OHC 12.11.95

178

OIL CONSERVATION DIVISION
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95 NO 20 AM 8:58

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

YATES PETROLEUM CORPORATION

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

O.K. o
HEARING TO
BRIAN Collins
ON 12.20.95

November 16, 1995

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

Dear Mr. Catanach,

Enclosed are the necessary documents for obtaining approval for the downhole commingling of the Hanagan APL Federal #1 located in G of Section 31, Township 19 South, Range 30 East, Eddy County.

Should you have any questions, feel free to contact me at (505) 748-4182. Thank you.

Sincerely,

Brian Collins
Engineer

BC/th

Enclosures

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TREASURER

November 16, 1995

Tim Gum
State of New Mexico
OIL CONSERVATION DIVISION
Drawer DD
Artesia, NM 88210

Dear Mr. Gum,

Enclosed are the necessary documents for obtaining approval for the downhole commingling of the Hanagan APL Federal #1 located in G of Section 31, Township 19 South, Range 30 East, Eddy County.

Should you have any questions, feel free to contact me at (505) 748-4182. Thank you.

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November 16, 1995

Richard Manus
Bureau of Land Management
P. O. Box 1778
Carlsbad, NM 88220

Dear Mr. Manus,

Enclosed for your information is the data necessary to obtain approval for the downhole commingling of the following well:

Hanagan APL Federal #1
Unit G Sec. 31-T19S-R30E
Eddy County, New Mexico
Operator: Yates Petroleum Corporation

This application has been submitted to the NMOCD in Santa Fe and Artesia. If you have any questions, please contact me at 505-748-4182. Thank you.

Sincerely,

Brian Collins
Engineer

BC/th

Enclosures

Application for Downhole Commingling
Hanagan APL Federal #1
Unit G Sec. 31-T19S-R30E
Eddy County, New Mexico

Reason for Application: Yates Petroleum Corporation respectfully requests approval to commingle the Atoka and Morrow formations. Our intention is to maximize gas recovery from the Atoka and Morrow and prevent mineral resource waste. The Atoka zones in this area historically are limited in size and deplete rapidly and the Morrow zone in this well appears to be marginally economic. Additional oil and gas will be produced by commingling the two zones because the economic limit, per zone, will be lower with both zones producing together.

1. Name and Address of the Operator:

   Yates Petroleum Corporation
   105 South Fourth Street
   Artesia, NM 88210
   ATTN: Brian Collins

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

   Hanagan APL Federal #1
   Unit G Sec. 31-T19S-R30E
   1980'FNL & 1980'FEL
   Pools: Undesignated Atoka
   Undesignated Morrow

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.

   See Attachment B (Atoka DST report and chronological of Morrow test).
   Morrow capable of approximately 300 MCFD. Best engineering estimate is
   100 MCFD against line pressure.
   Morrow perf interval 11,491-11,878'.
   Atoka capable of approximately 11,000 MCFD/neglible condensate from DST.
   Approximate Atoka perf interval 11,086-11,173'.

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. (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 description of treating, testing, etc., of each zone, and a prognostication of future production from each zone shall be submitted.)

   See Attachment B.

Morrow : Assume 30%/yr. exponential decline behavior (best engineering estimate).

Q_i = 100 MCFD
Q_{aban} = 5 MCFD
d = 30%/yr.

$$N_{gas} = 365 \frac{(5-100)}{\ln(1-.3)} = 97{,}217 \text{ MCF Morrow gas reserves.}$$

Condensate = 0

Atoka: Assume 99%/yr. exponential decline behavior (best engineering estimate), dry gas with 1 BBL/MMCF condensate per sample chamber.

Q_i = 11,000 MCFD
Q_{aban} = 30 MCFD
d = 99%/yr.

$$N_{gas} = 365 \frac{(30 - 11{,}000)}{\ln(1 - .99)} = 869{,}468 \text{ MCF Atoka gas reserves.}$$

Condensate = (1 BPM) (869 MMCF) = 869 BC Atoka oil reserves.

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.

   See Attachment B

   A reasonable estimate of the Morrow BHP is 4674 psi @ 11,685' assuming a normal pressure gradient of 0.40 psi/ft. A reasonable estimate of the Atoka BHP is 5202 psi @ 11,058' taken from DST.

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

   Both Atoka and Morrow will produce sweet gas. Don't anticipate any compatibility 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 Atoka and Morrow will produce sweet gas. The value of the gas will not be affected by commingling.

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.

   Gas: $\text{Atoka} = \frac{869{,}468 \text{ MCF}}{869{,}468 + 97{,}217 \text{ MCF}} = .8994 = 90\%$

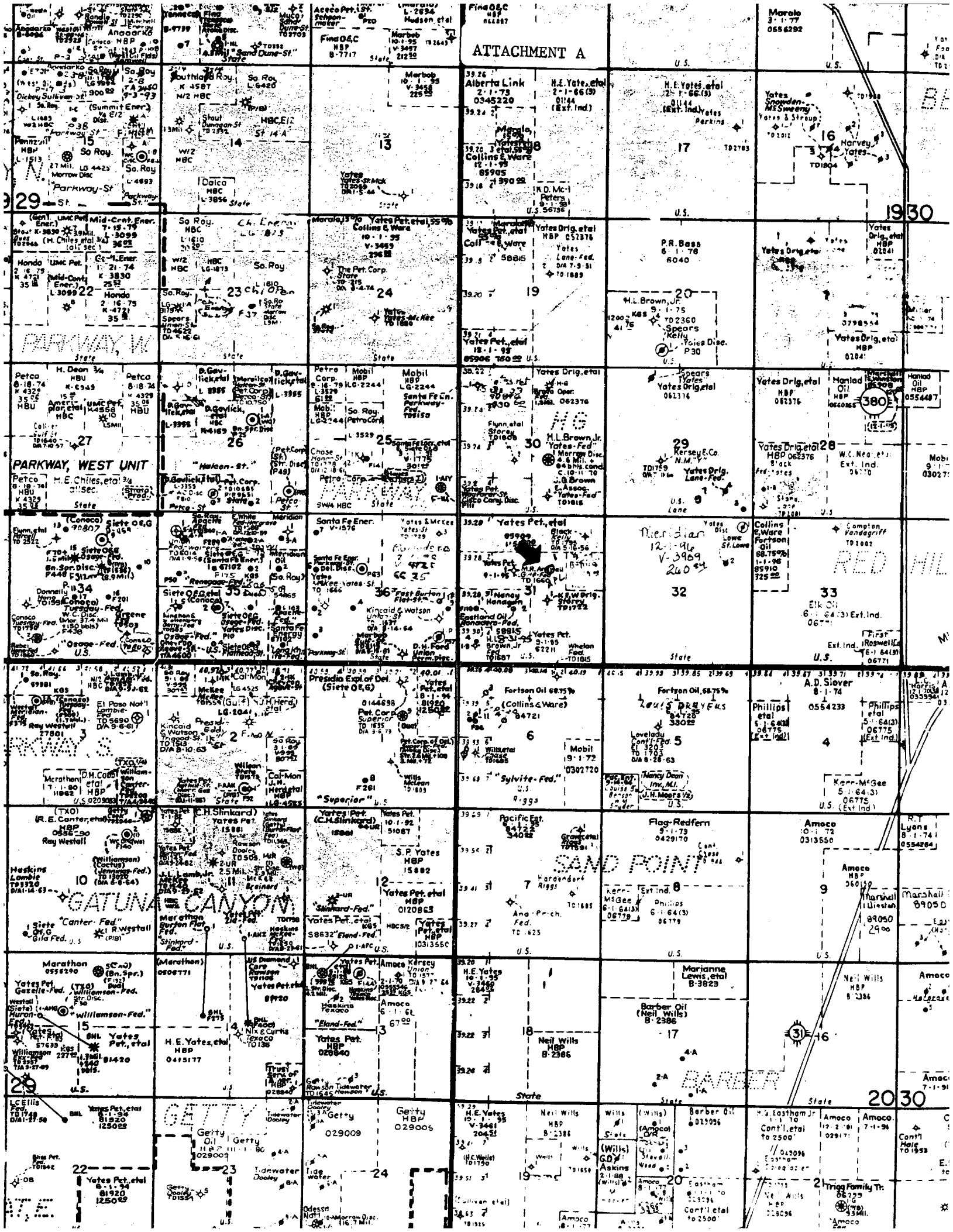
   Morrow = 10%

   Condensate: Atoka = 100%

   Morrow = 0%

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 and the BLM were notified of the proposed commingling of the Hanagan APL Federal #1.


ATTACHMENT A
PARKWAY, WEST UNIT
GATUNA CANYON
SAND POINT
RED HILL
BARBER
Parkway-St
Sand Dune-St
U.S.
State

Atoka

Attachment B

Schlumberger

FIELD REPORT

TYPE OF SERVICE	DATE	DISTRICT
OPEN HOLE DST	03-OCT-1995	HOBBS TEST

WELL OWNER: YATES PETROLEUM CORPORATION SERVICE ORDER NUMBER: 139286

REPORTS ADDRESS: 105 S. 4TH STREET / ARTESIA , NM 88210 ATTN:AL SPRINGER

WELL NAME & NO.: HANAGAN "APL" FED. COMM. #1 FIELD: WILDCAT LEASE:

LOCATION: S31-19S-30E COUNTY: EDDY STATE: NEW MEXICO

TEST NO. FIVE TEST INTERVAL FROM 11086 FT TO 11173 FT = 87 FT

SURFACE DATA

DESCRIPTION	DATE	TIME OF DAY	PRESSURE
SET PACKERS	03-OCT	09:23	
START FLOW ON 1/4" CHOKE		09:24	BB
GAS TO SURFACE STRONG BLOW		09:27	800
READING IN PSI		09:29	1450
		09:39	3200
		09:44	3600
		09:49	3650
REACHED HIGHEST PRESSURE		09:54	
ON 1/4" CHOKE			3700
OPENED ON 3/8" CHOKE		09:54	3400
		09:59	3250
		10:04	3200
PRESSURE STABLE ON 3/8"		10:09	3200
		10:14	3200
		10:19	3200
END FLOW & START SHUT-IN		10:24	3200
END SHUT-IN		12:58	
PULLED LOOSE		12:30	

EQUIPMENT SEQUENCE

COMPONENTS	OD	ID	LENGTH	DEPTH
DRILL PIPE	4.50	3.640	1801	
DRILL PIPE	4.50	3.826	6956	
DRILL PIPE	4.50	2.625	1536	
DRILL COLLARS	6.50	2.44	525.3	
PUMPOUT DISK REVERSING VALVE	6.00	2.25	1.23	
DRILL COLLARS	6.50	2.44	92.42	
BREAKOFF PIN REVERSING VALVE	6.00	2.25	1.00	
DRILL COLLARS	6.50	2.44	124.0	
CROSS OVER SUB	6.00	2.25	1.00	
RECORDER INSIDE ABV. TEST	5.75	1.12	5.90	11039
CROSS OVER SUB	6.00	2.25	1.00	
MFE (MFEV-B)	5.00	0.94	10.01	11045
MFE OH BYPASS (MBYP-B)	5.00	1.18	3.04	
RECORDER INSIDE ELECT.	4.75	1.12	5.90	11058
TH HYDRAULIC JAR (FJAR-B)	4.75	1.88	7.90	
SAFETY JOINT (SAJ-BA)	4.75	1.50	2.54	
BOB TAIL PACKER	7.00	1.50	6.20	11080
BOB TAIL PACKER	7.00	1.50	6.20	11086
PERFORATED ANCHOR	5.75	3.00	3.00	
CROSS OVER SUB	6.00	2.25	0.75	
DRILL COLLARS	6.50	2.44	60.86	
CROSS OVER SUB	6.00	2.25	0.75	
PERFORATED ANCHOR	5.75	3.00	15.0	
RECORDER OUTSIDE MECH.	5.75	1.12	6.00	11167

RECOVERY DESCRIPTION	FEET	BBLS	OIL GRAVITY	RESISTIVITY	CHLORIDES

SERVICE ORDER NUMBER: 139286

SCHLUMBERGER ENGINEER/TECHNICIAN: MARK LUNA

Atoka

Schlumberger

FIELD REPORT

TYPE OF SERVICE	DATE	DISTRICT	Page
OPEN HOLE DST	03-OCT-1995	HOBBS TEST	2 of 2

INSTRUMENT DATA

INSTRUMENT NO.	SB-20394	J-2067	J-1233		
CAPACITY(PSIG)	10000	6400	4700		
DEPTH	11058	11167	11039		
INSIDE-OUTSIDE	IN	OUT	ABV		
CLOCK CAP	ELECTRONIC	48 HR.	48 HR.		
TEMPERATURE °F	177	180			
I. HYD. PSIG	5588	5684			
I. FLOW PSIG	2789-4866	3004-4584	no leaks		
I.S.I. PSIG	5201	5255			
2nd FLOW PSIG					
2nd S.I. PSIG					
F. FLOW PSIG					
F.S.I. PSIG					
F. HYD. PSIG	5590	5671			

MUD DATA

MUD TYPE	DRISPAC/XC	MUD WT	9.7 #/gal
VISCOSITY	33	WATER LOSS	9.5 CC
RESISTIVITY: OF MUD	0.071 @ 60 °F		
RESISTIVITY: OF FILTRATE	@ °F		
CHLORIDES	135000 PPM		
H2S DURING TEST	0.0 PPM		

WELL BORE DATA

FORMATION TESTED	ATOKA		
NET PRODUCTIVE INTERVAL	11 ft	EST. POROSITY	14 %
ELEVATION	3319 ft	DEPTH MEASURED FROM	GL
TOTAL MEASURED DEPTH	11173 ft		
O H SIZE	7.875 in		
CASING SIZE	8.625		
LINER SIZE			
PERF INTERVAL FROM	ft	TO	ft
SHOT DENSITY			

CUSHION	LENGTH	AMOUNT	SURFACE PRESS	BOTTOM CHOKE SIZE
NONE				0.94

SAMPLER DATA

RECOVERY			RESISTIVITY			CHLORIDES		
GAS	32.56	C.F.	RECOVERED WATER	@	deg F	PPM		
OIL	5	C.C.	RECOVERED MUD	@	deg F			
WATER		C.C.	REC.MUD FILTRATE	@	deg F	PPM		
MUD		C.C.	PIT MUD 0.071	@ 60	deg F			
GRAVITY	°API	°F	PIT MUD FILTRATE	@	deg F	PPM		
GOR 14269	C.F./BBL		SAMPLER PRESSURE 4867 psig					

REMARKS: THIS DST ON THE ATOKA FORMATION WAS A SUCCESSFUL TEST. INTERVAL TESTED MADE 11000 MCF PER DAY RATE. IF YOU HAVE ANY QUESTIONS CALL SCHLUMBERGER AT (505)393-4107. THANK YOU.

SERVICE ORDER NUMBER:	SCHLUMBERGER ENGINEER/TECHNICIAN
139286	MARK LUNA

Atoka

REPORT NO. 139286

PAGE NO. 1

TEST DATE: 03-OCT-1995

S T A R

Schlumberger Testing Data Report

Pressure Data Report

Schlumberger

COMPANY: YATES PETROLEUM CORPORATION

WELL: HANAGAN "APL" FED. COMM. #1

TEST IDENTIFICATION

Test Type	OPEN HOLE DST
Test No.	FIVE
Formation	ATOKA
Test Interval (ft)	11085 to 11173
Depth Reference	GL

WELL LOCATION

Field	WILDCAT
County	EDDY
State	NEW MEXICO
Sec/Twn/Rng	S31-19S-30E
Elevation (ft)	3319

HOLE CONDITIONS

Total Depth (MD/TVD) (ft)	11173
Hole Size (in)	7.875
Casing/Liner I.D. (in)	8.625
Perf'd Interval/Net Pay (ft)	/ 11
Shot Density/Diameter (in)	

MUD PROPERTIES

Mud Type	DRISPAC/XC
Mud Weight (lb/gal)	9.7
Mud Resistivity (ohm.m)	0.071 @ 60F
Filtrate Resistivity (ohm.m)	
Filtrate Chlorides (ppm)	135000

INITIAL TEST CONDITIONS

Initial Hydrostatic (psi)	5588.81
Gas Cushion Type	
Surface Pressure (psi)	
Liquid Cushion Type	
Cushion Length (ft)	

TEST STRING CONFIGURATION

Pipe Length (ft)/I.D. (in)	10293 / 2.625
Collar Length (ft)/I.D. (in)	803 / 2.44
Packer Depths (ft)	11080, 11086,
Bottomhole Choke Size (in)	0.94
Gauge Depth (ft)/Type	11058/SS-20394

NET PIPE RECOVERY

Volume	Fluid Type	Properties

NET SAMPLE CHAMBER RECOVERY

Volume	Fluid Type	Properties
32.56 cuft	Gas	
5 cc	Oil	

Pressure: 4867 GOR: 1034308 GLR: 1034308

INTERPRETATION RESULTS

Model of Behavior	
Fluid Type Used for Analysis	
Reservoir Pressure (psi)	
Transmissibility (md.ft/cp)	
Effective Permeability (md)	
Skin Factor/Damage Ratio	
Storativity Ratio, Omega	
Interporos.Flow Coef., Lambda	
Distance to an Anomaly (ft)	
Radius of Investigation (ft)	
Potentiometric Surface (ft)	

ROCK/FLUID/WELLBORE PROPERTIES

Oil Density (deg. API)	
Basic Solids (%)	
Gas Gravity	
GOR (scf/STB)	
Water Cut (%)	
Viscosity (cp)	
Total Compressibility (1/psi)	
Porosity (%)	14
Reservoir Temperature (F)	177
Form.Vol.Factor (bbl/STB)	

PRODUCTION RATE DURING TEST: Data Report

COMMENTS:

THIS DST ON THE ATOKA FORMATION WAS A SUCCESSFUL TEST. INTERVAL TESTED MADE 11000 MCF PER DAY RATE. IF YOU HAVE ANY QUESTIONS CALL SCHLUMBERGER AT (505) 393-4107. THANK YOU.

© 1990 SCHLUMBERGER

Atoka

WELL TEST INTERPRETATION REPORT #:139286 CLIENT : YATES PETROLEUM CORPORATION		PAGE: 2, 3-OCT-95
REGION :CSD DISTRICT:HOBBS TEST BASE :MIDLAND ENGINEER:MARK LUNA	SEQUENCE OF EVENTS	FIELD:WILDCAT ZONE :ATOKA WELL :H.APL F.C. #1 LOCATION:S31-19S-30E

DATE	TIME (HR:MIN)	DESCRIPTION	ET (MINS)	BHP (PSIA)	WHP (PSIG)
03-OCT	09:23	SET PACKERS	-1		
	09:24	START FLOW ON 1/4" CHOKE	0	2789	88
	09:27	GAS TO SURFACE STRONG BLOW	3		800
	09:29	READING IN PSI	5		1450
	09:39		15		3200
	09:44		20		3600
	09:49		25		3650
	09:54	REACHED HIGHEST PRESSURE ON 1/4" CHOKE	30		3700
	09:54	OPENED ON 3/8" CHOKE	30		3400
	09:59		35		3250
	10:04		40		3200
	10:09	PRESSURE STABLE ON 3/8"	45		3200
	10:14		50		3200
	10:19		55		3200
	10:24	END FLOW & START SHUT-IN	60	4505	3200
	12:58	END SHUT-IN	214	5202	
	12:30	PULLED LOOSE	186	5590	

Morrow

Attachment B

****

4 AM 2200' 3 17
5 AM 2200' 3 17
6 AM 2200' 3 18
Total recovered 0 bbls oil and 70 bbls water. DC $10,525

11-12-95 Continued to swab/flow as follows:

TIME	FL	# SR	BW	MCF	
7 AM	2000'	2	16	Slight	Started to make gas and unload fluid
8 AM	60# - 3/4"		12	Slight	Burn
9 AM	80# - 3/4"		10	Fair	Burn
10 AM	50# - 3/4"		5	Fair	Burn
11 AM	20# - 3/4"		2	Fair	Burn/Rig up swab. IFL 10000'
12 PM	10,000'	2	10	Fair	Burn
1 PM	200# - 1/4"			313	20-25' flare
2 PM	190# - 1/4"			298	20-25' flare
3 PM	190# - 1/4"			298	20-25' flare
4 PM	190# - 1/4"			298	20-25' flare
5 PM	190# - 1/4"			298	20-25' flare

Shut down. Daily recovery 0 BO + 55 BW. Total recovered 0 BO + 125 BW.

11-13-95 SITP 2500#. Bled down to 80# in 60 mins. Did not unload fluid. Installed 1/4" choke. had a strong mist. Opened up on a 3/4" choke. Bled down to 15 psi. IFL 10000'.
Continued to swab/flow as follows:

TIME	FL	# SR	BW	MCF	
8 AM	80# - 3/4"			Good	Install 1/4" choke
9 AM	130# - 1/4"			Str mist	Install 3/4" choke. Bled down. Rig up swab.
10 AM	10000'	2	10	Good	
11 AM	190# - 1/4"			298	20-25' flare
12 PM	190# - 1/4"			298	20-25' flare
1 PM	190# - 1/4"			298	20-25' flare
2 PM	190# - 1/4"			298	20-25' flare
3 PM	190# - 1/4"			298	20-25' flare
4 PM	190# - 1/4"			298	20-25' flare
5 PM	190# - 1/4"			298	20-25' flare

Morrow Test

Shut down. Daily recovery 0 BO + 10 BW. Total recovery 0 BO + 135 BW. Moving to Strawn. DC $2125

WATER ANALYSIS: 11-12-95 10 AM

Spec Gravity	1.025 @ 74	Resistivity	.095 @ 75
pH	6.55	Sulfate	976
Iron	400	Tot Hardness	9762
Calcium	1953	Bicarbonate	2678
Magnesium	1185	Sod Chloride	38,508
Chloride	23,409	Tot Diss Sol	53,262
Sod & Pot	16,437	Pot Chloride	1500
Iodine	Nil		

Morrow

	4 PM	40# - 1/4"	0	0	78	10' flare
	5 PM	40# - 1/4"	0	0	78	10' flare

Prep to frac with 30,000#. THIS AM - Overnight SITP 1800#. Bled to 0 in 30 mins. DC $5325

11-7-95 SITP 1800#. Bled down to 0 psi in 30 mins. Rig up 15K tree saver. Tested annulus. Annulus would not test. Rig down 15K test saver. Nippled down tree. Reset packer. Tested annulus. Annulus would not test. Nippled up BOP. Unset packer at 11,017'. TOH with 2-7/8" N-80 tubing and packer. Shut down. Prep to TIH with Uni VI 10K packer and hydrotest tubing in hole. Will frac on Tuesday at 3 PM. DC $2475

11-8-95 TIH with packer, Uni VI 10K with 1.81 profile nipple and on/off tool and 2-7/8" N-80 tubing (hydrotest tubing in hole - test tubing to 8000 psi, found 3 collar leaks). Set packer at 11,017'. Tested annulus to 4000 psi for 10 mins, OK. Nippled down BOP and installed tree. Swabbed tubing. FL down to 9500'. Recovered 55 bbls water. Rig down swab. Rig up 15K tree saver. Frac'd perfs 11,491-11,496' down 2-7/8" N-80 tubing with 30000 gals 30Q Medallion frac 4000 + 30,000# 20/40 Premium AC frac "PR" Black. Max 9765#, Avg 9325# at 16.1 BPM. ISDP 5577#, 5 mins 5010#, 10 mins 4853#, 15 mins 4843#. TLTR 618 bbls. Max sand conc 2.5 ppg. Rig down tree saver. Left well shut in for 6 hours. Flowed well back as follows:

TIME	PSI/CHOKE	BW	MCF	
12 AM	4000# - 8/64"	50	CO2	
1 AM	3200# - 8/64"	50	CO2	little sand
2 AM	1900# - 12/64"	50	CO2	little sand
3 AM	1400# - 12/64"	40	CO2	no sand
4 AM	1000# - 12/64"	30	CO2	no sand
5 AM	600# - 16/64"	20	CO2	no sand
6 AM	500# - 16/64"	20	CO2	no sand

Total recovered 0 BO + 260 BW. Load left 358 bbls. DC $52,225

11-9-95 Continued to flow well as follows:

TIME	PSI/CHOKE	BW	MCF	
7 AM	490# - 24/64"	10	CO2	too wet to burn/no sand
8 AM	380# - 24/64"	10	CO2	too wet to burn/no sand
9 AM	100# - 1/2"	15	CO2	too wet to burn/no sand
10 AM	35# - 3/4"	10	CO2	too wet to burn/no sand
11 AM	20# - 3/4"	15	CO2	too wet to burn/no sand
12 PM	20# - 3/4"	10	CO2	too wet to burn/no sand

Daily recovery 0 BO + 70 BW. Total recovery 0 BO + 330 BW. Load left 288 bbls. Nippled down tree and nippled up BOP. Unset packer at 11,017'. TOH with 2-7/8" N-80 tubing and Uni VI 10K packer. Started TIH with retrieving tool and 2-7/8" N-80 tubing. Shut down. Prep to finish TIH and retrieve Uni VI RBP at 11,621'. DC $3175

11-10-95 Continued to TIH with retrieving tool and 2-7/8" N-80 tubing to 11,560'. Tag sand at 11,560'. Rig up and wash sand from 11,560-11,621'. Unset RBP at 11,621'. TOH with 2-7/8" N-80 tubing and RBP. TIH with on/off tool and 2-7/8" N-80 tubing to 11,686'. Latch on to packer at 11,686'. Unset packer 11,686'. TOH with 2-7/8" N-80 tubing and packer. TIH with retrieving tool and 2-7/8" N-80 tubing. Shut down. Prep to continue TOH with retrieving tool and 2-7/8" N-80 tubing to pull RBP; then run packer and swab in Morrow. DC $3025

11-11-95 Continued TIH with retrieving tool and 2-7/8" N-80 tubing to 11,750'. Washed sand from 11,750-11,812'. Latched onto RBP at 11,812'. Unset RBP at 11,812'. Started TOH with 2-7/8" N-80 tubing and RBP. Shut down because of high winds. Continued working at 6 PM 11-10-95. TOH with 2-7/8" N-80 tubing and RBP. TIH with packer (Uni VI 10K with 1.81" profile nipple and on/off tool) and 2-7/8" N-80 tubing. Set packer at 11,012'. Tested annulus to 3000 psi for 10 mins, OK. Nippled down BOP and installed tree. Rigged up swab. Swabbed as follows:

TIME	FL	# SR	BW
3 AM	2000'	3	18

Morrow

psi for 10 mins,OK. Unset packer at 11,600'. TOH with 2-7/8" N-80 and packer. Shut down. Prep to finish TOH with 2-7/8" N-80 tubing and packer, then TIH with Uni VI packer and acidize with 100 gals acid and N2. DC $8425

11-2-95 Finished TOH with 2-7/8" N-80 tubing and Uni V packer. TIH with Uni VI (10K) packer with 1.81 profile nipple and on/off tool and 2-7/8" N-80 tubing. Set packer at 11,017'. Nippled down BOP and nippled up tree. Tested annulus to 2000 psi, OK. Rigged up swab. Swabbed tubing fluid level down to 11,000'. Recovered 62 bbls. Rigged up tree saver. Rigged up and acidized perfs 11,491-11496' with 1000 gals 7-1/2% NEFE Morrow type acid with 1000 SCF/bbl N2 and 10 balls. Broke down 3200 psi. Avg 5400 psi @ 4.5 BPM. Ball action good. ISDP 5000 psi, 5 mins 4900 psi, 10 mins 4800 psi, 15 mins 4800 psi. Total load to recover 70 bbls. Rigged down tree saver. Rigged up and flow/swab with the following results:

TIME	PSI/CHOKE	OIL	WATER	GAS
7 PM	2800# - 8/64"	0	5	N2
8 PM	1100# - 12/64"	0	10	N2
9 PM	100# - 16/64"	0	5	N2
10 PM	0# - 3/4"	0	35	slight burn
11 PM	9800-SN 2 runs	0	7	slight burn
12 AM	SN 1 run	0	0	slight burn
1 MA	80# - 1/8"	0	0	32, 5-10' flre
2 AM	150# - 1/8"	0	0	56, 10-15' flre
3 AM	280# - 1/8"	0	0	101, 10-15' flre
4 AM	290# - 1/8"	0	0	105, 10-15' flre
5 AM	290# - 1/8"	0	0	105, 10-15' flre
6 AM	300# - 1/8"	0	0	108, 10-15' flre

Total recovered 0 bbls oil and 62 bbls water. Load left 8 bbls. At 8:00 AM Thursday flowing 340 psi on 1/8" choke = 122 MCFD with pressure increasing. prep to swab/flow well. DC $13,005

11-3-95 Continued to swab/flow as follows:

TIME	PSI/CHOKE	SR	BO	BW	MCF	
7 AM	320# - 1/8"		0	0	115	10-15' flare
8 AM	340# - 1/8"		0	0	122	10-15' flare
9 AM	1000'-SN	2	2%	7	Slt	10-15' flare
Put on 1/4" choke - 20 psi = 48 MCF						
10 AM	40# - 1/4"		0	0	77	10-15' flare
11 AM	45# - 1/4"		0	0	85	10-15' flare
12 PM	45# - 1/4"		0	0	85	10-15' flare
1 PM	45# - 1/4"		0	0	85	10-15' flare
Bled down. Rig up swab.						
2 PM	10200'-SN	1	2%	4	Slt	10-15' flare
Put on 1/4" choke, 30# = 63 MCF						
3 PM	45# - 1/4"		0	0	85	10-15' flare
4 PM	45# - 1/4"		0	0	85	10-15' flare
5 PM	45# - 1/4"		0	0	85	10-15' flare

Daily recovery trace of oil and 11 bbls water. Total recovery - trace oil and 73 bbls water. 3 bbls over load. Shut down. Plan to frac on Monday. DC $1525

WATER ANALYSIS:	11-2-95		2:00 PM
Spec Gravity	1.065 @ 65	Resistivity	.035 @ 75
pH	4.2	Sulfate	2230
Iron	160	Total Hard	3756
Calcium	25540	Bicarbonate	69
Magnesium	-14603	Sod Chlor	123540
Chloride	75100	Tot Diss Sol	145984
K+	1200	H2S	Nil

11-4-6-95 SITP 1150#. Bled down to 0 psi in 25 mins. TIH with thru tubing guns. Perforated 4 SPF with 21 - .27" holes as follows: 11,491-11,496'. TOH with thru tubing guns. Flowed as follows:

TIME	TP/CHOKE	BO	BW	MCF	
11 AM	20# - 1/4"	0	0	48	10' flare
12 PM	30# - 1/4"	0	0	63	10' flare
1 PM	Perf with thru tubing guns, left well flowing				
2 PM	40# - 1/4"	0	0	78	10' flare
3 PM	40# - 1/4"	0	0	78	10' flare

Morrow

K+ 1000

10-30-95 SITP 2200 psi. Bled down to 15 psi in 50 mins. Rigged up swab. Initial fluid level 5000'. Continued to swab/flow with the following results:

TIME	FL	#SR	OIL	WATER	GAS
8 AM	5000'		0	10	good, 15-20' flre
9 AM	8000'	2	0	13	good, 15-20' flre
10 AM	SN	2	0	9	good, 15-20' flre
11 AM	130# - 1/4" ck		0	0	210, 15-20' flre
Noon	130# - 1/4"		0	0	210, 15-20' flre
1 PM	130# - 1/4"		0	0	210, 15-20' flre
2 PM	130# - 1/4"		0	0	210, 15-20' flre
3 PM	130# - 1/4"		0	0	210, 15-20' flre
4 PM	130# - 1/4"		0	0	210, 15-20' flre
5 PM	130# - 1/4"		0	0	210, 15-20' flre

Daily recovered 0 bbls oil and 32 bbls water. Total recovered 0 bbls oil and 630 bbls water, 32 bbls overload. Shut down. NOTE: Recovery is estimated. DC $1725

WATER ANALYSIS: 10:00 AM 10-29-95 - load water

Sp. Gravity	1.025 @ 74	Resistivity	.085 @ 75
pH	6.55	Iron	150
Sulfate	68	Calcium	2732
Tot Hardness	10,732	Magnesium	948
Bicaronates	1690	Chloride	25,360
CALC	41,717	Sod & Pot	16,431
Tot Diss Sol	54,281	H2S	Nil
K+	1500		

10-31-95 SITP 2300 psi. Bled down to 15 psi in 50 mins. Rigged up swab. Initial fluid elvel 9000'. Continued to swab/flow well with the following results:

TIME	FL	#SR	OIL	WATER	GAS
8 AM	9000'	1	20%	8	good, 15-20' flre
9 AM	SN	2	2%	8	good, 15-20' flre
10 AM	120# - 1/4"		0	0	195, 15-20' flre
11 AM	120# - 1/4"		0	0	195, 15-20' flre
Noon	120# - 1/4"		0	0	195, 15-20' flre
Opened up, bled down. Rigged up swab.					
1 PM	10,200-SN	2	2%	6	good, 15-20' flre
2 AM	120# - 1/4"		0	0	195, 15-20' flre
3 PM	120# - 1/4"		0	0	210, 15-20' flre

Daily recovered 1 bbl oil and 21 bbls water. Total recovered 1 bbl oil and 651 bbls water, 53 bbls overload. Flow test - 120 psi @ 1/4" choke = 210 MCF. Shut down. NOTE: Recovery is estimated. prep to move to Morrow zone #3. DC $1525

WATER ANALYSIS:	8 AM 10-30-95	9 AM
Sp. Gravity	1.025 @ 76	1.023 @ 74
Resistivity	.095 @ 75	.095 @ 75
pH	6.35	6.55
Iron	150	125
Sulfate	63	68
Calcium	2341	1955
Tot Hardness	10,732	9775
Magnesium	1185	1188
Bicarbonate	1762	1717
Chloride	25,360	23,455
CALC	41,717	38,584
Sod & Pot	16,464	15,371
Tot Dis Solids	54,381	50,387
H2S	nil	nil
K+	1500	1500

11-1-95 SITP 2350 psi. Rigged up slickline and set standing valve in packer at 11,686. Bled down tubing. Loaded tubing with 2% KCL water. Get off on/off tool. Nipple down tree. Nippled up BOP. TOH with 2-7/8" N-80 tubing. Rigged up wireline. TIH with 4" casing guns. Correlated guns into place and perforate Morrow Zone #3 (2 SPF - 60 deg phasing) with 12 - .42" holes as follows: 11,491-11,496'. TOH with 4" casing guns and rigged down wireline. TIH with RBP (10K), packer and 2-7/8" N-80 tubing. Set RBP at 11,621'. Set packer at 11,600'. Rigged up and tested RBP to 3000

Morrow

Sulfate	191	Calcium	8038
Tot Hardness	24,880	Magnesium	1163
Bicarbonate	4086	Chloride	114,807
CALC	188,857	Sod & Pot	87,168
Tot Diss Sol	231,132	H2S	none

10-25-95 Prep to frac Morrow.

10-26-95 Prep to frac Morrow with 30,000 gals and 30,000# sand at 10:00 AM Thursday morning.

10-27-95 Rig down swab. Rig up 15K tree saver. Rig up and frac perfs 11,770-11,778' with 35,867 gals of 30Q Medallion frac 4000 and 31000# 20/40 AC frac Premium black sand. Avg 8700# at 15 BPM. ISDP 4723#, 5 mins 4338#, 10 mins 3968#, 15 mins 3900#. Max sand 3.5#/gal. TLTR 598 bbls. Shut in. Rig down tree saver. Shut in for 6 hours. Flow back well with the following results:

TIME	TP/CHOKE	BW	MCF	
10 PM	3000# - 1/8"	30	0	gel broke
11 PM	2300# - 1/4"	40	0	no sand
12 AM	7700# - 1/4"	40	CO2	no sand
1 AM	1300# - 16/64"	60	CO2	little sand
2 AM	1100# - 16/64"	50	CO2	little sand
3 AM	900# - 16/64"	50	CO2	little sand
4 AM	750# - 16/64"	50	CO2	little sand
5 AM	650# - 16/64"	50	CO2	no sand
6 AM	500# - 16/64"	50	CO2	no sand

Total recovered 0 bbls oil + 420 bbls water. Load left 178 bbls. *NOTE: Fluid recovery is estimated, flowing to pit not a frac tank. DC $52,425

10-28-95 Continued to flow back well with the following results:

TIME	PSI/CHOKE	OIL	WATER	GAS
7 AM	400# - 16/64"	0	50	CO2 - no sand
8 AM	150# - 3/8"	0	30	CO2 - no sand
9 AM	50# - 3/4"	0	15	CO2 - no sand
10 AM	50# - 3/4"	0	20	CO2 - no sand
11 AM	40# - 3/4"	0	10	sl - no sand, intermittent flr
Noon	30# - 3/4"	0	5	sl - inter flre
1 PM	22# - 3/4"	0	1	sl - inter flre
Installed 1/4" positive choke				
2 PM	70# - 1/4"	0	0	122 - 10-15' flre
3 PM	70# - 1/4"	0	0	122 - 10-15' flre
4 PM	70# - 1/4"	0	0	122 - 10-15' flre

Daily recovered 0 bbls oil and 131 bbls water. Total recovered 0 bbls oil and 551 bbls water. Load left 47 bbls water. NOTE: Fluid recovery is an estimate. DC $1725

10-29-95 SITP 1500 psi. Bled down to 0 psi in 50 mins. Rigged up swab. Initial fluid level 3000'. Continued to flow/swab with the following results:

TIME	FL	#SR	OIL	WATER	GAS
8 AM	3000'		0	5	good, 15-20' flre
9 AM	5500'-900'	3	0	18	good, 15-20' flre
10 AM	4000' scat	1	0	8	good, 15-20' flre
11 AM	8000' scat	1	0	6	good, 15-20' flre
Noon	9000' scat	2	0	10	good, 15-20' flre
1 PM	120# - 1/4"		0	0	195, 15-20' flre
2 PM	130# - 1/4"		0	0	210, 15-20' flre
3 PM	130# - 1/4"		0	0	210, 15-20' flre
4 PM	130# - 1/4"		0	0	210, 15-20' flre
5 PM	130# - 1/4"		0	0	210, 15-20' flre

Daily recovered 0 bbls oi and 47 bbls water. Total recovered 0 bbls oil and 598 bbls water. Load left 0 bbls. NOTE: Recovery is an estimate. Flowed and swabbed to pit, not a tank. Shut down. DC $1725

WATER ANALYSIS: 10:00 AM 10-28-95

Sp. Gravity	1.020 @ 72	Resistivity	.115 @ 75
pH	6.6	Iron	175
Sulfate	69	Calcium	2353
Tot Hardness	11,765	Magnesium	1429
Bicarbonate	2763	Chloride	19,603
CALC	32,248	Sod & Pot	11,304
Tot Diss sol	45,504	H2S	nil

Morrow
Yates Pet. - Hanagan "APL" Fed Com #1 (Unit G) 31-19S-30E Eddy Co.,NM
****

Magnesium	91	24
Bicarbonate	205	157
Chloride	20,556	13,858
CALC	33,815	22,797
Sod & Pot	17,305	11,595
Tot Diss Solids	40,169	27,590
H2S	None	None

10-22-95 SITP 700 psi. Bled to 0 psi in 30 mins. Initial fluid level 9200'. First swab run recovered 0 bbls oil and 3 bbls water. Continued to swab/flow with the following results:

TIME	FL	#SR	OIL	WATER	GAS
9 AM	11000'	2	0	6	slight - burn
10 AM	70# - 1/8"		0	0	28.8 5-6' flre*
11 AM	85# - 1/8"		0	0	34.0 5-6' flre*
Noon	95# - 1/8"		0	0	37.4 5-6' flre*
1 PM	110# - 1/8"		0	0	42.6 6-8' flre*
2 PM	130# - 1/8"		0	0	49.6 10-15' flre*
3 PM	140# - 1/8"		0	0	53.0 10-15' flre*
4 PM	140# - 1/8"		0	0	53.0 10-15' flre*
5 PM	140# - 1/8"		0	0	53.0 10-15' flre*

*Burn
Total recovered 0 bbls oil and 68 bbls water. Load left 5 bbls. DC $1975; CC $48,660
WATER ANALYSIS: 9 AM 10/21

Sp. Gravity	1.050 @ 74	Resisitivity	.075 @ 75
pH	3.3	Iron	49
Sulfate	714	Calcium	190
Tot Hardness	1810	Magnesium	324
Bicarbonate	198	Chloride	34,278
CALC	56,387	Sod & Pot	29,407
Tot Diss Sol	66,406	H2S	none

10-23-95 SITP 1000 psi. Bled to 0 psi in 40 mins. Initial fluid level 10,200'. First swab run recovered 0 bbls oil and 4 bbls water. Continued to swab/flow with the following results:

TIME	FL	#SR	OIL	WATER	GAS
9 AM	11,000'	2	0	5	slight - burn
10 AM	22# - 1/4" ck		0	0	51 6-8' flre*
11 AM	22# - 1/4" ck		0	0	51 6-8' flre*
Noon	22# - 1/4" ck		0	0	51 6-8' flre*

*Burn
Daily recovered 0 bbls oil and 5 bbls water. Total recovered 0 bbls oil and 73 bbls water. Load left 0 bbls. DC $1475; CC $50,135 THIS AM: SITP 1050 psi.
WATER ANALYSIS: 9 AM 10/22

Sp. Gravity	1.050 @ 73	Resisitivity	.065 @ 75
pH	3.3	Iron	52
Sulfate	595	Calcium	571
Tot Hardness	1905	Magnesium	116
Bicarbonate	93	Chloride	38,087
CALC	62,653	Sod & Pot	32,548
Tot Diss Sol	37,227	H2S	none

10-24-95 SITP 1050 psi. Bled down in 45 mins. Initial fluid level 9800'. First swab run recovered 3 bbls of distillate and 3 bbls water. Continued to swab/flow with the following results:

TIME	PSI/CHOKE		OIL	WATER	GAS
8 AM	9800'	1 run	3	3	slight
9 AM	11,000'	1 run	2%	2	slight, 2% distillate
10 AM	20# - 1/4"		0	0	48 - 4-5' flre*
11 AM	20# - 1/4"		0	0	48 - 4-5' flre*
Noon	20# - 1/4"		0	0	48 - 4-5' flre*

*Burn
Daily recovered 3 bbls of distillate and 5 bbls water. Total recovered 3 bbls of distillate and 78 bbls water, 5 bbls overload. Prep to frac Wednesday/Thursday. DC $1475; CC $51,610
WATER ANALYSIS: 1st swab run 10-23-95

Sp. Gravity	1.045 @ 72	Resistivity	.025 @ 75
pH	5.5	iron	31

Morrow

5 AM	11,000'	1	0	1	slight*
6 AM	wait				

*burn when pulling swab, vac after swab run
Total recovered 0 bbls oil and 69 bbls water. Load left 29 bbls. Prep to move to Morrow #2. DC $11,725; CC $31,085

WATER ANALYSIS:	5 PM 10/18	11 PM 10/18	3 AM 10/19
Sp. Gravity	1.015 @ 66	1.085 @ 66	1.070 @ 64
Resistivity	.125 @ 75	.025 @ 75	.025 @ 75
pH	7	4	5
Iron	9	10	6
Sulfate	172	138	196
Calcium	473	5530	8598
Total Hardness	2266	82,949	52,336
Magnesium	263	16,797	7494
Bicarbonate	300	157	114
Chloride	17,730	165,861	130,812
CALC	29,166	272,842	215,185
Sod & Pot	14,361	93,808	82,142
Tot Diss Solids	34,830	342,914	265,601
H2S	--	--	--
K+	700	600	600

10-20-95 Continued to swab/flow with the following results:

TIME	FL	#SR	OIL	WATER	GAS
7 AM	11,000'	1	0	1	slight
	Burn when pulling swab. Vac after swab run				
8 AM	0 psi @ 1/8 ck	0	0		slight

Daily recovered 0 bbls oil and 1 bbls water. Total recovered 0 bbls oil and 70 bbls water. Load left 28 bbls. Rigged down swab. Loaded tubing with 60 bbls 2% KCL water. Unset packer at 11,812'. Nippled down tree and installed BOP. TOH with 2-7/8" N-80 tubing and packer (UNI VI). Rigged up wireline. TIH with 4" casing guns. Correlated guns into place and perforated (2 SPF - 60 deg phasing) with 18 - .41" holes as follows: 11,770-11,778'. TOH with casing guns and rigged down wireline. TIH with RBP, packer and 2-7/8" N-80 tubing. Set RBP at 11,812'. Tested RBP to 2000 psi, OK. Moved up and set packer at 11,716'. NIppled down BOP and installed tree. Tested annulus to 1000 psi, OK. Rigged up swab. Shut down. Prep to swab tubing fluid level down to 10,000' and acidize. DC $5325; CC $36,410

10-21-95 Swabbed tubing fluid level down to 10,500'. Recovered 63 bbls. Rigged up tree saver. Tested adn hold 1000 psi on annulus. Rigged up and acidized perfs 11,770-11,778' with 1000 gals 7-1/2% HCL Morrow type acid with 1000 SCF/bbl N2 and 12 balls. Broke down 5300 psi, 5300 psi @ 4 BPM. Ball action none. ISDP 4800 psi, 5 mins 4500 psi, 10 mins 4250 psi, 15 mins 4200 psi. Total load to recover 73 bbls. Rigged down tree saver. Rigged up and flow/swab with the following results:

TIME	FL	#SR	OIL	WATER	GAS
1 PM	4200#				
2 PM	300# - 1/4" ck	0	34	0	N2
3 PM	0#	1	0	2	0 N2
	Rigged up swab. Initial fluid level 7100'				
4 PM	10,000'	2	0	13	acid gas
5 PM	10,500'	2	0	10	slight - burn
6 pM	11,000'	2	0	2	slight - burn
7 PM	11,000-SN	1	0	1	slight - burn
8 PM	20# - 1/8" ck	0	0		11.45 - burn, 3' lazy flare

Total recovered 0 bbls oil and 62 bbls water. Load left 11 bbls. Shut down. DC $10,275; CC $46,685

WATER ANALYSIS:	4 PM 10/20	7 PM
Sp. Gravity	1.070 @ 77	1.010 @ 74
pH	3.1	3.3
Resistivity	.115 @ 75	.155 @ 75
Iron	40	23
Sulfate	421	495
Calcium	523	554
Tot Hardness	1682	1485

Morrow

DETAILED CASING REPORT: TD 7-7/8" hole at 4:30 AM 10-10-95. Ran 292 joints (12,161.28') casing, set at 12,140' as follows:

55 joints 5-1/2" 17# S-95 LT&C	2310.73'
220 joints 5-1/2" 17# N-80 LT&C	9146.47'
17 joints 5-1/2" 17# S-95 LT&C	702.08'

Float shoe set 12,140'. Float collar set 12,097.40'. DV tool set 9207.66'. Cemented in two stages as follows: Stage I - 800 sxs Premium Lite + 5#/sx Gilsonite + .6% Halad 9 + 5% SMJ + .3% CFR-3 (yld 1.54, wt 13.5). PD 12 PM 10-13-95. Bumped plug to 1500 psi for 5 mins. Circulated thru DV tool 4 hours. Stage II - 1250 sxs Howco Lite + 5#/sx Salt + 1/4#/sx Flocele + .2% CFR-3 (yld 1.18, wt 15.6). PD 6 PM 10-13-95. Bumped plug to 4000 psi for 5 mins, float and casing held. Circulated 60 sacks. Rig released 10 PM 10-13-95.

Prep to move in service unit.

10-17-95 Cleaned location. Set and tested anchors and markers. Made cut off on 5-1/2" casing. Moved in and rigged up pulling unit. Installed tubing head and nippled up BOP. TIh with bit, stabilizer, drill collars and 2-7/8" N-80 tubing to DV tool at 9208'. Rigged up power swivel and drilled out DV tool. Tested casing to 3000 psi for 15 mins, OK. Finished TIH to 12,075'. Circulated casing with 2% KCL water. TOH with 2-7/8" N-80 tubing, drill collars, stabilizer and bit. TIH bit, scraper and 2-7/8" N-80 tubing to 9250'. Worked scraper thru DV tool. Prep to TOH with 2-7/8" N-80 tubing and run CBL/CCL/GR. Plan to perf Morrow zone today and acidized with 2000 Wednesday. DC $9985

10-18-95 TOH with 2-7/8" N-80 tubing, scraper and bit. Rigged up wireline. TIH with logging tool. Correlated logging tool into place and pressured casing to 1000 psi and run CBL/CCL/GR log from 12,071-3000'. TOH with logging tool. TIH with 4" casing guns. Correlated guns into place and perforated (2 SPF - 60 deg phasing) with 28 - .41" holes as follows: 11,872-11,878' and 11,853-11,859'. TOH with 4" casing guns and rigged down wireline. TIH with Uni VI packer with on/off tool and 1.81" profile nipple and 2-7/8" N-80 tubing to 11,812'. Shut down. Prep to acidize Morrow Zone #1 with 2000 gals acid with N2 and balls. DC $9375; CC $19,360

10-19-95 Finished TIH with 2-7/8" N-80 tubing to 11,907'. Rigged up and spotted 2 bbls of 7-1/2% HCL Morrow acid across perfs 11,853-11,878'. Moved up and set packer at 11,812'. Reversed 2 bbls inside tubing. Nippled down BOP and installed tree. Loaded and tested annulus to 1000 psi, OK. Rigged up swab. Swabbed fluid level in tubing down to 10,000'. Recovered 62 bbls. Rigged down swab. Rigged up tree saver. Rigged up and acidized perfs 11,853-11,878' with 2000 gals 7-1/2% HCL Morrow type acid with 1000 SCF/bbl N2 and 45 balls. Broke down 6200 psi, avg 6200 psi @ 4 BPM. Ball action good. ISDP 5500 psi, 5 mins 5200 psi, 10 mins 5100 psi, 15 mins 5000 psi. Total load to recover 98 bbls. Rigged down tree saver. Rigged up and flow/swab with the following results:

TIME	FL	#SR	OIL	WATER	GAS	
4 PM	700# - 1/4" ck		0	34	0	N2
5 PM	0# - 1/4" ck		0	2	0	N2
6 PM	1600'	1	0	22	0	flowed N2
7 PM	10,000'	1	0	0	0	no recovery
8 PM	light plant went down					
9 PM	waiting on new light plant					
10 PM	10,200'					
11 PM	10,800'	2	0	6	slight*	
12 AM	11,000'	2	0	2	slight*	
1 AM	11,000'	1	0	1	slight*	
2 AM	wait					
3 AM	11,000'	1	0	1	slight*	
4 AM	wait					

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

YATES PETROLEUM CORPORATION

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

November 16, 1995

Rondero Company, Inc.
P. O. Box 430
Roswell, NM 88202

Ladies and Gentlemen,

Yates Petroleum Corporation has submitted an application to the NMOCD to downhole commingle the Atoka and Morrow formations in the Hanagan APL Federal #1 located in G of Section 31-T19S-R30E. This letter 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) 748-4182.

Sincerely,

Brian Collins
Engineer

BC/th

Enclosures

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Siete Oil & Gas
P. O. Box 2523
Roswell, NM 88202-2523

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November 16, 1995

Collins & Ware
508 W. Wall
Suite 1200
Midland, TX 79701-5076

Ladies and Gentlemen,

Yates Petroleum Corporation has submitted an application to the NMOCD to downhole commingle the Atoka and Morrow formations in the Hanagan APL Federal #1 located in G of Section 31-T19S-R30E. This letter 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) 748-4182.

Sincerely,

Brian Collins
Engineer

BC/th

Enclosures

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

YATES PETROLEUM CORPORATION

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

November 16, 1995

Meridian Oil
P.O. Box 51810
Midland, TX 79710-1810

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