

**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

Energy Minerals and Natural Resources

Oil Conservation Division

1220 South St. Francis Dr.

Santa Fe, NM 87505

AMENDED REPORT  
**NM OIL CONSERVATION**  
ARTESIA DISTRICT

NOV 20 2014

**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 313914	Property Name Reposado 2 State SWD	APL Number 30-015-42813 Well No 1

**7. Surface Location**

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
K	2	26S	29E		2310'	South	2310'	West	Eddy

**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**

Pool Name SWD: Devonian	Pool Code 96101
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**Additional Well Information**

Work Type New Well	Well Type SWD	Cable/Rotary	Lease Type State	Ground Level Elevation 3023.6
Multiple N	Proposed Depth 16900'	Formation Devonian	Contractor	Spud Date 12/1/2014
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	26	20	94	575'	1500	0
Intrmd	17.5	13.375	61	3175'	1750	0
Intrmd 2	12.25	9.625	43.5	10300'	1750	0
Intrmd 3 Liner	8.5	7	29	9800' - 15450'	800	9800'
OH Disposal	6.125	NA	NA	16900'	NA	NA

**Casing/Cement Program: Additional Comments**

Plan to drill a 26" hole to 575' with Fresh Water. Run 20", 94#, J55 csg and cmt to surface. Drill 17-1/2" hole to 3175' with Brine, and run 13-3/8", 61#, J55 and cement to surface. Drill 12-1/4" hole to 10,300' with cut brine, and run 9-5/8", 43.5#, HCP110 and cement to surface. Drill 8-1/2" hole to approx 15,450' ( or no more than 100' into the top of the Devonian) with WBM and run 7", 29#, HCP110 drilling liner with TOL @ approx 9800' and cement to TOL. Drill a 6-1/8" hole to 16,900' for open hole completion. Will isolate OH with plug set inside casing prior to RDMD.

**22. Proposed Blowout Prevention Program**

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	5000	5000	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: 11/19/2014  
Phone: 575-748-6945

**OIL CONSERVATION DIVISION**

Approved By: *J. C. Shaffer*  
Title: *Geologist*  
Approved Date: *11-20-2014* Expiration Date: *11-26-2016*

Conditions of Approval Attached: *See Below COA*

SWD-1386 expires 1-25-15 unless well is actively injecting, per SWD order. May need to request extension thru NMOCD / Santa Fe if you are unable to activate the well prior to that date.

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

Jami Bailey  
Division Director  
Oil Conservation Division



Administrative Order SWD-1386  
January 25, 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 Reposado 2 State SWD Well No. 1 (API 30-015-NA) to be located 2310 feet from the South line and 2310 feet from the West line, Unit letter K of Section 2, Township 26 South, Range 29 East, NMPM, Eddy 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 Reposado 2 State SWD Well No. 1 (API 30-015-NA) to be located 2310 feet from the South line and 2310 feet from the West line, Unit letter K of Section 2, Township 26 South, Range 29 East, NMPM, Eddy County, New Mexico, for disposal of oil field produced water (UIC Class II only) into the Devonian formation through an open hole interval from approximately 15500 feet to 16900 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 3100 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.

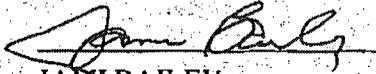
The injection authority granted under this order is not transferable except upon division approval. The division may require the operator to demonstrate mechanical integrity of any injection well that will be transferred prior to approving transfer of authority to inject.

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.



JAMN BAILEY  
Director

JB/wvjj

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

DISTRICT I  
1623 N. FRENCH DR., HOBBS, NM 88240  
Phone: (575) 393-5181 Fax: (575) 393-0720

DISTRICT II  
1381 S. GRAND AVENUE, ARTESIA, NM 88210  
Phone: (575) 748-1283 Fax: (575) 748-0720

DISTRICT III  
1000 RIO BRAZOS RD., AZTEC, NM 87410  
Phone: (505) 336-8176 Fax: (505) 336-8170

DISTRICT IV  
11885 S. ST. FRANCIS DR., SANTA FE, NM 87505  
Phone: (505) 478-3460 Fax: (505) 478-3462

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 30-025-015-428B	Pool Code 96101	Pool Name SWD; Devonian
Property Code 313914	Property Name REPOSADO 2 STATE SWD.	Well Number 1
OCRID No. 229137	Operator Name COG OPERATING, LLC	Elevation 3023.6

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	2	26-S	29-E		2310	SOUTH	2310	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	EDDY

Dedicated Acres N/A	Joint or Infill	Consolidation Code	Order No. SWD-1386
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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

LOT 4	LOT 3	LOT 2	LOT 1
41.92 Ac	42.02 Ac	41.94 Ac	42.05 Ac

2310' ——— S.L.

NAD 27  
SURFACE LOCATION  
Y=389544.5 N  
X=617119.5 E  
LAT.=32.070409' N  
LONG.=103.955234' W

2310'

**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* 11/19/11  
Signature Date

Melanie J Parker  
Printed Name  
mparker@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.

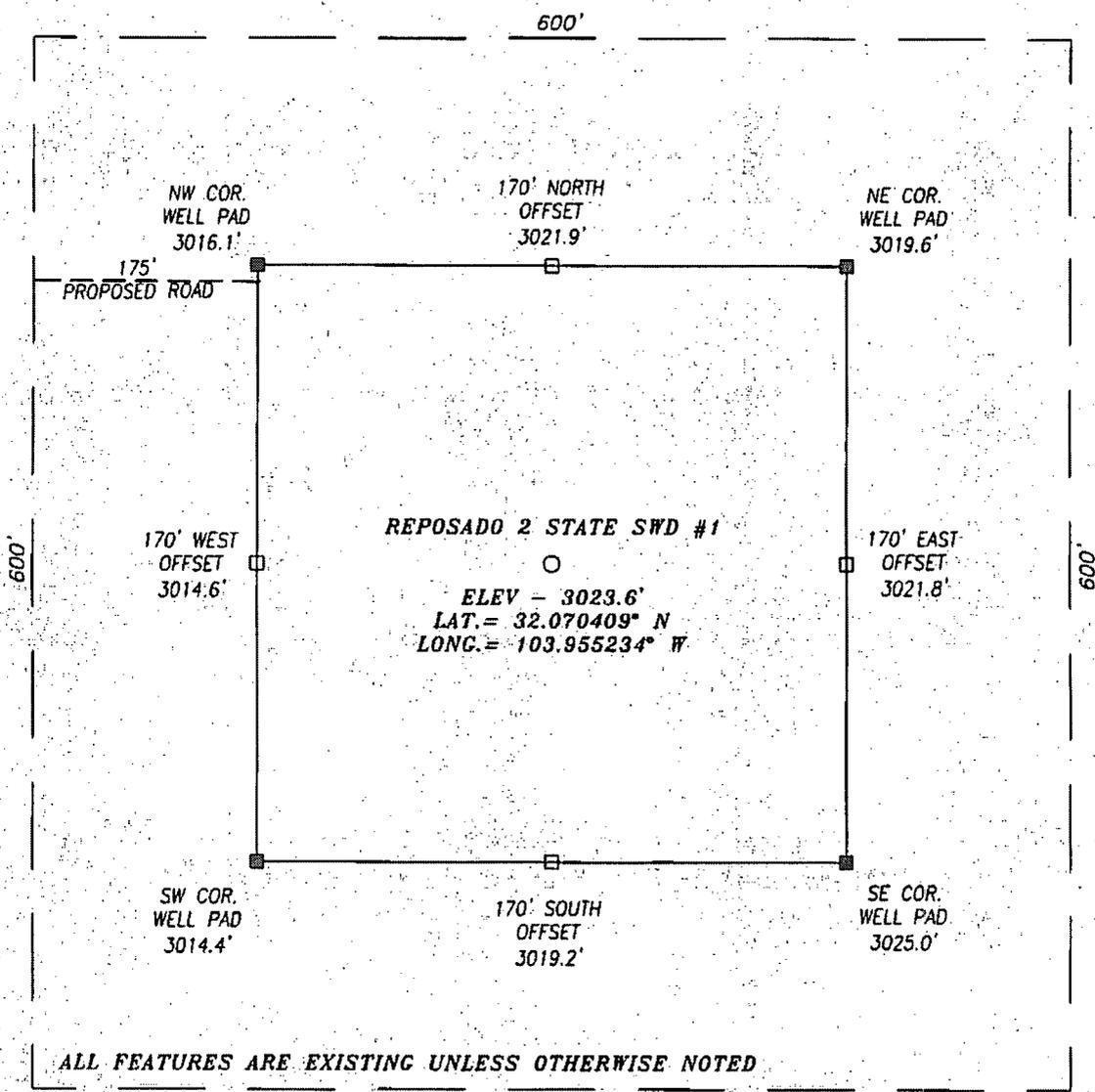
MARCH 26, 2013  
Date of Survey

Signature & Seal of Professional Surveyor



Chad L. Hargrow 4/4/13  
Certificate No. CHAD HARGROW 17777  
W.O. # 13-151 DRAWN BY: VD

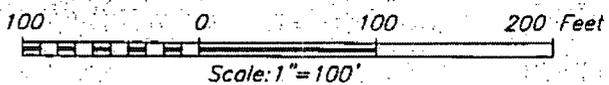
SECTION 2, TOWNSHIP 26 SOUTH, RANGE 29 EAST, N.M.P.M.,  
 EDDY COUNTY NEW MEXICO



ALL FEATURES ARE EXISTING UNLESS OTHERWISE NOTED

DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF HWY 285 AND CR #725 (LONGHORN RD) GO APPROX. 2.5 MILES NORTHEAST ALONG CR #725 TURN LEFT (NORTH) GO APPROX. 0.3 MILES TURN RIGHT (EAST) GO APPROX. 1.0 MILE ON WINDING ROAD TURN RIGHT (SOUTHEAST) GO APPROX. 0.6 MILES TURN LEFT (NORTHEAST) ONTO PIPELINE RD. GO APPROX. 0.2 MILES TURN RIGHT (EAST) GO APPROX. 2.3 MILES TURN LEFT (NORTH) ONTO A TWO TRACK ROAD GO APPROX. 0.3 MILES TURN RIGHT (NORTHEAST) GO APPROX. 0.2 MILES AND PROPOSED WELL IS 380 FEET EAST.

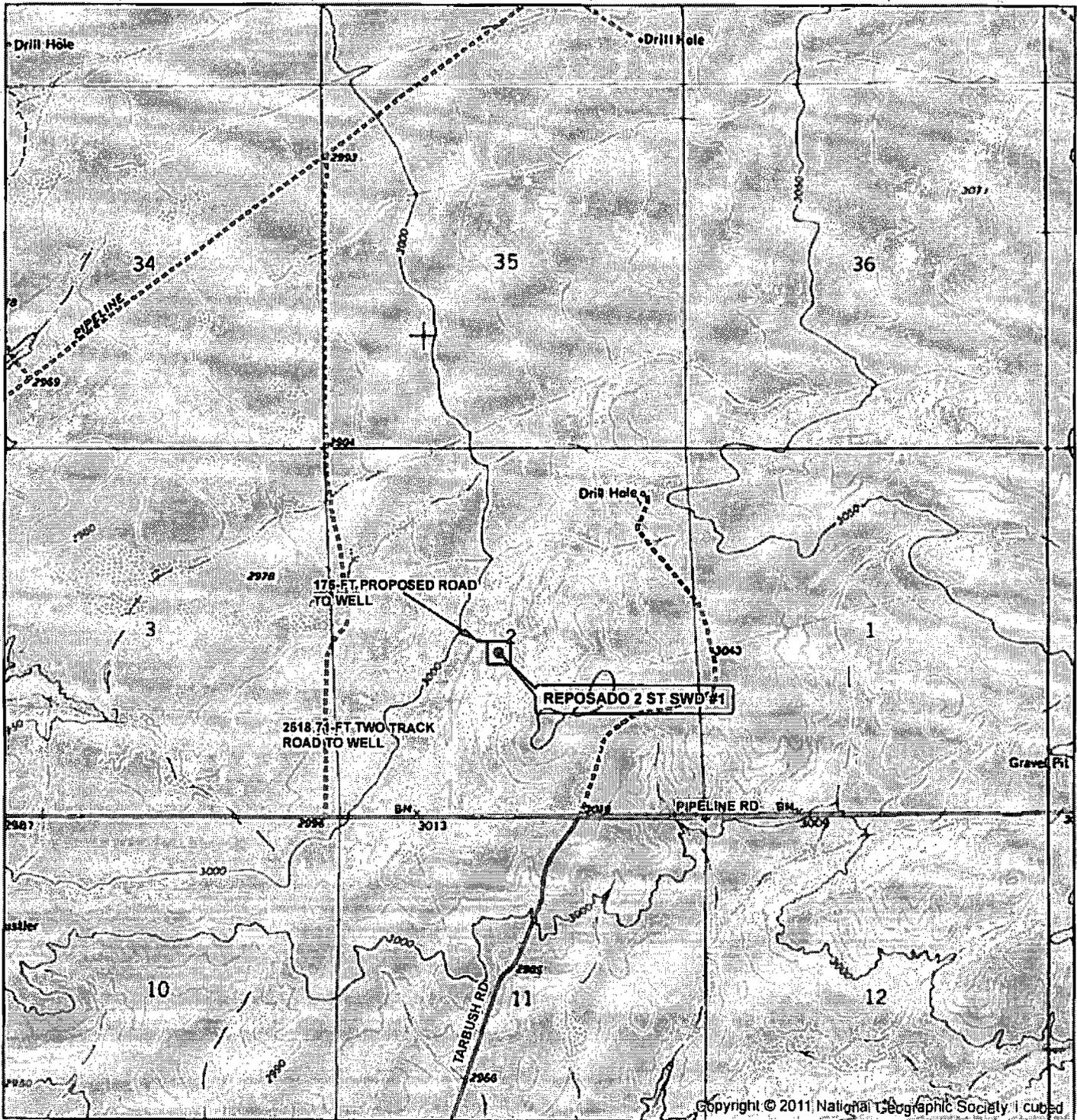


**HARCROW SURVEYING, LLC**  
 1107 WATSON, ARTESIA, N.M. 88210  
 PH: (575) 513-2570. FAX: (575) 746-2158  
 chad\_harcrow77@yahoo.com



<b>COG OPERATING, LLC</b>		
REPOSADO 2 STATE SWD #1 WELL LOCATED 2310 FEET FROM THE SOUTH LINE AND 2310 FEET FROM THE WEST LINE OF SECTION 2, TOWNSHIP 26 SOUTH, RANGE 29 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO		
SURVEY DATE: 03/26/2013	PAGE: 1 OF 1	
DRAFTING DATE: 03/27/2013		
APPROVED BY: CH	DRAWN BY: VD	FILE: 13-151

# LOCATION VERIFICATION MAP



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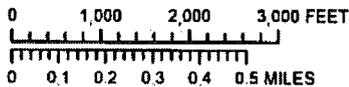
SEC 2, TWP. 28S, RGE 28E  
 SURVEY: N.M.P.M  
 COUNTY: EDDY STATE: NEW MEXICO  
 DESCRIPTION: REPOSADO 2 ST SWD #1  
 2310' FSL 2310' FWL

ELEVATION: 3023.6'  
 OPERATOR: COG OPERATING  
 LEASE: REPOSADO 2

W.O # 13-151

- WELL
- WELL PAD
- PROPOSED ROAD
- TWO-TRACK ROAD TO BE UPGRADED

1 IN = 2,000 FT

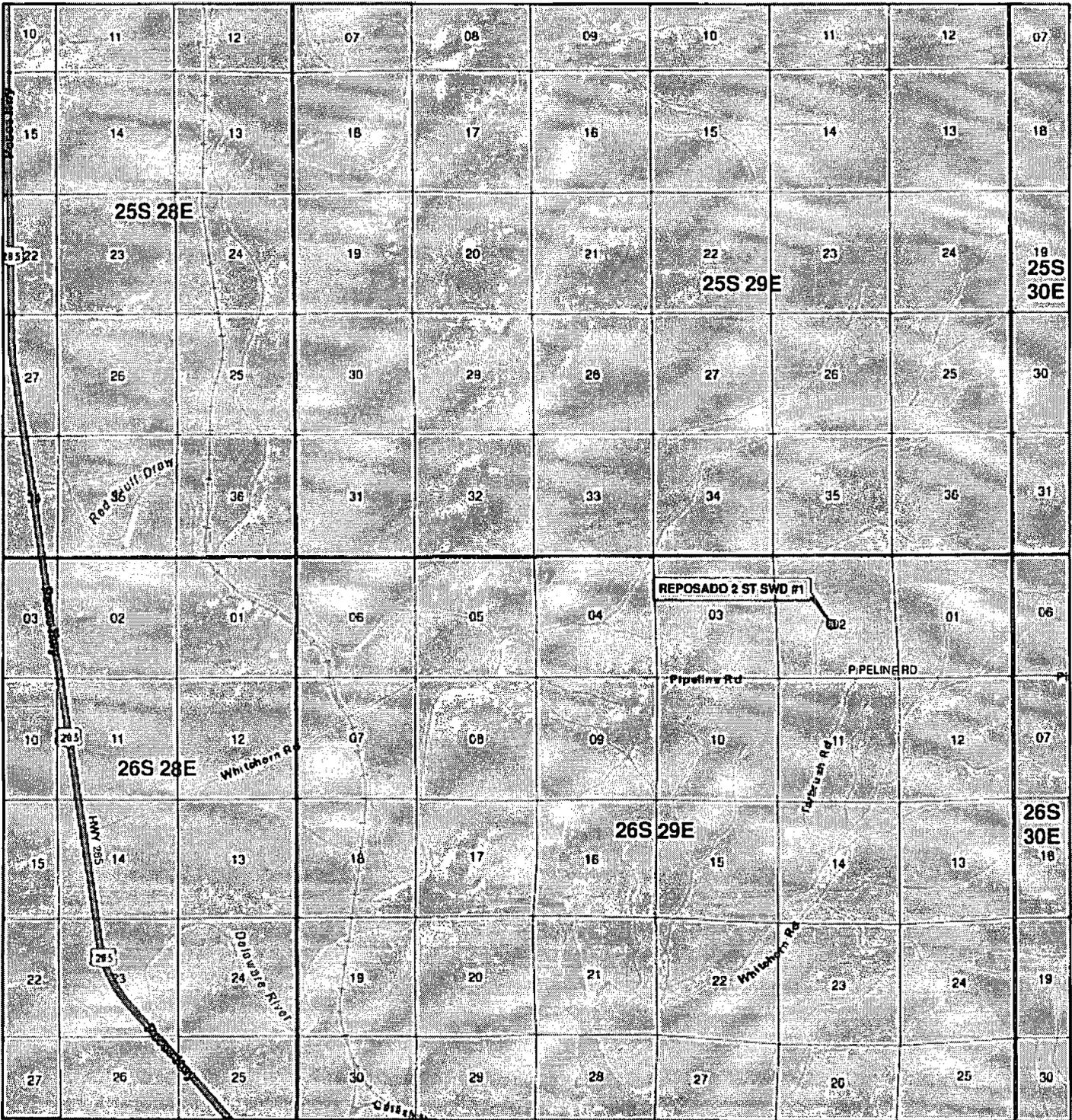


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 PH: (575) 513 2570 FAX: (575) 746-2158  
 chad\_harcrow@yahoo.com



MAP DATE: 4/1/2013

# VICINITY MAP



SEC. 2, TWP. 26S, RGE. 29E  
 SURVEY: N.M.P.M  
 COUNTY: EDDY STATE: NEW MEXICO  
 DESCRIPTION: REPOSADO 2 ST SWD #1  
 2310' FSL, 2310' FWL

ELEVATION: 3023.6'  
 OPERATOR: COG OPERATING  
 LEASE: REPOSADO 2

W.O. # 13-151



1 IN = 6,000 FT

- Well
- ▭ TOWNSHIP
- ▭ SECTION



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 PH: (575) 513-2570 FAX: (575) 746-2158  
 chad\_harcrow77@yahoo.com



MAP DATE: 4/1/2013

## Reposado 2 State SWD 1

	Hole Size	Casing	Wt	Depth	Cmt	TOC
Surface	26	20	94	575'	1500	0
Intrmd 1	17.5	13.375	61	3175'	1750	0
Intrmd 2	12.25	9.625	43.5	10,300'	1750	0
Intrmd 3 Liner	8.5	7	29	9800' – 15,450'	800	9800'
OH Disposal	6.125	NA	NA	16,900'	NA	NA

Plan to drill a 26" hole to 575' with Fresh Water. Run 20", 94#, J55 csg and cmt to surface. Drill 17-1/2" hole to 3175' with Brine, and run 13-3/8", 61#, J55 and cement to surface. Drill 12-1/4" hole to 10,300' with cut brine, and run 9-5/8", 43.5#, HCP110 and cement to surface. Drill 8-1/2" hole to approx 15,450' ( or no more than 100' into the top of the Devonian) with WBM and run 7", 29#, HCP110 drilling liner with TOL @ approx 9800' and cement to TOL. Drill a 6-1/8" hole to 16,900' for open hole completion. Will isolate OH with plug set inside casing prior to RDMO.

### Well Control

Type	Pressure	Test	Manufacture
Double Ram	5000	5000	Cameron