UNORTHODOX LOCATION

ATS-13-1101

Form 3160-3
(March 2012)

OCD Artesia

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014

HIGH CAVEKARST

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SHL-NM7715

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No. NMLC 0067981B, NMNMAA 017534, NMNMAA 017538, NMR 0020528

6. If Indian, Allotee or Tribe Name

TDS 2-28-2014

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. Peterson 7 PM Fed Com #1H <40434>

2. Name of Operator Mewbourne Oil Company <14744>

9. API Well No. 30-015-42124

3a. Address PO Box 5270, Hobbs, NM 88241

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

10. Field and Pool, or Exploratory Red Lake; Glorieta-Yeso (51120)

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

At surface 310' FSL & 640' FWL, Sec. 8 T18S R27E

At proposed prod. zone 350' FSL & 330' FWL, Sec. 7 T18S R27E

11. Sec., T. R. M. or Blk. and Survey or Area Sec. 8 T18S R27E

14. Distance in miles and direction from nearest town or post office* 8 miles SE of Artesia, NM

12. County or Parish Eddy

13. State NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 330'

16. No. of acres in lease 281.61

17. Spacing Unit dedicated to this well 160

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 310' - Jackson #1

19. Proposed Depth 8361' - MD, 2710' - TVD

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

21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3396' - GL

22. Approximate date work will start* 10/07/2013

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 08/07/2013

Title

Approved by *(Signature)* /S/ STEPHEN J. CAFFEY — Name *(Printed/Typed)* — Date FEB 26 2014

Title 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.

(Continued on page 2)

*(Instructions on page 2)

Roswell Controlled Water Basin

SEE ATTACHED FOR CONDITIONS OF APPROVAL

Approval Subject to General Requirements & Special Stipulations Attached

RECEIVED
FEB 28 2014
NMOCD ARTESIA

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 7 day of August, 2013.

Name: NM Young

Signature: B. B FOR NM Young

Position Title: Hobbs District Manager

Address: PO Box 5270, Hobbs NM 88241

Telephone: 575-393-5905

E-mail: myoung@mewbourne.com

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
Phone (575) 393-6161 Fax: (575) 393-0720
DISTRICT II
811 S. First St., Artesia, NM 88210
Phone (575) 748-1283 Fax: (575) 748-9720
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone (505) 334-6178 Fax: (505) 334-6170
DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

Form C-102
Revised August 1, 2011

Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-015-42124	51120	Red Lake; Glorieta - Yeso

Property Code	Property Name	Well Number
40434	PETERSON 7 PM FEDERAL COM	1H

OGRID No.	Operator Name	Elevation
14744	MEWBOURNE OIL COMPANY	3396'

Surface Location

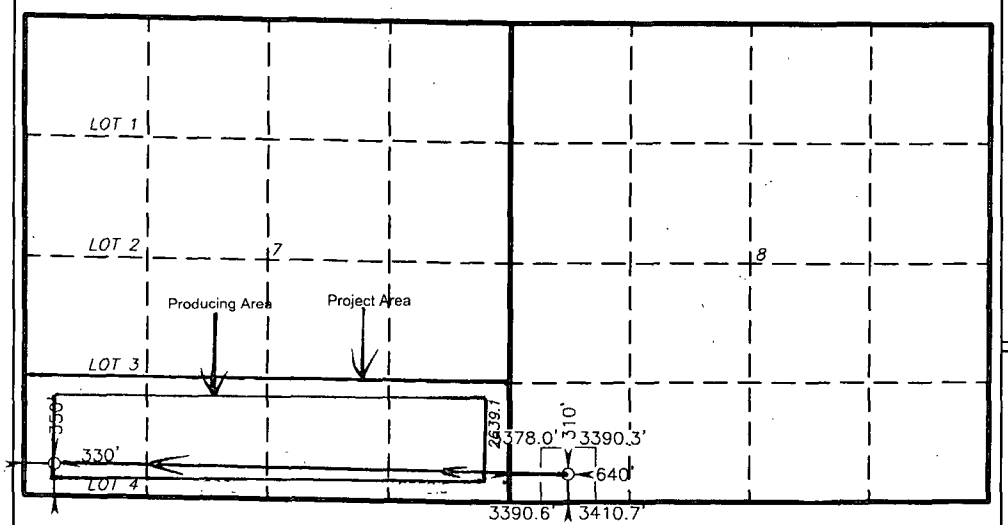
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	8	18 S	27 E		310	SOUTH	640	WEST	EDDY

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
LOT 4	7	18 S	27 E		350	SOUTH	330	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			2-26-14 8361

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



PROPOSED BOTTOM HOLE LOCATION
Lat - N 32°45'22.06"
Long - W 104°19'29.58"
NMSPCE- N 638790.184
E 502597.879
(NAD-27)

SURFACE LOCATION
Lat - N 32°45'20.85"
Long - W 104°18'23.61"
NMSPCE- N 638668.790
E 508230.971
(NAD-27)

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.

Bradley Bishop 8-7-13
Signature Date

BRADLEY BISHOP
Printed Name

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 supervison, and that the same is true and correct to the best of my belief.

JUNE 29, 2012
Date Surveyed

Signature & Seal of Professional Surveyor

GARY L. JONES NEW MEXICO REGISTERED PROFESSIONAL LAND SURVEYOR 7977

W.O. Num. 26876

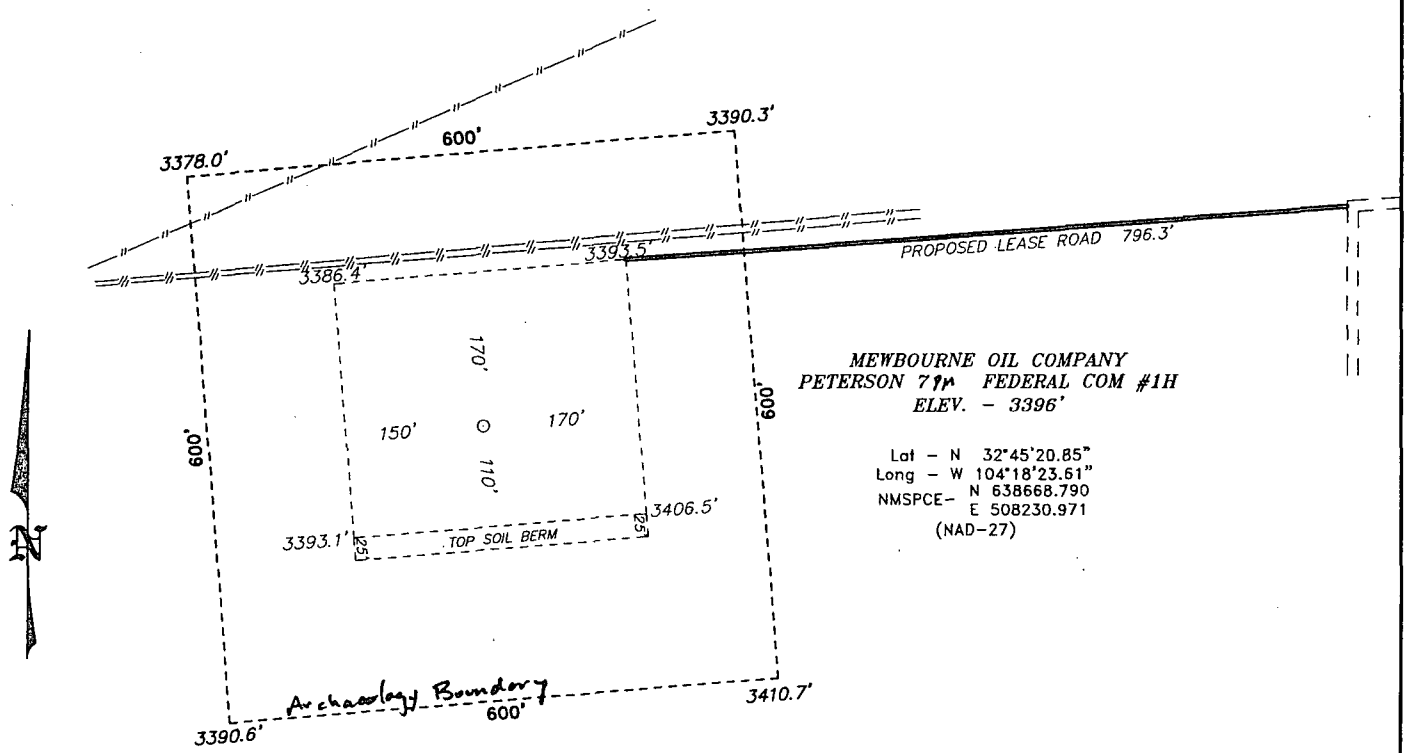
Certificate No. Gary L. Jones 7977

BASIN SURVEYS 26876

EXHIBIT "3"

SECTION 8, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M.,

EDDY COUNTY, NEW MEXICO.



200 0 200 400 FEET

SCALE: 1" = 200'

Directions to Location:

FROM THE JUNCTION OF LITTLE DIAMOND AND CHALK BLUFF, GO SOUTH ON CHALK BLUFF FOR 0.5 MILES TO LEASE ROAD, ON LEASE ROAD GO WESTERLY 0.6 MILES TURNING SOUTH FOR 0.2 MILES THENCE BACK WEST FOR 0.1 MILES TO PROPOSED LEASE ROAD.

MEWBOURNE OIL COMPANY

REF: PETERSON 7 PM FEDERAL COM #1H / WELL PAD TOPO

THE PETERSON 7 PM FEDERAL COM #1H LOCATED 310' FROM THE SOUTH LINE AND 650' FROM THE WEST LINE OF SECTION 8, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.

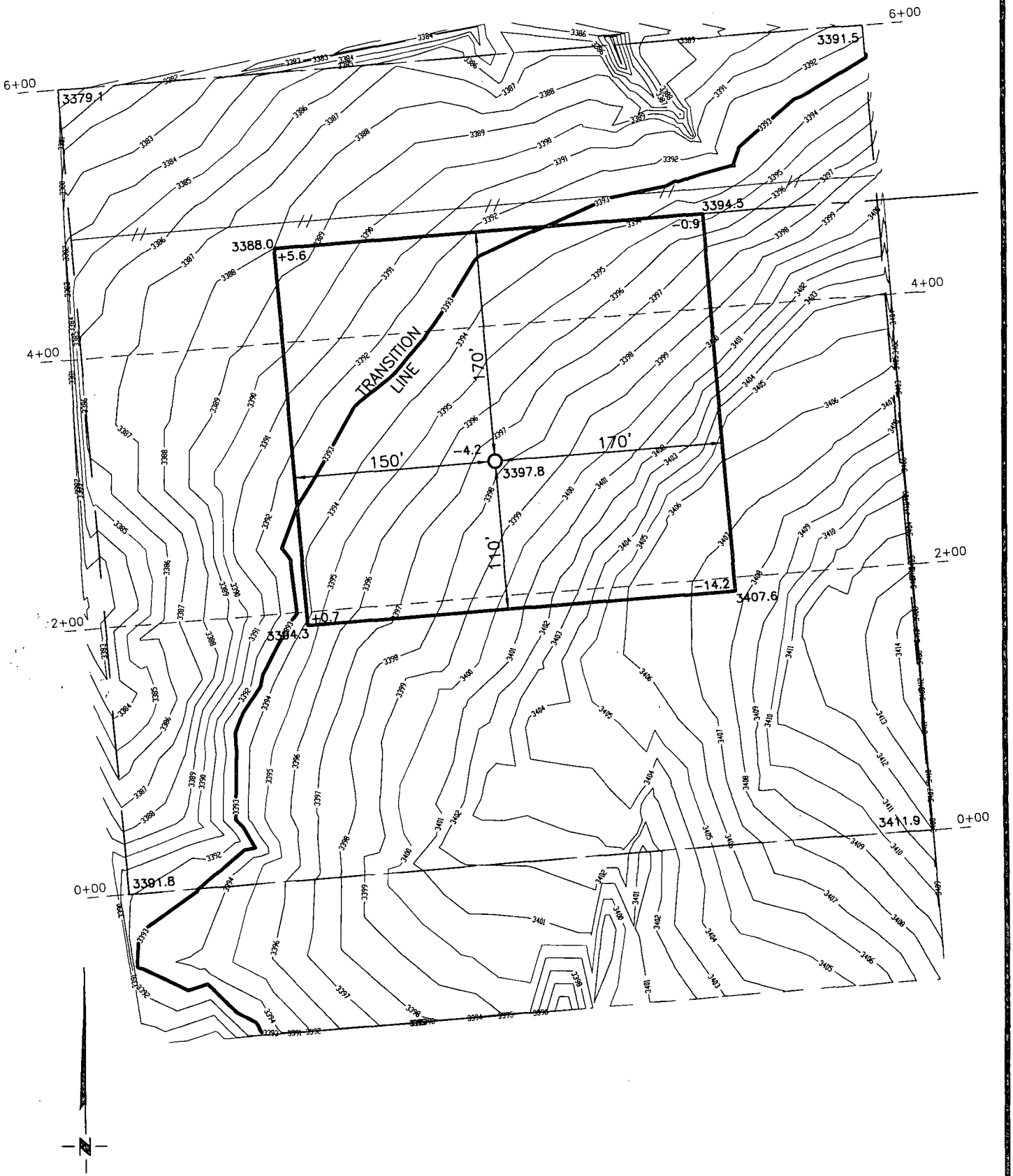
BASIN SURVEYS P.O. BOX 1786 – HOBBS, NEW MEXICO

W.O. Number: 26876	Drawn By: J. SMALL		
Date: 07-02-2012	Disk: JMS 26876	Survey Date: 06-29-2012	Sheet 1 of 1 Sheets

MEWBOURNE OIL COMPANY

PETERSON 7 PM FEDERAL COM. 1H
(310' FSL & 640' FWL)
Section 8, T-18-S, R-27-E,
N. M. P. M., Eddy Co., New Mexico

600 X 600 CROSS SECTIONS



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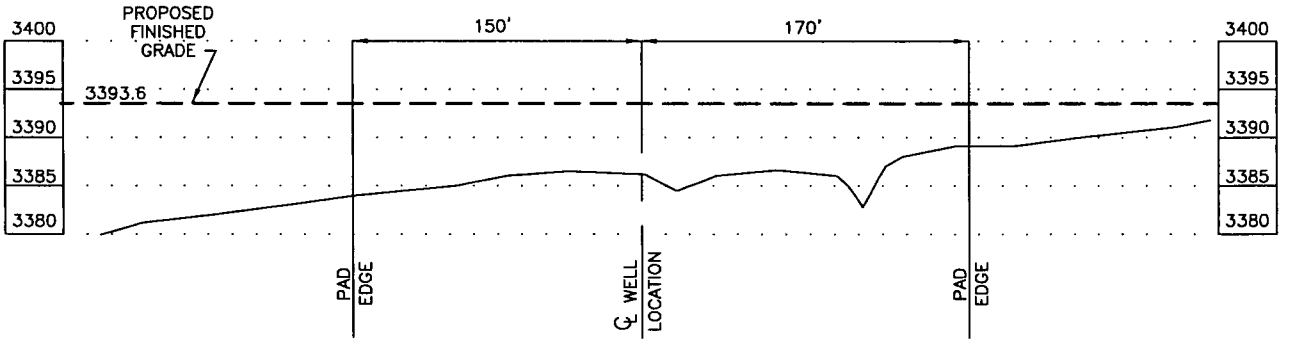
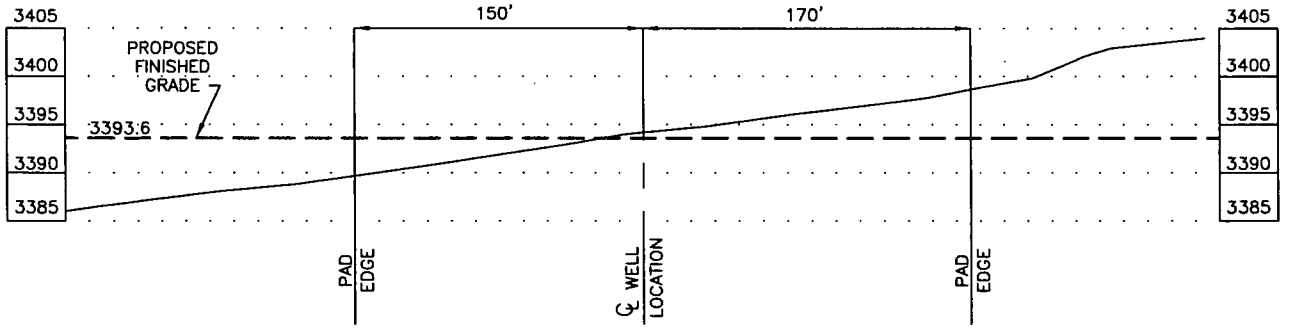
N. M. P. M., Eddy Co., New Mexico

600 X 600 CROSS SECTIONS

STATION 6+00



STATION 4+00



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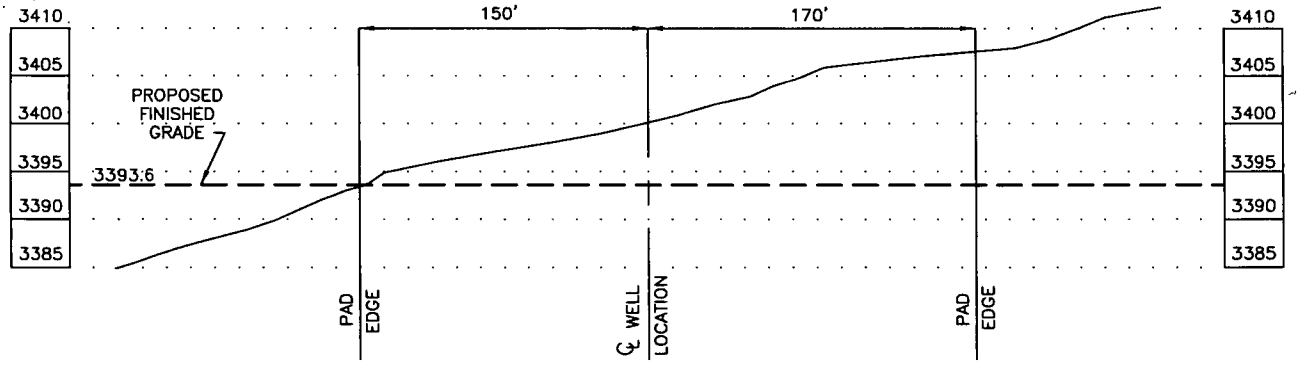

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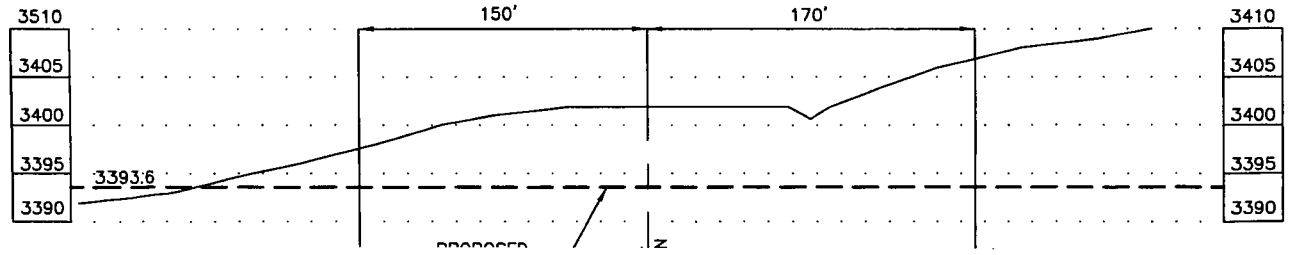

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(310' FSL & 640' FWL)
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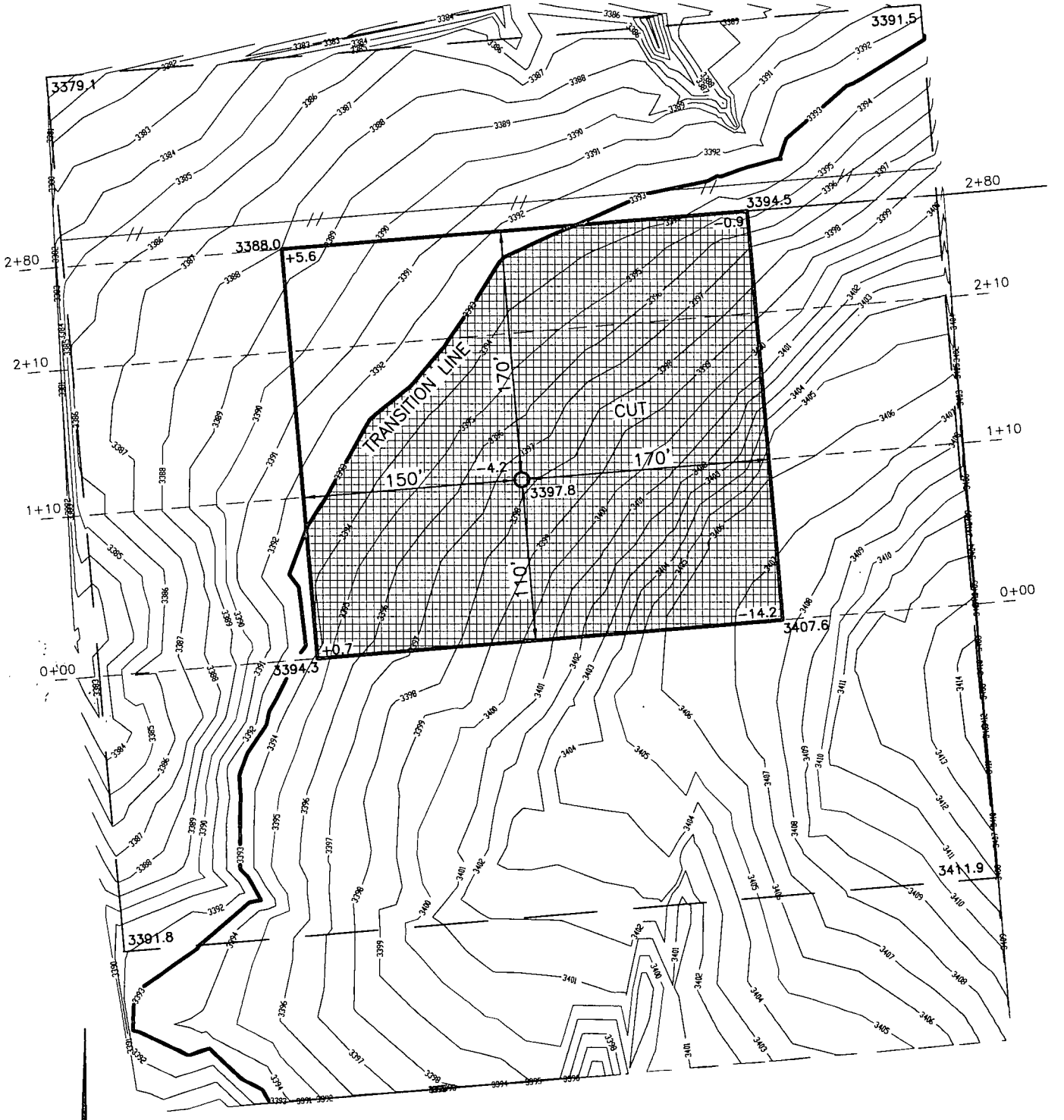
PAD CROSS SECTIONS



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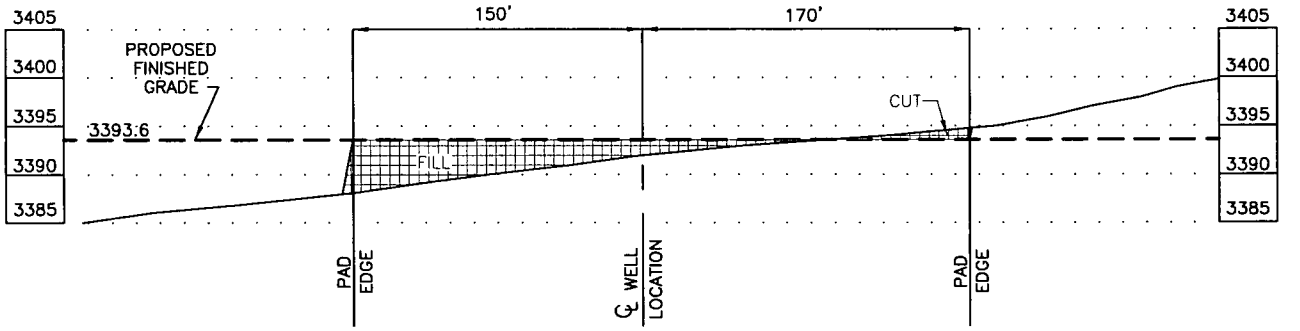
N. M. P. M., Eddy Co., New Mexico

PAD CROSS SECTIONS

STATION 2+80



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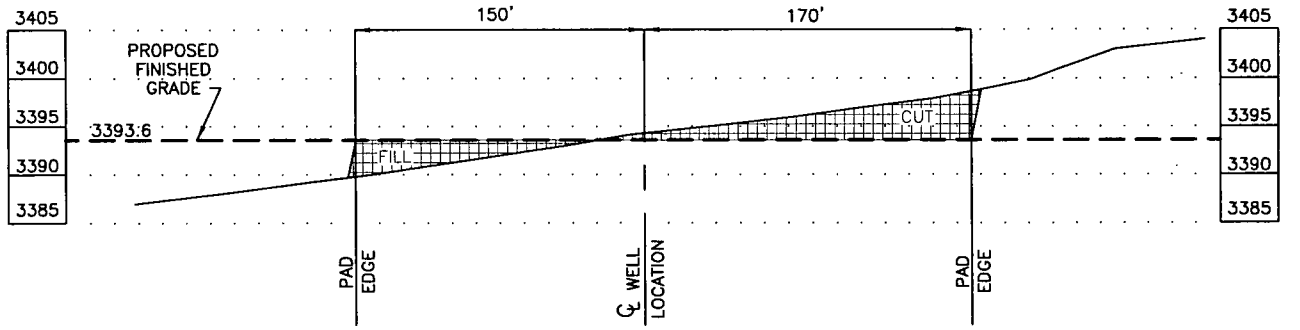

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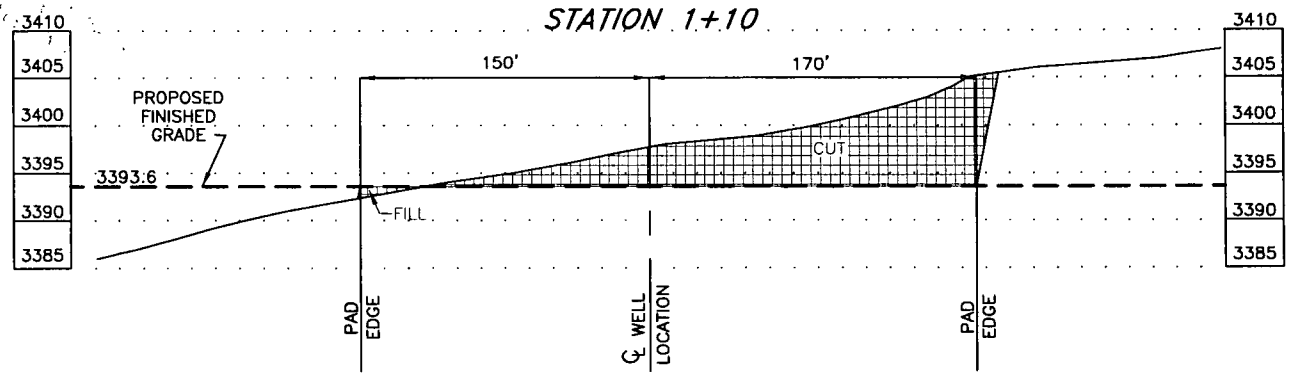

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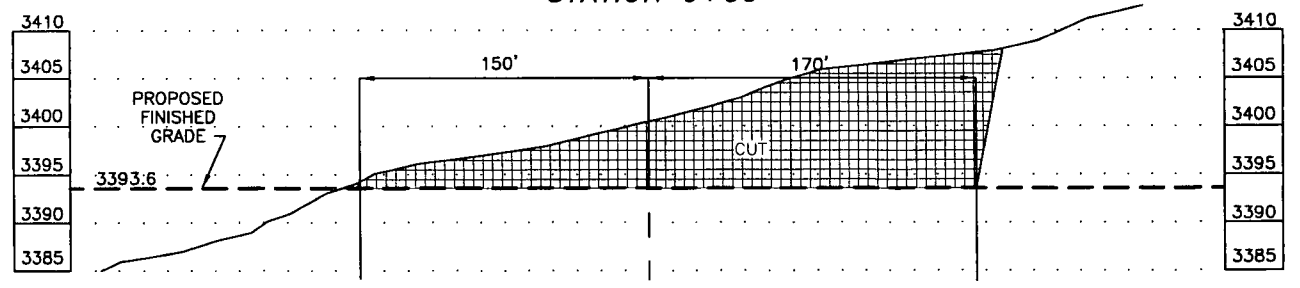
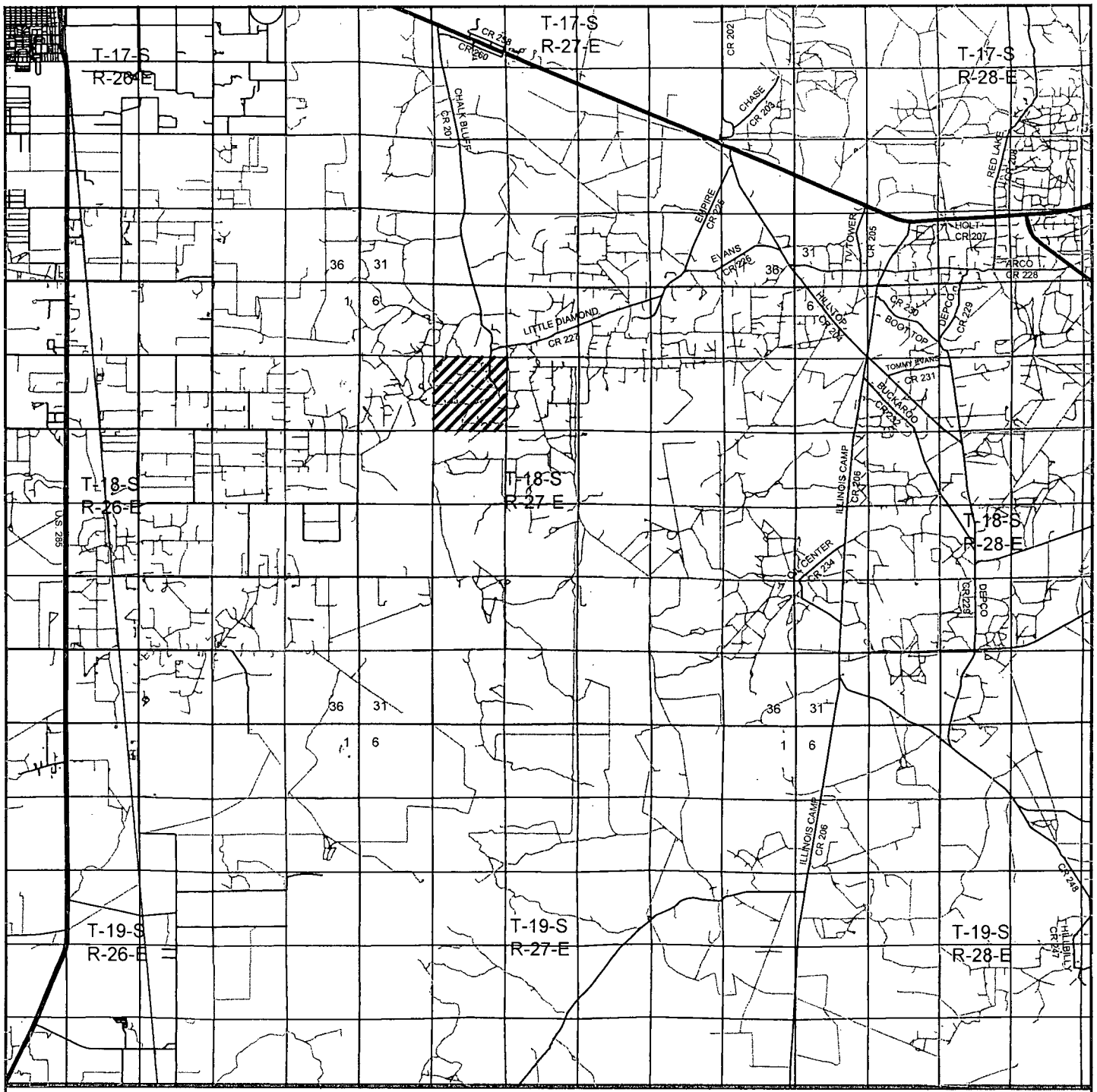


EXHIBIT "3B"



PETERSON 7 PM FEDERAL COM #1H
Located 310' FSL and 640' FWL
Section 8, Township 18 South, Range 27 East,
N.M.P.M., Eddy County, New Mexico.

basin surveys
focused on excellence in the oilfield

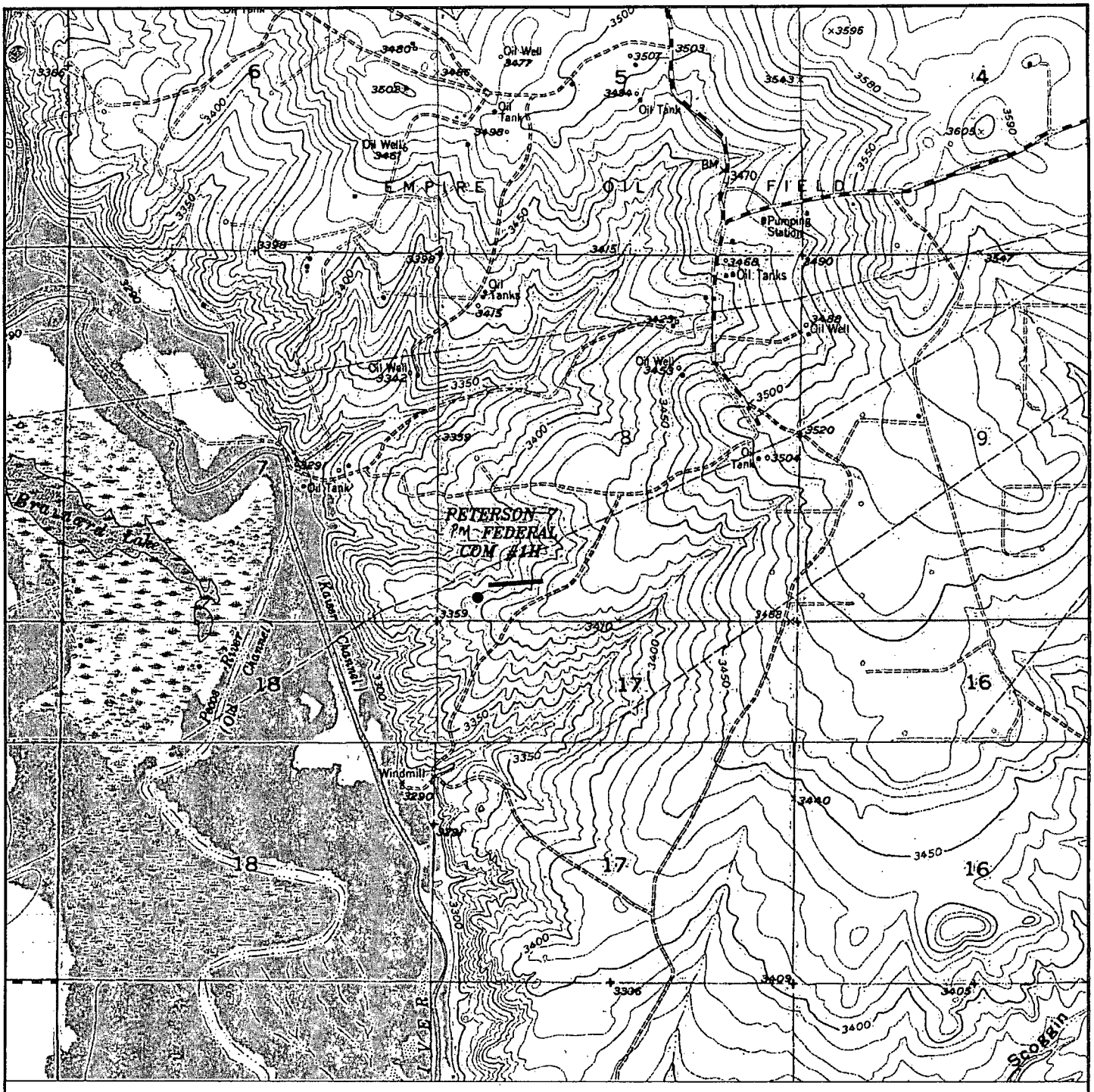
P.O. Box 1786
1120 N. West County Rd.
Hobbs, New Mexico 88241
(575) 393-7316 - Office
(575) 392-2206 - Fax
basinsurveys.com

W.O. Number:	JMS 26876
Survey Date:	06-29-2012
Scale:	1" = 2 Miles
Date:	07-02-2012

N

MEWBOURNE OIL COMPANY

EXHIBIT "3A"



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W.O. Number: JMS 26876
Survey Date: 06-29-2012
Scale: 1" = 2000'
Date: 07-02-2012

N

MEWBOURNE OIL COMPANY

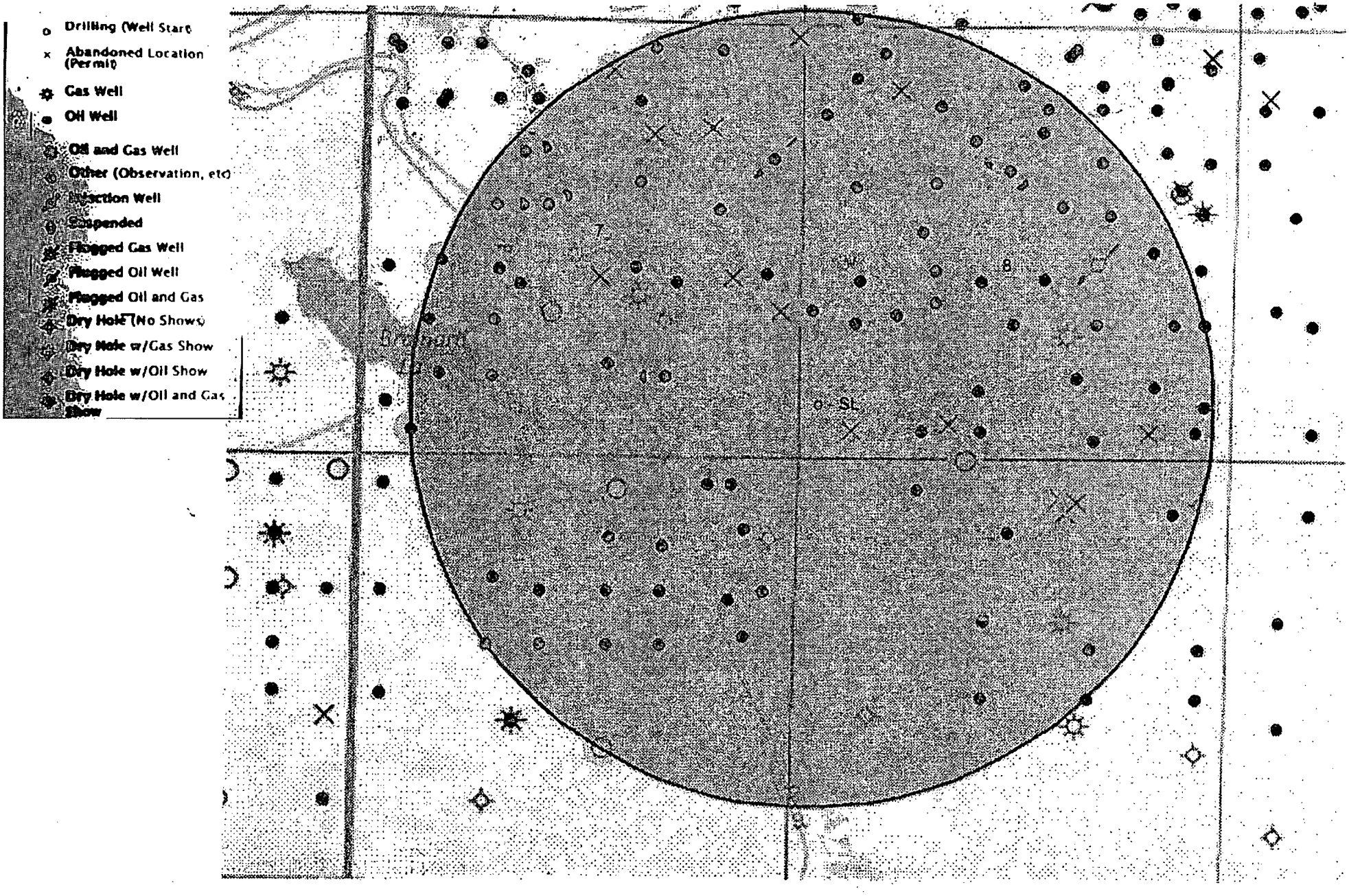


EXHIBIT "4" - Peterson 7 PM Fed Com #1H - SL - 310' FSL & 640' FWL, Sec. 8 T18S R27E

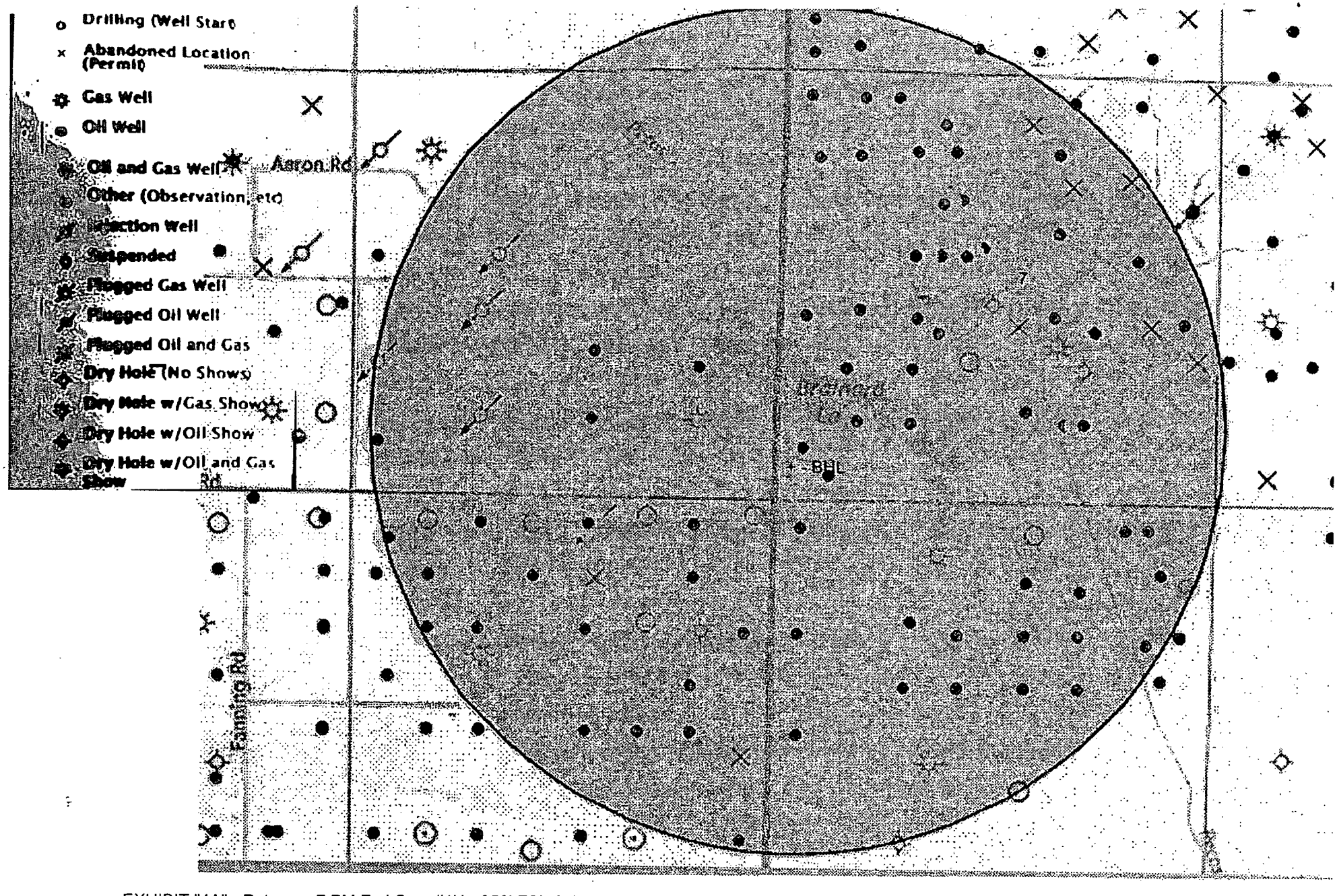
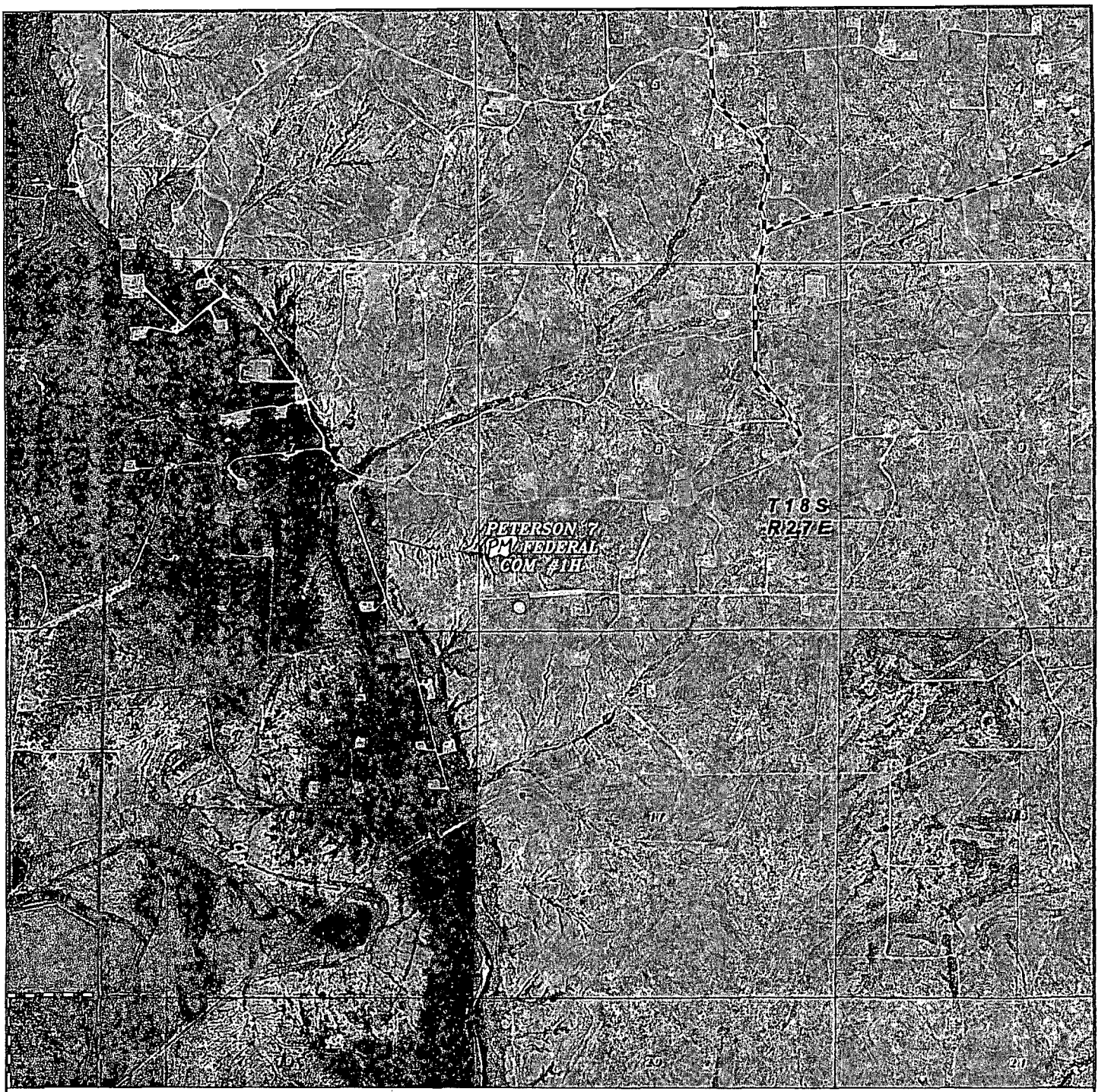


EXHIBIT "4A" - Peterson 7 PM Fed Com #1H - 350' FSL & 330' FWL, Sec. 7 T18S R27E, Eddy Co. NM

EXHIBIT "3C"



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basinsurveys.com

W.O. Number: JMS 26876

Scale: 1" = 2000'

YELLOW TINT - USA LAND
BLUE TINT - STATE LAND
NATURAL COLOR - FEE LAND

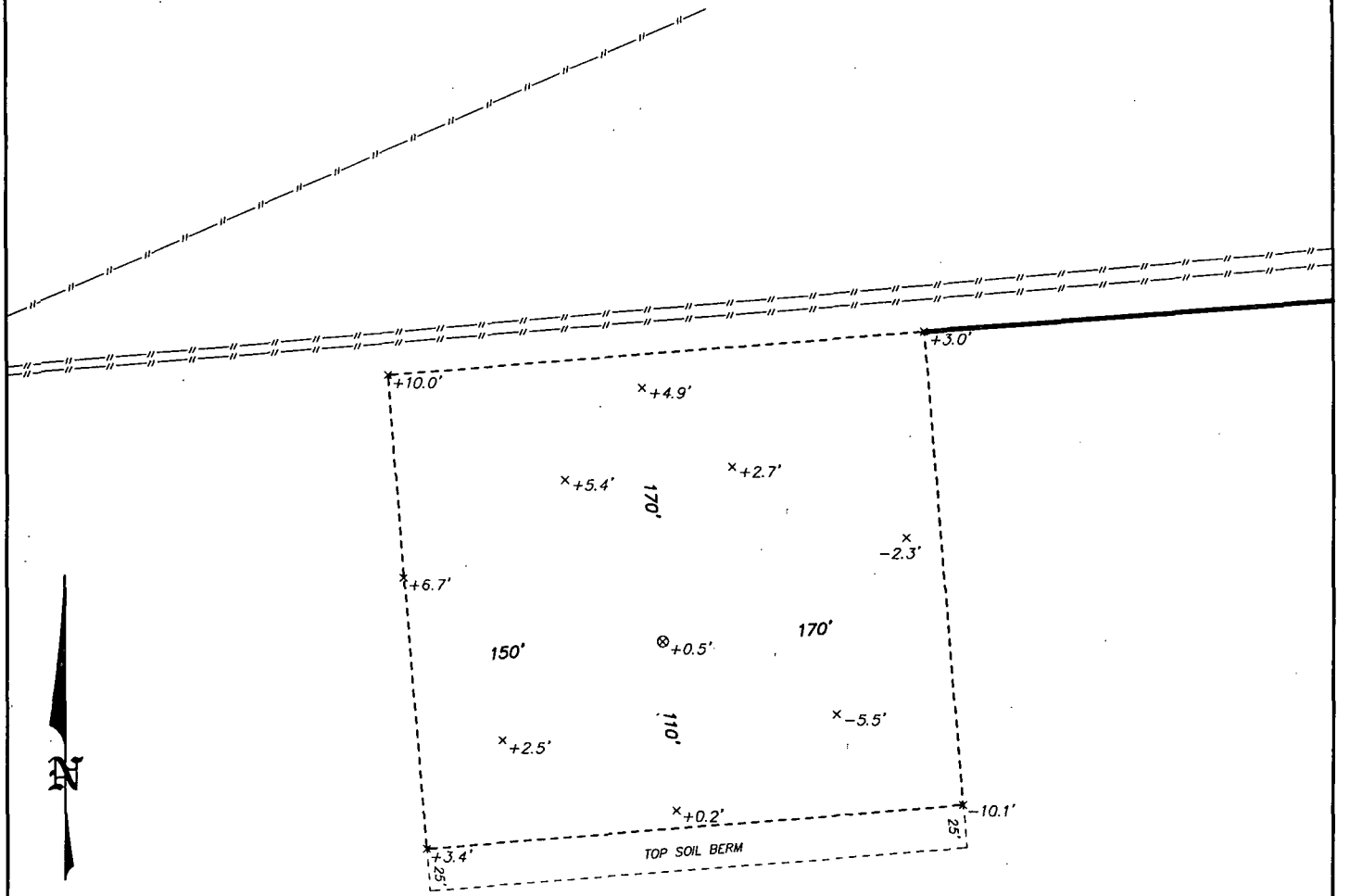
N

MEWBOURNE OIL COMPANY

CUT & FILL DIAGRAM

SECTION 8, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M.,

EDDY COUNTY, **NEW MEXICO.**



200 0 200 400 FEET

SCALE: 1" = 200'

Directions to Location:

FROM THE JUNCTION OF LITTLE DIAMOND AND CHALK BLUFF, GO SOUTH ON CHALK BLUFF FOR 0.5 MILES TO LEASE ROAD, ON LEASE ROAD GO WESTERLY 0.6 MILES TURNING SOUTH FOR 0.2 MILES THENCE BACK WEST FOR 0.1 MILES TO PROPOSED LEASE ROAD.

MEWBOURNE OIL COMPANY

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W.O. Number: 26876	Drawn By: J. SMALL		
Date: 07-02-2012	Disk: JMS 26876	Survey Date: 06-29-2012	Sheet 1 of 1 Sheets

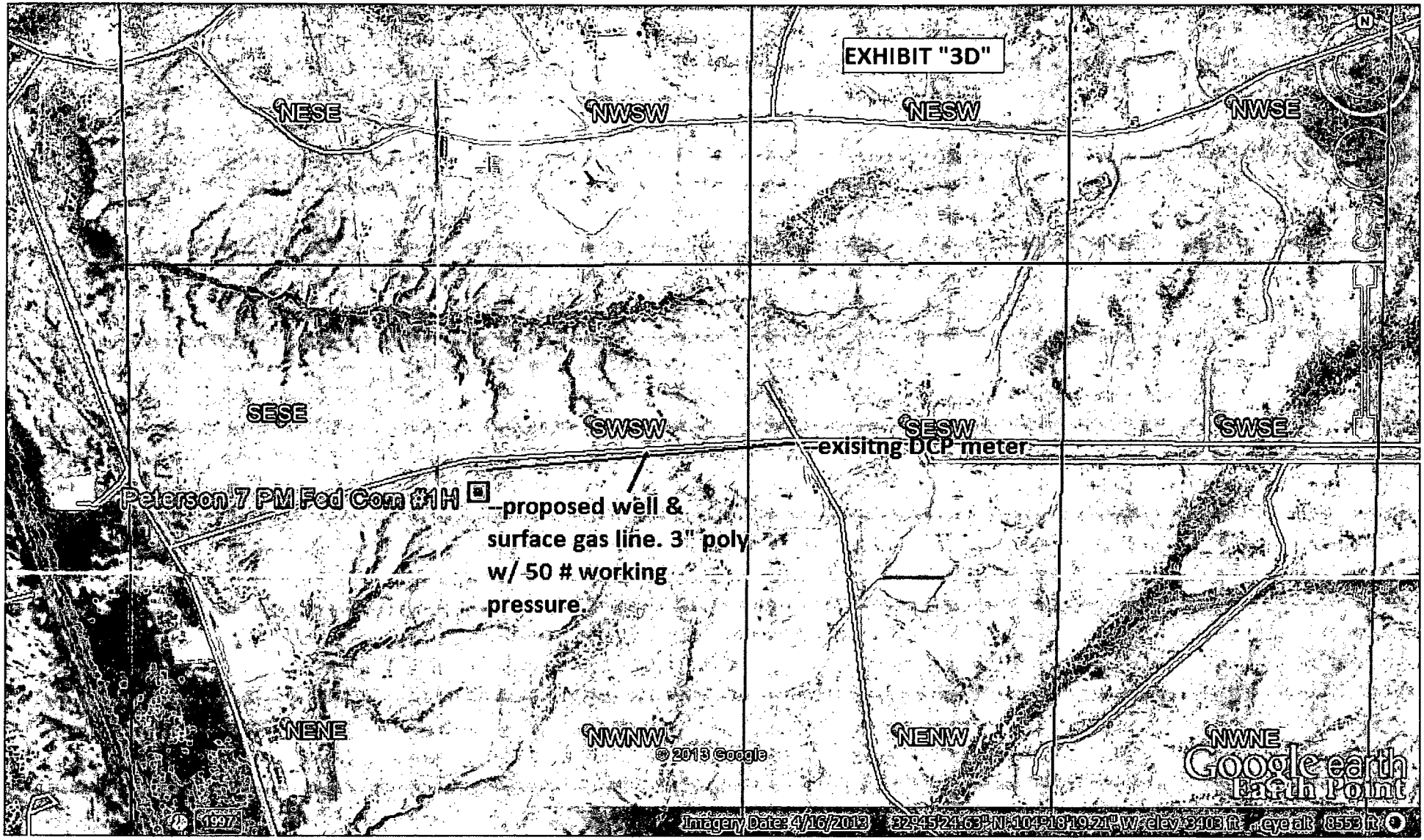


EXHIBIT "3D"
NESE
NWSW
NESW
NWSE
SESE
SWSW
SESW
SWSE
exisitng DCP meter
Peterson 7 PM Fed Com #1H
--proposed well & surface gas line. 3" poly w/ 50 # working pressure.
NENE
NWNW
NENW
NWNE
© 2013 Google
Google earth
Earth Point
Imagery Date: 4/16/2013 32°45'24.63" N 104°18'19.21" W elev 3403 ft eye alt 8553 ft

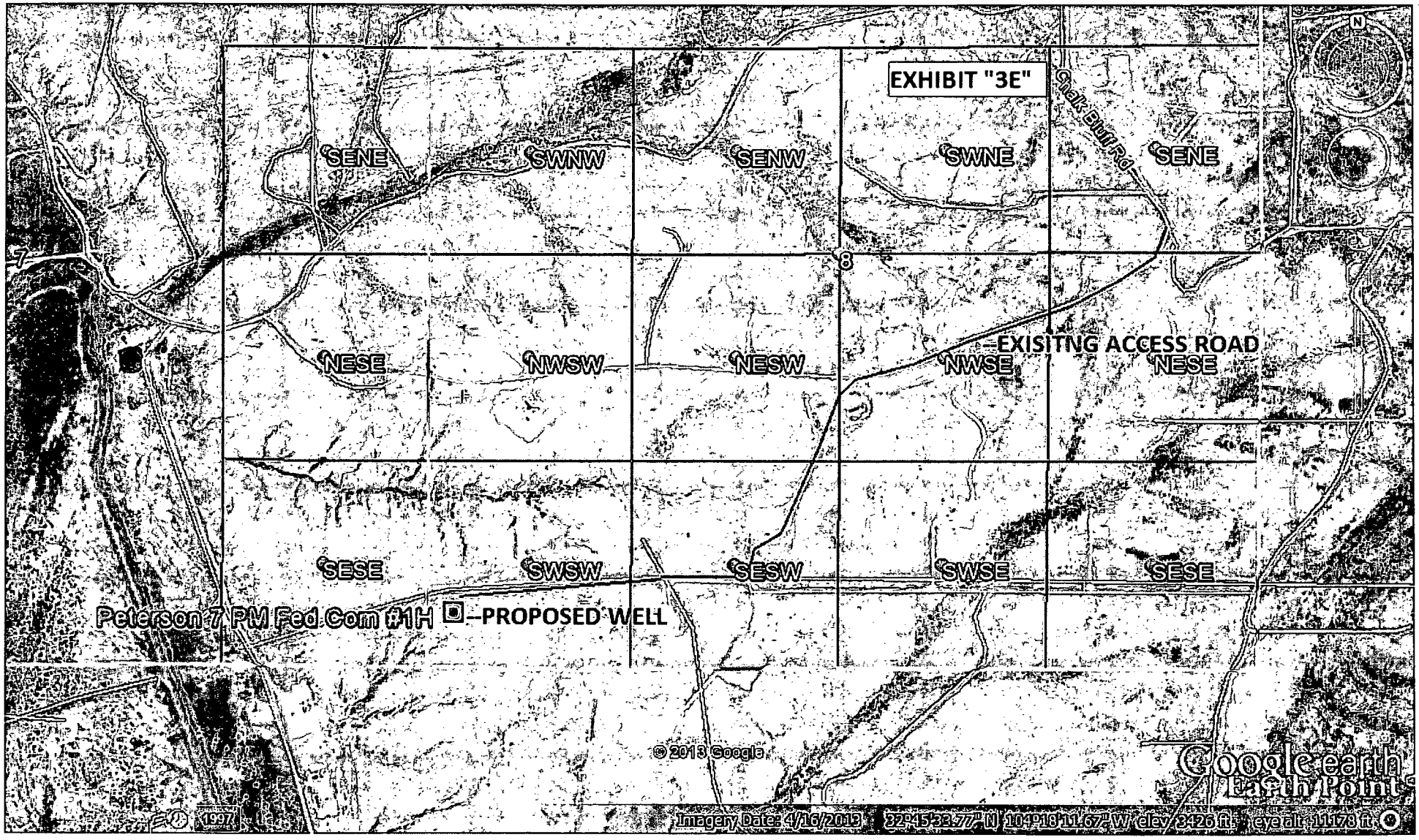


EXHIBIT "3E"
Clark Bluff Rd
SENE
SWNW
SENW
SWNE
SENE
7
8
NESE
NWSW
NESW
NWSE
NESE
EXISITNG ACCESS ROAD
SESE
SWSW
SESW
SWSE
SESE
Peterson 7 PM Fed Com #1H
PROPOSED WELL
© 2013 Google
Google earth
Earth Point
1997
Imagery Date: 4/16/2012
32°45'33.77" N 104°18'11.67" W elev 3426 ft
eye alt 11178 ft

Drilling Program
Mewbourne Oil Company
Peterson "7" PM Fed Com #1H
310' FSL & 640' FWL (SHL)
Sec 8 T18S R27E
Eddy County, New Mexico

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

Yates	50'
Queen	405'
Grayburg	790'
*San Andres	1060'
*Glorietta	2415'
*Yeso	2545'

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

Water	Fresh water is anticipated @ 40'-230' and will be protected by setting surface casing at 350' 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 BOP will be installed after running 9 5/8" & 7" casing. Pressure tests will be conducted and BOPE will remain in use until completion of drilling operations. The BOP will be inspected and operated daily to ensure mechanical integrity and the inspection will be recorded on the daily drilling report.
See COA
Will test the BOPE to 1500# with a third party testing company before drilling below shoe as per BLM Onshore Oil and Gas Order #2.

4. MOC proposes to drill a vertical wellbore to 2449' & kick off to horizontal @ 2926' TVD. The well will be drilled to 8361' MD (2710' TVD). See attached directional plan.

5. Proposed casing and cementing program:

A. Casing Program:

Hole Size	Casing	Wt/Ft.	Grade	Depth	Jt Type
12 ¼"	9 ⅝" (new)	36#	J55	0'-350'	ST&C
8 ¾"	7" (new)	26#	J55	0'-2449'	LT&C
8 ¾"	7" (new)	26#	J55	2449'-3219'	BT&C
6 1/8"	4 ½" (new)	11.6#	J55	3019'-8361' MD	LT&C

1st perforation will be at least 50' from 7" casing.

Minimum casing design factors: Collapse 1.125, Burst 1.0, Tensile strength 1.8.
*Subject to availability of casing.

B. Cementing Program:

i. Surface Casing: 200 sacks class "C" w/ 2% CaCl2. Yield at 1.34 cuft/sk. Cmt circulated to surface with 100% excess.

See COA ii. Production Casing: 460 sacks Class "C" cement Yield at 1.33 cuft/sk. Cmt circulated to surface with 25% excess.

iii. 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 light 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.

6. Mud Program:

Interval	Type System	Weight	Viscosity	Fluid Loss
0'-350'	FW spud mud	8.6-9.0	32-34	NA
350'-3219'	Fresh water w/ FW mud sweeps	8.4-8.6	28-30	NA
3219'- TD	FW w/Polymer	8.5-8.7	32-35	20

7. Evaluation Program:

Samples:	10' samples from surface casing to TD.
Logging:	Gyro, CN,& GR Surface to KOP-100' (2349'). GR 2349' to TD.

8. Downhole Conditions

See COA

Zones of abnormal pressure:	None anticipated
Zones of lost circulation:	Anticipated in surface hole
Maximum bottom hole temperature:	100 degree F
Maximum bottom hole pressure:	8.4 lbs/gal gradient or less (.43668 x 2926' =1269 psi)

9. Anticipated Starting Date:

Mewbourne Oil Company intends to drill this well as soon as possible after receiving approval with approximately 15 days involved in drilling operations and an additional 20 days involved in completion operations on the project.

Mewbourne Oil Co

Eddy County, New Mexico
Sec 8, T18S, R27E
Peterson 7 PM Federal Com #1H

Wellbore #1

Plan: Design #2

DDC Well Planning Report

22 July, 2013

The DIRECTIONAL DRILLING COMPANY

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Peterson 7 PM Federal Com #1H
Company:	Mewbourne Oil Co	TVD Reference:	WELL @ 3416.0usft (Patterson-UTI)
Project:	Eddy County, New Mexico	MD Reference:	WELL @ 3416.0usft (Patterson-UTI)
Site:	Sec 8, T18S, R27E	North Reference:	Grid
Well:	Peterson 7 PM Federal Com #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

Project Eddy County, New Mexico

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 Sec 8, T18S, R27E

Site Position:		Northing:	640,151.35 usft	Latitude:	32° 45' 35.520 N
From:	Map	Easting:	507,742.98 usft	Longitude:	104° 18' 29.324 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.01 °

Well Peterson 7 PM Federal Com #1H

Well Position	+N/-S	-1,482.6 usft	Northing:	638,668.79 usft	Latitude:	32° 45' 20.848 N
	+E/-W	488.0 usft	Easting:	508,230.97 usft	Longitude:	104° 18' 23.614 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	3,396.0 usft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/19/2013	7.71	60.50	48,645

Design Design #2

Audit Notes:

Version:		Phase:	PLAN	Tie On Depth:	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	271.23

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,449.0	0.00	0.00	2,449.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,219.1	92.41	273.53	2,926.0	30.6	-496.6	12.00	12.00	0.00	273.53	
3,282.4	92.41	271.00	2,923.4	33.1	-559.8	4.00	0.00	-4.00	-89.99	
8,360.9	92.41	271.00	2,710.0	121.4	-5,633.1	0.00	0.00	0.00	0.00	PBHL - Peterson 7 PM

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Peterson 7 PM Federal Com #1H
Company:	Mewbourne Oil Co	TVD Reference:	WELL @ 3416.0usft (Patterson-UTI)
Project:	Eddy County, New Mexico	MD Reference:	WELL @ 3416.0usft (Patterson-UTI)
Site:	Sec 8, T18S, R27E	North Reference:	Grid
Well:	Peterson 7 PM Federal Com #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
Build @ 12°/100'									
2,449.0	0.00	0.00	2,449.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	6.12	273.53	2,499.9	0.2	-2.7	2.7	12.00	12.00	0.00
2,600.0	18.12	273.53	2,597.5	1.5	-23.6	23.7	12.00	12.00	0.00
2,700.0	30.12	273.53	2,688.6	4.0	-64.3	64.4	12.00	12.00	0.00
2,800.0	42.12	273.53	2,769.2	7.6	-123.1	123.2	12.00	12.00	0.00
2,900.0	54.12	273.53	2,835.9	12.2	-197.3	197.5	12.00	12.00	0.00
3,000.0	66.12	273.53	2,885.6	17.5	-283.6	283.9	12.00	12.00	0.00
3,100.0	78.12	273.53	2,916.2	23.3	-378.5	378.9	12.00	12.00	0.00
3,200.0	90.12	273.53	2,926.5	29.5	-477.6	478.1	12.00	12.00	0.00
EOB @ 92.41° Inc / 273.53° Azm / 2926' TVD / Turn @ 4°/100'									
3,219.1	92.41	273.53	2,926.0	30.6	-496.6	497.1	12.00	12.00	0.00
EOT @ 92.41° Inc / 271° Azm									
3,282.4	92.41	271.00	2,923.4	33.1	-559.8	560.3	4.00	0.00	-4.00
3,300.0	92.41	271.00	2,922.6	33.4	-577.4	578.0	0.00	0.00	0.00
3,400.0	92.41	271.00	2,918.4	35.2	-677.3	677.9	0.00	0.00	0.00
3,500.0	92.41	271.00	2,914.2	36.9	-777.2	777.8	0.00	0.00	0.00
3,600.0	92.41	271.00	2,910.0	38.7	-877.1	877.7	0.00	0.00	0.00
3,700.0	92.41	271.00	2,905.8	40.4	-977.0	977.6	0.00	0.00	0.00
3,800.0	92.41	271.00	2,901.6	42.1	-1,076.9	1,077.5	0.00	0.00	0.00
3,900.0	92.41	271.00	2,897.4	43.9	-1,176.8	1,177.4	0.00	0.00	0.00
4,000.0	92.41	271.00	2,893.2	45.6	-1,276.7	1,277.3	0.00	0.00	0.00
4,100.0	92.41	271.00	2,889.0	47.3	-1,376.6	1,377.3	0.00	0.00	0.00
4,200.0	92.41	271.00	2,884.8	49.1	-1,476.5	1,477.2	0.00	0.00	0.00
4,300.0	92.41	271.00	2,880.6	50.8	-1,576.4	1,577.1	0.00	0.00	0.00
4,400.0	92.41	271.00	2,876.4	52.6	-1,676.2	1,677.0	0.00	0.00	0.00
4,500.0	92.41	271.00	2,872.2	54.3	-1,776.1	1,776.9	0.00	0.00	0.00
4,600.0	92.41	271.00	2,868.0	56.0	-1,876.0	1,876.8	0.00	0.00	0.00
4,700.0	92.41	271.00	2,863.8	57.8	-1,975.9	1,976.7	0.00	0.00	0.00
4,800.0	92.41	271.00	2,859.6	59.5	-2,075.8	2,076.6	0.00	0.00	0.00
4,900.0	92.41	271.00	2,855.4	61.2	-2,175.7	2,176.5	0.00	0.00	0.00
5,000.0	92.41	271.00	2,851.2	63.0	-2,275.6	2,276.5	0.00	0.00	0.00
5,100.0	92.41	271.00	2,847.0	64.7	-2,375.5	2,376.4	0.00	0.00	0.00
5,200.0	92.41	271.00	2,842.8	66.5	-2,475.4	2,476.3	0.00	0.00	0.00
5,300.0	92.41	271.00	2,838.6	68.2	-2,575.3	2,576.2	0.00	0.00	0.00
5,400.0	92.41	271.00	2,834.4	69.9	-2,675.2	2,676.1	0.00	0.00	0.00
5,500.0	92.41	271.00	2,830.2	71.7	-2,775.1	2,776.0	0.00	0.00	0.00
5,600.0	92.41	271.00	2,826.0	73.4	-2,875.0	2,875.9	0.00	0.00	0.00
5,700.0	92.41	271.00	2,821.8	75.1	-2,974.9	2,975.8	0.00	0.00	0.00
5,800.0	92.41	271.00	2,817.6	76.9	-3,074.8	3,075.7	0.00	0.00	0.00
5,900.0	92.41	271.00	2,813.4	78.6	-3,174.7	3,175.7	0.00	0.00	0.00
6,000.0	92.41	271.00	2,809.2	80.4	-3,274.6	3,275.6	0.00	0.00	0.00
6,100.0	92.41	271.00	2,805.0	82.1	-3,374.5	3,375.5	0.00	0.00	0.00
6,200.0	92.41	271.00	2,800.8	83.8	-3,474.4	3,475.4	0.00	0.00	0.00
6,300.0	92.41	271.00	2,796.6	85.6	-3,574.3	3,575.3	0.00	0.00	0.00
6,400.0	92.41	271.00	2,792.4	87.3	-3,674.2	3,675.2	0.00	0.00	0.00
6,500.0	92.41	271.00	2,788.2	89.1	-3,774.1	3,775.1	0.00	0.00	0.00
6,600.0	92.41	271.00	2,784.0	90.8	-3,874.0	3,875.0	0.00	0.00	0.00
6,700.0	92.41	271.00	2,779.8	92.5	-3,973.9	3,974.9	0.00	0.00	0.00
6,800.0	92.41	271.00	2,775.6	94.3	-4,073.8	4,074.9	0.00	0.00	0.00
6,900.0	92.41	271.00	2,771.4	96.0	-4,173.7	4,174.8	0.00	0.00	0.00
7,000.0	92.41	271.00	2,767.2	97.7	-4,273.6	4,274.7	0.00	0.00	0.00
7,100.0	92.41	271.00	2,763.0	99.5	-4,373.5	4,374.6	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Peterson 7 PM Federal Com #1H
Company:	Mewbourne Oil Co	TVD Reference:	WELL @ 3416.0usft (Patterson-UTI)
Project:	Eddy County, New Mexico	MD Reference:	WELL @ 3416.0usft (Patterson-UTI)
Site:	Sec 8, T18S, R27E	North Reference:	Grid
Well:	Peterson 7 PM Federal Com #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,200.0	92.41	271.00	2,758.8	101.2	-4,473.4	4,474.5	0.00	0.00	0.00
7,300.0	92.41	271.00	2,754.6	103.0	-4,573.2	4,574.4	0.00	0.00	0.00
7,400.0	92.41	271.00	2,750.4	104.7	-4,673.1	4,674.3	0.00	0.00	0.00
7,500.0	92.41	271.00	2,746.2	106.4	-4,773.0	4,774.2	0.00	0.00	0.00
7,600.0	92.41	271.00	2,742.0	108.2	-4,872.9	4,874.1	0.00	0.00	0.00
7,700.0	92.41	271.00	2,737.8	109.9	-4,972.8	4,974.0	0.00	0.00	0.00
7,800.0	92.41	271.00	2,733.6	111.6	-5,072.7	5,074.0	0.00	0.00	0.00
7,900.0	92.41	271.00	2,729.4	113.4	-5,172.6	5,173.9	0.00	0.00	0.00
8,000.0	92.41	271.00	2,725.2	115.1	-5,272.5	5,273.8	0.00	0.00	0.00
8,100.0	92.41	271.00	2,721.0	116.9	-5,372.4	5,373.7	0.00	0.00	0.00
8,200.0	92.41	271.00	2,716.8	118.6	-5,472.3	5,473.6	0.00	0.00	0.00
8,300.0	92.41	271.00	2,712.6	120.3	-5,572.2	5,573.5	0.00	0.00	0.00
8,360.9	92.41	271.00	2,710.0	121.4	-5,633.1	5,634.4	0.00	0.00	0.00

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL - Peterson 7 PM F - plan hits target center - Point	0.00	0.00	2,710.0	121.4	-5,633.1	638,790.19	502,597.88	32° 45' 22.059 N	104° 19' 29.578 W

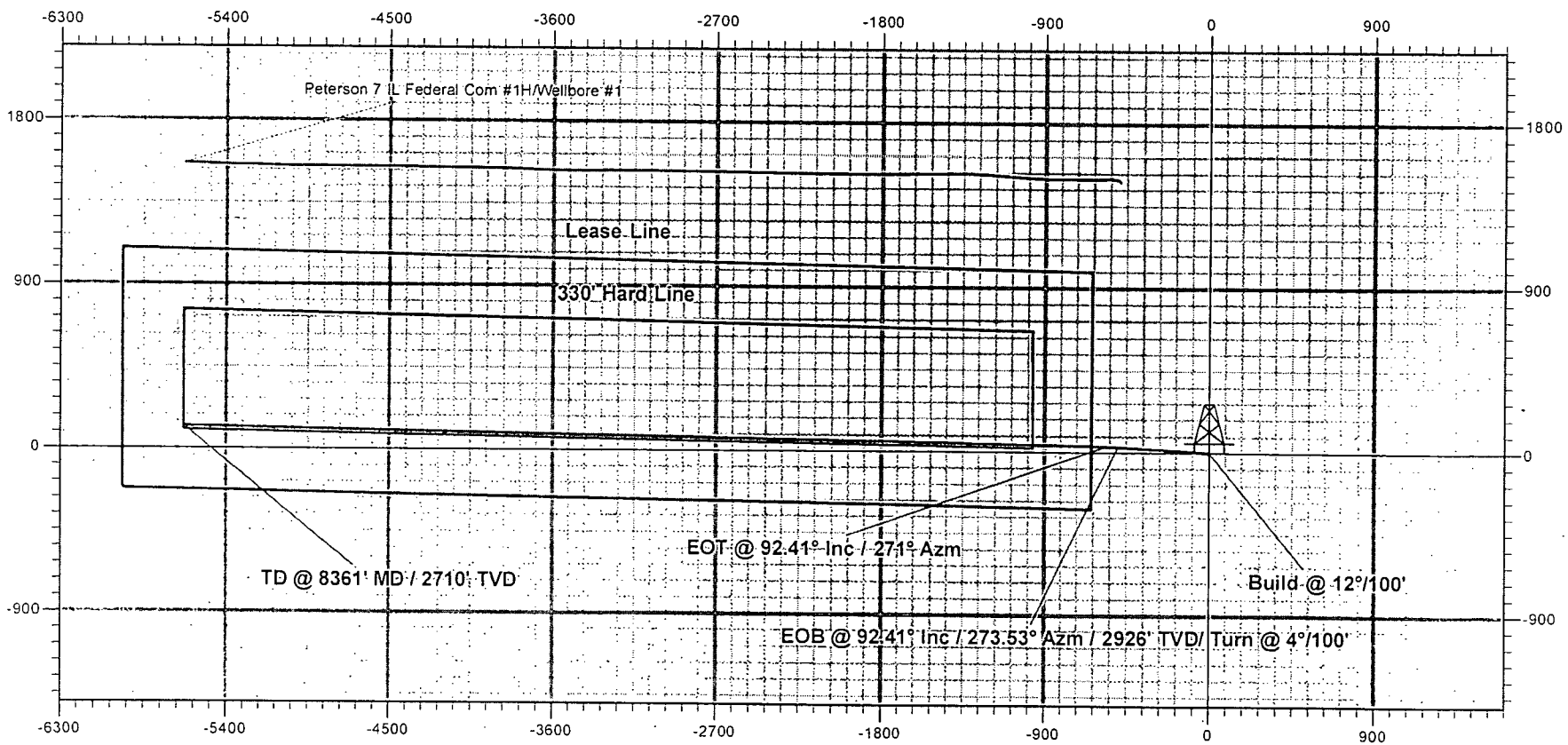
Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
2,449.0	2,449.0	0.0	0.0	Build @ 12°/100'
3,219.1	2,926.0	30.6	-496.6	EOB @ 92.41° Inc / 273.53° Azm / 2926' TVD/ Turn @ 4°/100'
3,282.4	2,923.4	33.1	-559.8	EOT @ 92.41° Inc / 271° Azm
8,360.9	2,710.0	121.4	-5,633.1	TD @ 8361' MD / 2710' TVD

Mewbourne Oil Company

Eddy County, New Mexico
Peterson 7 PM Federal Com #1H
Quote 130634
Design #2

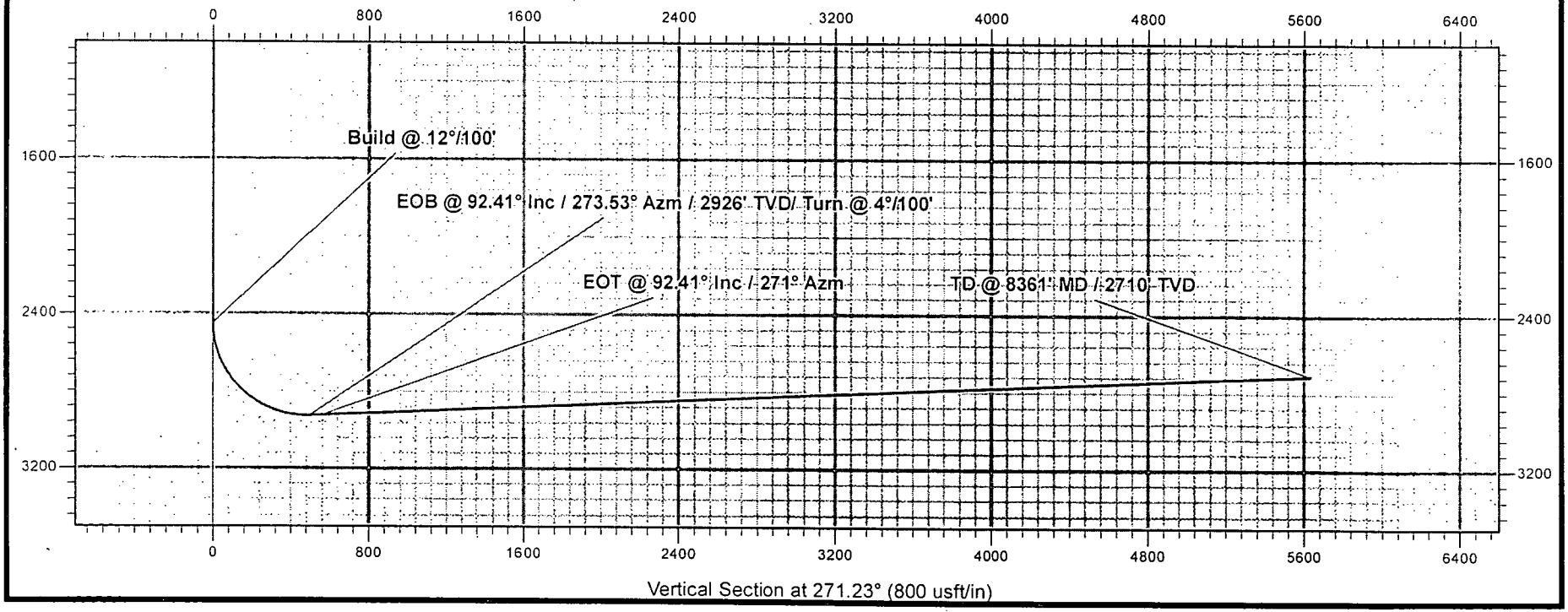
The DIRECTIONAL DRILLING COMPANY



Mewbourne Oil Company

Eddy County, New Mexico
Peterson 7 PM Federal Com #1H
Quote 130634
Design #2

DDC
The DIRECTIONAL DRILLING COMPANY



11" 2M BOPE & Closed Loop Equipment Schematic

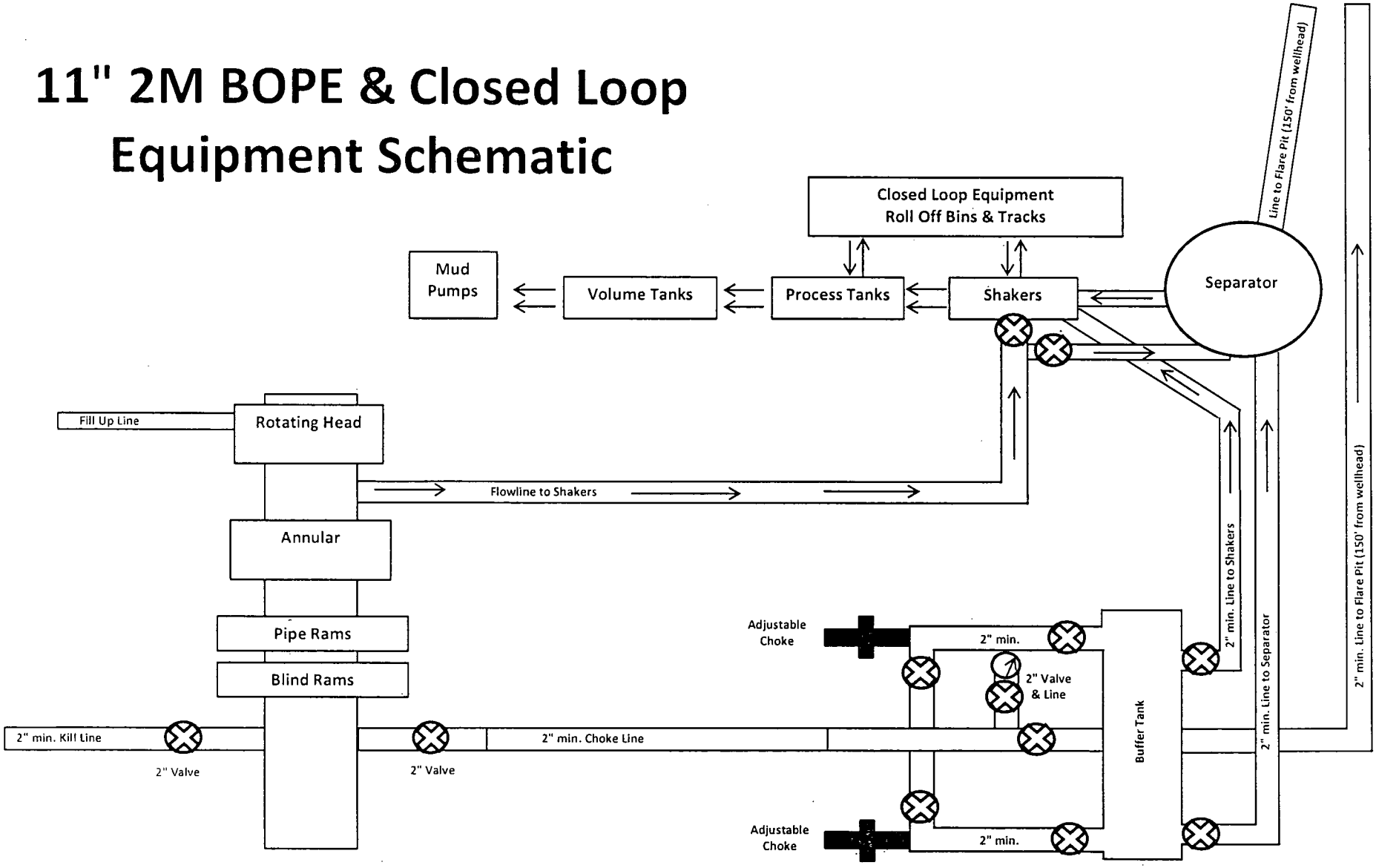


Exhibit 2
Well Name: Peterson 7 MP Fed Com #1H

Notes Regarding Blowout Preventer

Mewbourne Oil Company

Peterson 7 PM Fed Com #1H
310' FSL & 640' FWL (SHL)
Sec 8 T18S R27E
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.

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 2000 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.

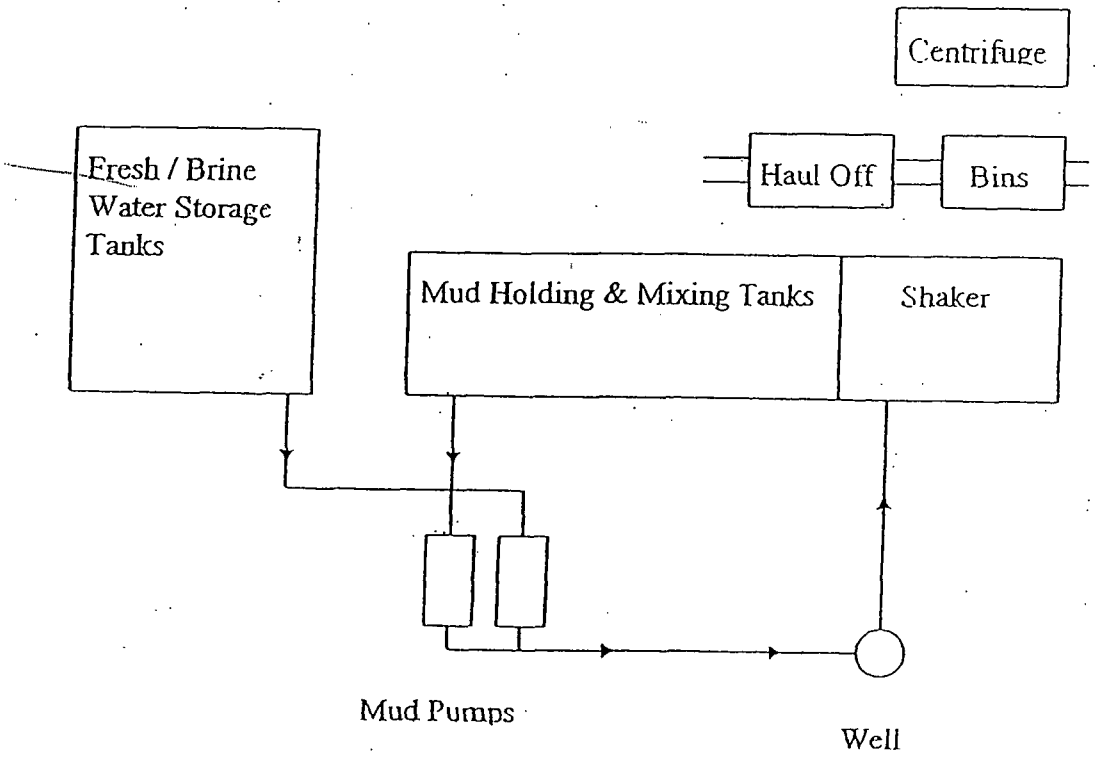
Blowout preventer closing equipment to include and accumulator of at least 40 gallon capacity, two independent sources of pressure on closing unit, and meet all other API specifications.

OPERATING AND MAINTENANCE PLAN

1. The operator will maintain all liquids and solids within the closed loop system. To prevent the contamination of fresh water and protect public health & environment. Rig personnel will inspect system each tour & report any leaks or spills as required. Leaks in system will be properly fixed immediately.

2. Solids and contaminated fluid will be hauled to the approved facility as required.

Closed Loop System Design & Construction



Peterson 7 PM Fed Com #1H
Sec 8, 18S, 27E
Eddy Co., NM

H2S Diagram

Closed Loop Pad Dimensions 280' x 320'

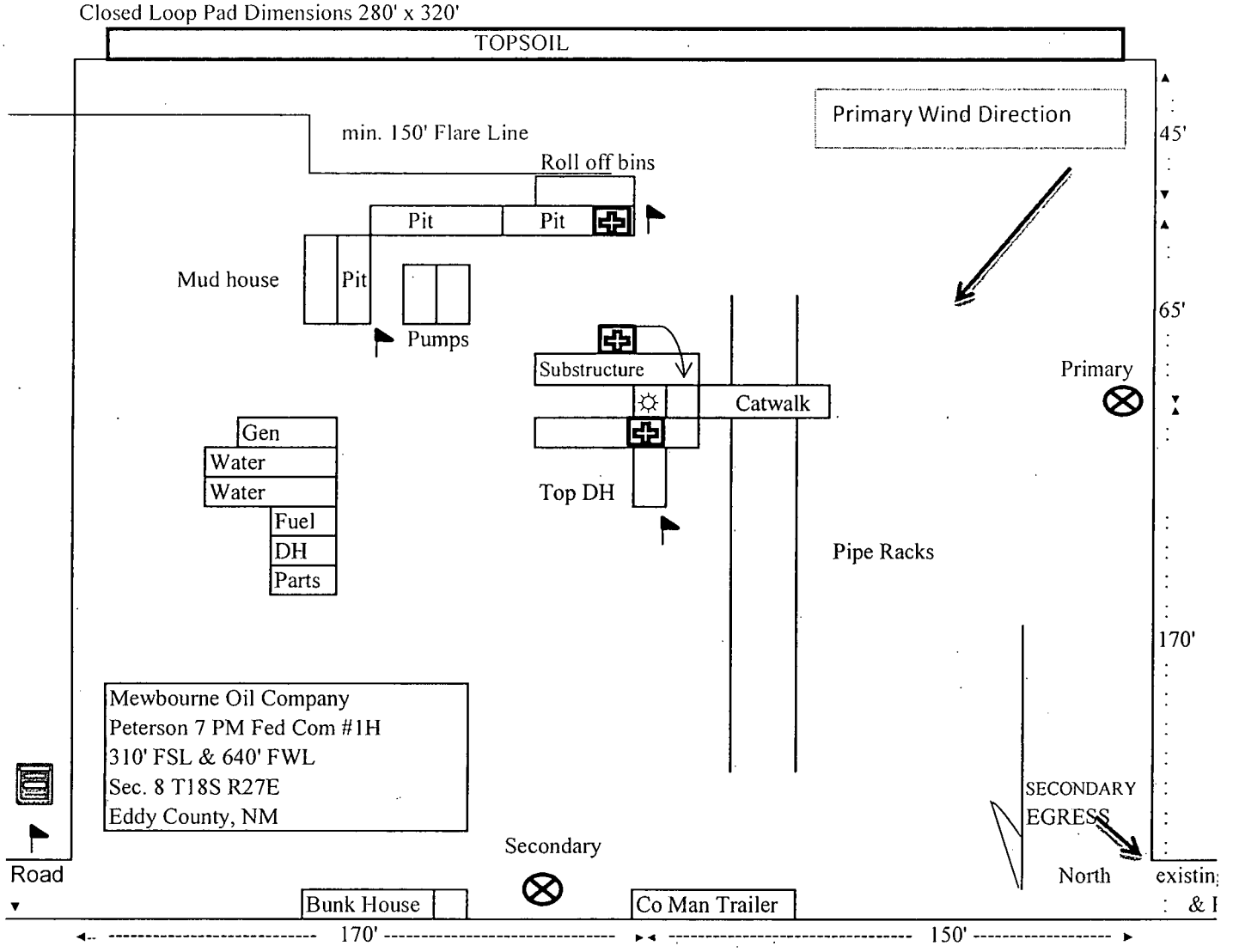


Exhibit 5

= Safety Stations

= Wind Markers

= H2S Monitors

= Warning Signs

Hydrogen Sulfide Drilling Operations Plan

Mewbourne Oil Company

Peterson "7" PM Fed Com #1H

310' FSL & 640' FWL

Sec. 8 T18S R27E

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 know 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 adjustable choke/remote 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.

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**
	2nd 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'

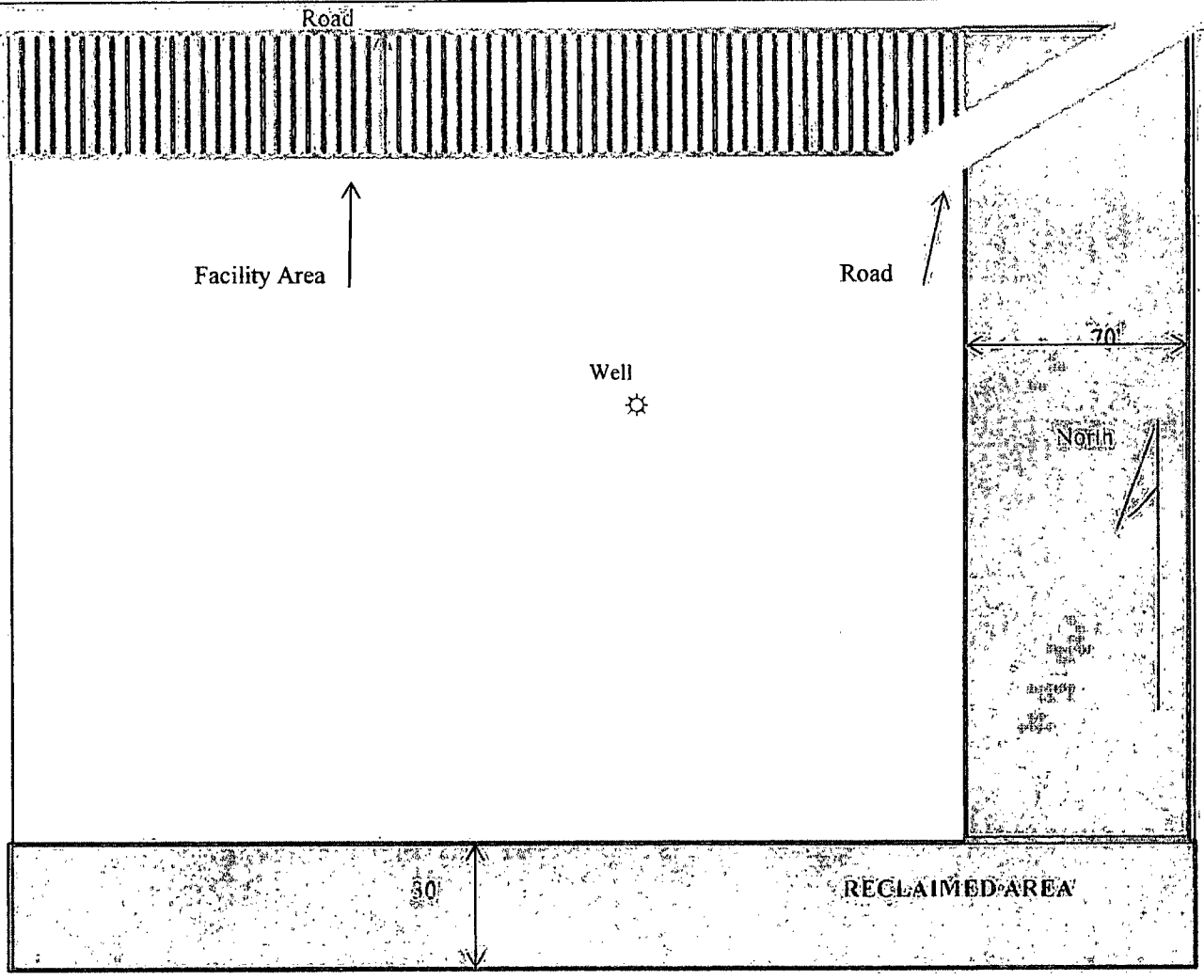


Exhibit 6

Mewbourne Oil Company
Peterson "7" PM Fed Com #1H
310' FSL & 640' FWL
Sec. 8 T18S R27E
Eddy County, NM

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

MEWBOURNE OIL COMPANY

Peterson "7" PM Fed Com #1H
310' FSL & 640' FWL (SHL)
Sec 8 T18S R27E
Eddy County, New Mexico

This plan is submitted with Form 3160-3, Application for Permit to Drill, Covering the above described well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of the surface disturbance involved, and the procedures to be followed in restoring the surface so that a complete appraisal can be made of the environmental impact associated with the proposed operations.

1. Existing Roads:

A. Exhibit #3 is a road map showing the location of the proposed well. Existing and proposed roads are highlighted in black. Exhibits #3A-3D are area maps showing the location of the proposed well and access roads.

B. Directions to location from Artesia, NM: Go east on US 82 5.3 miles to Chalk Bluff road. Turn south on Chalk Bluff road 5 miles to lease road. Turn west 0.6 miles turning south for .2 mile then back west for .1 mile to proposed lease road.

C. Existing roads will be maintained in a condition the same as or better than before operations begin.

2. Proposed Access Road:

A. 796.3' of new road construction is required.

B. The maximum width of the driving surface will be 14 feet. The road will be crowned and ditched with a 2% slope from the tip of the crown to the edge of the driving surface. The ditches will be 1 foot deep with 3:1 slopes. The road will be surfaced with rolled and compacted caliche.

C. Mewbourne Oil Co. will cooperate with other operators in the maintenance of lease roads.

3. Location of Existing Wells:

There are producing wells within the immediate vicinity of the well site. Exhibit #4 shows the proposed well and existing wells within a one mile radius.

4. Location of Existing and/or Proposed Facilities:

A. There are no production facilities on this lease at the present time.

B. In the event that the well is productive, production facilities will be located on the North side of the well pad. Gas line will follow new & existing lease roads to DCP meter. Gas line will be 850' of surface 3" poly pipe under 125 psi. Gas line will be within 5' of lease road. It will start on the North side of the well & end at DCP meter.

C. All production vessels left on location will be painted to conform to BLM painting stipulations within 180 days of installation.

5. Location and Type of Water Supply

The well will be drilled with a combination of fresh water and brine water based mud systems. The water will be obtained from commercial suppliers in the area and/or hauled to the location by transport trucks over existing and proposed roads as indicated in Exhibit #3.

6. Source of Construction Materials

All material required for construction of the drill pad and access roads will be obtained from private, state, or federal pits. The construction contractor will be solely responsible for securing construction materials required for this operation and paying any royalties that may be required on those materials.

7. Methods of Handling Waste Disposal:

A. Drill cuttings not retained for evaluation purposed will be hauled to a permitted off-site facility.
B. Water produced during operations will be hauled to an off-site permitted SWD in the area.
C. If any liquid hydrocarbons are produced during operations, those liquids will be stored in suitable tanks until sold.
D. Sewage and gray water will be safely contained on-site, and then waste will be disposed at an approved off-site facility.
E. All trash, junk, and other waste materials will be stored in proper containers to prevent dispersal and will be removed to an appropriate facility within one week of cessation of drilling and completion activities.

8. Ancillary Facilities

There are no ancillary facilities within the immediate vicinity of the proposed well site.

9. Well Site Layout

A A diagram of the drill pad is shown in Exhibit #5. Dimensions of the pad and location of major rig components are shown.
B. The pad dimension of 280' x 320' has been staked and flagged.
C. An archaeological survey has been completed by Boone Archaeological Survey.

10. Plans for Restoration of Surface

A. Within 90 days of cessation of drilling and completion operations, all equipment not necessary for production operations will be removed. The location will be cleaned of all trash and junk to assure the well site is left as aesthetically pleasing as reasonably possible.
B. Interim reclamation:
   i. All areas not needed for production operations will be reclaimed.
   ii. Caliche will be removed, the land will be recontoured, the top soil from stockpile will be spread over these areas.
   iii. The disturbed area will be restored by re-seeding during the proper growing season.
   iv. Any additional caliche required for production facilities will be obtained from the area shown in exhibit #6 as interim reclamation.

C. Final Reclamation:
Upon cessation of the proposed operations, if the well is abandoned, all equipment and trash will

be removed and taken to a proper facility.

i. The location and road surfacing material will be removed and used to patch area lease roads. The entire location will be restored to the original contour as much as reasonable possible. The top soil used for interim reclamation will be spread over the entire location. All restoration work will be completed within 180 days of cessation of activities.

11. Surface Ownership:

The surface is owned by BLM.

12. Other Information:

A. The primary use of the surface at the location is for grazing of livestock.
B. Arch survey is supplied by Boone Archaeology Services.

13. Operator's Representative:

A. Through APD approval, drilling, completion and production operations:

N.M. Young, District Manager
Mewbourne Oil Company
PO Box 5270
Hobbs, NM 88241
575-393-5905

SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN

Mewbourne Oil Company

P.O. Box 5270
Hobbs, New Mexico 88240

Peterson 7 MP Fed Com #1H

NW/4 Sec. 8-T18S-R27E
Eddy County, New Mexico

Latitude N 32 45'27.86" Longitude W-104 18'32.14"

10-31-2013

BLM
Received
12/11/13
TN

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*Only relevant rule provisions are indicated. For a complete list of SPCC requirements, refer to the full text of 40 CFR part 112.

Introduction

The purpose of this Spill Prevention, Control, and Countermeasure (SPCC) Plan is to describe measures implemented by Mewbourne Oil Company to prevent oil discharges from occurring, and to prepare Mewbourne Oil Company to respond in a safe, effective, and timely manner to mitigate the impacts of a discharge from the Peterson 7 PM Fed Com #1H production facility. This SPCC Plan has been prepared and implemented in accordance with the SPCC requirements contained in 40 CFR part 112.

In addition to fulfilling requirements of 40 CFR part 112, this SPCC Plan is used as a reference for oil storage information and testing records, as a tool to communicate practices on preventing and responding to discharges with Mewbourne Oil Company employees and contractors, as a guide on facility inspections, and as a resource during emergency response.

Management Approval
40 CFR 112.7

Mewbourne Oil Company is committed to maintaining the highest standards for preventing discharges of oil to navigable waters and the environment through the implementation of this SPCC Plan. This SPCC Plan has the full approval of Mewbourne Oil Company management. Mewbourne Oil Company's management has committed the necessary resources to implement the measures described in this Plan.

Antonio Martinez is the Designated Person Accountable for Oil Spill Prevention at this Company facility and has the authority to commit the necessary resources to implement the Plan as described.

Authorized Facility Representative: Antonio Martinez

Signature:

Title: Production Engineer

Date:

Professional Engineer Certification
40 CFR 112.3(d)

The undersigned Registered Professional Engineer is familiar with the requirements of Part 112 of Title 40 of the *Code of Federal Regulations* (40 CFR part 112) and has visited and examined the facility, or has supervised examination of the facility by appropriately qualified personnel. The undersigned Registered Professional Engineer attests that this Spill Prevention, Control, and Countermeasure Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards and the requirements of 40 CFR part 112; that procedures for required inspections and testing have been established; and that this Plan is adequate for the facility. [112.3(d)]

This certification in no way relieves the owner or operator of the facility of his/her duty to inspect the site and fully implement this SPCC Plan in accordance with the requirements of 40 CFR part 112.

Signature Date

Name of Professional Engineer

Registration Number *New Mexico*
Issuing State

Plan Review

40 CFR 112.5

In accordance with 40 CFR 112.5, Mewbourne Oil Company periodically reviews and evaluates this SPCC Plan for any change in the facility design, construction, operation, or maintenance that materially affects the facility's potential for an oil discharge. Mewbourne Oil Company reviews this SPCC Plan at least once every five years. Revisions to the Plan, if any are needed, are made within six months of this five-year review. Mewbourne Oil Company will implement any amendment as soon as possible, but not later than six months following preparation of any amendment. A registered PE will certify any technical amendment to the Plan, as described above, in accordance with 40 CFR 112.3(d).

Scheduled five-year reviews and Plan amendments are recorded in Table 0-1. This log must be completed even if no amendment is made to the Plan. Unless a technical or administrative change prompts an earlier review, the next scheduled review of this Plan must occur by October 31, 2018.

Table 0-1: Record of Plan Review and Changes

Date	Authorized Individual	Review Type	PE Certification	Summary of Changes

Location of SPCC Plan

40 CFR 112.3(e)

In accordance with 40 CFR 112.3(e), and because the facility is normally unmanned, a complete copy of this SPCC is maintained at the office of Mewbourne Oil Company, located at 701 South Cecil Street Hobbs, New Mexico 88240.

Certification of Substantial Harm Determination

40 CFR 112.20(e), 40 CFR 112.20(f)(1)

Facility Name: **Mewbourne Oil Company** ***Peterson 7 PM Fed Com #1H***

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

Yes No .

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground storage tank area?

Yes **No** .

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments?

Yes **No** .

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula) such that a discharge from the facility would shut down a public drinking water intake?

Yes **No** .

5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?

Yes **No** .

Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Production Engineer

Signature Title

Antonio Martinez

Name (type or print) Date

PART I - GENERAL FACILITY INFORMATION

40 CFR 112.7(a)(3)

1.1 Company Information

Name of Facility:	*Peterson 7 PM Fed Com #1H*
Type	Onshore oil production facility
Date of Initial Operation	March 1, 2014
Location	NW Sec. 8-T18S-R27E Eddy County, New Mexico
Company Name and Address	Mewbourne Oil Company 701 South Cecil Street Hobbs, New Mexico 88240
Phone Number:	575-393-5905

1.2 Contact Information

The designated person accountable for overall oil spill prevention and response at the facility, also referred to as the facility's "Response Coordinator" (RC), is the Production Engineer, Antonio Martinez. 24-hour contact information is provided in Table 1-1.

Personnel from Mewbourne Oil Company provide operations (pumper/gauger) activities, including performing informal daily examinations of the facility equipment, as described in Section 3.4 of this SPCC Plan. Mewbourne Oil Company personnel regularly visit the facility to record production levels and perform other maintenance/inspection activities. Key contacts for Mewbourne Oil Company are included in Table 1-1.

Table 1-1: Facility contact information

Name	Title	Telephone	Address
Mickey Young	District Superintendent	575-393-5905-work 575-390-0999-cell	701 South Cecil Street Hobbs, New Mexico 88240
Robin Terrell	Production Superintendent	575-393-5905-work 575-390-4816-cell	701 South Cecil Street Hobbs, New Mexico 88240

1.3 Facility Layout Diagram

Appendix A, at the end of this Plan, shows a general site plan for the facility. The site plan shows the site topography and the location of the facility relative to waterways, roads, and inhabited areas. Appendix A also includes a detailed facility diagram that shows the well, flowlines, tank batteries, and transfer areas for the facility. The diagram shows the location, capacity, and contents of all permanent oil storage containers of 55 gallons or more in capacity.

1.4 Facility Location and Operations

Mewbourne Oil Company owns and operates the lease production facility, which is located approximately 7.82 miles Southeast of Artesia, New Mexico.

As illustrated in Figure A-2 in Appendix A, the facility is comprised of three main areas: Well, flowlines, and tank batteries. The tank batteries include three 500-barrel (bbl) oil tanks, two 500-barrel (bbl) saltwater storage tanks, two 3-barrel (bbl) separators, one 6 x 20 Heater Treater and associated flowlines and piping.

The production facility is generally unmanned. Mewbourne Oil Company's office is located at 701 South Cecil Street Hobbs, New Mexico 88240. Field operations personnel from Mewbourne Oil Company or pumpers acting as contractors to Mewbourne Oil Company visit the facility daily to record production rates and ensure the proper functioning of wellhead equipment, storage tanks, flowlines, and separation vessels. This includes performing equipment inspections and maintenance as needed.

The facilities' production volumes are unavailable until the well is completed.

1.5 Oil Storage and Handling

1.5.1 Production Equipment

Oil storage at the facility consists of three 500-bbl oil storage tank, two 500-bbl saltwater storage tank, two 3-bbl separators, one 6x20 Heater treater and associated flowlines and piping as summarized in Table 1-2. The total oil capacity at this facility is 1606 bbl (67452 gallons).

The oil/saltwater storage tank is shop-built and meets the American Petroleum Institute (API) tank construction standard. Its design and construction are compatible with the oil/saltwater it contains and the temperature and pressure conditions of storage. The tank storing crude or produced oil or produced water is constructed of welded steel following API-12F *Shop Welded Tanks for Storage of Production Liquids* specifications. The oil/saltwater tank holding oil/produced water is constructed of fiberglass following API-12P *Fiberglass Reinforced Plastic Tanks* specifications.

1.5.2 Transfer Activities

The well produces crude oil, gas, and saltwater. The oil and water are produced through the tubing. The crude oil and produced water are sent through the separation equipment and then to storage tanks

Crude oil from the lease is purchased by Mewbourne Oil Company's crude oil purchaser and transported from the facility by the purchaser's tanker truck.. The largest tanker truck visiting the facility has a total capacity of 190 bbl (7,980 gallons). Tanker trucks come to the facility to transfer crude oil and do not remain at the facility. All transfer operations are attended by the trucker or by field operations personnel and meet the minimum requirements of the U.S. Department of Transportation Hazardous Materials Regulations. Appendix B to this Plan summarizes the Tank Truck Loading Procedure at this facility.

Produced water will be hauled off by 130 bbl tanker trucks.

1.6 Proximity to Navigable Waters

The site plan in the attached Location Plat in Appendix A shows the location of the facility relative to nearby waterways. The facility will be located 0.36 miles East of the Pecos River. The facility diagram included at the end of this plan shows the general direction of drainage. In the event of an uncontrolled discharge from the well, flowlines, or the tank battery areas, oil would follow the natural topography of the site.

1.7 Conformance with Applicable State and Local Requirements [112.7(j)]

The SPCC regulation at 40 CFR part 112 is more stringent than requirements from the state of New Mexico for this type of facility. This SPCC Plan was written to conform with 40 CFR part 112 requirements. The facility thereby conforms with general requirements for oil production facilities in New Mexico. All discharge notifications are made in compliance with local, state, and federal requirements.

PART II. SPILL RESPONSE AND REPORTING

40 CFR 112.7 2.1

Discharge Discovery and Reporting [112.7(a)(3)]

Several individuals and organizations must be contacted in the event of an oil discharge. The Production Engineer is responsible for ensuring that all required discharge notifications have been made. All discharges should be reported to the Production Engineer. The summary table included in Appendix F to this SPCC Plan provides a list of agencies to be contacted under different circumstances. Discharges would typically be discovered during the inspections conducted at the facility in accordance with procedures set forth in Section 3.4.1 of this SPCC Plan, Table 3-2 and Table 3-3, and on the checklist of Appendix C. The Form included in Appendix F of this Plan summarizes the information that must be provided when reporting a discharge, including contact lists and phone numbers.

2.1.1 Verbal Notification Requirements (Local, State, and Federal (40 CFR part 110))

Any reportable discharge into air, land or water must be reported immediately to the New Mexico Energy, Minerals and Natural Resources Department as soon as the discharge is detected.

For any discharge that reaches navigable waters, or threatens to reach navigable waters, *immediate* notification must be made to the National Response Center Hotline (800-424-8802).

In the event of a discharge that threatens to result in an emergency condition, facility field personnel must verbally notify the local police, sheriff and/or fire department immediately, and in no case later than *within one (1) hour* of the discovery of the discharge. An emergency condition is any condition that could reasonably be expected to endanger the health and safety of the public; cause significant adverse impact to the land, water, or air environment; or cause severe damage to property. This notification must be made regardless of the amount of the discharge.

2.1.2 Written Notification Requirements (State and Federal (40 CFR part 112))

A written notification will be made to EPA for any single discharge of oil to a navigable waters or adjoining shoreline waterway of more than 1,000 gallons, or for two discharges of 1 bbl (42 gallons) of oil to a waterway in any 12-month period. This written notification must be made within 60 days of the qualifying discharge, and a copy will be sent to the New Mexico Energy, Minerals and Natural Resources Department, which is the state agency in charge of oil pollution control activities. This reporting requirement is separate and in addition to reporting under 40 CFR part 110 discussed above.

2.1.3 Submission of SPCC Information

Whenever the facility experiences a discharge into navigable waters of more than 1,000 gallons, or two discharges of 42 gallons or more within a 12-month period, Mewbourne Oil Company will provide information in writing to the EPA Region 6 office within 60 days of a qualifying discharge as described above. The required information is described in Appendix F of this SPCC Plan.

2.2 Spill Response Materials

The flow through process vessels are inside a containment berm and loadline covers are installed on the ends of the loadlines, therefore no spill response materials are required at the site.

2.3 Spill Mitigation Procedures/Oil Spill Contingency Plan

The following is a summary of actions that must be taken in the event of a discharge. It summarizes the distribution of responsibilities among individuals and describes procedures to follow in the event of a discharge.

Reminder: *In the event of a discharge originating from the facility, facility personnel must immediately implement the Oil Spill Contingency Plan. The Oil Spill Contingency Plan discusses the additional procedures that must be followed to respond to a discharge of oil to navigable waters or adjoining shorelines.*

In the event of a discharge, Mewbourne Oil Company or contractor field personnel and the Production Engineer shall be responsible for the following:

2.3.1 Shut Off Ignition Sources

Field personnel must shut off all ignition sources, including motors, electrical circuits, and open flames. See Appendix G for more information about shut-off procedures.

2.3.2 Stop Oil Flow

Field personnel should determine the source of the discharge, and if safe to do so, immediately shut off the source of the discharge. Shut in the well(s) if necessary.

2.3.3 Stop the Spread of Oil and Call the Production Engineer

If safe to do so, field personnel must use resources available at the facility (see spill response material and equipment listed in Section 2.2) to stop the spilled material from spreading. Measures that may be implemented, depending on the location and size of the discharge, include placing sorbent material or other barriers in the path of the discharge (e.g., booms/pads), or constructing earthen berms or trenches.

In the event of a significant discharge, field personnel must immediately contact the Production Engineer, who may obtain assistance from authorized company contractors and direct the response and cleanup activities. Should a discharge reach a creek, only physical response and countermeasures should be employed, such as the construction of underflow dams, installation of hard boom and sorbent boom, use of sorbent pads, and use of vacuum trucks to recover oil and oily water from the creek. If water flow is low in the creek, construction of an underflow dam downstream and ahead of the spill flow may be advantageous. Sorbent material and/or boom should be placed immediately downstream of the dam to recover any sheen from the water. If water flow is normal in the creek, floating booms and sorbent boom will be deployed. Vacuum trucks will then be utilized to remove oil and oily water at dams and other access points. Crews should clean or remove oiled vegetation and debris from the creek banks and place them in bags for later disposal. After cleaning or removal of contaminated vegetation, creek banks should be flushed with water to remove free oil and help it flow down to dams and other access points where it can be recovered by a vacuum truck.

2.3.4 Gather Spill Information

The Production Engineer will ensure that the *Discharge Notification Form* is filled out and that notifications have been made to the appropriate authorities. The Production Engineer may ask for assistance in gathering the spill information on the *Discharge Notification Form* (Appendix F) of this Plan:

Reporter's name
Exact location of the spill
Date and time of spill discovery
Material spilled (e.g., oil, produced water containing a reportable quantity of oil)
Total volume spilled and total volume reaching or threatening navigable waters or adjoining shorelines
Weather conditions
Source of spill
Actions being taken to stop, remove, and mitigate the effects of the discharge
Whether an evacuation may be needed
Spill impacts (injuries; damage; environmental media, e.g., air, waterway, groundwater)
Names of individuals and/or organizations who have also been contacted

2.3.5 Notify Agencies Verbally

Some notifications must be completed *immediately* upon discovering the discharge. It is important to immediately contact the Production Engineer so that timely notifications can be made. If the Production Engineer is not available, or the Production Engineer requests it, field personnel must designate one person to begin notification. Section 2.1 of this Plan describes the required notifications to government agencies. The Notification List is included in Appendix F of this SPCC Plan. The Production Engineer must also ensure that written notifications, if needed, are submitted to the appropriate agencies.

2.4 Disposal Plan

The cleanup contractor will handle the disposal of any recovered product, contaminated soil, contaminated materials and equipment, decontamination solutions, sorbents, and spent chemicals collected during a response to a discharge incident.

Any recovered product that can be recycled will be placed into a tank to be separated and recycled. Any recovered product not deemed suitable for on-site recycling will be disposed of with the rest of the waste collected during the response efforts.

If the facility responds to a discharge without involvement of a cleanup contractor, Mewbourne Oil Company will contract a licensed transportation/disposal contractor to dispose of waste according to regulatory requirements. The Production Engineer will characterize the waste and arrange for the use of certified waste containers.

All facility personnel handling hazardous wastes must have received both the initial 40-hour and annual 8-hour refresher training in the Hazardous Waste Operations and Emergency Response Standard (HAZWOPER) of the Occupational Health and Safety Administration (OSHA). This training is included as part of the initial training received by all field personnel. Training records and certificates are kept at the office.

PART III. SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PROVISIONS

40 CFR 112.7 and 112.9

3.1 Potential Discharge Volume and Direction of Flow [112.7(b)] and Containment [112.7(a)(3)(iii)]

Table 3-1, below, summarizes potential oil discharge scenarios. If unimpeded, oil would NOT follow the site topography and reach a pond/lake or an intermittent creek/river.

Table 3-1: Potential discharge volume and direction of flow

Source	Type of Failure	Maximum Volume (gal)	Maximum Discharge Rage (gal/hr)	Direction of Flow	Containment
Tank Battery					
Crude Oil/water Storage Tank Rupture due to	lightning strike, seam failure	105,000	21,000	West	Containment berm
	Overflow (1 days production)	N/A	N/A	West	Containment berm
Flowlines and Piping					
Flowlines and Piping	Rupture/failure	N/A	N/a	various	See Oil Spill Contingency Plan
	Pinhole leak, or leak at connection	2,100	87	various	See Oil Spill Contingency Plan

Source	Type of Failure	Maximum Volume (gal)	Maximum Discharge Rate (gal/hr)	Direction of Flow	Containment
Well					
Valves, fittings, gauges	Leak	21	1	West	See Oil Spill Contingency Plan
Salt water Disposal					
Piping/hoses, pumps, valves	Leak	11	.46	West	Containment berm
Transfers and Loading Operations					
Transport truck loading hose	Rupture	84	84	west	Loadline Covers
Transfer valve	Rupture, leak of valve packing	3	3	west	Loadline Covers

3.2 Containment and Diversionary Structures [112.7(c) and 112.7(a)(3)(iii)]

The facility is configured to minimize the likelihood of a discharge reaching navigable waters. The following measures are provided:

#1 Secondary containment for the oil/saltwater storage tanks is provided by a minimum 65 ft x 35 ft x 1.6 ft berm that provides a total containment equal to the largest tank (500-bbl) + 25 year, largest 24 hour rainfall event for the area as a freeboard to contain precipitation (4 inches), as described in Section 3.2.2 below. The berm is constructed of clay based soil.

#2 Secondary containment will consist of a berm surrounding the entire well pad with a height of 1.5 ft.

The ends of the loadlines are equipped with loadline drip buckets designed to prevent small discharges that may occur when disconnecting the hose; therefore no spill response materials are required at the loading area.

These measures are described in more details in the following sections.

3.2.1 Oil Production Facility Drainage [112.9(b)]

Discharges from ASTs are restrained by the secondary containment berm, as described in Section 3.2.2 of this Plan. Discharges occurring during transfer operations will be contained by use of booms, pads or earthen dams.

Unsupervised drainage of any fluids, including rainwater, is not allowed from the facility. If rainwater collects inside the secondary containment berm, the primary method of water removal is evaporation. If more water is present than can evaporate in a timely manner, a vac truck will be dispatched to the site to vacuum the water and haul it to disposal. If a drain line is placed in the containment to drain rainwater from within the berm:

> The drains must be closed and sealed at all times except when uncontaminated rainwater is being drained. 112.9(b)(1)
> Prior to drainage, rainwater must be inspected and valves only be opened under responsible supervision and records kept of such events. 112.9(b)(1)
> Any accumulated oil on the rainwater must be removed prior to draining and returned to storage or disposed of in accordance with legally approved methods. 112.9 (b)(1)
> The area to which the drained water will run must be inspected and any oil discovered must be promptly removed. 112.9(b)(2)

3.3 Other Spill Prevention Measures

3.3.1 Bulk Storage Containers Overflow Prevention [112.9(c)(4)]

The tank batteries are designed with a fail-safe system to prevent discharge, as follows:

The capacity of the storage tanks is sufficient to ensure that storage is adequate in the event where facility personnel are unable to perform the daily visit to unload the tanks or the pumper is delayed in stopping production. The maximum capacity of the well linked to the tank batteries is approximately (N/A until well is completed) barrels per day. The storage tanks are sized to provide sufficient storage for at least three days.

3.3.2 Transfer Operations and Saltwater Disposal System [112.9(d)]

All aboveground valves, motors, hoses, pumps and piping associated with transfer operations and saltwater disposal system are inspected daily by the pumper and/or tank truck driver, as described in Section 3.4 of this Plan. The inspection procedure includes observing flange joints, valves, drip pans, and pipe supports. The conditions of the well and gauge valves, are also inspected daily.

3.4 Inspections, Tests, and Records [112.7(e)]

This Plan outlines procedures for inspecting the facility equipment in accordance with SPCC requirements. Records of inspections performed as described in this Plan and signed by the appropriate supervisor are a part of this Plan, and are maintained with this Plan at the company office for a minimum of three years. The reports include a description of the inspection procedure, the date of inspection, whether drainage of accumulated rainwater was required, and the inspector's signature.

The program established in this SPCC Plan for regular inspection of all oil storage tanks and related production and transfer equipment follows the American Petroleum Institute's *Recommended Practice for Setting Maintenance, Inspection, Operation, and Repair of Tanks in Production Service* (API RP 12R1, Fifth Edition, August 1997). Each container is inspected annually by field operation personnel as described in this Plan section and following the checklist provided in Appendix C of this SPCC Plan. The annual inspection is aimed at identifying signs of deterioration and maintenance needs, including the foundation and support of each container. Any leak from tank seams, gaskets, rivets, and bolts is promptly corrected.

This Plan also describes provisions for monitoring the integrity of flowlines through annual visual inspections or periodic pressure testing or through the use of an alternate technology. This is particularly important for this facility since flowlines do not have adequate secondary containment.

The inspection program is comprised of informal daily examinations, annually scheduled inspections, and periodic condition inspections. Additional inspections and/or examinations are performed whenever an operation alert, malfunction, shell or deck leak, or potential bottom leak is reported following a scheduled examination. Written examination/inspection procedures and annual examination/inspection reports are signed by the field inspector and are maintained at the field office for a period of at least three years.

3.4.1 Daily Examinations The facility is visited daily by field operations personnel. The daily visual examination consists of a walk through of the tank battery and around the well. Field operations personnel check the well and production equipment for leaks and proper operation. They examine all aboveground valves, wellheads, fittings, gauges, and flowline piping at the wellhead. Personnel inspect pumps to verify proper function and check for damage and leakage. They look for accumulation of water within the tank battery berms and verify the condition and position of valves. The storage tanks are gauged every day. A daily production report is maintained. Additionally, while driving the lease daily, field personnel will look for evidence of leaks in the vicinity of flowlines. All malfunctions, improper operation of equipment, evidence of leakage, stained or discolored soil, etc. are logged and communicated to the Mewbourne Oil Company Production Engineer. If at any time a section of buried line is exposed, it is carefully examined for corrosion or damage. If corrosion or damage is found, additional examination and corrective action must be taken as deemed appropriate considering the magnitude of the damage. Records of all examinations and repairs are kept at the facility for at least three years.

Table 3-2: Scope of daily examinations

Facility Area	Item	Observations
Storage Tanks (Oil and Produced Water)	Leaks	Tank liquid level gauged Drip marks, leaks from weld seams, base of tank Puddles containing spilled or leak material Corrosion, especially at base (pitting, flaking) Cracks in metal Excessive soil or vegetation buildup against base
	Foundation problems	Cracks Puddles containing spilled or leaked material Settling Gaps at base
	Flowlines problems	Evidence of leaks, especially at connections/collars Corrosion (pitting, flaking) Settling Evidence of stored material seepage from valves or seals
Wells	Leak	Evidence of oil seepage from the wellhead and wellhead flowlines, valves, gauges
SW Pumps	Leaks	Leaks at seals, flowlines, valves, hoses Puddles containing spilled or leaked material Corrosion

3.4.2 Annual Inspections

Table 3-3 summarizes the scope of annual inspections performed by field personnel.

The annual inspection covers the wellhead, flowlines, and all processing equipment. It also includes verifying the proper functioning of all detection devices, including high-level sensors on the storage tanks and separators. Storage tanks are inspected for signs of deterioration, leaks, or accumulation of oil inside the containment area, or other signs that maintenance or repairs are needed. The secondary containment area is checked for proper drainage, general conditions, evidence of oil, or signs of leakage. The annual inspection also involves visually inspecting all aboveground valves and pipelines and noting the general condition of items such

as transfer hoses, flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, well and gauge valves, locking of valves, and metal surfaces. Flowlines, both buried and above ground, will be walked to inspect for any evidence of leakage.

The checklist provided in Appendix C, or a similar one, is used during annual inspections. These inspections are performed in accordance with written procedures such as API standards (e.g., API RP 12R1), engineering specifications, and maintenance schedule developed by the equipment manufacturers.

Table 3-3: Scope of annual inspections

Facility Area	Equipment	Inspection Item
Tank Battery	Storage tanks	Leakage, gaskets, hatches Tank liquid level checked Tank welds in good condition Vacuum vents Overflow lines Piping, valves, and bull plugs Corrosion, paint condition Pressure / level safety devices Emergency shut-down system(s) Pressure relief valves
	Area	Berm and curbing Presence of contaminated/stained soil Excessive vegetation Equipment protectors and signs Engine drip pans and sumps General housekeeping
Truck Loading	Offload lines, drip pans, valves, catchment berm	Valve closed and in good condition Cap or bull plug at end of offload line/connection Sign of oil or standing water in drip pan(s) Sign of oil or standing water in catchment berm Sign of oil in surrounding area
Production equipment		Gauges (pressure, temperature, and liquid level) Pressure / level safety devices Emergency shut-down system(s) Pressure relief valves*
Wells (including saltwater disposal well)	Area	Spills and leaks Equipment protectors and signs General housekeeping
Leasehold area between wells and Tank Battery	Flowlines	Flowline between the well and tank battery/gun barrel Exposed line of buried piping Valves (condition of, whether locked or sealed) Evidence of leaks and/or damage, especially at Connections/collars Corrosion (pitting, flaking) Pipe supports
Road and Field Ditches		Evidence/puddles of crude oil and/or produced water
Other	Chemicals, Fuels, and Lube Oils	Storage conditions

3.4.3 Periodic Condition Inspection of Bulk Storage Containers

In that this facility is an oil and gas production facility, the tanks are located within a containment berm and daily and annual inspections are performed, periodic condition inspections by qualified inspectors are not required.

3.4.4 Brittle Fracture Evaluation [112.7(i)]

At the present time, none of the bulk storage containers at this site was field-erected, and therefore no brittle fracture evaluation is required.

3.4.5 Flowline Maintenance Program [112.9(d)(3)]

Because the facility is relying on a contingency plan to address discharges, the flowline maintenance program is specifically implemented to maintain the integrity of the primary container (in this case piping) to minimize releases of oil from this part of the production facility. The facility's gathering lines and flowlines are observed daily and inspected annually for leaks at connections and on each joint, for corrosion (pitting, flaking), and maintained to minimize the potential for a discharge as summarized in Table 3-4. Records of integrity inspections, leak tests, and part replacements are kept at the facility for at least three years (integrity test results are kept for ten years).

Table 3-4: Components of flowline maintenance program

Component	Measures/Activities
Configuration	Flowlines are identified on facility maps and are marked in the field, when possible, to facilitate access and inspection by facility personnel. With the exception of the buried portions of the flowline, the flowlines and appurtenances (valves, flange joints, supports) can be visually observed for signs of leakage, deterioration, or other damage. The flowlines are compatible with the production fluids and conditions expected in the operational environment.
Inspection	Lines are visually inspected for leaks and corrosion, or vegetation above buried line is observed for dead or distressed vegetation, as part of the daily and annual rounds by field personnel, as discussed in Section 3.4 above. The buried portions of the flowlines are visually observed for damage or coating condition whenever they are repaired, replaced, or otherwise exposed.
Maintenance	Any leak in the flowline or appurtenances is promptly addressed by isolating the damaged portion and repairing or replacing the faulty piece of equipment. Mewbourne Oil Company does not accept pipe clamps and screw-in plugs as forms of permanent repair. Any portion of a flowline that fails a mechanical integrity test is repaired and retested, or replaced. In the event of an oil release, prompt removal of impacted soil, or initiation of actions to stabilize and remediate the soil, will be taken.

3.5 Personnel, Training, and Discharge Prevention Procedures [112.7(f)]

The Production Engineer has been designated as the point of contact for all oil discharge prevention and response at this facility.

All Mewbourne Oil Company field personnel receive training on proper handling of oil products and procedures to respond to an oil discharge prior to entering any Mewbourne Oil Company production facility. The training ensures that all facility personnel understand the procedures described in this SPCC Plan and are informed of the requirements under applicable pollution control laws, rules and regulations.

Mewbourne Oil Company management holds briefings with field operations personnel at least once a year, as described below.

3.5.1 Spill Prevention Briefing

The Production Engineer conducts or makes available Spill Prevention Briefings annually to ensure adequate understanding and effective implementation of this SPCC Plan. These briefings highlight and describe known spill events or failures, malfunctioning components, and recently developed precautionary measures. Sign-in sheets are maintained with this Plan at Mewbourne Oil Company's field office. A *Discharge Prevention Briefing Log* form is provided in Appendix E to this Plan and is used to document the briefings. The scheduled annual briefing includes a review of policies and procedures relating to spill prevention, control, cleanup, and reporting; procedures for routine handling of products (e.g., loading, unloading, transfers); SPCC inspections and spill prevention procedures; spill reporting procedures; spill response; and recovery, disposal, and treatment of spilled material.

Personnel are instructed in operation and maintenance of equipment to prevent the discharge of oil, and in applicable federal, state, and local pollution laws, rules, and regulations. Facility operators and other personnel have an opportunity during the briefings to share recommendations concerning health, safety, and environmental issues encountered during facility operations.

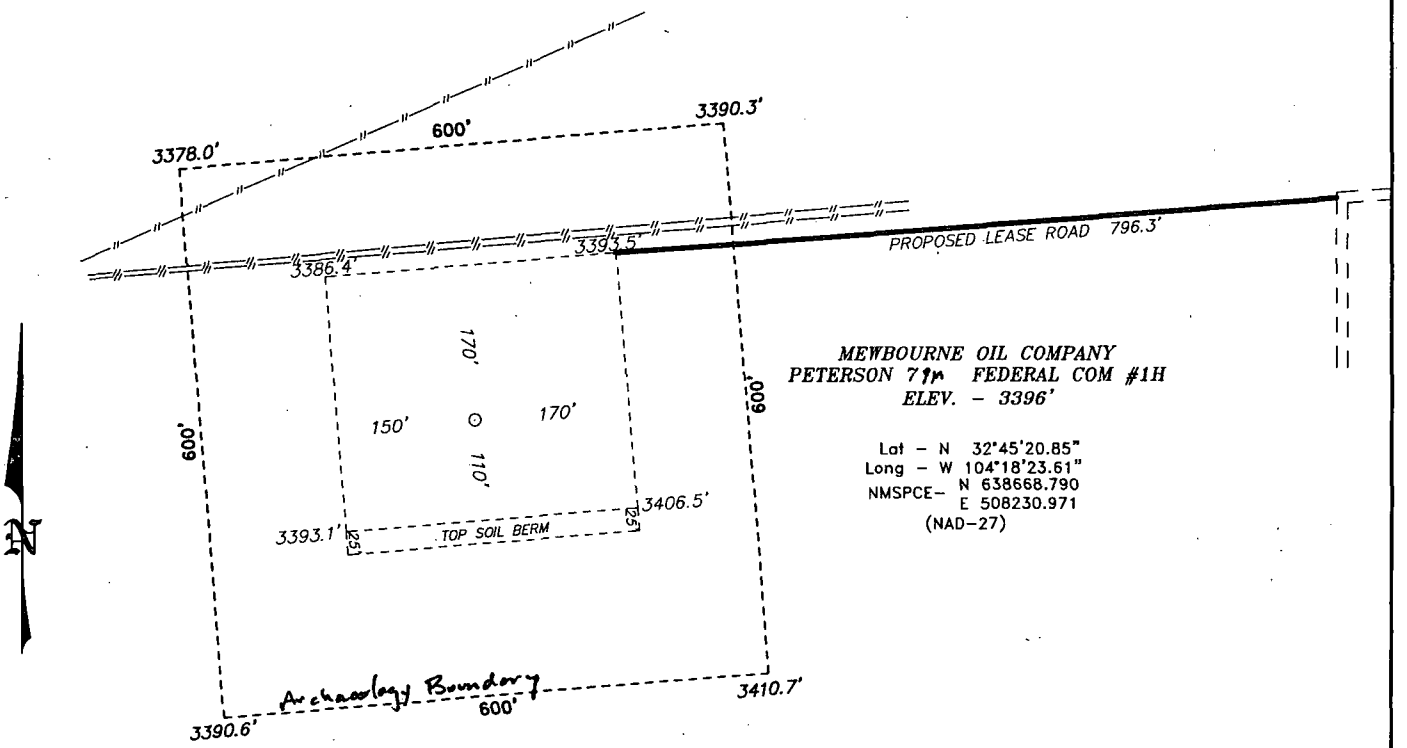
The general outline of the briefings is as follows:

Contents of the Plan;
Responsibilities of personnel and Designated Person Accountable for Spill Prevention;
Spill prevention regulations and requirements;
Spill prevention procedures;
Spill reporting and cleanup procedures, discovery and notification;
Equipment failures and operational issues;
Proper equipment operation and maintenance; and
General Facility Operations.

EXHIBIT "3"

SECTION 8, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M.,

EDDY COUNTY, NEW MEXICO.



200 0 200 400 FEET

SCALE: 1" = 200'

Directions to Location:

FROM THE JUNCTION OF LITTLE DIAMOND AND CHALK BLUFF, GO SOUTH ON CHALK BLUFF FOR 0.5 MILES TO LEASE ROAD, ON LEASE ROAD GO WESTERLY 0.6 MILES TURNING SOUTH FOR 0.2 MILES THENCE BACK WEST FOR 0.1 MILES TO PROPOSED LEASE ROAD.

MEWBOURNE OIL COMPANY

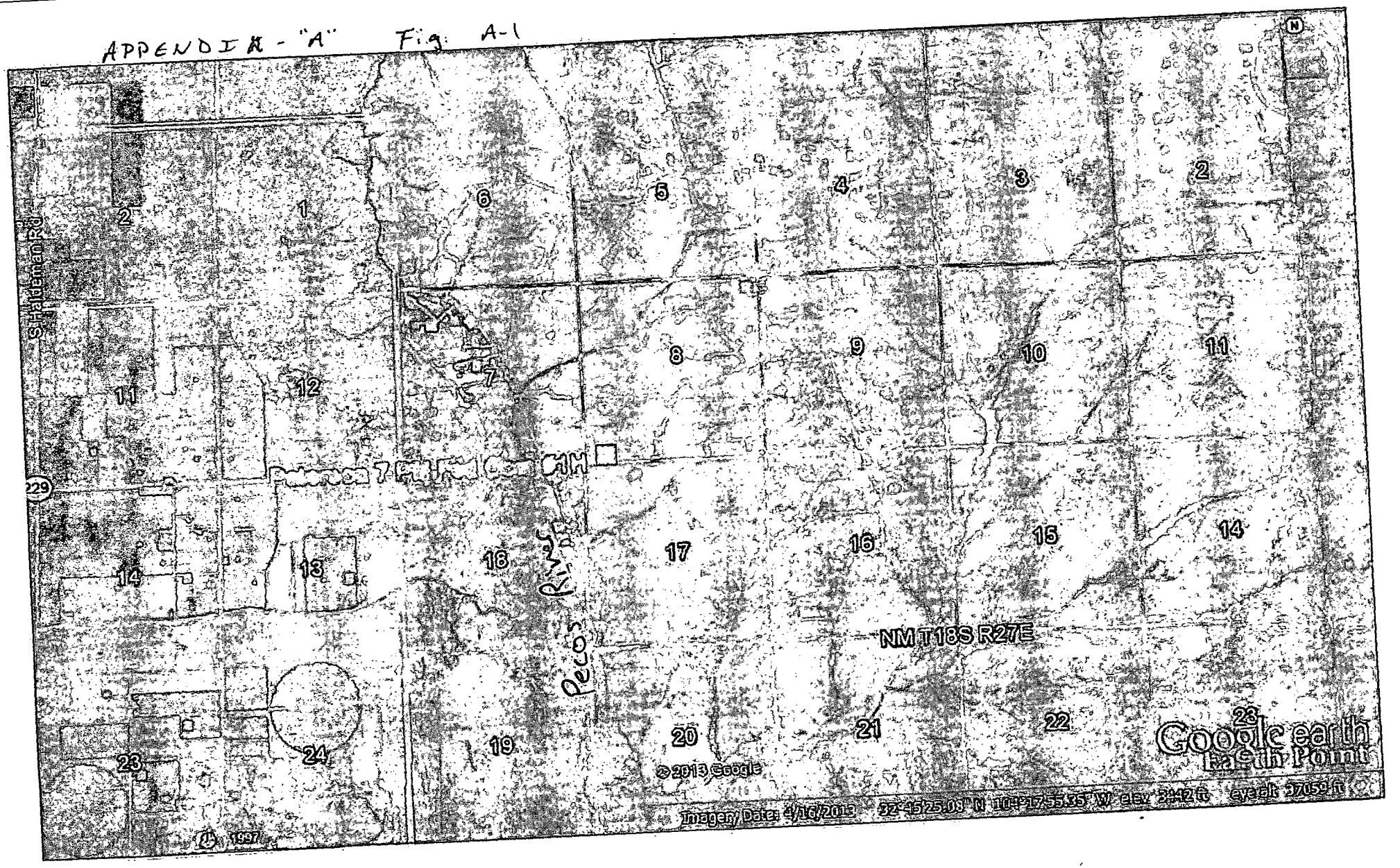
REF: PETERSON 7 PM FEDERAL COM #1H / WELL PAD TOPO

THE PETERSON 7 PM FEDERAL COM #1H LOCATED 310' FROM THE SOUTH LINE AND 650' FROM THE WEST LINE OF SECTION 8, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.

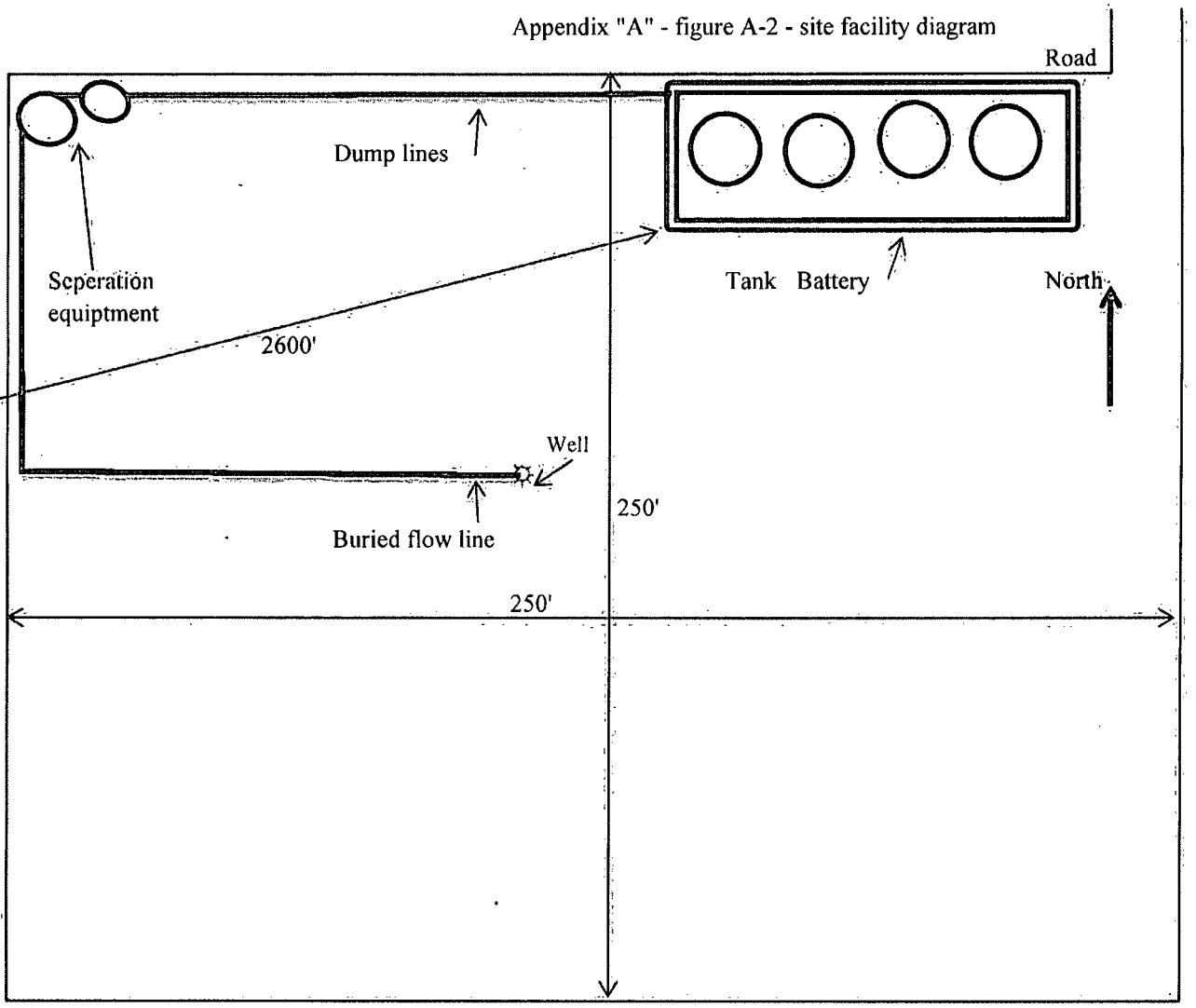
BASIN SURVEYS P.O. BOX 1786 – HOBBS, NEW MEXICO

W.O. Number: 26876	Drawn By: J. SMALL		
Date: 07-02-2012	Disk: JMS 26876	Survey Date: 06-29-2012	Sheet 1 of 1 Sheets

APPENDIX - "A" Fig. A-1



Appendix "A" - figure A-2 - site facility diagram



Pecos River

APPENDIX B: Tank Truck Loading Procedures

Loading Tank Truck

Make sure the vehicle tank is properly vented before starting to load or unload. If you are not certain that the trailer is properly vented, you must contact your supervisor and request permission to open the trailer dome before starting to load or unload.

To Load from Storage Tank to Tank Truck

Attach ground cable or bonding clamp to trailer.
Use wheel chocks or other similar barrier to prevent premature departure.
Hook up load hose and open all appropriate valves from storage tank to trailer entry.
Disengage clutch and place pump in load position.
Release clutch slowly.
Adjust throttle to proper engine RPM.
When trailer is loaded to appropriate level, slow engine speed.
Close valve to storage tank.
Loosen loading hose to allow enough air to drain loading hose dry.
Ensure that drips from the hose drain into the spill bucket at the loading area.
Disconnect loading hose completely, close load valve, plug and fasten securely.
Close belly valve on trailer.
Disconnect ground cable.
Promptly clean up any spilled oil.
Inspect lowermost drains and valves of the vehicle for discharges/leaks and ensure that they are tightened, adjusted, or replaced as needed to prevent discharges while vehicle is in transit.

APPENDIX C: Annual Inspection Checklist

ANNUAL SITE INSPECTION CHECKLIST

Instructions: Further description and comments, if needed, should be provided on a separate sheet of paper and attached to this sheet. Inspection forms shall be kept for no less than three (3) years.

Name of Owner/Operator		**Name of Facility**		**Site Property Number**	
State		**Latitude**		**Longitude**	
County/Parish		**Inspector Name**		**Inspection Date**	

Storage Tanks (Containers) and Separation Equipment	Yes		N/A	Comments/Description (Note tank/equipment ID)	Corrective Action Taken/Date
Tank surfaces show signs of leakage					
Tanks show signs of damage or deterioration					
Bolts, gaskets, or seams are damaged					
Aboveground tank supports are deteriorated or buckled					
Aboveground tank foundations have eroded or settled					
Floor inside containment shows signs of spills					
Level gauges or alarms are inoperative					
Vents or overflow lines are obstructed or closed					
Thief hatch does not seal air tight					
Trash or vegetation are present in the tank area					
Equipment protectors, labels, or signs are missing					

If any of the above questions are answered "YES" a corrective action must be performed. Failure to do so could result in a spill and/or fines.

Secondary Containment			N/A	Comments/Description (Note tank/equipment ID)	Corrective Action Taken/Date
Containment berm shows discoloration or stains					
Berm is breached, eroded, has vegetation, or below recommended height					
Berm drainage valves are open, broken, or unlocked					
Drainage pipe or structures clogged or have accumulated debris					

If any of the above questions are answered "YES" a corrective action must be performed. Failure to do so could result in a spill and/or fines.

Transfer Equipment			N/A	Comments/Description (Note tank/equipment ID)	Corrective Action Taken/Date
Loading/unloading lines are damaged or deteriorated					
Connections are not capped or blank-flanged					
Soil around loadlines is stained					
Load line covers or drip pans are over half full of liquids					

If any of the above questions are answered "YES" a corrective action must be performed. Failure to do so could result in a spill and/or fines.

Response Kit Inventory			N/A	Comments/Description (Note tank/equipment ID)	Corrective Action Taken/Date
Discharge response material is missing or damaged or needs replacement					

If any of the above questions are answered "YES" a corrective action must be performed. Failure to do so could result in a spill and/or fines.

Piping/Flowlines and Related Equipment	Yes		N/A	Comments/Description (Note tank/equipment ID)	Corrective Action Taken/Date
Valve seals or gaskets are leaking					

Pipelines or supports are damaged or deteriorated					
Buried pipelines are exposed					
Evidence of leakage at surface					
Dead or distressed vegetation is observed in the vicinity of the flowlines					

If any of the above questions are answered "YES" a corrective action must be performed. Failure to do so could result in a spill and/or fines.

General			N/A	Comments/Description (Note tank/equipment ID)	Corrective Action Taken/Date
SPCC diagram does not match with current tanks and equipment on site					
Road, ditch, or area surrounding battery or wellhead has signs of an oil or saltwater release					

If any of the above questions are answered "YES" a corrective action must be performed. Failure to do so could result in a spill and/or fines.

Additional Remarks:

Well Lat/Long:

_____

_____

Inspector Acknowledgement

I performed a annual SPCC inspection at the facility specified above.

Inspector or Supervisor Signature: _____ Date: _____

Title: _____

APPENDIX D: Record of Dike Drainage

This record must be completed when rainwater from diked areas is drained into a storm drain or into an open watercourse, lake, or pond, and bypasses the water treatment system. The bypass valve must normally be sealed in closed position and opened and resealed following drainage under responsible supervision. Records are maintained with the SPCC Plan.

Date	Area	Presence of Oil	Time Started	Time Finished	Signature

APPENDIX E: Discharge Prevention Briefing Log

Date	Instructor There	Print Name	Signature
	In Attendance		

Date	Instructor There	Print Name	Signature
	In Attendance		

APPENDIX F: Discharge Notification Procedures

Circumstances, instructions, and phone numbers for reporting a discharge to the National Response Center and other federal, state, and local agencies, and to other affected parties, are provided below. Note that any discharge to navigable water must be reported immediately to the National Response Center.

District Superintendent, Mickey Young (24 hours)	575-390-0999
Local Emergency (fire, explosion, or other hazards)	911

Agency / Organization	Agency Contact	Circumstances	When to Notify
Federal Agencies			
National Response Center	1-800-424-8802	Discharge reaching navigable waters.	**Immediately (verbal)**
EPA Region VI (Hotline)	1-800-887-6063	Discharge reaching navigable waters.	**Immediately (verbal)**
EPA Region VI Regional Administrator	First Interstate Bank Tower at Fountain Place 1445 Ross Avenue, 12th floor, Suite 1200 Dallas TX 75202	Discharge 1,000 gallons or more; or second discharge of 42 gallons or more over a 12-month period.	Written notification within 60 days (see Section 2.1 of this Plan)
State Agencies			
New Mexico Energy, Minerals and Natural Resources Department	505-748-1283 Ext-104 After 5 p.m. 575-626-3379	1) 10 Bbls or more to land or any amount to navigable waters. 2) Fire, explosion, or other impact that could affect public safety.	**Immediately (verbal)** Written notification to be made within 5 days.
Local Agencies			
Local Police Department	Artesia Police Department 702 West Chisum Avenue Artesia, New Mexico 88210 575-746-5000 or 911	Discharges that pose emergency conditions, regardless of the volume discharge.	**Immediately (verbal)**
Local Fire Department	Artesia Fire Department 309 North 7th Street Artesia, New Mexico 88210 575-746-5050 or 911	Discharges that pose emergency conditions, regardless of the volume discharge.	**Immediately (verbal)**
Others			
Response/cleanup contractors	Enviro Clean Services Office 405-373-4545 After hours 405-373-4585 Cell 405-642-0711 or 405-760-0146	Any discharge that exceeds the capacity of facility personnel to respond and cleanup.	As needed

The person reporting the discharge must provide the following information:

Name, location, organization, and telephone number;
Name and address of the owner/operator;
Date and time of the incident;
Location of the incident;
Source and cause of discharge;
Types of material(s) discharged;
Total quantity of materials discharged;
Quantity discharged in harmful quantity (to navigable waters or adjoining shorelines);
Danger or threat posed by the release or discharge;
Description of all affected media (e.g., water, soil);
Number and types of injuries (if any) and damage caused;
Weather conditions;
Actions used to stop, remove, and mitigate effects of the discharge;
Whether an evacuation is needed;
Name of individuals and/or organizations contacted; and
Any other information that may help emergency personnel respond to the incident.

Whenever the facility discharges more than 1,000 gallons of oil in a single event, or discharges more than 42 gallons of oil in each of two discharge incidents within a 12-month period, the Production Engineer must provide the following information to the U.S. Environmental Protection Agency's Regional Administrator within 60 days:

Name of the facility;
Name of the owner or operator;
Location of the facility;
Maximum storage or handling capacity and normal daily throughput;
Corrective actions and countermeasures taken, including a description of equipment repairs and replacements;
Description of facility, including maps, flow diagrams, and topographical maps;
Cause of the discharge(s) to navigable waters, including a failure analysis of the system and subsystems in which the failure occurred;
Additional preventive measures taken or contemplated to minimize possibility of recurrence; and
Other pertinent information requested by the Regional Administrator.

Discharge Notification Form

*** Notification must not be delayed if information or individuals are not available.

Facility: Mewbourne Oil Company *Peterson 7 PM Fed Com #1H* Production Facility
NW/4 Sec. 8-T18S-R27E Eddy County, New Mexico

Description of Discharge		
Date/time	Release date: Release time: Duration:	Discovery date: Discovery time:
Reporting Individual	Name: Tel. #:	
Location of discharge	Latitude: Longitude:	Description:
Equipment source	piping flowline well unknown stock, flare	Description: Equipment ID:
Product	crude oil saltwater other*	* Describe other:
Appearance and description		
Environmental conditions	Wind direction: Wind speed:	Rainfall: Current:
Impacts		
Quantity	Released:	Recovered:
Receiving medium	water** land other (describe):	Release confined to company property. Release outside company property. **If water, indicated extent and body of water:
Describe circumstances Of the release		
Assessment of impacts and remedial actions		
Disposal method for Recovered material		
Action taken to prevent Incident from reoccurring		
Safety issues	Injuries Fatalities Evacuation	

Notifications

Agency	Name	Date/time reported & Comments
Company Spill Response Coordinator		
National Response Center 1-800-424-8802		
State police		
New Mexico Energy, Minerals and Natural Resources Department		
Oil spill removal organization/cleanup contractor	Enviro Clean Services (405) 373-4585	

APPENDIX G: Equipment Shut-off Procedures

Source	Action
Manifold, transfer pumps or hose failure	Shut in the well supplying oil to the tank battery if appropriate. Immediately close the header/manifold or appropriate valve(s). Shut off transfer pumps.
Tank overflow	Shut in the well supplying oil to the tank battery. Close header/manifold or appropriate valve(s).
Tank failure	Shut in the well supplying oil to the tank battery. Close inlet valve to the storage tanks.
Flowline rupture	Shut in the well supplying oil to the flowline. Close nearest valve to the rupture site to stop the flow of oil.
Flowline leak	Shut in the well supplying oil to the flowline. Immediately close the nearest valve to stop the flow of the leaking section.
Explosion or fire	Immediately evacuate personnel from the area until the danger is over. Immediately shut in wells if safe to do so. If possible, close all manifold valves. If the fire is small enough such that it is safe to do so, attempt to extinguish with fire extinguishers available on site.
Equipment failure	Immediately close the nearest valve to stop the flow of oil into the leaking area.

APPENDIX H: Written Commitment of Manpower, Equipment, and Materials

In addition to implementing the preventive measures described in this Plan, Company will also specifically:

In the event of a discharge:

Make available all trained field personnel to perform response actions (minimum of 3)

Obtain assistance from an additional three full-time employees from any trained and available roustabout service if necessary

Collaborate fully with local, state, and federal authorities on response and cleanup operations

Maintain all on-site oil spill control equipment/supplies described in this Plan and in the attached Oil Spill Contingency Plan.

Maintain all communications equipment in operating condition at all times.

Review the adequacy of on-site and third-party response capacity with pre-established response/cleanup contractors on an annual basis and update response/cleanup contractor list as necessary.

Maintain formal agreements/contracts with response and cleanup contractors who will provide assistance in responding to an oil discharge and/or completing cleanup (see contract agreements maintained separately at the Corporate office and lists of associated equipment and response contractor personnel capabilities).

Authorized Facility Representative: Antonio Martinez

Signature:

Title: Production Engineer

PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**Mewbourne Oil Company**
LEASE NO.:	**NMLC-067981B**
WELL NAME & NO.:	**Peterson 7 PM Fed Com 1H**
SURFACE HOLE FOOTAGE:	**0310' FSL & 0640' FWL**
BOTTOM HOLE FOOTAGE LOCATION:	**0350' FSL & 0330' FWL Sec. 07, T. 18 S., R 27 E., Section 08, T. 18 S., R 27 E., NMPM**
COUNTY:	**Eddy County, New Mexico**

TABLE OF CONTENTS

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

I. GENERAL PROVISIONS

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

II. PERMIT EXPIRATION

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

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

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

IV. NOXIOUS WEEDS

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

V. SPECIAL REQUIREMENT(S)

Watershed Protection

1. The Spill Prevention, Control, and Countermeasure Plan contained in the APD shall be utilized.

2. The entire perimeter of the well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad.
   - The berm shall be constructed at a minimum of 12 inches high with impermeable mineral material (e.g. caliche).
   - No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad.
   - The topsoil stockpile shall be located outside the bermed well pad.
   - Topsoil, either from the well pad or surrounding area, shall not be used to construct the berm.
   - No storm drains, tubing or openings shall be placed in the berm.
   - If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.
   - The integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed.
   - Any access road entering the well pad shall be constructed so that the integrity of the berm height surrounding the well pad is not compromised. (Any access road crossing the berm cannot be lower than the berm height.)

3. Any water erosion that may occur due to the construction of the well pad during the life of the well will be quickly corrected and proper measures will be taken to prevent future erosion.

4. Tank Battery Only:

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

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

Reclamation Requirements:

Large rocks or subsoil clods (not evident in the surrounding terrain) must be buried within the approved area for interim and final reclamation.

Cave and Karst

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

Cave/Karst Surface Mitigation

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

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

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

Pad Berming:
The pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the pad. All sides will be bermed.

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

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

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

Cave/Karst Subsurface Mitigation

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

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

Directional Drilling:

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

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

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

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

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

Drilling:

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. In addition, the well sign shall include the surface and bottom hole lease numbers. If the Communitization Agreement number is known, it shall also be on the sign. If not, it shall be placed on the sign when the sign is replaced.

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) 234-5909 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 strip the top portion of the soil (root zone) from the entire well pad area and stockpile the topsoil along the edge of the well pad as depicted in the APD. The root zone is typically six (6) inches in depth. All the stockpiled topsoil will be redistributed over the interim reclamation areas. Topsoil shall not be used for berming the pad or facilities. For final reclamation, the topsoil shall be spread over the entire pad area for seeding preparation.

Other subsoil (below six inches) stockpiles must be completely segregated from the topsoil stockpile. Large rocks or subsoil clods (not evident in the surrounding terrain) must be buried within the approved area for interim and final reclamation.

C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

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

D. FEDERAL MINERAL MATERIALS PIT

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

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

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

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

F. EXCLOSURE FENCING (CELLARS & PITS)

Exclosure Fencing
The operator will install and maintain exclosure fencing for all open well cellars to prevent access to public, livestock, and large forms of wildlife before and after drilling operations until the pit is free of fluids and the operator initiates backfilling. (For examples of exclosure fencing design, refer to BLM's Oil and Gas Gold Book, Exclosure Fence Illustrations, Figure 1, Page 18.)

G. ON LEASE ACCESS ROADS

Road Width
The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty-five (25) feet.

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

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

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

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

Ditching
Ditching shall be required on both sides of the road.

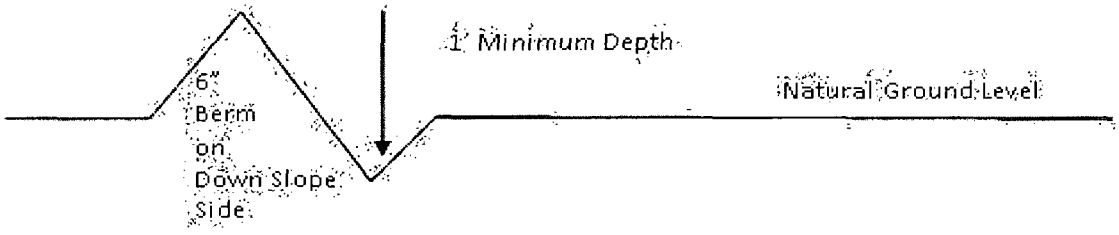
Turnouts
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

Drainage

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

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

Cross Section of a Typical Lead-off Ditch



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

Formula for Spacing Interval of Lead-off Ditches

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

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

Culvert Installations

Appropriately sized culverts shall be installed at deep waterway channel flow crossings through the road.

Cattleguards

An appropriately sized cattleguard sufficient to carry out the project shall be installed and maintained at fence/road crossings. Any existing cattleguards on the access road route 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 cattleguards that are in place and are utilized during lease operations.

Public Access

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

Construction Steps

1. Salvage topsoil
2. Construct road
3. Redistribute topsoil
4. Revegetate slopes

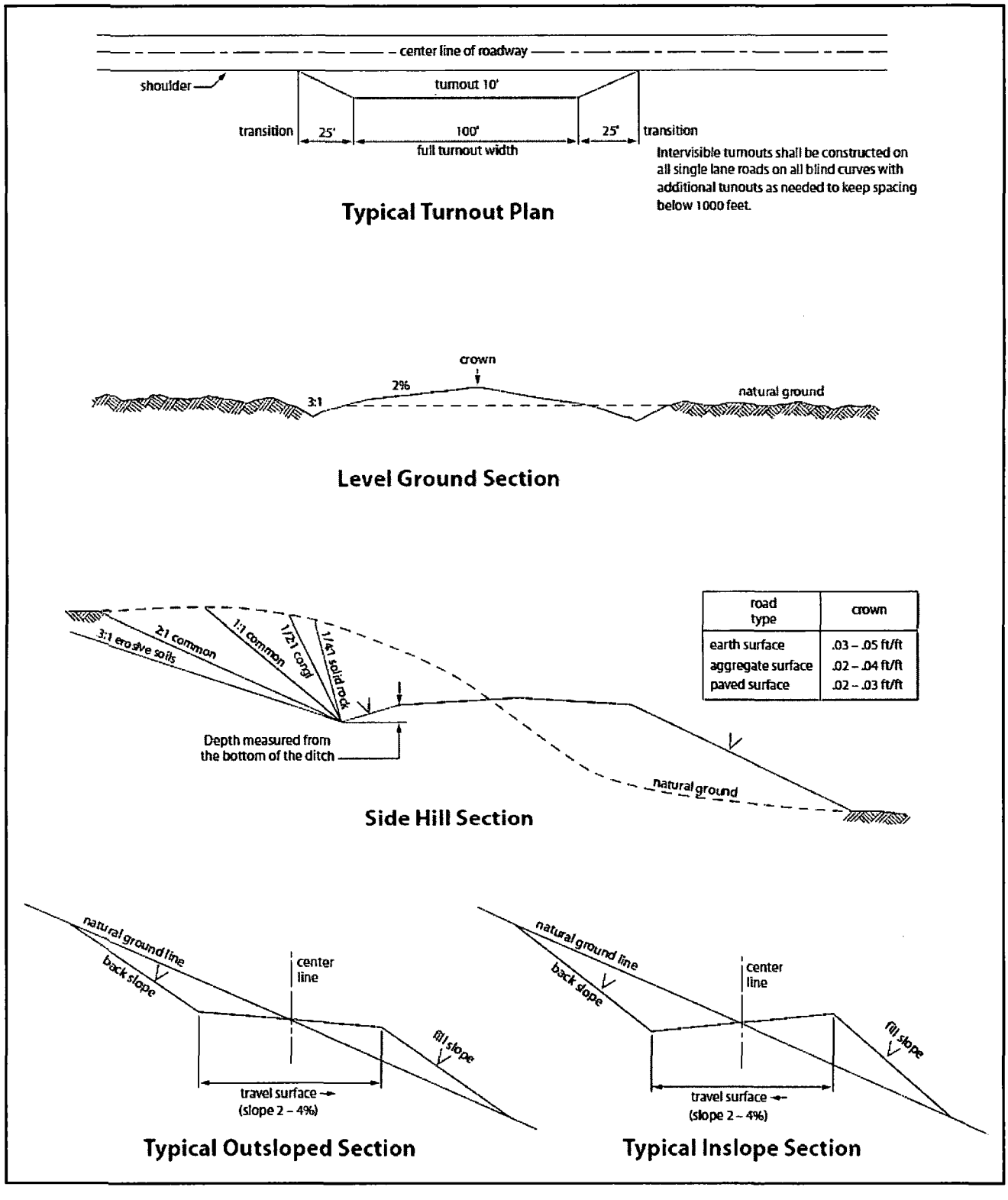


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

VII. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

a. Spudding well (minimum of 24 hours)
b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
c. BOPE tests (minimum of 4 hours)

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

1. A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **Queen** 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. **If the drilling rig is removed without approval – an Incident of Non-Compliance will be written and will be a "Major" violation.**

3. **The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies.**

B. CASING

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

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

Wait on cement (WOC) time prior to drilling out for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. IF OPERATOR DOES NOT HAVE THE WELL SPECIFIC CEMENT DETAILS ONSITE PRIOR TO PUMPING THE CEMENT FOR EACH CASING STRING, THE WOC WILL BE 30 HOURS. 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.

Possibility of water flows in the Artesia Group.
Possibility of lost circulation in the Grayburg and San Andres.

HIGH CAVE/KARST – CONTINGENCY CASING WILL BE REQUIRED IF LOST CIRCULATION OCCURS WHILE DRILLING THE SURFACE HOLE. THE SURFACE HOLE WILL HAVE TO BE REAMED AND A LARGER CASING INSTALLED AND THE BLM IS TO BE CONTACTED PRIOR TO RUNNING THE CASING. IF LOST CIRCULATION OCCURS WHILE DRILLING THE 7-7/8" HOLE, THE CEMENT PROGRAM FOR THE 5-1/2" CASING WILL NEED TO BE MODIFIED AND THE BLM IS TO BE CONTACTED PRIOR TO RUNNING THE CASING. A MINIMUM OF TWO CASING STRINGS CEMENTED TO SURFACE IS REQUIRED IN HIGH CAVE/KARST AREAS. THE CEMENT MUST BE IN A SOLID SHEATH THEREFORE, ONE INCH OPERATIONS WILL NOT BE PERMITTED. A DV TOOL WILL BE REQUIRED.

1. The **9-5/8** inch surface casing shall be set at approximately **350** feet and cemented to the surface.

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

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

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

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

Centralizers required through the curve and a minimum of one every other joint.

2. The minimum required fill of cement behind the **7** inch production casing is:

   ☒ Cement to surface. If cement does not circulate, contact the appropriate BLM office. **Excess calculates to 23% - Additional cement may be required.**

3. Cement not required on the **4-1/2"** casing. **Packer system being used.**

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

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

   b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**.

c. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock with a corresponding chart (i.e. two hour clock-two hour chart, one hour clock-one hour chart).

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

e. 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.**

f. 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. This test shall be performed prior to the test at full stack pressure.

D. DRILL STEM TEST

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

E. WASTE MATERIAL AND FLUIDS

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

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

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VIII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

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

Exclosure Netting (Open-top Tanks)
Immediately following active drilling or completion operations, the operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks until the operator removes the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1 ½ inches. The netting must not be in contact with fluids and must not have holes or gaps.

Chemical and Fuel Secondary Containment and Exclosure Screening
The operator will prevent all hazardous, poisonous, flammable, and toxic substances from coming into contact with soil and water. At a minimum, the operator will install and maintain an impervious secondary containment system for any tank or barrel containing hazardous, poisonous, flammable, or toxic substances sufficient to contain the contents of the tank or barrel and any drips, leaks, and anticipated precipitation. The operator will dispose of fluids within the containment system that do not meet applicable state or U. S. Environmental Protection Agency livestock water standards in accordance with state law; the operator must not drain the fluids to the soil or ground. The operator will design, construct, and maintain all secondary containment systems to prevent wildlife and livestock exposure to harmful substances. At a minimum, the operator will install effective wildlife and livestock exclosure systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1 ½ inches.

Open-Vent Exhaust Stack Exclosures
The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. (*Recommended exclosure structures on open-vent exhaust stacks are in the shape of a cone.*) Production equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, in-line units, and compressor mufflers.

Containment Structures
Proposed production facilities such as storage tanks and other vessels will have a secondary containment structure that is constructed to hold the capacity of 1.5 times the

largest tank, plus freeboard to account for precipitation, unless more stringent protective requirements are deemed necessary.

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** from the BLM Standard Environmental Color Chart (CC-001: June 2008).

B. PIPELINES

STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES

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

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

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

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

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

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

a. Activities of the holder including, but not limited to construction, operation, maintenance, and termination of the facility.
b. Activities of other parties including, but not limited to:
    (1) Land clearing.
    (2) Earth-disturbing and earth-moving work.
    (3) Blasting.
    (4) Vandalism and sabotage.
c. Acts of God.

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

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

5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve the holder of any responsibility as provided herein.

6. All construction and maintenance activity will be confined to the authorized right-of-way width of **20** feet. If the pipeline route follows an existing road or buried pipeline right-of-way, the surface pipeline must be installed no farther than 10 feet from the edge of the road or buried pipeline right-of-way. If existing surface pipelines prevent this distance, the proposed surface pipeline must be installed immediately adjacent to the outer surface pipeline. All construction and maintenance activity will be confined to existing roads or right-of-ways.

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

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

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

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

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

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

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

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

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

be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

16. 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, powerline 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.

17. Surface pipelines must be less than or equal to 4 inches and a working pressure below 125 psi.

IX. INTERIM RECLAMATION

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

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

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

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

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

X. FINAL ABANDONMENT & RECLAMATION

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

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

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

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

Seed Mixture 4, for Gypsum Sites

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

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

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

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

DWS: DeWinged Seed

*Pounds of pure live seed:

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