

INFILL DRILLING FINDINGS PURSUANT TO  
SECTION 271.305(b) OF THE FEDERAL ENERGY REGULATORY  
COMMISSION REGULATIONS, NATURAL GAS POLICY ACT OF 1978  
AND OIL CONSERVATION DIVISION ORDER NO. R-6013-A

Operator Doyle Hartman Well Name and No. Northshore Woolworth Well No. 6  
Location: Unit E Sec. 33 Twp. 24S Rng. 37E Cty. Lea

I.  
THE DIVISION FINDS:

- 1) That Section 271.305(b) of the Federal Energy Regulatory Commission Regulations promulgated pursuant to the Natural Gas Policy Act of 1978 provides that, in order for an infill well to qualify as a new onshore production well under Section 103 of said Act, the Division must find that the infill well is necessary to effectively and efficiently drain a portion of the reservoir covered by the proration unit which cannot be so drained by any existing well within that unit.
- 2) That by Order No. R-6013-A, dated February 8, 1980, the Division established an administrative procedure whereby the Division Director and the Division Examiners are empowered to act for the Division and find that an infill well is necessary.
- 3) That the well for which a finding is sought is completed in the Jalmat Tansill Yates Seven divers (Pro Gas) Pool, and the standard spacing unit in said pool is 640 acres.
- 4) That a 160 -acre proration unit comprising the NW/4 of Sec. 33, Twp. 24S, Rng. 37E, is currently dedicated to the Northshore Woolworth Well No. 3 located in Unit E of said section.
- 5) That this proration unit is ( ) standard (X) nonstandard; if nonstandard, said unit was previously approved by Order No. NSP-339.
- 6) That said proration unit is not being effectively and efficiently drained by the existing well(s) on the unit.
- 7) That the drilling and completion of the well for which a finding is sought should result in the production of an additional 626,100 MCF of gas from the proration unit which would not otherwise be recovered.
- 8) That all the requirements of Order No. R-6013-A have been complied with, and that the well for which a finding is sought is necessary to effectively and efficiently drain a portion of the reservoir covered by said proration unit which cannot be so drained by any existing well within the unit.
- 9) That in order to permit effective and efficient drainage of said proration unit, the subject application should be approved.

IT IS THEREFORE ORDERED:

1) That the applicant is hereby authorized to drill the well described in Section I above as an infill well on the existing proration unit described in Section II(4) above. The authorization for infill drilling granted by this order is necessary to permit the drainage of a portion of the reservoir covered by said proration unit which cannot be effectively and efficiently drained by any existing well thereon.

2) That 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 this 22nd day of July, 19 83.

  
DIVISION DIRECTOR

EXAMINER

## OIL CONSERVATION DIVISION

P. O. Box 2088

SANTA FE, NEW MEXICO

87501

ADMINISTRATIVE ORDER

NFL

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STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENTINFILL DRILLING FINDINGS PURSUANT TO  
SECTION 271.305(b) OF THE FEDERAL ENERGY REGULATORY  
COMMISSION REGULATIONS, NATURAL GAS POLICY ACT OF 1978  
AND OIL CONSERVATION DIVISION ORDER NO. R-6013-A

I.

Operator Doyle Hartman Well Name and No. Northshore Woolworth Well No. 6  
Location: Unit E Sec. 33 Twp. 24S Rng. 37E Cty. Lea

II.

## THE DIVISION FINDS:

(1) That Section 271.305(b) of the Federal Energy Regulatory Commission Regulations promulgated pursuant to the Natural Gas Policy Act of 1978 provides that, in order for an infill well to qualify as a new onshore production well under Section 103 of said Act, the Division must find that the infill well is necessary to effectively and efficiently drain a portion of the reservoir covered by the proration unit which cannot be so drained by any existing well within that unit.

(2) That by Order No. R-6013-A, dated February 8, 1980, the Division established an administrative procedure whereby the Division Director and the Division Examiners are empowered to act for the Division and find that an infill well is necessary.

(3) That the well for which a finding is sought is completed in the Jalmat Tansill Yates Seven Rivers (Pro Gas) Pool, and the standard spacing unit in said pool is 640 acres.

(4) That a 160-acre proration unit comprising the NW 1/4 of Sec. 33, Twp. 24S, Rng. 37E, is currently dedicated to the Northshore Woolworth Well No. 3 located in Unit E of said section.

(5) That this proration unit is ( ) standard (X) nonstandard; if nonstandard, said unit was previously approved by Order No. NSP-339.

(6) That said proration unit is not being effectively and efficiently drained by the existing well(s) on the unit.

(7) That the drilling and completion of the well for which a finding is sought should result in the production of an additional 626,100 MCF of gas from the proration unit which would not otherwise be recovered.

(8) That all the requirements of Order No. R-6013-A have been complied with, and that the well for which a finding is sought is necessary to effectively and efficiently drain a portion of the reservoir covered by said proration unit which cannot be so drained by any existing well within the unit.

(9) That in order to permit effective and efficient drainage of said proration unit, the subject application should be approved.

## IT IS THEREFORE ORDERED:

(1) That the applicant is hereby authorized to drill the well described in Section I above as an infill well on the existing proration unit described in Section II(4) above. The authorization for infill drilling granted by this order is necessary to permit the drainage of a portion of the reservoir covered by said proration unit which cannot be effectively and efficiently drained by any existing well thereon.

(2) That 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 this 22nd day of July, 19 83.

DIVISION DIRECTOR

EXAMINER

**DOYLE HARTMAN**

*Oil Operator*

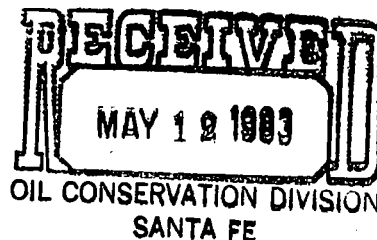
500 N. MAIN

P. O. BOX 10426

MIDLAND, TEXAS 79702

(915) 684-4011

May 10, 1983



State of New Mexico  
Energy and Minerals Department  
Oil Conservation Division  
Post Office Box 2088  
Santa Fe, New Mexico 87501

Attention: Mr. Mike Stogner

Re: Administrative Procedure  
Infill Finding  
Northshore Woolworth No. 6  
1720 FNL & 310 FWL (E)  
Section 33, T-24-S, R-37-E  
Lea County, New Mexico

Gentlemen:

Pursuant to Section 271.305 of the Final Rules and Regulations of the Federal Energy Regulatory Commission relating to Section 103 of the Natural Gas Policy Act of 1978, and to Order R-7247 of the New Mexico Oil Conservation Division, we hereby request an infill finding (NFL) for the above captioned Northshore Woolworth No. 6 located 1720 FNL & 310 FWL (E) Section 33, T-24-S, R-37-E, Lea County, New Mexico.

With regard to our request, and in accordance with Order R-7247, we submit the following:

Rule 5      A copy of approved Form C-101 for the infill well and Form C-102 showing the proration unit dedicated to the well are enclosed.

Rule 6      The name of the pool in which the infill well has been drilled is Jalmat (Gas) Pool, and the standard spacing unit therefor is 640 acres.

Rule 7      The number of the Administrative Order approving the directional drilling, unorthodox location and non-standard proration unit dedicated to the well is R-7247.

Rule 8      Table 1 attached to William P. Aycock's letter dated May 9, 1983 shows the following:

- a. Lease name and well location;
- b. Spud date;
- c. completion date;

- d. a description of any mechanical problems experienced along with a summary of remedial action(s) taken and the results obtained;
- e. the current rate of production;
- f. date of plug and abandonment, if any, and;
- g. a clear and concise statement indicating why the existing well(s) on the proration unit cannot effectively and efficiently drain the portion of the reservoir covered by the proration.

Rule 9

Letter dated May 9, 1983 from William P. Aycock submits geological and engineering information sufficient to support a finding as to the necessity for an infill well including:

- a. formation structure map;
- b. the volume of increased ultimate recovery expected to be obtained and a narrative describing how the increase was determined;
- c. any other supporting data which the applicant deems to be relevant which may include:
  - 1. porosity and permeability factors
  - 2. Production/pressure decline curve
  - 3. effects of secondary recovery or pressure maintenance operations
  - 4. C-104 and C-105 (including Inclination Report)
  - 5. Scout Ticket and Well Log Summary for Doyle Hartman's Northshore Woolworth No. 6 (Infill Jalmat (Gas) Well)
  - 6. Production Histories and Plots, Scout Tickets and Well Log Summaries for Doyle Hartman's Northshore Woolworth No. 3 and No. 5 wells

Rule 10

This application for infill finding is being filed in duplicate with the Santa Fe office of the Oil Conservation Division.

Rule 11

All operators of proration or spacing units offsetting the unit for which this infill finding is sought have been notified of this application by certified or registered mail.

New Mexico Oil Conservation Division  
May 10, 1983  
Page 3

We respectfully request that the Commission grant our request for an infill finding pursuant to Order R-6013-A.

Very truly yours,

DOYLE HARIMAN

*Michelle Hembree*

Michelle Hembree  
Administrative Assistant

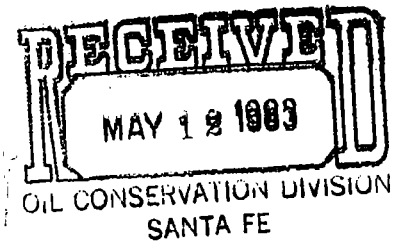
/mh

Enclosures as above

**WILLIAM P. AYCOCK & ASSOCIATES, INC.**

Petroleum Engineering Consultants  
308 WALL TOWERS WEST  
MIDLAND, TEXAS 79701  
PHONE 915/683-5721

May 9, 1982



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

Attention: Mr. Mike Stogner

Subject: Administrative Application for Infill Well Findings  
for Doyle Hartman's Northshore Woolworth No. 6,  
Section 33, Township 24 South, Range 37 East,  
Surface Location, 1720' FNL and 310' FWL,  
Jalmat (Gas) Pool, Lea County, New Mexico

Gentlemen:

Application is hereby made for an administrative infill well finding effective with initial gas deliveries for the described well in accordance with Exhibit "A", Order R-6013-A. The following constitute the requirements of the said Order:

- Rule 5: Attached are copies of the Forms C-101 and C-102.
- Rule 6: The name of the pool in which the infill well has been drilled is the Jalmat Pool, and the standard spacing therefor is 640 acres.
- Rule 7: The non-standard proration unit, unorthodox well location, simultaneous dedication and deviation permit were approved by Order No. R-7247, a copy of which is attached hereto.
- Rule 8: See attached Table No. 1, "Summary of Required Information, Rule 8, Exhibit "A", Order No. R-6013-A" for requirements of Sections "a." through "f.". Also required by Section "g." is "a clear and concise statement indicating why the existing well(s) on the proration unit cannot effectively and efficiently drain the portion of the reservoir covered by the

proration unit." The Jalmat (Gas) Pool wells to which the present 160-acre non-standard proration unit was assigned were the Doyle Hartman (originally Husky Oil Co. of Delaware) Northshore Woolworth No. 3 (2,310' FNL & 330' FWL) and the Doyle Hartman (also originally Husky Oil Co. of Delaware) Northshore Woolworth No. 5 (730' FNL and 1980' FWL); these wells had produced 7,503.3 MMCF as follows:

Operator Well Name and No.	Cumulative Gas Recovery, MMCF at 5-1-83	Estimated Future Gas Recovery, MMCF at 5-1-83
Doyle Hartman		
Northshore Woolworth 3	7,485.3	None
Northshore Woolworth 5	18.0	102.5
TOTAL	7,503.3	102.5

The estimated ultimate gas recovery as noted for the Doyle Hartman Northshore Woolworth No. 5 is 120.5 MMCF as of May 1, 1983, resulting in an estimated future gas recovery for this pre-existing well of 102.5 MMCF. The estimated future life is about twenty years. The Northshore Woolworth No. 3 has not been included in these estimates, as, by virtue of Order R-7247, the Northshore Woolworth 3 "will be shut-in upon successful completion of the Northshore Woolworth 6. Accordingly, any producible gas reserves that remain beneath the subject lease in excess of 120.5 MMCF would have been substantially not recoverable from the subject property without the drilling of the infill application well.

Rule 9:

- Section a. Requires that a formation structure map be submitted; attached is a Yates formation structure map of the immediate area containing the subject lease.
- Section b. Requires that the "volume of increased ultimate recovery expected to be obtained and a narrative describing how the increase was determined " be submitted. The estimated ultimate gas recovery for the Doyle Hartman Northshore Woolworth No. 6 is 626.1 MMCF. Since the gas to be recovered from the

Doyle Hartman Northshore Woolworth No. 5 is estimated to be 102.5 MMCF, the increased ultimated recovery is 523.6 MMCF. The estimate of increased recovery for the Doyle Hartman Northshore Woolworth No. 6 was accomplished as follows:

(1) Well logs for the Doyle Hartman Northshore Woolworth No. 6 were analyzed, resulting in the following:

Mean Porosity, Fraction of Bulk Volume	0.21
Mean Connate Water Saturation, Fraction of Net Effective Pore Volume	0.19
Net Effective Pay Thickness, Feet	82.

Since the gross pay thickness constituting potential gas reservoir for the Northshore Woolworth No. 6 is 95 feet, the above represents a net effective pay thickness to gross pay thickness ratio of 86 percent.

(2) The production test for the Doyle Hartman Northshore Woolworth No. 6 performed on May 2, 1983, was analyzed, resulting in the following:

Stabilized Deliverability Coefficient, MCF/day per psia <sup>2</sup> ,	0.072806
Initial Stabilized Wellhead Shut-in Pressure (Pc), psia	133.2
Initial Gas Formation Volume Factor scf/rcf	8.12

(3) The results of steps (1) and (2) were then combined, resulting in the following:

Original Gas-in-Place

MMCF/Acre	4.91
MMCF/160 Acres	785.5



New Mexico Department of Energy and Minerals,  
Oil Conservation Division  
May 9, 1983  
Page 4

Estimated Gas Recovery Factor,  
Fraction of Original Gas-in-Place 0.797

Estimated Ultimate Recovery,  
MMCF per 160 Acres 626.1

Section c. Other supporting data submitted include the following:

Well Log/Completion Summary for the pre-existing Doyle  
Hartman Northshore Woolworth No. 5.

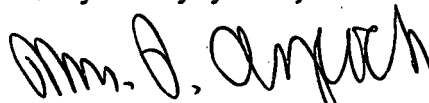
Gas Production History Tabulation and Graph for Doyle Hartman  
Northshore Woolworth No. 5 (the pre-existing well).

Complete New Mexico Oil Conservation Division (NMOCD) Forms  
on file for both the pre-existing Doyle Hartman Northshore  
Woolworth No. 5 and the Infill Hartman Northshore Woolworth  
No. 6.

New Mexico Oil Conservation Division Order No. R-7247

We believe that the above adequately documents this request and has been  
prepared in accordance with Exhibit "A", Order R-6013-A; however, we should  
be pleased to supply anything else which you might require in this  
connection.

Very truly yours,

  
Wm. P. Aycock, P.E.

WPA/pkm

Enclosures

TABLE NO. 1

SUMMARY OF REQUIRED INFORMATION, RULE 8, EXHIBIT "A", ORDER R-6013-A,  
 (Sections "a." through "f.")  
 NATURAL GAS POLICY ACT INFILL FINDINGS, ADMINISTRATIVE PROCEDURE

<u>SECTION OF RULE 8</u>	<u>RULE 8 REQUIREMENT</u>	<u>PRE-EXISTING WELL DOYLE HARTMAN, OPERATOR*</u>	<u>INFILL APPLICATION WELL DOYLE HARTMAN, OPERATOR</u>
a.	Lease Name and Well Location	Northshore Woolworth No. 5 Section 33, T-24-S, R-37-E 730' FNL and 1980' FWL	Northshore Woolworth No. 6 Section 33, T-24-S, R-37-E 1720' FNL and 310' FWL
b.	Spud Date	March 7, 1980	April 7, 1983
c.	Completion Date	June 12, 1980	April 21, 1983
d.	Mechanical Problems	None.	None.
e.	Current Rate of Production	50 MCF/day	C-105: 112 MCF/day
f.	Date of Plug and Abandonment	Not plugged.	Not plugged.

\*Originally operated by Husky Oil Company of Delaware.

30-025-28094<sup>FILE</sup>

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-101  
Revised 1-1-65

5A. Indicate Type of Lease

STATE ☐ PER ☒

State Oil & Gas Lease No.

**RECEIVED**  
MAY 12 1983  
OIL CONSERVATION DIVISION  
SANTA FE

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

Unit Agreement Name

8. Farm or Lease Name

Northshore Woolworth

9. Well No.

6

10. Field and Pool, or Wildcat

Jalmat (Gas)

12. County

Lea

19. Proposed Depth

3350'

19A. Formation

Yates-Seven Rivers

20. Rotary or C.T.

Rotary

21. Elevations (show whether DT, KT, etc.)

3162.0

21A. Kind & Status Plug. Bond

Multi-well Approved

21B. Drilling Contractor

Not Selected

22. Approx. Date Work will start

January 1983

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
12 1/4"	9 5/8"	36.0	400	300	Surface
8 3/4"	7"	23.0	3350	700	Surface

This proposed well will be drilled to a total depth of 3350 feet and will be completed as a Jalmat (Yates-Seven Rivers) gas producer. From the base of the surface pipe through the running of the production casing, the well will be equipped with a 3000 psi double ram BOP system.

Note: Any gas produced from the proposed well has previously been dedicated to El Paso Natural Gas Company.

APPROVAL VALID FOR 180 DAYS  
PERMIT EXPIRES 10/6/83  
UNLESS DRILLING UNDERWAY

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM; IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signed Larry C. Nimmey Title Engineer Date 12/14/82

(This space for State Use)

ORIGINAL SIGNED BY JERRY SEXTON

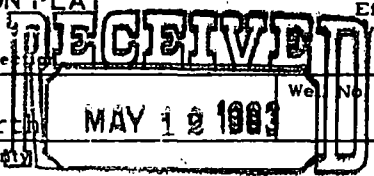
APPROVED BY DISTRICT 1 SUPERVISOR TITLE \_\_\_\_\_ DATE MAR 6 1983

CONDITIONS OF APPROVAL, IF ANY:

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102  
Supersedes C-128  
Effective 1-1-65

All distances must be from the outer boundaries of the Section



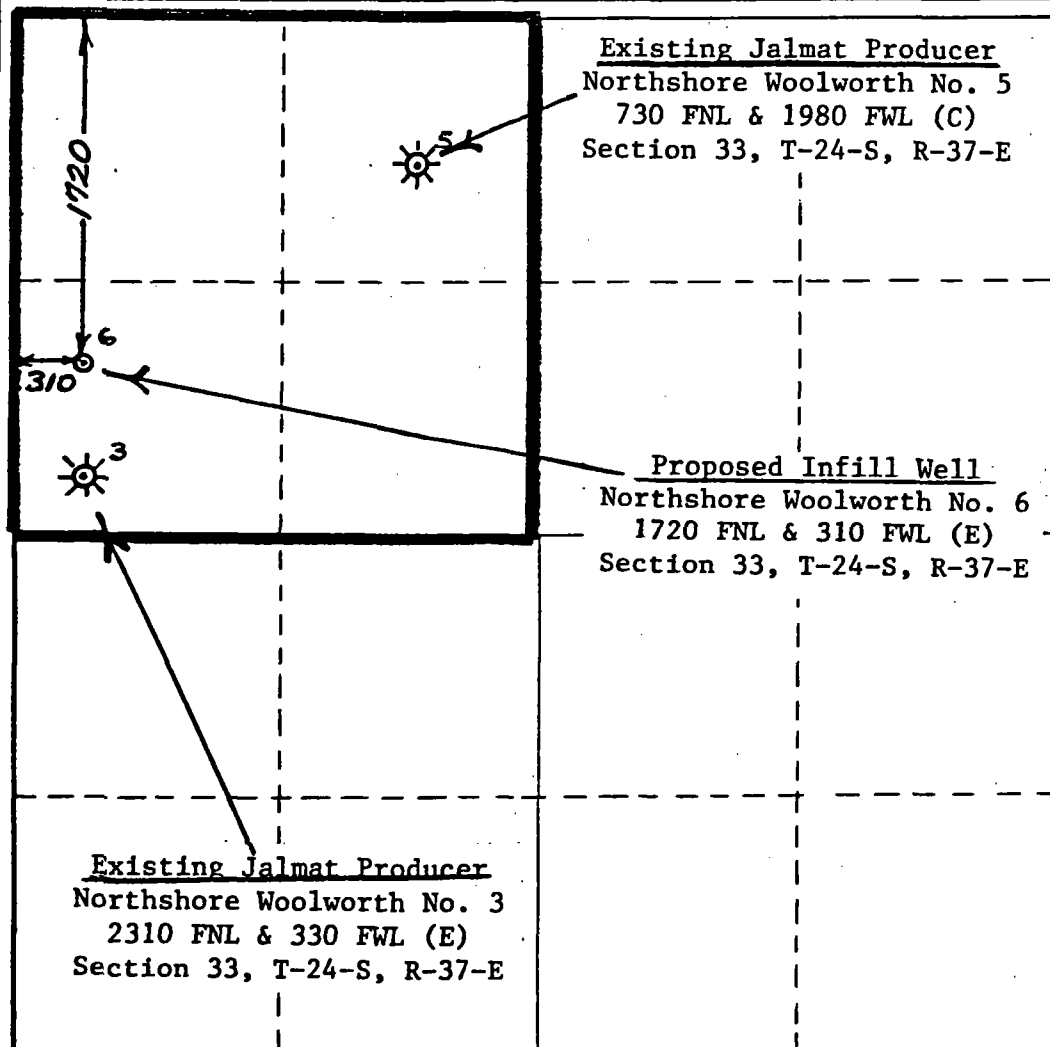
Operator <b>Doyle Hartman, Oil Operator</b>			Lease <b>North Shore Woolworth</b>		Well No. <b>6</b>
Unit Letter <b>E</b>	Section <b>33</b>	Township <b>24 South</b>	Range <b>37 East</b>	County <b>OIL CONSERVATION DIVISION</b>	
Actual Footage Location of Well: <b>1720</b> feet from the <b>North</b> line and <b>310</b> feet from the <b>West</b> line					
Ground Level Elev. <b>3162.0</b>	Producing Formation <b>Yates-Seven Rivers</b>	Pool <b>Jalmat (Gas)</b>		Dedicated Acreage: <b>160</b> Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



**CERTIFICATION**

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

*Larry A. Nermyr*

Name  
**Larry A. Nermyr**

Position  
**Engineer**

Company  
**Doyle Hartman**

Date  
**December 14, 1982**

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed  
**December 10, 1982**

Registered Professional Engineer and/or Land Surveyor

*Truman Gaskin*  
**Truman Gaskin**

Certificate No.  
**2126**

0. 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION COMMISSION

FEC

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
COMMISSION OF NEW MEXICO FOR  
THE PURPOSE OF CONSIDERING:

CASE NO. 7786  
Order No. R-7247

APPLICATION OF DOYLE HARTMAN FOR  
DIRECTIONAL DRILLING, SIMULTANEOUS  
DEDICATION, NON-STANDARD PRORATION UNIT,  
UNORTHODOX LOCATION, AND INFILL DRILLING,  
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:00 a.m. on February 23, 1983, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 31st day of March, 1983, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Doyle Hartman, seeks approval for directional drilling, simultaneous dedication, non-standard proration unit, unorthodox location, and infill drilling for its Northshore Woolworth Well No. 6 to be located no less than 1550 feet and no more than 1750 feet from the North line and no less than 230 feet and no more than 430 feet from the West line of Section 33, Township 24 South, Range 37 East, NMPM, to be directionally drilled to a bottom hole location 1980 feet from the North and 660 feet from the West line of said Section 33, Jalmat Pool, Lea County, New Mexico.
- (3) That the applicant further seeks to infill drill and to simultaneously dedicate to a non-standard gas proration unit comprising the NW/4 of said Section 33, the above described well and its Northshore Woolworth Well No. 5 located in Unit C of said Section 33.

(4) That the Northshore Woolworth Well No. 3, a third well on the proration unit, located in Unit E of said Section 33, will be shut-in upon successful completion of said Well No. 6.

(5) That the unorthodox location is necessitated by the existence of a gasoline plant in the SW/4 NW/4 of said Section 33.

(6) That the applicant proposes to directionally drill the above well to a bottom hole location within 100 feet of a point 1980 feet from the North line and 660 feet from the West line.

(7) That offset operators did appear and opposed any bottom hole location closer than 660 feet to the South and West lines of the NW/4 of said Section 33.

(8) That the bottom hole location of said Northshore Woolworth Well No. 6 should be no closer than 660 feet to the South and West lines of the NW/4 of said Section 33.

IT IS THEREFORE ORDERED:

(1) That Doyle Hartman is hereby authorized to drill its Northshore Woolworth Well No. 6 at an unorthodox location to be located no less than 1550 feet and no more than 1750 feet from the North line and no less than 230 feet and no more than 430 feet from the West line of Section 33, Township 24 South, Range 37 East, NMPM, Jalmat Pool, Lea County, New Mexico.

(2) That the NW/4 of said Section 33 shall be simultaneously dedicated to the above-described well and to applicant's Northshore Woolworth Well No. 5 located in Unit C of said Section 33.

(3) That said Northshore Woolworth Well No. 6 shall be directionally drilled to a bottom hole location no closer than 660 feet nor further than 990 feet from the South and West lines of the NW/4 of said Section 33.

(4) That the Northshore Woolworth Well No. 3, located in Unit E of said Section 33, shall be shut-in upon successful completion of said Well No. 6.

(5) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

Case No. 7786  
Order No. R-7-47

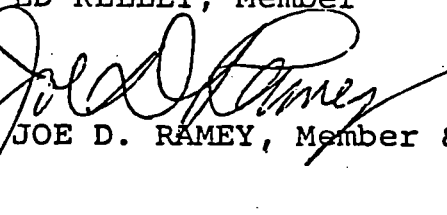
DONE at Santa Fe, New Mexico, on the day and year  
hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

JIM BACA, Member



ED KELLEY, Member



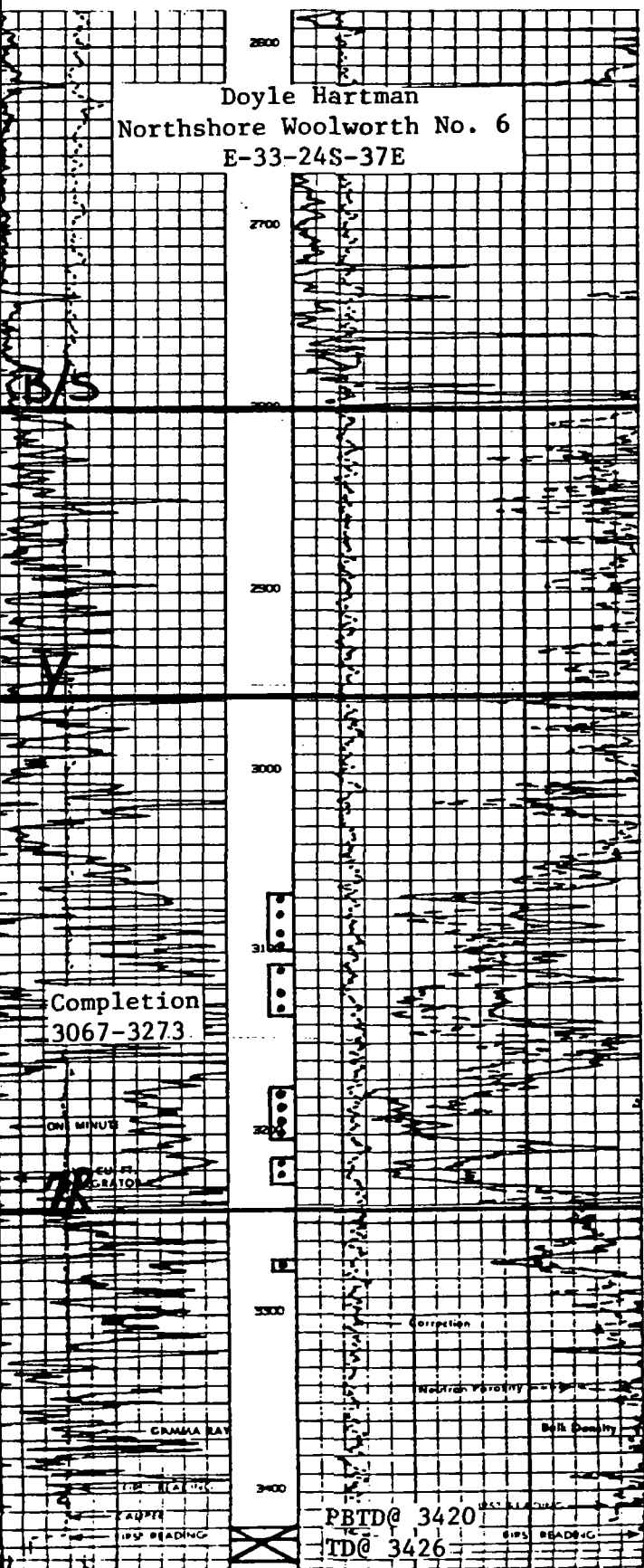
JOE D. RAMEY, Member & Secretary

S E A L









COMPANY Doyle Hartman

WELL Northshore Woolworth No. 6

FIELD Jalmat (Gas)

LOCATION 1710 FNL & 310 FWL (E)

Section 33, T-24-S, R-37-E

(24-37-33-E)

COUNTY Lea

STATE New Mexico

ELEVATIONS: KB 3273

DF 3272

GL 3262

### COMPLETION RECORD

SPUD DATE 4-7-83

COMP. DATE 4-21-83

TD 3426 \* (3366)

PBTD 3420 \* (3361)

CASING RECORD 9 5/8 @ 467 w/250

7 @ 3426 w/700

PERFORATING RECORD

Perf: 3067-3273 w/21.

\* (3009-3220)

STIMULATION A/5500

IP IPF= 112 MCFPD + 1 BWPD

GOR

GR

TP 45

CP83

CHOKE 18/64

TUBING

@

REMARKS

\* (True Vertical Depth)

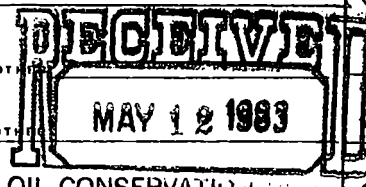
FRC

Form C-105  
Revised 11-80NEW MEXICO OIL CONSERVATION COMMISSION  
WELL COMPLETION OR RECOMPLETION REPORT AND LOG

NO. COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	

5a. Indicate Type of Lease	State <input type="checkbox"/>	Fee <input checked="" type="checkbox"/>
5. State Oil & Gas Lease No.		
Unit Agreement Date		
Term or Lease Date		
Northshore Woolworth		
Well No.		

1a. TYPE OF WELL	OIL WELL <input type="checkbox"/>	GAS WELL <input checked="" type="checkbox"/>	DRY <input type="checkbox"/>
b. TYPE OF COMPLETION	NEW WELL <input checked="" type="checkbox"/>	WORK OVER <input type="checkbox"/>	DEEPEN <input type="checkbox"/>
	PLUG BACK <input type="checkbox"/>	DIFF. REFR. <input type="checkbox"/>	



2. Name of Operator	Doyle Hartman
3. Address of Operator	Post Office Box 10426, Midland, Texas 79702

10. Field and Pool, or Wildcat	Jalmat (Gas)
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4. Location of Well	Bottom Hole Location = Unit E, 1967 FNL & 711 FWL
UNIT LETTER	E
LOCATED	1720
FEET FROM THE	North
LINE AND	310
FEET FROM	

12. County	Lea
------------	-----

THE	West	LINE OF SEC.	33	TWP.	24S	RGE.	37E	NMPM
-----	------	--------------	----	------	-----	------	-----	------

15. Date Spudded	16. Date T.D. Reached	17. Date Compl. (Ready to Prod.)	18. Elevations (DF, RKB, RT, GR, etc.)	19. Elev. Casinghead
4-7-83	4-18-83	4-21-83	3262 GL	3262

20. Total Depth	21. Plug Back T.D.	22. If Multiple Compl., How Many	23. Intervals Drilled By	24. Rotary Tools	25. Cable Tools
3426 (3366)	3420 (3361)		0-3426		

24. Producing Interval(s), of this completion - Top, Bottom, Name	25. Was Directional Survey Made
3067-3273 (3009-3220) W/21 Yates-Seven Rivers Note: (True Vertical Depth)	Yes

26. Type Electric and Other Logs Run	27. Was Well Cored
CDL-DSN-GR and Guard Forxo	No

28. CASING RECORD (Report all strings set in well)					
CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9 5/8	36.0	467	12 1/4	250 (Circ)	None
7	26.0	3426	8 3/4	700 (Circ)	None

29. LINER RECORD				30. TUBING RECORD			
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
21 Holes with one shot each at:							

31. Perforation Record (Interval, size and number)	32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.
3067 (3009) 3070 (3012), 3079 (3021), 3091 (3033), 3099 (3041), 3108 (3050), 3123 (3065), 3133 (3075), 3173 (3115), 3178 (3120), 3183 (3125), 3187 (3129), 3193 (3135), 3198 (3140), 3202 (3144), 3213 (3155), 3217 (3159), 3222 (3164), 3227 (3169), 3270 (3212), 3273 (3215).	DEPTH INTERVAL 3067-3273 (3009-3220) AMOUNT AND KIND MATERIAL USED A/5500 15% MCA

33. PRODUCTION							
Date First Production	Production Method (Flowing, gas lift, pumping - Size and type pump)				Well Status (Prod. or Shut-in)		
4-21-83	Flowing				Shut-in		
Date of Test	Hours Tested	Choke Size	Prod'n. For Test Period	Oil - Bbl.	Gas - MCF	Water - Bbl.	Gas - Oil Ratio
4-22-83	24	18/64			112	1	
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API (Corr.)	
45 psi	83 psi			112	1		

34. Disposition of Gas (Sold, used for fuel, vented, etc.)	Test Witnessed By
Vented	Harold Swain

35. List of Attachments	
None	

36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.

SIGNED Larry G. [Signature] TITLE Engineer DATE April 22, 1983

This form is to be filed with the appropriate District Office of the Commission not later than 30 days after the completion of any newly-drilled or deepened well. It shall be accompanied by a copy of all electrical and radioactivity logs in the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of conventionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 30 through 34 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1105.

# INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

## Southeastern New Mexico

## Northwestern New Mexico

T. Anhy <u>1210 (1190)</u>	T. Canyon _____	T. Ojo Alamo _____	T. Penn. "B" _____
T. Salt <u>1304 (1279)</u>	T. Strawn _____	T. Kirtland-Fruitland _____	T. Penn. "C" _____
T. Salt <u>2800 (2741)</u>	T. Atoka _____	T. Pictured Cliffs _____	T. Penn. "D" _____
T. Yates <u>2958 (2899)</u>	T. Miss _____	T. Cliff House _____	T. Leadville _____
T. 7 Rivers <u>3243 (3183)</u>	T. Devonian _____	T. Menefee _____	T. Madison _____
T. Queen _____	T. Silurian _____	T. Point Lookout _____	T. Elbert _____
T. Grayburg _____	T. Montoya _____	T. Mancos _____	T. McCracken _____
T. San Andres _____	T. Simpson _____	T. Gallup _____	T. Ignacio Ortiz _____
T. Glorieta _____	T. McKee _____	Base Greenhorn _____	T. Granite _____
T. Paddock _____	T. Ellenburger _____	T. Dakota _____	T. _____
T. Blinebry _____	T. Gr. Wash _____	T. Morrison _____	T. _____
T. Tubb _____	T. Granite _____	T. Todilto _____	T. _____
T. Drinkard _____	T. Delaware Sand _____	T. Entrada _____	T. _____
T. Abo _____	T. Bone Springs _____	T. Wingate _____	T. _____
T. Wolfcamp _____	T. _____	T. Chinle _____	T. _____
T. Penn. _____	T. _____	T. Permian _____	T. _____
T. Cisco (Bough C) _____	T. _____	T. Penn. "A" _____	T. _____

## OIL OR GAS SANDS OR ZONES

No. 1, from 3067 (3009) to 3273 (3215) No. 4, from \_\_\_\_\_ to \_\_\_\_\_

No. 2, from \_\_\_\_\_ to \_\_\_\_\_ No. 5, from \_\_\_\_\_ to \_\_\_\_\_

No. 3, from \_\_\_\_\_ to \_\_\_\_\_ No. 6, from \_\_\_\_\_ to \_\_\_\_\_

## IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from \_\_\_\_\_ to \_\_\_\_\_ feet

No. 2, from \_\_\_\_\_ to \_\_\_\_\_ feet

No. 3, from \_\_\_\_\_ to \_\_\_\_\_ feet

No. 4, from \_\_\_\_\_ to \_\_\_\_\_ feet

## FORMATION RECORD (Attach additional sheets if necessary)

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
1210 (1190)	1304 (1279)	89	Anhydrite				
1304 (1279)	2800 (2741)	1462	Salt and Anhydrite				
2800 (2741)	2958 (2899)	158	Dolomite and Anhydrite				
2958 (2899)	3243 (3183)	248	Dolomite and Sandstone				
3243 (3183)	3426 (3366)	183	Dolomite and Sandstone				



**REPORT  
of  
SUB-SURFACE  
DIRECTIONAL  
SURVEY**

Doyle Hartman  
COMPANY

Northshore Woolworth Well No. 6  
WELL NAME

Lea County, New Mexico  
LOCATION

JOB NUMBER  
WT0483-G0189  
WT0483-S0200

TYPE OF SURVEY  
Gyroscopic Multi Shot  
Magnetic Multi Shot

DATE  
4/8/83  
4/10/83

SURVEY BY  
Gary DeSpain, Doug Jeffers

OFFICE  
West Texas

DOYLE HARTMAN  
NORTH SHORE WOOLWORTH WELL NO. 6  
LEA COUNTY, NEW MEXICO  
4/8/83

BD1-271

EASTMAN WHIPSTOCK INC.  
GYROSCOPIC MULTI SHOT SURVEY  
SURVEYOR: GARY DESPAIN  
MAGNETIC MULTI SHOT SURVEY  
SURVEYOR: DOUG JEFFERS

WT0483-G0189  
(0'-400')  
WT0483-S0200  
(400'-3420')

VERTICAL SECTION CALCULATED IN PLANE OF PROPOSAL  
DIRECTION: S 54 DEG 1 MIN. E

**Eastman**

**Whipstock**

A PETROLANE COMPANY

RECORD OF SURVEY

RADIUS OF CURVATURE METHOD

DOYLE HARTMAN  
NORTH SHORE WOOLWORTH WELL NO.6  
LEA COUNTY, NEW MEXICO BD1-271

COMPUTATION  
TIME DATE  
08:54:29 19-APR-83  
PAGE NO.

MEASURED DEPTH FEET	DRIFT ANGLE D M	DRIFT DIRECTION D	COURSE LENGTH FEET	TRUE VERTICAL DEPTH FEET	VERTICAL SECTION FEET	R E C T A N G U L A R C O O R D I N A T E S FEET		DOGLEG SEVERITY DG/100FT
0.	0 0	0	0.	0.00	0.00	0.00	0.00	0.00
50.	0 30	N 29 E	50.	50.00	-0.03	0.19 N	0.11 E	1.00
100.	0 30	N 62 W	50.	100.00	-0.34	0.57 N	0.01 W	1.43
150.	0 30	N 20 W	50.	150.00	-0.75	0.89 N	0.29 W	0.72
200.	0 30	N 47 W	50.	199.99	-1.16	1.25 N	0.52 W	0.47
250.	0 45	N 61 W	50.	249.99	-1.70	1.57 N	0.96 W	0.58
300.	0 45	N 52 W	50.	299.99	-2.35	1.93 N	1.51 W	0.24
350.	0 45	N 48 W	50.	349.98	-3.01	2.35 N	2.01 W	0.10
400.	0 45	N 44 W	50.	399.98	-3.66	2.80 N	2.48 W	0.10
454.	0 15	N 50 W	54.	453.98	-4.12	3.13 N	2.83 W	0.93
517.	2 0	S 35 E	63.	516.96	-4.29	2.55 N	3.45 W	3.56
581.	5 0	S 25 E	64.	580.83	-0.71	0.83 S	1.50 W	4.77
644.	8 0	S 30 E	63.	643.42	5.65	7.15 S	1.79 E	4.84
707.	10 0	S 47 E	63.	705.64	15.11	14.84 S	7.90 E	5.25
770.	12 30	S 50 E	63.	767.43	27.34	22.98 S	17.10 E	4.07
833.	13 0	S 63 E	63.	828.87	41.20	30.64 S	28.67 E	4.61
896.	13 45	S 69 E	63.	890.17	55.45	36.56 S	41.98 E	2.50
959.	15 30	S 72 E	63.	951.12	70.70	41.87 S	56.97 E	3.03
1022.	15 45	S 71 E	63.	1011.79	86.89	47.25 S	73.06 E	0.51
1085.	15 45	S 72 E	63.	1072.43	103.20	52.68 S	89.28 E	0.43
1148.	15 30	S 71 E	63.	1133.10	119.38	58.06 S	105.37 E	0.58
1212.	16 0	S 70 E	64.	1194.70	136.04	63.86 S	121.75 E	0.89
1275.	15 45	S 71 E	63.	1255.29	152.56	69.61 S	137.99 E	0.59
1338.	16 0	S 72 E	63.	1315.89	169.00	75.08 S	154.34 E	0.59
1401.	16 15	S 73 E	63.	1376.41	185.60	80.34 S	171.02 E	0.59
1464.	15 45	S 72 E	63.	1436.97	202.07	85.57 S	187.58 E	0.91
1527.	15 15	S 71 E	63.	1497.68	218.12	90.91 S	203.55 E	0.90
1590.	16 15	S 59 E	63.	1558.31	234.88	98.12 S	219.02 E	5.40
1653.	17 45	S 58 E	63.	1618.56	253.24	107.75 S	234.73 E	2.43
1716.	17 0	S 59 E	63.	1678.68	272.00	117.58 S	250.77 E	1.28

DOYLE HARTMAN  
NORTH SHORE WOOLWORTH WELL NO. 6  
LEA COUNTY, NEW MEXICO BD1-271

COMPUTATION  
TIME DATE  
08:54:29 19-APR-83

PAGE NO.:

MEASURED DEPTH FEET	DRIFT ANGLE D M	DRIFT DIRECTION D	COURSE LENGTH FEET	TRUE VERTICAL DEPTH FEET	VERTICAL SECTION FEET	R E C T A N G U L A R C O O R D I N A T E S FEET		DOGLEG SEVERITY DG/100FT
1779.	15 45	S 59 E	63.	1739.13	289.69	126.72 S	265.99 E	1.98
1843.	15 15	S 59 E	64.	1800.80	306.73	135.53 S	280.65 E	0.78
1906.	14 15	S 59 E	63.	1861.72	322.71	143.79 S	294.40 E	1.59
1969.	13 30	S 58 E	63.	1922.88	337.77	151.69 S	307.28 E	1.25
2032.	12 45	S 57 E	63.	1984.24	352.05	159.37 S	319.35 E	1.24
2095.	12 15	S 55 E	63.	2045.75	365.68	167.00 S	330.65 E	1.05
2158.	11 45	S 58 E	63.	2107.37	378.76	174.23 S	341.57 E	1.27
2221.	11 0	S 61 E	63.	2169.13	391.13	180.53 S	352.28 E	1.52
2284.	10 45	S 62 E	63.	2231.00	402.91	186.20 S	362.72 E	0.50
2347.	10 15	S 64 E	63.	2292.94	414.25	191.41 S	372.95 E	0.98
2410.	9 0	S 65 E	63.	2355.06	424.61	195.95 S	382.46 E	2.00
2474.	8 45	S 68 E	64.	2418.29	434.25	199.89 S	391.51 E	0.82
2537.	8 0	S 67 E	63.	2480.62	443.17	203.40 S	399.99 E	1.21
2600.	6 45	S 64 E	63.	2543.09	451.10	206.75 S	407.35 E	2.08
2663.	5 30	S 50 E	63.	2605.73	457.79	210.40 S	412.97 E	3.08
2726.	4 15	S 30 E	63.	2668.50	462.96	214.48 S	416.39 E	3.32
2789.	4 15	S 6 E	63.	2731.33	466.71	218.89 S	417.83 E	2.80
2852.	4 15	S 20 W	63.	2794.16	468.95	223.49 S	417.26 E	3.03
2915.	4 0	S 34 W	63.	2856.99	469.66	227.51 S	415.21 E	1.64
2978.	3 45	S 33 W	63.	2919.85	469.84	231.06 S	412.86 E	0.41
3041.	3 0	S 35 W	63.	2982.74	469.97	234.14 S	410.79 E	1.20
3105.	2 45	S 35 W	64.	3046.66	470.03	236.77 S	408.94 E	0.39
3168.	3 0	S 37 W	63.	3109.58	470.02	239.32 S	407.09 E	0.43
3231.	2 45	S 31 W	63.	3172.50	470.13	241.94 S	405.32 E	0.62
3294.	2 0	S 36 W	63.	3235.45	470.25	244.12 S	403.88 E	1.23
3357.	1 45	S 47 W	63.	3298.41	470.05	245.66 S	402.52 E	0.69
3420.	1 45	S 45 W	63.	3361.38	469.71	247.00 S	401.13 E	0.10

FINAL CLOSURE - DIRECTION: S 58 DEGS 23 MINS E  
DISTANCE: 471.08 FEET

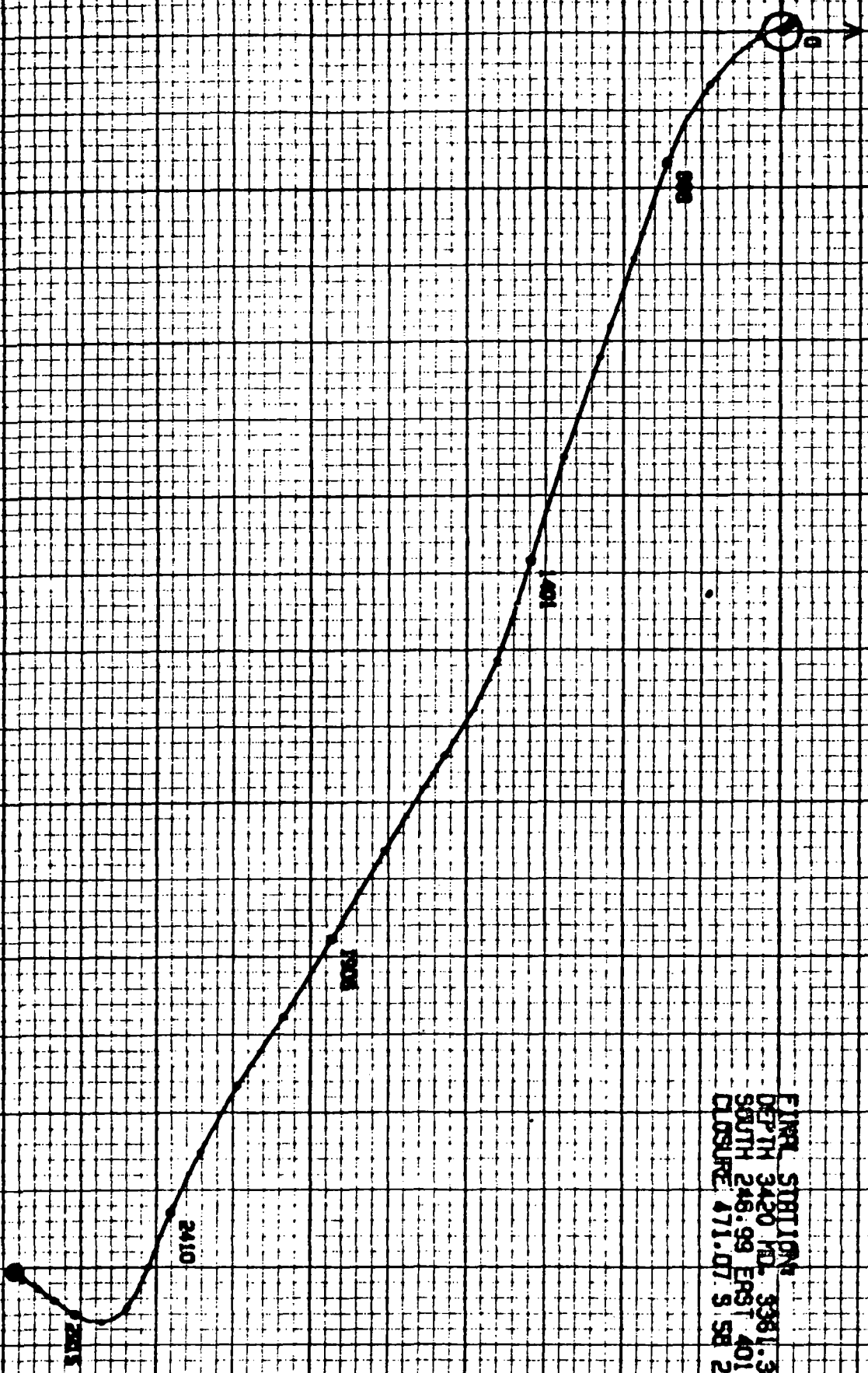


DOYLE HARRISON  
NORTH STONE HILL NORTH WELL NO. 6  
LER COUNTY, NEW MEXICO 801-271

EASTERN INSURANCE, INC.

HORIZONTAL PROJECTION  
SCALE 1 IN. = 50 FEET  
DEPTH INDICATOR NO

FINAL STATION:  
DEPTH 3420 MD. 3381.38 TVD  
SOUTH 248.99 EAST 401.13  
CLOSURE 471.07 S. 58 22.39 E





P. O. Box 5577/Midland, Texas 79704/(915) 563-0511

# SURVEY CERTIFICATION SHEET

STATE OF TEXAS  
COUNTY OF MIDLAND

I, Gary DeSpain, in the employ of Eastman Whipstock, Inc., did on the days of 4-8, 1983 thru 4-8, 1983 conduct or supervise the taking of a Gyroscopic Multi Shot survey by the method of magnetic orientation from a depth of 0 feet to 400 feet, with recordings of inclination and direction being obtained at approximate intervals of 50 feet.

This survey was conducted at the request of Doyle Hartman for their North Shore Woolworth #6, Lea County County, State of New Mexico, in the \_\_\_\_\_ field.

This data for this survey and the calculation were obtained and performed by me according to standards and procedures as set forth by Eastman Whipstock, Inc. and is true and correct to the best of my knowledge.

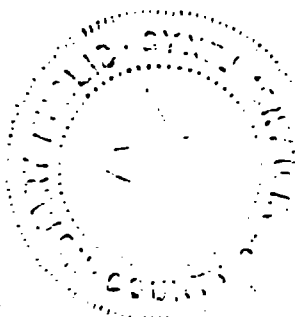
Gary DeSpain  
Directional Supervisor / Surveyor

The data for this survey has been examined by me and conforms to principles and procedures set forth by Eastman Whipstock, Inc.

Troy Dwyer  
Before me, the undersigned authority, on this day personally appeared Gary DeSpain, known to me to be the person whose name is subscribed to this instrument, who after being by me duly sworn on oath, states that he has knowledge of all the facts stated above and that this instrument is a true statement of facts therein recited.

Subscribed and sworn to before me on this 19TH day of April, 1983

Ray E. Stainke  
Notary Public in and for the  
County of Midland, Texas  
My commission expires 7/9/85





P. O. Box 5577/Midland, Texas 79704/(915) 563-0511

# SURVEY CERTIFICATION SHEET

STATE OF TEXAS  
COUNTY OF MIDLAND

I, Doug Jeffers, in the employ of Eastman Whipstock, Inc., did on the days of April 18, 1983 thru April 18, 1983 conduct or supervise the taking of a Magnetic Multi Shot survey by the method of magnetic orientation from a depth of 400 feet to 3420 feet, with recordings of inclination and direction being obtained at approximate intervals of 93 feet.

This survey was conducted at the request of Doyle Hartman for their North Shore Woolworth #6, Lea County, State of New Mexico, in the \_\_\_\_\_ field.

This data for this survey and the calculation were obtained and performed by me according to standards and procedures as set forth by Eastman Whipstock, Inc. and is true and correct to the best of my knowledge.

Doug Jeffers  
Directional Supervisor/ Surveyor

The data for this survey has been examined by me and conforms to principles and procedures set forth by Eastman Whipstock, Inc.

Doug Jeffers  
Before me, the undersigned authority, on this day personally appeared Doug Jeffers, known to me to be the person whose name is subscribed to this instrument, who after being by me duly sworn on oath, states that he has knowledge of all the facts stated above and that this instrument is a true statement of facts therein recited.

Subscribed and sworn to before me on this 19TH day of April, 1983

Doyle Hartman  
Notary Public in and for the  
County of Midland, Texas  
My commission expires 7/9/85



NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102  
Supersedes C-124  
Effective 1-1-65

All distances must be from the outer boundaries of the Section

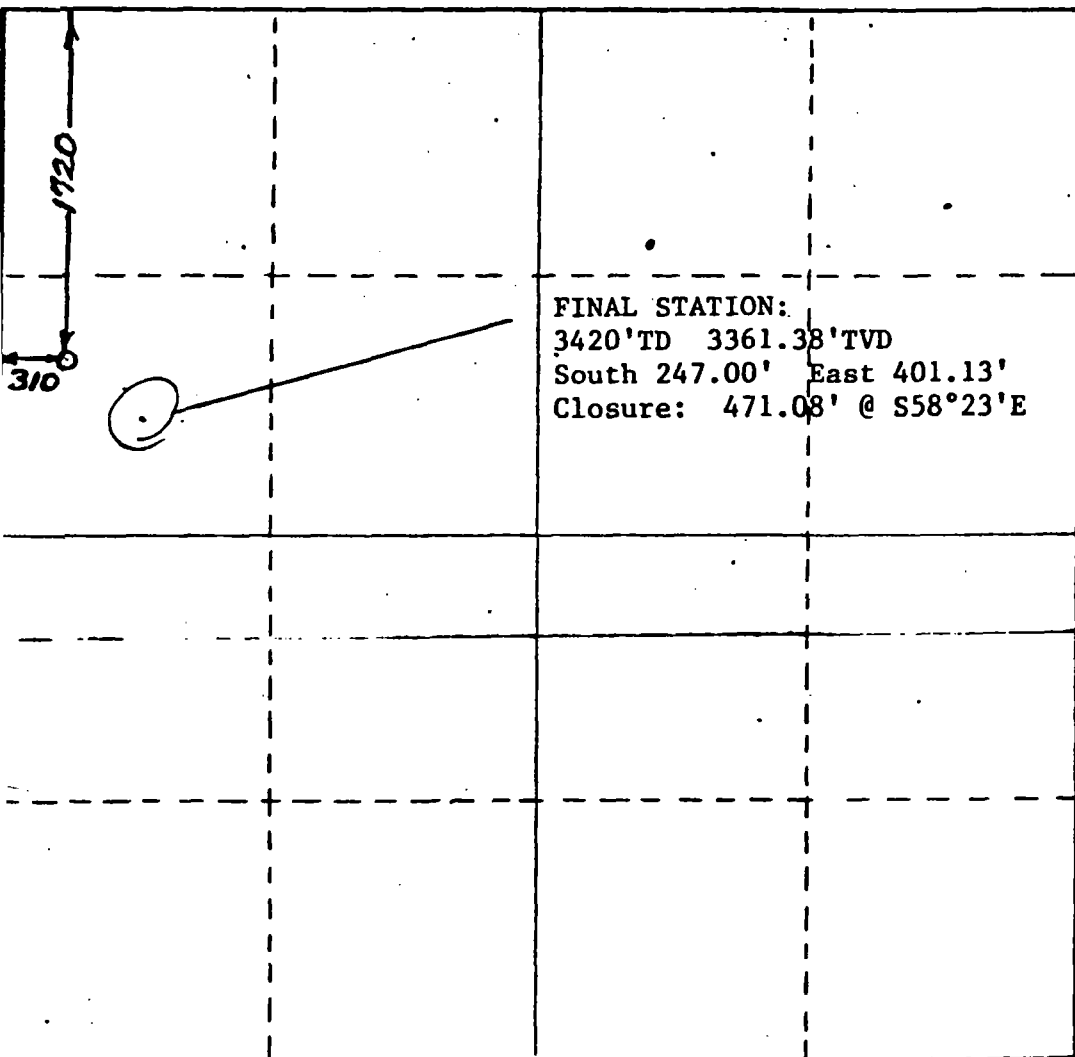
Operator <b>Doyle Hartman</b>		Lease <b>Northshore-Woolworth</b>		Well No. <b>6</b>	
Unit Letter <b>E</b>	Section <b>33</b>	Township <b>24 South</b>	Range <b>37 East</b>	County <b>De La</b>	
Actual Footage Location of Well: <b>1720</b> feet from the <b>North</b> line and <b>310</b> feet from the <b>West</b> line.				Oil Conservation Division <b>SANTA FE</b>	
Ground Level Elev. <b>3162.0</b>	Producing Formation <b>Yates-Seven Rivers</b>	Pool <b>Jalmat (Gas)</b>	Dedicated Acreage: <b>160</b> Acres		

- Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

*Larry A. Nermyr*

Name	<b>Larry A. Nermyr</b>
Position	<b>Engineer</b>
Company	<b>Doyle Hartman</b>
Date	<b>February 11, 1983</b>

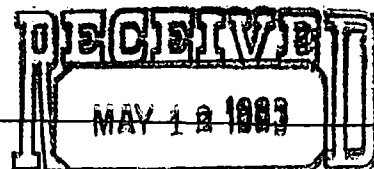
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed	<b>December 10, 1982</b>
Registered Professional Engineer and/or Land Surveyor	<i>Truman Gaskin</i> <b>Truman Gaskin</b>
Certificate No.	<b>2126</b>

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LAND OFFICE	
TRANSPORTER	OIL GAS
OPERATOR	
PRODUCTION OFFICE	

NEW MEXICO OIL CONSERVATION COMMISSION  
REQUEST FOR ALLOWABLE  
AND  
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Form C-104  
Supersedes Old C-104 and C-  
Effective 1-1-65



OIL CONSERVATION DIVISION  
SANTA FE

Operator  
Doyle Hartman  
Address  
Post Office Box 10426, Midland, Texas 79702

Reason(s) for filing (Check proper box)		Other (Please explain)	
New Well <input checked="" type="checkbox"/>	Change in Transporter of:		
Recompletion <input type="checkbox"/>	Oil <input type="checkbox"/>	Dry Gas <input checked="" type="checkbox"/>	
Change in Ownership <input type="checkbox"/>	Casinghead Gas <input type="checkbox"/>	Condensate <input type="checkbox"/>	

If change of ownership give name  
and address of previous owner

DESCRIPTION OF WELL AND LEASE

Lease Name Northshore Woolworth	Well No. 6	Pool Name, including Formation Jalmat (Gas)	Kind of Lease State, Federal or Fee	Lease No. Fee
Location Bottom Hole Location = 1967 FNL & 711 FWL Section 33, T-24-S, R-37-E				
Unit Letter <u>E</u> : <u>1720</u> Feet From The <u>North</u> Line and <u>310</u> Feet From The <u>West</u>				
Line of Section <u>33</u> Township <u>24S</u> Range <u>37E</u> , NMPM, Lea County				

DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input type="checkbox"/> or Condensate <input type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)					
Name of Authorized Transporter of Casinghead Gas <input type="checkbox"/> or Dry Gas <input checked="" type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)					
El Paso Natural Gas Company	Post Office Box 1384, Jal, New Mexico 88252					
If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.	Is gas actually connected?	When
					No	4-27-83

If this production is commingled with that from any other lease or pool, give commingling order number:

COMPLETION DATA

Designate Type of Completion - (X)		Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res't.	Diff. Res't.
			X	X					
Date Spudded 4-7-83	Date Compl. Ready to Prod. 4-21-83	Total Depth 3426 (3366 TVD)		P.B.T.D. 3420 (3361 TVD)					
Elevations (DF, RKB, RT, CR, etc.) 3262 GL	Name of Producing Formation Yate-Seven Rivers	Top Oil/Gas Pay 3067 (3009 TVD)		Tubing Depth 3397 (3338 TVD)					
Perforations 3067-3273 (3009-3220) Yates-Seven Rivers				Depth Casing Shoe 3426 (3366 TVD)					
TUBING, CASING, AND CEMENTING RECORD									
HOLE SIZE	CASING & TUBING SIZE		DEPTH SET		SACKS CEMENT				
12 1/4	9 5/8		467		250 (Circ)				
8 3/4	7		3426 (3366 TVD)		700 (Circ)				

TEST DATA AND REQUEST FOR ALLOWABLE  
OIL WELL

(Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil-Bble.	Water-Bble.	Gas-MCF

GAS WELL			
Actual Prod. Test-MCF/D 112	Length of Test 24 Hr	Bble. Condensate/MMCF	Gravity of Condensate
Testing Method (pilot, back pr.) Orifice Tester	Tubing Pressure (shut-in) 45 psi	Casing Pressure (shut-in) 83 psi	Choke Size 18/64

CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Commission have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Larry G. Newman  
(Signature)

ENGINEER  
(Title)

APRIL 22, 1983  
(Date)

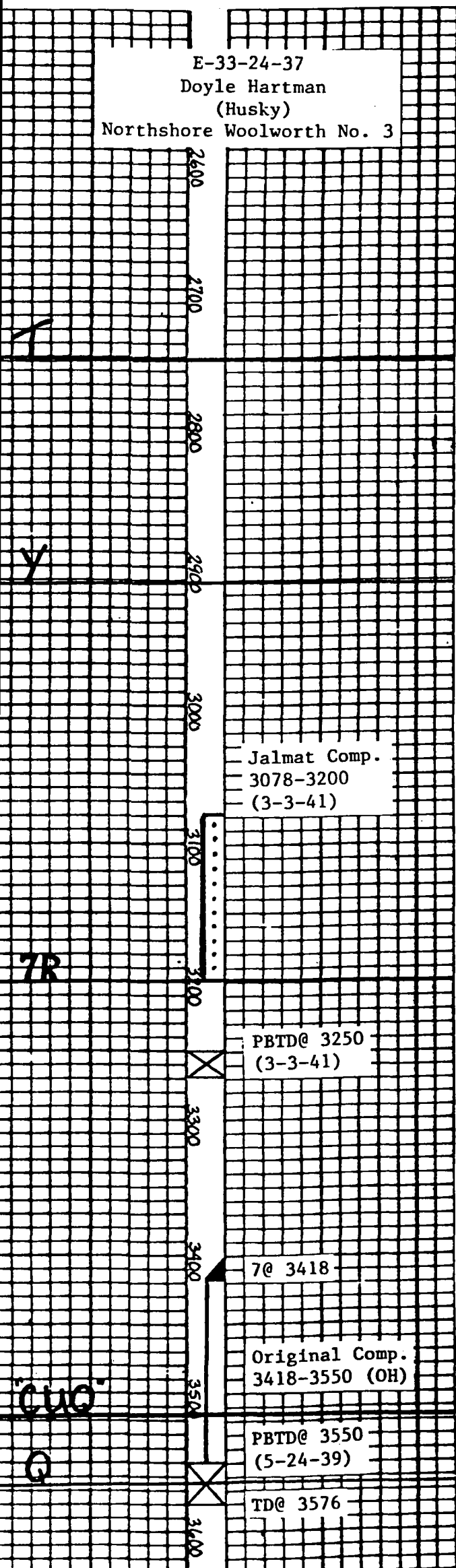
OIL CONSERVATION COMMISSION

APPROVED \_\_\_\_\_, 19

BY \_\_\_\_\_

TITLE \_\_\_\_\_

This form is to be filed in compliance with RULE 1104.  
If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviatoric tests taken on the well in accordance with RULE 111.  
All sections of this form must be filled out completely for allowable on new and recompleted wells.  
Fill out only Sections I, II, III, and VI for changes of owner, well name or number, or transporter, or other such change of conditions.



COMPANY	Doyle Hartman
	(Northshore/Husky)
WELL	Northshore Woolworth No. 3
FIELD	Jalmat (Gas)
LOCATION	2310 FNL & 330 FWL (E)
	Section 33, T-24-S, R-37-E
	(24-37-33-E)
COUNTY	Lea
STATE	New Mexico
ELEVATIONS:	KB _____
	DF 3273
	GL _____

COMPLETION RECORD			
SPUD DATE	2-26-39	COMP. DATE	5-24-39
TD	3576	PBTD	3550
CASING RECORD	9 5/8 @ 1218 w/250		
	7 @ 3418 w/250		
PERFORATING RECORD	OH: 3418-3550		
STIMULATION	Shot w/320 quarts		
	(3475-3570)		
	T/P @ 3531		
IP	IPF= 60 BOPD		
GOR		GR	
TP		CP	
CHOKE	TUBING		@
REMARKS	3-3-41: PBTD @ 3250. Perf		
	3078-3200 (Yates). F/8000 MCFPD.		
	Recompleted to gas.		
	Final Langmat Cum: 24.0 MBO		
	2-83 Cum Prod: 7485 MMCF		
	1982 Avg. Prod: 7 MCFPD		
	Pursuant to NMOCD Order No. R-7247, well		
	disconnected from El Paso Natural Gas		
	Company's Gathering System on April 28,		
	1983.		

## GAS PRODUCTION HISTORY

Date 2-1-83

Page 1 of 1

Operator: Doyle Hartman (Husky)

Well: Northshore Woolworth No. 3

Location: E-33-24S-37E

Pool: Jalmat (Gas)

Spud Date: \_\_\_\_\_ Original Completion Date: \_\_\_\_\_

Completion Interval (Gas): \_\_\_\_\_

Completion Date (Gas): \_\_\_\_\_ First Production (Gas): \_\_\_\_\_

Remarks: 2-3-83: Ran sinker bar on wireline.

Found junk in hole or collapsed casing

at 2730. Well shut-in 4-28-83.

[illegible]

1982		Detail Summary	
Jan.	700	July	51
Feb.	372	Aug.	38
March	847	Sept.	31
April	158	Oct.	0
May	68	Nov.	21
June	4	Dec.	187

19 <u>83</u>		<b>Detail Summary</b>
Jan.	<u>186</u>	July <u>                    </u>
Feb.	<u>95</u>	Aug. <u>                    </u>
March	<u>                    </u>	Sept. <u>                    </u>
April	<u>                    </u>	Oct. <u>                    </u>
May	<u>                    </u>	Nov. <u>                    </u>
June	<u>                    </u>	Dec. <u>                    </u>

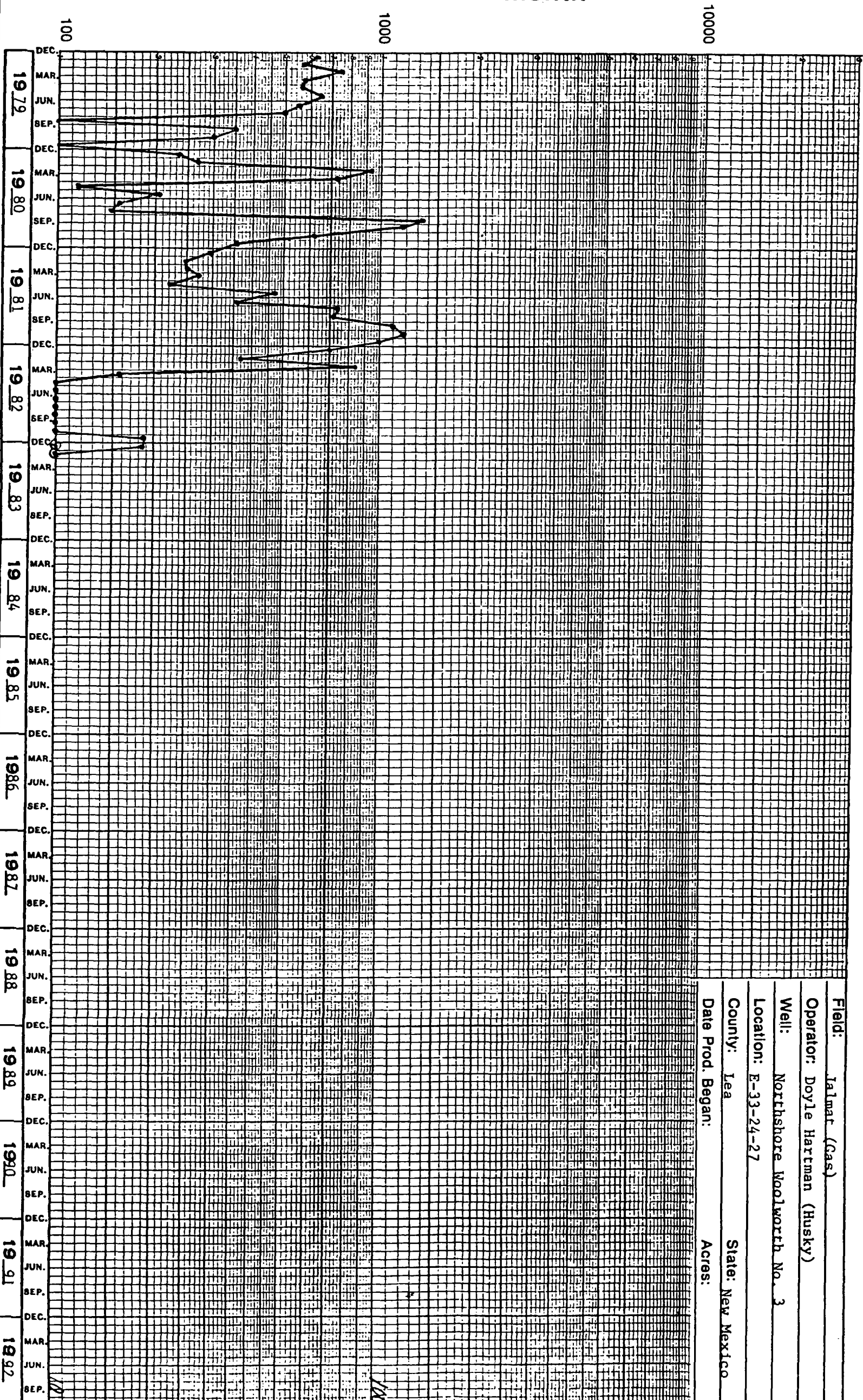
Production (Y-T-D) 2477 MCF / 281 MCF

Days or Months (Y-T-D) 12 mos. / 2 mos.

Avg. Rate (Y-T-D) 206 MCF/mo. / 141 MCF/mo.

7 MCFPD/5MCFPD

Gas Production - .MCF/month



Field: Jalmar (Gas)  
Operator: Doyle Hartman (Husky)  
Well: Northshore Woolworth No. 3  
Location: E-33-24-27  
County: Lea State: New Mexico  
Date Prod. Began: \_\_\_\_\_ Acres: \_\_\_\_\_

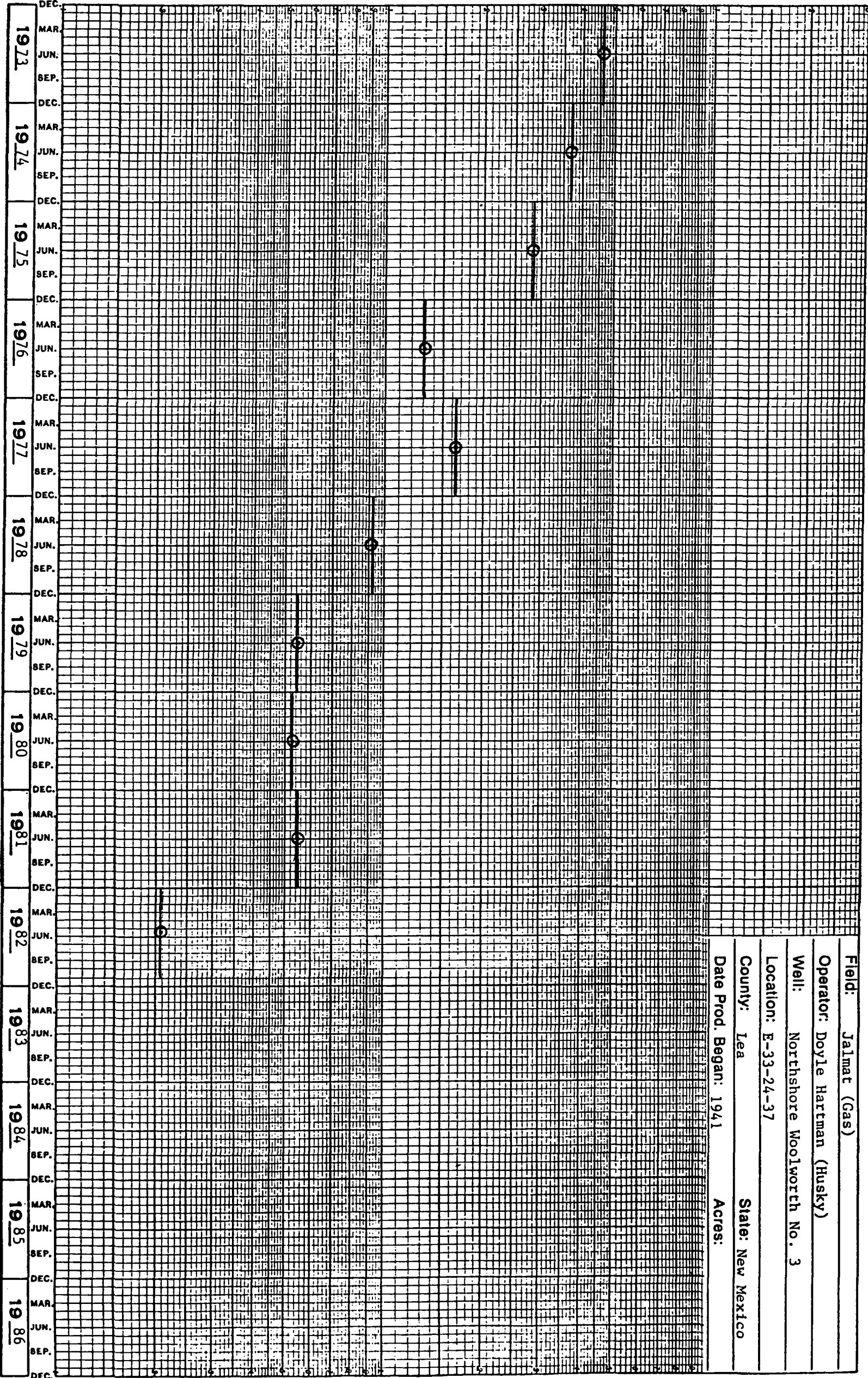


Gas Production - MCF/month

10000

1000

100



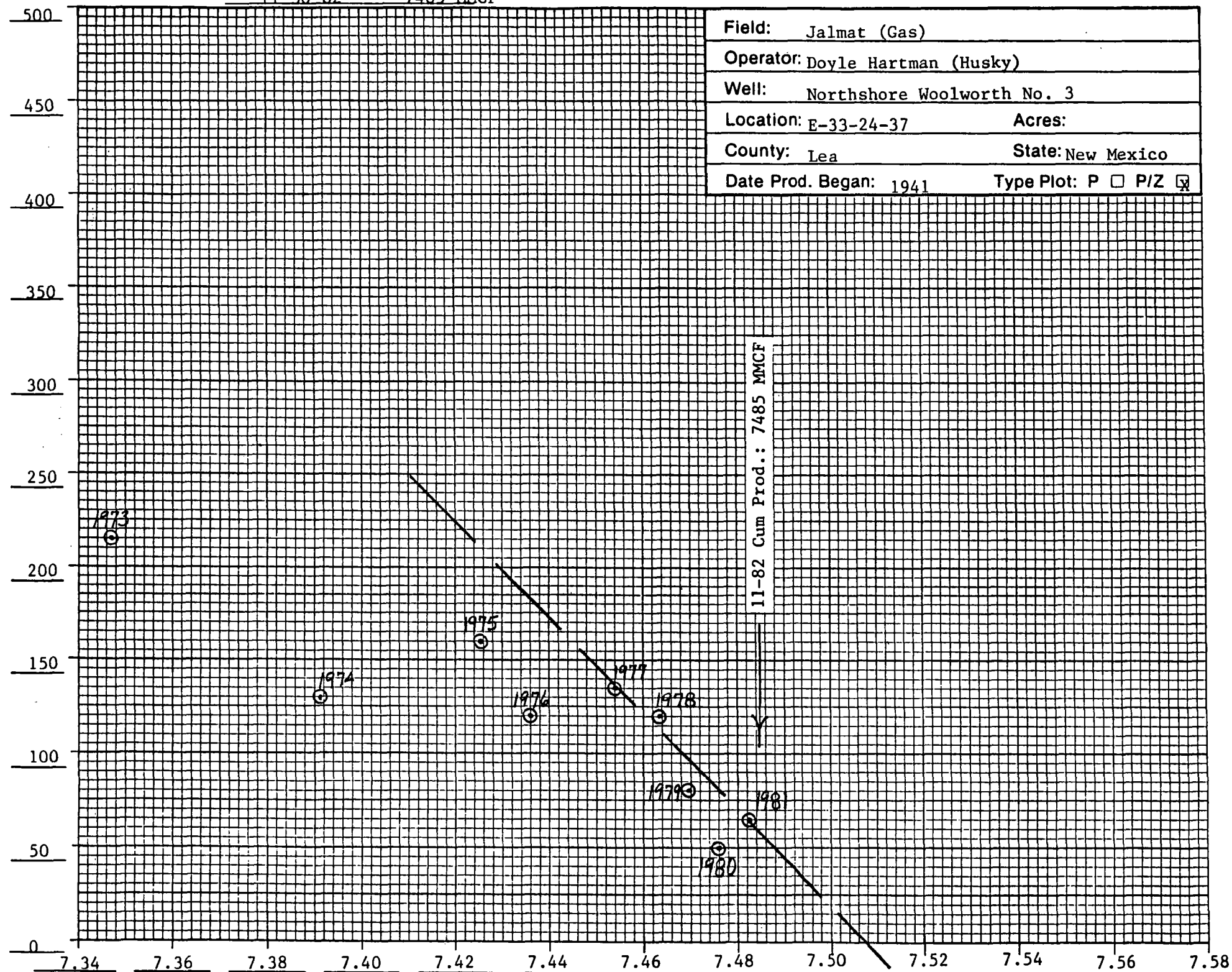
Field: Jalmat (Gas)  
Operator: Doyle Hartman (Husky)  
Well: Northshore Woolworth No. 3  
Location: E-33-24-37  
County: Lea State: New Mexico  
Date Prod. Began: 1941 Acres:

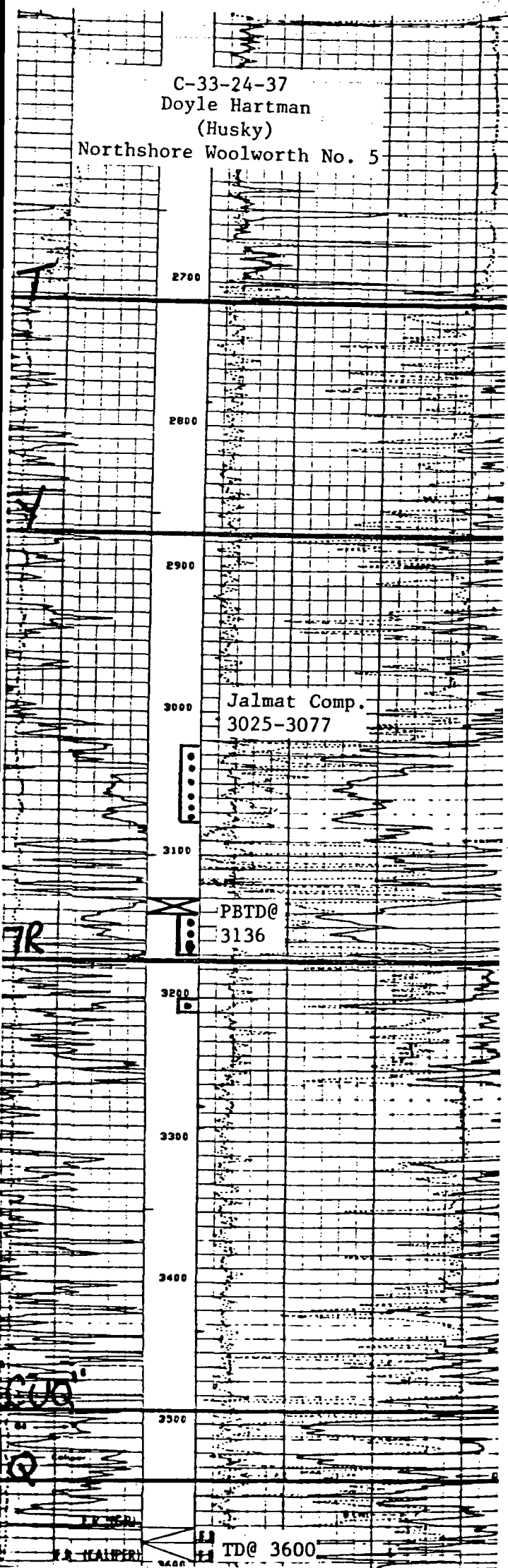
11-30-82 CUM: 7485 MMCF

Field:	Jalmat (Gas)		
Operator:	Doyle Hartman (Husky)		
Well:	Northshore Woolworth No. 3		
Location:	E-33-24-37	Acres:	
County:	Lea	State:	New Mexico
Date Prod. Began:	1941	Type Plot:	P <input type="checkbox"/> P/Z <input checked="" type="checkbox"/>

Pressure or P/Z - (psia)

11-82 Cum Prod.: 7485 MMCF





COMPANY	Doyle Hartman		
	(Husky)		
WELL	Northshore Woolworth No. 5		
FIELD	Jalmar		
LOCATION	730 FNL & 1980 FWL (C)		
	Section 33, T-24-S, R-37-E		
	(24-37-33-C)		
COUNTY	Lea		
STATE	New Mexico		
ELEVATIONS:	KB	3268	
	DF		
	GL	3258	

COMPLETION RECORD			
SPUD DATE	3-7-80	COMP. DATE	6-12-80
TD	3600	PBTD	3136
CASING RECORD	8 5/8 @ 1203 w/600		
	5 1/2 @ 3598 w/1026		
PERFORATING RECORD	Perf: 3025-3077 w/17*		
STIMULATION	A/2800		
	SWF/60,000 + 60,000		
IP	IPF= 50 MCFPD		
GOR		GR	
TP	90	CP	150
CHOKE	16/64	TUBING	2 3/8 @ 3069
REMARKS	*4-12-80: Perf 3141-3204 w/4.		
	A/1200 and tested. Set CIBP @		
	3136. Perf 3025-3077 w/17.		
	2-83 Cum Prod: 16.5 MMCF		
	1982 Avg. Prod: 15.1 MCFPD		

## GAS PRODUCTION HISTORY

Date 2-1-83

Page 1 of 1

Operator: Husky Oil Company of Delaware

Well: Northshore Woolworth No. 5

Location: C-33-24S-37E

Pool: Jalmat (Gas)

Spud Date: \_\_\_\_\_ Original Completion Date: \_\_\_\_\_

**Completion Interval (Gas):**

Completion Date (Gas): \_\_\_\_\_ First Production (Gas): 10/80

**Remarks:**[illegible]

**19 82 Detail Summary**

Jan.	<u>595</u>	July	<u>403</u>
Feb.	<u>576</u>	Aug.	<u>143</u>
March	<u>647</u>	Sept.	<u>114</u>
April	<u>585</u>	Oct.	<u>223</u>
May	<u>552</u>	Nov.	<u>585</u>
June	<u>546</u>	Dec.	<u>759</u>

**1983 Detail Summary**

Jan.	<u>668</u>	July	<u>          </u>
Feb.	<u>529</u>	Aug.	<u>          </u>
March	<u>          </u>	Sept.	<u>          </u>
April	<u>          </u>	Oct.	<u>          </u>
May	<u>          </u>	Nov.	<u>          </u>
June	<u>          </u>	Dec.	<u>          </u>

Production (Y-T-D) 5728 MCF / 1197 MCF

Days or Months (Y-T-D) 12 mos./2 mos.

Avg. Rate (Y-T-D) 477 MCF/mo. / 599 MCF/mo.

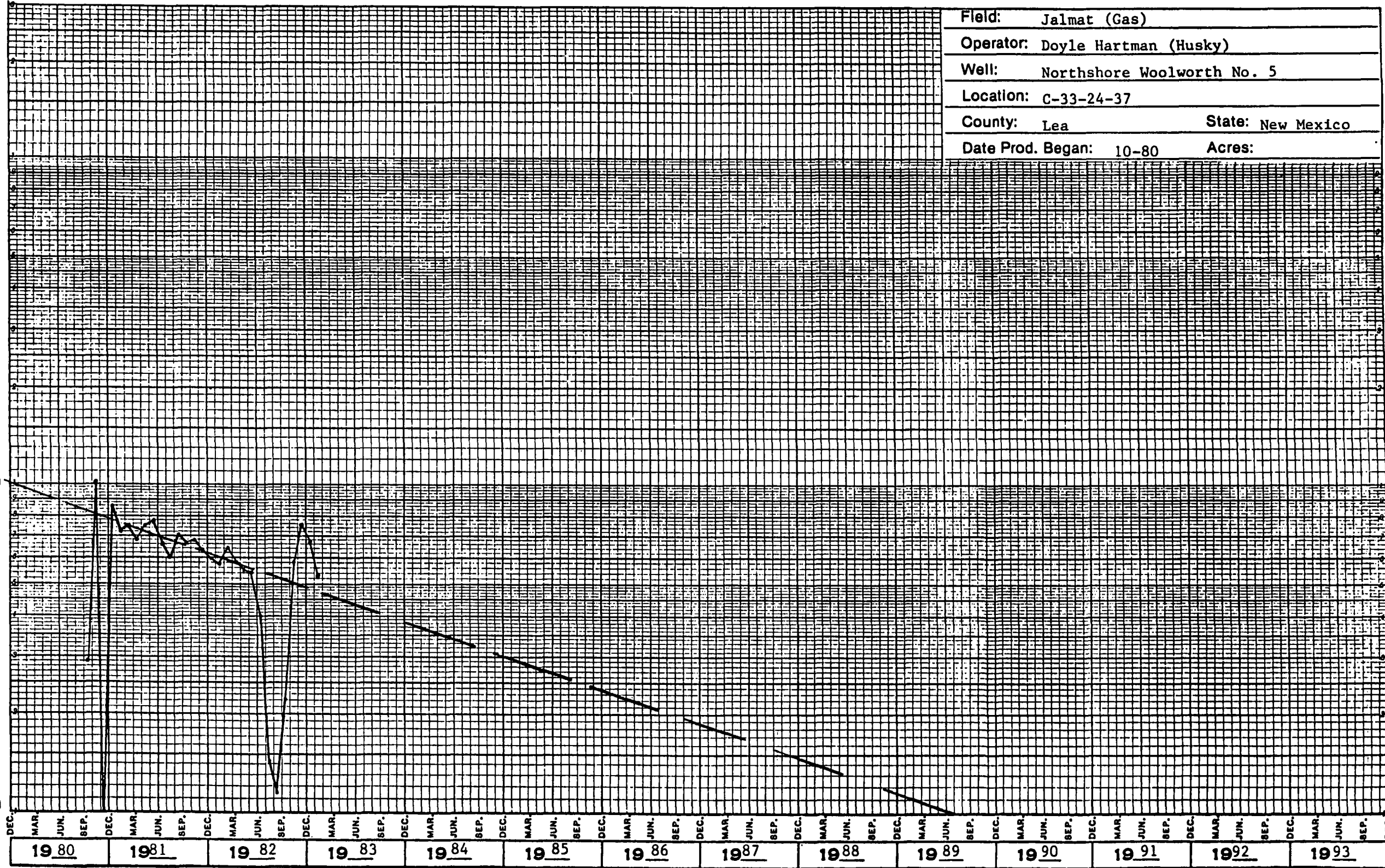
16 MCFPD/20 MCFPD

Gas Production - MCF/month

10000

1000

100



Field:	Jalmat (Gas)		
Operator:	Doyle Hartman (Husky)		
Well:	Northshore Woolworth No. 5		
Location:	C-33-24-37		
County:	Lea	State:	New Mexico
Date Prod. Began:	10-80	Acres:	

1. El Paso Natural Gas Company  
Woolworth Estate  
1570' FNL - 40, 1980 (as a SWD well)  
Spud: Matrix Salt Water Disposal Well

Doyle Hartman

Northshore Woolworth Well No. 5

730' FNL - 1980' FWL

Spud: March 27, 1980

Jalmat Tansill Yates Seven Rivers producer (NW1/4 - 160 acre dedication)

Cumulative Production as of 12/31/82

Gas - 15,948 MCF

3. Doyle Hartman

Northshore Woolworth Well No. 3

2310' FNL - 330' FWL

Spud: February 25, 1939

Was Langlie-Matrix producer until 7/6/56, was placed in the Jalmat Tansill Yates  
Seven Rivers (prorated gas pool) 7/6/56; NSP 338 NW1/4 160 acre dedication approved

Jan. 17, 1957

Jalmat Cumulative production as of 12/31/82

Gas - 748,547 MCF

4. Doyle Hartman (APPLICATION WELL)

Northshore Woolworth Well No. 6

1720' FNL - 310' FWL

Spud: April 7, 1983

proposed Jalmat Tansill Yates Seven Rivers (prorated gas pool) producer (NW1/4 160 acre dedication)

5. Amerada Hess Corporation

Langlie Matrix Woolworth Unit Well No. 805

2400' FNL - 330' FWL

Spud: October 23, 1970

Langlie Matrix producer

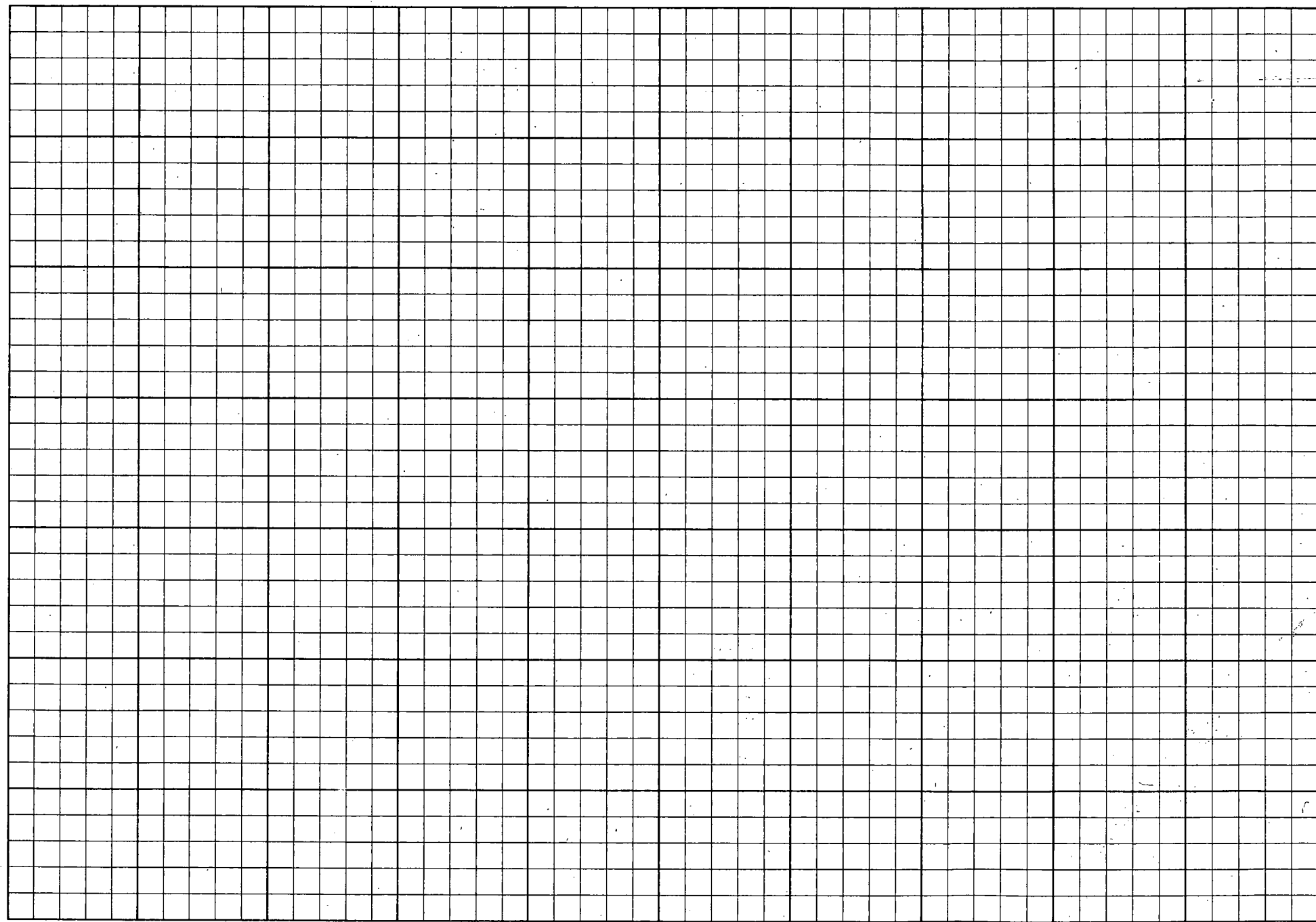
6. Amerada Hess Corporation

Langlie Matrix Woolworth Unit Well No. 804

990' FNL + WL

Spud: April 23, 1989

Langlie - Matrix producer





Buyer grants Seller a purchase money security interest in the goods sold, substitutions therefor, additions or accessions thereto, and the proceeds of each (hereinafter collectively called the Collateral) to secure Buyer's performance of Buyer's obligations as specified in American Furniture Company's Retail Charge Agreement and Buyer's performance hereof (hereinafter called the Obligations). The Collateral is personal property and not a fixture. If Buyer fails to perform any of the Obligations, Seller may declare all amounts Buyer owes Seller due and payable and pursue Seller's other remedies. Buyer will pay all costs, including attorney fees, incurred in enforcing this Agreement. If the Buyer purchases property or credit life insurance through the Seller, the Seller will have a security interest in the proceeds of the insurance policies. **THERE ARE NO WRITTEN OR ORAL REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, OF FITNESS OR MERCHANTABILITY, EXCEPT ANY MANUFACTURER'S WRITTEN WARRANTY, CONCERNING THE GOODS AND SERVICES SOLD HEREUNDER.**

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*Linda Stogner*  
BUYER

# AMERICAN

FURNITURE COMPANY

P.O. BOX 3685 • ALBUQUERQUE, N.M. 87190

Phone (505) 883-2211

INVOICE NO.	LOCATION	SLSMN	DATE
36737	178		221 3/25/83
SLSMRN 221	DEL.		
DEPT./QUAN.	DESC./PRICE	STOCK NO./TOTAL	TYPE ACCT
143	SMALL KIT APPL	2607612	1
		2.49	
143	SMALL KIT APPL	2607604	
		29.96	
SUB TOTAL		32.45	
4.25% SLS TAX		1.38	
DOWN PAYMENT		.00-	

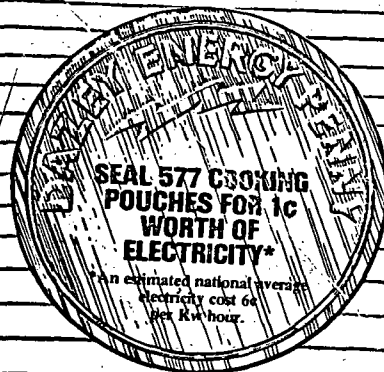
1761894/00000000

TOTAL 11 CHG TAKE 33.83

AUTHORIZED BY

CREDIT O.K.

## MODEL SAM-3



MADE IN U.S.A.



*Making life easier  
With Rebates*

**Get up to \$5.00 Rebate from Dazey**

**Offer Effective through June 30, 1983**

- ☒ \$5.00 Model SAM3 Vacuum Seal-A-Meal, DPK12 Perk-Up, HD61 Salon Hair Dryer
- ☐ \$3.00 Model SAM2/GBSM2/2820 Dazey Seal-A-Meal 2, FS2/FS20, FS3/FS30, FS200/FS202 Dazey Foot Saver With Heat, DF2/DF4 Dazey Donut Factory
- ☐ \$2.00 Model SAM1/GBSM1/8500 Dazey Seal-A-Meal, FJ28 Fruit Juicer, FS1/FS10 Dazey Foot Saver

I have purchased the Dazey product(s) marked above.

Enclosed is the:

- ☒ Original dated sales receipt. (Circle price paid).
- ☒ Proof of Purchase — clip warranty statement from box panel of model purchased.
- ☐ Fill out coupon and mail with original sales receipt and proof of purchase so that it is postmarked no later than midnight, June 30, 1983.

Only one rebate per product, per household or customer. Allow 6 to 8 weeks for your rebate check. Offer void where prohibited, taxed, or otherwise restricted by law. Mail to: **Dazey Rebate, P.O. Box 4322, Monticello, Minnesota 55365.**

**Requests for rebates will not be honored without all required information.**

1st Initial **W** 2nd Initial **E** Last Name **STOCHNER**  
Address **1509 PASSED DE PERALTA #20**  
City **SAWTA FE** State **WM** Zip **87501**

CUSTOMER COPY



MONTHLY TOTALS ARE THRU MONTH OF DECEMBER  
MONTHLY TOTALS ARE ADDED TO CUMULATIVE TOTALS

LEA COUNTY \* \* \* \* \*

FOLLOWING WELL PLUGGED AND ABANDONED 1977

5N31 24S37E	1859 P	5395	6117	29787	30532	4040146	JALMAT TANSILL*SKELLY OIL C*J W SHERRELL	* P
28031 24S37E				53939	10440	259798	LANGLIE MATTIX*UNION TEXAS	*LANGLIE JAL UNIT* P
27P31 24S37E				142443	215311	120953	I LANGLIE MATTIX*UNION TEXAS	*LANGLIE JAL UNIT* P
6A32 24S37E	11676 P	21419	10412	73913	1137	374589	I LANGLIE MATTIX*UNION TEXAS	*LANGLIE JAL UNIT* S
5832 24S37E						156285	I LANGLIE MATTIX*UNION TEXAS	*LANGLIE JAL UNIT* S
				5065			FOLLOWING WELL RECOMPLETED TO JALMAT TANSILL YT 7 RVRS (PRO GAS)	
				39182	711893	95524	LANGLIE MATTIX*APCO OIL COR*STATE	* S
1C32 24S37E	2104 P	100900	6222	754	2714	1793273	JALMAT TANSILL*UNION TEXAS	*LANGLIE JAL UNIT* S
4C32 24S37E	754 P	2714	10432	51446	226	102229	I LANGLIE MATTIX*UNION TEXAS	*LANGLIE JAL UNIT* S
1C32 24S37E							FOLLOWING WELL RECOMPLETED TO JALMAT TANSILL YT 7 RVRS (PRO GAS)	
3D32 24S37E				47329			LANGLIE MATTIX*UNION TEXAS	*STATE A 32 * S
1E32 24S37E							FOLLOWING WELL RECOMPLETED TO LANGLIE MATTIX 7 RVRS Q GRAYBURG	
				40755	243207	1270917	JALMAT TANSILL*UNION TEXAS	*LANGLIE JAL UNIT* S
10E32 24S37E	3244 P	56221	6949	53812	128	78950	LANGLIE MATTIX*UNION TEXAS	*LANGLIE JAL UNIT*UF
10E32 24S37E						27095	I LANGLIE MATTIX*UNION TEXAS	*LANGLIE JAL UNIT* S
9E32 24S37E			41555			379872	JALMAT TANSILL*UNION TEXAS	*STATE A 32 * S
4F32 24S37E							FOLLOWING WELL RECOMPLETED TO JALMAT TANSILL YT 7 RVRS (PRO GAS)	
				46682		140669	LANGLIE MATTIX*SINCLAIR OIL*STATE 157 E	* S
1G32 24S37E	8360 P	48138	9858	148982	310361	1275029	LANGLIE MATTIX*UNION TEXAS	*LANGLIE JAL UNIT*US
8G32 24S37E	12	107	17935	280	231		JALMAT TANSILL*ARCO OIL & G*JALMAT STATE GAS*CS	
1G32 24S37E				11194			I LANGLIE MATTIX*UNION TEXAS	*LANGLIE JAL UNIT* S
7H32 24S37E							FOLLOWING WELL NEW 8 1982	
				2009	4609	7351	LANGLIE MATTIX*UNION TEXAS	*LANGLIE JAL UNIT*US
98I32 24S37E	2009 P	4609	7351				FOLLOWING WELL RECOMPLETED TO JALMAT TANSILL YT 7 RVRS (PRO GAS)	
				3324	124236	68870	LANGLIE MATTIX*RODMAN PETRO*HUMBLE L STATE	* S
3I32 24S37E	3847 P	21321	7685	52273		7282306	LANGLIE MATTIX*UNION TEXAS	*LANGLIE JAL UNIT*UF
22I32 24S37E			45551		14935	138895	JALMAT TANSILL*READING AND *HUMBLE L STATE	* S
3I32 24S37E							I LANGLIE MATTIX*UNION TEXAS	*LANGLIE JAL UNIT*US
21J32 24S37E				1159	11275	20231	FOLLOWING WELL NEW 8 1982	
							LANGLIE MATTIX*UNION TEXAS	*LANGLIE JAL UNIT*US
99K32 24S37E	1159 P	11275	20231				FOLLOWING WELL ZONE ABANDONED	
						1747441	JALMAT TANSILL*SKELLY OIL C*STATE M	* S
3K32 24S37E				226862	385612	137356	LANGLIE MATTIX*UNION TEXAS	*LANGLIE JAL UNIT* S
20K32 24S37E	12012 P	50609	10563				FOLLOWING WELL NEW 8 1982	
				4660	9737	13531	LANGLIE MATTIX*UNION TEXAS	*LANGLIE JAL UNIT*US
100L32 24S37E	4660 P	9737	13531	72562	1727	630937	I LANGLIE MATTIX*UNION TEXAS	*LANGLIE JAL UNIT* S
19L32 24S37E				114	235	161595	JALMAT TANSILL*GETTY OIL CO*SKELLY M STATE	* S
4L32 24S37E	13	22	21867				FOLLOWING WELL NEW 8 1982	
				2760	11847	3737	LANGLIE MATTIX*UNION TEXAS	*LANGLIE JAL UNIT*US
95M32 24S37E	2760 P	11847	3737	203951	90711	133231	LANGLIE MATTIX*UNION TEXAS	*LANGLIE JAL UNIT* S
26M32 24S37E	9272 P	15287	18065				FOLLOWING WELL NEW 8 1982	
				3788	19480	2568	LANGLIE MATTIX*UNION TEXAS	*LANGLIE JAL UNIT*US
96N32 24S37E	3788 P	19480	2568				FOLLOWING WELL ZONE ABANDONED	
						3175589	JALMAT TANSILL*UNION TEXAS	*LANGLIE JAL UNIT* S
25N32 24S37E				62245			I LANGLIE MATTIX*UNION TEXAS	*LANGLIE JAL UNIT*US
25N32 24S37E				56210			FOLLOWING WELL RECOMPLETED TO JALMAT TANSILL YT 7 RVRS (PRO GAS)	
							LANGLIE MATTIX*SINCLAIR OIL*STATE 157 C	* S
1032 24S37E			4776	76409	94518	72903	LANGLIE MATTIX*UNION TEXAS	*LANGLIE JAL UNIT*OF
24032 24S37E	1837 P	15615	5932			2350702	JALMAT TANSILL*ARCO OIL & G*JALMAT STATE GAS*CS	
3032 24S37E							FOLLOWING WELL NEW 8 1982	
				879	10376	2579	LANGLIE MATTIX*UNION TEXAS	*LANGLIE JAL UNIT*US
97P32 24S37E	879 P	10376	2579				FOLLOWING WELL RECOMPLETED TO JALMAT TANSILL YT 7 RVRS (PRO GAS)	
				32070			LANGLIE MATTIX*SINCLAIR OIL*STATE 157 C	* S
							I LANGLIE MATTIX*UNION TEXAS	*LANGLIE JAL UNIT* S
2P32 24S37E						2181847	JALMAT TANSILL*ARCO OIL & G*JALMAT STATE GAS*CS	
23P32 24S37E			69382	640627	470605	155408	LANGLIE MATTIX*AMERADA HESS*LANGLIE MATTIX W*UP	
2P32 24S37E	5626 P	22155	1551	96029	4335	53784	I LANGLIE MATTIX*AMERADA HESS*LANGLIE MATTIX W*UP	
116A33 24S37E				213798	994560	26166	LANGLIE MATTIX*AMERADA HESS*LANGLIE MATTIX W*UP	
118B33 24S37E						15948	JALMAT TANSILL*DOYLE HARTMA*NORTH SHORE WOOL*CP	
801C33 24S37E	4411 P	90738	5180	43834		3514	I LANGLIE MATTIX*AMERADA HESS*LANGLIE MATTIX W*UP	
5C33 24S37E							FOLLOWING WELL RECOMPLETED TO JALMAT TANSILL YT 7 RVRS (PRO GAS)	
804033 24S37E				23949	20280	3896	LANGLIE MATTIX*HUSKY OIL CO*NORTH SHORE WOOL* P	
				12454			LANGLIE MATTIX*AMERADA HESS*LANGLIE MATTIX W*UP	
3E33 24S37E	389 P	567	2606	102728	5673	7485477	JALMAT TANSILL*DOYLE HARTMA*NORTH SHORE WOOL* P	
805E33 24S37E				413775	1280114	62517	I LANGLIE MATTIX*AMERADA HESS*LANGLIE MATTIX W*UP	
3E33 24S37E						101126	LANGLIE MATTIX*AMERADA HESS*LANGLIE MATTIX W*UP	
802F33 24S37E	2239 P	68451	166					
117G33 24S37E								



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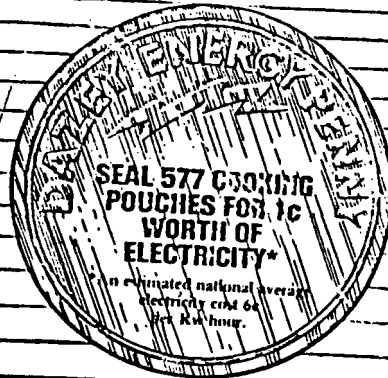
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AMERICAN  
FURNITURE COMPANY  
P.O. BOX 3865 • ALBUQUERQUE, N.M. 87160  
Phone: (505) 423-2211

NO.	ACC NO.	LOCATION	SLSMN	DATE
33707	170			221 3/25/83
CLASSRON 221 DEL				
QTY	PLAN	DESC/PRICE	STOCK NO./TOTAL	TYPE
143		SMALL KIT APPL	2607612	1
			2.47	
148		SMALL KIT APPL	2607604	
			29.26	
149		TOTAL	32.73	
		4.25% OLD TAX	1.38	
		DOWN PAYMENT	.00	

MODEL-SAM-3



MADE IN U.S.A.



Making life easier  
With Rebates

Get up to \$5.00 Rebate from Dazey

Offer Effective through June 30, 1983

- ☒ \$5.00 Model SAM3 Vacuum Seal-A-Meal, DPK12 Perk-Up, HD61 Salon Hair Dryer
- ☐ \$3.00 Model SAM2/GBSM2/2820 Dazey Seal-A-Meal 2, FS2/FS20, FS3/FS30, FS200/FS202 Dazey Foot Saver With Heat, DF2/DF4 Dazey Donut Factory
- ☐ \$2.00 Model SAM1/GBSM1/8500 Dazey Seal-A-Meal, FJ28 Fruit Juicer, FS1/FS10 Dazey Foot Saver

I have purchased the Dazey product(s) marked above.

Enclosed is the:

- ☒ Original dated sales receipt. (Circle price paid).
- ☒ Proof of Purchase — clip warranty statement from box panel of model purchased.
- ☐ Fill out coupon and mail with original sales receipt and proof of purchase so that it is postmarked no later than midnight, June 30, 1983.

Only one rebate per product, per household or customer. Allow 6 to 8 weeks for your rebate check. Offer void where prohibited, taxed, or otherwise restricted by law. Mail to: Dazey Rebate, P.O. Box 4322, Monticello, Minnesota 55365.

Requests for rebates will not be honored without all required information.

1st Initial W 2nd Initial E Last Name STOCHNER  
Address 15109 PASSED DE PERALTA #20  
City SAWTA FE State VA Zip 87501

BUYER Linda Stogner

1761894

1761894

LINDA STOCHNER

FORM 11 ONE TAKE

33707

AUTHORIZED BY

CREDIT O.K.

CUSTOMER COPY

**DOYLE HARTMAN**

*Oil Operator*

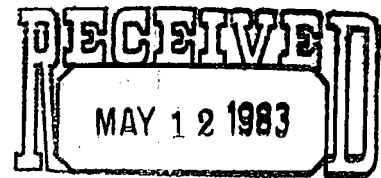
500 N. MAIN

P. O. BOX 10426

MIDLAND, TEXAS 79702

(915) 684-4011

May 10, 1983



OIL CONSERVATION DIVISION  
SANTA FE

State of New Mexico  
Energy and Minerals Department  
Oil Conservation Division  
Post Office Box 2088  
Santa Fe, New Mexico 87501

Attention: Mr. Mike Stogner

Re: Administrative Procedure  
Infill Finding  
Northshore Woolworth No. 6  
1720 FNL & 310 FWL (E)  
Section 33, T-24-S, R-37-E  
Lea County, New Mexico

Gentlemen:

Pursuant to Section 271.305 of the Final Rules and Regulations of the Federal Energy Regulatory Commission relating to Section 103 of the Natural Gas Policy Act of 1978, and to Order R-7247 of the New Mexico Oil Conservation Division, we hereby request an infill finding (NFL) for the above captioned Northshore Woolworth No. 6 located 1720 FNL & 310 FWL (E) Section 33, T-24-S, R-37-E, Lea County, New Mexico.

With regard to our request, and in accordance with Order R-7247, we submit the following:

- Rule 5      A copy of approved Form C-101 for the infill well and Form C-102 showing the proration unit dedicated to the well are enclosed.
- Rule 6      The name of the pool in which the infill well has been drilled is Jalmat (Gas) Pool, and the standard spacing unit therefor is 640 acres.
- Rule 7      The number of the Administrative Order approving the directional drilling, unorthodox location and non-standard proration unit dedicated to the well is R-7247.
- Rule 8      Table 1 attached to William P. Aycock's letter dated May 9, 1983 shows the following:
- a. Lease name and well location;
  - b. Spud date;
  - c. completion date;

New Mexico Oil Conservation Division  
May 10, 1983  
Page 3

We respectfully request that the Commission grant our request for an  
infill finding pursuant to Order R-6013-A.

Very truly yours,

DOYLE HARTMAN

*Michelle Hembree*

Michelle Hembree  
Administrative Assistant

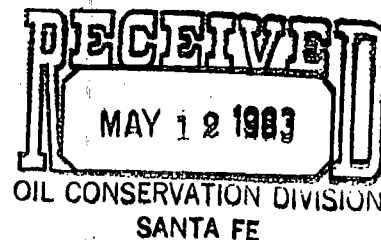
/mh

Enclosures as above

**WILLIAM P. AYCOCK & ASSOCIATES, INC.**

*Petroleum Engineering Consultants*  
308 WALL TOWERS WEST  
MIDLAND, TEXAS 79701  
PHONE 915/683-5721

May 9, 1982



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

Attention: Mr. Mike Stogner

Subject: Administrative Application for Infill Well Findings  
for Doyle Hartman's Northshore Woolworth No. 6,  
Section 33, Township 24 South, Range 37 East,  
Surface Location, 1720' FNL and 310' FWL,  
Jalmat (Gas) Pool, Lea County, New Mexico

Gentlemen:

Application is hereby made for an administrative infill well finding effective with initial gas deliveries for the described well in accordance with Exhibit "A", Order R-6013-A. The following constitute the requirements of the said Order:

Rule 5: Attached are copies of the Forms C-101 and C-102.

Rule 6: The name of the pool in which the infill well has been drilled is the Jalmat Pool, and the standard spacing therefor is 640 acres.

Rule 7: The non-standard proration unit, unorthodox well location, simultaneous dedication and deviation permit were approved by Order No. R-7247, a copy of which is attached hereto.

Rule 8: See attached Table No. 1, "Summary of Required Information, Rule 8, Exhibit "A", Order No. R-6013-A" for requirements of Sections "a." through "f.". Also required by Section "g." is "a clear and concise statement indicating why the existing well(s) on the proration unit cannot effectively and efficiently drain the portion of the reservoir covered by the

proration unit." The Jalmat (Gas) Pool wells to which the present 160-acre non-standard proration unit was assigned were the Doyle Hartman (originally Husky Oil Co. of Delaware) Northshore Woolworth No. 3 (2,310' FNL & 330' FWL) and the Doyle Hartman (also originally Husky Oil Co. of Delaware) Northshore Woolworth No. 5 (730' FNL and 1980' FWL); these wells had produced 7,503.3 MMCF as follows:

Operator Well Name and No.	Cumulative Gas Recovery, MMCF at 5-1-83	Estimated Future Gas Recovery, MMCF at 5-1-83
Doyle Hartman		
Northshore Woolworth 3	7,485.3	None
Northshore Woolworth 5	18.0	102.5
TOTAL	7,503.3	102.5

The estimated ultimate gas recovery as noted for the Doyle Hartman Northshore Woolworth No. 5 is 120.5 MMCF as of May 1, 1983, resulting in an estimated future gas recovery for this pre-existing well of 102.5 MMCF. The estimated future life is about twenty years. The Northshore Woolworth No. 3 has not been included in these estimates, as, by virtue of Order R-7247, the Northshore Woolworth 3 "will be shut-in upon successful completion of the Northshore Woolworth 6. Accordingly, any producible gas reserves that remain beneath the subject lease in excess of 120.5 MMCF would have been substantially not recoverable from the subject property without the drilling of the infill application well.

Rule 9:

- Section a. Requires that a formation structure map be submitted; attached is a Yates formation structure map of the immediate area containing the subject lease.
- Section b. Requires that the "volume of increased ultimate recovery expected to be obtained and a narrative describing how the increase was determined " be submitted. The estimated ultimate gas recovery for the Doyle Hartman Northshore Woolworth No. 6 is 626.1 MMCF. Since the gas to be recovered from the

UNITED STATES DEPARTMENT OF THE INTERIOR  
 BUREAU OF LAND MANAGEMENT  
 WASHINGTON, D. C. 20250

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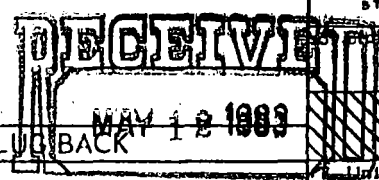
30-025-28094<sup>file</sup>

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OPERATOR	

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-101  
Revised 1-1-65

5A. Indicate Type of Lease  
STATE ☐ FEDERAL ☒  
Oil & Gas Lease No.



APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work		UNIT Agreement Name	
b. Type of Well DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		8. Farm or Lease Name Northshore Woolworth	
2. Name of Operator Doyle Hartman		9. Well No. 6	
3. Address of Operator P. O. Box 10426 Midland, Texas 79702		10. Field and Pool, or Wildcat Jalmat (Gas)	
4. Location of Well UNIT LETTER E LOCATED 1720 FEET FROM THE North LINE AND 310 FEET FROM THE West LINE OF SEC. 33 TWP. 24S RGE. 37E NMPM		12. County Lea	
19. Proposed Depth 3350'		19A. Formation Yates-Seven Rivers	
20. Rotary or C.T. Rotary		21. Elevations (Show whether DT, RT, etc.) 3162.0	
21A. Kind & Status Plug. Bond Multi-well Approved		21B. Drilling Contractor Not Selected	
22. Approx. Date Work will start January 1983			

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
12 1/4"	9 5/8"	36.0	400	300	Surface
8 3/4"	7"	23.0	3350	700	Surface

This proposed well will be drilled to a total depth of 3350 feet and will be completed as a Jalmat (Yates-Seven Rivers) gas producer. From the base of the surface pipe through the running of the production casing, the well will be equipped with a 3000 psi double ram BOP system.

Note: Any gas produced from the proposed well has previously been dedicated to El Paso Natural Gas Company.

APPROVAL VALID FOR 180 DAYS  
PERMIT EXPIRES 10/6/83  
UNLESS DRILLING UNDERWAY

ABOVE SPACE DESCRIBE PROPOSED PROGRAM; IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signed Larry C. [Signature] Title Engineer Date 12/14/82

(This space for State Use)  
ORIGINAL SIGNED BY JERRY SEXTON  
APPROVED BY DISTRICT 1 SUPERVISOR TITLE \_\_\_\_\_ DATE MAR 6 1983  
CONDITIONS OF APPROVAL, IF ANY:

0 2 2

DOE B' B EX' 1972 8 10-1972  
*[Signature]*  
DOE B' B EX' 1972 8 10-1972  
*[Signature]*  
DOE B' B EX' 1972 8 10-1972

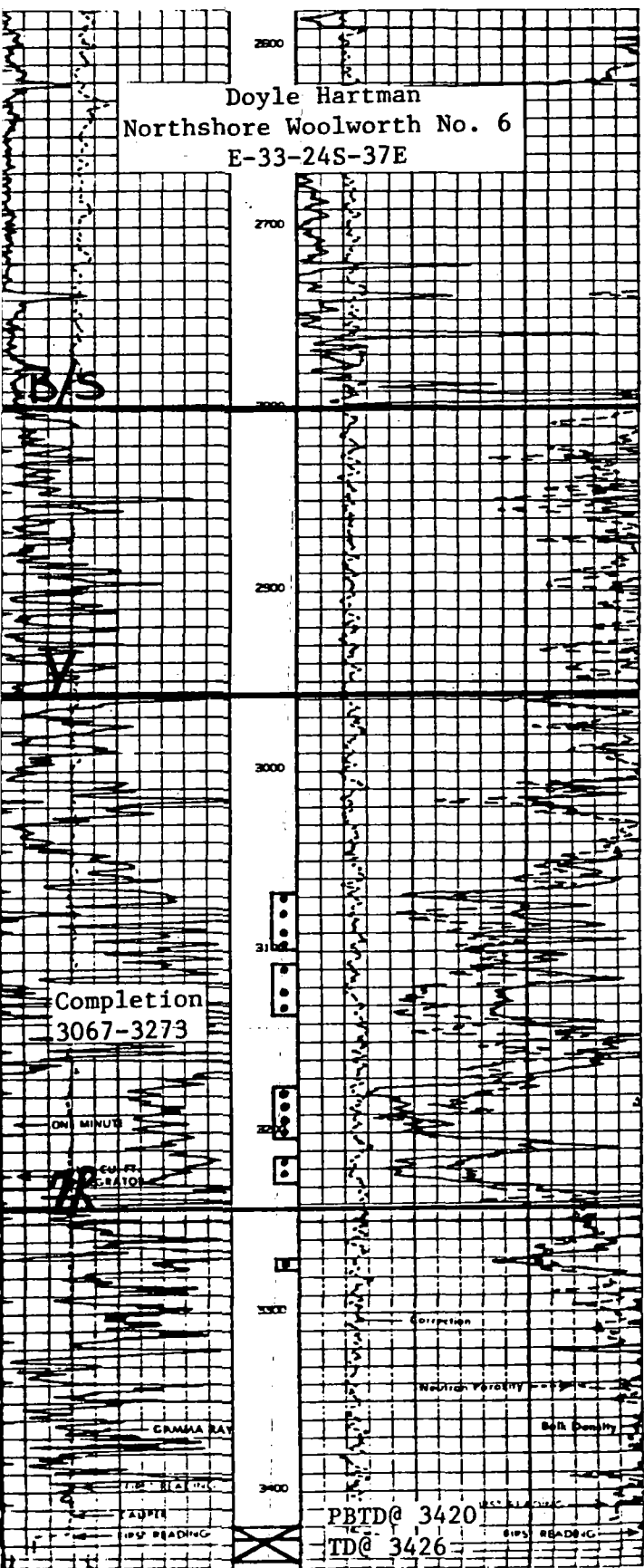
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DOE B' B EX' 1972 8 10-1972

DOE B' B EX' 1972 8 10-1972

DOE B' B EX' 1972 8 10-1972

DOE B' B EX' 1972 8 10-1972





COMPANY	Doyle Hartman
WELL	Northshore Woolworth No. 6
FIELD	Jalmat (Gas)
LOCATION	1710 FNL & 310 FWL (E) Section 33, T-24-S, R-37-E (24-37-33-E)
COUNTY	Lea
STATE	New Mexico
ELEVATIONS:	KB 3273 DF 3272 GL 3262

COMPLETION RECORD			
SPUD DATE	4-7-83	COMP. DATE	4-21-83
TD	3426 * (3366)	PBTD	3420 * (3361)
CASING RECORD 9 5/8 @ 467 w/250 7 @ 3426 w/700			
PERFORATING RECORD Perf: 3067-3273 w/21. * (3009-3220)			
STIMULATION A/5500			
IP	IPF= 112 MCFPD + 1 BWPD		
GOR	GR		
TP	45	CP83	
CHOKE	18/64	TUBING	@
REMARKS	* (True Vertical Depth)		

FERC

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OPERATOR	

**NEW MEXICO OIL CONSERVATION COMMISSION  
WELL COMPLETION OR RECOMPLETION REPORT AND LOG**

Form C-105  
Revised 10-78

5a. Indicate Type of Lease  
State ☐ Fee ☒

5. State Oil & Gas Lease No.

Unit Agreement No.

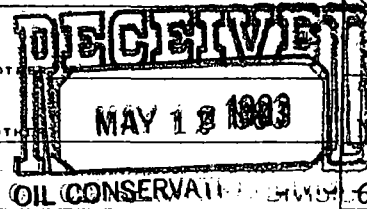
Form or Lease Name  
**Northshore Woolworth**

Well No.

1a. TYPE OF WELL  
OIL WELL ☐ GAS WELL ☒ DRY ☐

b. TYPE OF COMPLETION  
NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF. REVS. ☐

2. Name of Operator  
**Doyle Hartman**



3. Address of Operator  
**Post Office Box 10426, Midland, Texas 79702**

4. Location of Well  
**Bottom Hole Location = Unit E, 1967 FNL & 711 FWL**

UNIT LETTER **E** LOCATED **1720** FEET FROM THE **North** LINE AND **310** FEET FROM

THE **West** LINE OF SEC. **33** TWP. **24S** RGE. **37E** NMPM

10. Field and Pool, or Wildcat  
**Jalmat (Gas)**

12. County  
**Lea**

15. Date Spudded **4-7-83** 16. Date T.D. Reached **4-18-83** 17. Date Compl. (Ready to Prod.) **4-21-83** 18. Elevations (DF, RKB, RT, GR, etc.) **3262 GL** 19. Elev. Casinghead **3262**

20. Total Depth **3426 (3366)** 21. Plug Back T.D. **3420 (3361)** 22. If Multiple Compl., How Many **-----** 23. Intervals Drilled By Rotary Tools **0-3426** Cable Tools **-----**

24. Producing Interval(s), of this completion - Top, Bottom, Name  
**3067-3273 (3009-3220) W/21 Yates-Seven Rivers**  
**Note: (True Vertical Depth)**

25. Was Directional Survey Made  
**Yes**

26. Type Electric and Other Logs Run  
**CDL-DSN-GR and Guard Forxo**

27. Was Well Cored  
**No**

28. CASING RECORD (Report all strings set in well)					
CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
<b>9 5/8</b>	<b>36.0</b>	<b>467</b>	<b>12 1/4</b>	<b>250 (Circ)</b>	<b>None</b>
<b>7</b>	<b>26.0</b>	<b>3426</b>	<b>8 3/4</b>	<b>700 (Circ)</b>	<b>None</b>

29. LINER RECORD				30. TUBING RECORD		
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET
					<b>2 3/8</b>	<b>3397 (3338)</b>
<b>21 Holes with one shot each at:</b>						

31. Perforation Record (Interval, size and number) **3067 (3009)**  
**3070 (3012), 3079 (3021), 3091 (3033), 3099 (3041), 3108 (3050), 3123 (3065), 3133 (3075), 3173 (3115), 3178 (3120), 3183 (3125), 3187 (3129), 3193 (3135), 3198 (3140), 3202 (3144), 3213 (3155), 3217 (3159), 3222 (3164), 3227 (3169), 3270 (3212), 3273 (3215).**

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
<b>3067-3273 (3009-3220)</b>	<b>A/5500 15% MCA</b>

33. PRODUCTION

Date First Production <b>4-21-83</b>	Production Method (Flowing, gas lift, pumping - Size and type pump) <b>Flowing</b>	Well Status (Prod. or Shut-in) <b>Shut-in</b>
Date of Test <b>4-22-83</b>	Hours Tested <b>24</b>	Choke Size <b>18/64</b>
Flow Tubing Press. <b>45 psi</b>	Casing Pressure <b>83 psi</b>	Calculated 24-Hour Rate <b>-----</b>
Oil - Bbl. <b>-----</b>	Gas - MCF <b>112</b>	Water - Bbl. <b>1</b>
Oil Gravity - API (Corr.) <b>-----</b>		

34. Disposition of Gas (Sold, used for fuel, vented, etc.)  
**Vented**

Test Witnessed By  
**Harold Swain**

35. List of Attachments  
**None**

36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.

SIGNED Larry G. Murray TITLE Engineer DATE April 22, 1983



**REPORT  
of  
SUB-SURFACE  
DIRECTIONAL  
SURVEY**

Doyle Hartman  
COMPANY

Northshore Woolworth Well No. 6  
WELL NAME

Lea County, New Mexico  
LOCATION

JOB NUMBER  
WT0483-G0189  
WT0463-S0200

TYPE OF SURVEY  
Gyroscopic Multi Shot  
Magnetic Multi Shot

DATE  
4/8/83  
4/10/83

SURVEY BY  
Gary DeSpain, Doug Jeffers

OFFICE  
West Texas

DOYLE HARTMAN  
NORTH SHORE WOOLWORTH WELL NO. 6  
LEA COUNTY, NEW MEXICO BD1-271  
4/8/83

EASTMAN WHIPSTOCK INC.  
GYROSCOPIC MULTI SHOT SURVEY WT0483-G0189  
SURVEYOR: GARY DESPAIN (0'-400')  
MAGNETIC MULTI SHOT SURVEY WT0483-S0200  
SURVEYOR: DOUG JEFFERS (400'-3420')

VERTICAL SECTION CALCULATED IN PLANE OF PROPOSAL  
DIRECTION: S 54 DEG 1 MIN. E

**Eastman**

**Whipstock**

A PETROLANE COMPANY

RECORD OF SURVEY

RADIUS OF CURVATURE METHOD

DOYLE HARTMAN  
NORTH SHORE WOOLWORTH WELL NO.6  
LEA COUNTY, NEW MEXICO BD1-271

COMPUTATION PAGE NO.  
TIME DATE  
08:54:29 19-APR-83

MEASURED DEPTH FEET	DRIFT ANGLE D M	DRIFT DIRECTION D	COURSE LENGTH FEET	TRUE VERTICAL DEPTH FEET	VERTICAL SECTION FEET	R E C T A N G U L A R C O O R D I N A T E S FEET		DOGLEG SEVERITY DG/100FT
0.	0 0	0	0.	0.00	0.00	0.00	0.00	0.00
50.	0 30	N 29 E	50.	50.00	-0.03	0.19 N	0.11 E	1.00
100.	0 30	N 62 W	50.	100.00	-0.34	0.57 N	0.01 W	1.43
150.	0 30	N 20 W	50.	150.00	-0.75	0.89 N	0.29 W	0.72
200.	0 30	N 47 W	50.	199.99	-1.16	1.25 N	0.52 W	0.47
250.	0 45	N 61 W	50.	249.99	-1.70	1.57 N	0.96 W	0.58
300.	0 45	N 52 W	50.	299.99	-2.35	1.93 N	1.51 W	0.24
350.	0 45	N 48 W	50.	349.98	-3.01	2.35 N	2.01 W	0.10
400.	0 45	N 44 W	50.	399.98	-3.66	2.80 N	2.48 W	0.10
454.	0 15	N 50 W	54.	453.98	-4.12	3.13 N	2.83 W	0.93
517.	2 0	S 35 E	63.	516.96	-4.29	2.55 N	3.45 W	3.56
581.	5 0	S 25 E	64.	580.83	-0.71	0.83 S	1.50 W	4.77
644.	8 0	S 30 E	63.	643.42	5.65	7.15 S	1.79 E	4.84
707.	10 0	S 47 E	63.	705.64	15.11	14.84 S	7.90 E	5.25
770.	12 30	S 50 E	63.	767.43	27.34	22.98 S	17.10 E	4.07
833.	13 0	S 63 E	63.	828.87	41.20	30.64 S	28.67 E	4.61
896.	13 45	S 69 E	63.	890.17	55.45	36.56 S	41.98 E	2.50
959.	15 30	S 72 E	63.	951.12	70.70	41.87 S	56.97 E	3.03
1022.	15 45	S 71 E	63.	1011.79	86.89	47.25 S	73.06 E	0.51
1085.	15 45	S 72 E	63.	1072.43	103.20	52.68 S	89.28 E	0.43
1148.	15 30	S 71 E	63.	1133.10	119.38	58.06 S	105.37 E	0.58
1212.	16 0	S 70 E	64.	1194.70	136.04	63.86 S	121.75 E	0.89
1275.	15 45	S 71 E	63.	1255.29	152.56	69.61 S	137.99 E	0.59
1338.	16 0	S 72 E	63.	1315.89	169.00	75.08 S	154.34 E	0.59
1401.	16 15	S 73 E	63.	1376.41	185.60	80.34 S	171.02 E	0.59
1464.	15 45	S 72 E	63.	1436.97	202.07	85.57 S	187.58 E	0.91
1527.	15 15	S 71 E	63.	1497.68	218.12	90.91 S	203.55 E	0.90
1590.	16 15	S 59 E	63.	1558.31	234.88	98.12 S	219.02 E	5.40
1653.	17 45	S 58 E	63.	1618.56	253.24	107.75 S	234.73 E	2.43
1716.	17 0	S 59 E	63.	1678.68	272.00	117.58 S	250.77 E	1.28



DOYLE HARTMAN  
NORTH SHORE WOOLWORTH WELL NO.6  
LEA COUNTY, NEW MEXICO BD1-271

COMPUTATION  
TIME DATE  
08:54:29 19-APR-83

PAGE NO. 2

MEASURED DEPTH FEET	DRIFT ANGLE D M	DRIFT DIRECTION D	COURSE LENGTH FEET	TRUE VERTICAL DEPTH FEET	VERTICAL SECTION FEET	R E C T A N G U L A R C O O R D I N A T E S FEET		DOGLEG SEVERITY DG/100FT
1779.	15 45	S 59 E	63.	1739.13	289.69	126.72 S	265.99 E	1.98
1843.	15 15	S 59 E	64.	1800.80	306.73	135.53 S	280.65 E	0.78
1906.	14 15	S 59 E	63.	1861.72	322.71	143.79 S	294.40 E	1.59
1969.	13 30	S 58 E	63.	1922.88	337.77	151.69 S	307.28 E	1.25
2032.	12 45	S 57 E	63.	1984.24	352.05	159.37 S	319.35 E	1.24
2095.	12 15	S 55 E	63.	2045.75	365.68	167.00 S	330.65 E	1.05
2158.	11 45	S 58 E	63.	2107.37	378.76	174.23 S	341.57 E	1.27
2221.	11 0	S 61 E	63.	2169.13	391.13	180.53 S	352.28 E	1.52
2284.	10 45	S 62 E	63.	2231.00	402.91	186.20 S	362.72 E	0.50
2347.	10 15	S 64 E	63.	2292.94	414.25	191.41 S	372.95 E	0.98
2410.	9 0	S 65 E	63.	2355.06	424.61	195.95 S	382.46 E	2.00
2474.	8 45	S 68 E	64.	2418.29	434.24	199.89 S	391.51 E	0.82
2537.	8 0	S 67 E	63.	2480.62	443.17	203.40 S	399.99 E	1.21
2600.	6 45	S 64 E	63.	2543.09	451.10	206.75 S	407.35 E	2.08
2663.	5 30	S 50 E	63.	2605.73	457.79	210.40 S	412.97 E	3.08
2726.	4 15	S 30 E	63.	2668.50	462.96	214.48 S	416.39 E	3.32
2789.	4 15	S 6 E	63.	2731.33	466.71	218.89 S	417.83 E	2.80
2852.	4 15	S 20 W	63.	2794.16	468.95	223.49 S	417.26 E	3.03
2915.	4 0	S 34 W	63.	2856.99	469.66	227.51 S	415.21 E	1.64
2978.	3 45	S 33 W	63.	2919.85	469.84	231.06 S	412.86 E	0.41
3041.	3 0	S 35 W	63.	2982.74	469.97	234.14 S	410.79 E	1.20
3105.	2 45	S 35 W	64.	3046.66	470.03	236.77 S	408.94 E	0.39
3168.	3 0	S 37 W	63.	3109.58	470.02	239.32 S	407.09 E	0.43
3231.	2 45	S 31 W	63.	3172.50	470.13	241.94 S	405.32 E	0.62
3294.	2 0	S 36 W	63.	3235.45	470.25	244.12 S	403.88 E	1.23
3357.	1 45	S 47 W	63.	3298.41	470.05	245.66 S	402.52 E	0.69
3420.	1 45	S 45 W	63.	3361.38	469.71	247.00 S	401.13 E	0.10

FINAL CLOSURE - DIRECTION: S 58 DEGS 23 MINS E  
DISTANCE: 471.08 FEET

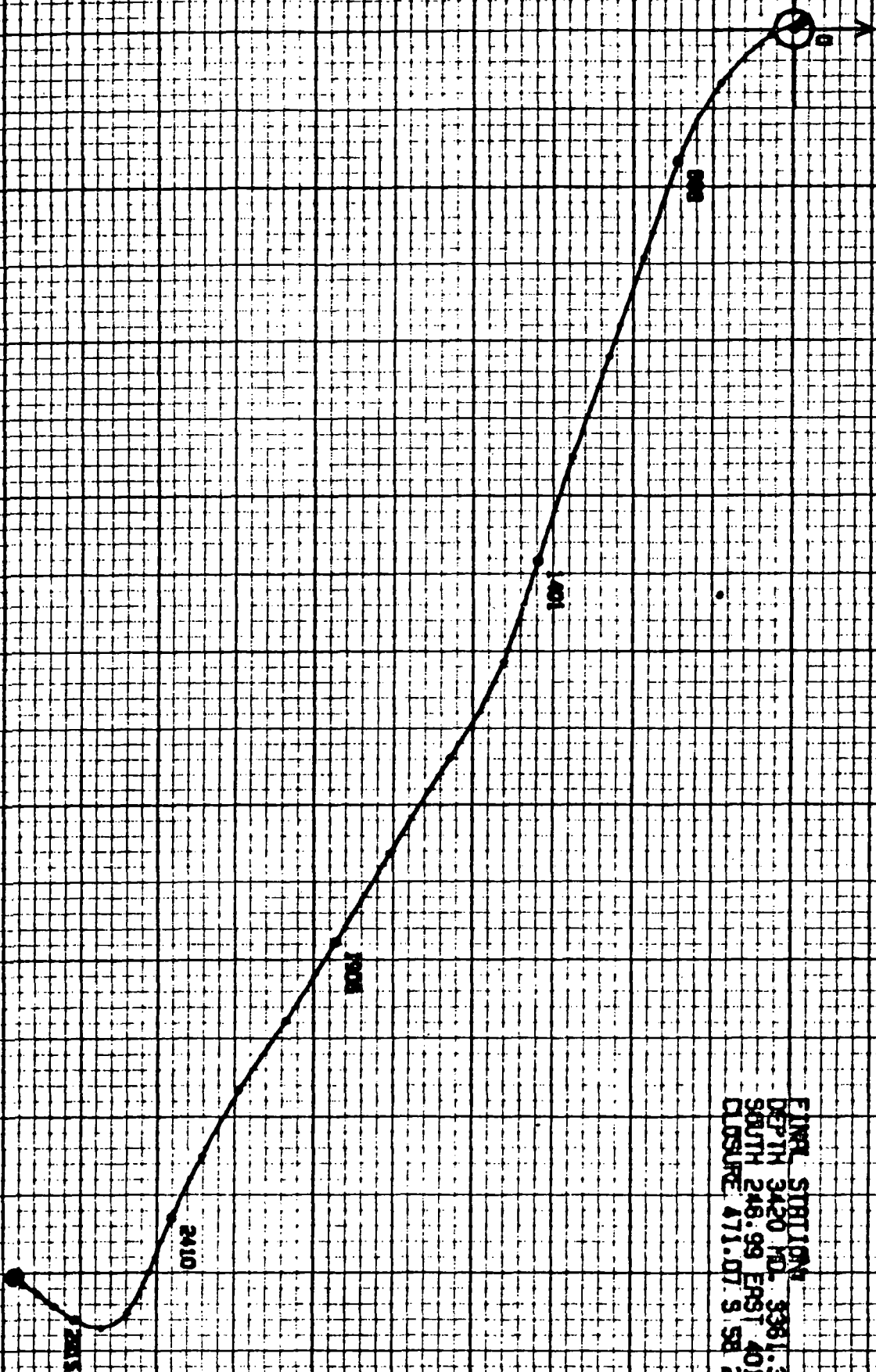
BOYLE HARRISON  
NORTH SHORE LOG NORTH WELL NO. 6  
LER COUNTY, NEW MEXICO

801-271

BRISTON WILSON, INC.

HORIZONTAL PROJECTION  
SCALE 1 IN. = 50 FEET  
DEPTH INDICATOR NO.

FINAL STRICTION  
DEPTH 3420 NO. 3381.38 TVD  
SOUTH 248.99 EAST 401.13  
CLOSURE 471.07 S 58 22 39 E





P. O. Box 5577/Midland, Texas 79704/(915) 563-0511

# SURVEY CERTIFICATION SHEET

STATE OF TEXAS  
COUNTY OF MIDLAND

I, Gary DeSpain, in the employ of Eastman Whipstock, Inc., did on the days of 4-8, 1983 thru 4-8, 1983 conduct or supervise the taking of a Gyroscopic Multi Shot survey by the method of magnetic orientation from a depth of 0 feet to 400 feet, with recordings of inclination and direction being obtained at approximate intervals of 50 feet.

This survey was conducted at the request of Doyle Hartman for their North Shore Woolworth #6, Lea County County, State of New Mexico, in the                      field.

This data for this survey and the calculation were obtained and performed by me according to standards and procedures as set forth by Eastman Whipstock, Inc. and is true and correct to the best of my knowledge.

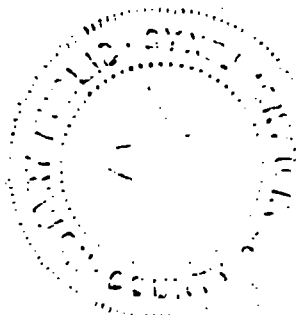
Gary DeSpain  
Directional Supervisor/ Surveyor

The data for this survey has been examined by me and conforms to principles and procedures set forth by Eastman Whipstock, Inc.

Troy Dwyer  
Before me, the undersigned authority, on this day personally appeared Gary DeSpain, known to me to be the person whose name is subscribed to this instrument, who after being by me duly sworn on oath, states that he has knowledge of all the facts stated above and that this instrument is a true statement of facts therein recited.

Subscribed and sworn to before me on this 19th day of April, 1983

Ray E. Stinke  
Notary Public in and for the  
County of Midland, Texas  
My commission expires 7/9/85





P. O. Box 5577/Midland, Texas 79704/(915) 563-0511

# SURVEY CERTIFICATION SHEET

STATE OF TEXAS  
COUNTY OF MIDLAND

I, Doug Jeffers, in the employ of Eastman Whipstock, Inc., did on the days of April 18, 1983 thru April 18, 1983 conduct or supervise the taking of a Magnetic Multi Shot survey by the method of magnetic orientation from a depth of 400 feet to 3420 feet, with recordings of inclination and direction being obtained at approximate intervals of 93 feet.

This survey was conducted at the request of Doyle Hartman for their North Shore Woolworth #6, Lea County, State of New Mexico, in the \_\_\_\_\_ field.

This data for this survey and the calculation were obtained and performed by me according to standards and procedures as set forth by Eastman Whipstock, Inc. and is true and correct to the best of my knowledge.

Doug Jeffers  
Directional Supervisor/ Surveyor

The data for this survey has been examined by me and conforms to principles and procedures set forth by Eastman Whipstock, Inc.

Doug Jeffers  
Before me, the undersigned authority, on this day personally appeared Doug Jeffers, known to me to be the person whose name is subscribed to this instrument, who after being by me duly sworn on oath, states that he has knowledge of all the facts stated above and that this instrument is a true statement of facts therein recited.

Subscribed and sworn to before me on this 19TH day of April, 1983

Doyle Steinke  
Notary Public in and for the  
County of Midland, Texas  
My commission expires 7/9/85

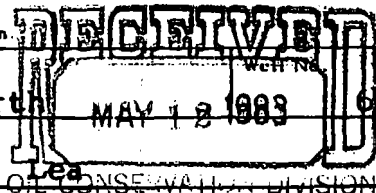


NEW MEXICO OIL CONSERVATION COMMISS  
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102  
Supersedes C-12H  
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

Operator <b>Doyle Hartman</b>		Lease <b>Northshore-Woolworth</b>		Well No. <b>6</b>	
Unit Letter <b>E</b>	Section <b>33</b>	Township <b>24 South</b>	Range <b>37 East</b>	County <b>SANTA FE</b>	



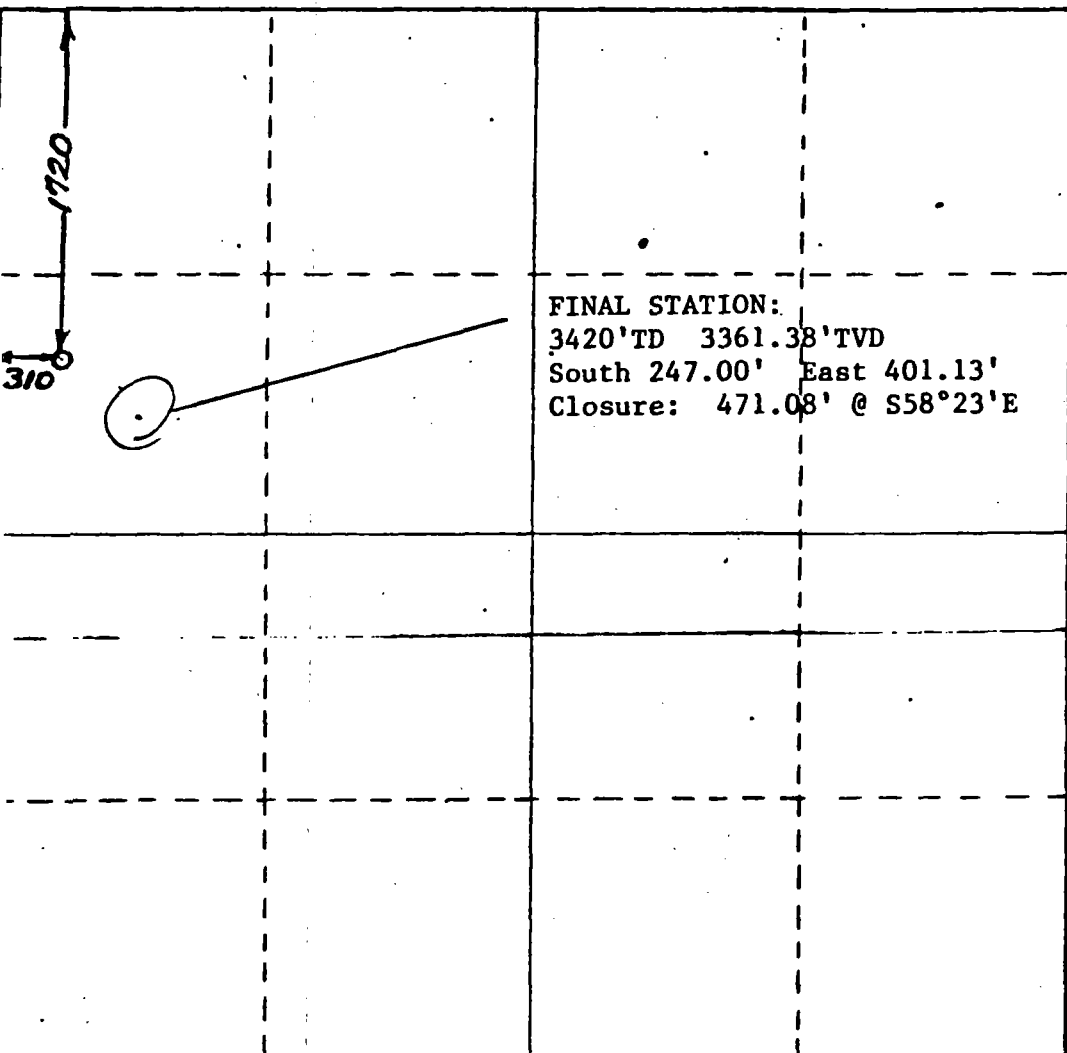
Actual Footage Location of Well <b>1720</b> feet from the <b>North</b> line and <b>310</b> feet from the <b>West</b> line		Ground Level Elev. <b>3162.0</b>		Producing Formation <b>Yates-Seven Rivers</b>	Pool <b>Jalmat (Gas)</b>	Dedicated Acreage: <b>160</b> Acres
--	--	-------------------------------------	--	--	-----------------------------	--

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

*Larry A. Nermyr*

Name

**Larry A. Nermyr**

Position

**Engineer**

Company

**Doyle Hartman**

Date

**February 11, 1983**

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

**December 10, 1982**

Registered Professional Engineer and/or Licensed Surveyor

*Truman Gaskin*  
**Truman Gaskin**

Certificate No.

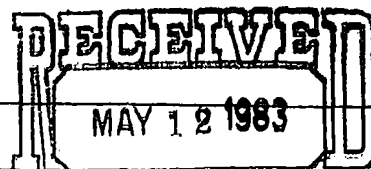
**2126**

330 660 990 1320 1650 1980 2310 2640 2970 3300 3630 3960 4290 4620 4950 5280 5610 5940 6270 6600

NO. OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
TRANSPORTER	OIL GAS
OPERATOR	
PRODUCTION OFFICE	

NEW MEXICO OIL CONSERVATION COMMISSION  
REQUEST FOR ALLOWABLE  
AND  
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Form C-104  
Supersedes Old C-104 and C-  
Effective 1-1-65



OIL CONSERVATION DIVISION  
SANTA FE

Operator  
Doyle Hartman  
Address  
Post Office Box 10426, Midland, Texas 79702

Reason(s) for filing (Check proper box)		Other (Please explain)	
New Well <input checked="" type="checkbox"/>	Change in Transporter of <input type="checkbox"/>		
Recompletion <input type="checkbox"/>	Oil <input type="checkbox"/>	Dry Gas <input checked="" type="checkbox"/>	
Change in Ownership <input type="checkbox"/>	Casinghead Gas <input type="checkbox"/>	Condensate <input type="checkbox"/>	

If change of ownership give name  
and address of previous owner

DESCRIPTION OF WELL AND LEASE

Lease Name Northshore Woolworth	Well No. 6	Pool Name, including Formation Jalmat (Gas)	Kind of Lease State, Federal or Fee	Fee	Lease No.
Location Bottom Hole Location = 1967 FNL & 711 FWL Section 33, T-24-S, R-37-E					
Unit Letter <u>E</u> : <u>1720</u> Feet From The <u>North</u> Line and <u>310</u> Feet From The <u>West</u>					
Line of Section <u>33</u> Township <u>24S</u> Range <u>37E</u> , NMPM, <u>Lea</u> County					

DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input type="checkbox"/> or Condensate <input type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)					
Name of Authorized Transporter of Casinghead Gas <input type="checkbox"/> or Dry Gas <input checked="" type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)					
El Paso Natural Gas Company	Post Office Box 1384, Jal, New Mexico 88252					
If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.	Is gas actually connected?	When
					No	4-27-83

If this production is commingled with that from any other lease or pool, give commingling order number:

COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v.	Diff. Res'v.
		X	X					
Date Spudded 4-7-83	Date Compl. Ready to Prod. 4-21-83		Total Depth 3426 (3366 TVD)		P.B.T.D. 3420 (3361 TVD)			
Elevations (DF, RKB, RT, GR, etc.) 3262 GL	Name of Producing Formation Yate-Seven Rivers		Top Oil/Gas Pay 3067 (3009 TVD)		Tubing Depth 3397 (3338 TVD)			
Perforations 3067-3273 (3009-3220) Yates-Seven Rivers					Depth Casing Shoe 3426 (3366 TVD)			

TUBING, CASING, AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
12 1/4	9 5/8	467	250 (Circ)
8 3/4	7	3426 (3366 TVD)	700 (Circ)

TEST DATA AND REQUEST FOR ALLOWABLE OIL WELL

(Test must be after recovery of total volume of load oil and must be equal to or exceed top oil available for this depth or be for full 24 hours)

Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil-Bbls.	Water-Bbls.	Gas-MCF

GAS WELL

Actual Prod. Test-MCF/D 112	Length of Test 24 Hr	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pilot, back pr.) Orifice Tester	Tubing Pressure (shut-in) 45 psi	Casing Pressure (shut-in) 83 psi	Choke Size 18/64

CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Commission have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Larry G. Newman  
(Signature)

ENGINEER

(Title)

APRIL 22, 1983

(Date)

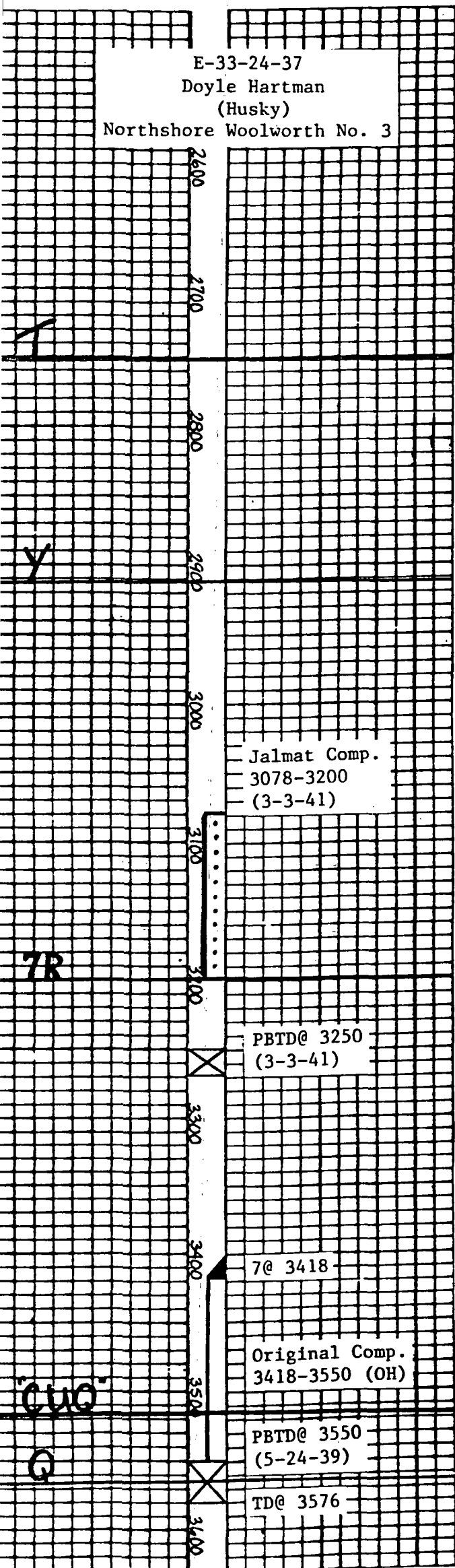
OIL CONSERVATION COMMISSION

APPROVED \_\_\_\_\_, 19 \_\_\_\_\_

BY \_\_\_\_\_

TITLE \_\_\_\_\_

This form is to be filed in compliance with RULE 1104.  
If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviation tests taken on the well in accordance with RULE 111.  
All sections of this form must be filled out completely for allowable on new and recompleted wells.  
Fill out only Sections I, II, III, and VI for changes of owner, well name or number, or transporter, or other such change of conditions.



COMPANY	Doyle Hartman
	(Northshore/Husky)
WELL	Northshore Woolworth No. 3
FIELD	Jalmat (Gas)
LOCATION	2310 FNL & 330 FWL (E)
	Section 33, T-24-S, R-37-E
	(24-37-33-E)
COUNTY	Lea
STATE	New Mexico
ELEVATIONS:	KB
	DF 3273
	GL

COMPLETION RECORD			
SPUD DATE	2-26-39	COMP. DATE	5-24-39
TD	3576	PBTD	3550
CASING RECORD	9 5/8 @ 1218 w/250		
	7 @ 3418 w/250		
PERFORATING RECORD	OH: 3418-3550		
STIMULATION	Shot w/320 quarts (3475-3570) T/P @ 3531		
IP	IPF= 60 BOPD		
GOR	GR		
TP	CP		
CHOKE	TUBING @		
REMARKS	3-3-41: PBTD @ 3250. Perf 3078-3200 (Yates). F/8000 MCFPD. Recompleted to gas.		
Final Langmat Cum: 24.0 MBO			
2-83 Cum Prod: 7485 MMCF			
1982 Avg. Prod: 7 MCFPD			
Pursuant to NMOCDC Order No. R-7247, well disconnected from El Paso Natural Gas Company's Gathering System on April 28, 1983.			

## GAS PRODUCTION HISTORY

Date 2-1-83

Page 1 of 1

Operator: Doyle Hartman (Husky)

Well: Northshore Woolworth No. 3

Location: E-33-24S-37E

Pool: Jalmat (Gas)

Spud Date: \_\_\_\_\_ Original Completion Date: \_\_\_\_\_

Completion Interval (Gas): \_\_\_\_\_

Completion Date (Gas): \_\_\_\_\_ First Production (Gas): \_\_\_\_\_

Remarks: 2-3-83: Ran sinker bar on wireline.

Found junk in hole or collapsed casing

at 2730. Well shut-in 4-28-83.

[illegible]

19 82		Detail Summary	
Jan.	700	July	51
Feb.	372	Aug.	38
March	847	Sept.	31
April	158	Oct.	0
May	68	Nov.	21
June	4	Dec.	187

19 <u>83</u>		Detail Summary	
Jan.	186	July	
Feb.	95	Aug.	
March		Sept.	
April		Oct.	
May		Nov.	
June		Dec.	

Production (Y-T-D) 2477 MCF / 281 MCF

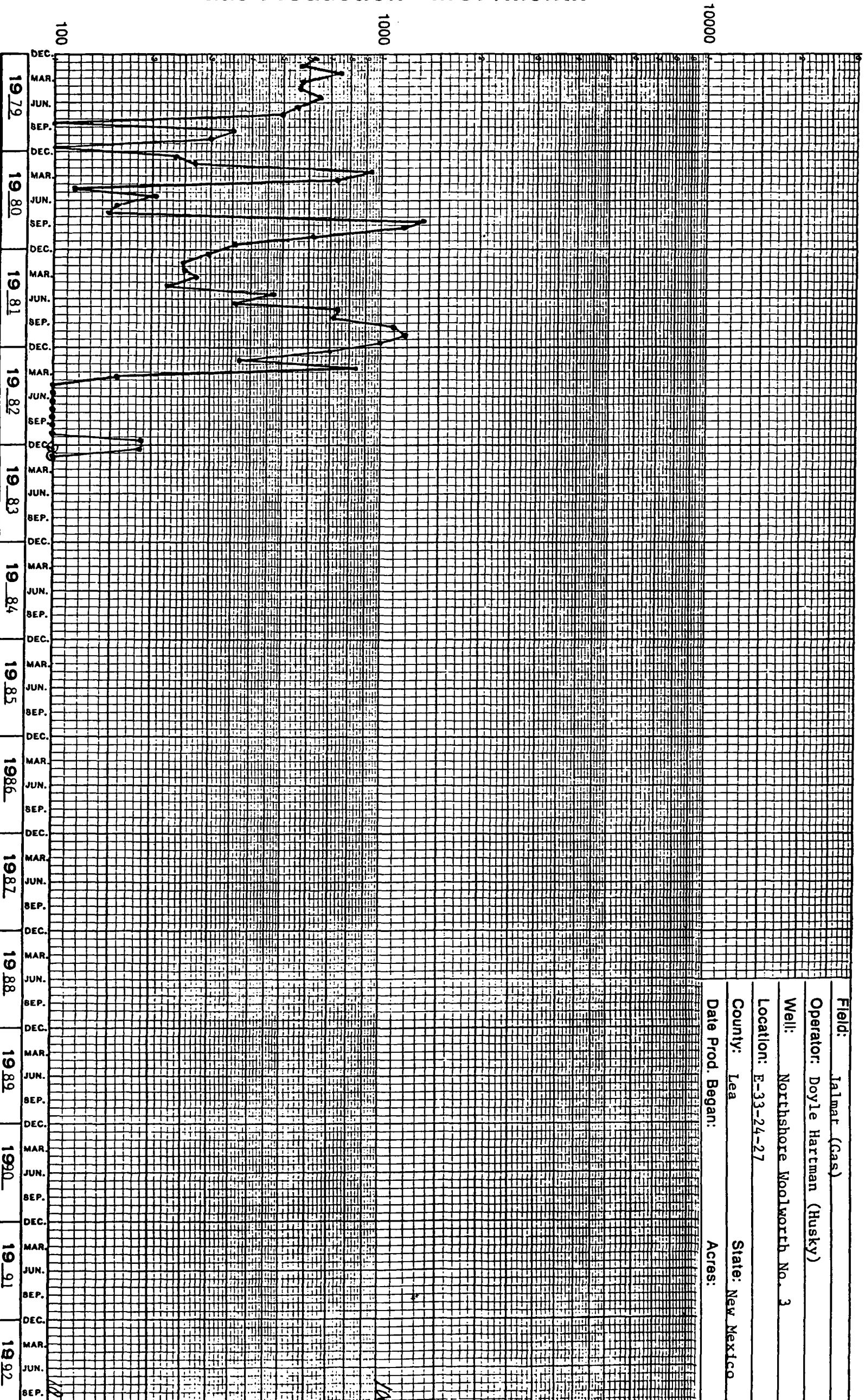
Days or Months (Y-T-D) 12 mos. / 2 mos.

Avg. Rate (Y-T-D) 206 MCF/mo. / 141 MCF/mo.

7 MCFPD/5MCFPD



Gas Production - MCF/month



Field: Jalmar (Gas)  
Operator: Doyle Hartman (Husky)  
Well: Northshore Woolworth No. 3  
Location: E-33-24-27  
County: Lea  
State: New Mexico  
Date Prod. Began: Acres:

# Gas Production - MCF/month

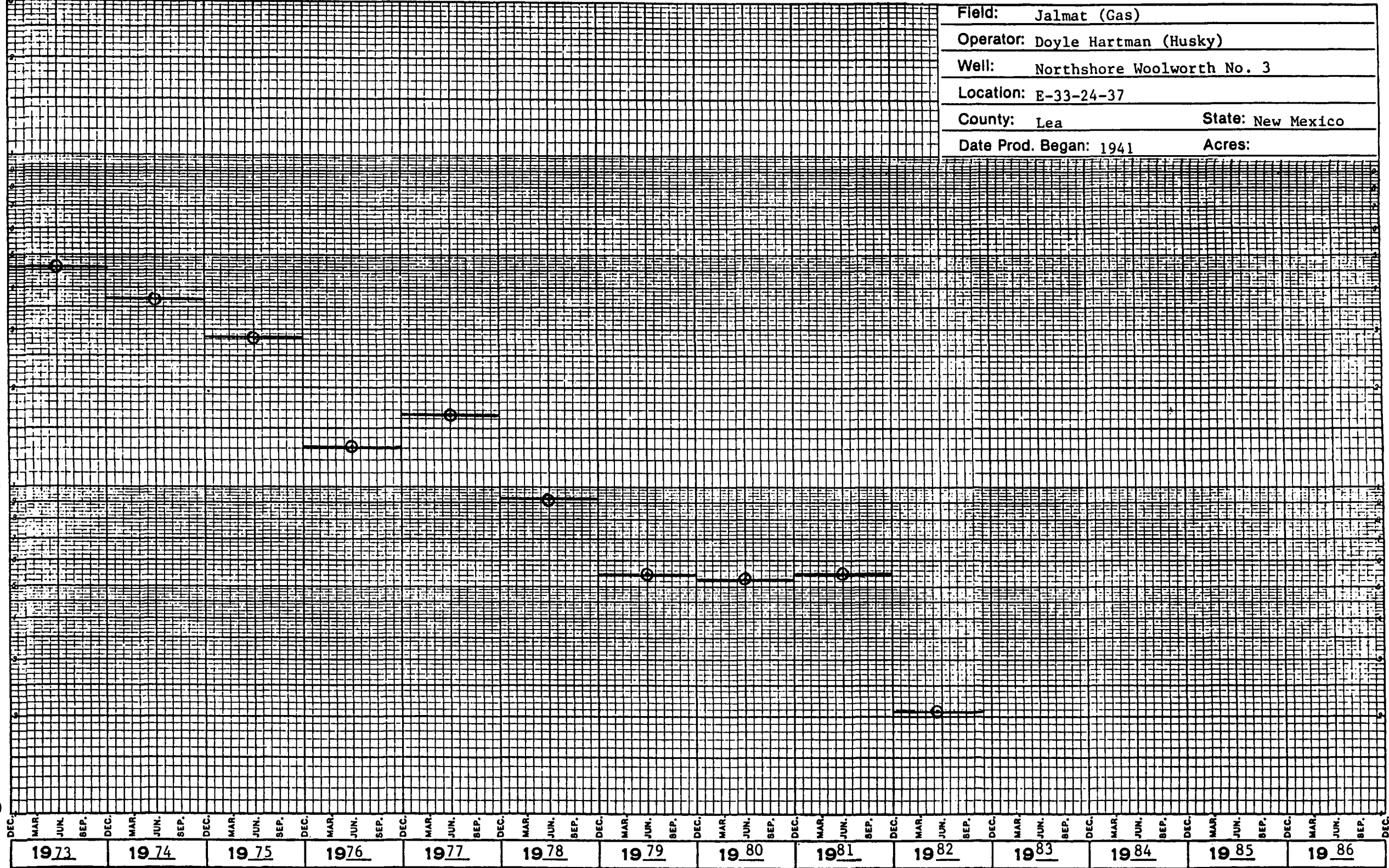
10000

1000

100

DEC. 1973 JUN. 1974 SEP. 1974 DEC. 1974 JUN. 1975 SEP. 1975 DEC. 1975 JUN. 1976 SEP. 1976 DEC. 1976 JUN. 1977 SEP. 1977 DEC. 1977 JUN. 1978 SEP. 1978 DEC. 1978 JUN. 1979 SEP. 1979 DEC. 1979 JUN. 1980 SEP. 1980 DEC. 1980 JUN. 1981 SEP. 1981 DEC. 1981 JUN. 1982 SEP. 1982 DEC. 1982 JUN. 1983 SEP. 1983 DEC. 1983 JUN. 1984 SEP. 1984 DEC. 1984 JUN. 1985 SEP. 1985 DEC. 1985 JUN. 1986 SEP. 1986 DEC. 1986

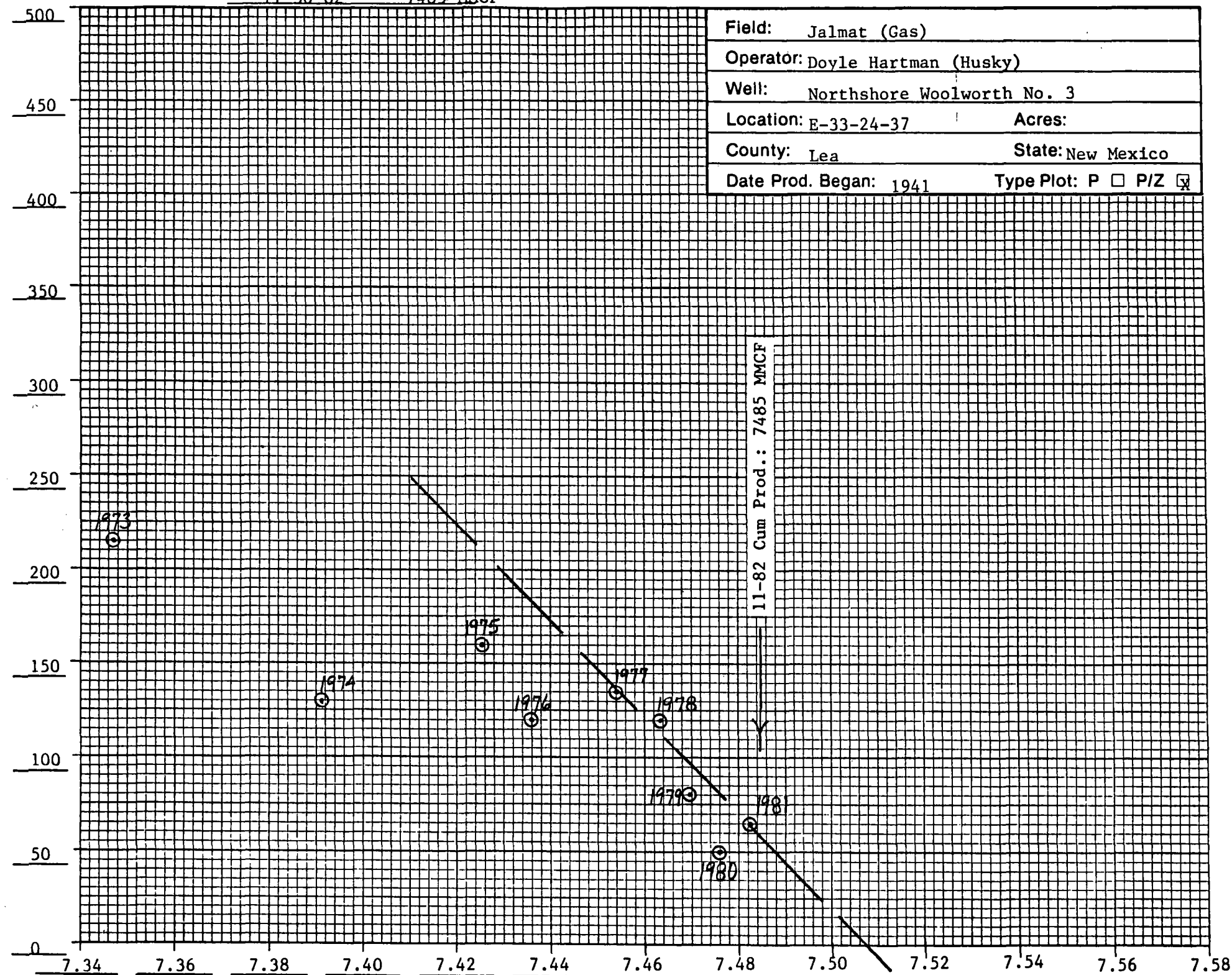
Field:	Jalmat (Gas)		
Operator:	Doyle Hartman (Husky)		
Well:	Northshore Woolworth No. 3		
Location:	E-33-24-37		
County:	Lea	State:	New Mexico
Date Prod. Began:	1941	Acres:	

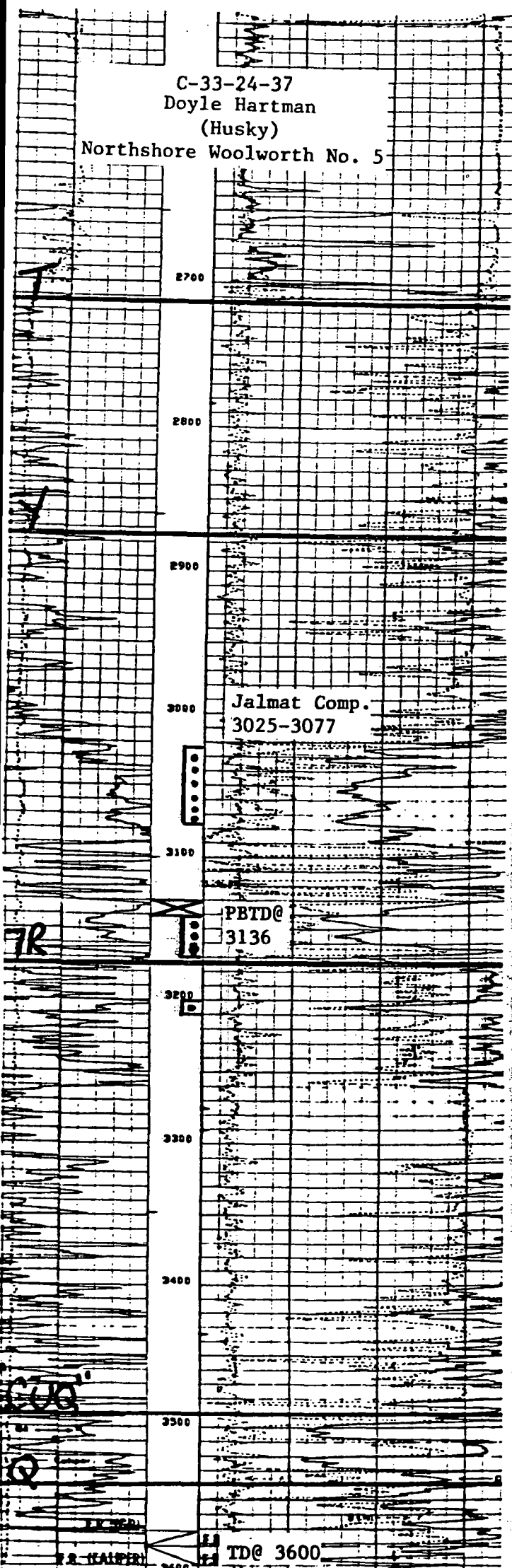


11-30-82 CUM: 7485 MMCF

Field:	Jalmat (Gas)		
Operator:	Doyle Hartman (Husky)		
Well:	Northshore Woolworth No. 3		
Location:	E-33-24-37	Acres:	
County:	Lea	State:	New Mexico
Date Prod. Began:	1941	Type Plot:	P <input type="checkbox"/> P/Z <input checked="" type="checkbox"/>

Pressure or P/Z - (psia)





COMPANY	Doyle Hartman
	(Husky)
WELL	Northshore Woolworth No. 5
FIELD	Jalmat
LOCATION	730 FNL & 1980 FWL (C)
	Section 33, T-24-S, R-37-E
	(24-37-33-C)
COUNTY	Lea
STATE	New Mexico
ELEVATIONS:	KB 3268
	DF
	GL 3258

COMPLETION RECORD			
SPUD DATE	3-7-80	COMP. DATE	6-12-80
TD	3600	PSTD	3136
CASING RECORD	8 5/8 @ 1203 w/600		
	5 1/2 @ 3598 w/1026		
PERFORATING RECORD	Perf: 3025-3077 w/17*		
STIMULATION	A/2800		
	SWF/60,000 + 60,000		
IP	IPF= 50 MCFPD		
GOR		GR	
TP	90	CP	150
CHOKE	16/64	TUBING	2 3/8 @ 3069
REMARKS	*4-12-80: Perf 3141-3204 w/4.		
	A/1200 and tested. Set CIBP @		
	3136. Perf 3025-3077 w/17.		
	2-83 Cum Prod: 16.5 MMCF		
	1982 Avg. Prod: 15.1 MCFPD		



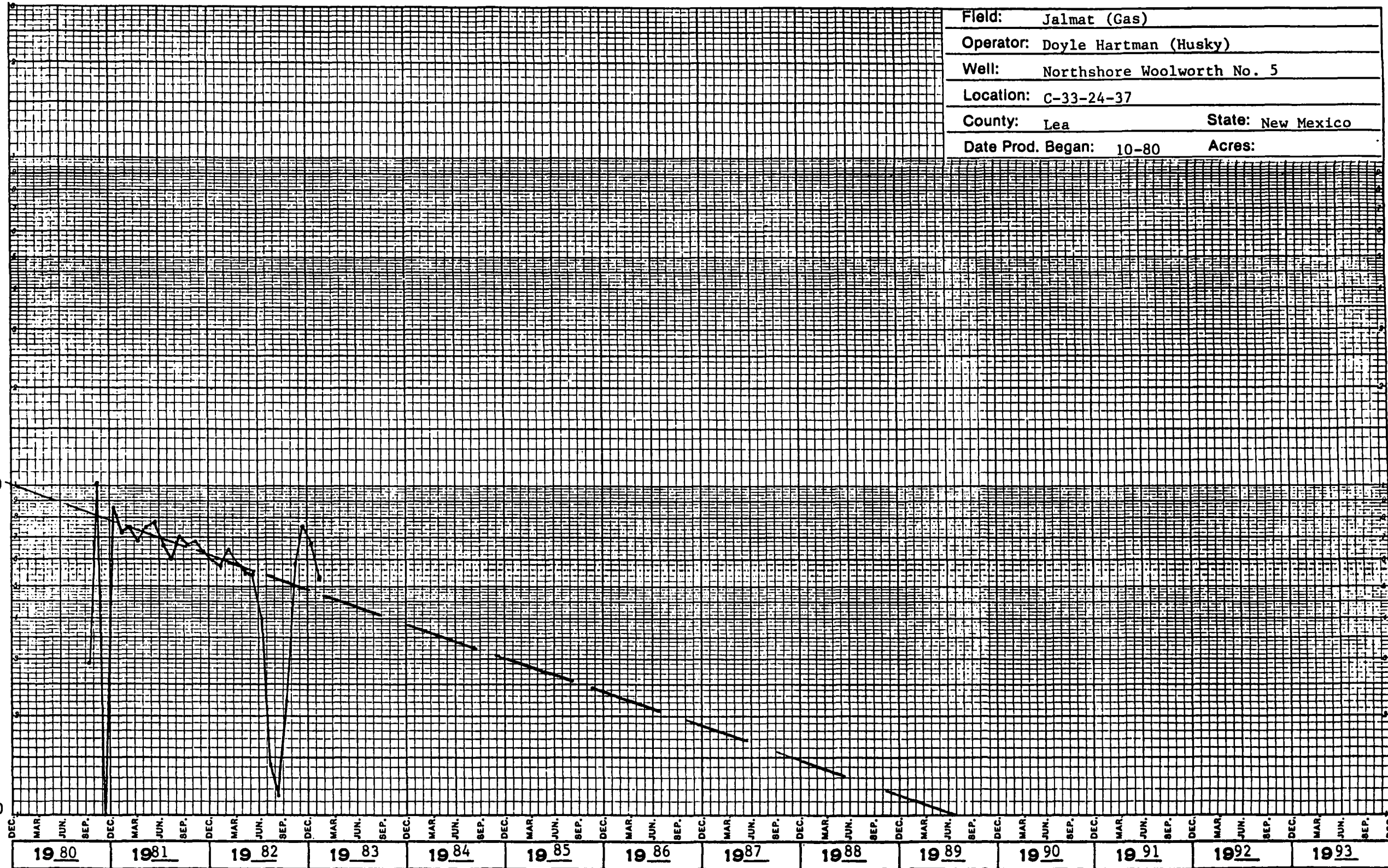


Gas Production - MCF/month

10000

1000

100



Field:	Jalmat (Gas)		
Operator:	Doyle Hartman (Husky)		
Well:	Northshore Woolworth No. 5		
Location:	C-33-24-37		
County:	Lea	State:	New Mexico
Date Prod. Began:	10-80	Acres:	