13-1040

RECEIVED
JAN 24 2014
OCD Artesia
OCD ARTESIA

Form 3160-3
(March 2012)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.: NM-01165

6. If Indian, Allotee or Tribe Name:

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

1a. Type of work: ☐ DRILL ☑ REENTER

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

8. Lease Name and Well No.: Derringer 18 SWD #1 <40356>

2. Name of Operator: Mewbourne Oil Company <14744>

9. API Well No.: 30-015-30828

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

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

10. Field and Pool, or Exploratory: ~~Wildcat Devonian~~ SWD; Devonian <96101>

4. Location of Well (Report location clearly and in accordance with any State requirements.*)
At surface: 660' FSL & 1980' FWL, Sec. 18 T20S R29E
At proposed prod. zone:

11. Sec., T. R. M. or Blk. and Survey or Area: Sec. 18 T20S R29E

14. Distance in miles and direction from nearest town or post office*: 12 miles NE of Carlsbad, NM

12. County or Parish: Eddy

13. State: NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any): 660'

16. No. of acres in lease: NM-01165 - 2494.41 acres

17. Spacing Unit dedicated to this well:

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.: 1250' - Yates Federal #2

19. Proposed Depth: 13,200' - TD

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

21. Elevations (Show whether DF, KDB, RT, GL, etc.): 3255'

22. Approximate date work will start*: 12/01/2013

23. Estimated duration: 60 days

24. Attachments

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

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

25. Signature: Bradley Bishop — Name (Printed/Typed): Bradley Bishop — Date: 10/30/2013

Title:

Approved by (Signature): /S/ STEPHEN J. CAFFEY — Name (Printed/Typed): — Date: JAN 21 2014

Title: FIELD MANAGER — Office: CARLSBAD FIELD OFFICE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

APPROVAL FOR TWO YEARS

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

(Continued on page 2)

*(Instructions on page 2)

Capitan Controlled Water Basin SWD-1425

Approval Subject to General Requirements & Special Stipulations Attached

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

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 Road, 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 & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-015-30828	96101	Devonian; SWD

4 Property Code	5 Property Name	6 Well Number
40356	DERRINGER 18 SWD	1

7 OGRID No.	8 Operator Name	9 Elevation
14744	MEWBOURNE OIL COMPANY	3255'

10 Surface Location

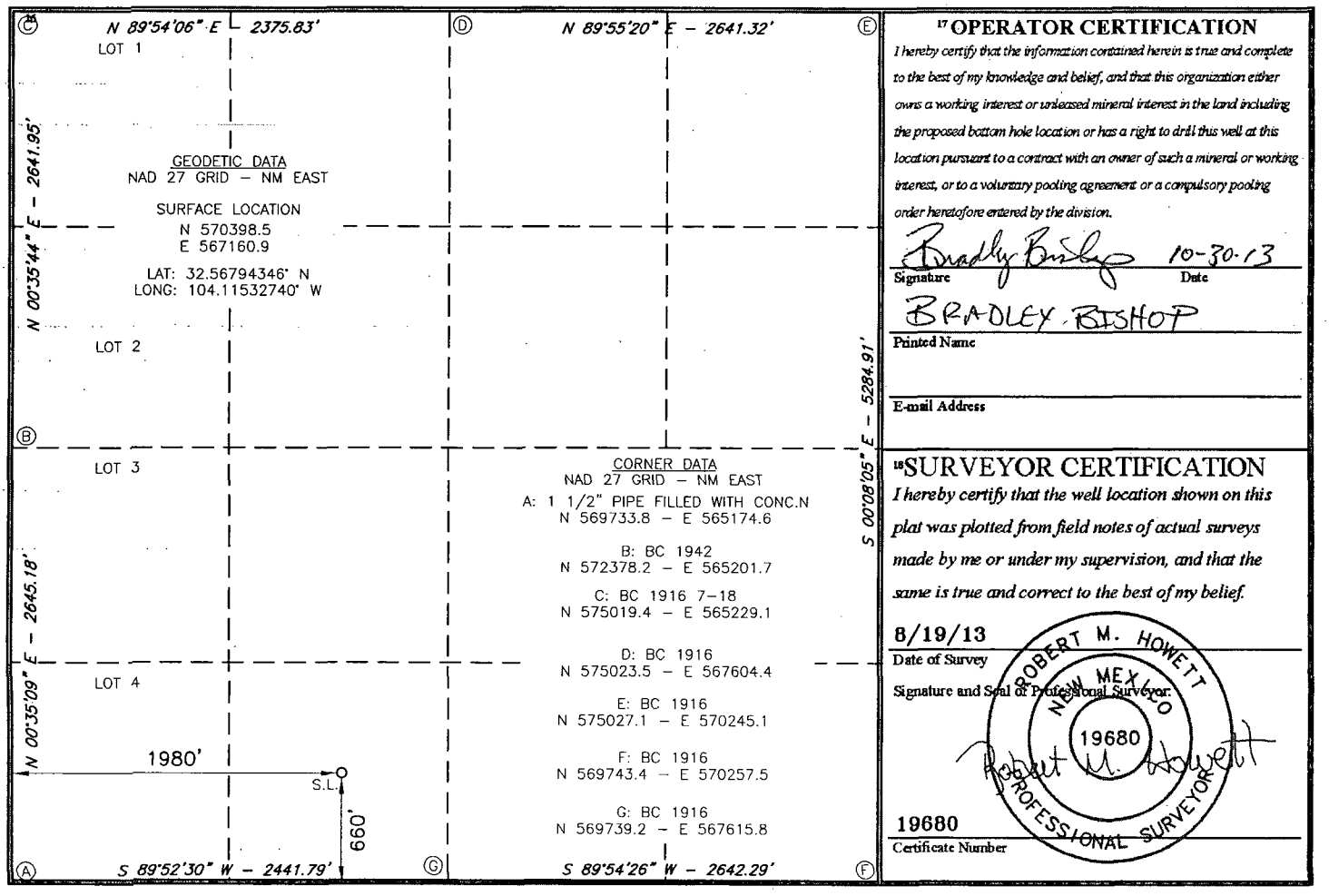
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	18	20-S	29-E		660	SOUTH	1980	WEST	EDDY

11 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

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
			1-21 13200

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.



17 OPERATOR CERTIFICATION

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

Bradley Bishop 10-30-13
Signature Date

BRADLEY BISHOP
Printed Name

E-mail Address

18 SURVEYOR CERTIFICATION

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

8/19/13
Date of Survey

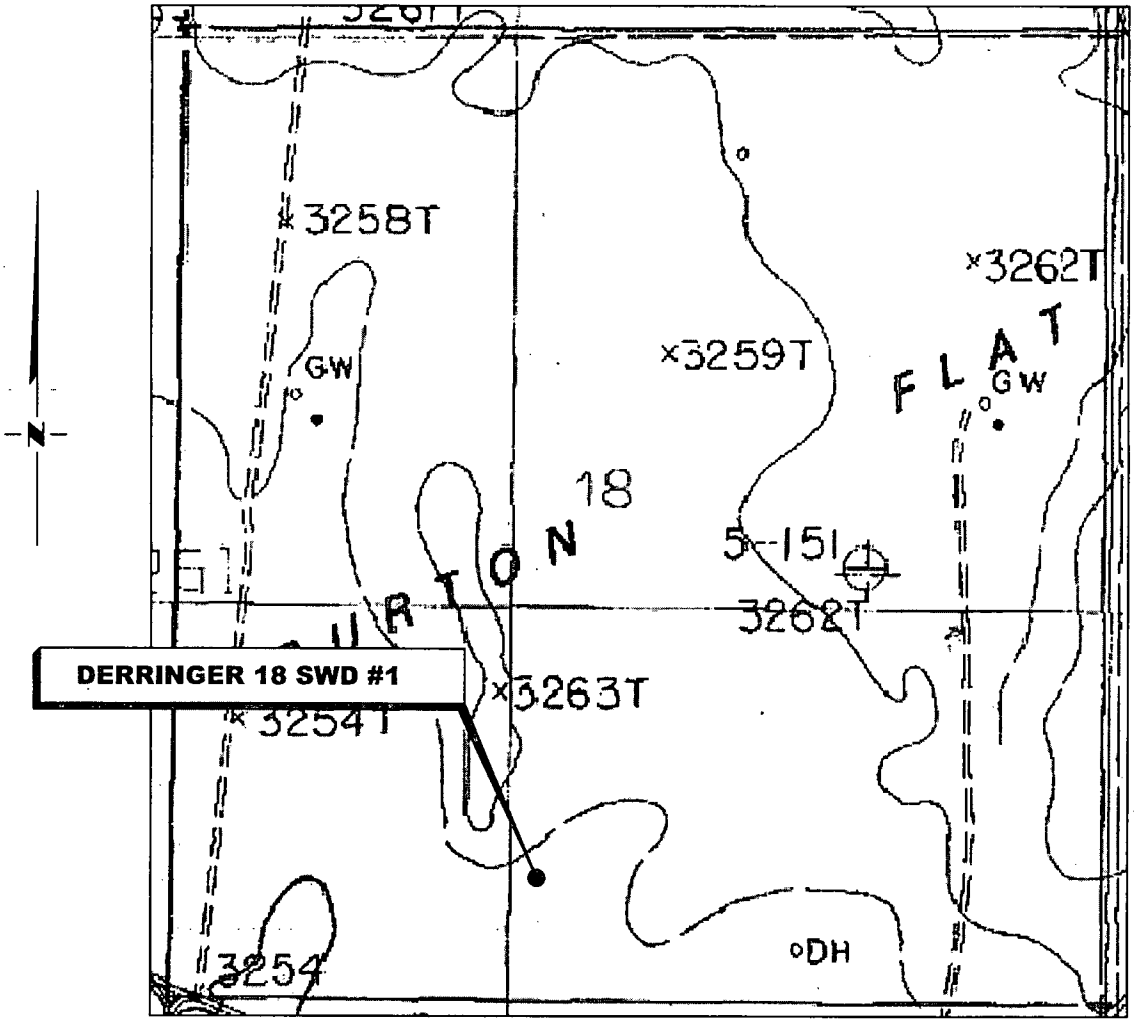
Signature and Seal of Professional Surveyor:

ROBERT M. HOWETT
NEW MEXICO
19680
PROFESSIONAL SURVEYOR

Robert M. Howett

19680
Certificate Number

LOCATION VERIFICATION MAP



SECTION 18, TWP. 20 SOUTH, RGE. 29 EAST,
N. M. P. M., EDDY COUNTY, NEW MEXICO

OPERATOR: Mewbourne Oil Company
LEASE: Derringer 18 SWD
WELL NO.: 1
ELEVATION: 3255'

LOCATION: 660' FSL & 1980' FWL
CONTOUR INTERVAL: 10'
USGS TOPO. SOURCE MAP:
Illinois Camp SE, NM (Prov. Ed. 1985)

NO.	REVISION	DATE

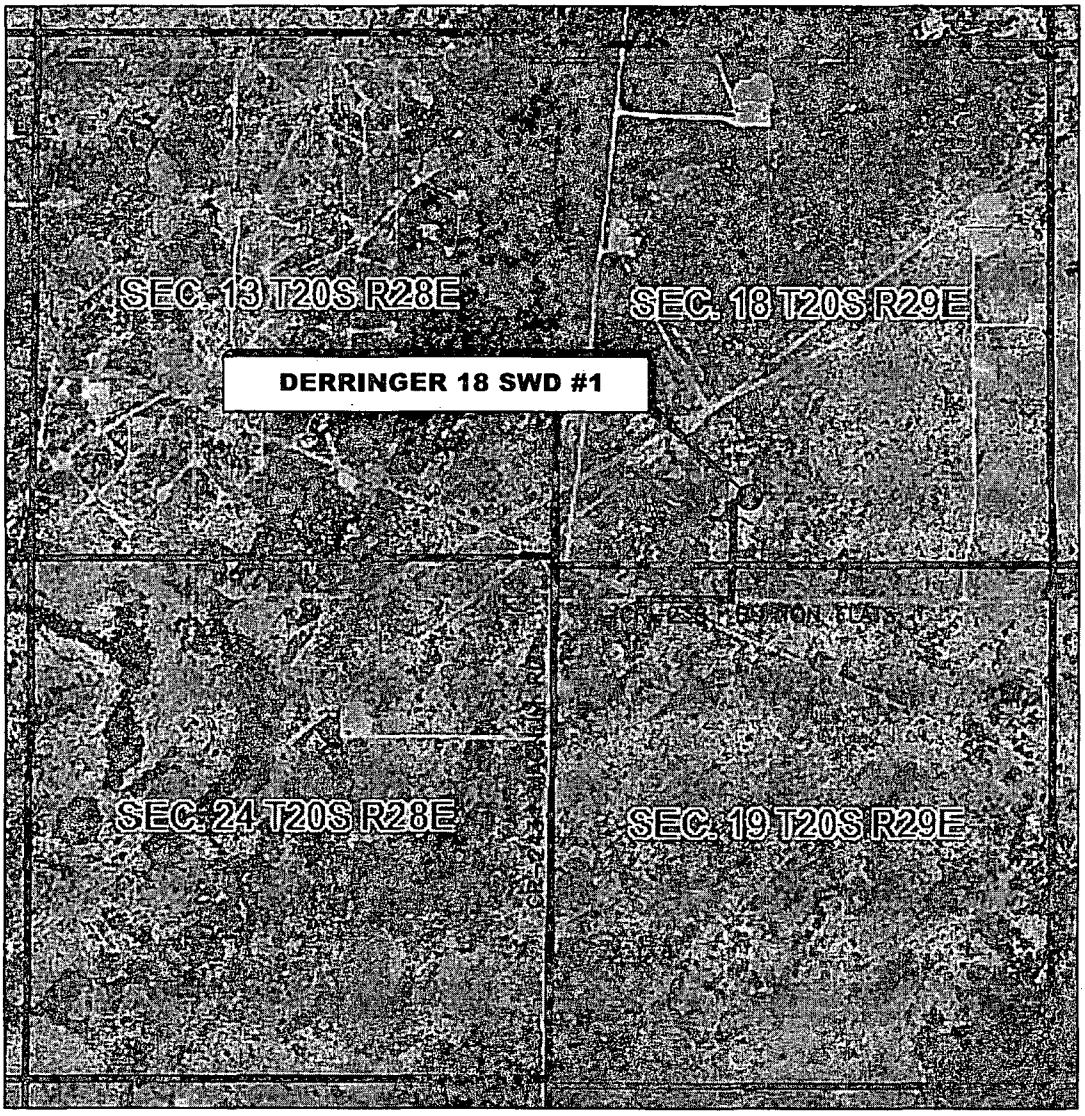
JOB NO.: LS130354
DWG. NO.: 130354LVM

PROSPERITY CONSULTANTS, LLC
2251 Double Creek Drive, Suite 602, Round Rock, Texas 78664
o (512) 992-2087 f (512) 251-2518

SCALE: 1" = 1000'
DATE: 8/19/13
SURVEYED BY: BK/IE
DRAWN BY: AF
APPROVED BY: LWB
SHEET : 1 OF 1

VICINITY MAP

NOT TO SCALE



SECTION 18, TWP. 20 SOUTH, RGE. 29 EAST, N. M. P. M., EDDY COUNTY, NEW MEXICO

OPERATOR: Mewbourne Oil Company
LEASE: Derringer 18 SWD
WELL NO.: 1

LOCATION: 660' FSL & 1980' FWL
ELEVATION: 3255'

NO.	REVISION	DATE

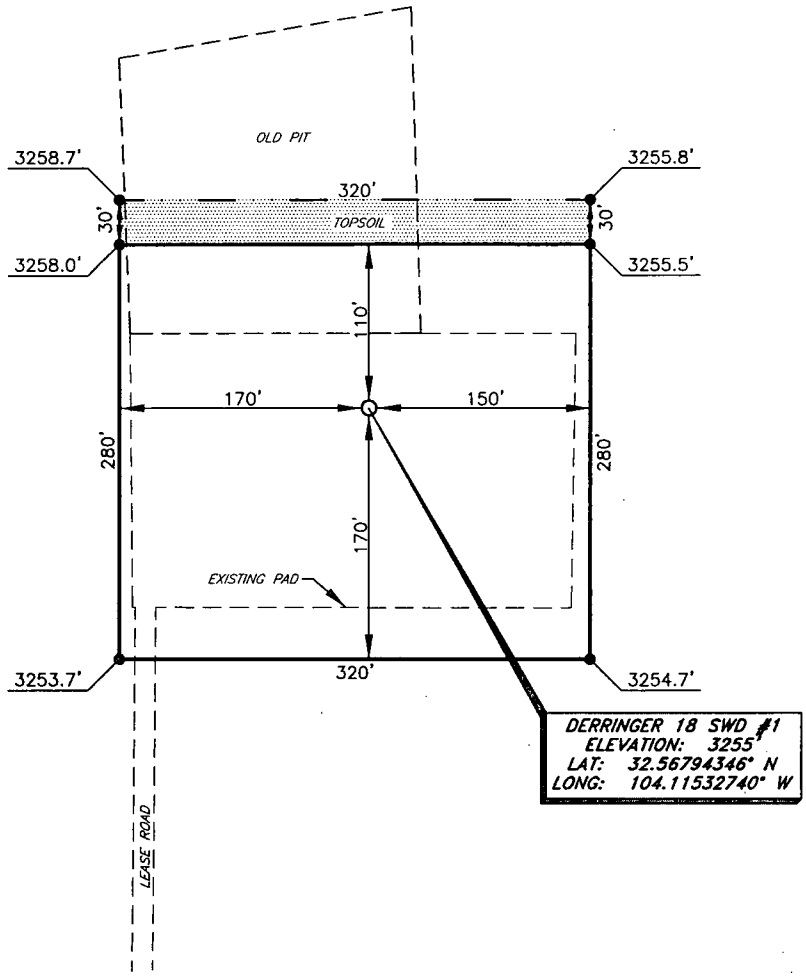
JOB NO.: LS130354
DWG. NO.: 130354VM

PROSPERITY CONSULTANTS, LLC
2251 Double Creek Drive, Suite 602, Round Rock, Texas 78664
o (512) 992-2087 f (512) 251-2518

SCALE: N.T.S.
DATE: 8/19/13
SURVEYED BY: BK/IE
DRAWN BY: AF
APPROVED BY: LWB
SHEET : 1 OF 1

MEWBOURNE OIL COMPANY

Derringer 18 SWD #1
(660' FSL & 1980' FWL)
Section 18, T-20-S, R-29-E,
N. M. P. M., Eddy Co., New Mexico



DIRECTIONS TO LOCATION

From the Intersection of Burton Flats CR-238 and Magnum CR-243:

Go East on CR-238 approx. 0.3 mile to old lease road.

Turn left and go North on lease road approx. 825 feet to this location.

N

SCALE: 1" = 100'
0 50 100

BEARINGS ARE NAD 27 - NM EAST DISTANCES ARE GROUND.

NO.	REVISION	DATE

JOB NO.: LS130354
DWG. NO.: 130354PAD

PROSPERITY CONSULTANTS, LLC
2251 Double Creek Drive, Suite 602, Round Rock, Texas 78664 o (512) 992-2087 f (512) 251-2518

SCALE: 1" = 100'
DATE: 8/19/13
SURVEYED BY: BK/IE
DRAWN BY: AF
APPROVED BY: LWB
SHEET : 1 OF 1

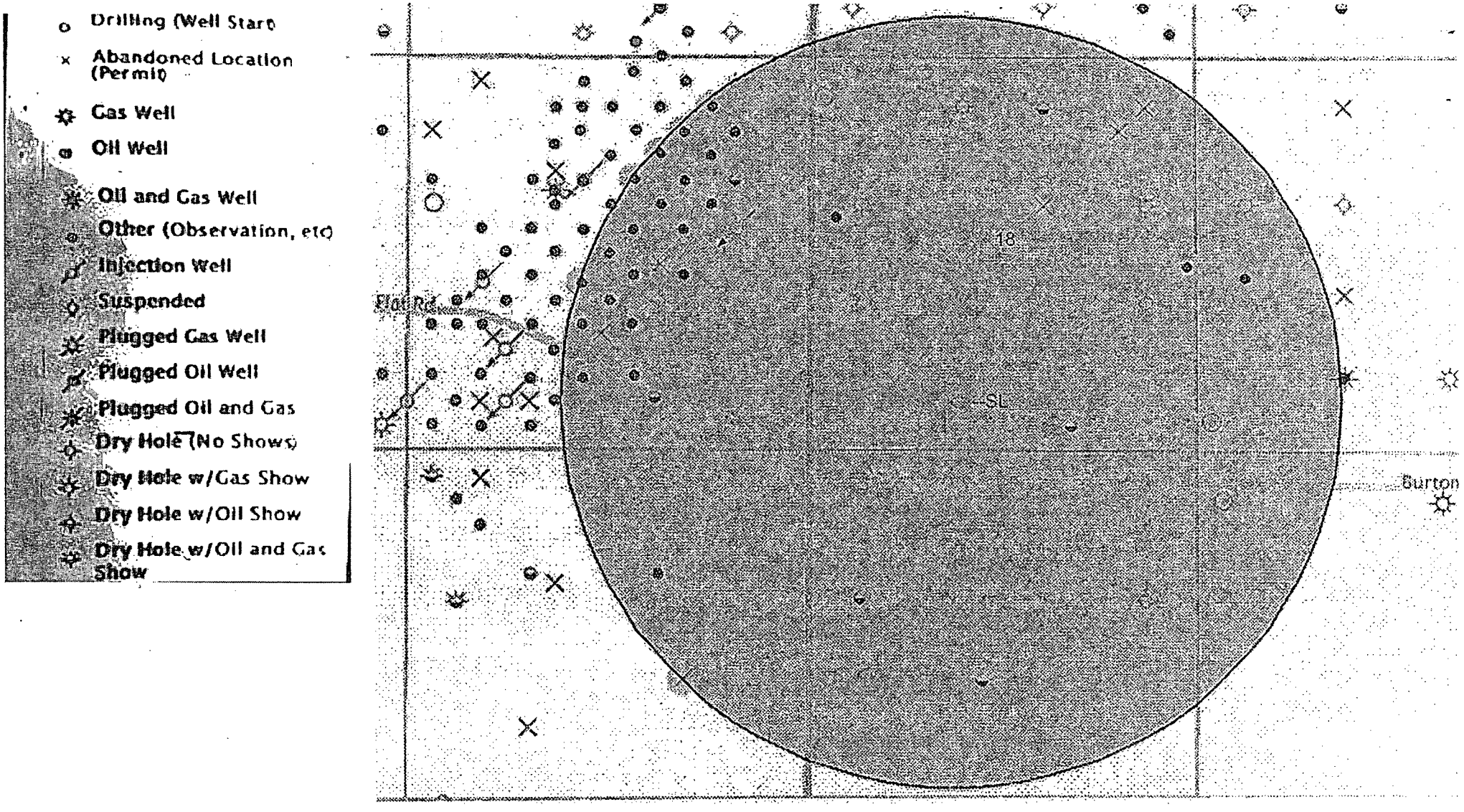


Exhibit "4"
Derringer SWD #1
660' FSL & 1980' FWL
Sec. 18 T20S R29E, Eddy Co. NM

Drilling Program
Mewbourne Oil Company
Derringer SWD #1
660' FSL & 1980' FWL (SHL)
Sec 18-T20S-R29E
Eddy County, New Mexico

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

Rustler	300'
Top Salt	440'
Base Salt	639'
Yates	885'
Capitan	1082'
Delaware	3168'
*Bone Springs	5650'
*1 BSPG Sand	6913'
*2nd BSPG Sand	7414'
*Wolfcamp	9140'
*Penn	9987'
*Strawn	10303'
*Atoka	10630'
*Morrow	11204'
Lower Morrow	11532'
Mississippian	12025'
Woodford	12540'
Devonian	12600'

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

Water	Fresh water will be protected by existing casing. Freshwater depth is at 45'.
Hydrocarbons	Oil and gas are anticipated in the above (*) formations. These zones will be protected by casing as necessary.

3. Pressure control equipment:

A 5000# WP Double Ram BOP and 5000# WP Annular will be installed before drilling out cement plugs. Pressure tests will be conducted prior to drilling out cement plugs. BOP controls will be installed prior to drilling and will remain in use until completion of drilling operations. BOPE will be inspected and operated as recommended in Onshore Order #2. A Kelly cock and a sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position when the Kelly is not in use.
Will test BOPE to 5000# and the Annular to 2500# with a third party testing company before drilling out cement plugs, but will test again, if needed, in 30 days from the 1st test as per BLM Onshore Oil and Gas Order #2

4. Existing casing and cement plugs:

A. Casing Program:

Hole Size	Casing	Wt/Ft.	Grade	Depth	Jt Type
26"	20" (existing)	94#	J55	0'-375'	BT&C
17 ½"	13 ⅜" (existing)	48#	H40	+/- 0'-1085'	ST&C
17 ½"	13 ⅜" (existing)	54.5#	J55	+/- 1085'-1245'	ST&C
12 ¼"	9 ⅝" (existing)	36#	K55	0'-3229'	LT&C

B. Existing cement plugs:

50' – surface
425'
1298'
3099' – 3274'
5800' – 5950'
7810' – 7960'
9350' – 9450'
10,600' – 10,800'
11,532' – 11,800'

5. Proposed casing and cementing program:

A. Casing Program:

Hole Size	Casing	Wt/Ft.	Grade	Setting Depth	Jt Type
26"	20" (new)	94#	J55	0-375'	BT&C
17 ½"	13 ⅜" (new)	54.5#	H40	0-1245'	ST&C
12 ¼"	9 ⅝" (new)	36#	K55	0-3229'	LT&C
8 ¾"	7" (new)	26#	P110	0 - 12100'	LT&C
8 ¾"	7" (new)	29#	P110	12100' – 13200'	LT&C

B. Cementing Program:

DV Tool @ 9000'

See COA

1st Stage: 320 sacks Class H light cement with fluid loss, LCM, & salt additives. Yield at 2.12 cuft/sk. 100 sacks Class H cement containing fluid loss additives. Yield at 1.18 cuft/sk. Calculated w/25% excess.

2nd Stage: 720 sacks Class H light cement with fluid loss, LCM, & salt additives. Yield at 2.12 cuft/sk. 100 sacks Class C cmt. Yield at 1.18 cuft/sk. Cmt circulated to surface w/25% excess.

6. Mud Program:

Interval	Type System	Weight	Viscosity	Fluid Loss
0' - 8000'	FW	8.4-8.6	28-32	NA
8000' - 12,600	Brine water w/Polymer	9.6-10.0	32-35	15
12600' - 13200'	Cut Brine	8.7-9.0	30	NA

**Visual mud monitoring system shall be in place to detect volume changes indicating loss or gain of circulation fluid volume. Sufficient mud materials will be kept on location at all times to combat abnormal conditions.

7. Evaluation Program:

Samples: 11,800' to TD
Logging: Mud Log.

6. Mud Program:

Interval	Type System	Weight	Viscosity	Fluid Loss
0' - 8000'	FW	8.4-8.6	28-32	NA
8000' - 12,600	Brine water w/Polymer	9.6-10.0	32-35	15
12600' - 13200'	Cut Brine	8.7-9.0	30	NA

**Visual mud monitoring system shall be in place to detect volume changes indicating loss or gain of circulation fluid volume. Sufficient mud materials will be kept on location at all times to combat abnormal conditions.

7. Evaluation Program:

Samples:	11,800' to TD
Logging:	Mud Log.

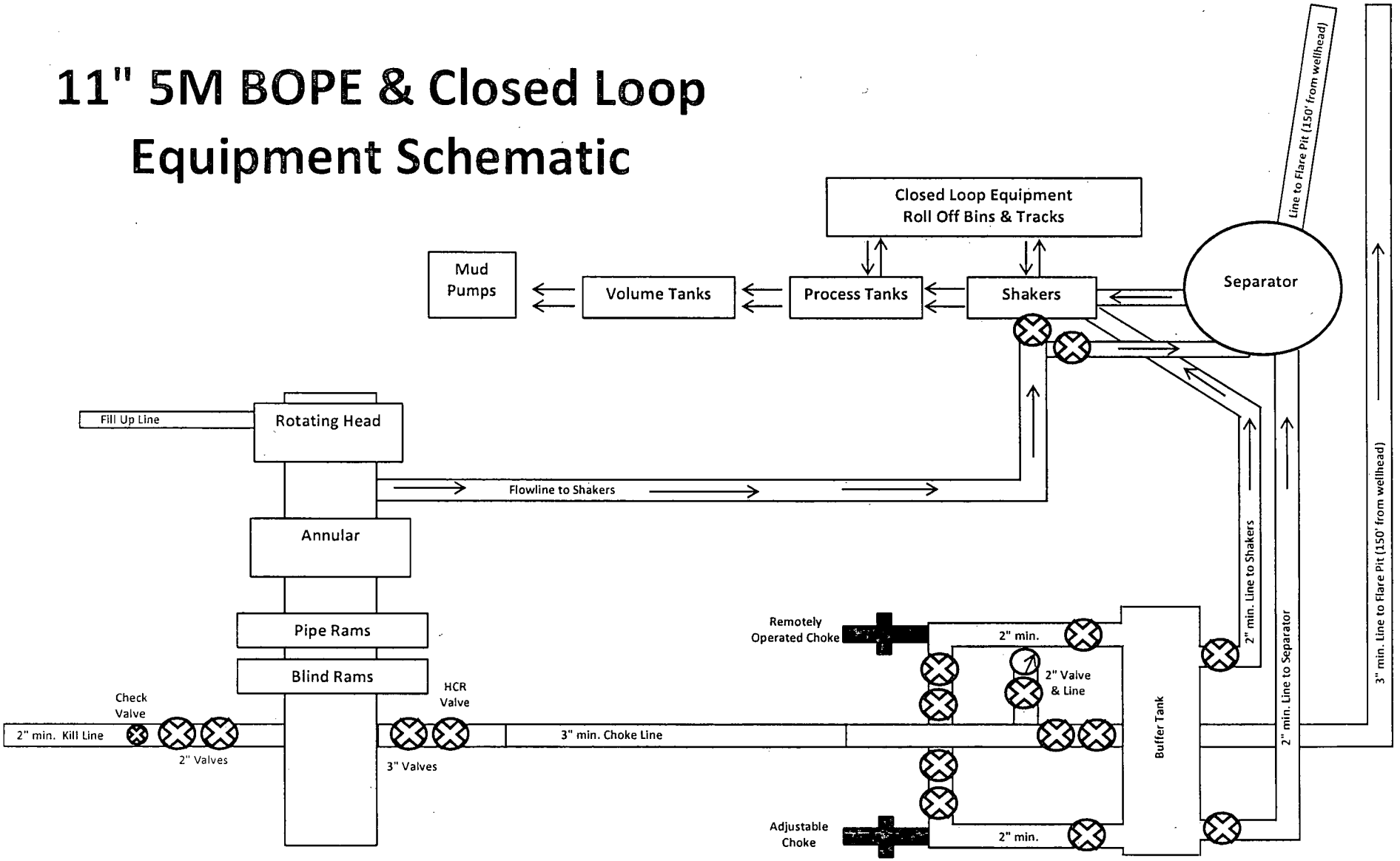
8. Downhole Conditions

Zones of abnormal pressure:	None anticipated
Zones of lost circulation:	Anticipated in surface and intermediate holes
Maximum bottom hole temperature:	145 degree F
Maximum bottom hole pressure:	5,900 psi

9. Anticipated Starting Date:

Mewbourne Oil Company intends to drill this well as soon as possible after receiving approval with approximately 40 days involved in drilling operations and an additional 10 days involved in completion operations on the project.

11" 5M BOPE & Closed Loop Equipment Schematic



Derringer SWD #1

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

Form 3160-5
(November 1994)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires November 30 2000

c/sp

N.M. Oil Cons. Division
811 S. 1st Street
Artesia, NM 88210-2834

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

5. Lease Serial No.
NM-01165

6. If Indian, Allottee or Tribe Name

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

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

8. Well Name and No.
YATES FEDERAL 18

2. Name of Operator
Marathon Oil Company

9. API Well No.
30-015-30828

3a. Address
P.O. Box 552 Midland, TX 79702

3b. Phone No. *(include area code)*
915/687-8356

10. Field and Pool, or Exploratory Area
BURTON FLATS MORROW

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
660' FSL & 1980' FWL
SEC. 18, T-20-S, R-29-E

11. County or Parish, State
EDDY NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Coommpleted Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

PURSUANT TO THE NMOCD 4 CASING STRING REQUIREMENT FOR SURFACE WATER PROTECTION, MARATHON PROPOSES THE ATTACHED PROGRAM FOR CASING & CEMENTING.

NOV 2 1999
RECEIVED
OCD - ARTESIA

Minimum Required Fill Of Cement Behind The 5½ Inch Production Casing Is Sufficient To Tie Back 600 Feet Above The Top Of The Bone Spring At Approximately 5693 Feet.

14. I hereby certify that the foregoing is true and correct
Name *(Printed/Typed)* R. J. LONGMIRE Walter J. Dumire

Title DRILLING SUPERINTENDENT

Date 11/16/99

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by David R. Glass

Title PETROLEUM ENGINEER

Date NOV 16 1999

Conditions of approval, if any, are attached. Approval of this notice 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.

Office

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

(Instructions on reverse)

Casing Summary

Casing Size	Set From	Set To	Csg Wt lbs/ft	Casing Grade	Casing Coupling	Torque ft-lbs	Hole Size	API Burst	Pipe Collapse	Ratings Tension
20"	0'	350'	94.0	H-40	BTC	Triangle	26"	1,530	520	1,041,000
13-3/8"	0'	1,100'	48.0	H-40	STC	3220	17-1/2"	1,730	770	322,000
13-3/8"	0'	1,255'	54.5	K-55	STC	5470	17-1/2"	1,730	770	322,000
9-5/8"	0'	3,200'	36.0	K-55	LTC	4890	12-1/4"	3,520	2,020	561,000
5-1/2"	0'	4,500'	20.0	L-80	LTC	4200	8-3/4"	9,190	8,830	428,000
5-1/2"	4,500'	9,800'	17.0	L-80	LTC	3410	8-3/4"	7,740	6,280	348,000
5-1/2"	9,800'	11,500'	20.0	L-80	LTC	4200	8-3/4"	9190	8830	428000

Casing Size	Csg Wt lbs/ft	Set To	Mud Wt When Set	Frac Grad At Shoe	Pore psi At Shoe	Pmax Surf psi	Calc Burst	Safety Collapse	Factors Tension
20"	94.0	350'	9.4	0.60	147	222	8.22	3.06	37.0
13-3/8"	48.0	1,100'	10.2	0.66	515	711	2.47	1.25	6.00
13-3/8"	54.5	1,255'	10.2	0.66	587	711	7.97	1.68	114.0
9-5/8"	36.0	3,200'	10.4	0.7	2410	1365	2.29	3.47	3.19
5-1/2"	20.0	4,500'	9.9	0.7	5148	4850	2.01	7.2	2.09
5-1/2"	17.0	9,800'	9.1	0.7	5148	4850	1.57	6.84	2.77
5-1/2"	20.0	11,500'	9.8	0.7	5148	4850	1.75	32.03	9.09

Remarks: Clean, drift, and visual end area inspection on all casing after arrival on locatrion. Run a four-point inspection on the intermediate and production casing prior to shipping from yard to location.

Cementing Summary

Contractor: Halliburton

20" Structural Casing

1st Stage Lead Slurry: Premium Plus + 2% CaCl2 + 1/4 lb/sk Flocele

From Depth	Planned TOC	Stage	Hole Size	% Excess	Density ppg	Yield ft3/sk	Mix Water	Qty Sx	Pump Time	FL cc	FW %	12 Hr psi	24 Hr psi
350'	0'	Lead	26	100	14.8	1.34	6.30	850	3:20	790	0	550	960

Remarks: Refer to actual cement recommendation. Use 100% excess.
Float Equipment: Guide Shoe, Stab-in Collar[Weatherford-Gemoco]
Centralizers: Middle of Shoe Jt. & Every Other Jt. to Surface [Weatherford-Gemoco]

13-3/8" Surface Casing

1st Stage: Lead Slurry: Halliburton Interfill Premium Plus + 0.25 lb/sk Flocele
Tail Slurry: Halliburton Premium + 2% CaCl2

From Depth	Planned TOC	Stage	Hole Size	% Excess	Density ppg	Yield ft3/sk	Mix Water	Qty Sx	Pump Time	FL cc	FW %	12 Hr psi	24 Hr psi
1,000'	0'	Lead	17-1/2"	50	11.9	2.46	14.28	550					
1,255'	1,000'	Tail	17-1/2"	50	14.8	1.34	6.31	250					

Remarks: Refer to actual cement recommendation. Use fluid caliper + 50% excess.
Float Equipment: Float Shoe, 2- Shoe Joints, Float Collar [Weatherford-Gemoco]
Centralizers: Middle of shoe joints, every 4th jt. to include into surface casing shoe.[Weatherford-Gemoco]

9-5/8" Intermediate Casing

1st Stage: Lead Slurry: Halliburton Light Premium Plus + 0.3% CFR-3, 0.2% Econolite + 6.0 lb/sk Salt
Tail Slurry: Halliburton Premium Plus + 0.2% Econolite

From Depth	Planned TOC	Stage	Hole Size	% Excess	Density ppg	Yield ft3/sk	Mix Water	Qty Sx	Pump Time	FL cc	FW %	12 Hr psi	24 Hr psi
2,700'	0'	Lead	12-1/4"	50	12.4	2.11	11.71	740					
3,200'	2,700'	Tail	12-1/4"	50	14.8	1.32	6.29	250					

Remarks: Refer to actual cement recommendation. Use fluid caliper + 50% excess.
Float Equipment: Float Shoe, 2- Shoe Joints, Float Collar [Weatherford-Gemoco]
Centralizers: Middle of shoe joints, every 4th joint to include into surface casing shoe.

5-1/2" Production Casing

Stage Collar Depth: 9000'(Approximate)

1st Stage: Lead Slurry: Modified Super H + 0.4% CFR-3 + 5 lb/sk Gilsonite + 0.5% HALAD-344 + 1 lb/sk Salt + 0.2% HR-7
2nd Stage: Lead Slurry: Halliburton Interfill Premium Plus + 0.25 lb/sk Flocele + 3.0 lb/sk Gilsonite + 0.2% HALAD-322
Tail Slurry: Halliburton 50/50 Premium Poz + 0.6% HALAD-9 + 2.0% Gel + 3.0 lb/sk KCl + 5.0% MicroBond

From Depth	Planned TOC	Stage	Hole Size	% Excess	Density ppg	Yield ft3/sk	Mix Water	Qty Sx	Pump Time	FL cc	FW %	12 Hr psi	24 Hr psi
11,500'	9000'	Lead	8-3/4"	30	13.0	1.67	8.27	725					
9,000'	8600'	Tail	8-3/4"	30	14.8	1.35	6.04	100					
8,600'	Surface	Lead	8-3/4"	30	11.9	2.47	14.00	1105					

Remarks: Use open hole caliper volume plus 30% excess.
Float Equipment: Float shoe, 2 shoe joints, float collar, DV tool @ 9000' [Weatherford-Gemoco]
Centralizers: Middle of shoe jt., every 4th jt. to DV collar, 1 below & above DV collar then every 4th jt. into int. csg. [Weatherford-Gemoco]

Wellhead Summary

Component	Description	Casing Hanger Type
"A" Section (Casinghead)	13-5/8" x 3M x 13-3/8" SOW w/2" LPO & bullplug(NoTrim)	9-5/8" slips
"B" Section (Casinghead)	13-5/8 " x 3M x 11" x 5M w/2-FGV's(All H2S Trim)	5-1/2" slips
"C" Section (Tubinghead)	11" x 5M x 7-1/16"x5M w/ 2-FGV's (All H2S Trim)	tubing hanger

Remarks: Requirements : API Monogram all wellhead equipment. "A" Section will be sweet service, "B" & "C" Sections will be sour service.

Form 3160-5
(November 1994)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires November 30 2000

c151

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

5. Lease Serial No.
NM-01165

6. If Indian, Allottee or Tribe Name

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

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

8. Well Name and No.
YATES FEDERAL 18

2. Name of Operator
Marathon Oil Company

9. API Well No.
30-015-30828

3a. Address
P.O. Box 552 Midland, TX 79702

3b. Phone No. *(include area code)*
800-351-1717

10. Field and Pool, or Exploratory Area
BURTON FLATS MORROW
73280

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
660' FSL & 1980' FWL
SEC. 18, T-20-S, R-29-E

11. County or Parish, State
EDDY NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other SPUD & DRLG OPERATIONS
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Coommpleted Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

11/13/99 – MIRU TMBR/Sharp # 23. Spud 26" hole @ 2230 hrs. Drilled to 375'. Ran 9 jts, 20", 94#, J-55, BTC casing to 375'. Cemented w/ 850 sx, Premium Plus w/ 2% cacl, .25 pps flocele. Did not circulate cement. WOC 6 hrs, Ran 1" to 58', cemented w/ 150 sx Premium Plus, circulated 25 sx to pit. Total WOC 18 hrs.
P.U. 17. 5 " bit and drilled stab-in shoe and formation to 1245'. Ran 4 jts, 13.375", 54.5#, J-55 and 24 jts, 48#, H-40 casing to 1245'. Float Collar @ 1198'. Cemented w/ 1100 sx Interfil Prem Plus followed by 250 sx Premium Plus w/ .25 pps flocele, 2% cacl. Circulated 431 sx to pit. N.U. 13-5/8" annular and mud cross. Total WOC 12.25 hrs. Tested annular against casing to 1000 psi

Drilled 12.25" hole to 3229'. Ran 72 jts. 9.625", 36#, K-55, LTC casing to 3229'. Cemented casing w/ 1000 sx HOWCO lite, w/ 3% P.P., 3% CFR-3, 2% econolite, 6 pps nacl, Tailed in w/ 250 sx, P.P. w/ 2% econolite, Circulated 452 sx. Set slips w/ 80K, cut 9.625". N.U. 13-5/8" 3M X 11" 5M B section. Tested to 1000 psi. N.U. 11 5m dual ram BOPE and annular w/ rotating head. Tested BOPE and lines to 300/3000 psi. / TIH W/ 8.75" bit and tested casing and blind rams to 1000 psi. Total WOC – 19.5 hrs. Drilled plug and float and resumed drilling formation to 11,800'. TD well @ 1815 hrs, 12/6/99.

Logged well w/ Platform Express 11,800' to surface. Set 103 sx Class "H" @11,800'. Dressed off cement to 11,532'. Ran DST # 1, 11,550' – 11,237'. Opened tool w/ instant blow, built to 35 psi in 15 min. SI 60 min, GTS in 11 min. Opened tool, Built to 70 psi in 19 min., had flow for 15 min and pkr seat failed. Recovered 188' GCM, Sample chamber 2500 cc mud Rm .272 @ 60, 50 psi. Temp 173 deg. IH – 5823, IF – 847 – 521, ISI – 4636. FF 838 – 631.

Consulted W/ BLM for plugging recommendations. Plugged well as follows: # 1 – 75 sx class "H" 10,800' – 10,600'. # 2 - 56 sx Class "H" 9450' – 9350'. # 3 – 56 sx Class "H" – 7960' – 7810'. # 4 - 56 sx – Class " H" 5950' – 5800'. #5 - 56 sx Class "C" 3274' – 3174'. WOC 4 hrs, tagged plug @ 3254'. Spotted 50 sx Class "C" @ 3254', WOC 3 hrs, Tagged plug @ 3099'. Set plug # 6 – 38 sx, Class "C" @ 1298'. Plug # 7 – 38 sx Class "C" @ 425'. Plug # 8 – 20 sx Class "C" 50' – surface. Nipped down BOPE released rig @ 12/12/99. Cut casing 3' below GL and installed dry hole marker.

14. I hereby certify that the foregoing is true and correct
Name *(Printed/Typed)*
R. J. LONGMIRE

Title
DRILLING SUPERINTENDENT

Date 12/16/99

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice 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.

Office

(ORIG. SGD.) DAVID R. GLASS

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

(Instructions on reverse)

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-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: _____Secondary Recovery _____Pressure Maintenance ____X____Disposal _____Storage
Application qualifies for administrative approval? ____X_____Yes _____No

II. OPERATOR: **Mewbourne Oil Company**

ADDRESS: **500 W. Texas Suite 1020**
Midland, TX 79701
CONTACT PARTY: **Drew Robison** PHONE: **432-682-3715**

III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project? _____Yes _____X_____No
If yes, give the Division order number authorizing the project: _____

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).

*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: **Drew Robison** TITLE: **Reservoir Engineer**

SIGNATURE: _____ DATE: 4/17/13

E-MAIL ADDRESS: **drobison@mewbourne.com**

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: _____

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

(1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.

(2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.

(3) A description of the tubing to be used including its size, lining material, and setting depth.

(4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

(1) The name of the injection formation and, if applicable, the field or pool name.

(2) The injection interval and whether it is perforated or open-hole.

(3) State if the well was drilled for injection or, if not, the original purpose of the well.

(4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.

(5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

(1) The name, address, phone number, and contact party for the applicant;

(2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;

(3) The formation name and depth with expected maximum injection rates and pressures; and,

(4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

Side 1

INJECTION WELL DATA SHEET

OPERATOR: **Mewbourne Oil Company**

WELL NAME & NUMBER: **Derringer SWD #1** (Originally: Yates #18) API 30-015-30828

WELL LOCATION:	**660' FSL & 1980' FWL**	**N**	**18**	**20S**	**29E**
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATIC (See Attached)

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: **26"** Casing Size: **20" @ 375'**

Cement with. **850 sx** Top of Cement: **Surface (1" 25sx to surface)**

Intermediate Casing

Hole Size: **17.5"** Casing Size: **13 3/8" @ 1245'**

Cement with. **1450 sx (circ 431 sx)** Top of Cement: **Surface (visual)**

Intermediate Casing

Hole Size: **12 1/4"** Casing Size: **9 5/8" @ 3229'**

Cement with. **1250 sx (circ 452 sx)** Top of Cement: **Surface (Visual)**

Production Casing

Hole Size: **8 3/4"** Casing Size: **7" to 12600**

Cement with. 1700 **sx (DV tool @ 9000')** Top of Cement: Surface

TD @ 13200

Injection Interval

Perforations @ 12600-13200 open-hole

INJECTION WELL DATA SHEET

Tubing Size: **3 1/2"9.3#** Lining Material: **TK99 IPC**

Type of Packer: **Arrowset 1X (nickel plated)**

Packer Setting Depth: **+/-12570'**

Other Type of Tubing/Casing Seal (if applicable): **None**

Additional Data

1. Is this a new well drilled for injection? **No**

   If no, for what purpose was the well originally drilled? **Morrow Test**

2. Name of the Injection Formation: **Devonian**

3. Name of Field or Pool (if applicable): **Wildcat Devonian**

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used.

   No perforations. Dry Hole.
   Plugs @ 10600' (75 sx), 9350' (56 sx), 7810' (56 sx), 5800' (56 sx), 3254' (56 sx), 3099' (50 sx), 1298' (38 sx), 425' (38 sx), 50' to surface (20 sx)

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:

   Overlying producing zone – **Morrow (roughly 1000' above injection interval)**

   Underlying producing zone – **N/A**

Derringer SWD #1 C-108
Additional Details

VI. There are no wells within the ½ mile area of review that penetrated the Devonian.

VII. 1. Proposed average rate of 5000 bwpd and maximum rate of 20,000 bwpd.

2. Closed system.

3. Proposed average injection pressure is unknown and the maximum injection pressure is 2520 psig (0.2 psi/ft x 12600 ft).

4. Injection fluid will be formation water from the Mewbourne Oil Company operated Bone Spring producing wells in the area. See attached water analysis for the Bone Spring formation from the Mewbourne Derringer 18 Federal #2H (18-20S-29E) which is the nearest current Mewbourne operated producer.

5. We will be injecting into the Devonian. No water analysis is available for the Devonian.

VIII. 1. The proposed injection interval is within the Devonian carbonate formation which is a porous dolomite at +/- 12,600'.

2. Any underground water sources will be shallower than the 375' setting depth of the surface casing. There are no freshwater zones underlying the formation.

IX. The proposed stimulation is an open-hole acid treatment of 20000 gallons of 15% HCL.

X. Well logs have been filed with the Division to a depth of 11,800'. New logs will be provided after the well has been deepened.

XI. There are no freshwater wells within one mile of proposed SWD.

XII. Mewbourne Oil Company has examined geologic and engineering data and has found that there is no evidence of faulting between the proposed disposal zone and any underground sources of drinking water.

XIII. See attached Proof of Notice

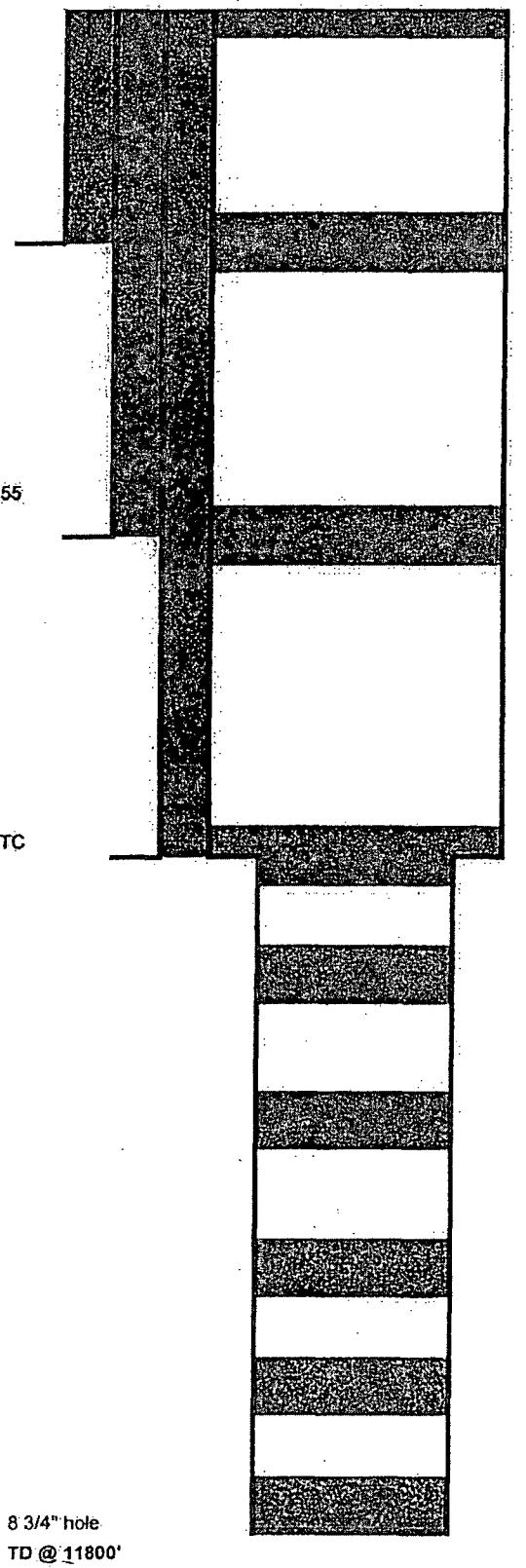
Current

Mewbourne Oil Company

Well Name: Derringer 18 SWD #1

Last Updated by: S. Heinze on 3/18/13

Spud Date: 1/13/99



26" x 20" 94# J55 BTC
Set @ 375'
Circ 25 sx to pit

17 1/2" x 13 3/8" x 54.5 # J55 & 48# H40
Set @ 1245'
Circ 431 sx to pit

12 1/4" x 9 5/8 x 36# K55 LTC
Set @ 3229'
Circ 452 sx to pit

8 3/4" hole
TD @ 11800'

Cmt plug @ 50' - surface

Cmt plug @ 425'

Cmt plug @ 1298'

Cmt plug @ 3099' - 3274'

Cmt plug @ 5800' - 5950'

Cmt plug @ 7810' - 7960'

Cmt plug @ 9350' - 9450'

Cmt plug @ 10600' - 10800'

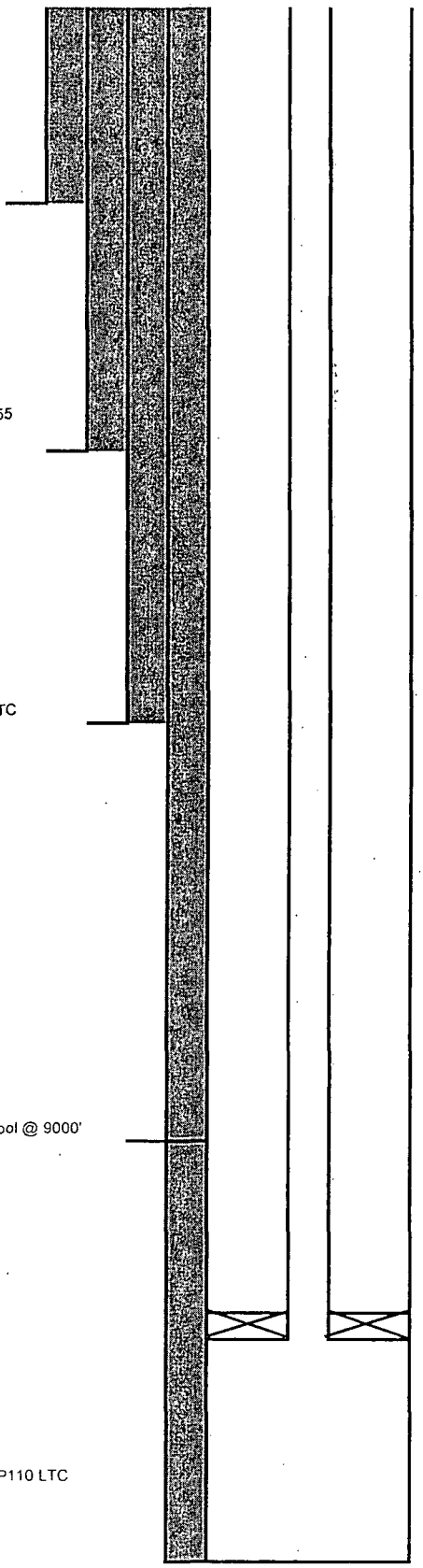
Cmt plug @ 11532' - 11800'

Mewbourne Oil Company

Well Name: Derringer 18 SWD #1

Last Updated by: S. Heinze on 3/18/13

Spud Date: 1/13/99



26" x 20" 94# J55 BTC
Set @ 375'
Circ 25 sx to pit

17 1/2" x 13 3/8" x 54.5 # J55
& 48# H40
Set @ 1245'
Circ 431 sx to pit

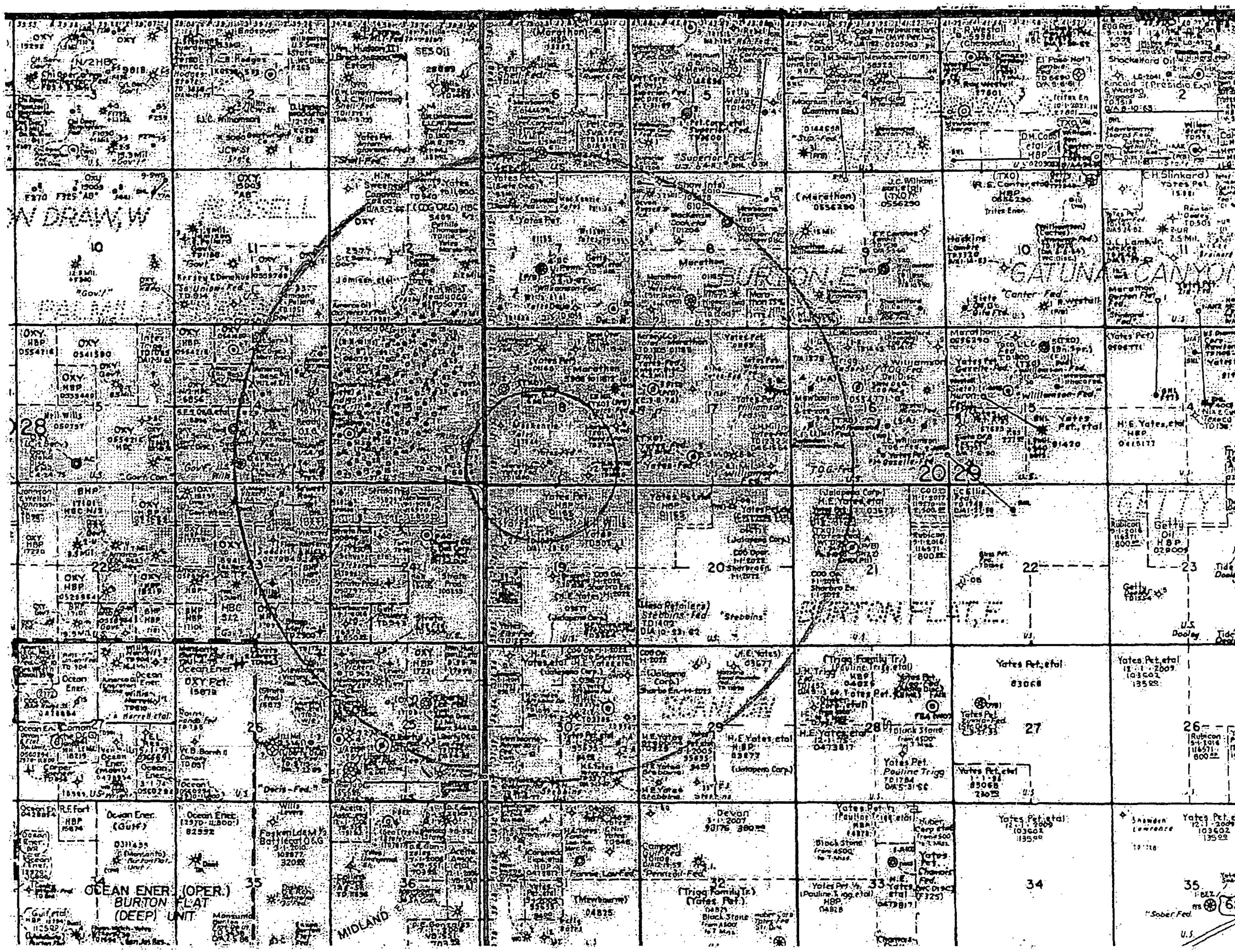
12 1/4" x 9 5/8 x 36# K55 LTC
Set @ 3229'
Circ 452 sx to pit

3 1/2" 9.3# L80 tbg IPC w/TK99

DV tool @ 9000'

2 7/8" x 7" Pkr set @ 12570'

8 3/4" x 7" 26# & 29# P110 LTC
Set @ 13200'
TOC surface



OCEAN ENER. (OPER.)
BURTON FLAT
(DEEP) UNIT
MIDLAND
GATUNA CANYON
Marathon
Yates Pet.
OXY
H.E. Yates, etal
Yates Pet. etal
Stebbins
Getty
Devon
Trigg Family Tr.
Shackelford Oil
Ocean Ener.

MEWBOURNE OIL COMPANY
P. O. BOX 7698
TYLER, TEXAS 75711

Lease	Derringer "18" Federal		**Well No**	2H	**Location**	2150' FNL & 330' FWL	
County	Eddy	**ST** NM	**Section**	18	**TwnShp**	20S	**Rng** 29E
Section		**Blk**	**Survey**				
Filename						**Page**	1

API No. 30-015-39758

DATE	DAILY REPORTS
APR 11 2013	**Water analysis from 04/10/13:** SG @ 1.170, Temp 70°, pH 6.79, Na 67801, Ca 8000, Mg 4800, Fe 0.3, CL 132000, SO_4 350, HCO_3 73 (all in Mg/L).

Bone Spring

-158

Submit to Appropriate District Office
State Lease - 6 copies
Fee Lease - 5 copies

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 Pacheco St.
Santa Fe, NM 87505

Form C-105
Revised 1-1-89

WELL API NO. 30-015-30828

5. Indicate Type Of Lease STATE ☐ FEE ☐

6. State Oil & Gas Lease No.

RECEIVED JAN 2000 OCD ARTESIA

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well: OIL WELL ☐ GAS WELL ☐ DRY ☒ OTHER

b. Type of Completion: NEW WELL ☐ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF RESVR ☐ OTHER

7. Lease Name or Unit Agreement Name: YATES FEDERAL

2. Name of Operator: Marathon Oil Company

8. Well No.: 18

3. Address of Operator: P.O. Box 552, Midland, TX 79702

9. Pool name or Wildcat: BURTON FLATS MORROW

4. Well Location
Unit Letter N : 660 Feet From The SOUTH Line and 1980 Feet From The WEST Line

Section 18 Township 20-S Range 29-E NMPM EDDY County

10. Date Spudded	11. Date T.D. Reached	12. Date Compl. (Ready to Prod.)	13. Elevations (DF & RKB, RT, GR, etc.)	14. Elev. Casinghead
111/13/99	12/6/99		3265' - KB	3251'

15. Total Depth	16. Plug Back T.D.	17. If Multiple Compl. How Many Zones?	18. Intervals Drilled By	Rotary Tools	Cable Tools
11,800'			XXX		

19. Producing Interval(s), of this completion - Top, Bottom, Name: NONE

20. Was Directional Survey Made: NO

21. Type Electric and Other Logs Run: PFE/HALS/NGT

22. Was Well Cored: NO

23. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
20"	94#	375'	26" TO 850	1000 SX "C". CIRC. 25 SX	-0-
13 3/8"	54.5#	1245'	17 1/2"	1350 SX "C". CIRC 431 SX	-0-
9 5/8"	36#	3229'	12.25"	1250 SX "C". CIRC 452 SX	-0-

24. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN

25. TUBING RECORD

SIZE	DEPTH SET	PACKER SET

Wrong Form Record Only

26. Perforation record (interval, size, and number)

27. ACID, SHOT, FRACTURE, CEMENT, SQEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED

PRODUCTION

28

Date First Production	Production Method (Flowing, gas lift, pumping - Size and type pump)	Well Status (Prod. or Shut-in)

Date of Test	Hours Tested	Choke Size	Prod'n For Test Period	Oil - Bbl.	Gas - MCF	Water - Bbl.	Gas - Oil Ratio

Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API -(Corr.)

29. Disposition of Gas (Sold, used for fuel, vented, etc.)

Test Witnessed By

30. List Attachments

31. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature Walter J. Dueitt, Jr. Printed Name R. J. LONGMIRE Title DRLG SUPERINTENDEN Date 1/17/00

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 25 through 29 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico				Northeastern New Mexico			
T. Anhy		T. Canyon	-0-	T. Ojo Alamo		T. Penn. "B"	
T. Salt	440	T. Strawn	10303	T. Kirtland-Fruitland		T. Penn. "C"	
B. Salt	762	T. Atoka	10630	T. Pictured Cliffs		T. Penn. "D"	
T. Yates		T. Miss		T. Cliff House		T. Leadville	
T. 7 Rivers	962	T. Devonian		T. Menefee		T. Madison	
T. Queen		T. Silurian		T. Point Lookout		T. Elbert	
T. Grayburg		T. Montoya		T. Mancos		T. McCracken	
T. San Andres		T. Simpson		T. Gallup		T. Ignacio Otzte	
T. Glorieta		T. McKee		Base Greenhorn		T. Granite	
T. Paddock		T. Ellenburger		T. Dakota		T.	
T. Blinebry		T. Gr. Wash		T. Morrison		T.	
T. Tubb		T. Delaware Sand	3118	T. Todilto		T.	
T. Drinkard		T. Bone Springs	5650	T. Entrada		T.	
T. Abo		T.	MORROW 11204	T. Wingate		T.	
T. Wolfcamp	9140	T.	L MORROW 11532	T. Chinle		T.	
T. Penn	9987	T.		T. Permain		T.	
T. Cisco (Bough C)		T.		T. Penn "A"		T.	

OIL OR GAS SANDS OR ZONES

No. 1, from ..... to ..... No. 3, from ..... to .....

No. 2, from ..... to ..... No. 4, from ..... to .....

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from ..... to ..... feet .....

No. 2, from ..... to ..... feet .....

No. 3. from ..... to ..... feet .....

LITHOLOGY RECORD (Attach additional sheet if necessary).

From	To	Thickness in Feet	Lithology	From	To	Thickness in Feet	Lithology
440	762	332	SALT & ANHYDRITE	10668	11430	762	SHALE & LIMESTONE
762	962	200	SHALE & LIMESTONE	11430	11800	370	SHALE & SANDSTONE
962	3118	2156	LIMESTONE				
3118	5650	2532	SANDSTONE & SHALE				
5650	5930	280	LIMESTONE & SHALE				
5930	6058	128	SHALE				
6058	6912	854	LIMESTONE				
6912	7092	180	SHALE & LIMESTONE				
7092	7510	418	LIMESTONE				
5410	7886	376	SANDSTONE				
7886	8710	824	LIMESTONE				
8710	9307	597	SANDSTONE & SHALE				
9307	9390	83	LIMESTONE				
9390	10300	910	SHALE				
10300	10668	368	LIMESTONE & SHALE				

Form 3160-5
(November 1994)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires November 30 2000

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

5. Lease Serial No.
NM-01165

6. If Indian, Allottee or Tribe Name

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

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

8. Well Name and No.
YATES FEDERAL 18

2. Name of Operator
Marathon Oil Company

9. API Well No.
30-015-30828

3a. Address
P.O. Box 552 Midland, TX 79702

3b. Phone No. (include area code)
800-351-1717

10. Field and Pool, or Exploratory Area
BURTON FLATS MORROW
73280

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
660' FSL & 1980' FWL
SEC. 18, T-20-S, R-29-E

11. County or Parish, State
EDDY NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other SPUD & DRLG OPERATIONS
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

11/13/99 – MIRU TMBR/Sharp # 23. Spud 26" hole @ 2230 hrs. Drilled to 375'. Ran 9 jts, 20", 94#, J-55, BTC casing to 375'. Cemented w/ 850 sx. Premium Plus w/ 2% cacl, .25 pps flocele. Did not circulate cement. WOC 6 hrs. Ran 1" to 58', cemented w/ 150 sx Premium Plus, circulated 25 sx to pit. Total WOC 18 hrs.
P.U. 17 .5 " bit and drilled stab-in shoe and formation to 1245'. Ran 4 jts, 13.375", 54.5#, J-55 and 24 jts, 48#, H-40 casing to 1245'. Float Collar @ 1198'. Cemented w/ 1100 sx Interfil Prem Plus followed by 250 sx Premium Plus w/ .25 pps flocele, 2% cacl. Circulated 431 sx to pit. N.U. 13-5/8" annular and mud cross. Total WOC 12.25 hrs. Tested annular against casing to 1000 psi.

Drilled 12.25" hole to 3229'. Ran 72 jts. 9.625", 36#, K-55, LTC casing to 3229'. Cemented casing w/ 1000 sx HOWCO lite, w/ 2% P.P., 3% CFR-3, 2% econolite, 6 pps nacl. Tailed in w/ 250 sx, P.P. w/ 2% econolite. Circulated 452 sx. Set slips w/ 80K, cut 9.625". N.U. 13-5/8" 3M X 11" 5M B section. Tested to 1000 psi. N.U. 11 5m dual ram BOPE and annular w/ rotating head. Tested BOPE and lines to 300/3000 psi. / TIH W/ 8.75" bit and tested casing and blind rams to 1000 psi. Total WOC – 19.5 hrs. Drilled plug and float and resumed drilling formation to N 800'. TD well @ 1815 hrs, 12/6/99.

Logged well w/ Platform Express 11,800' to surface. Set 103 sx Class "H" @ 11,800'. Dressed off cement to 11,532'. Ran DST # 1, 11,550' – 11,237'. Opened tool w/ instant blow, built to 35 psi in 15 min. SI 60 min, GTS in 11 min. Opened tool, Built to 70 psi in 19 min., had flow for 15 min and pkr seat failed. Recovered 188' GCM. Sample chamber 2500 cc mud Rm .272 @ 60, 50 psi. Temp 173 deg. IH – 5823, IF – 847 – 571, ISI – 4636, FF 838 – 631.

Consulted W/ BLM for plugging recommendations. Plugged well as follows: # 1 – 75 sx class "H" 10,800' – 10,600'. # 2 - 56 sx Class "H" 9450' – 9350'. # 3 – 56 sx Class "H" - 7960' – 7810'. # 4 - 56 sx – Class "H" 5950' – 5800'. #5 - 56 sx Class "C" 3274' – 3174'. WOC 4 hrs, tagged plug @ 3254'. Spotted 50 sx Class "C" @ 3254', WOC 3 hrs, Tagged plug @ 3099'. Set plug # 6 – 38 sx, Class "C" @ 1298'. Plug # 7 – 38 sx Class "C" @ 425'. Plug # 8 – 20 sx Class "C" 50' – surface. Nippled down BOPE released rig @ 12/12/99. Cut casing 3' below GL and installed dry hole marker.

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)
R. J. LONGMIRE

Title
DRILLING SUPERINTENDENT

Date
12/16/99

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice 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.

Office
(ORIG. SGD.) DAVID R. GLASS

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

(Instructions on reverse)

Form 3160-5
(November 1994)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

N.M. Oil Cons. Division
811 S. 1st Street
Artesia, NM 88210-2834

FORM APPROVED
Budget Bureau No. 1004-0135
Expires November 30 2000

c15F

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Nippled down BOPE. Released Rig on 12/12/99.

Cut casing 3' below GL and installed dry hole marker.

14. I hereby certify that the foregoing is true and correct
Name (*Printed/Typed*) R. J. LONGMIRE

Title DRILLING SUPERINTENDENT

Date 1/6/00

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice 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.

Office

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(Instructions on reverse)

State of New Mexico
Energy, Minerals and Natural Resources Department

Administrative Order SWD-1425
July 3, 2013

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION

Pursuant to the provisions of 19.15.26.8B NMAC, Mewbourne Oil Company (the "operator"), seeks an administrative order to utilize its Derringer Federal SWD No. 1 with a location of 660 feet from the South line and 1980 feet from the West line, Unit letter N of Section 18, Township 20 South, Range 29 East, NMPM, Eddy County, New Mexico, for produced water disposal purposes.

THE DIVISION DIRECTOR FINDS THAT:

The application has been duly filed under the provisions of 19.15.26.8B NMAC and satisfactory information has been provided that affected parties as defined in said rule have been notified and no objections have been received within the prescribed waiting period. The applicant has presented satisfactory evidence that all requirements prescribed in 19.15.26.8 NMAC have been met and the operator is in compliance with 19.15.5.9 NMAC.

IT IS THEREFORE ORDERED THAT:

The applicant, Mewbourne Oil Company (ORID 14744), is hereby authorized to utilize its Derringer Federal SWD Well No. 1 (API 30-015-30828) with a location of 660 feet from the South line and 1980 feet from the West line, Unit letter N of Section 18, Township 20 South, Range 29 East, NMPM, Eddy County, for disposal of oil field produced water (UIC Class II only) into the Devonian formations through open hole from approximately 12600 feet to 13200 feet. Injection will occur through internally coated tubing and a packer set within 100 feet of the permitted interval.

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the disposed water enters only the approved disposal interval and is not permitted to escape to other formations or onto the surface. This includes all changes in well construction proposed and described in the application.

The operator shall supply the Division's Engineering Bureau with a copy of a mud log over the permitted disposal interval and an estimated insitu water salinity for the permitted disposal interval developed from open-hole log correlations. If significant hydrocarbon shows occur while drilling, the operator shall receive permission in writing from the Division prior to commencing disposal.

After installing tubing, the casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge or an approved leak detection device in order to determine leakage in the casing, tubing, or packer. The casing shall be pressure tested from the surface to the packer setting depth to assure casing integrity.

The well shall pass an initial mechanical integrity test ("MIT") prior to initially commencing disposal and prior to resuming disposal each time the disposal packer is unseated. All MIT testing procedures and schedules shall follow the requirements in Division Rule 19.15.26.11A. NMAC. The Division Director retains the right to require at any time wireline verification of completion and packer setting depths in this well.

The wellhead injection pressure on the well shall be limited to **no more than 2520 psig.** In addition, the disposal well or system shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface tubing pressure to the maximum allowable pressure for this well.

The Director of the Division may authorize an increase in tubing pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the disposed fluid from the target formation. Such proper showing shall be demonstrated by sufficient evidence including but not limited to an acceptable Step-Rate Test.

The operator shall notify the supervisor of the Division's district II office of the date and time of the installation of disposal equipment and of any MIT test so that the same may be inspected and witnessed. The operator shall provide written notice of the date of commencement of disposal to the Division's district office. The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Division Rules 19.15.26.13 and 19.15.7.24 NMAC.

Without limitation on the duties of the operator as provided in Division Rules 19.15.29 and 19.15.30 NMAC, or otherwise, the operator shall immediately notify the Division's district II office of any failure of the tubing, casing or packer in the well, or of any leakage or release of water, oil or gas from around any produced or plugged and abandoned well in the area, and shall take such measures as may be timely and necessary to correct such failure or leakage.

The injection authority granted under this order is not transferable except upon division approval. The division may require the operator to demonstrate mechanical integrity of any injection well that will be transferred prior to approving transfer of authority to inject.

The division may revoke this injection permit after notice and hearing if the operator is in violation of 19.15.5.9 NMAC.

The disposal authority granted herein shall terminate two (2) years after the effective date of this order if the operator has not commenced injection operations into the subject well. One year after the last date of reported disposal into this well, the Division shall consider the well abandoned, and the authority to dispose will terminate *ipso facto*. The Division, upon written

request mailed by the operator prior to the termination date, may grant an extension thereof for good cause.

Compliance with this order does not relieve the operator of the obligation to comply with other applicable federal, state or local laws or rules, or to exercise due care for the protection of fresh water, public health and safety and the environment.

Jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh or protectable waters or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the disposal authority granted herein.

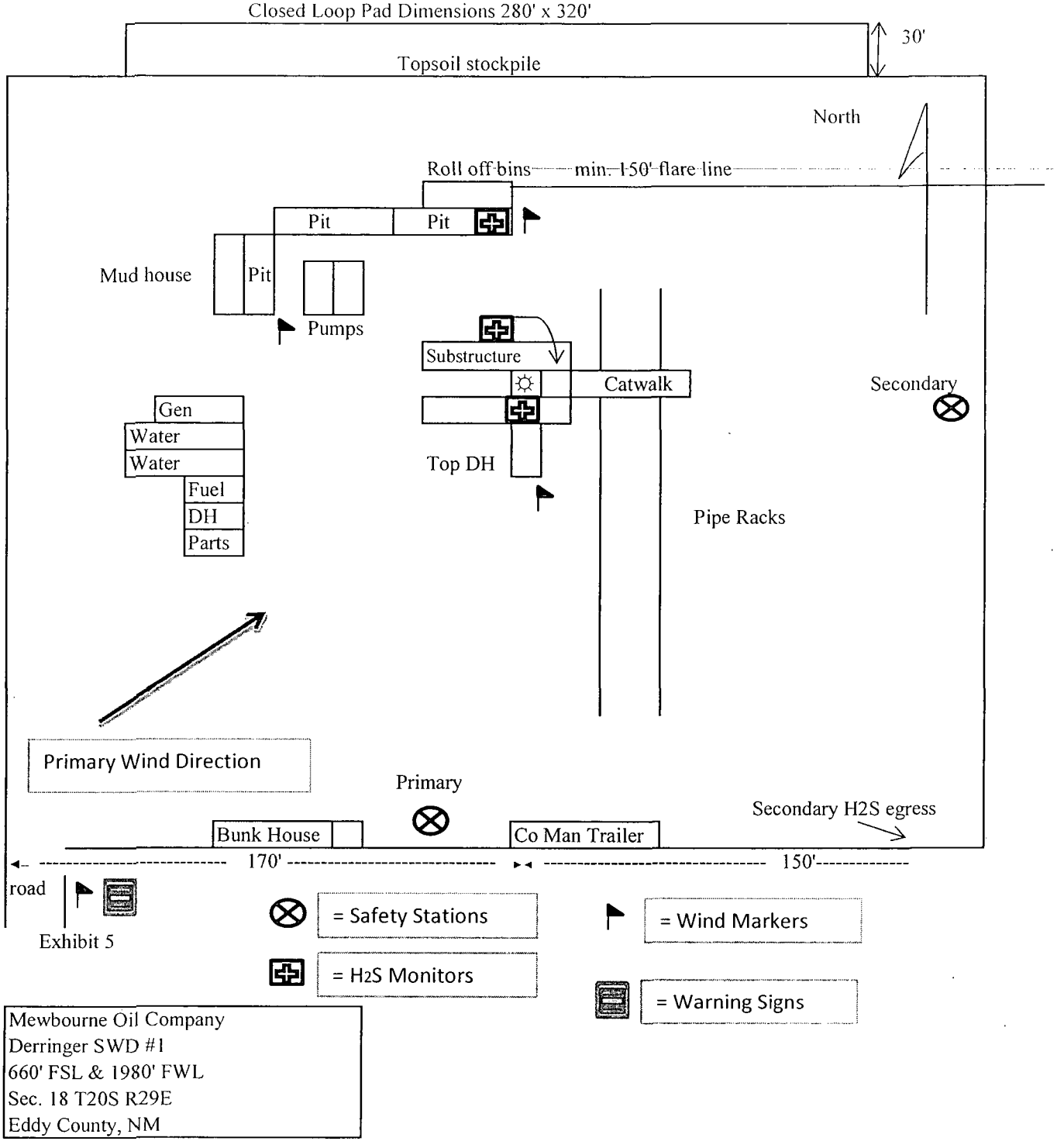
JAMI BAILEY
Director

JB/prg

cc: Oil Conservation Division – Artesia District Office
United States Bureau of Land Management – Carlsbad Office

H2S Diagram

Closed Loop Pad Dimensions 280' x 320'



Mewbourne Oil Company
Derringer SWD #1
660' FSL & 1980' FWL
Sec. 18 T20S R29E
Eddy County, NM

Hydrogen Sulfide Drilling Operations Plan

Mewbourne Oil Company

Derringer SWD #1

600' FSL & 1980' FWL

Sec 18-T20S-R29E

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 before the Delaware formation for purposes of safety and insurance requirements.

2. Hydrogen Sulfide Training

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

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

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

1 The effects of hydrogen sulfide on metal components. If high tensile tubular systems are utilized, supervisory personnel will be trained in their special maintenance requirements.

2 Corrective action and shut in procedures, blowout prevention, and well control procedures while drilling a well.

3 The contents of the Hydrogen Sulfide Drilling Operations Plan.

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

3. Hydrogen Sulfide Safety Equipment and Systems

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

1. Well Control Equipment
   - A. Choke manifold with minimum of one adjustable choke/remote choke.
   - B. Blowout preventers equipped with blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit
   - C. Auxiliary equipment including annular type blowout preventer.
2. Protective Equipment for Essential Personnel
   Thirty minute self contained work unit located in the dog house and at briefing areas.

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

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. If 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

Eddy County Sheriff's Office	**911 or 575-887-7551**
Ambulance Service	**911 or 575-885-2111**
Carlsbad Fire Dept	**911 or 575-885-2111**
Loco Hills Volunteer Fire Dept.	**911 or 575-677-3266**
Closest Medical Facility - Columbia Medical Center of Carlsbad	**575-492-5000**

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**
	Bradley Bishop	**575-390-6838**
Drilling Foreman	**Wesley Noseff**	**575-441-0729**

Closed Loop Pad Dimensions 280' x 320'

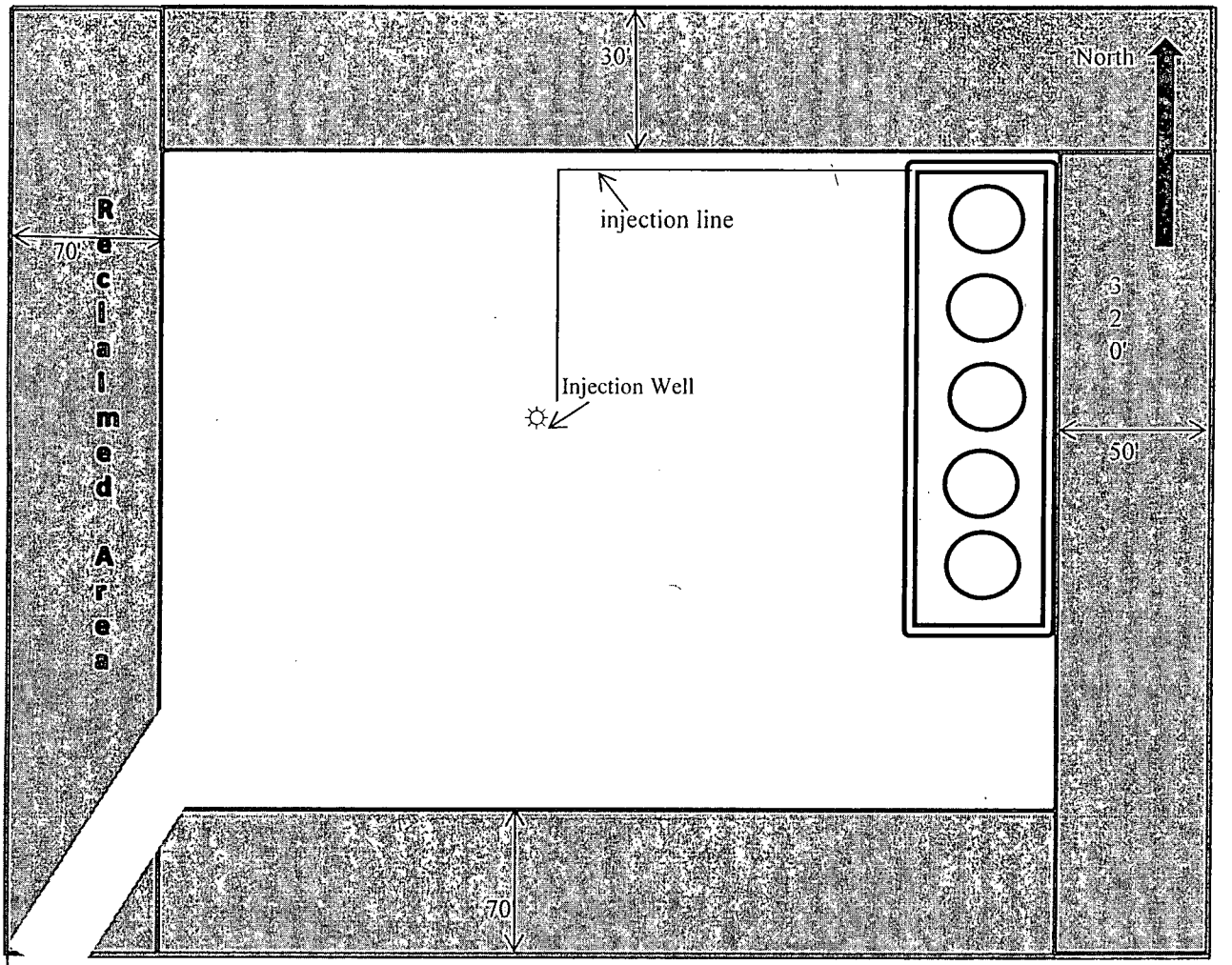


Exhibit 6

Mewbourne Oil Company
Derringer SWD #1
660' FSL & 1980' FWL
Sec. 18 T20S R29E
Eddy County, NM

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

MEWBOURNE OIL COMPANY

Derringer SWD #1
660' FSL & 1980' FWL (SHL)
Sec 18-T20S-R29E
Eddy County, New Mexico

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

1. Existing Roads:

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

B. Directions to location from the intersection of Burton Flat Rd & Magnum Rd. go east on Burton Flat Rd. for .4 miles to existing reclaimed lease road (proposed lease road). Turn North for 852' to existing reclaimed location (proposed well site)

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

2. Proposed Access Road:

A Approx. 852' upgraded existing lease road construction will be needed.

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

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

3. Location of Existing Wells:

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

4. Location of Existing and/or Proposed Facilities:

A. Tank Battery will be located on the East side of location.

B. Production vessels that will remain on this location will be painted to conform to BLM painting stipulations within 180 days of installation.

5. Location and Type of Water Supply

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

6. Source of Construction Materials

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

7. Methods of Handling Waste Disposal:

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

8. Ancillary Facilities

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

9. Well Site Layout

A A diagram of the drill pad is shown in Exhibit #5. Dimensions of the pad and location of major rig components are shown.
B. The pad dimension of 280' x 320' has been staked and flagged.
C. An archaeological survey has been conducted on the proposed well pad.

10. Plans for Restoration of Surface

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

iv. Any additional caliche required for production facilities will be obtained from the area shown in exhibit #6 as interim reclamation.

C. Final Reclamation:

i. Upon cessation of the proposed operations, if the well is abandoned, all equipment and trash will be removed and taken to a proper facility.

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

11. Surface Ownership:

Surface ownership is owned by BLM.

12. Other Information:

A. The primary use of the surface at the location is for grazing of livestock.

13. Operators Representative:

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

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

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 31 day of July, 2013.

Name: NM Young

Signature: FOR NM Young

Position Title: Hobbs District Manager

Address: PO Box 5270, Hobbs NM 88241

Telephone: 575-393-5905

E-mail: myoung@mewbourne.com

PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**Mewbourne Oil Company**
LEASE NO.:	**NMNM-01165**
WELL NAME & NO.:	**Derringer SWD 1**
SURFACE HOLE FOOTAGE:	**0660' FSL & 1980' FWL**
LOCATION:	**Section 18, T. 20 S., R 29 E., NMPM**
COUNTY:	**Eddy County, New Mexico**

TABLE OF CONTENTS

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

I. GENERAL PROVISIONS

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

II. PERMIT EXPIRATION

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

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

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

IV. NOXIOUS WEEDS

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

V. SPECIAL REQUIREMENT(S)

Constructing over a Reserve Pit

Yates shall not excavate any portion of the existing reserve pit area. No topsoil shall be stripped from the reserve pit area. Reclamation over the reserve pit area during interim reclamation or final reclamation must be satisfactory to the authorized officer. Yates must comply with OCD rules when drilling over a reserve pit.

Noxious Weeds

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

Cave and Karst

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

Cave/Karst Surface Mitigation

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

Construction:

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

No Blasting:

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

Pad Berming:

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

Tank Battery Liners and Berms:

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

Leak Detection System:

A method of detecting leaks is required. The method could incorporate gauges to measure loss, situating values and lines so they can be visually inspected, or installing

electronic sensors to alarm when a leak is present. Leak detection plan will be submitted to BLM for approval.

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

Cave/Karst Subsurface Mitigation

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

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

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

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

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

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

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

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5909 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL

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

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

C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

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

D. FEDERAL MINERAL MATERIALS PIT

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

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

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

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

F. EXCLOSURE FENCING (CELLARS & PITS)

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

G. ON LEASE ACCESS ROADS

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

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

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

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

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

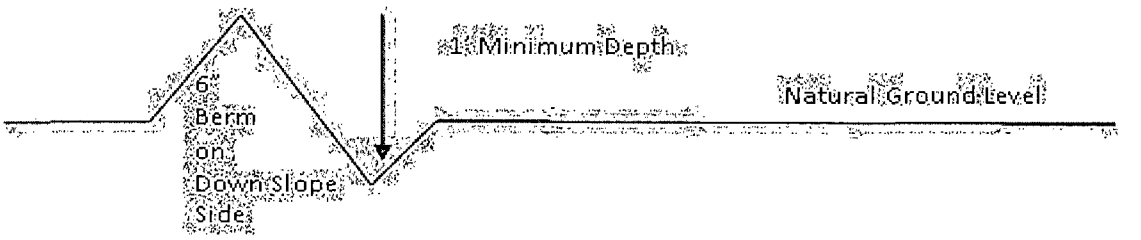
Ditching
Ditching shall be required on both sides of the road.

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

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

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

Cross Section of a Typical Lead-off Ditch



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

Formula for Spacing Interval of Lead-off Ditches

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

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

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

Cattleguards
An appropriately sized cattleguard sufficient to carry out the project shall be installed and maintained at fence/road crossings.

Any existing cattleguards on the access road route shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguards that are in place and are utilized during lease operations.

Fence Requirement

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

The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fences.

Public Access

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

Construction Steps

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

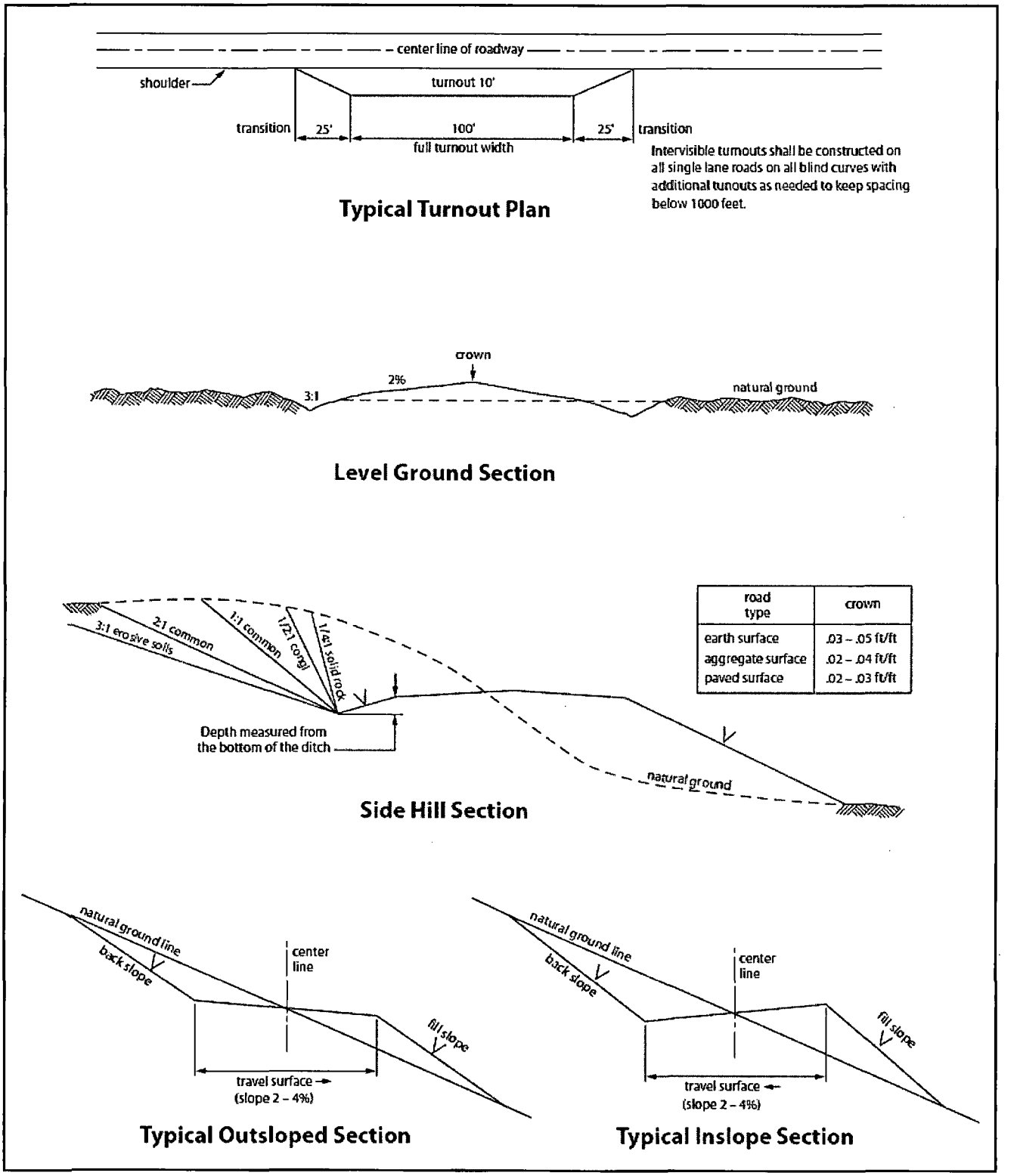


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

VII. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

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

a. BOPE tests (minimum of 4 hours)
b. Setting and Cementing the production casing strings (minimum of 4 hours)
c. CIT test

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

1. **Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface plug. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.**

2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval. **If the drilling rig is removed without approval – an Incident of Non-Compliance will be written and will be a "Major" violation.**

3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works is located, this does not include the dog house or stairway area.

B. CASING

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

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

Possibility of lost circulation in the Devonian, Ellenburger, and Mississippian. Abnormal pressures may be encountered near the Wolfcamp and subsequent strata.

1. The 20" surface casing is set at 375 feet with cement circulated to surface with 1'' operations.

2. The 13-3/8" 1st intermediate casing is set at 1245 feet with cement circulated to surface.

3. The 9-5/8" 2nd intermediate casing is set at 3229 feet with cement circulated to surface.

Operator to run CBL to verify they have cement to surface on the 9-5/8'' to ensure the Capitan Reef is protected. Submit Results to the BLM.

A CIT is to be performed on the 9-5/8 inch casing per Onshore Oil and Gas Order 2.III.B.1.h prior to drilling the shoe plug. Test casing to 1,500 psi.

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

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

Operator has proposed DV tool at depth of 9000'. Operator is to submit sundry if DV tool depth varies by more than 100' from approved depth.

a. First stage to DV tool:

☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve circulation on the next stage. **Excess calculates to 24% - Additional cement may be required.**

b. Second stage above DV tool:

☒ Cement to surface. If cement does not circulate, contact the appropriate BLM office. **Excess calculates to 17% - Additional cement may be required.**

2. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

C. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

2. **Prior to drilling surface plug, the BOP is to be tested.** Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5,000 (5M)** psi. **5M system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.**

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

    a. The tests shall be done by an independent service company.

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

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

    d. All tests are required to be recorded on a calibrated test chart. **A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.**

    e. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.

D. WASTE MATERIAL AND FLUIDS

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

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

E. WELL COMPLETION

A NOI sundry with the completion procedure for this well shall be submitted and approved prior to commencing completion work. The procedure will be reviewed to verify that the completion proposal will allow the operator to:

1. **Properly evaluate the injection zone utilizing open hole logs, swab testing and/or any other method to confirm that hydrocarbons cannot be produced in paying quantities. This evaluation shall be reviewed by the BLM prior to injection commencing.**
2. **Restrict the injection fluid to the approved formation.**

If off-lease water will be disposed in this well, the operator shall provide proof of right-of-way approval.

JAM 121713

VIII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

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

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

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

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

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

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

Painting Requirement
All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color, **Shale Green** from the BLM Standard Environmental Color Chart (CC-001: June 2008).

B. PIPELINES (Not applied for in APD)

C. ELECTRIC LINES (Not applied for in APD)

IX. INTERIM RECLAMATION

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

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

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

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

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

X. FINAL ABANDONMENT & RECLAMATION

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

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory

revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

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

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

Seed Mixture 4, for Gypsum Sites

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

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

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

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

DWS: DeWinged Seed

*Pounds of pure live seed:

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