

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

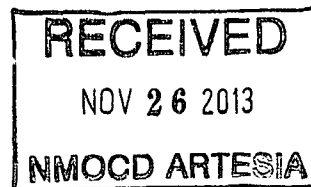
**District II**  
811 S. First St., Artesia, NM 88210  
Phone: (575) 748-1283 Fax: (575) 748-9720

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

Form C-101  
Revised July 18, 2013



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

Operator Name and Address COG Operating LLC 2208 West Main Street Artesia, NM 88210		OGRID Number 229137
Property Code 38670	Property Name Buena Vista 2 State	Well No 4H

7. Surface Location									
UL - Lot N	Section 2	Township 20S	Range 31E	Lot Idn N	Feet from 280	N/S Line South	Feet From 2000	E/W Line West	County Eddy

* Proposed Bottom Hole Location									
UL - Lot 4	Section 2	Township 20S	Range 30E	Lot Idn 4	Feet from 330	N/S Line North	Feet From 380	E/W Line West	County Eddy

9. Pool Information	
Pool Name Gatuna Canyon Bone Spring	Pool Code 96688

Additional Well Information				
11 Work Type New Well	12 Well Type Oil	13 Cable/Rotary	14 Lease Type State	15 Ground Level Elevation 3221.9'
16 Multiple N	17 Proposed Depth 13976'	18 Formation Bone Spring	19 Contractor	20 Spud Date 12/1/2013
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	450	400	
Intmd	12.25	9.625	36	3650	1200	
Production	7.875	5.5	17	13976	2000	2150

**Casing/Cement Program: Additional Comments**

Plan to drill a 17-1/2" hole to 450' with Fresh Water. Run 13-3/8", 48#, H-40 csg and cmt to surface. Drill 12-1/4" hole to 3650' with Brine, and run 9-5/8", 36#, J-55 and cement to surface in 2 stages. Drill 7-7/8" curve and lateral with cut brine to approx 13,976' MD. Run 5-1/2", 17#, P-110 csg and cement to 2150'.

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 ☒ and/or 19.15.14.9 (B) NMAC ☒ if applicable.

Signature: *Mayte Reyes*

Printed name: Mayte Reyes

Title: Regulatory Analyst

E-mail Address: mreyes1@concho.com

Date: 11/27/2013

Phone: 575-748-6945

**OIL CONSERVATION DIVISION**

Approved By:

*J. C. Shepard*

Title:

**"Geologist"**

Approved Date:

*11/27/2013*

Expiration Date:

*11/27/2015*

Conditions of Approval Attached

DISTRICT I  
1025 N. FRENCH DR., HOBBBS, NM 88240  
Phone: (575) 363-6161 Fax: (575) 363-0720

DISTRICT II  
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- <b>41829</b>	Pool Code 96688	Pool Name Gatuna Canyon; Bone Spring
Property Code 38670	Property Name BUENA VISTA 2 STATE COM	Well Number 4H
GRID No. 229137	Operator Name COG OPERATING, LLC	Elevation 3221.9

**Surface Location**

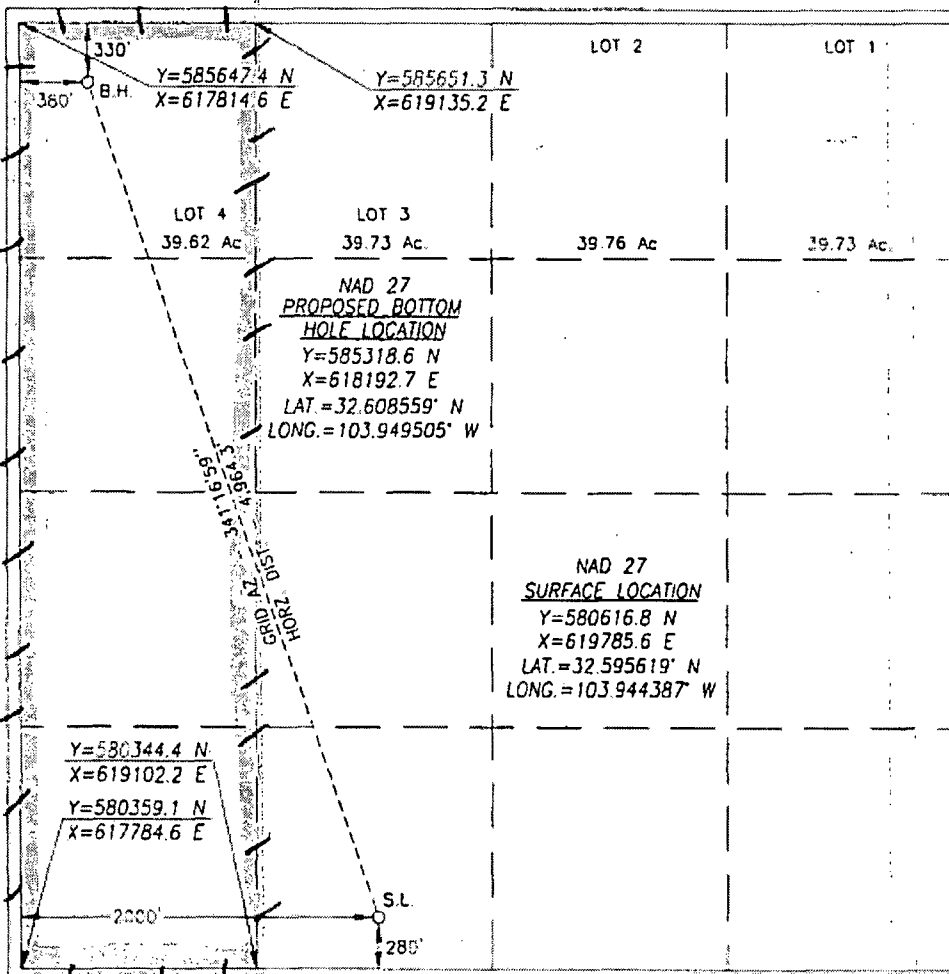
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	2	20-S	30-E		280	SOUTH	2000	WEST	EDDY

**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
4	2	20-S	30-E		330	NORTH	380	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
159.62			

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



**OPERATOR CERTIFICATION**

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.

Signature: *Melanie J. Parker* Date: 11/27/13  
Printed Name: *Melanie J. Parker*  
E-mail Address: *mparker@concho.com*

**SURVEYOR CERTIFICATION**

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.

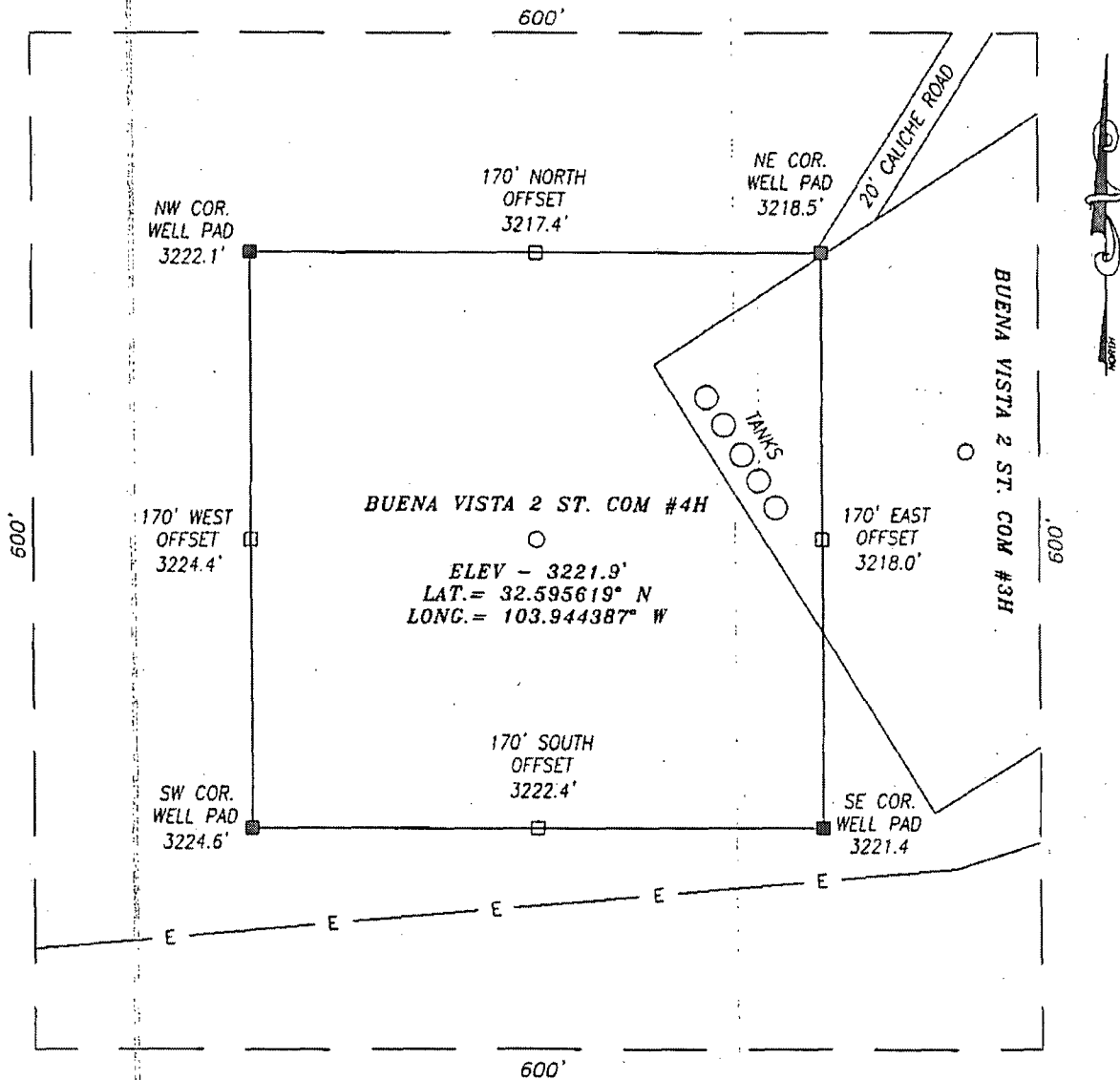
FEBRUARY 27, 2013

Date of Survey

Signature & Seal of Professional Surveyor

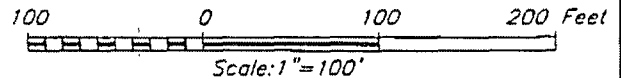
CHAD L. HARCROW  
NEW MEXICO  
17777  
LICENSED PROFESSIONAL SURVEYOR  
Signature: *Chad L. Harcrow* Date: 11/26/13  
Certificate No. CHAD HARCROW 17777  
W.O. # 13-90 DRAWN BY: VD

SECTION 2, TOWNSHIP 20 SOUTH, RANGE 30 EAST, N.M.P.M.,  
EDDY COUNTY NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF HWY 360 AND CR #222 SHUGART RD GO EAST ALONG CR #222 FOR APPROX. 3.9 MILES. TURN RIGHT (SOUTHEAST) ONTO A CALICHE LEASE ROAD GO APPROX. 0.9 MILES TURN RIGHT (WEST) GO APPROX 2.6 MILES TO EXISTING BUENA VISTA 2 STATE COM #3H AND WELL IS 260 FEET WEST.



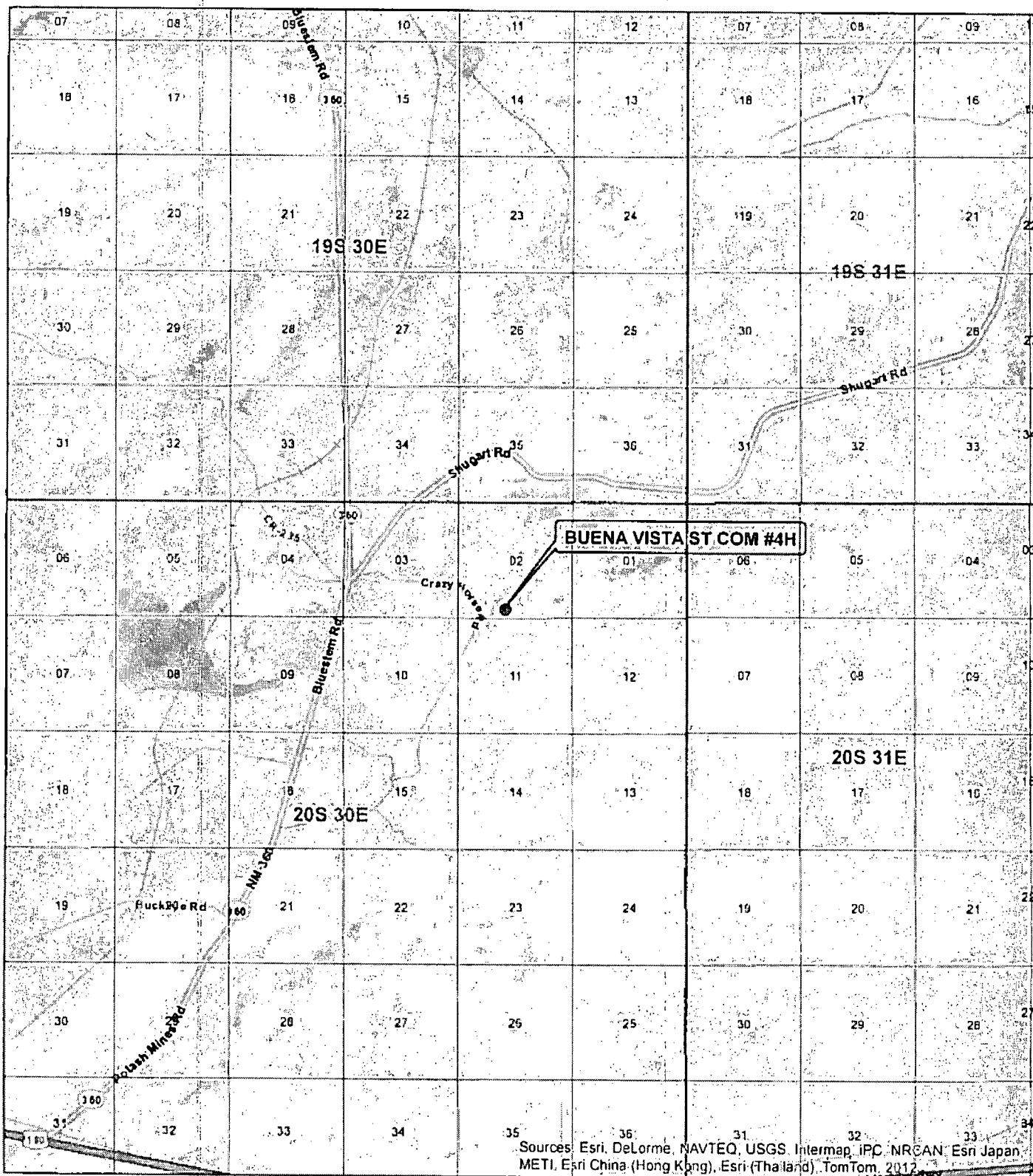
HARCROW SURVEYING, LLC  
1107 WATSON, ARTESIA, N.M. 88210  
PH: (575) 513-2570 FAX: (575) 746-2158  
chad\_harcrow77@yahoo.com



COG OPERATING, LLC

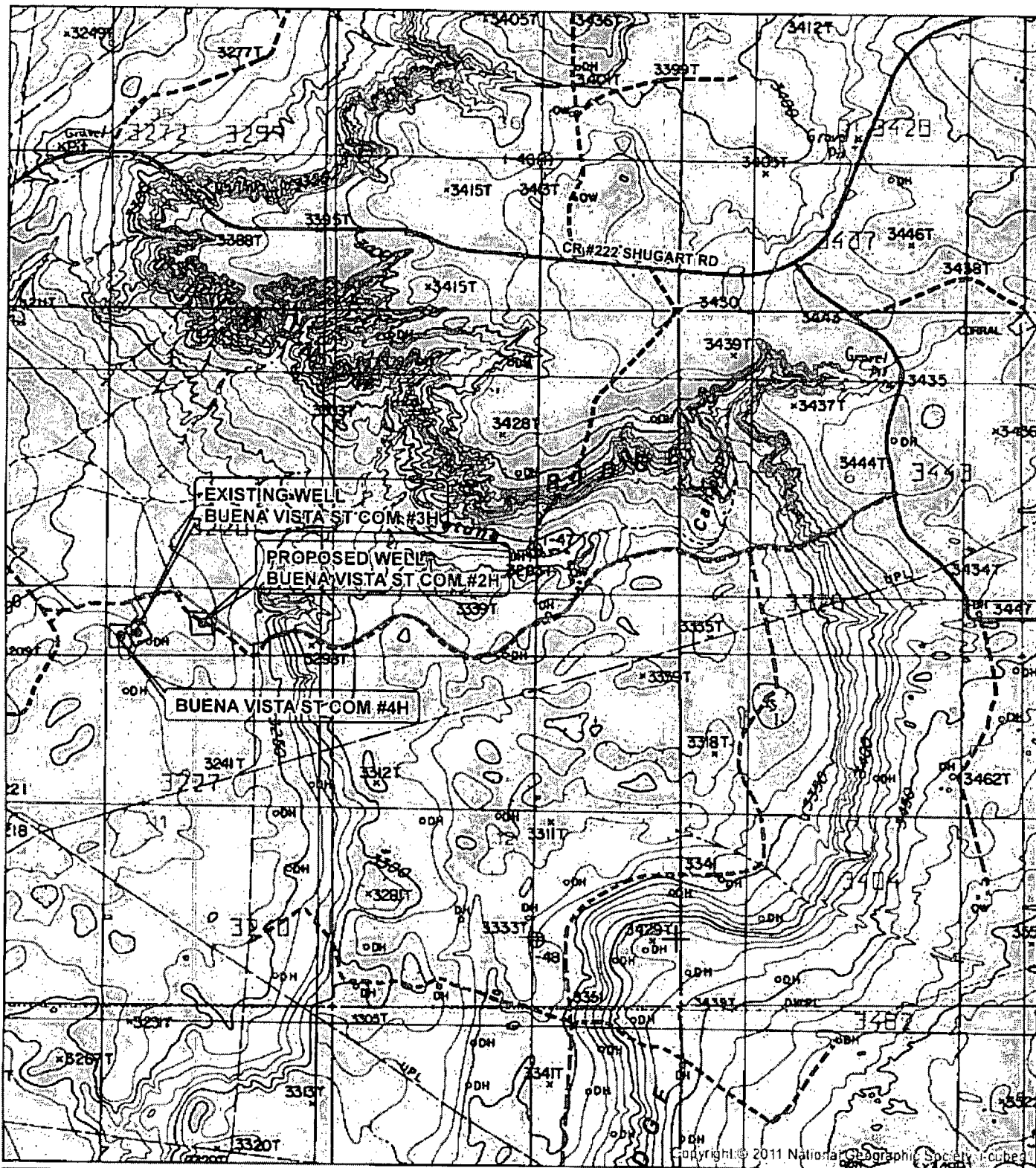
BUENA VISTA 2 ST. COM #4H WELL  
LOCATED 260 FEET FROM THE SOUTH LINE  
AND 2000 FEET FROM THE WEST LINE OF SECTION 2,  
TOWNSHIP 20 SOUTH, RANGE 30 EAST, N.M.P.M.,  
EDDY COUNTY, NEW MEXICO

SURVEY DATE: 02/27/2013	PAGE: 1 OF 1
DRAFTING DATE: 03/01/2013	
APPROVED BY: CH	DRAWN BY: VD FILE: 13-90



SECTION: 2 TOWNSHIP: 20 S. RANGE: 30 E. SURVEY: N.M.P.M	
COUNTY: EDDY	STATE: NEW MEXICO ELEVATION: 3221.9'
WELL NAME: BUENA VISTA ST COM #4H	
LEGEND:	280' FSL, 2000' FWL W.O. # 13-90
● Well	LEASE: BUENA VISTA ST COM
— Proposed Road	0 4,000 8,000 12,000 FEET
□ Township	0 0.5 1 1.5 2 2.5 MILES
□ Section	1 IN = 6,000 FT

<b>CONCHO</b>		<b>COG OPERATING, LLC</b>	
HARCROW SURVEYING, LLC 1107 WATSON, ARTESIA N.M. 88210 PH: (575) 513-2570 FAX: (575) 746-2158 chad_harcrow77@yahoo.com			
VICINITY MAP		10/1/2013	



SECTION: 2 TOWNSHIP: 20 S. RANGE: 30 E. SURVEY: N.M.P.M

COUNTY: EDDY STATE: NEW MEXICO ELEVATION: 3221.9'

WELL NAME: BUENA VISTA ST COM #4H

LEGEND:

- WELL
- WELL PAD
- MAIN ROAD

280' FSL, 2000' FWL W.O. # 13-90

LEASE: BUENA VISTA ST COM

0 2,000 4,000 FEET

0 0.5 MILES

1 IN = 2,000 FT



COG OPERATING, LLC

HARCROW SURVEYING, LLC

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

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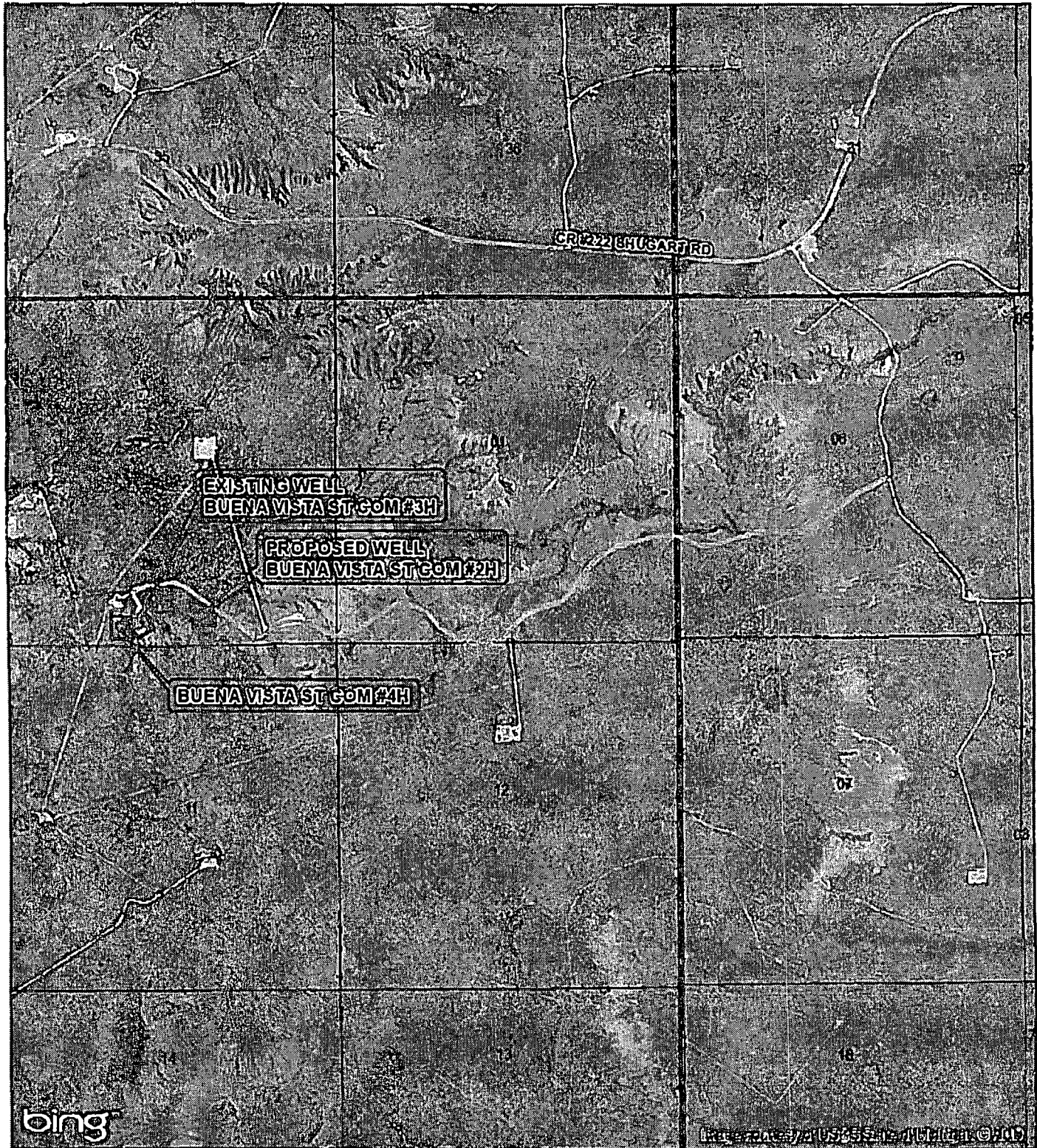


LOCATION MAP

TOPO

10/8/2013





SECTION: 2 TOWNSHIP: 20 S. RANGE: 30 E. SURVEY: N.M.P.M

COUNTY: EDDY STATE: NEW MEXICO ELEVATION: 3221.9'

WELL NAME: BUENA VISTA ST COM #4H

**LEGEND:**

- WELL
- WELL PAD
- MAIN ROAD

280' FSL, 2000' FWL W.O. # 13-90  
LEASE: BUENA VISTA ST COM

0 2,000 4,000 FEET

0 0.5 MILES

1 IN = 2,000 FT



COG OPERATING, LLC

HARCROW SURVEYING, LLC

1107 WATSON, ARTESIA N.M. 88210

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

chad\_harcrow77@yahoo.com



LOCATION MAP

IMAGERY

10/8/2013

## Buena Vista 2 Sate Com 4H

	Hole Size	Casing	Wt	Depth	Cmt	TOC
Surface	17.5	13.375	48	450'	400	0
Intrmd	12.25	9.625	36	3650'	1200	0
Prod	7.875	5.5	17	13,976'	2000	2150'

Plan to drill a 17-1/2" hole to 450' with Fresh Water. Run 13-3/8", 48#, H-40 csg and cmt to surface. Drill 12-1/4" hole to 3650' with Brine, and run 9-5/8", 36#, J-55 and cement to surface in 2 stages. Drill 7-7/8" curve and lateral with cut brine to approx 13,976' MD. Run 5-1/2", 17#, P-110 csg and cement to 2150'.

## Well Control

Type	Pressure	Test	Manufacture
Double Ram	3000	3000	Cameron

## Permit-Conditions of Approval

API: 30-015-41829

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

*Well will be reviewed for NSL subsequent to drilling RD*