



# dugan production corp.

30045-22295

11/26/2008

RCVD DEC 4 '08

OIL CONS. DIV.

DIST. 3

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

Re: Step-Rate-Test Request - Neoprene SWD 1

Gentlemen:

Dugan Production Corp. proposes to conduct a step-rate-test at the Neoprene SWD 1 well. The well is located in Sec. 17, Twn. 25N, Rng 10W, 1100' FSL & 1185' FWL. Injection is authorized by ADMINISTRATIVE ORDER SWD-1098.

A wellbore schematic is attached.

Injection history for this well is attached. Two months show that injection pressures were greater than permitted for some period during the month. We had difficulty getting the well to take any water below the permitted pressure. The well was shut-in during July for this reason. After the well was fractured, injection pressures remained below the permitted pressure. Pressures are now starting to rise near the limit causing us to make this request for a step-rate-test.

The well has been fracture treated. The ISIP was 1,230 psi. This makes the frac gradient 0.775 psi/ft.

A bottom hole pressure recording device will be installed on slick line at the top perforation.

The well will be shut-in for 24 hrs. prior to commencement of the test.

Starting pump rate will be 0.5 bpm and increased at 0.5 bpm each 15 minutes.

Pumping equipment will be able to pump at the rates and pressures needed for the test.

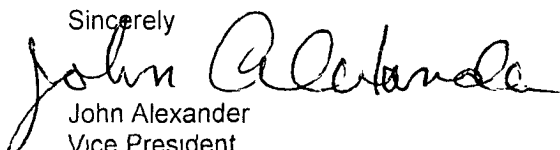
Adequate water will be available to complete the test.

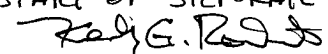
Casing and bradenhead pressures will be monitored during the test

The wellhead equipment will be rated for the anticipated pressures.

The Aztec NMOCD office will be notified at least 24 hours before starting the test.

Sincerely

  
John Alexander  
Vice President  
Dugan Production Corp.

CONDUCT BRADEN HEAD TEST  
PRIOR TO START OF STEP-RATE TEST.  


Attachments

cc: Mr. Charlie Perrin - NMOCD, 1000 Rio Brazos Road, Aztec, NM 87410

Molly Pitcher SWD 4  
Rate-Volume

12/1/2008

Neoprene SWD 1				
Water Required for SRT				
total time	min/step	Rate bpm	bbls/step	Cum Wtr
0.25	15	0.5	7.5	7.5
0.5	15	1	15	22.5
0.75	15	1.5	22.5	45
1	15	2	30	75
1.25	15	2.5	37.5	112.5
1.5	15	3	45	157.5
1.75	15	3.5	52.5	210
2	15	4	60	270
2.25	15	4.5	67.5	337.5
2.5	15	5	75	412.5
2.75	15	5.5	82.5	495
3	15	6	90	585
3.25	15	6.5	97.5	682.5
3.5	15	7	105	787.5
3.75	15	7.5	112.5	900
4	15	8	120	1020
4.25	15	8.5	127.5	1147.5
4.5	15	9	135	1282.5
4.75	15	9.5	142.5	1425
5	15	10	150	1575
5.25	15	10.5	157.5	1732.5
5.5	15	11	165	1897.5

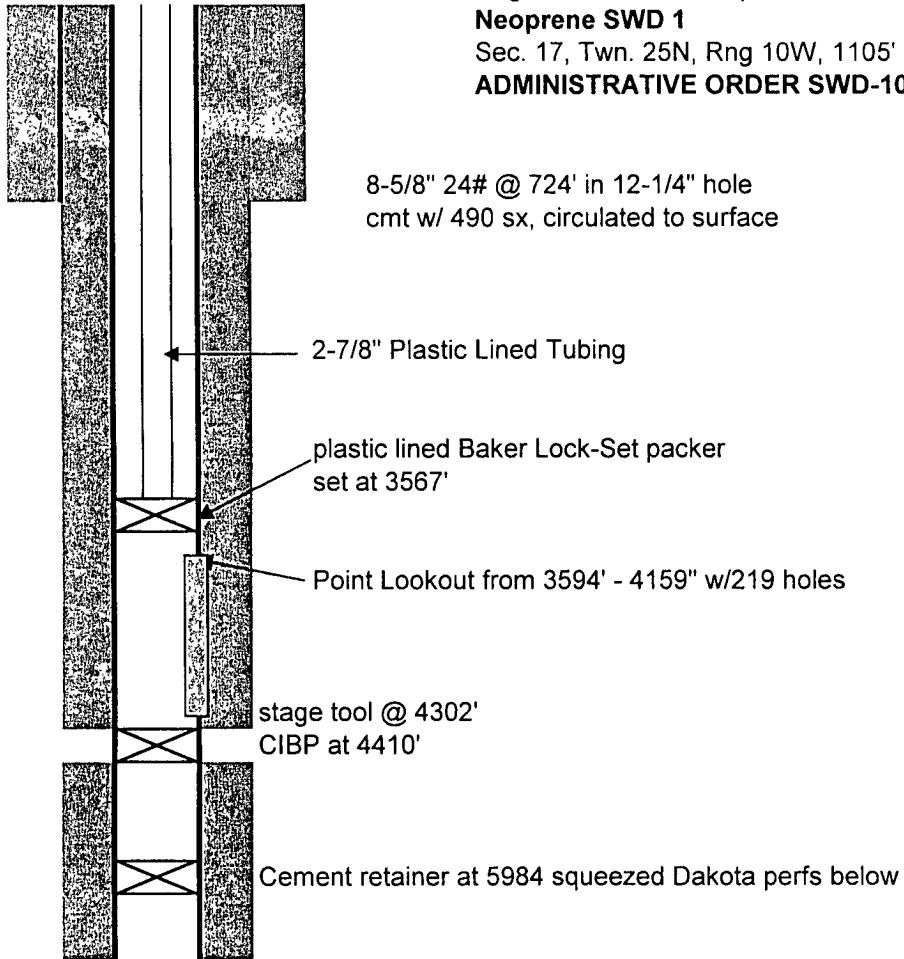
Neoprene SWD 1			
Maximum Injection Pressure 718 psi.			
Date	Rate	Pressure	
Apr-08	7,809	700	
May-08	10,807	740	
Jun-08	2,409	740	
Jul-08	0	0	
Aug-08	6,044	400	
Sep-08	10,052	550	
Oct-08	9,428	550	

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.

Dugan Production Corp  
Neoprene SWD 1  
1105' FSL & 1185' FWL  
M - 17-T 25N-R 10W  
San Juan Co., NM

## Step Rate Test, Rig Up Diagram

