

Submit 3 Copies To Appropriate District Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S St Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
June 19, 2008

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

WELL API NO. 30-045-32086
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. Lg-1917
7. Lease Name or Unit Agreement Name Mesa
8. Well Number 4
9. OGRID Number 006515
10. Pool name or Wildcat SWD; Mesaverde (96160)

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well ☐ Gas Well ☐ Other ☐ SWD-918

2. Name of Operator
Dugan Production Corp.

3. Address of Operator
P. O. Box 420, Farmington, NM 87499-0420

4. Well Location

Unit Letter I : 1450 feet from the South line and 1245 feet from the East line

Section 16 Township 24N Range 8W NMPM San Juan County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
6819' GL

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
DOWNHOLE COMMINGLE ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

OTHER: Conduct Step-Rate test ☒

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

The operator requests permission to conduct a step-rate-test on the subject well. The operational plan and well information have been previously submitted to the NMOCD office in Aztec under separate cover.

RCVD MAR 17 '09
OIL CONS. DIV.
DIST. 3

NOTIFY NMOCD AZTEC 24 HOURS PRIOR TO BEGINNING OPERATIONS

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE

John C. Alexander

TITLE

Vic Prosser

DATE

3/16/2009

Type or print name John C. Alexander E-mail address: johncalexander@duganproduction.com PHONE: 505-325-1821

For State Use Only

Deputy Oil & Gas Inspector,
District #3

APPROVED BY:

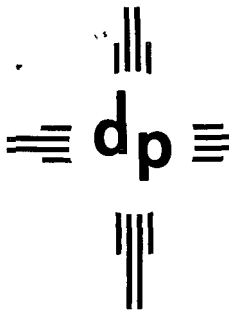
Kathy G. Bolte

TITLE

DATE

MAR 18 2009

Conditions of Approval (if any): * CONDUCT MIT AND BRADEN HEAD TEST PRIOR TO STEP RATE *



dugan production corp.

3/11/2009

Mr. Charlie Perrin
NMOCD
1000 Rio Brazos
Aztec, NM 87410

Re: Step Rate Test, Mesa SWD No. 4

Dear Mr. Perrin:

Dugan Production Corp. request permission to conduct a step-rate-test at the Mesa SWD No. 4 located in G-16-T.24N-R.8W, API 30-045-32086. The well is authorized for injection by Administrative Order SWD-918.

Injection commenced 7/24/2004.

A history of injection rates and pressures is attached.

A wellbore schematic is attached.

The following procedure will be used to conduct the test:

1. Shut the well in for 24 hours prior to beginning the test.
2. The NMOCD Aztec office will be advised of the test date.
3. A bottom hole pressure recording device will be set on slick line at the top perforation. The well has 5-1/2 casing set at 4651'. Cement was circulated to surface. The perforated interval is: 4288' – 4438' (115 holes) Plastic lined 2-7/8" tubing is set with a Baker AD-1 packer at 4222'. The well was hydraulically fractured. The frac gradient was 0.796 psi/ft.
4. Casing and bradenhead pressures will be monitored and recorded during the test.
5. Injection rates will commence at one half barrel per minute and increased by the same rate every 15 minutes.
6. All pumping, recording and pressure equipment will comply with safety standards.

Sincerely,

John Alexander
Vice President
Dugan Production Corp.
john.alexander@duganproduction.com
505-325-1821

Attachments

Well Tests (PM: 120.00)											
Well ID	MES04SWD		Name		MESA 4 SWD						
	Date	Type No	Pump Eff	Stroke Length	Amp	Hz	Pump Depth	Injection Vol	Injection Pressure	Annulus Pressure	Choke Size
1	8/1/2004	0 0	0.0	0.00	0.0	0.0	0	105.00	850	0.00	
2	9/1/2004	0 0	0.0	0.00	0.0	0.0	0	0.00	0	0.00	
3	11/1/2004	0 0	0.0	0.00	0.0	0.0	0	3004.00	60	0.00	
4	12/1/2004	0 0	0.0	0.00	0.0	0.0	0	2070.00	60	0.00	
5	1/1/2005	0 0	0.0	0.00	0.0	0.0	0	2361.00	150	0.00	
6	2/1/2005	0 0	0.0	0.00	0.0	0.0	0	0.00	150	0.00	
7	3/1/2005	0 0	0.0	0.00	0.0	0.0	0	3225.00	220	0.00	
8	4/1/2005	0 0	0.0	0.00	0.0	0.0	0	7961.00	125	0.00	
9	5/1/2005	0 0	0.0	0.00	0.0	0.0	0	3993.00	290	0.00	
10	6/1/2005	0 0	0.0	0.00	0.0	0.0	0	6639.00	280	0.00	
11	7/1/2005	0 0	0.0	0.00	0.0	0.0	0	5306.00	180	0.00	
12	8/1/2005	0 0	0.0	0.00	0.0	0.0	0	2655.00	100	0.00	
13	9/1/2005	0 0	0.0	0.00	0.0	0.0	0	3028.00	100	0.00	
14	10/1/2005	0 0	0.0	0.00	0.0	0.0	0	3725.00	80	0.00	
15	11/1/2005	0 0	0.0	0.00	0.0	0.0	0	2024.00	100	0.00	
16	12/1/2005	0 0	0.0	0.00	0.0	0.0	0	1705.00	100	0.00	
17	1/1/2006	0 0	0.0	0.00	0.0	0.0	0	1905.00	175	0.00	
18	2/1/2006	0 0	0.0	0.00	0.0	0.0	0	4329.00	200	0.00	
19	3/1/2006	0 0	0.0	0.00	0.0	0.0	0	6570.00	230	0.00	
20	4/1/2006	0 0	0.0	0.00	0.0	0.0	0	9060.00	540	0.00	
21	5/1/2006	0 0	0.0	0.00	0.0	0.0	0	12240.00	640	0.00	
22	6/1/2006	0 0	0.0	0.00	0.0	0.0	0	11303.00	600	0.00	
23	7/1/2006	0 0	0.0	0.00	0.0	0.0	0	6739.00	780	0.00	
24	8/1/2006	0 0	0.0	0.00	0.0	0.0	0	8890.00	780	0.00	
25	9/1/2006	0 0	0.0	0.00	0.0	0.0	0	10296.00	700	0.00	
26	10/1/2006	0 0	0.0	0.00	0.0	0.0	0	5661.00	740	0.00	
27	11/1/2006	0 0	0.0	0.00	0.0	0.0	0	1604.00	800	0.00	
28	12/1/2006	0 0	0.0	0.00	0.0	0.0	0	0.00	0	0.00	
29	1/1/2007	0 0	0.0	0.00	0.0	0.0	0	0.00	0	0.00	
30	4/1/2007	0 0	0.0	0.00	0.0	0.0	0	0.00	0	0.00	
31	6/1/2007	0 0	0.0	0.00	0.0	0.0	0	6569.00	660	0.00	

Well Tests (PM:120.00)											
Well ID	MES04SWD		Name		MESA 4 SWD						
	Date	Type No	Pump Eff	Stroke Length	Amp	Hz	Pump Depth	Injection Vol	Injection Pressure	Annulus Pressure	Chol e Size
32	7/1/2007	0 0	0.0	0.00	0.0	0.0	0	7559.00	768	0.00	
33	8/1/2007	0 0	0.0	0.00	0.0	0.0	0	728.00	600	0.00	
34	9/1/2007	0 0	0.0	0.00	0.0	0.0	0	7091.00	750	0.00	
35	10/1/2007	0 0	0.0	0.00	0.0	0.0	0	4203.00	820	0.00	
36	11/1/2007	0 0	0.0	0.00	0.0	0.0	0	4850.00	500	0.00	
37	12/1/2007	0 0	0.0	0.00	0.0	0.0	0	3992.00	400	0.00	
38	1/1/2008	0 0	0.0	0.00	0.0	0.0	0	5234.00	600	0.00	
39	2/1/2008	0 0	0.0	0.00	0.0	0.0	0	287.00	650	0.00	
40	3/1/2008	0 0	0.0	0.00	0.0	0.0	0	5210.00	400	0.00	
41	4/1/2008	0 0	0.0	0.00	0.0	0.0	0	4380.00	425	0.00	
42	5/1/2008	0 0	0.0	0.00	0.0	0.0	0	6290.00	450	0.00	
43	6/1/2008	0 0	0.0	0.00	0.0	0.0	0	12017.00	700	0.00	
44	7/1/2008	0 0	0.0	0.00	0.0	0.0	0	8070.00	725	0.00	
45	8/1/2008	0 0	0.0	0.00	0.0	0.0	0	8550.00	700	0.00	
46	9/1/2008	0 0	0.0	0.00	0.0	0.0	0	3116.00	675	0.00	
47	10/1/2008	0 0	0.0	0.00	0.0	0.0	0	7775.00	600	0.00	
48	11/1/2008	0 0	0.0	0.00	0.0	0.0	0	6020.00	580	0.00	
49	12/1/2008	0 0	0.0	0.00	0.0	0.0	0	3174.00	600	0.00	
50	1/1/2009	0 0	0.0	0.00	0.0	0.0	0	2294.00	650	0.00	
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Dugan Production Corp.

Wellbore Schematic

Mesa 4 SWD API 30-045-32086

G-16-T.24N-R.8W

San Juan Co., NM

8-5/8" 24 lb/ft. casing @ 224'.
Cement to surface.

Stage Tool @ 2,063'.

Tubing 2-7/8" EUE 6.5 lb/ft. plastic lined.

Packer @ 4,222'. Baker AD-1 tension.

Perforations 4288' – 4438' (115 holes)

5-1/2" 15.5 lb/ft. casing @ 4651'. Stage tool @ 2063'.
Cement w/280 sx BJ Premium Lite High Strength w/1/4# celloflake 5#/sx LCM-1.
Cement 2nd stage w/214 sx Premium Lite FM w/3% CaCl₂, 1/4# celloflake/sx,
5#/sx LCM-1, 8% Bentonite & .4% Sodium Metasilicate.
Tail w/50 sx Type III cement w/1% CaCl₂ & 1/4# celloflake/sx. Circ 25 bbls