JAN 1 1 2010 Form 3160 (August 2007) NMOCD ARTESIA NITED STATES

R-111 Potash

OMB NO 1004-0137 Expires: July 31, 2010

	DEPARTMENT OF THE			. 5	Lease Serial No	9-9-08
	BUREAU OF LAND MAN		,	Ľ	NM-65	
	APPLICATION FOR PERMIT TO	DRILL	OR REENTER	. 6	If Indian. Allottee or Tril	be Name
•					N/A	
			,	7.	If Unit or CA Agreement	, Name and No
a	Type of Work: x DRILL	REEN	TER			
				· 1	Lease Name and Well N	0.'
Э.	Type of Well: Oil Well Gas Well Other	L_	Single Zone Multiple Zon	1	Martha AIK F	ederal#11
	Name of Operator OIL Wellper CON re/ Sation	with		· · · · · · · · · · · · · · · · · · ·	API Well No	;
	Yates Petroleum Corporation			,	30 015.7	37510
1.	Address	3b. Pho	one No. (include area code)	10	. Field and Pool, or Explor	ratory
	105 South Fourth Street, Artesia, NM 88210		505-748-1471		Livingston Ridg	ge Delaware
	Location of well (Report location clearly and In accordance w	vith any S	State requirements.*)	11	Sec., T., R., M., or Blk.	And Survey or Area
	At surface		, · · ·	:		
	2310' FNL & 990	d' FEL. I	UL H, SENE	1	Section 11-T2	22S-R31E
	At proposed prod. zone 2310' FNL &	& 1650' I	FWL, UL F, SENW		•	
4.	Distance in miles and direction from the nearest town or post off		,	12	. County or Parish	13. State
	The well is about 41 miles east of	f Carlsba	ad. NM.		Eddy	NM
5.	Distance from proposed*		· · · · · · · · · · · · · · · · · · ·	17. Spacin	g Unit dedicated to this we	
	location to nearest					
	property or lease line, ft.					
	(Also to nearest drlg. unit line, if any) 990'		560.00		SENW	
8.	Distance from proposed location*			20. BLM/	BIA Bond No. on file	
	to nearest well, drilling, completed,		8410 VD AGH	,		
	applied for, on this lease, ft. None		9142, WD 11/18/0	1 ']	NATIONWIDE BOND#	NMB000434
1.	Elevations (Show whether DF, KDB, RT, GL, etc.)		22. Aproximate date work will st	lart*	23 · Estimated duration	
	3564 GL		ASAP	-		
			24. Attachments			
he	following, completed in accordance with the requirements of On	ishore Oil	l and Gas Order No. 1 shall be atta	ched to this	form:	,
		N.			,	:
l.	Well plat certified by a registered surveyor.		4. Bond to cover the op	erations un	ess covered by existing bor	nd on file(see
2.	A Drilling Plan.		item 20 above).	*		•
3.	A Surface Use Plan (if the location is on National Forest System		•	-	-	
	SUPO must be filed with the appropriate Forest Service Office).		. 1	fic informat	ion and/ or plans as may be	e required by the
			BLM		* * * * * * * * * * * * * * * * * * *	
5.	Signature (4 www.	Name (Printed/ Typed)	Cy Cowan	Date G	15/08
itle				7	,	1 / 3
pp	roved By (Signature)	Name (Printed/Typed)	· ·	Date	<u> </u>
,	/s/ Jesse J. Juen	<u> </u>	/s/ Jesse J. 1	luen		1 6 2009
itle	PACTUSTATE DIRECTOR	Office	,		TE OFFICE	

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

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

* (Instructions on page 2)

Approval Subject to General Requirements & Special Stipulations Attached

Carlsbad Controlled Water Basin

Conditions of approval, if any, are attached.

SEE ATTACHED FOR CONDITIONS OF APPROVA Form 3160-5 (February 2005)

UNITED STATES DEPARTMENT OF THE INTERIOROCD-ARTESIA

FORM APPROVED OMB No 1004-0137 Expires March 31, 2007

If Indian, Allottee or Tribe Name

BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or reenter an

2310' FNL and 990' FEL Surface Hole Location, UL H

2310' FNL and 1650' FWL Bottom Hole Location, UL F

Section 11, T15S-R31E

5. Lease Serial No.

11. County or Parish, State

Eddy County, New Mexico

NM-65417

abandoned well. Use Form 3160-3 (APD)	i		
SUBMIT IN TRIPLICATE - Other insti	7.	If Unit or CA/Agreement, Name and/o	
1. Type of Well			
X Oil Well Gas Well Other	-	8.	Well Name and No
2. Name of Operator		7	Martha AIK Federal #11
Yates Petroleum Corporation 025575		9.	API Well No.
3a. Address	3b. Phone No. (include area code)	1	
105 South Fourth Street, Artesia, NM 88210	(505) 748-1471	10	Field and Pool, or Exploratory Area
4 Location of Well (Footage Sec. T. R. M. or Survey Description	on)	7	Livington Ridge Delaware

12. CHECK THE APPR	ROPRIATE BOX(ES) TO I	NDICATE NATURE C	OF NOTICE, REPORT, OR O	THER DATA					
TYPE OF SUBMISSION		TYPE OF ACTION							
Notice of Intent	Acidize Alter Casing	Deepen Fracture Treat	Production (Start/Resume) Reclamation	Water Shut-Off Well Integrity					
Subsequent Report Final Abandonment Notice	Casing Repair Change Plans Convert to Injection	New Construction Plug and Abandon Plug Back	Recomplete Temporarily Abandon Water Disposal	Other change drilling plans & casing, etc.					

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

Yates Petroleum Corporation wishes to change the Drilling Plan for the captioned well. Attached please find the new drilling plan and engineering plats.

Please note changes in the formation tops, casing depths, kick off point, cementing and mud programs.

14. I hereby certify that the foregoing is true and correct	
Name (Printed/Typed)	tle
// Cy Cowan	Land Regulatory Agent
Signature Da	ite
() () male	November 12, 2009
」、「大大」は、「大大」は、「大大大大大大大大大大大大大大大大大大大大大大大大大	ERAL OR STATE USE
Approved V /s/ Jesse J. Juen ACTI	STATE DIRECTOR DEC 1 6 2009
Conditions of approval, if any, are attached. Approval of this notice does not warrant of certify that the applicant holds legal or equitable title to those rights in the subject leas which would entitle the applicant to conduct operations thereon	r Office

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

'DISTRICT' I 1625 N FRENCH DR. HOBBS, NW 58240

Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

Form C-102

Revised October 12, 2005 Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

DISTRICT: II '301 W GRAND AVENUE, ARTESIA, KM 88210

DISTRICT III 1000 Rio Brazos Rd , Aztec, NM 87410

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

. . .

DISTRICT IV 1220 S ST. FRANCIS DR., SANTA FE, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 375K	Pool Code 39360	Pool Name Livingston Ridge Delaw	are'.
Property Code	-	erty Name IK" FEDERAL	Well Number 11
OGRID No. 025575		ator Name EUM CORPORATION	Elevation . 3564'

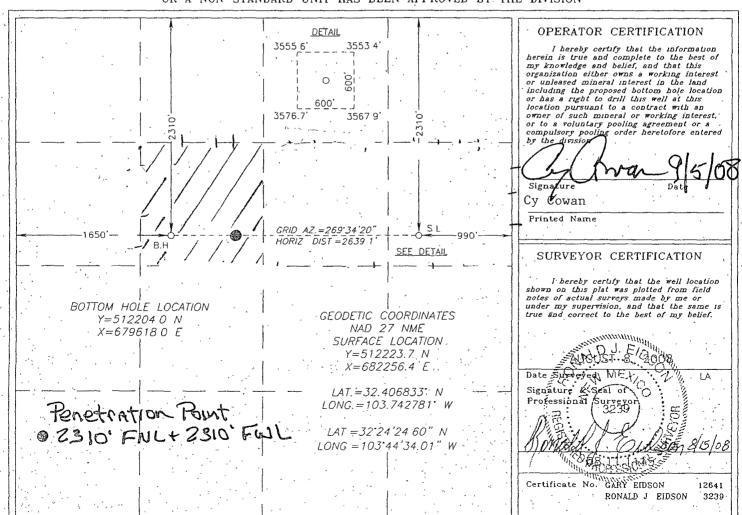
Surface Location

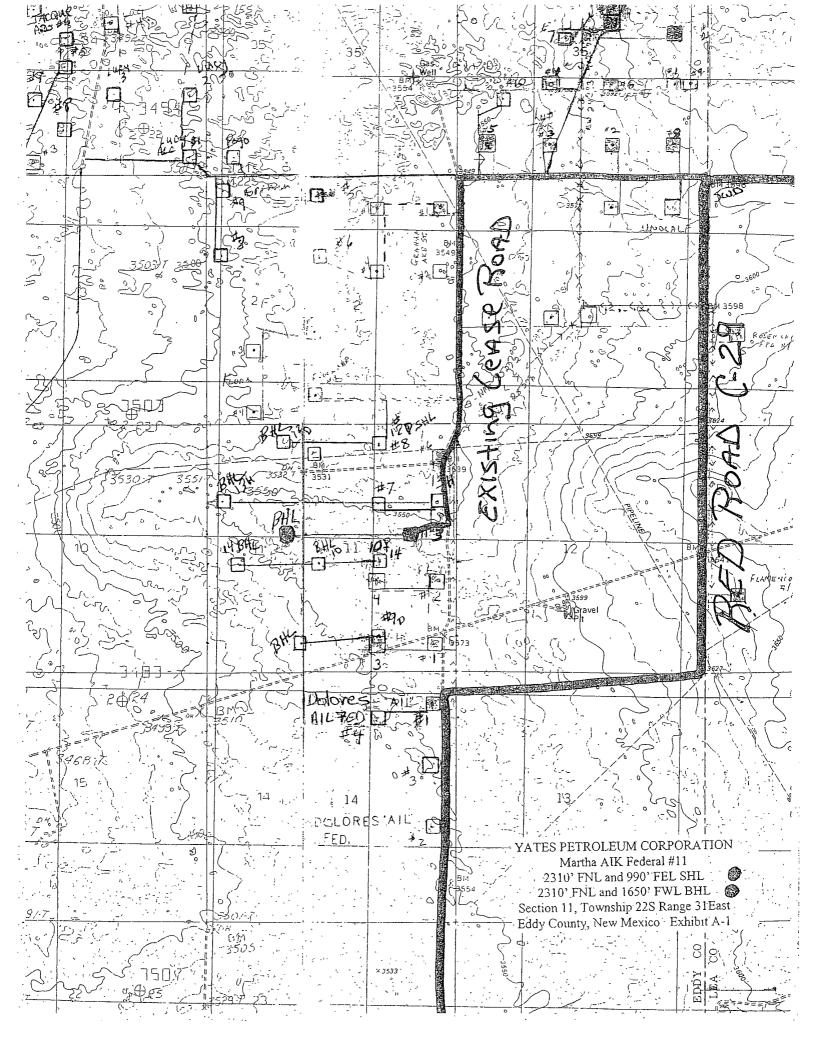
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	.11	22-S	31-E	`	2310	NORTH	990	EAST	EDDY

Bottom Hole Location If Different From Surface

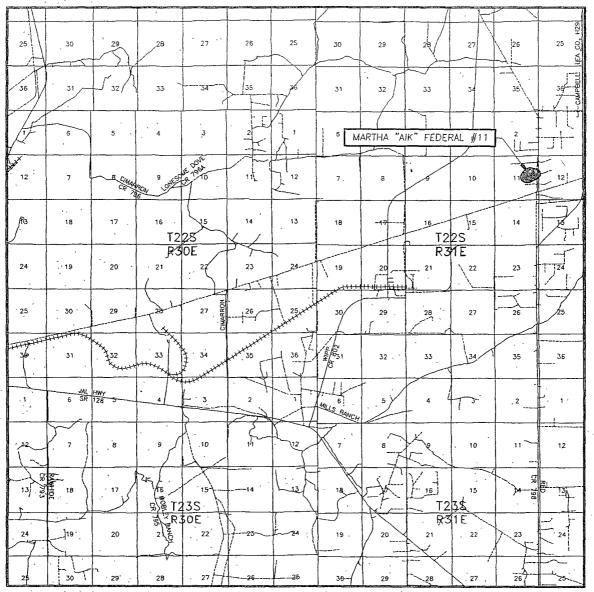
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	11	22-S	31-E		2310	NORTH	1650 -	WEST	EDDY
Dedicated ACT	es Joint o	r Infill Co	nsolidation (Code Ore	der No.				-

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





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 2310' FNL & 990' FEL

ELEVATION 3564'

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 #11
2310' FNL and 990' FEL SHL
2310' FNL and 1650' FWL BHL
Section 11, Township 22S Range 31East
Eddy County, New Mexico Exhibit A



SECTION 11, TOWNS	Jriir 22 J	JOIII, MAI	VOL OI	NEW.	MEXICO
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3576.7'	-	600'			
		YATES PET.	ROLEUM COR tha AIK Federal		5007.9
			NL and 990' FE	5	
DIRECTIONS TO LOCATION			NL and 1650' FV		
DIRECTIONS TO LOCATION			Fownship 22S R y, New Mexico		٠.,
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GO SOUTH APPROX. 1.5 MILES TO	THE MARTHA	VATEC D	ETPOLEI	IM CODE	ODATIO
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#3 LOCATION, FOLLOW ROAD SURVI SOUTHWEST CORNER OF PAD APPR WEST TO THIS LOCATION.			MARTHA "AIK" FEDE		LIME
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20	22	23	YATES PET	ROLEUM CORPORA tha AIK Federal #11	MOI
less page	v.š.	Texas Cr. Pright Fas. 70 8708 10 10 10 10 10 10 10 10 10 10 10 10 10	2310' I 2310' F	NL and 990' FEL SHL NL and 1650' FWL BH Township 22S Range 3	
113		A Pogo frod p	Eddy Coun	ty, New Mexico Exhib	oit D
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		MIDLAND MAP	"MAY-Fad" U.S. OIS		
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YATES PETROLEUM CORPORATION Martha AIK Federal #11 2310' FNL and 990' FEL, Surface Hole 2310' FNL & 1650' FWL, Bottom Hole Section 11-T22S-R32E 31 E Eddy County, New Mexico

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

Rustler	755'	Livingston Ridge	7330' Oil
Top of Salt	1000'	Brushy Canyon	7645' Oil
Base of Salt	3958'	Bone Springs	9016' Oil
Bell Canyon	4552'	TMD TVD	8600 8410
Cherry Canyon	5511' Oil	TMD	9359'

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

Water:

47' +/-

Oil or Gas: Oil Zones: 5511', 7330', 7645', and 9016'

- 3. Pressure Control Equipment: BOPE's will be installed on both the 13 3/8" and 8 5/8" casing and rated for 3000# BOP System. Pressure tests will be conducted before drilling out from under all casing strings, which are set and cemented in place. Blowout Preventer controls will be installed prior to drilling the surface plug and will remain in use until the well is completed or abandoned. Preventers 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 casing to be used

	<u>Hole Size</u>	Casing Size	Wt./Ft	<u>Grade</u>	<u>Coupling</u>	<u>Interval</u>	<u>Length</u>
	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'
400	11"	8 5/8"	24#	J-55	ST&C	100-2200'	2100'
See LOA	 11"	8 5/8"	32#	J-55	ST&C	2200-4050'	1850'
0011	7 7/8"	5.5"	17#	L-80	LT&C	0'-3400' 9152'	3400'
	7 7/8"	5.5"	17#	J-55	LT&C	3400-9 359	5959 5752'

This well will be drilled vertically to approximately 4300'. At 4300' well will be kicked off and directionally drilled at 12 degrees per 100' with a 7 7/8" hole to 9359' MD (8600' TVD) where 5 1/2" casing will be set and cemented. This well will be orthodox at 2310' FNL & 2310' FWL. TVD at this point will be7550' TVD.

- 1. Minimum Casing Design Factors: Burst 1.0, Tensile Strength 1.8, Collapse 1.125
- B. CEMENTING PROGRAM:

Surface Casing: 450 sacks C Lite (WT 12.60 YLD 1.99). Tail in with 225 sacks C (WT 14.80 YLD 1.32). TOC is at surface.

Martha AIK Federal #11

Page Two

Surface Casing: 450 sacks 'C' Lite (WT 12.6 YLD 1.99). Tail in with 225 sacks 'C'

(WT 14.8 YLD 1.32)

Intermediate Casing: 900 sacks of Hal LtPr+'C' (WT 12.6 YLD 1.99). Tail in with

225 sacks 'C' (WT 14.8 YLD 1.32.). TOC surface.

Production Casing:

Stage One: 500 sacks PecoVILt (WT 13. YLD 1.41). TOC 7400'.

Stage Two: 275 sacks Lite Crete (WT 9.9 YLD 3.19). Tail in with 100 sacks

PecosVILt (WT 13.00 YLD 1.40). DV tool at 7400' TVD TOC 4500'.

Stage Three: 450 sacks Lite Crete (WT 9.9 YLD 3.19) Tail in with 100 sacks

PecosVILt (WT 13. YLD 1.40). DV Tool at 4500'. TOC surface.

6. MUD PROGRAM AND AUXILIARY EQUIPMENT:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	Viscosity	Fluid Loss
0-850	FW/Gel	8.60-9.20	32-34	N/C
850-4050	Brine Water	10-10.2	28	N/C
4050-7355	Cut Brine	8.7-9.1	28	N/C
7355-9359	Cut Brine	8.7-9.1	28	<10-15 cc

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

Logging: Platform Express; CMR

Coring: None anticipated DST's: None Anticipated

Mudlogging: Yes

See

COA

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

Maximum Anticipated BHP:

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

8410'

Abnormal Pressures Anticipated: None Lost Circulation Zones Anticipated: None. H2S Zones Anticipated: None Anticipated Maximum Bottom Hole Temperature: 150 F

9. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 45 days to drill the well with completion taking another 20 days.

M.D.R.K.	Inclination &	Azimuth 🗻	T.V.D	N+/S-	E+/W	DES:	#ToolFace	T.F. Ref [HS/GN]	AND THE SECOND
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1000	0	0	1000	0	0	0			TOS
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4325	3	270	4324.99	0	-0.65	12	0	HS	
4350	6	270	4349.91	0	-2.62	12	0	HS	
4375	9	270	4374.69		-5.88	12	0	HS	
4400	12	270	4399.27	0	-10.43	12	0	HS	
4425	15	270	4423.58	0	-16.27	12	0	HS	
4450	18	270	4447.54	0	-23.37	12	0	HS	
4475	21	270	4471.11	0	-31.71	12	0	HS	
4500	24	270	4494.2	0	-41.28	12	0	HS	
4525	27	270	4516.77	0	-52.04	12	0	HS	
4550	30	270	4538.73	0	-63.97	12	0	HS	
4552	30.24	270	4540.46	0	-64.97	12	0	HS	BELL CANYON
4570.63	32.48	270	4556.37	0	-74.66	12	0	HS	
5511.37	32.48	270	5350	0	-505.12	12	0	HS	CHERRY CANYON
7330.9	32.48	270	6885	0	-1482.09	12	0	HS	LIVINGSTON RIDGE
7645.03	32.48	270	7150	0	-1650.75	12	0	HS	BRUSHY CANYON
8119 17	32 48	270	7550	0	-1980	0			
8119 17	32.48	270	7550	0	-1980	2	180	HS	
8125	32 36	270	7554.92	0	-1983.13	2	180	HS	
8130.04	32.26	270	7559.19	0	-1985.82	0			
9015.99	32.26	270	8310	0	-2457.28	0			BONE SPRINGS
9359.37	⊲. /≨ 32:26 ∖,	270	<u>ੋ∂</u> ਂ-8 600	T-1250	2640	25: 25 0 ;?+**	4 <u>2 8</u> 26 85	dig the first office of the	ar SgatTD~Sgata

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Well will be drilled vertically to approx. 4300'. At 4300' well will be kicked off and directionally drilled at 12 degrees per 100' with a 7 7/8" hole to 9,389' MD (8,690' TVD) where 5 1/2" casing will be set and cemented. This well will be orthodox at 2310' FNL & 2310' FWL(TVD at this point will be 7550').

8410

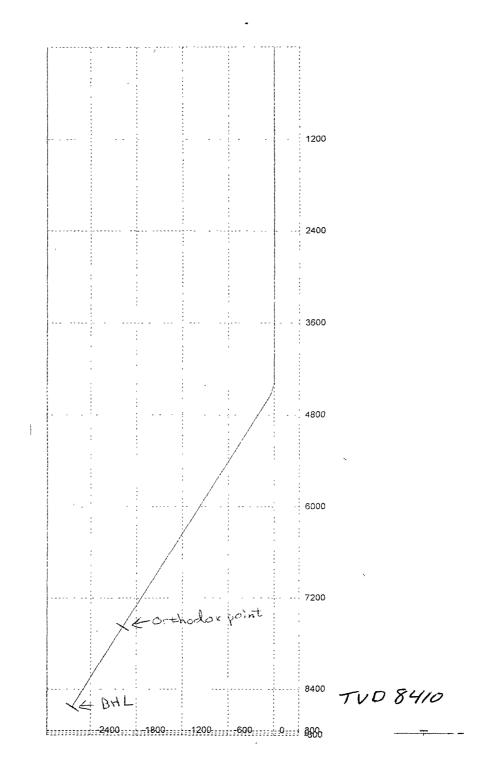
-per Armando Lopez
11/12/09 - conversation w/ Don Peterson

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3D³ Directional Drilling Planner - 3D View

Company: Yates Petroleum Corporation

Well: Martha AlK Federal #11



10011

more and the same

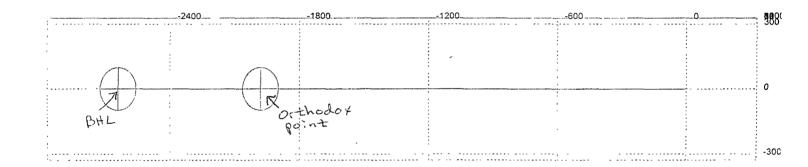
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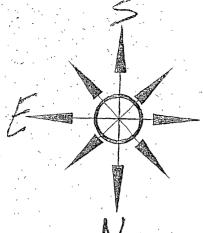
3D³ Directional Drilling Planner - 3D View

Company: Yates Petroleum Corporation

Well: Martha AIK Federal #11



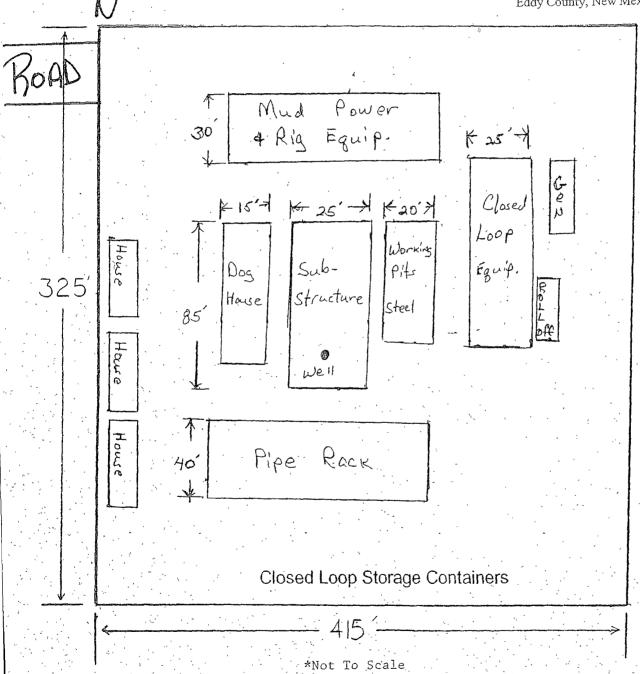
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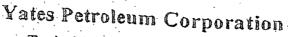


Yates Petroleum Corporation
Location Layout for Permian Basin

Closed Loop Design Plan

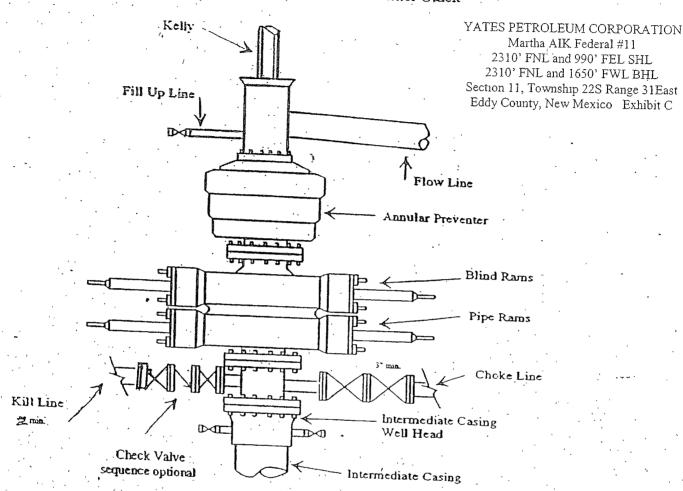
YATES PETROLEUM CORPORATION Martha AIK Federal #11 2310' FNL and 990' FEL SHL 2310' FNL and 1650' FWL BHL Section 11, Township 22S Range 31East Eddy County, New Mexico Exhibit B



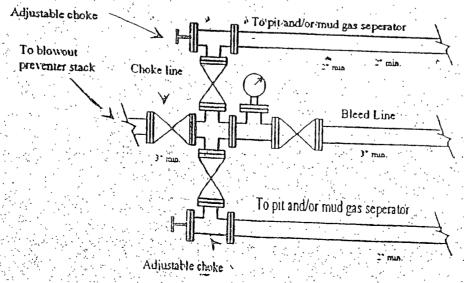


BOP-3

Typical 3.000 psi Pressure System
Schematic
Annular with Double Ram Preventer Stack



Typical 3,000 psi choke manifold assembly with at least these minimum features



Yates Petroleum Corporation

105 S. Fourth Street Artesia, NM 88210

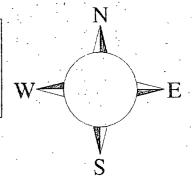
Hydrogen Sulfide (H₂S) Contingency Plan

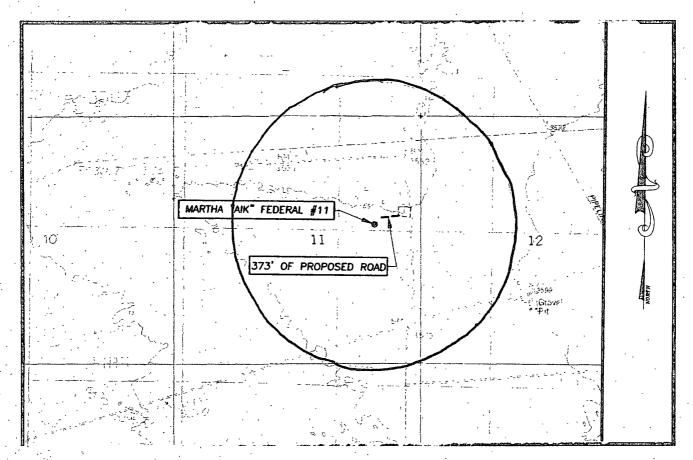
For

Martha AIK Federal #11
2310' FNL, 990' FEL, Surface Hole
2310' FNL, 1650' FWL, Bottom Hole
Section 11, T-22S, R-31E
Eddy County NM

Martha AIK Federal #11 Location

This is an open drilling site. H₂S monitoring equipment and emergency response equipment will be used within 500' of zones known to contain H₂S, including warning signs, wind indicators and H₂S monitor.





Assumed 100 ppm ROE = 3000° 100 ppm H2S concentration shall trigger activation of this plan.

Emergency Procedures

In the case of a release of gas containing H₂S, the first responder(s) must isolate the area and prevent entry by other persons into the 100 ppm ROE. Additionally the first responder(s) must evacuate any public places encompassed by the 100 ppm ROE. First responder(s) must take care not to injure themselves during this operation. Company and/or local officials must be contacted to aid in this operation. Evacuation of the public should be beyond the 100 ppm ROE.

All responders must have training in the detection of H_2S , measures for protection against the gas, equipment used for protection and emergency response. Additionally, responders must be equipped with H_2S monitors and air packs in order to control the release. Use the "buddy system" to ensure no injuries during the response.

Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO₂). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas

Characteristics of H₂S and SO₂

Common Name	Chemical [†] Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentr- ation
Hydrogen Sulfide	H ₂ S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO ₂	2.21 Air = 1	2 ppm	N/A	1000 ppm

Contacting Authorities

YPC personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available. The following call list of essential and potential responders has been prepared for use during a release. YPC Company response must be in coordination with the State of New Mexico's 'Hazardous Materials Emergency Response Plan' (HMER)

Yates Petroleum Corporation Phone Numbers

	,
YPC Office Paul Ragsdale/Operations Manager Ron Beasley/Production Manager	(575) 748-1471
Paul Ragsdale/Operations Manager	(575) 748-4520
Ron Beasley/Production Manager	(575) 748-4210
Ron Beasley/Production Manager Wade Bennett/Prod Superintendent	(575) 748-4236
Mike Lankin/Drilling	(575) 748-4220
Paul Hanas/Prod Foreman/Passys11	(575) 624 2805
Paul Hanes/Prod. Foreman/Roswell Tim Bussell/Drilling Superintendent	(373) (24-2003) (575) 749 (575)
Artesia Answering Service	(373) 740 -4 221
(During non-office hours)	(3/3) /48-4302
Agency Call List	,
	•
Eddy County (505)	,
Eduly County (505)	
Artesia	
State Police	746 2703
City Police.	
Sheriff's Office	
Ambulance	
Fire Department	
LEPC (Local Emergency Planning Committee)	
NMOCD	748-1283
	÷
Carlsbad	
State Police	885-3137
City Police	885-2111
Sheriff's Office	887-7551
Ambulance	911
Fire Department	885-2111
LEPC (Local Emergency Planning Committee)	
US Bureau of Land Management	
Ob Dureau of Dand Wanagoment	007-03-1-
Novy Maying Emergency Degrange Commission (Conta Es)	(505) 476, 0600
New Mexico Emergency Response Commission (Santa Fe)	
24 HR	(505) 827-9126
New Mexico State Emergency Operations Center	
National Emergency Response Center (Washington, DC)	(800) 424-8802
Other	
Boots & Coots IWC1-800-256-9688 or (281) 931-8884	
Cudd Pressure Control(915) 699-0139 or (915) 563-3356	
Halliburton(505) 746-2757	
B. J. Services(505) 746-3569	
Flight For Life -4000 24th St, Lubbock, TX(806) 743-9911
Flight For Life -4000 24th St, Lubbock, TX	(806) 747-8923

MULTI-POINT SURFACE USE AND OPERATIONS PLAN YATES PETROLEUM CORPORATION

Martha AIK Federal #11
2310' FNL & 990' FEL, Surface Hole
2310' FNL & 1650' FWL, Bottom Hole
Section 11-T22S-R31E
Eddy County, New Mexico

This plan is submitted with Form 3160-3, Application for Permit to Drill, covering the above described well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of the surface disturbance involved and the procedures to be followed in 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 41 miles east of Carlsbad, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

DIRECTIONS: Go east out of Carlsbad, New Mexico on 62/180 to the Halfway Watering Hole. Continue east for approximately 0.7 of a mile to Campbell Road (C-29). Turn south and go approximately 8.2 miles to a lease road on the west side of the road. Turn west and go approximately 1.0 mile. Turn left (south) and go south approximately 1.5 miles to the Martha AIK Federal #5 well pad. The new road will start here going from the southwest corner of the pad going west about 400' to the southeast corner of the proposed Martha AIK Federal #11 well pad.

2. PLANNED ACCESS ROAD:

- A. The proposed new access will be approximately 0.1 of a mile 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 both sides. No traffic turnouts may be needed.
- D. The route of the road is visible.
- Existing roads will be maintained in the same or better condition.

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 until an electric line can be built, if needed.

5. LOCATION AND TYPE OF WATER SUPPLY

A. It is planned to drill the proposed well with a brine 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:

The dirt contractor will be responsible for finding a source of material for construction of road and pad and will obtain any permits that may be required.

7. METHODS OF HANDLING WASTE DISPOSAL:

A. A closed loop system will be used to drill this and reserve pits will not be...

B. The closed loop system 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. Form C-144 attached.

C. Drilling fluids will be removed after drilling and completions are completed.

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.
- B. The closed loop system will be installed, maintained and closed per the NMOCD Pit Rule...
- C. A 600' x 600' area has been staked and flagged.

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 will be filled level after they have evaporated and dried. Pit reclamation will meet 19.15.17 requirements.

Martha AIK Federal #11. Page Three

11. SURFACE OWNERSHIP:

Federal Lands under the supervision of the Carlsbad BLM.

12. OTHER INFORMATION:

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

CERTIFICATION YATES PETROLEUM CORPORATION Martha AIK Federal #11

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 filling of false statements.

Executed this
Printed Name Cy Cowan
Signature
Position Title Regulatory Agent
Address_105 South Fourth Street, Artesia, NM 88210
Telephone <u>575-748-4372</u>
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.: WELL NAME & NO.: NM65417 SURFACE HOLE FOOTAGE: Martha AIK federal # 11 BOTTOM HOLE FOOTAGE 2310' FNL & 990' FEL 2310' FNL & 1650' FWL LOCATION: Section 11, T. 22 S., R 31 E., NMPM COUNTY: Eddy County, New Mexico

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

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Special Requirements Lesser Pro-	Sites
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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

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

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)

Lesser Prairie Chicken Timing and Low Profile Well Marker

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

NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (505) 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.

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.

Closed Loop System

Tanks are required for drilling operations: No Pits.

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

FEDERAL MINERAL MATERIALS PIT

If the operator elects to surface the access road and/or well pad, mineral materials D. 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 (505) 234-5972.

WELL PAD SURFACING E.

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.

ON LEASE ACCESS ROADS Tr.

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

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

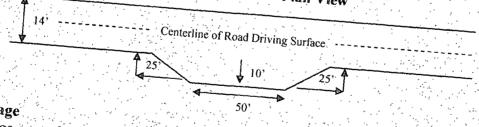
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction. Ditching

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

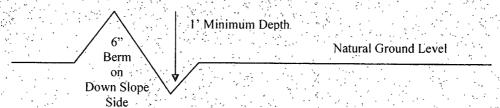


Drainage

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.

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

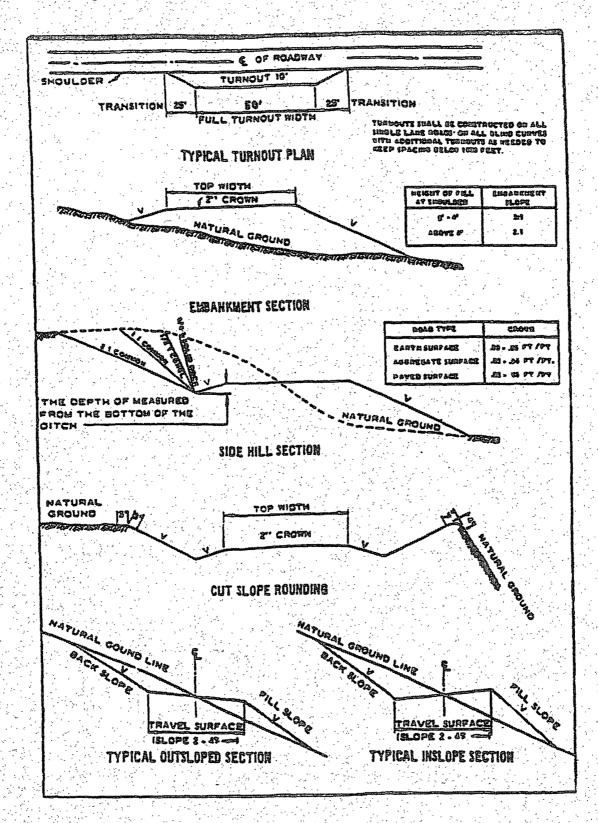
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

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.

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 feet 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 13-3/8" surface casing shoe shall be 3000 (3M) psi.
- 3. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. 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.

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.

DRILL STEM TEST D.

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

WIPP Requirements E.

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 111809

VIII. PRODUCTION (POST DRILLING)

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**

ELECTRIC LINES

IX. INTERIM RECLAMATION & RESERVE PIT CLOSURE

4. 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 <u>no</u> primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law (s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

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

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

<u>Species</u>			l <u>b/acre</u>
Sand dropseed (Sp	orobolus cryptandr	us)	1.0
Sand love grass (E	ragrostis trichodes)		1.0
Plains bristlegrass			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.