Form 3160-5
(March 2012)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Artesia

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2014

5. Lease Serial No.
NM - 65417

6. If Indian, Allottee or Tribe Name

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.*

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

1. Type of Well
☑ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
Martha AIK Federal 7H

2. Name of Operator
Yates Petroleum Corporation

9. API Well No.
~~#7H~~ 30-015-40051

3a. Address
105 S. Fourth St.
Artesia, NM 88210

3b. Phone No. *(include area code)*
575-748-4120

10. Field and Pool or Exploratory Area
Brushy Canyon

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)*
1750' FNL & 200' FEL SHL
1750' FNL & 330' FWL BHL, Sec. 11 of T22S - R31E

11. County or Parish, State
Eddy County, NM

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 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 would like to change the depth of the Martha AIK Federal #7H from the Livingston Ridge at a TD of 7060' and a MD of 11560' to the Brushy Canyon at a TD of ~~7919'~~ 7896 and a MD of 12530'. Please note the attached drilling plan and information.

RRDade 7/11/2013
Accepted for record
NMOCD

RECEIVED
JUL 11 2013
NMOCD ARTESIA

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

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

Title Land Regulatory Agent

Signature Travis Hahn

Date 04/23/2013

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

APPROVED
JUL 9 2013
/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)

YATES PETROLEUM CORPORATION
Martha AIK Federal #7H
1750' FNL & 200' FEL, Surface Hole
1750' FNL & 330' FWL, Bottom Hole
Section 11 –T22S-R31E
Eddy County, New Mexico

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

Rustler	680'	Cherry Canyon	5340' Oil
Top of Salt	990'	Livingston Ridge	7112' Oil MD
Base of Salt	4140'	Brushy Canyon	7175' Oil MD
Bell Canyon	4514'	Target Brushy Canyon	8266' Oil MD

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

Water: Approx. 0' - 650'
Oil or Gas: Oil Zones: 5340', 7112', 7175', 8266'

3. Pressure Control Equipment: 3000 PSI BOPE with a 13.625" opening will be installed on the 13.375" casing and a 5000 PSI BOPE with a 10.75" opening will be installed on the 7" and 4.5" casing. Pressure tests to 3000 PSI and 5000 PSI and then held for 30 minutes will be conducted before drilling out from under all casing strings, which are set and cemented in place. BOP Preventers and equipment will be tested to the pressure approved in the APD. Test will be conducted by an Independent Tester, utilizing a test plug in the well head. Test will be held for 10" on each segment of the system tested. Any leaks will be repaired at the time of test. Annular preventer will be tested to 50% of rated working pressure. Accumulator system will be inspected for correct pre charge pressures, and proper functionality, prior to connection to the BOP system. 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.

4. 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.

1. 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/J-55	ST&C	0-~~850'~~ 750 ~~850'~~	
12 1/4"	9 5/8"	40#	J-55	LT&C	0-80'	80'
12 1/4"	9 5/8"	36#	K-55	LT&C	80'-3200'	3120'
12 1/4"	9 5/8"	40#	J-55	LT&C	3200'-4200'	1000'
12 1/4"	9 5/8"	40#	HCK-55	LT&C	4200'-~~4600'~~ 4400 ~~400'~~ 200	
8 3/4"	7"	26#	J-55	LT&C	0-7400'	7400'
6 1/8"	4 1/2"	11.6#	P-110	Buttress Thread	0'-12530'	12530'

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

B. CEMENTING PROGRAM:
Surface Casing: 450 sacks of 35:65:6 PzC + 2% CaCl2 (YLD 2.00 WT.12.50). Tail in with 210 sacks of Class C + 2% CaCl2 (WT 14.80, YLD 1.34). Designed with 100% excess. TOC-Surface.

Intermediate Casing 1 (0-4600'): Lead with 1300 sacks of 35:65:6 PzC + 2% CaCl2 (YLD 2.00 WT 12.50); tail in with 200 sacks of Class C + 2% CaCl2 (YLD 1.34 WT. 14.80). Designed with 100% excess. TOC-Surface

Intermediate Casing 2: Stage 1 (6800'-7400') Lead with 130 sacks of Pecos Valley Lite (WT 13.0, YLD 1.41) 30%CaCO, 3.2% Expansion additive, 2% Antifoam, .8% Retarder, 15 Fluid loss.
Stage 2 (4650'-6800') Lead with 250 sacks of 35:65:6 PzC +2% CaCl2 (WT 12.5 YLD 2.0) and then Tail with 100 sacks of Pecos Valley Lite (WT 13.0, YLD 1.41) 30%CaCO, 3.2% Expansion additive, 2% Antifoam, .8% Retarder, 15 Fluid loss.
Stage 3 (0-4650') Lead with 555 sacks of 35:65:6 PzC + 2% CaCl2 (12.5 WT 2.0 YLD) and then Tail with 200 sacks of Class C + 2% CaCl2 (WT 14.8 YLD 1.34). Designed with 100% excess and TOC is surface.

Production Casing (6900'-12530'): Lead with 510 sacks of Pecos Valley Lite (WT 13.0 YLD 1.41) 30%CaCO, 3.2% Expansion additive, 2% Antifoam, .8% Retarder, 15 Fluid loss. Designed with 35% excess and TOC is 6900'.

An 8 3/4" hole will be drilled to approximately 7400' where 7" casing will be set with a stage packer between 6550' and 7050' and a DV between 4650' and 5150'. Well will be drilled vertically depth to 7509' well will then be kicked off and directionally drilled at 12 degrees per 100' with an 6 1/8" hole to 8266' MD (7986' TVD). Hole will then continue with 6 1/8" and drilled to 12530' MD (7919' TVD) where 4 1/2" casing will be set and cemented. Penetration point of producing zone will be encountered at 1754' FNL & 685' FEL, Section 11-22S-31E. Deepest TVD is 7986' in the lateral. NO PILOT HOLE.

5. Mud Program and Auxiliary Equipment:

Interval	Type	Weight	Viscosity	Fluid Loss
0-~~850'~~ 750	Fresh Water Gel	8.6-9.2	32-34	N/C
~~850'-4600'~~ 4400	Brine Water	10.0-10.20	28-29	N/C
~~4600'~~-7400'	Cut Brine	8.7-9.0	28-32	<10-15
7400'-12530'	Cut Brine (Lateral Section)	8.7-9.0	28-32	<10-12

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 from Intermediate casing.
Logging: MWD-GR – 500' before kickoff point
Coring: TBD.
DST's: TBD.
Mudlogger: On at 2500'.
Mud level monitoring: After surface casing is set, an electronic PVT system will be installed as our primary mud level monitoring system. A secondary system will also be implemented as to insure the PVT system is functioning properly. The secondary system will be comprised of the derrick hand checking the fluid level in the pits periodically using a nut on the end of a rope hanging just above the fluid level in the pit.

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

From:	0	TO: 850'	Anticipated Max. BHP:	407	PSI
From:	850'	TO: 4600'	Anticipated Max. BHP:	2440	PSI
From:	4600'	TO: 7400'	Anticipated Max. BHP:	3540	PSI
From:	7400'	TO: 7919'	Anticipated Max. BHP:	3788	PSI

No abnormal pressures or temperatures are anticipated.
H2S is not anticipated to be encountered on this well.

7. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 65 days to drill the well with completion taking another 30 days.

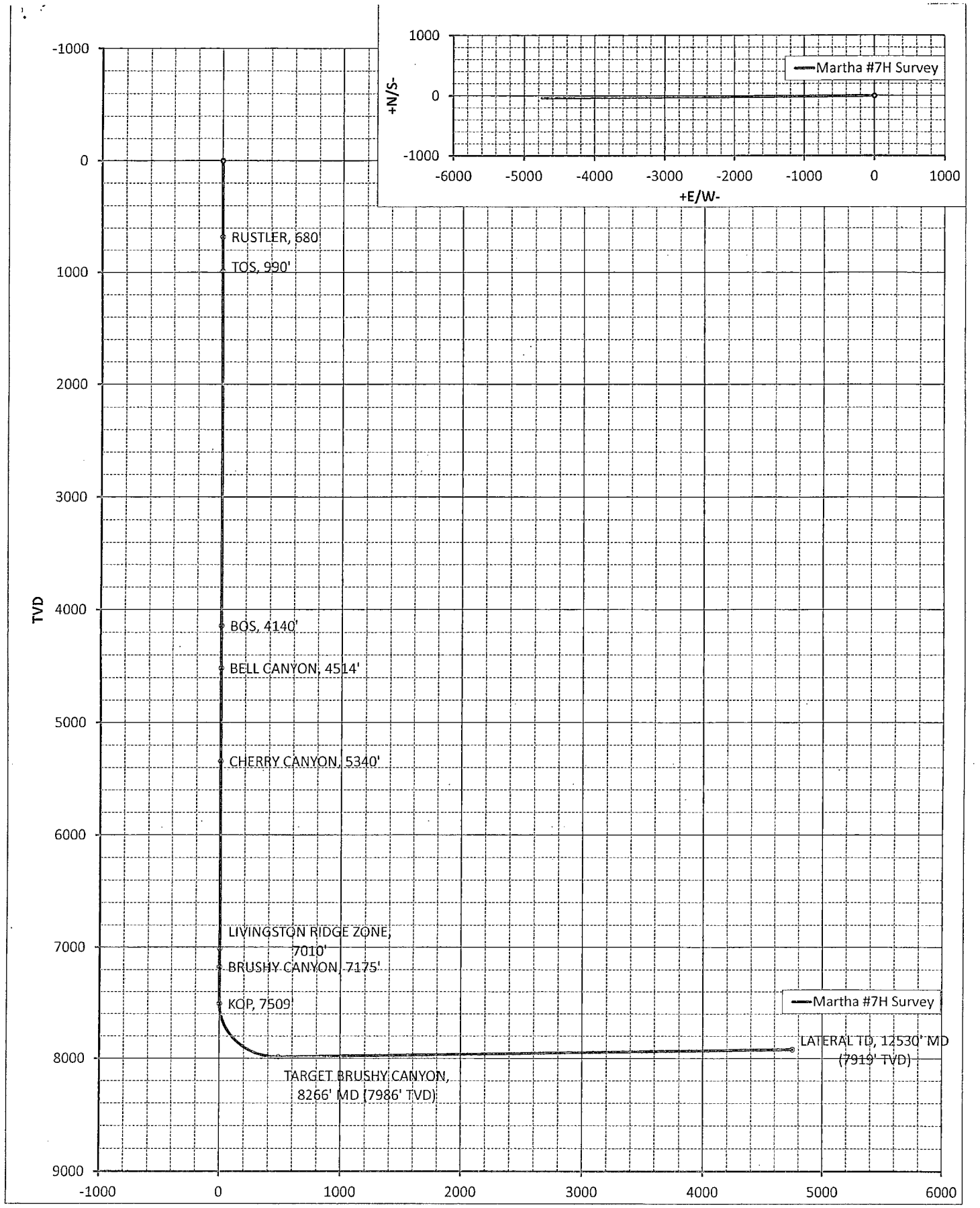
Operator Co.

Your Co.

Survey/Planning Report

Operator	Yates Petroleum Corp.	Northing		Date	18-Apr-13
Dir. Co.	Yates Petroleum Corp.	Easting		System	2 - St. Plane
Well Name	Martha #7H Survey	Elevation		Datum	1983 - NAD83
Location	Sec. 11, 22S-31E	Latitude		Zone	4302 - Utah Central
Rig		Longitude		Scale Fac.	
Job		Units	Feet	Converg.	

MD	INC	AZI	TVD	+N/S-	+E/W-	VS@269.57°	BR	TR	DLS
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
680.00	0.00	360.00	680.00	0.00	0.00	0.00	0.00	0.00	0.00
680: RUSTLER, 680'									
990.00	0.00	360.00	990.00	0.00	0.00	0.00	0.00	0.00	0.00
990: TOS, 990'									
4140.00	0.00	360.00	4140.00	0.00	0.00	0.00	0.00	0.00	0.00
4140: BOS, 4140'									
4514.00	0.00	360.00	4514.00	0.00	0.00	0.00	0.00	0.00	0.00
4514: BELL CANYON, 4514'									
5340.00	0.00	360.00	5340.00	0.00	0.00	0.00	0.00	0.00	0.00
5340: CHERRY CANYON, 5340'									
7010.00	0.00	360.00	7010.00	0.01	0.00	0.00	0.00	0.00	0.00
7010: LIVINGSTON RIDGE ZONE, 7010'									
7175.00	0.00	360.00	7175.00	0.01	0.00	0.00	0.00	0.00	0.00
7175: BRUSHY CANYON, 7175'									
7508.58	0.00	269.57	7508.58	0.01	0.00	0.00	0.00	3.59	0.00
7508.58: KOP, 7509'									
7600.00	10.97	269.57	7599.44	-0.06	-8.73	8.73	12.00	0.00	12.00
7700.00	22.97	269.57	7694.91	-0.28	-37.86	37.86	12.00	0.00	12.00
7800.00	34.97	269.57	7782.24	-0.64	-86.21	86.21	12.00	0.00	12.00
7900.00	46.97	269.57	7857.61	-1.13	-151.65	151.66	12.00	0.00	12.00
8000.00	58.97	269.57	7917.72	-1.72	-231.34	231.34	12.00	0.00	12.00
8100.00	70.97	269.57	7959.95	-2.40	-321.78	321.79	12.00	0.00	12.00
8200.00	82.97	269.57	7982.45	-3.13	-419.02	419.04	12.00	0.00	12.00
8266.07	90.90	269.57	7985.98	-3.62	-484.95	484.96	12.00	0.00	12.00
8266.07: TARGET BRUSHY CANYON, 8266' MD (7986' TVD)									
12530.40	90.90	269.57	7919.01	-35.49	-4748.63	4748.76	0.00	0.00	0.00
12530.4: LATERAL TD, 12530' MD (7919' TVD)									


1000
0
-1000
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Martha #7H Survey
-6000
-5000
-4000
-3000
-2000
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1000
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3000
4000
5000
6000
7000
8000
9000
TVD
RUSTLER, 680'
TOS, 990'
BOS, 4140'
BELL CANYON, 4514'
CHERRY CANYON, 5340'
LIVINGSTON RIDGE ZONE, 7010'
BRUSHY CANYON, 7175'
KOP, 7509'
Martha #7H Survey
LATERAL TD, 12530' MD (7919' TVD)
TARGET BRUSHY CANYON, 8266' MD (7986' TVD)
-1000
0
1000
2000
3000
4000
5000
6000

PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Yates Petroleum Corporation
LEASE NO.:	NMNM065417
WELL NAME & NO.:	Martha AIK Federal # 7H
SURFACE HOLE FOOTAGE:	1780' FNL & 200' FEL
BOTTOM HOLE FOOTAGE	1780' FSL & 330' FWL
LOCATION:	Section 11, T. 22 S., R 31 E., NMPM
COUNTY:	Eddy County, New Mexico

I. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

a. Spudding well (minimum of 24 hours)
b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
c. BOPE tests (minimum of 4 hours)

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

1. **Due to recent H2S encounters in the salt formation, it is recommended that monitoring equipment be onsite for potential Hydrogen Sulfide prior to drilling out the surface shoe. If Hydrogen Sulfide is encountered, please report measurements and formations to the BLM.**

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

3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

4. **The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall 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 program need prior approval if the items substituted are of lesser grade or different casing size. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.).

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

Wait on cement (WOC) time prior to drilling out for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. IF OPERATOR DOES NOT HAVE THE WELL SPECIFIC CEMENT DETAILS ONSITE PRIOR TO PUMPING THE CEMENT FOR EACH CASING STRING, THE WOC WILL BE 30 HOURS. 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 750 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 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 **9-5/8** inch intermediate casing is: **(Ensure casing is set in the base of the Castile or the Lamar at approximately 4400')**

☒ 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 potash.**

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

a. First stage to DV tool:

☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve circulation on the next stage.

b. Second stage above DV tool:

☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with third stage cement job. Operator should have plans as to how they will achieve circulation on the next stage.

c. Third stage above DV tool:

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

Formation below the 7" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe and the mud weight for the bottom of the hole. Report results to BLM office.

Centralizers required on horizontal leg, must be type for horizontal service and a minimum of one every other joint.

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

   a. First stage to DV tool:

   ☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve circulation on the next stage.

   b. Second stage above DV tool:

   ☒ Cement will not be pumped, casing will be cut and pulled after completion.

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.

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

3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 7 inch intermediate casing shoe shall be **5000 (5M)** psi. **5M system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.**

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

a. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time.

b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (18 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

c. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock.

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

e. 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.**

f. 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. This test shall be performed prior to the test at full stack pressure.

D. DRILL STEM TEST

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

E. WASTE MATERIAL AND FLUIDS

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

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

F. 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 Mr. Mel Balderrama at melvin.balderrama@wipp.ws or fax to his attention at 575-234-6062.

CRW 070913