

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 November 14, 2012

HOBBS OCD

Energy Minerals and Natural Resources

Oil Conservation Division

AMENDED REPORT

JAN 11 2013

1220 South St. Francis Dr.

RECEIVED

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 39623		4. API Number 30-025-40917	
5. Property Name Lightning 1 State SWD		6. Well No 1.	

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
14	1	21S	33E		3480	South	2300	West	Lea

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County

9. Pool Information

SWD; Delaware	Pool Name Cherry Canyon - Boshy Canyon	Pool Code 97996	Pool Code 96100
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Additional Well Information

11. Work Type New Well	12. Well Type SWD	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 3783.8'
16. Multiple N	17. Proposed Depth 7500'	18. Formation Delaware	19. Contractor	20. Spud Date 1/20/2013
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

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	54.5	1800	1150	
Intrmd	12.25	9.625	40	5500	1675	
Open Hole	8.75	7	26	7500	500	2500

Casing/Cement Program: Additional Comments

Plan to drill a 17-1/2" hole to 1800' with Fresh Water. Run 13-3/8", 54.5#, J-55 csg and cmt to surface. Drill 12-1/4" hole to 5500' with Brine, and run 9-5/8", 40#, J55/N80 and cement to surface in 2 stages. Drill 8-3/4" hole to 7500' with cut-brine and run 7", 26#, J55 and tie back cement 3,000' into previous casing string.

22. Proposed Blowout Prevention Program **Permit Expires 2 Years From Approval Date Unless Drilling Underway**

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	3000	3000	Cameron

SWD; 1373

<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 type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input 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: 1/10/2013</p>	OIL CONSERVATION DIVISION	
	Approved By: <i>[Signature]</i>	
	Title: <i>Dist. Mgr</i>	
	Approved Date: 1-15-2013	Expiration Date: 1-15-2015
	Conditions of Approval Attached	

HOBBS OCD

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240

State of New Mexico
Energy, Minerals and Natural Resources Department

JAN 11 2013

Form C-102
Revised October 12, 2010
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT II
1301 W. GRAND AVENUE, ARTESIA, NM 88210

OIL CONSERVATION DIVISION
11885 SOUTH ST. FRANCIS DRIVE
Santa Fe, New Mexico 87505

DISTRICT III
1000 RIO BRAZOS RD., AZTEC, NM 87410

DISTRICT IV
11885 S. ST. FRANCIS DR., SANTA FE, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

API Number 30-025-40917	Pool Code 97996	Pool Name SWD; Cherry Canyon - Bushy Canyon
Property Code 39623	Property Name LIGHTNING 1 STATE SWD	Well Number 1
OGRID No. 229137	Operator Name COG OPERATING, LLC	Elevation 3783.8'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
14	1	21-S	33-E		3480	SOUTH	2300	WEST	LEA

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

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
			SWD 1373

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

LOT 4 Ac.=40.33	LOT 3 Ac.=40.23	LOT 2 Ac.=40.12	LOT 1 Ac.=40.01
LOT 5 Ac.=40.12	LOT 6 Ac.=40.13	LOT 7 Ac.=40.14	LOT 8 Ac.=40.15
LOT 12 Ac.=40.11	LOT 11 Ac.=40.13	LOT 10 Ac.=40.13	LOT 9 Ac.=40.14
LOT 13 Ac.=40.10	LOT 14 Ac.=40.12	LOT 15 Ac.=40.12	LOT 16 Ac.=40.13

NAD 27
SURFACE LOCATION
Y=550191.9 N
X=748640.6 E
LAT.=32.510002° N
LONG.=103.526768° W

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.

Melanie Barker 11/10/13
Signature Date
Melanie J. Barker
Printed Name

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.

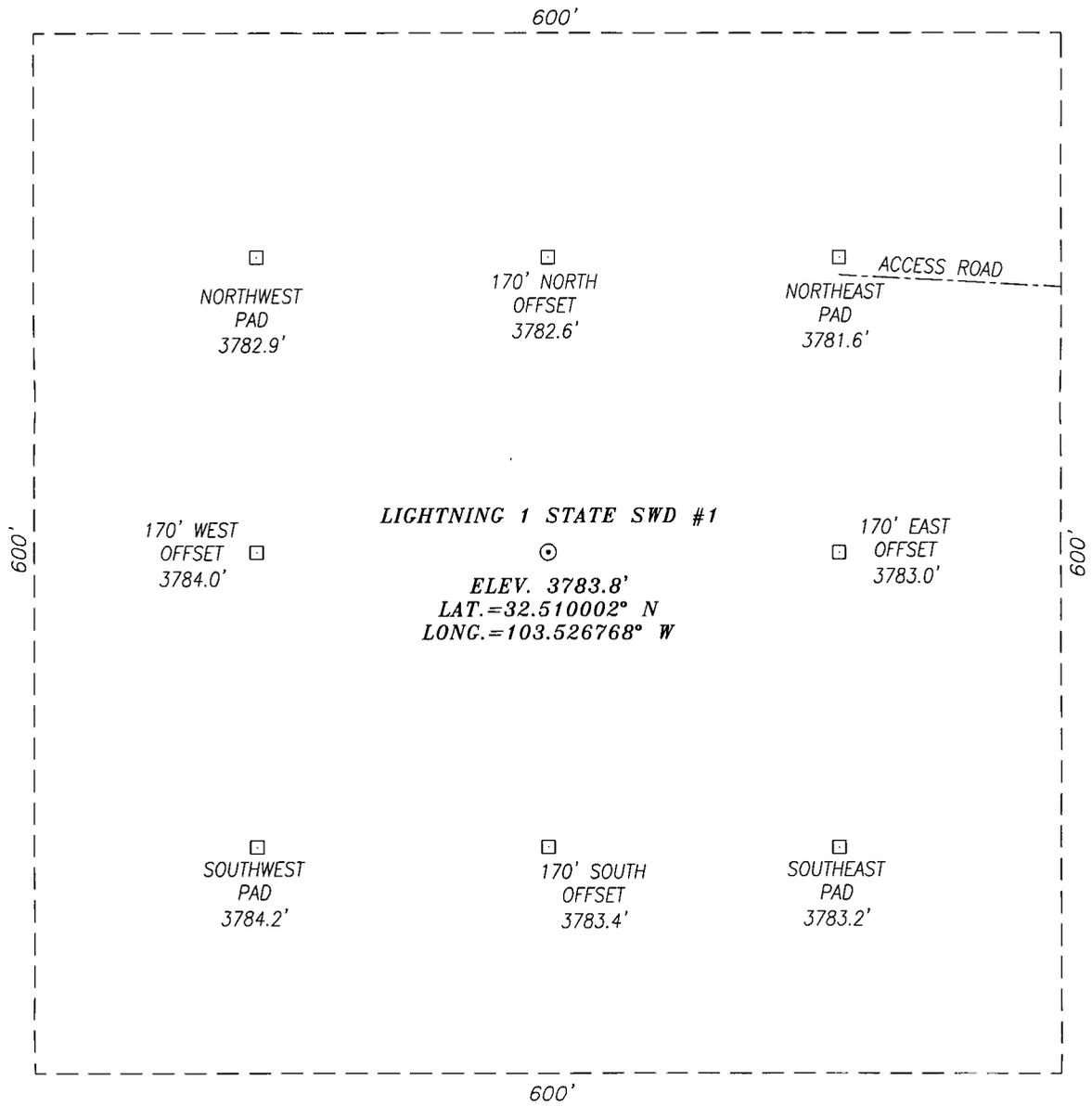
NOVEMBER 17, 2012
Date Surveyed
Signature & Seal of Professional Surveyor



Chad Harcrow 11/9/13
Certificate No. CHAD HARCROW 17777
W.O. # 12-124 2012-037

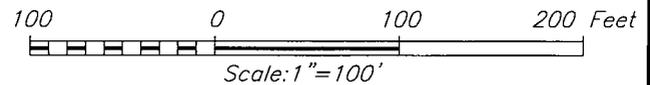
ELG 1-15-2013

SECTION 1, TOWNSHIP 21 SOUTH, RANGE 33 EAST, N.M.P.M.,
LEA COUNTY NEW MEXICO



DIRECTIONS TO LOCATION:

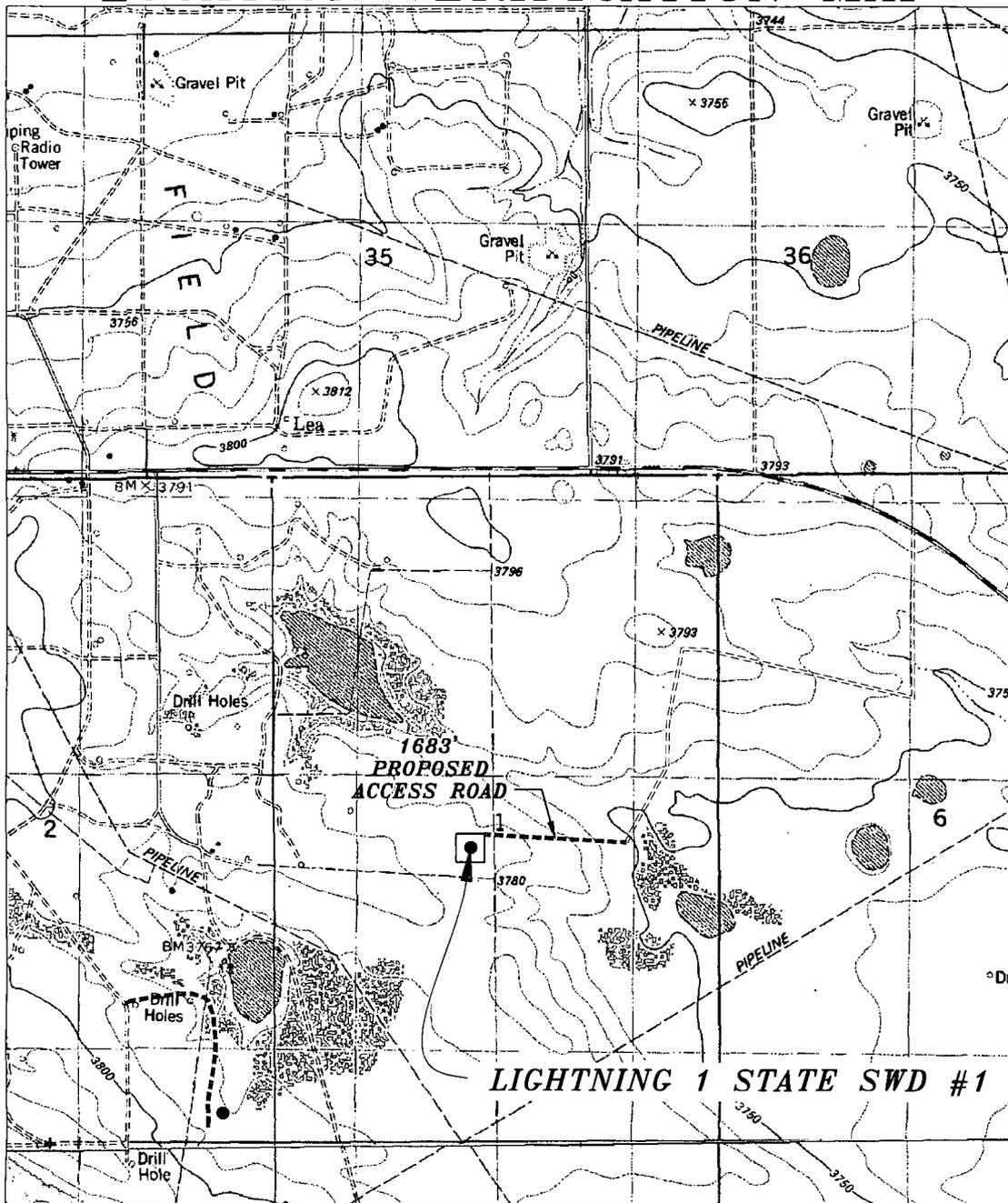
TRAVELING EAST ON 176 TURN RIGHT (SOUTH) APPROX. 0.25 MILES PAST MILE MARKER 13 ONTO CALICHE LEASE ROAD. TRAVEL ON ROAD FOR APPROX. 0.4 MILES THEN TURN RIGHT (WEST). FOLLOW ROAD FOR APPROX. 0.6 MILES THEN TURN LEFT (SOUTH). FOLLOW ROAD FOR APPROX. 0.5 MILES AND WELL IS APPROX. 1850 FEET WEST.



HARCROW SURVEYING
1107 WATSON, ARTESIA N.M. 88210
PH: (575) 513-2570
FAX: (575) 746-2808
EST. 2007

COG OPERATING, LLC	
LIGHTNING 1 STATE SWD #1 WELL LOCATED 3480 FEET FROM THE SOUTH LINE AND 2300 FEET FROM THE WEST LINE OF SECTION 1, TOWNSHIP 21 SOUTH, RANGE 33 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO	
SURVEY DATE: NOVEMBER 17, 2012	PAGE: 1 OF 1
DRAFTING DATE: DECEMBER 4, 2012	
APPROVED BY: CH	DRAWN BY: DDSI FILE: 12-124

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'

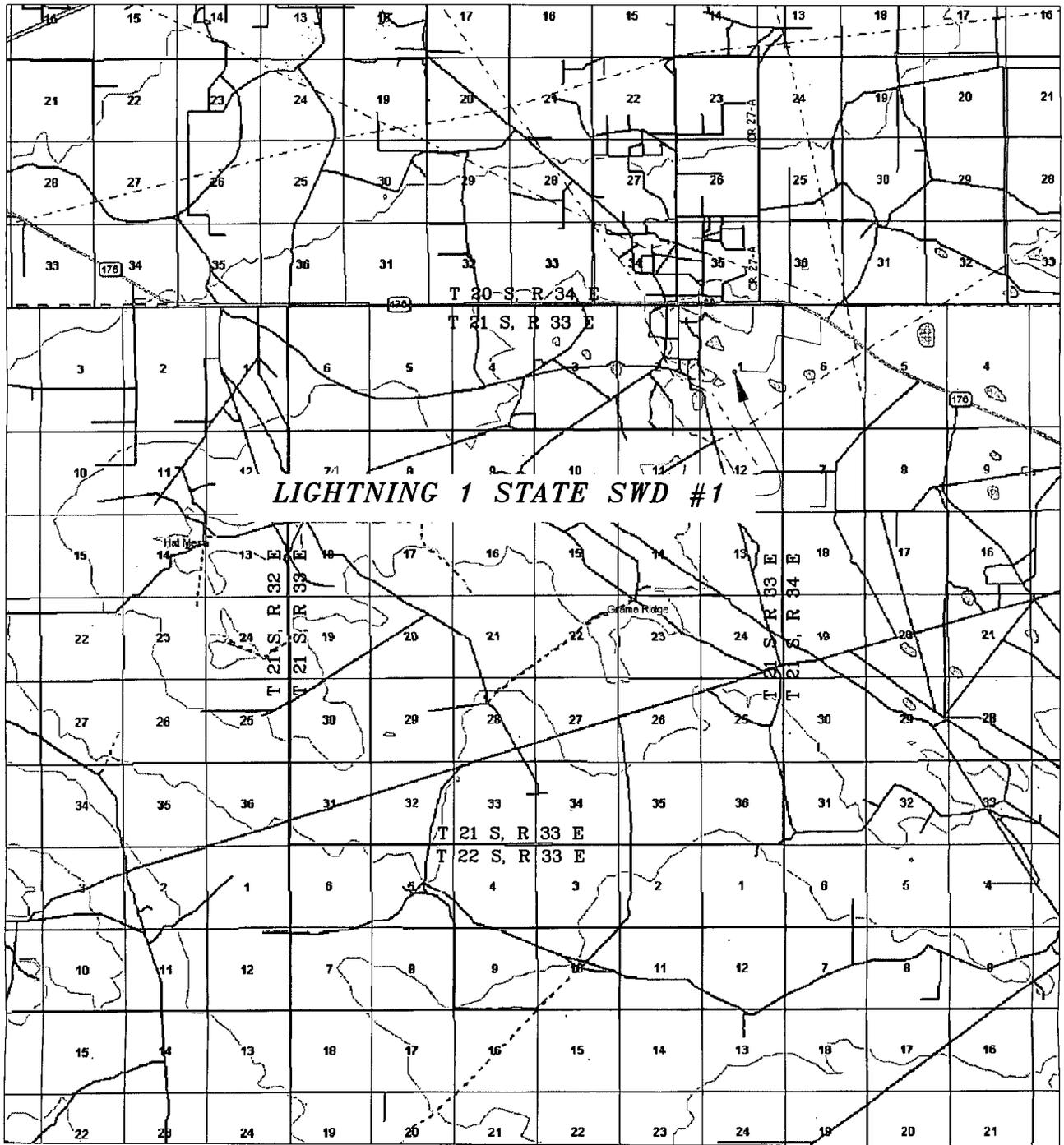
SEC. 1 TWP. 21-S RGE. 33-E
 SURVEY N.M.P.M.
 COUNTY LEA STATE NEW MEXICO
 DESCRIPTION 3480' FSL & 2300' FWL
 ELEVATION 3784'
 OPERATOR COG OPERATING, LLC
 LEASE LIGHTNING 1 STATE SWD
 U.S.G.S. TOPOGRAPHIC MAP
LEA, N.M.

HARCROW SURVEYING
 1107 WATSON, ARTESIA N.M. 88210
 PH: (575) 513-2570
 FAX: (575) 746-2808
 EST. 2007



COG OPERATING, LLC		
SURVEY DATE: NOV. 17, 2012	PAGE: 1 OF 1	
DRAFTING DATE: DEC. 06, 2012		
APPROVED BY: CH	DRAWN BY: DDSI	FILE: 12-124

VICINITY MAP



LIGHTNING 1 STATE SWD #1

SEC. 1 TWP. 21-S RGE. 33-E
 SURVEY N.M.P.M.
 COUNTY LEA STATE NEW MEXICO
 DESCRIPTION 3480' FSL & 2300' FWL
 ELEVATION 3784'
 OPERATOR COG OPERATING, LLC
 LEASE LIGHTNING 1 STATE SWD

SCALE: 1" = 2 MILES



HARCROW SURVEYING
 1107 WATSON, ARTESIA N.M. 88210
 PH: (575) 513-2570
 FAX: (575) 746-2808
 EST. 2007

COG OPERATING, LLC	
SURVEY DATE: NOVEMBER 17, 2012	PAGE: 1 OF 1
DRAFTING DATE: DECEMBER 06, 2012	
APPROVED BY: CH	DRAWN BY: DDSI
	FILE: 12-124

Lightning 1 State SWD 1

	Hole					
	Size	Casing	Wt	Depth	Cmt	TOC
Surface	17.5	13.375	54.5	1800'	1150	0
Intrmd	12.25	9.625	40	5500'	1675	0
Open Hole	8.75	7	26	7500'	500	2500'

Plan to drill a 17-1/2" hole to 1800' with Fresh Water. Run 13-3/8", 54.5#, J-55 csg and cmt to surface. Drill 12-1/4" hole to 5500' with Brine, and run 9-5/8", 40#, J55/N80 and cement to surface in 2 stages. Drill 8-3/4" hole to 7500' with cut-brine and run 7", 26#, J55 and tie back cement 3,000' into previous casing string.

Well Control

Type	Pressure	Test	Manufacture
Double Ram	3000	3000	Cameron