

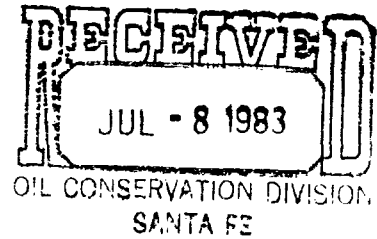


5029

Richard E. Ogden
Division Operations
Superintendent
July 5, 1983

Amoco Production Company (USA)

Houston Region
501 Westlake Park Boulevard
Post Office Box 3092
Houston, Texas 77253
Southwest Texas-Eastern
New Mexico Division



File: JDM-416-2740

Re: Plan of Development and Operations
Old Indian Draw Unit (Delaware Pool)
Eddy County, New Mexico

Mr. James Gillham
United States
Department of Interior
Bureau of Land Management
P. O. Box 1397
Roswell, NM 88201

State of New Mexico
Energy and Minerals Department
Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87501

Attention: Mr. Joe D. Ramey

Gentlemen:

In accordance with Section 10 of the Unit Agreement for the Development and Operation of the Old Indian Draw Unit, Amoco Production Company (USA) as Unit Operator herewith submits this plan on behalf of the Unit Working Interest Owners. This is an expansion of the authorization for waterflooding given by Oil Conservation Division Order No. R-6352.

Pilot waterflooding operations were commenced in January, 1982, with the conversion of OIDU Well No. 11 to water injection. Currently, the unit has 19 producers, one injector, one salt water disposal well, and one shut-in producer (Attachment No. 1). Since the initiation of water injection, waterflood response has been observed in several producing wells. Subsequently, a performance study indicated full-scale pattern waterflooding of the Delaware Pool is feasible and necessary for efficient operations and prevention of waste.

Amoco now intends to initiate full scale 80-acre 5-spot waterflooding in the fourth quarter of 1983. This will involve:

- 1) Conversion of nine existing producers to injectors (OIDU Well Nos. 2, 5, 6, 10, 12, 16, 19, 21, and 35).
- 2) Conversion of one salt water disposal well to an injector (OIDU Well No. 4).

File: JDM-416-2740
July 5, 1983
Page 2

- 3) Drilling of two water source wells, ODU Well Nos. 37 and 38, and
- 4) Return of shut-in ODU Well No. 15 to production status.

It is anticipated that response from a full scale flood will be observed by 1986. If performance dictates future plans for development of the Old Indian Draw Unit would include pattern densification to 40-acre 5-spot to further the efficient depletion of the Delaware Pool.

If you have any additional questions, please contact Lynn Wilson (713) 556-3163.

Richard Ogden

Approved For

Joe Ramey

By

Roy Johnson

Date

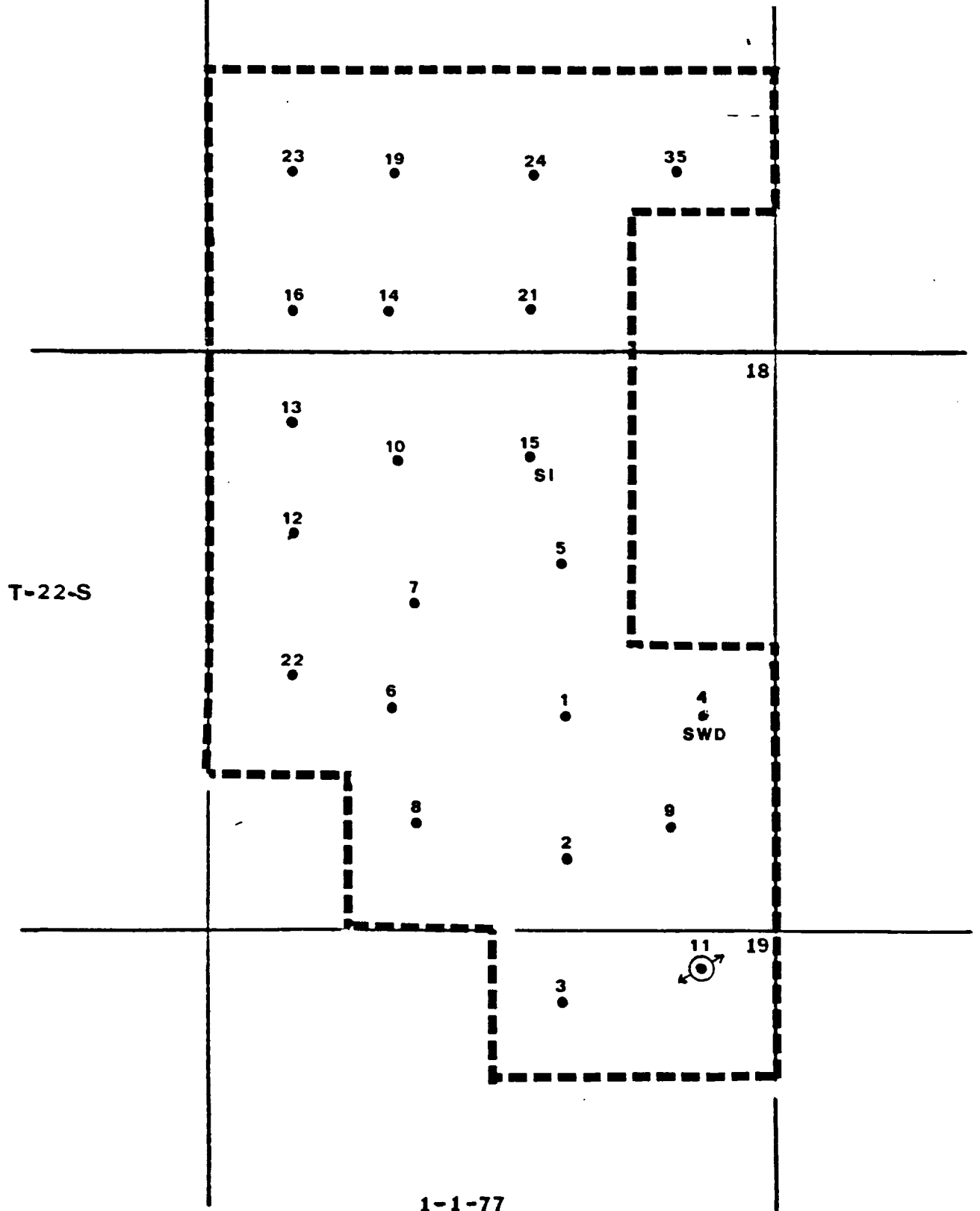
7-8-83

(5 copies)

LW/agd
1040/S

R-28-E

ATTACHMENT NO. 1
UNIT MAP



Amoco Production Company

SCALE: 1" = 1/4 mile

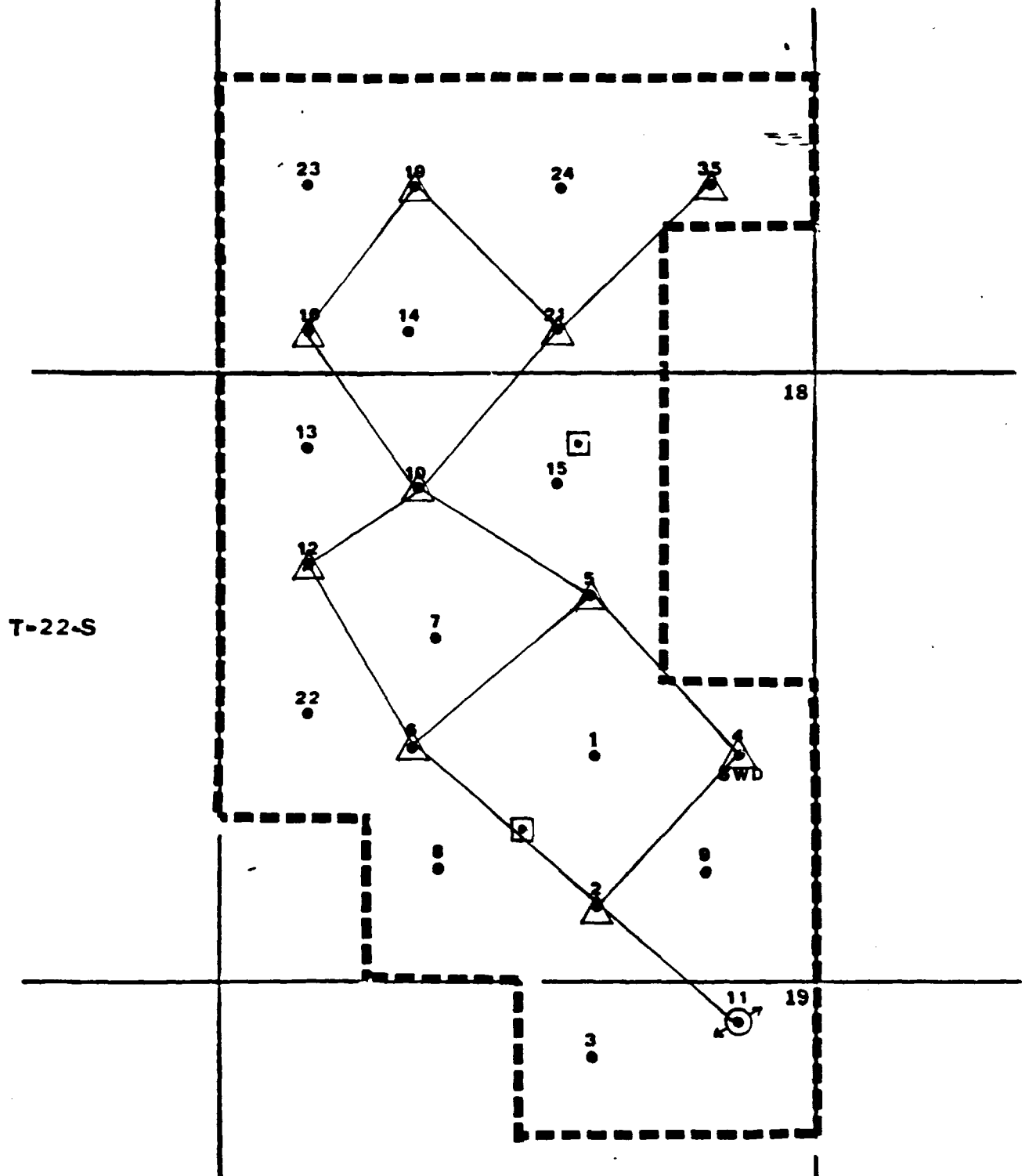
6-9-82

OLD INDIAN DRAW UNIT

DRG.
NO.

R-28-E

ATTACHMENT NO. 2



T-22-S

△ PROPOSED CONVERSION

□ PROPOSED WATER SOURCE WELLS

1-1-77

Amoco Production Company

SCALE 1"=1/4 mile

6-9-82

OLD INDIAN DRAW UNIT

DRG
NO



J. R. Barnett
Division Production
Manager

May 13, 1985

File: JDM-416-333

Re: 1985 Plan of Development and Operations
Old Indian Draw Unit
Eddy County, NM

United States Department of Interior
Bureau of Land Management
P. O. Box 1397
Roswell, NM 88201

Attention: Mr. Wayne Melton

State of New Mexico
Energy and Minerals Department
Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87501

Attention: Mr. R. L. Staments

Gentlemen:

In accordance with Section 10 of the Old Indian Draw Unit Agreement, Amoco Production Company submits, on behalf of the Working Interest Owners, a 1985 Plan of Development for the Old Indian Draw Unit. This plan, which revises our previous submittal of July 5, 1983, reviews operations over the past two years and addresses future development plans for the unit. Your approval for this plan is requested in order to initiate our development plans.

A waterflood development project was initiated in the Old Indian Draw Unit in 1983 which consisted of: 1) converting nine existing producers to injectors, 2) converting one salt water disposal well to an injector, 3) returning a shut-in producer to production, and 4) drilling of two water source wells. All work has now been completed except for the conversion of one well, OIDU No. 19, which has been deferred pending results of a workover on the offset producing well. Performance following

Ok - 7-3-85
RJA

Amoco Production Company
Houston Region
501 WestLake Park Boulevard
Post Office Box 3092
Houston, Texas 77253
Southwest Texas-
Eastern New Mexico Division

#5021

May 13, 1985

initiation of waterflooding on eighty-acre five-spot patterns has been very good and agrees favorably with predicted rates. The unit is currently exhibiting waterflood response and produced an average of approximately 330 BOPD during the first week of May, 1985. The project has resulted in proper conservation of natural resources and appears successful in increasing ultimate oil recovery from the unit. A copy of the unit's performance curve with the waterflood prediction and a tabulation of oil and water production and water injection by month for 1983 and 1984 are attached.

1983 - 1984 Operations

There was a great deal of activity during 1983 and 1984 in the Old Indian Draw Unit. During 1983, ten producing well workovers were performed, with nine of them involving exposure of an additional pay zone. Two injection well workovers were also performed. As the first stage of the 1983-1984 Waterflood Expansion Project, facilities were modified, four wells were converted to injection and one water source well was drilled during 1983.

Operations during 1984 involved completion of the 1983-1984 Waterflood Expansion Project, producing well workovers and injection well testing. Five additional wells were converted to injection, leaving one well (OIDU No. 19) to be converted during 1985. A second water source well, OIDU No. 38, was drilled and completed. Also during 1984, nine producing well workovers were performed and an injection well testing program was implemented.

Future Plans

Work completed thus far in 1985 has included fracture stimulating OIDU Nos. 4, 5, 11, 21 and 24 and cement squeezing and reperforating OIDU No. 8.

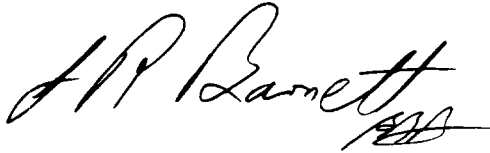
Plans for additional operations during 1985 involve fracture stimulating OIDU Nos. 15 and 38 and acidizing OIDU Nos. 6 and 16. In addition, automation equipment is being installed; and a comprehensive injection well testing program is being implemented.

Geological interpretation of the area to the immediate east of the unit indicates that potential for additional development may exist. Working Interest Owners are now evaluating drilling wells to the east side of the unit outside the current participating area. A definitive plan will be submitted under a supplemental plan of development at such time as the Working Interest Owners have reached concurrence on additional development.

File: JDM-416-333
Page 3
May 13, 1985

Future study plans for the Old Indian Draw Unit include evaluating the feasibility of carbon dioxide flooding which could further enhance the long-term performance of the unit.

Any questions regarding this matter should be directed to J. D. McElhaney at (713) 556-3185.

A handwritten signature in cursive script, appearing to read "J. P. Barnett". The signature is written in dark ink and is positioned above the typed name "J. P. Barnett" in the distribution list.

MSU/kk1

Attachments

cc: Bass Enterprises Production Co.
First City Bank Tower
201 Main Street
Fort Worth, TX 76102

Bass Enterprises Production Co.
P. O. Box 2760
Midland, TX 79702

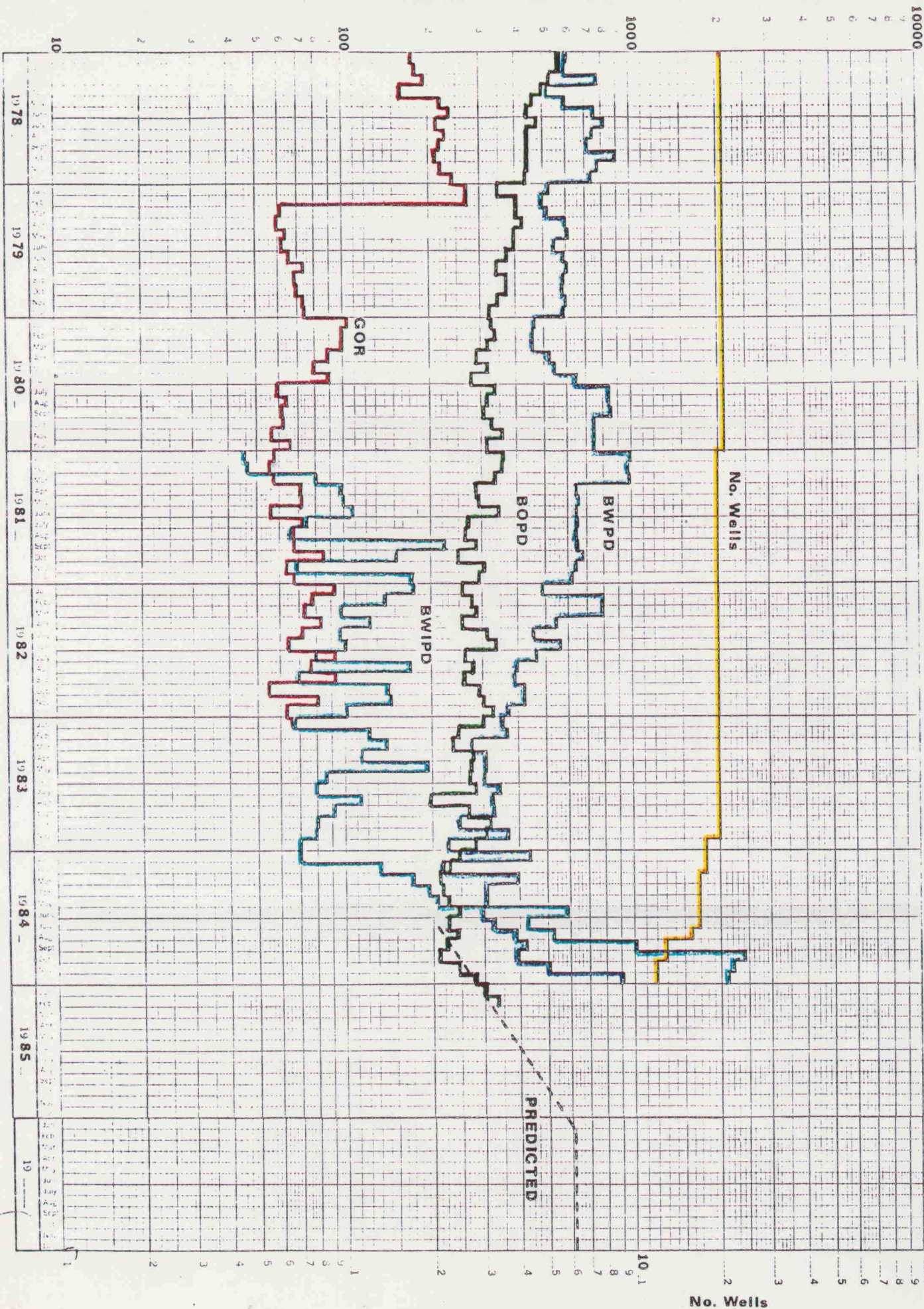
Marathon Oil Co.
P. O. Box 552
Midland, TX 79702

Attention: G. E. Yester

OLD INDIAN DRAW UNIT
1983-1984 OIL AND WATER PRODUCTION

1983				1984			
<u>MONTH</u>	<u>BOPD</u>	<u>BWPD</u>	<u>BWIPD</u>	<u>MONTH</u>	<u>BOPD</u>	<u>BWPD</u>	<u>BWIPD</u>
JAN.	304	364	68	JAN.	246	450	71
FEB.	249	370	125	FEB.	234	228	135
MAR.	240	277	142	MAR.	254	402	172
APR.	283	313	116	APR.	222	315	196
MAY	280	314	196	MAY	237	310	210
JUNE	275	307	86	JUNE	250	300	399
JULY	284	346	81	JULY	235	335	255
AUG.	208	323	113	AUG.	254	395	387
SEPT.	271	330	93	SEPT.	178	424	72
OCT.	327	139	81	OCT.	216	399	2474
NOV.	316	375	0	NOV.	252	514	2245
DEC.	288	230	71	DEC.	292	910	2125

OLD INDIAN DRAW UNIT





STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

LARRY KEHOE
SECRETARY

March 4, 1981

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

Amoco Production Company
Post Office Box 3092
Houston, Texas 77001

Attention: E. D. Newman

Re: Case No. 5029
Old Indian Draw Unit
Thirteenth Expansion of
the Delaware Participating
Area

Gentlemen:

We hereby approve the Thirteenth Expansion of the Delaware Participating Area of the Old Indian Draw Unit, Eddy County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands.

Two approved copies of the Thirteenth Expansion are returned herewith.

Yours very truly,

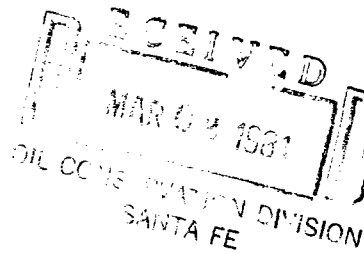
JOE D. RAMEY
Director

JDR/EP/fd
enc.

cc: U.S. G. S. - Albuquerque
Commissioner of Public Lands



E. D. Newman
Division Operations
Superintendent



Amoco Production Company

Houston Region
500 Jefferson Building
Post Office Box 3092
Houston, Texas 77001
West Texas-Eastern
New Mexico Division

February 24, 1981

File: GDD(3)-416-205

Re: Expansion of the Delaware Participating
Area and Old Indian Draw Unit
Eddy County, New Mexico
Contract 84194

Mr. James W. Sutherland, (3)
Area Oil & Gas Supervisor
United States Department of Interior
Geological Survey
P. O. Box 26124
Albuquerque, NM 87125

Mr. Joe D. Ramey, Directory (3)
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, NM

Gentlemen:

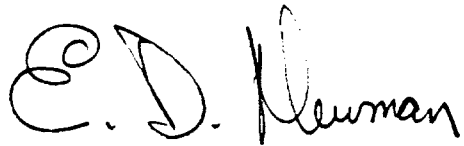
Amoco Production Company, as operator of the Old Indian Draw Unit, requests your approval of the thirteenth expansion of the Delaware Participating Area. This will also expand the Old Indian Draw Unit. The expansion will be effective March 1, 1981, and will include the NE/4 SE/4, Section 18, T22S, R28E.

This expansion is needed so Well No. 4 can be converted to water injection. Our letter of May 19, 1980, informed the USGS of our Plan of Development. Permits to inject fluid into the two pilot waterflood wells (Nos. 4 and 11) have been received. Our letter of March 4, 1980, and your approval of April 8, 1980, automatically eliminated land from the Old Indian Draw Unit effective December 14, 1978. Due to this contraction, the 40 acre tract needs to be added to the participating area before injection starts. Mr. A. Lopez, of the USGS has indicated that this tract of land should be included in the participating area. On January 23, 1981, Working Interest Owners were notified of the proposed expansion with no objections received.

GDD(3)-416-205
Page 2
February 24, 1981

Please indicate your approval of the thirteenth expansion by signing and returning one copy of this letter at your earliest convenience.

Yours very truly,

E. D. Newman

DES/dml

Attachments

Approved for: Gil Conservation Division
Approved by: [Signature]
Date: 3/5/81





cc: S. J. Okerson - Hobbs, NM

Note: Revised Exhibit A and Exhibit B attached.

[illegible]
$$\begin{array}{c} T \\ 22 \\ S \end{array}$$

NM-0415461
NM-0415688-A
NM-0429825

EFFECTIVE 3-1-81

 FEE LAND
 UNIT BOUNDARY
 FEDERAL LAND
 TRACT NO.

SCALE: 1" = 2000'

Effective 3/1/81

Revised Exhibit "B" - Old Indian Draw Unit Area, Eddy County, New Mexico

Tract No.	Description of Land	Number of Acres	Serial No. & Expiration Date of Lease	Basic Royalty & Ownership Percentage	Lessee of Record	Overriding Royalty and Percentage	Working Interest and Percentage
Federal Acreage							
2	<u>T22S-R28E</u> Sec. 19: N/2 NE/4	80.	NM-0415461 12/31/73	USA - All	Marathon	W. H. Brown 1/2 x 3% Raymond Chorney 1/2 x 3%, Scott A. Harris - \$83.34, Judy Harris - \$83.33, Stephen C. and Ellen Helbring - \$250.00, Abby J. Harris Yates - \$83.33, per acre production payment out of 3.25%.	Marathon Oil Company 100%
3	<u>T22S-R28E</u> Sec. 18: Lots 5, 6, 7, 8, 9, 10, and 12, W/2 NE/4, SE/4	488.22	NM-0415688-A 8/31/73	USA - All (12.5%)	Amoco Production Company	Robert N. Enfield and wife, Mona L. Enfield - \$250.00 per acre production payment out of 2%; Anita L. Berger Estate, Co-Trustees, Henry Berger, Anthony A. Adler, Melanie Adler and City National Bank - \$500.00 per acre production payment of 3%.	Amoco Production Co. 100%
4	<u>T22S-R28E</u> Sec. 7: Lots 7, 8	69.36	NM-0429825 8/31/73	USA - All (12.5%)	Amoco Production Company	Patricia B. Young 3%, Charles L. Southard 1%, Douglas Abel, Denton Trust 1/4 x 1%, Jo Denton Tuck 1/4 x 1%, Esther A. Denton 1/2 x 1%.	Amoco Production Co. 100%

3 Federal Tracts: 637.58

Effective 3/1/81

Revised Exhibit "B" - Old Indian Draw Unit Area, Eddy County, New Mexico

Tract No.	Description of Land	Number of Acres	Serial No. & Expiration Date of Lease	Basic Royalty & Ownership Percentage	Lessee of Record	Overriding Royalty and Percentage	Working Interest and Percentage
<u>Fee</u>							
6	T2S-R28E Sec. 7: E/2 SW/4, W/2 SE/4, NE/4 SE/4	200.00	9/29/77	Pecos Irrigation Company (18.75%)	Perry R. Bass and Bass Enterprises Production Company		Perry R. Bass - 25% Bass Enterprises Production Co. - 75%
<hr/>							
1 Fee Tract: 200.00							
<hr/>							

Total:

3 Federal Tracts - 637.58 acres = 76.1217
1 Fee Tract - 200.00 acres = 23.8783
837.58 100.0000%

South Central Region
P. O. Box 26124
Albuquerque, New Mexico 87125-6124

SEP 14 1981

Anoco Production Company
Attention: E. D. Newman
P. O. Box 3092
Houston, Texas 77001

5029

Gentlemen:

Expansion of the Old Indian Draw unit area, Eddy County, New Mexico, was given preliminary approval by the Conservation Manager by letter of April 14, 1981. The unit area presently contains 797.58 acres. This expansion will add 40.00 acres of Federal land to the unit area and will be included in the participating area. The area covered by this expansion is the NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 13, T. 22 S., R. 28 E., N.M.P.M. The unit area will be increased to 837.58 acres.

The expansion is necessary so that the Old Indian Draw unit well No. 4 can be converted to a water injection well to continue secondary recovery operations in the unit. All working interest owners have agreed to the expansion.

Therefore, we hereby approve the expansion of the Old Indian Draw unit area, effective March 1, 1981. This approval is subject to like approval by the appropriate officials of the State of New Mexico.

Sincerely yours,

(ONE COPY SENT TO SAC, ALBUQUERQUE)

FOR Gene F. Daniel
Deputy Conservation Manager
Oil and Gas

cc:
BLM, Santa Fe
NMOCD, Santa Fe (ltr only)
DS, Roswell
Accounting, Roswell (Exhibit A & B)

SEP 16 1981



UNITED STATES
DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY
South Central Region

P. O. Box 26124
Albuquerque, New Mexico 87125

APR 14 1981

Amoco Production Company
Attention: E. D. Newman
P. O. Box 3092
Houston, Texas 77001

5029

Gentlemen:

Your application of February 24, 1981, requests preliminary approval of a proposed expansion of the Old Indian Draw unit area, Eddy County, New Mexico.

The Old Indian Draw unit agreement, No. 14-08-0001-12405, was approved effective July 31, 1973. The unit area presently contains 797.58 acres following the 1978 elimination of some of the acreage within the initial unit area. Your proposed expansion will add 40.00 acres of Federal land to the unit area and would be included in the participating area. Upon approval of such expansion, the Old Indian Draw Unit area will be increased to 837.58 acres.

The proposed expansion and inclusion in the participating area is regarded as acceptable on the basis of being necessary for unit operations. Accordingly, no objection will be offered to the proposed expansion of the Old Indian Draw unit area if it is accomplished in accordance with the provisions of section 2 of the unit agreement. All terms and conditions of the unit agreement will apply to the expanded portion of the unitized area in the same manner as to the original unit area.

Four copies of the application for final approval accompanied with the appropriate joinders should be filed with the Deputy Conservation Manager, Oil and Gas.

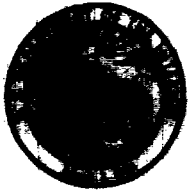
Sincerely yours,

(ORIG. SGD.) JAMES W. SUTHERLAND

James W. Sutherland
Conservation Manager
for the Director

cc:

BLM, Santa Fe
NMOCD, Santa Fe
DS, Roswell



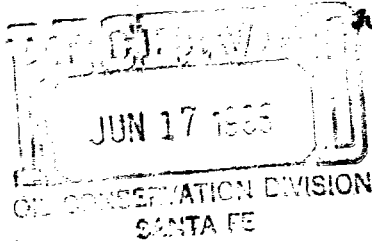
United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Box 1397, Roswell, New Mexico - 86201

14-00-0001-12405
3180(060)

June 12, 1985



#5029

Anaco Production Company
Attention: J.R. Barnett
501 Westlake Park Boulevard
P.O. Box 3092
Houston, TX 77253

Re: 1985 Plan of Development, Old Indian Draw Unit
Eddy County, New Mexico

Gentlemen:

We are in receipt of your May 13, 1985 letter which reviews your 1983-1984 operations and discusses your 1985 Plan of Development for the Old Indian Draw Unit, Eddy County, New Mexico.

Such plan proposes remedial well workovers including hydraulic fracturing, squeeze cementing, reperforating, acidizing, and a comprehensive injection well testing program to further enhance secondary recovery operations, and is hereby approved effective as of January 1, 1985.

This plan is subject to like approval by the appropriate officials of the State of New Mexico.

Sincerely yours,

Orig. Sgd. Francis R. Cherry, Jr.

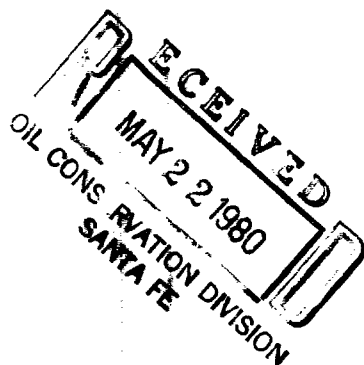
Francis R. Cherry, Jr.
District Manager

cc:

Commissioner of Public Lands, Santa Fe
✓ NMOC, Santa Fe



E. D. Newman
Division Operations
Superintendent



Amoco Production Company

Houston Region
500 Jefferson Building
Post Office Box 3092
Houston, Texas 77001
West Texas-Eastern
New Mexico Division

May 19, 1980

5029

File: RGS-1578-LF

Re: 1980 Plan of Development
Old Indian Draw Unit
Eddy County, New Mexico

Mr. Jack Willock
Assistant Area Oil and Gas Supervisor
United States Geological Survey
P. O. Box 26124
Albuquerque, NM 87125

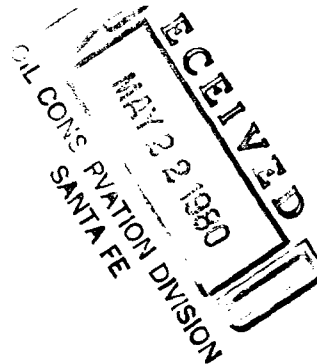
Gentlemen:

Amoco Production Company as operator of the Old Indian Draw Unit, Eddy County, New Mexico, hereby requests your approval for the 1980 Plan of Development.

Production in the Old Indian Draw Unit has declined in the past few years to a rate of 330 BOPD. In an effort to maximize recovery from the unit, a waterflood pilot is planned to determine floodability of the Delaware Sands. The pilot consists of converting two wells (Nos. 4 and 11) to injection. Currently No. 11 is a producing well and No. 4 is a salt water disposal well into an interval below the pay zone. Produced water is to be the injection fluid. If the pilot is successful then the waterflood will be expanded throughout the unit.

We have requested authorization to inject into Wells Nos. 4 and 11 at a public hearing before the New Mexico Oil Conservation Division on May 7, 1980, Case No. 6883. Attached for your information are Exhibit Nos. 1-6 which were submitted at subject hearing in support of our application and in compliance with New Mexico Statewide Rule 701 and Memorandum No. 3-7, issued August 24, 1977. Also, we requested authorization in the hearing to expand the waterflood administratively. Plans are to inject produced water at 300 BOPD and 800 psig. Also, injection well testing is planned for monitoring the injection.

File: RGS-1578-LF
Page 2
May 19, 1980



We respectfully request that our 1980 Plan of Development be approved calling for initiation of injection in a waterflood pilot and possible expansion in the future. Your favorable consideration of the foregoing at your earliest convenience will be appreciated.

Very truly yours,

Original Signed by:
E. D. NEWMAN

MVS/dgh
46/L

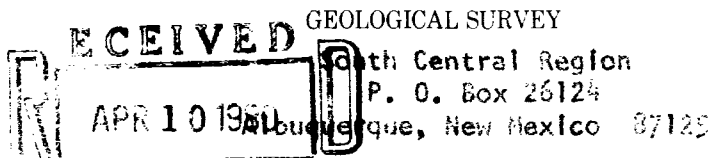
Attachments

cc: Mr. Alex Armijo
Commission of Public Lands
State of New Mexico
P. O. Box 1148
Santa Fe, NM 87501

Mr. Joe D. Ramey, Director
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87501



United States Department of the Interior



OIL CONSERVATION DIVISION
SANTA FE

APR 08 1980

5629

Amoco Production Company
Attention: S. J. Okerson
P. O. Box 3092
Houston, Texas 77001

Gentlemen:

Your letter of March 4, 1980, and the accompanying revised Exhibits "A" and "B", describe the lands automatically eliminated from the Old Indian Draw unit agreement, Eddy County, New Mexico, pursuant to Section 2(e) of the agreement. The lands so eliminated contain 2320.24 acres, which constitute all legal subdivisions, no part of which is included in the 797.58-acre Delaware participating area, the resultant unit area.

Federal lands remaining within the contracted unit area are embraced in the following leases:

NM-0429825*

NM-0415688-A*

NM-0415461*

*Indicates lease which covers lands inside the unit area, as well as land eliminated from the unit area.

Lease NM-0415239-B is entirely eliminated from the unit area.

The Initial Delaware participating area was effective December 15, 1973. Since drilling operations were not in progress on non-participating lands on the fifth anniversary of the Initial Delaware participating area, the automatic contraction provision of Section 2(e) operated effective as of December 14, 1978.

We hereby concur with your description of the lands automatically eliminated from the Old Indian Draw unit agreement effective December 14, 1978. You have complied with the requirements of Section 2(e) to our satisfaction, provided you promptly notify all parties in interest. Enclosed is one copy of the approved notification.

Sincerely yours,

(ORIG. SGD.) JACK WILLOCK

Jack Willock
Acting Deputy Conservation Manager
Oil and Gas

cc: BLM, Santa Fe (w/enclosure)
NMOCD, Santa Fe

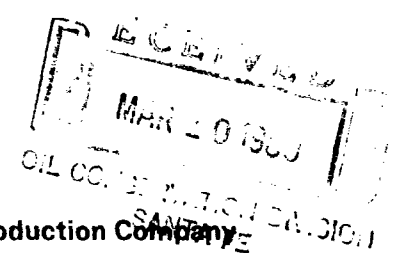


Enclosure

ONE HUNDRED YEARS OF EARTH SCIENCE IN THE PUBLIC SERVICE



S. J. Okerson
Division General
Superintendent



Amoco Production Company

Houston Region
500 Jefferson Building
Post Office Box 3092
Houston Texas 77001
West Texas-Eastern
New Mexico Division

March 4, 1980

5029

File: GDD-843-LF

Re: Delaware Participating Area
Old Indian Draw Unit
Eddy County, New Mexico
Contract 84194

United States Department of Interior
Geological Survey
P. O. Box 26124
Albuquerque, NM 87125

Attention: Mr. James W. Sutherland

Mr. Joe D. Ramey, Director
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87501

Gentlemen:

Reference is made to Mr. Sutherland's letter of February 1, 1980, requesting a description of all non-participating lands which were automatically eliminated from the unit effective December 14, 1978 per Section 2(e) of the unit agreement.

The following acreage was eliminated effective December 14, 1978 in
T-22-S, R-28-E:

All of Section 20, Tract 1, 640.00 acres;
Lots 5, 6, 7, 8, 9, 10, 11, 12, SE/4, S/2 NE/4, Section 19, Tract 2,
534.43 acres;
All of Section 17, Tract 3, 480.00 acres;
Lot 11, E/2 NE/4, NE/4 SE/4, Section 18, Tract 3, 154.41 acres;
Lots 5, 6, Section 7, Tract 4, 71.40 acres;
All of Section 8, Tract 5, 160.00 acres;
NE/4, E/2 NW/4, SE/4 SE/4, Section 7, Tract 6, 280.00 acres

File: GDD-843-LF
March 4, 1980
Page 2

Also attached are the revised exhibits A and B to the unit agreement.

Yours very truly,

ORIGINAL SIGNED BY: S. J. OKERSON
BY GDD

DES/am
389/Z

Attachments

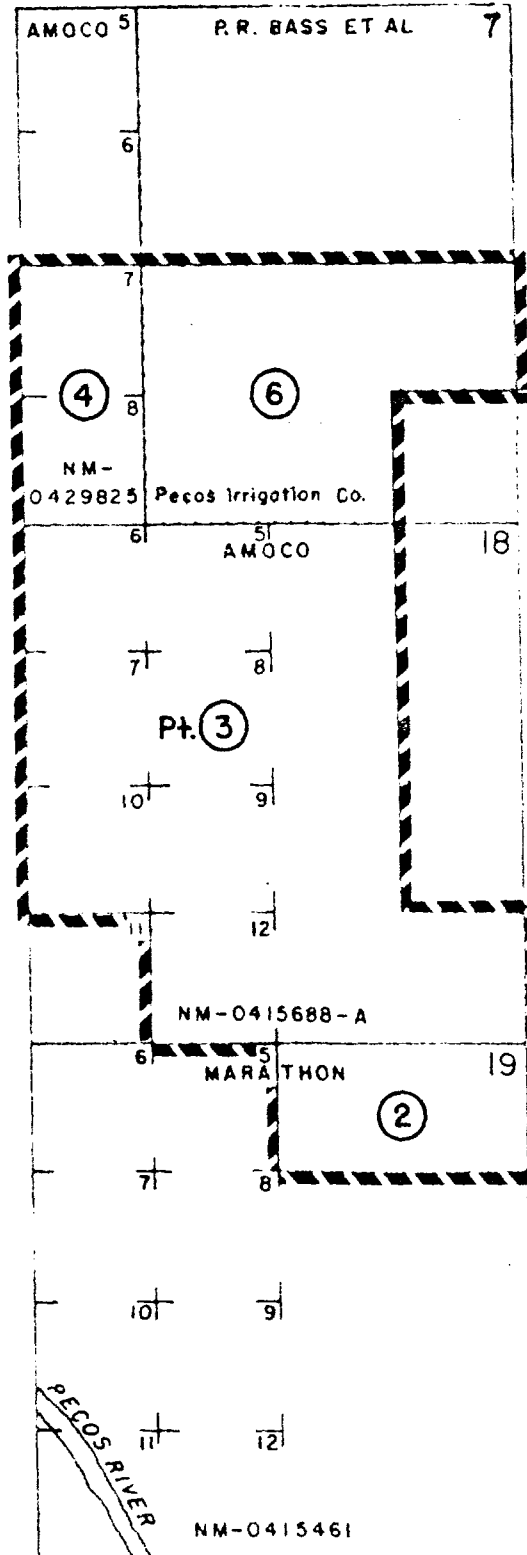
cc: Marathon Oil Company, w/attachments
P. O. Box 552
Midland, TX 79701

Attention: Mr. G. A. Naert

Bass Enterprises Production Company, w/attachment
3100 Fort Worth National Bank Building
Fort Worth, TX 76102

Attention: Mr. C. W. Walts

R28E







T
22
S

FEDERAL LEASES

NM-0415461
NM-0415688-A
NM-0429825

LEGEND

-  FEE LAND
-  UNIT BOUNDARY
-  FEDERAL LAND
-  TRACT NO.

REVISED EXHIBIT "A"

TO ACCOMPANY
OLD INDIAN DRAW
UNIT AGREEMENT
EDDY CO., NEW MEXICO
EFFECTIVE 12-14-78

Effective 12/15/78

Revised Exhibit "B" - Old Indian Draw Unit Area, Eddy County, New Mexico

Tract No.	Description of Land	Number of Acres	Serial No. & Expiration Date of Lease	Basic Royalty & Ownership Percentage	Lessee of Record	Overriding Royalty and Percentage	Working Interest and Percentage
Federal Acreage							
2	T22S-R28E Sec. 19: N/2 NE/4	80.	NM-0415461 12/31/73	USA - A11	Marathon	W. H. Brown 1/2 x 3% Raymond Chorney 1/2 x 3%, Scott A. Harris - \$83.34, Judy Harris - \$83.33, Stephen C. and Ellen Helbring - \$250.00, Abby J. Harris Yates - \$83.33, per acre production payment out of 3.25%.	Maraton Oil Company 100%
3	T22S-R28E Sec. 18: Lots 5,6,7,8 9,10, and 12 W/2 E/2, SE/4 SE/4	448.22	NM-0415688-A 8/31/73	USA - A11 (12.5%)	Amoco Prod. Co.	Robert N. Enfield and wife, Mona L. Enfield - \$250.00 per acre production payment out of 2%; Anita L. Berger Estate, Co-Trustees, Henry Berger, Anthony A. Adler, Melanie Adler and City National Bank - \$500.00 per acre production payment of 3%.	Amoco Production Co. 100%
4	T22S-R28E Sec. 7: Lots 7, 8	69.36	NM-0429825 8/31/73	USA - A11 (12.5%)	Amoco Prod. Co.	Patricia B. Young 3%, Charles L. Southard 1%, Douglas Abel1, Denton Trust 1/4 x 1%, Jo Denton Tuck 1/4 x 1%, Esther A Denton 1/2 x 1%.	Amoco Production Co. 100%

3 Federal Tracts: 597.58

Revised Exhibit "B" - Old Indian Draw Unit Area, Eddy County, New Mexico

Tract No.	Description of Land	Number of Acres	Serial No. & Expiration Date of Lease	Basic Royalty & Ownership Percentage	Lessee of Record	Overriding Royalty and Percentage	Working Interest and Percentage
6	T22S-R28E Sec. 7: E/2 SW/4, W/2 SE/4, NE/4 SE/4	200.00	9/29/77	Pecos Irrigation Company (18.75%)	Perry R. Bass and Bass Enterprises Production Co.		Perry R. Bass - 25% Bass Enterprises Production Co. - 75%
1 Fee Tract: 200.00 acres							

Total:

3	Federal Tracts -	597.58 acres =	74.9241
1	Fee Tract -	200.00 acres =	25.0759
			<u>797.58</u>
			100.0000%

Revised Exhibit "B" - Old Indian Draw Unit Area, Eddy County, New Mexico

Tract No.	Description of Land	Number of Acres	Serial No. & Expiration Date of Lease	Basic Royalty & Ownership Percentage	Lessee of Record	Overriding Royalty and Percentage	Working Interest and Percentage
Federal Acreage							
2	T22S-R28E Sec. 19: N/2 NE/4	80.	NM-0415461 12/31/73	USA - A11	Marathon	W. H. Brown 1/2 x 3% Raymond Chorney 1/2 x 3%, Scott A. Harris - \$83.34, Judy Harris - \$83.33, Stephen C. and Ellen Helbring - \$250.00, Abby J. Harris Yates - \$83.33, per acre production payment out of 3.25%.	Maraton Oil Company 100%
3	T22S-R28E Sec. 18: Lots 5, 6, 7, 8, 9, 10, and 12 W/2 E/2, SE/4 SE/4	448.22	NM-0415688-A 8/31/73	USA - A11 (12.5%)	Amoco Prod. Co.	Robert N. Enfield and wife, Mona L. Enfield - \$250.00 per acre production payment out of 2%; Anita L. Berger Estate, Co-Trustees, Henry Berger, Anthony A. Adler, Melanie Adler and City National Bank - \$500.00 per acre production payment of 3%.	Amoco Production Co. 100%
4	T22S-R28E Sec. 7: Lots 7, 8	69.36	NM-0429825 8/31/73	USA - A11 (12.5%)	Amoco Prod. Co.	Patricia B. Young 3%, Charles L. Southard 1%, Douglas Abell, Denton Trust 1/4 x 1%, Jo Denton Tuck 1/4 x 1%, Esther A Denton 1/2 x 1%.	Amoco Production Co. 100%



S. J. Okerson
Division Operations
Superintendent

Amoco Production Company

Houston Region
500 Jefferson Building
Post Office Box 3092
Houston, Texas 77001
West Texas-Eastern
New Mexico Division

February 8, 1980

(713) 652-5222

File: GDD-473-LF

Re: Delaware Participating Area Expansion
Old Indian Draw Unit
Eddy County, New Mexico

Marathon Oil Company
P. O. Box 552
Midland, TX 79701

Bass Enterprises Production Company
3100 Fort Worth National Bank Building
Fort Worth, TX 76102

Attention: Mr. G. A. Naert

Attention: Mr. C. W. Walts

Gentlemen:

Attached is a copy of the United States Department of Interiors letter of February 1, 1980 and the State of New Mexico Oil Conservation Division's letter of December 7, 1978 notifying Amoco Production Company of approvals of the 10th, 11th, and 12th expansions of the Old Indian Draw Participating Area.

As unit operator, we are required to submit to the United States Department of Interior within 90 days a description of all unit non-participating lands automatically eliminated effective December 14, 1978 with revised exhibits A and B. We will be furnishing you with copies of these revisions when finished.

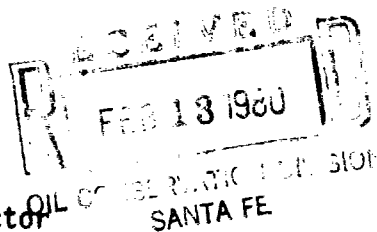
Yours very truly,

ORIGINAL SIGNED BY: S. J. OKERSON
BY GDD

DES/gh
184/E

Attachments

cc: Mr. Joe D. Ramey, Director
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87501





United States Department of the Interior

GEOLOGICAL SURVEY
P. O. Box 26124
Albuquerque, New Mexico 87125

Amoco Production Company
Attention: Mr. S. J. Okerson
P. O. Box 3092
Houston, Texas 77001

Gentlemen:

Your application of May 18, 1979, requesting approval of tenth, eleventh, and twelfth revisions of the Delaware participating area for the Old Indian Draw unit agreement, Eddy County, New Mexico, No. 14-08-0001-12405, was approved on this date by the Oil and Gas Supervisor, U. S. Geological Survey, effective May 1, 1977, June 1, 1977, and July 1, 1977, respectively. Such approval is subject to like approval by the New Mexico Oil Conservation Division.

The tenth revision will add 74.92 acres, which enlarges the Delaware participating area to 643.14 acres. Such revision is based on the completion of unit wells No. 19 in the NE $\frac{1}{4}$ SW $\frac{1}{4}$, and No. 23 in Lot 7 of section 7, T. 22 S., R. 28 E., N.M.P.M.

The eleventh revision is based on the completion of wells No. 21 in the SW $\frac{1}{4}$ SE $\frac{1}{4}$ section 7, No. 24 in the NW $\frac{1}{4}$ SE $\frac{1}{4}$ section 7, and No. 22 in Lot 10 of section 18. The eleventh revision will add 114.44 acres, which will increase the participating area to 757.58 acres.

The twelfth revision will increase the Delaware participating area to 797.58 acres by adding 40.00 acres, based on the completion of well No. 35 in the NE $\frac{1}{4}$ SE $\frac{1}{4}$ of section 7.

The participating areas are approved pursuant to Section 11 of the unit agreement by reason of subject wells being completed as productive in paying quantities.

Copies of the approved application are being distributed to the appropriate Federal offices and one approved copy is enclosed. You are requested to furnish the State of New Mexico and all other interested parties with appropriate evidence of this approval.

Our records show that the initial Delaware participating area for the Old Indian Draw unit agreement was established effective December 15, 1973. Such participating area effective date set the date of December 14, 1978 as the time when the automatic elimination provision contained in



RECEIVED
FEB 13 1980

ONE HUNDRED YEARS OF EARTH SCIENCE IN THE PUBLIC SERVICE

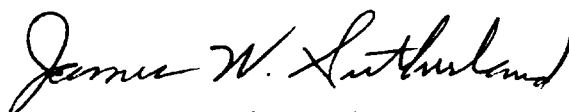
SANTA FE

NEW MEX. - E. NEW MEX. - PRODUCTION
FEB 15 1980
FEB 01 1980
E.E.M.
E.D.N.
S.J.O.
K.W.W.
H.H.R.
S.W.S.
D.C.R.
R.G.S.
G.D.D.
E.R.S.
R.G.M.
J.R.R.
J.H.V.
D.R.C.
FILE ☐ DESTROY ☐

Section 2(e) of the subject unit agreement became operative. No drilling operations were in progress on the unitized lands within the Old Indian Draw unit area outside the participating area on December 14, 1978. Therefore, all unit non-participating lands were automatically eliminated effective December 14, 1978.

As unit operator, you are required to submit to this office within 90 days a description of lands so eliminated with appropriate revised exhibits A and B.

Sincerely yours,

A handwritten signature in cursive script, reading "James W. Sutherland".

James W. Sutherland
Oil and Gas Supervisor, SRMA

Enclosure



S. J. Okerson
Division Operations
Superintendent

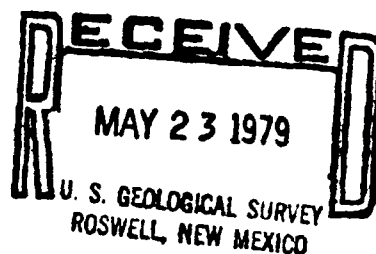
Amoco Production Company

Houston Region
500 Jefferson Building
Post Office Box 3092
Houston, Texas 77001
West Texas-Eastern
New Mexico Division

May 18, 1979

File: CGF(7)-3332-LF

Re: Delaware Participating Area Expansion
Old Indian Draw Unit
Eddy County, New Mexico



Mr. J. A. Gilliam (3)
Acting Area Oil & Gas Supervisor
United States Department of the Interior
Geological Survey
P. O. Drawer 1857
Roswell, NM 88201

Mr. Joe D. Ramey, Director (3)
New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, NM 87501

Gentlemen:

Returned herewith are our original applications for approval of the tenth, eleventh, and twelfth Delaware participating area revisions of the Old Indian Draw Unit plus the additional data required to obtain approval per your letter rejecting our initial application. Having complied with your request for this additional data we respectfully request your favorable consideration of this application.

Included are production plots on the individual wells in question and our economic analyses based on the projected ultimate recovery estimated by extrapolation of each well's performance to date. As can be seen, each well exhibits a steep production decline rate which results in a fairly low projected ultimate recovery. This steep decline rate is common for all wells in this unit during the early months of production. However, gradual flattening of this steep decline has been experienced on many of the older wells in the Unit. Since our reserve predictions were made based on the early decline rates under a primary producing mode, these projections are probably somewhat pessimistic. Also, please be advised that we are actively pursuing the possibility of secondary recovery by water injection and hope to initiate a pilot program in the coming months. This should further improve the ultimate cash position of the subject wells.

File: CGF(7)-3332-LF
May 18, 1979
Page 2

It should also be noted that our analysis indicates all wells, with the exception of Well No. 23, will payout and generate a positive ultimate cash position based on our possibly pessimistic reserve estimates. Although our analysis using a projection based on early performance indicates Well No. 23 will prove to have been a poor investment, flattening of our decline projection could alter that conclusion. Nevertheless, we do not believe this excludes Well No. 23 from being classified as a commercial producer since it does "produce oil and gas in paying quantities" as stipulated by Section 9 of the Unit Operating Agreement.

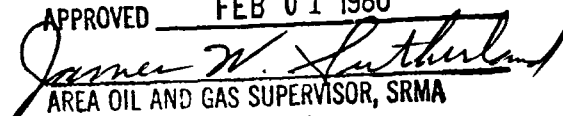
The structure map included with our initial application showed Well No. 23 to be outside the line upon which the structural elevation lines close. The line on which the structural lines close represents our current estimate of the geographical extent to which development drilling can now be justified based on the previously discussed economic evaluation. The attached cross-section shows the drastic decrease in pay quantity and quality between Wells No. 19 and 23.

Based on the data herein presented at your request plus the data originally submitted in our initial application, we request your approval of the subject revisions.

Yours very truly,



DES/ss
Attachment

APPROVED FEB 01 1980

AREA OIL AND GAS SUPERVISOR, SRMA
U.S. GEOLOGICAL SURVEY

OLD INDIAN DRAW UNIT (NO. 522059)
DELAWARE PARTICIPATING ACREAGE SCHEDULE
AFTER TENTH EXPANSION EFFECTIVE MAY 1, 1977

UNIT TRACT NO.	ACREAGE DESCRIPTION	LEASE NUMBER	NO. ACRES	PARTICIPATION PERCENT-DECIMAL	WELLS NOS. INVOLVED
3	NW/4 SE/4, Section 18, T22S, R28E	NM-0415688-A (USA)	40.00	.062195	1
3	SW/4 SE/4, Section 18, T22S, R28E	NM-0415688-A (USA)	40.00	.062195	2
2	NW/4 NE/4, Section 19, T22S, R28E	NM-0415461 (USA)	40.00	.062195	3
3	SW/4 NE/4, and Lot 9, Section 18, T22S, R28E	NM-0415688-A (USA)	76.18	.118450	5, 6
3	Lot 8, Lot 12, and SE/4 SE/4, Section 18, T22S, R28E	NM-0415688-A (USA)	112.40	.174768	7, 8, 9
3	Lot 5, Section 18, T22S, R28E	NM-0415688-A (USA)	36.38	.056566	10
2	NE/4 NE/4, Section 19, T22S, R28E	NM-0415461 (USA)	40.00	.062195	11
3	Lot 7, Section 18, T22S, R28E	NM-0415688-A (USA)	34.43	.053534	12
3	Lot 6, Section 18, T22S, R28E	NM-0415688-A (USA)	34.39	.053472	13
6	SE/4 SW/4, Section 7, T22S, R28E	Fee-unsigned royalty	40.00	.062195	14
3	NW/4 NE/4, Section 18, T22S, R28E	NM-0415688-A (USA)	40.00	.062195	15
4	Lot 8, Section 7, T22S, R28E	NM-0429825 (USA)	34.44	.053549	16
6	NE/4 SW/4, Section 7, T22S, R28E	Fee-unsigned royalty	40.00	.062195	19
4	Lot 7, Section 7, T22S, R28E	NM-0429825 (USA)	<u>34.92</u>	<u>.054296</u>	23
			643.14	1.000000	

OLD INDIAN DRAW UNIT (NO. 522059)
DELAWARE PARTICIPATING ACREAGE SCHEDULE
AFTER ELEVENTH EXPANSION EFFECTIVE JUNE 1, 1977

UNIT TRACT NO.	ACREAGE DESCRIPTION	LEASE NUMBER	NO. ACRES	PARTICIPATION PERCENT-DECIMAL	WELLS NOS. INVOLVED
3	NW/4 SE/4, Section 18, T22S, R28E	NM-0415688-A (USA)	40.00	.052800	1
3	SW/4 SE/4, Section 18, T22S, R28E	NM-0415688-A (USA)	40.00	.052800	2
2	NW/4 NE/4, Section 19, T22S, R28E	NM-0415461 (USA)	40.00	.052800	3
3	SW/4 NE/4, and Lot 9, Section 18, T22S, R28E	NM-0415688-A (USA)	76.18	.1005570	5, 6
3	Lot 8, Lot 12, and SE/4 SE/4, Section 18, T22S, R28E	NM-0415688-A (USA)	112.40	.148367	7, 8, 9
3	Lot 5, Section 18, T22S, R28E	NM-0415688-A (USA)	36.38	.048021	10
2	NE/4 NE/4, Section 19, T22S, R28E	NM-0415461 (USA)	40.00	.052800	11
3	Lot 7, Section 18, T22S, R28E	NM-0415688-A (USA)	34.43	.045448	12
3	Lot 6, Section 18, T22S, R28E	NM-0415688-A (USA)	34.39	.045394	13
6	SE/4 SW/4, Section 7, T22S, R28E	Fee-unsigned royalty	40.00	.052800	14
3	NW/4 NE/4, Section 18, T22S, R28E	NM-0415688-A (USA)	40.00	.052800	15
4	Lot 8, Section 7, T22S, R28E	NM-0429825 (USA)	34.44	.045460	16
6	NE/4 SW/4, Section 7, T22S, R28E	Fee-unsigned royalty	40.00	.052800	19
4	Lot 7, Section 7, T22S, R28E	NM-0429825 (USA)	34.92	.046094	23
6	SW/4 SE/4 and NW/4 SE/4, Section 7, T22S, R28E	Fee-unsigned royalty	80.00	.105599	21, 24
3	Lot 10, Section 18, T22S, R28E	NM-0415688-A	<u>34.44</u>	<u>.045460</u>	22
			757.58	1.000000	

OLD INDIAN DRAW UNIT (NO. 522059)
DELAWARE PARTICIPATING ACREAGE SCHEDULE
AFTER TWELFTH EXPANSION EFFECTIVE JULY. 1, 1977

UNIT TRACT NO.	ACREAGE DESCRIPTION	LEASE NUMBER	NO. ACRES	PARTICIPATION PERCENT-DECIMAL	WELLS NOS. INVOLVED
3	NW/4 SE/4, Section 18, T22S, R28E	NM-0415688-A (USA)	40.00	.050152	1
3	SW/4 SE/4, Section 18, T22S, R28E	NM-0415688-A (USA)	40.00	.050152	2
2	NW/4 NE/4, Section 19, T22S, R28E	NM-0415461 (USA)	40.00	.050152	3
3	SW/4 NE/4, and Lot 9, Section 18, T22S, R28E	NM-0415688-A (USA)	76.18	.095514	5, 6
3	Lot 8, Lot 12, and SE/4 SE/4, Section 18, T22S, R28E	NM-0415688-A (USA)	112.40	.140926	7, 8, 9
3	Lot 5, Section 18, T22S, R28E	NM-0415688-A (USA)	36.38	.045613	10
2	NE/4 NE/4, Section 19, T22S, R28E	NM-0415461 (USA)	40.00	.050152	11
3	Lot 7, Section 18, T22S, R28E	NM-0415688-A (USA)	34.43	.043168	12
3	Lot 6, Section 18, T22S, R28E	NM-0415688-A (USA)	34.39	.043118	13
6	SE/4 SW/4, Section 7, T22S, R28E	Fee-unsigned royalty	40.00	.050152	14
3	NW/4 NE/4, Section 18, T22S, R28E	NM-0415688-A (USA)	40.00	.050152	15
4	Lot 8, Section 7, T22S, R28E	NM-0429825 (USA)	34.44	.043180	16
6	NE/4 SW/4, Section 7, T22S, R28E	Fee-unsigned royalty	40.00	.050152	19
4	Lot 7, Section 7, T22S, R28E	NM-0429825 (USA)	34.92	.043782	23
6	SW/4 SE/4 and NW/4 SE/4, Section 7, T22S, R28E	Fee-unsigned royalty	80.00	.100303	21, 24
3	Lot 10, Section 18, T22S, R28E	NM-0415688-A	34.44	.043180	22
6	NE/4 SE/4, Section 7, T22S, R28E	Fee-unsigned royalty	<u>40.00</u>	<u>.050152</u>	35



United States Department of the Interior

GEOLOGICAL SURVEY
P. O. Box 26124
Albuquerque, New Mexico 87125

SEP 01 1980

Amoco Production Company
Attention: Mr. S. J. Okerson
P. O. Box 3092
Houston, Texas 77001

Gentlemen:

Your application of May 18, 1979, requesting approval of tenth, eleventh, and twelfth revisions of the Delaware participating area for the Old Indian Draw unit agreement, Eddy County, New Mexico, No. 14-08-0001-12405, was approved on this date by the Oil and Gas Supervisor, U. S. Geological Survey, effective May 1, 1977, June 1, 1977, and July 1, 1977, respectively. Such approval is subject to like approval by the New Mexico Oil Conservation Division.

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Copies of the approved application are being distributed to the appropriate Federal offices and one approved copy is enclosed. You are requested to furnish the State of New Mexico and all other interested parties with appropriate evidence of this approval.

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ONE HUNDRED YEARS OF EARTH SCIENCE IN THE PUBLIC SERVICE

Section 2(e) of the subject unit agreement became operative. No drilling operations were in progress on the unitized lands within the Old Indian Draw unit area outside the participating area on December 14, 1978. Therefore, all unit non-participating lands were automatically eliminated effective December 14, 1978.

As unit operator, you are required to submit to this office within 90 days a description of lands so eliminated with appropriate revised exhibits A and B.

Sincerely yours,

(ORIG. SGN.) JAMES W. SUTHERLAND

James W. Sutherland
Oil and Gas Supervisor, SRMA

Enclosure

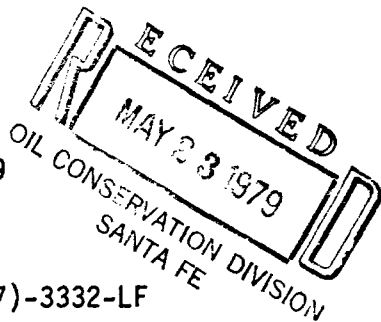
cc:

BLM, Santa Fe
NMOCD, Santa Fe



S. J. Okerson
Division Operations
Superintendent

May 18, 1979



File: CGF(7)-3332-LF

Re: Delaware Participating Area Expansion
Old Indian Draw Unit
Eddy County, New Mexico

Amoco Production Company

Houston Region
500 Jefferson Building
Post Office Box 3092
Houston, Texas 77001
West Texas-Eastern
New Mexico Division

Mr. J. A. Gilliam (3)
Acting Area Oil & Gas Supervisor
United States Department of the Interior
Geological Survey
P. O. Drawer 1857
Roswell, NM 88201

Mr. Joe D. Ramey, Director (3)
New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, NM 87501

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File: CGF(7)-3332-LF
May 18, 1979
Page 2

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Based on the data herein presented at your request plus the data originally submitted in our initial application, we request your approval of the subject revisions.

Yours very truly,

A handwritten signature in dark ink, appearing to read "S. J. O'Hearan" followed by a small flourish or initials.

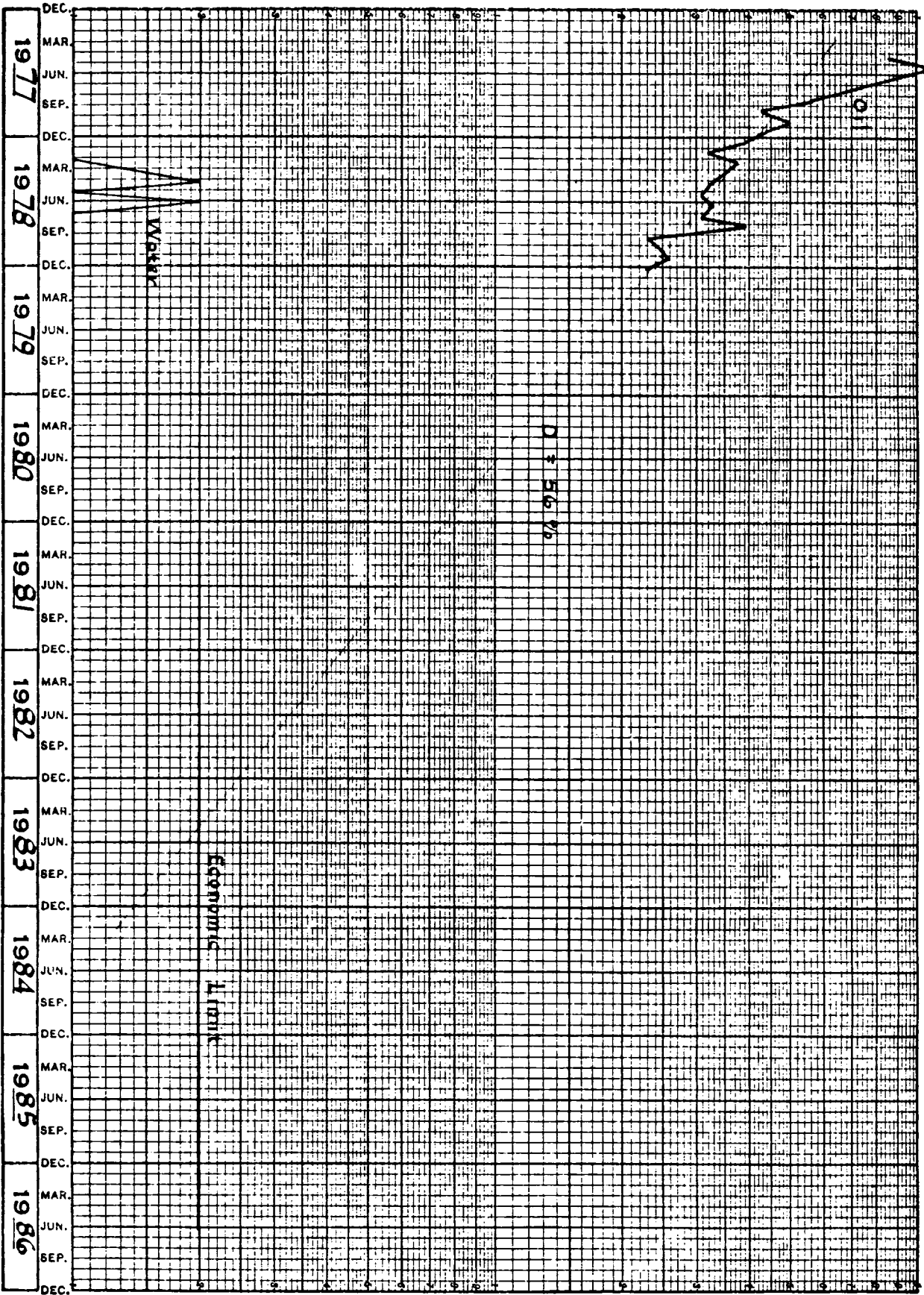
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Attachment

BPD

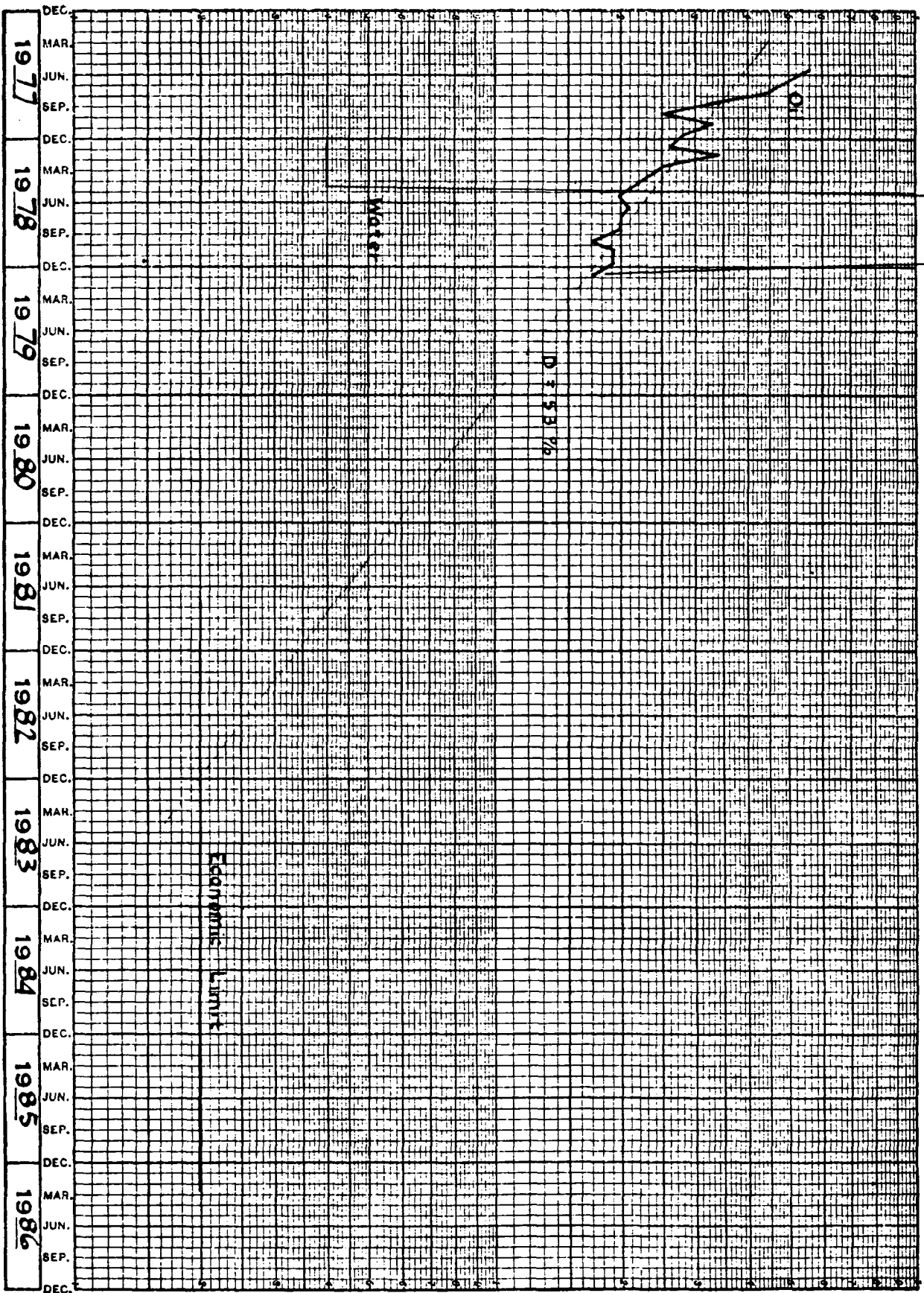
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Old Indian Draw Well No. 19
7K-T225 - R28E Eddy Co., NM.



Old Indian Draw Well No. 21
 70-T225 - R28E Eddy Co., NM.

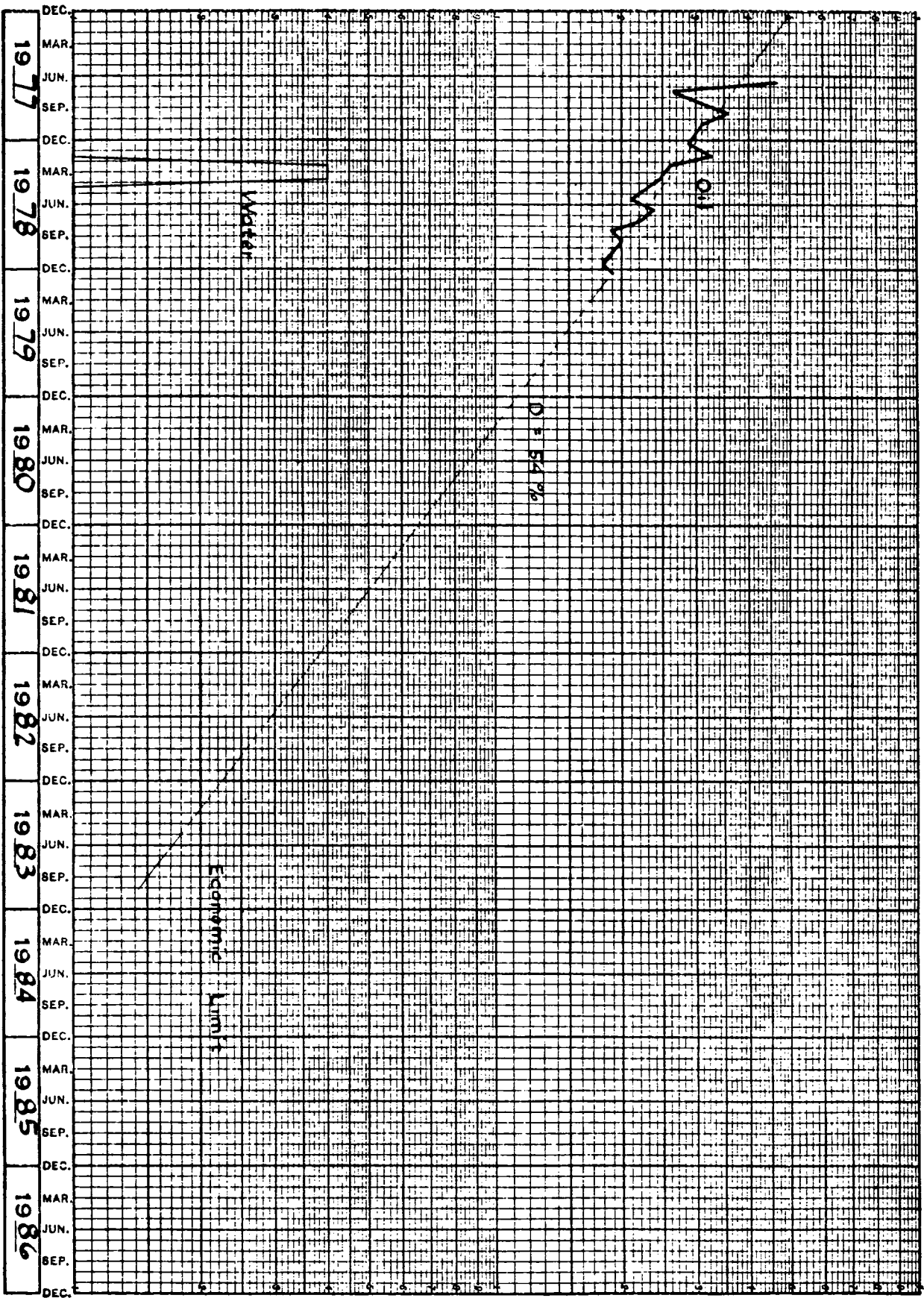


BPD

10

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Old Indian Draw Well No. 22
18L-T2225 - R28E Eddy Co., NM.

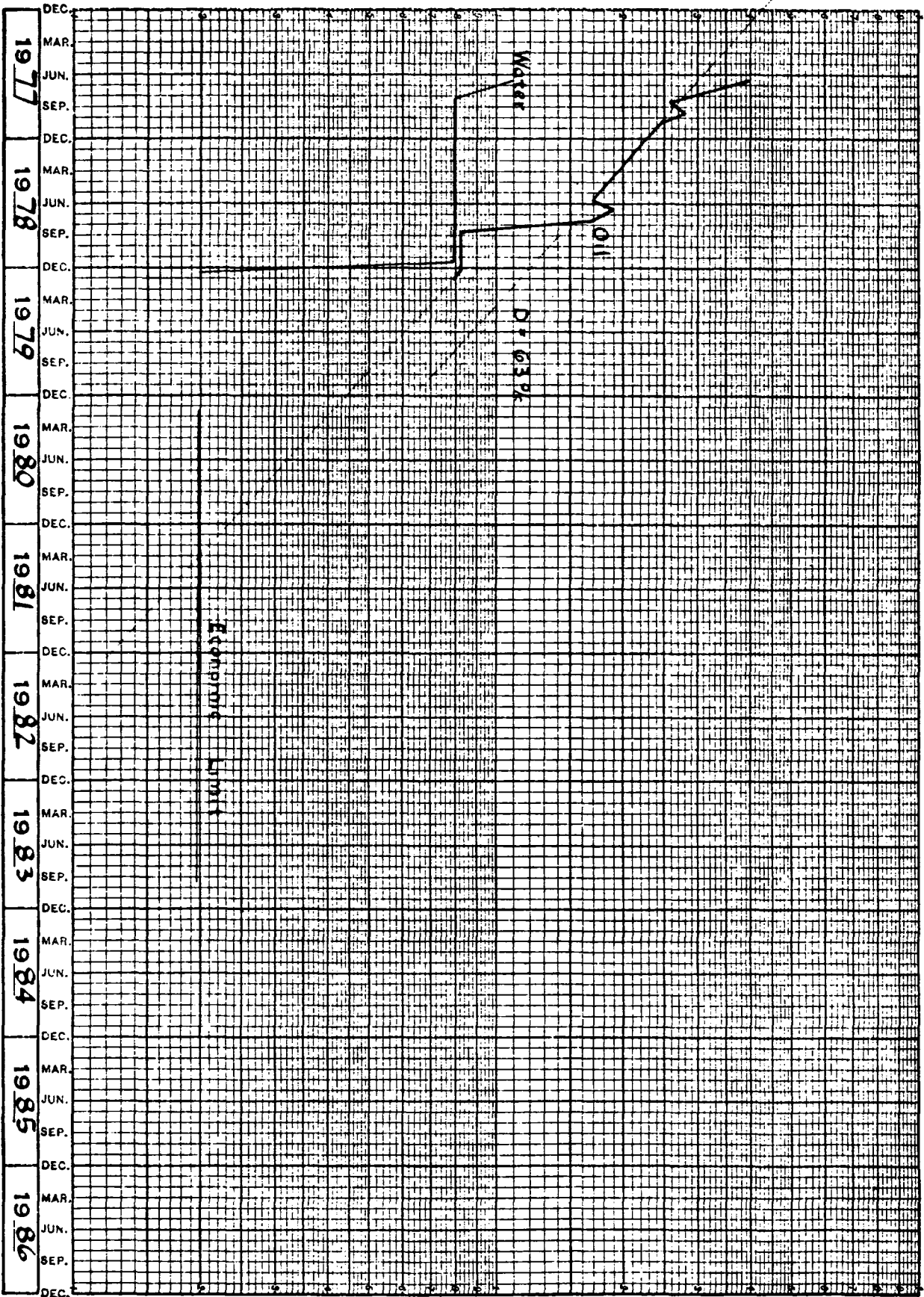


BPD

10

100

Old Indian Draw Well No. 23
7L - T225 - R28E Eddy Co., N.M.

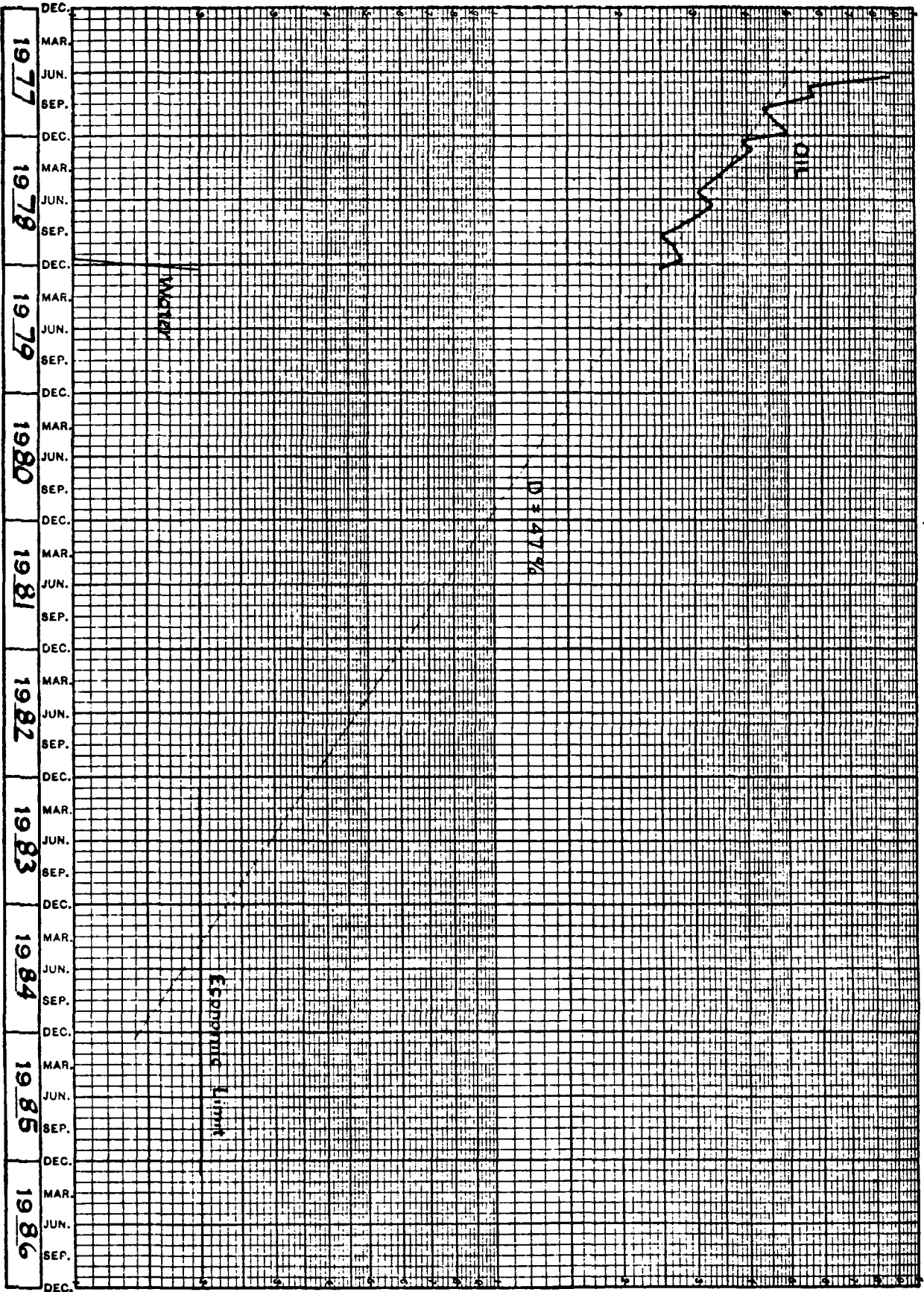


BPD

6

100

Old Indian Draw Well No. 24
7J - T22S - R28E Eddy Co., NM

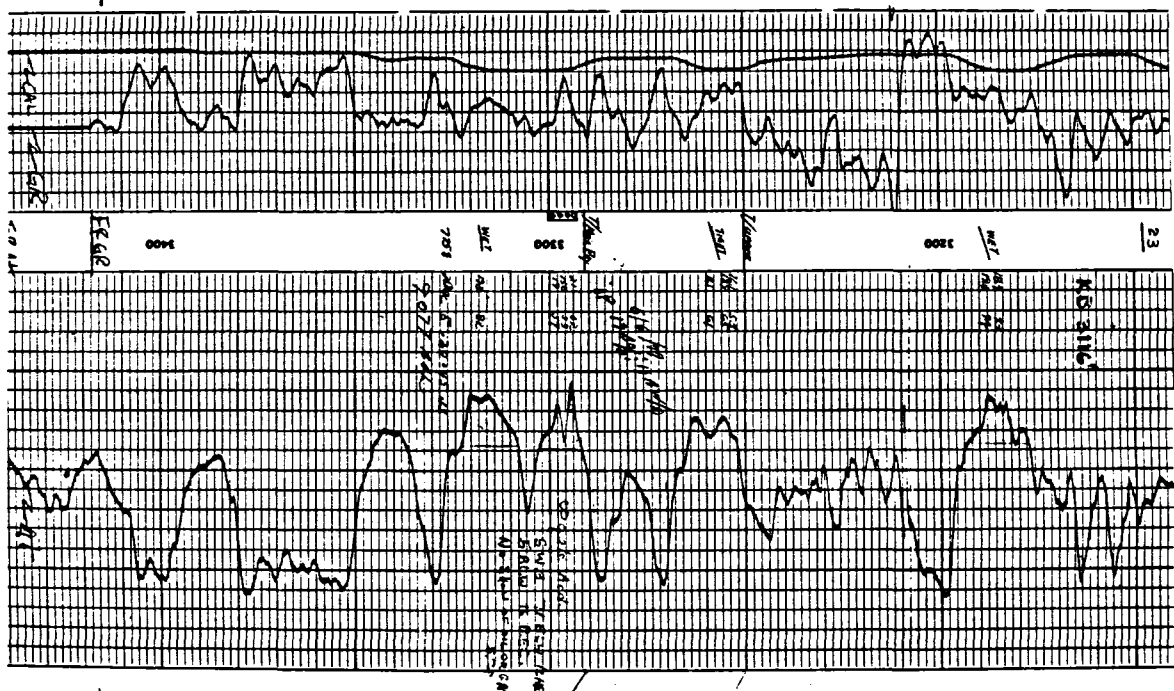


ECONOMIC ANALYSIS SUMMARY - OLD INDIAN DRAW UNIT

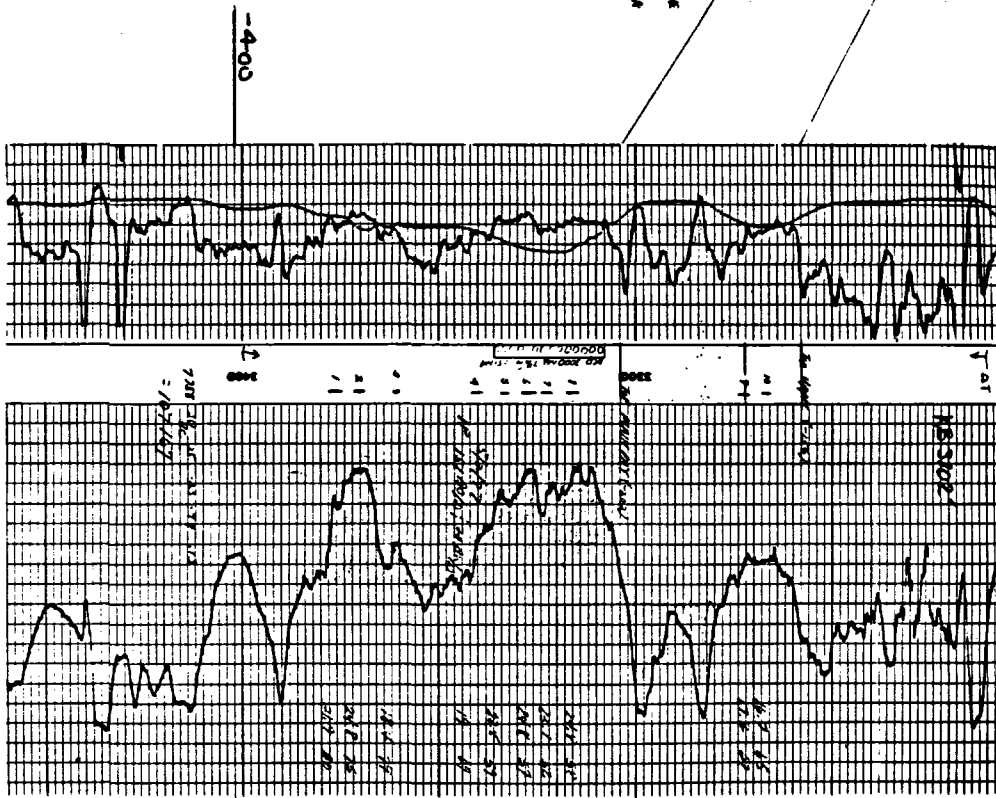
<u>Well No.</u>	<u>Gross Cost (\$)</u>	<u>Cum to 1-1-79 (B0)</u>	<u>Reserves From 1-1-79 (B0)</u>	<u>Predicted Ultimate (B0)</u>	<u>AFIT ECONOMICS</u>		
					<u>Payout (mo)</u>	<u>Cum Cash Flow (\$)</u>	<u>P_W₁₀ (\$)</u>
19	138,143	26,524	13,688	40,212	27	48,561	24,138
21	106,464	16,148	10,330	26,478	42	18,027	636
22	95,360	14,595	11,491	26,086	41	21,510	2,934
23	102,722	10,481	5,794	16,275	NONE	-11,891	-23,794
24	92,826	22,058	17,862	39,920	23	66,941	39,626

LMS/5/18/79

Old Indian Draw Unit #23



Old Indian Draw Unit #19





S. J. Okerson
Division Operations
Superintendent



Amoco Production Company

Houston Region
500 Jefferson Building
Post Office Box 3092
Houston, Texas 77001
West Texas-Eastern
New Mexico Division

May 18, 1979

File: CGF(7)-3332-LF

Re: Delaware Participating Area Expansion
Old Indian Draw Unit
Eddy County, New Mexico

Mr. J. A. Gilliam (3)
Acting Area Oil & Gas Supervisor
United States Department of the Interior
Geological Survey
P. O. Drawer 1857
Roswell, NM 88201

Mr. Joe D. Ramey, Director (3)
New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, NM 87501

Gentlemen:

Returned herewith are our original applications for approval of the tenth, eleventh, and twelfth Delaware participating area revisions of the Old Indian Draw Unit plus the additional data required to obtain approval per your letter rejecting our initial application. Having complied with your request for this additional data we respectfully request your favorable consideration of this application.

Included are production plots on the individual wells in question and our economic analyses based on the projected ultimate recovery estimated by extrapolation of each well's performance to date. As can be seen, each well exhibits a steep production decline rate which results in a fairly low projected ultimate recovery. This steep decline rate is common for all wells in this unit during the early months of production. However, gradual flattening of this steep decline has been experienced on many of the older wells in the Unit. Since our reserve predictions were made based on the early decline rates under a primary producing mode, these projections are probably somewhat pessimistic. Also, please be advised that we are actively pursuing the possibility of secondary recovery by water injection and hope to initiate a pilot program in the coming months. This should further improve the ultimate cash position of the subject wells.

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Page 2

It should also be noted that our analysis indicates all wells, with the exception of Well No. 23, will payout and generate a positive ultimate cash position based on our possibly pessimistic reserve estimates. Although our analysis using a projection based on early performance indicates Well No. 23 will prove to have been a poor investment, flattening of our decline projection could alter that conclusion. Nevertheless, we do not believe this excludes Well No. 23 from being classified as a commercial producer since it does "produce oil and gas in paying quantities" as stipulated by Section 9 of the Unit Operating Agreement.

The structure map included with our initial application showed Well No. 23 to be outside the line upon which the structural elevation lines close. The line on which the structural lines close represents our current estimate of the geographical extent to which development drilling can now be justified based on the previously discussed economic evaluation. The attached cross-section shows the drastic decrease in pay quantity and quality between Wells No. 19 and 23.

Based on the data herein presented at your request plus the data originally submitted in our initial application, we request your approval of the subject revisions.

Yours very truly,

A handwritten signature in dark ink, appearing to read "S. J. O'Hearan" followed by a small flourish or initials.

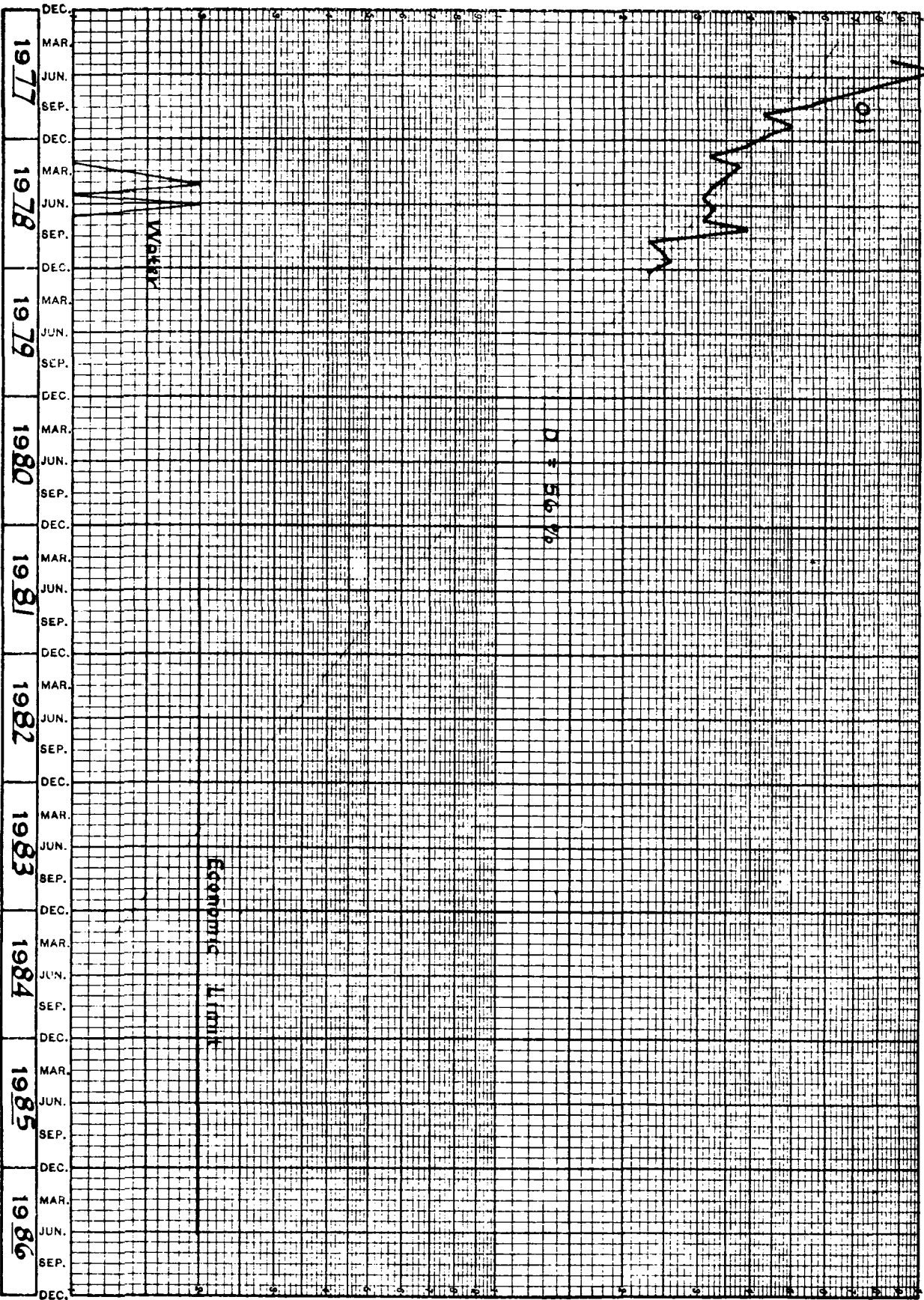
DES/ss
Attachment

BPD

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Old Indian Draw Well No. 19
7K-T2225 - R28E Eddy Co., NM.

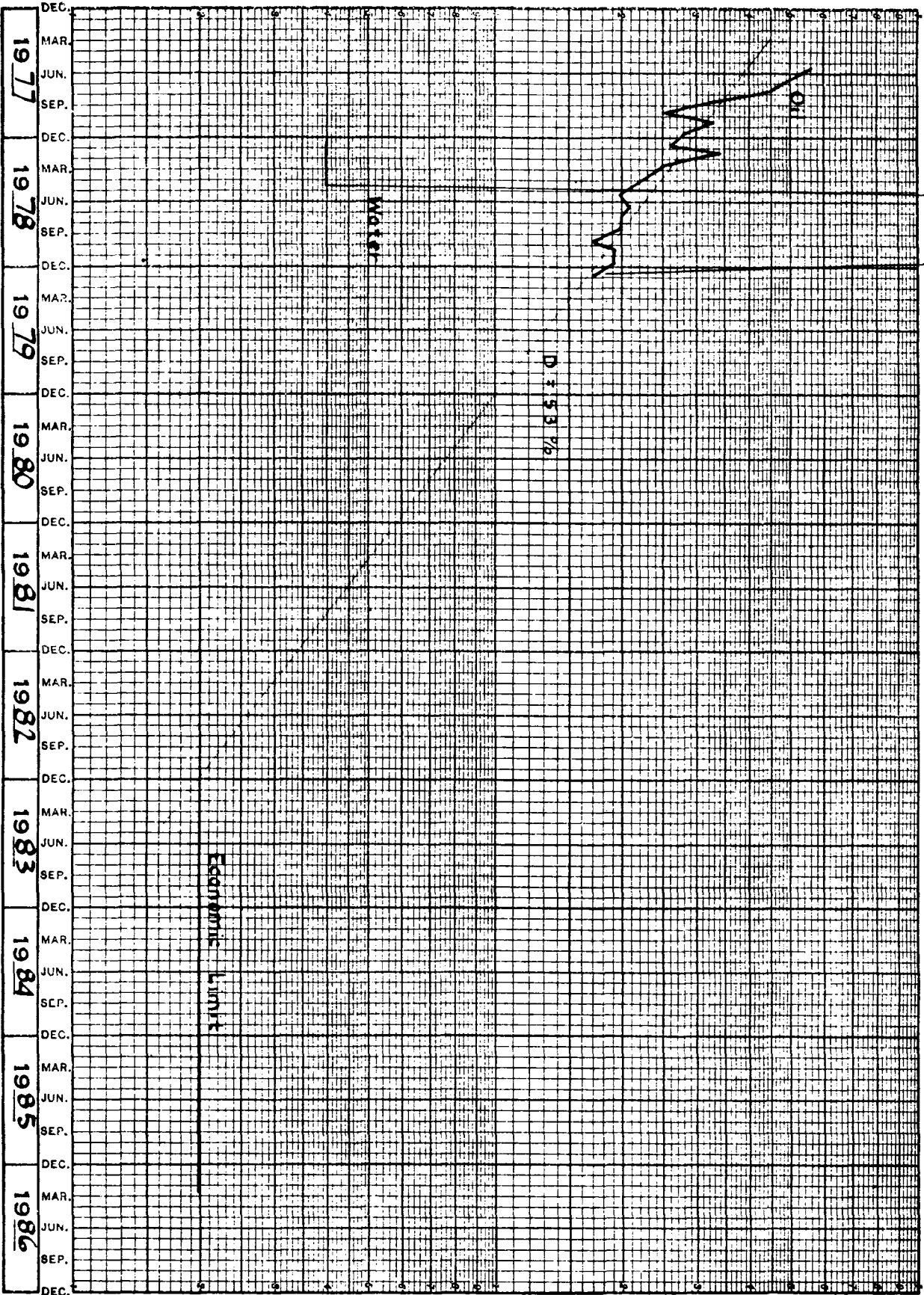


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70-T225 - R28E Eddy Co., NM.

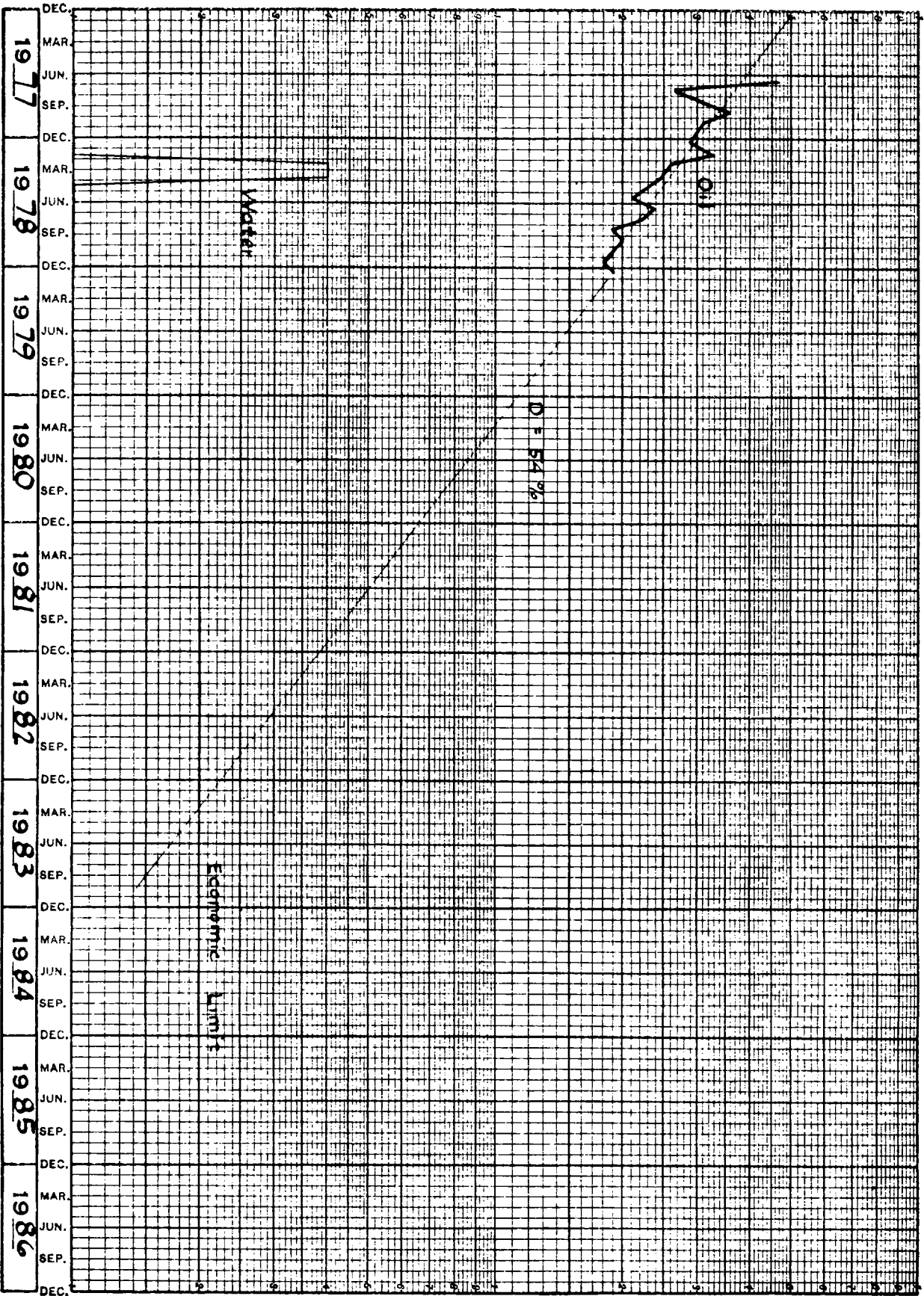


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18L-T2225 - R28E Eddy Co., NM.

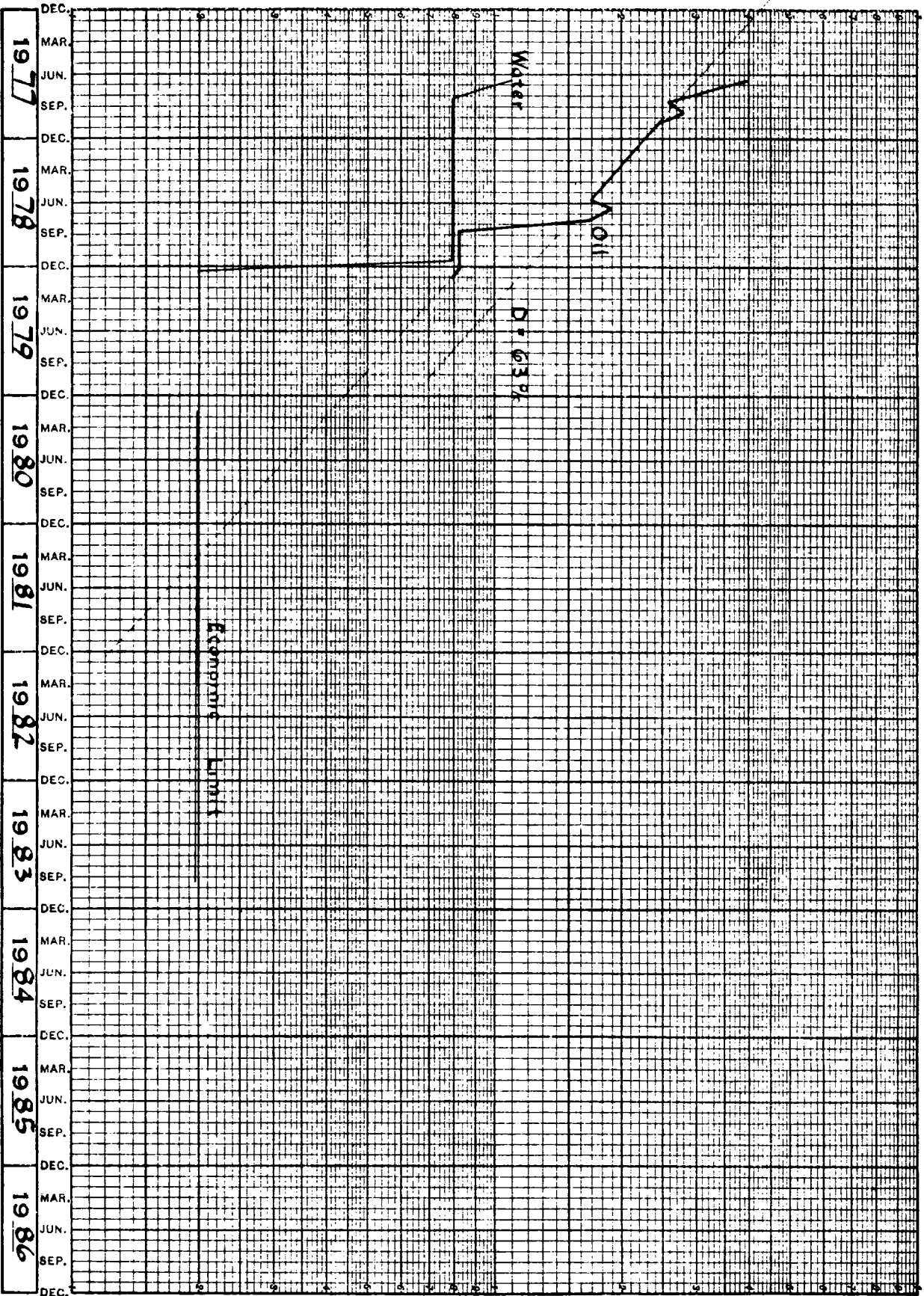


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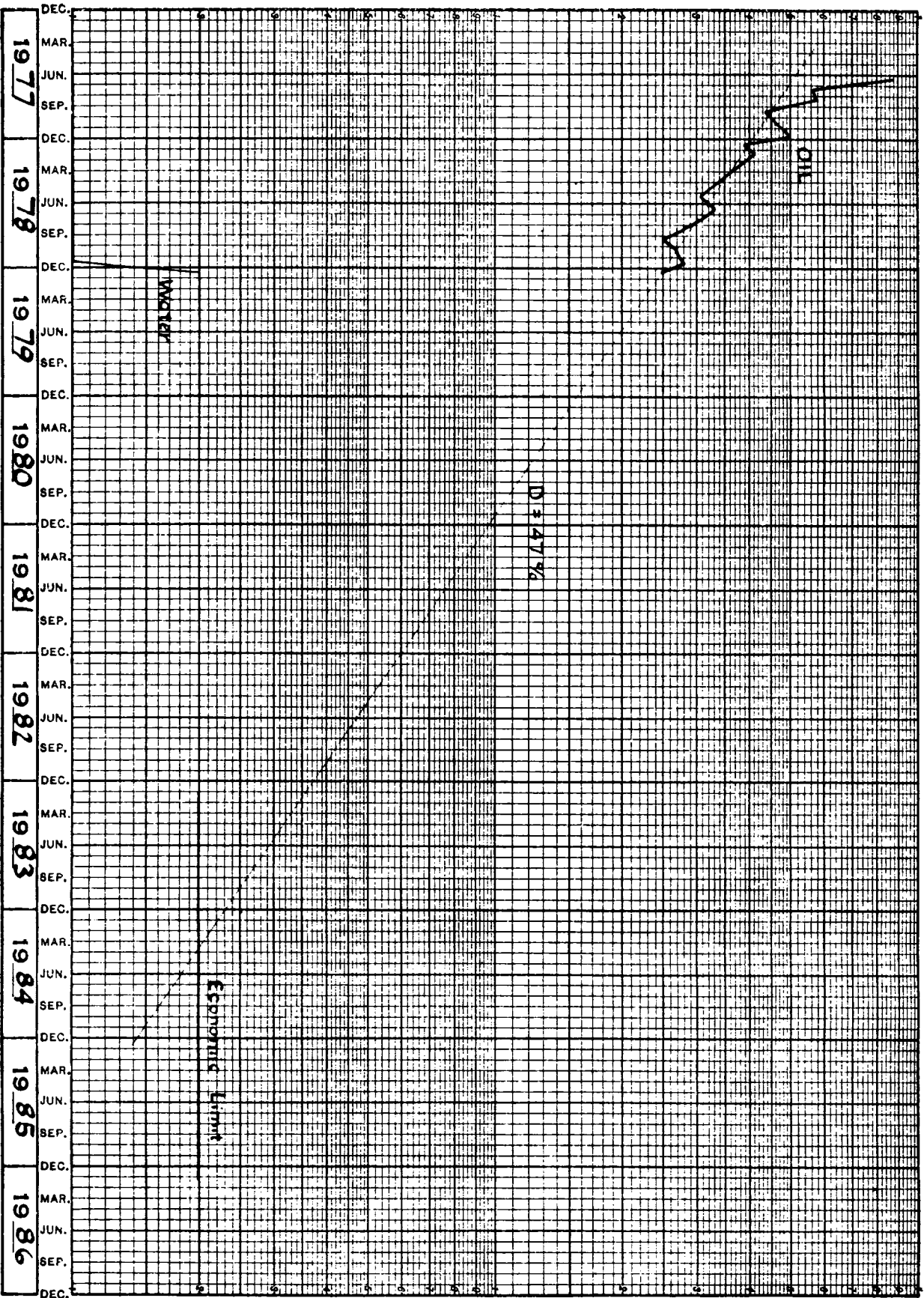


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Old Indian Draw Well No. 24
7J - T225 - R28E Eddy Co., NM



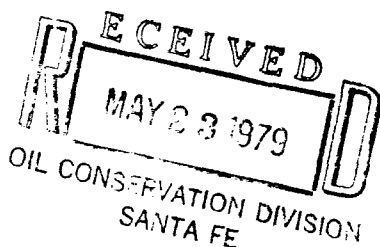
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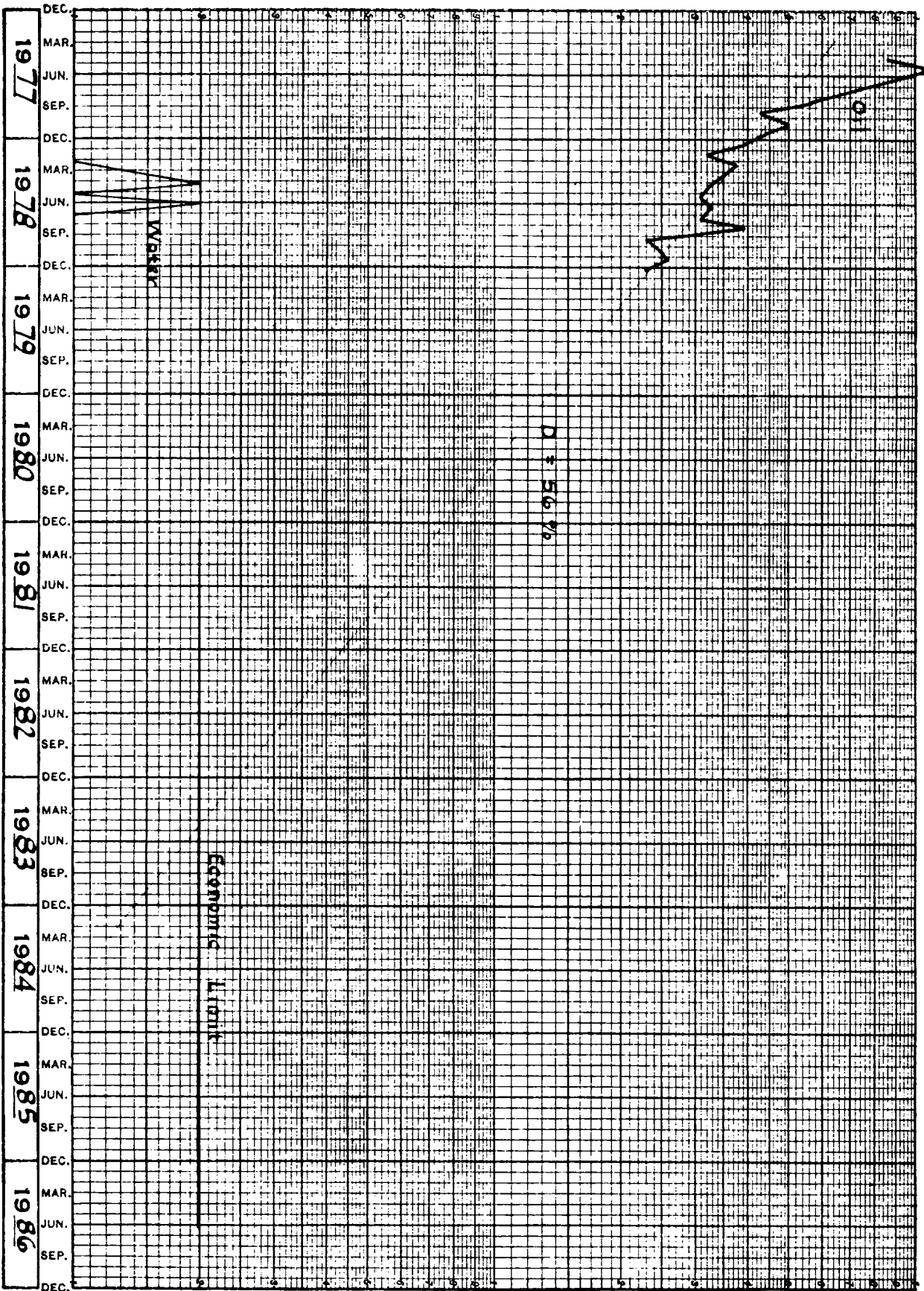
DES/ss
Attachment

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7K-T22S-R28E Eddy Co., NM.

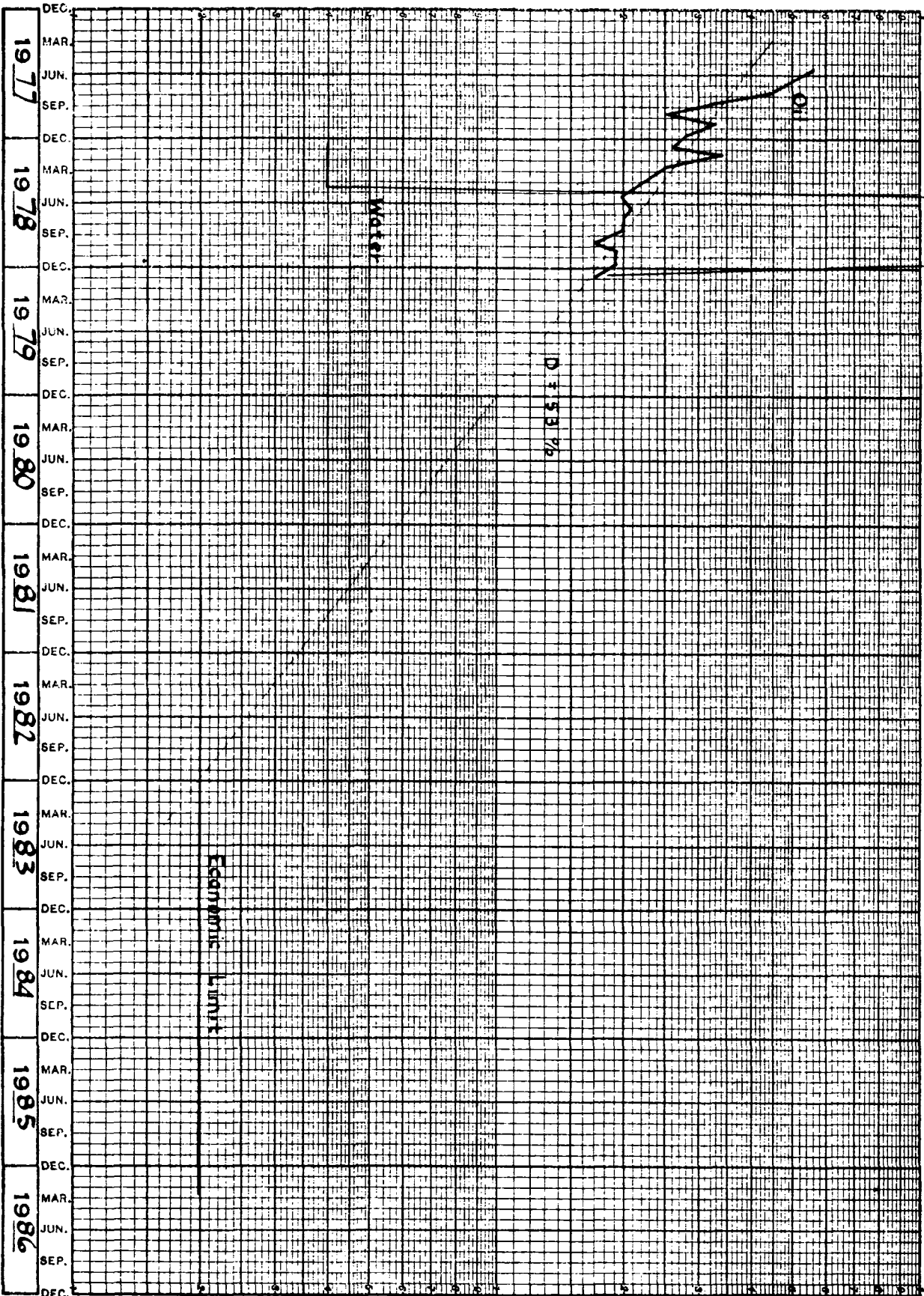


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Old Indian Draw Well No. 21
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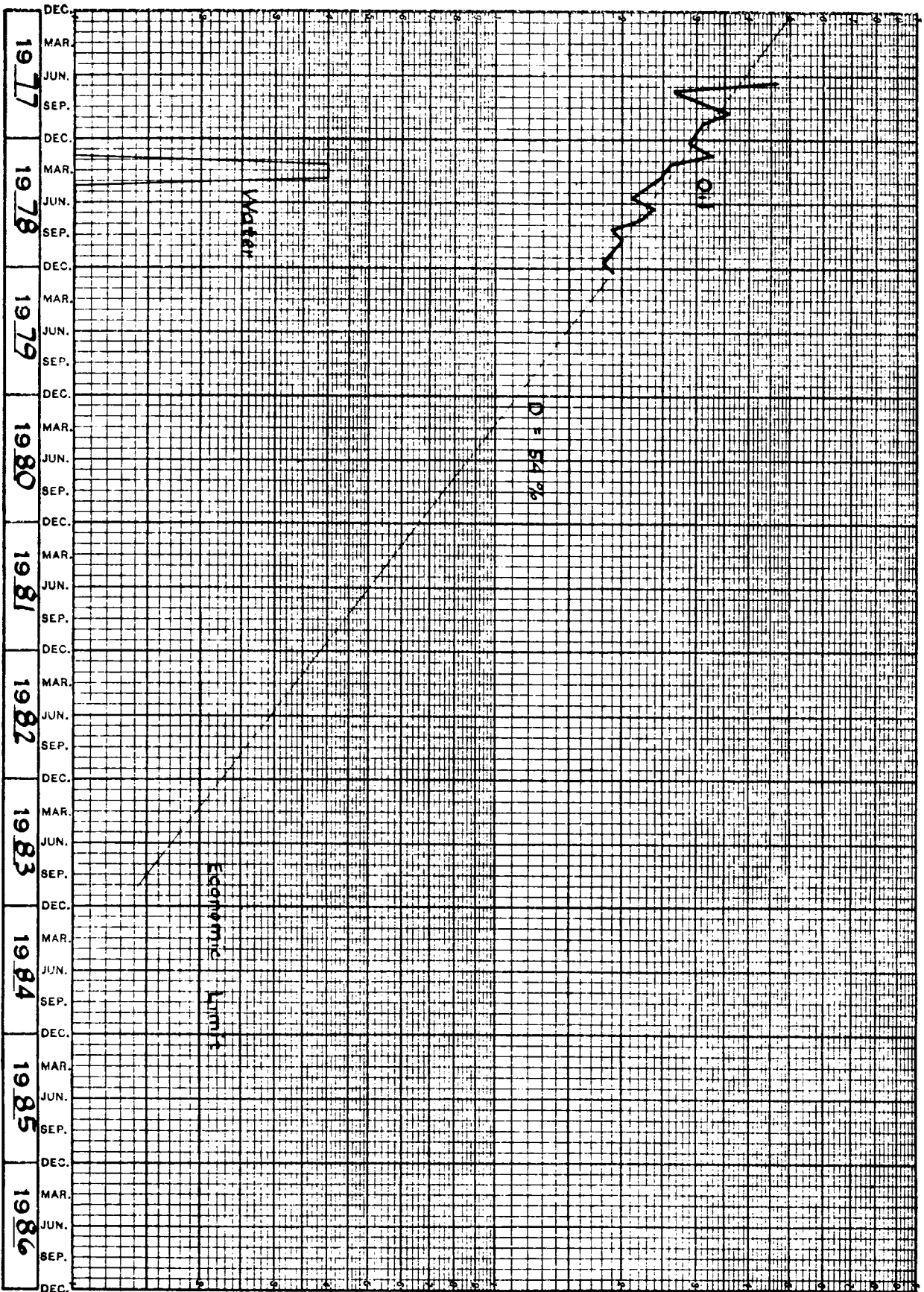


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Old Indian Draw Well No. 22
18L-T2225 - R28E Eddy Co., NM.

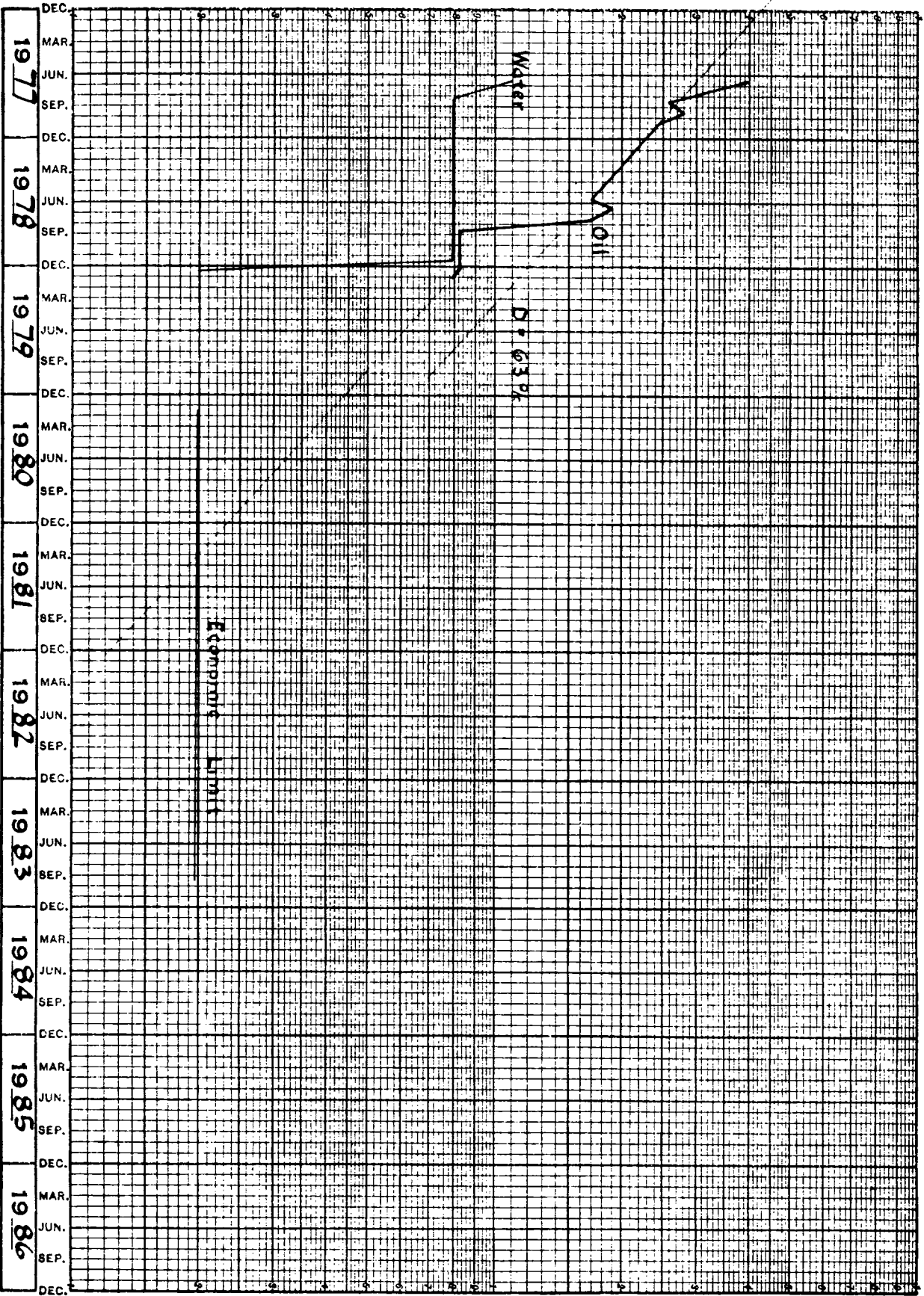


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Old Indian Draw Well No. 23
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ECONOMIC ANALYSIS SUMMARY - OLD INDIAN DRAW UNIT

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