

CASE 5080: Appli. of HORIZON OIL  
& GAS CO. OF TEXAS FOR A DUAL  
COMPLETION, EDDY COUNTY, N. M.

CASE No.

5080

Application,

Transcripts,

Small Exhibits

ETC.

dearnley, meier & associates

109 SIMMS BLDG., P.O. BOX 1092, PHONE 243-6891 • ALBUQUERQUE, NEW MEXICO 87103  
1216 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

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BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
CONFERENCE ROOM, STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO  
October 17, 1973

EXAMINER HEARING

IN THE MATTER OF:

Application of Horizon Oil &  
Gas Company of Texas for a  
dual completion, Eddy County,  
New Mexico.

Case No. 5080

BEFORE: DANIEL S. NUTTER,  
Examiner

TRANSCRIPT OF HEARING

1 MR. NUTTER: Call Case Number 5080.

2 MR. CARR: Case 5080, Application of Horizon Oil  
3 & Gas Company of Texas for a dual completion, Eddy  
4 County, New Mexico.

5 MR. KELLAHIN: If the Examiner please, Tom Kellahin  
6 of Kellahin and Fox, Santa Fe, New Mexico, appearing on  
7 behalf of the Applicant, Horizon Oil & Gas Company and  
8 I have one witness to be sworn.

9  
10 LOYD HENDRICKSON,  
11 was called as a witness, and after being duly sworn,  
12 testified as follows:

13 DIRECT EXAMINATION

14 BY MR. KELLAHIN:

15 Q Will you please state your name, by whom you're employed  
16 and in what capacity?

17 A My name is Loyd Hendrickson. I'm a consulting geologist  
18 in Midland.

19 Q Have you previously testified before this commission?

20 A No, sir, I haven't.

21 Q Mr. Hendrickson, will you briefly state your educational  
22 and employment background for the benefit of the  
23 Examiner?

24 A I received a Bachelor of Science Degree in geology in  
25 1954 from what is now the University of Texas at El Paso.

1 I was employed primarily as a exploration geologist from  
2 1954 by various companies, small independent companies,  
3 up until three years ago, at which time or since that  
4 time, I've been a consultant in Midland.

5 Q What experience have you had in Eddy County, New Mexico?

6 A In the past 10 years and especially the past three or  
7 four years, I've had quite a bit of experience primarily  
8 as a exploration geologist, with limited experience in  
9 the engineering and completion.

10 Q Are you familiar with the facts surrounding this particular  
11 application?

12 A Yes, I am.

13 MR. KELLAHIN: Mr. Examiner, are the witness's  
14 qualifications acceptable?

15 MR. NUTTER: Yes, they are.

16 Q Mr. Hendrickson, will you please refer to what has been  
17 marked as Exhibit Number 1, identify it for us and  
18 state briefly what the applicant is seeking.

19 A This is a shot of the land plat, covering primarily  
20 Township 17, 29 in Eddy County.

21 The wells colored in yellow are producers from  
22 the Grayburg Morrow reservoir. There's a well in the  
23 northeast or the southwest quarter of Section 15 that  
24 was completed from an Atoka Sandstone. I don't know  
25 if that has had a field name assigned to it at this time.

dearnley, meier & associates

209 SIMMS BLDG., P.O. BOX 1002, PHONE 243-6601, ALBUQUERQUE, NEW MEXICO 87103  
1216 FIRST NATIONAL BANK BLDG., EAST ALBUQUERQUE, NEW MEXICO 87108

1 The well in question, 1980 from the south and  
2 west lines of Section 28 is a dually completed well from  
3 the Atoka and also from the Grayburg Morrow pool.  
4 Q Please refer to what has been marked as Exhibit Number 2  
5 and identify it, please.

6 A This is a sketch showing the way the well is completed  
7 downhole. It shows the tubing strings, the production  
8 packers, the location of the scratcher and centralizers  
9 and notes the interval of perforations of the two zones.  
10 Q Also locates the location and quantity of the cement  
11 used, doesn't it?  
12 A That's correct.

13 Q What surface connections will be instituted on this well?  
14 A Each zone will have a separate separator and heater and  
15 metering device. They will be treated on the surface  
16 as two independent zones.

17 Q Will you please refer to what has been marked as Exhibit  
18 Number 3?  
19 A This is a copy of the electrical log showing the thickness  
20 of the two zones, the perforations and the drill stem  
21 test intervals that were run on these particular pay  
22 zones.

23 Q Perforations are marked by the red pencil, are they?  
24 A That's correct.

25 Q Will you please refer to Exhibit Number 4.

1 A This is form C105, completion report for the subject  
2 well. It shows, among other things, perforating intervals,  
3 casing and cement and treatment of the zones.

4 Q And Exhibit Number 5?

5 A I believe the first one was a C105 on the Morrow Zone  
6 and the next one is on the Grayburg-Atoka. You may have  
7 had those both marked as 4, did you?

8 Q I had them marked separately.

9 A Okay.

10 Q Exhibit Number 6, what is this?

11 A This is a Packer leakage test that was run on each zone.  
12 Behind the filled out form is the chart. It shows that  
13 as the individual zones were flowed, that the pertinent  
14 Packer did not show pressure communication.

15 Q Please refer to Exhibit Number 7 and identify it,  
16 please?

17 A Exhibit 7 is a four point back pressure test run on each  
18 zone showing completion in the Atoka of three million  
19 four hundred thirty five MCF per day and the Morrow,  
20 475.5 MCF per day.

21 Q Exhibit Number 8 is a back pressure test on the Morrow?

22 A That's correct.

23 Q As indicated on the schematic, Mr. Hendrickson, is that  
24 a conventional type of dual completion previously approved  
25 by the commission and is it adequate to protect the

1 separation of the two formations?

2 A Yes, I believe it is.

3 Q In your opinion, Mr. Hendrickson, will approval of this  
4 application prevent waste and protect the correlative  
5 rights of others?

6 A Yes, it will.

7 Q Were Exhibits 1 through 8 prepared either by you or  
8 under your direction and supervision?

9 A No, they were not.

10 Q Which exhibits were prepared by you?

11 A None of these exhibits were prepared.

12 Q Are these exhibits that have been furnished on commission  
13 forms and were either prepared -- who were they prepared  
14 by, Mr. Hendrickson?

15 A They were primarily prepared by Mr. Everett Tracy, who  
16 is the production manager for Horizon in Spearman, Texas.

17 Q Have you examined these exhibits and are they consistent  
18 with your investigations to establish whether they are  
19 accurate or not?

20 A Yes, sir.

21 Q And are they accurate?

22 A Yes, sir, I believe they are.

23 MR. KELIAHIN: Mr. Examiner, we move the introduction  
24 of Exhibits 1 through 8.

25 MR. NUTTER: Exhibits 1 through 8 will be admitted



1 in evidence.

2 MR. KELLAHIN: That concludes our direct examination.

3  
4 CROSS EXAMINATION

5 BY MR. NUTTER:

6 Q Mr. Hendrickson, on your Exhibit Number 1, you indicated  
7 that the yellow wells were the wells producing from the  
8 Grayburg Morrow gas pool.

9 A That's correct.

10 Q Are there any wells on this plat anywhere that's produced  
11 from the Atoka zone?

12 A Yes, sir, the well in Section 15, a recently completed  
13 well by Debco, it's shown and not colored. I apologize  
14 for that. It's in the northeast of the southwest quarter  
15 of 15.

16 Q That's an Atoka gas well?

17 A Yes, sir and in my opinion, roughly equivalent to the  
18 zone that produces in this well.

19 Q You've got a far better well in the Atoka here than you  
20 have in the Morrow.

21 A That's correct, even though we do feel the Morrow will  
22 improve. In the process of dually completing, we got a  
23 bunch of fluid in the Morrow formation that we think will  
24 clear up.

25 Q This well that's way out here to the west colored yellow,

1 that's a Morrow gas well?

2 A Yes.

3 Q It's probably not in the physical limits of the Grayburg  
4 Morrow, but it is a Morrow gas well?

5 A That's correct.

6 Q I said probably not within the physical limits of the  
7 Grayburg Morrow gas pool as defined by the commission,  
8 but it is a Morrow gas well?

9 A I believe that's known as the A Morrow field.

10 MR. NUTTER: Are there any further questions of  
11 Mr. Hendrickson?

12 MR. KELLAHIN: Nothing further, Mr. Examiner.

13 MR. NUTTER: He may be excused.

14 (Witness Excused)

15 MR. NUTTER: Does anyone have anything they wish  
16 to offer in Case 5080?

17 (No Response)

18 MR. NUTTER: We'll take the case under advisement.  
19  
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1  
2 STATE OF NEW MEXICO )  
3 ) ss  
4 COUNTY OF BERNALILLO )

5 I, Donna Keith, a Certified Shorthand Reporter, in and for  
6 the County of Bernalillo, State of New Mexico, do hereby  
7 certify that the foregoing and attached Transcript of Hearing  
8 before the New Mexico Oil Conservation Commission was reported  
9 by me; and that the same is a true and correct record of the  
10 said proceedings to the best of my knowledge, skill and  
11 ability.

12 Donna Keith  
13 CERTIFIED SHORTHAND REPORTER

14  
15  
16 I do hereby certify that the foregoing is  
17 a complete record of the proceedings in  
18 the Examiner hearing of Case No. 5080  
19 heard by me on 10/17, 1973.  
20  
21 Donna Keith, Examiner  
22 New Mexico Oil Conservation Commission  
23  
24  
25

I N D E XWITNESSPAGE

LOYD HENDRICKSON

Direct Examination by Mr. Kellahin

3

Cross Examination by Mr. Nutter

8

E X H I B I T SAPPLICANT'SOFFEREDADMITTED

Exhibit 1

Land Plat

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Exhibit 2

Sketch

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Exhibit 3

Electric Log

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Exhibit 4

Form C105 on  
Morrow Zone

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Exhibit 5

Form C105 on  
Grayburg-Atoka

7

7

Exhibit 6

Packer Leakage Test

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Exhibit 7

Four Point Back  
Pressure Test

7

7



# OIL CONSERVATION COMMISSION

**STATE OF NEW MEXICO**  
**P. O. BOX 2088 - SANTA FE**  
**87501**

**I. R. TRUJILLO**  
**CHAIRMAN**

**LAND COMMISSIONER**  
**ALEX J. ARMIJO**  
**MEMBER**

**STATE GEOLOGIST**  
**A. L. PORTER, JR.**  
**SECRETARY - DIRECTOR**

November 16, 1973

Mr. Tom Kellahin  
Kellahin & Fox  
Attorneys at Law  
Post Office Box 1769  
Santa Fe, New Mexico

Re: CASE NO. 5080  
ORDER NO. R-4655  
Applicant:  
Horizon Oil & Gas

**Dear Sir:**

Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case.

Very truly yours,

A. L. Porter, Jr.  
A. L. PORTER, Jr.  
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC	<u>x</u>
Artesia OCC	<u>x</u>
Aztec OCC	<u>  </u>

Other \_\_\_\_\_

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

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

CASE NO. 5080  
Order No. R-4655

APPLICATION OF HORIZON OIL & GAS COMPANY  
OF TEXAS, FOR A DUAL COMPLETION, EDDY  
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on October 17, 1973, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 16th day of November, 1973, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, 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, Horizon Oil & Gas Company of Texas, seeks authority to complete its State 28 Well No. 2, located in Unit K of Section 28, Township 17 South, Range 29 East, NMPM, Eddy County, New Mexico, as a dual completion (conventional) to produce gas from the Grayburg-Morrow Gas Pool and an undesignated Atoka Gas Pool through parallel strings of tubing.
- (3) That the mechanics of the proposed dual completion are feasible and in accord with good conservation practices.
- (4) That approval of the subject application will prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

- (1) That the applicant, Horizon Oil & Gas Company of Texas, is hereby authorized to complete its State 28 Well No. 2, located in Unit K of Section 28, Township 17 South, Range 29 East, NMPM, Eddy County, New Mexico, as a dual completion (conventional) to produce gas from the Grayburg-Morrow Gas Pool and an undesignated Atoka Gas Pool through parallel strings of tubing.

PROVIDED HOWEVER, that the applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A of the Commission Rules and Regulations insofar as said rule is not

-2-  
CASE NO. 5080  
Order No. R-4655

inconsistent with this order;

PROVIDED FURTHER, that the applicant shall take packer-leakage tests upon completion and annually thereafter during the Annual Shut-In Pressure Test Period for the Grayburg-Morrow Gas Pool.

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

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

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION



*[Signature]*  
R. TRUJILLO, Chairman

ALEX J. ARMIJO, Member

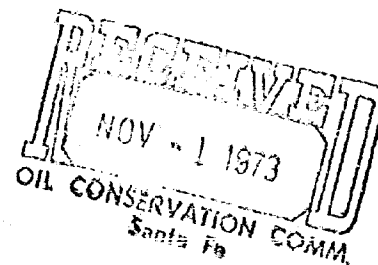
*[Signature]*  
A. L. PORTER, JR., Member & Secretary

3 E A L

*El Paso Natural Gas Company*

*El Paso, Texas 79902*

October 29, 1973



The New Mexico Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Attn: Mr. D. S. Nutter

Re: Horizon Oil and Gas Company of Texas  
State #28-2  
Sec. 28, T17S, R-29E  
Eddy Co., New Mexico

Dear Mr. Nutter:

El Paso Natural Gas Company does not have any objection to the Horizon Oil and Gas Company of Texas application seeking permission to dually complete the above captioned well as a gas-gas (Atoka-Morrow) dual.

Very truly yours,

A handwritten signature in cursive script that reads "John B. Magruder".

John B. Magruder, Director  
Gas Proration Department

JBM:keh

cc: Horizon Oil & Gas Co. of Texas  
P. O. Box 7  
Spearman, Texas 79081



Docket No. 29-73

DOCKET: EXAMINER HEARING - WEDNESDAY - OCTOBER 17, 1973

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM,  
STATE LAND OFFICE BUILDING - SANTA FE, NEW MEXICO

The following cases will be heard before Daniel S. Nutter, Examiner, or Richard L. Stamets, Alternate Examiner:

ALLOWABLE: (Continued from October 3, 1973, Examiner Hearing)

- (1) Consideration of the allowable production of gas for November, 1973, from seventeen prorated pools in Lea, Eddy, Roosevelt and Chaves Counties, New Mexico;
- (2) Consideration of the allowable production of gas from nine prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico, for November, 1973.

CASE 5075: Application of Hillin Production Company for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its JCW State Com. Well No. 1 located in Unit C of Section 2, Township 20 South, Range 28 East, Eddy County, New Mexico, in such a manner as to produce gas from an undesignated Strawn gas pool and from the Winchester-Morrow Gas Pool through the casing-tubing annulus and tubing, respectively.

CASE 5076: Application of David Fasken for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill a well at an unorthodox location 1980 feet from the North line and 660 feet from the West line of Section 7, Township 18 South, Range 26 East, West Atoka-Morrow Gas Pool, Eddy County, New Mexico, the N/2 of said Section 7 to be dedicated to the well.

CASE 5077: Application of Texaco Inc. for downhole commingling and a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle in the wellbore production from the Skaggs-Glorieta and East Weir-Blinebry Pools in its C. H. Weir "B" Well No. 4 located in Unit I of Section 11, Township 20 South, Range 37 East, Lea County, New Mexico, and to dually complete said well in such a manner as to permit the production of the aforesaid commingled fluids and hydrocarbons from the East Weir-Tubb Oil Pool through parallel strings of tubing.

CASE 5078: Application of Franklin, Aston & Fair for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to re-enter its McIntyre Well No. 6-A, an old hole located 990 feet from the South line and 1650 feet from the East line of Section 20, Township 17 South, Range 30 East, Eddy County, New Mexico, in order to complete said well as a Morrow gas well, the E/2 of said Section 20 to be dedicated to the well.

CASE 5079: Application of May Petroleum Inc. for an unorthodox oil well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a proposed well to be drilled at a point 1650 feet from the South line and 1129 feet from the East line of Section 31, Township 11 South, Range 38 East, North Gladiola-Devonian Pool, Lea County, New Mexico.

CASE 5080: Application of Horizon Oil & Gas Company of Texas for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its State 28 Well No. 2 located in Unit K of Section 28, Township 17 South, Range 29 East, Eddy County, New Mexico, in such a manner as to permit the production of gas from the Grayburg-Morrow Gas Pool and an undesignated Atoka Gas Pool through parallel strings of tubing.

CASE 5081: Application of Mesa Petroleum Company for a dual completion and special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Skelly State Well No. 1 located in Unit I of Section 14, Township 16 South, Range 35 East, in such a manner as to produce oil from the North Shoe Bar-Wolfcamp Pool and gas from an undesignated Morrow gas pool through parallel strings of tubing. Applicant further seeks the promulgation of temporary special rules for said North Shoe Bar-Wolfcamp Pool, including a provision for 160-acre drilling and proration units.

CASE 5082: Application of Mesa Petroleum Company for a dual completion, creation of a new oil pool, assignment of a discovery allowable, and special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of the North Shoe Bar-Strawn Pool for its Hillburn Well No. 1 located in Unit E of Section 13, Township 16 South, Range 35 East, Lea County, New Mexico, and the assignment of approximately 56,440 barrels of oil discovery allowable to said well; applicant also seeks approval for the dual completion of said well in such a manner as to permit the production of oil from the North Shoe Bar-Wolfcamp Pool and the North Shoe Bar-Strawn Pool through parallel strings of tubing; applicant further seeks the promulgation of temporary special rules for said pool, including a provision for 160-acre drilling and proration units.

CASE 5083: Application of Texaco Inc. for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle Blinbry-Paddock and Tubb production in the well-bore of its C. H. Lockhart Federal Well No. 3 located in Unit O of Section 18, Township 22 South, Range 38 East, Lea County, New Mexico.

CASE 5084: Southeastern nomenclature case calling for the extension of certain pools in Lea and Roosevelt Counties, New Mexico:

(Case 5084 continued from page 2)

- (a) Extend the Antelope Ridge-Atoka Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 24 SOUTH, RANGE 34 EAST, NMPM  
Section 2: S/2

- (b) Extend the Antelope Ridge-Morrow Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 24 SOUTH, RANGE 34 EAST, NMPM  
Section 2: S/2  
Section 3: S/2  
Section 4: S/2

- (c) Extend the Bluit-San Andres Associated Pool in Roosevelt County, New Mexico, to include therein:

TOWNSHIP 8 SOUTH, RANGE 38 EAST, NMPM  
Section 5: SW/4

- (d) Extend the EK Yates Seven Rivers-Queen Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 34 EAST, NMPM  
Section 8: NW/4

- (e) Extend the Hat Mesa-Morrow Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 32 EAST, NMPM  
Section 14: E/2

- (f) Extend the Monument-Paddock Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 37 EAST, NMPM  
Section 16: S/2  
Section 17: E/2

- (g) Extend the South Salt Lake-Morrow Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 33 EAST, NMPM  
Section 30: All

- (h) Extend the Triple X-Delaware Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 24 SOUTH, RANGE 32 EAST, NMPM  
Section 12: NE/4

Examiner Hearing - Wednesday - October 17, 1973

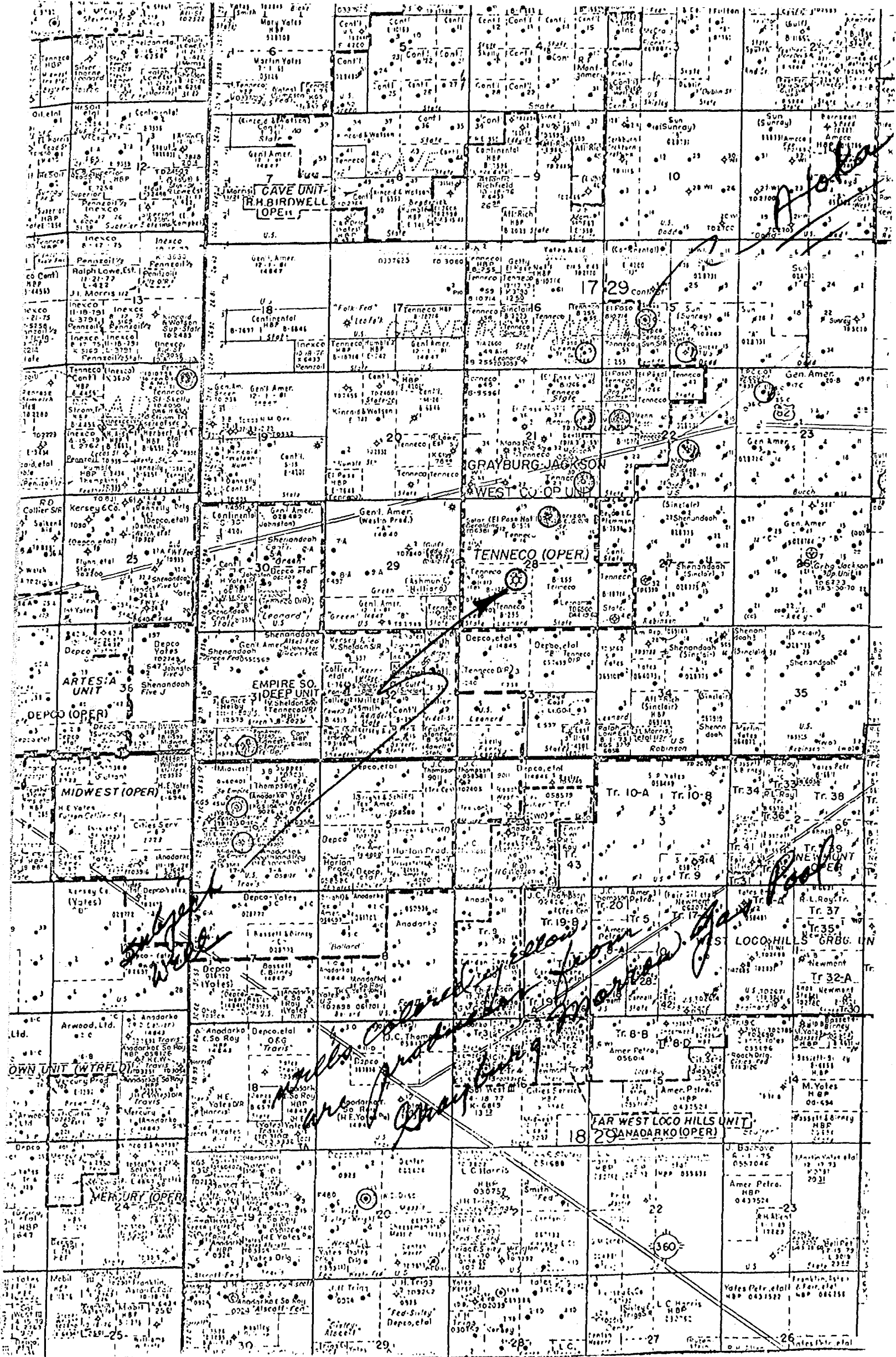
Docket No. 29-73

-4-

(Case 5084 continued from page 3)

(1) Extend the Williams-Pennsylvanian Pool in Lea County, New Mexico,  
to include therein:

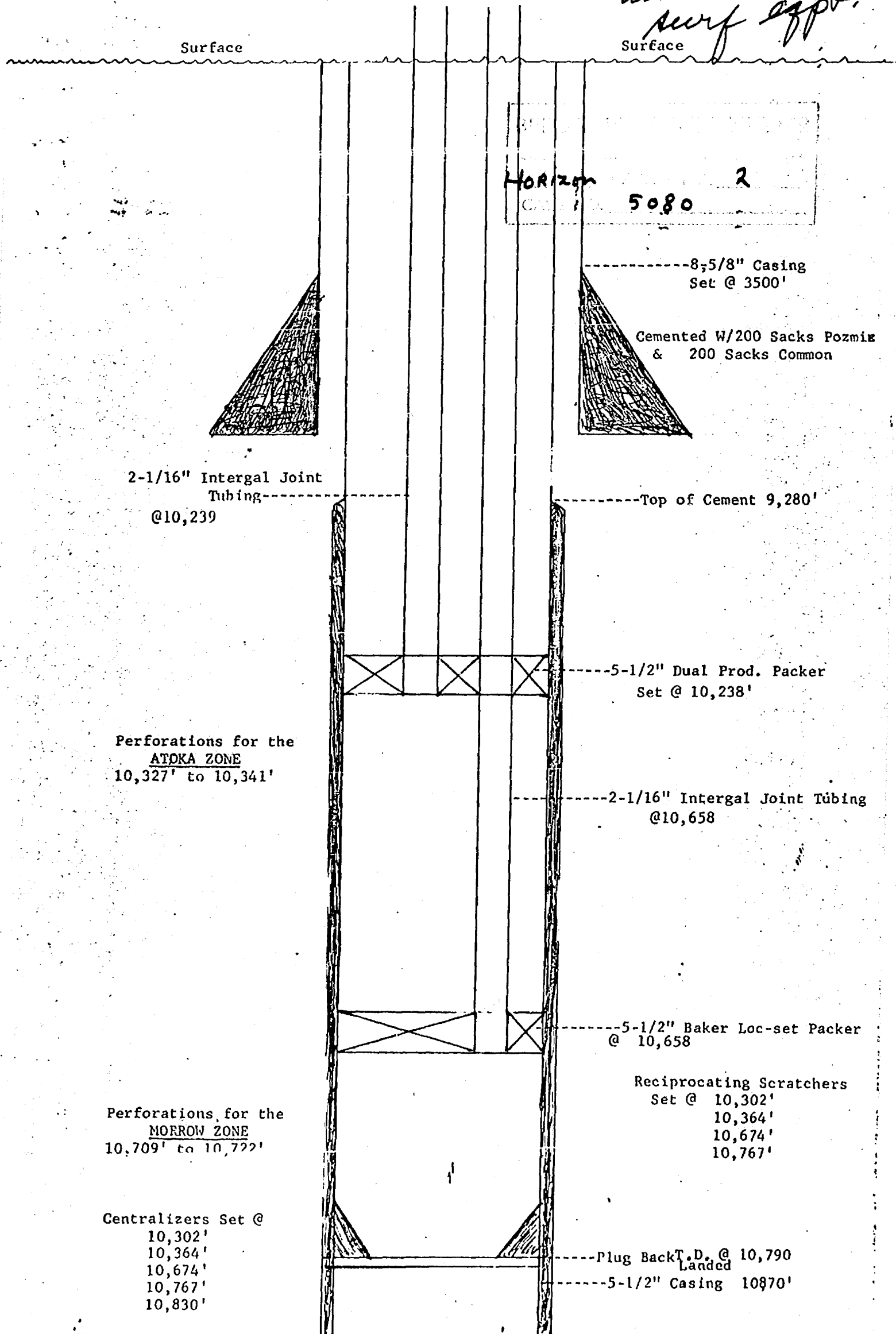
TOWNSHIP 13 SOUTH, RANGE 32 EAST, NMPM  
Section 29: NE/4



HORIZON OIL & GAS CO. OF TEXAS  
STATE 28-2

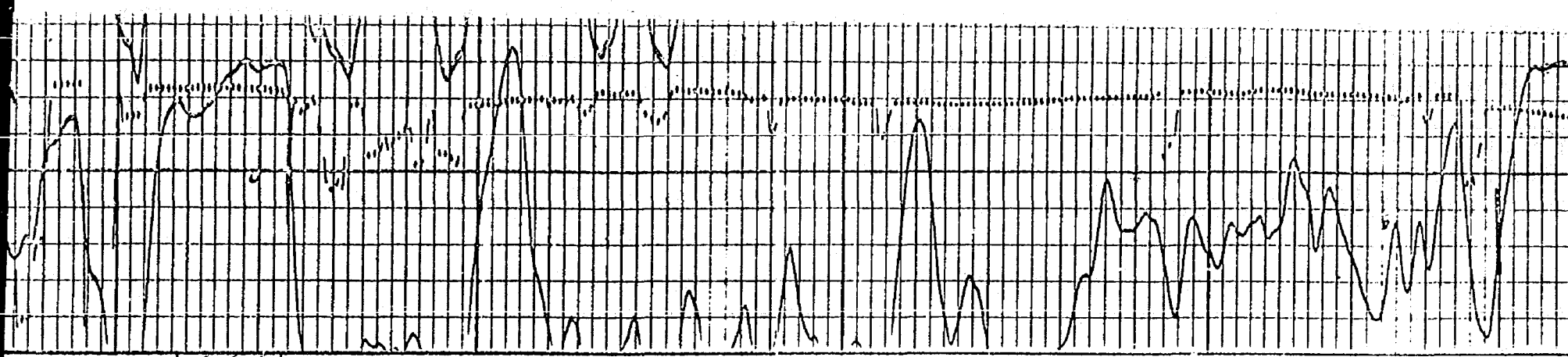
Sec. 28 - 17S - 29E Eddy County  
1980' from South & West Lines  
G.L. Elev. 3571.4'

*each zone will  
have individual  
surf eqpt.*

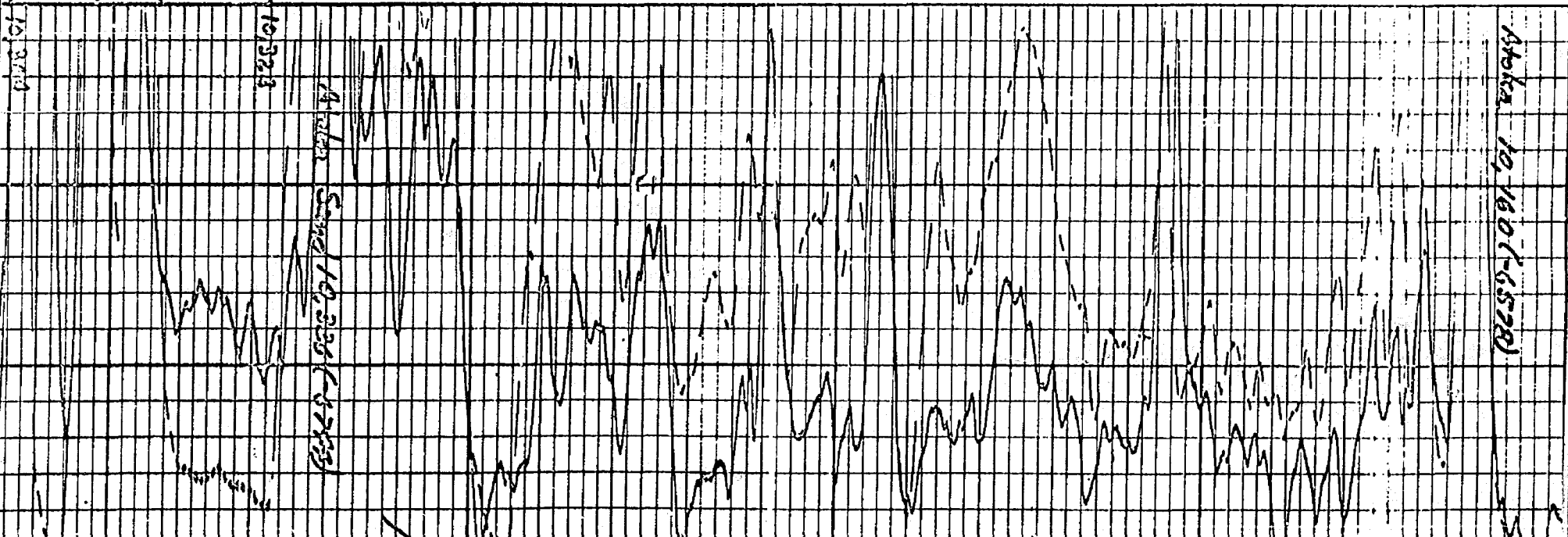


# COMPENSATED NEUTRON- FORMATION DENSITY

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Abaka 10,1601-65720

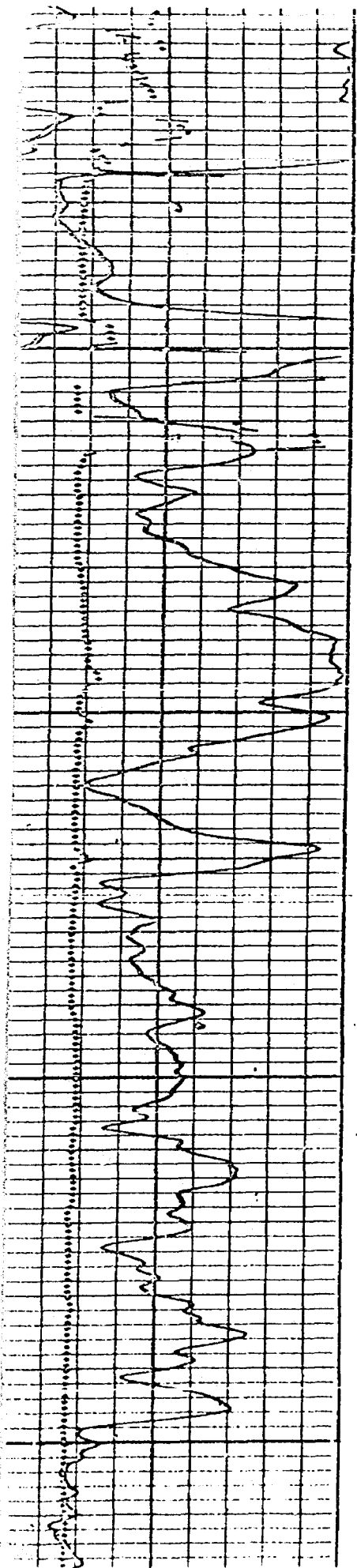
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Sample description

Red stone clear to white angular, to Sub rounded  
med to coarse grained unconsolidated to  
Part. (Good fracture)

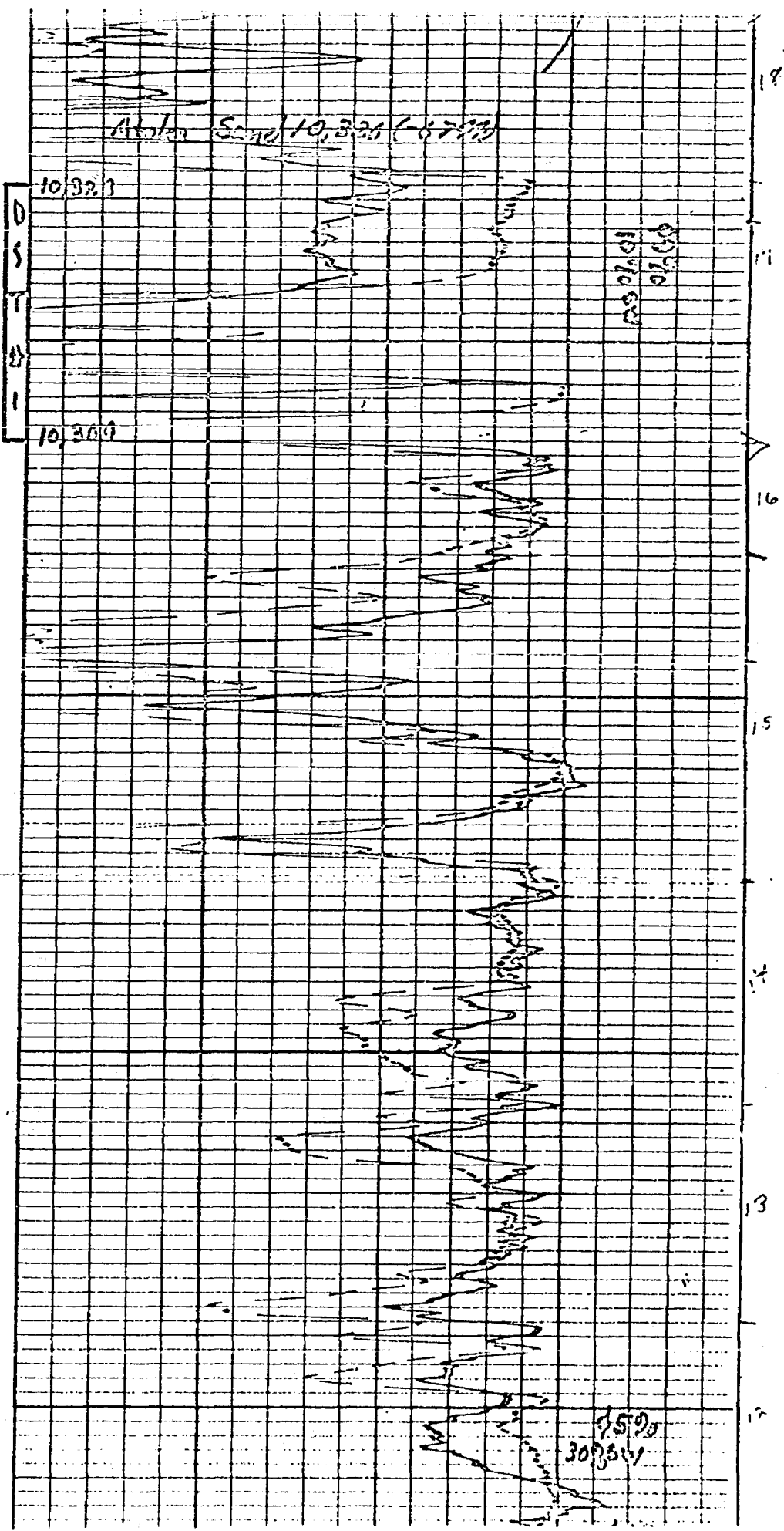
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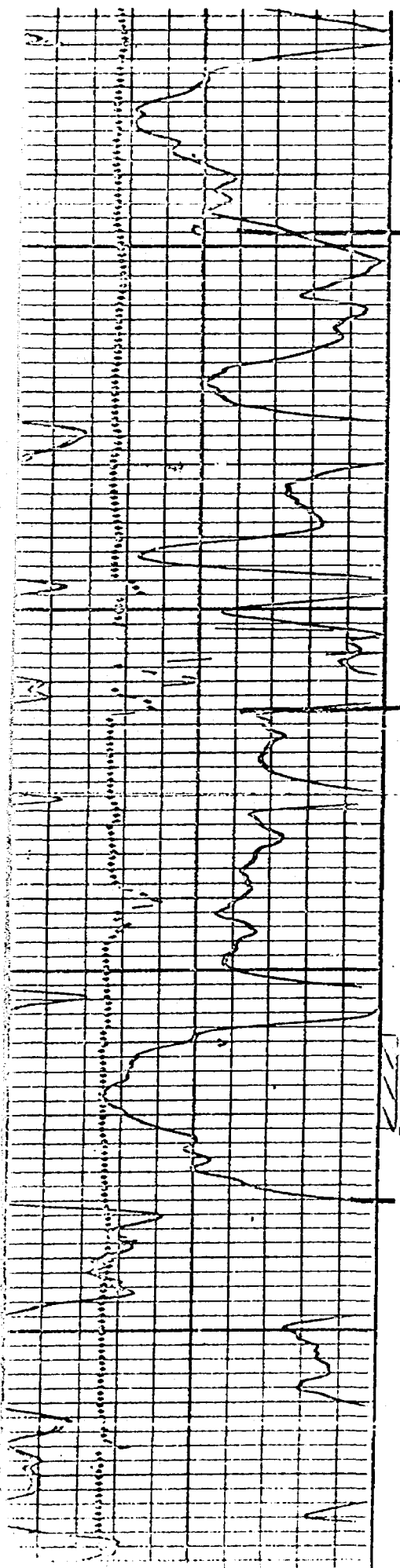




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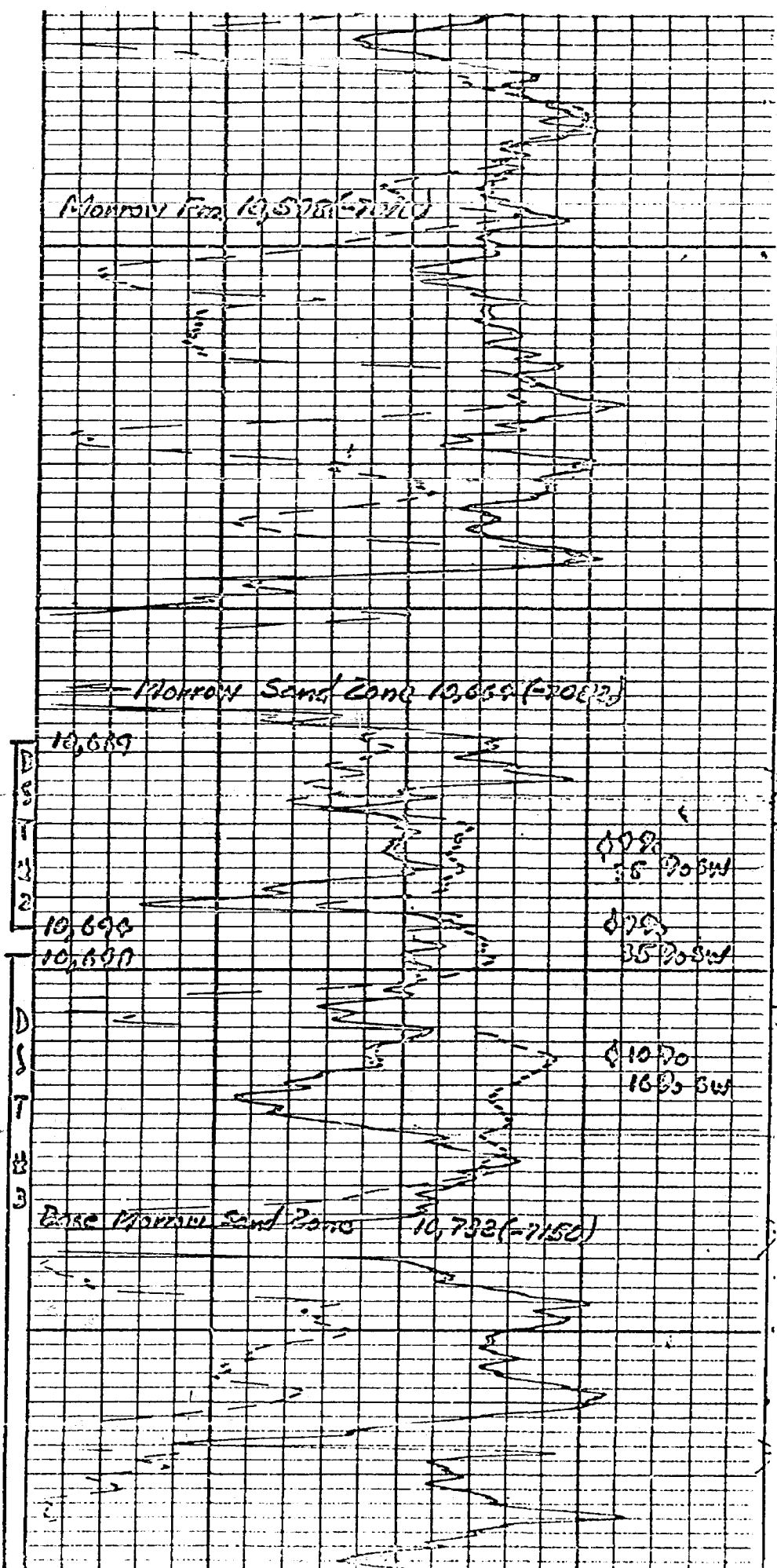


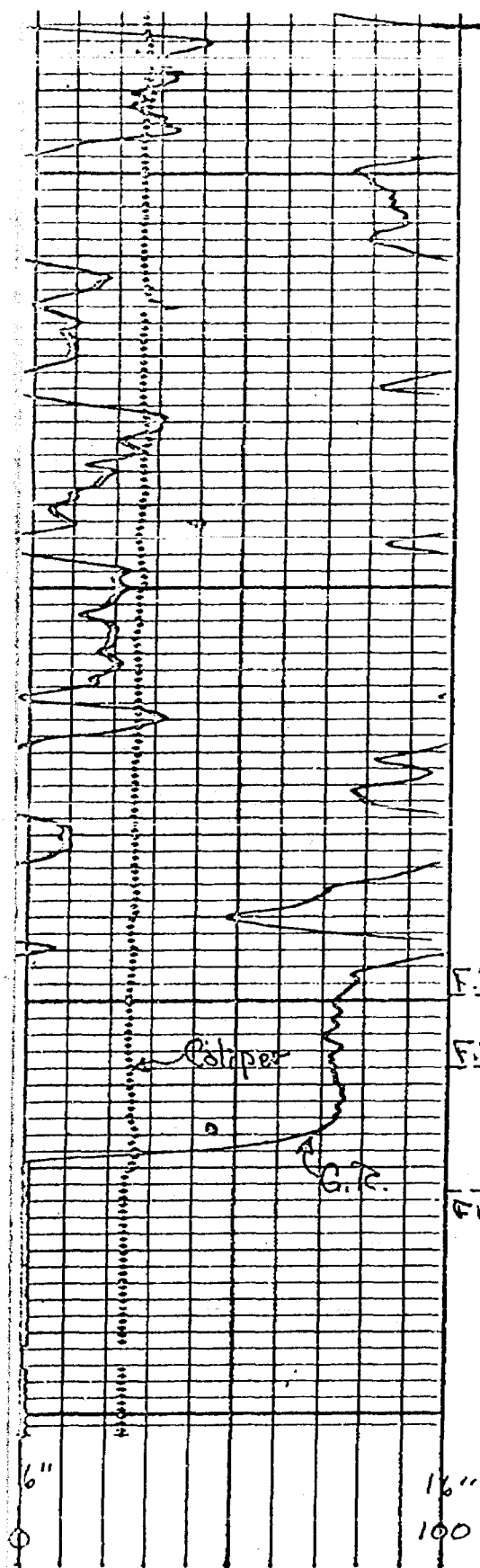


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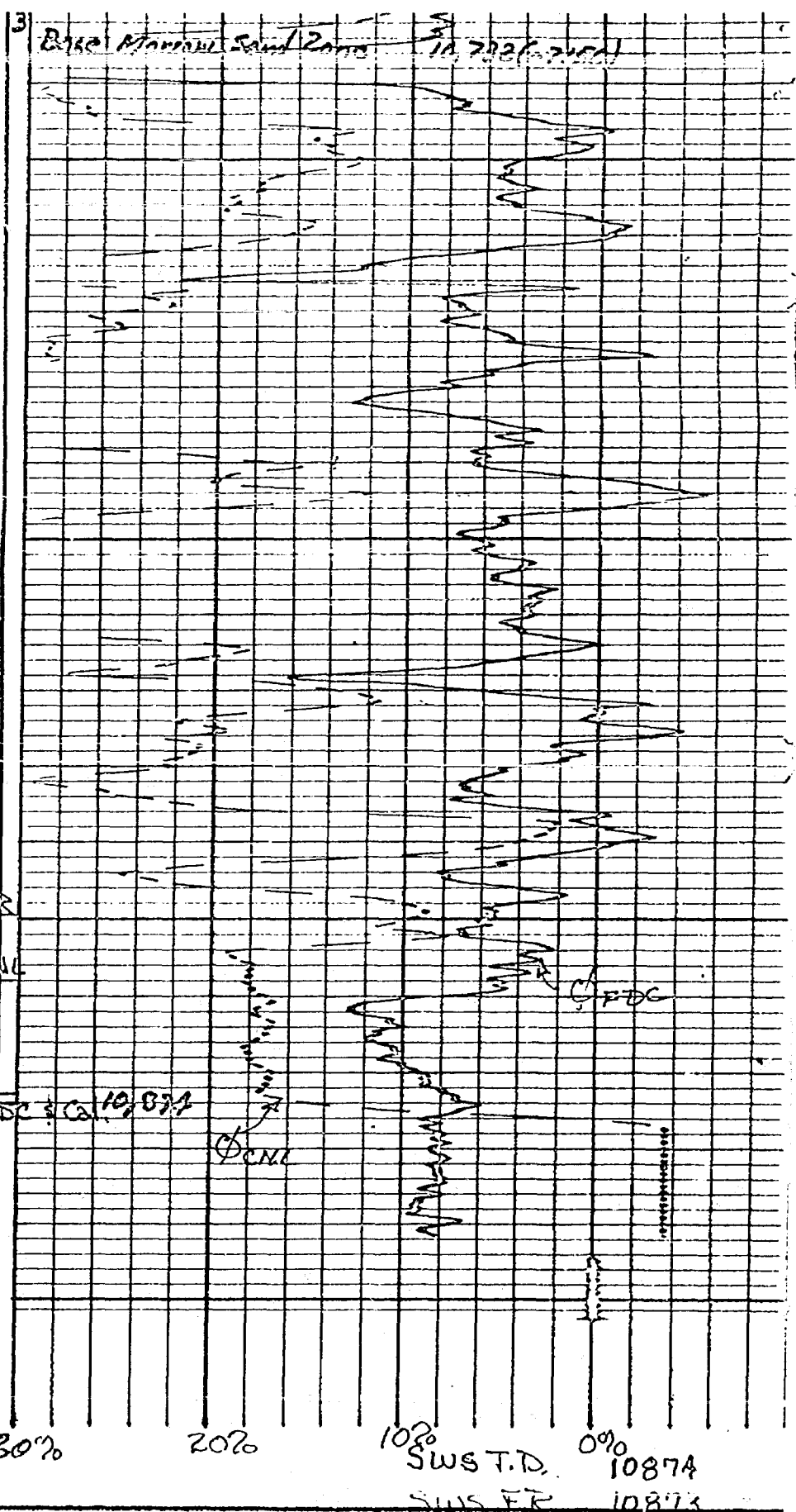
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Horizon Oil & Gas Co.



SWST T.D. 10874  
SWST FR 10873

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

**BEFORE SIGNATURE OF OPERATOR**  
**OIL CONSERVATION COMMISSION**

10. TYPE OF WELL  
 a. TYPE OF COMPLETION  
 NEW WELL ☒ WORK OVER ☐ DEEPEN ☐  
 OIL WELL ☐ WELL ☒ DRY ☐ OTHER ☒ 4  
 PLUG BACK ☐ DIFF. ☐ RESVR. ☐ OTHER ☐ 5080

2. Name of Operator  
**Horizon Oil & Gas Co. of Texas**

3. Address of Operator  
**Box 7, Spearman, Texas 79081**

4. Location of Well  
 UNIT LETTER **K** LOCATED **1980** FEET FROM THE **south** LINE AND **1980** FEET FROM  
 THE **west** LINE OF SEC. **28** TWP. **17S** RGE. **29E** NMPM **Eddy**

15. Date Spudded **4-27-73** 16. Date T.D. Reached **6-5-73** 17. Date Compl. (Ready to Prod.) **8-16-73** 18. Elevations (DP, RKB, RT, GR, etc.) **GL 3571, KB 3582.4**

20. Total Depth **10,890** 21. Plug Back T.D. **10,790** 22. If Multiple Compl., How Many **2** 23. Intervals Drilled By  
 Rotary Tools ☒ Cable Tools ☐

24. Producing interval(s), of this completion - Top, Bottom, Name  
**10,790 to 10,722 Morrow**

26. Type Electric and Other Logs Run  
**Dual Laterolog**

5a. Indicate Type of Lease  
 State ☒ Fee ☐

5. State Oil & Gas Lease No.

7. Unit Agreement Name

8. Farm or Lease Name  
**State 28 Com**

9. Well No.  
**2**

10. Field and Pool, or Wildcat  
**Und Grayburg Morrow**

12. County

28. CASING RECORD (Report all strings set in well)					
CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
11 3/4	12#	350	15"	350	
8 5/8	32#	3500	11"	400 Class C	
5 1/2	20#	10370	7 7/8"	300 Class H	

29. LINER RECORD					30. TUBING RECORD		
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
					2 1/16	10,653	10,658

31. Perforation Record (Interval, size and number)		32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED	DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
10,709 to 10,722	4 jets per ft.	10,709 to 10,722	3750 gal. acid
			8000 gal. 7 1/2% acid

33. PRODUCTION							
Date First Production		Production Method (Flowing, gas lift, pumping - Size and type pump)				Well Status (Prod. or Shut-in)	
		flowing				shut-in	
Date of Test	Hours Tested	Choke Size	Prod'n. For Test Period	Oil - Bbl.	Gas - MCF	Water - Bbl.	Gas - Oil Ratio
9-1-73	24	14/64			475		
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API (Corr.)	
459	packer			475			

34. Disposition of Gas (Sold, used for fuel, vented, etc.)  
**Vented for testing (Well to go on line 11-73)**

35. List of Attachments  
**DST @ 2 & 3 Dual Laterolog**

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 [Signature] TITLE **Production Manager** DATE **9-21-73**

# INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Commission not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radioactivity logs run on 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 directionally 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 duplicate 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	T. Canyon	T. Ojo Alamo	T. Penn. "B"
T. Salt	T. Strawn	T. Kirtland-Fruitland	T. Penn. "C"
B. Salt	T. Atoka	T. Pictured Cliffs	T. Penn. "D"
T. Yates	T. Miss	T. Cliff House	T. Leadville
T. 7 Rivers	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-Qtzite
T. Glorieta	T. McKee	Base Greenhorn	T. Granite
T. Paddock	T. Ellenburger	T. Dakota	T.
T. Blinberry	T. Gr. Wash	T. Morrison	T.
T. Tubb	T. Granite	T. Todillo	T.
T. Drinkard	T. Delaware Sand	T. Entrada	T.
T. Abo	T. Bone Springs	T. Wingate	T.
T. Wolfcamp	T. Morrow Form. 10598	T. Chino	T.
T. Penn.	T. Morrow Sand. 10564	T. Permian	T.
T. Cisco (Bough C)	T.	T. Penn. "A"	T.

## FORMATION RECORD (Attach additional sheets if necessary)

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
3500	3866	366	Dolomite				
3866	3960	94	Sandy Dolomite & Shale				
3960	5420	1460	Dolomite, some Shale				
5420	5980	560	Shale and Dolomite				
5980	6800	820	Interbedded dolomite & Shale				
6800	7217	417	Dolomite				
7217	7340	123	Granular Dolomite				
7340	7820	480	Limestone, some dolomite				
7820	8490	670	Limestone & Shale				
8490	8750	260	Limestone				
8750	8830	80	Reef type limestone				
8830	9965	1135	Limestone, some shale				
9965	10,160	195	Limestone, black shale				
10,160	10,598	438	Limestone, Sandstone, Shale				
10,598	10,644	66	Limestone, Gauconitic sngt.				
10,644	10,732	68	Sandstone				
10,732	10,890	158	Shale, black				

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FILE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	

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

Form O-105  
Revised 1-1-65

5a. Indicate Type of Lease  
State ☒ Fee ☐  
5. State Oil & Gas Lease No.

1a. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> DPY <input type="checkbox"/> OTHER <input type="checkbox"/>						7. Unit Agreement Name	
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. RESVR. <input type="checkbox"/> OTHER <input type="checkbox"/>						8. Farm or Lease Name <b>State-28 Com.</b>	
2. Name of Operator <b>Horizon Oil &amp; Gas Co. of Texas</b>						9. Well No. <b>2</b>	
3. Address of Operator <b>P.O. Box 7, Spearman, Texas 79081</b>						10. Field and Pool, or Wildcat <b>Grayburg Atoka</b>	
4. Location of Well <b>Horizon</b> UNIT LETTER <b>K</b> LOCATED <b>1980</b> FEET FROM THE <b>5</b> LINE AND <b>1980</b> FEET FROM						11. County <b>Eddy</b>	
15. Date Spudded <b>4-27-73</b>		16. Date T.D. Reached <b>6-5-73</b>		17. Date Compl. (Ready to Prod.) <b>8-16-73</b>		18. Elevations (DF, RKB, RT, GR, etc.) <b>GL 3571, KB 3582.4</b>	
20. Total Depth <b>10,990</b>		21. Plug Back T.D. <b>10,790</b>		22. If Multiple Compl., How Many <b>two</b>		23. Intervals Drilled By <b>X</b>	
24. Producing Interval(s), of this completion - Top, Bottom, Name <b>10,327 to 10,341</b>						25. Was Directional Survey Made <b>----</b>	
26. Type Electric and Other Logs Run <b>Dual Laterolog</b>						27. Was Well Cored <b>----</b>	
28. CASING RECORD (Report all strings set in well)							
CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED		
<b>11-3/4</b>	<b>42#</b>	<b>350</b>	<b>15"</b>	<b>350 sacks</b>			
<b>8-5/8</b>	<b>32#</b>	<b>3500</b>	<b>11"</b>	<b>400 Class C</b>			
<b>5 1/2</b>	<b>20#</b>	<b>10,870</b>	<b>7-7/8</b>	<b>300 Class H</b>			
29. LINER RECORD				30. TUBING RECORD			
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
					<b>2-1/16</b>	<b>10,238</b>	<b>10,238</b>
31. Perforation Record (Interval, size and number) <b>10,327 to 10,341 (4 jets per jt)</b>				32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.			
				DEPTH INTERVAL			
				10,327 to 10,341			
				AMOUNT AND KIND MATERIAL USED			
				2,500 gal 7 1/2% acid			
33. PRODUCTION							
Date First Production <b>-----</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>8-16-73</b>	Hours Tested <b>24</b>	Choke Size <b>22/64</b>	Prod'n. For Test Period <b>-----</b>	Oil - Bbl. <b>-----</b>	Gas - MCF <b>3435</b>	Water - Bbl. <b>-----</b>	Gas - Oil Ratio <b>-----</b>
Flow Testing Press. <b>475</b>	Casing Pressure <b>packer</b>	Calculated 24-Hour Rate <b>-----</b>	Oil - Bbl. <b>-----</b>	Gas - MCF <b>-----</b>	Water - Bbl. <b>-----</b>	Oil Gravity - API (Corr.) <b>-----</b>	
34. Disposition of Gas (Sold, used for fuel, vented, etc.) <b>Vented for testing (Well to go on line 11-73)</b>						Test Witnessed By <b>-----</b>	
35. Log DST Elements <b>Dual Laterolog</b>							
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 <b>-----</b>				TITLE <b>Production Manager</b>		DATE <b>9821-73</b>	

# INSTRUCTIONS

This form is to be filled with the appropriate District Office of the Commission not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radioactivity logs run on 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 horizontally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 10 through 24 shall be reported for each zone. This form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1165.

## INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

### Southeastern New Mexico

### Northwestern New Mexico

T. Anhy _____	T. Canyon _____	T. Ojo Alamo _____	T. Penn. "B" _____
T. Salt _____	T. Strawn <u>9965</u>	T. Kirtland-Fruitland _____	T. Penn. "C" _____
B. Salt _____	T. Atoka <u>10160</u>	T. Pictured Cliffs _____	T. Penn. "D" _____
T. Yates _____	T. Miss _____	T. Cliff House _____	T. Leadville _____
T. 7 Rivers _____	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 Qzite _____
T. Glorieta <u>3866</u>	T. McKee _____	Base Greenhorn _____	T. Granite _____
T. Paddock _____	T. Ellenburger _____	T. Dakota _____	T. _____
T. Blinberry _____	T. Gr. Wash _____	T. Morrison _____	T. _____
T. Tubb _____	T. Granite _____	T. Todillo _____	T. _____
T. Drinkard _____	T. Delaware Sand _____	T. Entrada _____	T. _____
T. Abo _____	T. Bone Springs _____	T. Wingate _____	T. _____
T. Wolfcamp <u>7217</u>	T. <u>Morrow Form 10598</u>	T. Chinle _____	T. _____
T. Penn. _____	T. <u>Morrow Sand 10664</u>	T. Permian _____	T. _____
T. Cisco (Bough C) _____	T. _____	T. Penn. "A" _____	T. _____

## FORMATION RECORD (Attach additional sheets if necessary)

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
3500	3866	266	Dolomite				
3866	3960	94	Sandy Dolomite & Shale				
3960	5420	1420	Dolomite, some shale				
5420	5980	560	Shale and Dolomite				
5980	6800	820	Interbedded dolomite & shale				
6800	7217	417	Dolomite				
7217	7340	123	Granular Dolomite				
7340	7820	480	Limestone, some dolomite				
7820	8490	670	Limestone & shale				
8490	8750	260	Limestone				
8750	8830	80	Reef type limestone				
8830	9965	1135	Limestone, some shale				
9965	10160	195	Limestone, black shale				
10160	10598	438	Limestone, sandstone, shale				
10598	10664	66	Limestone, Gauseitic sand.				
10664	10732	68	Sandstone				
10732	10890	158	Shale, black				

NEW MEXICO OIL CONSERVATION COMMISSION  
SOUTHEAST NEW MEXICO PACKER LEAKAGE TEST

Operator HORIZON OIL & GAS CO.			Lease STATE 28			Well No. 2	
Location of Well	Unit K	Sec 28	Twp 17S	Rge 29E	County EDDY		
Name of Reservoir or Pool			Type of Prod (Oil or Gas)	Method of Prod Flow, Art Lift	Prod. Medium (Tbg or Csg)	Choke Size	
Upper Compl	ATOKA		GAS	FLOW	TUBING	10/64"	
Lower Compl	MORROW		GAS	FLOW	TUBING	14/64"	

FLOW TEST NO. 1

Both zones shut-in at (hour, date): 8:00 A.M. 8-25-73,

Well opened at (hour, date): 11:30 A.M. 8-31-73

	Upper Completion	Lower Completion
Indicate by ( X ) the zone producing.....	X	
Pressure at beginning of test.....	3800	2005
Stabilized? (Yes or No).....	YES	YES
Maximum pressure during test.....	3800	2025
Minimum pressure during test.....	2900	2005
Pressure at conclusion of test.....	2925	2025
Pressure change during test (Maximum minus Minimum).....	900	20
Was pressure change an increase or a decrease?.....	DECREASE	INCREASE
Well closed at (hour, date): 2:00 P.M. 8-31-73	Total Time On Production 2.5 HOURS	
Oil Production During Test: 2 bbls; Grav. 56.5	Gas Production During Test: 2703 MCF; GOR 47.7	
Remarks		

FLOW TEST NO. 2

Well opened at (hour, date): 12:00 P.M. (NOON) 9-1-73

	Upper Completion	Lower Completion
Indicate by ( X ) the zone producing.....		X
Pressure at beginning of test.....	3825	2050
Stabilized? (Yes or No).....	YES	YES
Maximum pressure during test.....	3825	2050
Minimum pressure during test.....	3800	500
Pressure at conclusion of test.....	3810	500
Pressure change during test (Maximum minus Minimum).....	25	1550
Was pressure change an increase or a decrease?.....	DECREASE	DECREASE
Well closed at (hour, date): 5:00 P.M. 9-1-73	Total time on Production 5 HOURS	
Oil Production During Test: NONE bbls; Grav. -----	Gas Production During Test: 393.7	
Remarks		

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

Approved \_\_\_\_\_ 19 \_\_\_\_\_  
New Mexico Oil Conservation Commission

Operator HORIZON OIL AND GAS COMPANY

By \_\_\_\_\_

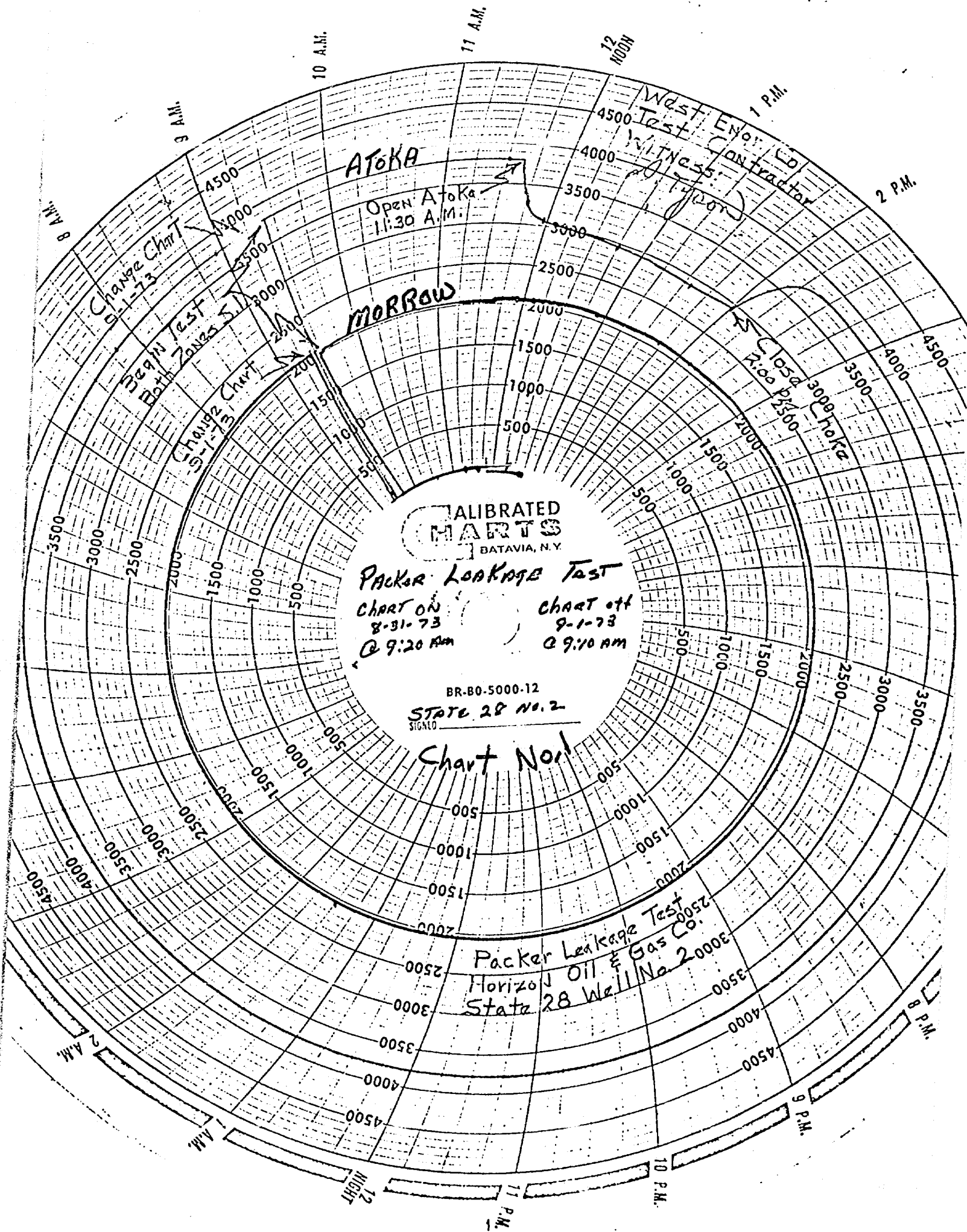
Title ENGINEER

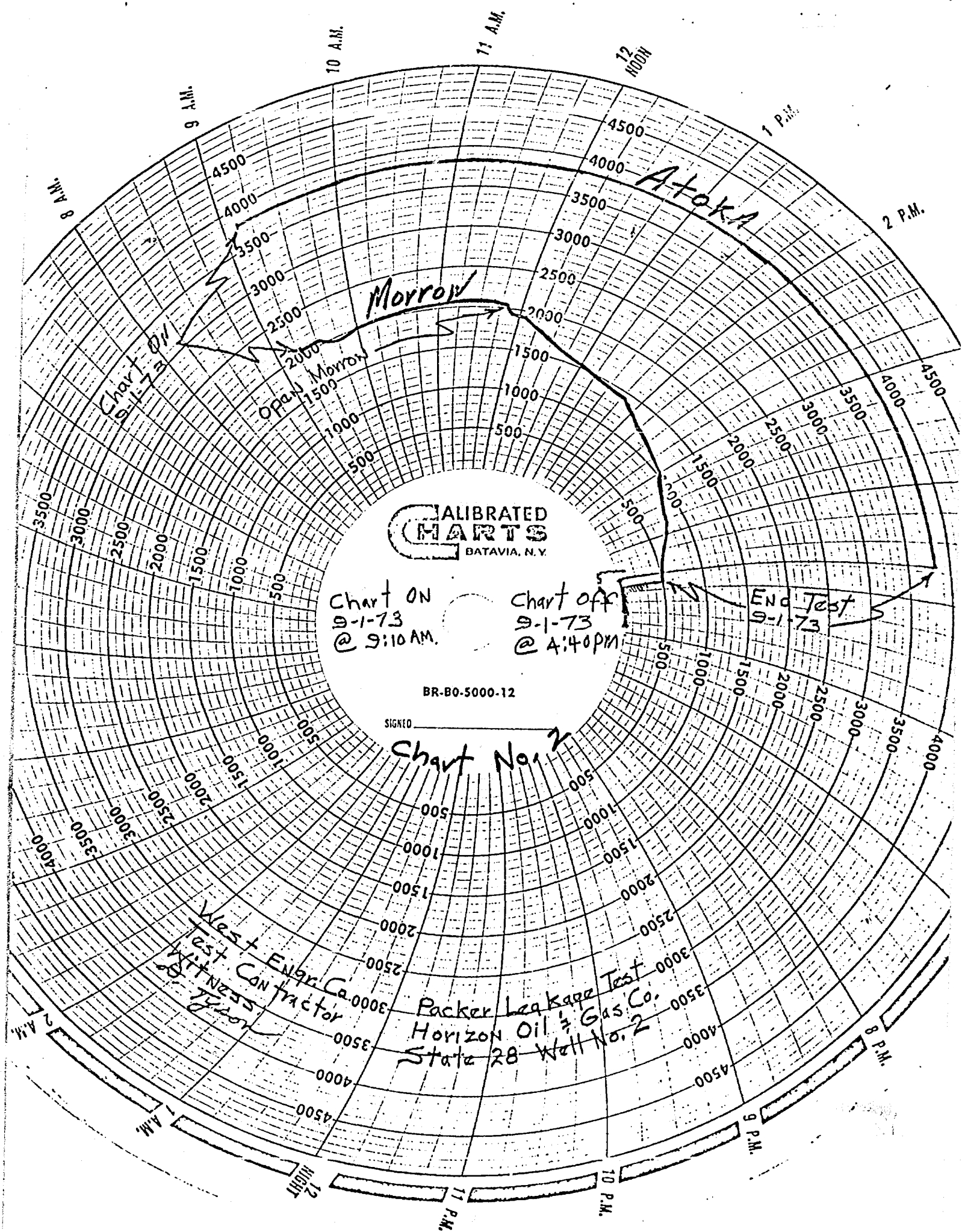
Date 9-5-73

By \_\_\_\_\_

Title \_\_\_\_\_







Adopted  
1-1-55

NEW MEXICO OIL CONSERVATION COMMISSION  
PACKER SETTING REPORT

I, Everett R. Tracy, being of lawful age and having full  
Name of party making report

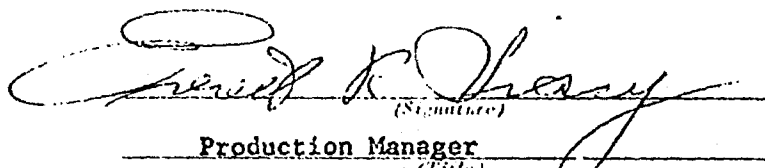
knowledge of the facts hereinbelow set out do state:

That I am employed by Horizon Oil & Gas Co. of Texas in the capacity of  
Production Manager, that on July 24, 19 73

I personally supervised the setting of a Baker Loc Set Packer  
Make & type of packer  
in Horizon Oil & Gas Co. of Texas, State 28,  
Operator of well Lease name

Well no. 2 located in the Grayburg Atoka field,  
Eddy county, state of New Mexico, at a subsurface depth of  
10,238 feet, said depth measurement having been furnished me by  
Vann Tool Company

That the purpose of setting this packer was to effect a seal in the annular space between two strings of pipe where the packer was set so as to prevent the commingling, in the bore of this well, of fluids produced from a stratum below the packer with fluids produced from a stratum above the packer; that this packer was properly set and that it did, when set, effectively and absolutely seal off the annular space between the two strings of pipe where it was set in such manner as that it prevented any movement of fluids across the packer.

  
(Signature)  
Production Manager  
(Title)  
9-21-73  
(Date)

Adopted  
1-1-65

NEW MEXICO OIL CONSERVATION COMMISSION  
PACKER SETTING REPORT

I, Everett R. Tracy, being of lawful age and having full  
Name of party making report  
knowledge of the facts hereinbelow set out do state:

That I am employed by Horizon Oil & Gas Co. of Texas in the capacity of

Production Manager, that on July 21, 1973

I personally supervised the setting of a Baker Loc Set Packer  
Make & type of packer

in Horizon Oil & Gas Co. of Texas, State 28,  
Operator of well Lease name

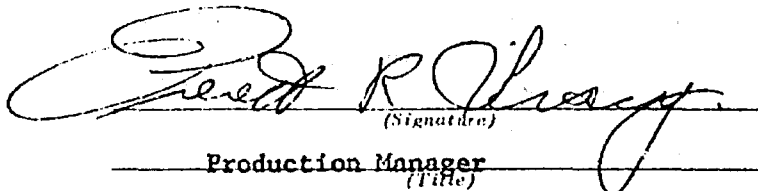
Well no. 2 located in the Grayburg Morrow field,

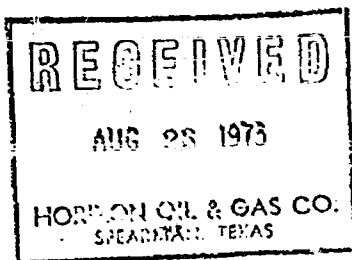
Eddy county, state of New Mexico, at a subsurface depth of

10,658 feet, said depth measurement having been furnished me by

Vann Tool Company;

That the purpose of setting this packer was to effect a seal in the annular space between two strings of pipe where the packer was set so as to prevent the comingling, in the bore of this well, of fluids produced from a stratum below the packer with fluids produced from a stratum above the packer; that this packer was properly set and that it did, when set, effectively and absolutely seal off the annular space between the two strings of pipe where it was set in such manner as that it prevented any movement of fluids across the packer.

  
(Signature)  
Production Manager  
(Title)  
9-21-73  
(Date)



Horizon

5080

7

NEW MEXICO OIL CONSERVATION COMMISSION  
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-222  
Revised 9-1-65

Type Test		<input checked="" type="checkbox"/> Initial		<input type="checkbox"/> Annual		<input type="checkbox"/> Special		Test Date		8-16-73	
Company				Connection							
HORIZON OIL & GAS CO.				TO AIR							
Pool				Formation				Unit			
GRAYBURG ATOKA				ATOKA							
Completion Date		Total Depth		Plug Back To		Elevation		Farm or Lease Name			
8-16-73		10,890 FT.		10,870 FT.		3571 GR.		STATE 28			
Comp. Size	Wt.	d	Set At	Perforations:		Well No.					
5 1/2"			10,870'	From 10,327' To 10,341'		2					
Reg. Size	Wt.	d	Set At	Perforations:		Unit		Sec.	Twp.	Page	
2 3/8"			10,238'	From To		K		28	17S	29E	
Type Well - Single - Horizontal - G.C. or G.O. Multiple						Packer Set At		County			
GAS GAS MULTIPLE						10,238 FT.		EDDY			
Producing Thru		Reservoir Temp. °F		Mean Annual Temp. °F		Boro. Press. - P <sub>g</sub>		State			
TUBING		157° 10,251'		60°		13.2		NEW MEXICO			
L	H	G <sub>g</sub>	% CO <sub>2</sub>	% N <sub>2</sub>	% H <sub>2</sub> S	Prover	Meter Run	FLANGE			
10,238'	10,238'	0.6392	0.35	0.42	-0-		3 IN.				
FLOW DATA											
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h <sub>w</sub>	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI							3659.0		PACKER	CHOKE	
1.	3" X 2.250"		450.0	1.0	108	3065.0	80		67/8"	60 MIN.	
2.	3" X 2.250"		475.0	3.5	108	2535.0	77		10/64	30 "	
3.	3" X 2.250"		470.0	8.0	79	1837.0	78		14/64	45 "	
4.	3" X 2.250"		475.0	11.0	79	1374.0	73		22/64	45 "	
5.											
RATE OF FLOW CALCULATIONS											
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P <sub>m</sub>	Flow Temp. Factor Ft.	Gravity Factor F <sub>g</sub>	Super Compress. Factor, F <sub>sc</sub>	Rate of Flow Q, Mcf/d				
1	28.78	21.52	463.2	0.9568	1.251	1.033	766				
2	28.78	41.34	488.2	0.9568	1.251	1.035	1474				
3	28.78	62.18	483.2	0.9822	1.251	1.042	2291				
4	28.78	73.28	488.2	0.9822	1.251	1.043	2703				
5.											
NO.	P <sub>1</sub>	Temp. °R	T <sub>1</sub>	Z	Gas Liquid Hydrocarbon Ratio 47.729		Mol. wt.				
1	0.69	568	1.54	0.937	A.P.I. Gravity of Liquid Hydro 56.5		Det.				
2.	0.73	568	1.54	0.933	Specific Gravity Separator Gas 0.6392		XXXXXXX				
3.	0.72	539	1.45	0.920	Specific Gravity Flowing Fluid XXXXX						
4.	0.73	539	1.46	0.920	Critical Pressure 670 P.S.I.A.		P.S.I.A.				
5.					Critical Temperature 366		R				
$P_1 = 4728.2$ $P_2 = 22256$											
NO.	P <sub>1</sub>	P <sub>2</sub>	P <sub>3</sub>	P <sub>4</sub>	(1) $\frac{P_2^2}{P_1^2 - P_2^2} = 1.2709$		(2) $\left[ \frac{P_2^2}{P_1^2 - P_2^2} \right]^n = 1.2709$				
1		120.2	16976	5380							
2		3334.2	12491	9865							
3		2683.2	7200	15156							
4		2143.2	5766	17590							
3435											
45°											
1.000											
BOTTOM HOLE PRESSURE MEASURED WITH AMERADA GAUGE 10,215 FEET											
GOOD ALIGNMENT BUT IN EXCESS OF 1.000											
Approved by: G. PARKER R. WEST J.W.W.											

RECEIVED

AUG 23 1973

HORIZON OIL & GAS CO.  
SPEARMAN, TEXAS

FORM 2907

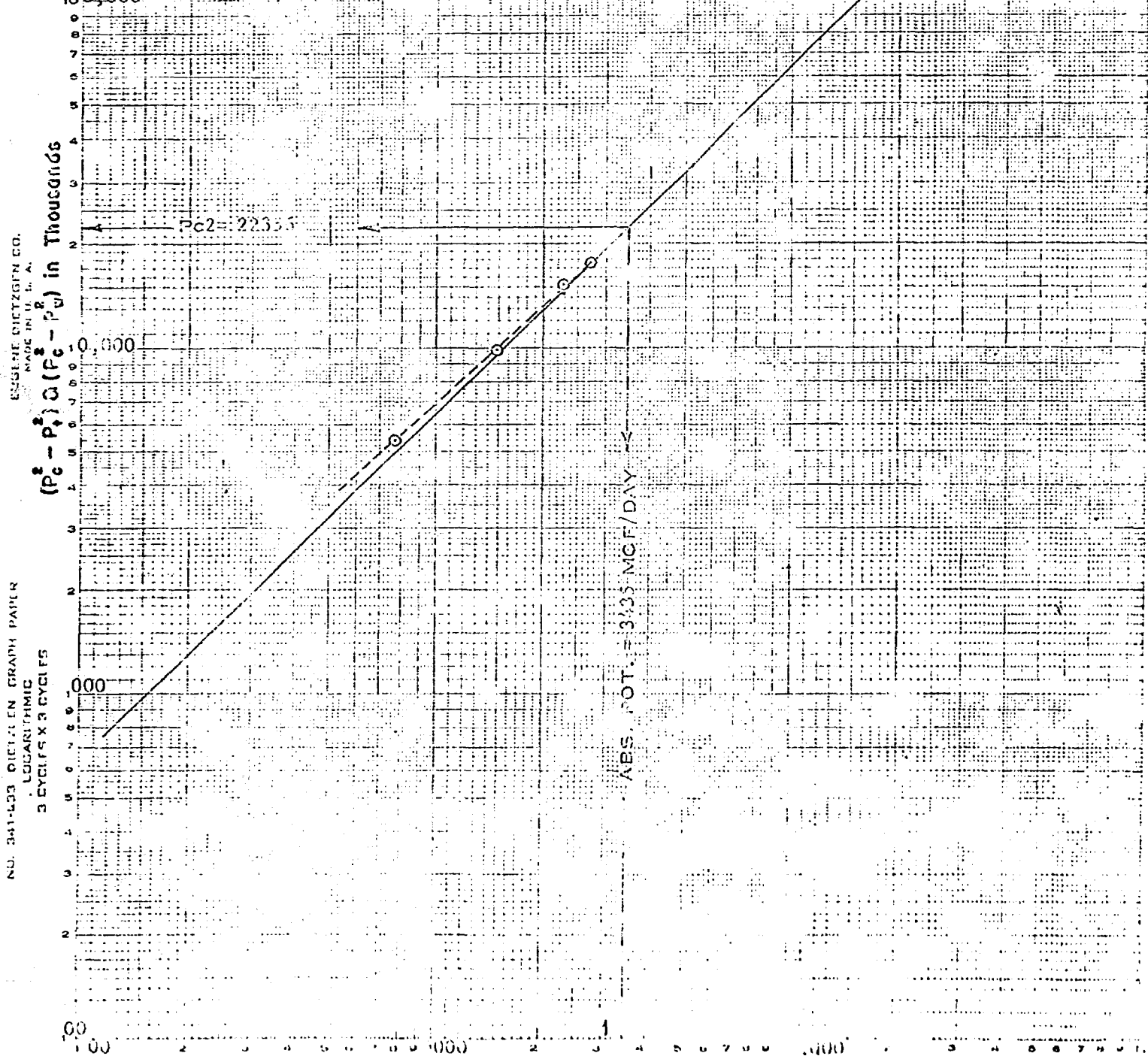
# BACK PRESSURE CURVE

Operator HORIZON OIL & GAS CO., Lecca STATE 28 Well No. 2

County EDDY Field GRAYBURG ATOKA Location K S28 T17S R29E

Date of Test 16-73 Slope "n" 1.000 LIMETER W.N. Abs.

Calc. W.N. Potential 0.000 MCF/D Calc. Abs. Potential 3435 MCF/D



Q in MCF/D

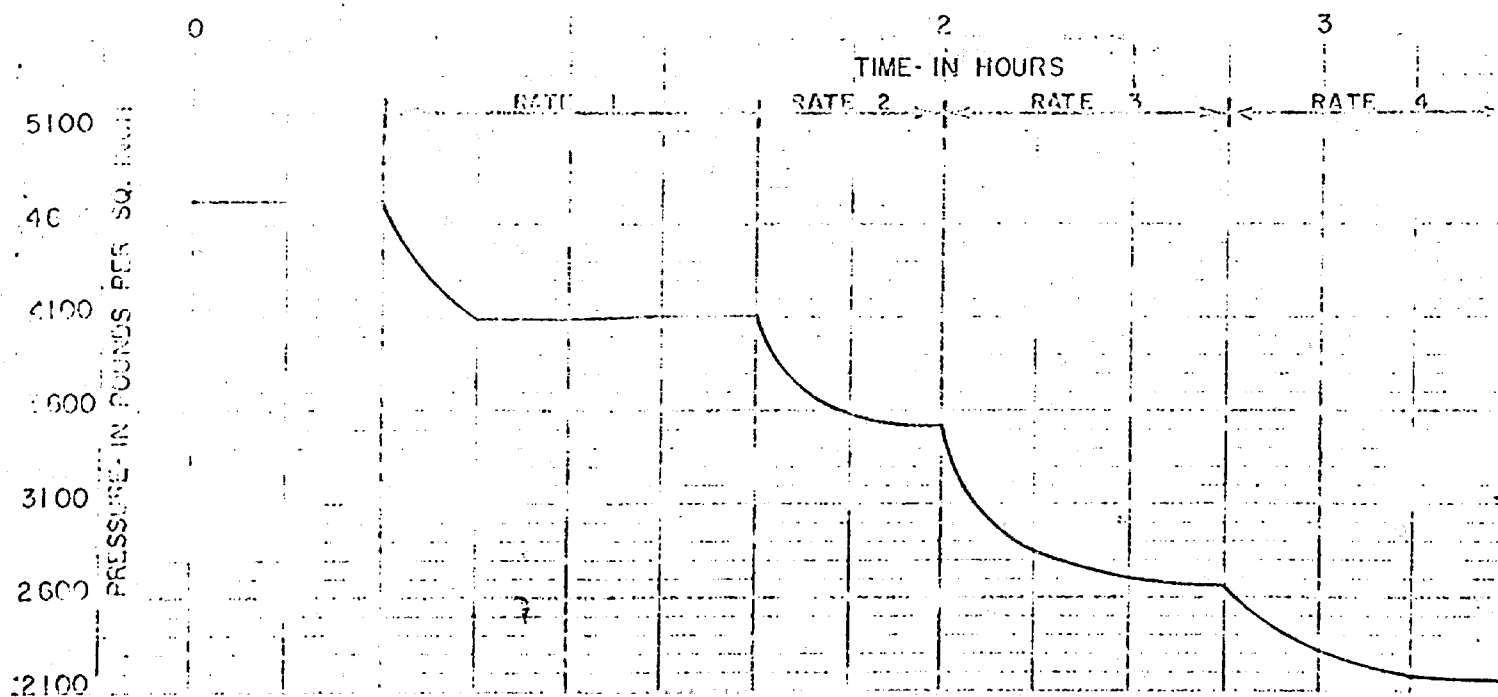
ABS. POT. = 2703 (22356) 1.000 = 3435 MCF/DAY

17590

TIME	CU	MIN.	PSIG @ 10,215 FEET
1:30 PM	0		4714 GAUGE REACHED 10,215'
2:00 PM	0		4714 OPEN CHOKER, BEGIN RATE 1
	0		4096
	0	0	4091
	0	5	4107
3:00 PM	0	10	4107 END RATE 1
	0	0	4107 BEGIN RATE 2
	0	5	3599
3:30 PM	0	00	3521 END RATE 2
	0	00	3521 BEGIN RATE 3
	0	15	2858
	0	30	2702
4:15 PM	0	45 MIN.	2670 END RATE 3

TIME	SHUT-IN PRESS./MIN.	PSIG @ 10,215 FEET
2:15 PM	02 HRS. 45 MIN.	2670 BEGIN RATE 4
	03	2309
	03	2186
5:00 PM	03 HRS. 30 MIN.	2170 END RATE 4, 1

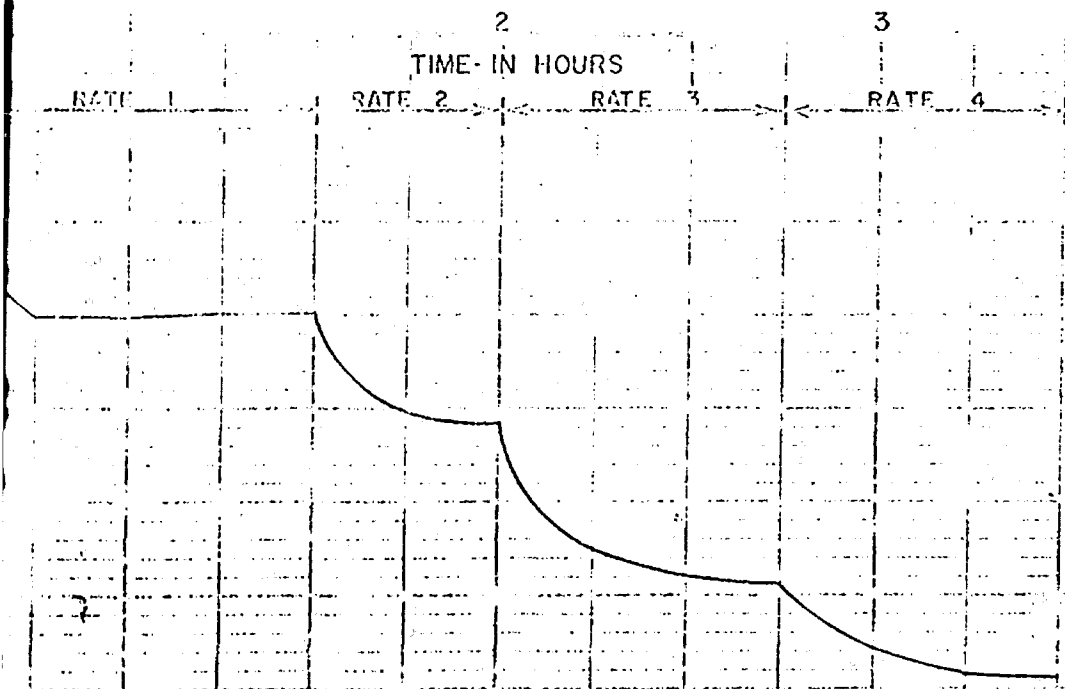
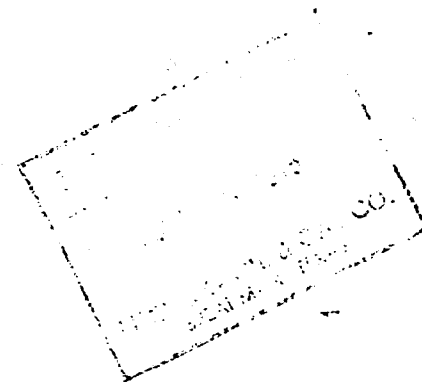
TEST DATE: AUGUST 16, 1973  
 TEST DEPTH: 10,215 FEET  
 ELEMENT No.: 16194-N  
 RANGE: 0-5000 PSI  
 CLOCK No.: 4052  
 RANGE: 0-12 HOURS



HORIZON OIL & GAS COMPANY  
 STATE 28 WELL No. 2  
 BOTTOM HOLE PRESSURES TO USE FOR  
 MULTI-POINT BACK PRESSURE TEST

8-21-73 M.C.T.

MIN.	PSIG @ 10,215 FEET	TIME	CUM. FRS./MIN.	PSIG @ 10,215 FEET
	4714 GAUGE REACHED 10,215'	1:15 PM	02 HRS. 45 MIN.	2670 BEGIN RATE 4
	4714 OPEN CHOKER, BEGIN RATE 1		03 0	2309
	4096		03 15	2186
0	4091	5:00 PM	03 HRS. 30 MIN.	2170 END RATE 4, END TEST
5	4107			
10	4107 END RATE 1			
0	4107 BEGIN RATE 2	TEST DATE:	AUGUST 16, 1973	
5	3599	TEST DEPTH:	10,215 FEET	
00	3521 END RATE 2	ELEMENT No.:	16194-N	
		RANGE:	0-5000 PSI	
00	3521 BEGIN RATE 3	CLOCK No.:	4052	
15	2858	RANGE:	0-12 HOURS	
30	2702			
45 MIN.	2670 END RATE 3			



HORIZON OIL & GAS COMPANY  
 STATE 28 WELL No. 2  
 BOTTOM HOLE PRESSURES TO USE FOR CALCULATING  
 MULTI-POINT BACK PRESSURE TEST

8-21-73 M.C.T. AS SHOWN



# RECEIVED

SEP 10 1973

HORIZON OIL & GAS CO.  
SPEARMAN, TEXAS

## NEW MEXICO OIL CONSERVATION COMMISSION MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122  
Revised 9-1-65

Horizon

5080

8

Type Test		<input checked="" type="checkbox"/> Initial		<input type="checkbox"/> Annual		<input type="checkbox"/> Special		Test Date		9-1-73	
Company				Connection							
HORIZON OIL & GAS CO				TO AIR							
Pool				Formation				Unit			
GRAYBURG				MORROW							
Completion Date		Total Depth		Plug Back TD		Elevation		Farm or Lease Name			
8-16-73		10,890'		10,870'		3571 GR.		STATE 28			
Csq. Size	Wi.	d	Set At	Perforations		Well No.					
5 1/2"			10,870'	From 10,709' To 10,722'		2					
Tbg. Size	Wi.	d	Set At	Perforations		Unit		Sec.	Twp.	Rge.	
2 1/16"			10,658'	From To		K		28	17S	29E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple						Packer Set At		County			
GAS - GAS MULTIPLE						10,658'		EDDY			
Producing Thru		Reservoir Temp. °F		Mean Annual Temp. °F		Baro. Press. - P <sub>c</sub>		State			
TUBING		158° @ 10,500		60°		13.2		NEW MEXICO			
L	H	Gg	% CO <sub>2</sub>	% N <sub>2</sub>	% H <sub>2</sub> S	Prover	Meter Run	Taps			
10,658'	10,658'	0.6515	0.45	0.36	-0-		3"	FLANGE			

FLOW DATA						TUBING DATA		CASING DATA		Duration	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h <sub>w</sub>	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	of Flow
SI							2001.0		PACKER	CHOKE	
1.	3.00" X 1.00"			490.0	6.5	90	1328.0	72		6/64"	120 MIN.
2.	3.00" X 1.00"			490.0	10.0	90	960.0	72		9/64"	60 "
3.	3.00" X 1.00"			360.0	10.0	78	721.0	66		11/64"	60 "
4.	3.00" X 1.00"			330.0	13.0	97	459.0	72		14/64"	60 "
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P <sub>m</sub>	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	4.789	57.19	503.2	0.9723	1.239	1.043	344.1
2	4.789	70.94	503.2	0.9723	1.239	1.043	426.9
3	4.789	61.09	373.2	0.9831	1.239	1.035	368.8
4	4.789	66.80	343.2	0.9662	1.239	1.028	293.7
5							

NO.	P <sub>f</sub>	Temp. °R	T <sub>f</sub>	Z
1.	0.75	550	1.47	0.920
2.	0.75	550	1.47	0.920
3.	0.56	538	1.43	0.933
4.	0.51	557	1.49	0.947
5.				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.	
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.	
Specific Gravity Separator Gas	0.6515
Specific Gravity Flowing Fluid	XXXXX
Critical Pressure	670 P.S.I.A.
Critical Temperature	375 °R

P <sub>c</sub> 2888.2	P <sub>c</sub> <sup>2</sup> 8341.7			
NO.	P <sub>f</sub> <sup>2</sup>	P <sub>w</sub>	P <sub>w</sub> <sup>2</sup>	P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup>
1		1993.2	3972.8	4368.9
2		1476.2	2179.2	6162.5
3		1250.2	1563.0	6778.7
4		965.2	931.6	7410.1
5				

(1)  $\frac{P_c^2}{P_c^2 - P_w^2} = 1.9093$

(2)  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0010$

QOF = Q  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 475.5$

QOF = 475.5

Absolute Open Flow	475.5	Mcf/d @ 15.025	Angle of Slope @	63.4°	Slope, n	0.500 LIMIT
--------------------	-------	----------------	------------------	-------	----------	-------------

Remarks: \_\_\_\_\_

BOTTOM HOLE PRESSURE MEASURED WITH KUSTER GUAGE @ 10,500 FEET

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	DON TYSON	ROY WEST	J.W.W.

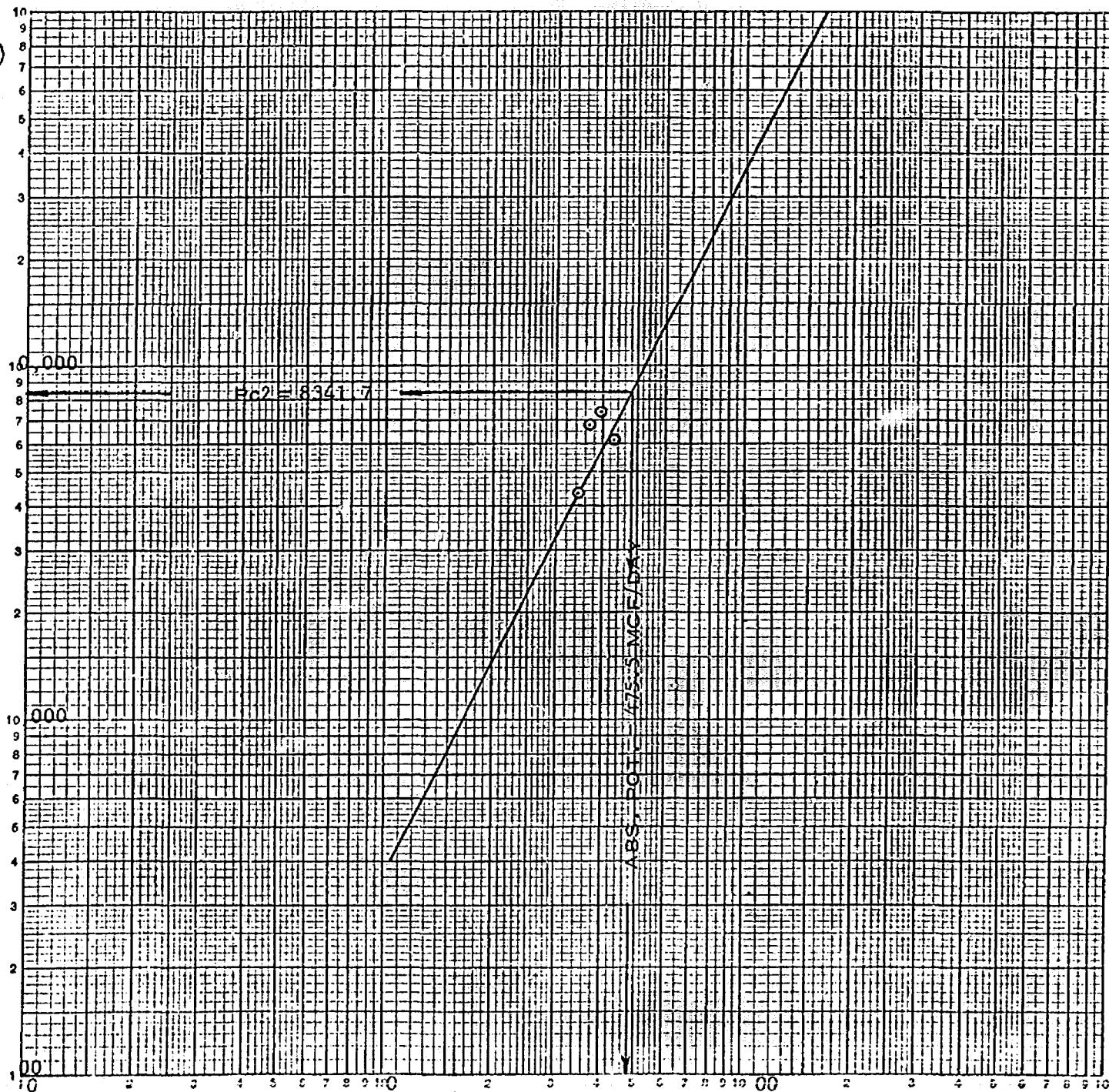
RECEIVED

SEP 10 1973

HORIZON OIL & GAS CO.  
SPEARMAN, TEXAS

HORIZON OIL AND GAS COMPANY  
STATE 28 WELL NO.2  
TEST DATE SEPTEMBER 1, 1973

KE LOGARITHMIC 46 7400  
3 X 3 CYCLES MADE IN U.S.A.  
KEUFFEL & ESSER CO.



ABS. SLOPE (N) = 0.500 LIMITED

ABS. POT. =  $344.1 \times 8341.7 = 475.5$  MCF/DAY  
4368.9

DATE  
8-31-73  
9-1-73

TIME  
11:10 A.M.  
9:35 A.M.  
9:50 A.M.  
12:00 P.M.

CUM. HRS./MIN  
00 HRS. 00 MIN.  
22 25  
22 40  
24 50

P.S.I.G. @ 10,500 FEET

2871 GUAGE REACHED 10,500 '  
2875 CHOKE OPENED  
2737 CHOKE CLOSED TO REPAIR REG.  
2862 CHOKE OPEN RATE 1 @ 6/64 CHOKE  
2648  
2483  
2278  
2196  
2114  
2070  
2021

HORIZON OIL & GAS  
STATE 28 No. 2

TEST DATE:  
TEST DEPTH:

ELEMENT NO.:  
CLOCK NO.:

GUAGE NO.:  
OPERATOR:

RECEIVED

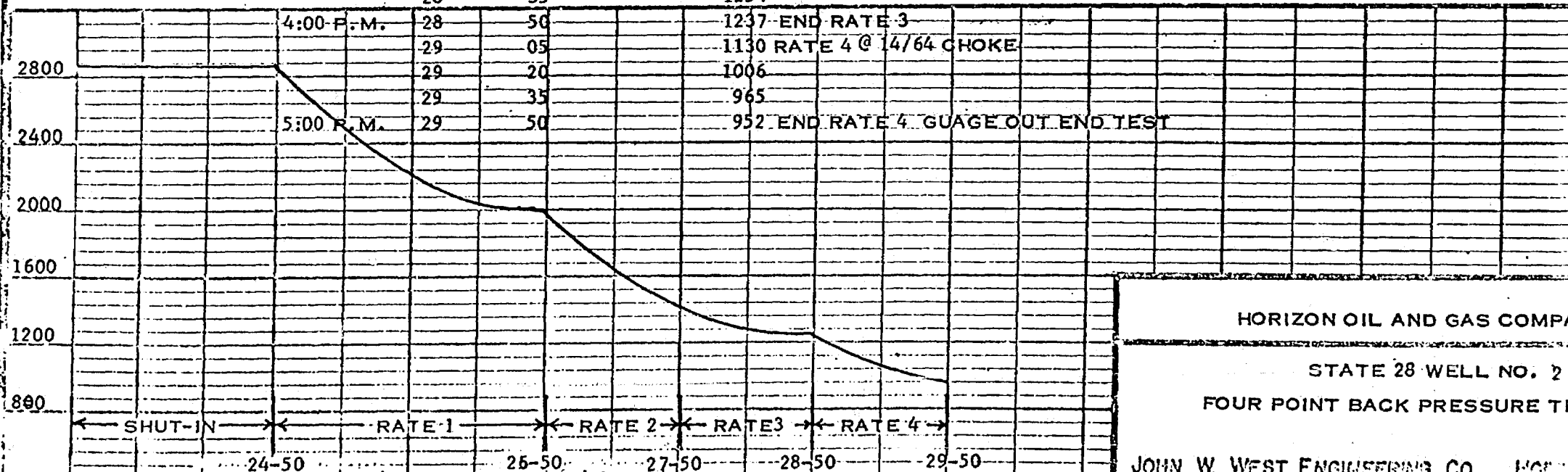
SEP 10 1973

HORIZON OIL & GAS CO.  
SPEARMAN, TEXAS

2:00 P.M.

3:00 P.M.

1980 END RATE 1  
1758 RATE 2 @ 9/64 CHOKE  
1615  
1515  
1463 END RATE 2  
1344 RATE 3 @ 11/64 CHOKE  
1283  
1254



HORIZON OIL AND GAS COMP

STATE 28 WELL NO. 2

FOUR POINT BACK PRESSURE TI

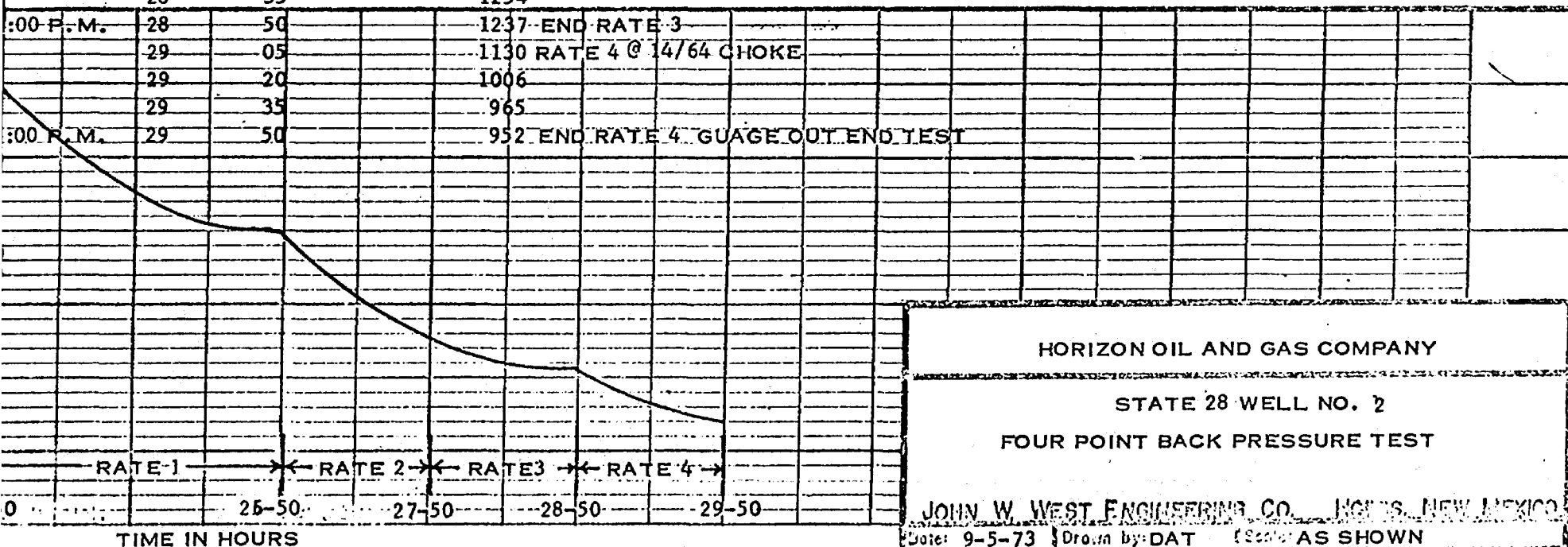
JOHN W. WEST ENGINEERING CO. INC.

Date: 9-5-73 Drawn by: DAT (Scale AS SHOWN)

TIME	CUM. HRS./MIN		P.S.I.G. @ 10,500 FEET
10 A.M.	00 HRS.	00 MIN.	2871 GUAGE REACHED 10,500'
35 A.M.	22	25	2875 CHOKE OPENED
50 A.M.	22	40	2737 CHOKE CLOSED TO REPAIR REG.
00 P.M.	24	50	2862 CHOKE OPEN RATE 1 @ 6/64 CHOKE
	25	05	2648
	25	20	2483
	25	35	2278
	25	50	2196
	26	05	2114
	26	20	2070
	26	35	2021
00 P.M.	26	50	1980 END RATE 1
	27	05	1758 RATE 2 @ 9/64 CHOKE
	27	20	1615
	2735	35	1515
00 P.M.	27	50	1463 END RATE 2
	28	05	1344 RATE 3 @ 11/64 CHOKE
	28	20	1283
	28	35	1254

HORIZON OIL & GAS CO  
STATE 28 No. 2

TEST DATE: 8-31/9-1, 1973  
TEST DEPTH: 10,500 FEET  
ELEMENT NO.: 4391 (0-3700#)  
CLOCK NO.: 5124 (0-72 HRS.)  
GUAGE NO.: 16163  
OPERATOR: D. TYSON



HORIZON OIL AND GAS COMPANY

STATE 28 WELL NO. 2

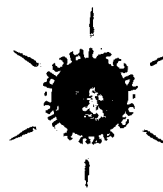
FOUR POINT BACK PRESSURE TEST

JOHN W. WEST ENGINEERING CO., HOUSTON, NEW MEXICO

Date: 9-5-73 Drawn by: DAT (See AS SHOWN)

Case 5080

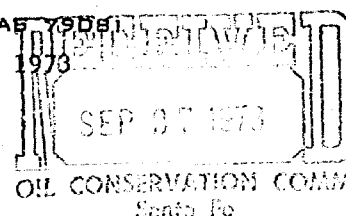
**HORIZON**  
**OIL & GAS CO.**  
**OF TEXAS** (a corporation)



P. O. BOX 7

SPEARMAN, TEXAS 79581

September 21, 1973



Oil Conservation Commission  
State of New Mexico  
Capitol Building  
Santa Fe, New Mexico 87501

Attention: D.S. Nutter

Re: State #28-2  
Sec. 28, T17S, R-29E  
Eddy Co., New Mexico

Gentlemen:

As per our telephone conversation of this date, Attached please find Form C-107 which includes the following:

1. Application for Multiple Completion
2. Diagrammatic sketch
3. Plat of Lease and offset wells
4. Copies of this application being mailed to  
Tenneco Oil Co., El Paso Natural Gas Co., &  
General American Oil Company of Texas.
5. Electric Log with tops

The above information plus the following is being forwarded to the Oil Conservation Commission in Artesia, New Mexico:

Form C-103 -Atoka, Morrow  
Form C-104 -Atoka, Morrow  
Form C-105 -Atoka, Morrow  
Form C-102 -Atoka  
Packer leakage test  
Packer setting report- Atoka, Morrow  
Form C-122 -Atoka, Morrow

It is my understanding that the Hearing will be held October 17, 1973, in Santa Fe, New Mexico. If additional information is needed, please let us know.

Yours very truly,  
HORIZON OIL & GAS CO. OF TEXAS

DOCKET MAILED

Date 10-5-73

*Everett R. Tracy*  
Everett R. Tracy  
Production Manager

ERT:jc

cc: Oil Conservation Commission, P.O. Drawer DD, Artesia, New Mexico (w/enc.)  
Tenneco Oil Company, 1200 Lincoln Tower Bldg., Denver, Colorado  
El Paso Natural Gas Co., El Paso, Texas (w/encl, Form C-107)  
General American Oil Co. of Texas, Dallas, Texas w/encl, Form C-107)  
file

NEW MEXICO OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO  
APPLICATION FOR MULTIPLE COMPLETION

Form C-107

5-1-61

Case 5080

Operator <b>Horizon Oil &amp; Gas Co. of Texas</b>		County <b>Eddy</b>	Date <b>9-20-73</b>
Address <b>P.O. Box 7 Spearman, Texas 79081</b>		Lease <b>State 28-2</b>	Well No. <b>2</b>
Location of Well <b>K</b>	Unit <b>28</b>	Township <b>17S</b>	Range <b>29E</b>

1. Has the New Mexico Oil Conservation Commission heretofore authorized the multiple completion of a well in these same pools or in the same zones within one mile of the subject well? YES \_\_\_\_\_ NO X
2. If answer is yes, identify one such instance: Order No. \_\_\_\_\_; Operator Lease, and Well No.: \_\_\_\_\_

3. The following facts are submitted:	Upper Zone	Intermediate Zone	Lower Zone
a. Name of Pool and Formation	<b>Atoka</b>		<b>Morrow</b>
b. Top and Bottom of Pay Section (Perforations)	<b>10,327 10,341</b>		<b>10,709 10,722</b>
c. Type of production (Oil or Gas)	<b>Gas</b>		<b>Gas</b>
d. Method of Production (Flowing or Artificial Lift)	<b>flowing</b>		<b>flowing</b>

4. The following are attached. (Please check YES or NO)

Yes	No	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	a. Diagrammatic Sketch of the Multiple Completion, showing all casing strings, including diameters and setting depths, centralizers and/or turbolizers and location thereof, quantities used and top of cement, perforated intervals, tubing strings, including diameters and setting depth, location and type of packers and side door chokes, and such other information as may be pertinent.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	b. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	c. Waivers consenting to such multiple completion from each offset operator, or in lieu thereof, evidence that said offset operators have been furnished copies of the application. * See cover letter & distribution below
<input checked="" type="checkbox"/>	<input type="checkbox"/>	d. Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforation indicated thereon. (If such log is not available at the time application is filed it shall be submitted as provided by Rule 112-A.)

5. List all offset operators to the lease on which this well is located together with their correct mailing address.

**Tenneco Oil Company, 1200 Lincoln Tower Bldg., Denver, Colorado 80203**

**El Paso Natural Gas Company, Box 1492, El Paso, Texas 79999**

**General American Oil Company of Texas, Meadows Building, Dallas, Texas 75206**

6. Were all operators listed in Item 5 above notified and furnished a copy of this application? YES X NO \_\_\_\_\_. If answer is yes, give date of such notification **9-20-73**.

CERTIFICATE: I, the undersigned, state that I am the Production Manager of the Horizon Oil & Gas Co. of Texas (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Signature

\*Should waivers from all offset operators not accompany an application for administrative approval, the New Mexico Oil Conservation Commission will hold the application for a period of twenty (20) days from date of receipt by the Commission's Santa Fe office. If, after said twenty-day period, no protest nor request for hearing is received by the Santa Fe office, the application will then be processed.

NOTE: If the proposed multiple completion will result in an unorthodox well location and/or a non-standard proration unit in one or more of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.

NEW MEXICO OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO  
APPLICATION FOR MULTIPLE COMPLETION

Form G-107  
5-1-61

Operator <b>Horizon Oil &amp; Gas Co. of Texas</b>		County <b>Eddy</b>	Date <b>9-20-73</b>
Address <b>P.O. Box 7 Spearman, Texas 79081</b>		Lease <b>State 28-2</b>	Well No. <b>2</b>
Location of Well <b>K</b>	Unit <b>28</b>	Township <b>17S</b>	Range <b>29E</b>

1. Has the New Mexico Oil Conservation Commission heretofore authorized the multiple completion of a well in these same pools or in the same zones within one mile of the subject well? YES \_\_\_\_\_ NO **X**
2. If answer is yes, identify one such instance: Order No. \_\_\_\_\_; Operator Lease, and Well No.: \_\_\_\_\_

3. The following facts are submitted:	Upper Zone	Intermediate Zone	Lower Zone
a. Name of Pool and Formation	<b>Atoka</b>		<b>Morrow</b>
b. Top and Bottom of Pay Section (Perforations)	<b>10,327 10,341</b>		<b>10,709 10,722</b>
c. Type of production (Oil or Gas)	<b>Gas</b>		<b>Gas</b>
d. Method of Production (Flowing or Artificial Lift)	<b>flowing</b>		<b>flowing</b>

4. The following are attached. (Please check YES or NO)

Yes	No	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	a. Diagrammatic Sketch of the Multiple Completion, showing all casing strings, including diameters and setting depths, centralizers and/or turbolizers and location thereof, quantities used and top of cement, perforated intervals, tubing strings, including diameters and setting depth, location and type of packers and side door chokes, and such other information as may be pertinent.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	b. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	c. Waivers consenting to such multiple completion from each offset operator, or in lieu thereof, evidence that said offset operators have been furnished copies of the application. <b>See cover letter &amp; distribution below</b>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	d. Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforation indicated thereon. (If such log is not available at the time application is filed it shall be submitted as provided by Rule 112-A.)

5. List all offset operators to the lease on which this well is located together with their correct mailing address.

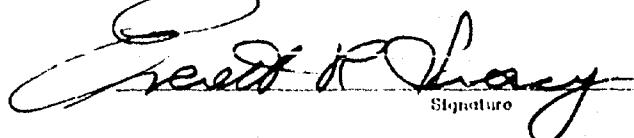
**Tenneco Oil Company, 1200 Lincoln Tower Bldg., Denver, Colorado 80203**

**El Paso Natural Gas Company, Box 1492, El Paso, Texas 79999**

**General American Oil Company of Texas, Meadows Building, Dallas, Texas 75206**

6. Were all operators listed in Item 5 above notified and furnished a copy of this application? YES **X** NO \_\_\_\_\_. If answer is yes, give date of such notification **9-20-73**.

CERTIFICATE: I, the undersigned, state that I am the **Production Manager** of the **Horizon Oil & Gas Co. of Texas** (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

  
Signature

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NOTE: If the proposed multiple completion will result in an unorthodox well location and/or a non-standard perforation unit in one or more of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.

NEW MEXICO OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO  
APPLICATION FOR MULTIPLE COMPLETION

Form C-107  
5-1-61

Operator <b>Horizon Oil &amp; Gas Co. of Texas</b>		County <b>Eddy</b>	Date <b>9-20-73</b>
Address <b>P.O. Box 7 Spearman, Texas 79081</b>		Lease <b>State 28-2</b>	Well No. <b>2</b>
Location of Well <b>K</b>	Unit <b>28</b>	Township <b>17S</b>	Range <b>29E</b>

1. Has the New Mexico Oil Conservation Commission heretofore authorized the multiple completion of a well in these same pools or in the same zones within one mile of the subject well? YES \_\_\_\_\_ NO ☒

2. If answer is yes, identify one such instance: Order No. \_\_\_\_\_; Operator Lease, and Well No.: \_\_\_\_\_

3. The following facts are submitted:	Upper Zone	Intermediate Zone	Lower Zone
a. Name of Pool and Formation	<b>Atoka</b>		<b>Morrow</b>
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d. Method of Production (Flowing or Artificial Lift)	<b>flowing</b>		<b>flowing</b>

4. The following are attached. (Please check YES or NO)

- |   |                             |   |
|---|-----------------------------|---|
| <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | a. Diagrammatic Sketch of the Multiple Completion, showing all casing strings, including diameters and setting depths, centralizers and/or turbolizers and location thereof, quantities used and top of cement, perforated intervals, tubing strings, including diameters and setting depth, location and type of packers and side door chokes, and such other information as may be pertinent. |
| <input checked="" type="checkbox"/>     | <input type="checkbox"/>    | b. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease.   |
| <input checked="" type="checkbox"/>     | <input type="checkbox"/>    | c. Waivers consenting to such multiple completion from each offset operator, or in lieu thereof, evidence that said offset operators have been furnished copies of the application. <b>See cover letter &amp; distribution below</b>  |
| <input checked="" type="checkbox"/>     | <input type="checkbox"/>    | d. Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforation indicated thereon. (If such log is not available at the time application is filed it shall be submitted as provided by Rule 112-A.)   |

5. List all offset operators to the lease on which this well is located together with their correct mailing address.

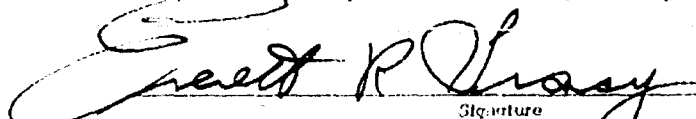
**Tenneco Oil Company, 1200 Lincoln Tower Bldg., Denver, Colorado 80203**

**El Paso Natural Gas Company, Box 1492, El Paso, Texas 79949**

**General American Oil Company of Texas, Meadows Building, Dallas, Texas 75206**

6. Were all operators listed in Item 5 above notified and furnished a copy of this application? YES ☒ NO \_\_\_\_\_. If answer is yes, give date of such notification **9-20-73**.

CERTIFICATE: I, the undersigned, state that I am the **Production Manager** of the **Horizon Oil & Gas Co. of Texas** (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

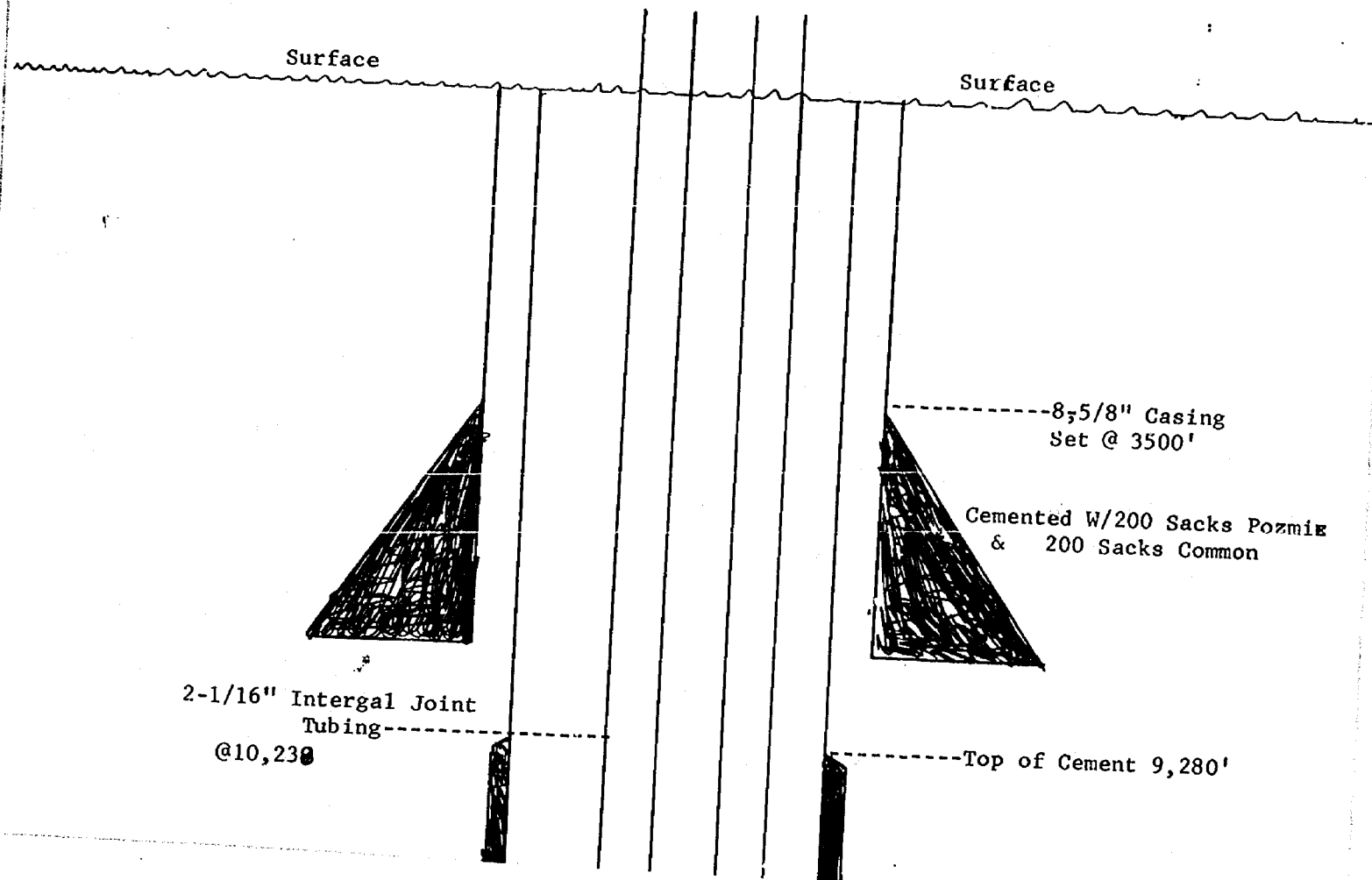
  
Signature

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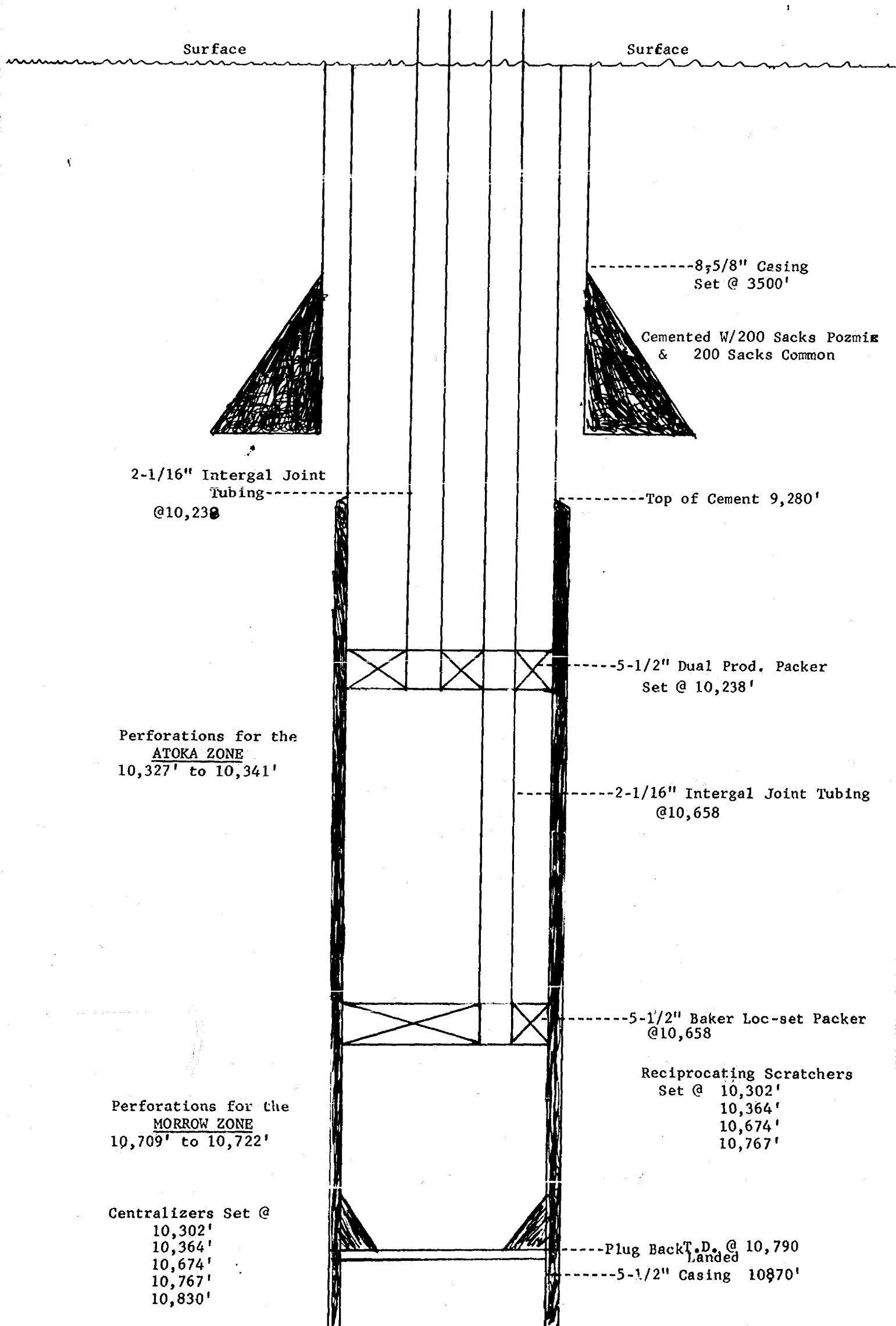


HORIZON OIL & GAS CO. OF TEXAS  
STATE 28-2  
Sec. 28 - 17S - 29E Eddy County  
1980' from South & West Lines  
G.L. Elev. 3571.4'



Case 5080

HORIZON OIL & GAS CO. OF TEXAS  
 STATE 28-2  
 Sec. 28 - 17S - 29E Eddy County  
 1980' from South & West Lines  
 G.L. Elev. 3571.4'



20	21 H.O.G. State 21-1 •	El Paso Leonard State #1 • 22
29	H.O.G. State 28-1 •  28 H.O.G. State 28-2 •	27
32	33	34

HORIZON OIL & GAS CO. OF TEXAS

State #28-2  
1980' from South & West lines  
Sec 28-17S-29E  
Eddy County, New Mexico  
Elev. G.L. 3571.4

Schlumberger

## DUAL LATEROLOG

COUNTY	EDDY
FIELD or LOCATION	GRAYBURG (MORROW)
WELL	STATE #2-28
COMPANY	HORIZON OIL & GAS
COMPANY HORIZON OIL & GAS CO. OF TEXAS	
WELL STATE #2-28	
FIELD GRAYBURG (MORROW)	
COUNTY EDDY STATE NEW MEXICO	
LOCATION 1980' FSL & 1980' FWL	
Other Services:	
CNL-FDC	
Sec. 28	Twp. 17-S Rge. 29-E
Permanent Datum: G.L. , Elev. 3571.4	
Log Measured From R.K.B. 11 Ft. Above Perm. Datum	
Drilling Measured From R.K.B.	
Elev. RKB 3582.4	
D.F. 3581.4	
G.L. 3571.4	

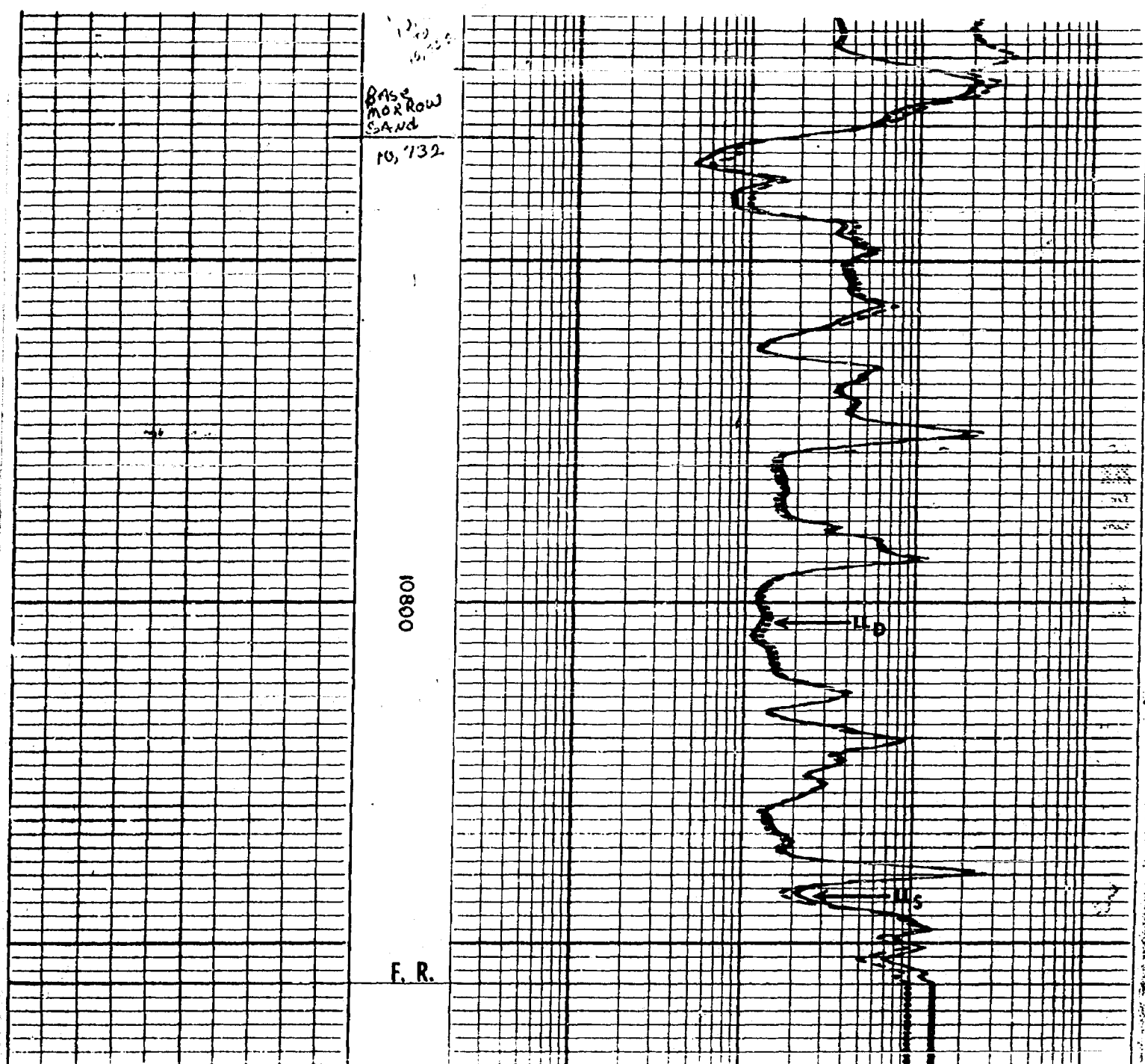
Date	6-4-73
Run No.	ONE
Depth-Driller	10890
Depth-Logger	10870
Btm. Log Interval	10856
Top Log Interval	3499
Casing-Driller	8 5/8 @ 3500
Casing-Logger	3499
Bit Size	7 7/8
Type Fluid in Hole	DRISPAC
FLUID LEVEL	FULL
Dens. Visc.	10 37
pH Fluid Loss	8.5 2.8 ml
Source of Sample	PIT
R <sub>m</sub> @ Meas. Temp.	.04 @ 87 °F
R <sub>ml</sub> @ Meas. Temp.	.036 @ 94 °F
R <sub>mc</sub> @ Meas. Temp.	.08 @ 87 °F
Source: R <sub>ml</sub> R <sub>mc</sub>	M C
R <sub>m</sub> @ BHT	.024 @ 146 °F
Time Since Circ.	11 HOURS
Max. Rec. Temp.	146 °F
Equip. Location	7646 HOBBS
Recorded By	CREEK

The well name, location and borehole reference data were furnished by the customer.

RANGES IN MUD TYPE OR ADDITIONAL SAMPLES		SCALE CHANGES	
Sample No.	Type Log	Depth	Scale Up Hole
Depth - Driller			Scale Down Hole
Depth - Fluid in Hole			
Visc.			
Fluid Loss			
Source of Sample			
@ Meas. Temp.			
@ Meas. Temp.			
@ Meas. Temp.			
Source: R <sub>ml</sub> R <sub>mc</sub>			
@ BHT			
@ BHT			
@ 3HT			
DIPMENT DATA			
No.	ONE	REMARKS	
Rel No.	711	Service Order No. - 90066	
t. No.	711	API Serial No. -	
de No.	713		
n. Panel No.	242		
Corr. No.	235		
Panel No.	711		
No.	809		
ed-F.P.M.	60		







DRAFT

dr/ (W)

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

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

CASE No. 5080

Order No. R-4655

APPLICATION OF HORIZON OIL & GAS COMPANY OF TEXAS  
FOR A DUAL COMPLETION, EDDY COUNTY,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on  
October 17, 1983, at Santa Fe, New Mexico, before Examiner  
Daniel S. Nutter.

NOW, on this November day of October, 1983, the Commission,  
a quorum being present, having considered the testimony, the record,  
and the recommendations of the Examiner, 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, Horizon Oil & Gas Company of Texas,  
seeks authority to complete its State 28

Well No. 2, located in Unit K of Section 28, Township

17 South Range 29 East, NMPM, Eddy County, New  
~~xxxxx~~ ~~North~~ ~~xxxxx~~

Mexico, as a dual completion (conventional) ~~(combination)~~ to produce gas  
~~(tubingless)~~

from the Grayburg-Morrow Gas Pool ~~through~~ and an  
undesignated Atoka Gas Pool through parallel strings of tubing.



(3) That the mechanics of the proposed dual completion are feasible and in accord with good conservation practices.

(4) That approval of the subject application will prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Horizon Oil & Gas Company of Texas,  
is hereby authorized to complete its State 28  
Well No. 2, located in Unit K of Section 28, Township  
17 ~~South~~ <sup>North</sup> Range 29 ~~East~~ <sup>West</sup>, NMPM, Eddy County, New  
Mexico, as a dual completion <sup>(conventional)</sup> ~~(combination)~~ <sup>xxxxxx</sup> to produce gas  
~~(tubingless)~~  
from the Grayburg-Morrow Gas Pool ~~through~~ and an  
undesignated Atoka Gas Pool through parallel strings of tubing.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_;

PROVIDED HOWEVER, that the applicant shall complete, operate,  
and produce said well in accordance with the provisions of Rule  
112-A of the Commission Rules and Regulations insofar as said rule  
is not <sup>is</sup> inconsistent with this order;

PROVIDED FURTHER, that the applicant shall take ~~none~~ <sup>core</sup> packer-leakage  
tests upon completion and annually thereafter during the Annual  
Shut-In Pressure  
~~Gas-Oil Ratio~~ Test Period for the Grayburg-Morrow Gas Pool.  
~~Deliverability~~

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

DONE at Santa Fe, New Mexico, on the day and year herein-  
above designated.

Everett Tracy  
**Memo**

From

D. S. NUTTER

CHIEF ENGINEER

P.O. Box 7 Spearman, Tex  
79081

To  
Horizon Oil & Gas Co  
of Texas

State 28 ~~W~~ Well No 2  
1980 FSL 1980 FWL

28-17S-29E  
Eddy Co.

Morrow & Atoka

parallel strgs of

Irving

Krayberg Morrow

Over 5000