

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010**SUNDRY NOTICES AND REPORTS ON WELLS**
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.***SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. NMLC028731B
2. Name of Operator COG OPERATING LLC		6. If Indian, Allottee or Tribe Name
Contact: KELLY J HOLLY E-Mail: kholly@concho.com		7. If Unit or CA/Agreement, Name and/or No.
3a. Address 550 WEST TEXAS AVENUE SUITE 100 MIDLAND, TX 79707	3b. Phone No. (include area code) Ph: 432-685-4384	8. Well Name and No. DODD FEDERAL UNIT 575
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 10 T17S R29E Mer NMP SWSE 1100FSL 2370FEL		9. API Well No. 30-015-39904
		10. Field and Pool, or Exploratory DODD; GLORIETA-UPPER YESO
		11. County or Parish, and State EDDY COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize <input type="checkbox"/> Deepen <input type="checkbox"/> Production (Start/Resume) <input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing <input type="checkbox"/> Fracture Treat <input type="checkbox"/> Reclamation <input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair <input type="checkbox"/> New Construction <input type="checkbox"/> Recomplete <input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans <input type="checkbox"/> Plug and Abandon <input type="checkbox"/> Temporarily Abandon Change to Original A
	<input type="checkbox"/> Convert to Injection <input type="checkbox"/> Plug Back <input type="checkbox"/> Water Disposal PD

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

COG Operating LLC submitted APD for this well at this location:
SHL: 1100' FSL & 2370' FEL, Unit O
BHL: 990' FSL & 1650' FEL, Unit O

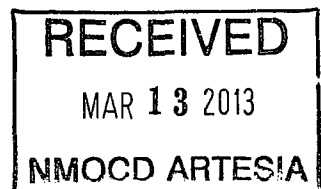
COG Operating LLC respectfully requests permission to change the SHL to:
SHL: 390' FSL & 1535' FEL, Unit O
BHL: 990' FSL & 1650' FEL, Unit O

Reason for location change is due to Archeology.

A revised C-102, 1 mile map, flow line, road map, directional plan, rig layouts, H2S, surface use plan are attached.

Accepted for record
NMOCD

YES
3/13/2013



14. I hereby certify that the foregoing is true and correct.	
Electronic Submission #189860 verified by the BLM Well Information System For COG OPERATING LLC, sent to the Carlsbad Committed to AFMSS for processing by KURT SIMMONS on 02/06/2013 ()	
Name (Printed/Typed) KELLY J HOLLY	Title PERMITTING TECH
Signature (Electronic Submission)	Date 01/25/2013

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By	Title FIELD MANAGER	Date MAR 11 2013
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office CARLSBAD FIELD OFFICE	

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED **

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 Benitos 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 & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-39904		² Pool Code 97917		³ Pool Name Dodd;Glorieta-Upper Yeso	
⁴ Property Code 308195		⁵ Property Name DODD FEDERAL UNIT			⁶ Well Number 575
⁷ OGRID No. 229137		⁸ Operator Name COG OPERATING, LLC			⁹ Elevation 3601'

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	10	17-S	29-E		390	SOUTH	1535	EAST	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
0	10	17-S	29-E		990	SOUTH	1650	EAST	EDDY

¹² Dedicated Acres 40	¹³ Joint or Infit	¹⁴ Consolidation Code	¹⁵ Order No.
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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.

<p>CORNER DATA NAD 27 GRID - NM EAST</p> <p>A: 1/2" REBAR N 670039.5 - E 580643.6</p> <p>B: 5/8" REBAR UNLEGIBLE ALUM. CAP N 670044.8 - E 585932.4</p> <p>C: BRASS CAP "1914" N 672688.8 - E 585919.9</p> <p>D: BRASS CAP "1914" N 672681.7 - E 580629.9</p> <p>E: CALCULATED POINT N 671360.6 - E 580636.8</p> <p>F: CALCULATED POINT N - 671366.8 - E 585926.1</p> <p style="text-align: center;">GEODETIC DATA NAD 27 GRID - NM EAST</p> <p style="text-align: center;">SURFACE LOCATION</p> <p style="text-align: center;">N 670433.1 E 584395.8</p> <p style="text-align: center;">LAT: 32.84280° N LONG: 104.05854° W</p> <p style="text-align: center;">BOTTOM LOCATION</p> <p style="text-align: center;">N 671033.1 E 584277.7</p> <p style="text-align: center;">DETAIL "A"</p>	<p>" OPERATOR CERTIFICATION <i>I hereby certify that the information contained 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 a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i></p> <p><i>Kacie Connally</i> 12/19/12 Signature Date</p> <p>Kacie Connally Printed Name</p> <p>kconnally@concho.com E-mail Address</p> <p>"SURVEYOR CERTIFICATION <i>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.</i></p> <p>12/5/12 Date of Survey</p> <p>Signature and Seal of Professional Surveyor: <i>Robert M. Howett</i></p> <p>19680 Certificate Number</p>
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Surface Use Plan
COG Operating, LLC
Dodd Federal Unit 575
SL: 390' FSL & 1535' FEL UL O
BHL: 990' FSL & 1650' FEL UL O
Section 10, T-17-S, R-29-E
Eddy County, New Mexico

I hereby certify that I, or persons under my direct supervision, have inspected the drill site and access road proposed herein; that I am familiar with the conditions that presently exist; that I have full knowledge of State and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or COG Operating, LLC, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements. Executed this 17th day of December, 2012.

Signed: Carl Bird

Printed Name: Carl Bird

Position: Drilling Engineer

Address: One Concho Center, 600 W. Illinois, Midland, Texas 79701

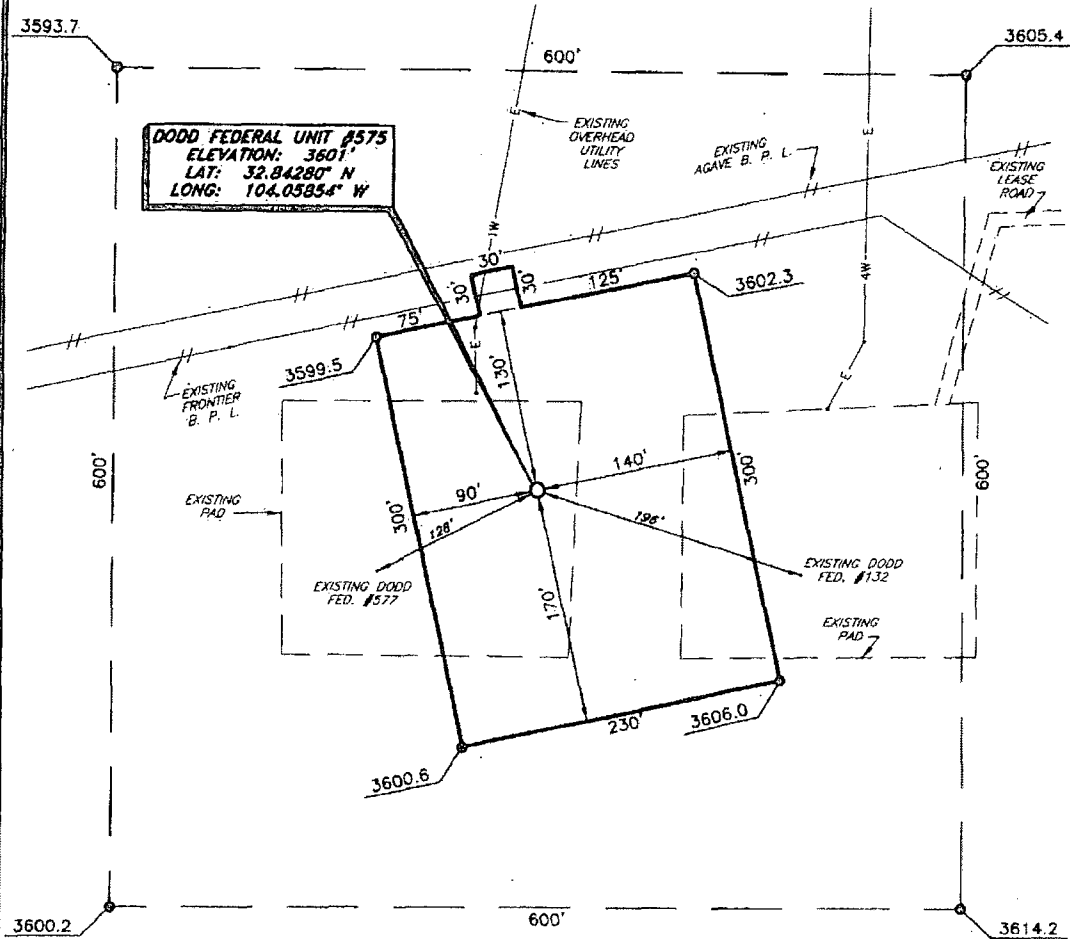
Telephone: (432) 683-7443

Field Representative (if not above signatory): Same

E-mail: cbird@concho.com

COG OPERATING, LLC

Dodd Federal Unit #575
(390' FSL & 1535' FEL)
Section 10, T-17-S, R-29-E,
N. M. P. M., Eddy Co., New Mexico



DIRECTIONS TO LOCATION

From the intersection of U. S. Hwy. No. 82 and County Road No. 214 (Barnaval Draw)

Go North on County Road 214 approx. 1.5 miles;

Turn Right on a lease road;

Follow lease road East approx. 0.8 mile;

Turn Left. Go North approx. 0.1 mile;

Turn left. Go West approx. 0.1 mile to Dodd Federal Unit #577;

Location stake is approx. 127 feet Northeast of the existing Dodd Federal Unit #577.

SCALE: 1" = 100'
0 50 100
NAD 27 - NM EAST

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NO.	REVISION	DATE
JOB NO.:	LS120021	
DWG. NO.:	120021PAD	

PROSPERITY CONSULTANTS, LLC



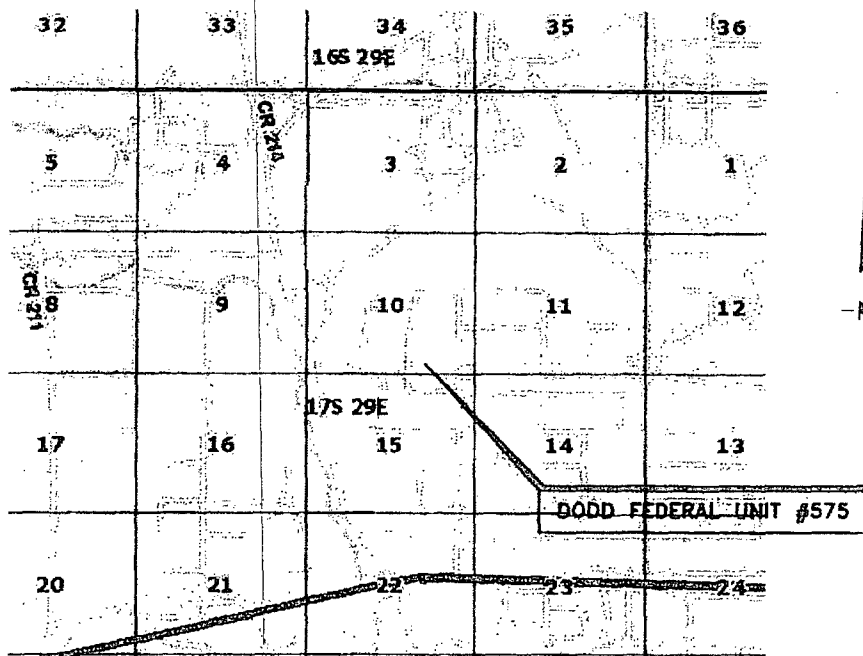
2251 Double Creek Drive, Suite 602, Round Rock, Texas 78664

© (512) 992-2087 f (512) 251-2518

SCALE: 1" = 100'
DATE: 12/5/12
SURVEYED BY: RH/GB
DRAWN BY: LWB
APPROVED BY: LWB
SHEET : 1 OF 1

VICINITY MAP

NOT TO SCALE



SECTION 10, TWP. 17 SOUTH, RGE. 29 EAST,
N. M. P. M., EDDY COUNTY, NEW MEXICO

OPERATOR: COG Operating, LLC
LEASE: Dodd Federal Unit
WELL NO.: 575
ELEVATION: 3601'
LOCATION: 390' FSL & 1535' FEL

DIRECTIONS TO LOCATION

From the intersection of U. S. Hwy. No. 82 and
County Road No. 214 (Barnaval Draw)

Go North on County Road 214 approx. 1.5 miles;

Turn Right on a lease road;

Follow lease road East approx. 0.8 mile;

Turn Left. Go North approx. 0.1 mile;

Turn left. Go West approx. 0.1 mile to Dodd Federal
Unit #577;

Location stake is approx. 127 feet Northeast of the
existing Dodd Federal Unit #577.

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NO.	REVISION	DATE
JOB NO.:	LS120021	
DWG. NO.:	120021VM	

PROSPERITY CONSULTANTS, LLC

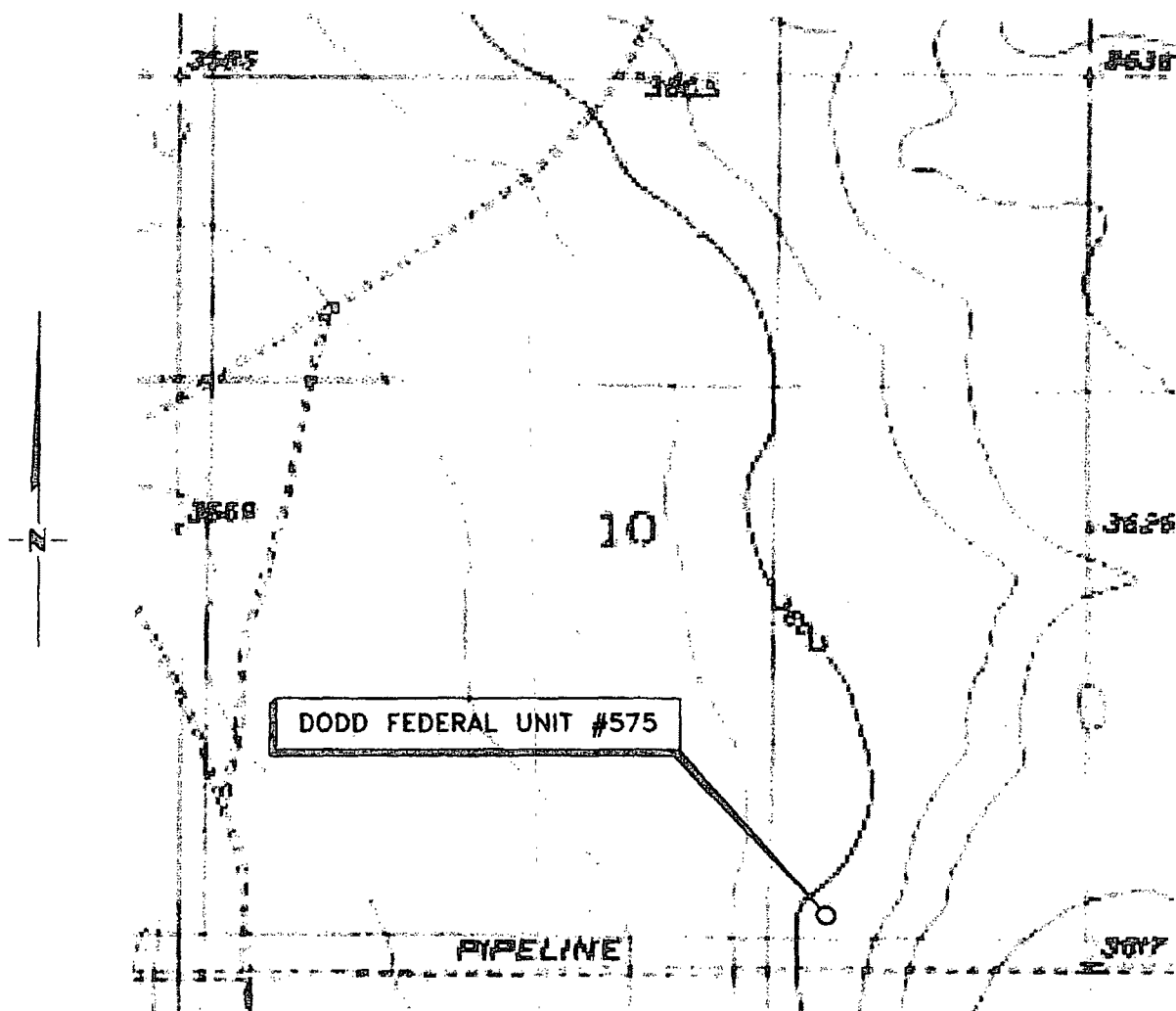


SCALE: 1" = 1000'
DATE: 12/5/12
SURVEYED BY: RH/GB
DRAWN BY: LWB
APPROVED BY: LWB
SHEET : 1 OF 1

2251 Double Creek Drive, Suite 602, Round Rock, Texas 78664

o (512) 992-2087 f (512) 251-2518

LOCATION VERIFICATION MAP



SECTION 10, TWP. 17 SOUTH, RGE. 29 EAST,
N. M. P. M., EDDY COUNTY, NEW MEXICO

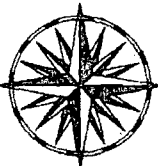
OPERATOR: COG Operating, LLC
LEASE: Dodd Federal Unit
WELL NO.: 575
ELEVATION: 3601'

LOCATION: 390' FSL & 1535' FEL
CONTOUR INTERVAL: 10'
USGS TOPO. SOURCE MAP:
Red Lake SE, NM (1955)

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NO.	REVISION	DATE
JOB NO.: LS120021		
DWG. NO.: 120021LVM		

PROSPERITY CONSULTANTS, LLC



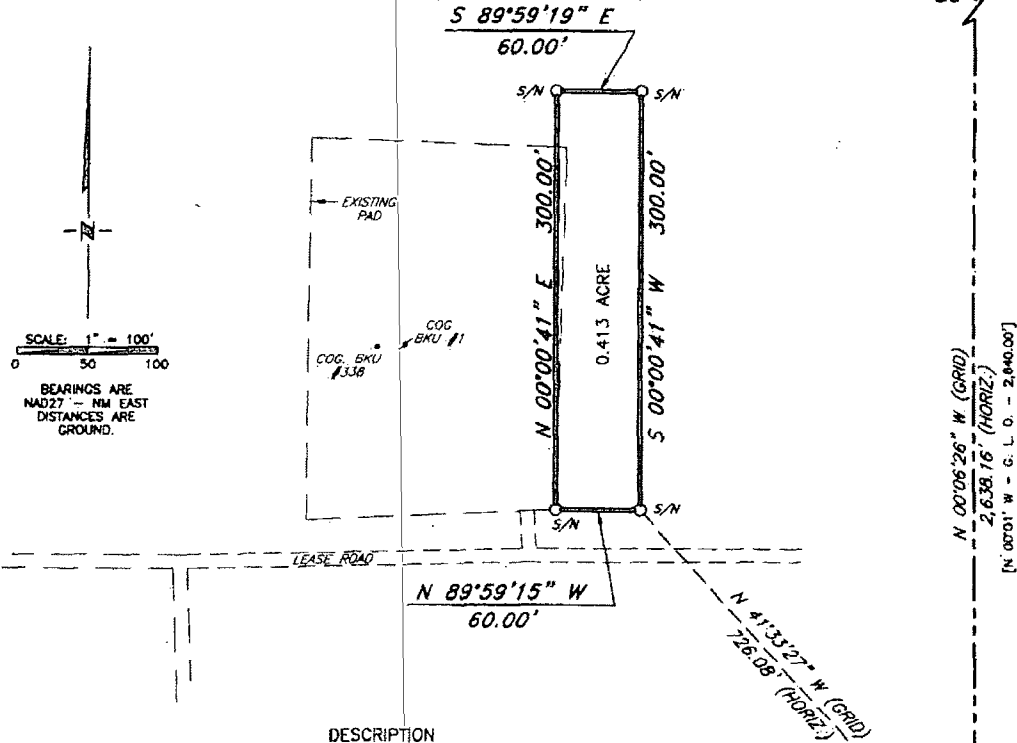
2251 Double Creek Drive, Suite 602, Round Rock, Texas 78664

o (512) 992-2087 f (512) 251-2518

SCALE: 1" = 1000'
DATE: 12/5/12
SURVEYED BY: RH/GB
DRAWN BY: LWB
APPROVED BY: LWB
SHEET : 1 OF 1

COG OPERATING, LLC

BKU #23-A PRODUCTION FACILITY
SEC. 23, T-17-S, R-29-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO



DESCRIPTION

A tract of land situated within the Southeast Quarter of Section 23, Township 17 South, Range 29 East, N. M. P. M., Eddy County, New Mexico. Said tract of land being more particularly described by metes and bounds as follows:

Commencing, for a tie, at a 2" galvanized pipe found for the Southeast corner of said Section 23, from which a 3/4" iron pipe found for the East Quarter Corner of said Section 23 bears N 00°06'26" W (NAD 27 - NM East), 2,638.16 feet;

Thence N 41°33'27" W, 726.08 feet to a spike nail set for the Point of Beginning and the Southeast corner of the tract of land herein described;

Thence N 89°59'15" W, 60.00 feet to a spike nail set for the Southwest corner of the tract of land herein described;

Thence N 00°00'41" E, 300.00 feet to a spike nail set for the Northwest corner of the tract of land herein described;

Thence S 89°59'19" E, 60.00 feet to a spike nail set for the Northeast corner of the tract of land herein described;

Thence S 00°00'41" W, 300.00 feet to the Point of Beginning;

Said tract of land containing 18,000 square feet or 0.413 acre, more or less.

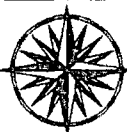
I, Robert M. Howell, a Professional Surveyor do hereby certify that the survey shown and described herein was made under my direct supervision, said survey and plat meet the Minimum Standards for Surveying in the State of New Mexico and are true and correct to the best of my knowledge and belief.

Robert M. Howell
19680
NM PS NATIONAL SURVEYOR

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NO.	REVISION	DATE
JOB NO.:	LS120022	
DWG. NO.:	120022TB	

PROSPERITY CONSULTANTS, LLC



2251 Double Creek Drive, Suite 602, Round Rock, Texas 78664

o (512) 992-2087 f (512) 251-2518

SCALE: 1" = 100'

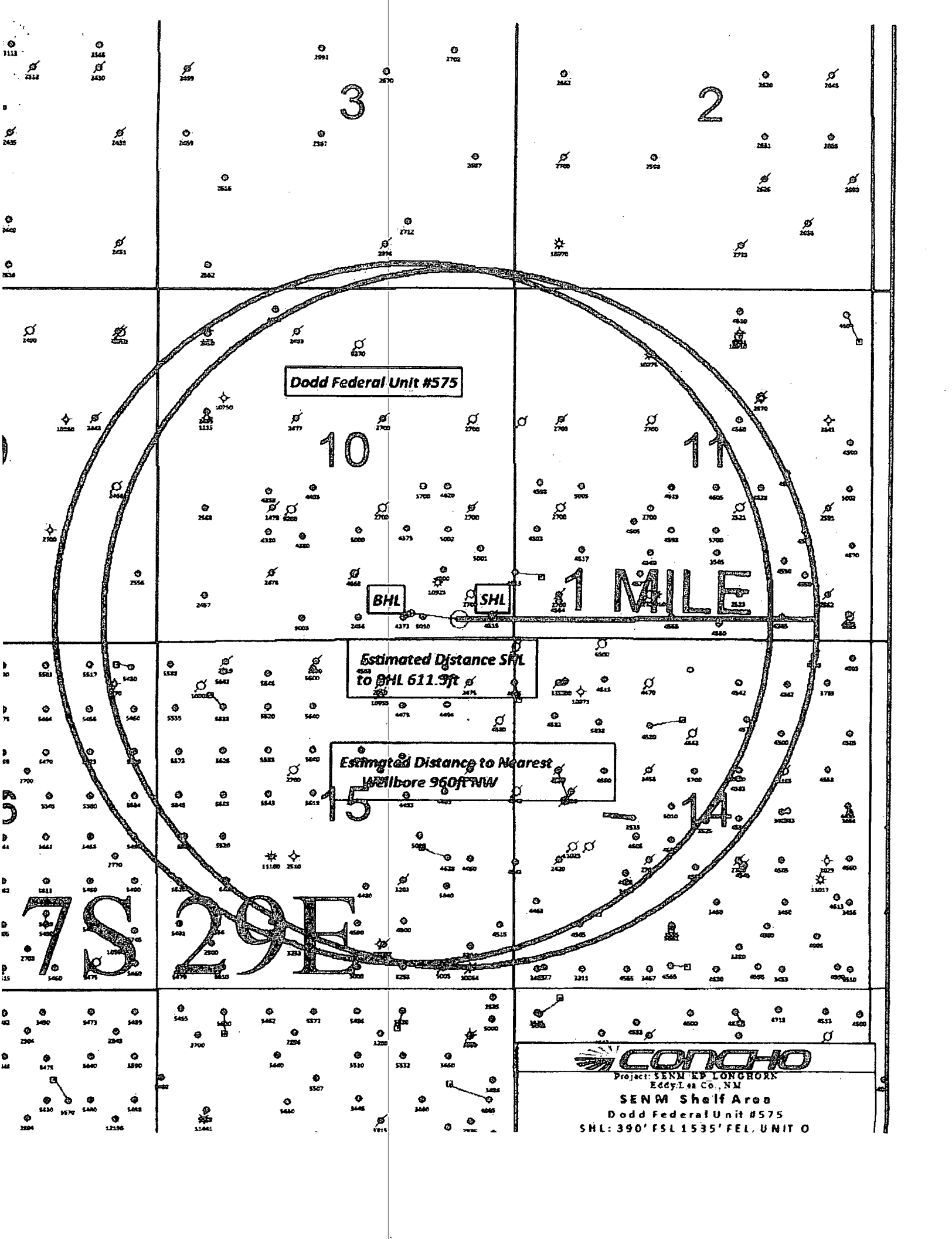
DATE: 12-5-12

SURVEYED BY: LWB

DRAWN BY: LWB

APPROVED BY: LWB

SHEET : 1 OF 1



Dodd Federal Unit #575

10

11

1 MILE

BHL

SHL

Estimated Distance SHL
to BHL 611.9ft

Estimated Distance to Nearest
Wellbore 960ft NW

15

14

7S 29E

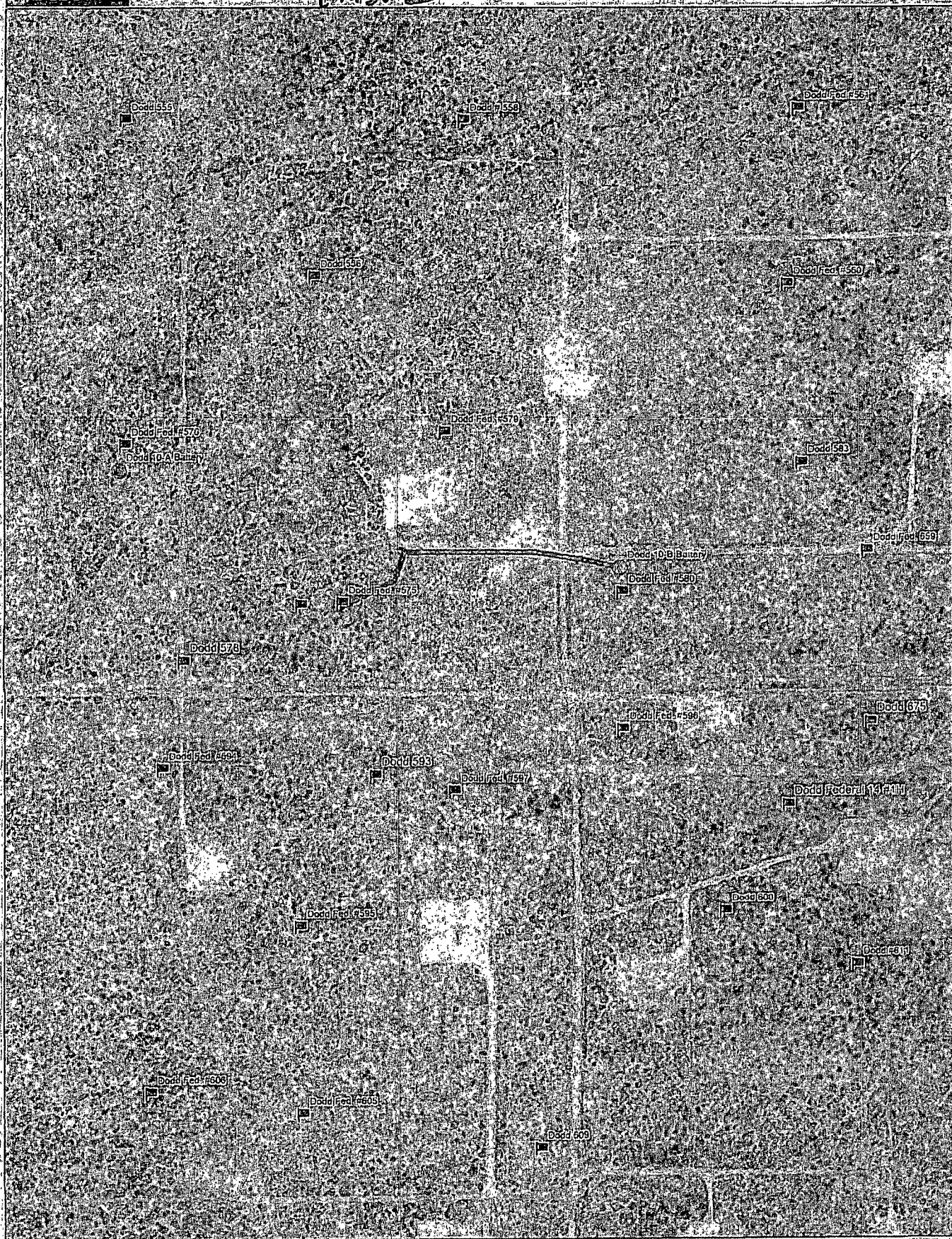
CONCHO

Project: SENM KP LONGHORN
Eddy Lea Co., NM

SENM Shelf Area

Dodd Federal Unit #575

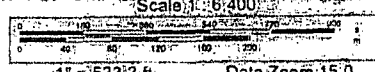
SHL: 390' FSL 1535' FEL UNIT 0



Data use subject to license.

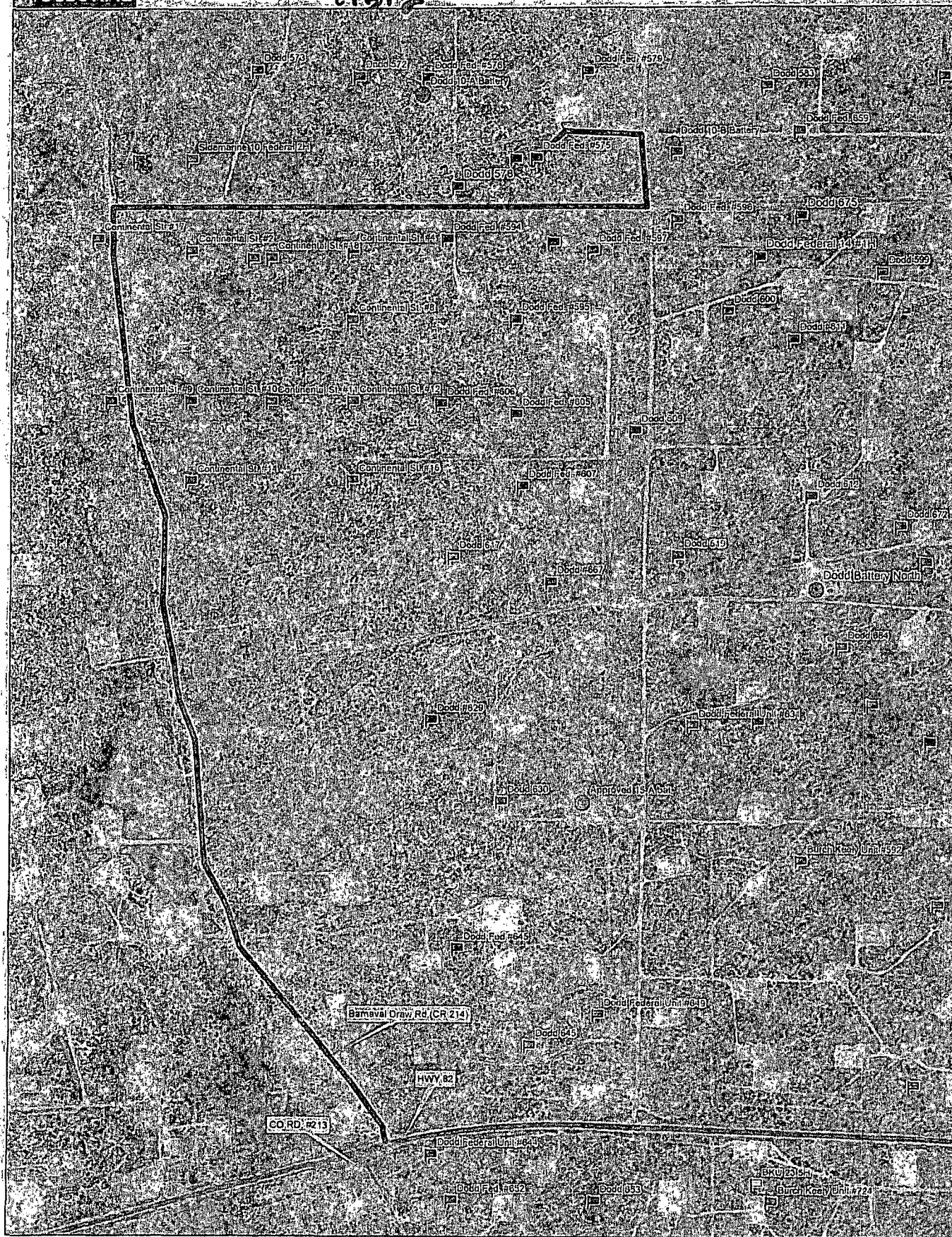
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www.delorme.com



1" = 5333.3 ft.

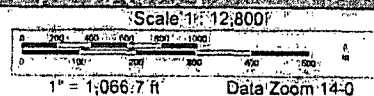
Data Zoom: 15.0



Data use subject to license.

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COG Operating LLC

Eddy County, NM (NAN27 NME)

Dodd Federal Unit #575

OH

Plan #6 - 7-7/8" Hole

Surface: 390' FSL, 1535' FEL, Sec 10, T17S, R29E, Unit O

BHL: 990' FSL, 1650' FEL, Sec 10, T17S, R29E, Unit O

Standard Planning Report

21 December, 2012





Scientific Drilling
Planning Report



Database	EDM 5000.1 Single User Db	Local Co-ordinate Reference	Well #575
Company	COG Operating LLC	TVD Reference	GL @ 3601.00usft
Project	Eddy County, NM (NAN27 NME)	MDI Reference	GL @ 3601.00usft
Site	Dodd Federal Unit	North Reference	Grid
Well	#575	Survey Calculation Method	Minimum Curvature
Wellbore	OH		
Design	Pan #6 - 7-7/8" Hole		

Project	Eddy County, NM (NAN27 NME)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		Using geodetic scale factor

Site	Dodd Federal Unit		
Site Position:	From: Map	Northing: 669,114.80 usft	Latitude: 32° 50' 21.008 N
		Easting: 586,009.50 usft	Longitude: 104° 3' 11.875 W
Position Uncertainty:	0.00 usft	Slot Radius: 13-3/16 "	Grid Convergence: 0.15 °

Well	#575		
Well Position	+N-S 1,318.41 usft	Northing: 670,433.10 usft	Latitude: 32° 50' 34.095 N
	+E-W -1,613.83 usft	Easting: 584,395.80 usft	Longitude: 104° 3' 30.749 W
Position Uncertainty	0.00 usft	Wellhead Elevation:	Ground Level: 3,601.00 usft

Wellbore	OH		
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	10/10/2011	7.82	60.67	48,902

Design	Pan #6 - 7-7/8" Hole		
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Audit Notes:			
Version:	Phase: PLAN	Tie On Depth:	0.00

Vertical Section:	Depth From (TVD) (usft)	+N-S (usft)	+E-W (usft)	Direction (°)
	0.00	0.00	0.00	348.86

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,150.00	0.00	0.00	1,150.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,701.89	11.04	348.86	1,698.48	52.00	-10.23	2.00	2.00	-2.02	348.86	
4,619.38	11.04	348.86	4,562.00	600.05	-118.11	0.00	0.00	0.00	0.00	PBHL



Scientific Drilling
Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #575
Company:	COG Operating, LLC	TVD Reference:	GL @ 3601.00usft
Project:	Eddy County, NM (NAN27 NME)	MD Reference:	GL @ 3601.00usft
Site:	Dodd Federal Unit	North Reference:	Grid
Well:	#575	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Pan #8 - 7-7/8" Hole		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,050.00	0.00	0.00	1,050.00	0.00	0.00	0.00	0.00	0.00	0.00	
8-5/8" Casing										
1,150.00	0.00	0.00	1,150.00	0.00	0.00	0.00	0.00	0.00	0.00	
KOP Start DLS 2.00 TFO 348.86										
1,200.00	1.00	348.86	1,200.00	0.43	-0.08	0.44	2.00	2.00	0.00	
1,300.00	3.00	348.86	1,299.93	3.85	-0.76	3.93	2.00	2.00	0.00	
1,400.00	5.00	348.86	1,399.68	10.70	-2.11	10.90	2.00	2.00	0.00	
1,500.00	7.00	348.86	1,499.13	20.95	-4.12	21.35	2.00	2.00	0.00	
1,600.00	9.00	348.86	1,598.15	34.61	-6.81	35.27	2.00	2.00	0.00	
1,700.00	11.00	348.86	1,696.63	51.64	-10.17	52.63	2.00	2.00	0.00	
1,701.89	11.04	348.86	1,698.48	52.00	-10.23	52.99	2.00	2.00	0.00	
Start 2917.49 hold at 1701.89 MD										
1,800.00	11.04	348.86	1,794.78	70.43	-13.86	71.78	0.00	0.00	0.00	
1,900.00	11.04	348.86	1,892.93	89.21	-17.56	90.92	0.00	0.00	0.00	
2,000.00	11.04	348.86	1,991.08	108.00	-21.26	110.07	0.00	0.00	0.00	
2,100.00	11.04	348.86	2,089.23	126.78	-24.96	129.22	0.00	0.00	0.00	
2,200.00	11.04	348.86	2,187.38	145.57	-28.65	148.36	0.00	0.00	0.00	
2,300.00	11.04	348.86	2,285.53	164.35	-32.35	167.51	0.00	0.00	0.00	
2,400.00	11.04	348.86	2,383.68	183.14	-36.05	186.65	0.00	0.00	0.00	
2,500.00	11.04	348.86	2,481.83	201.92	-39.75	205.80	0.00	0.00	0.00	
2,600.00	11.04	348.86	2,579.98	220.71	-43.44	224.94	0.00	0.00	0.00	
2,700.00	11.04	348.86	2,678.13	239.49	-47.14	244.09	0.00	0.00	0.00	
2,800.00	11.04	348.86	2,776.28	258.28	-50.84	263.23	0.00	0.00	0.00	
2,900.00	11.04	348.86	2,874.43	277.06	-54.54	282.38	0.00	0.00	0.00	
3,000.00	11.04	348.86	2,972.58	295.85	-58.23	301.53	0.00	0.00	0.00	
3,100.00	11.04	348.86	3,070.73	314.63	-61.93	320.67	0.00	0.00	0.00	
3,200.00	11.04	348.86	3,168.88	333.42	-65.63	339.82	0.00	0.00	0.00	
3,300.00	11.04	348.86	3,267.03	352.20	-69.33	358.96	0.00	0.00	0.00	
3,400.00	11.04	348.86	3,365.18	370.99	-73.02	378.11	0.00	0.00	0.00	
3,500.00	11.04	348.86	3,463.33	389.77	-76.72	397.25	0.00	0.00	0.00	
3,600.00	11.04	348.86	3,561.48	408.56	-80.42	416.40	0.00	0.00	0.00	
3,700.00	11.04	348.86	3,659.63	427.34	-84.12	435.54	0.00	0.00	0.00	
3,800.00	11.04	348.86	3,757.78	446.13	-87.81	454.69	0.00	0.00	0.00	
3,900.00	11.04	348.86	3,855.93	464.91	-91.51	473.83	0.00	0.00	0.00	
4,000.00	11.04	348.86	3,954.08	483.70	-95.21	492.98	0.00	0.00	0.00	
4,046.78	11.04	348.86	4,000.00	492.49	-96.94	501.94	0.00	0.00	0.00	
Top of Paddock										
4,100.00	11.04	348.86	4,052.23	502.48	-98.91	512.13	0.00	0.00	0.00	
4,200.00	11.04	348.86	4,150.38	521.27	-102.60	531.27	0.00	0.00	0.00	
4,300.00	11.04	348.86	4,248.53	540.05	-106.30	550.42	0.00	0.00	0.00	
4,400.00	11.04	348.86	4,346.68	558.84	-110.00	569.56	0.00	0.00	0.00	
4,500.00	11.04	348.86	4,444.83	577.62	-113.70	588.71	0.00	0.00	0.00	
4,600.00	11.04	348.86	4,542.98	596.41	-117.39	607.85	0.00	0.00	0.00	
4,619.38	11.04	348.86	4,562.00	600.05	-118.11	611.56	0.00	0.00	0.00	
PBHL										



Scientific Drilling
Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #575
Company:	COG Operating LLC	TVD Reference:	GL @ 3601.00usft
Project:	Eddy County, NM (NAN27 NME)	MD Reference:	GL @ 3601.00usft
Site:	Dodd Federal Unit	North Reference:	Grid
Well:	#575	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Pan #8 - 7-7/8" Hole		

Design Targets									
Target Name	hit/miss target	Dip Angle	Dip Dir	TVD	+N/-S	+E/-W	Northing	Easting	
Shape		(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)	
									Latitude Longitude
PBHL		0.00	0.01	4,562.00	600.05	-118.11	671,033.10	584,277.70	32° 50' 40.035 N 104° 3' 32.115 W
- plan hits target center									
- Point									

Casing Points					
Measured Depth	Vertical Depth			Casing Diameter	Hole Diameter
(usft)	(usft)			(")	(")
		Name			
1,050.00	1,050.00	8-5/8" Casing		8-5/8	12-1/4

Formations					
Measured Depth	Vertical Depth			Dip	Dip Direction
(usft)	(usft)			(°)	(°)
		Name	Lithology		
4,046.78	4,000.00	Top of Paddock		0.00	

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(usft)	(usft)	+N/-S	+E/-W		
		(usft)	(usft)	Comment	
1,150.00	1,150.00	0.00	0.00	KOP Start DLS 2.00 TFO 348.86	
1,701.89	1,698.48	52.00	-10.23	Start 2917.49 hold at 1701.89 MD	

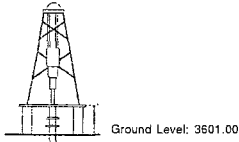


Azimuths to Grid North
True North: -0.15°
Magnetic North: 7.67°

Magnetic Field
Strength: 48901.5nT
Dip Angle: 60.67°
Date: 10/10/2011
Model: IGRF2010

To convert a Magnetic Direction to a Grid Direction, Add 7.67°
To convert a True Direction to a Grid Direction, Subtract 0.15°

Dodd Federal Unit #575
Eddy County, NM (NAN27 NME)
Northing: 670433.10
Easting: 584395.80
Pan #6 - 7-7/8" Hole



Ground Level: 3601.00

WELL DETAILS:					
		Ground Level:	3601.00		
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	670433.10	584395.80	32° 50' 34.095 N	104° 3' 30.749 W

SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1150.00	0.00	0.00	1150.00	0.00	0.00	0.00	0.00	0.00	
1701.89	11.04	348.86	1698.48	52.00	-10.23	2.00	348.86	52.99	
4619.38	11.04	348.86	4562.00	600.05	-118.11	0.00	0.00	611.56	PBHL

DESIGN TARGET DETAILS					
Name	TVD	+N/-S	+E/-W	Northing	Easting
PBHL	4562.00	600.05	-118.11	671033.10	584277.70

SITE DETAILS: Dodd Federal Unit
Site Centre Northing: 669114.80
Easting: 586009.50

Positional Uncertainty: 0.00
Convergence: 0.15
Local North: Grid

PROJECT DETAILS: Eddy County, NM (NAN27 NME)
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001

System Datum: Mean Sea Level

CASING DETAILS			
TVD	MD	Name	Size
1050.00	1050.00	8-5/8" Casing	8-5/8"

Map System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone Name: New Mexico East 3001

Local Origin: Well #575, Grid North

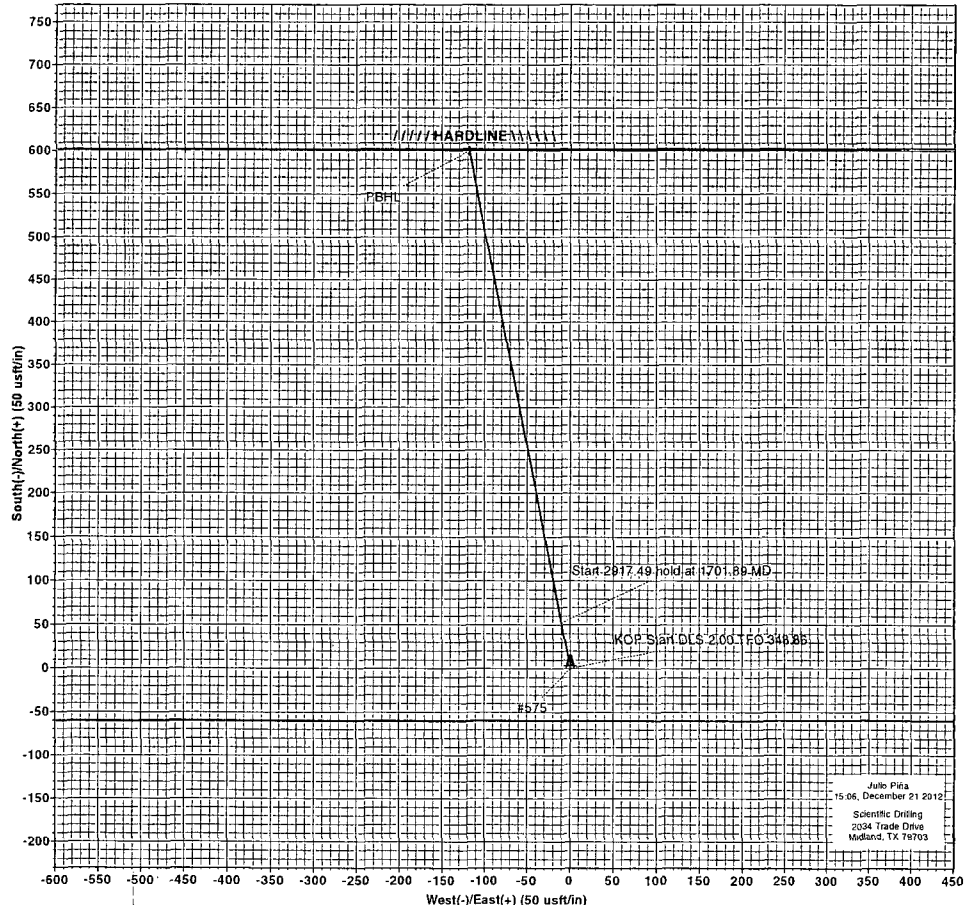
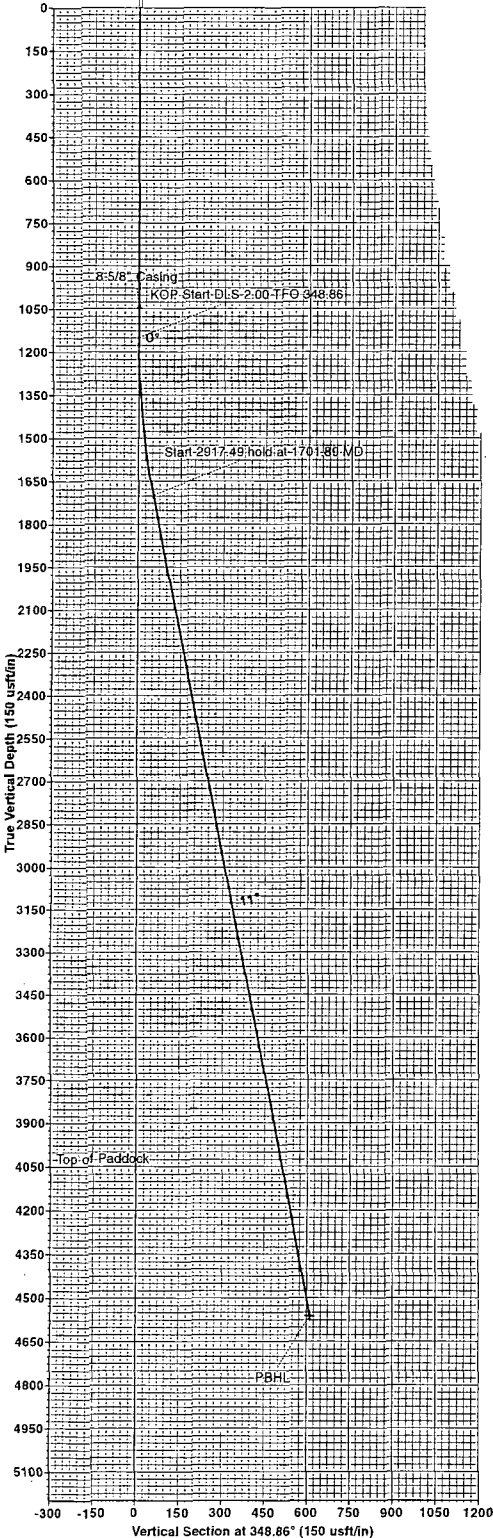
Latitude: 32° 50' 34.095 N
Longitude: 104° 3' 30.749 W

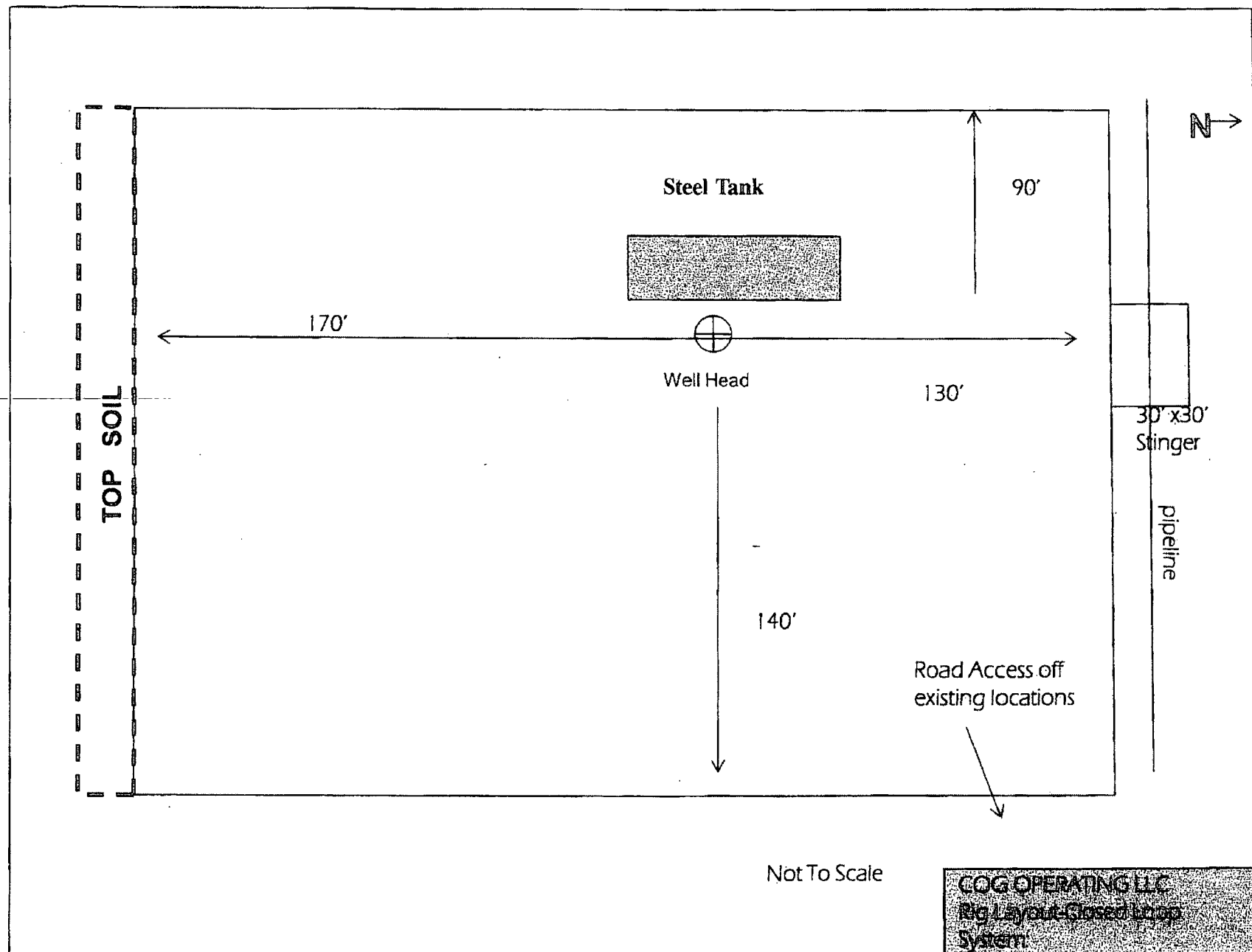
Grid East: 584395.80
Grid North: 670433.10
Scale Factor: 1.000

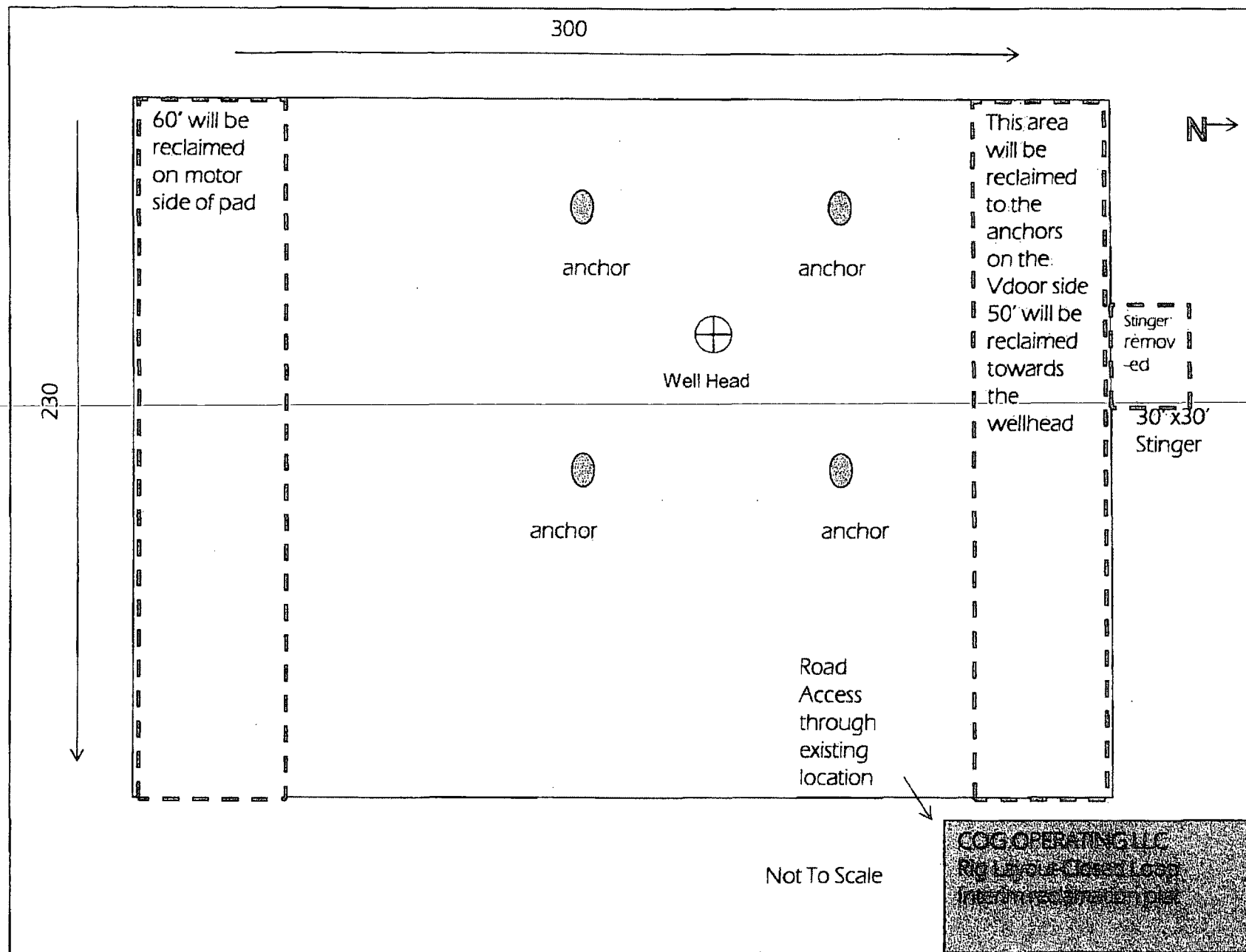
Geomagnetic Model: IGRF2010
Sample Date: 10-Oct-11
Magnetic Declination: 7.82°
Dip Angle from Horizontal: 60.67°
Magnetic Field Strength: 48902

To convert a Magnetic Direction to a Grid Direction, Add 7.67°
To convert a Magnetic Direction to a True Direction, Add 7.82° East
To convert a True Direction to a Grid Direction, Subtract 0.15°

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
4000.00	4046.78	Top of Paddock



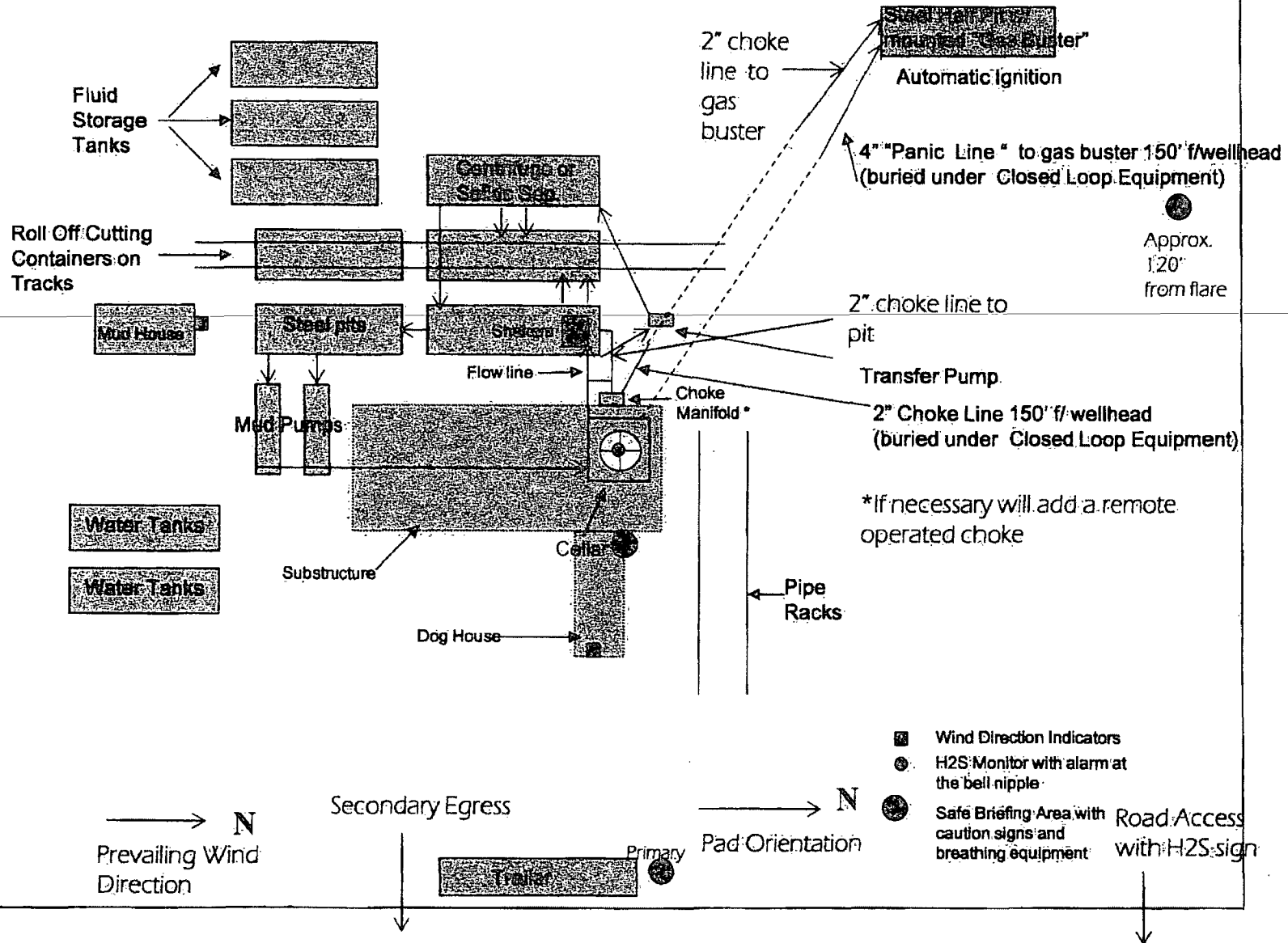




COG Operating LLC

Drilling Location - H2S Safety Equipment Diagram

EXHIBIT 8- Dodd 575



Surface Use & Operating Plan

Dodd Federal Unit #575

- Surface Tenant: Bogle Farms, Lewis Derrick, P O Box 441, Artesia, NM 88211.
- New Road: approx. 0'
- Flow Line: approx. 0.2 mile
- Facilities: Dodd South Federal Tank Battery

Well Site Information

V Door: North

Topsoil: South

Interim Reclamation: South/North

Notes

-611' move to avoid Archeology

Onsite: 12/4/2012

John Fast (BLM), Caden Jameson (COG), Gary Box (J.W.S)

SURFACE USE AND OPERATING PLAN

1. Existing & Proposed Access Roads

- A. The well site survey and elevation plat for the proposed well is attached with this application. It was staked by John West Engineering, Hobbs, NM.
- B. All roads to the location are shown in the Vicinity Map. The existing lease roads are illustrated and are adequate for travel during drilling and production operations. Upgrading existing roads prior to drilling the well will be done where necessary. The road route to the well site is depicted in Exhibit #2. The road highlighted in Exhibit #2 will be used to access the well.
- C. Directions to location: See exhibit #2.
- D. Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as any operations continue on this lease. Roads will be maintained according to specifications in section 2A of this Surface Use and Operating Plan.

2. Proposed Access Road:

The Elevation Plat shows that 0' of new access road will be required for this location. If any road is required it will be constructed as follows:

- A. The maximum width of the running surface will be 14'. The road will be crowned, ditched and constructed of 6" rolled and compacted caliche. Ditches will be at 3:1 slope and 4 feet wide. Water will be diverted where necessary to avoid ponding, prevent erosion, maintain good drainage, and to be consistent with local drainage patterns.
- B. The average grade will be less than 1%.
- C. No turnouts are planned.
- D. No culverts, cattle guard, gates, low water crossings or fence cuts are necessary.
- E. Surfacing material will consist of native caliche. Caliche will be obtained from the actual well site if available. If not available onsite, caliche will be hauled from the nearest BLM approved caliche pit.

3. Location of Existing Well:

The 1-mile Map shows all existing wells within a one-mile radius of this well.

As shown on this plat there are numerous wells producing from the San Andres and Yeso formations.

4. Location of Existing and/or Proposed Facilities:

- A. COG Operating LLC does operate a production facility on this lease.
- B. If the well is productive, contemplated facilities will be as follows:
 - 1) Production will be sent to the Dodd 10-B Federal Tank Battery to be located in Section 10 at the Dodd Federal Unit #580 well location. The facility location is shown in Exhibit #1.
 - 2) The tank battery and facilities including all flow lines and piping will be installed according to API specifications.
 - 3) Any additional caliche will be obtained from the actual well site. If caliche does not exist or is not plentiful from the well site, the caliche will be hauled from a BLM approved caliche pit. Any additional construction materials will be purchased from contractors.
 - 4) Proposed flow lines, will follow an archaeologically approved route to the Dodd 10-B Federal Tank Battery to be located in Section 10 at the Dodd Federal Unit #580 well location. The flowline will be SDR 7 3" poly line laid on the surface and will be approximately 0.2 mile in length.
 - 5) It will be necessary to run electric power if this well is productive. Power will be provided by CVE and they will submit a separate plan and ROW for service to the well location.
 - 6) If the well is productive, rehabilitation plans will include the following:
 - The original topsoil from the well site will be returned to the location, and the site will be re-contoured as close as possible to the original site.

5. Location and Type of Water Supply:

The well will be drilled with combination brine and fresh water mud system as outlined in the drilling program. The water will be obtained from commercial water stations in the area and hauled to location by transport truck over the existing and proposed access roads shown in Exhibit #2. If a commercial fresh water source is nearby, fast line may be laid along existing road ROW's and fresh water pumped to the well. No water well will be drilled on the location.

6. Source of Construction Materials and Location "Turn-Over" Procedure:

Obtaining caliche: The primary way of obtaining caliche to build locations and roads will be by "turning over" the location. This means, caliche will be obtained from the actual well sight. A caliche permit will be obtained from BLM prior to pushing up any caliche. 2400 cu. Yards is max amount of caliche needed for pad and roads. Amount will vary for each pad. The procedure below has been approved by BLM personnel:

- A. The top 6 inches of topsoil is pushed off and stockpiled along the side of the location.**
- B. An approximate 120' X 120' area is used within the proposed well site to remove caliche.**
- C. Subsoil is removed and piled alongside the 120' by 120' area within the pad site.**
- D. When caliche is found, material will be stock piled within the pad site to build the location and road.**
- E. Then subsoil is pushed back in the hole and caliche is spread accordingly across entire location and road.**
- F. Once well is drilled, the stock piled top soil will be used for interim reclamation and spread along areas where caliche is picked up and the location size is reduced. Neither caliche nor subsoil will be stock piled outside of the well pad. Topsoil will be stockpiled along the edge of the pad as depicted in attached plat.**
 - In the event that no caliche is found onsite, caliche will be hauled in from a BLM approved caliche pit.

7. Methods of Handling Water Disposal:

- A. The well will be drilled utilizing a closed loop mud system. Drill cuttings will be held in roll-off style mud boxes and taken to an NMOCD approved disposal site.
- B. Drilling fluids will be contained in steel mud pits.
- C. Water produced from the well during completion will be held temporarily in steel tanks and then taken to an NMOCD approved commercial disposal facility.
- D. Garbage and trash produced during drilling or completion operations will be collected in a trash bin and hauled to an approved landfill. No toxic waste or hazardous chemicals will be produced by this operation.
- E. Human waste and grey water will need to be properly contained and disposed of. Proper disposal and elimination of waste and grey water may include but are not limited to portable septic systems and/or portable waste gathering systems (i.e. portable toilets).
- F. After the rig is moved out and the well is either completed or abandoned, all waste materials will be cleaned up within 30 days. In the event of a dry hole only a dry hole marker will remain.

8. Ancillary Facilities:

No airstrip, campsite or other facilities will be built as a result of the operation on this well.

9. Well Site Layout:

- A. The drill pad layout, with elevations staked by John West Engineering, is shown in the Elevation Plat. Dimensions of the pad and pits are shown on the Rig Layout. V door direction is North. Topsoil, if available, will be stockpiled per BLM specifications. Because the pad is almost level no major cuts will be required.
- B. The Rig Layout Closed-Loop exhibit shows the proposed orientation of closed loop system and access road. No permanent living facilities are planned, but a temporary foreman/toolpusher's trailer will be on location during the drilling operations.

10. Plans for Restoration of the Surface:

- A. Interim Reclamation will take place after the well has been completed. The pad will be downsized by reclaiming the areas not needed for production operations. The portions of the pad that are not needed for production operations will be re-contoured to its original state as much as possible. The caliche that is removed will be reused to either build another pad site or for road repairs within the lease. The stockpiled topsoil will then be spread out reclaimed area and reseeded with a BLM approved seed mixture. In the event that the well must be worked over or maintained, it may be necessary to drive, park, and/or operate machinery on reclaimed land. This area will be repaired or reclaimed after work is complete.
- B. Final Reclamation: Upon plugging and abandoning the well all caliche for well pad and lease road will be removed and surface will be recountoured to reflect its surroundings as much as possible. Caliche will be recycled for road repair or reused for another well pad within the lease. If any topsoil remains, it will be spread out and the area will be reseeded with a BLM approved mixture and re-vegetated as per BLM orders.

11. Surface Ownership:

- A. The surface is owned by the U.S. Government and is administered by the Bureau of Land Management. The surface is multiple uses with the primary uses of the region for grazing of livestock and the production of oil and gas.
- B. The surface tenant is Bogle Farms, Lewis Derrick, P.O. Box 441, Artesia, NM 88211.
- C. The proposed road routes and surface location will be restored as directed by the BLM

Surface Use Plan
COG Operating, LLC
Dodd Federal Unit 575
SL: 390' FSL & 1535' FEL UL O
BHL: 440' FSL & 1650' FEL UL O
Section 10, T-17-S, R-29-E
Eddy County, New Mexico

12. Other Information:

- A. The area around the well site is grassland and the topsoil is sandy. The vegetation is moderately sparse with native prairie grasses, some mesquite and shinnery oak. No wildlife was observed but it is likely that mule deer, rabbits, coyotes and rodents traverse the area.
- B. There is no permanent or live water in the immediate area.
- C. There are no dwellings within 2 miles of this location.
- D. If needed, a Cultural Resources Examination is being prepared by Boone Arch Services of New Mexico, LLC. Carlsbad, NM, 88220. 506 E Chapman Rd. , phone # 575.887.7667 and the results will be forwarded to your office in the near future. Otherwise, **COG will be participating in the Permian Basin MOA Program.**

13. Bond Coverage:

Bond Coverage is Nationwide Bond # 000215

14. Lessee's and Operator's Representative:

The COG Operating LLC representative responsible for assuring compliance with the surface use plan is as follows:

Jim Evans
Drilling Superintendent
COG Operating LLC
One Concho Center
600 W. Illinois
Midland, TX 79701
Phone (432) 685-4304 (office)
(432) 221-0346 (business)

Ray Peterson
Drilling Manager
COG Operating LLC
One Concho Center
600 W. Illinois
Midland, TX 79701
Phone (432) 685-4304 (office)
(432) 818-2254 (business)

Well-Site Evaluation Field Form

Operator Name: COG Well Name: Dodd 575

SHL: Section 10, T. 17 S. R. 29 E. Footage 395 F SL & 1505 F EL

Well Type: Horizontal Vertical Oil Gas Other _____ NOS/APD Received? NOS APD

Surface Management Agency (SMA): BLM FEE STATE Other _____ SMA Contacted? Yes No

Operator Representative/ Contact Name: C Jamison Phone _____

BLM Onsite Representatives J Fast Date 12-4-12

Description & Topography: (cut & fill, etc.) expand N + S

Soils: (reseeding strips, etc.) Sandy

Cave Area: low

Hydrogeology: (playas, floodplain, drainages, erosive soils, plant indicators, etc.) NA

Wildlife: (habitat, LPC, SDL, etc.) _____

Range Improvements: (fences, etc.) _____

Well Infrastructure

V-Door Direction: N Topsoil: _____

Pad Size: 250 x 300

Road Route: _____

Prod. Facility Placement: _____

Interim Rec: N + S

Other: _____

Evaluation: (Moved?) _____

