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**OXY GRAND JUNCTION EBUSINESS**

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**SHELL 697-34-06  
GRAND VALLEY  
Garfield County , Colorado**

**Cement Surface Casing**  
19-May-2012

**Post Job Summary**

*The Road to Excellence Starts with Safety*

<b>Sold To #:</b> 344034	<b>Ship To #:</b> 344034	<b>Quote #:</b>	<b>Sales Order #:</b> 9522086
<b>Customer:</b> OXY GRAND JUNCTION EBUSINESS		<b>Customer Rep:</b> VILLEGAS, ALEX	
<b>Well Name:</b> SHELL		<b>Well #:</b> 697-34-06	<b>API/UWI #:</b> 05-045-21281
<b>Field:</b> GRAND VALLEY	<b>City (SAP):</b> ADDISON	<b>County/Parish:</b> Garfield	<b>State:</b> Colorado
<b>Lat:</b> N 39.961 deg. OR N 39 deg. 57 min. 39.6 secs.		<b>Long:</b> W 108.202 deg. OR W -109 deg. 47 min. 52.692 secs.	
<b>Contractor:</b> WORKOVER		<b>Rig/Platform Name/Num:</b> WORK OVER	
<b>Job Purpose:</b> Cement Surface Casing			
<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

**Job Personnel**

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
ARNOLD, EDWARD John	13.0	439784	BRENNECKE, ANDREW Bailey	13.0	486345	DEUSSEN, EDWARD Eric	13.0	485182
VANALSTYNE, TROY L	13.0	420256						

**Equipment**

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
5/19/2012	13	1.5						

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

**Job**

**Job Times**

Formation Name	Job			Date	Time	Time Zone
Formation Depth (MD)	Top	Bottom	Called Out	19 - May - 2012	06:00	MST
Form Type	BHST			On Location	19 - May - 2012	08:00
Job depth MD	1045. ft	Job Depth TVD	1045. ft	Job Started	19 - May - 2012	21:10
Water Depth		Wk Ht Above Floor	. ft	Job Completed	19 - May - 2012	22:41
Perforation Depth (MD)	From	To	Departed Loc	19 - May - 2012	23:30	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

**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 ft3/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 ft3/sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk

Stage/Plug #: 1									
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	Fresh Water Displacement		74.00	bbl	8.34	.0	.0	.0	
Calculated Values		Pressures		Volumes					
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	40	Load and Breakdown		Total Job	210
Rates									
Circulating		Mixing	6	Displacement	6	Avg. Job			6
Cement Left In Pipe	Amount	44 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*

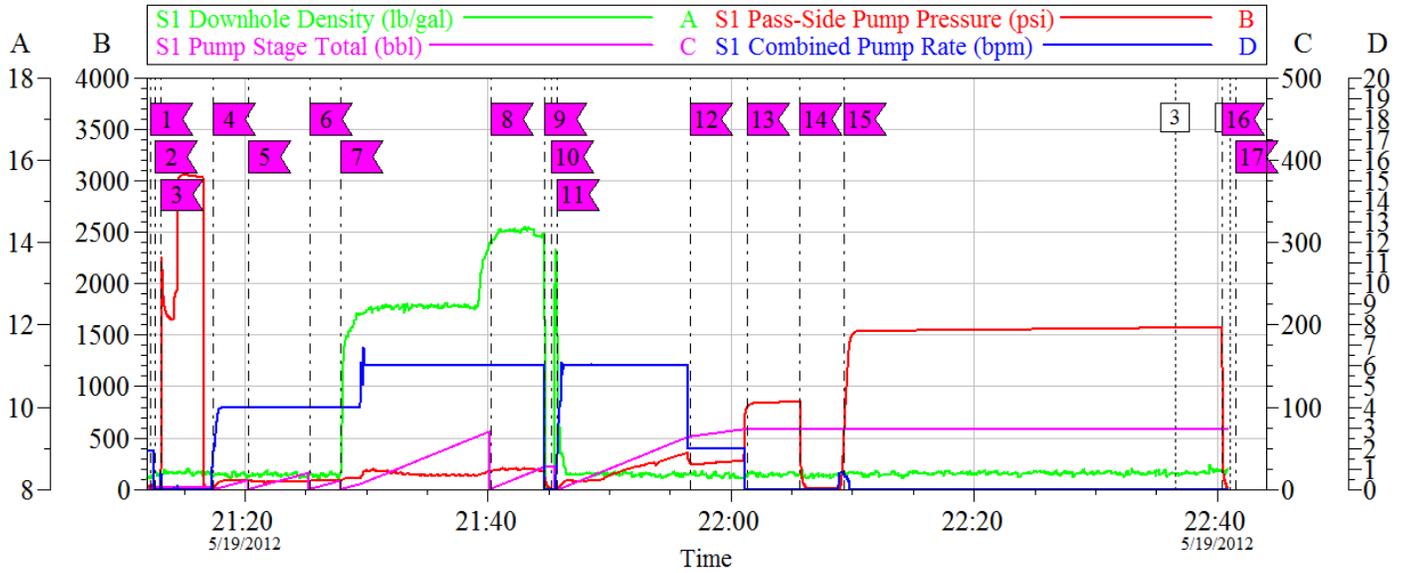
<b>Sold To #:</b> 344034	<b>Ship To #:</b> 344034	<b>Quote #:</b>	<b>Sales Order #:</b> 9522086
<b>Customer:</b> OXY GRAND JUNCTION EBUSINESS		<b>Customer Rep:</b> VILLEGAS, ALEX	
<b>Well Name:</b> SHELL		<b>Well #:</b> 697-34-06	<b>API/UWI #:</b> 05-045-21281
<b>Field:</b> GRAND VALLEY	<b>City (SAP):</b> ADDISON	<b>County/Parish:</b> Garfield	<b>State:</b> Colorado
<b>Legal Description:</b>			
<b>Lat:</b> N 39.961 deg. OR N 39 deg. 57 min. 39.6 secs.		<b>Long:</b> W 108.202 deg. OR W -109 deg. 47 min. 52.692 secs.	
<b>Contractor:</b> WORKOVER		<b>Rig/Platform Name/Num:</b> WORK OVER	
<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	05/19/2012 06:00							Crew already on location
Assessment Of Location Safety Meeting	05/19/2012 10:00							
Pre-Rig Up Safety Meeting	05/19/2012 19:50							Including entire cement crew.
Rig-Up Equipment	05/19/2012 20:00							1 Elite #1; 1 660 bulk truck; 1 hard line to cellar; 2 line to uprights; 9.625" compact head.
Rig-Up Completed	05/19/2012 20:20							
Pre-Job Safety Meeting	05/19/2012 20:30							Including everyone on location.
Start Job	05/19/2012 21:10							TD 1060 ; TP 1045 ; SJ 44; OH 12 1/4"; Casing 9.625" 36#; Mud 9.4 ppg. Job was performed using global events by pump operator
Pump Water	05/19/2012 21:11		2	2			38.0	Fill lines with fresh water.
Test Lines	05/19/2012 21:13						3056.0	Good pressure test, no leaks.
Pump Spacer 1	05/19/2012 21:17		4	10			86.0	10 BBL fresh water spacer.
Pump Spacer 2	05/19/2012 21:20		4	20			70.0	20 BBL Gel water spacer
Pump Spacer 1	05/19/2012 21:25		4	10			85.0	10 BBL fresh water spacer.
Pump Lead Cement	05/19/2012 21:27		6	67			177.0	158 sks Lead Cement, 12.3 ppg, 2.38 cf3, 13.77 gal/sk.
Pump Tail Cement	05/19/2012 21:40		6	32.1			206.0	126sks Tail Cement, 14.2 ppg, 1.43 cf3, 6.85 gal/sk.

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Shutdown	05/19/2012 21:44							
Drop Plug	05/19/2012 21:45							Plug left container.
Pump Displacement	05/19/2012 21:46		6	64			330.0	Fresh water displacement. 35 bbls cement return to surface
Slow Rate	05/19/2012 21:56		2	10	74.7		348.0	Slow rate 10 BBL's prior to bumping the plug.
Bump Plug	05/19/2012 22:01						280.0	Bumped plug, took 500 PSI over.
Check Floats	05/19/2012 22:05							Floats held, 1/2 BBL back
Pressure Test	05/19/2012 22:09						1568.0	Casing pressure test to 1500 psi for 30 minutes
End Job	05/19/2012 22:41							
Pre-Rig Down Safety Meeting	05/19/2012 22:45							Including entire cement crew.
Rig-Down Equipment	05/19/2012 22:46							
Rig-Down Completed	05/19/2012 23:10							
Pre-Convoy Safety Meeting	05/19/2012 23:25							Including entire cement crew.
Crew Leave Location	05/19/2012 23:30							Crew leave location for Service Center or another location.
Other	05/19/2012 23:31							Thank You for using Halliburton. Ed Arnold and Crew.

# OXY Shell 697-34-06

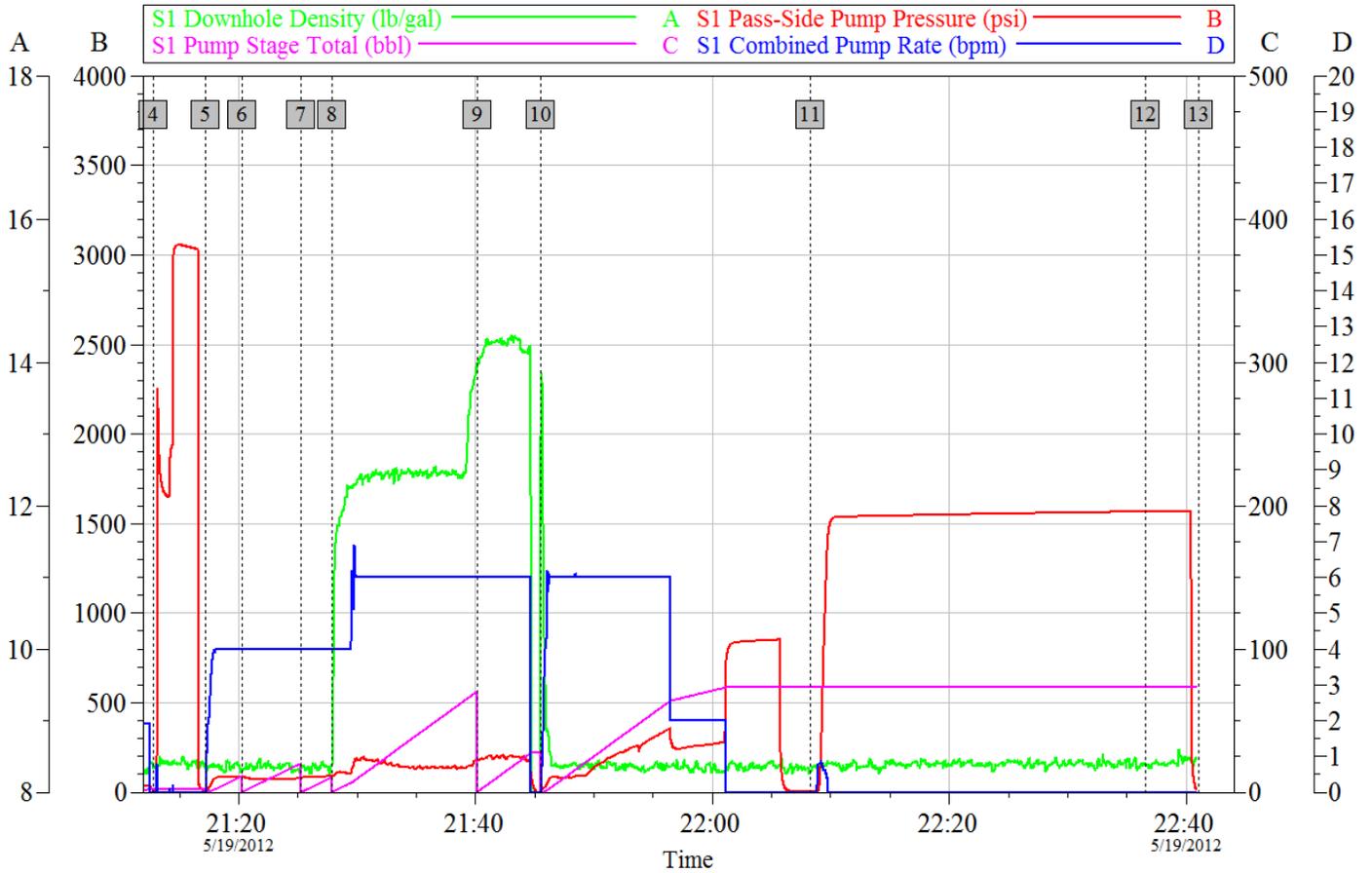
## 9 5/8 Surface



1	Start Job	21:12:14	2	Fill Lines	21:12:38	3	Pressure Test	21:13:07
4	Pump Water Spacer	21:17:24	5	Pump Gel Spacer	21:20:19	6	Pump Water Spacer	21:25:22
7	Pump Lead Cement	21:27:54	8	Pump Tail Cement	21:40:16	9	Shut Down	21:44:39
10	Drop Plug	21:45:14	11	Pump Displacement	21:45:43	12	Slow Rate	21:56:37
13	Bump Plug	22:01:18	14	Check Floats	22:05:40	15	Casing Pressure Test	22:09:16
16	Release Pressure	22:40:26	17	End Job	22:41:30			

Customer: OXY	Job Date: 19-May-2012	Sales Order #: 9522086
Well Description: Shell 697-34-06	Job Type: Surface	ADC Used: Yes
Company Rep: Darryle Clark	Cement Sup: Ed Deussen	Elite #1: Andrew Brennecke

# OXY Shell 697-34-06 9 5/8 Surface



Customer: OXY	Job Date: 19-May-2012	Sales Order #: 9522086
Well Description: Shell 697-34-06	Job Type: Surface	ADC Used: Yes
Company Rep: Darryle Clark	Cement Sup: Ed Deussen	Elite #1: Andrew Brennecke

OptiCem v6.4.10  
16-Jun-12 10:42

<b>Sales Order #:</b> 9522086	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 5/19/2012
<b>Customer:</b> OXY GRAND JUNCTION EBUSINESS		<b>Job Type (BOM):</b> CMT SURFACE CASING BOM
<b>Customer Representative:</b> CASEY BURNS		<b>API / UWI: (leave blank if unknown)</b> 05-045-21281
<b>Well Name:</b> SHELL		<b>Well Number:</b> 697-34-06
<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	5/19/2012
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	CASEY BURNS
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	SAFE JOB WELL DONE

<b>CUSTOMER SIGNATURE</b>
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<b>Sales Order #:</b> 9522086	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 5/19/2012
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<b>Well Name:</b> SHELL		<b>Well Number:</b> 697-34-06
<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>	5/19/2012
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

<b>Sales Order #:</b> 9522086	<b>Line Item:</b> 10	<b>Survey Conducted Date:</b> 5/19/2012
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<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	99
<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