		10/4/06	SUSPENSE	BROKS	LOGGEDIN 10/5/06	TYPE ASL	APP NO. D TDS0621853801
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ABOVE THIS LINE FOR DIVISION USE ONLY



- 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] Location - Spacing Unit - Simultaneous Dedication [A] NSL 🗆 NSP 🗆 SD 2006 Check One Only for [B] or [C] [B] Commingling - Storage - Measurement DHC CTB PLC PC OLS OLM \_\_\_ Injection - Disposal - Pressure Increase - Enhanced Oil Recovery [C] Pm WFX PMX SWD PIPI EOR PPR  $\sim$ [D] Other: Specify 5 [2] NOTIFICATION REQUIRED TO: - Check Those Which Apply of -Does Not App Working, Royalty or Overriding Royalty Interest Owners [A] [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 m	ust be completed by an	i individual with man	agerial and/or superv	isory capacity.	
Ocean Munds Dry		lunds-Dy	attorney	P	10-4-06
Print or Type Name	Signature	, ]	Title		Date
	-	0	<u>omunds</u> d	Ingholl	and hart.con



October 4, 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

- 30-025-35410

Re: Application of Yates Petroleum Corporation, to amend Administrative Order NSL-4597 to include the Mississippian formation for its Koala "AXZ" State Well No. 1, located at 990 feet from the North line and 330 feet from the East line of Section 19, Township 12 South, Range 34 East, N.M.P.M., Lea County, New Mexico.

Dear Mr. Fesmire:

Yates Petroleum Corporation ("Yates") hereby seeks an amendment to Administrative Order NSL-4597, dated July 5, 2001, to include the Mississippian formation for its Koala "AXZ" State Well No. 1, located 990 feet from the North line and 330 feet from the East line of Section 19, Township 12 South, Range 34 East, N.M.P.M., Lea County, New Mexico.

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 east line.

This well is currently approved at an unorthodox gas well location for the Atoka and Morrow intervals. A standard 320-acre spacing unit in the E/2 of Section 19 is dedicated to this well. Yates requests permission to deepen the well to test the Mississippian formation. The same justification for an unorthodox location in the Atoka and Morrow formations is relevant for the Mississippian (Austin) formation. See attached **Exhibit A** (Original Geologic Justification Provided for the original application). In sum, a north-south trending fault exists on the eastern side of Section 19. The current well location provides the best possibility of retaining porosity. See **Exhibit B**.

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



Administrative Application October 4, 2006 Page 2

**Exhibit** C is a plat that shows the subject area and the proposed unorthodox well location.

The proposed well location encroaches on the acreage to the east in Section 20 which is also operated by Yates Petroleum Corporation. All interest ownership is common in the offsetting spacing unit towards which the proposed well encroaches in Section 20. 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.

incerely.

ATTORNEY FOR YATES PETROLEUM CORPORATION

Enclosures cc: John Amiet (w/o attachments)

Administrative Application October 4, 2006 Page 3

Yates Petroleum Corporation

Attention: John Amiet

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

Dear Mr. Amiet:

Reference is made to your application dated October 4, 2006 for an amendment to Administrative Order NSL-4597. Yates requests to re-complete its Koala "AXZ" State Well No. 1 (API No. 30-025-35410) in the Mississippian formation. Said well is located 990 feet from the North line and 330 feet from the East line of Section 19, Township 12 South, Range 35 East, NMPM, Lea County, New Mexico.

A 320-acre spacing and protation unit comprising the E/2 of said Section 19 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 320-acre unit in the Mississippian formation is hereby approved.

Sincerely,

Mark E. Fesmire, P.E. Director

cc: Oil Conservation Division - Hobbs/Artesia

P. 04

#### Figure #4

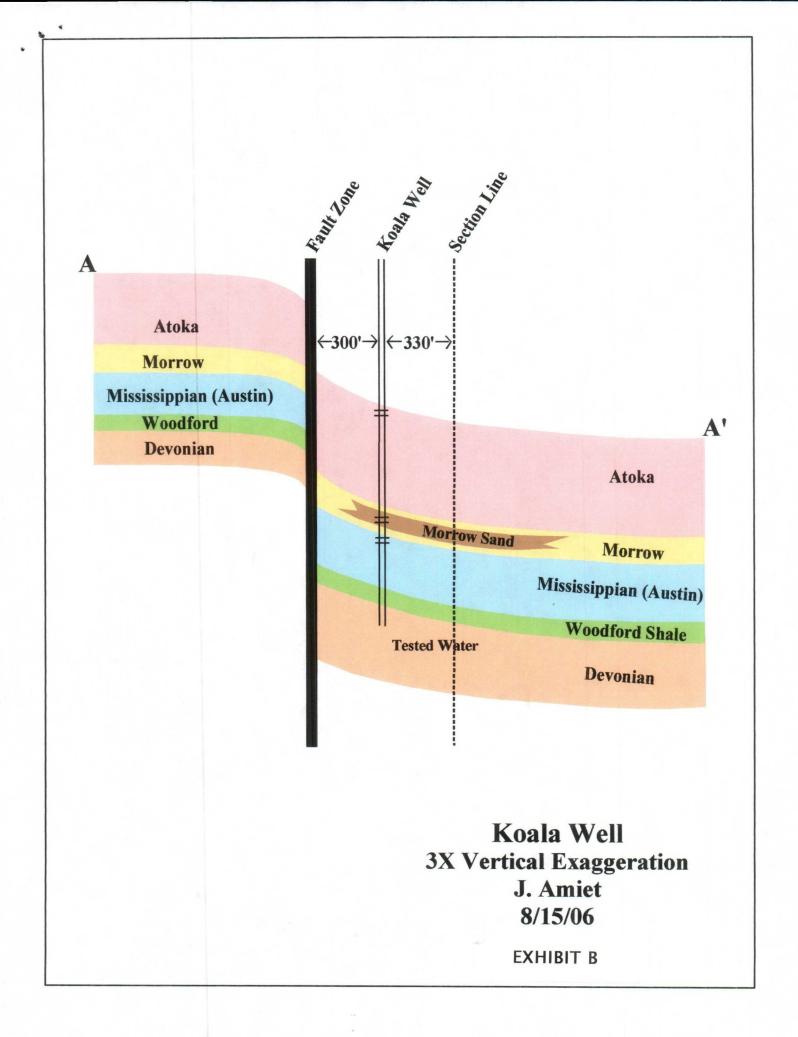
#### Koala "AXZ" State No. 1 Unorthodox Location Description and Geologic Justification

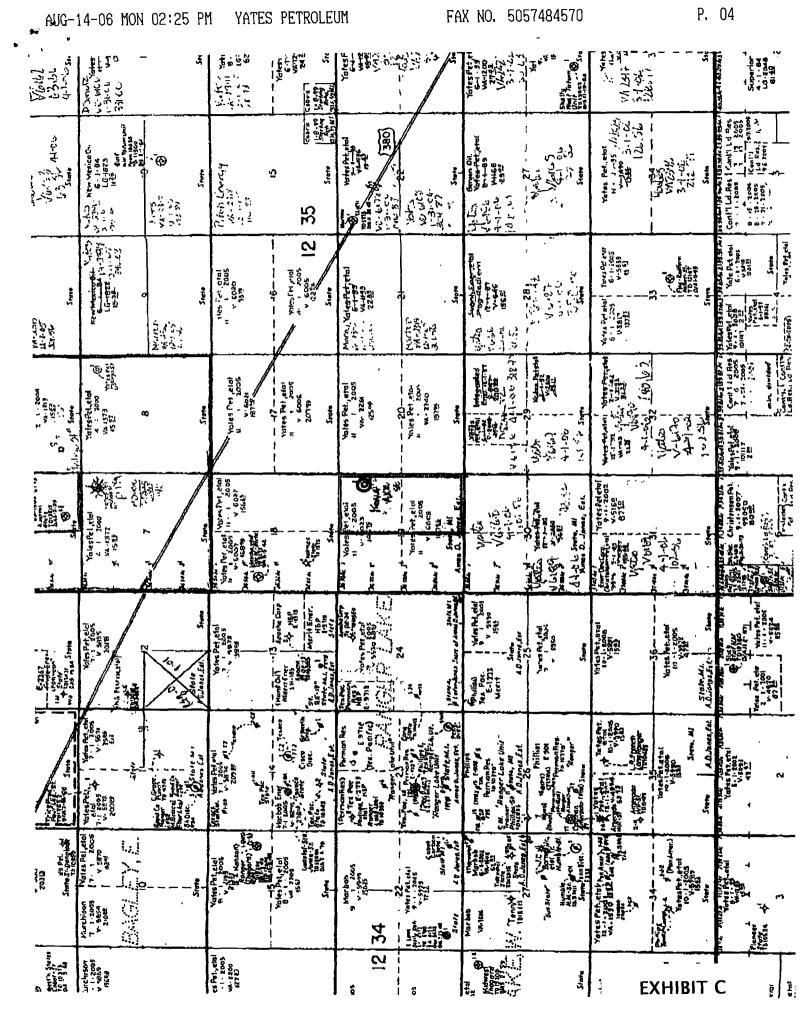
Yates Petroleum Corporation is requesting a non-standard location to drill a 13,700 foot Devonian test located 990' FNL and 330' FEL section 19 T12S R35E, Lea Co. New Mexico. The Devonian formation produces oil in this area from porous dolomite and limestone reservoirs on structural features with four way dip closure. The large structural closures in the Tatum Basin Devonian Play were drilled many years ago and include fields such as Cross Roads, Denton, Four Lakes and others. In recent years the availability of 3-D seismic surveys in the Tatum Basin area has allowed exploration wells to be drilled for much smaller structural closures that could not be identified without 3-D seismic. Often these small structures are developed as one or two well fields.

The small Devonian structural closure targeted with the Koala "AXZ" State No. 1 covers a total of approximately 180 acres in Sections 17, 18, 19 and 20. This application is required by the location of a north-south trending fault located on the eastern side of Section 19. Figures #1 and #2 show the fault controlled structure and the problems with a conventional location. A conventional location 660 feet from the Bast line would fall directly on top of this fault zone. The primary reason for not drilling immediately adjacent to the fault is that even with 3-D seismic data, pinpointing the exact location this fault zone at 13,700 feet is only good to within several hundred feet. A second reason for not drilling adjacent to the fault zone is that porosity is usually destroyed immediately adjacent to a compressional fault system. Moving the well into Section 20 with a standard location of 660 feet would lose approximately 90 feet of structural elevation. Figure #2 displays this concept very well. Structure is extremely important in small Devonian reservoirs such as this one, and 90 feet can mean the difference between a producing well and a dry hole. A sub-standard location 990 feet from the north line and 330 feet from the east line of Section 19 that retains the structural elevation is the best chance for a successful well.

Secondary targets for this deep test are the Morrow and Atoka sands. The same reasons apply for the Morrow sub-standard location, retention of the porosity and the inability of the 3-D seismic to pick the exact location of this fault at these depths.

### EXHIBIT A





### Brooks, David K., EMNRD

From: Ocean Munds-Dry [Omundsdry@hollandhart.com]

Sent: Thursday, November 02, 2006 3:09 PM

To: Brooks, David K., EMNRD

Subject: RE: Yates NSL application pTDS06-27853801 - Koala AXZ State Well No. 1

David: Yes, you are right the location is in Range 35 East. It was my typo. Thank you. Ocean

From: Brooks, David K., EMNRD [mailto:david.brooks@state.nm.us] Sent: Thursday, November 02, 2006 3:05 PM To: Ocean Munds-Dry Subject: Yates NSL application pTDS06-27853801 - Koala AXZ State Well No. 1

Ocean:

The referenced application describes a proposed location in Section 19, Township 12S, Range 34E.

The previous order (NSL-4597) and documents in the well file and Exhibit C to your application all concur in showing the location of this well in Section 19, Township 12S, Range 35E.

I accordingly assume that the reference to Range 34E in the application is a typographical error.

The order approving this application is ready for signature, but I need written confirmation that the requested location is in Range 35E so that the order can be issued.

Thanks

David K. Brooks Assistant General Counsel

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District I

1625 N. French Dr., Hobbs, NM 88240 District II

811 South First, Artesia, NM 88210 District III 1000 Rio Brazos Rd., Aztec, NM 87410

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

Form C-102 Revised August 15, 2000

AMENDED REPORT

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

<sup>1</sup> API Number <sup>2</sup> Pool					de <sup>3</sup> Pool Name					
30-025-35410				97164	64 Wildcat Austin			ustin		
4 Property	Code				<sup>5</sup> Property	Name			• Well Number	
2746	4				Koala AXZ State				1	
OGRID No.					<sup>8</sup> Operator Name				* Elevation	
02557	5			Yat	es Petroleum	Corporation			4114'	
					<sup>10</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	
Α	19	125	35E		990	North	330	East	Lea	
			<sup>11</sup> Be	ottom Ho	le Location I	f Different From	m Surface			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
Α	19	125	35E		1103	North	665	East	Lea	
<sup>2</sup> Dedicated Acre 320	<sup>13</sup> Joint o	r Iofill   <sup>14</sup> C	onsolidation	Code 15 O	rder No.		<u> </u>	<u> </u>	·····	

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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

ι6 VC	9-6023	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature Triated Name Stormi Davis Title Regulatory Compliance Technician Date 7-8-02
		18 SURVEYOR CERTIFICATION I hereby certify that the well location shows 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 base of my belief. Date of Survey Signature and Seal of Professional Surveyor. See Original Plat Certificate Number



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON Governor Jennifer A. Salisbury Cabinet Secretary

July 5, 2001

Lori Wrotenbery Director Oil Conservation Division

Telefax No. (505) 983-6043

Yates Petroleum Corporation c/o Holland & Hart LLP and Campbell & Carr P. O. Box 2208 Santa Fe, New Mexico 87504-2208 Attention: William F. Carr

Administrative Order NSL-4597

Dear Mr. Carr:

Reference is made to the following: (i) your application dated May 22, 2001 on behalf of the operator, Yates Petroleum Corporation ("Yates"); and (ii) the records of the New Mexico Oil Conservation Division ("Division") in Santa Fe: all concerning Yates's request to drill its Koala "AXZ" State Well No. 1 (API No. 30-025-35410) at an unorthodox gas well location in both the wildcat Atoka and Morrow formations 990 feet from the North line and 330 feet from the East line (Unit A) of Section 19, Township 12 South, Range 35 East, NMPM, Lea County, New Mexico. It is our understanding that the primary objective for this well is the deeper Devonian interval, in which the NE/4 NE/4 of Section 19 is to be dedicated to form a standard 40-acre oil spacing and proration unit [pursuant to Division Rule 104.B (1), this location is standard]. However, pursuant to Division 104.C (2) (a), this location is considered to be an unorthodox gas well location for both the Atoka and Morrow intervals in which the E/2 of Section 19 is to be dedicated thereby in order to form a standard 320-acre stand-up gas spacing and proration unit.

The geologic interpretation submitted with this application indicates that a well drilled at the proposed location will be at a more favorable geologic position within the Devonian interval than a well drilled at an alternate location considered to be standard within the proposed 320-acre Atoka/Morrow gas spacing and proration unit.

The application has been duly filed under the provisions of Division Rule 104.F.

By the authority granted me under the provisions of Division Rule 104.F (2), the above-described unorthodox Atoka/Morrow gas well location within the proposed 320-acre stand-up unit comprising the E/2 of Section 19 for Yates's proposed Koala "AXZ" State Well No. 1 is hereby approved.

Sincerely, Lori Wrotenbery Director

LW/MES/kv

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

## **Results of Directional Survey**

- -

30-025-35410	YATES PETROLEUM CORPORATION			
	KOLA AXZ STATE # 1			

	MD	N/S	E/W
	12500	-54.21	-240.77
TOP PERFS	12524	-55.29	-240.77
	12600	-58.69	-243.51
BOT PERFS	12620	-62.31	-244.58
	12700	-62.46	-244.62

NEXT TO LAST	13200	-82.21	-270.71
LAST READING	13211	-82.66	-271.64
TD	13950	-113.34	-335.05

Surface Location	990	FN	330	FE
Projected BHL	1103	FN	665	FE
Location of				
Top Perfs	1045	FN	571	FE
Bottom Perfs	1052	FN	575	FE

SUMMARY of Subsurface Locations

Surface Location	A-19-12S-35E	990	FN	330	FE
Top Perfs	A-19-12S-35E	1045	FN	571	FE
Bottom Perfs	A-19-12S-35E	1052	FN	575	FE
Projected TD	A-19-12S-35E	1103	FN	665	FE

Perforations are <u>OUTSIDE</u> the required stand-off for a 320 acre