

Well Name: COMANCHE 25-36 FED STATE COM	Well Location: T26S / R35E / SEC 25 / NWNE / 32.020502 / -103.3175249	County or Parish/State: LEA / NM
Well Number: 1H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM125402	Unit or CA Name:	Unit or CA Number:
US Well Number: 300254744900X1	Well Status: Drilling Well	Operator: CAZA OPERATING LLC

Subsequent Report

Type of Submission: Subsequent Report	Type of Action: Drilling Operations
Date Sundry Submitted: 03/03/2021	Time Sundry Submitted: 05:10
Date Operation Actually Began: 03/02/2021	

Actual Procedure: 03/02/2021 - Drilled 12.25" hole to 9,370'MD. Ran 9.625" 40# HCL80 BTC casing to 7,124'MD and 9.625" 47# HCL80 BTC to 9,360'MD. ECP @ 4,918'MD and DVT @ 4,915'MD. Cement stage 1 with 1005sx lead 11.5ppg Class C and 223sx tail 15.6ppg Class H cement. Circulate cement off DVT and ECP. Cement stage 2 with 3200sx lead 11.5ppg Class C and 150sx tail 14.8ppg Class C. Circulate 948sx to surface.

SR Attachments

PAActual Procedure

Comanche_1H_Intermediate_Cement_Report_20210303050801.pdf

Comanche_25_36_State_Fed_Com_1H___Intermediate_Casing_Tally_As_Run_20210303050727.pdf

Received by OCD: 3/4/2021 4:15:28 AM

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US Well Number: 300254744900X1	Well Status: Drilling Well	Operator: CAZA OPERATING LLC

Operator Certification

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a submission of Form 3160-5 or a Sundry Notice.

Operator Electronic Signature: MORRIS	Signed on: MAR 03, 2021 05:08 AM
Name: CAZA OPERATING LLC	
Title: Engineer	
Street Address: 200 NORTH LORRAINE SUITE 1550	
City: MIDLAND	State: TX
Phone: (432) 638-8475	
Email address: NOT ENTERED	

Field Representative

Representative Name: STEVE MORRIS		
Street Address: 200 N. LORRAINE ST 1550		
City: MIDLAND	State: TX	Zip: 79701
Phone: (198)541-5972		
Email address: steve.morris@morcorengineering.com		

BLM Point of Contact

BLM POC Name: Jonathon W Shepard	BLM POC Title: Petroleum Engineer
BLM POC Phone: 5752345972	BLM POC Email Address: jshepard@blm.gov
Disposition: Accepted	Disposition Date: 03/03/2021
Signature: Jonathon Shepard	

Rig: Citadel #4
Well: Comanche 25-36 S.F.C 1H
County: Lea
Prospect: Bone Springs
Date: 2/26/2021



	Bottom Csg	Top Csg
Casing Size (in)	9 5/8	9 5/8
Connection Type	BTC	BTC
Weight (lb/ft)	47.0	40.0
Grade	HCL80	HCL80
Casing I.D. (in)	8.681	8.835
Casing Drift (in)	8.500	8.75
Capacity (bbl/ft)	0.0732	0.0758 *
Disp. (bbl/ft)	0.0168	0.0142 *
Mud Wt. (ppg)	10.00	10.00
Bouyancy Factor	0.847	0.847 *
Block Weight (lbs)	47000.000	47000.000
Burst Strength (psi)	7,100	5,750
Collapse Strength (psi)	6,870	4,230
Tension Strength (lb)	1,027,000	836,000
Min torque (ft-lbs)	7,610	6,200
Optimum torque (ft-lbs)	10,150	8,270
Max torque (ft-lbs)	12,690	10,340
Confirmed drift OD (in)	8.68	8.53

Total Jts on Loc.	53	174
Total Jts ran in hole	53	168
Total Jts remain out	0	6
Marker Jts on Loc.		2
Marker Jts ran in hole		0
Marker Jts remain out		0
Damaged Jts on Loc.	0	1

T.D. (ft)	9,370.00 (From KB)
Shoe Depth (ft)	9,360.27
Top of FC (ft)	9,314.00

XO Info:	
OD	
ID	
Length	
Top Depth	

Top Liner (ft):	
Liner Lap(ft):	

Btm Csg Length	2,189.51 *
Top Csg Length	7,110.67 *

RKB to GL (ft)	23.60
RKB to 20" Cond. (ft.)	
RKB to 5.5" Mandrel (ft)	

13 3/8 Landing Joint	? (see instructions)
9 5/8" Landing Jt	? (see instructions)

Required Stick Up (ft)	4.25 *
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(* = Auto Calc.)

**type "out" in comments to remove jt from calculations

Joint #	Run In Hole #	JOINT LENGTH (ft)	CUM. LENGTH (ft) *	DEPTH FROM KB TO TOP OF JT (ft)*	O.D. *	Wt. (lb/ft) *	Wt. Ind. READING (lbs) *	CAP. (BBI) *	DISPL. (BBI) *	COMMENTS:
Shoe		2.00	1.98	9,358.29	9.625	47.00	47,080	0.15	0.03	Shoe
226	1	42.14	44.14	9,316.13	9.625	47.00	48,757	3.23	0.74	Centralizer
FC		1.80	45.94	9,314.33	9.625	47.00	48,829	3.36	0.77	Float Collar
225	2	42.4	88.34	9,271.93	9.625	47.00	50,517	6.47	1.48	Centralizer
224	3	42.41	130.75	9,229.52	9.625	47.00	52,205	9.57	2.20	Centralizer
223	4	42.41	173.16	9,187.11	9.625	47.00	53,893	12.68	2.91	
222	5	42.41	215.57	9,144.70	9.625	47.00	55,582	15.78	3.62	
221	6	42.43	258.00	9,102.27	9.625	47.00	57,271	18.89	4.33	
220	7	41.36	299.36	9,060.91	9.625	47.00	58,917	21.91	5.03	
219	8	41.53	340.89	9,019.38	9.625	47.00	60,570	24.95	5.73	Centralizer
218	9	40.81	381.70	8,978.57	9.625	47.00	62,195	27.94	6.41	
217	10	42.42	424.12	8,936.15	9.625	47.00	63,884	31.05	7.13	
216	11	42.39	466.51	8,893.76	9.625	47.00	65,571	34.15	7.84	
215	12	41.57	508.08	8,852.19	9.625	47.00	67,226	37.19	8.54	
214	13	42.09	550.17	8,810.10	9.625	47.00	68,902	40.27	9.24	Centralizer
213	14	42.39	592.56	8,767.71	9.625	47.00	70,589	43.38	9.96	
212	15	42.42	634.98	8,725.29	9.625	47.00	72,278	46.48	10.67	
211	16	42.44	677.42	8,682.85	9.625	47.00	73,967	49.59	11.38	
210	17	42.41	719.83	8,640.44	9.625	47.00	75,656	52.69	12.09	
209	18	42.42	762.25	8,598.02	9.625	47.00	77,344	55.80	12.81	Centralizer
208	19	38.78	801.03	8,559.24	9.625	47.00	78,888	58.64	13.46	
207	20	42.05	843.08	8,517.19	9.625	47.00	80,562	61.71	14.16	
206	21	42.39	885.47	8,474.80	9.625	47.00	82,250	64.82	14.88	
205	22	42.39	927.86	8,432.41	9.625	47.00	83,937	67.92	15.59	
204	23	42.4	970.26	8,390.01	9.625	47.00	85,625	71.02	16.30	Centralizer
203	24	42.23	1,012.49	8,347.78	9.625	47.00	87,306	74.11	17.01	
202	25	41.98	1,054.47	8,305.80	9.625	47.00	88,977	77.19	17.72	
201	26	41.61	1,096.08	8,264.19	9.625	47.00	90,634	80.23	18.41	
200	27	40.99	1,137.07	8,223.20	9.625	47.00	92,266	83.23	19.10	
199	28	42.43	1,179.50	8,180.77	9.625	47.00	93,955	86.34	19.82	Centralizer
198	29	41.91	1,221.41	8,138.86	9.625	47.00	95,623	89.41	20.52	
197	30	42.42	1,263.83	8,096.44	9.625	47.00	97,312	92.51	21.23	
196	31	42.29	1,306.12	8,054.15	9.625	47.00	98,995	95.61	21.94	
195	32	42.08	1,348.20	8,012.07	9.625	47.00	100,670	98.69	22.65	
194	33	42.42	1,390.62	7,969.65	9.625	47.00	102,359	101.79	23.36	Centralizer
193	34	42.42	1,433.04	7,927.23	9.625	47.00	104,048	104.90	24.08	
192	35	42.43	1,475.47	7,884.80	9.625	47.00	105,737	108.00	24.79	
191	36	42.42	1,517.89	7,842.38	9.625	47.00	107,426	111.11	25.50	
190	37	42.42	1,560.31	7,799.96	9.625	47.00	109,114	114.21	26.21	
189	38	42.43	1,602.74	7,757.53	9.625	47.00	110,803	117.32	26.93	Centralizer
188	39	42.05	1,644.79	7,715.48	9.625	47.00	112,477	120.40	27.63	
187	40	42.4	1,687.19	7,673.08	9.625	47.00	114,165	123.50	28.34	
186	41	42.04	1,729.23	7,631.04	9.625	47.00	115,839	126.58	29.05	
185	42	41.98	1,771.21	7,589.06	9.625	47.00	117,510	129.65	29.76	
184	43	42.4	1,813.61	7,546.66	9.625	47.00	119,198	132.76	30.47	Centralizer
183	44	42.41	1,856.02	7,504.25	9.625	47.00	120,886	135.86	31.18	
182	45	40.4	1,896.42	7,463.85	9.625	47.00	122,495	138.82	31.86	
181	46	42.4	1,938.82	7,421.45	9.625	47.00	124,182	141.92	32.57	
180	47	42.42	1,981.24	7,379.03	9.625	47.00	125,871	145.03	33.28	
179	48	42.41	2,023.65	7,336.62	9.625	47.00	127,559	148.13	34.00	Centralizer
178	49	42.4	2,066.05	7,294.22	9.625	47.00	129,247	151.23	34.71	
177	50	42.42	2,108.47	7,251.80	9.625	47.00	130,936	154.34	35.42	
176	51	42.41	2,150.88	7,209.39	9.625	47.00	132,624	157.44	36.13	
175	52	42.43	2,193.31	7,166.96	9.625	47.00	134,313	160.55	36.85	
174	53	42.14	2,235.45	7,124.82	9.625	40.00	135,741	163.74	37.45	Begin 40#

Joint #	Run In Hole #	JOINT LENGTH (ft)	CUM. LENGTH (ft) *	DEPTH FROM KB TO TOP OF JT (ft)*	O.D. *	Wt. (lb/ft) *	Wt. Ind. READING (lbs) *	CAP. (BBI) *	DISPL. (BBI) *	COMMENTS:
173	54	42.12	2,277.57	7,082.70	9.625	40.00	137,168	166.94	38.04	
172	55	42.14	2,319.71	7,040.56	9.625	40.00	138,596	170.13	38.64	
171	56	42.14	2,361.85	6,998.42	9.625	40.00	140,024	173.33	39.24	
170	57	42.14	2,403.99	6,956.28	9.625	40.00	141,451	176.52	39.84	Centralizer
169	58	42.11	2,446.10	6,914.17	9.625	40.00	142,878	179.71	40.44	
168	59	42.12	2,488.22	6,872.05	9.625	40.00	144,305	182.90	41.04	
167	60	42.13	2,530.35	6,829.92	9.625	40.00	145,732	186.10	41.63	
166	61	42.16	2,572.51	6,787.76	9.625	40.00	147,161	189.29	42.23	
165	62	42.13	2,614.64	6,745.63	9.625	40.00	148,588	192.49	42.83	Centralizer
164	63	42.16	2,656.80	6,703.47	9.625	40.00	150,017	195.68	43.43	
163	64	42.14	2,698.94	6,661.33	9.625	40.00	151,444	198.88	44.03	
162	65	42.15	2,741.09	6,619.18	9.625	40.00	152,872	202.07	44.63	
161	66	42.16	2,783.25	6,577.02	9.625	40.00	154,301	205.27	45.22	
160	67	42.15	2,825.40	6,534.87	9.625	40.00	155,729	208.46	45.82	Centralizer
159	68	42.17	2,867.57	6,492.70	9.625	40.00	157,157	211.66	46.42	
158	69	42.16	2,909.73	6,450.54	9.625	40.00	158,586	214.85	47.02	
157	70	41.81	2,951.54	6,408.73	9.625	40.00	160,002	218.02	47.61	
156	71	42.12	2,993.66	6,366.61	9.625	40.00	161,429	221.22	48.21	
155	72	42.15	3,035.81	6,324.46	9.625	40.00	162,857	224.41	48.81	Centralizer
154	73	42.14	3,077.95	6,282.32	9.625	40.00	164,285	227.61	49.41	
153	74	42.15	3,120.10	6,240.17	9.625	40.00	165,713	230.80	50.01	
152	75	42.16	3,162.26	6,198.01	9.625	40.00	167,142	234.00	50.61	
151	76	42.16	3,204.42	6,155.85	9.625	40.00	168,570	237.19	51.21	
150	77	42.12	3,246.54	6,113.73	9.625	40.00	169,997	240.39	51.80	Centralizer
149	78	42.16	3,288.70	6,071.57	9.625	40.00	171,425	243.58	52.40	
148	79	42.15	3,330.85	6,029.42	9.625	40.00	172,853	246.78	53.00	
147	80	42.11	3,372.96	5,987.31	9.625	40.00	174,280	249.97	53.60	
146	81	42.14	3,415.10	5,945.17	9.625	40.00	175,708	253.16	54.20	
145	82	42.15	3,457.25	5,903.02	9.625	40.00	177,136	256.36	54.80	Centralizer
144	83	41.81	3,499.06	5,861.21	9.625	40.00	178,552	259.53	55.39	
143	84	42.11	3,541.17	5,819.10	9.625	40.00	179,979	262.72	55.99	
142	85	42.17	3,583.34	5,776.93	9.625	40.00	181,408	265.91	56.59	
141	86	42.15	3,625.49	5,734.78	9.625	40.00	182,836	269.11	57.18	
140	87	41.79	3,667.28	5,692.99	9.625	40.00	184,252	272.28	57.78	Centralizer
139	88	42.14	3,709.42	5,650.85	9.625	40.00	185,679	275.47	58.38	
138	89	42.15	3,751.57	5,608.70	9.625	40.00	187,107	278.67	58.97	
137	90	41.79	3,793.36	5,566.91	9.625	40.00	188,523	281.83	59.57	
136	91	42.11	3,835.47	5,524.80	9.625	40.00	189,950	285.03	60.17	
135	92	42.16	3,877.63	5,482.64	9.625	40.00	191,378	288.22	60.76	Centralizer
134	93	42.15	3,919.78	5,440.49	9.625	40.00	192,806	291.42	61.36	
133	94	41.81	3,961.59	5,398.68	9.625	40.00	194,223	294.59	61.96	
132	95	41.78	4,003.37	5,356.90	9.625	40.00	195,638	297.75	62.55	
131	96	42.14	4,045.51	5,314.76	9.625	40.00	197,066	300.95	63.15	
130	97	42.15	4,087.66	5,272.61	9.625	40.00	198,494	304.14	63.75	Centralizer
129	98	42.14	4,129.80	5,230.47	9.625	40.00	199,922	307.34	64.35	
128	99	42.14	4,171.94	5,188.33	9.625	40.00	201,349	310.53	64.94	
127	100	42.14	4,214.08	5,146.19	9.625	40.00	202,777	313.72	65.54	
126	101	42.14	4,256.22	5,104.05	9.625	40.00	204,205	316.92	66.14	
125	102	42.15	4,298.37	5,061.90	9.625	40.00	205,633	320.11	66.74	
124	103	42.13	4,340.50	5,019.77	9.625	40.00	207,060	323.31	67.34	Centralizer
123	104	42.14	4,382.64	4,977.63	9.625	40.00	208,488	326.50	67.94	
122	105	42.13	4,424.77	4,935.50	9.625	40.00	209,915	329.69	68.53	
Pup		2.10	4,426.87	4,933.40	9.625	40.00	214,270	339.44	70.36	
ECP		14.85	4,441.72	4,918.55	9.625	40.00	214,773	340.56	70.57	
DV		2.69	4,444.41	4,915.86	9.625	40.00	214,864	340.77	70.61	
Pup		8.12	4,452.53	4,907.74	9.625	40.00	215,139	341.38	70.72	
121	106	42.13	4,494.66	4,865.61	9.625	40.00	211,343	332.89	69.13	
120	107	42.14	4,536.80	4,823.47	9.625	40.00	212,770	336.08	69.73	
119	108	42.15	4,578.95	4,781.32	9.625	40.00	214,198	339.28	70.33	Centralizer
118	109	42.14	4,621.09	4,739.18	9.625	40.00	215,626	342.47	70.93	
117	110	42.14	4,663.23	4,697.04	9.625	40.00	216,567	344.58	71.32	
116	111	41.77	4,705.00	4,655.27	9.625	40.00	217,982	347.74	71.92	
115	112	42.15	4,747.15	4,613.12	9.625	40.00	219,410	350.94	72.51	
114	113	42.13	4,789.28	4,570.99	9.625	40.00	220,837	354.13	73.11	Centralizer
113	114	42.12	4,831.40	4,528.87	9.625	40.00	222,264	357.32	73.71	
112	115	42.13	4,873.53	4,486.74	9.625	40.00	223,692	360.52	74.31	
111	116	42.13	4,915.66	4,444.61	9.625	40.00	225,119	363.71	74.91	
110	117	41.82	4,957.48	4,402.79	9.625	40.00	226,536	366.88	75.50	
109	118	42.14	4,999.62	4,360.65	9.625	40.00	227,964	370.07	76.10	Centralizer
108	119	42.13	5,041.75	4,318.52	9.625	40.00	229,391	373.27	76.70	
107	120	42.11	5,083.86	4,276.41	9.625	40.00	230,818	376.46	77.30	
106	121	42.12	5,125.98	4,234.29	9.625	40.00	232,245	379.65	77.89	
105	122	42.15	5,168.13	4,192.14	9.625	40.00	233,673	382.85	78.49	
104	123	38.16	5,206.29	4,153.98	9.625	40.00	234,966	385.74	79.03	Centralizer
103	124	42.12	5,248.41	4,111.86	9.625	40.00	236,393	388.93	79.63	
102	125	38.18	5,286.59	4,073.68	9.625	40.00	237,686	391.83	80.17	
101	126	42.14	5,328.73	4,031.54	9.625	40.00	239,114	395.02	80.77	
100	127	42.13	5,370.86	3,989.41	9.625	40.00	240,541	398.21	81.37	
99	128	42.11	5,412.97	3,947.30	9.625	40.00	241,968	401.41	81.97	Centralizer
98	129	42.12	5,455.09	3,905.18	9.625	40.00	243,395	404.60	82.57	
97	130	42.13	5,497.22	3,863.05	9.625	40.00	244,822	407.79	83.16	
96	131	42.13	5,539.35	3,820.92	9.625	40.00	246,250	410.99	83.76	
95	132	42.13	5,581.48	3,778.79	9.625	40.00	247,677	414.18	84.36	
94	133	42.16	5,623.64	3,736.63	9.625	40.00	249,105	417.38	84.96	Centralizer
93	134	42.14	5,665.78	3,694.49	9.625	40.00	250,533	420.57	85.56	
92	135	42.15	5,707.93	3,652.34	9.625	40.00	251,961	423.76	86.16	
91	136	42.13	5,750.06	3,610.21	9.625	40.00	253,388	426.96	86.76	
90	137	42.18	5,792.24	3,568.03	9.625	40.00	254,818	430.15	87.35	
89	138	42.15	5,834.39	3,525.88	9.625	40.00	256,246	433.35	87.95	Centralizer
88	139	42.15	5,876.54	3,483.73	9.625	40.00	257,674	436.54	88.55	
87	140	42.16	5,918.70	3,441.57	9.625	40.00	259,102	439.74	89.15	
86	141	42.15	5,960.85	3,399.42	9.625	40.00	260,530	442.94	89.75	

Joint #	Run In Hole #	JOINT LENGTH (ft)	CUM. LENGTH (ft) *	DEPTH FROM KB TO TOP OF JT (ft)*	O.D. *	Wt. (lb/ft) *	Wt. Ind. READING (lbs) *	CAP. (BBI) *	DISPL. (BBI) *	COMMENTS:
85	142	42.15	6,003.00	3,357.27	9.625	40.00	261,958	446.13	90.35	
84	143	42.16	6,045.16	3,315.11	9.625	40.00	263,386	449.33	90.95	Centralizer
83	144	42.14	6,087.30	3,272.97	9.625	40.00	264,814	452.52	91.54	
82	145	42.15	6,129.45	3,230.82	9.625	40.00	266,242	455.72	92.14	
81	146	42.12	6,171.57	3,188.70	9.625	40.00	267,669	458.91	92.74	
80	147	42.14	6,213.71	3,146.56	9.625	40.00	269,097	462.10	93.34	
79	148	42.15	6,255.86	3,104.41	9.625	40.00	270,525	465.30	93.94	Centralizer
78	149	42.15	6,298.01	3,062.26	9.625	40.00	271,953	468.49	94.54	
77	150	42.15	6,340.16	3,020.11	9.625	40.00	273,381	471.69	95.13	
76	151	42.14	6,382.30	2,977.97	9.625	40.00	274,809	474.88	95.73	
75	152	42.13	6,424.43	2,935.84	9.625	40.00	276,236	478.07	96.33	
74	153	42.14	6,466.57	2,893.70	9.625	40.00	277,664	481.27	96.93	Centralizer
73	154	42.14	6,508.71	2,851.56	9.625	40.00	279,092	484.46	97.53	
72	155	42.15	6,550.86	2,809.41	9.625	40.00	280,520	487.66	98.13	
71	156	42.14	6,593.00	2,767.27	9.625	40.00	281,947	490.85	98.72	
70	157	42.14	6,635.14	2,725.13	9.625	40.00	283,375	494.05	99.32	
69	158	42.16	6,677.30	2,682.97	9.625	40.00	284,803	497.24	99.92	Centralizer
68	159	42.15	6,719.45	2,640.82	9.625	40.00	286,231	500.44	100.52	
67	160	42.16	6,761.61	2,598.66	9.625	40.00	287,660	503.63	101.12	
66	161	42.15	6,803.76	2,556.51	9.625	40.00	289,088	506.83	101.72	
65	162	41.77	6,845.53	2,514.74	9.625	40.00	290,503	509.99	102.31	
64	163	42.15	6,887.68	2,472.59	9.625	40.00	291,931	513.19	102.91	Centralizer
63	164	42.15	6,929.83	2,430.44	9.625	40.00	293,359	516.38	103.51	
62	165	42.17	6,972.00	2,388.27	9.625	40.00	294,788	519.58	104.11	
61	166	42.12	7,014.12	2,346.15	9.625	40.00	296,215	522.77	104.70	
60	167	42.13	7,056.25	2,304.02	9.625	40.00	297,642	525.97	105.30	
59	168	42.14	7,098.39	2,261.88	9.625	40.00	299,070	529.16	105.90	Centralizer
58	169	42.13	7,140.52	2,219.75	9.625	40.00	300,497	532.35	106.50	
57	170	42.12	7,182.64	2,177.63	9.625	40.00	301,924	535.55	107.10	
56	171	42.13	7,224.77	2,135.50	9.625	40.00	303,352	538.74	107.70	
55	172	42.14	7,266.91	2,093.36	9.625	40.00	304,779	541.93	108.29	
54	173	42.11	7,309.02	2,051.25	9.625	40.00	306,206	545.13	108.89	Centralizer
53	174	42.18	7,351.20	2,009.07	9.625	40.00	307,635	548.32	109.49	
52	175	42.13	7,393.33	1,966.94	9.625	40.00	309,062	551.52	110.09	
51	176	42.12	7,435.45	1,924.82	9.625	40.00	310,489	554.71	110.69	
50	177	42.12	7,477.57	1,882.70	9.625	40.00	311,917	557.90	111.29	
49	178	42.13	7,519.70	1,840.57	9.625	40.00	313,344	561.10	111.88	Centralizer
48	179	42.14	7,561.84	1,798.43	9.625	40.00	314,772	564.29	112.48	
47	180	42.12	7,603.96	1,756.31	9.625	40.00	316,199	567.48	113.08	
46	181	42.13	7,646.09	1,714.18	9.625	40.00	317,626	570.68	113.68	
45	182	42.15	7,688.24	1,672.03	9.625	40.00	319,054	573.87	114.28	
44	183	42.14	7,730.38	1,629.89	9.625	40.00	320,482	577.07	114.88	Centralizer
43	184	42.12	7,772.50	1,587.77	9.625	40.00	321,909	580.26	115.47	
42	185	42.11	7,814.61	1,545.66	9.625	40.00	323,335	583.45	116.07	
41	186	42.13	7,856.74	1,503.53	9.625	40.00	324,763	586.64	116.67	
40	187	42.13	7,898.87	1,461.40	9.625	40.00	326,190	589.84	117.27	
39	188	42.12	7,940.99	1,419.28	9.625	40.00	327,617	593.03	117.87	Centralizer
38	189	42.12	7,983.11	1,377.16	9.625	40.00	329,044	596.22	118.46	
37	190	42.15	8,025.26	1,335.01	9.625	40.00	330,472	599.42	119.06	
36	191	42.15	8,067.41	1,292.86	9.625	40.00	331,900	602.61	119.66	
35	192	42.14	8,109.55	1,250.72	9.625	40.00	333,328	605.81	120.26	
34	193	42.13	8,151.68	1,208.59	9.625	40.00	334,755	609.00	120.86	Centralizer
33	194	42.14	8,193.82	1,166.45	9.625	40.00	336,183	612.19	121.46	
32	195	42.12	8,235.94	1,124.33	9.625	40.00	337,610	615.39	122.05	
31	196	42.13	8,278.07	1,082.20	9.625	40.00	339,037	618.58	122.65	
30	197	42.13	8,320.20	1,040.07	9.625	40.00	340,465	621.77	123.25	
29	198	42.12	8,362.32	997.95	9.625	40.00	341,892	624.97	123.85	Centralizer
28	199	42.15	8,404.47	955.80	9.625	40.00	343,320	628.16	124.45	
27	200	42.13	8,446.60	913.67	9.625	40.00	344,747	631.36	125.05	
26	201	42.12	8,488.72	871.55	9.625	40.00	346,174	634.55	125.64	
25	202	42.12	8,530.84	829.43	9.625	40.00	347,601	637.74	126.24	
24	203	42.14	8,572.98	787.29	9.625	40.00	349,029	640.94	126.84	Centralizer
23	204	42.12	8,615.10	745.17	9.625	40.00	350,456	644.13	127.44	
22	205	42.15	8,657.25	703.02	9.625	40.00	351,884	647.32	128.04	
21	206	42.12	8,699.37	660.90	9.625	40.00	353,311	650.52	128.64	
20	207	42.13	8,741.50	618.77	9.625	40.00	354,738	653.71	129.23	
19	208	42.16	8,783.66	576.61	9.625	40.00	356,167	656.90	129.83	Centralizer
18	209	42.12	8,825.78	534.49	9.625	40.00	357,594	660.10	130.43	
17	210	42.16	8,867.94	492.33	9.625	40.00	359,022	663.29	131.03	
16	211	42.12	8,910.06	450.21	9.625	40.00	360,449	666.49	131.63	
15	212	42.16	8,952.22	408.05	9.625	40.00	361,878	669.68	132.23	
14	213	42.13	8,994.35	365.92	9.625	40.00	363,305	672.87	132.82	Centralizer
13	214	42.12	9,036.47	323.80	9.625	40.00	364,732	676.07	133.42	
12	215	42.15	9,078.62	281.65	9.625	40.00	366,160	679.26	134.02	
11	216	42.15	9,120.77	239.50	9.625	40.00	367,588	682.46	134.62	
10	217	42.12	9,162.89	197.38	9.625	40.00	369,015	685.65	135.22	
9	218	42.12	9,205.01	155.26	9.625	40.00	370,442	688.84	135.82	Centralizer
8	219	42.15	9,247.16	113.11	9.625	40.00	371,870	692.04	136.41	
7	220	42.15	9,289.31	70.96	9.625	40.00	373,298	695.23	137.01	
6	221	42.14								OUT
5	222	42.11								OUT
4	223	42.11								OUT
3	224	42.11								OUT
2	225	42.15								OUT
1	226	42.43	9,331.74	28.53	9.625	47.00	374,987	698.34	137.73	
Mandrel		1.13	9,332.87	27.40	9.625	40.00	#REF!	#REF!	#REF!	
LJ		31.65	9,364.52	(4.25)	9.625	40.00	#REF!	#REF!	#REF!	

Joint #	Run In Hole #	JOINT LENGTH (ft)	CUM. LENGTH (ft) *	DEPTH FROM KB TO TOP OF JT (ft)*	O.D. *	Wt. (lb/ft) *	Wt. Ind. READING (lbs) *	CAP. (BBI) *	DISPL. (BBI) *	COMMENTS:

Caza Petroleum, Inc.
Comanche 25-36 Fed State Com
1H
Rig: Citadel 4



DV Intermediate
T-28066
County: Lea
Supervisor: Ruben Soto

Cementing Job Log

Date	Time	Description	Rate (BPM)	Volume (BBL)	Pressure (PSI)	Details of Operation and Procedure
03/01/2021	00:00	Job Complete				All equipment leaving location.
03/01/2021	05:30	Load Up For Job				All equipment loaded and ready to travel.
03/01/2021	05:45	Conduct Meetings				Journey management.
03/01/2021	06:30	Depart For Job				Pump trucks on location, Bulk trucks leaving Hobbs Yard.
03/01/2021	07:00	Equipment Arrives to Location				Pump trucks on location, Bulk trucks on route.
03/01/2021	07:20	Rigs Progress at Arrival				Rig on bottom @ 7:20 am.
03/01/2021	07:25	Discuss Job With Customer				Hole 12.25", TP 9360' 7166.65' 9 5/8 47# HCL80, from 7166.65 to 9360' TP 2193.31' 9 5/8 40# L80, Shoe 45.94', DV set@ 4915.86', Mud 10#, Displace with fresh Water.
03/01/2021	07:35	Conduct Meetings				Discuss rig up and cement Head JSA with cement crew.
03/01/2021	07:45	Install Cement Head				Cement head installed and ready for rig to circulate hole.
03/01/2021	07:50	Rig Circulate Hole	8		280	Rig circulate Hole through cement head.
03/01/2021	10:00	Equipment Arrives to Location				Bulk trucks 3358 and 3362 arrive on location, all cement on location.
03/01/2021	10:15	Rig Equipment				Equipment rigged up pumps are prime up and ready for cement job.
03/01/2021	10:20	Conduct Meetings				Discuss cement job JSA with cement and rig crew.
03/01/2021	10:45	Fill Lines	3	3	100	Fill lines with fresh water.
03/01/2021	10:50	Pressure Test	0.3	0.3	4630	Pressure test pumps and lines up to 4630 psi. Good test.
03/01/2021	10:51	Start Spacer	4	1	230	Fresh water spacer with dye.
03/01/2021	10:59	Spacer Complete	5	40	310	Fresh water with dye.
03/01/2021	11:00	Start Cement	8	1	590	Lead cement @ 11.5 ppg weighted with mud scales.
03/01/2021	12:11	Cement Complete	7	392	490	Lead cement @ 11.5 ppg weighted with mud scales.
03/01/2021	12:12	Start Cement	4	1	190	Tail cement @ 15.6 ppg weighted with mud scales.
03/01/2021	12:30	Cement Complete	5	47	560	Tail cement @ 15.6 ppg weighted with mud scales.
03/01/2021	12:31	Shut Down				
03/01/2021	12:35	Release Plug				Load and release to 9 5/8 top plug.
03/01/2021	12:36	Start Displacement	8	1	380	Fresh water displacement.
03/01/2021	13:20	Caught Cement	8	330	470	Catch lift pressure 330 bbls in to displacement. Pressure went from 380 to 470 psi.
03/01/2021	13:23	Decrease Rate	4	350	200	Slow rate to 4 bpm 350 bbls in to displace. Plug going through DV tool.
03/01/2021	13:28	Increase Rate	8	370	520	Increase rate to 8 BPM 370 bbls in to displacement.
03/01/2021	14:05	Decrease Rate	4	360	1160	Slow down to bump plug.
03/01/2021	14:17	Bump Plug	4	701	1760	Bump pressure went from 1480 psi to 1760 psi.
03/01/2021	14:22	Pressure Up	2	2.8	2800	Pressure up to inflate packer. 1740 to 2000 psi, 2000 to 2200 psi, 2200 to 2400 psi, 2400 to 2600 psi, 2600 to 2800 psi. Packer open with 2800 psi.

03/01/2021	14:27	Release Pressure				Release pressure down to 1750 psi. Packer took .5 BBLs to inflate.
03/01/2021	14:28	Check Floats		4.5		Check floats with 4.5 bbls back.
03/01/2021	14:35	Other				Drop bomb to open DV tool.
03/01/2021	15:10	Other	3	3	621	Pump fresh water to open DV tool. Tool open with 631 psi. Continue pumping 20 bbls.
03/01/2021	15:20	Rig Circulate Hole	8		550	Rig circulate through cement head.
03/01/2021	18:15	Shut Down	6	20	620	20 bbls gone Shut down pumps.
03/01/2021	18:30	Conduct Meetings				Cement job second stage JSA.
03/01/2021	18:45	Fill Lines	4	3	140	Fill lines with fresh water.
03/01/2021	18:50	Pressure Test	0.3	0.2	3800	Pressure test to 3800 psi. Good test.
03/01/2021	18:57	Start Spacer	4	1	170	Fresh water with dye.
03/01/2021	19:08	Spacer Complete	4	40	190	Fresh water spacer with dye.
03/01/2021	19:09	Start Cement	8	1	550	Lead cement @ 11.5 ppg. Weighted with mud scales.
03/01/2021	22:04	Cement Complete	8	1305	580	Lead cement @ 11.5 ppg weighted with mud scales.
03/01/2021	22:05	Start Cement	3	1	140	Tail cement @ 14.8 ppg weighted with mud scales.
03/01/2021	22:15	Other	3	25	200	Cement back to surface 25 bbls in to tail cement. Calculated 387 bbls=948 sks back to surface.
03/01/2021	22:20	Cement Complete	3	36	240	Tail cement @ 14.8 ppg weighted with mud scales.
03/01/2021	22:21	Shut Down				
03/01/2021	22:24	Release Plug				Load and release 9 5/8 top plug.
03/01/2021	22:25	Start Displacement	8	1	440	Fresh water displacement.
03/01/2021	23:10	Decrease Rate	3	330	930	Slow down to bump plug. 8 BPM = 1300 psi 3 Bpm =930 psi.
03/01/2021	23:17	Bump Plug	3	371	2100	Bump pressure went from 1100 psi to 2100 psi.
03/01/2021	23:23	Check Floats		4		Held pressure for 5 min, check floats with 4 bbls back. floats held.
03/01/2021	23:30	Conduct Meetings				Discuss rig down and depart JSA with cement crew.
03/01/2021	23:45	Rig Equipment				All equipment rigged down loaded and ready to travel.
03/01/2021	23:59	Called Out				Hard time @ 7:00 am. Caza 9 5/8 DV intermediate.

Cement Heights and Tops		
Slurry Type	Cement Height	Cement Top
Spacer		
Lead CMT	7025	4900
Tail CMT	778	8803
Spacer - Stage 2		
Lead CMT - Stage 2	4916	0
Tail CMT - Stage 2		4800
Crew Members		
Field Supervisor	Ruben Soto	
	Hector Orozco	
	Juan Perez	
	Brock Durham	
Bulk Hand	Teodoro Meza	
Casing Information		
	Previous Casing	Hole & Casing Info
Hole Size 1		12.25
MD:		9303
TVD:		9303
Casing Size	13.375	9.625
Casing Grade		HCL 80
Casing Length	1000	9360

Spacer					
	PPG		YLD		H2O
Lead CMT					
11.5	PPG	2.29	YLD	12.64	H2O
			1005	Sacks	50/50 Poz C
			5	bwow	Sodium Chloride (Salt)
			4	%	Bentonite Gel
			0.2	%	CPT-19
			2	%	CPT-45
			0.4	%	CPT-503P
			5	%	Gypsum
			0.4	%	CPT-20A
			0.4	%	Citric Acid
Tail CMT					
15.6	PPG	1.18	YLD	5.23	H2O
			223	Sacks	Class H Cement
			0.1	%	CPT-51A
Spacer - Stage 2					
	PPG		YLD		H2O

Casing Weight	54.50	40.00
Casing ID		8.835
DV Tool		
Shoe Joint		90
Burst Pressure	4600	
Cement Returns	387	
Mud Info		Water Info
Type	WBM	PH 7
Weight	9	Chlrd 288
		Temp 50

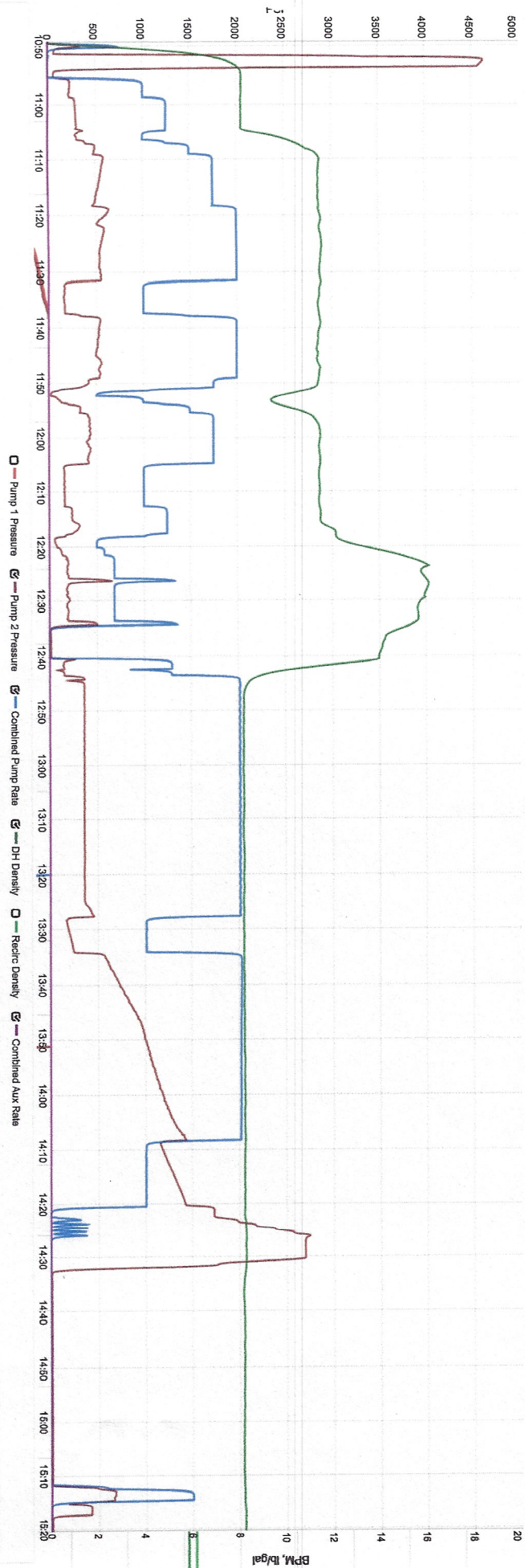
Lead CMT - Stage 2					
11.5	PPG	2.29	YLD	12.64	H2O
			3200	Sacks	50/50 Poz C
			5	bwow	Sodium Chloride (Salt)
			4	%	Bentonite Gel
			0.1	%	CPT-19
			2	%	CPT-45
			0.4	%	CPT-503P
			5	%	Gypsum
			0.15	%	CPT-20A
			0.15	%	Citric Acid
Tail CMT - Stage 2					
14.8	PPG	1.33	YLD	6.32	H2O
			150	Sacks	Class C Cement
			0.1	%	CPT-24

3/1/2021

Crest Pumping Technologies

CAZA
COMANCHE 1H

STAGE #1



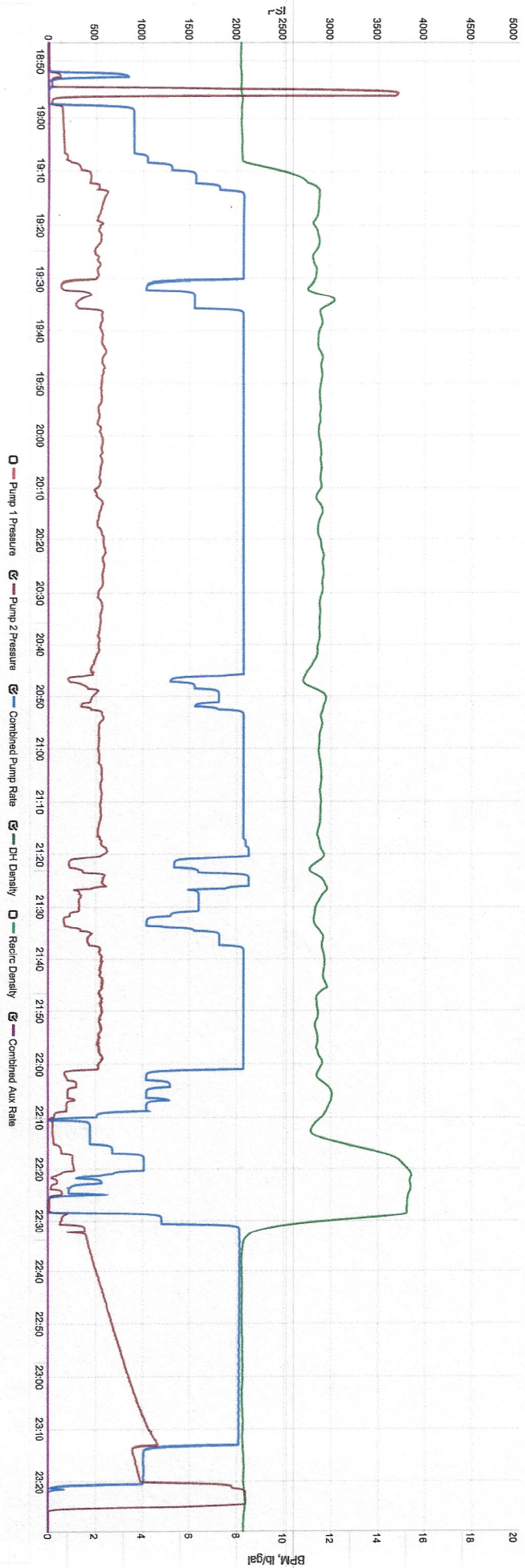
Events

Date	Flag	Total	Pump 1 Pressure	Pump 2 Pressure	Pump Combined Rate	Description
Mar 1, 2021 10:49:12 AM	A	865.0	14.873188018798828	11.900262832641602	0	Stage: SPACER
Mar 1, 2021 11:03:51 AM	B	40.4	312.9328308105469	305.79266357421875	5.012443542480469	Stage: LEAD
Mar 1, 2021 12:16:32 PM	C	501.7	323.9764709472656	311.84283447265625	5.007189750671387	Stage: TAIL
Mar 1, 2021 12:40:12 PM	D	554.8	19.996078491210938	12.694579124450684	6.705335614011487e-13	Stage: Displacement

3/1/2021

Crest Pumping Technologies

CAZA
COMANCHE 1H
STAGE #2



Events

Date	Flag	Total	Pump 1 Pressure	Pump 2 Pressure	Pump Combined Rate	Description
Mar 1, 2021 10:49:12 AM	A	865.0	14.873188018798828	11.900262832641602	0	Stage: SPACER
Mar 1, 2021 11:03:51 AM	B	40.4	312.9328308105469	305.79266357421875	5.012443542480469	Stage: LEAD
Mar 1, 2021 12:16:32 PM	C	501.7	323.9764709472656	311.84283447265625	5.007189750671387	Stage: TAIL
Mar 1, 2021 12:40:12 PM	D	554.8	19.996078491210938	12.694579124450684	6.705335614011487e-13	Stage: Displacement
Mar 1, 2021 7:07:46 PM	E	40.3	212.30999755859375	198.55416870117188	4.192996978759766	Stage: LEAD
Mar 1, 2021 10:08:27 PM	F	1,441.4	211.34652709960938	197.05377197265625	4.182703495025635	Stage: TAIL
Mar 1, 2021 10:28:18 PM	G	1,480.1	54.86483383178711	41.27032470703125	1.639391911123978e-8	Stage: Displacement

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 19643

CONDITIONS OF APPROVAL

Operator: CAZA OPERATING, LLC Suite 1550 Midland, TX79701	200 N Loraine St	OGRID: 249099	Action Number: 19643	Action Type: C-103N
OCD Reviewer plmartinez	Condition None			