

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

District IV

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

State of New Mexico  
Energy Minerals and Natural Resources

Form C-101

June 16, 2008

Submit to appropriate District Office

☐ AMENDED REPORT

Oil Conservation Division

1220 South St. Francis Dr.

Santa Fe, NM 87505

**APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN,  
PLUGBACK, OR ADD A ZONE**

<sup>1</sup> Operator Name and Address <b>LIME ROCK RESOURCES A, L.P.</b> C/o Mike Pippin LLC, 3104 N. Sullivan, Farmington, NM 87401		<sup>2</sup> OGRID Number 255333
<sup>3</sup> Property Code <b>304093</b>		<sup>3</sup> API Number <b>30-025-02801</b>
<sup>5</sup> Property Name <b>BUFFALO ARU STATE</b>		<sup>6</sup> Well No. <b>#1</b>
<sup>9</sup> Proposed Pool 1 Townsend Wolfcamp (59850) <i>Permo Upper Penn</i>		<sup>10</sup> Proposed Pool 2

<sup>7</sup> Surface Location

UL or lot no. K	Section 18	Township 16-S	Range 35-E	Lot Idn	Feet from the 1980	North/South line South	Feet from the 1945	East/West line West	County LEA
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<sup>8</sup> Proposed 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
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## Additional Well Information

<sup>11</sup> Work Type Code Plugback <i>same pool</i>	<sup>12</sup> Well Type Code O	<sup>17</sup> Cable/Rotary N/A	<sup>14</sup> Lease Type Code S	<sup>15</sup> Ground Level Elevation 4041'
<sup>16</sup> Multiple N	<sup>17</sup> Proposed Depth N/A	<sup>18</sup> Formation Wolfcamp	<sup>19</sup> Contractor N/A	<sup>20</sup> Spud Date N/A

<sup>21</sup> Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC

<sup>22</sup> Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

Lime Rock would like to plugback the Townsend Upper Penn Perfs & recomple into the ~~Townsend~~ Wolfcamp as follows: MIRUSU. TOH w/tbg. Set a 5-1/2" CIBP @ about 11,300' & top w/35' cmt. Perf the ~~Townsend~~ Wolfcamp @ about 10,821'-10,866'. Test new perfs & acidize and/or frac as necessary. TIH w/production tbg & complete as a single Wolfcamp oil well. See attached wellbore diagram.

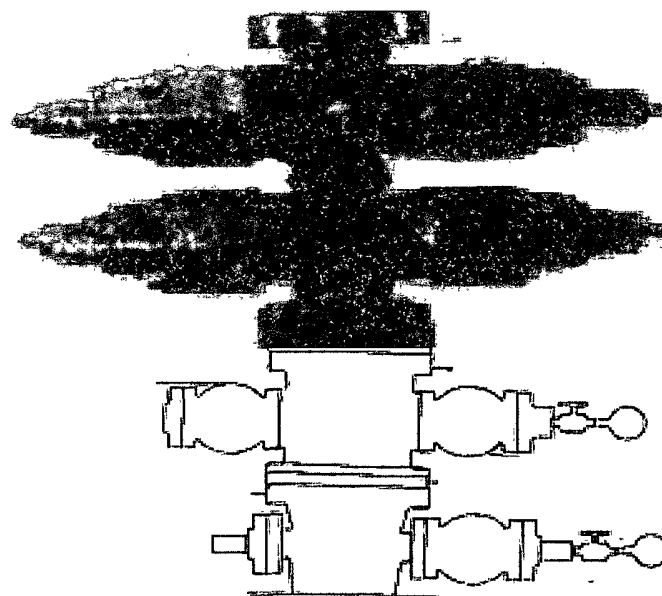
**Permit Expires 2 Years From Approval  
Date Unless Drilling Underway  
Plugback Same Pool**

<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief.		OIL CONSERVATION DIVISION	
Signature: <i>Mike Pippin</i>		Approved by: <i>[Signature]</i>	
Printed name: Mike Pippin		Title: <b>PETROLEUM ENGINEER</b>	
Title: Petroleum Engineer		Approval Date: <b>JAN 12 2010</b>	Expiration Date:
E-mail Address: mike@pippinllc.com			
Date: 1/6/10	Phone: 505-327-4573	Conditions of Approval Attached <input type="checkbox"/>	

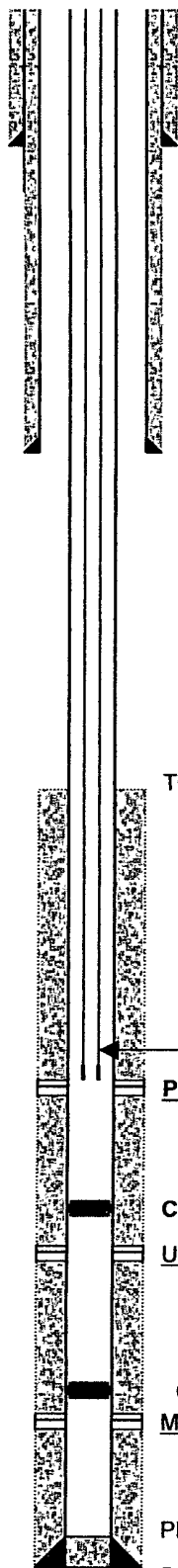
## BOP Arrangement for Lea County

3,000#, Double-Ram  
BOP (Rental)

Wellhead



# Proposed Recompletion



13-3/8", 36#, Armco Spiral-weld Surface Casing @ 357'

8-5/8", 24 & 32#, J-55, ST&C Intermediate Casing @ 4,680'

TOC @ 7,070'

2-7/8", 6.5#, L-80, EUE 8rd Tubing

**Proposed Wolfcamp Perfs: 10,821-66' (180 – 0.42" DIA holes)**

**CIBP to be set @ 11,300' w/ 35' cement on top of plug to abandon Upper Penn perfs**

**Upper Penn Perfs: 11,386-08' & 11,415-20' (102 – 0.42" DIA holes)**

**CIBP @ 12,850' w/ 35' cement on top of plug**

**Morrow Perfs: 12,895-99' & 12,925-50' (124 – 0.45" DIA holes)**

PBDT @ 13,253'

5-1/2"; 17 #; L-80 & S-95; LT&C Casing @ 13,293'

TD @ 13,647'

Elevation: 4,041' GL

Date Spud: 09/27/97 (Re-entry)

Date TD'd: 10/02/97

Date Completed: 10/24/97

<u>Zone</u>	<u>Frac</u>
Upper Penn	2,000 gals 15% HCl
Morrow	23,800 gals 50Q CO2 foam w/ 35,000# 20/40 Interprop

## Recompletions & Workovers

<u>Date</u>	
02/08/54	Well drilled to 13,647'. P&A'd as dry hole.
09/27/97	Re-entered dry hole & completed well in Morrow
08/08/07	Recompleted well to Upper Penn

Current Status:

Last Well Test:

**Lime Rock Resources  
Buffalo ARU State 1  
Sec 18K-16S-35E  
Lea County, NM**

**Updated: 17 Dec 2009 SJH**

## District I

1625 N. French Dr., Hobbs, NM 88240

## District II

1301 W. Grand Avenue, Albuquerque, NM 87102

## 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 &amp; 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

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-025-02801	<sup>2</sup> Pool Code <del>59850</del> 59847	<sup>3</sup> Pool Name Perm Upper Townsend Wellcamp Penn
<sup>4</sup> Property Code	<sup>5</sup> Property Name BUFFALO ARU STATE	<sup>6</sup> Well Number 1
<sup>7</sup> OGRID No. 255333	<sup>8</sup> Operator Name LIME ROCK RESOURCES A, L.P.	<sup>9</sup> Elevation 4041' GL

<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
K	18	16-S	35-E		1980'	SOUTH	1945'	WEST	LEA

<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 40	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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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.

	<sup>17</sup> <b>OPERATOR CERTIFICATION</b> 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 unless 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature: <u>Mike Pippin</u> Date: <u>1/6/10</u> Printed Name: <u>Mike Pippin</u>
	<sup>18</sup> <b>SURVEYOR CERTIFICATION</b> 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. Date of Survey: <u>8/17/53</u> Signature and Seal of Professional Surveyor: <u>Charles P. Miller</u>
	Certificate Number