

To supplement USGS Form 9-331C "Application for Permit to Drill, Deepen or Plugback", the following additional information is submitted to comply with USGS Order NTL-6.

Operator: Atlantic Richfield Company
Lease & Well No: West Red Lake Unit #32
Location: Unit Letter H
Section 8-18S-27E, Eddy County, N.M.
Lease, New Mexico LC-054205
Development well x Exploratory well _____

1. See Well Location and Acreage Dedication Plat Form C-102.
2. See Form 9-331C for elevation above sea level of unprepared location.

3. The geologic name of the surface formation is:

Tertiary with some Triassic exposed.

4. The type of drilling tools and associated equipment to be utilized will be: Rotary.

5. The proposed drilling depth will be 2300'.

6. The estimated tops of important geologic markers are:

Grayburg +1200'
San Andres +1755'

7. The estimated depths at which anticipated water, oil, gas or other mineral bearing formations are expected to be encountered are:

	+ 180- 195'	Water
	+ 870- 925'	Water
Grayburg	+ 1200- 1250'	Oil & Gas
Red Lake Queen San Andres	+ 1755- 2000'	Oil & Gas

8. The proposed casing program including the size, grade and weight-per-foot of each string has been indicated on Form 9-331C. All strings of casing will be New x Used _____.

9. See Form 9-331C for amount of cmt.

The type of cmt and additives for the surface casing will be: 125 sx Reg Fill-up cmt cont'g 2% CaCl, circ to surf.

The type of cmt and additives for the production string will be: 275 sx Reg Fill-up cmt, circ to surf.

10. The pressure control diagram is attached to Form 9-331C. The following additional information of the pressure control equipment is as follows:
- Size: 10"-900 Series Dbl Hyd Pipe & Blind Rams
Pressure Ratings: 3000# WP, 6000# T
Testing Procedure: Pressure up to 1500 PSIG before drilling out of casing.
Testing Frequency: Upon installation, daily and on all trips.

11. The type and characteristics of the proposed circulating medium or mediums to be employed for rotary drilling and the quantities and types of mud and weighting material to be maintained will be as follows:

0 - 200' Spud Mud
200 - 2300' Fresh Water

12. The testing, logging and coring programs will be:

Drill Stem Test

None

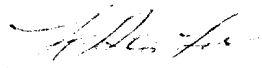
Logs

Gamma Ray-Comp Neutron
CNL-FDC logs
DLL-RXO
Epilog

Coring

None

13. There are no abnormal pressures or temperatures expected to be encountered.
14. The anticipated starting date will be 11/1/78 and completed approx 11/12/78
15. The auxiliary equipment to be used will consist of: Kelly cocks & a sub on floor w/full opening valve to be used when needed. Mud logging will be not be performed.



District Drilling Supt.

Multi-Point Surface Use and Operations Plan

Atlantic Richfield Company

Well No. 32, West Red Lake Unit

1980' FNL & 660' FEL Sec 8-18S-27E

Eddy County, New Mexico

Lease, New Mexico NM 04175 (c), LC-054205

Development Well

This plan is submitted with the Application for Permit to Drill the above described well. The purpose of the plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of necessary surface disturbance involved and the procedures to be followed in rehabilitating the surface after completion of the operation so that a complete appraisal can be made of the environmental effects associated with the operation.

1. Existing Roads:

A. Exhibit "A" is a portion of a map with highways showing the location of the proposed well as staked. From Artesia, go 5 miles east on Hwy 82, turn south before entering Riverside, N.M, go 5 miles on caliche county road to location on east side of road. Location is staked and red flagged.

B. Exhibit "B" is a plat showing all existing roads within a one mile radius of the wellsite and the planned access road.

2. Planned Access Roads:

A. No new road required.

B. Turnouts: None

C. Culverts: None

D. Cuts & fills: 3' cut on south, 3' fill on north

E. Gates, Cattleguards: None

3. Location of Existing wells:

A. Existing wells within a one mile radius are shown on Exhibit "B".

4. Location of Existing and/or Proposed Facilities:

Existing flowlines, water injection lines, tank battery and waterflood plant are shown on Exhibit "C". Location of the proposed surface production equipment if well is completed as a producer is shown on Exhibit "C". Any production equipment installed will be within existing battery and waterflood plant area. The proposed flow line is shown on Exhibit "C" and will be staked and flagged to be visible from one stake to the other.

5. Location & Type of Water Supply:

- A. Fresh water will be purchased from local contract water haulers. Contractor not selected.

6. Source of Construction Materials:

- A. Road and well pad construction materials will be furnished by a contractor. Any caliche permits or royalties to be paid will be responsibility of Contractor. Contractor will be Cone Construction Co, P. O. Box 204, Artesia, N.M. Caliche source will be from an existing pit located 360' FSL & 455' FWL Sec 36-17S-27E, Eddy County, N.M.

7. Methods of Handling Waste Disposal:

- A. Drill cuttings will be disposed of in the drilling pits.
- B. Drilling fluids will be allowed to evaporate in the drilling pits until pits are dry.
- C. Water produced during tests will be disposed of in the drilling pits. Oil produced during tests will be stored in test tanks until sold.
- D. Current laws & regulations pertaining to the disposal of human waste will be complied with.
- E. Trash, waste paper, garbage and junk will be buried in a separate trash pit and covered with a minimum of 24 inches of dirt. All waste material will be contained to prevent scattering by the wind. Location of trash pits is shown on Exhibit "D".
- F. All trash and debris will be buried or removed from the wellsite within 30 days after finishing drilling and/or completion operations.

8. Ancillary Facilities: none

9. Wellsite Layout:

- A. Exhibit "D" shows the relative location and dimensions of the well pad, mud pits, reserve pit, trash pit & location of major rig components.
- B. A 3' cut will be made on south side of wellsite and a 3' fill on the north side of wellsite.
- C. The reserve pit will be plastic lined and fenced.
- D. The pad and pit area has been staked and flagged.

10. Plans for Restoration of the Surface:

- A. After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. Pits will be filled and location cleaned of all trash and junk to leave the wellsite in an aesthetically pleasing a condition as possible.
- B. Any unguarded pits containing fluids will be fenced until they are filled.
- C. After abandonment of the well, surface restoration will be in accordance with the BLM and accomplished as expeditiously as possible.

11. Other Information:

- A. Topography: Land surface slopes gently west toward the Pecos River @ approx 100' the first mile and the remaining 1200' is flat.
- B. Soil: Soil is a chalk, sand, caliche.
- C. Flora & Fauna: The vegetative cover is generally sparse consisting of grease bush, some native grasses & wild flowers. The wildlife in the area is that typical of semi-arid desert land and includes coyotes, rabbits, rodents, dove, quail and occasional deer.
- D. Ponds & Streams: None within a mile radius.
- E. Residences and other structures: None
- F. Land Use: Grazing and hunting in season, and oil and gas production.
- G. Surface Ownership: Wellsite is on BLM surface.

12. Operator's Representative:

The field representative responsible for assuring compliance with the approved surface use and operations plan are as follows:

Name: LeRoy D. Lane
Address: Box 1710, Hobbs, New Mexico 88240

Office Phone: (505) 393-7163
Home Phone: (505) 393-7972

13. Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Atlantic Richfield Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

9-6-76
Date

J. H. Lee
District Drilling Supt.

R-27-E

5

4

County Road To Riverside
Abandoned Warehouse

Existing Tank Btty + Water Flood Plant

LC-036574(a)

LC-055383

LC-055383(a)

LC-070937

County Road

NM 0291330

LC 07093813

12
7/8
73.2

17
W.L.
30.1

N 04175(a)

W.L.
30

Flow Line

LC-054205

Transwestern Pl. - H.P. Gas

LC-054205

NM-031186

7/2
96.8

10/4
52

14
W.L.
25.4

19
2/0
15.7

20
S.L.
6.7

23
3/1
50.3

NM 01795(c)
LC-054205

3/1
50.3

UNIT BOUNDARY
BOPD | BWPD (CURRENT AS
MBO OF 12-77)

PROPOSED LOCATION

WATER INJECTION WELL

PRODUCER

LEGEND

10
6/2
45.8

16
W.L.
49.4

19
2/0
15.7

20
S.L.
6.7

23
3/1
50.3

NM 01795(c)
LC-054205

3/1
50.3

UNIT BOUNDARY
BOPD | BWPD (CURRENT AS
MBO OF 12-77)

PROPOSED LOCATION

WATER INJECTION WELL

PRODUCER

LEGEND

FEE

LC-067981

Atlantic Richfield Co.
Well No. 32 - West Red Lake Unit
1980' FNL + 660' FEL
Sec. 8-T18S-R27E, Eddy Co. N.M.

LC-04175

3/1
50.3

UNIT BOUNDARY
BOPD | BWPD (CURRENT AS
MBO OF 12-77)

PROPOSED LOCATION

WATER INJECTION WELL

PRODUCER

LEGEND

11
1/1
3.9

WEST RED LAKE UNIT
EDDY COUNTY, NEW MEXICO

RED LAKE QUEEN GRAYBURG

EDDY COUNTY, NEW MEXICO

LEGEND

11
1/1
3.9

Scale: 5-3/8" = 1 Mile

WEST RED LAKE UNIT
EDDY COUNTY, NEW MEXICO

RED LAKE QUEEN GRAYBURG

EDDY COUNTY, NEW MEXICO

LEGEND

R-27-E

2

Existing Tank Btly & Water Flood Plant

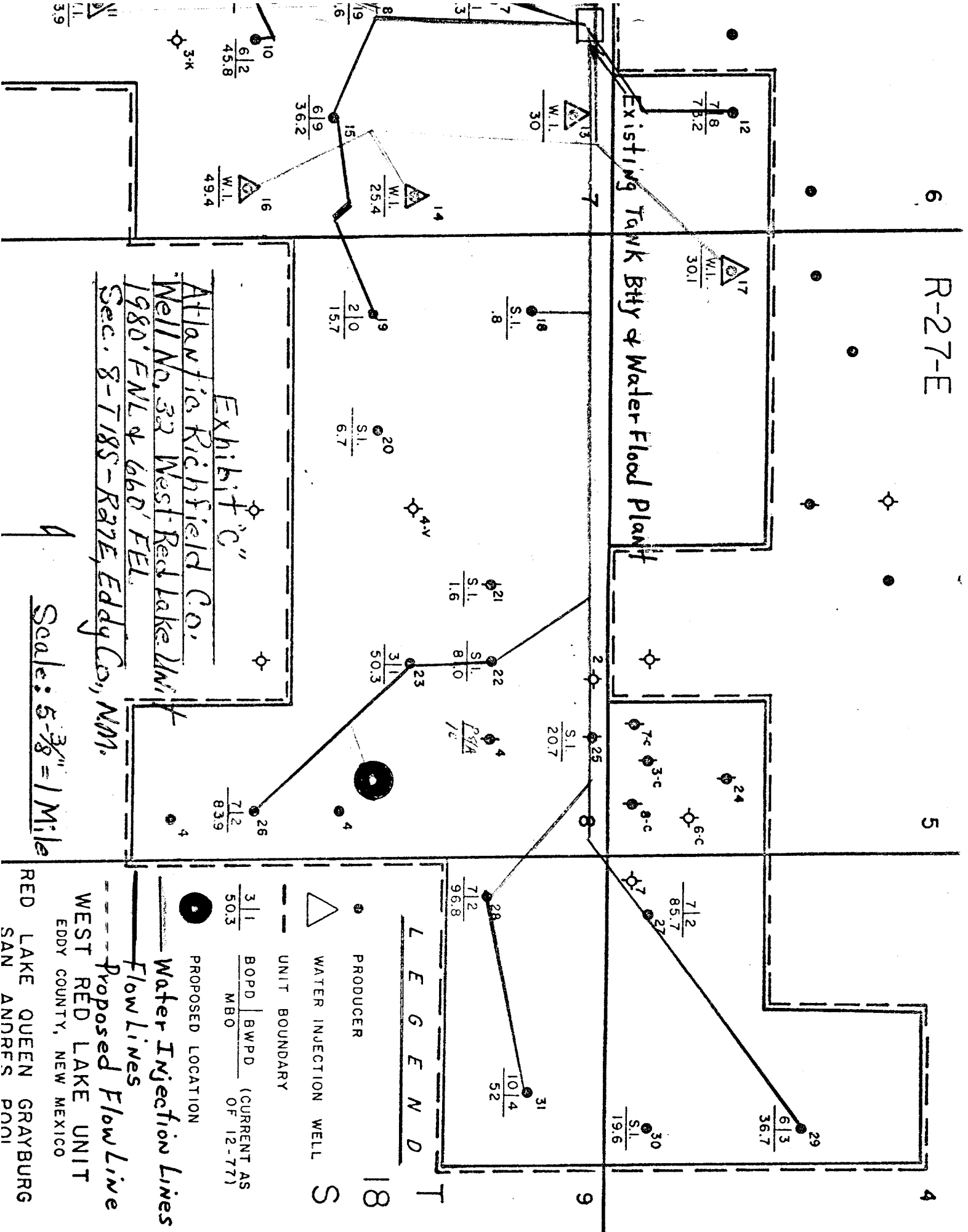


Exhibit "C"

Atlantic Richfield Co.

Well No. 33 West. Red Lake Minn.

1980' FNL & 660' FEL

Sec. 8-T185-R27E, Eddy Co., N.M.

Scale: $5\frac{3}{8}'' = 1 \text{ Mile}$

PROPOSED LOCATION

Water Injection Lines

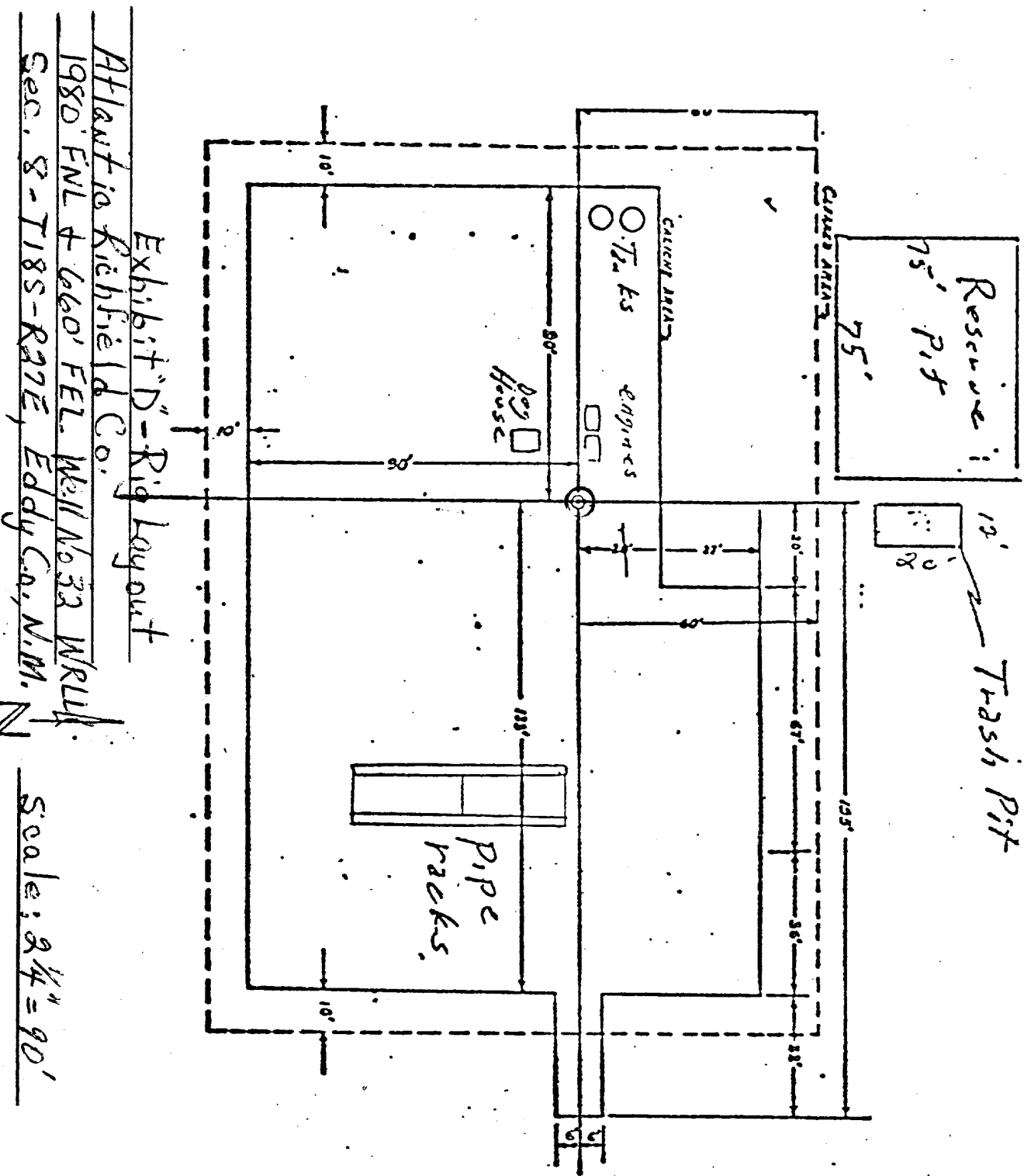
Flow Lines

Proposed Flow Line

WEST RED LAKE UNIT

EDDY COUNTY, NEW MEXICO

RED LAKE QUEEN GRAYBURG
SAN ANDRES POOL



SPECIFICATIONS-

A. LOCATION

1. CONTRACTOR SHALL FURNISH MALE, FCM
SPRING, AND CEMENT CALICHE INJECTION
SHALL BE 6" CONCRETE. MALE SHALL A
APPLIED AT THE APPROPRIATE DATE OF
DATE 1980 IN AREA CUTTING AT 1
AREA WITH CASER LINE SHALL BE 1000
WITH PAD.

B. ROAD WHEN APPLICABLE

1. ROAD SHALL BE BUILT IN THE RESERVATION AT
A. ROAD SHALL BE BUILT WITH CURBS AND 1
STEM AS TO ACCOMMODATE LOADED TRUCKS
B. ROAD SHALL BE COVERED WITH 6" CONCRETE
USING MALE AT THE RATE OF APPROX. ONE CU
YD 50 FT.
C. ATLANTIC SHALL FURNISH AT THE LOCAT.
D. CATTLE GUARD, TUBER SHED, AND POLE
CONTRACTOR SHALL INSTALL CATTLE GUARD,
LANDOWNERS SPECIFICATIONS.

C. ATTRA CALICHE FOR ALL TURNING ROAD

1. ATTRA CALICHE FOR ALL TURNING ROAD
BE ANTICIPATED AND LINEAR MEASUREMENT
BID SHALL INCLUDE SUCH EXTRA CALICHE
REQUIREMENTS.

D. GENERAL

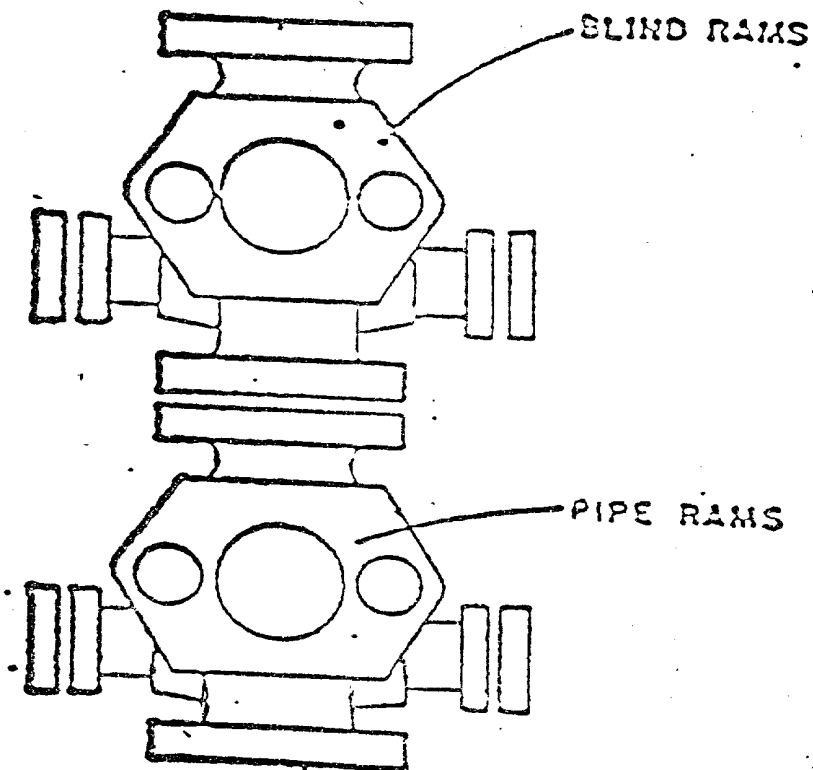
1. DRILLING MAT CONTAINS AN ESTIMATED
CU FOR 1000 MEASUREMENT.
2. CONTRACTOR SHALL BE RESPONSIBLE
ALL ROADS INCLUDING PIT ENTRAI
FEEL, IF ANY.
3. CILIAN TO BE BUILT WOOD FRAME.

BLUE PRINT RECORD		DATE		BY	
1	3/24/80	1980	3/24	1980	3/24
2	3/24/80	1980	3/24	1980	3/24
3	3/24/80	1980	3/24	1980	3/24
4	3/24/80	1980	3/24	1980	3/24
5	3/24/80	1980	3/24	1980	3/24
6	3/24/80	1980	3/24	1980	3/24
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96	3/24/80	1980	3/24	1980	3/24
97	3/24/80	1980	3/24	1980	3/24
98	3/24/80	1980	3/24	1980	3/24
99	3/24/80	1980	3/24	1980	3/24
100	3/24/80	1980	3/24	1980	3/24

Atlantic Richfield Company
Engineering and Construction Dept.

STANDARD DRILLING MAT
FOR WELLS LESS THAN 8000 F.

WELL NO. 33
WRL



ATLANTIC RICHFIELD COMPANY
Blow Out Preventer Program

Lease Name West Red Lake Unit

Well No. 32

Location 1980' FNL & 660' FEL
Sec 8-18S-27E, Eddy County

BOP to be tested before installed on well and will be maintained in good working condition during drilling. All wellhead fittings to be of sufficient pressure to operate in a safe manner.

Atlantic Richfield Company
 Well No. 33 West Red Lake Unit
 1980' ENL 4 660' FEL Sec. 8-T185-R37E
 Eddy County, NM

Scale: 1/2" = 1 Mile

