
ANTERO RESOURCES

**VALLEY FARMS I1
MAMM CREEK
Garfield County , Colorado**

Cement Surface Casing
05-Oct-2011

Job Site Documents

The Road to Excellence Starts with Safety

Sold To #: 337854	Ship To #: 2880596	Quote #:	Sales Order #: 8496707
Customer: ANTERO RESOURCES		Customer Rep: Oaks, Beaude	
Well Name: VALLEY FARMS	Well #: I1	API/UWI #: 05-045-19495	
Field: MAMM CREEK	City (SAP): SILT	County/Parish: Garfield	State: Colorado
Lat: N 39.527 deg. OR N 39 deg. 31 min. 35.81 secs.		Long: W 107.619 deg. OR W -108 deg. 22 min. 52.342 secs.	
Contractor: Pro Petro		Rig/Platform Name/Num: Pro Petro	
Job Purpose: Cement Surface Casing			
Well Type: Development Well		Job Type: Cement Surface Casing	
Sales Person: METLI, MARSHALL	Srvc Supervisor: REEVES, BRANDON	MBU ID Emp #: 287883	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
DOUT, JACOB J	3.5	430298	KUKUS, CHRISTOPHER A	3.5	413952	MCKAY, PATRICK Joseph	3.5	496671
REEVES, BRANDON W	3.5	287883						

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10248057	120 mile	10567589C	120 mile	10784064	120 mile	10995027	120 mile
11006314	120 mile	11583931	120 mile				

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
10/04/2011	2.5	.5	10/05/2011	1	.5			

TOTAL Total is the sum of each column separately

Job

Formation Name						Date	Time	Time Zone	
Formation Depth (MD)	Top			Bottom		Called Out	04 - Oct - 2011	17:35	MST
Form Type			BHST			On Location	04 - Oct - 2011	21:20	MST
Job depth MD	1001.8 ft		Job Depth TVD		1001.8 ft	Job Started	04 - Oct - 2011	23:20	MST
Water Depth			Wk Ht Above Floor		3. ft	Job Completed	05 - Oct - 2011	00:22	MST
Perforation Depth (MD)	From			To		Departed Loc			

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/3rd Party (HES)

Description	Qty	Qty uom	Depth	Supplier
PLUG,CMTG,TOP,8 5/8,HWE,7.20 MIN/8.09 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	8 5/8"	1	
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	Water Spacer		20.00	bbl	8.34	.0	.0	7.0	
2	Lead Cement	VERSACEM (TM) SYSTEM (452010)	180.0	sacks	12.3	2.38	13.77	7.0	13.77
		13.77 Gal	FRESH WATER						
3	Tail Cement	SWIFTCEM (TM) SYSTEM (452990)	205.0	sacks	14.2	1.43	6.88	7.0	6.88
		6.88 Gal	FRESH WATER						
4	DISACEMENT	FRESH WATER DISPLACEMENT	58	bbl	8.33	.0	.0	.0	
Calculated Values		Pressures		Volumes					
Displacement	58.4	Shut In: Instant		Lost Returns		Cement Slurry	128.5	Pad	
Top Of Cement		5 Min		Cement Returns	0	Actual Displacement	58	Treatment	
Frac Gradient		15 Min		Spacers	20	Load and Breakdown		Total Job	
Rates									
Circulating		Mixing	6	Displacement	6	Avg. Job	6		
Cement Left In Pipe	Amount	42.73 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

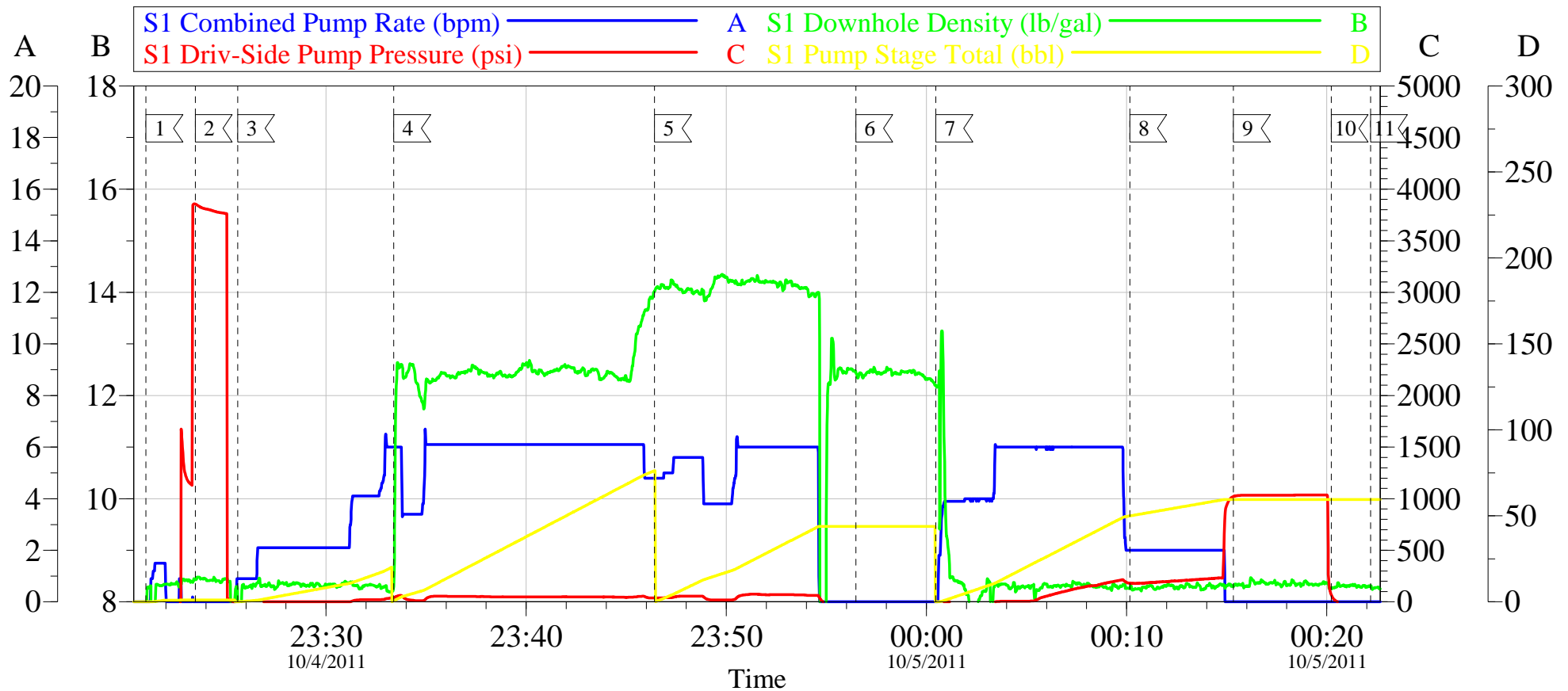
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Field: MAMM CREEK	City (SAP): SILT	County/Parish: Garfield	State: Colorado
Legal Description:			
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Job Purpose: Cement Surface Casing			Ticket Amount:
Well Type: Development Well		Job Type: Cement Surface Casing	
Sales Person: METLI, MARSHALL		Srvc Supervisor: REEVES, BRANDON	MBU ID Emp #: 287883

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	10/04/2011 17:35							
Pre-Convoy Safety Meeting	10/04/2011 19:50							
Arrive at Location from Service Center	10/04/2011 21:20							
Assessment Of Location Safety Meeting	10/04/2011 21:30							
Other	10/04/2011 21:40							SPOT EQUIPMENT
Pre-Rig Up Safety Meeting	10/04/2011 21:50							
Rig-Up Equipment	10/04/2011 22:00							
Pre-Job Safety Meeting	10/04/2011 23:10							
Start Job	10/04/2011 23:20							TD-1085' TP-1001.80' SJ-42.73' HOLE-12 1/4" CASING-8 5/8" 32#
Test Lines	10/04/2011 23:22						3890.0	
Pump Spacer 1	10/04/2011 23:25		6	20			55.0	FRESH WATER SPACER
Pump Lead Cement	10/04/2011 23:33		6	76.3			70.0	180 SKS. @ 12.3# 2.38 YIELD 13.77 WRQ.
Pump Tail Cement	10/04/2011 23:46		6	52.2			95.0	205 SKS. @ 14.2# 1.43 YIELD 6.85 WRQ.
Drop Top Plug	10/04/2011 23:57							
Pump Displacement	10/05/2011 00:00		6				240.0	FRESH WATER DISPLACEMENT. ESTABLISHED CIRCULATION 34 BBLS. INTO DISPLACEMENT.

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Slow Rate	10/05/2011 00:09		2	48			210.0	
Bump Plug	10/05/2011 00:15		2	58			1060.0	PLUG LANDED
Check Floats	10/05/2011 00:20							FLOATS HELD
End Job	10/05/2011 00:22							CIRCULATED 0 BBLS. OF CEMENT TO SURFACE. PIPE WAS NOT RECIPROCATED.
Rig-Down Equipment	10/05/2011 00:30							THANKS FOR USING HALLIBURTON. BRANDON REEVES AND CREW.

ANTERO RESOURCES

8 5/8" SURFACE



Local Event Log							
Intersection		SDPP		Intersection		SDPP	
1	START JOB	10/4/2011 23:21:00	-4.588	2	TEST LINES	10/4/2011 23:23:28	3854
3	PUMP H2O SPACER	10/4/2011 23:25:35	-2.169	4	PUMP LEAD CEMENT	10/4/2011 23:33:23	41.38
5	PUMP TAIL CEMENT	10/4/2011 23:46:25	37.00	6	DROP TOP PLUG	10/4/2011 23:56:28	-18.00
7	PUMP DISPLACEMENT	10/5/2011 00:00:29	-19.00	8	SLOW RATE	10/5/2011 00:10:10	181.1
9	LAND PLUG	10/5/2011 00:15:20	1021	10	CHECK FLOATS	10/5/2011 00:20:14	66.98
11	END JOB	10/5/2011 00:22:11	-12.00				

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Supervisor: BRANDON REEVES

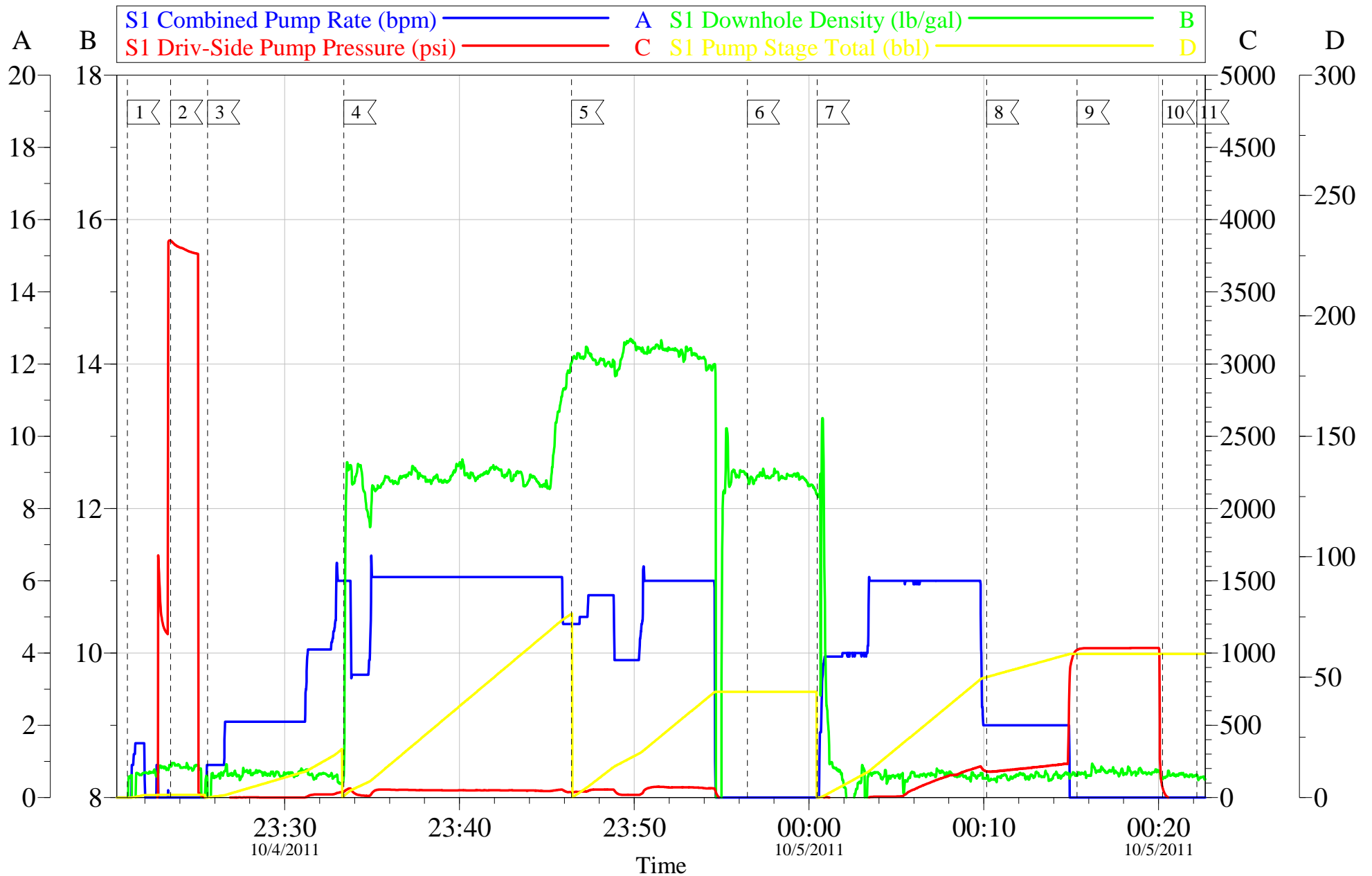
Job Date: 04-Oct-2011
Job Type: SURFACE
Company Rep: BEAUDE OAKS

Sales Order #: 8496707
ADC Used: YES
Elite/Operator: 3/CHRIS KUKUS

OptiCem v6.4.4
05-Oct-11 00:27

ANTERO RESOURCES

8 5/8" SURFACE



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Well Description: VALLEY FARMS I-1	Job Type: SURFACE	ADC Used: YES
Supervisor: BRANDON REEVES	Company Rep: BEAUDE OAKS	Elite/Operator: 3/CHRIS KUKUS

OptiCem v6.4.4
05-Oct-11 00:26

Sales Order #: 8496707	Line Item: 10	Survey Conducted Date: 10/5/2011
Customer: ANTERO RESOURCES		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative: BEAUDE OAKS		API / UWI: (leave blank if unknown) 05-045-19495
Well Name: VALLEY FARMS		Well Number: I1
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	10/5/2011
Survey Interviewer	The survey interviewer is the person who initiated the survey.	BRANDON REEVES (HBT9414)
Customer Participation	Did the customer participate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	BEAUDE OAKS
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	
Job DVA	Did we provide job DVA above our normal service today? Circle Y or N	No
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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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	10/5/2011

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.	2
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	Drilling Rig (Portable)
Number Of JSAs Performed Number Of Jsas Performed	6
Number of Unplanned Shutdowns Unplanned shutdown is when injection stops for any period of time.	0
Was this a Primary Cement Job (Yes / No)	Yes

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Customer Representative: BEAUDE OAKS		API / UWI: (leave blank if unknown) 05-045-19495
Well Name: VALLEY FARMS		Well Number: I1
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.	
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	95
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	95
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