Form3160-3
(August 2007)

A75-12-1124

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

BHL-LC067981A

OCD Artesia

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No. NM-7715 & Fee (SHL LC067981A)

6. If Indian, Allotee or Tribe Name

1/9/2013

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" IL Fed Com #1H C39645

2. Name of Operator Mewbourne Oil Company 14744

9. API Well No.
30-015-40945

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 1795' FSL & 150' FWL (Sec. 8 T18S R27E)
At proposed prod. zone 1795 ~~1882~~ 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 drlg. unit line, if any) 150'

16. No. of acres in lease
NMLC067981A - 80
~~NM-7715 - 120 acres~~
NMLC070678A - 240

17. Spacing Unit dedicated to this well
~~160~~
160.82

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 305' West Red Lake Unit #53

19. Proposed Depth
7689' - MD
2648' - TVD

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

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3381' GL

22. Approximate date work will start*
10/01/2012

23. Estimated duration
60 days

24. Attachments

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

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

25. Signature Bradley Bishop — Name (Printed/Typed) Bradley Bishop — Date 8-17-12

Title

Approved by (Signature) /s/ James A. Amos — Name (Printed/Typed) — Date JAN 3 - 2013

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

RECEIVED
JAN 08 2013
NMOCD ARTESIA

Approval Subject to General Requirements & Special Stipulations Attached

SEE ATTACHED FOR CONDITIONS OF APPROVAL

United States Department of the Interior
Bureau of Land Management
Carlsbad Field Office
620 E Greene Street
Carlsbad, New Mexico 88201-1287

Statement Accepting Responsibility for Operations

Operator Name: Mewbourne Oil Company
Street or Box: P.O. Box 5270
City, State: Hobbs, New Mexico
Zip Code: 88241

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

Lease Number: NM-7715

Legal Description of Land: Section 8, T-18S, R-27E Eddy County, New Mexico.
Location @ 1795' FSL & 150' FWL.

Formation (if applicable): Bone Spring

Bond Coverage: $150,000

BLM Bond File: NM1693, Nationwide

Authorized Signature: _____
Name: NM (Micky) Young
Title: District Manager
Date: 8/16/12

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
30-015-40945	51120	Red Lake; Glorieta-Yeso

Property Code	Property Name	Well Number
39618	PETERSON 7 IL FEDERAL COM	1H

OGRID No.	Operator Name	Elevation
14744	MEWBOURNE OIL COMPANY	3381'

Surface Location

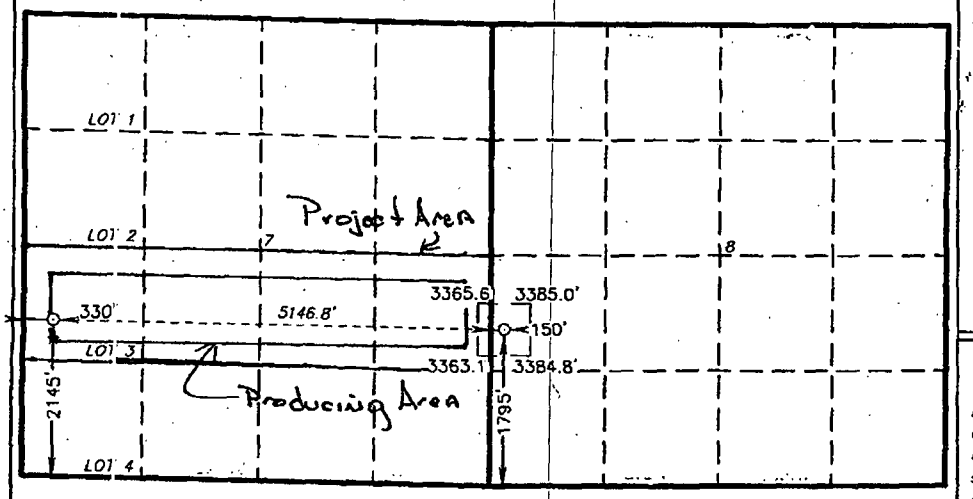
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	8	18 S	27 E		1795	SOUTH	150	WEST	EDDY

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 3	7	18 S	27 E		1795	SOUTH	330	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160.82			

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°45'36.36"
Long - W 104°19'29.59"
NMSPCE- N 640235.521
E 502596.952
(NAD-27)

SURFACE LOCATION
Lat - N 32°45'35.52"
Long - W 104°18'29.32"
NMSPCE- N 640151.350
E 507742.983
(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.

Signature 8/16/12 Date

NM Young
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
7977
REGISTERED PROFESSIONAL LAND SURVEYOR

W.O. Num. 26875

Certificate No. Gary L. Jones 7977

BASIN SURVEYS 26875

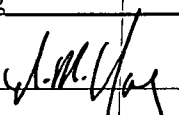
Mewbourne Oil Company

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 16 day of August, 2012.

Name: NM Young

Signature: 

Position Title: Hobbs District Manager

Address: PO Box 5270, Hobbs NM 88241

Telephone: 575-393-5905

E-mail: myoung@mewbourne.com

Drilling Program
Mewbourne Oil Company
Peterson "7" IL Fed Com #1H
1795' FSL & 150' FWL (SHL)
Sec 8 T18S R27E
Eddy County, New Mexico

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

Yates	50'
Queen	556'
Grayburg	928'
*San Andres	1195'
*Glorietta	2587'
*Yeso	2713'

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

Water	Fresh water is anticipated @ 80'-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.
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 2271' & kick off to horizontal @ 2749' TVD. The well will be drilled to 7689' MD (2648' 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'-3030'	ST&C
6 1/8"	4 ½" (new)	11.6#	J55	2800'-7689' MD	ST&C

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.

ii. Production Casing: 400 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'-3030'	Fresh water w/ FW mud sweeps	8.4-8.6	28-30	NA
3030'- TD	FW w/Polymer	8.5-8.7	32-35	20

7. Evaluation Program: See COA

Samples: 10' samples from surface casing to TD.
Logging: Gyro, CN,& GR Surface to KOP-100' (2171'). GR 2171' to TD.

8. Downhole Conditions

Zones of abnormal pressure: None anticipated
Zones of lost circulation: Anticipated in surface and intermediate holes
Maximum bottom hole temperature: 100 degree F
Maximum bottom hole pressure: 8.4 lbs/gal gradient or less (.43668 x 2648' =1156.33 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.

Job Number: S12-P7ILFC#1H
Company: Mewbourne Oil Company
Lease/Well: Peterson 7 IL Federal Com #1H
Location: NM-East
Rig Name: Patterson #101
State/County: New Mexico/ Eddy
Country: United States of America
API Number: N/A

Elevation (To MSL): 0.00 ft
RKB: 0.00 ft
Projection System: US State Plane 1927 (Exact solution)
Projection Group: New Mexico East 3001
Projection Datum: CLARKE 1866
Magnetic Declination: 7.84
Grid Convergence: 0.01363 E
Date: Monday, July 16, 2012

Calculated by HawkEye Software
Minimum Curvature Method
Vertical Section Plane 270.96°
Northing (US ft): 640151.35 Easting (US ft): 507742.98
Latitude: 32°45'35.5200" N Longitude: -104°18'29.3242" W
Well Location: 1807.80 FSL, 140.97 FWL, Section 8, T18S, R27E, Meridian 23, Eddy County, NM
Direction Reference: Grid North

Measured Depth (Ft)	INC Deg	AZM Deg	TVD (Ft)	NS (Ft)	EW (Ft)	Northing (US ft)	Easting (US ft)	Latitude DMS	Longitude DMS	Build Rate °/100Ft	VS (Ft)	Closure (Ft)	Closure Dir Deg	DLS °/100Ft
KOP-Begin Build @ 2271.48MD ,12.00°/ 100 Ft														
2271.48	0.00	0.00	2271.48	0.00	0.00	640151.35	507742.98	32°45'35.5200" N	-104°18'29.3242" W	0.00	0.00	0.00	0.03	0.00
2301.48	3.60	270.97	2301.46	0.02	-0.94	640151.37	507742.04	32°45'35.5201" N	-104°18'29.3353" W	12.00	0.94	0.94	271.14	12.00
2331.48	7.20	270.96	2331.32	0.07	-3.76	640151.42	507739.22	32°45'35.5206" N	-104°18'29.3683" W	12.00	3.76	3.76	271.00	12.00
2361.48	10.80	270.96	2360.95	0.14	-8.46	640151.49	507734.52	32°45'35.5214" N	-104°18'29.4233" W	12.00	8.46	8.46	270.95	12.00
2391.48	14.40	270.96	2390.22	0.25	-15.00	640151.60	507727.98	32°45'35.5225" N	-104°18'29.4999" W	12.00	15.00	15.00	270.97	12.00
2421.48	18.00	270.96	2419.02	0.40	-23.37	640151.75	507719.61	32°45'35.5240" N	-104°18'29.5979" W	12.00	23.37	23.37	270.98	12.00
2451.48	21.60	270.96	2447.25	0.57	-33.52	640151.92	507709.46	32°45'35.5256" N	-104°18'29.7168" W	12.00	33.53	33.53	270.97	12.00
2481.48	25.20	270.96	2474.77	0.77	-45.43	640152.12	507697.55	32°45'35.5277" N	-104°18'29.8563" W	12.00	45.44	45.44	270.97	12.00
2511.48	28.80	270.96	2501.50	1.00	-59.05	640152.35	507683.93	32°45'35.5299" N	-104°18'30.0157" W	12.00	59.06	59.06	270.97	12.00
2541.48	32.40	270.96	2527.32	1.25	-74.32	640152.60	507668.66	32°45'35.5325" N	-104°18'30.1945" W	12.00	74.33	74.33	270.96	12.00
2571.48	36.00	270.96	2552.13	1.54	-91.17	640152.89	507651.81	32°45'35.5354" N	-104°18'30.3919" W	12.00	91.19	91.19	270.97	12.00
2601.48	39.60	270.96	2575.83	1.85	-109.55	640153.20	507633.43	32°45'35.5385" N	-104°18'30.6071" W	12.00	109.57	109.57	270.97	12.00
2631.48	43.20	270.96	2598.33	2.18	-129.39	640153.53	507613.59	32°45'35.5418" N	-104°18'30.8395" W	12.00	129.41	129.41	270.97	12.00
2651.48	45.60	270.96	2612.62	2.42	-143.38	640153.77	507599.60	32°45'35.5442" N	-104°18'31.0033" W	12.00	143.40	143.40	270.97	12.00
2651.65	45.62	270.96	2612.73	2.42	-143.50	640153.77	507599.48	32°45'35.5442" N	-104°18'31.0047" W	11.76	143.52	143.52	270.97	11.89
2681.65	49.22	270.96	2633.03	2.79	-165.58	640154.14	507577.40	32°45'35.5479" N	-104°18'31.2633" W	12.00	165.61	165.61	270.96	12.00
2711.65	52.82	270.96	2651.90	3.18	-188.90	640154.53	507554.08	32°45'35.5518" N	-104°18'31.5363" W	12.00	188.93	188.93	270.96	12.00
2741.65	56.42	270.96	2669.27	3.59	-213.35	640154.94	507529.63	32°45'35.5560" N	-104°18'31.8227" W	12.00	213.38	213.38	270.96	12.00
2771.65	60.02	270.96	2685.06	4.02	-238.85	640155.37	507504.14	32°45'35.5603" N	-104°18'32.1213" W	12.00	238.88	238.88	270.96	12.00
2801.65	63.62	270.96	2699.23	4.46	-265.28	640155.81	507477.70	32°45'35.5647" N	-104°18'32.4308" W	12.00	265.32	265.32	270.96	12.00
2831.65	67.22	270.96	2711.70	4.92	-292.55	640156.27	507450.43	32°45'35.5693" N	-104°18'32.7502" W	12.00	292.60	292.60	270.96	12.00
2861.65	70.82	270.96	2722.44	5.39	-320.56	640156.74	507422.42	32°45'35.5740" N	-104°18'33.0782" W	12.00	320.60	320.60	270.96	12.00
2891.65	74.42	270.96	2731.40	5.87	-349.18	640157.22	507393.80	32°45'35.5788" N	-104°18'33.4133" W	12.00	349.23	349.23	270.96	12.00
2921.65	78.02	270.96	2738.55	6.36	-378.31	640157.71	507364.67	32°45'35.5838" N	-104°18'33.7545" W	12.00	378.36	378.36	270.96	12.00
2951.65	81.62	270.96	2743.85	6.86	-407.83	640158.21	507335.16	32°45'35.5887" N	-104°18'34.1001" W	12.00	407.88	407.88	270.96	12.00
2981.65	85.22	270.96	2747.29	7.36	-437.61	640158.71	507305.37	32°45'35.5938" N	-104°18'34.4490" W	12.00	437.68	437.68	270.96	12.00

Measured Depth (Ft)	INC Deg	AZM Deg	TVD (Ft)	NS (Ft)	EW (Ft)	Northing (US ft)	Easting (US ft)	Latitude DMS	Longitude DMS	Build Rate °/100Ft	VS (Ft)	Closure (Ft)	Closure Dir Deg	DLS °/100Ft
3011.65	88.82	270.96	2748.85	7.86	-467.57	640159.21	507275.41	32°45'35.5988" N	-104°18'34.7997" W	12.00	467.63	467.63	270.96	12.00
LP: 3031.82 MD, 91.24°														
3031.82	91.24	270.96	2748.84	8.20	-487.74	640159.55	507255.25	32°45'35.6022" N	-104°18'35.0359" W	12.00	487.81	487.81	270.96	12.00
3131.82	91.24	270.96	2746.67	9.88	-587.70	640161.23	507155.28	32°45'35.6191" N	-104°18'36.2066" W	0.00	587.79	587.79	270.96	0.00
3231.82	91.24	270.96	2744.51	11.57	-687.66	640162.92	507055.32	32°45'35.6359" N	-104°18'37.3772" W	0.00	687.76	687.76	270.96	0.00
3331.82	91.24	270.96	2742.34	13.25	-787.63	640164.60	506955.36	32°45'35.6528" N	-104°18'38.5478" W	0.00	787.74	787.74	270.96	0.00
3431.82	91.24	270.96	2740.18	14.93	-887.59	640166.28	506855.39	32°45'35.6697" N	-104°18'39.7185" W	0.00	887.72	887.72	270.96	0.00
3531.82	91.24	270.96	2738.01	16.61	-987.55	640167.96	506755.43	32°45'35.6865" N	-104°18'40.8891" W	0.00	987.69	987.69	270.96	0.00
3631.82	91.24	270.96	2735.85	18.30	-1087.51	640169.65	506655.47	32°45'35.7034" N	-104°18'42.0597" W	0.00	1087.67	1087.67	270.96	0.00
3731.82	91.24	270.96	2733.68	19.98	-1187.48	640171.33	506555.51	32°45'35.7202" N	-104°18'43.2304" W	0.00	1187.64	1187.64	270.96	0.00
3831.82	91.24	270.96	2731.52	21.66	-1287.44	640173.01	506455.54	32°45'35.7371" N	-104°18'44.4010" W	0.00	1287.62	1287.62	270.96	0.00
3931.82	91.24	270.96	2729.35	23.35	-1387.40	640174.70	506355.58	32°45'35.7539" N	-104°18'45.5716" W	0.00	1387.60	1387.60	270.96	0.00
4031.82	91.24	270.96	2727.19	25.03	-1487.36	640176.38	506255.62	32°45'35.7708" N	-104°18'46.7422" W	0.00	1487.57	1487.57	270.96	0.00
4131.82	91.24	270.96	2725.02	26.71	-1587.33	640178.06	506155.66	32°45'35.7876" N	-104°18'47.9129" W	0.00	1587.55	1587.55	270.96	0.00
4231.82	91.24	270.96	2722.86	28.39	-1687.29	640179.74	506055.69	32°45'35.8045" N	-104°18'49.0835" W	0.00	1687.53	1687.53	270.96	0.00
4331.82	91.24	270.96	2720.69	30.08	-1787.25	640181.43	505955.73	32°45'35.8213" N	-104°18'50.2541" W	0.00	1787.50	1787.50	270.96	0.00
4431.82	91.24	270.96	2718.53	31.76	-1887.21	640183.11	505855.77	32°45'35.8381" N	-104°18'51.4247" W	0.00	1887.48	1887.48	270.96	0.00
4531.82	91.24	270.96	2716.36	33.44	-1987.18	640184.79	505755.81	32°45'35.8550" N	-104°18'52.5954" W	0.00	1987.46	1987.46	270.96	0.00
4631.82	91.24	270.96	2714.20	35.13	-2087.14	640186.48	505655.84	32°45'35.8718" N	-104°18'53.7660" W	0.00	2087.43	2087.43	270.96	0.00
4731.82	91.24	270.96	2712.03	36.81	-2187.10	640188.16	505555.88	32°45'35.8886" N	-104°18'54.9366" W	0.00	2187.41	2187.41	270.96	0.00
4831.82	91.24	270.96	2709.86	38.49	-2287.06	640189.84	505455.92	32°45'35.9054" N	-104°18'56.1073" W	0.00	2287.39	2287.39	270.96	0.00
4931.82	91.24	270.96	2707.70	40.17	-2387.03	640191.52	505355.96	32°45'35.9223" N	-104°18'57.2779" W	0.00	2387.36	2387.36	270.96	0.00
5031.82	91.24	270.96	2705.53	41.86	-2486.99	640193.21	505256.00	32°45'35.9391" N	-104°18'58.4485" W	0.00	2487.34	2487.34	270.96	0.00
5131.82	91.24	270.96	2703.37	43.54	-2586.95	640194.89	505156.03	32°45'35.9559" N	-104°18'59.6191" W	0.00	2587.32	2587.32	270.96	0.00
5231.82	91.24	270.96	2701.20	45.22	-2686.91	640196.57	505056.07	32°45'35.9727" N	-104°19'0.7898" W	0.00	2687.29	2687.29	270.96	0.00
5331.82	91.24	270.96	2699.04	46.91	-2786.87	640198.26	504956.11	32°45'35.9895" N	-104°19'1.9604" W	0.00	2787.27	2787.27	270.96	0.00
5431.82	91.24	270.96	2696.87	48.59	-2886.84	640199.94	504856.15	32°45'36.0063" N	-104°19'3.1310" W	0.00	2887.25	2887.25	270.96	0.00
5531.82	91.24	270.96	2694.71	50.27	-2986.80	640201.62	504756.18	32°45'36.0231" N	-104°19'4.3017" W	0.00	2987.22	2987.22	270.96	0.00
5631.82	91.24	270.96	2692.54	51.95	-3086.76	640203.30	504656.22	32°45'36.0399" N	-104°19'5.4723" W	0.00	3087.20	3087.20	270.96	0.00
5731.82	91.24	270.96	2690.38	53.64	-3186.72	640204.99	504556.26	32°45'36.0567" N	-104°19'6.6429" W	0.00	3187.18	3187.18	270.96	0.00
5831.82	91.24	270.96	2688.21	55.32	-3286.69	640206.67	504456.30	32°45'36.0735" N	-104°19'7.8135" W	0.00	3287.15	3287.15	270.96	0.00
5931.82	91.24	270.96	2686.05	57.00	-3386.65	640208.35	504356.33	32°45'36.0903" N	-104°19'8.9842" W	0.00	3387.13	3387.13	270.96	0.00
6031.82	91.24	270.96	2683.88	58.69	-3486.61	640210.04	504256.37	32°45'36.1070" N	-104°19'10.1548" W	0.00	3487.11	3487.11	270.96	0.00
6131.82	91.24	270.96	2681.72	60.37	-3586.57	640211.72	504156.41	32°45'36.1238" N	-104°19'11.3254" W	0.00	3587.08	3587.08	270.96	0.00
6231.82	91.24	270.96	2679.55	62.05	-3686.54	640213.40	504056.45	32°45'36.1406" N	-104°19'12.4961" W	0.00	3687.06	3687.06	270.96	0.00
6331.82	91.24	270.96	2677.39	63.73	-3786.50	640215.08	503956.48	32°45'36.1574" N	-104°19'13.6667" W	0.00	3787.04	3787.04	270.96	0.00
6431.82	91.24	270.96	2675.22	65.42	-3886.46	640216.77	503856.52	32°45'36.1741" N	-104°19'14.8373" W	0.00	3887.01	3887.01	270.96	0.00
6531.82	91.24	270.96	2673.05	67.10	-3986.42	640218.45	503756.56	32°45'36.1909" N	-104°19'16.0080" W	0.00	3986.99	3986.99	270.96	0.00
6631.82	91.24	270.96	2670.89	68.78	-4086.39	640220.13	503656.60	32°45'36.2077" N	-104°19'17.1786" W	0.00	4086.96	4086.96	270.96	0.00
6731.82	91.24	270.96	2668.72	70.47	-4186.35	640221.82	503556.63	32°45'36.2244" N	-104°19'18.3492" W	0.00	4186.94	4186.94	270.96	0.00
6831.82	91.24	270.96	2666.56	72.15	-4286.31	640223.50	503456.67	32°45'36.2412" N	-104°19'19.5198" W	0.00	4286.92	4286.92	270.96	0.00

Measured Depth (Ft)	INC Deg	AZM Deg	TVD (Ft)	NS (Ft)	EW (Ft)	Northing (US ft)	Easting (US ft)	Latitude DMS	Longitude DMS	Build Rate °/100Ft	VS (Ft)	Closure (Ft)	Closure Dir Deg	DLS °/100Ft
6931.82	91.24	270.96	2664.39	73.83	-4386.27	640225.18	503356.71	32°45'36.2580" N	-104°19'20.6905" W	0.00	4386.89	4386.89	270.96	0.00
7031.82	91.24	270.96	2662.23	75.51	-4486.24	640226.86	503256.75	32°45'36.2747" N	-104°19'21.8611" W	0.00	4486.87	4486.87	270.96	0.00
7131.82	91.24	270.96	2660.06	77.20	-4586.20	640228.55	503156.78	32°45'36.2915" N	-104°19'23.0317" W	0.00	4586.85	4586.85	270.96	0.00
7231.82	91.24	270.96	2657.90	78.88	-4686.16	640230.23	503056.82	32°45'36.3082" N	-104°19'24.2024" W	0.00	4686.82	4686.82	270.96	0.00
7331.82	91.24	270.96	2655.73	80.56	-4786.12	640231.91	502956.86	32°45'36.3250" N	-104°19'25.3730" W	0.00	4786.80	4786.80	270.96	0.00
7431.82	91.24	270.96	2653.57	82.25	-4886.09	640233.60	502856.90	32°45'36.3417" N	-104°19'26.5436" W	0.00	4886.78	4886.78	270.96	0.00
7531.82	91.24	270.96	2651.40	83.93	-4986.05	640235.28	502756.94	32°45'36.3584" N	-104°19'27.7143" W	0.00	4986.75	4986.75	270.96	0.00
7631.82	91.24	270.96	2649.24	85.61	-5086.01	640236.96	502656.97	32°45'36.3752" N	-104°19'28.8849" W	0.00	5086.73	5086.73	270.96	0.00
PBHL @ 2648.00 Ft TVD														
7688.51	91.24	270.96	2648.00	86.57	-5142.67	640237.92	502600.31	32°45'36.3847" N	-104°19'29.5485" W	0.00	5143.40	5143.40	270.96	0.00

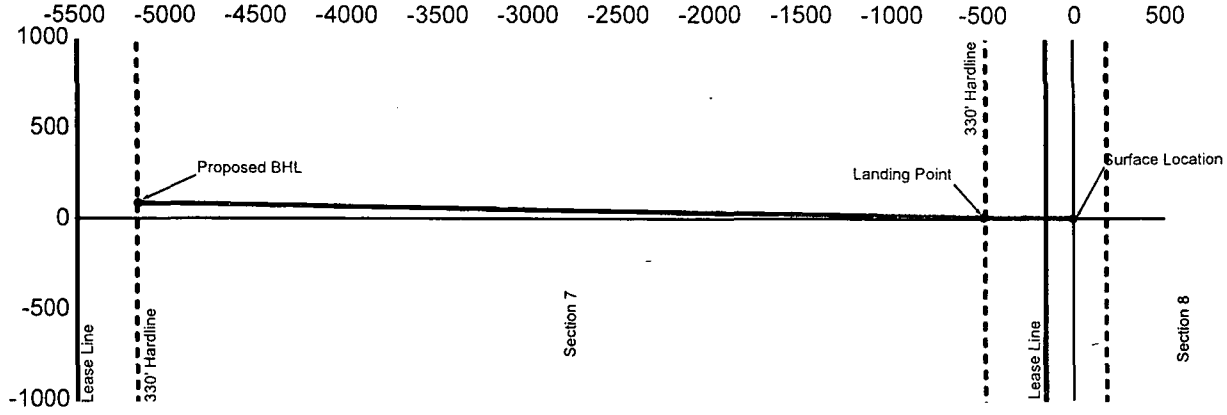
MAGNETICS INFORMATION

Magnetic Model: C:\HawkEye\IGRF2010.MIF	**Field Strength (nt):** 48774
Date for Magnetics: 07/16/2012	**B-X Component (nt):** 23777
Latitude: 32°45'35.5200" N	**B-Y Component (nt):** 3272
Longitude: -104°18'29.3242" W	**B-Z Component (nt):** 42460
Magnetic Declination: 7.84	**B-Horz Component (nt):** 24001
Total Correction(Mag to Grid): 7.82	**Dip Angle:** 60.52

TARGET DATA

Name	Shape	Easting (Ft)	Northing (Ft)	Subsea TVD (Ft)	NS (Ft)	EW (Ft)	Side A (Ft)	Side B (Ft)	Diameter (Ft)
PBHL	CYLINDER	502600.31	640237.92	2648.00	86.57	-5142.67	100.00	200.00	100.00
LP	CYLINDER	507263.05	640159.43	2749.00	8.08	-479.93	100.00	100.00	100.00

MEWBOURNE OIL COMPANY



Horizontal Plot
1" = 1000'

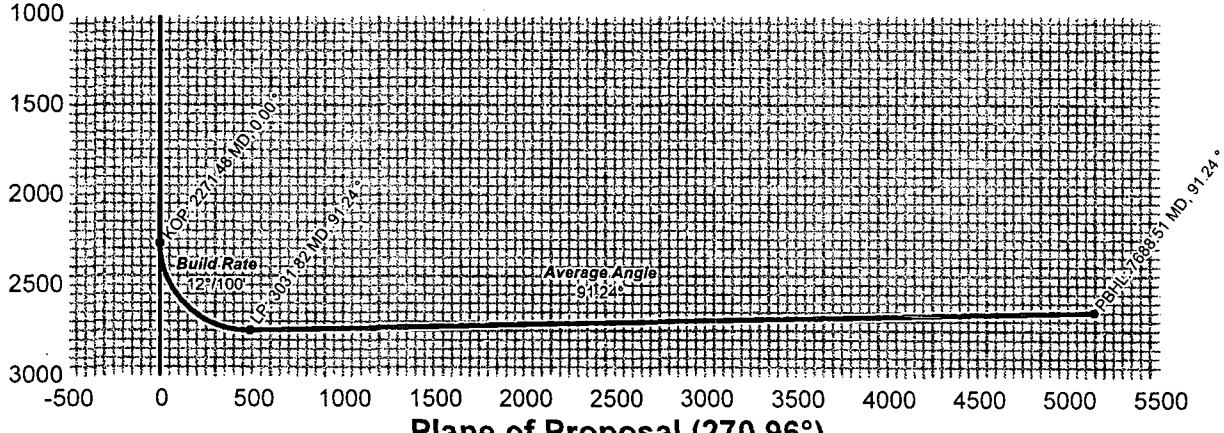
Well Plan #1
July 16, 2012

TRYKER ENERGY SERVICES

Peterson 7 IL Federal Com #1H
Eddy County, New Mexico
Patterson #101

NM-East
NAD27
Grid Correction = 7.823° E

Vertical Section Plot
1" = 1000'



Plane of Proposal (270.96°)
VS = 5143.40'

Surface Location
Latitude: 32°45'35.5200"
Longitude: -104°18'29.3242"
Y: 640151.35
X: 507742.98
1795 FSL, 150 FWL (Section 7)

Landing Point
487.81' Displacement from S/L
@ 270.96° Azimuth from S/L
North: 8.20' West: 487.74'
TVD: 2748.84' MD: 3031.82'
Y: 640159.55
X: 507255.25

Proposed BHL
5143.40' Displacement from S/L
@ 270.96° Azimuth from S/L
North: 86.57' West: 5142.67'
TVD: 2648.00' MD: 7688.51'
Y: 640237.92
X: 502600.31
1795 FSL, 330 FWL (Section 8)

Notes Regarding Blowout Preventer

Mewbourne Oil Company

Peterson 7 IL Fed Com #1H
1795' FSL & 150" 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.

11" 2M BOPE & Closed Loop Equipment Schematic

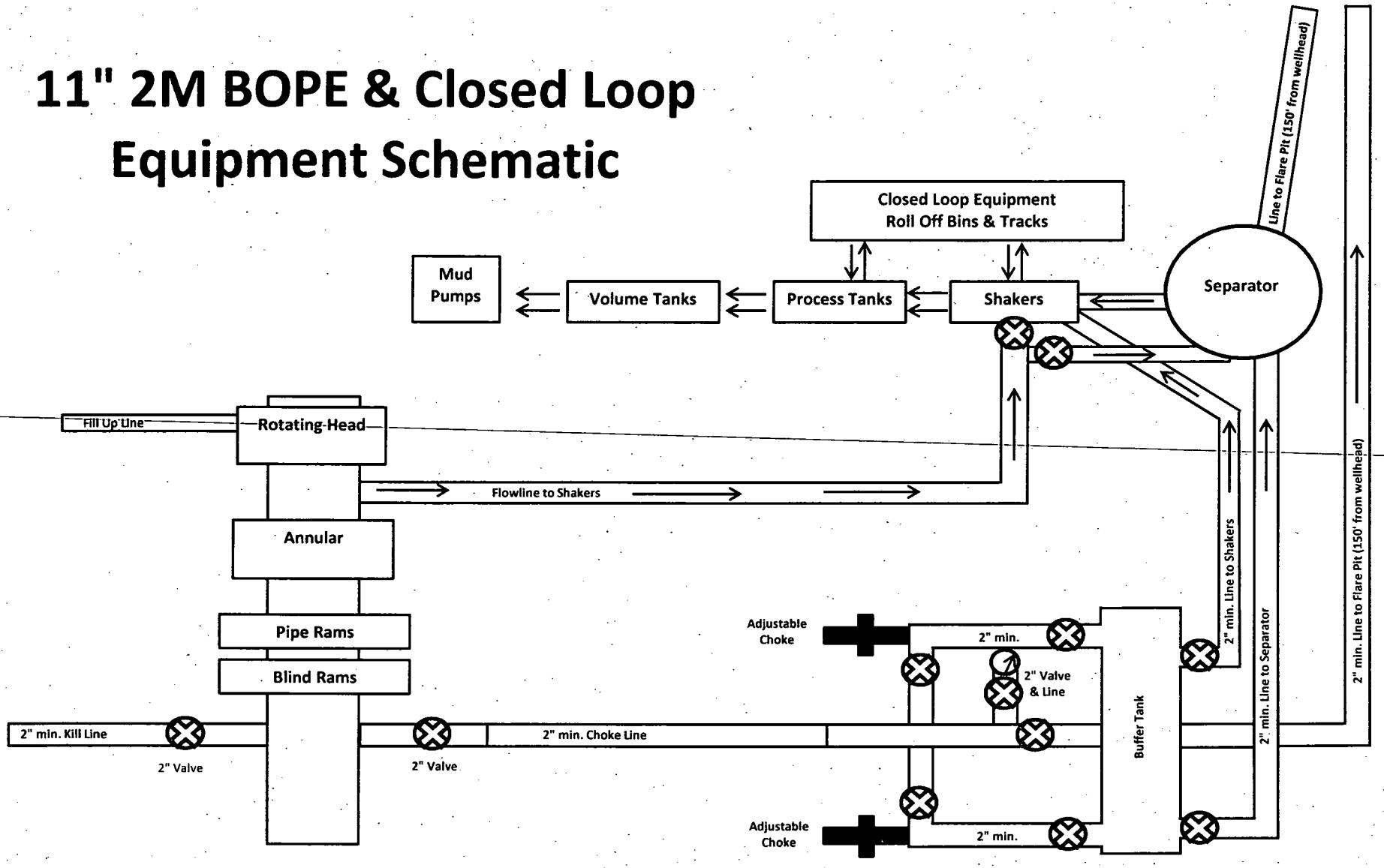
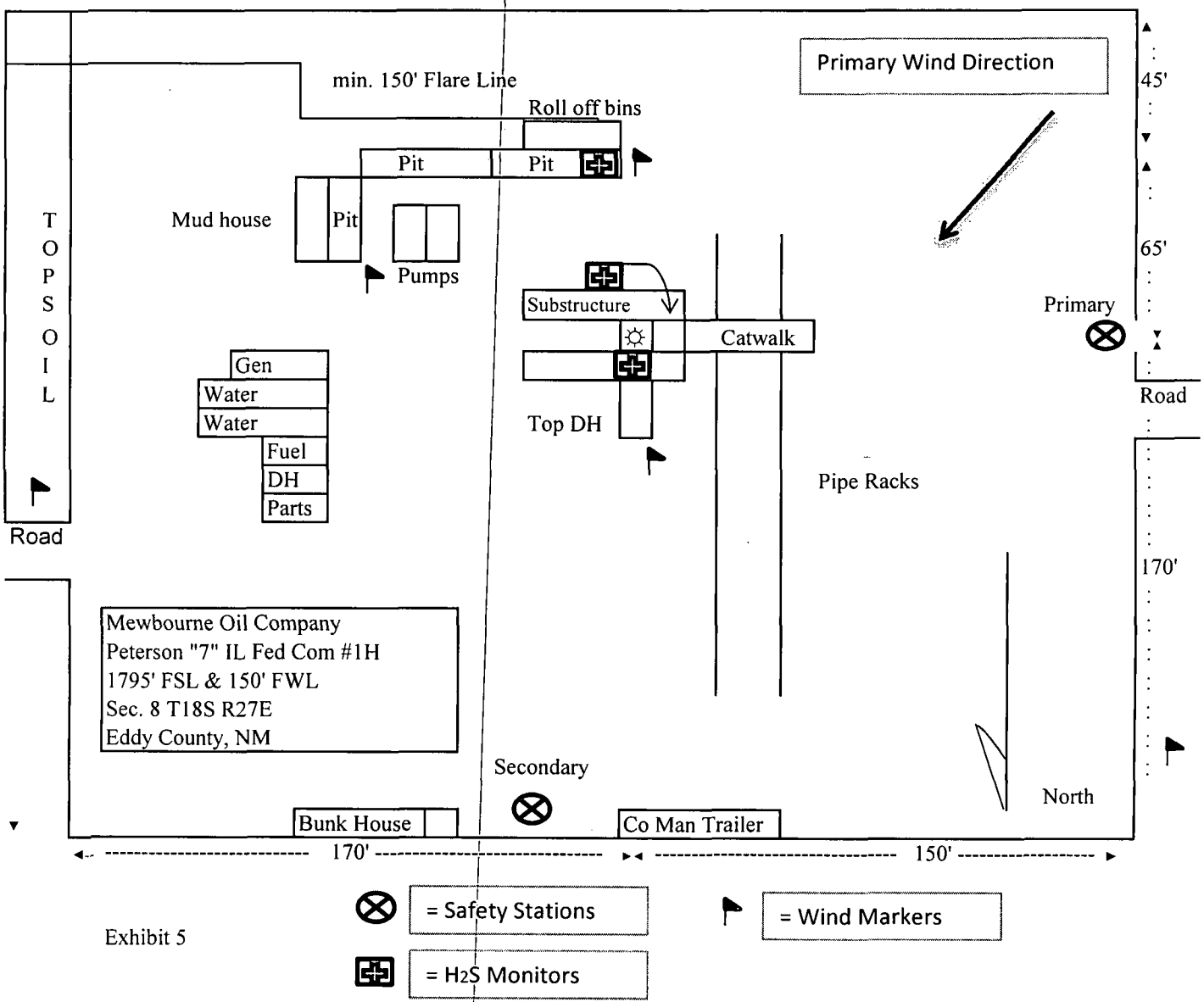


Exhibit 2
Well Name: Peterson 7 IL Fed Com #1H

H2S Diagram
Closed Loop Pad Dimensions 280' x 320'



= Safety Stations

= Wind Markers

= H2S Monitors

Exhibit 5

Hydrogen Sulfide Drilling Operations Plan

Mewbourne Oil Company
Peterson "7" IL Fed Com #1H
1795' FSL & 150' 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~~ remotely operated.
   - 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, and flare line with igniter will be installed.

* See COA *

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

4. Visual Warning Systems
A. Wind direction indicators as indicated on the wellsite diagram.
B. Caution signs shall be posted on roads providing access to location. Signs shall be painted a high visibility color with lettering of sufficient size to be readable at reasonable distances from potentially contaminated areas.

4. Mud Program

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

5. Metallurgy

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

6. Communications

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

7. Well Testing

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

8. Emergency Phone Numbers

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

Mewbourne Oil Company	**Hobbs District Office**	**575-393-5905**
	Fax	**575-397-6252**
	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'

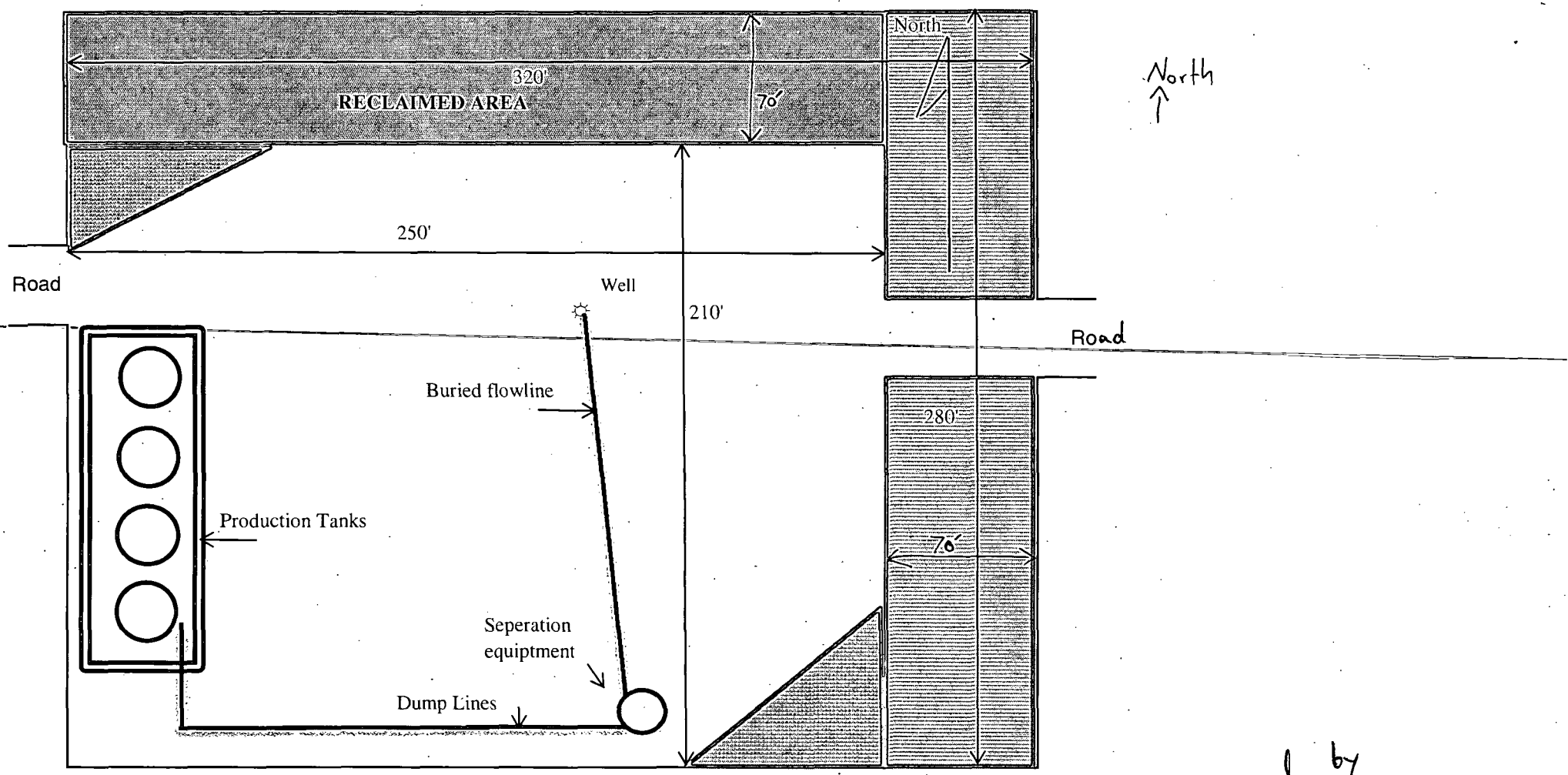


Exhibit 6

Mewbourne Oil Company
Peterson "7" IL Fed Com #1H
1795' FSL & 150' FWL
Sec. 8 T18S R27E
Eddy County, NM

Approved by
Robin Terrell
&
Bradley Bishop
of Mewbourne
9/7/12
TEN

PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Mewbourne Oil Co
LEASE NO.:	LC070678A
WELL NAME & NO.:	1H Peterson 7 IL Fed Com
SURFACE HOLE FOOTAGE:	1795' FSL & 150' FWL
BOTTOM HOLE FOOTAGE	1882' FSL & 330' FWL, Sec.7
LOCATION:	Section 8, T.18 S., R.27 E., NMPM
COUNTY:	Eddy County, New Mexico

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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.

SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN

Mewbourne Oil Company

701 South Cecil Street
Hobbs, NM 88240

Peterson 7 IL Fed Com #1H

SW Sec 8-T18S-R27E
Eddy County, New Mexico

Latitude N32.75987 Longitude W104.30815

Prepared by
Enviro Clean Services, L.L.C.

10/2/2012

P.O. BOX 721090 · OKLAHOMA CITY, OK 73172-1090
OFFICE:405-373-4545 · FAX:405-373-4549

110 AIRPORT DR., SUITE A · WAPPINGERS FALLS, NY 12590
OFFICE:800-477-2461 · FAX:845-463-4573

E-MAIL:Info@envirocleanps.com

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112.7(f)	3.5 Personnel, Training, and Discharge Prevention Procedures Appendix E: Discharge Prevention Briefing Log	27 Appendix E
112.7(g)	Security – N/A (does not apply to production facilities)	N/A
112.7(h)	Loading/Unloading Rack – N/A (no rack present at this facility, for loading area, see section 2.2)	N/A
112.7(i)	Brittle Fracture Evaluation – N/A (no field-erected aboveground tank at this Facility)	26
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*	**Cross-Reference - Oil Spill Contingency Plan**	**4a**

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

Cross-Reference with SPCC Rule 40 CFR 109.5 - Oil Spill Contingency Plan

	Section
Definition of authorities, responsibilities and duties of all persons, Organizations or agencies which are to be involved in planning or directing oil removal operations.	Appendix F, pg. 6
Establishment of notification procedures for the purpose of early detection and timely notification of an oil discharge including:	
(1) The identification of critical water use areas to facilitate the reporting of and response to oil discharges.	1.3, 1.6, Appendix A
(2) A current list of names, telephone numbers and addresses of the responsible persons and organizations to be notified when an oil discharge is discovered.	1.2, Table 1-1, Appendix F
(3) Provisions for access to a reliable communications system for timely notification of an oil discharge, and the capability of interconnection with the communications systems established under related oil removal contingency plans, particularly State and National plans.	2.3.3, Appendix H
(4) An established, prearranged procedure for requesting assistance during a major disaster or when the situation exceeds the response capability of the State, local or regional authority.	Appendix F, Appendix H
Provisions to assure that full resource capability is known and can be committed during an oil discharge situation including:	
(1) The identification and inventory of applicable equipment, materials and supplies which are available locally and regionally.	2.2
(2) An estimate of equipment, materials and supplies that would be required to remove the maximum oil discharge to be anticipated.	2.2
(3) Development of agreements and arrangements in advance of an oil discharge for the acquisition of equipment, materials and supplies to be used in responding to such a discharge.	Appendix H
Provisions for well defined and specific actions to be taken after discovery and notification of an oil discharge including:	
(1) Specification of an oil discharge response operating team consisting of trained, prepared and available operating personnel.	Appendix H
(2) Pre-designation of a properly qualified oil discharge response coordinator who is charged with the responsibility and delegated commensurate authority for directing and coordinating response operations and who knows how to request assistance from Federal authorities operating under existing national and regional contingency plans.	pg. 6
(3) A preplanned location for an oil discharge response operations center and a reliable communications system for directing the coordinated overall response operations.	pg. 7, Appendix H
(4) Provisions for varying degrees of response effort depending on the severity of the oil discharge.	2.3.3
(5) Specification of the order of priority in which the various water uses are to be protected where more than one water use may be adversely affected as a result of an oil discharge and where response operations may not be adequate to protect all uses.	2.3.3
Specific and well defined procedures to facilitate recovery of damages and enforcement measures as provided for by State and local statutes and ordinances.	1.7

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 IL 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.

Bradley Bishop 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: Bradley Bishop

Signature: Bradley Bishop

Title: Regulatory Regulatory

Date: 10-16-12

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)]

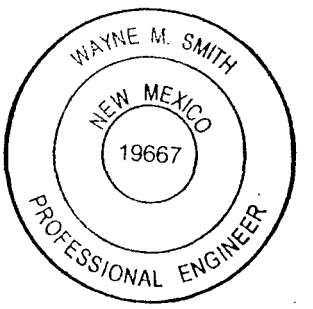
This certification in no way relieves the owner or operator of the facility of his/her duty to inspect the site and fully implement this SPCC Plan in accordance with the requirements of 40 CFR part 112.

Signature 10/18/12 Date

Wayne M. Smith
Name of Professional Engineer

19667 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 *10/2/2017.*

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, NM 88240. This will be the operations center for emergency response.

Certification of Substantial Harm Determination

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

Facility Name: **Mewbourne Oil Company, Peterson 7 IL 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.

Signature Bradley Bishop

Regulatory

Title

Bradley Bishop

Name (type or print)

Date 10-15-12

PART I - GENERAL FACILITY INFORMATION

40 CFR 112.7(a)(3)

1.1 Company Information

Name of Facility:	Peterson 7 IL Fed Com #1H
Type	Onshore oil production facility
Date of Initial Operation	November 1, 2012
Location	SW 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 Regulatory, Bradley Bishop. 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	575-390-0999 - Cell 575-393-5905 - Work	701 South Cecil Street Hobbs, New Mexico 88240
Robin Terrell	Production Superintendent	575-390-4816 - Cell 575-393-5905 - Work	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 battery, 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 9.5 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 a tank battery. The tank battery includes two 500-barrel (bbl) oil storage tanks, two 500-barrel (bbl) saltwater tanks, one 101-barrel (bbl) heater treater, one 13-barrel (bbl) separator, and associated flowlines and piping.

The production facility is generally unmanned. Mewbourne Oil Company's office is located at 701 South Cecil Street, Hobbs, NM 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 and pumpjacks, storage tanks, flowlines, and separation vessels. This includes performing equipment inspections and maintenance as needed.

The facility produces an average of 0.25 bbl (11 gallons) of crude oil and 0.25 bbl (11 gallons) of produced water each day. The produced water tanks contain an oil/produced water mixture. They are subject to 40 CFR part 112 and are covered by this SPCC Plan.

1.5 Oil Storage and Handling

1.5.1 Production Equipment

Oil storage at the facility consists of two (2) 500-bbl oil storage tanks, two (2) 500-bbl saltwater tanks, one (1) 101-bbl heater treater, one (1) 13-bbl separator, and associated flowlines and piping as summarized in Table 1-2. The total oil capacity at this facility is 2,114 bbl (88,788 gallons).

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

Table 1-2 lists all permanent oil containers present at the facility with capacity of 55 gallons or more, not including various 55 gallon drums.

Table 1-2: Characteristics of oil containers

ID	Type	Construction	Primary Content	Capacity (barrels)	Capacity (gallons)
#1	AST	Fiberglass	Saltwater	500	21,000
#2	AST	Fiberglass	Saltwater	500	21,000
#3	AST	Steel	Oil	500	21,000
#4	AST	Steel	Oil	500	21,000
#5	Heater Treater	Steel	Oil/Water	101	4,242
#6	Separator	Steel	Gas	13	546
			TOTAL	2,114	88,788

1.5.2 Transfer Activities

The well produces crude oil, saltwater and gas. The oil and water are produced through the tubing. Well liquids are then routed via flowlines to the separator for separation. Produced saltwater is routed from the heater treater to the saltwater storage tank. The crude oil is sent to the oil 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 only 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 saltwater is hauled from the saltwater tank by tanker trucks to an offsite disposal well.

1.6 Proximity to Navigable Waters

The well and tank battery are situated on relatively level ground that slopes in a general southwesterly direction. The site plan in Figure A-1 in Appendix A shows the location of the facility relative to nearby waterways. The facility diagram included in Figure A-2 in Appendix A indicates 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)]

This facility operates in conformance with the applicable state regulations and statutes. If there are state rules, regulations, or guidelines within New Mexico that are more stringent than the applicable prevention standards listed in 40 CFR 112, the facility will additionally comply with those rules, regulations or guidelines.

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 Regulatory is responsible for ensuring that all required discharge notifications have been made. All discharges should be reported to the Regulatory. 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 Environment 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 Environment 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 containment and loadline covers are installed on the ends of the loadlines, therefore no spill response materials are required at the site.

As the Company's emergency response contractor, Enviro Clean Services keeps in stock at a minimum:

(1)	Response trailer
(1)	Vac trailer
(1)	Backhoe
(600')	Absorbent boom
(600')	Hard boom
(20 bales)	Absorbent pads

24 hr. trained personnel
other appropriate equipment, trailers and trucks

These supplies and personnel should be adequate for the initial response to the maximum anticipated oil discharge from this facility.

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 Regulatory 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 Regulatory

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 Regulatory, 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.

The order of priority in which various water uses are to be protected is as follows: Oceans, Rivers, Major River Tributaries, Lakes, Creeks, Ponds.

2.3.4 Gather Spill Information

The Regulatory will ensure that the *Discharge Notification Form* is filled out and that notifications have been made to the appropriate authorities. The Regulatory 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 Regulatory so that timely notifications can be made. If the Regulatory is not available, or the Regulatory 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 Regulatory 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 Regulatory 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 follow the site topography and reach an intermittent creek.

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 Storage Tank	Rupture due to lightning strike, seam failure	21,000	12,600	Southwest	Containment berm
	Overflow (1 days production)	11	.45	Southwest	Containment berm
Flowlines and Piping					
Flowlines and Piping	Rupture/failure	22	1	Various	See Oil Spill Contingency Plan
	Pinhole leak, or leak at connection	24	1	Various	See Oil Spill Contingency Plan

Source	Type of Failure	Maximum Volume (gal)	Maximum Discharge Rate (gal/hr)	Direction of Flow	Containment
Well					
Polished rod stuffing box, valves, fittings, gauges	Leak	22	1	Southwest	See Oil Spill Contingency Plan
Saltwater Disposal					
Piping/hoses, pumps, valves	Leak	11	.45	Southwest	Containment berm
Transfers and Loading Operations					
Transport truck loading hose	Rupture	84	84	Southwest	Loadline Covers
Tank truck	Over-topping while loading	126	126	Southwest	Loadline Covers
Transfer valve	Rupture, leak of valve packing	3	3	Southwest	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:

- Secondary containment for Area A that contains the oil storage tanks and saltwater tanks (which may have small amounts of oil), is provided by a minimum 80 ft x 35 ft x 1.5 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.

- Secondary containment for Area B that contains the heater treater and separator is provided by a minimum 25 ft x 20 ft x 1.5 ft berm that provides a total containment equal to the largest tank (101-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.

- The tank truck loading area is flat but gently slopes to the southwest. The end of the loadline is equipped with a loadline drip bucket designed to prevent small discharges that may occur when disconnecting the hose.

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 either haul it to disposal or place it in the water tank on location. 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)

3.2.2 Secondary Containment for Bulk Storage Containers [112.9(c)(2)]

In order to further minimize the potential for a discharge to navigable waters, bulk storage containers such as all tank battery, separation, and treating equipment are placed inside Area A minimum 1.5-ft tall berm and Area B minimum 1.5-ft berm. They provide secondary containment sufficient for the size of the largest tank, plus the 25 year, largest 24 hour rainfall event for the area as a freeboard to contain precipitation. The amount of freeboard also equals the amount of precipitation anticipated at this facility, which is estimated to be 4 inches for a 24-hour, 25-year storm, based on data from www.Imnoeng.com/RainfallMaps/RainfallMaps.htm. Details of the berm capacity calculation are provided in Appendix J.

The floors and walls of the berms are constructed of clay based soil that ensures that the berms are able to contain the potential release of oil from the storage tanks until the discharge can be detected and addressed by field operations personnel. Facility personnel inspect the berms daily for the presence of oil.

3.2.3 Practicability of Secondary Containment [112.7(d)]

Flowlines adjacent to the production equipment and storage tanks are located within the berms, and therefore have secondary containment. Aboveground flowlines that go from the well to the production equipment and buried flowlines, however, lack adequate secondary containment.

The installation of double-wall piping, berms, or other permanent structures (e.g., remote impoundment) are impracticable at this facility due to the long distances involved and physical and road/fenceline right-of-way constraints. Additionally, such permanent structures would create land erosion and access problems for the landowner's operations and current uses of the land (e.g., agricultural production, animal grazing).

Other measures listed under 40 CFR 112.7(c) such as the use of sorbents are practical for small spills as means of secondary containment, however the volumes involved may exceed the sorbent capacity and the facility is attended for only a few hours each day.

Because secondary containment for flowlines outside of the tank battery is impracticable, Mewbourne Oil Company has provided with this Plan additional elements required under 40 CFR 112.7(d), including:

- A written commitment of manpower, equipment, and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful (see Appendix H).
- An Oil Spill Contingency Plan following the provisions of 40 CFR 109 (see Appendix I).
- Periodic and annual inspections (see section 3.4, 3.4.1, 3.4.2, and Appendix C).
- A Flowline Maintenance Program (see section 3.4.5).

3.3 Other Spill Prevention Measures

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

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

- The capacity of the oil storage tanks is sufficient to ensure that oil 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 battery is approximately 0.5 barrels per day. The oil tanks are sized to provide sufficient storage for at least two days.
- The tanks are connected with overflow equalizing lines to ensure that a full tank can overflow to an adjacent tank.

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 pumping well polish rod, stuffing boxes, and bleeder 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, polished rod stuffing boxes, wellheads, fittings, gauges, and flowline piping at the wellheads. 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 Regulatory. If at any time 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
Well	Leak	Evidence of oil seepage from pumping rod stuffing boxes, wellheads 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 wellheads, flowlines, and all processing equipment. It also includes verifying the proper functioning of all detection devices, including high-level sensors on oil storage tanks, heater treater, 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, pumping well pumping rod stuffing boxes, bleeder 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*
Well (including saltwater disposal well)	Area	Spills and leaks (e.g., stuffing box) Equipment protectors and signs General housekeeping
Leasehold area between well 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 lines 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 Regulatory 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 Regulatory 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.

APPENDIX A: Facility Diagrams

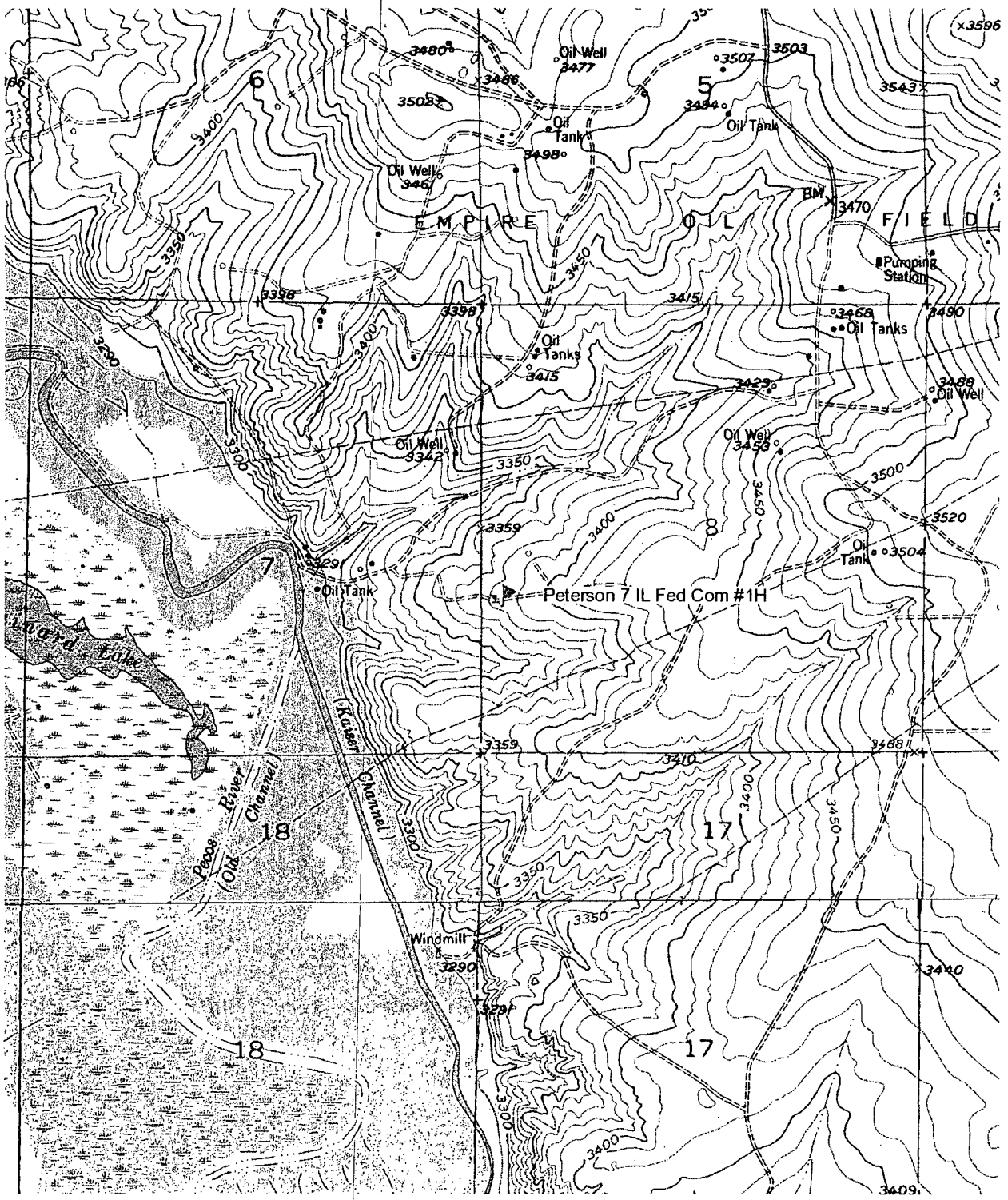
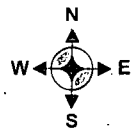
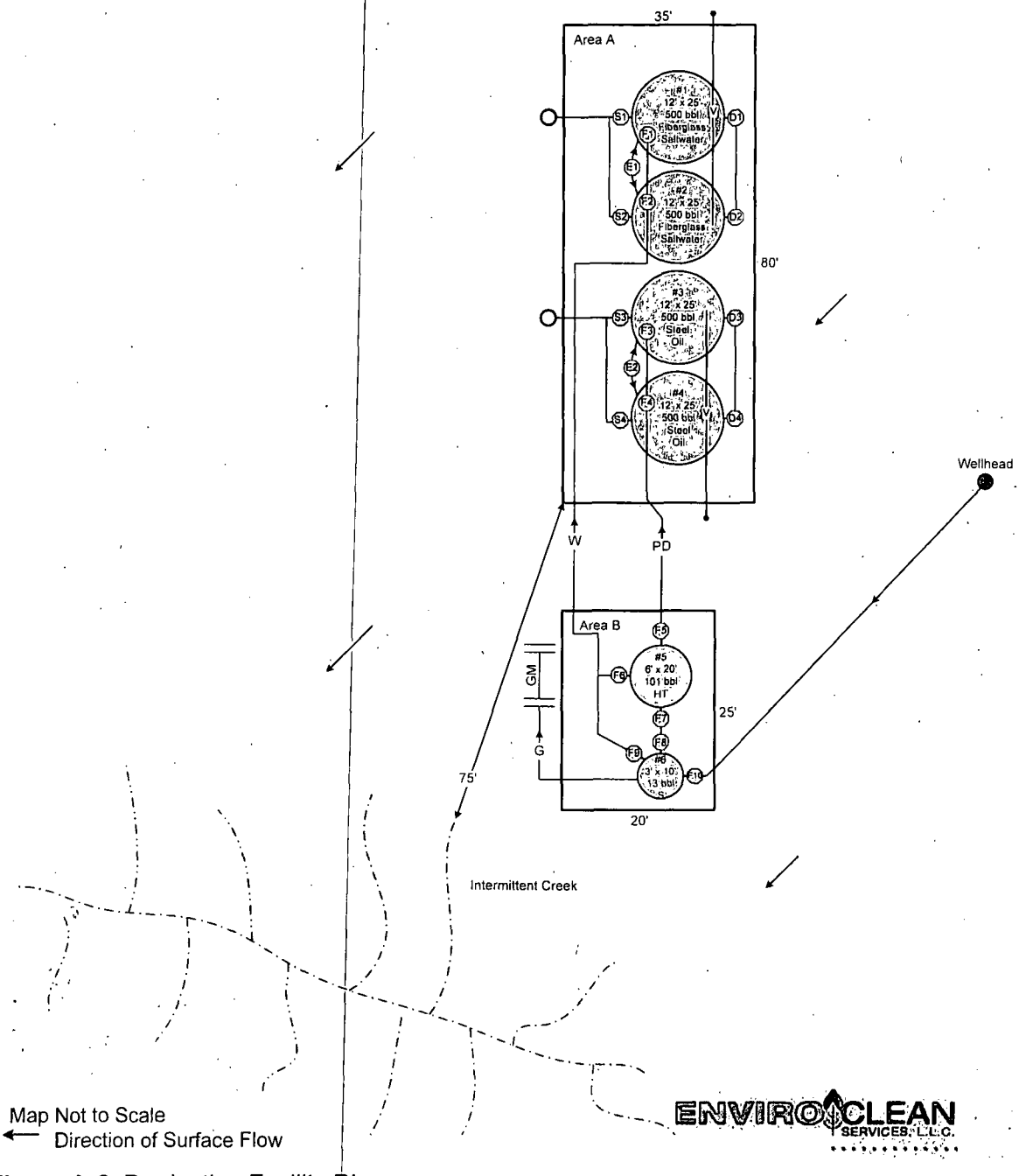


Figure A-1: Topo map.

Mewbourne Oil Company
Peterson 7 IL Fed Com #1H
SW Sec 8-T-18S-R27E
Eddy County, New Mexico
Latitude: N32.75987 Longitude: W104.30815

Open All Sides





Map Not to Scale
← Direction of Surface Flow

ENVIROCLEAN SERVICES, L.L.C.

Figure A-2: Production Facility Diagram.

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

ENVIROCLEAN SERVICES, L.L.C.

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	No	N/A	Comments/Description (Note Tanks/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				__Free standing fluid at_____ __Saturated soil at_____ __New stain at_____ __Old stain at_____ __See additional comments below	
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	**Yes**	**No**	**N/A**	**Comments/Description (Note Tank/Equipment ID)**	**Corrective Action Taken/Date**
Containment berm shows discoloration or stain					
Berm is breached, eroded, has vegetation, or below recommended height				Current berm height is_____ Low point is at _____ Berm height should be _____	
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	Yes	No	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 shows signs of leak				__Free standing fluid at_____ __Saturated soil at_____ __New stain at_____ __Old stain at_____ __See additional comments below	
Loadline 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	**Yes**	**No**	**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**	**No**	**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	**Yes**	**No**	**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 an annual SPCC Inspection at the facility specified above

Inspector or Supervisor Signature:_____ Title:_____ Date:_____

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 Environment Department	505-827-9329 - Emergency 24 hour 866-428-6535 - Non Emergency 24 hour	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 State Police 702 West Chisum Ave Artesia, NM 88210 575-748-9718 or 911	Discharges that pose emergency conditions, regardless of the volume discharge.	**Immediately (verbal)**
Local Fire Department	Artesia Fire Department 701 Wet Chisum Ave Artesia, NM 88210 575-748-0260 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 Regulatory 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 IL Fed Com #1H Production Facility
SW 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 Environment 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 well 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: Bradley Bishop

Signature: 

Title: Regulatory

APPENDIX I: Oil Spill Contingency Plan

See Section 2.3 of this SPCC Plan.

APPENDIX J: Calculation of Secondary Containment Capacity

The maximum 24-hour rainfall recorded in the last 25 years at this location is **4 inches**.

SECONDARY CONTAINMENT CALCULATIONS

Site: Peterson 7 IL Fed Com #1H Area A

1) Minimum volume needed for secondary containment structure:
=(Volume of single largest tank)
x 0.1337 cu. Ft/gallon

= 2808 cu.ft. plus largest 25 year rainfall event

2) Total Dike area: (L*W) using existing structure and / or ease of construction

L= 80 W= 35 Area= 2800 sq ft.

3) Total area of Tanks within secondary containment:
=∑ (∏ *d^2 /4) where d=diameter of tank.

∑ tank area= 339 sq ft.

4) Available Dike area:
=Total Dike area-total area of tanks
ADA= 2461 sq ft.

5) Needed Berm Height
=Minimum volume needed for secondary containment /ADA
Berm ht= 1.5 ft = 17.7 inches

Calculation worksheet revised 11/22/2004

FILL IN BELOW — Field dimen. — Tank diameters* — tank areas 3.1416 pi*(d/2)^2

Name	Containment area (sq ft)	Tank area (sq ft)	Ca-Ta sq. ft	max capacity in cu.ft	Berm ht. (ft)	25 yr Rainfall (ft)	single largest Tank Max Vol. (bbl)	L	W	d1	d2	d3	d4	d5	d6	area1	area2	area3	area4	area5	area6
Peterson 7 IL Fed Com #1H Area A	2800	339	2461	2808	1.5	0.3333	500	80	35	12	12	12				113.1	113.1	113.1	0.0	0.0	0.0
	0	0	0	0	#DIV/0!											0.0	0.0	0.0	0.0	0.0	0.0
	0	0	0	0	#DIV/0!											0.0	0.0	0.0	0.0	0.0	0.0

		sum(tank areas) - pi*r^2	max cap.*42gal/bbl*0.1337 cu.ft/gal.*1.5	(Ca-Ta)/max. cap
	L*W			

*NOTE: tank diameters listed from drawing - top to bottom
assume first # on drawing = diameter of tank
210 bbl=10ft 300 bbl=12ft
heater=4ft diameter, separator=3ft diameter

APPENDIX J: Calculation of Secondary Containment Capacity

The maximum 24-hour rainfall recorded in the last 25 years at this location is **4 inches**.

SECONDARY CONTAINMENT CALCULATIONS

Site: Peterson 7 IL Fed Com #1H Area B

1) Minimum volume needed for secondary containment structure:
=(Volume of single largest tank)
x 0.1337 cu. Ft/gallon
plus largest 25 year rainfall
= 567 cu.ft. event

2) Total Dike area: (L*W) using existing structure and / or ease of construction
L= 25 W= 20 Area= 500 sq ft.

3) Total area of Tanks within secondary containment:
=∑ (∏ *d^2 /4) where d=diameter of tank.
∑ tank area= 7 sq ft.

4) Available Dike area:
=Total Dike area-total area of tanks
ADA= 493 sq ft.

5) Needed Berm Height
=Minimum volume needed for secondary containment /ADA
Berm ht= 1.5 ft = 17.8 inches

Calculation worksheet revised 11/22/2004

FILL IN BELOW

Name	Containment area (sq ft)	Tank area (sq ft)	Ca-Ta sq. ft	max capacity in cu.ft	Berm ht. (ft)	25 yr Rainfall (ft)	single largest Tank Max Vol. (bbl)	Field dimen. L	W	Tank diameters* d1	d2	d3	d4	d5	d6	tank areas 3.1416 pi*(d/2)^2 area1	area2	area3	area4	area5	area6
Peterson 7 IL Fed Com #1H Area B	500	7	493	567	1.5	0.3333	101	25	20	3						7.1	0.0	0.0	0.0	0.0	0.0
	0	0	0	0	#DIV/0!											0.0	0.0	0.0	0.0	0.0	0.0
	0	0	0	0	#DIV/0!											0.0	0.0	0.0	0.0	0.0	0.0

	L*W	sum(tank areas) - pi*r^2	max cap.*42gal/bbl*0.1337 cu.ft/gal.*1.5	(Ca-Ta)/max. cap

NOTE: tank diameters listed from drawing - top to bottom
assume first # on drawing =diameter of tank
210 bbl=10ft , 300 bbl=12ft
heater= 4ft diameter, separator=3ft diameter