

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

RCUD JAN10'07  
OIL CONS. DIV.  
DIST. 3


APPLICATION FOR PERMIT TO DRILL OR REENTER

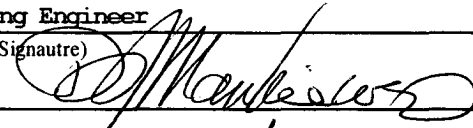
1a. Type of Work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. <b>NM-09840</b>
1b. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator <b>Energex Resources Corporation</b>		7. Unit or CA Agreement Name and No.
3a. Address <b>2198 Bloomfield Hwy Farmington, NM 87401</b>	3b. Phone No. (include area code) <b>505.325.6800</b>	8. Lease Name and Well No. <b>Tibbar Federal #3F</b>
4. Location of Well (Report location clearly and in accordance with any State requirements)* At surface <b>1043' fsl, 1340' fwl</b> At proposed prod. zone		9. API Well No. <b>30-045-34108</b>
14. Distance in miles and direction from nearest town or post office* <b>Approximately 2 miles southeast of Bloomfield</b>		10. Field and Pool, or Exploratory <b>Basin Dakota</b>
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) <b>1043'</b>	16. No. of Acres in lease <b>1440</b>	11. Sec., T., R., M., or Blk. and Survey or Area <b>(N) S24, T26N, R9W</b>
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. <b>Approx 75'</b>	19. Proposed Depth <b>6789'</b>	12. County or Parish <b>San Juan</b>
21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>6432' GL</b>	22. Approximate date work will start* <b>2/20/07</b>	13. State <b>NM</b>
23. Estimated duration <b>15 days</b>		17. Spacing Unit dedicated to this well <b>w/2 320</b>
20. BLM/BIA Bond No. on file		

24. Attachments

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) <b>Nathan Smith</b>	Date <b>12/05/06</b>
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Title <b>Drilling Engineer</b>		
Approved by (Signature) 	Name (Printed/Typed) <b>AFM</b>	Date <b>1/9/07</b>
Title <b>AFM</b>	Office <b>FFO</b>	

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. **Min. BOPC test requirement : 750#**

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)

DRILLING OPERATIONS AUTHORIZED ARE  
SUBJECT TO COMPLIANCE WITH ATTACHED  
"GENERAL REQUIREMENTS".

This action is subject to technical and  
procedural review pursuant to 43 CFR 3165.3  
and appeal pursuant to 43 CFR 3165.4

NMOCD

1/11/07

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**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**  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources Department  
**OIL CONSERVATION DIVISION**  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised October 12, 2005  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

RECEIVED  
OTO FARMINGHOUSE  
☐ AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

<sup>1</sup> API Number 30-045-34108		<sup>2</sup> Pool Code 71599	<sup>3</sup> Pool Name Basin Dakota
<sup>4</sup> Property Code 22012	<sup>5</sup> Property Name TIBBAR FEDERAL		<sup>6</sup> Well Number # 3F
<sup>7</sup> OGRID No. 162928	<sup>8</sup> Operator Name ENERGEN RESOURCES CORPORATION		<sup>9</sup> Elevation 6432'

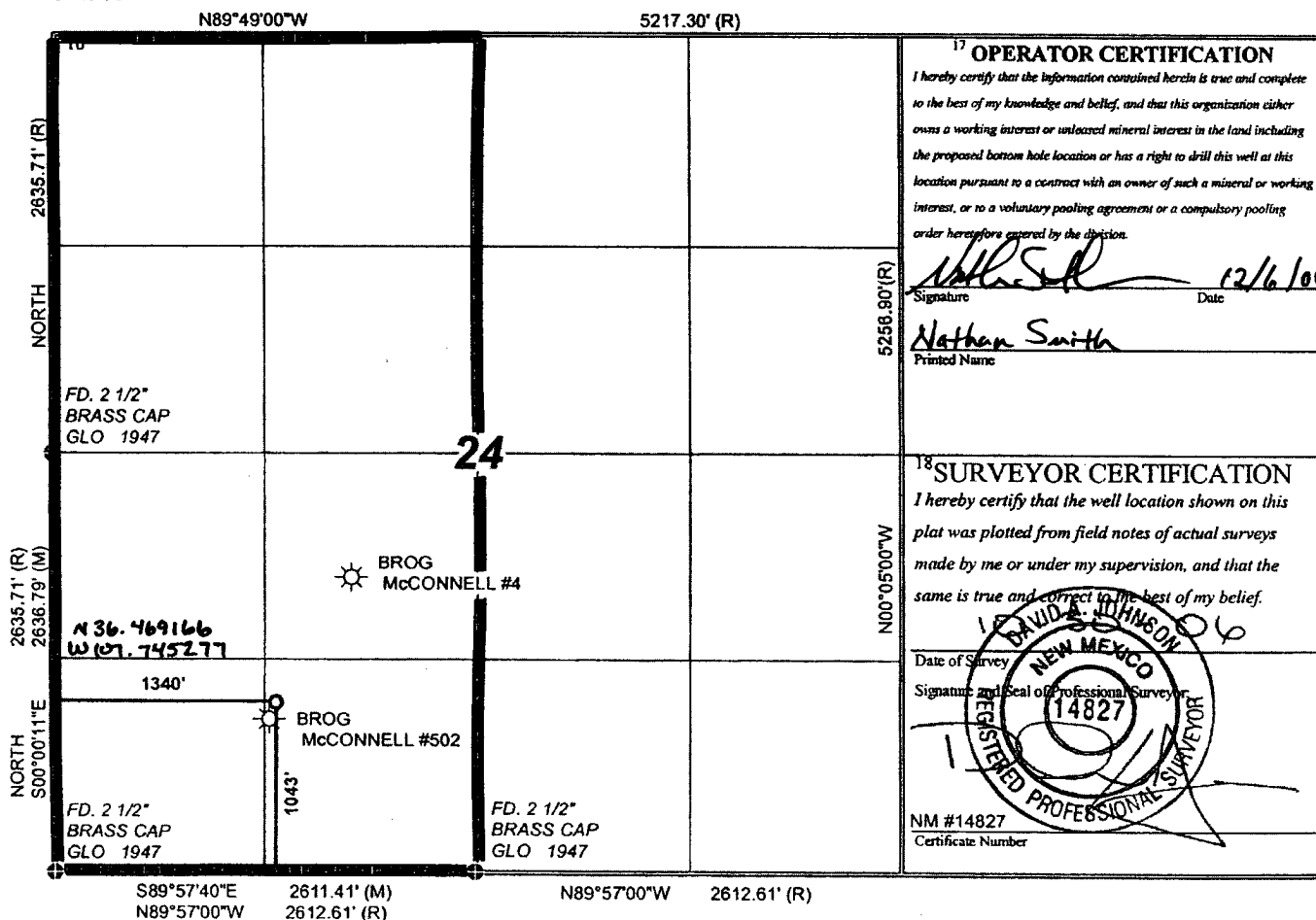
**<sup>10</sup> Surface Location**

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	24	26N	9W		1043	SOUTH	1340	WEST	SAN JUAN

**<sup>11</sup> 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
<sup>12</sup> Dedicated Acres w/ 370		<sup>13</sup> Joint or Infill		<sup>14</sup> Consolidation Code		<sup>15</sup> 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.



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Submit 3 Copies To Appropriate District  
Office  
District I  
1625 N. French Dr., Hobbs, NM 87240  
District II  
1301 W. Grand Ave., Artesia, NM 88210  
District III  
1000 Rio Brazos Rd., 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-103  
May 27, 2004

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

WELL API NO. <u>30-045-34108</u>
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name: <u>Tibbar Federal</u>
8. Well Number # <u>3F</u>
9. OGRID Number <u>162928</u>
10. Pool name or Wildcat <u>Basin Dakota</u>

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other	7. Lease Name or Unit Agreement Name: <u>Tibbar Federal</u>
2. Name of Operator <u>Energen Resources Corporation</u>	8. Well Number # <u>3F</u>
3. Address of Operator <u>2198 Bloomfield Highway, Farmington, NM 87401</u>	9. OGRID Number <u>162928</u>
4. Well Location Unit Letter <u>N</u> : <u>1043</u> feet from the <u>South</u> line and <u>1340</u> feet from the <u>West</u> line Section <u>24</u> Township <u>26N</u> Range <u>09W</u> NMPM County <u>San Juan</u>	10. Pool name or Wildcat <u>Basin Dakota</u>
11. Elevation (Show whether DR, RKB, RT, GR, etc.) <u>6432' GL</u>	
Pit or Below-grade Tank Application <input checked="" type="checkbox"/> or Closure <input type="checkbox"/>	
Pit type <u>Drill</u> Depth to Groundwater <u>&gt;100'</u> Distance from nearest fresh water well <u>&gt;1000'</u> Distance from nearest surface water <u>&gt;250'</u>	
Pit Liner Thickness: <u>12</u> mil Below-Grade Tank: Volume _____ bbls; Construction Material _____	

12. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPLETION <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input type="checkbox"/>	
OTHER: <u>Build drilling pit</u> <input checked="" type="checkbox"/>		OTHER: <input type="checkbox"/>	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Energen Resources plans to build a lined pit according to "OCD Pit and Below-grade Tank Guidelines", as issued on November 1, 2004. Energen anticipates the submittal of a C-144 for closure of this pit in accordance with BLM and "OCD Pit and Below-grade Tank Guidelines".

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any 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 ☐

SIGNATURE Vicki Donaghey TITLE Regulatory Analyst DATE 12/06/06  
Type or print name Vicki Donaghey E-mail address: vdonaghe@energen.com Telephone No. 505.325.6800

For State Use Only

APPROVED BY [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 6 DATE JAN 11 2007  
Conditions of Approval, if any:



**Operations Plan**  
December 4, 2006  
**Tibbar Federal #3F**

**General Information**

Location	1043' fsl, 1340' fwl sesw S24, T26N, R09W San Juan County, New Mexico
Elevations	6432' GL
Total Depth	6789' (MD)
Formation Objective	Basin Dakota

**Formation Tops**

Nacimiento	Surface	Menefee Fm	3704'
Ojo Alamo Ss	1269'	Point Lookout Ss	4469'
Kirtland Sh	1359'	Mancos Shale	4734'
Fruitland Fm	1794'	Graneros Shale	6429'
Top Coal	1854'	Dakota "Twowells" Ss	6454'
Bottom Coal	2059'	Dakota "Paguete" Ss	6554'
Pictured Cliffs Ss	2059'	Dakota "Cubero" Ss	6624'
Lewis Shale	2284'	Dakota "Oak Canyon" Ss	6724'
Cliffhouse Ss	3654'	Dakota "Encinal Cyn" Ss	6739'
		<b>Total Depth</b>	<b>6789'</b>

**Drilling**

The 12 1/4" wellbore will be drilled with a fresh water mud system.

The 6 1/4" wellbore will be drilled with a low solids non-dispersed fresh water mud system. Weighting materials will be drill cuttings. Mud density is expected to range from 8.3 ppg to 8.9 ppg.

**Blowout Control Specifications:**

A 2000 psi minimum double ram or annulus BOP stack (figure 1) will be used following nipple up of casing head. A 2" nominal, 2000 psi minimum choke manifold will also be used. An upper Kelly Cock valve handle and drill string valve should be available to fit each drill string and be available on the rig floor during drilling operations.

**Logging Program:**

Open hole logs: From Surface to TD – Temp / HRI / CNT, LDT / GR

Surveys: Surface and/or every 500' to TD

**Tubulars**

Casing, Tubing, & Casing Equipment:

String	Interval	Wellbore	Casing	Csg Wt	Grade
Surface	0'-200'	12 1/4"	9 5/8"	32.3 ppf	H-40 ST&C
Production	0'-6789'	6 1/4"	4 1/2"	11.6 ppf	J-55 LT&C
Tubing	0'-6690'		2 3/8"	4.7 ppf	J-55

## Casing Equipment:

**Surface Casing:** Depending on wellbore conditions, a Texas Pattern Guide Shoe on bottom. Casing centralization with standard bow spring centralizers to achieve optimal standoff.

**Production Casing:** Depending on wellbore conditions, a cement nose guide shoe on bottom with self fill insert float collar on top of shoe joint and casing centralization with standard bow spring centralizers to optimize standoff. If multistage cementing is required, DV tool(s) will be placed based on formation characteristics.

## Cementing

Surface Casing: 125 sks Type V cement with 2.0 %  $\text{CaCl}_2$  and  $\frac{1}{4}$  #/sk Flocele (15.4 ppg, 1.23 ft<sup>3</sup>/sk 154 ft<sup>3</sup> of slurry, 100% excess to circulate to surface). WOC 12 hours. Pressure test surface casing to 1000 psi for 30 min.

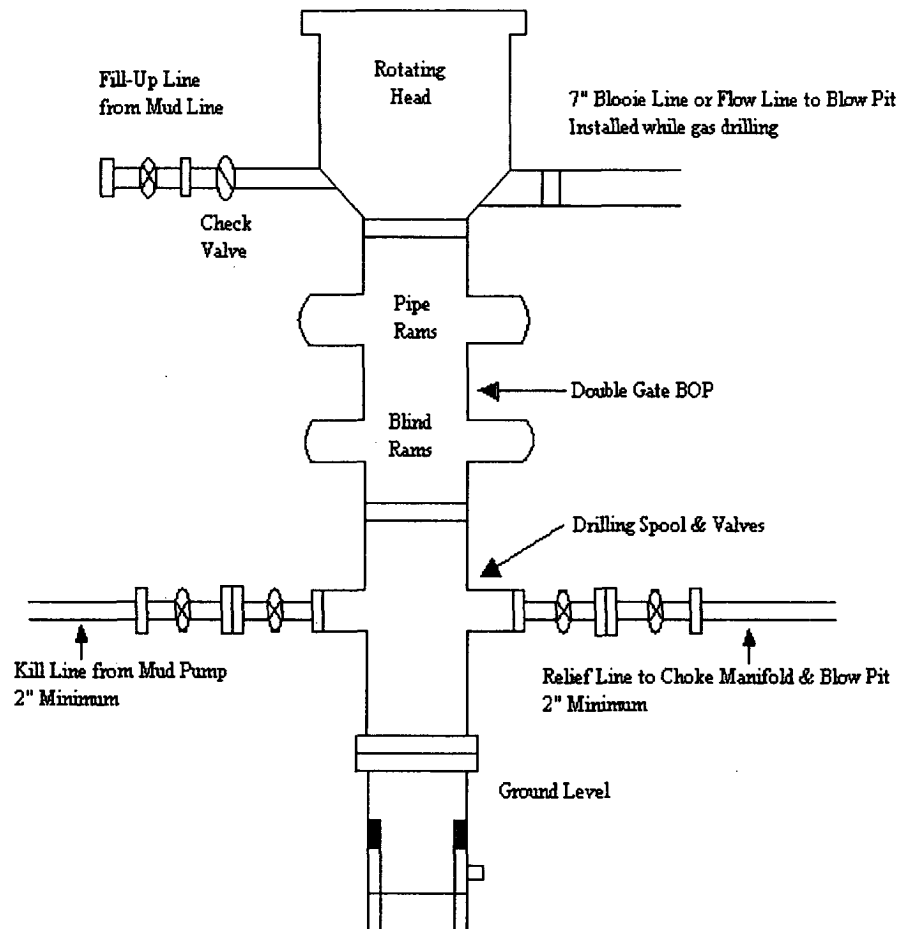
Production Casing: Before cementing, circulate hole at least 1 ½ hole volumes of mud and reduce funnel viscosity to minimum to aide in hole cleanout. Depending on wellbore conditions, cement may consist a lead of 550 sks 65/35 Type V with 6.0 % Bentonite, 2.0 %  $\text{CaCl}_2$ , 10 #/sk Gilsonite, and  $\frac{1}{4}$  #/sk Flocele (12.3 ppg, 1.93 ft<sup>3</sup>/sk) followed by a tail of 250 sks 50/50 Type V with 2.0 % Bentonite, 0.80 % Halad-9, 0.10 % CFR-3, 5.0 #/sk Gilsonite,  $\frac{1}{4}$  #/sk Flocele (13.5 ppg, 1.30 ft<sup>3</sup>/sk). (1386.5 ft<sup>3</sup> of slurry, 100 % excess to circulate to surface).

## Other Information

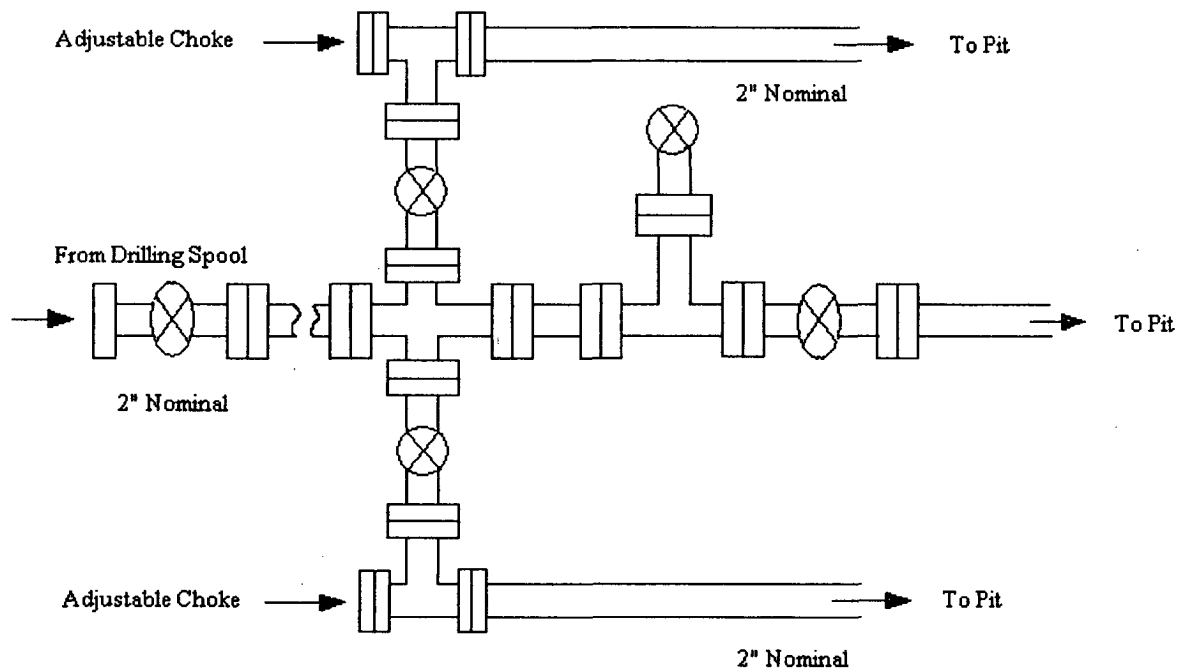
- 1) This well will be cased and the Basin Dakota fracture stimulated.
- 2) If lost circulation is encountered, sufficient LCM will be added to the mud system to maintain well control. The production string may need to be cemented in multiple stages with a slurry design deviated from that listed above.
- 3) No abnormal temperatures or pressures are anticipated. Anticipated fracture gradient is 0.70 psi/ft.
- 4) This gas is dedicated.

## Energen Resources Corporation

### Typical BOP Configuration for Gas Drilling



**Energen Resources Corporation**  
Typical 2000 psi Choke Manifold Configuration



Choke manifold installed from surface to TD