
OXY GRAND JUNCTION EBUSINESS

Shell 797-03-21A

Dallas County , Texas

Cement Surface Casing

23-May-2012

Post Job Summary

The Road to Excellence Starts with Safety

Sold To #: 344034	Ship To #: 2928897	Quote #:	Sales Order #: 9537311
Customer: OXY GRAND JUNCTION EBUSINESS	Customer Rep: Clark, Darryl		
Well Name: Shell	Well #: 797-03-21A	API/UWI #: 05-045-21280	
Field:	City (SAP): PARACHUTE	County/Parish: Dallas	State: Texas
Lat: N 39.48 deg. OR N 39 deg. 28 min. 46.488 secs.	Long: W 108.202 deg. OR W -109 deg. 47 min. 52.512 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	Srv 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 #
CHASTAIN, DERICK Allan	16.5	455848	HUGENTOBLE, LOGAN Mark	16.5	447333	MARTINEZ, CHRISTOPHER R	3	221570
TROUT, JONATHAN P	3	204910	WEAVER, CARLTON Russell	16.5	457698			

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10565341	120 mile	10951251	120 mile	10973571	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
5/23/2012	16.5	3						

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			
Form Type		BHST	Job Started	23 - May - 2012	14:26	MST
Job depth MD	1060. ft	Job Depth TVD	1060. ft	Job Completed	23 - May - 2012	16:08
Water Depth		Wk Ht Above Floor	. ft	Departed Loc		
Perforation Depth (MD)	From	To				

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			bbl	8.33	.0	.0	3	
2	Gel Water Spacer			bbl	8.34	.0	.0	6	
0.25 gal/bbl		LGC-36 UC, BULK (101582749)							
3	Fresh Water Spacer			bbl	8.33	.0	.0	6	
4	Lead Cement	VERSACEM (TM) SYSTEM (452010)		sacks	12.3	2.38	13.77	6	13.77
5	Tail Cement	SWIFTCES (TM) SYSTEM (452990)		sacks	14.2	1.43	6.85	6	6.85
6.85 Gal		FRESH WATER							
6	Fresh Water Displacement			bbl	8.34	.0	.0	6	
Calculated Values		Pressures		Volumes					
Displacement	74.7	Shut In: Instant		Lost Returns	0	Cement Slurry	99.1	Pad	
Top Of Cement	SURFACE	5 Min		Cement Returns	35	Actual Displacement	74.7	Treatment	
Frac Gradient		15 Min		Spacers	40	Load and Breakdown		Total Job	218
Rates									
Circulating	6	Mixing	6	Displacement	6	Avg. Job	5		
Cement Left In Pipe	Amount	44.7 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

Sold To #: 344034	Ship To #: 2928897	Quote #:	Sales Order #: 9537311
Customer: OXY GRAND JUNCTION EBUSINESS		Customer Rep: Clark, Darryl	
Well Name: Shell	Well #: 797-03-21A	API/UWI #: 05-045-21280	
Field:	City (SAP): PARACHUTE	County/Parish: Dallas	State: Texas
Legal Description:			
Lat: N 39.48 deg. OR N 39 deg. 28 min. 46.488 secs.		Long: W 108.202 deg. OR W -109 deg. 47 min. 52.512 secs.	
Contractor: H&P 330		Rig/Platform Name/Num: H&P 330	
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	05/23/2012 09:25							
Other	05/23/2012 09:26							SPOT EQUIPMENT
Pre-Rig Up Safety Meeting	05/23/2012 13:20							WITH ALL HES PERSONNEL
Rig-Up Equipment	05/23/2012 13:30							
Pre-Job Safety Meeting	05/23/2012 14:15							WITH ALL PERSONNEL ON LOCATION
Start Job	05/23/2012 14:26							TD: 1060', TP: 1009.7', SJ: 42.7', FC: 967', CSG: 9.625" 36# J-55, OH: 12 1/4", MUD: PPG: 9.2, TEMP: 95, PH: 18, YP: 16
Other	05/23/2012 14:27		2	2			19.0	FILL LINES
Test Lines	05/23/2012 14:29							TEST DID NOT HOLD. WE REPLACED 2" VALVE ON CEMENT HEAD.
Other	05/23/2012 14:39		1	1			10.0	FILL LINES
Test Lines	05/23/2012 14:41							STAGED TEST AT 2000 PSI, THEN TESTED TO 3220 PSI
Pump Spacer 1	05/23/2012 14:45		3	10			110.0	FRESH H2O SPACER
Pump Spacer 1	05/23/2012 14:49		6	20			180.0	GEL SPACER, 5 GAL PER 20 BBL
Pump Spacer 1	05/23/2012 14:54		6	10			95.0	FRESH H2O SPACER. SLOWED RATE TO MIX UP TUB.
Activity Description	Date/Time	Cht	Rate bbl/min	Volume bbl		Pressure psig		Comments

Sold To # : 344034

Ship To # :2928897

Quote # :

Sales Order # :

9537311

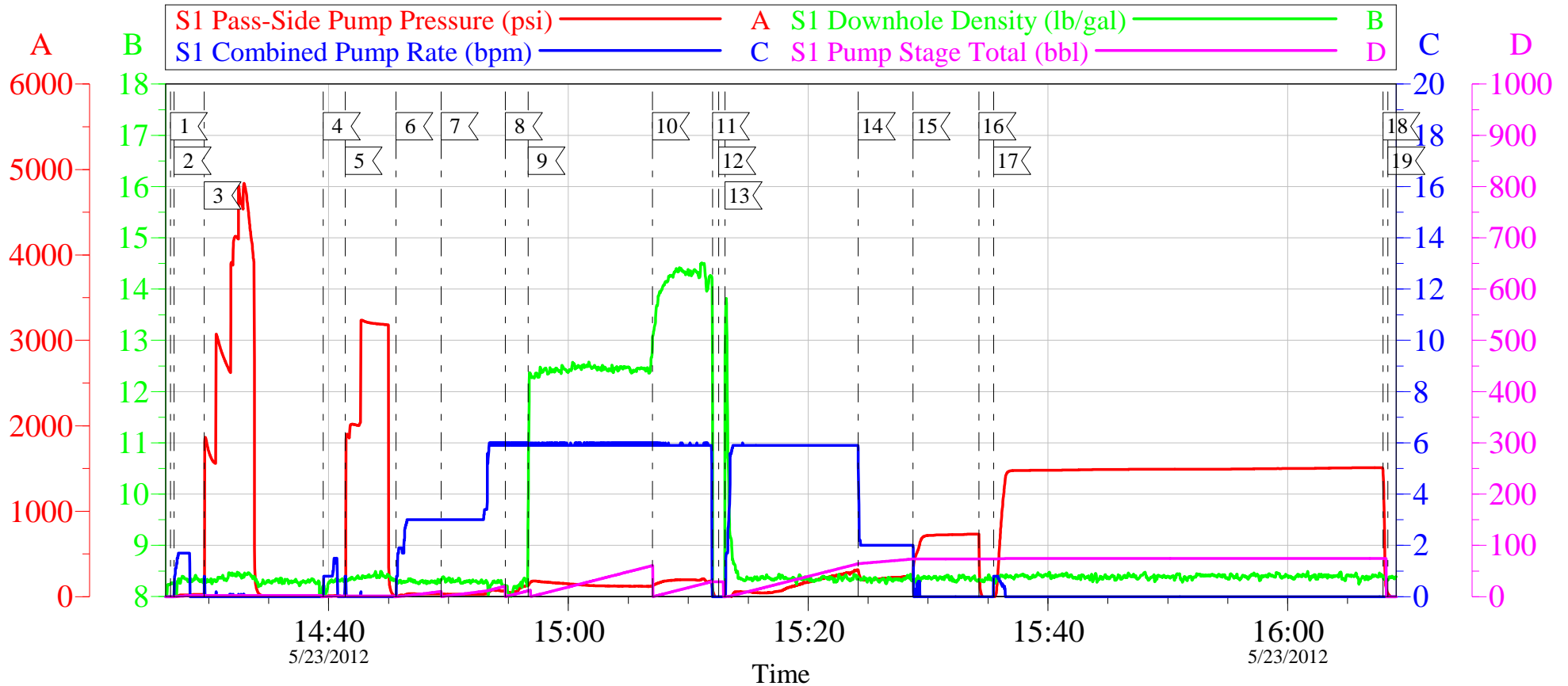
SUMMIT Version: 7.3.0021

Wednesday, May 23, 2012 04:44:00

		#		Stage	Total	Tubing	Casing	
Pump Lead Cement	05/23/2012 14:56		6	67			205.0	158 SKS, 12.3 LB/GAL, 2.38 FT3/SK, 13.77 GAL/SK.
Pump Tail Cement	05/23/2012 15:07		6	32.1			220.0	126 SKS, 14.2 LB/GAL, 1.43 FT3/SK, 6.85 GAL/SK
Shutdown	05/23/2012 15:12							
Drop Top Plug	05/23/2012 15:12							VERIFY PLUG LAUNCHED
Pump Displacement	05/23/2012 15:13		6	74.7			310.0	FRESH H2O DISPLACEMENT. CEMENT TO SURFACE @ 39.7 BBL GONE OF DISPLACEMENT.
Slow Rate	05/23/2012 15:24		2	65			225.0	SLOW RATE 10 BBLS PRIOR TO CALCULATED DISPLACEMENT
Bump Plug	05/23/2012 15:28		2	74.7			715.0	PLUG BUMPED
Check Floats	05/23/2012 15:34							FLOATS HOLDING
Pressure Up	05/23/2012 15:35						1520. 0	TEST CASING AT 1500 PSI FOR 30 MIN.
Release Casing Pressure	05/23/2012 16:07							
End Job	05/23/2012 16:08							GOOD RETURNS THROUGHOUT JOB. 35 BBLS CEMENT TO SURFACE. NO DERRICK CHARGE. NO ADD HOURS.
Pre-Rig Down Safety Meeting	05/23/2012 16:20							WITH ALL HES PERSONNEL
Rig-Down Equipment	05/23/2012 16:30							RIG DOWN TO BE OUT OF RIGS WAY.
Comment	05/23/2012 16:30							THANK YOU FOR CHOOSING HALLIBURTON. DERICK CHASTAIN AND CREW

OXY - SHELL 797-03-21A

9 5/8" SURFACE CASING



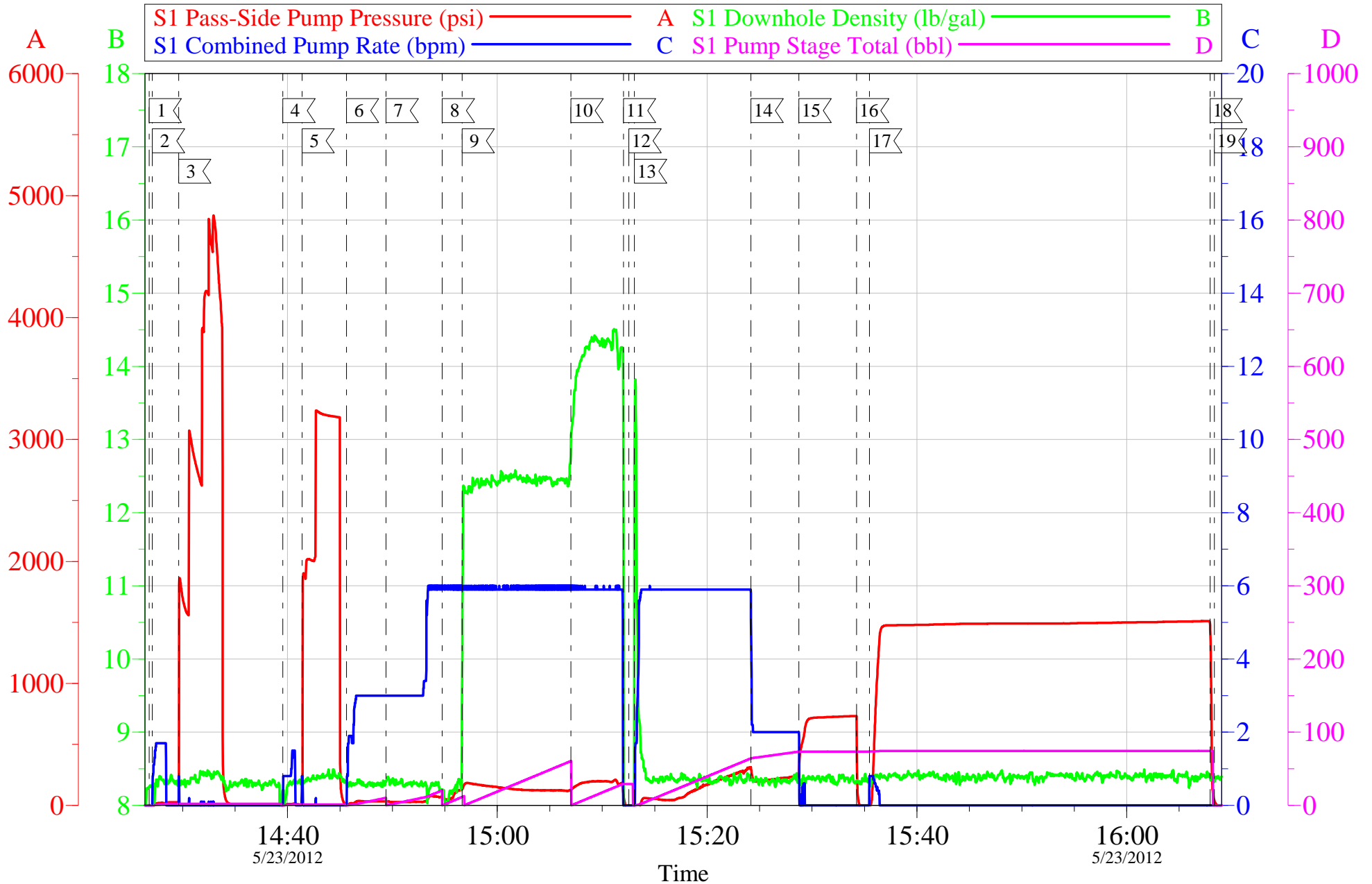
Local Event Log								
1	START JOB	14:26:49	2	FILL LINES	14:27:07	3	TEST LINES	14:29:37
4	FILL LINES	14:39:34	5	TEST LINES	14:41:23	6	PUMP H2O SPACER	14:45:37
7	PUMP GEL SPACER	14:49:23	8	PUMP H2O SPACER	14:54:45	9	PUMP LEAD CEMENT	14:56:38
10	PUMP TAIL CEMENT	15:07:01	11	SHUTDOWN	15:12:02	12	DROP TOP PLUG	15:12:33
13	PUMP DISPLACEMENT	15:13:04	14	SLOW RATE	15:24:11	15	BUMP PLUG	15:28:45
16	CHECK FLOATS	15:34:15	17	TEST CASING	15:35:29	18	RELEASE PRESSURE	16:07:57
19	END JOB	16:08:21						

Customer:	OXY	Job Date:	23-May-2012	Sales Order #:	9537311
Well Description:	SHELL 797-03-21A	Job Type:	SURFACE	ADC Used:	YES
Company Rep:	DARRYL CLARK	Cement Supervisor:	DERICK CHASTAIN	Elite #1:	CHRIS MARTINEZ

OptiCem v6.4.10
23-May-12 16:17

OXY - SHELL 797-03-21A

9 5/8" SURFACE CASING



Customer: OXY	Job Date: 23-May-2012	Sales Order #: 9537311	OptiCem v6.4.10 23-May-12 16:17
Well Description: SHELL 797-03-21A	Job Type: SURFACE	ADC Used: YES	
Company Rep: DARRYL CLARK	Cement Supervisor: DERICK CHASTAIN	Elite #1: CHRIS MARTINEZ	

HALLIBURTON

Water Analysis Report

Company: OXY
Submitted by: DERICK CHASTAIN
Attention: J. Trout
Lease: SHELL
Well #: 797-03-21A

Date: 5/23/2012
Date Rec.: 5/23/2012
S.O.#: 9537311
Job Type: SURFACE

Specific Gravity	<i>MAX</i>	1
pH	<i>8</i>	7
Potassium (K)	<i>5000</i>	0 Mg / L
Calcium (Ca)	<i>500</i>	0 Mg / L
Iron (FE2)	<i>300</i>	200 Mg / L
Chlorides (Cl)	<i>3000</i>	300 Mg / L
Sulfates (SO ₄)	<i>1500</i>	0 Mg / L
Chlorine (Cl ₂)		0 Mg / L
Temp	<i>40-80</i>	55 Deg
Total Dissolved Solids		210 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 its use

Sales Order #: 9537311	Line Item: 10	Survey Conducted Date: 5/23/2012
Customer: OXY GRAND JUNCTION EBUSINESS		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative: DARRYL CLARK		API / UWI: (leave blank if unknown) 05-045-21280
Well Name: Shell		Well Number: 797-03-21A
Well Type: Development Well	Well Country: United States of America	
H2S Present:	Well State: Texas	Well County: Dallas

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	5/23/2012
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	DARRYL CLARK
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	

CUSTOMER SIGNATURE

Sales Order #: 9537311	Line Item: 10	Survey Conducted Date: 5/23/2012
Customer: OXY GRAND JUNCTION EBUSINESS		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative: DARRYL CLARK		API / UWI: (leave blank if unknown) 05-045-21280
Well Name: Shell		Well Number: 797-03-21A
Well Type: Development Well	Well Country: United States of America	
H2S Present:	Well State: Texas	Well County: Dallas

KEY PERFORMANCE INDICATORS

General	
Survey Conducted Date	5/23/2012
The date the survey was conducted	

Cementing KPI Survey	
Type of Job	0
Select the type of job. (Cementing or Non-Cementing)	
Select the Maximum Deviation range for this Job	Vertical
What is the highest deviation for the job you just completed? This may not be the maximum well deviation.	
Total Operating Time (hours)	3
Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.	
HSE Incident, Accident, Injury	No
HSE Incident, Accident, Injury. This should be recordable incidents only.	
Was the job purpose achieved?	Yes
Was the job delivered correctly as per customer agreed design?	
Operating Hours (Pumping Hours)	1
Total number of hours pumping fluid on this job. Enter in decimal format.	
Customer Non-Productive Rig Time (hrs)	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.	
Type of Rig Classification Job Was Performed	Drilling Rig (Portable)
Type Of Rig (classification) Job Was Performed On	
Number Of JSAs Performed	8
Number Of Jsas Performed	
Number of Unplanned Shutdowns	0
Unplanned shutdown is when injection stops for any period of time.	
Was this a Primary Cement Job (Yes / No)	Yes

Sales Order #: 9537311	Line Item: 10	Survey Conducted Date: 5/23/2012
Customer: OXY GRAND JUNCTION EBUSINESS		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative: DARRYL CLARK		API / UWI: (leave blank if unknown) 05-045-21280
Well Name: Shell		Well Number: 797-03-21A
Well Type: Development Well	Well Country: United States of America	
H2S Present:	Well State: Texas	Well County: Dallas

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	97
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	99
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