NM OIL CONS. COMMISSION SUBMIT IN 1 LICATE* Drawer DD R 3164-3 (Other instructions on reverse side) Budget Bureau No. 1004. (December 1990) Artesia. NM 89NPTED STATES Expires: December 31, 1991 DEPARTMENT OF THE INTERIOR 5. LEASE DESIGNATION AND SERIAL NO. BUREAU OF LAND, MANAGEMENT NM 7721 6. IF INDIAN, ALLOTTED OR TRIBE HAME APPLICATION FOR BERMIT TO DRILL OR DEEPEN 1a. TYPE OF WORK 7. UNIT AGREEMENT NAME DRILL 🖾 W. Red Lake 8910089700 b. TYPE OF WELL MULTIPLE OIL X S. FARM OR LEASE HAME WELL NO. 0 OTES West Red Lake Unit #35 2. HAMB OF OPERAT vajaa) Devon Energy Corporation (Ne 552-4560 3. ADDRESS AND TELETIONS NO. Sk Vohoma 20 North Broadway Suite 1500 OK 73102 4. LOCATION OF WELL (Report location clearly and in accord eny State requirements. Red Lake, QN, Grybrg, SA At surince 11. SEC., T., R., M., OR BLE. AND SURVEY OR ARRA 330' FNL & 240' FWL RECEIVED ut. D D At proposed prod. some same Section 9 - T18S- R27E 111N 1 8 1993 14. DISTANCE IN MILES AND DIRECTION FROM HEAREST TOWN OR POST OFFICE® 12. COUNTY OR PARISE | 18. STATE Eddy NM Approximately 7 miles southeast of Artesia, NM C. C. D. 15. DISTANCE FROM PROPUSED* 16. NO. OF ACRES IN LE IT. NO. OF ACRES ASSIGNED LOCATION TO HEAREST PROPERTY OR LEASE LINE, PT. (Also to nearest drig, unit line, if any) TO THIS WELL 80 40 240' 19. PROPOSED DEPTH 20. BOTART OR CABLE TOOLS 18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DEILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 500' 2800' rotary 21. ELEVATINE (Show whether DF, RT, GR, etc.) 22. APPROX. DATE WORK WILL STARTS 3509' May 1, 1993 73 PROPOSED CASING AND CEMENTING PROGRAM Roswell Controlled Water Basin QUANTITY OF CEMENT SIZE OF HOLE GRADE, SIZE OF CASHO WRIGHT PER FOOT SETTING DEPTH 25" conductor 40' Redimix 5/8", J-55 1150' 415 sx Lite + 100 sx Class C 1/4" 24 ppf 12 120 sx Lite + 265 xs Class C 15.5 ppf 2800' 7/8" 1/2" * Cement will be circulated to surface on all casing strings Devon Energy plans to drill to 2800'+ to test the San Andres formation for commercial quantities of oil. If the San Andres is deemed non-commercial, the wellbore 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. Exhibit #6 - Rotary Rig Layout Drilling Program Exhibit #7 - Casing Program Surface Use and Operating Plan Exhibit #1 and #1-A - Blowout Prevention Equipment Evidence of Bond Coverage Exhibit #2 - Location and Elevation Plat APPROVAL SUBJECT TO Exhibit #3 - Planned Access Roads Exhibit #4 - Wells Within a One Mile Radius GENERAL REQUIREMENTS AND Exhibit #5 - Production Facilities Plat SPECIAL STIPULATIONS IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new proposed new proposed of the deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any. productive zone. If proposal is to drill or Randy Jackson District Engineer March 23, 1993 BIGNED 100 (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 lesse which would entitle the applicant to conduct operations the CONDITIONS OF APPROVAL IF ANY: LO CATION IS AREA CONTRACTOR JUN 16 1993 (ORIG. SGD.) RICHARD L. MANUS NSL+3288 *See Instructions On Reverse Side PENDENG NIL APPROVAL

*30-0*1タ・ス7५7フ

INSTRUCTIONS

cedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office, ramber of copies to be submitted, particularly with regard to local, area, or regional proregulations. Any necessary special instructions concerning the use of this form and the Federal or a State agency, or both, pursuant to applicable Federal and/or State laws and tions, as indicated, on all types of lands and lesses for appropriate action by either a GENERAL: This form is designed for submitting proposals to perform certain well opera-

or Federal office for specific instructions. land should be described in accordance with Federal requirements. Consult local State ITEM 4: If there are no applicable State requirements, locations on Federal or Indian State or Federal regulations concerning subsequent work proposals or reports on the well. tion or to a new reservoir, use this form with appropriate notations. Consult applicable ITEM 1: If the proposal is to redrill to the same reservoir at a different subsurface loca-

land or lease description. A plat, or plats, separate or on this reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should ILEM 14: Meeded only when location of well cannot readily be found by road from the

be furnished when required by Federal or State agency offices.

subsurface location of hole in any present or objective production zone. ITEMS 15 AND 18: If well is to be, or has been directionally drilled, give distances for

Defrais era sacitaraço erolad lasoqorq adi lo lavorqqa gairneo (TEM 22: Consult applicable Federal or State regulations, or appropriate officials, con-

MOTICE

nished the following information in connection with information required by this applica-The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be fur-

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR Pert 3160.

PRINCIPAL PURPOSE: The information is to be used to process and evaluate your application for permit

proposed operation from the record and/or the record will be transferred to appropriate (4)(5) Information from the record and/or the record will be transferred to appropriate ment and the projected impact on the land involved. (3) The evaluation of the effects of the Federal or Indian resources encountered. (2) The review of procedures and equip-ROUTINE USES: (1) The enalysis of the applicant's proposal to discover and extract to drill or deepen as oil or gas well.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the investigations or prosecutions, as well as routine regulatory responsibility. Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory

information is mandatory only if the operator elects to initiate drilling operation on an oil and gas lease.

BURDEN HOURS STATEMENT

(1004-0136), Washington, D.C. 20503, : Washington, D.C. 20240, and the Office of Management and Budget, Paperwork Reduction Project Bureau of Land Management, (Alternate) Bureau Clearance Officer, (WO-771), 1849 C Street, N.W., comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct Public reporting burden for this form is estimated to average 30 minutes per response, including the time for

The Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq) requires us to inform you

md gas leases. lio natibal has lectors and relling for oil and/or gas on Federal and ladian This information is being collected to allow evaluation of the technical, safety, and en-

Response to this request is mandatory only if the operator elects to initiate drilling operations on an oil This information will be used to analyze and approve applications.

.attal 212 DES

<u>DISTRICT 1</u>
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II P.O. Drawer DD, Artesia, NM 88210

OIL CONSERVATION DIVISION

EXHIBIT #2

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT III 1000 Rio Brazos Rd., Azzec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Aperator		Lease		Wall No.
Devon Energy Co	orporation	West Red La	ke Unit	35
Init Letter Section	Точтыір	Range	Coxinty	
D 9	18 South	27 East	NMIM	Eddy
Actual Footage Location of Well:	_			
330 feet from the NO.		240	feet from the West	
	g Formation	Pool	- 1-	Dedicated Acreage:
3509 San	Andres	West Red L		40 Acres
	•	didentify the ownership thereof (both	*	d royalty).
unitization, force-pooling, etc Yes If answer is "no" list the owner this form if neccessary.	2.? No If answer is "yes" ty sand tract descriptions which have	e well, have the interest of all owner pe of consolidation actually been consolidated. (Use re seen consolidated (by communitization)	everse side of	
T - No allowable will be assigned to O or until a non-standard unit, elin	minating such interest, has been ap	proved by the Division.		g, c. oct
3516.7			I herebecontained herebest of my known best of my known b	TOR CERTIFICATION TO certify that the information of the end complete to the inhedge and belief. The analysis with the information of the end complete to the inhedge and belief. The analysis with the information of the end of th
			I hereby cere on this plat actual surve supervison, correct to belief. Date Surveyor August Signature & Professional	tify that the well location show was plotted from field notes ys made by me or under rand that the same is true a the best of my knowledge and the same is true and the best of my knowledge and the best of my knowledge and the same is true.
0 330 660 990 1320 1650	1980 2310 2640 2	000 1500 1000 500	8112	SOCIOSIONAL LING

MINIMUM BLOWOUT PREVENTER RELIBREMENTS

3,000 psi Working Pressure

3 MWP

West Red Lake Unit #35
Eddy County, New Mexico
Exhibit #1

CONFIGURATION

STACK REQUIREMENTS

No.	ilem		Min. I.D.	Min. Nominal
1	Flowline			
2	Fill up kne			2.
9	Drilling nipple			i
4	Annular preventer			
5	Two single or one dual hydoperated rams	draulically		
6a	Drilling spool with 2" min. 3" min choke line outlets	kill line and		
6 b	2" min. kill line and 3" mir outlets in ram. (Alternate t			
7	Valve	Gate [] Plug []	3-1/6"	
8	Gate valve—power operat	e d	3-1/8"	
9	Line to choke manifold			3-
10	Vaives	Gate C Plug C	2-1/16"	
11	Check valve		2-1/16"	
12	Casing head			
13	Valve	Gate [] Plug []	1-13/16"	
14	Pressure gauge with need	e valve		
15	Kill line to rig mud pump m			2.

9	
ANNULAR PREVENTER	D
PIPE RAMS B D T	
DRILLING SPOOL CASING MEAD MEAD	
(a) CASING (B)	O

		OPTIONAL		
16	Flanged valve		1-13/16"	

CONTRACTOR'S OPTION TO FURNISH:

- All equipment and connections above bradenhead or casinghead. Working pressure of preventers to be 3,000 psi, minimum.
- Automatic accumulator (80 gatton, minimum) capable of closing BOP in 30 seconds or less and, holding them closed against full rated working pressure.
- 3.80P controls, to be located near drillers position.
- 4. Kelly equipped with Kelly cock.
- 5.Inside blowout prevventer or its equivalent on derrick floor at all times with proper threads to fit pipe being used.
- Kelly saver-sub equipped with rubber casing protector at all times.
- 7. Plug type blowout preventer tester.
- 8.Extra set pipe rams to fit drill pipe in use on location at all times.
- 9. Type RX ring gaskets in place of Type R.

MEC TO FURNISH:

- 1.Bradenhead or casinghead and side valves.
- 2. Wear bushing, if required.

GENERAL NOTES:

- Deviations from this drawing may be made only with the express permission of MEC's Drilling Manager.
- 2.All connections, valves, fittings, piping, etc., subject to well or pump pressure must be flanged (suitable clamp connections acceptable) and have minimum working pressure equal to rated working pressure of preventers up through chore. Valves must be full opening and suitable for high pressure mud service.
- Controls to be of standard design and each marked, showing opening and closing position.
- 4.Chokes will be positioned so as not to hamper or delay changing of choke beans. Replaceable parts for adjustable choke, other bean sizes, retainers, and choke wrenches to be conveniently located for immediate use.
- All valves to be equipped with handwheels or handles ready for immediate use.
- 6. Choke lines must be suitably anchored.

- 7. Handwheels and extensions to be connected and ready for use.
- Valves adjacent to driffing spool to be kept open. Use outside valves except for emergency.
- 9.All seamless steel control piping (3000 psi working pressure) to have flexible joints to avoid stress. Hoses will be permitted.
- Casinghead connections shall not be used except in case of emergency.
- Do not use kill line for routine fill-up operations.

Attachment to Exhibit #1 NOTES REGARDING BLOWOUT PREVENTORS

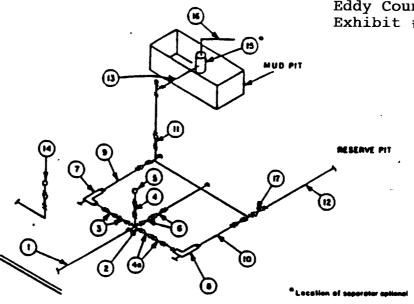
West Red Lake Unit #35 Eddy County, New Mexico

- 1. Drilling nipple will be constructed so it can be removed mechanically without the aid of a welder. The minimum internal diameter will equal BOPE bore.
- 2. Wear ring will be properly installed in head.
- 3. Blowout preventor and all associated fittings will be in operable condition to withstand a minimum 3000 psi working pressure.
- 4. All fittings will be flanged.
- 5. A full bore safety valve tested to a minimum 3000 psi W.P. 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 preventor 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.

MINIMUM CHOKE MANIFOLE 3,000, 5,000 and 10,000 PSI Working F. Jasure

3 MWP - 5 MWP - 10 MWP

West Red Lake Unit #35 Eddy County, New Mexico Exhibit #1-A



BEYOND SU	857	RUC	TURI
-----------	-----	-----	------

MINIMUM REQUIREMENTS										
			3,000 MWP			5,000 MWP		I	10,000 MWF	•
No.		I.D.	NOMINAL	RATING	1.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			10,000
	Cross 3"x3"x3"x3"									10.000
3	Valves(1) Gale □ Plug □(2)	3-1/6"		3,000	3-1/6*		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
48	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)	3-1/6"		3,000	3-1/6"		5,000	3-1/6"		10,000
7	Adjustable Choke(3)	5.		3,000	2.		5.000	2-	 	10,000
	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)	3-1/6*		3,000	3-1/8"		5,000	3-1/6"		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	Ges Separator		2'z\$'			2'25'			2'x5'	
16	Line		4.	1,000		4.	1.000		4.	2,000
17	Valves Gete [] (2)	3-1/6"		3,000	3-1/0"		5,000	3-1/8"	7	10,000

- (1) Only one required in Class 3M.
- (2) Gale velves 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 evaliable.
- 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.
- 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 built plugged tees.
- 7. Discharge lines from chokes, choke bypass and from top of gas separator should vent as far as practical from the well.

DRILLING PROGRAM

Attached to Form 3160-3 Devon Energy Corporation West Red Lake Unit #35 330' FNL & 240' FWL Section 9-T18S-R27E Eddy County, New Mexico

1. Geologic Name of Surface Formation:

Permian

2. Estimated Tops of Important Geologic Markers:

Seven Rivers 185'
Queen 725'
Grayburg 1,070'
San Andres 1,330'

3. Estimated Depths of Anticipated Fresh Water, Oil or Gas:

Water

Upper Permian: Surface - 750'

Oil

Grayburg: 1,200' - 1,330' San Andres: 1,850' - 2,200'

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 8 5/8" casing at 1150' and circulating cement back to surface. The Grayburg and San Andres intervals will be isolated by setting 5-1/2" casing to total depth (2800'±) and circulating cement to surface.

WEST RED LAKE UNIT #35 DRILLING PROGRAM PAGE 2

4. <u>Casing Program</u>:

Hole Size	Interval	Csg OD	Weight, Grade, Type
12-1/4"	0-40' 0-1150' 0-TD	8-5/8"	Conductor, 0.30" wall 24#, J-55 ERW, FBN ST&C R-3 15.5# J-55, ST&C seamless

Casing Program:

20" Conductor Casing: Cemented with redimix to surface.

8 5/8" Surface Casing: Cemented to surface with 415 sks 35:65 (Poz:Class C) +

6% gel + 2% CaCl2 + 1/4 lb/sk cellophane flakes and 100 sks Class C + 2% CaCl2 + 1/4 lb/sk cellophane

flakes.

5-1/2" Production: Cemented to surface with 120 sks 35:65 (Poz:Class C) 6%

gel + 10% salt + 1/4 lb/sk cellophane flakes and 265 sks Class C + 2% gel + fluid loss additive + 1/4 lb/sk

cellophane flakes.

The above cement volumes could be revised pending the caliper measurement from the open hole logs. The top of cement is designed to reach surface.

5. Minimum Specifications for Pressure Control:

The blowout preventor equipment (BOP) shown in Exhibit #1 will consist of a (3M system) double ram type (3000 psi WP) preventor and a bag-type (Hydril) preventor (3000 psi WP). Both units will be hydraulically operated and the ram type preventor will be equipped with blind rams on top and 4-1/2" drill pipe rams on bottom. Both BOP's will be installed on the 8 5/8" surface casing and utilized continuously until total depth is reached. As per BLM Drilling Operations Order #2, prior to drilling out the 8-5/8" casing shoe, the BOP's and Hydril will be function tested.

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 and choke manifold having 3000 psi WP rating.

6. Types and Characteristics of the Proposed Mud System:

The well will be drilled to total depth using brine, cut brine and polymer mud systems. Depths of systems are as follows:

<u>Depth</u>	<u>Type</u>	Weight (ppg)	Viscosity _(1/sec)	Water Loss (cc)
0 - 1150'	Fresh Water	8.8	34-36	No Control
1150' - T.D.	Cut Brine Polymer	8.8	32-36	10-20

The necessary mud products for weight addition and fluid loss control will be on location at all times.

7. 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.

8. Logging, Testing and Coring Program:

- 1 A. No drillstem tests are planned.
 - B. The open hole electrical logging program will be:

T. D. to 1150':	Dual Laterolog-Micro SFL with Gamma Ray, Caliper and SP
T.D. to 1150':	Compensated Neutron-Litho Density with Gamma Ray and Caliper
T. D. to surface:	Gamma Ray/Neutron

- C. Full cores will be taken from selected intervals (4) in the San Andres formation.
- D. Additional testing will be initiated subsequent to setting the 5 1/2" production casing. Specific intervals will be targeted based on log evaluation, geological sample shows and drill stem tests.

WEST RED LAKE UNIT #35 DRILLING PROGRAM PAGE 4

9. Abnormal Pressures, Temperatures and Potential Hazards:

No abnormal pressures or temperatures are foreseen. The anticipated bottom hole temperature at total depth is 104 degrees and maximum bottom hole pressure is 800 psig. No hydrogen sulfide gas has been reported or is known to exist at these depths in this area. No major loss circulation intervals have been encountered in adjacent wells.

10. Anticipated Starting Date and Duration of Operations:

Notice of Staking (NOS) was sent to the Carlsbad, New Mexico BLM office on February 9, 1993. Barry Hunt of that office has reviewed the proposed pad site for the location. A Cultural Resources Examination has been completed by Archaeological Survey Consultants and a copy forwarded to the Carlsbad, New Mexico BLM office.

Road and location preparation will not be undertaken until approval has been received from the BLM. The anticipated spud date is approximately May 1, 1993. The drilling operation should require approximately 10 days. If the well is deemed productive, completion operations will require, at minimum, an additional 30 days of testing to ascertain whether permanent production facilities will be constructed.

SURFACE USE AND OPERATING PLAN

Attachment to Form 3160-3 Devon Energy Corporation West Red Lake Unit #35 330' FNL & 240' FWL Section 9-T18S-R27E Eddy County, New Mexico

1. Existing Roads:

- A. The well site and elevation plat for the proposed West Red Lake Unit #35 is reflected on Exhibit #2. It was staked by P. R. Patton and Associates, Roswell, New Mexico.
- B. All roads into the location are depicted in Exhibit #3. Chalk Bluff Road will be used to access the location. No upgrades to roads other than the access into location from Chalk Bluff Road will be necessary.
- C. Directions to location: Turn right (south) off Highway 82 onto Chalk Bluff Road and go to the end of the road (Chalk Bluff Road turns east). Continue south on lease road for 0.4 miles and then turn left (east). Go ±0.2 mile to the West Red Lake Unit #28 location. The proposed #36 well is 500' north of the existing West Red Lake Unit #28.

2. Proposed Access Road:

Exhibit #3 shows the new access road to be constructed from Chalk Bluff Road. It will be constructed as follows:

- A. The maximum width of the road will be fifteen (15) feet.
- B. It will be crowned and made of 6 inches of rolled and compacted caliche. Water will be deflected, as necessary, to avoid accumulation and prevent surface erosion.
- C. Surface material will be native caliche. This material will be obtained from a BLM approved pit nearest in proximity to the location.
- D. The average grade will be approximately 1%.

- E. No cattleguards, grates or fence cuts will be required.
- F. No turnouts are planned.

3. <u>Location of Existing Wells</u>:

Exhibit #4 shows all existing wells within a one-mile radius of the proposed West Red Lake Unit #35. There are 63 total wells which include 15 active Queen/Grayburg/San Andres producers, 10 inactive Queen/Grayburg/San Andres wells, 17 active Abo producers, 10 inactive Abo wells, 3 inactive Penn wells, 1 active Wolfcamp producer, 1 active Atoka producer, 1 active Glorietta/Yesa producer and 5 drilled and abandoned wells. A list of the wells is depicted on Exhibit #4 attachment.

4. <u>Location of Existing and/or Proposed Facilities</u>:

- A. Devon Energy Corporation operates two production facilities in this unit. The West Red Lake Unit Battery is in Section 7 and the West Red Lake Unit Satellite Battery is in Section 8.
- B. In the event the well is found productive, it will be added to the West Red Lake Satellite Battery (refer to Exhibit #5).
- C. The well will be operated by means of an electric motor.
- D. 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. Caliche from unused portions of the drill pad will be removed. The original topsoil from the wellsite will be returned to the location. The drill site will then be contoured to the original natural state.

5. Location and Type of Water Supply:

The West Red Lake Unit #35 will be drilled using a combination of brine and fresh water mud systems (outlined in Drilling Program). The water will be obtained from the existing water line presently supplying fresh water to the unit. Additionally, produced salt water from lease gathering tanks may be used. No water well will be drilled on the location.

6. Source of Construction Materials:

All caliche utilized for the drilling pad and proposed access road will be obtained from a existing BLM approved pit. All roads will be constructed of 6" rolled and compacted caliche.

7. <u>Methods of Handling Water Disposal</u>:

- A. Drill cuttings will be disposed into the reserve pit.
- B. Drilling fluids will be contained in steel mud tanks and the reserve pit. The reserve pit will contain excess drilling fluid or fluid from the well during drilling, cementing, and completion operations. The reserve pit will be an earthen pit roughly 70' x 70' x 5', or smaller, in size.
- C. The reserve pit will be fenced on three sides throughout drilling operations and will be totally isolated upon removal of the rotary rig. The pit will be lined using a 5-7 mil plastic to minimize loss of drilling fluids.
- D. Water produced from the well during completion operations will be disposed into a steel tank or reserve pit, if volumes prove excessive. After placing the well on production through the production facilities, all water will be collected in tanks and injected into the water injection system. Produced oil will be separated into steel stock tanks until sold.
- E. A portable chemical toilet will be available on the location for human waste during the drilling operations.

- F. Garbage, trash and waste paper produced during drilling operations will be collected in a contained trailer and disposed at a approved landfill. All waste material will be contained to prevent scattering by the wind. All water, fluids, salt or other chemicals will be disposed into the reserve pit. No toxic waste or hazardous chemicals will be generated by this operation.
- G. All waste material will be removed within 30 days after the well is either completed or abandoned. The reserve pit will be completely fenced until it has dried. At the point the reserve pit is found sufficiently dry, it will be backfilled and reclaimed as per BLM specifications. Only the portion of the drilling pad used by the production equipment (pumping unit) will remain in use. If the well is deemed non-commercial, only a dry hole marker will remain.

8. Ancillary Facilities:

No campsite or other facilities will be constructed as a result of this well.

9. Well Site Layout:

- A. The drill pad is shown on Exhibit #6. Approximate dimensions of the pad, pits and general location of the rig equipment is displayed. Top soil will be stored adjacent to the pad until reclamation efforts are undertaken. Only modest cuts will be necessary to build the pad which will be covered with 6" of compacted caliche.
- B. No permanent living facilities are planned, but temporary trailers for the toolpusher, drilling foreman and mud logger may be on location throughout drilling operations.
- C. The reserve pit will be lined using plastic sheeting of 5-7 mil thickness.

10. Plans for Restoration of Surface:

- A. After concluding the drilling and/or completion operations, if the well is found non-commercial, the caliche will be removed from the pad and transported to the original caliche pit or used for other drilling locations. The road will be reclaimed as directed by the BLM. The reserve pit area will be broken out and leveled after drying to a condition where these efforts are feasible. The original top soil will again be returned to the pad and contoured, as close as possible, to the original topography.
- B. The pit lining will be buried or hauled away in order to return the location and road to their pristine nature. All pits will be filled and location leveled, weather permitting, within 120 days after abandonment.
- C. The location and road will be rehabilitated as recommended by the BLM.
- D. The reserve pit will be fenced on three sides throughout drilling operations. After the rotary rig is removed, the reserve pit will be fenced on the fourth side to preclude endangering wildlife. The fencing will be in place until the pit is reclaimed.
- E. If the well is deemed commercially productive, the reserve pit will be restored as described in 10 (A) within 120 days subsequent to the completion date. Caliche from areas of the pad site not required for operations will be reclaimed. The original top soil will be returned to the area of the drill pad not necessary to operate the well. These unused areas of the drill pad will be contoured, as close as possible, to match the original topography.

11. Surface Ownership:

The wellsite is owned by the Bureau of Land Management.

12. Other Information:

- A. The area surrounding the well site is a gypsum ridge. The top soil layer is very thin. The vegetation is moderately sparse with Chihuahua desert scrub.
- B. There is permanent water (Pecos River) 1.54 miles W/SW of the location.
- C. A Cultural Resources Examination has been completed by Archaeological Survey Consultants and forwarded to the Carlsbad, New Mexico BLM office. The report references no cultural areas on either the access road or drilling pad.

13. <u>Lessees's and Operator's Representative</u>:

Dander Indeson

The Devon Energy Corporation representatives responsible for assuring compliance of the surface use plan are:

Dan Talley

District Engineer	Production Foreman		
20 North Broadway	422 West Main		
Suite 1500	Suite F		
Oklahoma City, OK 73102	Artesia, NM 88210		
(405) 552-4560 (office)	(505) 748-3371 (office)		
(405) 340-8939 (home)	(505) 748-3671 (home)		

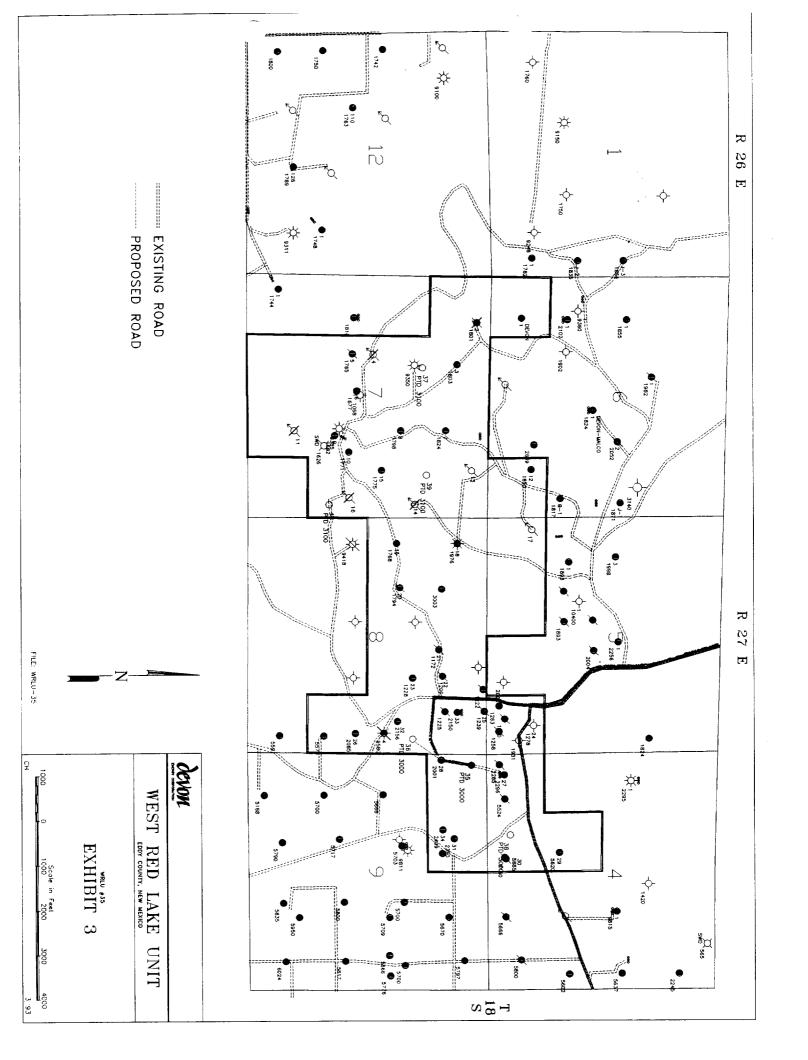
Certification:

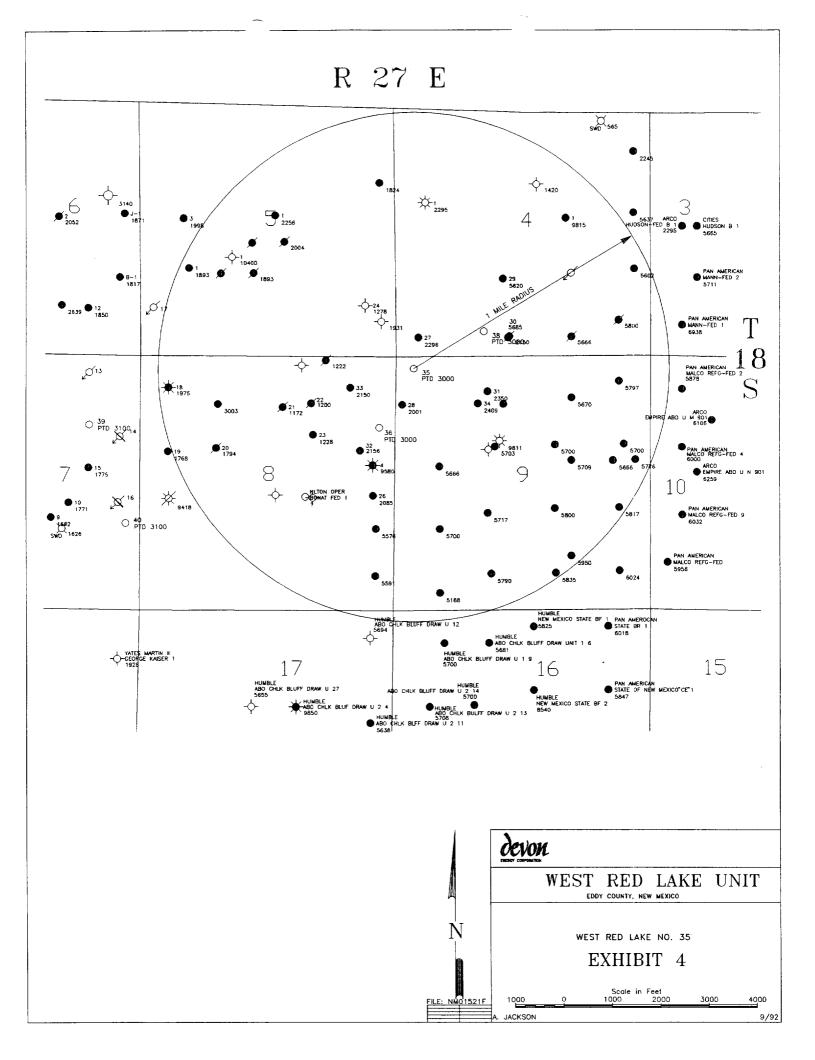
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access road; that I am familiar with the conditions that presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with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

Date: March 24, 1993

Randy Jackson
District Engineer

Signed: James Deckoon





Attachment to Exhibit #4

STATUS OF WELLS WITHIN ONE MILE RADIUS

West Red Lake Unit #35 Section 9 T18S R27E Eddy County, New Mexico

Sec. 4 - T18S - R27E

Mann #6

Devon	Energy Corp.			
	Hondo Fed. #1 West Red Lake Unit #29 West Red Lake Unit #27 West Red Lake Unit #30	Unit G Unit K Unit M Unit N	Qn - Grbg - SA Qn - Grbg - SA Qn - Grbg - SA Qn - Grbg - SA	(Active) (Active) (Active) (Inactive)
ARCO	Oil & Gas Corp.			
	Empire Abo Unit K #8	Unit I	Abo	(Inactive)
	Empire Abo Unit K #7	Unit J	Abo	(Inactive)
	Empire Abo Unit L #5	Unit M	Abo	(Inactive)
	Empire Abo Unit L #6	Unit N	Abo	(Inactive)
	Empire Abo Unit L #7	Unit O	Abo	(Inactive)
	Empire Abo Unit L #8	Unit P	Abo	(Inactive)
Merit 1	Energy Corp.			
	Federal BA Gas Com. #1	Unit E	Wolfcamp	(Active)
R. D. (Compton			

Unit G

D & A

<u>Sec. 5 - T18S - R27E</u>

Breck Operating Corp.

	Carter Collier Federal #1 Eaton Federal #1 Julia A Federal #1 Julia A Federal #2 Julia A Federal #3	Unit G Unit K Unit L Unit L Unit E	Qn - Grbg - SA Qn - Grbg - SA Qn - Grbg - SA Qn - Grbg - SA Qn - Grbg - SA	(Active) (Inactive) (Active) (Inactive) (Active)		
Petrol	leum Corp. of Texas					
	Yates Collier Federal #1	Unit J	Qn - Grbg - SA	(Inactive)		
R. D.	R. D. Compton					
	Brainard Fed. "A" #6 Brainard #24	Unit P Unit P	Qn - Grbg - SA Qn - Grbg - SA	(D & A) (D & A)		
Devoi	n Energy Corp.					
	West Red Lake Unit #17	Unit M	Qn - Grbg - SA	(Inactive)		
Exxo	n Co. USA					
	Chalk Bluff Unit P #1	Unit K	Penn.	(Inactive)		

Sec. 8 - T18S - R27E

Devon Energy Corp.

West Red Lake Unit #25	Unit A	Qn - Grbg - SA	(Inactive)
West Red Lake Unit #33	Unit A	Qn - Grbg - SA	(Active)
West Red Lake Unit #21	Unit B	Qn - Grbg - SA	(Inactive)
West Red Lake Unit #22	Unit B	Qn - Grbg - SA	(Inactive)
Pitcher Federal #1	Unit C	Glorieta-Yesa	(Active)
West Red Lake Unit #18	Unit D	Qn - Grbg - SA	(Active)
West Red Lake Unit #19	Unit E	Qn - Grbg - SA	(Active)
West Red Lake Unit #20	Unit F	Qn - Grbg - SA	(Inactive)
West Red Lake Unit #23	Unit G	Qn - Grbg - SA	(Active)
West Red Lake Unit #32	Unit H	Qn - Grbg - SA	(Active)
West Red Lake Unit #26	Unit I	Qn - Grbg - SA	(Active)

Julian E. Simon

rbg - SA	(Inactive)
ľ	rbg - SA

Amoco Production Co.

Hondo B Fed. Gas Com.	Unit L	Penn.	(Inactive)
-----------------------	--------	-------	------------

ARCO Oil & Gas Co.

Empire Abo Unit N #4	Unit H	Abo	(Active)
Empire Abo Unit O #4	Unit I	Abo	(Active)
Empire Abo Unit P #4	Unit P	Abo	(Active)

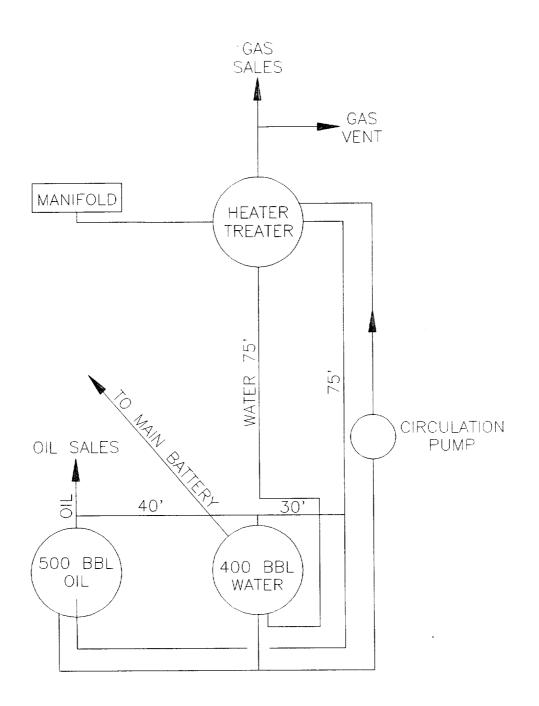
Sec. 8 - T18S - R27E

Pan American Corn

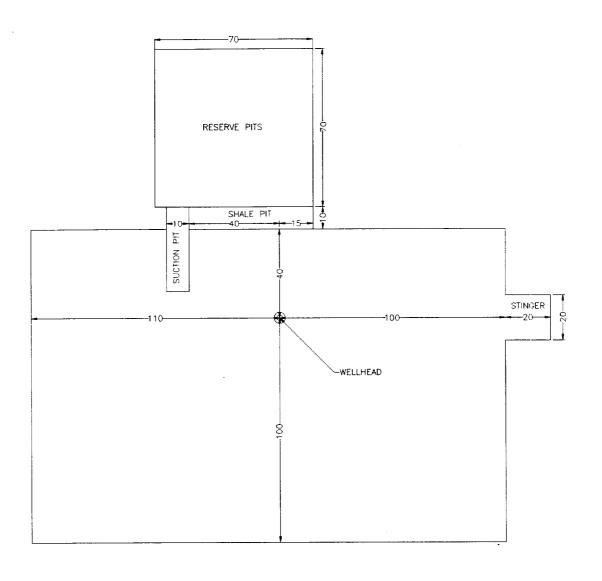
Pan American Corp.			
Chalk Bluff Draw Unit	Unit H	Penn.	(Inactive)
R.D. Compton			
Vandagriff#1	Unit J		(D & A)
Welch & Compton			
Smith Etal	Unit J		(D & A)
<u>Sec. 9 - T18S - R27E</u>			
ARCO Oil & Gas Co.			
Empire Abo Unit M #8	Unit A	Abo	(Active)
Empire Abo Unit M #7	Unit B	Abo	(Active)
Empire Abo Unit M #6	Unit C	Abo	(Active)
Empire Abo Unit N #5	Unit E	Abo	(Active)
Empire Abo Unit N #6	Unit F	Abo	(Inactive)
Empire Abo Unit N #701	Unit G	Abo	(Active)
Empire Abo Unit N #7	Unit G	Abo	(Inactive)
Empire Abo Unit N # 801	Unit H	Abo	(Active)
Empire Abo Unit N #8	Unit H	Abo	(Inactive)
Empire Abo Unit O #8	Unit I	Abo	(Active)
Empire Abo Unit O #7	Unit J	Abo	(Active)
Empire Abo Unit O #6	Unit K	Abo	(Active)
Empire Abo Unit O #5	Unit L	Abo	(Active)
Empire Abo Unit P #5	Unit M	Abo	(Active)
Empire Abo Unit P #6	Unit N	Abo	(Active)
Empire Abo Unit P #7	Unit O	Abo	(Inactive)
Empire Abo Unit P #701	Unit O	Abo	(Active)
Empire Abo Unit P #8	Unit P	Abo	(Active)

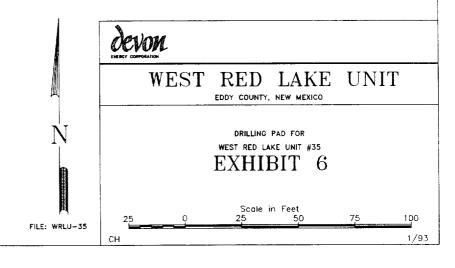
Devon Energy Corp.

West Red Lake Unit #31	Unit C	Qn - Grbg - SA	(Active)
West Red Lake Unit #34	Unit C	Qn - Grbg - SA	(Active)
West Red Lake Unit #28	Unit D	Qn - Grbg - SA	(Active)
Mann Federal #1	Unit F	Atoka	(Active)









DEVON ENERGY

Operator: DEVON ENERGY CORP	Well Name: WEST RED LAKE #35
Project ID:	Location:

Design Parameters: <u>Design Factors:</u> : 1.125 Collapse Mud weight (9.20 ppg) : 0.478 psi/ft : 1.00 Burst Shut in surface pressure : 1035 psi : 1.80 Internal gradient (burst) : 0.100 8 Round **(J)** psi/ft Buttress : 1.60 (J) Annular gradient (burst) : 0.000 psi/ft Body Yield : 1.50 (B) Tensile load is determined using air weight 0 lbs. Overpul l Service rating is "Sweet"

	Length (feet)		Weight (lb/ft)		e Joir		Depth (feet)	Drift (in.)	Cost
1	1,150	8-5/8"	24.00	J-55	5 ST&(2	1,150	7.972	
	Load (psi)	Collapse Strgth (psi)		Burst Load (psi)	Min Int Strgth (psi)			Tension Strgth (kips)	S.F.
1	550	1370	2.491	1150	2950	2.57	27.60	244	8.84 J

Prepared by : , Oklahoma City, OK

Date : 03-22-1993

Remarks

Minimum segment length for the 1,150 foot well is 1,100 feet.

Surface/Intermediate string:

Next string will set at 2,800 ft. with 9.20 ppg mud (pore pressure of 1,338 . psi.) The frac gradient of 1.000 at the casing seat results in an injection pressure of 1,150 psi. Effective BHP (for burst) is 1,150 psi.

The minimum specified drift diameter is 4.887 in.

NOTE: The design factors used in this casing string design are as shown above. As a general guideline, Lone Star Steel recommends using minimum design factors of 1.125 - Collapse (with evacuated casing), 1.0 - Burst, 1.8 - 8 Round Tension, 1.6 - Buttress Tension, and 1.5 - Body Yield. Collapse strength under axial tension was calculated based on the Westcott, Dunlop and Kemler curve. Engineering responsibility for use of this design will be that of the purchaser. Costs for this design are based on a 1990 pricing model. (Version 1.0G)

DEVON ENERGY

Operator: DEVON ENERGY CORP	Well Name: WEST RED LAKE #35
Project ID:	Location:

Design Factors: <u>Design Parameters:</u> Collapse : 1.125 Mud weight (9.20 ppg) : 0.478 psi/ft : 1.00 Burst Shut in surface pressure : 1058 8 Round : 1.80 (J) Internal gradient (burst): 0.100 psi/ft Buttress : 1.60 (J) Annular gradient (burst) : 0.000 psi/ft : 1.50 (B) Body Yield Tensile load is determined using air weight 0 lbs. Service rating is "Sweet" Overpul l

	Length (feet)	Size (in.)	Weight (lb/ft)		e Join		Depth (feet)	Drift (in.)	Cost
1	2,800	5-1/2"	15.50	J-5!	5 ST&0	Z	2,800	4.825	
	Load (psi)	Collapse Strgth (psi)	S.F.	Burst Load (psi)	Min Int Strgth (psi)		Load (kips)	Tension Strgth (kips)	S.F.
1	1338	4040	3.019	1338	4810	3.59	43.40	202	4.65 J

Prepared by : , Oklahoma City, OK

Date : 03-22-1993

Remarks :

Minimum segment length for the 2,800 foot well is 1,500 feet.

The mud gradient and bottom hole pressures (for burst) are 0.478 psi/ft and 1,338 psi, respectively.

NOTE: The design factors used in this casing string design are as shown above. As a general guideline, Lone Star Steel recommends using minimum design factors of 1.125 - Collapse (with evacuated casing), 1.0 - Burst, 1.8 - 8 Round Tension, 1.6 - Buttress Tension, and 1.5 - Body Yield. Collapse strength under axial tension was calculated based on the Westcott, Dunlop and Kemler curve. Engineering responsibility for use of this design will be that of the purchaser. Costs for this design are based on a 1990 pricing model. (Version 1.0G)

Land

(1

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT



GARREY CARRUTHERS GOVERNOR

June 14, 1989

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 8750 (505) 827-5800

Devon Energy Corporation 1500 Mid-America Tower 20 North Broadway Oklahoma City, Oklahoma 73102-8260

Attention: Charlene Newkirk

Re: \$50,000 Blanket Plugging Bond

Devon Energy Corporation, Principal Bond No. 56-0130-11003-82-1

Dear Ms. Newkirk:

The Oil Conservation Division hereby acknowledges receipt of and approves the rider to the above-captioned bond changing the name of principal as follows:

DEVON ENERGY CORPORATION (NEVADA)

Sincerely.

WILLIAM J. LEMAY.

Director

dr/

cc: Oil Conservation Division

Hobbs, Artesia, Aztec

DEVON ENERGY CORPORATION

1500 Mid-America Tower 20 North Broadway Oklahoma City, Oklahoma 73102-8260

405/235-3611 TWX 910-831-3277

May 5, 1989

State of New Mexico Oil & Gas Conservation Commission State Capitol Building Santa Fe, NM 87504

Re:

Blanket Plugging Bond State of New Mexico

No. 56-0130-11003-87

Gentlemen:

Devon Energy Corporation formerly Devon Corporation has changed its name to Devon Energy Corporation (Nevada). In this regard, enclosed is a Rider for the referenced bond to include both company names. Please amend your records.

Very truly yours,

Charlene Newkirk

Lease Records Supervisor

encls

cc: Carolyn Wilson

McEldowney McWilliams

RIDER

To be attached to and become	a part of Bond No. 56-0130-11003-87-1
issued by the United States Fideli	ty and Guaranty Company, on
behalf of Devon Energy Corpo	ration
as Principal, and in favor of	State of New Mexico
as Obligee, in the penalty of	Fifty thousand and no/100
Dollars (\$ 50,000.00)	for Blanket plugging bond
It is hereby understood and a	
February 10, 1989	the Principal in this
bond shall be Devon Energy Corporati	ion (Nevada)

However, the liability of the Surety in the aggregate to the Obligee for any and all defaults of the Principal, whether occuring before or after or partly before and partly after this rider become effective, shall in no event exceed the penalty stated in the bond.

Signed, Sealed, and Dated this 3rdday of March 1989.

ATTEST:	n .	Devon Energy Corporation (Nevada)
Chum (knusting	MARVIN C. LUNDE, JR. By: Vice President
المريان المريان	UNITED STATES	FIDELITY AND GUARANTY COMPANY
	Ву:	
•	Marcia C. Brejo	la Attorney-in-fact