• Form 3160-3 (February 2005)

### **UNITED STATES** DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

**OCD-HOBBS** 

ATS-07-119
FORM APPROVED

FORM APPROVED	
OMB NO. 1004-0137	
Expires March 31, 2007	
- 11 2/22	1

NTER	6. If Indian, Allotee or Tribe Name
X Single Zone Multiple Zo	ne 7. Unit or CA Agreement Name and No.
1 000	8. Lease Name and Well No. 2782
<u> </u>	West Louington Strain Unit #
•	9. API Well No.
79705 432/687-1155	30-025-36145
State equirements)*	10. Field and Pool, or Exploratory
DIN SALLA DA	Lovington; Strawn, West 11. Sec., T., R., M., or Blk. and Survey or Area
11/1 M Garage	
07LM 8-21-7/3 A	Sec. 33, T15S, R35E
	12. County or Parish 13. State
1	Lea NM
16. No. of Acres in lease	17. Spacing Unit dedicated to this well
330	
320	80
19. Proposed Depth	20.BLM/BIA Bond No. on file
11,800'	NM2707
22 Approximate data 1 11	
3-1-0/	8-12 days
24. Attachments	8-12 days .
	1112
Oil and Gas Order No. 1, must be attache	d to this form
Item 20 above). 5. Operator certification.	formation and or plans as may required by the
Name (Printed/Typed)	Date
	E 62 82 17 8
Carotyn Larson	1-30-07
Name (Printed/Typed)	Date MAR 2 0 2007
	· · · · · · · · · · · · · · · · · · ·
Office CARL	SBAD FIELD OFFICE
Of HELD	
egal or equitable title to those rights in	the subject lease which would entitle the applicant to
_	
	APPROVAL FOR 1 YEAR
ime for any person knowlingly and willfu	lly to make to any department or agency of the United
ny matter within its jurisdiction.	ing to make to any department of agency of the Officer
	A CAPA
LEAC	COUNTY CONTROLLED WATER BASIN
JJ rederat #1	
1.1	T
£17 7	1857
	5/1
12 8	
on 87	
EIT I ON 87	G.,
	3b. Phone No. (include area con 79705   432/687-1155    State equirements)*  U/L M

DISTRICT I 1625 N. French Dr., Hobbs, NM 88240

### State of New Mexico

Form C-102 Revised August 15, 2000

DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210

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

# Energy, Minerals, and Natural Resources Department OIL CONSERVATION DIVISION

Submit to Appropriate District Office State Lease - 4 copies

DISTRICT III

1220 South St. Francis Dr.

Fee Lease - 3 copies

1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV

Santa Fe, New Mexico 87505

AMENDED REPORT

### WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number	<sup>2</sup> Pool Code		<sup>3</sup> Pool Name	
30-025-36145	40875	LOVINGTON; STR	AWN, WEST	
Property Code	=ADAMS	Property Name MOOSETATE "33"	WEST LOVINGTON	Well Number
OGRID No.		8 Operator Name	:	<sup>9</sup> Elevation
162928	ENERGEN RESOURCES CO	RPORATION		3984'

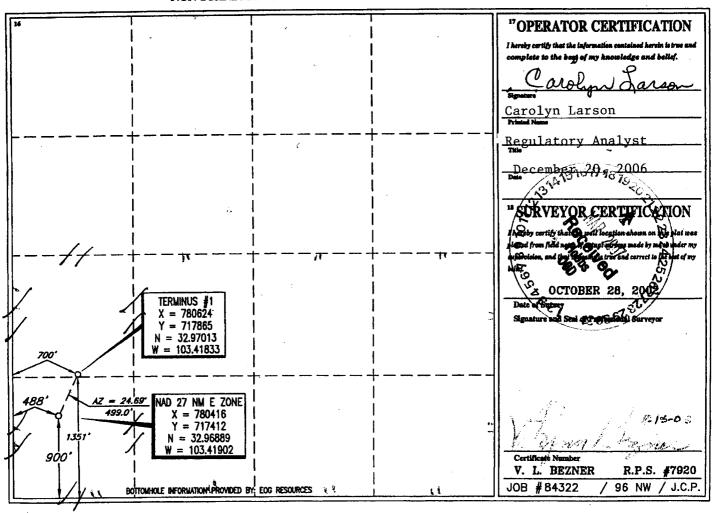
### <sup>10</sup> Surface Location

(	UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
	M	33	15 SOUTH	35 EAST, N.M.P.M.		800,	SOUTH	488'	WEST	LEA

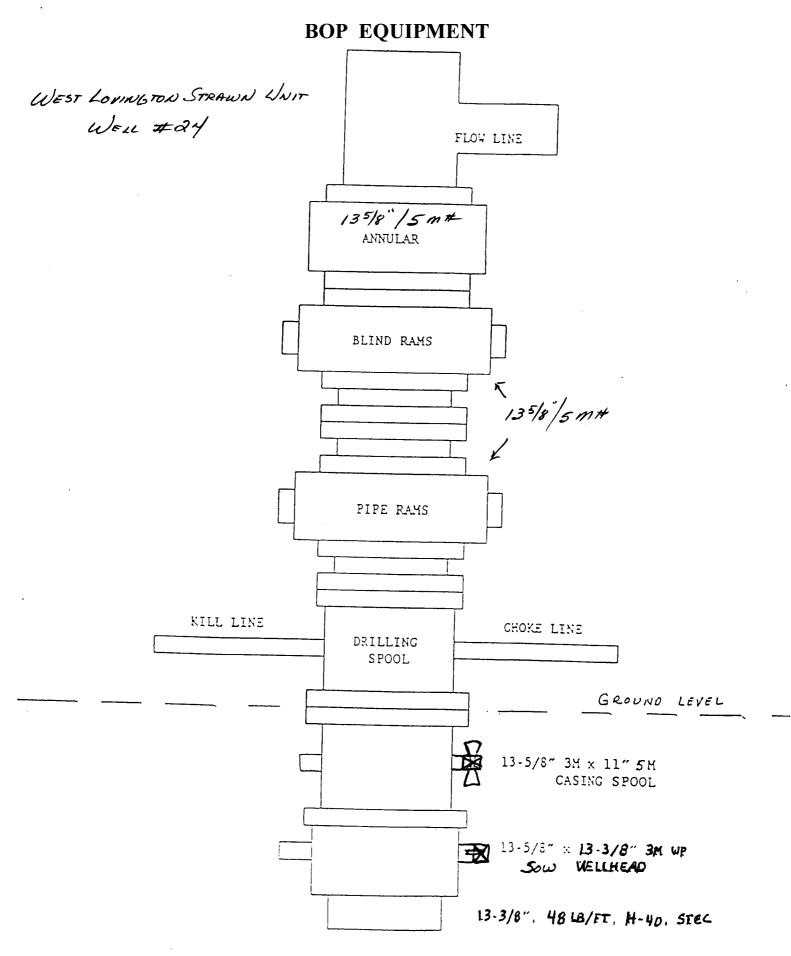
### 11 Bottom Hole Location If Different From Surface

	DOMAN MAN MAN MAN MAN MAN MAN MAN MAN MAN										
1	UL or let no.	Section	Township	Range	Lot ldn	Feet from the	North/South line	Feet from the	East/West line	County	l
	L	33	15 SOUTH	35 EAST, N.M.P.M.		1351'	SOUTH	700'	WEST	LEA	ľ
	12 Dedicated Acre	13	Joint or Infill	14 Consolidation Code	<sup>15</sup> Order N	o.					ĺ
	80				ŀ						1

## NO ALLOWABLE WELL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



### **ENERGEN RESOURCES CORPORATION**



MINIMUM BOP REQUIREMENT 5,000 PSI W.P.

#### CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Well Name & No.

Energen Resources Corp. West Lovington Strawn # 24

Location:

900'FSL, 488'FWL, SEC33, T15S, R35E, Lea County, NM 1351'FSL, 700'FWL, SEC33, T15S, R35E, Lea County, NM

BHL: Lease:

NM-04411

### **I. DRILLING OPERATIONS REQUIREMENTS:**

A. The Bureau of Land Management (BLM) is to be notified a minimum of 4 hours in advance, at the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 - for wells in Eddy County; and the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:

- 1. Spudding
- 2. Cementing casing: <u>5.5</u> inch <u>and CIT on the 8.625" before drilling out the shoe plug.</u>
- 3. BOP tests
- B. A **Hydrogen Sulfide (H2S) Drilling Plan** should be activated **prior to drilling within 500 feet of the top of the Strawn formation**. A copy of the plan shall be posted at the drilling site.
- C. 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.
- D. Gamma-Ray/Neutron logs shall be run from the base of the Salado Formation to the surface; cable speed not to exceed 30 feet per minute. (R-111-P area only)
- E. If floor controls are required, (3M or Greater) a controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

### II. CASING:

- A. The minimum required fill of cement behind the <u>5.5</u> inch production casing is <u>cement shall extend</u> <u>upward a minimum of 700 feet above the base of the intermediate casing string.</u>
  - 1. If cement does not circulate to 700 feet inside the intermediate casing, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
  - 2. Wait on Cement (WOC) time for a primary cement job will be a minimum of 12 hours for a non-water basin, 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compression strength, which ever is greater. (This is to include the lead cement)
  - 3. WOC time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds of compression strength, which ever is greater.
  - 4. If cement falls back, Remedial cementing shall be completed prior to drilling out that string.
- B. 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.

### III. PRESSURE CONTROL:

- A. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. and API RP53.
- B. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling the intermediate casing shall be 2000 psi. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling below the 8.625 inch casing shall be 5000 psi.
- C. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
- 1. The tests shall be done by an independent service company.
- 2. The results of the test shall be reported to the appropriate BLM office.
- 3. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of the independent service company test will be submitted to the appropriate BLM office.
- 4. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi in accordance with API RP 53. The test will be held for a minimum of 10 minutes if the test is done with a test plug and 30 minutes without a test plug.
- 5. BOP/BOPE must be tested by an independent service within 500 feet of the top of the **Wolfcamp** Formation. This test does not exclude the test prior to drilling out the casing shoe as per onshore order No. 2.
- 6. A variance to test the \_\_\_\_\_ to the reduced pressure of \_\_\_\_psi with the rig pumps is approved the BOP/BOPE must be tested by an independent service company.

### **IV. DRILLING MUD:**

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the <u>Wolfcamp</u> Formation, and shall be used until production casing is run and cemented. Monitoring equipment shall consist of the following:

- 1. Recording pit level indicator to indicate volume gains and losses.
- 2. Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.
- 3. Flow-sensor on the flow line to warn of abnormal mud returns from the well.

Engineering may be contacted at 505-706-2779 for variances if necessary.

FWright 2/15/07

Form C-144 June 1, 2004

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

State of New Mexico Energy, Minerals and Natural Resources

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

## Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank Type of action: Registration of a pit or	covered by a "general plan"? Yes No r below-grade tank X Closure of a pit or below-gra	ode tanik
Operator: Energen Resources Corporation Telephone: ( Address: 3300 North A St., Bldg. 4, Ste., 100, Midla Facility or well name: WLSU #24  County: Lea Latitude 32.97013 Longitude 10	432) 687-1155 e-mail address: andy.cob and, TX 79705  API #: 30-025-36145 U/Lor Or/Or.	M suc 33 T15S b 35F
Pit  Type: Drilling X Production Disposal Workover Emergency Lined X Unlimited Liner type: Synthetic X Thickness 12 mil Clay Pit Volume 9000 bbl	Below-grade tank  Volume:bbl Type of fluid:  Construction material:  Double-walled, with leak detection? Yes If n	
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more	(20 points) (10 points) ( 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 No	(20 points) ( 0 points) X
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and percential and ephemeral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more Ranking Score (Total Points)	(20 points) (10 points) (0 points)
If this is a pit closure: (1) attach a diagram of the facility showing the pit's relyou are burying in place) onsite offsite offsite, name of facility remediation start date and end date. (4) Groundwater encountered: No Yellow Attach soil sample results and a diagram of sample locations and excavations.  Additional Comments:	(3) Attach a general descripti	on of remedial action taken including
I hereby certify that the information above is true and complete to the best of my been/will be constructed or closed according to NMOCD guidelines [X], a g	Signature:	D-approved plan [].
Approval: Date; 5/4/07 Trinted Name/Title; CHUS WILLIAMS   DIST. SUPO.	Signature:	lan