

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

May 22, 1996

State of New Mexico
OIL CONSERVATION DIVISION
P. O. Box 1980
Hobbs, NM 88240

ATTN: Mr. Jerry Sexton

Dear Mr. Sexton,

Enclosed are the necessary documents for obtaining approval for the downhole commingling of the Bone Spring and the Delaware for the Hunt APO State #1 located in Unit L of Section 4, Township 21 South, Range 34 East.

Should you have any questions, please feel free to contact me at (505) 748-1471. Thank you.

Sincerely,

Morris Keith
Engineer

MK/th

Enclosures

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May 22, 1996

State of New Mexico
OIL CONSERVATION DIVISION
2040 S. Pacheco Street
Santa Fe, NM 87505-5472

ATTN: Mr. David Catanach

Dear Mr. Catanach,

Enclosed are the necessary documents for obtaining approval for the downhole commingling of the Bone Spring and the Delaware for the Hunt APO State #1 located in Unit L of Section 4, Township 21 South, Range 34 East.

Should you have any questions, please feel free to contact me at (505) 748-1471. Thank you.

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May 22, 1996

Commissioner of Public Lands
Oil/Gas and Minerals Division
P. O. Box 1148
Santa Fe, NM 87504-1148

ATTN: Mr. Pete Martinez

Dear Mr. Martinez,

Enclosed are the necessary documents and the \$30.00 filing fee for obtaining approval for the downhole commingling of the Hunt APO State #1 located in Unit L of Section 4, Township 21 South, Range 27 East. This copy of the application to commingle fulfills our requirement to notify offset operators per NMOCD Rule 303 D (10).

Should you have any questions, please feel free to contact me at (505) 748-1471. Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read 'Morris Keith'.

Morris Keith
Engineer

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May 22, 1996

Crescent Porter Hale
220 Bush Street
Suite 1069
San Francisco, CA 94104

Gentlemen:

Enclosed please find a copy of the application for commingling the Hunt APO State #1 located in L of Section 4-T21S-R34E. This copy of the application to commingle fulfills our requirement to notify offset operators per NMOCD Rule 303 D (10).

Should you have anyu questions, please feel free to contact me at (505) 748-1471.

Sincerely,

Morris Keith
Engineer

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May 22, 1996

Meridian Oil Inc.
P. O. Box 51810
Midland, TX 79710

Gentlemen:

Enclosed please find a copy of the application for commingling the Hunt APO State #1 located in L of Section 4-T21S-R34E. This copy of the application to commingle fulfills our requirement to notify offset operators per NMOCD Rule 303 D (10).

Should you have anyu questions, please feel free to contact me at (505) 748-1471.

Sincerely,

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TREASURER

May 22, 1996

Arco Oil & Gas Company
P. O. Box 1610
Midland, TX 79702

Gentlemen:

Enclosed please find a copy of the application for commingling the Hunt APO State #1 located in L of Section 4-T21S-R34E. This copy of the application to commingle fulfills our requirement to notify offset operators per NMOCD Rule 303 D (10).

Should you have anyu questions, please feel free to contact me at (505) 748-1471.

Sincerely,

Morris Keith
Engineer

MK/th

Enclosures

COMMINGLING DATA FOR THE HUNT APO STATE #1

- 1> Name and Address of the Operator:

Yates Petroleum Corporation
105 South Fourth Street
Artesia, NM 88210
ATTN: Morris Keith

- 2> Lease Name, Well Number, Well Location, Name of the Pools to be commingled:

Hunt APO State #1
Unit L Sec. 4-T21S-R34E
2310'FSL & 660'FWL
Pools: Delaware River Bone Spring

28434
28436
Grant Right - BS
Grant Right Dec
WILCOAT Delaware
275/2000

- 3> A plat of the area showing the acreage dedicated to the well and the ownership of all offsetting leases.

See Attachment A (map)

- 4> 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.

Bone Spring

8849'-9657'

See attached monthly production history summary (Attachment B).

Typical production is 6-7 BOPD/20-40 MCFGPD.

Delaware

8329'-8554'

See attached workover summary (Attachment C).

Typical production is 10-15 BOPD/20-50 MCFGPD.

- 5> 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. However, a complete description of treating, testing, etc., of each zone, and a prognostication of future production from each zone shall be submitted.)

See Attachment C (workover history)

See Attachment B (Bone Spring monthly production history)

Prognostication of Bone Spring reserves derived by assuming an exponential decline rate of 50%/yr. (best engineering estimate).

$Q_i = 15 \text{ BOPD, } 50 \text{ MCFGPD}$

$Q_{el} = 5 \text{ BOPD, } 5 \text{ MCFGPD}$

$d = 50\%/yr.$

$$N_{oil} = \frac{365 (Q_{el} - Q_i)}{\ln (1-d)} = \frac{365 (5-15)}{\ln (.5)} = 5266$$

$$N_{gas} = \frac{365 (5-30)}{\ln (.5)} = 13,165$$

Prognostication of Delaware reserves derived by assuming an exponential decline rate of 70%/yr. for 1 year followed by a 15%/yr. decline (best engineering estimate). An initial production rate of 8 BOPD is derived from swab and pump tests shown in the workover history.

$$Q_i = 15 \text{ BOPD}$$

$$Q, 1 \text{ yr.} = 5 \text{ BOPD} \quad Q, \text{ E. L.} = 3 \text{ BOPD}$$

$d = 70\%/yr.$ first year followed by $15\%/yr.$

$$N = \frac{365 (5-15)}{\ln (.3)} + \frac{365 (3-5)}{\ln (.85)} = 7523$$

Gas was TSTM during testing. Gas reserve = 0.

- 6> Estimated bottom-hole pressure for each artificially lifted zone. A current (within 30 days) measured bottom-hole pressure for each zone capable of flowing.

Estimated BHP of Bone Spring = 2250 psi at 9500'.

Estimated BHP of Delaware = 2013 psi at 8500' from pressure gradient of Bone Spring.

$$\frac{(2250 \text{ psi}) (8500 \text{ ft.})}{(9500 \text{ ft.})} = 2013 \text{ psi}$$

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

Both zones produce sweet oil and gas. There are no incompatibility problems.

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

Both zones produce sweet oil and gas. The value of the commingled production will not be less than the sum of the values of the individual streams.

By commingling the Bone Spring with the Delaware, an estimated additional 1950 BBLS of oil and 11,000 MCF of gas reserves will be produced during the life of the well.

- 9> 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.

$$\text{Oil: Bone Spring} - \frac{1950 \text{ BO}}{4875 \text{ BO}} = 0.4, 40\%$$

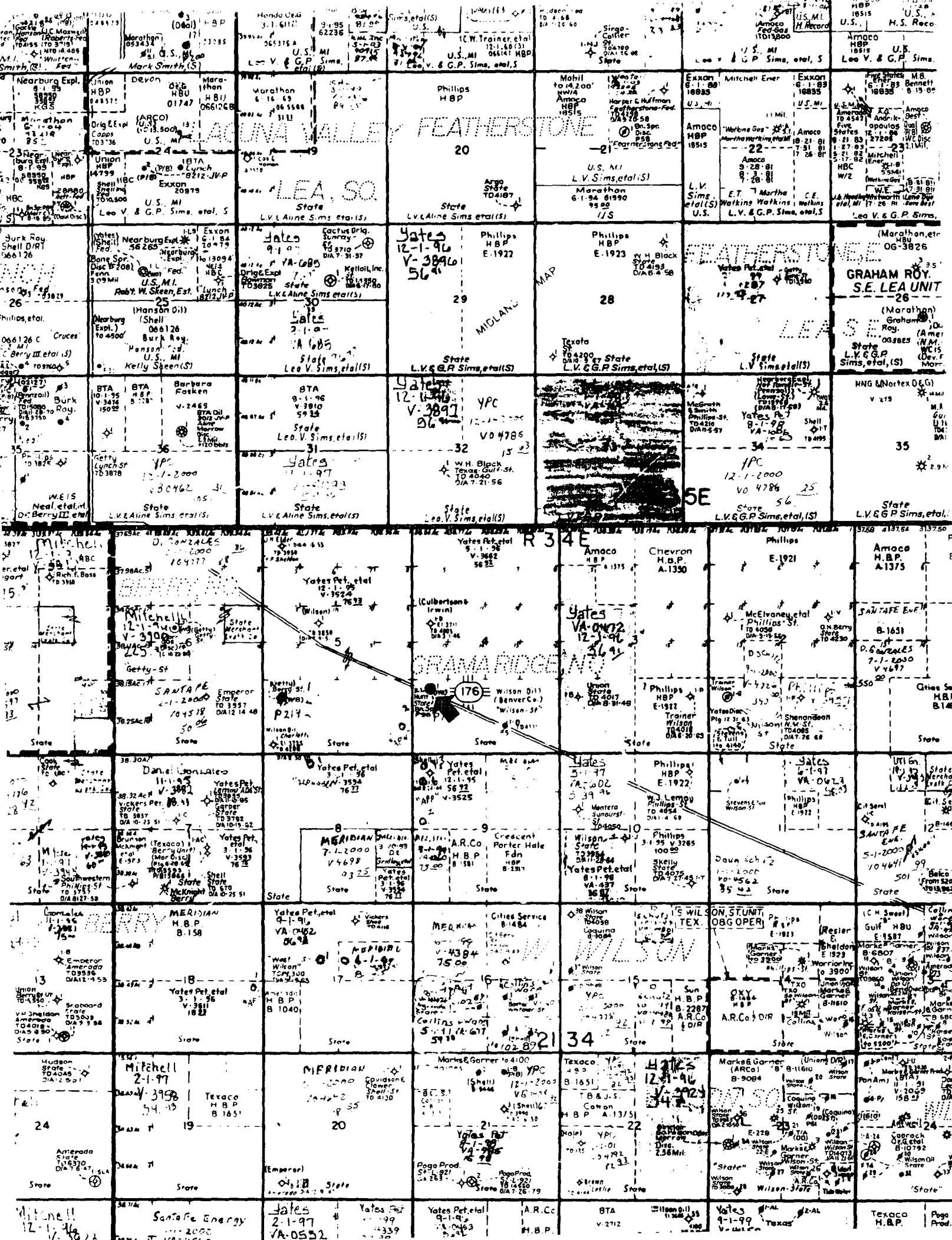
$$\text{Delaware} - \frac{2925 \text{ BO}}{4875 \text{ BO}} = 0.6, 60\%$$

Gas: Bone Spring - 60%

Delaware - 40%

- 10> 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.

The Offset Operators for this area were notified of the proposed commingling of the Hunt APO State #1.



YATES PETROLEUM CORPORATION
CHRONOLOGICAL DRILLING REPORT
Hunt "APO" State #1
Unit L
4-21S-34E
Lea County, New Mexico

RE-ENTRY

This well was originally drilled as the Hunt Oil Co, State 4 #1, in the Morrow formation. YPC proposes to re-enter and clean out cement plugs to approx TD 10,900', squeeze off Delaware perms 5805-5929' and test selected Bone Spring sand intervals to establish commercial oil production.

9-25-95 Moving in service unit to re-enter and complete well in Bone Spring and Delaware.

9-26-95 Cleaned location. Set and test anchors. Dug working pit. Dut out wellhead and cut off dry hole marker. Weld starting head on 9-5/8" casing and install cellar. Moved in and rigged up pulling unit and reverse unit. Installed BOP. TIH with 8-1/2" bit and drill collars. Tag 1st plug at 15'. Drilled out of 1st plug at 50'. Tag 2nd plug at 1108'. Drilled out of 2nd plug at 1210'. Dropped down and tag 3rd plug at 1800'. Circulated casing clean. Drilled out of 3rd plug at 1926'. Tagged 4th plug at 2040'. Drilled out of 4th plug at 2156'. Tagged 5th plug at 3736'. Circulated casing clean. At report time: 6 AM 9-26-95, drilling cement at 3940'. Continued drilling. DC \$10,805

9-27-95 Continued drilling cement to 7" casing stub at 4000'. Cellar and portion of location under pulling unit caved in. Circulated casing clean then rig down pulling unit to repair cellar and location. Rig up pulling unit and TOH with 2-7/8" tubing, drill collars and 8-1/2" bit. TIH with 6-1/8" bit, drill collars and 2-7/8" tubing. Drilled into 7" casing stub at 4000' and continued drilling cement plug. At 4034' to 4038', drilled up pieces of metal junk in cement. Drilled out of cement at 4056'. Dropped down and tag cement at 5694'. Circ mud out of hole and tested casing to 2000 psi for 6 mins. At 6 AM 9-27-95 - started drilling cement at 5694'. DC \$6113; CC \$16,918

9-28-95 Continued drilling cement. Tag CIBP at 5739'. Drilled out of CIBP at 5746'. Dropped down and tag cement at 5865'. Drilled out cement to cement retainer at 5869'. Drilled out cement retainer and cement to 5888'. NOTE: Drilling small pieces of retainer that we are pushing ahead of us. TOH for bit trip. TIH with new bit and resumed drilling cement and junk metal at 5888'. Dropped out of cement at 5891'. Dropped down and tag cement retainer at 5962'. At 6 AM 9-28-95, drilling retainer at 5962'. DC \$8413; CC \$25,331

9-29-95 Continued drilling retainer at 5962'. Dropped out of cement at 5977'. TIH and tag cement at 9410'. Circ casing clean. Drilled out cement and CIBP from 9410' to 9421'. TIH to 10,194' and circulated casing clean. Tested casing to 1000 psi. Bled off to 800 psi in 1 minute. Tested 3 times with same result. At 6 AM 9-29-95, TOH with 2-7/8" tubing, drill collars and bit. Prep to make bit and scraper runs in 9-5/8" casing and 7" casing and displace casing with 2% KCL water. DC \$6763; CC \$32,094

9-30/10-2-95 TIH with 8-1/2" bit, scraper and 2-7/8" tubing to 4000'. TOH with 2-7/8" tubing, scraper and bit. TIH with 6-1/8" bit, scraper and 2-7/8" tubing to 10,128'. Displace casing with 550 bbls 2% KCL water. TOH with 2-7/8" tubing, scraper and bit. Shut down. Prep to TIH with RBP, packer and test old Delaware perms at 5800'. DC \$5568; CC \$37,662

10-3-95 TIH with RBP, packer and 2-7/8" tubing. Set RBP at 9471' and tested to 2500 psi. Pulled up and set packer at 5989'. Tested casing from 5989-9471' to 2500 psi. Pulled up and set

DRILLING REPORT - RE-ENTRY

Page 2

Yates Petroleum - Hunt "APO" State #1 (Unit L) 4-21S-34E Lea Co., NM

packer at 5710'. Tested annulus to 2000 psi. Started swabbing as follows:

TIME	FL	# SR	BW
2 PM	SN	3	15
3 PM	SN	3	12
4 PM	SN	2	1
5 PM	SN	2	1
6 PM	SN	2	1
7 PM	SN	2	1/2
8 PM	SN	2	0
9 PM	--	--	--
10 PM	SN	2	1
11 PM	--	--	--
12 AM	SN	2	1
1 AM	--	--	--
2 AM	SN	2	1
3 AM	--	--	--
4 AM	SN	2	1
5 AM	--	--	--
6 AM	SN	2	1

Total recovered 35-1/2 bbls water. Prep to pressure test perfs for possible squeeze cut. DC \$6590; CC \$44,252
 Loaded tubing with 2% KCL water and pressure up to 1000 psi. Pressure bled down to 300 psi in 10 mins. Repeat pressure test with same results. Unset packer. TOH with 2-7/8" tubing and packer. TIH with logging tools. Correlate tools into place and ran CBL/CCL/GR log from 9450' to 5000'. TOH with logging tools. Shut down. Prep to perforate and acidize Bone Spring. DC \$3825

WATER ANALYSIS: 10-3-95

	2 AM	6 AM
Spec Gravity	1.120 @ 68	1.130 @ 68
Resistivity	.055 @ 75	.045 @ 75
pH	6.3	6.01
Iron	630	630
Calcium	4576	7228
Magnesium	3515	2279
Chloride	99,977	106,171
Sod & Pot	53,360	56,547
Sulfate	232	199
Tot Hardness	25,908	27,450
Bicarbonate	861	583
Sod Chloride	164,463	174,651
Tot Diss Sol	180,339	190,950

TIH with 4" casing guns. Perforated Bone Spring ~~2~~ SPF with 20 - .42" holes from 8849-58'. TIH with packer and 2-7/8" tubing. Spot 2 bbls 7-1/2% NEFE acid at 8877'. Pulled up and set packer at 8783'. Acidized perfs 8849-58' with 1000 gals 7-1/2% NEFE acid + 10 balls. Break down 3240#. Avg 5 BPM at 3700#. ISDP 2700#, 15 mins 2268#. TLTR 85 bbls. Bled well down and rig up swab. Swabbed as follows:

TIME	FL	# SR	BO	BW
4 PM	2500'	4		23
5 PM	4500'	3		16
6 PM	5500'	2		6
7 PM	SN	2		4
8 PM	SN	2		4
9 PM	SN	2		3
10 PM	SN	2	10%	1
11 PM	SN	2	20%	1/2
12 AM	SN	1	40%	1/2
1 AM	SN	2	0	0
2 AM	SN	1	40%	1/2
3 AM	SN	1	40%	1/2
4 AM	SN	1	50%	1/2
5 AM	SN	1	80%	1
6 AM	SN	1	80%	1/2

Total recovered 59 bbls water and 2 bbls oil. Load left 26 bbls water. Continued swabbing. DC \$9816

DRILLING REPORT - RE-ENTRY

Page 3

Yates Petroleum - Hunt "APO" State #1 (Unit L) 4-21S-34E Lea Co., NM

10-6-95 Unset packer. TOH with 2-7/8" tubing and packer. Changed out BOP's, slips and elevators. TIH with 10K Uni VI packer and 3-1/2" N-80 tubing. Set packer at 8765'. Loaded annulus and tested packer to 1000 psi. Shut down. Prep to frac Bone Spring. DC \$5123

10-7-95 Rigged up to frac Bone Spring with Halliburton. Began frac. Pumping pressure higher than anticipated. Flushed and shut down.

10-8-95 Re-perforated zone. Acidized perms. Frac'd Bone Spring with 169,000 gals XL gel with 175000# 20/40 and 38000# Resin coated sand. Avg 35 BPM at 79 00#. ISIP 7100#, 15 mins 5932#. TLTR 4183 bbls. Shut in overnight.

10-9-95 POH and laid down 3-1/2. Prep to TIH to release bridge plugs.

10-10-95 TIH with 2-7/8" tubing. Tag sand at 9043'. Reverse 130' of sand out of hole to RBP at 9173'. TOH with 2-7/8" tubing. Turn well over to production to put well on pump. Should be pumping by 9 AM Tuesday. DC \$4541

10-11-95 Pumped 25 bbls oil, 487 bbls water and 40 MCF.

10-12-95 Pumped 51 bbls oil, 414 bbls water and 86 MCF.

10-13-95 Pumped 62 bbls oil, 222 bbls water and 51 MCF.

10-14-95 Pumped 28 bbls oil, 70 bbls water and 25 MCF.

10-15-95 Pumped 43 bbls oil, 183 bbls water and 38 MCF.

10-16-95 Pumped 57 bbls oil, 117 bbls water and 35 MCF.

10-17-95 Pumping.

10-19-95 Moved in service unit to pull bridge plug and ~~measure pressure on lower Bone Springs zone.~~

10-20-95 Moved in and rigged up pulling unit. TOH with rods and pump. Nippled down wellhead and installed BOP. Unset anchor and TOH with production string. Shut down. Prep to TIH to retrieve RBPs. DC \$3269

10-21-23-95 TIH with overshot, jars, drill collars and 2-7/8" tubing. Circulated on top of RBP at 9173'. Latched onto RBP at 9173'. Try to unset RBP, but could not get any movement thru mandrel. Jar on RBP for 1 hour. Sheared off of retrieving head. RBP feels like it may have something metal down beside mandrel. TOH with 2-7/8" tubing, drill collars, jars and overshot. Prep to TIH with short catch overshot. DC \$6085; CC \$9354

10-24-95 No report.

10-25-95 No report.

10-26-95 No report.

10-27-95 Pulling BHP bomb.

10-28-30-95 Pulled 72 hour bomb at 2:00 PM. Results to follow. Waiting on orders. DC \$1236

10-31-95 Rigged up BJ. Acidized perms 9556-9657' with 2500 gals 7-1/2% NEFE acid and 100 balls. Avg 4-1/2 BPM @ 4500 psi. Good ball action. ISDP 2000 psi 15 mins 1000 psi. Total load to recover 123 bbls. Bled well down and rigged up swab. Swabbed as follows:

TIME	FL	#SR	WATER
2 PM	4500'	4	25
3 PM	6500'	3	16
4 PM	7500'	2	5 part sand line, repair
5 PM	--		
6 PM			
7 PM	6000'		
8 PM	8000'	3	16
9 PM	8500'	2	6 part sand line, repair
10 PM	--		
11 PM	--		
12 AM	8500'		
1 AM	SN	2	5
2 AM	SN	2	2
3 AM	SN	1	2
4 AM	SN	1	1
5 AM	SN	1	1
6 AM	SN	1	1 no show

Total recovered 80 bbls water. Load left 43 bbls. Prep to move uphole. DC \$9064

DRILLING REPORT - RE-ENTRY

Page 4

Yates Petroleum - Hunt "APO" State #1 (Unit L) 4-21S-34E Lea Co., NM

11-1-95 Unset packer. TOH with 2-7/8" tubing and packer. Prep to perforate and acidize Bone Springs 2. DC \$2197
WATER ANALYSIS: 4:00 AM 10-31-95

Sp. Gravity	1.075 @ 70	Resistivity	0.075 @ 75
pH	1.54	Iron	3000
Sulfate	39	Calcium	8008
Tot Hardness	76,790	Magnesium	13,789
Bicarbonate	ND	Chloride	186,005
CALC	305,978	Sod & Pot	85,363
Tot Diss Sol	348,197	Iodine	absent
Pot Chl	absent		

11-2-95 Rigged up wireline. TIH with 4" casing guns. Correlated guns into place and perforated Bone Springs (1 SPF) with 20 - .42" holes as follows: 9100', 20', 33', 46', 48', 52', 70', 75', 80', 84', 88', 91', 9372', 78', 80', 88', 94', 96', 9401', 06'. TOH with casing guns and rigged down wireline. TIH with RBP, packer and 2-7/8" tubing. Set RBP at 9450' and tested to 4000 psi. Pulled up and set packer at 9263'. Acidized perfs 9372-9406' with 2000 gals 7-1/2% NEFE acid and 10 balls. Breakdown 3400 psi. Avg 5 BPM @ 3000 psi. Balled out. ISDP 1700 psi, 15 mins 1250 psi. Total load to recover 121 bbls. Rigged up swab. Swabbed as follows:

TIME	FL	BBLS	
6:00	surface		700 SI
7:00	5500'	24	
8:00	6800'	10	
9:00	8000'	10	
10:00	8000'	6	
11:00	9000'	2	
12:00	9000'	2	
1:00	9100'	1	
2:00	9100'	1	
3:00	9100'	1	
4:00	9100'	1	- tr of gas on swb
5:00	9100'	1	- blk water
6:00	9100'	1	- no oil show

Load left 50%. Plan to swab today. DC \$10,009

11-3-95 First pull at 7 AM - very slight trace oil. Plan to swab today. Load left to recover 59 bbls.

11-4-6-95 Prep to move to next zone - BS/4.

WATER ANALYSIS: 10-3-95

Spec Gravity	1.023 @ 72	Resistivity	.095 @ 75
pH	7.02	Iron	350
Calcium	252	Sulfate	1886
Magnesium	305	Bicarbonate	877
Chloride	21,501	Sod Chloride	35,368
Sod & Pot	22,750	Tot Diss Sol	47,015
Pot Chloride	1.9% by titratio		

11-7-95 SITP 250#. Bled well down. Rig up swab. Initial fluid level at seating nipple. Scattered to seating nipple. Rec 0 bbls water. Rig down swab. Had bad tubing with 2% KCL water. Unset tools. Pulled up and straddle perfs 9100-91'. NOTE: Tested RBP to 3100#. Acidized perfs 9100-91' with 2500 gals 7-1/2% NEFE acid and 18 balls. Breakdown 4200 psi. Avg 5 BPM at 3400#. Balled out. ISDP 1850#, 15 mins 1730#. TLTR 119 bbls. Bled well down and rig up swab. Swabbed as follows:

TIME	FL	#SR	BW	
1 PM	4000'	4	20	
2 PM	5500'		10	
3 PM	6500'		10	
4 PM	7500'		6	
5 PM	8500'		4	
6 PM	9000'		2	
7 PM	SN	2	1	
8 PM	SN	2	1	
9 PM	SN		1	
10 PM	SN	2	0	Dry
11 PM	--	--	--	
12 AM	SN	2	1/2	

DRILLING REPORT - RE-ENTRY

Page 5

Yates Petroleum - Hunt "APO" State #1 (Unit L) 4-21S-34E Lea Co., NM

1 AM	SN	2	0	Dry
2 AM	--	--	--	
3 AM	SN	2	1/2	
4 AM	--	--	--	
5 AM	SN	2	0	

Total recovered 56 bbls water. Load left 63 bbls water.
Continued swabbing today. DC \$7854

11-8-95

Continued swabbing as follows:

TIME	FL	#	SR	BO	BW
7 AM	SN	2	--	1/2	
9 AM	SN	2	--	1	
11 AM	SN	2	--	1	
1 PM	SN	2		Trace	1
3 PM	SN	2		Trace	1

Total recovered 60-1/2 bbls water. Load left 58-1/2 bbls water. Shut down. Rig waiting on orders. Prep to perforate Delaware on Wednesday. DC \$1670

11-9-95

Unset packer and RBP and set RBP at 8654' and tested to 3000 psi. TOH with 2-7/8" tubing and packer. TIH with 4" casing gun. Perforated Delaware 1 & 2, 1 SPF with 20 - .42" holes as follows: 8536', 37', 38', 39', 42', 44', 46', 50', 52', 54', 8329', 30', 31', 46', 48', 49', 52', 54', 56', 58'. TOH with casing guns. TIH with packer and 2-7/8" tubing. Set packer at 8486' and acidized D-1 with 1000 gals 7-1/2% NEFE acid and 15 balls. Breakdown 3200 psi, 15 mins 2070 psi. TLTR 85 bbls. Bled well down and rigged up swab. Swabbed as follows:

TIME	FL	#	SR	BO	BW
4 PM	4000'				20
5 PM	5500'				10
6 PM	6500'				8
7 PM	7500'				6
8 PM	SN				2
9 PM	Dry	2			0
10 PM	--			--	
11 PM	SN	2			1
12 AM	--			--	
1 AM	SN	2			1/2
2 AM	--			--	
3 AM	SN	2			1/2
4 AM	--			--	
5 AM	SN	2			1/2
6 AM	--			--	

Total recovered 48-1/2 bbls water. Load left 36-1/2 bbls water. Continued swabbing. Prep to move to Delaware zone #2. DC \$7387

11-10-95

Unset tools. Pulled up and straddled D-2 perfs 8329-58'. Tested RBP to 3100#. Acidized D-2 perfs with 1000 gals 7-1/2% NEFE acid + 15 balls. Breakdown 2968 psi. Avg 5.2 BPM at 4300#. Balled out. ISDP 1898#, 15 mins 1840#. TLTR 76 bbls. Bled well down and rigged up swab. Swabbed as follows:

TIME	FL	#	SR	BO	BW
1 PM	3000'	4		--	20
2 PM	5800'	3		--	18
3 PM	7800'	2		--	14
4 PM	SN	2		--	8
5 PM	SN	2		--	3
6 PM	SN	2		--	1/2
7 PM	SN	1		--	1/2
8 PM	SN	1		--	1/2
9 PM	--	--		--	--
10 PM	SN	1		--	1/2
11 PM	--	--		--	--
12 AM	SN	1		--	1/2
1 AM	--	--		--	--
2 AM	SN	1		--	1/2
3 AM	--	--		--	--
4 AM	SN	1		20%	1/2
5 AM	--	--		--	--

DRILLING REPORT - RE-ENTRY

Page 6

Yates Petroleum - Hunt "APO" State #1 (Unit L) 4-21S-34E Lea Co., NM

6 AM SN 1 20% 1/2
Total recovered 67 bbls water. Load left 9 bbls water.
Continued swabbing. DC \$6046

11-11-95 Continued swabbing till 5:00 PM. Swabbed as follows:

TIME	FL	#	SR	BO	BW
6 AM	SN	2		20%	1/2
8 AM	SN	2		50%	1/2
10 AM	SN	2		50%	1/2
12 PM	SN	2		42 g	9 g
2 PM	SN	2		--	-- Dry
3 PM	SN	2		--	-- Dry
5 PM	SN	2		34 g	0 g

Total recovered for well 68.1 BW and 2.4 BO. Shut well in.
Prep to swab. Load left 7.9 BW. DC \$1904

11-12-13-95 SITP 50#. Swabbed as follows:

TIME	FL	#	SR	BO	BW
7 AM	SN	2		59 g	0 SITP 50#
9 AM	SN	2		33 g	10 g
11 AM	SN	2		18 g	4 g
1 PM	SN	2		--	-- Dry
2 PM	SN	2		--	-- Dry

Total recovered for day 14 gals water and 110 gals oil.
Total recovered for well 68.4 BW and 5 BO. Load left 7.6 BW.
Shut in. Prep to swab. Plan to frac. DC \$2128
This AM - 7:00 - SITP 150#. Initial FL 7500'. Recovered 3
BO and 2 BW. Swab dry.

11-14-95 Prep to frac D-2 today. DC \$1599

11-15-95 TIH with RBP, packer and 3-1/2" tubing. Set RBP at 8486' and
tested to 3600#. Pulled up and set packer at 6266'. Frac'd
D-2 perfs 8329-58' with 32,000 gals 35# crosslink gel and
100,000# 20/40 Ottawa sand. Avg 30 BPM at 5800#. Min 5600#,
Max 7300#. ISDP 3300#. TLTR 895 bbls. Force close well and
shut well in for 7 hours. Opened well at 8 PM with 2750 psi
and started bleeding well down to pit. At 6 AM 11-15-95,
well flowing back frac fluid at 120# on 1/2" choke.
Continued flowing well down. DC \$28,089 Plan to clean up
and move to D-3.

11-16-95 Bled well down. Unset packer. Reverse hole with 2% KCL
water. TOH with tubing and packer. TIH with retrieving head
and tubing. Reverse sand off of RBP. Unset RBP. Pulled up
and reset RBP at 8141'. Tested RBP to 3400 psi. Prep to
perforate and acidize D-3.

11-17-95 TIH with 4" casing guns. Correlated guns into place and
perforated D-3 with 2 SPF, 20 - .42" holes as follows:
7916', 17', 18', 32', 33', 34', 38', 39', 43', 44'. TIH with
packer and tubing. Set packer at 7819'. Acidized perfs
7916-44' with 1000 gals 7-1/2% NEFE acid + 20 balls.
Breakdown 3240 psi. Avg 5-1/2 BPM at 3200 psi. ISDP 1500#,
15 mins 1400#. TLTR 77 bbls. Bled well down and rigged up
swab. Swabbed as follows:

TIME	FL	#	SR	BO	BW
2 PM	3500'	4			24
3 PM	5000'	3			16
4 PM	6500'	2			12
5 PM	SN	2			8
6 PM	SN	2			2
7 PM	SN	2			2
8 PM	SN	2			2
9 PM	SN	2			1-1/2
10 PM	SN	2		1%	1-1/2
11 PM	--	--		--	--
12 AM	SN	--		30%	2
1 AM	--	--		--	--
2 AM	SN	2		30%	1-1/2
3 AM	--	--		--	--
4 AM	SN	2		30%	2
5 AM	--	--		--	--
6 AM	SN	2		30%	2

11-18-95 Frac'd D-3 perfs 7916-7944' with 21,000 gals 35# x-link gel
and 67,000# 20/40 Ottawa sand. Avg 21 BPM @ 3800 psi. ISDP

DRILLING REPORT - RE-ENTRY

Page 7

Yates Petroleum - Hunt "APO" State #1 (Unit L) 4-21S-34E Lea Co., NM

1540 psi. Total load to recover 598 bbls. Force closed well for 30 mins. Shut well in for 7 hours. Opened well at 10:00 PM on 1/8" choke and started flowing well down to pit. At 6:00 AM 11-17-95 well flowing at 80 psi on 1/2" choke.

Continued flowing well. DC \$26,013

11-19-20-95 Continued flowing well. Unset packer. TOH with 2-7/8" tubing and packer. TIH with 2-7/8" tubing. Reverse 121' of sand off of RBP at 8116'. Unset RBP. Dropped down and reset RBP at 8701' (above Bone Springs) and tested to 1000 psi. TOH with 2-7/8" tubing. Turned well to production to hang well on pump. Well pumping Sunday afternoon. DC \$4173

11-21-95 Pumped 20 bbls oil and 400 bbls water.

11-22-95 Pumped 22 bbls oil, 403 bbls water and 0 MCF.

11-23-95 Pumped 33 bbls oil, 456 bbls water and 57 MCF.

11-24-95 Pumped 67 bbls oil, 395 bbls water and 69 MCF.

11-25-95 No report.

11-26-95 Pumped 70 bbls oil, 285 bbls water and 65 MCF.

11-27-95 Pumped 70 bbls oil, 285 bbls water and 65 MCF.

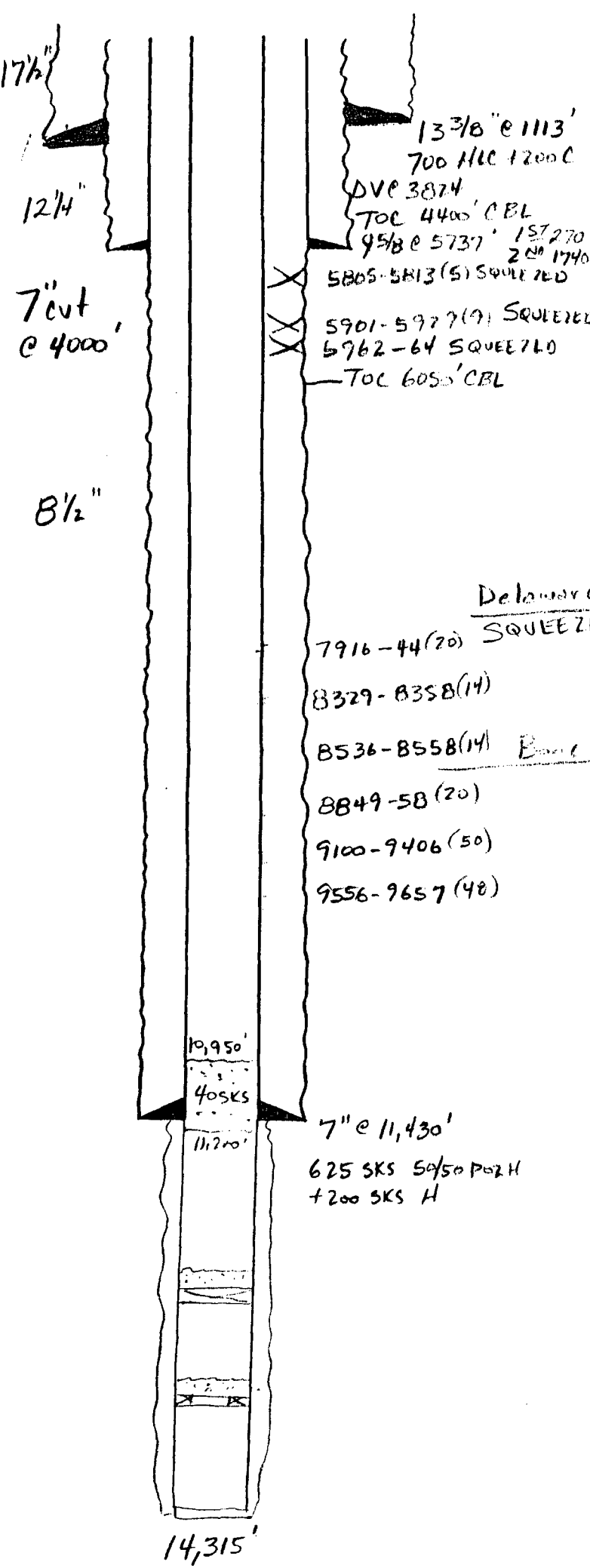
11-28-95 Pumped 79 bbls oil, 276 bbls water and 66 MCF.

11-30-95 TD 14,315'; PBTD 8701'. On a 24 hour Official Potential test taken 11-28-95, well pumped 79 BOPD, 50 MCFGPD and 276 BLW at a GOR of 633:1, thru perfs 7916-8554' Delaware. Well is Producing. FINAL REPORT.

WELL NAME: HUNT APO ST #1 FIELD AREA: N GRAMA RIDGE
 LOCATION: 2,310' FSL, 660 FWL UNIT L SEC 4 T21S R34E
 GL: 3730' ZERO: 16' AGL: _____
 KB: 3746' ORIG. DRILG./COMPL. DATE: _____
 COMMENTS: _____

CASING PROGRAM:

SIZE/WT./GR./CONN.	DEPTH SET
13 3/8" 54.5# K-55 STC	1113'
9 5/8" 36.40, 43.5#	5737'
7" 23#	11,430'
5" 18.70" LINER 11154-14315	
2 7/8" 16#	



9/81 BS 9556-98 (22)
 9603-07 (3)
 9612-26 (8)
 ACID - 3500 g 15% HCL
 9650-57 (15)
 ACID - 1000 g 15% HCL
 4/90: DELAWARE
 5901, 05, 10, 13, 17, 22, 24, 26, 5927'
 5805, 07, 09, 11, 5813, ACID - 2500 g
 9/95 BS -
 8849-58 ACID - 1000 g 7 1/2%
 257,000 # 20/40
 9100-9406 4500 g ACID 7 1/2%
 9556-9657 2500 g ACID 7 1/2%
 DELAWARE -
 8536-8558 1000 g 7 1/2% HCL
 8329-8358 1000 g 7 1/2%
 100,000 # 20/40 SAND
 7916-44 1000 g 7 1/2% 67,000 # 20/40

LAST UPDATE 2/29/96 PROPERTY 032840-001 HUNT APO STATE #1 YFC AFE# 952910 OWNER 999900 YATES PETROLEUM CORPORATION
 AFE TYPE 13 RE-ENTER P&A WELL OWNER INTEREST ***OWNER INTEREST NOT FOUND**

AFE BEGINNING DATE 9/13/95 ACTUAL DRILLING TYPE 1 HORIZON 57 NONE SPRING TO 14315
 AFE ENDING DATE 1/31/96 TYPE OF WELL 0 OIL FIELD
 SPUD DATE 9/25/95 ACTUAL LOCATION 21S 34E 004 CONTRACTOR
 COMPLETION DATE 11/28/95 ACTUAL COUNTY LEA LEA OPERATOR 999900 YATES PETROLEUM CORPORATION
 RIG RELEASE DATE 10/10/95 STATE NM NEW MEXICO

GEN SUB	DESCRIPTION	DRY BUDGET	BUDGET	ACTUAL COST FISCAL	ACTUAL COST CUMULATIVE	UNDER OR <OVER> AFE
WELL WORKOVER COSTS						
510-100	RIG EXPENSE	0	0	15,971.64	15,971.64	15,971.64-
510-250	CEMENTING	0	0	5,489.25	5,489.25	5,489.25-
510-300	ELECTRIC LOGGING & WIRELINE	0	0	2,493.60	2,493.60	2,493.60-
510-350	TOOL & EQUIPMENT RENTAL	0	0	3,028.34	3,028.34	3,028.34-
510-500	SUPERVISION & ADMINISTRATIVE	0	0	3,356.44	3,356.44	3,356.44-
510-600	TOOLS & SERVICES	0	0	961.95	961.95	961.95-
510-700	TUBING WORK STRING USAGE COS	0	0	2,792.61	2,792.61	2,792.61-
510-900	OTHER WELL WORKOVER COSTS	0	0	246.89	246.89	246.89-
	WELL WORKOVER COSTS	0	0	34,340.72	34,340.72	34,340.72- *

INTANGIBLE DRILLING COSTS						
920-100	STAKING, PERMIT & LEGAL FEES	5,000	5,000	3,628.39	3,628.39	1,371.61
920-110	LOCATION, RIGHT-OF-WAY	10,000	10,000	4,937.49	4,937.49	5,062.51
920-140	DRILLING WATER, FASLINE RENT	15,000	15,000	1,898.71	1,898.71	13,101.29
920-200	TOOL & EQ RNTL, TRUCKING & WL	5,000	5,000	2,233.39	2,233.39	2,766.61
920-210	SUPERVISION & OVERHEAD	3,000	3,000	11,371.37	11,371.37	8,371.37-
920-240	BITS, TOOL & SUPPLIES PURCHA	5,000	5,000	183.75	183.75	4,816.25
920-410	COMPLETION UNIT - SWABRING	40,000	35,000	87,128.65	87,128.65	52,128.65-
920-420	WATER FOR COMPLETION	10,000	10,000	53,192.63	53,192.63	43,192.63-
920-430	MUD & ADDITIVES FOR COMPLETI	5,000	0	162.64	162.64	162.64-
920-440	CEMENTING - COMPLETION	15,000	10,000	.00	.00	10,000.00
920-450	ELEC. LOGS, TESTING, ETC. - COMP	15,000	15,000	13,193.09	13,193.09	1,806.91
920-460	TOOL&EQUIP, RENTAL, ETC. - COMPL	35,000	35,000	86,512.33	86,512.33	51,512.33-
920-470	STIMULATION FOR COMPLETION	250,000	250,000	166,436.59	166,436.59	83,563.41
920-480	SUPERVISION & O/H - COMPLETI	6,000	6,000	.00	.00	6,000.00
920-490	ADDITIONAL LDC CHARGES-COMPL	3,500	1,500	3,522.50	3,522.50	2,022.50-
920-510	BITS, TOOLS & SUPP. - COMPLETI	0	0	4,061.26	4,061.26	4,061.26-

AFER35 GROSS AFE REPORT

ACTUAL COSTS THROUGH 02/96
COMPANY 003 YATES PETROLEUM CORPORATION

PAGE 11:05:52 4/05/96

LAST UPDATE 2/29/96 PROPERTY 032840-001 HUNT AFD STATE #1 YPC AFE# 952910 OWNER 999900 YATES PETROLEUM CORPORATION
*** CONT. *** AFE TYPE 13 RE-ENTER P&A WELL OWNER INTEREST ***OWNER INTEREST NOT FOUND**

GEN SUB	DESCRIPTION	DRY BUDGET	BUDGET	ACTUAL COST FISCAL	ACTUAL COST CUMULATIVE	UNDER OR <OVER> AFE
INTANGIBLE DRILLING COSTS						
	INTANGIBLE DRILLING COSTS	422,500	405,500	438,462.79	438,462.79	32,962.79- *
TANGIBLE WELL EQUIPMENT						
930-010	CHRISTMAS TREE & WELLHEAD	7,500	20,000	6,667.96	6,667.96	13,332.04
930-020	CASING	16,500	32,500	60.50	60.50	32,439.50
930-030	TUBING	18,500	37,000	33,714.76	33,714.76	3,285.24
930-040	PACKER & SPECIAL EQUIPMENT	0	7,500	.00	.00	7,500.00
	TANGIBLE WELL EQUIPMENT	42,500	97,000	40,443.22	40,443.22	56,556.78 *
GEN LEASE & BATTERY EQUIPMENT						
920-130	DRILLING, DAYWORK	35,000	35,000	.00	.00	35,000.00
920-150	DRILLING MUD & ADDITIVES	10,000	10,000	.00	.00	10,000.00
940-010	PUMPING EQUIPMENT	0	75,000	88,692.82	88,692.82	13,692.82-
940-020	STORAGE FACILITIES	0	25,000	14,910.74	14,910.74	10,089.26
940-030	SEPARATION EQ, FLOWLNS, MISC	0	25,000	38,836.71	38,836.71	13,836.71-
940-040	TRUCKING & CONSTRUCTION COST	0	25,000	32,867.10	32,867.10	7,867.10-
	GEN LEASE & BATTERY EQUIPMENT	45,000	195,000	175,307.37	175,307.37	19,692.63 *
TOTALS FOR AFE		510,000	697,500	688,554.10	688,554.10	8,945.90 **

PROPERTY: 032840-001 HUNT APO STATE #1 S1
Production Dates: 00/00 - 04/96

Mo/Yr	Prod Days	Oil		Gas		Water		Field-Sub	Pool
		Produced	Sold	Produced	Sold	Produced			
02/96	27	792	887	1777	1777	2704		400 GRAMA RIDGE	57 BONE SPRING
01/96	24	179	0	217	217	4790		400 GRAMA RIDGE	57 BONE SPRING
12/95	30	743	864	537	537	8106		400 GRAMA RIDGE	57 BONE SPRING
11/95	12	679	647	528	0	3981		400 GRAMA RIDGE	57 BONE SPRING
10/95	9	319	181	0	0	1201		400 GRAMA RIDGE	57 BONE SPRING
TOTALS:		102	2712	2579	3059	2531	20762		

WELL: 032840-001 S1 OIL HUNT APO STATE #1 YPC 133.21
FIELD: 400 GRAMA RIDGE CLOSING STOCK: 148.90
LOCATION: PUMPER

DAY	TP	CP	CHOKE	METER	ORF	STATIC	DIFF	WATER	GIL	GAS	WATER FILLED	OIL SOLD	REMARKS
01	0/	0	00/00	2.000	1.250	53.0		72.00	27.00	86			
02	0/	0	00/00	2.000	1.250	54.0		69.00	25.00	88			
03	0/	0	00/00	2.000	1.250	54.0		66.00	26.00	87			
04	0/	0	00/00	2.000	.625	52.0		63.00	18.00	85		179.40	
05	0/	0	00/00	2.000	1.250	51.0		64.00	19.00	83			
06	0/	0	00/00	2.000	.625	49.0		36.00	9.36	77			
07	0/	0	00/00	2.000	.625	47.0		72.00	11.00	59			
08	0/	0	00/00	2.000	1.250	51.0		83.00	17.00	71			
09	0/	0	00/00	2.000	.625	50.0		59.00	19.00	68			
10	0/	0	00/00	2.000	.625	50.0		55.00	18.00	66			
11	0/	0	00/00	2.000	.625	52.0		75.00	26.00	78			
12	0/	0	00/00	2.000	.625	51.0		64.00	26.00	79			
13	0/	0	00/00	2.000	.625	53.0		64.00	26.00	76			
14	0/	0	00/00	2.000	.625	49.0		66.00	19.00	71			
15	0/	0	00/00	2.000	.625	52.0		58.00	22.00	68		184.29	
16	0/	0	00/00	2.000	.625	52.0		61.00	20.00	67			
17	0/	0	00/00	2.000	.625	51.0		63.00	34.00	67			
18	0/	0	00/00	2.000	.625	50.0		53.00	20.00	64			
19	0/	0	00/00	2.000	.625	52.0		55.00	19.00	63			
20	0/	0	00/00	2.000	.625			78.00	19.00	62			
21	0/	0	00/00	2.000	.625	51.0		55.00	20.00	63			
22	0/	0	00/00	2.625		50.0		39.00	13.00	60			
23	0/	0	00/00	2.000	.625	52.0		42.00	13.00	46		179.89	
24	0/	0	00/00	2.000	.625	52.0		89.00	13.00	57			
25	0/	0	00/00	2.000	.625	50.0		50.00	19.00	56			
26	0/	0	00/00	2.000	.625	47.0		50.00	15.00	52			
27	0/	0	00/00	2.000	.625	47.0		40.00	15.00	51			
28	0/	0	00/00	2.000	.625	51.0		50.00	15.00	50			
29	0/	0	00/00	2.000	.625	48.0		53.00	13.00	47			
30	0/	0	00/00	2.000	.625	48.0		53.00	9.36	44			
31	0/	0	00/00	2.000	.625	48.0		11.00	3.51	37			



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

5/31/96

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 ☒ _____
NSL _____
NSP _____
SWD _____
WFX _____
PMX _____

Gentlemen:

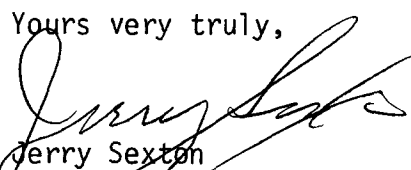
I have examined the application for the:

Yates Petroleum Corp Hunt APD State #1-T 4-21-34
Operator Lease & Well No. Unit S-T-R

and my recommendations are as follows:

OK

Yours very truly,


Jerry Sexton
Supervisor, District 1

/ed