

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 November 14, 2012

☐ AMENDED REPORT

FEB 26 2013

RECEIVED

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		⁴ OGRID Number 229137 ⁵ APT Number 30025-41028
³ Property Code 39751	² Property Name West Pearl 36 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
A	36	19S	34E		990	North	990	East	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, Belowcare	Pool Name SWD; CHERRY CANYON - BRUSHY CANYON	Pool Code 9799
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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 3736.6'
¹⁶ Multiple N	¹⁷ Proposed Depth 8175	¹⁸ Formation Delaware	¹⁹ Contractor	²⁰ Spud Date 3/15/2013
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	1785	1125	
Intnrd	12.25	9.625	36	3475	850	
Open Hole	8.75	7	26	8175	700	2975

Casing/Cement Program: Additional Comments

Plan to drill a 17-1/2" hole to 1785' with Fresh Water. Run 13-3/8", 54.5#, J-55 csg and cmt to surface. Drill 12-1/4" hole to 3475' with Brine, and run 9-5/8", 36# J55 and cement to surface. Drill 8-3/4" hole to 8175' with cut-brine and run 7", 26#, J55 and tie back cement 500' into previous casing string.

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	3000	3000	Cameron

Permit Expires 2 Years From Approval
Date Unless Drilling Underway

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 Approved By: <i>[Signature]</i>	
Printed name: Mayte Reyes		Title: Petroleum Engineer	
Title: Regulatory Analyst		Approved Date: 03/01/13 Expiration Date: 03/01/15	
E-mail Address: mreyes1@concho.com			
Date: 2/25/2013	Phone: 575-748-6945	Conditions of Approval Attached	

CONSERVATION CERT # CP-070P-002

MAR 04 2013

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240
Phone: (575) 393-0161 Fax: (575) 393-0720

DISTRICT II
1301 D. GRAND AVENUE, ARTESIA, NM 88210
Phone: (505) 748-1283 Fax: (505) 748-0720

DISTRICT III
1000 RIO BRAZOS RD., AZTEC, NM 87410
Phone: (505) 334-6176 Fax: (505) 334-6170

DISTRICT IV
11885 S. ST. FRANCIS DR., SANTA FE, NM 87505
Phone: (505) 478-3480 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

FEB 26 2013

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION

API Number 30025-41028	Pool Code 96100 97996	Pool Name SWD; Delaware CHERY CANYON - BRUSHY CANYON
Property Code 39751	Property Name WEST PEARL 36 STATE SWD	Well Number 1
GRID No. 229137	Operator Name COG OPERATING, LLC	Elevation 3736.6

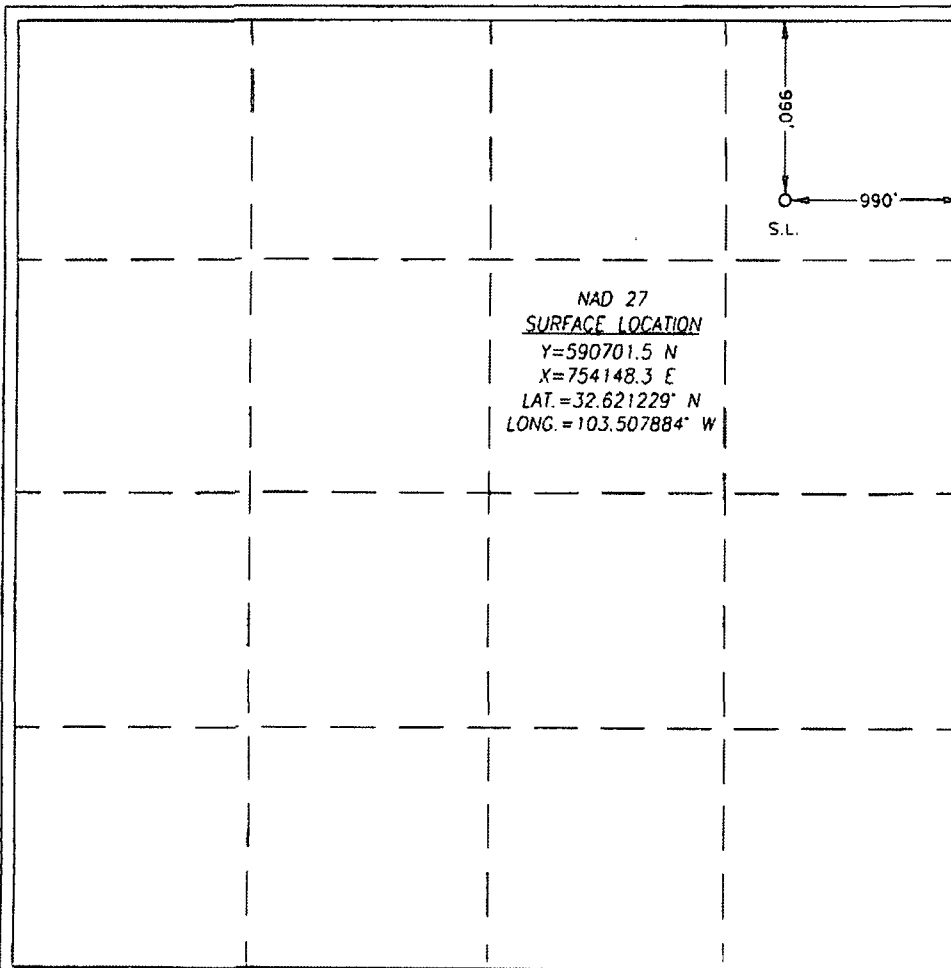
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	36	19-S	34-E		990	NORTH	990	EAST	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.			

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



NAD 27
SURFACE LOCATION
Y=590701.5 N
X=754148.3 E
LAT.=32.621229° N
LONG.=103.507884° 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 J. Parker 2/25/13
Signature Date
Melanie J. Parker
Printed Name
mjparker@concho.com
E-mail Address

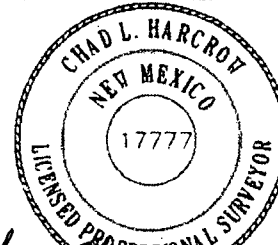
SURVEYOR CERTIFICATION

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 14, 2013

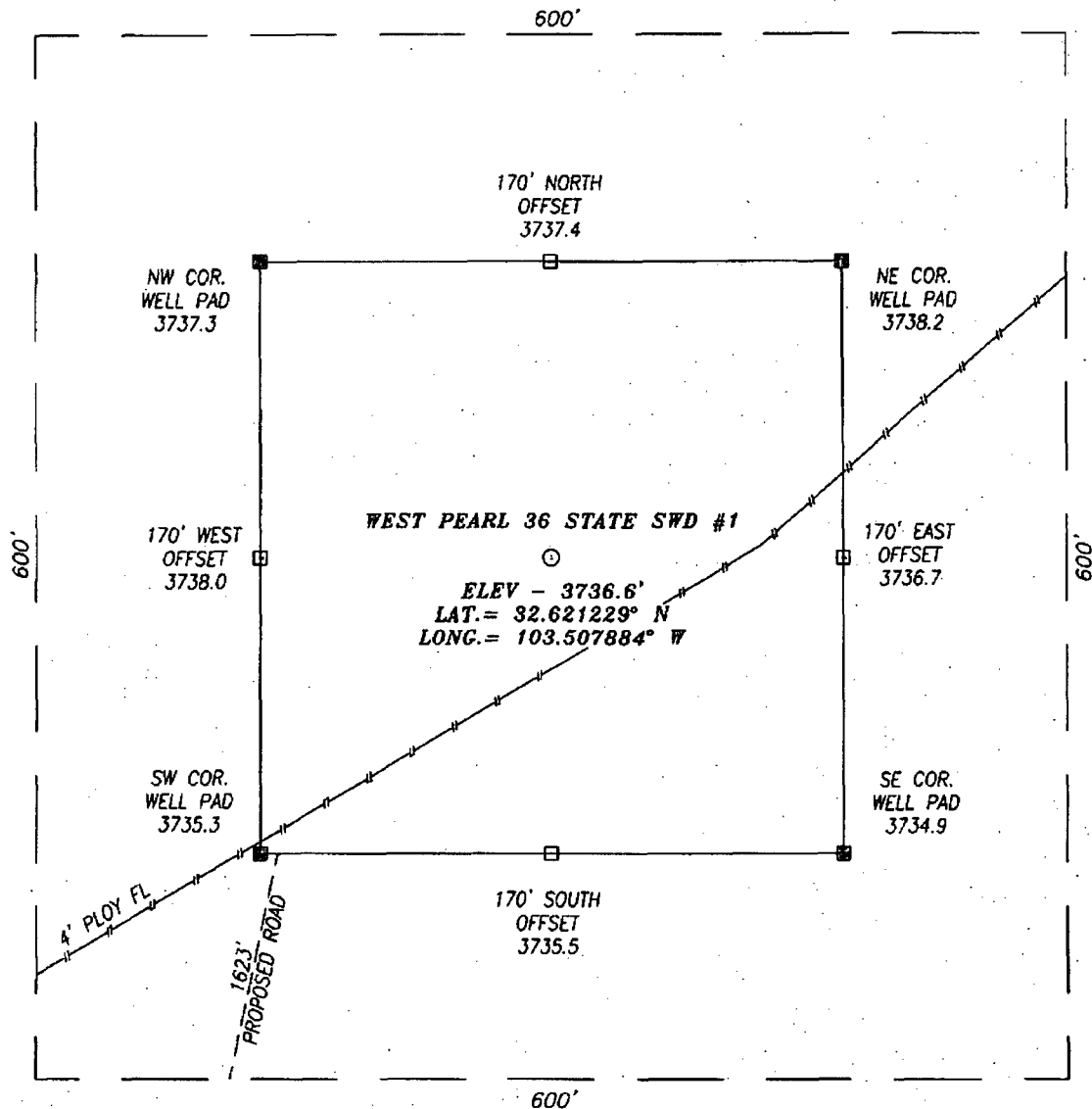
Date of Survey

Signature & Seal of Professional Surveyor



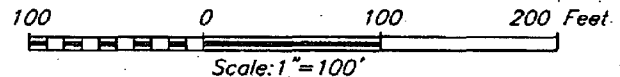
Chad L. Harcrow 2/19/13
Certificate No. CHAD HARCROW 17777
W.C. # 12-125 DRAWN BY: VC

SECTION 36, TOWNSHIP 19 SOUTH, RANGE 34 EAST, N.M.P.M.,
LEA COUNTY NEW MEXICO



DIRECTIONS TO LOCATION

HEADING EAST ON HWY 62/180 APPROX. 0.5 MILES AFTER MILE MARKER 81 TURN RIGHT (SOUTH) ONTO MARATHON RD. GO APPROX. 1.2 MILES TURN LEFT (SOUTHEAST) ONTO A CALICHE RD. GO APPROX 1360 FEET TURN LEFT (NORTH) ONTO A CALICHE RD. GO APPROX. 990 FEET TURN RIGHT (EAST) ONTO PROPOSED ROAD. GO APPROX. 323 FEET TURN LEFT (NORTH) GO APPROX 1300 FEET TO PROPOSED WELL.



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

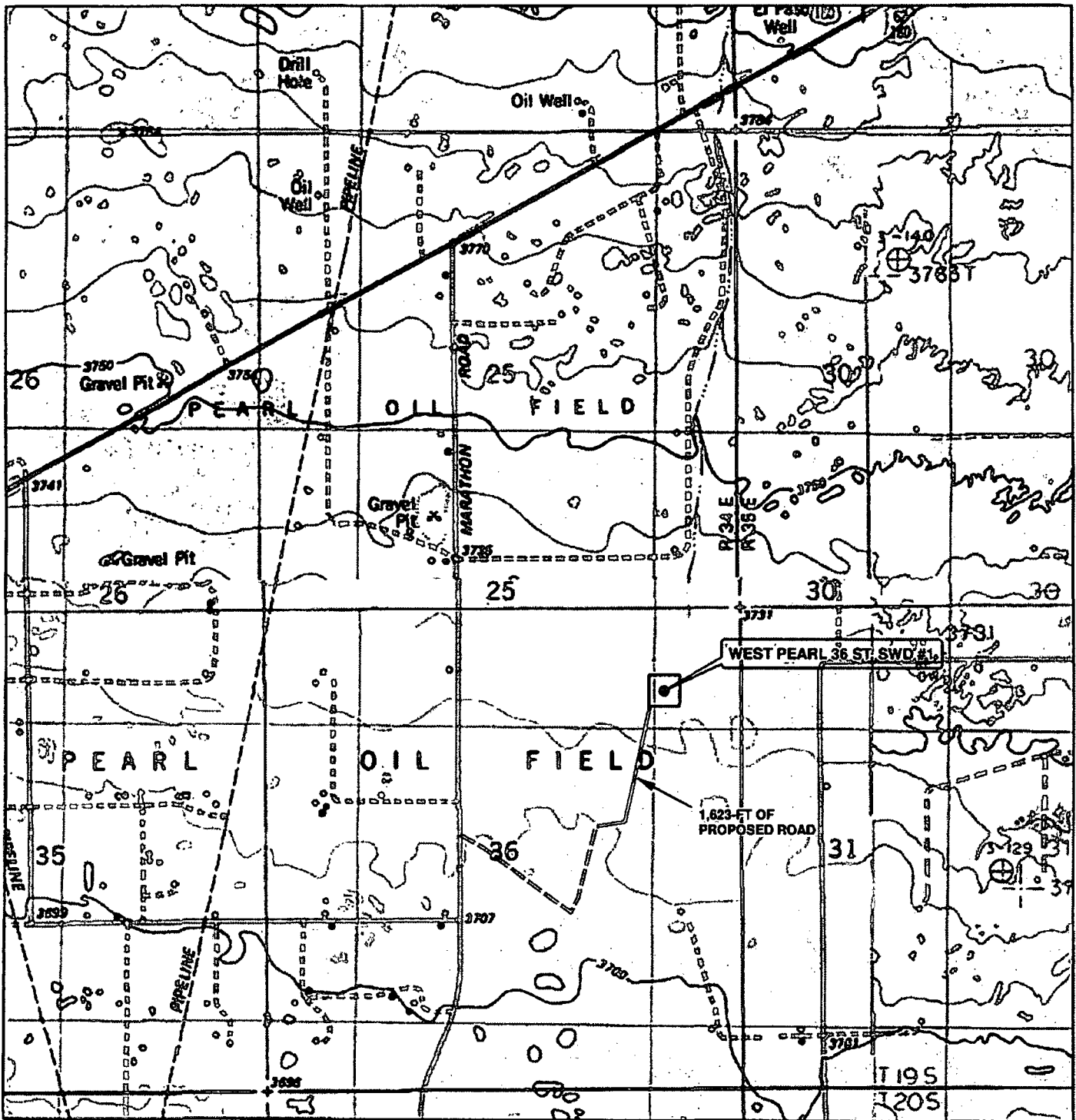


COG OPERATING, LLC

WEST PEARL 36 ST SWD #1 WELL
LOCATED 990 FEET FROM THE NORTH LINE
AND 990 FEET FROM THE EAST LINE OF SECTION 36,
TOWNSHIP 19 SOUTH, RANGE 34 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO

SURVEY DATE: 02/14/2013	PAGE: 1 OF 1
DRAFTING DATE: 02/15/2013	
APPROVED BY: CH	DRAWN BY: VD FILE: 12-125

LOCATION VERIFICATION MAP



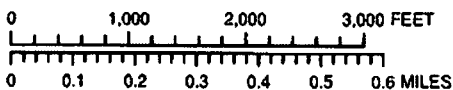
SEC. 36, TWP. 19S, RGE. 34E
 SURVEY: N.M.P.M.
 COUNTY: LEA STATE: NEW MEXICO
 DESCRIPTION: WEST PEARL 36 ST. SWD #1
 990' FNL, 990' FEL

ELEVATION: 3736.6'
 OPERATOR: COG OPERATING
 LEASE: WEST PEARL 36

W.O. # 12-125

- WELL
- WELL PAD
- PROPOSED ROAD
- EXISTING ROAD

1 IN = 1,500 FT



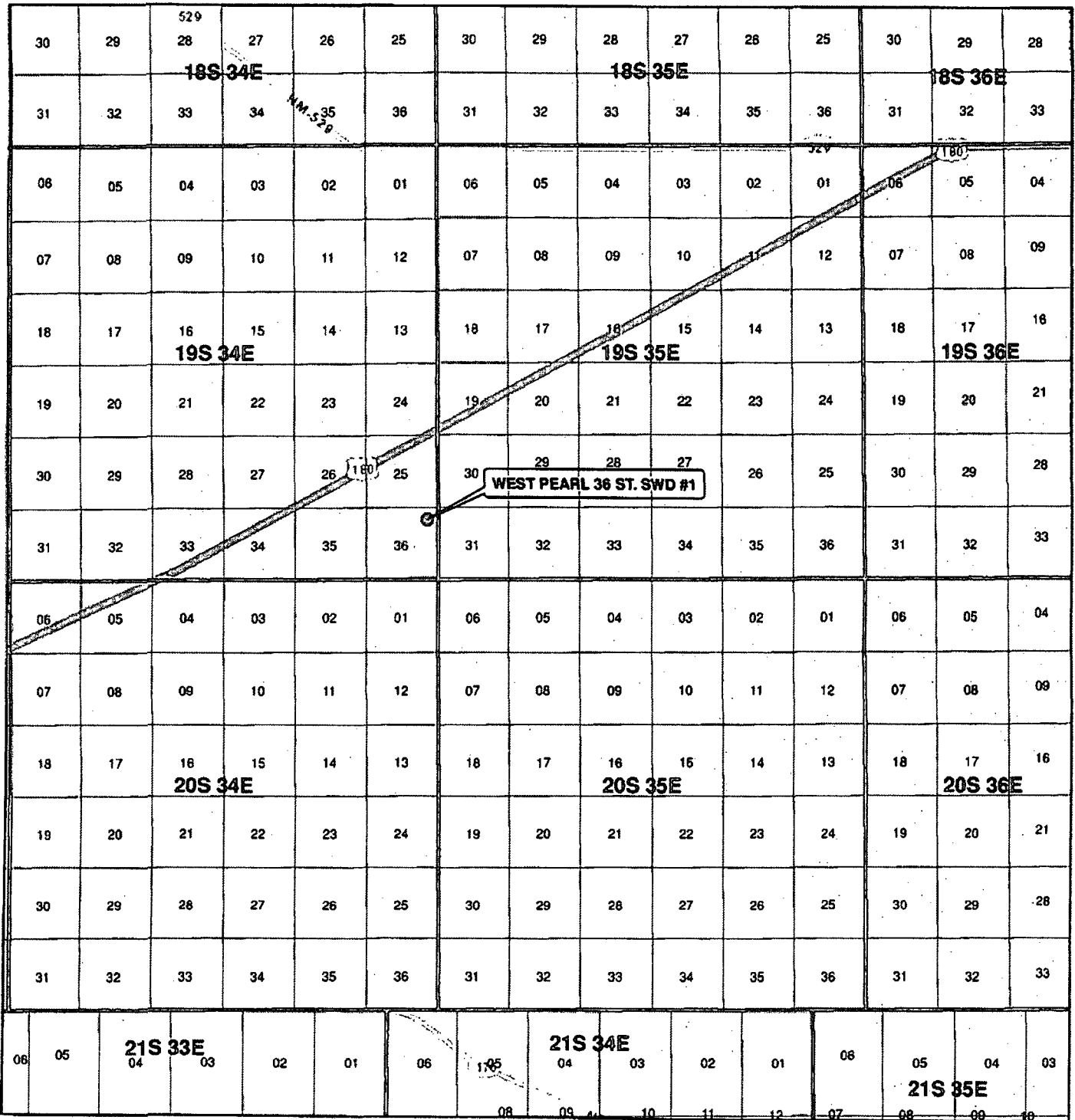
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 1107 WATSON, ARTESIA N.M. 88210
 PH: (575) 513-2570 FAX: (575) 746-2158
 chad_harcrow77@yahoo.com



MAP DATE: 2/15/2013

map produced by GeoWhiz

VICINITY MAP



SEC. 36, TWP. 19S, RGE. 34E
 SURVEY: N.M.P.M
 COUNTY: LEA STATE: NEW MEXICO
 DESCRIPTION: WEST PEARL 36 ST. SWD #1
 990' FNL, 990' FEL

ELEVATION: 3738.6'
 OPERATOR: COG OPERATING
 LEASE: WEST PEARL 36

WELL
 TOWNSHIP
 SECTION

1 IN = 10,000 FT

0 0.5 1 1.5 2 2.5 3 MILES

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



W.O. # 12-125

MAP DATE: 2/15/2013
 map produced by GeoWhiz

West Pearl 36 State SWD 1

	Hole Size	Casing	Wt	Depth	Cmt	TOC
Surface	17.5	13.375	54.5	1785'	1125	0
Intrmd	12.25	9.625	36	3475'	850	0
Open Hole	8.75	7	26	8175'	700	2975'

Plan to drill a 17-1/2" hole to 1785' with Fresh Water. Run 13-3/8", 54.5#, J-55 csg and cmt to surface. Drill 12-1/4" hole to 3475' with Brine, and run 9-5/8", 36# J55 and cement to surface. Drill 8-3/4" hole to 8175' with cut-brine and run 7", 26#, J55 and tie back cement 500' into previous casing string.

Well Control

Type	Pressure	Test	Manufacture
Double Ram	3000	3000	Cameron

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

John Bemis
Cabinet Secretary

Brett F. Woods, Ph.D.
Deputy Cabinet Secretary

HOBBS OCD

FEB 26 2013

Jami Bailey
Division Director
Oil Conservation Division



RECEIVED

Administrative Order SWD-1375
January 7, 2013

**ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION**

Under the provisions of 19.15.26.8B NMAC, COG Operating LLC, seeks an administrative order to utilize its proposed West Pearl 36 State SWD Well No. 1 (API 30-025-NA) to be located 990 feet from the North line and 990 feet from the East line, Unit letter A of Section 36, Township 19 South, Range 34 East, NMPM, Lea County, New Mexico, for produced water disposal purposes.

THE DIVISION DIRECTOR FINDS THAT:

The application has been duly filed under the provisions of 19.15.26.8B NMAC and satisfactory information has been provided that affected parties as defined in said rule have been notified and no objections have been received within the prescribed waiting period. The applicant has presented satisfactory evidence that all requirements prescribed in 19.15.26.8 NMAC have been met and the operator is in compliance with 19.15.5.9 NMAC.

IT IS THEREFORE ORDERED THAT:

The applicant, COG Operating LLC, is hereby authorized to utilize its proposed West Pearl 36 State SWD Well No. 1 (API 30-025-NA) to be located 990 feet from the North line and 990 feet from the East line, Unit letter A of Section 36, Township 19 South, Range 34 East, NMPM, Lea County, New Mexico, for disposal of oil field produced water (UIC Class II only) into the Cherry Canyon and Brushy Canyon members of the Delaware Mountain Group through perforations from approximately 6300 feet to 7900 feet through internally coated tubing and a packer set within 100 feet of the permitted interval.

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the disposed water enters only the approved disposal interval and is not permitted to escape to other formations or onto the surface.

After installing tubing, the casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge or an approved leak detection device in order to determine leakage in the casing, tubing, or packer. The casing shall be pressure tested from the surface to the packer setting depth to assure casing integrity.

The well shall pass an initial mechanical integrity test ("MIT") prior to initially commencing disposal and prior to resuming disposal each time the disposal packer is unseated. All MIT testing procedures and schedules shall follow the requirements in Division Rule 19.15.26.11A. NMAC. The Division Director retains the right to require at any time wireline verification of completion and packer setting depths in this well.

The wellhead injection pressure on the well shall be limited to **no more than 1260 psi**. In addition, the disposal well or system shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface tubing pressure to the maximum allowable pressure for this well.

The Director of the Division may authorize an increase in tubing pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the disposed fluid from the target formation. Such proper showing shall be demonstrated by sufficient evidence including but not limited to an acceptable Step-Rate-Test.

The operator shall notify the supervisor of the Division's district office of the date and time of the installation of disposal equipment and of any MIT test so that the same may be inspected and witnessed. The operator shall provide written notice of the date of commencement of disposal to the Division's district office. The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Division Rules 19.15.26.13 and 19.15.7.24 NMAC.

Without limitation on the duties of the operator as provided in Division Rules 19.15.29 and 19.15.30 NMAC, or otherwise, the operator shall immediately notify the Division's district office of any failure of the tubing, casing or packer in the well, or of any leakage or release of water, oil or gas from around any produced or plugged and abandoned well in the area, and shall take such measures as may be timely and necessary to correct such failure or leakage.

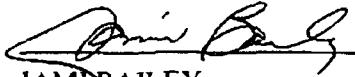
The injection authority granted under this order is not transferable except upon division approval. The division may require the operator to demonstrate mechanical integrity of any injection well that will be transferred prior to approving transfer of authority to inject.

The division may revoke this injection permit after notice and hearing if the operator is in violation of 19.15.5.9 NMAC.

The disposal authority granted herein shall terminate two years after the effective date of this order if the operator has not commenced injection operations into the subject well. One year after the last date of reported disposal into this well, the Division shall consider the well abandoned, and the authority to dispose will terminate *ipso facto*. The Division, upon written request mailed by the operator prior to the termination date, may grant an extension thereof for good cause.

Compliance with this order does not relieve the operator of the obligation to comply with other applicable federal, state or local laws or rules, or to exercise due care for the protection of fresh water, public health and safety and the environment.

Jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh or protectable waters or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the disposal authority granted herein.



JAMI BAILEY
Director

JB/wvjj

cc: Oil Conservation Division – Hobbs District Office
State Land Office – Oil, Gas, and Minerals Division