

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

RECEIVED
NOV 26 2013
NMOCD ARTESIA

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
		ABN Number 30-015-41829

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
N	2	20S	30E	N	280	South	2000	West	Eddy

*** Proposed Bottom Hole Location**

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

9. Pool Information

Pool Name Gatuna Canyon Bone Spring	Pool Code 96688
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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 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	
Intrmd	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

<p>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></p> <p>Printed name: Mayte Reyes</p> <p>Title: Regulatory Analyst</p> <p>E-mail Address: mreyes1@concho.com</p> <p>Date: 11/27/2013</p>	OIL CONSERVATION DIVISION	
	Approved By: <i>I. C. Shepard</i>	
	Title: "Geologist"	
	Approved Date: <i>11/27/2013</i>	Expiration Date: <i>11/27/2015</i>
	Conditions of Approval Attached	

DISTRICT I
1025 N. FRANCE DR., HOBBS, NM 88240
Phone: (575) 303-8181 Fax: (575) 303-0720

DISTRICT II
1301 W. GRAND AVENUE, ARTISIA, NM 86210
Phone: (575) 748-1283 Fax: (575) 748-9720

DISTRICT III
1000 RIO BRAZOS RD., AZTEC, NM 87410
Phone: (505) 331-8178 Fax: (505) 334-8170

DISTRICT IV
11885 S. ST. FRANCIS DR., SANTA FE, NM 87505
Phone: (505) 478-3460 Fax: (505) 478-3482

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

Surface Location

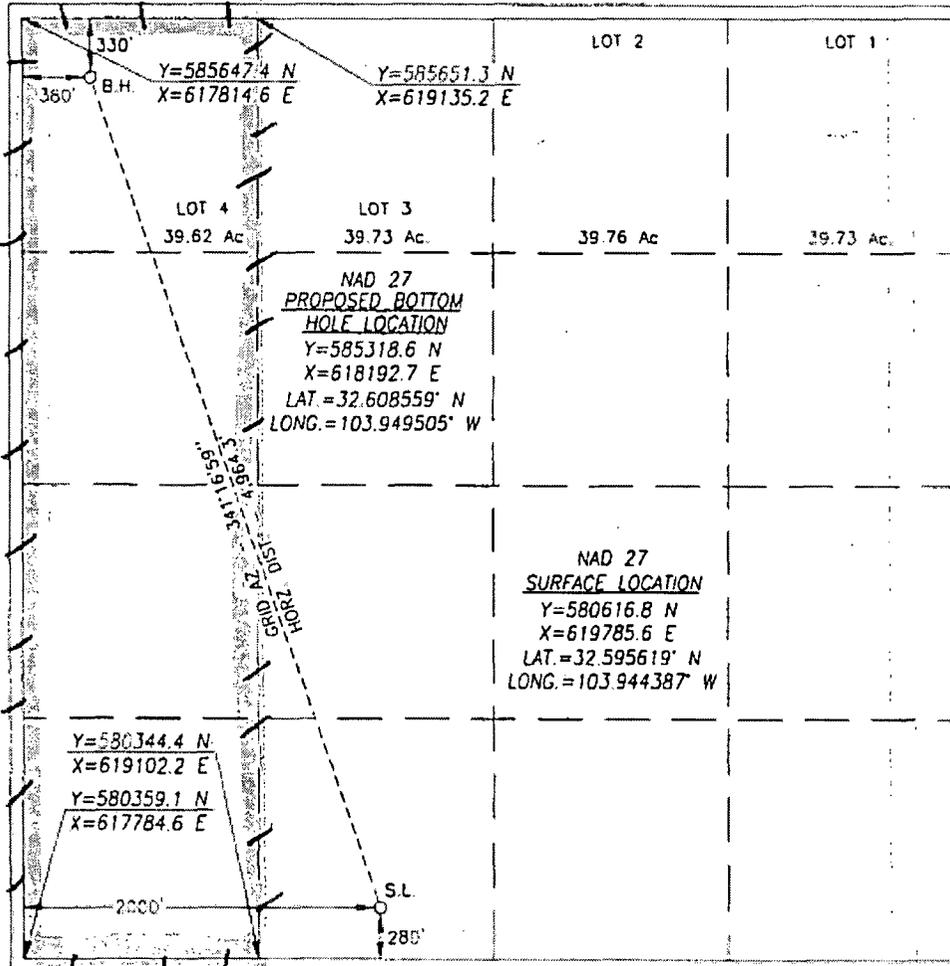
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	2	20-S	30-E		280	SOUTH	2000	WEST	EDDY

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 Parker* Date: 11/27/13
Printed Name: Melanie 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.

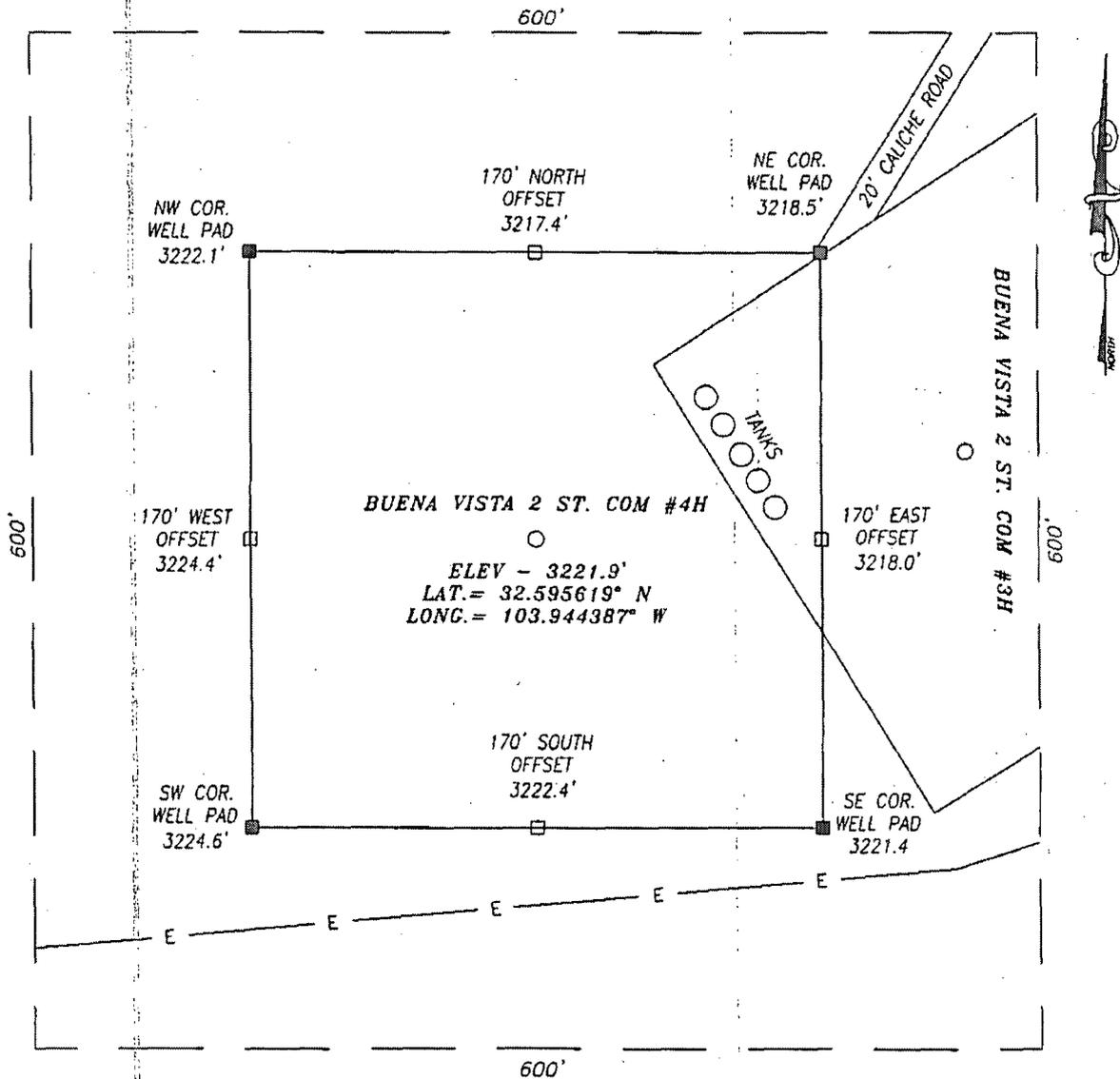
FEBRUARY 27, 2013
Date of Survey

Signature & Seal of Professional Surveyor

CHAD L. HARCROW
NEW MEXICO
17777
LICENSED PROFESSIONAL SURVEYOR

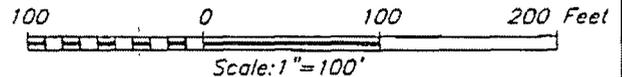
Chad Harcrow 11/26/13
Certificate No. CHAD HARCROW 17777
W.O. # 13-90 DRAWN BY: VD

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



DIRECTIONS TO LOCATION

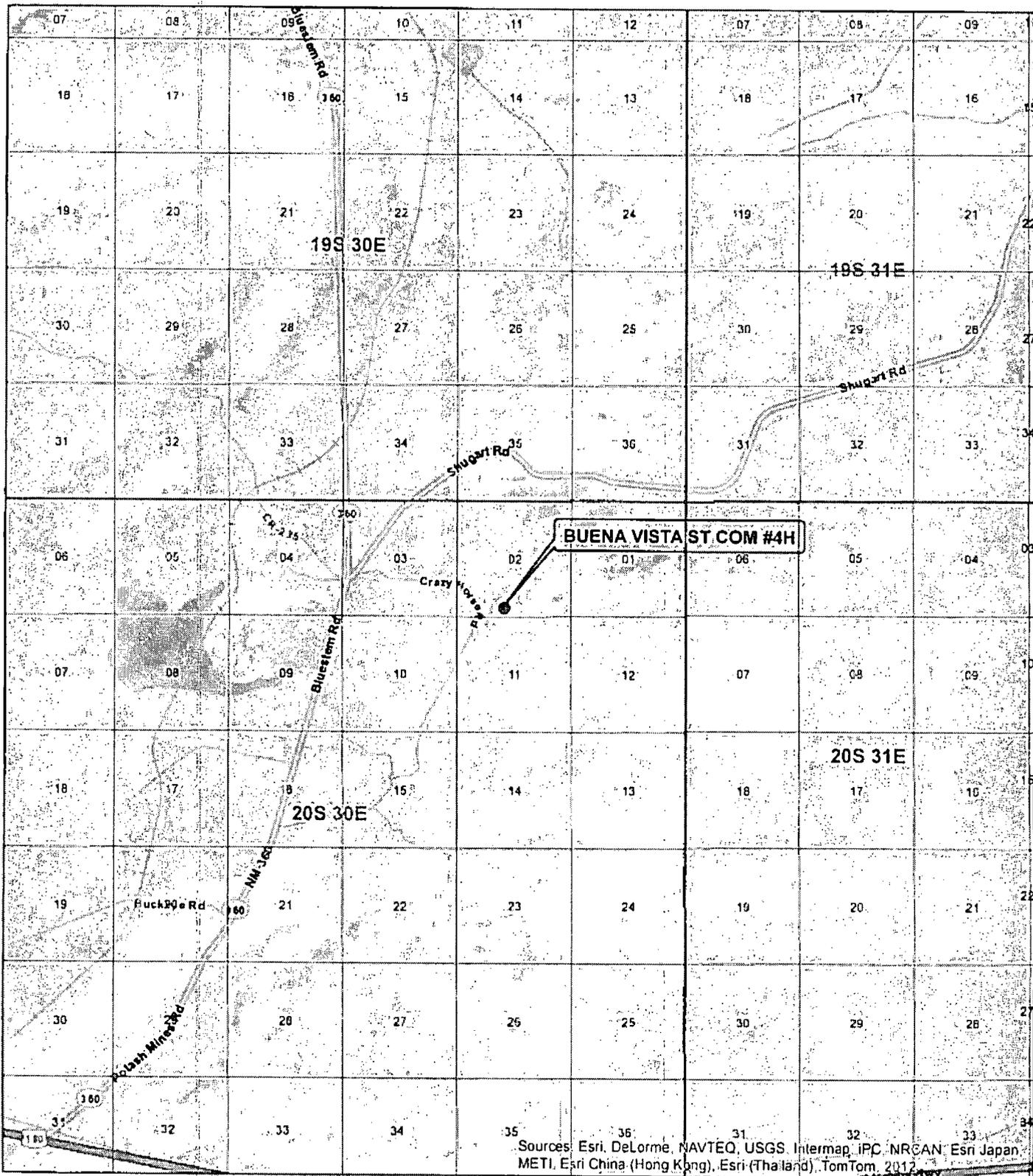
FROM THE INTERSECTION OF HWY 360 AND CR #222 SHUGART RD GO EAST ALONG CR #222 FOR APPROX. 3.9 MILES. TURN RIGHT (SOUTHEAST) ONTO A CALICHE LEASE ROAD GO APPROX. 0.9 MILES TURN RIGHT (WEST) GO APPROX 2.6 MILES TO EXISTING BUENA VISTA 2 STATE COM #3H AND WELL IS 260 FEET WEST.



HARCROW SURVEYING, LLC
 1107 WATSON, ARTESIA, N.M. 88210
 PH: (575) 513-2570 FAX: (575) 746-2158
 chad_harcrow77@yahoo.com



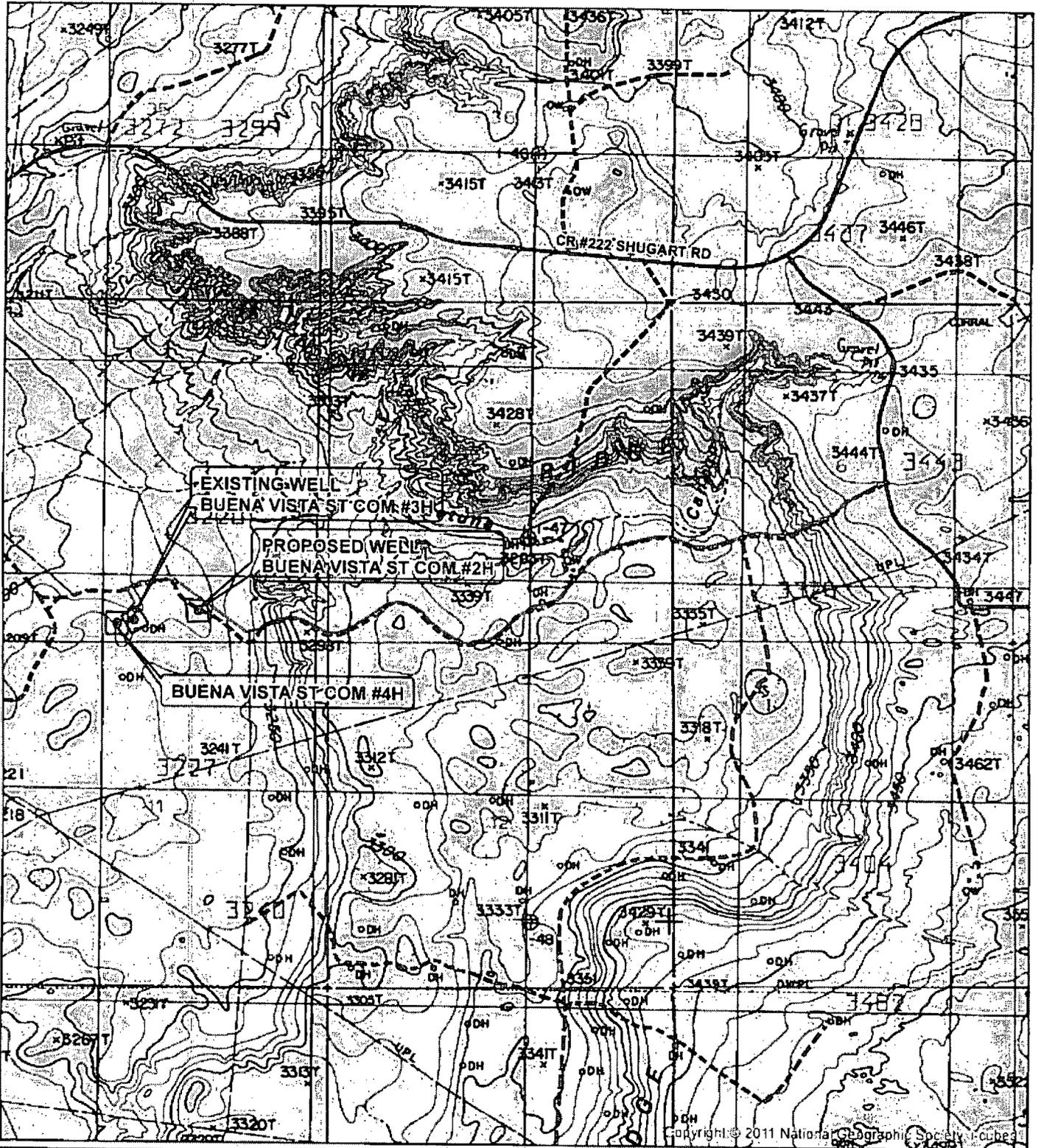
COG OPERATING, LLC		
BUENA VISTA 2 ST. COM #4H WELL LOCATED 280 FEET FROM THE SOUTH LINE AND 2000 FEET FROM THE WEST LINE OF SECTION 2, TOWNSHIP 20 SOUTH, RANGE 30 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO		
SURVEY DATE: 02/27/2013	PAGE: 1 OF 1	
DRAFTING DATE: 03/01/2013		
APPROVED BY: CH	DRAWN BY: VD	FILE: 13-90



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

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' ESL, 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

 COG OPERATING, LLC	
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

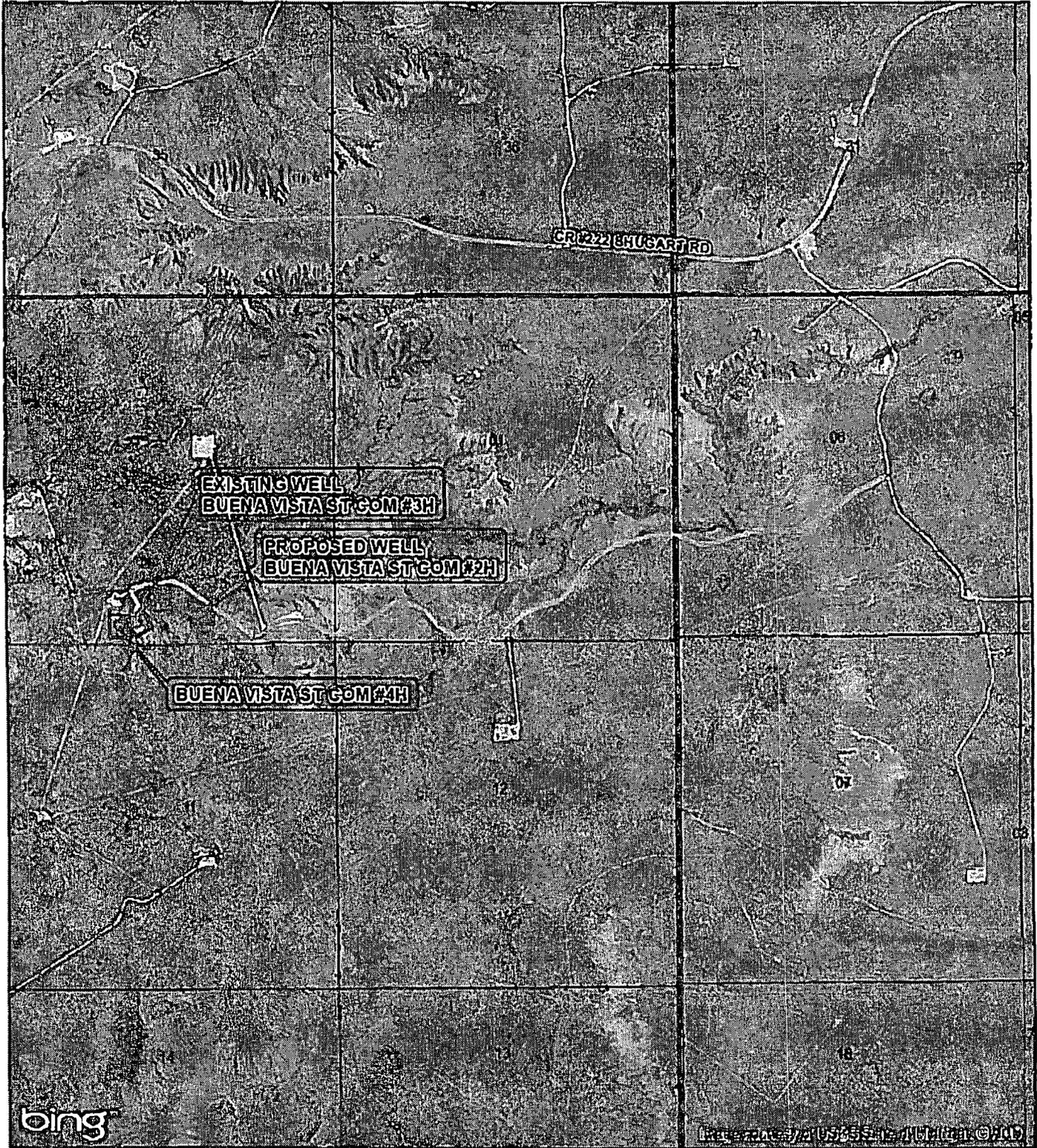


SECTION: 2 TOWNSHIP: 20 S. RANGE: 30 E. SURVEY: N.M.P.M
 COUNTY: EDDY STATE: NEW MEXICO ELEVATION: 3221.9'

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	

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

- WELL
- WELL PAD
- MAIN ROAD

		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