ATS-10-832

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-83066

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.
Crow Flats 28 Federal #3 H

2. Name of Operator
Mewbourne Oil Company - 14744

9. API Well No.
30-015-38269

3a. Address
PO Box 5270 Hobbs, NM 88241

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

10. Field and Pool, or Exploratory
DOG CANYON-Wolfcamp

4. Location of Well *(Report location clearly and in accordance with any State requirements. *)*
At surface 2120' FSL & 415' FWL Unit L, Sec 27, T16S, R28E
At proposed prod. zone 2310' FSL & 330' FWL Unit L Sec 28 T16S, R28E

11. Sec., T., R., M., or Blk. and Survey or Area
Sec 27-T16S-R28E

14. Distance in miles and direction from nearest town or post office*
15 Miles NE of Artesia, NM

12. County or Parish
Eddy

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 2160'	16. No. of Acres in lease 2560	17. Spacing Unit dedicated to this well 160'
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1716'	19. Proposed Depth 6561 TVD 11640' MD	20. BLM/BIA Bond No. on file NM1693, Nationwide
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3591' GL	22. Approximate date work will start* ASAP	23. Estimated duration 45

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 Jackie Lathan	Name *(Printed/Typed)* Jackie Lathan	Date 09/22/10
Title Hobbs Regulatory		
Approved by *(Signature)* /s/ Don Peterson	Name *(Printed/Typed)*	Date
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE	NOV 10 2010

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)*

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

RECEIVED
NOV 12 2010
NMOCD ARTESIA

Roswell Controlled Water Basin

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

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

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

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

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

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

Form C-102
Revised July 16, 2010

Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-015-38269	47970	DOG CANYON; WOLFCAMP

Property Code	Property Name	Well Number
37051o	CROW FLATS "28" FEDERAL	3H

OGRID No.	Operator Name	Elevation
14744	MEWBOURNE OIL COMPANY	3591'

Surface Location

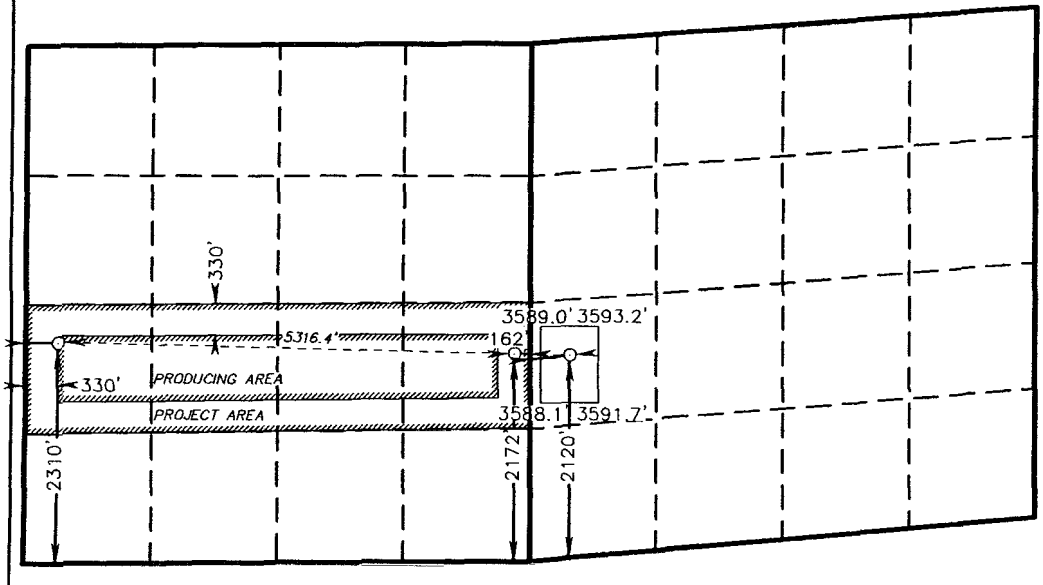
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	27	16 S	28 E		2120	SOUTH	415	WEST	EDDY

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
L	28	16 S	28 E		2310	SOUTH	330	WEST	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



PROPOSED BOTTOM HOLE LOCATION
Lat – N 32°53'30.35"
Long – W 104°19'21.31"
NMSPCE– N 688158.175
E 544636.078
(NAD-27)

SURFACE LOCATION
Lat – N 32°53'29.02"
Long – W 104°10'14.17"
NMSPCE– N 688039.064
E 549951.108
(NAD-27)

OPERATOR CERTIFICATION

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

Jackie Lathan 9/24/10
Signature Date

Jackie Lathan
Printed Name

jlathan@mewbourne.com
Email Address

SURVEYOR CERTIFICATION

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

AUGUST 25, 2010
Date Surveyed

Signature & Seal of Professional Surveyor

GARY L. JONES NEW MEXICO 7977 REGISTERED PROFESSIONAL LAND SURVEYOR

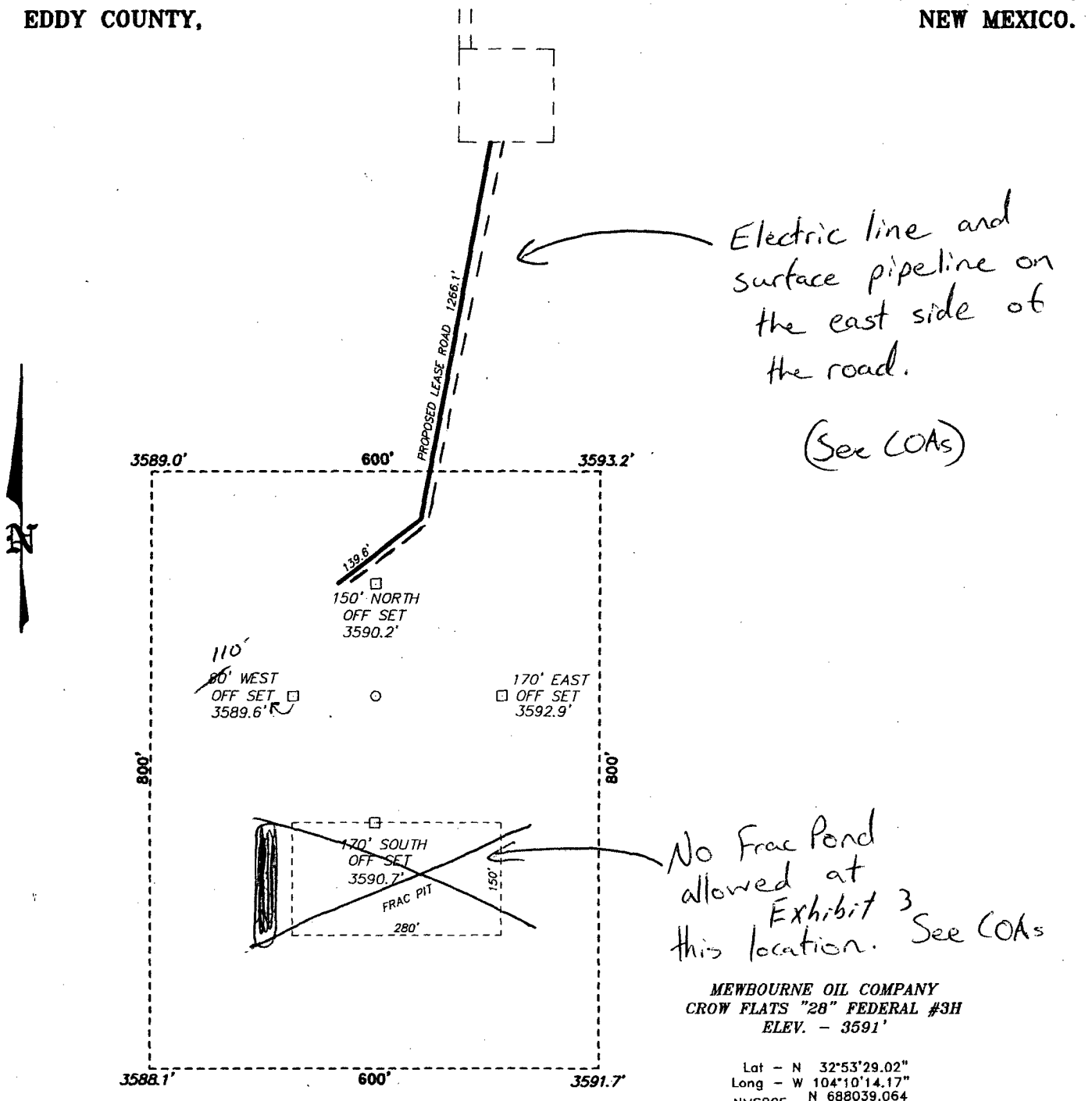
W.O. 23246

Certificate No. Gary L. Jones 7977

BASIN SURVEYS 23246

SECTION 27, TOWNSHIP 16 SOUTH, RANGE 28 EAST, N.M.P.M.,

EDDY COUNTY, **NEW MEXICO.**



Directions to Location:

FROM THE JUNCTION OF HWY 82 AND SOUTHERN UNION, GO NORTH 2.5 MILES WINDING NORTH FOR 1.2 MILES TO LEASE ROAD, ON LEASE ROAD GO NORTH 1.1 MILES TO LEASE ROAD, ON LEASE ROAD GO WEST 0.1 MILES THENCE SOUTH 0.5 MILES TO WELL PAD AND PROPOSED LEASE ROAD.

MEWBOURNE OIL COMPANY

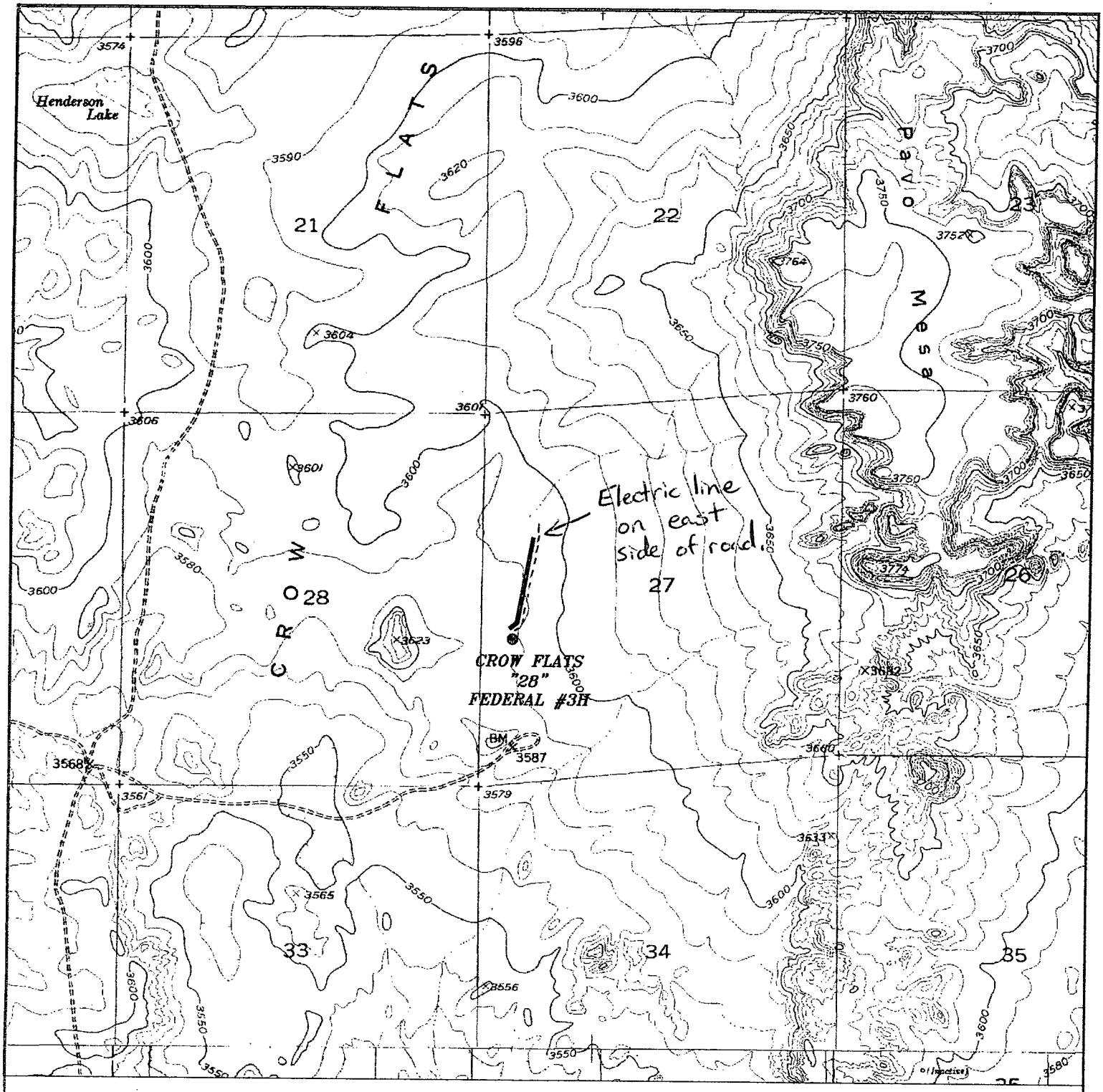
REF: CROW FLATS "28" FEDERAL #3H / WELL PAD TOPO

THE CROW FLATS "28" FEDERAL #3H LOCATED 2120' FROM THE SOUTH LINE AND 415' FROM THE WEST LINE OF SECTION 27, TOWNSHIP 16 SOUTH, RANGE 28 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.

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

W.O. Number: 23246	Drawn By: J. SMALL		
Date: 09-02-2010	Disk: JMS 23246	Survey Date: 08-25-2010	Sheet 1 of 1 Sheets

TEN 10/20/10



CROW FLATS "28" FEDERAL #3H
Located 2120' FSL and 415' FWL
Section 27, Township 16 South, Range 28 East,
N.M.P.M., Eddy County, New Mexico.

Exhibit 3A

basin surveys
focused on excellence in the oilfield

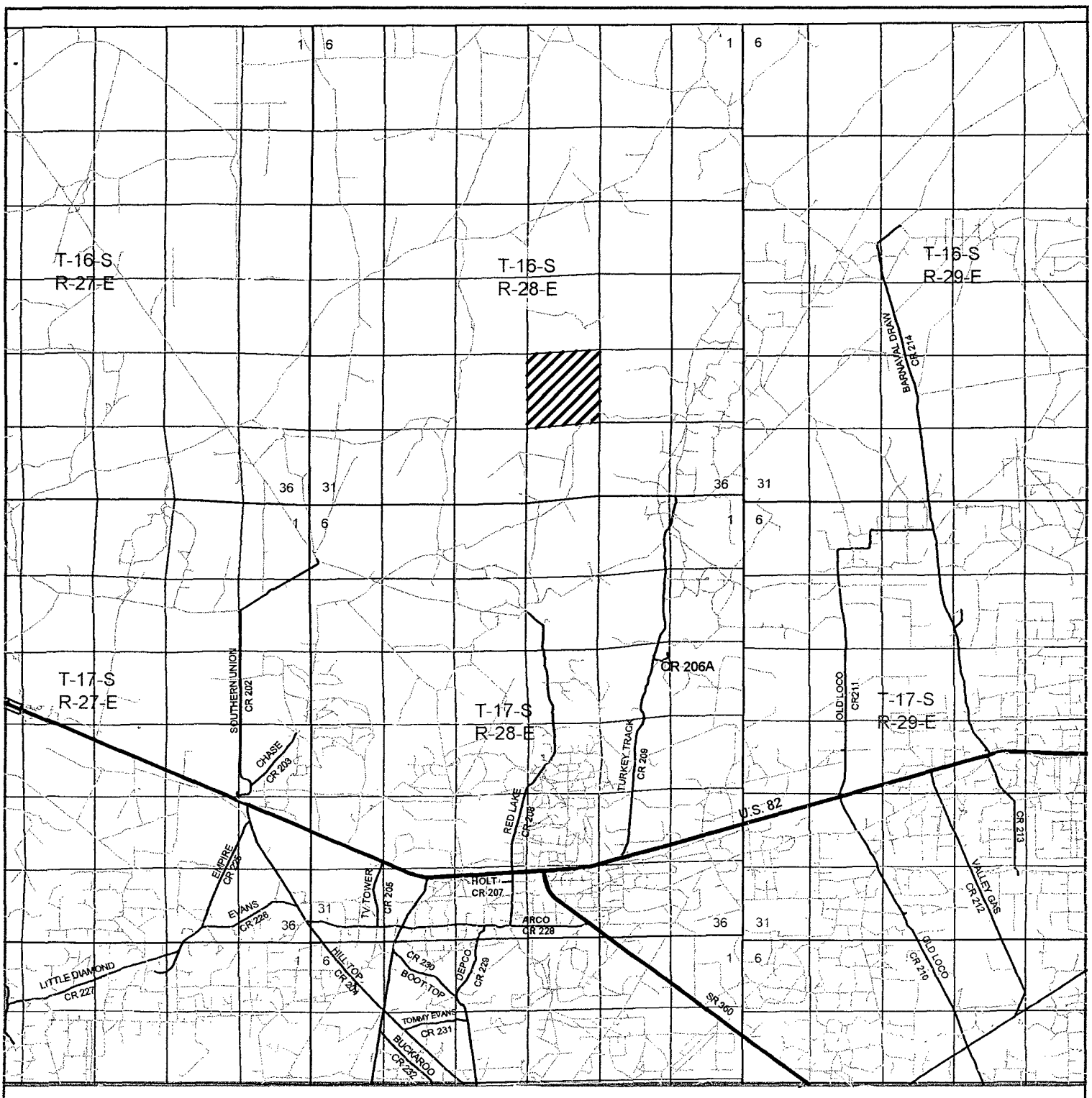
P.O. Box 1786
1120 N. West County Rd.
Hobbs, New Mexico 88241
(575) 393-7316 - Office
(575) 392-2206 - Fax
basinsurveys.com

W.O. Number: JMS 23246
Survey Date: 08-25-2010
Scale: 1" = 2000'
Date: 09-02-2010

N

MEWBOURNE OIL COMPANY

TEN 10/20/10



CROW FLATS "28" FEDERAL #3H

Located 2120' FSL and 415' FWL
Section 27, Township 16 South, Range 28 East,
N.M.P.M., Eddy County, New Mexico.

Exhibit 3B

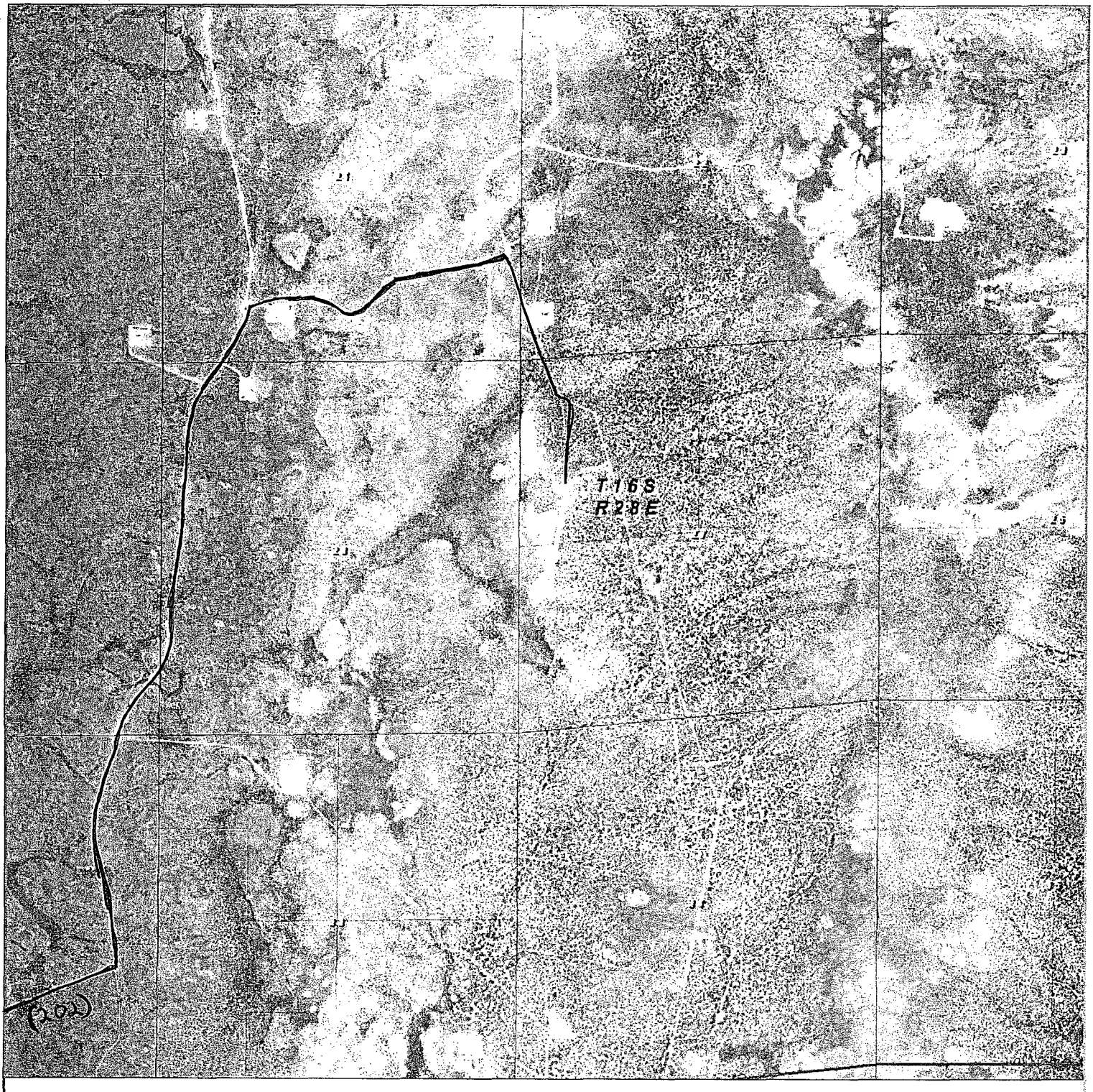
basin surveys
focused on excellence in the oilfield

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 23246
Survey Date:	08-25-2010
Scale:	1" = 2 Miles
Date:	09-02-2010

N

MEWBOURNE OIL COMPANY



CROW FLATS "28" FEDERAL #3H
Located 2120' FSL and 415' FWL
Section 27, Township 16 South, Range 28 East,
N.M.P.M., Eddy County, New Mexico.

Exhibit 3C

basin surveys
focused on excellence in the oilfield
P.O. Box 1786
1120 N. West County Rd
Hobbs, New Mexico 88241
(575) 392-7316 - Office
(575) 392-3074 - Fax
basinsurveys.com

JOB Number: JP 7236
SCALE: 1" = 2000'
YELLOW TINT - FEE LAND
BLUE TINT - STATE LAND
NATURAL COLOR - BLM LAND

MEWBOURNE OIL COMPANY

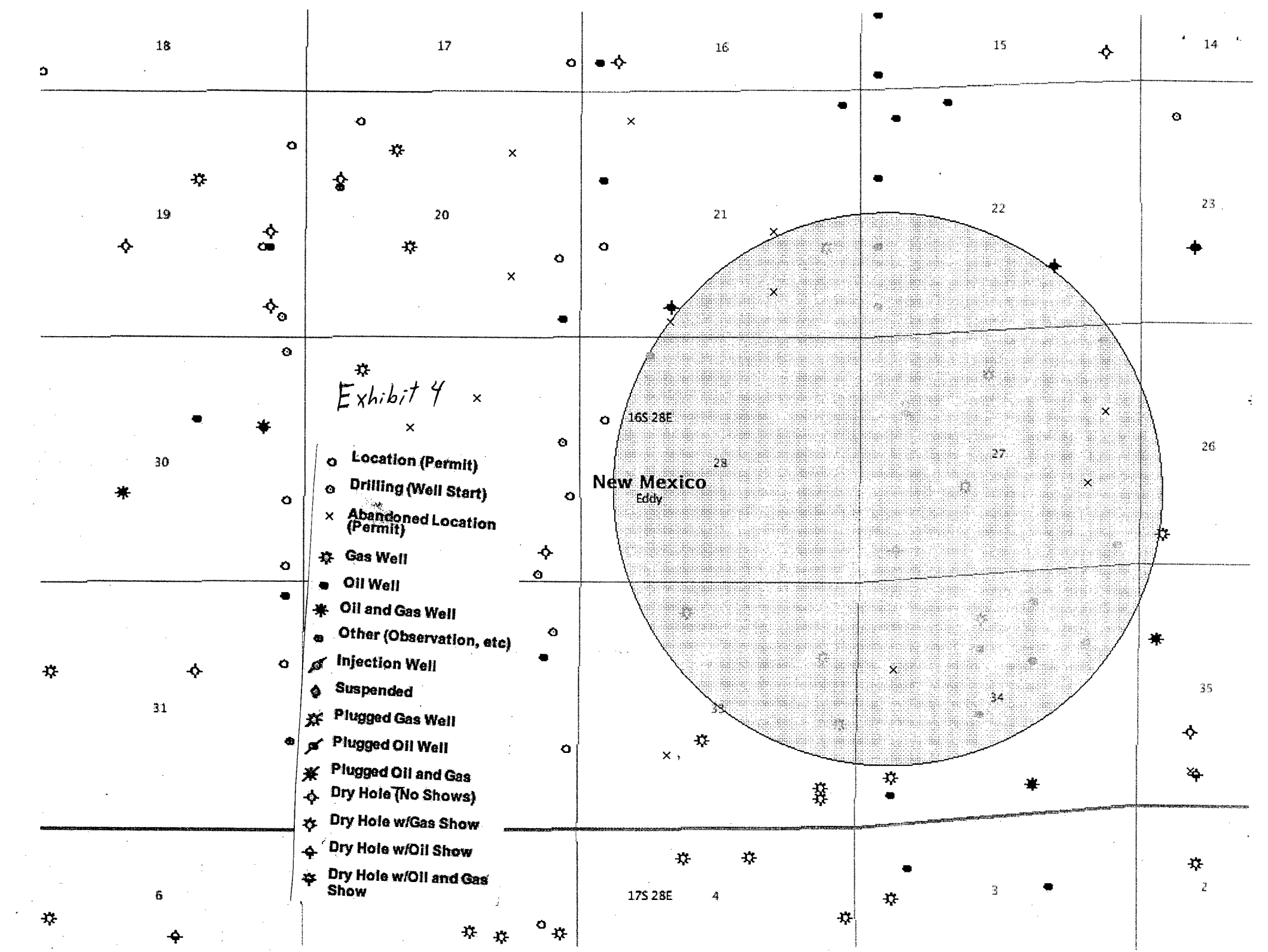


Exhibit 4
Location (Permit)
Drilling (Well Start)
Abandoned Location (Permit)
Gas Well
Oil Well
Oil and Gas Well
Other (Observation, etc)
Injection Well
Suspended
Plugged Gas Well
Plugged Oil Well
Plugged Oil and Gas
Dry Hole (No Shows)
Dry Hole w/Gas Show
Dry Hole w/Oil Show
Dry Hole w/Oil and Gas Show
New Mexico
Eddy
16S 28E
17S 28E
18
17
16
15
14
19
20
21
22
23
30
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27
26
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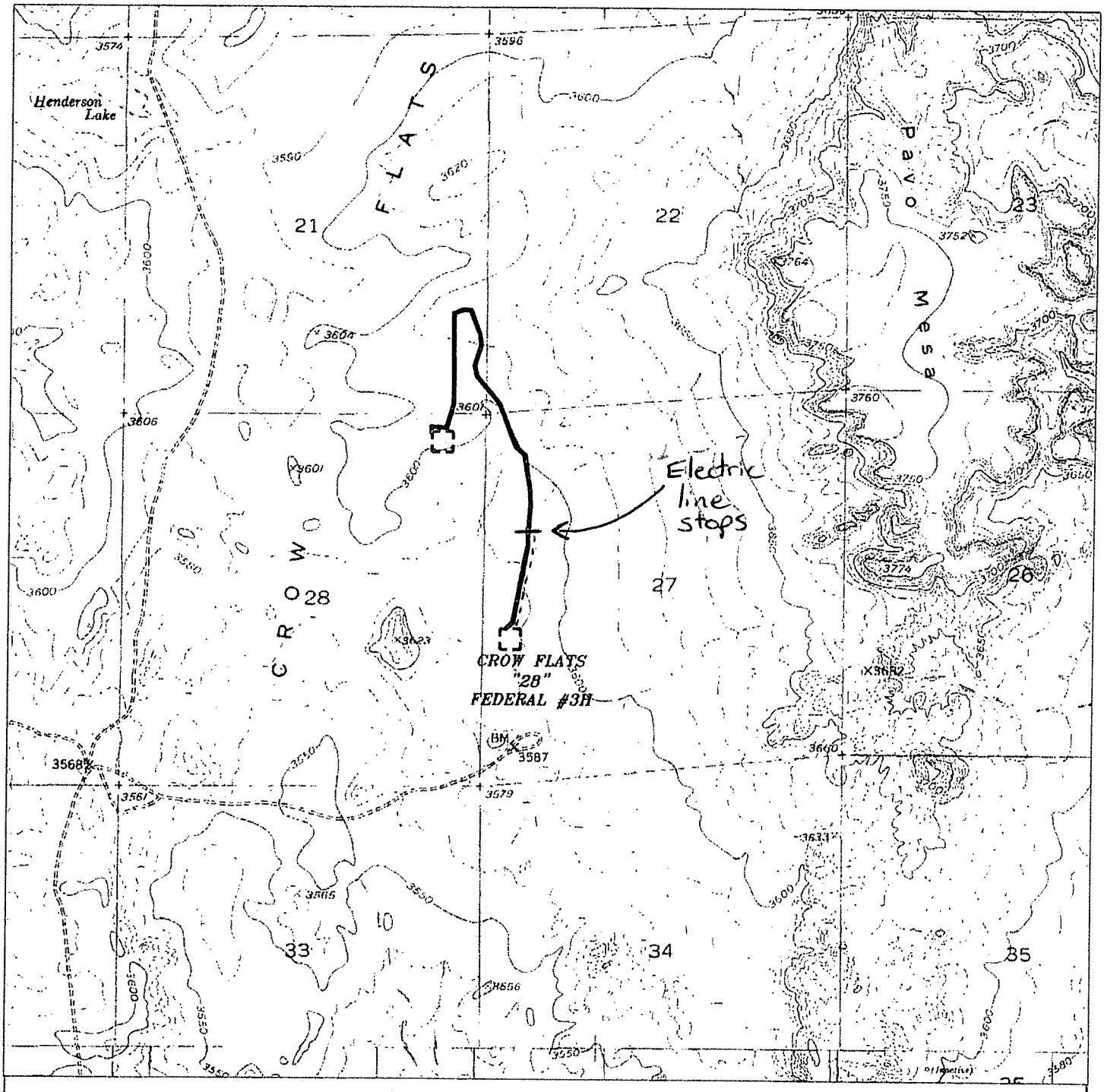
33
34
35
6
4
3
2



PROPOSED FLOWLINE TO THE CROWFLATS 28 FED #3H
Sections 21,22,27&28, Township 16 South, Range 28 East, N.M.P.M., Eddy County, New Mexico.

Exhibit 6

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

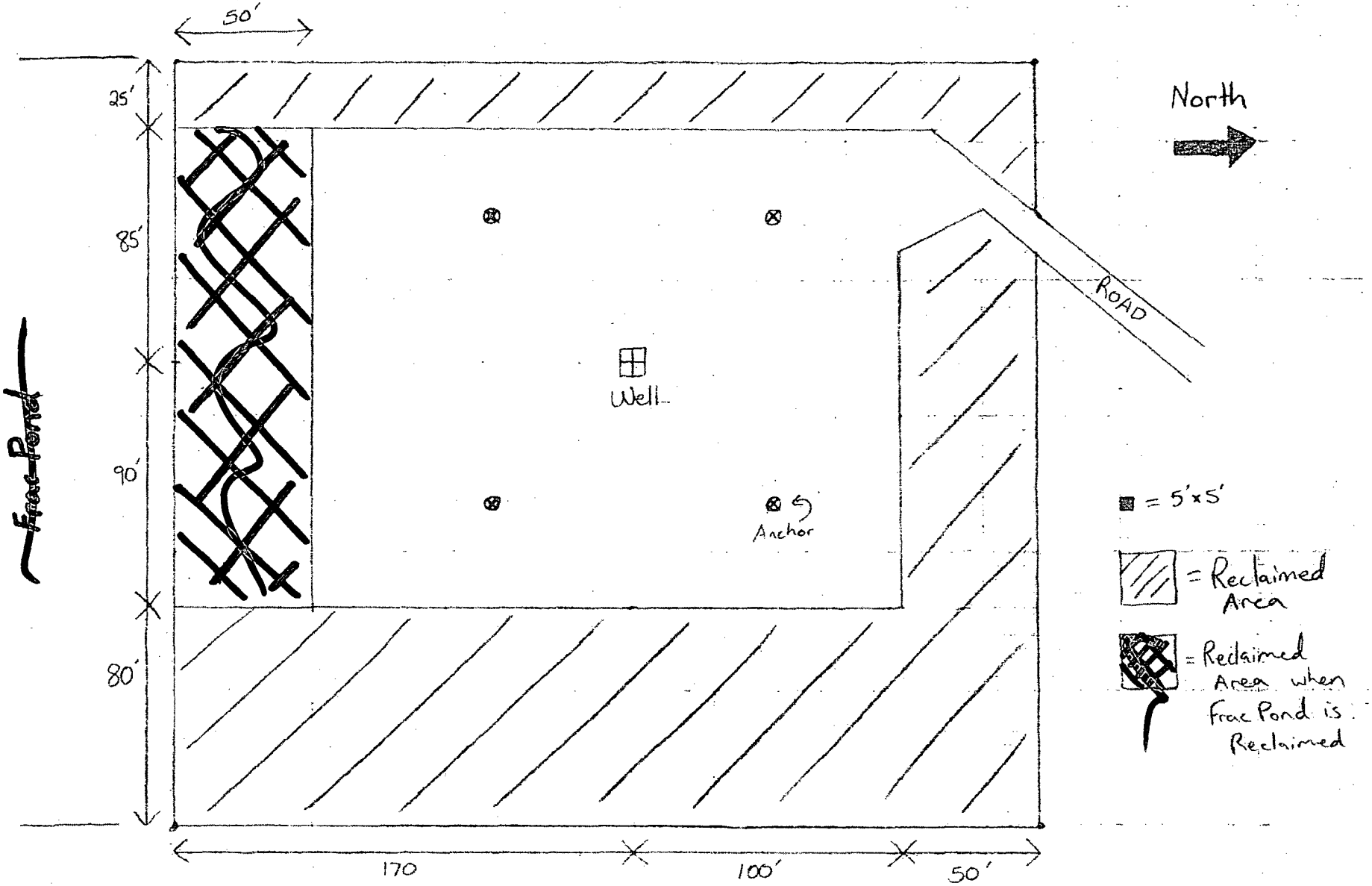
W.O. Number:	JMS 23246
Survey Date:	08-25-2010
Scale:	1" = 2000'
Date:	09-02-2010

N

MEWBOURNE OIL COMPANY

TEN 10/20/10

Crow Flats 28 #3H
accepted by Charles L. [illegible]



Drilling Program
Mewbourne Oil Company
Crow Flats"28" Federal #3H
2120' FSL & 415' FWL (SHL)
Sec 27-T16S-R28E
Eddy County, New Mexico

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

Yates	430'
Seven Rivers	664'
Bowers Sand	985'
*Queen	1171'
*Grayburg	1589'
*San Andres	1989'
Glorietta	3361'
Tubb	4713'
Abo Shale Marker	5591'
Top WABO	6565'
Base WABO	6695'

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

Water	Fresh water will be protected by setting surface casing at 400' and cementing to surface.
Hydrocarbons	Oil and gas are anticipated in the above (*) formations. These zones will be protected by casing as necessary.

3. Pressure control equipment:

A 2000# WP Annular will be installed after running 9 5/8" casing. A 3000# WP Double Ram BOP and 3000# WP Annular will be installed after running 7" casing. Pressure tests will be conducted prior to drilling out under all casing strings. BOP controls will be installed prior to drilling under surface casing and will remain in use until completion of drilling operations. BOP's will be inspected and operated as recommended in Onshore Order #2. A Kelly cock and a sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position when the Kelly is not in use.
Will test the 7" BOPE to 3000# and the 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. MOC proposes to drill a vertical wellbore to 5996' & kick off to horizontal @ 6569' TVD. The well will be drilled to 11640' MD (6554' TVD). See attached directional plan.

5. Proposed casing and cementing program:

A. Casing Program:

Hole Size	Casing	Wt/Ft.	Grade	Depth	Jt Type
12 ¼"	9 5/8" (new)	36#	J55	0'-350'	ST&C
8 ¾"	7" (new)	26#	P110	0'-6000' MD	LT&C
8 ¾"	7" (new)	26#	P110	6000'-6900' MD	BT&C
6 1/8"	4 ½" (new)	11.6#	P110	6700'-11640' MD	LT&C

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

B. Cementing Program:

i. Surface Casing: 120 sks Class C cement containing 2% CaCl. Yield at 1.34 cuft/sk. Cmt circulated to surface.

ii Intermediate Casing: 400 sacks Class H light cement with additives. Yield at 2.46 cuft/sk. 400 sacks Class H cement Containing FLA. Yield at 1.18 cuft/sk Cmt circulated to surface.

ii. Production Liner: This will be a Packer/Port completion from TD up inside 7" casing with packer type liner hanger.

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

6. Mud Program:

Interval	Type System	Weight	Viscosity	Fluid Loss
0'-350'	FW spud mud	8.6-9.0	32-34	NA
350'-6900'	Brine water	10.0-10.2	28-30	NA
6900'- TD	FW w/Polymer	8.5-8.7	32-35	15

7. Evaluation Program:

Samples:	10' samples from surface casing to TD
Logging:	GR & Gyro from KOP -100' (5900') to surface. GR from 5900' to TD.

8. Downhole Conditions

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

9. Anticipated Starting Date:

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

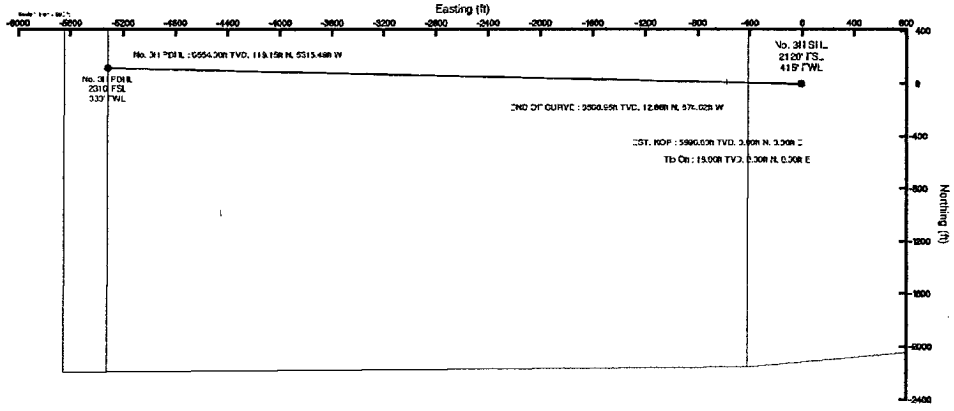
Mewbourne Oil Company

Location: Eddy County, NM
Field: (CF) Sec 27, T16S, R28E
Facility: Crow Flats 28 Fed No. 3H

Slot: No. 3H SHL
Well: No. 3H
Wellbore: No. 3H PWB

Well Profile Data

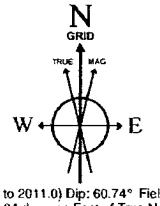
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	18.00	0.000	271.284	18.00	0.00	0.00	0.00	0.00
EST. KOP	5996.00	0.000	271.284	5996.00	0.00	0.00	0.00	0.00
END OF CURVE	6897.61	90.181	271.284	6568.95	12.88	-574.62	10.00	574.76
No. 3H PBHL	11639.69	90.181	271.284	6554.00	119.15	5315.49	0.00	5316.82



Mewbourne Oil Company

Plot reference wellpath is Prelim_1	
True vertical depths are referenced to Rig on No. 3 H S-L (KB)	Grid System: NAD27 / TM New Mexico State Planes, Eastern Zone (3001), US feet
Measured depths are referenced to Rig on No. 3 H S-L (KB)	North Reference: Grid north
Rig on No. 3H S-L (KB) is Mean Sea Level: 3609 feet	Scale: True distance
Mean Sea Level to Mud line (Facility: Crow Flats 28 Fed No. 3H): -3591 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: Victor Hernandez on 9/16/2010

BAKER HUGHES



BGGM (1945.0 to 2011.0) Dip: 60.74° Field: 49090.1 nT
Magnetic North is 8.04 degrees East of True North (at 9/15/2010)
Grid North is 0.09 degrees East of True North
To correct azimuth from True to Grid subtract 0.09 degrees
To correct azimuth from Magnetic to Grid add 7.96 degrees
For example: if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7.96 = 97.96

Mewbourne Oil Company

Planned Wellpath Report

Prelim_1

BAKER HUGHES

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Mewbourne Oil Company**	Slot	**No. 3H SHL**
Area	**Eddy County, NM**	Well	**No. 3H**
Field	**(CF) Sec 27, T16S, R28E**	Wellbore	**No. 3H PWB**
Facility	**Crow Flats 28 Fed No. 3H**		

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	**0.999912**	Report Generated	**9/16/2010 at 11:23:44 AM**
Convergence at slot	**0.09° East**	Database/Source file	**WA_Midland/No._3H_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**	549951.11	688039.06	32°53'29.017"N	104°10'14.175"W
Facility Reference Pt			**549951.11**	**688039.06**	32°53'29.017"N	104°10'14.175"W
Field Reference Pt			**550387.25**	**689669.00**	32°53'45.139"N	104°10'09.030"W

WELLPATH DATUM			
Calculation method	**Minimum curvature**	Rig on No. 3H SHL (KB) to Facility Vertical Datum	**18.00ft**
Horizontal Reference Pt	**Slot**	Rig on No. 3H SHL (KB) to Mean Sea Level	**3609.00ft**
Vertical Reference Pt	**Rig on No. 3H SHL (KB)**	Facility Vertical Datum to Mud Line (Facility)	**0.00ft**
MD Reference Pt	**Rig on No. 3H SHL (KB)**	Section Origin	**N 0.00, E 0.00 ft**
Field Vertical Reference	**Mean Sea Level**	Section Azimuth	**271.28°**

REFERENCE WELLPATH IDENTIFICATION			
Operator	Mewbourne Oil Company	Slot	No. 3H SHL
Area	Eddy County, NM	Well	No. 3H
Field	(CF) Sec 27, T16S, R28E	Wellbore	No. 3H PWB
Facility	Crow Flats 28 Fed No. 3H		

WELLPATH DATA (83 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	271.284	0.00	0.00	0.00	0.00	549951.11	688039.06	32°53'29.017"N	104°10'14.175"W	0.00	
18.00	0.000	271.284	18.00	0.00	0.00	0.00	549951.11	688039.06	32°53'29.017"N	104°10'14.175"W	0.00	Tie On
5996.00	0.000	271.284	5996.00	0.00	0.00	0.00	549951.11	688039.06	32°53'29.017"N	104°10'14.175"W	0.00	EST. KOP
6026.00†	3.000	271.284	6025.99	0.79	0.02	-0.79	549950.32	688039.08	32°53'29.017"N	104°10'14.184"W	10.00	
6056.00†	6.000	271.284	6055.89	3.14	0.07	-3.14	549947.97	688039.13	32°53'29.018"N	104°10'14.212"W	10.00	
6086.00†	9.000	271.284	6085.63	7.05	0.16	-7.05	549944.06	688039.22	32°53'29.019"N	104°10'14.258"W	10.00	
6116.00†	12.000	271.284	6115.12	12.52	0.28	-12.52	549938.59	688039.34	32°53'29.020"N	104°10'14.322"W	10.00	
6146.00†	15.000	271.284	6144.29	19.52	0.44	-19.52	549931.59	688039.50	32°53'29.022"N	104°10'14.404"W	10.00	
6176.00†	18.000	271.284	6173.05	28.04	0.63	-28.04	549923.08	688039.69	32°53'29.024"N	104°10'14.504"W	10.00	
6206.00†	21.000	271.284	6201.33	38.06	0.85	-38.05	549913.07	688039.92	32°53'29.026"N	104°10'14.621"W	10.00	
6236.00†	24.000	271.284	6229.04	49.53	1.11	-49.52	549901.59	688040.17	32°53'29.029"N	104°10'14.756"W	10.00	
6266.00†	27.000	271.284	6256.12	62.45	1.40	-62.43	549888.68	688040.46	32°53'29.032"N	104°10'14.907"W	10.00	
6296.00†	30.000	271.284	6282.48	76.76	1.72	-76.74	549874.37	688040.78	32°53'29.035"N	104°10'15.075"W	10.00	
6326.00†	33.000	271.284	6308.06	92.43	2.07	-92.41	549858.70	688041.14	32°53'29.039"N	104°10'15.259"W	10.00	
6356.00†	36.000	271.284	6332.78	109.43	2.45	-109.40	549841.72	688041.52	32°53'29.043"N	104°10'15.458"W	10.00	
6386.00†	39.000	271.284	6356.57	127.69	2.86	-127.65	549823.47	688041.93	32°53'29.047"N	104°10'15.672"W	10.00	
6416.00†	42.000	271.284	6379.38	147.17	3.30	-147.13	549803.99	688042.36	32°53'29.052"N	104°10'15.900"W	10.00	
6446.00†	45.000	271.284	6401.14	167.82	3.76	-167.77	549783.35	688042.82	32°53'29.057"N	104°10'16.142"W	10.00	
6476.00†	48.000	271.284	6421.79	189.57	4.25	-189.53	549761.60	688043.31	32°53'29.062"N	104°10'16.397"W	10.00	
6506.00†	51.000	271.284	6441.27	212.38	4.76	-212.33	549738.80	688043.82	32°53'29.067"N	104°10'16.665"W	10.00	
6536.00†	54.000	271.284	6459.53	236.18	5.29	-236.12	549715.01	688044.36	32°53'29.073"N	104°10'16.944"W	10.00	
6566.00†	57.000	271.284	6476.52	260.90	5.85	-260.84	549690.29	688044.91	32°53'29.079"N	104°10'17.234"W	10.00	
6596.00†	60.000	271.284	6492.20	286.48	6.42	-286.41	549664.73	688045.48	32°53'29.085"N	104°10'17.533"W	10.00	
6626.00†	63.000	271.284	6506.51	312.84	7.01	-312.76	549638.37	688046.07	32°53'29.091"N	104°10'17.842"W	10.00	
6656.00†	66.000	271.284	6519.42	339.91	7.62	-339.83	549611.31	688046.68	32°53'29.098"N	104°10'18.160"W	10.00	
6686.00†	69.000	271.284	6530.90	367.63	8.24	-367.54	549583.61	688047.30	32°53'29.104"N	104°10'18.485"W	10.00	
6716.00†	72.000	271.284	6540.92	395.90	8.87	-395.80	549555.34	688047.94	32°53'29.111"N	104°10'18.816"W	10.00	
6746.00†	75.000	271.284	6549.43	424.67	9.52	-424.56	549526.59	688048.58	32°53'29.118"N	104°10'19.153"W	10.00	
6776.00†	78.000	271.284	6556.44	453.83	10.17	-453.72	549497.43	688049.23	32°53'29.125"N	104°10'19.495"W	10.00	
6806.00†	81.000	271.284	6561.90	483.33	10.83	-483.21	549467.95	688049.89	32°53'29.132"N	104°10'19.841"W	10.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	Mewbourne Oil Company	Slot	No. 3H SHL
Area	Eddy County, NM	Well	No. 3H
Field	(CF) Sec 27, T16S, R28E	Wellbore	No. 3H PWB
Facility	Crow Flats 28 Fed No. 3H		

WELLPATH DATA (83 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
6836.00†	84.000	271.284	6565.82	513.07	11.50	-512.94	549438.22	688050.56	32°53'29.139"N	104°10'20.190"W	10.00	
6866.00†	87.000	271.284	6568.17	542.97	12.17	-542.84	549408.32	688051.23	32°53'29.146"N	104°10'20.540"W	10.00	
6896.00†	90.000	271.284	6568.96	572.96	12.84	-572.81	549378.35	688051.90	32°53'29.153"N	104°10'20.892"W	10.00	
6897.81	90.181	271.284	6568.95	574.76	12.88	-574.62	549376.54	688051.94	32°53'29.153"N	104°10'20.913"W	10.00	END OF CURVE
6897.81†	90.181	271.284	6568.95	574.77	12.88	-574.62	549376.54	688051.94	32°53'29.153"N	104°10'20.913"W	0.00	
6997.81†	90.181	271.284	6568.64	674.77	15.12	-674.60	549276.57	688054.18	32°53'29.177"N	104°10'22.086"W	0.00	
7097.81†	90.181	271.284	6568.32	774.77	17.36	-774.57	549176.61	688056.42	32°53'29.201"N	104°10'23.258"W	0.00	
7197.81†	90.181	271.284	6568.01	874.77	19.60	-874.55	549076.64	688058.67	32°53'29.224"N	104°10'24.430"W	0.00	
7297.81†	90.181	271.284	6567.69	974.77	21.84	-974.52	548976.67	688060.91	32°53'29.248"N	104°10'25.603"W	0.00	
7397.81†	90.181	271.284	6567.38	1074.77	24.08	-1074.50	548876.71	688063.15	32°53'29.272"N	104°10'26.775"W	0.00	
7497.81†	90.181	271.284	6567.06	1174.76	26.33	-1174.47	548776.74	688065.39	32°53'29.295"N	104°10'27.947"W	0.00	
7597.81†	90.181	271.284	6566.75	1274.76	28.57	-1274.44	548676.78	688067.63	32°53'29.319"N	104°10'29.120"W	0.00	
7697.81†	90.181	271.284	6566.43	1374.76	30.81	-1374.42	548576.81	688069.87	32°53'29.343"N	104°10'30.292"W	0.00	
7797.81†	90.181	271.284	6566.12	1474.76	33.05	-1474.39	548476.85	688072.11	32°53'29.366"N	104°10'31.464"W	0.00	
7897.81†	90.181	271.284	6565.80	1574.76	35.29	-1574.37	548376.88	688074.35	32°53'29.390"N	104°10'32.637"W	0.00	
7997.81†	90.181	271.284	6565.49	1674.76	37.53	-1674.34	548276.92	688076.59	32°53'29.414"N	104°10'33.809"W	0.00	
8097.81†	90.181	271.284	6565.17	1774.76	39.77	-1774.32	548176.95	688078.83	32°53'29.437"N	104°10'34.981"W	0.00	
8197.81†	90.181	271.284	6564.86	1874.76	42.01	-1874.29	548076.99	688081.07	32°53'29.461"N	104°10'36.154"W	0.00	
8297.81†	90.181	271.284	6564.54	1974.76	44.25	-1974.26	547977.02	688083.31	32°53'29.485"N	104°10'37.326"W	0.00	
8397.81†	90.181	271.284	6564.22	2074.76	46.49	-2074.24	547877.06	688085.55	32°53'29.508"N	104°10'38.498"W	0.00	
8497.81†	90.181	271.284	6563.91	2174.76	48.74	-2174.21	547777.09	688087.79	32°53'29.532"N	104°10'39.671"W	0.00	
8597.81†	90.181	271.284	6563.59	2274.76	50.98	-2274.19	547677.12	688090.04	32°53'29.555"N	104°10'40.843"W	0.00	
8697.81†	90.181	271.284	6563.28	2374.76	53.22	-2374.16	547577.16	688092.28	32°53'29.579"N	104°10'42.015"W	0.00	
8797.81†	90.181	271.284	6562.96	2474.76	55.46	-2474.14	547477.19	688094.52	32°53'29.603"N	104°10'43.188"W	0.00	
8897.81†	90.181	271.284	6562.65	2574.76	57.70	-2574.11	547377.23	688096.76	32°53'29.626"N	104°10'44.360"W	0.00	
8997.81†	90.181	271.284	6562.33	2674.76	59.94	-2674.09	547277.26	688099.00	32°53'29.650"N	104°10'45.533"W	0.00	
9097.81†	90.181	271.284	6562.02	2774.76	62.18	-2774.06	547177.30	688101.24	32°53'29.674"N	104°10'46.705"W	0.00	
9197.81†	90.181	271.284	6561.70	2874.76	64.42	-2874.03	547077.33	688103.48	32°53'29.697"N	104°10'47.877"W	0.00	
9297.81†	90.181	271.284	6561.39	2974.76	66.66	-2974.01	546977.37	688105.72	32°53'29.721"N	104°10'49.050"W	0.00	
9397.81†	90.181	271.284	6561.07	3074.76	68.90	-3073.98	546877.40	688107.96	32°53'29.744"N	104°10'50.222"W	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	Mewbourne Oil Company	Slot	No. 3H SHL
Area	Eddy County, NM	Well	No. 3H
Field	(CF) Sec 27, T16S, R28E	Wellbore	No. 3H PWB
Facility	Crow Flats 28 Fed No. 3H		

WELLPATH DATA (83 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
9497.81†	90.181	271.284	6560.76	3174.75	71.14	-3173.96	546777.44	688110.20	32°53'29.768"N	104°10'51.394"W	0.00	
9597.81†	90.181	271.284	6560.44	3274.75	73.39	-3273.93	546677.47	688112.44	32°53'29.792"N	104°10'52.567"W	0.00	
9697.81†	90.181	271.284	6560.12	3374.75	75.63	-3373.91	546577.51	688114.68	32°53'29.815"N	104°10'53.739"W	0.00	
9797.81†	90.181	271.284	6559.81	3474.75	77.87	-3473.88	546477.54	688116.92	32°53'29.839"N	104°10'54.911"W	0.00	
9897.81†	90.181	271.284	6559.49	3574.75	80.11	-3573.86	546377.57	688119.16	32°53'29.862"N	104°10'56.084"W	0.00	
9997.81†	90.181	271.284	6559.18	3674.75	82.35	-3673.83	546277.61	688121.41	32°53'29.886"N	104°10'57.256"W	0.00	
10097.81†	90.181	271.284	6558.86	3774.75	84.59	-3773.80	546177.64	688123.65	32°53'29.910"N	104°10'58.428"W	0.00	
10197.81†	90.181	271.284	6558.55	3874.75	86.83	-3873.78	546077.68	688125.89	32°53'29.933"N	104°10'59.601"W	0.00	
10297.81†	90.181	271.284	6558.23	3974.75	89.07	-3973.75	545977.71	688128.13	32°53'29.957"N	104°11'00.773"W	0.00	
10397.81†	90.181	271.284	6557.92	4074.75	91.31	-4073.73	545877.75	688130.37	32°53'29.980"N	104°11'01.945"W	0.00	
10497.81†	90.181	271.284	6557.60	4174.75	93.55	-4173.70	545777.78	688132.61	32°53'30.004"N	104°11'03.118"W	0.00	
10597.81†	90.181	271.284	6557.29	4274.75	95.79	-4273.68	545677.82	688134.85	32°53'30.027"N	104°11'04.290"W	0.00	
10697.81†	90.181	271.284	6556.97	4374.75	98.04	-4373.65	545577.85	688137.09	32°53'30.051"N	104°11'05.463"W	0.00	
10797.81†	90.181	271.284	6556.66	4474.75	100.28	-4473.62	545477.89	688139.33	32°53'30.075"N	104°11'06.635"W	0.00	
10897.81†	90.181	271.284	6556.34	4574.75	102.52	-4573.60	545377.92	688141.57	32°53'30.098"N	104°11'07.807"W	0.00	
10997.81†	90.181	271.284	6556.02	4674.75	104.76	-4673.57	545277.96	688143.81	32°53'30.122"N	104°11'08.980"W	0.00	
11097.81†	90.181	271.284	6555.71	4774.75	107.00	-4773.55	545177.99	688146.05	32°53'30.145"N	104°11'10.152"W	0.00	
11197.81†	90.181	271.284	6555.39	4874.75	109.24	-4873.52	545078.02	688148.29	32°53'30.169"N	104°11'11.324"W	0.00	
11297.81†	90.181	271.284	6555.08	4974.75	111.48	-4973.50	544978.06	688150.53	32°53'30.192"N	104°11'12.497"W	0.00	
11397.81†	90.181	271.284	6554.76	5074.75	113.72	-5073.47	544878.09	688152.78	32°53'30.216"N	104°11'13.669"W	0.00	
11497.81†	90.181	271.284	6554.45	5174.74	115.96	-5173.45	544778.13	688155.02	32°53'30.239"N	104°11'14.841"W	0.00	
11597.81†	90.181	271.284	6554.13	5274.74	118.20	-5273.42	544678.16	688157.26	32°53'30.263"N	104°11'16.014"W	0.00	
11639.89	90.181	271.284	6554.00[1]	5316.82	119.15	-5315.49	544636.10	688158.20	32°53'30.273"N	104°11'16.507"W	0.00	No. 3H PBHL

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Mewbourne Oil Company**	Slot	**No. 3H SHL**
Area	**Eddy County, NM**	Well	**No. 3H**
Field	**(CF) Sec 27, T16S, R28E**	Wellbore	**No. 3H PWB**
Facility	**Crow Flats 28 Fed No. 3H**		

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
1) No. 3H PBHL	11639.89	6554.00	119.15	-5315.49	**544636.10**	**688158.20**	32°53'30.273"N	104°11'16.507"W	point

SURVEY PROGRAM Ref Wellbore: No. 3H PWB Ref Wellpath: Prelim_1

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
18.00	11639.89	NaviTrak (Standard)		No. 3H PWB

Closed Loop Pad Dimensions 280' x 320'

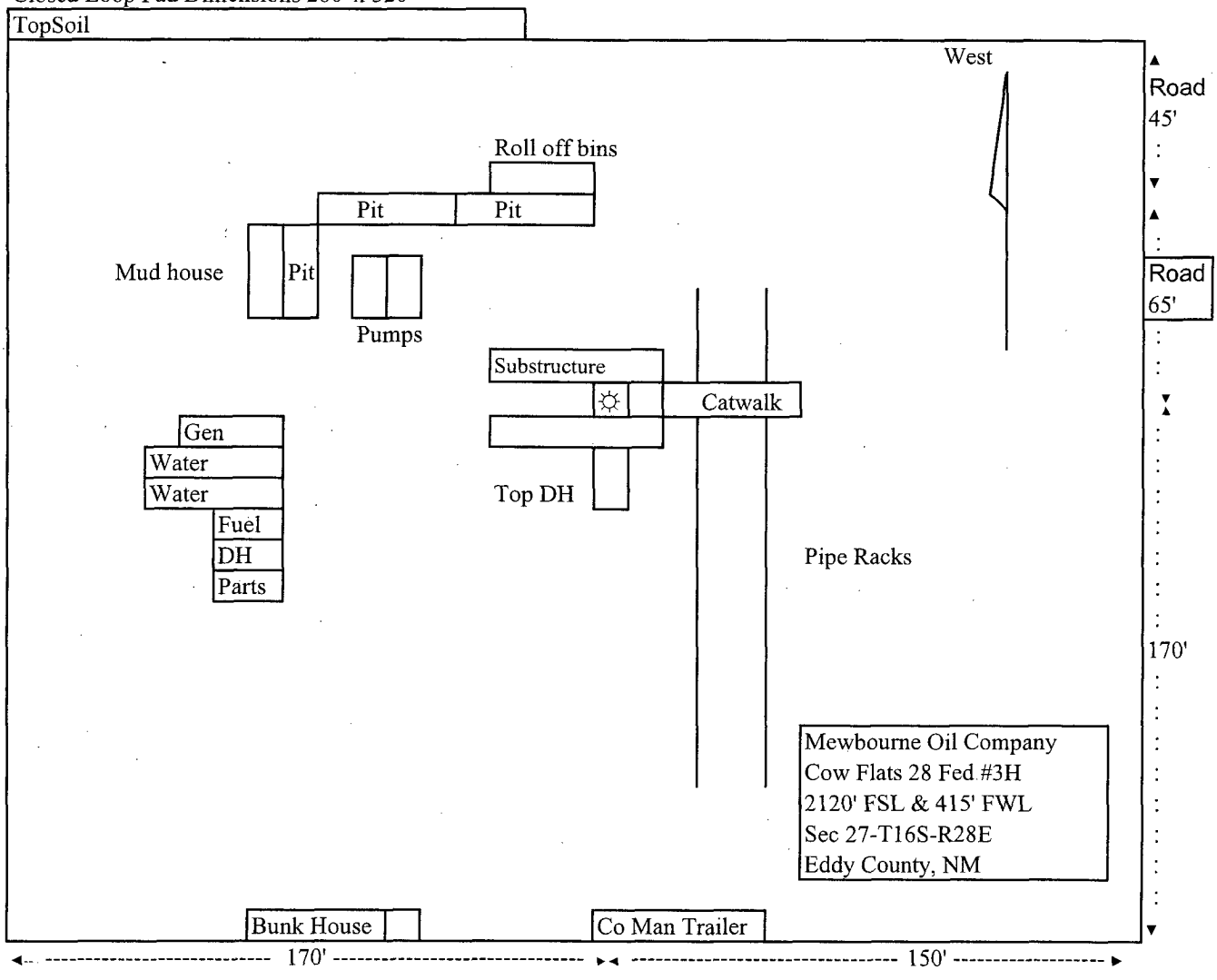


Exhibit 5

Notes Regarding Blowout Preventer

Mewbourne Oil Company

Crow Flats "28" Federal #3H
2120' FSL & 415' FWL (SHL)
Sec 27-T16S-R28E
Eddy County, New Mexico

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

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

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

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

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

Blowout preventer closing equipment to include 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 Schematic for
6 1/8" Hole

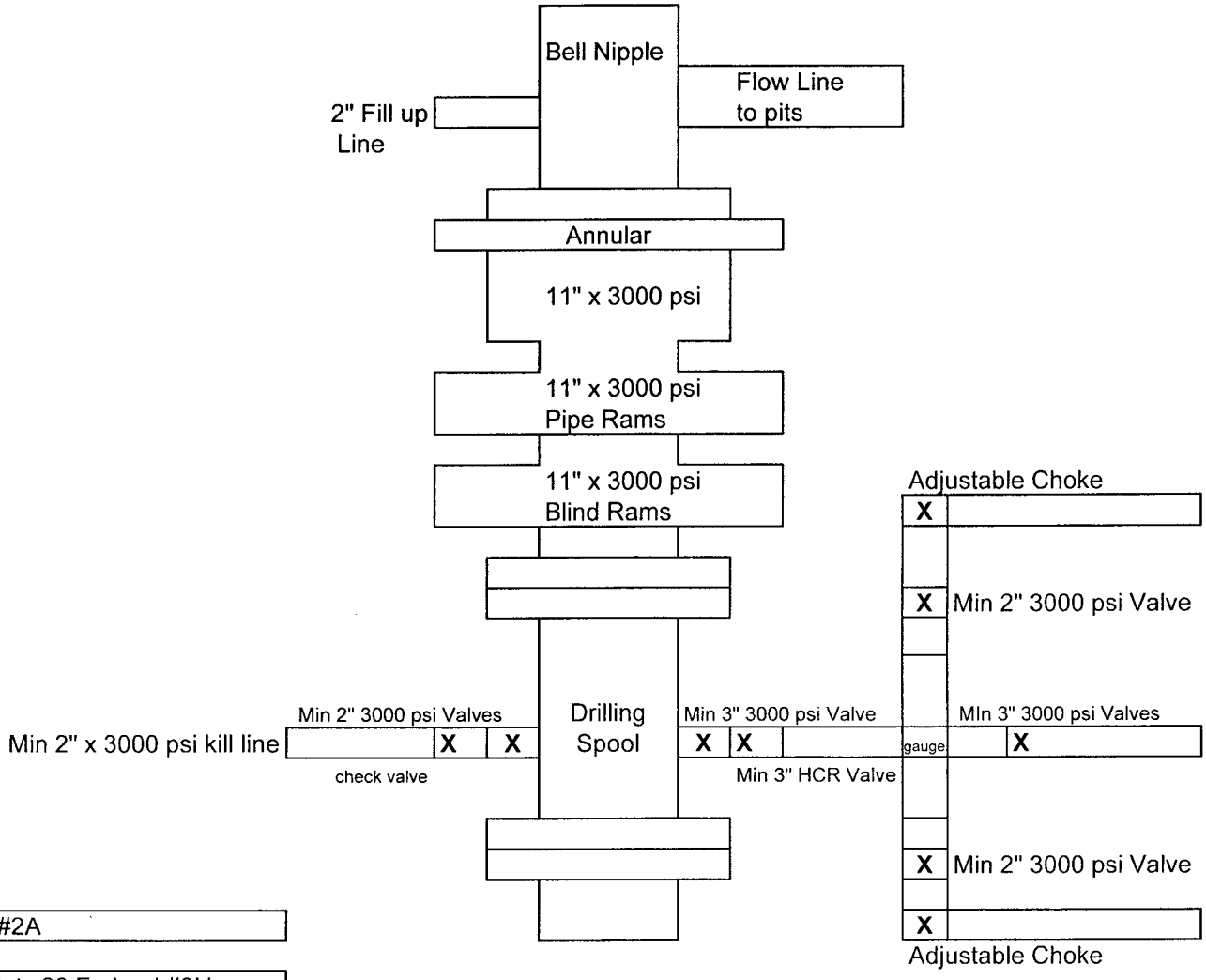
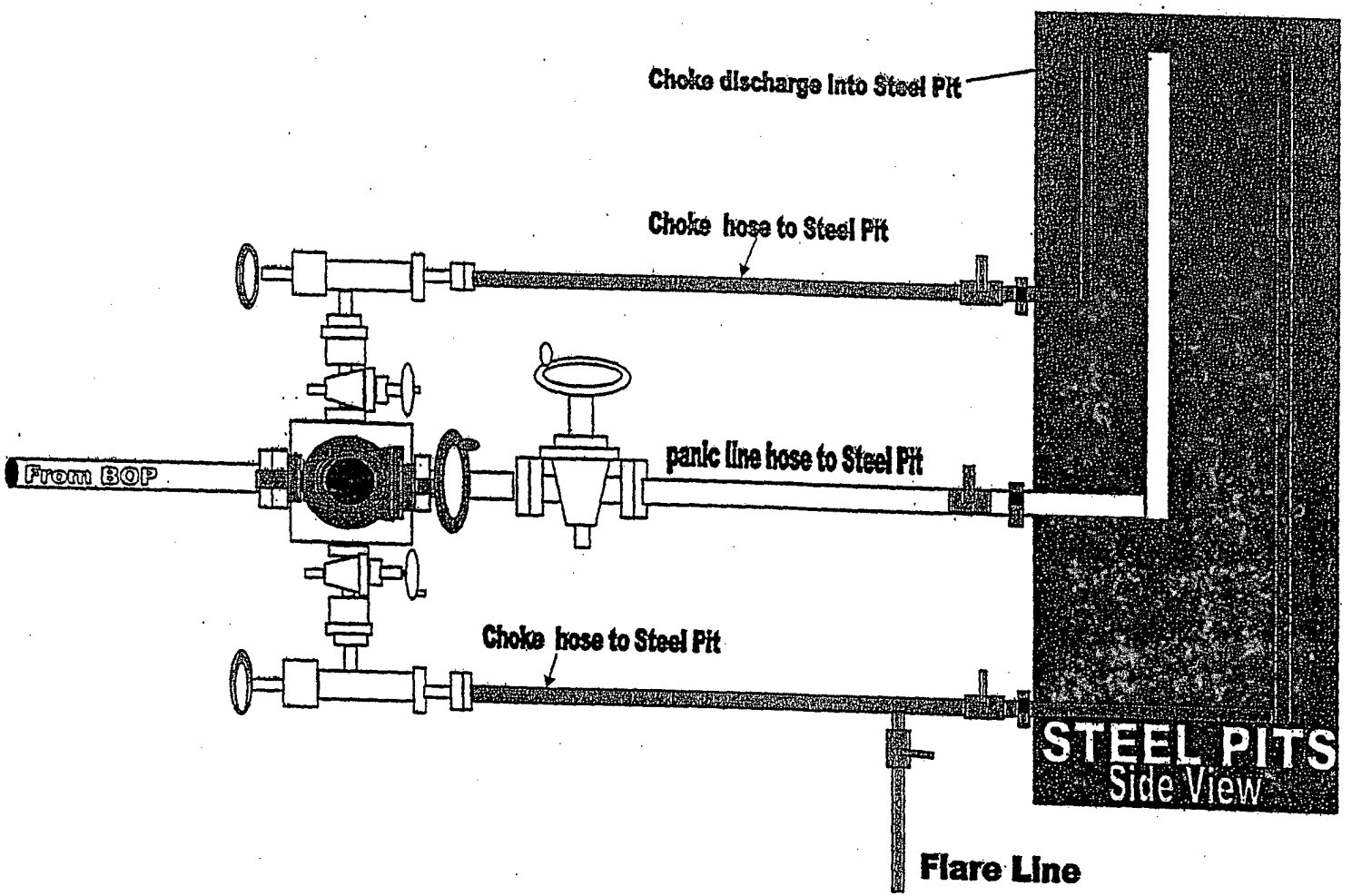


Exhibit #2A

Crow Flats 28 Federal #3H
2120' FSL & 415' FWL
Sec 27-T16S-R28E
Eddy, County
New Mexico



2000#/3000#BOP manifold system

For Exhibit 2 + 2A

Hydrogen Sulfide Drilling Operations Plan

Mewbourne Oil Company
Crow Flats "28" Federal #3H
2120' FSL & 415' FWL
Sec 27-T16S-R28E
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 Yates 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. 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**
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**
Drilling Foreman	**Wesley Noseff**	**575-441-0729**
Drilling Foreman	**George Smith**	**575-390-4365**

MULTI-POINT SURFACE USE AND OPERATIONS PLAN
MEWBOURNE OIL COMPANY

Crow Flats "28" Federal #3H
2120' FSL & 415' FWL (SHL)
Sec 27-T16S-R28E
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-#3C are maps showing the location of the proposed well and access road. Existing and proposed roads are highlighted in black.

B. Directions from Artesia: East on NM 82 10.5 miles, turn left (north) on Southern union Rd. (Eddy Co. 202) 2.5 miles. Turn right (east) 1.2 miles. Turn left (north) 1.1 miles. Turn west 0.1 miles then south 1 mile 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 Approx 1400 feet of new 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 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 the proposed well and existing wells within a one mile radius.

4. Location of Existing and/or Proposed Facilities:

A. There are 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 Crow Flats 27#1 battery. An above ground, 65 psi polypipe flowline will be placed on the ~~west~~ East side of the road as it exits the location and will lay 60' parallel to the road as shown on exhibit 6. If electricity is needed, it will tie into an existing line approx 1400' north and will be directly above the flowline (approx 10'-15' f/road) as shown in exhibit 6.

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

See Conditions of Approval

TEN
10/20/10

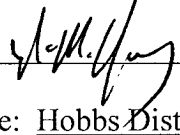
Mewbourne Oil Company

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 ____day of _____, 2010.

Name: NM Young

Signature: 

Position Title: Hobbs District Manager

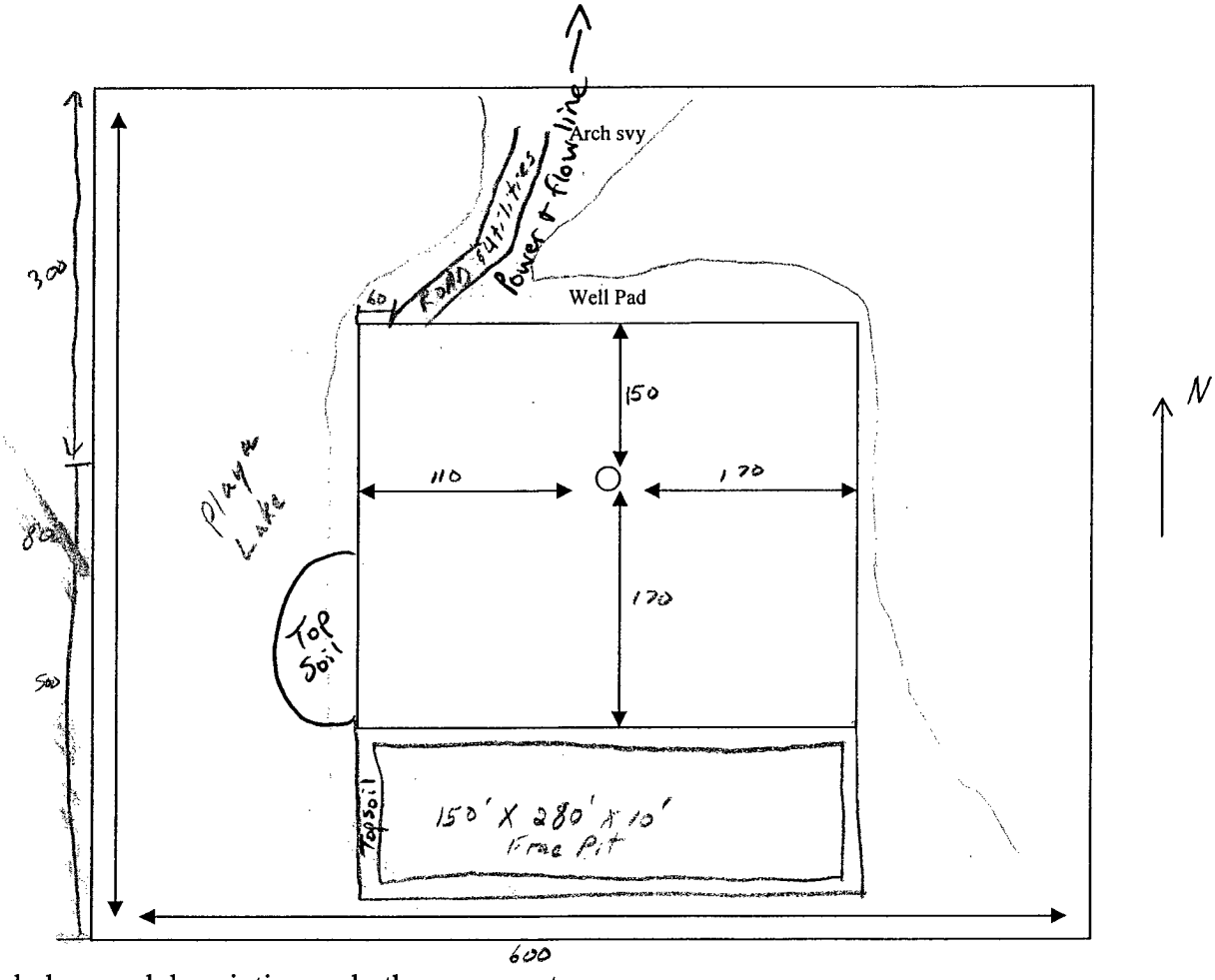
Address: PO Box 5270, Hobbs NM 88241

Telephone: 575-393-5905

E-mail: myoung@mewbourne.com

MEWBOURNE OIL COMPANY
BLM On-site Meeting

On 8-25-2010, an agent of the BLM met with Charles Martin (Mewbourne Oil Co) to stake the Crow Flats 28 "3 AI location at 2120' FSL & 415' FWL of Sec 27, T16 S, R28 E, Eddy County, New Mexico. ~~It was agreed that this is a drillable location, pending further study~~. The drawing below represents the pertinent details of this site as agreed upon.



Include a road description and other comments:

Tanner Nygren CBLM — Print name

Charles Martin — Print name

Signatures

Signatures

PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Mewbourne Oil Co
LEASE NO.:	NM83066
WELL NAME & NO.:	Crow Flats 28 Federal 3H
SURFACE HOLE FOOTAGE:	2120' FSL & 415' FWL
BOTTOM HOLE FOOTAGE	2310' FSL & 330' FWL
LOCATION:	Section 27, T. 16 S., R. 28 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

Bureau of Land Management, Carlsbad Field Office
620 E. Greene Street Carlsbad, NM 88220
Cultural and Archaeological Resources

Conditions of Approval

Historic properties in the vicinity of this project are protected by federal law. In order to ensure that they are not damaged or destroyed by construction activities, the project proponent and construction supervisors shall ensure that the following stipulations are implemented.

Date of Issue: 11/5/2010 **BLM Report No.:** 11-NM-523-39

Project Name: Crow Flats28 Federal #3H Location

1. Professional archaeological monitoring. Contact your project archaeologist:

These stipulations must be given to your monitor at least 5 days prior to the start of construction.

No construction, including vegetation removal or other site prep may begin prior to the arrival of the monitor.

2. The archaeological monitor

ENSURE THAT THERE IS A PERMANENT 4 WIRE STRAND FENCE (UPPER 3 STRANDS BARBED AND BOTTOM WIRE SMOOTH) CONSTRUCTED AT THE NORTHEAST EDGE OF THE PROPOSED PAD PRIOR TO ANY CONSTRUCTION ACTIVITY. THE PERMANENT FENCE SHALL BEGIN IMMEDIATELY EAST OF THE PROPOSED ACCESS ROAD AND CONTINUE EAST ALONG THE REMAINING PORTION OF THE NORTH EDGE OF THE PROPOSED WELL PAD. FROM THE NORTHEAST CORNER OF THE PROPOSED WELL PAD THE PERMANENT FENCE SHALL BE CONSTRUCTED MINIMALLY 150 FEET TO THE SOUTH ALONG THE PROPOSED WELL PAD.

ENSURER THAT ALL CONSTRUCTION ACTIVITY, EQUIPMENT, & PERSONNELL REMAIN OUTSIDE OF THE CULTURAL SITES.

Observe ALL ground-disturbing activities within 200 feet of cultural site no. LA 168551 and LA 168552.

Site Protection and Employee Education: It is the responsibility of the project proponent and his construction supervisor to inform all employees and subcontractors that cultural and archaeological sites are to be avoided by all personnel, vehicles, and equipment; and that it is illegal to collect, damage, or disturb cultural resources on Public Lands.

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:
The frac pond proposed in the Crow Flats 28 Federal #3H APD is **NOT** approved due to the fact that the location of the frac pond will impact a cultural site. Mewbourne Oil Company shall not construct the frac pond in the location it was proposed in the APD. Mewbourne Oil Company shall apply for the frac pond in a different location through Form 3160-5, Sundry Notices and Report on Wells.

Road Construction:
Because the road and well pad are within a low land area that has the potential to saturate with water quickly and may hold water for a short period of time, the operator shall incorporate drainage control structures (culverts, low water crossings, etc.) when constructing the road.

In addition to the Notification Requirement in Section VI of this COA, the operator or construction foreman shall contact Tanner Nygren, Natural Resource Specialist, BLM (cell # = 575-200-7903) at least 24 hours prior to constructing the access road.

Pipeline and Electric Line Placement:
The surface pipeline and electric line shall be placed on the east side of the proposed access road. The surface pipeline shall be placed 6 feet from and parallel to the driving

surface of the road. The electric line shall be placed 6 to 11 feet from and parallel to the driving surface of the road.

Hydrology:

- The entire well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad. Topsoil from around the perimeter of the pad shall not be used to construct the berm. No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad. The berm shall be maintained through the life of the well and after interim reclamation has been completed. The berm shall be impermeable to water flow.
- Any water erosion in excess of 5 inches deep that may occur due to the construction of the well pad during the life of the well will be quickly corrected and proper measures will be taken to prevent future erosion.
- Stockpiling of topsoil is required. The top soil shall be stockpiled in an appropriate location to prevent loss of soil due to water or wind erosion and not used for berming or erosion control.

Surface Pipeline COAs Only:

- A leak detection plan will be submitted to the BLM Carlsbad Field Office for approval prior to pipeline installation. The method could incorporate gauges to detect pressure drops, situating values and lines so they can be visually inspected periodically or installing electronic sensors to alarm when a leak is present. The leak detection plan will incorporate an automatic shut off system that will be installed for proposed pipelines to minimize the effects of an undesirable event.

Cave/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) 234-5972 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. 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 theCarlsbad Field Office at (575) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is required and it will be gravel.

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

F. 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 (20) feet.

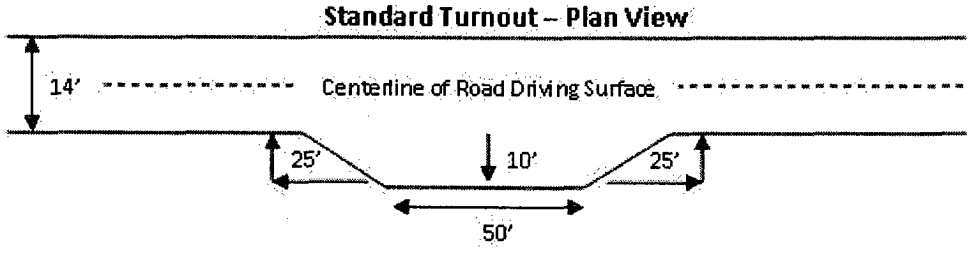
Surfacing
Surfacing material is required on this new access road driving surface and it will be gravel.

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).

Ditching
No ditching.

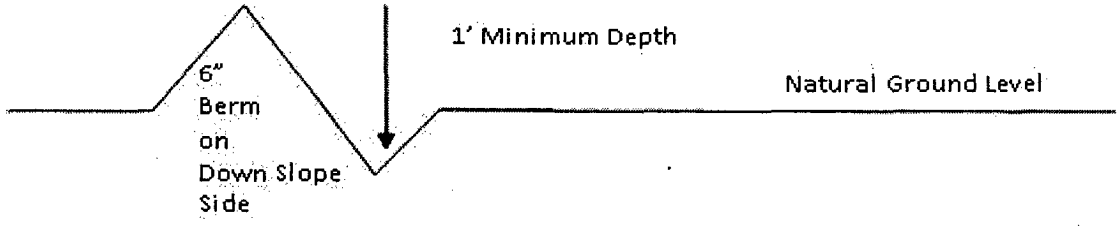
Turnouts
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:



Drainage
Drainage control systems shall be constructed on the entire length of road (e.g. 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 are required for the road. The installation of culverts must conform to BLM standards.

The culvert shall be no less than 18 inches in diameter and covered with no less than 12 inches of surfacing material. The culvert shall be marked with reflectors attached to T-Posts on both sides of the road. The uphill and downhill opening of the culvert shall have rip-rap (cobble stone) extending 2 feet out and 6 inches deep to slow water flow entering and exiting the culvert. The culvert shall be maintained as its original condition throughout the life of the road.

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.

VII. 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. **Although Hydrogen Sulfide has not been reported in this section, it is always a potential hazard. If Hydrogen Sulfide is encountered, please report measured amounts 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 are 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.**

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.

HIGH CAVE/KARST – THE CEMENTING PROGRAM MAY REQUIRE MODIFICATION FOR THE 7" CASING IF LOST CIRCULATION OCCURS WHILE DRILLING THE 8-3/4" HOLE. IF LOST CIRCULATION OCCURS, CONTACT THE BLM WITH REGARDS TO USING A DV TOOL ABOVE THE LOST CIRCULATION ZONE TO MEET THE HIGH CAVE/KARST REQUIREMENTS OF A MINIMUM OF TWO CASING STRINGS CEMENTED WITH A SOLID SHEATH TO SURFACE.

Possible lost circulation in the Grayburg and San Andres formations.

1. The **9-5/8** inch surface casing shall be set at **approximately 350 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt)** and cemented to the surface. **Additional cement will be required – Excess calculates to -8%.**

    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. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.**

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

   ☒ Cement not required – packer system to be used. Liner should tie-back at least 200 feet into previous casing string.

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

C. PRESSURE CONTROL

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

2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M)** psi.

   a. **For surface casing only:** If the BOP/BOPE is to be tested against casing, the wait on cement (WOC) time for that casing is to be met (see WOC statement at start of casing section). Independent service company required.

3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **7"** intermediate casing shoe shall be **3000 (3M)** psi.

4. 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.

DHW 102610

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.

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

B. PIPELINES

STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES

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

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

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

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

3. The holder agrees to indemnify the United States against any liability arising from the

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

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

a. Activities of the holder including, but not limited to construction, operation, maintenance, and termination of the facility.

b. Activities of other parties including, but not limited to:

(1) Land clearing.
(2) Earth-disturbing and earth-moving work.
(3) Blasting.
(4) Vandalism and sabotage.

c. Acts of God.

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

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

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

6. The authorized right-of-way width will be **20** feet. 14 feet of the right-of-way width will consist of existing disturbance (existing lease roads) and the remaining 6 feet will consist of area adjacent to the disturbance. All construction and maintenance activity will be confined to existing roads.

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

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

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

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

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

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

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

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

route is not used as a roadway.

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

C. ELECTRIC LINES

STANDARD STIPULATIONS FOR OVERHEAD ELECTRIC DISTRIBUTION LINES

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

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

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

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

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

whether a release is caused by the holder, its agent, or unrelated third parties.

4. There will be no clearing or blading of the right-of-way unless otherwise agreed to in writing by the Authorized Officer.

5. Powerlines shall be constructed in accordance to standards outlined in "Suggested Practices for Raptor Protection on Powerlines, " Raptor Research Foundation, Inc., 1981. The holder shall assume the burden and expense of proving that pole designs not shown in the above publication are "raptor safe." Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modification or additions to all powerline structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the holder without liability or expense to the United States.

6. 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 the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

7. The BLM serial number assigned to this authorization shall be posted in a permanent, conspicuous manner where the power line crosses roads and at all serviced facilities. Numbers will be at least two inches high and will be affixed to the pole nearest the road crossing and at the facilities served.

8. Upon cancellation, relinquishment, or expiration of this grant, the holder shall comply with those abandonment procedures as prescribed by the Authorized Officer.

9. All surface structures (poles, lines, transformers, etc.) shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facility or facilities or within 180 days of abandonment, relinquishment, cancellation, or expiration of this grant, whichever comes first. This will not apply where the power line extends service to an active, adjoining facility or facilities.

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

11. Special Stipulations
    - Install new power poles no farther than 11 feet from the access road.
    - For reclamation: remove poles, lines, transformer, etc. and dispose of properly.
    - Fill in any holes from the poles removed.

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 1, for Loamy 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 regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (small/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 lovegrass (Eragrostis intermedia)	0.5
Sand dropseed (Sporobolus cryptandrus)	1.0
Sideoats grama (Bouteloua curtipendula)	5.0

*Pounds of pure live seed:

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