Fcrm 3160--3 (November 1983) (formerly 9-331C) NM OIL CONS. COMMISSION

SUBMIT IN reverse side) Expires August 31, 1985

DEDADTMENT OF THE INTEDIOD

BUREAU OF LAND MANAGE	5. LEASE DESIGNATION AND SERIAL NO. NM-2538		
APPLICATION FOR PERMIT TO DRILL, DE	EEPEN, OR PLUG BACK	6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
DRILL X DEEPEN	OCT J JUSTAN JU	7. UNIT AGREEMENT NAME	
b. Type of well OIL GAS WELL OTHER	SINGLE MULTIPLE TO	8. FARM OR LEASE NAME	
2. NAME OF OPERATOR Yates Energy Corporation	RECEIVED	Thornbush Federal 9. WELL NO.	
3. ADDRESS OF OPERATOR	20, 20	2 10. FIELD AND POOL, OR WILDCAT	
4. LOCATION OF WELL (Report location clearly and in accordance with At surface	any State requirements.	Tamano Bone Spring 11. SEC., T., R., M., OB BLE. AND SURVEY OR AREA	
At proposed prod. zone 4. At proposed prod. zone	. <u>(0, C. D.</u>	- "	

Section 1-18S-31E 14. DISTANCE IN MILES AND DIBECTION FROM NEAREST TOWN OR POST OFFICE* 12. COUNTY OR PARISH | 13. STATE 10 miles S.E. of Loco Hills Eddy 15. DISTANCE FROM PROPOSED® LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT 16. NO. OF ACRES IN LEASE 17. NO. OF ACRES ASSIGNED TO THIS WELL 40 600.18 (Also to nearest drlg. unit line, if any) 330' 19. PROPOSED DEPTH 20. ROTARY OR CABLE TOOLS 18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1650' 9300' Rotary 21. ELEVATIONS (Show whether DF, RT, GR, etc.) 22. APPROX. DATE WORK WILL START

3774.0 GR

11/1/90

23. PROPOSED CASING AND CEMENTING PROGRAM QUANTITY OF CEMENT BIZE OF CABING WEIGHT PER FOOT SETTING DEPTH SIZE OF HOLE 17 1/2" 13 3/8" 48# 350 405 sx. Circulate 12 1/4" 8 5/8" 24# 2400' 1240 sx. Circulate 7/8" 5 1/2" 600 sx. (see stips) TD

Yates Energy Corporation proposes to drill and test the Bone Springs intervals and intermediate formations. Approximately 350' of surface casing and 2400' of intermediate casing will be set and cemented to the surface. If commercial pay is encountered, will run 5 1/2" casing and cement with a minimum of 600' of cover, perforate and stimulate as needed for production.

See attachment for details MUD PROGRAM:

BOP and Hydrill on 8 5/8/" casing, pipe rams tested daily, BOP PROGRAM:

blind rams tested on trips.

GAS NOT DEDICATED

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout pr 24

eventer program, if any.		
BIGNED Haran Hamillon TITH	LE Landman	DATE 10/2/90
(This space for Federal or State office use)		
PERMIT NO.	APPROVAL DATE	
APPROVED BY TITI	CID	DATE 10 24 90

APPROVAL SUBJECT TO

GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS

*See Instructions On Reverse Side

Submit to Appropriate District Office State Lease - 4 copies Foe Lease - 3 copies

State of New Mexico Energy, Minerals and Natural Resources Department

Form C-102 Revised 1-1-89

DISTRICT I P.O. Box 1980, Hobbs, NBM \$8240

OIL CONSERVATION DIVISION P.O. Box 2088

DESTRICT II P.O. Deswer DD, Artesia, NM \$8210 P.U. Box 2088

Santa Fe, New Mexico 87504-2088

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

NERGY COL	RP.		Lease	nornbush F	ederal		Well No.	2
tion 1	Township 18	South	Range 31	East	NMPM		ldy	
of Well: from the Produce	South ing Formation	line and	Pool			the West	Dedicated Acres	-
acreage dedicate one lease is de	ed to the subject we edicated to the well	, outline each as	acil or hachure n	narks on the plat be nership thereof (b	elow. oth as to worki		royalty).	Acres
force-pooling, e o" list the owns	stc.? No If a lers and tract descrip	nswer is "yes" ty xions which hav	pe of consolidati e actually been co	on Force	Pooling reverse side of			
tendard unit, e	liminating such iste	srest, has been a	oproved by the D	vision.	S F	OPERAT I hereby contained here cost of my know Printed Name Sharon R Position Landman Company Yates Er Date 10/2/90	certify that the in in true and contends and belief. Hamilton	oration
ergy Corp	ooration et	al .	ANI CES	SURVE		I hereby certifon this plat vactual surveys supervison, as correct to the belief. Date Surveyed Signature & S.	fy that the well was plotted from a made by me ad that the sam a bast of my September cal of	location sh field note: or under ne is true knowledge
	of Well: from the Product Born acreage dedicat cone lease is de cone lease of de force-pooling, cone lease of de cone lease of de	of Well: from the South Producing Formation Bone Springs creage dedicated to the subject well case lease of different ownership force-pooling, etc.? No If a of list the owners and tract descrip creasery. creating such interest ownership in the assigned to the well until a standard unit, eliminating such interest creating such inte	Township Townsh	Township 18 South 31 of Well: from the South line and 330 Producing Formation Pool Bone Springs Tamano accessed dedicated to the subject well by colored peacil or backure in the lease is dedicated to the well, outline each and identify the own lease of different ownership is dedicated to the well, have the force-pooling, etc.? The lease is dedicated to the well in the subject well by colored peacil or backure in the lease of different ownership is dedicated to the well, have the force-pooling, etc.? The lease is dedicated to the well in the subject with the well, have the force-pooling, etc.? The lease is dedicated to the well in the subject with the well, have the force-pooling, etc.? The lease is dedicated to the well in the subject with the well, have the force-pooling, etc.? The lease is dedicated to the well in the subject with the well, have the force-pooling, etc.? The lease is dedicated to the well in the subject will be assigned to the well in the subject will be assigned to the well in the subject will be assigned to the well in the subject will be assigned to the well in the subject will be assigned to the well in the subject will be assigned to the well in the subject will be assigned to the well in the subject will be assigned to the well in the subject will be assigned to the well in the subject will be assigned to the well in the subject will be assigned to the well in the subject will be assigned to the well in the subject will be assigned to the well in the subject will be assigned to the well in the subject will be assigned to the well in the subject will be assigned to the well in the subject will be assigned to the well in the subject will be assigned to the well in the subject will be assigned to the well in the subject will be assigned to the well in the subject will be assigned to the well in the subject will be assigned to the well in the subject will be assigned to the well in the subject will be assigned to the subject will be assigned to the subject will be assigned to the	Thornbush F ange 18 South 18 South 330 Producing Formation	Thornbush Federal Township Townshi	Thornbush Federal Township Townshi	Thornbush Federal Township Townshi

YATES ENERGY CORPORATION Thornbush Federal #2 660' FSL & 330' FWL Section 1, T18S, R31E Eddy County, New Mexico

In conjunction with Form 9-331-C, Application for Permit to Drill the well captioned above, Yates Energy Corporation submits the following ten items of pertinent information in accordance with BLM requirements.

- 1. The geologic surface formation is the Quaternary.
- 2. The estimated tops of geologic markers are as follows:

Yates	2370'	Bone Springs	5550'
Seven Rivers	2750'	1st Bone Springs	7550'
Oueen	34401	2nd Bone Springs	8100'
Loco Hills	4070'	3rd Bone Springs	10088
San Andres	4570'		

3. The estimated depths at which anticipated water, oil, or gas formations are expected to be encountered:

Water: Fresh water at approximately 150'

Oil or Gas: Queen 3440', San Andres 4570', 1st Bone Springs 7550,

2nd Bone Springs 8100', 3rd Bone Springs 8800'

- 4. Proposed Casing Program: See Form 9-331-C
- 5. Pressure Control Equipment: See Form 9-331-C and Exhibit.

6. Mud Program: 0 - 350' FW Spud, 8.9-0.0#/gal.

350' - 2400' Cut brine, 10#/gal., Vis. 28-29, CL 20-30

PPM.

2400' - TD Cut brine, 8.9-9.1#/gal., Vis. 29, WL

10-20cc or less, CL. 40-50 PPM.

- 7. Auxiliary Equipment: Kelly Cock; pit level indicators and flow sensor equipment; full-opening safety valve on floor with drill pipe and collar connections.
- 8. Testing, Logging and Coring Program:

DST's: If Warranted

Coring: None planned

Logging: Intermediate casing to TD

CNL-LDT to casing with GR-CNL on to surface and DLL from

TD to casing with selected RxO.

- 9. No abnormal pressures or temperatures are anticipated. In the event they are encountered, the proposed mud program will be modified to increase the mud weight.
- 10. Anticipated starting date: Around November 1, 1990. Drilling time will be approximately 21 days.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN
Yates Energy Corporation
Thornbush Federal #2
660' FSL & 330' FWL
Section 1, T18S, R31E
Eddy County, New Mexico

This plan is submitted with Form 9-331-C, Application for Permit to Drill, covering the above described well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of surface disturbance involved and the procedures to be followed in rehabilitating the surface after completion of the operations, so that a complete appraisal can be made of the environmental effect associated with the operations.

1. EXISTING ROADS

Exhibit A is a portion of a BLM topographic map showing the roads in the vicinity of the proposed location. The proposed well site is approximately 10 miles southeast of Loco Hills. The access route is indicated in red. The existing BLM right-of-way is indicated in blue.

Directions:

- 1. Travel east from Loco Hills on US 85 for 7 miles to County Road 222.
- 2. Turn south on County Road 222 and go approx. 4 miles to County Road 249.
- 3. Turn southeast on County Road 249 and go approx. 1.1 miles.
- 4. Turn norhteast at gravel pit onto field road, go approx. 2.2 miles.
- 5. Turn north at second gravel pit (Yates Energy Corporation sign at turn) and go approx. 1 mile to Yates Energy Corporation Thornbush Federal #1 well location.
- 6. Turn west and go approx. 1650' to location. (New access road is indicated in green on Exhibit "A")

2. PLANNED ACCESS ROAD

- A. The proposed new road will be approximately 1450' in length west from the existing lease road.
- B. The new road will have a 12 foot driving surface.
- C. The new road will be bladed with drainage on one side and surfaced where needed.
- D. The route of the road is staked.

3. LOCATION OF EXISTING WELLS

- A. Producing well Thornbush Federal #1, located 330' FSL & 1980' FWL of Section 1-185-31E, operated by Yates Energy Corporation.
- B. Producing well Mesquite "2" State #2, located 660' FS&EL of Section 2-18S-31E, operated by Harvey E. Yates Company.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

- A. There are currently production facilities on this lease located in Unit Letter N, 330' FSL & 1980' FWL of Section 1-185-31E.
- B. If the well proves to be commercial, the necessary production facilities will be installed on the drilling pad, or the existing facilities will be utilitized.

5. LOCATION AND TYPE OF WATER SUPPLY -

A. It is planned to drill this well with fresh and/or brine water. The water will be obtained from commercial sources and trucked to the location via the proposed route.

6. SOURCES OF CONSTRUCTION MATERIALS

A. Caliche, if possible, for surfacing the road and the well pad will be taken from the pad area.

7. METHODS OF HANDLING WASTE DISPOSAL

- A. Drill cuttings will be disposed in the reserve pits.
- B. Drilling fluids will be allowed to evaporate in the reserve pits until dry.
- C. All pits will be fenced with normal fencing materials to prevent livestock from entering the area only if cattle are run in this pasture.
- D. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or a separate disposal application will be submitted to BLM for approval.
- E. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- F. Oil produced during operations will be stored in tanks until sold.
- G. Trash, waste paper, garbage and junk will be buried in a separate trash pit and covered with minimum of 24 inches of dirt. All waste material will be contained to prevent scattering by the wind.

8. ANCILLARY FACILITIES

A. None required.

9. WELLSITE LAYOUT

- A. The well pad exhibit shows the relative location and dimensions of the well pad and reserve pits, etc.
- B. The location surface is relatively flat.
- C. The pad is on caliche, it will be hauled from the pad area to use on the road if necessary.
- D. The reserve pits will be to the north and lined.
- E. A 400' x 400' area has been staked and flagged.

10. PLANS FOR RESTORATION OF THE SURFACE

- A. After finishing drilling and/or completion operations all equipment and other material not needed for further work will be removed. The location will be cleaned of all trash and junk leaving the wellsite in as aesthetically pleasing a condition as possible.
- B. If the pits were fenced, they will remain so until they have dried and are leveled.
- C. If this well is non-productive, all rehabilitation and/or vegetation requirement of the Landowner/Operator agreement, if any, will be complied with and accomplished as expeditiously as possible. All pits will be filled and leveled within 90 days after abandonment or are no longer needed.

11. OTHER INFORMATION

- A. Topography: The terrain is level along the access road, with undulating terrain and a number of elongate dune rises along the west side. and north 1/2 of the well pad.
- B. Soil: Berion complex fine sands.
- C. Flora and Fauna: Grassland Formation, scrub-grass scrub disclimax community. No wildlife was observed, but the wildlife in the area probably includes those typical of semi-arid desert land.
- D. Land use: Cattle grazing.
- E. There are no dwellings in the vicinity of the wellsite.
- F. Surface Ownership: The surface is owned by the State of New Mexico with federal minerals. New Mexico Grazing Lease GM-2543, Williams & Sons Cattle Company, P. O. Box 30, Maljamar, NM 88264.

12. OPERATOR'S REPRESENTATIVE

A. The field representative responsible for assuring compliance with the approved surface use and operations plan is:

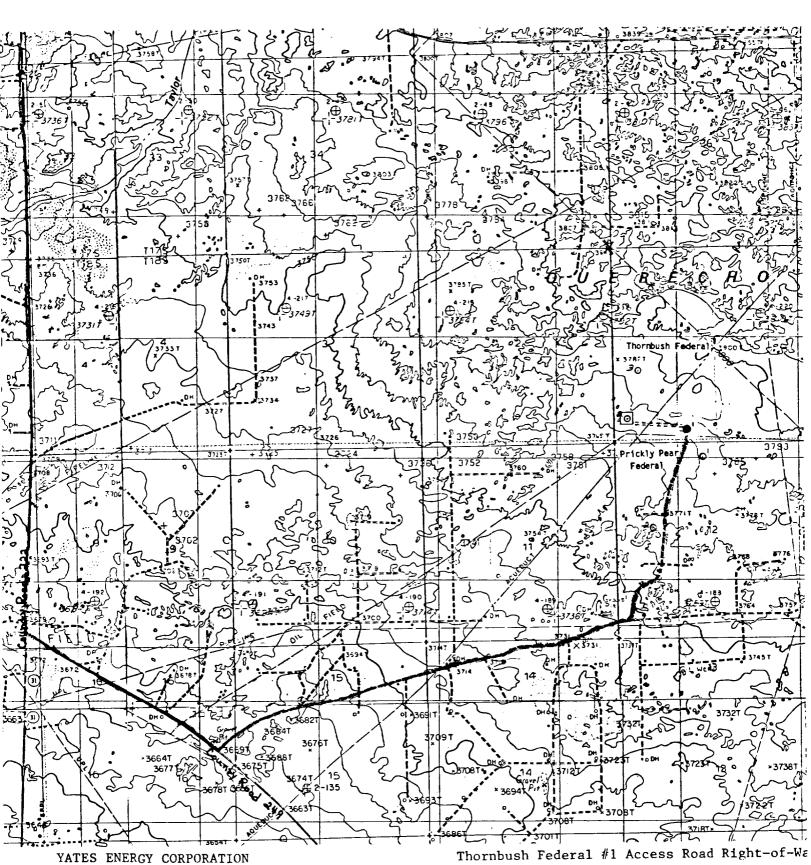
Jim O'Briant O'Briant Engineering Midland, Texas Phone: 915-683-5511

13. CERTIFICATION

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route, that I am familiar with the conditions which presently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Yates Energy Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

October 2, 1990
Date

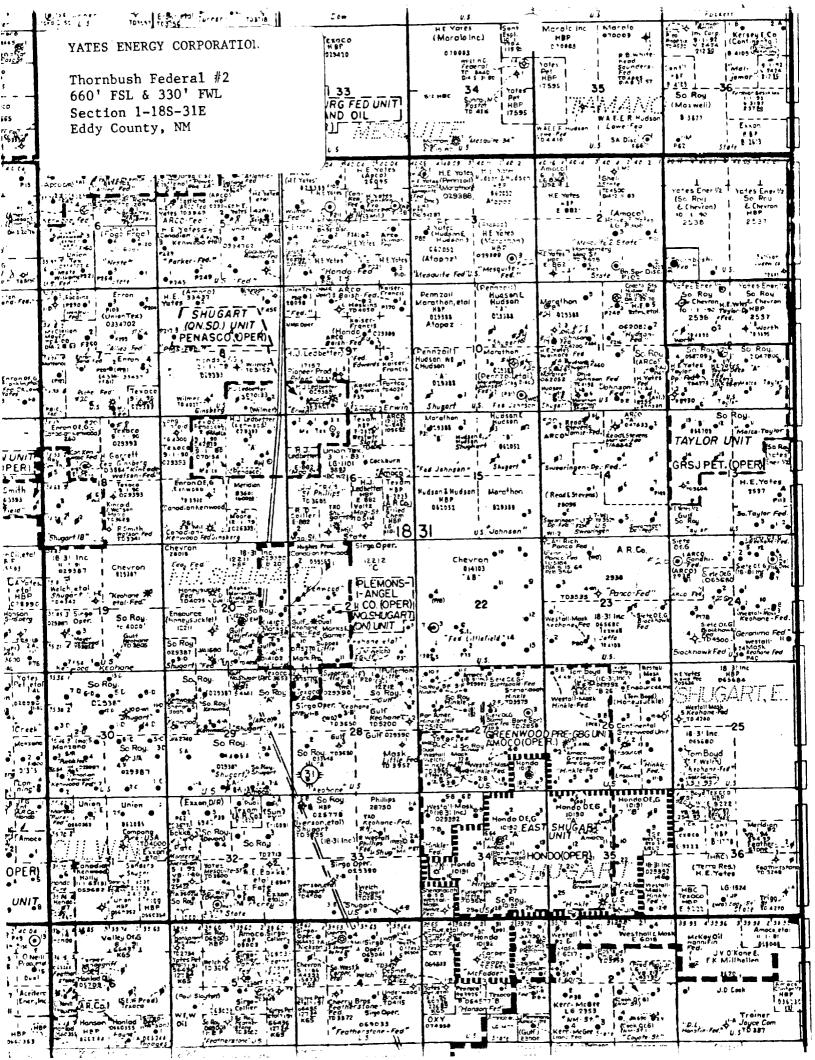
Sharon R. Hamilton, Landman for Yates Energy Corporation



YATES ENERGY CORPORATION Thornbush Federal #2 660' FSL & 330' FWL Section 1-18S-31E Eddy County, NM

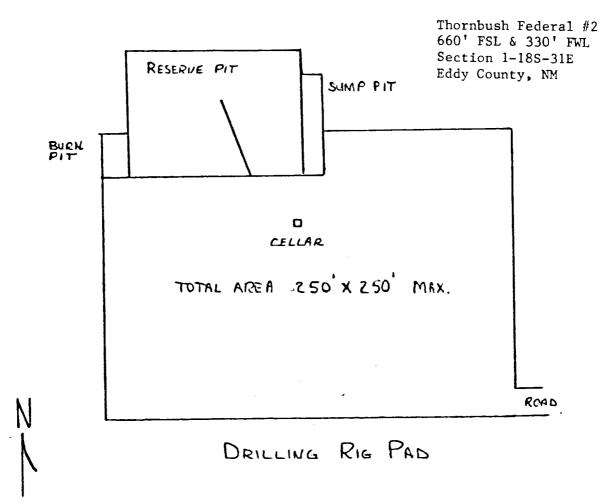
NM-82213 (NE)

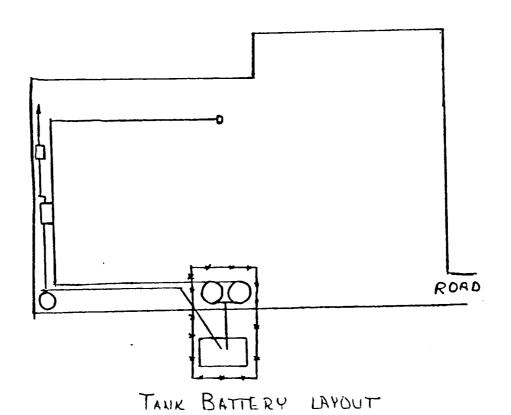
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Exhibit





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