



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,

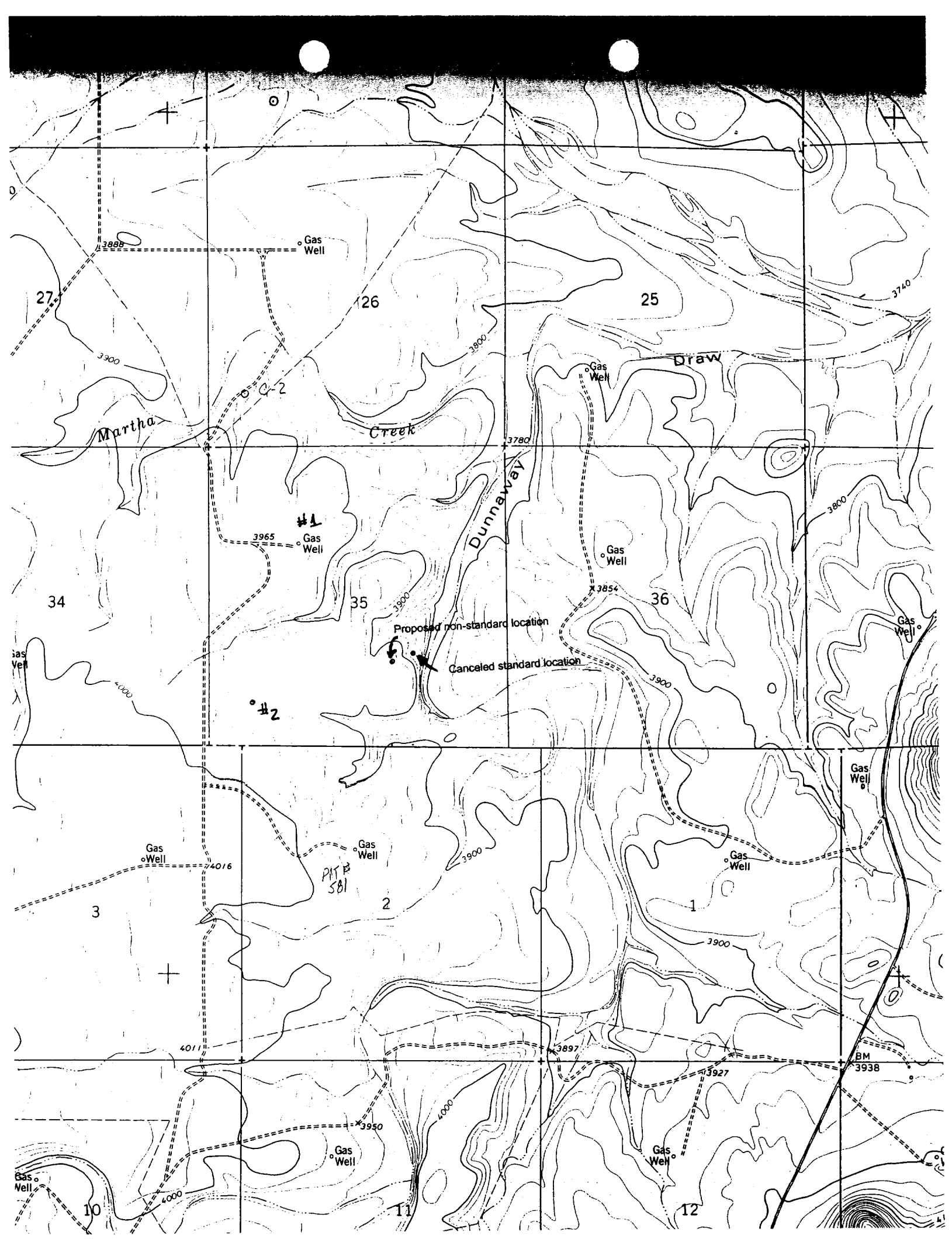
Enclosed for your review is Federal form 3160-3, Application for Permit to Drill for the above referenced well. Marathon Oil Company proposes to drill this well to test the Indian Basin-Upper Pennsylvanian Gas Pool which requires wells to be located no closer than 1650 feet from the outer boundary of 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 in cursive script, appearing to read 'Walter Duease', followed by a horizontal line.
Walter Duease



R 23 E



INDIAN BASIN UNIT

FED. C-35 #3



**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,

Walter J. Ducease

Walter J. Ducease
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: 

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: _____

UNIT 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

915/687-8356

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 drg. unit line, if any)

1500'

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

2500'

16. NO. OF ACRES IN LEASE

4680

17. NO. OF ACRES ASSIGNED
TO THIS WELL

640

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



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 FEDERAL "C" 35	Well Number 3
OGRID No. 14021	Operator Name MARATHON OIL COMPANY	Elevation 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 640	Joint or Infill	Consolidation Code	Order No.						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief. Signature R. J. Longmire Printed Name Drilling Superintendent Title 3/4/99 Date
	SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my belief. MARCH 1, 1999 Date Surveyed CDG Signature of Gary Edson Professional Surveyor 3-02-99 Certificate No. RONALD EDSON 3239 GARY EDSON 12641 REGISTERED PROFESSIONAL SURVEYOR

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.

3/4/99
Date

R. J. Longmire
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, H₂S 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 ₂ , 1/4# cello
9.625"			T	200	"C" Neat	1.32	14.8	Surf	2% CaCl ₂ , 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 ₂

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	ADDITIVES	VISUAL
FROM TO	(PPG)	CC		MONTR.
0 1200'	N/A	N/A	Soap for mist	Reserve
1200' 5000'	8.5	28-32	Gel, caustic, H ₂ S Scavenger	Reserve
5000' 7000'	9.0	32-36	Saturated brine	Reserve
7000' 7800'	9.0	32-36	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 P.

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			

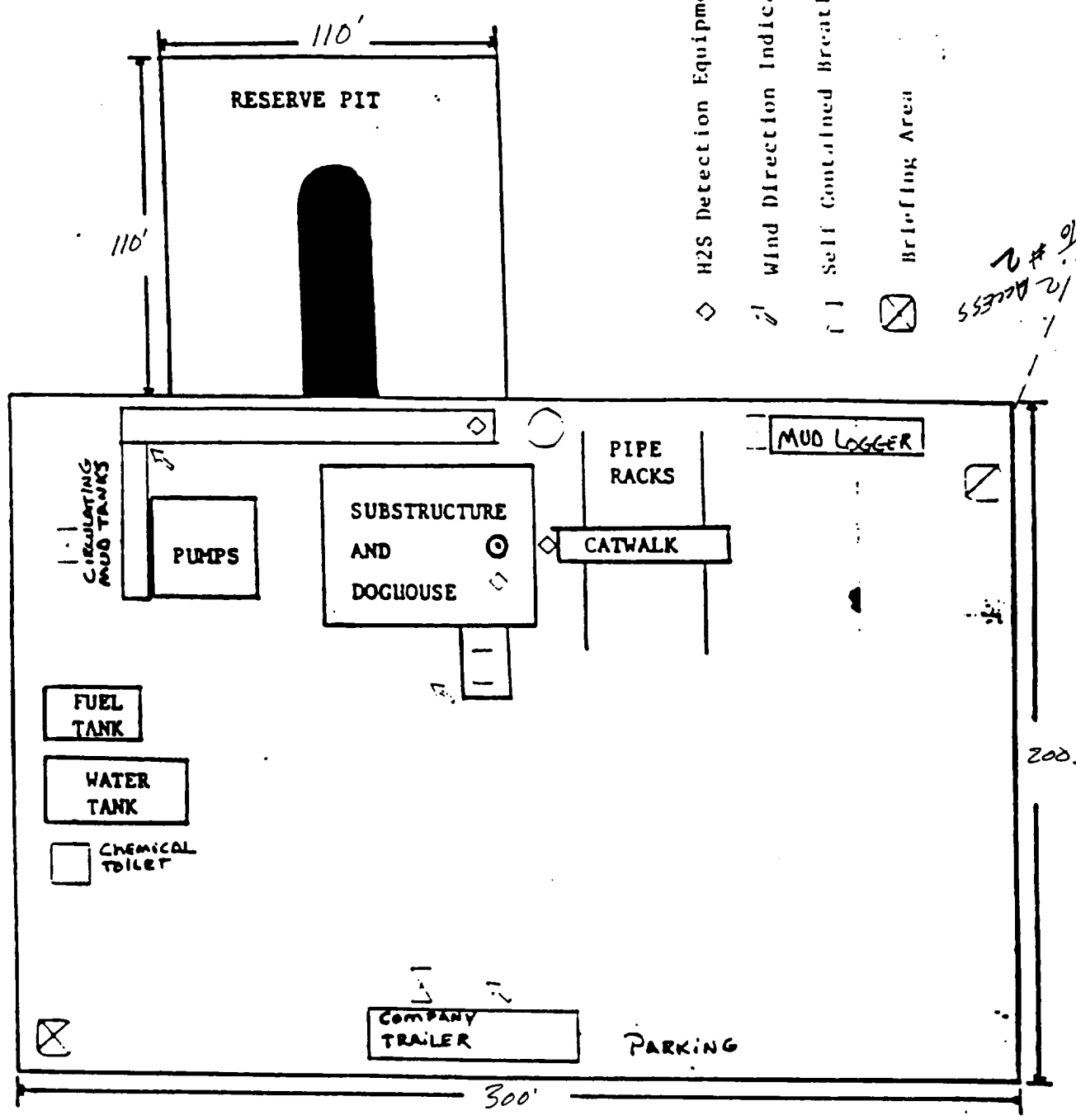
7. Abnormal Pressures, Temperatures or Potential Hazards:

None anticipated. Possible H₂S in Cisco & Upper Penn. See H₂S Drilling Operations Plan.

8. Other Information:

Anticipated Starting Date: As soon as possible.

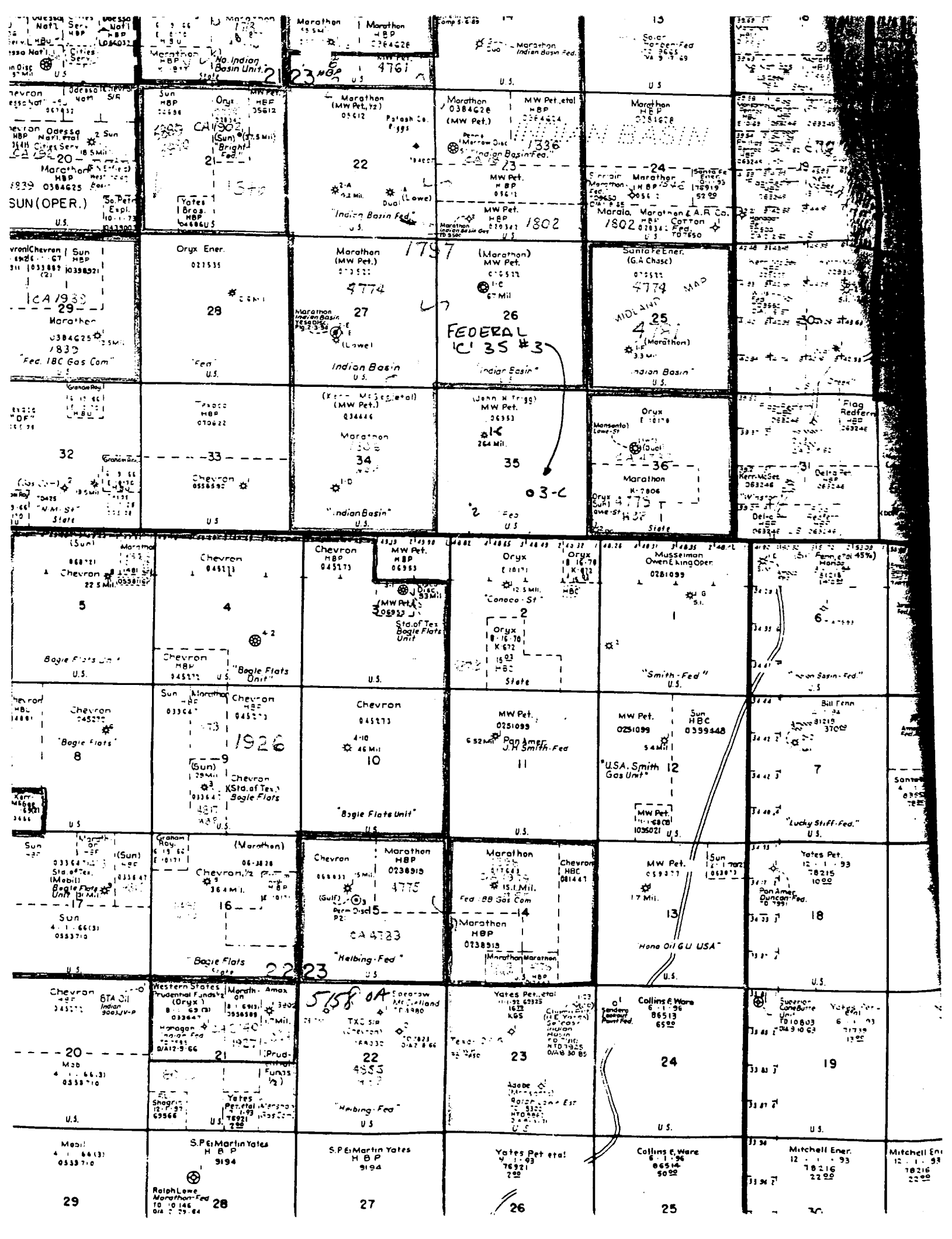
Duration of Well: drilling - 25 days, completion - 10 days.



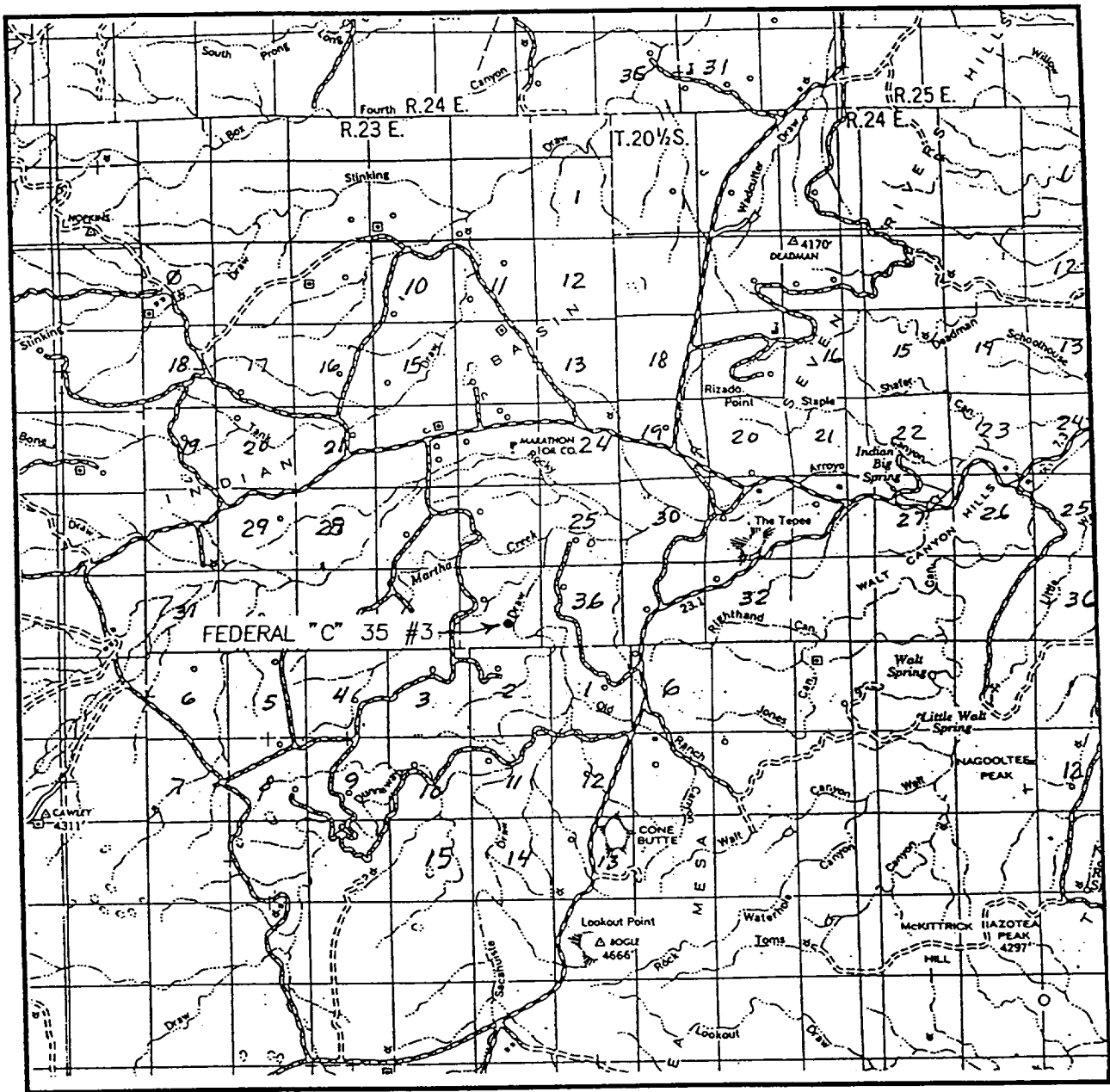
Prevailing Wind Direction
Southwest

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

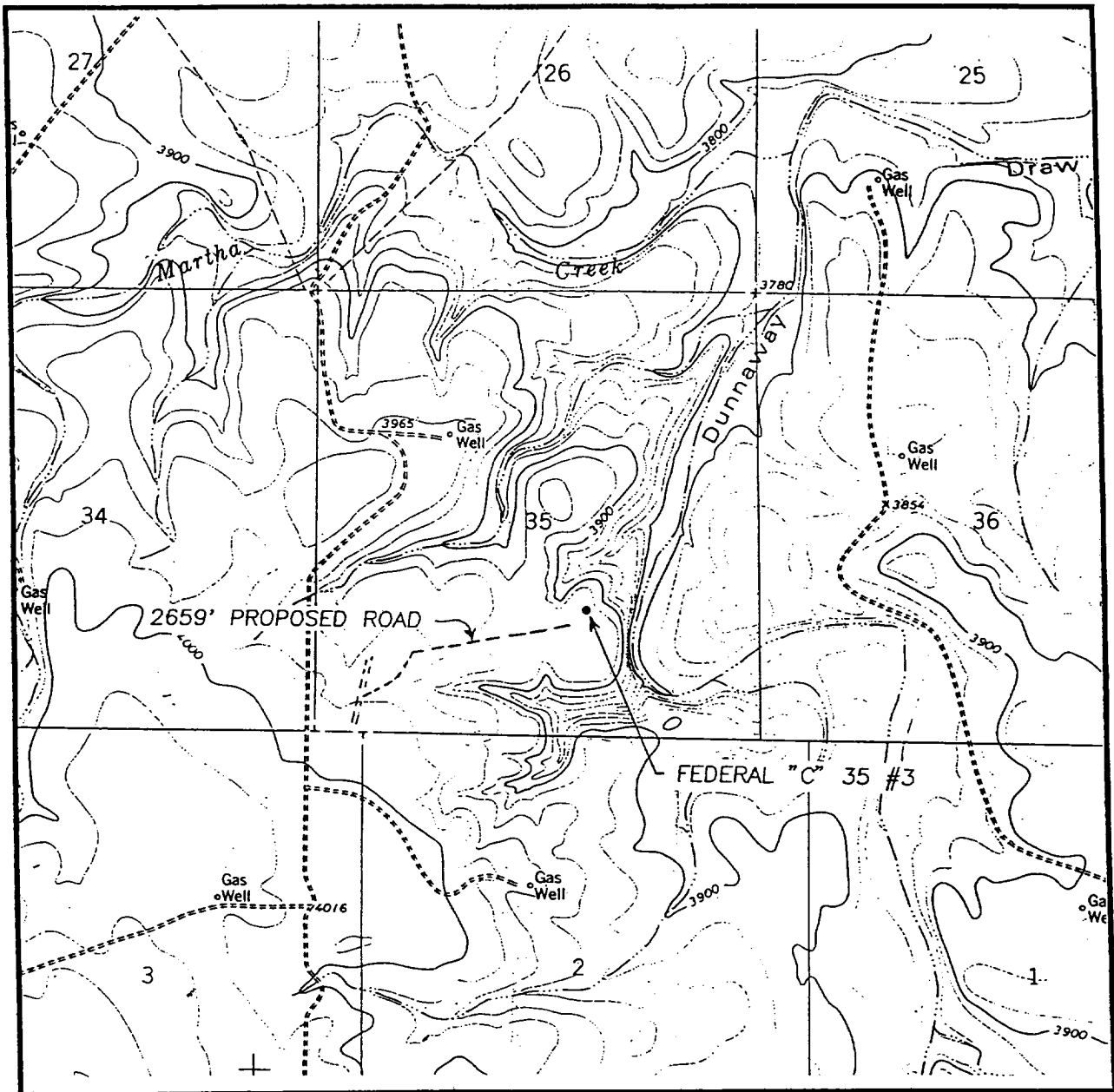
ELEVATION 3927'

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'

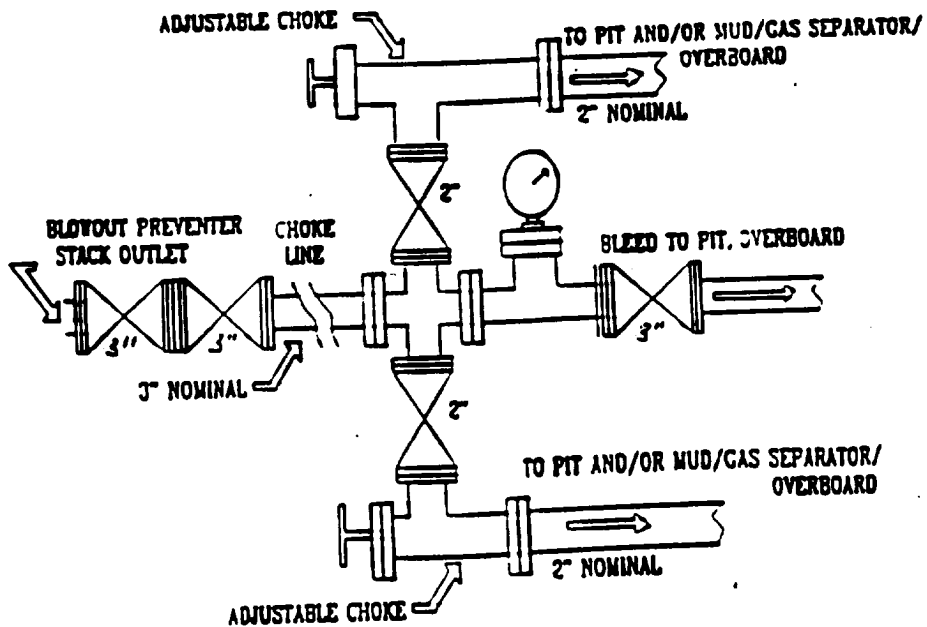
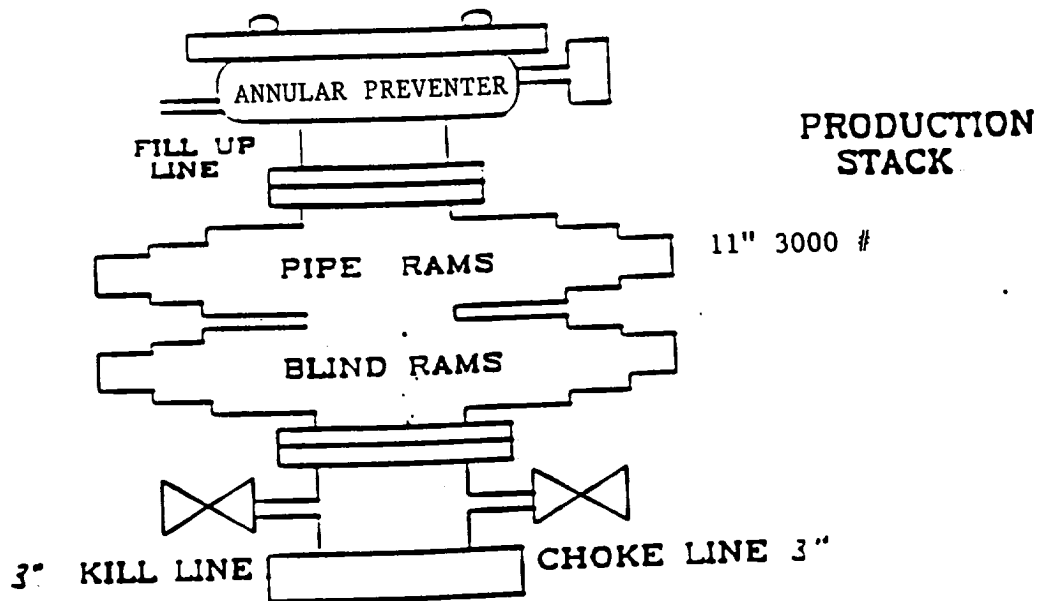
OPERATOR MARATHON OIL COMPANY

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 H₂S circulated to surface. Proper mud weight, safe drilling practices, and the use of H₂S scavengers when appropriate will minimize hazards when penetrating H₂S 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