NSL 8/11/97



20 North Broadway, Suite 1500 Oklahoma City, Oklahoma 73102-8260

Telephone 405/235-3611 FAX 405/552-4550

July 16, 1997

Certified Mail No. Z 447 031 498

State of New Mexico Energy, Minerals and Natural Resources Department Oil Conservation Division 2040 South Pacheco Santa Fe, New Mexico 87505

RE: Non-Standard Location Approval Hawk "10N" Federal #16 Eddy County, New Mexico

Gentlemen:

Devon Energy Corporation (Nevada) requests "Non-Standard Location" approval for the referenced well located as listed below. This unorthodox location is necessary due to pipeline and topography problems.

Well Name & No.	<u>Unit Ltr</u>	Section-T-R	Footage Location
Hawk "10N" Federal #16	N	10-18S-27E	280' FSL & 2130' FWL

Enclosed is a map of the West Red Lake Area showing the well's location and a copy of form C-102.

Operators having wells and/or lease holdings in the offsetting 40 acre tracts will be notified by certified mail. Copies of our letters of notification to the following operators are enclosed.

Arco Permian Altura Energy, Ltd. Midland, Texas Houston, Texas

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Hawk "10N" Federal #16 NSL Approval 7/16/97 Page Two State of New Mexico Energy, Minerals and Natural Resources Dept. Oil Conservation Division

If you have any questions, please contact the undersigned at (405) 235-3611, X4509.

Sincerely yours,

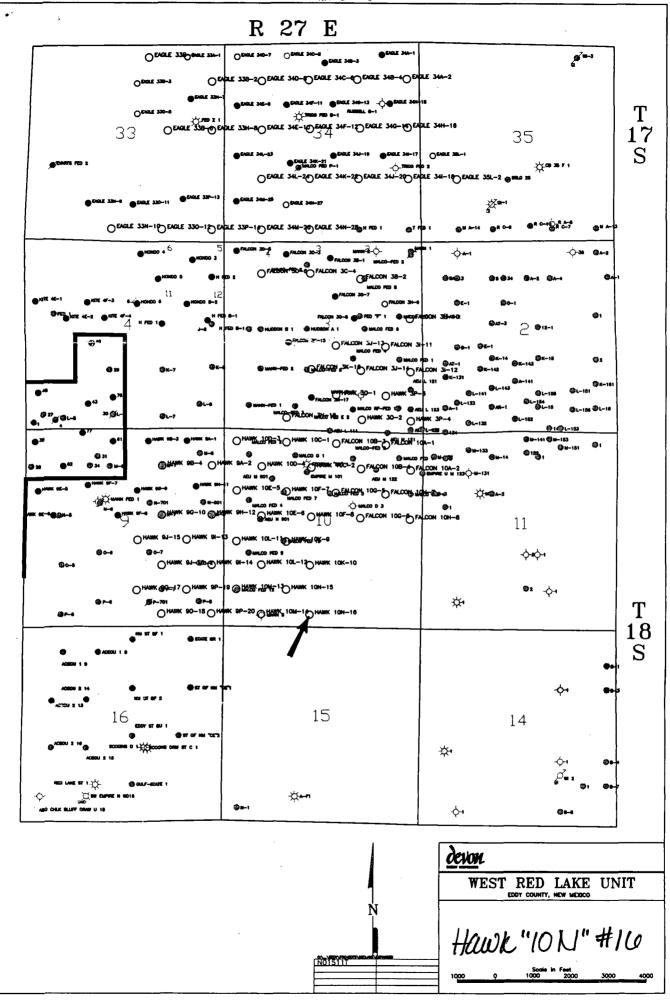
DEVON ENERGY CORPORATION (NEVADA)

E. I. Bithoy Je.

Mr. E.L. Buttross, Jr. District Engineer

ELB\dk Enclosures

cc: Oil Conservation Division - Artesia, NM Bureau of Land Management - Carlsbad, NM



DISTRICT 1 P.0. Box 1980, Hobbs, NM 88240

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

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410 State of New Mexico

Energy. Minerals and Natural Resources Department Exhibit 2

### OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

□ AMENDED REPORT

### WELL LOCATION AND ACREAGE DEDICATION PLAT

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API	Number			Pool Code	1	Pool Name					
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		<u>.                                    </u>	. <u></u>		Surface Location						
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			Bottom	Hole Loo	eation I	f Diffe	rent From Sur	fac	e		
UL or lot No.	Section	Township	Range	Lot Idn	Feet fro	m the	North/South line	F	eet from the	<b>Bast/West</b> line	County
Dedicated Acres	Joint o	r Infill Co	nsolidation	Code Or	der No.		L	L			L
NO ALLO	WABLE W						INTIL ALL INTER APPROVED BY			EN CONSOLIDA	ATED
									I hereby contained hereis best of my know Signature E. L. Bu Printed Nam District Title May 13, Date	Engineer 1997 PR CERTIFICAT	formation ete to the
	- 2130'	3447,0'	3463.					<u> </u>	on this plat we actual surveys supervison, an correct to the App Date Surveye Signature & Professional	No. 702205	l notes of under my true and



20 North Broadway, Suite 1500 Oklahoma City, Oklahoma 73102-8260 Telephone 405/235-3611 FAX 405/552-4550

July 16, 1997

#### Certified Mail No. Z 447 031 499

ARCO Permian P.O. Box 1610 Midland, TX 79702

RE: Non-Standard Location Approval Proposed 2800' San Andres Test Hawk "10N" Federal #16 280' FSL & 2130' FWL Section N-10-T18S-R27E Eddy County, New Mexico

Gentlemen:

We have applied for a permit to drill the referenced well. This unorthodox location was due to pipeline and topography problems. The proposed well site is in the West Red Lake area in Eddy County, New Mexico, and offsets your lease hold in Section 15 and 16-T18S-R27E.

The NMOCD Non-Standard Location Approval process requires that we notify offset lease holders and submit Proof of Notice.

Arco Permian

Hawk "10N" Federal #16 Non-Standard Location Approval July 16, 1997 Page Two

Please accept this certified letter as notification. If you have any questions, please contact Ernie Buttross, Jr., at (405) 235-3611, X4509.

Sincerely yours,

DEVON ENERGY CORPORATION (NEVADA)

Dilina Keys

Diana Keys Engineering Tech.

/dk

cc: Oil Conservation Division - Santa Fe, NM Oil Conservation Division - Artesia, NM Bureau of Land Management - Carlsbad, NM

### STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

# IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

CASE NO. 11966 ORDER NO. R-11162

# APPLICATION OF DEVON ENERGY CORPORATION (NEVADA) FOR 23 UNORTHODOX OIL WELL LOCATIONS, EDDY COUNTY, NEW MEXICO.

#### ORDER OF THE DIVISION

#### BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on April 16, 1998 at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this <u>13</u> Haday of April, 1999, the Division Director, having considered the testimony, the record and the recommendations of the Examiner,

#### FINDS THAT:

(1) Due public notice has been given and the Division has jurisdiction of this case and its subject matter.

(2) The applicant, Devon Energy Corporation (Nevada) ["Devon"], seeks authority to drill and produce the following wells at unorthodox oil well locations in Township 17 South, Range 27 East, NMPM, Eddy County, New Mexico:

Well Name and Number	<u>API Number</u>	Section	n Footage Location	<u>Unit</u>
Eagle "27-H" Federal No. 15	30-015-29942	27	1450' FNL & 990' FEL	н
Evarts "31" Federal No. 3	30-015-30171	31	1330' FSL & 1630' FEL	J
Eagle "33-G" Federal No. 6	30-015-29595	33	2460' FNL & 1350' FEL	G
Eagle "33-H" Federal No. 8	30-015-29596	33	2435' FNL & 531' FEL	Н
Eagle "33-N" Federal No. 10	30-015-29598	33	230' FSL & 2140' FWL	Ν
Eagle "34-E" Federal No. 10	30-015-29632	34	2310' FNL & 1240' FWL	E
Eagle "34-F" Federal No. 12	30-015-29635	34	2310' FNL & 2420' FWL	F
Eagle "34-G" Federal No. 14	30-015-29636	34	2310' FNL & 1600' FEL	G
Eagle "34-I" Federal No. 18	30-015-29655	34	1740' FSL & 280' FEL	I
Eagle "34-L" Federal No. 24	30-015-29643	34	1740' FSL & 1065' FWL	L

In addition, Devon seeks authority to drill and produce the following wells at unorthodox oil well locations in Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico:

Well Name and Number	<u>API Number</u>	<u>Sectio</u>	n Footage Location	<u>Unit</u>
Falcon "3-N" Federal No. 18	30-015-29575	3	680' FSL & 1350' FWL	Ν
Carter Collier "5" Federal No. 9	30-015-29995	5	330' FNL & 2360' FEL	В
Evarts "6" Federal No. 4	30-015-30109	6	330' FNL & 1190' FEL	A.
Fred "6" Federal. No. 5	30-015-30155	6	1260' FNL & 990' FWL	D
Patton "6" Federal No. 6	30-015-30085	6	2460' FNL & 2310' FWL	F
Patton "6" Federal No. 4	30-015-30079	6	1593' FSL & 1469' FWL	K
Patton "6" Federal No. 3	30-015-29980	6	930' FSL & 1450' FWL	Ν
Hawk "9-B" Federal No. 4	30-015-29480	9	990' FNL & 1360' FEL	В
Hawk "9-J" Federal No. 16	30-015-29483	9	1630' FSL & 1650' FEL	J
Hawk "9-O" Federal No. 17	30-015-29484	9	1170' FSL & 2310' FEL	0
Hawk "17-C" Federal No. 1	30-015-29515	17	380' FNL & 1450' FWL	С
Hawk "17-C" Federal No. 2	30-015-29726	17	890' FNL & 2585' FWL	С
Kaiser No. 1	NA	18	330' FNL & 1110' FEL	Α

(3) Prior to the hearing the Division issued the following Administrative Orders for four of the above-described wells:

- (a) NSL-3969 (SD), dated March 11, 1998, granted Devon approval to drill its Hawk "17-C" Federal Wells No. 1 and 2 at the above-described unorthodox oil well locations;
- (b) NSL-3982, dated March 23, 1998, granted Devon approval to drill its Carter Collier "5" Federal Well No. 9 at the above-described unorthodox oil well location; and
- (c) NSL-3983, dated March 23, 1998, granted Devon approval to drill its Evarts "6" Federal Well No. 4 at the above-described unorthodox oil well location.

Since it is unnecessary at this time to include these four wells in this application, they should be <u>dismissed</u>.

1

(4) The Red Lake (Queen-Grayburg-San Andres) Pool, as currently designated, includes the following lands in Eddy County, New Mexico:

star e for the

	<u>6 SOUTH, RANGE 28 EAST,</u>	TOWNSHIP 17 SOUTH, RANGE 28 EAST,			
<u>NMPM</u>	·	<u>NMPM</u>			
Section 24:	SE/4	(Contir	nued)		
Section 25:	All	Section 15:	All		
Section 26:	S/2 S/2	Section 16:	NE/4 and S/2		
Section 27:	SE/4 SE/4	Section 18:	W/2		
Section 34:	All	Section 19:	S/2		
Section 35:	All	Section 20:	All		
Section 36:	All	Section 22:	All		
		Section 23:	S/2 NW/4 and S/2		
TOWNSHIP 1	7 SOUTH, RANGE 27 EAST,	Section 25:	N/2		
<u>NMPM</u>		Section 26:	N/2		
Section 12:	SE/4	Section 27:	N/2 N/2 and SW/4		
Section 13:	N/2 and SE/4	Section 28:	All		
Section 22:	S/2 NE/4	Section 29:	N/2, SW/4, and N/2 SE/4		
Section 23:	S/2 NW/4, NE/4 SW/4, and SE/4	Section 30:	All		
Section 24:	NE/4, S/2 NW/4, N/2 SW/4, and	Section 31:	NE/4 NE/4, W/2 E/2, and W/2		
SE/4					
Section 25:	NE/4 and S/2	TOWNSHIP 1	8 SOUTH, RANGE 26 EAST,		
Section 26:	S/2 S/2	NMPM			
Section 27:	All	Section 1:	E/2		
Section 32:	SE/4				
Section 33:	NE/4 and S/2	TOWNSHIP 18	8 SOUTH, RANGE 27 EAST,		
Section 34:	All	<u>NMPM</u>			
Section 35:	All	Section 1:	S/2		
Section 36:	All	Section 2:	S/2		
		Section 3:	All		
TOWNSHIP 1	7 SOUTH, RANGE 28 EAST,	Section 4:	All		
<u>NMPM</u>		Section 5	Ali		
Section 7:	All	Section 6:	All		
Section 8:	SW/4	Section 7	All		
Section 9:	NE/4 NE/4, S/2 NE/4, and SE/4	Section 8:	All		
Section 10:	SW/4	Section 9:	All		
Section 11:	S/2	Section 17:	N/2		
Section 12:	SW/4 SW/4	Section 18:	NE/4, N/2 NW/4, and SE/4		
Section 14:	W/2	NW/4.			

(5) Currently the Red Lake (Queen-Grayburg-San Andres) Pool is governed by the Division's statewide rules, which require development on standard 40-acre spacing and proration units, each having a top unit depth bracket allowable of 80 barrels of oil per day and a limiting gas/oil ratio of 2,000 cubic feet of gas per barrel of oil, and allow infill drilling on each 40-acre unit.

(6) Within a 1236.85-acre area, more or less, comprising the following described

acreage in Eddy County, New Mexico, Devon is the operator of the West Red Lake Unit Area (approved by Division Order No. R-3453 dated July 12, 1968) in which waterflood operations are being conducted with injection into the Red Lake (Queen-Grayburg-San Andres) Pool (approved by Division Order No. R-3469, issued in Case No. 3824, dated August 13, 1968, and designated the West Red Lake Waterflood Project).

(7) The remaining 19 wells listed in Paragraph No. (2) above are either completed in or proposed to be completed in the Red Lake (Queen-Grayburg-San Andres) Pool, and each well will have a standard 40-acre, more or less, unit dedicated thereto. Eleven wells will be infill wells within existing 40-acre oil proration units while the remaining eight wells will be considered new designations.

- (8) The applicant presented evidence that indicates the following:
  - (a) All of the wells are located on federal land, except the Kaiser No. 1, which is located on fee land.
  - (b) The subject pool is continuous across the area, trending in a northeastsouthwest direction.
  - (c) The original locations for all of the subject wells were orthodox, but were moved due to topographic and engineering reasons.
  - (d) The subject area is near the Pecos River, with numerous draws and elevation changes of 100-200 feet. The Bureau of Land Management requested that numerous well locations be moved to prevent extreme cut and fill of slopes and prevent erosion of the highly erodible soil in this area. In addition, there are numerous gas transmission and gathering pipelines, roads, existing wells, and a gas plant. All of these factors limit well locations.
  - (e) Average reserves in wells completed in the subject pool are about 50,000 barrels of oil, which equate to approximately 24 acres of drainage. The drainage radius of such a well is much less than a well that is capable of draining 40 acres. The applicant has drilled wells within 400-450 feet of older, above-average wells in the pool, and has seen no evidence of drainage from those older wells.
  - (f) Directional drilling is not feasible because the small reserves in these wells do not justify the additional drilling and operating costs.

> (g) Applicant is drilling two wells per 40-acre unit to: (i) adequately drain each unit, and (ii) prepare for a possible future waterflood project. Injection in the West Red Lake Unit has shown a favorable production response. Drilling two wells per 40-acre unit could allow the Unit's waterflood project to be expanded in the future.

(9) Each of the above-described unorthodox oil well locations should be approved for one or more of the following reasons:

- (a) The location is a move toward the interior of a lease;
- (b) The location encroaches on a lease not owned or operated by the applicant, but notice was given to the offset and the Division received no objection;
- (c) The location will not drain the offset well unit due to the limited drainage areas in the subject pool;
- (d) A well will be drilled offsetting the proposed unorthodox well, or the offsetting well unit has existing wells producing from the same pool; and/or
- (e) There are no overriding royalty interest owners in the tract offsetting the subject well, or the applicant is the only overriding royalty interest owner in the offsetting tract.

(10) Approval of the proposed unorthodox oil well locations will afford the applicant the opportunity to produce its just and equitable share of oil and gas from the subject pool and will prevent waste and protect correlative rights.

### IT IS THEREFORE ORDERED THAT:

(1) The applicant, Devon Energy Corporation (Nevada), is hereby authorized to drill the wells described below at unorthodox oil well locations in the Red Lake (Queen-Grayburg-San Andres) Pool in Township 17 South, Range 27 East, NMPM, Eddy County, New Mexico:

Well Name and Number	<u>API Number</u>	<u>Secti</u>	on Footage Location	<u>Unit</u>
Eagle "27-H" Federal No. 15	30-015-29942	27	1450' FNL & 990' FEL	Н
Evarts "31" Federal No. 3	30-015-30171	31	1330' FSL & 1630' FEL	J j

Eagle "33-G" Federal No. 6 30-015-29595 33. 2460' FNL & 1350' FEL G Eagle "33-H" Federal No. 8 30-015-29596 33 2435' FNL & 531' FEL Η Eagle "33-N" Federal No. 10 230' FSL & 2140' FWL 30-015-29598 33 Ν Eagle "34-E" Federal No. 10 30-015-29632 34 2310' FNL & 1240' FWL Е Eagle "34-F" Federal No. 12 30-015-29635 34 2310' FNL & 2420' FWL F Eagle "34-G" Federal No. 14 30-015-29636 34 2310' FNL & 1600' FEL G Eagle "34-I" Federal No. 18 30-015-29655 34 1740' FSL & 280' FEL I Eagle "34-L" Federal No. 24 30-015-29643 34 1740' FSL & 1065' FWL L And in Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico:

Well Name and Number	<u>API Number</u>	<u>Section</u>	<u>Unit</u>	
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Patton "6" Federal No. 6	30-015-30085	6	2460' FNL & 2310' FWL	F
Patton "6" Federal No. 4	30-015-30079	6	1593' FSL & 1469' FWL	К
Patton "6" Federal No. 3	30-015-29980	6	930' FSL & 1450' FWL	Ν
Hawk "9-B" Federal No. 4	30-015-29480	9	990' FNL & 1360' FEL	В
Hawk "9-J" Federal No. 16	30-015-29483	9	1630' FSL & 1650' FEL	J
Hawk "9-O" Federal No. 17	30-015-29484	9	1170' FSL & 2310' FEL	0
Kaiser No. 1	NA	18	330' FNL & 1110' FEL	А

(2) Each well shall have a standard 40-acre oil spacing and proration unit dedicated thereto.

(3) Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

otenberg

LORI WROTENBERY Director

SEAL

04/12/99 11:30:59 ONGARD CMD : C101-APPLICATION FOR PERMIT TO DRILL OGOMES -TP1K OG6C101 OGRID Idn : 6137 API Well No: 30 15 29674 APD Status(A/C/P): A Opr Name, Addr: DEVON ENERGY CORP (NEVADA) Aprvl/Cncl Date : 06-13-1997 20 N BROADWAY STE 1500 OKLAHOMA CITY, OK 73102 Prop Idn: 21007 HAWK 10 N FEDERAL Well No: 16 U/L Sec Township Range Lot Idn North/South East/West Surface Locn : N 10 18S 27E FTG 280 F S FTG 2130 F W OCD U/L : N API County : 15 Work typ(N/E/D/P/A) : N Well typ(O/G/M/I/S/W/C): O Cable/Rotary (C/R) : F Lease typ(F/S/P/N/J/U/I): F Ground Level Elevation : 3456 State Lease No: Multiple Comp (Y/N) : N Prpsd Depth : 2800 Prpsd Frmtn : SAN ANDRES E0009: Enter data to modify record PF01 HELP PF02 PF03 EXIT PF04 GoTo PF05 PF06 CONFIRM PF08 PF09 PRINT PF10 C102 PF11 HISTORY PF12 PF07

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