

**UNITED STATES DEPARTMENT OF THE INTERIOR**  
**BUREAU OF LAND MANAGEMENT**  
**Artesia, NM 88210**

FORM APPROVED  
OMB NO. 1004-0136  
Expires: February 28, 1995

**APPLICATION FOR PERMIT TO DRILL OR DEEPEN**

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

OIL WELL ☐

GAS WELL ☐

OTHER **Re-enter**

SINGLE ZONE ☒

MULTIPLE ZONE ☐

2. NAME OF OPERATOR

**Marathon Oil Company**

3. ADDRESS AND TELEPHONE NO.

**P.O. Box 552 Midland, TX 79702**

**432-687-8360**

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
At surface

**1980' FSL & 660' FEL**

At proposed prod. zone

**Same as above**

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

**13 miles NNE of Carlsbad**

15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any) **660' FEL**

16. NO. OF ACRES IN LEASE

**1240**

17. NO. OF ACRES ASSIGNED TO THIS WELL

**40**

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.

**1320'**

19. PROPOSED DEPTH

**3700'**

20. ROTARY OR CABLE TOOLS

**ROTARY**

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

**3264' G.L.**

**CAPITAN CONTROLLED WATER BASIN**

22. APPROX. DATE WORK WILL START\*

**ASAP**

23.

**PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
<b>17-1/2"</b>	<b>13-3/8" H-40</b>	<b>48#</b>	<b>200'</b>	<b>230</b>
<b>11"</b>	<b>9-5/8"</b>	<b>36#</b>	<b>1210'</b>	<b>500</b>
<b>8-3/4"</b>	<b>7"</b>	<b>20/23#</b>	<b>3107'</b>	<b>600</b>

**ALL Casings in Place**

Marathon Oil Company is planning to re-enter the Yates federal # 6 that has been previously plugged.

Please see attached details for the reentry work.

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS  
AND SPECIAL STIPULATIONS  
ATTACHED

**RECEIVED**  
**DEC 11 2003**  
**OCD-ARTESIA**

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, 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 preventer program, if any.

24.

SIGNED

*Jerry Fletcher*

TITLE **Jerry Fletcher**

DATE **11/13/03**

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_

APPROVAL DATE \_\_\_\_\_

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

/s/ Joe G. Lara

**ACTING FIELD MANAGER**

**11 DEC 2003**

APPROVED BY \_\_\_\_\_

TITLE \_\_\_\_\_

DATE \_\_\_\_\_

\*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**APPROVAL FOR 1 YEAR**

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88211-0719

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

DISTRICT IV  
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

State of New Mexico  
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

Form C-102  
Revised February 10, 1994  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-015-26191	Pool Code	Pool Name Wildcat
Property Code	Property Name Yates Federal	Well Number # 6
OGRID No. 14021	Operator Name MARATHON OIL COMPANY	Elevation 3264' G.L.

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	18	20-S	29-E		1980'	South	660'	East	Eddy

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
Dedicated Acres 40	Joint or Infill	Consolidation Code	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

	<b>OPERATOR CERTIFICATION</b>  I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.   Signature  Jerry Fletcher Printed Name  Engineer Tech. Title  November 13, 2003 Date	
	<b>SURVEYOR CERTIFICATION</b>  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 knowledge and belief.  Date Surveyed  Signature & Seal of Professional Surveyor  Certificate No.	

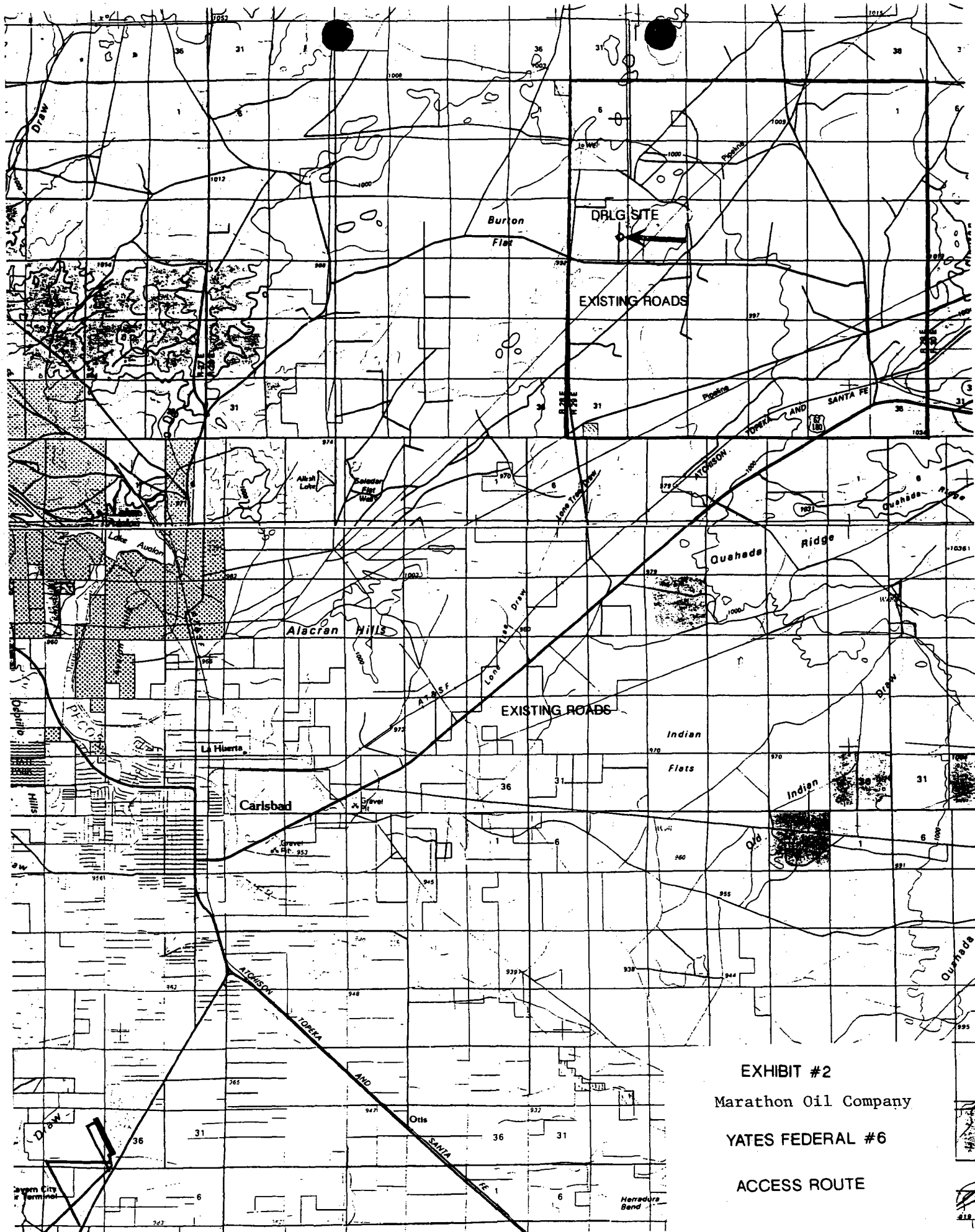
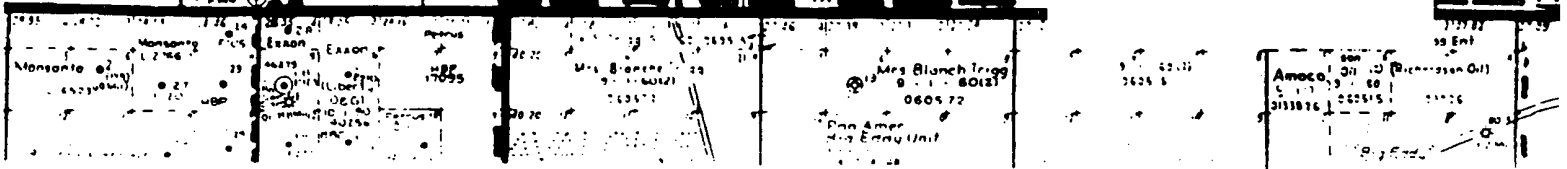
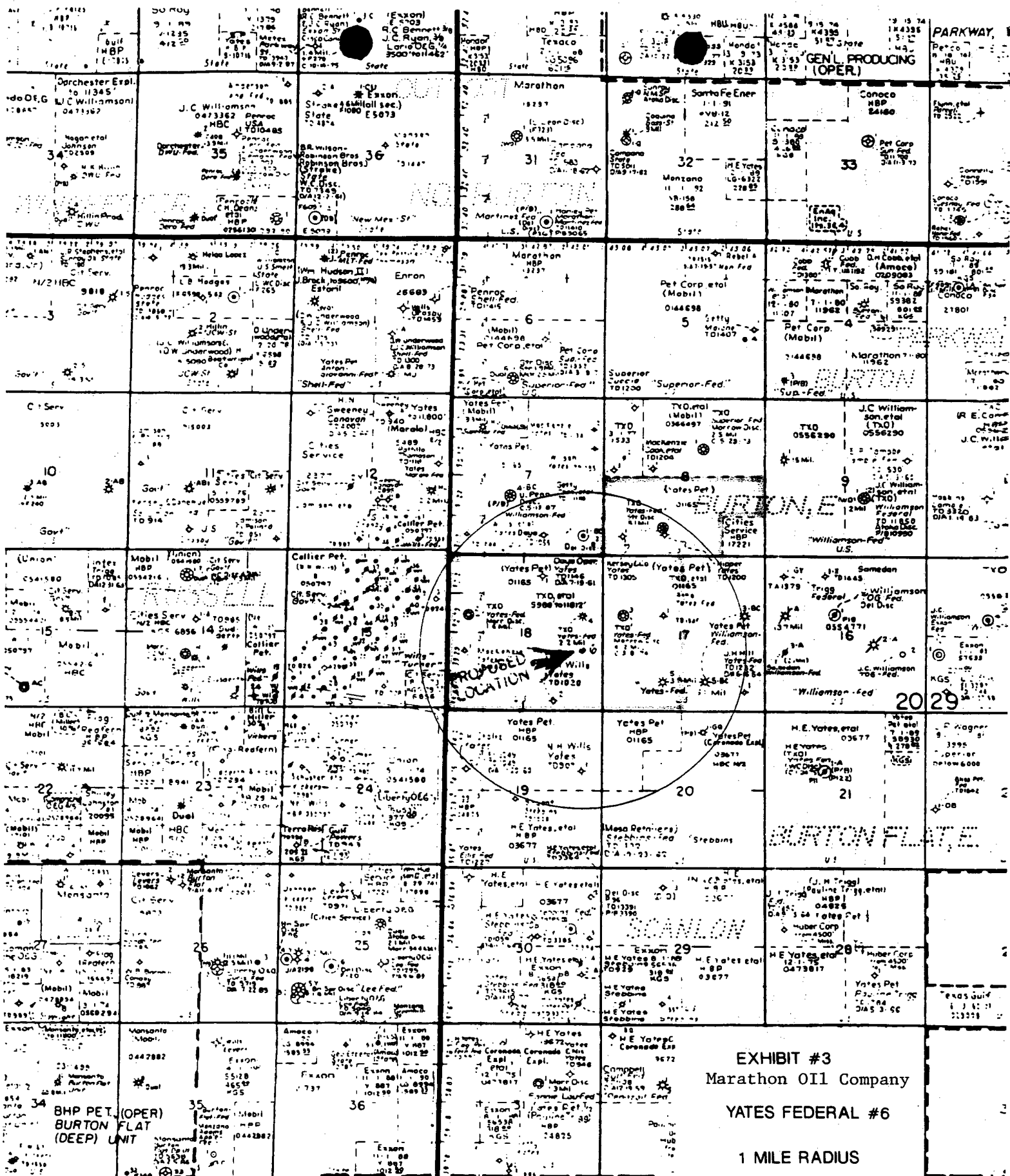


EXHIBIT #2  
Marathon Oil Company  
YATES FEDERAL #6  
ACCESS ROUTE



15 SHEETS 3 SQUARE  
12 SHEETS 400 SHEETS 3 SQUARE  
42 SHEETS 200 SHEETS 3 SQUARE  
NATIONAL

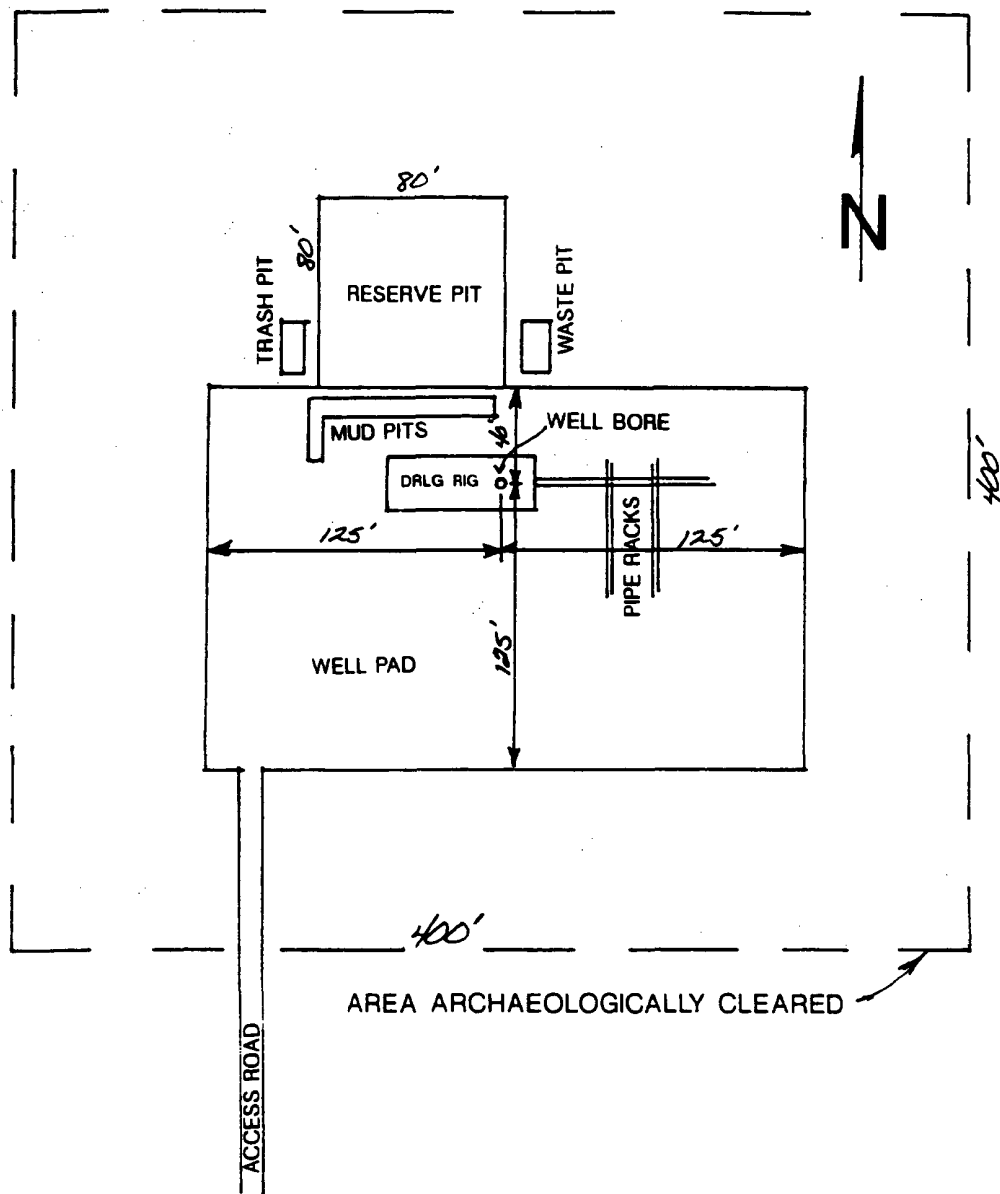
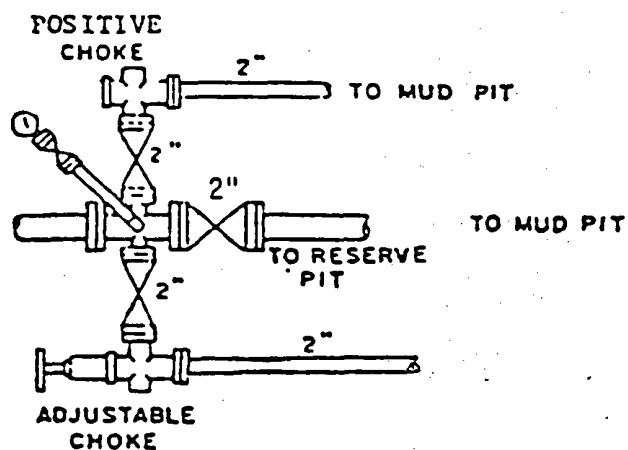
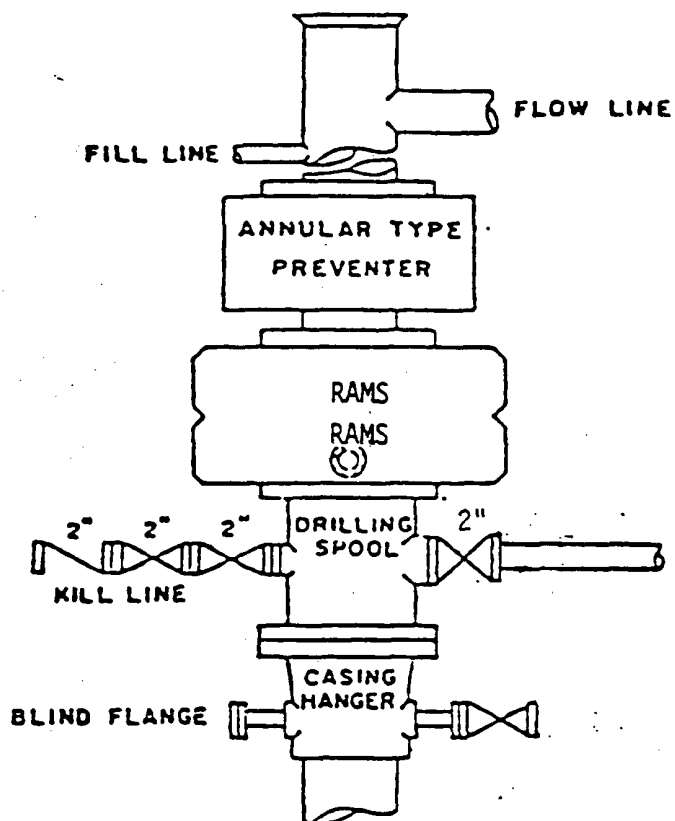


EXHIBIT #6  
Marathon Oil Company  
YATES FEDERAL #6  
DRILLING RIG LAYOUT



BOP STACK

3000 PSI WORKING PRESSURE

EXHIBIT #1

BOP ARRANGEMENT

Marathon Oil Company

**Thirteen Point Surface Use Plan**  
**MARATHON OIL COMPANY**

**Yates Federal # 6**  
**Sec. 18, T-20-S, R-29-E**  
**1980' FSL & 660' FEL**  
**Eddy County, New Mexico**

1. **Existing Roads:** Refer to Vicinity Lease Map.

- a. The proposed well site is staked and the surveyor's plat is attached.
- b. To reach the location from Carlsbad, New Mexico: Follow Hwy. 62/180 East of Carlsbad Approx. 8.1 miles, turn Left on C.R. # 243 follow black top road 8.1 miles, Turn right on C.R. 283, go .9 mile, turn left onto lease road travel .4 mile to well site.
- c. Existing roads within a one-mile radius (refer to Vicinity Lease Map).
- d. The existing road will be maintained as necessary to provide access during the drilling operation.

2. **Planned Access Road:** Refer to Vicinity Lease Map.

Access will be by existing State roads, lease roads The access road enters the drilling pad on the Southwest corner. The drilling location will have the rig V-door facing East.

3. **Location of Existing Wells:** See Vicinity Lease Map.

4. **Location of Existing and Proposed Production Facilities within a one-mile radius:**

- a. Existing: There are seven oil and gas wells operated by Marathon, and Yates within a one-mile radius of the proposed location. These locations have production facilities including separators, condensate, oil, water storage tanks. Marathon, Yates operate a variety of dehydrators, meter runs, and several gathering lines in the one-mile radius.
- b. New Facilities : No new facilities are proposed at this time.
- c. Rehabilitation of disturbed areas no longer needed for operations will be accomplished by grading, leveling and seeding as recommended.

5. **Location and Type of Water Supply:**

- a. **Source:** Hauled from town
- b. The water will be transported by a trucking contractor. No new construction will be required on/along the water route.
- c. No water well will be drilled on this location.

**A. P. D. (cont.)**  
**Thirteen Point Surface Use Plan**  
**Yates Federal # 6**

6. Source of Construction Materials:

- a. Construction materials may be obtained from the construction site.
- b. If production is obtained, native materials will be used on the location and for installation of production facilities.
- c. On-site inspection may dictate any changes in location construction.

7. Methods of Handling Waste Material Disposal:

- a. Cuttings - will be deposited in the reserve pit.
- b. Drilling fluids - contained in reserve pit and allowed to evaporate. Free water will be removed and transported to an approved disposal site to accelerate pit drying.
- c. Produced fluids - none anticipated.
- d. A portable chemical toilet will be provided.
- e. Garbage and other waste material - garbage and trash will be stored in a receptacle on location and periodically hauled to an approved sanitary landfill.
- f. After the rig moves out, all materials not necessary for operations will be removed. Pits will be backfilled and leveled. The location will be cleaned of all trash and debris.

8. Ancillary Facilities: Camp facilities will not be required. Portable trailers will be on location to house a company drilling foreman and contract tool pusher.

9. Well site Layout:

- a. The well pad layout shows the drill site layout as staked. Topsoil will be stockpiled per specifications.
- b. The reserve pit will be fenced on three sides before drilling begins. The fourth side will be fenced when the drilling rig leaves location.
- c. The reserve pit will be lined (8 mil material).

10. Plans for Restoration of the Surface:

- a. Backfilling, leveling, and contouring are planned as soon as all pits have dried. Waste disposal and spoiled materials will be hauled away immediately after drilling is completed. If production is obtained, the unused area will be restored as soon as possible.



**A. P. D. (cont.)**

**Thirteen Point Surface Use Plan**

**Yates Federal # 6**

- b. The soil banked material will be spread over the area. Re-vegetation will be accomplished by planting mixed grasses as per formula provided by the BLM. Re-vegetation is recommended for road area, as well as around the drill pad.
- c. The reserve pit will be fenced during drilling operations. Fencing will be maintained until leveling and cleanup are accomplished.
- d. If any oil is in the pits and is not immediately removed after operations cease, the pit containing the oil or other adverse substances will be flagged overhead or covered with mesh.
- e. The rehabilitation operations will begin after the completion rig is removed. Removal of oil or other adverse substances will begin immediately or area will be flagged and fenced. Other cleanup will be done as needed. Planting and re-vegetation will be done between July 15 and September 15.

**11. Other Information:**

- a. There are no significant archaeological or cultural sites visible in the area of disturbance. A cultural resource survey was performed by New Mexico Archaeological Services Inc on September, 7 1989. A 400' x 400' was surveyed. Copy is attached. Report # NMAS-1989-11-S
- b. General topography: Shown on Vicinity Lease Map. The terrain at the well site is gently rolling hills. Vegetation is primarily sage brush and natural grasses.
- c. Animal life: Prairie dogs, domestic livestock, rabbits and native rodents and predators.
- d. Dwellings (nearest): Approximately 3 miles.
- e. General location: Approximately 20 miles East of Carlsbad, New Mexico.
- f. Drainage: Internal
- g. Surface Owner: The surface is owned by the Bureau of Land Management.

**12. Operator Representatives:**

Tom Laylock  
Drilling, Completion, & Workover Superintendent  
P. O. Box 552  
Midland, TX 79702  
800/351-1417  
915/682-1626  
915/687-8344 (Direct Line)

**A. P. D. (cont.)**  
**Thirteen Point Surface Use Plan**  
**Yates Federal # 6**

13. Certification:

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

11/13/03  
Date

Tom Laylock



**DRILLING PROGRAM**  
**MARATHON OIL COMPANY**  
**Yates Federal # 6**

1. Estimated KB Elevation: 3274' KB      G.L 3264'      Rig Floor 10'

<u>FORMATION</u>	<u>-----TOP-----</u>		<u>-----BASE-----</u>		<u>FLUID CONTENT</u>
	<u>MEASURED</u>	<u>SUBSEA</u>	<u>MEASURED</u>	<u>SUBSEA</u>	
Yates	Surface	+3274'	1100'	2174'	Oil
Capitan	1100'	+2174'	1200'	2074'	water
Delaware	1200	+2074'	3250'	24'	Oil

	<u>PSIG</u>	<u>PPG EMW</u>	<u>DEG f</u>	<u>PPM</u>	<u>(obj, marker, etc.)</u>
Yates	800	8.5		100	Objective pay
Delaware	1250	9.0		200	marker

2. See (1) above.

If any unexpected water or mineral bearing zones are encountered, they will be reported, evaluated, and protected as circumstances and regulations require.

3. **Pressure Control Equipment:**

4. 13-3/8" Surface:13-5/8" 3M Annular tested to 300psi/3000 psi. 13-5/8" rams, choke Manifold and mud cross, Tested to 300psi/3000psi.

Auxiliary Equipment:

Surface Hole: Annular or rotating head w/air rig.

Intermediate Hole: N/A

Production Hole: Flow indicator, PVT, H<sub>2</sub>S Sensors, air packs, stroke counter, rotating head.

BOP systems will be consistent with API RP 53. Blowout preventers will be installed and pressure tested prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. Casing will be pressure tested before drilling casing cement plugs.

Upper and lower kelly cocks with valve handle and safety valve and subs to fit all drills tring connections in use will be available on rig floor.

**A. P. D. (cont.)**  
**Thirteen Point Surface Use Plan**  
**Yates Federal # 6**

Test Frequency

1. When installed.
2. Anytime a pressure seal is broken (test confined only to affected equipment).
3. At least every 20 days.
4. Blind and pipe rams shall be activated each trip but not more than once/day.

4. Casing and Cement Program:

<u>---DEPTH---</u> <u>FROM</u> <u>TO</u>		<u>SECTION</u> <u>LENGTH</u>	<u>HOLE</u> <u>SIZE</u>	<u>CSG</u> <u>SIZE</u>	<u>WT.</u> <u>PPF</u>	<u>GRADE</u>	<u>THREADS</u> <u>COUPLINGS</u>	<u>NEW</u> <u>USED</u>	
0	200'	200'	17.50"	13-3/8"	48#	H-40	8rd, ST&C	New	
0	1210'	1210'	12.25"	9-5/8"	36#	K-55	8rd, LT&C	New	
0	3100'	3100"	8.75"	7"	20/23#	N-80	8rd LT&C	New	
<u>Casing</u> <u>String</u>	<u>DV</u> <u>Depth</u>	<u>Stg.</u>	<u>Lead</u> <u>Tail</u>	<u>Amt</u> <u>SXS</u>	<u>Type</u> <u>Cement</u>	<u>Yield</u> <u>CF/SX</u>	<u>Wt.</u> <u>PPG.</u>	<u>TOC</u>	<u>Additives</u>
13-3/8"		1	L	230	Class "C"	1.32	14.8	surf	2% CaCl2
9-5/ 8"		1	L	500	Hal lite	1.32	14.8		2% CaCl2
9-5/ 8"		1	T	200	Class "C"	1.28	14.8		2% CaCl2
7"		1	L	400	Hal lite	1.32	14.8		6# salt
7"		1	T	200	Class "C"	1.32	14.8		2% CaCl2

**A. P. D. (cont.)**  
**Thirteen Point Surface Use Plan**  
**Yates Federal # 6**

Each stage will be preceded by an appropriate mud flush. Actual production hole volumes will be based on the caliper volume plus 25% excess.

Centralizer Program:

13-3/8" Conventional centralizers. Bottom 3 joints and every fourth joint to surface.

9-5/8" Conventional centralizers middle of 1<sup>st</sup> joint, and 1 cent. Every 4<sup>th</sup> joint thereafter to 2800'

7-0" Conventional centralizers middle of 1<sup>st</sup> joint, and 1 cent. Every 4<sup>th</sup> joint thereafter to 3100'

5. Mud Program

<u>---DEPTH---</u>		<u>WEIGHT</u>		<u>WL</u>		<u>ADDITIVES</u>	<u>VISUAL MONTR.</u>
<u>FROM</u>	<u>TO</u>	<u>MUD TYPE</u>	<u>(PPG)</u>	<u>VIS</u>	<u>CC</u>		
0	200'	fresh water	8.3	28	N/A	Gel, Lime	Reserve
200'	1200'	Sat. Brine	8.5	28-32	N/A	Gel, caustic, H <sub>2</sub> S Scavenger	Reserve
1200'	3700'	Fresh water	9.0	32	N/C	Gel, Caustic, H <sub>2</sub> S Scavenger	Steel Pits

Sufficient quantities of additives will be on location to maintain above mud properties for any anticipated well conditions.

6. Logging, Testing & Coring Programs:

<u>LOG/TEST/CORE/MUDLOG/OTHER</u>	<u>--INTERVAL--</u>		<u>REMARKS</u>
	<u>FROM</u>	<u>TO</u>	
DLL/MSFL/GR/CNL/LDT/CAL	TD	3000'	
LDT/CNL/GR/CAL	TD	surf casing	
MUD LOGGER	1000'	TD	ROP, Lithology, Gas Analysis, Chromatograph
NO CORES OR DST'S			

7. Abnormal Pressures, Temperatures or Potential Hazards:

None anticipated. Possible H<sub>2</sub>S in Delaware Sand

8. Other Information:

Anticipated Starting Date: As soon as possible.

**A. P. D. (cont.)**

**Thirteen Point Surface Use Plan**

**Yates Federal # 6**

Duration of Well: Drilling—3 days completion- 3 days.

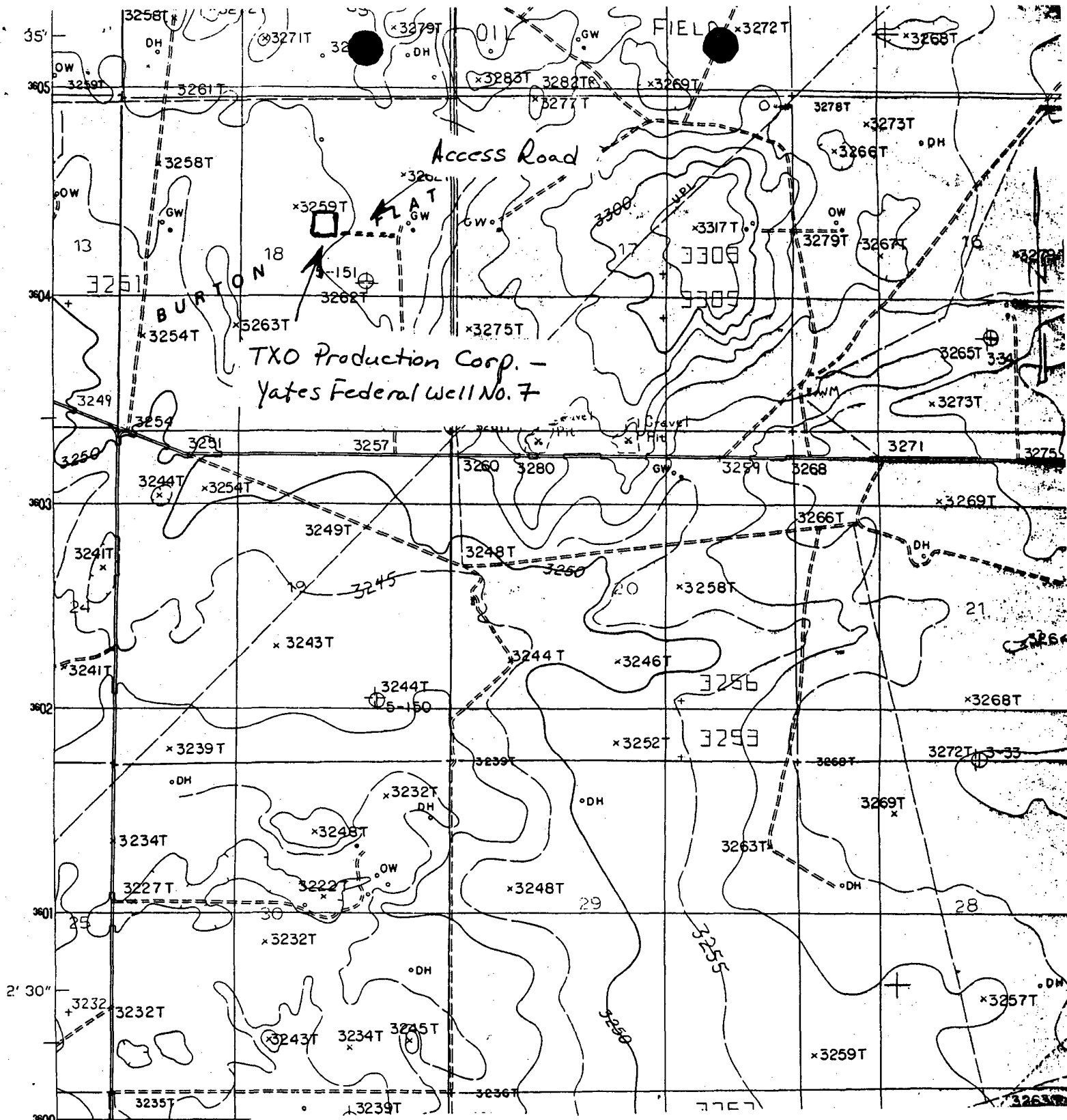


Fig. 2. USGS ILLINIOS CAMP SE QUADRANGLE, 7.5 Minute Series, 1:24,000, 1985, Prov. Ed., showing TXO PRODUCTION CORPORATION's proposed Yates Federal Well No. 7, 1980' FNL, 1980' FEL, and access road, Section 18, T20S, R29E, NMPM, Eddy County, NM

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB NO. 1004-0135  
Expires: November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an  
abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No.

**NM-01165**

6. If Indian, Allottee or Tribe Name

**N/A**

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.

**Yates Federal # 6**

9. API Well No.

**30-015-26191**

10. Field and Pool, or Exploratory Area

**Wildcat**

11. County or Parish, State

**Eddy N.M.**

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

**Marathon Oil Company**

3a. Address

**P.O. Box 552 Midland, TX 79702**

3b. Phone No. (include area code)

**432-687-8360**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

**1980' FSL & 660' FEL U.L. I  
Sec. 18, T-20-S, R-29-E  
Eddy Co. N.M.**

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

TYPE OF ACTION

☒ Notice of Intent

☐ Subsequent Report

☐ Final Abandonment Notice

☐ Acidize

☐ Alter Casing

☐ Casing Repair

☐ Change Plans

☐ Convert to Injection

☐ Deepen

☐ Fracture Treat

☐ New Construction

☐ Plug and Abandon

☐ Plug Back

☐ Production (Start/Resume)

☐ Reclamation

☐ Recomplete

☐ Temporarily Abandon

☐ Water Disposal

☐ Water Shut-Off

☐ Well Integrity

☒ Other **Re-Entry**

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BJA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

**Marathon Oil Company is proposing to Re-enter this P/A'd well to test the Yates formation. We plan to drill out surface cement plug to 265' then continue drilling the the second plug to 1220'. Perforate the Yates formation with 96 total holes.**

**Please see attached well bore schematic and Reentry procedure for details.**

SENT TO Roswell  
11/11/03  
*[Signature]*

14. I hereby certify that the foregoing is true and correct  
Name (Printed/Typed)

**Jerry Fletcher**

Title

**Engineer Tech.**

Date **11/11/03**

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Section 1212, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



**Re-Entry Procedure  
Yates Federal Well No. 6  
1,980' FSL & 660' FEL, Unit I  
Section 18, T-20-S, R-29-E  
Eddy County, New Mexico**

**Date:** 10/2/2003

**WBS #s:** RW.03.09675.CAP.CMP  
RW.03.09675.CAP.EQP

**AFE Cost:** \$90,000

**Elevation:** 3,264' GL      **TD:** 3,700'      **WI:** 100.0%      **NRI:** 82.5%

**Purpose:** Re-Enter P&A'd well to test Yates

**Surface Casing:** 13 3/8", 48#, H-40, STC casing set at 215'. Cemented with 230 sks. Circulated cement to surface. 80% Burst: 1384 psi    80% Collapse: 616 psi

**Intermediate Casing:** 9-5/8", 36#, K-55, LTC casing set at 1,209'. Cemented with 700 sks. Circulated cement to surface. 80% Burst: 1616 psi    80% Collapse: 2816 psi

**Production Casing:** 7", 20 & 23# casing set at 3,107'. Cemented with 600 sks. Circulated cement to surface.. 80% Burst: 1816 psi.    80% Collapse: 3984psi.

**Procedure:**

1. MIRU welder & contract gang w/backhoe. Dig up around capped casing. Hot tap 13-3/8" csg. Check for pressure. Issue hot work permit. Cut off capped 13-3/8" csg stub.
2. Install 13-3/8" casing head w/ base plate, 9-5/8" casing spool, and 7" tbg spool.
3. MIRU WOR & reverse unit. NU 3M BOPE. RU power swivel. TIH w/6-1/8 bit, on 3-1/8" drill collars on 2-7/8" workstring. Drill out surface cement plug from surface to 265' w/2% KCL. TIH and displace mud to pit w/2%KCL to second plug at 1,155'. Drill out plug to 1,220'. Test casing & BOPE to 1,000 psi. RD power swivel. TOH w/workstring.
4. MIRU Baker Atlas and lubricator. Test lubricator to 1,000 psi. RIH w/GR/CCL tool and log from PBTD to 950'. RIH with 4-1/2" carrier loaded with TAG 5000 382 GH 39 gram charges ( EH: 0.46" Pen: 37.4"). Perforate Yates with 4 JSPF, 90 deg. from 1,136' – 1,160' (96 holes). POOH. RD Baker Atlas.
5. RU Acid Company. Acidize Yates from 1,136' – 1,160' with 1,500 gals of 15% NEFE acid and 150 ballsealers. Flush w/ 2% KCl water. RD Acid Company.
6. Flow well to test equipment. Discuss tests results with project engineer. If test is unsuccessful, notify BLM of intentions to P&A wellbore. If test is successful, proceed to step #7.
7. Kill well w/2% KCL. TIH w/ SN on 2-3/8", 4.7 #/ft, J-55 tbg to 1,120'. ND BOPE and NU wellhead. RU swab and kick well off to production equipment RD WOR and reverse unit.

XC: R. S. Bose  
W. H. Arnett  
B. D. Lockhart  
Well File

## GEOLOGICAL EXPLORATION SERVICE CO.

P.O. BOX 1291  
BRECKENRIDGE, TEXAS 76024

3001526191

## HYDROCARBON ANALYSIS LOG



COMPANY TXO PRODUCTION CORP

WELL YATES FEDERAL NO. 6

FIELD

COUNTY EDDY

STATE NEW MEXICO

LOCATION 1980' ESL B 660' FFL SEC. 18, T-20S, R-29-E

LOGGED BY J. RODGERS

INTERVAL LOGGED 220' TO 3700'

DATE LOGGED 10/11/89 TO 10/20/89

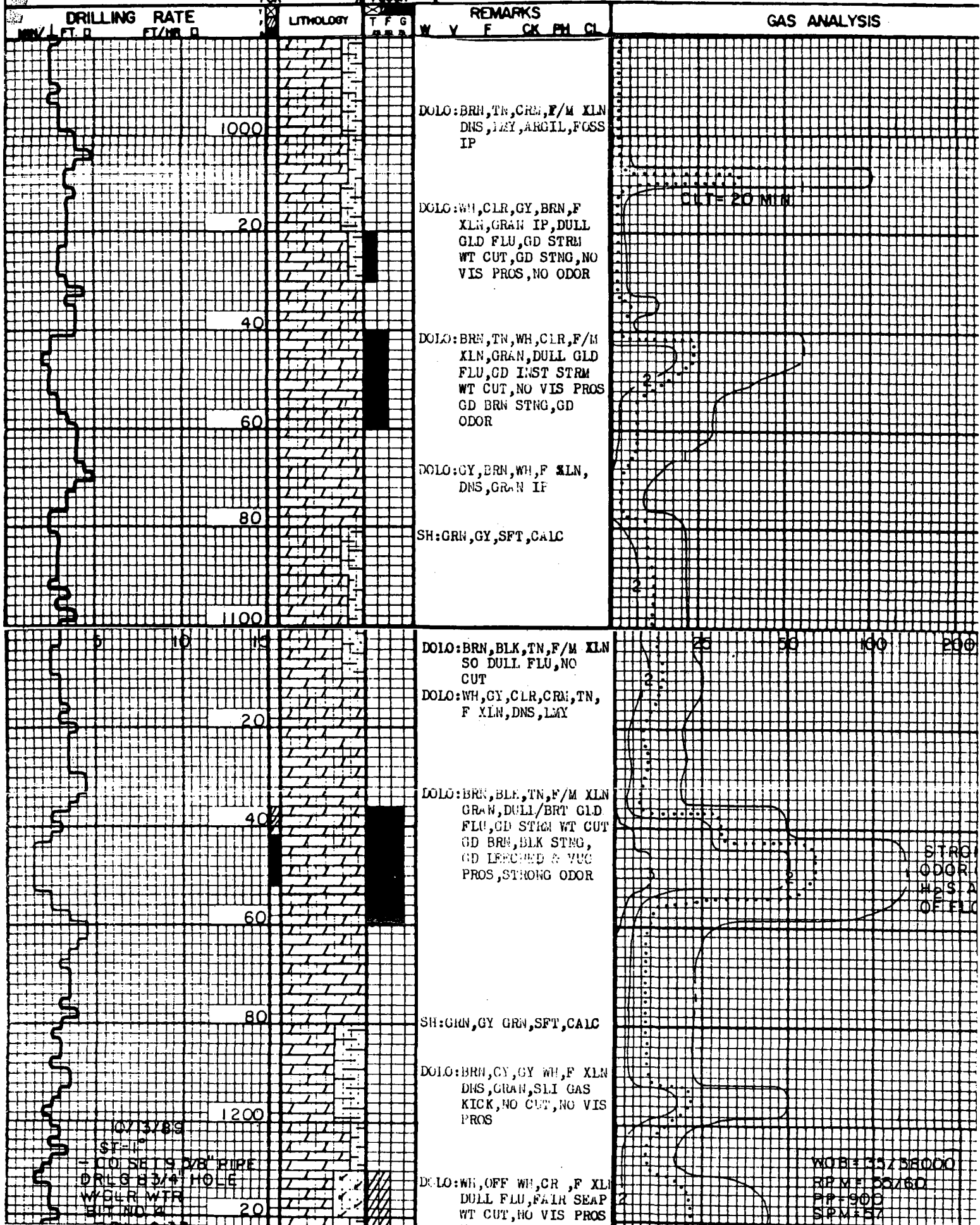
UNIT PHONE

## GAS SEPARATION

 METHANE ——— 1  
 ETHANE ——— 2  
 PROPANE ——— 3  
 BUTANE ——— 4

 PENTANE ——— 5  
 GAS FROM MUD .....  
 GAS FROM CUTTINGS ———

	SAND		CONGLOMERATE	ELEV.	3264.8'
	LIMESTONE		GRANITE	3274.8'	
	DOLOMITE		GRANITE WASH		
	SHALE		SALT		
	ANHYDRITE		COAL		
	CHERT		SILTSTONE		

 NB-NEW BIT  
 CO-CIRCULATED OUT  
 ST-SLOPE TEST  
 DST-DRILL STEM TEST  
 NR-NO RETURN  
 RS-REPORTED SHOW
CUT —  
% FLUOR

YATES FED #6

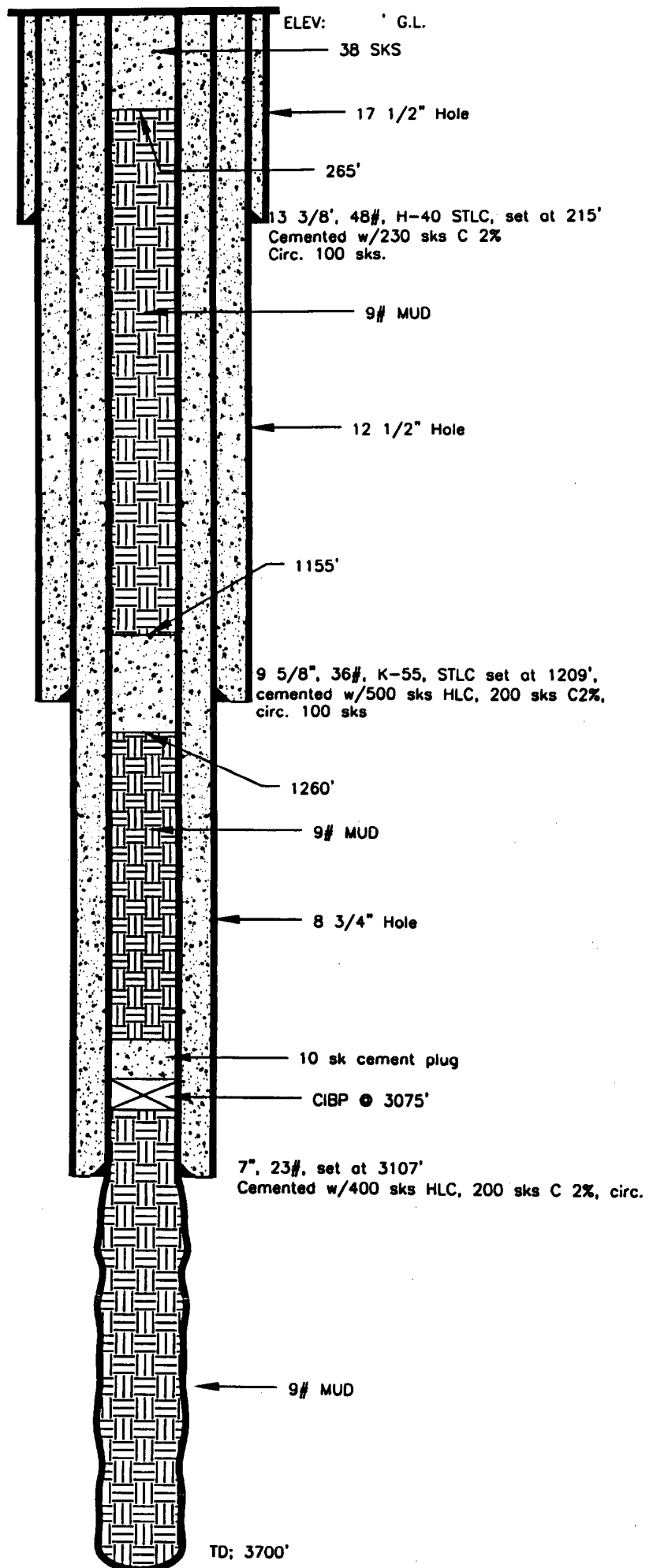
YATES FEDERAL WELL NO. 6

1980' FSL & 660' FEL, Unit 'H'  
Section 18, T-20-S, R-29-E  
Eddy County, New Mexico

October 1989: Drilled to TD of 3700'  
(No Delaware Sand)  
TA'ed well by setting plugged Guiberson  
UNI-VI packer @ 2991'

January 1992: Failed Mechanical Integrity  
Test, Well leaked from 500 psi to 440 psi  
in 15 mins.

November 1992: P&A'ed well.



Marathon  
Oil Company

MID-CONTINENT REGION

FACILITY DESCRIPTION		YATES FIELD UNIT		LOCATION		N:\ACADLT\WELLBORE\			
Yates FED #6									
SCALE	DWG	DATE	WELL/PROJ. NO.	FIELD/AREA	SYSTEM	PROJECT AREA	DRAWING NO.	SHT NO.	REV
None	REV	DATE		YAFF	090				
	CLV	10/07/2003							