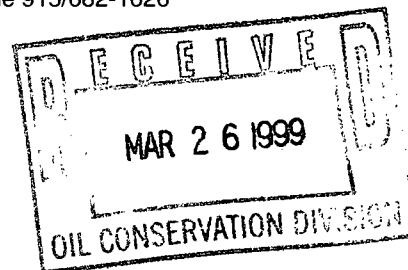




P.O. Box 552  
Midland, TX 79702-0552  
Telephone 915/682-1626



March 23, 1999

Mr. Mike Stogner  
New Mexico Oil Conservation Division  
Energy, Minerals and Natural Resources Department  
P.O. Box 2088  
Santa Fe, New Mexico 87501-2088

Re: Request for Administrative Approval for Non Standard Location  
Federal "C" 35 # 3  
1500' FSL & 2080' FEL  
Section 35, T-21-S, R-23-E  
Eddy County, New Mexico

Dear Mr. Stogner,

Enclosed for your review is Federal form 3160-3, Application for Permit to Drill for the above referenced well. Marathon Oil Company proposes to drill this well to test the Indian Basin-Upper Pennsylvanian Gas Pool which requires wells to be located no closer than 1650 feet from the outer boundary of the gas proration unit. A standard location was staked at 1650' FSL and 1650' FEL of Section 35 but was discouraged by the Bureau Of Land Management due to concerns of significant cut and fill damage and loss of floodplain associated with the steep hillside construction.

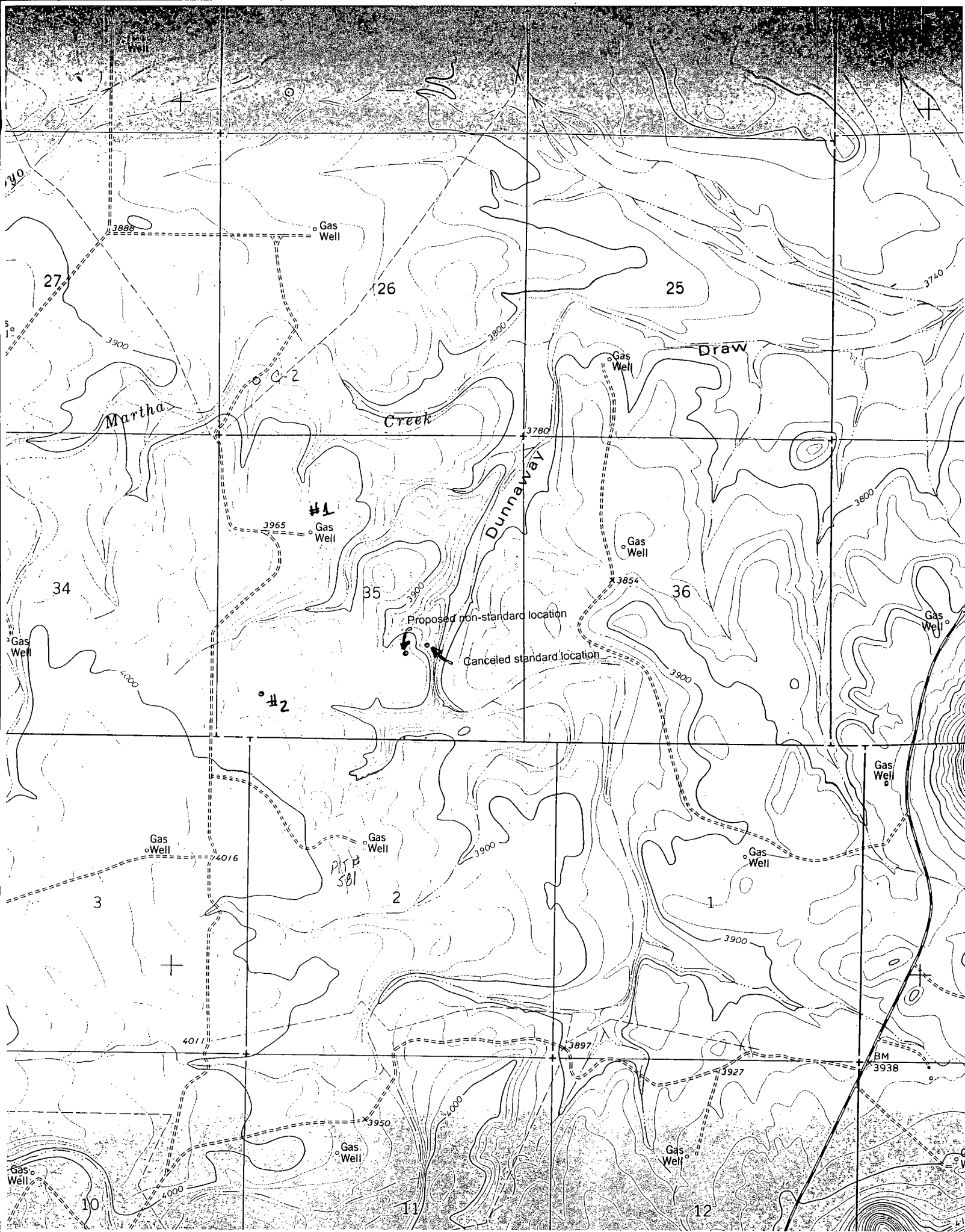
Attached please find a letter signed by Kerr-McGee Corporation which waives objection to our request as offset operator. Also enclosed please refer to the topographic map referencing the canceled standard location and the proposed non-standard location. This well shall require a 640 acre gas proration unit consisting of the entire section 35.

Marathon respectfully requests administrative approval for this nonstandard location based on extant topographical conditions pursuant to NMOCD rule 104.F(2). Should you have any questions please contact me at (800) 351-1417.

Very truly yours,

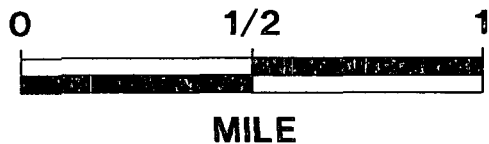
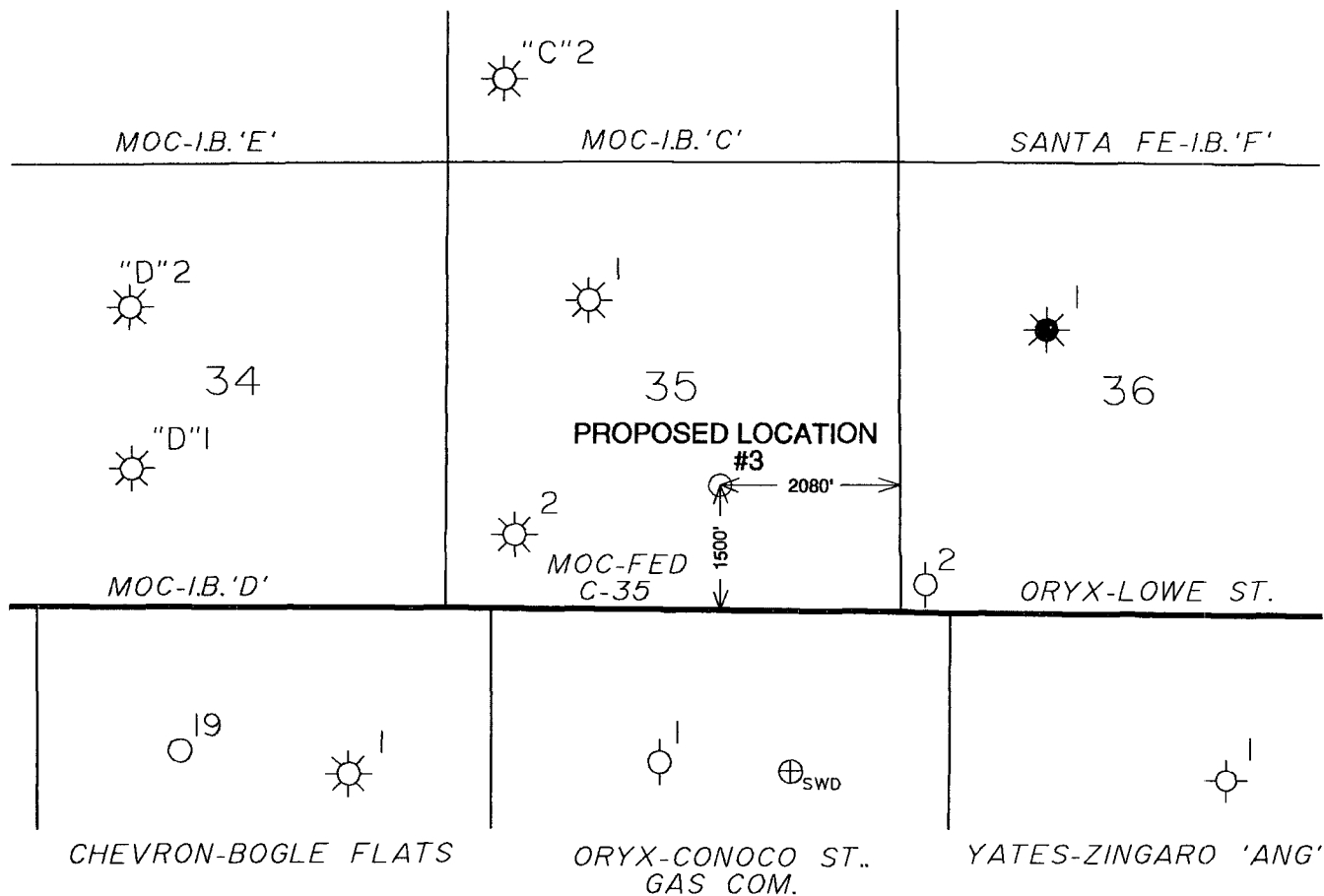
A handwritten signature of Walter Duecase.  
Walter Duecase

*cc - Kellahia*



R 23 E

T  
21  
S



MARATHON OIL COMPANY  
MID-CONTINENT REGION

# INDIAN BASIN UNIT

EDDY COUNTY, NEW MEXICO

**FED. C-35 #3**

Mid-Continent Region  
Production United States



**Marathon  
Oil Company**

P.O. Box 552  
Midland, TX 79702-0552  
Telephone 915/682-1626

February 26, 1999

Oryx Energy Company  
13155 Noel Road  
Dallas, Texas 75221-2880

Re: *Application for Administrative Approval  
of an Unorthodox Well Location  
Eddy County, New Mexico*

Dear Sir,

Marathon Oil Company requests offset operator approval of a non-standard Indian Basin, Upper Pennsylvanian Gas Pool location for the Federal "C" 35 # 3 to be located at 1500' FSL & 2080' FEL, Section 35, T-21-S, R-23-E, Eddy County, New Mexico. Due to topographical constraints the BLM has required Marathon to avoid significant cut and fill requirements and floodplain damage associated with a standard location proposed at 1650' FSL & 1650' FEL of Section 35. Pool rules for the Indian Basin, Upper Pennsylvanian Gas Pool require wells to be spaced no less than 1650 feet from the exterior boundaries. The proration unit for the proposed well shall comprise 640 acres or the entire section 35.

If you have an objection to this application, it must be filed in writing with the NMOCID at its Santa Fe office within twenty (20) days of the date of this letter.

Should you have no objection to this application, please signify by signing below and returning one executed copy to me at the letterhead address.

Very truly yours,

A handwritten signature in cursive script, appearing to read 'Walter J. Duccase'.

Walter J. Duccase  
Marathon Oil Company

Subject to Marathon's acceptance of Letter dated March 9, 1999, attached hereto, Kerr-McGee Corporation waives objection to Marathon Oil Company's request to drill the Federal "C" 35 # 3 at a non-standard location, in the Indian Basin, Upper Pennsylvanian Gas Pool at 1500' FSL & 2080' FEL, Section 35, T-21-S, R-23-E, Eddy County, New Mexico.  
Kerr-McGee Corporation

By: A handwritten signature in cursive script, appearing to read 'Steve Proeberster'.

Title: LANDMAN

Date: 3/9/99

**KERR-MCGEE CORPORATION**

PO BOX 2880 • DALLAS, TEXAS 75221-2880  
14311 WELCH ROAD • DALLAS, TEXAS 75244-3934  
972-715-8100

March 9, 1999

Mr. Walter Dueease  
Marathon Oil Company  
PO Box 552  
Midland, Texas 79702

RE: Federal "C" 35 #3  
Unorthodox Well Location 1500' FSL &  
2080' FEL, Section 35, T21S-R23E,  
Eddy County, New Mexico  
Sent via FAX (915)687-8337 (2 pages)


Gentlemen:

We are in receipt of letter dated February 26, 1999, delivered to Mr. Roy Wolin while visiting your office in Midland, concerning Marathon's request for approval of an unorthodox or non-standard gas well location for the captioned well, a copy of which is attached hereto. Kerr-McGee Corporation approves Marathon's request subject to Marathon's agreement to the following:

- 1) Marathon will not object to a mirror unorthodox well location, that is, a well located no closer than 1500' to the North Line of Section 2, T22S-R23E, Eddy County, New Mexico, with the distance to the other Section line for such well location being an orthodox or standard distance, for a well to be proposed or drilled to the Indian Basin-Upper Pennsylvanian Pool by Kerr-McGee in Section 2, T22S-R23E, Eddy County, New Mexico.
- 2) Marathon will promptly furnish Kerr-McGee with copies of well logs, as they are received by Marathon, for Marathon's Federal "C" 35 #3 Well.

Thank you, and if the foregoing is acceptable, please sign and date this letter in the space provided below and return it to me via FAX at 972/715-4685 on or before March 12, 1999.

Sincerely,  
Kerr-McGee Corporation

  
Steve Foerster  
Landman  
972/715-8269

Agreed to and accepted:

Marathon Oil Company

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE\*  
(Other instructions on  
reverse side)

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

SINGLE  
ZONE ☒

MULTIPLE  
ZONE ☐

2. NAME OF OPERATOR

Marathon Oil Company

3. ADDRESS AND TELEPHONE NO.

P.O. Box 552 Midland, TX 79702

915/687-8356

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

At surface

1500' FSL & 2080' FEL

At proposed prod. zone

1500' FSL & 2080' FEL

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

15 MILES NW OF CARLSBAD

15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest dritg unit line, if any) 1500'

16. NO. OF ACRES IN LEASE

4680

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

640

18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED,

OR APPLIED FOR, ON THIS LEASE, FT.

2500'

19. PROPOSED DEPTH

7800'

20. ROTARY OR CABLE TOOLS

ROTARY

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

3791' GL, 3807' KB

22. APPROX. DATE WORK WILL START\*

4/10/99

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	K-55, 9 5/8"	36#	1200'	800 CIRCULATE
8 3/4"	L-80, K-55, 7"	7800'	945 CIRCULATE	

WELL IS A PROPOSED INDIAN BASIN UPPER PENN GAS TEST.

WELL IS A NON-STANDARD LOCATION TO THE SOUTH SECTION LINE DUE TO SURFACE  
CONSTRAINTS OF FLOODPLAINS AND MINIMIZING CUT & FILL

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

*Walter J. Duesenberry, Jr.*

TITLE DRILLING SUPERINTENDENT

DATE 3/4/99

(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:

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.

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

State of New Mexico  
Energy, Minerals and Natural Resources Department

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

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

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

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
		Indian Basin - Upper Penn
Property Code	Property Name	Well Number
	FEDERAL "C" 35	3
OGRID No.	Operator Name	Elevation
14021	MARATHON OIL COMPANY	3927'

Surface Location

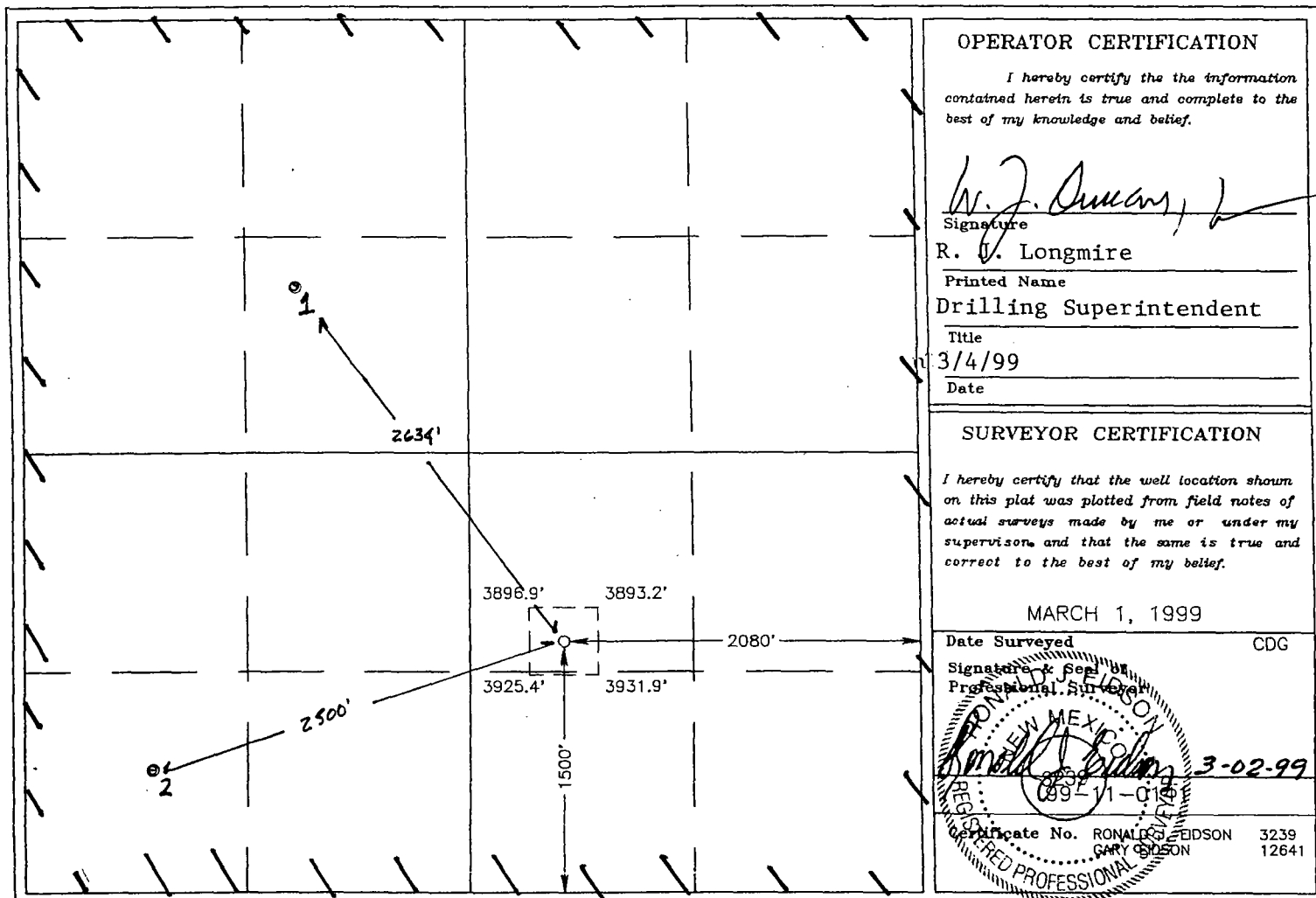
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	35	21 S	23 E		1500	SOUTH	2080	EAST	EDDY

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	Joint or Infill	Consolidation Code	Order No.
640			

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



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

FEDERAL "C" 35 #3  
Sec. 35, T-21-S, R-23-E  
**Eddy County, New Mexico**

1. Existing Roads: Refer to Vicinity Lease Map.
  - a. The proposed wellsite is staked and the surveyor's plat is attached.
  - b. To reach the location from Carlsbad, New Mexico: Turn South on extant lease road 1 mile West of IBGP. Follow road 1 mile South, .3 miles East, 1.4 miles South to IB "C" 35 #2.
  - 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 lease roads and 2659' of new access. Construction plans will require blading and rolling the road and pad. The access road enters the drilling pad on the Southwest corner. The drilling location will have a V-door facing West with pits built into the cut.
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, Santa Fe, and ORYX within a one-mile radius of the proposed location. These locations have production facilities including separators, condensate, oil, water storage tanks. Marathon, Santa Fe, and ORYX operate a variety of dehydrators, meter runs, and several gathering lines in the one-mile radius.
  - b. New Facilities: The proposed location will have a separator and gas sales line. The actual equipment and its configuration will be determined after the well is completed.
  - 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: Indian Basin Gas Plant, SE/4, NW/4, Sec. 28, T-21-S, R-24-E.
  - b. The water will be trucked by a contractor over existing roads to the well location. 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**  
**Federal "C" 35 #3**

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 toolpusher.

9. Wellsite Layout:

- a. The wellpad layout shows the drillsite layout as staked. Cross-sections have been drafted to visualize the planned cuts and fills across the location. 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 buried or hauled away immediately after drilling is completed. If production is obtained, the unused area will be restored as soon as possible.
- b. The soil banked material will be spread over the area. Revegetation will be accomplished by planting mixed grasses as per formula by BLM. Revegetation 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 contouring and cleanup are accomplished.

A. P. D. (cont.)  
Thirteen Point Surface Use Plan  
Federal "C" 35 #3

- 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 drilling 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 revegetation 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 Archaeological Consultants Inc. of Roswell.
- b. General topography: Shown on Vicinity Lease Map. The terrain at the wellsite 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 1.5 miles.
- e. General location: Approximately 15 miles Northwest of Carlsbad, New Mexico.
- f. Drainage: Internal
- g. Surface Owner: The surface is owned by the Federal Government.

12. Operator Representatives:

R. J. Longmire  
Drilling, Completion, & Workover Superintendent  
P. O. Box 552  
Midland, TX 79702  
800/351-1417  
915/682-1626

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.

Date

3/4/99

  
R. J. Longmire

**DRILLING PROGRAM  
MARATHON OIL COMPANY**

**FEDERAL "C" 35 #3**

1. Estimated KB Elevation: 3,807' KB'

<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>	
Queen	Surface	+3807'	650'	+3157'	water
San Andres	650'	+3157'	2250'	+1557'	water
Glorietta	2250'	+1557'	2355'	+507'	
Delaware	3300'	+507'	4300'	-493'	
Bone Spring	4300'	-493'	5950'	-2143'	oil gas
Wolfcamp	5950'	-2143'	7520'	-3713'	oil gas
B/Permian Shale	7520'	-3713'	7530'	-3723'	
U. Penn	7530'	-3723'	7550'	-3743'	gas, oil, water

<u>FORMATION</u>	<u>---EST PSIG</u>	<u>SBHP--- PPG EMW</u>	<u>EST DEG f</u>	<u>SBHT PPM</u>	<u>H2S</u>	<u>---SIGNIFICANCE--- (obj, marker, etc.)</u>
Bone Springs	1210	8.5			500	marker
Wolfcamp	1680	9.0				marker
B/Permian Shale	1810	9.0				objective pay
U. Penn	2050	9.0			5000	objective pay
Morrow	3460	9.2				objective pay

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:

9 5/8" Surface: 11" 3M annular tested to 200#/2000#, 11" 3M dual rams, choke manifold and mud cross, tested to 300#/3000#.

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 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. Preventers and 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 drillstring connections in use will be available on rig floor.

**A. P. D. (cont.)**  
**Thirteen Point Surface Use Plan**

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:

---DEPTH---	SECTION	HOLE	CSG	WT.		THREADS	NEW
FROM TO	LENGTH	SIZE	SIZE	PPF	GRADE	COUPLINGS	USED
0 1200'	1200'	12.25"	9.625"	36	K-55	8rd, STC	New
0 4700'	4700'	8.75"	7"	23	K-55	8rd, LTCNew	
4700' 7800'	3100'	8.75"	7"	26	K-55	8rd, LTC	New

Casing String	DV Depth	Stg.	Lead Tail	Amt SXS	Type Cement	Yield CF/SX	Wt. PPG.	TOC	Additives
9.625"	None	1	L	200	"C" Neat	1.51	14.6	Surf	10% Gel, 3% CACl <sub>2</sub> , 1/4# cello
9.625"			T	200	"C" Neat	1.32	14.8	Surf	2% CACl, 1/4# cello
7"	±5600'	1	L	270	"H" Lite	1.28	15.3	5600'	5 pps Silica, .6% Halad 9, 3% salt, 3 pps Gilsonite
7"		2	L	800	65:35 POZ	1.91	12.6	5500'	5 pps, salt, 3 pps Gilsonite, 4% Gel, 1/4 pps Cello
7"		2	T	100	"C" Neat	1.32	14.8	±1000'	2% CaCl <sub>2</sub>

*Each stage will be preceded by an appropriate mud flush. Actual production hole volumes will be based on the caliper volume plus 15% excess.*

Centralizer Program:

9 5/8" Conventional centralizers. Bottom 3 joints and every fourth joint to surface.

7" Conventional centralizers middle of 1st joint, then every joint to 7500', and 1 centralizer every 4th joint thereafter to 1100'.

5. Mud Program:

---DEPTH---	WEIGHT	WL		VIS	CC	ADDITIVES	VISUAL
FROM TO	(PPG)						MONTR.
0 1200'	N/A	N/A		N/A		Soap for mist	Reserve
1200' 5000'	8.5	28-32	N/C			Gel, caustic, H <sub>2</sub> S Scavenger	Reserve
5000' 7000'	9.0	32-36	N/C			Saturated brine	Reserve
7000' 7800'	9.0	32-36	<20			Salt gel, starch, caustic	Steel Pits

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

A. P. D. (cont.)  
Thirteen Point Surface Use Plan

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	5000'	
LDT/CNL/GR/CAL	TD	surf casing	
MUD LOGGER	6000'	TD	ROP, Lithology, Gas Analysis, Chromatograph
NO CORES OR DST'S			

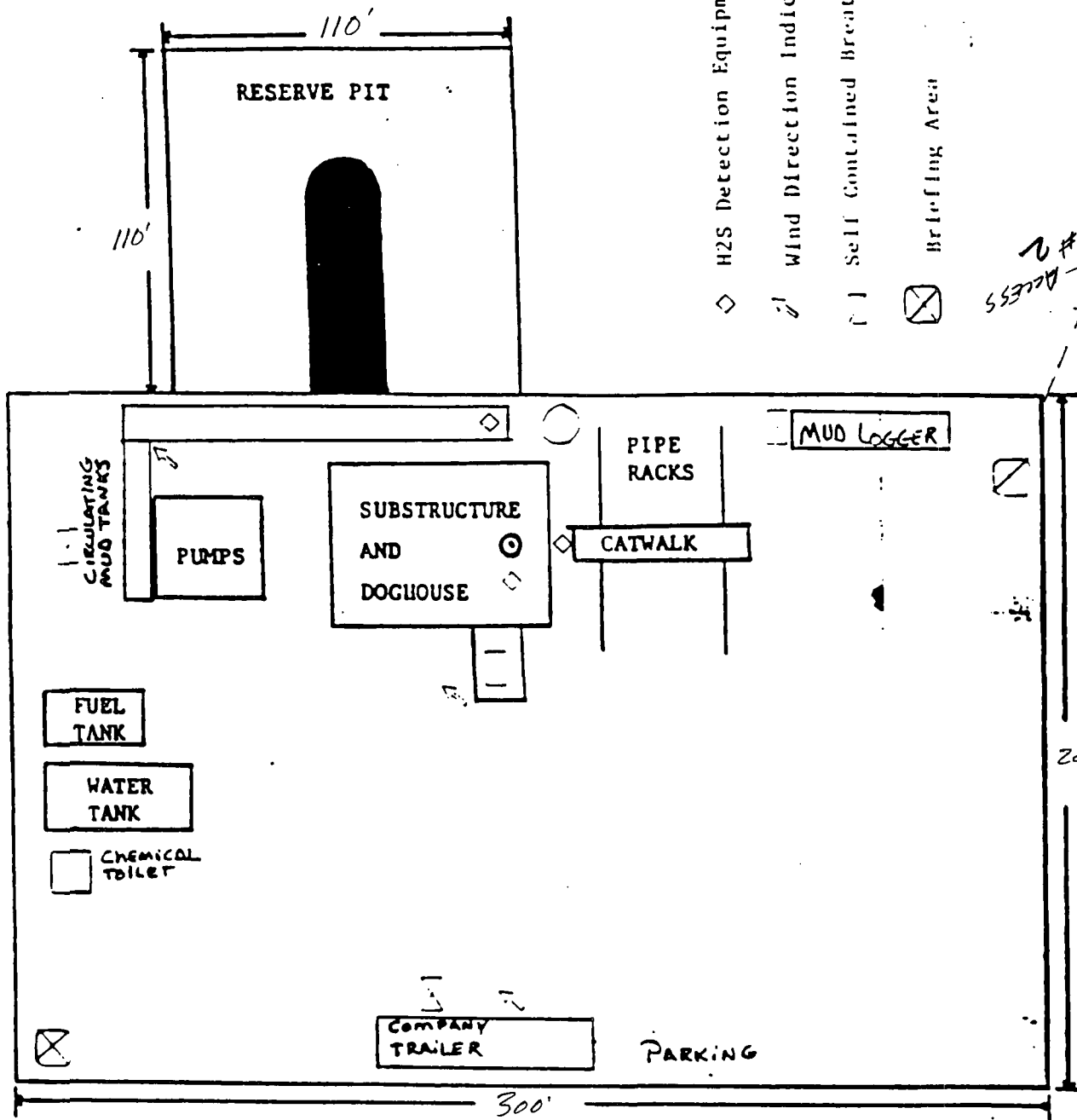
7. Abnormal Pressures, Temperatures or Potential Hazards:

None anticipated. Possible H<sub>2</sub>S in Cisco & Upper Penn. See H<sub>2</sub>S Drilling Operations Plan.

8. Other Information:

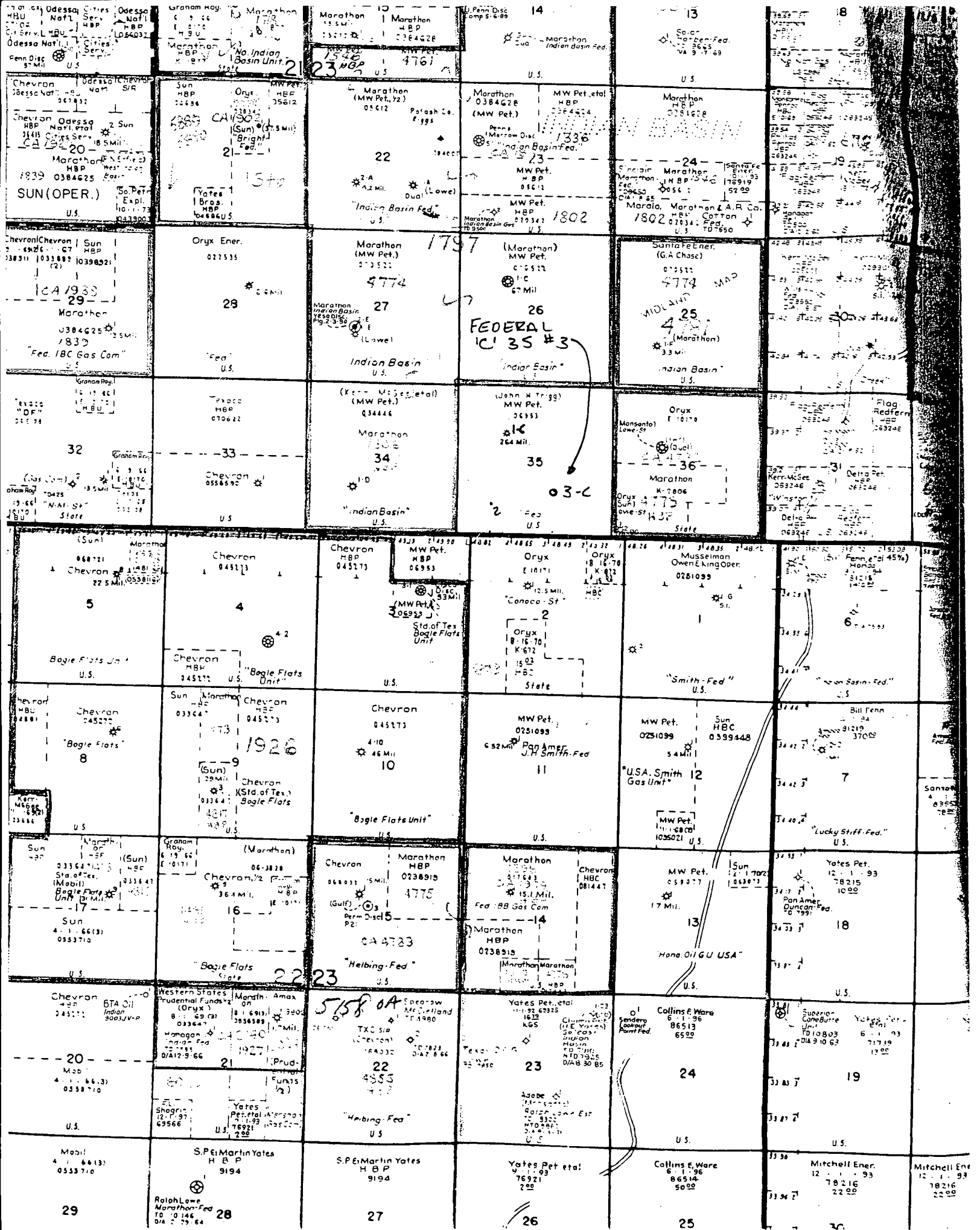
Anticipated Starting Date: As soon as possible.

Duration of Well: drilling - 25 days, completion - 10 days.

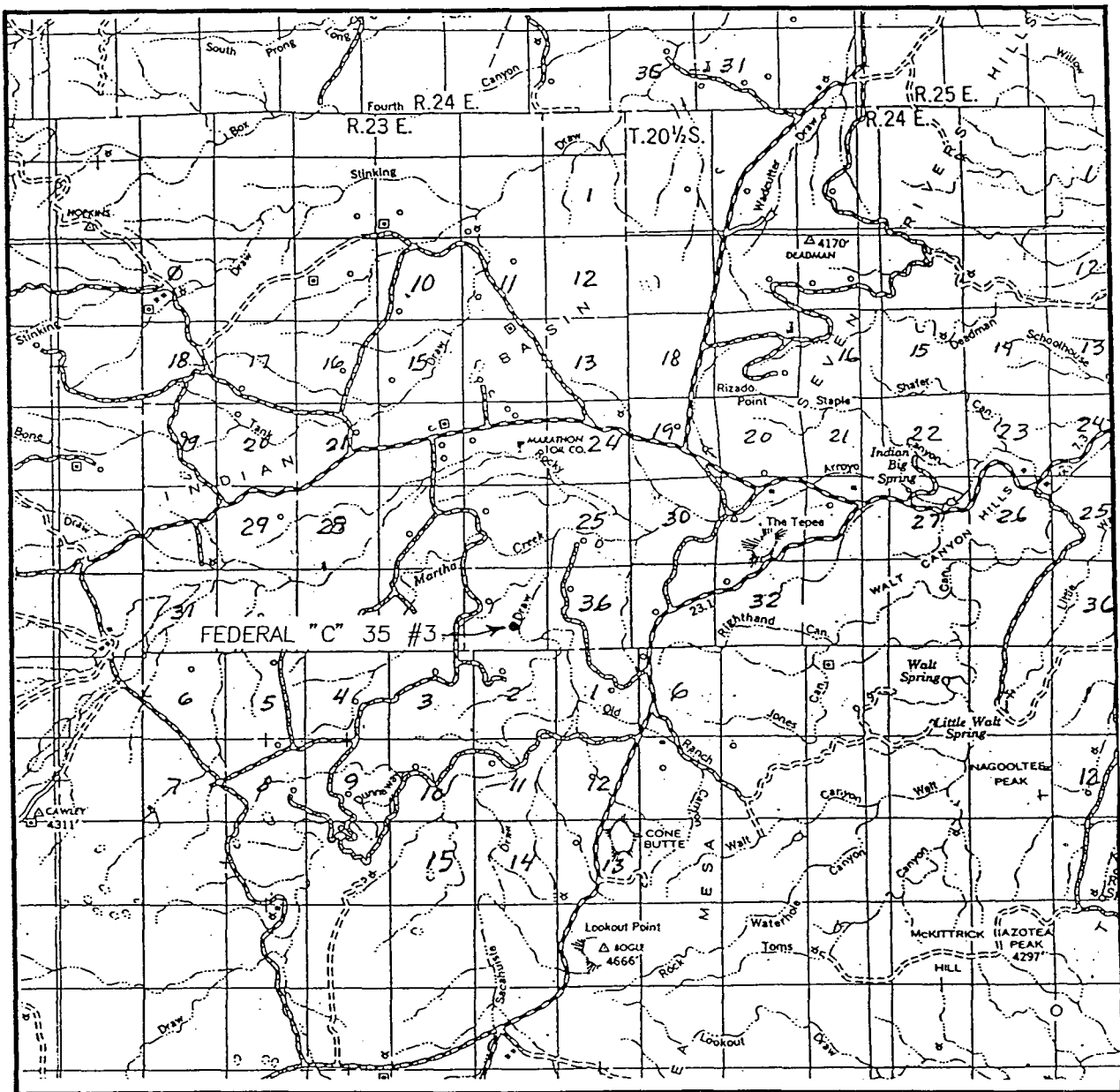


Prevailing Wind Direction  
Southwest

Foot-path for emergency  
egress



# VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 35 TWP. 21-S RGE. 23-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1500' FSL & 2080' FEL

ELEVATION 3927'

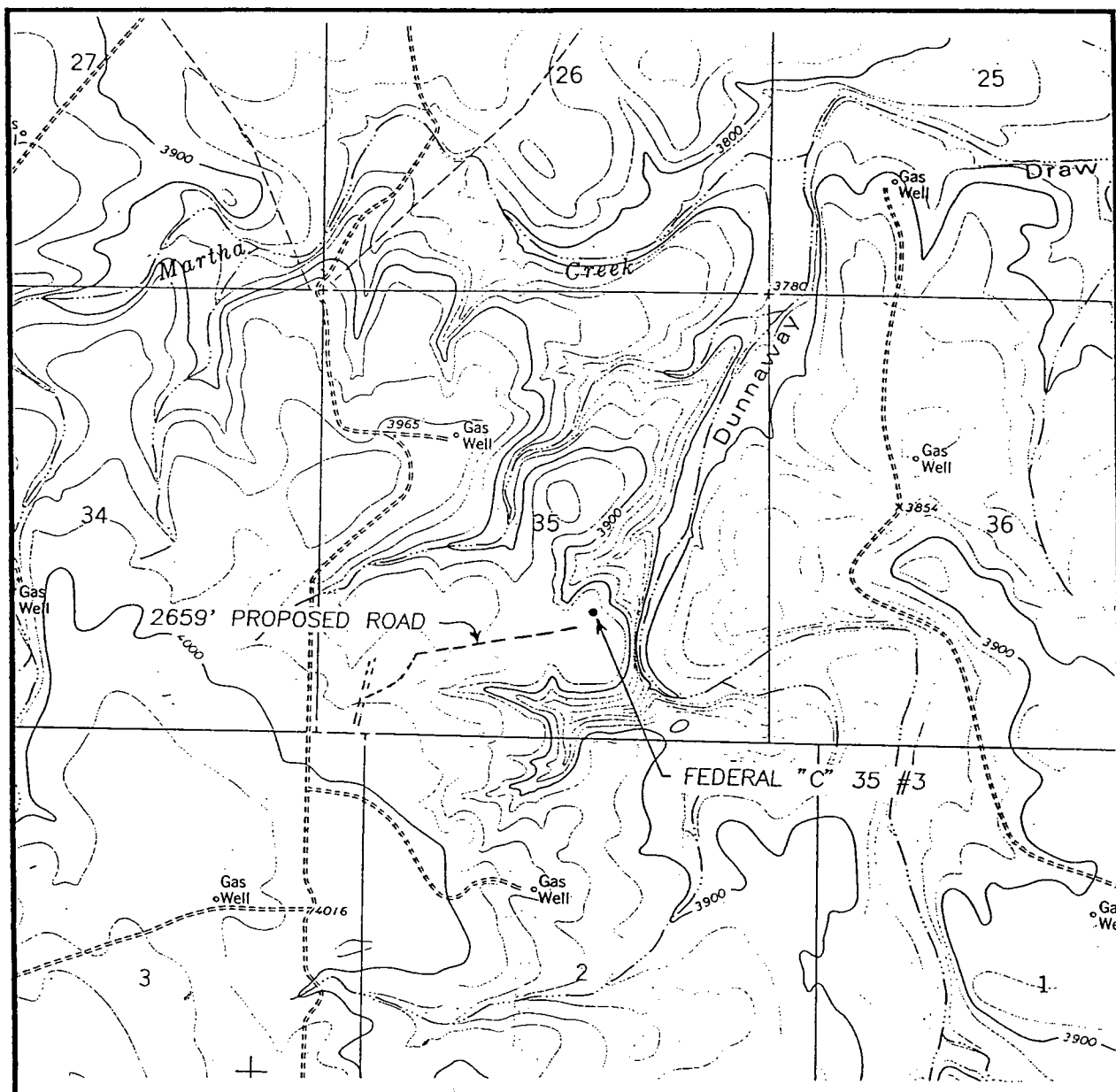
OPERATOR MARATHON OIL COMPANY

LEASE FEDERAL "C" 35

**JOHN WEST SURVEYING CO.**  
**HOBBS, NEW MEXICO**  
**(505) 393-3117**



# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL - 20'

SEC. 35 TWP. 21-S RGE. 23-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1500' FSL & 2080' FEL

ELEVATION 3927'

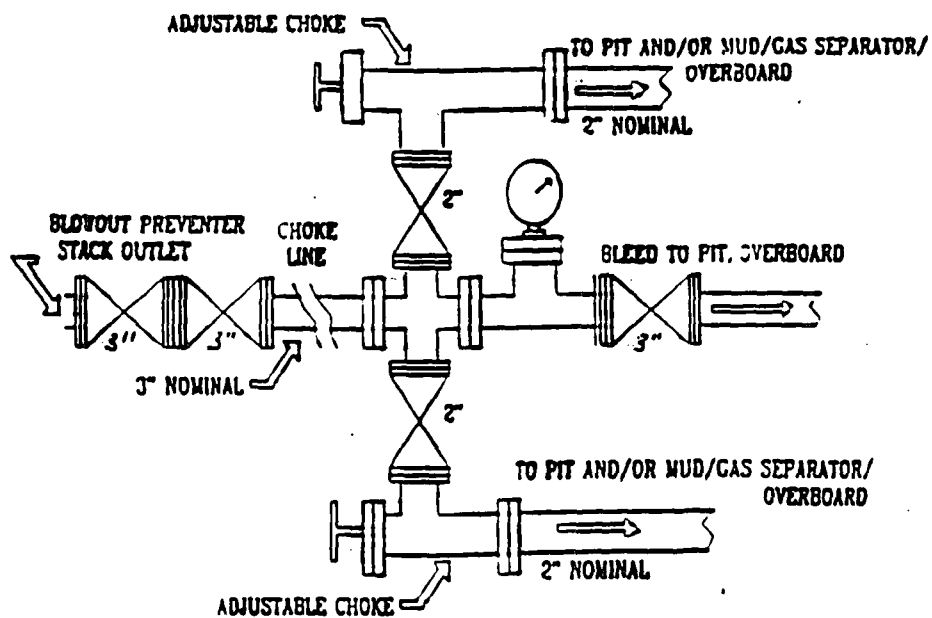
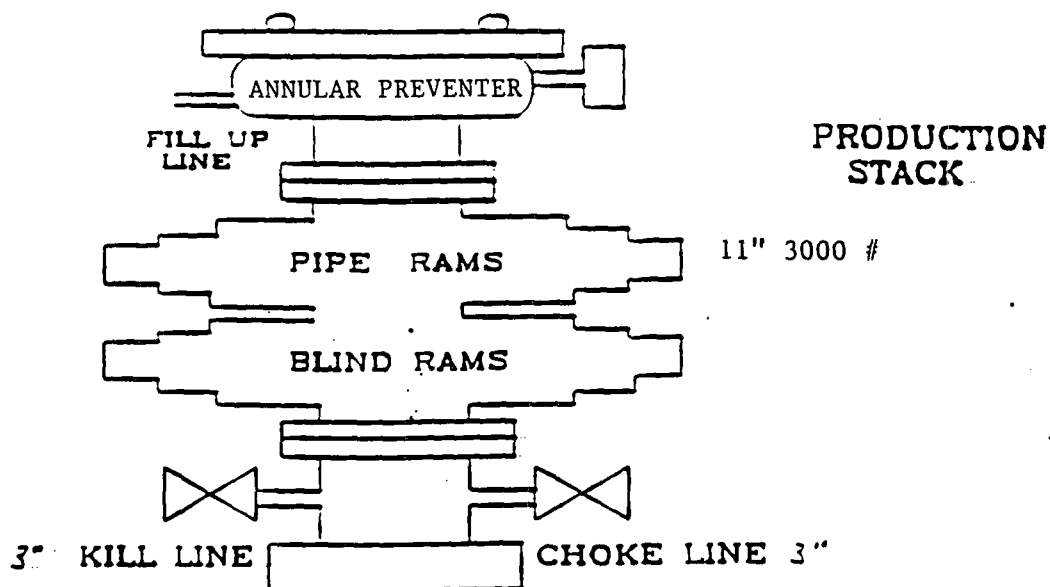
OPERATOR MARATHON OIL COMPANY

LEASE FEDERAL "C" 35

U.S.G.S. TOPOGRAPHIC MAP

MARTHA CREEK, NM

**JOHN WEST SURVEYING CO.**  
**HOBBS, NEW MEXICO**  
**(505) 393-3117**



# MARATHON OIL COMPANY

## H2S DRILLING OPERATIONS PLAN

### *I. HYDROGEN SULFIDE TRAINING*

All contractors and subcontractors employed by Marathon Oil Company will receive or have received training from a qualified instructor within the last twelve months in the following areas prior to commencing drilling operations on this well.

1. The hazards and characteristics of hydrogen sulfide (H2S)
2. Safety precautions
3. Operations of safety equipment and life support systems

In addition, contractor supervisory personnel will be trained or prepared in the following areas:

1. The effect of H2S on metal components in the system. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
2. Corrective action and shut-down procedures when drilling or reworking a well, blowout prevention and well control procedures, if the nature of work performed involves these items.
3. The contents and requirements of the contingency plan when such plan is required.

All personnel will be required to carry documentation of the above training on their person.

### *II. H2S EQUIPMENT AND SYSTEMS*

#### *1. Safety Equipment*

The following safety equipment will be on location.

- A. Wind direction indicators as seen in attached diagram.
- B. Automatic H2S detection alarm equipment (both audio and visual).
- C. Clearly visible warning signs as seen on the attached diagram. Signs will use the words "POISON GAS" and "CAUTION" with a strong color contrast.
- D. Protective breathing equipment will be located in the dog house and at briefing areas as seen in the attached diagram.

## 2. WELL CONTROL SYSTEMS

### A. Blowout Prevention Equipment

Equipment includes but is not limited to:

- a. pipe rams to accomodate all pipe sizes
- b. blind rams
- c. choke manifold
- d. closing unit

Auxillary equipment added as appropriate includes:

- a. annular preventor \_\_\_\_\_
- b. rotating head \_\_\_\_\_
- c. mud- gas separator \_\_\_\_\_
- d. flare line and means of ignition \_\_\_\_\_
- e. remote operated choke \_\_\_\_\_

### B. Communication

The rig contractor will be required to have two-way communication capability. Marathon Oil Company will have either land-line or mobile telephone capabilities.

### C. Mud Program

The mud program has been designed to minimize the volume of H<sub>2</sub>S circulated to surface. Proper mud weight, safe drilling practices, and the use of H<sub>2</sub>S scavengers when appropriate will minimize hazards when penetrating H<sub>2</sub>S bearing zones.

D. Drill Stem Test intervals are as follows:

DST No. 1	_____ ft. to _____ ft.
DST No. 2	_____ ft. to _____ ft.
DST No. 3	_____ ft. to _____ ft.

Drill Stem Testing Safety Rules are attached.

## III. WELL SITE DIAGRAM

A complete well site diagram including the following information is attached.

- 1. Rig orientation
- 2. Terrain
- 3. Briefing areas
- 4. Ingress and egress
- 5. Pits and flare lines
- 6. Caution and danger signs
- 7. Wind indicators and prevailing wind direction

STATE OF NEW MEXICO  
ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
DIVISION FOR THE PURPOSE OF  
CONSIDERING:

CASE NO. 10736  
Order No. R-9910

APPLICATION OF MW PETROLEUM CORPORATION/APACHE CORPORATION FOR  
AN UNORTHODOX GAS WELL LOCATION, EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on June 3, 1993, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 9th day of June, 1993, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) The applicant, MW Petroleum Corporation/Apache Corporation, seeks approval to drill its Federal "C" Well No. 2 as a replacement in the Indian Basin-Upper Pennsylvanian Gas Pool at an unorthodox gas well location 800 feet from the South and West lines (Unit M) of Section 35, Township 21 South, Range 23 East, NMPM, Eddy County, New Mexico.
- (3) All of said Section 35 is located within the Indian Basin-Upper Pennsylvanian (Prorated) Gas Pool and is therefore subject to the Special Rules and Regulations for said pool as promulgated by Division Order Nos. R-2440 and R-8170, as amended, which require standard 640-acre proration units with wells to be located no closer than 1650 feet from the outer boundary of the section nor closer than 330 feet from any governmental quarter-quarter section line.

(4) Currently all of said Section 35, being a standard 640-acre gas spacing and proration unit in the Indian Basin-Upper Pennsylvanian Gas Pool, is dedicated to MW's Federal "C" Well No. 1, located at a standard gas well location 1650 feet from the North and West lines (Unit F) of said Section 35.

(5) The applicant testified that should commercial gas production be established within the proposed replacement well, it intends to plug and abandon the aforesaid Federal "C" Well No. 1.

(6) Marathon Oil Company, the affected offset operator to the west of the proposed location, appeared at the hearing but did not present evidence or testimony.

(7) According to applicant's evidence and testimony, the Federal "C" Well No. 1 began to experience water encroachment in October, 1992. The most current available monthly production rate from this well was approximately 74,000 MCF of gas and 13,000 barrels of water.

(8) Applicant proposes to drill the subject well in order to recover the remaining gas reserves underlying said Section 35.

(9) The applicant presented geologic evidence and testimony which indicate that a well drilled at the proposed location should penetrate the Indian Basin-Upper Pennsylvanian Gas Pool at a structurally higher position in its proration unit that is up-dip of the encroaching gas/water contact zone.

(10) The evidence presented indicates that a well drilled at the proposed location should enable the applicant to produce the remaining gas reserves underlying Section 35.

(11) The applicant requested that a voluntary 38% production penalty (62% allowable/acreage factor) be assessed against the subject 640-acre unit at such time as the Federal "C" Well No. 1 is abandoned and the No. 2 well is placed on production in the prorated Indian Basin-Upper Pennsylvanian Gas Pool, said production penalty having been agreed to by MW Petroleum Corporation/Apache Corporation and the surrounding offset operators to the west, southwest, and south of the proposed unit.

(12) Until that time the subject unit will remain unchanged as it is currently listed in the proration schedule.

(13) In order to assure that correlative rights are protected, the proposed production penalty should be adopted in this case.

(14) No offset operator and/or interest owner appeared at the hearing in opposition to this application.

(15) Approval of the subject application will afford the applicant the opportunity to produce its just and equitable share of the gas in the affected pool and will otherwise prevent waste and protect correlative rights.

(16) In addition to filing the required Form C-104 (Request For Allowable) the operator should notify in writing the Division's Chief Gas Proration Engineer in Santa Fe, New Mexico at such time as the subject Federal "C" Well No. 1 is abandoned and the No. 2 well is completed and ready to produce.

(17) Authorization granted by this order should terminate one year after the effective date of this order if the operator has not commenced with due diligence the drilling of the Federal "C" Well No. 2; provided however, the Division, upon written request by the operator prior to the "one-year deadline date", may grant a "one-time only" 6-month extension thereof for good cause shown.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, MW Petroleum Corporation/Apache Corporation, is hereby authorized to drill its Federal "C" Well No. 2 as a replacement well in the Indian Basin-Upper Pennsylvanian Gas Pool at an unorthodox gas well location 800 feet from the South and West lines (Unit M) of Section 35, Township 21 South, Range 23 East, NMPM, Eddy County, New Mexico.

(2) The existing standard 640-acre gas spacing and proration unit comprising all of said Section 35 and currently dedicated to MW's Federal "C" Well No. 1 shall be dedicated to said well.

PROVIDED HOWEVER THAT:

(3) The Federal "C" Well No. 1 shall be plugged and rendered non-productive from the Indian Basin-Upper Pennsylvanian Gas Pool prior to placing the proposed Well No. 2 on production.

IT IS FURTHER ORDERED THAT:

(3) At that time a 38% production penalty (62% allowable/acreage factor) shall be assessed against the subject 640-acre unit.


(4) In addition to filing the required Form C-104 (Request For Allowable) the operator shall notify in writing the Division's Chief Gas Proration Engineer in Santa Fe, New Mexico at such time as the subject Federal "C" Well No. 1 is abandoned and the No. 2 well is completed and ready to produce.

(5) Authorization granted by this order shall terminate one year after the effective date of this order if the operator has not commenced with due diligence the drilling of the Federal "C" Well No. 2; provided however, the Division, upon written request by the operator by the "one-year deadline date", may grant a "one-time only" 6-month extension thereof for good cause shown.

(6) Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION



WILLIAM J. LEMAY  
Director

S E A L

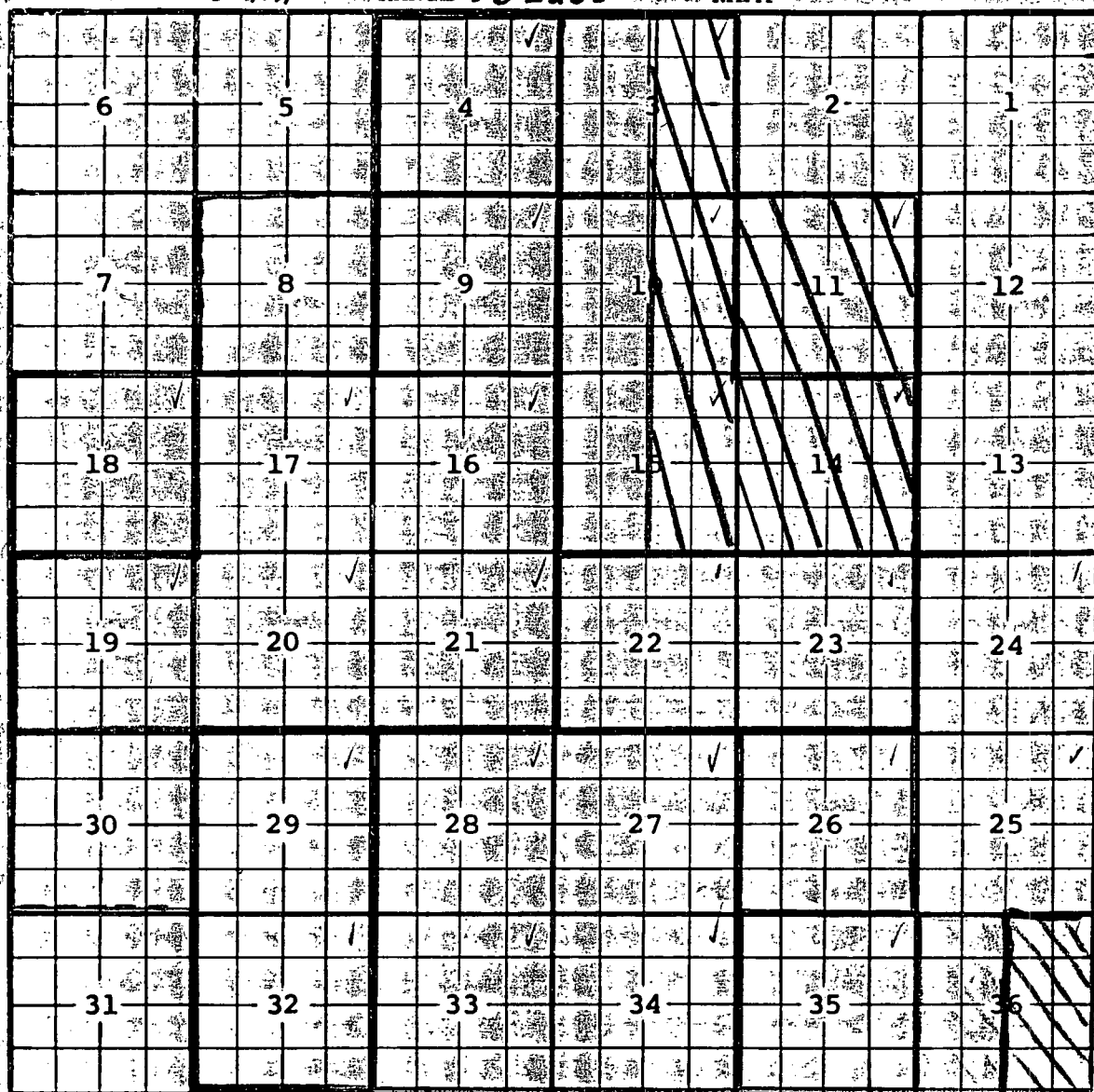


COUNTY Eddy

POOL

Indian Basin - Upper Pennsylvanian GasTOWNSHIP 21 SouthRANGE 23 East

NMFM



Description: All Sec. 22 & 23 (R-2440, 2-28-63)

Ext: All Sec. 10, 14 & 15 (R-2569, 10-1-63) - All Sec. 26 (R-2679, 4-1-64)

- All Sections 16, 17, 19, 20, 21, 24, 25, 35 & 36 (R-2726, 7-1-64)

- All Secs. 9, 11, 27, 28, 33 & 34 (R-2911, 6-1-65) - All Sec. 3 (R-2946, 9-1-65)

- All Sec. 18 (R-3030, 2-1-66) - All Sec. 29 & 32 (R-3056, 5-1-66) - All Sec. 4 (R-3342, 12-1-67)

Ext: All Sec. 30 (R-6657, 4-20-81) EXT: All SEC 8 (R-9418, 2-1-91)

Delete All Sec. 11 (A-10234, 11-7-94) Delete All Sec. 14 (A-10236, 11-3-94)

Delete 1/2 Sec. 3, 1/2 Sec. 10, 1/2 Sec. 15 (A-10895, 10-14-97)

Delete 1/2 Sec. 36 (R-9922-D, 12-7-98)

CMD : ONGARD 04/12/99 10:34:18  
OG6C101 C101-APPLICATION FOR PERMIT TO DRILL OGOMES -TP1K

OGRID Idn : 14021 API Well No: 30 15 30619 APD Status(A/C/P): A  
Opr Name, Addr: MARATHON OIL CO Aprvl/Cncl Date : 04-01-1995  
PO BOX 552  
MIDLAND, TX 79702

Prop Idn: 16957 FEDERAL C-35 Well No: 3

	U/L	Sec	Township	Range	Lot	Idn	North/South	East/West
Surface Locn	: J	35	21S	23E			FTG 1500 F S	FTG 2080 F E
OCD U/L	: J		API County	: 15				

Work typ(N/E/D/P/A) : N Well typ(O/G/M/I/S/W/C): G Cable/Rotary (C/R) : F  
Lease typ(F/S/P/N/J/U/I): F Ground Level Elevation : 3807

State Lease No: Multiple Comp (Y/N) : N  
Prpsd Depth : 7800 Prpsd Frmtn : UPPER PENN

E0009: Enter data to modify record

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06 CONFIRM
PF07	PF08	PF09 PRINT	PF10 C102	PF11 HISTORY	PF12

CMD :  
OG5SECT

ONGARD  
INQUIRE LAND BY SECTION

04/12/99 10:33:57  
OGOMES -TP1K  
PAGE NO: 1

Sec : 35 Twp : 21S Rng : 23E Section Type : NORMAL

D 40.00  Federal owned	C 40.00  Federal owned	B 40.00  Federal owned	A 40.00  Federal owned
E 40.00  Federal owned	F 40.00  Federal owned  A	G 40.00  Federal owned	H 40.00  Federal owned

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06
PF07 BKWD	PF08 FWD	PF09 PRINT	PF10 SDIV	PF11	PF12

CMD :  
OG5SECT

ONGARD  
INQUIRE LAND BY SECTION

04/12/99 10:34:10  
OGOMES -TP1K  
PAGE NO: 2

Sec : 35 Twp : 21S Rng : 23E Section Type : NORMAL

L 40.00	K 40.00	J 40.00	I 40.00
Federal owned	Federal owned	Federal owned A	Federal owned
M 40.00	N 40.00	O 40.00	P 40.00
Federal owned A	Federal owned	Federal owned	Federal owned

PF01 HELP  
PF07 BKWD

PF02  
PF08 FWD

PF03 EXIT  
PF09 PRINT

PF04 GoTo  
PF10 SDIV

PF05  
PF11

PF06  
PF12

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
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.

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires November 30 2000

5. Lease Serial No.

NM 06953

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.

FEDERAL C 35 #1

9. API Well No.

30-015-10403

10. Field and Pool, or Exploratory Area

INDIAN BASIN UPPER PENN GAS  
POOL

11. County or Parish, State

EDDY

NM

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)

915-682-1626

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

UL "F" 1650' FNL & 1650' FWL  
SECTION 35, T-21-S, R-23-E

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <u>OFF LEASE</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<u>STORAGE &amp; SALES, &amp;</u>
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	<u>ALT. MSMT. METHOD</u>

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 recomplate 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/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion 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.)

In reference to Notice of Incidents of Noncompliance #99-DW-132

The production from this well goes into a 2-phase separator. The gas is metered and transported to Marathon's Indian Basin Gas Plant via pipeline. After processing, the gas and NGLs are metered and sold at the tailgate of the plant. The liquid hydrocarbon production and water are sent to a storage tank on location. Production volumes are determined by gauging the tank and "color cutting" for the condensate/water interface. These liquids are then taken to the storage and measurement facility, located at the Indian Basin Gas Plant, by truck. After further separation, the liquid hydrocarbons are metered and sold through a LACT Unit. The water is disposed of in various salt water disposal wells per prior approvals. A drawing is attached which shows the equipment used, and the flow of production.

SEE ATTACHED FOR  
COMPLETION OF APPROVAL

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

GINNY LARKE

Title

Engineer Technician

Date

1/8/99

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

(ORIG. SGD.) ALEXIS C. SWOBODA

Title

PETROLEUM ENGINEER

Date

JAN 20 1999

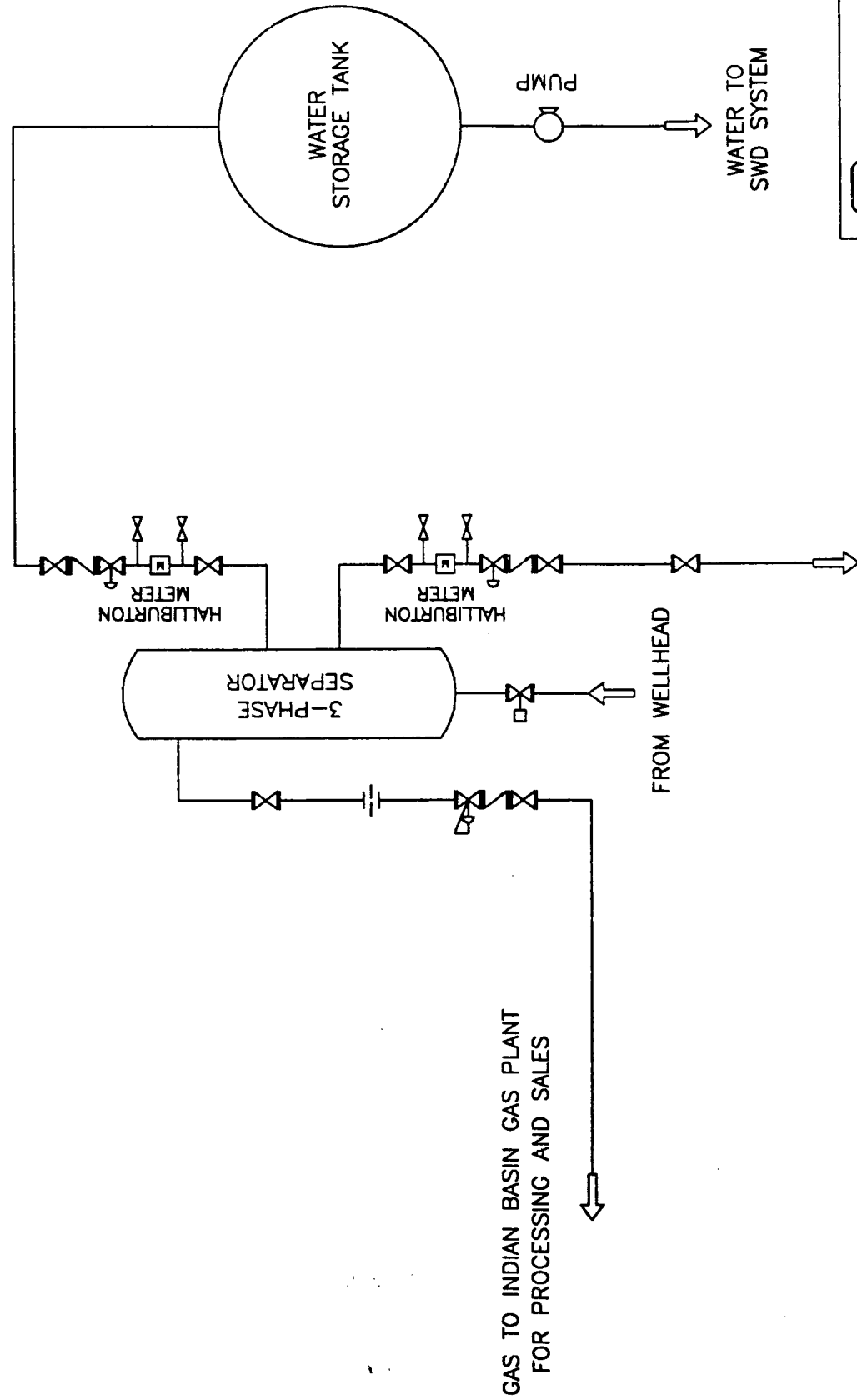
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

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.

(Instructions on reverse)

FEDERAL C 35" R  
 STATION 235  
 800' FSL & 800' FNL  
 SEC. 35 T-21-S, R-23-E  
 NM 08653  
 EDDY CO. N.M.

THE FACILITY IS LOCATED  
 TO THE SITE SECURITY PLAN.  
 THE INDIAN BASIN FIELD. THE  
 PLAN IS LOCATED AT:  
 MARATHON OIL CO.  
 329 MARATHON RD.  
 LAKEWOOD, NM 88259



LHC TO INDIAN BASIN GAS PLANT  
 FOR PROCESSING AND SALES

		INDIAN BASIN FIELD FEDERAL C 35" R EDDY COUNTY, NM	
FACILITY IDENTIFICATION	OPERATOR MARATHON OIL CO.	DATE 12/15/83	TIME 10:00 AM
DRAWN BY J. L. HARRIS	CHECKED BY J. L. HARRIS	APPROVED BY J. L. HARRIS	DATE 12/15/83

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

N.M. Oil Cons. Division

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

210-2834

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.

Use "APPLICATION FOR PERMIT -" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well  
☐ Oil Well ☐ Gas Well ☒ Other

2. Name of Operator  
Marathon Oil Company

3. Address and Telephone No.

P.O. Box 552 Midland, TX 79702

915/687-8449

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

UL "F" (Well #1) and UL "M" (Well #2), SECTION 35, T-21-S, R-23-E

5. Lease Designation and Serial No.

NM06953

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

FEDERAL C 35

#1 & #2

9. API Well No.

10. Field and Pool, or exploratory Area

11. County or Parish, State

EDDY

NM

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

TYPE OF SUBMISSION

☐ Notice of Intent

☒ Subsequent Report

☐ Final Abandonment Notice

TYPE OF ACTION

☐ Abandonment

☐ Recompletion

☐ Plugging Back

☐ Casing Repair

☐ Altering Casing

☒ Other PERMIT LINED SUMPS

☐ Change of Plans

☐ New Construction

☐ Non-Routine Fracturing

☐ Water Shut-Off

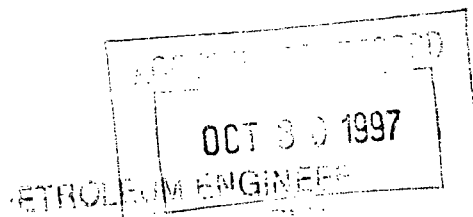
☐ Conversion to Injection

☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

MARATHON OIL COMPANY, in accordance with 43 CFR PART 3160 ONSHORE OIL AND GAS OPERATIONS; FEDERAL AND INDIAN OIL GAS LEASES; ONSHORE OIL AND GAS ORDER NO. 7, is notifying the BLM of the installation and locations of 2 sumps on the Federal C 35 lease. These sumps are double walled construction with inspection ports for leak detection, secondary containment, and are constructed in compliance with ONSHORE ORDER NO. 7, SECTION 3E. These sumps have been installed to catch compressor drain run-off and/or dehydrator condensation.



(CRIG. SGD.) GARY GOURLY

14. I hereby certify that the foregoing is true and correct

Signed

Garry Gourley

Title Engineer Technician

Date 10/21/97

(This space for Federal or State office use)

Approved by

Title

Date

Conditions of approval, if any:

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 statement or representations as to any matter within its jurisdiction.

\* See instruction on Reverse Side

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE

N.M. Oil Cons. Division

811 S. 1st  
Albuquerque, NM 87210  
(See other instructions on reverse side)

FORM APPROVED

OMB NO. 1004-0137

Expires: February 28, 1995

LEASE DESIGNATION AND SERIAL NO.  
NM 06953

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME, WELL NO.

Federal 'C' "35" #1

9. API WELL NO.

30-015-10403

10. FIELD AND POOL, OR WILDCAT

Indian Basin, U. Penn

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA

Sec 35, T21S, R23E

12. COUNTY OR PARISH

Eddy Co.,

13. STATE

N.M.

1a. TYPE OF WELL:

OIL WELL ☐GAS WELL ☒DRY ☐ Other

1b. TYPE OF COMPLETION:

NEW WELL ☐WORK OVER ☐DEEP-EN ☐PLUG BACK ☒DIFF. RESVR. ☒

Other APR 02 1997

2. NAME OF OPERATOR

Marathon Oil Company

3. ADDRESS AND TELEPHONE NO.

P.O. Box 552, Midland, TX 79702

915/682/1626

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

At surface

UL "F" 1650' FNL &amp; 1650' FWL

At top prod. interval reported below

At total depth

14. PERMIT NO.

DATE ISSUED

12. COUNTY OR PARISH

Eddy Co.,

13. STATE

N.M.

15. DATE SPUDDED

2/13/97

16. DATE T.D. REACHED

17. DATE COMPL. (Ready to prod.)

2/19/97

18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\*

GL:3961 KB:3974

19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD &amp; TVD

10,778

21. PLUG, BACK T.D., MD &amp; TVD

9,200

22. IF MULTIPLE COMPL., HOW MANY\*

23. INTERVALS DRILLED BY

ROTARY TOOLS

CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION - TOP, BOTTOM, NAME (MD AND TVD)\*

Indian Basin Upper Penn

25. WAS DIRECTIONAL SURVEY MADE

NO

26. TYPE ELECTRIC AND OTHER LOGS RUN

None

27. WAS WELL CORED

28. CASING RECORD (Report all strings set in well)

CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
No Change	See	Original	Completion	Report	

LINER RECORD				TUBING RECORD		
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	PACKER SET (MD)
					2 7/8"	8248

31. PERFORATION RECORD (Interval, size and number)

8,350-64 6 SPF

RECORDED FOR RECORD

MAR 31 1997

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD) AMOUNT AND KIND OF MATERIAL USED

None

33. PRODUCTION

DATE FIRST PRODUCTION 2/19/97		PRODUCTION METHOD (Flowing, gas lift, pumping - size and type of pump) Flowing				WELL STATUS (Producing or shut-in) Producing	
DATE OF TEST 2/20/97	HOURS TESTED 24	CHOKE SIZE 64/64	PROD'N. FOR TEST PERIOD →	OIL - BBL. 18.6	GAS - MCF. 3167	WATER - BBL. .2	GAS - OIL RATIO 170269
FLOW. TUBING PRESS. 1700	CASING PRESSURE Pkr	CALCULATED 24-HOUR RATE →	OIL - BBL. 18.6	GAS - MCF. 3167	WATER - BBL. .2	OIL GRAVITY - API (CORR.) 48	

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

Sold

TEST WITNESSED BY

John Connaway

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED

Thomas P. Puel

TITLE

Adv. Eng. Tech.

DATE

3/23/97

\*(See Instructions and Spaces for Additional Data 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.



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

N.M. Oil Cons. Division  
811 S. 1st Street  
Albany, NM 88201

FORM APPROVED

Budget Bureau No. 1004-0135  
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.

Use "APPLICATION FOR PERMIT - " for such proposals

SUBMIT IN TRIPLICATE

APR 02 1997

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

Marathon Oil Company

3. Address and Telephone No.

P.O. Box 552, Midland, TX 79702

915/682/1626

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

1650' FNL & 1650' FWL  
Sec. 35, T-21-S, R-23-E

5. Lease Designation and Serial No.

NM 06953

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

Federal "C" "35" #1

9. API Well No.

30-015-10403

10. Field and Pool, or exploratory Area

Indian Basin, U. Penn

11. County or Parish, State

Eddy Co., N.M.

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

TYPE OF SUBMISSION

- ☐ Notice of Intent  
☒ Subsequent Report  
☐ Final Abandonment Notice

TYPE OF ACTION

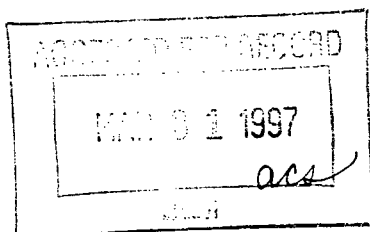
- ☐ Abandonment  
☒ Recompletion  
☐ Plugging Back  
☐ Casing Repair  
☐ Altering Casing  
☐ Other Recomplete to Penn  
☐ Change of Plans  
☐ New Construction  
☐ Non-Routine Fracturing  
☐ Water Shut-Off  
☐ Conversion to Injection  
☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drill, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Marathon Oil Co. recently plugged back and recompleted this well as per the work summarized below.

2/13/97: MIRU PU. ND tree. NU BOP. POOH with tbq and pkr. Set CIBP @ 9250'. Dump bailed 50' cement on top of plug. RIH with tubing conveyed perf guns. Set Packer @ 8248'. ND BOP NU tree. Tested annulus and packer to 500 PSI. Perfed 8350-8364 with 6 shots per foot. Turned well into test facility. RDMO PU 2/20/97.



14. I hereby certify that the foregoing is true and correct

Signed

Thomas M. Dyer

Title Adv. Eng. Tech.

Date 3/23/97

(This space for Federal or State office use)

Approved by

Title

Date

Conditions of approval, if any:

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 statement or representations as to any matter within its jurisdiction.

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
N.M. Oil Cons. Division  
1st Street  
Artesia, NM 88210-2804

SUBMIT IN TRIPLICATE\*

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

APPLICATION FOR PERMIT TO DRILL OR DEEPEN			5. LEASE DESIGNATION AND SERIAL NO. NM 06953	
1a. TYPE OF WORK DRILL <input type="checkbox"/> DEEPEN <input type="checkbox"/> <b>x Plug back</b>			6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>			7. UNIT AGREEMENT NAME	
2. NAME OF OPERATOR Marathon Oil Company			8. FARM OR LEASE NAME, WELL NO. Federal C 35 1	
3. ADDRESS AND TELEPHONE NO. P.O. Box 552, Midland, TX 79702			9. API WELL NO. 30-015-10403	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements) At surface: UL "F", 1650' EBL & 1650' FWL At proposed prod. zone: FNL			10. FIELD AND POOL, OR WILDCAT Indian Basin, U. Penn	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* DIST. 2			11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec 35, T21S, R23E	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 3630		16. NO. OF ACRES IN LEASE 640	17. NO. OF ACRES ASSIGNED TO THIS WELL 640	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.		19. PROPOSED DEPTH Plug back to 9200	20. ROTARY OR CABLE TOOLS Work over unit	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) GL: 3,961 KB: 3,974			22. APPROX. DATE WORK WILL START*	

23. PROPOSED CASING AND CEMENTING PROGRAM				
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
No Change	See Original	Completion	Report	

Marathon Oil Company intends to plugback and recompleat this well to the Upper Penn as per the procedure outlined below.

MIRU PU. Kill well. NU and test BOP. Release Pkr and POOH with tubing and packer. Using wireline set CIBP @ 9,250'. Dump bail 50' cement on top of plug for PBTD +- 9,200'. Pick up Vann gunn tubing conveyed guns and start in hole. Set packer @ +- 8,250'. ND BOP. NU tree. Drop bar to fire guns and perf 8,350'-8,362' with 6 JSPF. Turn well to test. Stimulate as directed by test results. RDMO PU. Turn well into production.

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 Thomas m Price TITLE Advanced Engineering Tech DATE 3/10/97

(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:

APPROVED BY (ORIG. SGD.) ALEXIS C. SWOBODA TITLE PETROLEUM ENGINEER DATE MAR 23 1997

\*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.

District I  
PO Box 1980, Hobbs, NM 88241-1980  
District II  
811 S. 1st Street, Artesia, NM 88210-2834  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals & Natural Resources Department

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

5f Form C-104  
Revised February 10, 1994  
Instructions on back  
Submit to Appropriate District Office  
5 Copies

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

<sup>1</sup> Operator name and Address Marathon Oil Company P.O. Box 552 Midland, Texas 79702		<sup>2</sup> OGRID Number 014021
		<sup>3</sup> Reason for Filing Code RC
<sup>4</sup> API Number 30-015-10403	<sup>5</sup> Pool Name Indian Basin / Upper Penn	<sup>6</sup> Pool Code 79040
<sup>7</sup> Property Code 16957	<sup>8</sup> Property Name Federal "C" 35	<sup>9</sup> Well Number 1

II. <sup>10</sup> Surface Location

UL or lot no. F	Section 35	Township 21S	Range 23E	Lot. Idn	Feet from the 1650	North/South Line North	Feet from the 1650	East/West line West	County Eddy
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<sup>11</sup> Bottom Hole Location

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
F	35	21S	23E		1650	North	1650	West	Eddy
<sup>12</sup> Lse Code F	<sup>13</sup> Producing Method Code Flow	<sup>14</sup> Gas Connection Date 2/20/97	<sup>15</sup> C-129 Permit Number	<sup>16</sup> C-129 Effective Date	<sup>17</sup> C-129 Expiration Date				

III. Oil and Gas Transporters

<sup>18</sup> Transporter OGRID	<sup>19</sup> Transporter Name and Address	<sup>20</sup> POD 2806771	<sup>21</sup> O/G G	<sup>22</sup> POD ULSTR Location and Description F, Sec. 35, 21S, 23E
014035	Marathon Oil Company P. O. Box 1324 Artesia, NM 88211-1324	286771		
014035	Marathon Oil Co PO Box 1324 Artesia, NM 88211-1324	2806722	0	F Sec 35, 21S 23E

IV. Produced Water

<sup>23</sup> POD 2806773 286773	<sup>24</sup> POD ULSTR Location and Description F, Sec. 35, 21S, 23E
----------------------------------------	--------------------------------------------------------------------------

V. Well Completion Data

<sup>25</sup> Spud Date 2/13/97	<sup>26</sup> Ready Date 2/19/97	<sup>27</sup> TD 10778'	<sup>28</sup> PBT 9,200'	<sup>29</sup> Perforations 8350-64
<sup>30</sup> Hole Sie NO Change See Original	<sup>31</sup> Casing & Tubing Size Completion Report	<sup>32</sup> Depth Set 8248	<sup>33</sup> Sacks Cement -	

VI. Well Test Data

<sup>34</sup> Date New Oil 2/20/97	<sup>35</sup> Gas Delivery Date 2/20/97	<sup>36</sup> Test Date 2/20/97	<sup>37</sup> Test Length 24 hr	<sup>38</sup> Tbg. Pressure 1700	<sup>39</sup> Csg. Pressure Pkr
<sup>40</sup> Choke Size 64/64	<sup>41</sup> Oil 18.6	<sup>42</sup> Water .2	<sup>43</sup> Gas 3167	<sup>44</sup> AOF 4,900	<sup>45</sup> Test Method Flow

<sup>46</sup> I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature: Thomas M. Price

Printed name:  
Thomas M. Price

Title:  
Advanced Engineering Technician

Date: 3/23/97

Phone: 915/682-1626

OIL CONSERVATION DIVISION

Approved by: Jim W. Beem

Title: District Supervisor

Approval Date: 3/27/97

<sup>47</sup> If this is a change of operator fill in the OGRID number and name of the previous operator

Previous Operator Signature	Printed Name	Title	Date

District I  
PO Box 1980, Hobbs, NM 88241-1980  
District II  
811 S. 1st Street, Artesia, NM 88210-2834  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals & Natural Resources Department

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

Form C-104

Revised February 10, 1994

Instructions on back

Submit to Appropriate District Office

5 Copies

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

<sup>1</sup> Operator name and Address Marathon Oil Company P.O. Box 552 Midland, Texas 79702		<sup>2</sup> OGRID Number 014021
		<sup>3</sup> Reason for Filing Code RC
<sup>4</sup> API Number 30-015-10403	<sup>5</sup> Pool Name Indian Basin Morrow	<sup>6</sup> Pool Code 78960
<sup>7</sup> Property Code 16957	<sup>8</sup> Property Name Federal "C" 35	<sup>9</sup> Well Number 1

II. <sup>10</sup> Surface Location

UL or lot no. F	Section 35	Township 21S	Range 23E	Lot. Idn	Feet from the 1650	North/South Line North	Feet from the 1650	East/West line West	County Eddy
--------------------	---------------	-----------------	--------------	----------	-----------------------	---------------------------	-----------------------	------------------------	----------------

<sup>11</sup> Bottom Hole Location

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
F	35	21S	23E		1650	North	1650	West	Eddy
<sup>12</sup> Lse Code F	<sup>13</sup> Producing Method Code Flow	<sup>14</sup> Gas Connection Date 5-15-96	<sup>15</sup> C-129 Permit Number	<sup>16</sup> C-129 Effective Date	<sup>17</sup> C-129 Expiration Date				

III. Oil and Gas Transporters

<sup>18</sup> Transporter OGRID 014035	<sup>19</sup> Transporter Name and Address Marathon Oil Company P. O. Box 1324 Artesia, NM 88211-1324	<sup>20</sup> POD 1958930 286771	<sup>21</sup> O/G 6	<sup>22</sup> POD ULSTR Location and Description F, Sec. 35, 21S, 23E

IV. Produced Water

<sup>23</sup> POD 1958930 286771	<sup>24</sup> POD ULSTR Location and Description F, Sec. 35, 21S, 23E
----------------------------------------	--------------------------------------------------------------------------

V. Well Completion Data

<sup>25</sup> Spud Date 4-23-96	<sup>26</sup> Ready Date 5-9-96	<sup>27</sup> TD 10778'	<sup>28</sup> PBSD 10019'	<sup>29</sup> Perforations 9288' - 9416'
<sup>30</sup> Hole Size	<sup>31</sup> Casing & Tubing Size	<sup>32</sup> Depth Set	<sup>33</sup> Sacks Cement	
	4 1/2" Liner	7610' - 10115'	345 sx	
	2 7/8"	9192'	-	

VI. Well Test Data

<sup>34</sup> Date New Oil	<sup>35</sup> Gas Delivery Date 5-15-96	<sup>36</sup> Test Date 7-18-96	<sup>37</sup> Test Length 24 hr	<sup>38</sup> Tbg. Pressure 540	<sup>39</sup> Csg. Pressure pkr
<sup>40</sup> Choke Size 20/64	<sup>41</sup> Oil 0	<sup>42</sup> Water 65	<sup>43</sup> Gas 1089	<sup>44</sup> AOF 1089	<sup>45</sup> Test Method Flow

<sup>46</sup> I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature: *Thomas M. Price*

Printed name:  
Thomas M. Price

Title:  
Advanced Engineering Technician

Date: 7/24/96

Phone: 915/682-1626

OIL CONSERVATION DIVISION

Approved by: *Jim W. Brown*

Title: *District Supervisor*

Approval Date: *7/31/96*

<sup>47</sup> If this is a change of operator fill in the OGRID number and name of the previous operator

Previous Operator Signature

Printed Name

Title

Date

RECEIVED

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG\*

1a. TYPE OF WELL:

OIL WELL ☐GAS WELL ☒DRY ☐

b. TYPE OF COMPLETION:

NEW WELL ☐WORK OVER ☐DEEP-EN ☒PLUG BACK ☐DIFF. RESVR. ☐

2. NAME OF OPERATOR

Marathon Oil Company

3. ADDRESS AND TELEPHONE NO.

P.O. Box 552, Midland, TX 79702

915/682-1626; 1006

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

At surface

UL "F" 1650' FNL &amp; 1650' FWL

At top prod. interval reported below

At total depth

14. PERMIT NO.

DATE ISSUED

12. COUNTY OR PARISH

Eddy

13. STATE

NM

15. DATE SPUDDED

4-23-96

16. DATE T.D. REACHED

5-9-96

17. DATE COMPL. (Ready to prod.)

5-22-96

18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\*

GL: 3961 KB: 3974

19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD &amp; TVD

10,778'

21. PLUG, BACK T.D., MD &amp; TVD

10,019'

22. IF MULTIPLE COMPL., HOW MANY\*

23. INTERVALS DRILLED BY

ROTARY TOOLS

ALL

CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION - TOP, BOTTOM, NAME (MD AND TVD)\*

9288' - 9338' Morrow

25. WAS DIRECTIONAL SURVEY MADE

No

26. TYPE ELECTRIC AND OTHER LOGS RUN

HAL/NET/SONIC/BHC

27. WAS WELL CORED

No

28. CASING RECORD (Report all strings set in well)

CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
	See	Original	Comp	Report	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
4 1/2"	7,610'	10,115'	345		2 7/8"	9192'	9192'

31. PERFORATION RECORD (Interval, size and number)

9288' - 96', 9326' - 38', 6 JSPF

9384' - 96', 9402' - 16', 8 JSPF

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
9288' - 9388'	3500 gal 7 1/2% HCl
9288' - 9388'	2825 gal 10% HCl
9288' - 9416'	32K GAL FOAM, 45K # SAND

33.\* PRODUCTION

DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping - size and type of pump)				WELL STATUS (Producing or shut-in)	
5-15-96		Flowing				Prod	
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL - BBL.	GAS - MCF.	WATER - BBL.	GAS - OIL RATIO
7-19-96	24	20/64		0	1089	65	
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL - BBL.	GAS - MCF.	WATER - BBL.	OIL GRAVITY - API (CORR.)	
540	pkf		0	1089	65		

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

Sold

TEST WITNESSED BY

Pat Hedderman

35. LIST OF ATTACHMENTS

Logs

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED

Thomas W. Prince

CARLSBAD, Advanced Engineering Tech.

DATE

7/24/96

\*(See Instructions and Spaces for Additional Data on Reverse Side)

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof, cored intervals, and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Morrow Sand	9143	9437	Sand, shale, lime - gas

38. GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH
Morrow	8985'	
Barnett	9438'	
Mississippian	9788'	
Woodford	10,040'	
Devonian	10,090'	

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

N.M. Oil Cons. Division

811 S. 1st Street

Artesia, NM 88210-2834

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir

Use "APPLICATION FOR PERMIT -" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well

☐ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

Marathon Oil Company

3. Address and Telephone No.

P.O. Box 552, Midland, TX 79702

915/682-1626

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

UL F, 1650' FNL & 1650' FWL  
Sec. 35, T-21-S, R-23-E

6. If Indian, Allottee or Tribe Name

AM 8 52

7. If Unit or CA, Agreement Designation

8. Well Name and No.

Federal "C" 35

1

9. API Well No.

30-015-10403

10. Field and Pool, or exploratory Area

Indian Basin/Morrow

11. County or Parish, State

Eddy Co. NM

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

TYPE OF SUBMISSION

- ☐ Notice of Intent  
☒ Subsequent Report  
☐ Final Abandonment Notice

TYPE OF ACTION

- ☐ Abandonment  
☐ Recompletion  
☐ Plugging Back  
☐ Casing Repair  
☐ Altering Casing  
☒ Other Add Perfs & Stimulate

- ☐ Change of Plans  
☐ New Construction  
☐ Non-Routine Fracturing  
☐ Water Shut-Off  
☐ Conversion to Injection  
☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

6-06-96: Using thru tbq guns on wireline, perforated 9384'-96', 9402'-16' w/8 JSPF.  
6-12-96: Acidized 9288'-9416' w/9000 gallons 30% foamed acid containing 6300 gallons 7 1/2% HCL/Meoh acid, 4725 gal 10% HCL & 1575 gal methenol. Used 300 ball sealers. Flowed well back to test tank. Put into line.  
6-29-96: MIRU PU. NU BOP. POOH w/prod tbq & pkr.  
6-30-96: Started fishing Van guns. Recovered guns on 7-1-96.  
7-02-96: NU 6" 5000# BOP. Installed 3 1/2" treating string w/pkr @ 9192'.  
7-03-96: Frac'd 9288'- 9416' w/32,000 gallons, 52 quality foam & 45,000# sand. Started blowing down to frac tank.  
7-04-96: Put well to test.  
7-10-96: Set tbq plug, lost wire line tools. Started RU Cudd pressure control.  
7-12-96: Washed down to 9196' w/coiled tbq. Fished wireline tools.  
7-13-96: Fished for tbq plug.  
7-14-96: C/O w/coiled tbq.  
7-15-96: POOH w/tbg & pkr. Started in hole with 2 7/8" prod tbq.  
7-16-96: Set pkr @ 9166'. Loaded backside w/2% KCl chemically inhibited wtr. Tested backside to 500#. ND BOP. NU tree. Kicked well off to test. RDMO. PU.  
e

14. I hereby certify that the foregoing is true and correct

Signed

Thomas m Price

Title

Advanced Engineering Tech.

Date

7/24/96

(This space for Federal or State office use)

Approved by

Title

ACCEPTED FOR RECORD  
JUL 31 1996

Date

Conditions of approval, if any:

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.

BLM

\* See instruction on Reverse Side

Form 3160-5  
(June 1990)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.

Use "APPLICATION FOR PERMIT -" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well

☐ Oil Well ☐ Gas Well ☒ Other

2. Name of Operator

Marathon Oil Company

3. Address and Telephone No.

P.O. Box 552, Midland, TX 79702

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

1650' FNL & 1650' FWL  
Sec. 35, T-21-S, R-23-E

JUN 20 1996

OIL CONL DIV.

OIL CONSERVATION DIV  
811 S. 1st ST.  
ARTESIA, NM 88310-2834

Budget Bureau No. 1004-0135  
Expires: March 31, 1993

5. Lease Designation and Serial No.

NM 06953

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

Federal 'C' "35" #1

9. API Well No.

30-015-10403

10. Field and Pool, or exploratory Area

Indian Basin, U. Penn

11. County or Parish, State

Eddy Co., N.M.

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

TYPE OF SUBMISSION

- ☐ Notice of Intent  
☒ Subsequent Report  
☐ Final Abandonment Notice

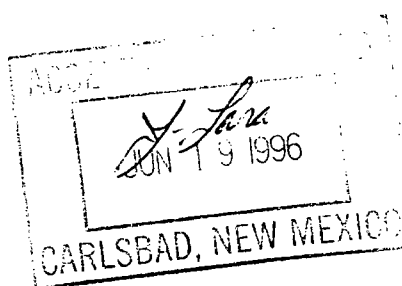
TYPE OF ACTION

- ☐ Abandonment  
☐ Recompletion  
☐ Plugging Back  
☒ Casing Repair  
☐ Altering Casing  
☒ Other Deepen to Devonian  
☐ Change of Plans  
☐ New Construction  
☐ Non-Routine Fracturing  
☐ Water Shut-Off  
☐ Conversion to Injection  
☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

See attached for detail



14. I hereby certify that the foregoing is true and correct

Signed

[Signature] Title DEPT. SGT.

Date

5/30/96

(This space for Federal or State office use)

Approved by

Title

Date

Conditions of approval, if any:

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 statement or representations as to any matter within its jurisdiction.

\* See instruction on Reverse Side





P.O. Box 552  
Midland, TX 79702-0552  
Telephone 915/682-1626

FEDERAL C "35" NO. 1

2/13/95 - MIRU PU, NU 7-1/16" 5M BOPE, ran RTTS to 220', tested annulus to 500 psi. Had communication between 7" and 9-5/8" casing. Isolated casing leak 5890'-5882'. Ran CBL, found TOC on 7" at 6344. Perf'd 7" 6340'-41' w/2 JSPF. Set retainer at 6275' and squeezed perfs w/100 sx "H" Neat. Had communication between 7" and 9-5/8" casing. Set 2nd retainer at 5803'. Pumped 885 sx 50-50 POZ w/100 sx "H" Neat. Squeezed off w/1500 psi. WIH w/2-7/8" and tagged TOC at 5800'. Tested BOP's to 1000 psi. Drilled cement and retainer at 5803' and cement to 5903'. Tested casing above retainer at 6275' to 1000 psi. Drilled retainer and cement to 6355'. Tested casing to 1000 psi. Tagged CIBP at 7256', drilled CIBP and lost returns, washed to CIBP at 7405'.

Set retainer at 7240' to squeeze open perfs at 7341'-96'. Squeezed perfs w/300 sx "H" w/sand and thixad, squeezed off to 2500#. Tagged cement at 7022'. Drilled cement and retainer to 7405', tested casing to 1000 psi. Drilled on HIP plug at 7405' and drilled cement to 7445', washed to 7495'. Attempted to test casing, perfs at 7412'-76' leaking. Spotted 50 sx "H" across perfs. Pressured up to 1500 psi. TIH and tagged cement at 7267', drilled cement to 7510', tested casing to 1500 psi.

4/23/96 - MIRU McVay No. 4, tested 11" 3M dual rams choke lines, manifold, floor valves and lines to 300/3000 psi. Tested annular to 1500 psi. PU 6-1/8" bit, DC's and 3-1/2" DP, TIH to 7808' - drilled cement in 7" shoe to 7850'. Drilled formation to 10,819', T/Devonian - 10,100'. Logged well as follows: HAL/NET/SONIC/BHC 10,812'-7200'. Ran FMI thru Morrow.

Ran 60 jts 4-1/2", 11.30#, FL4S to 10,115', Ran GR-CCL to correlate ECP/liner hanger. Liner top @ 7610'. Released setting tool from liner. Cemented w/345 sx "H" w/1% FL-62, 5 pps CSE, 3 pps Kolseal, 15% LWL, 45% CD-32. Plug down with 2200 hours.

5/5/96 - TOH w/2 stds. Reversed 21 sx cement into pit. WOC 7 hours. Tagged cement at 7606'.

Set RBP @ 3032'. Tested casing to 500 psi. Released McVay No. 4. The decision was made not to pursue a completion in the Devonian as a disposal well at this time due to favorable log analysis in the Morrow section.

5/9/96 - MIRU PU, NU 7-1/16" BOP and tested rams. PU 6-1/8" bit and DC's. RIH with tubing to TOL at 7613'. PU 7" RTTS and set packer at 7590'. Swab tested liner top, no fluid entry. POOH w/RTTS, RIH w/3-7/8" bit to TOC at 7613'. Did not find cement. RIH to 10,019'. Circ. clean, displace with 2% Kcl. Ran GR/CBL/CCL 10,019'-

7600'. RIH with 3-3/8" TCP guns. Set packer at 9186', ND BOP, NU 7-1/6" Christmas tree and tested to 3000 psi. Dropped bar, perf'd Morrow 9288'-96', 9326'-9338'. Max SI pressure - 47 psi. Swabbed 10 BW in 6 runs IFL - 7300', FFL - 9000'.

Shut well in for 72 hour pressure buildup. Acidized Morrow perms w/5000 gals. 30% foamed acid w/3500 gals, 7-1/2% Hcl, 2625 gals 10% Hcl, flushed w/2% foamed Kcl. ISIDP - 2600 psi. 10 min. - 2350 psi, 1 hour - 2020. Max psi - 3800, avg. - 3650. Opened well, flowed well on 16/64" choke. Recovered 40 bbls fluid. Pressure dropped to 250 psi, opened to full choke, flowed at 20 psi, 9 BPH.

Tied well in with separator, tested well on 32/64" choke from 0700-0600 hours, 5/22/96. TP - 110, 522 MCF, 0 BOPD, 42 BWPD.

H:\wjd\fed35-1  
srt

Form 3160-5  
(June 1990)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
CONSERVATION DIVISION  
RECEIVED

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.

Use "APPLICATION FOR PERMIT - " for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

Marathon Oil Company ✓

3. Address and Telephone No.

P.O. Box 552, Midland, TX 79702 915/682/1626

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

UL "F", 1650' FNL & 1650' FWL  
Sec 35, T-21-S, R-23-E

5. Lease Designation and Serial No.

NM-06953

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

Federal C 35 1

9. API Well No.

30-015-10403

10. Field and Pool, or exploratory Area

Indian Basin Upper Penn

11. County or Parish, State

Eddy Co., NM

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

TYPE OF SUBMISSION

- ☒ Notice of Intent  
☐ Subsequent Report  
☐ Final Abandonment Notice

TYPE OF ACTION

- ☐ Abandonment  
☐ Recompletion  
☐ Plugging Back  
☒ Casing Repair  
☐ Altering Casing  
☐ Other \_\_\_\_\_  
☐ Change of Plans  
☐ New Construction  
☐ Non-Routine Fracturing  
☐ Water Shut-Off  
☐ Conversion to Injection  
☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

This well was tested for mechanical integrity on 1/24/96 and failed. Marathon intends to initiate work to repair the leak by 2/22/96. The casing leak will be isolated using a packer and RBP. The repair procedure will depend on the location of the leak. If the leak is high enough a joint may be backed of and replace. Otherwise the leak will cement squeezed. Upon repair of the leak the casing will be tested again for mechanical integrity.

RECEIVED

APR 01 1996

OIL CON. DIV.  
DIST. 2

RECEIVED  
FEB 5 9 16 AM '96  
CARLSB. AREA  
TERMS  
PAGE

RECEIVED

14. I hereby certify that the foregoing is true and correct

Signed

*Thomas M. LARA*

Title Advanced Engineering Tech.

Date 2/2/96

(This space for Federal or State office use)

Approved by

(ORIG. SCD.) JOE G. LARA

Title

PETROLEUM ENGINEER

Date

3/21/96

Conditions of approval, if any:

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.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.

Use "APPLICATION FOR PERMIT - " for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well

☐ Oil Well ☐ Gas Well ☒ Other

2. Name of Operator

Marathon Oil Company

3. Address and Telephone No.

P.O. Box 552, Midland, TX 79702 915/682-1626

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

1650' FNL & 1650' FWL  
SEC. 35, T-21-S, R-23-E

FORM APPROVED

Budget Bureau No. 1004-0135

Expires: March 31, 1993

5. Lease Designation and Serial No.

NM06353 NM06953<sup>R</sup>

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

INDIAN BASIN

8. Well Name and No.

FEDERAL "C" 1

9. API Well No.

30-015-10403

10. Field and Pool, or exploratory Area

11. County or Parish, State

EDDY COUNTY NM

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

TYPE OF SUBMISSION

- ☒ Notice of Intent  
☐ Subsequent Report  
☐ Final Abandonment Notice

TYPE OF ACTION

- ☐ Abandonment  
☒ Recompletion  
☐ Plugging Back  
☐ Casing Repair  
☐ Altering Casing  
☒ Other DEEPEN  
☐ Change of Plans  
☐ New Construction  
☐ Non-Routine Fracturing  
☐ Water Shut-Off  
☒ Conversion to Injection  
☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

WELL IS A PROPOSED SWD CONVERSION TO THE DEVONIAN FORMATION. AN APPLICATION TO INJECT FLUIDS HAS BEEN MADE WITH THE NMOC.

SEE ATTACHED FOR DETAIL.

RECEIVED

FEB 2 1996

OIL CON. DIV.  
DIST. 2

Approved  
By State

14. I hereby certify that the foregoing is true and correct

Signed

*W. J. Quinn* FOR DPN

Title DRILLING SUPERINTENDENT

Date 01/05/96

(This space for Federal or State office use)

Approved by *Orig. Signed by Adene Salameh*

Title

*Deputy State Engineer*

Date

*1/31/96*

Conditions of approval, if any:

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.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## APPLICATION FOR PERMIT TO DRILL OR DEEPEN

## 1a. TYPE OF WORK

DRILL ☐DEEPEN ☒

## b. TYPE OF WELL

OIL  
WELL ☐GAS  
WELL ☐OTHER ☒SINGLE  
ZONE ☐MULTIPLE  
ZONE ☐

## 2. NAME OF OPERATOR

Marathon Oil Company

## 3. ADDRESS AND TELEPHONE NO.

P.O. Box 552, Midland, TX 79702

915/682-1626

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

At surface

1650' FNL &amp; 1650' FWL

At proposed prod. zone

1650' FNL &amp; 1650' FWL

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

10 MILES WEST OF LAKEWOOD, NM

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any)

19470'

## 16. NO. OF ACRES IN LEASE

4160

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

NONE-SWD

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

SEE BELOW

## 19. PROPOSED DEPTH

11000'

## 20. ROTARY OR CABLE TOOLS

ROTARY

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

GL 3961 KB 3974

## 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
17 1/2"	13 3/8"	48	125'	250 SX CIRC
12 1/4"	9 5/8"	36	3340'	1630 SX CIRC
8 3/4"	7"	23,26	7850	200 SX
6 1/8"	4 1/2"	11,35	10000'	300 SX TOC @ 7250'

3 3/8" - OPEN HOLE TO 11,000'

WELL IS A PROPOSED SWD CONVERSION

\*CSG IN PLACE

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FEB 2 1996

OIL CON. DIV.  
DIST. 2

API# 30-015-10403

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

W.J. Duman FOR OPN

TITLE

DRILLING SUPERINTENDENT

DATE

01/18/96

(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:

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.

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

**Federal "C" #1  
Sec. 35, T-21-S, R-23-E  
Eddy County, New Mexico**

---

1. Existing Roads: Refer to Vicinity Lease Map.

- a. The existing well pad will be used for this recompletion. No additional pad area will be required.
- b. To reach the location from Carlsbad, New Mexico: Follow Hwy 285 North of Carlsbad 14 miles. Turn West on Queen's highway (NM 137) for 8.8 miles. Turn right on NM 401 for 5 miles, turn left on existing lease road for .8 miles. Turn left at "Y" and follow .75 miles, then right at "Y" and follow one mile into location.
- 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 lease roads. Construction plans will require blading and rolling the road and pad. No access road is required for this recompletion. The existing road enters the drilling pad on the southwest corner. The drilling location will have a 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 four gas wells operated by Marathon and Oryx within a one-mile radius of the proposed location. These locations have production facilities including separators, condensate storage tanks and location drips. Marathon and Oryx operates a variety of dehydrators, meter runs, and several gathering lines in the one-mile radius.
- b. New Facilities: The proposed location will have a separator and gas sales line. The actual equipment and its configuration will be determined after the well is completed.
- c. Rehabilitation of disturbed areas no longer needed for operations will be accomplished by grading, levelling and seeding as recommended.

5. Location and Type of Water Supply:

- a. Source: Indian Basin Gas Plant, SW/4, NE/4, Sec. 23, T-21-S, R-23-E.
- b. The water will be pumped thru 3" plastic line over existing roads to the well location. No new construction will be required on/along the water route.
- c. No water well will be drilled on this location.

6. Source of Construction Materials:

- a. No construction materials will be required.
- 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, a 75' x 75' workover pit will be lined and dug.
- 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 levelled. 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 toolpusher.

9. Wellsite Layout:

- a. The wellpad layout shows the existing drillsite layout.
- 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, levelling, and contouring are planned as soon as all pits have dried. Waste disposal and spoiled materials will be buried or hauled away immediately after drilling is completed. If production is obtained, the unused area will be restored as soon as possible.
- b. The soil banked material will be spread over the area. Revegetation will be accomplished by planting mixed grasses as per formula by BLM. Revegetation 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 levelling 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 drilling 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 revegetation 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 Archaeological Consultants Inc. of Roswell.
- b. General topography: Shown on Vicinity Lease Map. The terrain at the wellsite 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 4-1/2 miles.
- e. General location: Approximately 8.5 miles west of Lakewood, New Mexico.
- f. Drainage: Internal
- g. Surface Owner: The surface is owned by the Federal Government



A. P. D. (cont.)  
Thirteen Point Surface Use Plan  
Federal "C" #1

12. Operator Representatives:

David Nordt  
Drilling, Completion, & Workover Superintendent  
P. O. Box 552  
Midland, TX 79702  
800/351-1417  
915/682-1626

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.

1/8-96  
Date

W. J. Dumas FOR DPN  
D. P. Nordt

**DRILLING PROGRAM  
MARATHON OIL COMPANY**

**Federal "C" #1**

1. **Estimated KB Elevation: 3974'**

<b><u>FORMATION</u></b>	<b><u>-----TOP-----</u></b>		<b><u>-----BASE-----</u></b>		<b><u>FLUID CONTENT</u></b>
	<b><u>MEASURED</u></b>	<b><u>SUBSEA</u></b>	<b><u>MEASURED</u></b>	<b><u>SUBSEA</u></b>	
Morrow	9050'	-5076'	9482'	-5508'	water
Barnett	9482'	-5508'	9736'	-5762'	water
Mississippian	9736'	-5762'	10126'	-6152'	
Woodford	10126'	-6152'	10193'	-6214'	
Devonian	10193'	-6219'	11176'	-7202'	

<b><u>FORMATION</u></b>	<b><u>--EST PSIG</u></b>	<b><u>SBHP-- PPG EMW</u></b>	<b><u>EST SBHT DEG f</u></b>	<b><u>H2S PPM</u></b>	<b><u>--SIGNIFICANCE-- (obj, marker, etc.)</u></b>
Morrow	3656	9.4		500	marker
Barnett	3795	9.4			marker
Mississippian	3910	9.4			marker
Woodford	4072	9.4			
Devonian	3095	8.3			objective

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:**

7" Production: 11" 3M annular tested to 200#/2000#, 11" 3M dual rams, choke manifold and mud cross, tested to 300#/3000#.

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 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. Preventers and 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 drillstring connections in use will be available on rig floor.

**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.

A. P. D. (cont.)  
Thirteen Point Surface Use Plan  
Federal "C" #1

4. Casing and Cement Program:

<u>---DEPTH---</u> <u>FROM 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>
7250' 10000'	2750'	6.125"	4.5"	11.35	L-80	FL-45	New
10000' 11000'	1000'	3.875	Open Hole				

*The 4 1/2" liner will be run below the Woodford Shale to ensure that the ECP will isolate the Woodford from the Devonian.*

Centralizer Program:

4 1/2" Conventional centralizers middle of 1st joint, then every joint to 9000', and 1 centralizer every 4th joint thereafter to 7300'.

Cementing Summary

4 1/2" liner, 7250' - 10,000'

ECP tool depth - above landing collar

Slurry: Class "H" with 5% CSE + 1% CF-14, 3% WL-1P

<u>FROM</u> <u>DEPTH</u>	<u>TOC</u>	<u>HOLE</u> <u>SIZE</u>	<u>%</u> <u>EXCESS</u>	<u>YIELD</u>	<u>DENSITY</u>	<u>QTY</u> <u>SX</u>
10,000'	9200'	6.125	50	1.28	15.33	165
9,200'	7850'	ANN	50	1.28	15.33	65
7,850'	7250'	CSG	0	1.28	15.33	70

**A. P. D. (cont.)**  
**Thirteen Point Surface Use Plan**  
**Federal "C" #1**

5. Mud Program:

<u>---DEPTH---</u> <u>FROM TO</u>		<u>MUD TYPE</u>	<u>WEIGHT</u> <u>(PPG)</u>	<u>VIS</u>	<u>WL</u> <u>CC</u>	<u>ADDITIVES</u>	<u>VISUAL</u> <u>MONTR.</u>
7850'	10000'	Cut Brine	9.4	32-36	<20	Salt Gel, Starch, Caustic	Steel Pits
10000'	11000'	Freshwater	8.4	28-30	N/C	Gel	

*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	TD	8000'	
LDT/CNL/GR/CAL	TD	8000'	
MUD LOGGER	NONE		
NO CORES OR DST'S			

7. Abnormal Pressures, Temperatures or Potential Hazards:

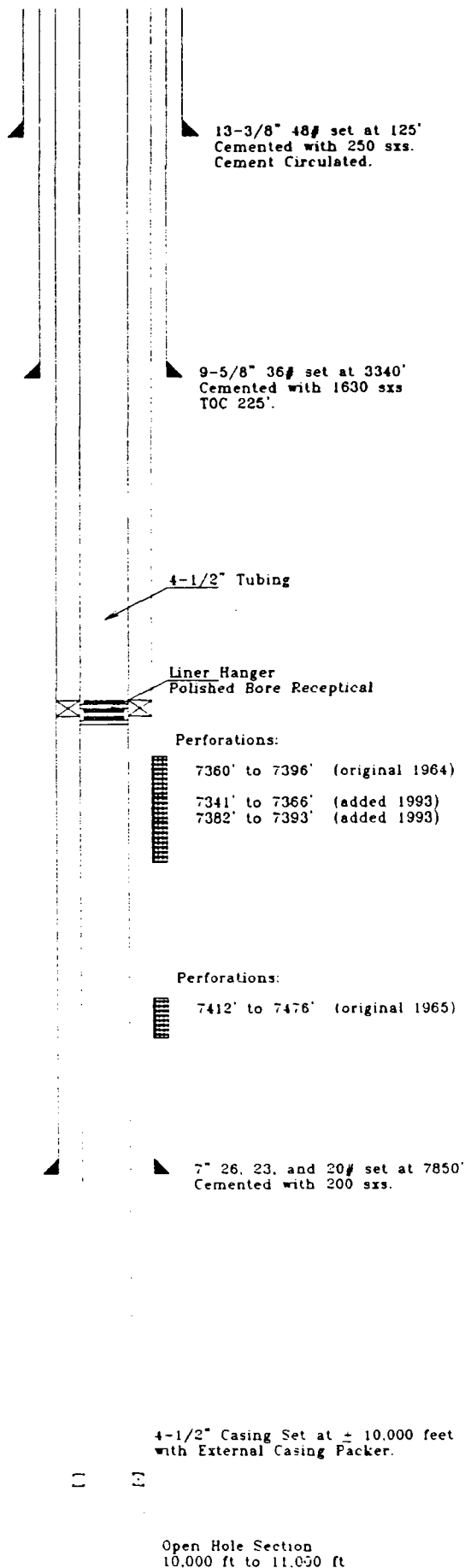
None anticipated. Possible H<sub>2</sub>S in Cisco & Upper penn. See H<sub>2</sub>S Drilling Operations Plan.

8. Other Information:

Anticipated Starting Date: As soon as possible.

Duration of Well: drilling - 18 days, completion - 10 days.

# PROPOSED SWD CONVERSION



WELL NAME:  
Federal "C" Well No. 1

LOCATION:  
1650' FNL & 1650' FWL  
Section 35, T-21-S, R-23-E  
Eddy County, NM

ELEVATIONS:  
GL: 3961'  
KB: 3974'

SURFACE CASING  
13-3/8" 48# set at 125'  
Cemented with 250 sxs.  
Cement circulated

INTERMEDIATE CASING  
9-5/8" 36# set at 3340'  
Cemented with 1630 sxs.  
Cement circulated. TOC 225'

LONG STRING  
7" 26, 23, & 20# set at 7850'  
Cemented with 200 sxs.

## P R O P O S E D

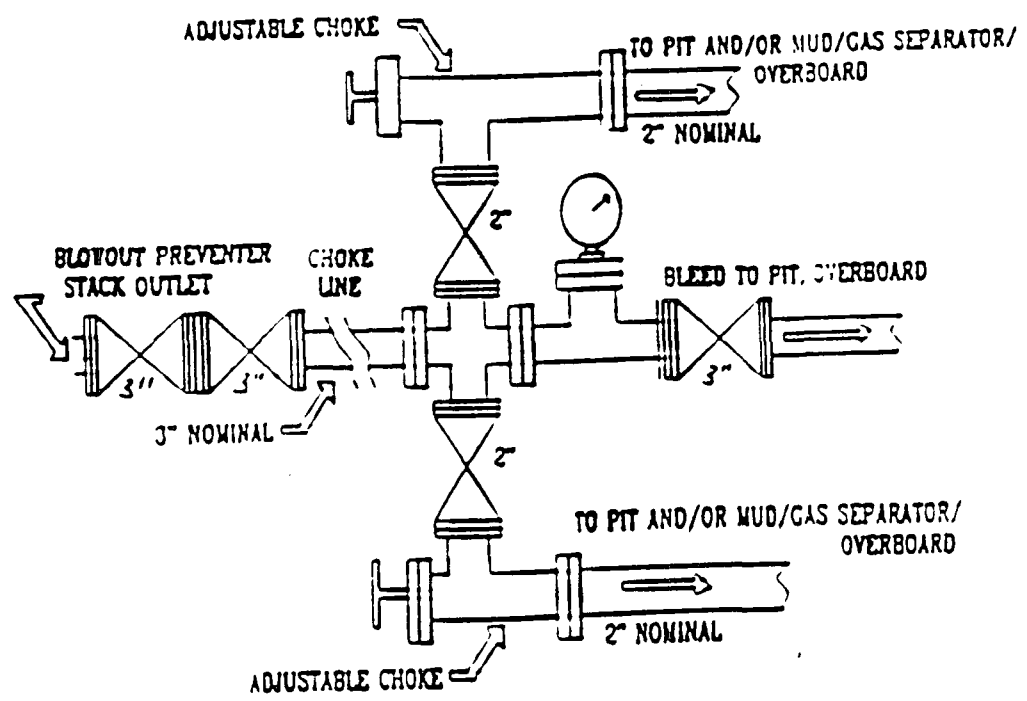
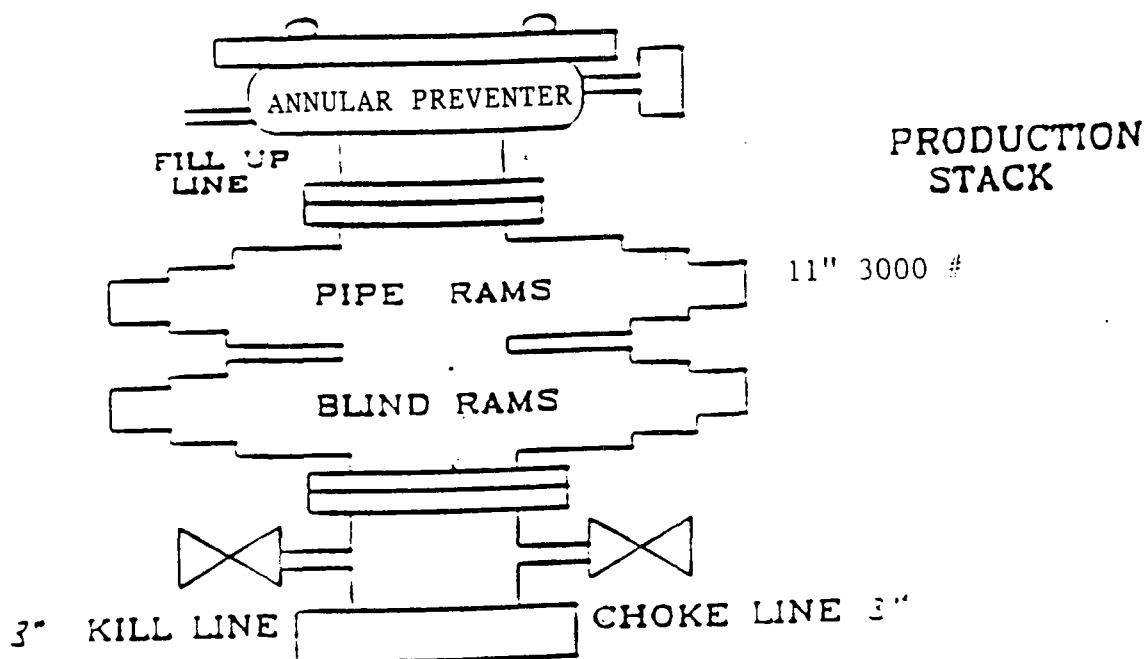
LINER  
4-1/2" 11.6# set from 7250' to 10,000'  
Cement with 300 sxs.  
Polished-Bore Receptical at 7250'.  
External Casing Packer and  
Cement Stage Tool at 10,000'.

TUBING  
4-1/2" tubing to 7250'.  
Lined with "Duoline-20"  
Fiberglass-Epoxy Lining

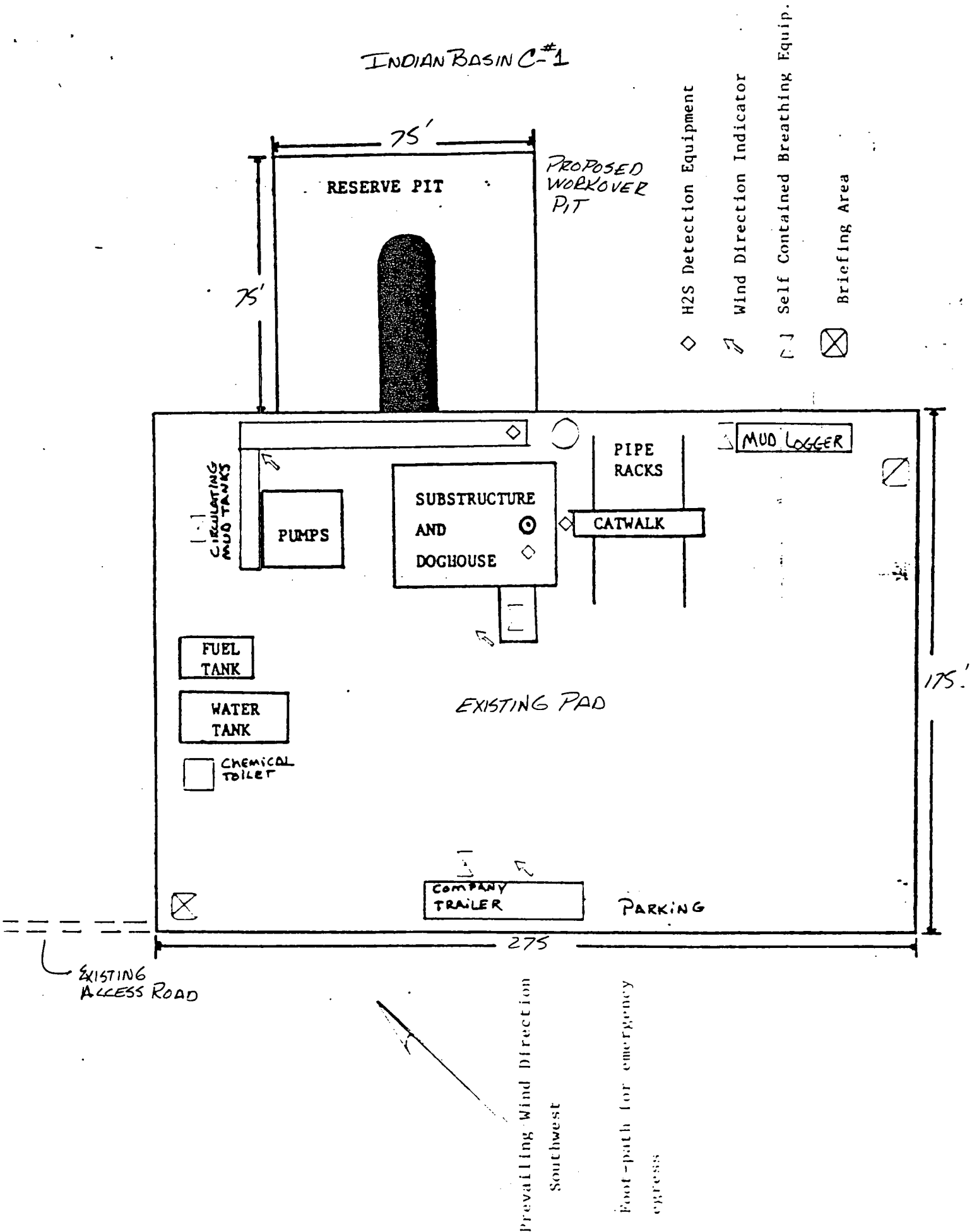
INJECTION INTERVAL  
Open Hole 10,000 ft to 11,00 ft  
Hole Size: 6-1/8"

PERFORATIONS  
Propose to cover perforations:  
7360' to 7396'  
7341' to 7366'  
7382' to 7393'  
7412' to 7476'  
with 4-1/2" liner and cement.

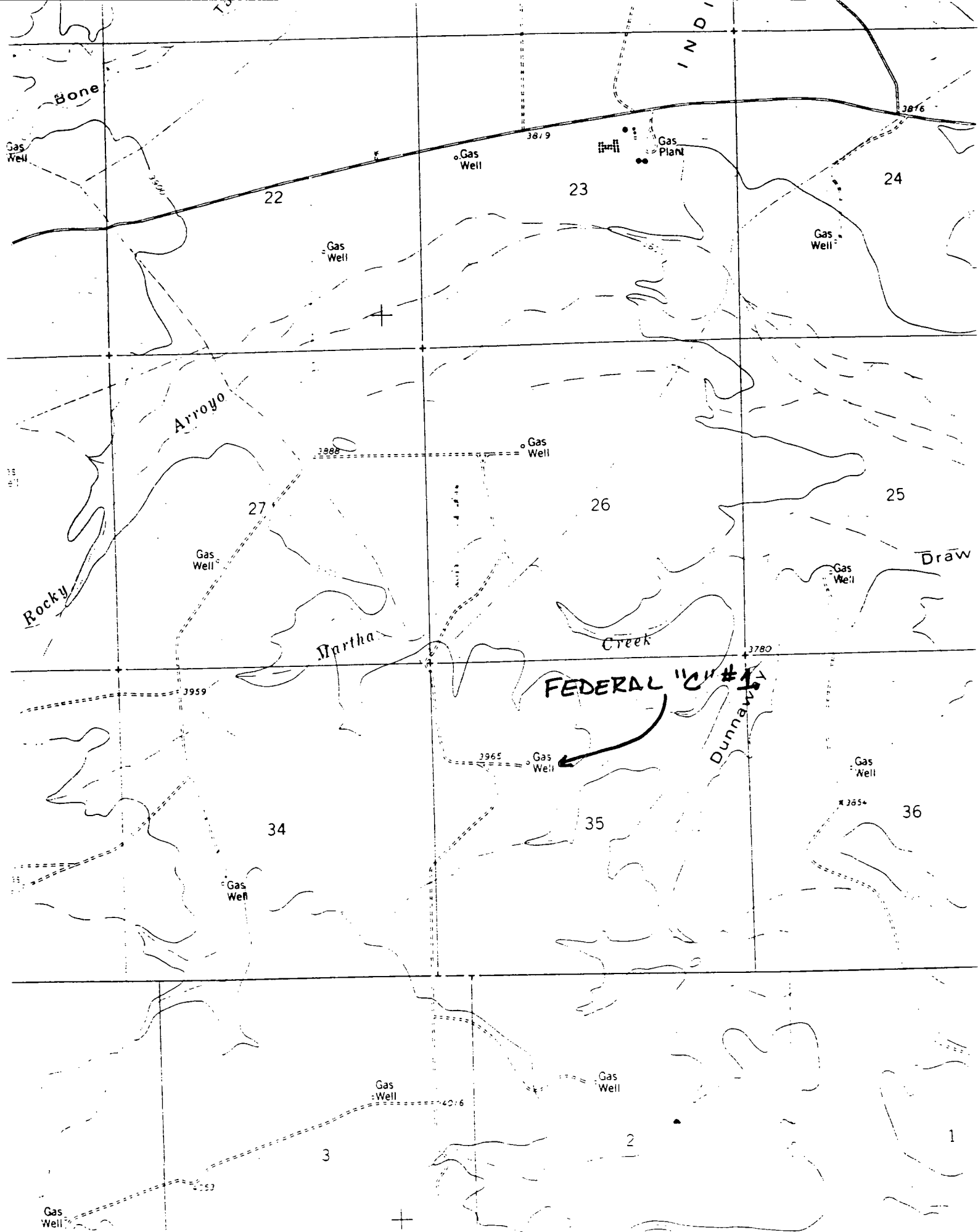




# INDIAN BASIN C-1







# MARATHON OIL COMPANY

## H2S DRILLING OPERATIONS PLAN

### *I. HYDROGEN SULFIDE TRAINING*

All contractors and subcontractors employed by Marathon Oil Company will receive or have received training from a qualified instructor within the last twelve months in the following areas prior to commencing drilling operations on this well.

1. The hazards and characteristics of hydrogen sulfide (H<sub>2</sub>S)
2. Safety precautions
3. Operations of safety equipment and life support systems

In addition, contractor supervisory personnel will be trained or prepared in the following areas:

1. The effect of H<sub>2</sub>S on metal components in the system. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
2. Corrective action and shut-down procedures when drilling or reworking a well, blowout prevention and well control procedures, if the nature of work performed involves these items.
3. The contents and requirements of the contingency plan when such plan is required.

All personnel will be required to carry documentation of the above training on their person.

### **II. H2S EQUIPMENT AND SYSTEMS**

#### **1. Safety Equipment**

The following safety equipment will be on location.

- A. Wind direction indicators as seen in attached diagram.
- B. Automatic H<sub>2</sub>S detection alarm equipment (both audio and visual).
- C. Clearly visible warning signs as seen on the attached diagram. Signs will use the words "POISON GAS" and "CAUTION" with a strong color contrast.
- D. Protective breathing equipment will be located in the dog house and at briefing areas as seen in the attached diagram.

## 2. WELL CONTROL SYSTEMS

### A. Blowout Prevention Equipment

Equipment includes but is not limited to:

- a. pipe rams to accomodate all pipe sizes
- b. blind rams
- c. choke manifold
- d. closing unit

Auxillary equipment added as appropriate includes:

- a. annular preventor \_\_\_\_\_
- b. rotating head \_\_\_\_\_
- c. mud- gas separator \_\_\_\_\_
- d. flare line and means of ignition \_\_\_\_\_
- e. remote operated choke \_\_\_\_\_

### B. Communication

The rig contractor will be required to have two-way communication capability. Marathon Oil Company will have either land-line or mobile telephone capabilities.

### C. Mud Program

The mud program has been designed to minimize the volume of H<sub>2</sub>S circulated to surface. Proper mud weight, safe drilling practices, and the use of H<sub>2</sub>S scavengers when appropriate will minimize hazards when penetrating H<sub>2</sub>S bearing zones.

D. Drill Stem Test intervals are as follows:

DST No. 1	_____ ft.	to	_____ ft.
DST No. 2	_____ ft.	to	_____ ft.
DST No. 3	_____ ft.	to	_____ ft.

Drill Stem Testing Safety Rules are attached.

## III. WELL SITE DIAGRAM

A complete well site diagram including the following information is attached.

1. Rig orientation
2. Terrain
3. Briefing areas
4. Ingress and egress
5. Pits and flare lines
6. Caution and danger signs
7. Wind indicators and prevailing wind direction

Form 3160-5  
(June 1990)

OIL CONSERVATION DIVISION

RECEIVED

OCS FEB 1996

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

NM OIL CONS COMMISSION  
Drawer DD  
Artesia, NM 88210

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

54

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT -" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well

☐ Oil Well ☐ Gas Well ☒ Other

2. Name of Operator

Marathon Oil Company

3. Address and Telephone No.

P.O. Box 552, Midland, TX 79702 915-682-1626

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

1650' FNL & 1650' FWL Section 25 35  
T-21-S, R-23-E, N.M.P.M. Eddy County, New Mexico

5. Lease Designation and Serial No.

NM-06953

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

Indian Basin Federal C1X1

9. API Well No.

30-015-10403

10. Field and Pool, or exploratory Area

11. County or Parish, State

Eddy NM

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

TYPE OF SUBMISSION

☒ Notice of Intent

☐ Subsequent Report

☐ Final Abandonment Notice

TYPE OF ACTION

☐ Abandonment

☐ Recompletion

☐ Plugging Back

☐ Casing Repair

☐ Altering Casing

☐ Other

☐ Change of Plans

☐ New Construction

☐ Non-Routine Fracturing

☐ Water Shut-Off

☒ Conversion to Injection

☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

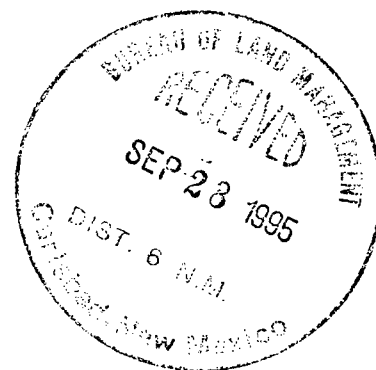
Marathon Oil Company proposes to convert Indian Basin Federal "C" Well No. 1 to a salt water injection well. The proposed well will be deepened and completed in the Devonian formation as per the attached State of New Mexico, Oil Conservation Division, Application for Authority to Inject.

RECEIVED

FEB 2 1996

OIL CON. DIV.  
DIST. 2

Subject to  
Like Approval  
By State



14. I hereby certify that the foregoing is true and correct

Signed [Signature]

Title Project Manager - IBAT

Date 27 Sept. 1995

(This space for Federal or State office use)

Approved by [Signature]

Title Petroleum Engineer

Date 11/17/96

Conditions of approval, if any:

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.

\* See Instruction on Reverse Side

## APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: ☐ Secondary Recovery ☐ Pressure Maintenance ☒ Disposal ☐ Storage  
Application qualifies for administrative approval: ☒ yes ☐ no

II. Operator: Marathon Oil Company

Address: P.O. Box 552 Midland, TX 79702-0552

Contact party: R.A. Biernbaum Phone: (915) 682-1626

III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.

- IV. Is this an expansion of an existing project? ☐ yes ☒ no  
If yes, give the Division order number authorizing the project \_\_\_\_\_

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

\* VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

\* VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

FEB 2 1990

\* X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.)

OIL CON. DIV.

\* XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Certification

I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: R.A. Biernbaum Title Manager, IBAT

Signature: \_\_\_\_\_ Date: 9/26/95

\* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal.

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate Division district office.

## III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

## XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;
- (3) the formation name and depth with expected maximum injection rates and pressures; and
- (4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

---

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

**Indian Basin Federal "C" Well No. 1  
Proposed Injection Well  
Attachments to C-108**

**Part III**

***Well Data***

See attached well data sheet for Indian Basin Federal "C" Well No. 1

**Part V**

***Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.***

See attached map.

**Part VI**

***Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.***

There are no wells within the "area of review" (one-half mile radius) which penetrate the proposed disposal interval.

**Part VII**

See attachment.

**Part VIII**

See attachment.

**Part IX**

***Describe the proposed stimulation program, if any.***

The proposed injection well will be completed open hole. The proposed open hole interval will be stimulated using 15% HCl acid (  $\pm$  6000 gallons).

**Indian Basin Federal "C" Well No. 1  
Proposed Injection Well  
Attachments to C-108**

**Part X**

***Attach appropriate logging and test data on the well.***

Forms C-103 and C-105, along with an inclination report and logs were filed on this well.

**Part XI**


***Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.***

There are no fresh water wells within a one mile radius of the proposed injection well.

**Part XII**

***Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.***

Marathon Oil Company, as Operator of the proposed injection well, has reviewed and examined available geologic and engineering data and finds no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.

  
\_\_\_\_\_  
R.A. Biernbaum

**Part XIII**

***Proof of notification***

See attachments



# PARTS V AND VI

## Marathon Oil Company

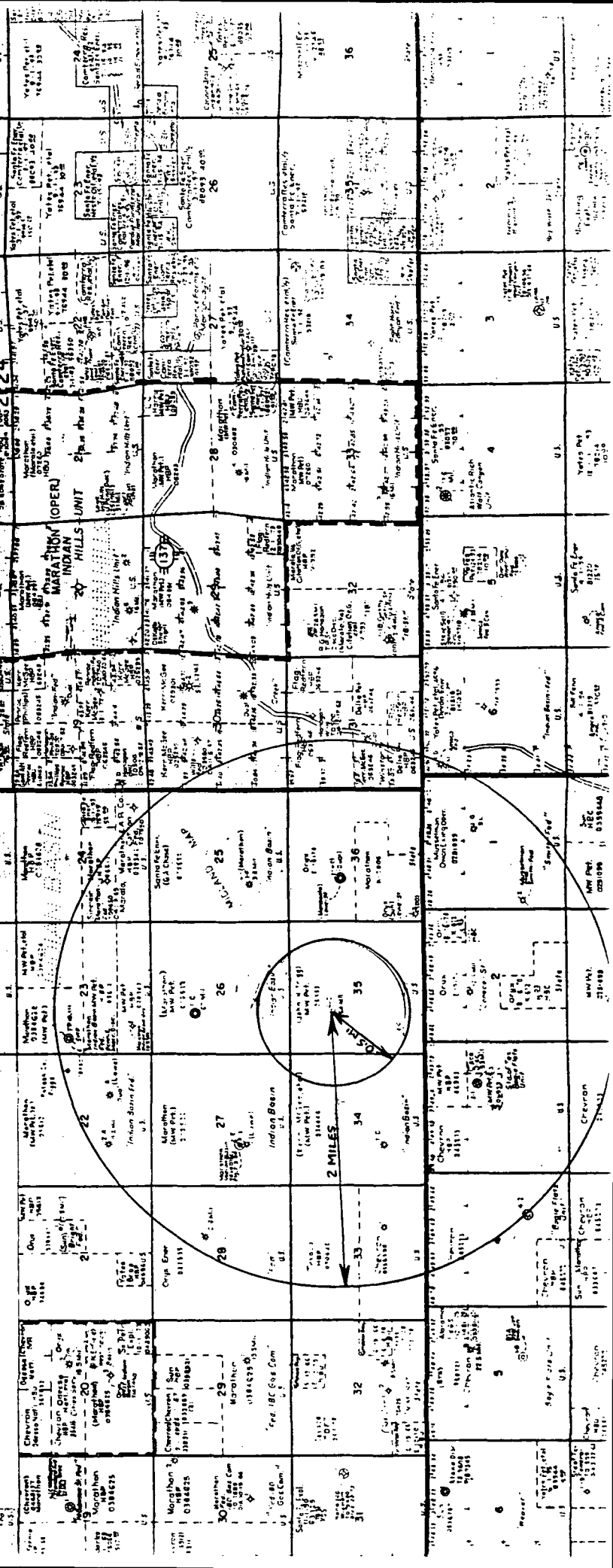
Proposed Injection Well

Federal "C" Well No. 1

Section 35

T-21-S, R-23-E, N.M.P.M.

Eddy County, New Mexico



**Indian Basin Federal "C" Well No. 1  
Proposed Injection Well  
Attachments to C-108  
(Part VII)**

**Proposed Operations**

- 1. *Proposed average and maximum daily rate and volume of fluids to be injected.***

Fluid:	Produced Water	
Average Rate:	7,500	BPD
Maximum Rate:	15,000	BPD

- 2. *Whether the system is open or closed.***

The proposed disposal system will be a closed system. Produced water will be gathered to a central location and will be pumped to the proposed injection well. The facility will be closed to "third-party" disposal operators.

- 3. *Proposed average and maximum injection pressure.***

Average Pressure:	1000	psi
Maximum Pressure:	2200	psi

- 4. *Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water.***

The source of the injection fluid will be produced water from offsetting leases.

Formations: Upper Penn  
Morrow

See attached water analysis for each of the above zones.

**Indian Basin Federal "C" Well No. 1  
Proposed Injection Well  
Attachments to C-108  
(Part VII)**

**Proposed Operations - continued**

5. *If injection is for disposal purpose into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.)*

Marathon Oil Company ran a DST test on North Indian Basin Well No. 1 (Section 9, T-21-S, R-23-E, Eddy County New Mexico) in 1963. The DST tested the interval 10,009 ft to 10,100 ft. Based on the DST, the following analysis was reported:

Specific Gravity	1.109	
pH	6.8	
Resistivity	.285	@ 94° F
Chlorides (Cl)	11,000	
Sulfates (SO4)	1500	
Alkalinity (HCO3)	610	
Calcium (Ca)	1080	
Magnesium (Mg)	775	
Iron (Fe)	20	
Sodium (Na)	5359	
Sulfides (H2S)	negl.	

## UPPER PENN



CABBAGE LABORATORIES, INC.

 3312 Bankhead Hwy  
 Midland, Texas 79701  
 (815) 689-7252  
 FAX (815) 689-0130

## WATER ANALYSIS REPORT

SAMPLE
 Oil Co. : Marathon Oil Company  
 Lease : Indian Hills State Com  
 Well No. : 8  
 Job No. : 9407010

 Sample Loc. : Separator Sight Glass  
 Date Sampled : 08-July-1994  
 Attention : Noel Garza  
 Analysis No. : 07010-1
ANALYSIS

MG/L      EQ. WT.      \*MEQ/L

1. pH 7.350
2. Specific Gravity 60/60 F. 1.009
3. CaCO<sub>3</sub> Saturation Index @ 80 F. +0.248  
@ 140 F. +0.948

Dissolved Gases

4. Hydrogen Sulfide 64.8
5. Carbon Dioxide Not Determined
6. Dissolved Oxygen Not Determined

Cations

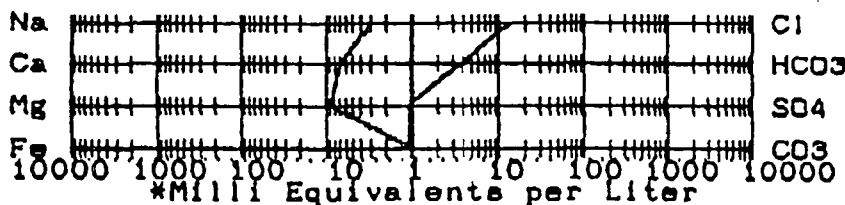
- |                                           |                |          |      |
|-------------------------------------------|----------------|----------|------|
| 7. Calcium (Ca <sup>++</sup> )            | 140            | / 20.1 = | 6.97 |
| 8. Magnesium (Mg <sup>++</sup> )          | 109            | / 12.2 = | 8.93 |
| 9. Sodium (Na <sup>+</sup> ) (Calculated) | 67             | / 23.0 = | 2.91 |
| 10. Barium (Ba <sup>++</sup> )            | Not Determined |          |      |

Anions

- |                                                  |            |          |       |
|--------------------------------------------------|------------|----------|-------|
| 11. Hydroxyl (OH <sup>-</sup> )                  | 0          | / 17.0 = | 0.00  |
| 12. Carbonate (CO <sub>3</sub> <sup>-</sup> )    | 0          | / 30.0 = | 0.00  |
| 13. Bicarbonate (HCO <sub>3</sub> <sup>-</sup> ) | 244        | / 61.1 = | 3.99  |
| 14. Sulfate (SO <sub>4</sub> <sup>-</sup> )      | 43         | / 48.8 = | 0.88  |
| 15. Chloride (Cl <sup>-</sup> )                  | 496        | / 35.5 = | 13.97 |
| 16. Total Dissolved Solids                       | 1,099      |          |       |
| 17. Total Iron (Fe)                              | 0          | / 18.2 = | 0.02  |
| 18. Total Hardness As CaCO <sub>3</sub>          | 801        |          |       |
| 19. Resistivity @ 75 F. (Calculated)             | 4.987 /cm. |          |       |

LOGARITHMIC WATER PATTERN

\*meq/L.


 Calculated Calcium Sulfate solubility in  
 this brine is 2,259 mg/L. at 90 F.
PROBABLE MINERAL COMPOSITION

COMPOUND	EQ. WT.	X *meq/L	= mg/L
Ca(HCO <sub>3</sub> ) <sub>2</sub>	81.04	3.99	32
CaSO <sub>4</sub>	68.07	0.88	6
CaCl <sub>2</sub>	55.50	2.08	11
Mg(HCO <sub>3</sub> ) <sub>2</sub>	73.17	0.00	
MgSO <sub>4</sub>	60.19	0.00	
MgCl <sub>2</sub>	47.62	8.93	42
NaHCO <sub>3</sub>	84.00	0.00	
NaSO <sub>4</sub>	71.03	0.00	
NaCl	58.46	2.95	17

Analyst

Remarks and Comments:

MORROW



# CAPROCK LABORATORIES, INC.

3312 Bankhead Hwy.  
Midland, Texas 79701  
(815) 889-7232  
FAX & (815) 889-0190

## WATER ANALYSIS REPORT

### SAMPLE

Oil Co. : Marathon Oil Company  
Lease : Winston Federal  
Well No. :  
Job No. : 9407010

Sample Loc. : Separator Sight Glass  
Date Sampled : 08-July-1994  
Attention : Noel Garza  
Analysis No. : 07010-2

### ANALYSIS

MG/L EQ. WT. \*MEQ/L

1. pH 6.550  
2. Specific Gravity 60/80 F. 1.009  
3. CaCO<sub>3</sub> Saturation Index @ 80 F. -0.303  
@ 140 F. +0.817

#### Dissolved Gases

4. Hydrogen Sulfide 10.8  
5. Carbon Dioxide Not Determined  
6. Dissolved Oxygen Not Determined

#### Cations

7. Calcium (Ca<sup>++</sup>) 5,451 / 20.1 = 271.19  
8. Magnesium (Mg<sup>++</sup>) 340 / 12.2 = 27.87  
9. Sodium (Na<sup>+</sup>) (Calculated) 32,955 / 23.0 = 1,432.83  
10. Barium (Ba<sup>++</sup>) Not Determined

#### Anions

11. Hydroxyl (OH<sup>-</sup>) 0 / 17.0 = 0.00  
12. Carbonate (CO<sub>3</sub><sup>-</sup>) 0 / 30.0 = 0.00  
13. Bicarbonate (HCO<sub>3</sub><sup>-</sup>) 134 / 61.1 = 2.19  
14. Sulfate (SO<sub>4</sub><sup>-</sup>) 540 / 46.6 = 11.07  
15. Chloride (Cl<sup>-</sup>) 60,979 / 35.5 = 1,717.72  
16. Total Dissolved Solids 100,399  
17. Total Iron (Fe) 38 / 18.2 = 2.06  
18. Total Hardness As CaCO<sub>3</sub> 15,013  
19. Resistivity @ 75 F. (Calculated) 0.092 /cm.

#### LOGARITHMIC WATER PATTERN

\*meq/L.



Calculated Calcium Sulfate solubility in this brine is 2,538 mg/L. at 90 F.

#### PROBABLE MINERAL COMPOSITION

COMPOUND	EQ. WT.	X	*meq/L	= mg/L.
Ca(HCO <sub>3</sub> ) <sub>2</sub>	81.04	2.19	178	
CaSO <sub>4</sub>	68.07	11.07	753	
CaCl <sub>2</sub>	55.50	257.94	14,315	
Mg(HCO <sub>3</sub> ) <sub>2</sub>	73.17	0.00	0	
MgSO <sub>4</sub>	60.19	0.00	0	
MgCl <sub>2</sub>	47.82	27.87	1,327	
NaHCO <sub>3</sub>	84.00	0.00	0	
NaSO <sub>4</sub>	71.03	0.00	0	
NaCl	58.46	1,431.91	83,710	

Analyst

Remarks and Comments:

**Indian Basin Federal "C" Well No. 1  
Proposed Injection Well  
Attachments to C-108  
(Part VIII)**

***Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.***

**Injection Zone**

Geological Name: Siluro - Devonian

Lithology: Dolomite / Limestone

Thickness:  $\pm 1000$  ft

Depth: 10,000 ft

**Drinking Water - Overlying**

Geological Name: Alluvian

Depth to bottom: 50 ft (?)

Geological Name: Lower Queen

Depth to bottom: 900 ft

Above data based upon publication: Geology and Ground Water Resources of Eddy County, New Mexico.

**Drinking Water - Underlying**

None

**Indian Basin Federal "C" Well No. 1  
Proposed Injection Well  
Attachments to C-108  
(Part XIII)**

**Offset Operators**

**Marathon Oil Company is the Operator of all leases within one-half mile of the proposed injection well.**

**Surface Owners**

1. United States of America  
Bureau of Land Management  
Carlsbad Resource Area  
P.O. Box 1778  
Carlsbad, New Mexico 88221

# Affidavit of Publication

No 16698

State of New Mexico,  
County of Eddy, ss.

Amy McKay

being first duly sworn, on oath says:

That she is Business Manager  
of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the state wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

July 25, 1995  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_

That the cost of publication is \$ 18.69,  
and that payment thereof has been made and will be assessed as court costs.

Amy McKay

Subscribed and sworn to before me this

26<sup>th</sup> day of July, 1995

Donna Crump

My commission expires 08/01/98

Notary Public

July 25, 1995

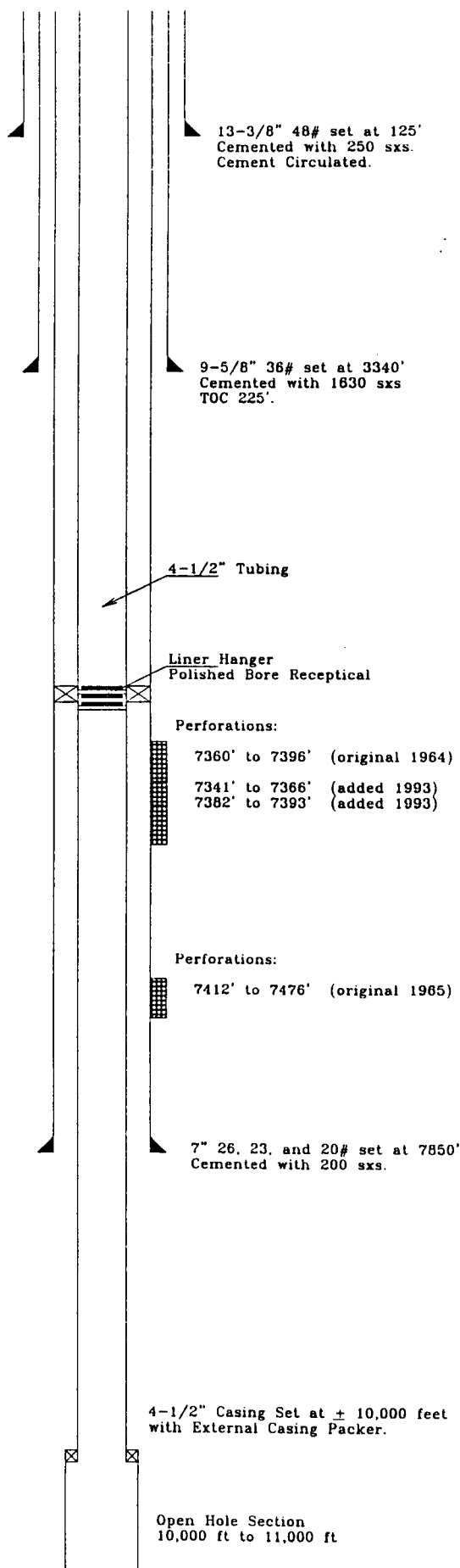
## PROPOSED INJECTION WELL

Marathon Oil Company, as Operator, proposes to deepen and convert the Indian Basin Federal "C" Well No.1 to water disposal service. The location of the well is 1650' FNL and 1650' FWL, Section 35, Township 21 South, Range 23 East, Eddy County New Mexico. The zone to be injected is

the Siluro-Devonian from 10,000 ft to 11,000 ft with a maximum injection rate of 15,000 BWP/D, and a maximum injection pressure of 2200 psig. Any interested party with objection or request of hearing should notify the Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico 87501 within fifteen (15) days of this notice. Any questions should be directed to R.A. Biernbaum of Marathon Oil Company at P.O. Box 552, Midland, Texas 79702 or telephone (915) 682-1626.



# PROPOSED SWD CONVERSION



## WELL NAME:

Federal "C" Well No. 1

## LOCATION:

1650' FNL & 1650' FWL  
Section 35, T-21-S, R-23-E  
Eddy County, NM

## ELEVATIONS:

GL: 3961'

KB: 3974'

## SURFACE CASING

13-3/8" 48# set at 125'  
Cemented with 250 sxs.  
Cement circulated

## INTERMEDIATE CASING

9-5/8" 36# set at 3340'  
Cemented with 1630 sxs.  
Cement circulated. TOC 225'

## LONG STRING

7" 26, 23, & 20# set at 7850'  
Cemented with 200 sxs.

## P R O P O S E D

## LINER

4-1/2" 11.6# set from 7250' to 10,000'  
Cement with 300 sxs.  
Polished-Bore Receptical at 7250'.  
External Casing Packer and  
Cement Stage Tool at 10,000'.

## TUBING

4-1/2" tubing to 7250'.  
Lined with "Duoline-20"  
Fiberglass-Epoxy Lining

## INJECTION INTERVAL

Open Hole 10,000 ft to 11,000 ft  
Hole Size: 6-1/8"

## PERFORATIONS

Propose to cover perforations:

7360' to 7396'

7341' to 7366'

7382' to 7393'

7412' to 7476'

with 4-1/2" liner and cement.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED  
JUL 21 1995

NM OIL CONS COM  
Drawer DD  
FORM APPROVED  
Bureau No. 1004-0135  
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.

Use "APPLICATION FOR PERMIT -" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

Marathon Oil Company

3. Address and Telephone No.

P.O. Box 552, Midland, TX 79702

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

UL "F" 1650' FNL & 1650' FWL  
SECTION 35, T-21-S, R-23-E

915-687-8324

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JUL 21 1995

5. Lease Designation and Serial No.  
NM-06953

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

Federal C 1

9. API Well No.

30-015-10403

10. Field and Pool, or exploratory Area

Indian Basin / Upper Penn

11. County or Parish, State

Eddy Co., NM

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

TYPE OF SUBMISSION

- ☐ Notice of Intent  
☒ Subsequent Report  
☐ Final Abandonment Notice

TYPE OF ACTION

- ☐ Abandonment  
☐ Recompletion  
☐ Plugging Back  
☐ Casing Repair  
☐ Altering Casing  
☐ Other Change of Operator  
☐ Change of Plans  
☐ New Construction  
☐ Non-Routine Fracturing  
☐ Water Shut-Off  
☐ Conversion to Injection  
☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

As required by 43 CFR 3100.0-5(a) and 43 CFR 3162.3 Marathon Oil Company is giving notification of a change of operator on the above referenced lease

Marathon Oil Company, as new operator accepts all applicable terms, conditions, stipulations and restrictions concerning operations conducted on the lease or portion of lease described.

Marathon Oil Company meets federal bonding requirements as follows (43 CFR 3104)

Bond Coverage: Nationwide  
BLM Bond File No.: WY2606

The effective date of this change was April 1, 1995.

ACCEPTED FOR RECORD  
J. Lara  
1995  
CARLSBAD, NEW MEXICO

RECEIVED  
JUN 19 9 42 AM '95

14. I hereby certify that the foregoing is true and correct

Signed

*[Signature]*

Title Advanced Engineering Tech.

Date 6/15/95

(This space for Federal or State office use)

Approved by

Title

Date

Conditions of approval, if any:

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.

1980, Hobbs, NM 88241-1980

District II  
811 S. 1st Street, Artesia, NM 88210-2834

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

District IV  
PO Box 2088, Santa Fe, NM 87504-2088

OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, NM 87504-2088

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Instructions on back  
Submit to Appropriate District Office  
5 Copies

RECEIVED 8 52 AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

1 Operator name and Address Marathon Oil Company P.O. Box 552 Midland, Texas 79702		2 OGRID Number 014021
4 API Number 30-015-10403	5 Pool Name Indian Basin Upper Penn	3 Reason for Filing Code Change of Operator
7 Property Code 16957-17976	8 Property Name Federal "C"	6 Pool Code 79040 7990
		9 Well Number 1

II. 10 Surface Location

UL or lot no. F	Section 35	Township 21-S	Range 23-E	Lot. Idn	Feet from the 1650	North/South Line North	Feet from the 1650	East/West line West	County Eddy
--------------------	---------------	------------------	---------------	----------	-----------------------	---------------------------	-----------------------	------------------------	----------------

11 Bottom Hole Location

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
12 Lse Code Federal	13 Producing Method Code Flowing	14 Gas Connection Date 1/26/66	15 C-129 Permit Number	16 C-129 Effective Date	17 C-129 Expiration Date				

III. Oil and Gas Transporters

18 Transporter OGRID	19 Transporter Name and Address	20 POD	21 O/G	22 POD ULSTR Location and Description
014035	Marathon Oil PO Box 552 Midland, Texas 79702	1958930	Gas	UL "F", Sec 35, T-21-S, R-23-E
734	Amoco 502 North West Ave Levelland, Texas 79336	1958910	Oil	UL "F", Sec 35, T-21-S, R-23-E

IV. Produced Water

23 POD 1958950	24 POD ULSTR Location and Description UL "F", Sec 35, T-21-S, R-23-E
-------------------	-------------------------------------------------------------------------

V. Well Completion Data

25 Spud Date	26 Ready Date	27 TD	28 PBD	29 Perforations
30 Hole Sie	31 Casing & Tubing Size	32 Depth Set	33 Sacks Cement	

VI. Well Test Data

34 Date New Oil	35 Gas Delivery Date	36 Test Date	37 Test Length	38 Tbg. Pressure	39 Csg. Pressure
40 Choke Size	41 Oil	42 Water	43 Gas	44 AOF	45 Test Method

46 I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief. Signature: <i>Thomas M. Penco for R.A. Biernabaum</i>		OIL CONSERVATION DIVISION Approved by: <i>Jim W. Gorman</i> Title: <i>District Supervisor</i> Approval Date: <i>11/8/95</i>	
Printed name: R. A. Biernabaum			
Title: Project Manager Indian Basin Asset Team			
Date: 10/09/95	Phone: 915/687/8422		
47 If this is a change of operator fill in the OGRID number and name of the previous operator OGRID 015422 MW PETROLEUM CORPORATION			
Previous Operator Signature: <i>Pamela M. Leighton</i>		Printed Name: PAMELA M. LEIGHTON	Title: CLERK Date: 11/8/95

WILDERNESS CONSERVATION DIVISION

RECEIVED

UNITED STATES

DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

'92 JAN 8

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DEC 23 1991

O. C. D.  
ARTESIA OFFICE

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

5. Lease Designation and Serial No.  
NM-06953

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

Federal C #1

9. API Well No.

10. Field and Pool, or Exploratory Area

Indian Basin Upper Penn

11. County or Parish, State

Eddy County, New Mexico

# SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

MW PETROLEUM CORPORATION

3. Address and Telephone No.

P. O. Box 4628, Houston, Tx. 77210

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

1650 FNL, 1650' FWL, Section 35-21 S-23 E

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

### TYPE OF SUBMISSION

- ☒ Notice of Intent  
☐ Subsequent Report  
☐ Final Abandonment Notice

### TYPE OF ACTION

- ☐ Abandonment  
☐ Recompletion  
☐ Plugging Back  
☐ Casing Repair  
☐ Altering Casing  
☐ Other \_\_\_\_\_
- ☐ Change of Plans  
☒ New Construction  
☐ Non-Routine Fracturing  
☐ Water Shut-Off  
☐ Conversion to Injection  
☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

To install Ajax DPL-300, Integral Gas Compressor on existing Production Pad. Unit is mounted on a heavy duty oil field type skid with dimensions on 18' wide x 16' long. Installation is anticipated on or about December 10, 1991.

RECEIVED  
NOV 25 10 39 AM '91  
CARTER  
AREA

14. I hereby certify that the foregoing is true and correct

Signed Jim Wall

Title Senior Production Engineer

Date 11/19/91

(This space for Federal or State office use)

Approved by \_\_\_\_\_

Conditions of approval, if any:

Title \_\_\_\_\_

Date 12-26-91

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

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DEC - 3 1991

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

REQUEST FOR ALLOWABLE AND AUTHORIZATION  
TO TRANSPORT OIL AND NATURAL GAS

O. C. D.

I.

Operator MW Petroleum Corporation	Well API No. 30-015-10403
Address 1700 Lincoln St., Suite 1900, Denver, Co. 80203	
Reason(s) for Filing (Check proper box) New Well <input type="checkbox"/> Change in Transporter of: Recompletion <input type="checkbox"/> Oil <input type="checkbox"/> Dry Gas <input type="checkbox"/> Change in Operator <input checked="" type="checkbox"/> Casinghead Gas <input type="checkbox"/> Condensate <input type="checkbox"/>	
If change of operator give name and address of previous operator Amoco Production Company, P.O. Box 591, Tulsa, Ok 74102	

II. DESCRIPTION OF WELL AND LEASE

Lease Name Federal C	Well No. 1	Pool Name, Including Formation Indian Basin - Upper Penn	Kind of Lease State (Federal) or Fee	Lease No. NM 06953
Location Unit Letter F : 1650 Feet From The North Line and 1650 Feet From The West Line Section 35 Township 21-S Range 23-E, NMPM, Eddy County				

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input type="checkbox"/> or Condensate <input checked="" type="checkbox"/> Scurlock Permian Corporation	Address (Give address to which approved copy of this form is to be sent) P.O. Box 4648, Houston, Tx 77210					
Name of Authorized Transporter of Casinghead Gas <input type="checkbox"/> or Dry Gas <input checked="" type="checkbox"/> Marathon Oil Company	Address (Give address to which approved copy of this form is to be sent) P.O. Box 552, Midland, Tx 79702					
If well produces oil or liquids, give location of tanks.	Unit F	Sec. 35	Twp. 21	Rge. 23	Is gas actually connected? Yes	When? 1/26/66

If this production is commingled with that from any other lease or pool, give commingling order number:

IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v	Diff Res'v
Date Spudded	Date Compl. Ready to Prod.		Total Depth			P.B.T.D.		
Elevations (DF, RKB, RT, GR, etc.)	Name of Producing Formation		Top Oil/Gas Pay			Tubing Depth		
Perforations						Depth Casing Shoe		

TUBING, CASING AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT

V. TEST DATA AND REQUEST FOR ALLOWABLE

OIL WELL (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours.)

Date First New Oil Run To Tank	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil - Bbls.	Water - Bbls.	Gas- MCF

GAS WELL

Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pilot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

VI. OPERATOR CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature  
Barbara A. Ellis Operations Clerk  
Printed Name  
12/2/91  
Date  
(713) 953-5364  
Telephone No.

OIL CONSERVATION DIVISION

DEC 5 1991

Date Approved  
By Mike Williams  
Title SUPERVISOR, DISTRICT II

INSTRUCTIONS: This form is to be filed in compliance with Rule 1104

- 1) Request for allowable for newly drilled or deepened well must be accompanied by tabulation of deviation tests taken in accordance with Rule 111.
- 2) All sections of this form must be filled out for allowable on new and recompleted wells.
- 3) Fill out only Sections I, II, III, and VI for changes of operator, well name or number, transporter, or other such changes.
- 4) Separate Form C-104 must be filed for each pool in multiply completed wells.

**WRS COMPLETION REPORT**COMPLETIONS SEC 35 TWP 21S RGE 23E  
PI# 30-T-0014 08/09/96 30-015-10403-0001 PAGE 1

NMEX EDDY \* 1650FNL 1650FWL SEC

STATE COUNTY FOOTAGE SPOT  
MARATHON OIL D D DG

OPERATOR WELL CLASS INIT FIN

1 FEDERAL 'C' 35

WELL NO. LEASE NAME  
3961GR INDIAN BASINOPER ELEV FIELD/POOL/AREA  
API 30-015-10403-0001

LEASE NO. PERMIT OR WELL I.D. NO.

04/23/1996 05/22/1996 ROTARY VERT GAS-WO

SPUD DATE COMP. DATE TYPE TOOL HOLE TYPE STATUS

7850 MCVAY DRLG 4

PROJ. DEPTH PROJ. FORM CONTRACTOR

DTD 10819 PB 10019 OTD 7850 FM/TD DEVONIAN

DRILLERS T.D. LOG T.D. PLUG BACK TD OLD T.D. FORM T.D.

**LOCATION DESCRIPTION**

26 MI W CARLSBAD, NM

**CASING/LINER DATA**

LNR 4 1/2 7610-10115 W/ 345S

**INITIAL POTENTIAL**

IPF 522 MCFD 42BW 32/64CK 24HRS

MORROW PERF 9288- 9296 9326- 9338 9288- 9338 GROSS

PERF 9288- 9296 9326- 9338

ACID 9288- 9338 11125GALS

TP 110 CP 0

GOR- DRY

P/L CON NOT RPTD

FIELD /RESERVOIR  
/PENNSYLVANIAN U

GAS GTY-NOT RPTD

TYPE FORMATION LTH TOP DEPTH/SUB BSE DEPTH/SUB

LOG DEVONIAN 10100 -6139

SUBSEA MEASUREMENTS FROM GR

**PRODUCTION TEST DATA**

CISCO PERF 7360- 7476

PERF 7360- 7476 7360- 7476

CASD 7360- 7476

CONTINUED

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**Petroleum Information  
Corporation**PI-WRS-GCT  
Form No 187

COMPLETIONS  
PI# 30-T-0014 08/09/96 SEC 35 TWP 21S RGE 23E  
30-015-10403-0001 PAGE 2

MARATHON OIL  
1

FEDERAL 'C' 35

D D DG

LOGS AND SURVEYS /INTERVAL, TYPE/  
LOGS 7200-10812 BHC 7600-10019 GR 7600-10019 CBL  
LOGS 7600-10019 CCL

DRILLING PROGRESS DETAILS

MARATHON OIL  
BOX 552  
MIDLAND, TX 79702  
915-682-1626  
OWWO: OLD INFO: FORMERLY TRIGG JOHN H 1  
FEDERAL 'CJ'. ELEV 3961 GR. SPUD 3/9/64. 13 3/8  
@ 125 W/250 SX, 9 5/8 @ 3340 W/1630 SX, 7 @  
7850 W/200 SX. LOG TOPS: WOLFCAMP 6320, CISCO  
7341, STRAWN 7820. OTD 7850. PB 7802. COMP  
4/25/64. IPF 38 BOPD. PROD ZONE: CISCO  
7360-7476.  
04/18 LOC/1996/  
08/07 DEEPENED 7850 TO 10819, RAN 4 1/2 LNR  
08/07 10819 TD, PB 10019  
COMP 5/22/96, IPF 522 MCFGPD (DRY)  
42 BWPD, 32/64 CK, GAS GTY  
(NR), FTP 110, FCP 0  
PROD ZONE - MORROW 9288-9338 (GROSS)  
NO CORES OR TESTS  
FIRST REPORT & COMPLETION

**WRS COMPLETION REPORT**COMPLETIONS SEC 35 TWP 21S RGE 23E  
PI# 30-T-0011 08/29/96 30-015-10403-0002 PAGE 1

NMEX EDDY \* 1650FNL 1650FWL SEC  
STATE COUNTY FOOTAGE SPOT  
MARATHON OIL D X DG  
OPERATOR WELL CLASS INIT FIN  
1 FEDERAL 'C' 35  
WELL NO. LEASE NAME  
3961GR INDIAN BASIN  
OPER ELEV FIELD/POOL/AREA  
API 30-015-10403-0002  
LEASE NO. PERMIT OR WELL I.D. NO.  
06/06/1996 07/19/1996 WO-UNIT VERT GAS-WO  
SPUD DATE COMP. DATE TYPE TOOL HOLE TYPE STATUS  
10019 MORROW NOT RPTD  
PROJ. DEPTH PROJ. FORM CONTRACTOR  
DTD 10819 PB 10019 OTD 10819 FM/TD DEVONIAN  
DRILLERS T.D. LOG T.D. PLUG BACK TO OLD T.D. FORM T.D.

**LOCATION DESCRIPTION**

26 MI W CARLSBAD, NM

**TUBING DATA**

TBG 2 7/8 AT 9192

**INITIAL POTENTIAL**

IPF 1089 MCFD 65BW 20/64CK 24HRS  
MORROW PERF 9288- 9416 GROSS  
PERF 9288- 9338 9384- 9396 9402- 9416  
ACFR 9288- 9416 9000GALS  
ACID 9288- 9416 6300GALS  
7 1/2% HCL  
ACID 9288- 9416 4725GALS  
10% HCL  
ACHL 9288- 9415 1575GALS  
TP 540  
GOR-DRY  
FCP: PKR  
GAS GTY-NR  
PERFS 9288-9338 FROM PREVIOUS REENTRY

**DRILLING PROGRESS DETAILS**

CONTINUED

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**Petroleum Information  
Corporation**PI-WRS-GST  
Form No 187



COMPLETIONS  
PI# 30-T-0011 08/29/96 SEC 35 TWP 21S RGE 23E  
30-015-10403-0002 PAGE 2

D X DG

MARATHON OIL  
1

FEDERAL 'C' 35

DRILLING PROGRESS DETAILS

MARATHON OIL  
BOX 552  
MIDLAND, TX 79702  
915-682-1626

OWWO: OLD INFO: FORMELY MARATHON OIL, 1  
FEDERAL 'C' 35. ELEV 3961 GR. SPUD 4/26/96.  
13 3/8 @ 125 W/250 SX, 9 5/8 @ 3340 W/1630  
SX, 7 @ 7850 W/200 SX, 4 1/2 LNR 7610-10115  
W/345 SX. LOG TOP: DEVONIAN 10100. OTD 10819.  
PB 10019. COMP 5/22/96. IPF 522 MCFGPD, 42  
BWP. PROD ZONE: MORROW 9288-9338.

06/01  
08/26

LOC/1996/  
10819 TD, PB 10019  
COMP 7/19/96, IPF 1089 MCFGPD, (DRY),  
65 BWP, GAS GTY (NR),  
FTP 540, FCP PKR  
PROD ZONE - MORROW 9288-9416 (GROSS)  
FIRST REPORT & COMPLETION

**WRS COMPLETION REPORT**

COMPLETIONS SEC 35 TWP 21S RGE 23E  
30-T-0039 06/13/97 30-015-10403-0003 PAGE 1

NMEX EDDY \* 1650FNL 1650FWL SEC  
STATE COUNTY FOOTAGE SPOT  
MARATHON OIL D X DG  
OPERATOR WELL CLASS INIT FIN  
1 FEDERAL 'C' 35  
WELL NO. LEASE NAME  
3961GR INDIAN BASIN  
OPER ELEV FIELD/POOL/AREA  
API 30-015-10403-0003  
LEASE NO. PERMIT OR WELL I.D. NO.  
02/13/1997 02/20/1997 WO-UNIT VERT GAS-WO  
SPUD DATE COMP. DATE TYPE TOOL HOLE TYPE STATUS  
9200 PNSLVN U NOT RPTD  
PROJ. DEPTH PROJ. FORM CONTRACTOR  
DTD 10819 PB 9200 OTD 10819 FM/TD DEVONIAN  
DRILLERS T.D. LOG T.D. PLUG BACK TD OLD T.D. FORM T.D.

**LOCATION DESCRIPTION**

26 MI W CARLSBAD, NM

**TUBING DATA**

TBG 2 7/8 AT 8248

**INITIAL POTENTIAL**

IPF 3422 MCFD 1HRS  
PNSLVN U PERF W/ 6/FT 8350- 8364  
PERF 8350- 8364  
SITP 2665  
@ 8350FT BHT 159F  
939MCFD TP 2548 BHFP 2563  
1309MCFD TP 2461 BHFP 2477  
2560MCFD TP 2085 BHFP 2115  
3422MCFD TP 1680 BHFP 723  
BH 2678 FPCAOF 4900MCFD  
GOR DRY

GAS GTY .619  
P/L CON NOT RPTD  
1ST THRU 4TH TEST IN 60 MINS

**PRODUCTION TEST DATA**

MORROW PERF 9288- 9416  
PERF 9288- 9416  
BRPG @ 9200 9288- 9416

CONTINUED IC# 300157041497

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**Petroleum Information /  
Dwights LLC**PI/D-WRS-GET  
Form No 187

COMPLETIONS  
30-T-0039 06/13/97 SEC 35 TWP 21S RGE 23E  
30-015-10403-0003 PAGE 2

MARATHON OIL

1

FEDERAL 'C' 35

D X DG

DRILLING PROGRESS DETAILS

MARATHON OIL  
BOX 552  
MIDLAND, TX 79702  
915-682-1626

OWWO: OLD INFO: FORMERLY MARATHON OIL, 1  
1 FEDERAL 'C' 35. ELEV 3961 GR. SPUD 6/6/96.  
13 3/8 @ 125 W/250 SX, 9 5/8 @ 3340 W/1630 SX,  
7 @ 7850 W/200 SX, 4 1/2 LNR 7610-10115  
W/345 SX. OTD 10819. PB 10019. COMP 7/19/96.  
IPF 1089 MCFGPD. PROD ZONE: MORROW 9288-9416.

02/10  
06/11

LOC/1997/  
10819 TD, PB 9200  
COMP 2/20/97, IPF 3422 MCFGPD, CAOF 4900,  
(DRY), GAS GTY .619, SITP  
2665, BHSIP 2678  
PROD ZONE - PENNSYLVANIAN U 8350-8364  
FIRST REPORT & COMPLETION

Petroleum Information  
Corporation  
GEO-FICHE

21S-23E-35-06 (SE NW)  
NEW MEXICO NM

WELL: FEDERAL C 1  
OPER: PAN AMERICAN  
CNTY: EDDY

API: 30-015-00000  
ISSUE: A07/87  
CARD: 1