

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

RECEIVED

JUL 16 2010

HOBBSOCD

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

Submit to appropriate District Office

☐ AMENDED REPORT

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

<sup>1</sup> Operator Name and Address CHEVRON U S A INC. 15 SMITH ROAD MIDLAND, TEXAS 79705		<sup>2</sup> OGRID Number 4323
		<sup>3</sup> API Number 30 - 025-03103
<sup>3</sup> Property Code 30005	<sup>5</sup> Property Name STATE AN	<sup>6</sup> Well No 3
<sup>9</sup> Proposed Pool VACCUM, BLINEBRY		<sup>10</sup> Proposed Pool 2

<sup>7</sup> Surface Location

UL or lot no G	Section 7	Township 18-S	Range 35-E	Lot Idn	Feet from the 1650	North/South line NORTH	Feet from the 2310	East/West line EAST	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 RECOMPLETE TO BLINEBRY Re-Entry	<sup>12</sup> Well Type Code O	<sup>13</sup> Cable/Rotary	<sup>14</sup> Lease Type Code S	<sup>15</sup> Ground Level Elevation 3970' GL
<sup>16</sup> Multiple NO	<sup>17</sup> Proposed Depth 8983'	<sup>18</sup> Formation BLINEBRY	<sup>19</sup> Contractor	<sup>20</sup> Spud Date

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

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
NO CHANGE					

<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

CHEVRON U S A INC. INTENDS TO RECOMPLETE THE SUBJECT WELL TO THE VACUUM BLINEBRY FIELD AND POOL. THIS WELL WAS PLUGGED AND ABANDONED IN THE VACUUM ABO REEF IN 2005

ATTACHED, PLEASE FIND THE INTENDED PROCEDURE, WELLBORE DIAGRAM, C-102 PLAT & THE C-144 PIT INFORMATION.

Permit Expires 2 Years From Approval  
Date Unless Drilling Underway  
Re-Entry

<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief

Signature:

*Denise Pinkerton*

Printed name  
DENISE PINKERTON

Title:  
REGULATORY SPECIALIST

E-mail Address:  
leakejd@chevron.com

OIL CONSERVATION DIVISION

Approved by

Title:

PETROLEUM ENGINEER

Approval Date:

JUL 19 2010

Expiration Date.

Date 07-14-2010	Phone: 432-687-7375	Conditions of Approval Attached <input type="checkbox"/>
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State of New Mexico

Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

Form C-102

Revised October 15, 2009

Submit one copy to appropriate

District Office

☐ AMENDED REPORT

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JUL 16 2010  
HOBBSOCD

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-025-03103	<sup>2</sup> Pool Code 61850	<sup>3</sup> Pool Name VACUUM;BLINEBRY
<sup>4</sup> Property Code 30005	<sup>5</sup> Property Name STATE AN	<sup>6</sup> Well Number 3
<sup>7</sup> OGRID No. 4323	<sup>8</sup> Operator Name CHEVRON U.S.A. INC.	<sup>9</sup> Elevation 3970' GL

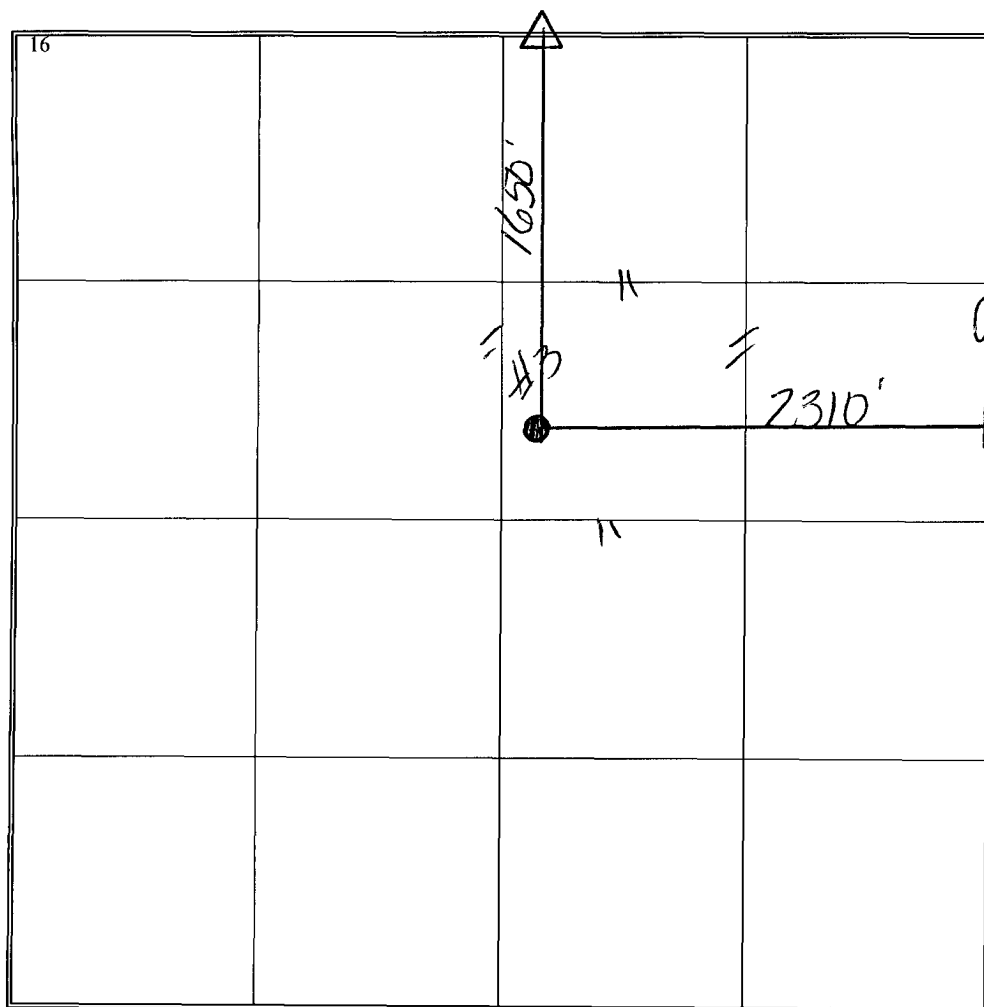
<sup>10</sup> Surface Location

UL or lot no. G	Section 7	Township 18-S	Range 35-E	Lot Idn	Feet from the 1650	North/South line NORTH	Feet from the 2310	East/West line EAST	County LEA
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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 40	<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> 	<p><sup>17</sup> <b>OPERATOR CERTIFICATION</b></p> <p>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.</p> <p><i>Denise Pinkerton</i> 07-14-2010 Signature Date</p> <p>DENISE PINKERTON REGULATORY SPECIALIST Printed Name</p>
	<p><sup>18</sup> <b>SURVEYOR CERTIFICATION</b></p> <p>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.</p> <p>Date of Survey Signature and Seal of Professional Surveyor</p> <p>Certificate Number</p>

Workover Procedure

1. Thoroughly review the detailed well plugging report.
2. Call 1-800-DIG-TESS 48 hours before work begins.
3. Fill out all excavation and hot work permits prior to starting work.
4. Dig out well at the surface.
5. Install 8-5/8" X 13-3/8" outlet and plate.
6. Weld stub on 5-1/2" casing to bring up to surface.
7. Weld stub on 8-5/8" casing to bring up to surface.
8. Weld on 8-5/8" starting head.
9. Install 5-1/2" X 8-5/8" packoff and tubing head.
10. Rig up pulling unit. Install BOP w/ annular.
11. Rig up reverse unit.
12. Pick up 4-3/4" bearclaw bit. Begin picking up 3-1/2" drill collars (12 collars total to be run).  
Review JSA and identify hazards. Prepare to encounter gas or pressure trapped below plug.  
Have personnel by accumulator prepared to shut-in.
13. Drill out cement plug from surface to 400'. Test casing to 500 psi.
14. Drill out cement plug from 1084' to 1200'. Test casing to 500 psi.
15. Drill out cement plug from 2460' to 2600'. Test casing to 500 psi.
16. Drill out cement plug from 3171' to 3400'. Test casing to 500 psi.
17. Drill out cement plug from 3900' to 4100'. Test casing to 500 psi.
18. Drill out cement plug from 4500' to 4700'. Test casing to 500 psi.
19. Drop down to 6800' to insure there are no obstructions.
20. Circulate hole clean. Spot 300 gallons 10% acetic acid from 6500' to 6200'. TOH.
21. Rig up wireline truck. Set CIBP @ 6700'. Cap with 20' cmt.
22. Pull Spectral GR-CNL log from 6600' to 4600'.
23. Pull radial cement evaluation log from 6600' to 4600'. Pull log with 0 psi and 1000 psi on casing.
24. Perforate the 5-1/2" casing across the pay interval as per the technical team recommendation.  
Rig down wireline truck.
25. TIH w/ 5-1/2" treating packer w/ 2.25" PN on 3-1/2" L-80 workstring and set at ~ 5700' (min 100' above perfs). Hydrotest tubing to 8,000 psi below the slips.
26. Acidize Blinberry perms w/ 3,500 gallons 15% NEFE HCl. Pump acid at 8-10 BPM. Drop 50% excess 1.0 s.g. ball sealers for diversion. Shut in for one hour and bleed off pressure. Release packer and run through perfs to knock balls off seat. Pull pkr to ~5700' and reset. Load and test BS to 1000 psi. (Anticipated pressure = 3,000 psi; Maximum pressure = 8,000 psi)
27. ND BOP. NU frac valve. Rig down pulling unit and move off.
28. Consult with remedial engineer about frac volumes and frac tanks to set.
29. Frac stimulate the Blinberry formation as per technical team recommendation.
30. Rig down frac crew and equipment. Commence flowing back load as soon as possible.

New Mexico State "AN" No. 3

Workover Procedure (cont.)

31. Perform scale squeeze as follows:
  - a. Pump 30 bbls fresh water pre-pad
  - b. Mix 220 gallons SCW358 scale inhibitor and 20 gallons XC-302 with 120 bbls fresh water
  - c. Pump the chemical mixture down the tubing
  - d. Overflush with 300 bbls fresh water.
32. Rig up pulling unit. ND frac valve. NU BOP.
33. Release packer and TOH laying down 3-1/2" workstring.
34. TIH w/ 4-3/4" bit on 2-7/8" workstring and clean out to 6680' (PBDT). Rig up foam air rig if needed. See attached foam air SOP. TOH w/ bit.
35. RIH w/ 2-7/8" production tubing, pump and rods as per ALCR.
36. Place on production. Test and obtain fluid levels weekly until the well is pumped off.

PTB 7/6/2010

Contact information:

Remedial Engineer, Ivan Pinney Office: 432-687-7949 Cell: 281-796-9252

ALCR, Carlos Valenzuela Cell: 575-390-9615

Production Engineer, Paul Brown Office: 432-687-7351 Cell: 432-238-8755

Schlumberger, Lori Ward Cell: 432-571-4658

Peak Packers, Sam Prieto 575-631-7704

### Foam / Air Cleanout Procedure

1. Review All JSA's associated with work. Ensure exclusion zones are identified and communicated to all personnel.
2. Install flowback manifold with two chokes. All components on flowback manifold must be rated to at least 3,000 psi. Flowback manifold components should be hydrotested before delivery. Recommend mandating proof of testing from vendor.
3. Install flowback tank downwind from rig.
4. Install test plug in wellhead. Close pipe rams and pressure test connection between BOP and wellhead to 250 psi/2,000 psi. Bleed off pressure.
5. Open pipe rams and close annular. Pressure test connection between BOP and wellhead to 250/1,500 psi. Bleed off pressure. Open annular. Remove test plug.
6. NU stripper head with **NO Outlets** (Check stripper cap for thread type – course threads preferred). Stripper head to be stump tested to 1,000 psi before being delivered to rig. Ensure stump test documentation can be provided upon arrival.
7. RIH to +/-4250 RU foam air unit. Install float at surface before beginning to pump. Break circulation with foam/air. Evacuate fluid from well.

**Pump high quality foam at all times. Do not pump dry air at any time. Fluid injection rates will generally be above 12 gallons per minute.**

**Whenever there is pressure on the stripper head, have a dedicated person continuously monitor pressure at choke manifold and have a dedicated person at accumulator ready to close annular BOP in case stripper leaks. Do not allow pressure on stripper head to exceed 500 psi. If pressure cannot be controlled below 500 psi, stop pumping, close BOP and bleed off pressure.**

8. Strip in hole until tag.
9. Rig up power swivel. Break circulation with foam/air. Install float at surface before beginning to pump. Cleanout as per original procedure. Circulate hole clean.
10. Kill tubing and casing using Brine water. If needed.
11. POOH LD workstring and bit. Brine water down tubing to put tubing on vacuum to help eliminate trapped pressure before breaking out string floats. **Have foam-air hand on location during this process.**
12. ND Stripper and flowback manifold.
13. Resume original procedure.

**CURRENT  
WELLBORE DIAGRAM**

**State AN #3**

**LOCATION**

State	New Mexico
County	Lea
Surface Location	1650 FNL, 2310 FEL
	Sec 7, R-35E, T-18S
	Unit G

**CASING DETAIL**

<b>Surface Csg.</b>	
Size:	13-3/8"
Wt.:	36#
Set @:	334'
Sxs cmt:	350sx
TOC:	Surface
Hole Size:	17-1/4"
<b>Intermediate Csg.</b>	
Size:	8-5/8"
Wt.:	24# & 32# J-55
Set @:	3300'
Sxs Cmt.	1600sx
TOC:	1650' (temp survey)
Hole Size:	11"
<b>Production Csg.</b>	
Size:	5-1/2"
Wt.:	15.5 & 17#
Set @:	8983'
Sxs Cmt:	750sx
TOC:	3300' (temp survey)
Hole Size:	7-7/8"

**WELL ID INFORMATION**

Lease Name	State AN #3
Field	Vacuum Abo Reef
Reservoir	Abo Reef
Ref #	FA4255
API #	30-025-03103

KB:	3982'
DF:	3981'
GL:	3970'
Spud Date:	3/24/1962
Compl. Date:	5/12/1962
P&A Date:	1/12/2005

