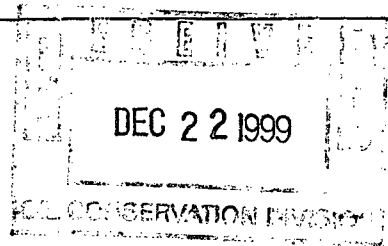




Texaco E & P

205 E. Bender Blvd.
Hobbs NM 88240
505 393 7191



1 P1-127 N/R

December 17, 1999

New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

Attn: Mr. David Catanach

Re: **Approval to Increase Injection Pressure**
18768 **Remuda Basin 19 Federal #2 SWD**
API #: 30 015 28901
B - 19 - 23S - 30E
Eddy County, New Mexico

Dear Mr. Catanach,

Texaco E & P Inc. respectfully requests approval to increase the maximum injection pressure on the Remuda Basin 19 Federal #2 SWD to 1,250 psig. Dowell Schlumberger performed a step rate injection test on the subject well December 16, 1999. The tabulated data and associated plot are attached. The requested pressure limit was determined to be 1,250 psig by taking the break-over point on the graph and subtracting 50 psig. A copy of Administrative Order **SWD-626** is also attached for your convenience.

Thank you for your consideration of this proposal.

Sincerely,

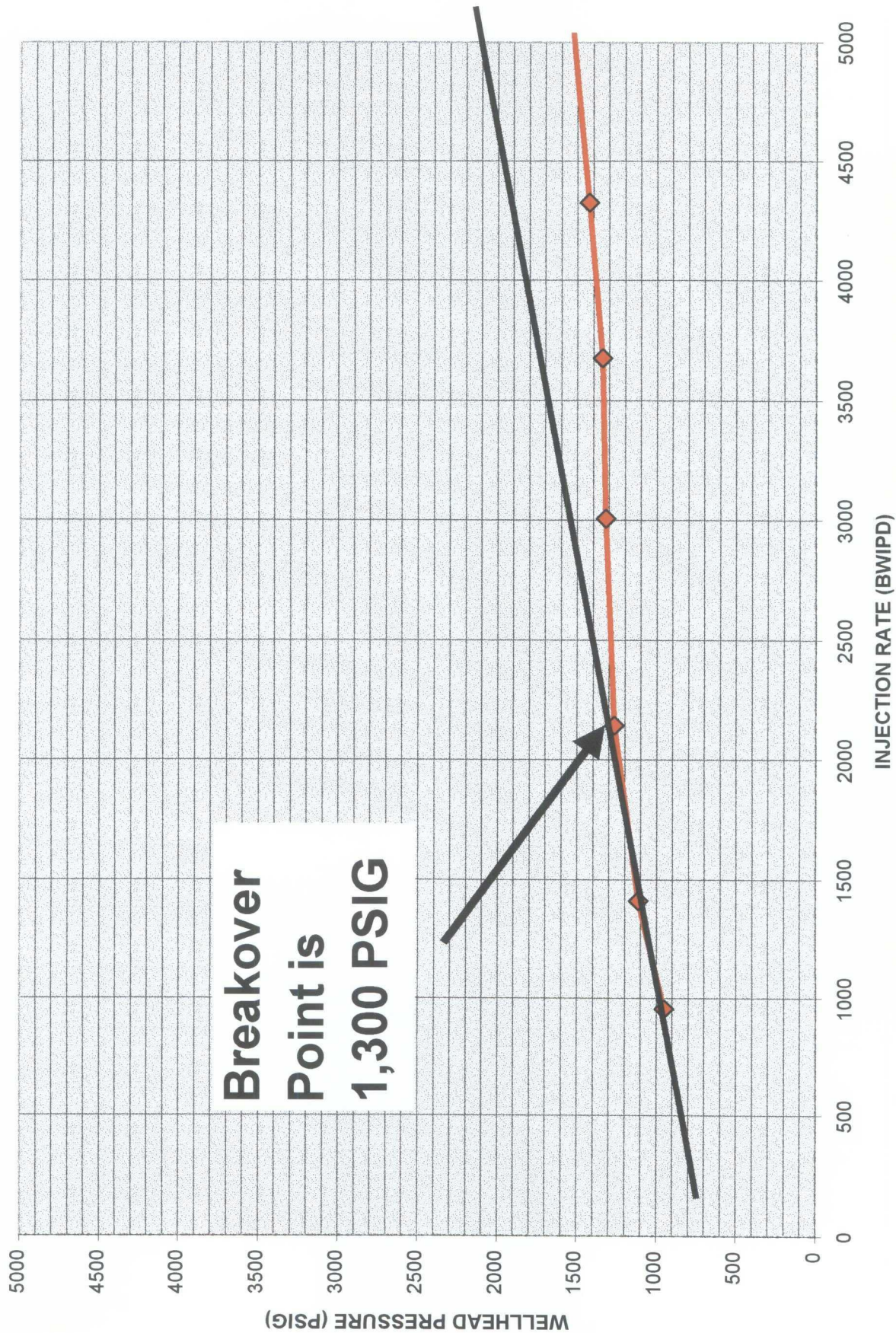
Darrell J. Carriger
Production Engineer
Texaco E & P Inc.
Hobbs Operating Unit

/djc
file

cc: Mr. Tim Gum (NMOCD District II Director - Artesia)
Attachments

96768 SWD; Basin Canyon

Remuda Basing Federal 19 #2 SWD Step-Rate-Test (12/16/69)



Remuda Basin Federal 19 #2 SWD

Step-Rate Test Data

Time	Volume	Rate (BPM)	Rate (BPD)	Pressure	Rate BIPD	Pressure (PSI)
12/16/1999 8:39	0.556	0.677	974.88	888.3	953	952
12/16/1999 8:40	1.24	0.677	974.88	888.3	1412	1116
12/16/1999 8:41	1.91	0.677	974.88	915.8	2143	1266
12/16/1999 8:42	2.59	0.677	974.88	915.8	3005	1322
12/16/1999 8:43	3.26	0.677	974.88	934.1	3677	1343
12/16/1999 8:44	3.94	0.677	974.88	947.8	4324	1426
12/16/1999 8:45	4.61	0.677	974.88	966.1	5054	1530
12/16/1999 8:46	5.28	0.592	852.48	989	5890	1593
12/16/1999 8:47	5.94	0.677	974.88	1012	6503	1673
12/16/1999 8:48	6.61	0.592	852.48	1007	7272	1761
12/16/1999 8:49	7.27	0.677	974.88	1012	8078	1943
12/16/1999 8:50	8.02	1.02	1468.8	1044		
12/16/1999 8:51	9.03	1.02	1468.8	1071		
12/16/1999 8:52	10.03	1.02	1468.8	1085		
12/16/1999 8:53	11.03	1.02	1468.8	1099		
12/16/1999 8:54	12.03	0.931	1340.64	1113		
12/16/1999 8:55	13.01	1.02	1468.8	1140		
12/16/1999 8:56	14	0.931	1340.64	1149		
12/16/1999 8:57	14.98	0.931	1340.64	1168		
12/16/1999 8:58	15.95	0.931	1340.64	1177		
12/16/1999 8:59	17.06	1.52	2188.8	1245		
12/16/1999 9:00	18.56	1.44	2073.6	1250		
12/16/1999 9:01	20.05	1.52	2188.8	1264		
12/16/1999 9:02	21.54	1.44	2073.6	1291		
12/16/1999 9:03	23.03	1.52	2188.8	1282		
12/16/1999 9:04	24.97	2.03	2923.2	1378		
12/16/1999 9:05	26.98	2.03	2923.2	1337		
12/16/1999 9:06	28.99	2.03	2923.2	1369		
12/16/1999 9:07	31.01	2.03	2923.2	1364		
12/16/1999 9:08	33.02	2.03	2923.2	1218		
12/16/1999 9:09	35.06	2.37	3412.8	1268		

Remuda Basin Federal 19 #2 SWD

Step-Rate Test Data

Time	Volume	Rate (BPM)	Rate (BPD)	Pressure	Rate BIPD	Pressure (PSI)
12/16/1999 9:10	37.63	2.54	3657.6	1319		
12/16/1999 9:11	40.21	2.54	3657.6	1328		
12/16/1999 9:12	42.79	2.62	3772.8	1351		
12/16/1999 9:13	45.36	2.54	3657.6	1351		
12/16/1999 9:14	47.93	2.54	3657.6	1346		
12/16/1999 9:15	50.51	2.54	3657.6	1360		
12/16/1999 9:16	53.26	2.96	4262.4	1424		
12/16/1999 9:17	56.26	2.96	4262.4	1410		
12/16/1999 9:18	59.27	2.96	4262.4	1406		
12/16/1999 9:19	62.13	3.13	4507.2	1465		
12/16/1999 9:20	65.66	3.55	5112	1516		
12/16/1999 9:21	69.23	3.47	4996.8	1543		
12/16/1999 9:22	72.93	3.98	5731.2	1653		
12/16/1999 9:23	76.98	3.98	5731.2	1447		
12/16/1999 9:24	81.05	4.31	6206.4	1680		
12/16/1999 9:25	85.53	4.4	6336	1722		
12/16/1999 9:26	90.01	4.48	6451.2	1630		
12/16/1999 9:27	94.5	4.48	6451.2	1639		
12/16/1999 9:28	98.98	4.48	6451.2	1658		
12/16/1999 9:29	103.2	4.74	6825.6	1717		
12/16/1999 9:30	108.4	5.08	7315.2	1799		
12/16/1999 9:31	113.4	4.99	7185.6	1758		
12/16/1999 9:32	118.5	5.08	7315.2	1726		
12/16/1999 9:33	123.7	5.58	8035.2	1951		
12/16/1999 9:34	129.3	5.5	7920	1955		
12/16/1999 9:35	135	5.75	8280	1923		



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

CORRECTED AMENDED ADMINISTRATIVE ORDER SWD-626

***APPLICATION OF TEXACO EXPLORATION & PRODUCTION, INC. FOR SALT
WATER DISPOSAL, EDDY COUNTY, NEW MEXICO.***

**ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION**

Under the provisions of Rule 701(B), Texaco Exploration & Production, Inc. made application to the New Mexico Oil Conservation Division on June 5, 1997, for permission to complete for salt water disposal its Remuda Basin '19' Federal Well No.2 **located 510 feet from the North line and 1580 feet from the East line (Unit B)** of Section 19, Township 23 South, Range 30 East, NMPM, Eddy 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) One objection has been received within the waiting period prescribed by said rule. Such objection has been satisfied and withdrawn by same party.
- (5) Division Order SWD-626 previously authorized the Remuda Basin State SWD Well No. 1 for salt water disposal.

IT IS THEREFORE ORDERED THAT:

The applicant herein, is hereby authorized to complete its Remuda Basin '19' Well No.2 **located 510 feet from the North line and 1580 feet from the East line (Unit B)** of Section 19, Township 23 South, Range 30 East, NMPM, Eddy County, New Mexico, in such manner as to permit the injection of salt water for disposal purposes into the Bell Canyon formation at approximately 3402 feet to 3912 feet through 2 7/8-inch plastic-lined tubing set in a packer located at approximately 3345 feet.

IT IS FURTHER ORDERED THAT:

Authorization to utilize the Remuda Basin State SWD Well No.1 for salt water disposal is hereby rescinded.

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.

Prior to commencing injection operations into the well, 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 at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing, or packer.

The injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection well to no more than 680 psi.

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 Bell Canyon 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 Artesia district office of the Division of the date and time of the installation of disposal equipment and of the mechanical integrity test so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Artesia 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.

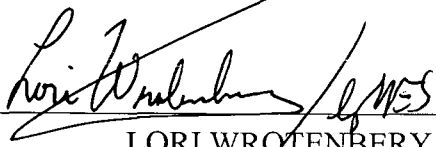
PROVIDED FURTHER THAT, jurisdiction of this cause is hereby retained by the Division for the entry of such further order or orders as may be deemed necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of the operator to conduct operations in a manner which will ensure the protection of fresh water or in a manner inconsistent with the requirements set forth in this order, the Division may, after notice and hearing, terminate the injection authority granted herein.

The operator shall submit monthly reports of the disposal operations in accordance with Rule Nos. 706 and 1120 of the Division Rules and Regulations.

Amended Division Order SWD-626
Texaco Exploration & Production, Inc.
October 14, 1998
Page 3

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.

Approved at Santa Fe, New Mexico, on this 14th day of October, 1998.



LORI WROTENBERY, Director

S E A L

LW/BES/kv

xc: Oil Conservation Division - Artesia
Bureau of Land Management - Carlsbad