Form 3160-3
(July 1992)

N.M. Oil Cons. Div-Dist. 2
1301 W. Grand Avenue
Artesia, NM 88210

FORM APPROVED
OMB NO. 1004-0136
Expires: February 28, 1995

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
OCD - ARTESIA

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

5. LEASE DESIGNATION AND SERIAL NO.: NM-98797

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: ---

7. UNIT AGREEMENT NAME: --- 29056

8. FARM OR LEASE NAME, WELL NO.: SHAFER CANYON "15" FED. # 1

9. API WELL NO.: 30-015-32248

10. FIELD AND POOL, OR WILDCAT: INDIAN BASIN UPPER PENN ASSOC.

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: SECTION 15 T21S-R24E

12. COUNTY OR PARISH: EDDY CO. | 13. STATE: NEW MEXICO

1a. TYPE OF WORK: DRILL [XX] DEEPEN [ ]

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [XX] OTHER | SINGLE ZONE [X] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR: DEVON ENERGY PRODUCTION COMPANY L.P. (WALLY FRANK) 405-552-4595

3. ADDRESS AND TELEPHONE NO.: 20 NORTH BROADWAY, SUITE 1500 OKLAHOMA CITY, OKLAHOMA 73102-8260 405-552-4595
20305

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 60' FNL & 185' FEL SEC. 21 T21S-R24E EDDY CO. NM
At proposed prod. zone: 660' FSL & 660' FWL SEC. 15 T21S-R24E EDDY CO. NM

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: Approximately 28 miles Northwest of Carlsbad New Mexico
~~Approximat~~

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL
660'	320	320 W/2
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. ROTARY OR CABLE TOOLS**
NA	MD-8717' TVD-8500'	ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 4010' GR.

22. APPROX. DATE WORK WILL START*: WHEN APPROVED

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
25"	Conductor	NA	40'	Cement to surface with Redi-mix.
12¼"	H-40 9 5/8"	32.30	1800'	1450 Sx. circulate cement to surface
8 3/4"	HCL-80,J-55 7" L-80	23	8717' MD	550 Sx. estimate top of cement 3500'

1. Drill 25" hole to 40'. Set 40' of 20" conductor pipe and cement to surface with Redi-mix.

2. Drill 12¼" hole to 1800'. Run and set 1800' of 9 5/8" 32.30# H-40 ST&C casing. Cement with 1000 Sx. of Light Weight cement + additives, tail in with 450 Sx. of Class "C" cement + 2% CaCl, + ¼# Flocele/Sx., circulate cement to surface.

3. Drill 8 3/4" hole to 8717'. Run and set 8717' of 7" casing as follows: 3717' of 7" 23# HCL-80 LT&C, 4000' of 7" 23# J-55 LT&C, 1000' of 7" 23# L-80 LT&C casing. Cement with 300 Sx. of Light Weight Cament + additives, tail in with 250 Sx. of Class "H" Premium Plus cement + additives, estimate top of cement 3500'.

Carlsbad Controlled Water Basin

SUBJECT TO LIKE APPROVAL BY STATE

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

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 Joel Janica TITLE Agent DATE 01/24/02

(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:

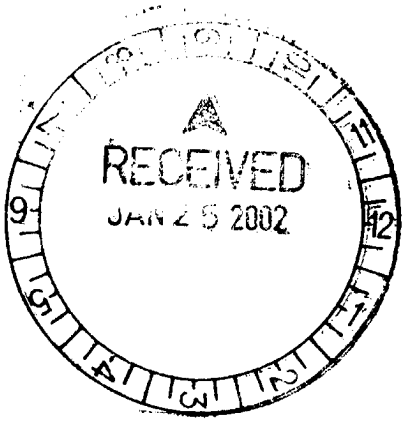
/s/ LESLIE A. THEISS

APPROVED BY _____ TITLE FIELD MANAGER DATE APR _ 3 2002

*See Instructions On Reverse Side

APPROVAL FOR 1 YEAR

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.


RECEIVED
JAN 25 2002

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 Department

OIL CONSERVATION DIVISION

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
	33685	INDIAN BASIN UPPER PENN (ASSOC)

Property Code	Property Name	Well Number
	SHAFER CANYON "15" FEDERAL	1

OGRID No.	Operator Name	Elevation
20305	DEVON ENERGY PRODUCTION CO, L.P.	4010'

Surface Location

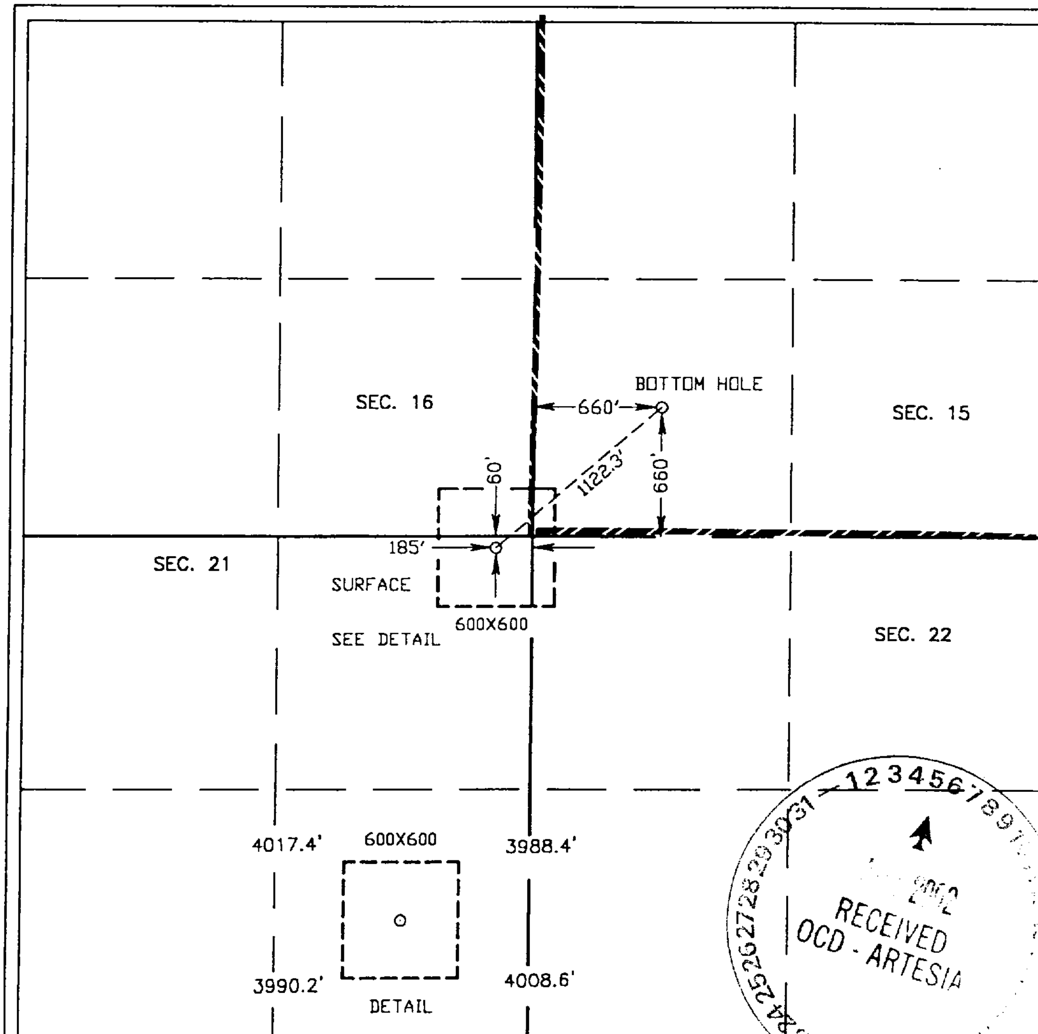
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	21	21-S	24-E		60	NORTH	185	EAST	EDDY

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
M	15	21-S	24-E		660	SOUTH	660	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			

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

Joe T. Janica
Printed Name

Agent
Title

01/24/02
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.

JANUARY 09, 2002
Date Surveyed AWB

Signature & Seal of Professional Surveyor

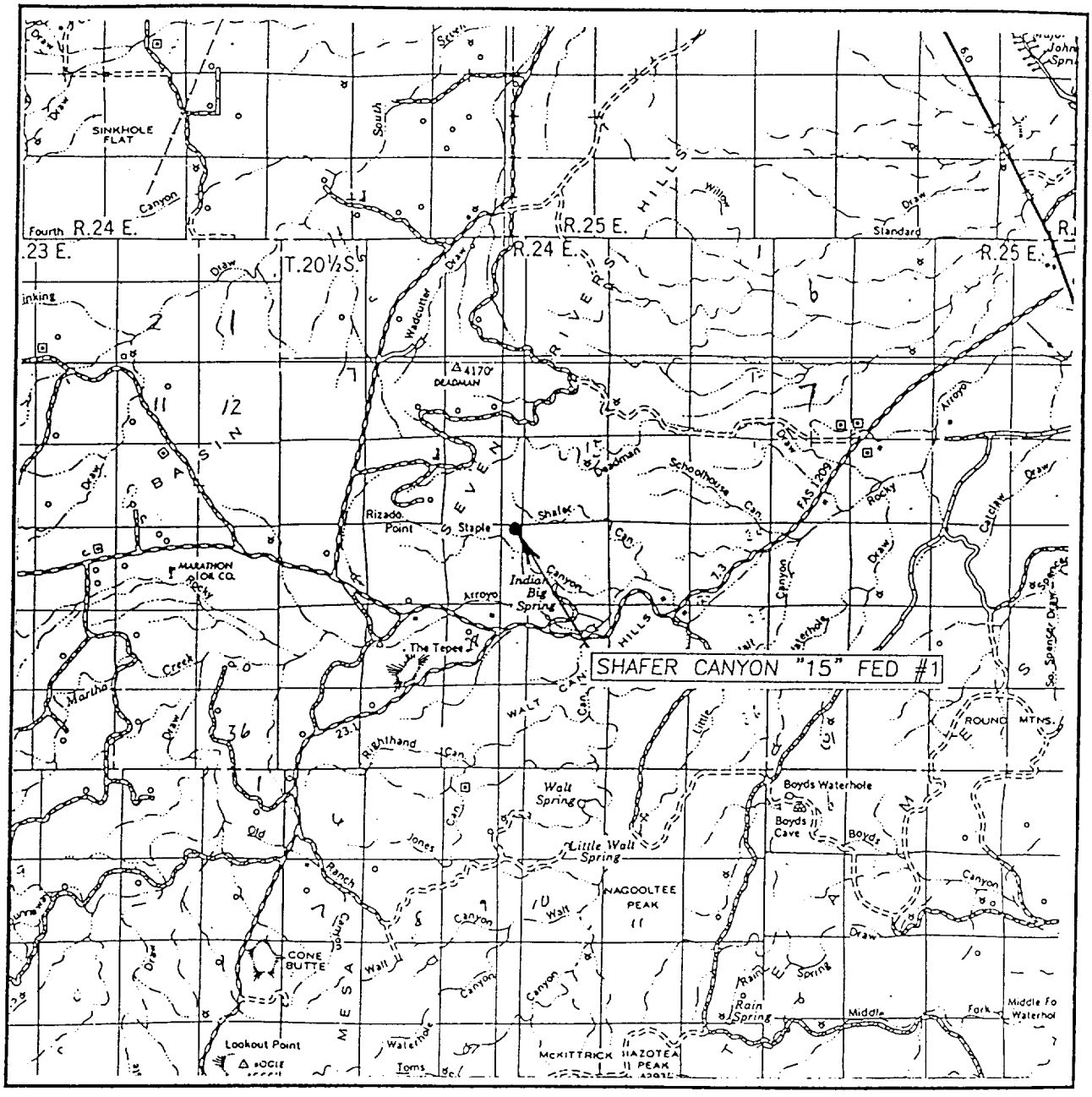
01/11/02

02.11.0024

Certificate No. RONALD J. EIDSON 3239
GARY EIDSON 12641

EXHIBIT "A"

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 21 TWP. 21-S RGE. 24-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 60' FNL & 185' FEL

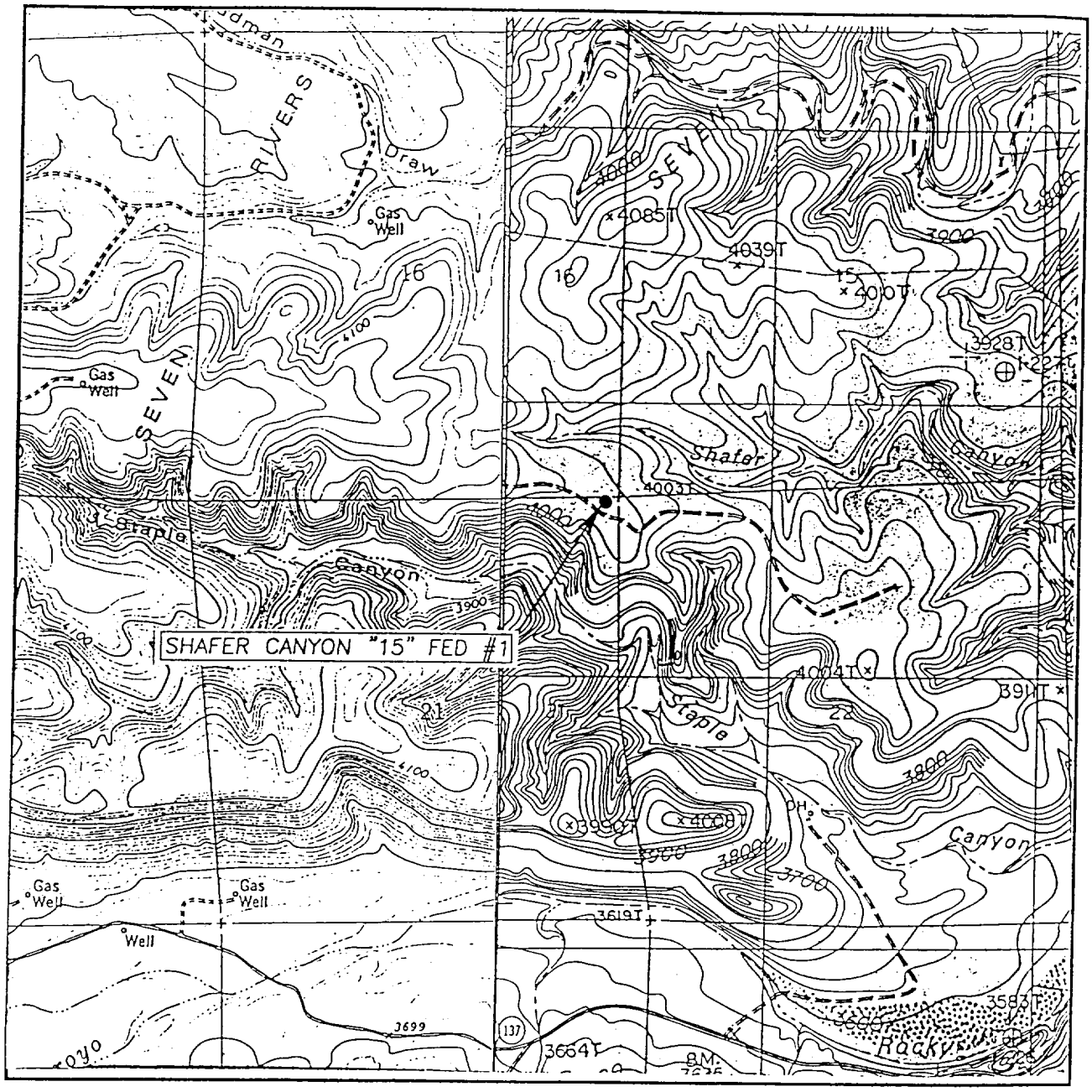
ELEVATION 4010'

OPERATOR DEVON ENERGY PRODUCTION CO, L.P.

LEASE SHAFER CANYON "15 FEDERAL

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

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 20'
AZOTEA PEAK N.M.
MARTHA CREEK

SEC. 21 TWP. 21-S RGE. 24-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 60' FNL & 185' FEL

ELEVATION 4010'

OPERATOR DEVON ENERGY PRODUCTION CO, L.P.

LEASE SHAFER CANYON "15 FEDERAL

U.S.G.S. TOPOGRAPHIC MAP
AZOTEA PEAK, MARTHA CREEK, N.M.

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

Well name:	**Shafer Canyon**
Operator:	**Devon Energy Production Company L.P.**
String type:	Surface
Location:	BHL 660' FSL & 660' FWL, Sec. 15, T21S, R24E

Design parameters:

Collapse
Mud weight: 8.500 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 1,029 psi
Internal gradient: 0.000 psi/ft
Calculated BHP 1,029 psi
Annular backup: 8.50 ppg

Minimum design factors:

Collapse:
Design factor 1.125

Burst:
Design factor 1.00

Tension:
8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.60 (B)

Tension is based on air weight.
Neutral point: 1,575 ft

Environment:
H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 89 °F
Temperature gradient: 0.80 °F/100ft
Minimum section length: 1,000 ft
Minimum Drift: 8.750 in

Non-directional string.

Re subsequent strings:
Next setting depth: 8,500 ft
Next mud weight: 9.000 ppg
Next setting BHP: 3,974 psi
Fracture mud wt: 11.000 ppg
Fracture depth: 1,800 ft
Injection pressure 1,029 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ($)
1	1800	9.625	32.30	H-40	ST&C	1800	1800	8.876	14886

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	795	1370	1.72	1029	2270	2.21	58.1	254	4.37 J

Prepared by: W.M. Frank, Devon Energy
Phone: (405) 552-4595
FAX: (405) 552-4621
Date: January 15,2002
Oklahoma City, Oklahoma

Remarks:
Collapse is based on a vertical depth of 1800 ft. a mud weight of 8.5 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

Well name:	**Shafer Canyon**
Operator:	**Devon Energy Production Company L.P.**
String type:	Production
Location:	BHL 660' FSL & 660' FWL, Sec. 15, T21S, R24E

Design parameters:

Collapse
- Mud weight: 9.000 ppg
- Design is based on evacuated pipe.

Burst
- Max anticipated surface pressure: 3,974 psi
- Internal gradient: 0.000 psi/ft
- Calculated BHP 3,974 psi
- Annular backup: 9.00 ppg

Minimum design factors:

Collapse:
- Design factor 1.125

Burst:
- Design factor 1.00

Tension:
- 8 Round STC: 1.80 (J)
- 8 Round LTC: 1.80 (J)
- Buttress: 1.60 (J)
- Premium: 1.50 (J)
- Body yield: 1.60 (B)

Tension is based on air weight.
- Neutral point: 7,562 ft

Estimated cost: 66,044 ($)

Environment:
- H2S considered? Yes
- Surface temperature: 75 °F
- Bottom hole temperature: 143 °F
- Temperature gradient: 0.80 °F/100ft
- Minimum section length: 1,000 ft

Directional Info - Build & Drop
- Kick-off point 4000 ft
- Departure at shoe: 1172 ft
- Maximum dogleg: 1.5 °/100ft
- Inclination at shoe: 0 °

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ($)
3	1000	7	23.00	L-80	LT&C	1000	1000	6.25	8969
2	4000	7	23.00	J-55	LT&C	4989	5000	6.25	20988
1	3717	7	23.00	HCL-80	LT&C	8500	8717	6.25	36087

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
3	468	3315	7.09	3974	6340	1.60	195.5	435	2.23 J
2	2332	2940	1.26	3506	4360	1.24	172.5	313	1.81 J
1	3974	5650	1.42	1642	6340	3.86	80.8	485	6.01 J

Prepared by: W.M. Frank, Devon Energy
Phone: (405) 552-4595
FAX: (405) 552-4621

Date: January 15,2002
Oklahoma City, Oklahoma

Remarks:
Collapse is based on a vertical depth of 8500 ft, a mud weight of 9 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.
Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

Shafer Canyon 15-1

Estimated Formation Tops

Ground Level Elevation: 4010

	TVD Tops	Subsea
San Andres (limestone)		
Glorieta/Yeso (dolomite)	2551	1459
base of Yeso dolomite	3207	803
Bone Spring (Limestone)	3207	803
1st Bone Spring Sand	3845	165
2nd Bone Spring Sand	5096	-1086
3rd Bone Spring Sand	6627	-2617
Wolfcamp Shale	6945	-2935
Wolfcamp "Carbonate"	7222	-3212
Wolfcamp Lime Marker	7357	-3347
Cisco-Canyon	7543	-3533
base Cisco-Canyon dolomite	8245	-4235

/ON ENERGY PRODUCTION COMPANY . .
SHAFER CANYON "15" FEDERAL # 1
UNIT "M" SECTION 15
T21S-R24E EDDY CO. NM

In response to questions asked under Section II of Bulletin NTL-6 the following information on the above well is provided for your consideration.

1. Location: SURFACE 60' FNL & 185' FEL SEC. 21 T21S-R24E EDDY CO. NM
BOTTOM HOLE 660' FSL & 660' FWL SEC. 15 T21S-R24E EDDY CO. NM

2. Elevation above Sea Level: 4010' GR.

3. Geologic name of surface formation: Quaternery Aeolian Deposits.

4. Drilling tools and associated equipment: Conventional rotary drilling rig using drilling mud as a circulating medium for solids removal from hole.

5. Proposed drilling depth: MD 8717' TVD 8500'

6. Estimated tops of geological markers:

Glorieta/Yeso	2551'	Wolfcamp Shale	6945'
Bone Spring Limestone	3207'	Wolfcamp Lime marker	7357'
1st Bone Spring Sand	3845'	Cisco-Canyon	7543'
3rd Bone Spring Sand	6627'	Base Cisco-Canyon Dol.	8245'

7. Possible mineral bearing formations:

Cisco-Canyon Oil,Gas,Water

8. Casing program:

Hole size	Interval	OD of casing	Weight	Thread	Collar	Grade
25"	0-40	20"	NA	NA	NA	Conductor
12¼"	0-1800'	9 5/8"	32.30	8-R	ST&C	H-40
8 3/4"	0-8717'	7"	23	8-r	LT&C	HCL-80 J-55,L-80

LVON ENERGY PRODUCTION COMPANY L.P.
SHAFER CANYON "15" FEDERAL # 1
UNIT "M" SECTION 15
T21S-R24E EDDY CO. NM

9. CASING CEMENTING & SETTING DEPTH:

20"	Conductor	Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
9 5/8"	Surface	Set 1800' of 9 5/8" 32.30# H-40 ST&C casing. Cement with 1000 Sx. of Class "C" Light Weight cement + additives, tail in with 450 Sx. of Class "C" cement + 2% CaCl, + ¼# Flocele/Sx. circulate cement to surface.
7"	Production	Set 8717' of 7" casing as follows: 3717' of 7" 23# HCL-80 LT&C, 4000' of 7" 23# J-55 LT&C, 1000' of 7" 23# L-80. Cement with 300 Sx. of Light Weight cement + additives, tail in with 250 Sx. of Class "H" Premium PLus cement + additives, estimate top of cement 3500'

10. PRESSURE CONTROL EQUIPMENT: Exhibit "E" shows a 900 Series 3000 PSI working pressure B.O.P. consisting of an annular bag type preventor, middle blind rams and bottom pipe rams. The B.O.P. will be nipped up on the 9 5/8" casing and tested to API specifications. The B.O.P. will be operated at least once in each 24 hour period and the blind rams will be operated when drill pipe is out of hole on trips. Full opening stabbing valve and upper kelly cock will be utilized. Exhibi "E-1" shows a hydraulically operated closing unit and a 2" 3000 PSI choke manifold with dual adjustable chokes. No abnormal pressures or temperatures are expected.

11. PROPOSED MUD CIRCULATING SYSTEM:

DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE MUD SYSTEM
40-1800'	8.4-8.6	29-38	NC	Fresh water Spud mud add paper to control seepage
1800-7500'	9.0-9.1	29-38	NC	Fresh water mud system add paper to control seepage & high viscosity sweeps to clean hole.
7500-8717'	9.0-9.1	32-38	10 cc or less	Fresh water Dris-Pac system use Soda Ash to control pH, and High viscosity sweeps to clean hole.

Sufficient mud materials will be kept on location at all times in order to combat lost circulation, or unexpected kicks. In order to run DST's , open hole logs, and casing viscosity and/or water loss may have to be adjusted to meet these needs.

VON ENERGY PRODUCTION COMPANY
SHAFER CANYON "15" FEDERAL # 1
UNIT "M" SECTION 15
T21S-R24E EDDY CO. NM

12. LOGGING, CORING, AND TESTING PROGRAM:

A. Open hole logs: Dual Induction, LDT, SNP, Compensated Neutron, Gamma Ray Caliper from TD to 1800'.

B. Run Gamma Ray, Neutron from 1800' to surface.

C. Mud logger may be rigged up on hole at the operators discretion. No DST's are planned at this time.

13. POTENTIAL HAZARDS:

No abnormal pressures or temperatures are expected. There is no known presence of H^2S in this area. If H^2S is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 3400 PSI, and Estimated BHT 140°.

14. ANTICIPATED STARTING DATE AND DURATION OF OPERATION:

Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operation and drilling is expected to take 33 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flowlines in order to place well on production.

15. OTHER FACETS OF OPERATIONS:

After running casing, cased hole Gamma Ray, Neutron Collar logs will be run from TD back to all possible productive zones. The Cisco-Canyon formation will be perforated and stimulated in order to establish production. The well will be swab tested and potentialed as Gas well.

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

1. All Company and Contract personnel admitted on location must be trained by a qualified H_2S safety instructor to the following:

   A. Characteristics of H_2S
   B. Physical effects and hazzards
   C. Proper use of safety equipment and life support systems.
   D. Principle and operation of H_2S detectors, warning system and briefing areas.
   E. Evacuation procedure, routes and first aid.
   F. Proper use of 30 minute pressure demand air pack.

2. H_2S Detection and Alarm Systems

   A. H_2S detectors and audio alarm system to be located at bell nipple, end of blooie line (mud pit) and on derrick floor or doghouse.

3. Windsock and/or wind streamers

   A. Windsock at mudpit area should be high enough to be visible.
   B. Windsock at briefing area should be high enough to be visible.
   C. There should be a windsock at entrance to location.

4. Condition Flags and Signs

   A. Warning sign on access road to location.
   B. Flags to be displayed on sign at entrance to location. Green flag, normal safe condition. Yellow flag indicates potential pressure and danger. Red flag, danger, H_2S present in dangerous concentration. Only emergency personnel admitted to location.

5. Well control equipment

   A. See exhibit "E"

6. Communication

   A. While working under masks chalkboards will be used for communication.
   B. Hand signals will be used where chalk board is inappropriate.
   C. Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephoned will be available at most drilling foreman's trailer or living quarters.

7. Drillstem Testing

   A. Exhausts will be watered.
   B. Flare line will be equipped with an electric ignitor or a propane pilot light in case gas reaches the surface.
   C. If location is near any dwelling a closed D.S.T. will be performed.

8. Drilling contractor supervisor will be required to be familiar with the effects H_2S has on tubular goods and other mechanical equipment.

9. If H_2S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas seperator will be brought into service along with H_2S scavengers if necessary.

SURFACE USE PLAN

DEVON ENERGY PRODUCTION COMPANY L.P.
SHAFER CANYON "15" FEDERAL # 1
UNIT "M" SECTION 15
T21S-R24E EDDY CO. NM

1. EXISTING ROADS & PROPOSED ROADS: Area maps; Exhibit "B" is a reproduction of a County General Hi-way Map. Exhibit "C" is a reproduction of a USGS Topographic Map, showing existing and proposed roads. All existing roads will be maintained in a condition equal to or better than current conditions. Any new roads will be constructed to BLM specifications.

   A. Exhibit "A" shows the proposed well site as staked.

   B. From Hobbs New Mexico take U.S. Hi-way 62-180 West toward Carlsbad NM go 68 miles to milepost 39, turn Right on to CR 604 go 8.4 miles to U.S. Hi-way 285 turn Right go 6.5 miles to State Road 137 turn Left go 8.9 miles to Marathon Road bear Right go 2.2 miles to White Pine Road (CR-28) go 1.2 miles turn Right go .9 miles bear Right follow road Southwest for .7± miles bear Left follow road East for 1.6± miles to location on the North side of road.

   C. Operator will lay flowlines along existing R-O-W's to sales line.

2. PLANNED ACCESS ROADS: No new road will be required.

   A. The access roads will be crowned and ditched to a 12' wide travel surface with a 40' Right-of-Way.

   B, Gradient of all roads will be less than 5.00%.

   C. If turn-outs are necessary they will be constructed.

   D. If needed roads will be surfaced with a mimimum of 4" of caliche. This material will be obtained from a local source.

   E. Center-line for new roads will be flagged. Earth-work will be will be done as field conditions require.

   F. Culverts will be placed in the access road if they are necessary. The roads will be constructed to utilaze low water crossings for drainage as required by topography.

3. LOCATIONS OF EXISTING WELLS IN A ONE MILE RADIUS. EXHIBIT "A-1"

A. Water wells	None known
B. Disposal wells	None known
C. Drilling wells	None known
D. Producing wells	As shown on Exhibit "A-1"
E. Abandoned wells	As shown on Exhibit "A-1"

4. If on completion this well is a producer the operator will lay pipelines and construct powerlines along existing road R-O-W's or other existing R-O-W's. Exhibit "F" shows proposed surface facility.

5. LOCATION AND TYPE OF WATER SUPPLY:

Water will be purchased locally from a commercial source and trucked over the access roads or piped to location in flexible lines laid on top of the ground.

6. SOURCE OF CONSTRUCTION MATERIAL:

If possible construction material will be obtained from the excavation of drill site, if additional material is needed it will be obtained from a local source and transported over the access roads as shown on Exhibit "C".

7. METHODS OF HANDLING WASTE MATERIAL:

A. Drill cuttings will be disposed of in the reserve pits.

B. All trash, junk and other waste material will be contained in trash cages or trash bins to prevent scattering. When the job is completed all contents will be removed and disposed of in a approved sanitary land fill.

C. Salts remaining after completion of well will be picked up by the supplier, including broken sacks.

D. Waste water from living quaters will be drained into holes with a minium of 10'. These holes will be covered during drilling and will be back filled when the well is completed. A Porto-John will be provided for the rig crews. This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete.

E. Remaining drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry enough to be broken out for furthed drying. If the drilling fluids do not evaporate in a reasonable time they will be hauled off by transports to a state approve disposal site. Later pips will be broken out to speed drying. Water produced during completion will be put in reserve pits. Oil and condensate produced will be put in storage tanks and sold.

8. ANCILLARY FACILITIES:

A. No camps or air strips will be constructed on location.

9. WELL SITE LAYOUT

A. Exhibit "D" shows the proposed well site layout.

B. This exhibit indicated proposed location of reserve and sump pits and living facilities.

C. Mud pits in the active circulating system will be steel pits & the reserve pit is proposed to be unlined unless subsurface condition encountered during pit construction indicate that lining is needed for lateral containment of fluids.

D. If needed, the reserve pit is to be lined with polyethelene. The pit liner will be 6 mils thick. Pit liner will extend a minimum 2'00" over the reserve pits dikes where the liner will be anchored down.

E. The reserve pit will be fenced on three sides with four strands of barbed wire during drilling and completion phases. The fourth side will be fenced after all drilling operations have ceased. If the well is a producer, the reserve pit fence will be torn down. The reserve pit and those areas of the location not essential to production facilities will be reclaimed and seeded per BLM requirements.

10. PLANS FOR RESTORATION OF SURFACE

Rehabilitation of the location and reserve pit will start in a timely manner after all drilling operations cease. The type of reclamation will depend on whether the well is a producer or a dry hole.

However, in either event, the reserve pit will be allowed to dry properly, and fluid removed and disposed of in accordance with Article 7.B as previously noted. The pit area will then be leveled and contoured to conform to the original and surrounding area. Drainage systems, if any, will be reshaped to the original configuration with provisions made to alleviate erosion. These may need to be modified in certain circumstances to prevent inundation of the location's pad and surface facilities. After the area has been shaped and contoured, topsoil from the spoil pile will be placed over the disturbed area to the extent possible. Revegetation procedures will comply with BLM standards.

If the well is a dry hole, the pad and road area will be contoured to match the existing terrain. Topsoil will be spread to the extent possible. Revegetation will comply with BLM standards.

Should the well be a producer, the previously noted procedures will apply to those areas which are not required for production facilities.

SURFACE USE PLAN

DEVON ENERGY PRODUCTION COMPANY L.P.
SHAFER CANYON "15" FEDERAL # 1
UNIT "M" SECTION 15
T21S-R24E EDDY CO. NM

11. OTHER INFORMATION:

A. Topography consists of deep canyons and high hills consting of limestone ridges. Vegetation consists of , little leaf sumac, yucca, prickly pear, cholla, and cresote.

B. The surface and minerals are owned by the U.S. Government and is administered by The Bureau of Land Management. The surface is used for livestock grazing and the production of oil and gas.

C. An archaeological survey will be conducted on the effected area and a report will be filed with the BLM field office in Carlsbad, New Mexico.

D. There are no dwellings located in the near vicinity of the location.

12. OPERATOR'S REPRESENTIVE:

BEFORE CONSTRUCTION:

TIERRA EXPLORATION, INC.
P.O. BOX 2188
HOBBS, NEW MEXICO 88241
JOE T. JANICA
OFFICE Ph. 505-391-8503

DURING & AFTER CONSTRUCTION:

DEVON ENERGY PRODUCTION COMPANY L.P.
20 NORTH BROADWAY SUITE 1500
OKLAHOMA CITY, OKLAHOMA 73102-8260
WALLY FRANK OFFICE Ph. 405-552-4595

DON MAYBERRY
P.O. BOX 250
ARTESIA, NEW MEXICO 88211-0250
Ph. OFFICE 505-748-3371 HOME 505-746-4945

13. CERTIFICATION: I certify that I or persons under my direct supervision have inspected the proposed dirll site and access route, that I am familiar with the conditions which currently exist and that the statements made in this plan are to the best of my knowledge, are true and correct, and that the work associated with the operations proposed herein will be performed by DEVON ENERGY PRODUCTION COMPANY L.P., it's contractors/subcontractors and is in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provision of U.S.C. 1001 for the filing of a false statement.

NAME : Joe T. Janica Joe T Janica

DATE : 01.24/02

TITLE : Agent

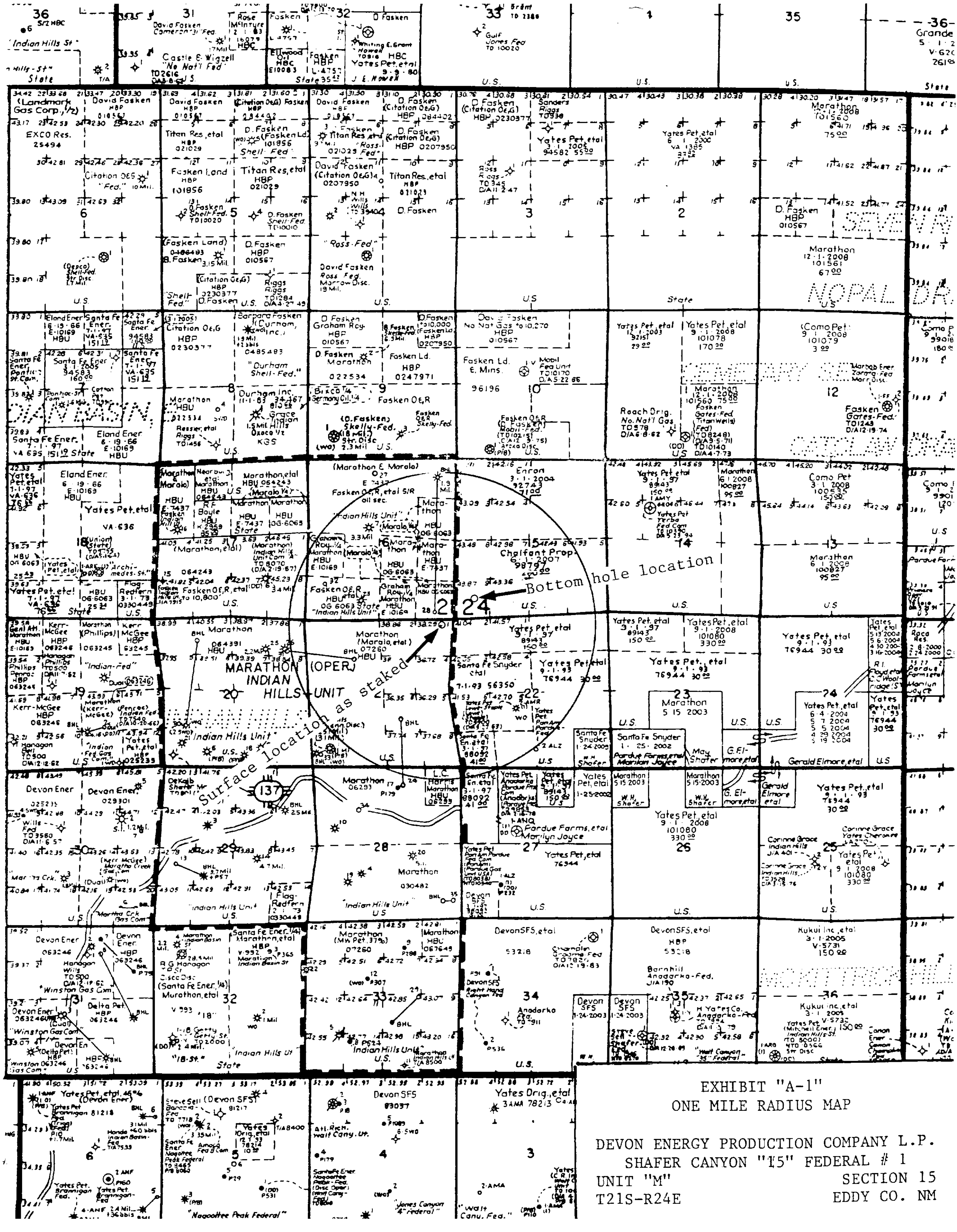


EXHIBIT "A-1"
ONE MILE RADIUS MAP

DEVON ENERGY PRODUCTION COMPANY L.P.
SHAFER CANYON "15" FEDERAL # 1
UNIT "M" SECTION 15
T21S-R24E EDDY CO. NM

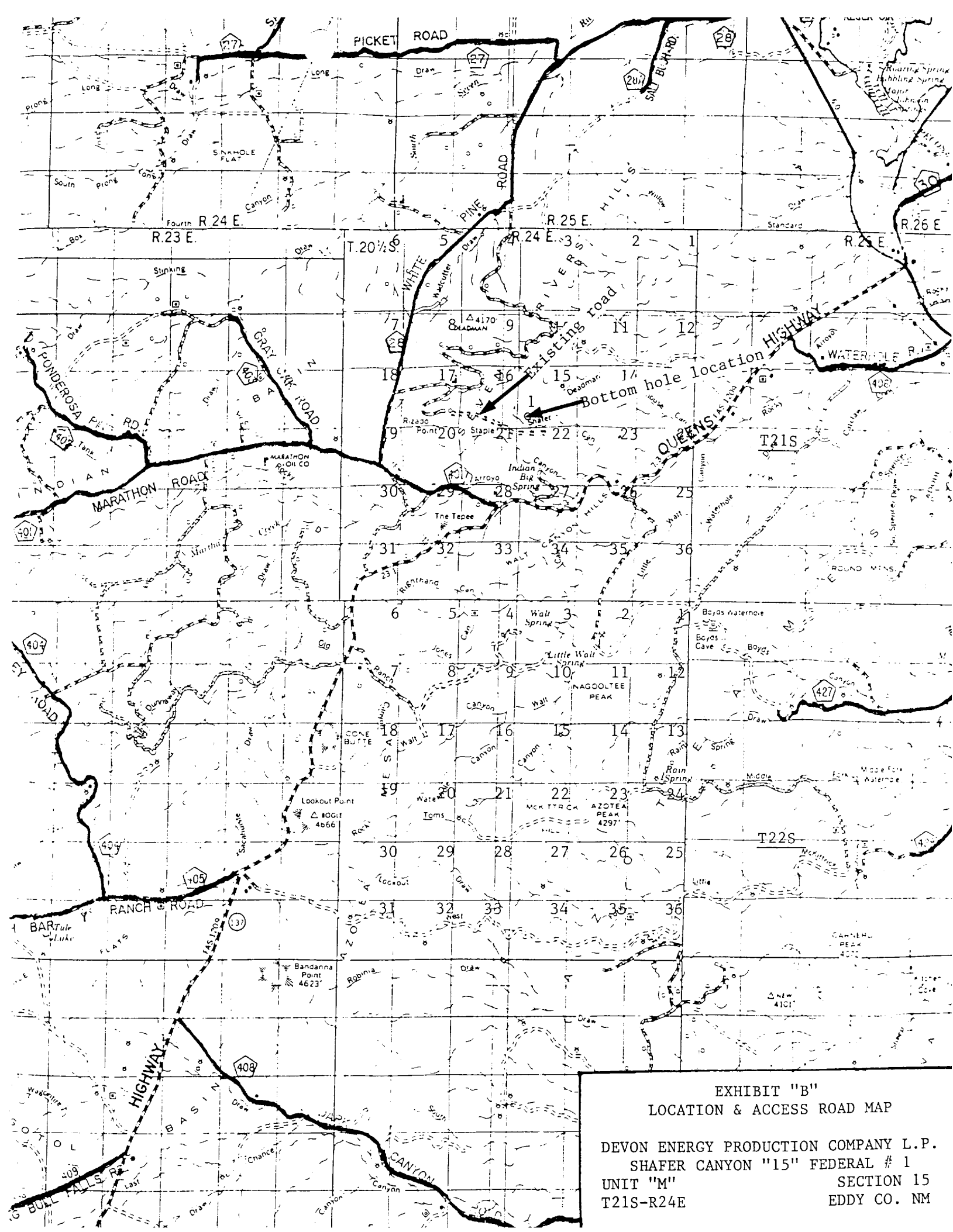


EXHIBIT "B"
LOCATION & ACCESS ROAD MAP

DEVON ENERGY PRODUCTION COMPANY L.P.
SHAFER CANYON "15" FEDERAL # 1
UNIT "M" SECTION 15
T21S-R24E EDDY CO. NM

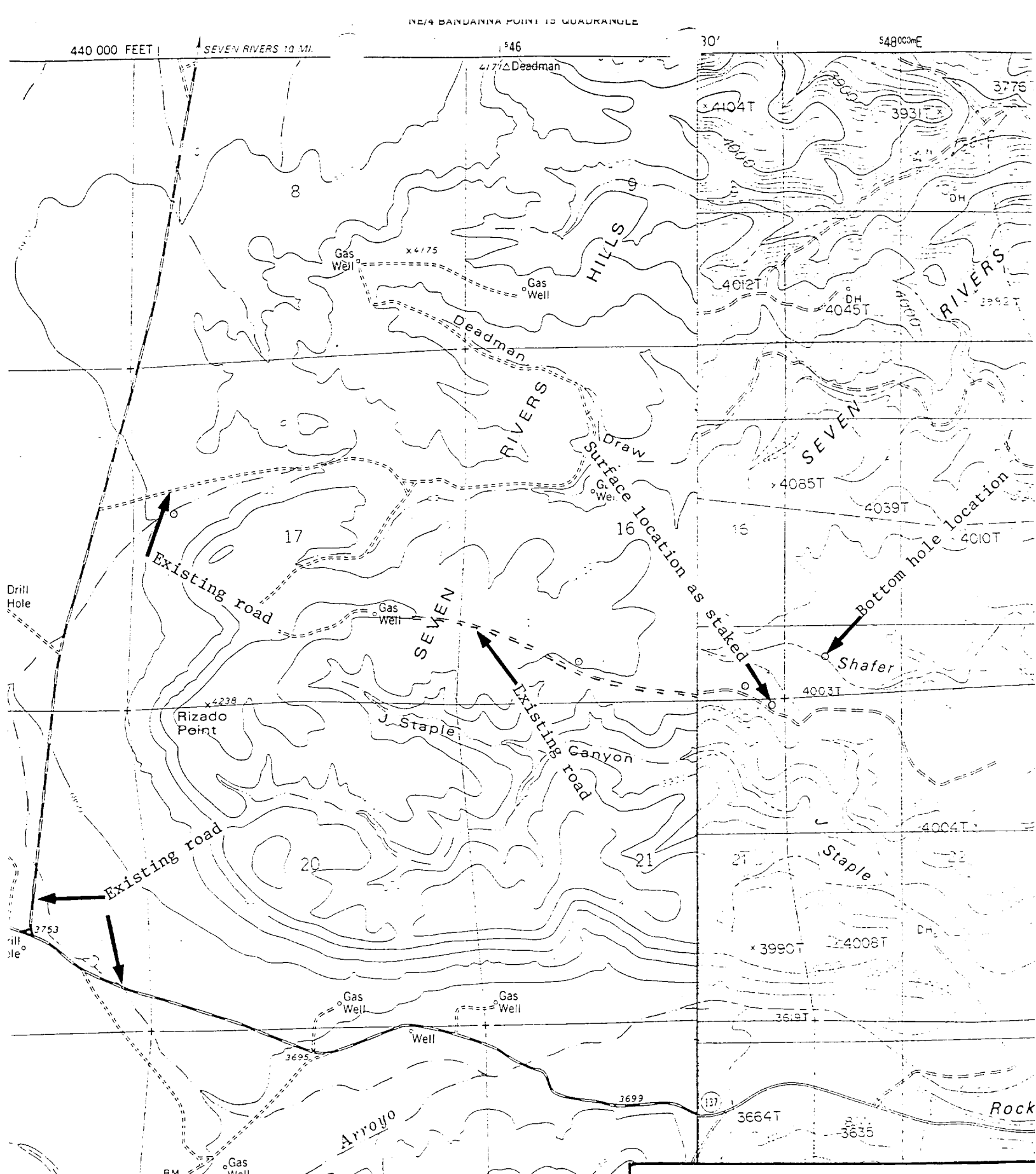
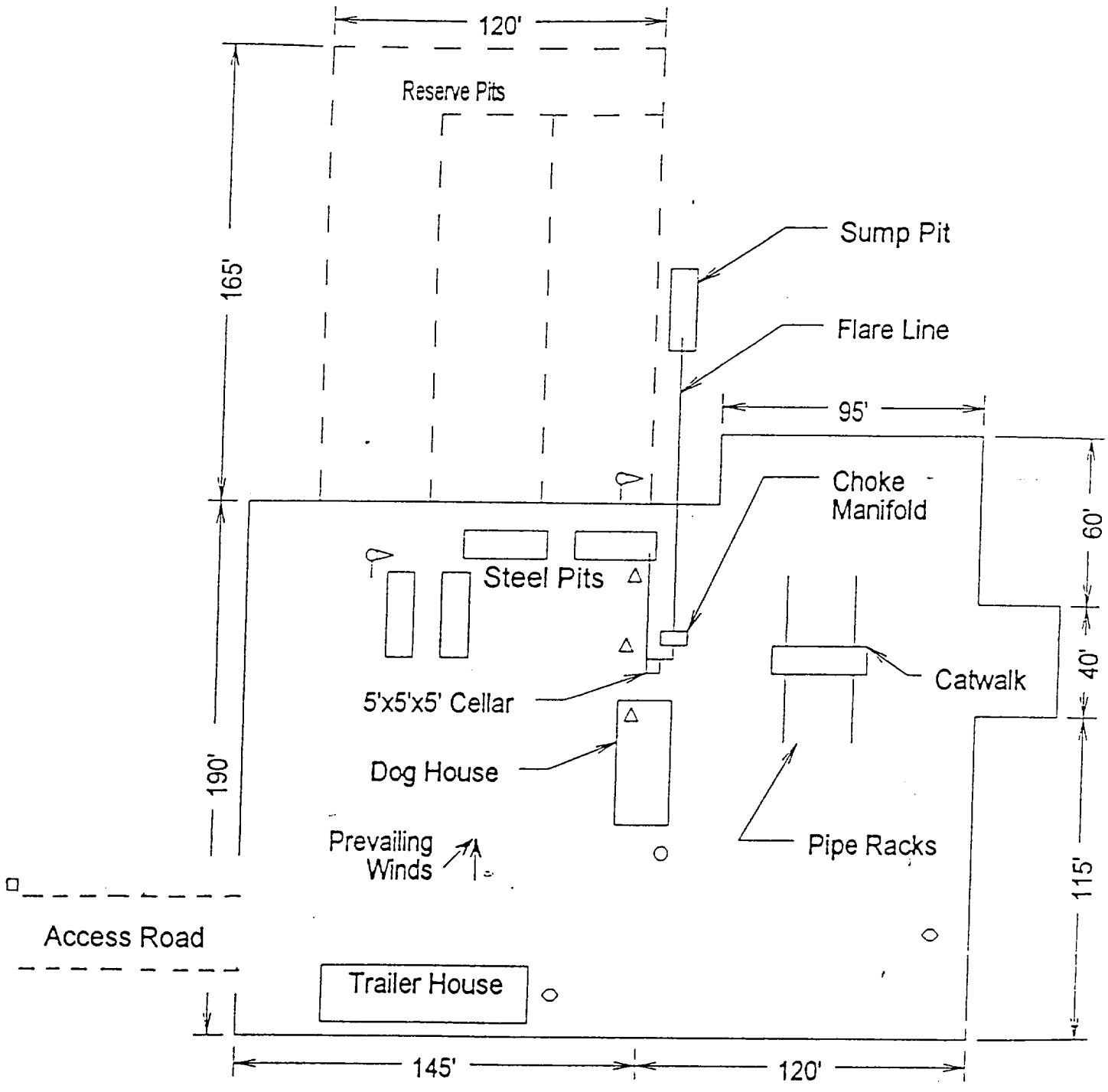


EXHIBIT "C"
TOPOGRAPHIC MAP SHOWING
ROADS & DIRECTIONS TO

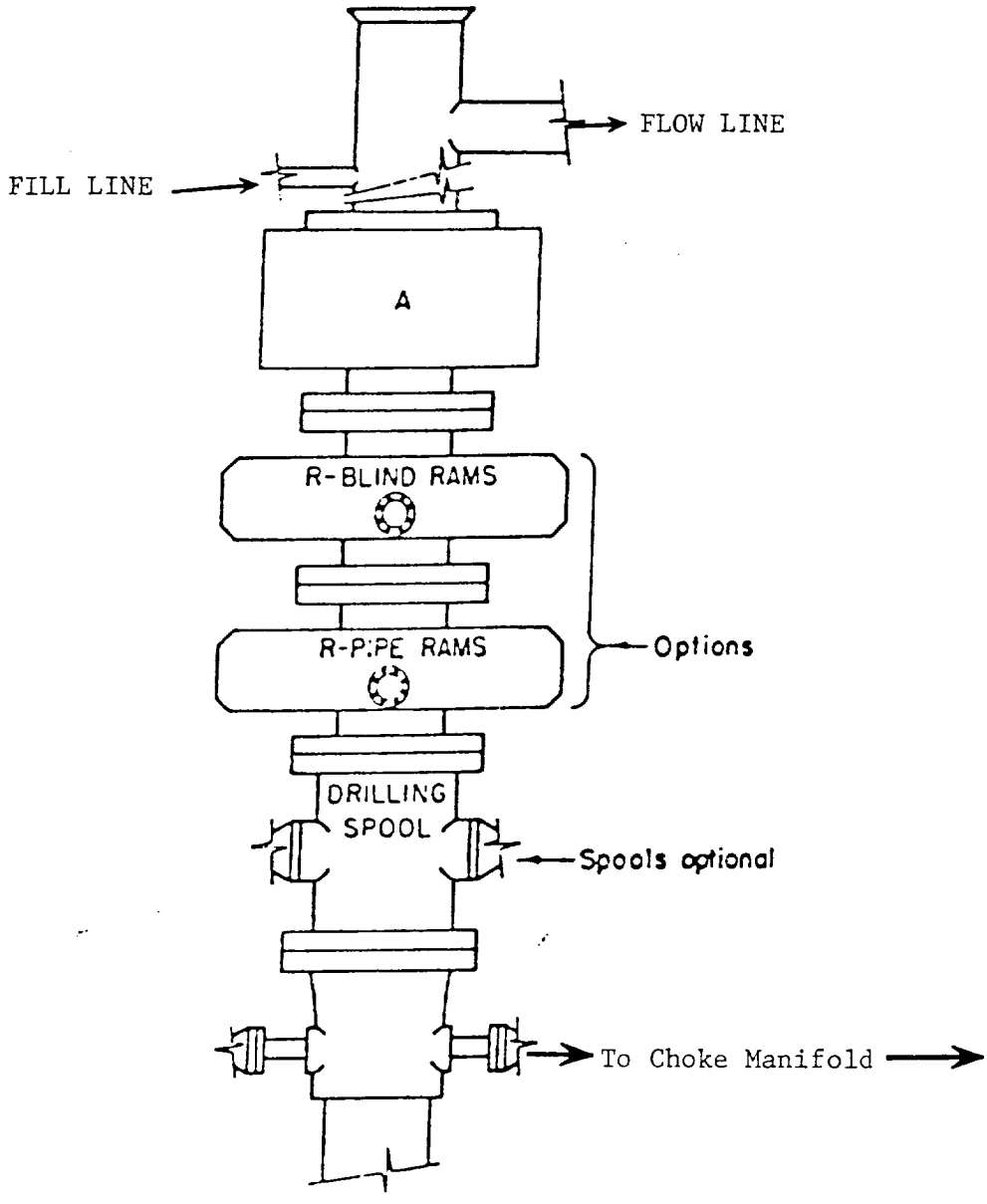
DEVON ENERGY PRODUCTION COMPANY L.P.
SHAFER CANYON "15" FEDERAL # 1
UNIT "M" SECTION 15
T21S-R24E EDDY CO. NM



- Wind Direction Indicators (wind sock or streamers)
- △ H2S Monitors (alarms at bell nipple and shale shaker)
- ◇ Briefing Areas
- ○ Remote BOP Closing Unit
- □ Sign and Condition Flags

EXHIBIT "D"
RIG LAY OUT PLAT

DEVON ENERGY PRODUCTION COMPANY L.P.
SHAFER CANYON "15" FEDERAL # 1
UNIT "M" SECTION 15
T21S-R24E EDDY CO. NM



ARRANGEMENT SRRA

900 Series
3000 PSI WP

EXHIBIT "E"
SKETCH OF B.O.P. TO BE USED ON

DEVON ENERGY PRODUCTION COMPANY L.P.
SHAFER CANYON "15" FEDERAL # 1
UNIT "M" SECTION 15
T21S-R24E EDDY CO. NM

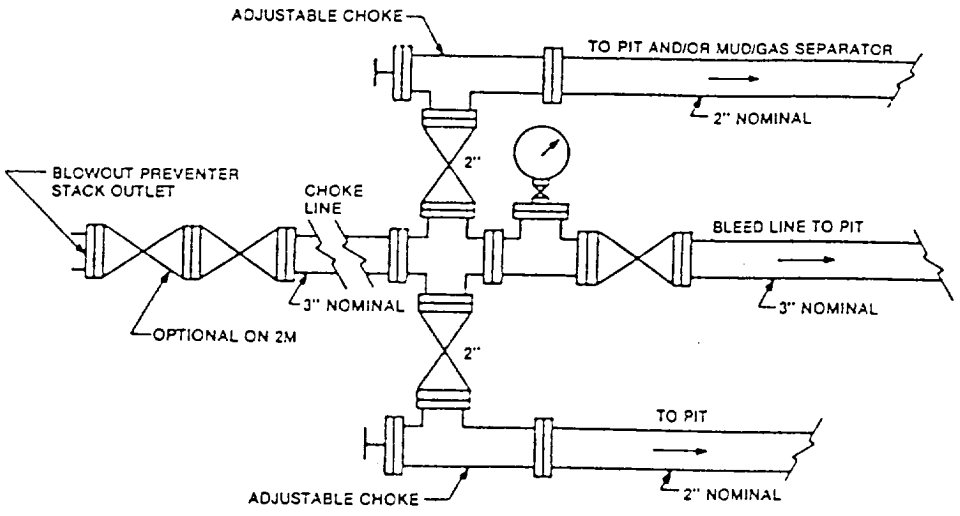


FIGURE K4-1. Typical choke manifold assembly for 2M and 3M rated working pressure service — surface installation.

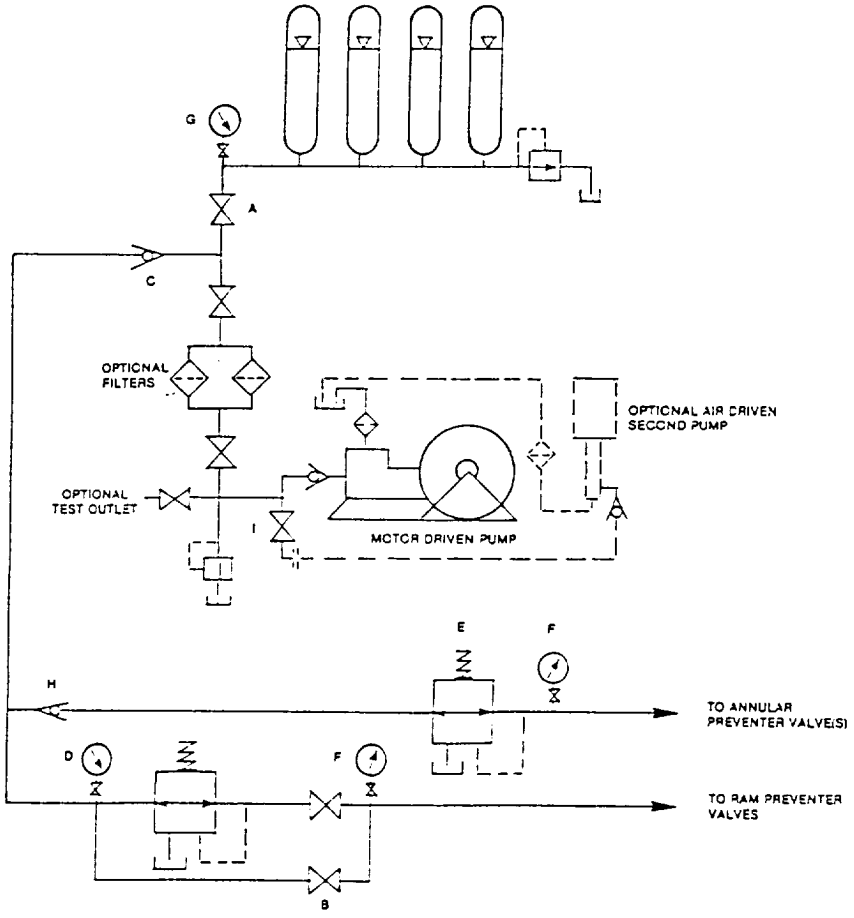


FIGURE K6-1. The schematic sketch of an accumulator system shows required and optional components.

EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

DEVON ENERGY PRODUCTION COMPANY L.P.
SHAFER CANYON "15" FEDERAL # 1
UNIT "M" SECTION 15
T21S-R24E EDDY CO. NM

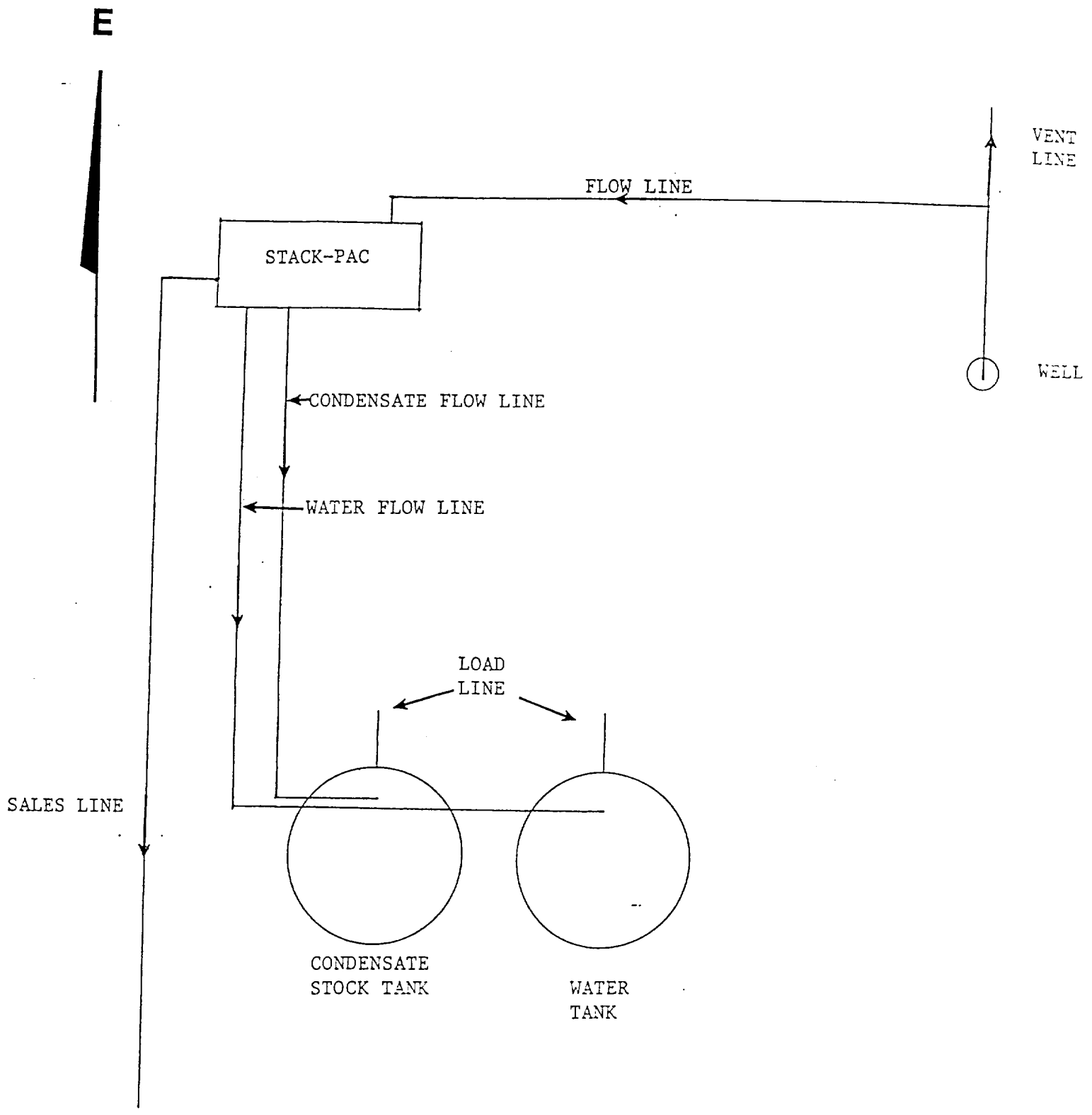


EXHIBIT "F"
PROPOSED SURFACE FACILITY

DEVON ENERGY PRODUCTION COMPANY L.P.
SHAFER CANYON "15" FEDERAL # 1
UNIT "M" SECTION 15
T21S-R24E EDDY CO. NM