

Released Sept. 16, 1985

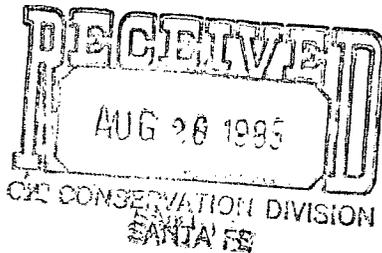
By DEC

NSL-2152
RULE-104 F(I)

EXXON COMPANY, U.S.A.

POST OFFICE BOX 1600, MIDLAND, TEXAS 79702-1600

PRODUCTION DEPARTMENT
MIDCONTINENT DIVISION



August 21, 1985

{ 1471' FSL }
{ 1908 FWL }

Unorthodox Location
Happy Valley Federal Com "B" #1
Section 28, T22S, R26E
Eddy County, NM

Underlined Happy Valley Morrow Pool
320 Acres S/2 Sect. 28.

New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, NM 87501

Dear Mr. Stamets:

Topographic Recon (Archaeological find, powerlines)

Exxon Corporation requests administrative approval of an unorthodox location for the subject well based upon ~~unorthodox~~ conditions. This well will be located nearer than 1980' from the nearest end boundary, and closer than 330' to the quarter-quarter section. This location was chosen because of a request from the BLM.

By copy (certified mail) of this letter, we are notifying all offset operators of our application to permit this well as an unorthodox location. If as an offset operator, you have no objections to this application, we request that you execute the attached waiver and forward a copy to Mr. Richard L. Stamets, Director, Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501, and return one copy to this office.

The offset operators as shown on the attached plat are:

- Amoco Production Company, Box 800, Denver, Colorado 80201
- ARCO Oil and Gas Company, Attn: David Douglas, Box 1610, Midland, Texas 79702
- Cities Service Oil and Gas Corporation, Box 1919, Midland, Texas 79702
- Chevron U. S. A., Inc., Attn: Land Dept., P. O. Box 1150, Midland, Texas 79702
- Cotton Petroleum Corporation, Attn: Ptar Migan, 3773 Cherry Creek Drive North, Denver, Colorado 80209
- ✓ HNG Oil Company, Box 2267, Midland, Texas 79702

Please grant administrative approval to drill this well as an unorthodox location. If you need additional information, please call me at 915 686-4406.

Sincerely,

Melba Knipling

Melba Knipling, Unit Head
NGPA and Permits

MK:dc

W A I V E R

Mr. Richard L. Stamets
Director, Oil Conservation Division
State of New Mexico
Energy and Minerals Department
P. O. Box 2088
Santa Fe, New Mexico 87501

This is to advise that the undersigned has been given due notice that Exxon Corporation has made application for administrative approval of an unorthodox location for Happy Valley Federal Com. B #1 in the Happy Valley (Morrow) Field.

We hereby waive any objections to the granting of the application for the above well which will be located:

1471' FSL and 1908' FWL of Section 28, T22S, R26E, Eddy County, New Mexico

Executed this _____ day of _____ 1985.

Company _____

By _____

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
 DRILL DEEPEN PLUG BACK

b. TYPE OF WELL
 OIL WELL GAS WELL OTHER SINGLE ZONE MULTIPLE ZONE

2. NAME OF OPERATOR
 Exxon Corporation

3. ADDRESS OF OPERATOR
 Box 1600, Midland, Texas 79702

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
 At surface
 1471' FSL and 1908' FWL (NE/SW)
 At proposed prod. zone

5. LEASE DESIGNATION AND SERIAL NO.
 NM-56520

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
 Happy Valley Federal Com "B"

9. WELL NO.
 1

10. FIELD AND POOL, OR WILDCAT
 Undesig.
 Happy Valley (Morrow)

11. SEC. T. R. M. OR B.L.L. AND SURVEY OR AREA
 Sec. 28-T22S-R26E

12. COUNTY OR PARISH
 Eddy

13. STATE
 NM

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 8 miles west of Carlsbad

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)
 1169'

16. NO. OF ACRES IN LEASE
 320

17. NO. OF ACRES ASSIGNED TO THIS WELL
 320

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
 None

19. PROPOSED DEPTH
 11900'

20. ROTARY OR CABLE TOOLS
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 3268' GL

22. APPROX. DATE WORK WILL START*
 9-1-85

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
26	22	94	80	Surface
20	16	65, 75	1750	Surface
14 3/4	10 3/4	40.5	2600	TOC 2000
9 7/8	7 5/8	29.7, 33.7 & 39	12000	TOC 9000

An unorthodox location exception is being requested.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, 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 Melba Kripleng TITLE Unit Head DATE 8-21-85

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

Exxon Lse. No. NM 56520

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-102
Supersedes C-128
Effective 1-1-65

State Lse. No. _____

WELL LOCATION AND ACREAGE DEDICATION PLAT

Federal Lse. No. _____

All distances must be from the outer boundaries of the Section.

Operator Exxon Corporation		Lease HAPPY VALLEY FED. COM. "B"		Well No. #1	
Unit Letter K	Section 28	Township 22 South	Range 26 East	County EDDY	
Actual Footage Location of Well: 1471 feet from the South line and 1908 feet from the West line					
Ground Level Elev. 3268'	Producing Formation Morrow	Pool Morrow	Dedicated Acreage: 320 Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes No If answer is "yes," type of consolidation Communitization is in process

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.

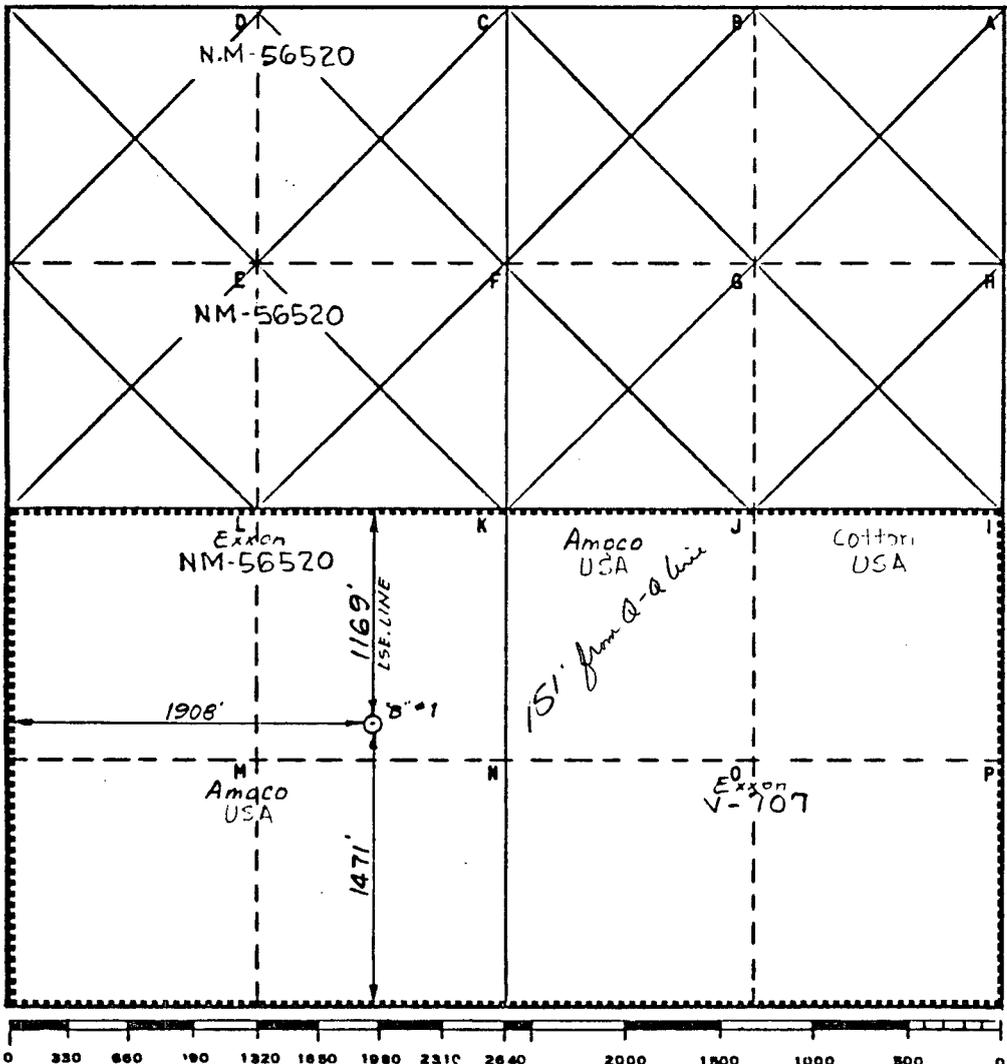
CERTIFICATION

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

Name Melva Kripling
 Position **UNIT HEAD**
 Company **Exxon Corporation**
 Box 1600 Midland, Texas
 Date 8-20-85

I hereby certify that the well location shown on this plat was plotted from field notes actually made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed 8-8-85
 Registered Professional Engineer and/or Land Surveyor
Bruce R. Pennell
 Certificate No. # 9062



8 Miles West of Carlsbad, New Mexico

C.E. Sec. File No. W-A-9052

DRILLING PLAN
HAPPY VALLEY FEDERAL COMM. B-1
SECTION 28, T-22-S, R-26-E
EDDY COUNTY, NEW MEXICO

1. Estimated tops of important geological markers:

Delaware	1,850'
Bone Springs	5,100'
Wolfcamp	8,600'
Canyon	9,800'
Strawn	10,000'
Atoka	10,500'
Morrow	10,900'

2. Estimated depths at which the top of anticipated water, oil, gas, or other mineral-bearing formations are expected to be encountered and the plan for protecting such resources:

Deepest F.W.	500'	Casing and Cement
Oil - Delaware	1,850'	Casing and Cement
Gas - Canyon	9,800'	Casing and Cement
Gas - Strawn	10,000'	Casing and Cement
Gas - Atoka	10,500'	Casing and Cement
Gas - Morrow	10,900'	Casing and Cement

3. Minimum specifications for pressure control equipment:

A. Wellhead Equipment:

A-Section	16"-8RD x 16-3/4"-3000psi
B-Section	16-3/4"-3000psi x 11"-3000psi
Tubing Head	11"-3000psi x 9"-5000psi
Tbg.Hd.Adp.	9"-5000psi x 2-9/16"-5000psi x 2-1/16"-5000psi
Tree	2-9/16"-5000psi x 2-1/16"-5000psi (for dual completion)

B. Blowout Preventers:

Refer to attached drawings and list of equipment. The SA BOP will be used on surface casing to approximately 2600'. The RRA will be used on intermediate casing from 2600' to 12,000'.

C. BOP Control Unit:

Unit will be hydraulically operated from a control unit, located at least 40 feet from the BOP stack.

D. Testing:

Refer to the attached "Equipment Testing and Crew Training Requirements."

4. Supplementary drilling equipment information:

A. Kelly Cocks:

Upper and lower installed on Kelly.

B. Safety Valve:

Full opening ball type to fit each size and type drill pipe in use will be available on rig floor at all times.

C. Otis "N" Nipple and Inside Safety Valve:

Nipple will be installed in drill pipe one stand above drill collars while drilling the production hole. A pump down safety valve will be available at all times.

D. Trip Tank:

Installed after setting surface casing to ensure that the hole stays full of fluid and to monitor the amount of fluid required to keep the hole full on trips.

E. Mud System Monitors:

A flow rate indicator will be installed at the flow line after setting surface casing. Pit volume totalizers will also be used when using the steel pit system.

F. Casing:

<u>STRING</u>	<u>SIZE/WEIGHT</u>	<u>HOLE SIZE</u>	<u>DEPTH INTERVAL</u>
Conductor	22"/94 ppf	26"	0 - 80'
Surface	16"/65,75 ppf	20"	0 - 1750'
Intermediate	10-3/4"/40.5 ppf	14-3/4"	0 - 2600'
Production	7-5/8"/29.7,33.7,39 ppf	9-7/8"	0 - 12000'

G. Cement:

<u>CASING</u>	<u>DEPTH</u>	<u>CEMENT TYPE</u>	<u>EST. TOC</u>
22"	80'	Ready Mix	Surf
16"	1750'	Class "C" + Gel	Surf
		Class "C" + CaCl ₂	1400'
10-3/4"	2600'	Class "C"	2000'
7-5/8"	12000'	Class "H"	9000'

5. Type and anticipated characteristics of drilling fluid:

<u>Depth Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Funnel Visc.</u>	<u>WL</u>	<u>pH</u>
0-1750'	FW	8.4-8.8	26-30	N.C.	N.C.
1750-2600'	FW	8.4-8.8	28-30	N.C.	10+
2600-9500'	Cut BW	9.0-9.5	28-30	N.C.	10+
9500-10700'	Sat'd BW	10.0-10.5	32-38	15-20	10+
10700-12000'	Sat'd BW	10.0-10.5	32-38	8-12	9-10+

6. Testing, Logging, and Coring:

1750'- TD	:	Mud Logger
1750'- TD	:	LDT-CNL
1750'- 2600':	}	DLL-MSFL
10300'- TD		
1750'- 2600':	}	Sidewall Cores
10300'- TD		

7. Abnormal pressure and other possible hazards:

- A. Bottom hole pressure is expected to be approximately 4800 psi.
- B. No abnormal pressure is anticipated.
- C. No H₂S is anticipated.

8. Any other facets of the proposed operation:

No special drilling operations are expected.

JLC:aff

SURFACE USE PLAN

Exxon Corporation
Happy Valley Federal Com. "B" #1
1471' FSL, & 1908' FWL, Section 28, T22S, R26E, N.M.P.M.
Lease No. NM-59378
Eddy County, New Mexico

1. EXISTING ROADS - Area map, Exhibit "A" is a reproduction of the West Carlsbad SE, Nov. '83, New Mexico U.S.G.S. 7.5' quadrangle. Existing roads are shown on this map.
 - A. Exhibit "A" shows the proposed location as staked.
 - B. From Carlsbad, New Mexico, go south 3.9 miles on U.S. 180, 62 to Eddy County Road #672. Travel west on Eddy County Road 3.4 miles to Eddy County Road #429, turn right and go 0.76 miles to access road. Turn left and travel 0.21 miles on access road to location.
 - C. The existing roads within a one mile radius are shown on Exhibit "A". The roads that will be used are all county roads and are maintained by the county.
 - D. Approximately 0.21 miles of existing road between Point "A" and the proposed location will require some minor upgrading to access the location. (See Exhibit "A")
2. PLANNED ACCESS ROADS - No new road construction will be needed to access the proposed location.
3. LOCATION OF EXISTING WELLS WITHIN A ONE MILE RADIUS
 - A. Water wells - William J. Gillock Water Well (abandoned), NW/SE Section 28, T22S, R26E.
 - B. Abandoned wells - none known.
 - C. Temporarily abandoned wells - none.
 - D. Disposal wells - none known.
 - E. Drilling wells - none.
 - F. Producing wells - ARCO, Hackberry Hills Unit No. 4, as shown on Exhibit "C" and C & K Petroleum West Airport Federal, as shown on Exhibit "C".
 - G. Shut-in wells - Exxon Happy Valley Com. No. 1, SW/NE Section 28, T22S, R26E.
 - H. Injection wells - none.

- I. Monitoring or observation wells for other resources - none known.
4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES
 - A. The location of production facilities will be submitted by Sundry Notice when the well is completed.
5. LOCATION AND TYPE OF WATER SUPPLY
 - A. Water will be purchased locally and will be either piped in lines laid on top of the ground or hauled over existing and proposed access routes to the location. No new roads will be built to haul water.
6. SOURCE OF CONSTRUCTION MATERIALS
 - A. Caliche will be used for location and road construction. It will be obtained from a Federal pit located in Section 20, T22S, R26E. This caliche pit has archeology clearance.
 - B. Caliche will be hauled down the existing road and proposed access routes.
7. WASTE DISPOSAL
 - A. Waste materials will be contained and disposed of as follows:
 1. Drill cuttings will be disposed of in the reserve pit.
 2. Trash, waste paper, and garbage will be contained in a trash pit, fenced with small mesh wire to prevent wind-scattering during storage and then burned; this pit is shown on the rig layout. Residue in the pit after completion of operations will be buried either within the pit or in the reserve pit by at least a 24" cover. When the rig moves out, all trash and debris left at the site will be contained to prevent scattering and will be either burned in the trash pit or buried at least 24" deep within 30 days unless ground freeze prevents burial.
 3. Salts that are not used in the drilling fluid will be removed from the location by the supplier.
 4. Sewage from trailer houses will drain into holes at least 10' deep, which will be covered until backfilled. An outdoor toilet will be provided for the rig crews and this area will be backfilled during clean up after the rig move-out.

5. Chemicals that are not used in the drilling and the completion of the well will be removed from the location by the supplier.
 - B. Drilling fluids will be allowed to evaporate in the reserve pit until the pit is dry enough for backfilling. Water produced during tests will be disposed of in the reserve pit. Oil produced during tests will be stored in test tanks until sold, at which time it will be hauled from site. In the event fluids in the pit do not evaporate in a reasonable period, fluid will be hauled by tank truck to an approved disposal site.
8. ANCILLARY FACILITIES
- A. No camps, airstrips, etcetera will be constructed.
9. WELL SITE LAYOUT
- A. Exhibit "B" (Scale 1" = 50') shows the proposed well site layout.
 - B. This exhibit indicates proposed location of mud, reserve, and trash pits; pipe racks and other major rig components; living facilities; parking area, and turn-in from the access road.
 - C. Mud pits in the active circulating system will be steel pits and the reserve pit is proposed to be unlined unless subsurface conditions encountered during pit construction indicate that lining is needed for lateral containment of fluids.
 1. If pit is lined, the material is a carbon black 6 mil low density polyethylene film. The material is run at 90° to the dike center and is double folded and stapled together. The edges are buried 12" deep along the top of the outside dikes, with sand bags placed to hold the interior of the liner in place.
10. RESTORATION OF SURFACE
- A. Upon completion of the operation and disposal of any trash and debris as discussed earlier, pits will be backfilled and leveled or contoured as soon as practical after drying time. Drill site soil will be distributed to extent available. Prior to leaving the drill site upon move-out, any pit that is to remain open for drying will be fenced and so maintained until backfilled and reshaped.
 - B. Exxon will rehabilitate road as per BLM recommendations.
 - C. Revegetation of the drill pad will comply with BLM requirements.

- D. Any oil on pits will be removed or otherwise disposed of to BLM approval.
- E. Rehabilitation operations will start in a timely manner after completion and will be completed as soon as is practical to BLM specifications.

11. OTHER INFORMATION

- A. The site is located on an arid, flat pasture. The vegetation is native brush and grasses. Soil is sandy.
- B. Surface use is grazing and is BLM administered. It is leased to William J. Gillock, Star Route 1, Box 102, Carlsbad, New Mexico 88220. 505/887-3991.
- C. An archeology search of the location area and access road has been conducted and the report forwarded to the BLM. Wooden laths have been placed along the south side of the access road to delineate the south extent of any grading activity in order to prevent any accidental damage to archeological features in the area.

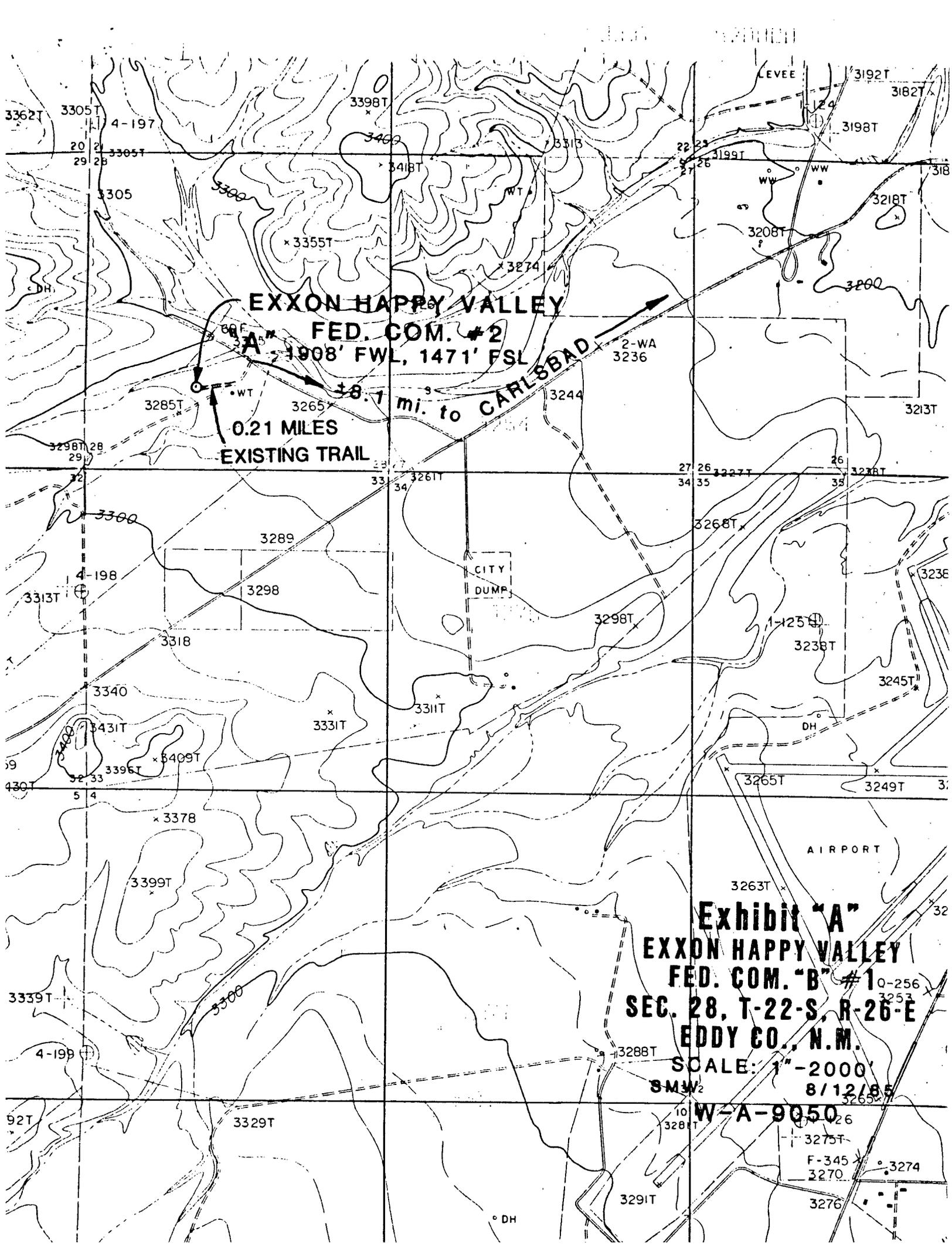
12. OPERATOR'S REPRESENTATIVE - Exxon's field representative for contact regarding compliance with the Surface Use Plan is:

M. C. Welborn
P.O. Box 10488
Midland TX 79702
915/686-4428

13. CERTIFICATION - 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 Exxon Corporation 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.

Date 8-20-85

Name, and Title M. C. Welborn OPERATIONS SUPERVISOR



EXXON HAPPY VALLEY

FED. COM. #2

1908' FWL, 1471' FSL

**0.21 MILES
EXISTING TRAIL**

18.1 mi. to CARLSBAD

**2-WA
3236**

**CITY
DUMP**

AIRPORT

Exhibit "A"
EXXON HAPPY VALLEY
FED. COM. "B" #1
SEC. 28, T-22-S, R-26-E
EDDY CO., N.M.

SCALE: 1"=2000'

SMW₂

8/12/85

W-A-9050

F-345
3270
3276

10-256
3253

32652

32

32

32

32

32

32

PLAN
SCALE: 1/2" = 50'
V-DOOR: SOUTH

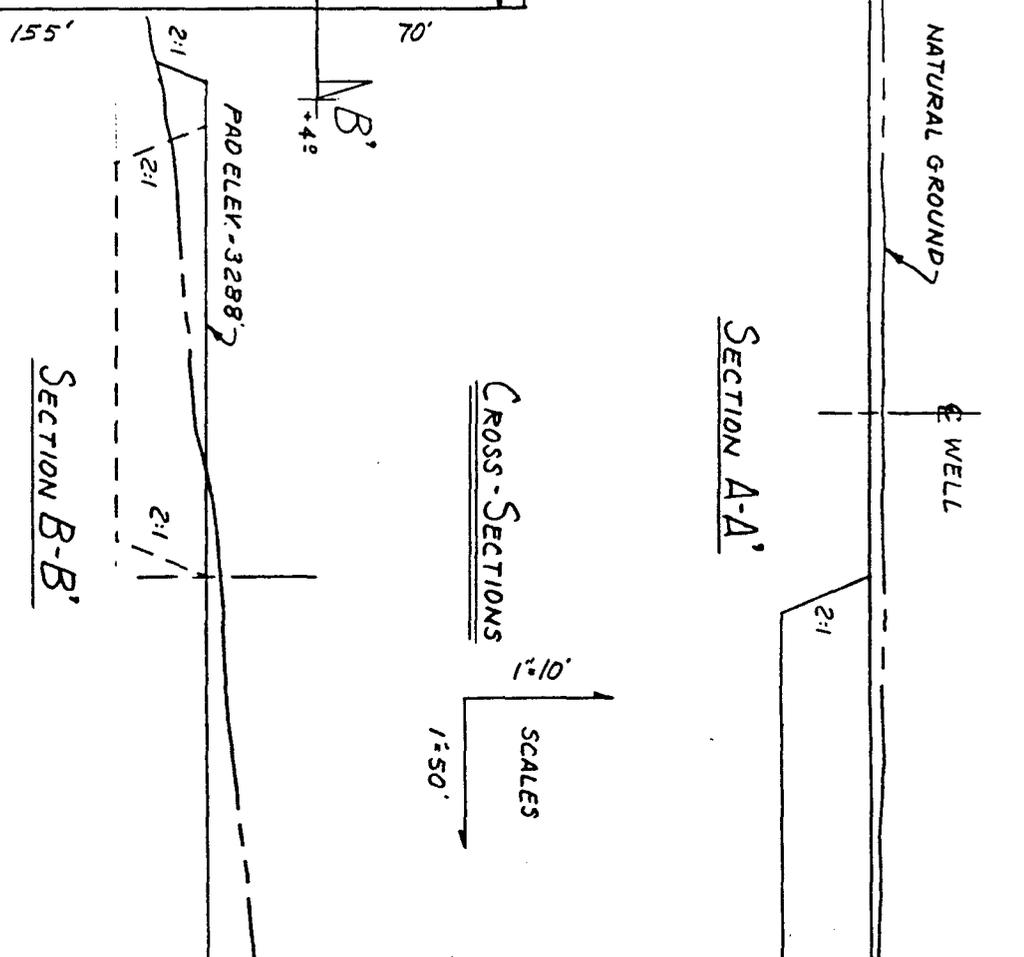
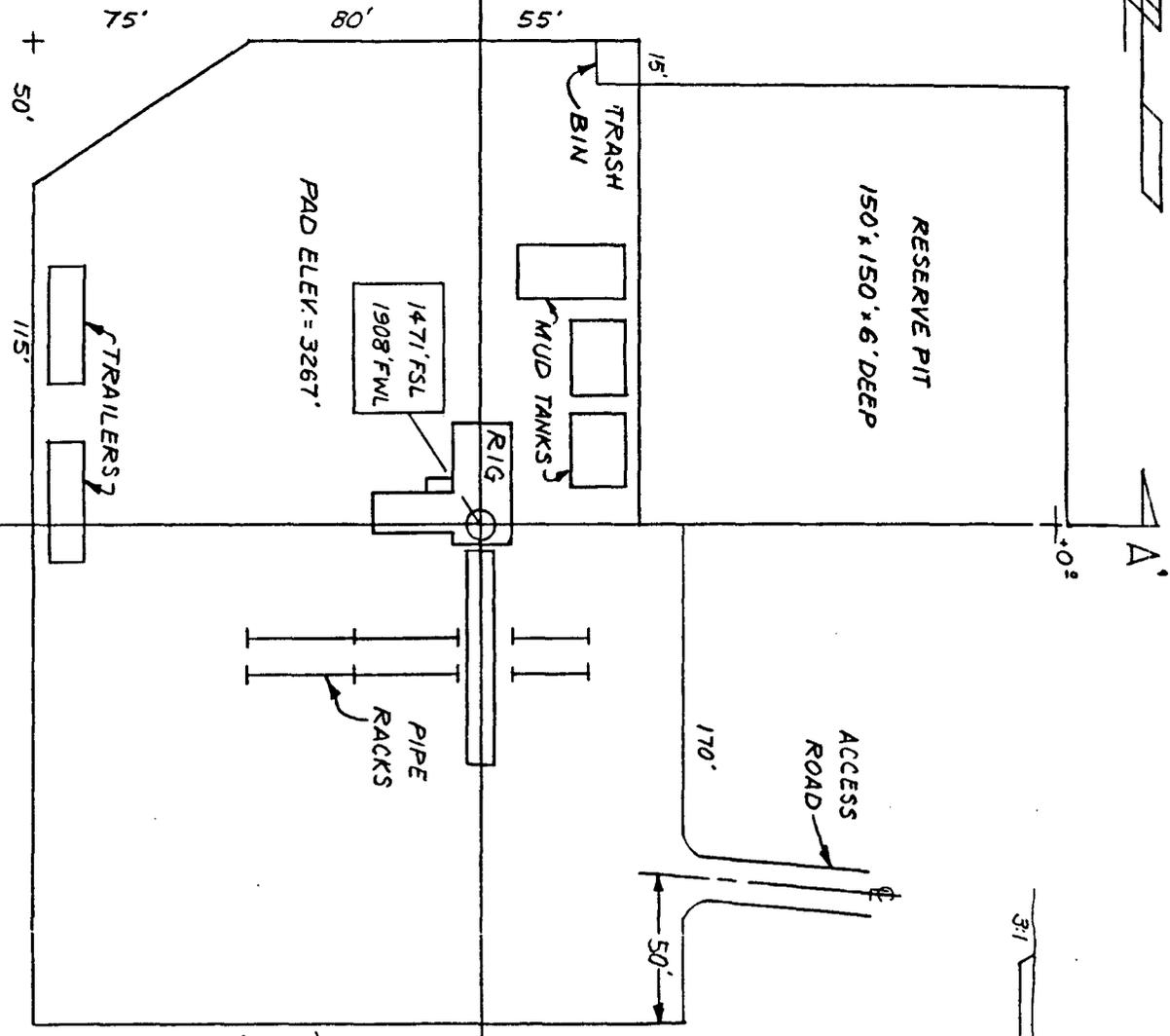


Exhibit "B"

<p>HAPPY VALLEY FED. COM. "B" # 1 SEC. 28, T-22-S, R-26-E EDDY CO., N.M.</p>		<p>EXXON COMPANY, USA PRODUCTION DEPT</p>	
<p>DRAWN: SWELCH</p>	<p>ENGR. SECTION: CIVIL</p>	<p>DATE: 3-12-85</p>	<p>JOB NO.</p>
<p>CHECKED:</p>	<p>APPROVED:</p>	<p>SCALE: Noted</p>	<p>WF</p>

CARLSB.

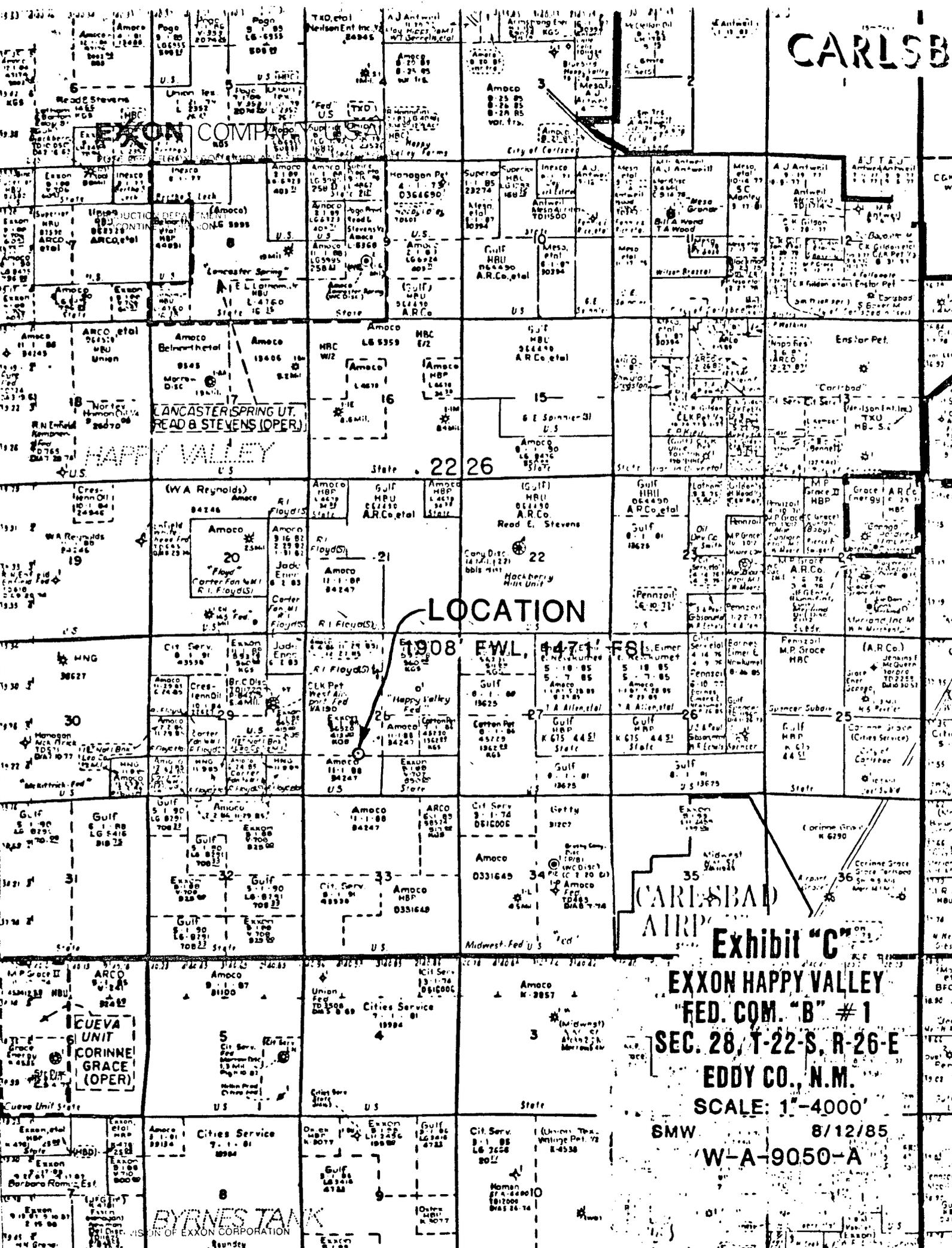
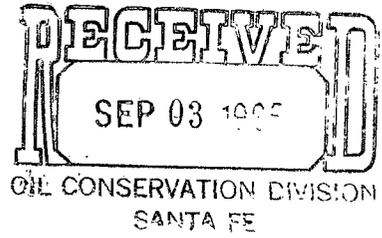


EXHIBIT "C"
EXXON HAPPY VALLEY
"FED. COM. B" #1
SEC. 28, T-22-S, R-26-E
EDDY CO., N.M.
SCALE: 1"=400'
SMW 8/12/85
W-A-9050-A

BYRNES TANK
 DIVISION OF EXXON CORPORATION

W A I V E R



Mr. Richard L. Stamets
Director, Oil Conservation Division
State of New Mexico
Energy and Minerals Department
P. O. Box 2088
Santa Fe, New Mexico 87501

This is to advise that the undersigned has been given due notice that Exxon Corporation has made application for administrative approval of an unorthodox location for Happy Valley Federal Com. B #1 in the Happy Valley (Morrow) Field.

We hereby waive any objections to the granting of the application for the above well which will be located:

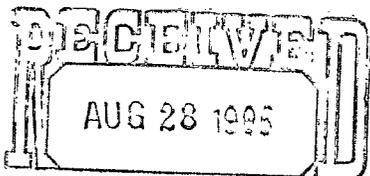
1471' FSL and 1908' FWL of Section 28, T22S, R26E, Eddy County, New Mexico

Executed this 28th day of August 1985.

Company HNG Oil Company

By Jerry L. Cherryhomes

Manager of Exploitation Geology



OIL CONSERVATION DIVISION
SANTA FE

W A I V E R

Mr. Richard L. Stamets
Director, Oil Conservation Division
State of New Mexico
Energy and Minerals Department
P. O. Box 2088
Santa Fe, New Mexico 87501

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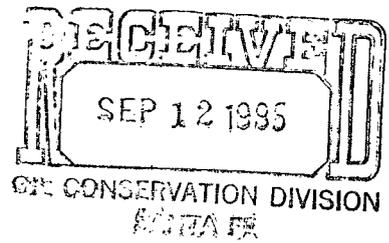
We hereby waive any objections to the granting of the application for the above well which will be located:

1471' FSL and 1908' FWL of Section 28, T22S, R26E, Eddy County, New Mexico

Executed this 26 day of August 1985.

Company ARCO Oil and Gas Co.

By [Signature]



W A I V E R

Mr. Richard L. Stamets
Director, Oil Conservation Division
State of New Mexico
Energy and Minerals Department
P. O. Box 2088
Santa Fe, New Mexico 87501

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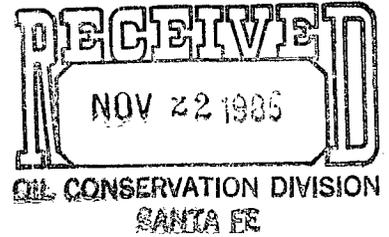
Executed this 9 day of Sept. 1985.

Company Cities Service Oil & Gas Corp.

By *Walter J. ...*

NSR - 2150

W A I V E R



Mr. Richard L. Stamets
Director, Oil Conservation Division
State of New Mexico
Energy and Minerals Department
P. O. Box 2088
Santa Fe, New Mexico 87501

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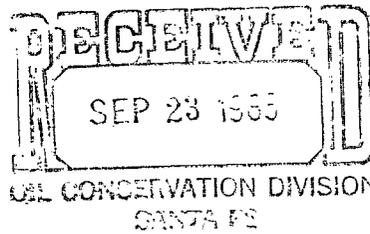
We hereby waive any objections to the granting of the application for the above well which will be located:

1471' FSL and 1908' FWL of Section 28, T22S, R26E, Eddy County, New Mexico

Executed this 20th day of November 1985.

Company AMOCO PRODUCTION COMPANY

By JR Barnett JDM
DIVISION PRODUCTION MANAGER



W A I V E R

Mr. Richard L. Stamets
Director, Oil Conservation Division
State of New Mexico
Energy and Minerals Department
P. O. Box 2088
Santa Fe, New Mexico 87501

NSL-2152

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1471' FSL and 1908' FWL of Section 28, T22S, R26E, Eddy County, New Mexico

Executed this 19th day of SEPTEMBER 1985.

Company CHEVRON U.S.A. Inc.

By R. C. Anderson