

# Oil Cons. N.M. DIV-Dist. 2 1301 W. Grand Avenue Artesia, NM 88210

SEP 25 2007

## **OCD-ARTESIA**

Form 3160-3 (April 2004)

UNITED STATES DEPARTMENT OF THE INTERIOR

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007
Lease Serial No.
NMNM-118110

EMENT	
	6. If Indian, Allotee or Tribe Name

BUKEAU OF LAND MAN	AGEMENI			···	
APPLICATION FOR PERMIT TO	DRILL OR REENTER		6. If Indian, Allotee or Tr	ibe Name	
la. Type of work:			7 If Unit or CA Agreement	, Name and No.	
b. Type of Well: Oil Well Gas Well Other	Single Zone Mult	iple Zone	8. Lease Name and Well N STARR "B" FEDE	THI 2/2	
Name of Operator ARMSTRONG ENERGY CORPORAT	1092		9. API Well No. 003	5, 5, 6 3°	
a. Address P.O. BOX 1973 ROSWELL, NM 88202	3b. Phone No. (include area code) 505-625-2222	ı	10. Field and Pool, or Explor		
Location of Well (Report location clearly and in accordance with any			11. Sec., T. R. M. or Blk. and		
At surface 1650' FNL & 330' FEL	L CONTROLLED WATER BASIN	٧ -	SEC. 19-T13S-R29	•	
Distance in miles and direction from nearest town or post office* 16 MILES EAST OF HAGERMAN, NM			12. County or Parish CHAVES	13. State NM	
Distance from proposed location to nearest property or lease line, ft.	16. No. of acres in lease	-			
(Also to nearest drig. unit line, if any) 330°  Distance from proposed location*	19. Proposed Depth				
to nearest well, drilling, completed, applied for, on this lease, ft.	9500'		NM-1826		
. Elevations (Show whether DF, KDB, RT, GL, etc.) 3657' GL	22. Approximate date work will start*		23. Estimated duration 45 DAYS		
3037 012	09/24/2007 24. Attachments		132710		
e following, completed in accordance with the requirements of Onshor		attached to th	is form:		
Well plat certified by a registered surveyor.  A Drilling Plan.		the operatio	ns unless covered by an existi	ing bond on file (see	
A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office).		e specific info	ormation and/or plans as may	be required by the	
5. Signature	Name (Printed/Typed) BRUCE A. STUBI	n c	Date	08/01/2007	
tle VICE PRESIDENT - OPERATIONS	DRUCE A. STUBI			08/01/200/	
oproved by (Signature) /S/ Angel Mayes	Name (Printed/Typs/) A	ngel N	layes	SEP 202	
ile प्रेडेडेडिंबिनि Fleid Manager	ROSWELL FI		APDASU	ED FOR 2 YEAR	
Lands And Minerals	***************************************				

\*(Instructions on page 2)

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

District 1 1625 N. French Dr., Hobbs, NM 8 District II 1301 W. Grand Avenue, Artesia. NM 882

State of New Mexico ergy, Minerals & Natural Resources Department

Revised October 12, 2005 Submit to Appropriate District Office OIL CONSERVATION DIVISION State Lease - 4 Copies District III 1220 South St. Francis Dr. OCT 03 2007 Fee Lease - 3 Copies 1000 Rio Brazos Rd., Aztec, NM 87410 Santa Fe, NM 87505 District IV **OCD-ARTESIA** ☐ AMENDED REPORT 1220 S. St. Francis Dr., Santa Fe, NM 87505 WELL LOCATION AND ACREAGE DEDICATION PLAT API Number Pool Code Lone Wolf Devonian, Southwest 40284 Property Code Well Number Property Name Starr "B" Federal Operator Name Elevation OGRID No. 1092 Armstrong Energy Corp. 3657 <sup>10</sup> Surface Location North/South line East/West line Feet from the Feet from the County UL or lot no. Township Lot Idn 1650 North 330 East Chaves H 19 **13S** 11 Bottom Hole Location If Different From Surface UL or lot no. Section Township Feet from the North/South line Feet from the East/West line County 12 Dedicated Acres Order No. Joint or Infill Consolidation Code 40 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. 16 17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either Lease No.: NMNM-118110 ns a working interest or unleased minered truerest in the kind including NE/4 & E/2 NW/4 the proposed bottom hole location or has a right to drill this well at this 1650 240 Ac. ant to a contract with an owner of such a mineral or working 08/01/2007 Bruce A. Stubbs SE/4 NE/4 330 Printed Name 40 Ac. 18SURVEYOR CERTIFICATION 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.

Form C-102

### Armstrong Energy Corporation Starr "B" Federal #1 Devonian Test 1650' FNL & 330' FEL Section 19-T13S-R29E Chaves County, New Mexico

1. The Estimated tops of geological markers are as follows:

Surface Formation: Permian – Quaternary Sandy Alluvium

Yates	685'
7-Rivers	825'
Queen	1405'
Grayburg	1710'
San Andres	1985'
Glorietta	3290'
Tubb	4820'
Abo	5610'
XX Wolfcamp	6825'
3-Brothers	7135'
Mississipian	8735'
Kinderhook	9210'
Devonian	9405'

2. The estimated depth at which anticipated water, oil or gas formations are expected to be encountered:

Water	150'
Oil	9405'

No other formations are expected to give up oil, gas or fresh water in measurable quantities. Any potential surface fresh water sands will be protected by setting 13 3/8" casing at 300' and circulating cement back to surface

- 3. Pressure Control Equipment: 3,000 psi W.P. BOP nippled up on the 8 5/8" casing
- 4. Proposed Casing and Cementing Program:
  - A. Casing Program:

Hole Size	Casing Size	<u> Wt./Ft.</u>	<u>Grade</u>	Coupling	<u>Interval</u>	Cond.
17 1/2"	13 3/8"	48 #/ft.	H-40	ST&C	0-325'	New
12 ¼"	8 5/8"	32 #/ft.	K-55	ST&C	0-2210'	New
7 7/8"	5 1/2"	17 #/ft.	N-80	LT&C	0-TD	New
Minimum	cacina decian f	actore Collane	a 1 125	Ruret 1 0	Tensile Strength 1	R

Minimum casing design factors: Collapse 1.125, Burst 1.0, Tensile Strength 1.8

B. Cementing Program:

String	<u>Sacks</u>	Type	Yield Yield	<u>Fill</u>
Surface	400	Class "C" w/ 2% CaCl <sub>2</sub>	1.32 ft <sup>3</sup>	Circ.
Intermediate	800	Lite		
	200	Class "C" w/ 2% CaCl <sub>2</sub>	1.32 ft <sup>3</sup>	Circ.
Production	305	Super "H" w/.5% LAP-1,		TOC @ 8000'
		.4% CFR-3, 2.5 #/sx. Salt,		
		.25 #/sx. D-Air		•

#### 5. Mud Program and Auxiliary Equipment:

<u>Interval</u>	Type	<u>Weight</u>	<b>Viscosity</b>	Fluid loss
0-325'	Fresh Water Gel	8.4-8.9	32-36	N.C.
325-2210'	Salt Gel/Starch/Brine	9.7-10.2	28-29	N.C.
2210-5600'	Cut Brine	9.1-9.2	28-29	N.C.
5600-8500'	Cut Brine/Oil/Torqmaster	9.0-9.1	34-40	N.C.
8500-T.D.	Cut Brine/Oil/Torqmaster	9.0-9.3	34-40	10-15

#### 6. Testing, logging and coring programs:

DST's: Possible on all secondary target formations, plus target formations.

Mud Logging: From the Queen formation to T.D.

Electric Logging: From surface to T.D.; projected to run a CNL/LDT/GR and from 2210' to

T.D. a sonic and DLL/MLL.

Coring: No coring is anticipated at this time. However, rotary sidewall cores may be

taken while logging.

8. Abnormal pressure, temperature or other hazards

Lost Circulation Zones: Records on nearby wells do not report any lost circulation zones.

Appropriate materials will be available to combat any lost

circulation that is encountered.

High Pressure: Records available from nearby wells do not indicate any over

pressured zones. Mud weights sufficient to maintain a hydrostatic

gradient of 0.45 psi/ft. should be sufficient for well control.

High Temperature: BHT measured in nearby wells indicates a normal temperature

gradient in this area. (145°F @ 9500'= .89 °F/100 ft.)

9. Anticipated starting date: September 24, 2007

#### MULTI-POINT SURFACE USE AND OPERATIONS PLAN

# Starr "B" Federal #1 Devonian Test 1650' FNL & 330' FEL Section 19-T13S-R29E Chaves County, New Mexico

1. Existing roads: Exhibit A is an aerial map showing the wells and roads in the vicinity of the proposed location. The wellsite is located approximately 16 miles east-northeast of Hagerman, New Mexico and the access road is indicated in yellow and the proposed access road is indicated in red.

Directions: From Hagerman, New Mexico, travel east on NM 31 to mile marker 20.6; turn north on Chaves county Road "Jemina"; which meanders north and then west a distance of 2.1 miles: turn north on Chaves County Road "Terersa" a distance of 6.3 miles to a dry hole marker and an unnamed oilfield road leading west. Turn west and travel 1.6 miles to a dry hole marker and large water tank. Turn south and travel .25 miles, turn west onto access road and travel .5 miles to location.

- 2. Planned access road: The original access road will be bladed, resurfaced and packed as necessary. The access road is approximately 150 feet (9.1 rods) from the existing road to the east side of the location.
- 3. Location of existing wells: Exhibit D shows existing wells within a one-mile radius of the proposed location. The following table lists the wells within the one-mile radius of the Starr "B" Federal #1.

Operator Name	Field Name	Prod Zone Name	Lease Name	#	<b>Location</b>
Armstrong Energy Corporation	Lone Wolf South	Devonian	South Lone Wolf	1	Sec. 29 F-T13S-R29E
Armstrong Energy Corporation	Lone Wolf South	Devonian	South Lone Wolf	2	Sec. 29 M-T13S-R29E
The Rodman Corporation	Wildcat	8778' D.H.	North King Camp Unit	5	Sec 17 K-T13S-R29E
Jack L. McClellan	Wildcat	1630' D.H.	North King Camp Unit	6	Sec 17 G-T13S-R29E
McClellan Oil Corporation	Wildcat	1497' D.H	North King Camp Unit	7	Sec 17 L-T13S-R29E
Elk Oil Company	Wildcat	9397' D.H.	Nitschke "66" Federal	1	Sec. 19 C-T13S-R29E
McGrath & Smith, Inc	Wildcat	2120' D H.	North King Camp Unit	3	Sec 20 G-T13S-R29E

- 4. Location of existing and/or proposed facilities: In the event the well is productive, the necessary production facilities will be installed on the drilling pad. It is anticipated the well will be a oil well and no electrical power or gas pipeline will be will be required.
- 5. Location and type of water supply: It is planned to reenter the proposed well using a cut brine mud system. The water will be obtained from commercial sources and will be hauled to location by truck over the existing and proposed roads shown in Exhibit A.
- 6. Source of construction material: It is planned to use the caliche from the Nitschke "66" Federal #1 location and road on this location. The dirt contractor will locate the nearest pit and obtain

any permits and materials needed for construction should the location need any additional materials.

#### 7. Method of handling waste disposal:

- A. Drill cutting will be collected in the reserve pit as per OCD pit rules.
- B. Drill fluids will be stored in steel tanks and the reserve pit.
- C. Water produced during production operations will be stored in tanks until hauled to an approved disposal system.
- D. Oil produced during production operations will be stored in tanks until sold.
- E. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- F. All trash, junk and other waste will be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved landfill. Burial on site is not approved.
- 8. Ancillary facilities: None
- 9. Wellsite layout:
  - A. Exhibit C shows the relative location and dimensions of the well pad, the location of the drilling equipment, rig orientation and access road approach.
  - B. An area 600' x 600' with a 100' wide access road was archaeologically cleared by Boone Archaeological Services, LLC on July 20, 2007.

#### 10. Plans for restoration:

- A. After the completion of the drilling and completion operations, all equipment and other materials not needed for additional operations will be removed. The location will be cleared of all trash and junk to leave the wellsite in an aesthetically pleasing a condition as possible.
- B. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible.
- 11. Surface Ownership: U.S.

Lessee: Mr. Robert Jolly

Sand Camp Ranch P. O. Box 597

Hagerman, NM 88232

505-752-6662

The surface lessee has been contacted and a surface use agreement is being negotiated between Sand Camp Ranch and Armstrong Energy Corporation.

#### 12. Other information:

- A. Topography: Refer to the existing archaeological report for a description of the topography, flora, fauna, soil characteristics, dwellings and historical and cultural sites.
- B. The primary surface use is for grazing.

#### 13. Operator's representative:

Mr. Bruce A. Stubbs Armstrong Energy Corporation P.O. Box 1973 Roswell, New Mexico 88202 Phone 505-625-2222 bastubbs@zianet.com

#### 14. Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions which 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 Armstrong Energy Corporation and it's contractors and sub contractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Date: August 1, 2007

Bruce A. Stubbs

Vice President – Operations Armstrong Energy Corporation

# Armstrong Energy Corporation Starr "B" Federal #1 1650' FNL & 330' FEL Sec. 19-T13S-R29E Chaves County, New Mexico

## Hydrogen Sulfide Plan

Offset wells have not reported hydrogen sulfide in concentration in excess of 100 ppm. As per Rule 118.C.2, no further action is necessary.

As a precautionary measure, a  $H_2S$  monitor will be maintained on the rig floor to alert personnel to unanticipated  $H_2S$  buildup at the bell nipple and rig floor. Should  $H_2S$  be detected, a Hydrogen Sulfide Plan will be implemented.

There are no dwellings within a one-half mile radius of the well. The closest dwelling is an abandoned ranch house approximately one mile east of the location.

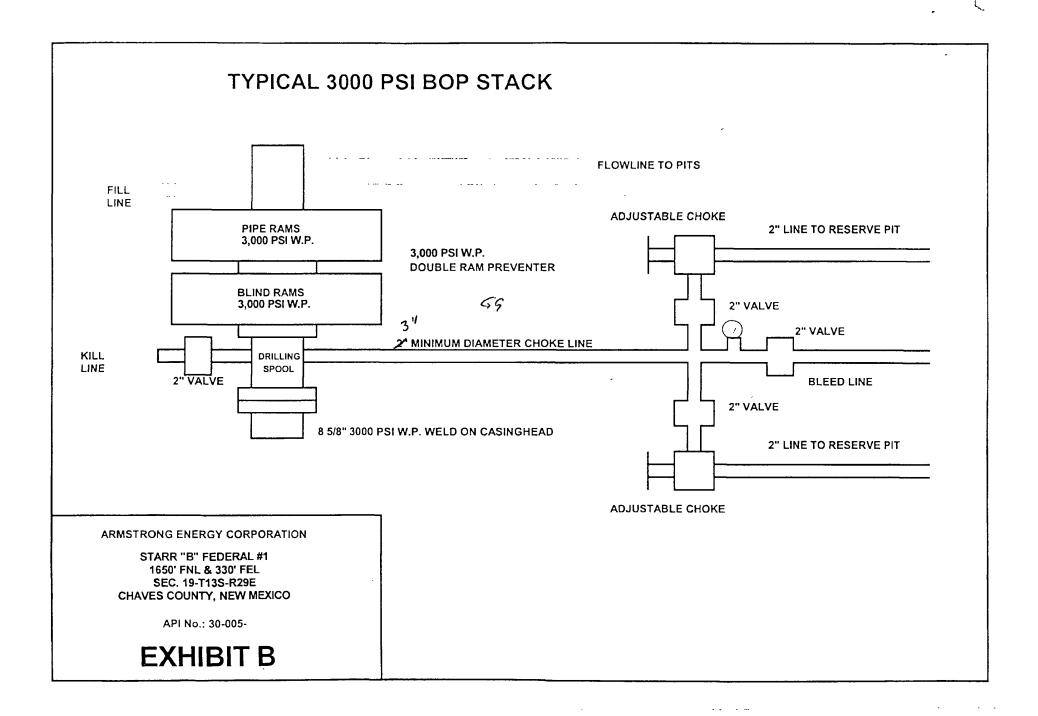
Should you have any questions concerning this well, please call me at 505-625-2222.

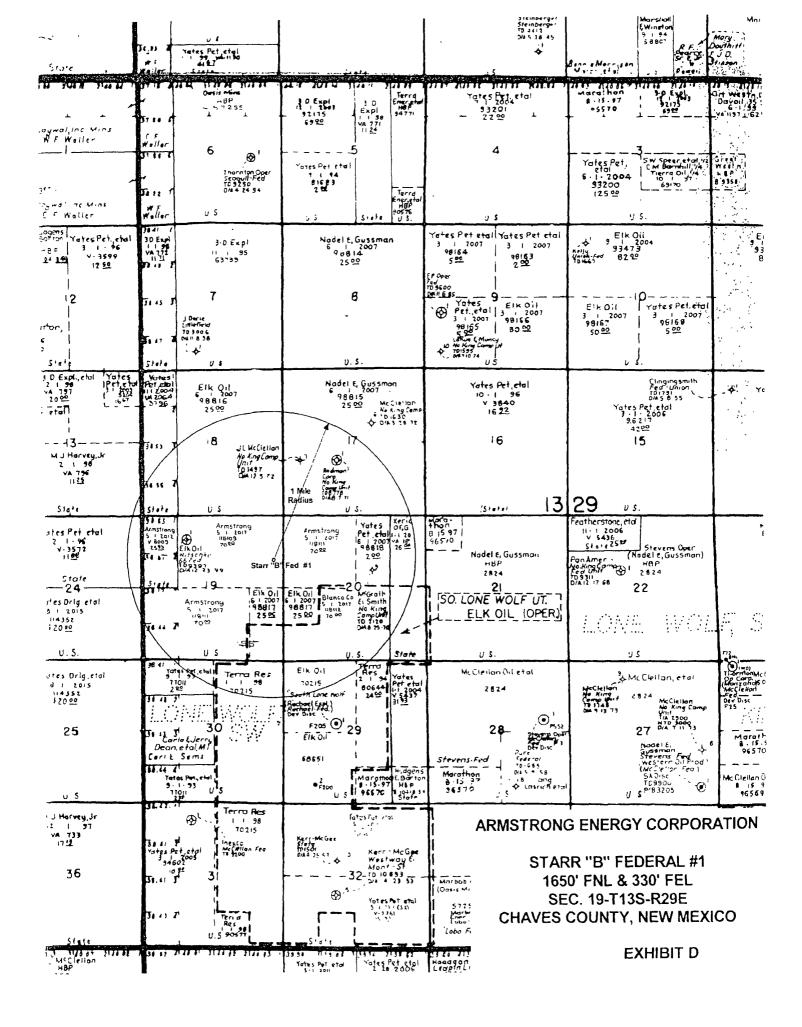
Sincerely,

**Armstrong Energy Corporation** 

By: Bruce A. Stubbs

Vice President - Operations





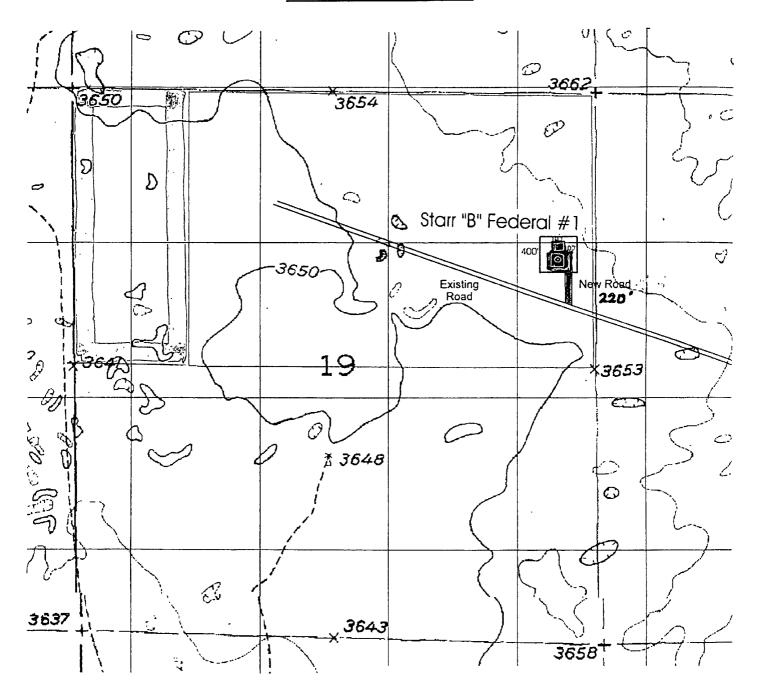
OPERATORS NAME: Armstrong Energy Corporation

LEASE NO.: <u>NM-118110</u>

WELL NAME & NO: Starr "B" Federal #1

SURFACE HOLE FOOTAGE: 1650' FNL & 330' FEL LOCATION: Section 19, T. 13 S., R. 29 E., NMPM

COUNTY: Chaves County, New Mexico



#### V. DRILLING

#### A. DRILLING OPERATIONS REQUIREMENTS

- 1. The Bureau of Land Management (BLM) is to be notified at the Roswell Field Office, 2909 West Second St., Roswell, NM 88201, (505) 627-0272, in sufficient time for a representative to witness:
- A. Spudding
- B. Cementing casing: 13 \( \frac{3}{8} \) inch; \( \frac{8}{8} \) inch; \( \frac{5}{12} \) inch.
- C. BOP Tests
- 2. A Hydrogen Sulfide (H2S) Drilling Plan is not required for this wellbore.
- 3. 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.
- 4. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.
- 5. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

#### B. CASING:

- 1. The 13 % inch shall be set at 325 Feet with cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified 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. The minimum required fill of cement behind the 8 % inch Intermediate casing is to circulate.
- 3. The minimum required fill of cement behind the 5 ½ inch Production casing is to place TOC to 8000 ft..

#### C. PRESSURE CONTROL:

- 1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the 13 1/8 inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.
- 2. Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 3 M psi.

#### Arrant, Bryan, EMNRD

From: Arrant, Bryan, EMNRD

Sent: Wednesday, September 26, 2007 10:58 AM

To: 'bastubbs@zianet.com'

Cc: 'John\_Simitz@nm.blm.gov'; Jones, William V., EMNRD

Subject: Starr B Federal # 1

Dear Mr. Stubbs,

In order to further review and possibly API this APD, please re submit NMOCD form C-102 and show the correct dedicated acreage for an oil well.

Unless Armstrong Energy Corporation has some kind approval from Santa Fe for 80 acre dedication, I cannot accept this application to produce.

In reviewing this area, there is an oil pool southeast of this proposed location named the Lone Wolf; Devonian, Southwest Oil Pool (Created by R-9771).

However, I do not see any special pools rules for this pool.

Please fill out your C-102 in it's entirety so that I can process you application faster.

Yours truly,

Bryan G. Arrant
District II Geologist
New Mexico Oil Conservation Division
1301 West Grand Ave.
Artesia, NM 88210
505-748-1283 Ext. 103

CC: Well File