

OCD-ARTESIA

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

RECEIVED

JUN - 1 2006

1a. Type of work: ☒ DRILL ☐ REENTER

1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone

2. Name of Operator
Devon Energy Production Company, LP

3a. Address 20 North Broadway
Oklahoma City, Oklahoma 73102-8260

3b. Phone No. (include area code)
405-552-8198

4. Location of Well (Report location clearly and in accordance with any State requirements.)

At surface

SESW Lot N 660 FSL 1500 FWL

At proposed prod. zone SESW Lot N 660 FSL 1500 FWL

SUBJECT TO LIKE

APPROVAL BY STATE

5. Lease Serial No.
NM-89156

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.
Hawk 8 N Federal 21

9. API Well No.

30-015-34964

10. Field and Pool, or Exploratory
Red Lake; Glorieta-Yeso

11. Sec., T. R. M. or Blk. and Survey or Area

Sec. 8 18S 27E, Unit N

14. Distance in miles and direction from nearest town or post office*
Approximately 7 miles southeast of Artesia, New Mexico

12. County or Parish
Eddy County

13. State
NM

15. Distance from proposed*
location to nearest
property or lease line, ft.
(Also to nearest drig. unit line, if any)

16. No. of acres in lease
80 acres

17. Spacing Unit dedicated to this well
40 acres

18. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft.

19. Proposed Depth
3500' MD

20. BLM/BIA Bond No. on file

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3432' GL

22. Approximate date work will start*
05/30/2006

23. Estimated duration
45 days

24. Attachments

ROSWELL CONTROLLED WATER BASIN

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

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

25. Signature

Name (Printed/Typed)

Date

Title

Sr. Staff Eng. Tech

Norvella Adams

04/03/2006

Approved by (Signature)

Name (Printed/Typed)

Date

Title

James Stovall
ACTING FIELD MANAGER

James Stovall

MAY 2 7 2006

CARLSBAD FIELD OFFICE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*(Instructions on page 2)

NS L-5390

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

DECLARED WATER BASIN
CEMENT BEHIND THE 8 5/8"
CASING MUST BE CIRCULATED

WITNESS

If earthen pits are used in
association with the drilling of this
well, an OCD pit permit must be
obtained prior to pit construction.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
SUNDRY NOTICES AND REPORTS ON WELLS

OCD-ARTESIA

FORM APPROVED
OMB NO. 1004-0135
EXPIRES: NOVEMBER 30, 2000

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals

SUBMIT IN TRIPLICATE

1a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other _____

2. Name of Operator
DEVON ENERGY PRODUCTION COMPANY, LP

3. Address and Telephone No.
20 North Broadway, Ste 1500, Oklahoma City, OK 73102 405-552-8198

4. Location of Well (Report location clearly and in accordance with Federal requirements)*
660 FSL & 1500 FWL Unit N, Sec 8 18S 27E

5. Lease Serial No. NM-89156	
6. If Indian, Allottee or Tribe Name	
7. Unit or CA Agreement Name and No.	
8. Well Name and No. Hawk 8 N Federal 21	
9. API Well No.	
10. Field and Pool, or Exploratory Red Lake: Glorieta-yeso	
12. County or Parish Eddy	13. State NM

CHECK APPROPRIATE BOX(es) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other _____
	<input checked="" type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work and approximate duration thereof. If the proposal deepens directionally or recompletes horizontally, give subsurface location and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirement, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection)

Devon Energy Production Co., LP respectfully requests approval to move the surface location as follows due to our proposed location being reported incorrectly on the original C102.

Old Location: 660 FSL & 1500 FWL
New Location: 330 FSL & 1500 FWL UL N Sec 8-18S-27E

14. I hereby certify that the foregoing is true and correct

Signed 

Name **Norvella Adams**
Title **Sr. Staff Eng. Tech**

Date **5-May-06**

(This space for Federal or State Office use)

Approved by **/s/ James Stovall**

ACTING

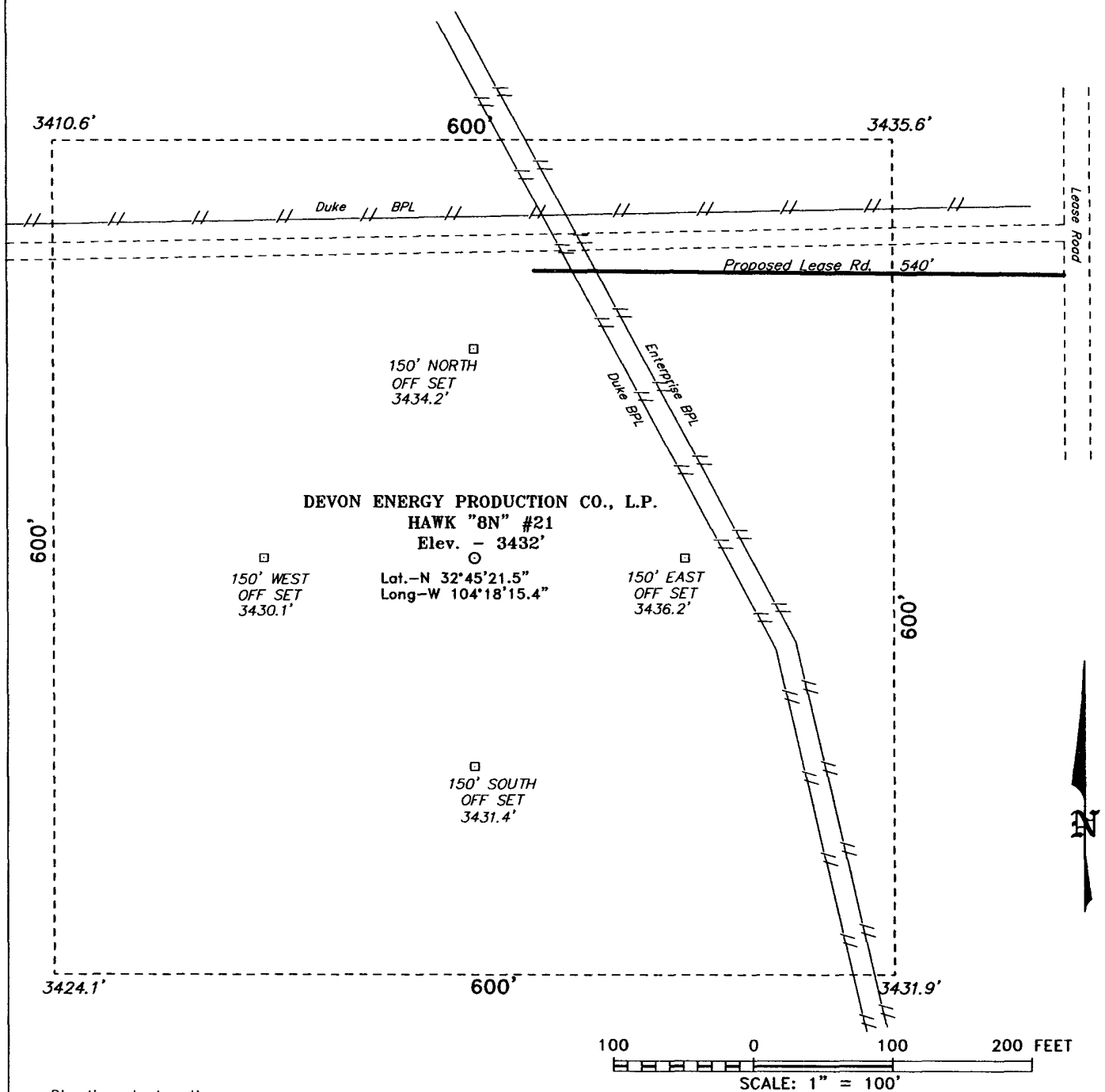
Title **FIELD MANAGER**

Date **MAY 27 2006**

Conditions of approval, if any:

BASIN SURVEYS

SECTION 8, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



Directions to Location:

FROM THE JUNCTION OF CO. RD. 201 AND US HWY 82, GO SOUTH ON HWY 82 FOR APPROX. 4.8 MILES TO LEASE ROAD; THENCE WEST ON LEASE ROAD FOR APPROX. 0.1 MILE; THENCE SOUTH FOR APPROX. 0.2 MILE TO PROPOSED LEASE ROAD.

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

W.O. Number: 6404

Drawn By: K. GOAD

Date: 03-31-2006

Disk: KJG CD#4 - 6404A.DWG

DEVON ENERGY PROD. CO., L.P.

REF: HAWK "8N" No. 21 / Well Pad Topo

THE HAWK "8N" No. 21 LOCATED 330' FROM

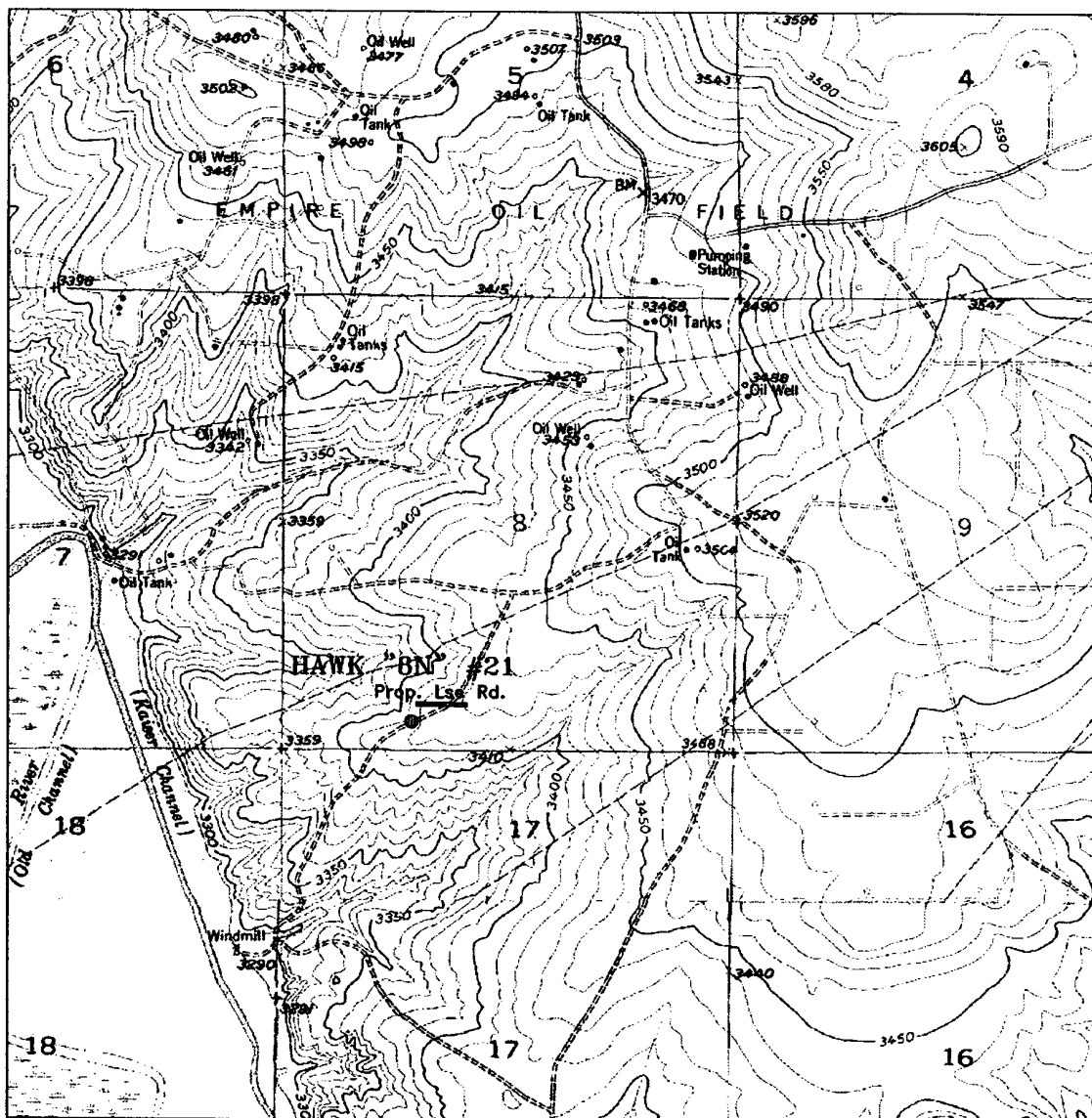
THE SOUTH LINE AND 1500' FROM THE WEST LINE OF

SECTION 8, TOWNSHIP 18 SOUTH, RANGE 27 EAST,

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

Survey Date: 03-23-2006

Sheet 1 of 1 Sheets



HAWK "8N" ^{Federal} #21

Located at 330' FSL AND 1500' FWL
Section 8, Township 18 South, Range 27 East,
N.M.P.M., Eddy County, New Mexico.

basin
surveys
focused on excellence
in the oilfield

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

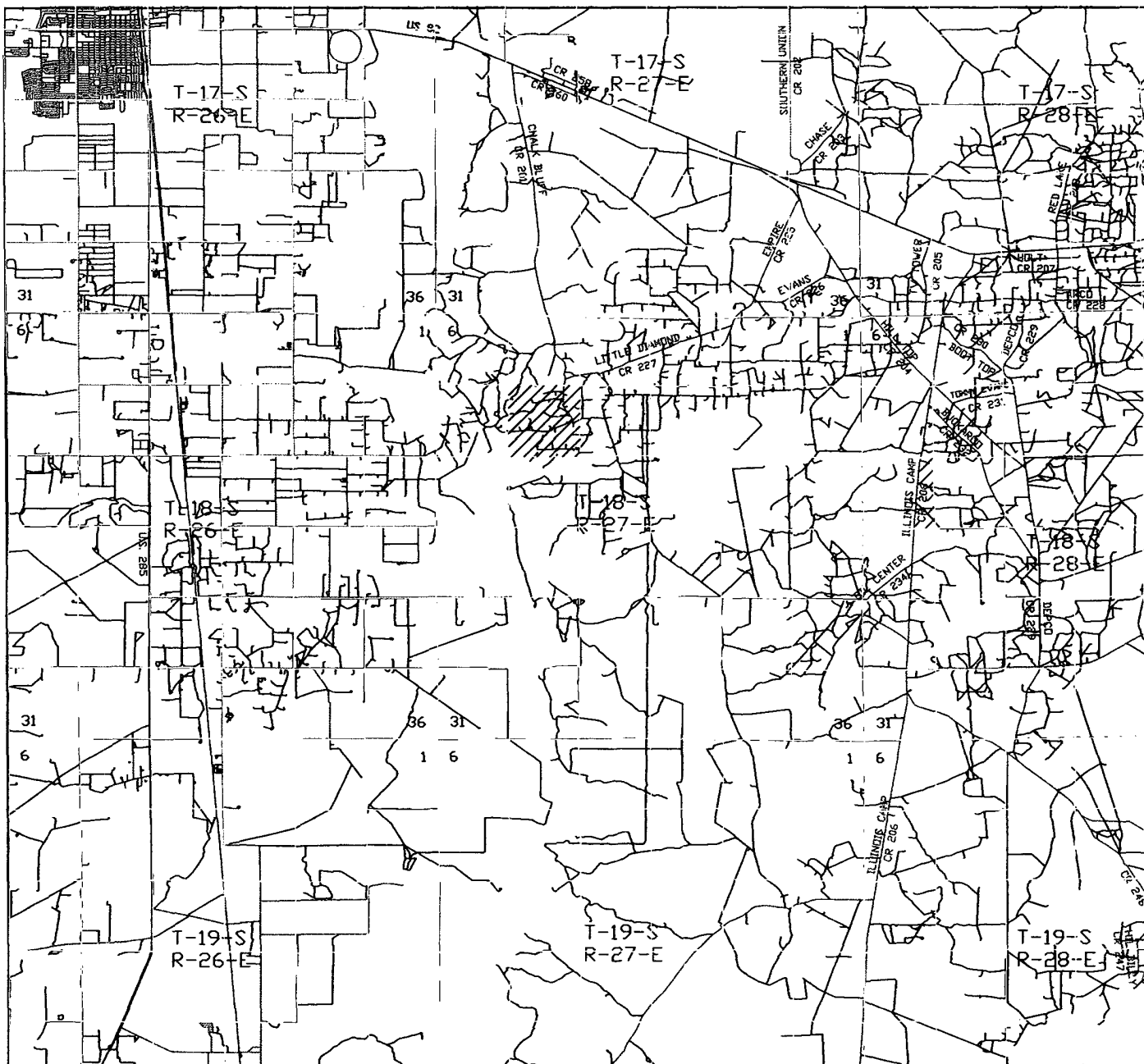
W.O. Number: 6404AA - KJG CD#4

Survey Date: 03-23-2006

Scale: 1" = 2000'

Date: 03-31-2006

DEVON ENERGY
PROD. CO., L.P.



HAWK "8N" ^{Federal} #21
 Located at 330' FSL AND 1500' FWL
 Section 8, Township 18 South, Range 27 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: 6404AA - KJG CD#4

Survey Date: 03-23-2006

Scale: 1" = 2 MILES

Date: 03-31-2006

DEVON ENERGY
 PROD. CO., L.P.

Additional Operator Remarks:

Devon Energy Production Company, LP proposes to drill a San Andres, Glorieta Yeso well per the approved Master Drilling and Surface Use Plan and Attachment A for the Red Lake Field Area to 3500' TD for commercial quantities of oil and gas. If the well is deemed noncommercial, the well bore will be plugged and abandoned per Federal regulations.

Directions: From the junction of Co. Rd. 201 and US Hwy 82, go south on Hwy 82 for approximately 4.8 miles to lease road; then west on lease road for approximately 0.1 mile; then south for approximately 0.2 mile to proposed lease road.

Please see attached MDSUP and Attachment A.



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Roswell Field Office
2909 West Second Street
Roswell, New Mexico 88201

IN REPLY REFER TO:

JUN 05 2003

Devon Energy Production Company, L.P.
Attn. Ms Karen Cottom
20 North Broadway, Suite 1500
Oklahoma City, Oklahoma 73102-8260

Re: Red Lake Field Area
Master Drilling and Surface Use Plan
Eddy County, New Mexico

The master drilling and surface use plan, dated May 6, 2003, for the Red Lake Field Area in Townships 17 and 18 South, Range 27 East, Eddy County, New Mexico, is now approved. Several corrections have been made to the attached list describing the field area. An approved copy is attached for your records.

Please note that the surface casing setting depth may change in individual APD (Form 3160-4) submittals because the depth of the expected fresh water varies across this area.

If you have any questions, please contact Alexis C. Swoboda, P.E. at 505-627-0228.

Sincerely,

Larry D. Bray
Assistant Field Manager
Lands and Minerals

MASTER DRILLING PROGRAM
RED LAKE FIELD
Attachment A

To be attached to Form 3160-3

UNIT AREA: Leases in the following Sections located in Township 18 South, Range 27 East, Eddy County, New Mexico operated by Devon Energy Production Company, L. P.

Township 18 South, Range 27 East	Federal Leases	Description
Section 5	USA NM-7714 USA LC-055383-A USA LC-064384 USA LC-049648-A	S/2 SW; SE SE S/2 SW; SE SE; NE SE Lots 1 & 2; S/2 NE NW SW; SW NW
Section 6	USA NM-7711 USA LC-026874-A USA LC-060894 USA LC-049648-B USA LC-069274 USA LC-026874-B USA LC-026874-F	SE SE SE SE; SW SW E/2 SW; SE NW NE SE; SW SE Lots 3, 4, 5, & 6 Lot 2; SW NE Lot 1; SE NE
Section 7	USA LC-067981-A USA NM-7718 USA NM-7715 USA NM-7719	SW NE; NE SE NW NE SW NE; NE SE E/2 NE
Section 8	USA NM-29275 USA LC-070678-A USA LC-043894 USA LC-054205 USA NM-7712 USA NM-7713 USA NM-7716 USA NM-29268 USA NM-29273 USA NM-89156 USA NM-7718	NE SE SE NW; W/2 NW; N/2 SW; SW SE SW NE N/2 NE; NE NW; SE NE SW NE N/2 NE; NE NW; SE NE SE NW; W/2 NW SE NE SE SE NW SE; SE SW NE SE
Section 9	USA NM-031186 USA NM-7721 USA NM-025604 USA LC-065478-B	N/2 NW; S/2 NW N/2 NW NE; N/2 SE S/2 SE
Section 10	USA NM-025604 USA LC-065478-B	NW; SW N/2 NE; S/2 NE
Section 17	USA NM-0758	NE NW; SW SE
Section 20	USA NM-0758	SE NE; W/2 NE; NW NW;

330' Per Attached 9/16/06 DMK dated 5/16/06 DMK
CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Devon Energy Production Company, LP Well No. 21 - Hawk 8N Federal
Location: 660' FSL & 1500' FWL sec. 8, T. 18 S., R. 27 E.
Lease: NM-89156

I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at (505) 234-5972 in sufficient time for a representative to witness:
 - A. Spudding
 - B. Cementing casing: 8-5/8 inch 5-1/2 inch
2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
3. Include the API No. assigned to well by NMOCD on the subsequent report of setting the first casing string.
4. A Hydrogen Sulfide Contingency Plan should be activated prior to drilling in the Queen formation. A copy of the plan shall be posted at the drilling site.

II. CASING:

1. 8-5/8 inch surface casing must be set **at approximately 410 feet**, below usable water and circulate cement to the surface. If cement does not circulate to the surface the BLM Carlsbad Field Office shall be notified at (505) 234-5972 and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.
2. Minimum required fill of cement behind the 5-1/2 inch production casing is **sufficient to tie back 500 feet above the uppermost perforation in the pay zone.**

III. PRESSURE CONTROL:

1. Before drilling below the 8-5/8 inch surface casing, the blowout preventer assembly shall consist of a minimum of One Annular Preventer or Two Ram-Type Preventers and a Kelly Cock/Stabbing Valve.
2. Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be **2000** psi.
3. The BOPE shall be installed before drilling below the 8-5/8 inch surface casing and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.
 - A. The results of the test will be reported to the BLM Carlsbad Field Office at 620 East Greene Street, Carlsbad, New Mexico 88220-6292.
 - B. Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
 - C. Testing must be done in a safe workman like manner. Hard line connections shall be required.

United States Department of the Interior
Bureau of Land Management
Roswell Field Office

Refer To: 3160-3

April 19, 2006

To: AFM, Lands & Minerals, RFO

From: Geologist, RFO

Subject: Geologic Review of Application for Permit to Drill

Operator: Devon Energy Production Company, L.P.

Well Name and Number: Hawk 8 N Federal No. 21

Location: ^{330'} ~~660'~~ FSL & 1500' FWL
per attached SN dated 5/6/06 Jmk

Section: 8, T. 18 S., R. 27 E., NMPM

County: Eddy

State: NM

Lease No.: NM-89156

Date APD Rec'd: 4/18/06

1. Surface Elevation **X** Surface Geology **X**
2. Geologic Marker Tops (from reports on surrounding wells):

<u>Geologic Marker</u>	<u>Depth</u>
Queen	555'
Grayburg	995'
San Andres	1220'
Glorietta	2563'
Yeso	2770'
Clearfork	3465'
Tubb	4045'
Abo	4720'
Wolfcamp	5955'
Atoka	8777'
Morrow Ls.	8985'

Geologic markers are taken from the Red Lake Federal Com. No. 1 well located in the NW $\frac{1}{4}$ SW $\frac{1}{4}$, sec. 6, T. 18 S., R. 27 E., NMPM

3. Fresh Water Information: Fresh water may be obtained as deep as 1130' from the Queen and Grayburg Formations. The Brainard No. 2 well located in sec. 5, T. 18 R. 27 E., NMPM reported encountering the artesian aquifer at a depth of 1130'. The upper most portion of this township seems to mirror to some extent that above it T. 17 S., R. 27 E. In that township, water in the west half is as deep as 1150+ ft. and in the east it is 350 to 450 ft. The same

situation is apparent in the very top of T. 18 S., R. 27 E.. Waters in sections 4 and 5 occur at 900 to 1175 and those east ward are around 300 ft. Seemingly this situation desolves south of the Artesia -Vaccum Arch as the sections south obtain water from 90 ft to a maximum of 381 ft. in section 8.

Deepest Expected Fresh Water: above 381 ft.

Does Surface Casing cover all anticipated usable fresh water zones? Although the land has been added to the companies drilling plan for the area I could not find the surface casing depths. **COA should state casing will be set at 410 ft.**

Controlled Water Basin: Yes

Capitan Carlsbad Roswell **X** Lea No basin

Remarks: Witness surface casing

4. Geologic Hazards? Yes

H2S **X** Karst **med** Abnormal Pressures Other **X**

Remarks: Although no H2S has been reported in Sections 7, 8, 9, and 15, T. 18 S., R. 27 E., NMPM, Eddy County, H2S is always a possible hazard. However, H2S has been reported several times in a Comstock Federal lease well completed in Artesia Queen-Grayburg-San Andres, located in the SE $\frac{1}{4}$ SW $\frac{1}{4}$ of Sec. 12, T. 18 S., R. 27 E., NMPM; measuring 224 ppm. in the Gas Streams and 4 ppm. in STVs. H2S has also been reported in a Shaw Federal lease well completed in the Artesia Pool, located in the NESW of Sec. 13, T. 18 S., R. 27 E., NMPM; measuring 760 ppm. in the Gas Stream and 20 ppm. in STVs. Also, H2S has been reported hundreds of times in an Empire Abo lease well in the SENW of Sec. 17, T. 18 S., R. 27 E., NMPM; measuring 29,600 ppm. in the Gas Streams and 100+ ppm. in STVs. Possible loss of circulation in the Grayburg and San Andres. The potential for the occurrence of karst type feature is medium.

5. Other Mineral Deposits: Possible Halite and other associated salts in the Salado Group. Possible sand gravel and caliche deposits.

6. Potash:

Secretary's Oil-Potash Area R-111-P Area Not Applicable **X**

7. Other References:

New Mexico State Engineer's Water Well Listings;

Eddy County H2S List;

Hendrikson, G. E., and Jones, R. S., 1952, Geology and Ground-Water Resources of Eddy

County, New Mexico, Ground Water Report No. 3, New Mexico Bureau of Mines and Mineral Resources, Campus Station, Socorro, New Mexico.

8. No active mining claims are located in this vicinity.

Geologist Signature: /s/ J. S. Simitz

Date: 4/18/06

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-144
June 1, 2004

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

For drilling and production facilities, submit to
appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe
office

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes ☒ No ☐

Type of action: Registration of a pit or below-grade tank ☒ Closure of a pit or below-grade tank ☐

Operator: Devon Energy Production Company, LP Telephone: 405-552-8198 e-mail address: norvella.adams@dev.com
Address: PO Box 250 Artesia NM 88211
Facility or well name: Hawk 8 N 21 API #: U/L or Qtr/Qtr N Sec 8 T 18S R 27E
County: Eddy Latitude N32°20' 46.8" Longitude W103°30'10.3" NAD: 1927 ☐ 1983 ☐
Surface Owner: Federal ☒ State ☐ Private ☐ Indian ☐

Pit

Type: Drilling ☒ Production ☐ Disposal ☐

Workover ☐ Emergency ☐

Lined ☒ Unlined ☐

Liner type: Synthetic ☒ Thickness 12 mil Clay ☐

Pit Volume bbl

Below-grade tank

Volume: bbl Type of fluid:

Construction material:

Double-walled, with leak detection? Yes ☐ If not, explain why not.

RECEIVED

JUN 22 2006

OCU-MTESIA

Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet	(20 points)
	50 feet or more, but less than 100 feet	(10 points)
	100 feet or more	(0 points)
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes	(20 points)
	No	(0 points)
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet	(20 points)
	200 feet or more, but less than 1000 feet	(10 points)
	1000 feet or more	(0 points)
Ranking Score (Total Points)		(0 Points)

If this is a pit closure: (1) Attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if our are burying in place) onsite ☐ offsite ☐ If offsite, name of facility . (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface ft. and attach sample results. 5) Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments:

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☒, or an (attached) alternative OCD-approved plan ☐.

Date: 5/08/06

Printed Name/Title Norvella Adams / Sr. Staff Engineering Technician

Signature Norvella Adams

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:

Printed Name/Title

Gerry Guye
Deputy Field Inspector
District II - Artesia

Signature Gerry Guye

Date:

JUN 22 2006