
OXY GRAND JUNCTION EBUSINESS

**CC 697-16-05
PARACHUTE
Garfield County , Colorado**

**Squeeze Perfs
18-Nov-2011**

Post Job Report

The Road to Excellence Starts with Safety

Sold To #: 344034	Ship To #: 2898452	Quote #:	Sales Order #: 9065926
Customer: OXY GRAND JUNCTION EBUSINESS	Customer Rep: EPPERSON, DOUG		
Well Name: CC	Well #: 697-16-05	API/UWI #: 05-045-16017	
Field: PARACHUTE	City (SAP): UNKNOWN	County/Parish: Garfield	State: Colorado
Lat: N 39.531 deg. OR N 39 deg. 31 min. 51.6 secs.	Long: W 108.223 deg. OR W -109 deg. 46 min. 37.2 secs.		
Contractor: WORKOVER	Rig/Platform Name/Num: WORKOVER		
Job Purpose: Squeeze Perfs			
Well Type: Development Well	Job Type: Squeeze Perfs		
Sales Person: HIMES, JEFFREY	Srvc Supervisor: JAMISON, PRICE	MBU ID Emp #: 229155	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BLUST, CHARLES Thomas	7.5	386662	DEUSSEN, EDWARD Eric	7.5	485182	EICKHOFF, ROBERT Edward	7.5	495311
JAMISON, PRICE W	7.5	229155						

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10784064	120 mile	11006314	120 mile	11360871	120 mile	11542767	120 mile
11583934	120 mile						

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
11/18/11	7.5	3						

TOTAL Total is the sum of each column separately

Job

Job Times

Formation Name	Formation Depth (MD)	Top	Bottom	Called Out	Date	Time	Time Zone
Form Type			BHST	On Location	18 - Nov - 2011	01:00	MST
Job depth MD	6954. ft		Job Depth TVD	Job Started	18 - Nov - 2011	08:30	MST
Water Depth			Wk Ht Above Floor	Job Completed	18 - Nov - 2011	12:38	MST
Perforation Depth (MD)	From 7,139.00 ft	To 7,140.00 ft	Departed Loc		18 - Nov - 2011	14:39	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
Perforation Interval								7139.	7140.	.	.

Sales/Rental/3rd Party (HES)

Description	Qty	Qty uom	Depth	Supplier
ADC (AUTO DENSITY CTRL) SYS, /JOB,ZI	1	JOB		
PORT. DATA ACQUIS. W/OPTICEM RT W/HES	1	EA		
R/A DENSOMETER W/CHART RECORDER,/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			
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar					Retainer					SSR plug set			
Insert Float										Plug Container			
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 ³ /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	Fresh Water		15.00	bbl	8.4	.0	.0	5.0	
2	Squeeze Cement	SQUEEZECM (TM) SYSTEM (452971)	70.0	sacks	15.5	1.2	5.32	5.0	5.32
	5.32 Gal	FRESH WATER							
3	Displacement		24.00	bbl	8.4	.0	.0	2.0	
Calculated Values		Pressures		Volumes					
Displacement	27	Shut In: Instant		Lost Returns	NO	Cement Slurry	15	Pad	
Top Of Cement	???	5 Min		Cement Returns	NO	Actual Displacement	24	Treatment	
Frac Gradient		15 Min		Spacers	15	Load and Breakdown		Total Job	54
Rates									
Circulating		Mixing	2	Displacement	2	Avg. Job	2		
Cement Left In Pipe	Amount	0 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

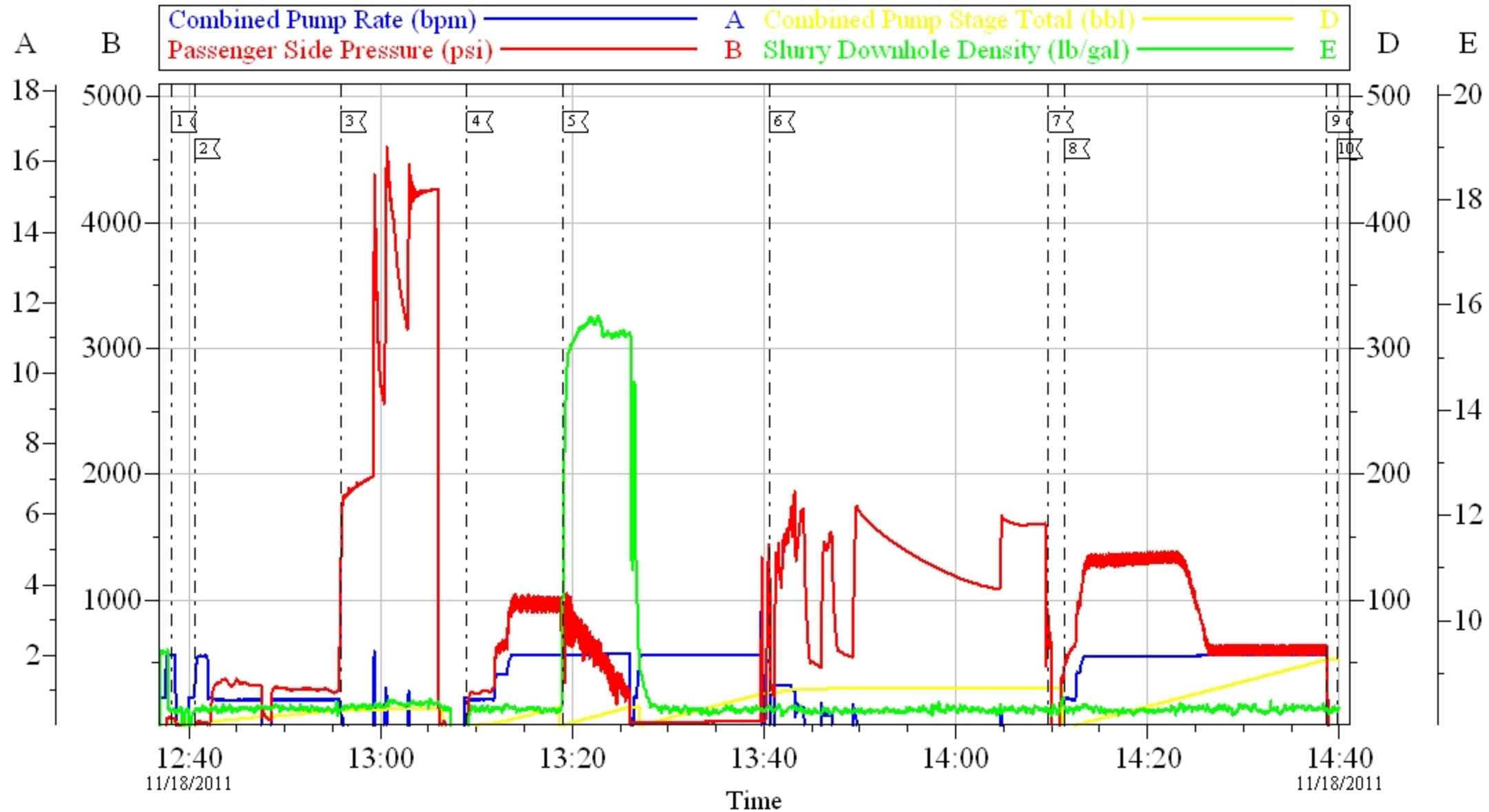
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Well Name: CC	Well #: 697-16-05	API/UWI #: 05-045-16017	
Field: PARACHUTE	City (SAP): UNKNOWN	County/Parish: Garfield	State: Colorado
Legal Description:			
Lat: N 39.531 deg. OR N 39 deg. 31 min. 51.6 secs.		Long: W 108.223 deg. OR W -109 deg. 46 min. 37.2 secs.	
Contractor: WORKOVER		Rig/Platform Name/Num: WORKOVER	
Job Purpose: Squeeze Perfs			Ticket Amount:
Well Type: Development Well		Job Type: Squeeze Perfs	
Sales Person: HIMES, JEFFREY		Srv Supervisor: JAMISON, PRICE	MBU ID Emp #: 229155

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	11/18/2011 01:00							TUBING 2 2/8 SET @ 6954 PERFS @ 7140 CASING 4.5 11.6 PPF N-80
Depart Yard Safety Meeting	11/18/2011 03:20							
Crew Leave Yard	11/18/2011 03:30							
Arrive At Loc	11/18/2011 08:30							
Assessment Of Location Safety Meeting	11/18/2011 08:40							
Pre-Rig Up Safety Meeting	11/18/2011 11:30							
Pre-Job Safety Meeting	11/18/2011 12:20							
Start Job	11/18/2011 12:40							
Prime Pumps	11/18/2011 12:45		2	13		450.0		FRESH WATER
Test Lines	11/18/2011 13:00					4000.0		
Pump Water	11/18/2011 13:09		2	15		990.0		FRESH WATER
Pump Cement	11/18/2011 13:19		2	15		890.0		MIXED @ 15.5 PPG YIELD 1.2 WAT/REQ 5.32 70 SKS
Pump Displacement	11/18/2011 13:28		2	24		1500.0		FRESH WATER
Stage Cement	11/18/2011 13:40							
Release Tubing Pressure	11/18/2011 14:09					1550.0		
Reverse Circ Well	11/18/2011 14:11		2	54			1300.0	FRESH WATER

Cementing Job Log

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Shutdown	11/18/2011 14:38							REVERSED OUT 3 BBLS OF CEMENT
End Job	11/18/2011 14:39							
Post-Job Safety Meeting (Pre Rig-Down)	11/18/2011 14:40							
Depart Location Safety Meeting	11/18/2011 15:50							
Crew Leave Location	11/18/2011 16:00							THANKS FOR USING HALLIBURTON BILL JAMISON & CREW

OXY SQUEEZE



Local Event Log			
1 START JOB	12:38:10	2 PRIME LINES	12:40:36
3 TEST LINES & TUBING	12:55:51		
4 START FRESH WATER SPACER	13:09:02	5 START CEMENT	13:19:02
6 START STAGEING CEMENT	13:40:34		
7 RELEASE PRESSURE	14:09:38	8 REVERSE OUT	14:11:18
9 SHUT DOWN	14:38:43		
10 END JOB	14:39:44		

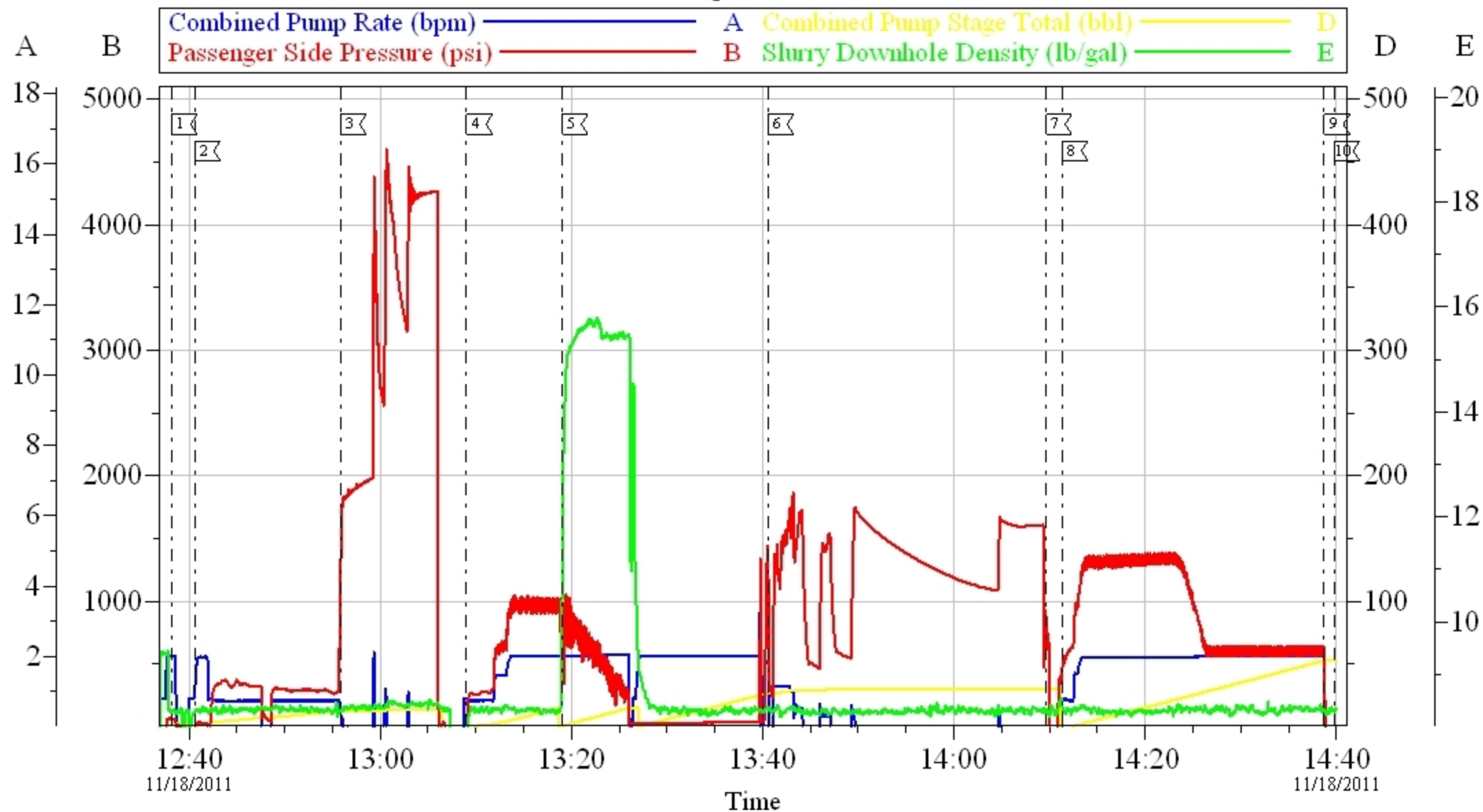
Customer: OXY
Well Description: CC 697-16-05
Company Rep: DOUG EPPERSON

Job Date: 18-Nov-2011
Job Type: CEMENT
Cement Supervisor: BILL JAMISON

Sales Order #: 9065926
ADC Used: YES
Elite #1: ED DEUSSEN

OptiCem v6.4.10
18-Nov-11 15:38

OXY SQUEEZE



Water Analysis Report

Company: OXY
Submitted by: BILL JAMISON
Attention: J.Trout
Lease: C.C.
Well #: 697-16-05

Date: 11/18/2011
Date Rec.: 11/18/2011
S.O.#: 9065926
Job Type: SQUEEZE

Specific Gravity	<i>MAX</i>	<i>1</i>
pH	<i>8</i>	<i>6.9</i>
Potassium (K)	<i>5000</i>	<i>400 Mg / L</i>
Calcium (Ca)	<i>500</i>	<i>250 Mg / L</i>
Iron (FE2)	<i>300</i>	<i>0 Mg / L</i>
Chlorides (Cl)	<i>3000</i>	<i>0 Mg / L</i>
Sulfates (SO ₄)	<i>1500</i>	<i>-200 Mg / L</i>
Chlorine (Cl ₂)		<i>0 Mg / L</i>
Temp	<i>40-80</i>	<i>64 Deg</i>
Total Dissolved Solids		<i>650 Mg / L</i>

Respectfully: BILL JAMISON

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 #: 9065926	Line Item: 10	Survey Conducted Date: 11/18/2011
Customer: OXY GRAND JUNCTION EBUSINESS		Job Type (BOM): CMT SQUEEZE PERFORATIONS BOM
Customer Representative: DOUG EPPERSON		API / UWI: (leave blank if unknown) 05-045-16017
Well Name: CC		Well Number: 697-16-05
Well Type: Development Well	Well Country: United States of America	
H2S Present: No	Well State: Colorado	Well County: 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	11/18/2011
Survey Interviewer	The survey interviewer is the person who initiated the survey.	PRICE JAMISON (HAL9235)
Customer Participation	Did the customer participate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	DOUG EPPERSON
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	GOOD JOB

CUSTOMER SIGNATURE

Sales Order #: 9065926	Line Item: 10	Survey Conducted Date: 11/18/2011
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Customer Representative: DOUG EPPERSON		API / UWI: (leave blank if unknown) 05-045-16017
Well Name: CC		Well Number: 697-16-05
Well Type: Development Well	Well Country: United States of America	
H2S Present: No	Well State: Colorado	Well County: Garfield

KEY PERFORMANCE INDICATORS

General	
Survey Conducted Date The date the survey was conducted	11/18/2011

Cementing KPI Survey	
Type of Job Select the type of job. (Cementing or Non-Cementing)	0
Select the Maximum Deviation range for this Job What is the highest deviation for the job you just completed? This may not be the maximum well deviation.	Vertical
Total Operating Time (hours) Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.	3
HSE Incident, Accident, Injury HSE Incident, Accident, Injury. This should be recordable incidents only.	No
Was the job purpose achieved? Was the job delivered correctly as per customer agreed design?	Yes
Operating Hours (Pumping Hours) Total number of hours pumping fluid on this job. Enter in decimal format.	1
Customer Non-Productive Rig Time (hrs) 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
Type of Rig Classification Job Was Performed Type Of Rig (classification) Job Was Performed On	Workover
Number Of JSAs Performed Number Of Jsas Performed	5
Number of Unplanned Shutdowns Unplanned shutdown is when injection stops for any period of time.	0
Was this a Primary Cement Job (Yes / No)	No

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Customer Representative: DOUG EPPERSON		API / UWI: (leave blank if unknown) 05-045-16017
Well Name: CC		Well Number: 697-16-05
Well Type: Development Well	Well Country: United States of America	
H2S Present: No	Well State: Colorado	Well County: Garfield

Primary Cement Job= Casing job, Liner job, or Tie-back job.	
Was this a Plug or a Squeeze Job? Please select the appropriate choice	No
Was this a Primary or a Remedial Job? Kick off plug, Plug to Abandon, LCM plug or Planned Liner Top Squeeze, Squeeze of existing perforations, Squeeze of casing leak	No
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	98
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	98
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