ATS-08-1035
R-111-POTASH
WIPP
EA-09-215

RECEIVED
JAN 11 2010
NMOCD ARTESIA

OCD-ARTESIA

Form 3160-3
(August 2007)

FORM APPROVED
OMB NO 1004-0137
Expires: July 31, 2010

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No: NM-65417
6. If Indian, Allottee or Tribe Name: N/A
7. If Unit or CA Agreement, Name and No.: N/A
8. Lease Name and Well No.: Martha AIK Federal #9
9. API Well No.: 30-015-37512

1a. Type of Work: [x] DRILL [ ] REENTER

1b. Type of Well: [X] Oil Well [x] ~~Gas Well~~ [ ] Other [ ] Single Zone [ ] Multiple Zone

2. Name of Operator: Oil well per conversation with Armando Lopez 11/6/09 CRL
Yates Petroleum Corporation 025575

3a. Address: 105 South Fourth Street, Artesia, NM 88210
3b. Phone No. *(include area code)*: 505-748-1471

10. Field and Pool, or Exploratory: Livingston Ridge Delaware

4. Location of well *(Report location clearly and In accordance with any State requirements.*)*
At surface: 810' FSL & 1650' FEL. UL O,SWSE
At proposed prod. zone: 660' FSL & 1650' FWL, UL N, SESW

11. Sec., T., R., M., or Blk. And Survey or Area: Section 11-T22S-R31E

14. Distance in miles and direction from the nearest town or post office*: The well is about 41 miles east of Carlsbad, NM.

12. County or Parish: Eddy
13. State: NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. unit line, if any): 660'
16. No. of acres in lease: 560.00
17. Spacing Unit dedicated to this well: SESW

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.: None
19. Proposed Depth: ~~8100 TVD~~ 9074' MD 3424 TVD 3884'
20. BLM/ BIA Bond No. on file: NATIONWIDE BOND #NMB000434

21. Elevations (Show whether DF, KDB, RT, GL, etc.): 3563 GL
22. Aproximate date work will start*: ASAP
23. Estimated duration:

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 must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by existing bond on file(see item 20 above).
5. Operator certification.
6. Such other site specific information and/ or plans as may be required by the BLM

25. Signature	Name *(Printed/ Typed)*	Date
Cy Cowan	Cy Cowan	9/10/2008

Title: Regulatory Agent

Approved By *(Signature)*	Name *(Printed/ Typed)*	Date
/s/ Jesse J. Juen	/s/ Jesse J. Juen	DEC 16 2009
Title: ACTING STATE DIRECTOR	Office: NM STATE 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 cc 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 wilfully 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 page 2)*

Carlsbad Controlled Water Basin

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

SEE ATTACHED FOR CONDITIONS OF APPROVAL

State of New Mexico
Energy, Minerals and Natural Resources Department

DISTRICT I
. FRENCH DR., HOBBS, NM 88240

DISTRICT II
301 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

OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
30-015-37592	39360	Livingston Ridge Delaware

Property Code	Property Name	Well Number
12538	MARTHA "AIK" FEDERAL	9

OGRID No.	Operator Name	Elevation
025575	YATES PETROLEUM CORPORATION	3563'

Surface Location

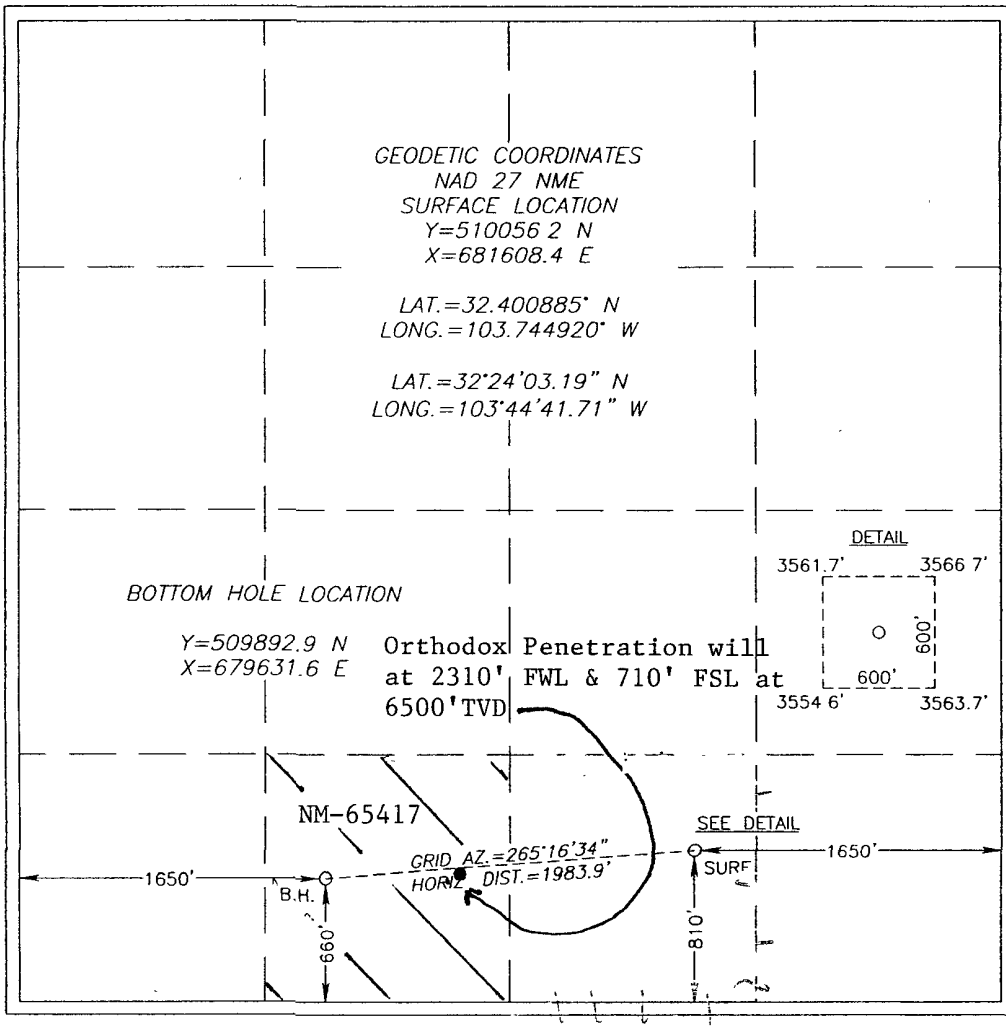
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	11	22-S	31-E		810	SOUTH	1650	EAST	EDDY

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
N	11	22-S	31-E		660	SOUTH	1650	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
40			

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 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature — Date: 9/10/08

Cy Cowan
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 supervision, and that the same is true and correct to the best of my belief.

RONALD J. EIDSON
NEW MEXICO
3239
REGISTERED PROFESSIONAL SURVEYOR

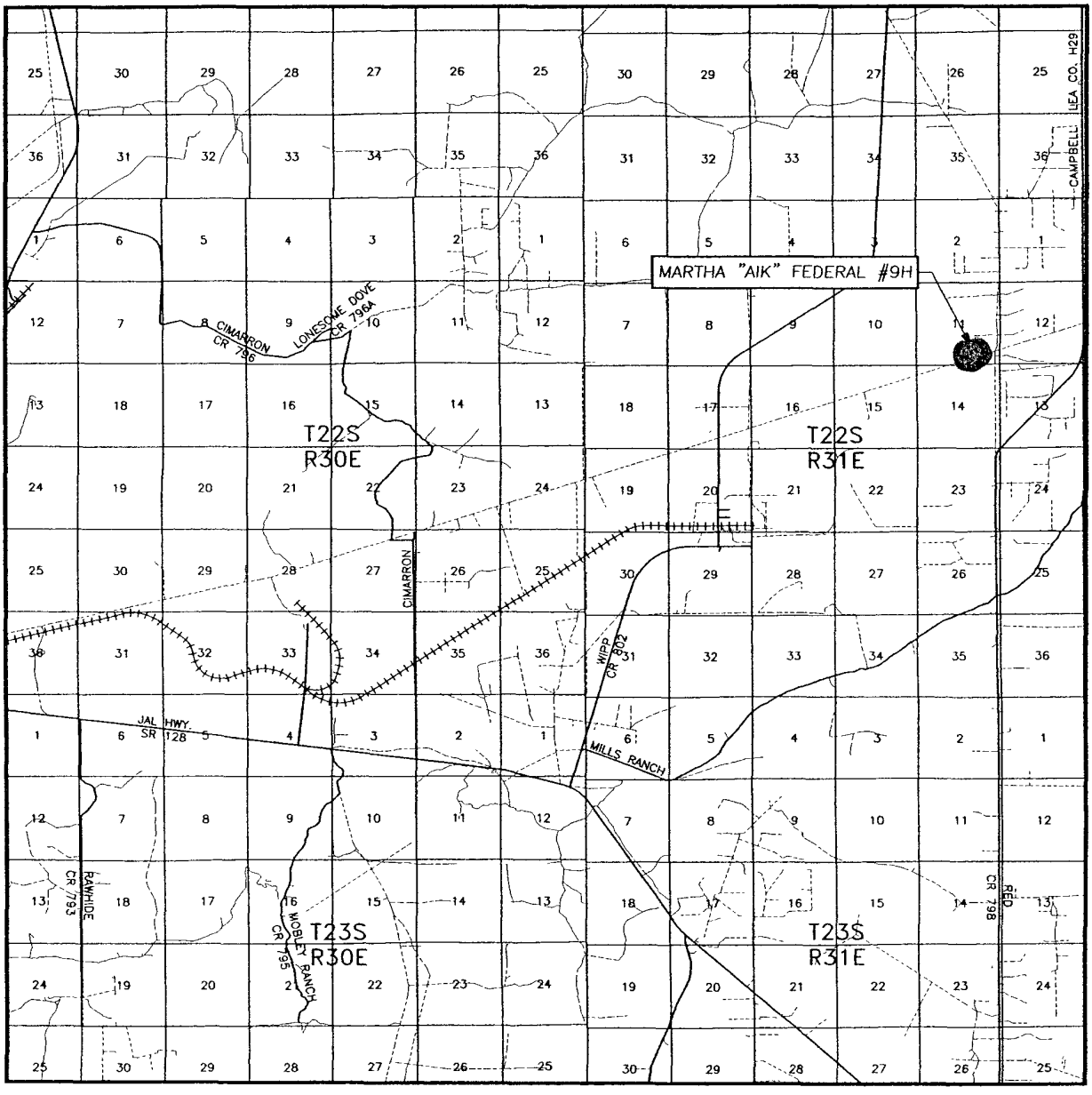
Date Surveyed: JULY 15, 2008 REV: 9/08/08 AR

Signature & Seal of Professional Surveyor

Ronald J. Eidson 9/09/08

Certificate No. GARY EIDSON 12641
RONALD J. EIDSON 3239

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 11 TWP. 22-S RGE. 31-E

SURVEY N.M.P.M.

COUNTY EDDY STATE NEW MEXICO

DESCRIPTION 810' FSL & 1650' FEL

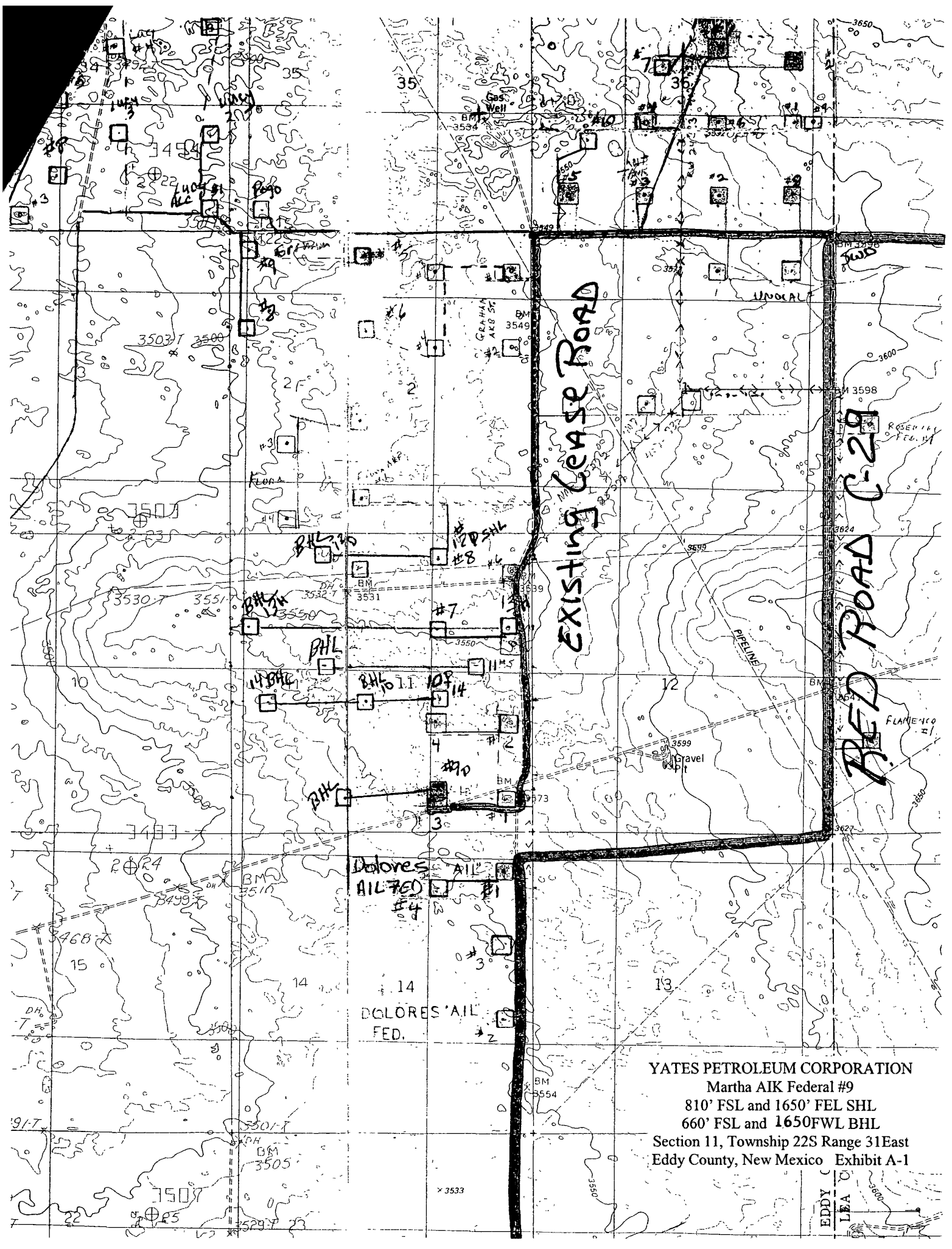
ELEVATION 3563'

OPERATOR YATES PETROLEUM CORPORATION

LEASE MARTHA "AIK" FEDERAL

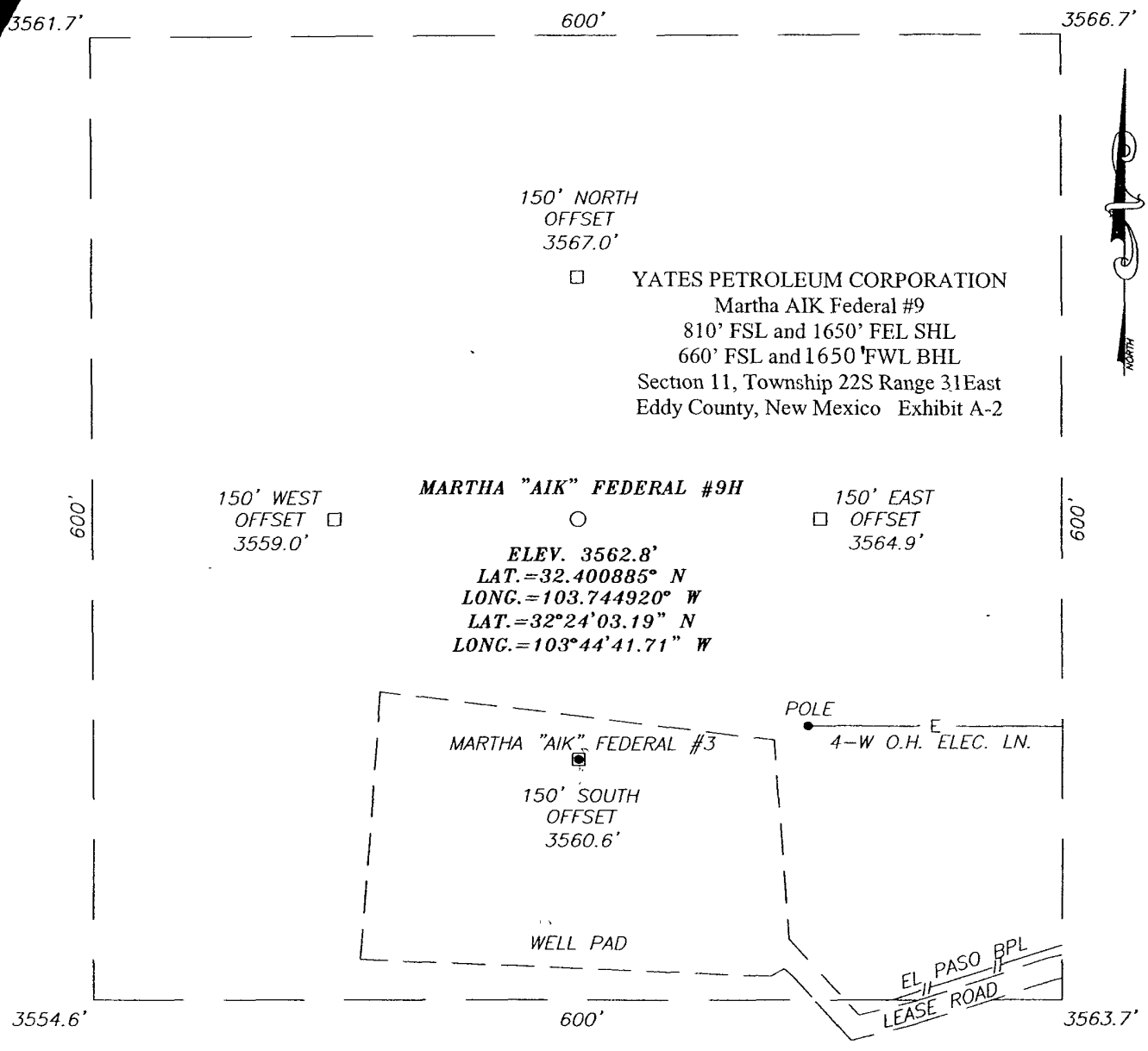
PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

YATES PETROLEUM CORPORATION
Martha AIK Federal #9
810' FSL and 1650' FEL SHL
660' FSL and 1650' FWL BHL
Section 11, Township 22S Range 31East
Eddy County, New Mexico Exhibit A



YATES PETROLEUM CORPORATION
Martha AIK Federal #9
810' FSL and 1650' FEL SHL
660' FSL and 1650FWL BHL
Section 11, Township 22S Range 31East
Eddy County, New Mexico Exhibit A-1

CTION 11, TOWNSHIP 22 SOUTH, RANGE 31 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF U.S. HWY. 62-180 AND CO. RD. #29, GO SOUTH ON CO. RD. #29 APPROX. 8.2 MILES. TURN RIGHT ON LEASE ROAD AND GO WEST APPROX. 1 0 MILE. TURN LEFT AND GO SOUTH APPROX. 1.9 MILES. TURN RIGHT AND GO SOUTHWEST APPROX. 0.25 MILES TO THE EXISTING MARTHA "AIK" FEDERAL #3 WELL PAD. THIS LOCATION IS NORTH APPROX. 150 FEET.

100 0 100 200 Feet

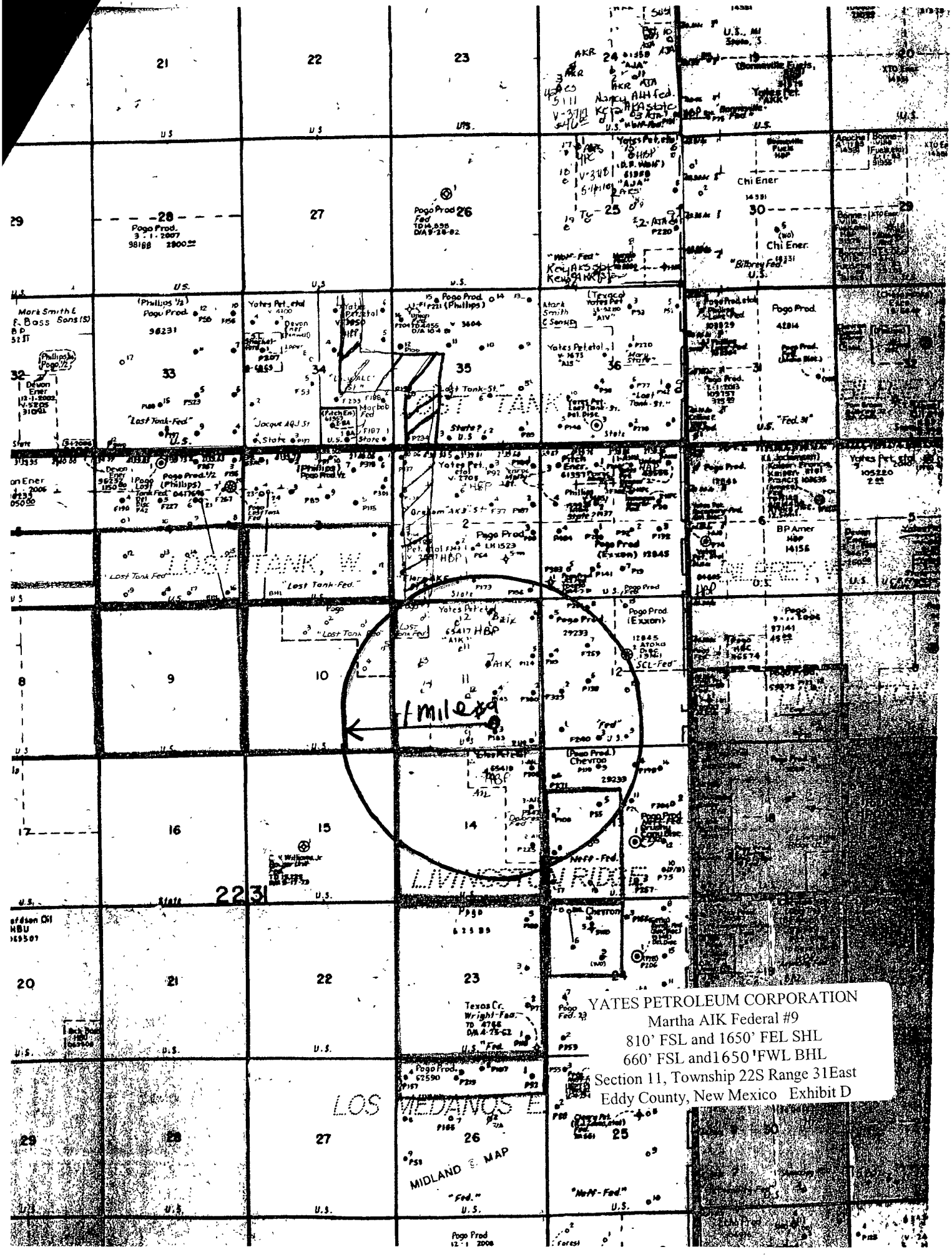
Scale:1"=100'

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

YATES PETROLEUM CORPORATION

MARTHA "AIK" FEDERAL #9H WELL
LOCATED 810 FEET FROM THE SOUTH LINE
AND 1650 FEET FROM THE EAST LINE OF SECTION 11,
TOWNSHIP 22 SOUTH, RANGE 31 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.

Survey Date: 7/15/08	Sheet 1 of 1 Sheets		
W.O. Number: 08.11.1113	Dr By: AR		Rev 1:N/A
Date: 7/18/08	Disk:	08111113	Scale:1"=100'


1 mile
YATES PETROLEUM CORPORATION
Martha AIK Federal #9
810' FSL and 1650' FEL SHL
660' FSL and1650 'FWL BHL
Section 11, Township 22S Range 31East
Eddy County, New Mexico Exhibit D
MIDLAND MAP

YATES PETROLEUM CORPORATION

Martha AIK Federal #9
810' FSL and 1650' FEL
660' FSL & 1650' FWL
Section 11-T22S-R31E
Eddy County, New Mexico
Directional Drill

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

Rustler	755'	No	Livingston Ridge	7290'	Oil
Top of Salt	1000'	No	Brushy Canyon	7580'	Oil
Base of Salt	3958'	No	~~Bone Springs~~	~~8803~~'	Oil
Bell Canyon	4520'	Oil	~~TD~~	~~9074' MD~~	TVD
Cherry Canyon	5623'	Oil	TMD 8884'	8420	Per Operator RGH 11/13/09

2. The estimated depths at which anticipated water, oil or gas formations are expected to be encounter:

   Water: 47'
   Oil or Gas: Bell Canyon, Cherry Canyon , Livingston Ridge, Brushy Canyon and Bone Springs

3. Pressure Control Equipment: A 3K system will be installed on the 8 5/8" casing. See COA BOPE will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings, which are set and cemented in place. Blowout Preventor controls will be installed prior to drilling the surface plug and will remain in use until the well is completed or abandoned. Preventors will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. See Exhibit B.

4. Auxiliary Equipment: Kelly cock, pit level indicators, flow sensor equipment, and a sub with full opening valve to fit the drill pipe and collars will be available on the rig floor in the open position at all times for use when Kelly is not in use.

5. THE PROPOSED CASING AND CEMENTING PROGRAM:

   A. Casing Program: **(ALL NEW)**

Hole Size	Casing Size	Wt./Ft	Grade	Coupling	Interval	Length
17 1/2"	13 3/8"	48#	H-40	ST&C	0-850'	850'
11"	8 5/8"	32#	J-55	ST&C	0-100'	100'
11"	8 5/8"	24#	J-55	ST&C	100-2200'	2100'
11"	8 5/8"	32#	J-55	ST&C	2200-4050'	1850' See COA
7 7/8"	5 1/2"	17#	L-80	LT&C	0-3400'	3400'
7 7/8"	5 1/2"	17#	J-55	LT&C	3400-~~9074~~ 8884'	~~5674~~ 5484' Per operator RGH

   1. Minimum Casing Design Factors: Collapse 1.125, Burst 1.0, and Tensile Strength 1.8
   2. A 3000# BOP will be nipped up on the 8 5/8" casing and tested to 3000 psi .

see COA

**This well will be drilled vertically to approximately 4100' and then kicked off and directionally drilled at 10 degrees per 100' with a 7 7/8" hole to 9074'MD and 8600' 8420 TVD where 5 ½" casing will be set and cemented. This well will be orthodox at 710' FSL & 2310' FWL (TVD at this point will be 6500').

   B. CEMENTING PROGRAM: ← see COA
   Surface Casing: 450 C Lite (WT 12.60 YLD 1.99). Tail in 225sx C (WT 14.80 YLD 1.32) Circulate to surface.

Intermediate Casing: 900 sacks of Hal LtPr+C (WT 12.60 YLD 1.99). Tail in with 225 sacks C (WT 14.80 YLD 1.32.). TOC at surface.

Production Casing: Stage One: 425 sacks PecoVILt (WT 13.00 YLD 1.41). Top of Cement approx. 7400'.
Second Stage: Lead with 300 sacks Lite Crete (WT 9.90 YLD 3.19). Tail in with 100 sacks PecosVILt (WT 13.00 YLD 1.40). DV tool at 7400' TVD. Top of Cement approximately 4400'.
Stage Three: Lead in with 450 sacks Lite Crete (WT 9.90 YLD 3.19) Tail in with 100 sacks PecosVILt (WT 13.00 YLD 1.40). DV tool at 4400' TVD. Top of Cement surface.

6. MUD PROGRAM AND AUXILIARY EQUIPMENT:

Interval	Type	Weight	Viscosity	Fluid Loss
0-850	Fresh Water Gel	8.60-9.20	32-34	N/C
850-4050	Brine Water	10.00-10.20	28-28	N/C
4050-7290	Cut Brine	8.70-9.10	28-28	N/C
7290-~~9074~~ 8884	Cut Brine	8.50-9.10	28-28	10.0-15.0

Sufficient mud material(s) to maintain mud properties, control lost circulation and contain a blow out will be available at the well site during drilling operations. Rig personnel will check mud hourly.

7. EVALUATION PROGRAM:

Samples: Every 10' from intermediate casing to TD
See COA — Logging: Platform Express; CMR
Coring: None anticipated
DST's: None Anticipated
Mudlogging: Yes

8. ABNORMAL CONDITIONS, BOTTOM HOLE PRESSURE, AND POTENTIAL HAZARDS:

Maximum Anticipated BHP:

0'-850'	400 PSI
850'-4050'	2150 PSI
4050'-~~8600'~~ 8420	4070 PSI

Abnormal Pressures Anticipated: None
Lost Circulation Zones Anticipated: None.
H2S Zones Anticipated: None Anticipated
Maximum Bottom Hole Temperature: 130 F

9. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 60 days to drill the well with completion taking another 20 days.

MD	Inclination	Azimuth	TVD	N+/S-	E+/W-	DLS	ToolFace	TF Ref HS/GN	
0	0	0	0	0	0	0			
755	0	0	755	0	0	0			RUSTLER
1000	0	0	1000	0	0	0			TOS
3958	0	0	3958	0	0	0			BOS
4100	0	0	4100	0	0	10	266	GN	KOP
4125	2.5	265.67	4124.99	-0.04	-0 54	10	0	HS	
4150	5	265 67	4149.94	-0.16	-2 17	10	0	HS	
4175	7.5	265 67	4174.79	-0.37	-4 89	10	0	HS	
4200	10	265.67	4199.49	-0.66	-8.68	10	360	HS	
4225	12.5	265.67	4224.01	-1 03	-13 54	10	0	HS	
4250	15	265.67	4248.29	-1.47	-19 47	10	0	HS	
4275	17 5	265.67	4272.29	-2	-26.44	10	360	HS	
4300	20	265 67	4295 96	-2.61	-34.45	10	360	HS	
4325	22 5	265.67	4319.26	-3.29	-43.49	10	360	HS	
4350	25	265 67	4342.14	-4.06	-53.53	10	0	HS	
4375	27.5	265.67	4364.56	-4 89	-64 55	10	0	HS	
4400	30	265.67	4386.48	-5 8	-76 54	10	0	HS	
4405.42	30.54	265.67	4391 16	-6 01	-79.27	10	360	HS	
4520 18	30.54	265.67	4490	-10.42	-137.42				BELL CANYON
5623 2	30.54	265.67	5440	-52 76	-696.35				CHERRY CANYON
6853.98	30.54	265.67	6500	-100	-1320	0			
6853.98	30.54	265.67	6500	-100	-1320	1 19	180	HS	
6875	30.29	265.67	6518 13	-100.8	-1330.61	1.19	180	HS	
6900	30	265.67	6539 74	-101.75	-1343.13	1.19	180	HS	
6925	29 7	265.67	6561.43	-102.69	-1355.54	1.19	180	HS	
6950	29.4	265 67	6583.18	-103 62	-1367.83	1.19	180	HS	
6975	29.11	265 67	6604.99	-104.55	-1380.01	1.19	180	HS	
7000	28 81	265.67	6626.86	-105.46	-1392.08	1.19	180	HS	
7025	28 51	265.67	6648 8	-106.37	-1404.04	1 19	180	HS	
7050	28 22	265 67	6670.8	-107.26	-1415.88	1.19	180	HS	
7075	27 92	265 67	6692.86	-108.15	-1427.61	1.19	180	HS	
7100	27 62	265.67	6714 98	-109.03	-1439.23	1.19	180	HS	
7125	27 33	265.67	6737.16	-109.9	-1450.73	1.19	180	HS	
7150	27.03	265.67	6759.4	-110.77	-1462.11	1 19	180	HS	
7175	26 73	265.67	6781.7	-111.62	-1473.38	1 19	180	HS	
7200	26.44	265.67	6804.05	-112 47	-1484.54	1 19	180	HS	
7225	26 14	265 67	6826.47	-113.3	-1495.58	1.19	180	HS	
7250	25.84	265 67	6848.94	-114.13	-1506.5	1.19	180	HS	
7275	25 55	265 67	6871.47	-114.95	-1517 31	1 19	180	HS	
7290	25 37	265.67	6885 01	-115 43	-1523.74	1 19	180	HS	LIVINGSTON RIDGE
7300	25.25	265 67	6894 05	-115.76	-1528	1 19	180	HS	
7325	24.95	265.67	6916.69	-116.56	-1538.58	1.19	180	HS	
7350	24 66	265 67	6939.39	-117.35	-1549.04	1.19	180	HS	
7375	24 36	265 67	6962.13	-118.13	-1559.38	1.19	180	HS	
7400	24.06	265.67	6984.93	-118.91	-1569.6	1.19	180	HS	
7425	23.77	265.67	7007.79	-119.67	-1579.7	1.19	180	HS	
7450	23.47	265 67	7030 69	-120 43	-1589.69	1 19	180	HS	
7475	23.17	265 67	7053 65	-121.18	-1599.56	1 19	180	HS	
7500	22 87	265 67	7076.66	-121.92	-1609 31	1.19	180	HS	
7525	22.58	265.67	7099.72	-122.65	-1618.94	1.19	180	HS	
7550	22 28	265 67	7122 83	-123.37	-1628 45	1 19	180	HS	
7575	21 98	265.67	7145 99	-124.08	-1637.84	1 19	180	HS	
7580	21 93	265 67	7150.62	-124.22	-1639 71	1 19	180	HS	BRUSHY CANYON
7600	21 69	265.67	7169.19	-124.78	-1647 11	1 19	180	HS	
7625	21 39	265 67	7192.45	-125.47	-1656 27	1 19	180	HS	
7650	21 09	265.67	7215 75	-126.16	-1665 3	1.19	180	HS	
7675	20 8	265 67	7239 1	-126 83	-1674 21	1 19	180	HS	
7700	20.5	265.67	7262.49	-127 5	-1683	1 19	180	HS	
7725	20.2	265.67	7285 93	-128.16	-1691.67	1 19	180	HS	
7750	19.91	265 67	7309.41	-128.8	-1700.22	1.19	180	HS	
7775	19.61	265.67	7332 94	-129.44	-1708.65	1.19	180	HS	
7800	19 31	265 67	7356 51	-130 07	-1716 96	1.19	180	HS	
7825	19.02	265 67	7380.13	-130.69	-1725.14	1 19	180	HS	
7850	18 72	265.67	7403.78	-131.3	-1733.2	1 19	180	HS	
7875	18.42	265 67	7427.48	-131.9	-1741.14	1.19	180	HS	
7900	18 13	265 67	7451.22	-132 5	-1748.96	1.19	180	HS	
7925	17 83	265 67	7475	-133.08	-1756 65	1 19	180	HS	
7950	17 53	265 67	7498.82	-133.65	-1764.23	1 19	180	HS	
7975	17 24	265.67	7522.68	-134.22	-1771 67	1 19	180	HS	
8000	16 94	265.67	7546.57	-134 77	-1779	1 19	180	HS	
8025	16.64	265.67	7570.51	-135 32	-1786 2	1.19	180	HS	
8050	16 35	265.67	7594.48	-135 85	-1793 28	1 19	180	HS	

8075	16.05	265.67	7618.48	-136.38	-1800.23	1.19	180	HS	
8100	15.75	265.67	7642.53	-136.9	-1807.06	1.19	180	HS	
8125	15.46	265.67	7666.61	-137.41	-1813.77	1.19	180	HS	
8150	15.16	265.67	7690.72	-137.91	-1820.35	1.19	180	HS	
8175	14 86	265.67	7714.86	-138.39	-1826 81	1 19	180	HS	
8200	14.57	265.67	7739.04	-138.87	-1833.14	1 19	180	HS	
8225	14.27	265.67	7763.26	-139.34	-1839.35	1.19	180	HS	
8250	13 97	265.67	7787 5	-139.81	-1845.43	1.19	180	HS	
8275	13.68	265.67	7811.78	-140.26	-1851.39	1.19	180	HS	
8300	13.38	265.67	7836.08	-140.7	-1857.22	1.19	180	HS	
8325	13.08	265 67	7860.42	-141.13	-1862.93	1.19	180	HS	
8350	12.79	265 67	7884.79	-141.55	-1868 51	1.19	180	HS	
8375	12.49	265.67	7909.18	-141.97	-1873.96	1.19	180	HS	
8400	12.19	265.67	7933.6	-142.37	-1879.29	1.19	180	HS	
8425	11.9	265.67	7958.05	-142.76	-1884.49	1.19	180	HS	
8450	11.6	265.67	7982.53	-143.15	-1889.57	1.19	180	HS	
8475	11.3	265.67	8007.03	-143.52	-1894.52	1.19	180	HS	
8500	11.01	265.67	8031 56	-143.89	-1899.34	1.19	180	HS	
8525	10.71	265 67	8056.11	-144.25	-1904.03	1.19	180	HS	
8550	10 41	265.67	8080.69	-144 59	-1908.6	1.19	180	HS	
8575	10 12	265 67	8105.29	-144 93	-1913.05	1.19	180	HS	
8600	9.82	265.67	8129 91	-145.25	-1917.36	1.19	180	HS	
8625	9.52	265 67	8154.55	-145.57	-1921.55	1.19	180	HS	
8650	9.23	265 67	8179.22	-145.88	-1925.61	1.19	180	HS	
8675	8.93	265.67	8203.91	-146.18	-1929 54	1.19	180	HS	
8700	8.63	265.67	8228 61	-146.47	-1933.35	1.19	180	HS	
8725	8.34	265.67	8253.34	-146.74	-1937.03	1.19	180	HS	
8750	8.04	265.67	8278.08	-147.01	-1940.58	1.19	180	HS	
8775	7.74	265.67	8302.85	-147.27	-1944	1.19	180	HS	
8800	7.45	265.67	8327.63	-147.52	-1947.29	1 19	180	HS	
8803	7.41	265.67	8330.6	-147.55	-1947.68	1.19	180	HS	BONE SPRINGS
8825	7 15	265.67	8352.43	-147.76	-1950.46	1.19	180	HS	
8850	6.85	265.67	8377 24	-147 99	-1953.5	1.19	180	HS	
8854.14	6.8	265 67	8381 35	-148.03	-1953.99	1.19	180	HS	
~~9074.34~~	6 8	265.67	~~8600~~	-150	-1980	0			TD

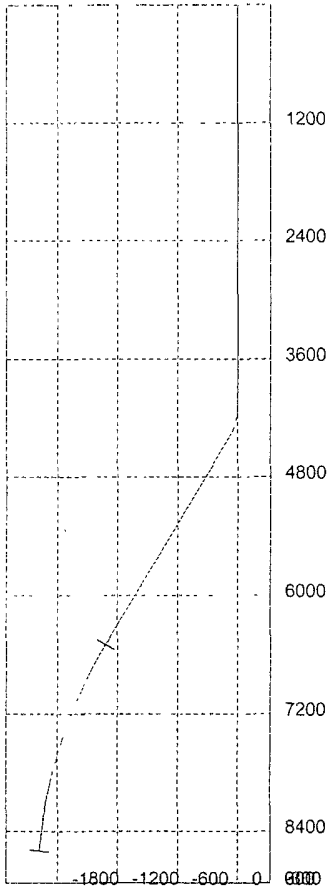
~~9884~~ 8425

Well will be drilled vertically to approx. 4100'. At 4100' well will be kicked off and directionally drilled at 10 degrees per 100' with a 7 7/8" hole to ~~9,074'~~ MD 8884
~~8,600'~~ TVD where 5 1/2" casing will be set and cemented. This well will be orthodox at 710' FSL & 2310' FWL(TVD at this point will be 6500').

8420 per operator
RGH 11/13/09

3D³ Directional Drilling Planner - 3D View

Company: **Yates Petroleum Corporation**
Well: **Martha AIK Federal #9**



TVD 8420'

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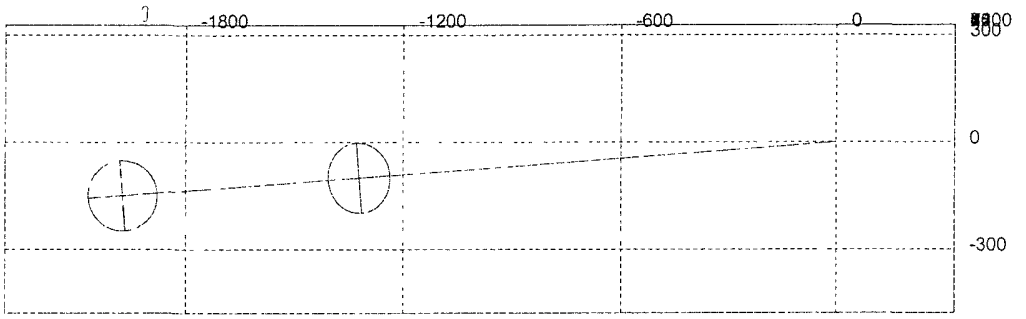
3D³ Directional Drilling Planner - 3D View

Company: **Yates Petroleum Corporation**
Well: **Martha AIK Federal #9**



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MULTI-POINT SURFACE USE AND OPERATIONS PLAN
YATES PETROLEUM CORPORATION
Martha AIK Federal #9
810' FSL & 1650' FEL
660' FSL & 1650' FWL
Section 11-T22S-R31E
Eddy County, New Mexico
Directional Drill

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 rehabilitating the surface after completion of the operations, so that a complete appraisal can be made of the environmental effect associated with the operations.

1. EXISTING ROADS:

Exhibit A is a portion of the BLM map showing the well and roads in the vicinity of the proposed location. The proposed well site is located approximately 30 miles Northeast of Loving, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

DIRECTIONS: Go east of Carlsbad, NM on 62/180 for approximately 30 miles to CR-29. Turn south and go approximately 8.2 miles. Turn right on lease road and go approximately 1 mile. Turn left and go south approximately 1.9 miles. Turn right and go southwest approximately 0.2 of a mile to the Martha AIK Federal #3 well pad. The proposed Martha AIK Federal #9 well location is located approximately 150 feet north of the Martha #3 well pad.

2. PLANNED ACCESS ROAD:

A. The proposed new access will be approximately 150' in length from the point of origin to the southwest corner of the drilling pad.
B. The new road will be 14 feet in width (driving surface) and will be adequately drained to control runoff and soil erosion.
C. The new road will be bladed with drainage on one sides. No turnouts will be constructed as they are not needed.
D. The route of the road is visible.
E. Existing roads will be maintained in the same or better condition.

3. LOCATION OF EXISTING WELL:

A. There is drilling activity within a one-mile radius of the well site.
B. Exhibit D shows existing wells within a one-mile radius of the proposed well site.

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, the necessary production facilities will be installed on the drilling pad. If the well is productive oil, a gas or diesel self-contained unit will be used to provide the necessary power unless electric power is ran to the well.

5. LOCATION AND TYPE OF WATER SUPPLY:

A. It is planned to drill the proposed well with a fresh water system. The water will be obtained from commercial sources and will be hauled to the location by truck over the existing and proposed roads shown in Exhibit A.

6. SOURCE OF CONSTRUCTION MATERIALS:

It will be up to the dirt contractor to locate construction materials and obtain any permits needed. No caliche will be taken from Federal sources without permission.

7. METHODS OF HANDLING WASTE DISPOSAL:

A. A closed loop system will be used instead of reserve pits.
B. The closed loop system will be constructed, maintained and reclamation done according to NMOCD guidelines. The C-144 is attached to APD.
C. Drilling fluids will be disposed of after the drilling and completions operations are finished.
D. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or separate disposal application will be submitted.
E. Oil produced during operations will be stored in tanks until sold.
F. Current laws and regulations pertaining to the disposal of human waste will be complied with.
G. All trash, junk, and other waste materials will be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not approved.

8. ANCILLARY FACILITIES: NONE

9. WELLSITE LAYOUT:

A. Exhibit C shows the relative location and dimensions of the well pad, the reserve pits, the location of the drilling equipment, pulling unit orientation and access road approach. Note: Pits to the West.
B. The temporary drilling pit will be constructed, maintained and closed in compliance with the State of New Mexico, Energy and Natural Resources Department, Oil Conservation Division – the "Pit Rule" 19.15.17 NMAC.
C. A 600' x 600' area has been staked and flagged for archaeological purposes.

10. PLANS FOR RESTORATION:

A. After finishing drilling and/or completion operations, all equipment and other material not needed for further operations will be removed. The location will be cleaned of all trash and junk to leave the well site in as aesthetically pleasing a condition as possible.
B. Unguarded pits, if any, containing fluids will be fenced until they have dried and been leveled.
C. If the proposed well is plugged and abandoned, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible. All pits, if any, will be reclaimed according to the NMOCD pit rule.

11. SURFACE OWNERSHIP:

Federal surface administered by Bureau of Land Management, Carlsbad NM Field Office.

12. OTHER INFORMATION:

A. Topography: Refer to the archaeological report for a description of the topography, flora, fauna, soil characteristics, dwellings, historical and cultural sites.
B. The primary surface use is for grazing.

CERTIFICATION
YATES PETROLEUM CORPORATION
Martha AIK Federal #9

I hereby certify that I or the company I represent, have inspected the drill site and access route proposed herein; that the company I represent is familiar with the conditions which currently exist; that 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 the company I represent is 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 3rd day of September 2008.

Printed Name Cy Cowan

Signature

Position Title Regulatory Agent

Address 105 South Fourth Street, Artesia, NM 88210

Telephone 575-748-4372

E-mail (optional) cyc@ypcnm.com

Field Representative (if not above signatory) Tim Bussell

Address (if different from above) Same

Telephone (if different from above) 575-748-4221

E-mail (optional)

PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Yates Petroleum Corporation
LEASE NO.:	NM-65417
WELL NAME & NO.:	Martha AIK Federal # 9
SURFACE HOLE FOOTAGE:	810' FSL & 1650' FEL
BOTTOM HOLE FOOTAGE	660' FSL & 1650' FWL
LOCATION:	Section 11, T. 22 S., R 31 E., NMPM
COUNTY:	Eddy County, New Mexico

TABLE OF CONTENTS

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

I. GENERAL PROVISIONS

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

II. PERMIT EXPIRATION

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

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

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

IV. NOXIOUS WEEDS

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

V. SPECIAL REQUIREMENT(S)

Martha AIK Federal # 9: Closed Loop System- V- Door East

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, geophysical exploration other than 3-D operations, and 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 ft. 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.

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 of the well pad. The topsoil shall not be used to backfill the reserve pit and will be used for interim and final reclamation.

C. Closed Loop System

Martha AIK Federal # 9: Closed Loop System- V- Door East

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

If the operator elects to surface the access road and/or well pad, mineral materials extracted during construction of the reserve pit may be used for surfacing the well pad and access road and other facilities on the lease.

Payment shall be made to the BLM prior to removal of any additional federal mineral materials from any site other than the reserve pit. Call the
Carlsbad Field Office at (575) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

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

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

F. 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.

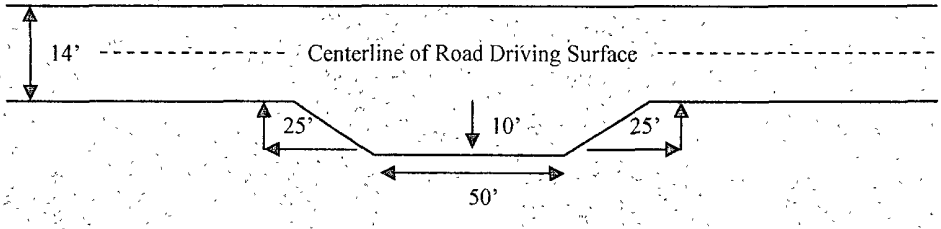
Crowning
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

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:

Standard Turnout – Plan View

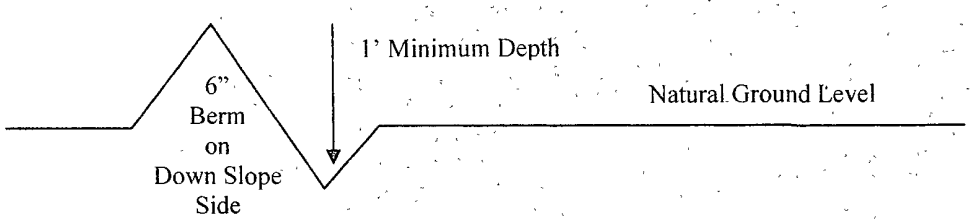


Drainage

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:

400 foot road with 4% road slope: $\frac{400'}{4\%} + 100' = 200'$ 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.

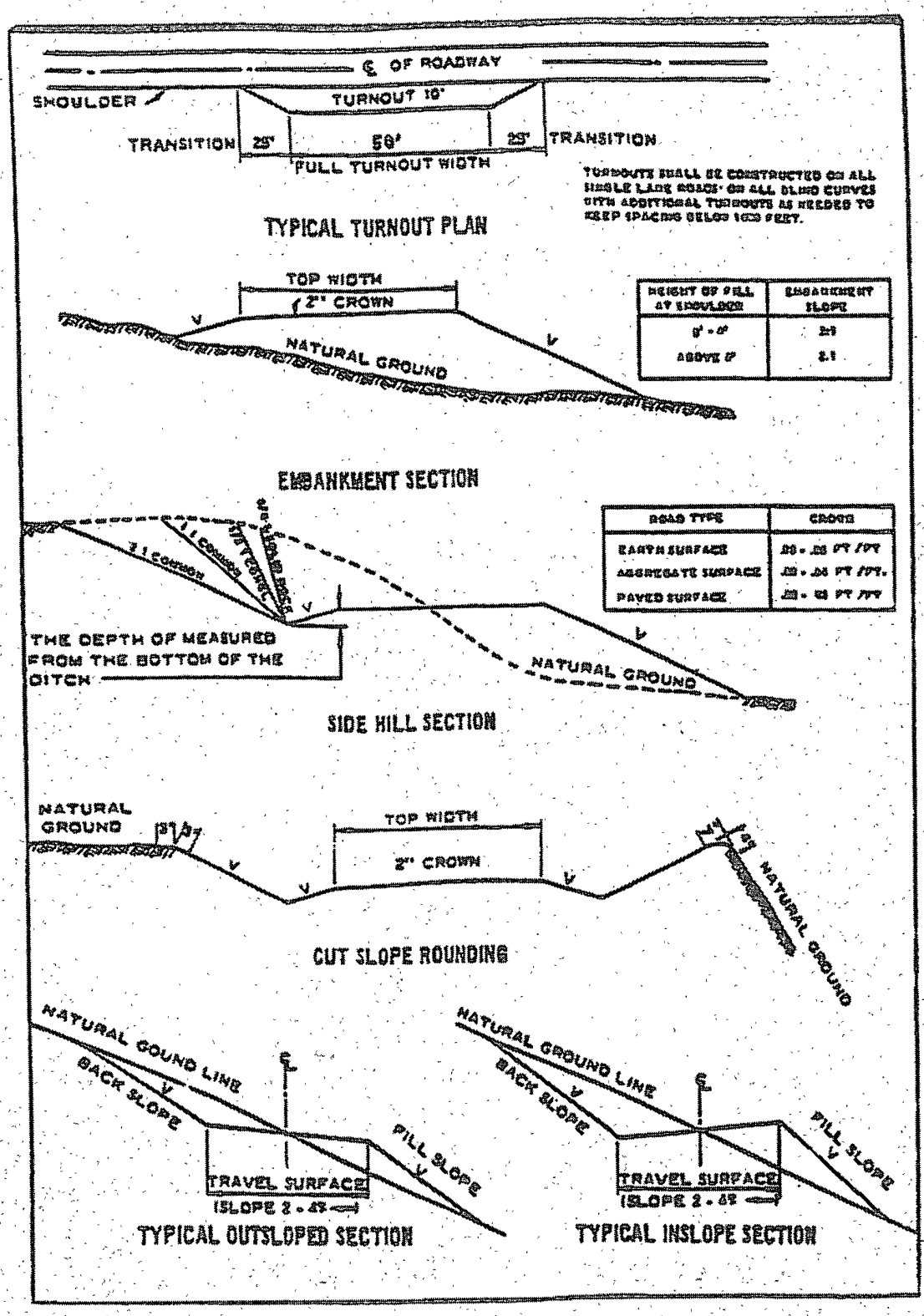
A gate shall be constructed and fastened securely to H-braces.

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



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.

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 CAL/GR/N well log run from TD to surface 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 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. 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.

WIPP/R-111-P potash.
Possible lost circulation in the Delaware and Bone Spring formations.
Possible brine/water flows in the Salado and Castile Groups.

1. The **13-3/8** inch surface casing shall be set **at approximately 850 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt)** and cemented to the surface. **If the salt is encountered at a shallower depth, the casing must be set 25' above the top of the salt.**

    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.

    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 **8-5/8** inch intermediate casing is: **The casing is to be set in the Lamar Limestone or Fletcher Anhydrite at a minimum of 100' and not more than 600' below the base of the salt. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to potash.**

    ☒ 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 R-111-P potash.**

3. The minimum required fill of cement behind the **5-1/2** inch production casing is:

   a. First stage to DV tool, cement shall:

   ☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office, before proceeding with second stage cement job.

   b. Second stage above DV tool, cement shall:

   ☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office, before proceeding with third stage cement job.

   c. Third stage above DV tool, cement shall:

   ☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office.

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.

5. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

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. **Piping from choke manifold to flare to be as straight as possible.**

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

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

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

   c. 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.**

d. 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. WIPP Requirements

The proposed well is located over 330' of the WIPP Land Withdrawal Area boundary. As a result, Yates Petroleum Corporation is requested, but not required to submit daily logs and deviation survey information to the Department of Energy per requirements of the Joint Powers Agreement. Information from this well will be included in the Quarterly Drilling Report. Information will also be provided to the New Mexico Oil Conservation Division after drilling activities have been completed. Any future entry into the well for purposes of completing additional drilling will require supplemental information.

Yates Petroleum Corporation can email the required information to Ms. Susan McCauslin at susan.mccauslin@wipp.ws or fax to her attention at 575-234-6003.

RGH 102609

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

C. ELECTRIC LINES

IX. INTERIM RECLAMATION & RESERVE PIT CLOSURE

A. INTERIM RECLAMATION

If the well is a producer, interim reclamation shall be conducted on the well site in accordance with the orders of the Authorized Officer. The operator shall submit a Sundry Notices and Reports on Wells (Notice of Intent), Form 3160-5, prior to conducting 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.

The operators should work with BLM surface management specialists to devise the best strategies to reduce the size of the location. Any reductions 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 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.

BLM SERIAL #:
COMPANY REFERENCE:
WELL # & NAME:

Seed Mixture 2, for Sandy 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 see 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
Sand dropseed (Sporobolus cryptandrus)	1.0
Sand love grass (Eragrostis trichodes)	1.0
Plains bristlegrass (Setaria macrostachya)	2.0

*Pounds of pure live seed:

Pounds of seed **x** percent purity **x** percent germination = pounds pure live seed
(Insert Seed Mixture Here)

X. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS

Upon abandonment of the well and/or when the access road is no longer in service the Authorized Officer shall issue instructions and/or orders for surface reclamation and restoration of all disturbed areas.

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.

On private surface/federal mineral estate land the reclamation procedures on the road and well pad shall be accomplished in accordance with the private surface land owner agreement.