



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

August 17, 1990

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88241-1980
(505) 393-6161

Yates Petroleum Corporation
105 South 4th Street
Artesia, NM 88210

Attn: Juanita Goodlett

Re: Woodstock State Unit #1-P
Section 5, T9S, R33E

Gentlemen:

It is noted from your subsequent report of work done on the above-referenced well that you are perforated in the Abo, Wolfcamp and Penn zones. This is to remind you that as stated in our letter of July 12, 1990, it will be necessary for you to obtain a downhole commingle order before production can be approved from these additional zones.

Very truly yours,

OIL CONSERVATION DIVISION

Jerry Sexton
Supervisor, District I

ed

*4-19-91 1st bit with Salina & Wolfcamp
1st bit with Salina & Wolfcamp
not in 1st
No production from Wolfcamp Salina*



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

GARREY CARRUTHERS
GOVERNOR

July 12, 1990

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88241-1980
(505) 393-6161

Yates Petroleum Corporation
105 South 4th Street
Artesia, NM 88210

Attn: Juanita Goodlett

Re: Recompletion
Woodstock State Unit #1-P
Sec. 5, T9S, R33E

Gentlemen:

We have approved your intention to plug back and test the Abo and Wolfcamp (Three Brothers) zones in the above-referenced well. However, if these zones are commercial you will need to obtain authority to downhole commingle if the zones are both marginal.

Very truly yours,

OIL CONSERVATION DIVISION

Jerry Sexton
Supervisor, District I

ed



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

9-24-90

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88241-1980
(505) 393-6161

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

RE: Proposed:

MC	_____
DHC	_____X_____
NSL	_____
NSP	_____
SWD	_____
WFX	_____
PMX	_____

Gentlemen:

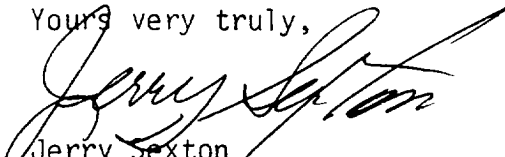
I have examined the application for the:

yates Pet Corp. Woodstock State Unit #1-P 59-33
Operator Lease & Well No. Unit S-T-R

and my recommendations are as follows:

OK

Yours very truly,


Jerry Sexton
Supervisor, District 1

/ed

MARTIN YATES, III
1912 - 1985
FRANK W. YATES
1936 - 1986



105 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88210
TELEPHONE (505) 748-1471

S. P. YATES
CHAIRMAN OF THE BOARD
JOHN A. YATES
PRESIDENT
PEYTON YATES
EXECUTIVE VICE PRESIDENT
RANDY G. PATTERSON
SECRETARY
DENNIS G. KINSEY
TREASURER

September 21, 1990

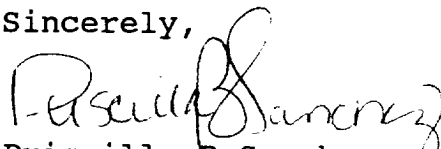
State of New Mexico
OIL CONSERVATION DIVISION
Hobbs District Office
P.O. Box 1980
Hobbs, NM 88241-1980
ATTN: Jerry Sexton, Supervisor

Dear Mr. Sexton,

Enclosed are the necessary documents for obtaining approval for downhole commingling on the Yates' Woodstock State Unit #1 located in Unit P of Section 5, Township 9 South, Range 33 East.

Should you have any questions, please feel free to call either myself or Paul Ragsdale, the petroleum engineer involved with the commingling procedures. Thank you.

Sincerely,


Priscilla B Sanchez
Engineering Technician

pbs

COMMINGLING DATA FOR THE WOODSTOCK STATE UNIT #1

- A> Name and Address of the Operator
Yates Petroleum Corporation
105 South Fourth Street
Artesia, NM 88210
Attn: Paul Ragsdale
- B> Lease Name, Well Number, Well Location, Name of the Pools to be commingled
Woodstock State Unit #1
Unit P Sec 5-T9S-R33E
660' FSL and 540' FEL
Pools: Undesignated
- C> A plat of the area showing the acreage dedicated to the well and the ownership of all offsetting leases.
See Attachment A (Map)
- D> A current (within 30 days) 24-hour productivity test on Division Form C-116 showing the amount of oil, gas, and water produced from each zone.
See Attachment B (Form C-116)
- E> A production decline curve for both zones showing that for a period of at least one year a steady rate of decline has been established for each zone which will permit a reasonable allocation of the commingled production to each zone for statistical purposes.
(This requirement may be dispensed with in the case of a newly completed or recently completed well which has little or no production history. However, a complete resume of the well's completion history including description of treating, testing, etc., of each zone, and a prognostication of future production from each zone shall be submitted.)
See Attachment C and D
- F> Estimated bottom-hole pressure for each artificially lifted zone. A current (within 30 days) measured bottom-hole pressure for each zone capable of flowing.

Bottom hole pressure for the Penn is 2002 psi based on the DST taken on 11-26-89. Bottom hole pressures for the Abo and Wolfcamp are not available at this time.

- G> A description of the fluid characteristics of each zone showing that the fluids will not be incompatible in the well-bore.

Water analysis for the Abo formation is supplied (See Attachment E), and there are no water analysis available at this time for the Penn or Wolfcamp formations.

- H> A computation showing that the value of the commingled production will not be less than the sum of the values of the individual streams.

The addition of the two (Wolfcamp and Abo) zones will not decrease effective oil and gas production from the Penn.

- I> A formula for the allocation of production to each of the commingled zones and a description of the factors or data used in determining such formula.

100% Penn unless the oil production deviates from the anticipated decline curve - at which time individual tests would be performed on each zone.

- J> A statement that all offset operators and, in the case of a well on federal land, the US BLM, have been notified in writing of the proposed commingling.

Those notified in writing of the proposed commingling of the Woodstock State Unit #1 are:

BUREAU OF LAND MANAGEMENT
P.O. Box 1397
Roswell, NM 88201
ATTN: Barbara Bills

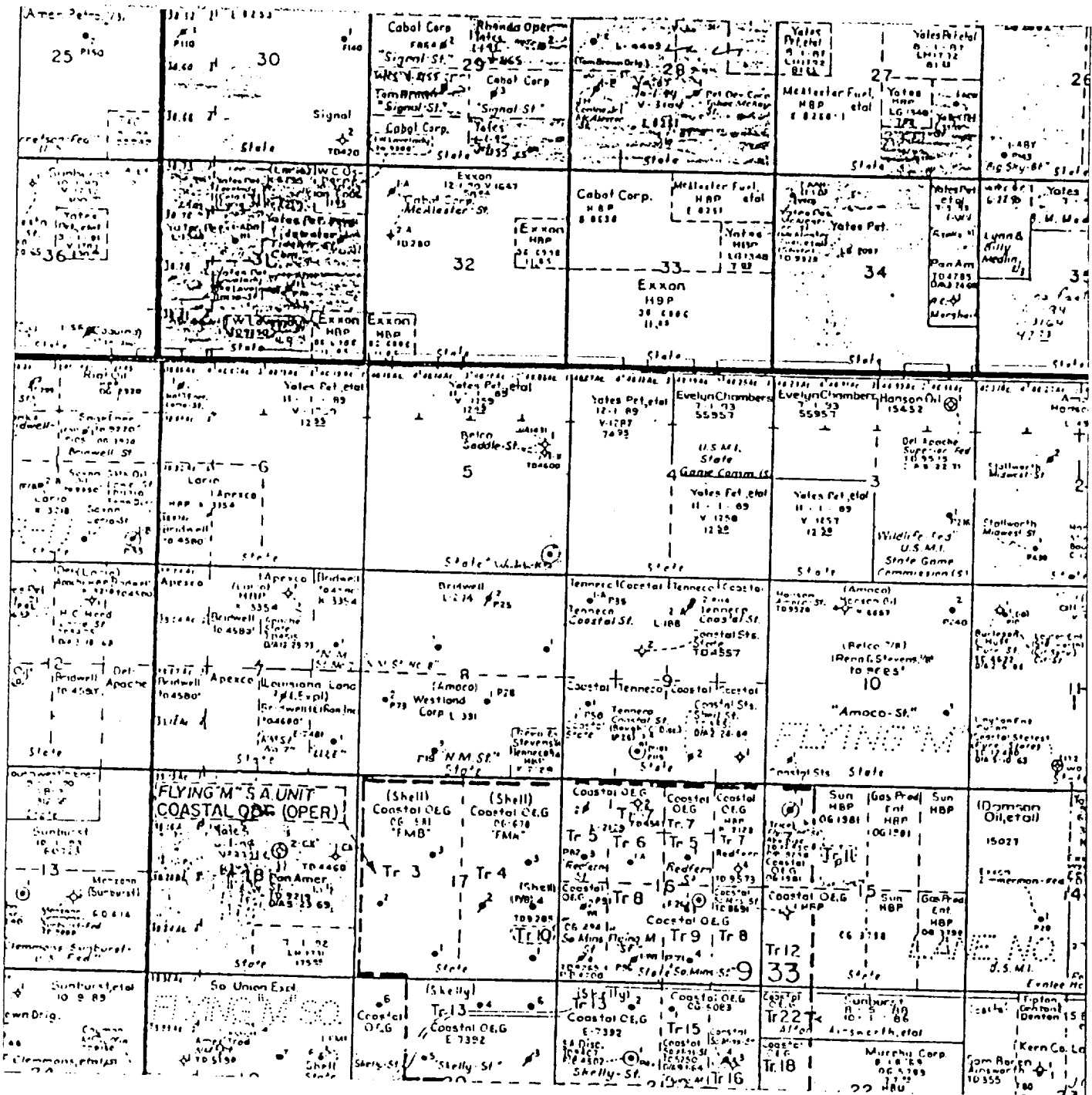
TENNECO OIL
7990 IH 10 West
San Antonio, TX 78230

BRIDWELL OIL CO
P.O. Drawer 1830
Wichita Falls, TX 76307

COASTAL OIL & GAS CORP
9 Greenway Plaza
Houston, TX 77046-0995

EXXON OIL & GAS CORP
P.O. Box 1600
Midland, TX 79702

ATTACHMENT A



WOODSTOCK STATE UNIT #1

Unit P Sec 5-T 9S- R 33E

660' FSL and 540' FEL

Lea County, New Mexico

Yates Petroleum Corporation

Submit to Appropriate
District Office
State Lease - 4 copies
Fee Lease - 3 copies

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised 1-1-89

OIL CONSERVATION DIVISION

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator YATES PETROLEUM CORPORATION			Lease Woodstock State Unit		Well No. 1
Unit Letter P	Section 5	Township 9S	Range 33E	County NMPM	Lea
Actual Footage Location of Well: 660 feet from the south line and 540 feet from the east line					
Ground level Elev. 4387.5'	Producing Formation Abo/Three Brothers		Pool Undesignated		Dedicated Acreage: 40 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.

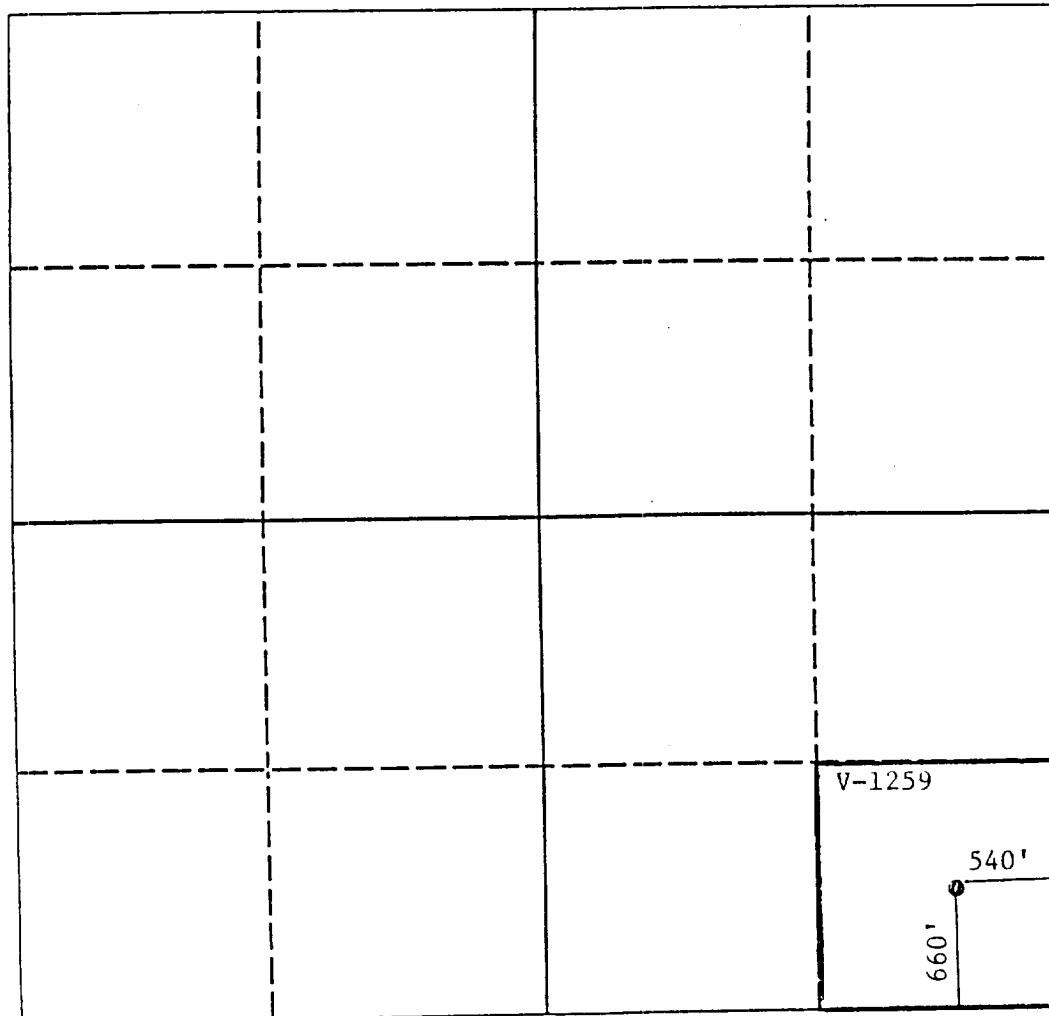
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?

☒ Yes ☐ No If answer is "yes" type of consolidation Unitization

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 interest, has been approved by the Division.



OPERATOR CERTIFICATION

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

Signature

Printed Name

JUANITA GOODLETT

Position

PRODUCTION SUPERVISOR

Company

YATES PETROLEUM CORPORATION

Date

7-9-90

SURVEYOR CERTIFICATION

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

Date Surveyed

REFER TO ORIGINAL PLAT

Signature & Seal of

Professional Surveyor dated 10-11-89

Certificate No.

Submit 2 copies to Appropriate District Office.

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240
DISTRICT II
P.O. Drawer DD, Artesia, NM 88210
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-116
Revised 1/1/89

ATTACHMENT B

OIL CONSERVATION DIVISION

GAS - OIL RATIO TEST

Operator YATES PETROLEUM CORPORATION		Pool Undes. Penn		County Lea												
Address 105 So. 4th, Artesia, NM 88210		TYPE OF TEST - (X)		Scheduled <input type="checkbox"/> Completion <input type="checkbox"/> Special <input checked="" type="checkbox"/>												
LEASE NAME	WELL NO.	LOCATION				DATE OF TEST	SIZE	CHOKE SIZE	TBQ. PRESS.	DAILY ALLOW. ABL	LENGTH OF TEST HOURS	PROD. DURING TEST			GAS - OIL RATIO CU.FT/BBL.	
		U	S	T	R							WATER BBL.S.	GRAV. OIL	OIL BBL.S.		GAS M.C.F.
Woodstock State Unit	1	P	5	9s	33e	7-28-90	P	Open	-	-	24	83.4	45	15.6	13.3	853

Instructions:

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Division.

Gas volumes must be reported in MCF measured at a pressure base of 15,025 psia and a temperature of 60° F. Specific gravity base will be 0.60.
Report casing pressure in lieu of tubing pressure for any well producing through casing.

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

Signature

Juanita Goodlett - Production Supvr.

Printed name and title

9-20-90

Date

(505) 748-1471

Telephone No.

(See Rule 301, Rule 1116 & appropriate pool rules.)

Submit 2 copies to Appropriate District Office.

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240
DISTRICT II
P.O. Drawer DD, Artesia, NM 88210
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

ATTACHMENT B

Form C-116
Revised 1/1/89

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

GAS - OIL RATIO TEST

Operator YATES PETROLEUM CORPORATION		Pool Undes. Abo		County Lea												
Address 105 So. 4th St., Artesia, NM 88210		TYPE OF TEST - (X) <input checked="" type="checkbox"/>		Scheduled <input type="checkbox"/>		Completion <input type="checkbox"/>		Special <input checked="" type="checkbox"/>								
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	STATUS	CHOKE SIZE	TBG. PRESS.	DAILY ALLOW-ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST			GAS - OIL RATIO CU FT/BBL.		
		U	S	T							R	WATER BBL.S.	GRAY. OIL		OIL BBL.S.	GAS M.C.F.
Midstock State Unit	1	P	5	9s	33e	8-4-90	*	Open	-	-	24	10	-	0	0	-----
*Swab test.																

Instructions:

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Division.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

(See Rule 301, Rule 1116 & appropriate pool rules.)

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

Signature

Juanita Goodlett

Juanita Goodlett - Production Supvr.

Printed name and title

9-20-90 (505) 748-1470

Date Telephone No.

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-116
Revised 1/1/89

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Submit 2 copies to Appropriate
District Office.
DISTRICT I
P.O. Box 1980, Hobbs, NM 88240
DISTRICT II
P.O. Drawer DD, Artesia, NM 88210
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

GAS - OIL RATIO TEST

Operator YATES PETROLEUM CORPORATION		Pool Undes. Wolfcamp		County Lea										
Address 105 So. 4th St., Artesia, NM 88210		TYPE OF TEST - (X)		Completion <input type="checkbox"/> Special <input checked="" type="checkbox"/>										
LEASE NAME Woodstock State Unit	WELL NO. 1	LOCATION U S T R			DATE OF TEST 8-1-90	STATUS *	CHOKE SIZE Open	TBG. PRESS. -	DAILY ALLOW-ABLE -	LENGTH OF TEST HOURS 24	PROD. DURING TEST			GAS - OIL RATIO CU FT/BBL.
		WATER BBL.S.	GRAV. OIL	OIL BBL.S.							GAS M.C.F.			
	P	5	9s	33e			*Swab test.			17	-	0	TSTM	-----

Instructions:

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Division.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

(See Rule 301, Rule 1116 & appropriate pool rules.)

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

Juanita Goodlett
Signature

Juanita Goodlett - Production Supvr.

Printed name and title

9-20-90 (505) 748-1471

Date Telephone No.

YATES PETROLEUM CORPORATION
 CHRONOLOGICAL DRILLING REPORT
 Woodstock State Unit #1
 Unit P
 5-9S-33E
 Lea County, New Mexico

10-26-89 Location: 660' FSL & 540' FEL of Section: 5-9S-33E, Chaves County, New Mexico. Lease No.: V-1259. Elevation: 4387.5' GR. PTD: 9000' Abo. Drilling Contractor: Peterson Rig _____. Building location.

10-27-89 Building location.

10-28-30-89 Building location.

10-31-89 Finished moving in rotary tools. Prep to spud.

11-1-89 Drilling 1700' redbed. Made 1700' in 15-1/4 hours, 111.5'/hr. MW 8.9, Vis 31, PV 7. Surveys 500' 1/4 deg, 958' 1/4 deg and 1492' 1/4 deg. WOB 85000#, RPM 100, SPM 88, PP 400#. Spudded with rotary tools at 2:00 PM 10-31-89. Notified Hobbs OCD. DC \$28,481; CC \$43,581

11-2-89 TD 1873' redbed. WOC. Made 173' in 5-1/2 hours, 31'/hr. MW 9, Vis 32, pH 8. Survey 1873' 1/4 deg. WOB 60000#, RPM 100, SPM 58, PP 500#. Tripped for bit at 1756'. Wash 60' to bottom. Reached TD to run casing 5:30 PM 11-1-89. Ran 43 joints 8-5/8" J-55 24# (1880') casing, set 1873'. Texas pattern notched guide shoe set 1873', insert float set 1831'. Cemented with 750 sacks Halliburton Lite with 2% CaCl & 1/4# flocele. Tailed in with 200 sacks Class "C" with 2% CaCl. Circulated 25 sacks to pit. PD 4:45 AM 11-2-89 with 300 psi. Bumped plug to 750 psi. Notified Hobbs OCD at 3:00 PM 11-1-89. DC \$33,637; CC \$77,212

11-3-89 Drilling 2950' anhydrite and salt. Made 1077' in 12-3/4 hours, 84.5'/hr. MW 10, Vis 28, pH 9. Nippled up and tested to 1000 psi for 30 minutes. WOC total 12 hours. Drilled out 4:45 PM 11-2-89. Reduced hole to 7-7/8". Drilled plug and resumed drilling. DMC \$179; CMC \$179; DC \$21,134; CC \$98,352

11-4-89 Drilling 3870' lime. Made 920' in 23-3/4 hours, 38.7'/hr. MW 10, Vis 29, pH 9, Cl 156,000. Survey 3350' 1-3/4 deg. WOB 38000#, RPM 70, SPM 58, PP 1500#. DMC \$68; CMC \$247; DC \$15,052; CC \$113,404

11-5-89 Drilling 4410' lime. Made 540' in 23-1/2 hours, 23'/hr. MW 10, Vis 29, pH 9. Survey 3882' 1 deg. WOB 48000#, RPM 50, SPM 58, PP 1500#. DMC \$0; CMC \$247; DC \$8517; CC \$121,921

11-6-89 Drilling 5020' lime. Made 610' in 23 hours, 27'/hr. MW 10, Vis 29, pH 9, Cl 160,000, Solids 1%. Surveys 4372' 1-1/2 deg and 4870' 1 deg. WOB 48000#, RPM 60, SPM 58, PP 1500#. DMC \$0; CMC \$247; DC \$9588; CC \$131,509

11-7-89 Drilling 5650' lime. Made 670' in 23-1/2 hours, 26.8'/hr. MW 10, Vis 29, pH 9.5. Survey 5365' 3/4 deg. WOB 48000#, RPM 60, SPM 58, PP 1500#. CMC \$247; DC \$14,516; CC \$146,025

11-8-89 Drilling 6010' sandstone. Made 360' in 15 hours, 24'/hr. MW 10, Vis 29, pH 10, Cl 168,000. Survey 5730' 2 deg. WOB 48000#, RPM 60, SPM 58, PP 1600#. POH and tested BOP. TIH with bit #4. DMC \$1146; CMC \$1393; DC \$7594; CC \$153,619

11-9-89 Drilling 6340' lime and shale. Made 330' in 18-1/2 hours, 17.8'/hr. MW 10, Vis 29, pH 9. Survey 6227' 1-1/2 deg. WOB 48000#, RPM 60, SPM 58, PP 1600#. Tripped for hole in pipe. Laid down 1 joint with hole and 1 cracked joint. DMC \$0; CMC \$1393; DC \$5304; CC \$158,923

11-10-89 Drilling 6695' dolomite. Made 355' in 21 hours, 16.9'/hr. MW 10, Vis 29, pH 9.5, Cl 171000. WOB 48000#, RPM 56, SPM 58, PP 1600#. Tripped for hole in pipe. DMC \$0; CMC \$1393; DC \$5687; CC \$164,610

Yates Petroleum - Woodstock State Unit #1 (Unit P) 5-9S-33E Lea Co., NM

11-11-89 Drilling 7135' dolomite. Made 440' in 23-1/2 hours, 18.7'/hr. MW 10.2, Vis 29, pH 9.5. Survey 6731' 1-1/2 deg. WOB 48000#, RPM 56, SPM 58, PP 1600#. DMC \$0; CMC \$1393; DC \$7267; CC \$171,877

11-12-89 Drilling 7455' dolomite and shale. Made 320' in 23-1/2 hours, 13.6'/hr. MW 10, Vis 34, pH 9.5, Cl 172000, Solids 3%. Survey 7226' 1-3/4 deg. WOB 50000#, RPM 56, SPM 58, PP 1600#. DMC \$0; CMC \$1393; DC \$5431; CC \$177,308

11-13-89 Drilling 7670' shale. Made 215' in 17-3/4 hours, 12.1'/hr. MW 10.2, Vis 36, PV 7, YP 11, Gels 5/8, pH 9, Cl 158000, Solids 2.5%, Sand trace. Survey 7500' 1-1/2 deg. WOB 50000#, RPM 66, SPM 58, PP 1600#. Tripped for bit at 7500'. Wash to bottom. DMC \$266; CMC \$1659; DC \$6384; CC \$183,692

11-14-89 Drilling 7940' shale and dolomite. Made 270' in 24 hours, 11.25'/hr. MW 10.2, Vis 36, pH 9, Co 180,000, Solids 2, Oil 2. WOB 55000#, RPM 60, SPM 58, PP 1500#. DMC \$0; CMC \$1659; DC \$4666; CC \$188,358

11-15-89 Drilling 8155' dolomite and shale. Made 225' in 23-1/2 hours, 9.6'/hr. MW 10.2, Vis 37, PV 7, YP 9, Gels 5/12, pH 9.5, Cl 162000, Solids 4%, Oil 1.5%. Survey 8000' 1-1/4 deg. WOB 55000#, RPM 60, SPM 58, PP 1500#. DMC \$2000; CMC \$3659; DC \$6628; CC \$184,986

11-16-89 Drilling 8375' shale. Made 210' in 24 hours, 8.7'/hr. MW 10.3, Vis 38, PV 11, YP 8, Gels 9/18, pH 9.5, Cl 185,000, Solids 3%, Sand trace, Oil 3%. WOB 58000#, RPM 56, SPM 58, PP 1500#. DMC \$0; CMC \$3659; DC \$3748; CC \$198,734

11-17-89 Drilling 8491' lime. Made 123' in 23-1/2 hours, 5.2'/hr. MW 10, Vis 39, PV 11, YP 18, Gels 9/18, pH 9, WL 45, Cl 185000, Solids 3%, Oil 3%. Survey 8475' 1-1/2 deg. WOB 50000#, RPM 56, SPM 58, PP 1500#. DMC \$1180; CMC \$4839; DC \$4407; CC \$203,141

11-18-89 Drilling 8605' shale and dolomite. Made 105' in 14-3/4 hours, 7.25'/hr. MW 10.2, Vis 39, pH 9, WL 20, Cl 172,000, Solids 3%, Oil 2%. WOB 48000#, RPM 66, SPM 58, PP 1500#. Tripped for bit at 8500'. Wash to bottom. DMC \$1666; CMC \$6405; DC \$3808; CC \$206,949

11-19-89 TD 8631' dolomite and shale. POH. Made 25' in 3 hours, 8.3'/hr. MW 10.2, Vis 39, pH 9, Cl 168,000. WOB 48000#, RPM 56, SPM 58, PP 1500#. POH for DST #1. DMC \$0; CMC \$6405; DC \$4418; CC \$211,367

11-20-89 TD 8631' dolomite and shale. TIH. MW 10.2, Vis 60, WL 14, Cl 168,000. DST #1 8630-8493' Lower Abo: Opened with weak blow, 1/4" in bubble bucket and continued through out. Closed tool in 30 mins with weak blow. Shut in 60 minutes. Opened with weak blow, died in 10 minutes. Closed tool in 60 minutes. Shut in 180 mins. Reopened for 3rd flow, dead through out. RECOVERY: 60' drilling mud, 168000 CL. SAMPLER: 1050 cc rat hole mud with 75 psi, 168,000 CL. PRESSURES: IHP 4664, 30 min IFP 96-109, 60 min ISIP 1028, 60 min 2nd FP 121-121, 180 min FSIP 1996, 60 min FFP 121-121, FHP 4646. DMC \$0; CMC \$6405; DC \$7949; CC \$219,360

11-21-89 Drilling 8748' lime. Made 117' in 20-1/2 hours, 5.7'/hr. MW 10, Vis 39, pH 9, WL 40, CL 115,000, Solids 3.5%, Sand trace, Oil 2%. Survey 8640' 2-3/4 deg. WOB 40000#, RPM 56, SPM 58, PP 1500#. TIH, wash to bottom. DMC \$2144; CMC \$8549; DC \$4875; CC \$224,191

11-22-89 Drilling 8930' lime. Made 182' in 23-1/4 hours, 7.8'/hr. MW 10.2, Vis 36, PV 7, YP 11, Gels 5/8, pH 9, WL 45, Cl 185,000, Solids 3%, Oil 3%. WOB 58,000#, RPM 56, SPM 58, PP 1500#. TIH, wash to bottom. DMC \$2144; CMC \$8549; DC \$4875; CC \$224,191

Yates Petroleum - Woodstock State Unit #1 (Unit P) 5-9S-33E Lea Co., NM

- 11-23-89 Drilling 9120' lime and shale. Made 190' in 24 hours, 7.91'/hr. MW 10, Vis 36, PV 6, YP 11, Gels 5/10, pH 9, WL 34, Cl 144,000, Solids 4%, Sand trace, Oil trace. WOB 48000#, RPM 53, SPM 58, PP 1500#. DMC \$92; CMC \$8696; DC \$3589; CC \$231,592.10
- 11-24-89 Drilling 9287' lime. Made 157' in 24 hours, 6.95'/hr. MW 10, Vis 37, PV 6, YP 11, Gels 5/10, pH 9.5, WL 12, FC 1/32, Cl 144000, Solids 4%, Sand trace. WOB 48000#, RPM 56, SPM 58, PP 1500#. DMC \$500; CMC \$9196; DC \$3645.10; CC \$235,237.20
- 11-25-89 TD 9361' lime and shale. Pick up test tools. Made 74' in 10-1/2 hours, 6.75'/hr. MW 10.2, Vis 41, PV 7, YP 9, Gels 4/7, pH 9.5, WL 10, FC 1/32, Cl 146,000, Solids 3.5%, Sand trace, Calcium 5200. Sruvey 9360' 3-1/2 deg. WOB 48000#, RPM 56, SPM 58, PP 1500#. Circulate and condition mud. TOH, SLM 9364.03'. Pick up test tools for DST #2 9291-9361' (70') Bough "C". DMC \$586; CMC \$9782; DC \$4786; CC \$240,023.20
- 11-26-89 Drilling 9388' lime and shale. Made 28' in 5 hours, 5.6'/hr. MW 10, Vis 43, pH 9, WL 26, FC 1/32, Cl 147,000. WOB 48000#, RPM 56, SPM 58, PP 1500#. RESULTS OF DST #2 9291-9361' (71') Bough C: TO 30", SI 60", TO 60", SI 180". Opened tool, to bottom of bucket in 1 min. Pressure increased from 15 psi to 68 psi. Shut in. Gas to surface in 2 minutes. Opened tool on 1/4" choke. Pressure increased from 21 psi to 85 psi. Shut in. RECOVERY: 1237' gas cut mud and water with foamy emulsion. SAMPLER: 2.4 cu ft gas, 280 cc oil, 550 cc water with pressure 390 psi. PRESSURES: IHP 5030, IFP 293-381, ISIP 2252, FFP 238-586, FSIP 2002, FHP 5022. DMC \$0; CMC \$9782; DC \$9086.10; CC \$249,109.30
- 11-27-89 Drilling 9543' lime and shale. Made 155' in 24 hours, 6.45'/hr. MW 10.2, Vis 40, PV 10, YP 8, Gels 5/8, pH 9, WL 15, FC 1/32, Cl 144000, Solids 4%, Sand trace. WOB 48000#, RPM 56, SPM 58, PP 1500#. Proposed TD 9560'. DMC \$0; CMC \$9782; DC \$2961.50; CC \$252,070.80
- 11-28-89 Drilling 9690' lime, shale and chert. Made 147' in 24 hours, 6.12'/hr. MW 10, Vis 43, PV 10, YP 7, Gels 4/7, pH 9, WL 9, FC 1/32, Cl 144000, Solids 4%, Sand trace. WOB 48000#, RPM 56, SPM 58, PP 1500#. DMC \$620; CMC \$10,402; DC \$4764.70; CC \$256,835.50
- 11-29-89 Drilling 9840' lime and shale. Made 150' in 24 hours, 6.25'/hr. MW 10, Vis 42, PV 11, YP 8, Gels 4/7, pH 9.5, WL 9, FC 2/32, Cl 144000, Solids 4%. WOB 48000#, RPM 56, SPM 58, PP 1500#. DMC \$500; CMC \$10,902; DC \$4990; CC \$261,825.50
- 11-30-89 TD 9875' lime and shale. Conditioning mud. Prep to log. Made 35' in 5-1/2 hours, 6.36'/hr. MW 10.2, Vis 45, PV 14, YP 10, Gels 4/8, pH 8.5, WL 11, FC 2/32, Cl 154,000, Solids 4%. WOB 48000#, RPM 56, SPM 58, PP 1500#. Reached TD 11:30 AM 11-29-89. TOH - SLM. Stuck with bit 6294'. Top of drill collar 5584'. Spotted 100 bbls oil at 11:30 PM. Pipe free at 6:30 AM 11-30-89. DMC \$724; CMC \$11,626; DC \$7039; CC \$268,864.50
- 12-1-89 TD 9875' lime and shale. TIH with drill pipe. Made 0'. MW 10.1, Vis 45, PV 14, YP 10, Gels 4/6, pH 8.5, WL 8, FC 1/32, Cl 155000, Solids 4%, Oil 4%, Calcium 3300. Survey 9875' 5 deg. Circulate and condition. TOH, SLM 9879.19'. Logged, logs went to 9880'. TIH with drill pipe. DMC \$480; CMC \$12,106; DC \$25,705.

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drill pipe and drill collars. Ran 5-1/2" casing. Work stuck casing. DMC \$0; CMC \$12,106; DC \$63,682; CC \$358,341.50

12-3-89 TD 9875'. Spot oil, work stuck casing. Ran free point. Casing stuck at 2265'. Circulate and work casing. Ran inside shot in casing. Shoot casing out of keyseat. Pulled 55 joints casing. Laid down DV tool. Ran casing to 9875'. Circulate. Cement. PD 12:00 AM 12-3-89. Nipped down BOP. Set slips. Clean pits. Rig released. DMC \$0; CMC \$12,106; DC \$56,067; CC \$414,408.50
 DETAILED CASING REPORT: Reached TD 11:30 AM 11-29-89. Ran 232 joints 5-1/2" (9894.26') casing, set 9875'. Ran casing as follows: 59 joints 5-1/2" 20# N-80 LT&C (2569.06'), 115 joints 5-1/2" 17# J-55 LT&C (4819.27'), 51 joints 5-1/2" 17# N-80 LT&C (2217.65') and 7 joints 5-1/2" 20# N-80 LT&C (288.28'). Float shoe set 9875', float collar set 9831'. Used 500 gals mud flush, 730 gals flo-check 21. Cemented with 725 sacks Class "H" with .5% Halad-22A, .3% CFR-3 and 5# CL/sack (yield 1.18, weight 15.6). PD 12:00 AM 12-3-89. Bumped plug to 2600 psi for 3 minutes, float and casing held okay. Rig released 4:00 AM 12-3-89.

12-5-89 Waiting on completion unit.

12-6-89 Waiting on completion unit.

12-7-89 Waiting on completion unit.

12-8-89 Waiting on completion unit.

12-9-11-89 Moved in and rigged up pulling unit. Unloaded 2-7/8" J-55 casing. Stand up 290 joints in derrick. Prep to log and perforate.

12-12-89 Rigged up Penwood Wireline and ran CBL, PBTD 9769', top of cement 7350'. WIH with 4" casing gun and perforated Bough "E" 9427-32' (2 SPF). TIH with Uni V packer (dry) and set at 9364'. Dropped bar. Had strong blow decreasing to dead in 15 mins. Initial fluid level 5800'. Had show of gas before fluid. No oil. Made three swab runs. Recovered 18 bbls. Final fluid level 7000'. Shut in. DC \$5830

12-13-89 SITP 50#. Fluid level 2000', no oil, show of gas. Swabbed down to 8000'. Fluid level staying at 6800'. Had show of gas on swab before fluid hits surface. No oil. Recovered 110 bbls this day. At report time 12-13-89, SITP 0#. Fluid level 2000'. No oil on 1st run. Show of gas before fluid hits surface.
 WATER ANALYSIS:
 Sp. Gravity 1.068 @ 70 deg Resistivity .078 @ 70 deg
 pH 6.7 Sulfate 1498
 Iron Lite to Med Bicarbonate 480
 H2S 0 Chloride 56,180
 Calcium 4269 Sodium 28,560
 Magnesium 2048 KCL 0

12-14-89 SITP 0#. Initial fluid level 2000'. Swabbed down to 6200'. Recovered 45 bbls water, no oil. Small show of gas before fluid hit surface. Unset packer. TOH. TIH with cement retainer and 2-7/8" tubing. Prep to correlate cement retainer into place and squeeze Bough E. DC \$1600

12-15-89 Rig up Penwood wireline. Correlate cement retainer, set bottom at 9413.6'. Establish injection rate .4 BPM @ 4000#. Spot 250 gals acid to end of tubing. After acid on perforations establish injection rate of 2.5 BPM @ 900#. Squeeze perforations 9427-9432'

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9260-9371' with 25 0.50" holes as follows: 9260', 61', 62', 9302', 03', 04', 07', 09', 10', 11', 12', 15', 17', 18', 19', 20', 9352', 53', 54', 55', 56', 60', 69', 70' and 9371'. Prep to run packer, bridge plug and acidize. DC \$10,950

12-16-89 TIH to 9387'. Spot 3-1/2 bbls acid. Pulled RBP to 9328' and tested to 2500#. Pulled packer to 9289'. Acidized Bough B perforations 9302-20' with 2500 gals 15% NEFE and 11 ball sealers. Good action. Breaks 5 BPM @ 2100# with balls on. ISDP vacuum. Moved RBP to 9387' and packer to 9330'. Pressure Bough C perforations 9352-71' to 5500#. Bled to 4000# in 10 mins. Drop packer to 9387' and respot 1500 gals acid and 8 ball sealers to end of tubing. Pull packer back to 9330'. Pump acid away into perforations 9352-71' at 5 BPM on vacuum. No ball action. Moved RBP to 9289' and tested to 2000#. spot 500 gals acid to end of tubing. Pulled packer to 9224'. Acidized Bough A perforations 9260-62' with 500 gals 15% NEFE. Moved RBP to 9387' and packer back to 9224'. Flushed annulus with 75 bbls. Set packer and tested to 500#. Start swabbing. Load to recover 520 bbls. DC \$6450

Treating pressures:	Bough B	Bough C	Bough A
Min	2000#	Vacuum	Vacuum
Max	5000#	5500#	2400#
Avg	4 BPM @ 2100#	5 BPM @ Vacuum	5 BPM @ 2400#
ISDP	Vacuum	Vacuum	Vacuum

12-17-89 SITP 200#. Blew down. Initial fluid level 4200'. Had 5% oil on 1st swab run. Recovered 11 bbls oil and 80 bbls water this day. Final fluid level 4500'. Had 10% oil cut at end of day with good gas blow between runs. Load to recover 440 bbls. DC \$950

12-18-89 SITP 500#. Initial fluid level 3700'. Had 50% oil on 1st half of run and 30% on 2nd half of 1st run. Recovered 15 bbls oil and 75 bbls water this day. Final fluid level 5200'. Had 8-10% oil cut at end of day, good gas. Load to recover 365 bbls. DC \$950

12-19-89 SITP 500#. Initial fluid level 3000'. Had 50% oil on first run. Recovered total of 121 bbls (15 bbls oil and 106 bblw water). Gas and oil disappeared for 2 hours in middle of day, but came back again. Fluid level dropped to 5200' but came back up to 4800'. Recovered water last 3 runs of day. Had 8% oil at end of day. Load left to recover 259 bbls.

12-20-89 Prep to set pumping unit.

12-21-89 Prep to install pumping unit after Christmas.

12-22-26-89 Prep to install pumping unit after Christmas.

12-27-89 Prep to install pumping unit.

12-28-89 Prep to install pumping unit.

12-29-89 Prep to install pumping unit.

12-30/1-2-90 Prep to install pumping unit.

1-3-90 Prep to install pumping unit.

Yates Petroleum - Woodstock State Unit #1 (Unit P) 5-9S-33E Lea Co., NM

1-19-90 Building battery. Waiting on electricity.
1-20-22-90 Waiting on electricity.
1-23-90 Waiting on electricity.
1-24-90 Waiting on electricity.
1-25-90 Waiting on electricity.
1-26-90 Waiting on electricity.
1-27-29-90 Waiting on electricity.
1-30-90 Waiting on electricity.
1-31-90 Waiting on electricity. DROPPED FROM REPORT WHILE WAITING
ON ELECTRICITY.
2-8-90 Rig up pulling unit. Tried to pull RBP, could not pull.
Prep to try Thursday.
2-9-90 Shut in.
2-10-90 Shut in.
2-11-90 Pumped 0 bbls oil and 103 bbls water in 11 hours.
2-12-90 Pumped 0 bbls oil and 260 bbls water in 26 hours.
2-13-90 Pumped 2 bbls oil and 101 bbls water in 12 hours.
2-14-90 Pumped 44 bbls oil and 142 bbls water in 18 hours.
2-15-90 Pumped 61 bbls oil and 150 bbls water.
2-16-90 Pumped 56 bbls oil and 140 bbls water.
2-17-90 Pumped 49 bbls oil and 165 bbls water.
2-18-90 Pumped 43 bbls oil and 157 bbls water.
2-19-90 Pumping 36 bbls oil and 75 bbls water.
2-20-90 Pumped 43 bbls oil and 239 bbls water.
2-21-90 Pumped 28 bbls oil and 130 bbls water.
2-23-90 TD 9875'; PBTD 9769'. On a 24 hour official potential
test taken 2-20-90, pumped 43 BOPD, 150 MCFGPD and 239
BWPD at GOR 3488/1 and gravity 40 deg (est) thru perfor-
ations 9260-9371' Penn. Well on production. FINAL REPORT.

DRILLING REPORT - RECOMPLETION

Page 1:

YATES PETROLEUM - Woodstock State Unit #1 (Unit P) 6-9S-33E Lea Co., NM

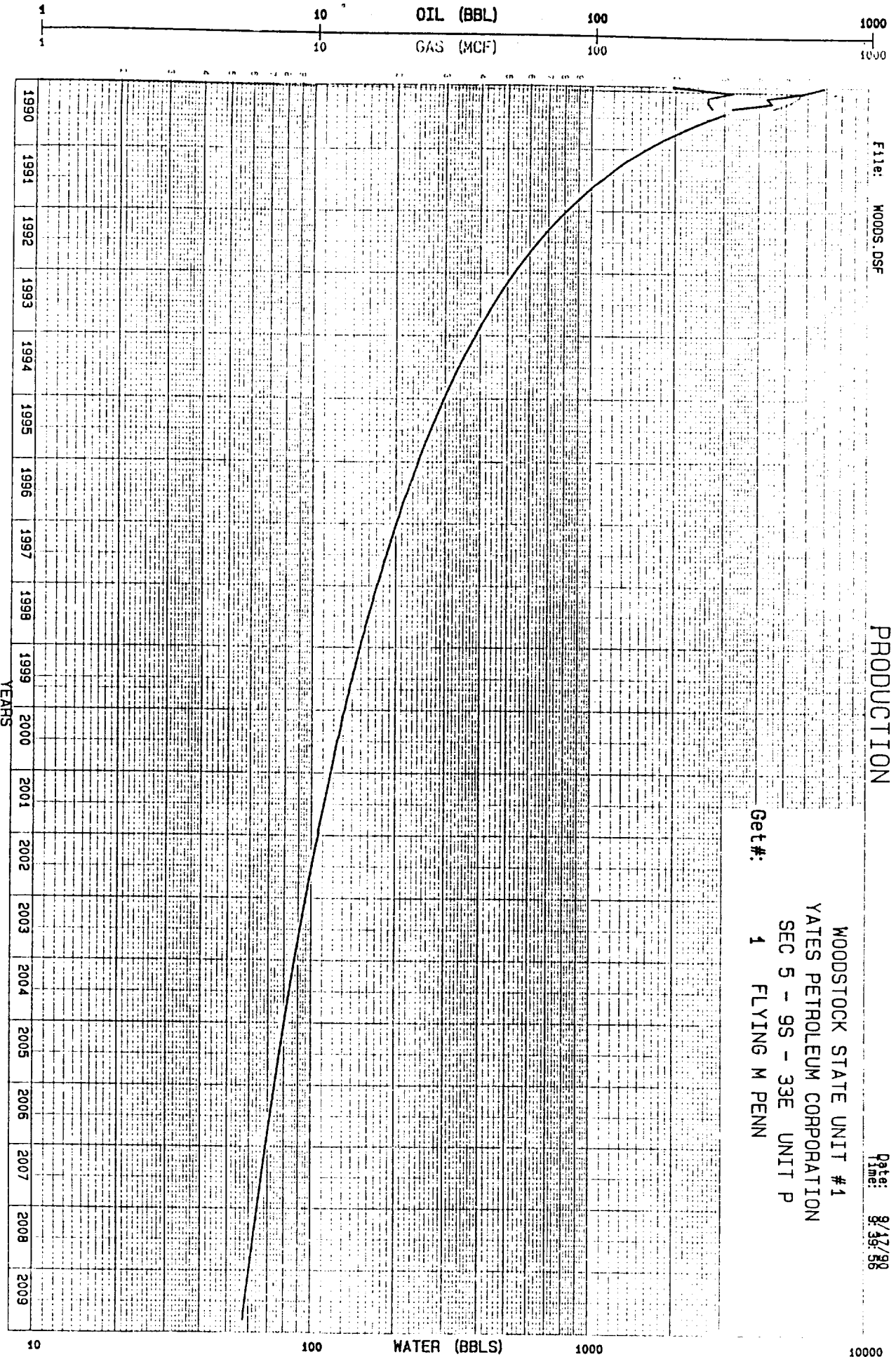
7-29-90 Rigged up. Pulled rods and tubing. DC \$2582.50
7-30-90 Rigged up wireline. Perforated Abo at 8604', 05', 06', 07', 08', 11', 12', 13', 14', 15', and 8616' with 2 SPF (22 holes) and 9105', 07', 08', 09', 10', 11', 12', 14', 16', 17', 18', and 9119' with 2 SPF (24 holes). RIH with packer and RBP. Set RBP at 9200' and tested. Prep to acidize. DC \$2605
7-31-90 Tested RBP to 2000#. Spotted acid across 9105' to 9119'. Pulled packer above perforated interval. Reversed 6 bbls. Set packer. Broke formation. Treated with 3000 gals of 15% NEFE acid and 25 ball sealers. Treating Pressures: Max psi 4940#, Avg 4450#. Avg rate 3.0 BPM. ISDP 4100#, 5 min 3800#, 10 min 3690#, 15 min 3600#. Load to recover 135 bbls. Recovered 87 bbls water. Fluid level 7500' from surface. DC \$5810.93
8-1-90 SITP 25#. First fluid level 7200' from surface. Swabbed dry in 3 runs. After swabbing dry, made hourly runs - 1 to 1-1/2 bbls per hour. Total fluid recovered 17 bbls, 0% oil with small show of gas. Water sample to Halliburton. DC \$1625
8-2-90 Overnight SI 0. Initial fluid level 500' above seating nipple. Recovered 3-1/2 bbls water. Shut in at noon. Prep to straddle and acidize Abo.
8-3-90 Moved RBP to 8700' and tested to 1500#. Spot acid on Abo perfs 8604-16' and treated with 3000 gals 15% NEFE acid and 25 ball sealers. Treating Pressure: Avg 3740# @ 3.4 BPM, ISDP 3200#, 15 min 2850#. Good ball action. 137 bbls left to recover. Flowed back 11 bbls water and died. Rig up swab. Swabbed 61 bbls water. Dry to seating nipple, 65 bbls short of load. Prep to continue swabbing.
8-4-90 SITP 50#. Fluid level 7200' from surface. Swabbed dry. Recovered 10 bbls water. Shut in at Noon. DC \$1050 WATER ANALYSIS: 8-2-90
Resistivity 0.06393 @ 70 deg
Sp. Gravity 1.12
pH 5.9
Calcium 105,000
Magnesium na
Chlorides na
Sulfates Heavy
Bicarbonates 96
Soluble Iron Heavy
8-7-90 No report.
8-8-90 Installed tubing line on unit. POH with RBP and packer. Started back in hole with tubing and anchor. DC \$1480
8-9-90 RIH with tubing and anchor. Set anchor. Ran rods and pump. Flanged well up. Got pump action. Cleaned location. Rigged down. Released to production. FINAL REPORT.

File: WOODS.DSF

PRODUCTION

Date: 8/17/98
Time: 8:39:58

WOODSTOCK STATE UNIT #1
YATES PETROLEUM CORPORATION
SEC 5 - 9S - 33E UNIT P
Get#: 1 FLYING M PENN



1942 A

ATTACHMENT E

HALLIBURTON DIVISION LABORATORY
HALLIBURTON SERVICES
MIDLAND DIVISION
HOBBS, NEW MEXICO 88240
LABORATORY WATER ANALYSIS

No. _____

To Yates PetroleumDate 8-1-90105 S. 4thArtesia, New Mexico 88210

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Submitted by Martin Galindo Date Rec. 8-2-90Well No. Woodstock State Unit #1 Depth _____ Formation AboCounty Lea Field _____ Source _____

Resistivity	0.06393 @ 70° F	
Specific Gravity	1.12	
pH	5.9	
Calcium (Ca)	105,000	*MPL
Magnesium (Mg)	NA	
Chlorides (Cl)	NA	
Sulfates (SO ₄)	Heavy	
Bicarbonates (HCO ₃)	96	
Soluble Iron (Fe)	Heavy	

Remarks: _____ *Milligrams per liter

Respectfully submitted,

Analyst: David Redume

HALLIBURTON COMPANY

cc:

By _____

CHEMIST

NOTICE