

NM OIL CONSERVATION  
ARTESIA DISTRICT

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

JAN 04 2019

FORM APPROVED  
OMB NO. 1004-0137  
Expires: January 31, 2018

**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.*

RECEIVED

5. Lease Serial No.  
NMNM82886

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.  
SPUD MUFFIN 31-30 FED COM 331H

9. API Well No.  
30-015-45459-00-X1

10. Field and Pool or Exploratory Area  
CEDAR CANYON-BONE SPRING

11. County or Parish, State  
EDDY COUNTY, NM

**SUBMIT IN TRIPLICATE - Other instructions on page 2**

1. Type of Well  
 Oil Well  Gas Well  Other

2. Name of Operator  
DEVON ENERGY PRODUCTION COMPANY  
Contact: ERIN WORKMAN  
Email: Erin.workman@dvn.com

3a. Address  
6488 SEVEN RIVERS HIGHWAY  
ARTESIA, NM 88211

3b. Phone No. (include area code)  
Ph: 405-552-7970

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
Sec 31 T23S R29E SWSW 270FSL 1275FWL  
32.255028 N Lat, 104.028221 W Lon

12. CHECK THE 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"/> Hydraulic Fracturing	<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 checked="" type="checkbox"/> Other
	<input 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 Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations 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 must 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 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, 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 for a Name, Bottom Hole, and formation change of the subject well:

Name Change:  
From Spud Muffin 31-30 Fed Com 732H to Spud Muffin 31-30 Fed Com 331H ✓

Bottom Hole Change:  
FROM: Sec. 30, T23S, R29E 230 FNL1990 FWL ✓  
To: Sec. 30, T23S, R29E 20 FNL1927 FWL

*C/102?  
PIAT.*

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

Electronic Submission #445652 verified by the BLM Well Information System  
For DEVON ENERGY PRODUCTION COMPAN, sent to the Carlsbad  
Committed to AFMSS for processing by MUSTAFA HAQUE on 11/29/2018 (19MH0008SE)

Name (Printed/Typed) ERIN WORKMAN Title REGULATORY COMPLIANCE PROF.

Signature (Electronic Submission) Date 11/29/2018

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By MUSTAFA HAQUE Title PETROLEUM ENGINEER Date 12/19/2018

Conditions of approval, if any, are attached. Approval of this notice 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.

Office Carlsbad

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.

*RWP 1-4-19*

**Additional data for EC transaction #445652 that would not fit on the form**

**32. Additional remarks, continued**

Formation Change:

From: Purple Sage; Wolfcamp  
To: Cedar Canyon; Bone Spring

ATTACHMENTS: Directional Survey, Anti-Collision, Drilling Plan, & C-102

Thanks

## Revisions to Operator-Submitted EC Data for Sundry Notice #445652

	<b>Operator Submitted</b>	<b>BLM Revised (AFMSS)</b>
Sundry Type:	OTHER NOI	OTHER NOI
Lease:	NMNM82886	NMNM82886
Agreement:		
Operator:	DEVON ENERGY PRODUCTION COMPAN 333 WEST SHERIDAN AVE. OKC, OK 73102 Ph: 405-552-7970	DEVON ENERGY PRODUCTION COMPAN 6488 SEVEN RIVERS HIGHWAY ARTESIA, NM 88211 Ph: 575.748.3371
Admin Contact:	ERIN WORKMAN REGULATORY COMPLIANCE PROF. E-Mail: Erin.workman@dvn.com  Ph: 405-552-7970	ERIN WORKMAN REGULATORY COMPLIANCE PROF. E-Mail: Erin.workman@dvn.com  Ph: 405-552-7970
Tech Contact:	ERIN WORKMAN REGULATORY COMPLIANCE PROF. E-Mail: Erin.workman@dvn.com  Ph: 405-552-7970	ERIN WORKMAN REGULATORY COMPLIANCE PROF. E-Mail: Erin.workman@dvn.com  Ph: 405-552-7970
Location:		
State:	NM	NM
County:	EDDY	EDDY
Field/Pool:	PURPLE SAGE; WOLFCAMP	CEDAR CANYON-BONE SPRING
Well/Facility:	SPUD MUFFIN 31-30 FED COM 732H Sec 31 T23S R29E Mer NMP SWSW 270FNL 1275FWL	SPUD MUFFIN 31-30 FED COM 331H Sec 31 T23S R29E SWSW 270FSL 1275FWL 32.255028 N Lat, 104.028221 W Lon



Intent  As Drilled

API #  
30-015-45459

Operator Name: DEVON ENERGY PRODUCTION COMPANY, L.P.	Property Name: SPUD MUFFIN 31-30 FED COM	Well Number 331H
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Kick Off Point (KOP)

UL	Section 31	Township 23S	Range 29E	Lot	Feet 50	From N/S FSL	Feet 927	From E/W FWL	County EDDY
Latitude 83					Longitude 83				NAD 83

First Take Point (FTP)

UL M	Section 31	Township 23S	Range 29E	Lot 4	Feet 100	From N/S SOUTH	Feet 986	From E/W WEST	County EDDY
Latitude 32.2545697					Longitude 104.0291597				NAD 83

Last Take Point (LTP)

UL D	Section 30	Township 23S	Range 29E	Lot 1	Feet 100	From N/S NORTH	Feet 927	From E/W WEST	County EDDY
Latitude 32.2832489					Longitude 104.0292482				NAD 83

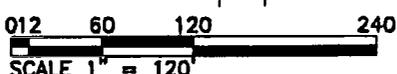
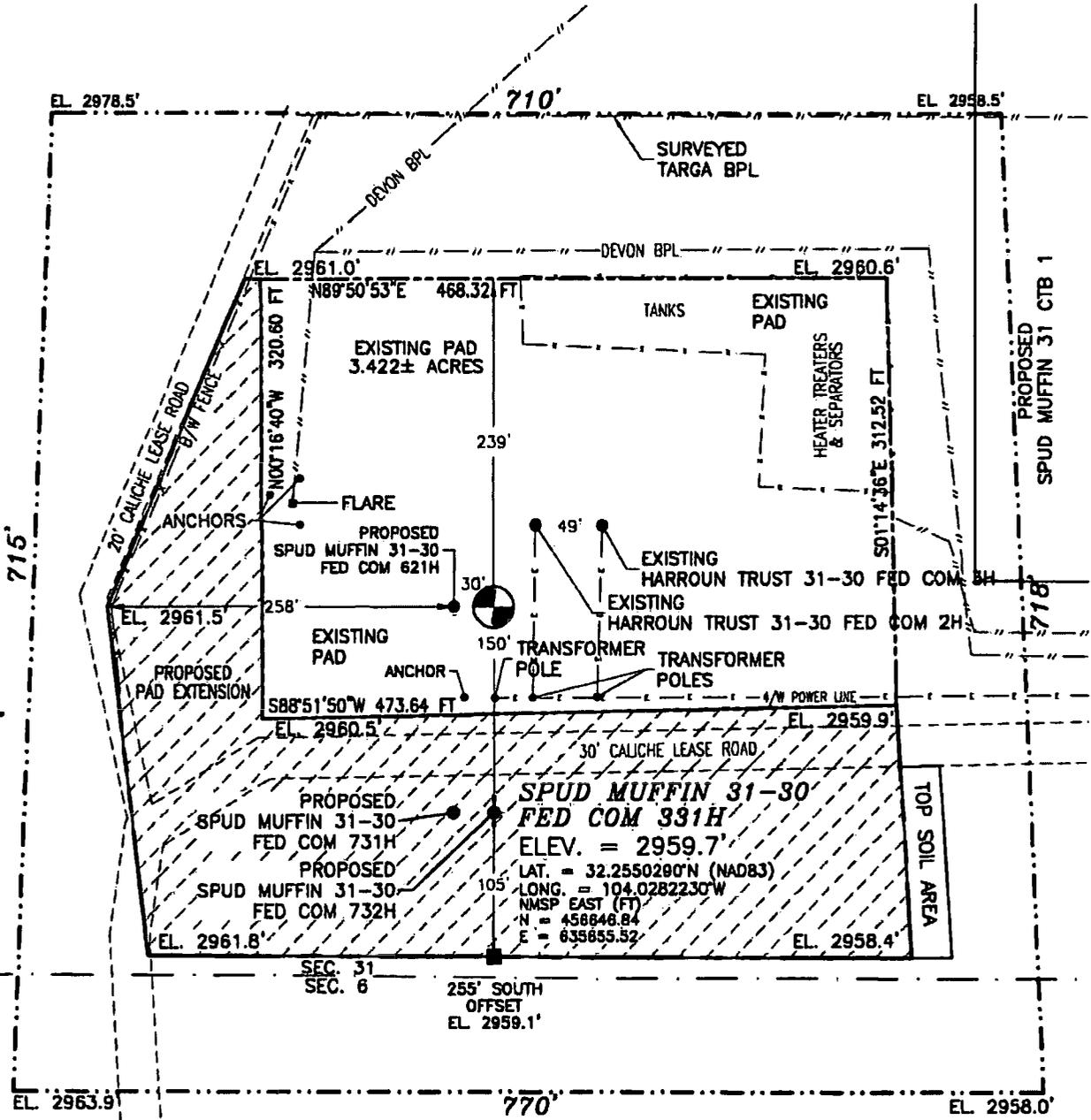
Is this well the defining well for the Horizontal Spacing Unit?

Is this well an infill well?

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #	Operator Name:	Property Name:	Well Number

**SECTION 31, TOWNSHIP 23 SOUTH, RANGE 29 EAST, N.M.P.M.  
EDDY COUNTY, STATE OF NEW MEXICO  
SITE MAP**



**DIRECTIONS TO LOCATION**  
 BEGINNING AT THE JUNCTION OF US 285 AND CR 720,  
 GO EAST ON CR 720 0.8 OF A MILE TO HARROUN  
 ROAD ON THE LEFT. GO NORTH-NORTHEAST ON  
 HARROUN ROAD FOR 3.1 MILES TO A FORK IN THE  
 ROAD. CONTINUE NORTH, LEFT ON SAID HARROUN ROAD  
 230' TO A LEASE ROAD TO THE LEFT, GO NORTH 0.5  
 OF A MILE, GO NORTH 14' TO THE EXISTING  
 SOUTHWEST PAD CORNER OF HARROUN TRUST 31-30  
 FED COM 2H & 3H FOR THIS LOCATION.

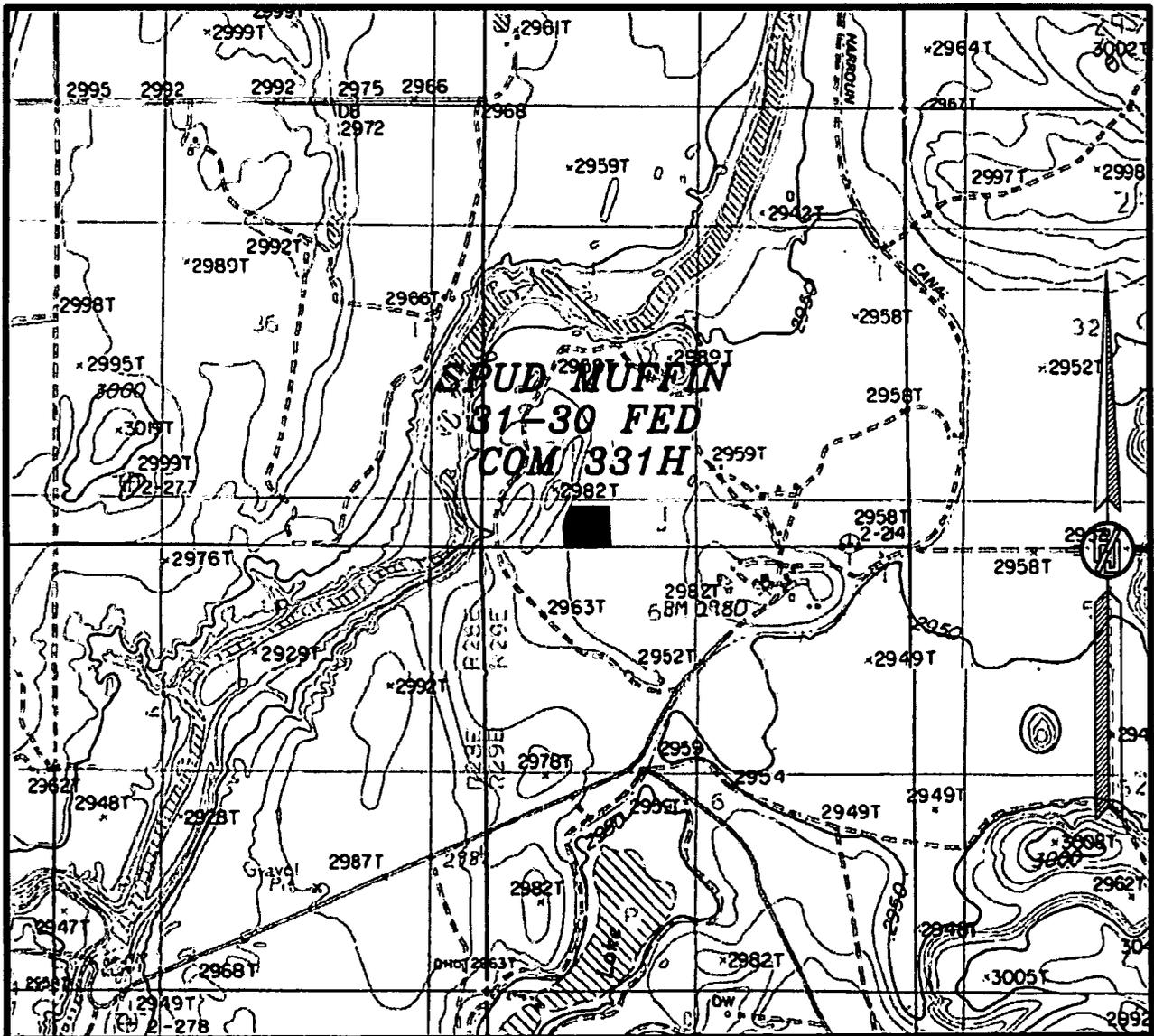
**DEVON ENERGY PRODUCTION COMPANY, L.P.  
 SPUD MUFFIN 31-30 FED COM 331H  
 LOCATED 270 FT. FROM THE SOUTH LINE  
 AND 1275 FT. FROM THE WEST LINE OF  
 SECTION 31, TOWNSHIP 23 SOUTH,  
 RANGE 29 EAST, N.M.P.M.  
 EDDY COUNTY, STATE OF NEW MEXICO**

SEPTEMBER 12, 2018

SURVEY NO. 6274C

**MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO**  
 (575) 234-3341

SECTION 31, TOWNSHIP 23 SOUTH, RANGE 29 EAST, N.M.P.M.  
 EDDY COUNTY, STATE OF NEW MEXICO  
 LOCATION VERIFICATION MAP



USGS QUAD MAP:  
 LOVING

NOT TO SCALE

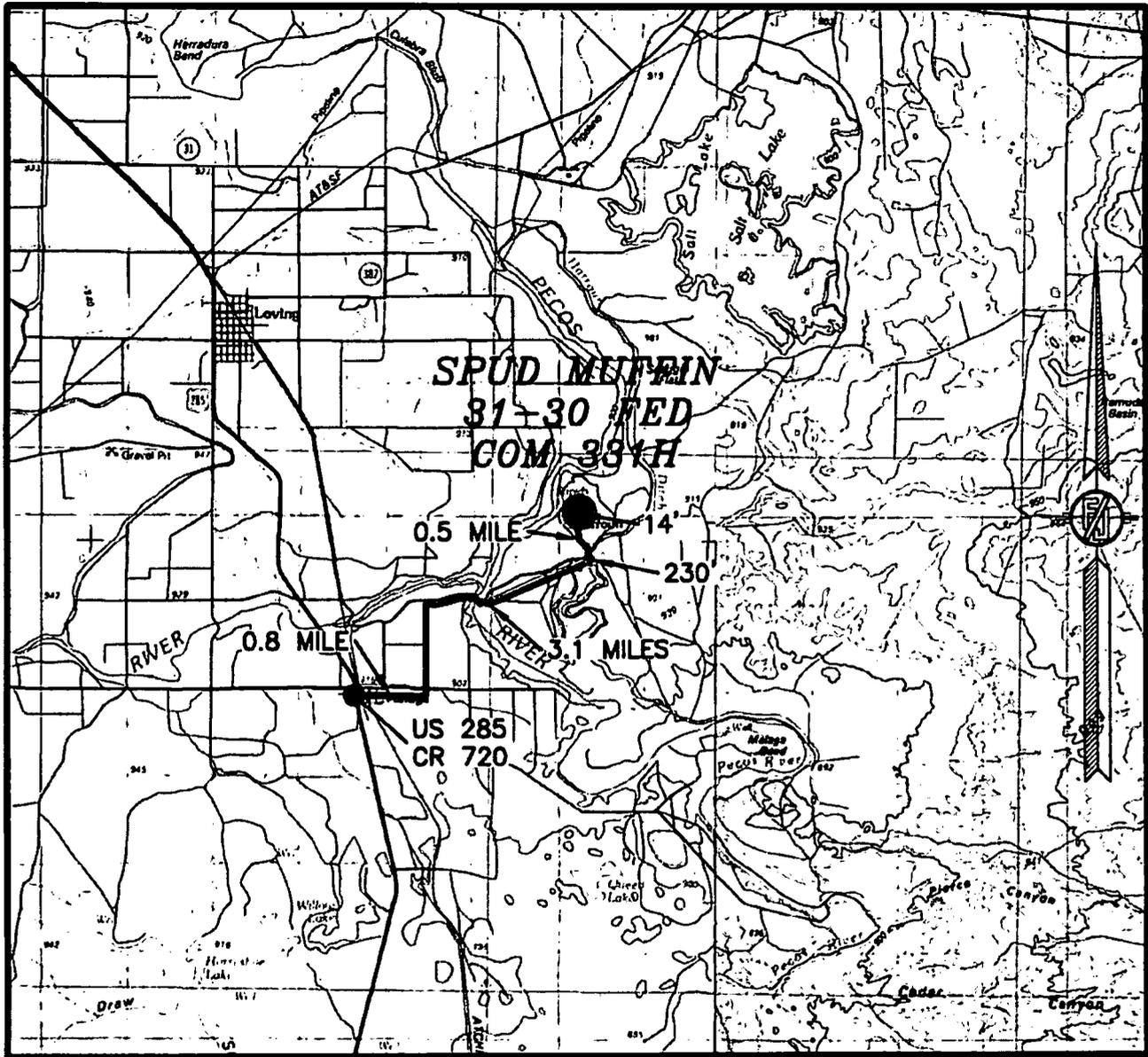
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 EDDY COUNTY, STATE OF NEW MEXICO

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MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO  
 (575) 234-3341

SECTION 31, TOWNSHIP 23 SOUTH, RANGE 29 EAST, N.M.P.M.  
 EDDY COUNTY, STATE OF NEW MEXICO  
 VICINITY MAP



DISTANCES IN MILES

NOT TO SCALE

**DIRECTIONS TO LOCATION**  
 BEGINNING AT THE JUNCTION OF US 285 AND CR 720,  
 GO EAST ON CR 720 0.8 OF A MILE TO HARROUN  
 ROAD ON THE LEFT. GO NORTH-NORTHEAST ON  
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 (575) 234-3341

SECTION 31, TOWNSHIP 23 SOUTH, RANGE 29 EAST, N.M.P.M.  
EDDY COUNTY, STATE OF NEW MEXICO  
AERIAL PHOTO



NOT TO SCALE  
AERIAL PHOTO:  
GOOGLE EARTH  
FEB. 2017

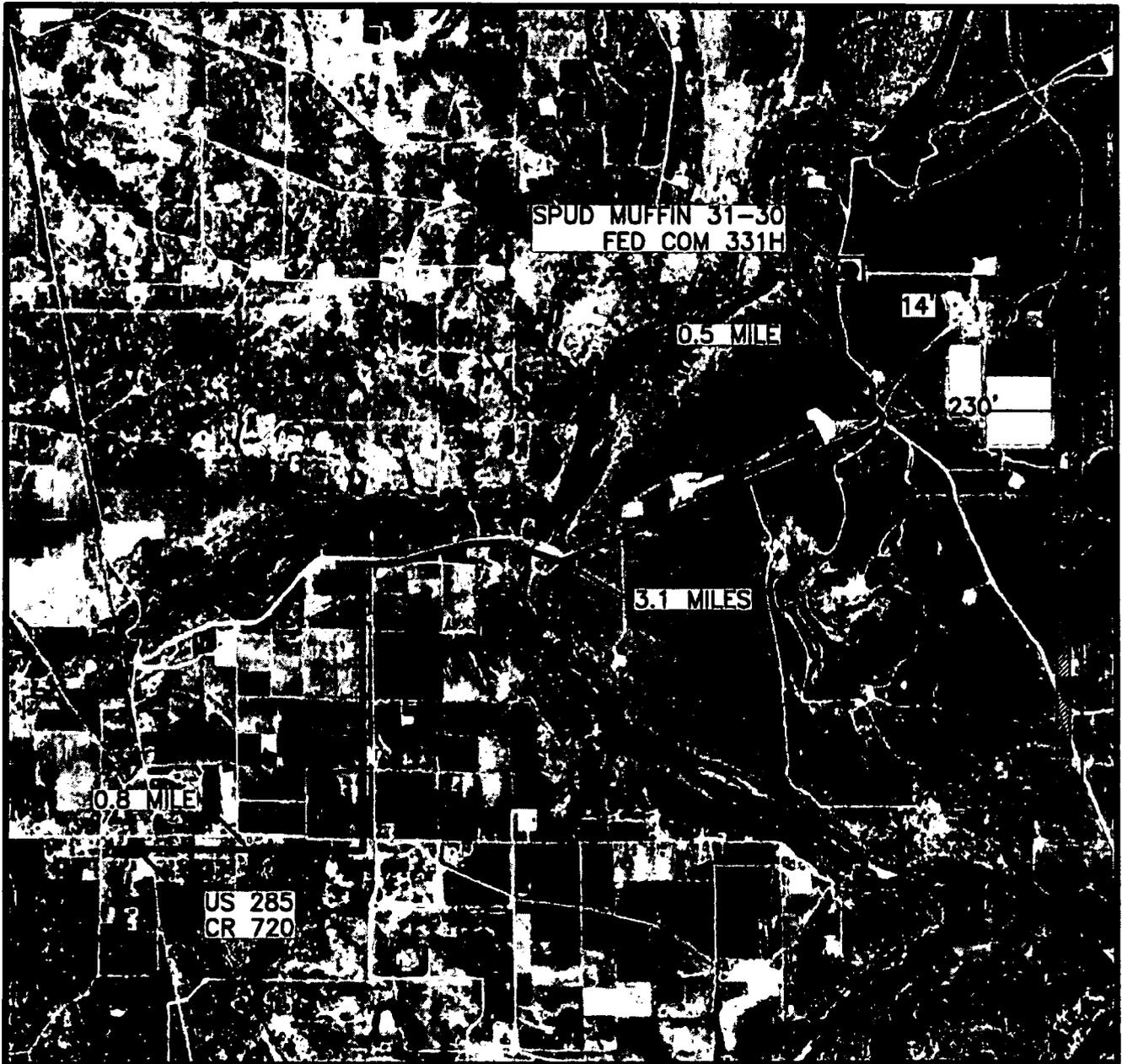
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EDDY COUNTY, STATE OF NEW MEXICO

SEPTEMBER 12, 2018

SURVEY NO. 6274C

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO  
(575) 234-3341

SECTION 31, TOWNSHIP 23 SOUTH, RANGE 29 EAST, N.M.P.M.  
EDDY COUNTY, STATE OF NEW MEXICO  
AERIAL ACCESS ROUTE MAP



NOT TO SCALE  
AERIAL PHOTO:  
GOOGLE EARTH  
FEB. 2017

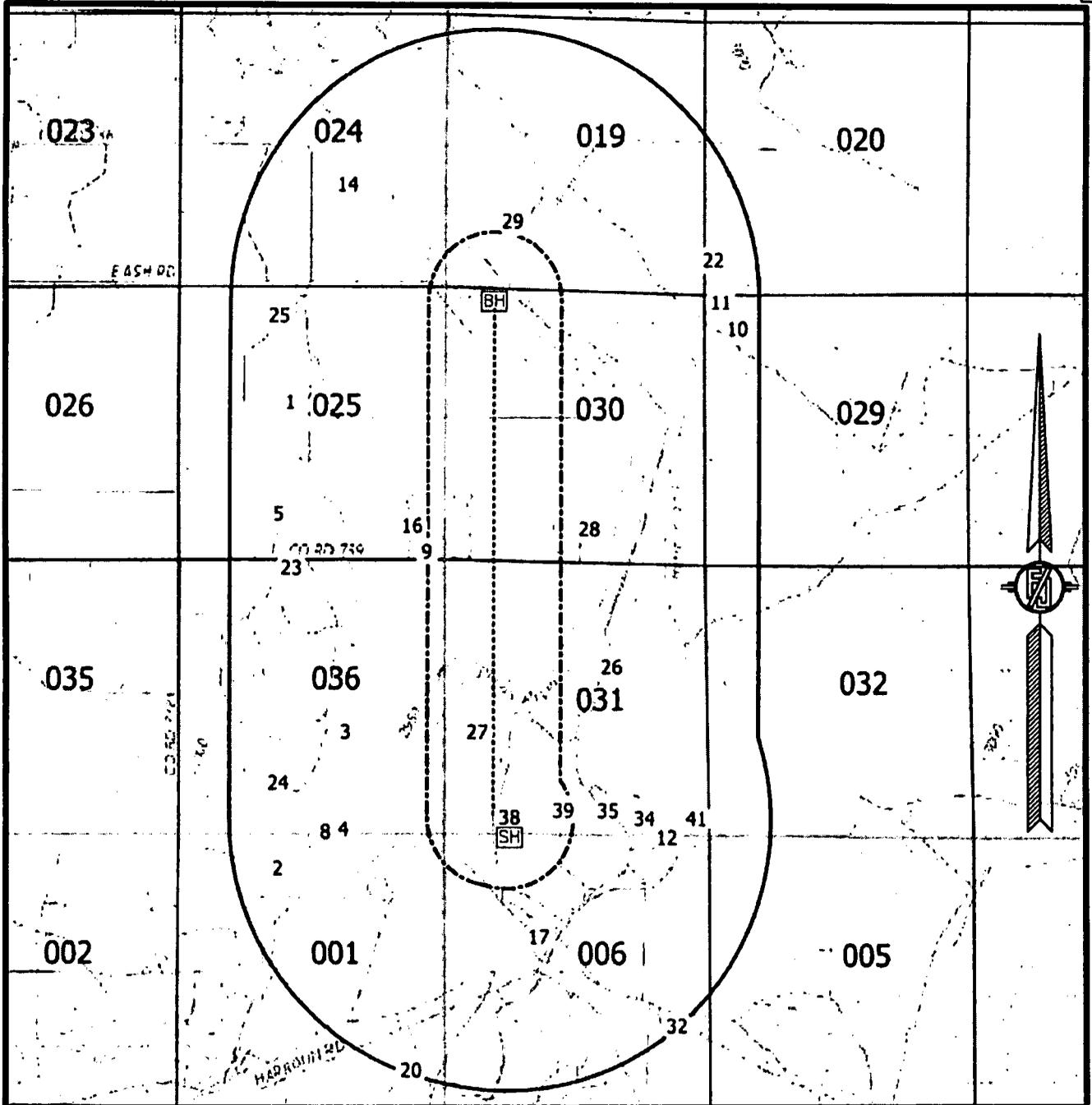
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RANGE 29 EAST, N.M.P.M.  
EDDY COUNTY, STATE OF NEW MEXICO

SEPTEMBER 12, 2018

SURVEY NO. 6274C

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

# 1-MILE WELL MAP



WELL DATA FROM NMOCD GIS - 6/6/18

**SH** SURFACE LOCATION

**BH** BOTTOM OF HOLE

**XX** WELLS WITHIN 1 MILE

----- WELL PATH

----- 1/4 MILE BOUNDARY

----- 1-MILE BOUNDARY

**DEVON ENERGY PRODUCTION COMPANY, L.P.**  
**SPUD MUFFIN 31-30 FED COM 331H**  
 LOCATED 270 FT. FROM THE SOUTH LINE  
 AND 1275 FT. FROM THE WEST LINE OF  
 SECTION 31, TOWNSHIP 23 SOUTH,  
 RANGE 29 EAST, N.M.P.M.  
 EDDY COUNTY, STATE OF NEW MEXICO

SEPTEMBER 12, 2018

SURVEY NO. 6274C

**MADRON SURVEYING, INC.** 301 SOUTH CANAL CARLSBAD, NEW MEXICO  
(575) 234-3341

## PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	DEVON ENERGY PRODUCTION COMPANY LP
LEASE NO.:	NMNM082886
WELL NAME & NO.:	SPUD MUFFIN 31-30 FED COM 331H
SURFACE HOLE FOOTAGE:	270'/S & 1275'/W
BOTTOM HOLE FOOTAGE:	20'/N & 927'/W
LOCATION:	SECTION 31, T23S, R29E, NMPM
COUNTY:	EDDY

Potash	<input checked="" type="radio"/> None	<input type="radio"/> Secretary	<input type="radio"/> R-111-P
Cave/Karst Potential	<input type="radio"/> Low	<input checked="" type="radio"/> Medium	<input type="radio"/> High
Variance	<input type="radio"/> None	<input checked="" type="radio"/> Flex Hose	<input type="radio"/> Other
Wellhead	<input type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl	
Other	<input type="checkbox"/> 4 String Area	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> WIPP

**All previous COAs still apply except for the following:**

### A. CASING

1. The 13 3/8 inch surface casing shall be set at approximately 400 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
  - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
  - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
  
2. The minimum required fill of cement behind the 8 5/8 inch first intermediate casing is:

**Option 1 (Single Stage):**

- Cement to surface. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.**

**Option 2:**

Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.

- a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
- b. Second stage above DV tool:
  - Cement to surface. If cement does not circulate, contact the appropriate BLM office. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.**

**For the 'Alternate Design II', operator has proposed to pump down 13 3/8" X 8 5/8" annulus. Operator must run a CBL from TD of the 8 5/8" casing to surface. Submit results to the BLM.**

- ❖ In **Medium Cave/Karst Areas** if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
3. The minimum required fill of cement behind the 7 5/8 inch second intermediate casing is:
    - Cement as proposed. If cement does not circulate, contact the appropriate BLM office.

**In the case of lost circulation, operator has proposed to pump down 8 5/8" X 7 5/8" annulus. Operator must run a CBL from TD of the 7 5/8" casing to surface. Submit results to the BLM.**

4. The minimum required fill of cement behind the 5 1/2 inch production casing is:
  - Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification.

**MHH 12182018**

## GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

Chaves and Roosevelt Counties  
Call the Roswell Field Office, 2909 West Second St., Roswell NM 88201.  
During office hours call (575) 627-0272.  
After office hours call (575)

Eddy County  
Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,  
(575) 361-2822

Lea County  
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575)  
393-3612

### A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log.
3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements.

4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.