

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Hobbs

HOBBS OCD

AUG 28 2012

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 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

2 Name of Operator

Yates Petroleum Corporation

3a Address
105 S Fourth St
Artesia, NM 88210

3b. Phone No (include area code)

575-748-4120

4 Location of Well (Footage, Sec, T, R, M., or Survey Description)
330' FSL & 330' FEL SHL
330' FNL & 660' FEL BHL Section 8 of T21S-R32E

5 Lease Serial No
NM-121957

6. If Indian, Allottee or Tribe Name

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

8 Well Name and No.
Capella BOP Federal #2H

9 API Well No
30-025-39529

10 Field and Pool or Exploratory Area
Delaware

11 Country or Parish, State
Lea County, New Mexico

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input checked="" type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> 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 recompleat 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 recompleat 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 Capella BOP Federal #2H from a vertical well to horizontal well. Please note the attached the new C-102, drilling prognosis, and horizontal drilling plan.

**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

Date 08/06/2012

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

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

Title Petroleum Engineer

Office

Date

APPROVED

AUG 24 2012

/s/ Chris Walls

**BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE**

Title 18 USC Section 1001 and Title 43 USC 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)

AUG 29 2012

YATES PETROLEUM CORPORATION

Capella BOP Federal #2H
330' FSL & 330' FEL Surface Hole
330' FNL & 660' FEL, Bottom Hole
Section 8, Township 21S – Range 32E
Lea County, New Mexico

1 The estimated tops of geologic markers are as follows:

Rustler	1190'
Top of Salt	1500'
Base of Salt	3240'
Bell Canyon	4850'
Cherry Canyon	5490'
Brushy Canyon	6650'
Brushy Horizontal TRGT	8500' Oil
Lateral Hole (TD)	13120' Oil

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

Water. Approx.: 0' - 1190'

Oil or Gas: See above--All Potential Zones

3. Pressure Control Equipment: A 3000 PSI BOP with a 13 5/8" opening will be installed on the 13 3/8" casing and on the 9 5/8" casing a 5000 PSI BOP with 13 5/8" opening will be installed. Pressure tests to 3000 PSI and 5000 PSI, held for 30 minutes 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.

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) 13 3/8" will be J-55/H-40 Hybrid

<u>Hole Size</u>	<u>Casing Size</u>	<u>Wt./Ft</u>	<u>Grade</u>	<u>Coupling</u>	<u>Interval</u>	<u>Length</u>
26"	20"	94#	H-40	ST&C	0-58'	58'
17 1/2"	13 3/8"	48#	J-55	ST&C	0-1220'	1220'
12 1/4"	9 5/8"	40#	HCK-55	LT&C	0'-80'	80'
12 1/4"	9 5/8"	36#	J-55	LT&C	0'-3200'	3120'
12 1/4"	9 5/8"	40#	HCK-55	LT&C	3200'-4350'	1150'
8 3/4"	5 1/2"	17#	L-80	LT&C	0'-8000'	8000'
8 1/2"	5 1/2"	17#	L-80	Buttress Thread	8000'-12910'	4910'

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

B. CEMENTING PROGRAM:

Surface casing (0'-1220'): Lead with 710 sacks of Class PozC 35:65:6 (WT 12.50 YLD 2.0); tail in with 200 sacks of Class C + 2% CaCl₂ (WT 14.80 YLD 1.34). Designed with 100% excess, TOC is surface.

Intermediate Casing (0'-4350'): Lead with 1230 sacks of Class PozC 35:65:6 (WT 12.50 YLD 2.00); tail in with 200 sacks of Class C + 2% CaCl₂ (WT 14.80 YLD 1.34). Designed with 100% excess, TOC is surface

Production Casing: Cement to be done with DV Tool in two stages at approximately 4500'.

Stage 2 from 0'-4500': Lead cement with 630 sacks of Class PozC 35:65:6 (WT. 12.50 YLD 2.0); tail in with 200 sacks of Class C + 2% CaCl₂ (WT 14.80 YLD 1.34). TOC is surface, designed with 35% excess.

Stage 1 from 4500'-12910': Lead with 715 sacks Class PozC 35:65:6 (WT 12.50 YLD 2.00); tail in with 1020 sacks of Pecos Valley Lite (WT. 13.00 YLD 1.41) 30% CaCO₃, 3 2% Expansion additive, 2% Antifoam, 0.8% Retarder, 15 Fluid loss. TOC- 4500' designed with 35% excess.

Well will be drilled vertically to a depth of 8012'. Well will then be kicked off at 8012' and drilled directionally at 12 degrees per 100' with a 8 3/4" hole to 8773' MD (8490' TVD). Hole will then be reduced to 8 1/2" and drilled to TD at 12190' MD (8400' TVD) where 5 1/2" casing will be set and cemented to the surface. Production casing will be cemented in two stages with a DV Tool placed at approximately 4500'. Penetration point of producing zone will be encountered at 816' FSL & 367' FEL, Section 8-21S-32E. Deepest TVD in the lateral will be 8490'.

5. Mud Program and Auxiliary Equipment:

Interval	Type	Weight	Viscosity	Fluid Loss
0-1220'	Fresh Water	8.6-9.2	32-34	N/C
1220'-4350'	Brine Water	10.0-10.2	28-28	N/C
3650'-12910'	Cut Brine	8.8-9.0	28-28	N/C

4350

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: Mudloggers on at Intermediate casing to TD

Logging: Platform Express-DLL/CNL/CMR to 30 degree deviation.

See COA

Coring: As warranted.

DST's: As warranted.

Mudlogging: From 1215' to TD (12910').

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

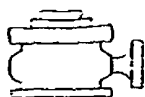
Anticipated BHP:

From: 0	TO: 1220'	Anticipated Max. BHP:	584	PSI
From: 1220	TO: 4350'	Anticipated Max. BHP:	2307	PSI
From: 3650'- 4350	TO: 8490'	Anticipated Max. BHP:	4062	PSI

No abnormal pressures or temperatures are anticipated
H₂S is not Anticipated

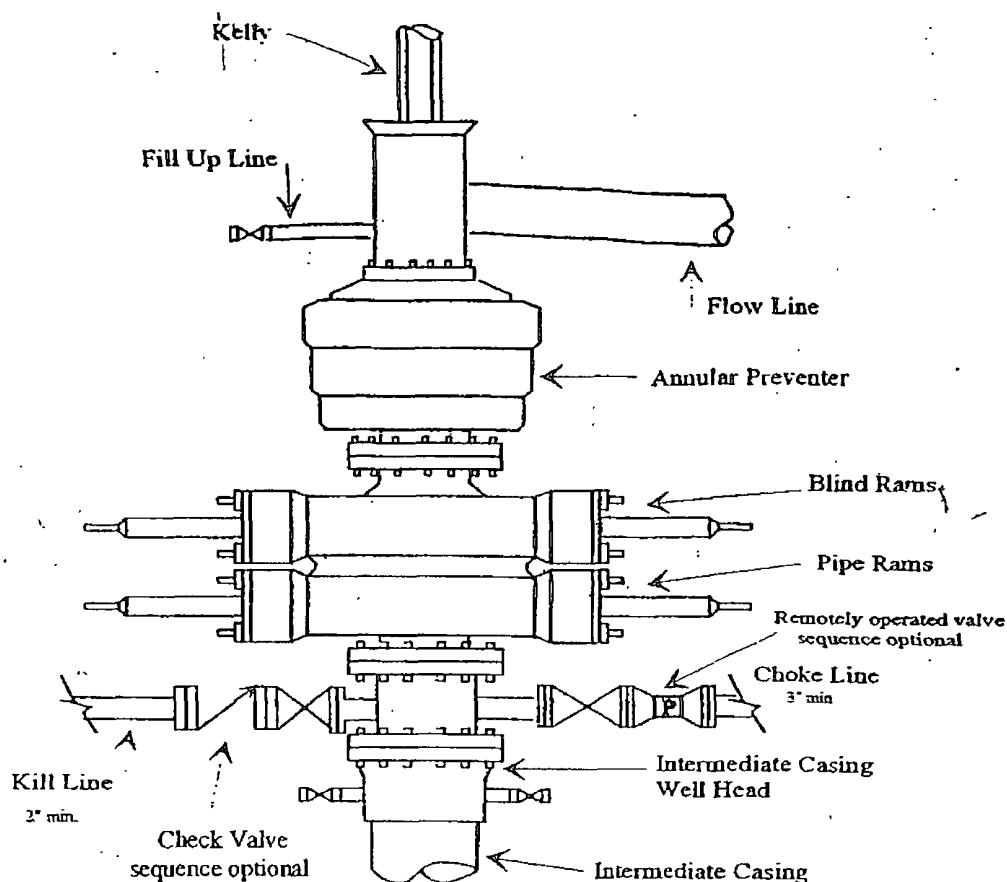
8. ANTICIPATED STARTING DATE.

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.

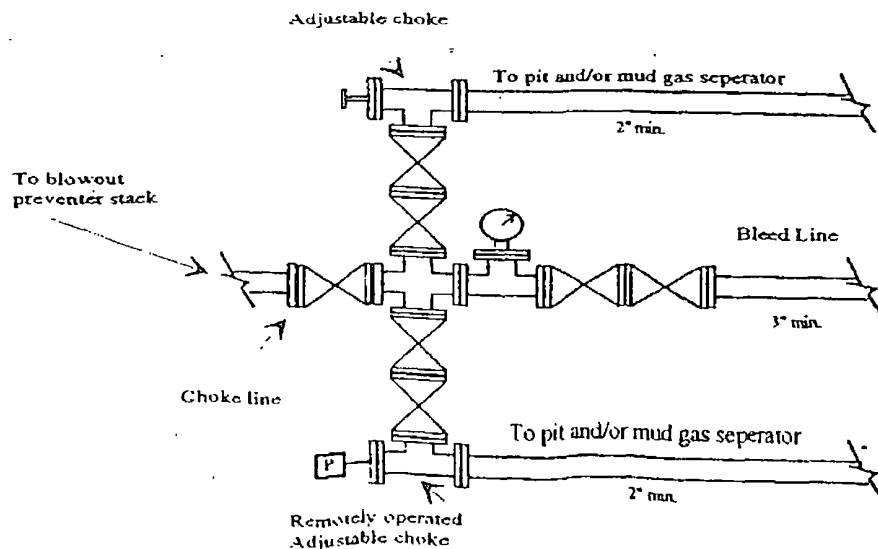


Yates Petroleum Corporation
Typical 5,000 psi Pressure System
Schematic
Annular with Double Ram Preventer Stack

BOP-4

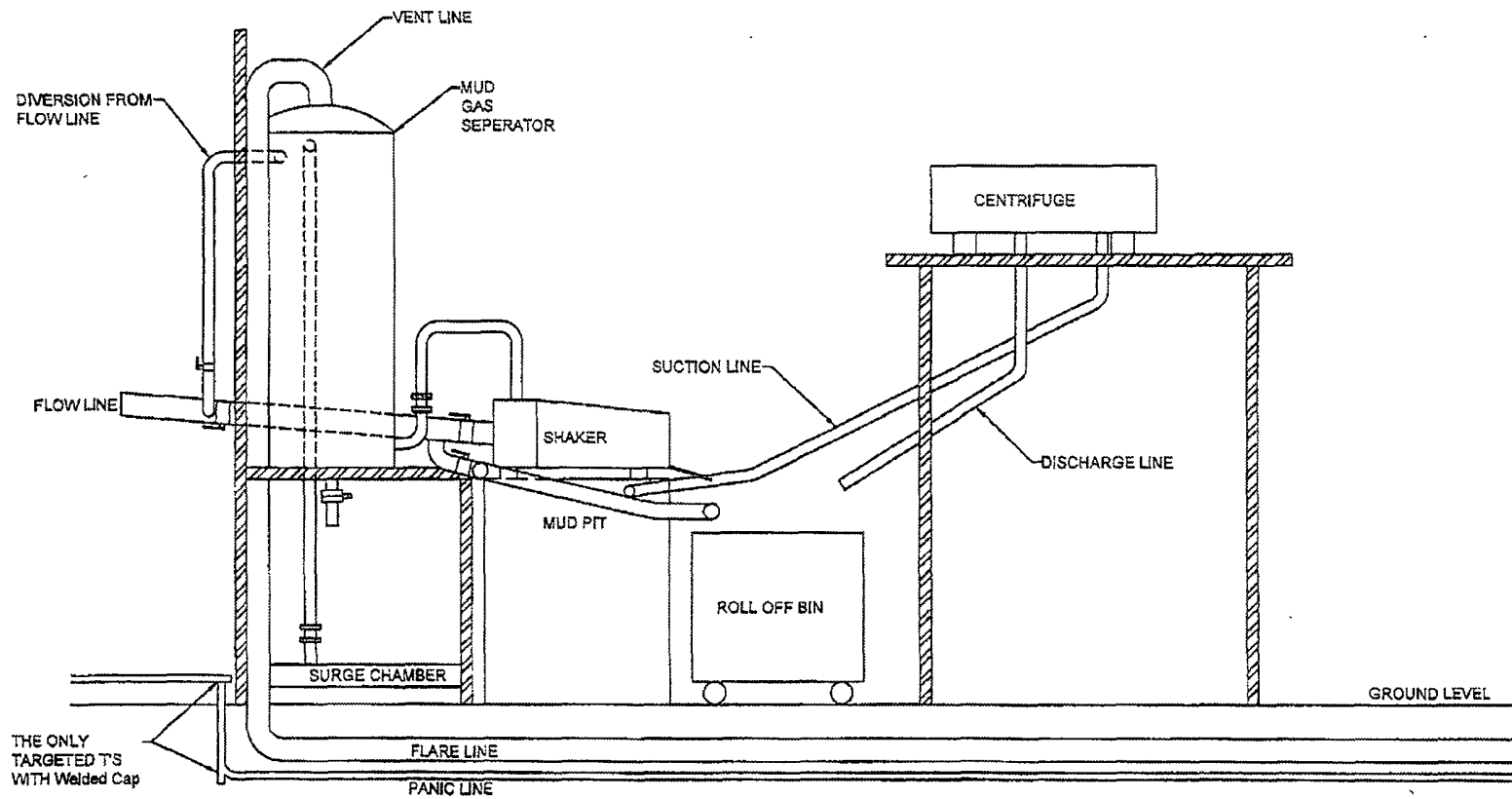


Typical 5,000 psi choke manifold assembly with at least these minimum features

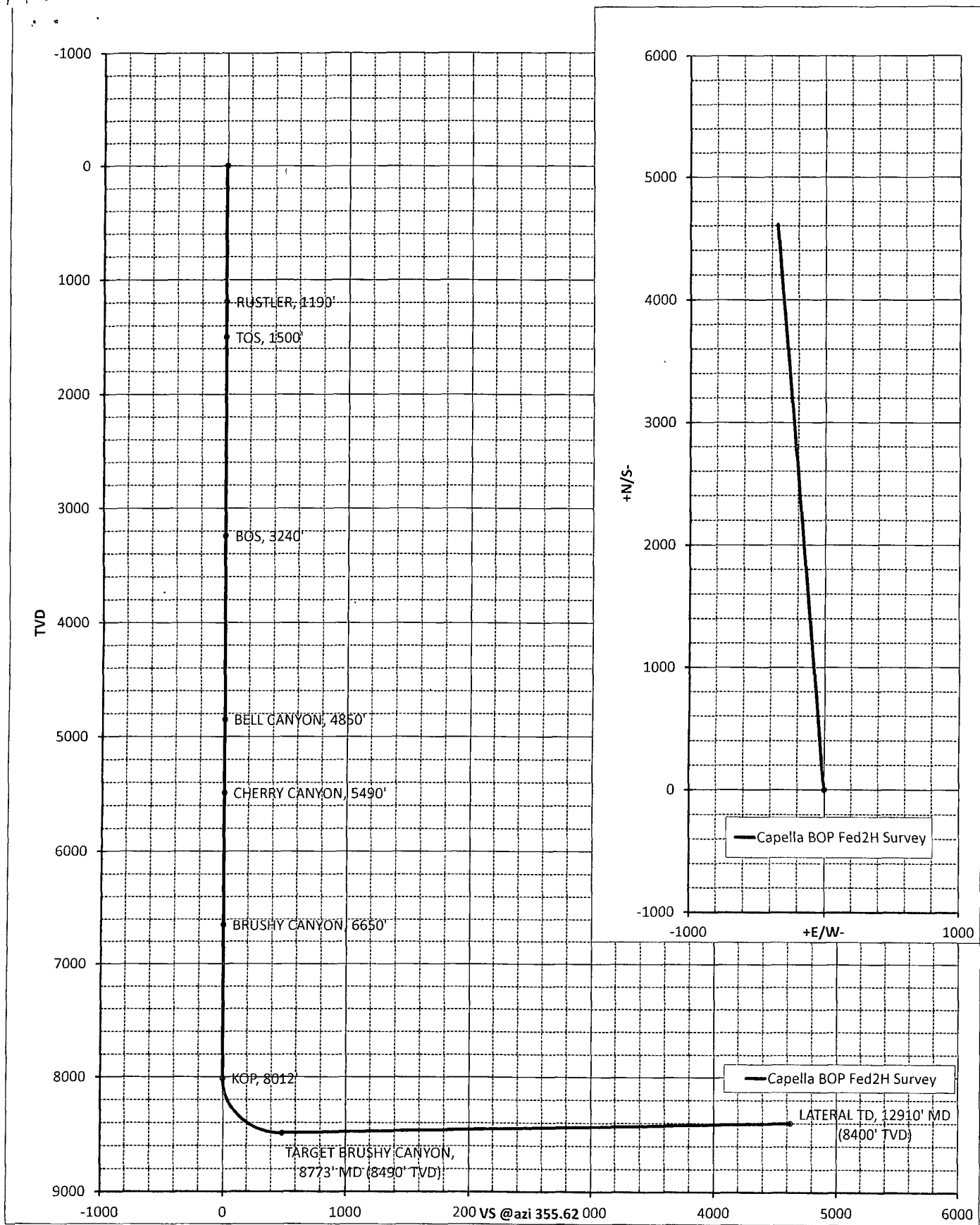


YATES PETROLEUM CORPORATION

Piping from Choke Manifold
to the Closed Loop Drilling Mud System



The flare discharge must be 100' from wellhead for non H₂S wells and 150' from wellhead for wells expected to encounter H₂S.



Operator Co.

Your Co.

Survey/Planning Report

Survey/Planning Report										
Operator	Yates Petroleum Corp.			Northing Easting Elevation Latitude Longitude Units	Feet	Date System Datum Zone Scale Fac. Converg.	3-Aug-12			
Dir. Co.	Yates Petroleum Corp.						2 - St. Plane			
Well Name	Capella BOP Fed2H Survey						1983 - NAD83			
Location	Sec. 8, 21S-32E						4302 - Utah Central			
Rig										
Job										
MD	INC	AZI	TVD	+N/S-	+E/W-	VS@355.62°	BR	TR	DLS	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1190.00	0.00	360.00	1190.00	0.00	0.00	0.00	0.00	0.00	0.00	
1190: RUSTLER, 1190'										
1500.00	0.00	360.00	1500.00	0.00	0.00	0.00	0.00	0.00	0.00	
1500: TOS, 1500'										
3240.00	0.00	360.00	3240.00	0.00	0.00	0.00	0.00	0.00	0.00	
3240: BOS, 3240'										
4850.00	0.00	360.00	4850.00	0.00	0.00	0.00	0.00	0.00	0.00	
4850: BELL CANYON, 4850'										
5490.00	0.00	360.00	5490.00	0.00	0.00	0.00	0.00	0.00	0.00	
5490: CHERRY CANYON, 5490'										
6650.00	0.00	360.00	6650.00	0.01	0.00	0.01	0.00	0.00	0.00	
6650: BRUSHY CANYON, 6650'										
8012.19	0.00	355.62	8012.19	0.01	0.00	0.01	0.00	-0.05	0.00	
8012.19: KOP, 8012'										
8100.00	10.54	355.62	8099.51	8.04	-0.61	8.06	12.00	0.00	12.00	
8200.00	22.54	355.62	8195.19	36.36	-2.78	36.47	12.00	0.00	12.00	
8300.00	34.54	355.62	8282.88	83.91	-6.42	84.16	12.00	0.00	12.00	
8400.00	46.54	355.62	8358.74	148.60	-11.37	149.03	12.00	0.00	12.00	
8500.00	58.54	355.62	8419.46	227.60	-17.42	228.26	12.00	0.00	12.00	
8600.00	70.54	355.62	8462.37	317.45	-24.29	318.38	12.00	0.00	12.00	
8700.00	82.54	355.62	8485.61	414.25	-31.70	415.46	12.00	0.00	12.00	
8772.52	91.24	355.62	8489.54	486.38	-37.22	487.80	12.00	0.00	12.00	
8772.52: TARGET BRUSHY CANYON, 8773' MD (8490' TVD)										
12910.33	91.24	355.62	8400.00	4611.16	-352.85	4624.64	0.00	0.00	0.00	
12910.33: LATERAL TD, 12910' MD (8400' TVD)										



CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Yates Petroleum Corporation
LEASE NO.:	NM121957
WELL NAME & NO.:	Capella BOP Fed # 2
SURFACE HOLE FOOTAGE:	330' FSL & 330' FEL
BOTTOM HOLE FOOTAGE:	330' FNL & 660' FEL
LOCATION:	Section 8, T. 21 S., R 32 E., NMPM
COUNTY:	Lea 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

☒ **Lea County**

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240,
(575) 393-3612

1. A Hydrogen Sulfide (H₂S) Drilling Plan should be activated 500 feet prior to drilling into the Delaware formation. **As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values 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 is 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. 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 Artesia Group and the Capitan Reef.

Possible water and brine flows in the Artesia and Salado Groups.

1. **The 13-3/8 inch surface casing shall be set at approximately 1220 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.

Special Capitan Reef requirements:

If any lost circulation occurs below the Base of the Salt, the operator shall do the following:

- **Switch to fresh water mud to protect the Capitan Reef and use fresh water mud until setting the intermediate casing. The appropriate BLM office is to be notified for a PET to witness the switch to fresh water.**
- **Daily drilling reports from the Base of the Salt to the setting of the intermediate casing are to be submitted to the BLM CFO engineering staff via e-mail by 0800 hours each morning. Any lost circulation encountered is to be recorded on these drilling reports. The daily drilling report should show mud volume per shift/tour. Failure to submit these reports will result in an Incidence of Non-Compliance being issued for failure to comply with the Conditions of Approval. If not already planned, the operator shall run a caliper survey for the intermediate well bore and submit to the appropriate BLM office.**

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:

- ☒ Cement to surface. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to Capitan Reef and potash concerns.**

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 surface. 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.

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. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **9-5/8** 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 results of the test shall be reported to the appropriate BLM office.

- d. All tests are required to be recorded on a calibrated test chart. **A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.**
- e. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.

D. DRILL STEM TEST

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

E. WASTE MATERIAL AND FLUIDS

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

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

CRW 082412