

SECRETARY'S POTASH

UNITED STATES

OCD Artesia

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

12-1266

5. Lease Serial No. ~~1001033775~~ 5H
NM-40117, NM-19440, LC-028978-A 8H

6. If Indian, Allottee or Tribe Name

TES

7. If Unit or CA Agreement, Name and No.

1/31/2013

8. Lease Name and Well No.
Phoenix "21" NC Fed Corn #1H

1387677

9. API Well No.

30-015-41030

10. Field and Pool, or Exploratory
Santo Nino Bone Spring (54600)

11. Sec., T. R. M. or Blk. and Survey or Area
Sec. 28 T18S R30E

12. County or Parish
Eddy

13. State
NM

1a. Type of work: ☒ DRILL

☐ REENTER

1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other

☐ Single Zone ☐ Multiple Zone

2. Name of Operator Mewbourne Oil Company

<14744>

3a. Address PO Box 5270
Hobbs, NM 88241

3b. Phone No. (include area code)
575-393-5905

4. Location of Well (Report location clearly and in accordance with any State requirements.)*

At surface 200' FNL & 1980' FWL - Sec. 28 T18S R30E

At proposed prod. zone 330' FNL & 1980' FWL - Sec. 21 T18S R30E

14. Distance in miles and direction from nearest town or post office*
25 miles SE of Artesia, NM

15. Distance from proposed* 200'
location to nearest
property or lease line, ft.
(Also to nearest drig. unit line, if any)

16. No. of acres in lease
640 + 200 + 160
160 + 240 = 1840

17. Spacing Unit dedicated to this well
160

18. Distance from proposed location* 330' Murchison
to nearest well, drilling, completed,
applied for, on this lease, ft.

19. Proposed Depth
13,174' MD
8188' TVD

20. BLM/BIA Bond No. on file
NM-1693 Nationwide, NMB-000919

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3453' GL

22. Approximate date work will start*
11/01/2012

23. Estimated duration
60 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

Bradley Bishop

Name (Printed/Typed)
Bradley Bishop

Date
09/20/2012

Title

Approved by (Signature)

/s/ William Merhege
STATE DIRECTOR

Name (Printed/Typed)

Office

NM STATE OFFICE

Date **JAN 16 2013**

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

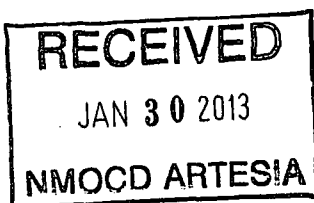
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United
States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 2)

*(Instructions on page 2)

Capitan Controlled Water Basin

Approval Subject to General Requirements
& Special Stipulations Attached



SEE ATTACHED FOR
CONDITIONS OF APPROVAL

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 July 16, 2010

Submit one copy to appropriate
District Office

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-015-41030	Pool Code 54600	Pool Name Santo Nino Bone Spring
Property Code 38767	Property Name PHOENIX "21" FEDERAL COM	Well Number 2H
OGRID No. 14744	Operator Name MEWBOURNE OIL COMPANY	Elevation 3453'

Surface Location

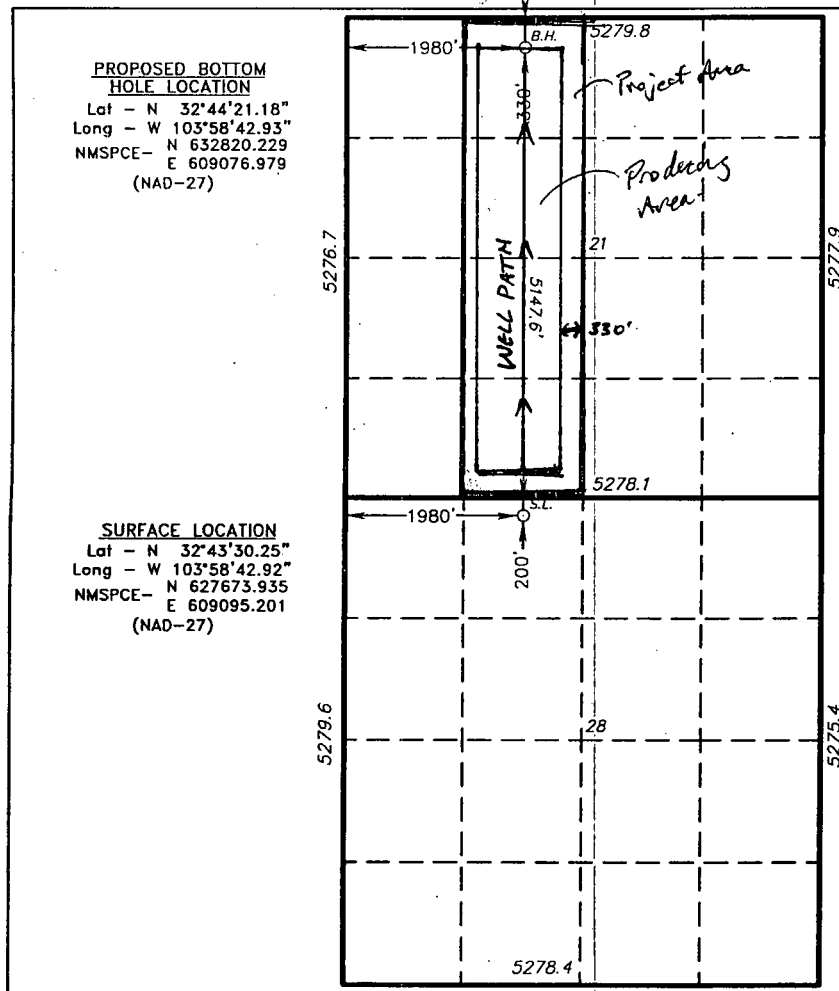
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	28	18 S	30 E		200	NORTH	1980	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	21	18 S	30 E		330	NORTH	1980	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			16 1374

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 contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature *G. L. Jones* Date **9/20/12**

Printed Name **NM4600ng**

Email Address

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date Surveyed

Signature & Seal of
Professional Surveyor

Certificate No. Gary L. Jones 7977

BASIN SURVEYS 24704

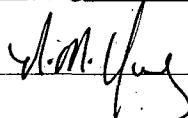
Mewbourne Oil Company

PO Box 5270
Hobbs, NM 88241
(575) 393-5905

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

Executed this 20 day of Sept., 2012.

Name: NM Young

Signature: 

Position Title: Hobbs District Manager

Address: PO Box 5270, Hobbs NM 88241

Telephone: 575-393-5905

E-mail: myoung@mewbourne.com

Drilling Program
Mewbourne Oil Company
 Phoenix "21" NC Federal Com #1H
 200' FNL & 1980' FWL (SHL)
 Sec 28-T18S-R30E
 Eddy County, New Mexico

1. The estimated tops of geological markers are as follows:

Rustler	300'
Top Salt	460'
Base Salt	825'
*Yates	1415'
Seven Rivers	1640'
*Queen	2575'
Capitan	Not Present
Grayburg	2975'
San Andres	3475'
*Delaware	4250'
*Bone Springs Lime	4900'
Wolfcamp	9450' - WILL NOT PENETRATE

2. Estimated depths of anticipated fresh water, oil, or gas:

Water	Fresh water will be protected by setting surface casing at 270' and cementing to surface.
Hydrocarbons	Oil and gas are anticipated in the above (*) formations. These zones will be protected by casing as necessary.

3. Pressure control equipment:

A 2000# WP Annular will be installed after running 13 3/8" casing. A 3000# WP Double Ram BOP and 3000# WP Annular will be installed after running 9 5/8" & 7" casing. Pressure tests will be conducted prior to drilling out under all casing strings. BOP controls will be installed prior to drilling under surface casing and will remain in use until completion of drilling operations. BOP's will be inspected and operated as recommended in Onshore Order #2. A Kelly cock and a sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position when the Kelly is not in use. Will test the 13 3/8" annular BOPE to 1250#. Will test 9 5/8" & 7" BOPE to 3000# and the Annular to 1500#. All BOPE tests will be done with third party testing company before drilling below each shoe, but will test again, if needed, in 30 days from the 1st test as per BLM Onshore Oil and Gas Order #2.

4. MOC proposes to drill a vertical wellbore to 7756' & kick off to horizontal @ 8233' TVD. The well will be drilled to 13174' MD (8188' TVD). See attached directional plan.

5. Proposed casing and cementing program:

A. Casing Program:

Hole Size	Casing	Wt/Ft.	Grade	Depth	Jt Type
17 1/2"	13 3/8" (new)	48#	H40	0'-325'	ST&C
12 1/4"	9 5/8" (new)	36#	J55	0'-1515' MD	LT&C
8 3/4"	7" (new)	26#	P110	0'-7510' MD	LT&C
8 3/4"	7" (new)	26#	P110	7510'-8510' MD	BT&C
6 1/8"	4 1/2" (new)	13.5#	P110	8310'- TD	LT&C

*cut off casing design factors
 Collapse 1.125 Burst 1.0 Tensile 1.8*

*Subject to availability of casing.

Drilling Program

Mewbourne Oil Company
Phoenix 21 NC Fed Com #1H
Page 2

B. Cementing Program:

- i. Surface Casing: 340 sks Class "C" light* cement with 2% CaCl₂. Yield at 1.34 cuft/sk. Cmt circulated to surface w/100% excess.
- ii. Intermediate Casing: 200 sacks Class "C" light* cement with CaCl₂ & LCM additives. Yield at 1.97 cuft/sk. 200 sacks Class "C" cement w/2% CaCl₂. Yield at 1.34 cuft/sk circulated to surface w/25% excess.
- iii. Production Casing: 600 sks Class "H" light* cement w/salt, FL & LCM additives. Yeild @ 1.87 cuft/sk. 400 sks Class "H" cement w/salt & FL additives. Yeild @ 1.29 cuft/sk. Cmt circulated w/25% excess.
- ii. Production Liner: This will be a Packer/Port completion from TD up inside 7" casing with packer type liner hanger.

*Referring to above blends of lite cement: (wt% fly ash, wt% cement, wt% bentonite of the total of first two numbers). Generic names of additives are used since the availability of specific company and products are unknown at this time.

**Mewbourne Oil Company reserves the right to change cement designs as hole conditions may warrant.*

6. Mud Program:

<u>Interval</u>	<u>Type System</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0'-325' <i>360</i>	FW spud mud	8.6-9.0	32-34	NA
325' -1515'	Brine water.	10.0-10.2	28-30	NA
1515'- TD	FW w/Polymer	8.5-8.7	32-35	15

7. Evaluation Program:

Samples: *See* 10' samples from surface casing to TD
Logging: *COA* GR, CNL & Gyro from KOP -100' (7656') to surface. GR from 7656' to TD.

8. Downhole Conditions

Zones of abnormal pressure:	None anticipated
Zones of lost circulation:	Anticipated in surface and intermediate holes
Maximum bottom hole temperature:	135 degree F
Maximum bottom hole pressure:	8.3 lbs/gal gradient or less

9. Anticipated Starting Date:

Mewbourne Oil Company intends to drill this well as soon as possible after receiving approval with approximately 40 days involved in drilling operations and an additional 20 days involved in completion operations on the project.



Job Number: S12-P21NCFC#1H
Company: Mewbourne Oil Company
Lease/Well: Phoenix 21 NC Federal Com #1H
Location: NM-East
Rig Name: Patterson #
State/County: New Mexico/ Eddy
Country: United States of America
API Number: N/A

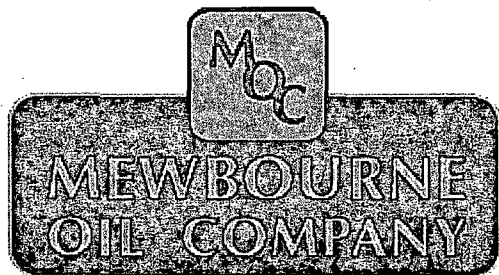
Elevation (To MSL): 0.00 ft
RKB: 0.00 ft
Projection System: US State Plane 1927 (Exact solution)
Projection Group: New Mexico East 3001
Projection Datum: CLARKE 1866
Magnetic Declination: 7.67
Grid Convergence: 0.19178 E
Date: Thursday, August 30, 2012

Calculated by HawkEye Software
 Minimum Curvature Method
 Vertical Section Plane 359.79°
 Northing (US ft): 627673.94 Easting (US ft): 609095.20
 Latitude: 32°43'30.2513" N Longitude: -103°58'42.9181" W
 Well Location: 197.24 FNL, 1988.40 FWL, Section 28, T18S, R30E, Meridian 23, Eddy County, NM
 Direction Reference: Grid North

Measured Depth (Ft)	INC Deg	AZM Deg	Subsea TVD (Ft)	TVD (Ft)	NS (Ft)	EW (Ft)	Northing (US ft)	Easting (US ft)	Latitude DMS	Longitude DMS	Build Rate /100Ft	VS (Ft)	Closure (Ft)	Closure Dir Deg	DLS /100Ft
KOP-Begin Build @ 7755.56MD, 12.00°/ 100 Ft															
7755.56	0.00	0.00	7755.56	7755.56	0.01	0.00	627673.94	609095.20	32°43'30.2514" N	-103°58'42.9181" W	0.00	0.01	0.01	0.01	0.00
7775.56	2.40	359.79	7775.55	7775.55	0.43	0.00	627674.36	609095.20	32°43'30.2556" N	-103°58'42.9181" W	12.00	0.43	0.43	359.79	12.00
7795.56	4.80	359.79	7795.51	7795.51	1.68	-0.01	627675.62	609095.19	32°43'30.2680" N	-103°58'42.9181" W	12.00	1.68	1.68	359.79	12.00
7815.56	7.20	359.79	7815.40	7815.40	3.77	-0.01	627677.71	609095.19	32°43'30.2887" N	-103°58'42.9181" W	12.00	3.77	3.77	359.79	12.00
7835.56	9.60	359.79	7835.19	7835.19	6.69	-0.02	627680.63	609095.18	32°43'30.3176" N	-103°58'42.9181" W	12.00	6.69	6.69	359.79	12.00
7855.56	12.00	359.79	7854.83	7854.83	10.44	-0.04	627684.38	609095.16	32°43'30.3547" N	-103°58'42.9181" W	12.00	10.44	10.44	359.79	12.00
7875.56	14.40	359.79	7874.30	7874.30	15.01	-0.05	627688.94	609095.15	32°43'30.3998" N	-103°58'42.9182" W	12.00	15.01	15.01	359.79	12.00
7895.56	16.80	359.79	7893.56	7893.56	20.39	-0.07	627694.32	609095.13	32°43'30.4531" N	-103°58'42.9182" W	12.00	20.39	20.39	359.79	12.00
7915.56	19.20	359.79	7912.58	7912.58	26.57	-0.10	627700.50	609095.10	32°43'30.5142" N	-103°58'42.9182" W	12.00	26.57	26.57	359.79	12.00
7935.56	21.60	359.79	7931.33	7931.33	33.54	-0.12	627707.47	609095.08	32°43'30.5832" N	-103°58'42.9182" W	12.00	33.54	33.54	359.79	12.00
7955.56	24.00	359.79	7949.76	7949.76	41.29	-0.15	627715.22	609095.05	32°43'30.6599" N	-103°58'42.9183" W	12.00	41.29	41.29	359.79	12.00
7975.56	26.40	359.79	7967.86	7967.86	49.80	-0.18	627723.74	609095.02	32°43'30.7441" N	-103°58'42.9183" W	12.00	49.80	49.80	359.79	12.00
7995.56	28.80	359.79	7985.58	7985.58	59.07	-0.22	627733.00	609094.99	32°43'30.8358" N	-103°58'42.9183" W	12.00	59.07	59.07	359.79	12.00
8015.56	31.20	359.79	8002.90	8002.90	69.07	-0.25	627743.00	609094.95	32°43'30.9348" N	-103°58'42.9184" W	12.00	69.07	69.07	359.79	12.00
8035.56	33.60	359.79	8019.78	8019.78	79.78	-0.29	627753.72	609094.91	32°43'31.0408" N	-103°58'42.9184" W	12.00	79.78	79.78	359.79	12.00
8055.56	36.00	359.79	8036.21	8036.21	91.19	-0.33	627765.13	609094.87	32°43'31.1538" N	-103°58'42.9184" W	12.00	91.20	91.20	359.79	12.00
8075.56	38.40	359.79	8052.14	8052.14	103.29	-0.38	627777.22	609094.82	32°43'31.2734" N	-103°58'42.9185" W	12.00	103.29	103.29	359.79	12.00
8095.56	40.80	359.79	8067.55	8067.55	116.03	-0.42	627789.97	609094.78	32°43'31.3995" N	-103°58'42.9185" W	12.00	116.03	116.03	359.79	12.00
8115.56	43.20	359.79	8082.41	8082.41	129.41	-0.47	627803.35	609094.73	32°43'31.5320" N	-103°58'42.9186" W	12.00	129.42	129.42	359.79	12.00
8132.86	45.28	359.79	8094.80	8094.80	141.48	-0.52	627815.42	609094.68	32°43'31.6514" N	-103°58'42.9186" W	12.02	141.48	141.48	359.79	12.02
8152.86	47.68	359.79	8108.57	8108.57	155.99	-0.57	627829.92	609094.63	32°43'31.7949" N	-103°58'42.9187" W	12.00	155.99	155.99	359.79	12.00
8172.86	50.08	359.79	8121.72	8121.72	171.05	-0.62	627844.99	609094.58	32°43'31.9440" N	-103°58'42.9187" W	12.00	171.05	171.05	359.79	12.00
8192.86	52.48	359.79	8134.23	8134.23	186.65	-0.68	627860.59	609094.52	32°43'32.0984" N	-103°58'42.9188" W	12.00	186.65	186.65	359.79	12.00
8212.86	54.88	359.79	8146.08	8146.08	202.77	-0.74	627876.70	609094.46	32°43'32.2578" N	-103°58'42.9188" W	12.00	202.77	202.77	359.79	12.00
8232.86	57.28	359.79	8157.24	8157.24	219.36	-0.80	627893.30	609094.40	32°43'32.4220" N	-103°58'42.9189" W	12.00	219.36	219.36	359.79	12.00
8252.86	59.68	359.79	8167.69	8167.69	236.41	-0.86	627910.34	609094.34	32°43'32.5907" N	-103°58'42.9190" W	12.00	236.41	236.41	359.79	12.00

Measured Depth (Ft)	INC Deg	AZM Deg	Subsea TVD (Ft)	TVD (Ft)	NS (Ft)	EW (Ft)	Northing (US ft)	Easting (US ft)	Latitude DMS	Longitude DMS	Build Rate "/100Ft	VS (Ft)	Closure (Ft)	Dir Deg	DLS "/100Ft
8272.86	62.08	359.79	8177.42	8177.42	253.88	-0.93	627927.82	609094.27	32°43'32.7636" N	-103°58'42.9190" W	12.00	253.88	253.88	359.79	12.00
8292.86	64.48	359.79	8186.42	8186.42	271.74	-0.99	627945.68	609094.21	32°43'32.9404" N	-103°58'42.9191" W	12.00	271.74	271.74	359.79	12.00
8312.86	66.88	359.79	8194.65	8194.65	289.97	-1.06	627963.90	609094.14	32°43'33.1207" N	-103°58'42.9191" W	12.00	289.97	289.97	359.79	12.00
8332.86	69.28	359.79	8202.12	8202.12	308.52	-1.13	627982.45	609094.07	32°43'33.3043" N	-103°58'42.9192" W	12.00	308.52	308.52	359.79	12.00
8352.86	71.68	359.79	8208.80	8208.80	327.37	-1.20	628001.30	609094.01	32°43'33.4908" N	-103°58'42.9193" W	12.00	327.37	327.37	359.79	12.00
8372.86	74.08	359.79	8214.69	8214.69	346.48	-1.27	628020.42	609093.94	32°43'33.6799" N	-103°58'42.9193" W	12.00	346.48	346.48	359.79	12.00
8392.86	76.48	359.79	8219.77	8219.77	365.82	-1.34	628039.76	609093.87	32°43'33.8713" N	-103°58'42.9194" W	12.00	365.83	365.83	359.79	12.00
8412.86	78.88	359.79	8224.04	8224.04	385.36	-1.41	628059.30	609093.79	32°43'34.0647" N	-103°58'42.9195" W	12.00	385.36	385.36	359.79	12.00
8432.86	81.28	359.79	8227.48	8227.48	405.06	-1.48	628079.00	609093.72	32°43'34.2596" N	-103°58'42.9196" W	12.00	405.06	405.06	359.79	12.00
8452.86	83.68	359.79	8230.10	8230.10	424.89	-1.55	628098.82	609093.65	32°43'34.4558" N	-103°58'42.9196" W	12.00	424.89	424.89	359.79	12.00
8472.86	86.08	359.79	8231.88	8231.88	444.81	-1.62	628118.74	609093.58	32°43'34.6529" N	-103°58'42.9197" W	12.00	444.81	444.81	359.79	12.00
8492.86	88.48	359.79	8232.83	8232.83	464.78	-1.70	628138.72	609093.50	32°43'34.8506" N	-103°58'42.9198" W	12.00	464.78	464.78	359.79	12.00
LP: 8510.13 MD, 90.55°															
8510.13	90.55	359.79	8232.98	8232.98	482.05	-1.76	628155.99	609093.44	32°43'35.0215" N	-103°58'42.9198" W	12.00	482.05	482.05	359.79	12.00
8610.13	90.55	359.79	8232.02	8232.02	582.04	-2.12	628255.98	609093.08	32°43'36.0110" N	-103°58'42.9202" W	0.00	582.05	582.05	359.79	0.00
8710.13	90.55	359.79	8231.05	8231.05	682.04	-2.49	628355.97	609092.71	32°43'37.0005" N	-103°58'42.9205" W	0.00	682.04	682.04	359.79	0.00
8810.13	90.55	359.79	8230.09	8230.09	782.03	-2.85	628455.97	609092.35	32°43'37.9900" N	-103°58'42.9208" W	0.00	782.04	782.04	359.79	0.00
8910.13	90.55	359.79	8229.12	8229.12	882.03	-3.22	628555.96	609091.99	32°43'38.9795" N	-103°58'42.9212" W	0.00	882.03	882.03	359.79	0.00
9010.13	90.55	359.79	8228.16	8228.16	982.02	-3.58	628655.96	609091.62	32°43'39.9690" N	-103°58'42.9215" W	0.00	982.03	982.03	359.79	0.00
9110.13	90.55	359.79	8227.19	8227.19	1082.02	-3.94	628755.95	609091.26	32°43'40.9585" N	-103°58'42.9219" W	0.00	1082.03	1082.03	359.79	0.00
9210.13	90.55	359.79	8226.23	8226.23	1182.01	-4.31	628855.95	609090.89	32°43'41.9480" N	-103°58'42.9222" W	0.00	1182.02	1182.02	359.79	0.00
9310.13	90.55	359.79	8225.26	8225.26	1282.01	-4.67	628955.94	609090.53	32°43'42.9375" N	-103°58'42.9226" W	0.00	1282.02	1282.02	359.79	0.00
9410.13	90.55	359.79	8224.30	8224.30	1382.00	-5.03	629055.94	609090.17	32°43'43.9270" N	-103°58'42.9229" W	0.00	1382.01	1382.01	359.79	0.00
9510.13	90.55	359.79	8223.34	8223.34	1482.00	-5.40	629155.93	609089.80	32°43'44.9165" N	-103°58'42.9232" W	0.00	1482.01	1482.01	359.79	0.00
9610.13	90.55	359.79	8222.37	8222.37	1581.99	-5.76	629255.93	609089.44	32°43'45.9060" N	-103°58'42.9236" W	0.00	1582.00	1582.00	359.79	0.00
9710.13	90.55	359.79	8221.41	8221.41	1681.99	-6.13	629355.92	609089.07	32°43'46.8955" N	-103°58'42.9239" W	0.00	1682.00	1682.00	359.79	0.00
9810.13	90.55	359.79	8220.44	8220.44	1781.98	-6.49	629455.92	609088.71	32°43'47.8850" N	-103°58'42.9243" W	0.00	1781.99	1781.99	359.79	0.00
9910.13	90.55	359.79	8219.48	8219.48	1881.98	-6.85	629555.91	609088.35	32°43'48.8745" N	-103°58'42.9246" W	0.00	1881.99	1881.99	359.79	0.00
10010.13	90.55	359.79	8218.51	8218.51	1981.97	-7.22	629655.91	609087.98	32°43'49.8640" N	-103°58'42.9249" W	0.00	1981.98	1981.98	359.79	0.00
10110.13	90.55	359.79	8217.55	8217.55	2081.96	-7.58	629755.90	609087.62	32°43'50.8534" N	-103°58'42.9253" W	0.00	2081.98	2081.98	359.79	0.00
10210.13	90.55	359.79	8216.58	8216.58	2181.96	-7.95	629855.89	609087.26	32°43'51.8429" N	-103°58'42.9256" W	0.00	2181.97	2181.97	359.79	0.00
10310.13	90.55	359.79	8215.62	8215.62	2281.95	-8.31	629955.89	609086.89	32°43'52.8324" N	-103°58'42.9260" W	0.00	2281.97	2281.97	359.79	0.00
10410.13	90.55	359.79	8214.66	8214.66	2381.95	-8.67	630055.88	609086.53	32°43'53.8219" N	-103°58'42.9263" W	0.00	2381.96	2381.96	359.79	0.00
10510.13	90.55	359.79	8213.69	8213.69	2481.94	-9.04	630155.88	609086.16	32°43'54.8114" N	-103°58'42.9266" W	0.00	2481.96	2481.96	359.79	0.00
10610.13	90.55	359.79	8212.73	8212.73	2581.94	-9.40	630255.87	609085.80	32°43'55.8009" N	-103°58'42.9270" W	0.00	2581.96	2581.96	359.79	0.00
10710.13	90.55	359.79	8211.76	8211.76	2681.93	-9.76	630355.87	609085.44	32°43'56.7904" N	-103°58'42.9273" W	0.00	2681.95	2681.95	359.79	0.00
10810.13	90.55	359.79	8210.80	8210.80	2781.93	-10.13	630455.86	609085.07	32°43'57.7799" N	-103°58'42.9277" W	0.00	2781.95	2781.95	359.79	0.00
10910.13	90.55	359.79	8209.83	8209.83	2881.92	-10.49	630555.86	609084.71	32°43'58.7694" N	-103°58'42.9280" W	0.00	2881.94	2881.94	359.79	0.00
11010.13	90.55	359.79	8208.87	8208.87	2981.92	-10.86	630655.85	609084.34	32°43'59.7589" N	-103°58'42.9283" W	0.00	2981.94	2981.94	359.79	0.00
11110.13	90.55	359.79	8207.90	8207.90	3081.91	-11.22	630755.85	609083.98	32°44'0.7484" N	-103°58'42.9287" W	0.00	3081.93	3081.93	359.79	0.00
11210.13	90.55	359.79	8206.94	8206.94	3181.91	-11.58	630855.84	609083.62	32°44'1.7379" N	-103°58'42.9290" W	0.00	3181.93	3181.93	359.79	0.00

Measured Depth (Ft)	INC Deg	AZM Deg	Subsea TVD (Ft)	TVD (Ft)	NS (Ft)	EW (Ft)	Northing (US ft)	Easting (US ft)	Latitude DMS	Longitude DMS	Build Rate %/100Ft	VS (Ft)	Closure (Ft)	Closure Dir Deg	DLS %/100Ft				
11310.13	90.55	359.79	8205.98	8205.98	3281.90	-11.95	630955.84	609083.25	32°44'2.7274" N	-103°58'42.9294" W	0.00	3281.92	3281.92	359.79	0.00				
11410.13	90.55	359.79	8205.01	8205.01	3381.90	-12.31	631055.83	609082.89	32°44'3.7169" N	-103°58'42.9297" W	0.00	3381.92	3381.92	359.79	0.00				
11510.13	90.55	359.79	8204.05	8204.05	3481.89	-12.68	631155.83	609082.53	32°44'4.7064" N	-103°58'42.9300" W	0.00	3481.91	3481.91	359.79	0.00				
11610.13	90.55	359.79	8203.08	8203.08	3581.89	-13.04	631255.82	609082.16	32°44'5.6959" N	-103°58'42.9304" W	0.00	3581.91	3581.91	359.79	0.00				
11710.13	90.55	359.79	8202.12	8202.12	3681.88	-13.40	631355.81	609081.80	32°44'6.6854" N	-103°58'42.9307" W	0.00	3681.90	3681.90	359.79	0.00				
11810.13	90.55	359.79	8201.15	8201.15	3781.87	-13.77	631455.81	609081.43	32°44'7.6749" N	-103°58'42.9311" W	0.00	3781.90	3781.90	359.79	0.00				
11910.13	90.55	359.79	8200.19	8200.19	3881.87	-14.13	631555.80	609081.07	32°44'8.6644" N	-103°58'42.9314" W	0.00	3881.90	3881.90	359.79	0.00				
12010.13	90.55	359.79	8199.22	8199.22	3981.86	-14.49	631655.80	609080.71	32°44'9.6539" N	-103°58'42.9317" W	0.00	3981.89	3981.89	359.79	0.00				
12110.13	90.55	359.79	8198.26	8198.26	4081.86	-14.86	631755.79	609080.34	32°44'10.6434" N	-103°58'42.9321" W	0.00	4081.89	4081.89	359.79	0.00				
12210.13	90.55	359.79	8197.30	8197.30	4181.85	-15.22	631855.79	609079.98	32°44'11.6329" N	-103°58'42.9324" W	0.00	4181.88	4181.88	359.79	0.00				
12310.13	90.55	359.79	8196.33	8196.33	4281.85	-15.59	631955.78	609079.62	32°44'12.6224" N	-103°58'42.9328" W	0.00	4281.88	4281.88	359.79	0.00				
12410.13	90.55	359.79	8195.37	8195.37	4381.84	-15.95	632055.78	609079.25	32°44'13.6119" N	-103°58'42.9331" W	0.00	4381.87	4381.87	359.79	0.00				
12510.13	90.55	359.79	8194.40	8194.40	4481.84	-16.31	632155.77	609078.89	32°44'14.6014" N	-103°58'42.9334" W	0.00	4481.87	4481.87	359.79	0.00				
12610.13	90.55	359.79	8193.44	8193.44	4581.83	-16.68	632255.77	609078.52	32°44'15.5909" N	-103°58'42.9338" W	0.00	4581.86	4581.86	359.79	0.00				
12710.13	90.55	359.79	8192.47	8192.47	4681.83	-17.04	632355.76	609078.16	32°44'16.5804" N	-103°58'42.9341" W	0.00	4681.86	4681.86	359.79	0.00				
12810.13	90.55	359.79	8191.51	8191.51	4781.82	-17.41	632455.76	609077.80	32°44'17.5699" N	-103°58'42.9345" W	0.00	4781.85	4781.85	359.79	0.00				
12910.13	90.55	359.79	8190.54	8190.54	4881.82	-17.77	632555.75	609077.43	32°44'18.5594" N	-103°58'42.9348" W	0.00	4881.85	4881.85	359.79	0.00				
13010.13	90.55	359.79	8189.58	8189.58	4981.81	-18.13	632655.75	609077.07	32°44'19.5489" N	-103°58'42.9351" W	0.00	4981.84	4981.84	359.79	0.00				
13110.13	90.55	359.79	8188.62	8188.62	5081.81	-18.50	632755.74	609076.70	32°44'20.5384" N	-103°58'42.9355" W	0.00	5081.84	5081.84	359.79	0.00				
PBHL @ 8188.00 Ft TVD																			
13173.72	90.55	359.79	8188.00	8188.00	5145.39	-18.73	632819.32	609076.47	32°44'21.1676" N	-103°58'42.9357" W	0.00	5145.42	5145.42	359.79	0.00				
MAGNETICS INFORMATION																			
Magnetic Model: C:\HawkEye\IGRF2010.MIF Date for Magnetics: 08/30/2012 Latitude: 32°43'30.2513" N Longitude: -103°58'42.9181" W Magnetic Declination: 7.67 Total Correction(Mag to Grid): 7.48								Field Strength (nt): 48778 B-X Component (nt): 23772 B-Y Component (nt): 3200 B-Z Component (nt): 42473 B-Horz Component (nt): 23987 Dip Angle: 60.54											
TARGET DATA																			
Name		Shape		Easting (Ft)		Northing (Ft)		Subsea TVD (Ft)		NS (Ft)		EW (Ft)		Side A (Ft)		Side B (Ft)		Diameter (Ft)	
PBHL		CYLINDER		609076.47		632819.33		8188.00		5145.39		-18.73		100.00		200.00		100.00	
LP		CYLINDER		609093.45		628155.93		8233.00		481.99		-1.75		100.00		100.00		100.00	



NM-East
NAD27

****Grid Correction = 7.476° E****

Horizontal Plot
1" = 1000'

-1000 -500 0 500 1000

Surface Location
Latitude: 32°43'30.2513"
Longitude: -103°58'42.9181"
Y: 627673.94
X: 609095.20
200 FNL, 1980 FWL (Section 28)

Landing Point
482.05' Displacement from S/L
@ 359.79° Azimuth from S/L
North: 482.05' West: 1.76'
TVD: 8232.98' MD: 8510.13'
Y: 628155.99
X: 609093.44

Proposed BHL
5145.42' Displacement from S/L
@ 359.79° Azimuth from S/L
North: 5145.39' West: 18.73'
TVD: 8188.00' MD: 13173.72'
Y: 632819.32
X: 609076.47
330 FNL, 1980 FWL (Section 21)

5500 Lease Line
330' Hardline
Proposed BHL

5000

4500

4000

3500

3000

2500

2000

1500

1000

500

0

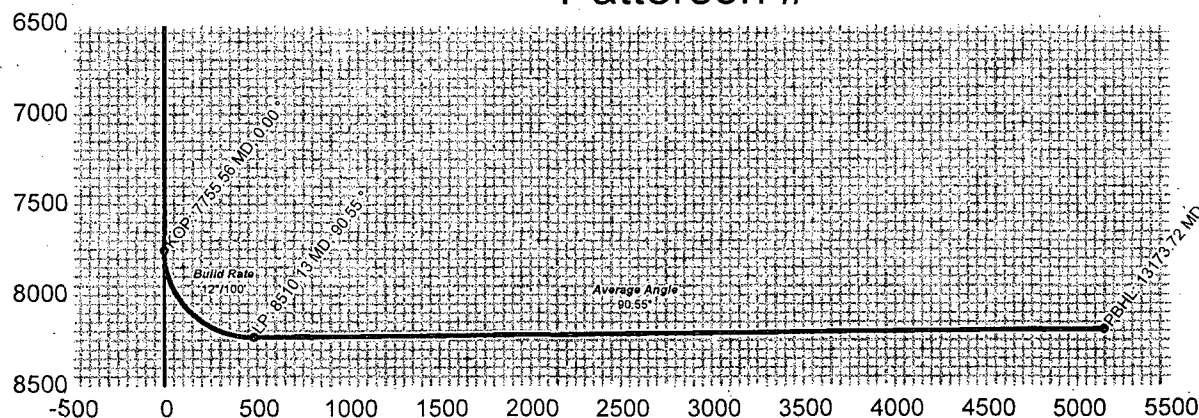
Landing Point
330' Hardline
Lease Line
Surface Location

Well Plan #1
August 30, 2012



Phoenix 21 NC Federal Com #1H Eddy County, New Mexico Patterson

Vertical Section Plot
1" = 1000'



Plane of Proposal (359.79°)
VS = 5145.42'

13 5/8" 2M BOPE & Closed Loop Equipment Schematic

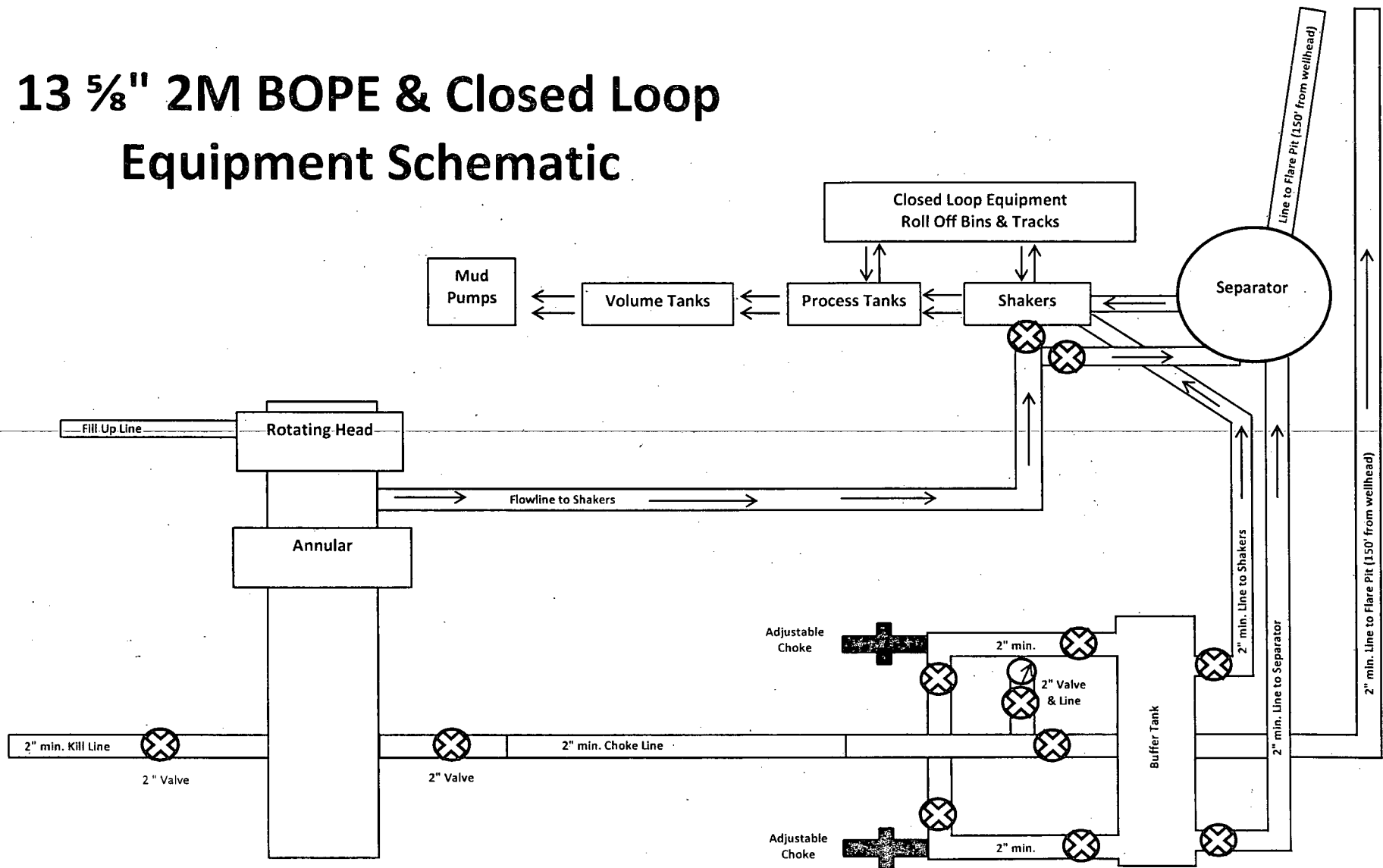


Exhibit 2A
Well Name: Phoenix "21" NC Fed Com #1H

11" 3M BOPE & Closed Loop Equipment Schematic

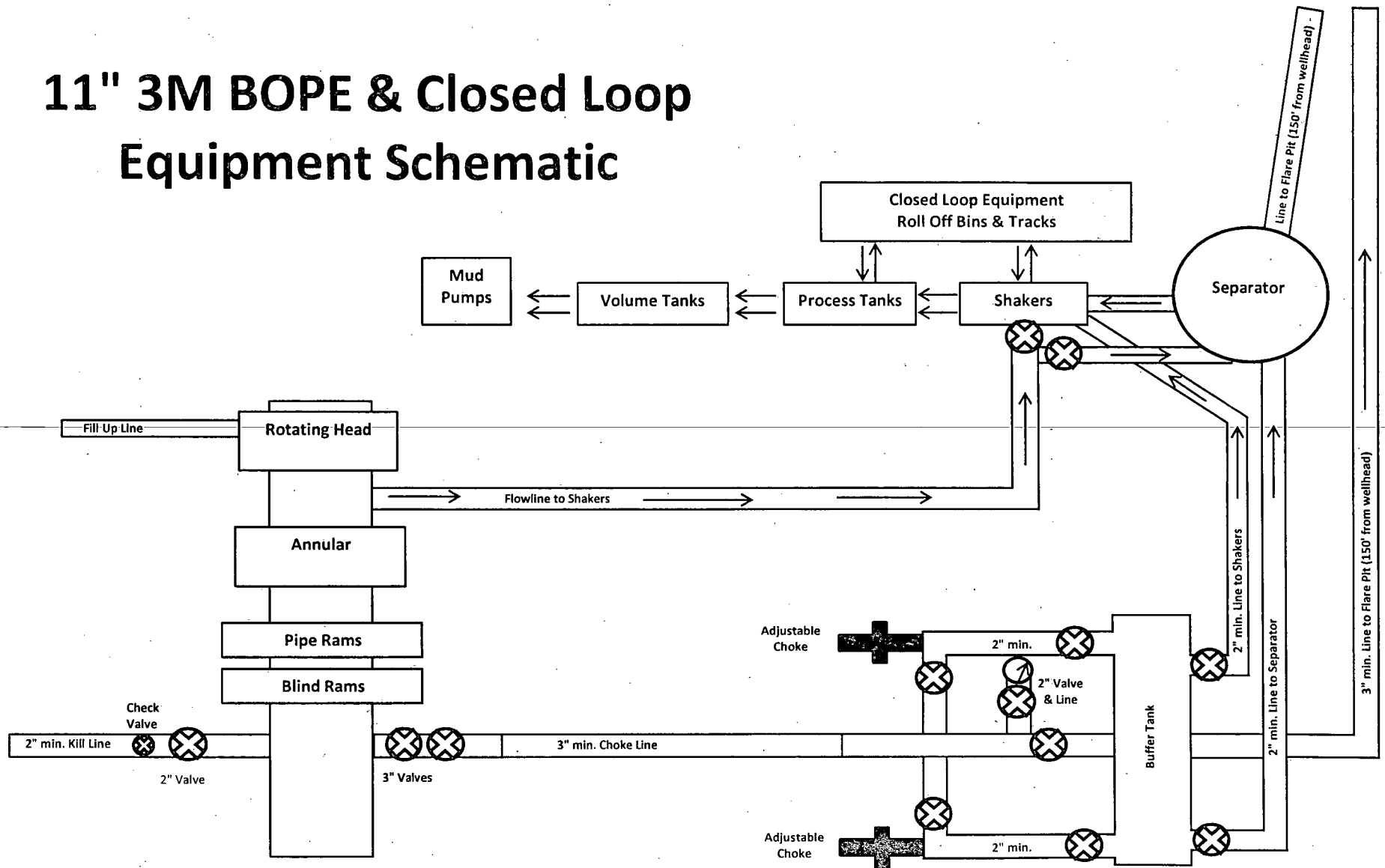


Exhibit 2

Well Name: Phoenix "21" NC Fed Com #1H

Note: All valves & lines on choke manifold are 3" unless otherwise noted. Exact manifold configuration may vary.

Notes Regarding Blowout Preventer

Mewbourne Oil Company

Phoenix "21" NC Fed Com #1H

200' FNL & 1980' FWL (SHL)

Sec. 28-T18S-R30E

Eddy County, New Mexico

- I. Drilling nipple (bell nipple) to be constructed so that it can be removed without the use of a welder through the opening of the rotary table, with minimum internal diameter equal to blowout preventer bore.
- II. Blowout preventer and all fittings must be in good condition with a minimum 2000 psi working pressure on 9 5/8" casing and 3000 psi working pressure on 7" casing.
- III. Safety valve must be available on the rig floor at all times with proper connections to install in the drill string. Valve must be full bore with minimum 3000 psi working pressure.
- IV. Equipment through which bit must pass shall be at least as large as internal diameter of the casing.
- V. A kelly cock shall be installed on the kelly at all times.

Blowout preventer closing equipment to include an accumulator of at least 40 gallon capacity, two independent sources of pressure on closing unit, and meet all other API specifications.

H2S Diagram
Closed Loop Pad Dimensions 280' x 320'

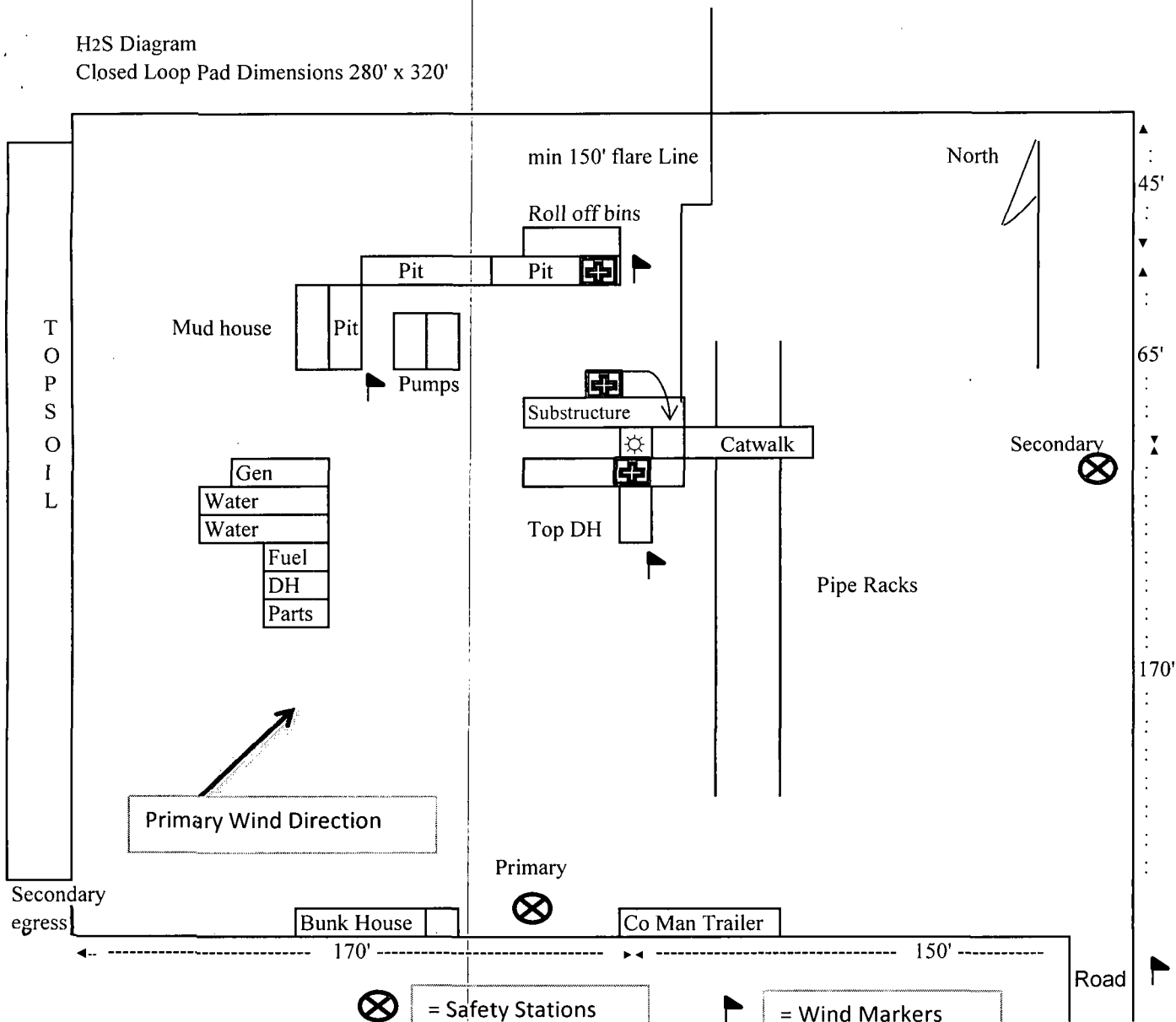


Exhibit 5



= Safety Stations



= Wind Markers



= H2S Monitors

Mewbourne Oil Company
Phoenix 21 NC Fed Com #1H
200' FNL & 1980' FWL
Sec. 28 T18S R30E
Eddy County, NM

Hydrogen Sulfide Drilling Operations Plan

Mewbourne Oil Company
Phoenix "21" NC Fed Com #1H
200' FNL & 1980' FWL
Sec. 28 T18S R30E
Eddy County, New Mexico

1. General Requirements

Rule 118 does not apply to this well because MOC has researched this area and no high concentrations of H₂S were found. MOC will have on location and working all H₂S safety equipment after setting 9 5/8" casing for purposes of safety and insurance requirements.

2. Hydrogen Sulfide Training

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will have received training from a qualified instructor in the following areas prior to entering the drilling pad area of the well:

1. The hazards and characteristics of hydrogen sulfide gas.
2. The proper use of personal protective equipment and life support systems.
3. The proper use of hydrogen sulfide detectors, alarms, warning systems, briefing areas, evacuation procedures.
4. The proper techniques for first aid and rescue operations.

Additionally, supervisory personnel will be trained in the following areas:

- 1 The effects of hydrogen sulfide on metal components. If high tensile tubular systems are utilized, supervisory personnel will be trained in their special maintenance requirements.
- 2 Corrective action and shut in procedures, blowout prevention, and well control procedures while drilling a well.
- 3 The contents of the Hydrogen Sulfide Drilling Operations Plan.

There will be an initial training session prior to encountering a known hydrogen sulfide source. The initial training session shall include a review of the site specific Hydrogen Sulfide Drilling Operations Plan.

3. Hydrogen Sulfide Safety Equipment and Systems

All hydrogen sulfide safety equipment and systems will be installed, tested, and operational prior to drilling below the intermediate casing.

1. Well Control Equipment

- A. Choke manifold with minimum of one ^{remote} adjustable choke.
- B. Blowout preventers equipped with blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit
- C. Auxiliary equipment including annular type blowout preventer.

2. Protective Equipment for Essential Personnel

Thirty minute self contained work unit located in the dog house and at briefing areas.

Additionally: If H₂S is encountered in concentrations less than 10 ppm, fans will be placed in work areas to prevent the accumulation of hazardous amounts of poisonous gas. If higher concentrations of H₂S are detected the well will be shut in MOC will follow Onshore Order 6 and install a rotating head, mud/gas separator, remote choke and flare line with igniter will be installed.

see
COA

3. Hydrogen Sulfide Protection and Monitoring Equipment

Two portable hydrogen sulfide monitors positioned on location for optimum coverage and detection. The units shall have audible sirens to notify personnel when hydrogen sulfide levels exceed 20 PPM.

4. Visual Warning Systems

A. Wind direction indicators as indicated on the wellsite diagram.

B. Caution signs shall be posted on roads providing access to location. Signs shall be painted a high visibility color with lettering of sufficient size to be readable at reasonable distances from potentially contaminated areas.

4. **Mud Program**

The mud program has been designed to minimize the amount of hydrogen sulfide entrained in the mud system. Proper mud weight, safe drilling practices, and the use of hydrogen sulfide scavengers will minimize hazards while drilling the well.

5. **Metallurgy**

All tubular systems, wellheads, blowout preventers, drilling spools, kill lines, choke manifolds, and valves shall be suitable for service in a hydrogen sulfide environment when chemically treated.

6. **Communications**

State & County Officials phone numbers are posted on rig floor and supervisors trailer. Communications in company vehicles and toolpushers are either two way radios or cellular phones.

7. **Well Testing**

Drill stem testing is not an anticipated requirement for evaluation of this well. A drill stem test is required, it will be conducted with a minimum number of personnel in the immediate vicinity. The test will be conducted during daylight hours only.

8. **Emergency Phone Numbers**

Lea County Sheriff's Office	911 or 575-396-3316
Ambulance Service	911 or 575-397-9308
Hobbs Fire Dept	911 or 575-397-9308
Lovington Fire Dept.	911 or 575-396-2359
Lea Regional Hospital – Hobbs	575-393-6581

Mewbourne Oil Company	Hobbs District Office	575-393-5905
	Fax	575-397-6252
	2 nd Fax	575-393-7259

District Manager	Micky Young	575-390-0999
Drilling Superintendent	Frosty Lathan	575-390-4103
Drilling Foreman	Wesley Noseff	575-441-0729
	Bradley Bishop	575-390-6838

Closed Loop Pad Dimensions 280' x 320'

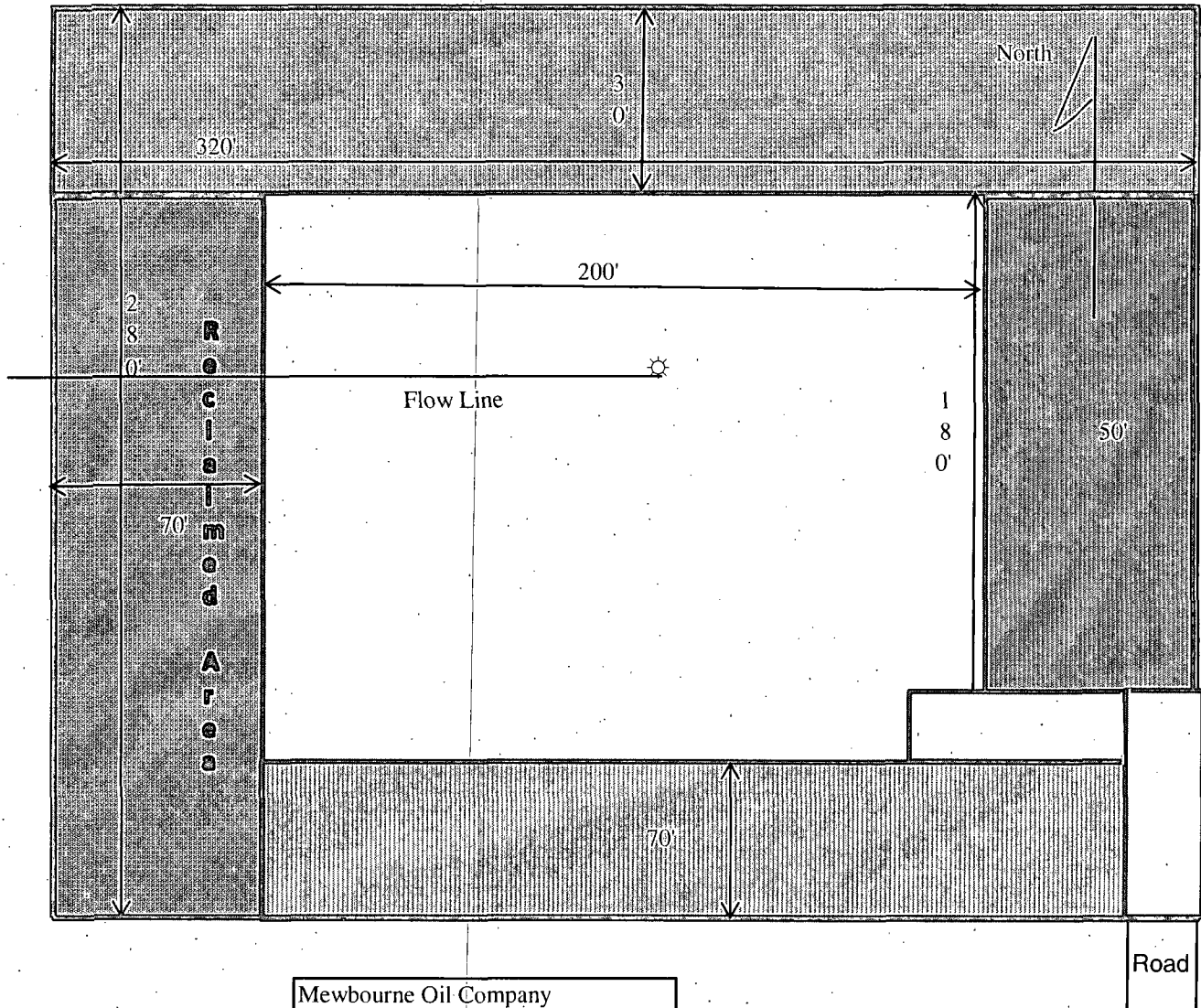


Exhibit 6

Mewbourne Oil Company
Phoenix 21 NC Fed Com #1H
200' FNL & 1980' FWL
Sec. 28 T18S R30E
Eddy County, NM

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	MEWBOURNE OIL COMPANY
LEASE NO.:	LC028987A
WELL NAME & NO.:	1H-PHOENIX 21 NC FED COM
SURFACE HOLE FOOTAGE:	200'/N. & 1980'/W.
BOTTOM HOLE FOOTAGE:	330'/N. & 1980'/W. (Sec. 21)
LOCATION:	Section 28, T. 18 S., R. 30 E., NMPM
COUNTY:	Eddy County, New Mexico

TABLE OF CONTENTS

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

- ☐ **General Provisions**
- ☐ **Permit Expiration**
- ☐ **Archaeology, Paleontology, and Historical Sites**
- ☐ **Noxious Weeds**
- ☒ **Special Requirements**
 - Lesser Prairie-Chicken Timing Stipulations
 - Ground-level Abandoned Well Marker
 - Communitization Agreement
- ☒ **Construction**
 - Notification
 - Topsoil
 - Closed Loop System
 - Federal Mineral Material Pits
 - Well Pads
 - Roads
- ☐ **Road Section Diagram**
- ☒ **Drilling**
 - Secretary's Potash
 - H₂S – Onshore Order #6
 - Waste Material and Fluids
- ☒ **Production (Post Drilling)**
 - Well Structures & Facilities
- ☐ **Interim Reclamation**
- ☒ **Final Abandonment & Reclamation**