

LEWIS B. BURLESON, INC.

OIL & GAS PROPERTIES  
BOX 2479 - PHONE 683-4747  
MIDLAND, TEXAS 79702

June 27, 1984

LEWIS B. BURLESON  
PRESIDENT



Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87501

Attn: Mr. Joe Ramey

*Case 8-94*

Re: Harrison # 2  
Unit N, Section 25,  
T-24-S, R-36-E,  
Lea County, New Mexico

Gentlemen:

Enclosed for your review and approval please find our Application for Classification as a Hardship Gas Well on the above referenced well, together with the necessary supporting data.

By copy of this letter we are forwarding copies of this application to the working interest owners, the purchaser (El Paso Natural Gas Company), the District office of the Commission and all off-set operators.

If you have any questions please do not hesitate to contact me.

Yours very truly,

Steven L. Burleson

cc: Oil Conservation Division  
Box 1980  
Hobbs, NM 88240

El Paso Natural Gas Co.  
Box 1492  
El Paso, TX 79978

WORKING INTEREST OWNERS

Doyle Hartman  
Box 10426  
Midland, TX 79702

Jack Huff  
Box 471  
Midland, TX 79702

June 27, 1984

June 27, 1984

OFF-SET OPERATORS

Doyle Hartman  
Box 10426  
Midland, TX 79702

Sun Oil Company  
Box 1861  
Midland, TX 79702

Millard Deck Estate  
Eunice, New Mexico 88321

Getty Oil Company  
Two Midland National Center  
Midland, TX 79701

Shell Oil Company  
600 N. Marienfeld, Suite 310  
Midland, TX 79701

Convest Energy Corp.  
2401 Fountain View Drive, Suite 700  
Houston, TX 77057

Operator Lewis B. Burleson, Inc. Contact Party Lewis B. Burleson  
 Address P.O. Box 2479, Midland, TX 79702 Phone No. 915-683-4747  
 Lease Harrison Well No. 2 W N Sec. 25 TWP 24-S RGE 36-E  
 Pool Name Jalmat Gas Pool Minimum Rate Requested 110 MCFPD  
 Transporter Name El Paso Natural Gas Company Purchaser (if different) \_\_\_\_\_

Are you seeking emergency "hardship" classification for this well?  yes  no

Applicant must provide the following information to support his contention that the subject well qualifies as a hardship gas well.

Provide a statement of the problem that leads the applicant to believe that "underground waste" will occur if the subject well is shut-in or is curtailed below its ability to produce. (The definition of underground waste is shown on the reverse side of this form)

2) Document that you as applicant have done all you reasonably and economically can do to eliminate or prevent the problem(s) leading to this application.

- a) Well history. Explain fully all attempts made to rectify the problem. If no attempts have been made, explain reasons for failure to do so.
- b) Mechanical condition of the well (provide wellbore sketch). Explain fully mechanical attempts to rectify the problem, including but not limited to:
  - i) the use of "smallbore" tubing; ii) other de-watering devices, such as plunger lift, rod pumping units, etc.

Present historical data which demonstrates conditions that can lead to waste. Such data should include:

- a) Permanent loss of productivity after shut-in periods (i.e., formation damage).
- b) Frequency of swabbing required after the well is shut-in or curtailed.
- c) Length of time swabbing is required to return well to production after being shut-in.
- d) Actual cost figures showing inability to continue operations without special relief

4) If failure to obtain a hardship gas well classification would result in premature abandonment, calculate the quantity of gas reserves which would be lost

5) Show the minimum sustainable producing rate of the subject well. This rate can be determined by:

- a) Minimum flow or "log off" test; and/or
- b) Documentation of well production history (producing rates and pressures, as well as gas/water ratio, both before and after shut-in periods due to the well dying, and other appropriate production data).

6) Attach a plat and/or map showing the proration unit dedicated to the well and the ownership of all offsetting acreage.

7) Submit any other appropriate data which will support the need for a hardship classification.

8) If the well is in a prorated pool, please show its current under- or over-produced status.

9) Attach a signed statement certifying that all information submitted with this application is true and correct to the best of your knowledge; that one copy of the application has been submitted to the appropriate Division district office (give the name) and that notice of the application has been given to the transporter/purchaser and all offset operators.

1) Definition of Underground Waste.

"Underground Waste as those words are generally understood in the oil and gas business, and in any event to embrace the inefficient, excessive, or improper use or dissipation of the reservoir energy, including gas energy and water drive, of any pool, and the locating, spacing, drilling, equipping, operating, or producing, of any well or wells in a manner to reduce or tend to reduce the total quantity of crude petroleum oil or natural gas ultimately recovered from any pool, and the use of inefficient underground storage of natural gas."

- 2) The only acceptable basis for obtaining a "hardship" classification is prevention of waste with the burden of proof solely on the applicant. The applicant must not only prove waste will occur without the "hardship" classification, but also that he has acted in a responsible and prudent manner to minimize or eliminate the problem prior to requesting this special consideration. If the subject well is classified as a "hardship" well, it will be permitted to produce at a specified minimum sustainable rate without being subject to shut-in by the purchaser due to low demand. The Division can rescind approval at any time without notice and require the operator to show cause why the classification should not be permanently rescinded if abuse of this special classification becomes apparent.
- 3) The minimum rate will be the minimum sustainable rate at which the well will flow. If data from historical production is insufficient to support this rate (in the opinion of the Director), or if an offset operator or purchaser objects to the requested rate, a minimum flow ("log off") test may be required. The operator may, if he desires, conduct the minimum flow test, and submit this information with his application.
- 4) If a minimum flow test is to be run, either at the operator's option or at the request of the Division, the offset operators, any protesting party, the purchaser and OCD will be notified of the date of the test and given the opportunity to witness, if they so desire.
- 5) Any interested party may review the data submitted at either the Santa Fe office or the appropriate OCD District Office.
- 6) The Director can approve uncontested applications administratively if, in his opinion, sufficient justification is furnished. Notice shall be given of intent to approve by attaching such notice to the regular examiner's hearing docket. Within 20 days following the date of such hearing, the affected parties will be permitted to file an objection. If no objection has been filed, the application may be approved.
- 7) Should a protest be filed in writing, the applicant will be permitted to either withdraw the application, or request it to be set for hearing.
- 8) An emergency approval, on a temporary basis for a period not to exceed 90 days, may be granted by the District Supervisor, pending filing of formal application and final action of the OCD Director. This temporary approval may be granted only if the District Supervisor is convinced waste will occur without immediate relief. If granted, the District Supervisor will notify the purchaser.  
  
After a well receives a "hardship" classification, it will be retained for a period of one year unless rescinded sooner by the Division. The applicant will be required to certify annually that conditions have not changed substantially in order to continue to retain this classification.
- 10) Nothing here withstanding, the Division may, on its own motion, require any and all operators to show cause why approval(s) should not be rescinded if abuse is suspected or market conditions substantially change in the State of New Mexico.
- 11) A well classified as a "hardship well" will continue to accumulate over and under production (prorated pools). Should allowables exceed the hardship allowable assigned, the well will be permitted to produce at the higher rate, if capable of doing so, and would be treated as any other non-hardship well. Any cumulative overproduction accrued either before or after being classified "hardship" must, however, be balanced before the well can be allowed to produce at the higher rate.

## APPLICATION FOR CLASSIFICATION AS HARDSHIP GAS WELL

1. That Lewis B. Burlison, Inc. Harrison # 2, Jalmat Gas Producer in Unit N, Section 25, Township 24 South, Range 36 East, Lea County, New Mexico should be granted a Hardship Gas Well classification because the Yates formation produces a large volume of water with the gas. Underground waste will occur if this well is not continuously produced so as to remove the large volumes of water. Reservoir engineering studies have proved that the Yates formation is sensitive to shut-in periods where the formation is being drowned with formation water. Therefore loss of gas reserves will occur if this water is not continuously removed from this formation along with the gas.

2. (a & b) This well was drilled in January of 1978 to a TD of 3620' and completed in the Queen sand from perforations from 3502 to 3578. Within six months the Queen section went to water and the well was plugged back to the Yates formation and perforated from 2895 to 3094 in April of 1979. The well was completed for 532 MCFPD. Within a two week period this well was dead due to the encroachment of large volumes of water. Gas production for July 1979 was 3500 MCF, for August 1979 - 3000 MCF, for September 1979 - 3200 MCF and for October 1979 2700 MCF. At that juncture the well was put on a large pumping unit and approximately 200 bbls. of water per day has been produced along with the gas from this formation. Showing the effects of the pumping unit, for November 1979 the gas produced was 12,000 MCF. Attached is a well bore sketch showing the plug back depth and the Yates perforations, and a production curve showing these above gas volumes.

3. a. Production history of the Harrison # 2 shows that when this well is shut-in for periods exceeding five days we must pump water at a rate of 200+ bbls. for a three to four day period before we can bring the gas back on production.

Because of the swelling clays and moderellirite present in the Yates, water that is not removed from the formation will lower the permeability of this formation and loss in productivity will occur. This characteristic of the Yates sand is well documented.

3. b. Because of the large volume of water, this well was put on the pump. Only downhole pumping equipment can handle 200 bbls. of water daily.

The large investment for pumping equipment was decided upon because of the water volumes. Swabbing this well would have had prohibitive cost and not solved our problem. Putting gas wells on the pump is becoming common practice in the Jalmat Gas Field.

4. It is important to obtain a hardship gas well classification if we are to recover the full amount of reserves that should be obtained from this borehole. It appears from thorough reserve studies of this well that one-half of our projected remaining gas reserves will be lost if this well is permitted to be shut-in for periods by the purchaser. There appears to be approximately 238,000 MCF of recoverable gas left, which would show a loss of 119,000 MCF if special relief is not obtained.

5. Enclosed is a production history over the last two years which shows that the minimum producing rate is approximately 110 MCFPD.

THE STATE OF TEXAS }  
COUNTY OF MIDLAND }

I, Steven L. Burleson, Vice-President of Lewis B. Burleson, Inc., do hereby certify that all of the information submitted with this application for classification of our Harrison No. 2 well as a Hardship Gas Well is true and correct to the best of my knowledge and that notice of this application has been given to El Paso Natural Gas Company, the transporter/purchaser, to the Hobbs District Office of the Oil Conservation Division and all off-set operators of this producing well.

Steven Burleson  
Steven L. Burleson

SWORN to and subscribed before me this 27th day of June, 1984.

Sue Watlington  
Notary Public, State of Texas



SUE WATLINGTON  
Notary Public, State of Texas  
My Commission Expires Aug. 13, 1985

DATE 6-18-84 WELL NO. 2 LEASE HARRISOW FIELD JALMAT YATES

8 5/8" 23# casing  
Set at 1165'. Cmt w/  
550 sks. Circ. Cmt.

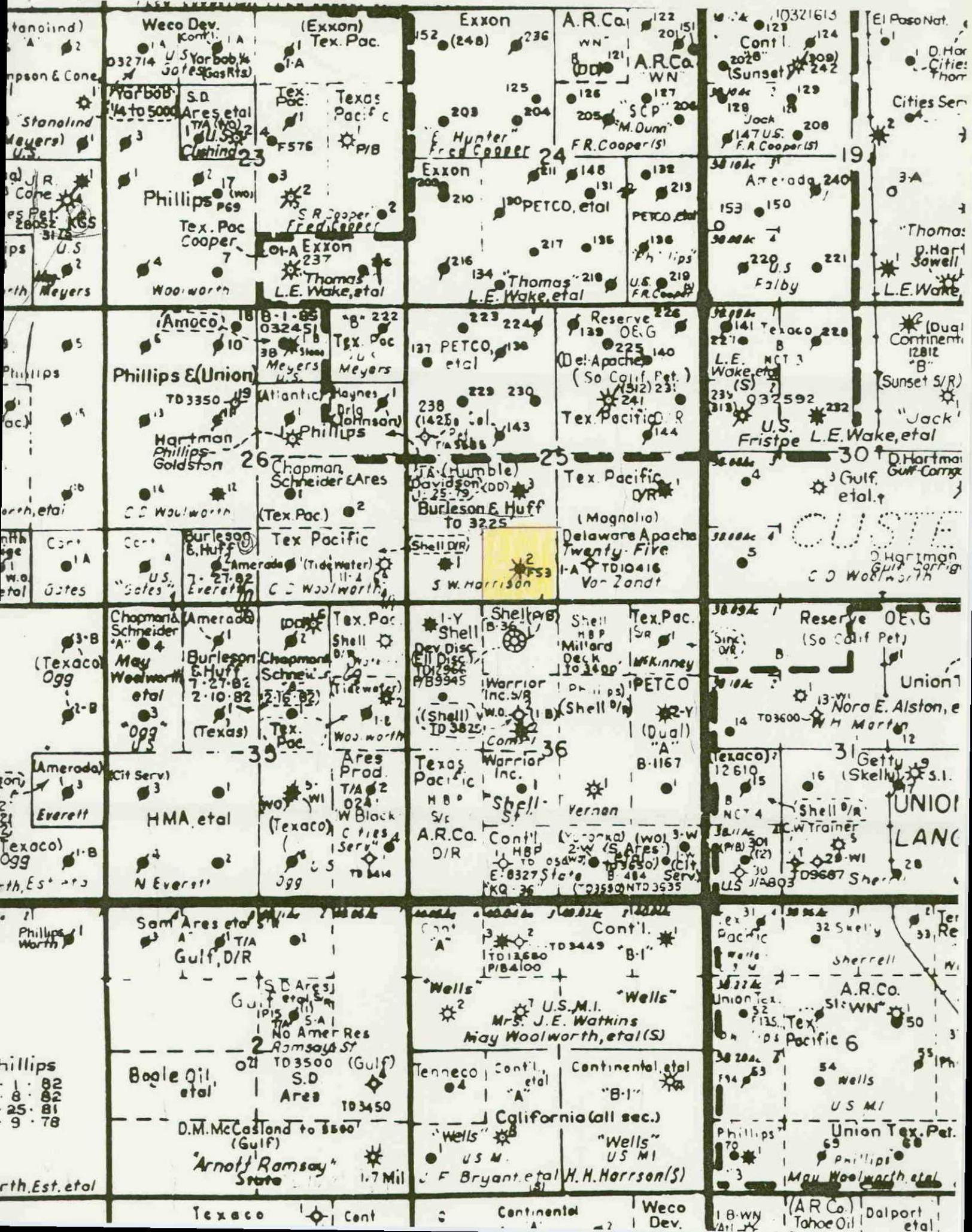
2 3/8" hbq. set at 2905'  
2 x 1 1/4 x 12' set at 2905'

Perf. 2895-3094' Acidize with 1500 gal.  
FRAC w/ 50,000 gals. wtr + 50,000 lbs. SAND.

Set CIRP at 3490'.

Perf 3502-3578'. Acidize w/  
1250 gals.

4 1/2" 10.5# casing Set at  
3620'. Cmt w/ 300 sks.



Stanlind  
Meyers  
U.S.  
Cone  
Pet  
KGS  
U.S.  
Meyers

Weco Dev.  
Kontl. 1A  
032714  
U.S. Yarbob  
Jot (Gas Rts)

(Exxon)  
Tex. Pac.  
1A  
Tex. Pac.  
Texas  
Pacific  
F576  
P/B

Exxon  
152 (248)  
236  
125  
203  
204  
Hunter  
Fred Cooper 24

A.R.Co. 122  
WN 201 151  
A.R.Co.  
WN  
126 127  
205 "M. Dunn"  
204  
F.R. Cooper (S)

10321613  
Contl. 123  
2028 (309)  
(Sunset) 242  
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Jack  
147 U.S.  
F.R. Cooper (S)

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Thorn  
Cities Ser

J.R.  
Cone  
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Meyers

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L.E. Wake,

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Burleson  
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Amerada (Tidewater)  
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C.D. Woolworth

Tex Pacific  
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Shell (D/R)  
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S.W. Harrison

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OR  
(Magnolia)  
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Twenty-Five  
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"Arnott Ramsay"  
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Shell (D/R)  
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S.W. Harrison

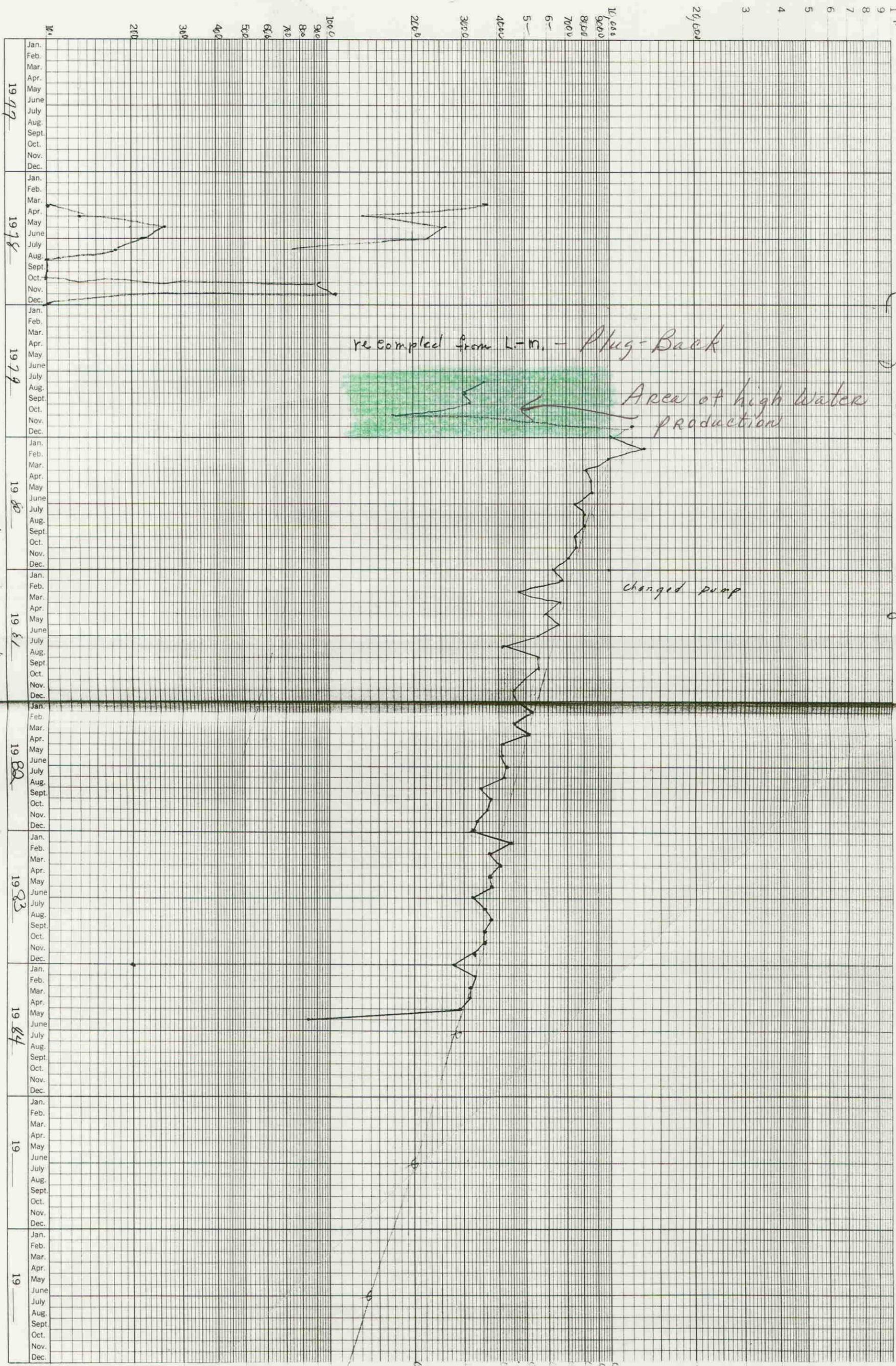
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Was  
L.M. (11)

Harrison No 2 25-24-86  
date of water  
200 Bbl/day  
Tailmat-Gas



WI = .33  
RI = .241

flow = 17000

34,000 Bbl

102,507 MCF

Shoofline = \$ 2.7