

DATE <u>10/25/01</u>	SUSPENSE <u>N/R</u>	ENGINEER <u>DC</u>	LOGGED IN <u>W</u>	TYPE <u>IPI</u>	APP NO. <u>130446351</u>
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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 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]**

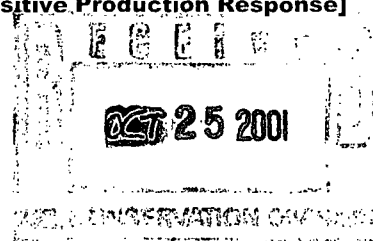
- [1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]
 [A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD

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

- [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.

Russell S. Pool
 Print or Type Name

[Signature]
 Signature

Operating Unit Manager 10/19/01
 Title Date

POOLRS @ 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

October 19, 2001

New Mexico Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505
Attention: Mr. David R. Catanach

RE: **Request for Increase in Surface Injection Pressure Limits**

Texaco Exploration and Production Inc
Central Vacuum Unit Well No. 14; Sec. 30, T17S, R35E; R-5530; API # 3002525811
Central Vacuum Unit Well No. 294; Sec. 6, T18S, R35E; R-5530; API # 3002535398
Lea County, New Mexico

Dear Mr. Catanach,

Texaco requests permission to increase surface injection pressure limits in these two wells. Step rate tests were performed on the wells on September 21 and October 1, 2001 respectively. Mr. Gary Wink of the District 1 office was notified about these tests by phone.

Well 14 injected water during the test up to a final surface pressure of 2727 PSIG. Our most conservative interpretation is that a straight line was established and a break in that line was observed at 1628 PSI. For this well we request a surface injection pressure limit of 1628 PSIG for water injection.

Well 294 injected water during the test up to a final surface pressure of 1839 PSIG. Our interpretation is that a radial flow straight line was established after early points were affected by wellbore storage and no fracturing was seen during the test. For this well we request limits of 1500 PSI for water and 1850 PSI for CO2 injection, which is the maximum we have requested for CO2 injectors.

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

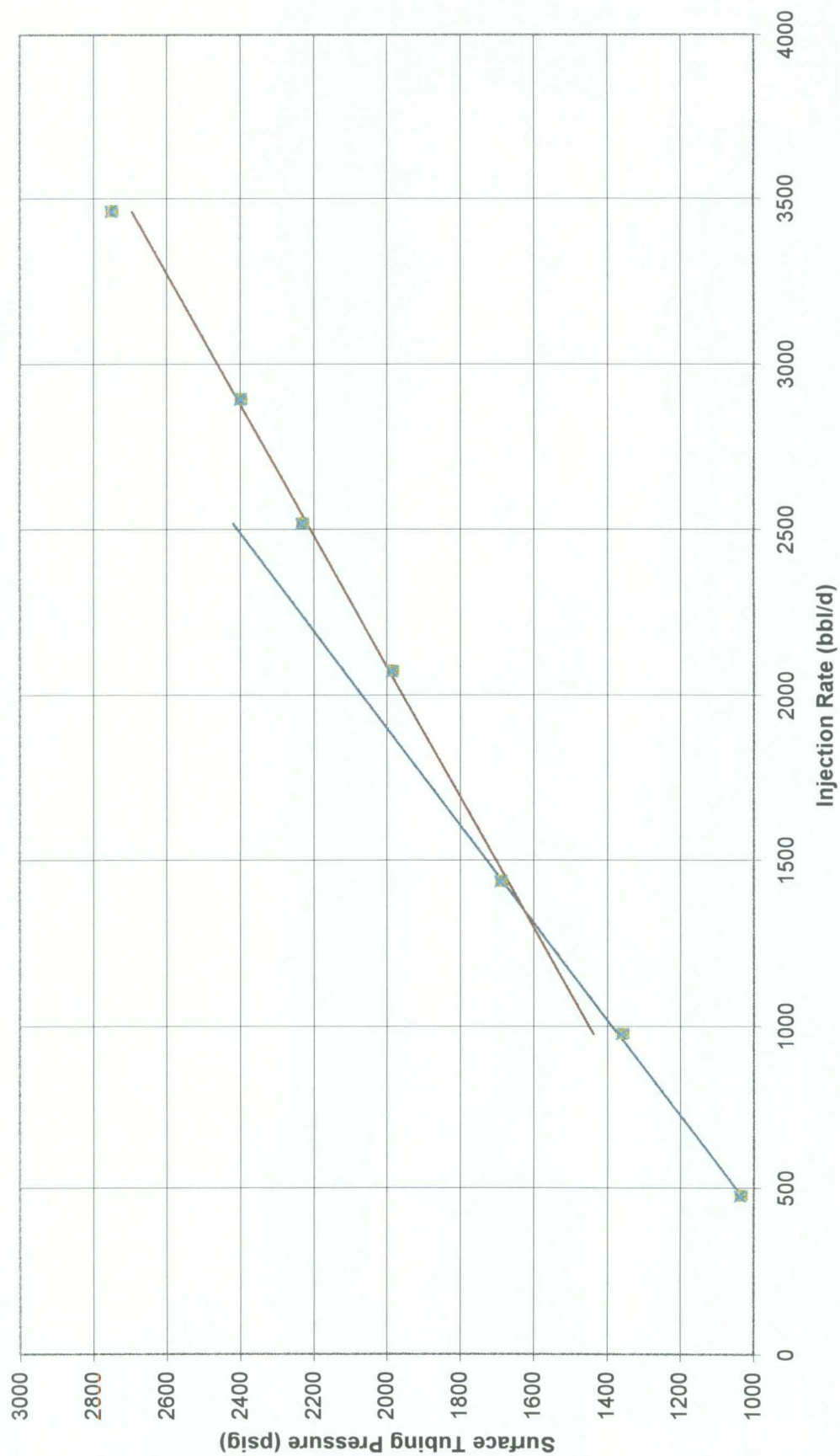
Yours truly,

Stephen Guillot
Production Engineer

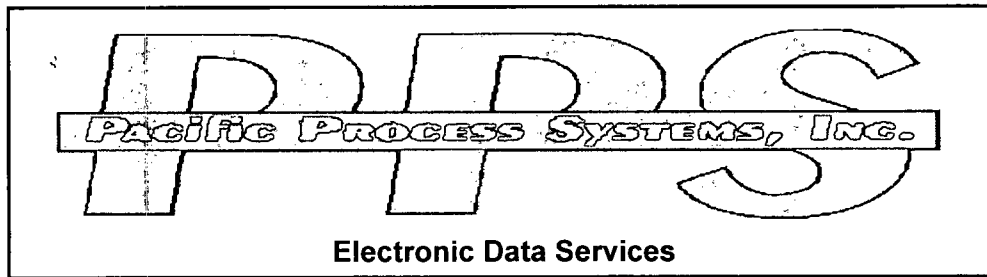
Attachments
Cc: Mr. Chris Williams
Hobbs NMOCD

Pacific Process Systems, Inc.

Step Rate Injection Test - CVU 14



Intersection calculated @ 1628 psi
First Regression = points 1-3
Second regression = points 4-6



Step Rate Injection Test Report

for

Texaco E&P

CVU 14

9/21/01

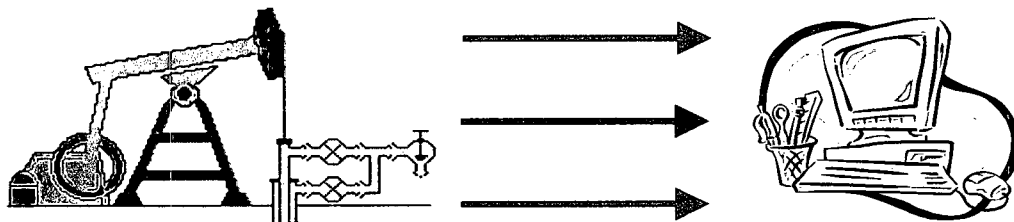


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SECTION IV	CHART



COMPANY : Texaco E&P
WELL: CVU 14
COMPANY REP: Steve Guillot
PERFORATIONS: N/A

SERVICE DATES : 9/21/01
TEST TYPE : Step Rate Injection
PPS TECHNICIANS : D. Ginanni
BHP GAUGE DEPTH: N/A

DATE	TIME	REMARKS
09/21/01	9:30	Start Pumping @ 500 BPD
09/21/01	9:35	
09/21/01	9:40	
09/21/01	9:45	Increase to 1000 BPD
09/21/01	9:50	
09/21/01	9:55	
09/21/01	10:00	Increase to 1500 BPD
09/21/01	10:05	
09/21/01	10:10	
09/21/01	10:15	Increase to 2000 BPD
09/21/01	10:20	
09/21/01	10:25	
09/21/01	10:30	Increase to 2500 BPD
09/21/01	10:35	
09/21/01	10:40	
09/21/01	10:45	Increase to 3000 BPD
09/21/01	10:50	
09/21/01	10:55	
09/21/01	11:00	Increase to 3500 BPD
09/21/01	11:05	
09/21/01	11:10	
09/21/01	11:15	Increase to 4000 BPD
09/21/01	11:20	
09/21/01	11:25	
09/21/01	11:30	Cease pumping, start falloff
09/21/01	11:31	
09/21/01	11:32	
09/21/01	11:33	
09/21/01	11:34	
09/21/01	11:35	
09/21/01	11:40	
09/21/01	11:45	End of test



COMPANY : **Texaco E&P**
 WELL: **CVU 14**
 COMPANY REP: **Steve Guillot**
 PERFORATIONS: **N/A**

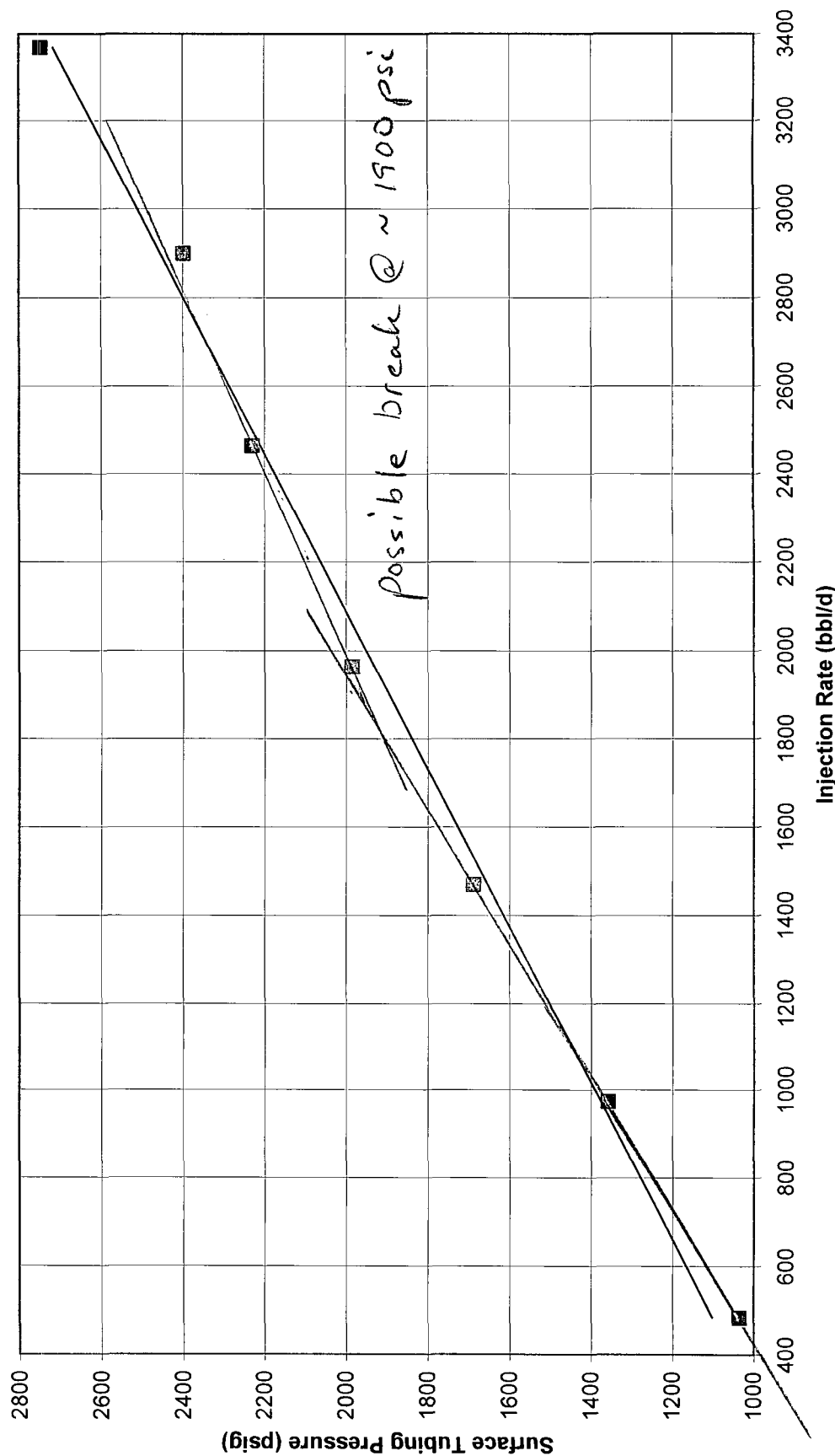
SERVICE DATES : **9/21/01**
 TEST TYPE : **Step Rate Injection**
 PPS TECHNICIANS : **D. Ginanni**
 BHP GAUGE DEPTH: **N/A**

STEP NO.	TIME	SURFACE TUBING PRESS. (psig)	CUMULATIVE VOL INJECTED (bbls)	INJECTION RATE (bbls/day)	INJECTION RATE (gpm) (3)/34.2857	MEASURED BHP (psi)
	9:30	953.9				
	9:35	979.7	1.7	487.6	14.22	
	9:40	1009.1	3.4	489.7	14.28	
1	9:45	1036.0	5.0	477.1	13.91	
	9:50	1185.0	8.4	959.8	27.99	
	9:55	1225.4	11.8	989.1	28.85	
2	10:00	1357.5	15.2	974.4	28.42	
	10:05	1476.4	20.3	1475.8	43.05	
	10:10	1566.2	25.5	1500.1	43.75	
3	10:15	1687.9	30.5	1435.9	41.88	
	10:20	1813.7	37.2	1923.6	56.10	
	10:25	1888.8	43.8	1895.2	55.28	
4	10:30	1985.2	51.0	2074.0	60.49	
	10:35	2153.7	59.5	2455.2	71.61	
	10:40	2218.7	67.9	2420.1	70.59	
5	10:45	2230.3	76.7	2518.3	73.45	
	10:50	2341.9	86.6	2868.0	83.65	
	10:55	2349.7	96.8	2937.0	85.66	
6	11:00	2398.8	106.9	2894.4	84.42	
	11:05	2541.2	118.4	3325.5	96.99	
	11:10	2563.4	129.9	3322.2	96.90	
7	11:15	2748.6	142.0	3460.7	100.94	
	11:20	2768.0	155.5	3895.7	113.62	
	11:25	2727.2	168.8	3845.2	112.15	
8	11:30	1877.8	182.2	3857.0	112.50	
FALLOFF	11:31	1796.1				
	11:32	1788.8				
	11:33	1781.1				
	11:34	1774.3				
	11:35	1767.8				
	11:40	1737.7				
	11:45	1712.2				

Pacific PROCESS SYSTEMS, INC.

TEXACO BUCKEYE CVU 14

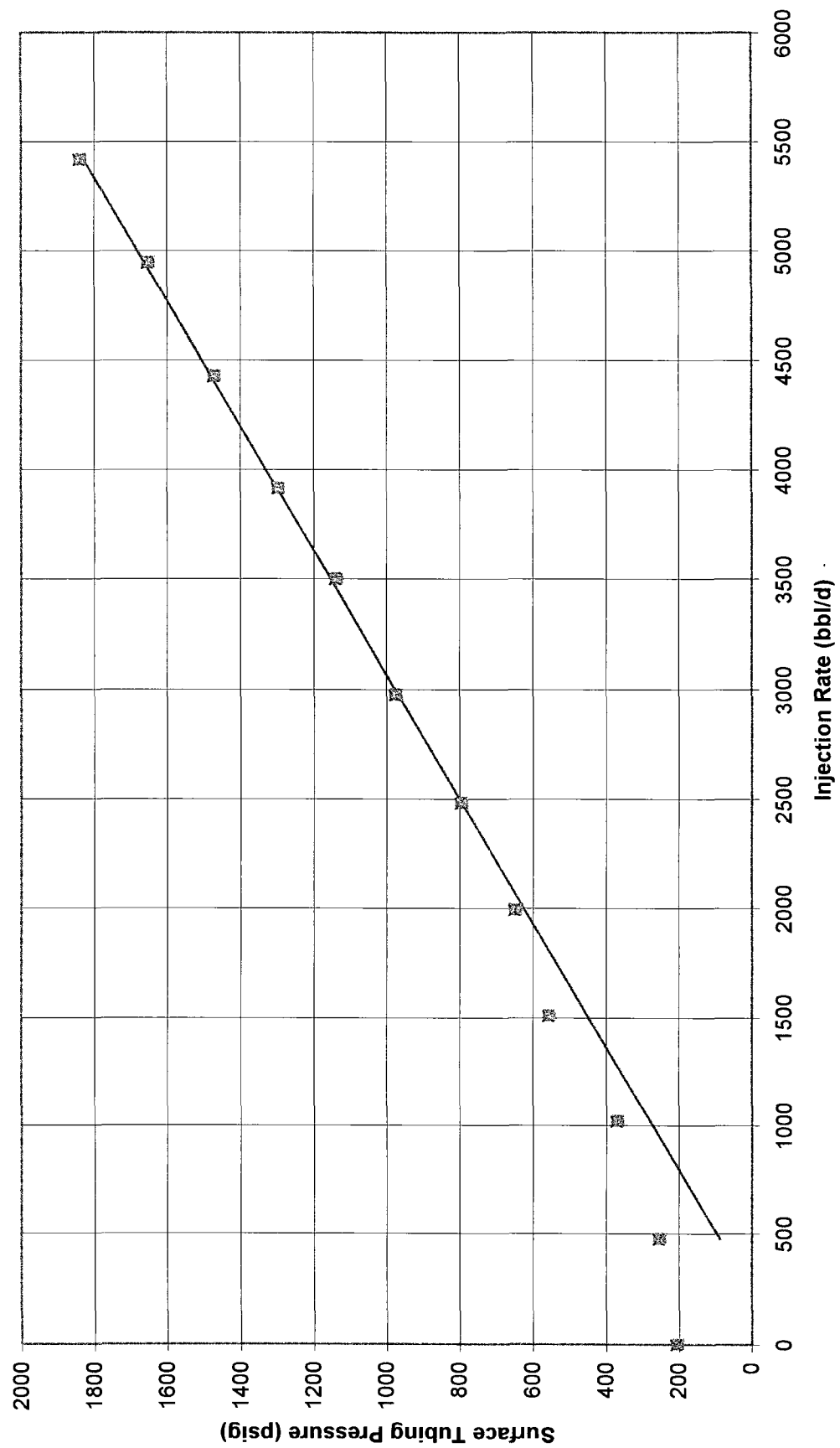
Step Rate Injection Test

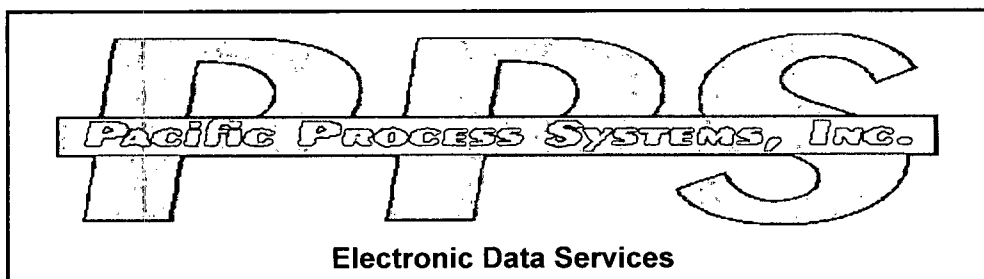


Phone: (505) 392-8813
Fax: (505) 392-6612

3406 Lovington Hwy.
Hobbs, NM 88240

Step Rate Injection Test - CVU 294





Step Rate Injection Test Report

for

Texaco E&P

CVU 294

10/01/01

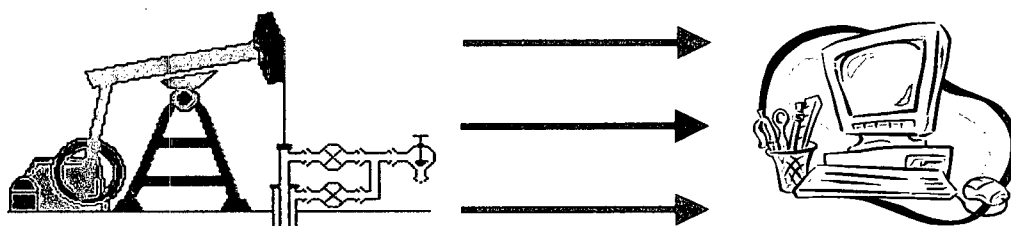


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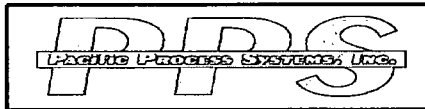


COMPANY : Texaco E&P
WELL: CVU 294
COMPANY REP: Steve Guillot
PERFORATIONS: N/A

N/A

SERVICE DATES : 10/01/01
TEST TYPE : Step Rate Injection
PPS TECHNICIANS : D. Ginanni
BHP GAUGE DEPTH: N/A

DATE	TIME	REMARKS
10/01/01	9:30	Start Pumping @ 500 BPD
10/01/01	9:45	Increase to 1000 BPD
10/01/01	10:00	Increase to 1500 BPD
10/01/01	10:15	Increase to 2000 BPD
10/01/01	10:30	Increase to 2500 BPD
10/01/01	10:45	Increase to 3000 BPD
10/01/01	11:00	Increase to 3500 BPD
10/01/01	11:15	Increase to 4000 BPD
10/01/01	11:30	Increase to 4500 BPD
10/01/01	11:45	Increase to 5000 BPD
10/01/01	12:00	Increase to 5500 BPD
10/01/01	12:15	Cease pumping, start falloff
10/01/01	12:30	End of test



COMPANY : Texaco E&P
 WELL: CVU 294
 COMPANY REP: Steve Guillot
 PERFORATIONS: N/A

SERVICE DATES : 10/01/01
 TEST TYPE : Step Rate Injection
 PPS TECHNICIANS : D. Ginanni
 BHP GAUGE DEPTH: N/A

STEP NO.	TIME	SURFACE TUBING PRESS. (psig)	CUMULATIVE VOL INJECTED (bbls)	INJECTION RATE (bbls/day)	INJECTION RATE (gpm) (3)/34.2857	MEASURED BHP (psi)
	9:30	207.1				
	9:35	223.8	1.6	464.5	13.55	
	9:40	232.7	3.3	476.9	13.91	
1	9:45	254.1	4.9	475.0	13.85	
	9:50	326.1	8.3	972.6	28.37	
	9:55	349.7	11.8	1019.5	29.74	
2	10:00	370.2	15.4	1018.2	29.70	
	10:05	495.3	20.5	1466.9	42.79	
	10:10	498.4	25.7	1500.8	43.77	
3	10:15	555.4	30.9	1508.7	44.00	
	10:20	629.0	37.6	1920.7	56.02	
	10:25	671.7	44.5	1994.2	58.16	
4	10:30	648.9	51.4	1992.9	58.13	
	10:35	729.0	59.6	2358.2	68.78	
	10:40	762.0	68.2	2481.4	72.38	
5	10:45	796.1	76.8	2478.9	72.30	
	10:50	878.8	86.9	2888.5	84.25	
	10:55	957.2	97.2	2978.0	86.86	
6	11:00	975.1	107.5	2974.9	86.77	
	11:05	1075.4	119.5	3451.7	100.67	
	11:10	1123.8	131.7	3494.4	101.92	
7	11:15	1140.0	143.8	3501.4	102.12	
	11:20	1228.0	157.3	3882.9	113.25	
	11:25	1288.9	170.9	3906.1	113.93	
8	11:30	1296.5	184.5	3916.0	114.22	
	11:35	1421.3	199.7	4379.0	127.72	
	11:40	1425.4	215.0	4427.8	129.15	
9	11:45	1472.8	230.4	4429.4	129.19	
	11:50	1598.5	247.4	4885.5	142.49	
	11:55	1619.2	264.6	4947.3	144.30	
10	12:00	1652.3	281.7	4943.9	144.20	
	12:05	1755.4	300.3	5353.1	156.13	
	12:10	1788.3	319.1	5404.2	157.62	



COMPANY : Texaco E&P
 WELL: CVU 294
 COMPANY REP: Steve Guillot
 PERFORATIONS: N/A

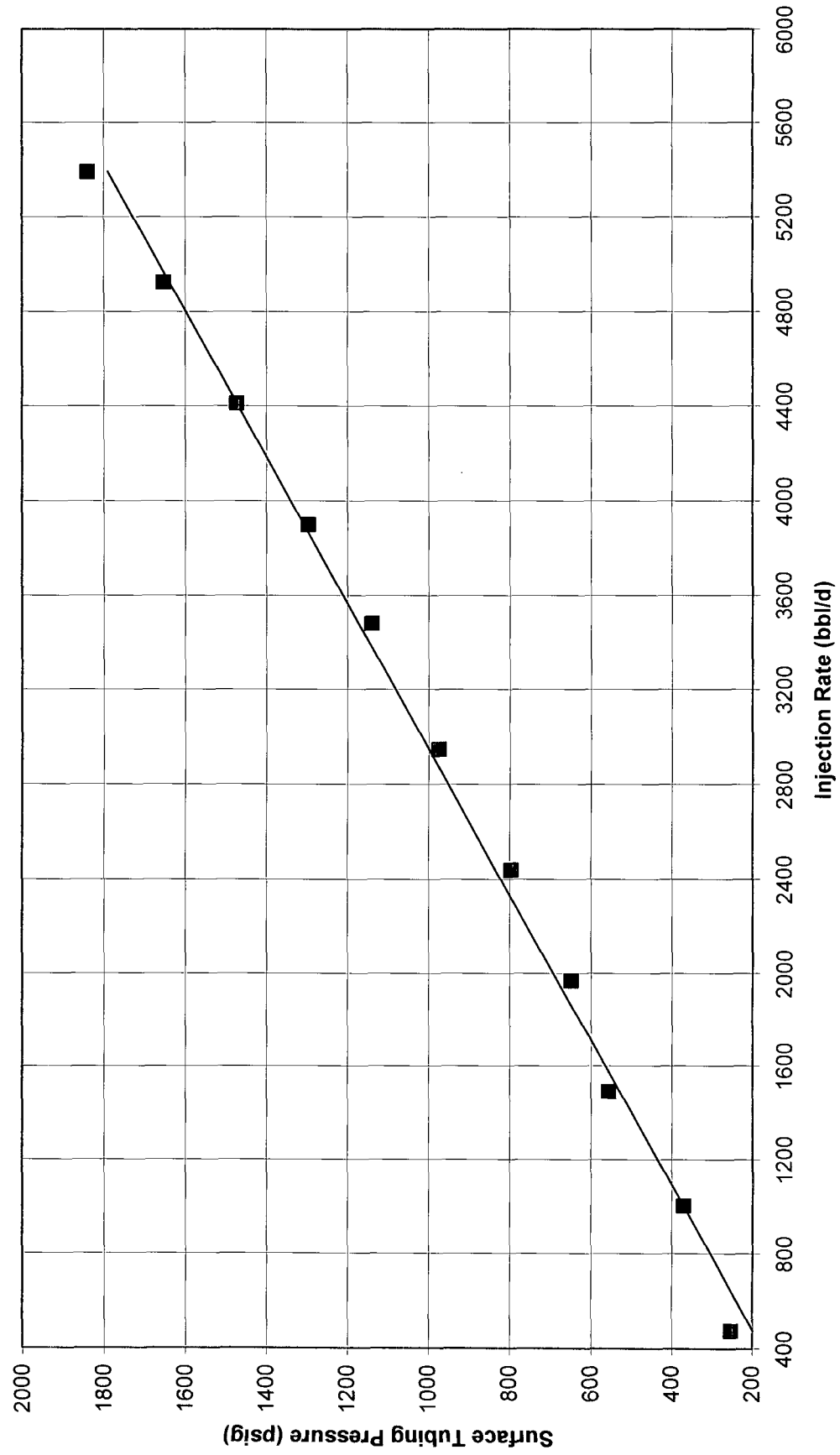
SERVICE DATES : 10/01/01
 TEST TYPE : Step Rate Injection
 PPS TECHNICIANS : D. Ginanni
 BHP GAUGE DEPTH: N/A

STEP NO.	TIME	SURFACE TUBING PRESS. (psig)	CUMULATIVE VOL INJECTED (bbls)	INJECTION RATE (bbls/day)	INJECTION RATE (gpm) (3)/34.2857	MEASURED BHP (psi)
11	12:15	1839.7	337.9	5418.4	158.04	
FALLOFF	12:16	1272.7				
	12:17	1227.0				
	12:18	1175.9				
	12:19	1137.6				
	12:20	1106.3				
	12:25	1000.8				
	12:30	933.9				
	12:30	932.0				
	12:30	930.4				
	12:30	928.5				
	12:30	926.9				
	12:30	925.1				

Pacific PROCESS SYSTEMS, INC.

TEXACO EI, BUCKEYE CVU 294

Step Rate Injection Test



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