
ANTERO RESOURCES

**McLin C-20
KOKOPELLI
Garfield County , Colorado**

Cement Surface Casing **29-Oct-2011**

Post Job Report

The Road to Excellence Starts with Safety

Sold To #: 337854	Ship To #: 2887759	Quote #:	Sales Order #: 8493122
Customer: ANTERO RESOURCES		Customer Rep: Oaks, Bowdie	
Well Name: McLin		Well #: C-20	API/UWI #: 05-045-20130
Field: KOKOPELLI	City (SAP): SILT	County/Parish: Garfield	State: Colorado
Lat: N 39.525 deg. OR N 39 deg. 31 min. 30.09 secs.		Long: W 107.607 deg. OR W -108 deg. 23 min. 34.166 secs.	
Contractor: CRAIGS #2		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: STILLSON, ERIC	MBU ID Emp #: 393789

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
HARDRICK, RAYMOND Frank	6	391324	STILLSON, ERIC W	6	393789	WEAVER, CARLTON Russell	6	457698
WINKER, STEVEN	6	478776						

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10025118	60 mile	10205677	60 mile	10551730C	60 mile	10741259	60 mile
10784053	60 mile	10973571	60 mile	11259885	60 mile		

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
10-29-11	6	1						

TOTAL Total is the sum of each column separately

Job

Formation Name	Formation Depth (MD)	Top	Bottom	Form Type	Job depth MD	Job Depth TVD	Water Depth	Perforation Depth (MD)	From	To
				BHST	1060. ft	1060. ft				
						3. ft				

Job Times

Date	Time	Time Zone
29 - Oct - 2011	06:00	MST
29 - Oct - 2011	10:00	MST
29 - Oct - 2011	11:52	MST
29 - Oct - 2011	13:04	MST
29 - Oct - 2011	14:30	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
OPEN HOLE				12.25				.	1060.		
SURFACE CASING	Unknown		8.625	7.921	32.		J-55	.	1042.3		

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	8.625	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	4	
2	VersaCem	VERSACEM (TM) SYSTEM (452010)	160.0	sacks	12.3	2.38	13.77	6	13.77
		13.77 Gal	FRESH WATER						
3	SwiftCem	SWIFTCEM (TM) SYSTEM (452990)	205.0	sacks	14.2	1.43	6.85	6	6.85
		6.85 Gal	FRESH WATER						
4	Fresh Water Displacement		61.00	bbl	8.33	.0	.0	6.0	
Calculated Values		Pressures		Volumes					
Displacement	60.9	Shut In: Instant		Lost Returns	0	Cement Slurry	121	Pad	
Top Of Cement	SURFACE	5 Min		Cement Returns	35	Actual Displacement	61	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	41.5 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

Sold To #: 337854	Ship To #: 2887759	Quote #:	Sales Order #: 8493122
Customer: ANTERO RESOURCES		Customer Rep: Oaks, Bowdie	
Well Name: McLin	Well #: C-20	API/UWI #: 05-045-20130	
Field: KOKOPELLI	City (SAP): SILT	County/Parish: Garfield	State: Colorado
Legal Description:			
Lat: N 39.525 deg. OR N 39 deg. 31 min. 30.09 secs.		Long: W 107.607 deg. OR W -108 deg. 23 min. 34.166 secs.	
Contractor: CRAIGS #2		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		Srv Supervisor: STILLSON, ERIC	MBU ID Emp #: 393789

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	10/29/2011 06:00							
Pre-Convoy Safety Meeting	10/29/2011 08:00							ENTIRE CREW, OBSERVE ALL SAFE DRIVING PROCEDURES
Arrive At Loc	10/29/2011 10:00							ARRIVED EARLY. RIG JUST STARTING CASING.
Assessment Of Location Safety Meeting	10/29/2011 10:05							REVIEWED EMERGENCY PLAN, ASSESSED WORK AREA AND SPOTTED EQUIPMENT.
Pre-Rig Up Safety Meeting	10/29/2011 10:20							ENTIRE CREW, WALKED THROUGH RIG UP LOOKING FOR HAZARDS.
Rig-Up Equipment	10/29/2011 10:30							1 PICK UP, 1 HT400 PUMP TRUCK, 2 660 BULK CEMENT TRUCKS, 1 PLUG, JOB PUMPED THROUGH SWAGE
Pre-Job Safety Meeting	10/29/2011 11:30							ENTIRE CREW, CO REP AND RIG CREW.
Start Job	10/29/2011 11:50							TD 1060 TP 1042.34 SJ 41.55 FC 1000.79, AIR DRILLED HOLE , 8 5/8 32# CASING IN 12 1/4 HOLE.
Pump Water	10/29/2011 11:51		1	0.5			5.0	FILL LINES BEFORE TESTING
Pressure Test	10/29/2011 11:53		0.5	0.1			2400.0	HELD PRESSURE FOR 2 MIN, PRESSURE HELD, NO LEAKS.

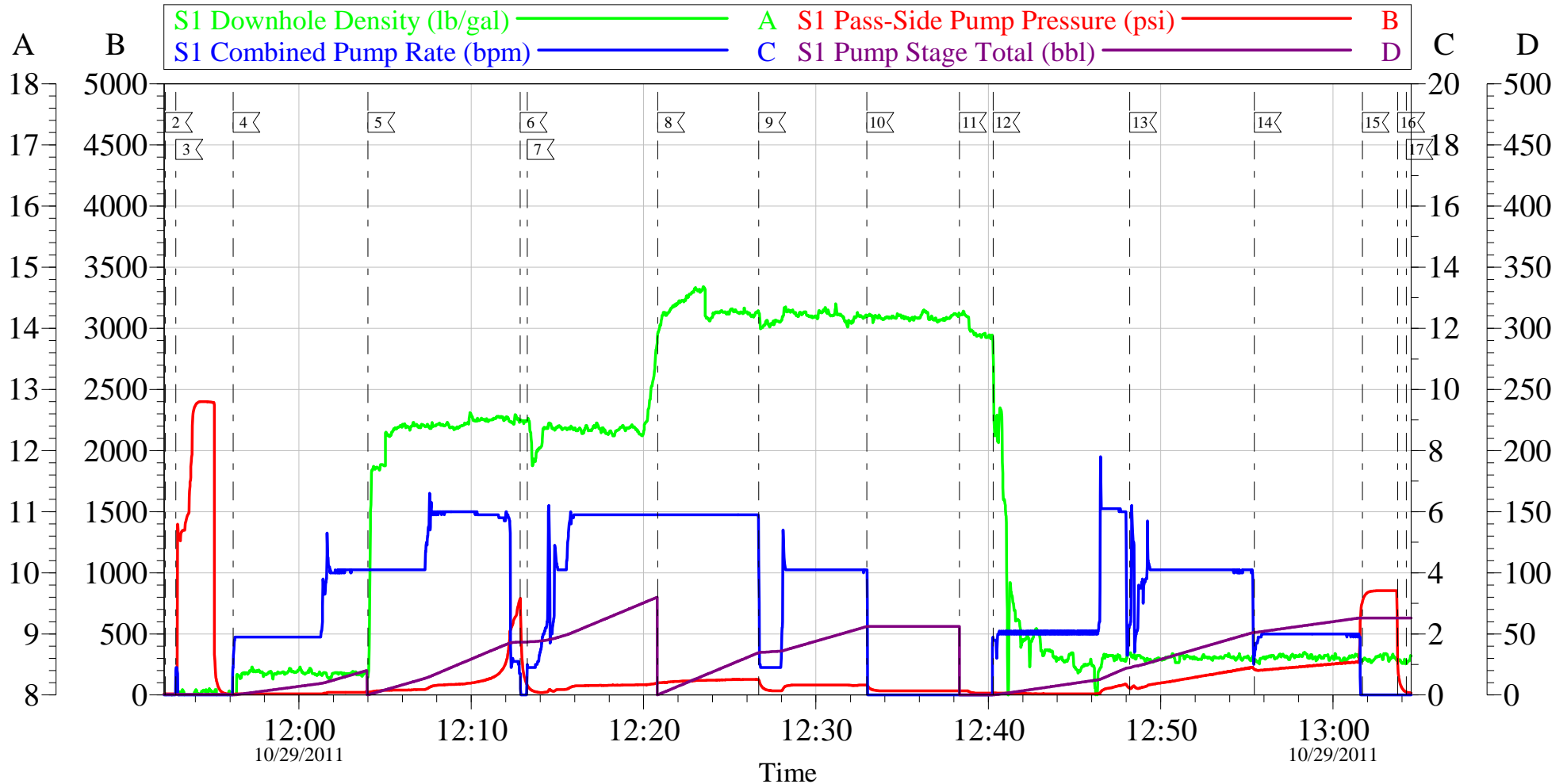
Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Pump Spacer 1	10/29/2011 11:56		4	20			30.0	FRESH WATER, PUMPED AT 2 BPM UNTIL CEMENT TUB UP TO WEIGHT AND WEIGHED WITH SCALES, SPED RATE TO 4 BPM AT 10 BBLS GONE.
Pump Lead Cement	10/29/2011 12:04		6	67.8			100.0	160 SKS VERSACEM, 12.3 PPG, 2.38 CUFT/SK, 13.77 GAL/SK.
Shutdown	10/29/2011 12:12							AT 43 BBLS GONE ON LEAD CEMENT WE CAUGHT PRESSURE SO SLOWED RATE TO 1 BPM THEN SHUTDOWN DUE TO PIPE LIFTING A LITTLE
Pump Lead Cement	10/29/2011 12:13							RESUME LEAD CEMENT, RESUMED AT 1 BPM THEN SLOWLY WALKED RATE BACK UP WITH NO PROBLEMS WITH PRESSURE.
Pump Tail Cement	10/29/2011 12:20		6	52.2			125.0	205 SKS SWIFTCM, 14.2 PPG, 1.43 CUFT/SK, 6.85 GAL/SK. AT 37 BBLS GONE SLOWED RATE TO 2 BPM THEN 4 BPM DUE TO SUCK TRUCK NOT KEEPING UP WITH RETURNS
Shutdown	10/29/2011 12:32							
Drop Top Plug	10/29/2011 12:38							TOOK OFF SWAGE AND DROPPED PLUG
Pump Displacement	10/29/2011 12:40		6	60.9			270.0	FRESH WATER, SLOWED TO 4 BPM AT 30 BBLS GONE DUE TO SUCK TRUCK, CEMENT TO SURFACE AT 26 BBLS GONE, 35 BBLS OF CEMENT TO SURFACE. USED 40 LBS SUGAR.

Cementing Job Log

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Slow Rate	10/29/2011 12:55		2	51			270.0	SLOWED RATE TO 2 BPM TO BUMP PLUG.
Bump Plug	10/29/2011 13:01		2	60.9			840.0	PLUG LANDED AT 270 PSI, BUMPED UP TO 840 PSI AND HELD FOR 2 MIN PER CO REP.
Check Floats	10/29/2011 13:03							FLOATS HELD, WHEN RELEASED PRESSURE GOT 1/4 BBL OF WATER BACK TO TRUCK.
End Job	10/29/2011 13:04							RETURNS TO SURFACE AT 35 BBLS GONE ON TAIL CEMENT, GOOD RETURNS REMAINDER, DID NOT RECIPROCATATE PIPE.
Post-Job Safety Meeting (Pre Rig-Down)	10/29/2011 13:10							ENTIRE CREW
Rig-Down Equipment	10/29/2011 13:30							
Pre-Convoy Safety Meeting	10/29/2011 14:20							ENTIRE CREW, OBSERVE ALL SAFE DRIVING PROCEDURES
Crew Leave Location	10/29/2011 14:30							THANK YOU FOR USING HALLIBURTON, ERIC STILLSON AND CREW.

ANTERO

8 5/8 SURFACE



Customer: ANTERO
 Well Description: MCLIN C-20
 Company Rep: BOWDIE OAKS

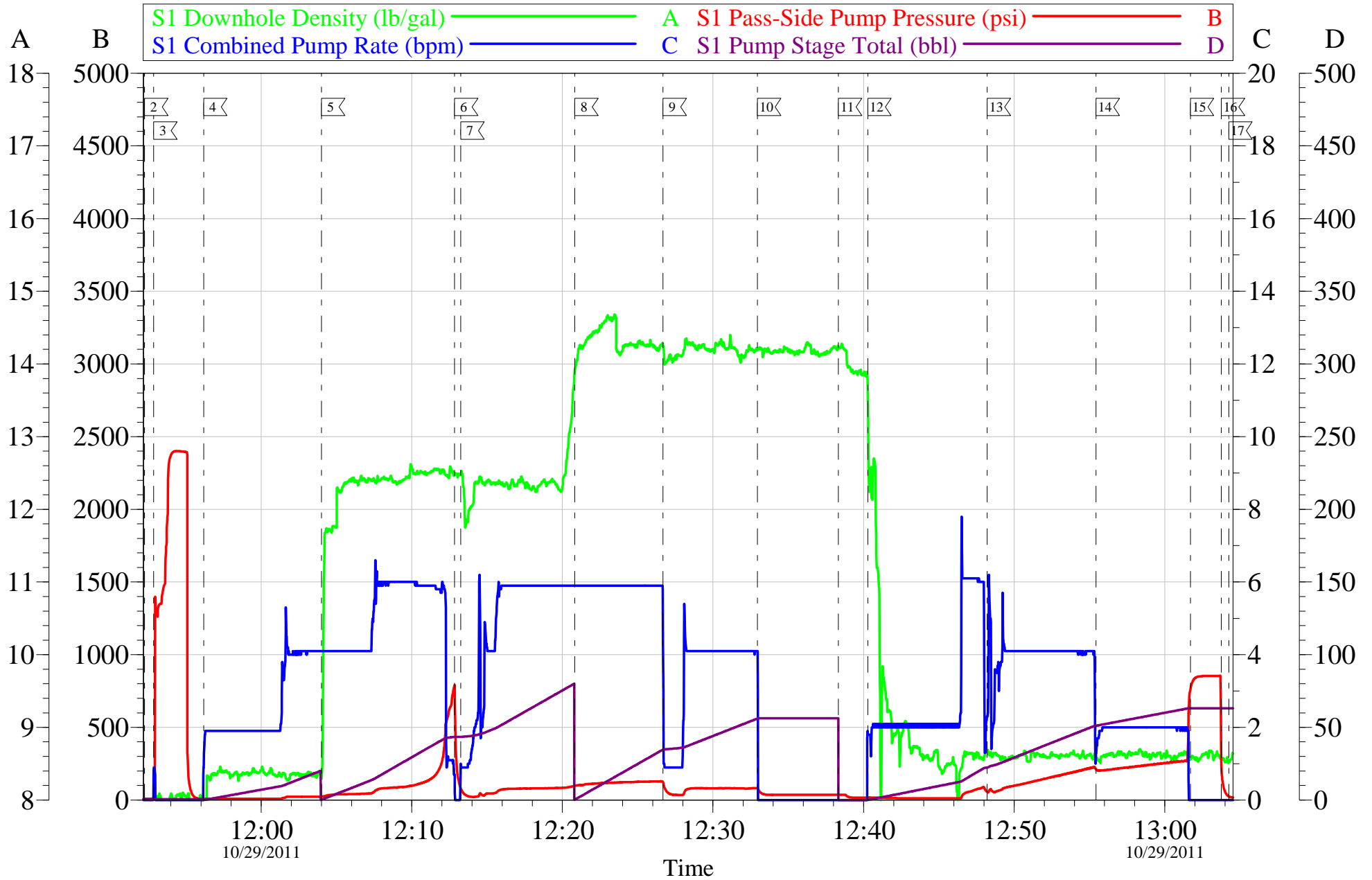
Job Date: 29-Oct-2011
 Job Type: SURFACE
 Cement Supervisor: ERIC STILLSON

Sales Order #: 8493122
 ADC Used: YES
 Elite #: 2 RUSTY WEAVER

OptiCem v6.4.10
 29-Oct-11 13:16

ANTERO

8 5/8 SURFACE



Customer: ANTERO	Job Date: 29-Oct-2011	Sales Order #: 8493122
Well Description: MCLIN C-20	Job Type: SURFACE	ADC Used: YES
Company Rep: BOWDIE OAKS	Cement Supervisor: ERIC STILLSON	Elite #: 2 RUSTY WEAVER

OptiCem v6.4.10
29-Oct-11 13:16

Sales Order #: 8493122	Line Item: 10	Survey Conducted Date: 10/29/2011
Customer: ANTERO RESOURCES		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative: BOWDIE OAKS		API / UWI: (leave blank if unknown) 05-045-20130
Well Name: McLin		Well Number: C-20
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	10/29/2011
Survey Interviewer	The survey interviewer is the person who initiated the survey.	ERIC STILLSON (HX26907)
Customer Participation	Did the customer participate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	BOWDIE 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