

NEW MEXICO OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Form C-110
Revised 7/1/55

(File the original and 4 copies with the appropriate district office)

CERTIFICATE OF COMPLIANCE AND AUTHORIZATION
TO TRANSPORT OIL AND NATURAL GAS

So. Union Govt. 2-19

CONSOLIDATED OIL & GAS, INC.

Company or Operator _____ Lease _____

Well No. 2-19 Unit Letter A 19 31N 12W West Blanco Dakota
S T R Pool _____

County San Juan Kind of Lease (State, Fed. or Patented) Federal

If well produces oil or condensate, give location of tanks: Unit S T R

Authorized Transporter of Oil or Condensate Foutz & Bursum Trucking Company

Address P.O. Box 1877 - Farmington, New Mexico

(Give address to which approved copy of this form is to be sent)

Authorized Transporter of Gas Southern Union Gas Company
Address 1507 Pacific Avenue - Dallas, 1, Texas

Date Connected _____
(Give address to which approved copy of this form is to be sent)

If Gas is not being sold, give reasons and also explain its present disposition:

Waiting on Pipeline connections

Reasons for Filing: (Please check proper box) New Well X

Change in Transporter of (Check One): Oil () Dry Gas () C'head () Condensate ()

Change in Ownership () Other ()

Remarks: _____ (Give explanation below)

The undersigned certifies that the Rules and Regulations of the Oil Conservation Commission have been complied with.

Executed this the 17th day of June 19 60

Approved JUN 20 1960 19 _____

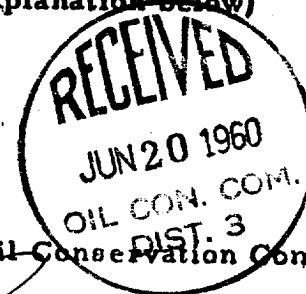
OIL CONSERVATION COMMISSION
By Original Signed Emery C. Arnold

Title Supervisor Dist. II

By [Signature]
Title Production Manager

Company Consolidated Oil & Gas, Inc.

Address 2112 Tower Bldg.
1700 Broadway
Denver 2, Colorado





STATE OF NEW MEXICO		
OIL CONSERVATION COMMISSION		
AZTEC DISTRICT OFFICE		
NUMBER OF COPIES RECEIVED		5
DISTRIBUTION		
SANTA FE		1
FILE		1
U.S.G.S.		
FIELD OFFICE		
TRANSPORTER	OIL GAS	1
PRODUCTION OFFICE		
OPERATOR		2

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒DEEPEEN ☐

b. TYPE OF WELL

OIL
WELL ☐GAS
WELL ☒

OTHER

SINGLE
ZONE ☒MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Marathon Oil Company (915) 682-1626

3. ADDRESS AND TELEPHONE NO.

P. O. Box 552, Midland, Tx. 79702-0552

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

660' FSL & 1970' FEL

At proposed prod. zone

Same

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

4 air miles SE of LaPlata, NM

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.
(Also to nearest drig. unit line, if any)

660'

18. DISTANCE FROM PROPOSED LOCATION*

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

447'

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

5,896' ungraded ground

5. LEASE DESIGNATION AND SERIAL NO.

NMNM-021025

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

N/A

7. UNIT AGREEMENT NAME

N/A

8. FARM OR LEASE NAME, WELL NO.

Ohio E 1 C

9. AM WELL NO.

30-045-30132

10. FIELD AND POOL, OR WILDCAT

Blanco Mesa Verde

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

18-31n-12w NMMPM

12. COUNTY OR PARISH

San Juan

13. STATE

NM

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.
(Also to nearest drig. unit line, if any)

660'

18. DISTANCE FROM PROPOSED LOCATION*

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

447'

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

5,896' ungraded ground

22. APPROX. DATE WORK WILL START*

Mar. 25, 2000

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8" (J-55)	24#	350'	≈289 cu ft & to surface
7-7/8"	4-1/2" (J-55)	11.6#	5,500'	≈1829 cu ft & to surface

procedural review pursuant to 43 CFR 3163.3
and appeal pursuant to 43 CFR 3165.4.DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS"

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

Consultant (505) 466-8120

2-5-00

TITLE

DATE

(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:

NMOC

APPROVED BY

/s/ Charlie Beecham

TITLE

DATE

FEB 29 2000

*See Instructions On Reverse Side

District I
PO Box 1988, Hobbs, NM 88241-1988
District II
PO Drawer DD, Artesia, NM 88211-0719
District III
2800 Rio Raza Rd., Alamo, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

505-326-1653 Ans. Serv. Page: 5 of 10

Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-045-30132		Pool Code 72319	Well Name BLANCO - MESA VERDE
Property Code 25401	Property Name CHIO 1761		Well Number 1-C
UGEDU No. 14021	Operator Name MARATHON OIL COMPANY		Elevation 5896

1st Surface Location

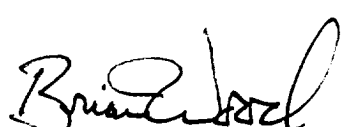

UL or lot no.	Section	Township	Range	Lot Ids	Feet from the	North/South line	Feet from the	East/West line	County
0	18	31 N	12 W		660	South	1970	East	SAN JUAN

2nd Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ids	Feet from the	North/South line	Feet from the	East/West line	County

Indicated Acres	Joint or Inlet	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

<div>16 19.10ac N 89° 32' W 20.01ac Lot No. (Twp.) 1 79.48ac 2 3 4 19.46ac N 89° 19' W 19.95ac 660' 39.90ac 1970'</div>	<div>17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  Signature BRIAN WOOD Printed Name CONSULTANT Title FEB. 5, 2000 Date</div>	
	<div>18 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.  Date of Survey Signature Certificate Number 8456</div>	

New Mexico Oil Conservation Division

Marathon Oil Company
Ohio E 1 C
660' FSL & 1970' FEL
Sec. 18, T. 31 N., R. 12 W.
San Juan County, New Mexico

PAGE 1

Drilling Program

1. ESTIMATED FORMATION TOPS

<u>Formation Name</u>	<u>GL Depth</u>	<u>KB Depth</u>	<u>Subsea Elevation</u>
Nacimiento Fm	000'	10'	+5,896'
Fruitland Coal	1,596'	1,606'	+4,300'
Pictured Cliffs Ss	2,244'	2,254'	+3,652'
Cliff House Ss	3,936'	3,946'	+1,960'
Menefee Fm	4,031'	4,041'	+1,865'
Pt. Lookout Ss	4,603'	4,613'	+1,293'
Base Mesa Verde Ss	4,694'	4,704'	+1,202'
Total Depth (TD)*	5,500'	5,510'	+396'

* all elevations reflect the ungraded ground level of 5,896'

2. NOTABLE ZONES

<u>Gas Zones</u>	<u>Water Zones</u>	<u>Coal Zones</u>
Fruitland Coal (1,596')	Fruitland Coal (1,596')	Fruitland Fm (1,596')
Pictured Cliffs (2,244')		
Mesa Verde (4,650')		

Water zones will be protected with casing, cement, and weighted mud. Fresh water encountered during drilling will be recorded by depth, cased, and cemented. Oil and gas shows will be tested for commercial potential based on the well site geologist's recommendations.

3. PRESSURE CONTROL

The drilling contract has not yet been awarded, thus the exact BOP model to be used is not yet known. (A typical 3,000 psi model is on PAGE 3.) An 8-

Marathon Oil Company
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PAGE 2

5/8" x 11" 3,000 pound double ram BOP system with a choke manifold and mud cross will be tested to 300 psi and then to 3000 psi. A flow indicator, PVT, and annular preventer will be used to drill the production hole. Upper and lower Kelly cocks with valve handle and subs to fit all drill string connections which are in use will be available on the rig floor.

Tests will be run when:

- 1) installed
- 2) anytime a pressure seal is broken (test only affected equipment)
- 3) at least every 20 days
- 4) blind & pipe rams will be activated each trip, but no more than daily

BOP systems will be consistent with API RP 53. Blowout preventers will be installed and tested before drilling surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated 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. Maximum expected pressure is $\approx 2,200$ psi.

4. CASING & CEMENT

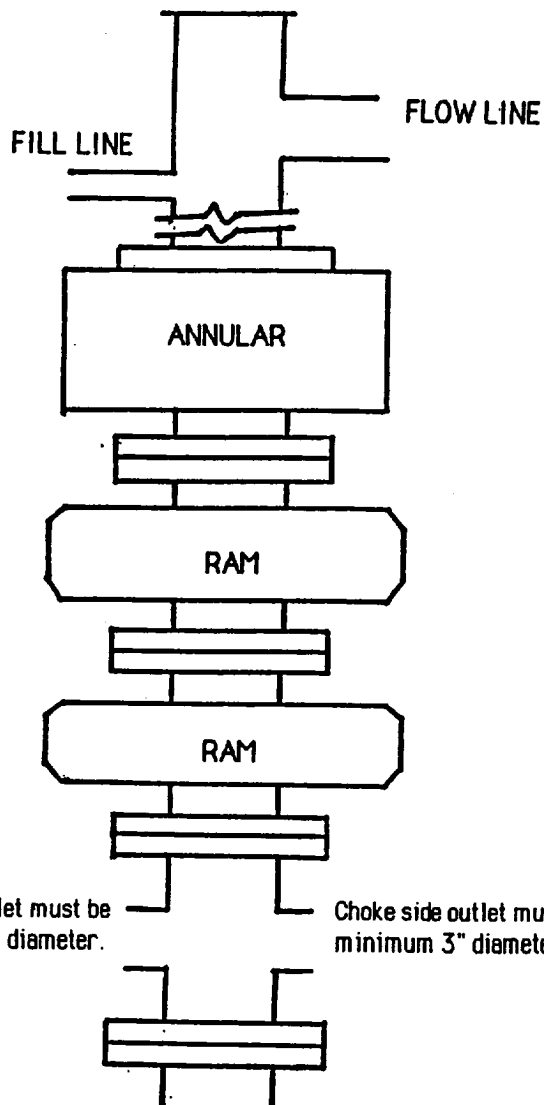
<u>Hole Size</u>	<u>O.D.</u>	<u>Weight (lb/ft)</u>	<u>Grade</u>	<u>Age</u>	<u>Connections</u>	<u>GL Setting Depth</u>
12-1/4"	8-5/8"	24	J-55	New	8rd, ST&C	350'
7-7/8"	4-1/2"	11.6	K-55	New	8rd, LT&C	5,500'

Surface casing will be cemented to surface with ≈ 289 cu. ft. (≈ 228 sx) Class B Neat + 1/4 lb/sk cello-flake + 2% CaCl_2 . Yield = 1.27 cu. ft./sk. Weight = 15.2 lb/gal.

Conventional centralizers will be set on the bottom two joints and every fourth joint to surface.

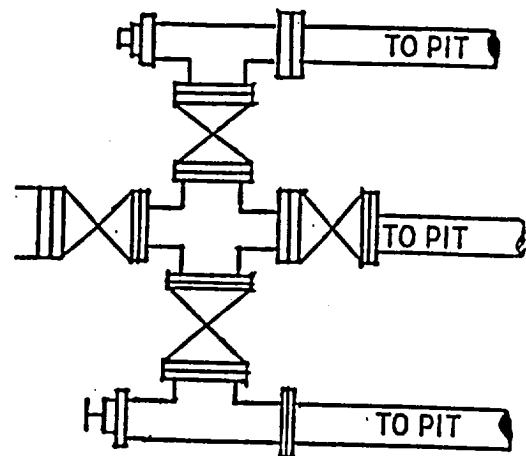
Marathon Oil Company
 Ohio E 1 C
 660' FSL & 1970' FEL
 Sec. 18, T. 31 N., R. 12 W.
 San Juan County, New Mexico

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TYPICAL BOP STACK
& CHOKE MANIFOLD

There will be at least 2 chokes and 2 choke line valves (3" minimum). The choke line will be 3" in diameter. There will be a pressure gauge on the choke manifold.



Kill side outlet must be minimum 2" diameter.

Choke side outlet must be minimum 3" diameter.

Kill line will be minimum 2" diameter and have 2 valves, one of which shall be a minimum 2" check valve.

Upper kelly cock will have handle available.
 Safety valve and subs will fit all drill string connections in use.
 All BOPE connections subjected to well pressure will be flanged, welded, or clamped.

Marathon Oil Company
Ohio E 1 C
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Production casing hole will be cemented to surface as follows. DV depth = 2,000'.

First stage Lead will be cemented to 2,000' with 1,012 cu. ft. (530 sx) 65:35 Poz + 3 lb/sk gilsonite + 4% gel + 1/4 lb/sk cello-flake. Yield = 1.91 cu. ft./sk. Weight = 12.6 lb/gal.

First stage Tail will be cemented to 5,400' with 127 cu. ft. (100 sx) Class B Neat + 3 lb/sk gilsonite + 1/4 lb/sk cello-flake. Yield = 1.27 cu. ft./sk. Weight = 12.6 lb/gal.

Second stage Lead will be cemented to surface with 563 cu. ft. (295 sx) 65:35 Poz + 3 lb/sk gilsonite + 4% gel + 1/4 lb/sk cello-flake. Yield = 1.91 cu. ft./sk. Weight = 12.6 lb/gal.

Second stage Tail will be cemented to 1,900' with 127 cu. ft. (100 sx) Class B Neat + 3 lb/sk gilsonite + 1/4 lb/sk cello-flake. Yield = 1.27 cu. ft./sk. Weight = 12.6 lb/gal.

Conventional centralizers will be set on the bottom two joints and every second joint to 4,200'.

5. MUD PROGRAM

<u>RANGE</u>	<u>MUD TYPE</u>	<u>WEIGHT</u>	<u>VISCOSITY</u>	<u>WATER LOSS</u>	<u>ADDITIVES</u>
0' - 2,000'	Fresh	8.5-8.8	28	NC	Gel, lime
2,000'-5,500'	Fresh	8.5-8.8	35	10 cc	Gel, soda ash, LCM

6. CORING, TESTING, & LOGGING

No cores or DSTs are planned. Induction/GR, cement bond, and density logs will be run from TD to surface.

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7. DOWN HOLE CONDITIONS

No abnormal pressures, temperatures, nor hydrogen sulfide are expected. Maximum pressure will be $\approx 2,200$ psi.

8. OTHER INFORMATION

The anticipated spud date is March 25, 2000. It is expected it will take about ten days to drill and two weeks to complete the well.

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Surface Use Plan

1. DIRECTIONS & EXISTING ROADS (See Pages 11 & 12)

From US 64 in Farmington, go north 14.5 mi. on NM 170 to a red school
Then turn right and go east 3.6 mi. on NM 574 to a yellow gate
Then turn right and go south 1.2 mi. on a dirt road
Then turn left and go southeast 1.3 mi. on a dirt road
Then turn left and go southeast 0.7 mi. on a dirt road
Then turn right and go south 100' on a dirt road
Then turn right and go west 50' on an orange flagged route to the well

Roads will be maintained to a standard at least equal to their present condition. The BLM right-of-way application for Marathon's Ohio F 1 C APD will also serve this APD.

2. ROADS TO BE UPGRADED & BUILT (See Page 12)

About 100' of new road will be built. Road will be crowned and ditched with a 15' wide running surface. Maximum disturbed width will be 25'. A minimum 18" x 50' CMP culvert will be placed at the east end of the new road. No cattleguard is needed. Maximum cut or fill is 2'. Maximum grade is 3%.

3. EXISTING WELLS (See Page 12)

Fifteen gas wells and one P&A well are within a mile radius according to NM Oil Conservation Division records in Santa Fe reviewed on December 10, 1999. There are no water, oil, or injection wells within a mile.

Marathon Oil Company
Ohio E 1 C
660' FSL & 1970' FEL
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4. PROPOSED PRODUCTION FACILITIES (See Page 15)

A 300 bbl oil tank, 30 barrel water tank, meter run, and three phase separator will be installed on the pad. Surface equipment will be painted a flat juniper green color.

A 3" OD steel Schedule 40 Grade X-42 welded steel natural gas pipeline will be laid 1,569.8' northeast to and existing Marathon pipeline. Operating pressure = 20 psi. Test pressure = 1000 psi. Burst pressure >2000 psi. Pipe will be pressure tested with air or nitrogen. Wall thickness ≥ 0.2016 ". Burial depth ≥ 30 ". The route will be posted with intervisible markers. All of the route is on lease.

5. WATER SUPPLY

Water will be trucked from a private water source in Farmington.

6. CONSTRUCTION MATERIALS & METHODS

NM One Call (1-800-321-ALERT) and BLM will be notified before construction starts. The top 6" of soil will be stockpiled in a pile west of the pit. A diversion ditch will be cut along the south side of the pad. Brush will be piled at the east corners of the pad to act as sediment filter traps. A minimum 10 mil plastic liner will be installed in the reserve pit.

7. WASTE DISPOSAL

All trash will be placed in a portable trash cage. It will be hauled to the county landfill. There will be no trash burning. Once dry, contents of the reserve pit will be buried in place. Human waste will be disposed of in chemical toilets and

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hauled to an approved dump station.

8. ANCILLARY FACILITIES

There will be no air strips or camps. Camper trailers will be on location for the company man, tool pusher, or mud logger.

9. WELL SITE LAYOUT

See Pages 13 and 14 for depictions of the well pad, cross section, cut and fill diagram, reserve pit, trash cage, access onto the location, parking, living facilities, and rig orientation.

10. RECLAMATION

Reclamation starts once the reserve pit is dry. It usually takes a year for a reserve pit to fully evaporate, at which point it will be backfilled. The pad and backfilled pit will be recontoured to a natural appearance. Soil, brush, and trees will be evenly spread over disturbed areas. Disturbed areas will be ripped or harrowed. A BLM woodland seed mix #3 will be drilled between July 1 and September 15. If broadcast, the rate will be doubled. A harrow or cable will be dragged over the area to assure seed cover.

If the well is a producer, then the reserve pit and any other areas not needed for workovers will be reclaimed as previously described.

11. SURFACE OWNER

All construction is on BLM surface.

Marathon Oil Company
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12. OTHER INFORMATION

The nearest hospital is a 30 minute drive away in southwest Farmington.

13. REPRESENTATION

Anyone having questions concerning the APD should call:

Brian Wood, Consultant
Permits West, Inc.

37 Verano Loop
Santa Fe, NM 87505

(505) 466-8120

FAX: (505) 466-9682

Cellular: (505) 699-2276

Field representatives will be:

Gary Doneghey
Marathon Oil Company
P. O. Box 1439
Farmington, NM 87499
(505) 326-2783

Kirk Spilman
Marathon Oil Company
P. O. Box 552
Midland, Tx. 79702-0552
(915) 682-1626

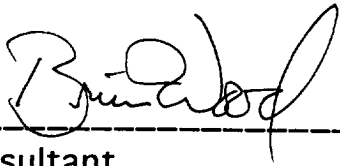
Marathon Oil Company has the necessary consents from the proper lease owners to conduct lease operations in conjunction with this well. Bond coverage pursuant to 43 CFR 3104 for lease activities and operations is being provided by Marathon Oil Company.

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with operations proposed herein will be performed by Marathon Oil Company

Marathon Oil Company
Ohio E & C
660' FSL & 1970' FEL
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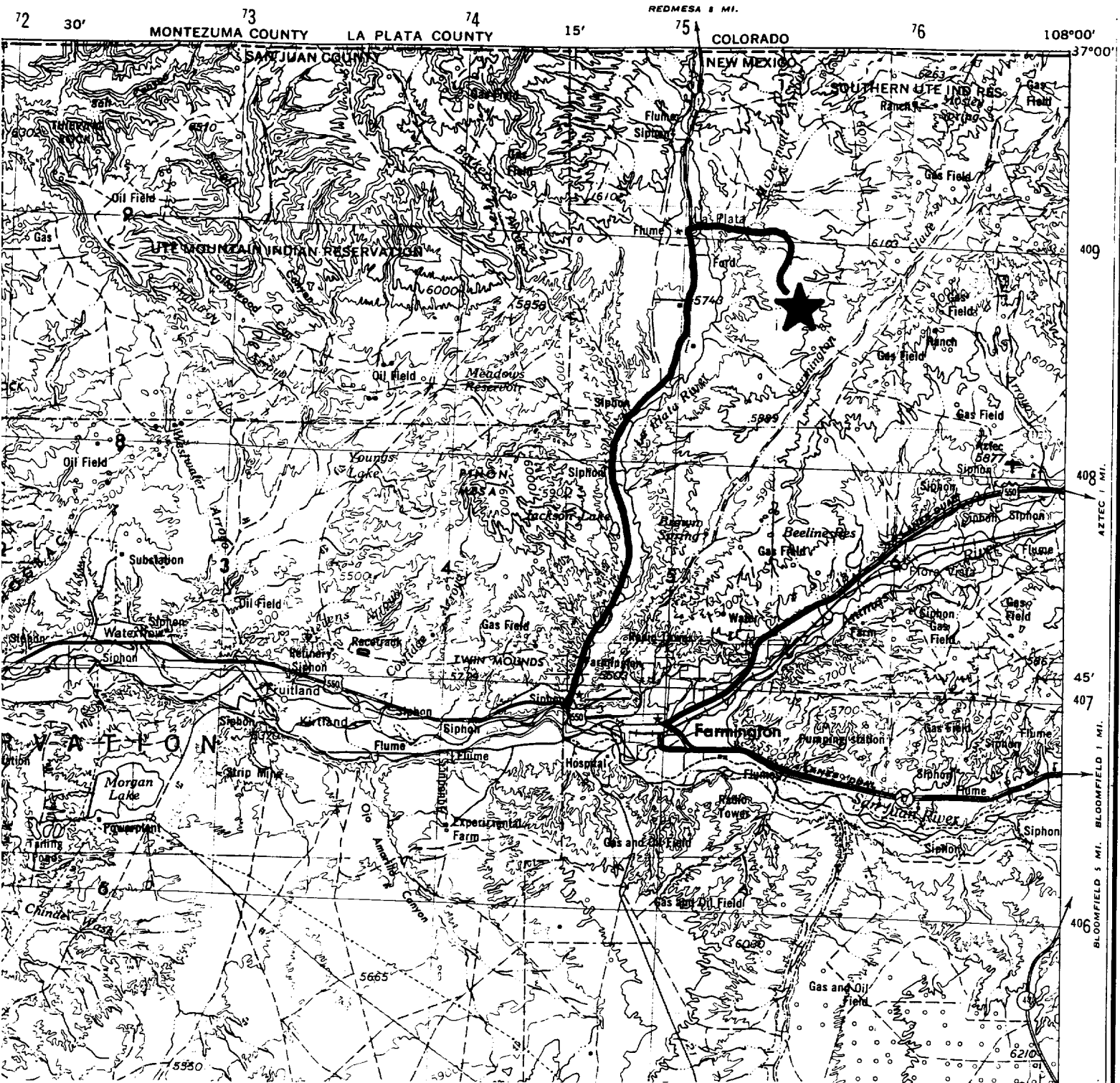
and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.



Consultant

February 5, 2000
Date

Marathon Oil Company
 Ohio E 1 C
 660' FSL & 1970' FEL
 Sec. 18, T. 31 N., R. 12 W.
 San Juan County, New Mexico



PROPOSED WELL:

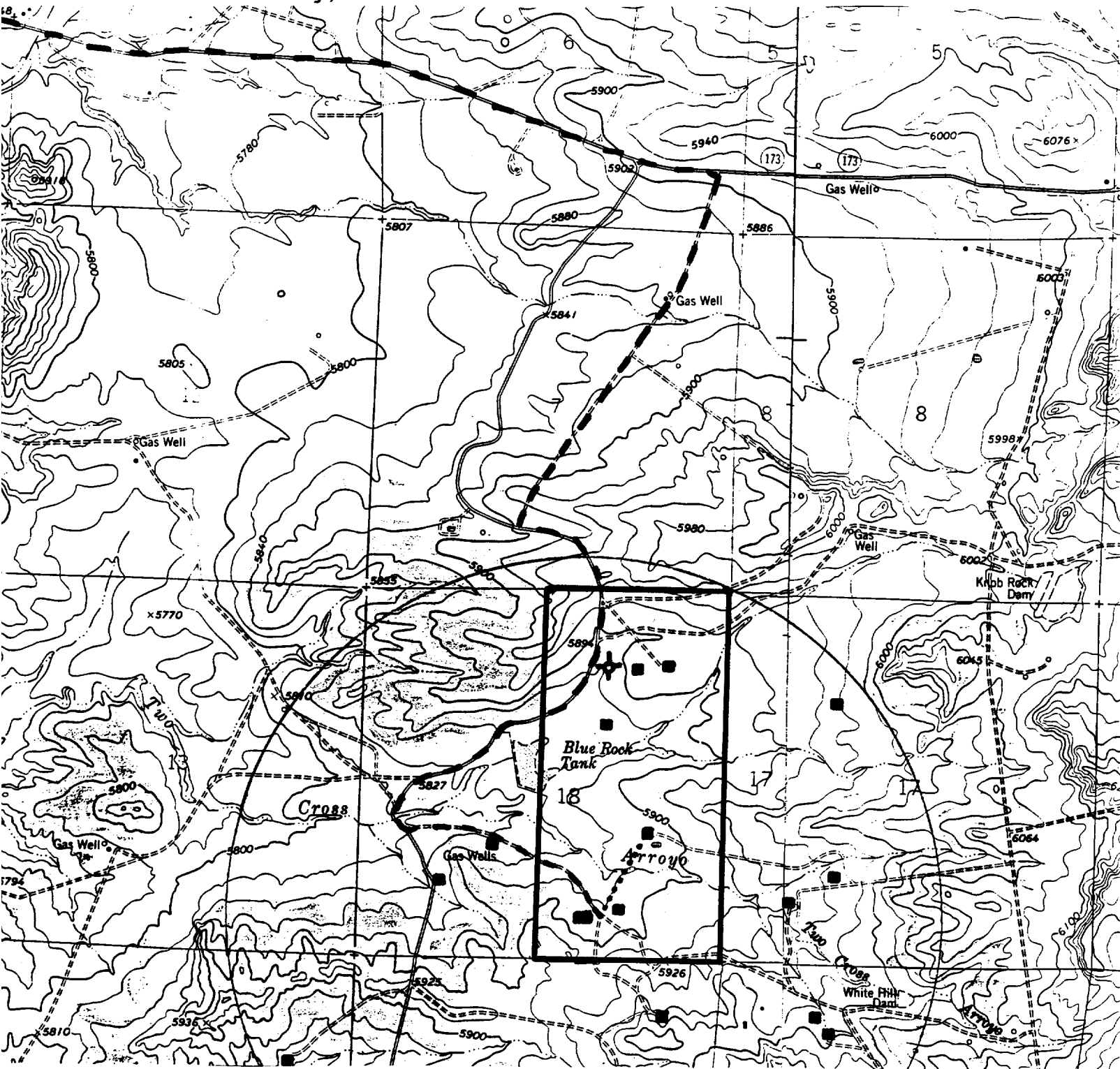


ACCESS ROUTE:



Marathon Oil Company
Ohio E 1 C
660' FSL & 1970' FEL
Sec. 18, T. 31 N., R. 12 W.
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PROPOSED WELL: ■

EXISTING WELL: ■

LEASE LINE: —

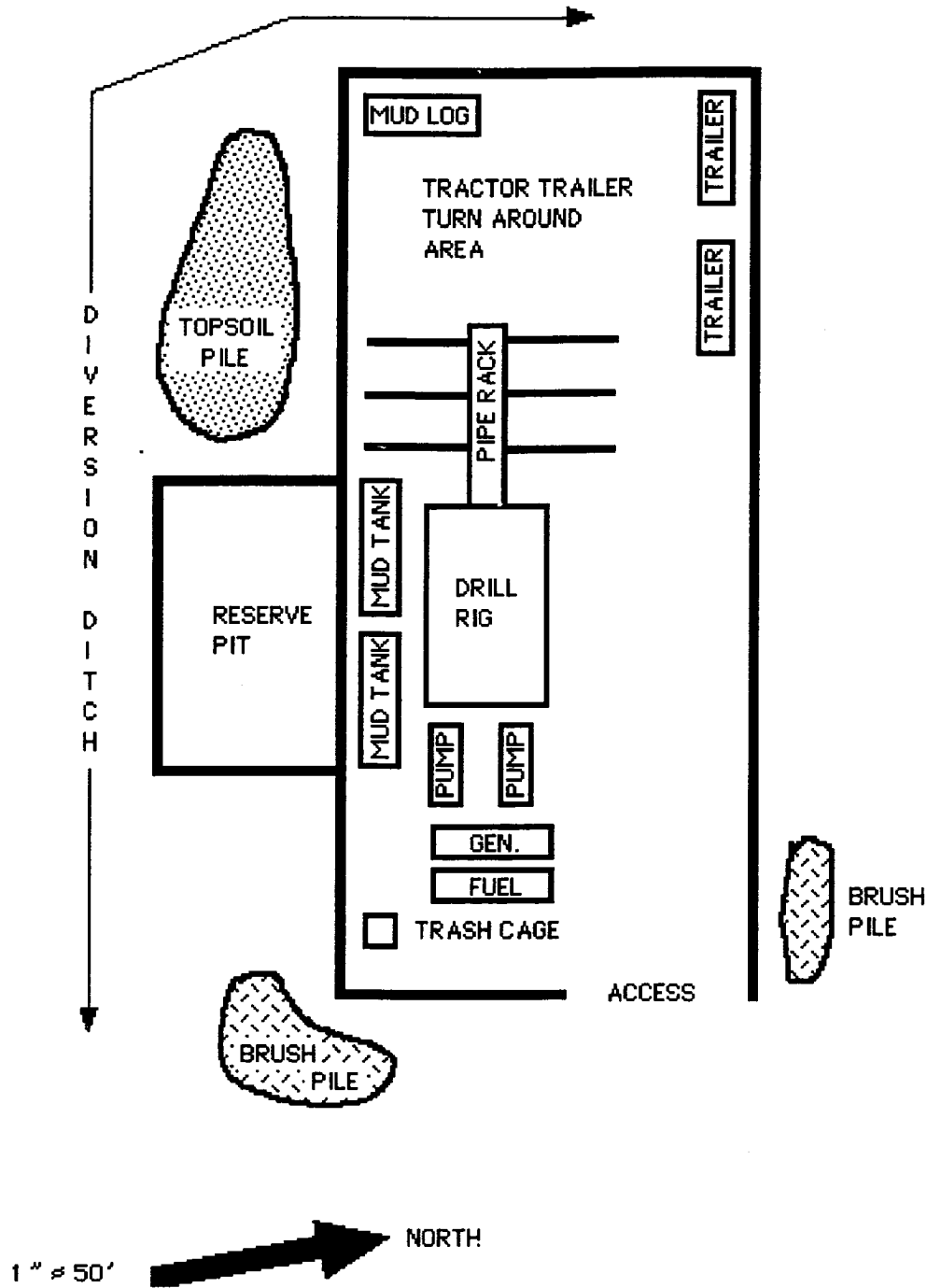
EXISTING ROAD: - - -

PROPOSED PIPELINE: . . .

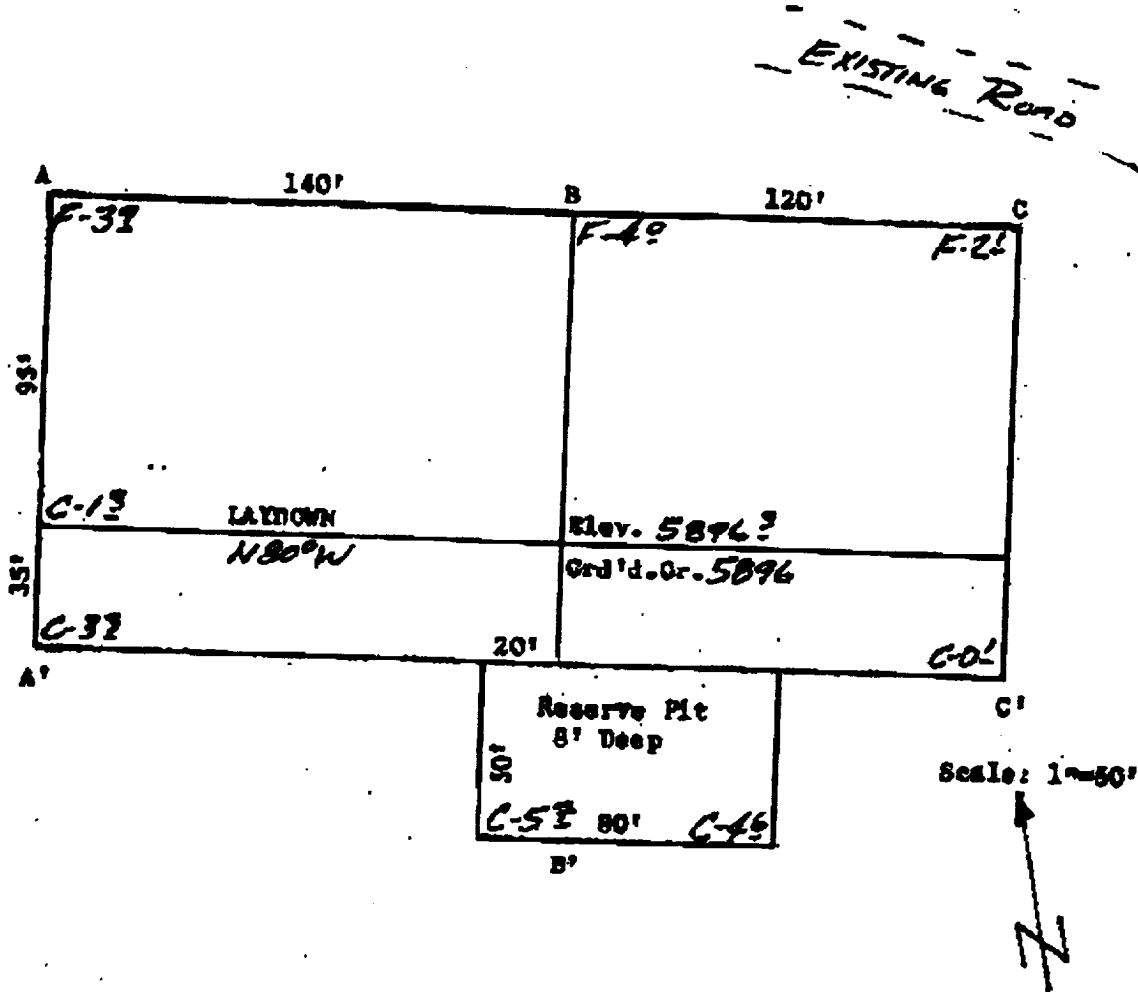
PERMITS WEST INC.
PROVIDING PERMITS for LAND USERS

Marathon Oil Company
Ohio E 1 C
660' FSL & 1970' FEL
Sec. 18, T. 31 N., R. 12 W.
San Juan County, New Mexico

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MARATHON OIL COMPANY
OHIO "E" #1-C
660' FSL & 1970' FEL
Sec. 18, T31N, R12W, NMPN
San Juan Co., NM



A-B		Vert. 1" = 30'	Horiz. 1" = 100'	C/L	
5900					
5890					
B-C					
5900					
5890					
C-D					
5900					
5890					

MARATHON OIL COMPANY

SW SE SEC. 18, T 31 N, R 12 W, NMPM

SAN JUAN CO., NM

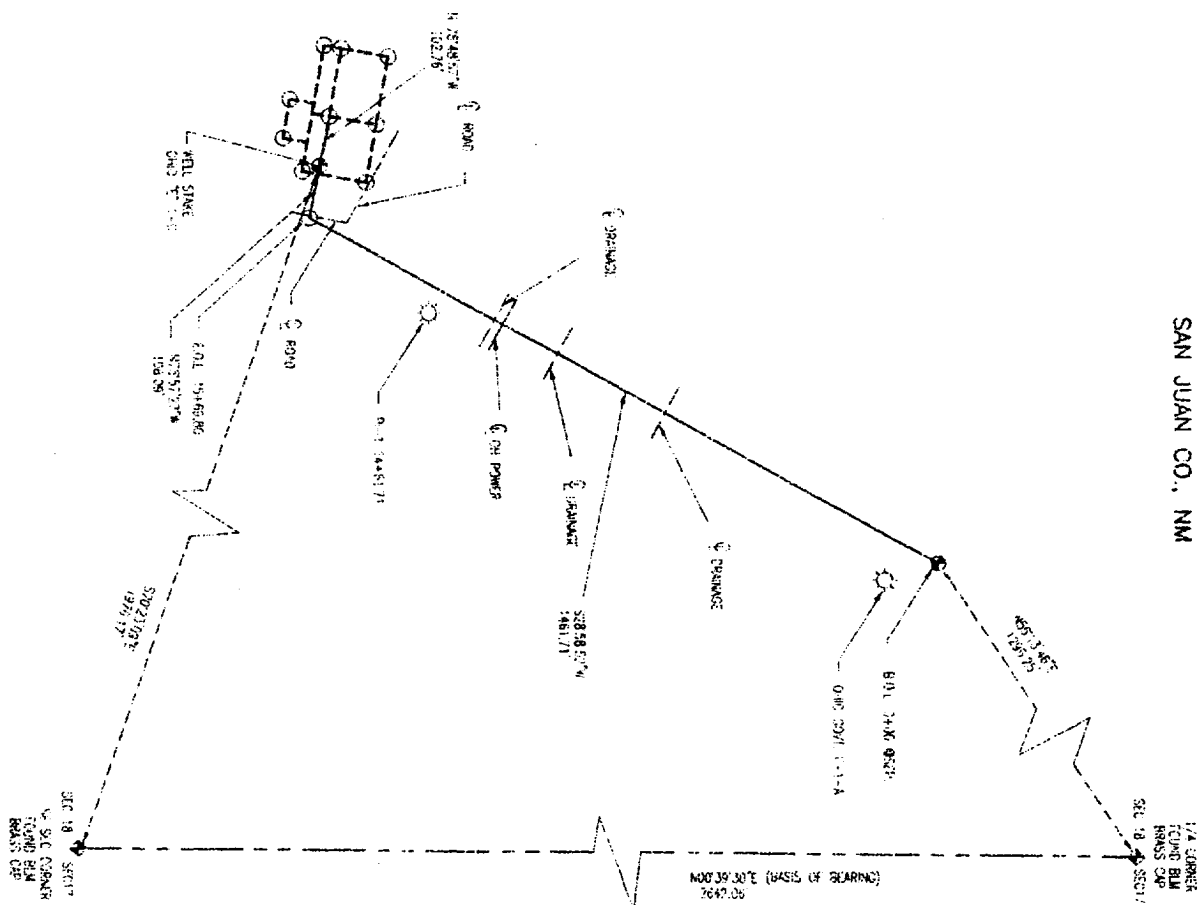
12	7	8
11	<p>SURVEY AREA</p>	17
24	19	20

三、

— 4 —

BEARINGS ARE EASID UPON
THE EAST LINE OF THE MOUNTED
1/2 OF SECTION 18, MOUNTED
BY A BLW BRASS CAP AT THE NE 1/4
CORNER OF SECTION 20 AND A
BLW BRASS CAP AT THE SOUTHEAST
CORNER OF SEC. 18 BEARING N 00°33'30"E
SHOWN HEREON.

◆	POINT BY PRESS CAP
- - -	SECTION LINE
—	POLYLINE
☼	FIELD HATCH
○	POINT OF INTERSECTION
▽	MILL SCALE SYMBOL
I	
●	BOUNDING BOX OF LINE



NOO 39 30'E (BASIS OF BEARING)
7642.18'

PI CHART

001 0100 0 SEP.
 0285952 W 1461.71
 01-1 4-16.71
 9/85727 W 108.09
 05+69.80
 001

2007 年 4 月 23 日 星期三

SCALE : 2:30

THE

20


CERTIFICATE OF SURVEY

WILLIAM F. WANNING II, DO HEREBY CERTIFY THAT I CONDUCTED, AND AM RESPONSIBLE FOR, THE SURVEY SHOWN HEREON, AND THAT THE SURVEY MEETS WITH THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.

WILLIAM F. WANNING II
 REGISTERED SURVEYOR
 NO. 10000
 STATE OF NEW MEXICO

UNLESS SIGNED, SEALED AND DATED THIS IS A PRELIMINARY PLAN

No.	DATE	REVISION

 Flowers Elevation Co.,

NAKATHUN OIL COMPANY
P.O. BOX 552

C. ENT

PROPOSED PIPELINE FOR MARATHON OIL COMPANY

Scale : 1"=200'
Surveyed By : W. MAHARVE
Drawn By : J. PANGE

望