
ANTERO RESOURCES

**DIXON FED B12
MAMM CREEK
Garfield County , Colorado**

**Cement Surface Casing
09-Jul-2011**

Job Site Documents

The Road to Excellence Starts with Safety

Sold To #: 337854		Ship To #: 2864592		Quote #:		Sales Order #: 8306365							
Customer: ANTERO RESOURCES				Customer Rep: Honeycutt, Matt									
Well Name: DIXON FED			Well #: B12		API/UWI #: 05-045-20432								
Field: MAMM CREEK		City (SAP): SILT		County/Parish: Garfield		State: Colorado							
Lat: N 39.524 deg. OR N 39 deg. 31 min. 26.724 secs.				Long: W 107.66 deg. OR W -108 deg. 20 min. 25.346 secs.									
Contractor: Craigs Roustabout Service, Inc.			Rig/Platform Name/Num: Craigs #2										
Job Purpose: Cement Surface Casing													
Well Type: Development Well				Job Type: Cement Surface Casing									
Sales Person: METLI, MARSHALL			Srvc Supervisor: ANDREWS, ANTHONY			MBU ID Emp #: 321604							
Job Personnel													
HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #					
ANDREWS, ANTHONY Michael		321604	LEIST, JAMES R		362787	LESTER, LEVI William		474117					
Equipment													
HES Unit #	<i>Distance-1 way</i>	HES Unit #	<i>Distance-1 way</i>	HES Unit #	<i>Distance-1 way</i>	HES Unit #	<i>Distance-1 way</i>						
Job Hours													
Date	<i>On Location Hours</i>	Operating Hours	Date	<i>On Location Hours</i>	Operating Hours	Date	<i>On Location Hours</i>	Operating Hours					
7/9/11	3.5	2.5											
TOTAL		<i>Total is the sum of each column separately</i>											
Job				Job Times									
Formation Name				Date	Time	Time Zone							
Formation Depth (MD)	Top	Bottom		Called Out	09 - Jul - 2011	11:00	MST						
Form Type	BHST			On Location	09 - Jul - 2011	16:00	MST						
Job depth MD	1070. ft	Job Depth TVD	1070. ft	Job Started	09 - Jul - 2011	16:57	MST						
Water Depth		Wk Ht Above Floor	3. ft	Job Completed	09 - Jul - 2011	18:03	MST						
Perforation Depth (MD)	<i>From</i>	<i>To</i>		Departed Loc	09 - Jul - 2011	19:30	MST						
Well Data													
<i>Description</i>	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		
12 1/4" Open Hole				12.25				.	1070.				
8 5/8" Surface Casing	New		8.625	7.825	36.		J-55	.	1070.				
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								
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			
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 ft3/sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk	
1	Water Spacer				20	bbl	8.33	.0	.0	.0		
2	Lead Cement	VERSACEM (TM) SYSTEM (452010)			160	sacks	12.3	2.38	13.77		13.77	
		13.77 Gal FRESH WATER										
3	Tail Cement	SWIFTCEM (TM) SYSTEM (452990)			205	sacks	14.2	1.43	6.85		6.85	
		6.85 Gal FRESH WATER										
4	Displacement				61.6	bbl	8.33	.0	.0	.0		
Calculated Values		Pressures			Volumes							
Displacement	61.6	Shut In: Instant			Lost Returns	N	Cement Slurry		120	Pad		
Top Of Cement	SURFACE	5 Min			Cement Returns	18	Actual Displacement		61.6	Treatment		
Frac Gradient		15 Min			Spacers	20	Load and Breakdown			Total Job	201.6	
Rates												
Circulating	RIG	Mixing	5			Displacement	5-2		Avg. Job	5		
Cement Left In Pipe	Amount	42.08 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							

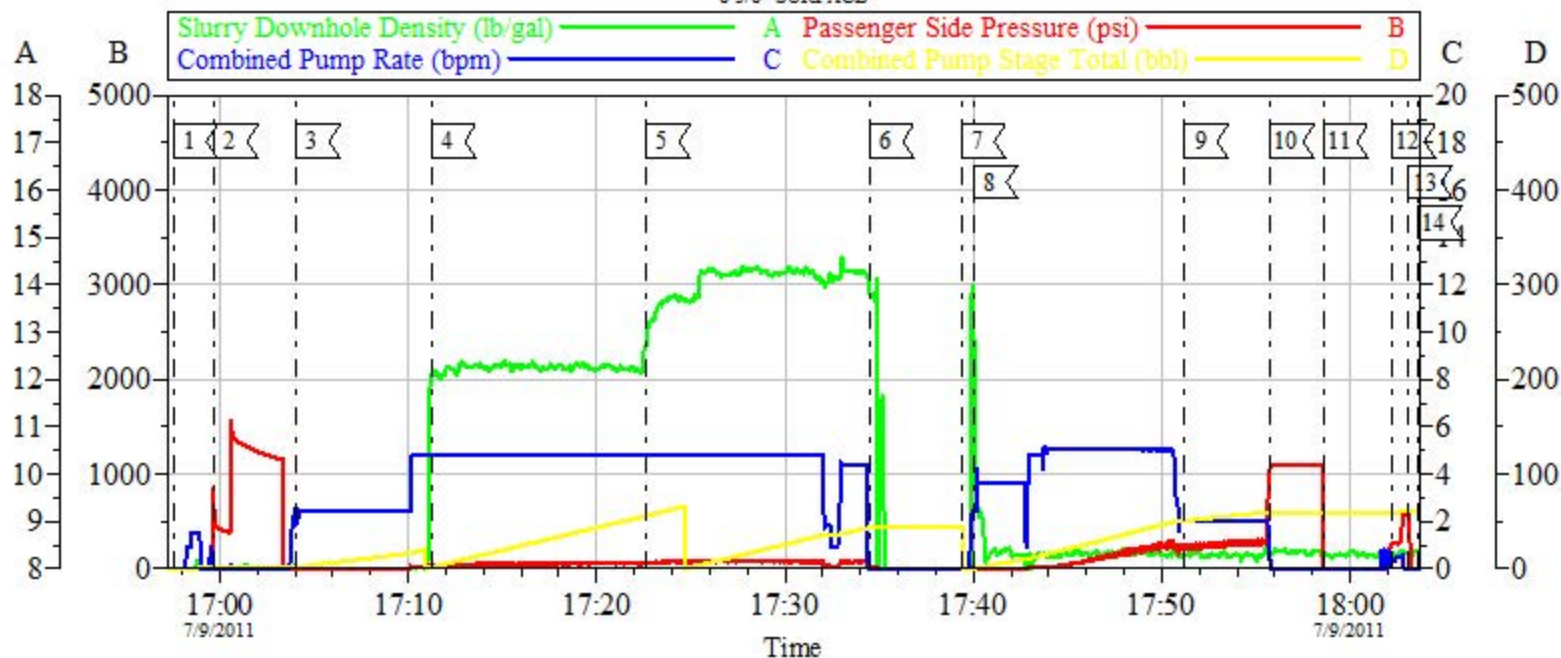
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Well Name: DIXON FED		Well #: B12	API/UWI #: 05-045-20432
Field: MAMM CREEK	City (SAP): SILT	County/Parish: Garfield	State: Colorado
Legal Description:			
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Contractor: Craigs Roustabout Service, Inc.		Rig/Platform Name/Num: Craigs #2	
Job Purpose: Cement Surface Casing			Ticket Amount:
Well Type: Development Well		Job Type: Cement Surface Casing	
Sales Person: METLI, MARSHALL		Srvc Supervisor: ANDREWS, ANTHONY	MBU ID Emp #: 321604

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	07/09/2011 11:00							
Pre-Convoy Safety Meeting	07/09/2011 12:15							
Crew Leave Yard	07/09/2011 12:30							
Arrive At Loc	07/09/2011 16:00							
Assessment Of Location Safety Meeting	07/09/2011 16:05							
Other	07/09/2011 16:10							SPOT EQUIPMENT
Pre-Rig Up Safety Meeting	07/09/2011 16:15							
Rig-Up Equipment	07/09/2011 16:20							
Pre-Job Safety Meeting	07/09/2011 16:45							
Start Job	07/09/2011 16:57							TD: 1070 TP: 1053.42 SJ: 42.08 MW: AIR 8.625" 32#/FT CSG IN 12.25" OH
Test Lines	07/09/2011 16:59							1500 PSI TEST
Pump Spacer	07/09/2011 17:04		3	20			20.0	FRESH H2O SPACER
Pump Lead Cement	07/09/2011 17:11		5	67.8			45.0	160 SKS @ 12.3 PPG 2.38 YLD 13.77 GAL/SK H2O

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Pump Tail Cement	07/09/2011 17:22		5	52.2			65.0	205 SKS @ 14.2 PPG 1.43 YLD 6.85 GAL/SK H2O. GAINED H2O RETURNS JUST AT WE SWAPPED FROM LEAD TO TAIL CMT.
Shutdown	07/09/2011 17:34							
Drop Plug	07/09/2011 17:39							PLUG AWAY
Pump Displacement	07/09/2011 17:40		5		61.6		110.0	H2O DISPLACEMENT
Slow Rate	07/09/2011 17:51		2	50			213.0	
Bump Plug	07/09/2011 17:55		2	61.6			1059.0	PLUG BUMPED AT CALCULATED DISPLACEMENT
Check Floats	07/09/2011 17:58							FLOATS WERE LEAKING BACK A LITTLE, CUSTOMER REQUESTED THAT WE PUT 500 PSI ON PLUG AND SHUT IN WELL, LEAVE SWAGE AND 2" LO-TORC ON CASING
Pressure Up	07/09/2011 18:02							PRESSURE UP TO 500 PSI
Shut In Well	07/09/2011 18:02							
Other	07/09/2011 18:03							RELEASE PRESSURE FROM PUMPS AND LINES
End Job	07/09/2011 18:03							
Post-Job Safety Meeting (Pre Rig-Down)	07/09/2011 18:15							GAINED CIRCULATION @ +/- 60 BBLS AWAY ON LEAD CMT HAD GOOD CIRCULATION FROM THERE ON OUT TO FINISH JOB. CIRCULATED 18 BBLS CEMENT TO SURFACE. PIPE WAS LEFT STATIC THROUGHOUT JOB.
Rig-Down Equipment	07/09/2011 18:30							

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Pre-Convoy Safety Meeting	07/09/2011 19:20							
Crew Leave Location	07/09/2011 19:30							THANK YOU FOR CHOOSING HALLIBURTON CEMENTING OF GRAND JUNCTION, COLORADO ANTHONY ANDREWS AND CREW

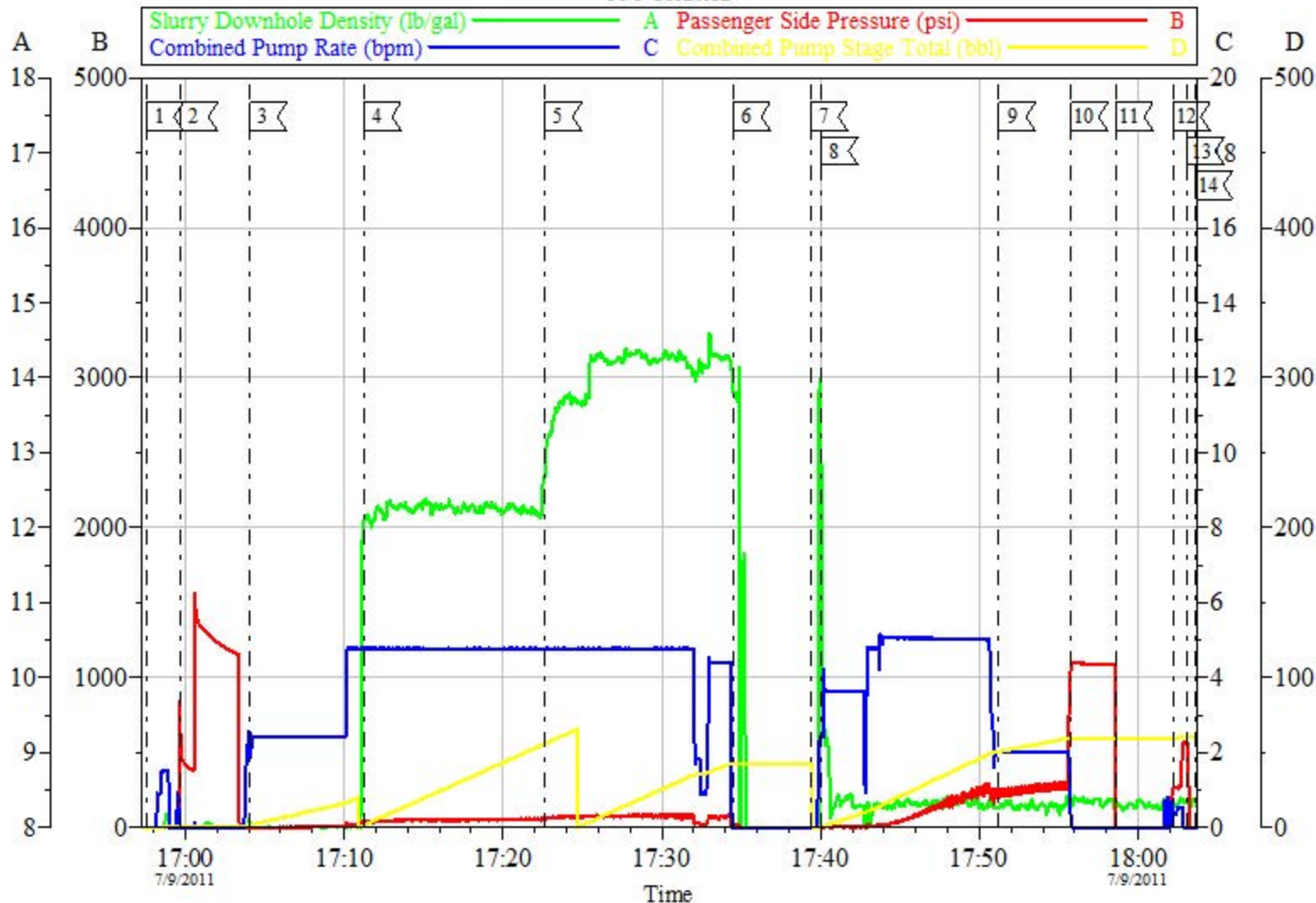


Local Event Log							
Intersection		PSP	Intersection	PSP			
1	START JOB	16:57:33	-6.066	2	TEST LINES	16:59:42	603.0
3	PUMP SPACER	17:04:03	2.994	4	PUMP LEAD CEMENT	17:11:15	39.50
5	PUMP TAIL CEMENT	17:22:38	58.26	6	SHUTDOWN	17:34:31	22.52
7	DROP PLUG	17:39:23	-5.136	8	PUMP DISPLACEMENT	17:40:02	8.867
9	SLOW RATE	17:51:12	213.6	10	BUMP PLUG	17:55:45	1059
11	CHECK FLOATS	17:58:37	27.11	12	PRESSURE UP/ SHUT IN	18:02:11	262.2
13	RELEASE PUMP PRESSURE	18:03:05	560.8	14	END JOB	18:03:37	-5.337

Customer: ANTERO
Well Number: Dixon Fed B12
Customer Rep: Baude Oaks

Job Date: 09-Jul-2011
Job Type: Surface
Pump Truck: Elite 2/ James Leist

Sales Order #: 8306365
ADC Used: Yes
Supervisor: Anthony Andrews



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Job Date: 09-Jul-2011
 Job Type: Surface
 Pump Truck: Elite 2/ James Leist

Sales Order #: 8306365
 ADC Used: Yes
 Supervisor: Anthony Andrews

Sales Order #: 8306365	Line Item: 10	Survey Conducted Date: 7/9/2011
Customer: ANTERO RESOURCES		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative: BEAUDE OAKS		API / UWI: (leave blank if unknown) 05-045-20432
Well Name: DIXON FED		Well Number: B12
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	7/9/2011
Survey Interviewer	The survey interviewer is the person who initiated the survey.	ANTHONY ANDREWS (HAM3833)
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

Sales Order #: 8306365	Line Item: 10	Survey Conducted Date: 7/9/2011
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Well Name: DIXON FED		Well Number: B12
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	7/9/2011
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)	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	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)	Yes

Sales Order #: 8306365	Line Item: 10	Survey Conducted Date: 7/9/2011
Customer: ANTERO RESOURCES		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative: BEAUDE OAKS		API / UWI: (leave blank if unknown) 05-045-20432
Well Name: DIXON FED		Well Number: B12
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	90
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	90
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