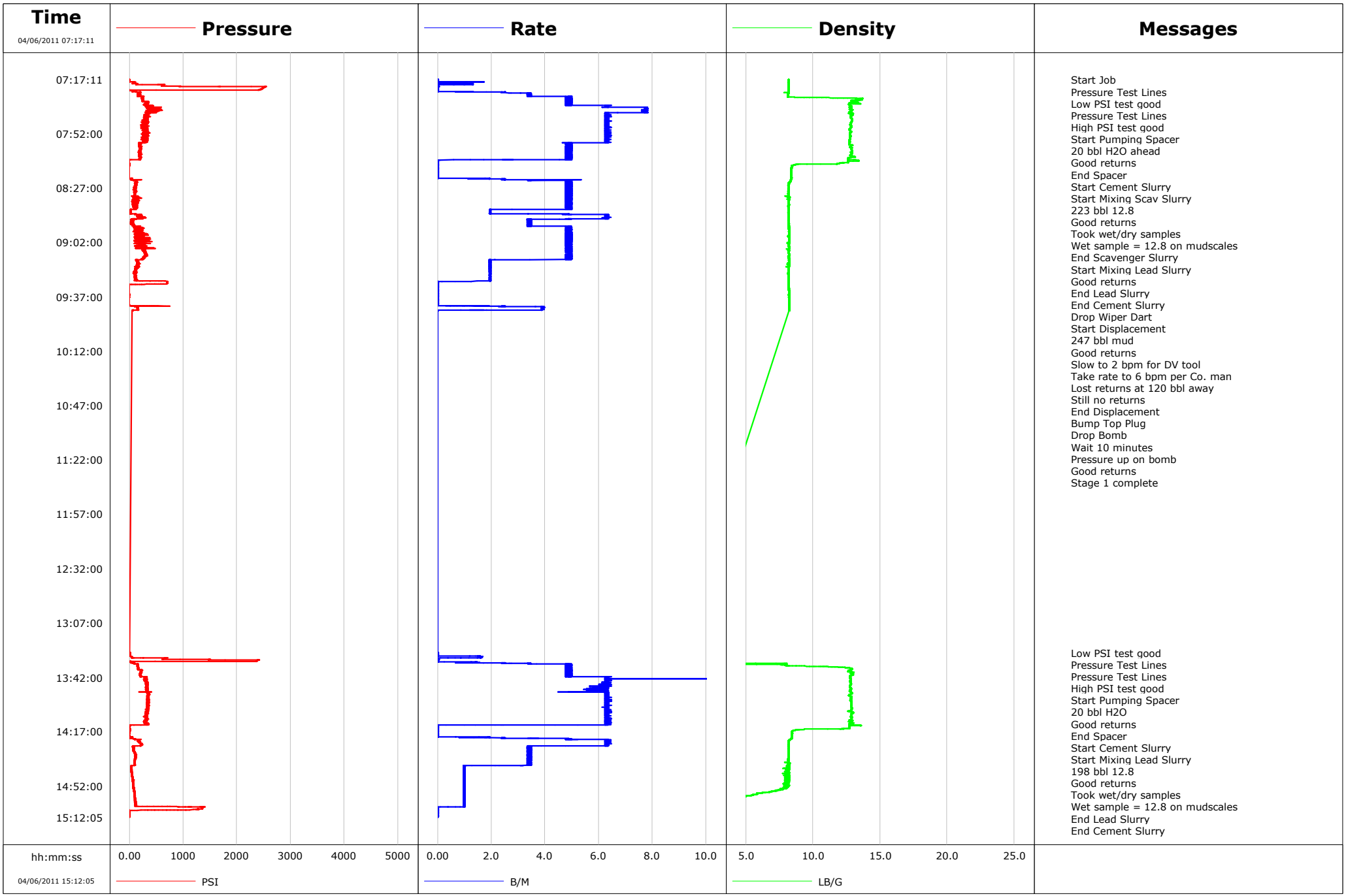
Schlumberger Cementing Job Report

Well	RG 513-14-298	**Client**	Williams
Field	Ryan Gulch	**SIR No.**	BQIT-00003
Engineer	Matthew Fair	**Job Type**	2 Stage Surface
Country	United States	**Job Date**	04-06-2011



Schlumberger

Cementing Service Report

Customer	Job Number
Williams	BQIT-00003

Well	Location (legal)	Schlumberger Location	Job Start
RG 513-14-298			Apr/06/2011

Field	Formation Name/Type	Deviation	Bit Size	Well MD	Well TVD
Ryan Gulch	Shale	deg	13.5 in	3245.0 ft	3245.0 ft

County	State/Province	BHP	BHST	BHCT	Pore Press. Gradient
Rio Blanco	Colorado	psi	112 degF	86 degF	lb/gal
Well Master 0631265328	**API/UWI**				

Rig Name	Drilled For	Service Via
Frontier 10	Gas	Land

Offshore Zone	Well Class	Well Type
	New	Exploration

Drilling Fluid Type	Max. Density	Plastic Viscosity
Bentonite	lb/gal	cP

Service Line	Job Type
Cementing	2 Stage Surface

Max. Allowed Tub. Press	Max. Allowed Ann. Press	WH Connection
2030 psi	3520 psi	9 5/8

Service Instructions

Stage 1 - 216 bbl 12.8 ppg (707 sks)
Stage 2 - 206 bbl 12.8 ppg (674 sks)

Casing/Liner

Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
3245.0	9.6	36.0	J55	BUTT
0.0	0.0	0.0		

Tubing/Drill Pipe

T/D	Depth, ft	Size, in	Weight, lb/ft	Grade	Thread

Perforations/Open Hole

Top, ft	Bottom, ft	shot/ft	No. of Shots	Total Interval
ft	ft			ft
ft	ft			Diameter
ft	ft			in

Treat Down	Displacement	Packer Type	Packer Depth
Casing	247.0 bbl		ft

Tubing Vol.	Casing Vol.	Annular Vol.	Openhole Vol.
bbl	251.0 bbl	209.0 bbl	507.0 bbl

Casing/Tubing Secured	1 Hole Vol. Circulated prior to Cement
X	X

Lift Pressure	Pipe Rotated	Pipe Reciprocated
1606 psi		

No. Centralizers	Top Plugs	Bottom Plugs
11	1	0

Cement Head Type
Single

Job Scheduled For	Arrived on Location	Leave Location
Apr/06/2011 05:00	Apr/06/2011 05:00	Apr/06/2011 16:00

Casing Tools

Shoe Type	Float
Shoe Depth	3245.0 ft
Stage Tool Type	DV
Stage Tool Depth	1299.0 ft
Collar Type	Float
Collar Depth	3199.0 ft

Squeeze Job

Squeeze Type	
Tool Type	
Tool Depth	ft
Tail Pipe Size	in
Tail Pipe Depth	ft
Sqz. Total Vol.	bbl

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
04/06/2011	07:17:11	-9	0.0	8.19	0.0	Started Acquisition
04/06/2011	07:17:13	-9	0.0	8.19	0.0	Start Job
04/06/2011	07:18:51	70	1.7	8.19	0.5	
04/06/2011	07:20:31	533	0.6	8.19	1.8	
04/06/2011	07:20:32	533	0.6	8.19	1.8	Pressure Test Lines
04/06/2011	07:20:33	597	0.2	8.19	1.8	Low PSI test good
04/06/2011	07:21:34	686	0.0	8.19	1.8	Pressure Test Lines
04/06/2011	07:21:35	686	0.0	8.19	1.8	High PSI test good
04/06/2011	07:22:11	2500	0.0	8.19	1.8	
04/06/2011	07:23:51	2417	0.0	8.19	1.8	
04/06/2011	07:24:41	54	0.0	8.19	1.8	Start Pumping Spacer
04/06/2011	07:25:31	193	2.4	8.19	2.8	
04/06/2011	07:27:11	184	3.5	8.14	8.2	
04/06/2011	07:28:42	232	4.9	9.33	14.2	20 bbl H2O ahead
04/06/2011	07:28:51	257	4.9	10.64	14.9	
04/06/2011	07:29:27	227	4.8	13.68	17.8	Good returns
04/06/2011	07:30:31	241	5.0	13.52	23.0	
04/06/2011	07:31:18	270	4.9	13.23	26.9	End Spacer
04/06/2011	07:31:19	240	5.0	13.23	27.0	Start Cement Slurry
04/06/2011	07:31:21	276	5.0	13.18	27.1	Start Mixing Scav Slurry
04/06/2011	07:31:23	252	4.9	13.14	27.3	223 bbl 12.8

Well	Field	Job Start	Customer	Job Number
RG 513-14-298	Ryan Gulch	Apr/06/2011	Williams	BQIT-00003

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
04/06/2011	07:33:10	310	5.0	12.64	36.1	Took wet/dry samples
04/06/2011	07:33:11	310	4.9	12.64	36.1	Wet sample = 12.8 on mudscales
04/06/2011	07:33:51	299	4.8	12.74	39.4	
04/06/2011	07:34:04	343	6.4	12.76	40.7	End Scavenger Slurry
04/06/2011	07:34:06	427	6.2	12.77	41.0	Start Mixing Lead Slurry
04/06/2011	07:35:31	458	7.7	12.86	50.5	
04/06/2011	07:37:11	439	7.7	12.81	63.4	
04/06/2011	07:38:51	351	6.4	12.66	75.8	
04/06/2011	07:40:31	304	6.4	12.85	86.3	
04/06/2011	07:42:11	330	6.2	12.85	96.9	
04/06/2011	07:43:51	312	6.4	12.90	107.4	
04/06/2011	07:45:31	334	6.4	12.80	117.9	
04/06/2011	07:47:11	293	6.4	12.85	128.4	
04/06/2011	07:48:51	285	6.4	12.75	138.9	
04/06/2011	07:50:31	306	6.4	12.79	149.4	
04/06/2011	07:50:45	266	6.4	12.82	150.9	Good returns
04/06/2011	07:52:11	255	6.2	12.76	159.9	
04/06/2011	07:53:51	324	6.4	12.77	170.4	
04/06/2011	07:55:31	266	6.4	12.76	181.0	
04/06/2011	07:57:11	262	6.2	12.73	191.5	
04/06/2011	07:58:51	203	4.9	12.72	200.6	
04/06/2011	08:00:31	193	5.0	12.77	208.8	
04/06/2011	08:02:11	205	5.0	12.85	216.9	
04/06/2011	08:03:51	186	4.8	12.89	225.1	
04/06/2011	08:05:31	182	4.9	12.81	233.2	
04/06/2011	08:07:11	205	4.8	13.13	241.4	
04/06/2011	08:08:51	189	4.5	12.61	249.5	
04/06/2011	08:09:02	-8	0.0	13.29	249.8	End Lead Slurry
04/06/2011	08:09:03	-8	0.0	13.29	249.8	End Cement Slurry
04/06/2011	08:09:10	-9	0.0	13.32	249.8	Drop Wiper Dart
04/06/2011	08:09:14	-9	0.0	13.34	249.8	Start Displacement
04/06/2011	08:10:31	-17	0.0	12.62	249.8	
04/06/2011	08:12:11	-3	0.0	8.66	249.8	
04/06/2011	08:13:51	-14	0.0	8.40	249.8	
04/06/2011	08:15:31	-13	0.0	8.38	249.8	
04/06/2011	08:17:11	-13	0.0	8.38	249.8	
04/06/2011	08:18:51	-13	0.0	8.38	249.8	
04/06/2011	08:22:11	104	4.8	8.31	253.1	
04/06/2011	08:23:51	101	4.9	8.20	261.2	
04/06/2011	08:24:40	117	5.0	8.18	265.2	247 bbl mud
04/06/2011	08:24:43	120	5.0	8.18	265.4	Good returns
04/06/2011	08:25:31	112	4.9	8.17	269.4	
04/06/2011	08:27:11	119	4.8	8.17	277.5	
04/06/2011	08:28:51	101	4.9	8.17	285.7	
04/06/2011	08:30:31	97	4.9	8.17	293.8	
04/06/2011	08:32:11	122	5.0	8.19	302.0	
04/06/2011	08:33:51	109	4.9	8.17	310.2	
04/06/2011	08:35:31	113	4.9	8.20	318.3	
04/06/2011	08:37:11	136	4.9	8.20	326.5	
04/06/2011	08:38:51	108	4.9	8.20	334.6	
04/06/2011	08:40:31	107	4.9	8.20	342.8	
04/06/2011	08:41:10	23	2.0	8.20	345.2	Slow to 2 bpm for DV tool
04/06/2011	08:42:11	19	1.9	8.20	347.1	
04/06/2011	08:43:48	18	2.0	8.20	350.3	Take rate to 6 bpm per Co. man

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04/06/2011	08:45:31	176	6.2	8.20	360.7	
04/06/2011	08:47:11	35	3.5	8.20	370.6	
04/06/2011	08:48:51	49	3.5	8.20	376.3	
04/06/2011	08:50:31	62	3.3	8.20	382.0	
04/06/2011	08:50:56	80	3.5	8.20	383.5	Lost returns at 120 bbl away
04/06/2011	08:52:11	182	4.9	8.20	388.4	
04/06/2011	08:53:51	203	5.0	8.21	396.5	
04/06/2011	08:55:31	194	4.9	8.22	404.7	
04/06/2011	08:57:11	124	5.0	8.21	412.8	
04/06/2011	08:58:51	227	5.0	8.22	421.0	
04/06/2011	09:00:31	194	5.0	8.21	429.1	
04/06/2011	09:02:11	273	4.9	8.22	437.3	
04/06/2011	09:03:51	200	5.0	8.20	445.4	
04/06/2011	09:05:31	259	4.9	8.21	453.6	
04/06/2011	09:07:11	247	4.9	8.20	461.7	
04/06/2011	09:08:51	290	4.9	8.20	469.9	
04/06/2011	09:10:31	320	4.9	8.21	478.0	
04/06/2011	09:12:11	267	5.0	8.15	486.2	
04/06/2011	09:13:51	130	1.9	8.22	492.3	
04/06/2011	09:15:31	166	2.0	8.21	495.5	
04/06/2011	09:15:36	171	2.0	8.13	495.7	Still no returns
04/06/2011	09:17:11	165	1.9	8.14	498.8	
04/06/2011	09:18:51	105	1.9	8.19	502.0	
04/06/2011	09:20:31	98	1.9	8.20	505.3	
04/06/2011	09:22:11	99	1.9	8.19	508.5	
04/06/2011	09:23:51	91	1.9	8.19	511.8	
04/06/2011	09:25:31	107	1.9	8.20	515.0	
04/06/2011	09:27:05	647	1.9	8.20	518.1	End Displacement
04/06/2011	09:27:10	708	0.2	8.20	518.2	Bump Top Plug
04/06/2011	09:27:11	708	0.2	8.20	518.2	
04/06/2011	09:27:20	694	0.0	8.20	518.2	Drop Bomb
04/06/2011	09:28:51	573	0.0	8.20	518.2	
04/06/2011	09:30:31	-17	0.0	8.20	518.2	
04/06/2011	09:32:11	-17	0.0	8.20	518.2	
04/06/2011	09:33:51	-14	0.0	8.21	518.2	
04/06/2011	09:35:31	-9	0.0	8.20	518.2	
04/06/2011	09:36:51	-12	0.0	8.21	518.2	Wait 10 minutes
04/06/2011	09:37:11	-12	0.0	8.21	518.2	
04/06/2011	09:38:51	-12	0.0	8.21	518.2	
04/06/2011	09:40:31	-11	0.0	8.21	518.2	
04/06/2011	09:42:11	-11	0.0	8.21	518.2	
04/06/2011	09:42:43	14	1.8	8.21	518.2	Pressure up on bomb
04/06/2011	09:43:51	150	3.9	8.21	521.0	
04/06/2011	09:45:28	156	3.9	8.21	527.3	Good returns
04/06/2011	09:45:31	149	3.9	8.21	527.5	
04/06/2011	09:45:46	51	1.7	8.21	528.3	Stage 1 complete
04/06/2011	13:26:12	0	0.0	-0.00	528.4	Pressure Test Lines
04/06/2011	13:27:11	0	0.0	-0.00	528.4	
04/06/2011	13:28:00	0	0.0	-0.00	528.4	Pressure Test Lines
04/06/2011	13:28:14	1	0.0	-0.00	528.4	High PSI test good
04/06/2011	13:28:51	44	1.6	-0.00	529.2	
04/06/2011	13:30:31	609	0.0	-0.00	530.5	
04/06/2011	13:32:11	13	0.0	-0.00	530.5	
04/06/2011	13:33:51	152	4.9	8.01	535.3	

Well	Field	Job Start	Customer	Job Number
RG 513-14-298	Ryan Gulch	Apr/06/2011	Williams	BQIT-00003

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
04/06/2011	13:37:00	161	4.9	12.84	550.7	Start Pumping Spacer
04/06/2011	13:37:11	163	4.9	12.80	551.6	
04/06/2011	13:38:11	213	5.0	12.64	556.5	20 bbl H2O
04/06/2011	13:38:51	203	4.9	12.95	559.8	
04/06/2011	13:39:00	216	4.9	12.99	560.5	Good returns
04/06/2011	13:40:00	188	4.9	12.90	565.4	End Spacer
04/06/2011	13:40:31	194	4.9	12.94	567.9	
04/06/2011	13:41:42	201	5.0	12.75	573.7	Start Cement Slurry
04/06/2011	13:42:00	302	6.4	12.76	575.5	Start Mixing Lead Slurry
04/06/2011	13:42:11	282	6.4	12.78	576.7	
04/06/2011	13:42:16	293	6.2	12.76	577.2	198 bbl 12.8
04/06/2011	13:42:32	297	6.2	12.77	578.9	Good returns
04/06/2011	13:43:00	304	6.4	12.79	581.8	Took wet/dry samples
04/06/2011	13:43:21	301	6.4	12.80	584.8	Wet sample = 12.8 on mudscales
04/06/2011	13:43:51	308	6.4	12.79	588.0	
04/06/2011	13:45:31	338	6.5	12.80	598.5	
04/06/2011	13:47:11	322	6.4	12.77	608.9	
04/06/2011	13:48:51	333	6.0	12.77	619.2	
04/06/2011	13:50:31	320	6.1	12.79	629.0	
04/06/2011	13:52:11	345	6.2	12.90	639.1	
04/06/2011	13:53:51	351	6.4	12.69	649.6	
04/06/2011	13:55:31	344	6.2	12.80	660.1	
04/06/2011	13:57:11	342	6.2	12.80	670.6	
04/06/2011	13:58:51	322	6.4	12.87	681.1	
04/06/2011	14:00:31	349	6.4	12.84	691.6	
04/06/2011	14:02:11	342	6.2	12.87	702.2	
04/06/2011	14:03:51	334	6.2	12.68	712.7	
04/06/2011	14:05:31	313	6.4	12.88	723.2	
04/06/2011	14:07:11	299	6.4	12.83	733.7	
04/06/2011	14:08:51	298	6.5	12.82	744.2	
04/06/2011	14:10:31	260	6.2	12.65	754.7	
04/06/2011	14:12:11	347	6.4	12.71	765.2	
04/06/2011	14:13:51	-6	0.0	12.71	768.9	
04/06/2011	14:15:00	-10	0.0	12.69	768.9	End Lead Slurry
04/06/2011	14:15:31	1	0.0	9.40	768.9	
04/06/2011	14:15:41	1	0.0	9.04	768.9	End Cement Slurry
04/06/2011	14:17:00	-9	0.0	8.42	768.9	Drop Top Plug
04/06/2011	14:17:01	-9	0.0	8.42	768.9	Start Displacement
04/06/2011	14:17:11	-9	0.0	8.42	768.9	
04/06/2011	14:18:00	-9	0.0	8.43	768.9	100 bbl H2O
04/06/2011	14:18:51	-10	0.0	8.42	768.9	
04/06/2011	14:19:03	-10	0.0	8.42	768.9	Good returns
04/06/2011	14:20:31	31	1.5	8.40	769.0	
04/06/2011	14:22:11	113	4.9	8.28	774.4	
04/06/2011	14:23:51	176	6.2	8.18	784.9	
04/06/2011	14:25:31	226	6.4	8.17	795.4	
04/06/2011	14:27:11	60	3.5	8.18	802.9	
04/06/2011	14:28:51	75	3.5	8.17	808.6	
04/06/2011	14:30:00	80	3.5	8.17	812.5	Lost returns
04/06/2011	14:30:31	103	3.4	8.17	814.3	
04/06/2011	14:32:11	114	3.4	8.17	820.0	
04/06/2011	14:33:51	116	3.5	8.18	825.7	
04/06/2011	14:35:31	100	3.4	8.12	831.4	
04/06/2011	14:37:11	91	3.5	8.23	837.1	

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Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
04/06/2011	14:40:31	34	1.0	7.94	844.3	
04/06/2011	14:42:11	37	1.0	8.01	845.9	
04/06/2011	14:43:51	39	1.0	7.88	847.5	
04/06/2011	14:45:31	44	1.0	7.90	849.1	
04/06/2011	14:47:11	49	1.0	8.20	850.8	
04/06/2011	14:48:51	56	1.0	8.18	852.4	
04/06/2011	14:50:31	63	1.0	8.06	854.0	
04/06/2011	14:52:11	69	1.0	8.12	855.6	
04/06/2011	14:53:51	77	1.0	7.90	857.3	
04/06/2011	14:55:31	84	1.0	6.92	858.9	
04/06/2011	14:57:11	92	1.0	5.82	860.5	
04/06/2011	14:58:51	98	1.0	4.98	862.2	
04/06/2011	15:00:31	105	1.0	3.49	863.8	
04/06/2011	15:01:00	98	1.0	3.06	864.2	End Displacement
04/06/2011	15:02:11	111	1.0	1.54	865.4	
04/06/2011	15:03:51	120	1.0	0.20	867.0	
04/06/2011	15:05:31	1158	1.0	-0.00	868.7	
04/06/2011	15:07:11	1271	0.0	-0.00	868.8	
04/06/2011	15:08:00	-7	0.0	-0.00	868.8	Float held
04/06/2011	15:08:05	-7	0.0	-0.00	868.8	1/2 bbl H2O back
04/06/2011	15:08:51	-8	0.0	-0.00	868.8	

Post Job Summary

Average Pump Rates, bbl/min				Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2
4.3			54.0	868.8	0.0	40.9	

Treating Pressure Summary, psi					Breakdown Fluid		
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density
2535	-8	228				bbl	lb/gal

Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp		
%	0.0 bbl	369.1 bbl	50 degF	Cement Circulated to Surface? ☐	Volume bbl
				Washed Thru Perfs ☐	To ft

Customer or Authorized Representative	Schlumberger Supervisor	Circulation Lost	Job Completed
Kenny Bascom	Matthew Fair	☐ -	☒ -