

DISTRICT I
P.O. Box 1000, Hobbs, NM 88241-1000

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1984
Submit to Appropriate District Office

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

State Lease - 4 Copies
Fee Lease - 3 Copies

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

OIL CONSERVATION DIVISION

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

AMENDED REPORT

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number v	Pool Code 79040	Pool Name Indian Basin - U. Penn
Property Code 169570	Property Name INDIAN BASIN "C"	Well Number 3
OGRID No. 14021	Operator Name MARATHON OIL COMPANY	Elevation 3846

Surface Location

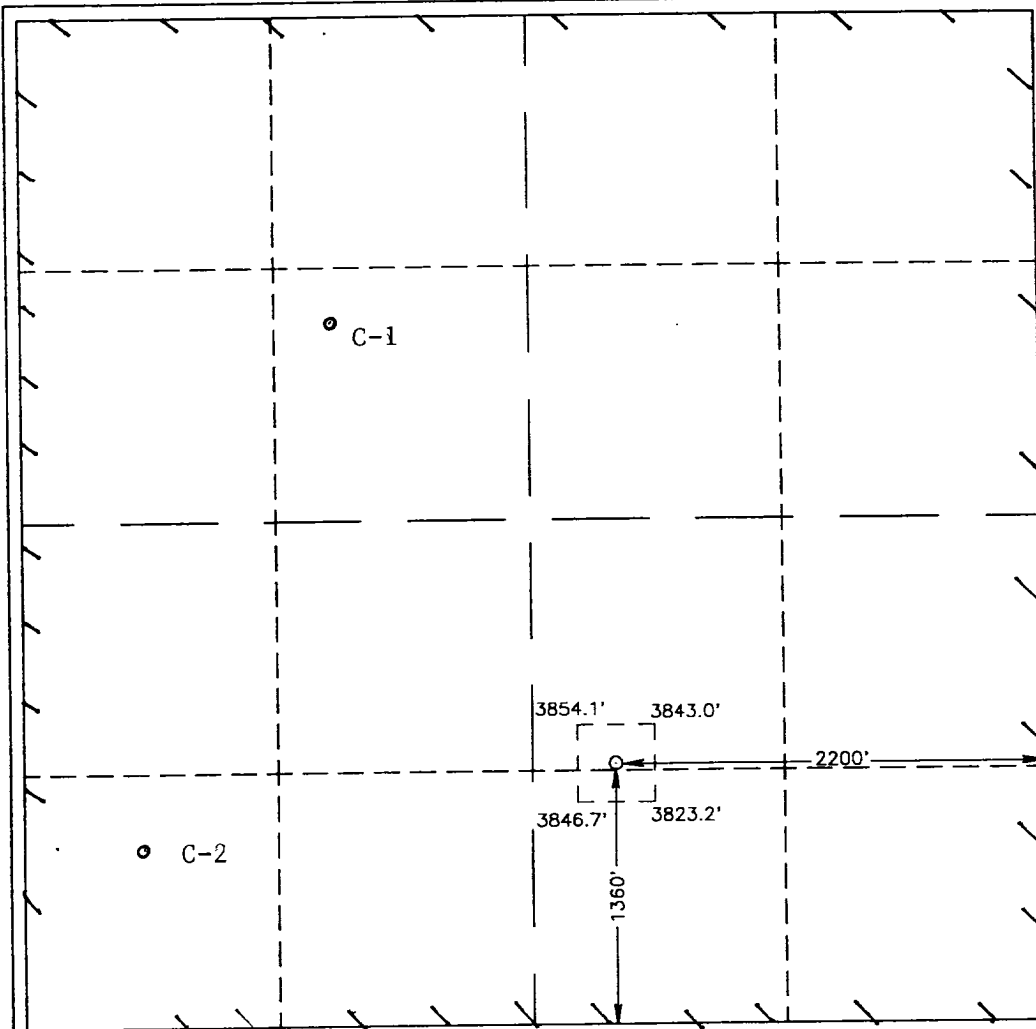
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	26	21 S	23 E		1360	SOUTH	2200	EAST	EDDY

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



OPERATOR CERTIFICATION

I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.

R. J. Longmire
Signature
R. J. Longmire
Printed Name
Drilling Superintendent
Title
5/3/99
Date

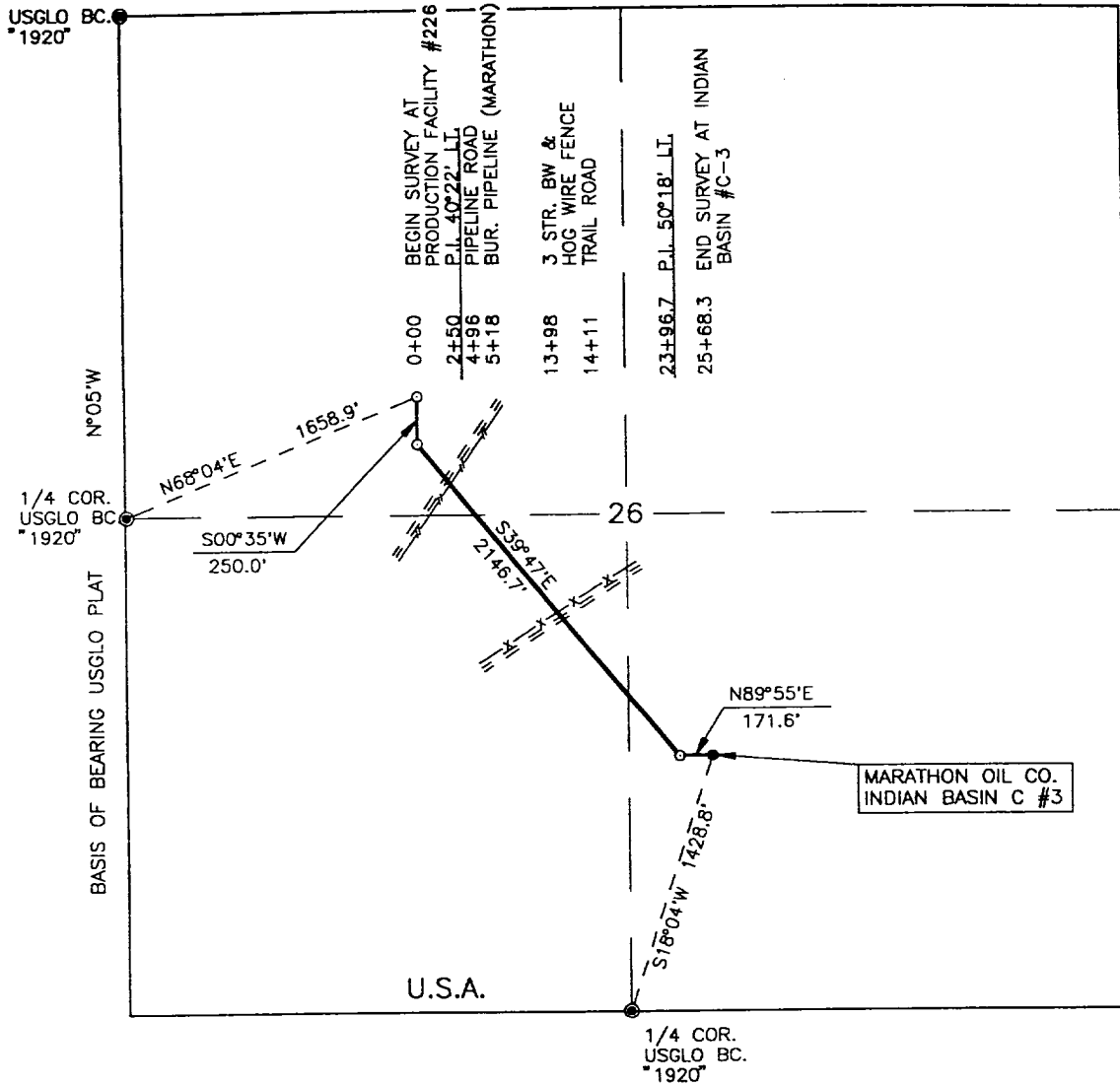
SURVEYOR CERTIFICATION

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.

RONALD J. EIDSON
31.5.99
Date Surveyed
Signature & Seal of Professional Surveyor
Professional Surveyor
3239
W.O. ID# 3239
31-99

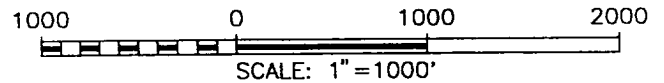
Certificate No. RONALD J. EIDSON, 3239
GARY G. EIDSON, 12841
MACON McDONALD, 12185

SECTION 26, TOWNSHIP 21 SOUTH, RANGE 23 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



DESCRIPTION

A STRIP OF LAND 50.0 FEET WIDE AND 2568.3 FEET OR 0.486 MILES IN LENGTH AND BEING 25.0 FEET RIGHT AND 25.0 FEET LEFT OF THE ABOVE PLATTED SURVEY OF CENTERLINE:



I HEREBY CERTIFY THAT I DIRECTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.

[Signature] 4-16-99
 RONALD J. EIDSON, N.M. R.S.S. No. 3239
 GARY G. EIDSON, N.M. R.S.S. No. 12641
 JOHN WEST SURVEYING COMPANY
 MIDLAND, TEXAS / BOBBS, NEW MEXICO



MARATHON OIL COMPANY

A PIPELINE CROSSING U.S.A. LAND LOCATED IN SECTION 26, TOWNSHIP 21 SOUTH, RANGE 23 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 4/15/99	Sheet 1 of 1 Sheets
W.O. Number: 99-11-0331	Drawn By: J. L. Presley
Date: 4/16/99	DISK: JLP#R7 MAR0331

Thirteen Point Surface Use Plan
MARATHON OIL COMPANY

INDIAN BASIN "C" #3
Sec. 26, 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, .75 miles East, .3 miles South, .3 miles East to new access road.
- 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 1,500' of new access. Construction plans will require a cattle guard to be installed in the fence line, 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 east 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
Indian Basin "C" #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. 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 stockpiled topsoil from construction will be spread over the area. Revegetation will be accomplished by planting mixed grasses as per formula by BLM.
- 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
Indian Basin "C" #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 well is completed. 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 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.
Surface Grazing Lessee: Biebelle, Walter, Stacy; Lyman, Patricia Shafer

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.

5/4/99
Date

R. J. Longmire
R. J. Longmire

**DRILLING PROGRAM
MARATHON OIL COMPANY**

INDIAN BASIN "C" #3

1. Estimated KB Elevation: 3,862' 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	+3862'	650'	+3212'	water
San Andres	650'	+3212'	2250'	+1612'	water
Glorietta	2250'	+1612'	2355'	+562'	
Delaware	3300'	+562'	4300'	-438'	
Bone Spring	4300'	-438'	5950'	-2088'	oil gas
Wolfcamp	5950'	-2088'	7520'	-3658'	oil gas
B/Permian Shale	7520'	-3658'	7530'	-3668'	
U. Penn	7530'	-3668'	7550'	-3688'	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

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 . . . an
Indian Hills Unit #14**

Test Frequency

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

4. Casing and Cement Program:

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

<u>Casing</u>	<u>DV</u>	<u>Lead</u>	<u>Amt</u>	<u>Type</u>	<u>Yield</u>	<u>Wt.</u>	<u>TOC</u>	<u>Additives</u>
<u>String</u>	<u>Depth</u>	<u>Stg.</u>	<u>SXS</u>	<u>Cement</u>	<u>CF/SX</u>	<u>PPG.</u>		
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, 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:

<u>---DEPTH---</u>		<u>MUD TYPE</u>	<u>WEIGHT</u>	<u>WL</u>	<u>ADDITIVES</u>	<u>VISUAL</u>
<u>FROM</u>	<u>TO</u>		<u>(PPG)</u>	<u>CC</u>		<u>MONTR.</u>
0	1200'	air/mist	N/A	N/A	Soap for mist	Reserve
1200'	5000'	fresh	8.5	28-32	Gel, caustic, H ₂ S Scavenger	Reserve
5000'	7000'	cut brine	9.0	32-36	Saturated brine	Reserve
7000'	7800'	cut brine	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 . an
Indian Hills Unit #14

6. Logging, Testing & Coring Programs:

<u>LOG/TEST/CORE/MUDLOG/OTHER</u>	<u>--INTERVAL--</u> <u>FROM TO</u>		<u>REMARKS</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:

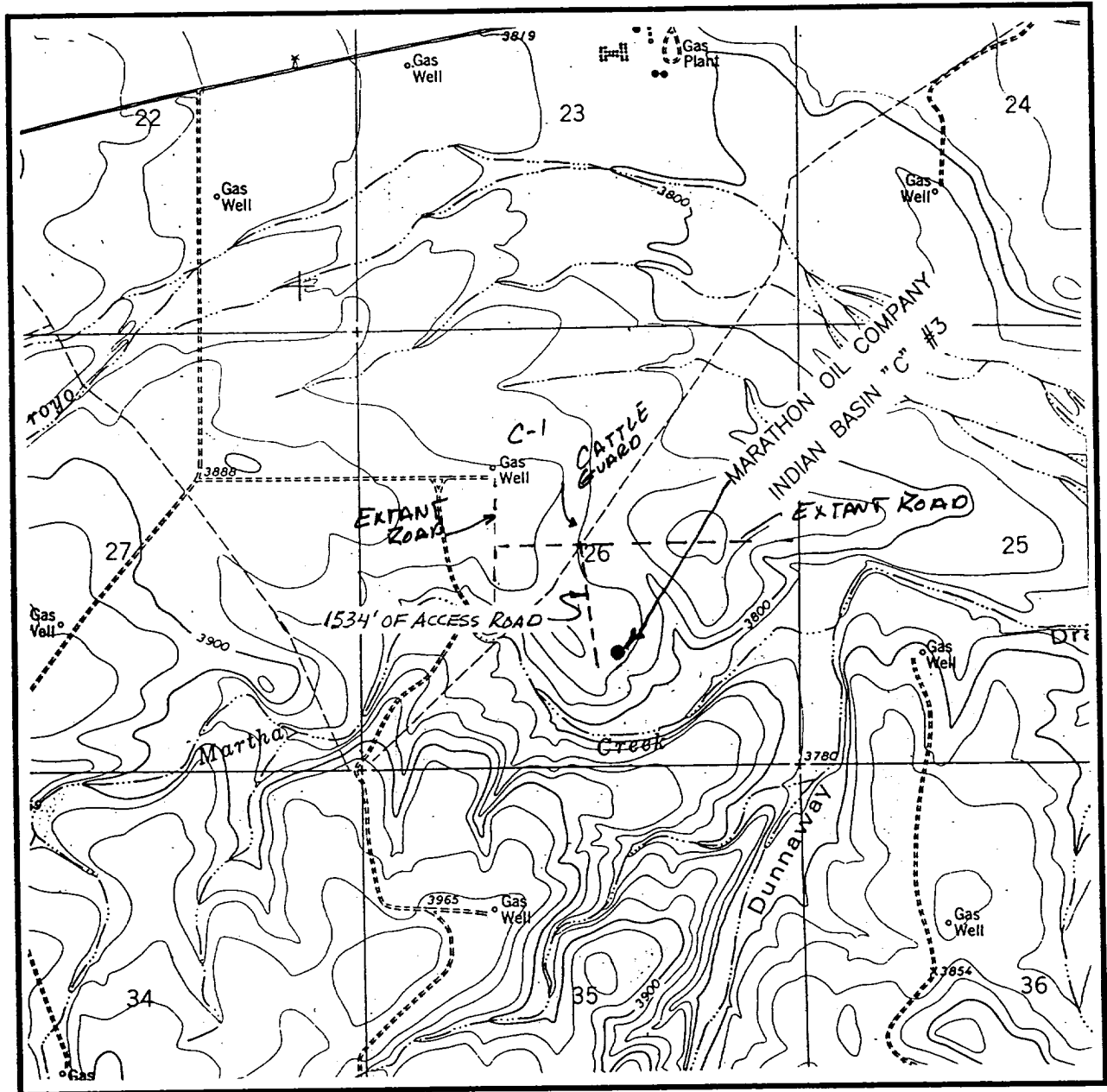
None anticipated. Possible H₂S in Cisco & Upper Penn. See H₂S Drilling Operations Plan.

8. Other Information:

Anticipated Starting Date: As soon as possible.

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

LOCATION VERIFICATION MAP

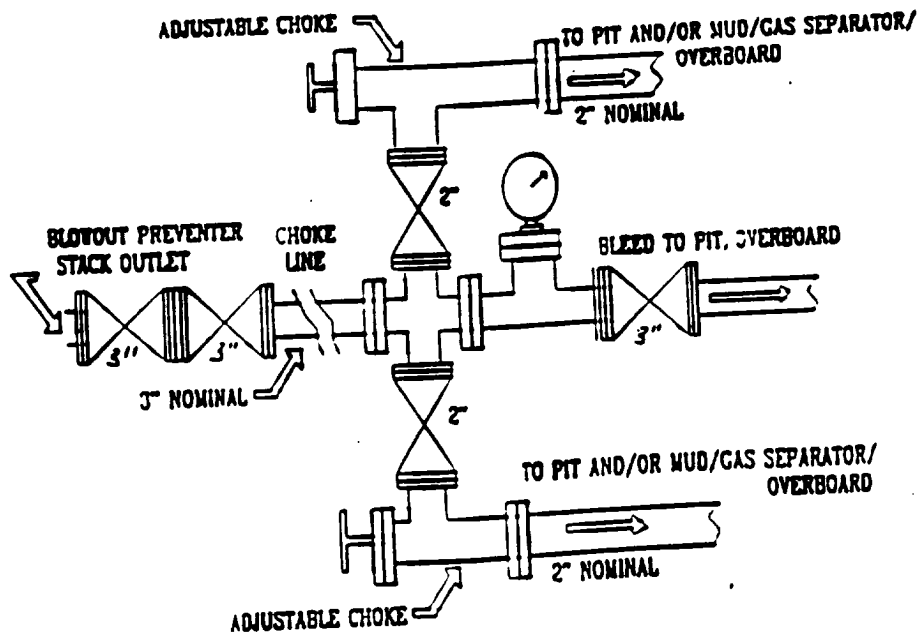
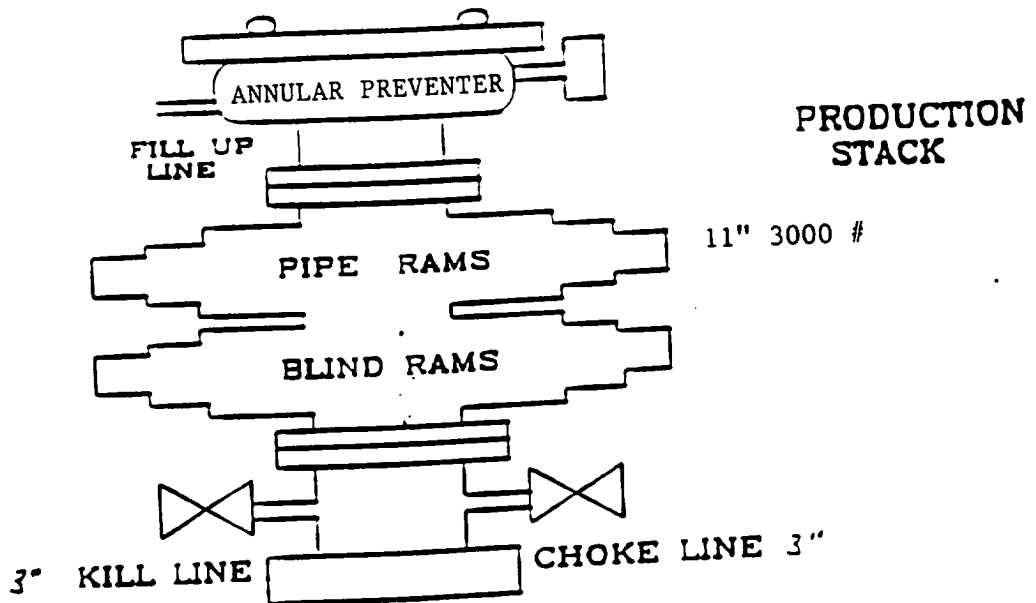


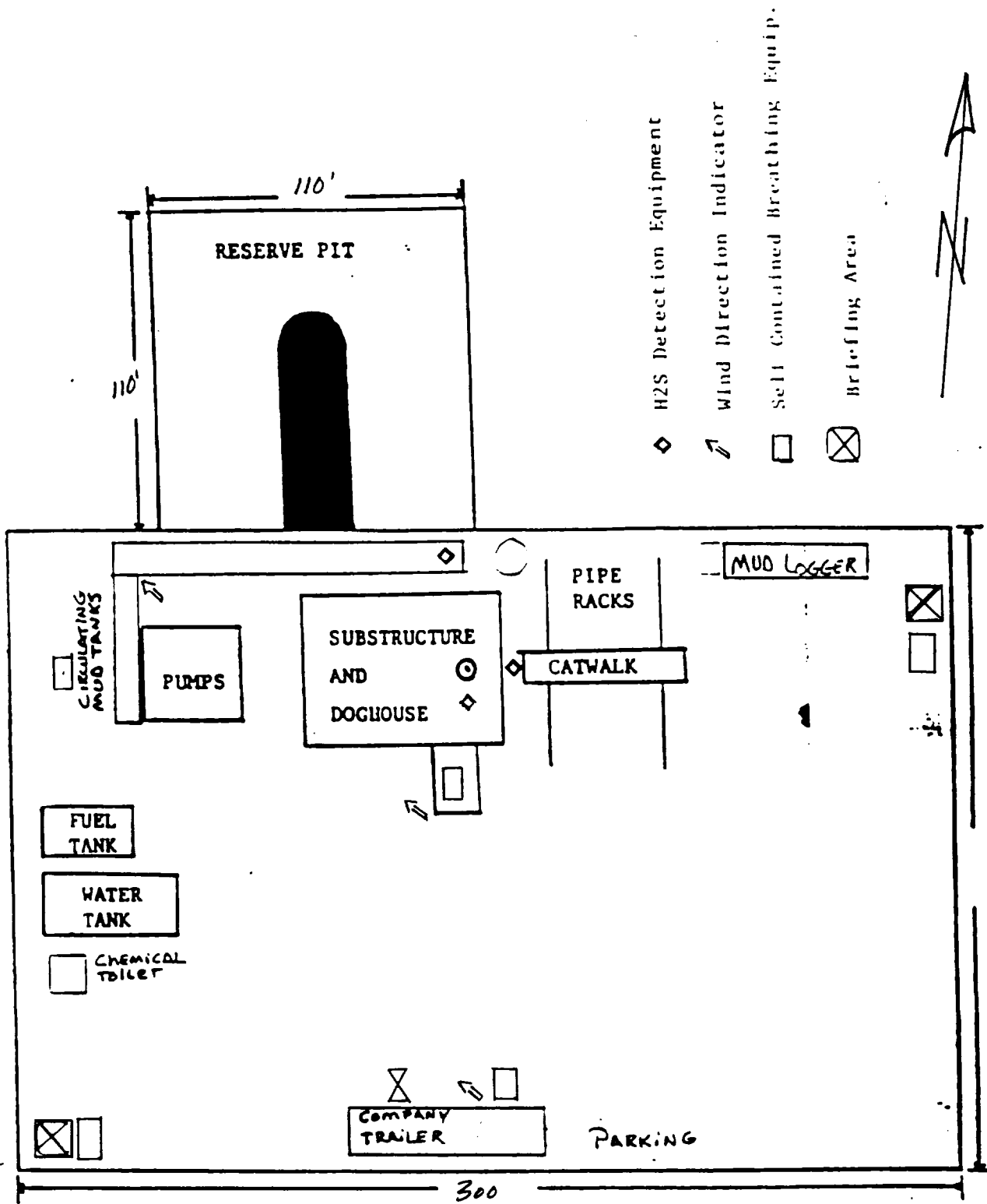
SCALE: 1" = 2000'

CONTOUR INTERVAL - 20'

SEC. 26 TWP. 21-S RGE. 23-E
 SURVEY N.M.P.M.
 COUNTY EDDY
 DESCRIPTION 1360' FSL & 2200' FEL
 ELEVATION 3846'
 OPERATOR MARATHON OIL COMPANY
 LEASE INDIAN BASIN "C"
 U.S.G.S. TOPOGRAPHIC MAP
MARTHA CREEK, N.M.

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





PROPOSED ACCESS - ± 1500'
NOT TO SCALE

Prevailing Wind Direction
Southwest

Foot-path for emergency
egress

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

5. Lease Designation and Serial No.

NM 076522

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

INDIAN BASIN

8. Well Name and No.

INDIAN BASIN 'C' 3

9. API Well No.

NOT ASSIGNED

10. Field and Pool, or Exploratory Area

INDIAN BASIN, U. PENN

11. County or Parish, State

EDDY CO., N.M.

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)

1360' FSL & 2200' FEL
SEC. 26, T-21-S, R-23 E

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

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other PIPELINE ROUTE
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

(Note: Report results of multiple completion on Well Completion or Recommendation 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.)

PROPOSE TO ROUTE 2-4" STEEL, SCHEDULE 40, GRADE 'B' SURFACE FLOWLINES FROM THE PROPOSED 'C'-#3 LOCATION ALONG PROPOSED AND EXISTING ROADS TO THE EXISTING PRODUCTION FACILITIES AT WELL 'C'-#1.

RECEIVED
1999 MAY 27 A 1:28
BUREAU OF LAND MANAGEMENT
LAND AND MINERAL RESOURCES AREA

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

Signed [Signature] Title _____

(This space for Federal or State office use)
LARRY J. BRAY

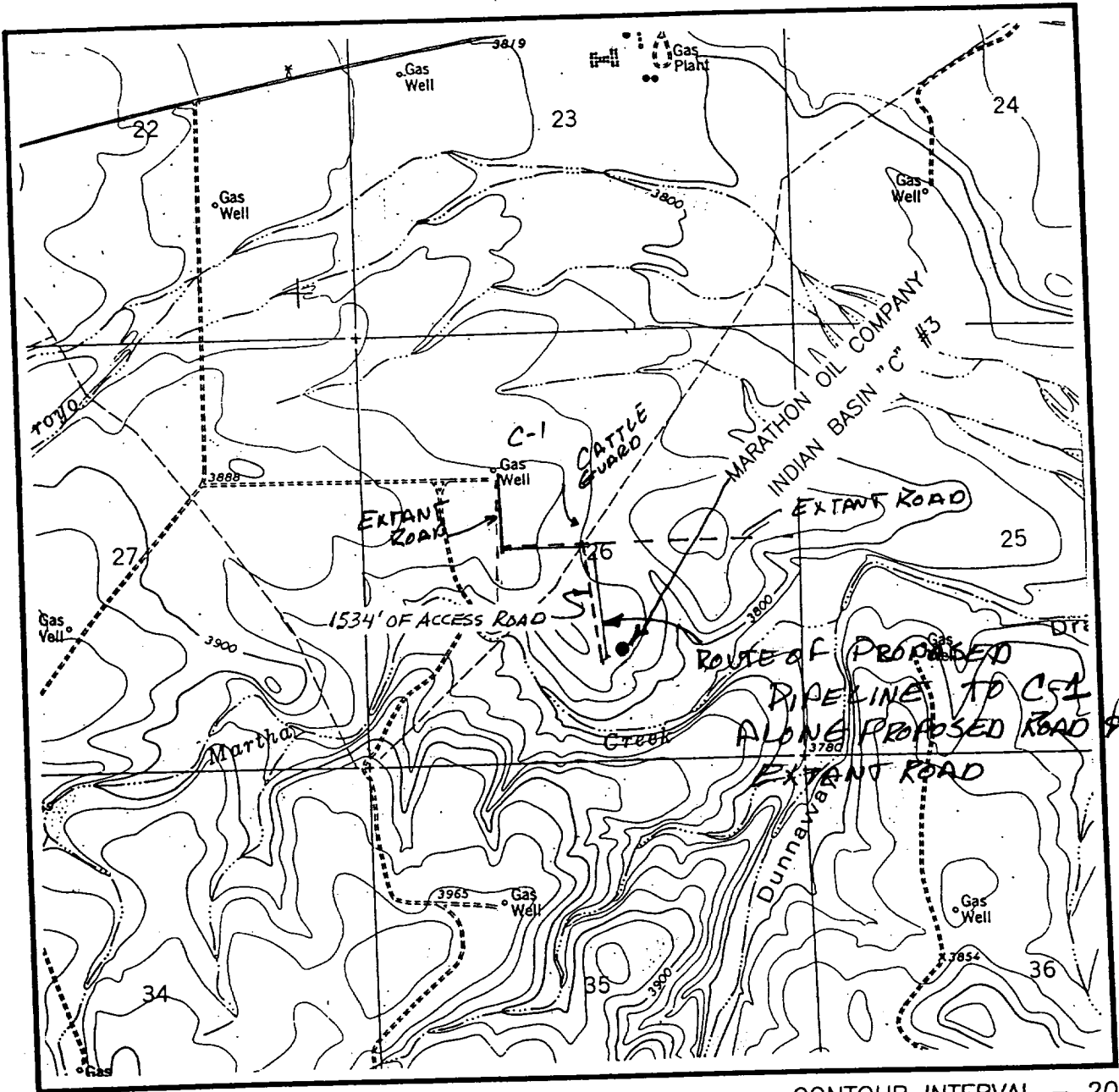
Approved by _____ Title _____

Assistant Field Manager,
Lands And Minerals

Date _____

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.

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL - 20'

SEC. 26 TWP. 21-S RGE. 23-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1360' FSL & 2200' FEL

ELEVATION 3846'

OPERATOR MARATHON OIL COMPANY

LEASE INDIAN BASIN "C"

U.S.G.S. TOPOGRAPHIC MAP

MARTHA CREEK, N.M.

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

RECEIVED

1999 MAY 27 A 11: 22

STATE OF LAND MGMT.
LAND RESOURCE AREA