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# **OXY GRAND JUNCTION EBUSINESS**

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**SHELL 697-34-05  
GRAND VALLEY  
Garfield County , Colorado**

## **Cement Surface Casing** **17-May-2012**

### **Post Job Summary**

## The Road to Excellence Starts with Safety

Sold To #: 344034	Ship To #: 344034	Quote #:	Sales Order #: 9487287
Customer: OXY GRAND JUNCTION EBUSINESS	Customer Rep: VILLEGAS, ALEX		
Well Name: SHELL	Well #: 697-34-05	API/UWI #: 05-045-21283	
Field: GRAND VALLEY	City (SAP): ADDISON	County/Parish: Garfield	State: Colorado
Lat: N 39.48 deg. OR N 39 deg. 28 min. 46.596 secs.	Long: W 108.202 deg. OR W -109 deg. 47 min. 52.584 secs.		
Contractor: H&P 330	Rig/Platform Name/Num: H&P 330		
Job Purpose: Cement Surface Casing			
Well Type: Development Well	Job Type: Cement Surface Casing		
Sales Person: HIMES, JEFFREY	Srvc Supervisor: DEUSSEN, EDWARD	MBU ID Emp #: 485182	

### Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
ARNOLD, EDWARD John	7.0	439784	BRENNECKE, ANDREW Bailey	7.0	486345	DEUSSEN, EDWARD Eric	7.0	485182
VANALSTYNE, TROY L	7.0	420256						

### Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10867322	120 mile	10998512	120 mile	11259882	120 mile	11542767	120 mile
11808835	120 mile						

### Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
5/17/2012	7.0	1.5						

TOTAL	Total is the sum of each column separately							
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### Job

Formation Name	Top	Bottom	Called Out	Date	Time	Time Zone
Formation Depth (MD)			On Location	17 - May - 2012	03:30	MST
Form Type		BHST	Job Started	17 - May - 2012	07:00	MST
Job depth MD	1041. ft	Job Depth TVD	Job Completed	17 - May - 2012	14:45	MST
Water Depth		Wk Ht Above Floor	Departed Loc	17 - May - 2012	16:15	MST
Perforation Depth (MD)	From	To		17 - May - 2012	17:30	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
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### 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		
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
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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	Fresh Water Spacer		10.00	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		10.00	bbl	8.33	.0	.0	.0	
4	Lead Cement	VERSACEM (TM) SYSTEM (452010)	158.0	sacks	12.3	2.38	13.77		13.77
5	Tail Cement	SWIFTCEM (TM) SYSTEM (452990)	126.0	sacks	14.2	1.43	6.85		6.85
6.85 Gal		FRESH WATER							
6	Fresh Water Displacement		74.00	bbl	8.34	.0	.0	.0	
<b>Calculated Values</b>		<b>Pressures</b>		<b>Volumes</b>					
Displacement	74.3	Shut In: Instant		Lost Returns	0	Cement Slurry	99.1	Pad	
Top Of Cement	SURFACE	5 Min		Cement Returns	35	Actual Displacement	74.3	Treatment	
Frac Gradient		15 Min		Spacers		Load and Breakdown		Total Job	210
<b>Rates</b>									
Circulating		Mixing	6	Displacement	6	Avg. Job			6
Cement Left In Pipe	Amount	44.19 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*

<b>Sold To #:</b> 344034	<b>Ship To #:</b> 344034	<b>Quote #:</b>	<b>Sales Order #:</b> 9487287
<b>Customer:</b> OXY GRAND JUNCTION EBUSINESS		<b>Customer Rep:</b> VILLEGAS, ALEX	
<b>Well Name:</b> SHELL	<b>Well #:</b> 697-34-05	<b>API/UWI #:</b> 05-045-21283	
<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 39.48 deg. OR N 39 deg. 28 min. 46.596 secs.		<b>Long:</b> W 108.202 deg. OR W -109 deg. 47 min. 52.584 secs.	
<b>Contractor:</b> H&P 330		<b>Rig/Platform Name/Num:</b> H&P 330	
<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>Srvc Supervisor:</b> DEUSSEN, EDWARD	<b>MBU ID Emp #:</b> 485182

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	05/17/2012 03:30							
Pre-Convoy Safety Meeting	05/17/2012 05:45							Including entire cement crew.
Crew Leave Yard	05/17/2012 06:00							
Arrive At Loc	05/17/2012 07:00							Rig still drilling.
Assessment Of Location Safety Meeting	05/17/2012 07:30							
Pre-Rig Up Safety Meeting	05/17/2012 13:00							Including entire cement crew.
Rig-Up Equipment	05/17/2012 13:15							1 Elite #1 ; 1 660 bulk truck; 1 hard line to cellar; 2 lines to upright;. 9.625" compact head.
Rig-Up Completed	05/17/2012 13:45							
Pre-Job Safety Meeting	05/17/2012 14:00							Including everyone on location.
Start Job	05/17/2012 14:45							TD 1061 ; TP 1041 ; SJ 44.19 ; OH 12 1/4"; Casing 9.625" 36#; Mud 9.1ppg.
Pump Water	05/17/2012 14:46		2	2			27.0	Fill lines with fresh water.
Test Lines	05/17/2012 14:47						3834.0	Good pressure test, no leaks.
Pump Spacer 1	05/17/2012 14:51		4	10			70.0	10 BBL fresh water spacer.
Pump Spacer 2	05/17/2012 14:54		4	20			66.0	20 BBL Gel Spacer
Pump Spacer 1	05/17/2012 14:59		4	10			75.0	10 BBL fresh water spacer
Activity Description	Date/Time	Cht	Rate bbl/min	Volume bbl		Pressure psig		Comments

Sold To # : 344034

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Quote # :

Sales Order # :

9487287

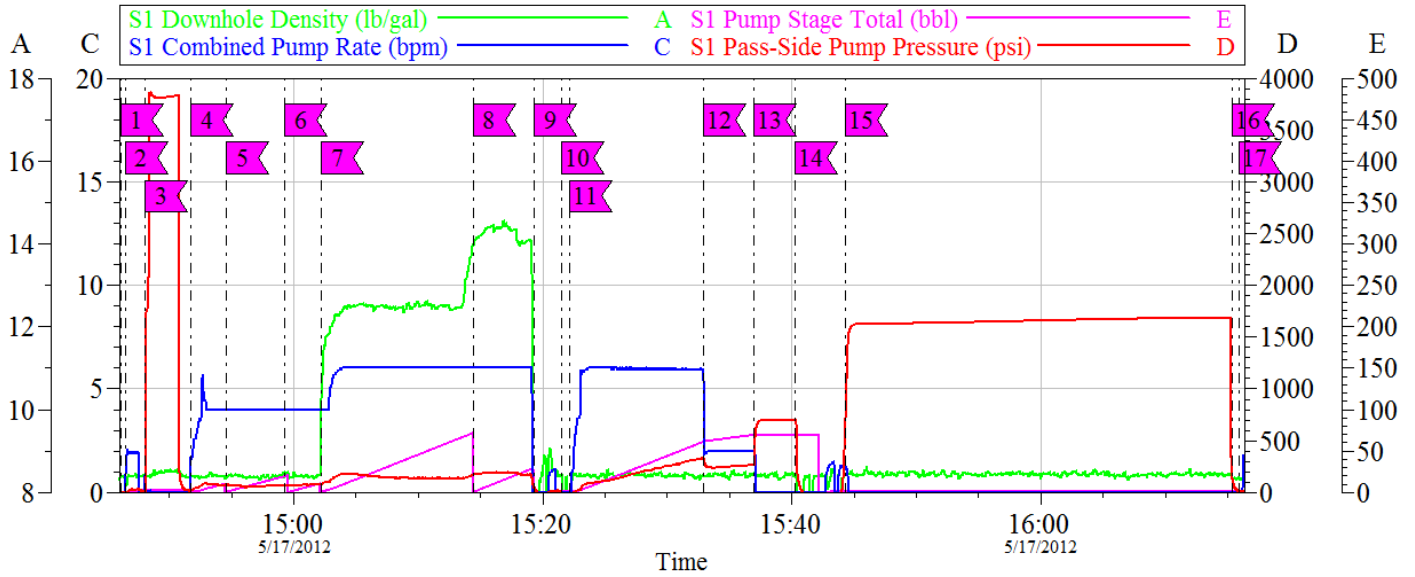
SUMMIT Version: 7.3.0021

Saturday, June 16, 2012 09:07:00

		#		Stage	Total	Tubing	Casing	
Pump Lead Cement	05/17/2012 15:02		6	67			179.0	158 sks Lead Cement, 12.3 ppg, 2.38 cf3, 13.77 gal/sk.
Pump Tail Cement	05/17/2012 15:14		6	32.1			191.0	126 sks Tail Cement, 14.2 ppg, 1.43 cf3, 6.85 gal/sk.
Shutdown	05/17/2012 15:19							
Drop Plug	05/17/2012 15:20							Plug left container.
Pump Displacement	05/17/2012 15:22		6	64			315.0	Fresh water displcement.
Slow Rate	05/17/2012 15:33		2	10	74.3		265.0	Slow rate 10 BBL's prior to bumping the plug.
Bump Plug	05/17/2012 15:37						770.0	Bumped plug, took 500 PSI over.
Check Floats	05/17/2012 15:40							Floats held, 1/2 BBL back - 35 bbls cement returned
Pressure Up Well	05/17/2012 15:44						1614. 0	1500 psi casing test for 30 minutes
End Job	05/17/2012 16:15							
Pre-Rig Down Safety Meeting	05/17/2012 16:20							Including entire cement crew.
Rig-Down Equipment	05/17/2012 16:21							
Rig-Down Completed	05/17/2012 16:30							
Pre-Convoy Safety Meeting	05/17/2012 17:00							Including entire cement crew.
Crew Leave Location	05/17/2012 17:30							Crew leave location for Service Center or another location.
Other	05/17/2012 17:31							Thank You for using Halliburton. Ed Arnold and Crew.

# OXY Shell 697-34-05

## 9 5/8 Surface



### Local Event Log

1 Start Job	14:46:05	2 Fill Lines	14:46:28	3 Pressure Test	14:48:04
4 Pump Water Spacer	14:51:45	5 Pump Gel Spacer	14:54:35	6 Pump Water Spacer	14:59:18
7 Pump Lead Cement	15:02:13	8 Pump Tail Cement	15:14:24	9 Shut Down	15:19:19
10 Drop Top Plug	15:21:29	11 Pump Displacement	15:22:09	12 Slow Rate	15:32:54
13 Bump Plug	15:36:58	14 Check Floats	15:40:16	15 Casing Pressure Test	15:44:19
16 Release Pressure	16:15:23	17 End Job	16:15:57		

Customer: OXY  
Well Description: Shell 697-34-05  
Company Rep: Alex V.

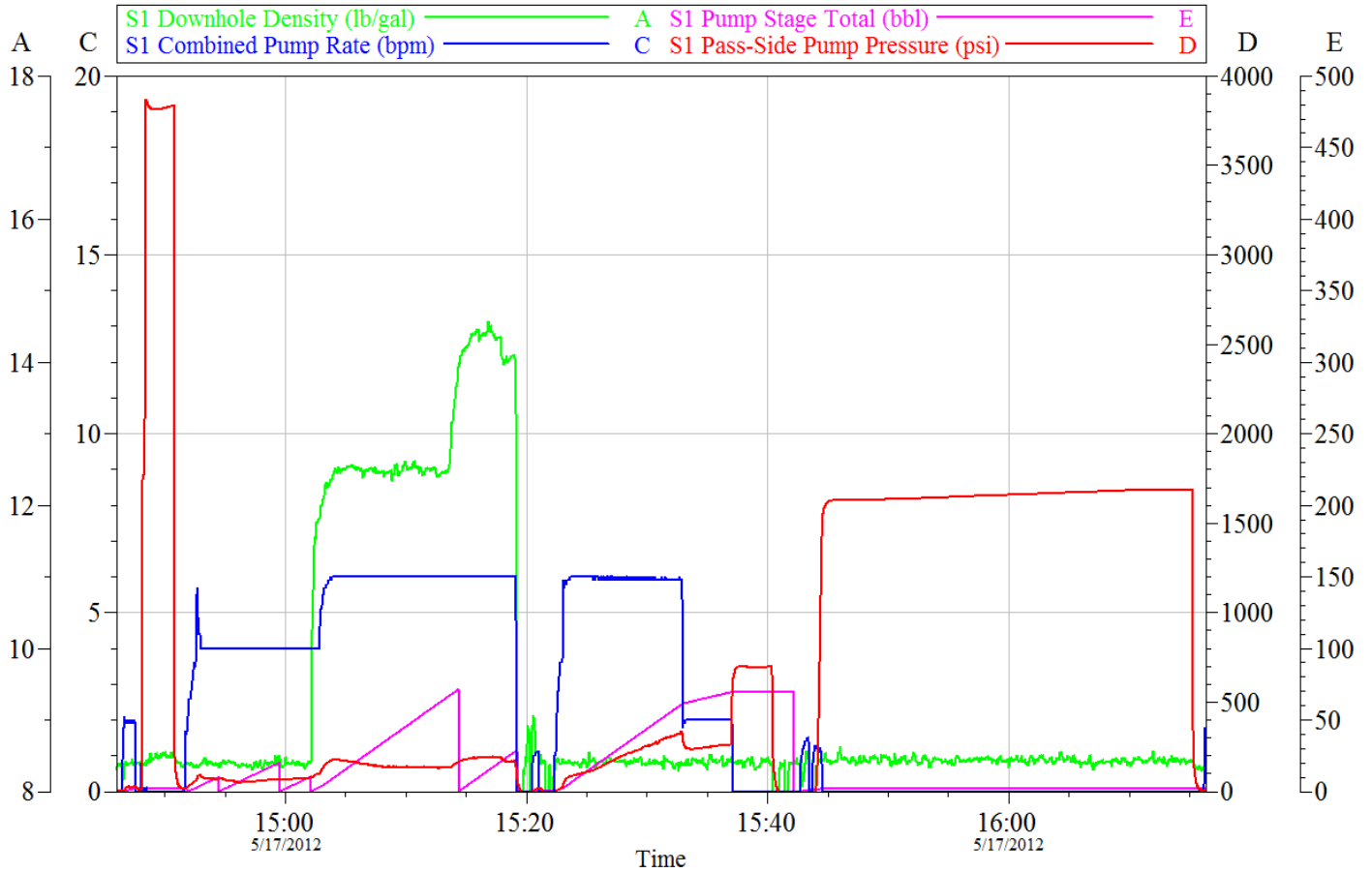
Job Date: 17-May-2012  
Job Type: Surface  
Cement Sup: Ed Deussen

Sales Order #: 9487287  
ADC Used: Yes  
Elite #1: Triy Vanalstyne

OptiCem v6.4.10  
16-Jun-12 09:26

# OXY Shell 697-34-05

## 9 5/8 Surface



Customer: OXY  
Well Description: Shell 697-34-05  
Company Rep: Alex V.

Job Date: 17-May-2012  
Job Type: Surface  
Cement Sup: Ed Deussen

Sales Order #: 9487287  
ADC Used: Yes  
Elite #1: Triy Vanalstyne

OptiCem v6.4.10  
16-Jun-12 09:16

<b>Sales Order #:</b> 9487287	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 5/17/2012
<b>Customer:</b> OXY GRAND JUNCTION EBUSINESS		<b>Job Type (BOM):</b> CMT SURFACE CASING BOM
<b>Customer Representative:</b> ALEX VILLEGAS		<b>API / UWI: (leave blank if unknown)</b> 05-045-21283
<b>Well Name:</b> SHELL		<b>Well Number:</b> 697-34-05
<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	5/17/2012
Survey Interviewer	The survey interviewer is the person who initiated the survey.	EDWARD DEUSSEN (HB57194)
Customer Participation	Did the customer participate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	ALEX VILLEGAS
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	GREAT JOB

CUSTOMER SIGNATURE



<b>Sales Order #:</b> 9487287	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 5/17/2012
<b>Customer:</b> OXY GRAND JUNCTION EBUSINESS		<b>Job Type (BOM):</b> CMT SURFACE CASING BOM
<b>Customer Representative:</b> ALEX VILLEGAS		<b>API / UWI: (leave blank if unknown)</b> 05-045-21283
<b>Well Name:</b> SHELL		<b>Well Number:</b> 697-34-05
<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>	5/17/2012
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>	2.5
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>	1.5
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>	5
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

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<b>Customer Representative:</b> ALEX VILLEGAS		<b>API / UWI: (leave blank if unknown)</b> 05-045-21283
<b>Well Name:</b> SHELL		<b>Well Number:</b> 697-34-05
<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	99
<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	100
<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