

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

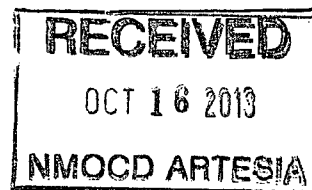
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

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

State of New Mexico
Energy Minerals and Natural Resources

Form C-101
Revised July 18, 2013

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 40112		⁴ API Number 30-015-41041
⁵ Property Name SRO State Com		⁶ Well No 60H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
H	10	26S	28E	H	2450	North	380	East	Eddy

*** Proposed Bottom Hole Location**

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
P	15	26S	28E	P	330	South	380	East	Eddy

9. Pool Information

⁷ Pool Name Red Bluff, BS, South. Hay Hollow, Bone Spring	⁸ Pool Code 30215 51010
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Additional Well Information

¹¹ Work Type New Well	¹² Well Type Oil	¹³ Cable/Rotary	¹⁴ Lease Type State	¹⁵ Ground Level Elevation 2982.1
¹⁶ Multiple N	¹⁷ Proposed Depth 15763'	¹⁸ Formation Bone Spring	¹⁹ Contractor	²⁰ Spud Date 10/29/2013
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	400	420	
Intrmd	12.25	9.625	36	2570	865	
Production	7.875	5.5	17	15763	2510	2270

Casing/Cement Program: Additional Comments

Drill 17-1/2" hole to ~400' 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 ~2570' 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 15763' with cut brine. Run 5-1/2" 17# P110 LTC casing to TD and cement in one stage bringing TOC to 2270' (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: <i>10/17/2013</i> Expiration Date: <i>10/17/2015</i>	
Date: 10/15/2013	Phone: 575-748-6945	Conditions of Approval Attached	

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State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-	Pool Code 30215	Pool Name <i>Red Bluff</i> Hay Hollow; Bone Spring, <i>South</i>
Property Code 40112	Property Name SRO STATE COM	Well Number 60H
OGRID No. 229137	Operator Name COG OPERATING, LLC	Elevation 2982.1'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	10	26-S	28-E		2450	NORTH	380	EAST	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
P	15	26-S	28-E		330	SOUTH	380	EAST	EDDY

Dedicated Acres 240	Joint or Infill	Consolidation Code	Order No.
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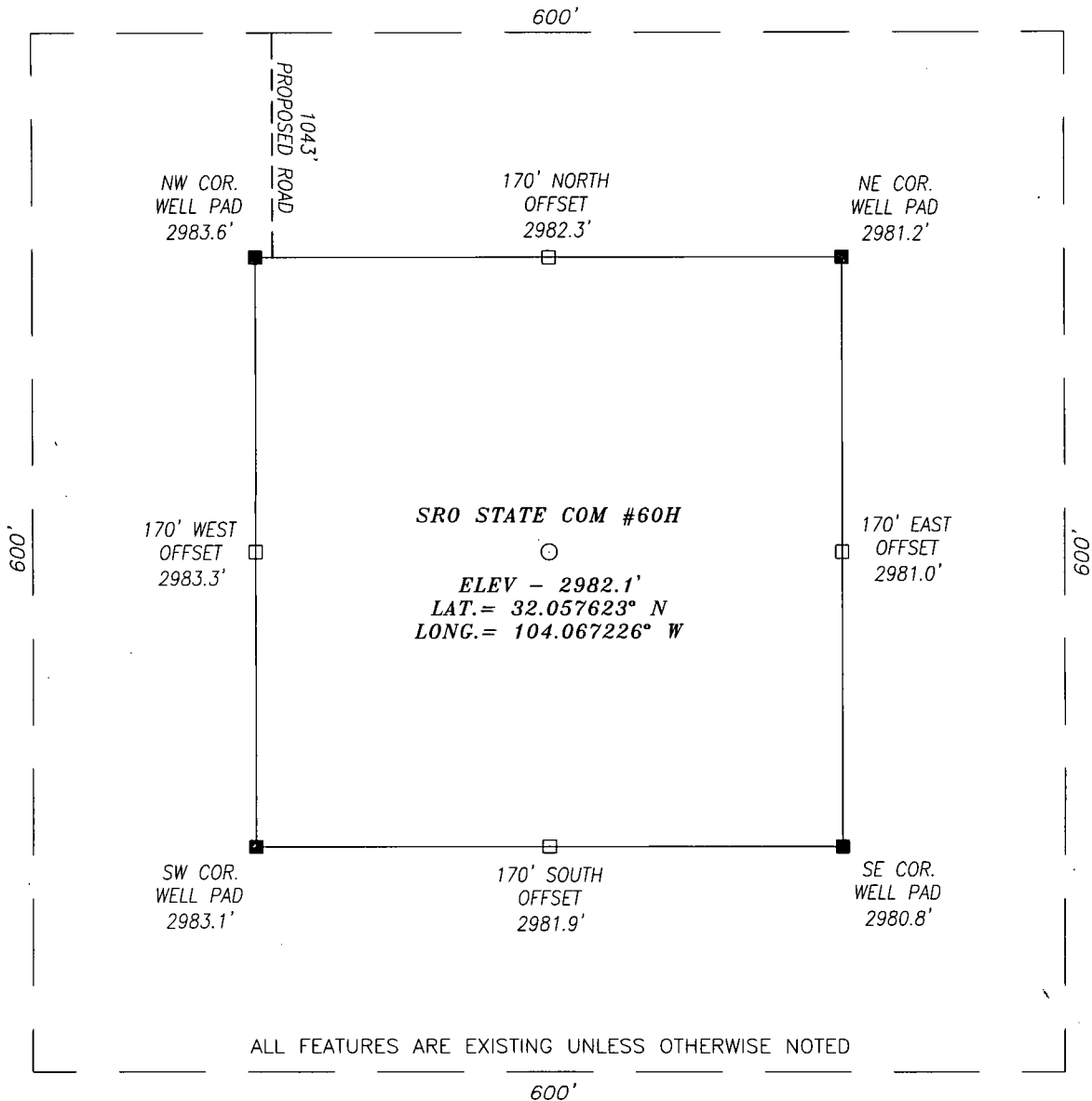
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<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 Parker</i> 10/15/13 Signature Date <i>Melanie Parker</i> 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>AUGUST 23, 2013 Date of Survey</p> <p>Signature & Seal of Professional Surveyor</p> <p> <i>Chad Harcrow</i> 9/9/13 Certificate No. CHAD HARCROW 17777 W.O. # 13-590 DRAWN BY: TL</p>
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SECTION 10, TOWNSHIP 26 SOUTH, RANGE 28 EAST, N.M.P.M.,

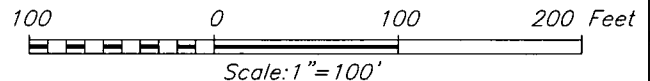
EDDY COUNTY

NEW MEXICO



DIRECTIONS TO LOCATION:

HEADING SOUTH ON HWY 285 TURN RIGHT (WEST) ONTO CR #724 (WHITES CITY RD) AND GO APPROX. 0.1 MILE THEN PROPOSED WELL IS APPROX. 1235 FEET SOUTH.



HARCROW SURVEYING, LLC

2314 W. MAIN ST, ARTESIA, N.M. 88210

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

chad_harcrow77@yahoo.com



COG OPERATING, LLC

SRO STATE COM #60H WELL
LOCATED 2450 FEET FROM THE NORTH LINE
AND 380 FEET FROM THE EAST LINE OF SECTION 10,
TOWNSHIP 26 SOUTH, RANGE 28 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO

SURVEY DATE: 08/23/2013

PAGE: 1 OF 1

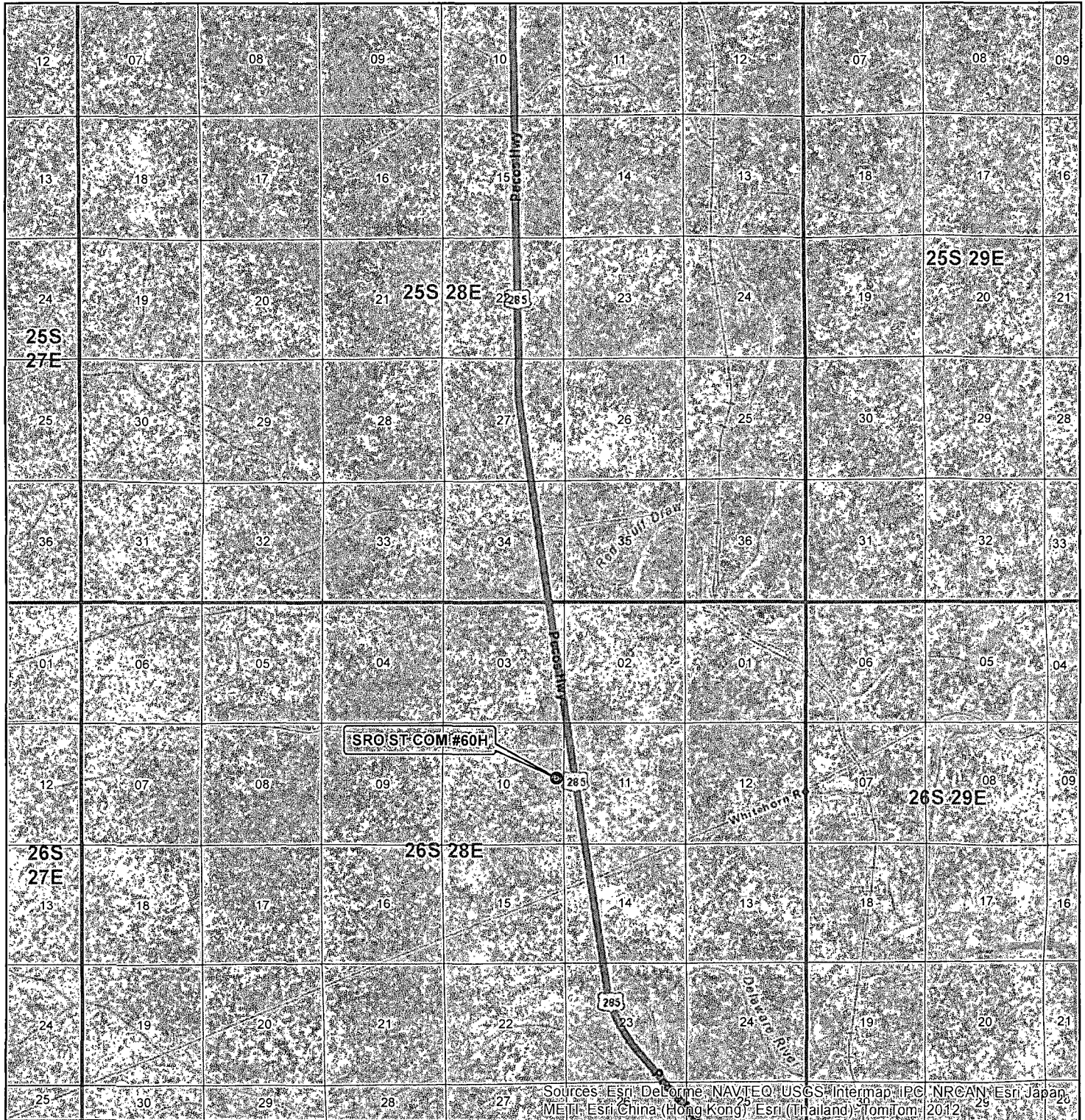
DRAFTING DATE: 08/26/2013

APPROVED BY: CH

DRAWN BY: TL

FILE: 13-590

VICINITY MAP



Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, IPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2012

SEC. 10, TWP. 26 S, RGE. 28E
 SURVEY: N.M.P.M.
 COUNTY: EDDY STATE: NEW MEXICO
 DESCRIPTION: SRO ST COM #60H
 2450' FNL, 380' FEL

ELEVATION: 2982.1'
 OPERATOR: COG OPERATING LLC
 LEASE: SRO ST COM

W.O. # 13-590



1 IN = 6,000 FT

0 0.5 MILES

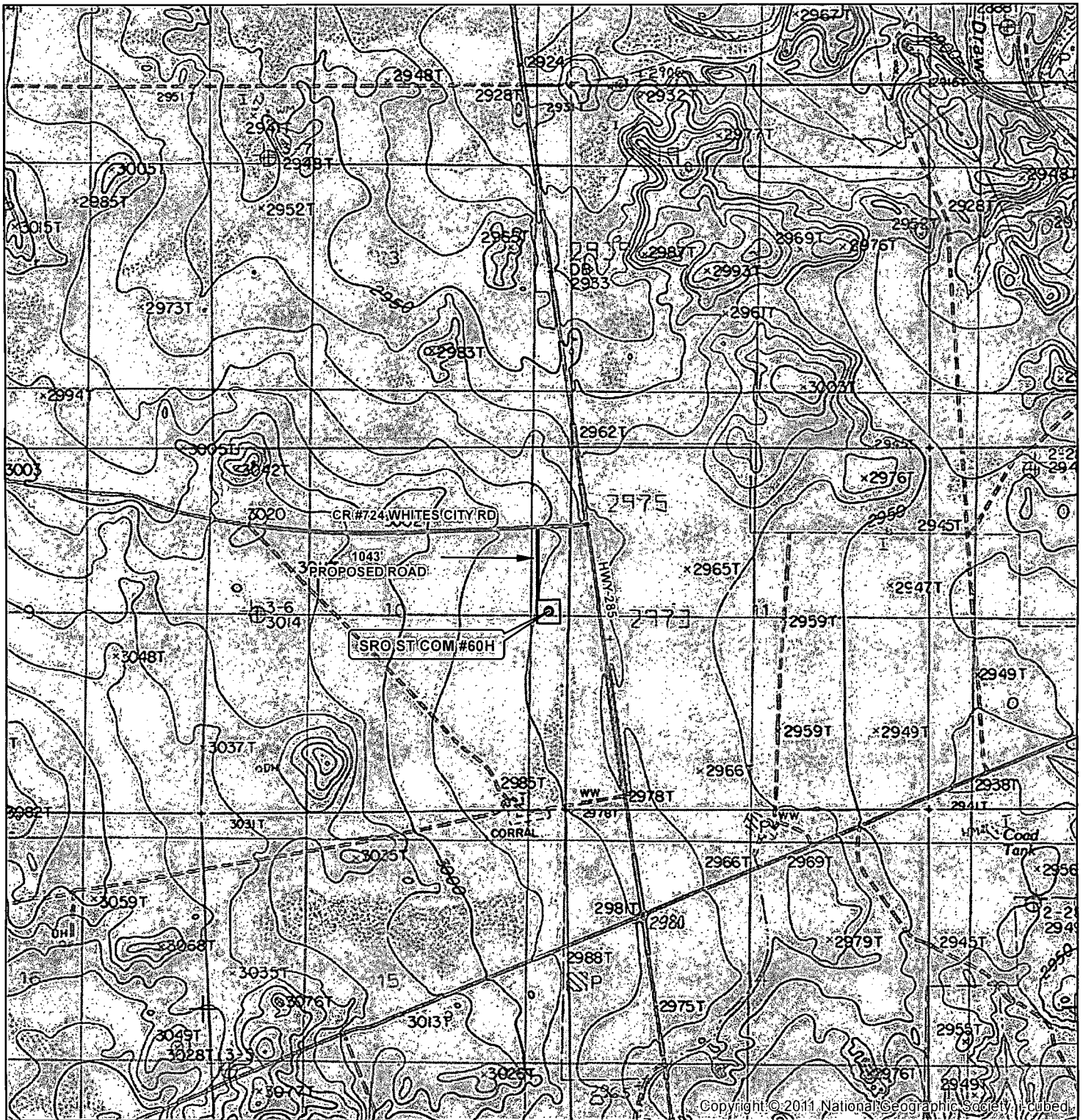
- WELL
- TOWNSHIP
- SECTION

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 1107 WATSON, ARTESIA N.M. 88210
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MAP DATE: 8/29/2013

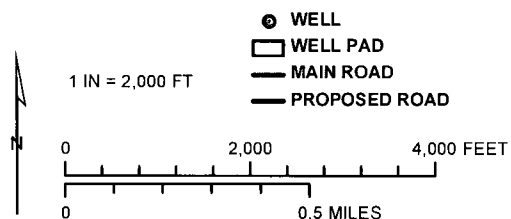
LOCATION VERIFICATION MAP



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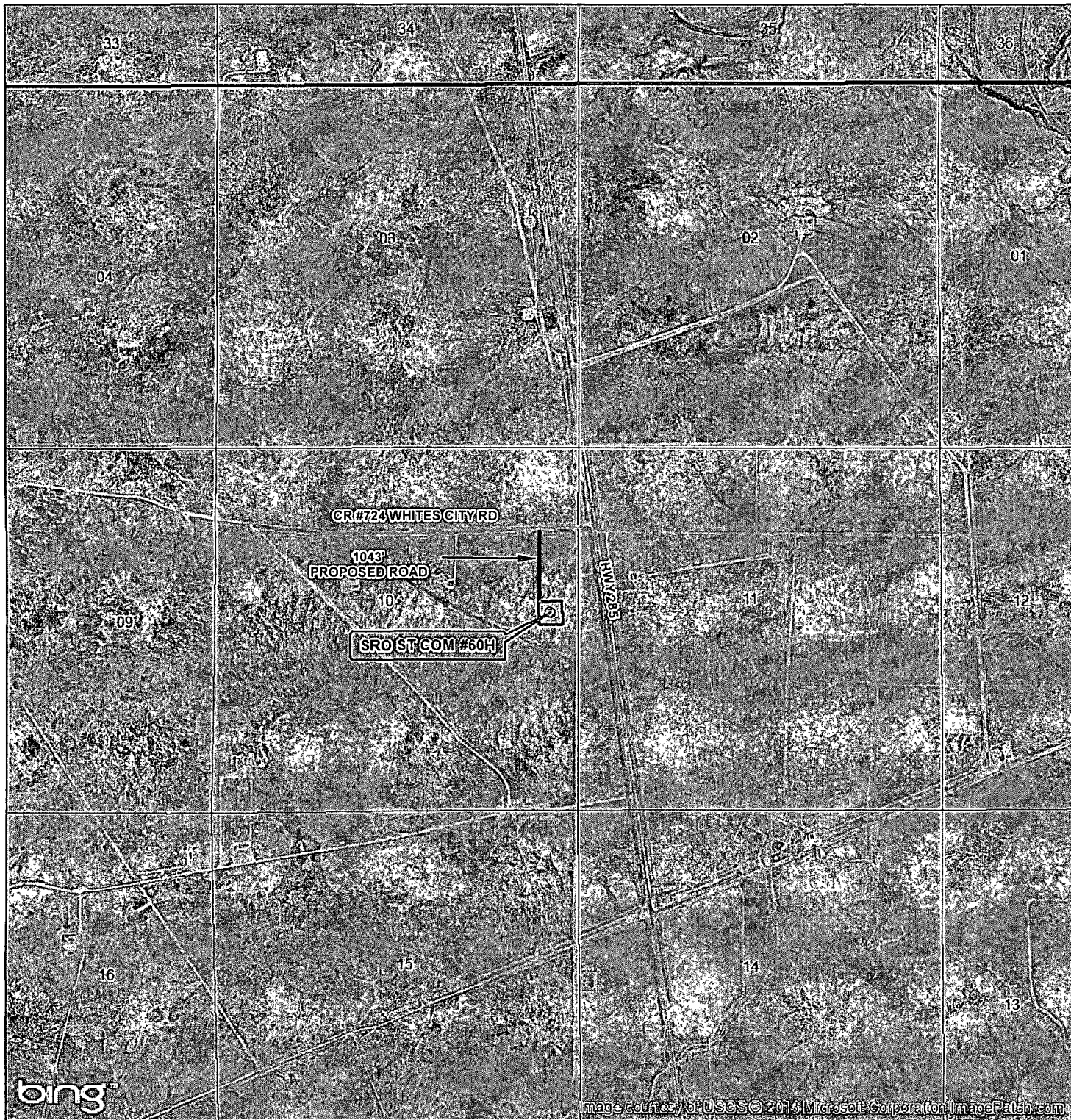


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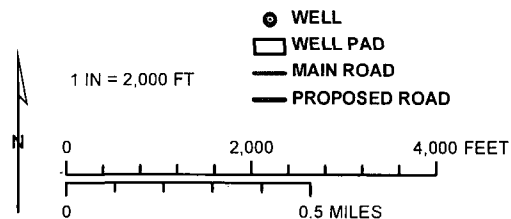
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MAP DATE: 8/29/2013

Permit Conditions of Approval

API: 30-015-41741

OCD Reviewer	Condition
CSHAPARD	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string