DATE IN 5/14/01	SUSPENSE N/R	ENGINEER DC	LOGGED IN KV	TYPE IPI	APP NO. 1135403O6

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -
1220 South St. Francis Drive, Santa Fe, NM 87505

ADMINISTRATIVE APPLICATION COVERSHEET

THIS COVERSHEET 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]

RECEIVED
MAY 14 2001

[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

[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] **INFORMATION / DATA SUBMITTED IS COMPLETE** - Certification

I hereby certify that I, or personnel under my supervision, have reviewed the applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common.

I understand that any omission of data (including API numbers, pool codes, etc.), pertinent information and any required notification is cause to have the application package returned with no action taken.

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

STEPHEN GUILLOT	Stephen Guillot	Production Engineer	5/8/01
Print or Type Name	Signature	Title	Date

guillsn@texaco.com
e-mail Address

Texaco Exploration and Production Inc
Permian Basin Business Unit
Hobbs Operating Unit

P. O. Box 3109
Midland TX 79702-3019
505 688 4100

May 8, 2001

New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe NM 87501
Attention: Mr. David R. Catanach

RE: **Request for Increase in Surface Injection Pressure Limits**
Texaco Exploration and Production Inc
Central Vacuum Unit Well No. 173H; T17S, R34E; PMX-211; API # 30-025-35212
Central Vacuum Unit Well No. 241H; T17S, R34E; PMX-211; API # 30-025-35213
New Mexico "Z" State NCT-1 Well No. 1; T18S, R34E; SWD-776; API # 30-025-29988
Lea County, New Mexico

Dear Mr. Catanach,

Texaco requests permission to increase surface injection pressure limits in these three wells. Step rate tests were performed on the three above-captioned wells on February 27, May 2, and March 6, 2001 respectively. Mr. Gary Wink of the District 1 office was notified about these tests by phone.

The first two wells are horizontal injectors drilled as part of the Central Vacuum Unit CO_2 flood. Well 173H injected water during the test up to a final surface pressure of 1901 PSIG and the radial flow straight line was maintained until the end of the test. Our highest typical requested injection pressure limits for CO_2 injection wells in the Vacuum field are 1500 PSIG for water injection (well below the maximum test pressure) and 1850 PSIG for CO_2 injection; therefore, we request increasing our permitted injection pressures to these limits.

Well 241H injected water during the test up to a final surface pressure of 1864 PSIG and our interpretation is that a straight line was established after a long wellbore storage period, but the last two points departed from that straight line. We calculated surface formation parting pressure to be 1514 PSIG. Therefore, for this well we also request surface injection pressure limits of 1500 PSIG for water injection and 1850 PSIG for CO_2 injection.

The New Mexico "Z" State NCT-1 Well No. 1 is a water disposal well. During our step rate test of this well we injected water up to a final surface pressure of 2152 PSIG and the radial flow straight line was maintained until the end of the test. We request an injection pressure limit of 2152 PSIG for this well

Thank you for your consideration. Please call me at 915-688-4577 if you have questions or concerns.

Yours truly,

Stephen Guillot
Production Engineer

Attachments
Cc: Mr. Chris Williams
Hobbs NMOCD

PACIFIC PROCESS SYSTEMS, INC.

Step Rate Injection Test Report

for

Texaco Exploration & Production

NM Z State #1

March 6, 2001

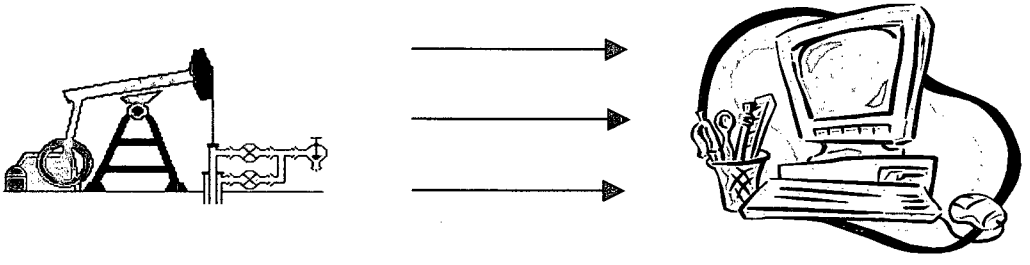

TABLE OF CONTENTS

COMPANY : Texaco Exploration & Production
WELL: NM Z State #1
COMPANY REP: Steve Guillot
PERFORATIONS: 4894 - 5080

SERVICE DATES : March 6, 2001
TEST TYPE : Step Rate Injection
PTS TECHNICIANS : D. Ginanni
4852 BHP GAUGE DEPTH: N/A

DATE	TIME	REMARKS
03/06/01	10:10	Start pumping @ 400 BPD
03/06/01	10:15	
03/06/01	10:20	
03/06/01	10:25	Increase to 900 BPD
03/06/01	10:30	
03/06/01	10:35	
03/06/01	10:40	Increase to 1200 BPD
03/06/01	10:45	
03/06/01	10:50	
03/06/01	10:55	Increase to 1600 BPD
03/06/01	11:00	
03/06/01	11:05	
03/06/01	11:10	Increase to 2000 BPD. Encountering trash in pump
03/06/01	11:15	
03/06/01	11:20	
03/06/01	11:25	Increase to 2400 BPD
03/06/01	11:30	
03/06/01	11:35	
03/06/01	11:40	Increase to 2800 BPD
03/06/01	11:45	
03/06/01	11:50	
03/06/01	11:55	Increase to 3200 BPD
03/06/01	12:00	
03/06/01	12:05	
03/06/01	12:10	Increase to 3600 BPD
03/06/01	12:15	
03/06/01	12:20	
03/06/01	12:25	Increase to 4000 BPD
03/06/01	12:30	
03/06/01	12:35	
03/06/01	12:40	Increase to 4400 BPD
03/06/01	12:45	
03/06/01	12:50	
03/06/01	12:55	End of test, ran out of water.

Phone: (505) 392-8813
Fax: (505) 392-6612

3406 Lovington Hwy.
Hobbs, NM 88240

COMPANY : **Texaco Exploration & Production**
WELL: **NM Z State #1**
COMPANY REP: **Steve Guillot**
PERFORATIONS: **4894 - 5080**

SERVICE DATE: **March 6, 2001**
TEST TYPE: **Step Rate Injection**
PPS REP: **D. Ginanni**
PACKER DEPTH: **4852**

STEP NO.	TIME	SURFACE TUBING PRESS. (psig)	CUMULATIVE VOL INJECTED (bbls)	INJECTION RATE (bbls/day)	INJECTION RATE (gpm) (3)/34.2857	MEASURED BHP (psi)
	10:10	434.2				
	10:15	504.1	1.7	486.9	14.20	
	10:20	519.0	3.7	568.8	16.59	
1	10:25	574.2	5.8	603.2	17.59	
	10:30	569.2	8.9	905.6	26.41	
	10:35	569.3	12.1	928.1	27.07	
2	10:40	632.2	15.3	920.6	26.85	
	10:45	706.3	19.7	1272.3	37.11	
	10:50	642.3	24.4	1353.5	39.48	
3	10:55	746.7	29.2	1361.2	39.70	
	11:00	760.6	34.6	1575.8	45.96	
	11:05	767.0	40.1	1584.1	46.20	
4	11:10	773.3	45.7	1592.5	46.45	
	11:15	840.2	52.6	1986.5	57.94	
	11:20	946.9	59.5	1984.1	57.87	
5	11:25	1040.5	66.4	1988.9	58.01	
	11:30	1026.8	74.8	2423.5	70.69	
	11:35	1102.3	83.1	2383.2	69.51	
6	11:40	1171.0	91.1	2328.7	67.92	
	11:45	1266.4	100.7	2746.9	80.12	
	11:50	1284.7	110.6	2856.6	83.32	
7	11:55	1344.4	120.7	2897.7	84.52	
	12:00	1471.6	132.0	3269.6	95.36	
	12:05	1477.5	143.2	3234.9	94.35	
8	12:10	1634.6	154.7	3289.2	95.94	
	12:15	1677.2	167.3	3644.2	106.29	
	12:20	1723.4	180.0	3644.8	106.31	
9	12:25	1810.2	192.7	3673.3	107.14	
	12:30	1981.8	206.4	3935.4	114.78	
	12:35	1848.6	220.5	4065.8	118.59	
10	12:40	2001.8	234.0	3873.8	112.99	
	12:45	2151.6	249.4	4448.6	129.75	
	12:50	2161.6	264.1	4228.4	123.33	
11	12:55	2151.6	278.2	4064.3	118.54	

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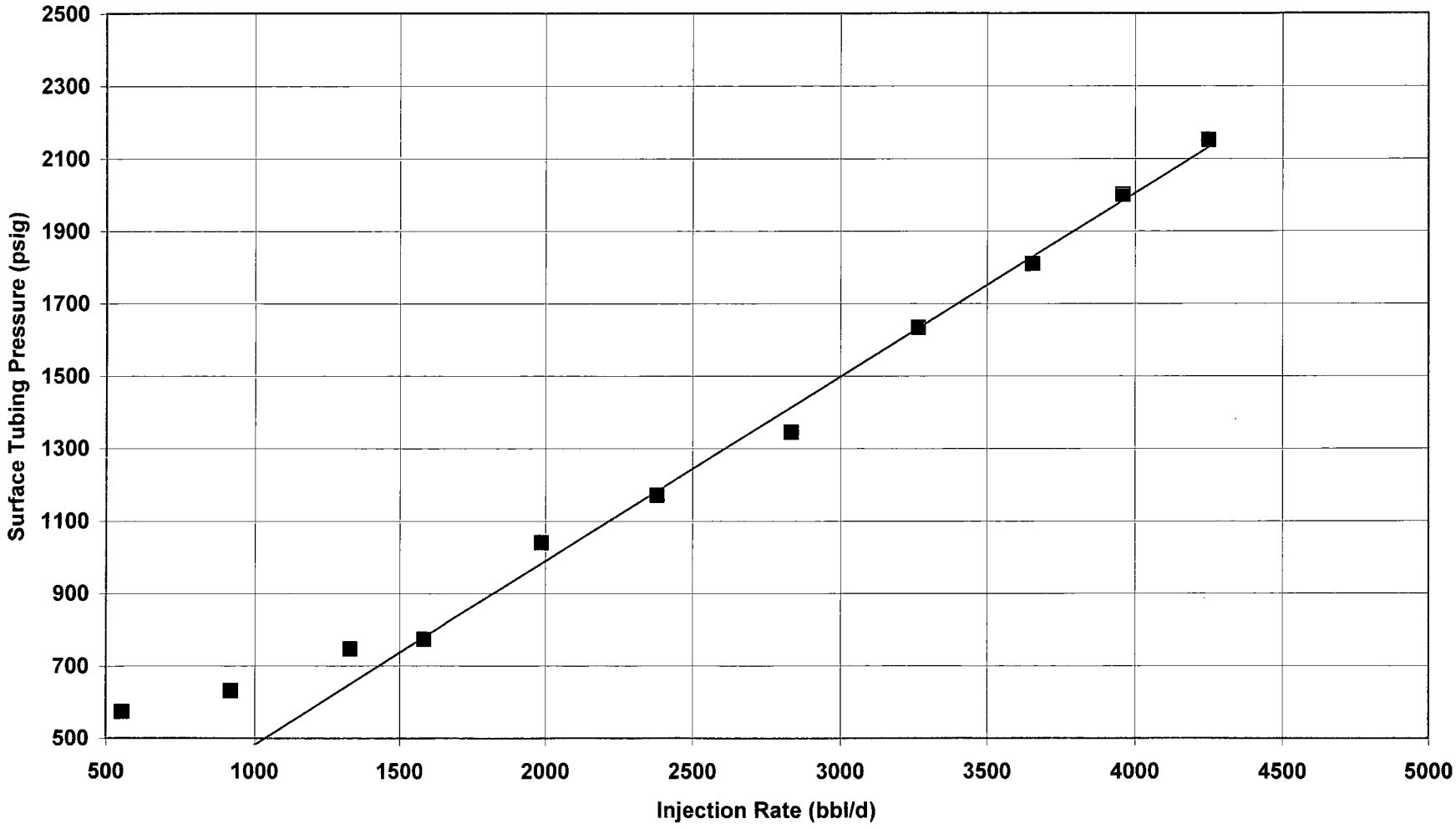
3406 LOVINGTON Hwy.
Hobbs, NM 88240

PACIFIC PROCESS SYSTEMS, INC.

Step Rate Injection Test



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