NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
BETTY RIVERA
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

November 7, 2002

Phillips Petroleum Company
4001 Penbrook Street
Odessa, Texas 79762

Attention: Mr. L. M. Sanders

Re: Request to Qualify the Phillips Leamex Waterflood Project as an "Enhanced Oil Recovery Project" Pursuant to the "New Mexico Enhanced Oil Recovery Act" (NMSA 1978 Sections 7-29A-1 through 7-29A-5).

Dear Mr. Sanders:

Reference is made to your request dated September 13, 2001, to qualify the Phillips Leamex Waterflood Project as an "Enhanced Oil Recovery Project" pursuant to the "New Mexico Enhanced Oil Recovery Act" (NMSA 1978 Sections 7-29A-1 through 7-29A-5). This project was initially authorized by Division Order No. WFX-775 dated November 28, 2001, and currently comprises the following described area in Lea County, New Mexico:

Project Area
Township 17 South, Range 33 East, NMPM

Section 23:	E/2
Section 24:	S/2, NW/4
Section 25:	N/2

The evidence presented in you application demonstrates that the subject waterflood project meets all the criteria for approval.

The approved project area shall initially comprise the area described above provided, however, the "project area" and/or the producing wells eligible for the enhanced oil recovery (EOR) tax rate may be contracted and reduced based upon the evidence presented by the applicant in its demonstration of a positive production response.

To be eligible for the EOR tax rate, the operator shall advise the

Division of the date and time water injection commences within the waterflood project. At that time, the Division will certify the project to the New Mexico Taxation and Revenue Department.

At such time as a positive production response occurs, and within five years from the date the project was certified to the New Mexico Taxation and Revenue Department, the applicant must apply to the Division for certification of a positive production response. This application shall identify the area benefiting from enhanced oil recovery operations and the specific wells eligible for the EOR tax rate. The Division may review the application administratively or set if for hearing. Based upon the evidence presented, the Division will certify to the New Mexico Taxation and Revenue Department those wells that are eligible for the EOR tax rate.

Sincerely,

Lori Wrotenbery by DC

Lori Wrotenbery
Director

Xc: WFX-775

DATE IN	SUSPENSE	ENGINEER	LOGGED IN	TYPE	APP NO.

ABOVE THIS LINE FOR DIVISION USE ONLY

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

ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

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OIL CONSERVATION DIVISION

[1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR

[D] Other: Specify Enhanced Oil Recovery Project Tax Incentive

[2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or Does Not Apply

[A] ☐ Working, Royalty or Overriding Royalty Interest Owners

[B] ☐ Offset Operators, Leaseholders or Surface Owner

[C] ☐ Application is One Which Requires Published Legal Notice

[D] ☐ Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

915 368-1667
Celeste
cgdale@ppco.com

[E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☐ Waivers are Attached

[3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

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

L. M. Sanders		Supv., Regulation/ Proration	09/13/01
Print or Type Name	Signature	Title	Date

lmsande@ppco.com
e-mail Address

Application for a Certificate of Qualification for the Leamex Waterflood Pilot as an Expansion of an Enhanced Recovery Project

September 10, 2001

The following data is provided in accordance with procedure requirements for a Certificate of Qualification for the expansion of an Enhanced Oil Recovery Project. Data provided is for a waterflood pilot project, Leamex lease, Maljamar Grayburg/San Andres Pool, Lea County, New Mexico. This project is an expansion of the Northeast Maljamar Waterflood Project.

a. Operators name and address: Phillips Petroleum Company
4001 Penbrook Street
Odessa, Texas 79762

b. Description of the project area:

1. Plat outlining the project area. See Attachment 1, Plat of Proposed Leamex Waterflood Pilot Project.

2. Description of the project area.

The proposed waterflood pilot project area is approximately defined as follows: the NW/4 and S/2 of Section 24, the E/2 of Section 23, and the N/2 of Section 25, Township 17S Range 33E, Lea County, New Mexico, comprising six 80 acre patterns as shown on Attachment 2.

3. Total acres. The project covers 480 acres more or less.

4. Name of subject pool and formation. Maljamar Grayburg San Andres Pool
Grayburg Formation

c. Status of operations in the project area:

1. The project area is currently under primary production from 11 producers and is entirely within the boundaries of the Leamex lease.

2. There is one injector in the project area (Leamex #19) injecting approximately 10 BWPD.

3. Lease Description

Lessor: State of New Mexico

Lessee: Phillips Petroleum Company

Legal Description:

T17S, R33e

SW/4	Section 15
E/2	Section 16
E/2, NE/4 NW/4, NE/4 SW/4	Section 21
W/2	Section 22
All of	Section 23
All of	Section 24
All of	Section 25

d. Method of recovery to be used:

1. Fluids to be injected:
   Produced water and makeup water supplied by third parties.

2. Division Order approving the project.
   The project was approved by the Division with administrative order number WFX-775 dated June 12, 2001, as an expansion to the Northeast Maljamar Waterflood Project, originally approved with Order No. R-3154, November 28, 1966. (Note: WFX-775 refers to the original project as the Phillips Leamex Waterflood Project).

e. Description of the project:

1. A list of producing wells. See Attachment 3 for a list of existing producing wells. The water injection well listed will be converted to a producer.

2. A list of injection wells. See Attachment 3 for a list of injection wells, all of which were drilled this year.

3. Capital cost of additional facilities.

   Total capital cost of the project is as follows:

Drill and Complete 6 Water Injection Wells:	2,752,000
Workover 11 Existing Producers and 1 Conversion:	413,000
Leamex Production Battery Modifications:	156,000
Construct a Water Injection System:	334,000
Taxes and Contingency:	278,000
Total Capital Cost:	$ 3,933,000

4. Total project cost.

   Total project costs include initial capital expenditures. The project will also require routine maintenance and flood surveillance, but these costs are not included in the following detail:

Initial capital costs:	3,933,000
Incremental Operating Cost* over 17 years:	3,298,000
Total Project Cost:	$ 7,231,000

   *Includes make-up water purchases, water recycle costs, additional lifting costs.

5. The estimated total value of the additional production that will be recovered as a result of this project:

   The following is the estimated incremental oil production forecast for the waterflood pilot project:

Year	Oil Production (MBOPY)	Gas Production (MMCFPY)
2001	3.24	0.65
2002	4.38	0.88
2003	131.36	26.27
2004	175.20	35.04
2005	141.70	28.34
2006	111.12	22.22
2007	93.34	18.67
2008	81.21	16.24
2009	72.18	14.44
2010	36.58	7.32
2011	34.66	6.93
2012	32.94	6.59
2013	31.37	6.27
2014	29.93	5.99
2015	28.61	5.72
2016	27.38	5.48
2017	26.24	5.25
Totals	1061.44	212.30

1.061 million barrels

6. Anticipated date for commencement of injection:

The anticipated date for commencement of injection is October 1, 2001. November

7. Type of fluid to be injected and the anticipated volumes:

Produced and make-up water will be injected in the formation.

The forecasted injection volumes are as follows:

Year	Water Injection (BWPD)
2001	1,800
2002	1,800
2003	1,800
2004	1,800
2005	1,800
2006	1,800
2007	1,800
2008	1,800
2009	1,800
2010	990
2011	990
2012	990
2013	990
2014	990
2015	990
2016	990
2017	990

8. If application is made for an expansion of an existing project, explain what changes in technology will be used or what additional geographic area will be added to the project area:

   A. Well spacing will be reduced from 80 acres to 40 acres by infill drilling 6 new injectors

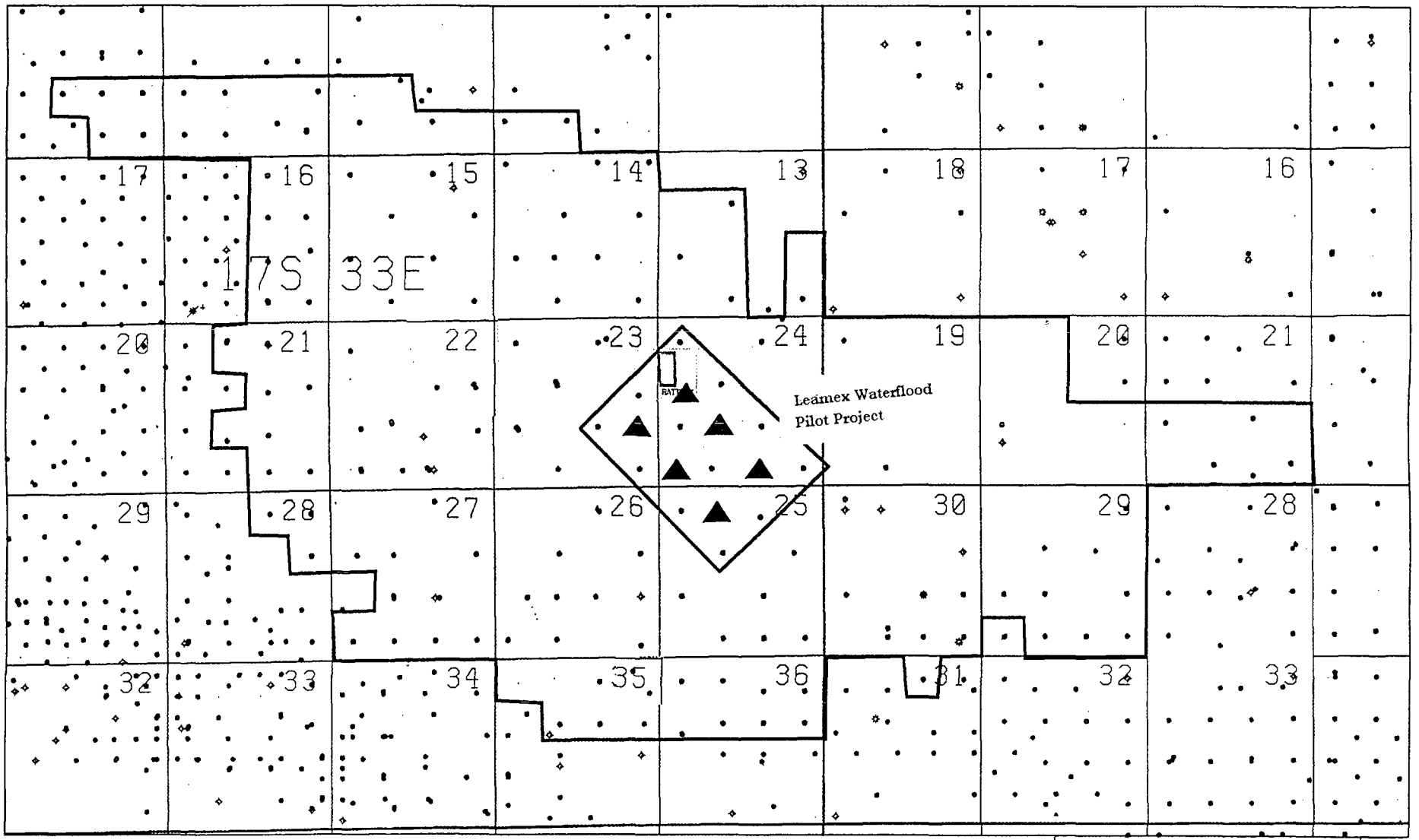
   B. The area was not previously subjected to water injection, except the small amount of water injection into Leamex #19. Offset producers have not responded to water injection in this well, which was not sufficient to even balance withdrawals. The well will be converted to a producer.

f. Production data: Provide graphs, charts and other supporting data to show the production history and production forecast of oil, gas, casinghead gas and water from the project area.

   Attachment 4: Type log showing the Grayburg layers to be flooded.

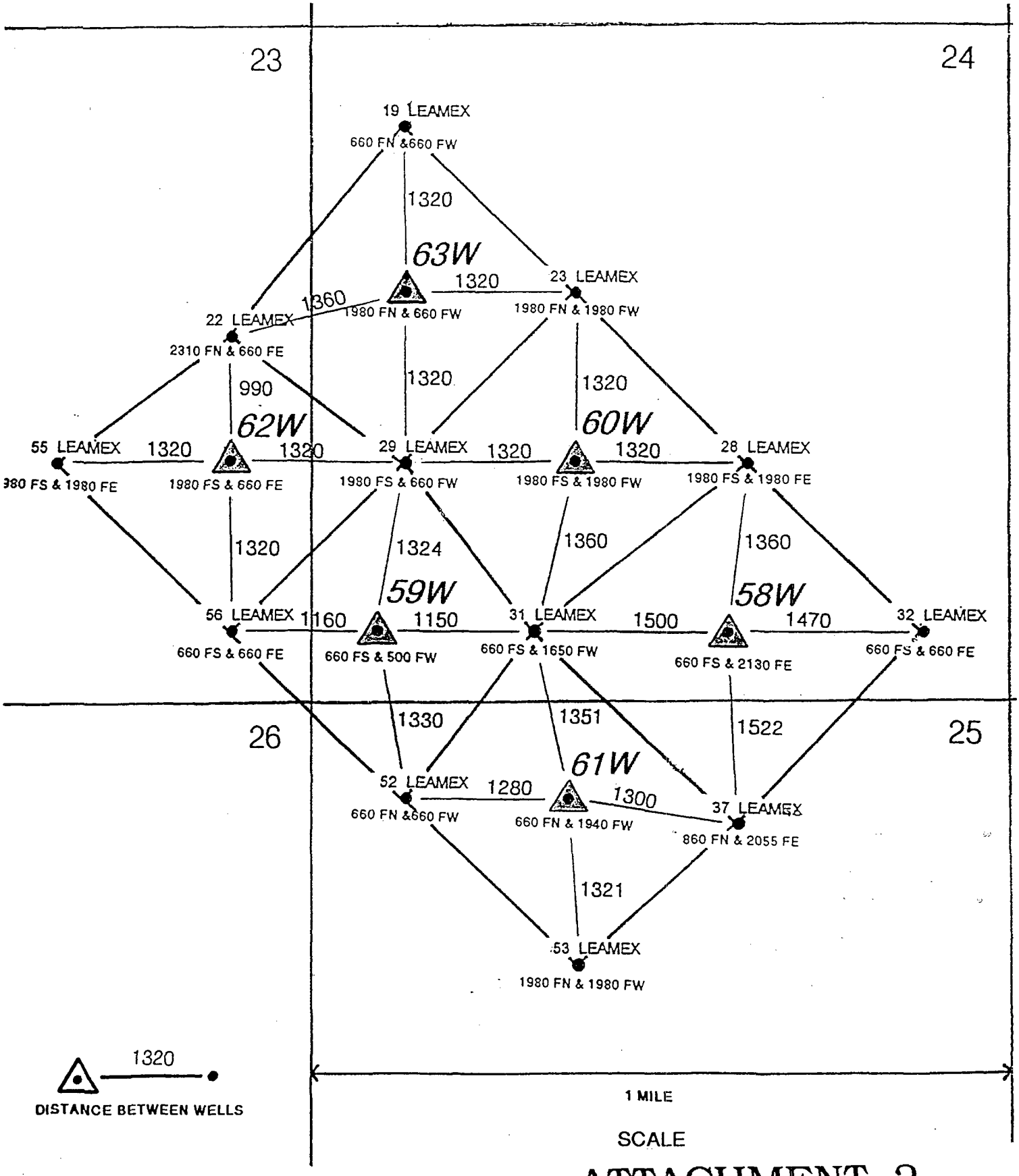
   Attachment 5: Historical production plot (oil, gas, water) for the 12 wells in the waterflood pilot area.

   Attachment 6: Recent historical production plot, plus forecast production (oil, gas) for the waterflood pilot area.



ATTACHMENT 1

Leamex Waterflood Pilot Project



ATTACHMENT 2

Northeast Maljamar Waterflood Expansion
Leamex Waterflood Pilot Project
New Injectors and Existing Producers

New Injectors

	API Number	Location				Expected
			Section	Township	Range	Completion Date
Leamex 58	30-025-35570	660 FSL & 2130 FEL	24	17S	33E	September 2001
Leamex 59	30-025-35571	760 FSL & 700 FWL	24	17S	33E	September 2001
Leamex 60	30-025-35572	1980 FSL & 1980 FWL	24	17S	33E	September 2001
Leamex 61	30-025-35573	660 FSL & 1940 FWL	25	17S	33E	September 2001
Leamex 62	30-025-35574	1980 FSL & 660 FEL	23	17S	33E	Year 2002
Leamex 63	30-025-35575	1980 FNL & 660 FWL	24	17S	33E	Year 2002

Existing Producers

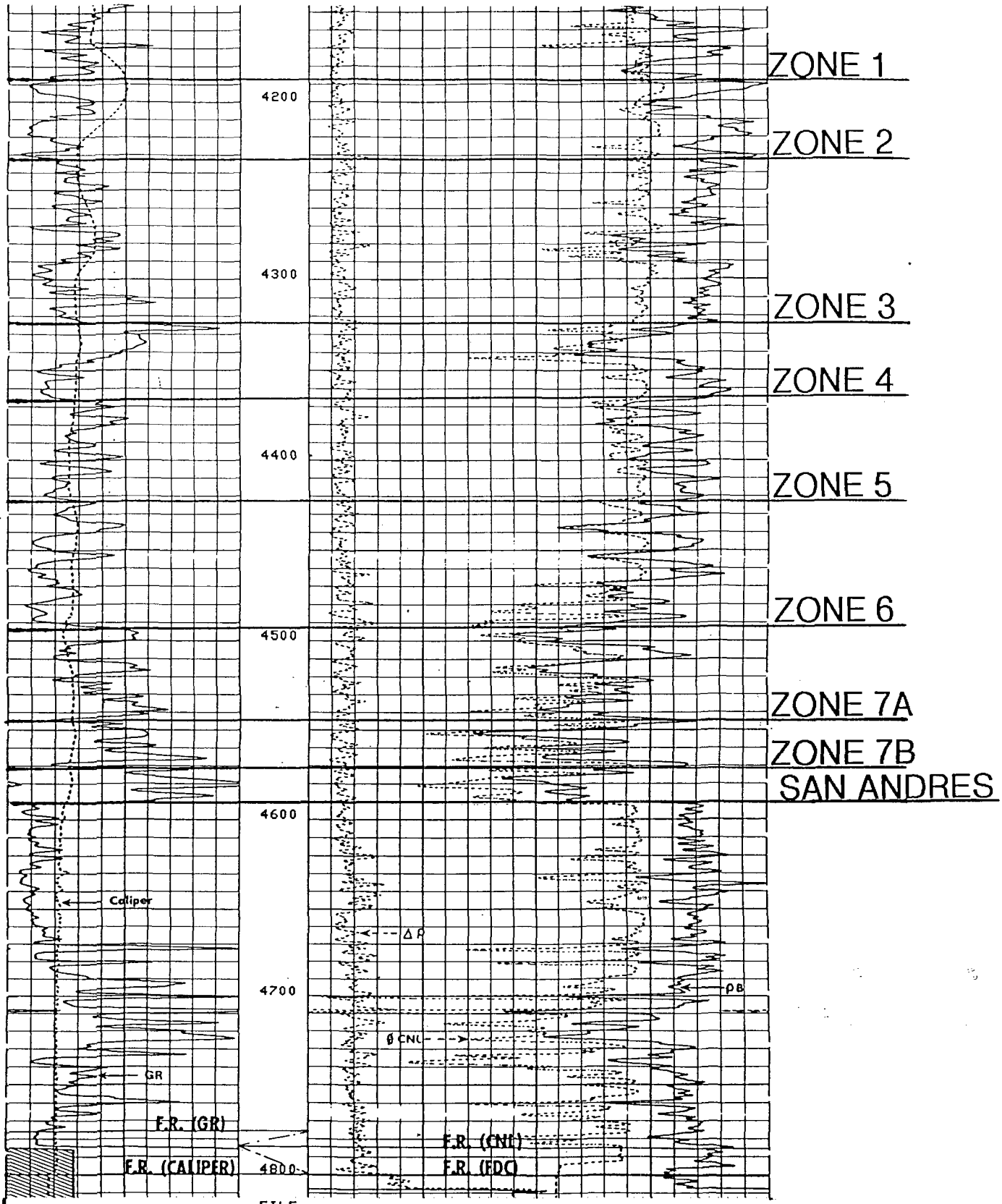
	API Number	Location				Actual
			Section	Township	Range	Completion Date
Leamex 19*	30-025-26420	660 FNL & 660 FWL	24	17S	33E	12/06/79
Leamex 22	30-025-26422	2310 FNL & 660 FEL	23	17S	33E	12/26/79
Leamex 23	30-025-26423	1980 FNL & 1980 FWL	24	17S	33E	12/17/79
Leamex 55	30-025-30480	1980 FSL & 1980 FEL	23	17S	33E	11/16/88
Leamex 29	30-025-26852	1980 FSL & 660 FWL	24	17S	33E	12/17/80
Leamex 28	30-025-26851	1980 FSL & 1980 FEL	24	17S	33E	12/08/80
Leamex 56	30-025-30481	660 FSL & 660 FEL	23	17S	33E	11/28/88
Leamex 31	30-025-27650	660 FSL & 1650 FWL	24	17S	33E	03/01/82
Leamex 32	30-025-27651	660 FSL & 660 FEL	24	17S	33E	02/08/82
Leamex 52	30-025-30467	660 FNL & 660 FWL	25	17S	33E	10/19/88
Leamex 37	30-025-29115	860 FNL & 2055 FEL	25	17S	33E	12/28/85
Leamex 53	30-025-30453	1980 FNL & 1980 FWL	25	17S	33E	10/12/88

* Leamex 19 was converted to a+B15n injector in May 1985. It is expected to be converted back to a producer in 2002.

Attachment 3

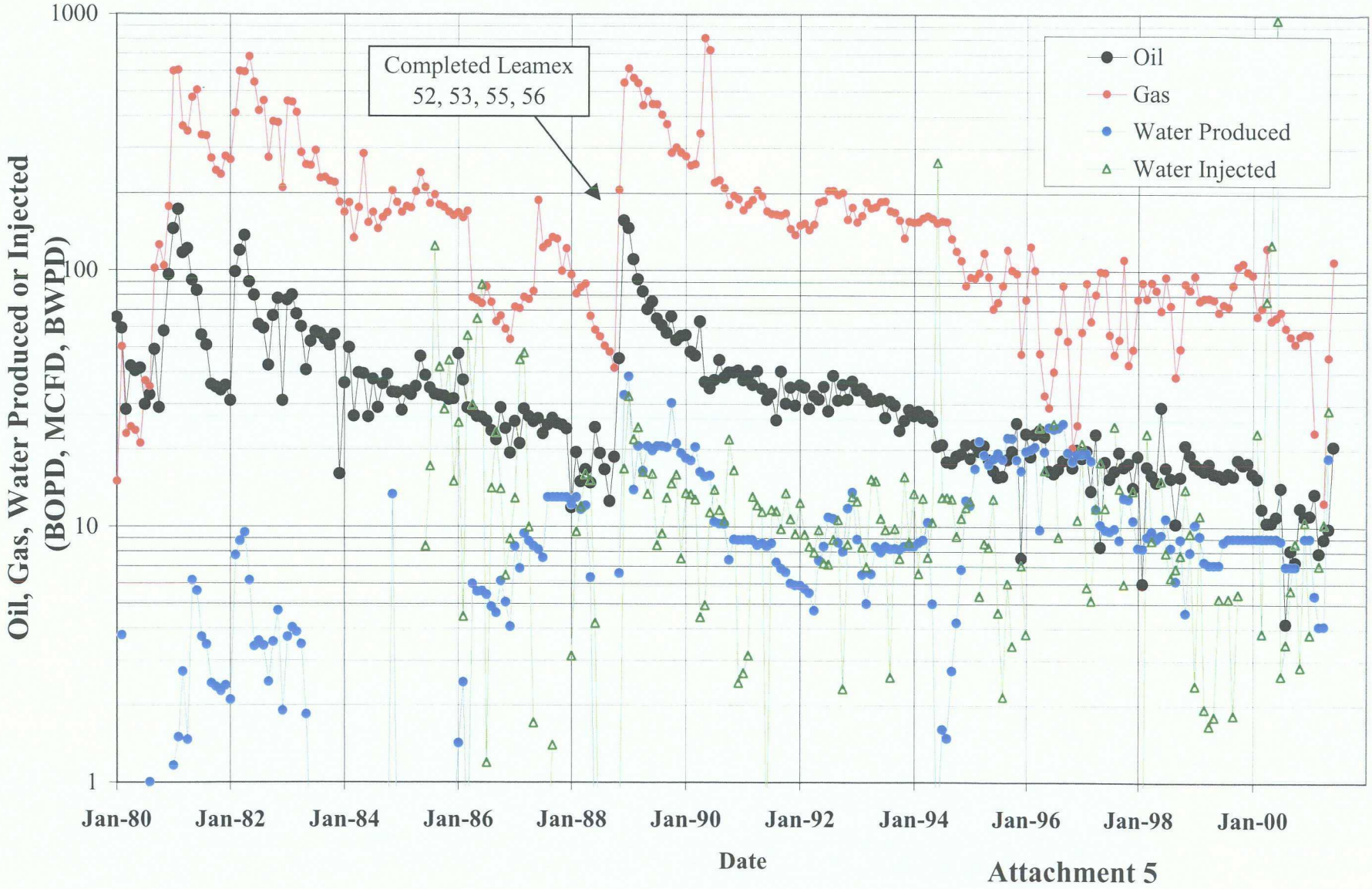
TYPE LOG

MALJAMAR GRAYBURG ZONES 1-7



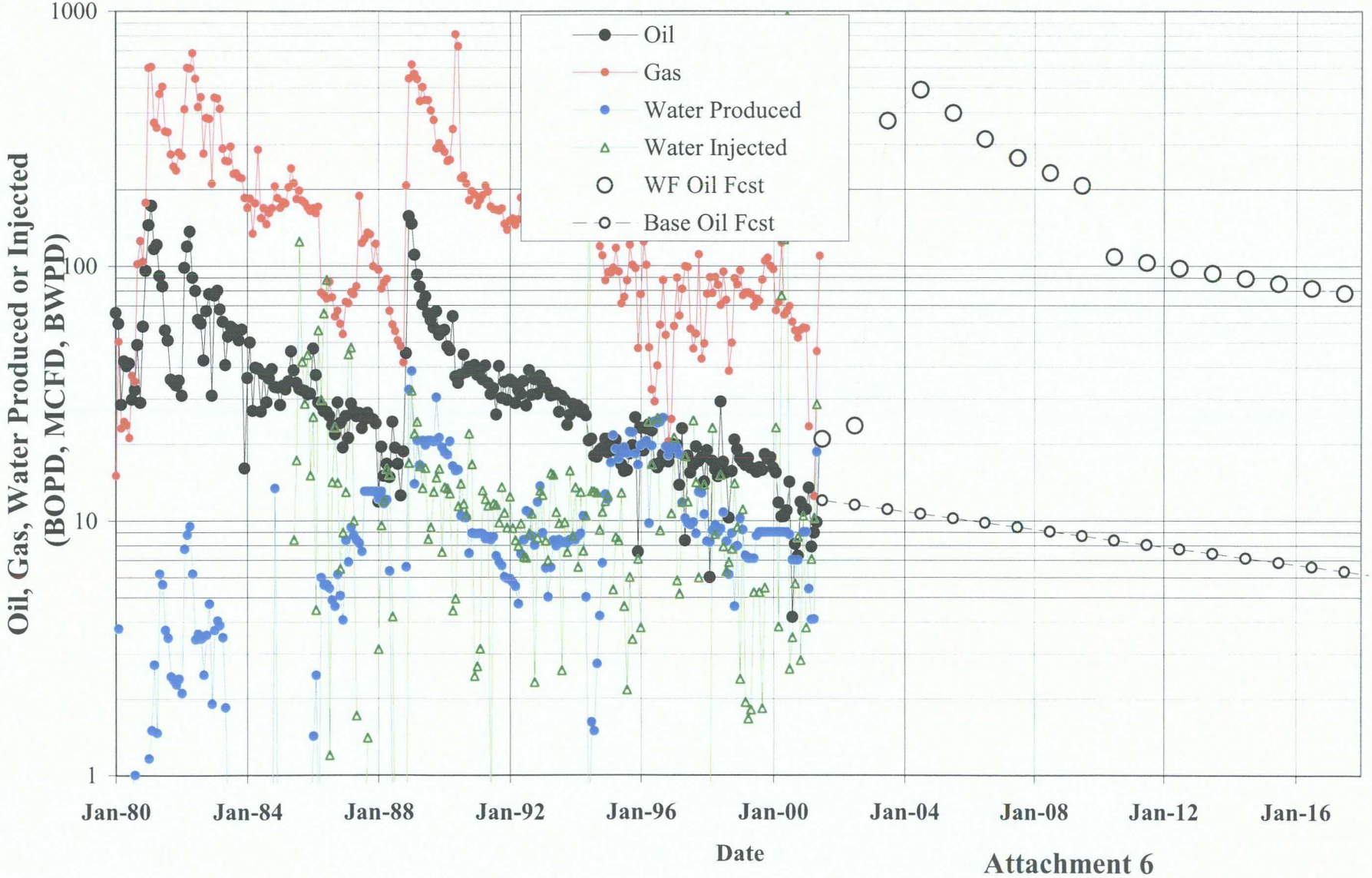
ATTACHMENT 4

Leamex Waterflood Pilot Area
Historical Production/Injection from 12 Existing Wells



Attachment 5

Leamex Waterflood Pilot Area
Oil Production Forecasts



Attachment 6