

# V. H. WESTBROOK

OIL OPERATOR

810 West Broadway

P. O. Box 2264

(505) 393-9714

HOBBS, NEW MEXICO 88240

August 6, 1986

*Case 5999*

Oil Conservation Division  
P. O. Box 1980  
Hobbs, New Mexico 88241

Attn: Mr. Jerry Sexton

Re: Kinahan Federal #1  
Sec. 20, T-15-S,R-30-E  
Chaves County, NM

Dear Mr. Sexton,

Enclosed for your review and approval, please find our Application for Classification as a Hardship Gas Well on the above captioned well.

To support our request for the Hardship Classification we are enclosing graphs on oil, gas and water production indicating the detrimental effect on the well when shut in. The well was shut in several days each month with the exception of August, 1985. Each time the well was shut in, it became progressively weaker. After swabbing well in February, 1986, it became apparent that drilling mud and water was entering the well bore and blocking entry of gas and other fluids. Five hundred gallons of 15% HCL was dumped down tubing to try to dissolve mud block. It was assumed the acid would clear casing perforation. The well was then swabbed back the same day.

The well was then shut in March 18th until June 4th, 1986. The well died on June 6th and we started swabbing June 7th. The well gave up some condensate, water and drilling mud. The well became increasingly weaker. We moved swab unit back on well, swabbed well down and acidized with 1000 gallons of 10% gelled acid to dissolve drilling mud block. Started swabbing back immediately. Swabbed on well from June 11th thru June 16th. Unable to kick well off due to water and drilling mud entry. We then pulled tubing and packer and ran

*The well has been shut in since 8/27 in July*

back with tubing anchor and rod pump. Set American 456 pumping unit and electrified lease. Started pumping on July 1, 1986. We are currently moving approximately 340 MCF of gas daily, approximately 40 barrels of oil and approximately 100 barrels of water. We think if this well is shut in for any extended length of time, the water and mud will log off the formation and cause premature abandonment of the well.

We estimate, if the above circumstances occur, the amount of gas reserves lost due to premature abandonment would be 367 MMCF of gas and 44,000 barrels of condensate.

To prevent this waste and protect our correlative rights, we are requesting administrative approval to produce this well at its present rate of 350 MCF daily and given the circumstances and problems we have had with this, that our Application for Classification as a Hardship Gas Well be approved.

Also find for review the following supportive documents:

- 1.) Ownship map
- 2.) well bore sketch
- 3.) production history of well
- 4.) Form C-102
- 5.) copy of letter to offset operators
- 6.) certified statement
- 7.) cost of work-over and equipment to regain production

If further information is required, please contact me.

Sincerely yours,



V. H. Westbrook  
Operator

VHW/prw

Enclosures

Case 8999

APPLICATION FOR CLASSIFICATION AS HARDSHIP GAS WELL

Operator V. H. Westbrook, Oil Operator Contact Party V. H. Westbrook  
Address P. O. Box 2264 Hobbs, New Mexico 88241 Phone No. (505)393-9714  
Lease Kinahan Federal Well No. 1 UT 0 Sec. 20 TWP 15-S RGE 30-E  
Pool Name West Cedar Point Wolfcamp Gas Minimum Rate Requested 350 MCF  
Transporter Name Cabot Corporation Purchaser (if different) \_\_\_\_\_  
Are you seeking emergency "hardship" classification for this well? XX yes \_\_\_\_\_ no

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

- 1) 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.
- 3) 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.

GENERAL INFORMATION APPLICABLE TO HARDSHIP GAS WELL CLASSIFICATION

## 1) Definition of Underground Waste.

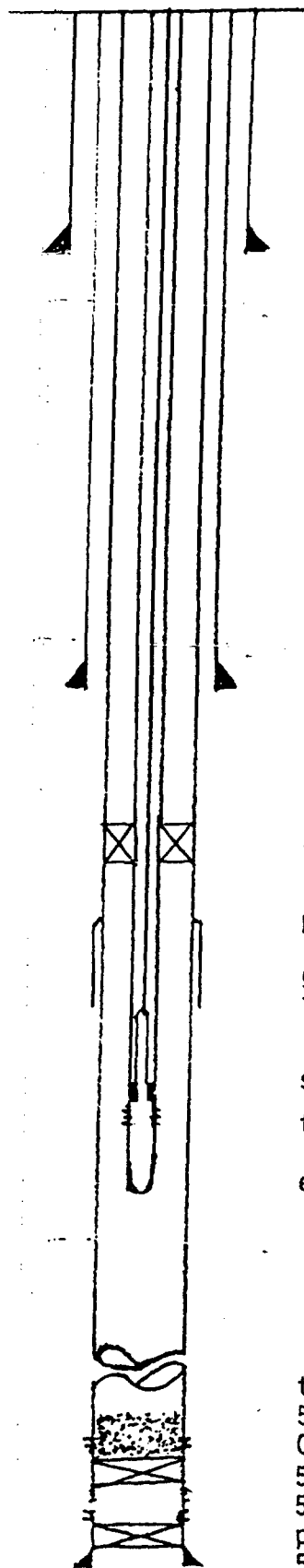
"Underground Waste as ~~those~~ words are generally understood in the oil and gas business, and in any event to embrace the inefficient, excessive, or improper use or dissipation of the ~~reservoir~~ energy, including gas energy and water drive, of any pool, and the locating, spacing, drilling, equipping, 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.
- 9) 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.





V. H. WESTBROOK  
KINAHAN FEDERAL #1  
660 FSL - 1980 FEL Unit 0  
Section 20, T-15-S, R-30-E



13-3/8" set at 478' cement w/600 sxs circulated

8-5/8" set at 2959' cement w/800sxs circulated

2-7/8" x 5-1/2" tbg. anchor at 7917'

Bowen csg. patch at 8035' cement w/75sxs

5-1/2" csg. perfs. 8060' to 8070', 10 holes  
1", 7/8" & 3/4" rods w/ 2-1/2" x 1-3/4" x 20' pump

seating nipple 8225'

tbg. perfs. 8226' - 8230'

end 2-7/8" tbg. 8262'

top sand 9600'

5-1/2" csg. perfs. 9838' - 9848' 20 holes

CIBP at 9910' top w/ 50' cement

5-1/2" csg. perfs. 9928' to 9941' 20 holes

5-1/2" csg. perfs. 10,116' to 10,175' 34 holes

plug back. depth 10,200'

5-1/2" set at 11,157' cemented w/ 300 sk

V. H. WESTBROOK  
 KINAHAN FEDERAL #1  
 660 FSL - 1980 FEL UNIT 0  
Section 20, T-15-S, R-30-E

SUMMARY OF PRODUCTION

	<u>DAYS PRODUCED</u>	<u>GAS-MCF</u>	<u>OIL-BBLS.</u>	<u>WATER-BBLS.</u>	
<u>1985</u>					
June	16	12,635	363.9	-0-	24721
July	27	22,776	697.1	-0-	
August	31	18,421	364.3	-0-	50,565
September	3	807	117.9	-0-	
October	30	11,552	369.0	-0-	
November	22	5,753	185.5	-0-	
December	18	5,294	374.7	-0-	14,149
<u>1986</u>					
January	17	4,418	189.8	-0-	12,117
February	23	5,389	187.6	-0-	13,117
March	16	3,275	-0-	-0-	
April	--	-0-	-0-	-0-	
May	--	-0-	-0-	-0-	
June	4	655	30.0	253	
July	28	6,518	802.0	3323	

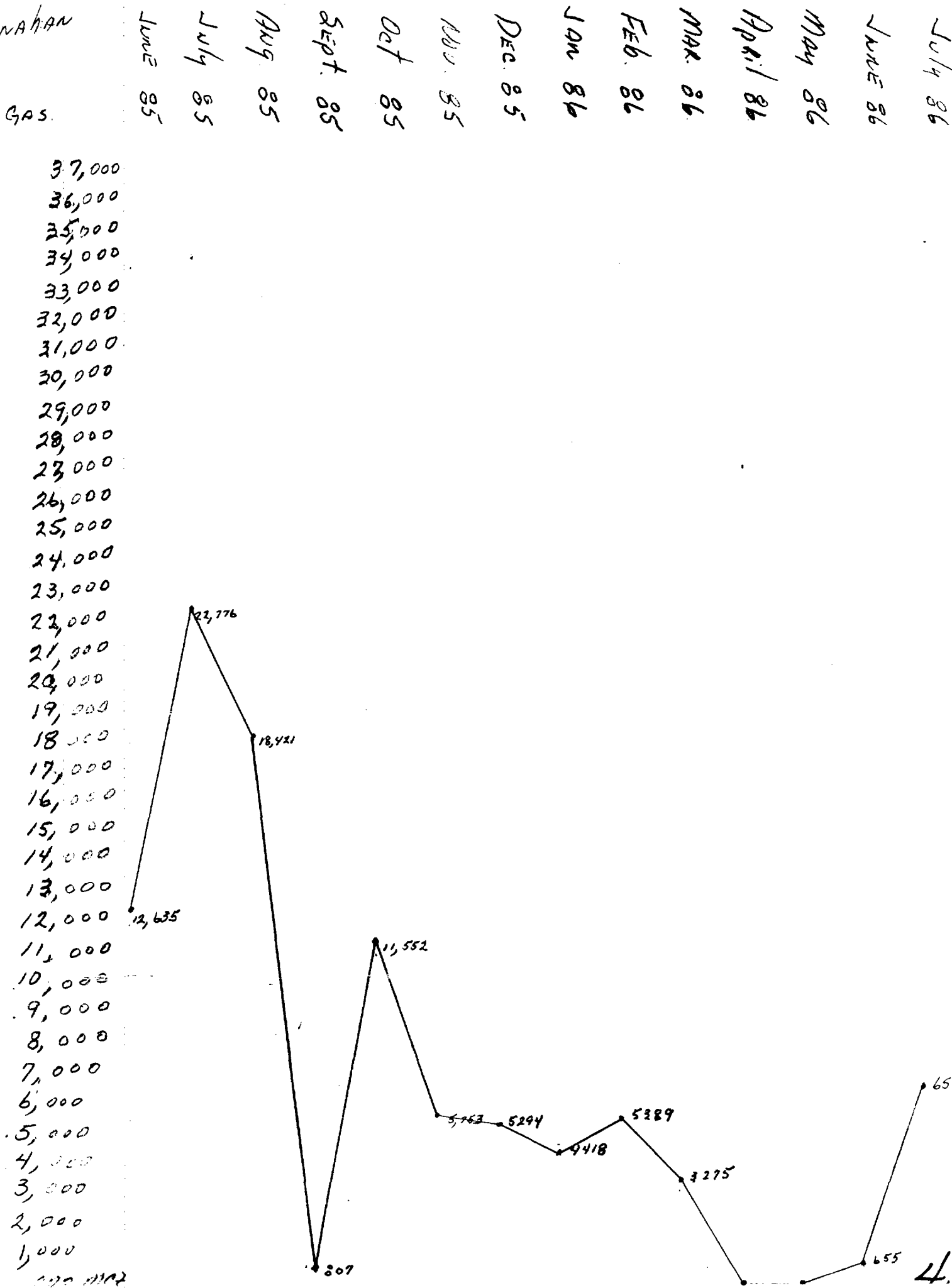
2937 4-9-85

2103 9-13-85

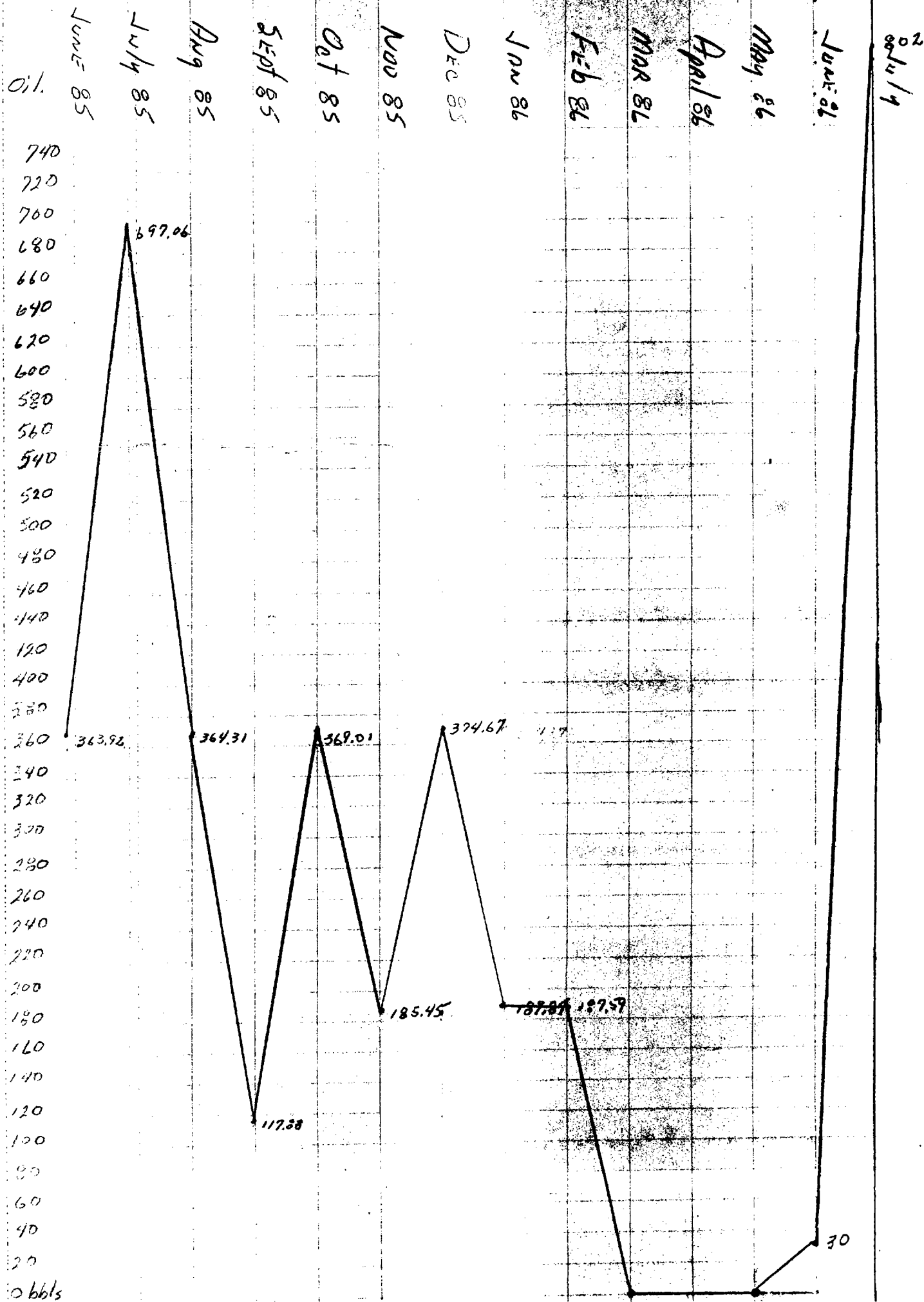
1156116 / 5, 4114

KINAHAN

Gas.

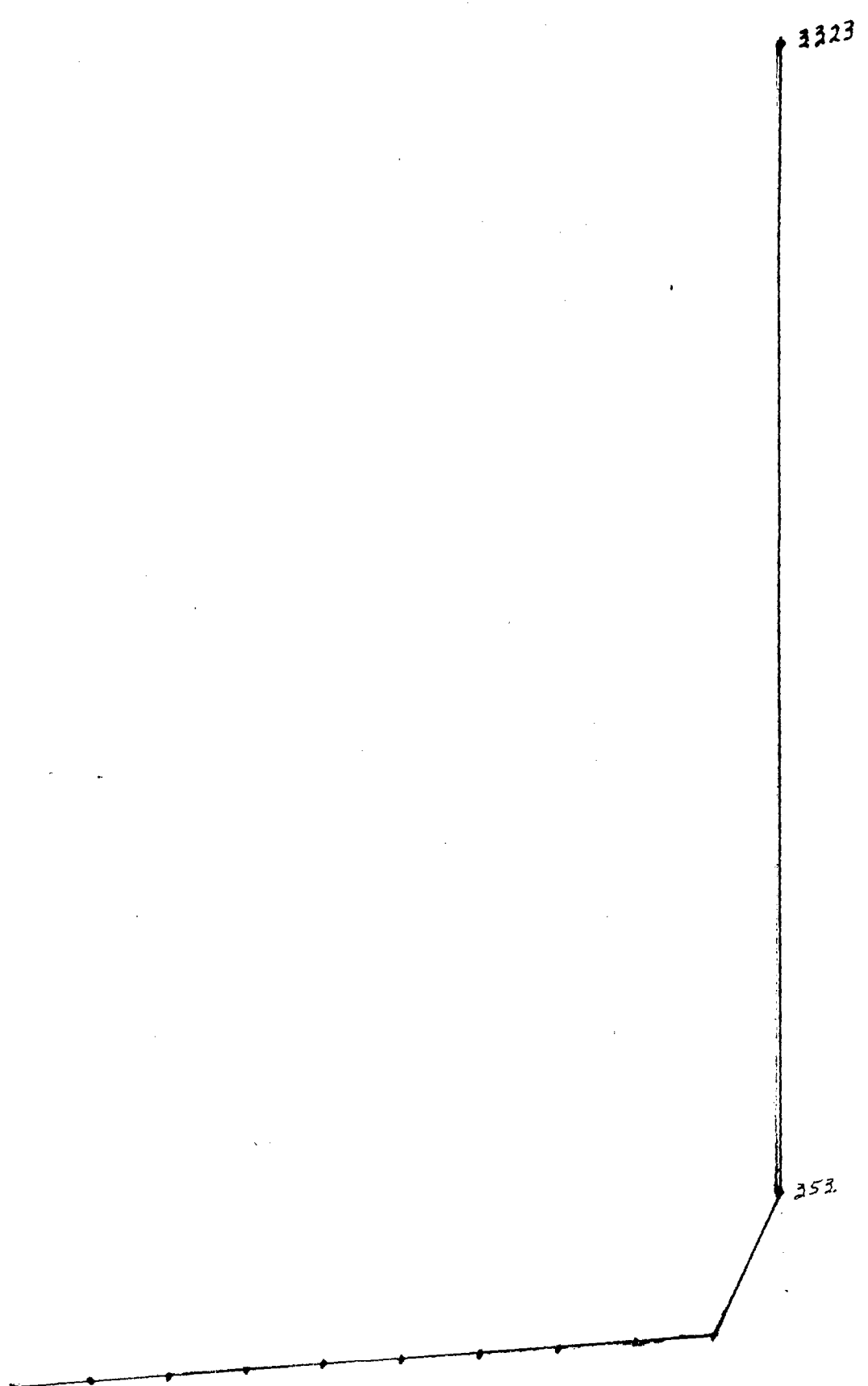






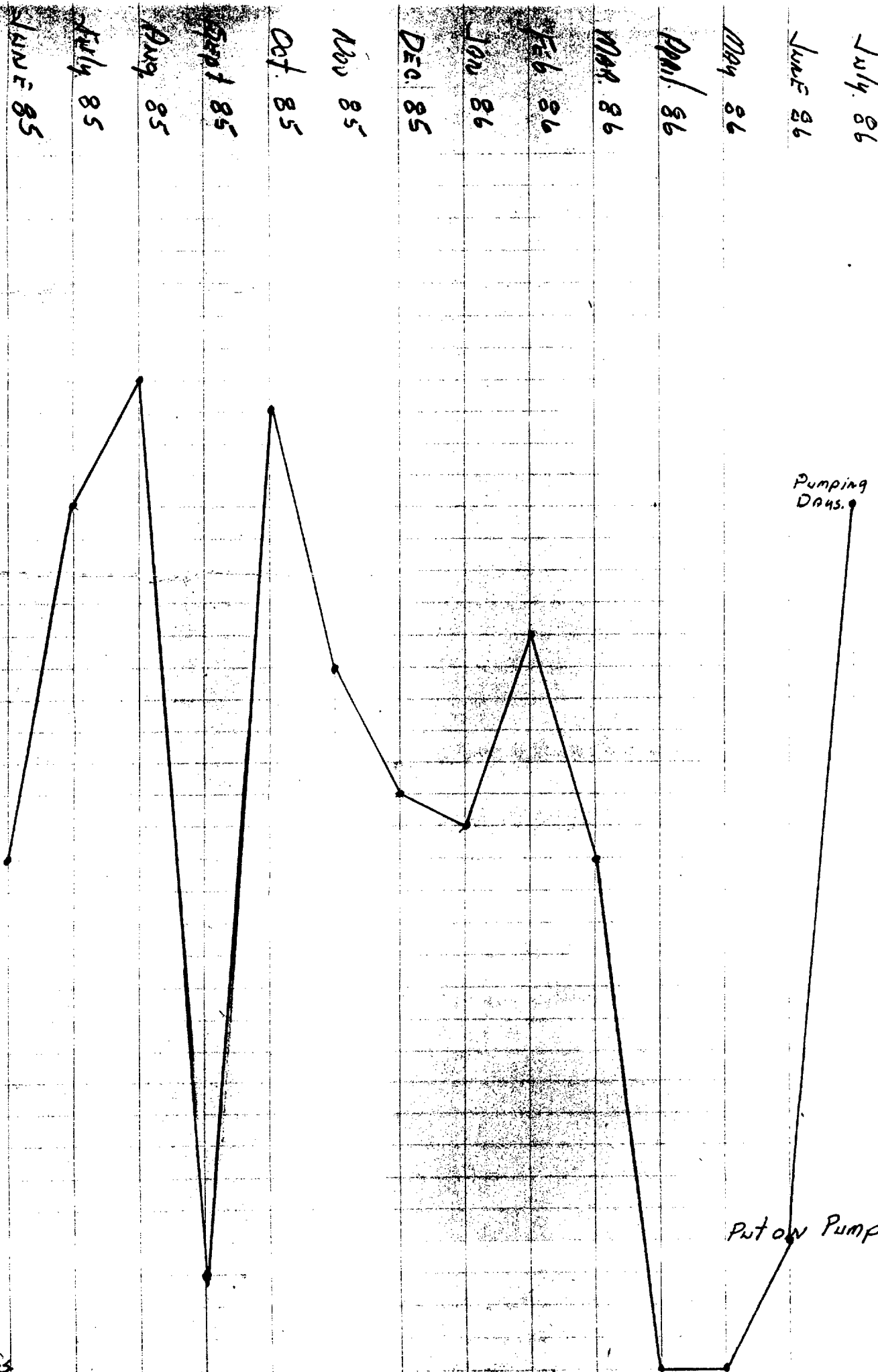
July 86  
 June 86  
 May 86  
 April 86  
 Mar 86  
 Feb. 86  
 Jan 86  
 Dec. 86  
 Nov 86  
 Oct. 86  
 Sept 86  
 Aug. 86  
 July 86  
 June 86  
 WATER

3700  
 3600  
 3500  
 3400  
 3300  
 3200  
 3100  
 3000  
 2900  
 2800  
 2700  
 2600  
 2500  
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 2300  
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 1400  
 1300  
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 300  
 200  
 100



Kinnahan  
Producing  
DAYS.

31  
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11  
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8  
7  
6  
5  
4  
3  
2  
1  
0 DAYS





# BENNETT-CATHEY WIRE LINE SERVICE

P. O. BOX 787

ARTESIA, NEW MEXICO 88210

Phone (505) 746-3281



7960 2102.2  
5000 1672.2  
1960 436

## BOTTOM HOLE PRESSURE SURVEY REPORT

OPERATOR V.H. WESTBROOK  
LEASE KINEHAN FEDERAL  
WELL NO. 1'  
POOL                      FORMATION STRAWN  
DATE 9-13-85 TIME 1822 HOURS  
CO. MAN BUDDY WESTBROOK  
STATUS SHUT IN TEST DEPTH 7960'  
TIME S.I. 0800 HRS LAST TEST DATE 4-6-85  
9-3-85 BHP LAST TEST 2922  
TUB. PRES. 1364.2 BHP CHANGE - 814  
CAS. PRES.                      FLUID TOP 5965  
DATUM PLANE WATER TOP  
DATUM PSIA 2108.2 RUN BY PETE HERNANDEZ  
TEMP 126° CLOCK # A-6385  
PRESSURE RANGE 8000#  
ELEMENT NO. RPG3#21034A

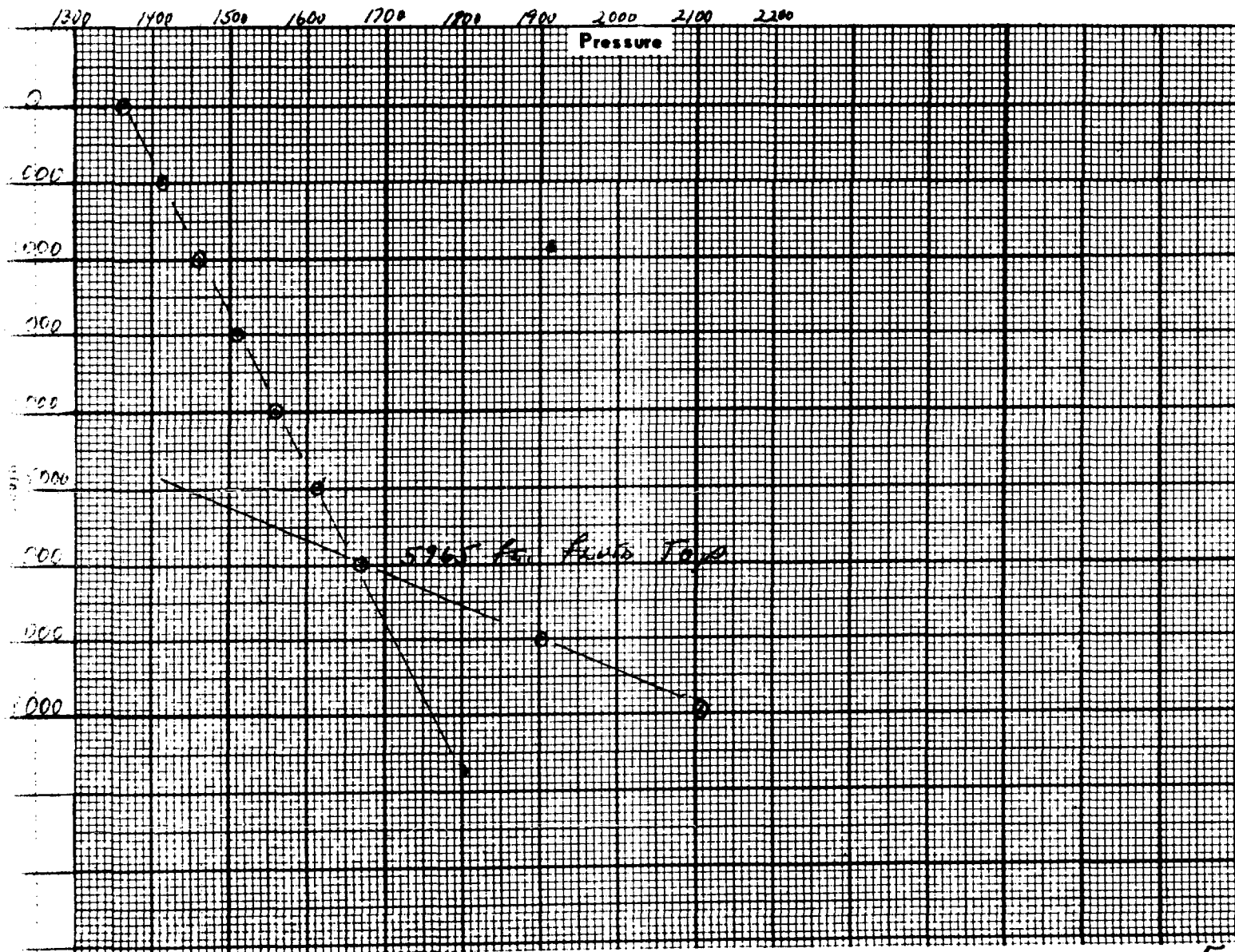
DEPTH	PSIA PRESSURE	LBS/100 FT GRADIENT
0	1364.2	
1000	1412.2	4.8
2000	1461.2	4.9
3000	1510.2	4.9
4000	1559.2	4.9
5000	1617.2	5.8
6000	1672.2	4.5
7000	1904.2	23.2
7960	2108.2	21.3

TIME B.H.P. MEASURED 1822 HOURS

LENGTH OF TIME WELL SHUT IN  
250 HOURS 22 MINUTES

PERFORATIONS FROM 8040 TO 8050

gradient 1.222 psi/ft





# BENNETT-CATHEY WIRE LINE SERVICE

P. O. BOX 787  
ARTESIA, NEW MEXICO 88210  
Phone (505) 746-3281



## BOTTOM HOLE PRESSURE SURVEY REPORT

8045 2937  
7810 2894  
235 43  
235 43  
235 43

OPERATOR VH WESTBROOK  
LEASE KINAHAN FED.  
WELL NO. #1  
POOL                      FORMATION STRAWN  
DATE 4/9/85 TIME 1526 HOUR  
CO. MAN MIKE WESTBROOK  
STATUS SHUT IN TEST DEPTH 7960  
TIME S.I. 4/6/85 LAST TEST DATE 1ST TEST  
1515 HOUR BHP LAST TEST                       
TUB. PRES. 1912.2 BHP CHANGE                       
CAS. PRES.                      FLUID TOP 3810 FEET.  
DATUM PLANE                      WATER TOP                       
DATUM PSIA 2937.2 RUN BY KELLY WILLIAMS  
TEMP 148° CLOCK # 82684  
PRESSURE RANGE 7600 LBS.  
ELEMENT NO. RPG3#18753

DEPTH	PSIA PRESSURE	LBS/100 FT GRADIENT
0	1912.2	
2000	2062.2	7.5
4000	2264.2	10.1
6000	2600.2	16.8
7810	2894.2	16.2
7960	2922.2	18.6
8045	2937.2	18.6

8045 FEET WAS EXTRAPOLATED

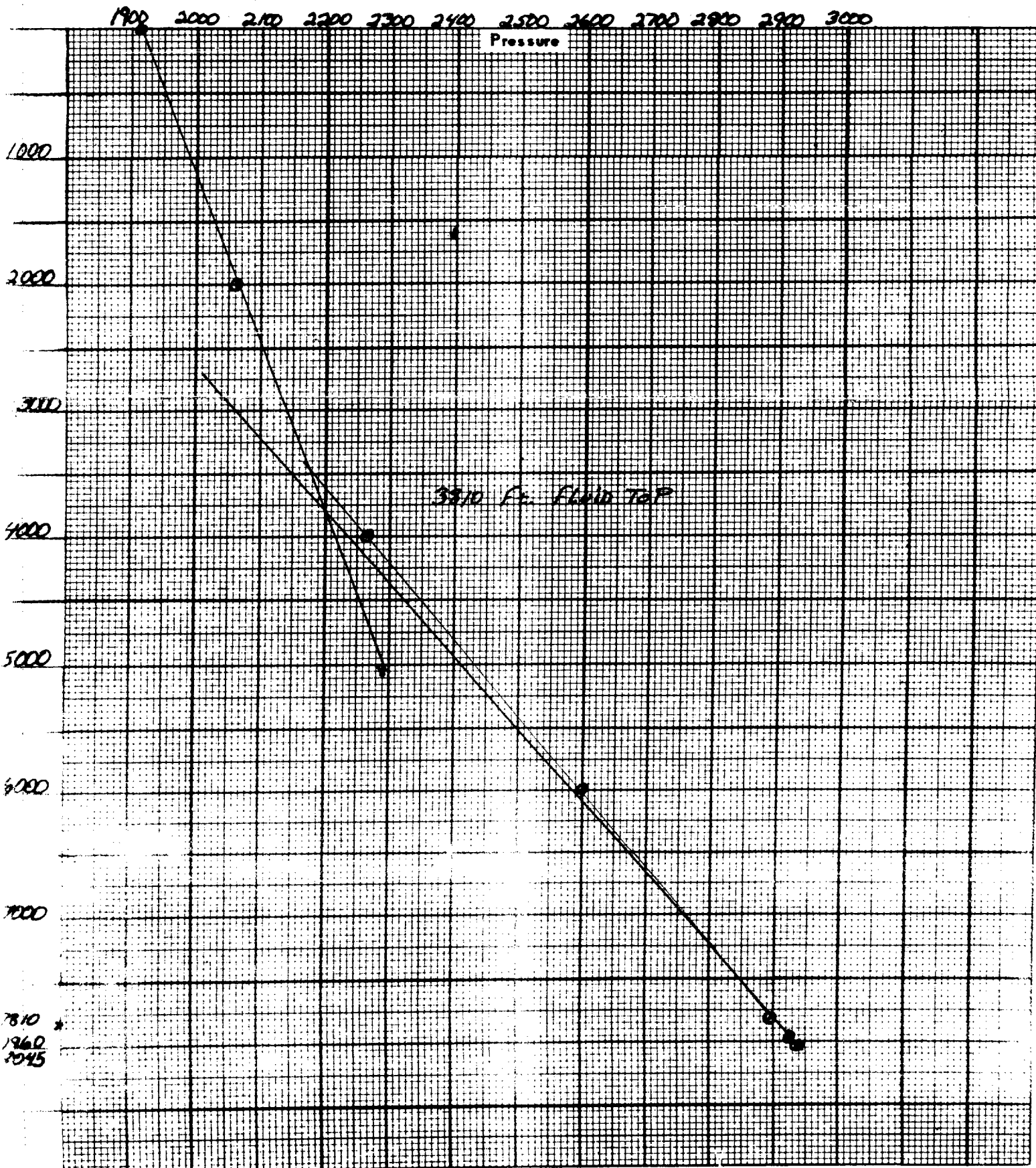
TIME B.H.P. MEASURED 1526 HOUR

LENGTH OF TIME WELL SHUT IN 72 HOURS 11 MIN

PERFORATIONS FROM 8040 TO 8050

8045 2937  
4000 2264  
4045 673

grad = 16.6 psi/ft



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

Owner V. H. Westbrook		Lease Kinahan Federal		Well No. 1
Section 0	Section 20	Township 15 South	Range 30 East	County Chaves

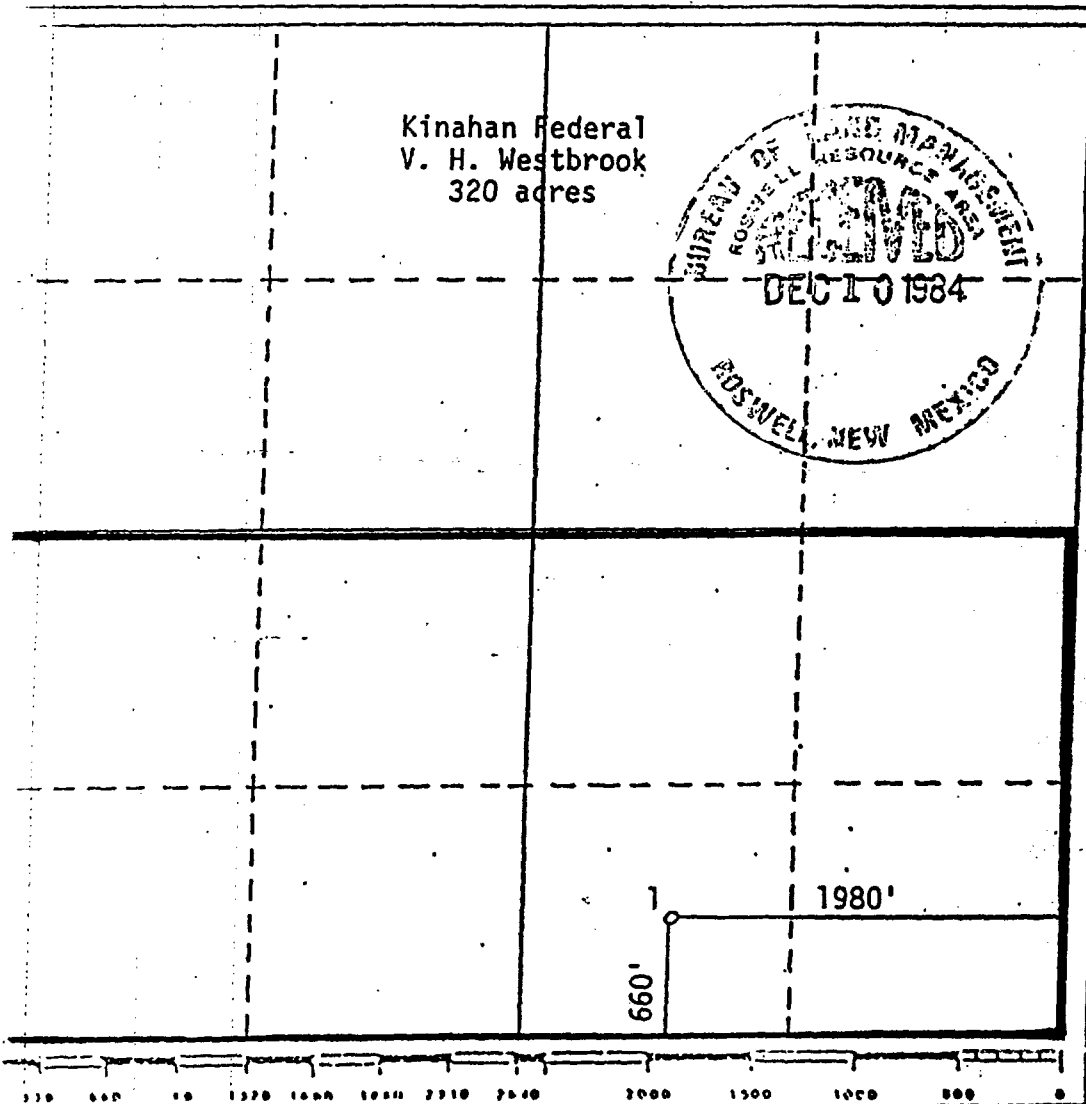
Postage Location of Wells 660		feet from the South line and 1980		feet from the East line Section 20	
Ground Level Elev. 3978	Producing Formation Wolfcamp	Pool Undesignated	Dedicated Acreage: 320		

- Outline the acreage dedicated to the subject well by colored pencil or hatchure 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 N/A

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 Division.



CERTIFICATION

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

*V. H. Westbrook*

Name

Manager

Position

V. H. Westbrook

Company

12/7/84

Date

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.

5/13/60

Date Surveyed

J. J. Velten

Registered Professional Engineer and/or Land Surveyor

8174

Certificate No.



V. H. WESTBROOK

OIL OPERATOR

810 West Broadway

P. O. Box 2264

(505) 393-9714

HOBBS, NEW MEXICO 88240

August 6, 1986

McClellan Oil Corporation  
P. O. Box 730  
Roswell, New Mexico 88201

Re: Kinahan Federal #1  
Sec. 20, T-15-S, R-30-E  
Chaves County, N. M.

Gentlemen:

As an offset operator, please be informed that we are applying for a Hardship Gas Well Classification on the above referenced well.

Enclosed for your review and records, please find one copy each of the Application for Classification as a Hardship Gas Well and a map showing the ownership of all offsetting acreage.

If you have any questions concerning this application, please direct them to the Oil Conservation Division of New Mexico in Santa Fe, New Mexico.

Sincerely,



V. H. Westbrook  
Operator

VHW/prw  
Enclosures

cc: Dalport Oil Company  
3471 Inter First One  
Dallas, Texas 75202

Texaco, Inc.  
P. O. Box 728  
Hobbs, New Mexico 88241

V. H. WESTBROOK

OIL OPERATOR

810 West Broadway

P. O. Box 2264

(505) 393-9714

HOBBS, NEW MEXICO 88240

August 7, 1986

Cabot Corporation  
7120 I-40 West  
Amarillo, Texas 79106

Re: Kinahan Federal #1  
Sec. 20, T-15-S, R-30-E  
Chaves County, NM

Gentlemen:

As transporter/purchaser of gas from the above lease,  
please be informed that we are applying for a Hardship Gas  
Well Classification.

Enclosed for your review and records is one copy of the  
Application and ownership map.

If you have any questions concerning this application,  
please direct them to the Oil Conservation Division of  
New Mexico in Santa Fe, New Mexico.

Sincerely,



V. H. Westbrook  
Operator

VHW/prw

# V. H. WESTBROOK

OIL OPERATOR

810 West Broadway

P. O. Box 2264

(505) 393-9714

HOBBS, NEW MEXICO 88240

August 6, 1986

I, V. H. Westbrook, certify that all foregoing information submitted with the Application for Classification as Hardship Gas Well on the Kinahan Federal #1, Section 20, T-15-S, R-30-E, Chaves County, New Mexico is true and correct to the best of my knowledge and further attest that one copy of the Application has been submitted to the appropriate Division district office ( Oil Conservation Division, P. O. Box 1980, Hobbs, NM 88241) and that notice of this application has been given to the transporter/purchaser (Cabot Corporation, 7120 I-40 West, Amarillo, Texas 79106) and notice of this application has been given to all offset operators.



V. H. Westbrook, Operator

9.

V. H. WESTBROOK  
KINAHAN FEDERAL #1  
660 FSL - 1980 FEL UNIT 0  
Section 20, T-15-S, R-30-E

WORKOVER COSTS FOR THE MONTHS OF JUNE & JULY, 1986

SURFACE EQUIPMENT

1 - 456 Amer. pumping unit	\$ 28,915.00
Serial # T36F120-4A-1965	
1 - 50 hp 1200 rpm motor	2,000.00
Serial #JH7743-30	
1 - Size 3 panel box	700.00
Flow line connections - LTV Energy	701.66
Flow line connections - Union Supply	451.61

DOWNHOLE EQUIPMENT

Tubing Anchor - V. L. Mahan	400.00
Sucker rods, Pony rods - Axelson	9,223.08
Pump and connections - LTV Energy	2,380.84

SERVICES PERFORMED

Electricity to lease-Central Valley Co-op	550.00
Hook up electricity - Dixie Electric	1,000.00
Acidize formation - Halliburton	1,669.14
Swab well - McCasland	715.44
Move & install pumping unit - Ruthco	2,036.50
Swab well - Ralph Johnson	4,902.25
Pull rods, change out pump - Mack Chase	660.45
Repaired stack pack - Stevenson Roach	696.45
Move rods to location - Forklift Ent.	817.97
Swab well - McCasland	2,275.43
Swab cups	247.65
I & W Transport - Haul water	3,868.78
Connect wellhead to stack pack - T J & C	471.42

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TOTAL EXPENSES TO DATE	\$ 64,683.67
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