15-447

HOBBS OCD

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SEP 28 2016

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Form 3160-3
(March 2012)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
NM-15317

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.
Farber BOB Federal #2H (37842)

2. Name of Operator Yates Petroleum Corporation (25575)

9. API Well No.
30-025-43435

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

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

10. Field and Pool, or Exploratory
WC-025 G-07 S243225C; LWR BS (97964)

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface 50' FSL & 440' FEL
At proposed prod. zone 330' FNL & 440' FEL LOT 1

11. Sec., T. R. M. or Blk. and Survey or Area
Section 1, T25S-R32E

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

12. County or Parish
Lea County

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 50'

16. No. of acres in lease
1120.84 acres

17. Spacing Unit dedicated to this well
E2E2
160 acres

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 4400'

19. Proposed Depth
11000' TVD
15697' TD

20. BLM/BIA Bond No. on file
NMB 000434
NMB 000920

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3522'

22. Approximate date work will start*

23. Estimated duration
30 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

Name *(Printed/Typed)*
Travis Hahn

Date
02/26/2015

Title
Land Regulatory Agent

Approved by *(Signature)*
/s/Cody Layton

Name *(Printed/Typed)*

Date
SEP 22 2016

Title
FIELD MANAGER

Office
CARLSBAD FIELD 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)

Carlsbad Controlled Water Basin

KA 09/28/16

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

Approval Subject to General Requirements
& Special Stipulations Attached

YATES PETROLEUM CORPORATION
Farber BOB Federal #2H
50' FSL & 440' FEL, Section 1, T25S - R32E, Surface Hole
330' FNL & 440' FEL, Section 9, T25S - R32E, Bottom Hole
Lea County, New Mexico

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

Rustler	1000'	Brushy Canyon	7800' Oil
Salado	1320'	Bone Springs	9030'
Castile	3580'	Upper Avalon	9140'
Base of Salt	4710'	Lower Avalon	9470' Oil
Delaware	4960' Oil	Bone Springs 1/Sand	10040' Oil
Bell Canyon	4980' Oil	Bone Springs 2/Sand	10620' Oil
Cherry Canyon	5940' Oil	Target Bone Springs 2/Sand	11273'

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

Water: Approx.: 0' – 1025'
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 a 5000 PSI BOP will be installed on the 9 5/8" casing. Test will be conducted by an independent tester, utilizing a test plug in the well head. 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 on each segment of the system tested if test is done with a test plug and 30 minutes without a test plug. Blind rams and pipe rams will be tested to the rated pressure of the BOP. Any leaks will be repaired at the time of the test. Annular preventers will be tested to 50% of rated pressure. Accumulator system will be inspected for correct pre charge pressures, and proper functionality, prior to connection to the BOP system. 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.

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 H-40/J-55 Hybird

Hole Size	Casing Size	Wt./Ft	Grade	Coupling	Interval	Length
26"	20"	94#	H-40	ST&C	0'-58'	58'
17.5"	13.375"	48#	J-55	ST&C	0'-~~1025'~~ 1110	1025'
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'	1000'
12.25"	9.625"	40#	HCK-55	LT&C	4200'-~~5050'~~ 4950	850'
8.75"	5.5"	17#	P-110	Buttress Thread	0'-11273'	11273'
8.5"	5.5"	17#	P-110	Buttress Thread	11273'-15697'	4424'

See COA

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

B. CEMENTING PROGRAM:
Conductor Cement (0'-58'): Lead with Ready Mix cement.

See COA

Surface Cement (0'-~~1025'~~ 1110'): Lead with 575 sacks of Class PozC 35:65:6 (WT 12.5, YLD 2.0, H2O gal/sack 11.0). Tail with 200 sacks of Class PozC 50/50 (WT 14.2, YLD 1.34, H2O gal/sack 6.2) designed with 100% excess, TOC is surface.

Intermediate 1 Cement (3000'-~~5050'~~ 4950'): Lead with 500 sacks of Class PozC 35:65:6 (WT 12.5, YLD 2.0, H2O gal/sack 11.0); tail in with 200 sacks of Class PozC 50/50 (WT 14.8, YLD 1.34, H2O gal/sack 6.2). Designed with 100% excess, TOC is surface.

Intermediate 2 Cement (0'-3000'): Lead with 800 sacks of Class PozC 35:65:6 (WT 12.5, YLD 2.0, H2O gal/sack 11.0); tail in with 200 sacks of Class PozC 50/50 (WT 14.8, YLD 1.34, H2O gal/sack 6.2). Designed with 100% excess, TOC is surface.

Production 1 Cement (4550'-7800'): Lead with 420 sacks of Class PozC 35:65:6 (WT. 12.5, YLD 2.0, H2O gal/sack 11.0); tail in with 200 sacks of Pecos Valley Lite (WT. 13.0, YLD 1.41, H2O gal/sack 6.8). 30% CaCO3 Weight, 3.2% Expansion additive, 2% Antifoam, .8% Retarder, 15 Fluid loss. TOC is 4550', designed with 35% excess.

Production 2 Cement (7800'-15697'): Lead with 460 sacks of Class PozC 35:65:6 (WT. 12.5, YLD. 2.0, H2O gal/sack 11.0); tail in with 900 sacks of Pecos Valley Lite (WT. 13.0, YLD 1.82, H2O gal/sack 6.8). 30% CaCO3 Weight, 3.2% Expansion additive, 2% Antifoam, .8% Retarder, 15 Fluid loss.

Well will be drilled vertically to approximately 10523' well will then be kicked off and directionally drilled at 12 degrees per 100' with an 8.75" hole to 11273' MD (11000' TVD). Hole size will then be reduced to 8.5" and drilled to 15697' MD (11000' TVD) where 5.5" casing will be set and cemented to 4550' in two stages. A DV tool will be placed at approximately 7800'. Penetration point of producing zone will be encountered at 527' FSL & 440' FEL, Section 1-T25S – R32E. Deepest TVD is 11000' in the lateral. DV @ 3000

Mud Program and Auxiliary Equipment:

See COA

Interval	Type	Weight	Viscosity	Fluid Loss
0'-~~1025'~~ 1110'	Fresh Water	8.6-9.2	28-32	N/C
~~1025'-5050'~~ 4950'	Brine Water	10.0-10.2	28-30	N/C
5050'-15697'	Cut Brine Water	8.8-9.2	30-32	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. 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 a derrick hand checking the fluid level in the pits hourly using a nut on the end of a rope hanging just above the fluid level in the pit.

6. EVALUATION PROGRAM:

Samples: 10' samples from 5050' to TD.
Logging: Horizontal-MWD-GR Horizontal 10000' to TD
Coring: None.
DST's: None.
Mudlogging: On from intermediate casing (1025') to TD

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

Anticipated BHP:

From:	0	TO:	1025'	Anticipated Max. BHP:	490 PSI
From:	1025'	TO:	5050'	Anticipated Max. BHP:	2680 PSI
From:	5050'	TO:	11000'	Anticipated Max. BHP:	5262 PSI

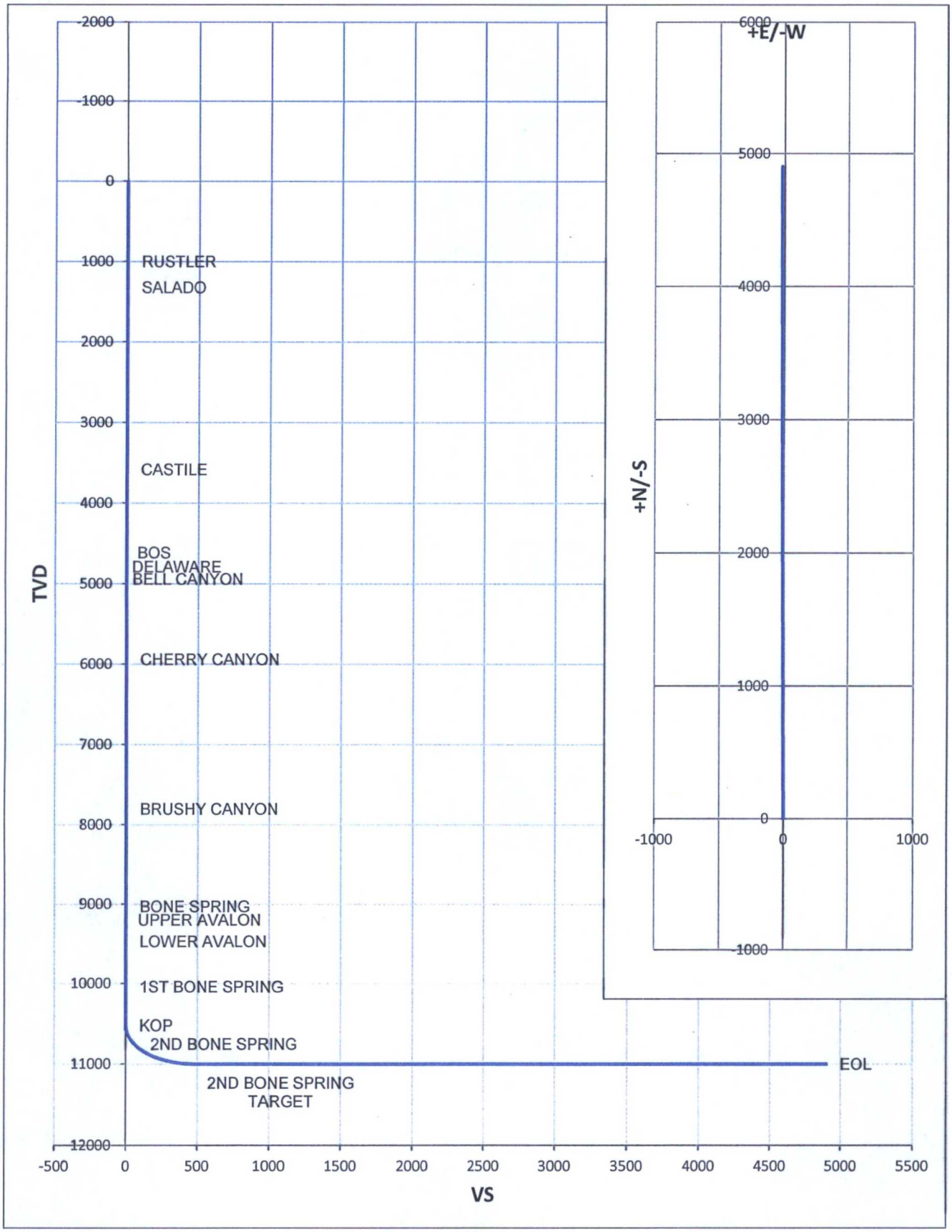
No abnormal pressures or temperatures are anticipated.
H2S Zones Not Anticipated

8. ANTICIPATED STARTING DATE:

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

Well Name: Farber BOB Federal #2H	**Tgt N/-S:** 4902.15		
	Tgt E/-W: -19.53	**EOC TVD/MD:** 11000.00 / 11272.54	
Surface Location: Section 1 , Township 25S Range 32E	**VS:** 4902.19		
Bottom Hole Location: Section 1 , Township 25S Range 32E	**VS Az:** 359.77	**EOL TVD/MD:** 11000.00 / 15697.26	

MD	Inc.	Azi.	TVD	+N/-S	+E/-W	VS	DLS	Comments
0	0	0	0	0	0	0	0	
1000.00	0.00	0.00	1000.00	0.00	0.00	0.00	0.00	RUSTLER
1320.00	0.00	0.00	1320.00	0.00	0.00	0.00	0.00	SALADO
3580.00	0.00	0.00	3580.00	0.00	0.00	0.00	0.00	CASTILE
4710.00	0.00	0.00	4710.00	0.00	0.00	0.00	0.00	BOS
4960.00	0.00	0.00	4960.00	0.00	0.00	0.00	0.00	DELAWARE
4980.00	0.00	0.00	4980.00	0.00	0.00	0.00	0.00	BELL CANYON
5940.00	0.00	0.00	5940.00	0.00	0.00	0.00	0.00	CHERRY CANYON
7800.00	0.00	0.00	7800.00	0.00	0.00	0.00	0.00	BRUSHY CANYON
9030.00	0.00	0.00	9030.00	0.00	0.00	0.00	0.00	BONE SPRING
9140.00	0.00	0.00	9140.00	0.00	0.00	0.00	0.00	UPPER AVALON
9470.00	0.00	0.00	9470.00	0.00	0.00	0.00	0.00	LOWER AVALON
10040.00	0.00	0.00	10040.00	0.00	0.00	0.00	0.00	1ST BONE SPRING
10522.54	0.00	0.00	10522.54	0.00	0.00	0.00	0.00	KOP
10525.00	0.30	359.77	10525.00	0.01	0.00	0.01	12.00	
10550.00	3.30	359.77	10549.98	0.79	0.00	0.79	12.00	
10575.00	6.30	359.77	10574.89	2.88	-0.01	2.88	12.00	
10600.00	9.30	359.77	10599.66	6.27	-0.02	6.27	12.00	
10620.69	11.78	359.77	10620.00	10.05	-0.04	10.05	12.00	2ND BONE SPRING
10625.00	12.30	359.77	10624.22	10.95	-0.04	10.95	12.00	
10650.00	15.30	359.77	10648.49	16.91	-0.07	16.91	12.00	
10675.00	18.30	359.77	10672.42	24.14	-0.10	24.14	12.00	
10700.00	21.30	359.77	10695.94	32.60	-0.13	32.60	12.00	
10725.00	24.30	359.77	10718.99	42.29	-0.17	42.29	12.00	
10750.00	27.30	359.77	10741.49	53.16	-0.21	53.17	12.00	
10775.00	30.30	359.77	10763.40	65.21	-0.26	65.21	12.00	
10800.00	33.30	359.77	10784.64	78.38	-0.31	78.38	12.00	
10825.00	36.30	359.77	10805.17	92.64	-0.37	92.64	12.00	
10850.00	39.30	359.77	10824.93	107.96	-0.43	107.96	12.00	
10875.00	42.30	359.77	10843.85	124.29	-0.50	124.29	12.00	
10900.00	45.30	359.77	10861.89	141.59	-0.56	141.59	12.00	
10925.00	48.30	359.77	10879.01	159.81	-0.64	159.81	12.00	
10950.00	51.30	359.77	10895.14	178.90	-0.71	178.91	12.00	
10975.00	54.30	359.77	10910.26	198.81	-0.79	198.82	12.00	
11000.00	57.30	359.77	10924.31	219.49	-0.87	219.49	12.00	
11025.00	60.30	359.77	10937.26	240.87	-0.96	240.87	12.00	
11050.00	63.30	359.77	10949.07	262.90	-1.05	262.90	12.00	
11075.00	66.30	359.77	10959.72	285.51	-1.14	285.52	12.00	
11100.00	69.30	359.77	10969.16	308.66	-1.23	308.66	12.00	
11125.00	72.30	359.77	10977.39	332.26	-1.32	332.27	12.00	
11150.00	75.30	359.77	10984.36	356.27	-1.42	356.27	12.00	
11175.00	78.30	359.77	10990.07	380.60	-1.52	380.61	12.00	
11200.00	81.30	359.77	10994.50	405.21	-1.61	405.21	12.00	
11225.00	84.30	359.77	10997.64	430.00	-1.71	430.01	12.00	
11250.00	87.30	359.77	10999.47	454.93	-1.81	454.94	12.00	
11272.54	90.00	359.77	11000.00	477.46	-1.90	477.46	12.00	2ND BONE SPRING TARGET
15697.26	90.00	359.77	11000.00	4902.15	-19.53	4902.19	0.00	EOL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CASTILE
BOS
DELAWARE
BELL CANYON
CHERRY CANYON
BRUSHY CANYON
BONE SPRING
UPPER AVALON
LOWER AVALON
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KOP
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+N/-S
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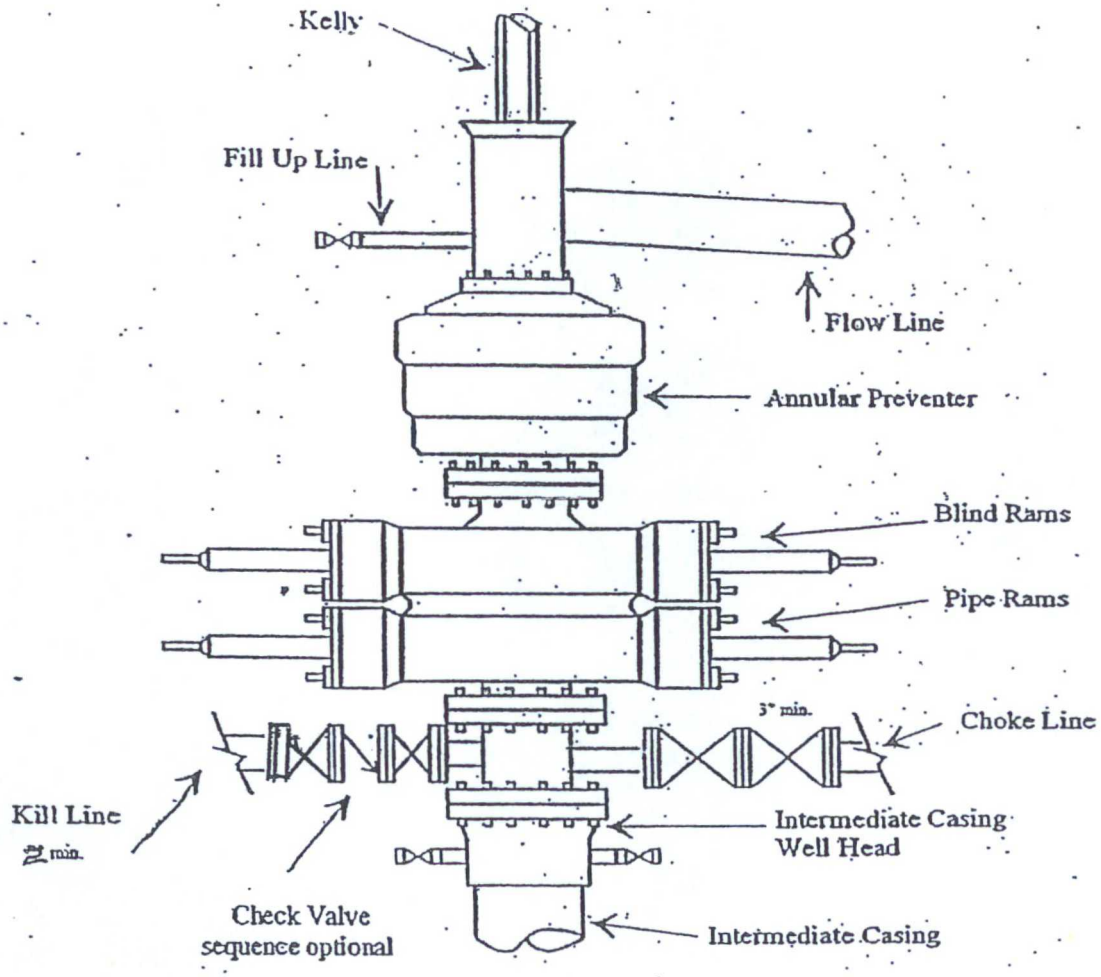
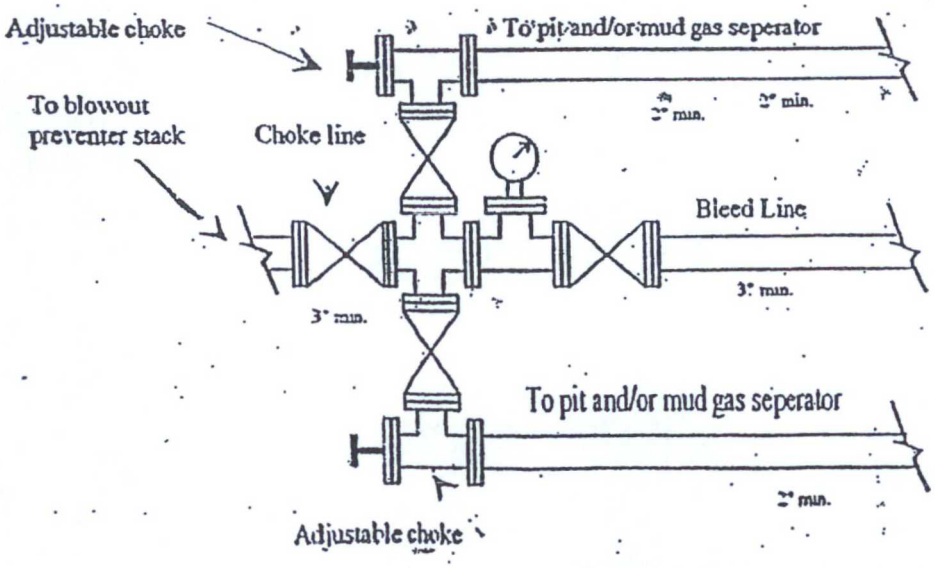
1000

Yates Petroleum Corporation

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

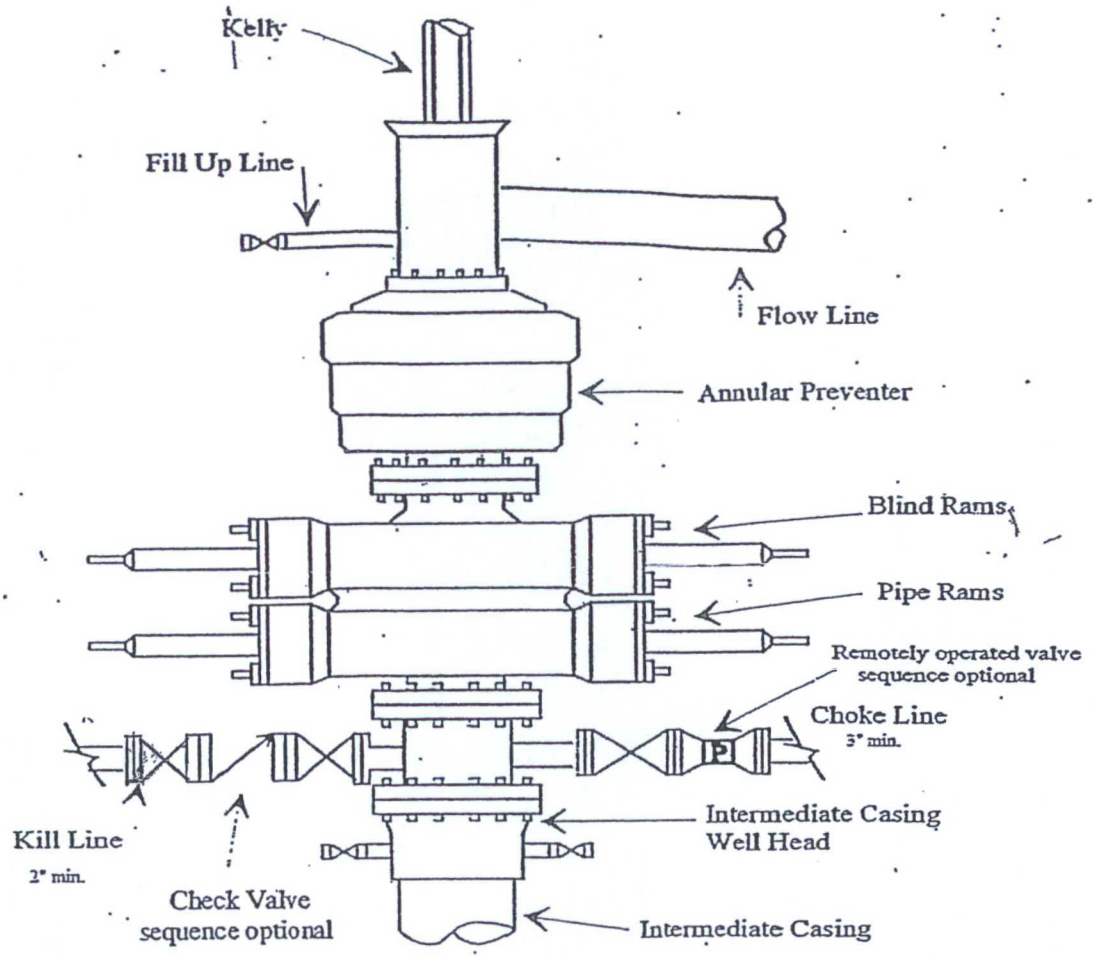


Typical 3,000 psi choke manifold assembly with at least these minimun features

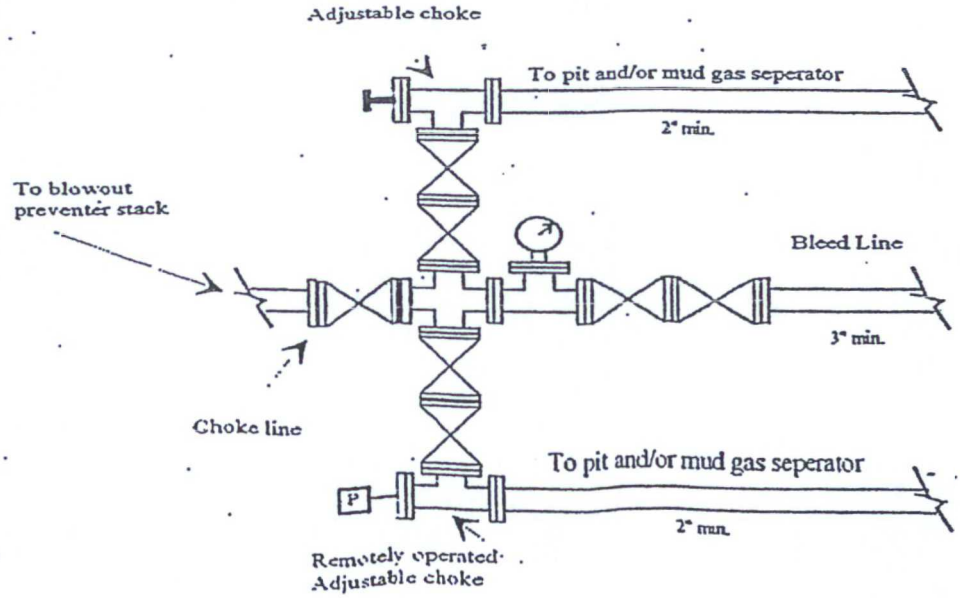


Yates Petroleum Corporation

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

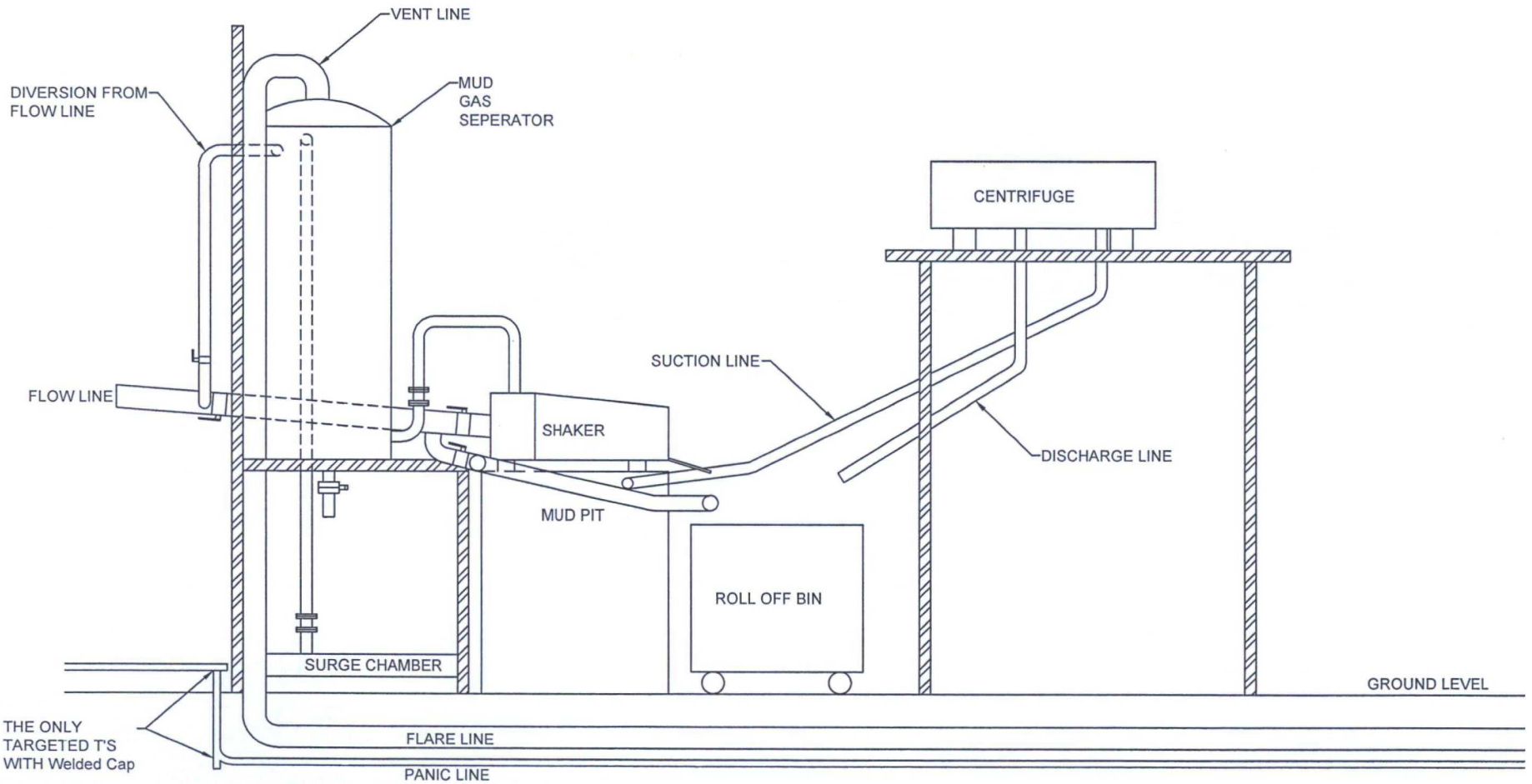


Typical 5,000 psi choke manifold assembly with at least these minimun features



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.

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.

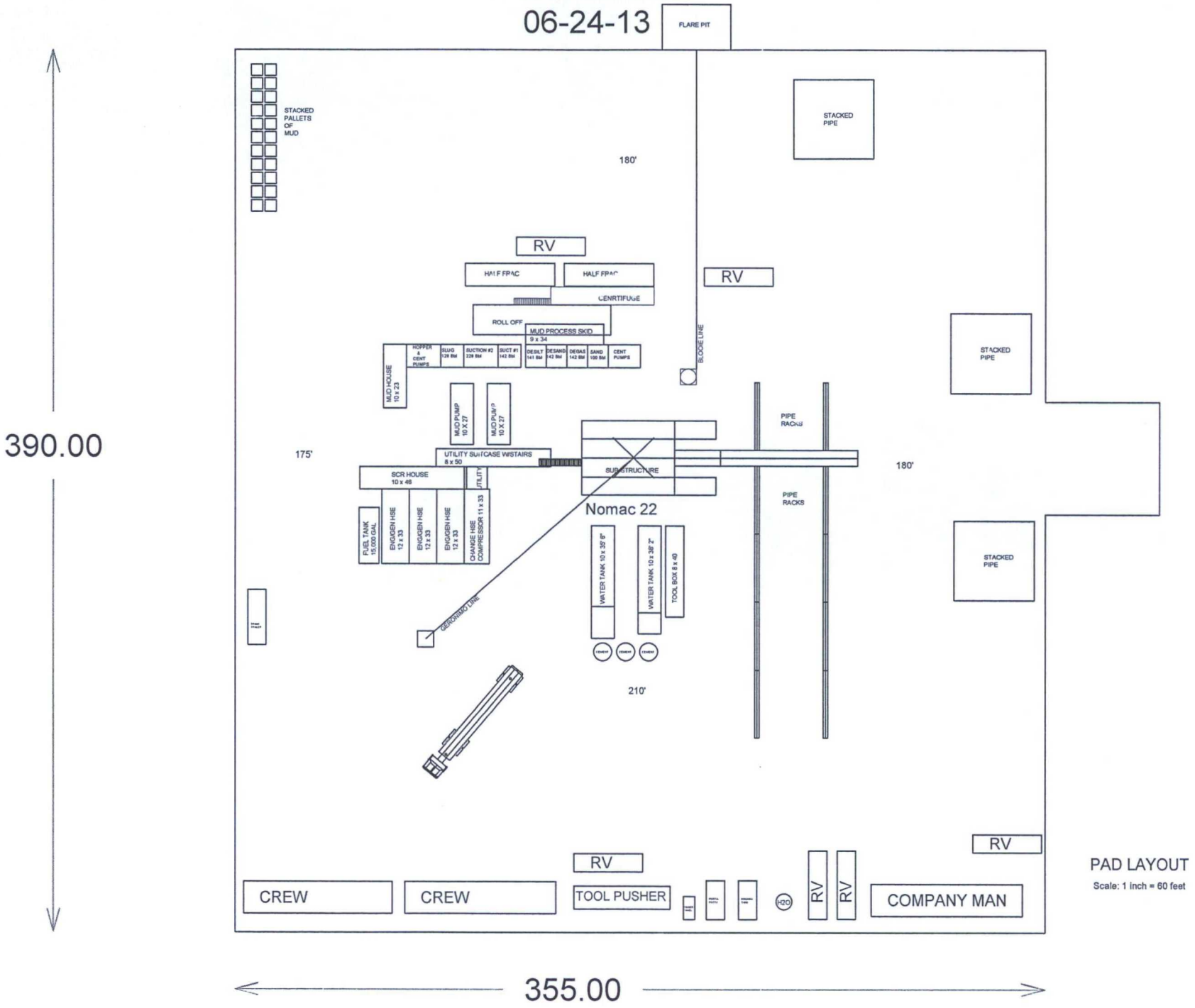
Closure Plan

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

Nomac 22

06-24-13



390.00

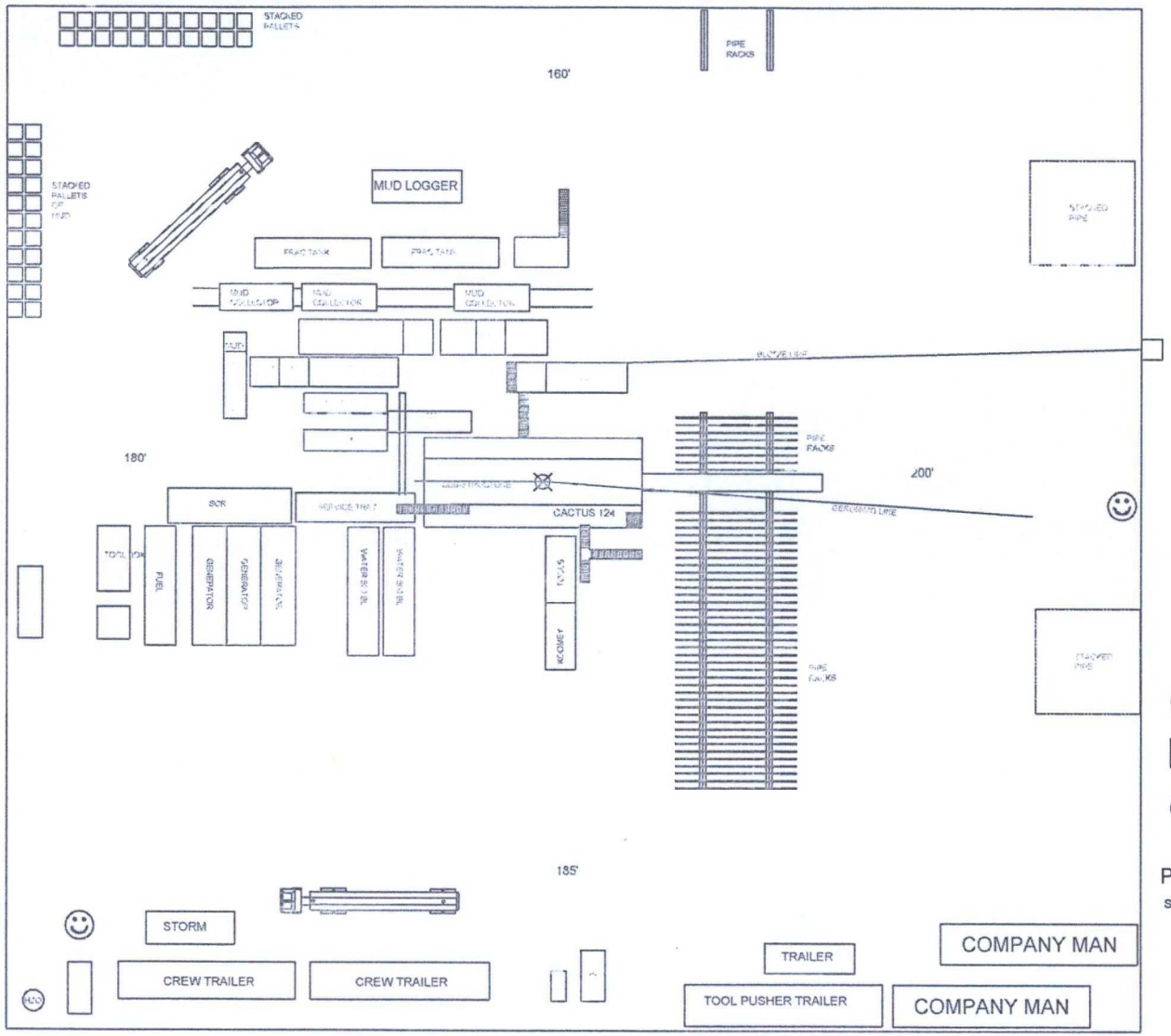
355.00

PAD LAYOUT

Scale: 1 inch = 60 feet

YATES PETROLEUM CORPORATION
CACTUS 124
07-24-13

345.00



380.00

Safe Briefing Area with caution signs and breathing equipment

Wind Direction Indicators

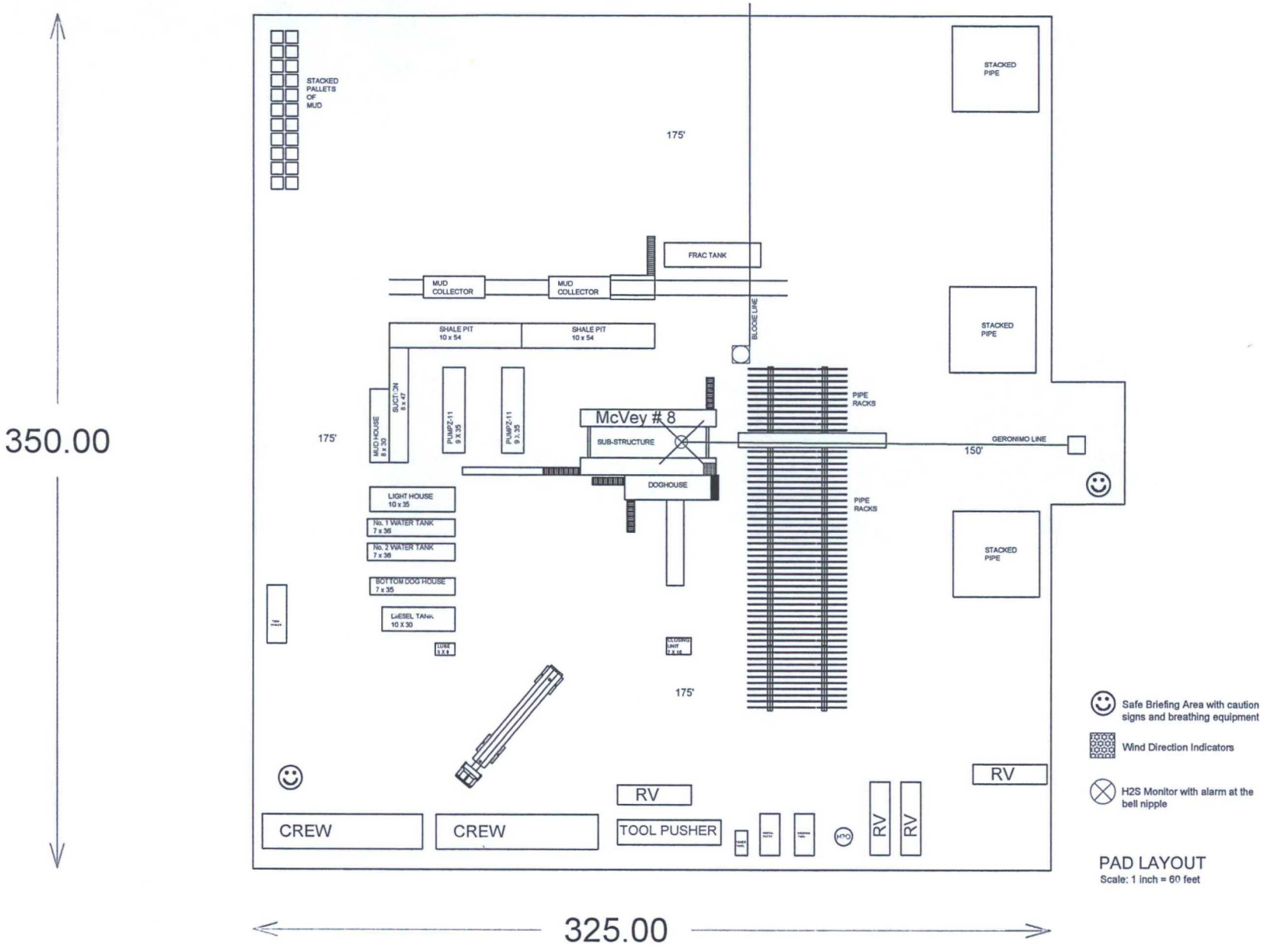
H2S Monitor with alarm at the bell nipple

PAD LAYOUT

Scale: 1 inch = 60 feet

07-24-13

YATES PETROLEUM CORPORATION
McVay # 8
10-09-13



Interim Reclamation Well Pad Layout

Farber BOB Federal #2H

Dimensions and locations will vary and are not intending to be actual representations. Final interim reclamation will be done with BLM approvel of the plan.