

BEFORE THE OIL CONSERVATION DIVISION  
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF :  
YATES PETROLEUM CORPORATION FOR : CASE NO.10132  
COMMINGLING OF PRODUCTION FROM WOLFCAMP :  
AND CANYON FORMATIONS, EDDY COUNTY, :  
NEW MEXICO :  
\_\_\_\_\_ :

PRE-HEARING STATEMENT

This prehearing statement is submitted by Yates Petroleum Corporation, as required by the Oil Conservation Division.

APPEARANCES OF PARTIES

APPLICANT	ATTORNEY
Yates Petroleum Corporation	Ernest L. Carroll Losee, Carson, Haas & Carroll, P. A. P. O. Drawer 239 Artesia, New Mexico 88210

STATEMENT OF CASE

APPLICANT

Applicant has completed its Hillview AHE Com #3 in Unit N, Section 23, Township 20 South, Range 24 East, N.M.P.M., Eddy County in the Canyon formation at a depth of 7,655 feet to 7,800 feet and proposes to commingle said formation with the Wolfcamp formation at a depth of 6,676 to 6,718 feet.

OPPOSITION OR OTHER PARTY

Yates is the operator of all offsetting acreage.

PROPOSED EVIDENCE

APPLICANT

WITNESSES (Name and expertise)	EST. TIME	EST. EXHIBITS
Pinson McWhorter, Reservoir Engineer	20 min.	5 to 7
Janet Richardson, Landman	10 min.	1

OPPOSITION

n/a

LAW OFFICES

NOV 21 1990  
LOSEE, CARSON, HAAS & CARROLL, P. A.

ERNEST L. CARROLL  
JOEL M. CARSON  
JAMES E. HAAS  
A. J. LOSEE  
DEAN B. CROSS

300 YATES PETROLEUM BUILDING  
P. O. DRAWER 239  
ARTESIA, NEW MEXICO 88211-0239

TELEPHONE  
(505) 746-3508

TELECOPY  
(505) 746-6316

November 21, 1990

Mr. William J. LeMay  
New Mexico Oil Conservation Division  
P. O. Box 2088  
Santa Fe, New Mexico 87501

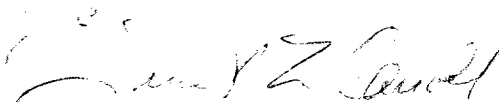
Re: Application of Yates Petroleum Corp. for  
Commingling of Production from Wolfcamp and  
Canyon Formations, Eddy County; No. 10132

Dear Mr. LeMay:

I am enclosing herewith an original and three copies of the  
Prehearing Statement of Yates Petroleum Corporation for filing in  
the above-referenced case.

Very truly yours,

LOSEE, CARSON, HAAS & CARROLL, P.A.



Ernest L. Carroll

ELC:kth  
Enclosures

xc: Pinson McWhorter

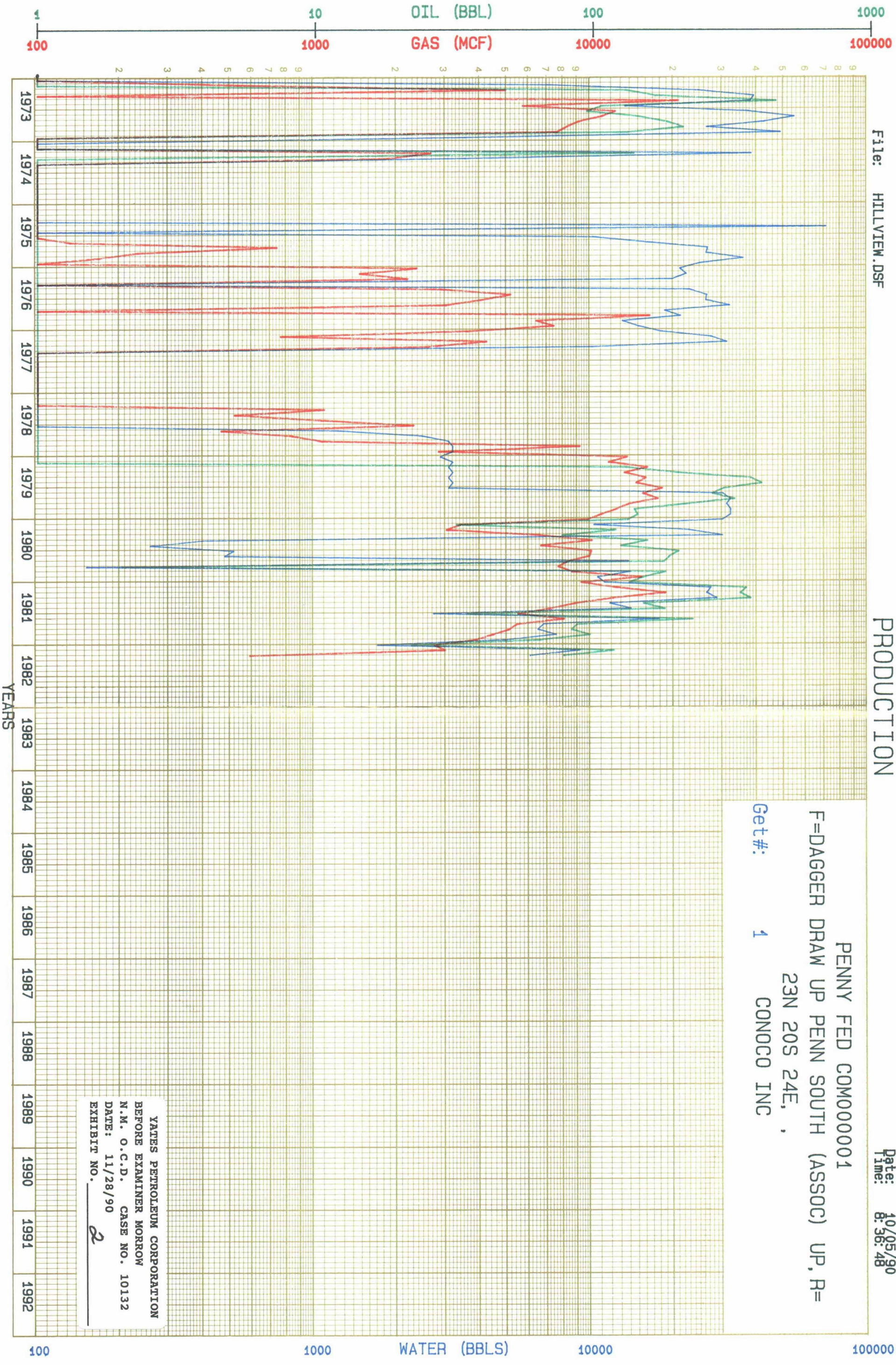


File: HILLVIEW.DSF

# PRODUCTION

Date: 10/05/90  
Time: 8:36:48

PENNY FED COM000001  
F=DAGGER DRAW UP PENN SOUTH (ASSOC) UP, R=  
23N 20S 24E, ,  
Get#: 1 CONOCO INC



YATES PETROLEUM CORPORATION  
 BEFORE EXAMINER MORROW  
 N.M. O.C.D. CASE NO. 10132  
 DATE: 11/28/90  
 EXHIBIT NO. 2

FILE

OPERATOR'S COPY  
UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE

(See Instructions on Reverse Side)

Form approved.  
Budget Bureau No. 42-R355.6.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY  Other \_\_\_\_\_

b. TYPE OF COMPLETION:  
NEW WELL  WORK OVER  DEEP-EN  PLUG BACK  DIFF. RESERV.  Other Recomplete

2. NAME OF OPERATOR  
**CONCCO INC.**

3. ADDRESS OF OPERATOR  
**P. O. Box 460, Hobbs, N.M. 88240**

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)  
At surface **660' FSL & 1980' FWL**  
At top prod. interval reported below   
At total depth

5. LEASE DESIGNATION AND SERIAL NO.  
**NM 045274**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. PAUM OR LEASE NAME  
**PENNY FEDERAL**

9. WELL NO.  
**1**

10. FIELD AND POOL, OR WILDCAT  
**UNDESIGNATED WOLFCAMP**

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA  
**Sec. 23, T-20S, R-2E**

12. COUNTY OR PARISH  
**EDDY**

13. STATE  
**NM**

14. PERMIT NO. \_\_\_\_\_ DATE ISSUED \_\_\_\_\_

15. DATE SPUNDED **4-17-71** 16. DATE T.D. REACHED **5-17-71** 17. DATE COMPL. (Ready to prod.) **3/8/83** 18. ELEVATIONS (DF, RKB, RT, GR ETC.)\* **3682' DF** 19. ELEV. CASINGHEAD \_\_\_\_\_

20. TOTAL DEPTH, MD & TVD **7919'** 21. PLUG. BACK T.D., MD & TVD **6720' BP** 22. IF MULTIPLE COMPLET., HOW MANY\* \_\_\_\_\_ 23. INTERVALS DRILLED BY \_\_\_\_\_ 24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*  
**6704'-6718' w/2 JSPF WOLFCAMP**  
**6676'-6683' w/2 JSPF "**

25. WAS DIRECTIONAL SURVEY MADE  
**YES**

26. TYPE ELECTRIC AND OTHER LOGS RUN  
**CBL, SP, SNP, IES**

27. WAS WELL CORED  
**NO**

ACCEPTED FOR RECORD  
**PETER W. CHESTER**  
**MAR 23 1983**  
MINERALS MANAGEMENT SERVICE  
ROSWELL, NEW MEXICO

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	AMOUNT PULLED
<b>NO CHANGE</b>				

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)
<b>NONE</b>				

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
<b>2 7/8"</b>	<b>6680'</b>	<b>6665'</b>

31. FLORATION RECORD (Interval, size and number)  
**Perf w/2 JSPF 6704'-6718'**  
**and 6676'-6683' w/2 JSPF**  
**Total 46 HOLES**

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
<b>6704'-6718'</b>	<b>54 Hls. 15% HCL-NE-FE</b>
<b>6676'-6683'</b>	<b>and 7 Hls TFW.</b>

33.\* PRODUCTION

DATE FIRST PRODUCTION **3/10/83** PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) **FLOWING** WELL STATUS (Producing or shut-in) **PRODUCING**

DATE OF TEST	HOURS TESTED	CHOKER SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
<b>3-10-83</b>	<b>24</b>	<b>NA</b>	<b>→</b>	<b>1</b>	<b>220</b>	<b>13</b>	<b>220,000</b>

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (COBR.)
<b>NA</b>	<b>NA</b>	<b>→</b>	<b>1</b>	<b>220</b>	<b>13</b>	<b>NA</b>

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)  
**SOLD**

35. LIST OF ATTACHMENTS  
**VERBAL APPROVAL PER PETER CHESTER 3-10**

36. I hereby certify that the foregoing and attached information is complete and correct as determined by me.

SIGNED **Wm. B. [Signature]** TITLE **Administrative Supervisor**

YATES PETROLEUM CORPORATION  
BEFORE EXAMINER MORROW  
N.M. O.C.D. CASE NO. 10132 S.  
DATE: **11/28/90**  
EXHIBIT NO. **3**

\*(See Instructions and Spaces for Additional Data on Reverse Side)

APRIL 14, 1983  
FINALS ON REMEDIAL WORK

NMFU - HARE SIMPSON - LEA COUNTY, NEW MEXICO - 25%

AFE NO: NONE

HAWK B-3 NO. 4 - OBJECTIVE: OPEN ADDITIONAL PAY, CO & TEST PUMP

LOCATION: 2130' FSL & 660' FEL OF SECTION 3, T-21S, R-37E

BEFORE:

EST. COST: \$51,200

TD: 7845' PBD 7830'

PERFS: 7612' - 7820'

DF ELEV: 3474'

CSG: 5-1/2" set at 7844'

FORMATION: HARE SIMPSON

TESTED: Shut-in

AFTER:

EST. COST: \$68,012

TD: N/C

PERFS: 7479'-7820'

DF ELEV: N/C

CSG: N/C

FORMATION: N/C

TESTED: Pmpd 3' BO, 0 BW & 33  
MCF in 24 hrs on 3-25-83

WORK STARTED: 10-22-82

WORK COMPLETED: 3-5-83

WORK DONE: Pulled out of hole with rods & pump. Top of fill at 7080'. Clean out to 7830' using 9# brine. Pkr set at 7531'. Acidized Lower McKee intervals with 1680 gals 15% HCL-NE-FE, 265 gals 10#/brine w/10 bbls guar gum & 400 bbls rocksalt, 840 gals 15% HCL-NE-FE & 2100 gals TFW for flush. Swbd well. Set RBP at 7604'. Spot 3 bbls 15% HCL-NE-FE acid. Perf Hare Simpson w/1 JSPF at 74'9', 86', 93', 98', 7507', 16', 32', 39', 46', 62', 68', 76' & 7582'. Set pkr at 7280'. Swbd well. Acidize w/1100 gals 15% HCL-NE-FE acid. Rel pkr. Land tbg at 7561' w/SN at 7529'. Swbd well. Rel RBP. Fill at 7732'. (98' of fill). Clean out to TD. Set SN at 7556'. OPSMA at 7587'. Tbg anchor at 7339'. Ran producing equipment and place well on test. III

DAGGER DRAW - SOUTH DAGGER DRAW PENN - EDDY COUNTY, NEW MEXICO - 75%

AFE NO: 40-61-3623

PENNY FEDERAL NO. 1 - OBJECTIVE: RECOMPLETE

LOCATION: 660' FSL & 1980' FWL OF SECTION 23, T-20S, R-24E

BEFORE:

EST. COST: \$85,000

TD: 7919'

PERFS: 7696'-7800'

GL ELEV: 3682'

CSG: 5-1/2" SET AT 7919'

FORMATION: CISCO

TESTED: SHUT-IN 5-1-82

AFTER:

EST. COST: \$31,722

TD: N/C

PERFS: 6676'-6718'

GL ELEV: N/C

CSG: N/C

FORMATION: WOLF CAMP

TESTED: Flwd 2 BO, 2 BW &  
23 MCF in 24 Hrs on  
3-17-83

WORK STARTED: 3-1-83

WORK COMPLETED: 3-9-83

WORK DONE: Load hole with 150 BTFW. Pulled tbg & pkr. Set RBP at 7600'. Perf w/2 JSPF at 6704'-6718'. Set pkr at 6650'. Acidize Wolfcamp w/1500 gals 15% HCL-NE-FE acid & 1500 gals of TFW. Swbd well. Spot 2 sxs sand on RBP at 7600'. Rel pkr. Set RBP at 6695'. Spot 100 gals acid. Perf w/2 JSPF at 6676'-6683'. Pkr set at 6547'. Acidize w/800 gals 15% HCL-NE-FE acid & 1600 gals TFW. Swbd well. Kill well w/TFW. Rel RBP and placed well on production. III

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY RECEIVED

OPERATOR'S COPY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

JUN 29 11 36 AM '83  
DUNN  
ROSWELL DISTRICT

1. oil well  gas well  other

2. NAME OF OPERATOR  
CONOCO INC.

3. ADDRESS OF OPERATOR  
P. O. Box 460, Hobbs, N.M. 88240

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)  
AT SURFACE: 660' FSL + 1980' FWL  
AT TOP PROD. INTERVAL: ✓  
AT TOTAL DEPTH: ✓

5. LEASE  
NM-045274

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
PENNY FEDERAL

9. WELL NO.  
1

10. FIELD OR WILDCAT NAME  
UNDESIGNATED WOLFCAMP

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
SEC. 23, T-20S, R-24E

12. COUNTY OR PARISH | 13. STATE  
Eddy | NM

14. API NO.

15. ELEVATIONS (SHOW OF, KDB, AND WD)

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	<input type="checkbox"/>		<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>		<input checked="" type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>		<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>		<input type="checkbox"/>
PULL OR ALTER CASING	<input type="checkbox"/>		<input type="checkbox"/>
MULTIPLE COMPLETE	<input type="checkbox"/>		<input type="checkbox"/>
CHANGE ZONES	<input type="checkbox"/>		<input type="checkbox"/>
ABANDON*	<input type="checkbox"/>		<input type="checkbox"/>
(other)	<input type="checkbox"/>		<input type="checkbox"/>

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

MIRU ON 6/15/83. SET PKR @ 6665'. TREAT PERFS 6683'-6704' w/46 BBLs 15% HCL-NE-FE. FLUSHED w/29% KCL TFW. REL PKR. FRAC WOLFCAMP 6683'-6704' w/A TOTAL OF 52,950 GALS GEL + 31,000 LBS 20/40 SAND. FLUSHED w/97 BBLs TFW. SWABBED. RAN PRODUCTION EQUIPMENT. TESTED @ 30, 18 BW, + 176 MCF IN 24 HRS ON 6/29/83.

Subsurface Safety Valve: Manu. and Type \_\_\_\_\_ Set @ \_\_\_\_\_ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED Wm. A. Butterfield TITLE Administrative Supervisor DATE 7/26/83

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

YATES PETROLEUM CORPORATION  
BEFORE EXAMINER MORROW ID  
N.M. O.C.D. CASE NO. 10132  
DATE: 11/28/80  
EXHIBIT NO. 4

\*See Instructions on Reverse Side

PAGE 2  
HOBBS DIVISION  
DAILY DRILLING REPORT  
JULY 15, 1983

FINALS ON REMEDIAL WORK

DAGGER DRAW - SOUTH DAGGER DRAW PENN - EDDY COUNTY, NEW MEXICO - 75%  
AFE NUMBER: 40-61-3623

PENNY FEDERAL NO. 1 - OBJECTIVE: SAND FRAC

LOCATION: 660 FSL & 1980 FWL OF SECTION 23, T-20S, R-24E

BEFORE:

EST. COST: \$85,000

TD: 7919'

PERFS: 6670' - 6718'

GL ELEV: 3682'

CSG: 5-1/2" SET AT 7919'

FORMATION: WOLFCAMP

TESTED: 2 BO, 2 BW &  
23 MCF in 24 hrs

AFTER:

EST. COST: \$78,821

TD: N/C

PERFS: N/C

DF ELEV: N/C

CSG: N/C

FORMATION: N/C

TESTED: PRODUCED 1 BO, 18 BW &  
176 MCF in 24 hrs on  
6-28-83

WORK STARTED: 6-16-83

WORK COMPLETED: 6-19-83

WORK DONE: Attempt to kill well w/2% KCL TFW w/mutual solvent & filtered through 5 micron filters (55 bbls) would not stay dead. Pmpd 25 bbls 10# filtered brine down tbg. Rel pkr at 6665'. Circ 100 bbls 10# filtered brine wtr down tbg out csg. Set pkr at 6665'. Displace tbg w/2% KCL TFW & filtered. Acidized Wolfcamp perfs 6704'-6683' w/46 bbls 15% HCL-NE-FE acid shooting 30 ballsealers, starting after the first 6 bbls pmpd, 2 ballsealers after each 3 bbls. Flushed w/2% KCL TFW w/mutual solvent & filtered for flush & circ. SI for 1-1/2 hrs. Rel pkr at 6665'. Sand frac Wolfcamp perfs 6704'-6683' w/crosslinked 2% KCL wtr w/25# Halliburton Pur-Set/1000 gals, 5% diesel, 1 gal/1000 gals Halliburton. Frac Low II, 1 gal/1000 gals Adocide Bactericide as follows (A) 20,000 gals pad (B) 9,000 gals crosslinked gel containing 1# gal 20/40 sand (C) 8,000 gals crosslinked gel containing 2#/gal 20/40 sand & (D) 2,000 gals crosslinked gel containing 3#/gal 20/40 sand. Flushed w/97 bbls TFW & filtered. Total gel 52,950 gals & 31,000# sand. Landed tbg at 6665'. Ran producing equipment and place on test. III



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

CONTACT RECEIVING  
OFFICE FOR NUMBER  
OF COPIES REQUIRED

(See other In-  
structions on  
reverse side)

NM Roswell District  
Modified Form No.  
BIXO-3160-3

5. LEASE IDENTIFICATION AND SERIAL NO.

NM 045274

6. IF INDIAN ALLOTTEE OR TRIBE NAME

SEP 10 8 47 AM '90

7. UNIT AGREEMENT NAME

CANON  
ARE

8. NAME OF LESSEE

H-11 View AHE Federal Com

9. WELL NO.

3

10. FIELD AND POOL, OR WILDCAT

South Dagger Draw Upper Penn

11. SEC., T., R., S., OR BLOCK AND SURVEY OR AREA

Unit N, Sec. 23-T20S-R24E

12. COUNTY OR PARISH

Eddy

13. STATE

NM

WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY  Other \_\_\_\_\_

b. TYPE OF COMPLETION: NEW WELL  WORK OVER  DEEP EN  PLUG BACK  REPER.  Other RECOMPLETION

2. NAME OF OPERATOR: YATES PETROLEUM CORPORATION  
3a. Area Code & Phone No.: 505/748-1471

3. ADDRESS OF OPERATOR: 105 South 4th St., Artesia, NM 88210

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*  
At surface 660' FSL & 1980' FWL, Sec. 23-20S-24E

At top prod. interval reported below

At total depth

9a. API Well No.: 30-015-20426  
14. PERMIT NO. \_\_\_\_\_ DATE ISSUED \_\_\_\_\_

15. DATE SPUNDED: RECOMPLETION 7-31-90  
16. DATE T.D. REACHED: -  
17. DATE CONCL. (Ready to prod.): 8-25-90  
18. ELEVATIONS (DV, HKB, RT, OB, ETC.):\* 3682' GR  
19. ELEV. CASINGHEAD \_\_\_\_\_

20. TOTAL DEPTH, MD & TVD: 7936'  
21. PLUG. BACK T.D., MD & TVD: 7919'  
22. IF MULTIPLE COMPL., HOW MANY\* \_\_\_\_\_  
23. INTERVAL DRILLED BY: Pulling Unit  
CABLE TOOLS \_\_\_\_\_

24. PRODUCING INTERVAL(S), OF THIS COMPLETION--TOP, BOTTOM, NAME (MD AND TVD)\*: 7696-7800'; 7655-7666' Canyon  
25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: None for recompletion  
27. WAS WELL CORED: No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8"	32#	1580'	11"	725 sx (in place)	
5 1/2"	17#	7919'	7-7/8"	400 sx (in place)	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	BACKS CEMENT*	SCREEN (MD)	30. TUBING RECORD
					SIZE: 2-7/8" DEPTH SET (MD): 7600' PACKER SET (MD): -

31. PERFORATION RECORD (Interval, size and number)

7696-7800' (existing perfs)  
7655-7766' w/12 .40" Holes (1 SPF)  
6676-6718' (tested non-productive)

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
7696-7800'	w/23000g. 20% NEFE acid.
7655-7666'	w/3000g. 20% NEFE acid.

33. PRODUCTION

DATE FIRST PRODUCTION: 8-9-90  
PRODUCTION METHOD (Flowing, gas lift, pumping--size and type of pump): Pumping  
WELL STATUS (Producing or shut-in): Producing

DATE OF TEST	HOURS TESTED	CHOKER SIZE	PROD'N. FOR TEST PERIOD	OIL--BBL.	GAS--MCF.	WATER--BBL.	GAS-OIL RATIO
8-25-90	24	2"		89	216	2083	2427
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL--BBL.	GAS--MCF.	WATER--BBL.	OIL GRAVITY-API (CORR.)	
250	300		89	216	2083	41°	

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.): Sold - Connected to Yates Gas Gathering 8-9-90.  
TEST WITNESSED BY: Norbert McCaw

35. LIST OF ATTACHMENTS: None  
YATES PETROLEUM CORPORATION  
BEFORE EXAMINER MORROW

36. I hereby certify that the foregoing and attached information is complete and correct as determined.  
SIGNED: *Juanita S. ...* TITLE: Production Supervi  
N.M. O.C.D. CASE NO. 10132  
DATE: 11/28/90  
EXHIBIT NO. 5

\*(See Instructions and Spaces for Additional Data on Reverse Side)

Yates Petroleum - Hill View "AHE" Fed Com #3 (Unit N) 23-20S-24E

\*\*\*\*\* Eddy Co., NM \*\*\*\*\*

7-31-90 Move in and rig up pulling unit. Prep to POH with RBP and packer.

8-2-90 WIH and washed frac, ball sealers, and sand from 6900' to 7600'. Cleaned off top of RBP. latched onto RBP. TOH with RBP and tubing. Rig up wireline and run GR/CCL/CBL. Shut well in overnight. Prep to acidize.

8-3-90 TIH with packer to 7600'. Rig up and acidized perfs 7696-7800' with 23000 gals 20% NEFE acid and scale inhibitor in 3 stages with 1500# Block between each stage. AIR 15 BPM, Max 4000, Avg 3480. ISDP 850, 7 min vacuum. TOH with packer. Rig up wireline. WIH with 4' casing gun and perforated 12 - 1/2" holes from 7655-7666' (1 SPF). Rig down wireline. TIH with RBP and packer. Straddled perfs 7655-7666'. Acidized with 3000 gals 20% NEFE acid, scale inhibitor and ball sealers. AIR 5 BPM, Max 1780, Avg 1000 psi, ISDP 0. Moved tools and astraddles perfs 7655-7800'. Nipple down BOP. Nipple up wellhead. Rig up swab. Initial fluid level 1000'. Swabbed back 125 bbls water, 774 bbls load water to recover. Continue swabbing.

8-4-90 Continue swabbing. Recovered 464 bbls fluid in 24 hours with trace of oil and show of gas. Fluid level at 1800-2000'. 310 bbls load water to recover.

8-5-90 Continue swabbing. Recovered 437 bbls fluid in 24 hours with trace of oil and show of gas. Fluid level 1800-2000'. 127 bbls water overload.

8-6-90 Continue swabbing. Recovered 475 bbls fluid in 24 hours with trace of oil and show of gas. Fluid level at 1800-2000'. Continue swabbing. 602 bbls water overload.

8-7-90 Swab back 75 bbls with rainbow of oil. Final fluid level 1500-1800'. Rig down pulling unit. Prep to run sub pump.

8-8-90 No report.

8-9-90 No report.

8-10-90 No report.

8-11-90 Produced 287 bbls oil and 2576 bbls water. (MCF 60 MCF for Hill View #3 only).

8-12-90 Produced 206 bbls oil and 3451 bbls water. (MCF 601 MCF for Hill View #3 only).

8-13-90 Produced 116 bbls oil and 3050 bbls water. (MCF 710 MCF with TP 210# and CP 300# for Hill View #3 only).

8-14-90 Produced 83 bbls oil, 2396 bbls water. (MCF 352 for #3 only).

COMBINED PRODUCTION WITH HILL VIEW #4:

8-15-90 Produced 179 bbls oil and 2213 bbls water. (MCF 299 for #3 only -- down since midnight).

8-16-90 Down for repairs.

COMBINED PRODUCTION WITH HILL VIEW #2 and #4:

8-17-90 Down for repairs.

8-18-90 Down for repairs.

8-19-90 Produced 159 bbls oil and 3032 bbls water. (MCF 328 for Hill View #3 only).

8-20-90 Produced 242 bbls oil and 3471 bbls water. (MCF 547 with TP 200# for Hill View #3 only).

8-21-90 Produced 253 bbls oil and 4093 bbls water. (MCF 602 MCF with TP 200# for Hill View #3 only).

8-22-90 Produced 63 bbls oil and 820 MCF for Hill View #3 only. Combined water produced = 4307 bbls.

8-23-90 Produced 124 bbls oil, 1960 bbls water and 741 MCF with TP 240# and CP 300#.

PRODUCTION FOR HILLVIEW #3 ONLY:

8-24-90 Produced 83 bbls oil, 2130 bbls water and 741 MCF.

8-25-90 Produced 89 bbls oil, 2083 bbls water and 216 MCF.

8-26-90 Produced 69 bbls oil, 1944 bbls water and 440 MCF.

8-27-90 Shut in. Made 518 MCF.

8-28-90 Shut in. Made 549 MCF.

8-29-90 Shut in. Made 518 MCF.

CDR - RECOMPLETION

Page 2

Yates Petroleum - Hillview "AHE" Fed Com #3 (Unit N) 23-20S-24E Eddy, NM  
\*\*\*\*\*

8-30-90 Produced 141 bbls oil and 2238 bbls water. (MCF 481 for Hill View #3 only).  
8-31-90 Produced 157 bbls oil and 2307 bbls water. (MCF 450 for Hill View #3 only).  
9-2-90 Produced 3 bbls oil, 539 bbls water. (MCF 372 for Hill View #3 only).  
9-3-90 Produced 3 bbls oil and 581 bbls water. (MCF 492 for Hill View #3 only).  
9-4-90 Produced 6 bbls oil and 528 bbls water. (MCF 345 for Hill View #3 only).  
9-5-90 Produced 6 bbls oil and 484 bbls water. (351 MCF for Hillview #3 only)  
9-6-90 Combined oil and water production with Hillview #2: 3 bbls oil and 625 bbls water. MCF 317 on Hillview #3 only.  
9-7-90 Produced 3 bbls oil and 522 bbls water. MCF 329 for Hill View #3 only.

TD 7936'; PBTD 7919'. On a 24 hour Official Potential test taken 8-25-90, pumped 89 BOPD, 216 MCFGPD and 2083 BWPD at a GOR of 2427 and Gravity 41 deg, through peris 7696-7800', 7655-7666' Canyon. WELL ON PRODUCTION. FINAL REPORT.  
\*Casinghead gas connected to Yates Gas Gathering 8-9-90.

WATER ANALYSIS REPORT  
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Company : YATES PETROLEUM	Date : 8-28-90
Address : ARTESIA, NM	Date Sampled : 8-23-90
Lease : HILLVIEW "AHE" FED	Analysis No. : 2
Well : #3	
Sample Pt. : WELLHEAD	

ANALYSIS -----	mg/L -----	* meq/L -----
1. pH	7.4	
2. H2S	250 PPM	
3. Specific Gravity	1.005	
4. Total Dissolved Solids	4991.7	
5. Suspended Solids	NR	
6. Dissolved Oxygen	NR	
7. Dissolved CO2	NR	
8. Oil In Water	NR	
9. Phenolphthalein Alkalinity (CaCO3)		
10. Methyl Orange Alkalinity (CaCO3)		
11. Bicarbonate	HCO3 1220.0	HCO3 20.0
12. Chloride	Cl 344.0	Cl 9.7
13. Sulfate	SO4 2000.0	SO4 41.6
14. Calcium	Ca 560.0	Ca 27.9
15. Magnesium	Mg 146.1	Mg 12.0
16. Sodium (calculated)	Na 721.6	Na 31.4
17. Iron	Fe 0.0	
18. Barium	Ba 0.0	
19. Strontium	Sr 0.0	
20. Total Hardness (CaCO3)	2000.0	

PROBABLE MINERAL COMPOSITION  
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*milli equivalents per Liter +-----+	Compound	Equiv wt	X meq/L	= mg/L																				
<table border="0" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; border-right: 1px solid black;">28</td> <td style="text-align: center;">*Ca &lt;-----</td> <td style="text-align: center;">*HCO3</td> <td style="text-align: center; border-right: 1px solid black;">20</td> </tr> <tr> <td style="text-align: center; border-right: 1px solid black;">-----</td> <td style="text-align: center;">/-----&gt;</td> <td style="text-align: center;">-----</td> <td style="text-align: center; border-right: 1px solid black;">-----</td> </tr> <tr> <td style="text-align: center; border-right: 1px solid black;">12</td> <td style="text-align: center;">*Mg -----&gt;</td> <td style="text-align: center;">*SO4</td> <td style="text-align: center; border-right: 1px solid black;">42</td> </tr> <tr> <td style="text-align: center; border-right: 1px solid black;">-----</td> <td style="text-align: center;">&lt;-----&gt;</td> <td style="text-align: center;">/-----</td> <td style="text-align: center; border-right: 1px solid black;">-----</td> </tr> <tr> <td style="text-align: center; border-right: 1px solid black;">31</td> <td style="text-align: center;">*Na -----&gt;</td> <td style="text-align: center;">*Cl</td> <td style="text-align: center; border-right: 1px solid black;">10</td> </tr> </table>	28	*Ca <-----	*HCO3	20	-----	/----->	-----	-----	12	*Mg ----->	*SO4	42	-----	<----->	/-----	-----	31	*Na ----->	*Cl	10	Ca(HCO3)2	81.0	20.0	1621
28	*Ca <-----	*HCO3	20																					
-----	/----->	-----	-----																					
12	*Mg ----->	*SO4	42																					
-----	<----->	/-----	-----																					
31	*Na ----->	*Cl	10																					
	CaSO4	68.1	7.9	541																				
	CaCl2	55.5																						
	Mg(HCO3)2	73.2																						
	MgSO4	60.2	12.0	723																				
	MgCl2	47.6																						
	NaHCO3	84.0																						
	Na2SO4	71.0	21.7	1540																				
	NaCl	58.4	9.7	567																				

Saturation Values Dist. Water 20 C

CaCO3	13 mg/L	
CaSO4 * 2H2O	2090 mg/L	
BaSO4	2.4 mg/L	

REMARKS:  
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Petrolite Oilfield Chemicals Group

YATES PETROLEUM CORPORATION  
BEFORE EXAMINER MORROW  
N.M. O.C.D. CASE NO. 10132  
DATE: 11/28/90  
EXHIBIT NO. 6



**TRETOLITE DIVISION**  
 369 Marshall Avenue / Saint Louis, Missouri 63119  
 (314) WO 1-3500/TWX 910-760-1660/Telex 44-2417

# WATER ANALYSIS REPORT

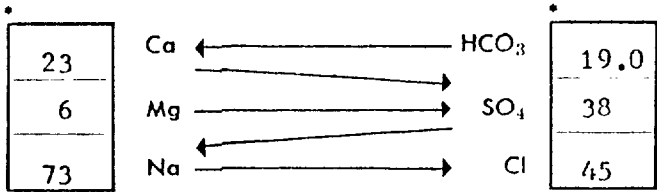
COMPANY Roger C. Hanks ADDRESS Hobbs, N.M. DATE: 6-24-75

SOURCE Penny Fed. #1 DATE SAMPLED 6-12-75 ANALYSIS NO. 9726  
 Analysis Mg/L \*Meq/L

- |     |   |              |                                   |
|-----|---|--------------|-----------------------------------|
| 1.  | PH  | <u>7.5</u>   |                                   |
| 2.  | H <sub>2</sub> S (Qualitative)                  | <u>Pos.</u>  |                                   |
| 3.  | Specific Gravity                                | <u>1.000</u> |                                   |
| 4.  | Dissolved Solids                                |              | <u>6,793</u>                      |
| 5.  | Suspended Solids                                |              |                                   |
| 6.  | Phenolphthalein Alkalinity (CaCO <sub>3</sub> ) |              |                                   |
| 7.  | Methyl Orange Alkalinity (CaCO <sub>3</sub> )   |              | <u>950</u>                        |
| 8.  | Bicarbonate (HCO <sub>3</sub> )                 | <u>1,159</u> | ÷ 61 <u>19.0</u> HCO <sub>3</sub> |
| 9.  | Chlorides (Cl)                                  | <u>1,600</u> | ÷ 35.5 <u>45</u> Cl               |
| 10. | Sulfates (SO <sub>4</sub> )                     | <u>1,800</u> | ÷ 48 <u>38</u> SO <sub>4</sub>    |
| 11. | Calcium (Ca)                                    | <u>452</u>   | ÷ 20 <u>23</u> Ca                 |
| 12. | Magnesium (Mg)                                  | <u>73</u>    | ÷ 12.2 <u>6</u> Mg                |
| 13. | Total Hardness (CaCO <sub>3</sub> )             |              | <u>1,430</u>                      |
| 14. | Total Iron (Fe)                                 |              | <u>4.0 ppm</u>                    |
| 15. | Barium (Qualitative)                            |              |                                   |
| 16. |   |              |                                   |

\*Milli equivalents per liter

### PROBABLE MINERAL COMPOSITION



Compound	Equiv. Wt.	X	Meq/L	=	Mg/L
Ca (HCO <sub>3</sub> ) <sub>2</sub>	81.04		<u>19</u>		<u>1,539</u>
Ca SO <sub>4</sub>	68.07		<u>4</u>		<u>272</u>
Ca Cl <sub>2</sub>	55.50				
Mg (HCO <sub>3</sub> ) <sub>2</sub>	73.17				
Mg SO <sub>4</sub>	60.19		<u>6</u>		<u>361</u>
Mg Cl <sub>2</sub>	47.62				
Na HCO <sub>3</sub>	84.00				
Na <sub>2</sub> SO <sub>4</sub>	71.03		<u>28</u>		<u>1,988</u>
Na Cl	58.46		<u>45</u>		<u>2,633</u>

Saturation Values	Distilled Water 20°C
Ca CO <sub>3</sub>	13 Mg/L
Ca SO <sub>4</sub> • 2H <sub>2</sub> O	2,090 Mg/L
Mg CO <sub>3</sub>	103 Mg/L

REMARKS Hanks - Cone

CC (3) Saltzman - Worsham - Nix - File

Respectfully submitted  
TRETOLITE COMPANY

Ray Shaffner