ATS-10-606

Form 3160-3
(September 2001)

OCD-ARTESIA

FORM APPROVED
OMB No. 1004-0136
Expires January 31, 2004

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
NM-89881 (SL) NM-89880 (BHL

6. If Indian, Allottee or Tribe Name

1a. Type of Work: ☑ DRILL ☐ REENTER

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

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

8. Lease Name and Well No.
Tamano 10 Federal Com #6H 32676

2. Name of Operator
Mewbourne Oil Company - 14744

9. API Well No.
30-015-38286

3a. Address	3b. Phone No. *(include area code)*	10. Field and Pool, or Exploratory
PO Box 5270 Hobbs, NM 88241	575-393-5905	Tamano Bone Spring 58040

4. Location of Well *(Report location clearly and in accordance with any State requirements. *)*
At surface 600' FNL & 350' FWL (SL) Unit D
At proposed prod. zone 400' FNL & 330' FEL (BHL) Unit A

11. Sec., T., R., M., or Blk. and Survey or Area
Sec 10 - T18S - R31E

14. Distance in miles and direction from nearest town or post office*	12. County or Parish	13. State
14 miles SE of Loco Hills, NM	Eddy	NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 330'	16. No. of Acres in lease	17. Spacing Unit dedicated to this well
	40	160
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 498	**19. Proposed Depth** 12745' MD 8382' TVD	**20. BLM/BIA Bond No. on file** NM1693, Nationwide
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3719' GL	**22. Approximate date work will start*** ASAP	**23. Estimated duration** 40

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall 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 shall 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 authorized officer.

25. Signature	Name *(Printed/Typed)*	Date
Jackie Lathan	Jackie Lathan	06/08/10

Title
Hobbs Regulatory

Approved by *(Signature)* /s/ Don Peterson	Name *(Printed/Typed)*	Date NOV 5 2010
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.

(Instructions on reverse)

Capitan Controlled Water Basin

RECEIVED
NOV 09 2010
NMOCD ARTESIA

Approval Subject to General Requirements & Special Stipulations Attached

KG 11/22/10

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240

DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210

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

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

Form C-102
Revised October 15, 2009

Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name	
30-015-38286	58040	Tamano Bone Spring	
Property Code	**Property Name**		**Well Number**
32676	TAMANO "10" FEDERAL COM		6H
OGRID No.	**Operator Name**		**Elevation**
14744	MEWBOURNE OIL COMPANY		3719'

Surface Location

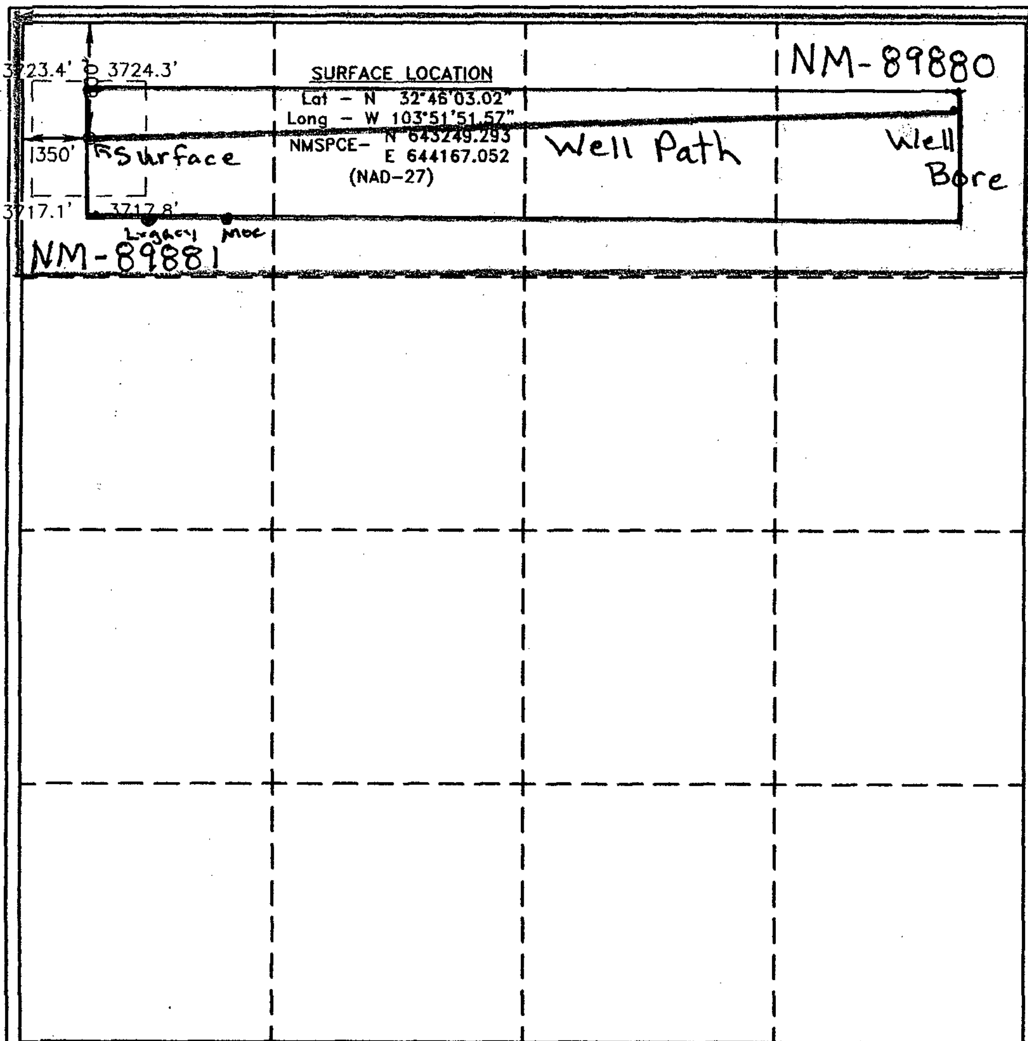
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	10	18 S	31 E		600	NORTH	350	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	10	18S	31E		400	North	330	East	Eddy

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



OPERATOR CERTIFICATION

I hereby certify that the information 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.

Jackie Lathan 6/8/10
Signature Date

Jackie Lathan
Printed Name

SURVEYOR CERTIFICATION

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

APRIL 23, 2010
Date Surveyed

Signature & Seal of Professional Surveyor

GARY L. JONES
NEW MEXICO
7977
REGISTERED PROFESSIONAL LAND SURVEYOR

W.O. 22655

Certificate No. Gary L. Jones 7977

BASIN SURVEYS

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

Statement Accepting Responsibility for Operations

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

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

Lease Number: Lease Number NM-89881 (SL)
NM-89880 (BHL)

Legal Description of Land: Section 10, T-18S, R-31E Eddy County, New Mexico.
Location @ 600' FNL & 350' FWL.

Formation (if applicable): Bone Spring

Bond Coverage: $150,000

BLM Bond File: NM1693, Nationwide

Authorized Signature: Jackie Lathan
Name: NM (Micky) Young
for Title: District Manager
Date: June 8, 2010

SECTION 10, TOWNSHIP 18 SOUTH, RANGE 31 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.

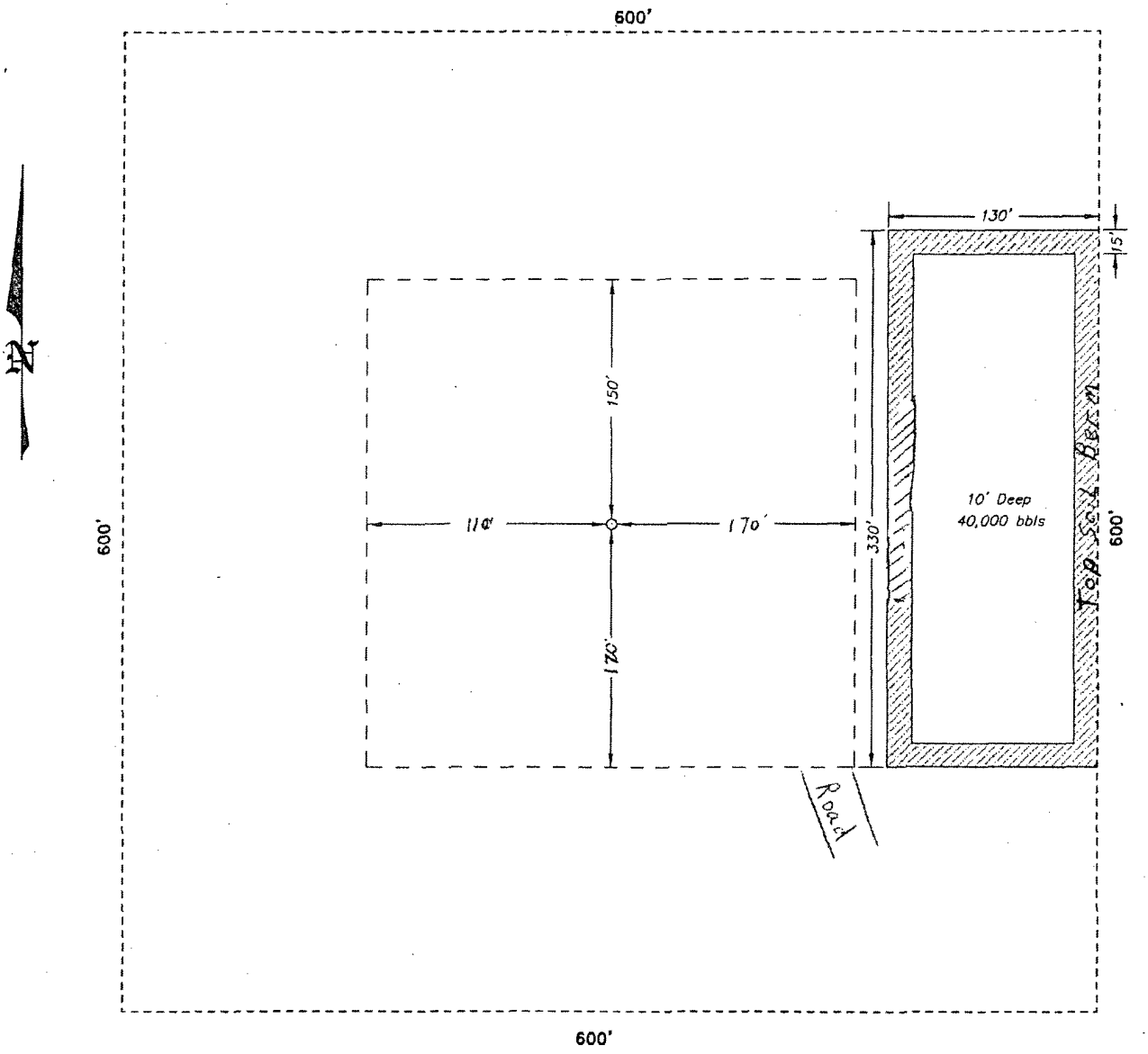


Exhibit 7

100 0 100 200 FEET
SCALE: 1" = 100'

NOTE:
FRAC PIT STAKED BY MEWBOURNE OIL COMPANY.
PLAT BY BASIN SURVEYS. NO SURVEYING DONE.

MEWBOURNE OIL COMPANY

REF: TAMANO "10" FEDERAL COM #6H / WELL PAD TOPO

THE TAMANO "10" FEDERAL COM #6H LOCATED 600' FROM THE NORTH LINE AND 350' FROM THE WEST LINE OF SECTION 10, TOWNSHIP 18 SOUTH, RANGE 31 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.

BASIN SURVEYS P.O. BOX 1786 – HOBBS, NEW MEXICO			
W.O. Number: 22655	Drawn By: J. SMALL		
Date: 05-04-2010	Disk: JMS 22655	Survey Date: 04-23-2010	Sheet 1 of 1 Sheets

Received 8/31/10 TEN

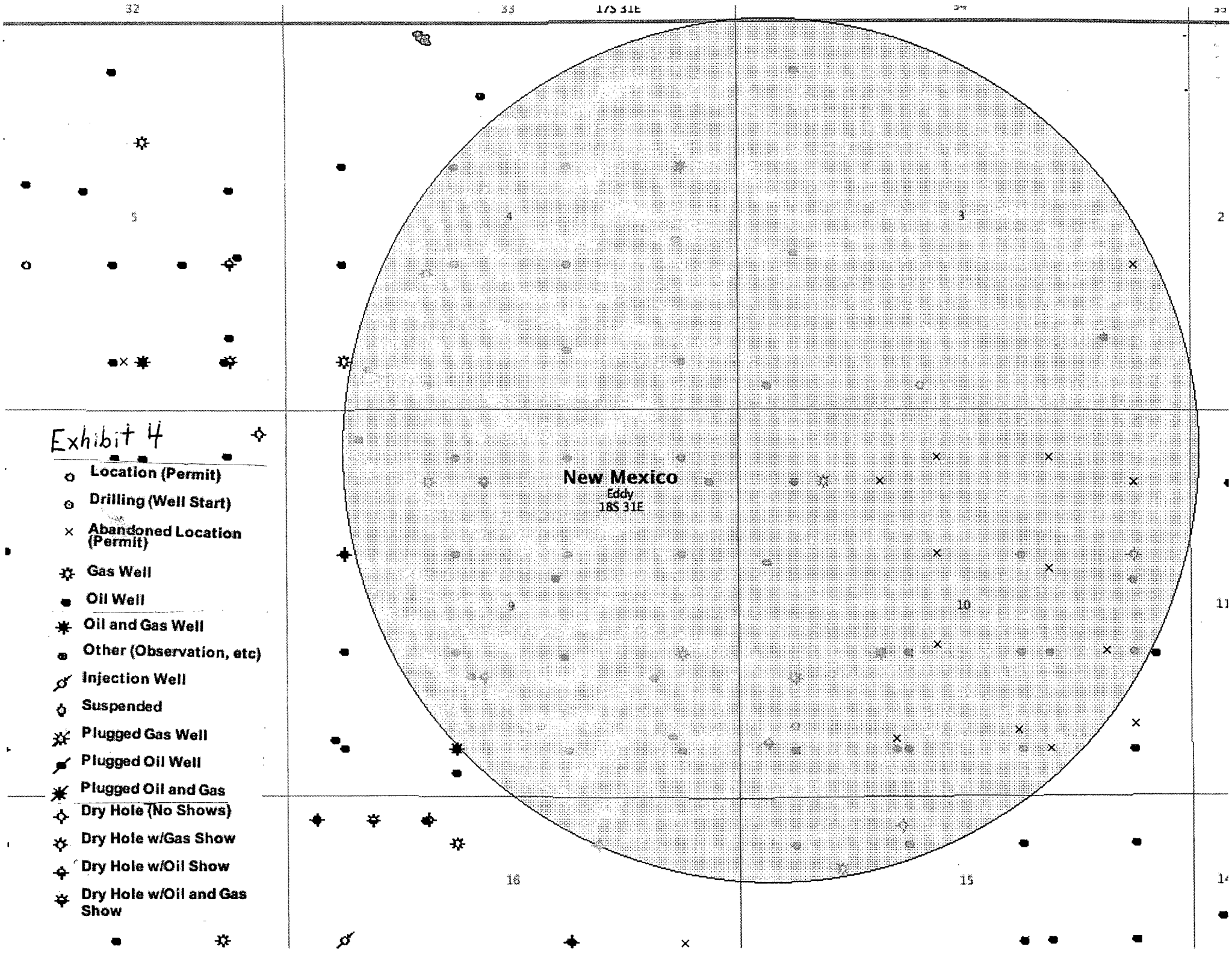
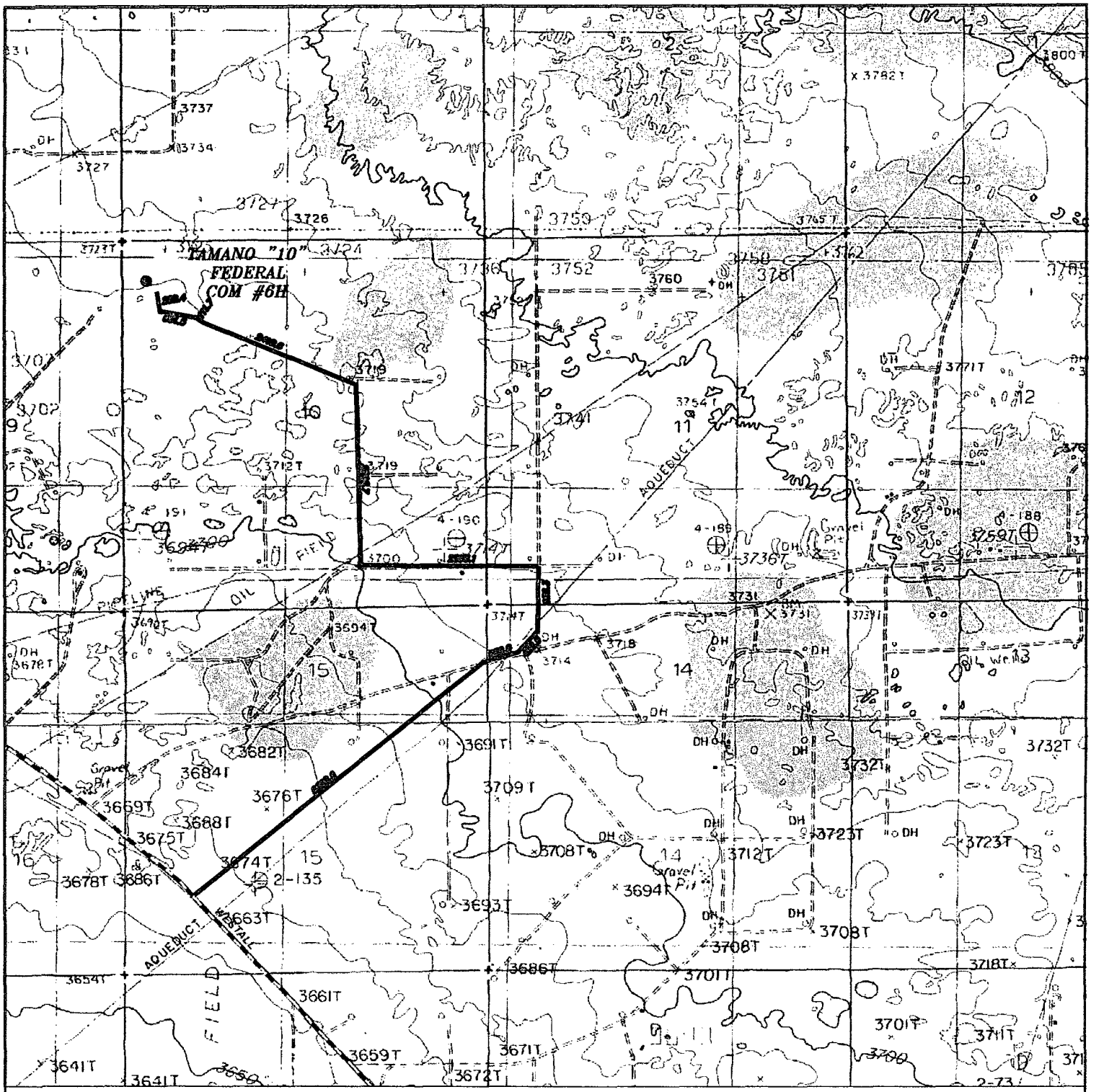


Exhibit 4
Location (Permit)
Drilling (Well Start)
Abandoned Location (Permit)
Gas Well
Oil Well
Oil and Gas Well
Other (Observation, etc)
Injection Well
Suspended
Plugged Gas Well
Plugged Oil Well
Plugged Oil and Gas
Dry Hole (No Shows)
Dry Hole w/Gas Show
Dry Hole w/Oil Show
Dry Hole w/Oil and Gas Show
New Mexico
Eddy
18S 31E
32
33
17S 31E
5
4
3
2
9
10
11
16
15
14



TAMANO "10" FEDERAL COM #6H

Exhibit 3

Located 600' FNL and 350' FWL
Section 10, Township 18 South, Range 31 East,
N.M.P.M., Eddy County, New Mexico.

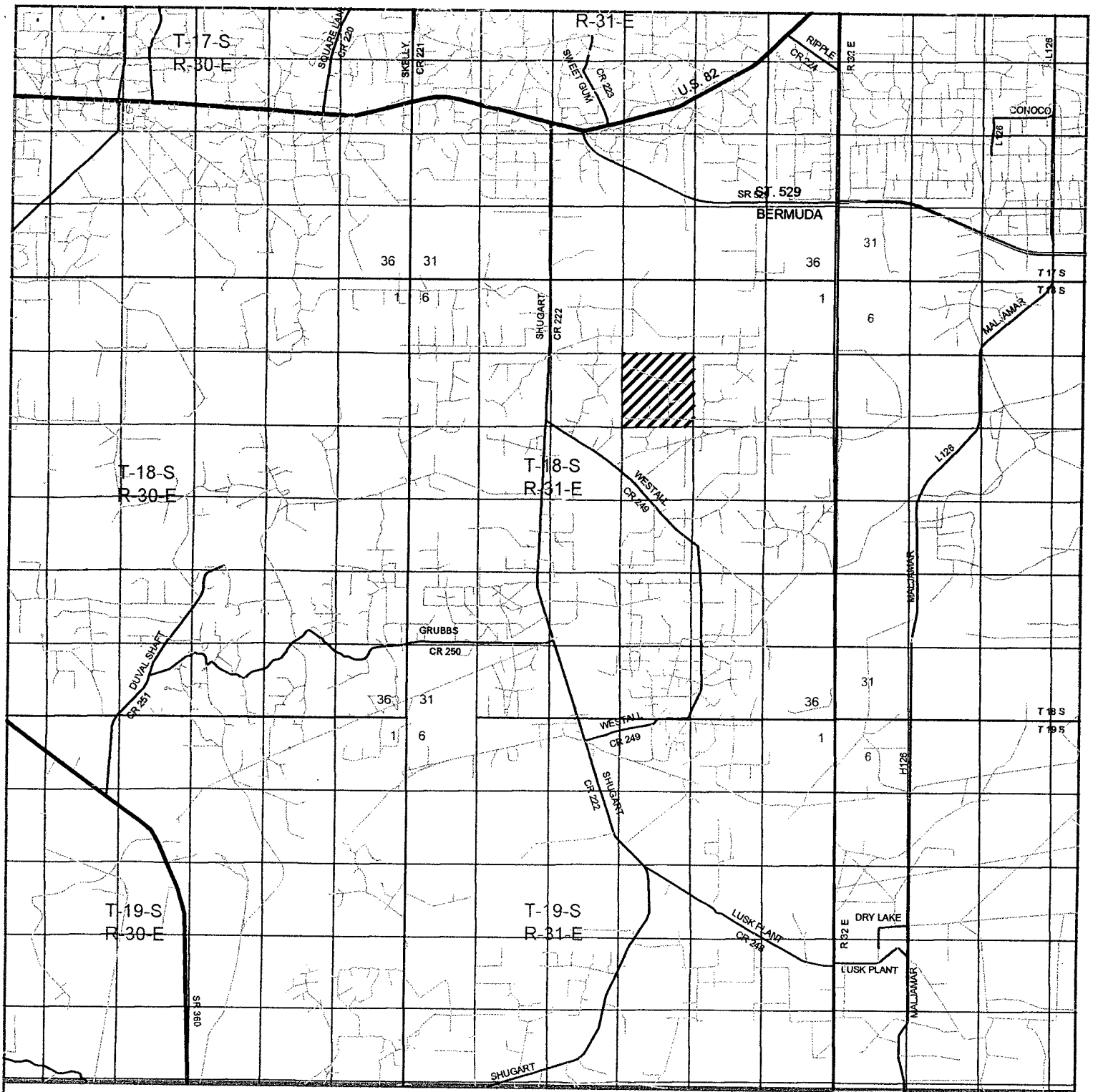
basin surveys
focused on excellence in the oilfield

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

W.O. Number:	JMS 22655
Survey Date:	04-23-2010
Scale:	1" = 2000'
Date:	05-04-2010

N

MEWBOURNE OIL COMPANY



TAMANO "10" FEDERAL COM #6H

Exhibit 3A

Located 600' FNL and 350' FWL

Section 10, Township 18 South, Range 31 East,

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

basin surveys
focused on excellence in the oilfield

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

W.O. Number: JMS 22655

Survey Date: 04-23-2010

Scale: 1" = 2 Miles

Date: 05-04-2010

N

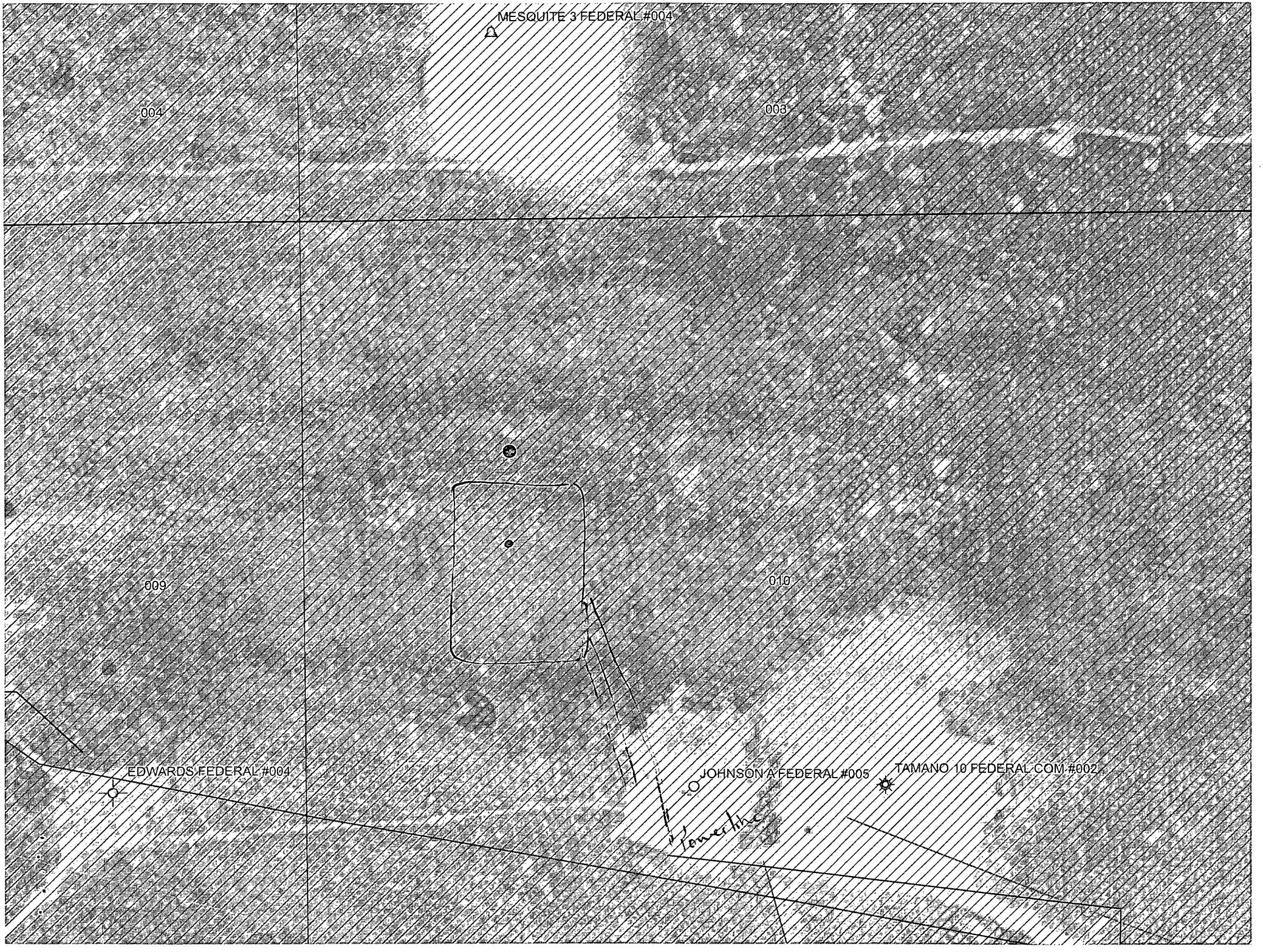
MEWBOURNE OIL COMPANY

Exhibit #4
Status of Wells in Immediate Vicinity
Mewbourne Oil Company
Tamano 10 Federal Com #6H
600' FNL & 350' FWL (SL)
Sec 10-T18S-R31E
Eddy County, New Mexico

Section 35-T24S-R28E

Operator:	Mewbourne Oil Company
Well Name:	Tamano 10 Federal Com #2
Unit letter:	D (990' FN & WL)
Status:	Flowing
Field:	Shugart Morrow North

Operator:	Legacy Reserves Operating
Well Name:	Johnson A Federal #5
Unit letter:	D (990' FNL & 660' FWL)
Status:	Producing
Field:	Shugart Yates, 7 Rivers, Queen, Grayburg


MESQUITE 3 FEDERAL #004
004
003
009
010
EDWARDS FEDERAL #004
JOHNSON A FEDERAL #005
TAMANO 10 FEDERAL COM #002
Powerline

Drilling Program
Mewbourne Oil Company
Tamano 10 Federal Com #6H
600' FNL & 350' FWL (SHL)
Sec 10-T18S-R31E
Eddy County, New Mexico

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

Rustler	690'	*San Andres	3930'
*Yates	2120'	*Delaware	4600'
*Queen	3230'	*Bone Spring	5380'
*Grayburg	3740'		

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

Water	Fresh water will be protected by setting surface casing at 700' and cementing to surface.
Hydrocarbons	Oil and gas are anticipated in the above (*) formations. These zones will be protected by casing as necessary.

3. Pressure control equipment:

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

***4. Proposed casing and cementing program:**

A. Casing Program:

See COA

Hole Size	Casing	Wt/Ft.	Grade	Depth	Jt Type
12 ¼"	9 5/8" (new)	36#	J55	0'-~~700'~~ 750'	ST&C
8 ¾"	7" (new)	26#	P110	0-7800'	LT&C
8 ¾"	7" (new)	26#	P110	7800'-8700'	BT/C
6 ⅛"	4 ½" (new)	11.6#	P110	8500'-12745'	LT&C

See COA

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

B. Cementing Program:

i. Surface Casing: 300 sacks Class "C" cement containing 2% CaCl. Yield at 1.34 cuft/sk. Cmt circulated to surface.

ii. Intermediate Casing: 500 sacks 35:65 poz mix H cement containing 6% gel, 5#/sack gilsonite. Yield at 1.98 cuft/sk. 400 sacks Class H cement containing FLA. Yield at 1.28 cuft/sk. Cmt circulated to surface.

iii. Production Casing: Plans are to use a Packer-Plus system with 4 ½" casing. Will run Packer type liner @ 8500'.

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

5. Mud Program:

Interval	Type System	Weight	Viscosity	Fluid Loss
0'-~~700'~~ 750'	FW spud mud	8.6-9.0	32-34	NA
~~700'~~-8700'	Brine water	10.0-10.2	28-30	NA
8700'-12745' TD	FW w/Polymer	8.5-8.7	32-35	15

See COA —

6. Evaluation Program:

See COA — Samples: 10' samples from surface casing to TD
Logging: Tie-in GR & Gyro from KOP (7800') to surface. GR from 7800' to TD.

7. Downhole Conditions

Zones of abnormal pressure:	None anticipated
Zones of lost circulation:	Anticipated in surface and intermediate holes
Maximum bottom hole temperature:	120 degree F
Maximum bottom hole pressure:	8.3 lbs/gal gradient or less

8. Anticipated Starting Date:

Mewbourne Oil Company intends to drill this well as soon as possible after receiving approval with approximately 45 days involved in drilling operations and an additional 10 days involved in completion operations on the project.

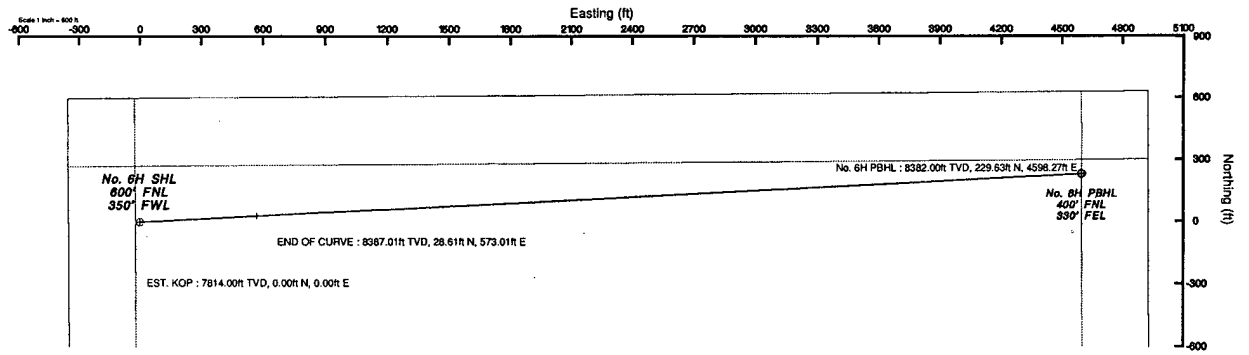
Mewbourne Oil Company

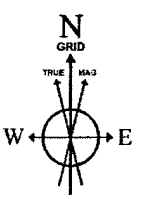
Mewbourne Oil Company

Location: Eddy County, NM
Field: (Tamano) Sec 10, T18S, R31E
Facility: Tamano 10 Fed Com No. 6H
Slot: No. 6H SHL
Well: No. 6H
Wellbore: No. 6H PWB

BAKER HUGHES

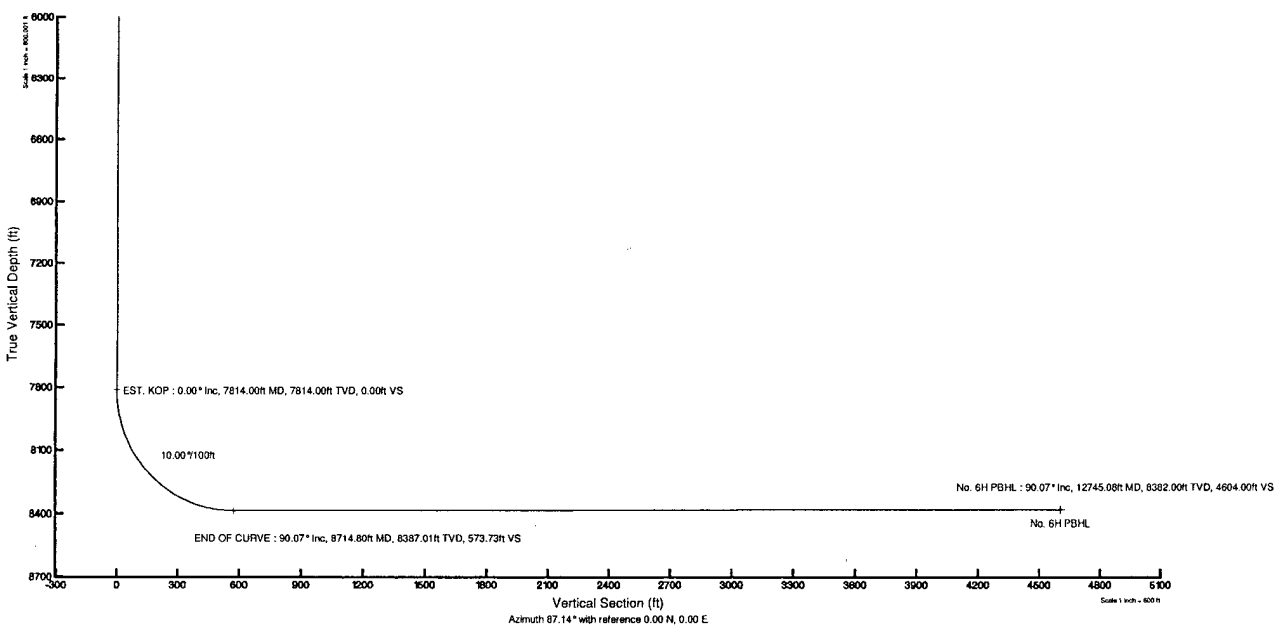
Well Profile Data								
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	0.00	0.000	87.141	0.00	0.00	0.00	0.00	0.00
EST. KOP	7814.00	0.000	87.141	7814.00	0.00	0.00	0.00	0.00
END OF CURVE	8714.80	90.071	87.141	8387.01	28.61	573.01	10.00	573.73
No. 6H PBHL	12745.08	90.071	87.141	8382.00	229.63	4598.27	0.00	4604.00





BGGM (1945.0 to 2011.0) Dip: 60.68° Field: 49080.5 nT
Magnetic North is 7.93 degrees East of True North (at 5/24/2010)
Grid North is 0.25 degrees East of True North
To correct azimuth from True to Grid subtract 0.25 degrees
To correct azimuth from Magnetic to Grid add 7.68 degrees
For example: if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7.68 = 97.68

Plot reference wellpath is Plan #1	
True vertical depths are referenced to Rig on No. 6H SHL (KB)	Grid System: NAD27 / TM New Mexico State Planes, Eastern Zone (3001), US feet
Measured depths are referenced to Rig on No. 6H SHL (KB)	North Reference: Grid north
Rig on No. 6H SHL (KB) to Mean Sea Level: 3737 feet	Scale: True distance
Mean Sea Level to Mud line (Facility: Tamano 10 Fed Com No. 6H): -3719 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: Victor Hernandez on 5/25/2010



Mewbourne Oil Company

Planned Wellpath Report

Plan #1

BAKER HUGHES

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Mewbourne Oil Company**	Slot	**No. 6H SHL**
Area	**Eddy County, NM**	Well	**No. 6H**
Field	**(Tamano) Sec 10, T18S, R31E**	Wellbore	**No. 6H PWB**
Facility	**Tamano 10 Fed Com No. 6H**		

REPORT SETUP INFORMATION			
Projection System	**NAD27 / TM New Mexico State Planes, Eastern Zone (3001), US feet**	Software System	**WellArchitect® 2.0**
North Reference	**Grid**	User	**Victor Hernandez**
Scale	**0.999933**	Report Generated	**5/25/2010** at **1:30:52 PM**
Convergence at slot	**0.25° East**	Database/Source file	**WA_Midland/No._6H_PWB.xml**

WELLPATH LOCATION	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	**East[ft]**	**Easting[USft]**	**Northing[USft]**	**Latitude**	**Longitude**
Slot Location	**0.00**	**0.00**	644167.05	643249.29	32°46'03.025"N	103°51'51.566"W
Facility Reference Pt			**644167.05**	**643249.29**	32°46'03.025"N	103°51'51.566"W
Field Reference Pt			**644167.05**	**643249.29**	32°46'03.025"N	103°51'51.566"W

WELLPATH DATUM			
Calculation method	**Minimum curvature**	Rig on No. 6H SHL (KB) to GL	**18.00ft**
Horizontal Reference Pt	**Slot**	Rig on No. 6H SHL (KB) to Mean Sea Level	**3737.00ft**
Vertical Reference Pt	**Rig on No. 6H SHL (KB)**	GL to Mud Line (Facility)	**0.00ft**
MD Reference Pt	**Rig on No. 6H SHL (KB)**	Section Origin	**N 0.00, E 0.00 ft**
Field Vertical Reference	**Mean Sea Level**	Section Azimuth	**87.14°**

Mewbourne Oil Company

Planned Wellpath Report

Plan #1

BAKER HUGHES

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Mewbourne Oil Company**	Slot	**No. 6H SHL**
Area	**Eddy County, NM**	Well	**No. 6H**
Field	**(Tamano) Sec 10, T18S, R31E**	Wellbore	**No. 6H PWB**
Facility	**Tamano 10 Fed Com No. 6H**		

WELLPATH DATA (53 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00	0.000	87.141	0.00	0.00	0.00	0.00	644167.05	643249.29	32°46'03.025"N	103°51'51.566"W	0.00	Tie On
7814.00	0.000	87.141	7814.00	0.00	0.00	0.00	644167.05	643249.29	32°46'03.025"N	103°51'51.566"W	0.00	EST. KOP
7914.00†	9.999	87.141	7913.49	8.70	0.43	8.69	644175.74	643249.72	32°46'03.028"N	103°51'51.464"W	10.00	
8014.00†	19.998	87.141	8009.96	34.55	1.72	34.51	644201.55	643251.01	32°46'03.040"N	103°51'51.162"W	10.00	
8114.00†	29.997	87.141	8100.48	76.75	3.83	76.66	644243.70	643253.12	32°46'03.059"N	103°51'50.668"W	10.00	
8214.00†	39.996	87.141	8182.30	134.03	6.69	133.87	644300.91	643255.97	32°46'03.085"N	103°51'49.998"W	10.00	
8314.00†	49.995	87.141	8252.92	204.65	10.21	204.40	644371.43	643259.50	32°46'03.117"N	103°51'49.172"W	10.00	
8414.00†	59.994	87.141	8310.22	286.46	14.29	286.10	644453.13	643263.58	32°46'03.153"N	103°51'48.215"W	10.00	
8514.00†	69.993	87.141	8352.43	376.97	18.80	376.50	644543.52	643268.09	32°46'03.194"N	103°51'47.156"W	10.00	
8614.00†	79.992	87.141	8378.30	473.43	23.61	472.84	644639.86	643272.90	32°46'03.237"N	103°51'46.027"W	10.00	
8714.00†	89.991	87.141	8387.02	572.93	28.57	572.21	644739.22	643277.86	32°46'03.282"N	103°51'44.863"W	10.00	
8714.80	90.071	87.141	8387.01	573.73	28.61	573.01	644740.02	643277.90	32°46'03.283"N	103°51'44.854"W	10.00	END OF CURVE
8814.00†	90.071	87.141	8386.89	672.93	33.56	672.09	644839.09	643282.85	32°46'03.327"N	103°51'43.694"W	0.00	
8914.00†	90.071	87.141	8386.77	772.92	38.55	771.96	644938.96	643287.84	32°46'03.372"N	103°51'42.524"W	0.00	
9014.00†	90.071	87.141	8386.64	872.92	43.54	871.84	645038.83	643292.82	32°46'03.417"N	103°51'41.354"W	0.00	
9114.00†	90.071	87.141	8386.52	972.92	48.52	971.71	645138.70	643297.81	32°46'03.462"N	103°51'40.184"W	0.00	
9214.00†	90.071	87.141	8386.39	1072.92	53.51	1071.59	645238.57	643302.80	32°46'03.507"N	103°51'39.014"W	0.00	
9314.00†	90.071	87.141	8386.27	1172.92	58.50	1171.46	645338.43	643307.79	32°46'03.552"N	103°51'37.844"W	0.00	
9414.00†	90.071	87.141	8386.14	1272.92	63.49	1271.34	645438.30	643312.77	32°46'03.597"N	103°51'36.674"W	0.00	
9514.00†	90.071	87.141	8386.02	1372.92	68.48	1371.22	645538.17	643317.76	32°46'03.642"N	103°51'35.505"W	0.00	
9614.00†	90.071	87.141	8385.90	1472.92	73.46	1471.09	645638.04	643322.75	32°46'03.687"N	103°51'34.335"W	0.00	
9714.00†	90.071	87.141	8385.77	1572.92	78.45	1570.97	645737.91	643327.73	32°46'03.732"N	103°51'33.165"W	0.00	
9814.00†	90.071	87.141	8385.65	1672.92	83.44	1670.84	645837.78	643332.72	32°46'03.776"N	103°51'31.995"W	0.00	
9914.00†	90.071	87.141	8385.52	1772.92	88.43	1770.72	645937.65	643337.71	32°46'03.821"N	103°51'30.825"W	0.00	
10014.00†	90.071	87.141	8385.40	1872.92	93.41	1870.59	646037.51	643342.70	32°46'03.866"N	103°51'29.655"W	0.00	
10114.00†	90.071	87.141	8385.27	1972.92	98.40	1970.47	646137.38	643347.68	32°46'03.911"N	103°51'28.485"W	0.00	
10214.00†	90.071	87.141	8385.15	2072.92	103.39	2070.34	646237.25	643352.67	32°46'03.956"N	103°51'27.316"W	0.00	
10314.00†	90.071	87.141	8385.02	2172.92	108.38	2170.22	646337.12	643357.66	32°46'04.001"N	103°51'26.146"W	0.00	
10414.00†	90.071	87.141	8384.90	2272.92	113.36	2270.10	646436.99	643362.64	32°46'04.046"N	103°51'24.976"W	0.00	
10514.00†	90.071	87.141	8384.78	2372.92	118.35	2369.97	646536.86	643367.63	32°46'04.091"N	103°51'23.806"W	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Mewbourne Oil Company**	Slot	**No. 6H SHL**
Area	**Eddy County, NM**	Well	**No. 6H**
Field	**(Tamano) Sec 10, T18S, R31E**	Wellbore	**No. 6H PWB**
Facility	***Tamano 10 Fed Com No. 6H***		

WELLPATH DATA (53 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10614.00†	90.071	87.141	8384.65	2472.92	123.34	2469.85	646636.73	643372.62	32°46'04.136"N	103°51'22.636"W	0.00	
10714.00†	90.071	87.141	8384.53	2572.92	128.33	2569.72	646736.59	643377.61	32°46'04.181"N	103°51'21.466"W	0.00	
10814.00†	90.071	87.141	8384.40	2672.92	133.31	2669.60	646836.46	643382.59	32°46'04.225"N	103°51'20.296"W	0.00	
10914.00†	90.071	87.141	8384.28	2772.92	138.30	2769.47	646936.33	643387.58	32°46'04.270"N	103°51'19.127"W	0.00	
11014.00†	90.071	87.141	8384.15	2872.92	143.29	2869.35	647036.20	643392.57	32°46'04.315"N	103°51'17.957"W	0.00	
11114.00†	90.071	87.141	8384.03	2972.92	148.28	2969.22	647136.07	643397.56	32°46'04.360"N	103°51'16.787"W	0.00	
11214.00†	90.071	87.141	8383.91	3072.92	153.26	3069.10	647235.94	643402.54	32°46'04.405"N	103°51'15.617"W	0.00	
11314.00†	90.071	87.141	8383.78	3172.92	158.25	3168.97	647335.81	643407.53	32°46'04.450"N	103°51'14.447"W	0.00	
11414.00†	90.071	87.141	8383.66	3272.92	163.24	3268.85	647435.67	643412.52	32°46'04.495"N	103°51'13.277"W	0.00	
11514.00†	90.071	87.141	8383.53	3372.92	168.23	3368.73	647535.54	643417.50	32°46'04.540"N	103°51'12.107"W	0.00	
11614.00†	90.071	87.141	8383.41	3472.92	173.21	3468.60	647635.41	643422.49	32°46'04.585"N	103°51'10.938"W	0.00	
11714.00†	90.071	87.141	8383.28	3572.92	178.20	3568.48	647735.28	643427.48	32°46'04.629"N	103°51'09.768"W	0.00	
11814.00†	90.071	87.141	8383.16	3672.92	183.19	3668.35	647835.15	643432.47	32°46'04.674"N	103°51'08.598"W	0.00	
11914.00†	90.071	87.141	8383.03	3772.92	188.18	3768.23	647935.02	643437.45	32°46'04.719"N	103°51'07.428"W	0.00	
12014.00†	90.071	87.141	8382.91	3872.92	193.16	3868.10	648034.89	643442.44	32°46'04.764"N	103°51'06.258"W	0.00	
12114.00†	90.071	87.141	8382.79	3972.92	198.15	3967.98	648134.75	643447.43	32°46'04.809"N	103°51'05.088"W	0.00	
12214.00†	90.071	87.141	8382.66	4072.92	203.14	4067.85	648234.62	643452.41	32°46'04.854"N	103°51'03.918"W	0.00	
12314.00†	90.071	87.141	8382.54	4172.92	208.13	4167.73	648334.49	643457.40	32°46'04.898"N	103°51'02.749"W	0.00	
12414.00†	90.071	87.141	8382.41	4272.92	213.11	4267.60	648434.36	643462.39	32°46'04.943"N	103°51'01.579"W	0.00	
12514.00†	90.071	87.141	8382.29	4372.92	218.10	4367.48	648534.23	643467.38	32°46'04.988"N	103°51'00.409"W	0.00	
12614.00†	90.071	87.141	8382.16	4472.92	223.09	4467.36	648634.10	643472.36	32°46'05.033"N	103°50'59.239"W	0.00	
12714.00†	90.071	87.141	8382.04	4572.92	228.08	4567.23	648733.97	643477.35	32°46'05.078"N	103°50'58.069"W	0.00	
12745.08	90.071	87.141	8382.00[1]	4604.00	229.63	4598.27	648765.00	643478.90	32°46'05.092"N	103°50'57.706"W	0.00	No. 6H PBHL

Mewbourne Oil Company

Planned Wellpath Report

Plan #1

BAKER HUGHES

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Mewbourne Oil Company**	Slot	**No. 6H SHL**
Area	**Eddy County, NM**	Well	**No. 6H**
Field	**(Tamano) Sec 10, T18S, R31E**	Wellbore	**No. 6H PWB**
Facility	**Tamano 10 Fed Com No. 6H**		

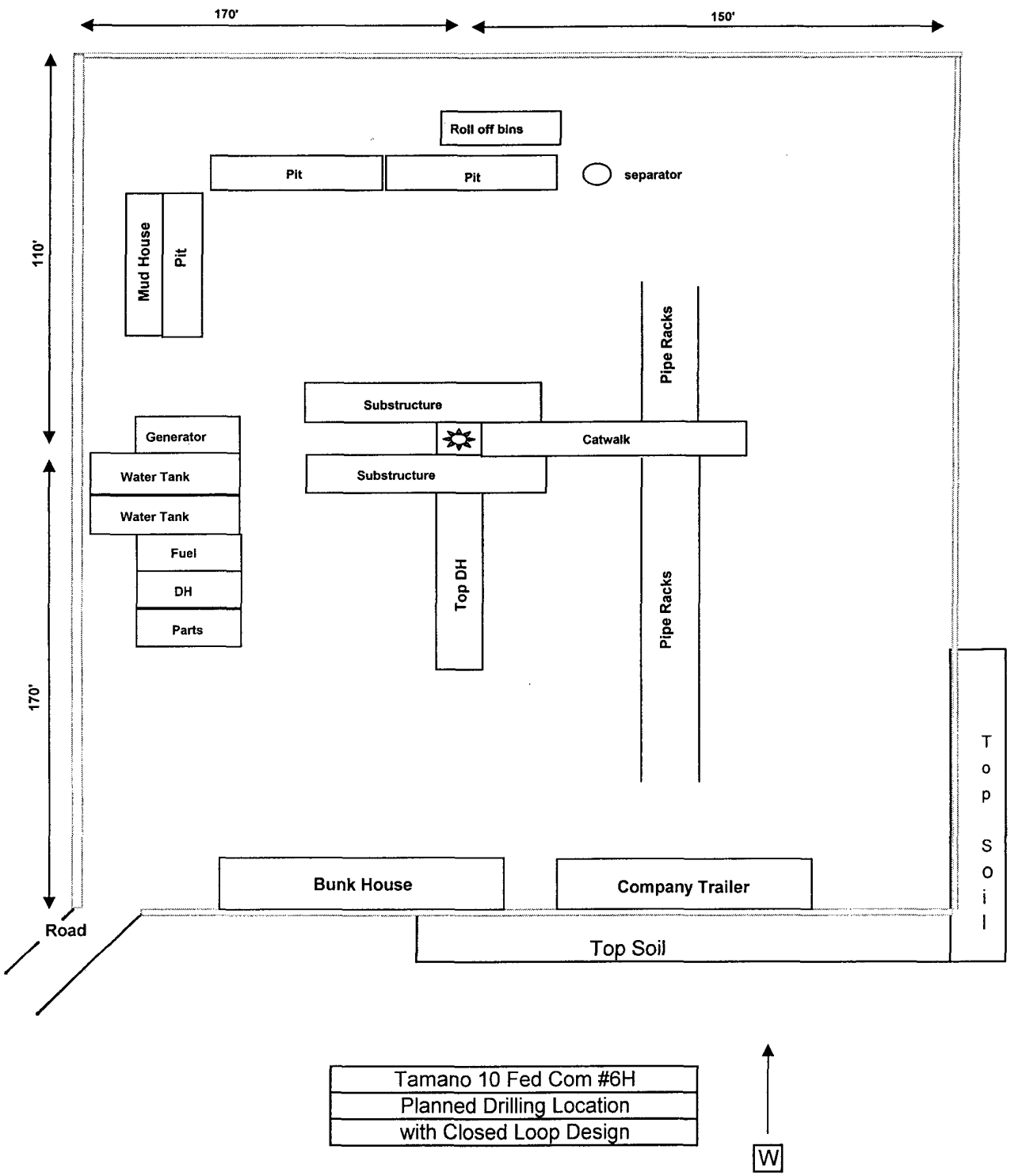
TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
1) No. 6H PBHL	12745.08	8382.00	229.63	4598.27	**648765.00**	**643478.90**	32°46'05.092"N	103°50'57.706"W	point

SURVEY PROGRAM Ref Wellbore: No. 6H PWB Ref Wellpath: Plan #1

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
18.00	12745.08	NaviTrak (Standard)		No. 6H PWB

Exhibit #5



Tamano 10 Fed Com #6H
Planned Drilling Location
with Closed Loop Design

W

Notes Regarding Blowout Preventer

Mewbourne Oil Company

Tamano 10 Federal Com #6H
600' FNL & 350' FWL (SHL)
Sec 10-T18S-R31E
Eddy County, New Mexico

I. Drilling nipple (bell nipple) to be constructed so that it can be removed without the use of a welder through the opening of the rotary table, with minimum internal diameter equal to blowout preventer bore.

II. Blowout preventer and all fittings must be in good condition with a minimum 2000 psi working pressure on 9 5/8" casing and 3000 psi working pressure on 7".

III. Safety valve must be available on the rig floor at all times with proper connections to install in the drill string. Valve must be full bore with minimum 3000 psi working pressure.

IV. Equipment through which bit must pass shall be at least as large as internal diameter of the casing.

V. A kelly cock shall be installed on the kelly at all times.

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

Mewbourne Oil Company
BOP Scematic for
8 3/4" & 6 1/8" Hole

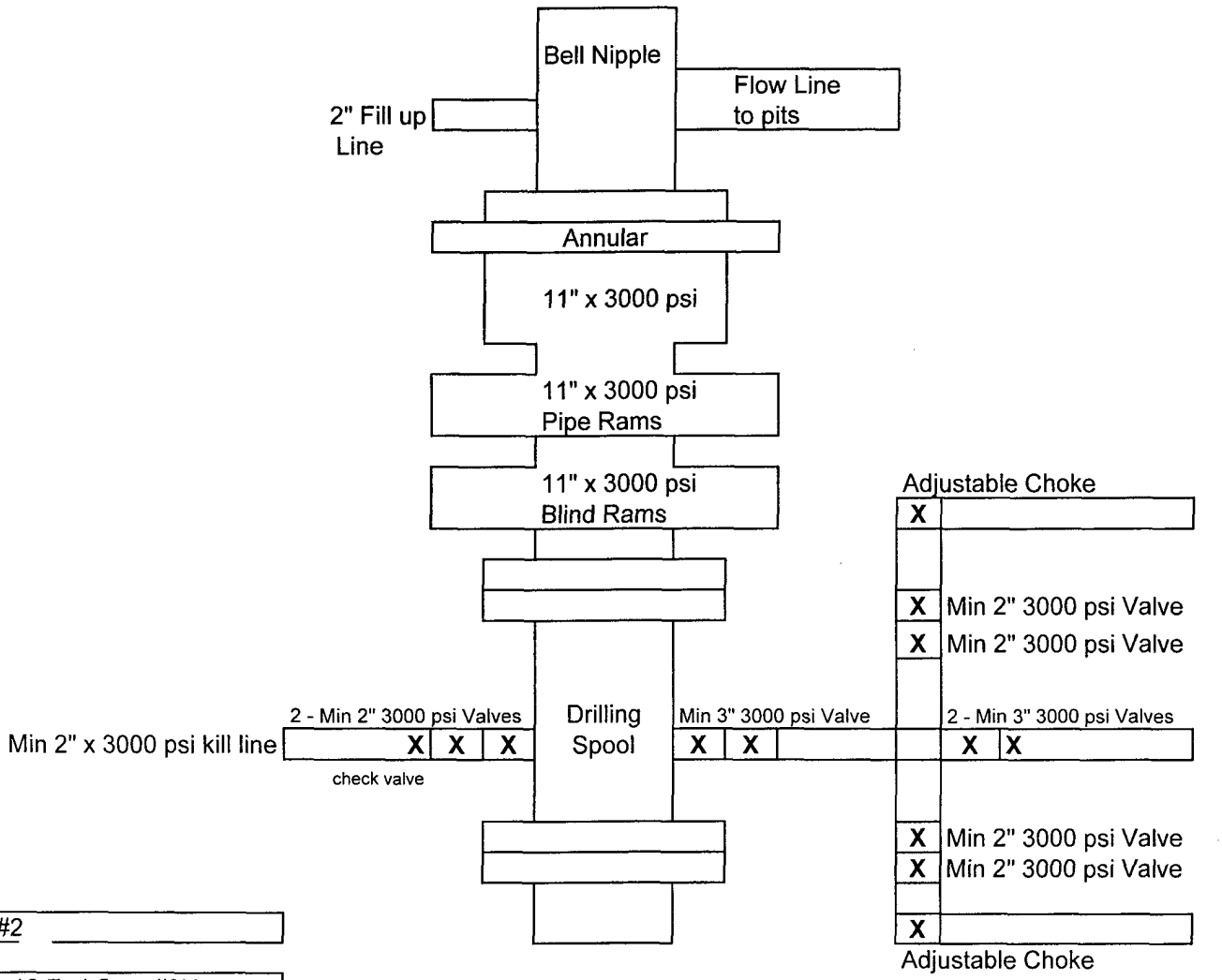
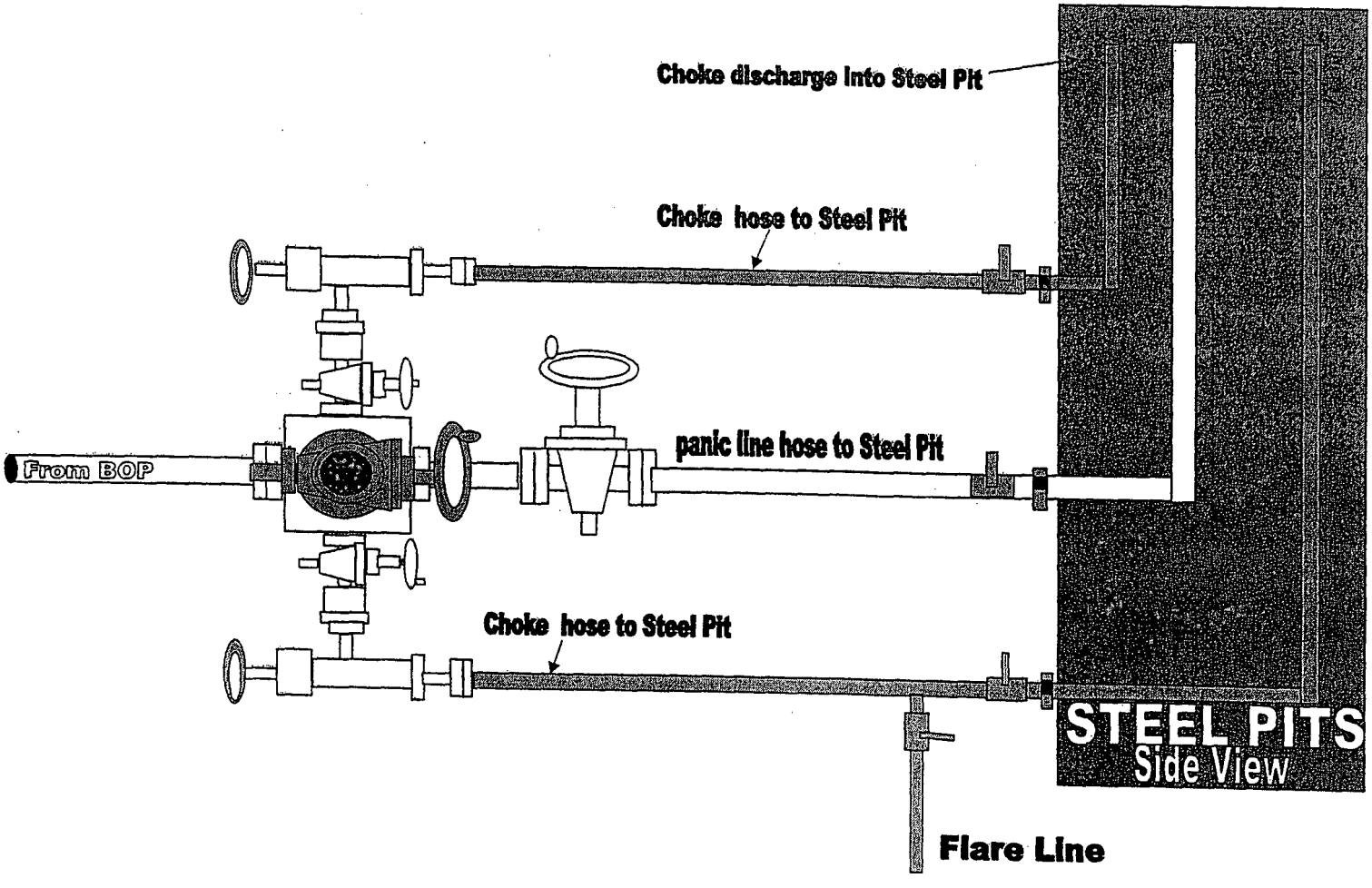


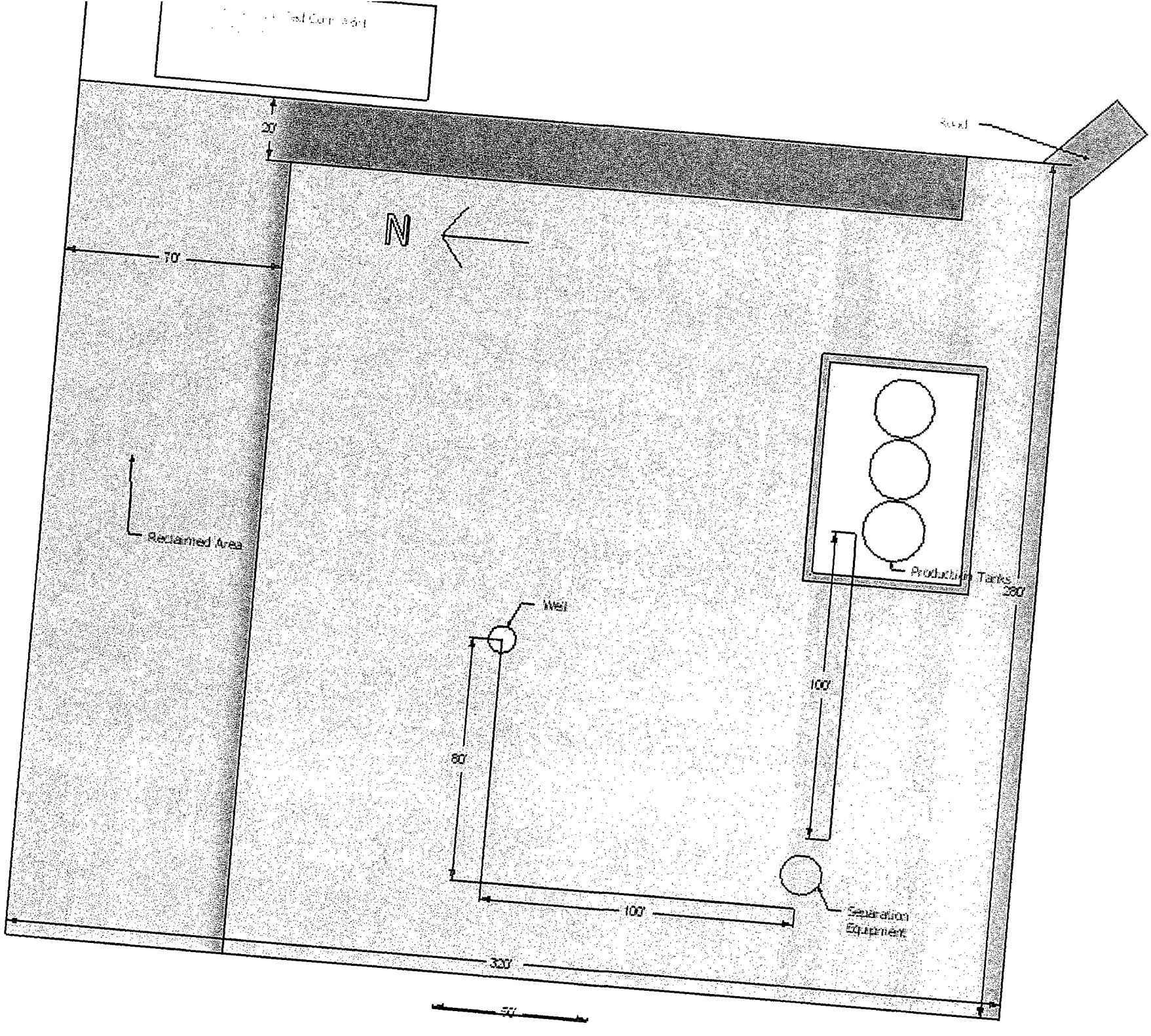
Exhibit #2

Tamano 10 Fed Com #6H
600' FNL & 350' FWL
Sec 10-T18S-R31E
Eddy, County
New Mexico



2000#/3000#BOP manifold system

For Exhibit 2


20'
N
70'
Reclaimed Area
Well
Production Tanks
280'
100'
80'
100'
Separation Equipment
300'
50'

Hydrogen Sulfide Drilling Operations Plan

Mewbourne Oil Company

Tamano 10 Federal Com #6H

600' FNL & 350' FWL (SL)

Sec 10-T18S-R31E

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 drilling out from surface casing for purposes of safety and insurance requirements.

2. Hydrogen Sulfide Training

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

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

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

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

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

3 The contents of the Hydrogen Sulfide Drilling Operations Plan.

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

3. Hydrogen Sulfide Safety Equipment and Systems

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

1. Well Control Equipment
   - A. Flare line with automatic igniter or continuous ignition source.
   - B. Choke manifold with minimum of one adjustable choke.
   - C. Blowout preventers equipped with blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit
   - D. Auxiliary equipment including annular type blowout preventer.

2. Protective Equipment for Essential Personnel
   Thirty minute self contained work unit located at briefing area as indicated on wellsite diagram.

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

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

4. Mud Program

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

5. Metallurgy

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

6. Communications

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

7. Well Testing

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

8. Emergency Phone Numbers

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**
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**
Drilling Foreman	**Wesley Noseff**	**575-441-0729**
Drilling Foreman	**George Smith**	**575-390-4365**

MEWBOURNE OIL COMPANY
P O BOX 7698
TYLER TX 75711 7698

No. 218105

(903)561-2900

INVOICE DATE	INVOICE NUMBER	DESCRIPTION	VOUCHER	AMOUNT
05/20/10	FEE-5/10.F	BLM APPLICATION FEE FOR THE TAMANO 10 FED COM #6H LOCATED 600'FNL & 350'FWL, SEC 10,T18S,R31E	1005218105	6500.00
	DEPT OF INTERIOR-BLM		TOTAL	6,500.00

THIS CHECK IS VOID WITHOUT A BLUE AND GREEN BACKGROUND AND AN ARTIFICIAL WATERMARK ON THE BACK. HOLD AT AN ANGLE TO VIEW

Bank of America
TYLER, TEXAS

MEWBOURNE OIL COMPANY
P O BOX 7698
TYLER TX 75711 7698

No. 218105

DATE	PAY THIS AMOUNT
5/20/10	******6,500.00

********6,500*DOLLARS AND*****0*CENTS

PAY TO THE
ORDER OF DEPT OF INTERIOR-BLM
620 EAST GREEN STREET
CARLSBAD, NM 88220

J Joe Buckley

BORDER CONTAINS MICROPRINTING

⑈218105⑈ ⑆111000025⑆ 005890385310⑈

(1)..

Well-Site Evaluation Field Form

Company Name: Mewbourne **Well Name** Tamano 10 Fed Com 6H

Location: Section 10, T. 18S. R. 31E. Footage 400 FNL & 330 FWL

Examined by Tanner Nygren **Date** 4/21/10

Mickey Young

Resources

Description & Topography: (cut & fill, etc.) Fairly smooth undulating sand dunes. Sand dunes to the west.

Soils: (reseeding stips, etc.) Sandy

Cave Area: Low

Hydrogeology: (wells, playas, floodplain, drainages, erosive soils, plant indicators, etc.)

Shinnery oak dominated, dropseeds, bluestems, forbs

Wildlife: (habitat, LPC, SDL, etc.) LPC, SDL habitat

Range Improvements: (fences, etc.) Cattleguard on road route

Well Infrastructure

V-Door Direction: N Topsoil: N on E half (6")

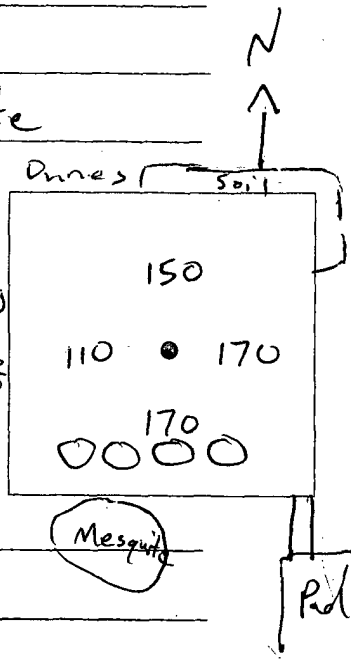
Road Route: SE corner to NW corner of existing pad.

Pipeline: NA

Production Facility Placement: South side near road

Interim Reclamation: W, E, & S sides

Some behind tank battery



Other: (VRM, existing structures, etc.)

Ask about getting power from the nearby legacy well

Found that CVE has powerline to Legacy well. Mewbourne will use this.

Evaluation: (Moved?) Move 600 FNL 350 FWL

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

MEWBOURNE OIL COMPANY

Tamano 10 Federal Com #6H
600' FNL & 350' FWL (SHL)
Sec 10-T18S-R31E
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 and proposed road is highlighted in blue. Exhibit #3A is a topographic map showing the location of the proposed well and access road. Existing and proposed roads are highlighted in black.

B. **Directions to location: Leaving out of Loco Hills, NM on Hwy US 82 east 6 miles. Turn right (south) on Shugart Rd (CR 222) & go 4 miles. Turn left (SE) on Westall Rd (CR 249) & go 1.6 mile. Turn right (NE) & go 1 mile. Turn right (east) & go 0.1 mile. Turn left (NE) & go 500'. Turn left (north) & go 1000'. Turn left (east) & go 0.5 mile. Turn right (north) & go 0.5 mile. Turn left (NW) & go 0.6 mile. Turn right(north) on new lease road 280' to location.**

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

2. Proposed Access Road:

A 280' of new road 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 6" of 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 existing wells within a one mile radius.

4. Location of Existing and/or Proposed Facilities:

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

B. In the event that the well is productive, production facilities will be located on the ~~east~~ south side of well pad.

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

TEN
9/7/10

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 CRI permit# NM-010006.
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 is in the process of being conducted on the proposed location 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.

i. The disturbed area will be restored by re-seeding during the proper growing season.
ii. Any additional caliche required for production facilities will be obtained from the area shown in exhibit #6 as interim reclamation.

B. 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. Frac Pit:

A frac pit will be constructed east of the east edge of the well pad as shown on exhibit 7. The exterior dimensions of the pit will be approx 130' by 330'. No portion of the pit will be outside the arch survey area. The interior dimensions will be approx 100' by 300' by 10' deep as shown in exhibit 7. Working volume is approx 40,000 bbls. This pit will be lined and filled with fresh water purchased from a commercial source. Topsoil excavated during construction of the pit will be stockpiled inside the east berm of the pit.

12. Surface Ownership:

The surface is owned by BLM.

13. Other Information:

A. Topography: Refer to the archaeological report for a detailed description of flora, fauna, soil characteristics, dwellings, and historical or cultural sites.

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

14. 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

Received
8/31/10
TEN

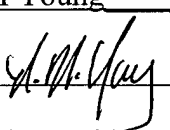
Mewbourne Oil Company

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 _30__day of May___, 2010.

Name: NM Young

Signature: 

Position Title: Hobbs District Manager

Address: PO Box 5270, Hobbs NM 88241

Telephone: 575-393-5905

E-mail: myoung@mewbourne.com

PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	MEWBOURNE OIL CO.
LEASE NO.:	NM89880
WELL NAME & NO.:	TAMANO 10 FEDERAL COM # 6H
SURFACE HOLE FOOTAGE:	0600' FNL & 0350' FWL
BOTTOM HOLE FOOTAGE	0400' FNL & 0330' FEL
LOCATION:	Section 10, T. 18 S., R 31 E., NMPM
COUNTY:	Eddy County, New Mexico

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

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)

Frac Pond Topsoil:
The operator shall stockpile topsoil approximately 25 feet outside the **EAST** bermed perimeter of the pond in a low profile manner, reasonably protected from wind and water erosion

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

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

Communitization Agreement : A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5972 at least 3 working days prior to commencing construction of the access road and/or well pad.

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

B. TOPSOIL

The operator shall stockpile the topsoil in a low profile manner in order to prevent wind/water erosion of the topsoil. The topsoil to be stripped is approximately 6 inches in depth. The topsoil will be used for interim and final reclamation.

C. FRAC POND

A copy of the APD and attachments, including stipulations, survey plat and diagram, will be on location during construction. BLM personnel may request to see a copy of your permit during construction to ensure compliance with all conditions of approval.

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

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

2. The Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated.

3. Required Standard Conditions of Approval:

- Contact the Supervisory Environmental Protection Specialist, Jim Amos, at 575-234-5909 at least 24 hours prior to starting construction.

- The frac pond will only be authorized to contain freshwater and testing of water quality is required. Additives are not allowed without consent of the authorized officer.

- If at any time the water in the frac pond becomes polluted with salts or other contaminants, use of the frac pond will cease and desist, and all liquids will be removed from the frac pond and disposed of properly.

- Confine all construction and maintenance activity to the authorized area.

- Temporary pipelines flowing from the frac pond to the target well will be laid along existing roadways unless an exception has been granted by the authorized officer.

- Mineral materials extracted during construction of the frac pond will be stored on-location and/or used for constructing the frac pond.

- The frac pond will be lined.

- The operator shall stockpile topsoil approximately 25 feet outside the **EAST** bermed perimeter of the pond in a low profile manner, reasonably protected from wind and water erosion

- Topsoil shall not be used for constructing the frac pond. The topsoil will be used for final reclamation purposes only.

- The frac pond shall be fenced on all sides.

- Install earthen erosion-control structures as are suitable for the specific terrain and soil conditions.

- The plastic lining will be removed prior to final abandonment

- Reclamation efforts will commence immediately after the frac pond is no longer needed for the purpose of completing wells.

- Within 3 months of completion of frac operations on associated wells, all earthwork and final reclamation must be completed. This includes reclaiming and/or removal of:

  Any roads approved for use with the pond

  Surface water lines

  Tanks, pumps, fencing etc.

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

Requirements for Operations and Final Reclamation:

4. If, during any phase of the construction, operation, maintenance, or termination of the frac pond, any pollutant should be released from the contaminated frac pond, the control and total removal, disposal, and cleaning up of such pollutant, wherever found, shall be the responsibility of holder, regardless of fault.

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

6. Any cultural and/or paleontological resources (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

7. 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.

8. After all disturbed areas have been satisfactorily contoured and prepared for seeding the location needs to be revegetated with the seed mixture provided. Seeding may need to be repeated until revegetation is successful. Operators shall contact Jim Amos, Supervisor, Environmental Protection – (575)234-5909, **prior** to beginning surface reclamation operations.

9. Seeding is required: Use the following seed mix.

( ) seed mixture 1	( ) seed mixture 3
( ) seed mixture 2	( ) seed mixture 4
(x) LPC mixture	( ) Aplomado Falcon mix

10. The topsoil to be stripped is approximately 6 inches in depth.

11. Special Stipulations: None

12. Upon failure of holder to control, dispose of, or clean up such discharge, or to repair all damages resulting there-from, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve holder of any responsibility as provided herein.

D. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

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

E. FEDERAL MINERAL MATERIALS PIT

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

F. 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.

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 thirty (30) feet.

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

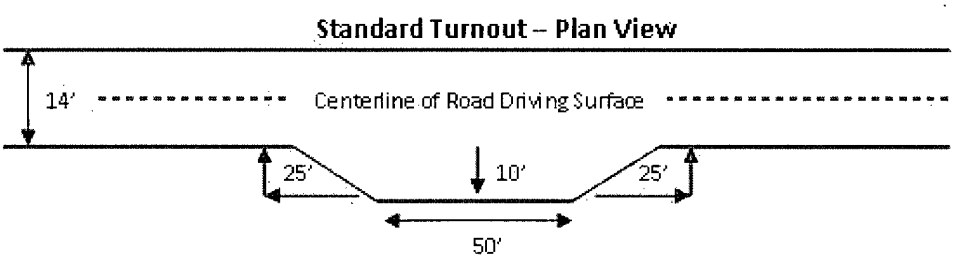
Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

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

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

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

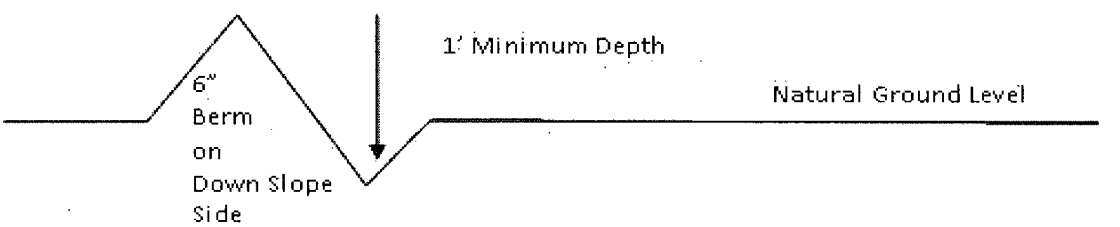
Turnouts
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:



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 culvert(s) shall be installed at the deep waterway channel flow crossing.

Cattleguards
An appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s).

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

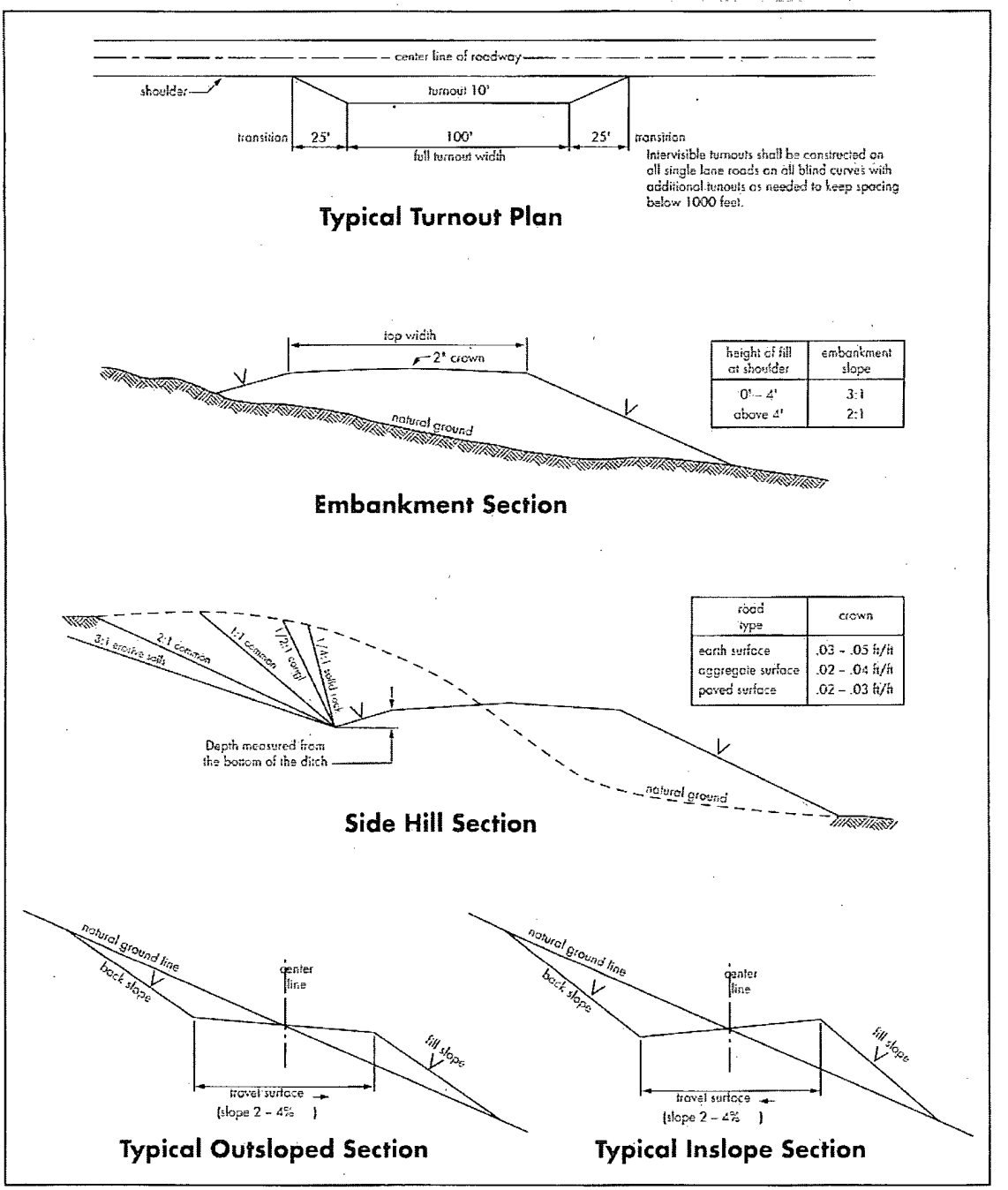
A gate shall be constructed and fastened securely to H-braces.

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

The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

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

Figure 1 – Cross Sections and Plans For Typical Road Sections



I. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

a. Spudding well
b. Setting and/or Cementing of all casing strings
c. BOPE tests

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

1. A Hydrogen Sulfide (H2S) Drilling Plan should be activated 500 feet prior to drilling into the **Grayburg** formation. **As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.**

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

3. 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.

4. **The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) will be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.**

B. CASING

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

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

Wait on cement (WOC) time prior to drilling out for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.

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

Possible water/brine flows in the Salado Group and Grayburg.
Possible lost circulation in the Grayburg and San Andres.

1. The **9-5/8** inch surface casing shall be set at approximately **750** feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface. **Freshwater mud to be used to setting depth.**

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

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

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

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

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

    ☒ Cement to surface. If cement does not circulate see B.1.a, c-d above. **May require additional cement as the excess calculates 13%.**

3. The minimum required fill of cement behind the **4-1/2** inch production liner is:

    ☒ Cement is not required; operator is using the Packer-Plus completion system.

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

C. PRESSURE CONTROL

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

2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **3000 (3M)** psi.

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

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

    b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (18 hours) or potash (24 hours) prior to initiating the test.

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

    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. DRILL STEM TEST

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

E. WASTE MATERIAL AND FLUIDS

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

RGH 090210

II. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

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

Containment Structures
The containment structure shall be constructed to hold the capacity of the entire contents of the largest tank, plus 24 hour production, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

Painting Requirement
All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color
Shale Green, Munsell Soil Color Chart # 5Y 4/2

III. 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).

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well.

Seed Mixture for LPC Sand/Shinnery Sites

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

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

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

Species	lb/acre
Plains Bristlegrass	5lbs/A
Sand Bluestem	5lbs/A
Little Bluestem	3lbs/A
Big Bluestem	6lbs/A
Plains Coreopsis	2lbs/A
Sand Dropseed	1lbs/A
**Four-winged Saltbush	5lbs/A

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

*Pounds of pure live seed:

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