

Cement Post Job Report

Client: PDC Energy

Well Name: George 17N

API #: 05-123-51781

Job Date: April 22, 2024

Job Type: New Well - 5.5" Production String

Cement Company & Contact: EXERO Well Integrity -
Cheve Meyer 720-239-3819

EXERO

TREATMENT REPORT

CLIENT	WELL	RIG	JOB TYPE	THREAD TYPE	WELLHEAD CONNECTION
PDC Energy	George 17N	True 41	Production	Buttress	5 1/2" HP Cement Head

WELL MD (FT)	WELL TVD (FT)	DEVIATION (DEG)	NUMBER OF STAGES	BHST (DEG)	BHCT (DEG)
17,388	6752	90	1	230	230

PACKER/RETAINER/CIBP/DV TOOL DEPTHS (FT)	TOOL TYPE	TOP OF PERFS (FT)	BOTTOM OF PERFS (FT)	NUMBER OF HOLES

CASING/TUBING/DP DETAILS								
STRING TYPE	GRADE	OD"	WT/FT	ID"	OH SIZE"	% EXCESS LEAD	% EXCESS TAIL	TOTAL DEPTH (FT)
Surface	K55	9.625	36	8.921	12.25			1989
Production	P110	5.5	20	4.778	8.5	0	0	17,388
MAXIMUM CASING/TUBING/DP PSI					MAXIMUM ANNULAR PSI			

Mud Type	OBM	Rotate Y,N	Yes	Circulation Data				Water Requirements (bbls)		
Mud ppg	10.2	Rate (rpm)		Circulate Time (hrs)		1.5	Spacers		160	
Flow Temp		Torque Val.	13000	Circulation Rate (bpm)		10.5	PSI	1400	Stage 1 Lead	148
Vis. Sec/qt		Time (hr)	3	Full Circulation ? (Y,N,P)		Yes			Stage 1 Tail	225
PV (cP)		Pipe Reciprocation		Gas Present (Y,N)		NO	Units		Stage 2 Lead	
Yield Pt		Recip Y,N		Centralizers/Plugs				Stage 2 Tail		
10 sec gel		Stroke (ft)		Quantity & Type		Customer Provided			Displacement	385
10 min gel		Recip time		Top Plug/Type		Customer Provided			Wash up	20
30 min gel		Stuck ?		Bottom Plug/Type		Customer Provided			Total + 10% Safety	1032

Preflush & Spacers		Stage 1 Lead - Class G		Stage 1 Tail - Class G		Stage 2 Lead		Stage 2 Tail		Displacement	
Spacer 1	Spacer	Density	12.9	Density	13.7	Density		Density		Fluid Type	Water
Density	12	Sacks	1643	Sacks	1426	Sacks		Sacks		Dens. ppg	8.33
Volume	160	Vol/bbls	319.0	Vol/bbls	347.9	Vol/bbls	0.0	Vol/bbls	0.0	Vol. bbl	385
Rate	10	Rate	10	Rate	10	Rate		Rate		Rate bpm	10
Spacer 2		Yield	1.09	Yield	1.37	Yield		Yield		Clay Stay?	No
Density		Gal/Sk	3.77	Gal/Sk	6.63	Gal/Sk		Gal/Sk		Biocide ?	YES
Volume		% Excess	0	% Excess	0	% Excess		% Excess		Slow @ bbl	365
Rate		TOL (ft)	800	TOT (ft)	8618	TOL (ft)		TOT (ft)		Bump PSI	3300

Final Displacement (bbls)	385
Bump Plug?	Yes
Final Bump Pressure (psi)	3300
Full Returns throughout job?	Full
Vol. away/Time when returns lost	
Vol. away when returns were regained	
Spacer to Surface?	Yes
Spacer volume returned (bbls)	122
Cement to surface?	No
Cement volume to surface stage 1	
Cement volume to surface stage 2	

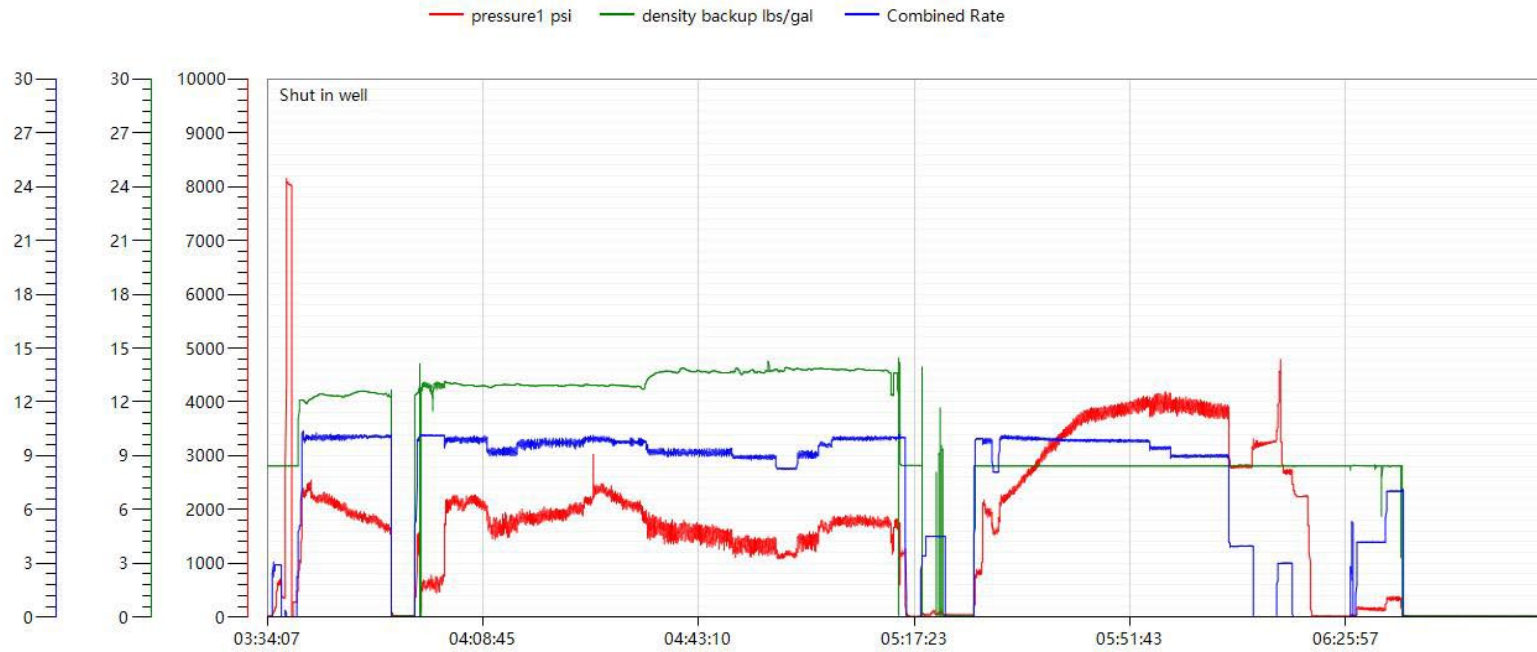
Surface Top Out Details-Pumped		Job Summary & Chems Used	
Cement Type		MFC 47 (gal)	112
Dens. ppg		MFC 67 (gal)	160
Sacks qty		Defoamer (gal)	35
Gal/sk		Biocide (gal)	20
Yield		Corr. Inhib (gal)	
Lbs. of chloride used		Fiber (lbs)	
Top out pipe used ?		Chloride (lbs)	
Feet of top out pipe		Retarder (lbs)	
Annulus holding?		Clay Stay (gal)	
Sodium Silicate Used		Other	

JOB LOG

CLIENT	WELL	RIG	JOB TYPE	START DATE	Ambient Conditions		
PDC Energy	George 17N	True 41	Production	4/22/2024	Temp / Hum / Air Press 40 Deg F / 86% / 24.86 in		
DATE (dd/mm)	TIME (hh:mm)	DENSITY (ppg)	RATE (bpm)	VOL. (bbl)	TOTAL VOL.	PRESSURE	TREATMENT COMMENTS
4/21/2024	6:00:00 PM						CREW ARRIVED ON LOCATION
4/22/2024	1:00:00 AM						REQUESTED LOCATION TIME 01:00
4/22/2024	2:00:00 AM						RIG UP
4/22/2024	3:15:00 AM						SAFETY MEETING
4/22/2024	3:30:00 AM						LOAD BOTTOM PLUG
4/22/2024	3:35:00 AM	8.3	3.0	3	3	650	FILL LINES
4/22/2024	3:37:00 AM	8.3	1.0	1	1	8000	PRESSURE TEST
4/22/2024	3:40:00 AM	12	5.0	0	0	1000	ONLINE WITH SPACER
4/22/2024	3:44:00 AM	12	10.0	50	50	2180	SPACER
4/22/2024	3:49:00 AM	12	10.0	100	100	1880	SPACER
4/22/2024	3:54:00 AM	12	10.0	160	160	1820	TOTAL SPACER PUMPED/ SHUT DOWN DROP 2ND PLUG
4/22/2024	3:56:00 AM	12.9	10.0	0	0	1600	BEGIN LEAD CEMENT
4/22/2024	4:04:00 AM	12.9	10.0	50	50	1500	LEAD CEMENT
4/22/2024	4:08:00 AM	12.9	10.0	100	100	2120	LEAD CEMENT
4/22/2024	4:12:00 AM	12.9	9.0	150	150	1800	LEAD CEMENT
4/22/2024	4:18:00 AM	12.9	10.0	200	200	2000	LEAD CEMENT
4/22/2024	4:25:00 AM	12.9	10.0	250	250	2100	LEAD CEMENT
4/22/2024	4:33:00 AM	12.9	10.0	300	300	2250	LEAD CEMENT
4/22/2024	3:34:00 AM	12.9	10.0	319	319	2000	TOTAL LEAD CEMENT PUMPED
4/22/2024	3:35:00 AM	13.7	9.0	0	0	1690	BEGIN TAIL CEMENT
4/22/2024	3:41:00 AM	13.7	9.3	50	50	1750	TAIL CEMENT
4/22/2024	4:47:00 AM	13.7	9.0	100	100	1550	TAIL CEMENT
4/22/2024	4:53:00 AM	13.7	9.0	150	150	1400	TAIL CEMENT
4/22/2024	4:58:00 AM	13.7	8.3	200	200	1220	TAIL CEMENT
4/22/2024	5:03:00 AM	13.7	9.5	250	250	1580	TAIL CEMENT
4/22/2024	5:08:00 AM	13.7	10.0	300	300	1780	TAIL CEMENT
4/22/2024	5:14:00 AM	13.7	10.0	348	348	1750	TOTAL TAIL CEMENT PUMPED
4/22/2024	5:15:00 AM	8.3	10.0	10	10	1190	SUGAR WATER 10BBL
4/22/2024	5:17:00 AM						SHUTDOWN WASH PUMP AND LINES
4/22/2024	5:19:00 AM						DROP TOP PLUG
4/22/2024	5:25:00 AM	8.3	10.0	0	0	1200	BEGIN DISPLACEMENT
4/22/2024	5:33:00 AM	8.3	10.0	50	50	2286	DISPLACEMENT
4/22/2024	5:38:00 AM	8.3	10.0	100	100	3100	DISPLACEMENT
4/22/2024	5:45:00 AM	8.3	10.0	150	150	3700	DISPLACEMENT
4/22/2024	5:50:00 AM	8.3	10.0	200	200	3850	DISPLACEMENT
4/22/2024	5:55:00 AM	8.3	10.0	250	250	4000	DISPLACEMENT
4/22/2024	5:57:00 AM	8.3	10.0	263	263	3900	OVERBOARD AT CALCULATED SPACER TO SURFACE
4/22/2024	6:00:00 AM	8.3	9.0	300	300	4000	DISPLACEMENT
4/22/2024	6:06:00 AM	8.3	9.0	350	350	3800	DISPLACEMENT
4/22/2024	6:08:00 AM	8.3	4.0	365	365	2850	SLOW RATE TO LAND PLUG 500 PSI OVER FCP
4/22/2024	6:12:00 AM	8.3	4.0	385	385	3300	LANDED PLUG AT 3300 PSI
4/22/2024	6:16:00 AM	8.3	3.0	5	5	4800	ONLINE TO BURST DISK BURSTED AT 4800 PSI
4/22/2024	6:20:00 AM						CHECK FLOATS 4 BBL BACK
4/22/2024	6:25:00 AM						FLUSH STACK
4/22/2024	6:45:00 AM						RIG DOWN AND DEPART LOCATION

George 17N Production Pump Chart – Pressure / Rate / Density

Chart Report



Date: wellname: Location: Country: Operators: Supervisor: Jobtype: Address: Comment: