
ANTERO RESOURCES

**McLin C7
KOKPELLI
Garfield County , Colorado**

**Cement Surface Casing
08-Apr-2012**

Post Job Report

The Road to Excellence Starts with Safety

Sold To #: 337854	Ship To #: 2919484	Quote #:	Sales Order #: 9414883
Customer: ANTERO RESOURCES		Customer Rep: Oaks, Beaudé	
Well Name: McLin	Well #: C7	API/UWI #: 05-045-20107	
Field: KOKPELLI	City (SAP): SILT	County/Parish: Garfield	State: Colorado
Lat: N 39.525 deg. OR N 39 deg. 31 min. 30.763 secs.		Long: W 107.607 deg. OR W -108 deg. 23 min. 34.559 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: MAGERS, MICHAEL	MBU ID Emp #: 339439

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
DEUSSEN, EDWARD Eric	3.0	485182	EICKHOFF, ROBERT Edward	3.0	495311	MAGERS, MICHAEL Gerard	3.0	339439
SALAZAR, PAUL Omar	3.0	445614						

Equipment

HES Unit #	Distance-1 way						
10025118	120 mile	10248057	120 mile	10871245	120 mile	11259885	120 mile
11360881	120 mile	11808831	120 mile				

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
04/07/2012	2	0	04/08/2012	1	1			

TOTAL Total is the sum of each column separately

Job

Job Times

Formation Name	Top	Bottom	Called Out	Date	Time	Time Zone
Formation Depth (MD)			On Location	07 - Apr - 2012	19:00	MST
Form Type		BHST	Job Started	07 - Apr - 2012	22:00	MST
Job depth MD	1070. ft	Job Depth TVD	1070. ft	Job Completed	08 - Apr - 2012	00:59
Water Depth		Wk Ht Above Floor	2. ft	Departed Loc	08 - Apr - 2012	01:45
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
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	HES
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar					Retainer					SSR plug set			
Insert Float										SWEDGE	8 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 ft ³ /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 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	.0		
2	Lead Cement	VERSACEM (TM) SYSTEM (452010)	160.0	sacks	12.3	2.38	13.77	.0	13.77	
		13.77 Gal FRESH WATER								
3	Tail Cement	SWIFTCEM (TM) SYSTEM (452990)	205.0	sacks	14.2	1.43	6.85	.0	6.85	
		6.85 Gal FRESH WATER								
4	Fresh Water Displacement		62.00	bbl	8.33	.0	.0	.0		
Calculated Values		Pressures			Volumes					
Displacement	62	Shut In: Instant		Lost Returns		Cement Slurry	115	Pad		
Top Of Cement	SURFACE	5 Min		Cement Returns	20	Actual Displacement	62	Treatment		
Frac Gradient		15 Min		Spacers	20	Load and Breakdown		Total Job	197	
Rates										
Circulating		Mixing		Displacement		Avg. Job				
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						

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Field: KOKPELLI	City (SAP): SILT	County/Parish: Garfield	State: Colorado
Legal Description:			
Lat: N 39.525 deg. OR N 39 deg. 31 min. 30.763 secs.		Long: W 107.607 deg. OR W -108 deg. 23 min. 34.559 secs.	
Contractor: Pro Petro		Rig/Platform Name/Num: PRO PETRO	
Job Purpose: Cement Surface Casing			Ticket Amount:
Well Type: Development Well		Job Type: Cement Surface Casing	
Sales Person: METLI, MARSHALL		Srvc Supervisor: MAGERS, MICHAEL	MBU ID Emp #: 339439

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	04/07/2012 19:00							
Pre-Convoy Safety Meeting	04/07/2012 20:15							HES ALL PRESENT
Crew Leave Yard	04/07/2012 20:30							HES ALL PRESENT
Arrive At Loc	04/07/2012 22:00							HES ARRIVED ON LOCATION
Assessment Of Location Safety Meeting	04/07/2012 22:10							LOCATION IN GOOD CONDITION
Pre-Rig Up Safety Meeting	04/07/2012 22:20							JSA ON RIGGING UP
Rig-Up Equipment	04/07/2012 22:30							1 PICKUP 1 ELITE 1 BULK TRUCK 1 BODY LOAD
Safety Huddle	04/07/2012 23:40							RIG CREW AND HES ALL PRESENT
Start Job	04/07/2012 23:48							TD 1070 TP 1055 SJ 44 CASING 8 5/8 32 LB J-55 OH 12 1/4 MW AIR
Other	04/07/2012 23:49		2	2			7.0	FILL LINES
Pressure Test	04/07/2012 23:50		0.5	0.5			3622.0	PSI TEST OK
Pump Spacer 1	04/07/2012 23:53		4	20			53.0	FRESH WATER
Pump Lead Cement	04/08/2012 00:02		6	63			138.0	VERSACEM 160 SKS 12.3 PPG 2.38 FT3/SK 13.77 GAL/SK
Pump Tail Cement	04/08/2012 00:16		6	52			160.0	SWIFTCEM 205 SKS 14.2 PPG 1.43 FT3/SK 6.85 GAL/SK
Shutdown	04/08/2012 00:25							
Activity Description	Date/Time	Cht	Rate bbl/min	Volume bbl		Pressure psig		Comments

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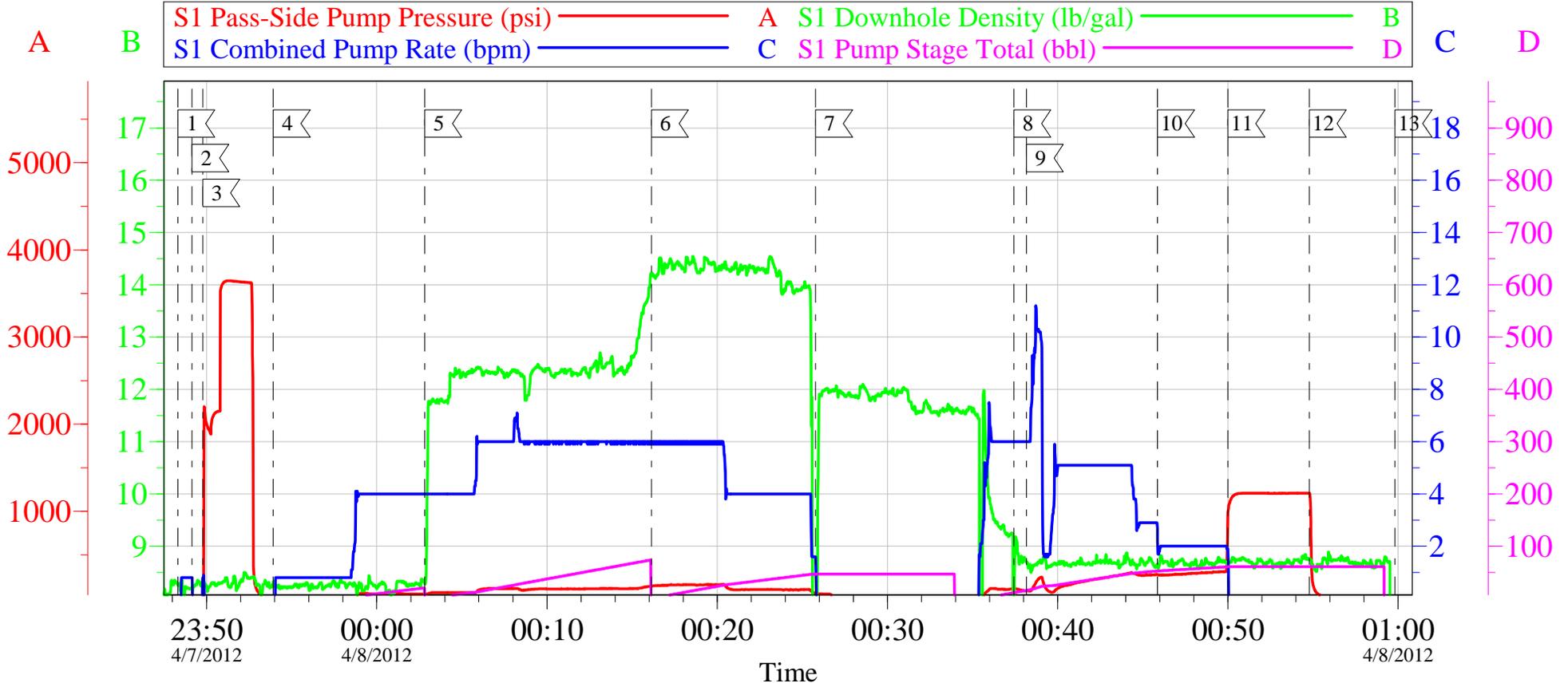
Quote # :

Sales Order # : 9414883

		#		Stage	Total	Tubing	Casing	
Drop Top Plug	04/08/2012 00:37							PLUG AWAY NO PROBLEMS/USED 8 5/8" SWAGE
Pump Displacement	04/08/2012 00:38		6	52			275.0	FRESH WATER
Slow Rate	04/08/2012 00:45		2	10			250.0	GOT 20 BBLS CEMENT BACK TO SURFACE
Bump Plug	04/08/2012 00:50		2	62			310.0	BUMPED PLUG
Check Floats	04/08/2012 00:54			62			1200.0	FLOATS HELD/GOT 3/4 BBL BACK
End Job	04/08/2012 00:59							
Comment	04/08/2012 01:00							THANKS FOR USING HES AND CREW OF ED DEUSSEN

ANTERO McLIN C7

8.625 SURFACE

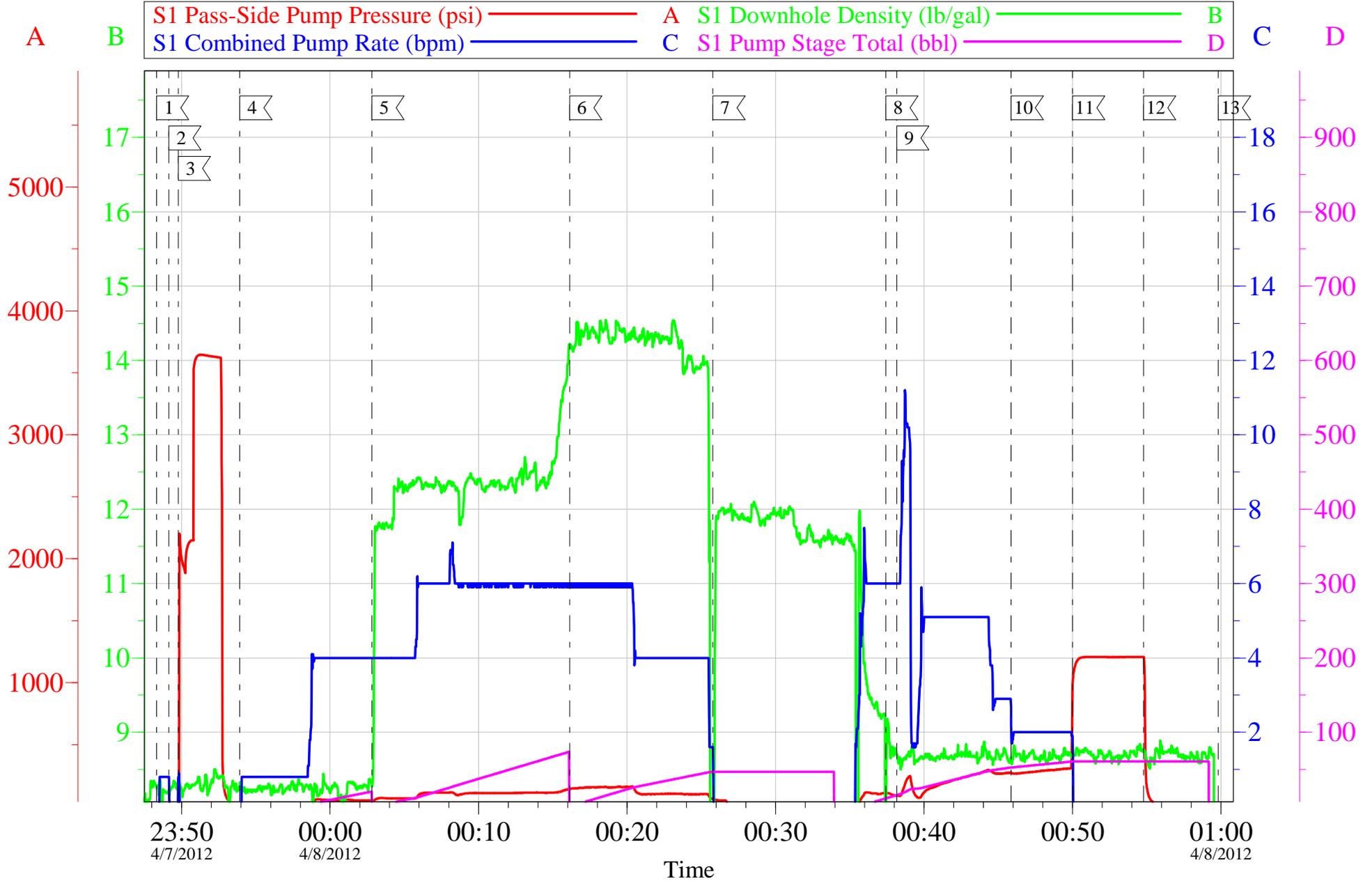


1	START JOB	4/7/2012 23:48:19	2	FILL LINES	4/7/2012 23:49:09
3	PRESSURE TEST	4/7/2012 23:49:47	4	PUMP H2O SPACER	4/7/2012 23:53:55
5	PUMP LEAD CEMENT	4/8/2012 00:02:49	6	PUMP TAIL CEMENT	4/8/2012 00:16:08
7	SHUTDOWN	4/8/2012 00:25:47	8	DROP PLUG	4/8/2012 00:37:26
9	PUMP H2O DISPLACEMENT	4/8/2012 00:38:10	10	SLOW RATE	4/8/2012 00:45:52
11	BUMP PLUG	4/8/2012 00:50:00	12	CHECK FLOATS	4/8/2012 00:54:47
13	END JOB	4/8/2012 00:59:49			

Customer: ANTERO PRO PETRO	Job Date: 07-Apr-2012	Sales Order #: 9414883
Well Description: McLIN C7	Job Type: SURFACE	ADC Used: YES
Company Rep: BEAUDE OAKS	Cement Supervisor: ED DEUSSEN	Elite # 8 ROB EICKHOFF

ANTERO McLIN C7

8.625 SURFACE



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Well Description: McLIN C7	Job Type: SURFACE	ADC Used: YES
Company Rep: BEAUDE OAKS	Cement Supervisor: ED DEUSSEN	Elite # 8 ROB EICKHOFF

OptiCem v6.4.10
08-Apr-12 01:12

HALLIBURTON

Water Analysis Report

Company: ANTERO
Submitted by: MIKE MAGERS
Attention: C.Martinez/ J.Trout
Lease: McLin
Well #: C 7

Date: 4/8/2012
Date Rec.: 4/8/2012
S.O.#: 9414883
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>	120 Mg / L
Iron (FE2)	<i>300</i>	0 Mg / L
Chlorides (Cl)	<i>3000</i>	0 Mg / L
Sulfates (SO ₄)	<i>1500</i>	UNDER 200 Mg / L
Chlorine (Cl ₂)		0 Mg / L
Temp	<i>40-80</i>	50 Deg
Total Dissolved Solids		120 Mg / L

Respectfully: MIKE MAGERS

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

Sales Order #: 9414883	Line Item: 10	Survey Conducted Date: 4/8/2012
Customer: ANTERO RESOURCES		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative: BEAUDE OAKS		API / UWI: (leave blank if unknown) 05-045-20107
Well Name: McLin		Well Number: C7
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	4/8/2012
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	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	

CUSTOMER SIGNATURE

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Well Name: McLin		Well Number: C7
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	4/8/2012
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	4
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

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Well Name: McLin		Well Number: C7
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	94
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	94
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