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# **NOBLE ENERGY INC E-BUSINESS**

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**BM 35-23C  
GRAND VALLEY  
Garfield County , Colorado**

**Cement Surface Casing**  
**10-Dec-2010**

**Post Job Summary**

## The Road to Excellence Starts with Safety

<b>Sold To #:</b> 345242		<b>Ship To #:</b> 2812540		<b>Quote #:</b>		<b>Sales Order #:</b> 7782105	
<b>Customer:</b> NOBLE ENERGY INC E-BUSINESS				<b>Customer Rep:</b> Porter, Lance			
<b>Well Name:</b> BM			<b>Well #:</b> 35-23C			<b>API/UWI #:</b> 05-045-19864	
<b>Field:</b> GRAND VALLEY		<b>City (SAP):</b> HOUSTON		<b>County/Parish:</b> Garfield		<b>State:</b> Colorado	
<b>Lat:</b> N 39.392 deg. OR N 39 deg. 23 min. 32.87 secs.				<b>Long:</b> W 107.972 deg. OR W -108 deg. 1 min. 40.616 secs.			
<b>Contractor:</b> H&P Drilling			<b>Rig/Platform Name/Num:</b> H&P 322				
<b>Job Purpose:</b> Cement Surface Casing							
<b>Well Type:</b> Development Well			<b>Job Type:</b> Cement Surface Casing				
<b>Sales Person:</b> METLI, MARSHALL			<b>Srvc Supervisor:</b> STILLSON, ERIC			<b>MBU ID Emp #:</b> 393789	

### Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
HAMMOND, ANSON Perry	12	421370	HOEFER, FREEMAN Dennis	12	369666	JENSEN, SHANE Lynn	22	441759
NICKLE, RYON	12	454759	SALAZAR, PAUL Omar	22	445614	STILLSON, ERIC W	22	393789
WEAVER, CARLTON Russell	22	457698						

### Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10295581	60 mile	10616651C	60 mile	10822535	60 mile	10867322	60 mile
10995025	60 mile	10998512	60 mile	11018454	60 mile	11021972	60 mile
11027039	60 mile	11259884	60 mile				

### Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
12-09-10	11	4	12-10-10	11	2			

**TOTAL** Total is the sum of each column separately

### Job

Formation Name	Job	Job Times
<b>Formation Depth (MD)</b> <b>Top</b>	<b>Bottom</b>	<b>Date</b> <b>Time</b> <b>Time Zone</b>
<b>Form Type</b>	BHST	<b>Called Out</b> 09 - Dec - 2010 07:00 MST
<b>Job depth MD</b> 3330. ft	<b>Job Depth TVD</b> 3330. ft	<b>On Location</b> 09 - Dec - 2010 13:00 MST
<b>Water Depth</b>	<b>Wk Ht Above Floor</b> 3. ft	<b>Job Started</b> 09 - Dec - 2010 16:13 MST
<b>Perforation Depth (MD)</b> <b>From</b>	<b>To</b>	<b>Job Completed</b> 10 - Dec - 2010 08:02 MST
		<b>Departed Loc</b> 10 - Dec - 2010 11:00 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				14.75				184.	3334.	184.	3334.
CONDUCTOR CASING	Unknown		20.	19.166	90.			.	184.		
SURFACE CASING	Unknown		9.625	8.835	40.			.	3330.	.	3330.

### Sales/Rental/3<sup>rd</sup> Party (HES)

Description	Qty	Qty uom	Depth	Supplier
PLUG,CMTG,TOP,9 5/8,HWE,8.16 MIN/9.06 MA	1	EA		
R/A DENSOMETER W/CHART RECORDER,/JOB,ZI	1	JOB		
PORT. DAS W/CEMWIN;ACQUIRE W/HES, ZI	1	JOB		
ADC (AUTO DENSITY CTRL) SYS, /JOB,ZI	1	JOB		

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	
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				10.00	bbl	8.33	.0	.0	5			
2	SUPER FLUSH - XLC	SUPERFLUSH-XLC - SBM (549694)			20.00	bbl	10.	.0	.0	5			
3	Water Spacer				10.00	bbl	8.33	.0	.0	5			
4	Lead Cement	VERSACEM (TM) SYSTEM (452010)			1088.0	sacks	12.3	2.3	11.68	5	11.68		
		11.68 Gal FRESH WATER											
5	Tail Cement	VERSACEM (TM) SYSTEM (452010)			184.0	sacks	12.6	2.14	10.47	5	10.47		
		10.47 Gal FRESH WATER											
6	Displacement				249.00	bbl	8.33	.0	.0	6			
Calculated Values		Pressures		Volumes									
Displacement	249	Shut In: Instant			Lost Returns	805	Cement Slurry		571	Pad			
Top Of Cement	SURFACE	5 Min			Cement Returns	5	Actual Displacement		249	Treatment			
Frac Gradient		15 Min			Spacers	40	Load and Breakdown			Total Job			
Rates													
Circulating	RIG	Mixing		5	Displacement	6	Avg. Job		5				
Cement Left In Pipe	Amount	43.3 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*

<b>Sold To #:</b> 345242	<b>Ship To #:</b> 2812540	<b>Quote #:</b>	<b>Sales Order #:</b> 7782105
<b>Customer:</b> NOBLE ENERGY INC E-BUSINESS		<b>Customer Rep:</b> Porter, Lance	
<b>Well Name:</b> BM	<b>Well #:</b> 35-23C	<b>API/UWI #:</b> 05-045-19864	
<b>Field:</b> GRAND VALLEY	<b>City (SAP):</b> HOUSTON	<b>County/Parish:</b> Garfield	<b>State:</b> Colorado
<b>Legal Description:</b>			
<b>Lat:</b> N 39.392 deg. OR N 39 deg. 23 min. 32.87 secs.		<b>Long:</b> W 107.972 deg. OR W -108 deg. 1 min. 40.616 secs.	
<b>Contractor:</b> H&P Drilling		<b>Rig/Platform Name/Num:</b> H&P 322	
<b>Job Purpose:</b> Cement Surface Casing			<b>Ticket Amount:</b>
<b>Well Type:</b> Development Well		<b>Job Type:</b> Cement Surface Casing	
<b>Sales Person:</b> METLI, MARSHALL		<b>Srvc Supervisor:</b> STILLSON, ERIC	<b>MBU ID Emp #:</b> 393789

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	12/09/2010 07:00							OFFLINE JOB, PUMPED THROUGH SWAGE, DID NOT USE PLUG CONTAINER.
Pre-Convoy Safety Meeting	12/09/2010 10:00							ENTIRE CREW, OBSERVE ALL SAFE DRIVING PROCEDURES
Arrive At Loc	12/09/2010 13:00							ARRIVED 2 HRS LATE, ROLLED OVER FROM ANOTHER JOB, RIG RUNNING CASING
Assessment Of Location Safety Meeting	12/09/2010 13:30							REVIEWED EMERGENCY PLAN, ASSESSED WORK AREA AND SPOTTED EQUIPMENT AFTER CASING RACKS OUT OF THE WAY.
Pre-Rig Up Safety Meeting	12/09/2010 14:25							ENTIRE CREW, WALKED THROUGH RIG UP LOOKING FOR HAZARDS.
Rig-Up Equipment	12/09/2010 14:30							1 PICK UP, 1 HT400 PUMP TRUCK, 2 660 BULK CEMENT TRUCKS, 1 BULK CEMENT BIN, 1 SUPERFLUSH TRANSPORT
Pre-Job Safety Meeting	12/09/2010 15:50							ENTIRE CREW, CO REP AND RIG CREW.

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Start Job	12/09/2010 16:13							TD 3334 TP 3330 SJ 43.30 FC 3286.7 MW 9.1 PPG, 9 5/8 40# CASING IN 14 3/4 HOLE, 20" CONDUCTOR CASING AT 184. PARASITE SET TO 3019, RIG CIRC APPROX 1 HR.
Pump Water	12/09/2010 16:13		2	2			37.0	FILL LINES BEFORE TESTING
Pressure Test	12/09/2010 16:18		0.5	0.1			3800. 0	PRESSURE NOT HOLDING DUE TO LEAKING 1" VALVE ON RELEASE LINE.
Other	12/09/2010 16:21							REPLACED RELEASE VALVE ON PUMP, THEN REPRIMED PUMPS.
Test Lines	12/09/2010 16:29		0.5	0.1			3850. 0	HELD PRESSURE FOR 2 MIN, NO LEAKS.
Pump Spacer 1	12/09/2010 16:32		5	10			145.0	FRESH WATER
Pump Spacer 2	12/09/2010 16:35		5	20			150.0	SUPERFLUSH XLC, SUPERFLUSH TRANSPORT CHARGED FROM 13:00 TO BUMP PLUG AT 19:37, 6 HRS CHARGED.
Pump Spacer 1	12/09/2010 16:38		5	10			145.0	FRESH WATER, SLOWED TO 1 BPM TO PREMIX CEMENT TUB AND WEIGH WITH SCALES, RESUMED 5 BPM AT 8 BBLS GONE.
Pump Lead Cement	12/09/2010 16:44		5	445.7			214.0	1088 SKS VERSACEM, 12.3 PPG, 2.3 CUFT/SK, 11.68 GAL/SK,
Pump Tail Cement	12/09/2010 18:14		5	70.1			212.0	184 SKS VERSACEM, 12.6 PPG, 2.14 CUFT/SK, 10.47 GAL/SK,
Shutdown	12/09/2010 18:29							WASH UP ON TOP OF PLUG PER CO REP.
Drop Top Plug	12/09/2010 18:33							TOOK OFF SWAGE AND DROPPED PLUG

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Pump Displacement	12/09/2010 18:37		6	249.1			750.0	FRESH WATER, STARTED AT 6 BPM THEN WALKED DOWN TO 3 BPM UNTIL 230 BBLS GONE, THEN SLOWED TO 2 BPM TO LAND PLUG.
Slow Rate	12/09/2010 19:30		2	230			750.0	SLOWED RATE TO 2 BPM TO BUMP PLUG.
Bump Plug	12/09/2010 19:37		2	249			1200.0	PLUG LANDED AT 750 PSI, BUMPED UP TO 1200 PSI AND HELD FOR 2 MIN PER CO REP.
Check Floats	12/09/2010 19:39							FLOATS HELD, WHEN RELEASED PRESSURE GOT 1 BBL OF WATER BACK TO TRUCK. NO RETURNS THROUGHOUT JOB, BUT GOOD LIFT PRESSURE.
Pump Water	12/09/2010 20:25		2	10			268.0	10 BBLS WATER WITH 10 LBS SUAR PUMPED THROUGH PARASITE, NOT ON CHART BECAUSE HAD TO UNPLUG COMPUTER AND MOVE PICKUP PER CO REP REQUEST TO ALLOW FORKLIFT TO MOVE THINGS FOR RIG. RETURNS AT 3 BBLS GONE, TOP PRESSURE WAS 268 PSI.
Comment	12/09/2010 20:30							CUSTOMER ORDERED 450 SKS TOPOUT AND CALCIUM CHLORIDE, TOPOUT ARRIVED ON LOCATION AT 00:30.
Rig-Up Equipment	12/10/2010 02:00							SPOTTED FRUEHAFF TO BLOW INTO BIN AND RIG UP TO TOPOUT SWAGE WITH PVC PIPE RAN IN APPROX 180 FEET.

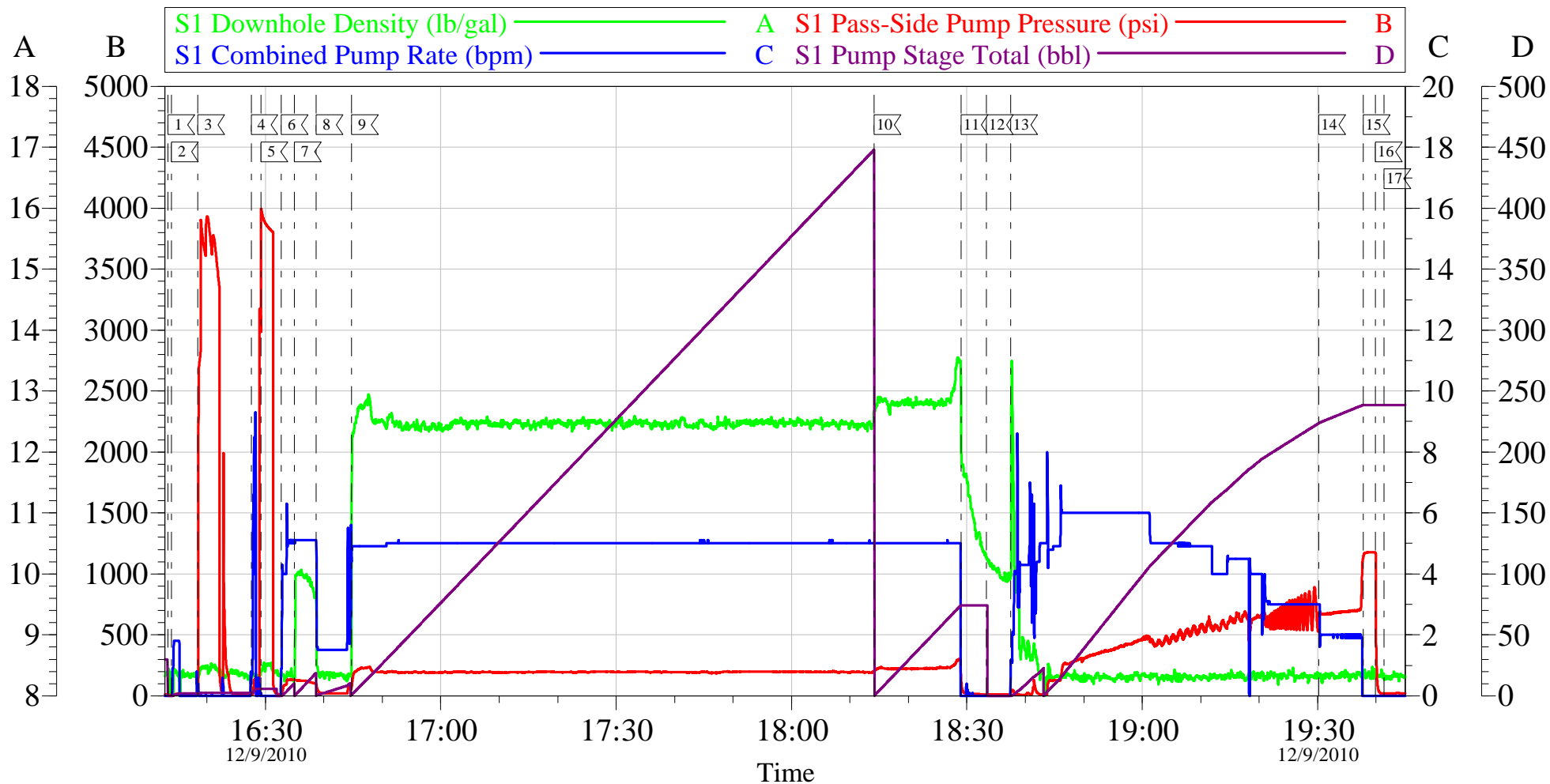
Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Pump Water	12/10/2010 03:37		1	0.5			30.0	PUMP WATER TO ENSURE FLOW,
Pump Cement	12/10/2010 03:39		2	20			200.0	TOPOUT CEMENT, 15.8 PPG, 1.15 CUFT/SK, 5.0 GAL/SK, CALCIUM CHLORIDE BAGS POURED INTO DOWNHOLE SIDE OF TUB ON THE FLY.
Shutdown	12/10/2010 03:47							SHUTDOWN DUE TO CELLAR PUMP.
Pump Cement	12/10/2010 03:50		1.5	30	50		120.0	RESUME CEMENT, 50 BBLS TOTAL PUMPED, APPROX 244 SKS USED
Shutdown	12/10/2010 04:22							CEMENT TO SURFACE, WAIT TO SEE IF IT FALLS BACK.
Comment	12/10/2010 07:00							AFTER WAITING A COUPLE HOURS, CEMENT FELL BACK SOME, RIGGED BACK UP TO TOPOUT.
Pump Water	12/10/2010 07:57		1	0.5			50.0	PUMP WATER TO ENSURE FLOW
Pump Cement	12/10/2010 07:59		1	5			120.0	TOPOUT CEMENT, 15.8 PPG, 1.15 CUFT/SK, 5.0 GAL/SK, PUMPED 5 BBLS CEMENT TO SURFACE.
Shutdown	12/10/2010 08:02							TOTAL OF APPROX. 269 SKS TOPOUT USED, 8 SKS CALCIUM CHLORIDE, AND 50 LBS SUGAR.
End Job	12/10/2010 08:03							20 HRS FROM ARRIVAL TO END OF TOPOUT, 16 ADD HOURS CHARGED.
Post-Job Safety Meeting (Pre Rig-Down)	12/10/2010 08:10							ENTIRE CREW

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Rig-Down Equipment	12/10/2010 09:00							LOADED LEFTOVER TOPOUT, APPROX 181 SKS, BACK INTO FRUEHAFF TO BRING BACK TO GET WEIGHED BACK FOR ACCURACY ON TICKET.
Pre-Convoy Safety Meeting	12/10/2010 10:50							ENTIRE CREW, OBSERVE ALL SAFE DRIVING PROCEDURES
Crew Leave Location	12/10/2010 11:00							THANK YOU FOR USING HALLIBURTON, ERIC STILLSON AND CREW.



# NOBLE

## 9 5/8 SURFACE



### Local Event Log

1 START JOB	16:13:18	2 FILL LINES	16:13:56	3 TEST LINES	16:18:28
4 REPLACE 1 " VALVE/REPRIME	16:27:34	5 RETEST LINES	16:29:13	6 PUMP H2O SPACER	16:32:44
7 PUMP SUPERFLUSH	16:35:00	8 PUMP H2O SPACER	16:38:43	9 PUMP LEAD CEMENT	16:44:43
10 PUMP TAIL CEMENT	18:14:09	11 SHUTDOWN	18:29:01	12 DROP PLUG	18:33:22
13 PUMP DISPLACEMENT	18:37:31	14 SLOW RATE	19:30:11	15 BUMP PLUG	19:37:49
16 CHECK FLOATS	19:39:53	17 END JOB	19:41:20		

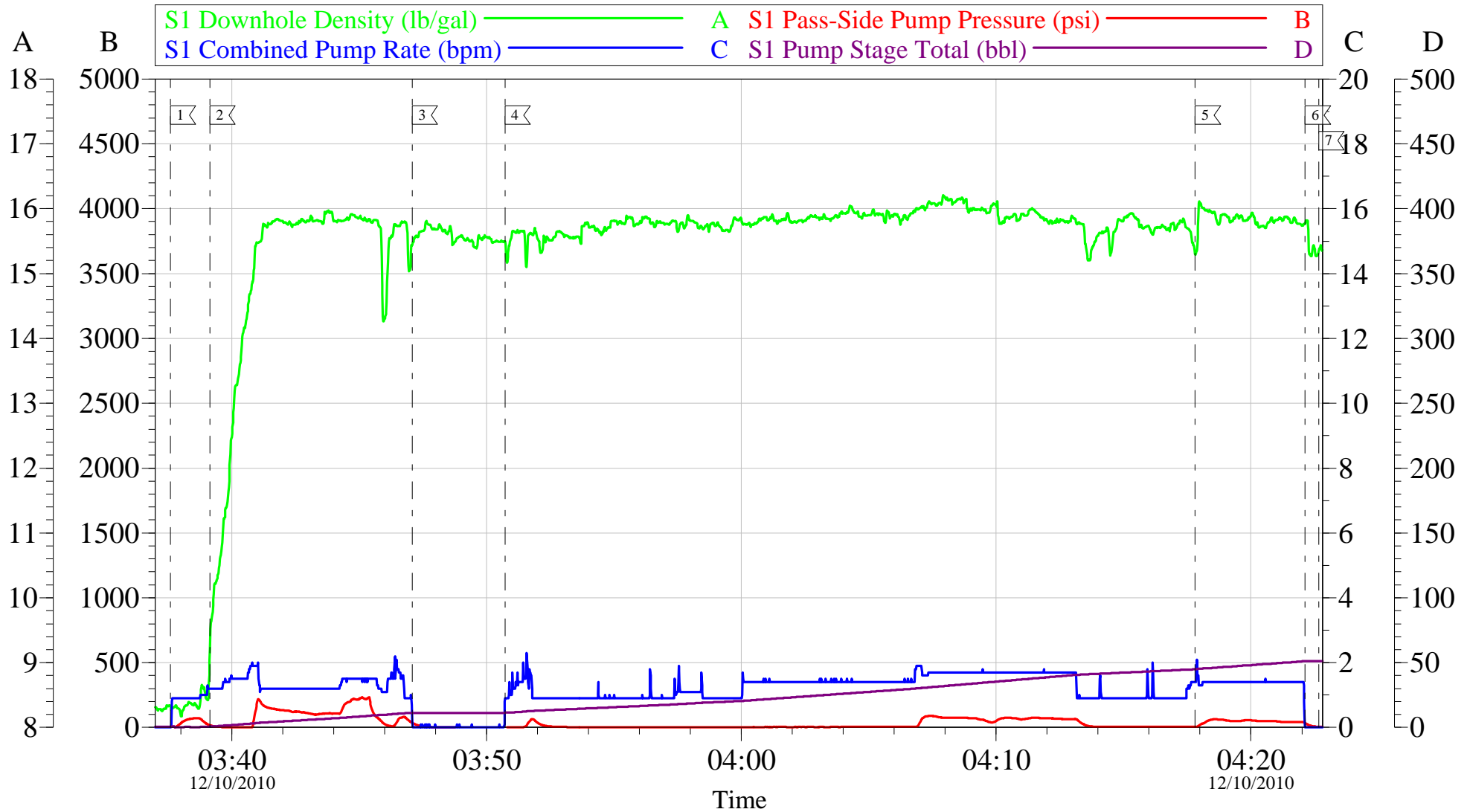
Customer: NOBLE  
Well Description: BM 35-23C  
Company Rep: LANCE PORTER

Job Date: 09-Dec-2010  
Job Type: SURFACE  
Cement Supervisor: ERIC STILLSON

Sales Order #: 7782105  
ADC Used: YES  
Elite #: 4 PAUL SALAZAR

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09-Dec-10 21:12

# NOBLE TOPOUT 9 5/8 SURFACE



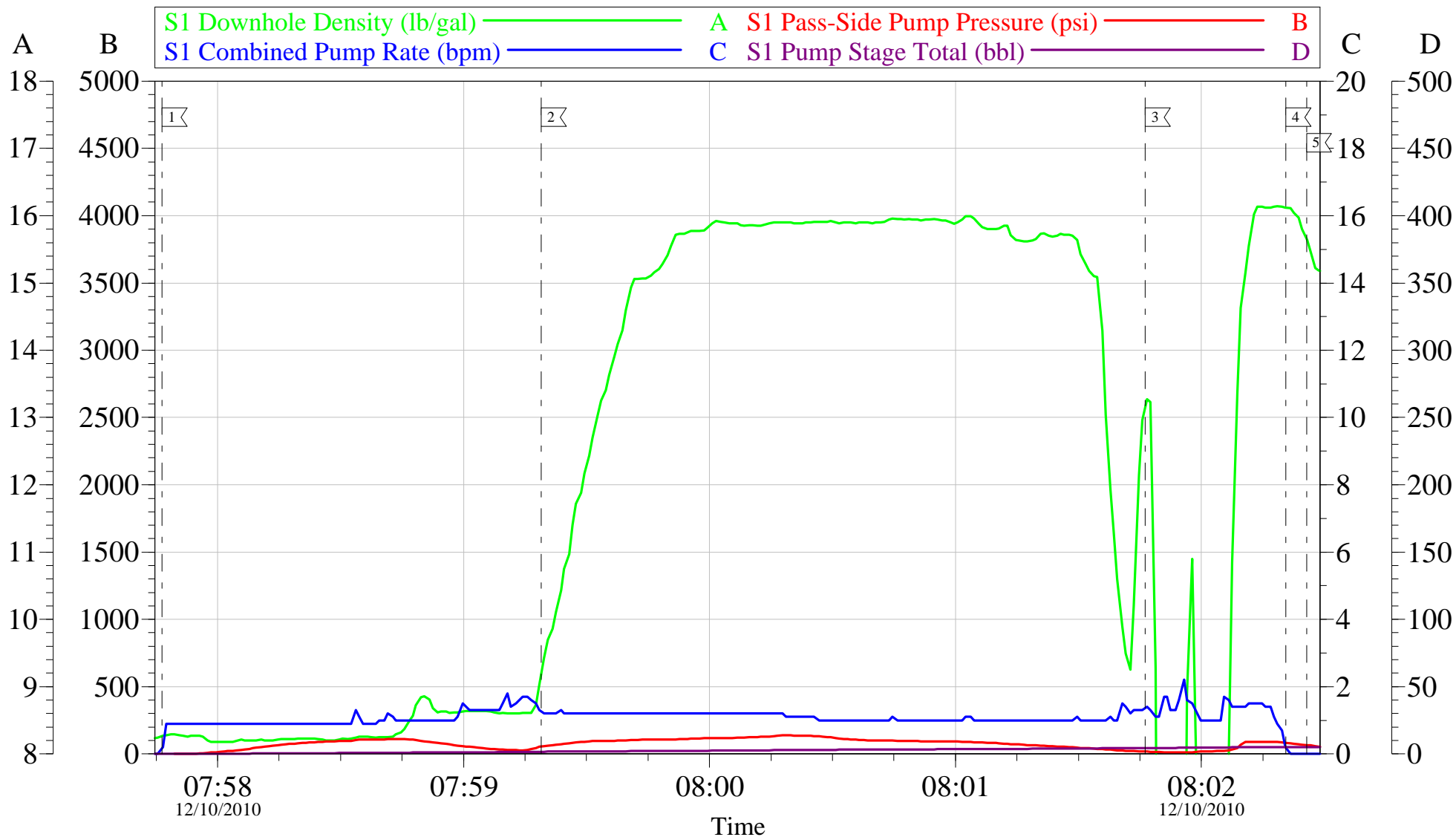
Local Event Log			
1	PUMP WATER	03:37:35	2
2	PUMP TOPOUT CEMENT	03:39:08	3
3	SHUTDOWN	03:47:05	4
4	RESUME TOPOUT CEMENT	03:50:43	5
5	CEMENT TO SURFACE	04:17:49	6
6	SHUTDOWN	04:22:08	7
7	END JOB	04:22:40	

Customer: NOBLE	Job Date: 10-Dec-2010	Sales Order #: 7782105
Well Description: BM 35-23C	Job Type: TOPOUT	ADC Used: YES
Company Rep: LANCE PORTER	Cement Supervisor: ERIC STILLSON	Elite #: 4 PAUL SALAZAR

OptiCem v6.4.2  
10-Dec-10 07:30

# NOBLE

## (2)TOPOUT 9 5/8 SURFACE CASING



Customer: NOBLE  
Well Description: BM 35-23C  
Company Rep: LANCE PORTER

Job Date: 10-Dec-2010  
Job Type: TOPOUT  
Cement Supervisor: ERIC STILLSON

Sales Order #: 7782105  
ADC Used: YES  
Elite #: 4 PAUL SALAZAR

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10-Dec-10 08:27