
OXY GRAND JUNCTION EBUSINESS

**CC 697-16-23A
GRANDVALLEY
Garfield County , Colorado**

**Cement Surface Casing
05-Aug-2011**

Post Job Report

The Road to Excellence Starts with Safety

Sold To #: 344034	Ship To #: 2870256	Quote #:	Sales Order #: 8362516
Customer: OXY GRAND JUNCTION EBUSINESS		Customer Rep: Vallegas, Alex	
Well Name: CC		Well #: 697-16-23A	API/UWI #: 05-045-20566
Field: GRANDVALLEY	City (SAP): PARACHUTE	County/Parish: Garfield	State: Colorado
Lat: N 39.523 deg. OR N 39 deg. 31 min. 23.146 secs.		Long: W 108.225 deg. OR W -109 deg. 46 min. 28.877 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: ROYSTER, JACOB		Srvc Supervisor: SMITH, CHRISTOPHER	MBU ID Emp #: 452619

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
HAYES, JESSE Doug	11	403601	LEIST, JAMES R	11	362787	SALAZAR, PAUL Omar	11	445614
SMITH, CHRISTOPHER Scott	11	452619						

Equipment

HES Unit #	Distance-1 way						
10722398	120 mile	11139330	120 mile	11259882	120 mile	11360871	120 mile
11542767	120 mile						

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
08.04.2011	6.5	08.05.2011	5					

TOTAL Total is the sum of each column separately

Job

Job Times

Formation Name	Job			Job Times			
Formation Depth (MD)	Top	Bottom	2720	Called Out	Date	Time	Time Zone
	0			On Location	04 - Aug - 2011	10:30	MST
Form Type		BHST		Job Started	04 - Aug - 2011	17:30	MST
Job depth MD	2720. ft	Job Depth TVD	2720. ft	Job Completed	05 - Aug - 2011	03:05	MST
Water Depth		Wk Ht Above Floor	3. ft	Departed Loc	05 - Aug - 2011	05:00	MST
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
14.75" OPEN HOLE				14.75				.	2720.		
9.625" SURFACE	Unknown		9.625	8.921	36.		N-80	.	2702.		

Sales/Rental/3rd Party (HES)

Description	Qty	Qty uom	Depth	Supplier
PLUG,CMTG, TOP, 9 5/8, HWE, 8.16 MIN/9.06 MA	1	EA		

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 ft ³ /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	Water Spacer		20.00	bbl	8.33	.0	.0	4	
2	Gel Spacer		20.00	bbl	.	.0	.0	4	
3	Water Spacer		20.00	bbl	.	.0	.0	4	
4	Lead Cement	VERSACEM (TM) SYSTEM (452010)	1055.0	sacks	12.3	2.33	12.62	7	12.62
	12.62 Gal	FRESH WATER							
5	Tail Cement	VERSACEM (TM) SYSTEM (452010)	146.0	sacks	12.8	2.07	10.67	6	10.67
	10.67 Gal	FRESH WATER							
6	Displacement		205.00	bbl	.	.0	.0	7	
7	Topout Cement	HALCEM (TM) SYSTEM (452986)	48.5	sacks	12.5	1.97	10.96	2	10.96
	10.96 Gal	FRESH WATER							
Calculated Values		Pressures			Volumes				
Displacement	205	Shut In: Instant		Lost Returns		Cement Slurry	491	Pad	
Top Of Cement		5 Min		Cement Returns		Actual Displacement	205	Treatment	
Frac Gradient		15 Min		Spacers	60	Load and Breakdown		Total Job	756
Rates									
Circulating	RIG	Mixing	7	Displacement	7	Avg. Job	7		
Cement Left In Pipe	Amount	48.8 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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Field: GRANDVALLEY	City (SAP): PARACHUTE	County/Parish: Garfield	State: Colorado
Legal Description:			
Lat: N 39.523 deg. OR N 39 deg. 31 min. 23.146 secs.		Long: W 108.225 deg. OR W -109 deg. 46 min. 28.877 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: ROYSTER, JACOB		Srvc Supervisor: SMITH, CHRISTOPHER	MBU ID Emp #: 452619

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Pre-Convoy Safety Meeting	08/04/2011 14:00							ALL HES PERSONEL
Crew Leave Yard	08/04/2011 14:30							
Arrive At Loc	08/04/2011 17:30							RIG RUNNING CASEING.
Assessment Of Location Safety Meeting	08/04/2011 17:45							ALL HES PERSONEL
Rig-Up Equipment	08/04/2011 19:50							
Pre-Job Safety Meeting	08/04/2011 20:15							ALL HES PERSONEL AND RIG CREW
Start Job	08/04/2011 20:26							TD 2720', TP 2702', SJ 48.81', OH 14.75", CSG 9.625" 36# J-55 , MUD 9.1PPG, YP- 16, PV- 16, TEMP- 78 DEG.
Other	08/04/2011 20:28		2	2			29.0	FILL LINES
Pressure Test	08/04/2011 20:31		0.5	0.5				LOW PSI TEST, ALL LINES HELD PRESSURE @ 1704 PSI
Pressure Test	08/04/2011 20:33		0.5	0.5				HIGH PSI TEST, ALL LINES HELD PRESSURE AT 2650 PSI
Pump Spacer 1	08/04/2011 20:38		6	20			125.0	FRESH WATER
Pump Spacer 2	08/04/2011 20:44		6	20			95.0	LGC SPACER
Pump Spacer 1	08/04/2011 20:49		6	20			127.0	FRESH WATER
Activity Description	Date/Time	Cht	Rate bbl/min	Volume bbl		Pressure psig		Comments

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SUMMIT Version: 7.2.27

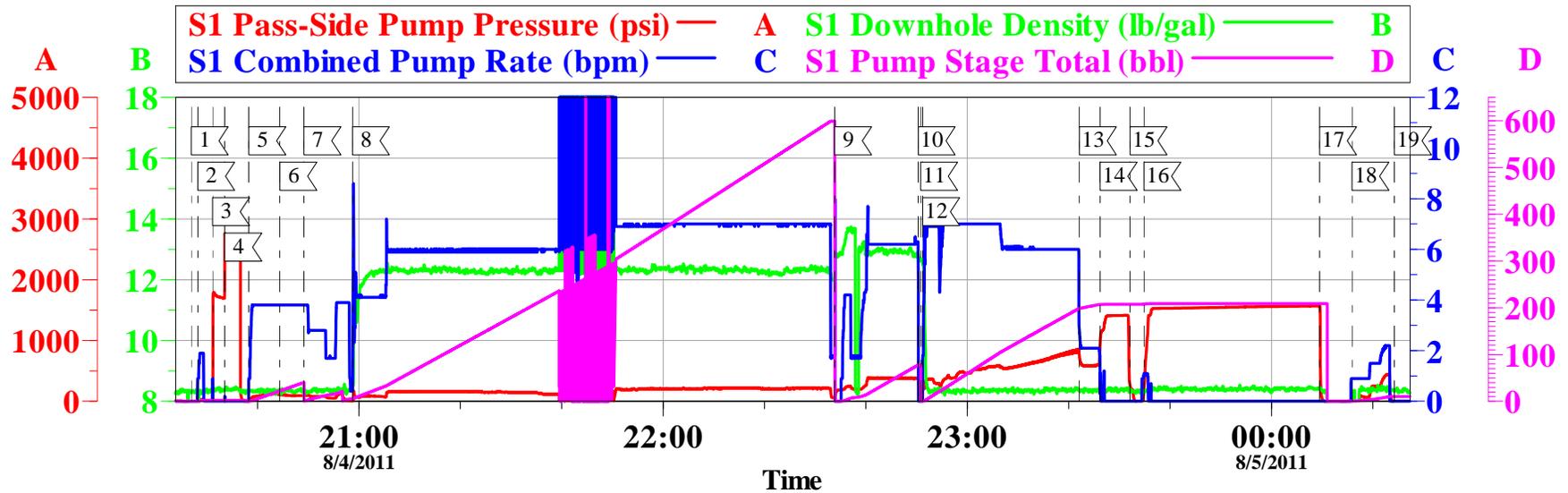
Wednesday, August 17, 2011 02:25:00

		#		Stage	Total	Tubing	Casing	
Pump Lead Cement	08/04/2011 20:58		7	437.8			210.0	1055 SKS, 12.3 PPG, 2.33 FT3/SK, 12.62 GAL/SK, SET UP TIME 4:45 @ 70 BC. 1 LB. TUFF FIBER PER 5 BBL OF LEAD CEMENT.
Pump Tail Cement	08/04/2011 22:33		6	53.8			390.0	146 SKS, 12.8 PPG, 2.07 FT3/SK, 10.67 GAL/SK, SET UP TIME 4:28 @ 70 BC.
Shutdown	08/04/2011 22:50							
Drop Top Plug	08/04/2011 22:50							PLUG WENT
Pump Displacement	08/04/2011 22:51		6	95			800.0	FRESH WATER
Slow Rate	08/04/2011 23:22		2	10			580.0	
Bump Plug	08/04/2011 23:26						1350.0	PLUG BUMPED
Check Floats	08/04/2011 23:32							FLOATS HELD
Other	08/04/2011 23:34		2.5	10			440.0	PUMP DOWN PARASITE WITH SUGAR WATER
Other	08/05/2011 00:15		0.5	0.5			1550.0	PRESSURE TEST CASEING, HELD PRESSURE FOR 30 MIN.
Other	08/05/2011 00:16							WAIT 2 HRS FOR CEMENT TO SET UP, PER COMPANY MAN REQUEST.
Other	08/05/2011 02:50		2	2		40.0		FILL LINES
Other	08/05/2011 02:52		2	8		40.0		TOP OUT CEMENT, 12.5 PPG, 1.97 FT3/SK, 10.96 GAL/SK,
Shutdown	08/05/2011 02:56							WAIT AND SEE IF CEMENT FALLS BACK
Other	08/05/2011 02:58		2	3		.0		TOP OUT CEMENT
Shutdown	08/05/2011 03:00							WAIT AND SEE IF CEMENT FALLS BACK
Other	08/05/2011 03:01		2	6		21.0		TOP OUT CEMENT
Shutdown	08/05/2011 03:04							
Activity Description	Date/Time	Cht	Rate bbl/ min	Volume bbl	Pressure psig			Comments

		#		Stage	Total	Tubing	Casing	
End Job	08/05/2011 03:05							NO CIRCULATION THROUGHOUT JOB, CEMENT TO SURFACE WITH 8 BBLs OF TOP OUT CEMENT PUMPED, PIPE WAS NOT MOVED DURING THE JOB.
Post-Job Safety Meeting (Pre Rig-Down)	08/05/2011 03:30							ALL HES PERSONEL
Rig-Down Completed	08/05/2011 04:30							
Depart Location Safety Meeting	08/05/2011 04:45							ALL HES PERSONEL
Crew Leave Location	08/05/2011 04:55							
Other	08/05/2011 05:00							THANK YOU FOR CHOOSING HALLIBURTON, CHRIS SMITH AND CREW

OXY

9.625" SURFACE/ CC 697-16-23A

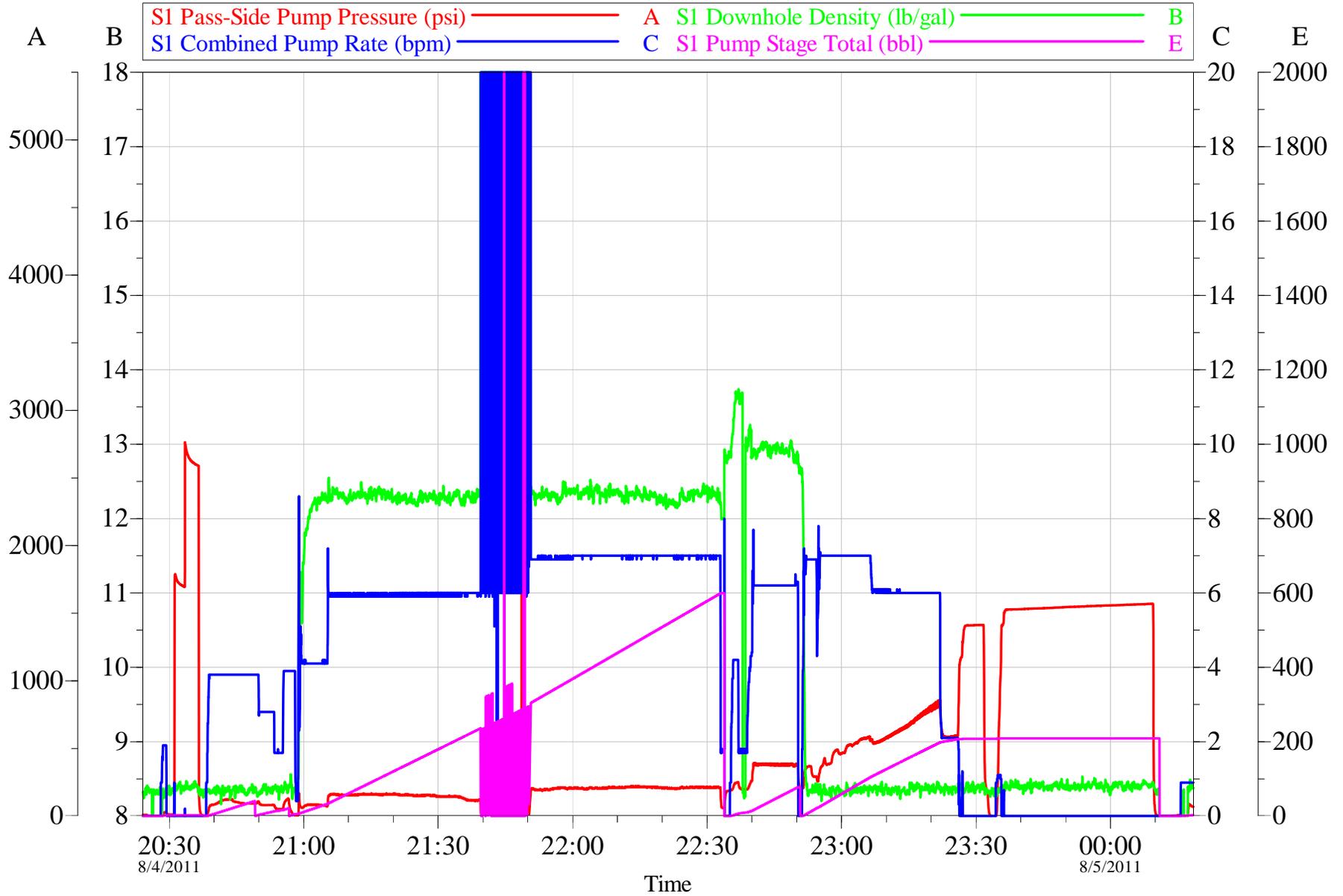


Local Event Log						
	Maximum		SPPP	Maximum		SPPP
1	START JOB	8/4/2011 20:26:54	-1.000	2	FILL LINES	8/4/2011 20:28:12 30.00
3	LOW PSI TEST	8/4/2011 20:31:07	2764	4	HIGH PSI TEST	8/4/2011 20:33:32 2764
5	H2O SPACER	8/4/2011 20:38:17	125.0	6	LGC SPACER	8/4/2011 20:44:24 108.0
7	H2O SPACER	8/4/2011 20:49:08	128.0	8	LEAD CEMENT	8/4/2011 20:58:42 16109
9	TAIL CEMENT	8/4/2011 22:33:49	393.0	10	SHUTDOWN	8/4/2011 22:50:19 358.0
11	DROP PLUG	8/4/2011 22:50:46	202.0	12	H2O DISPLACEMENT	8/4/2011 22:51:12 858.0
13	SLOW RATE	8/4/2011 23:22:06	936.7	14	BUMP PLUG	8/4/2011 23:26:11 1414
15	CHECK FLOATS	8/4/2011 23:32:06	250.0	16	TEST CASING	8/4/2011 23:34:50 1570
17	RELEASE PSI	8/5/2011 00:09:29	1570	18	SUGAR H2O PARACITE	8/5/2011 00:15:52 441.0
19	SHUTDOWN	8/5/2011 00:24:14	3027			

Customer: OXY GRAND JUNCTION EBUSINESS	Job Date: 04-Aug-2011	Sales Order #: 8362516
Well Description: CC 697-16-23A	Job type: 05-045-20566	ADC Used: YES
Customer Rep: ALEX VALLEGAS	Service Supervisor: C. SMITH	Operator/ Pump: J. HAYES/ EI

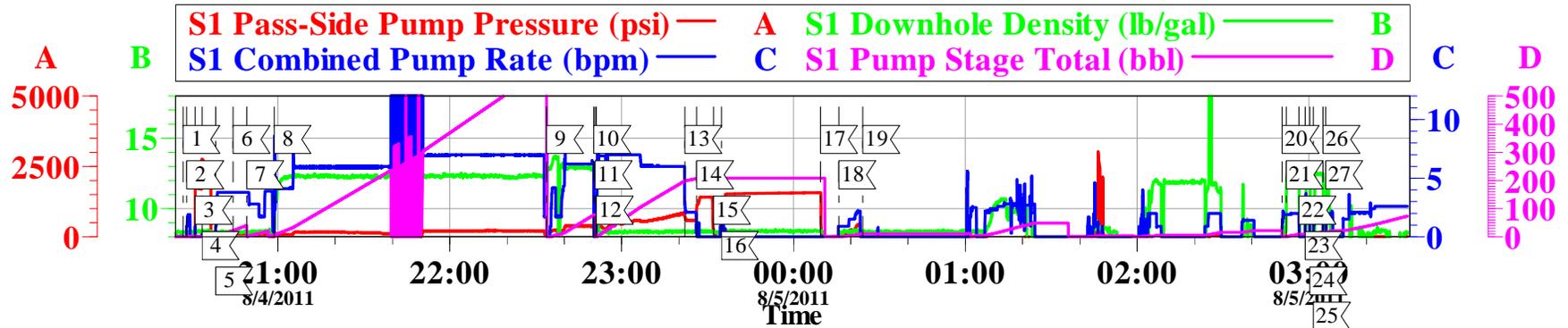
OptiCem v6.4.10
05-Aug-11 03:54

Oxy CC 697-16-23A Surface



OXY

9.625" SURFACE/ CC 697-16-23A



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15	CHECK FLOATS	8/4/2011 23:32:06	250.0	16	TEST CASING	8/4/2011 23:34:50 1570
17	RELEASE PSI	8/5/2011 00:09:29	1570	18	SUGAR H2O PARACITE	8/5/2011 00:15:52 441.0
19	SHUTDOWN	8/5/2011 00:24:14	3027	20	FILL LINE	8/5/2011 02:50:37 18.00
21	TOP OUT CEMENT	8/5/2011 02:52:03	41.00	22	SHUTDOWN	8/5/2011 02:56:31 39.00
23	TOP OUT CEMENT	8/5/2011 02:58:41	33.00	24	SHUTDOWN	8/5/2011 03:00:18 21.00
25	TOP OUT CEMENT	8/5/2011 03:01:35	24.00	26	SHUTDOWN	8/5/2011 03:04:54 17.00
27	END JOB	8/5/2011 03:05:50	22.00			

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Customer Rep: ALEX VALLEGAS	Service Supervisor: C. SMITH	Operator/ Pump: J. HAYES/ EI

OptiCem v6.4.10
05-Aug-11 03:57

JOB PROCEDURE

HP353

Pre-Planned Job Procedure Single Stage

EVENT #	EVENT	VOLUME	SACKS	WEIGHT	YIELD	GAL/ SK
1	Start Job					
6	Test Lines	1000.0				
6	Test Lines	2500.0				
10	H2O Spacer	20.0				
10	LGC Spacer	20.0				
10	H2O Spacer	20.0				
13	Lead Cement	437.8	1055	12.3	2.33	12.62
15	Tail Cement	53.8	146	12.8	2.07	10.67
	SHUTDOWN					
	DROP PLUG					
22	Displacement	205.9		Mud Wt.	9.1	
1085	Slow Rate	195.9		Casing	9.625	36
26	Land Plug	568		Open Hole	14.75	
	Release Psi / Job Over	1068				
	Check Floats					
22	END JOB					
				Disp Fluid	8.33	
			Do Not Overdisplace			
DISPLACEMENT	TOTAL PIPE	SHOE JOINT LENGTH		ANN FACTOR	BBL/FT	H2O REQ.
206.48	2720	48.81		0.1214	0.0773	650
PSI to Lift Pipe	1158.7	*****Use Mud Scales on Each Tier*****				
Total Displacement	206.48					
CALCULATED DIFFERENTIAL PSI		568		TOTAL FLUID PUMPED		757
Collapse	2020	Burst	3520		S.O.#	8362516
HOT	412.3	TOT	2290.0	Company Rep:		
Bbls to Pit	160.0					

HALLIBURTON

Water Analysis Report

Company:	<u>WILLIAMS</u>	Date:	<u>08.04.2011</u>
Submitted by:	<u>Chris Smith</u>	Date Rec.:	<u></u>
Attention:	<u>J.Trout</u>	S.O.#	<u>8362516</u>
Lease	<u>HP353</u>	Job Type:	<u>SURFACE</u>
Well #	<u>CC 697-16-23A</u>		

Specific Gravity	<i>MAX</i>	1
pH	<i>8</i>	7.5
Potassium (K)	<i>5000</i>	220 Mg / L
Hrdness	<i>500</i>	0 Mg / L
Iron (FE2)	<i>300</i>	0 Mg / L
Chlorides (Cl)	<i>3000</i>	0 Mg / L
Sulfates (SO ₄)	<i>1500</i>	<200 Mg / L
Temp	<i>40-80</i>	61 Deg
Total Dissolved Solids		550 Mg / L

Respectfully: Chris Smith

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 repor

Sales Order #: 8308691	Line Item: 10	Survey Conducted Date: 8/4/2011
Customer: WILLIAMS PRODUCTION RMT INC - EBUS		Job Type (BOM): CMT SQUEEZE PERFORATIONS BOM
Customer Representative:		API / UWI: (leave blank if unknown) 05-045-12799
Well Name: RWF		Well Number: 23-9
Well Type: Development Well	Well Country: United States of America	
H2S Present:	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	8/4/2011
Survey Interviewer	The survey interviewer is the person who initiated the survey.	CHRISTOPHER SMITH (HB20137)
Customer Participation	Did the customer participate in this survey? (Y/N)	No
Customer Representative	Enter the Customer representative name	
HSE	Was our HSE performance satisfactory? Circle Y or N	
Equipment	Were you satisfied with our Equipment? Circle Y or N	
Personnel	Were you satisfied with our people? Circle Y or N	
Customer Comment	Customer's Comment	
Job DVA	Did we provide job DVA above our normal service today? Circle Y or N	
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

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H2S Present:	Well State: Colorado	Well County: Garfield

KEY PERFORMANCE INDICATORS

General	
Survey Conducted Date	8/4/2011
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)	1.5
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	7
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)	No

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Well Name: RWF		Well Number: 23-9
Well Type: Development Well	Well Country: United States of America	
H2S Present:	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	99.9
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	93
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