

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico

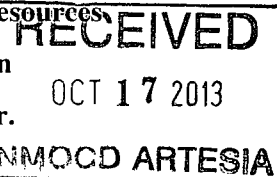
Form C-101
Revised July 18, 2013

Energy Minerals and Natural Resources

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

| | | |
|---|--|---------------------------------------|
| 1. Operator Name and Address COG Operating LLC 2208 West Main Street Artesia, NM 88210 | | 2. OGRID Number 229137 |
| 3. Property Code 38521 | | 4. Property Name Myox 21 State Com |
| 5. API Number 30-015-41745 | | 6. Well No 1H |

7. Surface Location

| UL - Lot | Section | Township | Range | Lot Idn | Feet from | N/S Line | Feet From | E/W Line | County |
|----------|---------|----------|-------|---------|-----------|----------|-----------|----------|--------|
| M | 21 | 25S | 28E | M | 190 | South | 660 | West | Eddy |

* Proposed Bottom Hole Location

| UL - Lot | Section | Township | Range | Lot Idn | Feet from | N/S Line | Feet From | E/W Line | County |
|----------|---------|----------|-------|---------|-----------|----------|-----------|----------|--------|
| D | 16 | 25S | 28E | D | 330 | North | 660 | West | Eddy |

9. Pool Information

| | | | |
|-----------------------|-------------------|-----------|--------------------|
| Red Bluff Bone Spring | San Lorenzo; B.S. | Pool Name | Pool Code 30990 |
|-----------------------|-------------------|-----------|--------------------|

Additional Well Information

| | | | | |
|---------------------------|-----------------------------|--|-------------------------|--------------------------------------|
| 11. Work Type New Well | 12. Well Type Oil | 13. Cable/Rotary | 14. Lease Type State | 15. Ground Level Elevation 2991.9 |
| 16. Multiple N | 17. Proposed Depth 17958 | 18. Formation Bone Spring | 19. Contractor | 20. Spud Date 10/24/2013 |
| Depth to Ground water | | Distance from nearest fresh water well | | Distance to nearest surface water |

☒ We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program

| Type | Hole Size | Casing Size | Casing Weight/ft | Setting Depth | Sacks of Cement | Estimated TOC |
|------------|-----------|-------------|------------------|---------------|-----------------|---------------|
| Surface | 17.5 | 13.375 | 48 | 350 | 365 | |
| Intrnd | 12.25 | 9.625 | 36 | 2360 | 810 | |
| Production | 7.875 | 5.5 | 17 | 17958 | 3030 | 2060 |

Casing/Cement Program: Additional Comments

Drill 17-1/2" hole to ~350' w/ fresh water spud mud. Run 13-3/8" 48# H40 STC casing to TD and cement to surface in one stage. Will use 1" tubing and Class C w/ 2% CaCl₂ to cement to surface, if necessary.

Drill 12-1/4" hole to ~2360' with saturated brine water. Run 9-5/8" 36# J55 LTC casing to TD and cement to surface in one stage.

Drill 7-7/8" vertical hole, curve and lateral to 17958' with cut brine. Run 5-1/2" 17# P110 LTC casing to TD and cement in one stage bringing TOC to 2060' (300' overlap).

22. Proposed Blowout Prevention Program

| Type | Working Pressure | Test Pressure | Manufacturer |
|------------|------------------|---------------|--------------|
| Double Ram | 3000 | 3000 | Cameron |

| | | | |
|--|---------------------|---|--|
| 23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that I have complied with 19.15.14.9 (A) NMAC <input checked="" type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input checked="" type="checkbox"/> , if applicable. Signature: <i>Mayte Reyes</i> | | OIL CONSERVATION DIVISION | |
| Printed name: Mayte Reyes | | Approved By: <i>T. C. Shepard</i> | |
| Title: Regulatory Analyst | | Title: "Geologist" | |
| E-mail Address: mreyes1@concho.com | | Approved Date: 10/17/2013 Expiration Date: 10/17/2015 | |
| Date: 10/16/2013 | Phone: 575-748-6945 | Conditions of Approval Attached | |

DISTRICT I
1825 N. FRENCH DR., HOBBS, NM 88240
Phone: (575) 393-6181 Fax: (575) 393-0720

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1301 W. GRAND AVENUE, ARTESIA, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

DISTRICT III
1000 RIO BRAZOS RD., AZTEC, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV
11885 S. ST. FRANCIS DR., SANTA FE, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
11885 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | |
|------------------------------------|--|---|
| API Number 30-015- 41745 | Pool Code 50990 | Pool Name San Lorenzo Red Bluff ; Bone Spring |
| Property Code 38521 | Property Name MYOX 21 STATE COM | Well Number 1H |
| GRID No. 229137 | Operator Name COG OPERATING, LLC | Elevation 2991.9 |

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 | 21 | 25-S | 28-E | | 190 | SOUTH | 660 | WEST | EDDY |

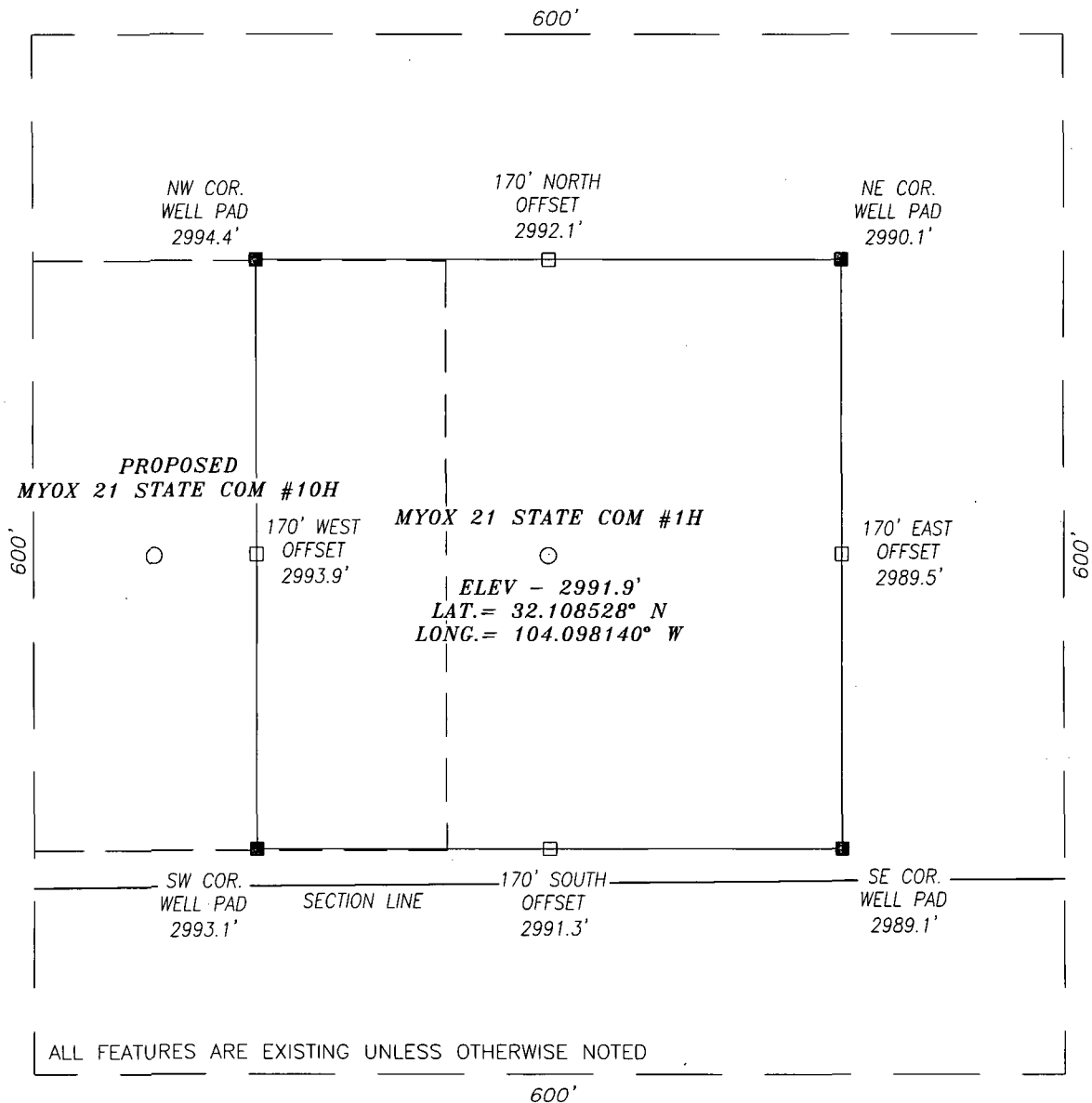
Bottom Hole Location If Different From Surface

| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|------------------------|-----------------|--------------------|-----------|---------|---------------|------------------|---------------|----------------|--------|
| D | 16 | 25-S | 28-E | | 330 | NORTH | 660 | WEST | EDDY |
| Dedicated Acres 320 | Joint or Infill | Consolidation Code | 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

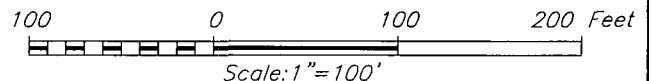
| | | |
|--|---|--|
| <p>Y=413725.6 N X=572071.3 E</p> <p>NAD 27 PROPOSED BOTTOM HOLE LOCATION Y=413397.8 N X=572734.2 E LAT.=32.136329° N LONG.=104.098355° W</p> <p>NAD 27 SURFACE LOCATION Y=403284.9 N X=572822.8 E LAT.=32.108528° N LONG.=104.098140° W</p> <p>Y=403089.1 N X=572164.6 E</p> | <p>330' B.H.</p> <p>660'</p> <p>Y=413730.0 N X=573404.2 E</p> <p>GRID AZ. - 359°29'53" HORZ. DIST. - 10,113.3'</p> <p>SECTION 16</p> <p>SECTION 21</p> <p>660' S.L.</p> <p>190'</p> | <p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Melanie J. Parker</i> 10/16/13 Signature Date Printed Name mparker@concho.com E-mail Address</p> <p>SURVEYOR CERTIFICATION</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>MAY 15, 2013 Date of Survey</p> <p>Signature & Seal of Professional Surveyor</p> <p><i>Chad L. Harcrow</i> 5/30/13 Certificate No. CHAD HARCROW 17777 W.O. # 13-297 DRAWN BY: VD</p> |
|--|---|--|

SECTION 21, TOWNSHIP 25 SOUTH, RANGE 28 EAST, N.M.P.M.,
EDDY COUNTY NEW MEXICO



DIRECTIONS TO LOCATION

TRAVELING SOUTH ON 285 APPROX. 0.9 MILE PAST MILE MARKER 9 TURN RIGHT (WEST) ONTO A CALICHE RD AND GO APPROX 0.5 MILE; THEN TURN LEFT (SOUTHWEST) AND GO APPROX. 0.3 MILE; THEN TURN RIGHT (NORTHWEST) AND GO APPROX. 0.8 MILE; THEN TURN LEFT (SOUTHWEST) AND GO APPROX. 0.2 MILE TO THE EXISTING MYOX 21 ST #9H WELL PAD; GO TO SOUTHEAST PAD CORNER AND PROPOSED WELL IS 345 FEET SOUTHEAST.



HARCROW SURVEYING, LLC

1107 WATSON, ARTESIA, N.M. 88210

PH: (575) 513-2570 FAX: (575) 746-2158

chad_harcrow77@yahoo.com



COG OPERATING, LLC

MYOX 21 STATE COM #1H WELL
LOCATED 190 FEET FROM THE SOUTH LINE
AND 660 FEET FROM THE WEST LINE OF SECTION 21,
TOWNSHIP 25 SOUTH, RANGE 28 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO

SURVEY DATE: 05/15/2013

PAGE: 1 OF 1

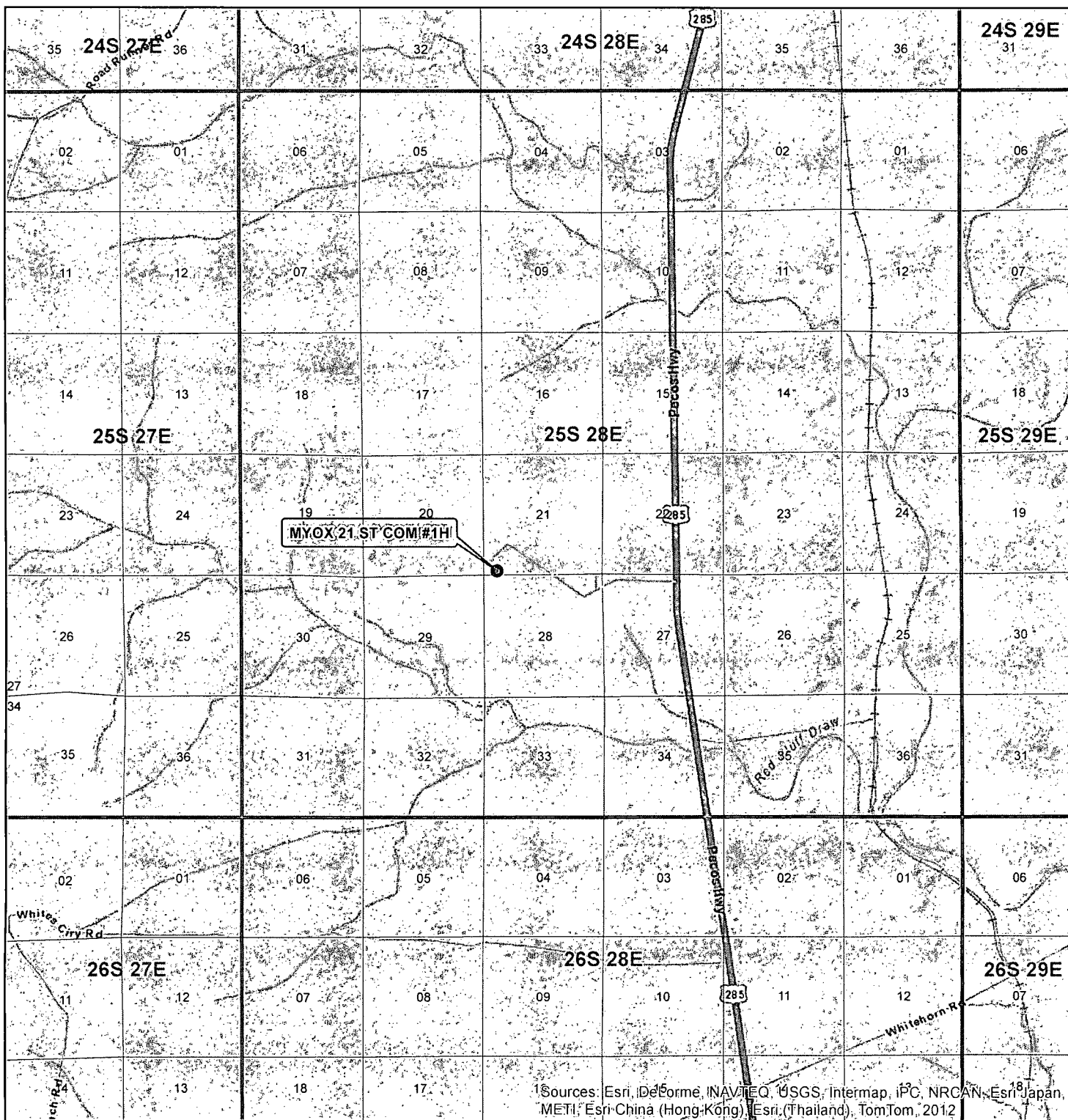
DRAFTING DATE: 05/21/2013

APPROVED BY: CH

DRAWN BY: VD

FILE: 13-297

VICINITY MAP



SEC. 21, TWP. 25S, RGE. 28E
 SURVEY: N.M.P.M
 COUNTY: EDDY STATE: NEW MEXICO
 DESCRIPTION: MYOX 21 ST COM #1H
 190' FSL, 660' FWL

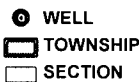
ELEVATION: 2991.9'
 OPERATOR: COG OPERATING LLC
 LEASE: MYOX 21 ST COM

W.O. # 13-297



1 IN = 6,000 FT

0 0.5 1 1.5 2 MILES

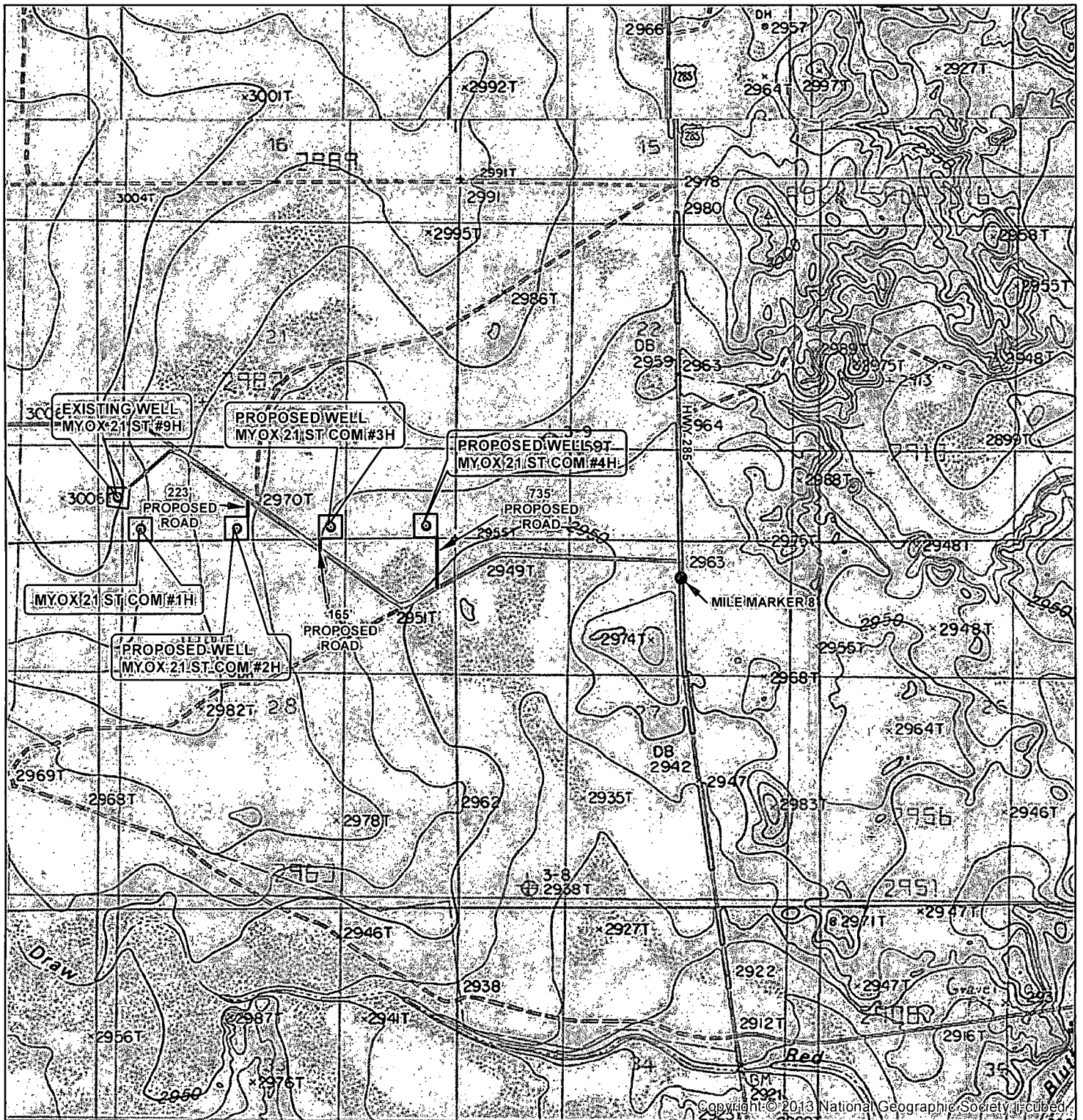


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MAP DATE: 5/21/2013

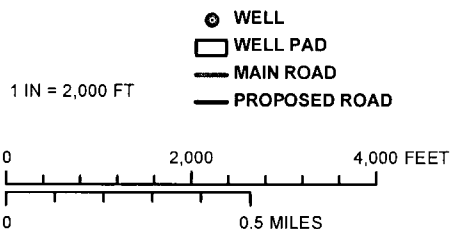
LOCATION VERIFICATION MAP



SEC. 21, TWP. 25S, RGE. 28E
 SURVEY: N.M.P.M
 COUNTY: EDDY STATE: NEW MEXICO
 DESCRIPTION: MYOX 21 ST COM #1H
 190' FSL, 660' FWL

ELEVATION: 2991.9'
 OPERATOR: COG OPERATING LLC
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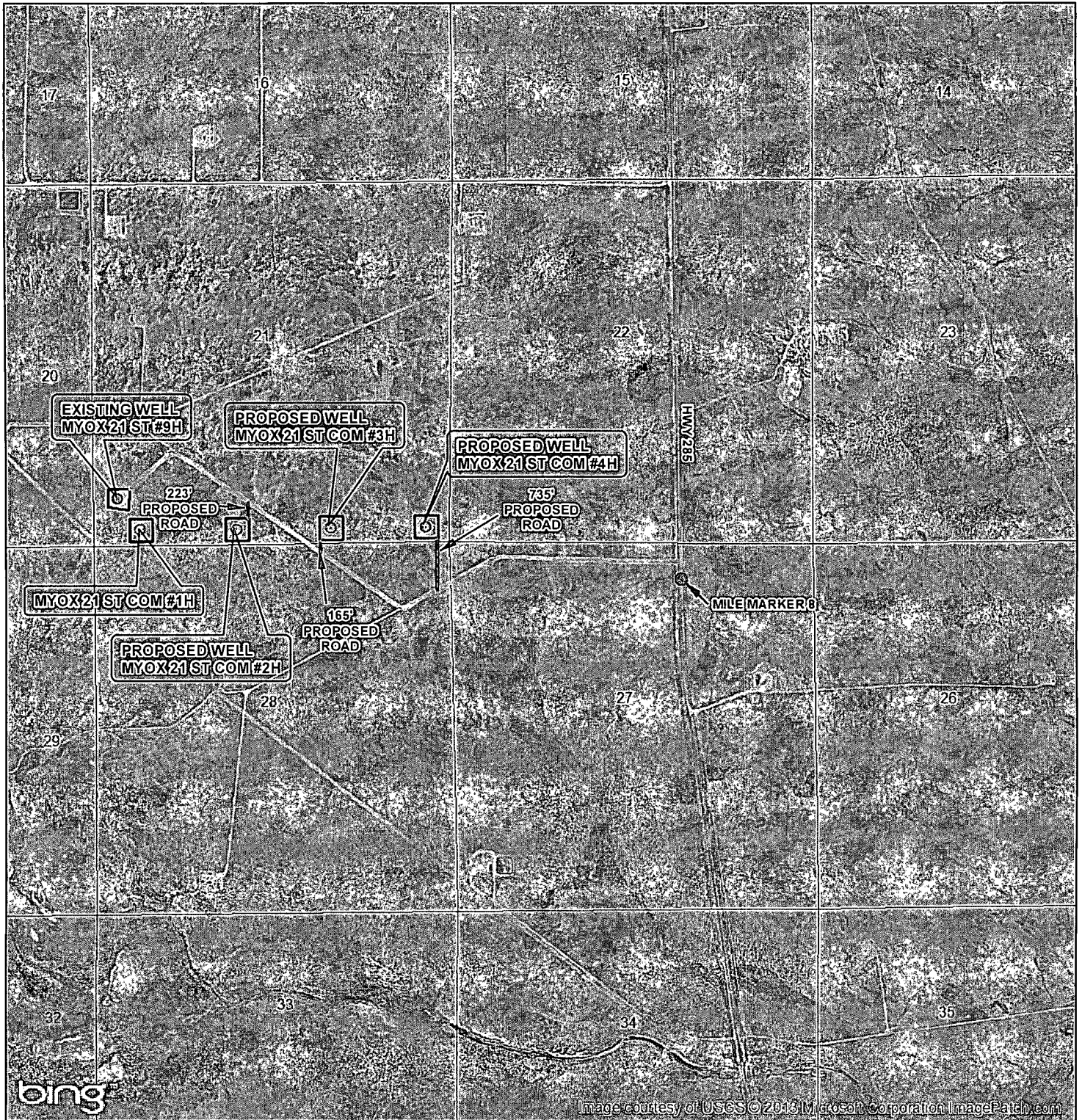


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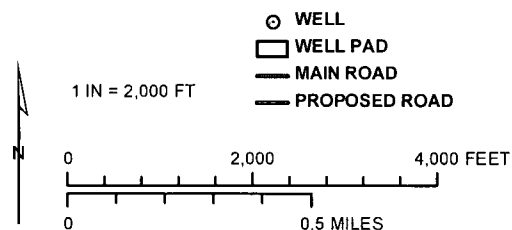
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