

New Mexico Oil Conservation Division, District I
1625 N. French Drive
Hobbs, NM 88240

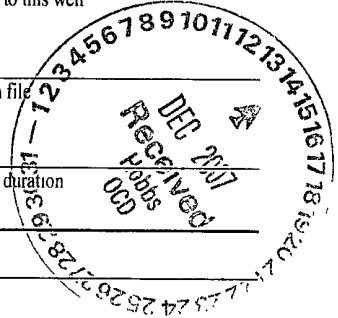
Form 3160-3
 (August 2007)

UNITED STATES
 DEPARTMENT OF THE INTERIOR
 BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
 OMB No. 1004-0137
 Expires July 31, 2010

5a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. SL NMLE 105885 BHL State of NM
6. Name of Operator COG Operating, LLC		6. If Indian, Allottee or Tribe Name N/A
7a. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		7. If Unit or CA Agreement, Name and No. N/A
8. Address 550 West Texas, Suite 1300 Midland, TX 79701		8. Lease Name and Well No. (36894) Taurus Federal #1
9. Phone No. (include area code) (432)-685-9158		9. API Well No. 30-005-28000
10. Location of Well (Report location clearly and in accordance with any State requirements *) At surface 330' FSL & 330' FWL, Unit M At proposed prod. zone 330' FSL & 330' FEL, Unit P ROSWELL CONTROLLED WATER BASIN		10. Field and Pool or Exploratory Undesignated Wolfcamp
11. Distance in miles and direction from nearest town or post office* Approx 15 miles North of Maljamar, New Mexico		11. Sec., T. R. M. or Blk. and Survey or Area Section 10, T15S, R31E
12. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 330	13. No. of acres in lease 800	12. County or Parish Chaves Co..
14. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. N/A	15. Proposed Depth 13300' MD 8680' TVD	13. State NM
16. Elevations (Show whether DF, KDB, RT, GL, etc.) 4415' GL	17. Approximate date work will start* 04/01/2008	17. Spacing Unit dedicated to this well 160
18. Estimated duration 45 Days		20. BLM/BIA Bond No. on file NMB 000215
24. Attachments		



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

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

25. Signature	Name (Printed/Typed) Dwaine Moore	Date 09/12/2007
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Title Agent for COG Operating LLC		
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Approved by (Signature) <i>/s/ Angel Mayes</i>	Name (Printed/Typed) <i>/s/ Angel Mayes</i>	Date DEC 12 2007
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Title Assistant Field Manager, Lands And Minerals	Office ROSWELL FIELD OFFICE	APPROVED FOR 2 YEARS
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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.

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.

(Continued on page 2)

*(Instructions on page 2)

**APPROVAL SUBJECT TO
 GENERAL REQUIREMENTS AND
 SPECIAL STIPULATIONS ATTACHED**

EXHIBIT "A"

DISTRICT I
1825 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
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised October 12, 2005

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-005-28000	Pool Code <input checked="" type="checkbox"/>	Pool Name Wildcat Undesignated Wolfcamp
Property Code 36894	Property Name TAURUS FEDERAL	Well Number 18
OGRID No. 229137	Operator Name C.O.G. OPERATING L.L.C.	Elevation 4415'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	10	15 S	31 E		330	SOUTH	330	WEST	CHAVES

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
P	10	15 S	31 E		330	SOUTH	330	EAST	CHAVES
Dedicated Acres 160	Joint or Infill	Consolidation Code	Order No.						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p>Signature: <i>[Signature]</i> Date: 9/12/07</p> <p>Printed Name: Duane Mearse Agent For COG</p>	
	<p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>JULY 22 2007</p> <p>Date Surveyed: 7/22/07</p> <p>Signature: <i>[Signature]</i> Professional Surveyor</p> <p>W.O. [Signature]</p>	
	<p>Certificate No. Gary L. Jones 7977</p> <p>BASIN SURVEYS</p>	
	<p>SURFACE LOCATION LAT.: N 33°01'26.67" LONG.: W 103°49'01.83" SPC- N.: 736670.6 E.: 699556.0 (NAD-83)</p> <p>BOTTOM HOLE LOCATION LAT.: N 33°01'26.72" LONG.: W 103°48'07.26" SPC- N.: 736716.220 E.: 704118.495 (NAD-83)</p> <p>Producing Area 4630.0'</p> <p>Project Area = 160 acres</p>	

ATTACHMENT TO FORM 3160-3
COG Operating, LLC
Taurus Federal # 1H
SL: 330' FSL & 330' FWL, Unit M
BHL: 330' FSL & 330' FEL, Unit P
Sec 10, T15S, R31E
Chaves County, NM

1. Proration Unit Spacing: 160 Acres
2. Ground Elevation: 4415'
3. Proposed Depths: Pilot hole TD = 8960', Horizontal TVD = 8680', MD = 13300'
4. Estimated tops of geological markers:

Quaternary	Surface
Yates	2410'
Queen	3220'
San Andres	3950'
Tubb	6770'
Abo	7460'
Wolfcamp	8660'

5. Possible mineral bearing formations:

Water sand	150'	Fresh Water
Yates	2410'	Oil / Gas
Queen	3220'	Oil / Gas
San Andres	3950'	Oil / Gas
Tubb	6770'	Oil / Gas
Abo	7460'	Oil / Gas
Wolfcamp	8660'	Oil / Gas

6. Casing Program - Proposed

<u>Hole size</u>	<u>Interval</u>	<u>OD of Casing</u>	<u>Weight</u>	<u>Cond.</u>	<u>Collar</u>	<u>Grade</u>
17-1/2"	0' - +/-400'	13-3/8"	48#	New	STC	H40
Collapse sf – 3.78, Burst sf – 7.20, Tension sf – 15.72						
12 1/4"	0' - 4000'	9-5/8"	40#	New	STC	J-55
Collapse sf – 1.285, Burst sf – 1.17, Tension sf – 3.25						
8-3/4"	0' – 8500'	5-1/2"	17#	New	LTC	P-110
Collapse sf – 1.75, Burst sf – 2.42, Tension sf – 2.94						
7-7/8"	8500' – 13300'	5-1/2"	17#	New	BTC	P-110
Collapse sf – 1.68, Burst sf – 2.39, Tension sf – 79.28						

**ATTACHMENT TO FORM 3160-3
COG Operating, LLC
Taurus Federal # 1H
Page 2 of 3**

7. Cement Program

13 3/8" Surf. Csg. Set at +/- 400', Circ to Surf with +/- 400 sx Class "C" w/ 2% CaCl₂, 1.35 yd.

WITNESS

9 5/8" Intrmd. Csg. Set at +/- 4000'. Circ to Surf with +/- 800 sx 35/65 Poz "C", 2.05 yd. & 200 sx Class "C" w/ 2% CaCl₂, 1.35 yd.

5 1/2" Prod. Csg. Set at +/- 13300' MD. Cement casing with +/- 200 sx. 50/50/2 "C", 1.37 yd & +/- 900 sx Class "H", 1.18 yd. Est. TOC @ 8500'.

8. Pressure Control Equipment:

After setting 13 3/8" casing and installing 3000 psi casing head, NU 13 5/8" 3000 psi annular BOP. Test annular BOP, casing and manifold with clear fluid to 800 psi w/ rig pump. After setting 9 5/8" casing and installing 3000 psi casing spool, NU 3000 psi double ram BOP and 3000psi annular BOP. Test double ram BOP and manifold to 3000# with clear fluid and annular to 1500 psi using an independent tester and used continuously until TD is reached. Blind rams will be operationally checked on each trip out of hole. Pipe rams will be operationally checked each 24 hour period. These checks will be noted on daily tour sheets. Other accessories to the BOP equipment include a Kelly cock and floor safety valves, choke lines and choke manifold with 3000 psi WP rating.

9. Proposed Mud Circulating System

<u>Interval</u>	<u>Mud Wt.</u>	<u>Visc.</u>	<u>FL</u>	<u>Type Mud System</u>
0' - 400'	8.5	28	NC	Fresh water native mud w/ paper for seepage and sweeps. Lime for PH.
400'- 4000'	9.1	30	NC	Cut brine mud, lime for PH and paper for seepage and sweeps.
4000'- 7500'	9.1	29	NC	Drill section with fresh water/cut brine circulating the reserve utilizing periodic sweeps of paper as needed for seepage control and solids removal.
7500' - 13300'	9.5	36	10	Drill pilot hole, curve and horizontal section with XCD polymer / cut brine / starch.

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

10. 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.

ATTACHMENT TO FORM 3160-3
COG Operating, LLC
Taurus Federal # 1H
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11. Production Hole Drilling Summary:

Drill 8-3/4" Pilot hole thru Wolfcamp, run open hole logs. Spot 150 sx. "H" Kick off plug from +/- 8800' to +/-8300'. Time drill and kick off 7-7/8" hole at +/- 8300', building curve over +/- 475' to horizontal at 8680' TVD. Drill horizontal section in an easterly direction for +/-4500' lateral. Run production casing and cement.

12. Logging, Testing and Coring Program:

- A. The electric logging program will consist of GR-Dual Laterolog, Spectral Density, Dual Spaced Neutron, CSNG Log and will be ran from T.D. in vertical pilot hole to 9 5/8" casing shoe.
- B. The mud logging program will consist of lagged 10' samples from intermediate casing point to T.D. in vertical pilot hole and from Kick off point to TD in Horizontal hole.
- C. Drill Stem test is not anticipated.
- D. No conventional coring is anticipated.
- E. Further testing procedures will be determined after the 5 1/2" production casing has been cemented at TD based on drill shows and log evaluation.

13. Abnormal Conditions, Pressures, Temperatures and Potential Hazards:

No abnormal pressures or temperatures are anticipated. The estimated bottom hole at TD is 120 degrees and estimated maximum bottom hole pressure is 3750 psig. Low levels of Hydrogen sulfide have been monitored in producing wells in the area, so H2S may be present while drilling of the well. An H2S plan is attached to the Drilling Program. No major loss of circulation zones has been reported in offsetting wells.

14. Anticipated Starting Date

Drilling operations will commence approximately on April 1, 2008 with drilling and completion operations lasting approximately 45 days.

Planned Wellpath Report

Plan #1
Page 1 of 5



REFERENCE WELLPATH IDENTIFICATION			
Operator	Concho O&G	Slot	#1H_SHL
Area	Chavez County, NM	Well	#1H
Field	(Taurus)Section 10 T15S R31E	Wellbore	#1H_PWB
Facility	Taurus Federal #1H		

REPORT SETUP INFORMATION			
Projection System	NAD83 / TM New Mexico State Planes, Eastern Zone (3001), US feet	Software System	WellArchitect™ 1.2
North Reference	Grid	User	Gomeoscr
Scale	0.999938	Report Generated	09/21/07 at 06:51:42
Wellbore last revised	09/20/07	Database/Source file	WA_Midland/#1H_PWB.xn

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North [feet]	East [feet]	Easting [US feet]	Northing [US feet]	Latitude [°]	Longitude [°]
Slot Location	0.00	0.00	699556.00	736670.60	33 01 26.537N	103 49 01.613W
Facility Reference Pt			699556.00	736670.60	33 01 26.537N	103 49 01.613W
Field Reference Pt			699556.00	736670.60	33 01 26.537N	103 49 01.613W

WELLPATH DATUM			
Calculation method	Minimum curvature	Rig on #1H_SHL (RT) to Facility Vertical Datum	0.00 feet
Horizontal Reference Pt	Facility Center	Rig on #1H_SHL (RT) to GRN. ELEV.	4415.00 feet
Vertical Reference Pt	Rig on #1H_SHL (RT)	Facility Vertical Datum to Mud Line (Facility)	0.00 feet
MD Reference Pt	Rig on #1H_SHL (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	GRN. ELEV.	Section Azimuth	89.49°

Planned Wellpath Report

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Field	(Taurus)Section 10 T15S R31E	Wellbore	#1H_PWB
Facility	Taurus Federal #1H		

WELLPATH DATA (59 stations) † = interpolated/extrapolated station									
MD [feet]	Inclination [°]	Azimuth [°]	TVD [feet]	Vert Sect [feet]	North [feet]	East [feet]	DLS [°/100ft]	Design Comments	Path Comment
0.00	0.000	89.491	0.00	0.00	0.00	0.00	0.00	Tie On	
2380.00†	0.000	89.491	2380.00	0.00	0.00	0.00	0.00		Yates
3190.00†	0.000	89.491	3190.00	0.00	0.00	0.00	0.00		Queen
3920.00†	0.000	89.491	3920.00	0.00	0.00	0.00	0.00		San Andres D
6740.00†	0.000	89.491	6740.00	0.00	0.00	0.00	0.00		Tubb
7430.00†	0.000	89.491	7430.00	0.00	0.00	0.00	0.00		Abo
8200.00	0.000	89.491	8200.00	0.00	0.00	0.00	0.00	KOP	
8300.00†	12.060	89.491	8299.26	10.49	0.09	10.49	12.06		
8400.00†	24.120	89.491	8394.14	41.48	0.37	41.48	12.06		
8500.00†	36.180	89.491	8480.46	91.61	0.81	91.61	12.06		
8600.00†	48.240	89.491	8554.39	158.67	1.41	158.67	12.06		
8700.00†	60.300	89.491	8612.68	239.70	2.13	239.69	12.06		
8800.00†	72.360	89.491	8652.75	331.12	2.94	331.11	12.06		
8807.62†	73.278	89.491	8655.00	338.40	3.00	338.38	12.06		Wolfcamp
8900.00†	84.420	89.491	8672.84	428.89	3.81	428.88	12.06		
8938.28	89.037	89.491	8675.02	467.11	4.15	467.09	12.06	EOC	
9000.00†	89.037	89.491	8676.06	528.81	4.69	528.79	0.00		
9100.00†	89.037	89.491	8677.74	628.80	5.58	628.77	0.00		
9200.00†	89.037	89.491	8679.42	728.78	6.47	728.76	0.00		
9300.00†	89.037	89.491	8681.10	828.77	7.36	828.74	0.00		
9400.00†	89.037	89.491	8682.78	928.76	8.24	928.72	0.00		
9500.00†	89.037	89.491	8684.46	1028.74	9.13	1028.70	0.00		
9600.00†	89.037	89.491	8686.14	1128.73	10.02	1128.68	0.00		
9700.00†	89.037	89.491	8687.82	1228.71	10.91	1228.67	0.00		
9800.00†	89.037	89.491	8689.50	1328.70	11.79	1328.65	0.00		

Planned Wellpath Report

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INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	Concho O&G	Slot	#1H_SHL
Area	Chavez County, NM	Well	#1H
Field	(Taurus)Section 10 T15S R31E	Wellbore	#1H_PWB
Facility	Taurus Federal #1H		

WELLPATH DATA (59 stations) † = interpolated/extrapolated station									
MD [feet]	Inclination [°]	Azimuth [°]	TVD [feet]	Vert Sect [feet]	North [feet]	East [feet]	DLS [°/100ft]	Design Comments	Path Comment
9900.00†	89.037	89.491	8691.18	1428.69	12.68	1428.63	0.00		
10000.00†	89.037	89.491	8692.87	1528.67	13.57	1528.61	0.00		
10100.00†	89.037	89.491	8694.55	1628.66	14.46	1628.59	0.00		
10200.00†	89.037	89.491	8696.23	1728.64	15.34	1728.57	0.00		
10300.00†	89.037	89.491	8697.91	1828.63	16.23	1828.56	0.00		
10400.00†	89.037	89.491	8699.59	1928.61	17.12	1928.54	0.00		
10500.00†	89.037	89.491	8701.27	2028.60	18.01	2028.52	0.00		
10600.00†	89.037	89.491	8702.95	2128.59	18.89	2128.50	0.00		
10700.00†	89.037	89.491	8704.63	2228.57	19.78	2228.48	0.00		
10800.00†	89.037	89.491	8706.31	2328.56	20.67	2328.47	0.00		
10900.00†	89.037	89.491	8707.99	2428.54	21.56	2428.45	0.00		
11000.00†	89.037	89.491	8709.67	2528.53	22.44	2528.43	0.00		
11100.00†	89.037	89.491	8711.35	2628.52	23.33	2628.41	0.00		
11200.00†	89.037	89.491	8713.03	2728.50	24.22	2728.39	0.00		
11300.00†	89.037	89.491	8714.71	2828.49	25.11	2828.38	0.00		
11400.00†	89.037	89.491	8716.39	2928.47	26.00	2928.36	0.00		
11500.00†	89.037	89.491	8718.07	3028.46	26.88	3028.34	0.00		
11600.00†	89.037	89.491	8719.75	3128.45	27.77	3128.32	0.00		
11700.00†	89.037	89.491	8721.44	3228.43	28.66	3228.30	0.00		
11800.00†	89.037	89.491	8723.12	3328.42	29.55	3328.29	0.00		
11900.00†	89.037	89.491	8724.80	3428.40	30.43	3428.27	0.00		
12000.00†	89.037	89.491	8726.48	3528.39	31.32	3528.25	0.00		
12100.00†	89.037	89.491	8728.16	3628.37	32.21	3628.23	0.00		
12200.00†	89.037	89.491	8729.84	3728.36	33.10	3728.21	0.00		
12300.00†	89.037	89.491	8731.52	3828.35	33.98	3828.20	0.00		

Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Concho O&G	Slot	#1H SHL
Area	Chavez County, NM	Well	#1H
Field	(Taurus)Section 10 T15S R31E	Wellbore	#1H PWB
Facility	Taurus Federal #1H		

WELLPATH DATA (59 stations) † = interpolated/extrapolated station									
MD [feet]	Inclination [°]	Azimuth [°]	TVD [feet]	Vert Sect [feet]	North [feet]	East [feet]	DLS [°/100ft]	Design Comments	Path Comment
12400.00†	89.037	89.491	8733.20	3928.33	34.87	3928.18	0.00		
12500.00†	89.037	89.491	8734.88	4028.32	35.76	4028.16	0.00		
12600.00†	89.037	89.491	8736.56	4128.30	36.65	4128.14	0.00		
12700.00†	89.037	89.491	8738.24	4228.29	37.53	4228.12	0.00		
12800.00†	89.037	89.491	8739.92	4328.28	38.42	4328.11	0.00		
12900.00†	89.037	89.491	8741.60	4428.26	39.31	4428.09	0.00		
13000.00†	89.037	89.491	8743.28	4528.25	40.20	4528.07	0.00		
13100.00†	89.037	89.491	8744.96	4628.23	41.08	4628.05	0.00		
13102.17	89.037	89.491	8745.00	4630.40	41.10	4630.22	0.00	#1H BHL	

HOLE & CASING SECTIONS Ref Wellbore: #1H PWB Ref Wellpath: Plan #1									
String/Diameter	Start MD [feet]	End MD [feet]	Interval [feet]	Start TVD [feet]	End TVD [feet]	Start N/S [feet]	Start E/W [feet]	End N/S [feet]	End E/W [feet]
8.75in Open Hole	8200.00	8938.28	738.28	8200.00	8675.02	0.00	0.00	4.15	467.08
7.875in Open Hole	8938.28	13102.17	4163.89	8675.02	NA	4.15	467.08	NA	NA

Planned Wellpath Report

Plan #1
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REFERENCE WELLPATH IDENTIFICATION			
Operator	Concho O&G	Slot	#1H_SHL
Area	Chavez County, NM	Well	#1H
Field	(Taurus)Section 10 T15S R31E	Wellbore	#1H_PWB
Facility	Taurus Federal #1H		

TARGETS									
Name	MD [feet]	TVD [feet]	North [feet]	East [feet]	Grid East [us survey feet]	Grid North [us survey feet]	Latitude [°]	Longitude [°]	Shape
1) #1H BHL	13102.17	8745.00	41.10	4630.22	704185.92	736711.70	33°01'26.715N	103°48'07.231W	point

Concho O&G

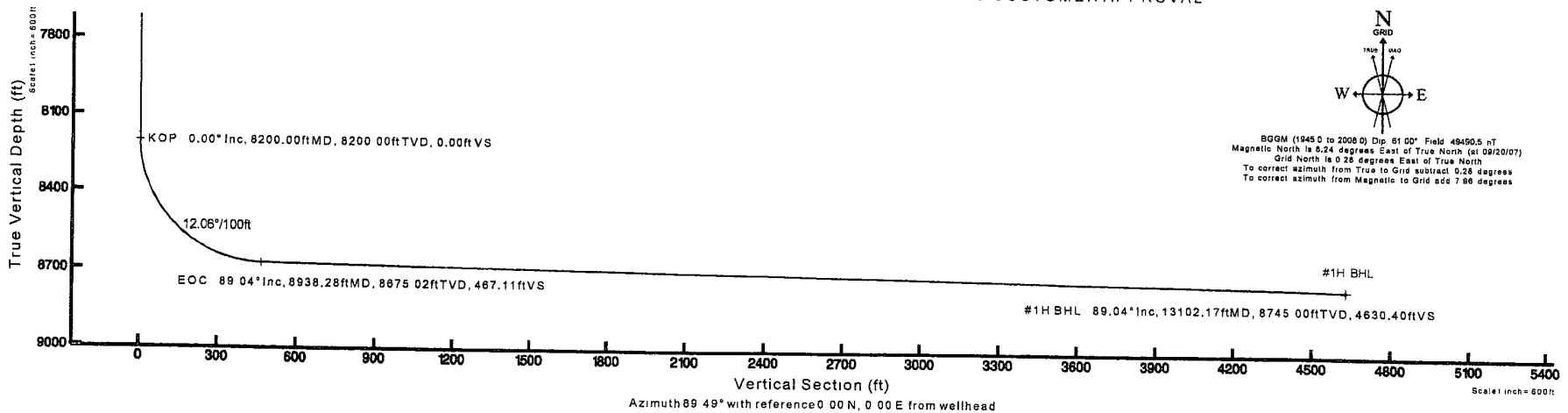
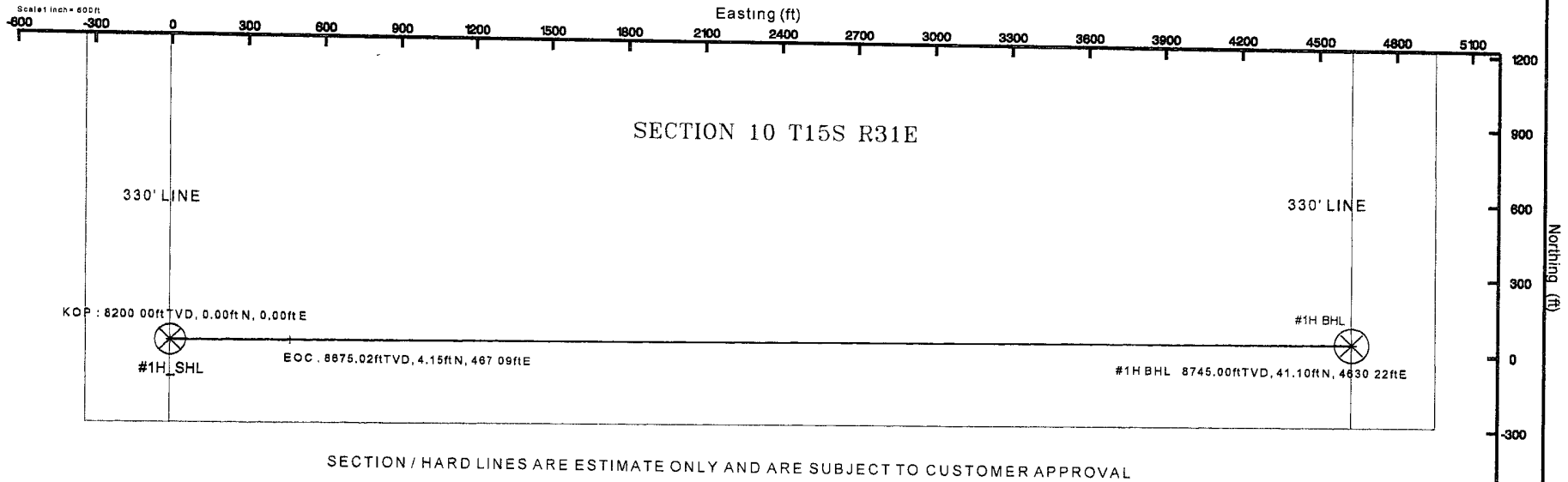
Location: Chavez County, NM
 Field: (Taurus) Section 10 T15S R31E
 Facility: Taurus Federal #1H

Slot: #1H_SHL
 Well: #1H
 Wellbore: #1H_PWB



Well Profile Data								
Design Comment	MD (ft)	Inc (")	Az (°)	TYD (ft)	Local N (ft)	Local E (ft)	DLS ("/100ft)	VS (ft)
Tie On	0.00	0.000	89.491	0.00	0.00	0.00	0.00	0.00
KOP	8200.00	0.000	89.491	8200.00	0.00	0.00	0.00	0.00
EOC	8938.28	89.037	89.491	8675.02	4.15	467.09	12.06	467.11
#1H_BHL	13102.17	89.037	89.491	8745.00	41.10	4630.22	0.00	4630.40

Plot Reference Well Path Plan	
True Vertical Depth has reference to Rig on #1H_SHL (RT)	Grid System: NAD83/TM New Mexico State Planes, Eastern Zone (3001) UST Feet
Measure depth has reference to Rig on #1H_SHL (P1)	North Reference: Grid north
Rig on #1H_SHL (RT) CHN ELEV: 4415 feet	Scale: True distance
GRN ELEV. to Madwell Facility (Taurus Federal #1H): 4415 feet	Depth in feet
Coordinates in feet, referenced Facility Center	Circle by gomek on 9/21/2007



SURFACE USE AND OPERATIONS PLAN
FOR DRILLING, COMPLETION, AND PRODUCING

C.O.G. Operating, LLC
Taurus Federal #1H
SL: 330' FSL & 330' FWL, Unit M
BHL: 330' FSL & 330' FEL, Unit P
Sec 10, T15S, R31E
Chaves County, New Mexico

LOCATED

Approximately 15 miles North of Maljamar, New Mexico

OIL & GAS LEASE

SL: NMLC #105885
BHL: State 8459-0000

RECORD TITLE LESSEE

SL: Chesapeake Exploration LP, P O Box 18496, Oklahoma City, OK 73154-0496
Harvey E. Yates Co. PO Box 1933, Roswell, NM 88202-1933
BHL: Chevron USA Inc., 11111 S. WILCREST HOUSTON, TX 77099

BOND COVERAGE

\$25,000 statewide bond of C.O.G. Operating, L.L.C.

SURFACE OWNER

Billy & Donna Medlin P.O. Box 50 Maljamar, NM 88264 1-505-676-4121

MINERAL OWNER

State of New Mexico

POOL

Undesignated Wolfcamp

PROPOSED TOTAL DEPTH

This well will be drilled to a Total Vertical Depth of approximately 8680' and a Measured Depth of approximately 13300'.

EXHIBITS

- A. Well Location & Acreage Dedication Map
- B. Area Road Map
- C. Vicinity Oil & Gas Map
- D. Topographic & Location Verification Map
- E-1- E-3 Proposed Lease Road and Pad Layout Map
- F-1, F-2 Electric Lines and Layout Map
- G. Cut and Fill
- H. Drilling Rig Layout
- I. BOPE Schematic
- J. Choke Manifold Schematic

EXISTING ROADS

- A. Exhibit A is a portion of a section map showing the location of the proposed well as staked.
- B. Exhibit B is a map showing existing roads in the vicinity of the proposed well site.
- C. Directions to well location: From the junction of US HWY 82 and State HWY 249, go North 11 miles to Co. Rd. 172, continue North on Co. Rd 172 for 9/10 miles to Ranch Rd., follow Ranch Rd. Westerly 9/10 miles to proposed location.

ACCESS ROADS

- A. Length and Width: 5276' long and 30' wide. The access road is on Fee and State of New Mexico surface. The Road Right of Way will be obtained from The Medlin's, and the State of New Mexico; shown on Exhibit E-1 to E-3.
- B. Surface Material: Existing
- C. Maximum Grad: Less than five percent
- D. Turnouts: None necessary
- E. Drainage Design: Existing
- F. Culverts: None necessary
- G. Gates and Cattle Guards: Elevated Cattle Guard with gate

LOCATION OF EXISTING WELLS

Existing wells in the immediate area are shown in Exhibit C.

LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

Necessary production facilities for this well will be located on the well pad.

LOCATION AND TYPE OF WATER SUPPLY

It is not contemplated that a water well will be drilled. Water necessary for drilling will be purchased and hauled to the site over existing roads shown on Exhibit E-1 to E-4.

METHODS OF HANDLING WASTE DISPOSAL

- A. Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry.
- B. Water produced during tests will be disposed of in the drilling pits.
- C. Oil produced during tests will be stored in test tanks.
- D. Trash will be contained in a trash trailer and removed from well site.
- E. All trash and debris will be removed from the well site within 30 days after finishing drilling and/or completion operations.

ANCILLARY FACILITIES

None required.

WELL SITE LAYOUT

Exhibits G and H show the relative location and dimensions of the well pad, mud pits, reserve pit, and trash pit, and the location of major rig components.

PLANS FOR RESTORATION OF THE SURFACE

- A. After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. The well site will be cleaned of all trash and junk to leave the site in an as aesthetically pleasing condition as possible.
- B. After abandonment, all equipment, trash, and junk will be removed and the site will be clean.

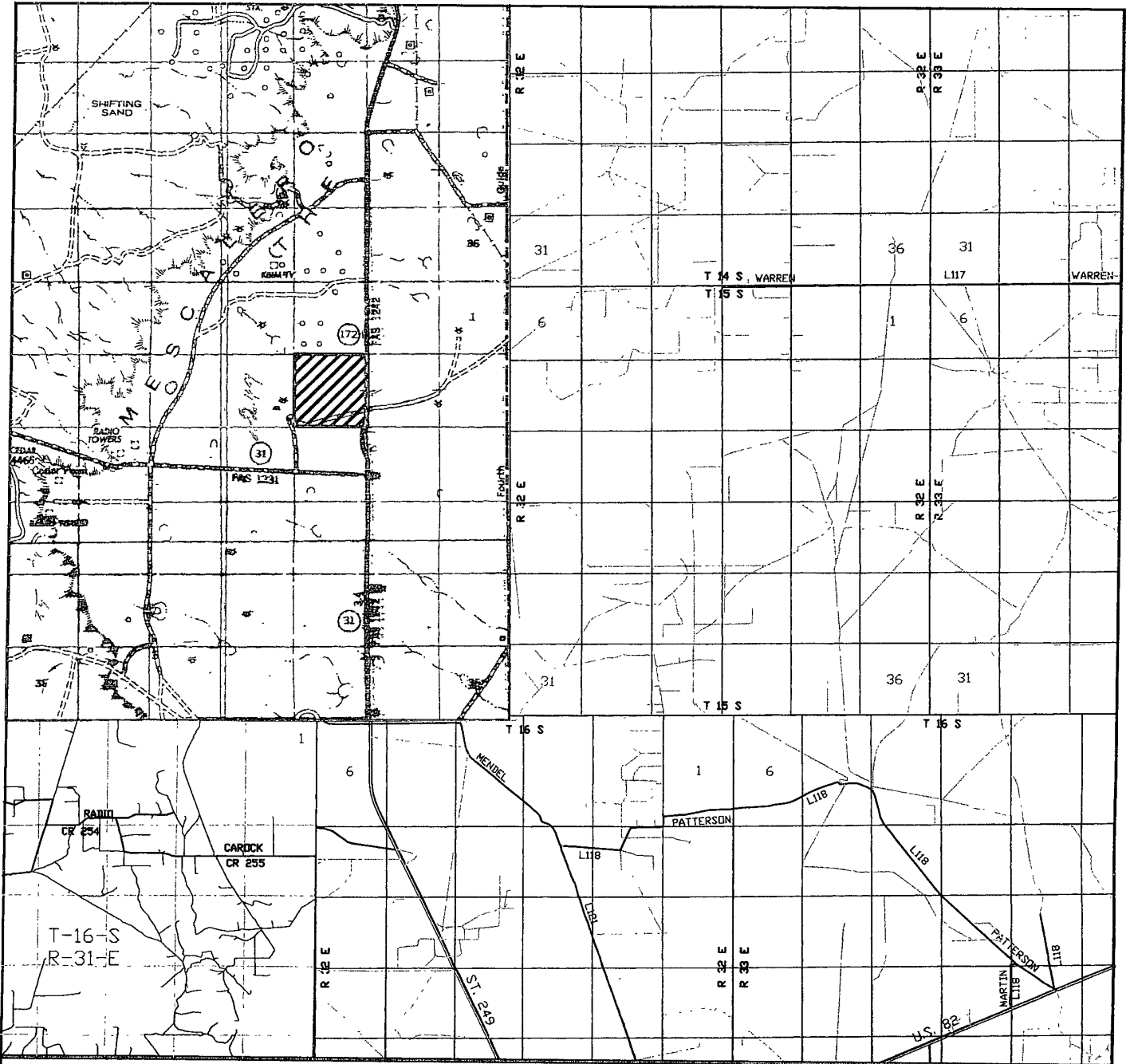
OTHER INFORMATION

- A. **Topography:**
The topography consists of sandy soil with native grasses. No wildlife was observed, but the usual inhabitants of this region are Jackrabbits, Reptiles, Coyotes, etc.
- B. **Soil:** Topsoil at the well site is sandy soil.
- C. **Flora and Fauna:** The location is in an area sparsely covered with mesquite and range grasses.
- D. **Ponds and Streams:** There are no rivers, lakes, ponds, or streams in the area.
- E. **Residences and Other Structures:** There are no residences within a mile of the proposed well site.
- F. **Archaeological, Historical, and Cultural sites:** An Archaeological Survey has been ordered and a copy to be sent to the BLM Office.
- G. **Land Use:** Grazing

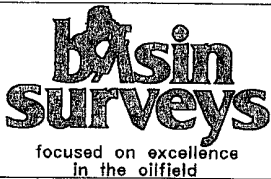
OPERATOR'S REPRESENTATIVE

John Coffman
C.O.G. Operating, LLC
550 W. Texas Ave, Suite 1300
Midland, TX 79701
(432) 683-7443

EXHIBIT "B"



TAURUS FEDERAL #1H
 Located at 330' FSL and 330 FWL
 Section 10, Township 15 South, Range 31 East,
 N.M.P.M., Chaves County, New Mexico.



P.O. Box 1786
 1120 N. West County Rd.
 Hobbs, New Mexico 88241
 (505) 393-7316 - Office
 (505) 392-3074 - Fax
 basinsurveys.com

W.O. Number: JMS 18370TR

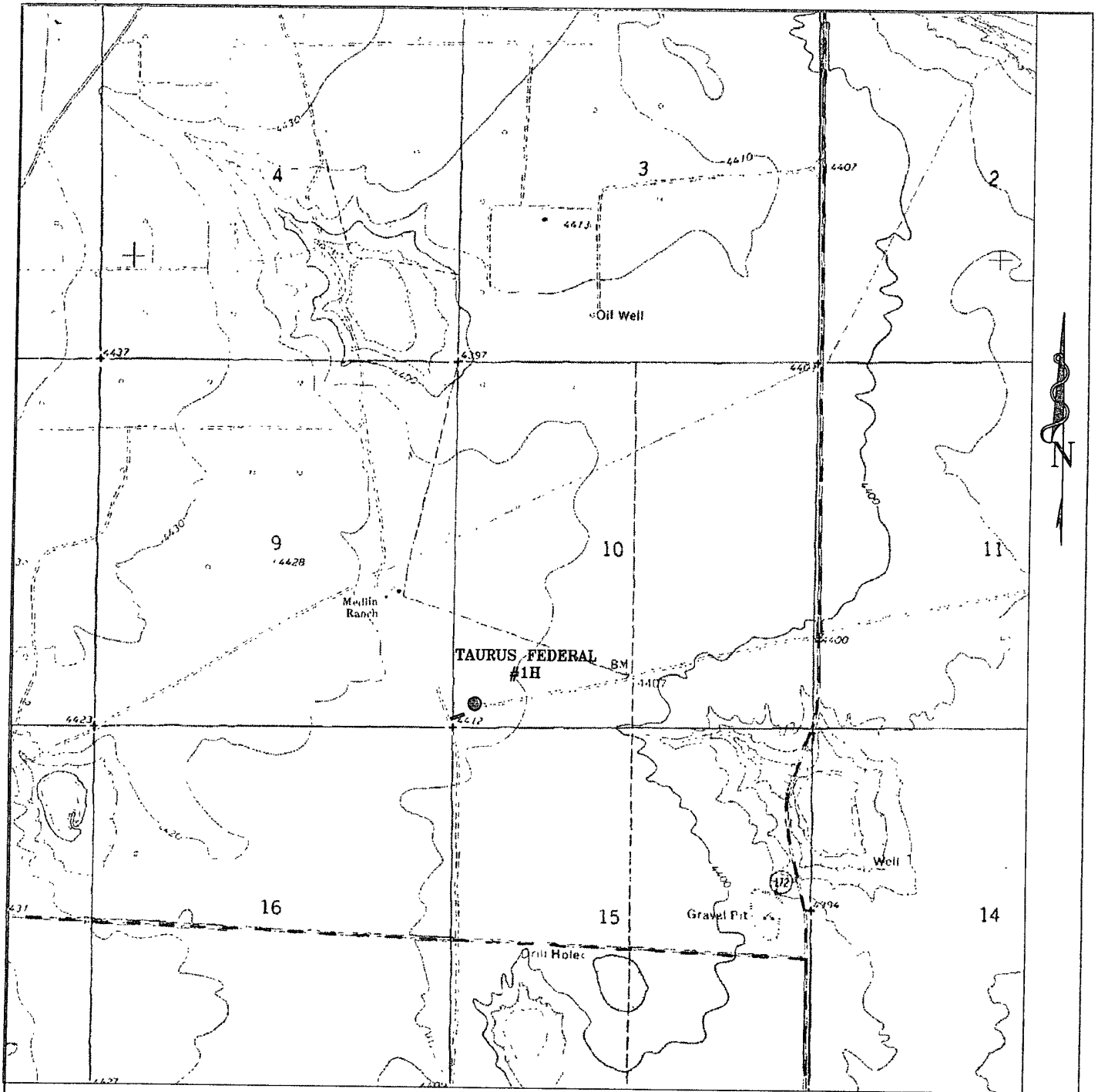
Survey Date: 07-27-2007

Scale: 1" = 2 MILES

Date: 07-30-2007

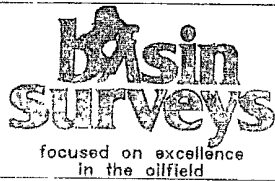
C.O.G.
 OPERATING
 L.L.C.

EXHIBIT "D"



TAURUS FEDERAL #1H

Located at 330' FSL and 330 FWL
 Section 10, Township 15 South, Range 31 East,
 N.M.P.M., Chaves County, New Mexico.



P.O. Box 1786
 1120 N. West County Rd.
 Hobbs, New Mexico 88241
 (505) 393-7316 - Office
 (505) 392-3074 - Fax
 basinsurveys.com

W.O. Number: JMS 18370T

Survey Date: 07-27-2007

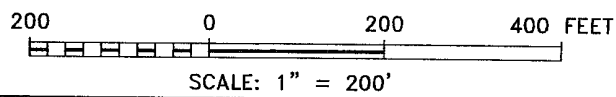
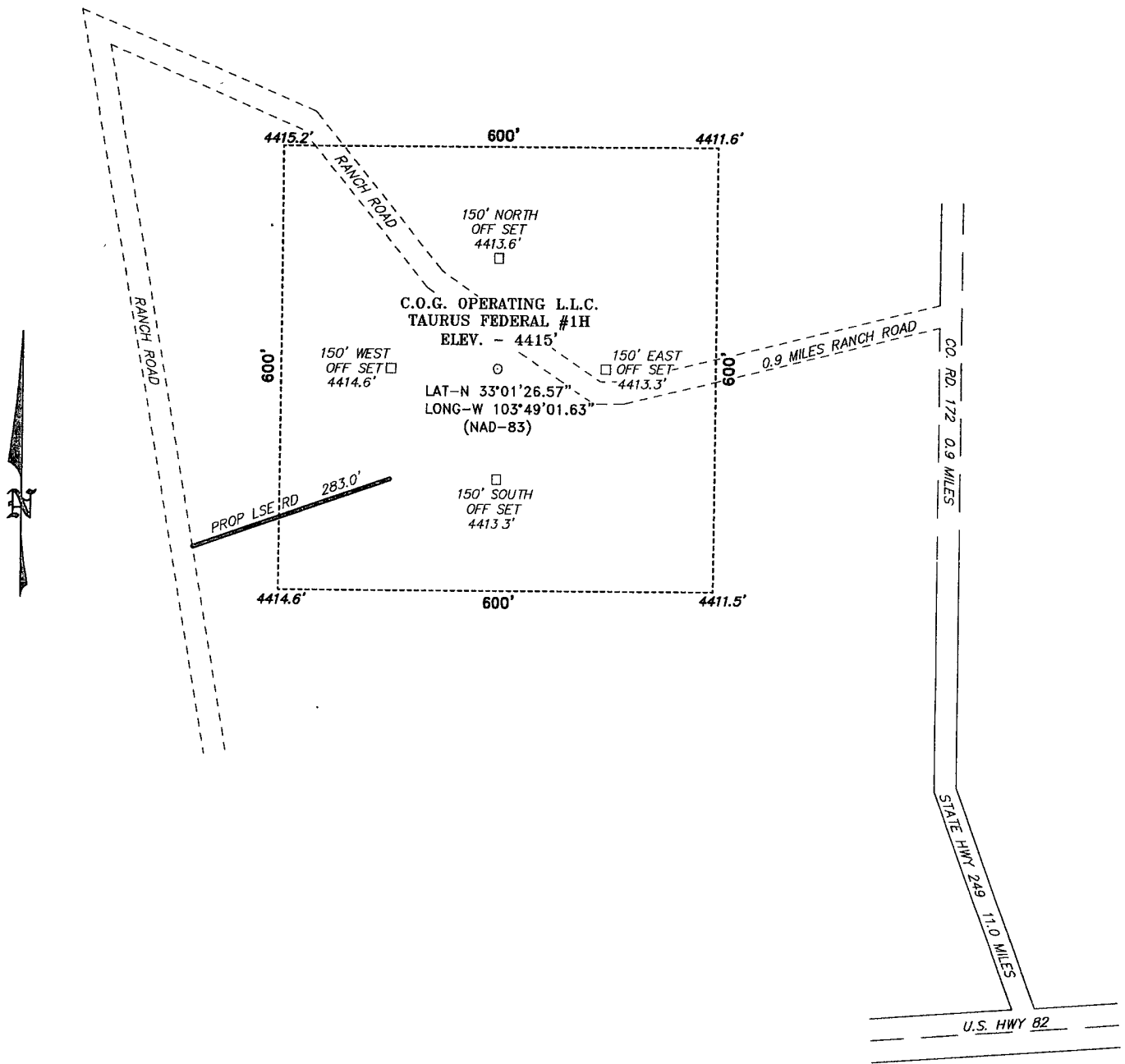
Scale 1" = 2000'

Date: 07-30-2007

**C.O.G.
 OPERATING
 L.L.C.**

Exhibit "E-1"

SECTION 10, TOWNSHIP 15 SOUTH, RANGE 31 EAST, N.M.P.M.,
CHAVES COUNTY, NEW MEXICO.



DIRECTIONS TO LOCATION:

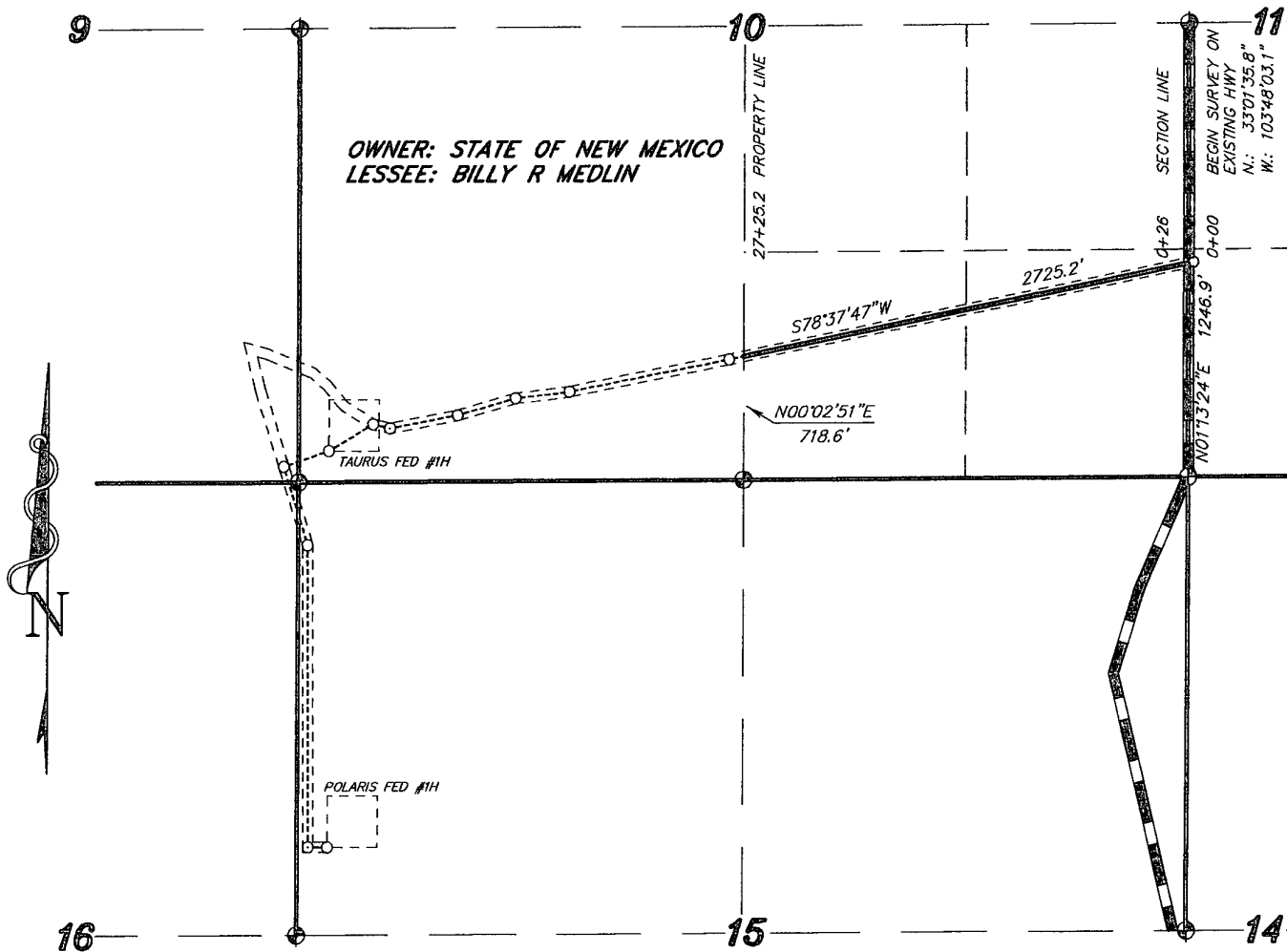
FROM THE JUNCTION OF U.S. HWY 82 AND STATE HWY 249, GO NORTH 11 MILES TO CO. RD. 172, CONTINUE NORTH ON CO. RD. 172 FOR 0.9 MILES TO RANCH ROAD, FOLLOW RANCH ROAD WESTERLY 0.9 MILES TO PROPOSED LOCATION.

C.O.G. OPERATING L.L.C.	
REF: TAURUS FEDERAL #1H / Well Pad Topo	
THE TAURUS FEDERAL #1H LOCATED 330' FROM THE SOUTH LINE AND 330' FROM THE WEST LINE OF SECTION 10, TOWNSHIP 15 SOUTH, RANGE 31 EAST, N.M.P.M., CHAVES COUNTY, NEW MEXICO.	

BASIN SURVEYS P.O. BOX 1786 - HOBBS, NEW MEXICO	
W.O. Number: 18370	Drawn By: J. M. SMALL
Date: 07-30-2007	Disk: JMS 18370W

Survey Date: 07-27-2007	Sheet 1 of 1 Sheets
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SECTIONS 10&11, TOWNSHIP 15 SOUTH, RANGE 31 EAST, N.M.P.M.,
CHAVES COUNTY, NEW MEXICO.



OWNER: STATE OF NEW MEXICO
LESSEE: BILLY R MEDLIN

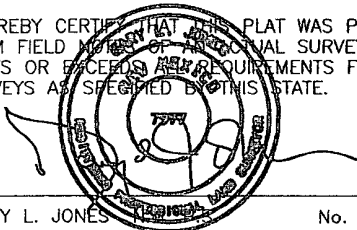
LEGAL DESCRIPTION

A STRIP OF LAND 20.0 FEET WIDE, LOCATED IN SECTIONS 10&11, TOWNSHIP 15 SOUTH, RANGE 31 EAST, N.M.P.M., CHAVES COUNTY, NEW MEXICO AND BEING 10.0 FEET LEFT AND RIGHT OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY.

BEGINNING AT A POINT WHICH LIES N.01°13'24"E., 1246.9 FEET FROM THE SOUTHWEST CORNER OF SAID SECTION 11; THENCE S.78°37'47"W., 2725.2 FEET TO A POINT ON THE WEST PROPERTY LINE WHICH LIES N.00°02'51"E., 718.6 FEET FROM THE SOUTH QUARTER CORNER OF SAID SECTION 10. SAID STRIP OF LAND BEING 2725.2 FEET OR 165.16 RODS IN LENGTH AND CONTAINING 1.25 ACRES, MORE OR LESS, AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

SW/4 SW/4 (SEC 11) = 1.58 RODS = 0.01 ACRES SE/4 SE/4 (SEC 10) = 81.79 RODS = 0.62 ACRES
SW/4 SE/4 (SEC 10) = 81.79 RODS = 0.62 ACRES

I HEREBY CERTIFY THAT THIS PLAT WAS PREPARED FROM FIELD NOTES OF A REAL SURVEY AND MEETS OR EXCEEDS ALL REQUIREMENTS FOR LAND SURVEYS AS SPECIFIED BY THIS STATE.



GARY L. JONES No. 7977
TEXAS P.L.S. No. 5074



C.O.G. OPERATING L.L.C.

REF: PROP. LEASE ROAD TO THE TAURUS FEDERAL #1H

A LEASE ROAD CROSSING STATE LAND IN
SECTIONS 10&11, TOWNSHIP 15 SOUTH, RANGE 31 EAST,
N.M.P.M., CHAVES COUNTY, NEW MEXICO.

BASIN SURVEYS P.O. BOX 1786—HOBBS, NEW MEXICO

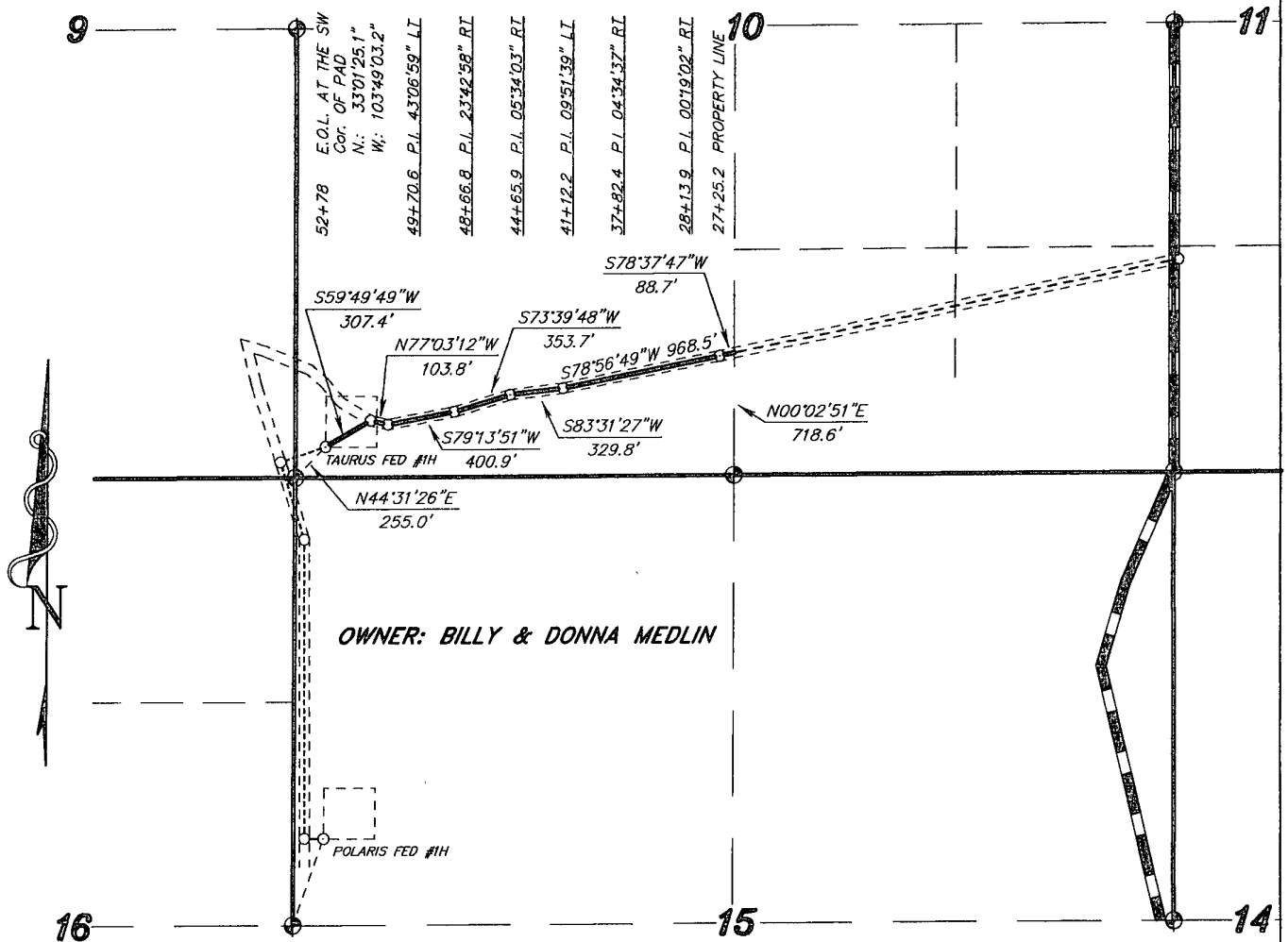
W.O. Number: 18423 Drawn By: J. M. SMALL

Date: 08-07-2007 Disk: JMS 18423R

Survey Date: VARIES

Sheet 1 of 2 Sheets

SECTION 10, TOWNSHIP 15 SOUTH, RANGE 31 EAST, N.M.P.M.,
CHAVES COUNTY, NEW MEXICO.



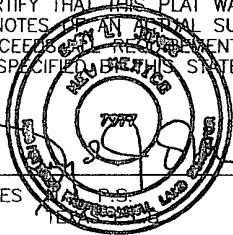
LEGAL DESCRIPTION

A STRIP OF LAND 20.0 FEET WIDE, LOCATED IN SECTION 10, TOWNSHIP 15 SOUTH, RANGE 31 EAST, N.M.P.M., CHAVES COUNTY, NEW MEXICO AND BEING 10.0 FEET LEFT AND RIGHT OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY. BEGINNING AT A POINT ON THE EAST PROPERTY LINE WHICH LIES N.00°02'51"E., 718.6 FEET FROM THE SOUTH QUARTER CORNER OF SAID SECTION 10; THENCE S.78°37'47"W., 88.7 FEET; THENCE S.78°56'49"W., 968.5 FEET; THENCE S.83°31'27"W., 329.8 FEET; THENCE S.73°39'48"W., 353.7 FEET; THENCE S.79°13'51"W., 400.9 FEET; THENCE N.77°03'12"W., 103.8 FEET; THENCE S.59°49'49"W., 307.4 FEET TO THE END OF THIS LINE WHICH LIES N.44°31'26"E., 255.0 FEET FROM THE SOUTHWEST CORNER OF SAID SECTION 10. SAID STRIP OF LAND BEING 2552.8 FEET OR 154.72 RODS IN LENGTH.

I HEREBY CERTIFY THAT THIS PLAT WAS PREPARED FROM FIELD NOTES OF A REAL SURVEY AND MEETS OR EXCEEDS THE REQUIREMENTS FOR LAND SURVEYS AS SPECIFIED IN THIS STATE.



GARY L. JONES No. 7977
No. 5074



C.O.G. OPERATING L.L.C.

REF: PROP. LEASE ROAD TO THE TAURUS FEDERAL #1H

A LEASE ROAD CROSSING FEE LAND IN
SECTION 10, TOWNSHIP 15 SOUTH, RANGE 31 EAST,
N.M.P.M., CHAVES COUNTY, NEW MEXICO.

BASIN SURVEYS P.O. BOX 1786--HOBBS, NEW MEXICO

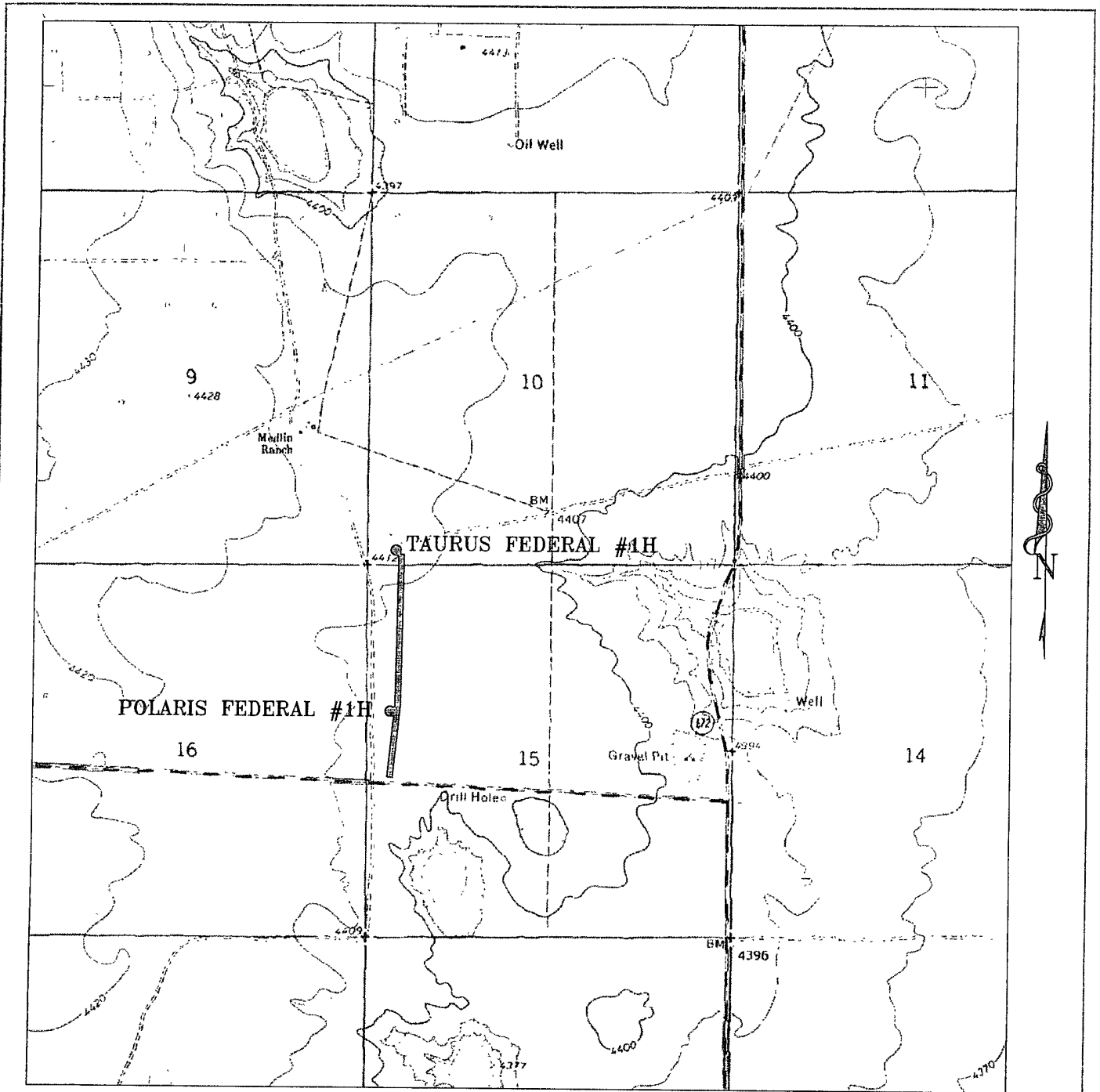
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Date: 08-06-2007 Disk: JMS 18423R

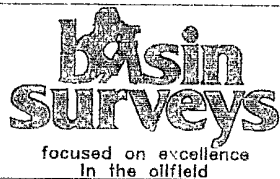
Survey Date: VARIES

Sheet 2 of 2 Sheets

Exhibit "F-1"



PROPOSED ELECLINE FOR THE COG - TAURUS FEDERAL #1H &
 PROPOSED ELECLINE FOR THE COG - POLARIS FEDERAL #1H
 Sections 10&15, Township 15 South, Range 31 East,
 N.M.P.M. Chaves County, New Mexico.



P.O. Box 1786
 1120 N. West County Rd.
 Hobbs, New Mexico 88241
 (505) 393-7316 - Office
 (505) 392-3074 - Fax
 basinsurveys.com

W.O. Number: 18475

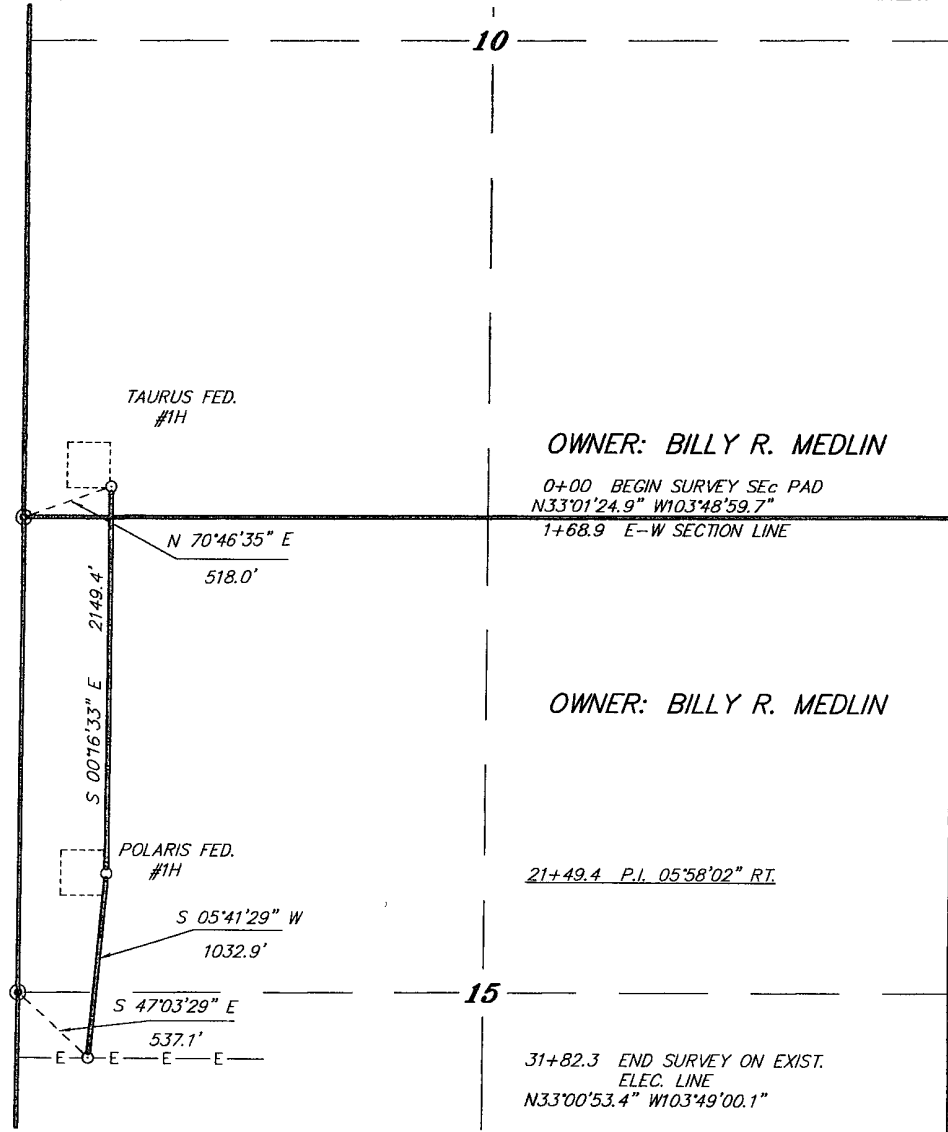
Survey Date: 08/23/07

Scale: 1" = 2000'

Date: 08/27/07

**COG
 OPERATING,
 LLC.**

SECTIONS 10&15, TOWNSHIP 15 SOUTH, RANGE 31 EAST, N.M.P.M.,
CHAVES COUNTY, NEW MEXICO.

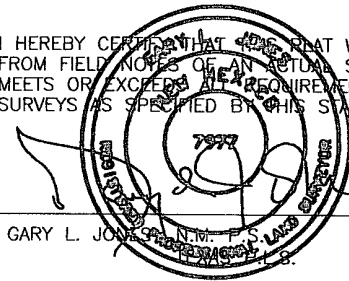


LEGAL DESCRIPTION

A STRIP OF LAND 30.0 FEET WIDE, LOCATED IN SECTIONS 10&15, TOWNSHIP 15 SOUTH, RANGE 31 EAST, N.M.P.M., CHAVES COUNTY, NEW MEXICO AND BEING 15.0 FEET LEFT AND RIGHT OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY.

BEGINNING AT A POINT WHICH LIES N.70°46'35"E., 518.0 FEET FROM THE SOUTHWEST CORNER OF SAID SECTION 10; THENCE S.00°16'33"E., 2149.4 FEET; THENCE S.05°41'29"W., 1032.9 FEET TO THE END OF THIS LINE WHICH LIES S.47°03'29"E., 537.1 FEET FROM THE WEST QUARTER CORNER OF SAID SECTION 15. SAID STRIP OF LAND BEING 3182.3 FEET OR 192.87 RODS IN LENGTH.

I HEREBY CERTIFY THAT THIS PLAT WAS PREPARED FROM FIELD NOTES OF AN ACTUAL SURVEY AND MEETS OR EXCEEDS ALL REQUIREMENTS FOR LAND SURVEYS AS SPECIFIED BY THIS STATE.



GARY L. JONES, N.M.P.S. LAND SURVEYOR, No. 7977, No. 5074



COG OPERATING, LLC.

REF:ELEC. LINE FOR THE TAURUS FED, #1H & POLARIS FED. #1H

A ELECTRIC LINE CROSSING FEE LAND IN SECTIONS 10&15, TOWNSHIP 15 SOUTH, RANGE 31 EAST, N.M.P.M., CHAVES COUNTY, NEW MEXICO.

Basin Surveys P.O. BOX 1786 - HOBBS, NEW MEXICO

W.O. Number: 18475	Drawn By: James Presley	Survey Date: 08/23/07	Sheet 1 of 1 Sheets
Date: 08/27/07	Disk: JLP #1 - COG18475		

EXHIBIT "P"

BOPE SCHEMATIC

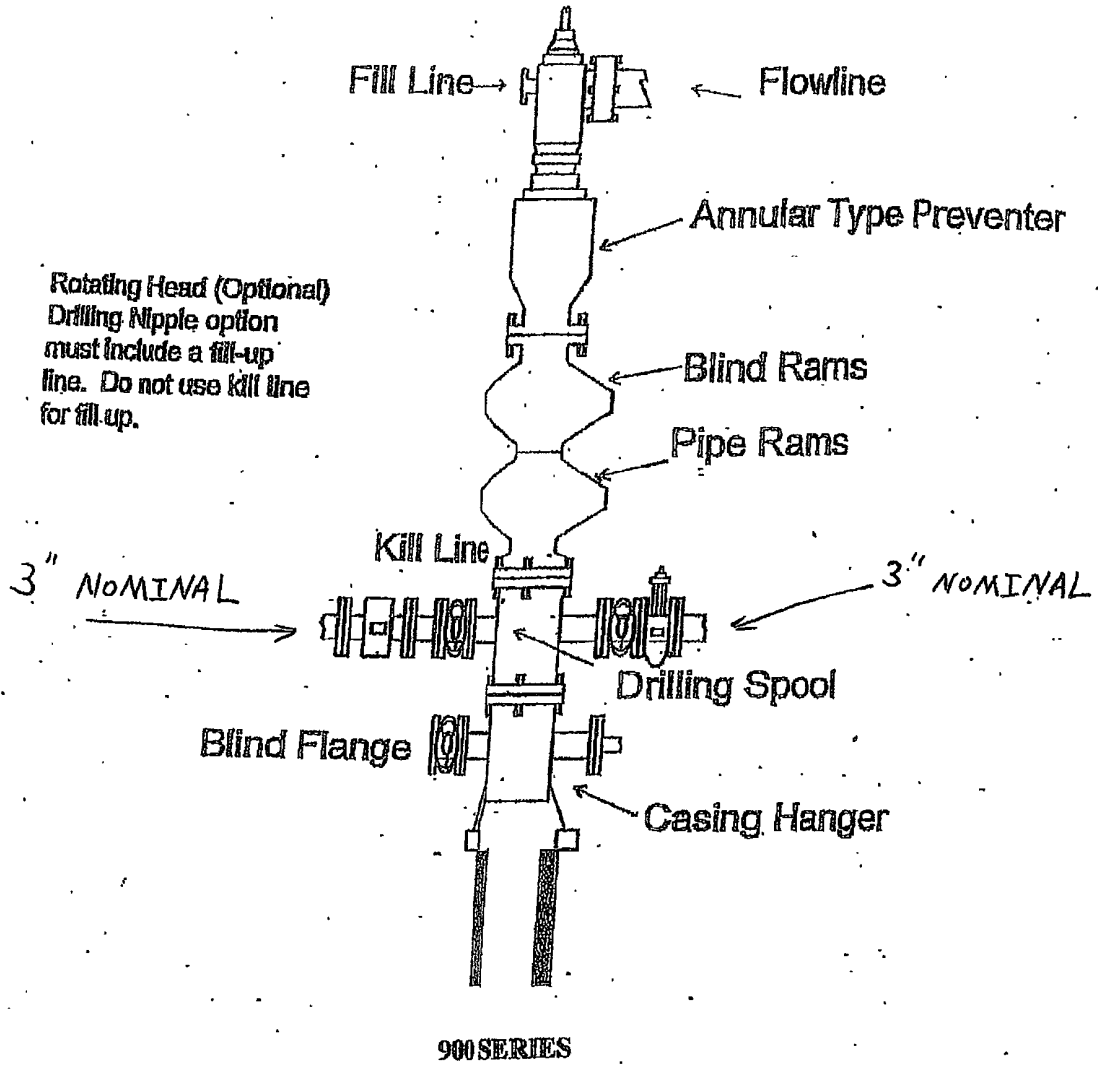
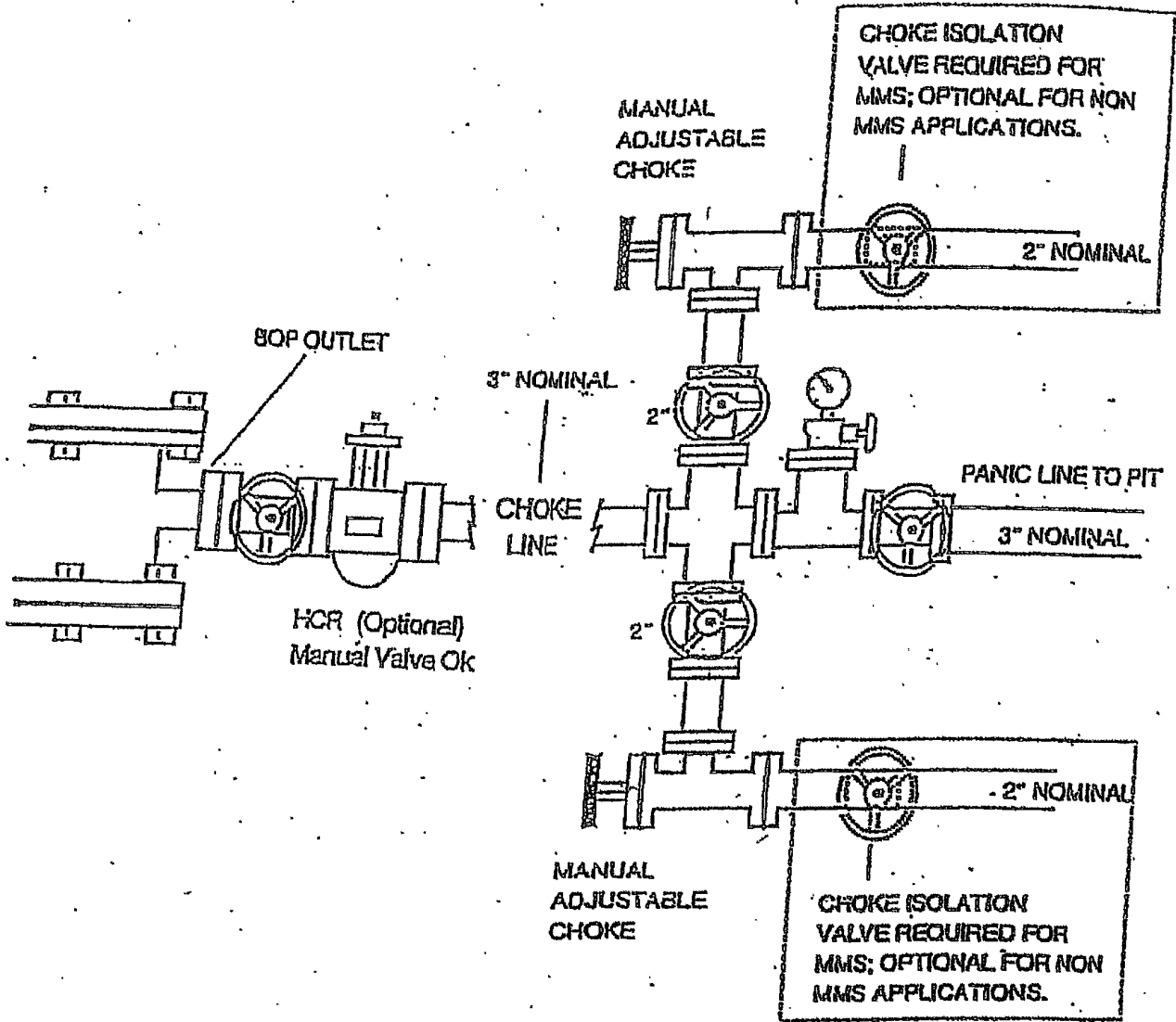


EXHIBIT "J"

CHOKE MANIFOLD

3M SERVICE



PECOS DISTRICT - RFO

CONDITIONS OF APPROVAL

OPERATORS NAME: COG Operating, LLC
LEASE NO.: NM-105885
WELL NAME & NO: Taurus Federal #1H
SURFACE HOLE FOOTAGE: 330' FSL & 330' FWL
BOTTOM HOLE FOOTAGE: 330' FSL & 330' FEL
LOCATION: Section 10, T. 15 S., R. 31 E., NMPM
COUNTY: Chaves County, New Mexico

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.

I. 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).

II. 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.

III. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations (access road and/or well pad). 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.

IV. CONSTRUCTION

A. NOTIFICATION:

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Roswell Field Office at (505) 627-0247 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 Application for Permit to Drill and Conditions of Approval on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL:

The operator shall stockpile the topsoil of the well pad. The topsoil to be stripped is approximately 6 inches in depth. The topsoil shall not be used to backfill the reserve pit and will be used for interim and final reclamation. The topsoil shall be stockpiled on the southeast corner of the well pad.

C. RESERVE PITS:

The reserve pit shall be constructed and closed in accordance with the NMOCD rules.

The reserve pit shall be constructed 160' X 160' on the NORTH side of the well pad.

The reserve pit shall be constructed, so that upon completion of drilling operations, the dried pit contents shall be buried a minimum depth of three feet below ground level. Should the pit content level not meet the three foot minimum depth requirement, the excess contents shall be removed until the required minimum depth of three feet below ground level has been met. The operator shall properly dispose of the excess contents at an authorized disposal site.

The reserve pit shall be constructed and maintained so that runoff water from outside the location is not allowed to enter the pit. The berms surrounding the entire perimeter of the pit shall extend a minimum of two (2) feet above ground level. At no time will standing fluids in the pit be allowed to rise above ground level.

The reserve pit shall be fenced on three (3) sides during drilling operations. The fourth side shall be fenced immediately upon rig release.

D. FEDERAL MINERAL MATERIALS PIT:

If the operator elects to surface the access road and/or well pad, mineral materials extracted during construction of the reserve pit may be used for surfacing the well pad and access road and other facilities on the lease.

Payment shall be made to the BLM prior to removal of any additional federal mineral materials from any site other than the reserve pit. Call the Roswell Field Office at (505) 627-0236.

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 need.

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 thirty (30) 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.

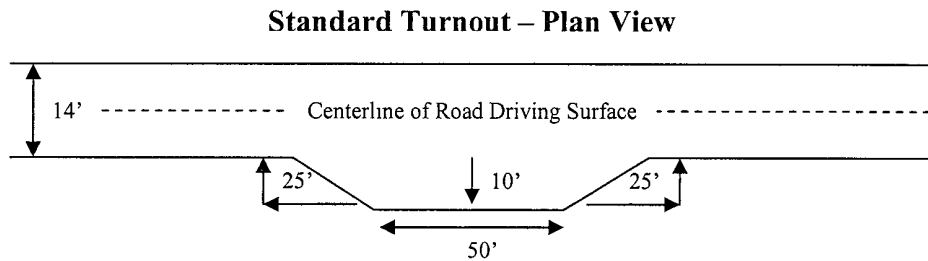
The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing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

Turnouts

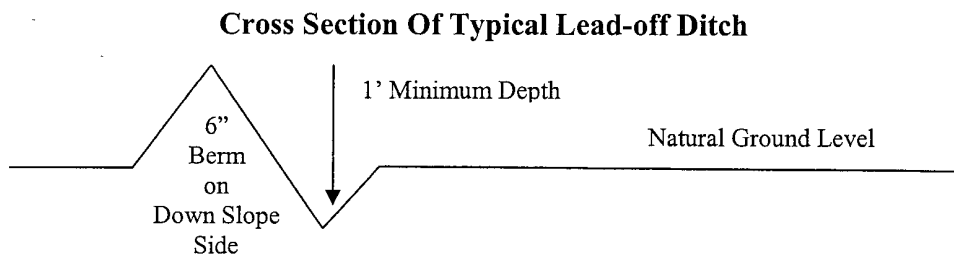
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:



Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill out-sloping and in-sloping, 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.



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:

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

Cattleguards

An appropriately sized cattleguard(s) good enough to handle vehicular traffic for the project shall be installed and maintained at the fence crossing(s) in the NE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ of Sec. 10 - T. 15 S. -R. 31 E.. A swinging arm gate shall be constructed across the cattleguard to close the fenceline.

Fence Requirement

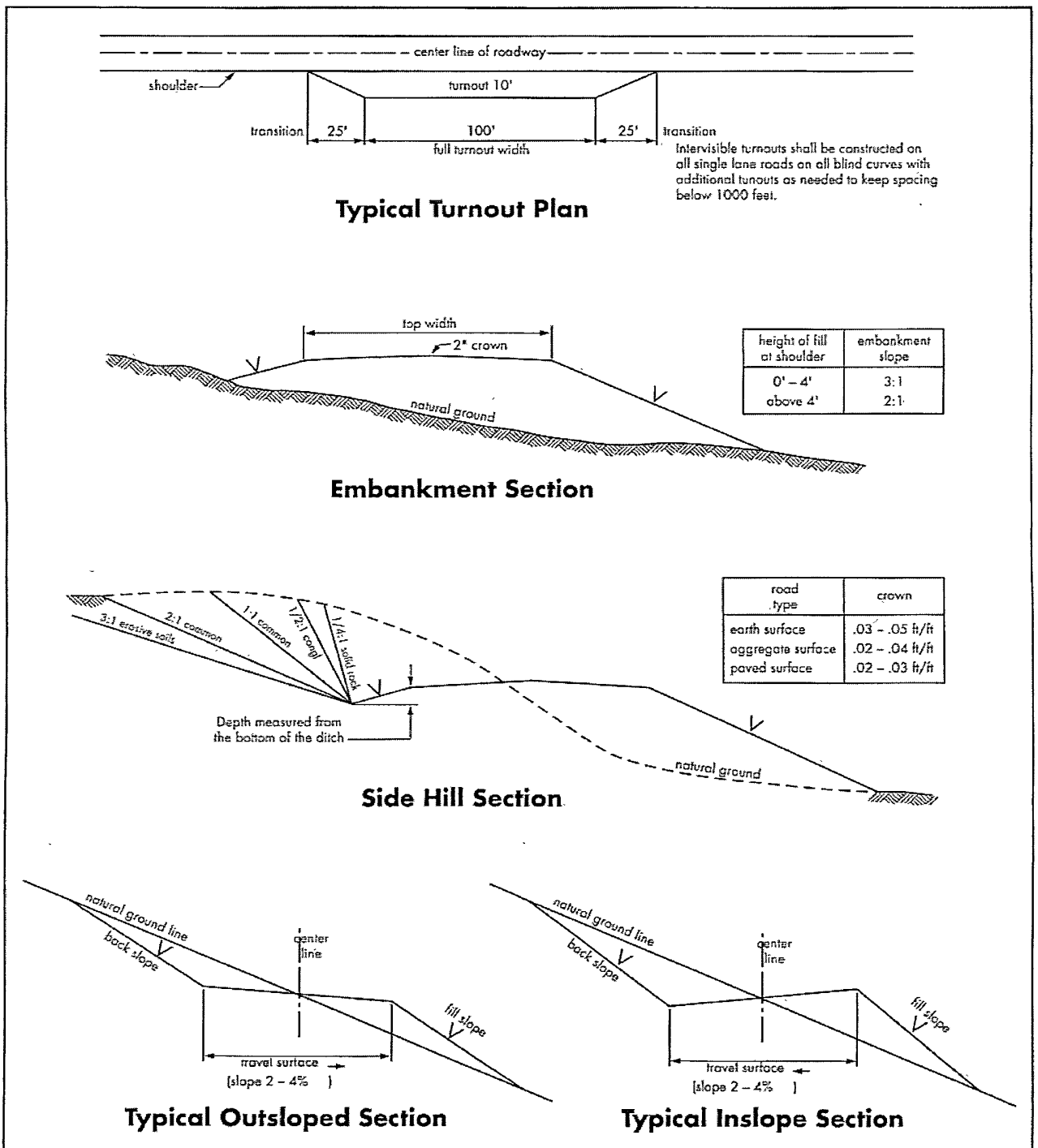
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

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



V. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

Chaves County; call the Roswell Field Office, 2909 West Second St., Roswell NM 88201. 24 hour 505 – 627 - 0205

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
1. A Hydrogen Sulfide (H₂S) Drilling Plan is required for this wellbore.
 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.
 3. When floor controls are required, (3M or Greater) controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

B. CASING

1. The 13 3/8 inch surface casing shall be set at 400 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 a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compression strength, whichever is greater. (This is to include the lead cement).
 - 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 compression strength, whichever is greater.
 - d. If cement falls back, remedial action will be done prior to drilling out that string.
2. The minimum required fill of cement behind the 9 5/8 inch intermediate casing is to circulate to surface. If cement does not circulate see B.1. a-d above.

3. The minimum required fill of cement behind the 5 1/2 -inch production casing is . Tie back into the 9 5/8 inch casing by at least 500 ft. (depth or cement to surface).
 - a. If cement does not circulate, contact the appropriate BLM office for approval of remedial action.
 - b. If cement is required to tie-back into previous casing string, a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
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.

C. 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.
2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 3000 psi. A variance to test the surface BOP prior to drilling below the 13 3/8 inch show to 800 psi with the rig pumps is approved.
3. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. The tests shall be done by an independent service company.
 - b. The results of the test shall be reported to the appropriate BLM office.
 - c. 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.
 - d. 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.

VI. PRODUCTION

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, Olive Drab, Munsell Soil Color Chart 18-0622 TPX.

VRM Facility Requirement

Low profile facilities are required on this location.

VII. INTERIM RECLAMATION & RESERVE PIT CLOSURE

A. INTERIM RECLAMATION

If the well is a producer, interim reclamation shall be conducted on the well site in accordance with the orders of the Authorized Officer. The operator shall submit a Sundry Notices and Reports on Wells (Notice of Intent), Form 3160-5, prior to conducting 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.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche may be used in road repairs, fire walls or for building other roads and locations. In addition, 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.

B. RESERVE PIT CLOSURE

At the time reserve pits are to be reclaimed, operators should work with BLM surface management

specialists to devise the best strategies to reduce the size of the location. Any reductions should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

The reserve pit, when dried and closed, shall be recontoured, all trash removed, and reseeded as follows:

Ecological Site: Sandy HP-3 for Shallow HP-3

<u>Common Name and Preferred Variety</u>	<u>Scientific Name</u>	<u>Pounds of Pure Live Seed Per Acre</u>
Blue grama, var. Lovington	(<i>Bouteloua gracilis</i>)	2.00 lbs.
Sideoats grama var. Vaughn or El Reno	(<i>Bouteloua curtipendula</i>)	3.00 lbs.
Little bluestem	(<i>Schizachyrium scoparium</i>)	0.50 lb.
Sand dropseed	(<i>Sporobolus cryptandrus</i>)	1.00 lb.
Plains bristlegrass	(<i>Setaria macrostachya</i>)	1.00 lb.
Indian blanketflower	(<i>Gaillardia aristata</i>)	0.50 lb.
Desert or Scarlet Globemallow or <i>S. coccinea</i>)	(<i>Sphaeralcea ambigua</i>)	<u>1.00 lb.</u>
TOTAL POUNDS PURE LIVE SEED (pls) PER ACRE		9.00 lbs.

Certified Weed Free Seed. IF ONE SPECIES IS NOT AVAILABLE, INCREASE ALL OTHERS PROPORTIONATELY. No less than four (4) species, including one (1) forb. No less than 9.0 pounds pls per acre shall be applied.

VIII. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS

Upon abandonment of the well and/or when the access road is no longer in service the Authorized Officer shall issue instructions and/or orders for surface reclamation and restoration of all disturbed areas.

On private surface/federal mineral estate land the reclamation procedures on the road and well pad shall be accomplished in accordance with the Private Surface Land Owner agreements.