

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.

Print or Type Name	Signature	Title	Date

e-mail Address			

RECEIVED

DEC 21 2005
JAN
Oil Conservation Division
1220 S. Saint Francis Drive
Santa Fe, NM 87505

MEWBOURNE OIL COMPANY

P. O. BOX 7698
TYLER, TEXAS 75711
(903) 561-2900
FAX (903) 561-1870

January 17, 2005

New Mexico Oil Conservation Commission
1220 S. St. Francis Drive
Santa Fe, New Mexico 87505

Att: Mr. David Catanach

Re: *Application for Increased Surface Pressure*
Querecho Plains Bone Spring Waterflood Project
Lea County, New Mexico

Dear Mr. Catanach:

Mewbourne Oil Company requests administrative approval to increase surface injection pressure for the following wells at the referenced project (see attached step-rate graphs). Step rate tests were conducted in December 2004 to bring wells in compliance with permit pressures.

	<u>Well</u>	<u>Permit Pressure</u>	<u>Frac Pressure</u>	<u>Requested Pressure</u>
30-025-30583	QPBSSU No. 2A-1	2300	2450	2430 psig
30-025-29679	QPBSSU No. 13-2	2250	2400	2380 psig

Administrative approval is requested as interpreted in Division Order No. R-10151 and Division Rule 704.C. The attached step-rate tests demonstrate that the subject wells can inject at the requested surface pressures without propagating the existing fracture stimulation out of the Bone Spring formation.

The step-rate tests, as represented on the graphs, have water gravity, friction factors and depth to top perforation incorporated in the calculations. Stabilization times between test were held constant.

Waterflood production from the Bone Spring formation is in the later state of depletion. As a result of continued pore volume pressure increasing the fracture pressure and difficulty in maintaining injectivity is increasing. The fracture pressure is directly proportional to the pore volume pressure plus other rock matrix stress relationships. Prior approved injection pressure in Order No. R-9737-B of May 2, 1996 approved a pressure 20 psig below the average fracture pressure as shown on the step-rate test curves provided. Fracture pressure is a continually moving target. By the time that approval is obtained, fracture pressures will have

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New Mexico Oil Conservation Commission
Mr. David Catanach
January 17, 2005

progressed above the current request. For this reason, I respectfully request the approval of the requested pressure. If you have any questions, please contact me at the above number. Thank you for your consideration in this matter.

Yours truly,

MEWBOURNE OIL COMPANY



K. M. Calvert

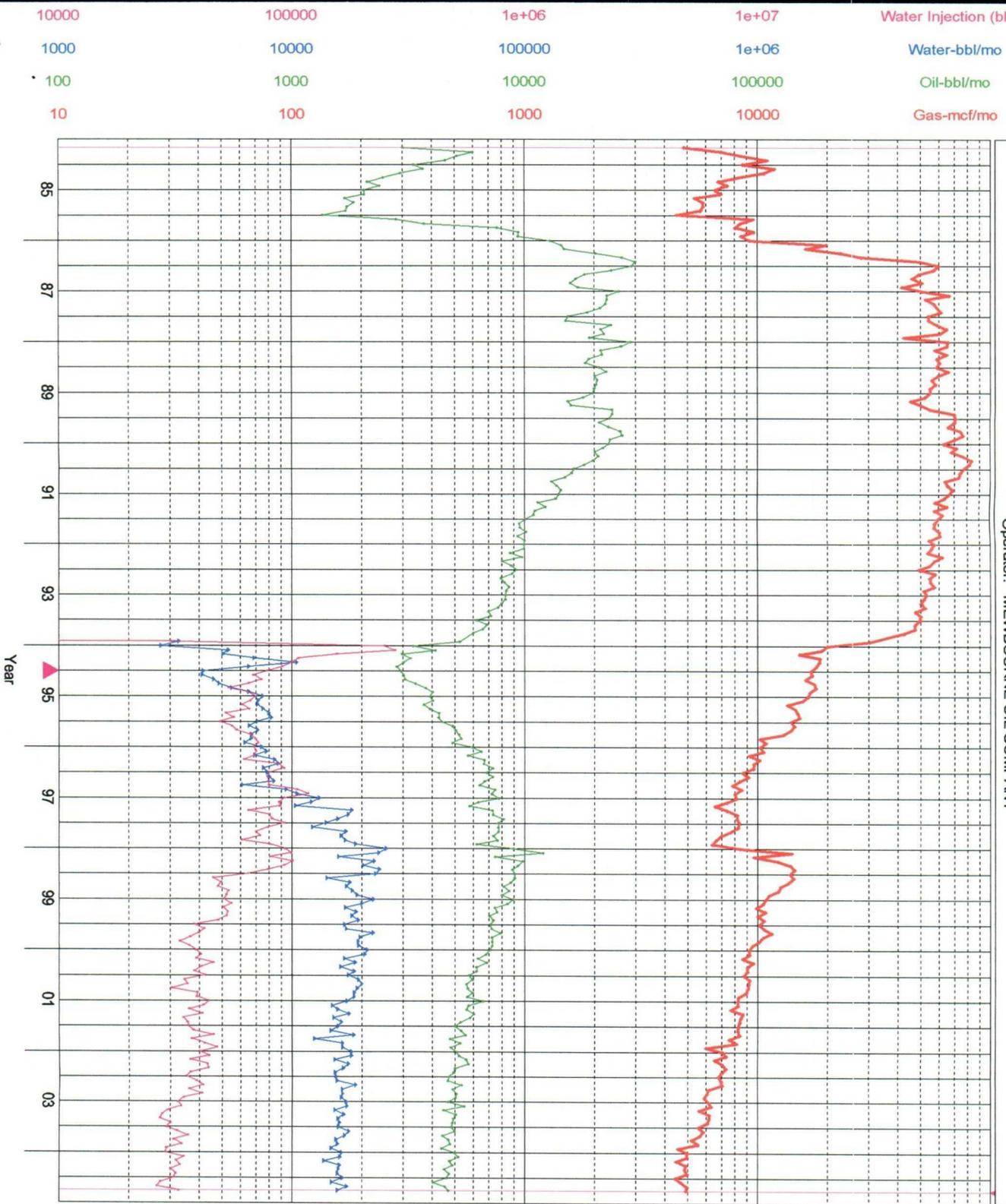
KMC/sh

Attachments: Step-Rate Graphs

cc: Arthur Boice

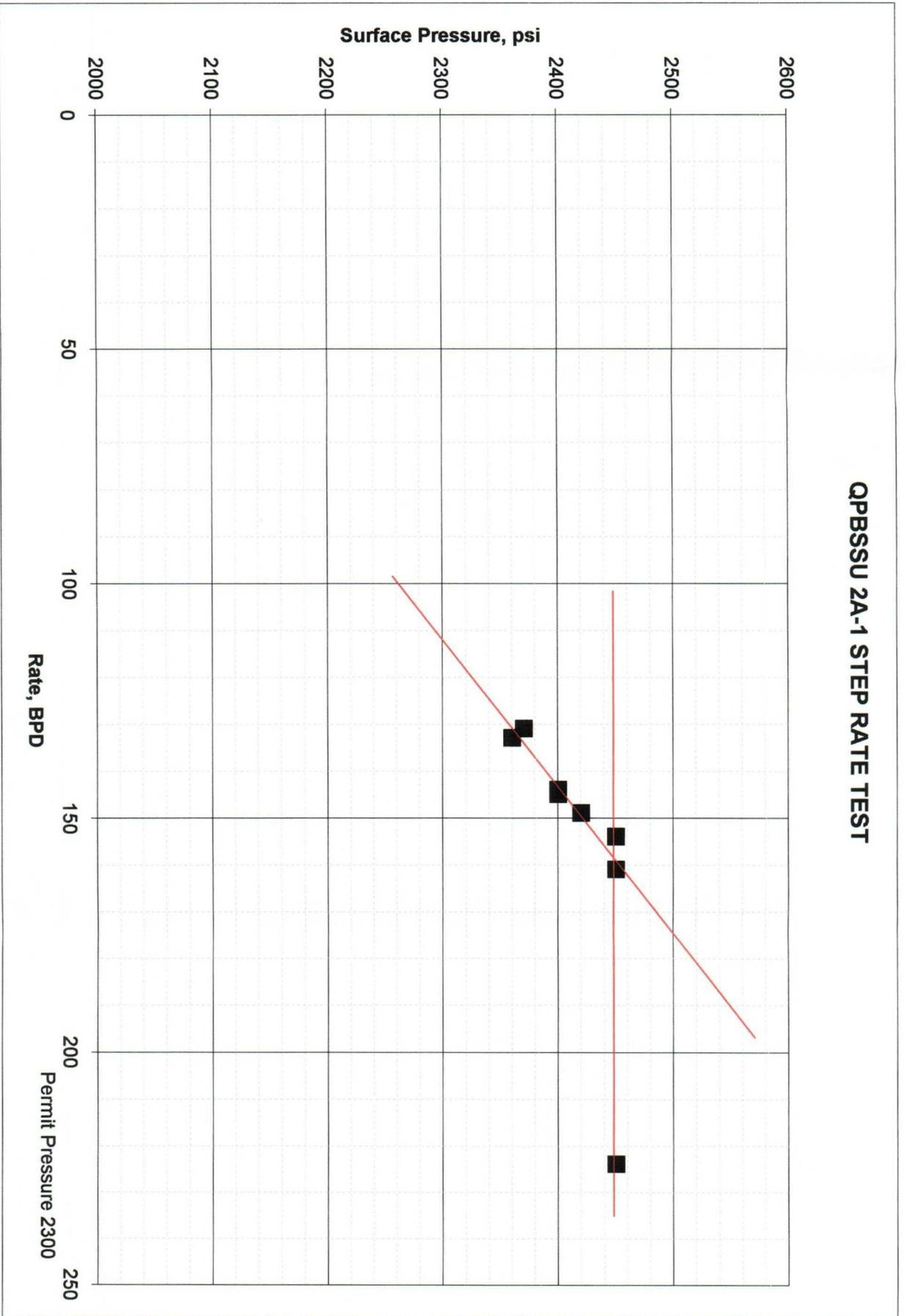
Mr. Chris Williams
New Mexico Oil Conservation Division
1625 N. French Drive
Hobbs, NM 88241

Lease: QPBSSU
 Location: UPPER BONE SPRING
 Reservoir: QUERECHO PLAINS
 Field: LEA, NIM
 City, St: MEMPHIS, TN
 Operator: MEMPHIS OIL COMPANY

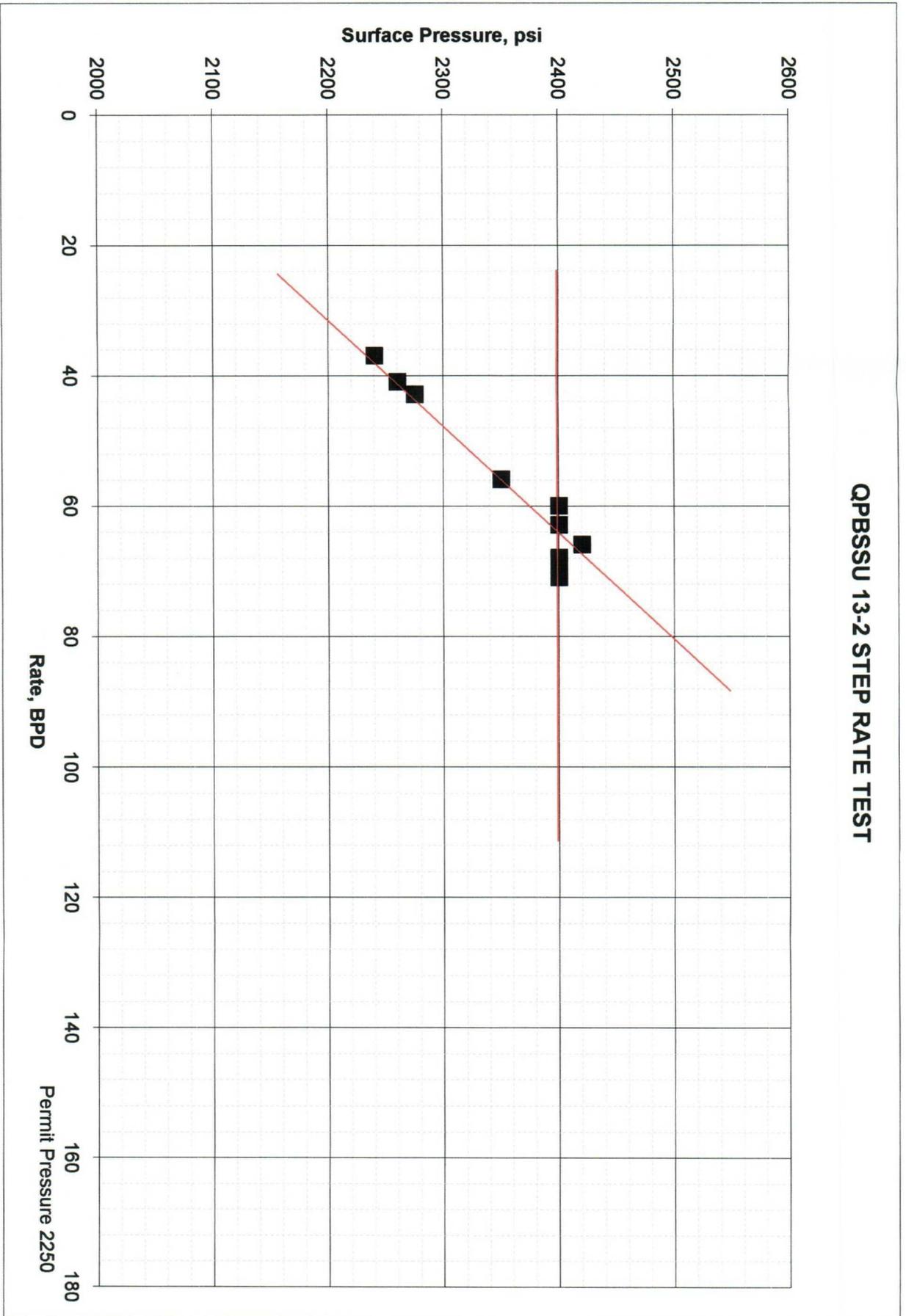


Gas-mcf/mo ◆ 10/2004
 Cum = 6824375
 Oil-bbl/mo ◆ 10/2004
 Cum = 2379656
 Water-bbl/mo ◆ 10/2004
 Cum = 1872280
 Water Inject ◆ 10/2004
 Cum = 7592002

QPBSU 2A-1 STEP RATE TEST



QPSSU 13-2 STEP RATE TEST



API Well Number :
OGRID Name : MEWBOURNE
Property Name : QUERECHO P
Pool Name :
County :
Well Type :
Well Status :
Permit :

Section : **Land:**
Township : **Dir. :**
Range : **Dir. :**

Company	Inspections	Well Master
Scheduler	Mech. Int. Tests	Well History
Data Action	Inactive Detail	Env. Inspections
Admin Permits	Inactive Mat.	Incidents
Hearing Orders	RUN	Pool Master
Compliance	GIS	Surf Facilities

Close all
 Functions
 and Exit
 RBDMS



WELL FILTER SUB FORM

Active API Record Below is Carried Throughout RBDMS for Inspections, Compliance, MITs, W

API WELL #	Well	Well #	Op	Typ	Sta	Coun	Sub	UL	Sec	Tw	N/S	Rng	W/E	Feet	NS	Ft	EW	Last Insp	Order No
30-025-24564-00-00	QU	002	ME	I	A	Lea	F	C	26	18	S	32	E	660	N	1980	W	1/12/2005	R-9737-A
30-025-25894-00-00	QU	001	ME	I	A	Lea	F	K	27	18	S	32	E	1980	S	1980	W	1/14/2005	IPI-151
30-025-29227-00-00	QU	001	ME	I	A	Lea	F	D	26	18	S	32	E	660	N	660	W	1/12/2005	R-9737-A
30-025-29252-00-00	QU	010	ME	I	A	Lea	F	G	27	18	S	32	E	2310	N	2310	E	1/12/2005	R-9737-A
30-025-29516-00-00	QU	011	ME	I	A	Lea	F	A	27	18	S	32	E	660	N	530	E	1/12/2005	R-9737-A
30-025-29679-00-00	QU	002	ME	I	A	Lea	F	N	23	18	S	32	E	760	S	2310	W	1/12/2005	WFX-776
30-025-29749-00-00	QU	002	ME	I	A	Lea	F	K	23	18	S	32	E	1950	S	1980	W	1/12/2005	R-9737-A
30-025-29770-00-00	QU	002	ME	I	A	Lea	F	J	23	18	S	32	E	2310	S	2030	E	1/12/2005	R-9737-A
30-025-29828-00-00	QU	003	ME	I	A	Lea	F	L	23	18	S	32	E	1980	S	990	W	1/12/2005	R-9737-A
30-025-30129-00-00	QU	004	ME	I	A	Lea	F	B	23	18	S	32	E	660	N	1650	E	1/12/2005	R-9737-A
30-025-30570-00-00	QU	003	ME	I	A	Lea	P	J	14	18	S	32	E	1980	S	1980	E	11/8/2004	R-9737-A
30-025-30583-00-00	QU	001	ME	I	A	Lea	P	D	24	18	S	32	E	660	N	660	W	11/8/2004	R-9737-A
30-025-30643-00-00	QU	004	ME	I	A	Lea	F	I	14	18	S	32	E	1980	S	660	E	11/8/2004	R-9737-A
30-025-31115-00-00	QU	161	ME	I	A	Lea	F	L	24	18	S	32	E	2310	S	330	W	12/1/2004	WFX-686