



# Cementing Service Report

				Customer CHEVRON		Job Number EN82-00738	
Well ROTH A32-790 A32-790		Location (legal) ROTH PAD		Schlumberger Location CHEYENNE		Job Start Oct/03/2021	
Field WATTENBERG		Formation Name/Type Dirty-Sandstone		Deviation 0 deg	Bit Size 13.5 in	Well MD 1961.0 ft	Well TVD 1961.0 ft
County WELD COUNTY		State/Province Colorado		BHP psi	BHST 120 degF	BHCT 91 degF	Pore Press. Gradient lb/gal
Well Master 0066328843		API/UWI 05-123-51332-00-00					
Rig Name H&P 517	Drilled For Oil	Service Via Land	Casing/Liner				
			Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
Offshore Zone	Well Class New	Well Type Development	1951.0	9.6	36.0	J55	BUTT
			0.0	0.0	0.0		
Drilling Fluid Type		Max. Density lb/gal	Plastic Viscosity cP	Tubing/Drill Pipe			
				T/D	Depth, ft	Size, in	Weight, lb/ft
Service Line Cementing	Job Type SURFACE						
Max. Allowed Tub. Press psi	Max. Allowed Ann. Press psi	WH Connection Single Cement head	Perforations/Open Hole				
			Top, ft	Bottom, ft	shot/ft	No. of Shots	Total Interval ft
Service Instructions PUMP 30.3 BBL H2O SPACER PUMP 168.9 BBL LEAD @ 13.5 PPG 1.68YLD 8.93H2O 564SKS PUMP 24.6 BBL TAIL @ 14.8 PPG 1.25YLD 5.79H2O 110SKS DROP TOP PLUG DISP 145.2 BBL H2O 30 BBL CEM TO SURF ToT 1676'			ft	ft			
			ft	ft			
			ft	ft			
			Treat Down Casing	Displacement 145.2 bbl	Packer Type	Packer Depth ft	
Tubing Vol. bbl	Casing Vol. 148.5 bbl	Annular Vol. 10.9 bbl	Openhole Vol. 160.4 bbl				
Casing/Tubing Secured <input checked="" type="checkbox"/>	1 Hole Vol. Circulated prior to Cement <input checked="" type="checkbox"/>	Casing Tools			Squeeze Job		
Lift Pressure 600 psi		Shoe Type Float	Squeeze Type				
Pipe Rotated <input type="checkbox"/>	Pipe Reciprocated <input type="checkbox"/>	Shoe Depth 1951.0 ft	Tool Type				
No. Centralizers 17	Top Plugs 1	Bottom Plugs	Stage Tool Type			Tool Depth ft	
Cement Head Type Single		Stage Tool Depth ft	Tail Pipe Size in				
Job Scheduled For Oct/03/2021 08:00	Arrived on Location Oct/03/2021 08:00	Leave Location Oct/03/2021 12:00	Collar Type Float	Tail Pipe Depth ft			
			Collar Depth 1907.8 ft	Sqz. Total Vol. bbl			
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
10/03/2021	09:41:15	-0	0.0	8.38	0.0		
10/03/2021	09:42:05	0	0.0	8.38	0.0		
10/03/2021	09:42:52	-1	0.0	8.38	0.0	Start Job	
10/03/2021	09:42:55	-2	0.0	8.38	0.0		
10/03/2021	09:43:45	-4	0.0	8.38	0.0		
10/03/2021	09:44:35	16	0.8	8.39	0.0		
10/03/2021	09:45:25	22	3.7	8.39	0.0		
10/03/2021	09:45:52	6	0.0	8.39	0.0	PRESSURE TEST LINES	
10/03/2021	09:46:15	815	0.0	8.39	0.0		
10/03/2021	09:47:05	994	0.0	8.39	0.0		
10/03/2021	09:47:55	2547	0.0	8.39	0.0		
10/03/2021	09:48:45	2525	0.0	8.39	0.0		
10/03/2021	09:49:35	2512	0.0	8.39	0.0		
10/03/2021	09:50:25	2504	0.0	8.39	0.0		
10/03/2021	09:52:05	4	0.0	8.39	0.0		
10/03/2021	09:52:52	44	1.7	8.39	0.0	Start Pumping Spacer	
10/03/2021	09:52:55	38	1.7	8.39	0.0		
10/03/2021	09:53:45	246	6.5	8.39	0.0		
10/03/2021	09:54:35	238	6.5	8.39	0.0		
10/03/2021	09:55:25	250	6.5	8.39	0.0		
10/03/2021	09:56:15	255	6.5	8.39	0.0		

Well			Field	Job Start		Customer	Job Number
ROTH A32-790 A32-790			WATTENBERG	Oct/03/2021		CHEVRON	EN82-00738
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
10/03/2021	09:57:55	13	0.0	8.39	0.0		
10/03/2021	09:58:45	16	0.0	8.38	0.0		
10/03/2021	09:59:35	18	0.0	8.39	0.0		
10/03/2021	09:59:52	20	0.0	8.39	0.0	End Spacer	
10/03/2021	10:00:16	19	0.0	8.38	0.0	Reset Total, Vol = 30.29 bbl	
10/03/2021	10:00:25	19	0.0	8.38	0.0		
10/03/2021	10:01:15	17	0.0	8.38	0.0		
10/03/2021	10:01:52	69	1.4	13.62	0.0	Start Mixing Lead Slurry	
10/03/2021	10:02:05	63	1.7	13.53	0.0		
10/03/2021	10:02:55	221	4.6	13.28	0.0		
10/03/2021	10:03:45	298	5.2	13.43	0.0		
10/03/2021	10:04:35	383	6.5	13.49	0.0		
10/03/2021	10:05:25	358	6.5	13.46	0.0		
10/03/2021	10:06:15	364	6.5	13.45	0.0		
10/03/2021	10:07:05	350	6.5	13.42	0.0		
10/03/2021	10:07:55	346	6.5	13.39	0.0		
10/03/2021	10:08:45	355	6.5	13.41	0.0		
10/03/2021	10:09:35	356	6.5	13.47	0.0		
10/03/2021	10:10:25	352	6.5	13.46	0.0		
10/03/2021	10:11:15	362	6.5	13.44	0.0		
10/03/2021	10:12:05	345	6.5	13.41	0.0		
10/03/2021	10:12:55	346	6.5	13.40	0.0		
10/03/2021	10:13:45	356	6.5	13.42	0.0		
10/03/2021	10:14:35	361	6.5	13.43	0.0		
10/03/2021	10:15:25	348	6.5	13.43	0.0		
10/03/2021	10:15:52	344	6.5	13.42	0.0	13.5 PPG 1.68 YLD 8.93 H2O 564 SKS	
10/03/2021	10:16:15	351	6.5	13.42	0.0		
10/03/2021	10:17:05	360	6.5	13.41	0.0		
10/03/2021	10:17:55	363	6.5	13.41	0.0		
10/03/2021	10:18:45	349	6.5	13.38	0.0		
10/03/2021	10:19:35	342	6.5	13.38	0.0		
10/03/2021	10:20:25	360	6.5	13.38	0.0		
10/03/2021	10:21:15	350	6.5	13.38	0.0		
10/03/2021	10:22:05	343	6.5	13.36	0.0		
10/03/2021	10:22:55	349	6.5	13.31	0.0		
10/03/2021	10:23:45	328	6.5	13.32	0.0		
10/03/2021	10:24:35	363	6.5	13.32	0.0		
10/03/2021	10:25:25	266	5.3	13.32	0.0		
10/03/2021	10:26:15	261	5.3	13.41	0.0		
10/03/2021	10:27:05	259	5.3	13.51	0.0		
10/03/2021	10:27:55	261	5.3	13.41	0.0		
10/03/2021	10:28:45	50	2.6	13.44	0.0		
10/03/2021	10:29:35	17	2.3	13.45	0.0		
10/03/2021	10:29:52	25	3.6	11.18	0.0	End Lead Slurry	
10/03/2021	10:30:25	7	1.1	14.41	0.0		
10/03/2021	10:30:41	-5	0.0	14.35	0.0	Reset Total, Vol = 168.67 bbl	
10/03/2021	10:31:15	-3	0.0	14.31	0.0		
10/03/2021	10:32:05	-5	0.0	14.29	0.0		
10/03/2021	10:32:52	-3	0.0	14.27	0.0	Start Mixing Tail Slurry	
10/03/2021	10:32:55	-5	0.0	14.27	0.0		
10/03/2021	10:33:45	-5	0.0	14.26	0.0		
10/03/2021	10:34:35	-6	0.1	14.24	0.0		
10/03/2021	10:35:25	146	2.1	14.34	0.0		
10/03/2021	10:35:52	130	3.4	14.28	0.0	14.8 PPG 1.25 YLD 5.79 H2O 110 SKS	

Well			Field		Job Start		Customer		Job Number	
ROTH A32-790 A32-790			WATTENBERG		Oct/03/2021		CHEVRON		EN82-00738	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message				
10/03/2021	10:37:05	115	3.4	14.40	0.0					
10/03/2021	10:37:55	114	3.4	14.49	0.0					
10/03/2021	10:38:45	121	3.4	14.50	0.0					
10/03/2021	10:39:35	117	3.5	14.50	0.0					
10/03/2021	10:40:25	119	3.5	14.50	0.0					
10/03/2021	10:41:15	118	3.5	14.66	0.0					
10/03/2021	10:41:52	116	3.5	14.66	0.0	End Tail Slurry				
10/03/2021	10:42:05	119	3.5	14.63	0.0					
10/03/2021	10:42:37	-6	0.0	14.04	0.0	Reset Total, Vol = 25.92 bbl				
10/03/2021	10:42:52	-6	0.0	14.02	0.0	Drop Top Plug				
10/03/2021	10:42:55	-6	0.0	14.01	0.0					
10/03/2021	10:43:45	-2	0.0	13.87	0.0					
10/03/2021	10:44:35	-1	0.0	13.77	0.0					
10/03/2021	10:45:25	-1	0.0	11.88	0.0					
10/03/2021	10:45:52	-2	0.0	10.22	0.0	Start Displacement				
10/03/2021	10:46:15	-3	0.0	10.22	0.0					
10/03/2021	10:47:05	-2	0.0	10.58	0.0					
10/03/2021	10:47:55	-1	0.0	10.43	0.0					
10/03/2021	10:48:45	0	0.0	9.59	0.0					
10/03/2021	10:49:35	66	3.6	9.52	0.0					
10/03/2021	10:50:25	127	4.6	9.58	0.0					
10/03/2021	10:51:15	111	4.6	8.68	0.0					
10/03/2021	10:52:05	93	5.0	8.89	0.0					
10/03/2021	10:52:55	107	4.6	9.00	0.0					
10/03/2021	10:53:45	94	4.6	8.39	0.0					
10/03/2021	10:54:35	96	4.7	8.38	0.0					
10/03/2021	10:55:25	92	4.6	8.38	0.0					
10/03/2021	10:56:15	90	4.6	8.38	0.0					
10/03/2021	10:57:05	90	4.6	8.40	0.0					
10/03/2021	10:57:55	92	4.7	8.38	0.0					
10/03/2021	10:58:45	175	5.0	8.38	0.0					
10/03/2021	10:59:35	205	1.4	8.40	0.0					
10/03/2021	11:00:25	240	0.8	8.41	0.0					
10/03/2021	11:01:15	412	8.4	8.38	0.0					
10/03/2021	11:02:05	447	8.4	8.38	0.0					
10/03/2021	11:02:55	481	8.4	8.39	0.0					
10/03/2021	11:03:45	543	8.3	8.38	0.0					
10/03/2021	11:04:35	567	8.3	8.39	0.0					
10/03/2021	11:05:25	633	8.3	8.39	0.0					
10/03/2021	11:06:15	665	8.3	8.39	0.0					
10/03/2021	11:07:05	695	8.3	8.39	0.0					
10/03/2021	11:07:55	752	8.3	8.39	0.0					
10/03/2021	11:08:45	731	8.2	8.39	0.0					
10/03/2021	11:09:35	513	3.3	8.38	0.0					
10/03/2021	11:10:25	525	3.3	8.38	0.0					
10/03/2021	11:11:15	532	3.3	8.38	0.0					
10/03/2021	11:12:05	549	3.3	8.38	0.0					
10/03/2021	11:12:55	571	3.3	8.38	0.0					
10/03/2021	11:13:45	576	3.3	8.38	0.0					
10/03/2021	11:14:35	583	3.3	8.38	0.0					
10/03/2021	11:15:25	598	3.3	8.38	0.0					
10/03/2021	11:16:15	1166	0.0	8.39	0.0					
10/03/2021	11:16:52	1153	0.0	8.38	0.0	Bump Top Plug				
10/03/2021	11:16:53	1150	0.0	8.39	0.0	End Displacement				

Well			Field		Job Start		Customer		Job Number	
ROTH A32-790 A32-790			WATTENBERG		Oct/03/2021		CHEVRON		EN82-00738	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message				
10/03/2021	11:17:55	1153	0.0	8.39	0.0					
10/03/2021	11:18:45	1155	0.0	8.39	0.0					
10/03/2021	11:19:35	1156	0.0	8.39	0.0					
10/03/2021	11:20:25	1153	0.0	8.39	0.0					
10/03/2021	11:21:15	1157	0.0	8.39	0.0					
10/03/2021	11:22:05	1160	0.0	8.39	0.0					
10/03/2021	11:22:55	1162	0.0	8.39	0.0					
10/03/2021	11:23:45	1160	0.0	8.39	0.0					
10/03/2021	11:24:35	1160	0.0	8.39	0.0					
10/03/2021	11:25:25	1162	0.0	8.39	0.0					
10/03/2021	11:26:15	1166	0.0	8.39	0.0					
10/03/2021	11:27:05	1165	0.0	8.39	0.0					
10/03/2021	11:27:55	1166	0.0	8.39	0.0					
10/03/2021	11:28:45	1164	0.0	8.39	0.0					
10/03/2021	11:30:25	1164	0.0	8.39	0.0					
10/03/2021	11:30:52	1164	0.0	8.39	0.0	FLOATS HELD 1 BBL BACK				
10/03/2021	11:31:15	1165	0.0	8.39	0.0					
10/03/2021	11:31:52	-1	0.0	8.39	0.0	30 BBL CEMENT TO SURFACE				
10/03/2021	11:32:05	1	0.0	8.39	0.0					
10/03/2021	11:32:55	-3	0.0	8.39	0.0					
10/03/2021	11:33:45	-7	0.0	8.39	0.0					
10/03/2021	11:33:52	-5	0.0	8.39	0.0	TOP OF TAIL 1676'				
10/03/2021	11:34:35	-4	0.0	8.39	0.0					
10/03/2021	11:35:25	-3	0.0	8.39	0.0					
10/03/2021	11:36:15	-3	0.0	8.39	0.0					
10/03/2021	11:37:05	-3	0.0	8.39	0.0					
10/03/2021	11:37:55	-4	0.0	8.39	0.0					
10/03/2021	11:38:45	-3	0.0	8.39	0.0					
10/03/2021	11:39:35	-3	0.0	8.39	0.0					
10/03/2021	11:40:25	0	0.0	8.39	0.0					
10/03/2021	11:41:15	-2	0.0	8.39	0.0					
10/03/2021	11:42:05	-1	0.0	8.39	0.0					
10/03/2021	11:42:27	0	0.2	8.38	0.0	WASH OUT CELLAR 10 BBL				
10/03/2021	11:42:55	38	3.1	8.38	0.0					
10/03/2021	11:43:45	41	3.0	8.39	0.0					
10/03/2021	11:44:35	42	3.0	8.39	0.0					
10/03/2021	11:45:25	43	3.1	8.39	0.0					
10/03/2021	11:45:52	43	3.0	8.39	0.0	End Job				
10/03/2021	11:46:15	-5	0.0	8.39	0.0					
10/03/2021	11:47:05	68	2.1	8.39	0.0					
10/03/2021	11:47:55	451	7.9	8.39	0.0					
10/03/2021	11:48:45	430	8.0	8.39	0.0					
10/03/2021	11:49:35	7	0.2	8.42	0.0					
10/03/2021	11:50:25	3	0.0	8.32	0.0					
10/03/2021	11:51:15	3	0.0	8.37	0.0					
10/03/2021	11:52:05	3	0.0	7.81	0.0					
10/03/2021	11:52:55	-0	0.0	8.09	0.0					
10/03/2021	11:53:45	0	0.0	8.39	0.0					

<b>Well</b> ROTH A32-790 A32-790	<b>Field</b> WATTENBERG	<b>Job Start</b> Oct/03/2021	<b>Customer</b> CHEVRON	<b>Job Number</b> EN82-00738
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Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl						
Slurry 4.6	N2		Mud	Maximum Rate 8.5	Total Slurry 193.5	Mud 0.0		Spacer 30.3	N2		
Treating Pressure Summary, psi					Breakdown Fluid						
Maximum 2584	Final 0	Average 392	Bump Plug to 1140	Breakdown	Type		Volume bbl		Density lb/gal		
Avg. N2 Percent %		Designed Slurry Volume 186.6 bbl		Displacement 185.2 bbl		Mix Water Temp 75 degF		Cement Circulated to Surface?	<input checked="" type="checkbox"/>	Volume 30.0 bbl	
								Washed Thru Perfs		<input type="checkbox"/>	To ft
Customer or Authorized Representative				Schlumberger Supervisor ZACHARY BUCK				Circulation Lost	<input type="checkbox"/>	Job Completed	<input checked="" type="checkbox"/>
								-		-	

**Well** ROTH A32-790  
**Field** WATTENBERG  
**Engineer** ZACHARY BUCK  
**Country** USA

**Client** CHEVRON  
**SIR No.** EN82-00738  
**Job Type** SURFACE  
**Job Date** Duane Gonzalez, James Koy, Jos

