

DATE IN 2/17/09	SUSPENSE	ENGINEER D. Brooks	LOGGED IN 2/17/09	TYPE NSL	APP NO. KAAD904857814
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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



Merle State Unit #19H  
Yates Pet Corp. 25575

**ADMINISTRATIVE APPLICATION CHECKLIST**

6007

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 \_\_\_\_\_

2009 FEB 17 PM 3 55

RECEIVED

[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 2-17-09  
Print or Type Name Signature Title Date  
omundsdry@hollandhart.com  
e-mail Address



February 17, 2009

**HAND-DELIVERED**

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

Re: Application of Yates Petroleum Corporation for Administrative Approval of an Unorthodox Well Location for its Merle State Unit Well No. 19H from a surface location 1 600 feet from the North line and 1100 feet from the West line of Section 14, a penetration point 1211 from the North line and 1378 from the West line of Section 14 and a bottomhole location 1450 feet from the South line and 2000 feet from the East line of Section 11, Township 10 South, Range 34 East, N.M.P.M., Lea County, New Mexico.

Dear Mr. Fesmire:

Pursuant to the provisions of Division Rules 19.15.15.13 and 19.15.16.14, Yates Petroleum Corporation ("Yates") hereby seeks administrative approval of an unorthodox well location for its Merle State Unit Well No. 19H from a surface location 1600 feet from the North line and 1100 feet from the West line of Section 14, a penetration point of 1211 from the North line and 1378 from the West line of Section 14, and a bottomhole location 1450 feet from the South line and 2000 feet from the East line of Section 11, Township 10 South, Range 34 East, N.M.P.M., Lea County, New Mexico. The S/2 of Section 32 will be dedicated to the well.

This location is unorthodox because it is governed by the Division's statewide rules which provide for wells on 40-acre spacing to be located no closer than 330 feet to the outer boundary of the spacing unit. Division Rule 19.15.16.14 defines the "Penetration Point" as "the point where the wellbore penetrates the top of the pool from which it is intended to produce." The proposed penetration point is unorthodox because it penetrates the Wolfcamp (oil) at a point 88 feet from the western boundary and 109 feet from the southern boundary of the spacing unit.

As discussed by Mr. Amiet in Exhibit A, Yates would like to test the Wolfcamp (Abo). Exhibit B is a Structure Map Base Basal Abo Pay. Exhibit C is a Basal Abo Net Pay Isopach.



Attached hereto as **Exhibit D** is a copy of the C-101 and C-102 and a plat. Yates is the operator of the Merle State Unit and is therefore also the offset operator towards which the well is encroaching and holds 100% of the working interest in Section 14. Therefore, there are no affected parties as defined by Division rules and no notice is required.

The proposed location is the most efficient and reasonable way to develop these potential reserves and would be in the best interest of conservation and the prevention of waste.

Your attention to this application is appreciated.

Sincerely,

Ocean Munds-Dry  
ATTORNEY FOR YATES PETROLEUM  
CORPORATION

Enclosures

cc: Mr. Robert Bullock

## REQUEST FOR LOCATION EXCEPTION – MERLE STATE UNIT # 19H

Yates Petroleum Corporation is requesting a location exception for the Merle State Unit #19H well. This well is currently permitted with a 9150' basal Abo pilot hole, and then a 4000' lateral trending N35E. The permitted surface hole location is approximately 1600' FNL and 1100' FWL section 14, T10S R34E. The BHL is projected to be 1450' FSL and 2000' FEL of section 11, T10S R34E. This horizontal well will intersect 5 proration units in two different sections.

Included is a structure map contoured on the base of the productive basal Abo trend, and a net pay map of this same productive trend. The structure map shows a gentle regional dip to the SE. The basal Abo net pay map shows there are two productive systems oriented in a NW-SE direction. The Merle #19H horizontal well will drill across one of these productive trends. The purpose of the #19H well is to test a portion of the undrilled area between the two trends and then cross the northern productive trend to see how wide the pay zone is. The horizontal well will drill between the Merle #12 and the Merle #13. The closest the Merle #19H will get to any other well is approximately 800' from the Merle #12 vertical well. The Merle #12 had an IP of 200 BO/D, 216 MCF/D, and 21 BW/D. The expected EUR is 66 MBO and 436 MMCF. The Merle #13 had an IP of 237 BO/D, 403 MCF/D, and 0 BW/D. The Merle #13 has an expected EUR of 64 MBO and 271 MMCF.

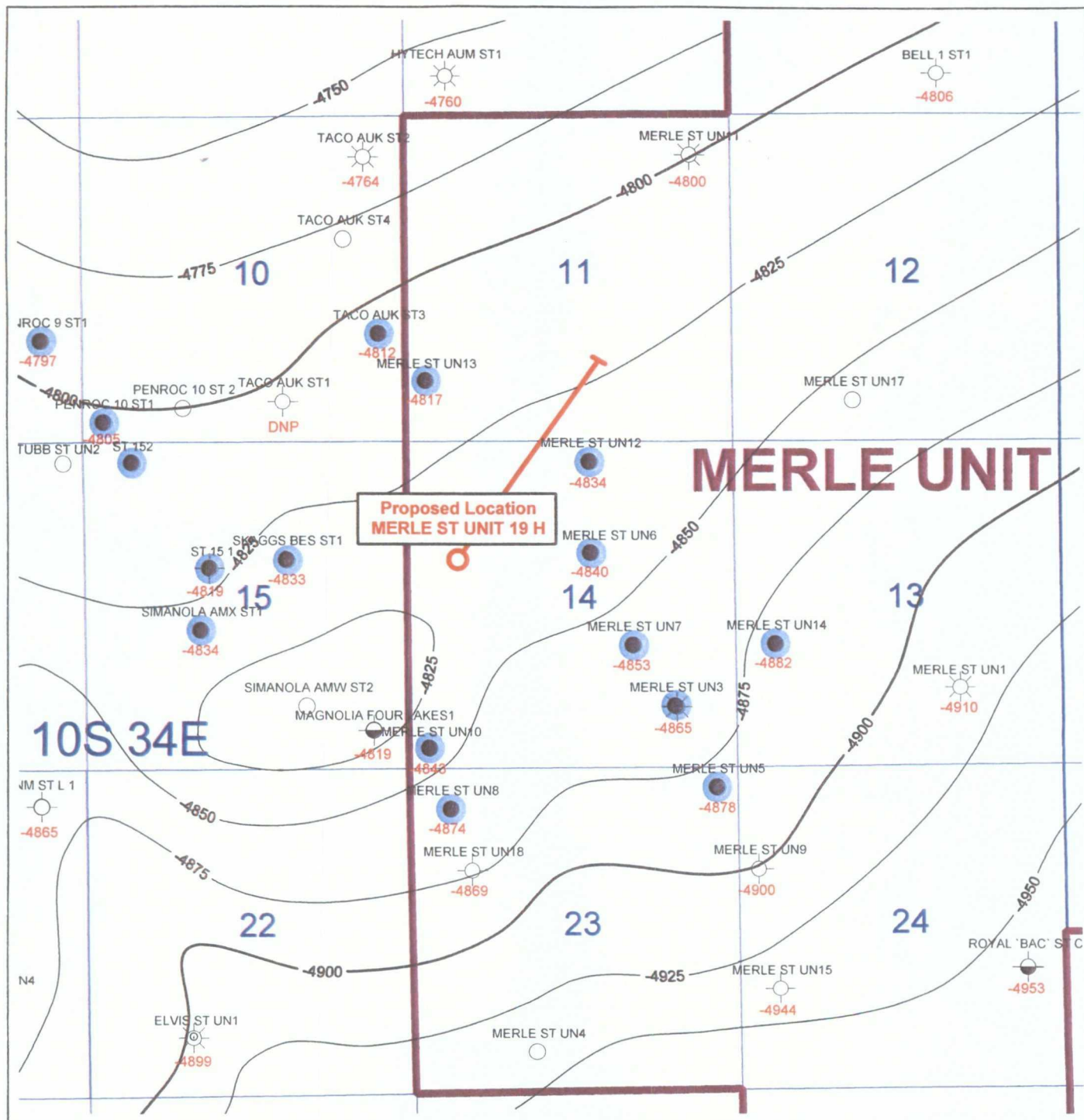
The Merle Abo trend is in Lane Southeast Field which allocates a 40 acre spacing.

Yates Petroleum has 100% working interest in the Merle State Unit # 19H, and the entire wellbore is inside the Merle State Unit. Yates has been very active in this area and has drilled 14 wells in the Merle State Unit, and 11 of these are productive wells. This proposed horizontal well should access considerably more productive dolomite than a vertical well, and should produce several times the cumulative production of a vertical well. Yates believes the Merle # 19H would be the most efficient and reasonable way to evaluate the future potential of this lease, and would be in the best interest of conservation and the prevention of waste.



John Amiet      575-748-4312





- Locations
- Productive Basal Abo Wells



**STRUCTURE MAP BASE BASAL ABO PAY**  
T - 10S R - 34E  
Lea County, New Mexico

Author:  
JOHN AMIET

C.I. = 25 feet

Date:  
17 December, 2008

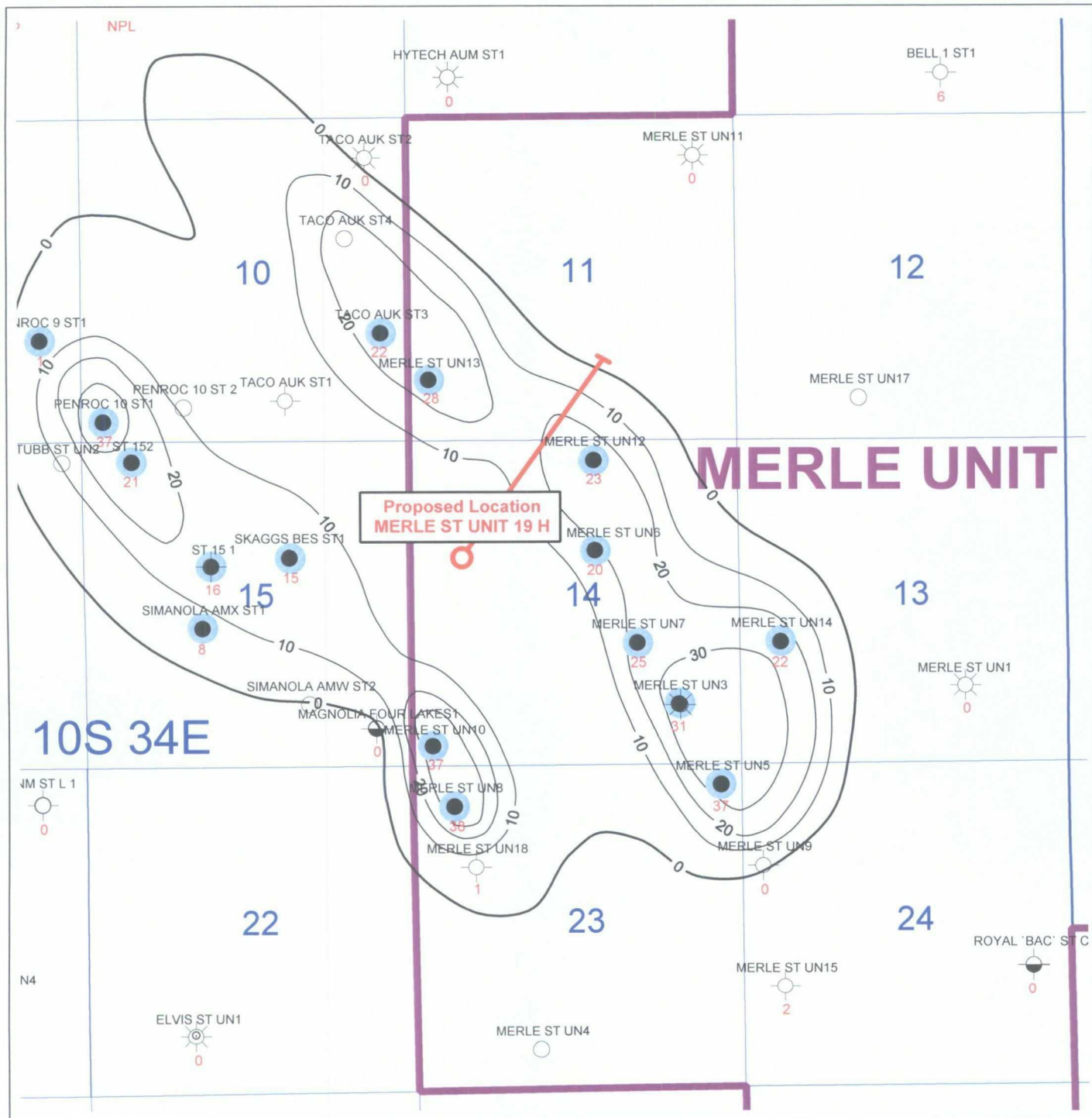
Scale:  
1" = 2400'

Merle St Un 19H Str  
Map.gmp

EXHIBIT

B

tabbles



- Locations
- Productive Basal Abo Wells



**BASAL ABO NET PAY ISOPACH**  
Cross Plot Porosity > 5%  
T - 10S R - 34E  
Lea County, New Mexico

Author:  
**JOHN AMIET**

C.I. = 10 feet

Date:  
17 December, 2008  
Merle St Un 19H Iso  
Map.gmp

Scale:  
1" = 2400'

**EXHIBIT**

**C**

tabbles

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Form C-101  
June 16, 2008

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Submit to appropriate District Office

☐ AMENDED REPORT

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

<sup>1</sup> Operator Name and Address Yates Petroleum Corporation 105 South Fourth Street Artesia, New Mexico		<sup>2</sup> OGRID Number 025575
		<sup>3</sup> API Number 30 -
<sup>3</sup> Property Code	<sup>5</sup> Property Name Merle State Unit	<sup>6</sup> Well No. 19H
<sup>9</sup> Proposed Pool 1 Wildcat Wolfcamp		<sup>10</sup> Proposed Pool 2

<sup>7</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	14	10S	34E		1600	North	1100	West	Lea

<sup>8</sup> Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	11	10S	34E		1450	South	2000	East	Lea

Additional Well Information

<sup>11</sup> Work Type Code N	<sup>12</sup> Well Type Code O	<sup>13</sup> Cable/Rotary R	<sup>14</sup> Lease Type Code S	<sup>15</sup> Ground Level Elevation 4189
<sup>16</sup> Multiple No	<sup>17</sup> Proposed Depth 9150	<sup>18</sup> Formation Wolfcamp	<sup>19</sup> Contractor	<sup>20</sup> Spud Date

<sup>21</sup> Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
14.75	11.75	42.0	400	275	0
11.0	8.625	32.0	4150	1125	0
7.875	5.5	17	12570	1100	8000

<sup>22</sup> Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

Yates Petroleum Corporation proposes to drill and test the Wolfcamp/intermediate formations. A pilot hole will be drilled to 9150'. Well will then be plugged back and kicked off at approximately 8548' at 12 degrees per 100' with a 7 7/8" hole to 12570' MD with a TVD of 9020' at TD. Penetration point of producing zone will be encountered at 1211' FNL & 1378' FWL, Section 14-10S-34E. Deepest TVD in the well is 9150' in the pilot hole. Deepest TVD in the lateral is 9026.46'

<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature:

*Clifton May*

Printed name:

Clifton May

Title:

Regulatory Agent

E-mail Address:

cliff@yatespetroleum.com

Date:

February 4, 2009

Phone:

575-748-4347

OIL CONSERVATION DIVISION

Approved by:

Title:

Approval Date:

Expiration Date:

EXHIBIT

tabbies

D

al Attached ☐

## Permit Comments

Created By:	Comment:	Comment Date:
L Briggs	Mud Program: 0 to 400' with Fresh Water Gel; 400' to 2190' with Fresh Water; 2190' to 4150' with Red Bed Mud/Oil; 4150 to 7700' with Cut Brine; 7700' to 9150' with SW Gel/Starch; 8548' to 12,570 with Salt Water Gel/Starch/4-6%KCL	2/4/2009
L Briggs	BOPE Program: A 3000 psi BOPE system will be installed on the 8 5/8" casing and tested daily for operational.	2/4/2009
L Briggs	Sources at Yates Petroleum Corporation have relayed information to me that they believe there will not be enough H <sub>2</sub> S found from surface to TD to meet OCD's minimum requirements for the submission of a contingency plan per Rule 118.	2/4/2009
L Briggs	The new C-144 that reflects the rule changes effective June 16, 2008 will be submitted via fax and then hard copy to follow in the mail to the appropriate OCD district office (reserve pit).	2/4/2009



DISTRICT I  
1625 N. FRENCH DR., HOBBS, NM 88240

DISTRICT II  
1301 W. GRAND AVENUE, ARTESIA, NM 88210

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

DISTRICT IV  
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION  
1220 SOUTH ST. FRANCIS DR.  
Santa Fe, New Mexico 87505

Form C-102  
Revised October 12, 2005  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number <b>30-025-39341</b>	Pool Code	Pool Name <b>WILDCAT WOLF CAMP</b>
Property Code	Property Name <b>MERLE STATE UNIT</b>	Well Number <b>19H</b>
OGRID No.	Operator Name <b>YATES PETROLEUM CORPORATION</b>	Elevation <b>4189'</b>

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	14	10-S	34-E		1600	NORTH	1100	WEST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	11	10-S	34-E		1450	SOUTH	2000	EAST	LEA

Dedicated Acres <b>160</b>	Joint or Infill	Consolidation Code	Order No.
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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

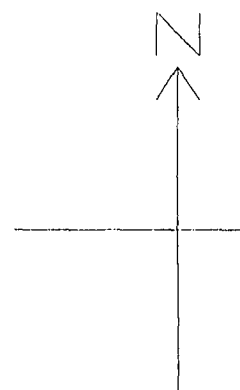
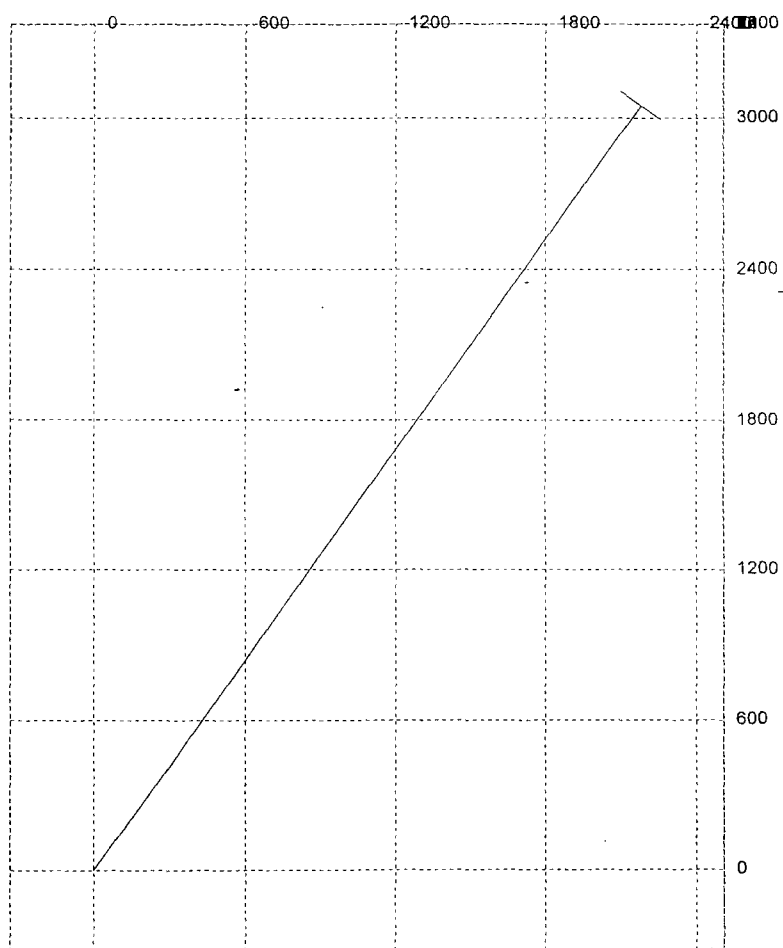
<p><b>BOTTOM HOLE LOCATION</b> Y=895431.3 N X=774870.3 E</p> <p><b>GEODETIC COORDINATES</b> NAD 27 NME SURFACE LOCATION Y=892359.5 N X=772695.8 E</p> <p>LAT.=33.449866° N LONG.=103.439316° W LAT.=33°26'59.52" N LONG.=103°26'21.54" W</p>	<p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify that the information 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 or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Clifton May</i> 2/4/09 Signature Date <b>CLIFTON MAY</b> Printed Name</p> <p><b>SURVEYOR CERTIFICATION</b></p> <p>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.</p> <p><b>RONALD J. EIDSON</b> JANUARY 16, 2009 Date Surveyed Signature &amp; Seal of Professional Surveyor <i>Ronald J. Eidson</i> 2/26/09 Certificate No. <b>GARY EIDSON 12841</b> <b>RONALD EIDSON 3239</b></p>
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MD	Inclination	Azimuth	TVD	N.M.S.	E.M.S.	D.M.S.	Depth	Pressure	Flow
0	0	0	10	0	0	0			
2,190	0	0	2,190	0	0	0			RUSTLER
2,800	0	0	2,800	0	0	0			YATES
4,060	0	0	4,060	0	0	0			SAN ANDRES
5,505	0	0	5,505	0	0	0			GLORIETA
6,970	0	0	6,970	0	0	0			TUBB
7,780	0	0	7,780	0	0	0			ABO
8548	0.24	35.56	8548	0	0	12	360	HS	
8550	0.24	35.56	8550	0	0	12	360	HS	
8575	3.24	35.56	8574.99	0.62	0.44	12	0	HS	
8600	6.24	35.56	8599.9	2.3	1.65	12	0	HS	
8625	9.24	35.56	8624.67	5.04	3.6	12	0	HS	
8650	12.24	35.56	8649.23	8.83	6.31	12	0	HS	
8675	15.24	35.56	8673.51	13.66	9.76	12	0	HS	
8700	18.24	35.56	8697.45	19.52	13.95	12	0	HS	
8725	21.24	35.56	8720.97	26.39	18.86	12	0	HS	
8750	24.24	35.56	8744.03	34.25	24.48	12	0	HS	
8775	27.24	35.56	8766.54	43.08	30.79	12	360	HS	
8800	30.24	35.56	8788.46	52.86	37.78	12	0	HS	
8825	33.24	35.56	8809.72	63.56	45.43	12	360	HS	
8850	36.24	35.56	8830.26	75.15	53.71	12	360	HS	
8875	39.24	35.56	8850.03	87.59	62.61	12	0	HS	
8900	42.24	35.56	8868.97	100.87	72.09	12	360	HS	
8925	45.24	35.56	8887.03	114.93	82.14	12	360	HS	
8950	48.24	35.56	8904.16	129.74	92.73	12	360	HS	
8975	51.24	35.56	8920.31	145.26	103.82	12	360	HS	
9000	54.24	35.56	8935.45	161.44	115.39	12	360	HS	
9025	57.24	35.56	8949.52	178.25	127.4	12	360	HS	
9050	60.24	35.56	8962.49	195.63	139.83	12	360	HS	
9075	63.24	35.56	8974.33	213.55	152.63	12	360	HS	
9100	66.24	35.56	8984.99	231.94	165.78	12	360	HS	
9125	69.24	35.56	8994.46	250.76	179.23	12	360	HS	
9150	72.24	35.56	9002.71	269.96	192.95	12	360	HS	
9175	75.24	35.56	9009.71	289.48	206.91	12	360	HS	
9200	78.24	35.56	9015.44	309.27	221.06	12	0	HS	
9225	81.24	35.56	9019.89	329.29	235.36	12	360	HS	
9250	84.24	35.56	9023.05	349.46	249.78	12	360	HS	
9275	87.24	35.56	9024.91	369.74	264.27	12	360	HS	
9298.8	90.1	35.56	9025.46	389.09	278.1	0			PAY-ZONE
12569.52	90.1	35.56	9020	3050	2180	0			LATERAL TD

Pilot hole will be drilled to 9150'. Well will then be plugged back and kicked off at approx. 8548' at 12 degrees per 100' with a 7 7/8" hole to 12570' MD with a TVD of 9,020' at TD. Penetration point of producing zone will be encountered at 1211' FNL and 1378' FWL, 14-10S-34E. Deepest TVD in the well is 9150' in the pilot hole. Deepest TVD in the lateral is 9025.46'.

### 3D<sup>3</sup> Directional Drilling Planner - 3D View

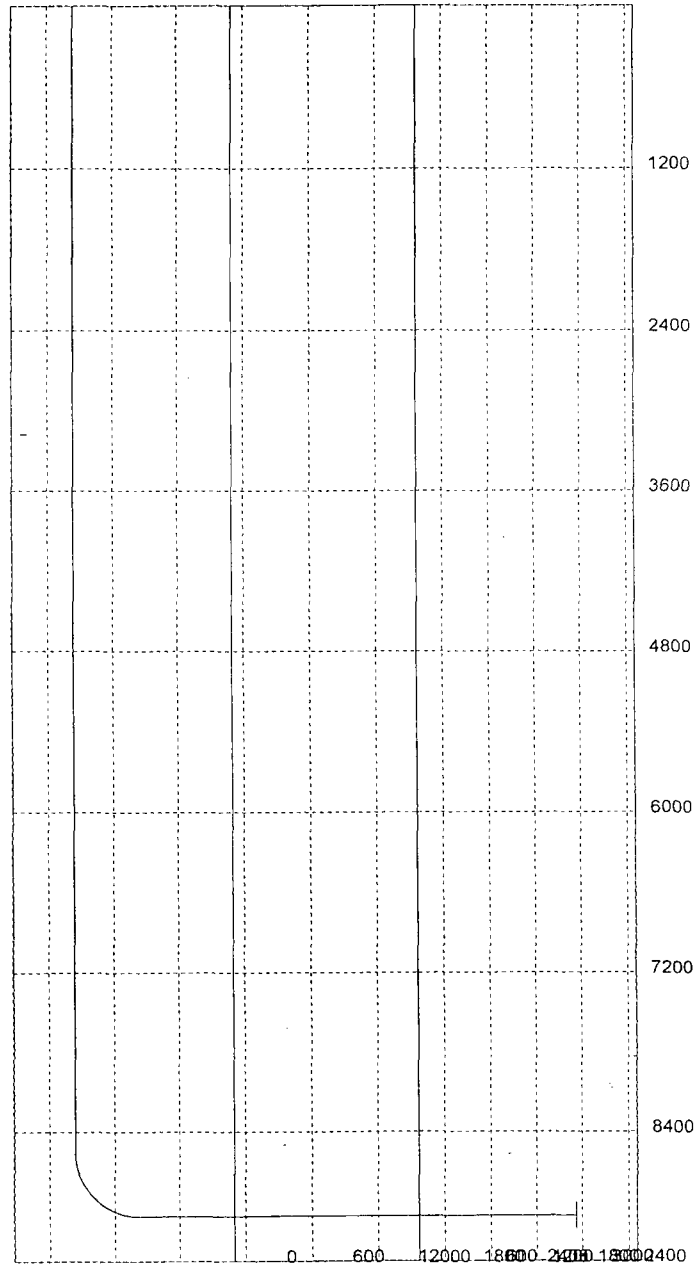
Company: **Yates Petroleum Corporation**  
Well: **Merle State Unit #19H**

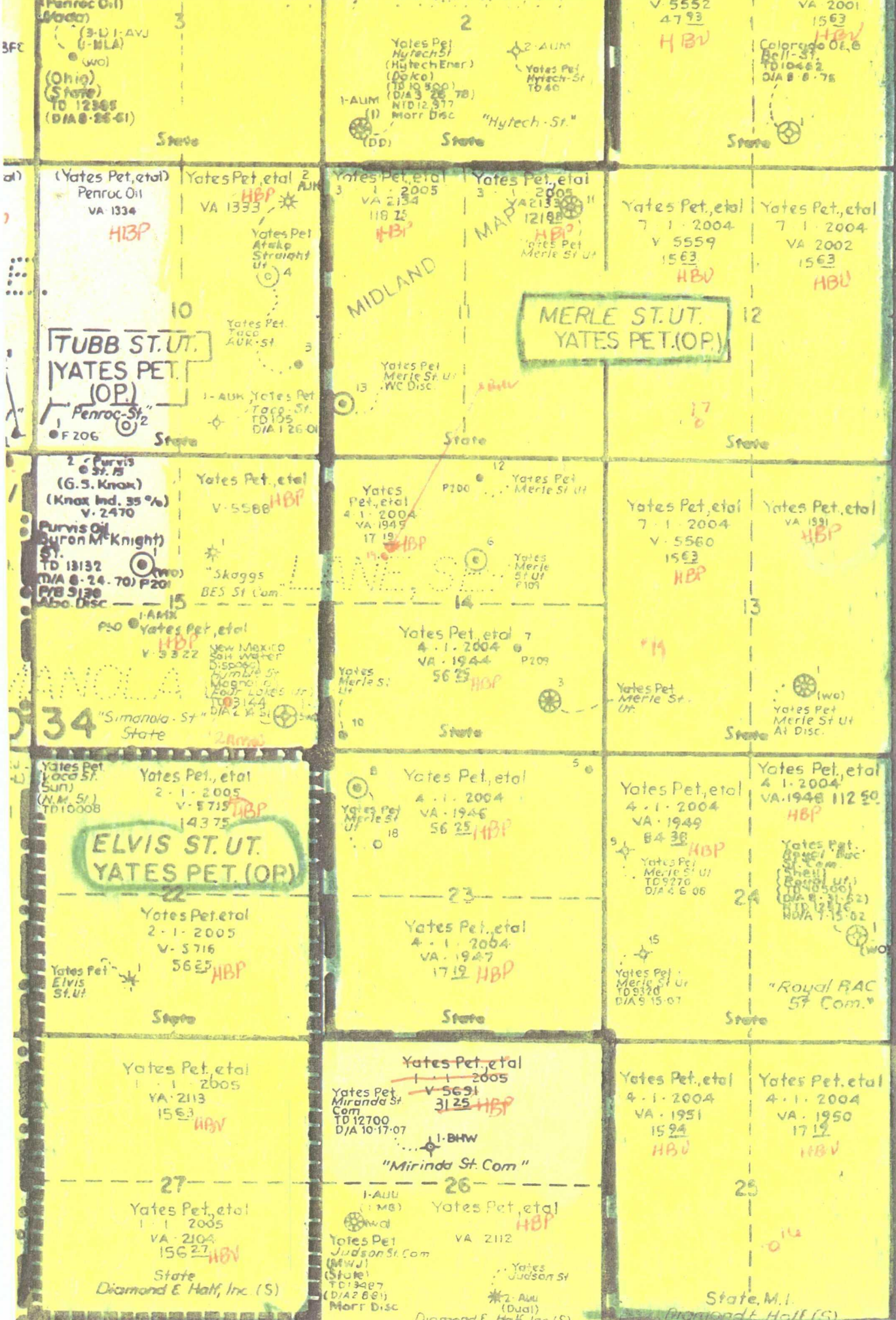


### 3D<sup>+</sup> Directional Drilling Planner - 3D View

Company: Yates Petroleum Corporation

Well: Merle State Unit #19H





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10  
S