ATS-09-452

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Form 3160-3
(February 2005)

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. BHL: NM104686
SHL NMNM 094094 mid: NM01087

6 If Indian, Allotee or Tribe Name

1a. Type of work ☑ DRILL ☐ REENTER

7 If Unit or CA Agreement, Name and No

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

8 Lease Name and Well No. <37774>
Stealth Federal Com #1

2 Name of Operator
Marbob Energy Corporation <14049>

9 API Well No.
30-025-39484

3a. Address **P.O. Box 227, Artesia, NM 88211-0227**

3b. Phone No. *(include area code)*
575-748-3303

10 Field and Pool, or Exploratory
Lusk; Bone Spring

4. Location of Well *(Report location clearly and in accordance with any State requirements *)*
At surface **330' FSL & 600' FEL** Unit P
At proposed prod zone **330' FNL & 380' FEL** Unit A

11 Sec , T R M. or Blk and Survey or Area
Section 17, T19S - R32E

14 Distance in miles and direction from nearest town or post office*
About 15 miles from Maljamar

12 County or Parish
Lea County

13 State
NM

15 Distance from proposed* location to nearest property or lease line, ft (Also to nearest drig unit line, if any) **330'**	16 No of acres in lease **40.00**	17 Spacing Unit dedicated to this well **160**
18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft	19. Proposed Depth ~~14000' MD~~ 13771 TVD 9350'	20 BLM/BIA Bond No. on file **NMB000412**
21 Elevations (Show whether DF, KDB, RT, GL, etc) **3595' GL**	22 Approximate date work will start* **07/10/2009**	23 Estimated duration **40 Days**

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
2. A Drilling Plan
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)
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 BLM.

25 Signature Nancy T. Agnew	Name *(Printed Typed)* **Nancy T. Agnew**	Date **06/11/2009**
Title **Land Department**		

Approved by *(Signature)* **/s/ Don Peterson**	Name *(Printed Typed)* **/s/ Don Peterson**	Date **JUL 22 2009**
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)

Capitan Controlled Water Basin

SEE ATTACHED FOR CONDITIONS OF APPROVAL

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof, as described below:

Date: June 11, 2009

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Lease #: NMNM 094094
Stealth Federal Com #2

Legal Description: Sec. 17-T19S-R32E
Lea County, New Mexico

Formation(s): Permian

Bond Coverage: Statewide

BLM Bond File #: NMB000412

Marbob Energy Corporation

Nancy Agnew
Land Department

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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
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease – 4 Copies
Fee Lease – 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
30-025-39484	41440	lusk; bone spring

Property Code	Property Name	Well Number
37774	STEALTH FEDERAL COM	1

OGRID No.	Operator Name	Elevation
14049	MARBOB ENERGY CORPORATION	3595'

Surface Location

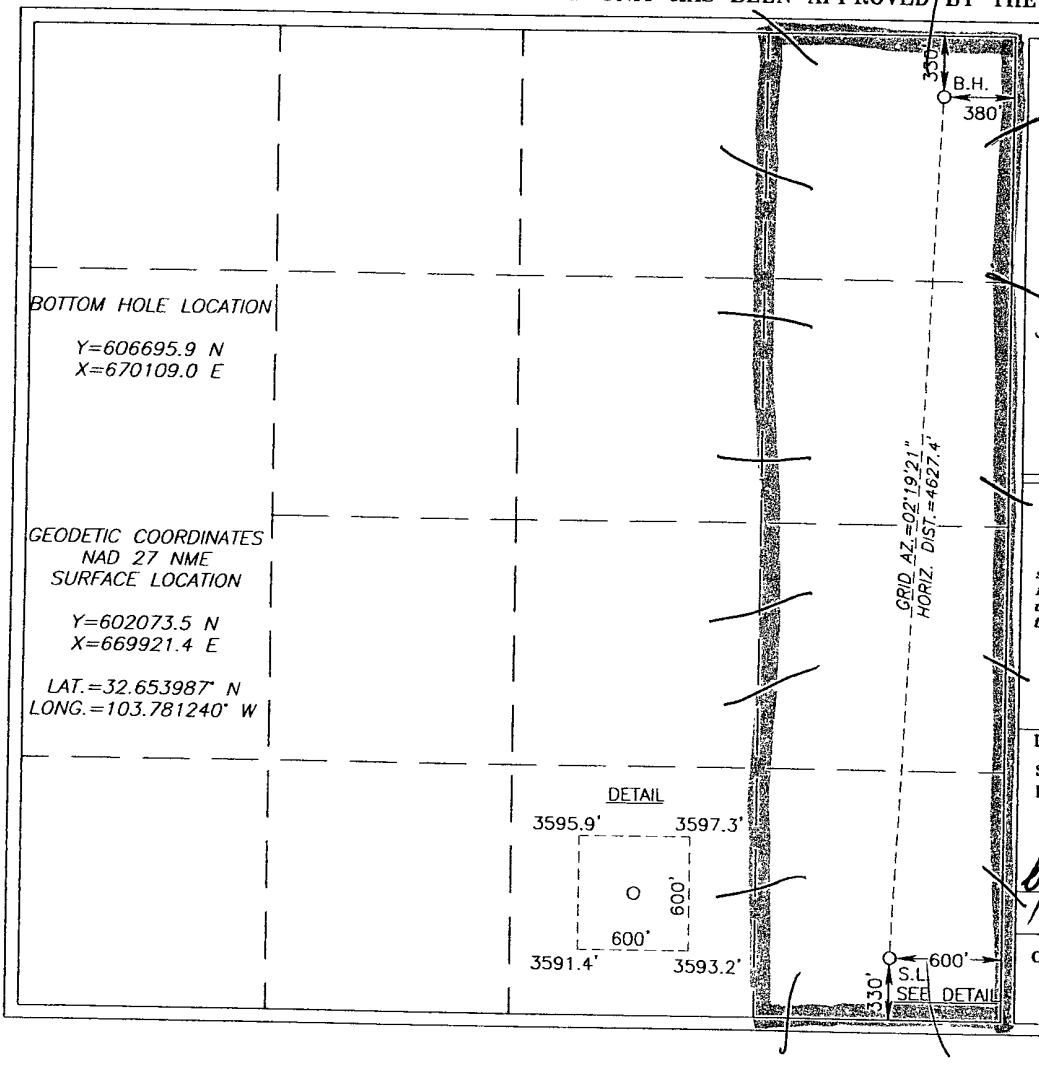
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	17	19-S	32-E		330	SOUTH	600	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	17	19-S	32-E		330	NORTH	380	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			

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.

Nancy T. Agnew 6/12/09
Signature Date

NANCY T AGNEW
Printed Name

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.

RONALD J. EIDSON
NEW MEXICO
3239
PROFESSIONAL SURVEYOR

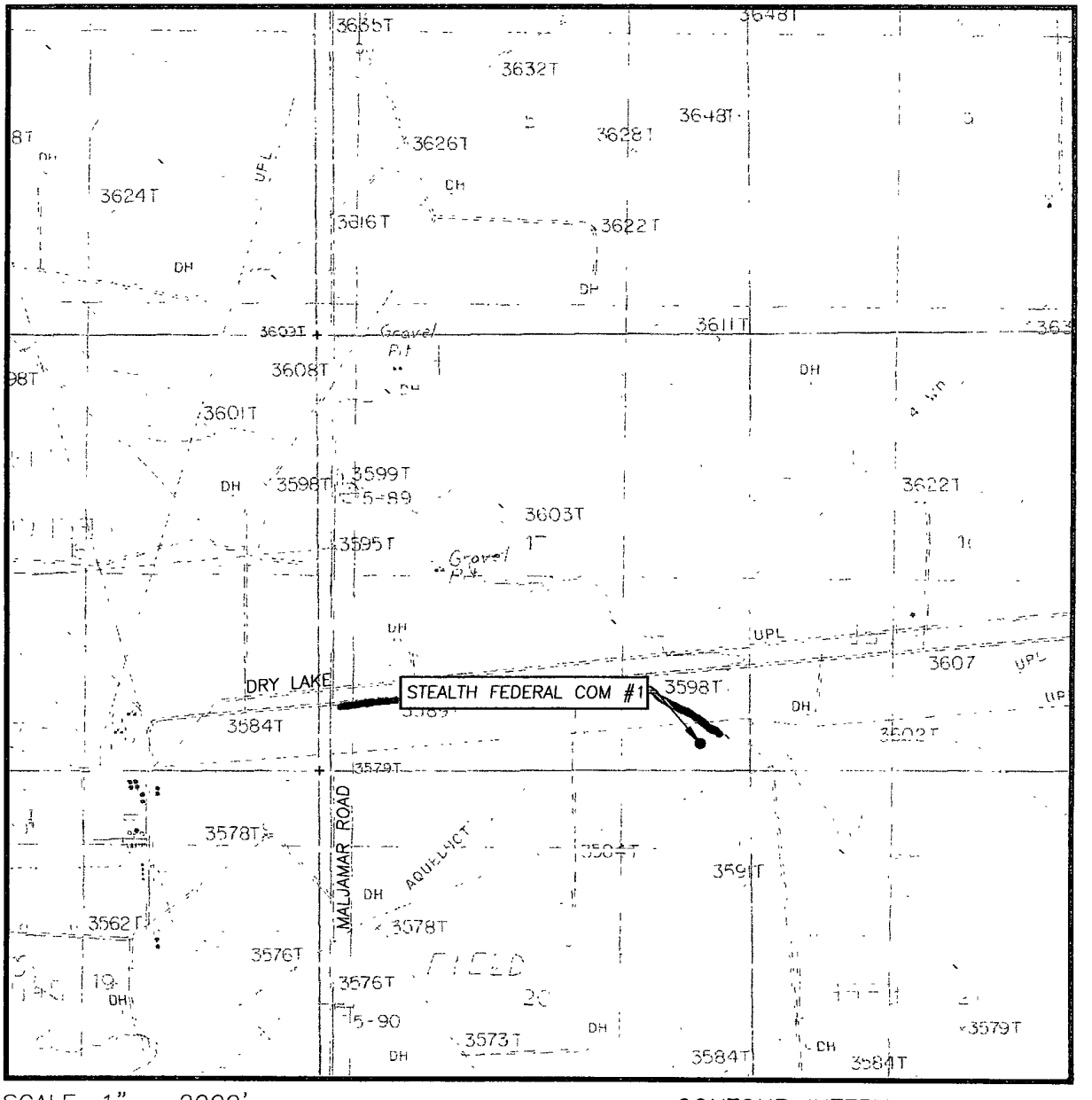
MAY 29, 2009
Date Surveyed

Signature & Seal of Professional Surveyor

Ronald J. Eidson 06/03/09

Certificate No. GARY EIDSON 12641
RONALD J. EIDSON 3239

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
GREENWOOD LAKE, N.M. – 10'

SEC. 17 TWP. 19-S RGE. 32-E

SURVEY N.M.P.M.

COUNTY LEA STATE NEW MEXICO

DESCRIPTION 330' FSL & 600' FEL

ELEVATION 3595'

OPERATOR MARBOB ENERGY CORPORATION

LEASE STEALTH FEDERAL COM

U.S.G.S. TOPOGRAPHIC MAP
GREENWOOD LAKE, N.M.

EXISTING ROADS

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(575) 393-3117

EXHIBIT #2

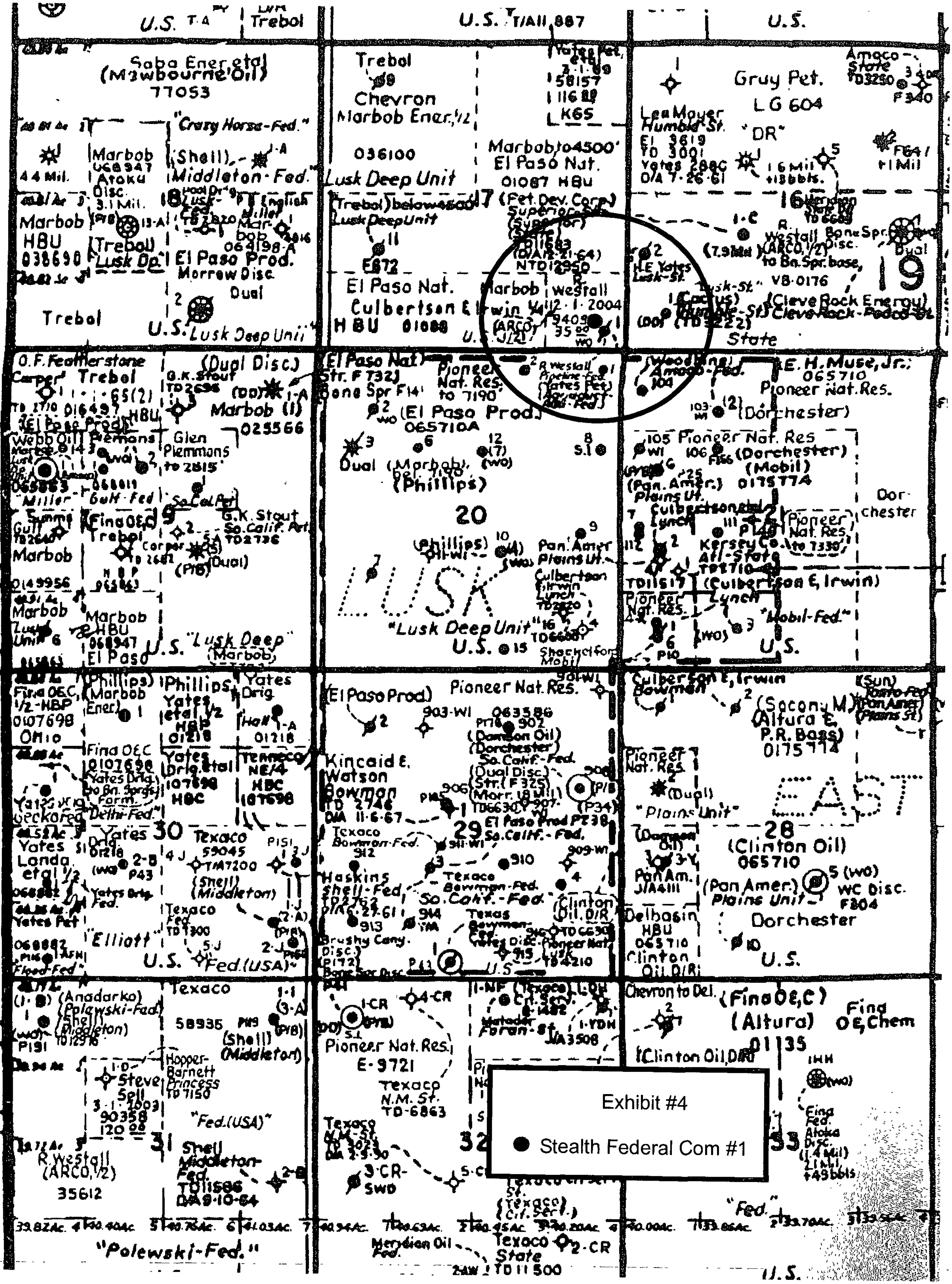


Exhibit #4
Stealth Federal Com #1
U.S.
Trebol
Saba Ener. etal
(Mewbourne Oil)
77053
"Crazy Horse-Fed."
Middleton-Fed.
Marbob
HBU
038698
El Paso Prod.
Morrow Disc.
Dual
Lusk Deep Unit
Chevron
Marbob Ener.1/2
036100
El Paso Nat.
Culbertson & Irwin 1/4
HBU 01088
Marbob/o4500'
El Paso Nat.
01087 HBU
17
Gruy Pet.
LG 604
"DR"
16
19
R. Westall
(ARCO,1/2)
to Bn. Spr. base
VB-0176
(Cleve Rock Energy)
State
R. Westall
12-1-2004
O.F. Featherstone
(Dual Disc.)
Marbob (I)
025566
(El Paso Nat)
Pioneer Nat. Res.
to 7190'
(El Paso Prod.)
065710A
(Phillips)
20
LUSK
"Lusk Deep Unit"
U.S.
E.H. Muse, Jr.
065710
Pioneer Nat. Res.
(Dorchester)
Pioneer Nat. Res
(Mobil)
0175774
Dorchester
Kersey Co.
All-State
(Culbertson & Irwin)
"Mobil-Fed."
"Lusk Deep"
(Marbob)
El Paso
Pioneer Nat. Res.
063586
(Dawson Oil)
(Dorchester)
So. Calif.-Fed.
Kincaid & Watson
Bowman
29
El Paso Prod.
So. Calif.-Fed.
Texaco
Bowman-Fed.
Haskins
Shell-Fed.
Phillips
Yates Drig.
30
Texaco
59045
(Shell)
(Middleton)
"Elliott"
Fed.(USA)
Culbertson & Irwin
(Socony M)
(Altura &
P.R. Bass)
0175774
EAST
"Plains Unit"
28
(Clinton Oil)
065710
(Pan Amer.)
Plains Unit
Dorchester
WC Disc.
Delbasin
HBU
065710
Clinton Oil, D/R
U.S.
(Anadarko)
(Polewski-Fed.)
Texaco
58935
(Shell)
(Middleton)
Steve Sell
3-1-2003
90358
31
R. Westall
(ARCO,1/2)
35612
Shell
Middleton-Fed.
"Fed.(USA)"
Pioneer Nat. Res.
E-9721
Texaco
N.M. St.
TD-6863
32
(Fina OE,C)
(Altura)
Fina OE,Chem
01135
Clinton Oil, D&R
33
"Fed."
"Polewski-Fed."
Meridian Oil Fed.
Texaco
State
TD 11500
U.S.

MARBOB ENERGY CORPORATION
DRILLING AND OPERATIONS PROGRAM

Stealth Federal Com #1
SHL: 330' FSL & 600' FEL
BHL: 330' FNL & 380' FEL
Section 17, T19S-R32E
Lea County, New Mexico

In conjunction with Form 3160-3, Application for Permit to Drill subject well, Marbob Energy Corporation submits the following ten items of pertinent information in accordance with BLM requirements.

1. Geological surface formation: Permian

2. The estimated tops of geologic markers & estimated depths at which anticipated water, oil or gas formations are expected to be encountered are as follows:

Rustler	750'	
Top of Salt	800'	
Bottom of Salt	2340'	
Yates	2540'	Oil
Seven Rivers	2860'	
Delaware	4650'	Oil
Bone Spring	7160'	
1st Bone Spring	8360'	Oil
2nd Bone Spring	9100'	Oil
3rd Bone Spring	9940'	
TD	10200'	

No other formations are expected to give up oil, gas, or fresh water in measurable quantities. The surface fresh water sands will be protected by setting 13 3/8" casing at ~~775'~~ and circulating cement back to surface. All intervals will be isolated by setting 5 ½" casing to total depth and circulating cement above the base of the 13 3/8" casing.

3. **Proposed Casing Program:**

Hole Size	Interval See COA	OD Casing	New or Used	Wt	Collar	Grade	Collapse Design Factor	Burst Design Factor	Tension Design Factor
17 ½"	0' – ~~775'~~	13 3/8"	New	54.5#	STC	J-55	1.125	1.125	1.6
12 ¼"	775' – ~~3500'~~ See COA	9 5/8"	New	36#	STC	J-55	1.125	1.125	1.6
8 3/4"	3500' – 10200'								
7 7/8"	10200' – ~~14000'~~ 13771	5 1/2"	New	17#	LTC	N-80	1.125	1.125	1.6

Plan to drill production hole to 10200' with 8 ¾" bit then drill lateral portion of hole with 7 7/8" bit.

5. Proposed Cement Program: ← See COA

a. 13 3/8" Surf. — Cement to surface with 450 sk "C" Light wt 12.7 ppg yield 1.91. Tail in with 200 sk "c" wt 14.8 yield 1.34

b. 9 5/8" Int. — Cement with 650 sk "C" Light wt 12.7 ppg yield 1.91. Tail in with 200 sk "c" wt 14.8 yield 1.34, TOC 500' ← See COA

c. 5 1/2" Prod — Cement 1st Stage with 450 sk acid soluble "H" wt 15.0 yield 2.6. Cement 2nd stage with 850 sk "H" Light wt 12.7 ppg yield 1.91 Tail in with 100 sk "H" wt 13.0 yield 1.64 TOC 3300 DV @ 8800'

See COA →

The above cement volumes could be revised pending the caliper measurement from the open hole logs. The top of cement is designed to reach approximately 200' above the 13 3/8" casing shoe. The surface casing shoe shall be set in the anhydrite to ensure adequate sealing. If cement does not circulate to the surface the operator may then use ready-mix cement to fill the remaining annulus. The operator is not required to use an excess of 100% cement volume to fill the annulus. **All casing is new and API approved.**

See COA

6. Minimum Specifications for Pressure Control:

Nipple up on 13 3/8" casing with a 2M system tested to 2000 psi with independent tester (hydril). Nipple up on 9 5/8" with 3M system tested to 3000# by independent tester.

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. A 2"kill line and a 3" choke line will be included in the drilling spool located below the ram-type BOP. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold with 3000 psi WP rating.

7. Estimated BHP: 4243 psi

8. Mud Program: The applicable depths and properties of this system are as follows:

Depth	Type System	Mud Weight	Viscosity (sec)	Waterloss (cc)
0' – 775'	Fresh Water	8.4	29	N.C.
775' – 3500'	Brine	9.9-10.0	29	N.C.
3500-14000	Cut Brine	8.8	29	N.C.

See COA

The necessary mud products for weight addition and fluid loss control will be on location at all times

9. Auxiliary Well Control and Monitoring Equipment:

a. A Kelly cock will be in the drill string at all times.
b. A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.
c. Hydrogen Sulfide detection equipment will be in operation after drilling out the 13 3/8" casing shoe until the 5 ½" casing is cemented. Breathing equipment will be on location upon drilling the 13 3/8" shoe until total depth is reached.

10. Testing, Logging and Coring Program:

a. Drill stem tests will be based on geological sample shows.
b. The open hole electrical logging program will be:
   i. Total Depth to Intermediate Casing: Dual Laterolog-Micro Laterolog and Gamma Ray. Compensated Neutron – Z Density log with Gamma Ray and Caliper.
   ii. Total Depth to Surface: Compensated Neutron with Gamma Ray
   iii. No coring program is planned
   iv. Additional testing will be initiated subsequent to setting the 5 ½" production casing. Specific intervals will be targeted based on log evaluation, geological sample shows and drill stem tests.

11. Potential Hazards:

a. No abnormal pressures or temperatures are expected. There is no known presence of H2S in this area. If H2S is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP: 4243 psi. No H2S is anticipated to be encountered.

12. Anticipated starting date and Duration of Operations:

a. Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as possible after BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 40 days.

marbob
energy corporation
Artesia, N.M.

Marbob

Eddy County
Stealth Federal Com
#1H
OH

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Plan: Plan #1

Pathfinder X & Y Planning Report

11 June, 2009

PATHFINDER

Company:	Marbob	**Local Co-ordinate Reference:**	Well #1H
Project:	Eddy County	**TVD Reference:**	WELL @ 3609.00ft (14' KB Correction)
Site:	Stealth Federal Com	**MD Reference:**	WELL @ 3609.00ft (14' KB Correction)
Well:	#1H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #1	**Database:**	Midland Database

Project Eddy County

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 Stealth Federal Com

Site Position:		**Northing:**	602,073.500 ft	**Latitude:**	32° 39' 14.354 N
From:	Map	**Easting:**	669,921 400 ft	**Longitude:**	103° 46' 52.462 W
Position Uncertainty:	0.00 ft	**Slot Radius:**	"	**Grid Convergence:**	0.30 °

Well #1H

Well Position	**+N/-S**	0 00 ft	**Northing:**	602,073.500 ft	**Latitude:**	32° 39' 14.354 N
	+E/-W	0.00 ft	**Easting:**	669,921 400 ft	**Longitude:**	103° 46' 52.462 W
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	3,595.00 ft

Wellbore OH

Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF200510	06/11/2009	7.94	60.61	49,080

Design Plan #1

Audit Notes:

Version:	**Phase:**	PLAN	**Tie On Depth:**	8,872.50

Vertical Section:	**Depth From (TVD) (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Direction (°)**
	0.00	0 00	0.00	2 32

Company:	Marbob	**Local Co-ordinate Reference:**	Well #1H
Project:	Eddy County	**TVD Reference:**	WELL @ 3609.00ft (14' KB Correction)
Site:	Stealth Federal Com	**MD Reference:**	WELL @ 3609.00ft (14' KB Correction)
Well:	#1H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #1	**Database:**	Midland Database

Survey Tool Program **Date** 06/11/2009

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	8,872.50	Plan #1 (Pilot Hole)	MWD	MWD - Standard
8,872.50	13,771.26	Plan #1 (OH)	MWD	MWD - Standard

Planned Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
0 00	0.00	0 00	0.00	-3,609 00	0 00	0 00	0.00	0.00	602,073.50	669,921.40
100.00	0.00	0.00	100.00	-3,509 00	0.00	0.00	0.00	0 00	602,073.50	669,921 40
200.00	0.00	0.00	200.00	-3,409 00	0.00	0.00	0.00	0.00	602,073 50	669,921.40
300 00	0.00	0.00	300 00	-3,309.00	0.00	0.00	0.00	0.00	602,073.50	669,921.40
400 00	0.00	0.00	400 00	-3,209.00	0.00	0.00	0.00	0.00	602,073.50	669,921 40
500.00	0.00	0.00	500 00	-3,109.00	0.00	0.00	0.00	0.00	602,073.50	669,921 40
600.00	0.00	0.00	600 00	-3,009.00	0.00	0.00	0.00	0.00	602,073.50	669,921.40
700 00	0.00	0.00	700 00	-2,909.00	0.00	0.00	0.00	0.00	602,073.50	669,921 40
800.00	0.00	0.00	800.00	-2,809.00	0.00	0.00	0.00	0.00	602,073.50	669,921 40
900 00	0 00	0.00	900.00	-2,709 00	0 00	0 00	0.00	0.00	602,073.50	669,921.40
1,000.00	0.00	0 00	1,000.00	-2,609 00	0 00	0.00	0 00	0.00	602,073 50	669,921.40
1,100.00	0.00	0 00	1,100.00	-2,509 00	0.00	0.00	0.00	0.00	602,073 50	669,921 40
1,200.00	0.00	0.00	1,200 00	-2,409.00	0.00	0 00	0.00	0 00	602,073.50	669,921 40
1,300.00	0 00	0 00	1,300 00	-2,309.00	0 00	0 00	0.00	0.00	602,073.50	669,921 40
1,400.00	0 00	0.00	1,400 00	-2,209 00	0 00	0.00	0.00	0.00	602,073.50	669,921 40
1,500.00	0.00	0.00	1,500.00	-2,109 00	0 00	0.00	0 00	0.00	602,073 50	669,921 40
1,600.00	0 00	0.00	1,600.00	-2,009 00	0.00	0.00	0 00	0.00	602,073.50	669,921.40
1,700 00	0.00	0 00	1,700.00	-1,909 00	0.00	0 00	0.00	0 00	602,073.50	669,921 40
1,800 00	0.00	0.00	1,800.00	-1,809.00	0.00	0.00	0.00	0.00	602,073.50	669,921 40
1,900 00	0.00	0.00	1,900.00	-1,709 00	0 00	0.00	0.00	0 00	602,073.50	669,921.40
2,000 00	0.00	0.00	2,000.00	-1,609.00	0.00	0.00	0 00	0.00	602,073 50	669,921.40

Company:	Marbob	**Local Co-ordinate Reference:**	Well #1H
Project:	Eddy County	**TVD Reference:**	WELL @ 3609.00ft (14' KB Correction)
Site:	Stealth Federal Com	**MD Reference:**	WELL @ 3609 00ft (14' KB Correction)
Well:	#1H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #1	**Database:**	Midland Database

Planned Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
2,100.00	0.00	0.00	2,100 00	-1,509.00	0.00	0 00	0 00	0 00	602,073.50	669,921.40
2,200 00	0 00	0 00	2,200 00	-1,409.00	0.00	0.00	0 00	0.00	602,073.50	669,921 40
2,300.00	0 00	0 00	2,300 00	-1,309.00	0 00	0.00	0.00	0.00	602,073 50	669,921 40
2,400 00	0.00	0.00	2,400.00	-1,209.00	0.00	0.00	0.00	0.00	602,073.50	669,921.40
2,500 00	0 00	0 00	2,500.00	-1,109.00	0.00	0 00	0.00	0 00	602,073.50	669,921.40
2,600.00	0.00	0 00	2,600.00	-1,009 00	0.00	0.00	0.00	0.00	602,073.50	669,921 40
2,700 00	0.00	0.00	2,700.00	-909.00	0.00	0.00	0 00	0.00	602,073.50	669,921.40
2,800.00	0.00	0.00	2,800.00	-809.00	0 00	0.00	0.00	0 00	602,073.50	669,921.40
2,900.00	0.00	0.00	2,900.00	-709.00	0.00	0.00	0.00	0.00	602,073.50	669,921.40
3,000.00	0.00	0.00	3,000 00	-609.00	0.00	0.00	0.00	0 00	602,073 50	669,921.40
3,100 00	0.00	0.00	3,100 00	-509.00	0.00	0 00	0.00	0 00	602,073 50	669,921.40
3,200.00	0.00	0 00	3,200 00	-409.00	0 00	0 00	0.00	0 00	602,073.50	669,921.40
3,300.00	0.00	0.00	3,300 00	-309.00	0.00	0.00	0 00	0 00	602,073.50	669,921.40
3,400.00	0.00	0.00	3,400.00	-209.00	0.00	0.00	0 00	0.00	602,073.50	669,921 40
3,500 00	0 00	0 00	3,500.00	-109.00	0.00	0.00	0.00	0.00	602,073.50	669,921.40
3,600 00	0 00	0 00	3,600.00	-9.00	0.00	0.00	0 00	0 00	602,073 50	669,921.40
3,700.00	0.00	0 00	3,700 00	91.00	0.00	0 00	0.00	0 00	602,073 50	669,921.40
3,800.00	0.00	0.00	3,800.00	191 00	0 00	0 00	0.00	0.00	602,073 50	669,921.40
3,900 00	0.00	0.00	3,900.00	291 00	0.00	0 00	0.00	0.00	602,073 50	669,921.40
4,000.00	0.00	0 00	4,000.00	391 00	0 00	0 00	0.00	0 00	602,073.50	669,921.40
4,100.00	0.00	0 00	4,100 00	491 00	0.00	0.00	0 00	0.00	602,073.50	669,921.40
4,200.00	0.00	0.00	4,200 00	591.00	0.00	0 00	0 00	0 00	602,073.50	669,921.40
4,300 00	0.00	0.00	4,300 00	691 00	0.00	0.00	0.00	0.00	602,073.50	669,921 40
4,400 00	0.00	0.00	4,400 00	791 00	0 00	0 00	0.00	0 00	602,073.50	669,921 40
4,500.00	0.00	0.00	4,500.00	891 00	0.00	0 00	0.00	0.00	602,073.50	669,921.40
4,600 00	0.00	0 00	4,600 00	991 00	0 00	0 00	0 00	0.00	602,073 50	669,921.40
4,700.00	0.00	0 00	4,700.00	1,091.00	0.00	0 00	0.00	0.00	602,073.50	669,921 40

Company:	Marbob	**Local Co-ordinate Reference:**	Well #1H
Project:	Eddy County	**TVD Reference:**	WELL @ 3609 00ft (14' KB Correction)
Site:	Stealth Federal Com	**MD Reference:**	WELL @ 3609.00ft (14' KB Correction)
Well:	#1H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #1	**Database:**	Midland Database

Planned Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
4,800 00	0 00	0.00	4,800.00	1,191.00	0.00	0.00	0.00	0.00	602,073 50	669,921.40
4,900.00	0 00	0 00	4,900.00	1,291 00	0.00	0 00	0.00	0 00	602,073.50	669,921 40
5,000.00	0 00	0 00	5,000.00	1,391 00	0.00	0 00	0.00	0 00	602,073 50	669,921 40
5,100 00	0.00	0.00	5,100 00	1,491.00	0 00	0.00	0 00	0.00	602,073.50	669,921.40
5,200.00	0.00	0 00	5,200 00	1,591.00	0.00	0.00	0 00	0.00	602,073.50	669,921.40
5,300.00	0.00	0.00	5,300.00	1,691 00	0 00	0 00	0.00	0 00	602,073 50	669,921 40
5,400.00	0.00	0.00	5,400 00	1,791.00	0.00	0.00	0.00	0.00	602,073 50	669,921 40
5,500 00	0.00	0 00	5,500.00	1,891 00	0.00	0.00	0.00	0.00	602,073.50	669,921.40
5,600 00	0.00	0.00	5,600 00	1,991.00	0 00	0.00	0 00	0.00	602,073.50	669,921 40
5,700.00	0.00	0 00	5,700.00	2,091.00	0.00	0.00	0.00	0.00	602,073.50	669,921.40
5,800.00	0.00	0.00	5,800 00	2,191 00	0.00	0 00	0.00	0.00	602,073.50	669,921.40
5,900.00	0.00	0.00	5,900.00	2,291.00	0.00	0.00	0.00	0.00	602,073.50	669,921.40
6,000.00	0.00	0 00	6,000 00	2,391.00	0.00	0.00	0.00	0 00	602,073.50	669,921.40
6,100.00	0.00	0 00	6,100 00	2,491.00	0 00	0.00	0.00	0 00	602,073.50	669,921.40
6,200.00	0 00	0 00	6,200 00	2,591.00	0 00	0 00	0 00	0.00	602,073.50	669,921.40
6,300 00	0 00	0.00	6,300.00	2,691.00	0.00	0.00	0.00	0.00	602,073 50	669,921 40
6,400.00	0 00	0.00	6,400.00	2,791.00	0 00	0 00	0.00	0.00	602,073 50	669,921.40
6,500.00	0.00	0.00	6,500.00	2,891 00	0.00	0.00	0.00	0.00	602,073 50	669,921.40
6,600.00	0.00	0.00	6,600.00	2,991 00	0.00	0 00	0.00	0.00	602,073 50	669,921 40
6,700 00	0.00	0.00	6,700 00	3,091 00	0 00	0.00	0 00	0.00	602,073 50	669,921 40
6,800.00	0 00	0.00	6,800 00	3,191 00	0.00	0.00	0.00	0.00	602,073.50	669,921.40
6,900.00	0.00	0 00	6,900 00	3,291.00	0.00	0 00	0.00	0.00	602,073 50	669,921.40
7,000.00	0.00	0 00	7,000.00	3,391 00	0 00	0.00	0 00	0 00	602,073.50	669,921.40
7,100 00	0.00	0.00	7,100 00	3,491.00	0 00	0 00	0.00	0.00	602,073.50	669,921.40
7,200.00	0.00	0.00	7,200.00	3,591 00	0.00	0.00	0.00	0.00	602,073.50	669,921.40
7,300.00	0.00	0.00	7,300 00	3,691.00	0 00	0.00	0.00	0.00	602,073 50	669,921.40
7,400.00	0.00	0.00	7,400 00	3,791.00	0.00	0 00	0 00	0 00	602,073.50	669,921.40

Company:	Marbob	**Local Co-ordinate Reference:**	Well #1H
Project:	Eddy County	**TVD Reference:**	WELL @ 3609.00ft (14' KB Correction)
Site:	Stealth Federal Com	**MD Reference:**	WELL @ 3609 00ft (14' KB Correction)
Well:	#1H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #1	**Database:**	Midland Database

Planned Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
7,500.00	0 00	0.00	7,500 00	3,891.00	0.00	0.00	0 00	0.00	602,073.50	669,921 40
7,600.00	0.00	0 00	7,600.00	3,991.00	0 00	0.00	0 00	0.00	602,073.50	669,921 40
7,700.00	0 00	0 00	7,700.00	4,091.00	0.00	0 00	0 00	0.00	602,073.50	669,921.40
7,800.00	0 00	0.00	7,800.00	4,191 00	0 00	0.00	0.00	0.00	602,073.50	669,921.40
7,900 00	0 00	0.00	7,900.00	4,291 00	0 00	0.00	0.00	0.00	602,073 50	669,921.40
8,000.00	0.00	0 00	8,000 00	4,391.00	0 00	0.00	0.00	0 00	602,073.50	669,921.40
8,100.00	0.00	0.00	8,100 00	4,491.00	0.00	0.00	0 00	0 00	602,073.50	669,921 40
8,200.00	0.00	0.00	8,200.00	4,591.00	0.00	0.00	0.00	0.00	602,073.50	669,921.40
8,300 00	0 00	0.00	8,300.00	4,691 00	0 00	0.00	0 00	0 00	602,073 50	669,921 40
8,400.00	0 00	0.00	8,400.00	4,791 00	0.00	0.00	0.00	0 00	602,073.50	669,921.40
8,500.00	0.00	0.00	8,500.00	4,891.00	0 00	0 00	0 00	0 00	602,073.50	669,921.40
8,600.00	0.00	0 00	8,600.00	4,991 00	0.00	0.00	0.00	0.00	602,073.50	669,921 40
8,700.00	0.00	0.00	8,700.00	5,091 00	0 00	0.00	0.00	0 00	602,073.50	669,921.40
8,800 00	0 00	0.00	8,800.00	5,191.00	0.00	0.00	0 00	0.00	602,073.50	669,921.40
8,872.50	0 00	0.00	8,872.50	5,263.50	0.00	0.00	0.00	0.00	602,073 50	669,921.40
KOP-8872.50'MD,0.00°INC,0.00°AZI										
8,875.00	0.30	2 32	8,875 00	5,266 00	0.01	0 00	0.01	12.00	602,073 51	669,921.40
8,900 00	3 30	2.32	8,899.98	5,290.98	0.79	0.03	0.79	12 00	602,074.29	669,921.43
8,925.00	6.30	2.32	8,924.89	5,315.89	2.88	0.12	2.88	12.00	602,076 38	669,921.52
8,950.00	9 30	2 32	8,949 66	5,340 66	6 27	0.25	6.28	12.00	602,079.77	669,921.65
8,975 00	12 30	2.32	8,974 21	5,365.21	10.95	0.44	10.96	12.00	602,084.45	669,921.84
9,000 00	15.30	2.32	8,998 49	5,389.49	16.91	0.68	16.92	12 00	602,090.41	669,922 08
9,025.00	18 30	2 32	9,022 42	5,413.42	24 13	0.98	24 15	12.00	602,097 63	669,922.38
9,050.00	21 30	2.32	9,045.94	5,436 94	32 59	1.32	32.61	12.00	602,106 09	669,922 72
9,075.00	24.30	2.32	9,068.98	5,459.98	42.26	1 71	42.30	12 00	602,115.76	669,923 11
9,100.00	27.30	2 32	9,091 49	5,482 49	53 13	2.15	53.18	12.00	602,126.63	669,923.55
9,125.00	30.30	2 32	9,113 40	5,504.40	65.17	2.64	65 22	12 00	602,138 67	669,924 04

Company:	Marbob	Local Co-ordinate Reference:	Well #1H
Project:	Eddy County	TVD Reference:	WELL @ 3609 00ft (14' KB Correction)
Site:	Stealth Federal Com	MD Reference:	WELL @ 3609.00ft (14' KB Correction)
Well:	#1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	Midland Database

Planned Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
9,150 00	33 30	2.32	9,134 64	5,525.64	78 33	3.17	78.39	12.00	602,151 83	669,924.57
9,175.00	36.30	2.32	9,155.17	5,546 17	92 58	3 75	92.66	12.00	602,166.08	669,925.15
9,200.00	39 30	2 32	9,174.92	5,565 92	107 89	4 37	107 98	12.00	602,181 39	669,925.77
9,225 00	42 30	2.32	9,193 84	5,584.84	124.21	5.03	124.31	12.00	602,197 71	669,926.43
9,250.00	45 30	2 32	9,211.89	5,602.89	141.49	5.73	141.61	12.00	602,214.99	669,927.13
9,275.00	48 30	2 32	9,229.00	5,620.00	159 70	6 47	159 83	12.00	602,233 20	669,927.87
9,300.00	51 30	2.32	9,245 14	5,636.14	178 78	7 24	178.92	12.00	602,252.28	669,928.64
9,325 00	54.30	2.32	9,260.25	5,651 25	198.67	8.05	198 83	12 00	602,272.17	669,929 45
9,350.00	57 30	2.32	9,274.30	5,665 30	219.33	8.89	219.51	12 00	602,292.83	669,930 29
9,375.00	60 30	2.32	9,287.25	5,678 25	240 69	9 75	240.89	12 00	602,314.19	669,931.15
9,400.00	63.30	2.32	9,299.07	5,690.07	262 70	10 64	262.92	12.00	602,336 20	669,932 04
9,425.00	66 30	2.32	9,309.71	5,700.71	285 30	11 56	285.53	12 00	602,358.80	669,932 96
9,450.00	69.29	2.32	9,319.16	5,710.16	308.42	12.50	308 68	12.00	602,381.92	669,933.90
9,475.00	72 29	2.32	9,327 38	5,718 38	332.01	13.45	332.28	12 00	602,405 51	669,934.85
9,500.00	75.29	2.32	9,334.36	5,725.36	355.99	14 42	356.29	12 00	602,429.49	669,935.82
9,525.00	78.29	2.32	9,340 07	5,731.07	380 31	15 41	380.62	12 00	602,453.81	669,936 81
9,550 00	81.29	2.32	9,344 50	5,735.50	404 89	16.40	405.22	12.00	602,478.39	669,937 80
9,575.00	84 29	2 32	9,347 63	5,738 63	429.67	17.41	430.02	12.00	602,503 17	669,938 81
9,600 00	87 29	2.32	9,349.47	5,740.47	454.58	18.42	454.95	12.00	602,528.08	669,939.82
9,622 56	90 00	2 32	9,350.00	5,741 00	477.11	19.33	477 50	12.00	602,550.61	669,940.73
EOC-9622.56'MD,90.00°INC,2.32°AZI,12.00°DLS, 477.50'VS, 477.11'N, 19.33'E										
9,700 00	90 00	2.32	9,350.00	5,741 00	554 49	22.46	554.94	0 00	602,627.99	669,943 86
9,800 00	90.00	2.32	9,350.00	5,741.00	654.41	26.51	654 94	0.00	602,727.91	669,947.91
9,900.00	90 00	2.32	9,350.00	5,741 00	754 33	30.56	754.94	0.00	602,827 83	669,951.96
10,000.00	90 00	2 32	9,350.00	5,741 00	854 24	34.61	854 94	0.00	602,927.74	669,956.01
10,100 00	90 00	2.32	9,350.00	5,741.00	954.16	38.66	954.94	0 00	603,027.66	669,960.06
10,200 00	90 00	2.32	9,350.00	5,741.00	1,054.08	42.70	1,054.94	0 00	603,127 58	669,964.10

Company:	Marbob	**Local Co-ordinate Reference:**	Well #1H
Project:	Eddy County	**TVD Reference:**	WELL @ 3609.00ft (14' KB Correction)
Site:	Stealth Federal Com	**MD Reference:**	WELL @ 3609.00ft (14' KB Correction)
Well:	#1H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #1	**Database:**	Midland Database

Planned Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
10,300 00	90.00	2.32	9,350 00	5,741.00	1,154.00	46.75	1,154.94	0.00	603,227 50	669,968.15
10,400 00	90.00	2.32	9,350.00	5,741 00	1,253.92	50.80	1,254.94	0 00	603,327 42	669,972 20
10,500 00	90.00	2.32	9,350.00	5,741 00	1,353.83	54.85	1,354 94	0.00	603,427.33	669,976.25
10,600 00	90.00	2.32	9,350.00	5,741.00	1,453.75	58.90	1,454 94	0.00	603,527.25	669,980.30
10,700.00	90.00	2.32	9,350.00	5,741 00	1,553.67	62.95	1,554.94	0.00	603,627.17	669,984.35
10,800.00	90.00	2 32	9,350.00	5,741 00	1,653.59	66 99	1,654.94	0.00	603,727.09	669,988.39
10,900.00	90 00	2 32	9,350.00	5,741 00	1,753.51	71.04	1,754.94	0.00	603,827.01	669,992.44
11,000.00	90 00	2.32	9,350.00	5,741.00	1,853.42	75 09	1,854.94	0.00	603,926.92	669,996.49
11,100 00	90.00	2 32	9,350.00	5,741.00	1,953 34	79.14	1,954 94	0.00	604,026.84	670,000 54
11,200 00	90.00	2.32	9,350.00	5,741.00	2,053.26	83.19	2,054.94	0.00	604,126.76	670,004 59
11,300.00	90.00	2.32	9,350.00	5,741 00	2,153.18	87.23	2,154.94	0 00	604,226.68	670,008.63
11,400 00	90.00	2.32	9,350.00	5,741 00	2,253.10	91.28	2,254.94	0 00	604,326.60	670,012 68
11,500 00	90.00	2.32	9,350.00	5,741.00	2,353.01	95.33	2,354 94	0.00	604,426.51	670,016 73
11,600.00	90.00	2 32	9,350 00	5,741.00	2,452.93	99.38	2,454 94	0.00	604,526.43	670,020.78
11,700.00	90 00	2.32	9,350 00	5,741.00	2,552 85	103.43	2,554.94	0.00	604,626.35	670,024.83
11,800.00	90 00	2.32	9,350 00	5,741 00	2,652.77	107 47	2,654.94	0.00	604,726 27	670,028.87
11,900 00	90.00	2.32	9,350 00	5,741.00	2,752.69	111.52	2,754.94	0 00	604,826 19	670,032.92
12,000 00	90.00	2 32	9,350.00	5,741.00	2,852.60	115.57	2,854 94	0.00	604,926.10	670,036 97
12,100.00	90 00	2.32	9,350.00	5,741.00	2,952.52	119.62	2,954 94	0.00	605,026.02	670,041.02
12,200 00	90 00	2 32	9,350.00	5,741.00	3,052 44	123 67	3,054.94	0 00	605,125 94	670,045.07
12,300 00	90.00	2 32	9,350.00	5,741.00	3,152 36	127 71	3,154.94	0.00	605,225 86	670,049 11
12,400.00	90.00	2.32	9,350 00	5,741.00	3,252.28	131.76	3,254.94	0 00	605,325.78	670,053 16
12,500.00	90.00	2.32	9,350 00	5,741 00	3,352.19	135 81	3,354.94	0 00	605,425.69	670,057 21
12,600 00	90.00	2.32	9,350.00	5,741 00	3,452.11	139.86	3,454 94	0.00	605,525.61	670,061 26
12,700 00	90 00	2 32	9,350.00	5,741 00	3,552.03	143 91	3,554.94	0 00	605,625 53	670,065.31
12,800.00	90.00	2.32	9,350.00	5,741.00	3,651 95	147.95	3,654.94	0 00	605,725 45	670,069 35
12,900.00	90.00	2 32	9,350 00	5,741.00	3,751.87	152.00	3,754 94	0 00	605,825.37	670,073.40

Company:	Marbob	**Local Co-ordinate Reference:**	Well #1H
Project:	Eddy County	**TVD Reference:**	WELL @ 3609.00ft (14' KB Correction)
Site:	Stealth Federal Com	**MD Reference:**	WELL @ 3609 00ft (14' KB Correction)
Well:	#1H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #1	**Database:**	Midland Database

Planned Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
13,000 00	90.00	2.32	9,350.00	5,741.00	3,851.78	156.05	3,854.94	0 00	605,925 28	670,077.45
13,100.00	90 00	2 32	9,350.00	5,741.00	3,951.70	160.10	3,954.94	0 00	606,025.20	670,081 50
13,200 00	90 00	2 32	9,350.00	5,741 00	4,051 62	164 15	4,054.94	0.00	606,125 12	670,085 55
13,300 00	90 00	2 32	9,350.00	5,741.00	4,151 54	168 19	4,154.94	0.00	606,225 04	670,089 59
13,400 00	90.00	2.32	9,350.00	5,741.00	4,251 46	172.24	4,254 94	0.00	606,324.96	670,093 64
13,500 00	90 00	2.32	9,350.00	5,741.00	4,351.38	176.29	4,354.94	0.00	606,424.88	670,097.69
13,600 00	90 00	2.32	9,350.00	5,741.00	4,451.29	180.34	4,454.94	0.00	606,524.79	670,101.74
13,700.00	90.00	2.32	9,350 00	5,741 00	4,551 21	184 39	4,554 94	0.00	606,624.71	670,105 79
13,771 25	90.00	2.32	9,350.00	5,741.00	4,622 40	187 27	4,626.19	0 00	606,695.90	670,108.67
BHL-13771.25'MD,90.00°INC,2.32°AZI, 9350.00'TVD, 4626.19'VS, 4622.40'N, 187.27'E										
13,771.26	90 00	2 32	9,350.00	5,741.00	4,622.41	187.27	4,626.21	0 00	606,695.91	670,108 67
PBHL(Stealth#1H)										

Company:	Marbob	**Local Co-ordinate Reference:**	Well #1H
Project:	Eddy County	**TVD Reference:**	WELL @ 3609.00ft (14' KB Correction)
Site:	Stealth Federal Com	**MD Reference:**	WELL @ 3609.00ft (14' KB Correction)
Well:	#1H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #1	**Database:**	Midland Database

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
PBHL(Stealth#1H) - plan hits target - Point	0 00	0 00	9,350.00	4,622.40	187.60	606,695.900	670,109 000	32° 40' 0 084 N	103° 46' 49.986 W

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
8,872.50	8,872 50	0.00	0.00	KOP-8872 50'MD,0.00°INC,0.00°AZI
9,622.56	9,350.00	477.11	19 33	EOC-9622.56'MD,90.00°INC,2 32°AZI,12 00°DLS, 477.50'VS, 477.11'N
13,771 25	9,350.00	4,622 40	187.27	BHL-13771.25'MD,90 00°INC,2 32°AZI, 9350.00'TVD, 4626.19'VS, 462

Checked By: _____ Approved By: _____ Date: _____

marbob energy corporation
Artesia, N.M.

Project: Eddy County
Site: Stealth Federal Cor
Well: #1H
Wellbore: OH
Plan: Plan #1 (#1H/OH)

Azimuths to Grid North
True North: -0.30°
Magnetic North: 7.65°

Magnetic Field
Strength: 49080.1snT
Dip Angle: 60.61°
Date: 06/11/2009
Model: IGRF200510

PATHFINDER

PROJECT DETAILS: Eddy County
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
Local North: Grid

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	8872.50	0.00	0.00	8872.50	0.00	0.00	0.00	0.00	0.00	
2	9622.56	90.00	2.32	9350.00	477.11	19.33	12.00	2.32	477.50	
3	13771.26	90.00	2.32	9350.00	4622.41	187.27	0.00	0.00	4626.21	PBHL(Stealth#1H)

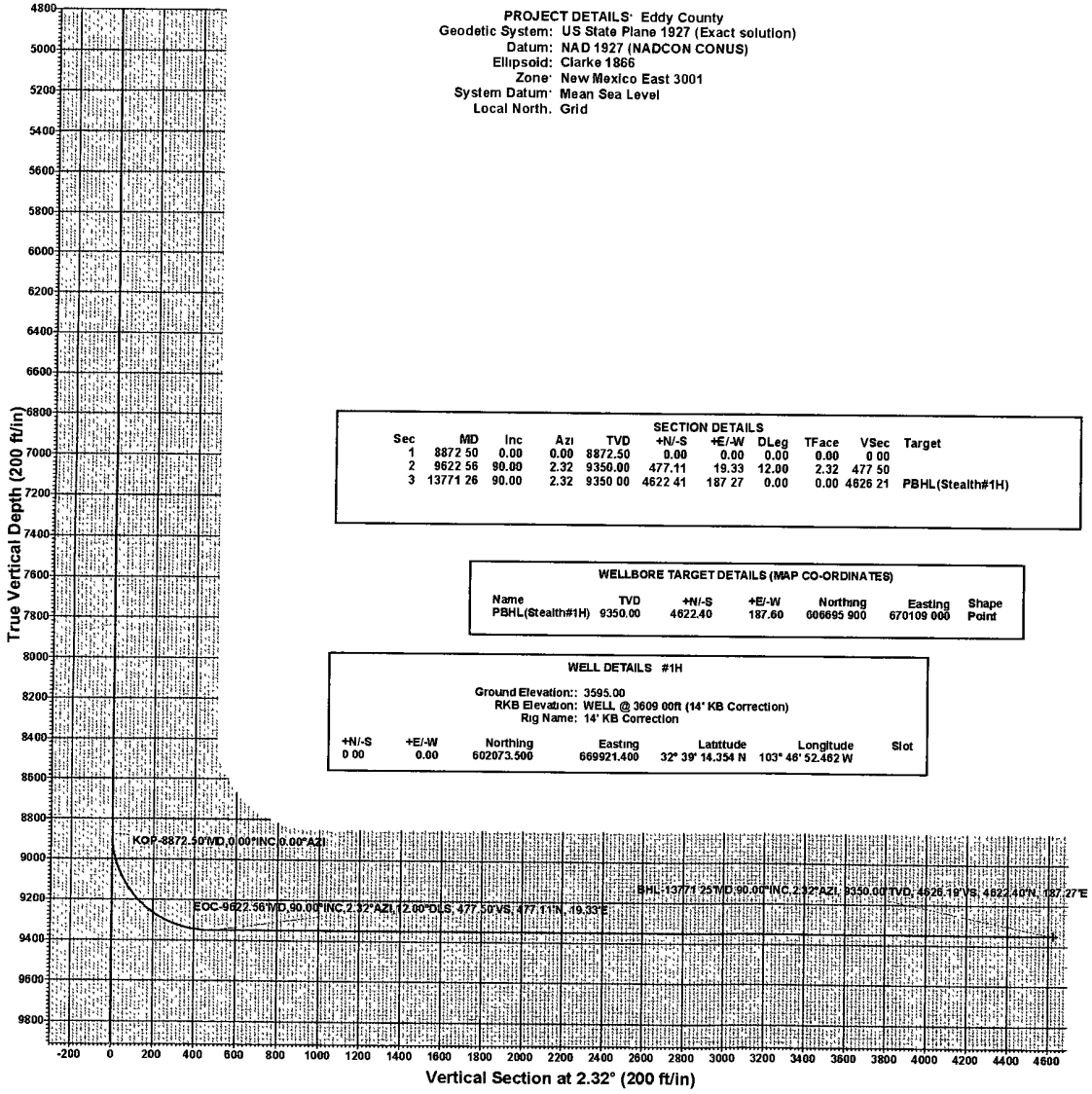
WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

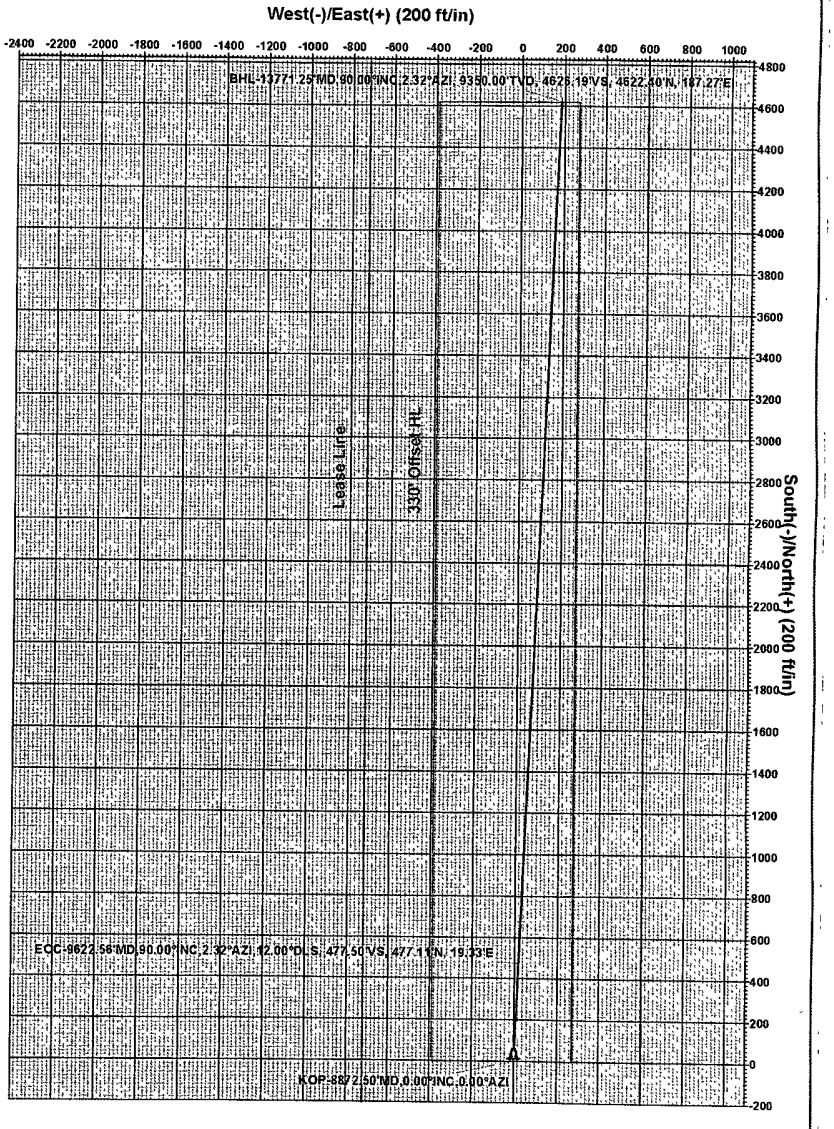
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL(Stealth#1H)	9350.00	4622.40	187.60	606695.900	670109.000	Point

WELL DETAILS #1H

Ground Elevation:: 3595.00
RKB Elevation: WELL @ 3609.00ft (14' KB Correction)
Rig Name: 14' KB Correction

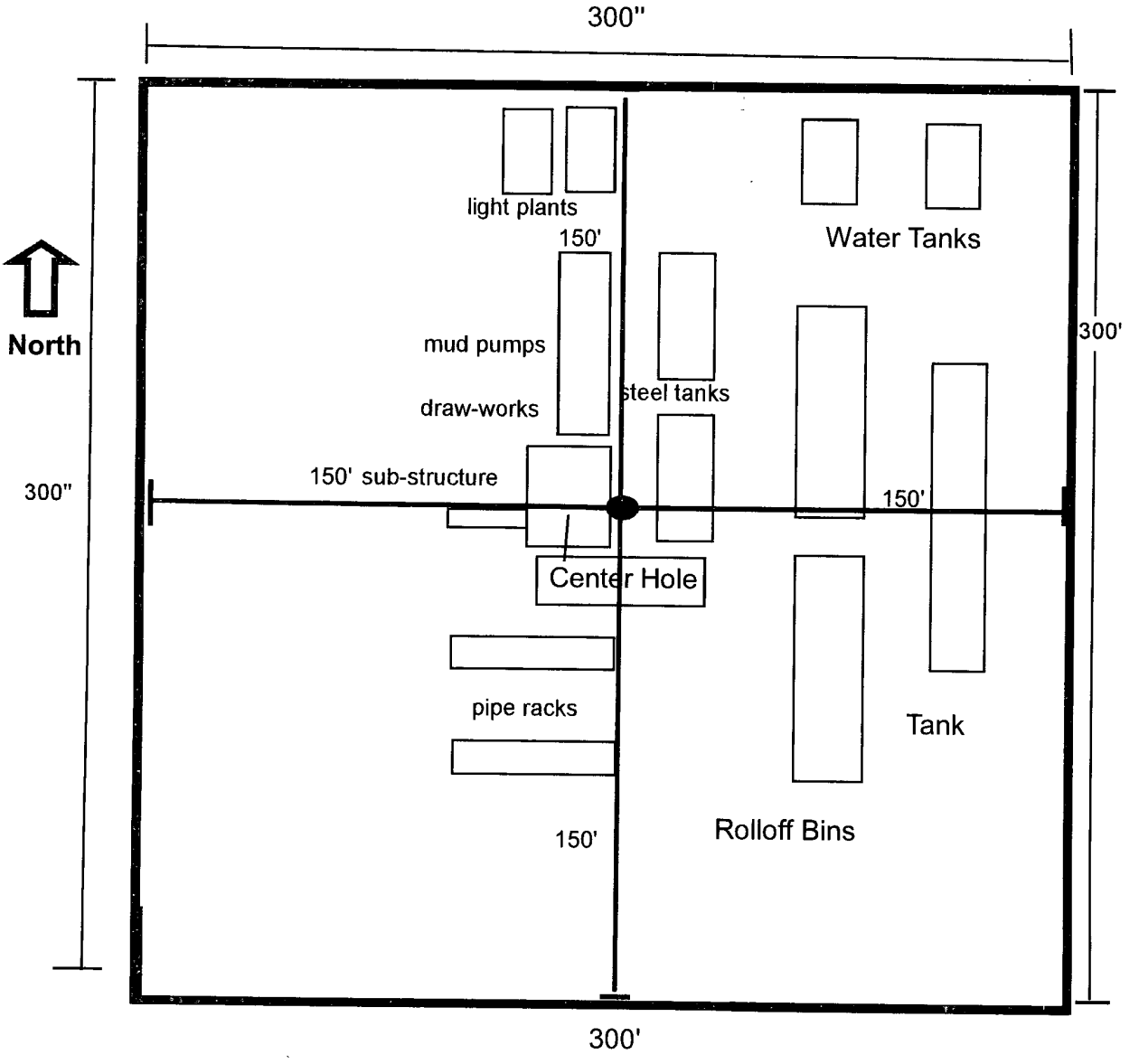
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	602073.500	669921.400	32° 39' 14.354 N	103° 48' 52.462 W	





Plan: Plan #1 (#1H/OH)
Created By: Nate Bingham Date: 9:43, June 11 2009
Checked: _____ Date: _____

Well Site Lay-Out Plat

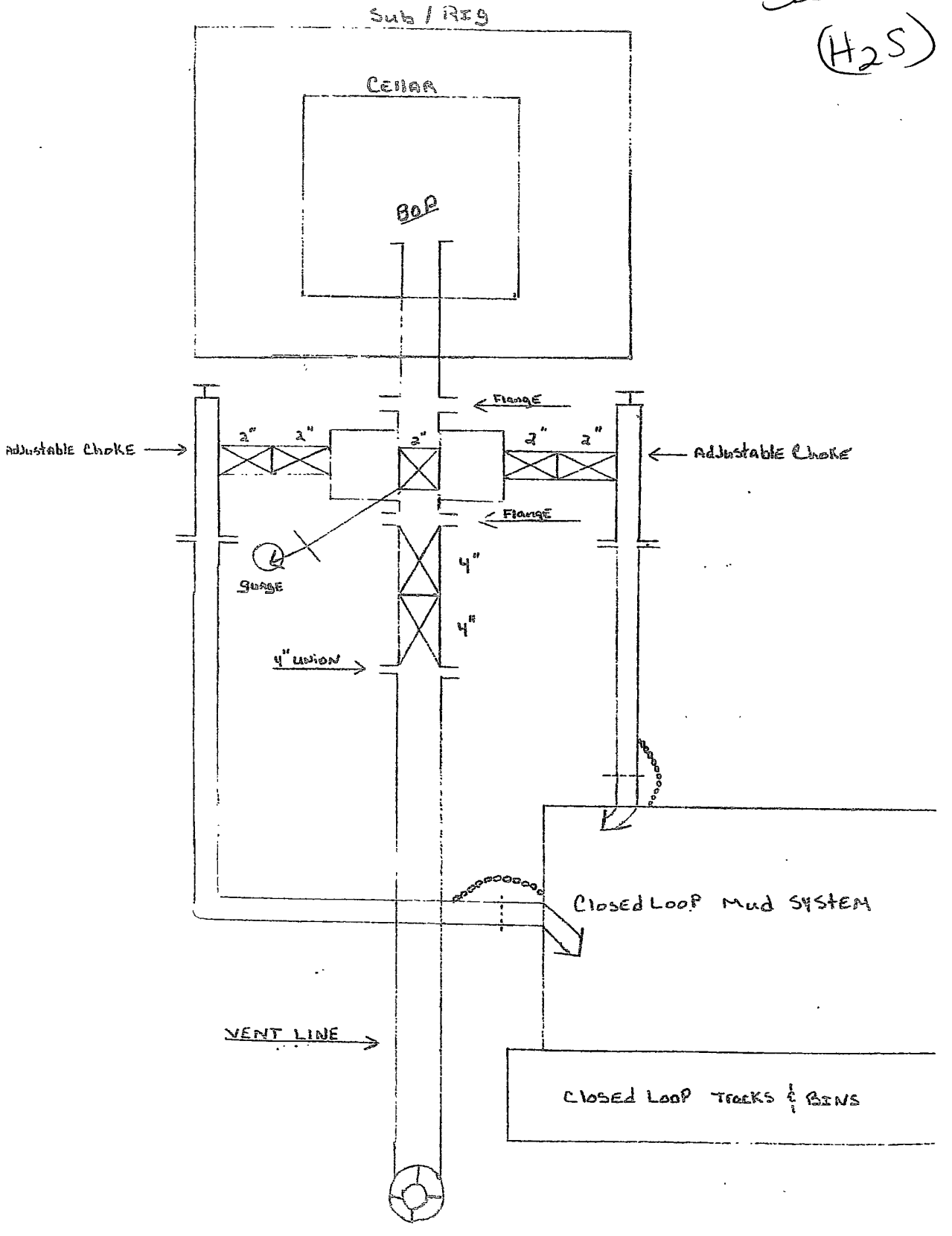


Stealth Federal Com #1
SHL: 330 FSL 600 FEL
BHL: 330 FNL 380 FEL
Sec. 17 T19S R32E
Lea County, NM

EXHIBIT THREE

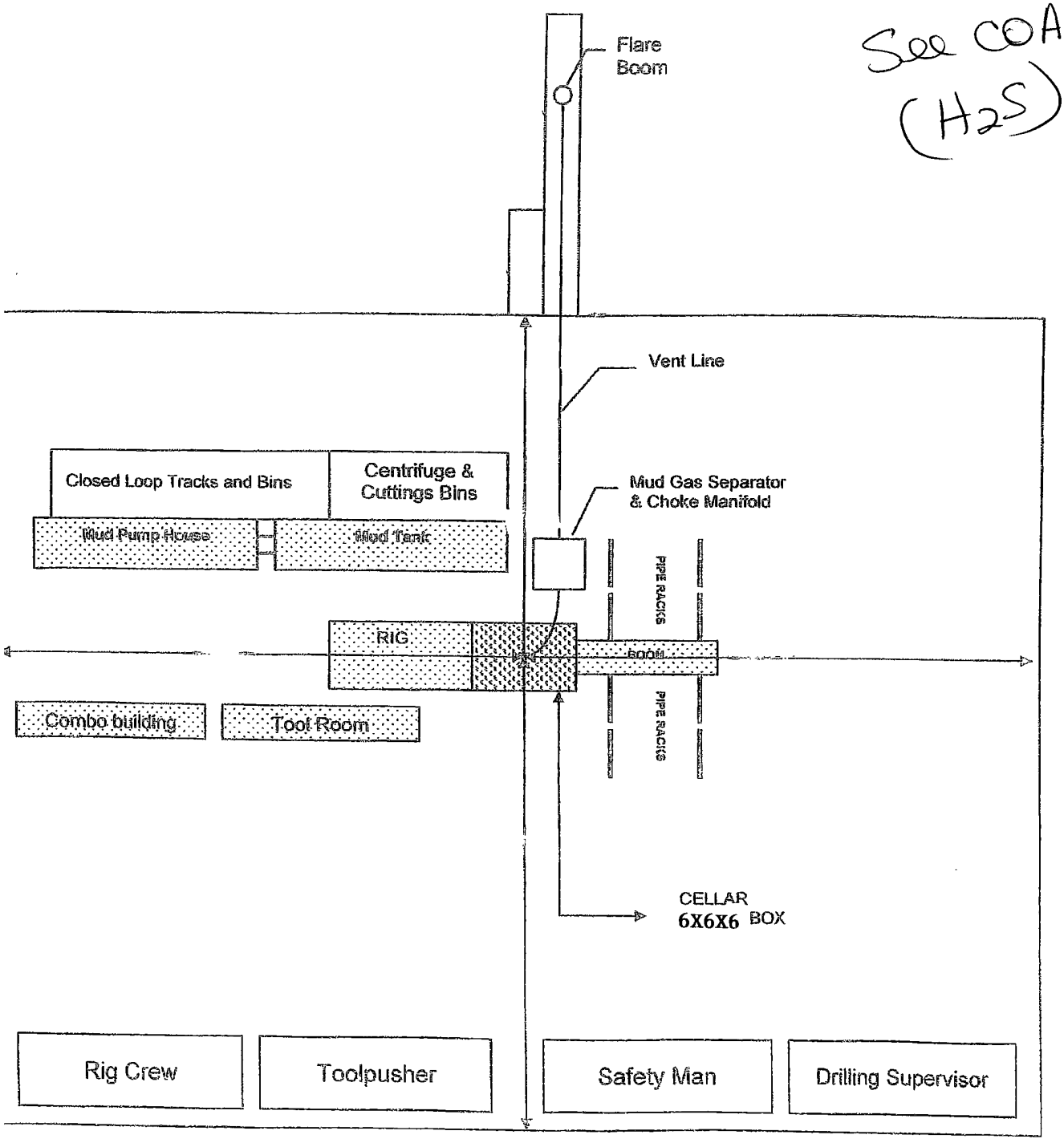
2M Choke Manifold Equipment

See COA (H_2S)

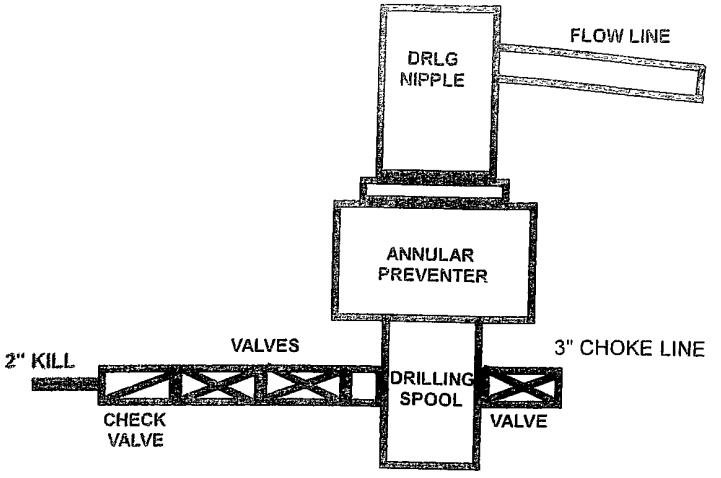


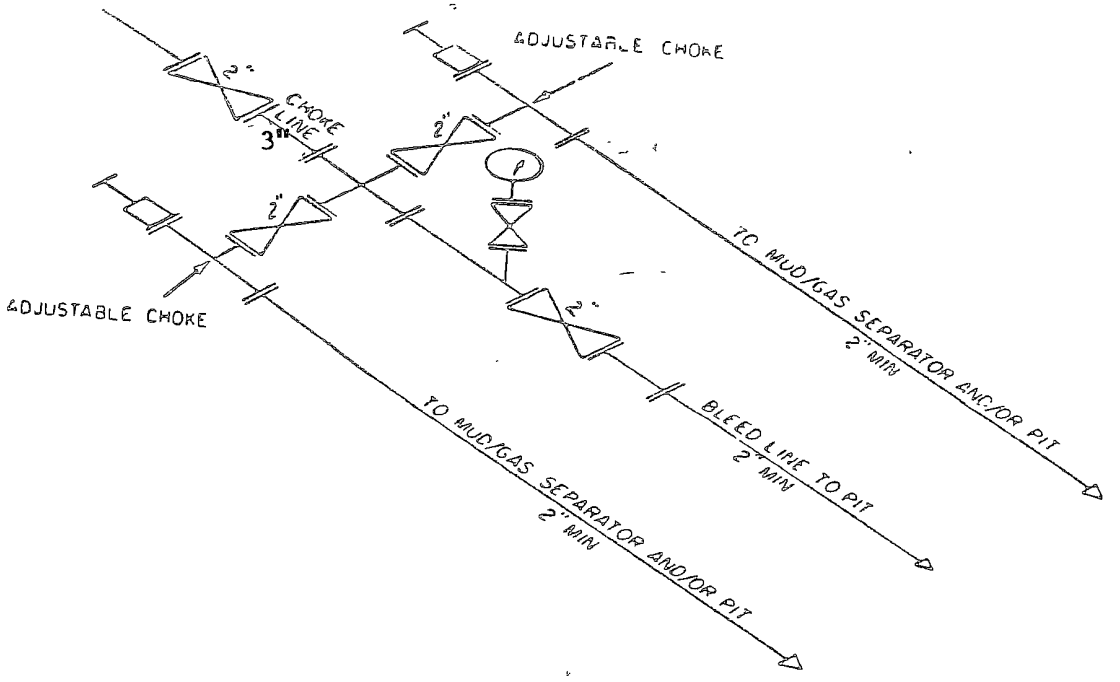
3M Choke Manifold Equipment

See COA (H2S)



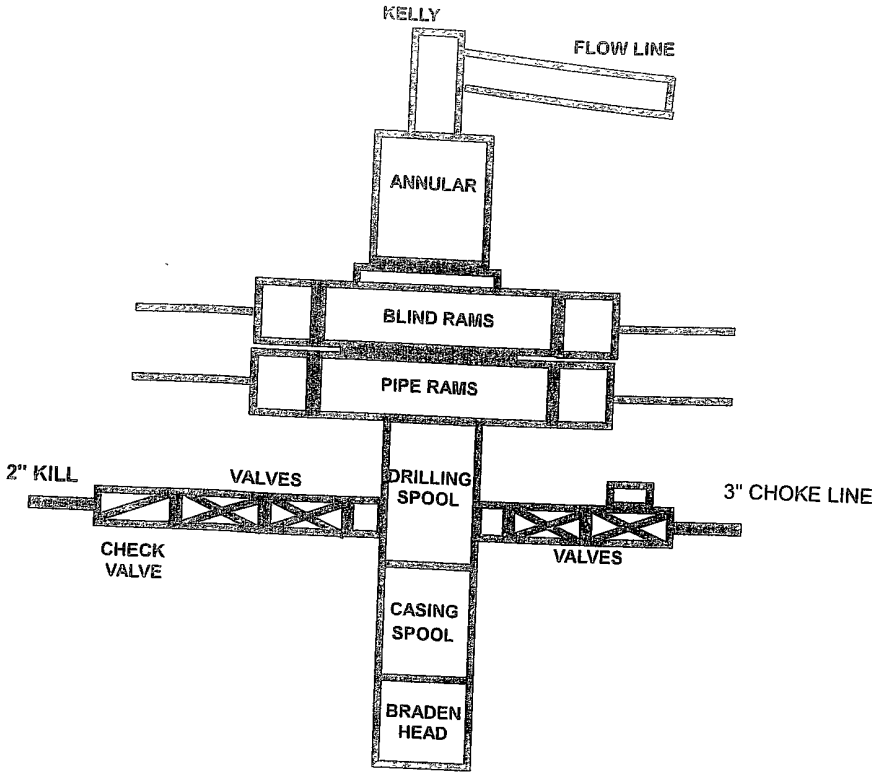
2M SYSTEM

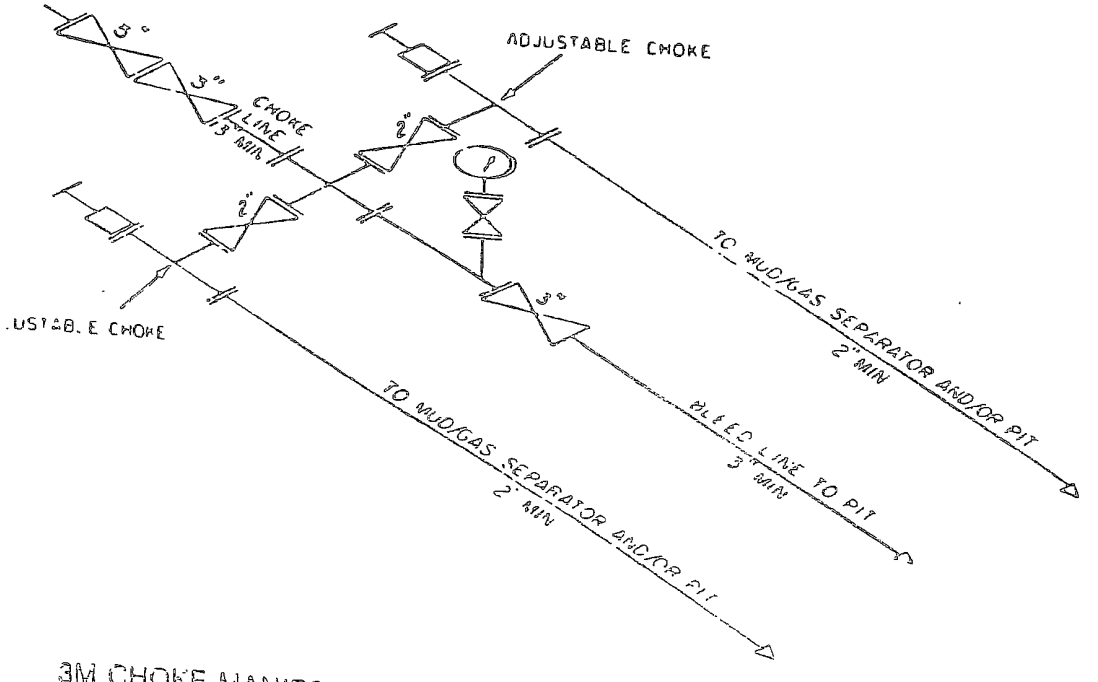




2M CHOKE MANIFOLD EQUIPMENT — CONFIGURATION OF CHOKES MAY VARY

3M SYSTEM





3M CHOKE MANIFOLD EQUIPMENT — CONFIGURATION OF CHOKES MAY VARY

MARBOB ENERGY CORPORATION

HYDROGEN SULFIDE DRILLING OPERATIONS 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:

A. The hazards and characteristics of hydrogen sulfide (H_2S).

B. The proper use and maintenance of personal protective equipment and life support systems.

C. The proper use of H_2S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.

D. The proper techniques for first aid and rescue procedures.

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

A. The effects of H_2S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.

B. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.

C. The contents and requirements of the H_2S Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H_2S zone (within 3 days or 500 feet) and weekly H_2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H_2S Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

II. H_2S SAFETY EQUIPMENT AND SYSTEMS

Note: All H_2S 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 reasonably expected to contain H_2S.

A. Well Control Equipment:

Flare line.

Choke manifold.

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

Auxiliary equipment to include: annular preventer, mud-gas separator, rotating head.

B. Protective equipment for essential personnel:

Mark II Surviveair 30-minute units located in the dog house and at briefing areas.

C. H_2S detection and monitoring equipment:

2 - portable H_2S monitor positioned on location for best coverage and response. These units have warning lights and audible sirens when H_2S levels of 20 ppm are reached.

D. Visual warning systems:

Caution/Danger signs 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.

E. Mud Program:

The mud program has been designed to minimize the volume of H_2S circulated to the surface.

F. Metallurgy:

All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H_2S service.

G. Communication:

Company vehicles equipped with cellular telephone and 2-way radio.

Marbob Energy has conducted a review to determine if an H2S contingency plan is required for the above referenced well. We were able to conclude that any potential hazardous volume would be minimal. H2S concentrations of wells in this area from surface to TD are low enough; therefore we do not believe that an H2S Contingency Plan would be necessary.

WARNING

YOU ARE ENTERING AN H_2S AREA
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. ***CK WITH MARBOB FOREMAN AT MAIN OFFICE***

MARBOB ENERGY CORPORATION

1-575-748-3303

EMERGENCY CALL LIST

	Office	Mobile	Home
Marbob Energy Corp.	575-748-3303		
Sheryl Baker	575-748-3303	575-748-5489	575-748-2396
Johnny C. Gray	575-748-3303	575-748-5983	575-885-3879
Raye Miller	575-748-3303	575-513-0176	575-746-9577
Dean Chumbley	575-748-3303	575-748-5988	575-748-2426

EMERGENCY RESPONSE NUMBERS
Eddy County, New Mexico

State Police	575-748-9718
Eddy County Sheriff	575-746-2701
Emergency Medical Services (Ambulance)	911 or 575-746-2701
Eddy County Emergency Management (Harry Burgess)	575-887-9511
State Emergency Response Center (SERC)	575-476-9620
Carlsbad Police Department	575-885-2111
Carlsbad Fire Department	575-885-3125
New Mexico Oil Conservation Division	575-748-1283
Indian Fire & Safety	800-530-8693
Halliburton Services	800-844-8451

PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	MARBOB ENERGY CORPORATION
LEASE NO.:	NM104686 (BHL)
WELL NAME & NO.:	Stealth Federal Com - 1
SURFACE HOLE FOOTAGE:	330' FSL & 600' FEL (NM094094)
BOTTOM HOLE FOOTAGE	330' FNL & 380' FEL
LOCATION:	Section 17, T. 19 S., R 32 E., NMPM
COUNTY:	Lea 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)

Timing Limitation Stipulation Condition of Approval for Lesser Prairie-Chicken: Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 ft. from the source of the noise.

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well. For more installation details, contact the Carlsbad Field Office at 575-234-5972.

Communitization Agreement

A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales. Operator to supply NMOCD order or description of pool which details the vertical and horizontal extent of pool to verify that requested communitization is within an approved and established pool.

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) 234-5972 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 of the well pad. The topsoil to be stripped is approximately inches in depth. The topsoil shall not be used to backfill the reserve pit and will be used for interim and final reclamation.

There is no measurable soil on this well pad to stockpile. No topsoil stockpile is required.

C. RESERVE PITS

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

The reserve pit shall be constructed 150' X 150' on the West 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.

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

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 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 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.

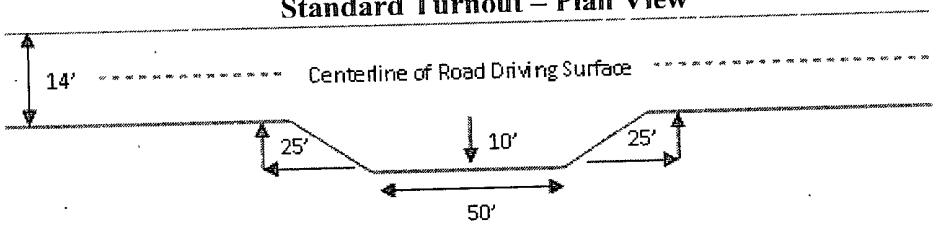
Crowning
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

Ditching
Ditching shall be required on the uphill side of the road.

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:

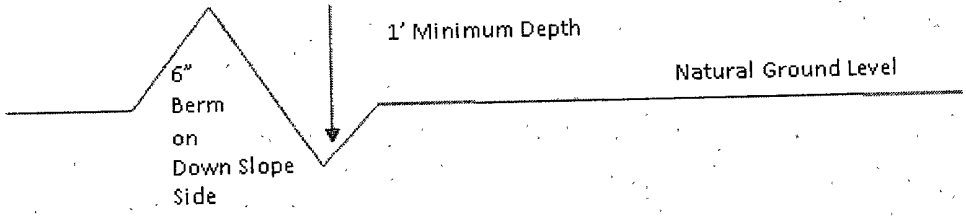
Standard Turnout – Plan View



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 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: 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.

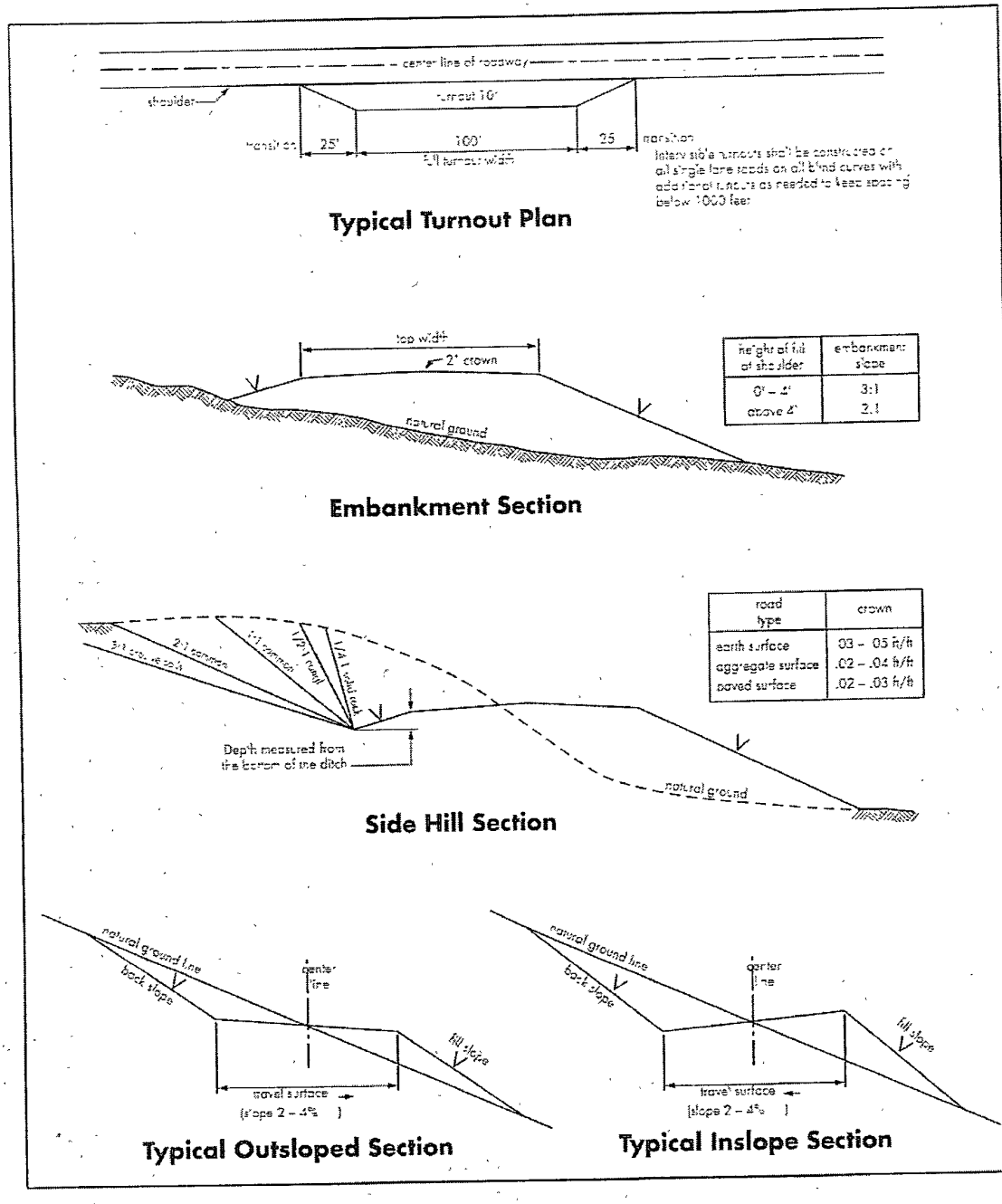
A gate shall be constructed and fastened securely to H-braces.

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 500 feet prior to drilling into the **Delaware** formation. **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.

3. Floor controls are required for 3M or Greater systems. These 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

Changes to the approved APD casing and cement program require submitting a sundry and receiving approval prior to work. Failure to obtain approval prior to work will result in an Incident of Non-Compliance being issued.

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

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 compressive strength, whichever is greater for all casing strings. 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.

Possible lost circulation in the Artesia Group and the Capitan Reef.
Possible water flows in the Artesia and Salado Groups.

1. The **13-3/8** inch surface casing shall be set **at approximately 850 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt)** and cemented to the surface. **Fresh water mud to be used to setting depth.**

    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 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.

If any lost circulation occurs below the Base of the Salt, the operator is to switch to fresh water mud to protect the Capitan Reef and use fresh water mud until setting the intermediate casing. The appropriate BLM office is to be notified for a PET to witness the switch to fresh water.

In addition, daily drilling reports are to be submitted to the BLM CFO by 0800 hours each morning from the setting of the surface casing until the intermediate casing is set. Failure to submit these reports will result in an Incidence of Non-Compliance being issued for failure to comply with the Conditions of Approval.

NOTE: **9-5/8" Intermediate casing to be set in the base of the Goat Seep Reef at approximately 4150 feet.**

Intermediate casing to be filled after running each 1000' to meet BLM collapse safety factor of 1.125.

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:

   ☒ Cement to surface. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to Capitan Reef. Additional cement may be required as excess cement calculates to 11%.**

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

   a. First stage to DV tool, cement shall:

   ☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office, before proceeding with second stage cement job. **Additional cement may be required as excess cement calculates to 20%.**

   b. Second stage above DV tool, cement shall:

   ☒ Cement should tie-back to **2800** feet and a minimum of 50 feet above the DV tool in the intermediate casing. This will provide a second barrier for the Capitan Reef and provide for cement across the DV tool in the intermediate casing. Operator shall provide method of verification. **Additional cement may be required as excess cement calculates to 16%.**

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 **2000 (2M)** psi.

3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **9-5/8"** intermediate casing shoe shall be **3000 (3M)** psi.

4. 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.

    e. **Effective November 1, 2008, no variances will be granted on reduced pressure tests on the surface casing and BOP/BOPE. Onshore Order 2 requirements will be in effect.**

D. DRILL STEM TEST

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

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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

VRM Facility Requirement
Low-profile tanks not greater than eight-feet-high shall be used.

B. PIPELINES

C. ELECTRIC LINES

IX. 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.

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.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche 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.

B. RESERVE PIT CLOSURE

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

Seed Mixture for LPC Sand/Shinnery 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
Plains Bristlegrass	5lbs/A
Sand Bluestem	5lbs/A
Little Bluestem	3lbs/A
Big Bluestem	6lbs/A
Plains Coreopsis	2lbs/A
Sand Dropseed	1lbs/A

**Four-winged Saltbush 5lbs/A

* This can be used around well pads and other areas where caliche cannot be removed.

*Pounds of pure live seed:

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

X. 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.

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well. For more installation details, contact the Carlsbad Field Office at 575-234-5972.

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 agreement.