May 5, 1998

Mewbourne Oil Company P.O. Box 7698 Tyler, Texas 75711-7698

Attn: Mr. K.M. Calvert

RE: Injection Pressure Increase Quercho Plains Queen Associated Sand Unit EOR Waterflood Project Lea County, New Mexico.

Dear Mr. Calvert:

Reference is made to your request dated September 25,1997 and revised April 22, 1998, to increase the surface injection pressure on six wells in the above referenced project. This request is based on step rate tests conducted on these wells immediately prior to your original request, and additional information supplied on April 22, 1998. The results of the tests and additional data have been reviewed by my staff and we feel an increase in injection pressures on these wells is justified at this time.

You are therefore authorized to increase the surface injection pressure on the following wells:

Well Name and Number	Maximum Injection Surface Pressure
QPQASU Well No.13	1550 PSIG
QPQASU Well No.18	1985 PSIG
QPQASU Well No.22	1650 PSIG
QPQASU Well No.25	1650 PSIG
QPQASU Well No.26	1660 PSIG
QPQASU Well No.27	1700 PSIG
All wells located in Lea Co	unty, New Mexico.

Injection Pressure Increase Mewbourne Oil Company May 5, 1998 Page 2

The Division Director may rescind any injection pressure increase if it becomes apparent that the injected water is not being confined to the injection zone or is endangering any fresh water aquifers.

Sincerely,

Tout notembery

Lori Wrotenbery

Director

LW/BES/kv

cc: Oil Conservation Division - Hobbs

Files: Case File No.10960; EOR-19; PSI-X 4th QTR 98

July 8, 1997

Mewbourne Oil Company P.O. Box 7698 Tyler, Texas 75711-7698

Attn: Mr. K.M. Calvert

RE: Injection Pressure Increase Quercho Plains Queen Associated Sand Unit EOR Waterflood Project Lea County, New Mexico.

Dear Mr. Calvert:

Reference is made to your request dated May 23, 1997 to increase the surface injection pressure on twelve (12) wells in the above referenced project. This request is based on step rate tests conducted recently on these wells. The results of the tests have been reviewed by my staff and we feel an increase in injection pressures on these wells is justified at this time.

You are therefore authorized to increase the surface injection pressure on the following wells:

Well and Location	Maximum Injection Surface Pressure
QPQASU Well No.1	1920 PSIG
QPQASU Well No.2	1720 PSIG
QPQASU Well No.3	1780 PSIG
QPQASU Well No.6	1370 PSIG
QPQASU Well No.11	1750 PSIG
QPQASU Well No.13	1280 PSIG
QPQASU Well No.14	1850 PSIG
QPQASU Well No.17	1830 PSIG
QPQASU Well No.18	1930 PSIG
QPQASU Well No.22	1550 PSIG

QPQASU Well No.25	1470 PSIG					
QPQASU Well No.27	1625 PSIG					
All wells located in Lea County, New Mexico.						

The Division Director may rescind this injection pressure increase if it becomes apparent that the injected water is not being confined to the injection zone or is endangering any fresh water aquifers.

Sincerely

William J. LeMay

Director

WJL/BES

cc: Oil Conservation Division - Hobbs

Files: Case File No.10960; EOR-19; PSI-X 4th QTR 97

December 4, 1996

Mewbourne Oil Company P.O. Box 7698 Tyler, Texas 75711-7698

Attn: Mr. K.M. Calvert

RE: Injection Pressure Increase Quercho Plains Queen Associated Sand Unit EOR Waterflood Project Lea County, New Mexico.

Dear Mr. Calvert:

Reference is made to your request dated October 1, 1996 to increase the surface injection pressure on two wells in the above referenced project. This request is based on step rate tests conducted recently on these wells. The results of the tests have been reviewed by my staff and we feel an increase in injection pressures on these wells is justified at this time.

You are therefore authorized to increase the surface injection pressure on the following wells:

Well and Location	Maximum Injection Surface Pressure	
QPQASU Well No.2 (Cedar Lake Well No.1)	1470 PSIG	
QPQASU Well No.17 (Marshall Well No.1)	1625 PSIG	
Both wells located in Lea Cou	inty, New Mexico.	

The Division Director may rescind this injection pressure increase if it becomes apparent that the injected water is not being confined to the injection zone or is endangering any fresh water aquifers.

Sincerely,

William J. L¢May

Director

Injection Pressure Increase Mewbourne Oil Company December 4, 1996 Page 2

WJL/BES

cc: Oil Conservation Division - Hobbs

Files: Case File No.10960; EOR-19; PSI-X 1st QTR 97

May 21, 1996

Mewbourne Oil Company P.O. Box 7698 Tyler, Texas 75711-7698

Attn: Mr. Kevin Mayes

RE: Injection Pressure Increase Quercho Plains Queen Associated Sand Unit EOR Waterflood Project Lea County, New Mexico.

Dear Mr. Mayes:

Reference is made to your request dated April 11, 1996 to increase the surface injection pressure on four wells in the above referenced project. This request is based on step rate tests conducted recently on these wells. The results of the tests have been reviewed by my staff and we feel an increase in injection pressures on these wells is justified at this time.

You are therefore authorized to increase the surface injection pressure on the following wells:

Well and Location	Maximum Injection Surface Pressure				
QPQASU Well No.11 (Cavalcade No.4) Unit P, Section 21, Township 18 South, Range 32 East	1490 PSIG				
QPQASU Well No.18 (Walker No.1) Unit D, Section 26, Township 18 South, Range 32 East	1460 PSIG				
QPQASU Well No.26 (Anadarko No.2) Unit K, Section 27, Township 18 South, Range 32 East	1427 PSIG				
QPQASU Well No.27 (Anadarko No.3) Unit L, Section 27, Township 18 South, Range 32 East	1494 PSIG				
All wells located in Lea County, New Mexico.					

The Division Director may rescind this injection pressure increase if it becomes apparent that the injected water is not being confined to the injection zone or is endangering any fresh water aquifers.

Sincerely,

William J. LeMay Director

WJL/BES

Oil Conservation Division - Hobbs cc:

Files: Case File No.10960; EOR-19; PSI-X 3rd QTR 96

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

April 10, 1996

Mewbourne Oil Company P.O. Box 7698 Tyler, Texas 75711

Attn: Mr. Kevin Mayes

Injection Pressure Increase - Quercho Plains RE:

Queen Associated Sand Unit Waterflood Project

Lea County, New Mexico

Dear Mr. Gibson:

Reference is made to your request dated December 13, 1995 to increase the surface injection pressure on the above referenced well. This request is based on a step rate test conducted in December, 1995. The results of the test have been reviewed by my staff and we feel an increase in injection pressure on this well is justified at this time.

You are therefore authorized to increase the surface injection pressure on the following well:

Well and Location	Maximum Surface Injection Pressure				
QPQASU Well No.30	1050 PSIG				
Located in Section 26, Township 18 South, Range 32 East, Lea County, New Mexico.					

The Division Director may rescind this injection pressure increase if it becomes apparent that the injected water is not being confined to the injection zone or is endangering any fresh water aquifers.

Sincerely.

William J. LeM Director

WJL/BES

Oil Conservation Division - Hobbs

Files: WFX-673; EOR-19; PSI-X 4th QTR-96

OIL CONSERVATION DIVISION

December 18, 1995

Mewbourne Oil Company P.O. Box 7698
Tyler, Texas 75711

Attention: Mr. Kevin Mayes

Re: Positive Production Response

Querecho Plains Queen Associated Sand Unit

Dear Mr. Mayes:

Pursuant to your request dated October 10, 1995, please be advised that the Division hereby certifies that a positive production response occurred within the Querecho Plains Queen Associated Sand Unit Waterflood Project on December 1, 1994.

All Querecho Plains-Queen Associated Pool producing wells within the following described area, which currently number seventeen as shown on Exhibit "A" attached hereto, shall be eligible for the recovered oil tax rate:

OUERECHO PLAINS OUEEN ASSOCIATED SAND UNIT WF PROJECT

TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM

Section 22: S/2

Section 23: SW/4, S/2 NW/4, W/2 SE/4

Section 26: NW/4 NW/4

Section 27: N/2 NE/4, SE/4 NE/4, S/2 NW/4,

NE/4 NW/4, N/2 SW/4

Section 28: SE/4 NE/4

Mewbourne shall notify the Division:

- a) of the change in status of any of the producing wells shown on Exhibit "A";
- b) in the event new producing wells are drilled within the project area;
- c) of changes in operations within the unit which may affect the certification and resulting tax rate granted herein.

The Division Director shall notify the Secretary of the New Mexico Taxation and Revenue Department of the certification

Sincerely,

William J LeMay Division Director

xc: File-EOR-19

EXHIBIT "A" QUERECHO PLAINS QUEEN ASSOCIATED SAND UNIT PRODUCING WELLS

API NO.	OPOASU WELL NO.	WELL LOCATION - UL-S-T-R
30-025-24888	2	F-23-18S-32E
30-025-24856	4	K-23-18S-32E
30-025-25620	5	L-23-18S-32E
30-025-27909	6	I-22-18S-32E
30-025-28148	. 7	J-22-18S-32E
30-025-28152	8	K-22-18S-32E
30-025-28190	9	L-22-18S-32E
30-025-28186	12	M-22-18S-32E
30-025-28149	13	N-22-18S-32E
30-025-27910	15	P-22-18S-32E
30-025-27037	16	M-23-18S-32E
30-025-28212	19	A-27-18S-32E
30-025-28211	20	B-27-18S-32E
30-025-27951	21	C-27-18S-32E
30-025-25619	23	E-27-18S-32E
30-025-25618	24	F-27-18S-32E
30-025-32723	28	O-23-18S-32E

OIL CONSERVATION DIVISION

December 18, 1995

Department of Taxation and Revenue P.O. Box 630
Santa Fe, New Mexico 87509-0630

Attention: Mr. John Chavez, Secretary

RE: Certification of a Positive

Production Response, Mewbourne Oil Company

Querecho Plains Queen Associated Sand Unit Waterflood Project

Dear Secretary Chavez:

Enclosed is a copy of a Division Certification which was issued on December 18, 1995. This document certifies that a positive production response has occurred within the Querecho Plains Queen Associated Sand Unit Waterflood Project Area which is currently operated by Mewbourne Oil Company. In addition, this positive production response has occurred within the five year time limit as described within the "New Mexico Enhanced Oil Recovery Act". The Division has determined that all wells within the certified area producing from the Querecho Plains-Queen Associated Pool are eligible for the recovered oil tax rate. These wells are shown on Exhibit "A" to the Division Certification.

For your convenience we have also enclosed a summary page showing all pertinent data. If additional information is required please advise.

Sincerely,

William J. LeMay Director

WJL/DRC

Enclosures

POSITIVE PRODUCTION RESPONSE DATA OUERECHO PLAINS OUEEN ASSOCIATED SAND UNIT WATERFLOOD PROJECT

NAME OF PROJECT

Querecho Plains Queen Associated Sand Unit Waterflood Project

OPERATOR

Mewbourne Oil Company
P.O. Box 7698
Tyler, Texas 75711
Attention: Mr. Kevin Mayes

POOL

Querecho Plains-Queen Associated Pool

OCD ORDER NO. APPROVING WATERFLOOD PROJECT & DATE

R-10151, July 14, 1994

PROJECT AREA

TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM

Section 22: S/2

Section 23: SW/4, S/2 NW/4, W/2 SE/4

Section 26: NW/4 NW/4

Section 27: N/2 NE/4, SE/4 NE/4, S/2 NW/4,

NE/4 NW/4, N/2 SW/4

Section 28: SE/4 NE/4

DATE WATER INJECTION COMMENCED

October, 1994

DATE CERTIFIED PROJECT TO TAXATION & REVENUE

August 3, 1994 & May 10, 1995

DATE POSITIVE PRODUCTION RESPONSE OCCURRED

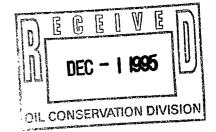
December 1, 1994,

CURRENT NUMBER OF WELLS WITHIN PROJECT AREA

Injection: 9
Production: 17

MEWBOURNE OIL COMPANY

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



November 27, 1995

State of New Mexico Energy, Minerals and Natural Resources Department Oil Conservation Division 2040 S. Pacheco Santa Fe, New Mexico 87505

Attention: Mr. David Catanach

RE: POSITIVE PRODUCTION RESPONSE CERTIFICATE

Querecho Plains Bone Spring Sand Unit Lea County, New Mexico

Dear David:

Pursuant to our phone conversation, you should find enclosed both graphical production for the entire life and columnar production for years 1994 and 1995 for all wells involved with the referenced. I appreciate your quick response to our application. Should you have any questions or comments concerning this application, please contact me at (903) 561-2900.

Sincerely,

Kevin Mayes, PE

CASE: 6 QPQASU 2 (CEDAR LAKE #1)

QPQASU LEA , NM MEWBOURNE OIL COMPANY DATE: 11/27/95 TIME: 11:26:52 PAGE: 3

PAGE: 3 MOCSEC.DBS

DATE	OIL, BBL	GAS, MCF	WATER, BBL	GOR, CF/BBL	WATER CUT, %	CUM OIL, BBL	CUM GAS, MCF
PRIOR	1028	2561	0	2491	0.00	1,028	2,561
1/94	0	0	0	0	0.00	1,028	2,561
2/94	0	0	0	0	0.00	1,028	2,561
3/94	0	0	0	0	0.00	1,028	2,561
4/94	0	0	0	0	0.00	1,028	2,561
5/94	0	0	0	0	0.00	1,028	2,561
6/94	0	0	0	0	0.00	1,028	2,561
7/94	76	142	1	1868	1.30	1,104	2,703
8/94	117	95	74	812	38.74	1,221	2,798
9/94	58	87	29	1500	33.33	1,279	2,885
10/94	48	43	26	896	35.14	1,327	2,928
11/94	41	77	23	1878	35.94	1,368	3,005
12/94	39	10	18	256	31.58	1,407	3,015
TOT/94	379	454	171	1198		1,407	3,015
1/95	38	69	23	1816	37.70	1,445	3,084
2/95	31	128	13	4129	29.55	1,476	3,212
3/95	33	87	12	2636	26.67	1,509	3,299
4/95	31	69	11	2226	26.19	1,540	3,368
5/95	30	95	14	3167	31.82	1,570	3,463
6/95	28	114	10	4071	26.32	1,598	3,577
7/95	21	136	21	6476	50.00	1,619	3,713
8/95	33	101	12	3061	26.67	1,652	3,814
9/95	24	96	13	4000	35.14	1,676	3,910
10/95							
11/95							
12/95							
TOT/95	269	895	129	3327		1,676	3,910
TOTAL	1676	3910	300	2333		1,676	3,910

CASE: 37 QPQASU 4 (GOV K #1)

QPQASU

LEA , NM MEWBOURNE OIL COMPANY

DATE: 11/27/95 TIME: 11:30:58 PAGE: 15

MOCSEC.DBS

PRODUCTION LEDGER

DATE	OIL, BBL	GAS, MCF	WATER, BBL	GOR, CF/BBL	WATER CUT, %	CUM OIL, BBL	CUM GAS, MCF
PRIOR	76393	84588	4956	1107	6.09	76,393	84,588
1/94	194	0	0	0	0.00	76,587	84,588
2/94	184	0	0	0	0.00	76,771	84,588
3/94	197	0	1	0	0.51	76,968	84,588
4/94	189	0	0	0	0.00	77,157	84,588
5/94	192	0	0	0	0.00	77,349	84,588
6/94	149	0	0	0	0.00	77,498	84,588
7/94	100	12	5	120	4.76	77,598	84,600
8/94	30	65	42	2167	58.33	77,628	84,665
9/94	70	72	20	1029	22.22	77,698	84,737
10/94	91	61	14	670	13.33	77,789	84,798
11/94	80	74	56	925	41.18	77,869	84,872
12/94	74	55	35	743	32.11	77,943	84,927
TOT/94	1550	339	173	219		77,943	84,927
1/95	181	31	9	171	4.74	78,124	84,958
2/95	112	44	47	393	29.56	78,236	85,002
3/95	141	28	35	199	19.89	78,377	85,030
4/95	132	32	8	242	5.71	78,509	85,062
5/95	155	38	9	245	5.49	78,664	85,100
6/95	218	29	0	133	0.00	78,882	85,129
7/95	190	43	68	226	26.36	79,072	85,172
8/95	298	68	0	228	0.00	79,370	85,240
9/95	253	39	100	154	28.33	79,623	85,279
10/95							
11/95							
12/95							
TOT/95	1680	352	276	210		79,623	85,279
TOTAL	79623	85279	5405	1071		79,623	85,279

/

CASE: 20 QPQASU 5 (FED F #1)

QPQASU LEA , NM

MEWBOURNE OIL COMPANY

DATE: 11/27/95 TIME: 11:29:56

PAGE: 12 MOCSEC.DBS

DATE	OIL, BBL	GAS, MCF	WATER, BBL	GOR, CF/8BL	WATER CUT, %	CUM OIL, BBL	CUM GAS, MCF
PRIOR	50270	246271	-15	4899	0.03	50,270	246,271
1/94	217	92	0	424	0.00	50,487	246,363
2/94	203	89	0	438	0.00	50,690	246,452
3/94	236	92	0	390	0.00	50,926	246,544
4/94	214	93	0	435	0.00	51,140	246,637
5/94	214	96	0	449	0.00	51,354	246,733
6/94	172	73	0	424	0.00	51,526	246,806
7/94	108	12	5	111	4.42	51,634	246,818
8/94	100	11	0	110	0.00	51,734	246,829
9/94	89	48	88	539	49.72	51,823	246,877
10/94	202	76	59	376	22.61	52,025	246,953
11/94	237	74	0	312	0.00	52,262	247,027
12/94	205	78	0	380	0.00	52,467	247,105
TOT/94	2197	834	152	380		52,467	247,105
1/95	124	21	0	169	0.00	52,591	247,126
2/95	160	44	0	275	0.00	52,751	247,170
3/95	126	28	0	222	0.00	52,877	247,198
4/95	112	32	0	286	0.00	52,989	247,230
5/95	142	37	0	261	0.00	53,131	247,267
6/95	128	39	4	305	3.03	53,259	247,306
7/95	124	33	0	266	0.00	53,383	247,339
8/95	114	44	0	386	0.00	53,497	247,383
9/95	81	46	. 0	568	0.00	53,578	247,429
10/95							
11/95							
12/95							
TOT/95	1111	324	4	292		53,578	247,429
TOTAL	53578	247429	171	4618		53,578	247,429

CASE: 21 QPQASU 6 (FED F #2)

QPQASU

LEA , NM MEWBOURNE OIL COMPANY

DATE: 11/27/95 TIME: 11:30:17

PAGE: 13 MOCSEC.DBS

DATE	OIL, 88L	GAS, MCF	WATER, BBL	GOR, CF/BBL	WATER CUT, %	CUM OIL, 88L	CUM GAS, MCF
PRIOR	14009	35122	0	2507	0.00	14,009	35,122
1/94	31	112	0	3613	0.00	14,040	35,234
2/94	23	0	0	0	0.00	14,063	35,234
3/94	70	110	0	1571	0.00	14,133	35,344
4/94	47	76	0	1617	0.00	14,180	35,420
\$/94	48.	93	0	1938	0.00	14,228	35,513
6/94	48	98	0	2042	0.00	14,276	35,611
7/94	43	23	5	535	10.42	14,319	35,634
8/94	66	39	0	591	0.00	14,385	35,673
9/94	56	94	0	1679	0.00	14,441	35,767
10/94	60	87	5	1450	7.69	14,501	35,854
11/94	53	74	0	1396	0.00	14,554	35,928
12/94	18	32	0	1778	0.00	14,572	•
TOT/94	563	. 838	10	1488		14,572	35,960
1/95	36	31	0	861	0.00	14,608	35,991
2/95	61	44	0	721	0.00	14,669	36,035
3/95	32	28	0	875	0.00	14,701	36,063
4/95	37	32	0	865	0.00	14,738	36,095
5/95	55	37	0	673	0.00	14,793	36,132
6/95	43	23	0	535	. 0.00	14,836	36,155
7/95	62	25	0	403	0.00	14,898	36,180
8/95	64	57	0	891	0.00	14,962	•
9/95	60	50	. 0	833	0:00	15,022	
10/95							•
11/95	•		•				
12/95			•				
TOT/95	450	327	0	727		15,022	36,287
TOTAL	15022	36287	10	2416		15,022	36,287

CASE: 133 QPQASU 7 (FED J #1)

QPQASU

DATE: 11/27/95 TIME: 11:33:01

PAGE: 21 MOCSEC.DBS

DATE	OIL, 88L	GAS, MCF	WATER, BBL	GOR, CF/88L	WATER CUT, %	CUM OIL, 8BL	CUM GAS, MCF
PRIOR	7089	39609	749	5587	9.56	7,089	39,609
1/94	6	16	8	2667	57.14	7,095	39,625
2/94	7	13	8	1857	53.33	7,102	39,638
3/94	7	11	15	1571	68.18	7,109	39,649
4/94	5	14	5	2800	50.00	7,114	39,663
5/94	6	14	8.	2333	57.14	7,120	39,677
6/94	1	22	4	22000	80.00	7,121	39,699
7/94	15	6	8	400	34.78	7,136	
8/94	19	7	0	368	0.00	7,155	39,712
9/94	18	0	0	0	0.00	7,173	39,712
10/94	19	0	0	0	0.00	7,192	
11/94	20	0	0	0	0.00	7,212	39,712
12/94	15	0	0	0	0.00	7,227	39,712
TOT/94	138	103	56	746		7,227	39,712
1/95	12	5	0	417	0.00	7,239	39,717
2/95	85	26	3	306	3.41	7,324	39,743
3/95	28	4	0	143	0.00	7,352	39,747
4/95	15	20	15	1333	50.00	7,367	39,767
5/95	17	32	9	1882	34.62	7,384	
6/95	19	40	11	2105	36.67	7,403	39,839
7/95	12	39	7	3250	36.84	7,415	39,878
8/95	12	31	0	2583	0.00	7,427	39,909
9/95	. 5	10	3	2000	37.50	7,432	39,919
10/95							
11/95							
12/95							
TOT/95	205	207	48	1010		7,432	39,919
TOTAL	7432	39919	853	5371		7,432	39,919

CASE: 134 QPQASU 8 (BENNETT FED #2)

QPQASU

DATE: 11/27/95 TIME: 11:33:21

PAGE: 22 MOCSEC.DBS

DATE	OIL, BBL	GAS, MCF	WATER, BBL	GOR, CF/BBL	WATER CUT, %	CUM OIL, 88L	CUM GAS, MCF
PRIOR	4282	30022	1682	7011	28.20	4,282	30,022
1/94	10	. 87	0	8700	0.00	4,292	30,109
2/94	10	77	0	7700	0.00	4,302	30,186
3/94	8	69	0	8625	0.00	4,310	30,255
4/94	7	74	0	10571	0.00	4,317	30,329
5/94	6	70	0	11667	0.00	4,323	30,399
6/94	4	56	0	14000	0.00	4,327	30,455
7/94	18	6	8	333	30.77	4,345	30,461
8/94	20	7	0	350	0.00	4,365	30,468
9/94	18	0	0	0	0.00	4,383	30,468
10/94	18	0	0	0	0.00	4,401	30,468
11/94	20	0	0	0	0.00	4,421	30,468
12/94	15	0	0	. 0	0.00	4,436	30,468
TOT/94	154	446	8	2896		4,436	30,468
1/95	14	11	1	786	6.67	4,450	30,479
2/95	8	28	6	3500	42.86	4,458	30,507
3/95	0	39	14	. 0	0.00	4,458	30,546
4/95	16	20	15	1250	48.39	4,474	30,566
5/95	96	47	7	490	6.80	4,570	30,613
6/95	66	40	61	606	48.03	4,636	30,653
7/95	54	39	57	722	51.35	. 4,690	30,692
8/95	46	36	2	783	4.17	4,736	30,728
9/95	18	33	19	1833	51.35	4,754	30,761
10/95							
11/95							
12/95							
TOT/95	318	293	182	921		4,754	30,761
TOTAL	4754	30761	1872	6471		4,754	30,761

CASE: 132 QPQASU 10 (CAVALCADE #1)

QPQASU

DATE: 11/27/95 TIME: 11:32:40

PAGE: 20 MOCSEC.DBS

DATE	OIL, 88L	GAS, MCF	WATER, BBL	GOR, CF/BBL	WATER CUT, %	CUM OIL, BBL	CUM GAS, MCF
PRIOR	62469	96695	1105	1548	1.74	62,469	96,695
1/94	528	44	0	83	0.00	62,997	96,739
2/94	550	48	56	87	9.24	63,547	96,787
3/94	569	59	62	104	9.83	64,116	96,846
4/94	530	61	120	115	18.46	64,646	96,907
5/94	554	59	248	106	30.92	65,200	96,966
6/94	326	26	95	80	22.57	65,526	96,992
7/94	519	1	279	2	34.96	66,045	96,993
8/94	484	21	127	43	20.79	66,529	97,014
9/94	434	51	93	118	17.65	66,963	97,065
10/94	426	29	160	68	27.30	67,389	97,094
11/94	449	35	128	78	22.18	67,838	97,129
12/94	488	20	265	41	35.19	68,326	97,149
TOT/94	5857	454	1633	78		68,326	97,149
1/95	434	10	259	23	37.37	68,760	97,159
2/95	436	20	318	46	42.18	69,196	97,179
3/95	467	32	350	69	42.84	69,663	97,211
4/95	428	. 38	348	89	44.85	70,091	97,249
5/95	447	20	429	. 45	48.97	70,538	97,269
6/95	405	0	394	0	49.31	70,943	97,269
7/95	412	37	338	90	45.07	71,355	97,306
8/95	430	36	352	84	45.01	71,785	97,342
9/95	400	26	337	. 65	45.73	72,185	97,368
10/95							
11/95					•		
12/95							
TOT/95	3859	219	3125	57		72,185	97,368
TOTAL	72185	97368	5863	1349		72,185	97,368

CASE: 135 QPQASU 12 (BENNETT FED #4)

QPQASU

DATE: 11/27/95 TIME: 11:33:41

PAGE: 23 MOCSEC.D8S

DATE	OIL, BBL	GAS, MCF	WATER, BBL	GOR, CF/BBL	WATER CUT, %	CUM OIL, BBL	CUM GAS, MCF
PRIOR	2447	18323	1021	7488	29.44	2,447	18,323
1/94	10	86	0	8600	0.00	2,457	18,409
2/94	10	77	0	7700	0.00	2,467	18,486
3/94	8	70	0	8750	0.00	2,475	18,556
4/94	7	74	0	10571	0.00	2,482	18,630
5/94	6	70	0	11667	0.00	2,488	18,700
6/94	4	56	0	14000	0.00	2,492	18,756
7/94	20	6	. 8	300	28.57	2,512	18,762
8/94	17	13	42	765	71.19	2,529	18,775
9/94	32	10	10	313	23.81	2,561	18,785
10/94	12	27	12	2250	50.00	2,573	18,812
11/94	15	41	103	2733	87.29	2,588	18,853
12/94	12	46	. 88	3833	88.00	2,600	18,899
TOT/94	153	576	263	3765		2,600	18,899
1/95	20	40	. 8	2000	28.57	2,620	18,939
2/95	35	28	14	800	28.57	2,655	18,967
3/95	64	39	12	609	15.79	2,719	19,006
4/95	24	37	19	1542	44.19	2,743	19,043
5/95	13	50	20	3846	60.61	2,756	19,093
6/95	26	39	22	1500	45.83	2,782	19,132
7/95	12	39	3	3250	20.00	2,794	19,171
8/95	13	36	5	2769	27.78	2,807	19,207
9/95	15	33	20	2200	57.14	2,822	19,240
10/95							,
11/95							
12/95							
TOT/95	222	341	123	1536		2,822	19,240
TOTAL	2822	19240	. 1407	6818		2,822	19,240

CASE: 136 QPQASU 13 (BENNETT FED #3)

QPQASU

DATE: 11/27/95 TIME: 11:34:01 PAGE: 24

PAGE: 24 MOCSEC.DBS

DATE	OIL, 88L	GAS, MCF	WATER, BBL	GOR, CF/BBL	WATER CUT, %	CUM OIL, BBL	CUM GAS, MCF
PRIOR	7316	41887	2164	5725	22.83	7,316	41,887
1/94	3	26	10	8667	76.92	7,319	41,913
2/94	3	23	9	7667	75.00	7,322	41,936
3/94	3	26	10	8667	76.92	7,325	41,962
4/94	2	21	10	10500	83.33	7,327	41,983
5/94	2	23	9	11500	81.82	7,329	42,006
6/94	1	14	8	14000	88.89	7,330	42,020
7/94	18	6	8	333	30.77	7,348	42,026
8/94	17	7	3	412	15.00	7,365	42,033
9/94	18	0	0	0	0.00	7,383	42,033
10/94	16	0	0	0	0.00	7,399	42,033
11/94	14	0	0	0	0.00	7,413	42,033
12/94	9	0	0	0	0.00	7,422	42,033
TOT/94	106	146	67	1377		7,422	42,033
1/95	12	28	0	2333	0.00	7,434	42,061
2/95	16	28	1	1750	5.88	7,450	42,089
3/95	16	39	2	2438	11.11	7,466	42,128
4/95	5	. 37	0	7400	0.00	7,471	42,165
5/95	9	47	8	5222	47.06	7,480	42,212
6/95	15	40	11	2667	42.31	7,495	42,252
7/95	7	19	3	2714	30.00	7,502	42,271
8/95	18	36	6	2000	25.00	7,520	42,307
9/95	16	33	8	2063	33.33	7,536	42,340
10/95							
11/95							
12/95							
TOT/95	114	307	39	2693		7,536	42,340
TOTAL	7536	42340	2270	5618		7,536	42,340

CASE: 24 QPQASU 15 (FED H #1)

QPQASU

LEA , NM MEWBOURNE OIL COMPANY

DATE: 11/27/95 TIME: 11:30:37

PAGE: 14 MOCSEC.DBS

DATE	OIL, BBL	GAS, MCF	WATER, BBL	GOR, CF/BBL	WATER CUT, %	CUM OIL, BBL	CUM GAS, MCF
PRIOR	24205	79370	0	3279	0.00	24,205	79,370
1/94	22	74	0	3364	0.00	24,227	79,444
2/94	19	67	0	3526	0.00	24,246	79,511
3/94	11	163	0	14818	0.00	24,257	79,674
4/94	20	148	0	7400	0.00	24,277	79,822
5/94	21	163	0	7762	0.00	24,298	79,985
6/94	7	118	0	16857	0.00	24,305	80,103
7/94	28	23	5	821	15.15	24,333	80,126
8/94	13	55	9	4231	40.91	24,346	80,181
9/94	45	63	77	1400	63.11	24,391	80,244
10/94	10	77	119	7700	92.25	24,401	80,321
11/94	26	74	0	2846	0.00	24,427	80,395
12/94	32	44	0	1375	0.00	24,459	80,439
TOT/94	254	1069	210	4209		24,459	80,439
1/95	40	31	0	775	0.00	24,499	80,470
2/95	29	44	0	1517	0.00	24,528	80,514
3/95	29	28	0	966	0.00	24,557	80,542
4/95	25	32	0	1280	0.00	24,582	80,574
5/95	15	37	0	2467	0.00	24,597	80,611
6/95	34	23	0	676	0.00	24,631	80,634
7/95	46	25	4	543	8.00	24,677	80,659
8/95	24	52	41	2167		24,701	80,711
9/95	29	72	33	2483	53.23	24,730	80,783
10/95							
11/95							
12/95							
TOT/95	271	344	78	1269		24,730	80,783
TOTAL	24730	80783	288	3267		24,730	80,783

CASE: 40 QPQASU 16 (MARSHALL FED #2)

QPQASU LEA , NM

LEA , NM MEWBOURNE OIL COMPANY DATE: 11/27/95 TIME: 11:31:39

PAGE: 17 MOCSEC.DBS

DATE	OIL, BBL	GAS, MCF	WATER, BBL	GOR, CF/BBL	WATER CUT, %	CUM OIL, BBL	CUM GAS, MCF
PRIOR	13527	20443	1066	1511	7.30	13,527	20,443
1/94	0	0	0	0	0.00	13,527	20,443
2/94	0	0	0	0	0.00	13,527	20,443
3/94	0	0	0	0	0.00	13,527	20,443
4/94	0	. 0	0	0	0.00	13,527	20,443
5/94	0	0	0	0	0.00	13,527	20,443
6/94	0	0	0	0	0.00	13,527	20,443
. 7/94	73	7	6	96	7.59	13,600	20,450
8/94	87	31	52	356	37.41	13,687	20,481
9/94	45	63	77	1400	63.11	13,732	20,544
10/94	51	53	34	1039	40.00	13,783	20,597
11/94	14	55	111	3929	88.80	13,797	20,652
12/94	25	58	87	2320	77.68	13,822	20,710
TOT/94	295	267	367	905		13,822	20,710
. 1/95	25	31	116	1240	82.27	13,847	20,741
2/95	31	39	111	1258	78.17	13,878	20,780
3/95	33	29	138	879	80.70	13,911	20,809
4/95	21	32	107	1524	83.59	13,932	20,841
5/95	43	45	129	1047	75.00	13,975	20,886
6/95	10	24	159	2400	94.08	13,985	20,910
7/95	4	29	71	7250	94.67	13,989	20,939
8/95	6	49	12	8167	66.67	13,995	20,988
9/95	33	46	0	1394	0.00	14,028	21,034
10/95							
11/95			•				
12/95							
TOT/95	206	324	843	1573		14,028	21,034
TOTAL	14028	21034	2276	1499		14,028	21,034

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QPQASU LEA , NM

MEWBOURNE OIL COMPANY

DATE: 11/27/95 TIME: 11:28:55

PAGE: 9 MOCSEC.DBS

DATE	OIL, BBL	GAS, MCF	WATER, BBL	GOR, CF/BBL	WATER CUT, %	CUM OIL, BBL	CUM GAS, MCF
PRIOR	23479	44726	617	1905	2.56	23,479	44,726
1/94	99	171	100.	1727	50.25	23,578	44,897
2/94	81	148	. 80	1827	49.69	23,659	45,045
3/94	101	0	201	0	66.56	23,760	45,045
4/94	90	158	30	1756	25.00	23,850	45,203
5/94	89	168	40	1888	31.01	23,939	45,371
6/94	75	152	40	2027	34.78	24,014	45,523
7/94	50	56	30	1120	37.50	24,064	45,579
8/94	88	54	0	614	0.00	24,152	45,633
9/94	65	51	8	785	10.96	24,217	45,684
10/94	. 66	103	23	1561	25.84	24,283	45,787
11/94	78	83	8	1064	9.30	24,361	45,870
12/94	. 100	67	44	670	30.56	24,461	45,937
TOT/94	982	1211	604	1233		24,461	45,937
1/95	170	42	107	247	38.63	24,631	45,979
2/95	92	28	1	304	1.08	24,723	46,007
3/95	69	39	0	565	0.00	24,792	46,046
4/95	82	37	1	451	1.20	24,874	46,083
5/95	131	47	7	359	5.07	25,005	46,130
6/95	183	. 65	. 4	355	2.14	25,188	46,195
7/95	257	79	1	307	0.39	25,445	46,274
8/95	254	73	0	287	0.00	25,699	46,347
9/95	227	65	4	286	1.73	25,926	46,412
10/95							
11/95							
12/95							
TOT/95	1465	475	125	324		25,926	46,412
TOTAL	25926	46412	1346	1790		25,926	46,412

CASE: 14 QPQASU 20 (FED E #6)

QPQASU LEA , NM

MEWBOURNE OIL COMPANY

DATE: 11/27/95 TIME: 11:28:34

PAGE: 8 MOCSEC.DBS

DATE	OIL, BBL	GAS, MCF	WATER, BBL	GOR, CF/BBL	WATER CUT, %	CUM OIL, BBL	CUM GAS, MCF
PRIOR	18489	44110	497	2386	2.62	18,489	44,110
1/94	66	137	50	2076	43.10	18,555	44,247
2/94	46	124	40	2696	46.51	18,601	44,371
3/94	50	0	109	0	68.55	18,651	44,371
4/94	45	114	20	. 2533	30.77	18,696	44,485
5/94	45	122	30	2711	40.00	18,741	44,607
6/94	32	107	30	3344.	48.39	18,773	44,714
7/94	35	48	30	1371	46.15	18,808	44,762
8/94	36	47	0	1306	0.00	18,844	44,809
9/94	38	36	0	947	0.00	18,882	44,845
10/94	15	59	0	3933	0.00	18,897	44,904
11/94	448	48	48	107	9.68	19,345	44,952
12/94	848	47	355	55	29.51	20,193	44,999
TOT/94	1704	889	712	522		20,193	44,999
1/95	344	50	457	145	57.05	20,537	45,049
2/95	257	74	658	288	71.91	20,794	45,123
3/95	198	72	311	364	61.10	20,992	45,195
4/95	223	71	824	318	78.70	21,215	45,266
5/95	231	121	972	524	80.80	21,446	45,387
6/95	242	124	760	512	75.85	21,688	45,511
7/95	170	237	795	1394	82.38	21,858	45,748
8/95	217	208	806	959	78.79	22,075	45,956
9/95	226	163	921	721	80.30	22,301	46,119
10/95							
11/95 12/95							
TOT/95	2108	1120	6504	531		22,301	46,119
TOTAL	22301	46119	7713	2068		22,301	46,119

CASE: 13 QPQASU 21 (FED E #5)

QPQASU LEA , NM

MEWBOURNE OIL COMPANY

DATE: 11/27/95 TIME: 11:28:14

PAGE: 7 MOCSEC.DBS

DATE	OIL, 88L	GAS, MCF	WATER, BBL	GOR, CF/88L	WATER CUT, %	CUM OIL, BBL	CUM GAS, MCF
PRIOR	23451	57392	904	2447	3.71	23,451	57,392
1/94	66	137	50	2076	43.10	23,517	57,529
2/94	83	124	40	1494	32.52	23,600	57,653
3/94	108	0	131	0	54.81	23,708	57,653
4/94	97	114	15	1175	13.39	23,805	57,767
5/94	96	122	20	1271	17.24	23,901	57,889
6/94	65	106	20	1631	23.53	23,966	57,995
7/94	60	48	20	800	25.00	24,026	58,043
8/94	56	122	6	2179	9.68	24,082	58,165
9/94	11	203	70	18455	86.42	24,093	58,368
10/94	91	157	37	1725	28.91	24,184	58,525
11/94	85	95	30	1118	26.09	24,269	58,620
12/94	60	80	24	1333	28.57	24,329	58,700
TOT/94	878	1308	463	1490		24,329	58,700
1/95	. 69	42	8	609	10.39	24,398	58,742
2/95	76	28	2	368	2.56	24,474	58,770
3/95	45	39	17	867	27.42	24,519	58,809
4/95	79	37	7	468	8.14	24,598	58,846
5/95	111	65	8	586	6.72	24,709	58,911
6/95	87	108	9	1241	9.37	24,796	59,019
7/95	77	77	6	1000	7.23	24,873	59,096
8/95	53	73	9	1377	14.52	24,926	59,169
9/95	30	65	3	2167	9.09	24,956	59,234
10/95							
11/95							
12/95							
TOT/95	627	534	69	852		24,956	59,234
TOTAL	24956	59234	1436	2374		24,956	59,234

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QPQASU LEA , NM

MEWBOURNE OIL COMPANY

DATE: 11/27/95 TIME: 11:27:53

PAGE: 6 MOCSEC.DBS

DATE	OIL, 88L	GAS, MCF	WATER, BBL	GOR, CF/BBL	WATER CUT, %	CUM OIL, BBL	CUM GAS, MCF
PRIOR	63519	38385	1127	604	1.74	63,519	38,385
1/94	415	80	60	193	12.63	63,934	38,465
2/94	406	87	60	214	12.88	64,340	38,552
3/94	479 .	100	64	209	11.79	64,819	38,652
4/94	486	98	64	202	11.64	65,305	38,750
5/94	438	77	65	176	12.92	65,743	38,827
6/94	359	83	55	231	13.29	66,102	38,910
7/94	203	58	40	. 286	16.46	66,305	38,968
8/94	334	98	120	293	26.43	66,639	39,066
9/94	383	91	145	238	27.46	67,022	39,157
10/94	417	95	240	228	36.53	67,439	39,252
11/94	490	50	363	102	42.56	67,929	39,302
12/94	478	30	374	63	43.90	68,407	39,332
TOT/94	4888	947	1650	194		68,407	39,332
1/95	500	19	497	38	49.85	68,907	39,351
2/95	446	19	460	43	50.77	69,353	39,370
3/95	638	46	577	72	47.49	69,991	39,416
4/95	644	54	599	84	48.19	70,635	39,470
5/95	538	65	604	121	52.89	71,173	39,535
6/95	559	44	736	79	56.83	71,732	39,579
7/95	734	53	964	72	56.77	72,466	39,632
8/95	873	57	1164	65	57.14	73,339	39,689
9/95	966	48	1264	50	56.68	74,305	39,737
10/95							
11/95							
12/95							
TOT/95	5898	405	6865	69		74,305	39,737
TOTAL	74305	39737	9642	535		74,305	39,737

CASE: 11 QPQASU 24 (FED E #2)

QPQASU LEA , NM

MEWBOURNE OIL COMPANY

DATE: 11/27/95 TIME: 11:27:33

PAGE: 5 MOCSEC.DBS

DATE	OIL, BBL	GAS, MCF	WATER, BBL	GOR, CF/BBL	WATER CUT, %	CUM OIL, BBL	CUM GAS, MCF
PRIOR	20643	23203	416	1124	1.98	20,643	23,203
1/94	40	50	40	1250	50.00	20,683	23,253
2/94	38	51	40	1342	51.28	20,721	23,304
3/94	40	66	45	1650	52.94	20,761	23,370
4/94	39	79	44	2026	53.01	20,800	23,449
5/94	48	67	45	1396	48.39	20,848	23,516
6/94	44	72	35	1636	44.30	20,892	23,588
7/94	35	38	40	1086	53.33	20,927	23,626
8/94	175	53	120	303	40.68	21,102	23,679
9/94	87	36	68	414	43.87	21,189	23,715
10/94	95	24	42	253	30.66	21,284	23,739
11/94	31	38	61	1226	66.30	21,315	23,777
12/94	84	28	138	333	62.16	21,399	23,805
TOT/94	756	602	718	796		21,399	23,805
1/95	92	42	102	457	52.58	21,491	23,847
2/95	80	46	63	575	44.06	21,571	23,893
3/95	106	23	115	217	52.04	21,677	23,916
4/95	143	20	83	140	36.73	21,820	23,936
5/95	274	12	30	44	9.87	22,094	23,948
6/95	367	33	96	90	20.73	22,461	23,981
7/95	335	33	99	99	22.81	22,796	24,014
8/95	340	32	80	94	19.05	23,136	24,046
9/95	308	23	78	75	20.21	23,444	24,069
10/95						·	,
11/95							
12/95							
TOT/95	2045	264	746	129		23,444	24,069
TOTAL	23444	24069	1880	1027		23,444	24,069

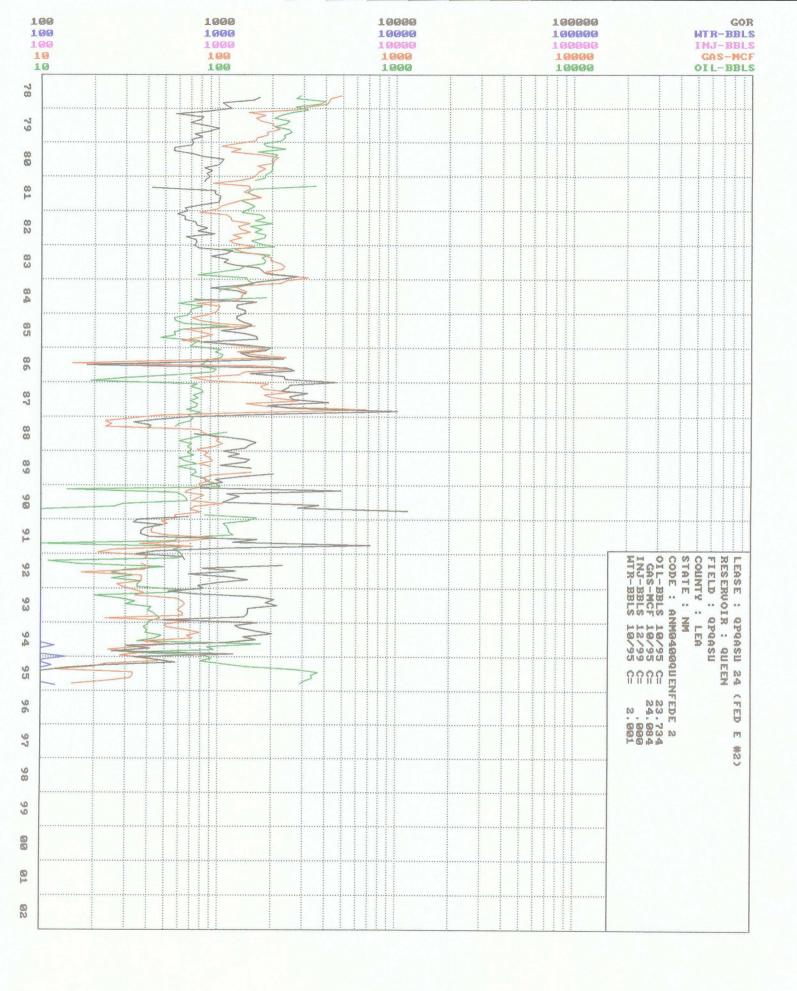
CASE: 796 QPQASU 28 (QPQASU 28)

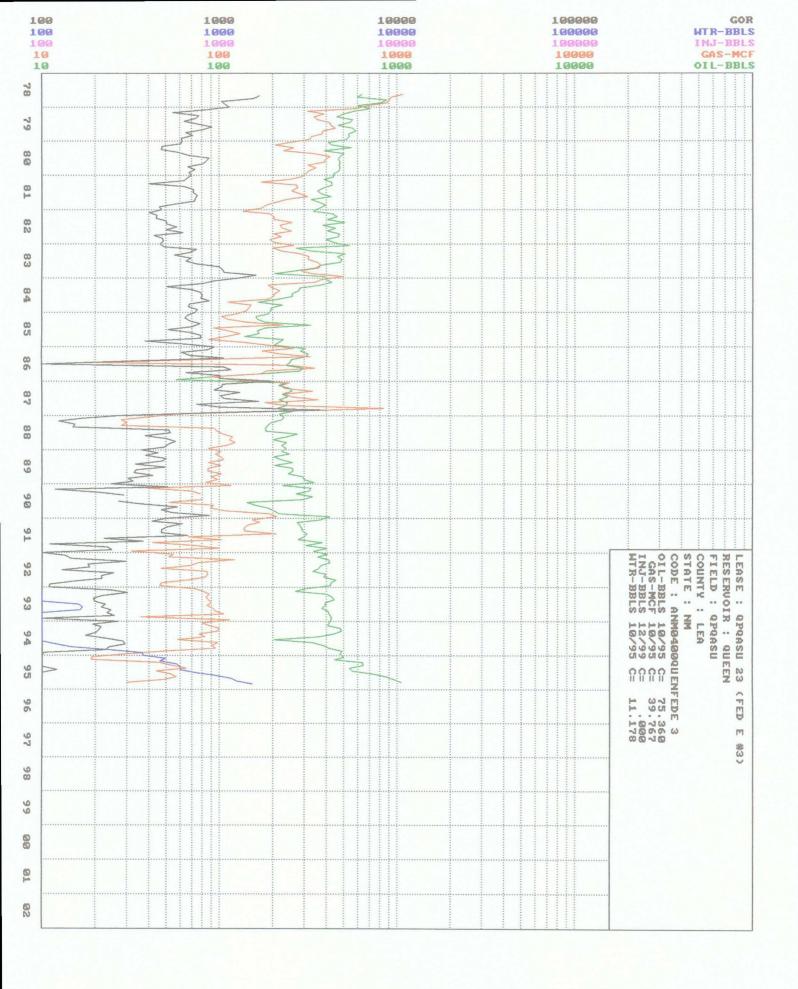
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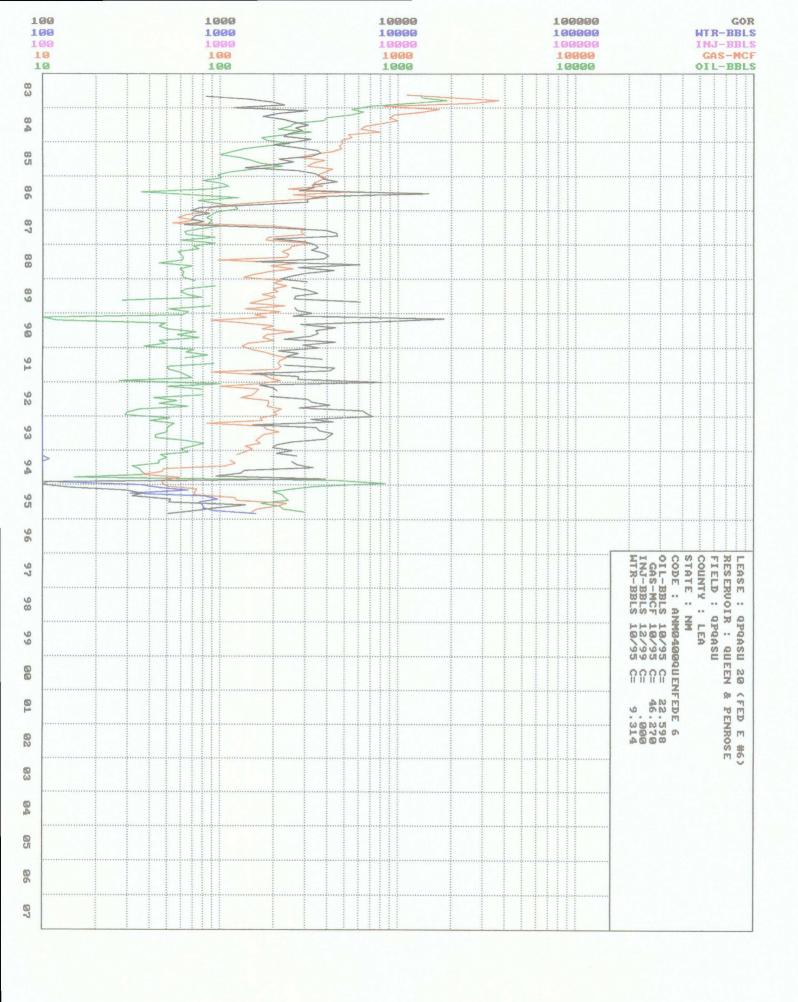
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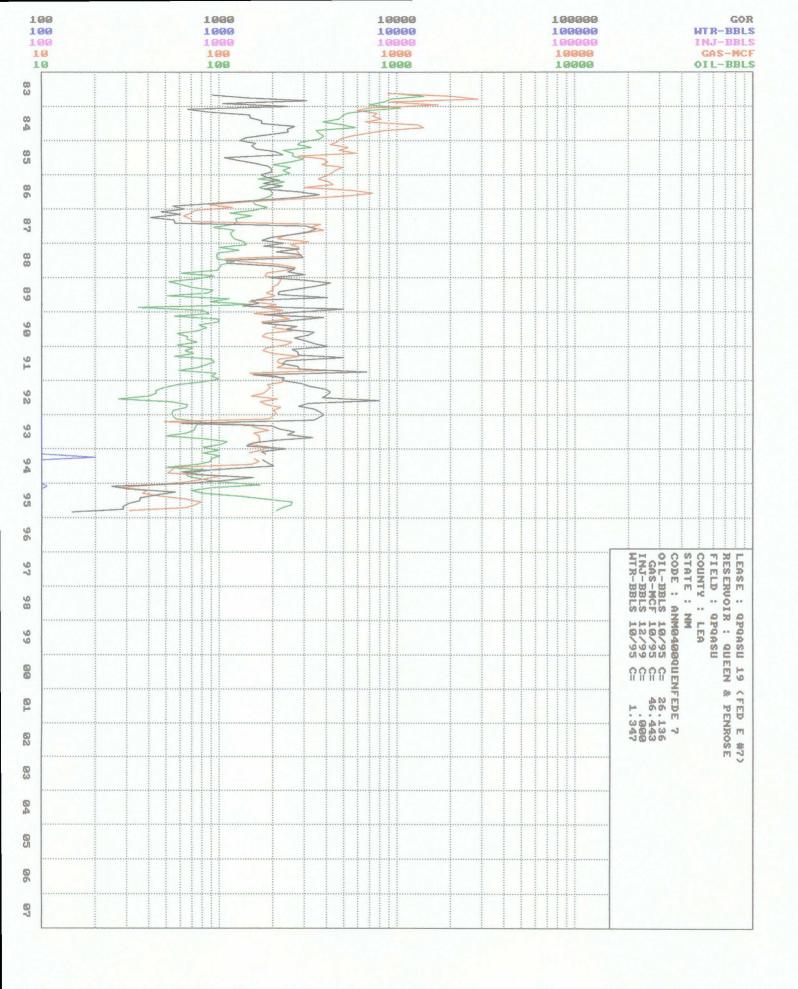
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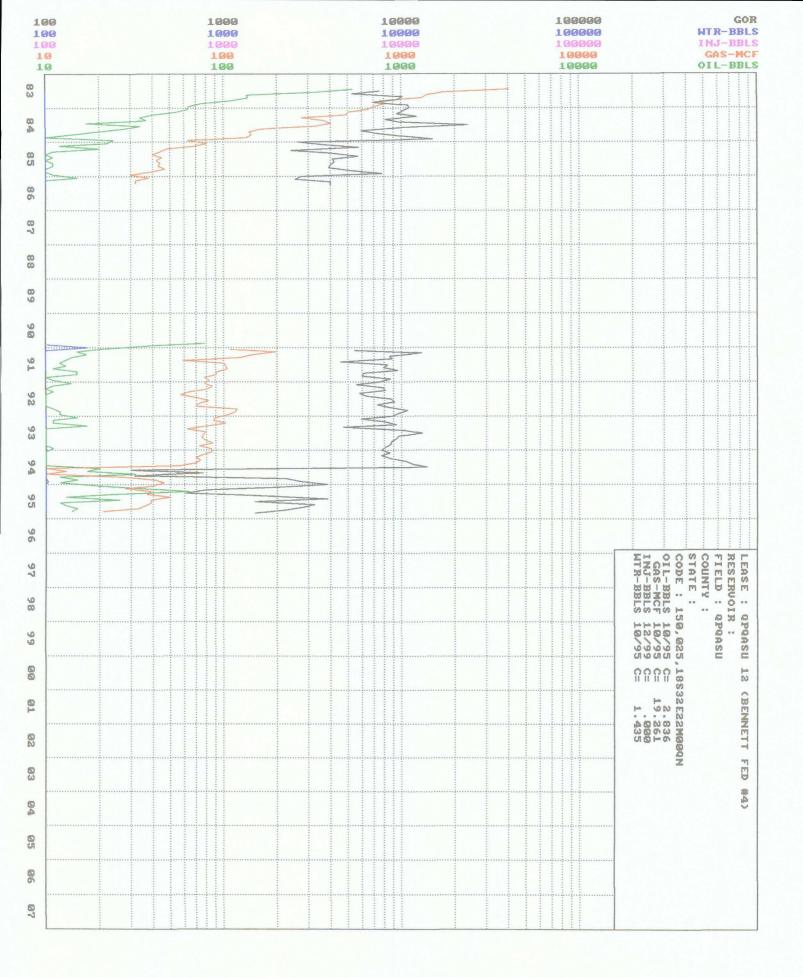
DATE	OIL, BBL	GAS, MCF	WATER, BBL	GOR, CF/BBL	WATER CUT, %	CUM OIL, 88L	CUM GAS, MCF
PRIOR	0	0	0	0	0.00	0	0
1/95	994	463	125	466	11.17	994	463
2/95	703	208	24	296	3.30	1,697	671
3/95	737	364	23	494	3.03	2,434	1,035
4/95	611	312	38	511	5.86	3,045	1,347
5/95	425	251	45	591	9.57	3,470	1,598
6/95	440	283	0	643	0.00	3,910	1,881
7/95	514	316	13	615	2,47	4,424	2,197
8/95	483	244	0	505	0.,00	4,907	2,441
9/95	480	227	5	473	1.03	5,387	2,668
10/95						•	,
11/95							
12/95							
TOT/95	5387	2668	273	495		5,387	2,668
TOTAL	5387	2668	273	495		5,387	2,668

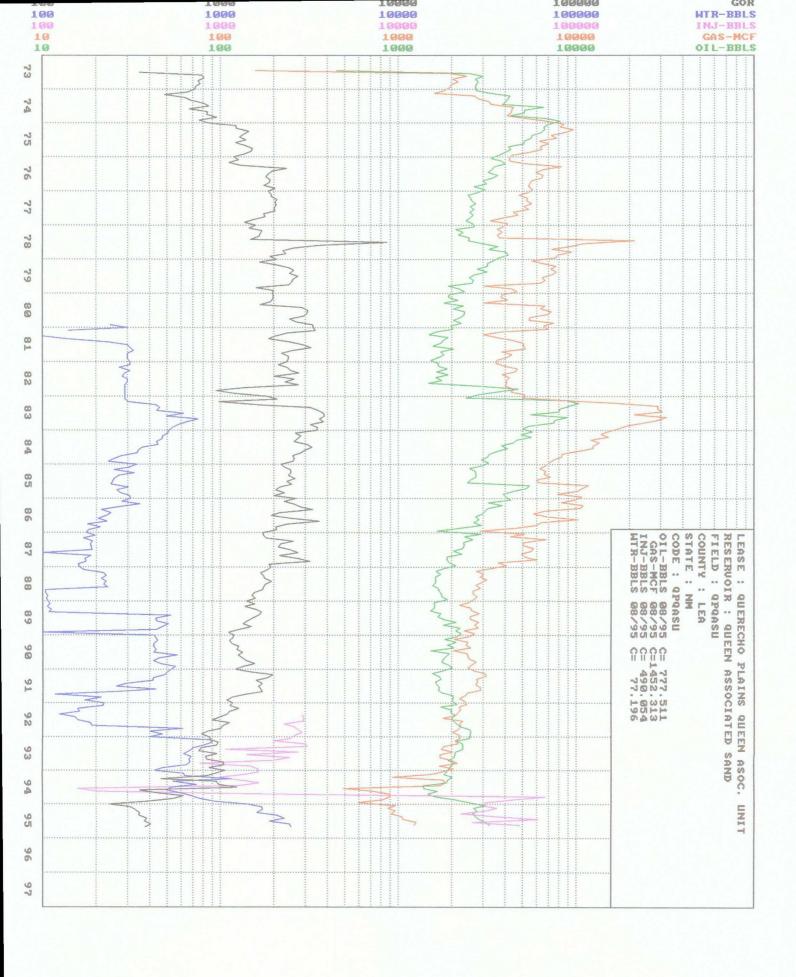


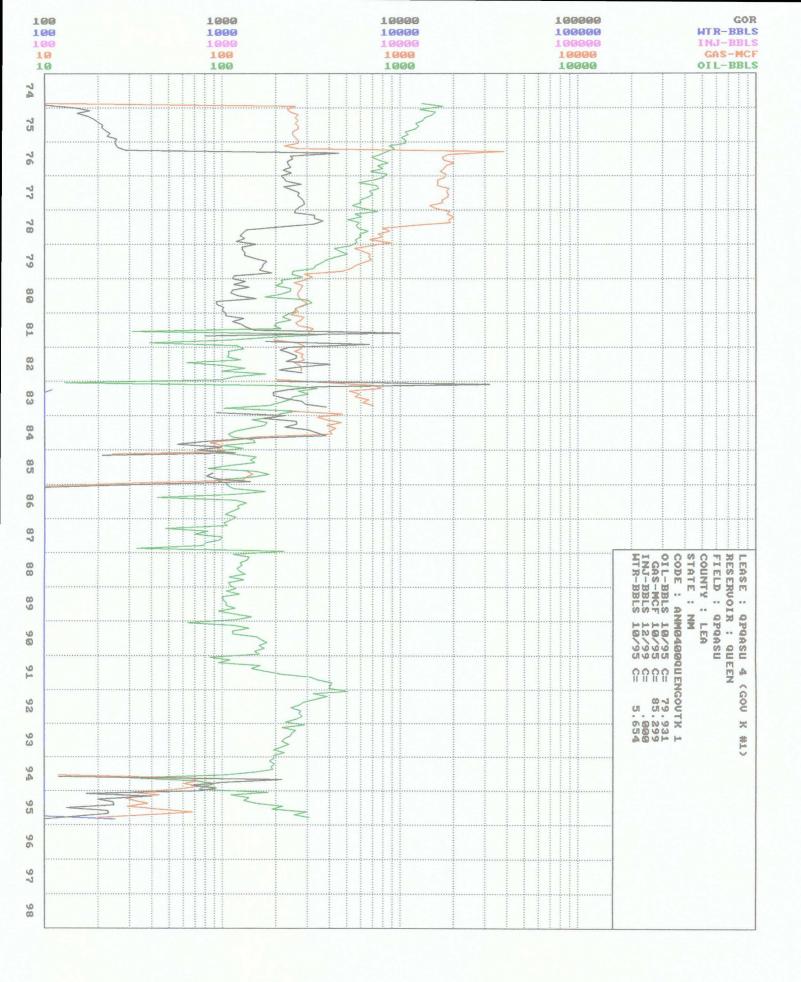


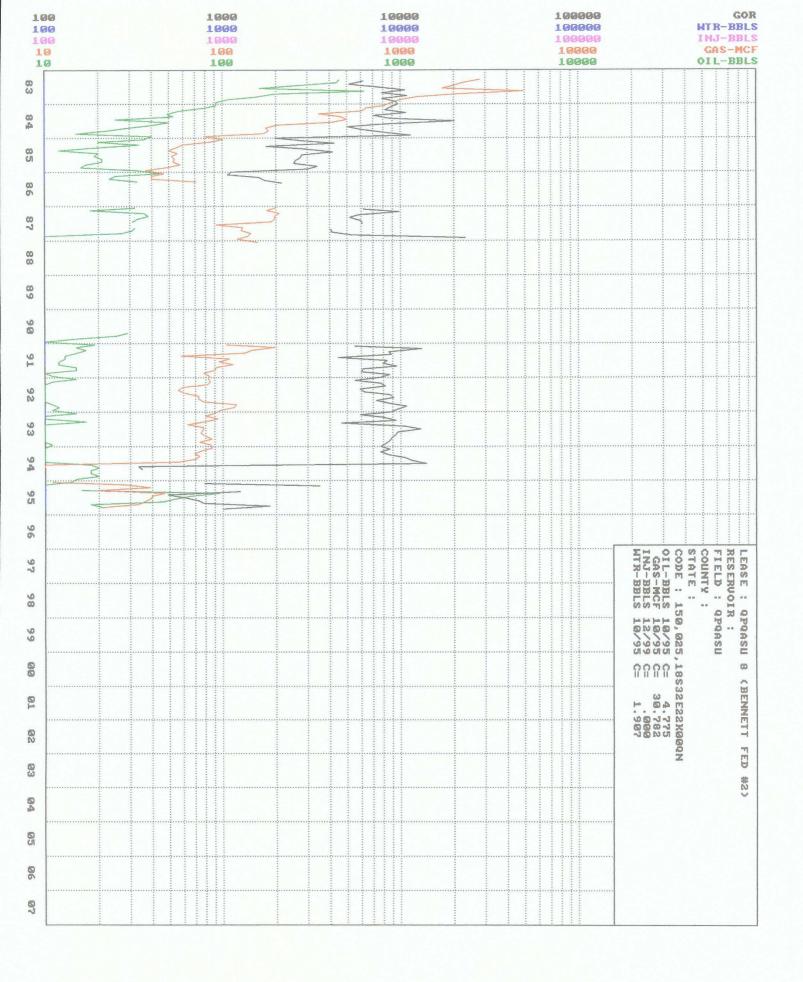


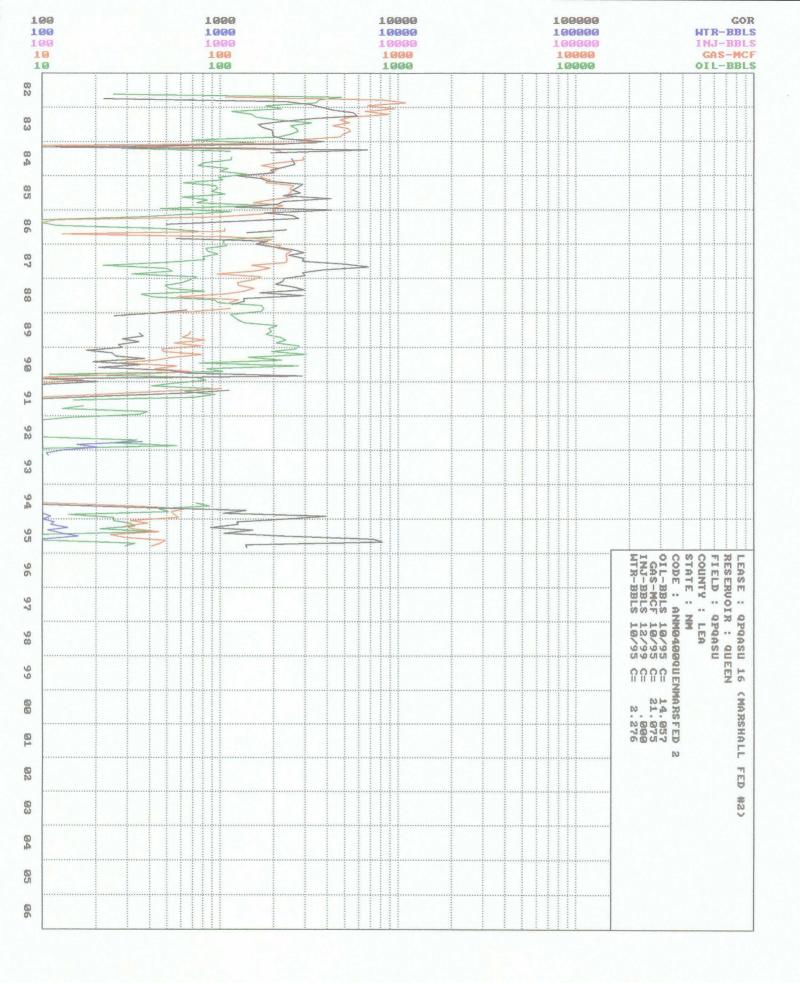


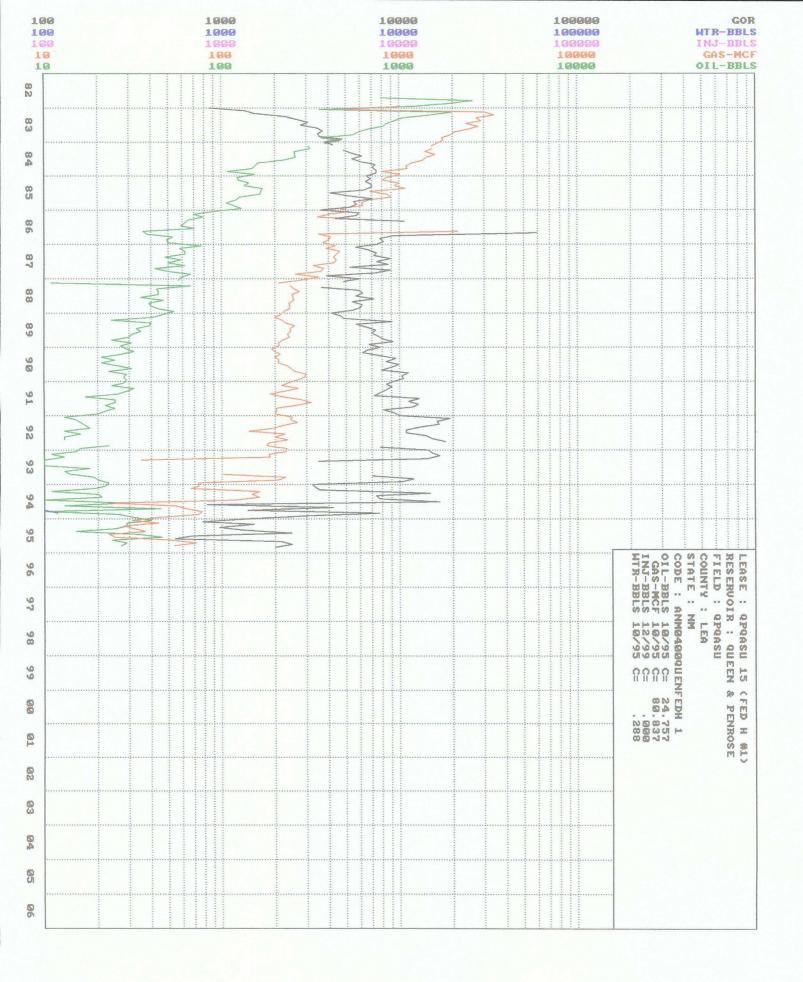


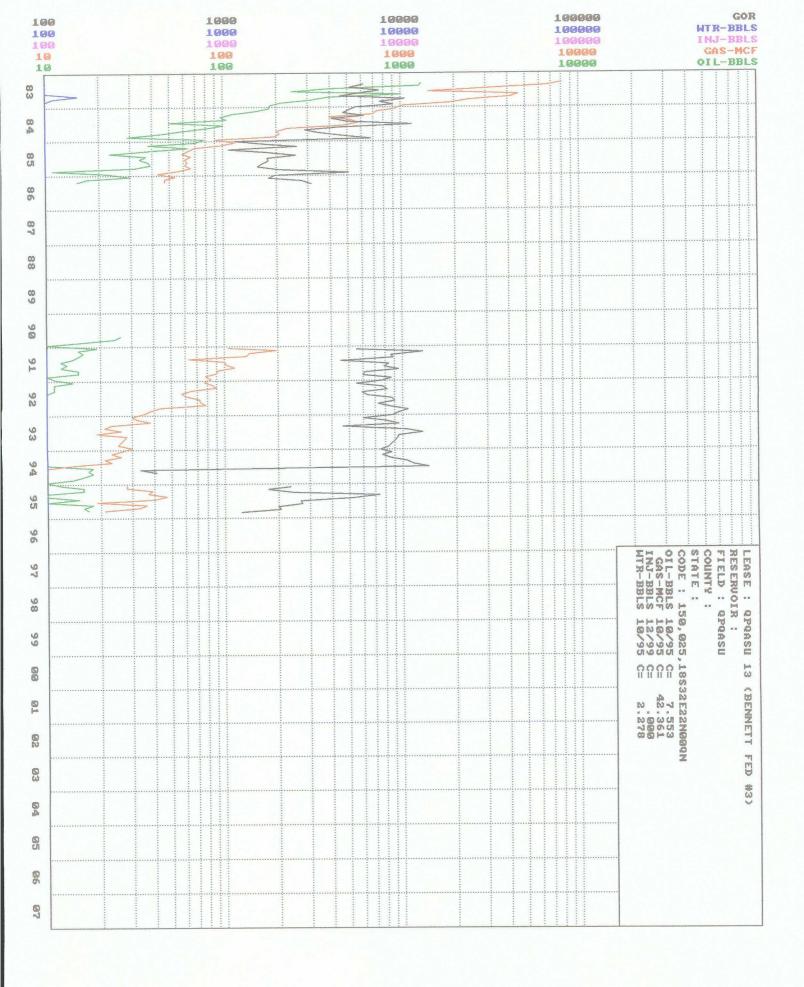


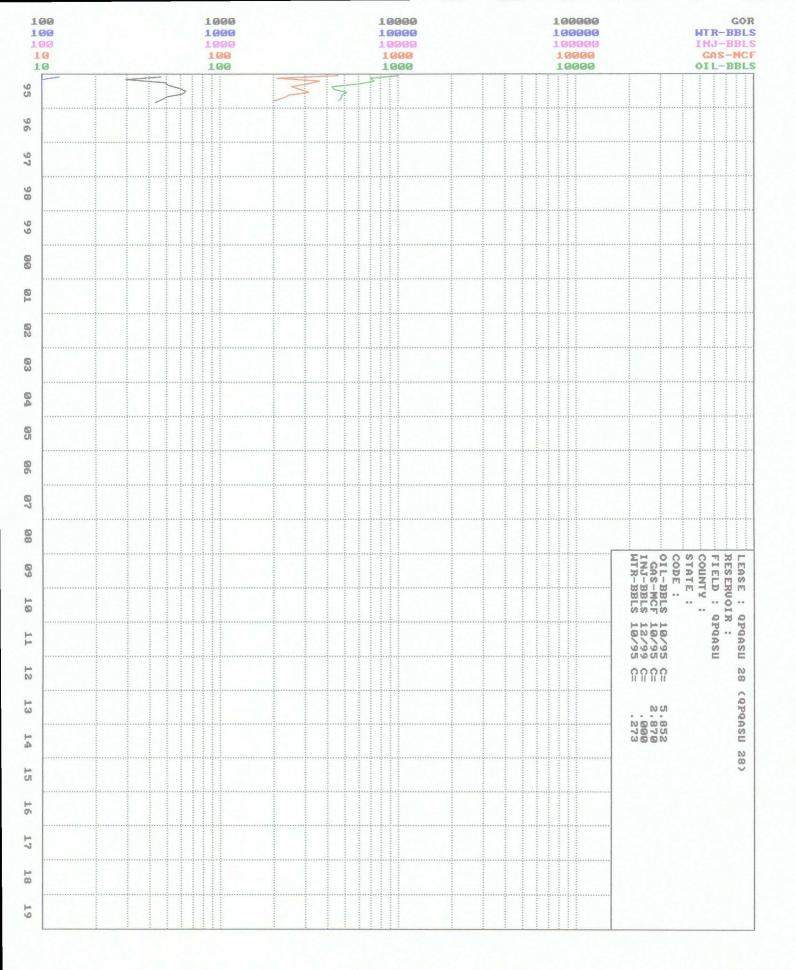


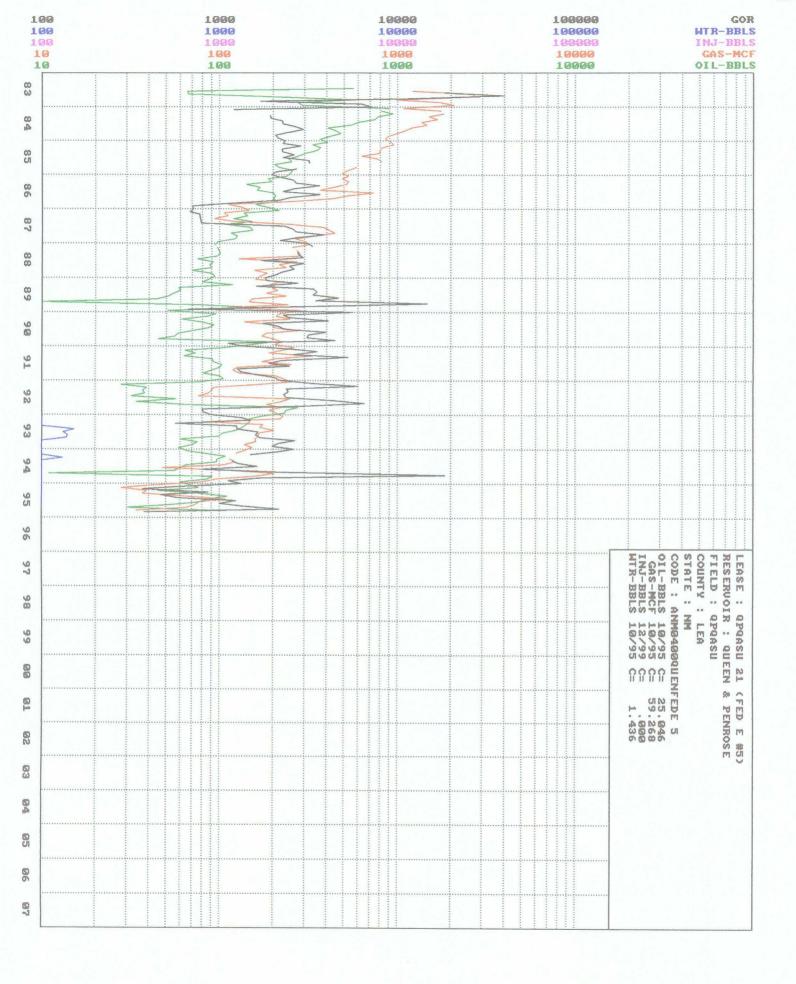


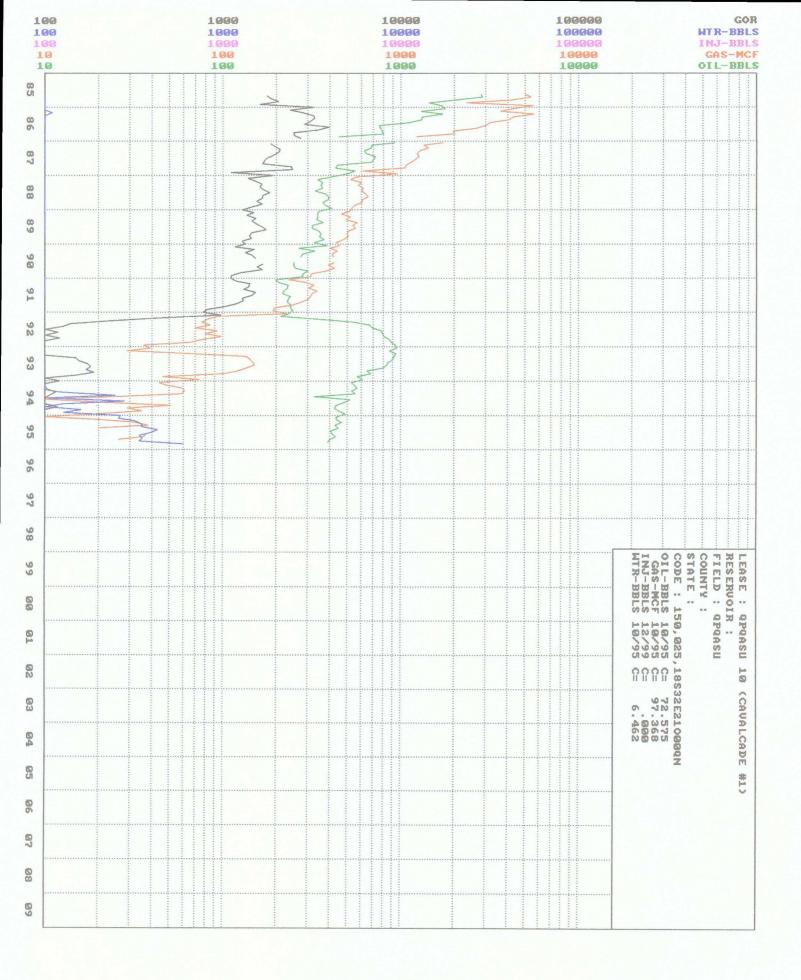


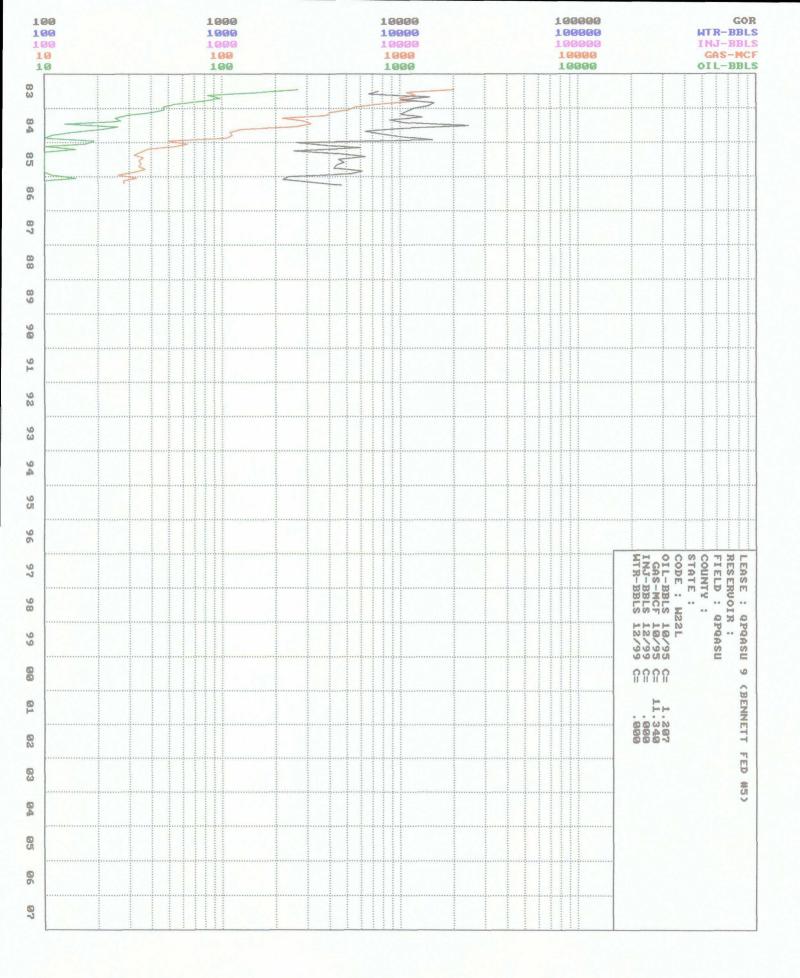


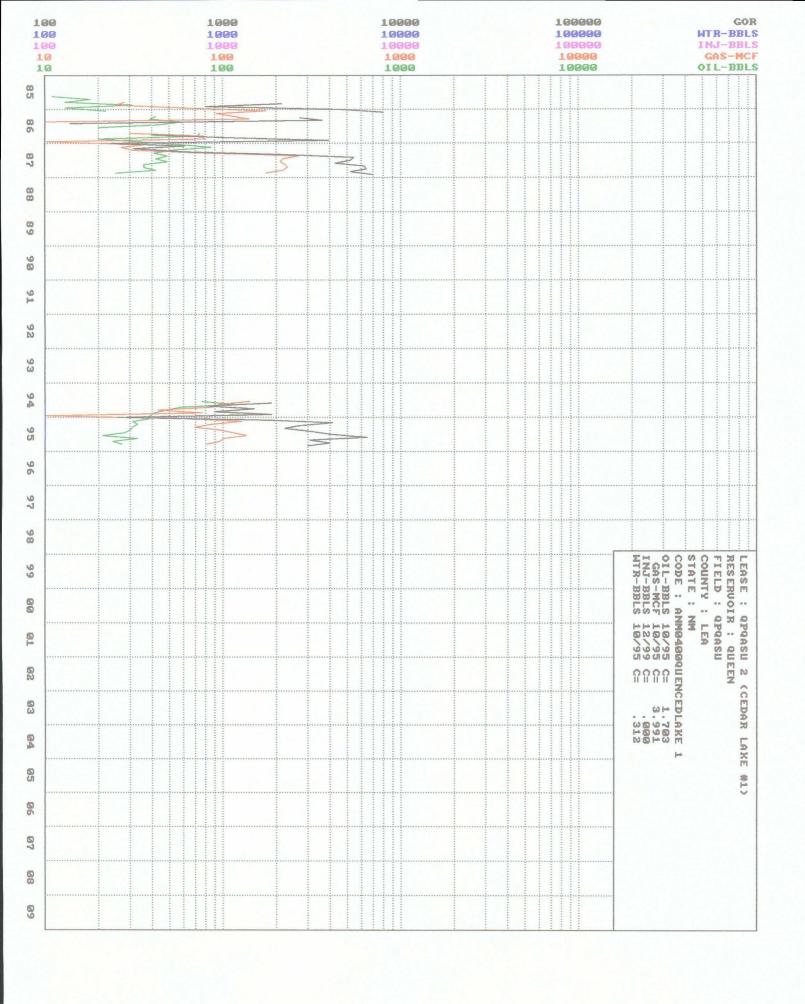


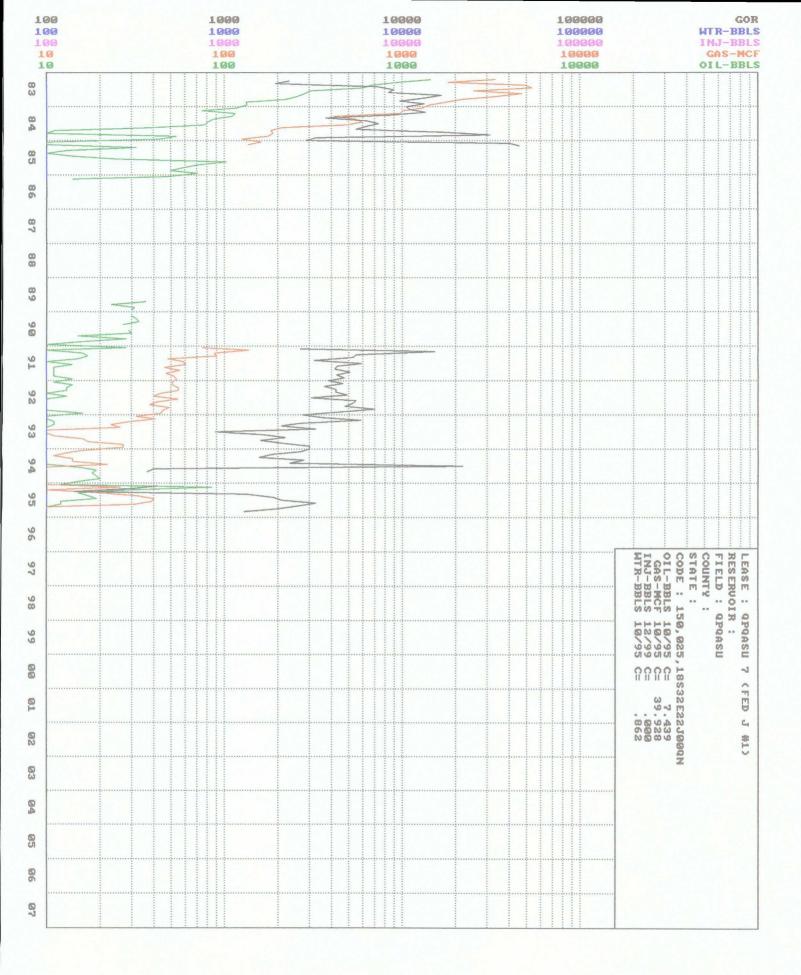


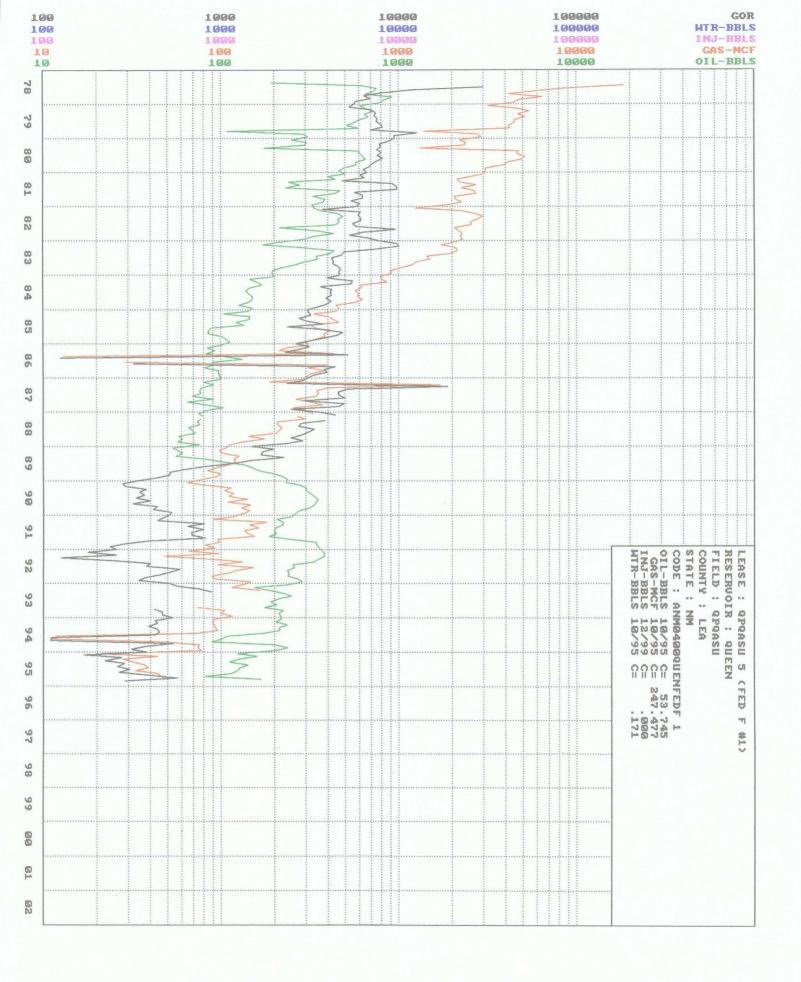


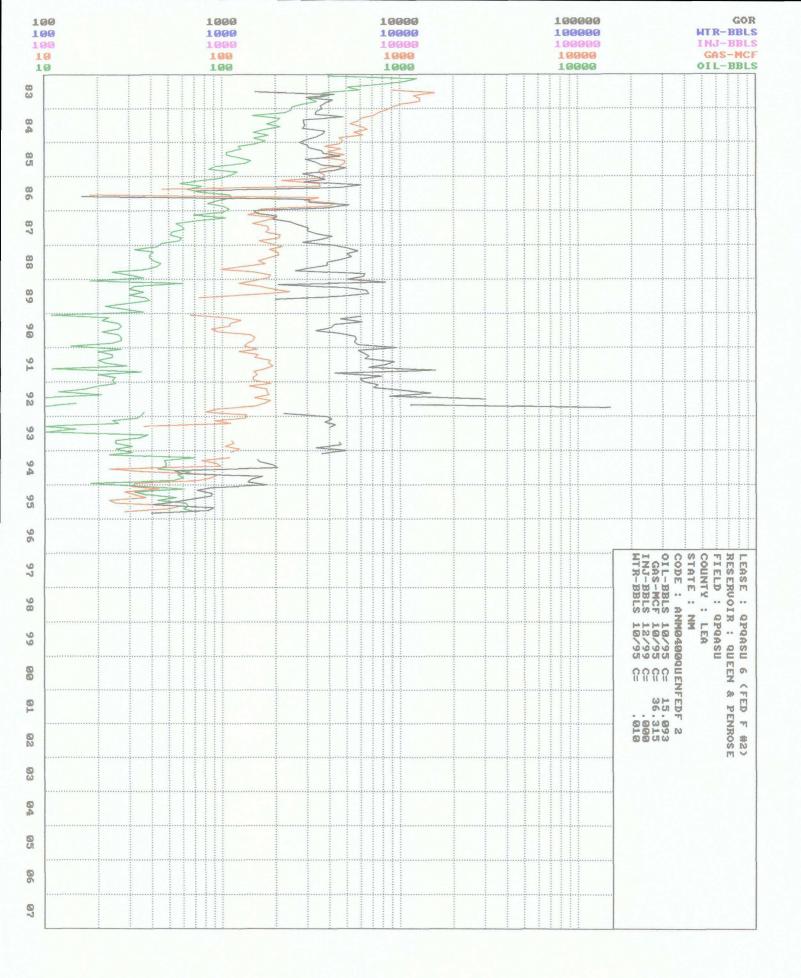


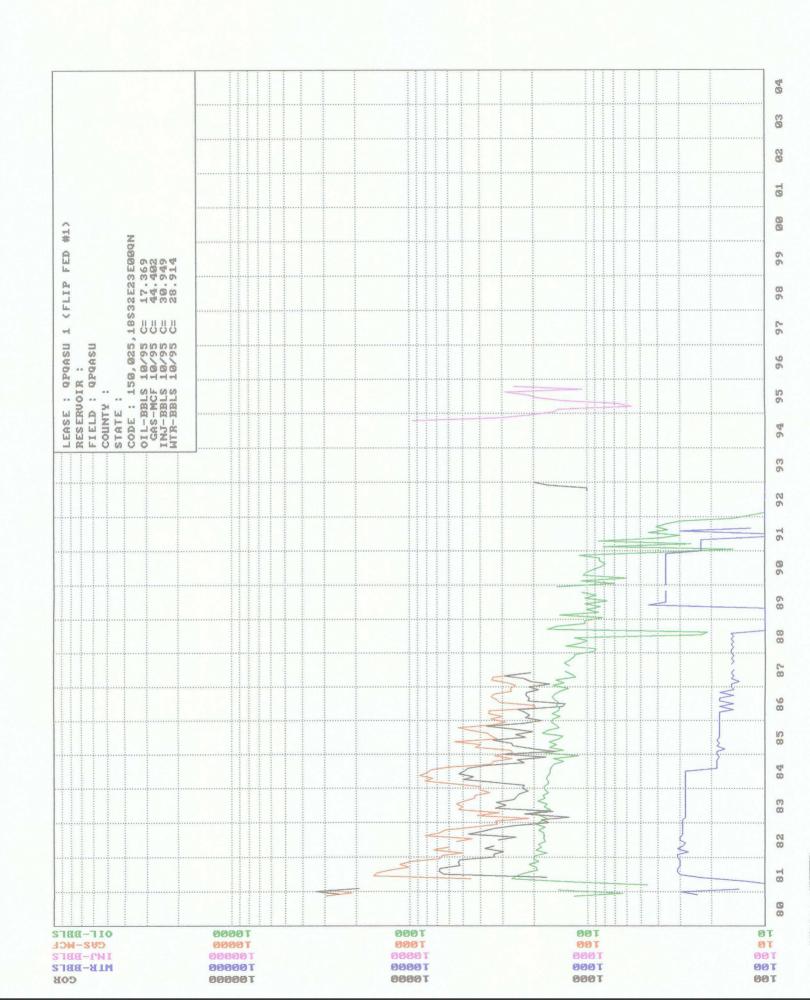


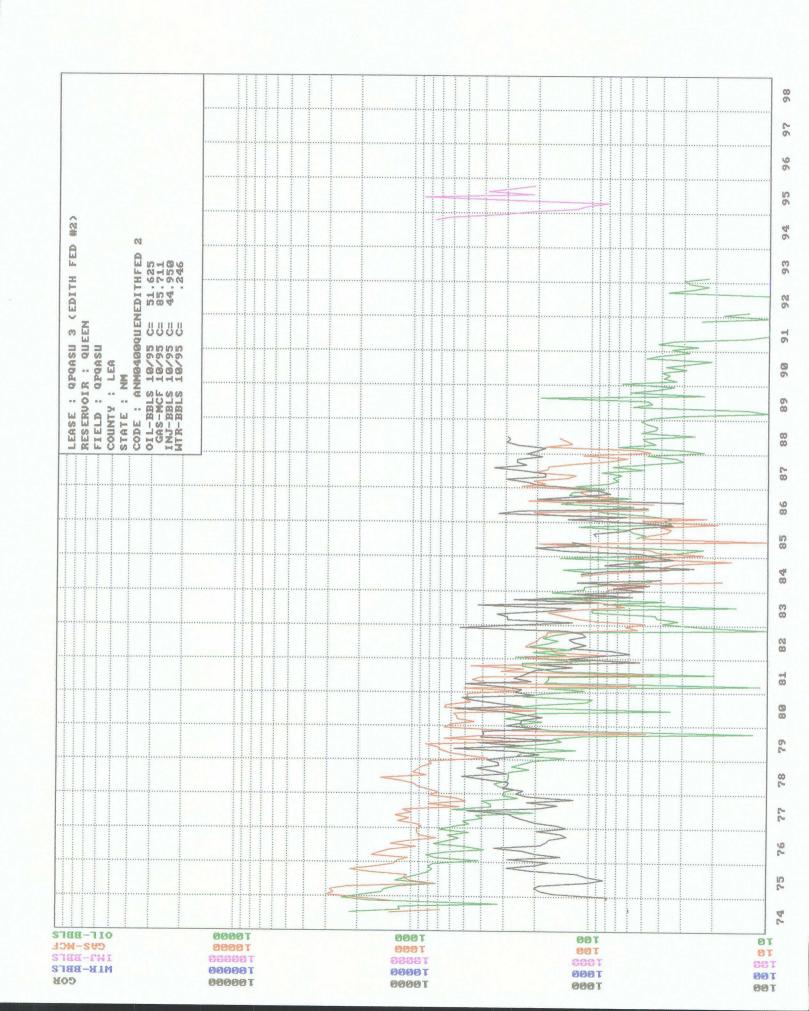


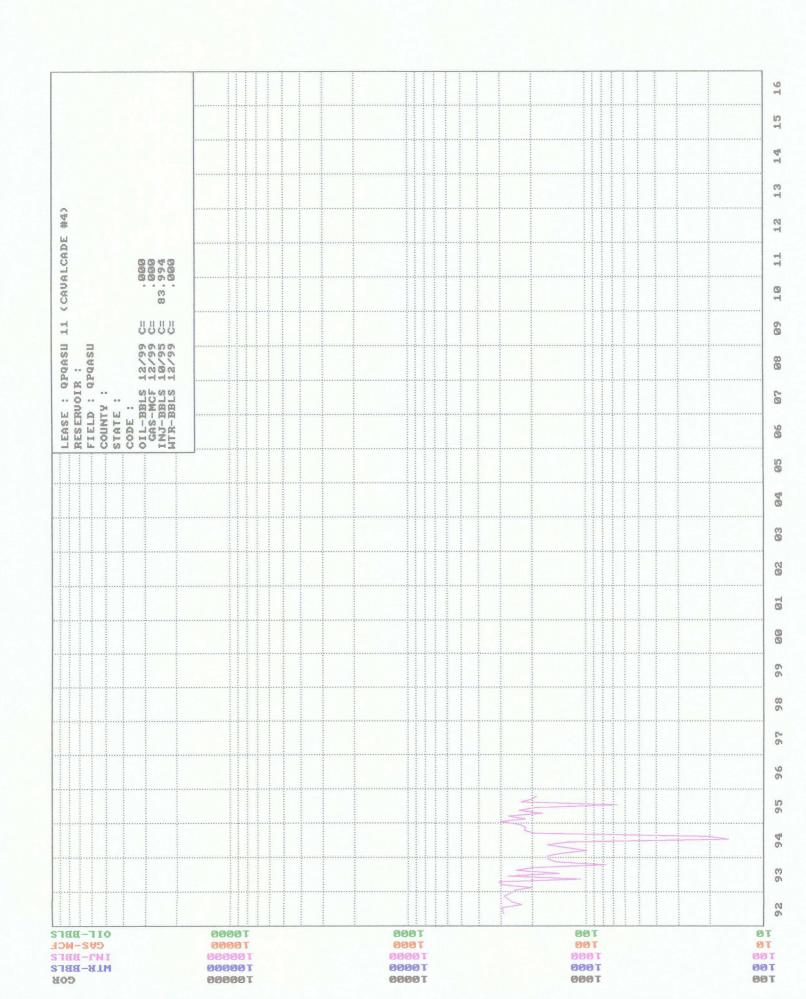


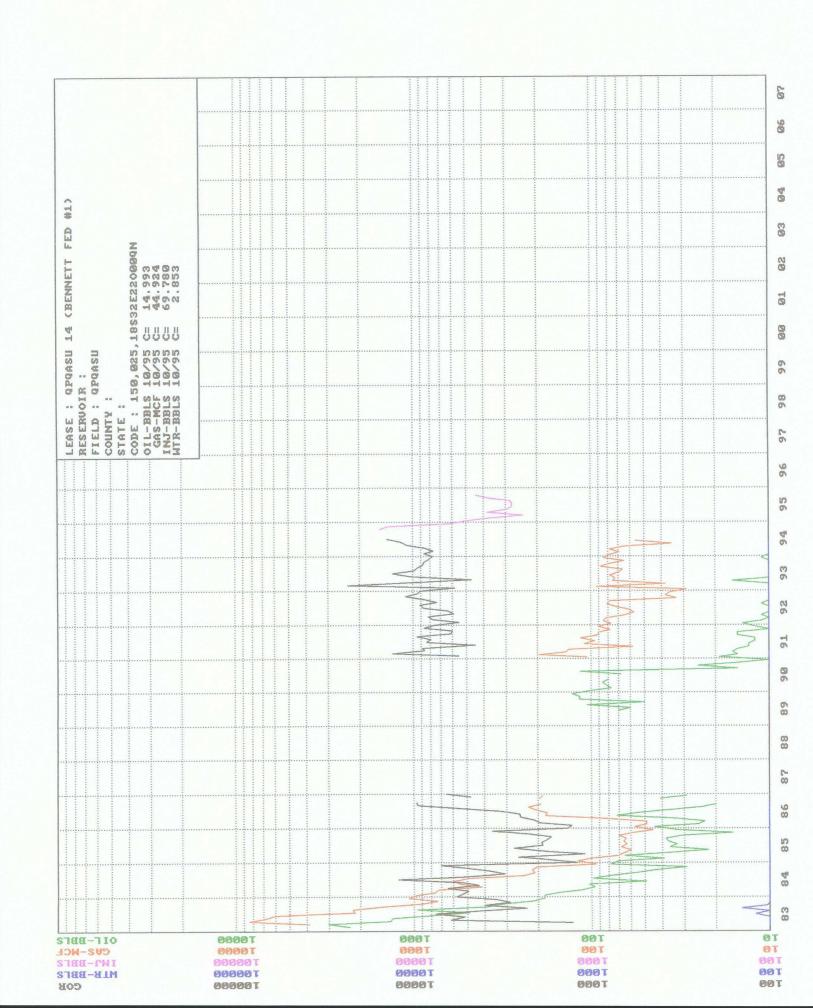


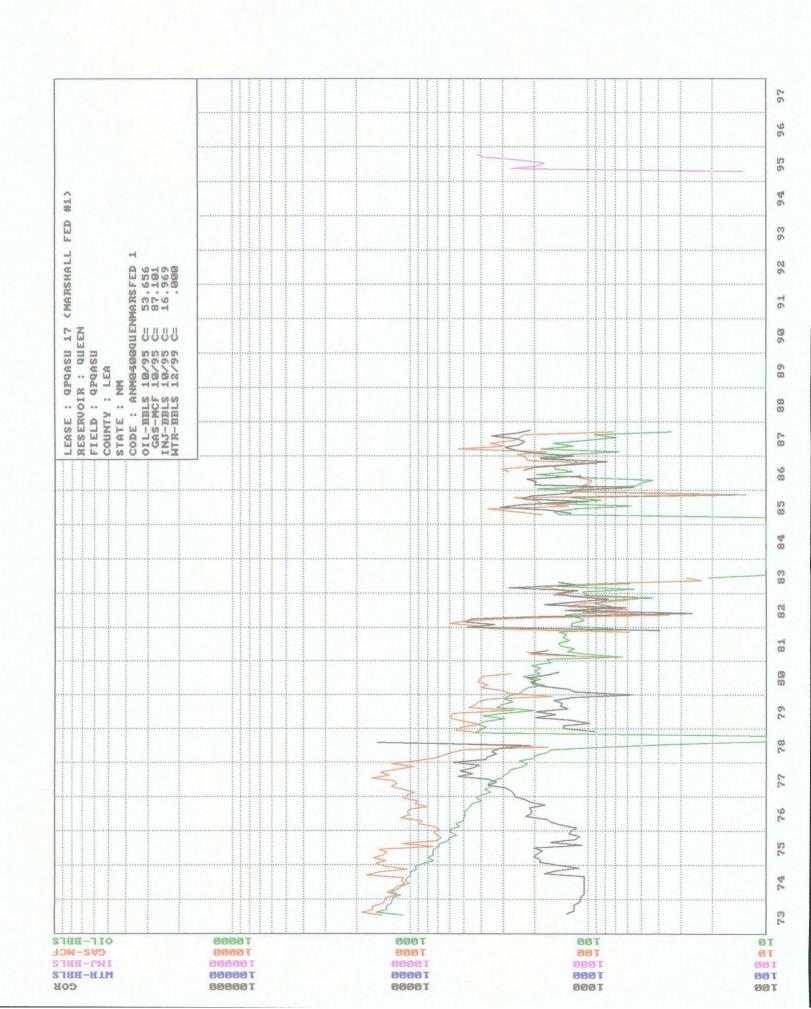


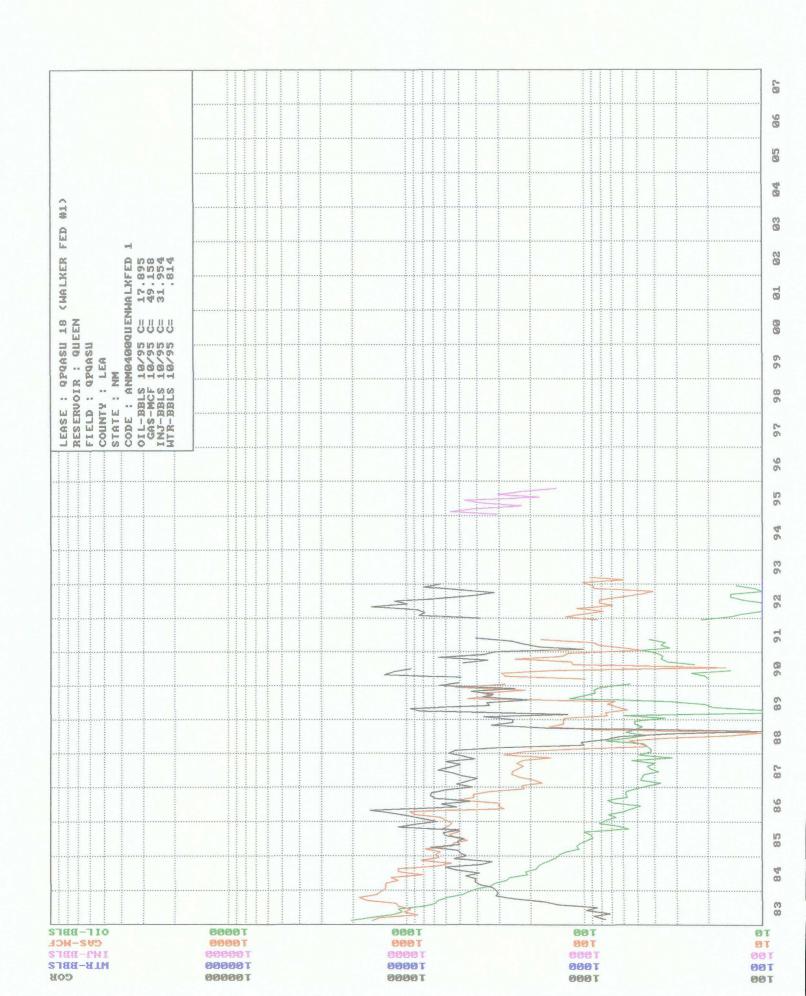


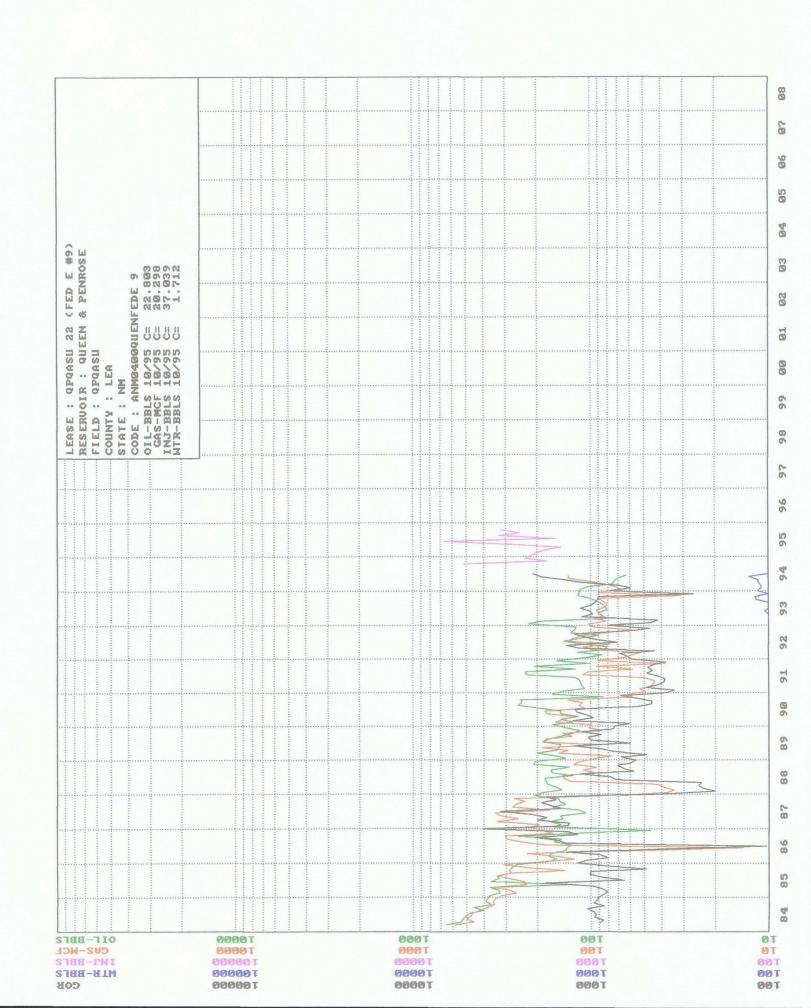


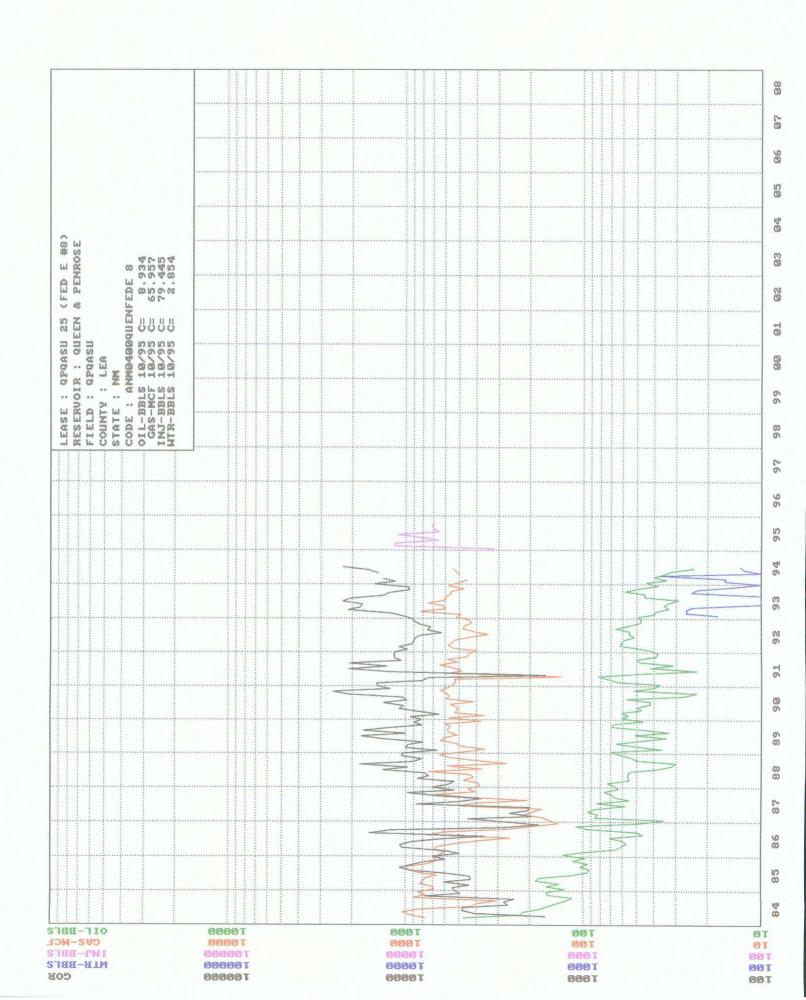


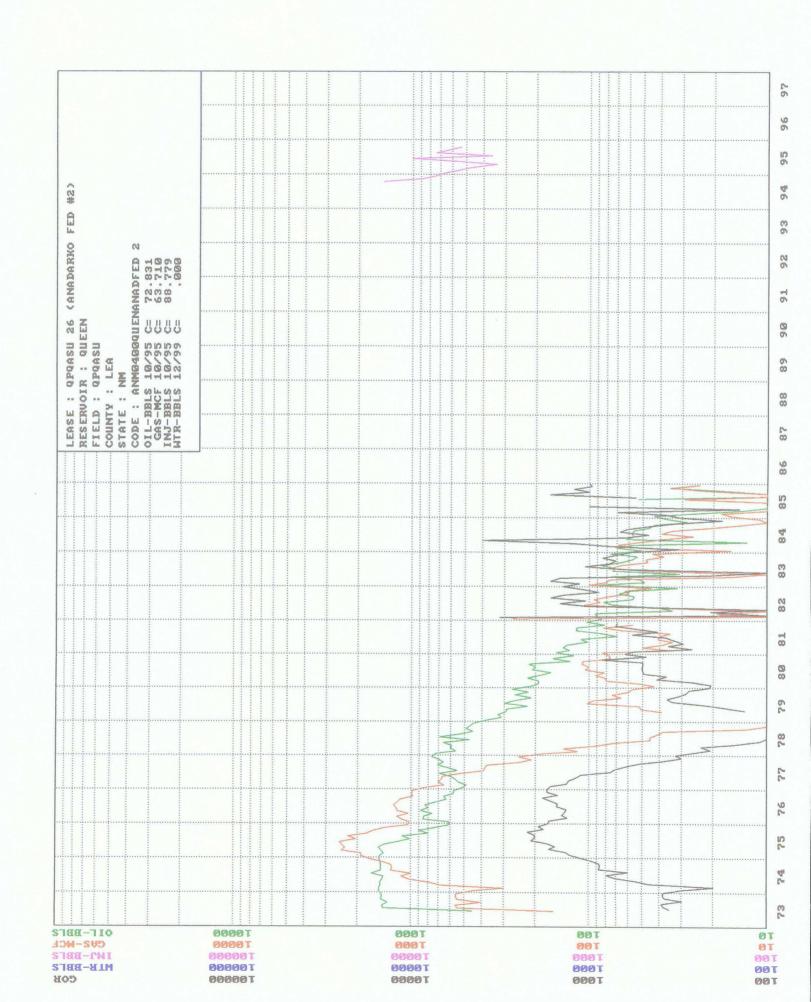


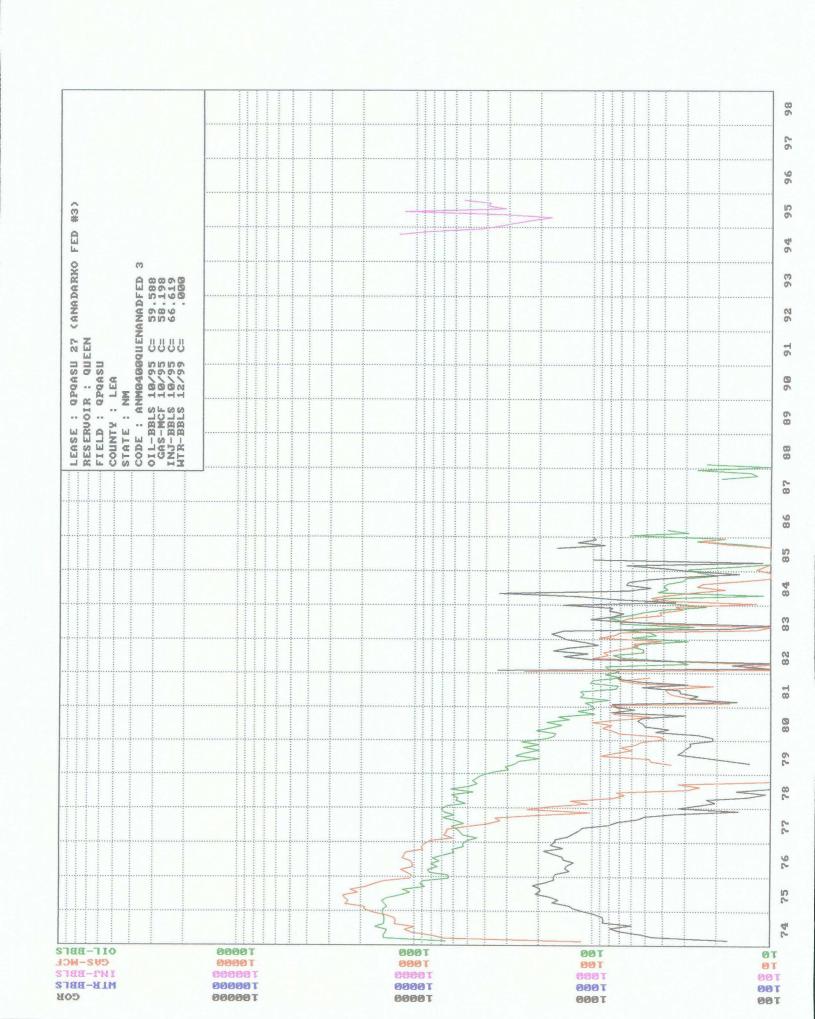


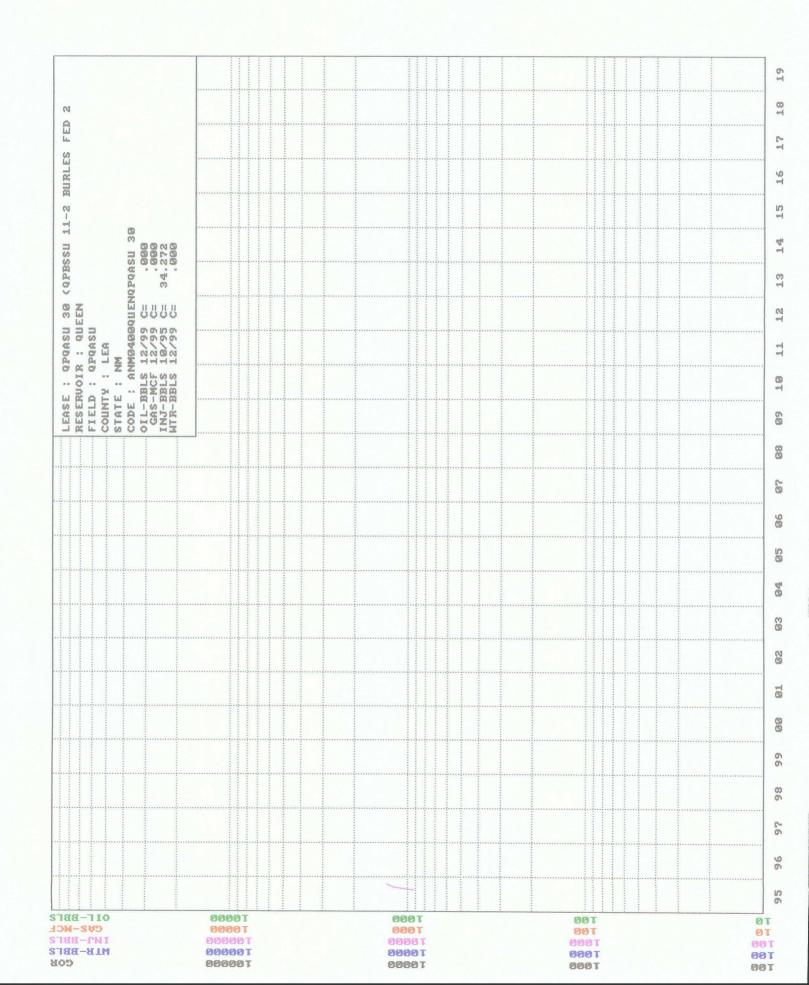












MEWBOURNE OIL COMPANY

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

GIL CONSERVATION DIVISION RECEIVED

October 10, 1995

State of New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87505

RE: POSITIVE PRODUCTION RESPONSE CERTIFICATE

Querecho Plains Queen Associated Sand Unit Lea County, New Mexico

Gentlemen:

Mewbourne Oil Company requests administrative approval of positive production response for the referenced unit. This letter with attachments should address all rules put forth in NMOCD Order No. R-9708.

Water injection began at the referenced in October 1994. Gas-oil ratio started dropping immediately and has declined from pre-waterflood levels of 1000 scf/stb to 300 scf/stb. Positive production response is apparent starting in December 1994. As a result, we seek December 1, 1994, as the effective date for positive production response.

Should you have any questions or comments concerning this application, please contact me at (903) 561-2900.

Sincerely,

Kevin Mayes, PE

Attachments: Certificate of EOR Project for Recovered Oil Tax Rate

Expansion of EOR Project to SW/4 SE/4 Section 23

Order No. R-10151

Economic Summary Sheet

Predicted Production Performance Unit Boundary and Well Status Plat

Well Status Table

Current Production History Plot Current Producing Well Table

STATE OF NEW MEXICO



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING GOVERNOR

ANITA LOCKWOOD CABINET SECRETARY

STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87504 (505) 827-5800

August 3, 1994

Mewbourne Oil Company P.O. Box 7698 Tyler, TX 75711

Attenton: K.M. Calvert

CERTIFICATION OF ENHANCED OIL RECOVERY PROJECT FOR RECOVERED OIL TAX RATE

The New Mexico Oil Conservation Division hereby certifies that the following Enhanced Oil Recovery Project has been approved by the Division as a secondary project, pursuant to the provisions of the New Mexico Enhanced Oil Recovery Act (Laws of 1992, Chapter 38). In order to qualify for the Recovered Oil Tax Rate, you must apply for certification of positive production response within five years from the date of this certification. Only production from that portion of the project area identified herein which is actually developed for enhanced recovery will qualify for the reduced tax rate.

If operation of this project is terminated for any reason, the operator of the project must notify this Division and the Secretary of the Taxation and Revenue Department not later than the thirtieth day after termination.

NAME OF PROJECT:

Quercheo Plains Queen Associated Sand Unit

Compared by Agreement Williams

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ger in der eine seine State der betreit der bei der bei der

OCD ORDER NO.

R-10151

OPERATOR:

Mewbourne Oil Company

ADDRESS:

P.O. Box 7698

Tyler, TX 75711

CERTIFICATION DATE: July 1, 1994

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PROJECT AREA:

TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM

Section 22: S/2

Section 23: SW/4, S/2 NW/4 and NE/4 SE/4

Section 26: NW/4 NW/4

Section 27: N/2 NE/4, SE/4 NE/4, S/2 NW/4, NE/4 NW/4 and N/2 SW/4

Section 28: SE/4 NE/4

APPROVED BY:

STATE OF NEW MEXICO

OIL CONSERVATION DIVISION

WILLIAM J. LEMA

DIRECTOR

SEAL

STATE OF NEW MEXICO



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

2040 S. PACHECO SANTA FE, NEW MEXICO 87505 (505) 827-7131

May 10, 1995

Mewbourne Oil Company P.O. Box 7698
Tyler, Texas 75711

Attention: Kevin Mayes, P.E.

Re: EXPANSION OF THE PREVIOUSLY CERTIFIED ENHANCED OIL RECOVERY PROJECT FOR THE RECOVERED OIL TAX RATE-QUERECHO PLAINS QUEEN ASSOCIATED SAND UNIT WATERFLOOD PROJECT

The New Mexico Oil Conservation Division hereby certifies that following acreage is eligible to be included in the Querecho Plains Queen Associated Sand Unit Enhanced Oil Recovery Project, as previously approved by Division Order No. R-10151, and as previously certified to the New Mexico Taxation and Revenue Department on July 1, 1994:

TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM

Section 23: SW/4 SE/4

APPROVED BY:

STATE OF NEW MEXICO

OIL CONSERVATION DIVISION

WILLIAM J / LEMAY

DIRECTOR /

STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

Case No. 10960 Order No. R-10151

APPLICATION OF MEWBOURNE OIL COMPANY FOR A WATERFLOOD PROJECT AND QUALIFICATION FOR THE RECOVERED OIL TAX RATE, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on April 28, 1994 at Santa Fe, New Mexico, before Examiner Jim Morrow.

NOW, on this 14th day of July, 1994 the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) At the time of the hearing this case was consolidated with Division Case No. 10959 for the purpose of testimony. Case No. 10959 is a companion case concerning statutory unitization.
- (3) The applicant, Mewbourne Oil Company, seeks authority to institute a waterflood project in its proposed Querecho Plains Queen Associated Sand Unit Area (Division Case No. 10959), Lea County, New Mexico, by the injection of water into the Querecho Plains-Queen Associated Pool, as found in that stratigraphic interval between 3886 feet to 4222 feet as measured on the Welex Compensated Acoustic Velocity Log run on July 15, 1983 in the applicant's Federal Well No. 7 located 330 feet from the North line and 990 feet from the East line (Unit A) of Section 27, Township 18 South, Range 32 East, NMPM, Lea County, New Mexico, through ten certain wells as further described in Exhibit "A" attached hereto and made a part hereof.

It is proposed that the waterflood project area coincide with the boundary of the Ouerecho Plains Queen Associated Sand Unit Area in Lea County, New Mexico, as further described below, which was the subject of Division Case No. 10959 and was heard in combination with this case:

TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM

S/2 SE/4 Section 21:

Section 22: S/2

Section 23: S/2 and S/2 NW/4

Section 26: N/2 N/2

N/2 and N/2 SW/4 Section 27:

Section 28: NE/4 SE/4, N/2 NE/4, and SE/4 NE/4

The above-described area contains several tracts of undeveloped acreage; therefore, in compliance with Division General Rule 701.G(1) the project area as requested should be reduced to include only those oil spacing and proration units within the proposed area that have experienced production from the Querecho Plains-Queen Associated Pool. The S/2 SE/4 of Section 21 should also be removed from the project area because of the reasons explained in Finding Paragraph No. 21 of this order. The resulting project area should contain the following described 1000 acres in Lea County, New Mexico:

TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM

Section 22: S/2

Section 23: SW/4, S/2 NW/4 and NE/4 SE/4

Section 26: NW/4 NW/4

Section 27: N/2 NE/4, SE/4 NE/4, S/2 NW/4, NE/4 NW/4 and N/2 SW/4

Section 28: SE/4 NE/4

- The present Queen Associated oil producing wells within the subject project area and interval are in an advanced state of depletion and should therefore be properly classified as "stripper wells".
- The applicant requested that maximum surface injection pressure be set at 1400 psi. In support of this request, the applicant's witness used initial shut-in pressure and fluid gradients from the fracture treatments of seventeen wells in the pool, but failed to prove that 1400 psi surface injection pressure would not cause fracturing in the Queen-Penrose. the interval, where the many the dependence is a supercommentation of the contract of the cont

fact from the East line (that are a sectionisty Tanamate) is south, that a fact family EvacCoumy, New Abstica, through and costally with in them a described in technical and

attacked here a dress trace property booksalts.

- (8) The injection wells or pressurization system should be initially equipped with a pressure control device or acceptable substitute which will limit the surface injection pressure to no more than 777 PSI because the increase in surface injection pressure as requested by the applicant was not supported with step rate tests.
- (9) The Division Director should have the authority to administratively authorize a pressure limitation in excess of the above upon a showing by the operator that such higher pressure will not result in the fracturing of the injection formation or confining strata.
- (10) The operator of the proposed Querecho Plains Queen Associated Sand Unit Waterflood Project should take all steps necessary to ensure that the injected water enters and remains confined to only the proposed injection interval and is not permitted to escape from that interval and migrate into other formations, producing intervals, pools or onto the surface from injection, production, or plugged and abandoned wells.
- (11) The applicant submitted data concerning all plugged and producing wells within the area of review. There are five wells which may not be plugged in such a manner which will assure that their wellbores will not serve as a conduit for movement of injected fluid out of the injection interval. Three of the wells are located outside the zero contour lines of the Queen and Penrose porosity isopach maps and should pose no problem. The other two following described wells should be re-plugged in a manner which will assure that the wellbores will not serve as a conduit for migration of injection fluid to the satisfaction of the Hobbs District Supervisor.

Plugged Wells:

Oil Associates, Inc.
Edwards Well No. 1
660' FSL & 660' FWL (Unit M), Section 22;

H & S Oil Company Anadarko Well No. 1-Y 1980' FNL & 1995' FWL (Unit F), Section 27.

(12) There are five active producing wells in the area of review which do not have cement covering the Queen-Penrose interval. These wells, and their casing program and calculated cement tops, are listed below. These wells will require remedial cement operations in a manner which will assure that the wellbores will not serve as a conduit for migration of injection fluid to the satisfaction of the Hobbs District Supervisor.

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		•
Anadarko Pet. Co.	Cavalcade Federal No. 3	I-21-18S-32E
	13 3/8" @ 753' w/750 sx	TOC - Surface
	8 5/8" @ 3465' W/1700 sx	TOC - Surface
	5 1/2" @ 10,787' w/400 sx	TOC - 8880'
Mewbourne Oil Co.	Murjo Federal Well No. 1	E-23-18S-32E
	13 3/8" @ 350' w/350 sx	TOC - Surface
	8 5/8" @ 2777' w/1200 sx	TOC - Surface
	5 1/2" @ 10,800' w/650 sx	TOC - 7701'
Mewbourne Oil Co.	Burleson Federal No. 1	B-26-18S-32E
	11 3/4" @ 350' w/485 sx	TOC - Surface
and organization of the second	8 5/8" @ 2800' w/2250 sx	TOC - Surface
and the second of the second o	4 1/2" @ 8700' w/1205 sx	TOC - 4331'
Mewbourne Oil Co.	Sprinkle Federal No. 3	E-26-18S-32E
	11 3/4" @ 350' w/485 sx	TOC - Surface
	8 5/8" @ 2767' w/1700 sx	TOC - Surface
	5 1/2" @ 8710' w/700 sx	TOC - 5373'
Santa Fe Energy	Sprinkle Federal No. 4	F-26-18S-32E
	13 3/8" @ 353' w/370 sx	TOC - Surface
	8 5/8" @ 2810' w/1050 sx	TOC - Surface
	5 1/2" @ 9700' w/900 sx	TOC - 5409'

⁽¹³⁾ Evidence on the corrosive nature of the proposed injection fluid was submitted by the applicant in support of its request to utilize "bare steel" tubing instead of internally plastic-coated tubing at this time. The Division requires plastic-coated tubing on injection wells because even though fresh water is used for initial injection, this water is recirculated and injected with producted water from the Queen-Penrose formation, which can be corrosive.

- (14) The injection of water into the proposed injection wells should be accomplished either through 2 3/8-inch or 2 7/8-inch plastic-coated tubing installed in a packer set within 100 feet of the uppermost injection perforation; the casing-tubing annulus should be filled with an inert fluid and a gauge or approved leak-detection device should be attached to the annulus in order to determine leakage in the casing, tubing or packer.
- (15) Prior to commencing injection operations into the proposed injection wells, the casing in each well should be pressure tested throughout the interval from the surface down to the proposed packer setting depth, to assure the integrity of such casing.
- (16) The injection wells or pressurization system for each well should be so equipped as to initially limit injection pressure at the wellhead to no more than 777 psi.
- (17) Any further increase in the injection pressure limitation placed upon any well in the project area should only be approved after the Santa Fe office of the Division has reviewed evidence showing that increased injection pressure will not result in fracturing.
- (18) The operator should give advance notification to the supervisor of the Hobbs District Office of the Division of the date and time of the installation of injection equipment and of the mechanical integrity pressure-tests in order that the same may be witnessed.
- (19) The proposed waterflood project should be approved and the project should be governed by the provisions of Rule Nos. 701 through 708 of the Oil Conservation Division Rules and Regulations.
- (20) The applicant further requests that the subject waterflood project be approved by the Division as a qualified "Enhanced Oil Recovery Project" pursuant to the "Enhanced Oil Recovery Act" (Laws 1992, Chapter 38, Sections 1 through 5).
- The applicant's witness submitted a unit area production performance curve showing oil, gas and water production from 1973 to 1993. Oil production peaked at approximately 12,000 barrels per month in 1983 and has now declined to less than 2500 barrels per month. Slight increases in production were shown in 1987 and 1991 in response to injection in Section 27 outside the unit area and later into the Cavalcade Federal 21 Well No. 4 in Section 21 as approved by Division Order No. R-9240, dated July 1, 1990. While injection outside the unit area had some slight affect on unit production, it does not constitute an area project and would not disqualify any part of the project for approval under the "Enhanced Oil Recovery Act." However, as required by Rule D.2, Exhibit "A" of Division Order No. R-9708, the project area should have the S/2 SE/4 of Section 21 removed because of the injection into the Cavalcade Federal 21 Well No. 4. Average injection rate into the well in 1993 was 66 barrels of water per day. Total injection as of December 1993 was 88,208 barrels. \mathbb{C} ave $\mathbb{Q}_{\mathbb{R}}$ Med Median or and the mend"

- (22) The evidence presented indicates that the subject waterflood project meets all the criteria for approval.
- (23) The approved "project area" should initially comprise that area described in Finding Paragraph No. (5) above.
- (24) To be eligible for the EOR credit, prior to commencing injection operations, the operator must request from the Division a Certificate of Qualification, which certificate will specify the proposed project area as described above.
- (25) At such time as a positive production response occurs and within five years from the date of the Certificate of Qualification, the applicant must apply to the Division for certification of positive production response, which application shall identify the area actually benefitting from enhanced recovery operations, and identifying the specific wells which the operator believes are eligible for the credit. The Division may review the application administratively or set it for hearing. Based upon evidence presented, the Division will certify to the Department of Taxation and Revenue those lands and wells which are eligible for the credit.
- (26) The project is expected to cost at least \$592,000 and recover an additional 220,000 barrels of oil.
- (27) The applicant requested special operating rules for the unit which would provide for administrative approval of unorthodox locations and injection wells. Division General Rule 104.F(1) and 701.G currently provide for the administrative procedures, therefore the special rules are not needed.
- (28) The injection authority granted herein for the proposed injection wells should terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject wells, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Mewbourne Oil Company, is hereby authorized to institute a waterflood project in its Querecho Plains Queen Associated Sand Unit Area (Division Case No. 10959), Lea County, New Mexico, by the injection of water into the Querecho Plains-Queen Associated Pool (as found in that stratigraphic interval between 3886 feet to 4222 feet as measured on the Welex - Compensated Acoustic Velocity Log run on July 15, 1983 in the applicant's Federal "E" Well No. 7 located 330 feet from the North line and 990 feet from the East line (Unit A) of Section 27, Township 18 South, Range 32 East, NMPM, Lea County, New Mexico) through ten certain wells as further described in Exhibit "A" attached hereto and made a part hereof.

(2) The waterflood project, hereby designated the Querecho Plains Queen Associated Sand Unit Waterflood Project, shall coincide with the boundary of the Querecho Plains Queen Associated Sand Unit Area, as further described below, which was the subject of Division Case No. 10959 heard in combination with this case:

QUERECHO PLAINS QUEEN ASSOCIATED SAND UNIT WATERFLOOD PROJECT LEA COUNTY, NEW MEXICO

TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM

Section 21:

S/2 SE/4

Section 22:

S/2

Section 23:

S/2 and S/2 NW/4

Section 26:

N/2 N/2

Section 27:

N/2 and N/2 SW/4

Section 28:

NE/4 SE/4, N/2 NE/4, and SE/4 NE/4

(3) However, the initial waterflood project area, for allowable and tax credit purposes, shall comprise only the following described 1000 acres in Lea County, New Mexico:

TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM

Section 22:

S/2

Section 23:

SW/4, S/2 NW/4 and NE/4 SE/4

Section 26:

NW/4 NW/4

Section 27:

N/2 NE/4, SE/4 NE/4, S/2 NW/4, NE/4 NW/4 and N/2

SW/4

Section 28:

SE/4 NE/4

(4) The applicant must take all steps necessary to ensure that the injected water only enters and remains confined to the proposed injection interval and is not permitted to escape to other formations or onto the surface from injection, production, or plugged and abandoned wells.

PROVIDED HOWEVER THAT:

(5) Prior to initiating injection within one-half mile of any of the wells listed below, the applicant shall re-plug said wells in a manner which will assure that these wellbores will not serve as a conduit for migration of injected fluid to the satisfaction of the supervisor of the Hobbs District Office of the Division.

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Plugged Wells: Commence of the second Oil Associates, Inc. Edwards Well No. 1 (Unit M), Section 22;

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Section 1

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H & S Oil Company Anadarko Well No. 1-Y (Unit F), Section 27.

Prior to initiating injection within one-half mile of any of the five active, producing wells listed below, the applicant shall perform remedial cement operations on said wells in a manner which will assure that these wellbores will not serve as a conduit for migration of injected fluid to the satisfaction of the supervisor of the Hobbs District Office of the Division.

Producing Wells:

Anadarko Petroleum Company Cavalcade Federal No. 3 (Unit I), Section 21;

Mewbourne Oil Company Murjo Federal Well No. 1 (Unit E), Section 23;

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Mewbourne Oil Company Burleson Federal No. 1 (Unit B), Section 26;

Mewbourne Oil Company Sprinkle Federal Well No. 3 (Unit E), Section 26; and,

Santa Fe Energy Company (Unit F), Section 26,

> all in Township 18 South, Range 32 East, NMPM, Lea County, New Mexico.

IT IS FURTHER ORDERED THAT:

Injection shall be accomplished through 2 3/8-inch or 2 7/8-inch plastic-coated tubing installed in a packer set approximately within 100 feet of the uppermost injection perforation; the casing-tubing annulus in each well shall be filled with an inert fluid and equipped with an approved pressure gauge or attention-attracting leak detection device.

- (8) The injection wells or pressurization system for each injection well shall be so equipped as to initially limit injection pressure at the wellhead to no more than 777 psi.
- (9) Any additional increase in the injection pressure limitation placed upon any well in the project area shall only be approved by the Santa Fe Office of the Division.
- (10) Prior to commencing injection operations, the casing in each injection well shall be pressure-tested throughout the interval from the surface down to the proposed packer setting depth, to assure the integrity of such casing.
- (11) The operator shall give advance notification to the supervisor of the Hobbs District Office of the Division of the date and time of the installation of injection equipment and of the mechanical integrity pressure-test in order that the same may be witnessed.
- (12) The applicant shall immediately notify the supervisor of the Hobbs District Office of the Division of the failure of the tubing, casing or packer in any of the injection wells, the leakage of water or oil from or around any producing well, or the leakage of water or oil from any plugged and abandoned well within the project area, and shall take such steps as may be timely and necessary to correct such failure or leakage.
- (13) The applicant shall conduct injection operations in accordance with Division Rule Nos. 701 through 708 and shall submit monthly progress reports in accordance with Division Rule Nos. 706 and 1115.

FURTHERMORE:

- (14) The subject waterflood project is hereby approved as an "Enhanced Oil Recovery Project" pursuant to the "Enhanced Oil Recovery Act" (Laws 1992, Chapter 38, Sections 1 through 5).
- (15) The approved "project area" shall initially comprise that area described in Decretory Paragraph No. (3) above.
- (16) To be eligible for the EOR credit, prior to commencing injection operations, the operator must request from the Division a Certificate of Qualification, which certificate will specify the proposed project area as described above.
- (17) At such time as a positive production response occurs and within five years from the date of the Certificate of Qualification, the applicant must apply to the Division for certification of positive production response, which application shall identify the area actually benefitting from enhanced recovery operations, and identifying the specific wells which the

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operator believes are eligible for the credit. The Division may review the application administratively or set it for hearing. Based upon evidence presented, the Division will certify to the Department of Taxation and Revenue those lands and wells which are eligible for the credit.

- (18)The injection authority granted herein for the proposed injection wells shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject wells, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.
- Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

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EXHIBIT "A"

CASE NO. 10960 ORDER NO. R-10151

Mewbourne Oil Company Proposed Injection Well Locations Querecho Plains Queen Associated Sand Unit Waterflood Project Area

Township 18 South, Range 32 East, NMPM, Lea County, New Mexico

Well Name and Number	Footage Location	Section	Unit	Proposed Injection Interval (Feet)
Cavalcade Federal Well No. 4	400' FSL & 660' FEL	21	P	4096 - 4130
Bennett Federal Well No. 1	660' FSL & 1650' FEL	22	0	3897 - 4138
Flip Federal Well No. 1	1650' FNL & 330' FWL	23	E	4143 - 4150
Edith Federal Well No. 2	1980' FSL & 1980' FEL	23	J	3953 - 4224
Marshall Federal Well No. 1	660' FSL & 1980' FWL	23	Z	4176 - 4190
Walker Federal Well No. 1	330' FNL & 330' FWL	26	D	3914 - 3947
Federal "E" Well No. 8	1650' FNL & 660' FEL	27	Н	3934 - 4198
Anadarko Federal Well No. 2	1650' FSL & 1980' FWL	27	Ж	3888 - 4026
Anadarko Federal Well No. 3	1650' FSL & 990' FWL	27	L	3830 - 4060
Federal "E" Well No. 9	1980' FNL & 330' FEL	28	Н	3875 - 4152

QUERECHO PLAINS QUEEN ASSOCIATED SAND UNIT LEA COUNTY, NEW MEXICO

INITIAL CAPITAL INVESTMENT

Unitization, Design, Construction and Implementation

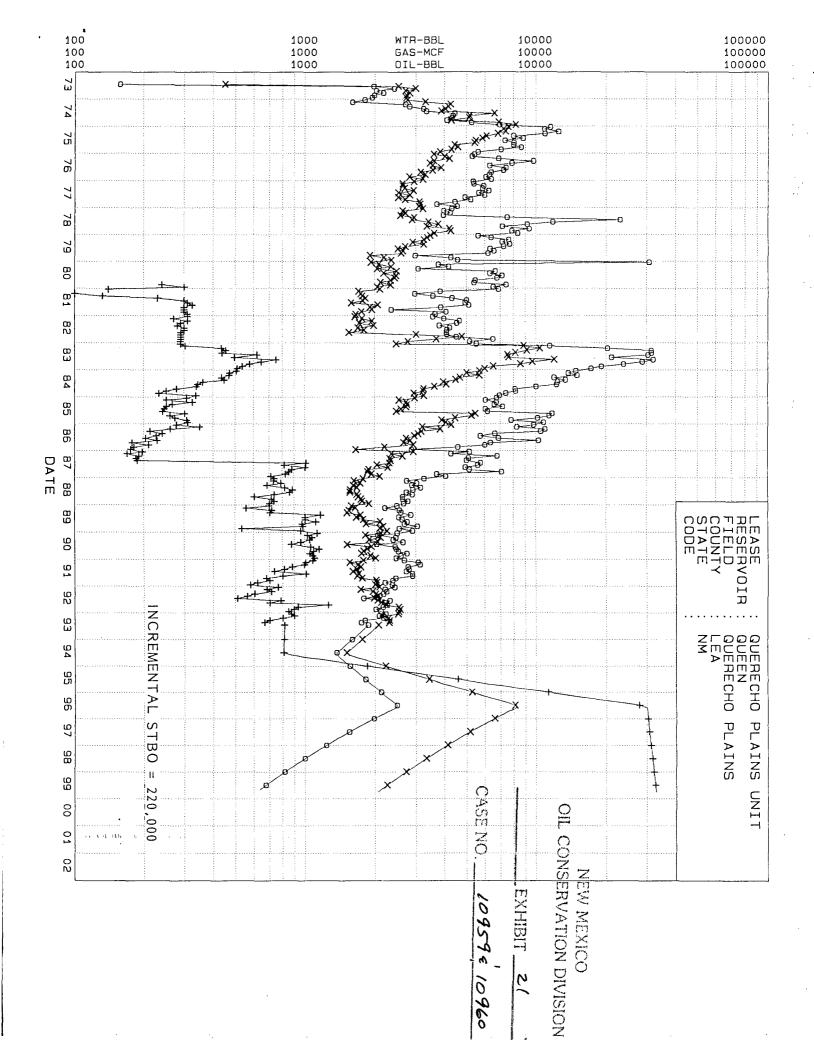
\$ 592,000

INCREMENTAL ECONOMIC EVALUATION

	Present Worth Undisc. (M\$)	ROI Undiscounted	Present Worth Discounted @ 10% (M\$)	ROI Disc. @ 10%	IRR (%)
Working Int. (Total Group)	850	2.4:1	480	1.8:1	29
Royalty Int. (BLM)	250	N/A	180	N/A	N/A
ORRI Interests (Total Group)	200	N/A	140	N/A	N/A

Note: Economics do have BLM royalty reduction and the State's EOR tax rate taken into account.

NEW MEXICO OIL CONSERVATION DIVISION
EXHIBIT
CASE NO. 10959 2 10960



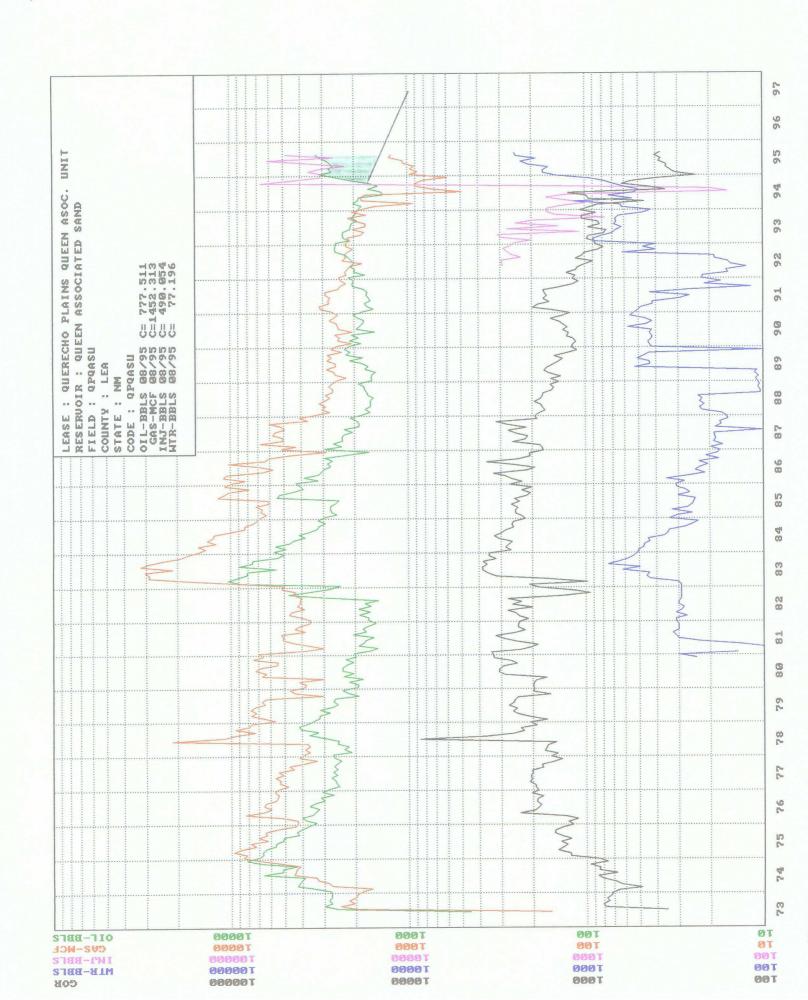


85



QUERECHO PLAINS QUEEN ASSOCIATED SAND UNIT T18S, R32E, Lea County, New Mexico Well Status Table

Well No.	Location	Completion Date	Status
Querecho Plains QA Sand Unit No. 1	23E	11/07/80	I
Querecho Plains QA Sand Unit No. 2	23F	01/19/75	P
Querecho Plains QA Sand Unit No. 3	23Ј	06/22/74	I
Querecho Plains QA Sand Unit No. 4	23K	11/15/74	P
Querecho Plains QA Sand Unit No. 5	23L	02/01/78	Р
Querecho Plains QA Sand Unit No. 6	22I	12/22/82	Р
Querecho Plains QA Sand Unit No. 7	22Ј	03/09/83	P
Querecho Plains QA Sand Unit No. 8	22K	04/04/83	Р
Querecho Plains QA Sand Unit No. 9	22L	06/15/83	T.A.
Querecho Plains QA Sand Unit No. 10	210	06/27/85	P
Querecho Plains QA Sand Unit No. 11	21P	10/26/85	I
Querecho Plains QA Sand Unit No. 12	22M	06/15/83	P
Querecho Plains QA Sand Unit No. 13	22N	03/24/83	P
Querecho Plains QA Sand Unit No. 14	220	02/04/83	I
Querecho Plains QA Sand Unit No. 15	22P	09/27/82	P
Querecho Plains QA Sand Unit No. 16	23M	06/14/82	P
Querecho Plains QA Sand Unit No. 17	23N	07/24/73	Ī
Querecho Plains QA Sand Unit No. 18	26D	02/01/83	I
Querecho Plains QA Sand Unit No. 19	27A	08/19/83	P
Querecho Plains QA Sand Unit No. 20	27B	08/16/83	P
Querecho Plains QA Sand Unit No. 21	27C	07/01/83	P
Querecho Plains QA Sand Unit No. 22	28H	03/03/84	<u> </u>
Querecho Plains QA Sand Unit No. 23	27E	08/04/78	P
Querecho Plains QA Sand Unit No. 24	27F	10/25/77	P
Querecho Plains QA Sand Unit No. 25	27Н	02/28/84	I
Querecho Plains QA Sand Unit No. 26	27K	06/21/73	I
Querecho Plains QA Sand Unit No. 27	27L	02/12/74	I
Querecho Plains QA Sand Unit No. 28	230	12/23/94	P
Querecho Plains QA Sand Unit No. 29	27D	11/22/94	D&A
Querecho Plains QA Sand Unit No. 30	26A	08/15/95	I



QUERECHO PLAINS QUEEN ASSOCIATED SAND UNIT T18S, R32E, Lea County, New Mexico Current Producing Well Table

Well No.	Location	Completion Date	Status
Querecho Plains QA Sand Unit No. 2	23F	01/19/75	P
Querecho Plains QA Sand Unit No. 4 🗸	23K	11/15/74	P
Querecho Plains QA Sand Unit No. 5	23L	02/01/78	P
Querecho Plains QA Sand Unit No. 6	22I	12/22/82	Р
Querecho Plains QA Sand Unit No. 7 🗸	22J	03/09/83	P
Querecho Plains QA Sand Unit No. 8	22K	04/04/83	P
Querecho Plains QA Sand Unit No. 9	22L	06/15/83	T.A.
Querecho Plains QA Sand Unit No. 19/	210	06/27/85	P
Querecho Plains QA Sand Unit No. 12	22M	06/15/83	P
Querecho Plains QA Sand Unit No. 13	22N	03/24/83	P
Querecho Plains QA Sand Unit No. 15	22P	09/27/82	P
Querecho Plains QA Sand Unit No. 16	23M	06/14/82	Р
Querecho Plains QA Sand Unit No. 19	27A	08/19/83	P
Querecho Plains QA Sand Unit No. 20	27B	08/16/83	P
Querecho Plains QA Sand Unit No. 21	27C	07/01/83	Р
Querecho Plains QA Sand Unit No. 23	27E	08/04/78	Р
Querecho Plains QA Sand Unit No. 24	27F	10/25/77	P
Querecho Plains QA Sand Unit No. 28	230	12/23/94	P

NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

October 17, 1995

Mewbourne Oil Company P.O. Box 7698 Tyler, Texas 75711-7698

Attn: Mr. K.M. Calvert

RE: Injection Pressure Increase Quercho Plains Queen Associated Sand Unit EOR Waterflood Project Lea County, New Mexico

Dear Mr. Calvert:

Reference is made to your request dated August 31, 1995 to increase the surface injection pressure on one well on the above referenced project. This request is based on a step rate test conducted from July 13 to August 14, 1995. The results of the test have been reviewed by my staff and we feel an increase in injection pressure on this well is justified at this time.

You are therefore authorized to increase the surface injection pressure on the following well:

Well and Location	Maximum Injection Surface Pressure		
QPQASU (Flip Federal) Well No.1 Unit E, Section 23, Township 18 South, Range 32 East	1750 PSIG		
This well located in Lea County, New	This well located in Lea County, New Mexico.		

The Division Director may rescind this injection pressure increase if it becomes apparent that the injected water is not being confined to the injection zone or is endangering any fresh water aquifers.

Sincerely,

William J. LeMa Director

WJL/BES

cc: Oil Conservation Division - Hobbs Data Processing - Rick Brown

Files: Case File No.10960; EOR-19; PSI-X 1st QTR 96

STATE OF NEW MEXICO



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

2040 S. PACHECO SANTA FE, NEW MEXICO 87505 (505) 827-7131

May 10, 1995

Department of Taxation & Revenue P.O. Box 630 Santa Fe, New Mexico 87509-0630

Attention: Mr. John Chavez, Secretary

Dear Secretary Chavez:

Enclosed is a copy of a letter to Mewbourne Oil Company wherein the Division approved the expansion of a previously certified enhanced oil recovery project, the Querecho Plains Queen Associated Sand Unit Enhanced Oil Recovery Project. This project was certified to the Taxation & Revenue Department on July 1, 1994. Mewbourne has drilled an additional producing well on acreage offset by injection wells, and the Division has deemed that this acreage should be included in the project area. If you should have any questions, please contact Mr. David Catanach at (505) 827-8184.

Sincerely.

William J. HeMay Division Director

WJL/drc

Enclosures

STATE OF NEW MEXICO



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

2040 S. PACHECO SANTA FE, NEW MEXICO 87505 (505) 827-7131

May 10, 1995

Mewbourne Oil Company P.O. Box 7698 Tyler, Texas 75711

Attention: Kevin Mayes, P.E.

Re: EXPANSION OF THE PREVIOUSLY CERTIFIED ENHANCED OIL RECOVERY PROJECT FOR THE RECOVERED OIL TAX RATE-QUERECHO PLAINS QUEEN

ASSOCIATED SAND UNIT WATERFLOOD PROJECT

The New Mexico Oil Conservation Division hereby certifies that following acreage is eligible to be included in the Querecho Plains Queen Associated Sand Unit Enhanced Oil Recovery Project, as previously approved by Division Order No. R-10151, and as previously certified to the New Mexico Taxation and Revenue Department on July 1, 1994:

TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM

Section 23: SW/4 SE/4

APPROVED BY:

STATE OF NEW MEXICO

OIL CONSERVATION DIVISION

WILLIAM J LEMAY DIRECTOR

MEWBOURNE OIL COMPANY

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

OIL CONSERVATION DIVISION RECEIVED

*95 MB 4 AM 8 52

April 3, 1995

Certified Mail No. Z 077 781 613

New Mexico Oil Conservation Commission P.O. Box 1980 Hobbs, New Mexico 88240 Attn: David Catanach

Application for Expansion of Project Area

Querecho Plains Queen Associated Unit

Lea County, New Mexico

Gentlemen:

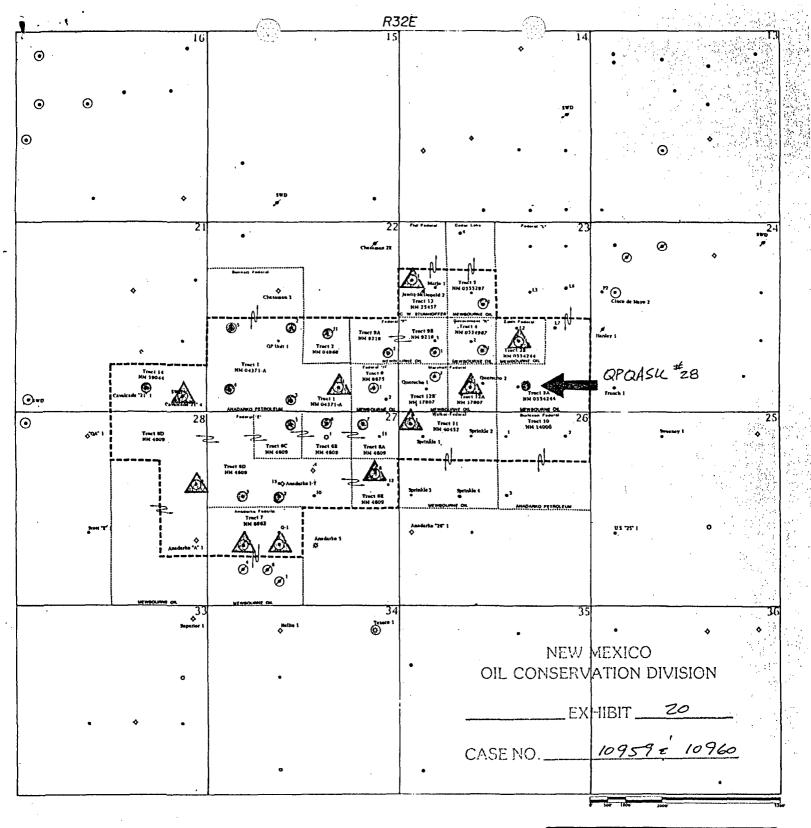
Mewbourne Oil Company seeks administrative approval for expanding the project area at the referenced unit. We seek to expand the project area to include a 40 acre unit located in Section 23, T18S, R32E, Unit O. This expansion is requested due to drilling a new producing well, the QPQASU No. 28, at said location. This new well directly offsets two water injection wells. Attached is a plat of the unit area showing the location of the subject wells. Also attached is a copy of Division Order R-10151 approving a waterflood project and designating the original project area for the referenced unit.

Should you have any questions or comments of myself or Mewbourne Oil Company please call me or Ken Calvert at (903) 561-2900.

Sincerely,

Kevin Mayes,

Project Engineer





Producer



STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

Case No. 10960 Order No. R-10151

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APPLICATION OF MEWBOURNE OIL COMPANY FOR A WATERFLOOD PROJECT AND QUALIFICATION FOR THE RECOVERED OIL TAX RATE, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on April 28, 1994 at Santa Fe, New Mexico, before Examiner Jim Morrow.

NOW, on this 14th day of July, 1994 the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) At the time of the hearing this case was consolidated with Division Case No. 10959 for the purpose of testimony. Case No. 10959 is a companion case concerning statutory unitization.
- (3) The applicant, Mewbourne Oil Company, seeks authority to institute a waterflood project in its proposed Querecho Plains Queen Associated Sand Unit Area (Division Case No. 10959), Lea County, New Mexico, by the injection of water into the Querecho Plains-Queen Associated Pool, as found in that stratigraphic interval between 3886 feet to 4222 feet as measured on the Welex Compensated Acoustic Velocity Log run on July 15, 1983 in the applicant's Federal Well No. 7 located 330 feet from the North line and 990 feet from the East line (Unit A) of Section 27, Township 18 South, Range 32 East, NMPM, Lea County, New Mexico, through ten certain wells as further described in Exhibit "A" attached hereto and made a part hereof.

(4) It is proposed that the waterflood project area coincide with the boundary of the Querecho Plains Queen Associated Sand Unit Area in Lea County, New Mexico, as further described below, which was the subject of Division Case No. 10959 and was heard in combination with this case:

TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM

Section 21: S/2 SE/4

Section 22: S/2

Section 23: S/2 and S/2 NW/4

Section 26: N/2 N/2

Section 27: N/2 and N/2 SW/4

Section 28: NE/4 SE/4, N/2 NE/4, and SE/4 NE/4

(5) The above-described area contains several tracts of undeveloped acreage; therefore, in compliance with Division General Rule 701.G(1) the project area as requested should be reduced to include only those oil spacing and proration units within the proposed area that have experienced production from the Querecho Plains-Queen Associated Pool. The S/2 SE/4 of Section 21 should also be removed from the project area because of the reasons explained in Finding Paragraph No. 21 of this order. The resulting project area should contain the following described 1000 acres in Lea County, New Mexico:

TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM

Section 22: S/2

Section 23: SW/4, S/2 NW/4 and NE/4 SE/4

Section 26: NW/4 NW/4

Section 27: N/2 NE/4, SE/4 NE/4, S/2 NW/4, NE/4 NW/4 and N/2 SW/4

Section 28: SE/4 NE/4

- (6) The present Queen Associated oil producing wells within the subject project area and interval are in an advanced state of depletion and should therefore be properly classified as "stripper wells".
- (7) The applicant requested that maximum surface injection pressure be set at 1400 psi. In support of this request, the applicant's witness used initial shut-in pressure and fluid gradients from the fracture treatments of seventeen wells in the pool, but failed to prove that 1400 psi surface injection pressure would not cause fracturing in the Queen-Penrose interval.

- (8) The injection wells or pressurization system should be initially equipped with a pressure control device or acceptable substitute which will limit the surface injection pressure to no more than 777 PSI because the increase in surface injection pressure as requested by the applicant was not supported with step rate tests.
- (9) The Division Director should have the authority to administratively authorize a pressure limitation in excess of the above upon a showing by the operator that such higher pressure will not result in the fracturing of the injection formation or confining strata.
- (10) The operator of the proposed Querecho Plains Queen Associated Sand Unit Waterflood Project should take all steps necessary to ensure that the injected water enters and remains confined to only the proposed injection interval and is not permitted to escape from that interval and migrate into other formations, producing intervals, pools or onto the surface from injection, production, or plugged and abandoned wells.
- (11) The applicant submitted data concerning all plugged and producing wells within the area of review. There are five wells which may not be plugged in such a manner which will assure that their wellbores will not serve as a conduit for movement of injected fluid out of the injection interval. Three of the wells are located outside the zero contour lines of the Queen and Penrose porosity isopach maps and should pose no problem. The other two following described wells should be re-plugged in a manner which will assure that the wellbores will not serve as a conduit for migration of injection fluid to the satisfaction of the Hobbs District Supervisor.

Plugged Wells:

Oil Associates, Inc.
Edwards Well No. 1

660' FSL & 660' FWL (Unit M), Section 22;

H & S Oil Company Anadarko Well No., 1-Y 1980' FNL & 1995' FWL (Unit F), Section 27.

(12) There are five active producing wells in the area of review which do not have cement covering the Queen-Penrose interval. These wells, and their casing program and calculated cement tops, are listed below. These wells will require remedial cement operations in a manner which will assure that the wellbores will not serve as a conduit for migration of injection fluid to the satisfaction of the Hobbs District Supervisor.

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Anadarko Pet. Co.	Cavalcade Federal No. 3	I-21-18S-32E
	13 3/8" @ 753' w/750 sx	TOC - Surface
	8 5/8" @ 3465' W/1700 sx	TOC - Surface
en e	5 1/2" @ 10,787' w/400 sx	TOC - 8880'
Mewbourne Oil Co.	Murjo Federal Well No. 1	E-23-18S-32E
	13 3/8" @ 350' w/350 sx	TOC - Surface,
	8 5/8" @ 2777' w/1200 sx	TOC - Surface
	5 1/2" @ 10,800' w/650 sx	TOC - 7701'
Mewbourne Oil Co.	Burleson Federal No. 1	B-26-18S-32E
	11 3/4" @ 350' w/485 sx	TOC - Surface
gantang di salah sebagai belah di sebagai berbagai berbagai berbagai berbagai berbagai berbagai berbagai berba Sebagai berbagai ber	8 5/8" @ 2800' w/2250 sx	#TOC - Surface
and green and the second	4 1/2" @ 8700' w/1205 sx	TOC - 4331'
Mewbourne Oil Co.	Sprinkle Federal No. 3	E-26-18S-32E
	11 3/4" @ 350' w/485 sx	TOC - Surface
	8 5/8" @ 2767' w/1700 sx	TOC - Surface
	5 1/2" @ 8710' w/700 sx	TOC - 5373'
Santa Fe Energy	Sprinkle Federal No. 4	F-26-18S-32E
· .	13 3/8" @ 353' w/370 sx	TOC - Surface
	8 5/8" @ 2810' w/1050 sx	TOC - Surface
	5 1/2" @ 9700' w/900 sx	TOC - 5409'

⁽¹³⁾ Evidence on the corrosive nature of the proposed injection fluid was submitted by the applicant in support of its request to utilize "bare steel" tubing instead of internally plastic-coated tubing at this time. The Division requires plastic-coated tubing on injection wells because even though fresh water is used for initial injection, this water is recirculated and injected with producted water from the Queen-Penrose formation, which can be corrosive.

- (14) The injection of water into the proposed injection wells should be accomplished either through 2 3/8-inch or 2 7/8-inch plastic-coated tubing installed in a packer set within 100 feet of the uppermost injection perforation; the casing-tubing annulus should be filled with an inert fluid and a gauge or approved leak-detection device should be attached to the annulus in order to determine leakage in the casing, tubing or packer.
- (15) Prior to commencing injection operations into the proposed injection wells, the casing in each well should be pressure tested throughout the interval from the surface down to the proposed packer setting depth, to assure the integrity of such casing.
- (16) The injection wells or pressurization system for each well should be so equipped as to initially limit injection pressure at the wellhead to no more than 777 psi.
- (17) Any further increase in the injection pressure limitation placed upon any well in the project area should only be approved after the Santa Fe office of the Division has reviewed evidence showing that increased injection pressure will not result in fracturing.
- (18) The operator should give advance notification to the supervisor of the Hobbs District Office of the Division of the date and time of the installation of injection equipment and of the mechanical integrity pressure-tests in order that the same may be witnessed.
- (19) The proposed waterflood project should be approved and the project should be governed by the provisions of Rule Nos. 701 through 708 of the Oil Conservation Division Rules and Regulations.
- (20) The applicant further requests that the subject waterflood project be approved by the Division as a qualified "Enhanced Oil Recovery Project" pursuant to the "Enhanced Oil Recovery Act" (Laws 1992, Chapter 38, Sections 1 through 5).
- showing oil, gas and water production from 1973 to 1993. Oil production peaked at approximately 12,000 barrels per month in 1983 and has now declined to less than 2500 barrels per month. Slight increases in production were shown in 1987 and 1991 in response to injection in Section 27 outside the unit area and later into the Cavalcade Federal 21 Well No. 4 in Section 21 as approved by Division Order No. R-9240, dated July 1, 1990. While injection outside the unit area had some slight affect on unit production, it does not constitute an area project and would not disqualify any part of the project for approval under the "Enhanced Oil Recovery Act." However, as required by Rule D.2, Exhibit "A" of Division Order No. R-9708, the project area should have the S/2 SE/4 of Section 21 removed because of the injection into the Cavalcade Federal 21 Well No. 4. Average injection rate into the well in 1993 was 66 barrels of water per day. Total injection as of December 1993 was 88,208 barrels.

- (22) The evidence presented indicates that the subject waterflood project meets all the criteria for approval.
- (23) The approved "project area" should initially comprise that area described in Finding Paragraph No. (5) above.
- (24) To be eligible for the EOR credit, prior to commencing injection operations, the operator must request from the Division a Certificate of Qualification, which certificate will specify the proposed project area as described above.
- (25) At such time as a positive production response occurs and within five years from the date of the Certificate of Qualification, the applicant must apply to the Division for certification of positive production response, which application shall identify the area actually benefitting from enhanced recovery operations, and identifying the specific wells which the operator believes are eligible for the credit. The Division may review the application administratively or set it for hearing. Based upon evidence presented, the Division will certify to the Department of Taxation and Revenue those lands and wells which are eligible for the credit.
- (26) The project is expected to cost at least \$592,000 and recover an additional 220,000 barrels of oil.
- (27) The applicant requested special operating rules for the unit which would provide for administrative approval of unorthodox locations and injection wells. Division General Rule 104.F(1) and 701.G currently provide for the administrative procedures, therefore the special rules are not needed.
- (28) The injection authority granted herein for the proposed injection wells should terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject wells, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Mewbourne Oil Company, is hereby authorized to institute a waterflood project in its Querecho Plains Queen Associated Sand Unit Area (Division Case No. 10959), Lea County, New Mexico, by the injection of water into the Querecho Plains-Queen Associated Pool (as found in that stratigraphic interval between 3886 feet to 4222 feet as measured on the Welex - Compensated Acoustic Velocity Log run on July 15, 1983 in the applicant's Federal "E" Well No. 7 located 330 feet from the North line and 990 feet from the East line (Unit A) of Section 27, Township 18 South, Range 32 East, NMPM, Lea County, New Mexico) through ten certain wells as further described in Exhibit "A" attached hereto and made a part hereof.

(2) The waterflood project, hereby designated the Querecho Plains Queen Associated Sand Unit Waterflood Project, shall coincide with the boundary of the Querecho Plains Queen Associated Sand Unit Area, as further described below, which was the subject of Division Case No. 10959 heard in combination with this case:

QUERECHO PLAINS QUEEN ASSOCIATED SAND UNIT WATERFLOOD PROJECT LEA COUNTY, NEW MEXICO

TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM

Section 21:

S/2 SE/4

S/2

Section 22: Section 23:

S/2 and S/2 NW/4

Section 26:

N/2 N/2

Section 27:

N/2 and N/2 SW/4

Section 28:

NE/4 SE/4, N/2 NE/4, and SE/4 NE/4

(3) However, the initial waterflood project area, for allowable and tax credit purposes, shall comprise only the following described 1000 acres in Lea County, New Mexico:

TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM

Section 22: S/2

Section 23:

SW/4, S/2 NW/4 and NE/4 SE/4

Section 26:

NW/4 NW/4

Section 27:

N/2 NE/4, SE/4 NE/4, S/2 NW/4, NE/4 NW/4 and N/2

SW/4

Section 28:

SE/4 NE/4

(4) The applicant must take all steps necessary to ensure that the injected water only enters and remains confined to the proposed injection interval and is not permitted to escape to other formations or onto the surface from injection, production, or plugged and abandoned wells.

PROVIDED HOWEVER THAT:

(5) Prior to initiating injection within one-half mile of any of the wells listed below, the applicant shall re-plug said wells in a manner which will assure that these wellbores will not serve as a conduit for migration of injected fluid to the satisfaction of the supervisor of the Hobbs District Office of the Division.

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Plugged Wells: CONTRACTOR STATE Oil Associates, Inc. Edwards Well No. 1 (Unit M), Section 22;

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H & S Oil Company Anadarko Well No. 1-Y (Unit F), Section 27.

Prior to initiating injection within one-half mile of any of the five active, producing wells listed below, the applicant shall perform remedial cement operations on said wells in a manner which will assure that these wellbores will not serve as a conduit for migration of injected fluid to the satisfaction of the supervisor of the Hobbs District Office of the Division.

Producing Wells:

Anadarko Petroleum Company Cavalcade Federal No. 3 (Unit I), Section 21;

Mewbourne Oil Company Murio Federal Well No. 1 (Unit E), Section 23;

Committee of the Market

Mewbourne Oil Company Burleson Federal No. 1 (Unit B), Section 26;

Mewbourne Oil Company Sprinkle Federal Well No. 3 (Unit E), Section 26; and,

As the second was a second of the Santa Fe Energy Company Sprinkle Federal Well No. 4 (Unit F), Section 26,

> all in Township 18 South, Range 32 East, NMPM, 1992 Lea County, New Mexico.

IT IS FURTHER ORDERED THAT:

Injection shall be accomplished through 2 3/8-inch or 2 7/8-inch plastic-coated tubing installed in a packer set approximately within 100 feet of the uppermost injection perforation; the casing-tubing annulus in each well shall be filled with an inert fluid and equipped with an approved pressure gauge or attention-attracting leak detection device.

- (8) The injection wells or pressurization system for each injection well shall be so equipped as to initially limit injection pressure at the wellhead to no more than 777 psi.
- (9) Any additional increase in the injection pressure limitation placed upon any well in the project area shall only be approved by the Santa Fe Office of the Division.
- (10) Prior to commencing injection operations, the casing in each injection well shall be pressure-tested throughout the interval from the surface down to the proposed packer setting depth, to assure the integrity of such casing.
- (11) The operator shall give advance notification to the supervisor of the Hobbs District Office of the Division of the date and time of the installation of injection equipment and of the mechanical integrity pressure-test in order that the same may be witnessed.
- (12) The applicant shall immediately notify the supervisor of the Hobbs District Office of the Division of the failure of the tubing, casing or packer in any of the injection wells, the leakage of water or oil from or around any producing well, or the leakage of water or oil from any plugged and abandoned well within the project area, and shall take such steps as may be timely and necessary to correct such failure or leakage.
- (13) The applicant shall conduct injection operations in accordance with Division Rule Nos. 701 through 708 and shall submit monthly progress reports in accordance with Division Rule Nos. 706 and 1115.

FURTHERMORE:

- (14) The subject waterflood project is hereby approved as an "Enhanced Oil Recovery Project" pursuant to the "Enhanced Oil Recovery Act" (Laws 1992, Chapter 38, Sections 1 through 5).
- (15) The approved "project area" shall initially comprise that area described in Decretory Paragraph No. (3) above.
- (16) To be eligible for the EOR credit, prior to commencing injection operations, the operator must request from the Division a Certificate of Qualification, which certificate will specify the proposed project area as described above.
- (17) At such time as a positive production response occurs and within five years from the date of the Certificate of Qualification, the applicant must apply to the Division for certification of positive production response, which application shall identify the area actually benefitting from enhanced recovery operations, and identifying the specific wells which the

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operator believes are eligible for the credit. The Division may review the application administratively or set it for hearing. Based upon evidence presented, the Division will certify to the Department of Taxation and Revenue those lands and wells which are eligible for the credit.

- The injection authority granted herein for the proposed injection wells shall (18)terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject wells, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.
- Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO

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EXHIBIT "A"

CASE NO. 10960 ORDER NO. R-10151 Mewbourne Oil Company
Proposed Injection Well Locations
Querecho Plains Queen Associated Sand Unit Waterflood Project Area

Township 18 South, Range 32 East, NMPM, Lea County, New Mexico

Well Name and Number	Footage Location	Section	Unit	Proposed Injection Interval (Feet)
Cavalcade Federal Well No. 4	400' FSL & 660' FEL	21	Ь	4096 - 4130
Bennett Federal Well No. 1	660' FSL & 1650' FEL	22	0	3897 - 4138
Flip Federal Well No. 1	1650' FNL & 330' FWL	23	田	4143 - 4150
Edith Federal Well No. 2	1980' FSL & 1980' FEL	23	J	3953 - 4224
Marshall Federal Well No. 1	660' FSL & 1980' FWL	23	Z	4176 - 4190
Walker Federal Well No. 1	330' FNL & 330' FWL	26	D	3914 - 3947
Federal "E" Well No. 8	1650' FNL & 660' FEL	27	Н	3934 - 4198
Anadarko Federal Well No. 2	1650' FSL & 1980' FWL	27	×	3888 - 4026
Anadarko Federal Well No. 3	1650' FSL & 990' FWL	27	1	3830 - 4060
Federal "E" Well No. 9	1980' FNL & 330' FEL	28	H	3875 - 4152

STATE OF NEW MEXICO



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING GOVERNOR

ANITA LOCKWOOD CABINET SECRETARY

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

August 3, 1994

Department of Taxation and Revenue P.O. Box 630 Santa Fe, NM 87509-0630

Attention: Dick Minzner, Secretary

RE: Certification of EOR Project

Mewbourne Oil Company

Quercheo Plains Queen Associated Sand Unit

Dear Secretary Minzner:

Enclosed is a copy of the certification issued to Mewbourne Oil Company for its Quercheo Plains Queen Associated Sand Unit EOR project, certified by this Division on July 1, 1994, to be a qualified Enhanced Oil Recovery Project. If the operator applies for certification of positive production response within five years from that date, this project will be eligible for the *Recovered Oil Tax Rate* as provided in Laws of 1992, Chapter 38.

Only oil production from that portion of the lands identified in the certification which is actually developed for enhanced recovery will be eligible for the reduced tax rate. At the time positive production response is certified, we will identify for you the specific lands and wells within the project which qualify for the *Recovered Oil Tax Rate*.

Sincerely.

William J. LeM

Director

WJL/amg

Enclosures

STATE OF NEW MEXICO



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING GOVERNOR

ANITA LOCKWOOD CABINET SECRETARY

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87504 (505) 827-5800

August 3, 1994

Mewbourne Oil Company P.O. Box 7698 Tyler, TX 75711

Attenton: K.M. Calvert

CERTIFICATION OF ENHANCED OIL RECOVERY PROJECT FOR RECOVERED OIL TAX RATE

The New Mexico Oil Conservation Division hereby certifies that the following Enhanced Oil Recovery Project has been approved by the Division as a secondary project, pursuant to the provisions of the New Mexico Enhanced Oil Recovery Act (Laws of 1992, Chapter 38). In order to qualify for the Recovered Oil Tax Rate, you must apply for certification of positive production response within five years from the date of this certification. Only production from that portion of the project area identified herein which is actually developed for enhanced recovery will qualify for the reduced tax rate.

If operation of this project is terminated for any reason, the operator of the project must notify this Division and the Secretary of the Taxation and Revenue Department not later than the thirtieth day after termination.

NAME OF PROJECT:

Quercheo Plains Queen Associated Sand Unit

OCD ORDER NO.

R-10151

OPERATOR:

Mewbourne Oil Company

ADDRESS:

P.O. Box 7698

Tyler, TX 75711

CERTIFICATION DATE: July 1, 1994

MEWBOURNE OIL COMPANY

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

July 19, 1994

William J. LeMay
Oil Conservation Division
P. O. Box 2308
Santa Fe, New Mexico 87503-2308

Dear Mr. LeMay:

Mewbourne Oil Company, the designated Operator of the Querecho Plains Queen Associated Sand Unit pursuant to Division Order No. R-10123, hereby requests the Division to issue a Certificate of Qualification for the project area for the Unit, as approved in Division Order No. R-10151. The initial project area is described in Paragraph No. (5) of said Order. Mewbourne Oil Company wishes to commence injection by August 1, 1993, and thus your attention to this matter is appreciated.

MEWBOURNE OIL COMPANY

BA:

M. Calvert

Engineering Manager Secondary Recovery

KMC\sh

Attachment: Certificate of Qualification

K. M. Calvert Mewbourne Oil Company P. O. Box 7698 Tyler, Texas 75711

CERTIFICATION OF ENHANCED OIL RECOVERY PROJECT FOR RECOVERED OIL TAX RATE

The New Mexico Oil Conservation Division hereby certifies that the following Enhanced Oil Recovery Project has been approved by the Division as a secondary project, pursuant to the provisions of the New Mexico Enhanced Oil Recovery Act (L. 1992, Ch. 38). In order to qualify for the Recovered Oil Tax Rate, you must apply for certification of positive production response within five years from the date of this certification. Only production from that portion of the project are identified herein which is actually developed for enhanced recovery will qualify for the reduced tax rate.

If operation of this project is terminated for any reason, the operator of the project must notify this Division and the Secretary of Taxation and Revenue not later than the thirtieth day after termination.

NAME OF PROJECT:

Querecho Plains Queen Associated Sand Unit

OCD ORDER NO.:

R-10|151

OPERATOR:

Mewbourne Oil Company

ADDRESS:

P. O. Box 7698

Tyler, Texas 75711

CERTIFICATION DATE:

July 1, 1994

INITIAL PROJECT AREA

TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM

Section 22: S/2

Section 23: SW/4, S/2 NW/4 and NE/4 SE/4

Section 26: NW/4 NW/4

Section 27: N/2 NE/4, SE/4 NE/4, S/2 NW/4, NE/4 NW/4 and N/2 SW/4

Section 28: SE/4 NE/4

Approved

William J. LeMAy Director

(Seal)

55083

CERTIFICATE OF EFFECTIVENESS OF THE QUERECHO PLAINS QUEEN ASSOCIATED SAND UNIT

Mewbourne Oil Company, the operator of the Querecho Plains Queen Associated Sand Unit, approved by New Mexico Oil Conservation Division Order No. R-10959, hereby certifies that the Unit became effective on the 1st day of July 1994. More than 75% of working interests and more than 75% of royalty interests have approved, in writing, the plan of unit operations approved by the New Mexico Oil Conservation Division.

The working interest owners who have approved the plan of unit operations are:

	<u>Participation in Unit</u>
ANADARKO PETROLEUM CORP.	0.25883804
ASSOCIATED PARTNERS 1986	0.00307698
BISHOP, PHILIP R.	0.00169992
HEAD, DEBRA JOHNSON	0.00076190
HILLSIDE SYNDICATE	0.00034189
HOPSON, DEMAR JOHNSON	0.00076190
JOYRAN CORP.	0.00341887
MCREYNOLDS, ANN H. JOHNSON	0.00034286
MEWBOURNE, CURTIS W.	0.55246580
MEWBOURNE OIL COMPANY	0.01271820
OXY USA INC.	0.13292986
WALKER, C. DANIEL	0.00675645
APPROVED:	0.97411268

The royalty interest owners who have approved the plan of unit operations are:

ANADARKO PETROLEUM CORP. 0.030465661

ANADARKO PETROLEUM CORP.	0.030465661
BEARDEN, L. E., JR.	0.000218481
BERRY, O. H.	0.008450410
BERRY, VIRGINIA B.	0.000838410
BEUCH, MARGARET L.	0.001414336
BUREAU OF LAND MANAGEMENT	0.712095475
EGKGAARD, RICHARD D.	0.000682020
BURLESON, LEWIS B.	0.000174072
BURLESON, STEVE	0.000099310
CLOUTHIER, ADRIAN	0.000362854
CLOUTHIER, CHARLES & GWEN	0.000090710
CLOUTHIER, ROBERT L.	0.000090710
CLUB OIL & GAS, LTD.	0.002456761
COLE, JAMES J.	0.003482550
COLE, JIMMIE R.	0.003482550
CREWS, KATHERINE D.	0.002321690
CREWS, SUSIE	0.002321690
CURRAN, THOMAS	0.000543975
ESTATE OF WALTER DUNCAN	0.002456761
DUNCAN, J. WALTER, JR.	0.002211085
DUNCAN, JOAN R.	0.021367371
DUPONT, GENEVIEVE	0.002841096
GREEN, WILLIAM J.	0.003460694
HAYES, NANCY	0.000099310
HEYNE, CHARLES	0.000059500
HEYNE, F. (HEYNE OIL & GAS)	0.000790462
HOWARD, PATRICIA B.	0.000181427

HUBBARD, JEANETTE	0.000136068
HUFF, JACK	0.000372681
HYDEN, MICHAEL R.	0.000519100
JAMES, LUCY SIMPSON	0.000272135
JOHNSON, COURTENAY C.	0.002321689
JWD III, INC.	0.000245676
LEVENSON, MICHAEL	0.002076402
LITTLE, ANNE B.	0.011014171
LITTLE, CURTIS J. ESTATE	0.008811337
LITTLE, MARJORIE	0.001101417
MAKINS, JAMES E.	0.004051081
MAKINS, JAMES E., JR.	0.004051081
MAKINS, MICHAEL	0.004051081
MAKINS, PATRICK C.	0.004051081
MAKINS, SCOTT R.	0.004051081
MARSHALL & WINSTON, INC.	0.045607729
MEWBOURNE OIL COMPANY	0.008197571
MILLS, ANN SPIESS	0.000136068
MOBIL OIL CORPORATION	0.028365915
MCCURDY, MARGARET JOHNSON	0.009179290
NATIONS BANK (DAVID TRAMMEL)	0.000463259
NATIONS BANK (MILDRED TRAMMELL)	0.000231629
OCHTERBECK, DIANA	0.000136068
PANOS INVESTMENT COMPANY	0.000390643
PANOS, PATRICK T.	0.000090708
PETRO-ATLAS CORP.	0.002447889
PITTMAN, RAFELITA SIMPSON	0.000272135
RHODES, CECIL J.	0.000511337
ROSS, FAMILY TRUST	0.001360675

SHANNON, GLADYS	0.000139873
SHOGRIN, FRANK L.	0.003229854
SIMPSON, ADELE	0.000136068
SIMPSON, PETER F., JR.	0.000068030
SIMPSON, SAMMY LU	0.000068030
SPIESS-FERRIS, ELEANOR	0.000136070
SPRINKLE, JOSEPH S.	0.004079820
WOOD, OLIVIA S.	0.000136068
APPROVED.	0.955576530

By: K. M. Caluerl

K. M. Calvert, On Behalf of MEWBOURNE OIL COMPANY

STATE OF TEXAS

}ss.

COUNTY OF SMITH }

The foregoing instrument was acknowledged before me this 87H day of JULY , 1994 by K. M. Calvert.

Notary Public

My Commission Supingaron
NOTARY PUBLIC
State of Texas
My Comm. Eq. 11:3067

STATE OF NEW MEXICO COUNTY OF LEA FILED

JUL 11 1994

at 11:05 o'clock A M
and recorded in Book 589
Page 258
Par Chappello, Los County Clerk
By 511111 Hillors Copputy



ATTEST:

Certified this Lay of the correct copy of the original on file in this office.

PAT CHAPPELLE, LEA COUNTY CLERK

helda Bever Deputy