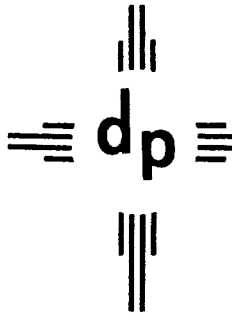


#1866

Nmoco



## dugan production corp.

RECEIVED  
BLM

91 MAR 10 AM 10:59

019 FARMINGTON, N.M.

March 12, 1991

Bureau of Land Management  
1235 La Plata Hwy.  
Farmington, NM 87401

State of New Mexico  
Commissioner of Public Lands  
P.O. Box 1148  
Santa Fe, NM 87504-1148

Re: 1991 Plan of Development  
1990 Report of Operations  
West Bisti Lower Gallup Sand Unit  
San Juan County, New Mexico

APPROVED

APR 30 1991  
*[Signature]*  
AREA MANAGER

Gentlemen:

Dugan Production Corp, Operator of the West Bisti Lower Gallup Sand Unit, submits the following Plan of Development for 1991 and Report of Operations for 1990 for your approval.

**Report of Operations for 1990**

No new wells were drilled for development or water injection purposes during 1990.

Remedial work was performed on the following wells:

**West Bisti Unit #114**

Located casing leaks 256-286', 3826' & 4292-4322'. Squeezed with cement and returned to production 7-11-90.

**West Bisti Unit WIW #125**

Acidized existing perms with 2000 gallons 15% HCL and returned well to injection on 5-11-90.

**West Bisti Unit #127**

Located casing leaks 3733'-3764' - squeezed with 118 cubic feet cement and returned to production 7-17-90.

**West Bisti Unit WIW #151**

Located casing leaks 3381-3414' and 2846-2877'. Squeezed leaks with 700 gallons sodium silicate gel and installed Guiberson casing patch 2794-3484'. With injection packer at 4892', casing-tubing annulus would not pressure test. shut in to evaluate remedial possibilities.

Bureau of Land Management  
Plan of Development, West Bisti Unit  
March 12, 1991  
Page 2

RECEIVED  
BLM

91 MAR 18 AM 10:59

019 FARMINGTON, NM 89400

The West Bisti Unit WIW #140 was plugged on December 14, 1990.

A sundry requesting permission to plug and abandon the West Bisti Unit #134 was submitted to the BLM on December 13, 1990.

**Well Status, December 31, 1990**

Producing Active	9	
Producing Inactive	31	(22 SI, 9 TA)
Water Injection Active	1	
Water Injection Inactive	14	(14 SI, 0 TA, 1 P&A in 1990)
Water Supply Inactive	<u>4</u>	
<b>TOTAL</b>	<b>59</b>	

**Production and Injection Summary, December 31, 1990\*\***

	<u>Oil Prod.</u> <u>(Bbls)</u>	<u>Water Prod.</u> <u>(Bbls)</u>	<u>*Gas Prod.</u> <u>(MCF)</u>	<u>Water</u> <u>Inj.</u> <u>(Bbls)</u>
January	1,567	1,758	144	0
February	1,502	2,238	138	2238
March	1,527	2,819	140	2819
April	2,071	3,135	191	3135
May	1,806	3,240	166	3240
June	1,664	4,114	153	4114
July	2,020	5,392	186	5392
August	1,644	4,380	151	4380
September	1,344	4,238	124	4238
October	1,817	4,380	167	4380
November	1,738	3,758	160	3758
December	1,602	3,884	147	3884
<b>Total 1989</b>	<b>20,302</b>	<b>43,336</b>	<b>1867</b>	<b>41,578</b>

<b>Cumulative</b> <b>(12/31/90)</b>	<b>11,259,810</b>	<b>28,466,614</b>	<b>4,896,573</b>	<b>47,549,348</b>
--	-------------------	-------------------	------------------	-------------------

\*All gas is utilized for lease fuel. There is very little gas associated with the oil (which is produced at water cuts up to 85%), and fuel requirements are currently being purchased from El Paso Natural Gas Company.

\*\*On October 25, 1989, Chevron conducted casing integrity tests on 15 water injection wells (12 active and 3 shut-in) as directed by the New Mexico Oil Conservation Division (NMOCD). Fourteen of the injection wells did not pass the casing integrity test and, the NMOCD ordered that injection into these wells be discontinued immediately. With 14 injection wells shut in, several high water cut producing wells were also shut in and during 1990 producing

Bureau of Land Management  
Plan of Development, West Bisti Unit  
March 12, 1991  
Page 3

wells were operated to balance water production with injection capacity.

**Production Curve and Map**

Attached are production and injection curves for the West Bisti Unit through December 1990. Also attached is a map which presents well status as of 12-31-90.

**Plan of Development 1991**

Dugan Production Corp. plans to drill a 5000' Gallup producing well (the proposed West Bisti Unit Well #172) in the SE/4 of Section 13, T26N, R14W in 1991.

Other proposed work for West Bisti Unit in 1991 is as follows:

Convert West Bisti Unit Wells #127 & 135 from producing to water injection (applications have been filed and approval received from the State of New Mexico).

Convert West Bisti Unit #107 from shut-in injector to producer.

Repair the following temporarily abandoned wells and return to operation if feasible, or plug and abandon:

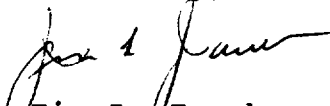
**Inactive Producing Wells:** 100, 102,  
103, 109, 118, 121, 128, 132, 136,  
146, 154, 159, 161, 162, 165.

**Inactive Injection Wells:** 151, 153.

**Inactive Water Supply Wells:** 131, 138, 149.

During 1991 we plan to continue our evaluation of the West Bisti Unit and the wells within the unit.

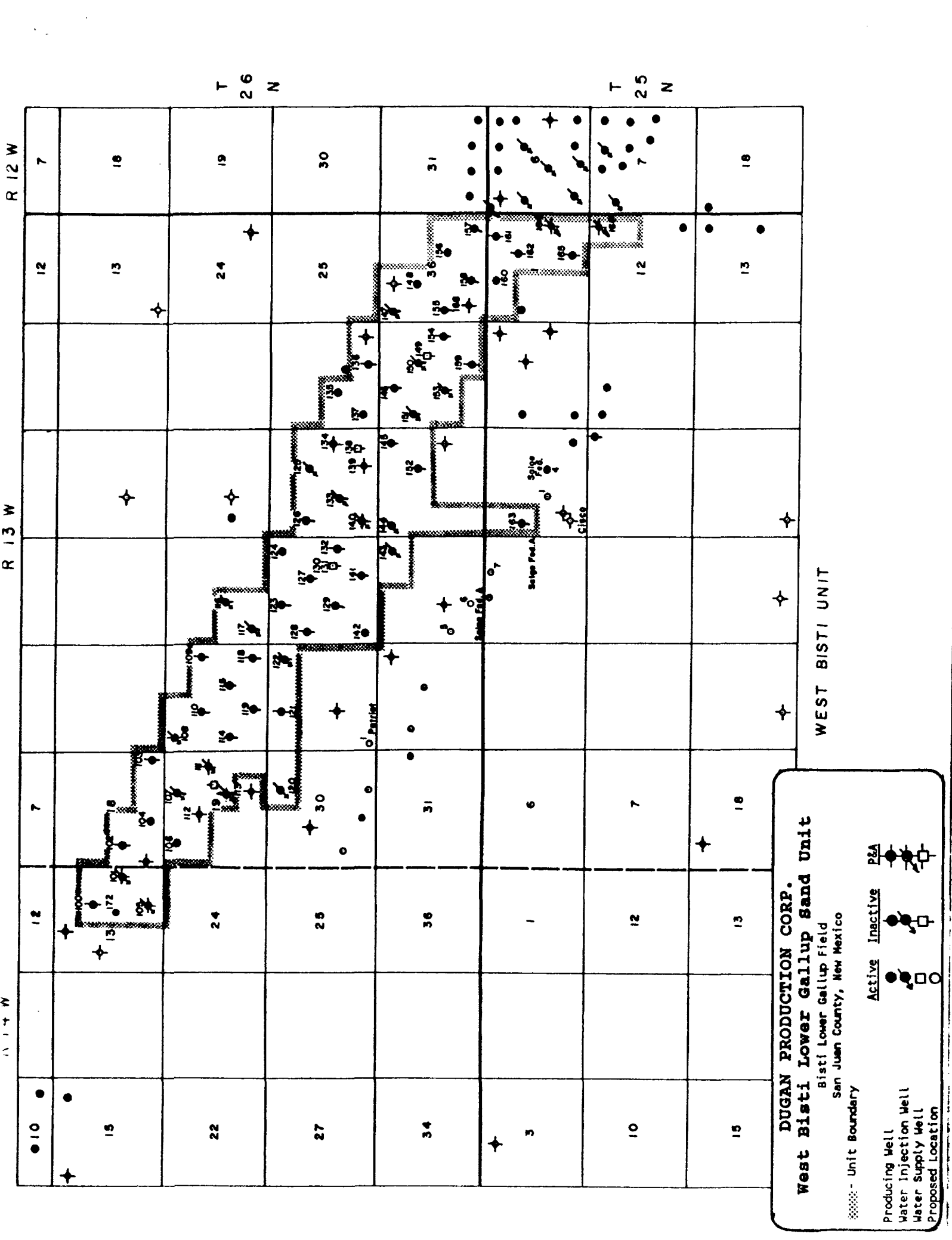
Sincerely,

  
Jim L. Jacobs  
Vice-President

JDR/cg

attachs.

cc: W.I. Owners



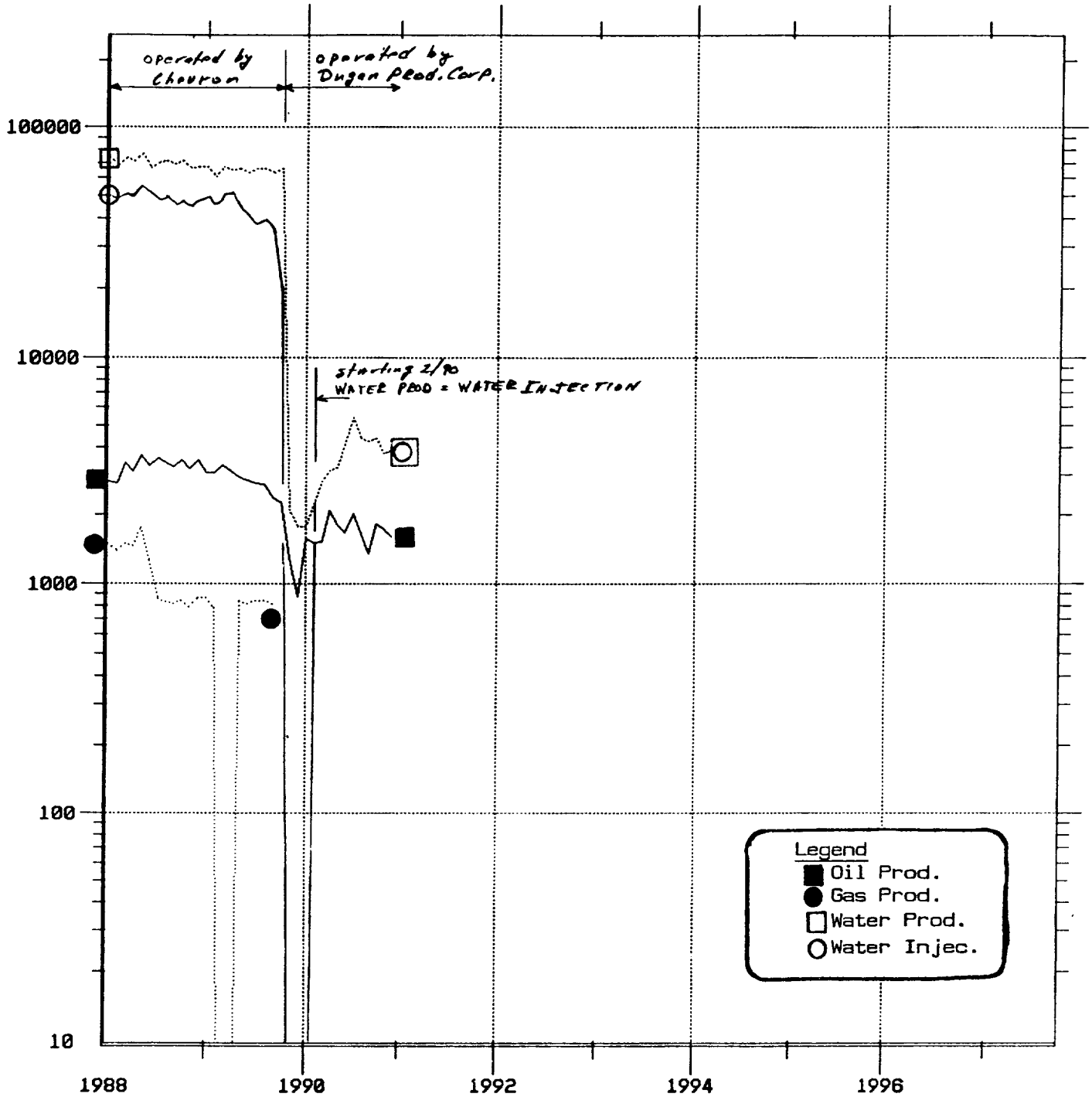
**DUGAN PRODUCTION CORP.**  
**West Bisti Lower Gallup Sand Unit**  
Bisti Lower Gallup Field  
San Juan County, New Mexico

----- Unit Boundary

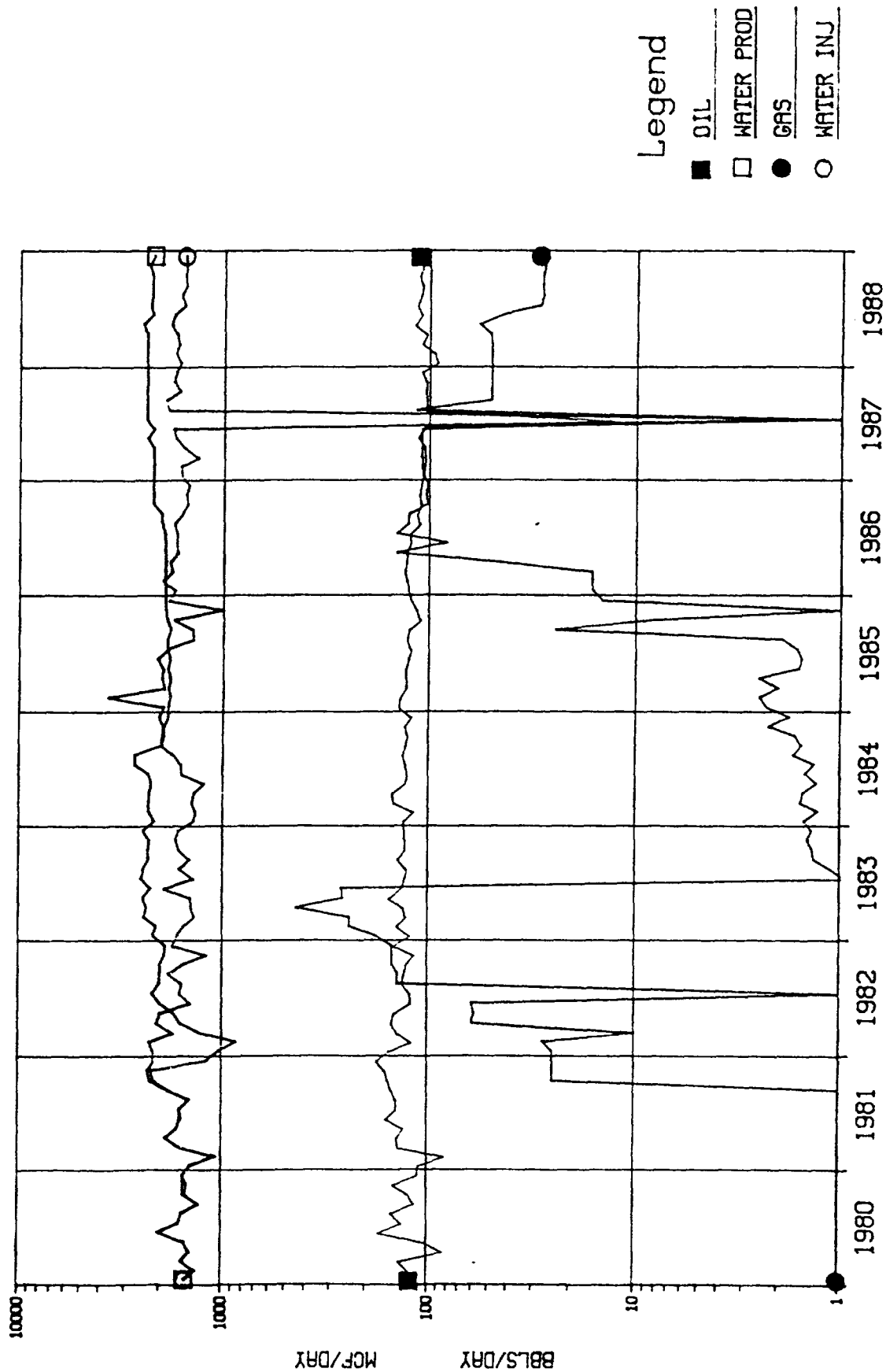
Producing Well  
Water Injection Well  
Water Supply Well  
Proposed Location

Active Inactive P&A

West Bisti Unit  
Production Rate vs Time  
BBL/Mo or Mcf/Mo vs Months  
West Bisti Unit  
For the Period 01/1988 to 12/1996



# WEST BISTI UNIT





#1866

COMMERCIAL RESOURCES  
(505)-827-5724

SURFACE RESOURCES  
(505)-827-5793

MINERAL RESOURCES  
(505)-827-5744

ROYALTY  
(505)-827-5772

State of New Mexico  
Commissioner of Public Lands

Ray Powell, M.S., D.V.M.  
310 Old Santa Fe Trail, P. O. Box 1148  
Santa Fe, New Mexico 87504-1148  
Phone (505)-827-5760, Fax (505)-827-5766

PUBLIC AFFAIRS  
(505)-827-5763

ADMINISTRATIVE MGMT.  
(505)-827-5700

LEGAL  
(505)-827-5713

PLANNING  
(505)-827-5752

March 12, 1997

Dugan Production Corporation  
P.O. Box 420  
Farmington, New Mexico 87499-0420

Attn: Mr. John Alexander

Re: 1998 Plan of Development  
West Bisti Lower Gallup Sand Unit  
Rio Arriba County, New Mexico

Dear Mr. Alexander:


The Commissioner of Public Lands has, of this date, approved the above-captioned Plan of Development. Our approval is subject to like approval by all other appropriate agencies.

The possibility of drainage by wells outside of the unit area and the need for further development of the unit may exist. You may be contacted at a later date regarding these possibilities.

If you have any questions or if we may be of further help, please contact Pete Martinez at (505) 827-5791.

Very truly yours,

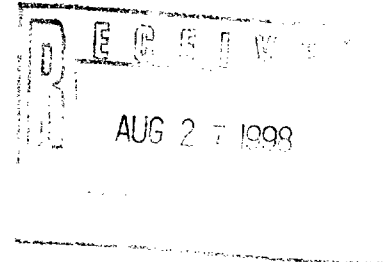
RAY POWELL, M.S., D.V.M.  
COMMISSIONER OF PUBLIC LANDS

BY:   
JAMI BAILEY, Director  
Oil, Gas and Minerals Division  
(505) 827-5744

RP/JB/cpm  
pc: Reader File

OCD

BLM



"WE WORK FOR EDUCATION"

cc: Reader File

OCD

BLM



**Chevron U.S.A. Inc.**

Overthrust Area Office, P. O. Box 6004, Evanston, WY 82930-6004

G. L. Park  
Area Operations Superintendent

#1866

March 23, 1989

1989 Plan of Development  
1988 Report of Operations  
West Bisti Lower Gallup Sand Unit  
San Juan County, New Mexico

United States Department of the Interior  
Bureau of Land Management  
Albuquerque District Office  
435 Montano N.E.  
Albuquerque, NM 87107

Attention Mr. Sid Vogelpohl

Gentlemen:

Chevron U.S.A. Inc., Operator of the West Bisti Lower Gallup Sand Unit, submits the following Plan of Development for 1989 and Report of Operations for 1988 for your approval.

Report of Operations for 1988

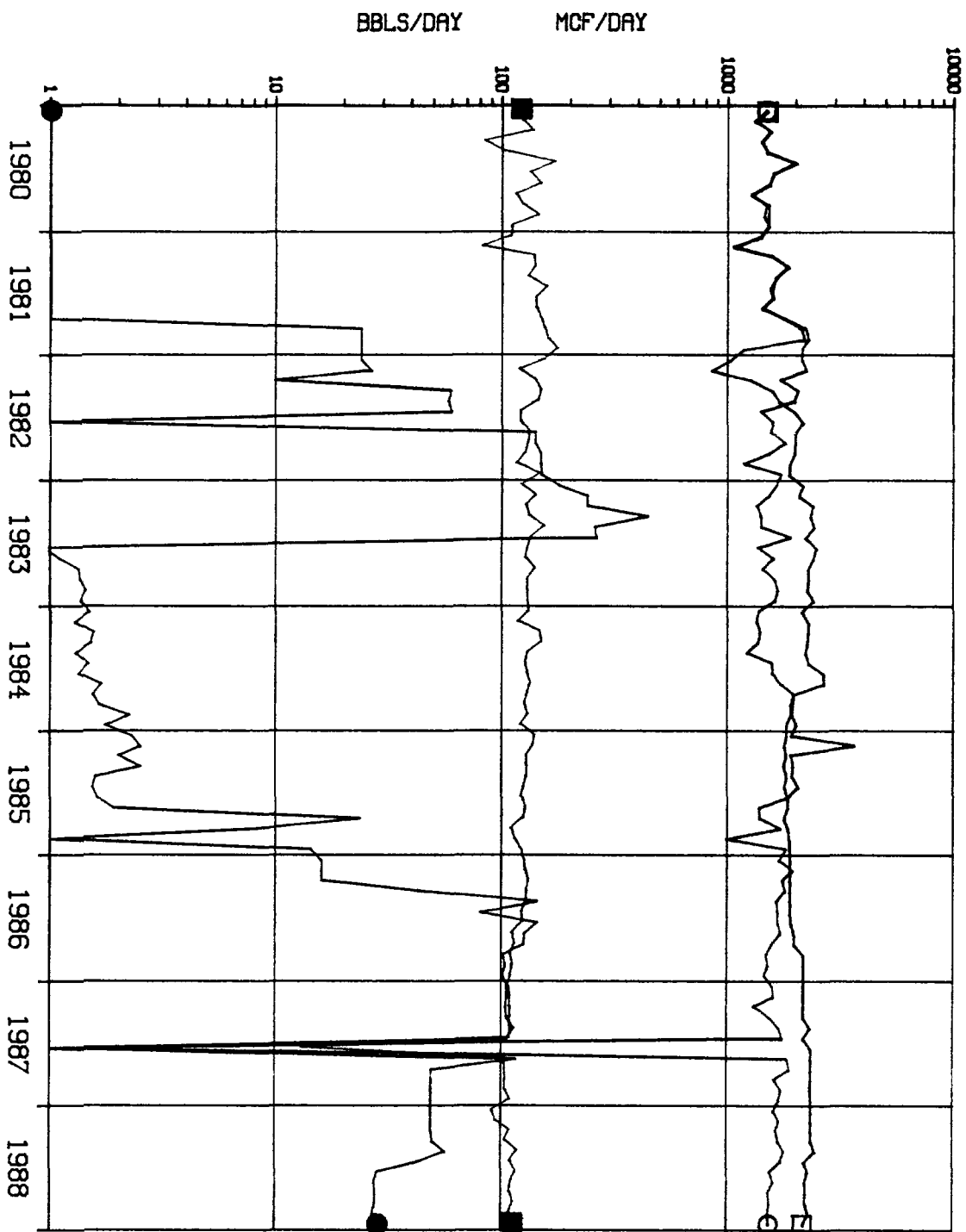
No new wells were drilled for either development or water injection purposes in 1988. One producing well (well number 107) was converted to water injection.

Well Status, December 31, 1988

Producing Active	22
Producing Inactive	18 (15 TA'd, 3 SI)
Water Injection Active	16
Water Injection Inactive	1 (TA'd)
Water Supply Inactive	3 (TA'd)
TOTAL	<u>60</u>



# WEST BISTI UNIT



## Legend

- OIL
- WATER PROD
- GAS
- WATER INJ



**Chevron U.S.A. Inc.**

Overthrust Area Office, P. O. Box 6004, Evanston, WY 82930-6004

G. L. Park  
Area Operations Superintendent

1866

D -  
Unit letter  
Thx  
124

FEB 15 1988

February 16, 1988

1988 Plan of Development  
1987 Report of Operations  
West Bisti Lower Gallup Sand Unit  
San Juan County, New Mexico

State of New Mexico  
Oil Conservation Division  
P. O. Box 2088  
Land Office Building  
Santa Fe, NM 87504-2088

Attention Mr. Roy Johnson

Gentlemen:

Chevron U.S.A. Inc., Operator of the West Bisti Lower Gallup Sand Unit, submits the following Plan of Development for 1988 and Report of Operations for 1987 for your approval.

REPORT OF OPERATIONS FOR 1987

No new wells were drilled for either development or water injection purposes in 1987. In addition, no producing wells were converted to water injection. Three wells, numbers 123, 134 and 141 were shut-in and one well, number 157, was returned to production.

Well Status, December 31, 1987

Producing Active	23
Producing Inactive	18 (15 TA'd, 3 SI)
Water Injection Active	15
Water Injection Inactive	1 (TA'd)
Water Supply Inactive	3 (TA'd)
TOTAL	<u>60</u>

Production and Injection Summary, December 31, 1987

	<u>Oil Prod.</u> (Bbls.)	<u>Water Prod.</u> (Bbls.)	<u>*Gas Prod.</u> (MCF)	<u>Water Inj.</u> (Bbls.)
January	3,315	67,549	3,293	49,629
February	3,064	61,012	2,949	45,348
March	3,370	67,704	3,230	41,107
April	3,282	65,370	3,161	46,459
May	3,378	72,912	3,512	52,973
June	3,263	65,370	3,161	53,214
July	3,233	69,374	3,385	55,505
August	3,203	73,377	3,609	57,795
September	3,121	71,010	1,469	57,295
October	3,235	73,439	1,522	50,517
November	3,114	70,350	1,472	52,595
December	3,409	73,439	1,522	53,115
Total 1987	38,987	830,906	32,285	615,552
Cumulative (12/31/87)	11,169,352	26,926,327	4,874,800	46,493,395

\*All gas is utilized as lease fuel gas.

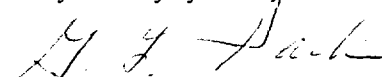
Production Curve

Attached is a production and injection curve for the West Bisti Unit through December 1987.

PLAN OF DEVELOPMENT FOR 1988

Chevron U.S.A. Inc. has no plans to drill additional development wells or water injection wells within the West Bisti Unit during 1988. We plan to expand the waterflood in West Bisti Unit by converting a producer, well number 107, to water injection. Based upon the success of this work, another producer, well number 110, will then be converted to water injection within one year of the well number 107 conversion. Well workovers for recompletion and/or stimulation will be proposed as warranted. All wells currently shut-in or temporarily abandoned will be evaluated and proposed for recompletion or plug and abandonment as their evaluations dictate.

Very truly yours,

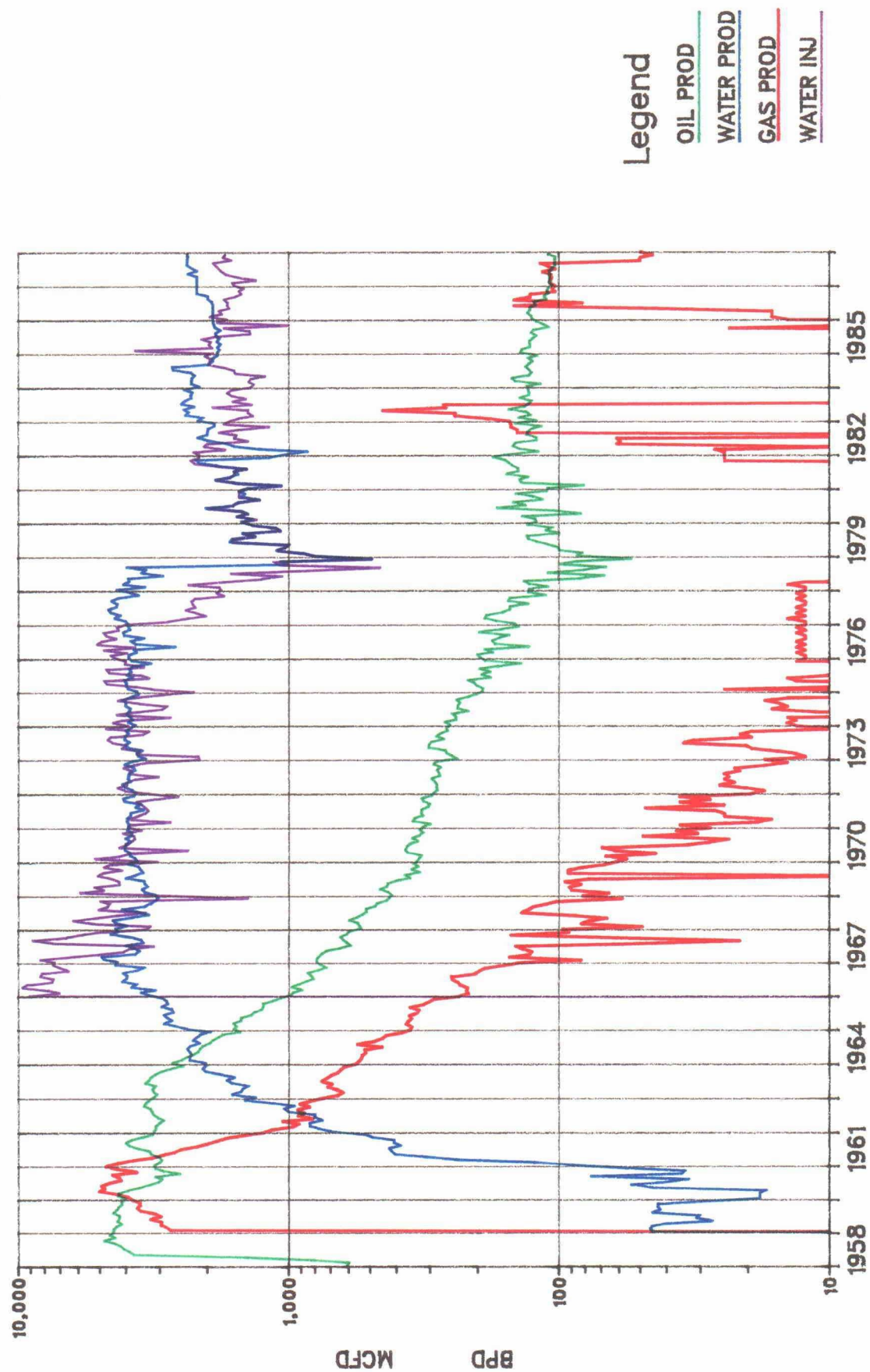


Area Operations Superintendent

CMF:sh  
Attachment  
cc: W. I. Owners



## WEST BISTI UNIT Production and Injection



# State of New Mexico



W.R. HUMPHRIES  
COMMISSIONER



SLO REF. NO. OG-389

## Commissioner of Public Lands

September 2, 1987

P.O. BOX 1148  
SANTA FE, NEW MEXICO 87504-1148

Chevron U.S.A. Inc.  
Attention: T. L. Perryman  
P. O. Drawer AA  
Evanston, Wyoming 82930

Re: West Bisti Lower Gallup Sand Unit  
1987 Plan of Development

Gentlemen:

The Commissioner of Public Lands has this date approved the above captioned Plan of Development. Our approval is subject to like approval by all appropriate agencies.

If we may be of further help, please do not hesitate to call on us.

Very truly yours,

W. R. HUMPHRIES  
COMMISSIONER OF PUBLIC LANDS

BY: *Floyd O. Frando*  
FLOYD O. FRANDO, Director  
Oil & Gas Division  
(505) 827-5744

WRH/FOP/ams  
enclosure  
cc: Bureau of Land Management  
Oil Conservation Division



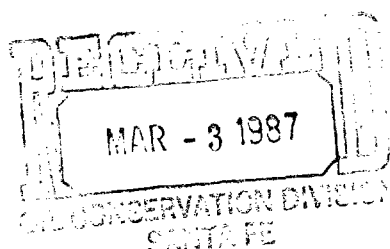
**Chevron U.S.A. Inc.**

Overthrust Area Office, P. O. Drawer AA, Evanston, WY 82930

**T. L. Perryman**

Area Operations Superintendent

February 13, 1987



1987 Plan of Development and  
1986 Review of Operations  
West Bisti Lower Gallup Sand Unit  
San Juan County, New Mexico

State of New Mexico  
Oil Conservation Division  
P. O. Box 2088  
Land Office Building  
Santa Fe, NM 87501

Attention: Mr. Roy Johnson

Gentlemen:

Chevron U.S.A. Inc., Operator of the West Bisti Unit, submits the following Plan of Development for 1987 and the Summary of Operations for 1986 for your approval.

SUMMARY OF OPERATIONS FOR 1986

No new wells were drilled for either development or water injection purposes in 1986. Likewise, no producing wells were converted to water injection. Three (3) wells, numbers 105, 111 and 168, were plugged and abandoned during 1986. Wells 105 and 111 were plugged due to unrepairable casing leaks and well 168 was plugged due to detrimental water communication with east offset producing well 158.

Well Status, December 31, 1986

Producing Active	25	
Producing Inactive	16	(15 TA'd - 1 SI)
Water Injection Active	15	
Water Injection Inactive	1	
Water Supply Inactive	3	
TOTAL	60	Wells

Production Summary

<u>Month</u>	<u>BO/M</u>	<u>BW/M</u>	<u>*MCF/M</u>
January	3918	59,117	4496
February	3579	53,396	4448
March	4083	59,117	4496
April	3864	57,210	4290
May	3976	59,117	4476
June	3684	57,210	4412
July	3850	59,675	4476

<u>Month</u>	<u>BO/M</u>	<u>BW/M</u>	<u>*MCF/M</u>
August	3452	61,676	4370
September	3433	59,685	4410
October	3384	67,724	4133
November	3352	65,598	4470
December	3399	67,723	4390
ANNUAL	43,974	727,248	52,867
CUMULATIVE	7,319,666	26,183,531	4,842,953
UNIT PRODUCTION			
CUMULATIVE TOTAL			
PRODUCTION	11,078,346	N/A	N/A

\* All gas is utilized as lease fuel gas


#### Production Curve

Attached are production curves for the West Bisti Unit through December 1986.

#### PLAN OF DEVELOPMENT FOR 1987

Chevron U.S.A., Inc. has no plans to drill additional development wells or water injection wells within the West Bisti Unit during 1987. Well workovers for recompletion and/or stimulation will be proposed as warranted. All wells currently shut-in or temporarily abandoned will be evaluated and proposed for recompletion or plug and abandonment as their evaluations dictate.

Very truly yours,

  
\_\_\_\_\_  
T. L. Perryman  
Area Operations Superintendent

MJM/gp  
Attachment

cc: W. I. Owners



**Chevron U.S.A. Inc.**

Overthrust Area Office, P. O. Drawer AA, Evanston, WY 82930

**T. L. Perryman**

Area Operations Superintendent

**February 13, 1987**

1987 Plan of Development and  
1986 Review of Operations  
West Bisti Lower Gallup Sand Unit  
San Juan County, New Mexico

State of New Mexico  
Oil Conservation Division  
P. O. Box 2088  
Land Office Building  
Santa Fe, NM 87501

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UNIT PRODUCTION			
CUMULATIVE TOTAL			
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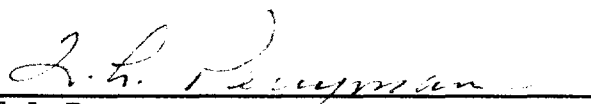
#### Production Curve

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Very truly yours,

  
T. L. Perryman  
Area Operations Superintendent

MJM/gp  
Attachment

cc: W. I. Owners



**Chevron U.S.A. Inc.**

Overthrust Area Office, P. O. Drawer AA, Evanston, WY 82930

**T. L. Perryman**

Area Operations Superintendent

February 13, 1987

1987 Plan of Development and  
1986 Review of Operations  
West Bisti Lower Gallup Sand Unit  
San Juan County, New Mexico

State of New Mexico  
Oil Conservation Division  
P. O. Box 2088  
Land Office Building  
Santa Fe, NM 87501

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