

OXY GRAND JUNCTION EBUSINESS  
DO NOT MAIL - PO BOX 1767  
ADDISON, Texas

CC 697-05-70

H&P/353

## **Post Job Summary**

# **Cement Surface Casing**

Prepared for: HENRY COOMBS  
Date Prepared: May 21, 2011  
Version: 1

Service Supervisor: MAGERS, MICHAEL

Submitted by: MIKE MAGERS

**HALLIBURTON**

### The Road to Excellence Starts with Safety

Sold To #: 344034	Ship To #: 2855339	Quote #:	Sales Order #: 8187855
Customer: OXY GRAND JUNCTION EBUSINESS	Customer Rep: COOMBS, HENRY		
Well Name: CC	Well #: 697-05-70	API/UWI #:	
Field: CASCADE CREEK	City (SAP): PARACHUTE	County/Parish: Garfield	State: Colorado
Lat: N 39.542 deg. OR N 39 deg. 32 min. 31.355 secs.	Long: W 108.238 deg. OR W -109 deg. 45 min. 42.786 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: DUNNING, DUSTIN	Srvc Supervisor: MAGERS, MICHAEL	MBU ID Emp #:	339439

### Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BORSZICH, STEPHEN A	13	412388	MAGERS, MICHAEL Gerard	13	339439	MOAT, RYAN C	13	489025
ROSE, BENJAMIN Keith	13	487022	SINCLAIR, DAN J	13	338784			

### Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10053558	120 mile	10867425	120 mile	10871245	120 mile	10897891	120 mile
11259886	120 mile	11360881	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
05/21/2011	13	4						

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

### Job

Formation Name	Top	Bottom	Called Out	Date	Time	Time Zone
Formation Depth (MD)			On Location	21 - May - 2011	00:15	MST
Form Type	BHST		Job Started	21 - May - 2011	11:00	MST
Job depth MD	2735. ft	Job Depth TVD	Job Started	21 - May - 2011	19:35	MST
Water Depth		Wk Ht Above Floor	Job Completed	21 - May - 2011	23:22	MST
Perforation Depth (MD)	From	To	Departed Loc	22 - May - 2011	01:00	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
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### 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
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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	.0	
2	Gel Spacer		20.00	bbl	.	.0	.0	.0	
3	Water Spacer		20.00	bbl	.	.0	.0	.0	
4	Lead Cement	VERSACEM (TM) SYSTEM (452010)	1050.0	sacks	12.3	2.33	12.62		12.62
	12.62 Gal	FRESH WATER							
5	Tail Cement	VERSACEM (TM) SYSTEM (452010)	170.0	sacks	12.8	2.07	10.67		10.67
	10.67 Gal	FRESH WATER							
6	Displacement		210.00	bbl	.	.0	.0	.0	
7	Topout Cement	HALCEM (TM) SYSTEM (452986)		sacks	12.5	1.97	10.96		10.96
	10.96 Gal	FRESH WATER							
Calculated Values		Pressures		Volumes					
Displacement	209.7	Shut In: Instant		Lost Returns	0	Cement Slurry	498	Pad	
Top Of Cement	SURFACE	5 Min		Cement Returns	70	Actual Displacement	209.7	Treatment	
Frac Gradient		15 Min		Spacers	60	Load and Breakdown		Total Job	768
Rates									
Circulating	6	Mixing	6	Displacement	6/2	Avg. Job	6		
Cement Left In Pipe	Amount	49 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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Well Name: CC	Well #: 697-05-70	API/UWI #:	
Field: CASCADE CREEK	City (SAP): PARACHUTE	County/Parish: Garfield	State: Colorado
Legal Description:			
Lat: N 39.542 deg. OR N 39 deg. 32 min. 31.355 secs.		Long: W 108.238 deg. OR W -109 deg. 45 min. 42.786 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: DUNNING, DUSTIN	Srv Supervisor: MAGERS, MICHAEL	MBU ID Emp #: 339439	

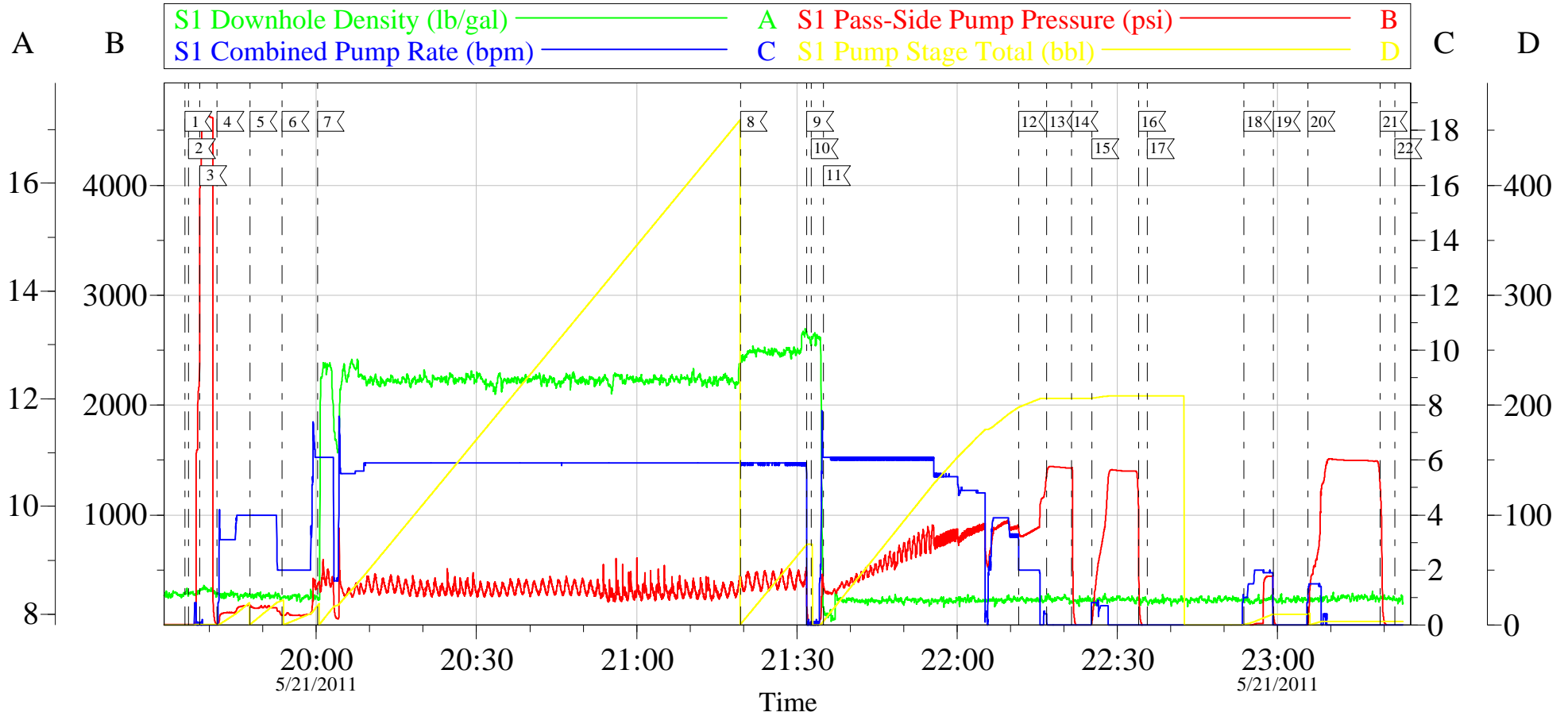
Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Crew Leave Yard	05/21/2011 02:30							HES ALL PRESENT
Arrive At Loc	05/21/2011 11:00							RIG WAS JUST STARTING TO RUN CASING WHEN HES ARRIVED/HES ARRIVED 3 HOURS BEFORE REQUESTED TIME/RIG CIRCULATED FOR 1.5 HRS
Assessment Of Location Safety Meeting	05/21/2011 11:10							LOCATION WET/MUDDY/SNOWING AND THE WIND BLOWING
Pre-Rig Up Safety Meeting	05/21/2011 18:00							JSA ON RIGGING UP
Rig-Up Equipment	05/21/2011 18:15							TD-2735 TP-2713 SJ-49 MW-9.4 CSG- 9.625 36# J-55 OH--14.75"
Safety Huddle	05/21/2011 19:00							RIG CREW AND HES ALL PRESENT
Start Job	05/21/2011 19:35							
Other	05/21/2011 19:36		2	2			46.0	FILL LINES
Pressure Test	05/21/2011 19:38		0.5	0.5			4608.0	PSI TEST OK
Pump Spacer 1	05/21/2011 19:41		4	20			180.0	FRESH WATER
Pump Spacer 2	05/21/2011 19:47		4	20			160.0	GEL WATER SPACER
Pump Spacer 1	05/21/2011 19:53		4	20			332.0	FRESH WATER

## Cementing Job Log

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Pump Lead Cement	05/21/2011 20:00		6	436			416.0	VERSACEM 1050 SKS 12.3 PPG 2.33 FT3/SK 12.62 GAL/SK
Pump Tail Cement	05/21/2011 21:19		6	63			470.0	VERSACEM 170 SKS 12.8 PPG 2.07 FT3/SK 10.67 GAL/SK
Shutdown	05/21/2011 21:31							
Drop Plug	05/21/2011 21:32							PLUG AWAY NO PROBLEMS
Pump Displacement	05/21/2011 21:35		6	209.7			933.0	FRESH WATER
Slow Rate	05/21/2011 22:11		2	199			888.0	GOT 70 BBLS OF CEMENT TO SURFACE
Bump Plug	05/21/2011 22:16		2	209.7			940.0	BUMPED PLUG
Check Floats	05/21/2011 22:21			209.7			1440.0	FLOATS HELD/FLOATS DID NOT HOLD
Bump Plug	05/21/2011 22:25		1.5	3.5			1408.0	REBUMP PLUG
Check Floats	05/21/2011 22:34			3.5			1408.0	FLOATS HELD/GOT 3.5 BBLS BACK INTO DISPLACEMENT TANK
Shutdown	05/21/2011 22:35							RIG UP TO PARASITE STRING
Other	05/21/2011 22:53		2	10			400.0	PUMP 10 BBLS OF SUGAR WATER
Shutdown	05/21/2011 22:59							RIG UP TO STANDPIPE LINE
Pressure Test	05/21/2011 23:05		2	3.5			1500.0	PRESSURE TEST 9.625" CASING 1500 PSI
Release Casing Pressure	05/21/2011 23:19						1500.0	PER COMPANY REP RELEASE PRESSURE/RIG DOWN FLOOR/AND RIG WOULD PRESSURE TEST CASING
End Job	05/21/2011 23:22							HAD GOOD CIRCULATION THROUGHOUT JOB/THANKS FOR USING HES AND THE CREW OF MIKE MAGERS

# OXY H&P 353

## SURFACE



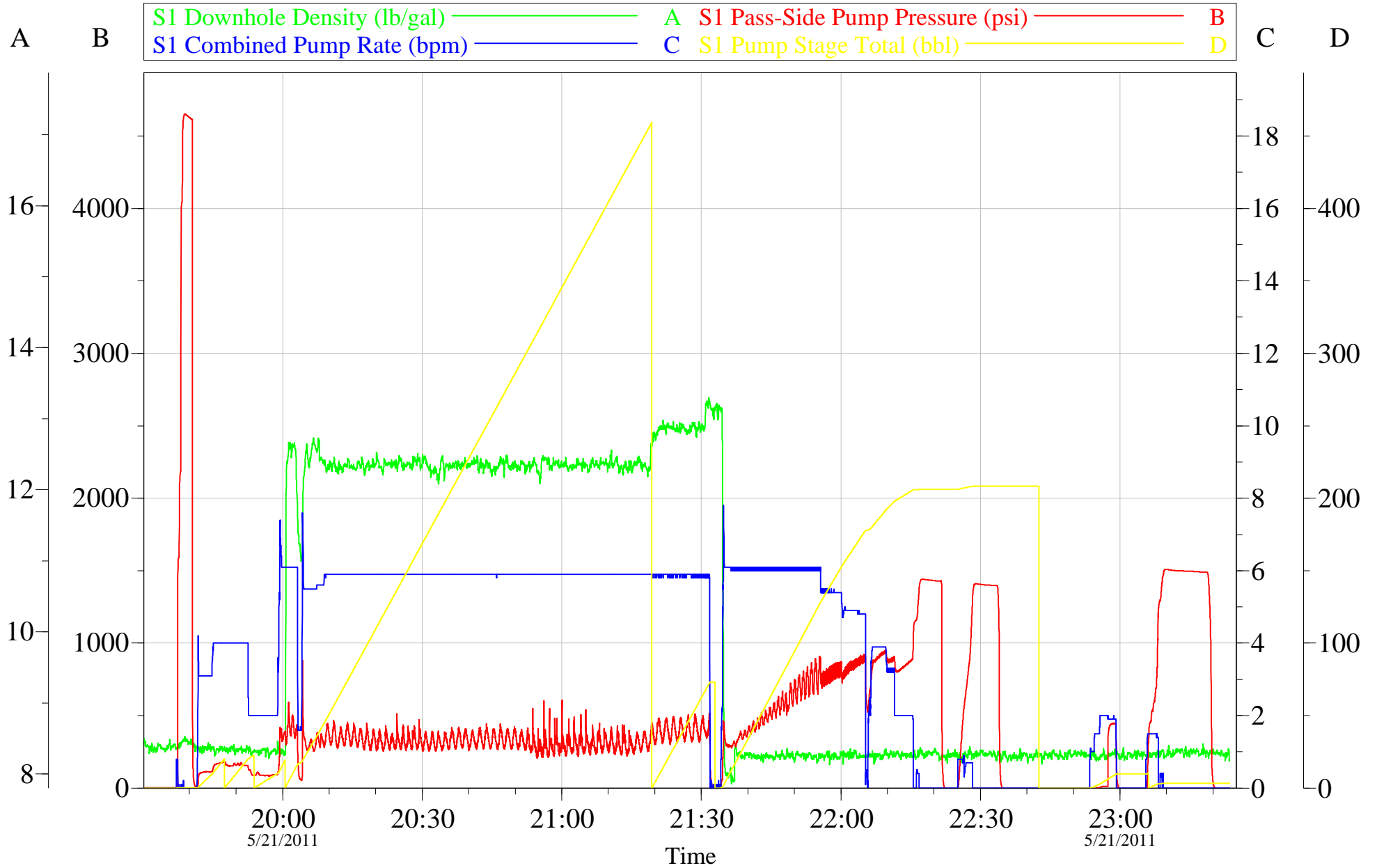
Local Event Log			
1 START JOB	19:35:25	2 FILL LINES	19:36:06
4 PUMP SPACER	19:41:24	5 PUMP GEL SPACER	19:47:35
7 PUMP LEAD CEMENT	20:00:13	8 PUMP TAIL CEMENT	21:19:26
10 DROP PLUG	21:32:46	11 PUMP FRSH WTR DISPLACEMENT	21:35:03
13 BUMP PLUG	22:16:49	14 CHECK FLOATS	22:21:25
16 CHECK FLOATS	22:34:03	17 SHUT DOWN	22:35:40
19 SHUT DOWN	22:59:18	20 PRESSURE TEST CASING	23:05:45
22 END JOB	23:22:02	3 PRESSURETEST	19:38:11
		6 PUMP SPACER	19:53:33
		9 SHUT DOWN	21:31:49
		12 SLOW RATE	22:11:33
		15 REBUMP PLUG	22:25:19
		18 PUMP SUGAR WATER THRU PARASITE	22:53:48
		21 RELEASE PRESSURE	23:19:17

Customer: OXY H&P 353	Job Date: 21-May-2011	Sales Order #: 8187855
Well Description: CC 697-05-70	Job Type: SURFACE	ADC Used: YES
Company Rep: HENRY COOMBS	Cement Supervisor: MIKE MAGERS	Elite #: 8 DAN SINCLAIR/Ryan MOATS

OptiCem v6.3.4  
22-May-11 00:04

# OXY H&P 353

## SURFACE



Customer: OXY H&P 353	Job Date: 21-May-2011	Sales Order #: 8187855
Well Description: CC 697-05-70	Job Type: SURFACE	ADC Used: YES
Company Rep: HENRY COOMBS	Cement Supervisor: MIKE MAGERS	Elite #: 8 DAN SINCLAIR/Ryan MOATS

OptiCem v6.3.4  
21-May-11 23:52

# HALLIBURTON

## Water Analysis Report

Company: OXY H&P 353  
Submitted by: MIKE MAGERS  
Attention: J.Trout/ C.Martinez  
Lease CC  
Well # 697-05-70

Date: 5/21/2011  
Date Rec.: 5/21/2011  
S.O.# 8187855  
Job Type: SURFACE

Specific Gravity	<i>MAX</i>	<i>1</i>
pH	<i>8</i>	<i>7</i>
Potassium (K)	<i>5000</i>	<i>250</i> Mg / L
Calcium (Ca)	<i>500</i>	<i>120</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 <sub>4</sub> )	<i>1500</i>	<i>UNDER 200</i> Mg / L
Chlorine (Cl <sub>2</sub> )		<i>0</i> Mg / L
Temp	<i>40-80</i>	<i>60</i> Deg
Total Dissolved Solids		<i>370</i> Mg / L

Respectfully: MIKE MAGERS

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



<b>Sales Order #:</b> 8187855	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 5/22/2011
<b>Customer:</b> OXY GRAND JUNCTION EBUSINESS		<b>Job Type (BOM):</b> CMT SURFACE CASING BOM
<b>Customer Representative:</b> TERRY RESSER		<b>API / UWI: (leave blank if unknown)</b> AFEY0RNBHXJVWNJ0AAA
<b>Well Name:</b> CC		<b>Well Number:</b> 697-05-70
<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	5/22/2011
Survey Interviewer	The survey interviewer is the person who initiated the survey.	MICHAEL MAGERS (HX13672)
Customer Participation	Did the customer participate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	TERRY RESSER
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	
Job DVA	Did we provide job DVA above our normal service today? Circle Y or N	No
Time	Please enter hours in decimal format to nearest quarter hour.	
Other	Enter short text for other efficiencies gained.	
Customer Initials	Customer's Initials	
Please provide details	Please describe how the job efficiencies were gained.	

CUSTOMER SIGNATURE

<b>Sales Order #:</b> 8187855	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 5/22/2011
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<b>Customer Representative:</b> TERRY RESSER		<b>API / UWI: (leave blank if unknown)</b> AFEY0RNBHXJVWNJ0AAA
<b>Well Name:</b> CC		<b>Well Number:</b> 697-05-70
<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>	5/22/2011
The date the survey was conducted	

Cementing KPI Survey	
<b>Type of Job</b>	0
Select the type of job. (Cementing or Non-Cementing)	
<b>Select the Maximum Deviation range for this Job</b>	Vertical
What is the highest deviation for the job you just completed? This may not be the maximum well deviation.	
<b>Total Operating Time (hours)</b>	6
Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.	
<b>HSE Incident, Accident, Injury</b>	No
HSE Incident, Accident, Injury. This should be recordable incidents only.	
<b>Was the job purpose achieved?</b>	Yes
Was the job delivered correctly as per customer agreed design?	
<b>Operating Hours (Pumping Hours)</b>	4
Total number of hours pumping fluid on this job. Enter in decimal format.	
<b>Customer Non-Productive Rig Time (hrs)</b>	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.	
<b>Type of Rig Classification Job Was Performed</b>	Drilling Rig (Portable)
Type Of Rig (classification) Job Was Performed On	
<b>Number Of JSAs Performed</b>	4
Number Of Jsas Performed	
<b>Number of Unplanned Shutdowns</b>	0
Unplanned shutdown is when injection stops for any period of time.	
<b>Was this a Primary Cement Job (Yes / No)</b>	Yes

<b>Sales Order #:</b> 8187855	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 5/22/2011
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<b>Customer Representative:</b> TERRY RESSER		<b>API / UWI: (leave blank if unknown)</b> AFEY0RNBHXJVWNJ0AAA
<b>Well Name:</b> CC		<b>Well Number:</b> 697-05-70
<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	94
<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