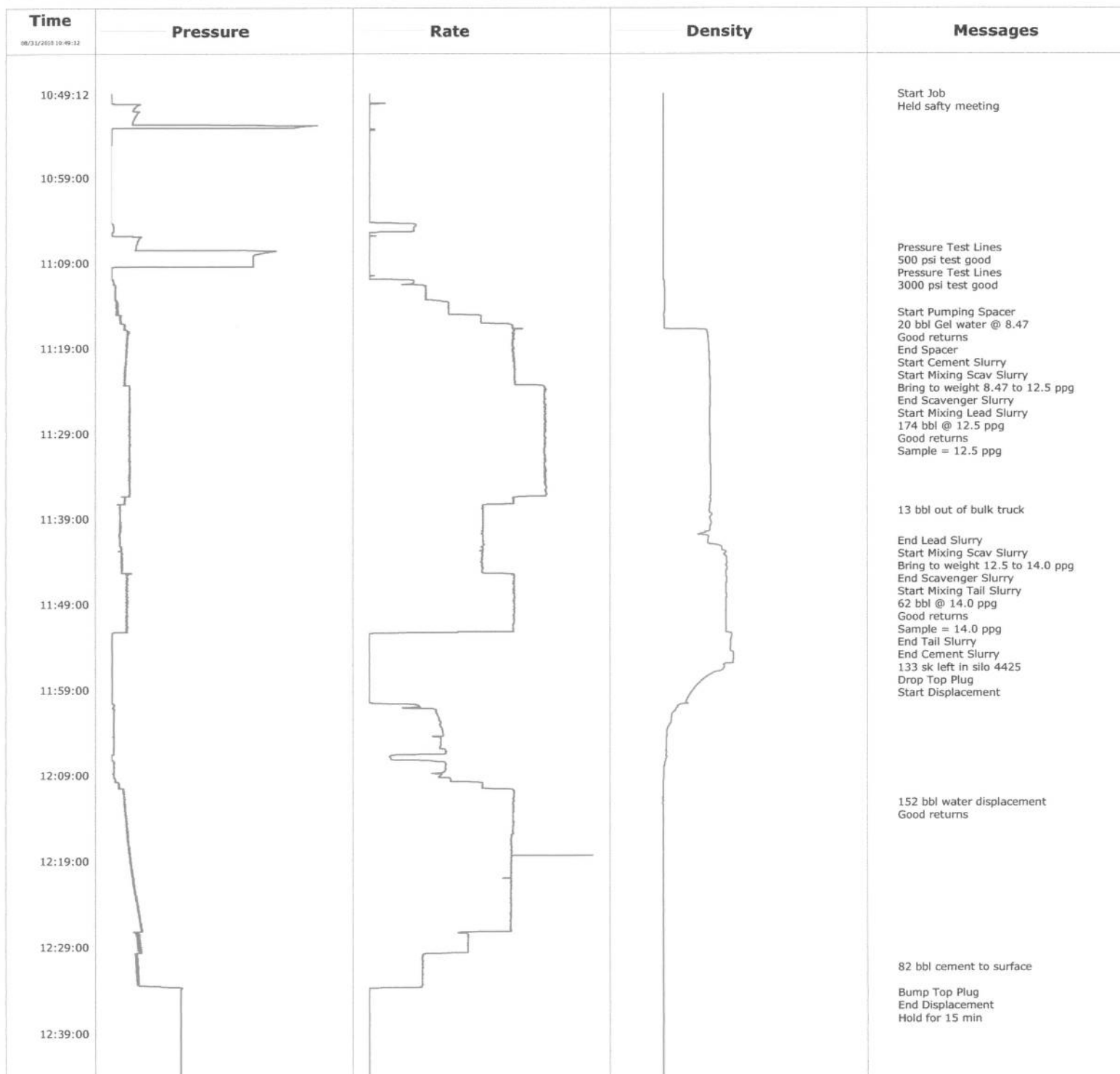




Cementing Job Report

CemCAT v1.3

Well	Union Pacific 154Y29	Client	Chevron Corp
Field	Rangely	SIR No.	BAD4-00163
Engineer	Terry Borg	Job Type	9 5/8 Surface
Country	United States	Job Date	08-31-2010





Cementing Service Report

				Customer Chevron Corp		Job Number BAD4-00163	
Well Union Pacific 154Y29 154Y29			Location (legal) 154Y29		Schlumberger Location GCO		Job Start Aug/31/2010
Field Rangely		Formation Name/Type Shale		Deviation	Bit Size 12.3 in	Well MD 2013.0 ft	Well TVD 2013.0 ft
County Rio Blanco		State/Province Colorado		BHP	BHST 103 degF	BHCT 89 degF	Pore Press. Gradient
Well Master 0631184519		API/UWI					
Rig Name H&P 316		Drilled For Gas		Service Via Land		Casing/Liner	
				Depth, ft	Size, in	Weight, lb/ft	Grade
Offshore Zone		Well Class New		Well Type Development			
Drilling Fluid Type Bentonite		Max. Density		Plastic Viscosity		Tubing/Drill Pipe	
				Depth,	Size,	Weight,	Grade
Service Line Cementing		Job Type 9 5/8 Surface					
Max. Allowed Tubing Press 3000 psi		Max. Allowed Ann. Press 500 psi		Wellhead Connection 9 5/8		Perforations/Open Hole	
						Top,	Bottom,
						No. of Shots	Total Interval
							Diameter
						Treat Down Casing	Displacement 152.0 bbl
						Packer Type	Packer Depth
						Tubing Vol.	Casing Vol. 155.6 bbl
						Annular Vol. 118.0 bbl	Openhole Vol. 280.0 bbl
Casing/Tubing Secured <input checked="" type="checkbox"/>		1 Hole Volume Circulated prior to Cement <input checked="" type="checkbox"/>		Casing Tools		Squeeze Job	
Lift Pressure 996 psi				Shoe Type Guide		Squeeze Type	
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>		Shoe Depth 2013.0 ft		Tool Type	
No. Centralizers 13		Top Plugs 1		Bottom Plugs		Stage Tool Type	
Cement Head Type Single				Stage Tool Depth		Tool Depth	
Job Scheduled For Aug/30/2010 23:00		Arrived on Location Aug/31/2010 04:00		Leave Location Aug/31/2010 14:00		Collar Type Diff-Fill	
				Collar Depth 1968.0 ft		Tail Pipe Depth	
						Sqz. Total Vol.	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
08/31/2010	08:26:10					Started Acquisition	
08/31/2010	10:49:12	2	0.0	8.31	0.0		
08/31/2010	10:49:13					Start Job	
08/31/2010	10:49:13	2	0.0	8.31	0.0		
08/31/2010	10:49:18					Held safty meeting	
08/31/2010	10:49:18	2	0.0	8.31	0.0		
08/31/2010	10:49:30	1	0.0	8.31	0.0		
08/31/2010	10:52:50	2234	0.0	8.31	0.0		
08/31/2010	10:56:10	-3	0.0	8.31	0.1		
08/31/2010	11:02:50	-3	0.0	8.31	0.1		
08/31/2010	11:06:10	621	0.0	8.31	2.2		
08/31/2010	11:07:15					Pressure Test Lines	
08/31/2010	11:07:15	550	0.0	8.31	2.2		
08/31/2010	11:07:17					500 psi test good	
08/31/2010	11:07:17	550	0.0	8.31	2.2		

JOB CALCULATIONS

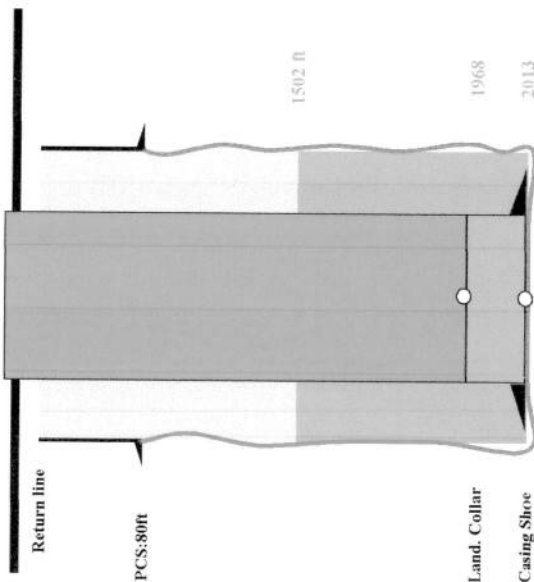
Phase	Preflush	Spacer	Lead	Tail	Displace	Top Out
Fluid Type	Water	Gel Water	12.5 Poz/G Lead	14.1 surface tail	Water	N/A
# of sks			463	227		
Yield			2.11	1.54		
Density	8.34	8.47	12.50	14.00	8.34	
Required Water		75.00%	12.13	7.91		
Volume		20.0	174	62	152.1	
Thickening Time :			4:00	3:30		

sacks
cuft/sk
ppg
gal/sk
bbls

OH diameter	12 1/4	inch
Previous Casing		
OD	16	inch
Weight	84	lb/ft
ID	15.01	inch
Shoe Depth	80	ft

Water Required:	
Preflushes:	0
Spacer:	15
Lead:	134
Tail:	43
Displacement:	152
Top Out:	0
Wash Up:	50
Safety:	39
Total:	433 bbl

TOC: 0 ft
Mud Weight: 9.2 ppg



OD	String 1	String 2	String 3	inch
Weight	9.58			lb/ft
Grade	36			
ID	15.55			inch
Burst pressure	3520			psi
Collapse pressure	2030			psi
Bottom MD	2013	0		ft
Shoe joint	45			ft

Casing Cap.	0.0773102	0.0000000	0.0000000	bbl/ft
Ann. Cap. In OH	0.0557811	0.1457747	0.1457747	bbl/ft
Ann. Cap. In casing	0.1288689	0.2188625	0.2188625	bbl/ft
Ann. Volume	232.77	0.000	0	bbls

Top of Tail:	1502	ft
Top of Lead:	0	ft
Differential Pressure	463	psi
Lift Pressure	993	psi

Shoe Joint Volume	3.5	bbls
Annular Volume	118	bbls without excess
Hole Volume	280	bbls without excess
Slurry Volume	236	bbls
Slurry Excess	115	bbls
Annular Excess	106	%

Well			Field	Job Start		Customer	Job Number
Union Pacific 154Y29 154Y29			Rangely	Aug/31/2010		Chevron Corp	BAD4-00163
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
08/31/2010	11:14:51	140	3.5	8.42	12.9		
08/31/2010	11:14:56					20 bbl Gel water @ 8.47	
08/31/2010	11:14:56	119	3.5	8.41	13.2		
08/31/2010	11:14:57					Good returns	
08/31/2010	11:14:57	136	3.5	8.41	13.3		
08/31/2010	11:16:10	203	5.0	8.41	19.1		
08/31/2010	11:16:42					End Spacer	
08/31/2010	11:16:42	284	6.4	8.41	22.2		
08/31/2010	11:16:44					Start Cement Slurry	
08/31/2010	11:16:44	307	6.4	8.41	22.4		
08/31/2010	11:16:46					Start Mixing Scav Slurry	
08/31/2010	11:16:46	281	6.4	8.41	22.7		
08/31/2010	11:16:48					Bring to weight 8.47 to 12.5 ppg	
08/31/2010	11:16:48	271	6.8	8.50	22.9		
08/31/2010	11:18:07					End Scavenger Slurry	
08/31/2010	11:18:07	341	6.4	12.31	31.4		
08/31/2010	11:18:08					Start Mixing Lead Slurry	
08/31/2010	11:18:08	364	6.4	12.31	31.5		
08/31/2010	11:19:02					174 bbl @ 12.5 ppg	
08/31/2010	11:19:02	345	6.5	12.35	37.3		
08/31/2010	11:19:04					Good returns	
08/31/2010	11:19:04	340	6.4	12.35	37.5		
08/31/2010	11:19:06					Sample = 12.5 ppg	
08/31/2010	11:19:06	336	6.4	12.35	37.7		
08/31/2010	11:19:30	324	6.4	12.38	40.3		
08/31/2010	11:22:50	297	6.5	12.48	61.9		
08/31/2010	11:26:10	403	7.9	12.46	87.2		
08/31/2010	11:29:30	396	7.9	12.48	113.4		
08/31/2010	11:32:50	398	7.8	12.54	139.6		
08/31/2010	11:36:10	410	7.9	12.55	165.8		
08/31/2010	11:38:07					13 bbl out of bulk truck	
08/31/2010	11:38:07	192	5.1	12.43	177.8		
08/31/2010	11:39:30	187	5.1	12.58	184.9		
08/31/2010	11:41:39					End Lead Slurry	
08/31/2010	11:41:39	186	5.1	12.28	195.8		
08/31/2010	11:41:51					Start Mixing Scav Slurry	
08/31/2010	11:41:51	193	5.1	12.26	196.8		
08/31/2010	11:41:57					Bring to weight 12.5 to 14.0 ppg	
08/31/2010	11:41:57	185	5.1	12.28	197.4		
08/31/2010	11:42:50	144	4.9	13.71	201.9		
08/31/2010	11:43:14					End Scavenger Slurry	
08/31/2010	11:43:14	236	5.1	13.75	203.9		
08/31/2010	11:43:17					Start Mixing Tail Slurry	
08/31/2010	11:43:17	237	5.1	13.74	204.1		
08/31/2010	11:44:50					62 bbl @ 14.0 ppg	
08/31/2010	11:44:50	227	5.1	14.02	212.0		
08/31/2010	11:44:52					Good returns	
08/31/2010	11:44:52	238	5.1	14.02	212.1		

Well			Field		Job Start		Customer		Job Number	
Union Pacific 154Y29 154Y29			Rangely		Aug/31/2010		Chevron Corp		BAD4-00163	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message				
08/31/2010	11:52:27	7	1.0	14.22	260.1					
08/31/2010	11:52:30					133 sk left in silo 4425				
08/31/2010	11:52:30	17	0.2	14.38	260.1					
08/31/2010	11:52:31					Drop Top Plug				
08/31/2010	11:52:31	17	0.1	14.40	260.1					
08/31/2010	11:52:32					Start Displacement				
08/31/2010	11:52:32	17	0.1	14.41	260.1					
08/31/2010	11:52:50	14	0.0	14.44	260.1					
08/31/2010	11:56:10	13	0.0	13.69	260.1					
08/31/2010	11:59:30	13	0.0	10.77	260.1					
08/31/2010	12:02:50	55	3.2	9.03	265.9					
08/31/2010	12:06:10	56	3.4	8.57	276.7					
08/31/2010	12:09:30	86	3.6	8.34	286.1					
08/31/2010	12:12:11					152 bbl water displacement				
08/31/2010	12:12:11	280	6.4	8.28	301.2					
08/31/2010	12:12:12					Good returns				
08/31/2010	12:12:12	284	6.4	8.28	301.3					
08/31/2010	12:12:50	309	6.5	8.29	305.4					
08/31/2010	12:16:10	360	6.4	8.31	326.8					
08/31/2010	12:19:30	439	6.4	8.31	353.7					
08/31/2010	12:22:50	544	6.4	8.31	374.8					
08/31/2010	12:26:10	637	6.3	8.31	396.0					
08/31/2010	12:29:30	641	4.4	8.32	412.9					
08/31/2010	12:31:19					82 bbl cement to surface				
08/31/2010	12:31:19	557	2.4	8.32	417.7					
08/31/2010	12:32:50	612	2.4	8.32	421.4					
08/31/2010	12:34:18					Bump Top Plug				
08/31/2010	12:34:18	1567	0.0	8.32	423.5					
08/31/2010	12:34:19					End Displacement				
08/31/2010	12:34:19	1569	0.0	8.32	423.5					
08/31/2010	12:34:22					Hold for 15 min				
08/31/2010	12:34:22	1568	0.0	8.32	423.5					
08/31/2010	12:36:10	1565	0.0	8.32	423.5					
08/31/2010	12:39:30	1565	0.0	8.32	423.5					
08/31/2010	12:42:50	1564	0.0	8.32	423.5					
08/31/2010	12:46:10	1564	0.0	8.32	423.5					
08/31/2010	12:49:30	1474	0.0	8.32	423.5					
08/31/2010	12:51:15					1 bbl water back				
08/31/2010	12:51:15	3	0.0	8.32	423.5					
08/31/2010	12:52:50	3	0.0	8.32	423.5					
08/31/2010	12:53:04					End Job				
08/31/2010	12:53:04	3	0.0	8.32	423.5					
08/31/2010	12:53:13					Stopped Acquisition				

Post Job Summary

Average Pump Rates, bbl/min				Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2
5.6		0.0	7.0	263.0	0.0	20.0	

JOB PROCEDURE

Pressure Test to: 500 / 3000 psi

Stage	Volume (bbls)	Density (ppg)	Rate (bpm)	Time (min)
Water	0	8.34	6	0
Gel Water	20	8.47	6	4
Lead - 12.5 Poz/G Lead	174	12.50	6	29
Tail - 14.) surface tail	62	14.00	6	11
Shut Down - Wash Up - Drop Top Plug				10
Displacement	152	8.34	6	26
Slow down in the last 10 bbls				80 min

DO NOT DISPLACE OVER: 153.9 bbls

Bump the Plug

Check Float

Differential Pressure: 462 psi

Lift Pressure: 996 psi

LEAD: TT= 4:00

20 BBL Gel Water @ 8.47 ppg / 200 lb D020 at 10 lb/bbl first 20 bbl

SILO 4425 - 134 BBL @ 12.5 PPG

TAIL : TT= 3:30

SILO 24561 - 62 BBL @10.0 PPG