HOBBS OCD

FEB 13 2014

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OCD Artesia

14-21

Form 3160-3
(March 2012)

R-111-POTASH

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
NM-94095, NM-121957

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☑ DRILL ☐ REENTER

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

1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other ☑ Single Zone ☐ Multiple Zone

8. Lease Name and Well No.
Capella BOP Federal #6H (37845)

2. Name of Operator Yates Petroleum Corporation (25575)

9. API Well No.
30-025-41659

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

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

10. Field and Pool, or Exploratory
Lost Tank; Delaware (40299)

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface 2140' FSL & 2360' FWL Section 17 SHL
At proposed prod. zone 330' FNL & 1980' FWL Section 8 BHL

11. Sec., T. R. M. or Blk. and Survey or Area
Section 17, and 8, T21S-R32E

14. Distance in miles and direction from nearest town or post office*
45 miles

12. County or Parish
Lea Eddy County

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)
2360' FSL SHL
330' FNL BHL

16. No. of acres in lease
1280 for NM-121957
640 for NM-94095

17. Spacing Unit dedicated to this well
E2W2
160 acres

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.
250'

19. Proposed Depth
8466' TVD
13194' TD

20. BLM/BIA Bond No. on file
NMB000434
NMB000920

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3707'

22. Approximate date work will start*
11/07/2014

23. Estimated duration
40 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the BLM.

25. Signature [signature] Name *(Printed/Typed)* Travis Hahn Date 11/06/2013

Title
Land Regulatory Agent

Approved by *(Signature)* /s/ Jesse J. Juen Name *(Printed/Typed)* Date JAN - 8 2014

Title STATE DIRECTOR Office NM STATE OFFICE

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

APPROVAL FOR TWO YEARS

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and 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.

(Continued on page 2)

*(Instructions on page 2)

Capitan Controlled Water Basin

KA 02/14/14

RECEIVED
JAN 29 2014
NMOCD ARTESIA

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

Approval Subject to General Requirements & Special Stipulations Attached

FEB 19 2014

YATES PETROLEUM CORPORATION
Capella BOP Federal Com #6H
2140' FSL & 2360' FWL Sec. 17 T21S-R32E SHL
330' FNL & 1980' FWL, Sec. 8 T21S-R32E BHL
Lea County, New Mexico

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

Rustler	1056'
Top of Salt	1114'
Base of Salt	4170'
Lamar Lime	4535'
Bell Canyon	4601'
Cherry Canyon	5491'
Brushy Canyon	7270'
Brushy Horizontal TRGT	8712' Oil
Lateral Hole (TD)	16326' Oil

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

Water: Approx.: 0' - 1056'
Oil or Gas: See above--All Potential Zones

3. Pressure Control Equipment: 3000 PSI BOPE with a 13.625" opening will be installed on the 13.375" casing and also on the 9.625" casing. Pressure tests to 3000 PSI and held for 30 minutes will be conducted before drilling out from under all casing strings, which are set and cemented in place. Test will be conducted by an Independent Tester, utilizing a test plug in the well head. Test will be held for 10 mintues 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.

5. THE PROPOSED CASING AND CEMENTING PROGRAM:

A. Casing Program: (All New) 13 3/8" will be J-55/H-40 Hybird

See COA

Hole Size	Casing Size	Wt./Ft	Grade	Coupling	Interval	Length
26"	20"	94#	H-40		0-65'	65'
17.5"	13.375"	48#	J-55	ST&C	0-~~1080'~~ 1180'	~~1080'~~
12.25"	9.625"	40#	J-55	LT&C	0'-80'	80'
12.25"	9.625"	36#	J-55	LT&C	80'-3200'	3120'
12.25"	9.625"	40#	J-55	LT&C	3200'-~~4200'~~ 4400'	~~1000'~~
12.25"	9.625"	40#	HCK-55	LT&C	4200'-4650'	450'
8.75"	5.5"	17#	P-110	Buttress Thread	0'-8712'	8712'
8.5"	5.5"	17#	P-110	Buttress Thread	8712'-16326'	7614'

Minimum Casing Design Factors: Burst 1.0, Tensile 2.8, Collapse 1.125

B. CEMENTING PROGRAM:

13 3/8" Surface casing (0' – 1080'): Lead with 610 sacks of Class PozC 35:65:6 (WT 12.50, YLD 2.0, H2O 11 gal/sack); tail in with 215 sacks of Class C + 2% CaCl2 (WT 14.80, YLD 1.34, H2O 6.2 gal/sack). Designed with 100% excess, TOC is surface.

9 5/8" Intermediate Casing (0' – 4650'): Lead with 1315 sacks of Class PozC 35:65:6 (WT 12.50, YLD 2.00, H2O 11 gal/sack); tail in with 210 sacks of Class C + 2% CaCl2 (WT 14.80, YLD 1.34, H2O 6.2 gal/sack). Designed with 100% excess, TOC is surface.

5 1/2" Production Casing: Cement to be done with DV Tool in three stages at approximately 4700' and 7200'.

Stage 1 from 7200' – 16326': Cement with 1580 sacks of Pecos Valley Lite (WT 13.0, YLD 1.82, H2O 9.3 gal/sack) 30% CaCO, 3.2% Expansion additive, 2% Antifoam, 0.8% Retarder, 15 Fluid loss. TOC- 7200' designed with 35% excess.

See COA

Stage 2 from 4700' – 7200': Lead cement with 290 sacks of Class PozC 35:65:6 (WT. 12.50, YLD 2.0, H2O 11 gal/sack); tail in with 205 sacks of Class C + 2% CaCl2 (WT 14.80, YLD 1.34, H2O 6.2 gal/sack). TOC is 4700, designed with 35% excess.

Stage 3 from 0' – 4700': Lead cement with 665 sacks of Class PozC 35:65:6 (WT. 12.50, YLD 2.0, H2O 11 gal/sack); tail in with 205 sacks of Class C + 2% CaCl2 (WT 14.80, YLD 1.34, H2O 6.2 gal/sack). TOC is surface, designed with 35% excess.

Well will be drilled vertically to a depth of 7270'. Well will then be kicked off at 7270' and drilled directionally at 12 degrees per 100' with an 8.75" hole to 8712' MD (8432' TVD). Hole will then be reduced to 8.5" and drilled to TD at 16326' MD (8300' TVD) where 5.5" casing will be set and cemented to the surface. Production casing will be cemented in three stages with a DV Tool placed at approximately 4500' and 7900'. Penetration point of producing zone will be encountered at 2310' FNL & 2310' FEL, Section 17-21S-32E. Deepest TVD in the lateral will be ~~8432~~ 8394'.

6. MUD PROGRAM AND AUXILIARY EQUIPMENT:

See COA

Interval	Type	Weight	Viscosity	Fluid Loss
0-~~1080'~~ 1180'	Fresh Water	8.6-9.2	32-34	N/C
~~1080'-4650'~~ 4400'	Brine Water	10.0-10.2	28-28	N/C
~~4650'~~-16326'	Cut Brine	8.8-9.0	28-28	N/C

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. 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. EVALUATION PROGRAM:

Samples: 10' samples 2000' to TD.
Logging: CNL/LDT/NGT Curve – Intermediate casing
CNL/GR Curve – Surface
DLL-MSFL – Curve – Intermediate casing
CMR Curve – Intermediate casing
Horizontal-MWD-GR Horizontal
Coring: None
DST's: None
Mudlogging: From 2000' to TD

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

Anticipated BHP:

From:	0'	TO:	1080'	Anticipated Max. BHP:	517 PSI
From:	1080'	TO:	4650'	Anticipated Max. BHP:	2466 PSI
From:	4650'	TO:	8432'	Anticipated Max. BHP:	3946 PSI

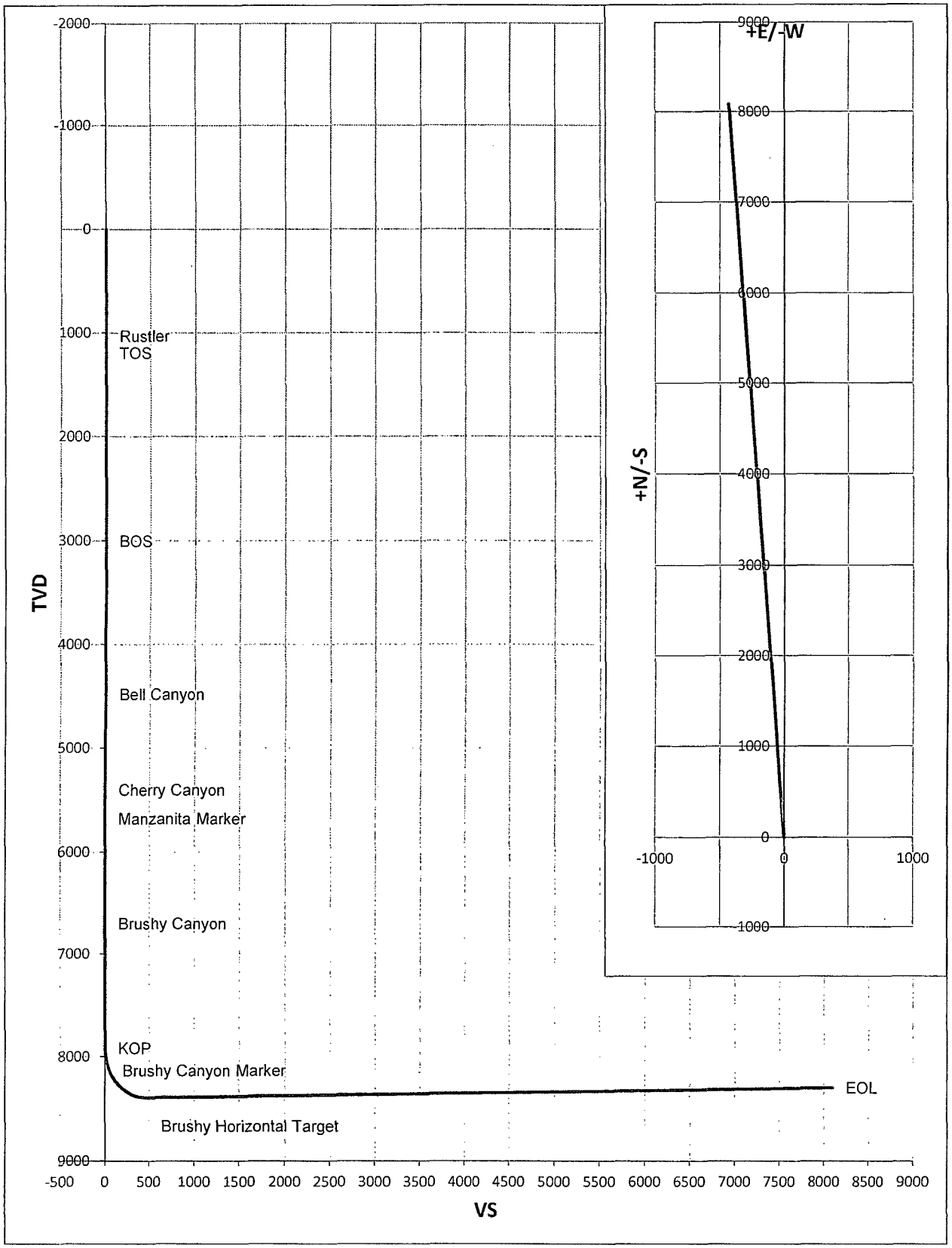
No abnormal pressures or temperatures are anticipated
H2S is not Anticipated

9. 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.

Well Name: Capella BOP Federal Com #6H		**Tgt N/-S:**	8087.83		
		Tgt E/-W:	-432.94	**EOC TVD/MD:**	8394.03 / 8672.50
Surface Location: Section 17 , Township 21S Range 32E		**VS:**	8099.41		
Bottom Hole Location: Section 8 , Township 21S Range 32E		**VS Az:**	356.94	**EOL TVD/MD:**	8300.00 / 16288.55

MD	Inc.	Azi.	TVD	+N/-S	+E/-W	VS	DLS	Comments
0	0	0	0	0	0	0	0	
1030.00	0.00	0.00	1030.00	0.00	0.00	0.00	0.00	Rustler
1120.00	0.00	0.00	1120.00	0.00	0.00	0.00	0.00	TOS
3000.00	0.00	0.00	3000.00	0.00	0.00	0.00	0.00	BOS
4482.00	0.00	0.00	4482.00	0.00	0.00	0.00	0.00	Bell Canyon
5400.00	0.00	0.00	5400.00	0.00	0.00	0.00	0.00	Cherry Canyon
5675.00	0.00	0.00	5675.00	0.00	0.00	0.00	0.00	Manzanita Marker
6700.00	0.00	0.00	6700.00	0.00	0.00	0.00	0.00	Brushy Canyon
7916.60	0.00	0.00	7916.60	0.00	0.00	0.00	0.00	KOP
7925.00	1.01	356.94	7925.00	0.07	0.00	0.07	12.00	
7950.00	4.01	356.94	7949.97	1.17	-0.06	1.17	12.00	
7975.00	7.01	356.94	7974.85	3.56	-0.19	3.57	12.00	
8000.00	10.01	356.94	7999.58	7.25	-0.39	7.26	12.00	
8025.00	13.01	356.94	8024.07	12.23	-0.65	12.25	12.00	
8050.00	16.01	356.94	8048.27	18.49	-0.99	18.51	12.00	
8075.00	19.01	356.94	8072.11	26.00	-1.39	26.03	12.00	
8100.00	22.01	356.94	8095.52	34.74	-1.86	34.79	12.00	
8125.00	25.01	356.94	8118.45	44.70	-2.39	44.76	12.00	
8137.83	26.55	356.94	8130.00	50.26	-2.69	50.34	12.00	Brushy Canyon Marker
8150.00	28.01	356.94	8140.82	55.84	-2.99	55.92	12.00	
8175.00	31.01	356.94	8162.57	68.13	-3.65	68.23	12.00	
8200.00	34.01	356.94	8183.65	81.55	-4.37	81.66	12.00	
8225.00	37.01	356.94	8204.00	96.04	-5.14	96.18	12.00	
8250.00	40.01	356.94	8223.56	111.59	-5.97	111.75	12.00	
8275.00	43.01	356.94	8242.28	128.13	-6.86	128.31	12.00	
8300.00	46.01	356.94	8260.11	145.63	-7.80	145.84	12.00	
8325.00	49.01	356.94	8276.99	164.03	-8.78	164.27	12.00	
8350.00	52.01	356.94	8292.89	183.30	-9.81	183.56	12.00	
8375.00	55.01	356.94	8307.76	203.36	-10.89	203.65	12.00	
8400.00	58.01	356.94	8321.55	224.18	-12.00	224.50	12.00	
8425.00	61.01	356.94	8334.23	245.69	-13.15	246.04	12.00	
8450.00	64.01	356.94	8345.77	267.83	-14.34	268.21	12.00	
8475.00	67.01	356.94	8356.14	290.55	-15.55	290.96	12.00	
8500.00	70.01	356.94	8365.30	313.77	-16.80	314.22	12.00	
8525.00	73.01	356.94	8373.22	337.44	-18.06	337.93	12.00	
8550.00	76.01	356.94	8379.90	361.50	-19.35	362.02	12.00	
8575.00	79.01	356.94	8385.31	385.87	-20.66	386.42	12.00	
8600.00	82.01	356.94	8389.43	410.49	-21.97	411.08	12.00	
8625.00	85.01	356.94	8392.26	435.29	-23.30	435.91	12.00	
8650.00	88.01	356.94	8393.78	460.21	-24.63	460.86	12.00	
8672.50	90.71	356.94	8394.03	482.67	-25.84	483.36	12.00	Brushy Horizontal Target
16288.55	90.71	356.94	8300.00	8087.83	-432.94	8099.41	0.00	EOL


-2000
-1000
0
1000
2000
3000
4000
5000
6000
7000
8000
9000
TVD
Rustler
TOS
BOS
Bell Canyon
Cherry Canyon
Manzanita Marker
Brushy Canyon
KOP
Brushy Canyon Marker
EOL
Brushy Horizontal Target
-500 0 500 1000 1500 2000 2500 3000 3500 4000 4500 5000 5500 6000 6500 7000 7500 8000 8500 9000
VS
+E/-W
9000
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6000
5000
4000
3000
2000
1000
0
-1000
+N/-S
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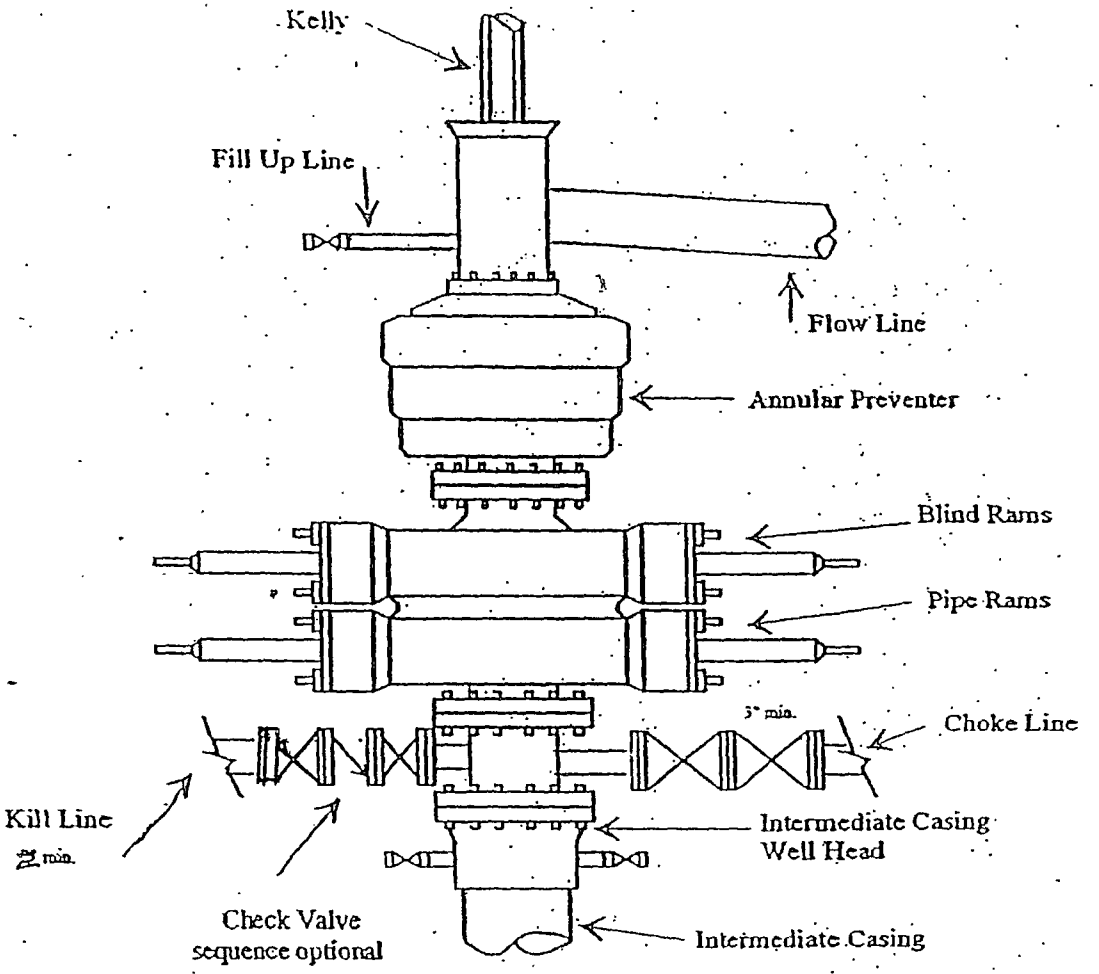
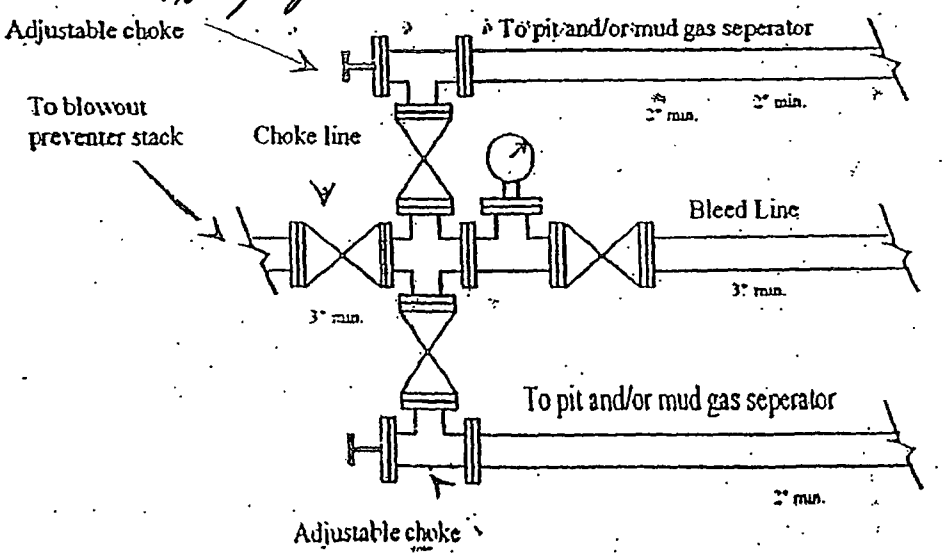
Yates Petroleum Corporation

Typical 3,000 psi Pressure System
Schematic
Annular with Double Ram Preventer Stack



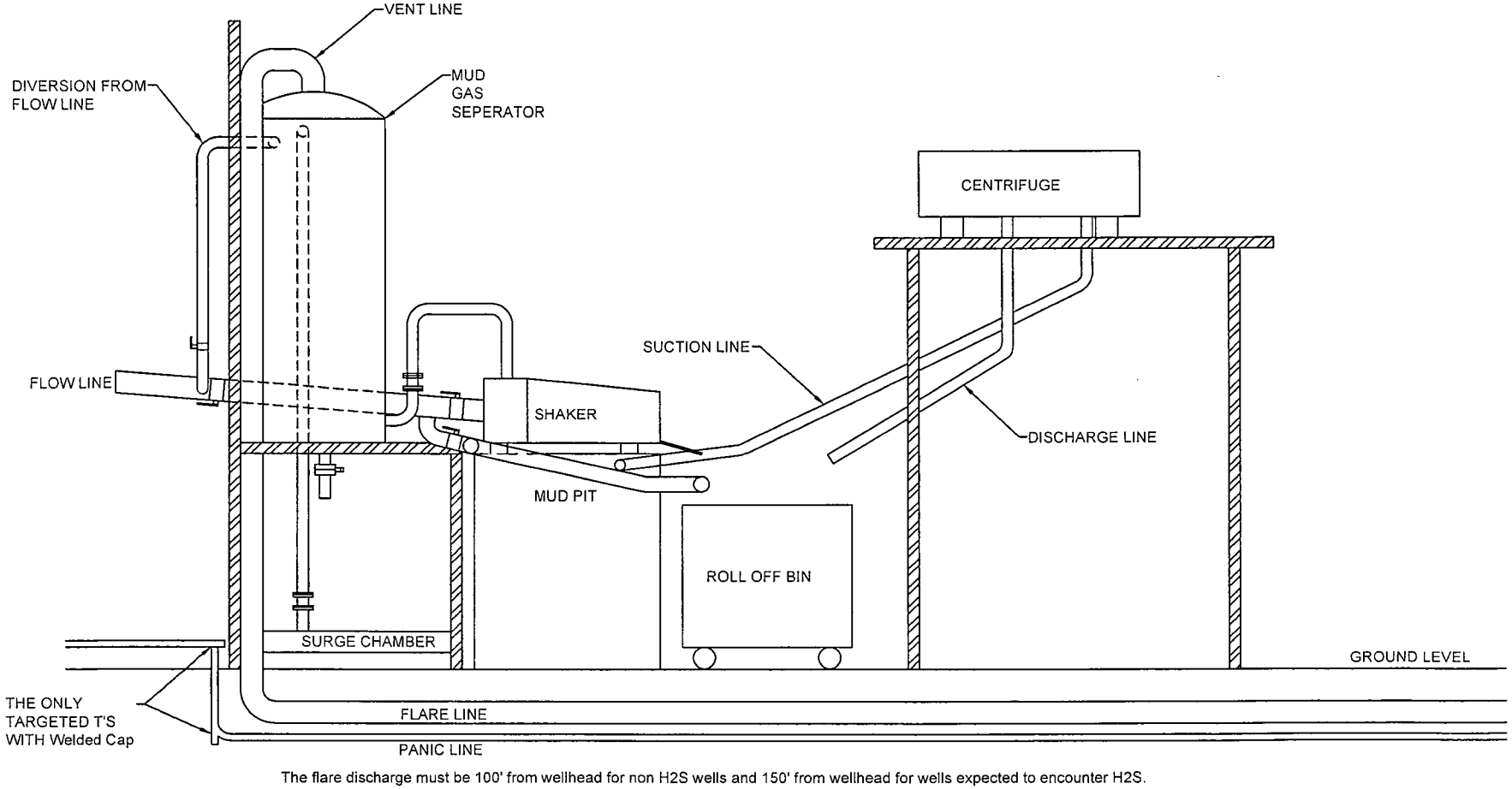
Typical 3,000 psi choke manifold assembly with at least these minimun features

Remotely operated in H2S situation.



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.

Yates Petroleum Corporation
Closed Loop System

Equipment Design Plan

Closed Loop System will consist of:
1 – double panel shale shaker
1 – (minimum) Centrifuge, certain wells and flow rates may require 2 centrifuges
On certain wells, the Centrifuge will be replaced by a Clackco Settling Tank System
1 – minimum centrifugal pump to transfer fluids
2- 500 bbl. FW Tanks
1 – 500 bbl. BW Tank
1 – half round frac tank – 250 bbl. capacity as necessary to catch cement / excess mud returns generated during a cement job.
1 Set of rail cars / catch bins
Certain wells will use an ASC Auger Tank

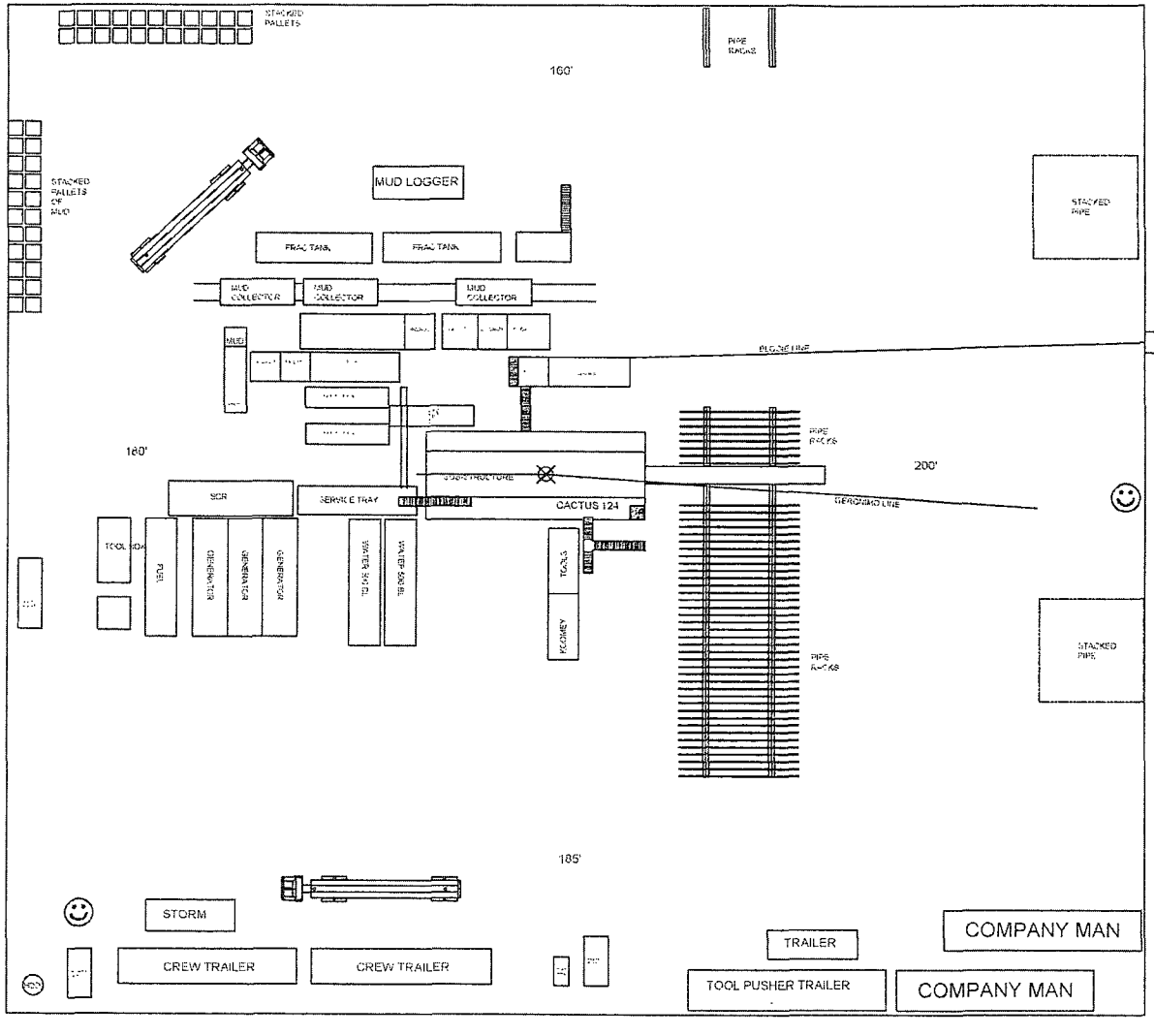
Operation Plan

All equipment will be inspected at least hourly by rig personnel and daily by contractors' personnel.
Any spills / leaks will be reported to YPC, NMOCD, and cleaned up without delay.

Closure Plan

Drilling with Closed Loop System, haul off bins will be taken to Gandy Marley, Lea Land Farm, CRI or Sundance Services Inc.

YATES PETROLEUM CORPORATION
CACTUS 124
07-24-13



345.00

380.00

Safe Briefing Area with caution signs and breathing equipment

Wind Direction Indicators

H2S Monitor with alarm at the bell nipple

PAD LAYOUT

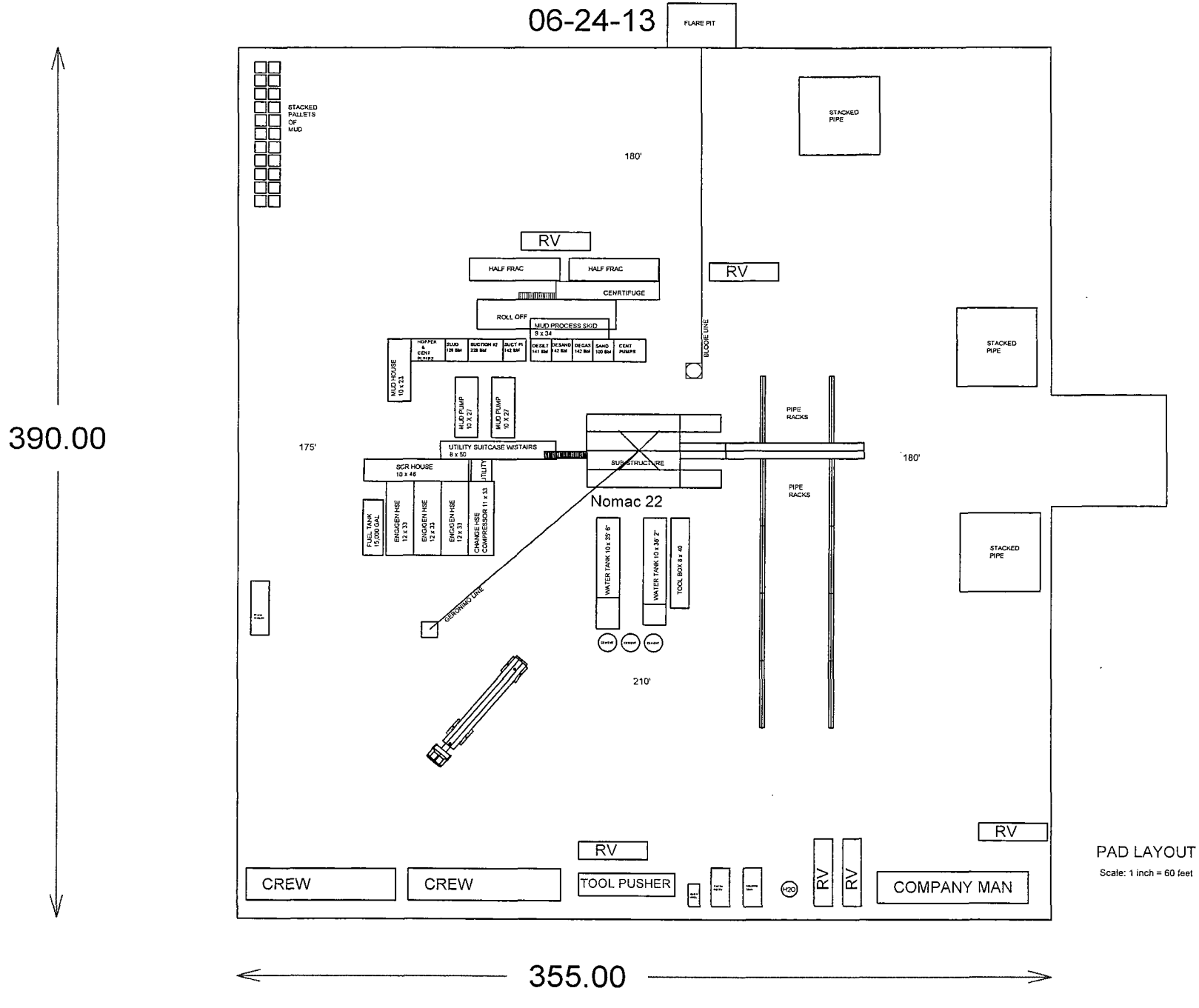
Scale: 1 inch = 60 feet

07-24-13

YATES PETROLEUM CORPORATION

Nomac 22

06-24-13



PAD LAYOUT

Scale: 1 inch = 60 feet