OCD-ARTESIA

Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE – *Other instructions on page 2.*

1. Type of Well ☑ Oil Well ☐ Gas Well ☐ Other	5 Lease Serial No. NM-94614
	6. If Indian, Allottee or Tribe Name N/A
	7 If Unit of CA/Agreement, Name and/or No. N/A
	8. Well Name and No. Domino "AOJ" Federal Com. #9H
2 Name of Operator Yates Petroleum Corporation	9. API Well No 30-015-35804
3a. Address 105 South Fourth Street, Atesia, New Mexico 88210 3b Phone No. *(include area code)* 575-748-4347	10 Field and Pool or Exploratory Area Undesignated Bone Spring
4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)* 660' FSL & 660' FWL, SWSW, Section 8-T19S-R31E, Surface Location 660' FSL & 330' FEL, SESE, Section 8-T19S-R31E, Bottom Hole Location	11. Country or Parish, State Eddy County, New Mexico

RECEIVED
MAR 10 2010
NMOCD ARTESIA

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

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

13. Describe Proposed or Completed Operation Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA Required subsequent reports 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 name of the well from Checker "BIC" Federal Com. #2 to the Domino "AOJ" Federal Com #9H. YPC is changing the depth of the well to 9100' TVD and making this a horizontal well in the bone spring. Attached are new C-102 and horizontal diagrams.

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

SUBJECT TO LIKE
APPROVAL BY STATE

14. I hereby certify that the foregoing is true and correct Name *(Printed/Typed)*
Clifton May

Title Land Regulatory Agent

Signature

Date 2/12/10

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

APPROVED
MAR 5 2010
/s/ Chris Walls
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

Approved by

Title

Date

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

Office

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

(Instructions on page 2)

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410
DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

Form C-102
Revised October 15, 2009

Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name

Property Code	Property Name	Well Number
	DOMINO "AOJ" FEDERAL COM	9H
OGRID No.	**Operator Name**	**Elevation**
	YATES PETROLEUM CORP.	3458'

Surface Location

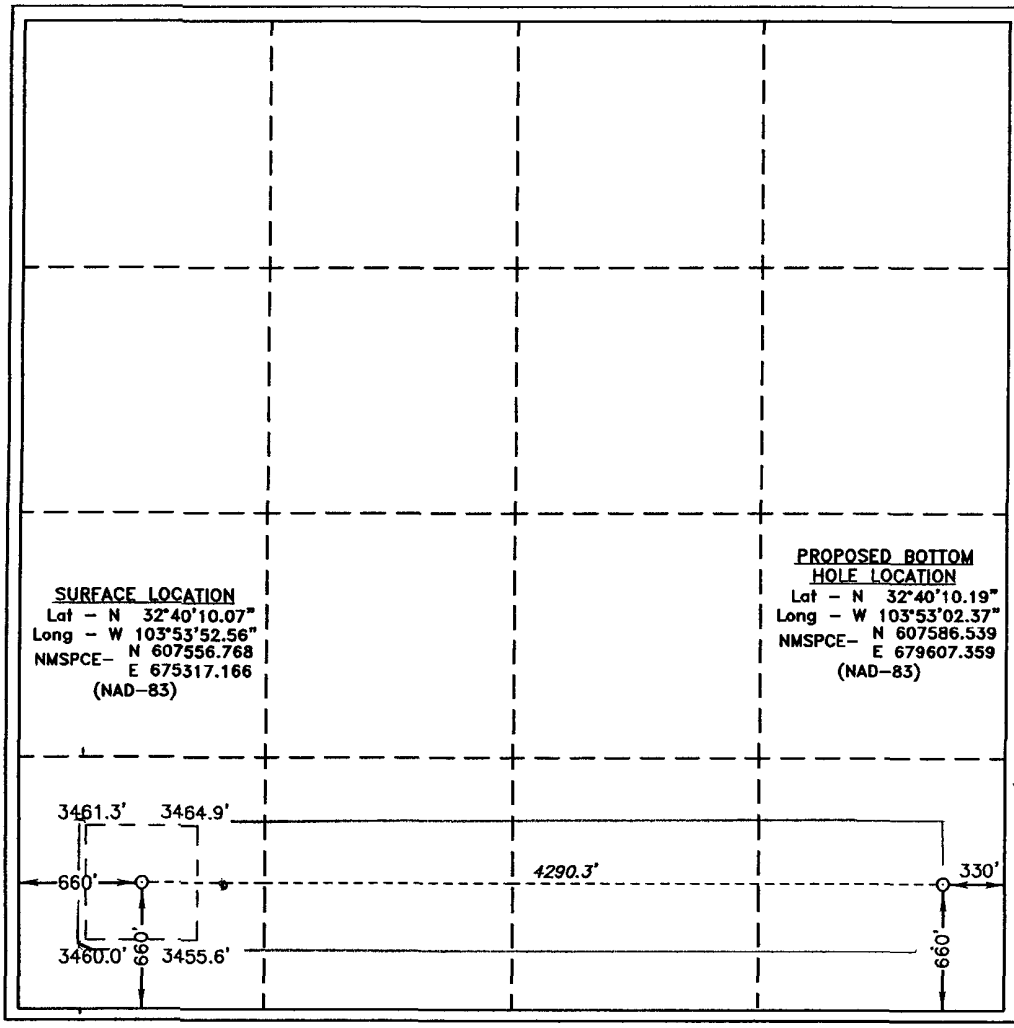
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	8	19 S	31 E		660	SOUTH	660	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	8	19 S	31 E		660	SOUTH	330	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order 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



OPERATOR CERTIFICATION

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

Signature 2/12/10 Date

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 supervison, and that the same is true and correct to the best of my belief.

JANUARY 09, 2010
Date Surveyed

Signature & Seal of Professional Surveyor
7977

NEW MEXICO
REGISTERED PROFESSIONAL SURVEYOR
No. 22082

Certificate No. Gary L. Jones 7977

BASIN SURVEYS

YATES PETROLEUM CORPORATION
Domino AOJ Federal Com. #9H
660' FSL & 660' FWL, Surface Hole
660'FSL & 330' FEL, Bottom Hole
Section 8 -T19S-R31-E
Eddy County, New Mexico

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

Rustler	518'	1st Bone Spring	7800' Oil Pay
Tansill	2140' Oil Pay	2nd Bone Spring	8590' Oil Pay
Yates	2280' Oil Pay	TD (Lateral Hole)	8770'
Seven Rivers	2630' Oil Pay	TD (Pilot Hole)	9100'
Queen	3200' Oil Pay		
Capitan	3800' Oil Pay		
Cherry Canyon	4050' Oil Pay		
Brushy Canyon	4860' Oil Pay		
Bone Spring	6400' Oil Pay		

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

Water: Approx 250' - 350'
Oil or Gas: All Potential Zones

3. Pressure Control Equipment: BOPE will be installed on the 13 3/8" and 9 5/8" casing and rated for 3000 BOP systems 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.

Auxiliary Equipment:

A. 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.

4. 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	0-550'	550'
12 1/4"	9 5/8"	36#	J-55	ST&C	0-3300'	3300'
8 3/4"	5 1/2"	17#	HCP-110	LT&C	0-12855'	12855'

Minimum Casing Design Factors: Burst 1.0, Tensile 1.8, Collapse 1.125

B. CEMENTING PROGRAM:
Surface casing: 250 sacks C Lite (YLD 2.01 WT.12.5) tail in w/200 sacks Class (YLD1.3WT 14.8). TOC-Surface.

Intermediate Casing: 910 sacks C Lite (YLD 2.06 WT 12.5); tail in w/200 sacks Class C (YLD 1.34 WT. 14.8) TOC-Surface

Production Casing: Cement to be done in two stages with stage tool at approx. 4300'

Stage 1 from 4300'-12855'; cement w/2550 sacks Pecos Valley Lite (YLD 1.41 WT. 13.0). TOC-4300

Stage 2 from 2800'-4300'; cement w/550 sacks Pecos Valley Lite (YLD 1.41 WT 13.0) TOC-2800'.

Pilot hole will be drilled vertically to 9100'. Well will be plugged back with a 400'-500' plug, then kicked off at approximately 8293' and directionally drilled at 12 degrees per 100' with a 7 7/8" hole to 12,855' MD (8770' TVD) where 5 1/2" casing will be set and cemented. Penetration point of producing zone will be encountered at 660' FSL & 1138' FWL. Deepest TVD in the well is 9100' in pilot hole. Deepest TVD in the lateral will be 8770'. An isolation plug on the bottom of pilot hole is not warranted on this well due to the fact that there will be no change in formation between the kick off plug and bottom of the pilot hole.

5. Mud Program and Auxiliary Equipment:

Interval	Type	Weight	Viscosity	Fluid Loss
0-550'	Fresh Water	8.6-9.2	35-40	N/C
550'-3300'	Brine Water	10.0-10.2	28	N/C
3300'-9100'	Cut Brine	8.7-9.2	28-29	N/C
8293'-12855'	Cut Brine (lateral)	8.8-9.0	28-32	<12

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. Mud will be checked hourly by rig personnel.

6. EVALUATION PROGRAM:

Samples: 10 samples out from under surface casing.
Logging: Platform Express/Hals/Sonic,CMR.
Coring: As warranted.
DST's: As warranted.

7. Abnormal Conditions, Bottom hole pressure and potential hazards:
Anticipated BHP:

From:	0	TO:	550'	Anticipated Max. BHP:	263	PSI
From:	550'	TO:	3300'	Anticipated Max. BHP:	1750	PSI
From:	3300'	TO:	9100	Anticipated Max. BHP:	4353	PSI

No abnormal pressures or temperatures are anticipated.

Lost Circulation Zones Anticipated: None.

H2S Zones Anticipated: None

8. ANTICIPATED STARTING DATE:

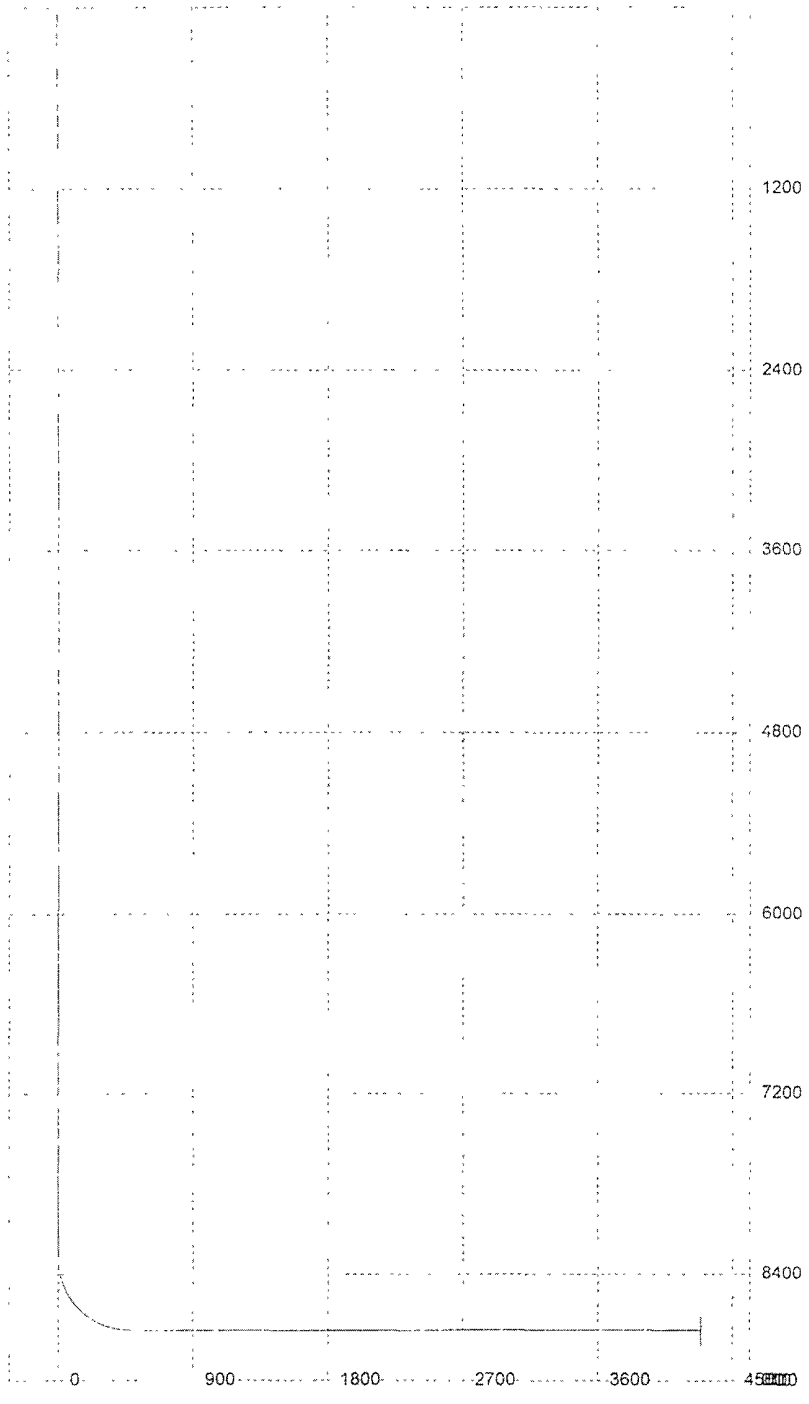
Plans are to drill this well as soon as possible after receiving approval. It should take approximately 45 days to drill the well with completion taking another 15 days.

M.D.	Inclination	Azimuth	T.V.D.	N+/S-	E+/W-	D.L.S.	ToolFace	T.F. Ref [HS/GN]	
0	0	0	0	0	0	0			
518	0	0	518	0	0	0			RUSTLER
2140	0	0	2140	0	0	0			TANSILL
2280	0	0	2280	0	0	0			YATES
2630	0	0	2630	0	0	0			SEVEN RIVERS
3200	0	0	3200	0	0	0			QUEEN
3800	0	0	3800	0	0	0			CAPITAN
4050	0	0	4050	0	0	0			CHERRY CANYON
4860	0	0	4860	0	0	0			BRUSHY CANYON
6400	0	0	6400	0	0	0			BONE SPRINGS
7800	0	0	7800	0	0	0			FIRST BONE SPRINGS
8293	0	0	8293	0	0	12	90	GN	KOP
8300	0.84	90	8300	0	0 05	12	0	HS	
8325	3 84	90	8324.98	0	1 07	12	0	HS	
8350	6 84	90	8349.87	0	3.4	12	0	HS	
8375	9.84	90	8374.6	0	7.02	12	0	HS	
8400	12.84	90	8399 11	0	11.94	12	0	HS	
8425	15 84	90	8423.33	0	18.13	12	0	HS	
8450	18.84	90	8447.19	0	25.58	12	0	HS	
8475	21.84	90	8470.62	0	34.27	12	0	HS	
8500	24 84	90	8493.58	0	44 17	12	0	HS	
8525	27 84	90	8515.98	0	55 26	12	0	HS	
8550	30.84	90	8537.77	0	67 51	12	0	HS	
8575	33.84	90	8558 89	0	80.88	12	0	HS	
8600	36 84	90	8579 28	0	95.34	12	0	HS	
8614	38 52	90	8590.36	0	103 9	12	0	HS	2nd BONE SPRINGS
8625	39.84	90	8598 89	0	110 85	12	0	HS	
8650	42.84	90	8617.65	0	127 36	12	0	HS	
8675	45.84	90	8635.53	0	144 83	12	0	HS	
8700	48.84	90	8652.47	0	163.21	12	0	HS	
8725	51 84	90	8668 43	0	182.46	12	0	HS	
8750	54.84	90	8683.35	0	202.51	12	0	HS	
8775	57.84	90	8697.21	0	223 32	12	0	HS	
8800	60 84	90	8709.95	0	244 82	12	0	HS	
8825	63.84	90	8721.56	0	266 96	12	0	HS	
8850	66.84	90	8731.99	0	289 68	12	0	HS	
8875	69.84	90	8741.21	0	312 91	12	0	HS	
8900	72.84	90	8749.21	0	336 59	12	0	HS	
8925	75 84	90	8755.96	0	360 66	12	0	HS	
8950	78.84	90	8761.44	0	385.05	12	0	HS	
8975	81.84	90	8765.63	0	409 69	12	0	HS	
9000	84.84	90	8768.53	0	434.52	12	0	HS	
9025	87.84	90	8770.13	0	459.47	12	0	HS	
9043.06	90.01	90	8770.47	0	477.52	12	0	HS	TARGET ZONE
12855.54	90.01	90	8770	0	4290	0			LATERAL TD

Pilot hole drilled vertically to 9100'. Well will be plugged back with a 400'-500' kick off plug, then kicked off at approx. 8293' and directionally drilled at 12 degrees per 100' with a 7 7/8" hole to 12,855' MD (8770' TVD) where 5 1/2" casing will be set and cemented. Penetration point of producing zone will be encountered at 660' FSL and 1138' FWL, 8-19S-31E. Deepest TVD in the well is 9100' in the pilot hole. Deepest TVD in the lateral will be 8770'. An isolation plug on the bottom of the pilot hole is not warranted on this well due to the fact that there will be no change in formation between the kick off plug and the bottom of the pilot hole.

3D³ Directional Drilling Planner - 3D View

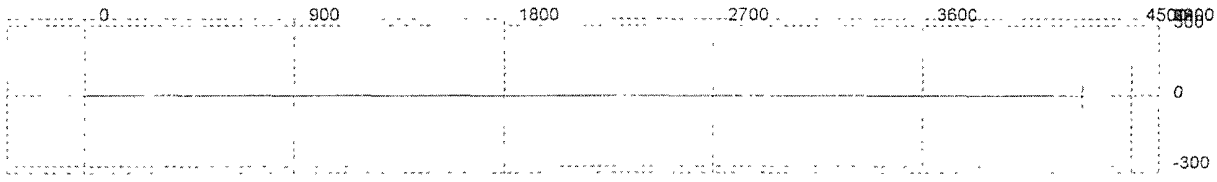
Company: **Yates Petroleum Corporation**
Well: **Domino AOJ Federal Com. #9H**



File: G:\drilling toolbox wellplans\Horizontal\domino9h.wpp

3D³ Directional Drilling Planner - 3D View

Company: **Yates Petroleum Corporation**
Well: **Domino AOJ Federal Com. #9H**



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MULTI-POINT SURFACE USE AND OPERATIONS PLAN
Yates Petroleum Corporation
Domino AOJ Federal Com. #9H
660' FSL & 660' FWL, Surface Hole
660' FSL & 330' FEL, Bottom Hole
Section. 8, T-19S-R31-E
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 15 miles southeast of Loco Hills, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

DIRECTIONS:

Go east of Loco Hills on Highway 82 approx. 4.8 miles to County Road (222) Sugart Road. Turn south and go approx. 10 miles cattle guard on right. Turn west crossing cattle guard and go on caliche road for approx. 1.5 miles going toward the Domino #2 location. Approximately 300 feet before the Domino #2 the new road starts here going west for approximately 0.5 of a mile to the southeast corner of the well location.

2. PLANNED ACCESS ROAD.

A. The proposed new access will go west approximately 0.5 of a mile to the southeast corner of the drilling pad. The road will lie in an east to west direction.
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 side. Traffic turnouts may be built.
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 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 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:

Dirt contractor will locate closest pit and obtain any permits and materials needed for construction.

7. METHODS OF HANDLING WASTE DISPOSAL:

A. This well will be drilled with a closed loop system.
B. The closed loop system will be constructed, maintained, and closed in compliance with the State of New Mexico, Energy and Natural Resources Department, OCD-the "Pit Rule" 19.15.17 NMAC.
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 disposed in an approved sanitary landfill. Burial onsite is not allowed.

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, rig orientation and access road approach.
B. The closed loop system will be constructed, maintained, and closed in compliance with the State of New Mexico, Energy and Natural Resources Department of New Mexico, Oil Conservation Division – the "Pit Rule" 19.15.17 NMAC.
C. A 400' x 400' 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 non-productive, 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.

11. SURFACE OWNERSHIP: Federal surface, Administered by the Bureau of Land Management, Carlsbad, New Mexico.

12. OTHER INFORMATION:

A. Topography: Refer to the existing 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
Domino AOJ Federal Com. #9H
660' FSL & 660' FWL, Surface Hole
660' FSL & 330' FEL, Bottom Hole
Section 8-T19S-R31E
Eddy County, New Mexico

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 12th day of February, 2010.

Printed Name Cy Cowan

Signature

Position Title Land Regulatory Agent

Address 105 South Fourth Street, Artesia, NM 88210

Telephone 575-748-4376

E-mail (optional) cy@yatespetroleum.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**
LEASE NO.:	**NM-94614**
WELL NAME & NO.:	**Domino AOJ Fed Com 9H**
SURFACE HOLE FOOTAGE:	**660' FSL & 660' FWL**
LOCATION:	**Section 8, T. 19 S., R 31 E., NMPM**
COUNTY:	**Eddy County, New Mexico**

I. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

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

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

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

1. **Although Hydrogen Sulfide has not been reported in this section, it is always a possible hazard. It has been reported in the Township to the east. 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 are 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.

Possible loss circulation in the Artesia Group and the Capitan Reef.
Possible water flows in the Artesia and Salado Groups.
High pressure gas bursts possible in the Wolfcamp and the Pennsylvanian section may be over pressured.

1. The **13-3/8** inch surface casing shall be set at **approximately 550 feet feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt)** and cemented to the surface.

    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 a surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

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

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

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

2. The minimum required fill of cement behind the **8-5/8** inch intermediate casing is:

☒ Cement to surface. If cement does not circulate see B.1.a, c-d above.

Variance is approved to set only a 500' kick off plug in the pilot hole. The pilot hole does not require an isolation plug since the pilot hole is entirely in the Bone Spring formation.

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

☒ Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification.

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

C. PRESSURE CONTROL

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

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

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

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

a. Casing cut-off and BOP installation will not be initiated until the cement has had a minimum of 8 hours setup time for a water basin. The casing shall remain stationary and under pressure for at least eight hours after the operator places the cement. In the potash area, the minimum time is 12 hours and the casing shall remain stationary and under pressure during this time period. Casing shall be under pressure if the operator uses some acceptable means of holding pressure or if the operator employs one or more float valves to hold the cement in place. Testing the BOP/BOPE against a plug can commence after meeting the above conditions plus the BOP installation time.

b. The tests shall be done by an independent service company utilizing a test plug.

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

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

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

D. DRILL STEM TEST

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

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