OCD-ARTESIA

ATS-11-453

Form 3160-3
(April 2004)

FORM APPROVED
OMB No 1004-0137
Expires March 31, 2007

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5 Lease Serial No.
NMNM-096836

6 If Indian, Allotee or Tribe Name
N/A

7 If Unit or CA Agreement, Name and No
N/A

1a. Type of work ☑ DRILL ☐ REENTER

1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone

8 Lease Name and Well No
Spruce Federal #3 [302565]

2 Name of Operator
COG Operating LLC <229137>

9 API Well No.
30-015- 40197

3a Address
550 W. Texas, Suite 100 Midland TX 79701

3b Phone No. *(include area code)*
(432) 685-4384

10 Field and Pool, or Exploratory
Red Lake; Glorieta-Yeso, Northeast [96836]

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface **SHL: 1328' FSL & 1501' FWL, UL J** **UNORTHODOX**
At proposed prod zone **BHL: 1650' FSL & 1650' FWL, UL K** **LOCATION**

11 Sec., T R M or Blk and Survey or Area
Sec 25, T17S, R27E

14 Distance in miles and direction from nearest town or post office*
2 miles North of Loco Hills, NM

12 County or Parish
Eddy

13 State
NM

15 Distance from proposed* location to nearest property or lease line, ft (Also to nearest drig unit line, if any)	16 No of acres in lease	17 Spacing Unit dedicated to this well
1328'	**40**	**40**

18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft	19 Proposed Depth	20 BLM/BIA Bond No. on file
700'	**TVD: 4700' MD: 4720'** 4718' -per directional plan	**NMB000740; NMB000215**

21 Elevations (Show whether DF, KDB, RT, GL, etc.)	22 Approximate date work will start*	23 Estimated duration
3596' GL	**01/30/2012**	**15 days**

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No 1, shall be attached to this form

1. Well plat certified by a registered surveyor
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office)
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above)
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer

25 Signature	Name *(Printed/Typed)*	Date
Title **Permitting Tech**	**Kelly J. Holly**	12/06/2011

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
/s/ Cody R. Layton		APR 19 2012
Title **for FIELD MANAGER**	Office **CARLSBAD FIELD OFFICE**	

Application approval 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.
Conditions of approval, if any, are attached

APPROVAL FOR TWO YEARS

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

**(Instructions on page 2)*

Roswell Controlled Water Basin

Approval Subject to General Requirements & Special Stipulations Attached

RECEIVED
APR 23 2012
NMOCD ARTESIA

SEE ATTACHED FOR CONDITIONS OF APPROVAL

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 make 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 6th day of December, 2011.

Signed: Carl Bird

Printed Name: Carl Bird

Position: Drilling Engineer

Address: 550 W. Texas, Suite 1300, Midland, Texas 79701

Telephone: (432) 683-7443

Field Representative (if not above signatory): Same

E-mail: cbird@conchoresources.com

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240
DISTRICT II
1301 W. GRAND AVENUE, ARTESIA, NM 88210
DISTRICT III
1000 RIO BRAZOS RD., AZTEC, NM 87410
DISTRICT IV
11885 S ST. FRANCIS DR., SANTA FE, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Form C-102
Revised July 16, 2010
Submit to Appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-015 40197	96836	Red Lake; Glorieta-Yeso, Northeast

Property Code	Property Name	Well Number
302565	SPRUCE FEDERAL	3

OGRID No.	Operator Name	Elevation
229137	COG OPERATING, LLC	3596'

Surface Location

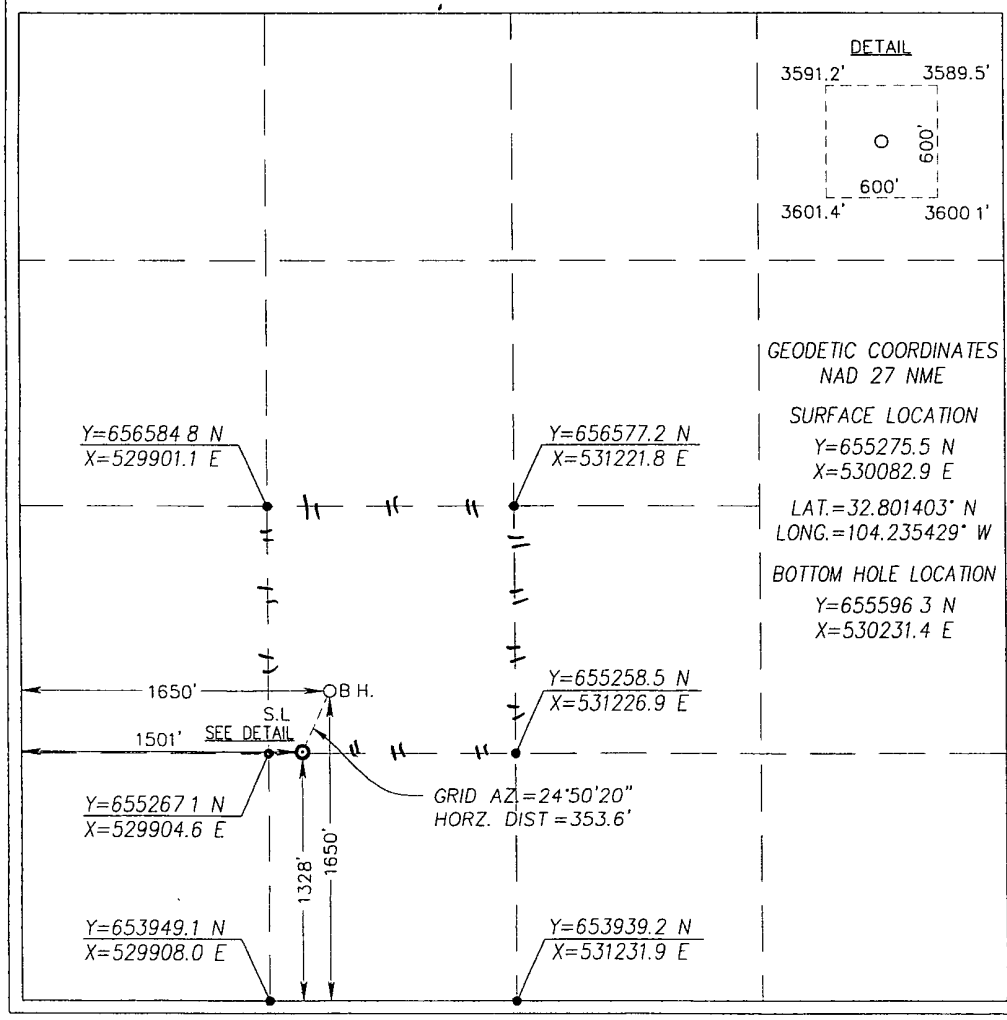
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	25	17-S	27-E		1328	SOUTH	1501	WEST	EDDY

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
K	25	17-S	27-E		1650	SOUTH	1650	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
40			

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 6-20-11 Date

Kelly J. Holly
Printed Name

kholly@conchoresources.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.

JUNE 8, 2011
Date of Survey

Signature & Seal of Professional Surveyor:

GARY G. EIDSON NEW MEXICO 12641 REGISTERED PROFESSIONAL SURVEYOR 6/16/11

Certificate Number	Gary G. Eidson	12641
	Ronald J. Eidson	3239

DSS WSC W.O.: 11.11.0800

Offset wells to Spruce Federal #3

API#	Operator	County	Legal	Lease	Well#	Date Issued	Permitted Depth	Permit TVD	Images	Doc	Total Depth	Well Type	Well Status	Permit#
30-015-39029	GEORGE A CHASE JR DBA G AND C SERVICE	EDDY	S.26, T.17S, R.27E	CONKLIN	001Y	5/10/2011	550		Yes	link	550	PO	Active Permit	TEMP784523531
30-015-39132	COG OPERATING LLC	EDDY	S.25, T 17S, R 27E	DOGWOOD FEDERAL	2	5/4/2011	4,750		Yes	link	4,750	PO	Active Permit	TEMP31688374
30-015-38514	LIME ROCK RESOURCES A, L.P	EDDY	S 25, T 17S, R 27E	RESLER STATE	004	3/2/2011	3,900		Yes	link	3,900	PO	Active Permit	TEMP2086612170
30-015-38539	COG OPERATING LLC	EDDY	S 25, T.17S, R 27E	BEECH FEDERAL	006	2/23/2011	4,800		Yes	link	4,800	PO	Active Permit	TEMP134774717
30-015-38420	COG OPERATING LLC	EDDY	S.36, T 17S, R.27E	KIOWA STATE	003	1/18/2011	4,850		Yes	link	4,850	PO	Active Permit	TEMP542518741
30-015-38399	COG OPERATING LLC	EDDY	S.36, T.17S, R.27E	KIOWA STATE	001	1/10/2011	4,850		Yes	link	4,850	PO	Active Permit	TEMP923037391
30-015-38290	COG OPERATING LLC	EDDY	S.30, T 17S, R.28E	MAPLE STATE	013	11/23/2010	4,800		Yes	link	4,800	PO	Active Permit	TEMP2060345126
30-015-38012	COG OPERATING LLC	EDDY	S 30, T.17S, R 28E	MAPLE STATE	007	7/26/2010	4,800		Yes	link	4,800	PO	Active Permit	TEMP1451357427
30-015-37936	COG OPERATING LLC	EDDY	S.30, T.17S, R 28E	MAPLE STATE	11	6/22/2010	4,800		Yes	link	4,800	PO	Active Permit	TEMP850046207
30-015-37738	JOE L TARVER	EDDY	S 35, T.17S, R 27E	MAGRUDER	13	3/26/2010	540		Yes	link	540	PO	Active Permit	TEMP796017875
30-015-37742	JOE L TARVER	EDDY	S.35, T.17S, R.27E	MAGRUDER	17	3/26/2010	540		Yes	link	540	PO	Active Permit	TEMP718470452
30-015-37744	JOE L TARVER	EDDY	S.35, T 17S, R.27E	MAGRUDER	19	3/26/2010	540		Yes	link	540	PO	Active Permit	TEMP673936982
30-015-37745	JOE L TARVER	EDDY	S 35, T.17S, R 27E	MAGRUDER	20	3/26/2010	540		Yes	link	540	PO	Active Permit	TEMP1331140130
30-015-37746	JOE L TARVER	EDDY	S.35, T.17S, R 27E	MAGRUDER	21	3/26/2010	540		Yes	link	540	PO	Active Permit	TEMP2032968097
30-015-37747	JOE L TARVER	EDDY	S.35, T.17S, R.27E	MAGRUDER	22	3/26/2010	540		Yes	link	540	PO	Active Permit	TEMP1519638088
30-015-00669	ASPEN OIL INC.	EDDY	S.36, T.17S, R.27E	HOMAN	1	3/25/2010			Yes	link		PO	Temporarily Abandoned	TEMP1106714001
30-015-37672	LIME ROCK RESOURCES A, L.P.	EDDY	S.36, T 17S, R.27E	NO BLUFF 36 STATE COM	10	3/16/2010	4,800		Yes	link	4,658	U	Active Permit	TEMP1496242947
30-015-37641	LIME ROCK RESOURCES A, L P	EDDY	S.25, T.17S, R.27E	ENRON FEDERAL	11	2/18/2010	4,800		Yes	link	3,258	O	Active Permit	TEMP1722110124
30-015-37372	LIME ROCK RESOURCES A, L P.	EDDY	S.36, T.17S, R 27E	NO BLUFF 36 STATE CON	8	11/3/2009	4,800		Yes	link	4,637	U	Active Permit	TEMP1993841815
30-015-37739	JOE L TARVER	EDDY	S.35, T 17S, R.27E	MAGRUDER	14	10/29/2009	540		Yes	link	540	PO	Active Permit	TEMP1612284831
30-015-37743	JOE L TARVER	EDDY	S.35, T.17S, R 27E	MAGRUDER	18	10/29/2009	540		Yes	link	540	PO	Active Permit	TEMP781665509
30-015-37313	LIME ROCK RESOURCES A, L.P.	EDDY	S.25, T 17S, R.27E	RESLER STATE	3	10/13/2009			Yes	link	3,855	O	Active Permit	TEMP1982828410
30-015-37217	LIME ROCK RESOURCES A, L.P	EDDY	S 25, T.17S, R.27E	ENRON FEDERAL	10	8/7/2009	3,300		Yes	link	3,233	O	Active Permit	TEMP2025049969
30-015-36978	LIME ROCK RESOURCES A, L.P.	EDDY	S.31, T.17S, R.28E	ENRON STATE	15	3/4/2009	3,600		Yes	link	3,700	U	Active Permit	TEMP860340959
30-015-36976	LIME ROCK RESOURCES A, L P.	EDDY	S 30, T.17S, R 28E	STALEY STATE	11	3/4/2009	4,000		Yes	link	4,770	U	Active Permit	TEMP1563026244
	LIME ROCK RESOURCES A,			ENRON										

30-015-32551	L P	EDDY	S:25, T:17S, R:27E	FEDERAL	7	1/15/2009	3,600		Yes	link	3,223	O	Active	TEMP1941871256
30-015-36342	ASPEN OIL INC.	EDDY	S.36, T 17S, R 27E	STATE A	4	5/22/2008	550		Yes	link	550	O	Active Permit	TEMP1166252595
30-015-00669	ASPEN OIL INC.	EDDY	S.36, T 17S, R:27E	HOMAN	1	5/6/2008			Yes	link		PO	Temporarily Abandoned	TEMP929207991
30-015-31571	FAIRWAY RESOURCES OPERATING, LLC	EDDY	S:26, T 17S, R:27E	TRIGG FEDERAL	4	3/8/2008	2,500		Yes	link	2,531	O	Active	TEMP976588617
30-015-36131	FAIRWAY RESOURCES OPERATING, LLC	EDDY	S 36, T:17S, R.27E	SOUTH RED LAKE II UNIT	059	2/20/2008	2,100		Yes	link	2,123	U	Active Permit	TEMP1354534032
30-015-36116	FAIRWAY RESOURCES OPERATING, LLC	EDDY	S:36, T 17S, R:27E	SOUTH RED LAKE II UNIT	057	2/11/2008	2,100		Yes	link	2,121	U	Active Permit	TEMP2103199160
30-015-36081	DEVON ENERGY PRODUCTION COMPANY, LP	EDDY	S:35, T:17S, R 27E	LOGAN 35 FEDERAL	1	1/26/2008	4,000		Yes	link	3,585	O	Active Permit	TEMP946719981
30-015-35973	SDX RESOURCES INC	EDDY	S.25, T 17S, R:27E	RESLER STATE	002	12/10/2007	4,000		Yes	link	3,830	U	Active Permit	TEMP1868511120
30-015-35619	FAIRWAY RESOURCES OPERATING, LLC	EDDY	S:35, T.17S, R:27E	MIDNIGHT MATADOR "A"	2	5/14/2007	2,500		Yes	link	2,500	O	Active Permit	TEMP1646923518
30-015-35620	FAIRWAY RESOURCES OPERATING, LLC	EDDY	S:35, T:17S, R:27E	MIDNIGHT MATADOR "A"	5	5/14/2007	2,500		Yes	link	2,500	O	Active Permit	TEMP1113678844
30-015-35697	FAIRWAY RESOURCES OPERATING, LLC	EDDY	S 35, T.17S, R 27E	MIDNIGHT MATADOR "A"	3	5/14/2007	2,500		Yes	link	2,500	O	Active Permit	TEMP304660648
30-015-00646	ASPEN OIL INC or ASPEN OIL INC.	EDDY	S 36, T.17S, R.27E	DELHI 32314	7	2/5/2007	540		Yes	link	540	PO	Temporarily Abandoned	TEMP617249262
30-015-35289	FAIRWAY RESOURCES OPERATING, LLC	EDDY	S:35, T:17S, R:27E	MIDNIGHT MATADOR	007	12/20/2006	2,500		Yes	link	2,520	O	Active	TEMP2035326037
30-015-35264	FAIRWAY RESOURCES OPERATING, LLC	EDDY	S 35, T 17S, R:27E	MIDNIGHT MATADOR	005	12/1/2006	2,500		Yes	link	2,500	O	Active Permit	TEMP1521636442
30-015-33793	SOUTHWESTERN ENERGY PRODUCTION COMPANY or CHEVRON USA, INC.	EDDY	S:36, T:17S, R:27E	NO BLUFF STATE COM	4	11/8/2006			Yes	link	3,652	U	Active	TEMP338523802
30-015-35222	EDGE PETROLEUM OPERATING COMPANY, INC	EDDY	S 36, T 17S, R 27E	RED LAKE 36 A STATE	004	11/2/2006	3,650		Yes	link	3,650	O	Active Permit	TEMP394422630
30-015-35213	EDGE PETROLEUM OPERATING COMPANY, INC.	EDDY	S:36, T:17S, R:27E	RED LAKE 36 C STATE	004	10/26/2006	3,650		Yes	link	3,650	O	Active Permit	TEMP1975223290
30-015-35193	FAIRWAY RESOURCES OPERATING, LLC	EDDY	S 36, T:17S, R:27E	SOUTH RED LAKE II UNIT	52	10/20/2006	1,800		No	link	1,814	O	Active Permit	TEMP698426663
30-015-34050	SOUTHWESTERN ENERGY COMPANY or SOUTHWESTERN ENERGY PRODUCTION COMPANY	EDDY	S.36, T 17S, R:27E	NO BLUFF STATE "36" COM	9	7/31/2006			Yes	link	3,709	U	Active Permit	TEMP1451808530
	SDX RESOURCES			ENRON										

30-015-32036	INC	EDDY	S:25, T:17S, R 27E	FEDERAL	9	5/9/2006	3,500		Yes	link	7,950	PO	Active	TEMP1981383307
30-015-33792	SOUTHWESTERN ENERGY PRODUCTION COMPANY or CHEVRON USA, INC.	EDDY	S 36, T.17S, R 27E	NO BLUFF STATE "36" COM	3	4/21/2006			Yes	link	3,890	O	Active	TEMP665692533
30-015-34626	SDX RESOURCES, INC.	EDDY	S:36, T:17S, R 27E	JEFFERS 36 STATE	4	2/17/2006	3,500		No	link	3,524	O	Active	TEMP1714028261
30-015-34577	SDX RESOURCES, INC.	EDDY	S:36, T 17S, R:27E	JEFFERS 36 STATE	4	2/2/2006	3,500		No	link	3,500	PO	Active Permit	TEMP298784189
30-015-34511	MCQUADRANGLE, LC	EDDY	S:35, T.17S, R 27E	MIDNIGHT MATADOR FED	002	12/21/2005	2,400		No	link	2,400	O	Active Permit	TEMP388068100
30-015-00625	JOE L TARVER	EDDY	S:35, T:17S, R 27E	MAGRUDER A	001	11/15/2005	550		No	link	550	PO	Unknown	TEMP268440922
30-015-00631	JOE L TARVER	EDDY	S:35, T:17S, R 27E	MAGRUDER A	003	11/15/2005	550		No	link	550	PO	Active	TEMP358749047
30-015-34377	EDGE PETROLEUM OPERATING COMPANY, INC	EDDY	S.36, T:17S, R:27E	RED LAKE 36 C STATE	003	10/7/2005	3,800		No	link	3,660	PO	Active Permit	TEMP694342868
30-015-34379	EDGE PETROLEUM OPERATING COMPANY, INC.	EDDY	S.36, T.17S, R.27E	RED LAKE 36 A STATE	003	10/7/2005	3,800		No	link	3,650	PO	Active Permit	TEMP1988099628
30-015-34385	MCQUADRANGLE, LC	EDDY	S:35, T.17S, R 27E	MIDNIGHT MATADOR "A" FEDERAL	001	10/6/2005	2,420		No	link	2,475	O	Active Permit	TEMP1934056285
30-015-34146	SOUTHWESTERN ENERGY PRODUCTION COMPANY	EDDY	S:36, T:17S, R 27E	NO BLUFF STATE COM	007	6/13/2005	3,800		No	link	3,665	U	Active Permit	TEMP1001863318
30-015-34136	SOUTHWESTERN ENERGY PRODUCTION COMPANY	EDDY	S:36, T:17S, R:27E	NO BLUFF STATE COM	008	5/27/2005	3,800		No	link	3,800	PO	Active Permit	TEMP1593556959
30-015-34089	ASPEN OIL INC	EDDY	S:36, T:17S, R:27E	STATE A	003	4/27/2005	550		No	link	550	PO	Active Permit	TEMP1389107960
30-015-34090	ASPEN OIL INC	EDDY	S:36, T 17S, R:27E	ACREY STATE	006	4/27/2005	550		No	link	519	PO	Active Permit	TEMP85442413
30-015-34082	DEVON ENERGY PRODUCTION COMPANY LP or DEVON ENERGY PRODUCTION COMPANY, LP	EDDY	S.26, T:17S, R 27E	EAGLE 26 P FEDERAL	003	4/21/2005	4,000		No	link	3,510	O	Active Permit	TEMP1408197620
30-015-34050	SOUTHWESTERN ENERGY PRODUCTION COMPANY	EDDY	S:36, T:17S, R 27E	NO BLUFF STATE COM	009	4/12/2005	3,800		No	link	3,709	U	Active Permit	TEMP924450840
30-015-34029	SOUTHWESTERN ENERGY PRODUCTION COMPANY	EDDY	S:36, T.17S, R:27E	NO BLUFF STATE	005	3/29/2005	3,800		No	link	3,709	U	Active	TEMP1802163495
30-015-34023	OCCIDENTAL PERMIAN LP or OCCIDENTAL PERMIAN LTD	EDDY	S:35, T:17S, R:27E	OPL EAGLE 35 FEDERAL	003	3/18/2005	3,600		No	link	3,600	O	Active	TEMP1221391582
	EDGE PETROLEUM													

30-015-34004	OPERATING COMPANY, INC.	EDDY	S:36, T 17S, R:27E	RED LAKE 36 C STATE	002	3/17/2005	3,650		No	link	3,650	O	Active	TEMP621537335
30-015-33994	EDGE PETROLEUM OPERATING COMPANY, INC	EDDY	S:36, T:17S, R 27E	RED LAKE 36 A STATE	002	3/11/2005	3,650		No	link	3,650	G	Active	TEMP2090034687
30-015-33792	SOUTHWESTERN ENERGY PRODUCTION COMPANY or CHEVRON USA, INC	EDDY	S:36, T.17S, R 27E	NO BLUFF STATE COM	003	1/4/2005	4,200		No	link	3,890	O	Active	TEMP35301825
30-015-33793	SOUTHWESTERN ENERGY PRODUCTION COMPANY or CHEVRON USA, INC.	EDDY	S:36, T:17S, R 27E	NO BLUFF STATE COM	004	1/4/2005	4,200		No	link	3,652	U	Active	TEMP249997969
30-015-33764	OCCIDENTAL PERMIAN LP or OCCIDENTAL PERMIAN LTD	EDDY	S 35, T.17S, R:27E	OPL EAGLE 35 FEDERAL	002	12/7/2004	3,600		No	link	3,600	O	Active	TEMP1300642392
30-015-33765	OCCIDENTAL PERMIAN LP or OCCIDENTAL PERMIAN LTD	EDDY	S:35, T 17S, R:27E	OPL EAGLE 35 FEDERAL	001	12/7/2004	3,600		No	link	3,600	O	Active	TEMP1238095243
30-015-33765	OCCIDENTAL PERMIAN LP or OCCIDENTAL PERMIAN LTD	EDDY	S:35, T:17S, R:27E	OPL EAGLE 35 FEDERAL	001	11/30/2004			No	link	3,600	O	Active	TEMP203282760
30-015-33764	OCCIDENTAL PERMIAN LP or OCCIDENTAL PERMIAN LTD	EDDY	S:35, T.17S, R:27E	OPL EAGLE 35 FEDERAL	002	11/30/2004			No	link	3,600	O	Active	TEMP486556694
30-015-32314	SDX RESOURCES INC	EDDY	S:25, T.17S, R 27E	RESLER STATE	002Q	10/31/2004			No	link	4,000	O	Active	TEMP1776298251
30-015-33580	EDGE PETROLEUM OPERATING COMPANY, INC	EDDY	S 36, T.17S, R:27E	RED LAKE 36 A STATE	1	8/25/2004	3,700		No	link	3,650	O	Active	TEMP206537815
30-015-33581	EDGE PETROLEUM OPERATING COMPANY, INC	EDDY	S 36, T 17S, R 27E	RED LAKE 36 C STATE	1	8/25/2004	3,700		No	link	3,650	O	Active	TEMP1297534098
30-015-33580	EDGE PETROLEUM OPERATING COMPANY, INC.	EDDY	S 36, T:17S, R 27E	RED LAKE 36 A STATE	001	7/31/2004			No	link	3,650	O	Active	TEMP246609204
30-015-33581	EDGE PETROLEUM OPERATING COMPANY, INC	EDDY	S.36, T.17S, R:27E	RED LAKE 36 C STATE	001	7/31/2004			No	link	3,650	O	Active	TEMP763727050
30-015-34134	SOUTHWESTERN ENERGY PRODUCTION COMPANY	EDDY	S 36, T 17S, R:27E	NO BLUFF STATE COM	006	5/25/2004	3,800		No	link	3,595	PO	Active Permit	TEMP1124326240
30-015-34134	SOUTHWESTERN ENERGY PRODUCTION COMPANY	EDDY	S.36, T:17S, R 27E	NO BLUFF STATE COM	006	5/25/2004	3,800		Yes	link	3,595	PO	Active Permit	TEMP1653148675

30-015-33351	MCQUADRANGLE, LC	EDDY	S 35, T:17S, R:27E	MIDNIGHT MATADOR A FEDERAL	001	3/30/2004	2,420		No	link	2,420	O	Active	TEMP491634311
30-015-33351	MCQUADRANGLE, LC	EDDY	S:35, T 17S, R:27E	MIDNIGHT MATADOR A FEDERAL	001	2/29/2004			No	link	2,420	O	Active	TEMP191849059
30-015-33427	DEVON ENERGY PRODUCTION COMPANY LP or MARBOB ENERGY CORP	EDDY	S 35, T 17S, R:27E	EAGLE 35 A FEDERAL	019	1/29/2004	4,000		No	link	3,550	O	Active	TEMP1681710478
30-015-32551	SDX RESOURCES, INC. or SDX RESOURCES INC	EDDY	S:25, T:17S, R:27E	ENRON FEDERAL	007	1/22/2004			No	link	3,223	O	Active	TEMP602265924
30-015-32551	SDX RESOURCES INC	EDDY	S 25, T:17S, R:27E	ENRON FEDERAL	007	12/31/2003			No	link	3,223	O	Active	TEMP685266231
30-015-33427	DEVON ENERGY PRODUCTION COMPANY, LP	EDDY	S 35, T:17S, R:27E	EAGLE 35 A FEDERAL	019	12/31/2003			No	link	3,550	O	Active	TEMP661626861
30-015-33010	DEVON ENERGY PRODUCTION COMPANY, LP	EDDY	S:35, T:17S, R 27E	EAGLE 35 H FEDERAL	014	8/31/2003			No	link	3,500	O	Active	TEMP1066711097
30-015-32978	DEVON ENERGY PRODUCTION COMPANY LP or MARBOB ENERGY CORP	EDDY	S:35, T 17S, R:27E	EAGLE 35 FEDERAL	015	8/5/2003	4,000		No	link	3,505	O	Active	TEMP1475121458
30-015-32927	MACK ENERGY CORPORATION or MACK ENERGY CORP	EDDY	S:25, T 17S, R:27E	DOGWOOD FEDERAL	1	7/30/2003	7,200		No	link	7,331	O	Active	TEMP1122034865
30-015-33010	DEVON ENERGY PRODUCTION COMPANY LP or MARBOB ENERGY CORP	EDDY	S:35, T 17S, R:27E	EAGLE 35 FEDERAL	014	7/30/2003	4,000		No	link	3,500	O	Active	TEMP1411455702
30-015-32927	MACK ENERGY CORP	EDDY	S.25, T 17S, R:27E	DOGWOOD FEDERAL	001	6/30/2003			No	link	7,331	O	Active	TEMP315347991
30-015-32335	OXY USA WTP LIMITED PARTNERSHIP	EDDY	S 24, T 17S, R 27E	OXY SWEET & SOUR FEDERAL	003	6/28/2003	7,200		No	link	7,200	O	Active	TEMP121073280
30-015-32861	MCQUADRANGLE, LC	EDDY	S:35, T:17S, R:27E	MIDNIGHT MATADOR	1	6/27/2003	2,390		No	link	2,443	O	Active	TEMP1698107691
30-015-32861	MCQUADRANGLE, LC	EDDY	S.35, T 17S, R:27E	MIDNIGHT MATADOR	001	5/31/2003			No	link	2,443	O	Active	TEMP951799292
30-015-32694	MACK ENERGY CORPORATION or MACK ENERGY CORP	EDDY	S:25, T.17S, R 27E	REDBUD FEDERAL	001	3/21/2003	7,200		No	link	7,130	O	Active	TEMP1632810942
30-015-32694	MACK ENERGY CORP	EDDY	S:25, T:17S, R:27E	REDBUD FEDERAL	001	2/28/2003			No	link	7,130	O	Active	TEMP6119247
30-015-32662	SDX RESOURCES, INC or SDX RESOURCES INC	EDDY	S:25, T 17S, R:27E	ENRON FEDERAL	008	2/24/2003	4,000		No	link	3,220	O	Active	TEMP2134773022
30-015-00526	ASPEN OIL INC	EDDY	S:25, T 17S, R:27E	BRAINARD	001	2/1/2003			No	link		PO	Temporarily Abandoned	TEMP25529186
30-015-00665	ASPEN OIL INC	EDDY	S.36, T 17S, R:27E	ACREY	003Y	2/1/2003	0		No	link	0	PO	Pumping	TEMP1001244927
30-015-00666	ASPEN OIL INC	EDDY	S 36, T.17S, R:27E	CONKLIN	001	2/1/2003			No	link		O	Temporarily Abandoned	TEMP7331249
30-015-00690	ASPEN OIL INC	EDDY	S:36, T.17S, R:27E	CONKLIN	002	2/1/2003	0		No	link	0	O	Pumping	TEMP171249604
30-015-00663	ASPEN OIL INC	EDDY	S:36, T 17S, R:27E	ACREY	002	2/1/2003			No	link		PO	Active	TEMP646479726

30-015-25670	ASPEN OIL INC	EDDY	S:36, T 17S, R 27E	ACREY	005	2/1/2003	0		No	link	560	O	Pumping	TEMP1109332653
30-015-00693	ASPEN OIL INC	EDDY	S 36, T.17S, R.27E	DELHI	001	2/1/2003			No	link	2,276	O	Temporarily Abandoned	TEMP55951461
30-015-00654	ASPEN OIL INC	EDDY	S:36, T:17S, R:27E	DELHI	002	2/1/2003			No	link		O	Active	TEMP1200137803
30-015-01217	ASPEN OIL INC	EDDY	S 36, T 17S, R:27E	DELHI	003	2/1/2003			No	link	0	PO	Shut-in	TEMP1203600543
30-015-00680	ASPEN OIL INC	EDDY	S:36, T:17S, R 27E	DELHI	004	2/1/2003			No	link	0	PO	Active	TEMP1584886703
30-015-00651	ASPEN OIL INC	EDDY	S:36, T:17S, R 27E	DELHI	005	2/1/2003	0		No	link	513	O	Active	TEMP1460228060
30-015-00691	ASPEN OIL INC	EDDY	S:36, T:17S, R:27E	DELHI	006	2/1/2003	0		No	link	0	O	Active	TEMP1433680386
30-015-00646	ASPEN OIL INC	EDDY	S 36, T 17S, R:27E	DELHI	007	2/1/2003			No	link	540	PO	Temporarily Abandoned	TEMP1703004616
30-015-23358	ASPEN OIL INC	EDDY	S 36, T 17S, R:27E	DELHI	008	2/1/2003	0		No	link	0	O	Active	TEMP1670685708
30-015-00669	ASPEN OIL INC	EDDY	S:36, T:17S, R:27E	HOMAN	001	2/1/2003			No	link		PO	Temporarily Abandoned	TEMP1642599038
30-015-00649	ASPEN OIL INC	EDDY	S:36, T 17S, R.27E	STATE A	001	2/1/2003			No	link	532	PO	Temporarily Abandoned	TEMP303672866
30-015-01633	ASPEN OIL INC	EDDY	S.31, T:17S, R:28E	ASTON & FAIR A	001	2/1/2003			No	link	2,245	O	Temporarily Abandoned	TEMP546449422
30-015-00650	ASPEN OIL INC	EDDY	S 36, T.17S, R 27E	STATE A	002	2/1/2003			No	link		PO	Temporarily Abandoned	TEMP1194525866
30-015-32662	SDX RESOURCES INC	EDDY	S:25, T:17S, R.27E	ENRON FEDERAL	008	1/31/2003			No	link	3,220	O	Active	TEMP1785350200
30-015-32551	SDX RESOURCES, INC. or SDX RESOURCES INC	EDDY	S.25, T.17S, R:27E	ENRON FEDERAL	007	12/12/2002	4,000		No	link	3,223	O	Active	TEMP196929220
30-015-00692	SDX RESOURCES INC	EDDY	S.36, T:17S, R:27E	STATE B	001	10/1/2002	0		No	link	0	O	Temporarily Abandoned	TEMP23438796
30-015-01640	HANSON ENERGY	EDDY	S:31, T 17S, R:28E	RAMPO	002	9/1/2002			No	link	1,996	PO	Active	TEMP58903128
30-015-02666	HANSON ENERGY	EDDY	S 31, T:17S, R:28E	HUDSON SAIKIN STATE	001	9/1/2002	0		No	link	0	O	Pumping	TEMP1218951710
30-015-00501	HANSON ENERGY	EDDY	S 24, T:17S, R:27E	BERRY A	026	7/1/2002	0		No	link	0	G	Shut-in	TEMP761645327
30-015-00516	HANSON ENERGY	EDDY	S.25, T.17S, R:27E	BERRY B	024	7/1/2002			No	link	0	PO	Active	TEMP514636533
30-015-00578	HANSON ENERGY	EDDY	S:25, T:17S, R 27E	BERRY B	025	7/1/2002	0		No	link	0	O	Pumping	TEMP811192853
30-015-32314	SDX RESOURCES, INC or SDX RESOURCES INC	EDDY	S 25, T:17S, R:27E	RESLER STATE	002	5/31/2002	4,000		No	link	4,000	O	Active	TEMP2081719768
30-015-32299	SDX RESOURCES, INC or SDX RESOURCES INC	EDDY	S:25, T:17S, R:27E	ENRON FEDERAL	005	5/10/2002	4,000		No	link	3,185	O	Active	TEMP1490884053
30-015-32300	SDX RESOURCES, INC or SDX RESOURCES INC	EDDY	S 25, T:17S, R:27E	ENRON FEDERAL	006	5/10/2002	4,000		No	link	3,180	O	Active	TEMP1099979171
30-015-32299	SDX RESOURCES INC	EDDY	S:25, T:17S, R 27E	ENRON FEDERAL	005	4/30/2002			No	link	3,185	O	Active	TEMP313586005
30-015-32300	SDX RESOURCES INC	EDDY	S:25, T 17S, R:27E	ENRON FEDERAL	006	4/30/2002			No	link	3,180	O	Active	TEMP933168997
30-015-32163	SDX RESOURCES, INC. or SDX RESOURCES INC	EDDY	S 25, T:17S, R:27E	ENRON FEDERAL	003	1/14/2002			No	link	3,177	O	Pumping	TEMP1970958305
30-015-05934	BP AMERICA PRODUCTION COMPANY	EDDY	S 36, T 17S, R:27E	EMPIRE ABO UNIT	019A	12/31/2001	0		No	link	5,970	O	Injection Well	TEMP1862301372
30-015-32163	SDX RESOURCES INC	EDDY	S 25, T:17S, R:27E	ENRON FEDERAL	003	12/31/2001			No	link	3,177	O	Pumping	TEMP1430791186
30-015-30407	DEVON ENERGY PRODUCTION COMPANY LP or MARBOB ENERGY CORP	EDDY	S 35, T 17S, R:27E	LOGAN 35 FEDERAL	001	11/23/2001			No	link	3,400	O	Active	TEMP244520665
30-015-30407	DEVON ENERGY PRODUCTION COMPANY, LP	EDDY	S.35, T.17S, R:27E	LOGAN 35 FEDERAL	001	10/31/2001			No	link	3,400	O	Active	TEMP1904919360

30-015-32069	MACK ENERGY CORP	EDDY	S 25, T:17S, R:27E	FIR FEDERAL	001	10/23/2001			No	link	7,208	O	Pumping	TEMP701016988
30-015-32036	MACK ENERGY CORP	EDDY	S 25, T 17S, R:27E	BEECH FEDERAL	003	10/4/2001	7,800		Yes	link	7,950	PO	Active	TEMP187361883
30-015-32037	MACK ENERGY CORP	EDDY	S 25, T.17S, R:27E	BEECH FEDERAL	004	10/4/2001			No	link	7,800	O	Active	TEMP312020526
30-015-32037	MACK ENERGY CORPORATION or MACK ENERGY CORP	EDDY	S 25, T:17S, R:27E	BEECH FEDERAL	004	10/4/2001	7,800		No	link	7,800	O	Active	TEMP207894890
30-015-31991	OXY USA WTP LIMITED PARTNERSHIP	EDDY	S:25, T:17S, R:27E	OXY MEARBALL STATE	001	9/13/2001			No	link	9,810	G	Pumping	TEMP2116892941
30-015-31994	MARBOB ENERGY CORP	EDDY	S 25, T:17S, R:27E	STATE 25	002	9/13/2001			No	link	8,150	O	Flowing	TEMP2019173059
30-015-30936	MACK ENERGY CORP	EDDY	S 25, T:17S, R 27E	EVERGREEN STATE	001	8/30/2001			No	link		PO	Unknown	TEMP2115016813
30-015-31927	MARBOB ENERGY CORP	EDDY	S:25, T 17S, R:27E	STATE 25	001	8/6/2001	8,200		Yes	link	8,130	O	Flowing	TEMP1549742414
30-015-31441	SDX RESOURCES INC	EDDY	S:25, T:17S, R:27E	RESLER STATE	002	8/1/2001			No	link		O	Active	TEMP755819898
30-015-31790	MACK ENERGY CORP	EDDY	S:25, T 17S, R:27E	BEECH FEDERAL	002	5/15/2001	7,800		Yes	link	7,800	PO	Pumping	TEMP1828999834
30-015-31743	OXY USA WTP LIMITED PARTNERSHIP	EDDY	S 24, T:17S, R 27E	OXY CHOPSTICKS FEDERAL	002	4/24/2001			No	link	9,800	O	Flowing	TEMP589338877
30-015-31571	SDX RESOURCES INC	EDDY	S:26, T 17S, R:27E	TRIGG FEDERAL	004	1/22/2001			No	link	2,531	O	Active	TEMP946701325
30-015-31540	SDX RESOURCES INC	EDDY	S 25, T:17S, R 27E	S W STATE	001	1/11/2001			No	link	4,000	O	Active	TEMP610415462
30-015-31541	SDX RESOURCES INC	EDDY	S:36, T 17S, R:27E	JEFFERS 36 STATE	3	1/11/2001	4,000		Yes	link	3,525	O	Active	TEMP242595514
30-015-31540	SDX RESOURCES, INC. or SDX RESOURCES INC	EDDY	S 25, T:17S, R:27E	S W STATE	001	1/11/2001	4,000		No	link	4,000	O	Active	TEMP262913982
30-015-30882	OXY USA WTP LIMITED PARTNERSHIP	EDDY	S 26, T 17S, R.27E	OXY HARVESTER FEDERAL	001	1/1/2001			No	link	9,820	G	Active	TEMP1502865989
30-015-31314	OXY USA WTP LIMITED PARTNERSHIP	EDDY	S 24, T:17S, R 27E	OXY SWEET & SOUR STATE	001	1/1/2001			No	link	9,800	G	Active	TEMP1973303336
30-015-00594	SDX RESOURCES INC	EDDY	S:26, T:17S, R 27E	HANSON TRIGG FEDERAL	001	12/31/2000		415	No	link	415	PO	Shut-in	TEMP1345594013
30-015-00595	SDX RESOURCES INC	EDDY	S 26, T.17S, R:27E	HANSON TRIGG FEDERAL	002	12/31/2000			No	link	99,999	PO	Shut-in	TEMP1095137804
30-015-31388	SDX RESOURCES INC	EDDY	S.26, T:17S, R:27E	TRIGG FEDERAL	003	9/27/2000			No	link		O	Active	TEMP1005206466
30-015-31283	SDX RESOURCES INC	EDDY	S 25, T 17S, R:27E	RESLER STATE	001	8/9/2000			No	link	3,600	O	Pumping	TEMP39702910
30-015-31193	SDX RESOURCES INC	EDDY	S.26, T 17S, R.27E	TRIGG FEDERAL	002	6/16/2000	4,000		Yes	link	3,690	PO	Pumping	TEMP2117938274
30-015-31123	SOUTHWESTERN ENERGY PRODUCTION COMPANY or CHEVRON USA, INC.	EDDY	S 36, T.17S, R 27E	NO BLUFF 36 STATE COM	002	5/3/2000			No	link	10,050	G	Flowing	TEMP959698827

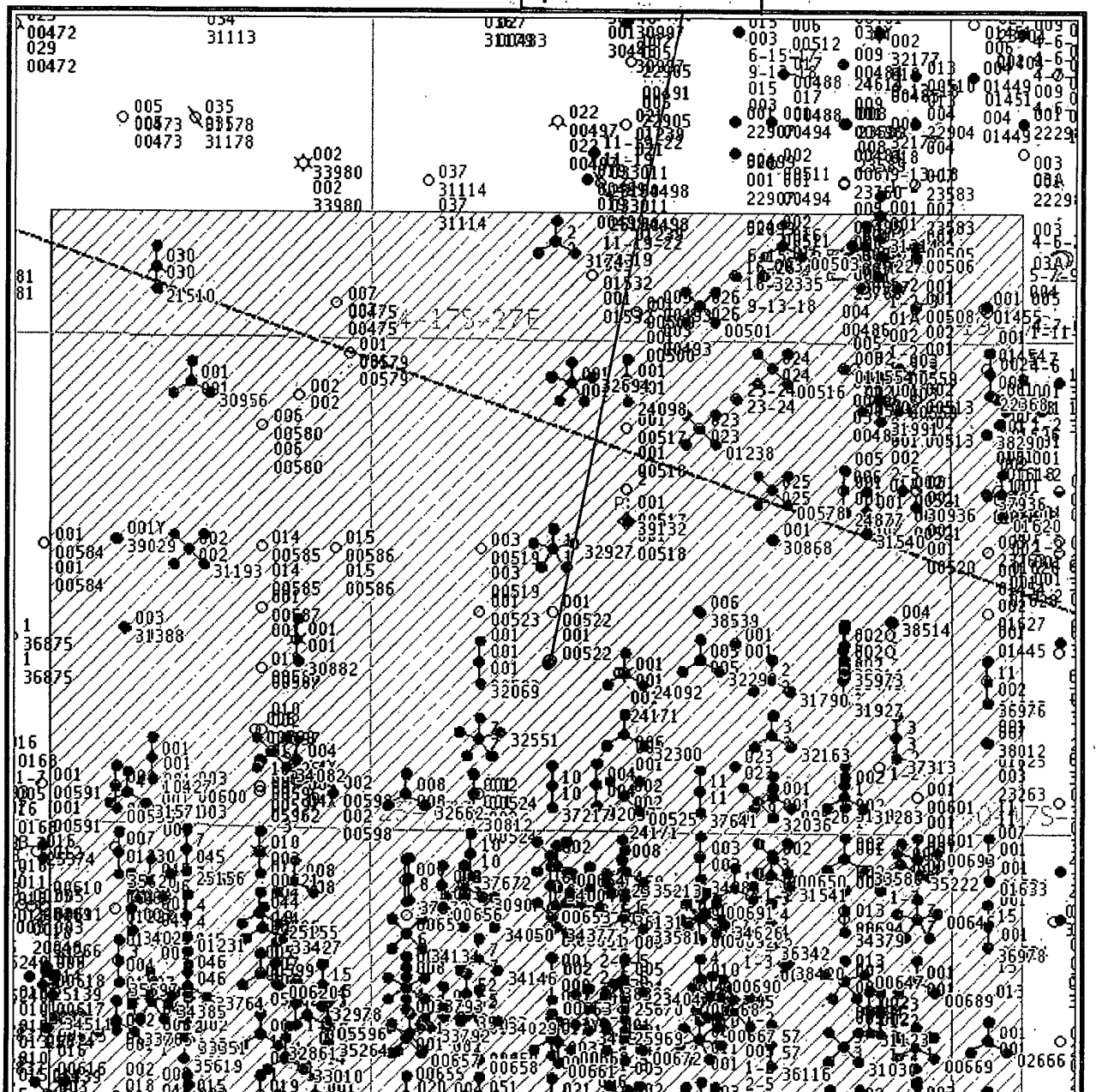
30-015-31036	C. E LARUE & B. N MUNCY, JR.	EDDY	S:36, T:17S, R:27E	GATES STATE	3	3/21/2000	530		Yes	link	614	O	Shut-in	TMP000000009257
30-015-01238	SDX RESOURCES INC	EDDY	S:25, T.17S, R 27E	BERRY B	023	2/1/2000	0		No	link	0	O	Shut-in	TEMP845912199
30-015-21510	SDX RESOURCES INC	EDDY	S:23, T:17S, R:27E	BERRY FEDERAL	030	2/1/2000	0		No	link	0	G	Shut-in	TEMP471602425
30-015-30956	SDX RESOURCES INC	EDDY	S:26, T:17S, R:27E	TRIGG FEDERAL	001	1/28/2000			No	link	3,600	O	Pumping	TEMP355855947
30-015-30937	ROJO GRANDE COMPANY LLC or ROJO GRANDE LLC	EDDY	S 36, T 17S, R:27E	RAMAPO	005	1/26/2000			No	link		O	Shut-in	TEMP898736645
30-015-30907	SOUTHWESTERN ENERGY PRODUCTION COMPANY or CHEVRON USA, INC.	EDDY	S:36, T:17S, R:27E	NO BLUFF STATE COM	001	1/7/2000			No	link	9,917	U	Flowing	TEMP1765264739
30-015-30868	MACK ENERGY CORP	EDDY	S.25, T.17S, R:27E	BIRCH FEDERAL	001	12/14/1999			No	link	7,814	O	Active	TEMP1263536849
30-015-30812	MACK ENERGY CORP	EDDY	S:25, T:17S, R:27E	BEECH FEDERAL	001	10/28/1999			No	link	7,244	O	Pumping	TEMP595200412
30-015-30939	ROJO GRANDE COMPANY LLC or ROJO GRANDE LLC	EDDY	S 36, T:17S, R:27E	RAMAPO	001Y	9/11/1999			No	link	524	O	Pumping	TEMP783696724
30-015-00671	ROJO GRANDE COMPANY LLC or ROJO GRANDE LLC	EDDY	S.36, T:17S, R:27E	RAMAPO	003	6/15/1999	0		No	link	0	O	Pumping	TEMP1174126796
30-015-00673	ROJO GRANDE COMPANY LLC or ROJO GRANDE LLC	EDDY	S.36, T 17S, R 27E	RAMAPO	001	6/15/1999	0		No	link	5,865	O	Pumping	TEMP1775758345
30-015-00674	ROJO GRANDE COMPANY LLC or ROJO GRANDE LLC	EDDY	S.36, T 17S, R 27E	RAMAPO	002	6/15/1999			No	link	0	PO	Shut-in	TEMP2082787968
30-015-00619	MCQUADRANGLE, LC	EDDY	S 35, T:17S, R:27E	SOUTH RED LAKE GRAYBURG UNIT	015	5/10/1999			No	link	0	PO	Active	TEMP1169879234
30-015-00620	MCQUADRANGLE, LC	EDDY	S:35, T 17S, R 27E	SOUTH RED LAKE GRAYBURG UNIT	007	5/10/1999	0		No	link	0	I	Pumping	TEMP900555004
30-015-00621	MCQUADRANGLE, LC	EDDY	S 35, T 17S, R 27E	SOUTH RED LAKE GRAYBURG UNIT	003	5/10/1999	0		No	link	0	PI	Active	TEMP933258660
30-015-00622	MCQUADRANGLE, LC	EDDY	S:35, T:17S, R 27E	SOUTH RED LAKE GRAYBURG UNIT	024	5/10/1999	0		No	link	0	PO	Shut-in	TEMP1050607075
30-015-00623	MCQUADRANGLE, LC	EDDY	S.35, T:17S, R:27E	SOUTH RED LAKE GRAYBURG UNIT	019	5/10/1999	0		No	link	0	I	Pumping	TEMP683171875
				SOUTH RED LAKE										

30-015-00627	MCQUADRANGLE, LC	EDDY	S 35, T.17S, R:27E	GRAYBURG UNIT	018	5/10/1999	0		No	link	0	I	Pumping	TEMP789362572
30-015-00632	MCQUADRANGLE, LC	EDDY	S.35, T 17S, R.27E	SOUTH RED LAKE GRAYBURG UNIT	025	5/10/1999	0		No	link	0	O	Active	TEMP2145517362
30-015-00652	MCQUADRANGLE, LC	EDDY	S 36, T:17S, R:27E	SOUTH RED LAKE GRAYBURG UNIT	008	5/10/1999			No	link	0	PI	Pumping	TEMP409630731
30-015-00653	MCQUADRANGLE, LC	EDDY	S:36, T 17S, R 27E	SOUTH RED LAKE GRAYBURG UNIT	001	5/10/1999	0		No	link	0	O	Active	TEMP1616588031
30-015-00658	MCQUADRANGLE, LC	EDDY	S:36, T 17S, R:27E	SOUTH RED LAKE GRAYBURG UNIT	013	5/10/1999	0		No	link	0	O	Active	TEMP1504626101
30-015-00660	MCQUADRANGLE, LC	EDDY	S:36, T:17S, R:27E	SOUTH RED LAKE GRAYBURG UNIT	012	5/10/1999	0		No	link	0	O	Active	TEMP1530789026
30-015-00664	MCQUADRANGLE, LC	EDDY	S:36, T 17S, R 27E	SOUTH RED LAKE GRAYBURG UNIT	009	5/10/1999			No	link	0	PI	Flowing	TEMP1244920594
30-015-00667	MCQUADRANGLE, LC	EDDY	S 36, T:17S, R:27E	SOUTH RED LAKE GRAYBURG UNIT	011	5/10/1999			No	link	0	PI	Active	TEMP1265312285
30-015-00668	MCQUADRANGLE, LC	EDDY	S:36, T:17S, R.27E	SOUTH RED LAKE GRAYBURG UNIT	010	5/10/1999	0		No	link	0	PO	Active	TEMP1388816682
30-015-00675	MCQUADRANGLE, LC	EDDY	S:36, T 17S, R:27E	SOUTH RED LAKE GRAYBURG UNIT	050	5/10/1999			No	link	5,849	PO	Active	TEMP1951588593
30-015-00678	MCQUADRANGLE, LC	EDDY	S:36, T:17S, R:27E	SOUTH RED LAKE GRAYBURG UNIT	020	5/10/1999	0		No	link	0	I	Flowing	TEMP2122532835
30-015-01219	MCQUADRANGLE, LC	EDDY	S:36, T:17S, R:27E	SOUTH RED LAKE GRAYBURG UNIT	021	5/10/1999	0		No	link	0	PO	Pumping	TEMP227906657
30-015-01220	MCQUADRANGLE, LC	EDDY	S 36, T 17S, R 27E	SOUTH RED LAKE GRAYBURG UNIT	022	5/10/1999			No	link	0	PO	Temporarily Abandoned	TEMP2942683
30-015-01221	MCQUADRANGLE, LC	EDDY	S.36, T.17S, R:27E	SOUTH RED LAKE GRAYBURG UNIT	023	5/10/1999	0		No	link	0	O	Temporarily Abandoned	TEMP48228921
30-015-01231	MCQUADRANGLE, LC	EDDY	S 35, T 17S, R 27E	SOUTH RED LAKE GRAYBURG UNIT	004	5/10/1999			No	link	2,460	O	Active	TEMP194547635
				SOUTH RED LAKE										

30-015-05596	MCQUADRANGLE, LC	EDDY	S:35, T:17S, R:27E	GRAYBURG UNIT	014	5/10/1999	0		No	link	0	PO	Active	TEMP757256558
30-015-05935	MCQUADRANGLE, LC	EDDY	S:36, T:17S, R:27E	SOUTH RED LAKE GRAYBURG UNIT	051	5/10/1999	0		No	link	0	O	Active	TEMP1974648050
30-015-23913	MCQUADRANGLE, LC	EDDY	S 36, T:17S, R:27E	SOUTH RED LAKE GRAYBURG UNIT	043	5/10/1999			No	link	1,750	PO	Active	TEMP1097057712
30-015-25155	MCQUADRANGLE, LC	EDDY	S:35, T:17S, R:27E	SOUTH RED LAKE GRAYBURG UNIT	044	5/10/1999	0		No	link	2,497	O	Active	TEMP919782058
30-015-25156	MCQUADRANGLE, LC	EDDY	S 35, T:17S, R:27E	SOUTH RED LAKE GRAYBURG UNIT	045	5/10/1999	0		No	link	2,502	O	Active	TEMP1043286455
30-015-25157	MCQUADRANGLE, LC	EDDY	S:35, T:17S, R:27E	SOUTH RED LAKE GRAYBURG UNIT	046	5/10/1999	0		No	link	0	PO	Active	TEMP675466507
30-015-25969	MCQUADRANGLE, LC	EDDY	S 36, T:17S, R:27E	SOUTH RED LAKE GRAYBURG UNIT	047	5/10/1999			No	link	6,124	PO	Active	TEMP1275489541
30-015-30436	DEVON ENERGY PRODUCTION COMPANY, LP	EDDY	S.35, T:17S, R:27E	LOGAN 35 FEDERAL	002	10/13/1998			No	link	3,725	O	Active	TEMP769799791
30-015-30437	DEVON ENERGY PRODUCTION COMPANY, LP	EDDY	S 35, T:17S, R:27E	LOGAN 35 FEDERAL	004	10/13/1998			No	link	4,400	O	Active	TEMP743636866
30-015-30408	DEVON ENERGY PRODUCTION COMPANY, LP	EDDY	S:35, T:17S, R:27E	LOGAN 35 FEDERAL	003	9/22/1998			No	link	3,807	O	Pumping	TEMP382573832
30-015-24092	MACK ENERGY CORP	EDDY	S.25, T:17S, R:27E	SPRUCE FEDERAL	001	7/13/1998			No	link	9,985	G	Pumping	TEMP844153731
30-015-00657	JKM ENERGY, LLC	EDDY	S:36, T:17S, R:27E	MAGRUDER STATE	001	1/10/1997			No	link	0	PO	Shut-in	TEMP1779721565
30-015-24877	RODNEY B WEBB DBA WEBB OIL CO	EDDY	S:25, T 17S, R:27E	MICHAEL STATE	001	1/1/1995			No	link	2,038	PG	Active	TEMP1123806244
30-015-00525	PRONGHORN MANAGEMENT CORP	EDDY	S:25, T 17S, R:27E	BRAINARD	002	5/1/1994	0		No	link	0	O	Temporarily Abandoned	TEMP620827229
30-015-27224	MEWBOURNE OIL COMPANY or MEWBOURNE OIL CO	EDDY	S:35, T:17S, R:27E	CHALK BLUFF 35 FED	001	2/23/1994			No	link	9,963	G	Pumping	TEMP564301957
30-015-24098	MWJ PRODUCING CO	EDDY	S:25, T:17S, R:27E	ROPER FEDERAL	001	5/1/1982			No	link	0	PO	Pumping	TEMP403971701
30-015-22795	HANSON ENERGY	EDDY	S:24, T:17S, R:27E	WEST	002	3/1/1979	0		No	link	0	O	Active	TEMP1049284547
30-015-22368	HANSON ENERGY	EDDY	S:30, T:17S, R:28E	WEST	001	12/6/1977			No	link	550	PO	Active	TEMP312367810
30-015-00688	KERSEY & CO or KERSEY & COMPANY	EDDY	S:36, T:17S, R 27E	RAMAPO	001	9/14/1970			No	link		PO	Active	TEMP1294437471
30-015-00647	C E LARUE & B M MUNCY JR	EDDY	S:36, T:17S, R:27E	GATES STATE	002	1/1/1970			No	link	0	PO	Shut-in	TEMP290743321
	KERSEY & CO or KERSEY &													

30-015-00670	COMPANY	EDDY	S 36, T 17S, R:27E	RAMAPO	003	1/1/1970			No	link	0	PO	Shut-in	TEMP1097177016
30-015-00687	KERSEY & CO or KERSEY & COMPANY	EDDY	S 36, T 17S, R.27E	RAMAPO	002	1/1/1970			No	link	0	PG	Active	TEMP987407849
30-015-01620	BABER WELL SERVICING CO	EDDY	S:30, T 17S, R 28E	SUNRAY STATE	001	1/1/1970			No	link		PD	Active	TEMP183873428
30-015-23404	STEVENS OPERATING CORPORATION or HANAGAN PETROLEUM CORP	EDDY	S.36, T.17S, R:27E	PRE-ONGARD WELL	004	1/1/1970			No	link		O	Active	TEMP1023559242
30-015-10426	ACHEN OIL & GAS INC.	EDDY	S:26, T:17S, R.27E	HARBOLD	017	5/21/1963			No	link	1,680	O	Shut-in	TEMP1507021606
30-015-10427	ACHEN OIL & GAS INC.	EDDY	S 26, T 17S, R:27E	TRIGG	001	11/28/1962	0		No	link	0	O	Active	TEMP1523181060

Offset wells to Spruce Federal #3



DRILLING PROGRAM

1. Geologic Name of Surface Formation

Quaternary

2. Estimated Tops of Important Geologic Markers:

Quaternary	Surface
Top of Salt	Not Present
Base of Salt	Not Present
Yates	210'
Seven Rivers	455'
Queen	980'
Grayburg	1410'
San Andres	1760'
Glorieta	3110'
Paddock	3220'
Blinebry	3700'
Tubb	4620'

3. Estimated Depths of Anticipated Fresh Water, Oil and Gas

Water Sand	Surface	Fresh Water
Grayburg	1410'	Oil/Gas
San Andres	1760'	Oil/Gas
Glorieta	3110'	Oil/Gas
Paddock	3220'	Oil/Gas
Blinebry	3700'	Oil/Gas
Tubb	4620'	Oil/Gas

No other formations are expected to give up oil, gas or fresh water in measurable quantities. Setting 13 3/8" casing to 350' and circulating cement back to the surface will protect the surface fresh water sand or shallow cave if encountered. There is no Salt Section, but incompetent or unconsolidated zones, or deeper cave/karst zones will be protected by setting 8 5/8" casing to 1000' and circulating cement, in a single or multi-stage job and/or with an ECP, back to the surface. See COA Any shallower zones above TD, which contain commercial quantities of oil and/or gas, will have cement circulated across them. This will be achieved by cementing, with a single or multi-stage job, the 5 1/2" production casing back 200' into the intermediate casing (although cement volume is actually calculated to surface), to be run at TD. If wellbore conditions arise that require immediate action and/or a change to this program, COG Operating LLC personnel will always react to protect the wellbore and/or environment. See COA

4. Casing Program

Hole Size	Interval	OD Casing	Weight	Grade	Jt., Condition	Jt.	brst/clps/ten
17 ½"	0-350'	13 3/8"	48#	H-40orJ-55	ST&C/New	ST&C	9.22/3.943/15.8
11"	0-1000'	8 5/8"	24or32#	J-55orK-55	ST&C/New	ST&C	3.03/2.029/7.82
7 7/8"	0-TD	5 1/2"	15.5or17#	J-55orL-80	LT&C/New	LT&C	1.88/1.731/2.42

5. Cement Program

13 3/8" Surface Casing:

Class C w/ 2% Cacl2 + 0.25 pps CF, 350 sx, yield 1.32, back to surface. 90% excess

8 5/8" Intermediate Casing:

11" Hole:
Single Stage: 50:50:10 C:Poz:Gel w/ 5% Salt +0.25% CF, 200 sx lead, yield-2.45 + Class C, 200 sx tail, yield-1.32, back to surface. 197% excess
Multi-Stage: Stage 1: Class C w/2% CaCl2, 200 sx, yield - 1.32; 108% excess Stage 2: 50:50:10 C:Poz:Gel w/ 5% Salt +0.25% CF, 300 sx, yield - 2.45, back to surface, 726% excess; assumption for tool is lost circulation. Multi stage tool to be set at approximately, depending on hole conditions, 400' (50' below the surface casing). Cement volumes will be adjusted proportionately for depth changes of multi stage tool.

5 1/2" Production Casing:

Single Stage: LEAD 400 sx 35:65:6 C:Poz:Gel w/ 5% Salt + 5 pps LCM + 0.2% SMS + 0.3% FL-52A + 0.125 pps CF, yield-2.05; + TAIL 400 sx 50:50:2 C:Poz:Gel w/ 5% Salt + 3 pps LCM + 0.6% SMS + 1% FL-25 + 1% BA-58 + 0.3% FL-52A + 0.125 pps CF, yield-1.37, to 200' minimum tie back to intermediate casing. 52% open hole excess, cement calculated back to surface (no need for excess in casing overlap).
Multi-Stage: Stage 1: (Assumed TD of 4850' to DV at 2500') 50:50:2, C:Poz:Gel w/ 5% Salt + 3 pps LCM + 0.6% SMS + 1%

FL-25 + 1% BA-58 + 0.3% FL-52A + 0.125 pps CF, 500 sx, yield - 1.37, 56% excess; **this is a minimum volume and will be adjusted up after caliper is run.** Stage 2: LEAD 50:50:2 C:Poz:Gel w/ 5% Salt + 3 pps LCM + 0.6% SMS + 1% FL-25 + 1% BA-58 + 0.3% FL-52A + 0.125 pps CF, 450 sx, yield - 1.37, + TAIL Class C w/ 0.3% R-3 + 1.5% CD-32, 250 sx, yield – 1.02 88% excess calculated back to surface (no need for excess in casing overlap). Multi stage tool to be set at approximately, depending on hole conditions, 2500'. Cement volumes will be adjusted proportionately for depth changes of multi stage tool; assumption for use of tool is water flow.

6. Minimum Specifications for Pressure Control

The blowout preventer equipment (BOP) shown in Exhibit #9 will consist of a double ram-type (2000 psi WP) preventer, and in some cases possibly a 2000 psi Hydril type annular preventer as provided for in Onshore Order #2. This unit will be hydraulically operated and the ram type preventer will be equipped with blind rams on top of 4 1/2" drill pipe rams on the bottom. A 13-5/8" or 11" BOP will be used, depending on the rig selected, during the drilling of the well. The BOP will be nippled up on the 13 3/8" surface casing with BOP equipment and tested to 2000 psi. When 11" BOP is used the special drilling flange will be utilized on the 13-3/8" head to allow testing the BOP with a retrievable test plug. After setting 8-5/8" the BOP will then be nippled up on the 8 5/8" intermediate casing and tested by a third party to 2000 psi and used continuously until total depth is reached. Pipe rams will be operationally checked each 24-hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment (Exhibit #10) will include a Kelly cock and floor safety valve, choke lines and a choke manifold (Exhibit #11) with a 2000 psi WP rating.

The majority of the rigs currently in use have a 13-5/8" BOP, so no special provision is needed for most wells in the area for conventionally testing the BOP with a test plug. However, due to the vagaries of rig scheduling, it might be that one of the few rigs with 11" BOP's might be called upon to drill any specific well in the area. Note that intermediate hole size is always 11". Therefore, COG Operating LLC respectfully requests a variance to the requirement of 13-5/8" BOP on 13-3/8" casing. When that circumstance is encountered the special flange will be utilized to allow testing the entire BOP with a test plug, without subjecting the casing to test pressure. The special flange also allows the return to full-open capability if desired. See COA

7. Types and Characteristics of the Proposed Mud System

The well will be drilled to TD with a combination of brine, cut brine and polymer mud system. The applicable depths and properties of this system are as follows:

DEPTH	TYPE	WEIGHT	VISCOSITY	WATERLOSS
0-~~350'~~ 375	Fresh Water	8.5	28	N.C.
~~350~~-1000'	Brine	10	30	N.C.
1000'-TD'	Cut Brine	8.7-9.2	30	N.C.

Sufficient mud materials will be kept at the well site to maintain mud properties and meet minimum lost circulation and weight increase requirements at all times.

8. Auxiliary Well Control and Monitoring Equipment

A. Kelly cock will be kept in the drill string at all times.

B. A full opening drill pipe-stabbing valve with proper drill pipe connections will be on the rig floor at all times.

9. Logging, Testing and Coring Program See COA

A. The electric logging program will consist of GR-Dual Laterolog, Spectral Density, Dual Spaced Neutron, CSNG Log and will be run from TD to Surface.

B. Drill Stem test is not anticipated.

C. No conventional coring is anticipated.

D. Further testing procedures will be determined after the 5 ½" production casing has been cemented at TD, based on drill shows and log evaluation.

10. Abnormal Conditions, Pressure, Temperatures and Potential Hazards

No abnormal pressures or temperatures are anticipated. The estimated bottom hole temperature at TD is 100 degrees and the estimated maximum bottom hole pressure is 1900 psig. Measurable gas volumes or Hydrogen Sulfide levels have not been encountered during drilling operations in this area, although a Hydrogen Sulfide Drilling Operation Plan is attached to this program. No major loss of circulation zones has been reported in offsetting wells.

11. Anticipated Starting Date and Duration of Operations

Road and location work will not begin until approval has been received from the BLM. As this is a Master Drilling plan, please refer to the Form 3160-3 for the anticipated start date. Once commenced, drilling operations should be finished in approximately 10 days. If the well is productive, an additional 30 days will be required for completion and testing before a decision is made to install permanent facilities.

CONCHO

COG Operating LLC

Eddy County, NM (NAN27 NME)
Spruce Federal #3
Spruce Federal #3

OH

Plan: Plan #1 7-7/8" Hole
SHL = 1328' FSL & 1501' FWL
BHL = 1660' FSL & 1660' FWL
Top of Paddock = 193' North of Surface & 93' East of Surface @ 3200' TVD

Standard Planning Report

11 July, 2011

Scientific Drilling
Directional Drilling Operations

Database:	EDM Julio	**Local Co-ordinate Reference:**	Site Spruce Federal #3
Company:	COG Operating LLC	**TVD Reference:**	GL Elev @ 3596 00usft
Project:	Eddy County, NM (NAN27 NME)	**MD Reference:**	GL Elev @ 3596 00usft
Site:	Spruce Federal #3	**North Reference:**	Grid
Well:	Spruce Federal #3	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 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		

Site Spruce Federal #3

Site Position:		**Northing:**	655,275 50 usft	**Latitude:**	32° 48' 5.052 N
From:	Map	**Easting:**	530,082 90 usft	**Longitude:**	104° 14' 7 544 W
Position Uncertainty:	0 00 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0 05 °

Well Spruce Federal #3

Well Position	**+N/-S**	0 00 usft	**Northing:**	655,275 50 usft	**Latitude:**	32° 48' 5 052 N
	+E/-W	0 00 usft	**Easting:**	530,082.90 usft	**Longitude:**	104° 14' 7 544 W
Position Uncertainty		0 00 usft	**Wellhead Elevation:**		**Ground Level:**	3,596 00 usft

Wellbore OH

Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2010	2011/07/08	7 93	60 60	48,882

Design Plan #1- 7-7/8" Hole

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	25 60

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	
950 00	0 00	0 00	950 00	0 00	0 00	0 00	0 00	0 00	0 00	
1,240 53	5 81	25 60	1,240 03	13 27	6 36	2 00	2 00	8 81	25 60	
4,718.37	5 81	25 60	4,700 00	330 80	158 50	0 00	0 00	0 00	0 00	PBHL-Spruce #3

Database:	EDM-Julio	**Local Co-ordinate Reference:**	Site Spruce Federal #3
Company:	COG Operating LLC	**TVD Reference:**	GL Elev @ 3596 00usft
Project:	Eddy County, NM (NAN27 NME)	**MD Reference:**	GL Elev @ 3596 00usft
Site:	Spruce Federal #3	**North Reference:**	Grid
Well:	Spruce Federal #3	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 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
West HL-Spruce #3 - South HL-Spruce #3									
850 00	0 00	0 00	850 00	0 00	0 00	0 00	0 00	0 00	0 00
8-5/8" Casing									
950 00	0 00	0 00	950.00	0.00	0 00	0 00	0 00	0 00	0.00
KOP Start DLS 2.00°/100'									
1,000 00	1 00	25 60	1,000 00	0 39	0 19	0 44	2 00	2 00	0 00
1,100 00	3 00	25 60	1,099 93	3 54	1 70	3 93	2 00	2 00	0 00
1,200 00	5 00	25 60	1,199 68	9 83	4 71	10 90	2 00	2 00	0 00
1,240 53	5 81	25 60	1,240 03	13 27	6 36	14.72	2 00	2 00	0 00
EOC hold 5.81°									
1,300 00	5 81	25 60	1,299 20	18 70	8 96	20 74	0 00	0 00	0 00
1,400 00	5 81	25 60	1,398 68	27 83	13 34	30 86	0 00	0 00	0 00
1,500 00	5 81	25.60	1,498 17	36 96	17 71	40 99	0 00	0 00	0 00
1,600 00	5 81	25 60	1,597 66	46.09	22 09	51.11	0 00	0 00	0 00
1,700 00	5 81	25 60	1,697 14	55 22	26 46	61 24	0 00	0 00	0 00
1,800 00	5 81	25 60	1,796 63	64 35	30 83	71 36	0 00	0 00	0.00
1,900 00	5 81	25 60	1,896 11	73.48	35 21	81 48	0 00	0 00	0 00
2,000 00	5 81	25 60	1,995 60	82 61	39 58	91 61	0 00	0 00	0.00
2,100 00	5 81	25 60	2,095 09	91 74	43.96	101 73	0 00	0 00	0 00
2,200 00	5 81	25 60	2,194 57	100 87	48.33	111 86	0 00	0 00	0 00
2,300 00	5 81	25 60	2,294 06	110 00	52.71	121 98	0 00	0 00	0 00
2,400 00	5 81	25 60	2,393 55	119 13	57 08	132 10	0 00	0.00	0 00
2,500 00	5 81	25.60	2,493 03	128 26	61 46	142 23	0 00	0 00	0 00
2,600.00	5 81	25 60	2,592 52	137 39	65.83	152 35	0 00	0 00	0 00
2,700 00	5 81	25 60	2,692 00	146.52	70 21	162 47	0 00	0 00	0 00
2,800 00	5 81	25 60	2,791 49	155.65	74 58	172 60	0 00	0 00	0 00
2,900 00	5 81	25 60	2,890 98	164 78	78 95	182 72	0 00	0 00	0 00
3,000.00	5 81	25 60	2,990 46	173 91	83 33	192 85	0 00	0 00	0.00
3,100.00	5 81	25.60	3,089 95	183 04	87 70	202 97	0 00	0 00	0.00
3,200 00	5 81	25 60	3,189 43	192 17	92 08	213.09	0 00	0 00	0 00
3,210.62	5.81	25 60	3,200 00	193 14	92 54	214 17	0 00	0.00	0 00
Top of Paddock									
3,300 00	5 81	25 60	3,288 92	201 30	96 45	223.22	0 00	0 00	0 00
3,400 00	5 81	25 60	3,388 41	210 43	100 83	233.34	0 00	0 00	0 00
3,500 00	5 81	25 60	3,487 89	219 56	105 20	243 47	0 00	0 00	0 00
3,600 00	5 81	25 60	3,587 38	228 69	109 58	253 59	0 00	0 00	0 00
3,700 00	5.81	25 60	3,686 87	237 82	113 95	263 71	0 00	0 00	0 00
3,800 00	5 81	25.60	3,786 35	246 95	118 33	273 84	0 00	0 00	0 00
3,900 00	5 81	25 60	3,885 84	256 08	122 70	283 96	0 00	0 00	0 00
4,000 00	5 81	25 60	3,985 32	265 21	127 07	294 09	0 00	0 00	0 00
4,100 00	5.81	25 60	4,084 81	274 34	131 45	304 21	0 00	0 00	0 00
4,200 00	5 81	25 60	4,184 30	283 47	135.82	314 33	0 00	0 00	0 00
4,300.00	5 81	25 60	4,283 78	292 60	140 20	324.46	0 00	0 00	0 00
4,400 00	5 81	25 60	4,383 27	301 73	144 57	334 58	0 00	0.00	0.00
4,500 00	5 81	25 60	4,482 76	310 86	148.95	344 70	0 00	0 00	0 00
4,600 00	5 81	25 60	4,582 24	319 99	153 32	354 83	0 00	0 00	0 00
4,700 00	5 81	25 60	4,681 73	329 12	157 70	364.95	0 00	0 00	0.00
4,718.37	5 81	25 60	4,700 00	330 80	158 50	366 81	0 00	0 00	0 00
PBHL-Spruce #3									

Database:	EDM Julio	**Local Co-ordinate Reference:**	Site Spruce Federal #3
Company:	COG Operating LLC	**TVD Reference:**	GL Elev @ 3596 00usft
Project:	Eddy County, NM (NAN27 NME)	**MD Reference:**	GL Elev @ 3596 00usft
Site:	Spruce Federal #3	**North Reference:**	Grid
Well:	Spruce Federal #3	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 7-7/8" Hole		

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
West HL-Spruce #3	0 00	0 00	0 00	320 80	148 50	655,596 30	530,231 40	32° 48' 8 225 N	104° 14' 5 801 W
- plan misses target center by 353.50usft at 0 00usft MD (0 00 TVD, 0 00 N, 0 00 E)									
- Rectangle (sides W0 00 H100 00 D0.00)									
South HL-Spruce #3	0 00	0 00	0 00	320 80	148 50	655,596 30	530,231 40	32° 48' 8 225 N	104° 14' 5 801 W
- plan misses target center by 353 50usft at 0 00usft MD (0 00 TVD, 0 00 N, 0 00 E)									
- Rectangle (sides W100 00 H0 00 D0 00)									
PBHL-Spruce #3	0 00	0 01	4,700 00	330 80	158 50	655,606 30	530,241 40	32° 48' 8 324 N	104° 14' 5 684 W
- plan hits target center									
- Circle (radius 10 00)									

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
850 00	850 00	8-5/8" Casing	8-5/8	12-1/4

Formations

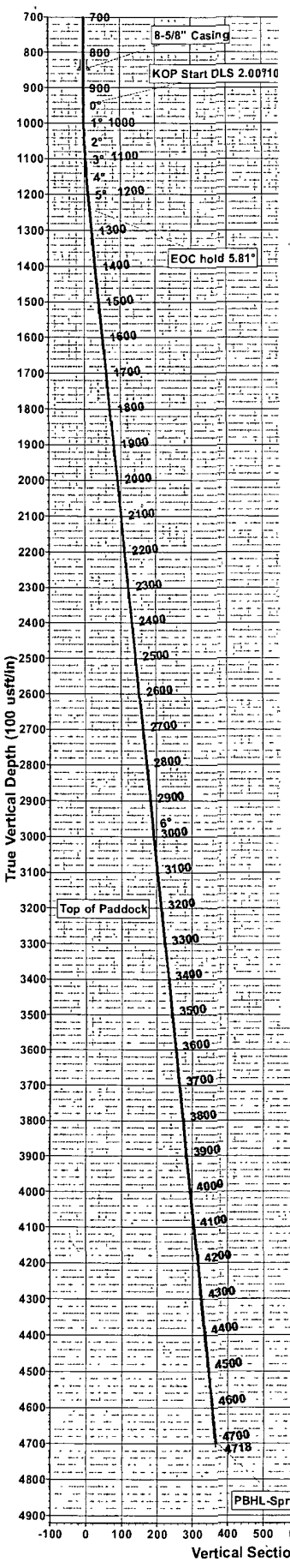
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,210 62	3,200 00	Top of Paddock		0 00	

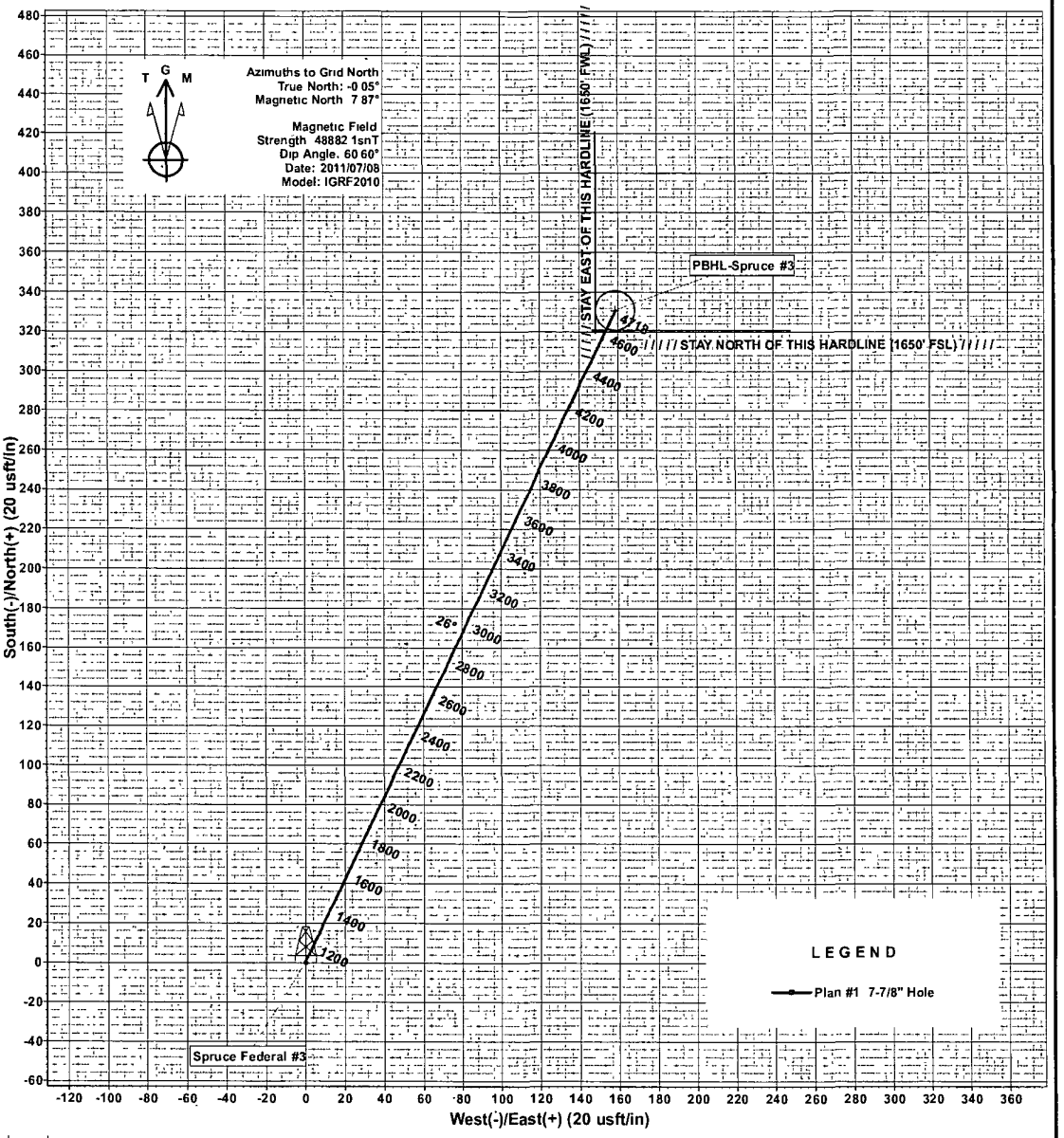
Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
950 00	950 00	0 00	0 00	KOP Start DLS 2 00°/100'
1,240 53	1,240 03	13 27	6 36	EOC hold 5 81°

Scientific Drilling for COG Operating LLC
Site: Eddy County, NM (NAN27 NME)
Well: Spruce Federal #3
Wellbore: OH
Design: Plan #1 7-7/8" Hole

Scientific Drilling
Directional Drilling Operations





WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
South HL-Spruce #3	0.00	320.80	148.50	655596.30	530231.40	32°48' 8.225 N	104°14' 5.801 W	Rectangle (Sides L 0.00 W100.00)
West HL-Spruce #3	0.00	320.80	148.50	655596.30	530231.40	32°48' 8.225 N	104°14' 5.801 W	Rectangle (Sides L1 00.00 W0.00)
PBHL-Spruce #3	4700.00	330.80	158.50	655606.30	530241.40	32°48' 8.324 N	104°14' 5.684 W	Circle (Radius: 10.0 0)

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	950.00	0.00	0.00	950.00	0.00	0.00	0.00	0.00	0.00	
3	1240.53	5.81	25.60	1240.03	13.27	6.36	2.00	25.60	14.72	
4	4718.37	5.81	25.60	4700.00	330.80	158.50	0.00	0.00	366.81	PBHL-Spruce #3

WELL DETAILS: Spruce Federal #3

Ground Level: 3596.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	655275.50	530082.90	32°48' 5.052 N	104°14' 7.544 W	

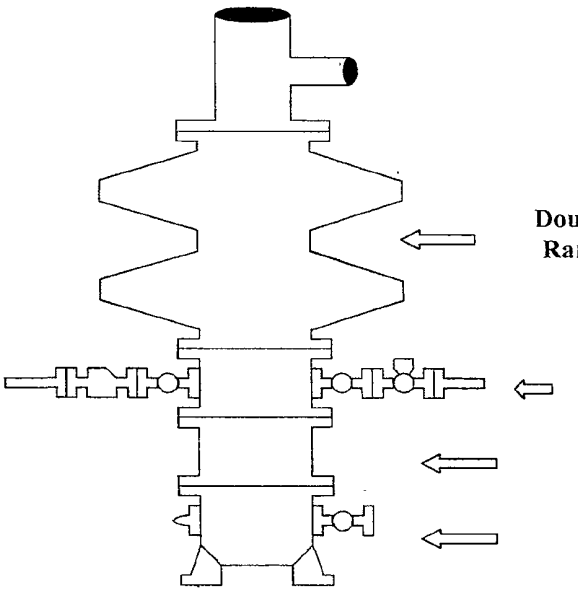
PROJECT DETAILS: Eddy County, NM (NAN27 NME)

Plan: Plan #1 7-7/8" Hole (Spruce Federal #3/OH)

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

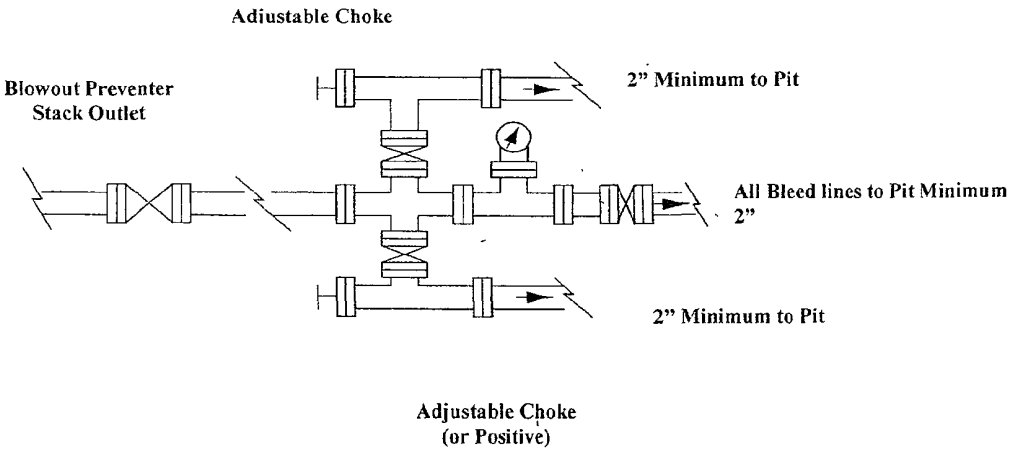
Created By: Julio Pina — Date: 08-Jul-11
Checked — Date
Reviewed — Date
Approved — Date

COG Operating LLC
Exhibit #9
BOPE and Choke Schematic



Minimum 4" Nominal choke and kill lines

Choke Manifold Requirement (2000 psi WP)
No Annular Required

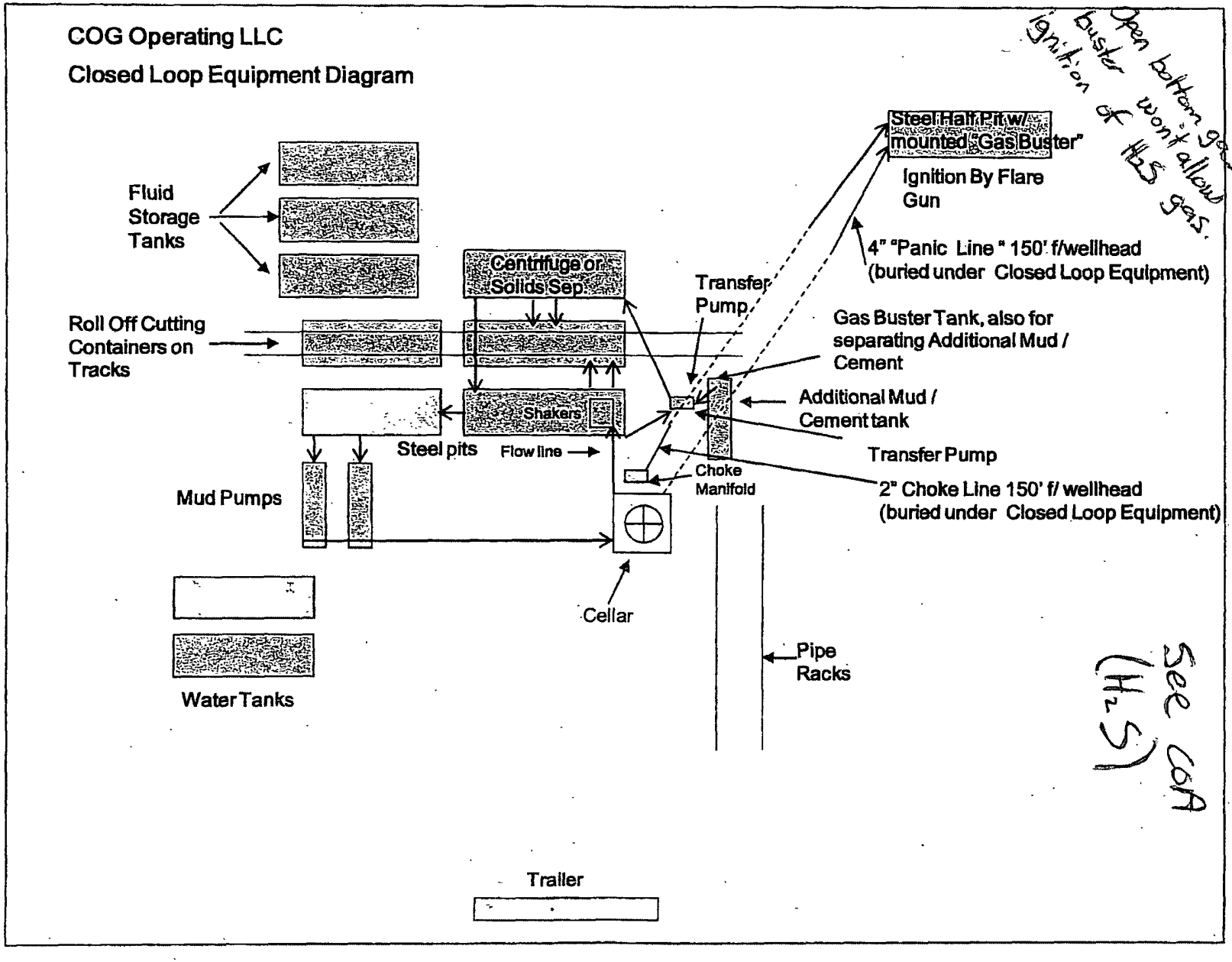


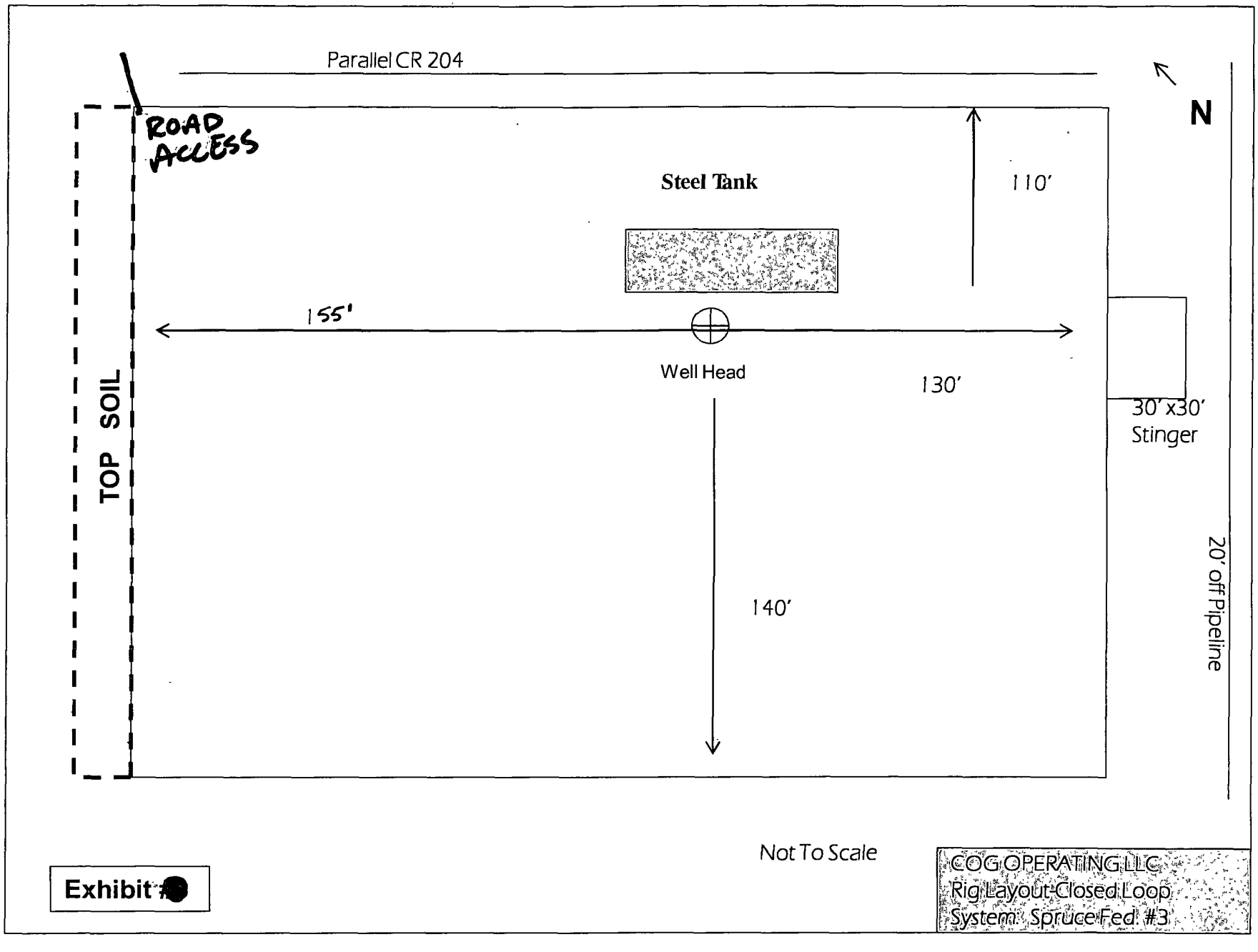
NOTES REGARDING THE BLOWOUT PREVENTERS
Master Drilling Plan
Eddy County, New Mexico

1. Drilling nipple to be so constructed that it can be removed without use of a welder through rotary table opening, with minimum I.D. equal to preventer bore.
2. Wear ring to be properly installed in head.
3. Blow out preventer and all fittings must be in good condition, 2000 psi WP minimum.
4. All fittings to be flanged.
5. Safety valve must be available on rig floor at all times with proper connections, valve to be full 2000 psi WP minimum.
6. All choke and fill lines to be securely anchored especially ends of choke lines.
7. Equipment through which bit must pass shall be at least as large as the diameter of the casing being drilled through.
8. Kelly cock on Kelly.
9. Extension wrenches and hands wheels to be properly installed.
10. Blow out preventer control to be located as close to driller's position as feasible.
11. Blow out preventer closing equipment to include minimum 40-gallon accumulator, two independent sources of pump power on each closing unit installation all API specifications.

COG Operating LLC

Closed Loop Equipment Diagram




Parallel CR 204
ROAD ACCESS
N
Steel Tank
110'
155'
Well Head
130'
30' x30'
Stinger
TOP SOIL
140'
20' off Pipeline
Not To Scale
Exhibit #
COG OPERATING LLC
Rig Layout Closed Loop
System: Spruce Fed. #3

COG Operating LLC

Hydrogen Sulfide Drilling Operation Plan

I. HYDROGEN SULFIDE TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

1. The hazards an characteristics of hydrogen sulfide (H2S)
2. The proper use and maintenance of personal protective equipment and life support systems.
3. The proper use of H2S detectors alarms warning systems, briefing areas, evacuation procedures, and prevailing winds.
4. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

1. The effects of H2S on metal components. If high tensile tubular are to be used, personnel well be trained in their special maintenance requirements.
2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
3. The contents and requirements of the H2S Drilling Operations Plan and Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H2S zone (within 3 days or 500 feet) and weekly H2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H2S Drilling Operations Plan and the Public Protection Plan. **The concentrations of H2S of wells in this area from surface to TD are low enough that a contingency plan is not required.**

II. H2S SAFETY EQUIPMENT AND SYSTEMS

Note: All H2S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonable expected to contain H2S.

1. **Well Control Equipment:**

   A. Flare line.

   B. Choke manifold.

   C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.

   D. Auxiliary equipment may include if applicable: annular preventer & rotating head.

2. **Protective equipment for essential personnel:**

   A. Mark II Survive air 30-minute units located in the doghouse and at briefing areas, as indicated on well site diagram.

3. **H2S detection and monitoring equipment:**

   A. 1 portable H2S monitors positioned on location for best coverage and response. These units have warning lights and audible sirens when H2S levels of 20 PPM are reached.

4. **Visual warning systems:**

   A. Wind direction indicators as shown on well site diagram (Exhibit #8).

   B. Caution/Danger signs (Exhibit #7) shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used, when appropriate. See example attached.

5. **Mud program:**

   A. The mud program has been designed to minimize the volume of H2S circulated to surface. Proper mud weight, safe drilling practices, and the use of H2S scavengers will minimize hazards when penetrating H2S bearing zones.

6. **Metallurgy:**

   A. All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.

   B. All elastomers used for packing and seals shall be H2S trim.

7. **Communication:**

   A. Radio communications in company vehicles including cellular telephone and 2-way radio.

   B. Land line (telephone) communication at Office.

8. **Well testing:**

   A. Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity, which are necessary to safely and adequately conduct the test. The drill stem testing will be conducted during daylight hours and formation fluids will not be flowed to the surface. All drill-stem-testing operations conducted in an H2S environment will use the closed chamber method of testing.

   B. There will be no drill stem testing.

EXHIBIT #7

WARNING

YOU ARE ENTERING AN H2S

AUTHORIZED PERSONNEL ONLY

1. BEARDS OR CONTACT LENSES NOT ALLOWED
2. HARD HATS REQUIRED
3. SMOKING IN DESIGNATED AREAS ONLY
4. BE WIND CONSCIOUS AT ALL TIMES
5. CHECK WITH COG OPERATING FOREMAN AT

COG OPERATING LLC

1-432-683-7443

1-575-746-2010

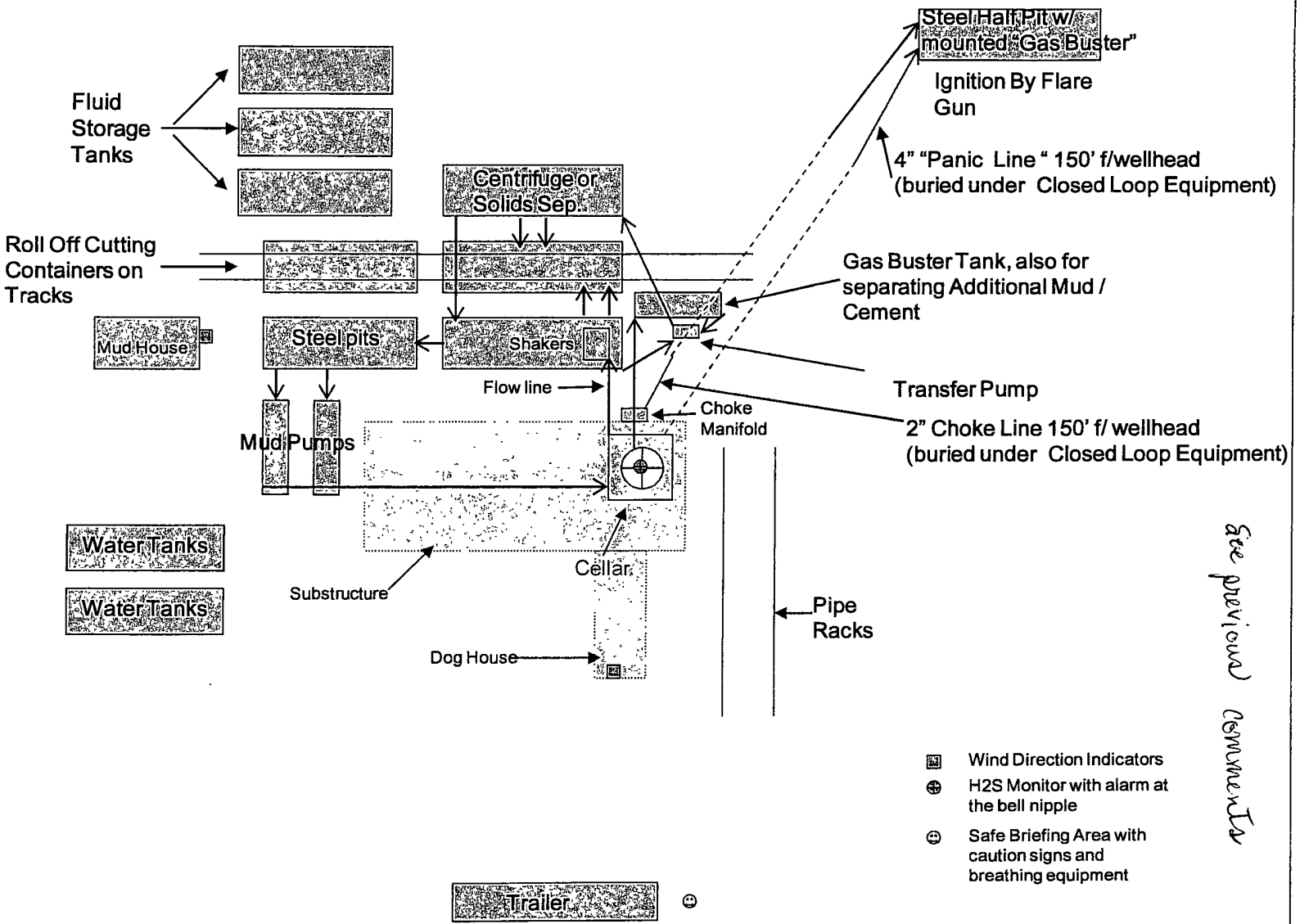
EDDY COUNTY EMERGENCY NUMBERS
ARTESIA FIRE DEPT. 575-746-5050
ARTESIA POLICE DEPT. 575-746-5000
EDDY CO. SHERIFF DEPT. 575-746-9888

LEA COUNTY EMERGENCY NUMBERS
HOBBS FIRE DEPT. 575-397-9308
HOBBS POLICE DEPT. 575-397-9285
LEA CO. SHERIFF DEPT. 575-396-1196

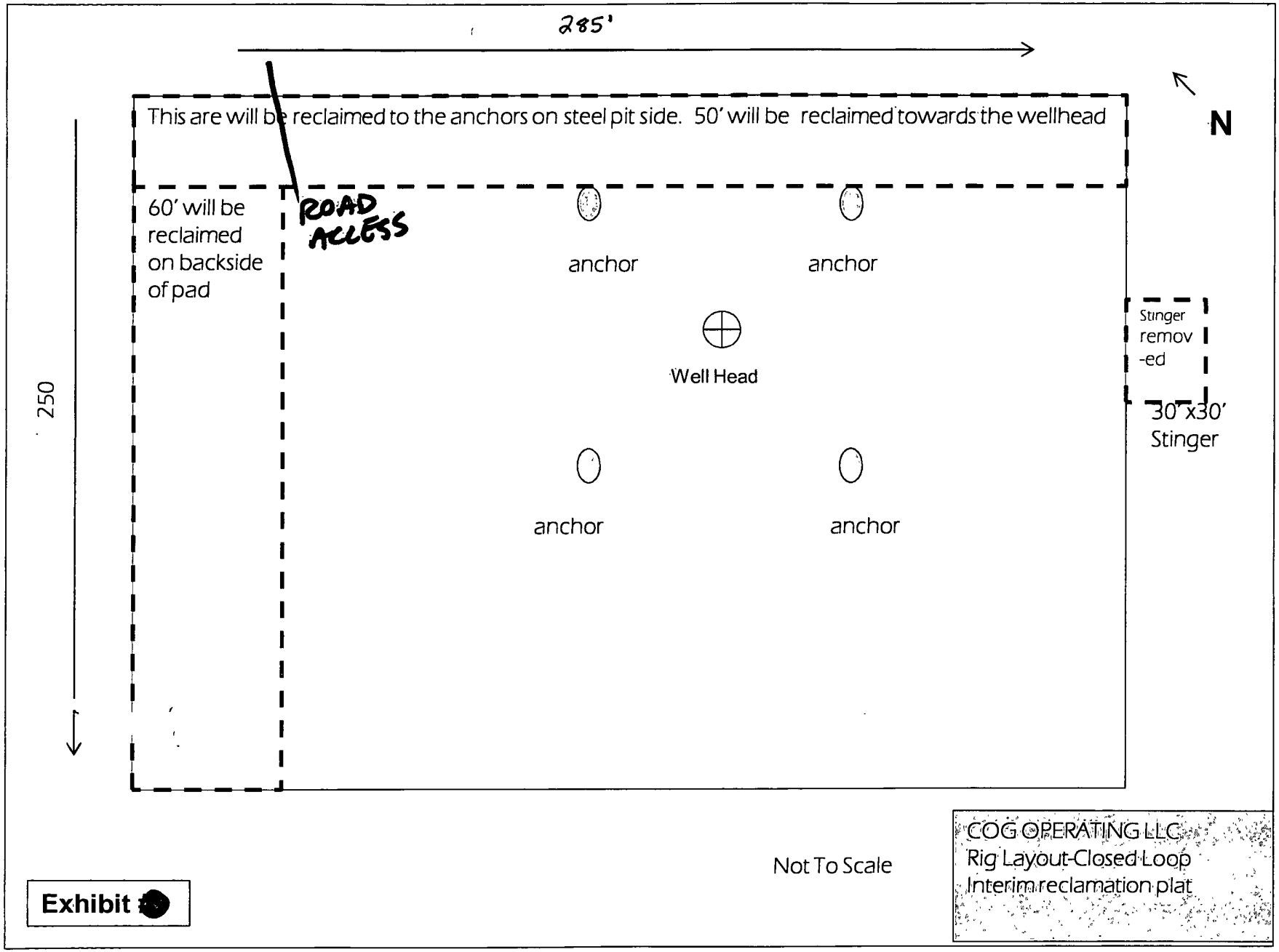
COG Operating LLC

EXHIBIT 8

Drilling Location - H2S Safety Equipment Diagram



See previous comments


285'
This are will be reclaimed to the anchors on steel pit side. 50' will be reclaimed towards the wellhead
N
60' will be reclaimed on backside of pad
ROAD ACCESS
anchor
anchor
Well Head
Stinger remov -ed
30' x30' Stinger
250
anchor
anchor
Not To Scale
COG OPERATING LLC
Rig Layout-Closed Loop
Interim reclamation plat
Exhibit #

PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	COG Operating
LEASE NO.:	NM96836
WELL NAME & NO.:	Spruce Federal 3
SURFACE HOLE FOOTAGE:	1328' FSL & 1501' FWL
BOTTOM HOLE FOOTAGE	1650' FSL & 1650' FWL
LOCATION:	Section 25, T.17 S., R.27 E., NMPM
COUNTY:	Eddy County, New Mexico

TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

V. SPECIAL REQUIREMENT(S)

Cave and Karst

** Depending on location, additional Drilling, Casing, and Cementing procedures may be required by engineering to protect critical karst groundwater recharge areas.

Cave/Karst Surface Mitigation

The following stipulations will be applied to minimize impacts during construction, drilling and production.

Construction:
In the advent that any underground voids are opened up during construction activities, construction activities will be halted and the BLM will be notified immediately.

No Blasting:
No blasting will be utilized for pad construction. The pad will be constructed and leveled by adding the necessary fill and caliche.

Tank Battery Liners and Berms:
Tank battery locations will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing to prevent tears or punctures. Tank battery berms must be large enough to contain 1 ½ times the content of the largest tank.

Leak Detection System:
A method of detecting leaks is required. The method could incorporate gauges to measure loss, situating values and lines so they can be visually inspected, or installing electronic sensors to alarm when a leak is present. Leak detection plan will be submitted to BLM for approval.

Automatic Shut-off Systems:
Automatic shut off, check values, or similar systems will be installed for pipelines and tanks to minimize the effects of catastrophic line failures used in production or drilling.

Cave/Karst Subsurface Mitigation

The following stipulations will be applied to protect cave/karst and ground water concerns:

Rotary Drilling with Fresh Water:
Fresh water will be used as a circulating medium in zones where caves or karst features are expected. SEE ALSO: Drilling COAs for this well.

Directional Drilling:
Kick off for directional drilling will occur at least 100 feet below the bottom of the cave occurrence zone. SEE ALSO: Drilling COAs for this well.

Lost Circulation:
ALL lost circulation zones from the surface to the base of the cave occurrence zone will be logged and reported in the drilling report.

Regardless of the type of drilling machinery used, if a void of four feet or more and circulation losses greater than 70 percent occur simultaneously while drilling in any cave-bearing zone, the BLM will be notified immediately by the operator. The BLM will assess the situation and work with the operator on corrective actions to resolve the problem.

Abandonment Cementing:
Upon well abandonment in high cave karst areas additional plugging conditions of approval may be required. The BLM will assess the situation and work with the operator to ensure proper plugging of the wellbore.

Pressure Testing:
Annual pressure monitoring will be performed by the operator on all casing annuli and reported in a sundry notice. If the test results indicated a casing failure has occurred, remedial action will be undertaken to correct the problem to the BLM's approval.

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-6235 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL

The operator shall stockpile the topsoil in a low profile manner in order to prevent wind/water erosion of the topsoil. The topsoil to be stripped is approximately 4 inches in depth. The topsoil will be used for interim and final reclamation.

C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

D. FEDERAL MINERAL MATERIALS PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation.

The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

F. ON LEASE ACCESS ROADS

Road Width
The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty (20) feet.

Surfacing
Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

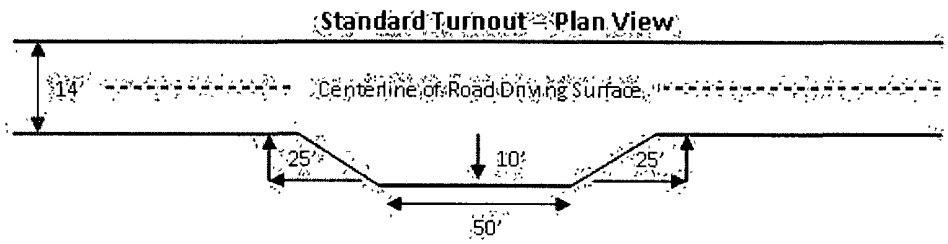
The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

Crowning
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

Ditching

Ditching shall be required on both sides of the road.

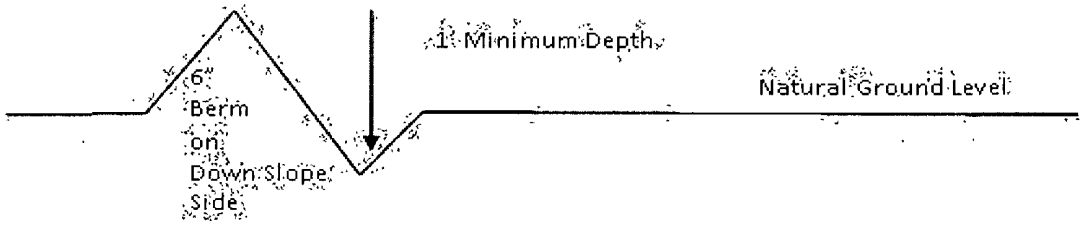
Turnouts
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:



Drainage
Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

400 foot road with 4% road slope: $\frac{400'}{4\%} + 100' = 200'$ lead-off ditch interval

Culvert Installations

Appropriately sized culvert(s) shall be installed at the deep waterway channel flow crossing.

Cattleguards

An appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s).

Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations.

A gate shall be constructed and fastened securely to H-braces.

Fence Requirement

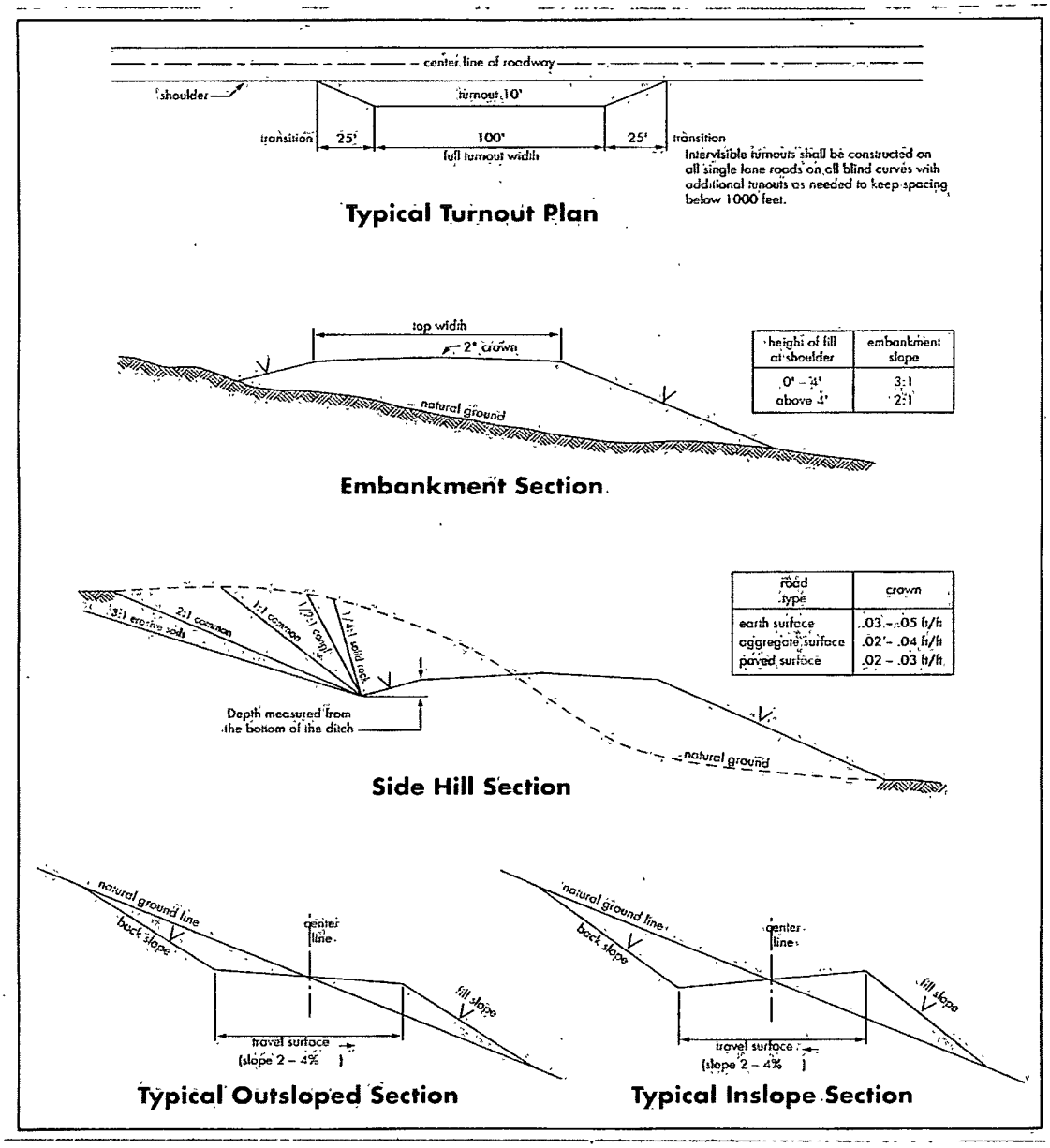
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

Public Access

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Figure 1 – Cross Sections and Plans For Typical Road Sections



VII. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

a. Spudding well
b. Setting and/or Cementing of all casing strings
c. BOPE tests

☒ **Eddy County**
Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

1. A Hydrogen Sulfide (H2S) Drilling Plan should be activated prior to drilling the surface hole. **As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.**

2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval. **If the drilling rig is removed without approval – an Incident of Non-Compliance will be written and will be a "Major" violation.**

3. **The record of the drilling rate along with the GR/N well log run from TD to surface will be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The top and bottom of Salt are to be recorded on the Completion Report.**

A. CASING

Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.).

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) time prior to drilling out for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

HIGH CAVE/KARST
Possible lost circulation in the Grayburg and San Andres formations.

1. The **13-3/8** inch surface casing shall be set at **approximately 375 feet** and cemented to the surface.

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

    b. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.

    c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.

    d. If cement falls back, remedial cementing will be done prior to drilling out that string.

2. The minimum required fill of cement behind the **8-5/8** inch intermediate casing is: **Freshwater mud to be used to setting depth.**

    ☒ As proposed. If cement does not circulate see B.1.a, c-d above.

Operator has proposed DV tool at depth of 270', but will adjust cement proportionately if moved. DV tool SHALL be set a minimum of 50' below previous shoe (270' NOT APPROVED) and a minimum of 200' above current shoe. Operator shall submit sundry if DV tool depth cannot be set in this range. If an ECP is used, it is to be set a minimum of 50' below the shoe to provide cement across the shoe. If it cannot be set below the shoe, a CBL shall be run to verify cement coverage.

a. First stage to DV tool:

☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve circulation on the next stage.

b. Second stage above DV tool:

☒ Cement to surface. If cement does not circulate, contact the appropriate BLM office.

If 75% or greater lost circulation occurs while drilling the intermediate casing hole, the cement on the production casing must come to surface.

3. The minimum required fill of cement behind the **5-1/2** inch production casing is:

☒ As proposed. Operator shall provide method of verification.

Operator has proposed DV tool at depth of 2500', but will adjust cement proportionately if moved. DV tool shall be set a minimum of 50' below previous shoe and a minimum of 200' above current shoe. Operator shall submit sundry if DV tool depth cannot be set in this range.

a. First stage to DV tool:

☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve tie-back on the next stage.

b. Second stage above DV tool:

☒ Cement as proposed. Operator shall provide method of verification.

4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17. **Operator approved for either 13-5/8" or 11" BOP stack.**

2. Proposed blowout preventer (BOP) and related equipment (BOPE) meets minimum requirement.

    a. **For surface casing only:** If the BOP/BOPE is to be tested against casing, the wait on cement (WOC) time for that casing is to be met (see WOC statement at start of casing section). Independent service company required.

3. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

    a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

    b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (18 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

    c. The results of the test shall be reported to the appropriate BLM office.

    d. All tests are required to be recorded on a calibrated test chart. **A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.**

    e. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.

C. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

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VIII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities
Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

Containment Structures
The containment structure shall be constructed to hold the capacity of the entire contents of the largest tank, plus 24 hour production, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

Painting Requirement
All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color
Shale Green, Munsell Soil Color Chart # 5Y 4/2

B. PIPELINES

STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES

A copy of the APD and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to activity of the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. The holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. The holder shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the right-of-way or permit area:

a. Activities of the holder including, but not limited to construction, operation, maintenance, and termination of the facility.

b. Activities of other parties including, but not limited to:

(1) Land clearing.
(2) Earth-disturbing and earth-moving work.
(3) Blasting.
(4) Vandalism and sabotage.

c. Acts of God.

The maximum limitation for such strict liability damages shall not exceed one million dollars ($1,000,000) for any one event, and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred.

This section shall not impose strict liability for damage or injury resulting primarily from an act of war or from the negligent acts or omissions of the United States.

5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full

expense of the holder. Such action by the Authorized Officer shall not relieve the holder of any responsibility as provided herein.

6. All construction and maintenance activity will be confined to the authorized right-of-way width of **20** feet.

7. No blading or clearing of any vegetation will be allowed unless approved in writing by the Authorized Officer.

8. The holder shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain. In hummocky of duney areas, the pipeline will be "snaked" around hummocks and dunes rather then suspended across these features.

9. The pipeline shall be buried with a minimum of **24** inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.

10. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.

12. Excluding the pipe, all above-ground structures not subject to safety requirement shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2; designated by the Rocky Mountain Five State Interagency Committee.

13. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. Signs will be maintained in a legible condition for the life of the pipeline.

14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder. The holder will take whatever steps are necessary to ensure that the pipeline

route is not used as a roadway.

15. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

C. ELECTRIC LINES (not applied for in APD)

IX. INTERIM RECLAMATION

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

X. FINAL ABANDONMENT & RECLAMATION

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

Seed Mixture 4, for Gypsum Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

Species	lb/acre
Alkali Sacaton (Sporobolus airoides)	1.0
DWS Four-wing saltbush (Atriplex canescens)	5.0

DWS: DeWinged Seed

*Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed