

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  
May 27, 2004

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Submit to appropriate District Office

NOV 21 2007

☐ AMENDED REPORT

OCD-ARTESIA

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

<sup>1</sup> Operator Name and Address Marbob Energy Corporation PO Box 227 Artesia, NM 88211-0227		<sup>2</sup> OGRID Number 14049	
<sup>3</sup> Property Code 34326		<sup>4</sup> API Number 30 - 015-33659	
<sup>5</sup> Property Name Dime State		<sup>6</sup> Well No. 1	
<sup>9</sup> Proposed Pool 1 Wildcat, Atoka (96049)✓		<sup>11</sup> Proposed Pool 3 Wildcat, Canyon (96072)✓	
<sup>10</sup> Proposed Pool 2 Wildcat, Strawn (96081)✓		<sup>12</sup> Proposed Pool 4 Wildcat, Wolfcamp (96086)✓	

<sup>7</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
J	30	18S	28E		1980	South	1580	East	Eddy

<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

Additional Well Information

<sup>11</sup> Work Type Code P	<sup>12</sup> Well Type Code G	<sup>13</sup> Cable/Rotary R	<sup>14</sup> Lease Type Code S	<sup>15</sup> Ground Level Elevation 3561'
<sup>16</sup> Multiple N	<sup>17</sup> Proposed Depth 10780'	<sup>18</sup> Formation Morrow	<sup>19</sup> Contractor	<sup>20</sup> Spud Date 11/9/04
Depth to Groundwater		Distance from nearest fresh water well		Distance from nearest surface water
<u>Pit</u> Liner. Synthetic <input type="checkbox"/> _____mils thick Clay <input type="checkbox"/> Pit Volume: _____bbls Drilling Method: _____				
Closed-Loop System <input type="checkbox"/> Fresh Water <input type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				

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

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17 1/2"	13 3/8"	54.5#	432'	425 sx	0
12 1/4"	9 5/8"	36#	2235'	800 sx	0
8 3/4"	5 1/2"	17#	10757'	1750 sx	1200'

<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.

Marbob Energy Corporation proposes to perforate, acidize, test & possibly frac the Atoka, Strawn, Canyon and/or Wolfcamp zones as follows:

Set 10K composite frac plug @ 10175'

Atoka 9937' - 10129' (15 shots) 2500 gal NE Fe 15% HCl

Plug back techniques to be determined

Strawn 9529' - 9750' (44 shots) 1500 gal NE Fe 15% HCl

Canyon 8965' - 9104' (18 shots) 3000 gal NE Fe 15% HCl

Wolfcamp 8289' - 8488' (18 shots) 3000 gal NE Fe 15% HCl

Wolfcamp Dolomite 7910' - 7916' (14 shots) 1000 gal NE Fe 20% HCl

\*\*\*Note: Any zone to be abandoned will be done with a CIBP + 35' cmt set within 50' - 100' of the top perforation. Marginally producing zones will be downhole commingled with NMOCD approval. A pkr/RBP, pkr/CBP and/or pkr/CIBP combination will be used when testing each zone. \*\*\*

<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines ☐, a general permit ☐, or an (attached) alternative OCD approved plan ☐.

Signature

Printed name: Diana J. Briggs

Title: Production Analyst

E-mail Address: production@marbob.com

Date: 11/20/07

Phone: (575) 748-3303

OIL CONSERVATION DIVISION

Approved by:

BRYAN G. ARANT

DISTRICT II GEOLOGIST

Title:

Approval Date: NOV 29 2007

Expiration Date: NOV 29 2008

Conditions of Approval Attached ☐

**Dime St 1  
J-30-18S-28E  
Eddy Co., NM**

**Recompletion Procedure 1  
6 Sept 2005**

**Basic Data:**

13-3/8" @ 432' Circ. Cmt.

9-5/8" @ 2235' Circ. Cmt.

5.5"/17ppf/M95-110/LTC Burst=10640 psi, 8512 psi at 80% Nom. ID=4.892" Drift ID=4.767"

2.375"/4.7ppf/L80/EUE Burst=11200 psi, 8960 psi at 80% Nom ID=1.995" Drift ID=1.901"

Collapse=11780 psi, 9424 at 80%

Tensile=104,300 lb with no safety factor

**Objective:** Recomplete well to the Atoka, Strawn, Canyon and/or Wolfcamp.

**Procedure:**

1. When ready to move to next zone, blow well down, pump small slug of 7% KCl water down tubing, NU BOP and TOOH with packer using as little fluid to control well as possible.
2. RU lubricator, run gauge ring to 10200', set 10k composite frac plug (ball on top) at 10175', load casing with KCl water, test casing to 2000 psi and perf the Atoka with 3-3/8" or 4" casing guns loaded 1 spf at any phasing at the depths shown below.

Atoka: 9937', 9941', 9954', 9970', 10006', 10017', 10025', 10027', 10029', 10048', 10057',  
10103', 10107', 10109', 10129' (15 shots)

3. RIH with packer assembly to approx. 9900', space out, set packer, test annulus to 500 psi, tree up, swab tubing dry, install tree saver and acidize with 2500 gals. NE Fe 15% HCl acid at 3-5 bpm while limiting treating pressure to 8500 psi and holding 1000 psi on annulus. Drop 45 ballsealers throughout job. Swab/flow test until notified to do otherwise.

- 
4. When ready to move to next zone, plugback technique will be determined based on results of previous zone(s). RU lubricator and perf the Strawn with 3-3/8" or 4" casing guns loaded 2 spf at any phasing at the depths shown below.

Strawn: 9529-9534', 9539-9545', 9734', 9736', 9738', 9740', 9742', 9744', 9746', 9748', 9750' (44 shots)

5. RIH with packer/RBP (ball catcher) assembly, straddle 9734-9750', pump acid close to packer, close bypass and acidize with 1500 gals. NE Fe 15% HCl acid at 3-5 bpm while limiting treating pressure to 8000 psi and holding 1000 psi on annulus. Drop 40 ballsealers through job. Swab/flow test until notified to do otherwise.

6. When ready to move up hole, straddle 9529-9545', pump acid close to packer, close bypass and acidize with 1000 gals. NE Fe 7.5% HCl acid at 3-5 bpm while limiting treating pressure to 8000 psi and holding 1000 psi on annulus. Drop 40 ballsealers through job. Swab/flow test until notified to do otherwise.
  7. If decision made to frac, kill well, install 10k frac valve with BOP on top, unseat packer, swab as much fluid out of casing as possible while still allowing for a safe trip OOH, and TOOH with packer and tubing. RU lubricator, run gauge ring to 9600', set CIBP/composite BP/composite frac plug (to be determined) at 9570' and reperforate 9529-34' and 9539-45' with 3 spf at 120° phasing using 3-3/8" or 4" casing gun.
  8. Install casing saver and frac down casing at 20 bpm with 65Q CO2 foam carrying approx. 25,000 lbs. 18/40 versaprop. Flow back until gas burns. Dump 15 bbls clean 7% KCl water down casing, shut in overnight, set a retrievable packer with pump out plug on wireline, blow casing down, run tubing, circulate packer fluid, tree up, pump out plug, swab well in, clean it up and SIWOPL.
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9. When ready to move to next zone, plugback technique will be determined based on results of previous zone(s). RU lubricator and perforate the Canyon with 3-3/8" or 4" casing guns loaded 1 spf at any phasing at the depths shown below.

Canyon: 8965', 8973', 8980', 8986', 8999', 9011', 9029', 9037', 9058', 9061', 9064',  
9071', 9074', 9078', 9087', 9095', 9099', 9104' (18 shots)

10. RIH with packer assembly to approx. 8900', space out, set packer, test annulus to 500 psi, tree up, swab tubing dry, install tree saver and acidize with 3000 gals. NE Fe 15% HCl acid at 3-5 bpm while limiting treating pressure to 8500 psi and holding 1000 psi on annulus. Drop 60 ballsealers throughout job. Swab/flow test until notified to do otherwise.
- 

11. When ready to move to next zone, plugback technique will be determined based on results of previous zone(s). RU lubricator and perforate the Wolfcamp with 3-3/8" or 4" casing guns loaded 2 spf at any phasing at the depths shown below.

Wolfcamp: 8289', 8290', 8291', 8336', 8337', 8338', 8486', 8487', 8488' (18 shots)

12. RIH with packer assembly, pump acid close to packer, close bypass and acidize with 3000 gals. NE Fe 15% HCl acid at 3-5 bpm while limiting treating pressure to 8000 psi and holding 1000 psi on annulus. Drop 60 ballsealers throughout job. Swab/flow test until notified to do otherwise.
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13. When ready to move to next zone, plugback technique will be determined based on results of previous zone(s). Spot 500 gals double inhibited NE Fe 20% HCl acid at 7900'. RU lubricator, pressurize the casing to 1500 psi and perforate the Wolfcamp Dolomite with 3-3/8" or 4" casing guns loaded 2 spf at any phasing at the depths shown below. If well doesn't go on vacuum, pump the spot acid away at 1/2 to 1 bpm. If well comes in flowing, be prepared to lubricate a packer in on wireline.

Wolfcamp Dolomite: 7910-7916' (14 shots)

14. RIH with packer assembly and swab/flow test until notified to do otherwise.
15. If decision is made to acidize, pump 1000 gals. NE Fe 20% HCl acid at 1-2 bpm while limiting treating pressure to 5000 psi and holding 1000 psi on annulus. No ballsealers will be used. Swab/flow test until notified to do otherwise.

Kbc/dime st 1 atoka

Well: Dime St. 1

Location: 1980' FSL 1580' FEL  
J-30-185-28  
EDL, NM

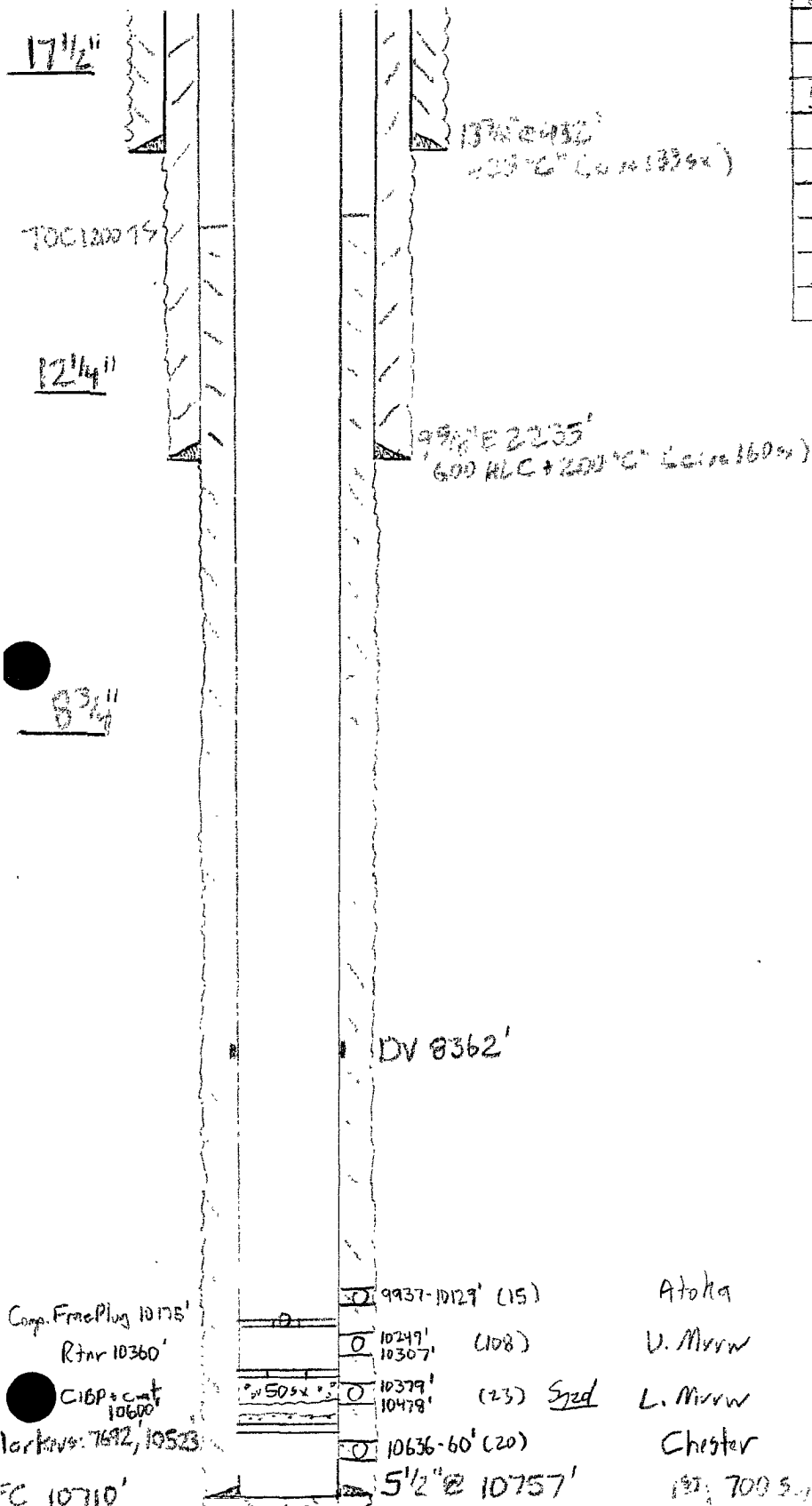
Zen: 16' AGL

KB: 3577'

GL: 3561'

Casing Program:

Size	Wt.	Grade	Conn.	Depth
13 3/4"	54.5	J55	STC	432'
9 5/8"	36	J55	STC	2235'
5 1/2"	17	M95-110	LTC	10757'
2 3/8"	4.7	L80	EA	



Atoka

V. Murrow

L. Murrow

Chester

100' 700 S. J. H (C. 200' 5')

200' 575 Int. H + 325 HLC + 150 S. J. H

— Sketch Not To Scale —

AFTER

KBC Collins /

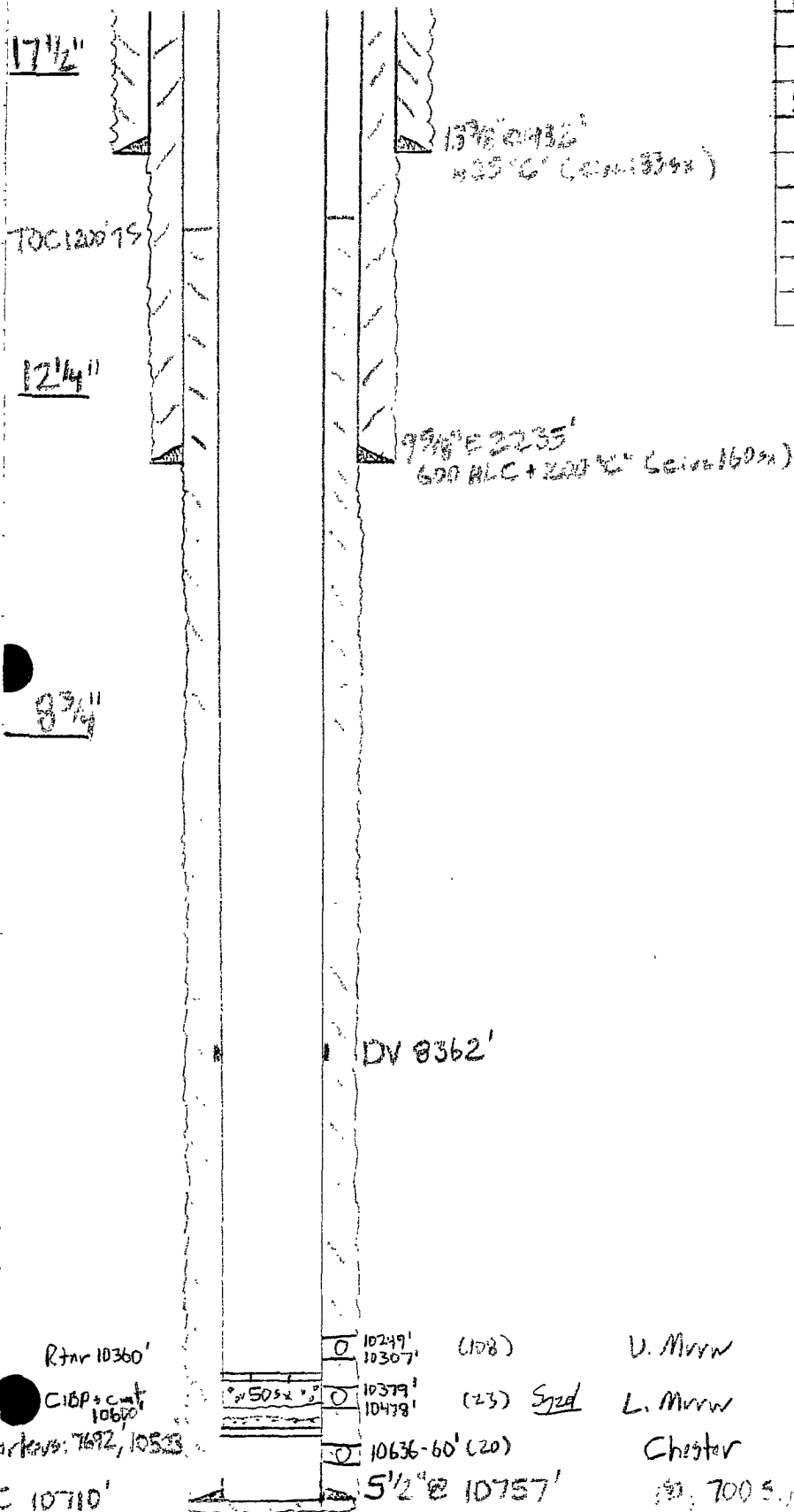
Well: Dime St. 1

Location: 1780' FSL 1580' FEL  
J-30-185-28e  
EDJ, NM

Elev: 16' AGL  
 KB: 3577'  
 GL: 3561'

Casing Program:

Size	Wt.	Grade	Conn.	Depth
13 3/4"	54.5	J55	STC	432'
9 5/8"	36	J55	STC	2235'
5 1/2"	17	M75-110	LTC	10757'
2 7/8"	4.7	L80	EWC	



BEFORE

V. Murr

L. Murr

Chester

100 700 S. M. H. (Conn 2235')

245 575 Int. A. H. + 325 HLC + 150 S. M. H.

Sketch Not To Scale

KBCollins /

District I  
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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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-015-33659	<sup>2</sup> Pool Code 96049	<sup>3</sup> Pool Name Wildcat; Atoka
<sup>4</sup> Property Code 34326	<sup>5</sup> Property Name Dime State	<sup>6</sup> Well Number 1
<sup>7</sup> OGRID No. 14049	<sup>8</sup> Operator Name Marbob Energy Corporation	<sup>9</sup> Elevation 3561' GL

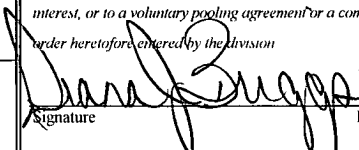
<sup>10</sup> Surface Location

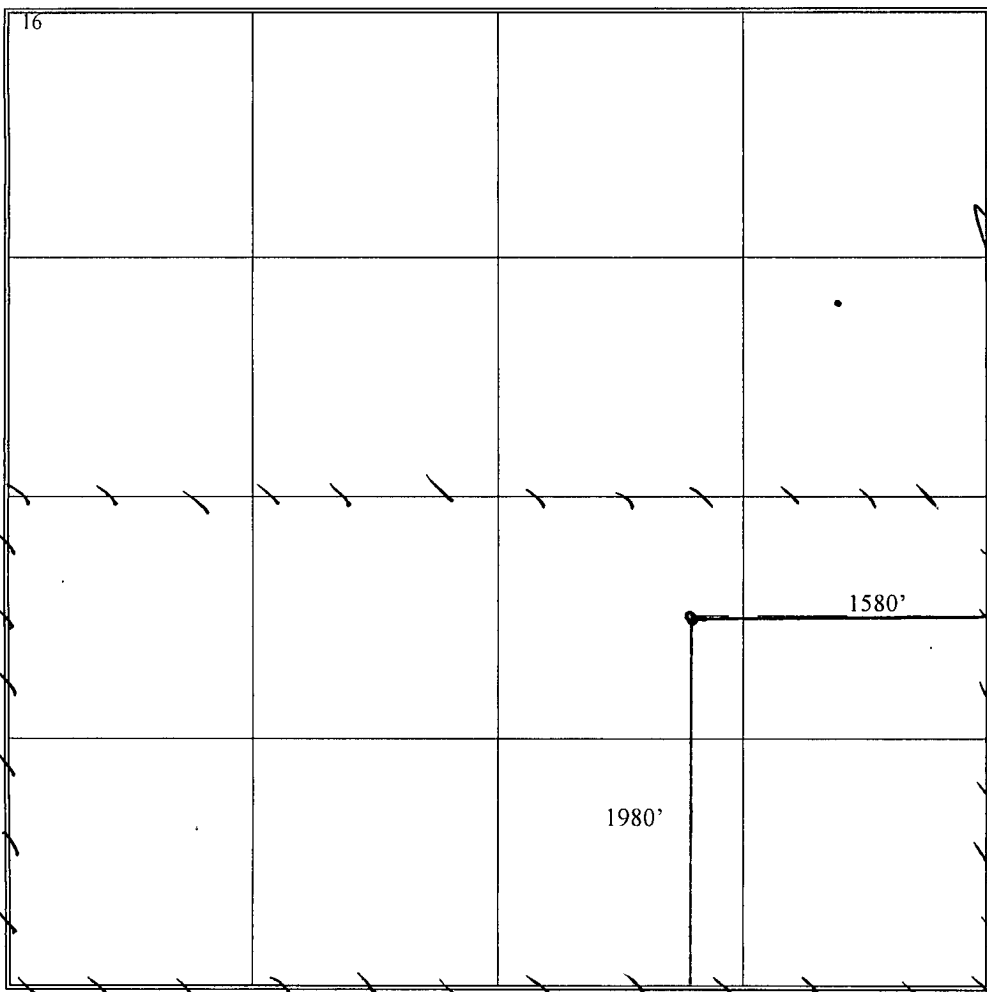
UL or lot no. J	Section 30	Township 18S	Range 28E	Lot Idn	Feet from the 1980	North/South line South	Feet from the 1580	East/West line East	County Eddy
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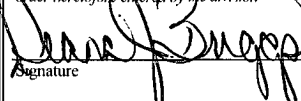
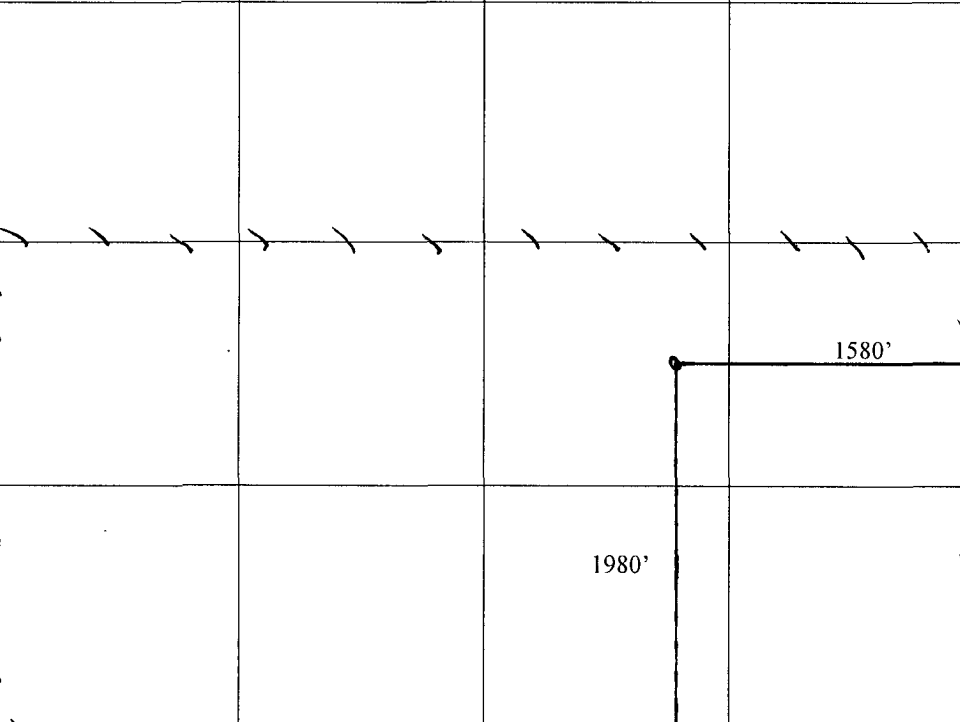
<sup>11</sup> Bottom Hole Location If Different From Surface

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 326.48	<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.

<sup>16</sup>					<sup>17</sup> OPERATOR CERTIFICATION <i>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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i>  Signature Date 11/20/07 Diana J. Briggs Printed Name Production Analyst	
					<sup>18</sup> SURVEYOR CERTIFICATION <i>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.</i> 8/31/04 Date of Survey Signature and Seal of Professional Surveyor Gary Eidson 12641 Certificate Number	



16				<div data-bbox="1037 991 1482 1021"><b>17 OPERATOR CERTIFICATION</b></div> <div data-bbox="1037 1021 1482 1223"><i>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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division</i></div> <div data-bbox="1037 1223 1482 1353"><div data-bbox="1037 1223 1336 1323"></div><div data-bbox="1336 1223 1482 1323">11/20/07 Date</div><div data-bbox="1037 1323 1482 1353">Diana J. Briggs      Production Analyst Printed Name</div></div>
 <div data-bbox="885 1561 958 1591">1580'</div> <div data-bbox="636 1779 709 1808">1980'</div>				<div data-bbox="1037 1472 1482 1502"><b>18 SURVEYOR CERTIFICATION</b></div> <div data-bbox="1037 1502 1482 1649"><i>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.</i></div> <div data-bbox="1037 1649 1482 1947"><div data-bbox="1037 1649 1482 1678">8/31/04</div><div data-bbox="1037 1678 1482 1708">Date of Survey</div><div data-bbox="1037 1708 1482 1738">Signature and Seal of Professional Surveyor</div><div data-bbox="1037 1738 1482 1768">Gary Eidson</div><div data-bbox="1037 1768 1482 1798">12641</div><div data-bbox="1037 1798 1482 1827">Certificate Number</div></div>