

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

SEP 25 2007

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

Form 3160-3 (April 2004)

UNITED STATES

5. Lease Serial No.

BUREAU OF LAND MANA	NMNM-118110							
APPLICATION FOR PERMIT TO D	6. If Indian, Allotee or Tribe Name			-				
la. Type of work:  DRILL REENTER	7 If Unit or CA Agreement, Name and No.			-				
lb. Type of Well: Oll Well Gas Well Other	✓Sir	ngle Zone Multip	ole Zone	8. Lease Name and STARR "B"		L#1	3	367
2. Name of Operator  ARMSTRONG ENERGY CORPORATE	ON	1092		9. API Well No. C	05	<u>62</u>	le:	390
3a. Address P.O. BOX 1973 ROSWELL, NM 88202		(include area code)	•	10. Field and Pool, or		٠.		
	505-62			ne Wolf				س
4 Location of Well (Report location clearly and in accordance with any	State requirem	ents *)		11. Sec , T. R. M. or 1	Blk. and Su	vey or A	ırea	
At surface 1650' FNL & 330' FEL ROSWELL ( At proposed prod. zone SAME	CONTROLL	ED WATER BASIN	-	SEC. 19-T13S	S-R29E			
14 Distance in miles and direction from nearest town or post office*				12. County or Parish		13. Stat	ie	•
16 MILES EAST OF HAGERMAN, NM			l	CHAVES		ı	NM	
location to nearest			17. Spacin	ing Unit dedicated to this well			•	
(Also to nearest drig. unit line, if any) 330'		0 AC.		80 AC.			_	
18. Distance from proposed location* to nearest well, drilling, completed,	19. Proposed	Depth	Depth 20. BLM/BIA Bond No. on file					
applied for, on this lease, ft. N.A.	9500'		NM-1826					
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3657' GL	22. Approxim	nate date work will star 09/24/2007	rt*	23. Estimated duration 45 DAYS	on	·····		
	24. Attac	hments		·				•
The following, completed in accordance with the requirements of Onshore	Oil and Gas 1	Order No. 1. shall be at	tached to thi	is form.				-
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan</li> <li>A Surface Use Plan (if the location is on National Forest System La SUPO shall be filed with the appropriate Forest Service Office).</li> </ol>		4 Bond to cover the Item 20 above). 5. Operator certific	ne operation ation specific info	ns unless covered by ar				-
25. Signature	i	(Printed/Typed)			Date			
1 Wall		BRUCE A. STUBBS	<u> </u>		08/0	1/2007		
Title VICE PRESIDENT - OPERATIONS								
Approved by (Signature) /S/ Angel Mayes	Name	(Printed/Types!) An	igel M	ayes	DatSE	P	20	2007
Tute Assistant Fleid Manager, Lands And Minerals	Office	OSWELL FIE		ADD	ROVED	FOR	2 VE/	ARS
Application approval does not warrant or certify that the applicant holds I					entitle the a	pplicant	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 crim States any false, fictitious or fraudulent statements or representations as to	ne for any pe any matter w	rson knowingly and within its jurisdiction	allfully to m	ake to any department of	or agency (	of the Ur	nited	

\*(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 I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410

District IV

State of New Mexico
Thergy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION

OCT 0 3 2007

State Lease - 4 Copies Fee Lease - 3 Copies

Form C-102

1220 South St. Francis Dr. Santa Fe, NM 87505

OCD-ARTESIA

Revised October 12, 2005

Submit to Appropriate District Office

1220 S. St. Franci	s Dr., Santa F	e, NM 87505						ł	AME	IDED KEPUKI	
		W.	ELL LC	CATIO	N AND ACR	EAGE DEDIC	ATION PLA	Τ			
API Number Pool Code 40284				l l	Lone Wolf Devonian, Southwest						
Property Code					<sup>5</sup> Property !				<sup>6</sup> Well Number		
3 4.1	9				Starr "B" F	ederal				<u>l</u>	
OGRID	No.				8 Operator ]	Name			Elevation		
1092				Armstrong Energy Corp.					3657		
					<sup>10</sup> Surface	Location					
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South lipe	Feet from the	East/W	st line	County	
H	19	13S	29E	,	1650	North	330	Ea	East Chaves		
			11 Bo	ottom Ho	le Location I	f Different Fron	n Surface			· · · · · · · · · · · · · · · · · · ·	
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East	/West line	County	
	]										
12 Dedicated Acr	es 3 Joint o	r Infill	Consolidation	Code 15 O	rder No.						
40				- 1							

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	Lea	se No.: NMNM-1181 NE/4 & E/2 NW/4 240 Ac.	10 10 10 10 10 10 10 10 10 10 10 10 10 1	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 owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a numeral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the drysipn
			SE/4 NE/4 330 40 Ac.	Signature Date  Bruce A. Stubbs  Printed Name
·			·	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.  6/21/2007  Date of Survey  MA F.
., ,				Signature and Scarof Professional Surveyor.

## 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	1	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	Wt./Ft.	<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
3.51					~	

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

B. Cementing Program:

<u>String</u>	<u>Sacks</u>	Type	<u>Yield</u>	<u>Fill</u>
Surface	400	Class "C" w/ 2% CaCl <sub>2</sub>	$1.32 \text{ ft}^3$	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	#	Location
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.

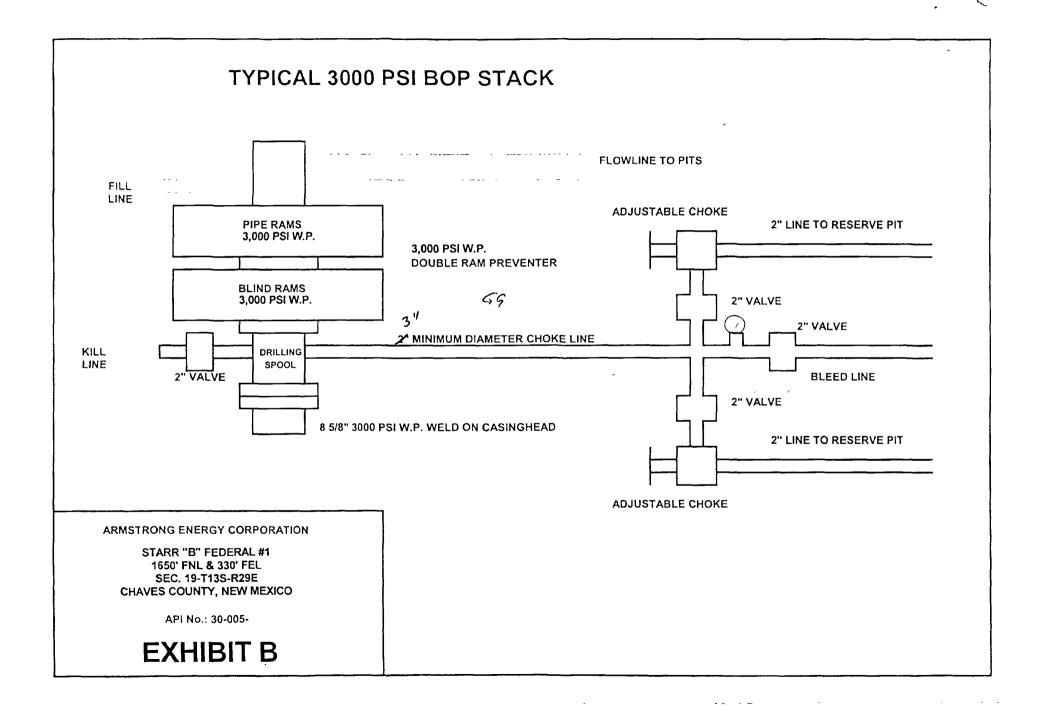
Should you have any questions concerning this well, please call me at 505-625-2222.

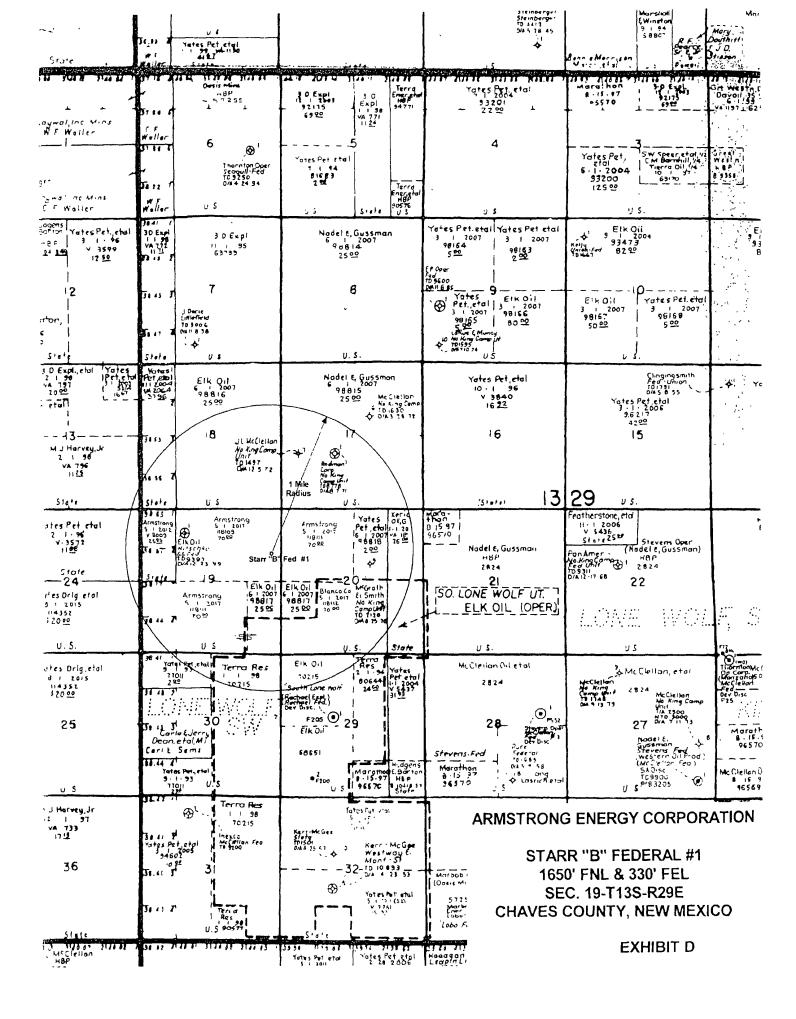
Sincerely,

**Armstrong Energy Corporation** 

By: Bruce A. Stubbs

Vice President - Operations





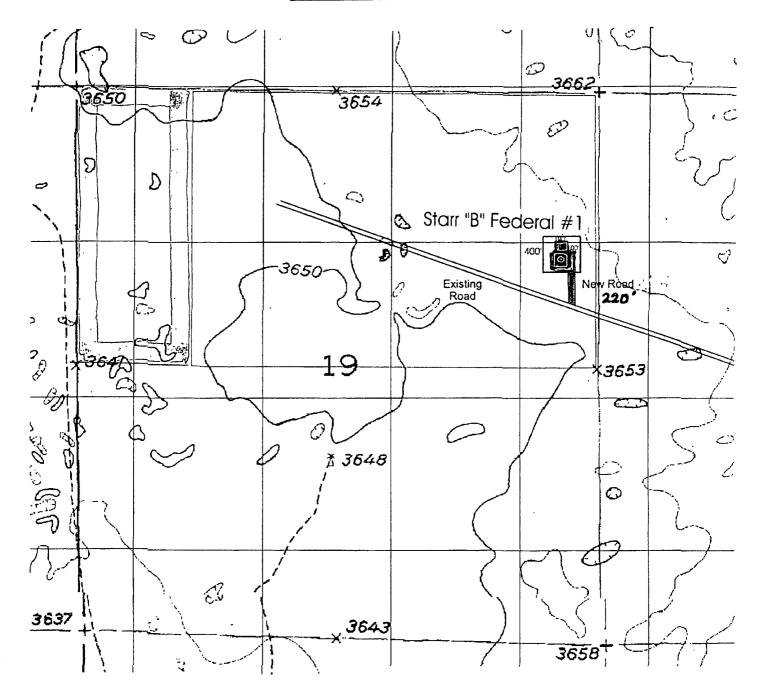
OPERATORS NAME: Armstrong Energy Corporation

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 % inch; 8 % inch; 5 ½ 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 ½ 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