



Yates. 38

10

# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

**Joanna Prukop**

Cabinet Secretary

**Mark E. Fesmire, P.E.**

Director

**Oil Conservation Division**

**August 7, 2006**

**Yates Petroleum Corporation**  
c/o **Holland & Hart LLP**  
**P. O. Box 2208**  
**Santa Fe, New Mexico 87504-2208**

**Attention: Ocean Munds-Dry**  
**Legal Counsel for Yates Petroleum Corporation**

**Re:** *Application on behalf of Yates Petroleum Corporation ("Yates") submitted on July 5, 2006 (administrative application reference No. pTDS0-618659927) for administrative review by the Division for an unorthodox deep gas well location in the Atoka, Morrow, and Austin formations for Yates's proposed Merle State Unit Well No. 8 to be drilled 330 feet from the North and West lines (Unit D) of Section 23, Township 10 South, Range 34 East, NMPM, Lea County, New Mexico.*

Dear Ms. Munds-Dry,

In commencing my review of your application for Yates, I discovered that on July 19, 2006 Yates electronically filed an Application for Permit to Drill ("APD") for this well to a depth of 12,300 feet in the Mississippian limestone at a standard deep gas well location 660 feet from the North and West lines (Unit D) of Section 23 (see paper copy attached). Since this APD negates your request for an unorthodox location, I am withdrawing your application and returning your filing at this time.

It was a good thing I caught this before anymore time was wasted on it.

Sincerely,

**Michael E. Stogner**  
Staff Engineer

cc: **New Mexico Oil Conservation Division - Hobbs**  
**New Mexico State Land Office - Santa Fe**

DATE IN 7/5/06	SUSPENSE	ENGINEER MEKE STAGNER	LOGGED IN 7/5/06	TYPE NSL	APP NO. pTDS0618659727
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ABOVE THIS LINE FOR DIVISION USE ONLY

## NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505



### ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

#### Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]  
 [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]  
 [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]  
 [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]  
 [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]  
 [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

#### [1] TYPE OF APPLICATION - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Simultaneous Dedication

☒ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement

☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery

☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR

[D] Other: Specify \_\_\_\_\_

2006 JUL 5 PM 3 07

#### [2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or Does Not Apply

[A] ☐ Working, Royalty or Overriding Royalty Interest Owners

[B] ☐ Offset Operators, Leaseholders or Surface Owner

[C] ☐ Application is One Which Requires Published Legal Notice

[D] ☐ Notification and/or Concurrent Approval by BLM or SLO  
 U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☐ Waivers are Attached

#### [3] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Ocean Munds-Dry Ocean Munds Dry Attorney 7-5-06  
 Print or Type Name Signature Title Date  
 omundsdry@hollandhart.com  
 e-mail Address



July 5, 2006

**HAND DELIVERY**

Mr. Mark Fesmire, Director  
Oil Conservation Division  
New Mexico Department of Energy,  
Minerals and Natural Resources  
1220 South Saint Francis Drive  
Santa Fe, New Mexico 87505

30-025 - ~~36077~~  
37911

Re: Application of Yates Petroleum Corporation, for administrative approval of an unorthodox well location for its Merle State Unit Well No. 5, to be drilled at a surface location 330 feet from the North line and 330 feet from the East line of Section 23, Township 10 South, Range 34 East, N.M.P.M., Lea County, New Mexico.

Dear Mr. Fesmire:

Yates Petroleum Corporation ("Yates") hereby seeks administrative approval pursuant to the provisions of Division Rule 104 F (2)-(4), of an unorthodox well location for its Merle State Unit Well No. 5 located 330 feet from the North line and 330 feet from the East line of Section 23 (Unit A), Township 10 South, Range 34 East, N.M.P.M., Lea County, New Mexico.

This well is currently permitted as a 9,200 feet basal Abo test and is at a legal location for an Abo oil well. This location was picked using 3-D seismic and is offsetting the Merle State Unit Well No. 3 in Section 14 to the north. Moving the location to a legal gas well location moves out of the prospective basal Abo trend. If the proposed well is successful as a basal Abo well, Yates requests permission to deepen the well to approximately 12,400 feet to test the Atoka, Morrow, and Austin gas zones. Having this secondary target ready would be the most efficient and reasonable way to develop these potential deeper reserves. This proposed location is unorthodox because it is governed by the Division's Statewide Rules which provides for gas wells on 320-acre spacing units to be located no closer than 660 feet to the outer boundary of the quarter section on which the well is located and no closer than 10 feet to any quarter-quarter section line or subdivision inner boundary. The proposed unorthodox well location is only 330 feet from the north and east boundaries of the spacing unit. Should Yates proceed with the secondary targets, a standard 320-acre spacing unit and proration unit comprised of the E/2 of Section 23 will be dedicated to the well.

**Holland & Hart** LLP

Phone [505] 988-4421 Fax [505] 983-6043 [www.hollandhart.com](http://www.hollandhart.com)

110 North Guadalupe Suite 1 Santa Fe, NM 87501 Mailing Address P.O. Box 2208 Santa Fe, NM 87504-2208

Aspen Billings Boise Boulder Cheyenne Colorado Springs Denver Denver Tech Center Jackson Hole Salt Lake City Santa Fe Washington, D.C. ☺



The non-standard location is required by geologic conditions. As shown on the attached **Exhibit A**, there is potential for deep gas sand development at the proposed well location. The Austin isopach map shows the thickness of the Austin limestone in the Merle Unit and surrounding area. **Exhibit B** is Cross-Section A-A' and shows how the Austin limestone (in blue) thins in the Merle State Unit Well No. 1. Often these Austin limestone thins indicate structural lows where sand deposition occurs. The overlying Atoka and Morrow sands are more prevalent in these Austin lows. The thin Austin limestones can occur from non-deposition or erosion. The second best Atoka-Morrow production on the Austin map is the Merle State Unit Well No. 1 which had a cumulative production of 17 MBO and 696 MMCFG. The best Atoka Morrow well on the map is the Hytech well located northwest of the proposed well in Section 2. This well has an intermediate thickness of Austin lime. The offsetting well to the proposed well is the Merle State Unit Well No. 3, which tested the Austin for 1 BO and 1914 MCF/D. This well is currently producing from the Abo formation. **Exhibit C** is a prospective Abo trend map which was generated from 3-D seismic. The Merle State Unit Well No. 3 is located in the SE/4 of Section 14 and is a 300 barrel per day well in the basal Abo. Yates' seismic interpretation indicates in green the prospective trend. Yates is attempting to stay in the center of the green color and extend this narrow trend through the NE/4 of Section 23.

**Exhibit D** is a plat that shows the unit boundaries and the proposed unorthodox well location.

The proposed well location is within the boundaries of the Merle State Unit and the ownership is common in the offsetting spacing units towards which the proposed well encroaches in Section 14, Section 13 and Section 24. Therefore there are no affected parties to notify of this application as defined in Division Rule 1210.

Also enclosed is a proposed administrative order prepared by Yates on behalf of the Division.

Your attention to this application is appreciated.

Sincerely,

Ocean Munds-Dry

ATTORNEY FOR YATES PETROLEUM  
CORPORATION

Enclosures

cc: Rob Bullock (w/o attachments)  
John Amiet (w/o attachments)

Yates Petroleum Corporation

Attention: Robert Bullock

*Administrative Order NSL-\_\_\_\_\_*

Dear Mr. Bullock:

Reference is made to your application dated July 5, 2006 for an unorthodox well location for Yates Petroleum Corporation's Merle State Unit Well No. 5 to be drilled to the Abo formation with a secondary target in the Atoka, Morrow and Austin gas zones. Said well will be located 330 feet from the North line and 330 feet from the East line of Section 23, Township 10 South, Range 34 East, NMPM, Lea County, New Mexico.

A 320-acre spacing and proration unit comprising the E/2 of said Section 23 is to be dedicated to said well.

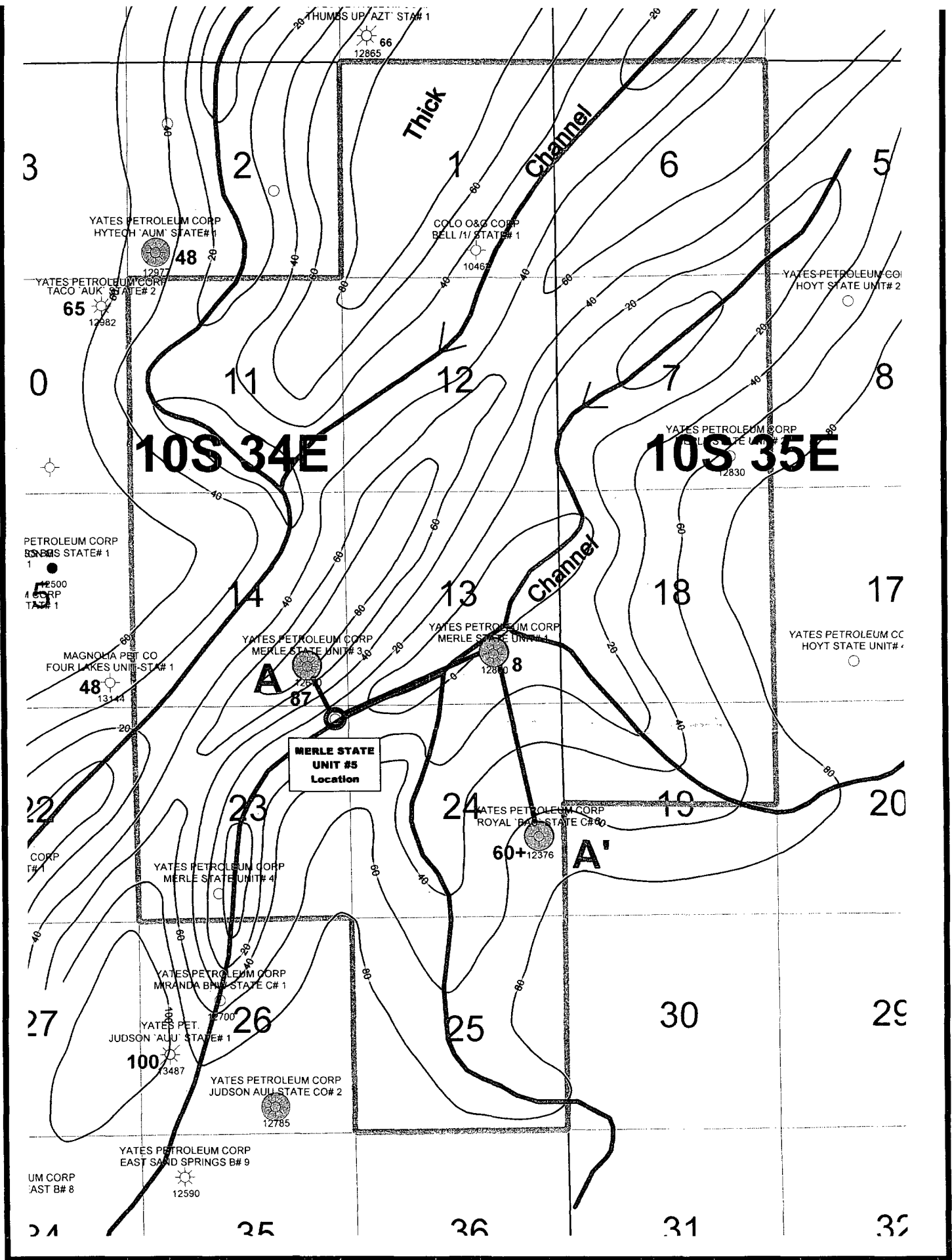
This application has been duly filed under the provisions of Rule 104.F of the General Rules of the Oil Conservation Division revised by Division Order No. R-11231, issued by the New Mexico Oil Conservation Commission in Case No. 12119 on August 12, 1999.

By authority granted me under the provisions of Rule 104.F(2), the above-described unorthodox well location within this 80-acre unit in the Strawn formation is hereby approved.

Sincerely,

Mark E. Fesmire, P.E.  
Director

cc: Oil Conservation Division - Hobbs/Artesia



YATES PETROLEUM CORPORATION		
MERLE STATE UNIT #5 DEEP POTENTIAL AUSTIN ISOPACH MAP All Wells Shown Lea County, NM		
Author: JOHN AMIET		Date: 20 June, 2006
Tech: Nancy Elrod	Scale: 1" = 2500'	


 Productive Atoka-Morrow Well  
**48** Austin Lms Isopach



EXHIBIT A

AA 0



89600

889600



EXHIBIT C



Yates Petroleum Corp.

Basal Abo trend

Merle Unit

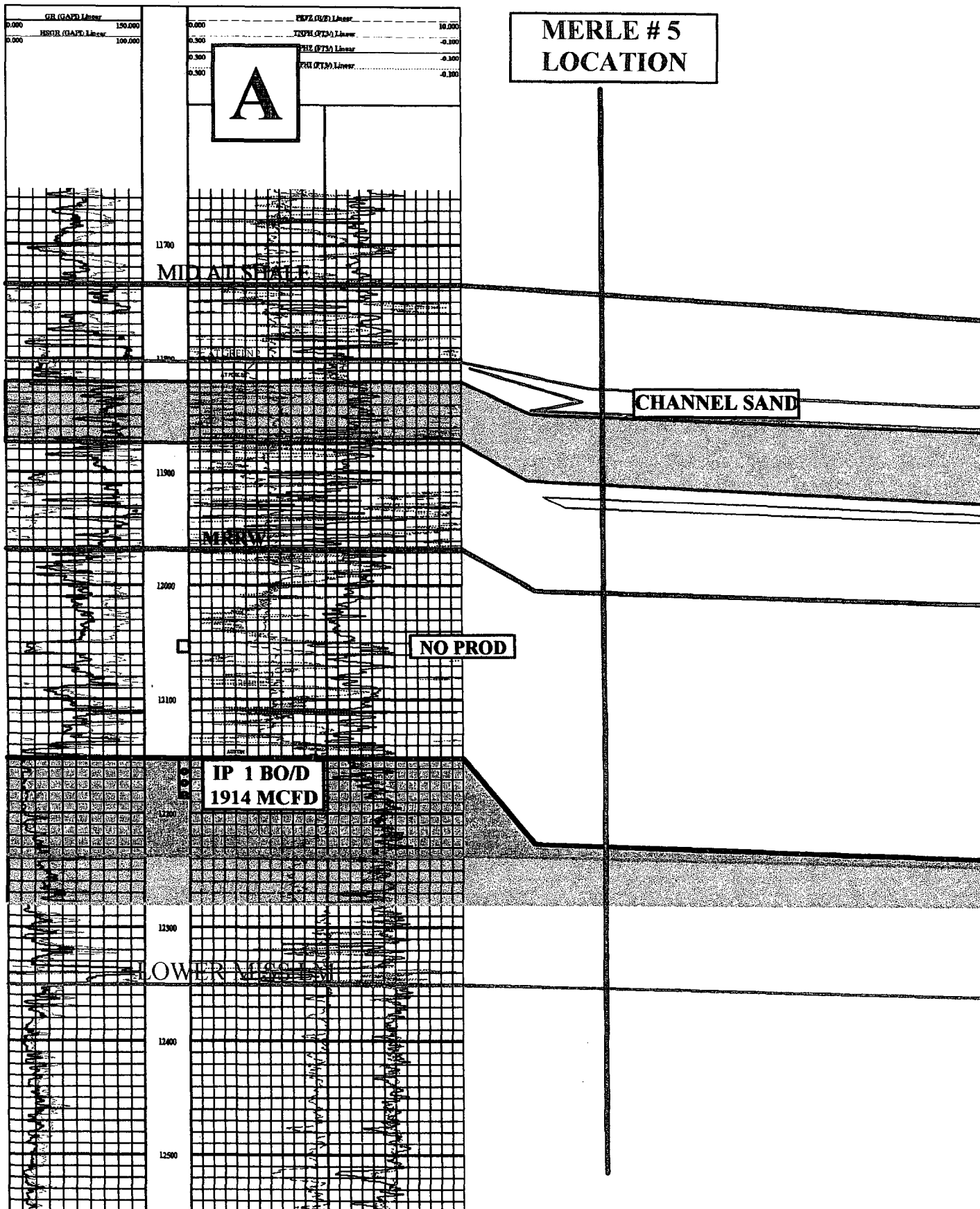
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0 500 1000 1500 ft

June 29, 2006

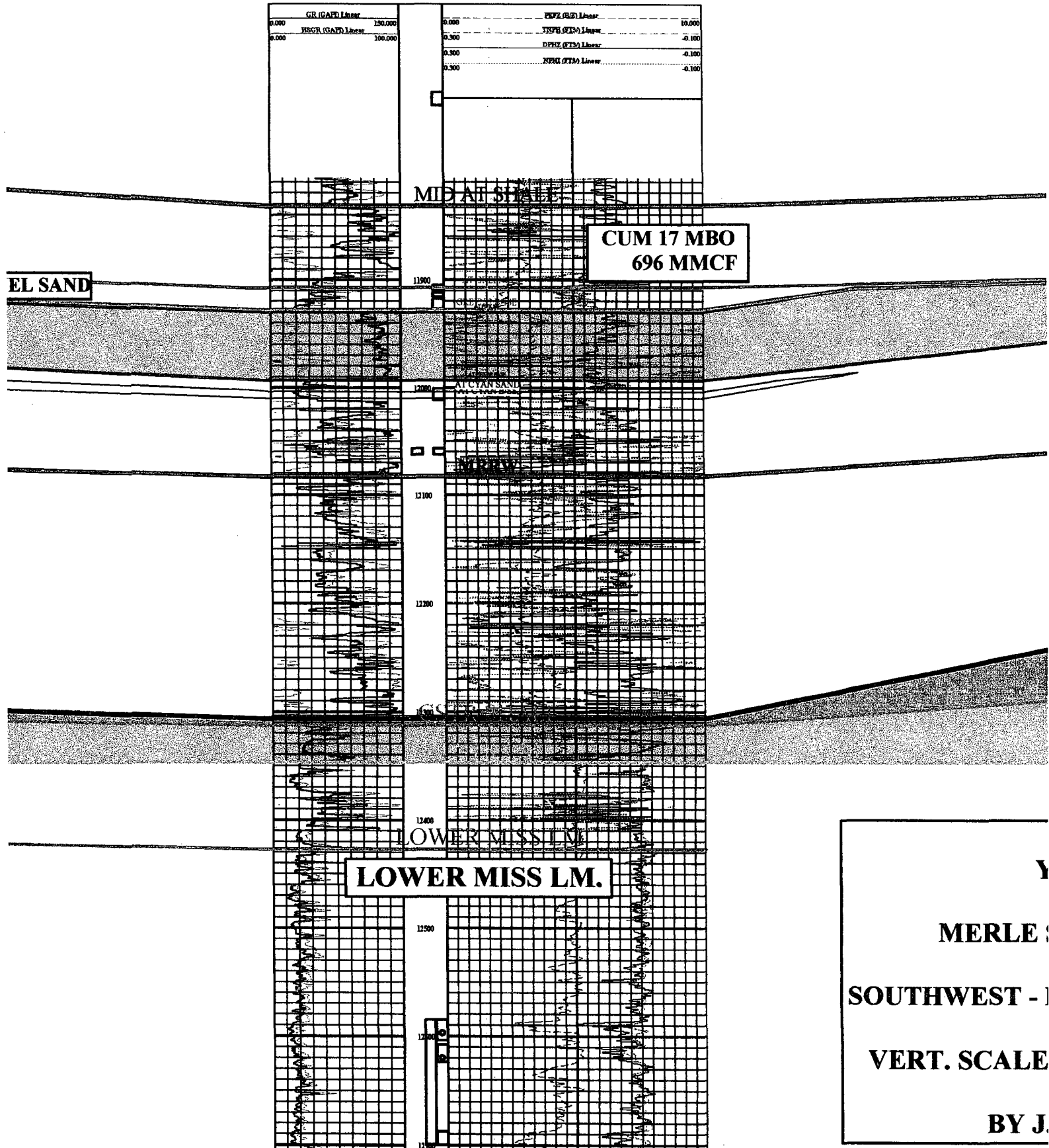


30025375450000  
YATES PETROLEUM CORP  
MERLE STATE UNIT 3  
4190 KB  
010.0S 034.0E 014



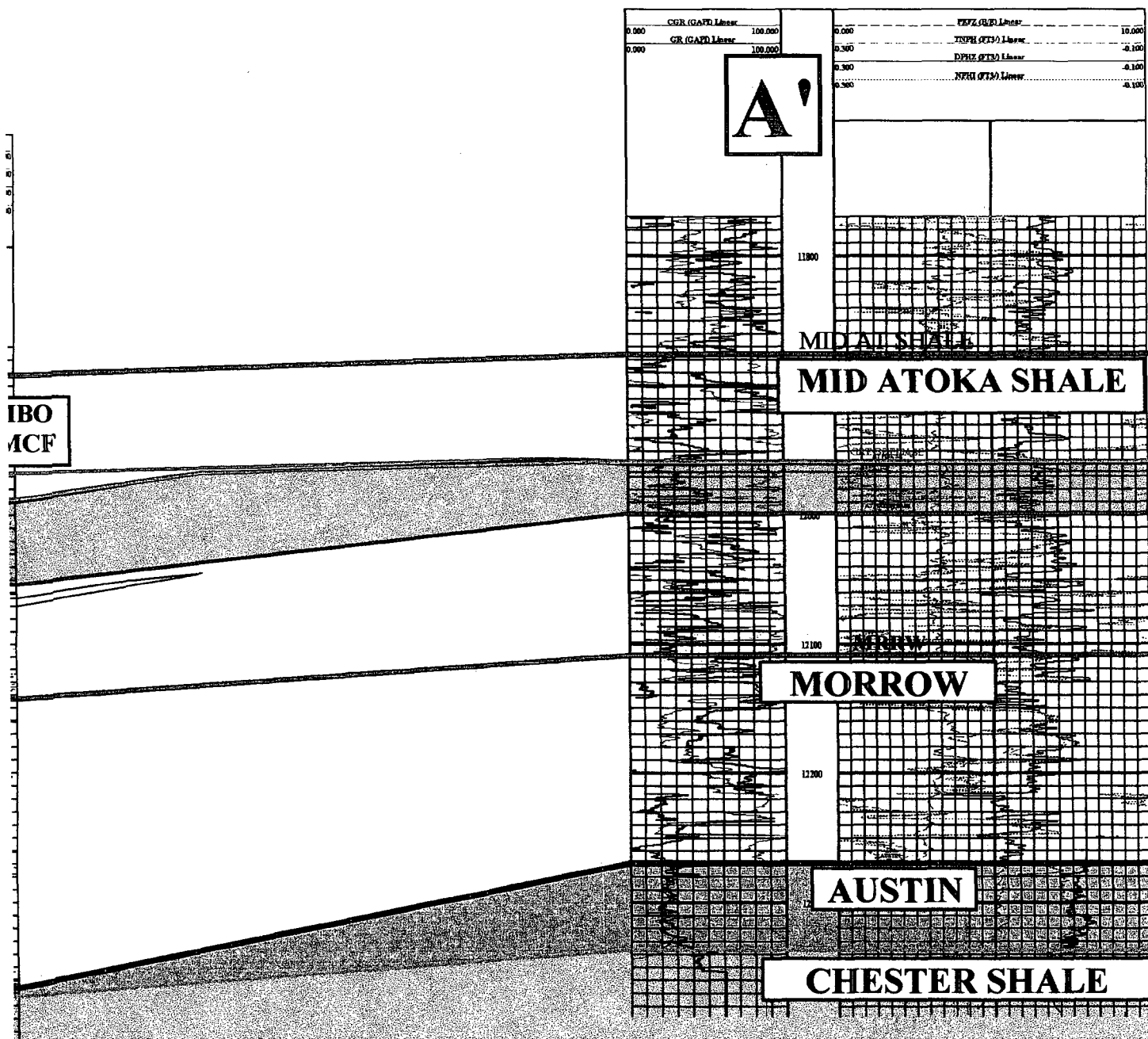


1





30025018170001  
YATES PETROLEUM CORP  
ROYAL 'BAC' STATE C 1  
4168 KB  
010.0S 034.0E 024



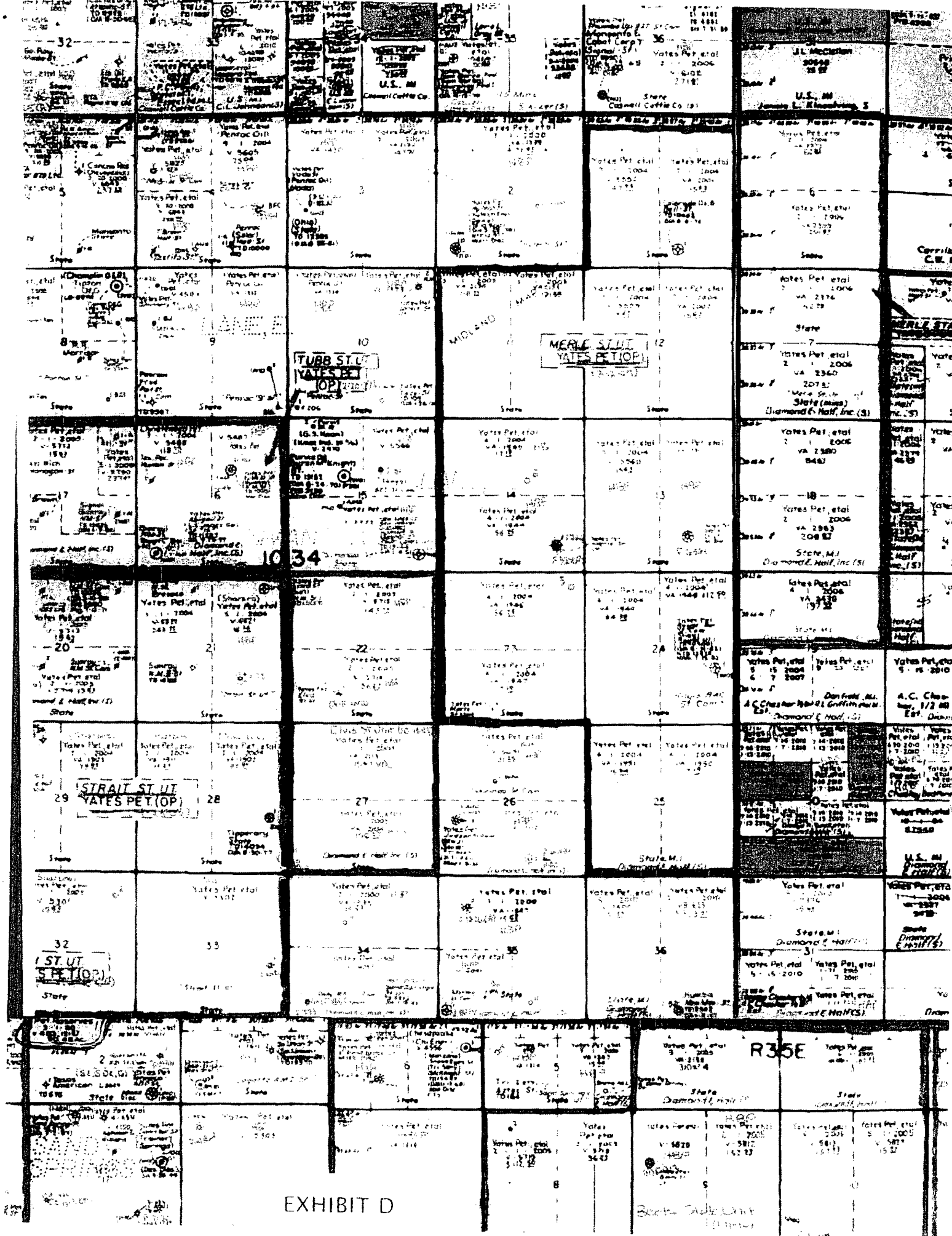
**YATES PETROLEUM CORP.**

**MERLE STATE UNIT # 5 DEEP POTENTIAL**

**SOUTHWEST - NORTH EAST STRATIGRAPHIC SECTION**

**VERT. SCALE 1" = 100'      HORIZ. SCALE 1" = 1000'**

**BY J. AMIET      JUNE 20, 2006**



CMD :  
OG5SECT

ONGARD  
INQUIRE LAND BY SECTION

08/07/06 14:01:38  
OGOEEM -TQ0H  
PAGE NO: 1

Sec : 23 Twp : 10S Rng : 34E Section Type : NORMAL

D 40.00 TWR VA1946 0002 YATES PETROLEUM C U 04/01/04 A	C 40.00 TWR VA1946 0002 YATES PETROLEUM C U 04/01/04	B 40.00 TWR VA1946 0002 YATES PETROLEUM C U 04/01/04	A 40.00 TWR VA1946 0002 YATES PETROLEUM C U 04/01/04 A
E 40.00 TWR VA1946 0002 YATES PETROLEUM C U 04/01/04	F 40.00 TWR VA1946 0002 YATES PETROLEUM C U 04/01/04	G 40.00 TWR VA1946 0002 YATES PETROLEUM C U 04/01/04	H 40.00 TWR VA1946 0002 YATES PETROLEUM C U 04/01/04
I 40.00 TWR VA1947 0000 YATES PETROLEUM C U 04/01/04	K 40.00 TWR VA1947 0000 YATES PETROLEUM C U 04/01/04	J 40.00 TWR VA1947 0000 YATES PETROLEUM C U 04/01/04	I 40.00 TWR VA1947 0000 YATES PETROLEUM C U 04/01/04
M 40.00 TWR VA1947 0000 YATES PETROLEUM C U 04/01/04	N 40.00 TWR VA1947 0000 YATES PETROLEUM C U 04/01/04 A	O 40.00 TWR VA1947 0000 YATES PETROLEUM C U 04/01/04	P 40.00 TWR VA1947 0000 YATES PETROLEUM C U 04/01/04

**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

**APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE**

1. Operator Name and Address <b>YATES PETROLEUM CORPORATION</b> 105 S 4TH ST ARTESIA, NM 88210		2. OGRID Number 25575
		3. API Number 30-025-38017
4. Property Code 33444	5. Property Name MERLE STATE UNIT	6. Well No. 008

**7. Surface Location**

UL - Lot	Section	Township	Range	Lot Km	Feet From	N/S Line	Feet From	E/W Line	County
D	23	10S	34E	D	660	N	660	W	LEA

**8. Pool Information**

Mississippian	0
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**Additional Well Information**

9. Work Type New Well	10. Well Type GAS	11. Cable/Rotary	12. Lease Type State	13. Ground Level Elevation 4119
14. Multiple N	15. Proposed Depth 12300	16. Formation Mississippi Limestone	17. Contractor	18. Spud Date
Depth to Ground water 45		Distance from nearest fresh water well > 1000		Distance to nearest surface water > 1000
Pk: Liner: Synthetic <input checked="" type="checkbox"/> 12 miles thick Clay: Pk Volume: 24000 bbls Drilling Method: Closed Loop System <input type="checkbox"/> Fresh Water <input checked="" type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				

**19. Proposed Casing and Cement Program**

Type	Hole Size	Casing Type	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5	13.375	48	400	450	0
Int1	12.25	9.625	40	4150	1400	0
Prod	8.75	5.5	17	12300	925	0

**Casing/Cement Program: Additional Comments**

Yates Petroleum Corporation proposes to drill and test the Mississippian/intermediate formations. Approximately 400' of surface casing will be set and cement circulated. Intermediate casing will be set at 4150', cement circulated to surface. If commercial production casing will be ran, perforated, and stimulated as needed to gain production.

**Proposed Blowout Prevention Program**

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	5000	5000	

I hereby certify that the information given above is true and complete to the best of my knowledge and belief.  
 I further certify that the drilling pit will be constructed according to NMDCB guidelines ☐ a general permit ☒ or an (attached) alternative OCB-approved plan ☐.

**OIL CONSERVATION DIVISION**

Printed Name: Electronically filed by dustyb		Approved By: Paul Kautz	
Title: Regulatory Tech		Title: Geologist	
Email Address: dustyb@ypcnm.com		Approved Date: 7/20/2006	Expiration Date: 7/20/2007
Date: 7/19/2006	Phone: 505-748-4364	Conditions of Approval Attached	

1625 N. French Dr., Hobbs, NM 88240  
Phone: (505) 393-6161 Fax: (505) 393-0720

# Energy, Minerals and Natural Resources

## District II

1301 W. Grand Ave., Artesia, NM 88210  
Phone: (505) 748-1283 Fax: (505) 748-9720

## Oil Conservation Division

1220 S. St Francis Dr.

Santa Fe, NM 87505

## District III

1000 Rio Brazos Rd., Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170

## District IV

1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3470 Fax: (505) 476-3462

### WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-025-38017	2. Pool Code	3. Pool Name Mississippian
4. Property Code 33444	5. Property Name MERLE STATE UNIT	6. Well No. 008
7. OGRID No. 25575	8. Operator Name YATES PETROLEUM CORPORATION	9. Elevation 4119

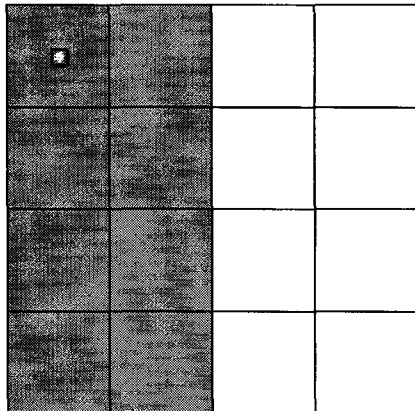
### 10. Surface Location

UL - Lot	Section	Township	Range	Lot Lbr	Feet From	N/S Line	Feet From	E/W Line	County
D	23	10S	34E		660	N	660	W	LEA

### 11. Bottom Hole Location If Different From Surface

UL - Lot	Section	Township	Range	Lot Lbr	Feet From	N/S Line	Feet From	E/W Line	County
12. Dedicated Acres 320.00	13. Joint or Infill	14. Consolidation Code	15. Order No.						

**NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT 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, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location(s) or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.*

E-Signed By: dusty bean

Title: Regulatory Tech

Date: 7/19/2006

### 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 belief.*

Surveyed By: Hershel Jones

Date of Survey: 7/18/2006

Certificate Number: 3640

## Permit Comments

Operator: YATES PETROLEUM CORPORATION , 25575

Well: MERLE STATE UNIT #008

API: 30-025-38017

Created By	Comment	Comment Date
dustyb	Sources at YPC have relayed information to me that there will not be enough H2S found from the surface to the Mississippian formation to meet the OCD's minimum requirements for the submission of a contingency plan per rule 118.	7/19/2008
dustyb	BOPE PROGRAM: A 5000# BOPE will be installed on the 9.825" casing and tested daily for operational.	7/19/2008
dustyb	MUD PROGRAM: 0-400' Fresh Water Gel; 400'-2150' Fresh Water; 2150'-4150' Red Bed Mud/Oil; 4150'-7650' Cut Brine; 7650'-11470' SW/GEL/Starch; 11470'-11945' SW/Gel/Starch/4.8% KCL; 11945'-12300' SW/GEL/Starch/4.8% KCL.	7/19/2008

## Permit Conditions of Approval

Operator: YATES PETROLEUM CORPORATION , 25575

Well: MERLE STATE UNIT #008

API: 30-025-38017

OCD Reviewer	Condition
pkautz	Pit construction and closure must satisfy all requirements of your approved plan, O.C.D. Rule 19.15.2.50, and the Pit and Below-Grade Tank Guidelines
pkautz	prior to any pit construction notify Gary Wink at 505-393-6161 ext 114