Form 3160-3
(August, 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

Form approved
OMB No. 1004-0136
Expires November 30, 2000

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a TYPE OF WORK: ☒ DRILL ☐ REENTER

b. TYPE OF WELL: ☐ OIL WELL ☒ GAS WELL ☐ Other ___ ☐ SINGLE ZONE ☐ MULTIPLE ZONE

2. NAME OF OPERATOR
DEVON ENERGY PRODUCTION COMPANY, L.P.

3a. ADDRESS AND TELEPHONE NO.
20 NORTH BROADWAY, SUITE 1500, OKC, OK 73102

3b. TELEPHONE (Include area code).
(405) 235-3611

4. LOCATION OF WELL *(Report location clearly and in accordance with any State requirements)**
At surface **2430' FSL & 1054' FEL**

At top proposed prod. zone **1880' FSL & 990' FEL**

SUBJECT TO LIKE APPROVAL BY STATE

5. LEASE DESIGNATION AND SERIAL NO.
NMNM34246

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME, WELL NO.
Amoco 19 Federal #5

9. API WELL NO.
30-015-33140

10. FIELD AND POOL, OR WILDCAT
Happy Valley, Morrow

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA
Sec 19, T22S R26E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
Approximately 5 miles west of Carlsbad, New Mexico

12. COUNTY OR PARISH
Eddy

13. STATE
NM

RECEIVED
DEC 11 2003
OCD-ARTESIA

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. Spacing Unit dedicated to this well
1054'	318.00	318
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. BLM/BIA Bond No. on file**
	11,600'	CO1104
21. ELEVATIONS (Show whether DF, RT, GR, etc.)	**22. APPROX. DATE WORK WILL START***	**23. Estimated duration**
3351' GR	October 15, 2003	45 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the authorized officer.

Devon Energy proposes to drill a Devonian well to TD 11,700± for commercial quantities of gas. If the well is deemed noncommercial, the well bore will be plugged and abandoned per Federal regulations. Programs to adhere to onshore oil and gas regulations are outlined in the following exhibits and attachments.

CARLSBAD CONTROLLED WATER BASIN

Drilling Program
Surface Use and Operating Plan
Exhibit #1 = Blowout Prevention Equipment
Exhibit #2 = Location and Elevation Plat
Exhibit #3 = Road Map and Topo Map
Exhibit #4 = Wells Within 1 Mile Radius
Exhibit #5 = **Production Facilities Plat**
Exhibit #6 = Rotary Rig Layout
Exhibit #7 = Casing Design
H_2S Operating Plan
Archeological clearance report

The undersigned accepts all applicable terms, conditions, stipulations and restrictions concerning operations conducted on the leased land or: portions thereof, as described above

Bond Coverage: Nationwide
BLM Bond #: CO-1104

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

25. Signature	Name (Printed/Typed)	Date
Karen Cottom	KAREN COTTOM	9/15/03

Title: OPERATIONS TECHNICIAN

Approved by (signature)	Name (Printed/Typed)	Date
/s/ Joe G. Lara	/s/ Joe G. Lara	10 DEC 2003
Title	**Office**	
ACTING FIELD MANAGER	CARLSBAD FIELD OFFICE	

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, are attached.

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

*(Instructions on reverse)

APPROVAL FOR 1 YEAR

DRILLING PROGRAM

Devon Energy Production Company, LP
Amoco 19 Federal #5
Surface Location: 2430' FSL & 1054' FEL, Unit I, Sec 19 T22S R26E, Eddy, NM
Bottom hole Location: 1880' FSL & 990' FEL, Unit I, sec 19 T22S R26E, Eddy, NM

1. **Geologic Name of Surface Formation**
   a. Quaternery Aeolian Deposits

2. **Estimated tops of geological markers:**

a.	Delaware	2,350'
b.	Bone Spring Lm	4,725'
c.	Wolfcamp Lm	8,360'
d.	Strawn Lm	9,900'
e.	Atoka	10,035'
f.	U. Morrow Clastics	10,875'
g.	M. Morrow Lm Mkr	11,100'
h.	Lwr Morrw Shale Mkr.	11,300'
i.	Barnett Shale	11,470'
j.	PTD	11,600'

3. **Estimated Depths of Anticipated Fresh Water, Oil or Gas**
   a. Water: Random Fresh water from surface to approximately 350'
   b. Oil: Bone Spring, Wolfcamp
   c. Gas: Cisco, Strawn, Atoka, Morrow

4. **Casing Program:**

Hole Size	Interval	OD Csg	Weight	Collar	Grade	
17 ½"	0' – 500'	13 3/8"	48#	ST&C	H-40	WITNESS
12 ¼"	0' – ~~2,400'~~ 2200'	9 5/8"	36#	ST&C	J-55	WITNESS
8 ¾"	0 ' – 11,600'	5 ½"	17#	LT&C	HCP-110	

5. **Cement & Setting Depth:**
   a. 13 3/8" Surface — Cement to surface – with approximately 650 sx Class C
   b. 9 5/8" Intermediate — Cement to surface – with approximately 200 Sx C + 950 sx Class C Lite + 200 sx Class C w/2% CaCl2
   c. 5 ½" Production — Cement to surface with approximately 1100 sx Super H + 1050 sx Class C Lite + 200 sx Class C neat-

The cement volumes for the 5 ½" casing will be revised pending the caliper measurement from the open hole logs.

6. **Pressure Control Equipment:**
   a. The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of a (5M system) double ram type (5000 psi WP) preventer and a bag-type (Hydril) preventer (3000 psi WP).

Both units will be hydraulically operated and the ram type preventer will be equipped with blind rams on top and drill pipe rams on bottom. Both BOP's will be installed on the 9 5/8" surface casing and utilized continuously until total depth is reached. As per BLM Drilling Order #2, prior to drilling out the casing shoe, the BOP's and Hydril will be function tested.

b. Pipe rams will be operated and checked each 24-hour period and each time the drill pipe is out of the hole. These functional tests will be documented on the daily drillers log. A 2" kill line and 3" choke line will be incorporated in the drilling spool below the ram-type BOP. Other accessory BOP equipment will include a Kelly cock, floor safety valve, choke lines an choke manifold having 5000 psi WP rating.

7. Proposed Mud Circulation System

Depth	Mud Wt.	Visc	Fluid Loss	Type System
0' – 500'	9.5	29-34	NC	Fresh Water
500' – 2400'	8.5 – 10.5	29-34	NC	Fresh Water
2400' – 11,600'	10.2–10.6	29-34	NC	Cut Brine

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, & casing the viscosity and/or water loss may have to be adjusted to meet these needs.

8. Auxiliary Well Control and Monitoring Equipment:

a. A Kelly cock will be in the drill string at all times.

b. A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.

c. Hydrogen sulfide detection equipment will be in operations after drilling out the 13 3/8" casing shoe until the 8 5/8" casing is cemented. Breathing equipment will be on location upon drilling the 13 3/8" shoe until total depth is reached.

9. Logging, Coring, and Testing Program:

a. No cores or drill stem tests are planned at this time.

b. The open hole electrical logging program will be as follows

   i. Platform Express Azimuthal Laterlog/MCFL/NGT and Three Detector Litho-Density Compensated Neutron/NGT logs from TD to base of surface casing.

   ii. A formation pressure testing tool and a formation imaging tool may be run

c. Additional testing will be initiated subsequent to setting the 5 ½" production casing. Specific intervals will be targeted based on log evaluation, geological sample shows and drill stem tests.

10. Potential Hazards:

a. No abnormal pressures or temperatures are foreseen. The anticipated bottom hole temperature at total depth is 170° and maximum bottom hole pressure is 5500 psig. Hydrogen sulfide gas may be encountered in this area. See attached "Hydrogen Sulfide Operations Plan". Lost circulation intervals have been encountered in adjacent wells.

11. Anticipated Starting Date and Duration of Operations:

a. 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 operations and drilling is expected to take 40-45 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flow lines in order to place well on production.

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

1. All Company and Contract personnel admitted on location must be trained by a qualified H2S safety instructor to the following:
   a. Characteristics of H2S
   b. Physical effects and hazards
   c. Proper use of safety equipment and life support systems.
   d. Principle and operation of H2S detectors, warning system and briefing areas
   e. Evacuation procedures, routes and first aid.
   f. Proper use of 30-minute pressure demand air pack.

2. H2S Detection and Alarm System
   a. H2S 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 mud pit 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, H2S present in dangerous concentration. Only emergency personnel admitted to location.

5. Well Control Equipment
   a. See Exhibit "E" & "E-1"

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 telephones will be available at most drilling foreman's trailer or living quarters.

7. Drill stem Testing
   a. Exhausts will be watered
   b. Flare line will be equipped with an electric igniter or a propane pilot light in case gas reaches the surface.
   c. If the location is near to a dwelling a closed DST will be performed.

8. Drilling contractor supervisor will be required to be familiar with the effects H2S has on tubular goods and other mechanical equipment.
9. If H2S is encountered, mud system will be altered if necessary to maintain control or formation. A mud gas separator will be brought into service along with H2S scavengers if necessary.

SURFACE USE PLAN

Devon Energy Production Company, LP

Amoco 19 Federal #5

Surface Location: 2430' FSL & 1054' FEL, Unit I, Sec 19 T22S R26E, Eddy, NM

Bottom hole Location: 1880' FSL & 990' FEL, Unit I, sec 19 T22S R26E, Eddy, NM

1. **Existing Roads:**
   a. The well site and elevation plat for the proposed are reflected on Exhibit 2. John West Surveying staked the well.
   b. All roads into the location are depicted on Exhibit 3.
   c. Directions to Location: From Carlsbad go 2.0 miles South on Hwy 62/180 to Hildago. Go 4.0 miles and turn right at CR429 or McKitrick rd. Go 3.5 miles, as the road changes from NW to W, the proposed well pad will be on the right (North) side of the road.
2. **Access Road**
   a. Exhibit #3 shows the existing lease road. Access to this location will not require any construction.
   b. No cattle guards, grates or fence cuts will be required. No turnouts are planned.
3. **Location of Existing and/or Proposed Facilities**
   a. In the event the well is found productive, a tank battery would be constructed and the necessary production equipment will be installed at the well site.
   b. If necessary, the well will be operated by means of an electric prime mover. Electric power poles will be set along side of the access road. w/prior Sundry Notice approval. TSO
   c. The tank battery, all connections and all lines will adhere to API standards.
4. **If the well is productive, rehabilitation plans are as follows.**
   a. The reserve pit will be back-filled after the contents of the pit are dry (within 120 days after completion, weather permitting).
   b. The original topsoil from the well site will be returned to the location. The drill site will then be contoured as close as possible to the original natural state.
5. **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 an approved sanitary landfill.
   c. The supplier, including broken sacks, will pick up salts remaining after completion of well.
   d. Wastewater from living quarters will be drained into hole with a minimum 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 further drying. If the drilling fluids do not evaporate in a reasonable time they will be hauled off by transports to a state approved disposal site. Later pits will be broken out to speed dry. Water produced during completion will be put in reserve pits. Oil and condensate produced will be put in a storage tank and sold.
6. **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 pits 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 polyethylene. 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 b 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.

7. **Other Information:**
a. Topography Project is on an alluvial fan that has a slight but steady slope to the north toward nearby Little McKittrick Draw. Overall ground cover is approx. 10% creosotebush, acacia, tarbush, mesquite, prickly pear cactus, stick cholla cactus, broom snakeweed, Christmas cholla cactus, althorn, assorted grasses and other flora.
b. The surface and minerals are owned by the US Government and is administered by the Bureau of Land Management. The surface is of limited use except for the grazing of livestock and the production of oil and gas.
c. An archaeological survey will be conducted of the well pad location and the results will be filed with the Bureau of Land Management in Carlsbad Field office.
d. There are no dwellings within 2 miles of location.

Operators Representative:

The Devon Energy Production Company, L.P. representatives responsible for ensuring compliance of the surface use plan are listed below.

Gerald T. (Tom) Pepper
Operations Engineering Advisor

Devon Energy Production Company, L.P.
20 North Broadway, Suite 1500
Oklahoma City, OK 73102-8260

(405) 552-4513 (office)
(405) 203-2242 (Cellular)

Don Mayberry
Superintendent

Devon Energy Production Company, L.P.
Post Office Box 250
Artesia, NM 88211-0250

(505) 748-3371 (office)
(505) 746-4945 (home)

Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access road; that I am familiar with the conditions that 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 Devon Energy Production Company, L.P. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Signed: Karen Cottom Date: September 15, 2003

Karen Cottom
Operations Technician

Attachment to Exhibit #1
NOTES REGARDING BLOWOUT PREVENTERS
Devon Energy Production Company, LP
Amoco 19 Federal #5
Surface Location: 2430' FSL & 1054' FEL, Unit I, Sec 19 T22S R26E, Eddy, NM
Bottom hole Location: 1880' FSL & 990' FEL, Unit I, sec 19 T22S R26E, Eddy, NM

1. Drilling nipple will be constructed so it can be removed mechanically without the aid of a welder. The minimum internal diameter will equal BOP bore.

2. Wear ring will be properly installed in head.

3. Blowout preventer and all associated fittings will be in operable condition to withstand a minimum 5000 psi working pressure.

4. All fittings will be flanged.

5. A full bore safety valve tested to a minimum 5000 psi WP with proper thread connections will be available on the rotary rig floor at all times.

6. All choke lines will be anchored to prevent movement.

7. All BOP equipment will be equal to or larger in bore than the internal diameter of the last casing string.

8. Will maintain a kelly cock attached to the kelly.

9. Hand wheels and wrenches will be properly installed and tested for safe operation.

10. Hydraulic floor control for blowout preventer will be located as near in proximity to driller's controls as possible.

11. All BOP equipment will meet API standards and include a minimum 40 gallon accumulator having two independent means of power to initiate closing operation.

UNITED STATES DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Roswell Field Office
2909 West Second Street
Roswell, New Mexico 88201-1287

Statement Accepting Responsibility for Operations

Operator Name:	**Devon Energy Production Company, LP**
Street or Box:	**20 North Broadway, Suite 1500**
City, State:	**Oklahoma City, Oklahoma**
Zip Code:	**73102-8260**

The undersigned accepts all applicable terms, conditions, stipulations and restrictions concerning operations conducted on the leased land or portion thereof, as described below.

Lease No.:	**NMNM34246**
Legal Description of Land:	**318 acres 19-T22S-R26E**
Formation(s):	**Morrow**
Bond Coverage:	**Nationwide**
BLM Bond File No.:	**CO-1104**
Authorized Signature:	Karen Cottom **Karen Cottom**
Title:	**Operations Technician**
Date:	September 15, 2003

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
	78060	HAPPY VALLEY: MORROW

Property Code	Property Name	Well Number
	AMOCO 19 FEDERAL	5

OGRID No.	Operator Name	Elevation
6137	DEVON ENERGY PRODUCTION COMPANY, L.P.	3351'

Surface Location

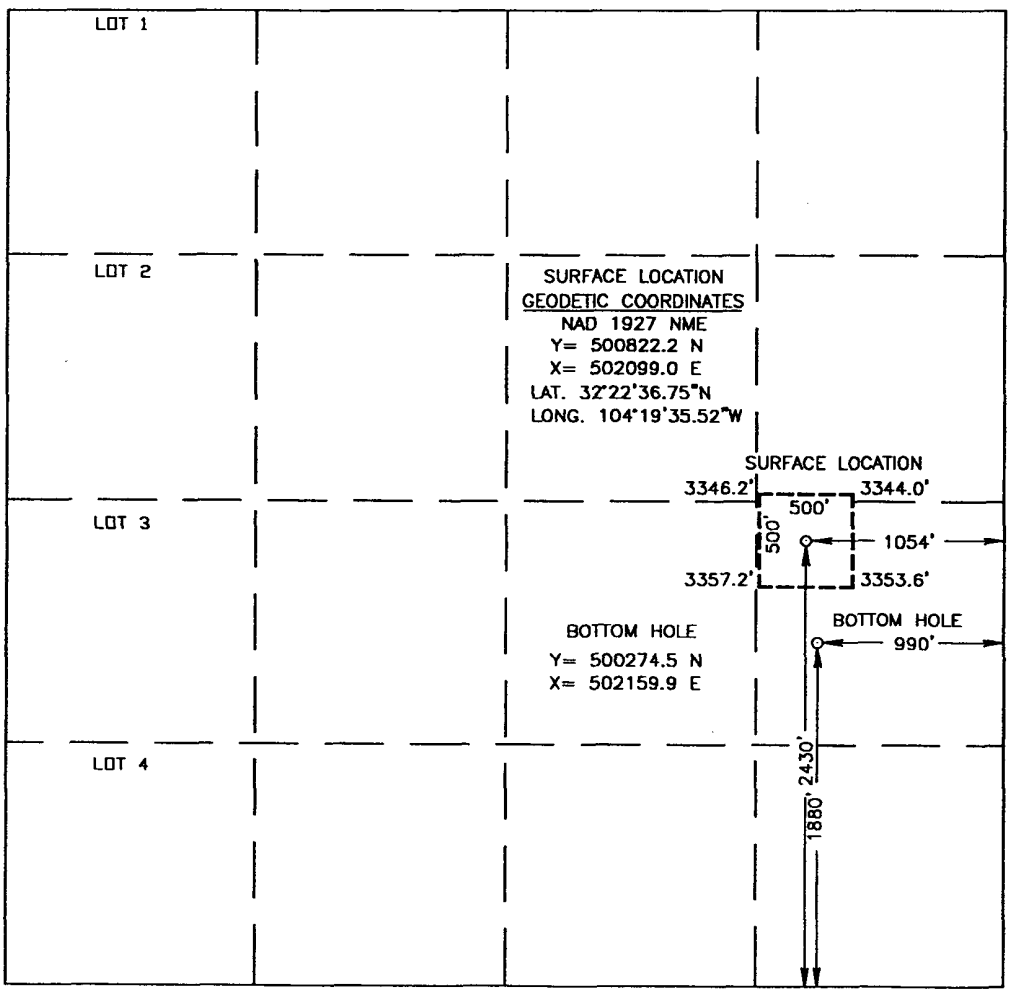
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	19	22-S	26-E		2430'	SOUTH	1054'	EAST	EDDY

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
I	19	22-S	26-E		1880'	SOUTH	990'	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
318			

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.

Karen Cottom
Signature

Karen Cottom
Printed Name

Operations Technician
Title

September 15, 2003
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.

June 23, 2003
Date Surveyed AWB

Signature & Seal of Professional Surveyer

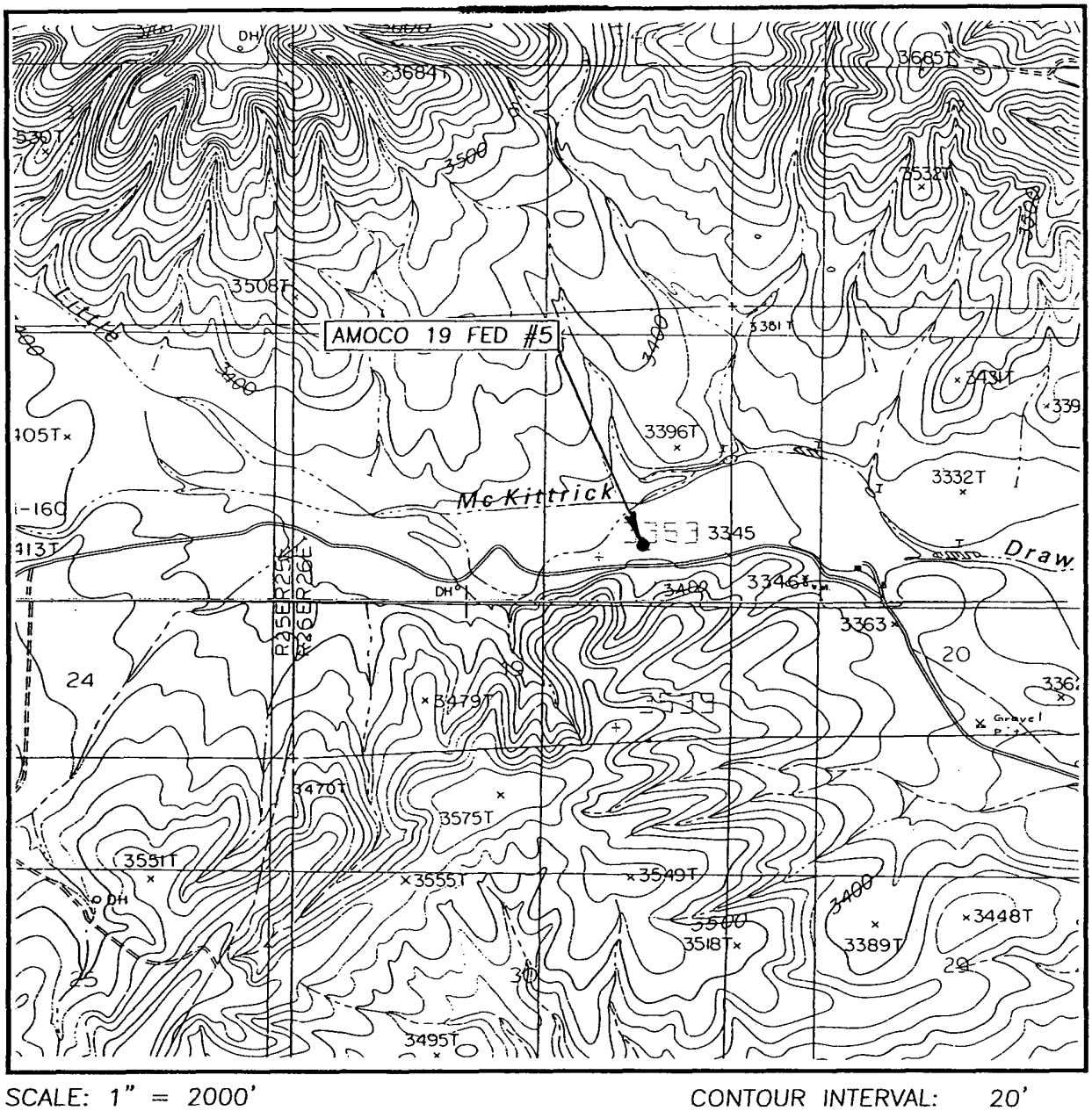
GARY G. EIDSON NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR

Gary G Eidson 6/25/03

03.11.0572

Certificate No. RONALD J. EIDSON 3239
GARY EIDSON 12641

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 20'
KITCHEN COVE, N.M.
SUP: 10'

SEC. 19 TWP. 22-S RGE. 26-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 2430' FSL & 1054' FEL

ELEVATION 3351'

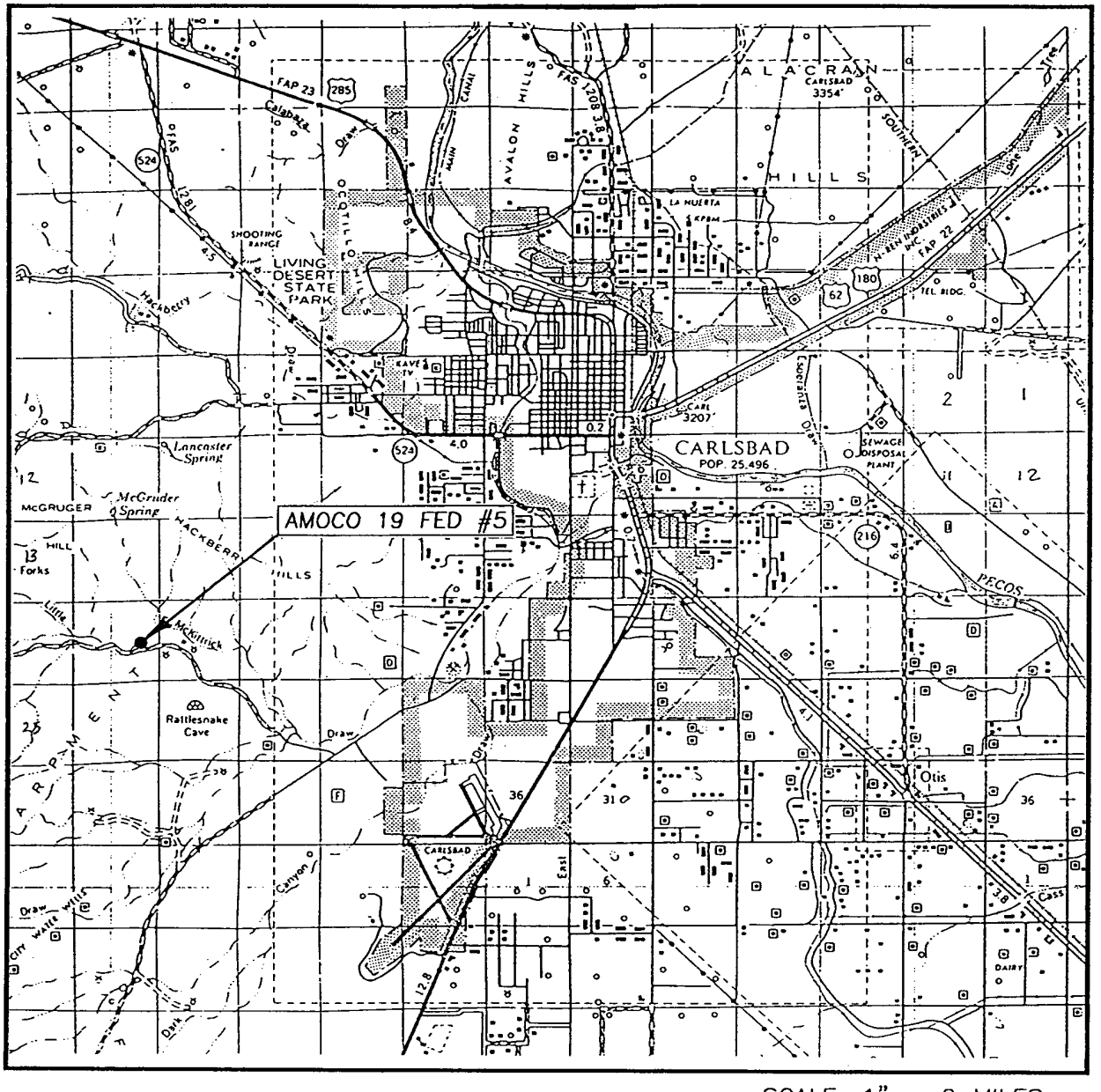
OPERATOR DEVON ENERGY PROD, CO. L.P.

LEASE AMOCO 19 FEDERAL

U.S.G.S. TOPOGRAPHIC MAP
KITCHEN COVE, N.M.

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

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 19 TWP. 22-S RGE. 26-E

SURVEY N.M.P.M.

COUNTY EDDY

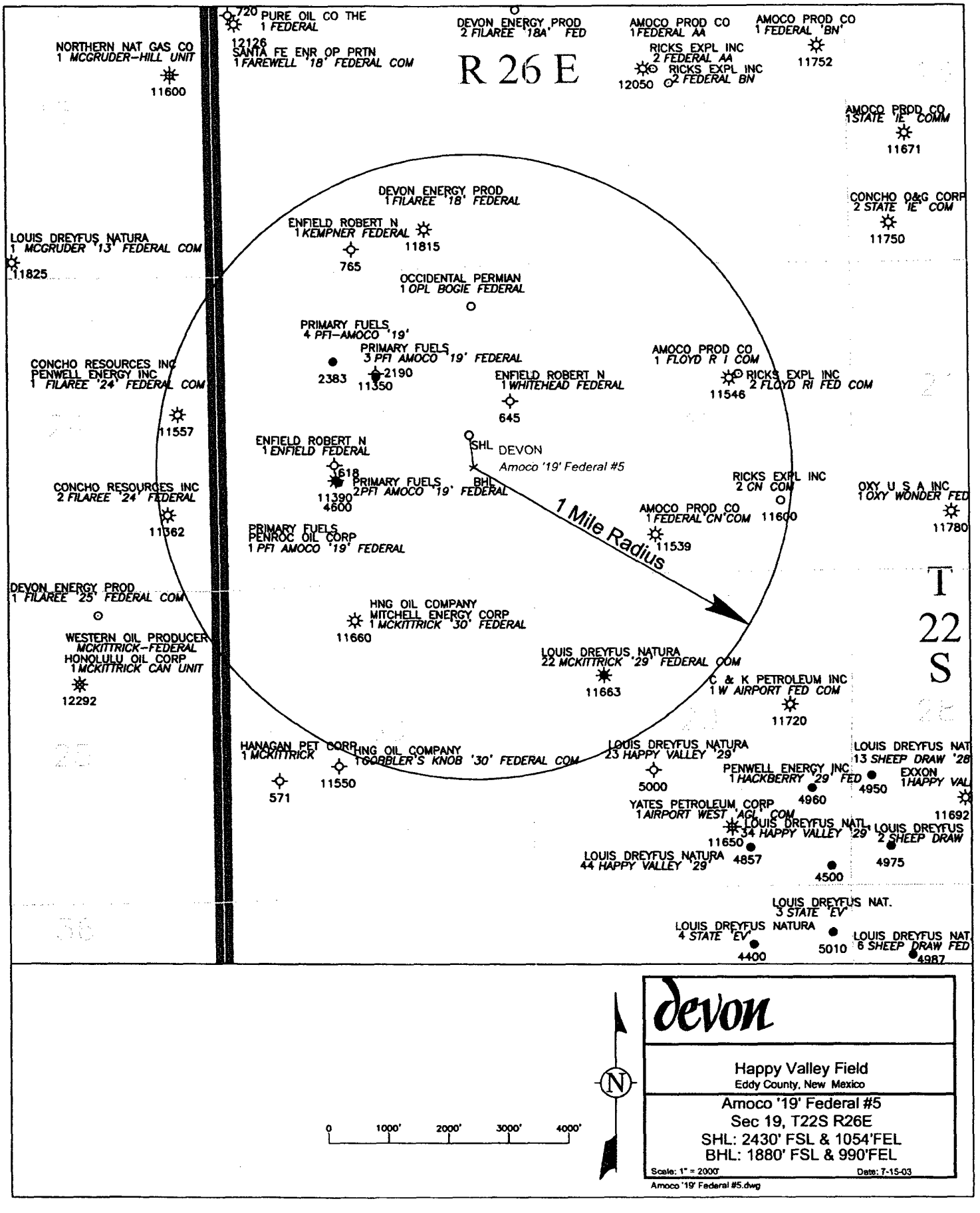
DESCRIPTION 2430' FSL & 1054' FEL

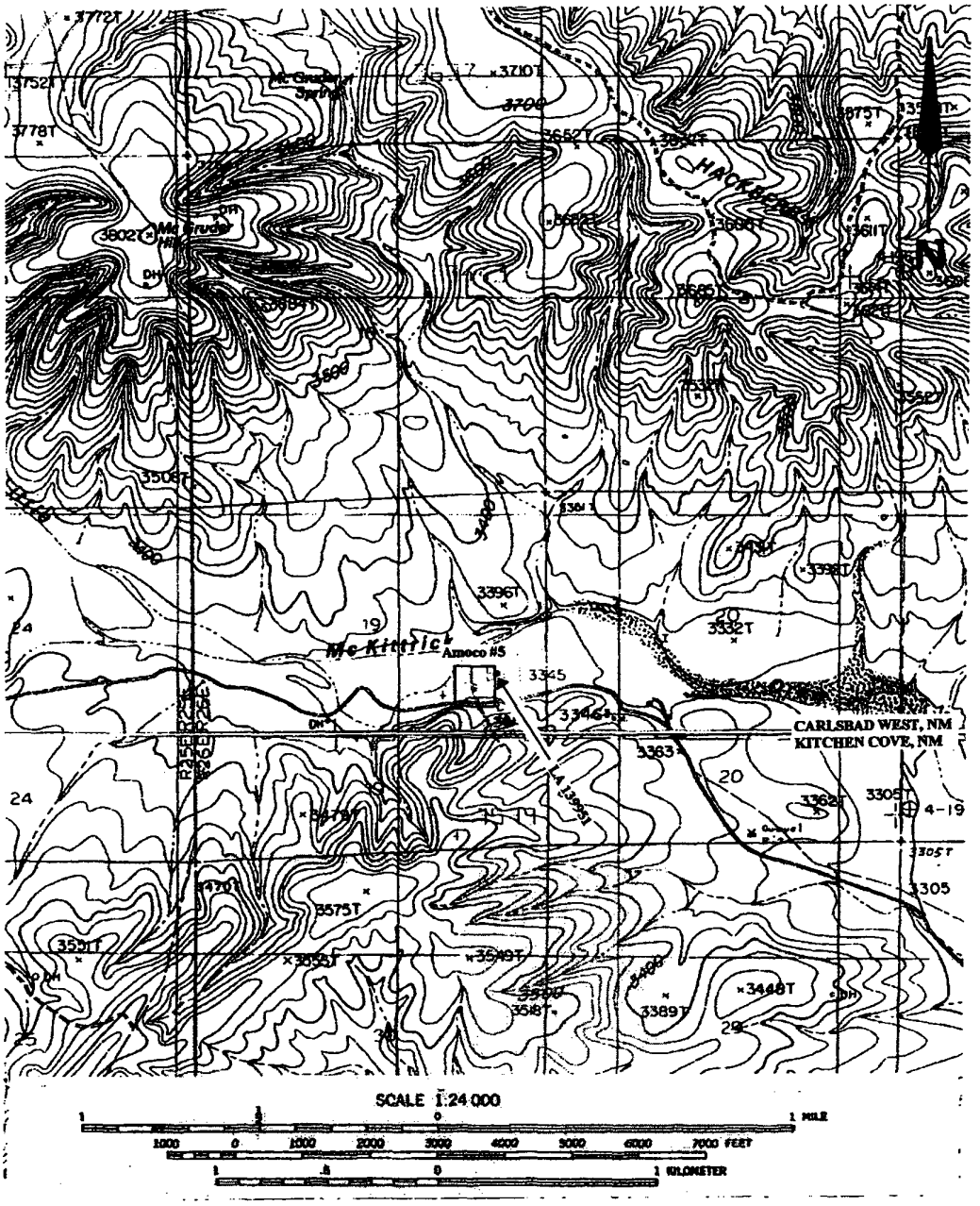
ELEVATION 3351'

OPERATOR DEVON ENERGY PROD, CO. L.P.

LEASE AMOCO 19 FEDERAL

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


R 26 E
T 22 S
720 PURE OIL CO THE 1 FEDERAL
12126 SANTA FE ENR OP PRTN 1 FAREWELL '18' FEDERAL COM
DEVON ENERGY PROD 2 FILAREE '18A' FED
AMOCO PROD CO 1 FEDERAL AA
AMOCO PROD CO 1 FEDERAL 'BN'
11752
RICKS EXPL INC 2 FEDERAL AA
RICKS EXPL INC 2 FEDERAL BN
12050
NORTHERN NAT GAS CO 1 MCGRUDER-HILL UNIT
11600
AMOCO PROD CO 1 STATE 'E' COMM
11671
DEVON ENERGY PROD 1 FILAREE '18' FEDERAL
CONCHO O&G CORP 2 STATE 'E' COM
11750
ENFIELD ROBERT N 1 KEMPNER FEDERAL
11815
765
LOUIS DREYFUS NATURA 1 MCGRUDER '13' FEDERAL COM
11825
OCCIDENTAL PERMIAN 1 OPL BOGIE FEDERAL
PRIMARY FUELS 4 PFI-AMOCO '19'
PRIMARY FUELS 3 PFI AMOCO '19' FEDERAL
2383
2190
11350
CONCHO RESOURCES INC
PENWELL ENERGY INC 1 FILAREE '24' FEDERAL COM
11557
ENFIELD ROBERT N 1 WHITEHEAD FEDERAL
645
AMOCO PROD CO 1 FLOYD R 1 COM
RICKS EXPL INC 2 FLOYD RI FED COM
11546
SHL DEVON
Amoco '19' Federal #5
BHL
1 Mile Radius
ENFIELD ROBERT N 1 ENFIELD FEDERAL
618
PRIMARY FUELS 2 PFI AMOCO '19' FEDERAL
11390
4600
RICKS EXPL INC 2 CN COM
OXY U S A INC 1 OXY WONDER FED
11780
CONCHO RESOURCES INC 2 FILAREE '24' FEDERAL
11362
AMOCO PROD CO 1 FEDERAL CN COM
11600
11539
PRIMARY FUELS
PENROC OIL CORP 1 PFI AMOCO '19' FEDERAL
DEVON ENERGY PROD 1 FILAREE '25' FEDERAL COM
HNG OIL COMPANY
MITCHELL ENERGY CORP 1 MCKITTRICK '30' FEDERAL
11660
WESTERN OIL PRODUCER MCKITTRICK-FEDERAL
HONOLULU OIL CORP 1 MCKITTRICK CAN UNIT
12292
LOUIS DREYFUS NATURA 22 MCKITTRICK '29' FEDERAL COM
11663
C & K PETROLEUM INC 1 W AIRPORT FED COM
11720
HANAGAN PET CORP 1 MCKITTRICK
HNG OIL COMPANY 1 GOBBLER'S KNOB '30' FEDERAL COM
11550
571
LOUIS DREYFUS NATURA 23 HAPPY VALLEY '29'
5000
LOUIS DREYFUS NAT 13 SHEEP DRAW '28'
PENWELL ENERGY INC 1 HACKBERRY '29' FED
4960
4950
EXXON 1 HAPPY VAL
11692
YATES PETROLEUM CORP 1 AIRPORT WEST 'AGL' COM
LOUIS DREYFUS NATL 34 HAPPY VALLEY '29'
11650
LOUIS DREYFUS 2 SHEEP DRAW
4975
LOUIS DREYFUS NATURA 44 HAPPY VALLEY '29'
4857
4500
LOUIS DREYFUS NAT. 3 STATE 'EV'
LOUIS DREYFUS NATURA 4 STATE 'EV'
4400
5010
LOUIS DREYFUS NAT 6 SHEEP DRAW FED
4987
0 1000' 2000' 3000' 4000'
N
devon
Happy Valley Field
Eddy County, New Mexico
Amoco '19' Federal #5
Sec 19, T22S R26E
SHL: 2430' FSL & 1054'FEL
BHL: 1880' FSL & 990'FEL
Scale: 1" = 2000'
Date: 7-15-03
Amoco '19' Federal #5.dwg



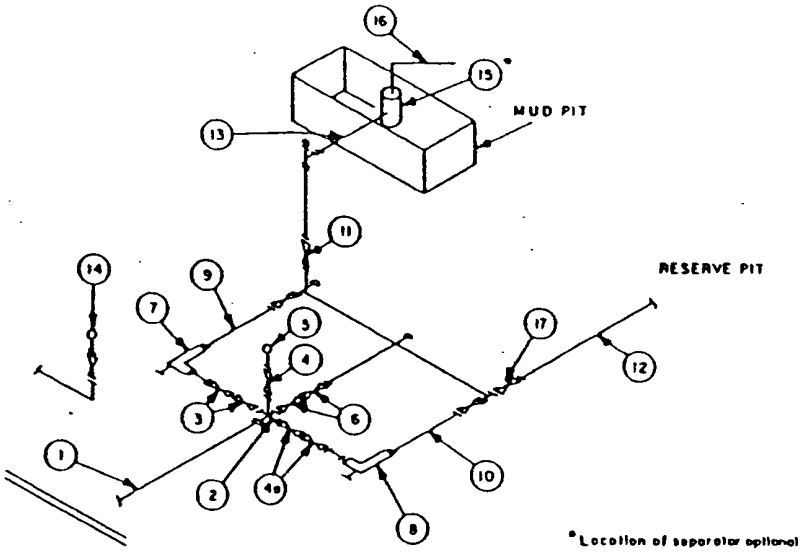
Location map of Devon Energy Production Company, L.P.'s proposed pad for the Amoco 19 Federal well No. 5 in Section 19, T 22 S, R 26 E, NMPM EDDY County, NM.
Map reference 7.5' Series, CARLSBAD WEST, NM (Prov. Ed. 1985) 32104 D3

BAS

MINIMUM CHOKE MANIFOLD
-,000, 5,000 and 10,000 PSI Working Pressure

3 MWP - 5 MWP - 10 MWP

EXHIBIT # 1



MINIMUM REQUIREMENTS										
		3,000 MWP			5,000 MWP			10,000 MWP		
No.		I.D.	NOMINAL	RATING	I.D.	NOMINAL	RATING	I.D.	NOMINAL	RATING
1	Line from drilling spool		3"	3,000		3"	5,000		3"	10,000
2	Cross 3"x3"x3"x2"			3,000			5,000			
	Cross 3"x3"x3"x3"									10,000
3	Valves(1) Gate ☐ Plug ☐(2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000
4	Valve Gate ☐ Plug ☐(2)	1-13/16"		3,000	1-13/16"		5,000	1-13/16"		10,000
4a	Valves(1)	2-1/16"		3,000	2-1/16"		5,000	3-1/8"		10,000
5	Pressure Gauge			3,000			5,000			10,000
6	Valves Gate ☐ Plug ☐(2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000
7	Adjustable Choke(3)	2"		3,000	2"		5,000	2"		10,000
8	Adjustable Choke	1"		3,000	1"		5,000	2"		10,000
9	Line		3"	3,000		3"	5,000		3"	10,000
10	Line		2"	3,000		2"	5,000		3"	10,000
11	Valves Gate ☐ Plug ☐(2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000
12	Lines		3"	1,000		3"	1,000		3"	2,000
13	Lines		3"	1,000		3"	1,000		3"	2,000
14	Remote reading compound standpipe pressure gauge			3,000			5,000			10,000
15	Gas Separator		2"x5"			2"x5"			2"x5"	
16	Line		4"	1,000		4"	1,000		4"	2,000
17	Valves Gate ☐ Plug ☐(2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000

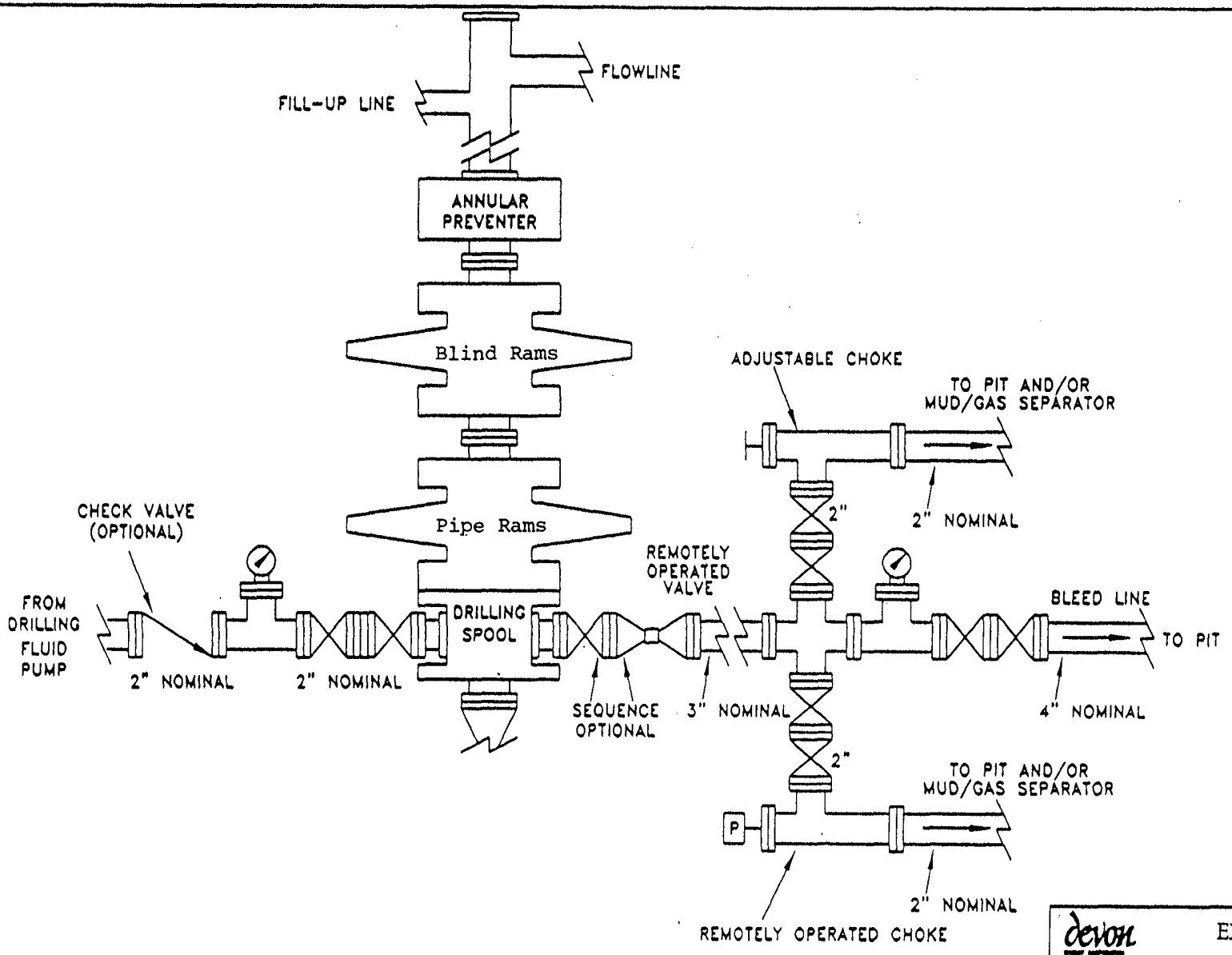
(1) Only one required in Class 3M.

(2) Gate valves only shall be used for Class 10M.

(3) Remote operated hydraulic choke required on 5,000 psi and 10,000 psi for drilling.

EQUIPMENT SPECIFICATIONS AND INSTALLATION INSTRUCTIONS

1. All connections in choke manifold shall be welded, studded, flanged or Cameron clamp of comparable rating.
2. All flanges shall be API 6B or 6BX and ring gaskets shall be API RX or BX. Use only BX for 10 MWP.
3. All lines shall be securely anchored.
4. Chokes shall be equipped with tungsten carbide seats and needles, and replacements shall be available.
5. Choke manifold pressure and standpipe pressure gauges shall be available at the choke manifold to assist in regulating chokes. As an alternate with automatic chokes, a choke manifold pressure gauge shall be located on the rig floor in conjunction with the standpipe pressure gauge.
6. Line from drilling spool to choke manifold should be as straight as possible. Lines downstream from chokes shall make turns by large bends or 90° bends using bull plugged tees.
7. Discharge lines from chokes, choke bypass and from top of gas separator should vent as far as practical from the well.



devon

EXHIBIT 1

AREA NAME
COUNTY, STATE

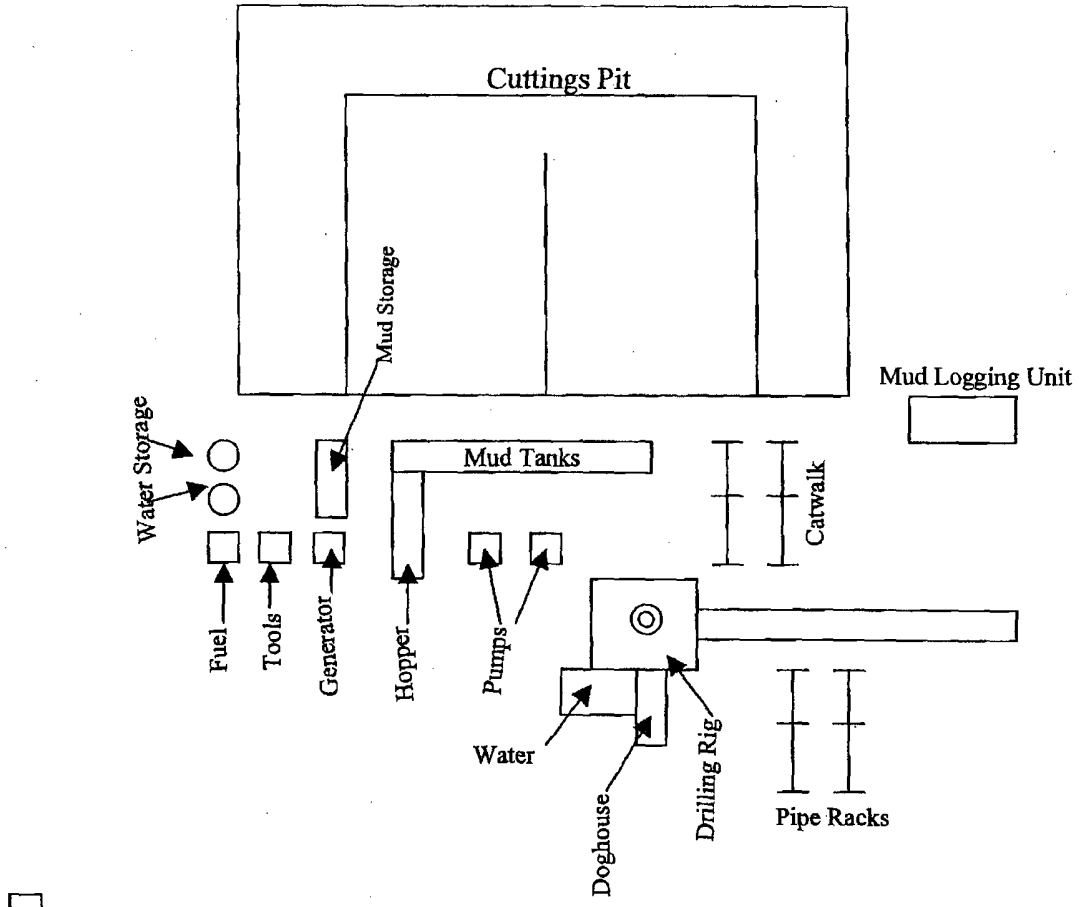
SCHEMATIC

PROPOSED 5-M BOPE AND CHOKE ARRANGEMENT

s:\..\nm\plats
5mbope.dwg

SC

10/00


Cuttings Pit
Mud Storage
Mud Logging Unit
Water Storage
Mud Tanks
Catwalk
Fuel
Tools
Generator
Hopper
Pumps
Water
Doghouse
Drilling Rig
Pipe Racks
Garbage Trailer
Toilet
Parking Area
Trailer
Trailer
N
Devon Energy Production Company, LP
Amoco 19-5
Drilling Pad
Exhibit #

devon Energy Corp

2401 Pecos Ave
Artesia NM 88210

Hydrogen Sulfide (H_2S) Contingency Plan

For

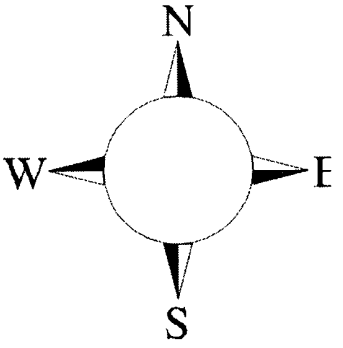
Amoco 19 Federal Well #5

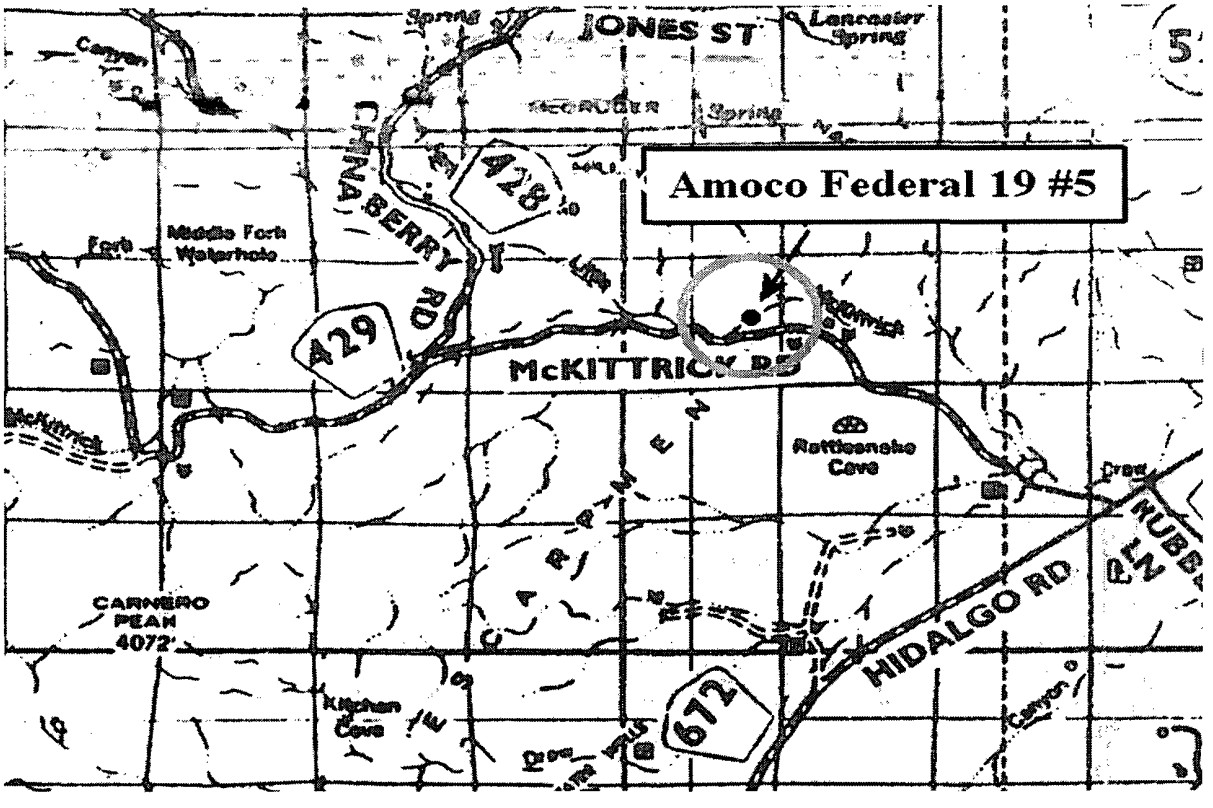
2430' FSL, 1054' FEL
Sec-19, T-22S, R-26E

Eddy County NM

Amoco 19 Federal Well #5 Location

This is an open drilling site. H_2S monitoring equipment and emergency response equipment will be used within 500' of zones known to contain H_2S, including warning signs, wind indicators and H_2S monitor.





Assumed 100 ppm ROE 3000'
100 ppm H2S concentration shall trigger activation of this plan.

Emergency Procedures

In the case of a release of gas containing H_2S, the first responder(s) must isolate the area and prevent entry by other persons into the 100 ppm ROE. Additionally the first responder(s) must evacuate any public places encompassed by the 100 ppm ROE. First responder(s) must take care not to injure themselves during this operation. Company and/or local officials must be contacted to aid in this operation. Evacuation of the public should be beyond the 100 ppm ROE. **This includes traffic control on McKittrick Road.**

All responders must have training in the detection of H_2S, measures for protection against the gas, equipment used for protection and emergency response. Additionally, responders must be equipped with H_2S monitors and air packs in order to control the release. Use the "buddy system' to ensure no injuries during the response.

Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO_2). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas

Characteristics of H_2S and SO_2

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentr-ation
Hydrogen Sulfide	H_2S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO_2	2.21 Air = 1	2 ppm	N/A	1000 ppm

Contacting Authorities

Devon Energy Corp. personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available. The following call list of essential and potential responders has been prepared for use during a release. Devon Energy Corp. Company response must be in coordination with the State of New Mexico's 'Hazardous Materials Emergency Response Plan' (HMER)

Devon Energy Corp. Company Call List

Artesia (505)	Cellular	Office	Home
Foreman – BJ Cathey	390-5893	748-0176	887-6026
Asst. Foreman – Bobby Jones	748-7447	748-0176	746-3194
Cecil Thurmond	748-7180	748-0171	887-1479
David Purdy	(432)631-2969	(432)495-7279	(432)683-0735
Engineer – Tom Pepper	(405) 203-2242	(405) 552-4513	(405) 728-8641

Agency Call List

Eddy County (505)

Artesia

State Police	746-2703
City Police	746-2703
Sheriff's Office	746-9888
Ambulance	911
Fire Department	746-2701
LEPC (Local Emergency Planning Committee)	746-2122
NMOCD	748-1283

Carlsbad

State Police	885-3137
City Police	885-2111
Sheriff's Office	887-7551
Ambulance	911
Fire Department	885-2111
LEPC (Local Emergency Planning Committee)	887-3798
US Bureau of Land Management	887-6544

New Mexico Emergency Response Commission (Santa Fe)	(505)476-9600
24 HR	(505) 827-9126
National Emergency Response Center (Washington, DC)	(800) 424-8802

Other

Boots & Coots IWC	1-800-256-9688 or (281) 931-8884
Cudd Pressure Control	(915) 699-0139 or (915) 563-3356
Halliburton	(505) 746-2757
B. J. Services	(505) 746-3569

Flight For Life -4000 24th St, Lubbock, TX	(806) 743-9911
Aerocare -Rr 3 Box 49f, Lubbock, TX	(806) 747-8923
Med Flight Air Amb 2301 Yale Blvd SE #D3, Albuq, NM	(505) 842-4433
S B Air Med Svc 2505 Clark Carr Loop SE, Albuq, NM	(505) 842-4949

Prepared in conjunction with
Wade Rohloff of;

Compliance Services
PO Box 2734 Hobbs NM 88240 (505) 631-4561