

ABOVE THIS LINE FOR DIVISION USE ONLY

RECEIVED NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

2009 APR 10 AM 11:38 1220 South St. Francis Drive, Santa Fe, NM 87505



30-045-22295
Neoprene SWD
Dugan
6515

ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

IPI-339

[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☐ SWD ☒ IPI ☐ EOR ☐ PPR

Ref:
(SWD-1098)

[D] Other: Specify _____

[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or Does Not Apply

[A] ☐ Working, Royalty or Overriding Royalty Interest Owners

[B] ☐ Offset Operators, Leaseholders or Surface Owner

[C] ☐ Application is One Which Requires Published Legal Notice

[D] ☐ Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☐ Waivers are Attached

[3] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

John Alexander

Print or Type Name

John Alexander
Signature

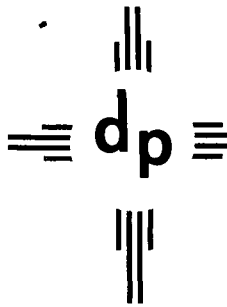
Vice-President

Title

4/9/09

Date

johnalexander@duganproduction.com
e-mail Address



dugan production corp.

4/9/2009

Engineering Bureau
New Mexico Oil Conservation Division
1220 South St. Frances Drive
Santa Fe, NM 87505

Re: Pressure Increase Request Neoprene SWD 1

Gentlemen:

Dugan Production Corp. requests a maximum surface pressure of 897 psi at the subject well.

A ~~step-rate test was conducted at the Neoprene-SWD-1 well on 4/2/2009.~~ The well is located in Sec-17, Twn-25N, Rng-10W, 1100' FSL & 1185' FWL. Injection is authorized by ADMINISTRATIVE ORDER SWD-1098. Pumping services were provided by BJ Services. Bottom hole pressure was recorded by Tefteller Inc.

Attached are copies of the following:

Administrative check list form

Bottom hole pressure versus injection rate in both tabular and graphical format.

Surface pressure versus injection rate in both tabular and graphical format.

A well bore schematic

A CD with the above information (the files are either Excel or JPEG formats)

It is my interpretation that the surface pressure vs. injection rate is too difficult to properly determine the parting pressure. Using the bottom hole pressure data, the parting pressure is shown at 2625 psi. The pressure bomb is set at 3876, so the hydrostatic pressure is 1678 psi using a gradient of 0.433 psi/ft. Subtracting the hydrostatic pressure from the bottom hole pressure, the surface parting pressure is 947 psi. Since the formation break is not very sharp, I conclude that the parting pressure is probably above this point. I can accurately maintain the maximum surface pressure at 50 psi below the parting pressure. I request that you allow me to inject at a maximum surface pressure of 897 psi (947 - 50).

Please contact me at the letterhead address is you have questions or need additional information.

Sincerely,

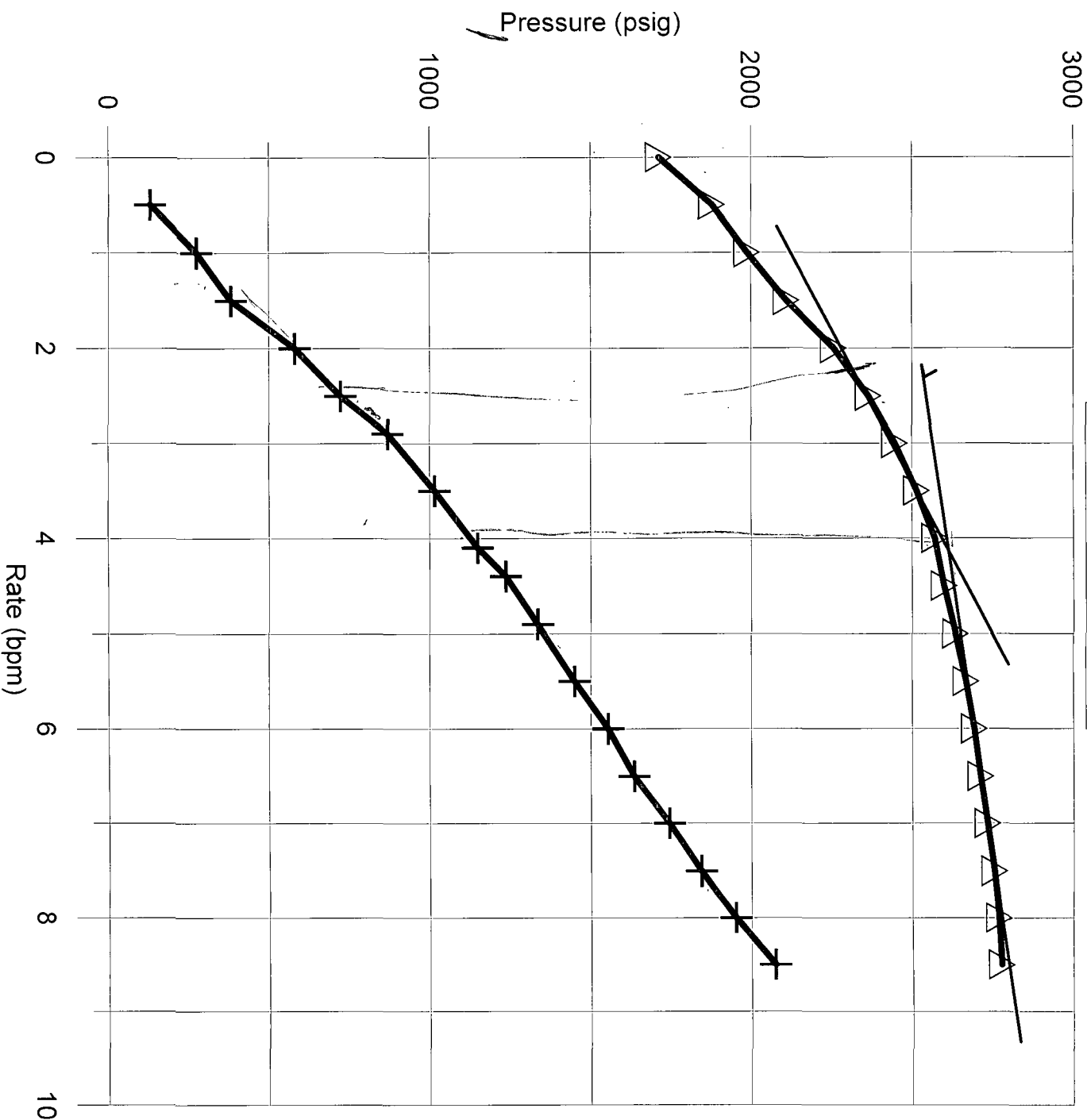
John Alexander
Vice President
john.alexander@duganproduction.com

Enclosures

3594'
897@
0.25

Dugan Production Corp.
Neoprene SWD 1
Step-Rate-Test 4/2/2009
Surf Press & BHP vs. Rate

△ BHP vs Rate
+ Surf Pressure vs Rate

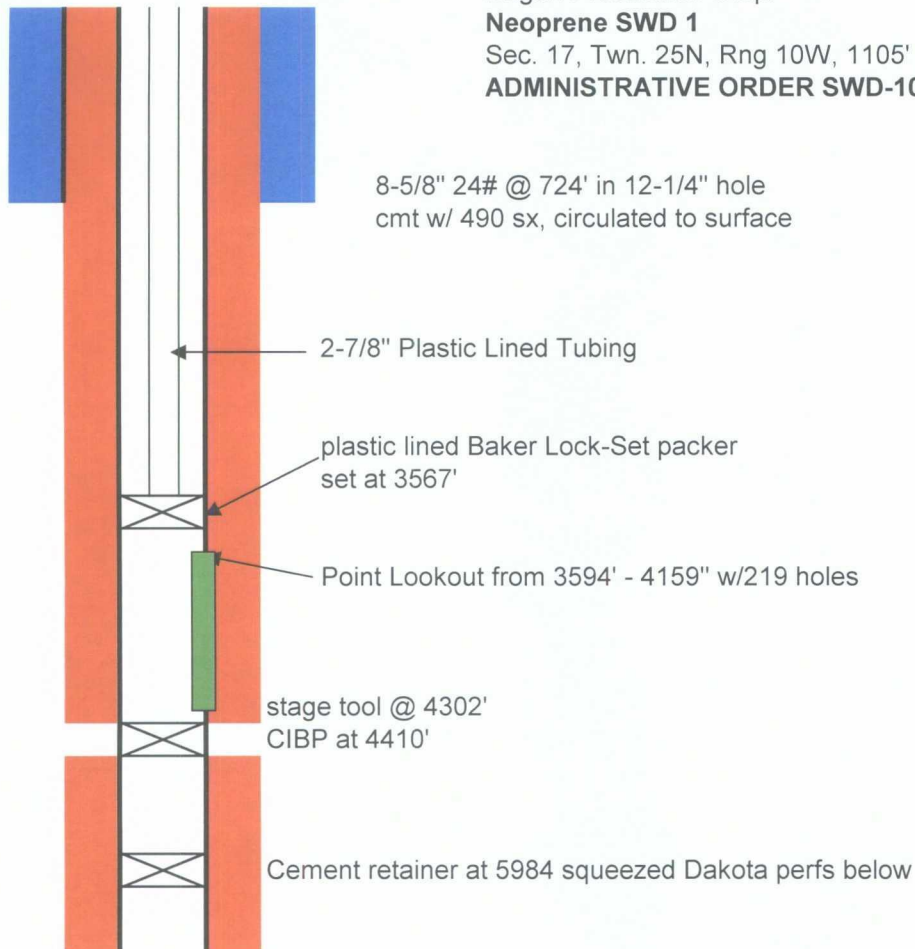


Dugan Production Corp.

Neoprene SWD 1

Sec. 17, Twn. 25N, Rng 10W, 1105' FSL & 1185' FWL

ADMINISTRATIVE ORDER SWD-1098



5-1/2" 15.5 lb. @ 6201' with stage tool @ 4302'. Cemented first stage with 250 sks regular cement. TOC calculated at 4500'. Cemented second stage with 600 sks regular cement (?). TOC calculated to be inside surface casing.

3594
x.2
719

897 $\Rightarrow$ 0.2496

BJ Services Rate vs Surface Pressure			
Dugan Production			
Neoprene			
rate	pressure		
0.5	130		
1	275		
1.5	383		
2	580		
2.5	722		
2.9	870		
3.5	1016		
4.1	1149		
4.4	1236		
4.9	1335		
5.5	1450		
6	1554		
6.5	1635		
7	1745		
7.5	1844		
8	1951		
8.5	2074		
Injection test 4/02/2009			
Neoprene SWD #1			

[illegible]

step	bhp	bht	surf rate				
0	0.01	49.961					
2.5	0.01	49.961					
3	0.01	49.871					
3.5	0.01	49.775					
4	0.01	49.692					
4.5	0.01	49.599					
5	0.01	49.515					
5.5	0.01	49.425					
6	0.01	49.34					
6.5	0.01	49.249					
7	0.01	49.165					
7.5	0.01	49.073					
8	0.01	48.981					
8.5	0.01	48.903					
9	0.01	48.824					
9.5	0.01	48.745					
10	0.01	48.666					
10.5	0.01	48.593					
11	0.01	48.514					
11.5	0.01	48.435					
12	0.01	48.356					
12.5	0.01	48.283					
13	0.01	48.204					
13.5	0.01	48.124					
14	0.01	48.045					
14.5	0.01	47.991					
15	0.01	47.944					
15.5	0.01	47.897					
16	0.01	47.85					
16.5	0.01	47.803					
17	0.01	47.756					
17.5	0.01	47.716					
18	0.01	47.669					
18.5	0.01	47.623					
19	0.01	47.576					
19.5	0.01	47.529					
20	0.01	47.483					
20.5	0.01	47.449					
21	0.01	47.415					
21.5	0.01	47.382					
22	0.01	47.348					
22.5	0.01	47.321					
23	0.01	47.287					
23.5	0.01	47.254					
24	0.01	47.22					
24.5	0.01	47.194					
25	0.01	47.16					
25.5	0.01	47.127					
26	0.01	47.093					
26.5	0.01	47.08					
27	0.01	47.072					

step	bhp	bht	surf rate				
27.5	0.01	47.065					
28	0.01	47.057					
28.5	0.01	47.05					
29	0.01	47.043					
29.5	0.01	47.029					
30	0.01	47.022					
30.5	0.01	47.015					
31	0.01	47.008					
31.5	0.01	47.001					
32	0.01	46.994					
32.5	0.01	46.975					
33	0.01	46.961					
33.5	0.01	46.948					
34	0.01	46.928					
34.5	0.01	46.915					
35	0.01	46.895					
35.5	0.01	46.882					
36	0.01	46.862					
36.5	0.01	46.849					
37	0.01	46.829					
37.5	0.01	46.815					
38	0.01	46.802					
38.5	0.01	46.789					
39	0.01	46.782					
39.5	0.01	46.775					
40	0.01	46.775					
40.5	0.01	46.768					
41	0.01	46.761					
41.5	0.01	46.761					
42	0.01	46.754					
42.5	0.01	46.747					
43	0.01	46.747					
43.5	0.01	46.74					
44	0.01	46.734					
44.5	0.01	46.746					
45	0.01	46.753					
45.5	0.01	46.759					
46	0.01	46.765					
46.5	0.01	46.772					
47	0.01	46.778					
47.5	0.01	46.791					
48	0.01	46.797					
48.5	0.01	46.804					
49	0.01	46.81					
49.5	0.01	46.817					
50	0.01	46.823					
50.5	0.01	46.855					
51	0.01	46.887					
51.5	0.01	46.92					
52	0.01	46.952					
52.5	0.01	46.991					

step	bhp	bht	surf rate				
53	0.01	47.023					
53.5	0.01	47.056					
54	0.01	47.088					
54.5	0.01	47.128					
55	0.01	47.16					
55.5	0.01	47.193					
56	0.01	47.234					
56.5	0.01	47.259					
57	0.01	47.292					
57.5	0.01	47.327					
58	0.01	47.359					
58.5	0.01	47.397					
59	0.01	47.431					
59.5	0.01	47.463					
60	0.01	47.495					
60.5	0.01	47.534					
61	0.01	47.567					
61.5	0.01	47.599					
62	0.01	47.632					
62.5	0.01	47.645					
63	0.01	47.916					
63.5	0.01	48.188					
64	0.01	48.487					
64.5	11.139	48.766					
65	35.309	49.045					
65.5	67.028	49.324					
66	120.162	49.603					
66.5	180.691	49.882					
67	239.141	50.161					
67.5	302.511	50.44					
68	365.175	50.719					
68.5	435.519	51.903					
69	499.799	53.968					
69.5	565.392	56.037					
70	639.135	58.116					
70.5	719.378	60.193					
71	798.45	62.28					
71.5	881.004	64.364					
72	961.843	66.458					
72.5	1039.61	68.55					
73	1113.763	70.653					
73.5	1188.807	72.753					
74	1266.101	74.863					
74.5	1345.216	77.557					
75	1419.343	79.786					
75.5	1491.77	82.026					
76	1560.461	84.271					
76.5	1627.733	86.514					
77	1688.284	88.768					
77.5	1692.178	91.028					
78	1692.953	93.291					

step	bhp	bht	surf rate				
78.5	1693.459	95.553					
79	1693.521	97.826					
79.5	1693.589	100.104					
80	1693.663	102.38					
80.5	1693.752	103.579					
81	1693.886	104.179					
81.5	1694.057	104.779					
82	1694.236	105.379					
82.5	1694.399	105.98					
83	1694.572	106.582					
83.5	1694.738	107.139					
84	1694.86	107.778					
84.5	1694.976	108.38					
85	1695.095	108.944					
85.5	1695.177	109.586					
86	1695.268	110.15					
86.5	1695.312	110.433					
87	1695.369	110.567					
87.5	1695.437	110.701					
88	1695.513	110.836					
88.5	1695.596	110.971					
89	1695.662	111.107					
89.5	1695.735	111.237					
90	1695.792	111.374					
90.5	1695.834	111.511					
91	1695.887	111.648					
91.5	1695.927	111.786					
92	1695.954	111.924					
92.5	1695.972	111.989					
93	1696.005	112.022					
93.5	1696.006	112.06					
94	1696.024	112.098					
94.5	1696.013	112.136					
95	1696.022	112.174					
95.5	1696.027	112.211					
96	1696.03	112.248					
96.5	1696.026	112.285					
97	1696.043	112.322					
97.5	1696.031	112.359					
98	1696.041	112.389					
98.5	1696.047	112.405					
99	1696.06	112.421					
99.5	1696.048	112.431					
100	1696.023	112.447					
100.5	1696.023	112.455					
101	1695.999	112.471					
101.5	1695.977	112.479					
102	1695.98	112.494					
102.5	1695.986	112.503					
103	1695.977	112.518					
103.5	1695.954	112.526					

step	bhp	bht	surf rate				
104	1695.965	112.54					
104.5	1695.941	112.535					
105	1712.943	112.465	0				
105.5	1727.965	112.381					
106	1748.396	112.289					
106.5	1762.342	112.205					
107	1773.042	112.12					
107.5	1781.99	112.029					
108	1789.586	111.945					
108.5	1796.369	111.86					
109	1802.344	111.769					
109.5	1807.779	111.685					
110	1813.076	111.6					
110.5	1817.853	111.46					
111	1822.279	111.558					
111.5	1826.569	111.664					
112	1830.316	111.769					
112.5	1834.066	111.874					
113	1837.812	111.98					
113.5	1841.153	112.085					
114	1844.632	112.191					
114.5	1847.837	112.296					
115	1851.045	112.402					
115.5	1854.115	112.507					
116	1857.188	112.606					
116.5	1860.095	112.802					
117	1862.908	112.873					
117.5	1865.718	112.95					
118	1868.395	113.021					
118.5	1870.934	113.098					
119	1873.477	113.168					
119.5	1876.016	113.246					
120	1878.423	113.316	0.5				
120.5	1881.235	113.393					
121	1896.475	113.464					
121.5	1899.013	113.541					
122	1902.23	113.612					
122.5	1905.763	113.548					
123	1909.197	113.386					
123.5	1912.634	113.225					
124	1915.663	113.063					
124.5	1918.287	112.901					
125	1921.316	112.739					
125.5	1923.805	112.577					
126	1926.429	112.416					
126.5	1929.192	112.254					
127	1933.979	112.092					
127.5	1941.198	111.931					
128	1946.391	111.769					
128.5	1950.389	111.551					
129	1953.983	111.326					

step	bhp	bht	surf rate				
129.5	1957.04	111.102					
130	1960.503	110.87					
130.5	1963.827	110.645					
131	1967.291	110.421					
131.5	1970.484	110.189					
132	1972.867	109.965					
132.5	1975.922	109.74					
133	1978.711	109.509					
133.5	1981.365	109.284					
134	1983.34	109.06					
134.5	1985.863	108.822					
135	1987.849	108.57	1				
135.5	1994.433	108.317					
136	2010.484	108.072					
136.5	2019.64	107.82					
137	2027.038	107.568					
137.5	2033.084	107.323					
138	2038.185	107.071					
138.5	2043.286	106.819					
139	2047.576	106.575					
139.5	2054.166	106.323					
140	2059.81	106.071					
140.5	2064.79	105.792					
141	2069.65	105.47					
141.5	2074.102	105.156					
142	2078.422	104.842					
142.5	2082.469	104.527					
143	2086.114	104.213					
143.5	2086.044	103.899					
144	2086.052	103.586					
144.5	2087.975	103.272					
145	2089.586	102.958					
145.5	2091.473	102.644					
146	2093.767	102.324					
146.5	2095.933	101.976					
147	2097.972	101.621					
147.5	2099.872	101.273					
148	2102.45	100.925					
148.5	2104.753	100.577					
149	2106.519	100.229					
149.5	2108.556	99.881					
150	2110.729	99.534	1.5				
150.5	2125.77	99.187					
151	2140.953	98.839					
151.5	2150.176	98.492					
152	2158.451	98.138					
152.5	2164.966	97.791					
153	2171.223	97.41					
153.5	2176.261	97.028					
154	2181.843	96.647					
154.5	2186.476	96.266					

step	bhp	bht	surf rate				
155	2191.517	95.885					
155.5	2195.338	95.511					
156	2199.974	95.131					
156.5	2203.526	94.75					
157	2207.756	94.37					
157.5	2211.038	93.989					
158	2214.863	93.609					
158.5	2217.891	93.188					
159	2221.612	92.739					
159.5	2224.252	92.283					
160	2227.703	91.828					
160.5	2230.476	91.379					
161	2233.119	90.924					
161.5	2236.3	90.469					
162	2238.944	90.014					
162.5	2241.444	89.567					
163	2244.496	89.113					
163.5	2247.002	88.658					
164	2249.372	88.211					
164.5	2252.014	87.764					
165	2255.854	87.366	2				
165.5	2271.245	86.967					
166	2280.395	86.562					
166.5	2287.775	86.164					
167	2293.657	85.766					
167.5	2298.87	85.361					
168	2303.264	84.964					
168.5	2307.655	84.566					
169	2311.375	84.162					
169.5	2315.228	83.764					
170	2318.941	83.367					
170.5	2322.655	82.984					
171	2325.835	82.566					
171.5	2328.748	82.149					
172	2331.521	81.739					
172.5	2334.164	81.322					
173	2337.075	80.905					
173.5	2339.578	80.496					
174	2341.95	80.079					
174.5	2344.323	79.663					
175	2346.692	79.254					
175.5	2348.926	78.838					
176	2350.892	78.422					
176.5	2353.39	78.027					
177	2355.183	77.686					
177.5	2357.25	77.346					
178	2359.316	77.005					
178.5	2361.525	76.665					
179	2363.32	76.325					
179.5	2365.116	75.978					
180	2364.052	75.638	2.5				

step	bhp	bht	surf rate				
180.5	2379.467	75.298					
181	2385.895	74.958					
181.5	2390.826	74.619					
182	2395.213	74.279					
182.5	2398.764	73.98					
183	2401.761	73.695					
183.5	2404.763	73.41					
184	2407.489	73.126					
184.5	2410.083	72.841					
185	2412.673	72.556					
185.5	2415.409	72.265					
186	2417.182	71.98					
186.5	2419.229	71.695					
187	2421.143	71.411					
187.5	2423.463	71.127					
188	2425.378	70.842					
188.5	2427.562	70.558					
189	2427.763	70.328					
189.5	2430.522	70.091					
190	2431.869	69.855					
190.5	2433.893	69.618					
191	2435.24	69.381					
191.5	2436.86	69.145					
192	2438.202	68.908					
192.5	2438.381	68.672					
193	2441.029	68.435					
193.5	2442.514	68.199					
194	2442.67	67.969					
194.5	2444.908	67.78					
195	2446.358	67.612	3				
195.5	2456.538	67.443					
196	2466.991	67.274					
196.5	2472.12	67.106					
197	2476.3	66.937					
197.5	2479.53	66.762					
198	2482.618	66.593					
198.5	2485.571	66.425					
199	2487.7	66.256					
199.5	2489.971	66.088					
200	2491.833	65.919					
200.5	2493.841	65.73					
201	2495.582	65.528					
201.5	2497.324	65.333					
202	2499.065	65.131					
202.5	2500.529	64.936					
203	2502.003	64.734					
203.5	2503.467	64.539					
204	2504.8	64.337					
204.5	2504.977	64.142					
205	2507.33	63.94					
205.5	2507.529	63.745					

step	bhp	bht	surf rate				
206	2507.895	63.543					
206.5	2508.351	63.368					
207	2511.935	63.234					
207.5	2512.106	63.093					
208	2512.421	62.951					
208.5	2512.877	62.81					
209	2513.429	62.669					
209.5	2514.038	62.528	3.5				
210	2520.024	62.387					
210.5	2531.295	62.246					
211	2536.427	62.105					
211.5	2540.189	61.964					
212	2543.673	61.83					
212.5	2546.332	61.709					
213	2548.728	61.575					
213.5	2551.115	61.447					
214	2552.823	61.32					
214.5	2554.532	61.185					
215	2556.514	61.058					
215.5	2557.814	60.93					
216	2559.386	60.803					
216.5	2559.58	60.669					
217	2559.936	60.541					
217.5	2563.012	60.414					
218	2563.184	60.28					
218.5	2563.475	60.146					
219	2563.864	60.038					
219.5	2564.334	59.931					
220	2564.896	59.817					
220.5	2565.465	59.71					
221	2566.063	59.603					
221.5	2566.708	59.489					
222	2567.392	59.382					
222.5	2568.109	59.275					
223	2568.853	59.161					
223.5	2569.597	59.054					
224	2570.34	58.946					
224.5	2571.08	58.866					
225	2570.441	58.806	4				
225.5	2581.958	58.739					
226	2583.772	58.672					
226.5	2583.96	58.612					
227	2584.282	58.545					
227.5	2584.739	58.478					
228	2585.262	58.411					
228.5	2585.863	58.351					
229	2586.507	58.284					
229.5	2587.163	58.217					
230	2587.829	58.156					
230.5	2588.527	58.09					
231	2589.228	58.036					

step	bhp	bht	surf rate				
231.5	2589.93	57.976					
232	2590.59	57.916					
232.5	2591.282	57.855					
233	2591.91	57.795					
233.5	2592.553	57.735					
234	2593.209	57.675					
234.5	2593.829	57.615					
235	2594.465	57.554					
235.5	2595.07	57.494					
236	2595.669	57.441					
236.5	2596.287	57.387					
237	2596.874	57.347					
237.5	2597.481	57.3					
238	2598.083	57.26					
238.5	2598.634	57.213					
239	2599.188	57.173	4.5				
239.5	2599.722	57.126					
240	2604.737	57.086					
240.5	2612.283	57.039					
241	2615.176	56.999					
241.5	2617.255	56.953					
242	2619.054	56.912					
242.5	2619.242	56.852					
243	2619.586	56.792					
243.5	2620.061	56.725					
244	2620.646	56.658					
244.5	2621.252	56.598					
245	2621.901	56.531					
245.5	2622.608	56.465					
246	2623.271	56.398					
246.5	2623.966	56.338					
247	2624.711	56.271					
247.5	2625.407	56.204					
248	2626.106	56.144					
248.5	2626.787	56.07					
249	2627.451	56.01					
249.5	2628.124	55.95					
250	2628.78	55.897					
250.5	2629.378	55.837					
251	2629.997	55.777					
251.5	2630.586	55.723					
252	2631.174	55.663					
252.5	2631.76	55.603					
253	2632.345	55.55					
253.5	2632.929	55.49					
254	2633.49	55.429					
254.5	2633.98	55.384					
255	2634.488	55.336	5				
255.5	2645.398	55.289					
256	2648.435	55.243					
256.5	2650.373	55.196					

step	bhp	bht	surf rate				
257	2650.56	55.149					
257.5	2653.302	55.096					
258	2653.375	55.049					
258.5	2655.273	55.002					
259	2655.345	54.956					
259.5	2655.547	54.909					
260	2655.902	54.862					
260.5	2656.365	54.782					
261	2656.824	54.729					
261.5	2657.281	54.669					
262	2657.781	54.609					
262.5	2658.318	54.549					
263	2658.816	54.488					
263.5	2659.283	54.428					
264	2659.746	54.368					
264.5	2660.297	54.308					
265	2660.876	54.248					
265.5	2661.456	54.188					
266	2652.756	54.135					
266.5	2643.067	54.095					
267	2655.816	54.048					
267.5	2660.769	54.002					
268	2663.397	53.948					
268.5	2665.341	53.902					
269	2665.341	53.857					
269.5	2667.04	53.802					
270	2667.062	53.757	5.5				
270.5	2673.521	53.708					
271	2676.154	53.655					
271.5	2678.093	53.608					
272	2678.28	53.562					
272.5	2678.58	53.482					
273	2681.634	53.395					
273.5	2683.049	53.315					
274	2683.217	53.228					
274.5	2683.479	53.149					
275	2683.843	53.062					
275.5	2684.222	52.982					
276	2687.533	52.895					
276.5	2687.587	52.815					
277	2687.654	52.732					
277.5	2687.72	52.652					
278	2687.859	52.562					
278.5	2688.095	52.489					
279	2688.411	52.436					
279.5	2688.697	52.384					
280	2688.936	52.333					
280.5	2689.264	52.276					
281	2689.726	52.223					
281.5	2690.001	52.17					
282	2690.35	52.116					

step	bhp	bht	surf rate				
282.5	2690.618	52.065					
283	2690.988	52.01					
283.5	2691.297	51.958					
284	2691.611	51.903					
284.5	2691.895	51.871					
285	2692.295	51.863	6				
285.5	2700.051	51.85					
286	2701.562	51.843					
286.5	2701.746	51.83					
287	2703.9	51.823					
287.5	2705.275	51.81					
288	2705.321	51.803					
288.5	2705.36	51.791					
289	2705.509	51.783					
289.5	2705.655	51.771					
290	2707.767	51.764					
290.5	2707.767	51.77					
291	2707.811	51.777					
291.5	2707.847	51.79					
292	2707.944	51.797					
292.5	2708.092	51.81					
293	2708.283	51.817					
293.5	2708.532	51.83					
294	2708.785	51.837					
294.5	2709.154	51.85					
295	2709.529	51.857					
295.5	2709.749	51.87					
296	2709.955	51.876					
296.5	2710.217	51.89					
297	2710.594	51.89					
297.5	2710.816	51.897					
298	2711.07	51.903					
298.5	2711.349	51.903					
299	2711.696	51.91					
299.5	2711.869	51.917					
300	2712.15	51.923	6.5				
300.5	2719.442	51.923					
301	2721.488	51.93					
301.5	2722.714	51.937					
302	2722.896	51.937					
302.5	2723.14	51.937					
303	2723.436	51.917					
303.5	2723.867	51.897					
304	2724.387	51.877					
304.5	2724.892	51.857					
305	2725.335	51.837					
305.5	2725.868	51.823					
306	2726.382	51.803					
306.5	2726.834	51.784					
307	2727.351	51.764					
307.5	2727.805	51.744					

step	bhp	bht	surf rate				
308	2728.232	51.724					
308.5	2728.75	51.697					
309	2729.205	51.665					
309.5	2729.636	51.63					
310	2730.113	51.604					
310.5	2730.51	51.572					
311	2730.892	51.537					
311.5	2731.282	51.511					
312	2731.584	51.479					
312.5	2732.025	51.444					
313	2732.393	51.418					
313.5	2732.677	51.386					
314	2732.968	51.351					
314.5	2733.327	51.324					
315	2733.674	51.304	7				
315.5	2740.212	51.284					
316	2742.414	51.258					
316.5	2742.575	51.238					
317	2742.872	51.218					
317.5	2743.236	51.191					
318	2743.61	51.171					
318.5	2746.722	51.151					
319	2746.771	51.125					
319.5	2746.834	51.106					
320	2747.051	51.085					
320.5	2747.165	51.058					
321	2747.398	51.038					
321.5	2747.641	51.018					
322	2747.936	50.998					
322.5	2748.23	50.979					
323	2748.497	50.959					
323.5	2748.792	50.945					
324	2749.037	50.926					
324.5	2749.382	50.905					
325	2749.67	50.886					
325.5	2750.051	50.865					
326	2750.345	50.846					
326.5	2750.686	50.826					
327	2751.04	50.806					
327.5	2751.358	50.786					
328	2751.674	50.759					
328.5	2751.937	50.74					
329	2752.178	50.714					
329.5	2752.433	50.693					
330	2752.784	50.666	7.5				
330.5	2756.603	50.646					
331	2759.906	50.619					
331.5	2759.929	50.6					
332	2759.948	50.581					
332.5	2761.864	50.546					
333	2761.934	50.54					

step	bhp	bht	surf rate				
333.5	2763.519	50.533					
334	2763.68	50.52					
334.5	2763.906	50.513					
335	2764.117	50.5					
335.5	2764.341	50.493					
336	2764.574	50.48					
336.5	2764.838	50.473					
337	2753.569	50.46					
337.5	2753.684	50.453					
338	2748.51	50.447					
338.5	2759.61	50.427					
339	2762.085	50.413					
339.5	2765.103	50.4					
340	2765.264	50.387					
340.5	2765.491	50.374					
341	2767.865	50.36					
341.5	2767.799	50.34					
342	2767.653	50.327					
342.5	2767.554	50.314					
343	2767.589	50.3					
343.5	2767.665	50.287					
344	2767.662	50.274					
344.5	2767.706	50.261					
345	2769.717	50.241	8				
345.5	2773.562	50.221					
346	2773.496	50.201					
346.5	2773.463	50.181					
347	2773.623	50.161					
347.5	2773.802	50.148					
348	2773.999	50.128					
348.5	2774.257	50.108					
349	2774.494	50.088					
349.5	2774.715	50.069					
350	2774.996	50.048					
350.5	2775.141	50.041					
351	2775.238	50.048					
351.5	2775.272	50.055					
352	2775.347	50.055					
352.5	2775.544	50.061					
353	2775.777	50.068					
353.5	2775.432	50.068					
354	2776.938	50.074					
354.5	2776.938	50.081					
355	2776.892	50.081					
355.5	2776.989	50.088					
356	2777.024	50.094					
356.5	2777.053	50.107					
357	2777.063	50.133					
357.5	2777.102	50.161					
358	2776.994	50.187					
358.5	2776.99	50.214					

step	bhp	bht	surf rate				
359	2776.942	50.241					
359.5	2776.807	50.267	8.5				
360	2742.719	50.294					
360.5	2693.286	50.32					
361	2675.747	50.347					
361.5	2663.827	50.374					
362	2653.817	50.4					
362.5	2644.892	50.453					
363	2636.758	50.546					
363.5	2629.589	50.639					
364	2622.694	50.732					
364.5	2616.341	50.826					
365	2610.267	50.919					
365.5	2604.604	51.012					
366	2599.079	51.105					
366.5	2593.958	51.198					
367	2588.844	51.291					
367.5	2583.866	51.384					
368	2579.021	51.477					
368.5	2574.3	51.604					
369	2569.706	51.737					
369.5	2565.254	51.87					
370	2560.94	52.003					
370.5	2556.483	52.136					
371	2552.306	52.269					
371.5	2548.266	52.396					
372	2544.089	52.529					
372.5	2540.186	52.662					
373	2536.141	52.795					
373.5	2532.239	52.929					
374	2528.611	53.062					
374.5	2524.84	53.195					
375	2521.07	53.335					
375.5	2517.437	53.475					
376	2513.809	53.608					
376.5	2510.313	53.748					
377	2506.817	53.888					
377.5	2503.464	54.022					
378	2500.106	54.162					
378.5	2496.748	54.302					
379	2493.389	54.435					
379.5	2490.305	54.575					
380	2487.084	54.715					
380.5	2484	54.855					
381	2480.77	55.016					
381.5	2477.812	55.176					
382	2474.718	55.336					
382.5	2471.761	55.496					
383	2468.805	55.656					
383.5	2465.99	55.81					
384	2463.171	55.97					

step	bhp	bht	surf rate				
384.5	2460.215	56.131					
385	2457.396	56.291					
385.5	2454.851	56.451					
386	2452.032	56.612					
386.5	2449.351	56.765					
387	2446.669	56.926					
387.5	2444.13	57.08					
388	2441.591	57.233					
388.5	2439.047	57.387					
389	2436.509	57.541					
389.5	2433.97	57.695					
390	2431.563	57.849					
390.5	2428.752	58.003					
391	2388.219	58.156					
391.5	2325.966	58.31					
392	2245.266	58.471					
392.5	2162.268	58.592					
393	2077.107	58.665					
393.5	1997.281	58.739					
394	1906.799	58.806					
394.5	1825.472	58.879					
395	1744.419	58.953					
395.5	1662.136	59.02					
396	1571.516	59.094					
396.5	1489.364	59.167					
397	1413.911	59.234					
397.5	1335.032	59.308					
398	1250.003	59.382					
398.5	1154.017	58.987					
399	1065.56	58.458					
399.5	979.806	57.936					
400	891.562	57.414					
400.5	827.092	56.892					
401	749.874	56.371					
401.5	691.245	55.85					
402	677.918	55.329					
402.5	675.68	54.809					
403	673.168	54.288					
403.5	670.931	53.768					
404	668.969	53.242					
404.5	667.038	53.322					
405	665.213	53.568					
405.5	663.254	53.808					
406	661.569	54.048					
406.5	659.882	54.295					
407	186.822	54.535					
407.5	0.01	54.775					
408	0.01	55.007					
408.5	0.01	55.254					
409	0.01	55.503					
409.5	0.01	55.734					

step	bhp	bht	surf rate				
410	0.01	55.982					
410.5	0.01	55.99					
411	0.01	55.757					
411.5	0.01	55.538					
412	0.01	55.304					
412.5	0.01	55.084					
413	0.01	54.856					
413.5	0.01	54.635					
414	0.01	54.406					
414.5	0.01	54.184					
415	0.01	53.954					
415.5	0.01	53.688					
416	0.01	53.455					



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop

Cabinet Secretary

Mark E. Fesmire, P.E.

Director

Oil Conservation Division

Administrative Order SWD-1098

APPLICATION OF DUGAN PRODUCTION CORPORATION FOR PRODUCED WATER DISPOSAL, SAN JUAN COUNTY, NEW MEXICO

ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Rule 701(B), Dugan Production Corporation made application to the New Mexico Oil Conservation Division for permission to utilize for produced water disposal its Neoprene SWD Well No. 1 (API No. 30-045-22295) located 1105 feet from the South line and 1185 feet from the West line of Section 17, Township 25 North, Range 10 West, NMPM, San Juan County, New Mexico.

THE DIVISION DIRECTOR FINDS THAT:

- (1) The application has been duly filed under the provisions of Rule 701(B) of the Division Rules and Regulations;
- (2) Satisfactory information has been provided that all offset operators and surface owners have been duly notified;
- (3) The applicant has presented satisfactory evidence that all requirements prescribed in Rule 701 will be met; and
- (4) No objections have been received within the waiting period prescribed by said rule.

IT IS THEREFORE ORDERED THAT:

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4159
The applicant is hereby authorized to utilize its Neoprene SWD Well No. 1 (API No. 30-045-22295) located 1105 feet from the South line and 1185 feet from the West line of Section 17, Township 25 North, Range 10 West, NMPM, San Juan County, New Mexico, in such manner as to permit the injection of produced water for disposal purposes into the Menefee and Point Lookout members of the Mesaverde formation through perforations from approximately 3590 feet to approximately 4270 feet and through plastic-lined tubing set in a packer located within 100 feet of the top of the perforated injection interval.

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

After installing injection tubing, the casing shall be pressure tested from the surface to the packer setting depth to assure the integrity of said casing.

The casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge or an approved leak detection device in order to determine leakage in the casing, tubing, or packer.

The wellhead injection pressure on the well shall be limited to **no more than 718 psi**. In addition, the injection well or system shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface injection pressure to the maximum allowable pressure for this well.

The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluid from the injection formation. Such proper showing shall consist of a valid step-rate test run in accordance with and acceptable to this office.

The operator shall notify the supervisor of the Aztec district office of the Division of the date and time of the installation of disposal equipment and of any mechanical integrity test so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Aztec district office of the Division of the failure of the tubing, casing, or packer in said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

PROVIDED FURTHER THAT, jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh water or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the injection authority granted herein.

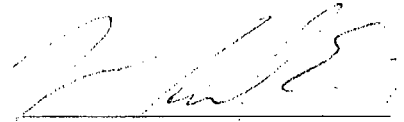
The operator shall provide written notice of the date of commencement of injection to the Aztec district office of the Division.

The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Rule Nos. 706 and 1120 of the Division Rules and Regulations.

The injection authority granted herein shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject well, provided

however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

Order approved at Santa Fe, New Mexico, on September 26, 2007.



MARK E. FESMIRE, P.E.
Director

MEF/wvj

cc: Oil Conservation Division – Aztec
Bureau of Land Management – Farmington