Form 3160-3 (August, 1999)

# UNITED STATES N.M. DIV-Dist. 2 DEPARTMENT OF THE INTER 301 W. Grand Avenue BUREAU OF LAND MANAGEMENT Artesia, NM 88210

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

APPLICATION FOR PERMI	T TO DRILL O	R REENTER	5.LEASE DESIGNAT	ION AND SERIAL NO.
la TYPE OF WORK: DRILL RE	ENTER		NMNM533177A 6.IF INDIAN, ALLOT	MO5371771 TEE OR TRIBE NAME
b. TYPE OF WELL: OIL GAS WELL Other		SINGLE MULTIPLE ZONE	7.UNIT AGREEMEN	T NAME
2. NAME OF OPERATOR  DEVON ENERGY PRODUC	TION COMPANY	' T D		
3a. ADDRESS AND TELEPHONE NO.		TELEPHONE (Include area code).	8 FARM OR LEASE 1	
20 NORTH BROADWAY, SUITE 1500, OKC, OK	73102	(405) 235-3611	TODD 14 G FEI  9.API WELL NO.	DERAL #7
4. LOCATION OF WELL (Report location clearly and in acc. At surface 1980 FNL & 1980 FEL	ordance with any State	e requirements)*	30-015	-33213 ., OR WILDCAT
A Suitage 1700 11 to 1700 1 DE		- om ACM	10.FIELD AND POOL	, OR WILDCAT
At top proposed prod. zone 1980 FNL & 1980 FEL	R	-111-POTASH	INGLE WELLS	DELAWARE BLOCK AND SURVEY OR AREA
			UNIT G, SEC 14	
14.DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POS	T OFFICE*		12. COUNTY OR PA	
21 MILES EAST OF LOVING		RECEIVED	EDDY	NM NM
15 DISTANCE FROM PROPOSED LOCATION TO NEAREST	16.NO. OF ACRES IN LEA		17.Spacing Unit dedicated to	this well
PROPERTY OR LEASE LINE, FT. 660' (Also to nearest drig, unit line if any)	800.00	JAN 2 8 7004	40	
18.DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED,	19.PROPOSED DEPTH	OCD-ARTESIA	20.BLM/BIA Bond No. on fi	le
OR APPLIED FOR, ON THIS LEASE, FT. NA	8600		CO1104	
21.ELEVATIONS (Show whether DF, RT, GR, etc.)	22. APPROX. DATE WOR 10/1/03	K WILL START*	23. Estimated duratio 45 DAYS	n
3490'	10/1/03		43 DA 13	
2	4. Attachments			······································
The following, completed in accordance with the requirements	of Onshore Oil and G	as Order No. 1, shall be attached to t	his form:	
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest Sys shall be filed with the appropriate Forest Service Office).</li> </ol>	tem Lands, the SUPO	above). 5. Operator certification.	-	existing bond on file (see Item 20 may be required by the authorized
CARLSBAD CONTRO	OLLED WATER I	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 I Mile Radius		The undersigned accepts all appl and restrictions concerning opera portions thereof, as described ab	ations conducted on the ove	e leased land or:
Exhibit #5 = Production Facilities Plat Exhibit #6 = Rotary Rig Layout Exhibit #7 = Casing Design H <sub>2</sub> S Operating Plan Archeological clearance report		Bond Coverage: Nationwide BLM Bond #: CO-1104	GENERAL F	SUBJECT TO REQUIREMENTS AL STIPULATIONS
25. Signature  Title  Title	Name (Printed/Typed) KAREN COTTO	)M		Date 7/21/03
OPERÁTIONS TECHNICIAN				
Approved by (signature) /s/ Jesse J. Juen	Name (Printed/Typed)	/s/ Jesse J. Juen		<b>2 2</b> JAN 2004
A650 c. STATE DIRECTOR	Office	NM STA	TE OFFICE	

plication 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 ations thereon.

ions of approval, if any, are attached.

# APPROVAL FOR 1 YEAR

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 representations as to any matter within its jurisdiction

# **DRILLING PROGRAM**

Attached to Form 3160-3
Devon Energy Production Company, LP **TODD 14 G FEDERAL 7**(G) 1980' FNL & 1980' FEL, Section 14, T-23-S, R-31-E
Eddy County, New Mexico

# 1. Geologic Name of Surface Formation

Alluvium

# 2. Estimated Tops of Important Geologic Markers

Rustler	800'
Top of Salt	1,100'
Base of Salt	3,900'
Bell Canyon	4,400'
Cherry Canyon	5,600'
Brushy Canyon	7,000'
Bone Spring Lime	8,300'
Total Depth	8600'

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

The estimated depths at which water, oil and gas will be encountered are as follows.

Upper Permian Sands	above 800'	fresh water
Delaware (Bell Canyon)	4,400'	oil
Delaware (Cherry Canyon	6,000'	oil
Delaware (Brushy Canyon)	7,000'	oil

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 13 3/8" casing at 850' and circulating cement back to surface. The Potash and Salt intervals will be protected by setting 8 5/8" casing at 4350' and circulating cement to surface. The Delaware intervals will be isolated by setting 5 ½" casing to total depth and circulating cement above the base of the 8 5/8" casing.

# DRILLING PLAN

PAGE 2

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

<u>INTERVALS</u>	<u>LENGTH</u>	CASING	
<u>Surface</u> 0 – 850'	850'	13 3/8" 48# H-40 STC	WITNESS
Intermediate 0 – 4350'	4350'	8 5/8" 32# J-55 STC	
Production 0 - 8600'	8600'	5 ½", 15.5 & 17# J-55 LTC	

# **Cementing Program**

HOLE SIZE	<u>DEPTH</u>	<u>CEMENT</u>	TOC	WOC <u>HRS</u>
Surface 17 ½"	850'	Lead: 500 sx Poz 35:65 Class C, w/6%gel + 2% CaCl +1/4 lb/sx Cellophane flakes Tail: 200 sx Class C w/2% CaCl + 1/4lb/sx Cellophane Flakes	Surf.	24
<u>Intermediate</u>		•		
11"	4350°	Lead: 800 sx Poz 35:65 Class C 6% gel, 15 % salt +1/4 lb/sx Cellophane flakes Tail: 200 sx Class C w/2% CaCl + 1/4lb/sx Cellophane Flakes	Surf.	24
Production		•		
7 7/8"	8600'	Lead: 325 sx Silica Lite Class H + 3% salt 0.6% Fl additive + ¼ lb/sx Cellophane flakes  Tail: 400 sx Class H +4% gel +5% salt, 1/4lb sx cellophane flakes	4000'	24

The above cement volumes could be revised pending the caliper measurement from the open hole logs. The top of cement is designed to reach 450'+ above the 8 5/8" casing seat @ 4350'.

**DRILLING PLAN** 

PAGE 3

# 5. <u>Minimum Specifications for Pressure Control</u>

The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of a (3M system) double ram type (2000 psi WP) preventer and a bag-type (Hydril) preventer (2000 psi WP). Both units will be hydraulically operated and the ram type preventer will be equipped with blind rams on top and 5 1/2" drill pipe rams on bottom. Both BOP's will be installed on the 13 3/8" 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 brine with starch mud systems. Depths of systems are as follows.

<u>Depth</u>	<u>Type</u>	Weight (ppg)	Viscosity (1/sec)	Water Loss (cc)
0' - 850'	Fresh Water	8.8	34-36	No control
850' – 4350'	Brine Water	10.0	28	No control
4350' – TD	Fresh Water	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.
- C. Hydrogen Sulfide detection equipment (Compliance Package) will be in operations when drilling out the 13 3/8" casing shoe until the 5 ½" casing is cemented.

**DRILLING PLAN** 

PAGE 4

- 8. <u>Logging, Testing and Coring Program</u>
  - A. Drill stem tests may be run on potential pay interval.
  - B. The open hole electrical logging program will be as follows.
    - 1) TD to intermediate casing; Induction/ Gamma Ray/ Neutron/ Density Log.
    - 2) TD to surface: Neutron with Gamma Ray.
  - C. No coring program is planned.
  - 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.

# 9. Abnormal Pressures, Temperatures and Potential Hazards

No abnormal pressures or temperatures are foreseen. The anticipated bottom hole temperature at total depth is 130 degrees and maximum bottom hole pressure is 2900 psi. No Hydrogen sulfide or other hazardous gases or fluids have been encountered, reported or are known to exist at this depth in this area. No major loss circulation intervals have been encountered in adjacent wells.

# 10. Anticipated Starting Date and Duration of Operations

Road and location preparation will not be undertaken until approval has been received from the BLM. If approved, this well will be drilled as part of a development project. The anticipated spud date for the project is in October 2003. The drilling operation should require approximately 45 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

Attached to Form 3160-3 **TODD 14 G FEDERAL #7**(G) 1980' FNL & 1980' FEL, Section 14, T-23-S, R-31-E

Eddy County, New Mexico

# 1. Existing Roads

- A. The well site and elevation plat for the proposed **TODD 14 G FEDERAL #7** are reflected on Exhibit #2. This well was staked by Basin Surveys in Hobbs, NM.
- B. All roads into the location are depicted in Exhibit #3. New construction from the existing lease road will be used to access the location. New construction will conform to the specifications outlined in Item #2 below.
- C. Directions to location: from the junction of State Hwy 128 and Co Rd 798 (Red Road), go North on 798 for 3.6 miles to a lease road left; thence West on lease road for 0.4 mile to proposed lease road right. Go .1 mile to location.

# 2. Proposed Access Road

Exhibit #3 shows the existing lease road. Access to this location will require the construction of about 500' of proposed access road. All new construction will adhere to the following.

- A. The maximum width of the road will be 15'. It will be crowned and made of 6" of rolled and compacted caliche. Water will be deflected, as necessary, to avoid accumulation and prevent surface erosion.
- B. Surface material will be native caliche. This material will be obtained from a BLM approved pit nearest in proximity to the location. The average grade will be approximately 1%.
- C. No cattle guards, grates or fence cuts will be required. No turnouts are planned.

# SURFACE USE AND OPERATING PLAN PAGE 2

# 3. Location of Existing Wells

Exhibit #4 shows all existing wells within a one-mile radius of the proposed Todd 14 G Federal #7

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

- 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.
  - 1) 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. When the set along side of the access road.
  - 2) The tank battery, all connections and all lines will adhere to API standards.
- B. If the well is productive, rehabilitation plans are as follows.
  - 1) The reserve pit will be back-filled after the contents of the pit are dry (within 120 days after completion, weather permitting).
  - 2) The original topsoil from the well site will be returned to the location. The drill site will then be contoured to the original natural state.

# 5. <u>Location and Type of Water Supply</u>

The Todd 14 G Federal #7 will be drilled using a combination of brine and fresh water mud systems (outlined in Drilling Program). The water will be obtained from commercial sources and will be transported over the existing and proposed roads. No water well will be drilled on the location.

SURFACE USE AND OPERATING PLAN PAGE 3

# 6. Source of Construction Materials

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

# 7. Methods of Handling Water Disposal

- A. Drill cuttings will be disposed into the reserve pit.
- B. Drilling fluids will be contained in steel mud tanks. 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 125' x 125' x 6', 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 and saturation of the ground with brine water used during drilling.
- 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. 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 an 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 and tank battery) will remain in use. If the well is deemed non-commercial only a dry hole marker will remain.

SURFACE USE AND OPERATING PLAN PAGE 4

# 8. Ancillary Facilities

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

# 9. Well Site Layout

- A. The drilling pad is shown on Exhibit #5 The pad, pits and general location of the rig equipment are 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 tool pusher, 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. The original top soil will 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.

# **TODD 14 G FEDERAL #7**SURFACE USE AND OPERATING PLAN PAGE 5

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. The original top soil will be returned to the area of the drilling pad not necessary to operate the well. These unused areas of the drilling pad will be contoured, as close as possible, to match the original topography.

# 11. Surface Ownership

The well site is owned by the Bureau of Land Management.

Road routes have been approved by the BLM.

The surface location will be restored as directed by the BLM.

# 12. Other Information

- A. The area surrounding the well site is grassland. The top soil is very sandy in nature. The vegetation is moderately sparse with native prairie grass, sagebrush, yucca and miscellaneous weeds.
- B. There is no permanent water in the immediate area.
- C. Land use is for oil and gas production, grazing and hunting.
- D. A Cultural Resources Examination will be completed by Southern New Mexico Archaeological Services, Inc. and forwarded to the BLM office in Carlsbad, New Mexico.

# **TODD 14 G FEDERAL #7**SURFACE USE AND OPERATING PLAN PAGE 6

# 13. <u>Lessee's and Operator's Representative</u>

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

James Blount Don Mayberry
Operations Engineer Advisor Superintendent

Devon Energy Production Company, L.P.

20 North Broadway, Suite 1500

Oklahoma City, OK 73102-8260

Devon Energy Production Company, L.P.

Post Office Box 250

Artesia, NM 88211-0250

(405) 228-4301 (office)(505) 748-3371 (office)(405) 348-0102 (home)(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: Date: July 22, 2003

James Blount

Operations Engineer Advisor

# Attachment to Exhibit #1 NOTES REGARDING BLOWOUT PREVENTERS

# Devon Energy Production Company, LP

# **TODD 14 G FEDERAL #7**

# (G) 1980' FNL & 1980' FEL, Section 14, T-23-S, R-31-E 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 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 3000 psi working pressure.
- 4. All fittings will be flanged.
- 5. A full bore safety valve tested to a minimum 3000 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: Street or Box: City, State: Zip Code:	Devon Energy Production Company, LP 20 North Broadway, Suite 1500 Oklahoma City, Oklahoma 73102-8260
	plicable terms, conditions, stipulations and restrictions ed on the leased land or portion thereof, as described
Lease No.:	NM-533177A
Legal Description of Land:	40 acres 14 T23S-R31E
Formation(s):	Ingel Wells Delaware
Bond Coverage:	Nationwide
BLM Bond File No.:	CO1104
Authorized Signature:	James Blount
Title:	Oper. Engineering Advisor
Date:	7/22/03

DISTRICT 1 1625 N. French Dr., Hobbs, NM 88240 DISTRICT II

# State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102 Revised March 17, 1999

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

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

811 South First, Artesia, NM 88210

# OIL CONSERVATION DIVISION

DISTRICT IV 2040 South Pacheco, Santa Fe, NM 87505 2040 South Pacheco Santa Fe, New Mexico 87504-2088

D AMENDED REPORT

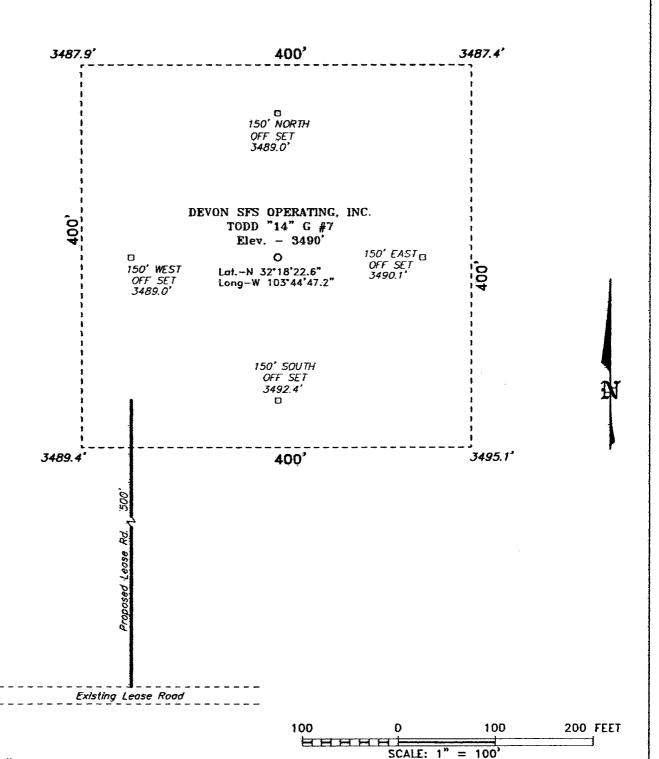
# WELL LOCATION AND ACREAGE DEDICATION PLAT

API	Number			Pool Code 3745		Pool Name Ingle Wells Delaware				
Property	Code	1	Property Name Well N TODD "14" G 7					nwper		
ogrid N 20305	<b>.</b>		Operator Name DEVON SFS OPERATING, INC.					- 1	Elevation 3490'	
		·			Surface Loca	ation				
UL or lot No.	Section	Township	Range	Let Idn	Feet from the	North/South line	Feet from the	East/West line	County	
G	14	23 S	31 E	'	1980	NORTH	1980	EAST	EDDY	
			Bottom	Hole Loc	cation If Diffe	rent From Sur	face	-		
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	Bast/West line	County	
Dedicated Acre	s Joint o	r Infill Co	nsolidalion (	Code Or	der No.					

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

<del></del>			
N32°18'22.6" - W103°44'47.2"	3487.9' 5487.4'   0 =     3489.4' 3495.1'	1980'	OPERATOR CERTIFICATION  I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.  Signature  James Blount  Printed Name  Sr Engineering Advisor  Title  July 22, 2002  Date  SURVEYOR CERTIFICATION  I hereby certify that the wett 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.  LINE 28, 2002  Date Surveyer Opension of the state of the state of the state of the best of the be
			ME DUX / SW

# SECTION 14, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.



Directions to Location:

FROM THE JUNCTION OF STATE HWY 128 AND CO. RD. 798(RED ROAD), GO NORTH ON 798 FOR 3.6 MILES TO A LEASE ROAD LEFT; THENCE WEST ON LEASE ROAD FOR 0.4 MILE TO PROPOSED LEASE ROAD RIGHT.

BASIN SURVEYS P.O. BOX 1786 - HOBBS, NEW MEXICO

W.O. Number: 2588 Drawn By: **K. GOAD**Date: 07-01-2002 Disk: KJG CD#4 ~ 2588A.DWG

# DEVON SFS OPERATING, INC.

REF; TODD "14" G No, 7 / Well Pad Topo

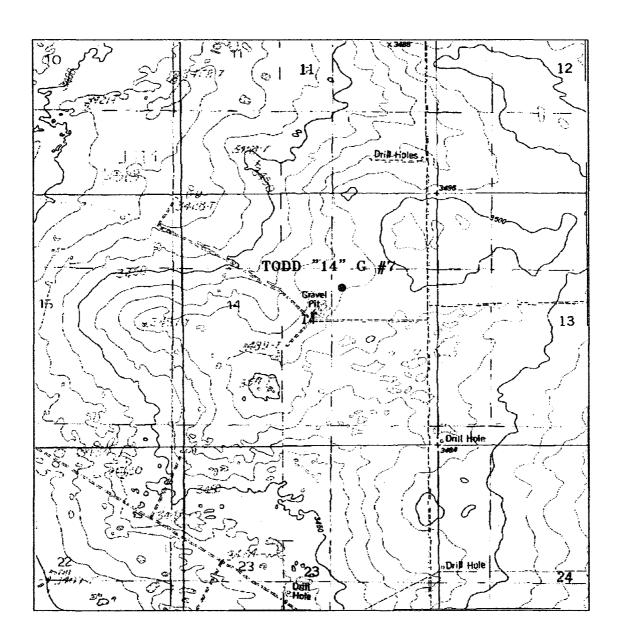
THE TODD "14" G No. 7 LOCATED 1980' FROM

THE NORTH LINE AND 1980' FROM THE EAST LINE OF

SECTION 14, TOWNSHIP 23 SOUTH, RANGE 31 EAST.

N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 06-28-2002 | Sheet 1 of 1 Sheets





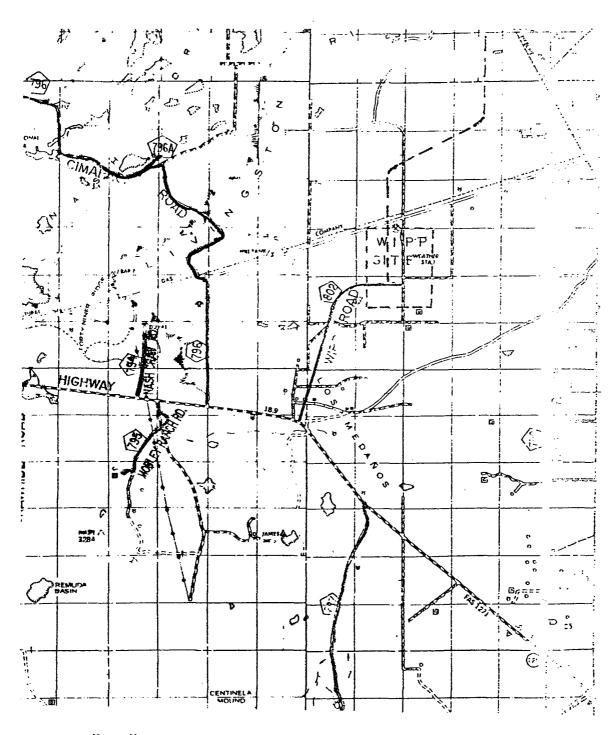
TODD "14" G #7
Located at 1980' FNL and 1980' FEL
Section 14, Township 23 South, Range 31 East,
N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (505) 393-7316 - Office (505) 392-3074 - Fax basinsurveys.com

W.O. Number:	2588AA - KJG CD#4
Survey Date:	06-28-2002
Scale: 1" = 20	000'
Date: 07-01-	-2002

DEVON SFS OPERATING, INC.



TODD "14" G #7
Located at 1980' FNL and 1980' FEL
Section 14, Township 23 South, Range 31 East,
N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (505) 393-7316 — Office (505) 392-3074 — Fax basinsurveys.com

W.O. Number:	2588AA - KJG CD#4
Survey Date:	06-28-2002
Scale: 1" = 2	MILES
Date: 07-01-	-2002

DEVON SFS OPERATING, INC.

# 3,000 psi Working Pressure

### 3 MWP

### STACK REQUIREMENTS

No.	Hem		Min. I.D.	Min, Nominal
1	Flowline			
2	Fill up line			5-
3	Orilling rapple			
4	Annular preventer			
5	Two single or one dual h operated rams	ydraulically		
64	Drilling spool with 2" mir 3" min choke line outlets			
<b>5</b> b	2" min. kill line and 3" m outlets in ram, (Alternate			
7	Valve	3-1/8*		
8	Gate valve—power oper	aled	3-1/8"	
9	Line to choke manifold			3*
10	Valves	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 nee	dle valve		
15	Kill line to rig mud pump		2-	

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· •	
• •	NULAR VENTER
. 6.11	10 AAUS
e PIP	(1AW)
	ILLIMO POOL
0	Asime Day
0	ASIME (2)

CONFIGURATION

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.
- 2. Automatic accumulator (80 gallon, minimum) capable of closing BOP in 30 seconds or less and, holding them closed against full rated working pressure.
- BOP controls, to be located near drillers position.
- 4. Kelly equipped with Kelly cock.
- S.Inside blowout prevventer or its equivalent on derrick floor at all times with proper threads to fit pipe being used.
- 6.Kelly saver-sub equipped with rubber casing protector at all times.
- 7.Plug type blowout preventer tester.
- 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 cismp 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 perts for adjustable choke, other bean sizes, retainers, and choke wrenches to be conveniently located for immediate use.
- S.All valves to be equipped with handwheels or handles ready for immediate use.
- 8. Choke lines must be suitably anchored.

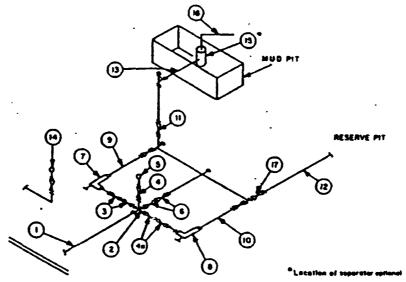
- Handwheels and extensions to be connected and ready for use.
- Valves adjacent to drilling spool to be kept open. Use outside valves except for emergency.
- All seamless steel control piping (3000 psi working pressure) to have flexible joints to avoid stress. Hosee will be permitted.

- - -

- Casinghead connections shall not be used except in case of emergency.
- 11.Do not use kill line for routine fill-up operations.

1

#### 3 MWP - 5 MWP - 10 MWP



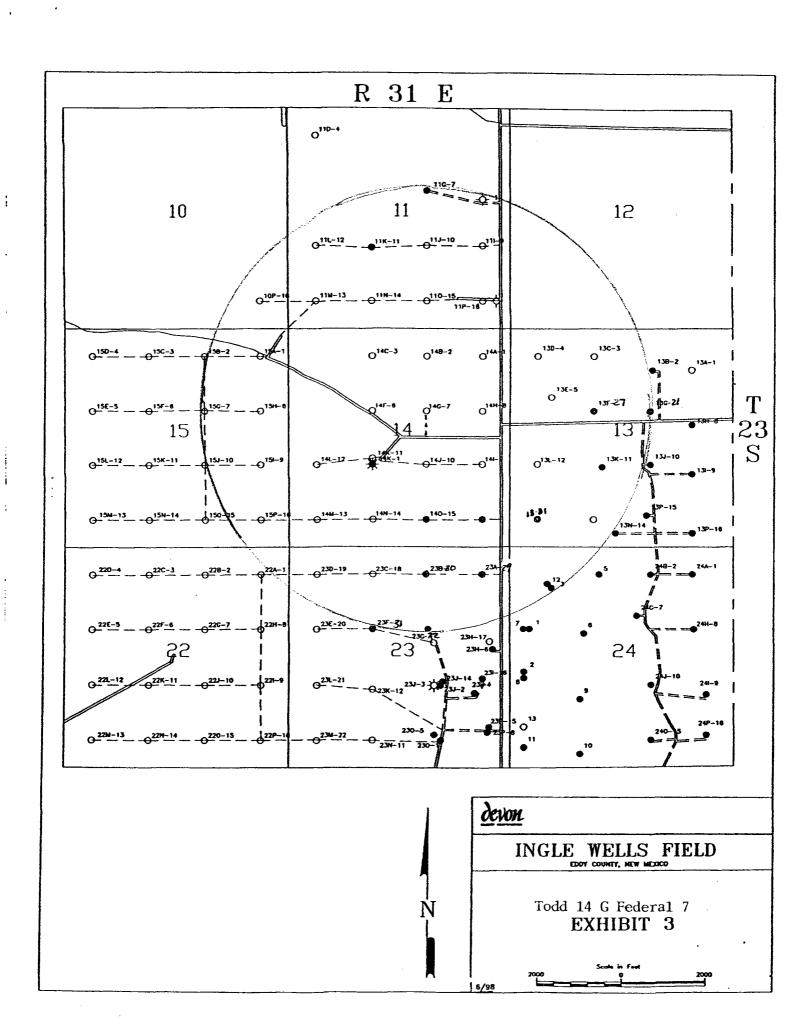
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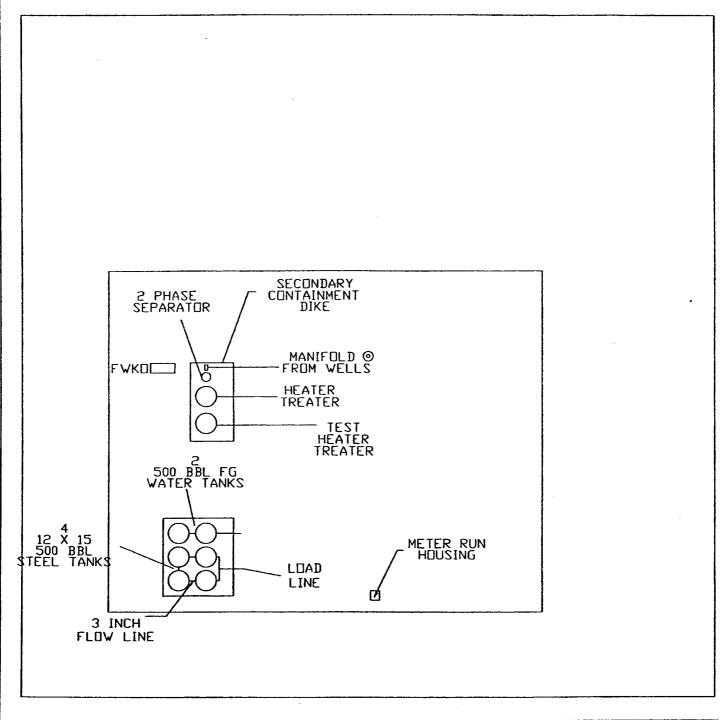
			MINII	NUM REQU	REMENTS	<del></del>	<del></del>		·	<del></del>
			3,000 MWP	5,000 MWP			10,000 MWP			
No.		I.D.	NOMINAL	RATING	1.0.	NOMINAL	RATING	1.D.	NOMINAL	RATING
1	Line from drilling spool		3.	3,000		3-	5,000		3-	10.000
2	Cross 3"x3"x3"x2"			3,000			5,000			
	Cross 3"x3"x3"x3"									10,000
3	Valves(1) 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
42	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
8	Valves Gate ☐ Plug ☐[2]	3-1/8*		3,000	3-1/8"		5,000	3-1/8"		10,000
7	Adjustable Choke(3)	5.		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		5.	3,000		5-	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	Gos Separator		2'x5'			2'x5'			27:5"	
16	Line		4°	1,000		4*	1,000		4-	2,000
17	Valves Gete () Plug ()(2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000

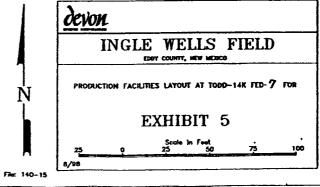
- (1) Only one required in Class 3M.
- (2) Gate valves only shall be used for Class 10M.
- (3) Remote operated hydraulic choke required on \$,000 psi and 10,000 psi for drilling.

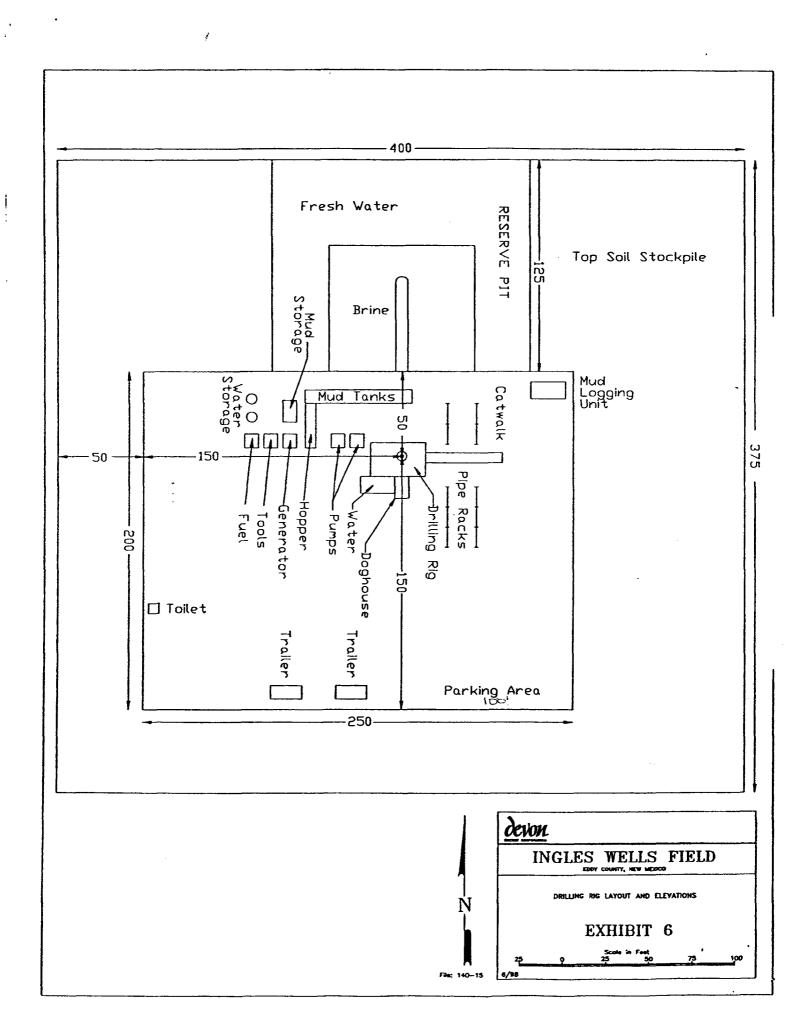
# **EQUIPMENT SPECIFICATIONS AND INSTALLATION INSTRUCTIONS**

- 1. All connections in choice manifold shall be welded, studded, flanged or Cameron clamp of comparable rating.
- 2. All flanges shell be API 68 or 6BX and ring gaskets shell 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.
- 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.









# **DEVON ENERGY CORPORATION**

# HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

# A. Hydrogen Sulfide Training

All rig crews and company personnel will receive training from a qualified instructor in the following areas prior to penetrating any hydrogen sulfide bearing formations during drilling operations:

- 1. The hazards and characteristics of hydrogen sulfide (H2S).
- 2. The proper use and maintenance of the H2S safety equipment and of personal protective equipment to be utilized at the location such as H2S detection monitors, alarms and warning systems, and breathing equipment. Briefing areas and evacuation procedures will also be discussed and established.
- 3. Proper rescue techniques and procedures will be discussed and established.

In addition to the above, supervisory personnel will be trained in the prevention of oil and gas well blowouts in accordance with Minerals Management Service Standards Subpart - 0 - 250 - 212.

Prior to penetrating any known H2S bearing formation, H2S training will be required at the rig sight for all rig crews and company personnel that have not previously received such training. This instruction will be provided by a qualified instructor with each individual being required to pass a 20 question test regarding H2S safety procedures. All contract personnel employed on an unscheduled basis will be required to have received appropriate H2S training.

This Hydrogen Sulfide Drilling And Operations Plan shall be available at the wellsite during drilling operations.

# **B. H2S Safety Equipment And Systems**

All H2S safety equipment and systems will be installed, tested, and operational when drilling operations reach a depth approximately 500' above any known or probable H2S bearing formation. The safety systems to be utilized during drilling operations are as follows:

# Operations Plan

# 1. Well Control Equipment

- (a) Double ram BOP with a properly sized closing unit and pipe rams to accommodate all pipe sizes in use.
- (b) A choke manifold with a minimum of one remote choke.

# 2. H2S Detection And Monitoring Equipment

- (a) Three (3) H2S detection monitors will be placed in service at the location. One monitor will be placed near the bell nipple on the rig floor; one will be placed at the rig substructure; and, one will be at the working mud pits or shale shaker. This monitoring system will have warning lights and audible alarms that will alert personnel when H2S levels reach 10 ppm.
- (b) One (1) Sensidyne Pump with the appropriate detection tubes will also be available to perform spot checks for H2S concentrations in any remote or isolated areas.

# 3. Protective Equipment For Essential Personnel

Protective equipment will consist of the following:

- (a) Four (4) five minute escape packs located at strategic points around the rig.
- (b) Two (2) thirty minute rescue packs to be located at the designated briefing areas.

# 4. Visual Warning System

Visual warning system will consist of the following:

- (a) Two wind direction indicators.
- (b) One condition / warning sign which will be posted on the road providing direct access to the location. The sign will contain lettering of sufficient size to be readable at a reasonable distance from the immediate location. The sign will inform the public that a hydrogen sulfide gas environment could be encountered at the location.

# 5. Mud Program

Operations Plan

The mud program has been designed to minimize the volume of H2S circulated to surface. Proper mud weight and safe drilling practices (for example, keeping the hole filled during trips) will minimize hazards when drilling in H2S bearing formations.

# 6. Metallurgy

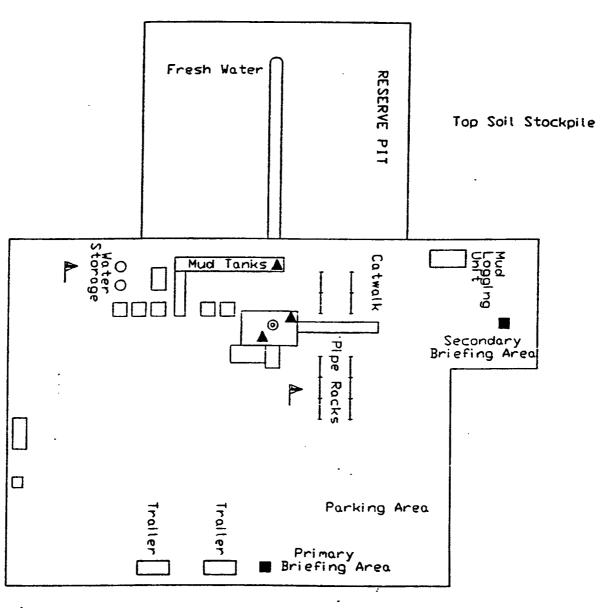
All drill strings, casings, tubing, wellhead, blowout preventers, drilling spools, kill lines, choke manifold and lines and valves shall be suitable for H2S service.

# 7. Communication

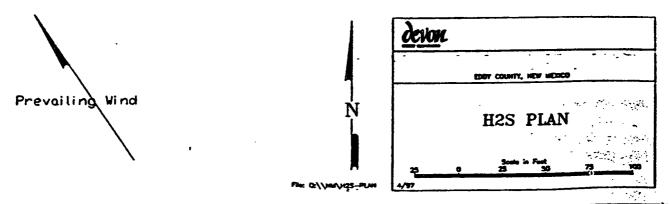
Cellular telephone communication will be available in company vehicles.

# C. Diagram of Drilling Location

Attached is a diagram representing a typical location layout as well as the location of H2S monitors, briefing areas and wind direction indicators.



- H2S MONITORS WITH ALARMS AT THE BELL NIPPLE, SUBSTRUCTURE, AND SHALE SHAKER WIND DIRECTION INDICATORS
- SAFE BRIEFING AREAS WITH CAUTION SIGNS AND PROTECTIVE BREATHING EQUIPMENT



4



Devon Energy Corporation 20 North Broadway Oklahoma City, Oklahoma 73102-8260 Fax 405-552-8113

July 22, 2003

United States Department of the Interior Bureau of Land Management 620 East Greene Street Carlsbad, New Mexico 88220 Attn: Leslie A. Theiss

Re: Application for Permit to Drill Todd 14G Federal #7 1980' FNL & 1980' FEL Section 14-T23S-R31E Eddy County, New Mexico 2003 JUL 28 AM 6 57
BUREAU OF LAND MOMT.
CARLSBAD FIELD OFFICE

# Dear Ms. Theiss:

Enclosed you will find Devon Energy Production Company, L.P.'s ("Devon") Application for Permit to Drill ("APD") the referenced Delaware development well. As you know, this APD is located on Federal Lease NM-0533177 which has been the subject of numerous meetings and telephone conversations with regard to Devon's attempt to develop its oil and gas interests under the N/2 of Section 14. In each of the previous meetings, Bureau of Land Management ("BLM") personnel have elected not to make any further decisions regarding the issuance of APD's in the N/2 of Section 14 until a decision has been issued by the Administrative Law Judge ("ALJ") appointed by the Interior Board of Land Appeals ("IBLA") in case IBLA 92-612, etal. Devon, and presumably BLM, is in receipt of the IBLA's long awaited decision dated July 7, 2003. Therefore, it is appropriate that Devon submit the enclosed APD at this time for BLM's approval. The enclosed application should be approved by BLM for the following reasons:

- 1. Lease NM-0533177 dated April 1, 1964, covers the N/2 of Section 14 as well as other lands. Because some of the lands (excluding the N/2 Section 14) were included within the then existing Oil/Potash Area, the attendant potash stipulations were attached to the lease. That portion of NM-0533177 located in the N/2 of Section 14 was not included in the Oil/Potash area as recognized by the Secretary of the Interior until issuance of the 1975 Secretarial Order dated November 5, 1975.
- 2. The N/2 of Section 14 is completely surrounded by acreage that is the subject matter of the Settlement Agreement between BLM and Devon which provides that Devon may fully develop such acreage without potash impediments.

United States Department of the Interior July 22, 2003 Page 2

- 3. The N/2 of Section 14 and all surrounding acreage is unleased for potash and has been unleased for many years.
- 4. The closest potash mining operations are approximately seven miles to the West.
- 5. The N/2 of Section 14 lies on the edge of the area currently designated by BLM as containing sufficient ore to be deemed a potash "enclave".

Clearly, one of the ALJ's decisions under the aforementioned IBLA order was that BLM's long-standing enclave policy and the criteria used by BLM to approve or deny APD's in the Oil/Potash area are not in accord with the governing Secretarial Order of 1986. In other words, all of the lands within the currently established enclave are not known to contain potash ore in sufficient thickness and quality to be mineable under existing technology and economics. It is Devon's opinion that the area covered by the enclosed APD, as well as the remainder of the N/2 of Section 14 for which permits have not previously been approved, should be approved for oil and gas drilling in accordance with the ALJ's decision.

Devon looks forward to your approval of the enclosed APD at your earliest convenience so that orderly oil and gas development may proceed.

If there are any questions or if additional information is required, feel free to call me at 1-800-583-3866, extension 4633.

Yours very truly,

DEVON ENERGY PRODUCTION COMPANY, L.P.

Ken Gray

Senior Land Advisor

Uen Branf

Kg/

**Enclosure**