Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

N.M vision
811 S. 1st S
Artesia, NM 210-2834

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

C151

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

5. Lease Designation and Serial No.
7260

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation
INDIAN HILLS UNIT

1. Type of Well
[ ] Oil Well [ ] Gas Well [X] Other

8. Well Name and No.
INDIAN HILLS UNIT #12

2. Name of Operator
Marathon Oil Company

9. API Well No.
30-015-28813

3. Address and Telephone No.
P.O. Box 552, Midland, TX 79702 915/682-1626

10. Field and Pool, or exploratory Area
INDIAN BASIN UPPER PENN ASSOCIATED POOL

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
2080' FNL & 2130' FWL UL "F"
SEC. 33, T-21-S, R-24-E

11. County or Parish, State
EDDY NM

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

TYPE OF SUBMISSION	TYPE OF ACTION	
[X] Notice of Intent	[ ] Abandonment	[ ] Change of Plans
[ ] Subsequent Report	[X] Recompletion	[ ] New Construction
[ ] Final Abandonment Notice	[ ] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
	[ ] Altering Casing	[ ] Conversion to Injection
	[ ] Other _____	[X] 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 NMOCD.

NOTE: THIS WELL IS BEING DEEPENED FOR USE AS A SALT WATER DISPOSAL WELL, HOWEVER, WE INTEND TO PRODUCE SIMULTANEOUSLY FROM THE UPPER PENN FORMATION (see attached wellbore diagram).

SUBJECT TO LIKE APPROVAL BY [redacted] NMOCD

14. I hereby certify that the foregoing is true and correct
Signed Jimmy Parke Title Engineer Technician Date 6/2/98

(This space for Federal or State office use)
Approved by (ORIG. SGD.) LES BABYAK Title PETROLEUM ENGINEER Date JUN 04 1998
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

Thirteen Point Surface Use Plan
MARATHON OIL COMPANY

Indian Hills Unit #12
Sec. 33, T-21-S, R-24-E
Eddy County, New Mexico

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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 13 miles. Turn left onto existing caliche lease road and follow East 1.5 miles. Turn left and follow .3 miles, turn left at "Y" and follow existing lease road 4.5 miles to 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 location will have a V-door facing east. The existing road will be detoured around the North side of the pad for other lease traffic.

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 six gas wells operated by Marathon, Santa Fe and Yates Petr. within a one-mile radius of the proposed location. These locations have production facilities including separators, condensate storage tanks and location drips. Marathon and Santa Fe and Yates 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, leveling 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 trucked by a contractor. 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. Construction materials will 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 existing drill site 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, 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 leveling and cleanup are accomplished.

d. If any oil is in the pits and is not immediately removed after operations cease, the pit containing the oil or other adverse substances will be flagged overhead or covered with mesh.

e. The rehabilitation operations will begin after the 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 archaeolcgical 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 limestone outcrops bordering steep slopes, interspersed with shallow stony loam. Vegetation is primarily Chihuahua desert scrub.

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 22 miles west of Carlsbad, New Mexico.

f. Drainage: Right Hand Canyon, South.

g. Surface Owner: The surface is owned by the Federal Government.

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 drill site 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.

6/2/98
Date

D. P. Nordt

DRILLING PROGRAM
MARATHON OIL COMPANY

Indian Hills Unit #12

1. Estimated KB Elevation: 4133'

FORMATION	TOP MEASURED	TOP SUBSEA	BASE MEASURED	BASE SUBSEA	FLUID CONTENT
Queen	Surface	+4131'	650'	+3481'	water
San Andres	650'	3481'	2250'	1881'	water
Glorietta	2250'	1881'	2355'	831'	
Delaware	3300'	831'	4300'	-169'	
Bone Spring	4300'	-169'	5950'	-1819'	oil gas
Wolfcamp	5950'	-1819'	7520'	-3389'	oil gas
B/Permian Shale	7520'.	-3389'	7530'	-3399'	
U. Penn	7530'	-3399'	7550'	-3419'	gas, oil water
Penn Dolomite	7550'	-3419'	8000'	-3869'	gas, oil water
Strawn	8150'	-4019'	8800'	-4669'	
Atoka	8800'	-9050'	9050'	-4919'	
Morrow	9050'	-9500'	9500'	-5369'	
Barnett	9482'	-5508'	10233'	-6100'	
Mississippian	10233'	-6100'	10603'	-6470'	
Woodford	10603'	-6470'	10683'	-6550'	
Devonian	10 683'	-6550'	11500'	-7367'	

FORMATION	EST PSIG	SBHP PPG EMW	EST SBHT DEG f	H2S PPM	SIGNIFICANCE (obj, marker, etc.)
Bone Springs	1210	8.5		500	marker
Wolfcamp	1680	9.0			marker
B/Permian Shale	1810	9.0			marker
U. Penn	2050	9.0		5000	objective pay
Penn Dolomite	2164	9.0		5000	objective
Morrow	3460	9.2			objective
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: 7-1/16" 3M annular tested to 200#/2000#, 7-1/16"" 3M dual rams, choke manifold and mud cross, tested to 300#/3000#.

Production Hole: Flow indicator, H_2S 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 production 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.

4. Casing and Cement Program:

---DEPTH--- FROM	TO	SECTION LENGTH	HOLE SIZE	CSG SIZE	WT. PPF	GRADE	THREADS COUPLINGS	NEW USED
10000'	10900'	900'	6.125"	4.5"	11.35	L-80	FL-4S	New
10900'	11500'	600'	6.125"	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 second joint to 10000'.

Cementing Summary:

4-1/2" liner, 10000' - 10900'
ECP tool depth - above landing collar

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

FROM DEPTH	TOC	HOLE SIZE	% EXCESS	YIELD	DENSITY	QTY. SX
10900'	10000'	6.125	50	1.66	13.0	100

5. Mud Program:

---DEPTH--- FROM	TO	MUD TYPE	WEIGHT (PPG)	VIS	WL CC	ADDITIVES	VISUAL MONTR.
10210'	11500'	Freshwater gel	8.4	32-36	N/C	Gel	Steel Pits

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

6. Logging, Testing & Coring Programs:

LOG/TEST/CORE/MUDLOG/OTHER	--INTERVAL- FROM	TO	REMARKS
LDT/CNL/GR/CAL	TD	10000'	
MUD LOGGER	NONE		

NO CORES OR DST'S

7. Abnormal Pressures, Temperatures or Potential Hazards:

None anticipated. Possible H_2S in Cisco & Upper penn. See H_2S Drilling Operations Plan.

8. Other Information:

Anticipated Starting Date: As soon as possible.

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

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

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

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

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

State of New Mexico
Energy, Minerals and Natural Resources Departmen.

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

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

Property Code	Property Name	Well Number
	INDIAN HILLS UNIT	12
OGRID No.	Operator Name	Elevation
	MARATHON OIL COMPANY	4121

Surface Location

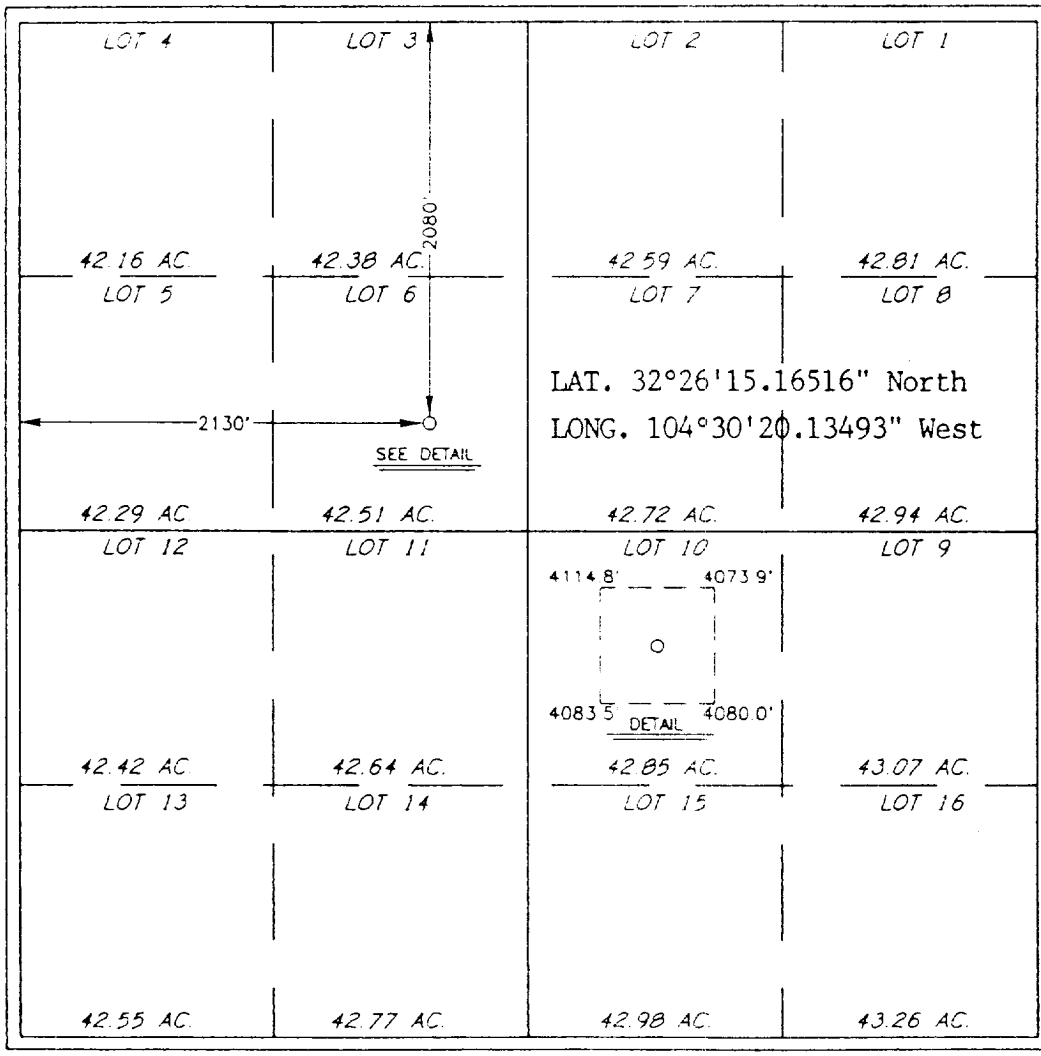
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
6	33	21 S	24 E		2080	NORTH	2130	WEST	EDDY

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.

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

Printed Name

Title

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 supervison, and that the same is true and correct to the best of my belief.

SEPTEMBER 27, 1995

Date Surveyed SJA

Signature & Seal of Professional Surveyor

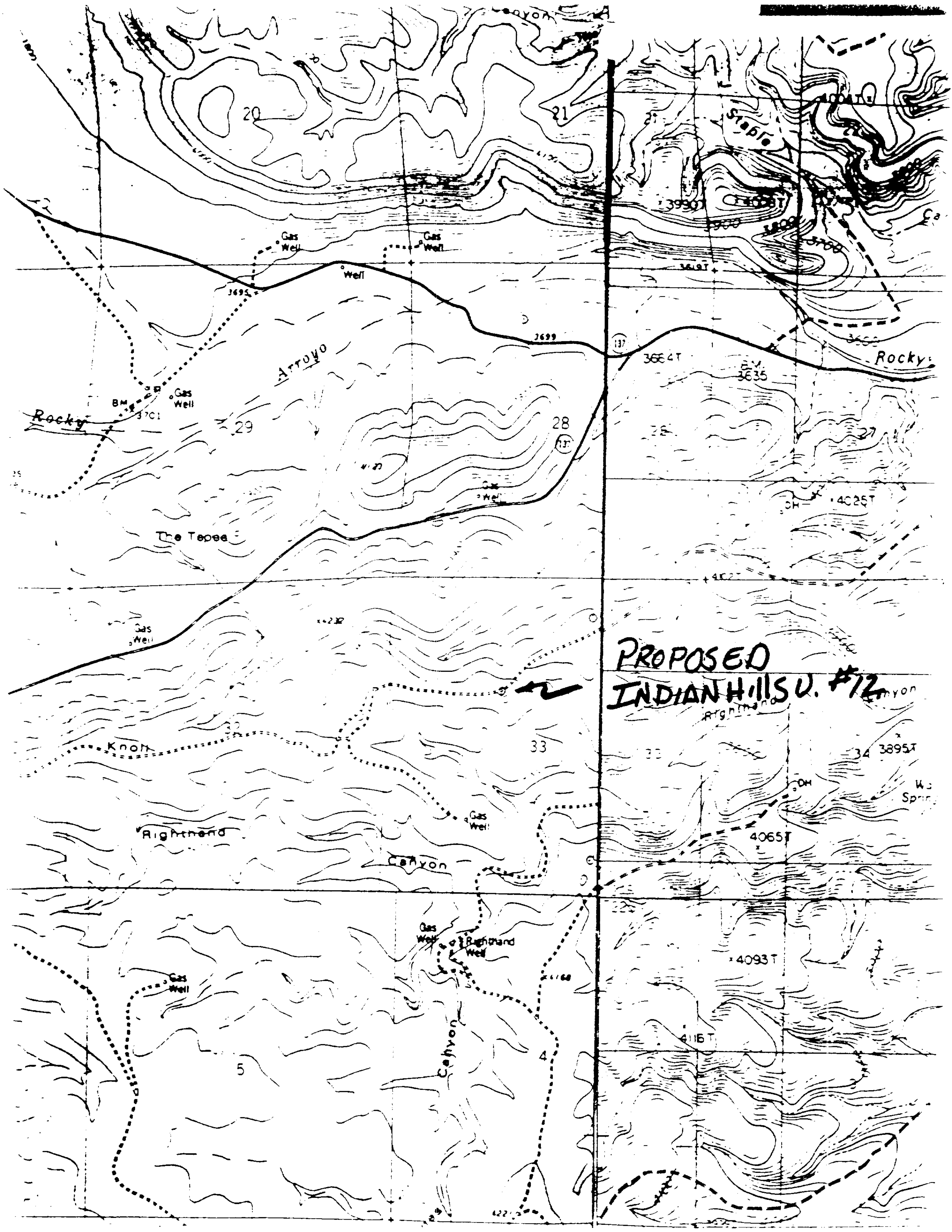
NEW MEXICO 12641 REGISTERED PROFESSIONAL SURVEYOR GARY EIDSON

5-09-96
10-04-95

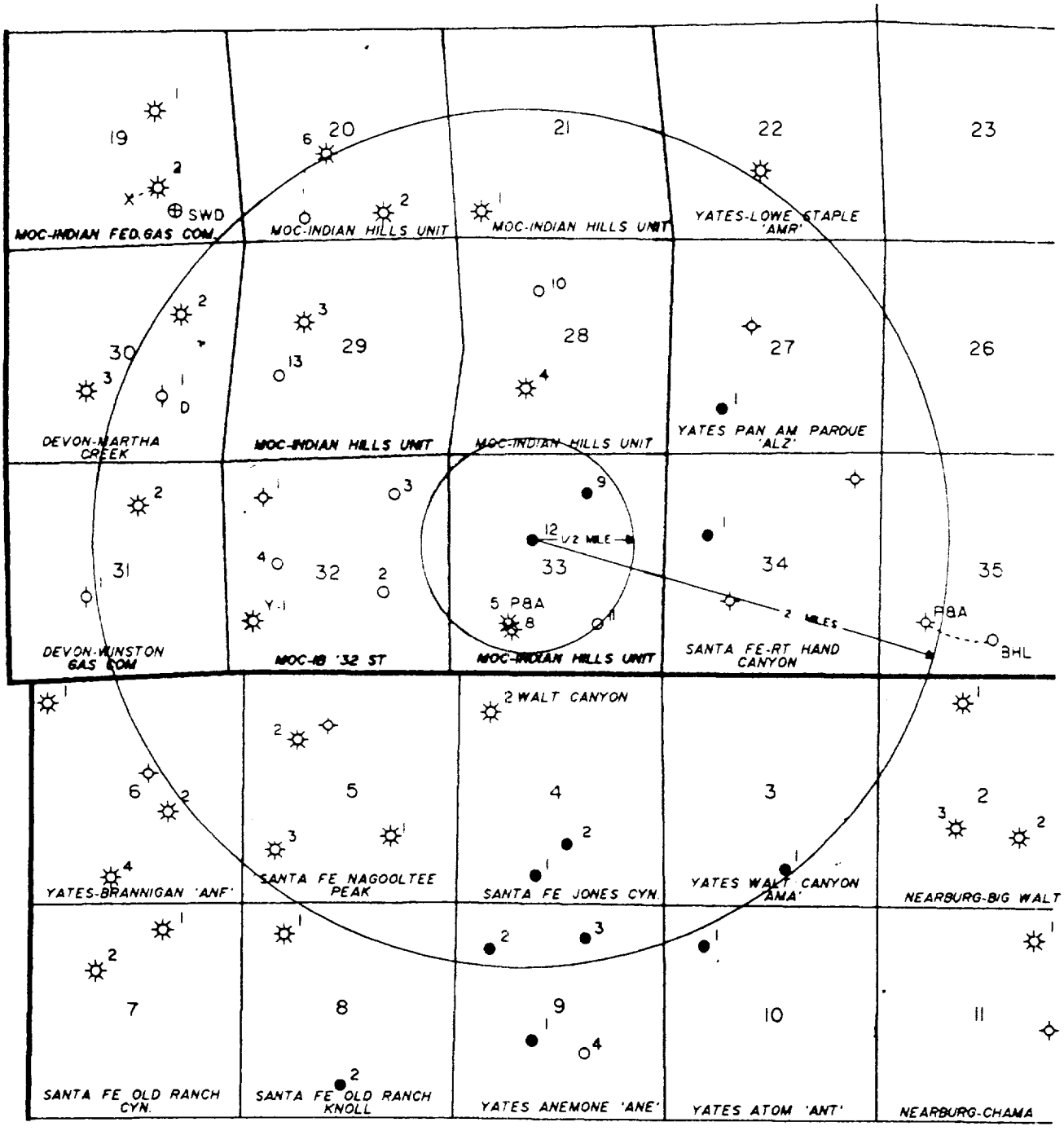
W.O. Num. 95-11-1473

Certificate No. JOHN W. WEST 676
GARY L. EIDSON 3239
GARY EIDSON 12641

GPS to locate LAT. & LONG. 96110528


PROPOSED
INDIAN Hills U. #12
Rocky
Arroyo
The Tepee
Knoll
Righthand
Canyon
Gas Well
Well
Righthand Well
Stable
BM 3701
BM 3635
3695
3699
3664T
3990T
3619T
4025T
4065T
4093T
4116T
3895T
20
21
28
29
27
32
33
34
4
5

Indian Hills Unit Well No. 12
Proposed Downhole Separation and Disposal

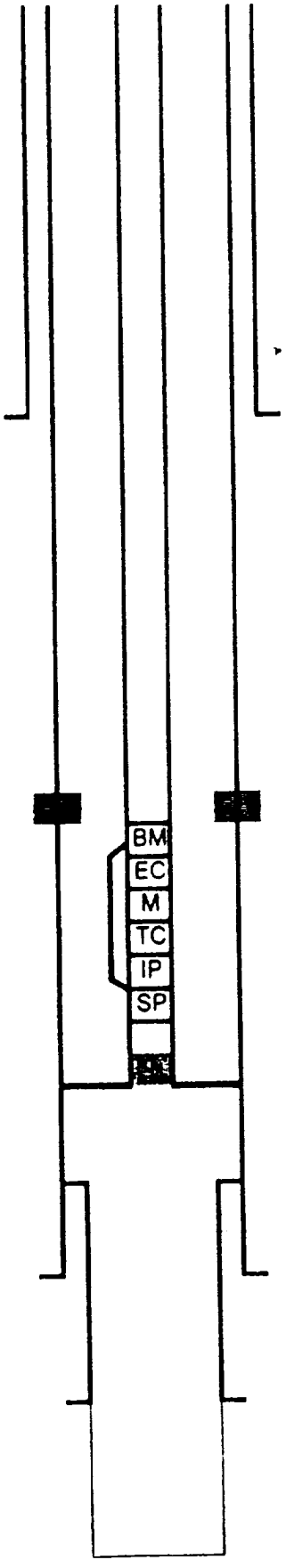


MARATHON OIL COMPANY
MID-CONTINET REGION

INDIAN BASIN

EDDY COUNTY, NEW MEXICO

PROPOSED DOWNHOLE SEPARATION AND INJECTION



FIELD: INDIAN BASIN
WELL: INDIAN HILL UNIT #12
LOCATION: 2080 FNL 2130 FWL SEC 33, T21S - R24E
COUNTY: EDDY
STATE: NM
STATUS: SHUT IN
DATE: 3/16/98
ELEVATIONS: 4115' GL & 4113' KB

9 5/8" @ 1800'

SURFACE: 9 5/8", 36#, K-55 set at 1800'. CMT w/ 970 sxs Circulated

PRODUCTION: 7", 23# & 26#, K-55 set at 10210'. CMT w/ 1325 sxs Circulated 164 sxs

LINER: 4 1/2" 11.35#, L-80 FL-4S @ 10,900' TOL @ 10,000'

PRODUCING INTERVAL: 7804' - 8200'

SQUEEZE PERFS: 8,140'-8,164' [2 spf/49 holes]

DOWNHOLE EQUIP.: 2 7/8" 6.5# L-80 TBG, Bypass Manifold, Expansion Chamber, Motor, Thrust Chamber, Injection Pump, Oil-water separator, Injection Tubing, Seal Bore Asm & Packer

PKR @ 9,200'

TOL @ 10,000'

7" @ 10,210'

4 1/2" Liner @ 10,900'

INJECTION ZONE: 6 1/8" OPENHOLE

TD @ 11,500'

Indian Hills Unit Well No. 12
Proposed Downhole Separation and Disposal

Proposed Completion for:

A. (1) Indian Hills Unit Well No. 12
Federal Lease No. NM07260
UL "F", 2080' FNL, 2130' FWL
Sec. 33, T-21-S, R-24-E
Eddy County, New Mexico

A. (2) CASING AND CEMENT

Surface Casing: 9-5/8", 36#, K-55 set at 1800'. Cmt w/970 sxs
Circulated

Production Casing: 7", 23# & 26#, K-55 set at 10210', Cmt w/1325 sxs
Circulated 164 sxs

Injection Liner: 4-1/2", 11.35#, L-80 FL-4S at 10,900'
Top of liner @ 10,000'

A. (3) Injection Tubing: 2-7/8" , 6.5#, L-80, Internally plastic coated tubing, attached to downhole separator discharge and set in seal assembly at ± 10,000'.

A. (4) Injection Packer: Polished bore receptacle and seal assembly attached to liner hanger @ 10,000'.

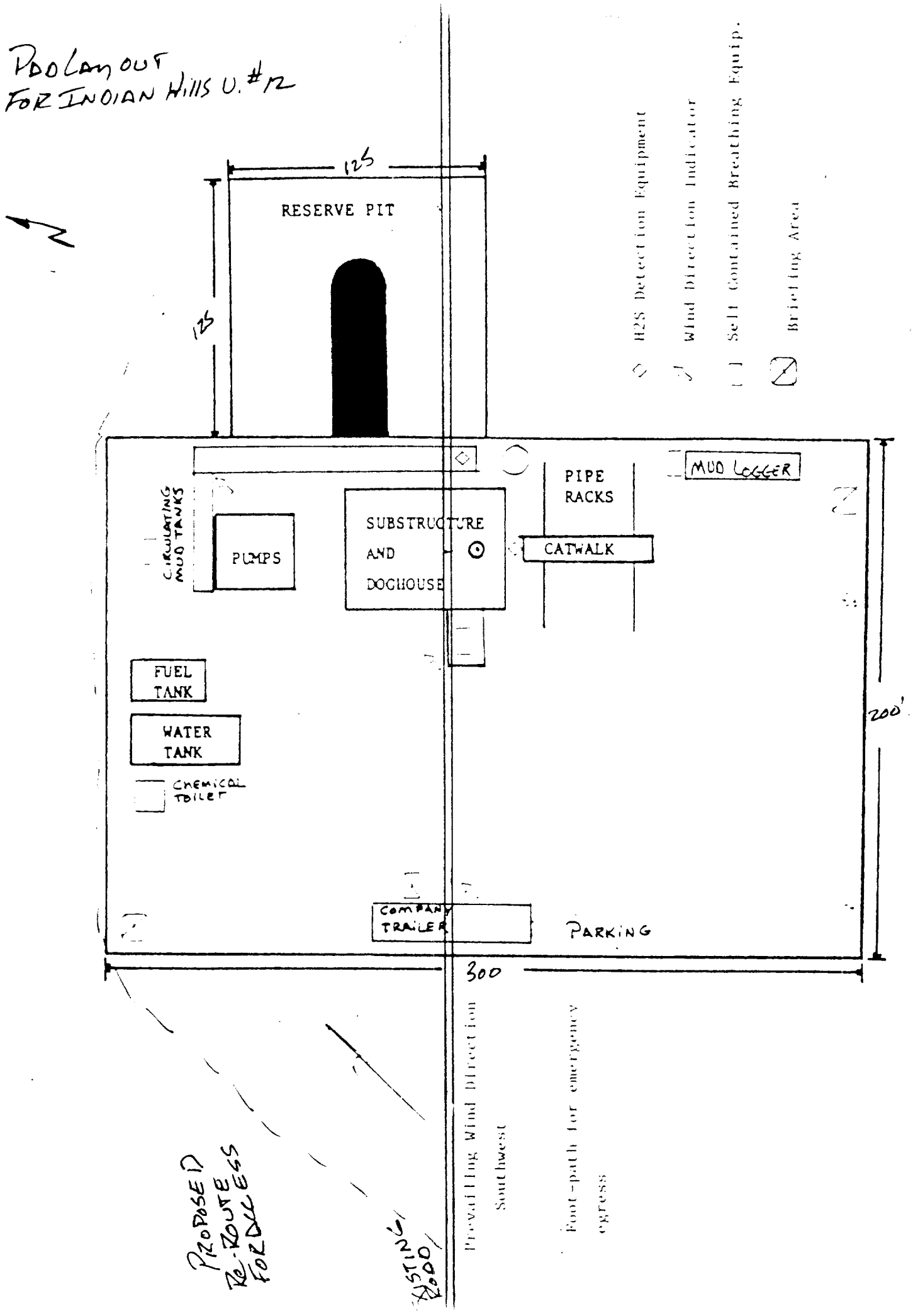
B. (1) Injection Formation: Devonian

B. (2) Injection Interval: 10,900' - 11,500'

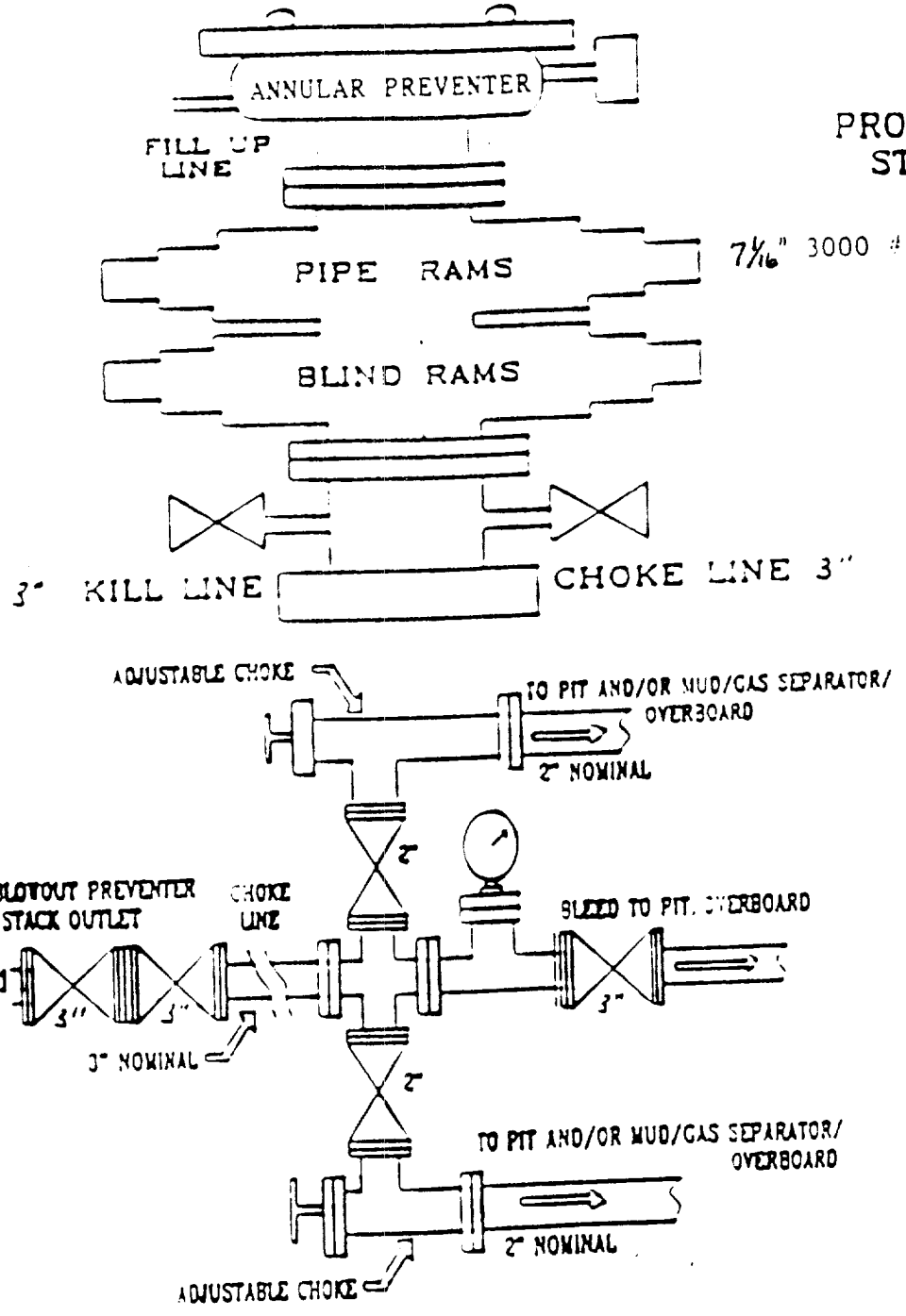
B. (3) The proposed deepening of this well is for the purpose of water disposal, although we intend to produce simultaneously from the Upper Penn formation.

B. (4) The next higher productive oil or gas zone is the Upper Penn at a depth of 8420' (Base).

B. (5) No formations below the Devonian have ever been produced in this area.


PDO Lay out
FOR INDIAN HILLS U. #12
125
RESERVE PIT
125
H2S Detection Equipment
Wind Direction Indicator
Self Contained Breathing Equip.
Briefing Area
MUD LOGGER
PIPE RACKS
CIRCULATING MUD TANKS
PUMPS
SUBSTRUCTURE AND DOGHOUSE
CATWALK
FUEL TANK
WATER TANK
CHEMICAL TOILET
COMPANY TRAILER
PARKING
200'
300
PROPOSED RE-ROUTE EGRESS FOR DLL
EXISTING ROAD
Prevailing Wind Direction
Southwest
Foot-path for emergency egress

PRODUCTION STACK



MARATHON OIL CC .NY

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