55							ATTENDED BY ALL HES CREW
Rig-Up Equipment	11/03/2011 00:00							
Pre-Job Safety Meeting	11/03/2011 05:00							ATTENDED BY ALL HES CREW, RIG CREW AND COMPANY REP
Start Job	11/03/2011 06:03							**OFFLINE CEMENT JOB** TP 2718' , TD 2740' , SJ 46.22' , FC 2621.78' , MW 9.4, CASING 9.625" 36# J-55, HOLE 14.75"

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Comment	11/03/2011 06:04							**WHEN FILLING LINES WELL HEAD ATTACHMENT LEAKED (0603), REPLACED O-RINGS, ATTEMPTED FILL 2ND TIME (0639), ATTACHMENT STILL LEAKED, REPLACED WELL HEAD ATTACHMENT WITH EQUIP FROM 330 (0820).
Other	11/03/2011 08:27		2	2				FILL LINES, NEW SEAL AND FITTING SHOWED NO LEAKS
Test Lines	11/03/2011 08:29							PRESSURED UP TO PSI, PRESSURE HELD
Pump Spacer 1	11/03/2011 08:37		4	20			60.0	FRESH WATER
Pump Spacer 2	11/03/2011 08:41		4	20			98.0	GEL SPACER
Pump Spacer 1	11/03/2011 08:47		4	20			98.0	H2O SPACER
Pump Lead Cement	11/03/2011 08:56		6	440			146.0	1060 SKS; 12.3 PPG / 2.33 YIELD / 12.62 GPS
Pump Tail Cement	11/03/2011 10:31		6	56			95.0	150 SKS; 12.8 PPG / 2.07 YIELD / 10.67 GPS
Shutdown	11/03/2011 10:47							
Drop Top Plug	11/03/2011 10:51							COMPANY REP VERIFIED THAT PLUG LAUNCHED, WASHED UP ON TOP PER COMPANY REP
Pump Displacement	11/03/2011 10:53		6	204.3			725.0	FRESH WATER, RETURNS W/ 10 BBLS GONE, CEMENT RETURNS WITH 50 BBLS GONE
Slow Rate	11/03/2011 11:38		2	190			670.0	
Bump Plug	11/03/2011 11:44						1057.0	PLUG LANDED
Check Floats	11/03/2011 11:50							FLOATS HELD
Pressure Up	11/03/2011 11:53						1565.0	PRESSURE UP CASING,

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Release Casing Pressure	11/03/2011 12:23							PRESSURE HELD FOR 30 MINUTES
Other	11/03/2011 12:34		2	10			700.0	PUMP THROUGH PARASITE W/ SUGAR WATER
End Job	11/03/2011 12:43							GAINED CIRCULATION AT 380 BBLS LEAD CEMENT, 150 BBLS CEMENT TO SURFACE, PIPE WAS NOT MOVED DURING JOB
Post-Job Safety Meeting (Pre Rig-Down)	11/03/2011 12:45							ATTENDED BY ALL HES CREW
Rig-Down Equipment	11/03/2011 12:50							
Depart Location Safety Meeting	11/03/2011 14:20							ATTENDED BY ALL HES CREW
Crew Leave Location	11/03/2011 14:30							THANK YOU FOR USING HALLIBURTON CEMENT, RYON NICKLE AND CREW

# OXY

## 9.625" SURFACE/CC 697-05-55A



### Local Event Log

1 START JOB	06:03:20	2 FILL INES	08:27:08	3 PRESSURE TEST	08:29:40
4 START H2O SPACER	08:37:47	5 START GELL SPACER	08:41:47	6 START H2O SPACER	08:47:00
7 START LEAD CEMENT	08:56:21	8 START TAIL CEMENT	10:31:51	9 SHUT DOWN	10:49:15
10 DROP PLUG	10:51:43	11 START DISPLACEMENT	10:53:01	12 SLOW RATE	11:38:11
13 BUMP PLUG	11:44:52	14 CHECK FLOATS	11:50:04	15 PRESSURE TEST CASING	11:51:06
16 RELEASE PRESSURE	12:23:58	17 PUMP THROUGH PARASITE	12:34:44	18 SHUT DOWN	12:43:09
19 END JOB	12:43:54				

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Well Description: CC 697-05-55A  
Company Rep:

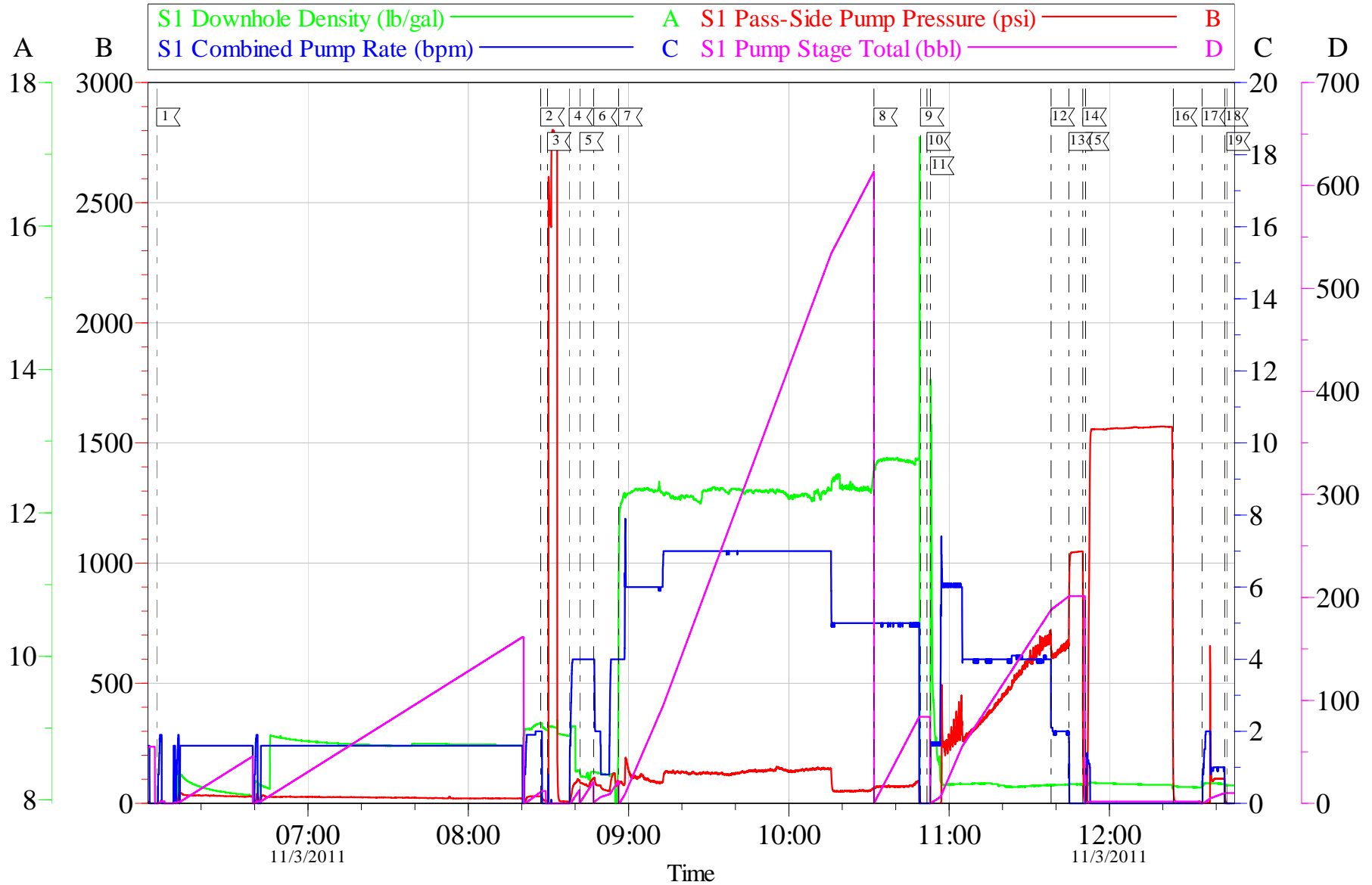
Job Date: 03-Nov-2011  
Job Type: SURFACE  
Cement Supervisor: RYON NICKLE

Sales Order #: 8554160  
ADC Used: YES  
Elite #/Operator: 7 / JEROD SIMINOE

OptiCem v6.4.0  
03-Nov-11 13:31

# OXY

## 9.625" SURFACE/CC 697-05-55A



Customer: OXY GRAND JUNCTION EBUSINESS  
 Well Description: CC 697-05-55A  
 Company Rep:

Job Date: 03-Nov-2011  
 Job Type: SURFACE  
 Cement Supervisor: RYON NICKLE

Sales Order #: 8554160  
 ADC Used: YES  
 Elite #/Operator: 7 / JEROD SIMINOE

OptiCem v6.4.0  
 03-Nov-11 13:32



# HALLIBURTON

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## Water Analysis Report

Company:	<u>OXY</u>	Date:	<u>11/2/2011</u>
Submitted by:	<u>ERIC CARTER</u>	Date Rec.:	<u>11/2/2011</u>
Attention:	<u>J.Trout</u>	S.O.#	<u>8554160</u>
Lease	<u>H+P 353</u>	Job Type:	<u>SURFACE</u>
Well #	<u></u>		

Specific Gravity	<i>MAX</i>	<i>1</i>
pH	<i>8</i>	<i>7</i>
Potassium (K)	<i>5000</i>	<i>220</i> Mg / L
Hrdness	<i>500</i>	<i>0</i> Mg / L
Iron (FE2)	<i>300</i>	<i>200</i> Mg / L
Chlorides (Cl)	<i>3000</i>	<i>0</i> Mg / L
Sulfates (SO <sub>4</sub> )	<i>1500</i>	<i>&lt;200</i> Mg / L
Temp	<i>40-80</i>	<i>60</i> Deg
Total Dissolved Solids		<i>380</i> Mg / L

Respectfully: ERIC CARTER

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 repor

<b>Sales Order #:</b> 8554160	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 11/3/2011
<b>Customer:</b> OXY GRAND JUNCTION EBUSINESS		<b>Job Type (BOM):</b> CMT SURFACE CASING BOM
<b>Customer Representative:</b>		<b>API / UWI: (leave blank if unknown)</b> 05-045-20376
<b>Well Name:</b> CC		<b>Well Number:</b> 697-05-55A
<b>Well Type:</b> Development Well	<b>Well Country:</b> United States of America	
<b>H2S Present:</b>	<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	11/3/2011
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	
HSE	Was our HSE performance satisfactory? Circle Y or N	
Equipment	Were you satisfied with our Equipment? Circle Y or N	
Personnel	Were you satisfied with our people? Circle Y or N	
Customer Comment	Customer's Comment	

CUSTOMER SIGNATURE

<b>Sales Order #:</b> 8554160	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 11/3/2011
<b>Customer:</b> OXY GRAND JUNCTION EBUSINESS		<b>Job Type (BOM):</b> CMT SURFACE CASING BOM
<b>Customer Representative:</b>		<b>API / UWI: (leave blank if unknown)</b> 05-045-20376
<b>Well Name:</b> CC		<b>Well Number:</b> 697-05-55A
<b>Well Type:</b> Development Well	<b>Well Country:</b> United States of America	
<b>H2S Present:</b>	<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	11/3/2011

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.	8
<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.	6.5
<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	7
<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> 8554160	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 11/3/2011
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<b>Customer Representative:</b>		<b>API / UWI: (leave blank if unknown)</b> 05-045-20376
<b>Well Name:</b> CC		<b>Well Number:</b> 697-05-55A
<b>Well Type:</b> Development Well	<b>Well Country:</b> United States of America	
<b>H2S Present:</b>	<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	95
<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	95
<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