

NSL 8/18/97



ENERGY CORPORATION

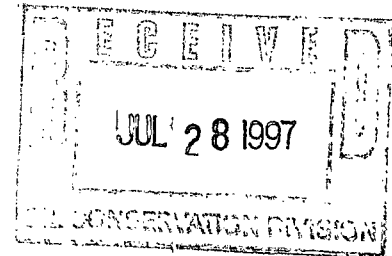
20 North Broadway, Suite 1500  
Oklahoma City, Oklahoma 73102-8260

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

July 23, 1997

**Certified Mail No. Z 397 639 918**

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 "17C" Federal #2  
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.

<u>Well Name &amp; No.</u>	<u>Unit Ltr</u>	<u>Section-T-R</u>	<u>Footage Location</u>
Hawk "17C" Federal #2	C	17-18S-27E	890' FNL & 2585' 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

Midland, Texas

Hawk "17C" Federal #2  
NSL Approval  
7/23/97  
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.L. Buttross, Jr.*  
*By Diana Kuys*

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

ELB\dk  
Enclosures

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

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

State of New Mexico  
Energy, Minerals and Natural Resources Department

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

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

## OIL CONSERVATION DIVISION

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

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

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number <b>30-015-29726</b>	Pool Code	Pool Name <b>Red Lake (Q-GB-SA)</b>
Property Code	Property Name <b>Hawk "17" C Federal</b>	Well Number <b>2</b>
OGRID No.	Operator Name <b>Devon Energy Corporation</b>	Elevation <b>3383'</b>

## Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	17	18 S	27 E		890	North	2585	West	Eddy

## Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint or Infill	Consolidation Code	Order 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

	<p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><u>E. L. Buttross Jr.</u> Signature</p> <p><u>E. L. Buttross, Jr.</u> Printed Name</p> <p><u>District Engineer</u> Title</p> <p><u>June 3, 1997</u> Date</p>
	<p><b>SURVEYOR CERTIFICATION</b></p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my belief.</p> <p><u>May 17, 1997</u> Date Surveyed</p> <p><u>Signature of Gary L. Jones</u> Professional Surveyor</p> <p><u>W.O. No. 702206</u> Certificate No. Gary L. Jones 7977</p> <p><u>Basin Surveys</u></p>

ST 002 2

CHANDLER FEB 1964

ABO CHALK BLUFF DRAW U 10

SDX RESOURCES



ENERGY CORPORATION

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

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

July 23, 1997

**Certified Mail No. Z 397 639 917**

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

RE: Non-Standard Location Approval  
Proposed 2800' San Andres Test  
Hawk "17C" Federal #2  
890' FNL & 2585' FWL  
Section C-174-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 17-T18S-R27E.

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

Hawk "17C" Federal #2  
Non-Standard Location Approval  
July 23, 1997  
Page Two

ARCO Permian

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)

A handwritten signature in cursive script that reads "Diana Keys".

Diana Keys  
Engineering Tech.

/dk

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



NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505  
(505) 827-7131

January 6, 1998

Devon Energy Corporation  
20 North Broadway - Suite 1500  
Oklahoma City, Oklahoma 73102-8260

Attention: E. L. Buttross, Jr.

Re: *Application for administrative approval for two unorthodox oil well locations for the Hawk "17-C" Federal Well Nos. 1 (API No. 30-015-29514) and 2 (API No. 30-015-29726) to be drilled 380 feet from the North line and 1450 feet from the West line (Unit C) and 890 feet from the North line and 2585 feet from the West line (Unit C), respectively, of Section 17, Township 18 South, Range 27 East, NMPM, Undesignated Red Lake Queen-Grayburg-San Andres Pool, Eddy County, New Mexico.*

Dear Mr. Buttross:

These locations are subject to the statewide rules and regulations for oil wells, as promulgated by **Rule 104.C(1)**, which provides for 40-acre oil spacing and proration units, or drilling units, and requires that wells be located no closer than 330 feet to the outer boundary of such 40-acre tract. The information provided is inadequate, it appears that locations within this standard window are acceptable and that the drilling of these wells serve only to encroach upon another lease not belonging to Devon, which could adversely effect correlative rights (see Section 70-2-11.A, NMSA 1978).

Should Devon wish to pursue these requests further please submit the following:

- (1) detailed information to support the drilling of both unorthodox locations;
- (2) a detail explanation with adequate supporting data explaining your claim that no standard locations within the NE/4 NW/4 (Unit C) of said Section 17 are available to Devon;
- (3) how drainage from these wells will or will not affect the offsetting lease or leases;  
and,
- (4) why directional drilling to standard bottomhole locations is not an option.

Thank you.

Sincerely,

Michael E. Stogner  
Chief Hearing Officer/Engineer

cc: Oil Conservation Division - Artesia  
U. S. Bureau of Land Management - Carlsbad  
Jim Bruce - Santa Fe



**ENERGY CORPORATION**

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

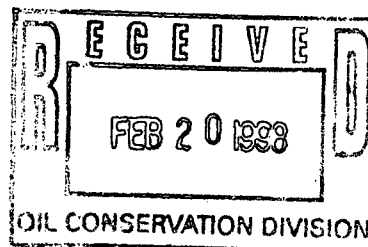
Telephone 405/235-3611  
FAX 405/552-4550

February 19, 1998

New Mexico Energy, Minerals & Natural Resources Dept.  
Oil Conservation Division  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505

Attention: Michael E. Stogner

**RE: Application For NSL Approval  
Hawk "17C" Federal #1 & #2  
Red Lake Q-GB-SA Pool  
Eddy County, New Mexico**



Dear Mr. Stogner:

We apologize for not providing you with adequate information to evaluate these two unorthodox locations. We certainly did not place these wells at their locations to encroach upon another lease line. The original staked location for the Hawk "17C" Federal #1 was 330' FNL & 1650' FWL of section 17, T18S, R27E while the original location for the Hawk "17C" Federal #2 was 990' FNL & 2310' FWL of section 17, T18S, R27E which were both standard locations.

Exhibit 1 is an areal photo with the subject lease outlined and the actual locations of these wells shown. As you can see, there is one major draw and several smaller draws that traverse this lease. Our field foreman had an onsite consultation with the BLM representative, Barry Hunt who instructed us to move the wells to their present locations. These locations, as your know, are as follows:

Hawk "17C" Federal #1 - 380' FNL & 1450' FWL, Sec. 17, T18S, R27E

Hawk "17C" Federal #2 - 890' FNL & 2585' FWL, Sec. 17, T18S, R17E



**For future possible waterflood development, we would have preferred to drill the wells at their previous locations, but this was not an option with the BLM. The BLM's policy is to provide the minimum amount of disturbance to the terrain. They would not permit us to build a location or road that would impact the draws. This meant that the locations could not be built in some areas of the lease because a road would need to be built through a draw.**

After receiving the survey plats, we noticed that the Hawk "17C" Federal #1 was only 130' from the west lease line and the Hawk "17C" Federal #2 was only 55' from the east lease line, but since these locations were necessitated by the BLM we did not feel there would be a problem as long as the offset operator did not object. Administrative approval was requested for these locations per State of New Mexico Oil Conservation Division Rule 104.F No. 2 and the offset operators, Arco and Amoco were notified. There was no objection from the offset operators. The only response was from Mr. Dave Cole with Altura (formerly Amoco) for us to send him copies of the logs and completions reports. He said that he understood the reason for the unorthodox locations, and we told him that we would not oppose any unorthodox locations on their acreage. After receiving approval for the drilling permits, we called your office and were told that you were backlogged with paper, but did not see any problem with the NSL's for these wells. The wells were subsequently drilled and completed, the #1 in June 1997 and the #2 in October 1997. At no time did we realize you would have a problem approving these unorthodox locations until we received your letter of January 6, 1998.

As for your question concerning drainage, these are low volume producers with a **combined producing rate of only 25 BOPD**. Production is from a 700' section of an extremely tight San Andres reservoir with permeability less than a millidarcy. This results in very low areal drainage. We have drilled wells in this field only 200' from old producers and still found virgin reservoir pressures in the new wells. Even if there is a small amount of drainage across lease lines, the minerals on this lease and the offsetting leases is owned by the United States and the offsetting operator has not objected.

As for the option of directionally drilling to a standard location, these wells would have been uneconomic to drill directionally. The cost to directionally drill would have increased the well cost by over 40%. The marginal producing rates make cost control a very important part of drilling in this area.

In conclusion, we respectfully request that approval be given for these unorthodox locations. If you need additional information or would like to

discuss this further, we would be happy to meet you in Santa Fe or at the well sites.

We are also in the process of preparing areal photo exhibits for our other unorthodox location applications in the field that you have not approved. We assume that you apparently need additional information on these too.

We are very anxious to get your problems with these applications resolved, please give me a call at 405-552-4509 if you would like to schedule a meeting to discuss this further.

Sincerely,

A handwritten signature in cursive script that reads "E. L. Buttross Jr.".

Ernie L. Buttross, Jr.  
District Engineer

Xc: Jim Bruce



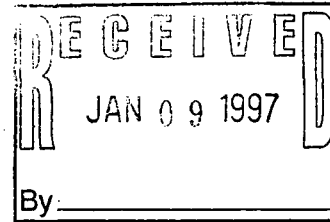
NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505  
(505) 827-7131

January 6, 1998

Devon Energy Corporation  
20 North Broadway - Suite 1500  
Oklahoma City, Oklahoma 73102-8260

Attention: E. L. Buttross, Jr.



Re: *Application for administrative approval for two unorthodox oil well locations for the Hawk "17-C" Federal Well Nos. 1 (API No. 30-015-29514) and 2 (API No. 30-015-29726) to be drilled 380 feet from the North line and 1450 feet from the West line (Unit C) and 890 feet from the North line and 2585 feet from the West line (Unit C), respectively, of Section 17, Township 18 South, Range 27 East, NMPM, Undesignated Red Lake Queen-Grayburg-San Andres Pool, Eddy County, New Mexico.*

Dear Mr. Buttross:

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- (3) how drainage from these wells will or will not affect the offsetting lease or leases;  
and,
- (4) why directional drilling to standard bottomhole locations is not an option.

Thank you.

Sincerely,

Michael E. Stogner  
Chief Hearing Officer/Engineer

cc: Oil Conservation Division - Artesia  
U. S. Bureau of Land Management - Carlsbad  
Jim Bruce - Santa Fe





EXHIBIT 1  
AERIAL PHOTO  
HAWK "17" FEDERAL LEASE  
RED LAKE FIELD  
EDDY COUNTY, NEW MEXICO

78

HAWK 8L-5

HAWK 8K-3

HAWK 8L-5

HAWK 8L-4

HAWK 8L-3

HAWK 8L-6

HAWK 8L-4

HAWK 8L-2

HAWK 8L-1

DAILY

HAWK 8N-7

HAWK 8N-7

HAWK 8N-7

HAWK 8N-8

HAWK 8N-8

HAWK 8N-8

HAWK 8N-8

HAWK 17C-1

HAWK 17C-4

HAWK 17C-2

HAWK 17C-2

Nominal Scale: 1:400



COUNTY Eddy POOL Red Lake Queen - Crayburg - San Andres

POOL Red Lake Queen - Grayburg - San Andres

TOWNSHIP 18 South

RANGE 27 East

**NMPM**

A 36x36 grid with numbered starting points 1 through 36. The grid is divided into four quadrants by a central cross. The top-left quadrant contains numbers 1-12, the top-right 13-24, the bottom-left 25-36, and the bottom-right 37-48. The numbers are placed in the center of each quadrant's grid section.

Description:  $N_2$  Sec. 1;  $N_2$  &  $SW_4$  Sec. 2; All Sec. 3 thru 6,  $B_2$  Sec. 7, All Sec. 8,  $W_2$  &  $NE_4$  Sec. 9

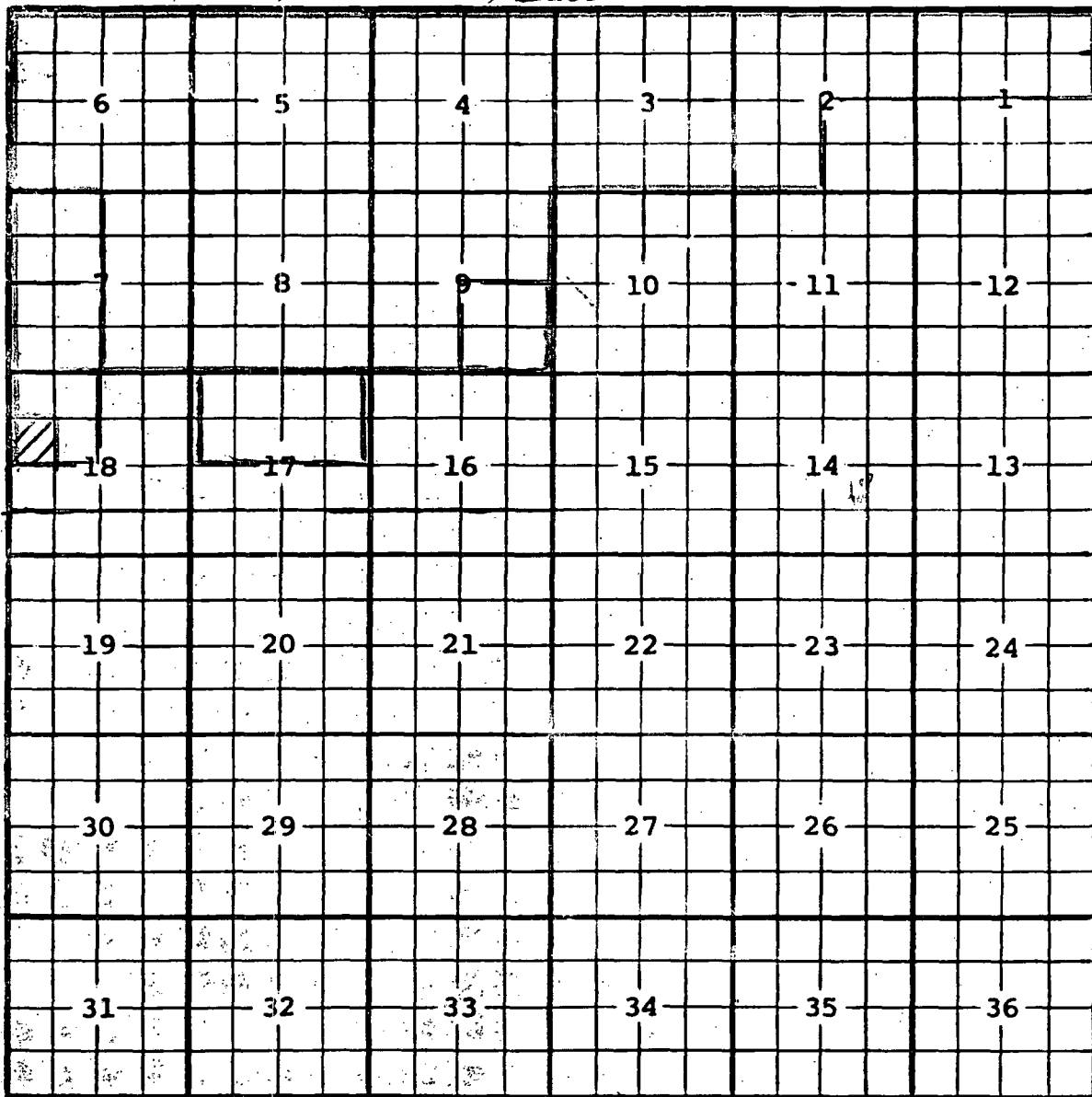
Ext: <sup>NW</sup> 1/4 Sec 7 (R-1059, 9-3-57) - <sup>SW</sup> 1/4 Sec 7 (R-1143, 3-25-58) - <sup>NW</sup> 1/4 Sec 18 (R-1424, 7-1-59)

Extend vertical limits to include Queen formation and  
redesignate Red Lake Queen-Grayburg-San Andres (R-3280, 8-1-67)

Deletion:  $\frac{SW}{4} \frac{NW}{4}$  Sec 18 (R. #167, 8-1-71)

COUNTY EddyPOOL Red Lake Queen - Grayburg - San AndresTOWNSHIP 18 SouthRANGE 27 East

NMPM



Description:  $\frac{N}{2}$  Sec. 1;  $\frac{N}{2}$  &  $\frac{SW}{4}$  Sec. 2; All Sec. 3 thru 6;  $\frac{E}{2}$  Sec. 7; All Sec. 8;  
 $\frac{W}{2}$  &  $\frac{NE}{4}$  Sec. 9.

Ext:  $\frac{NW}{4}$  Sec. 7 (R-1059, 9-3-57) -  $\frac{SW}{4}$  Sec. 7 (R-1143, 3-25-58) -  $\frac{NW}{4}$  Sec. 18 (R-1424, 7-1-59)

Extend vertical limits to include Queen formation and  
 redesignate Red Lake Queen - Grayburg - San Andres (R-3280, 8-1-67)

Relection:  $\frac{SW}{4}$  &  $\frac{NW}{4}$  Sec. 18 (R-4167, 8-1-71) Ext:  $\frac{SE}{4}$  Sec. 9 (R-10938, 1-9-98)

Ext:  $\frac{N}{2}$  Sec. 17 (R-10951, 2-4-98)