

ATS-11-164

OCD Hobbs

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Form 3160-3  
(February 2005)UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED  
OMB NO. 1004-0137  
Expires: March 31, 2007

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. <b>NM-66927</b>
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator <b>Yates Petroleum Corporation</b>		7. If Unit or C.A. Agreement, Name and No.
3a. Address <b>105 South Fourth Street, Artesia, NM 88210</b>		8. Lease Name and Well No. <b>Dean APQ Federal #2H</b> <i>(19731)</i>
3b. Phone No. (include area code) <b>505-748-1471</b>		9. API Well No. <b>30-025-40089</b>
4. Location of well (Report location clearly and in accordance with any State requirements. *) At surface <b>Unit N 330' FSL &amp; 1980' FWL</b> At proposed prod. zone <b>Unit C 330' FNL &amp; 1980' FWL</b>		10. Field and Pool, or Exploratory <b>Hardin Tank</b> <i>(96661)</i> <b>Undesignated Bone Spring</b>
11. Sec., T., R., M., or Blk. And Survey or Area <b>Section 3-T26S-R34E</b>		12. County or Parish <b>Lea</b>
13. State <b>NM</b>		14. Distance in miles and direction from the nearest town or post office* <b>Approximately 25 miles west of Jal, NM</b>
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. unit line, if any)	16. No. of acres in lease <b>2480.00</b>	17. Spacing Unit dedicated to this well <b>E2W2</b>
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth <b>9630'TVD &amp; 14027' MD</b>	20. BLM/ BIA Bond No. on file <b>NATIONWIDE BOND #NMB000434</b>
21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>3313 GL</b>	22. Approximate date work will start* <b>February 1, 2001</b>	23. Estimated duration <b>60 days</b>
24. Attachments		

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

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

25. Signature <i>Clifton May</i>	Name (Printed/ Typed) <b>Clifton May</b>	Date <b>12/17/2010</b>
Title <b>Land Regulatory Agent</b>		
Approved By (Signature) <i>J. Martinez</i>	Name (Printed/ Typed) <b>CARLSBAD FIELD OFFICE</b>	Date <b>MAR - 8 2011</b>
Title <b>FIELD MANAGER</b>		

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 cc 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

\* (Instructions on page 2)

Carlsbad Controlled Water Basin

SEE ATTACHED FOR  
CONDITIONS OF APPROVALAPPROVAL SUBJECT TO  
GENERAL REQUIREMENTS  
AND SPECIAL STIPULATIONS  
ATTACHED

K2 03/18/11

**DISTRICT IV**  
1220 S. St. Francis Dr., Santa Fe, NM 87505

**OIL CONSERVATION DIVISION**  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

HOBBSOCD

Form C-102  
Revised July 16, 2010  
D  
One copy to appropriate  
District Office

**□ AMENDED REPORT**

API Number 30-025-40089	Pool Code 90661	Hardin Tank Undesignated Bone Spring
Property Code 9731	Property Name DEAN "APQ" FEDERAL	Well Number 2H
OGRIID No. 025575	Operator Name YATES PETROLEUM CORP.	Elevation 3313'

### Surface Location

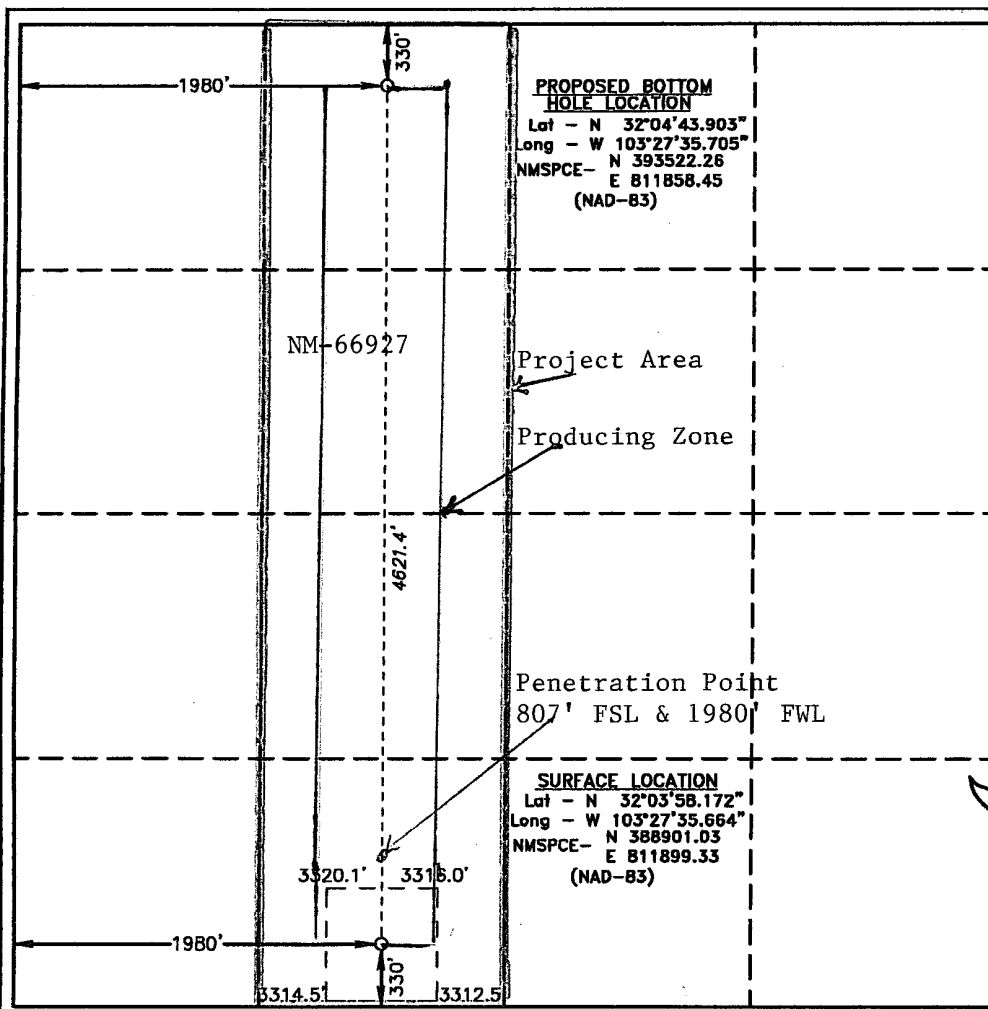
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	3	26 S	34 E		330	SOUTH	1980	WEST	LEA

## 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
C	3	26 S	34 E		330	NORTH	1980	WEST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			

**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, working interest or 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.

Clifton May 12/17/10  
Signature Date

Clifton May  
Printed Name  
cliff@yatespetroleum.com  
Email Address

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

NOVEMBER 2010  
Date Surveyed: 11/11/10  
Signature: [Signature] Seal of  
Professional Surveyor  
WFO - No. 26714

Certificate No. Gary L. Jones 7977

BASIN SURVEYS 23714

YATES PETROLEUM CORPORATION  
Dean APQ Federal #2H  
330' FSL and 1980' FWL, Sec. 3-26S-34E, Surface Hole Location  
330' FNL & 19800' FWL, Sec. 3-26S-34E, Bottom Hole Location  
Lea County, New Mexico

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

				TMD
Rustler	900'	Bone Spring	9480'-Oil	9513'
Castille	2750'	Avalon Shale	9500'-Oil	9541'
Base Salt	5080'	Target Shale	9630'-Oil	9902'
Bell Canyon	5390'-Oil	TVD (Lateral)	9630'	14027'
Cherry Canyon	6370'-Oil			
Brushy Canyon	7790'-Oil			
2. The estimated depths at which anticipated water, oil or gas formations are expected to be encountered:
 

Water: 170'

Oil or Gas: Oil Zones: 5390', 6370', 7790', 9513', 9541', 9902'..
3. Pressure Control Equipment: 3000 PSI BOPE with a 13 5/8" opening will be installed on the 13 3/8" and a 5000 PSI BOPE with a 13 5/8" opening will be installed on the 9 5/8" casing. Pressure 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 B.
4. 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 casing to be used

see  
COA

<u>Hole Size</u>	<u>Casing Size</u>	<u>Wt./Ft</u>	<u>Grade</u>	<u>Coupling</u>	<u>Interval</u>	<u>Length</u>
17 1/2"	13 3/8"	48#	H-40	ST&C	0-950'	950'
12 1/4"	9 5/8"	40#	J-55	LT&C	0-100'	100'
12 1/4"	9 5/8"	36#	J-55	LT&C	100'-3200'	3100'
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'-5400'	1200'
8 1/2"	5.5"	17#	HCP- 110	LT&C	0'-14027' MD	14027'

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

B. CEMENTING PROGRAM:

Surface Casing: Lead with 525 sacks Class C Lite+2% CaCl<sub>2</sub> (Yld 2.00 Wt 12.50) tail in with 200 sacks class C with 2% CaCl<sub>2</sub> (Yld 1.34Wt. 14.80). TOC surface.

Intermediate Casing: Lead with 1575 sacks C Lite+2% CaCl<sub>2</sub> (Yld 2.00 Wt 12.50). Tail in with 200 sacks Class C+2% CaCl<sub>2</sub> (YLD 1.34 WT 14.80 YLD). TOC surface

Production Casing cement is to be done in two stages with dv tool at 8700'.

Stage One: From 8700'-1427'; Cement with 1375 sacks Pecos Valley Lite with Calcium Carbonate 22.5 lb/sack, Extender 1.5 lb/sack,

Retarder 0.01 lb/sack, Antifoam Agent (Yld 1.83 Wt 13.00). TOC 8700'. DV Tool set approximately 8700'.

Stage Two: From 4900'-8700' lead with 675 sacks Lite Crete with Retarder .03 gal/sack, Anti Foam 0.2%, Dispersant, Extender 39 lb/sack (Yld 2.66 Wt 9.90) tail in with 100 sacks Pecos Valley Lite with Calcium Carbonate 22.5 lb/sack, Extender 1.5 lb/sack, Retarder 0.01 lb/sack, Retarder 0.6 lb/sack, Antifoam Agent 0.15 lb/sack (Yld 1.41 Wt 13.00) TOC 4900'

Well drilled vertically to 9153'. Well will then be kicked off and drilled at 12 degrees per 100' with a 8 3/4" hole to 9902' MD (9630' TVD). Hole size will then reduced to 8 1/2" and drilled to 14027' MD (9630' VD) where 5 1/2" casing will be set and cemented. Penetration point of producing zone will be encountered at 807' FSL & 1980' FWL, 3-26S-34E. Deepest TVD in the lateral will be 9630'.

6. MUD PROGRAM AND AUXILIARY EQUIPMENT:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0-950' <i>5350'</i>	Fresh Water Gel	8.60-9.20	35-40	N/C
1500'- <del>5400'</del> <i>5400'</i>	Brine Water	10.00-10.20	28	N/C
<del>5400'</del> -9153'	Cut Brine	8.90-9.10	28-29	N/C
9153'-14027'	Cut Brine(Lateral Section)	8.80-9.20	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. Rig personnel will check mud hourly.

7. EVALUATION PROGRAM: *See COA*

Samples: Thirty foot samples to 3000'. Every 10' from 3000' to TD  
Logging: Platform Huls; CMR; dipole sonic for stress field  
Coring: None anticipated  
DST's: None Anticipated  
Mudlogging: From surface casing

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

Maximum Anticipated BHP:  
0'-950' 454 PSI  
950'-5400' 2864 PSI  
5400'-9630' 4607 PSI

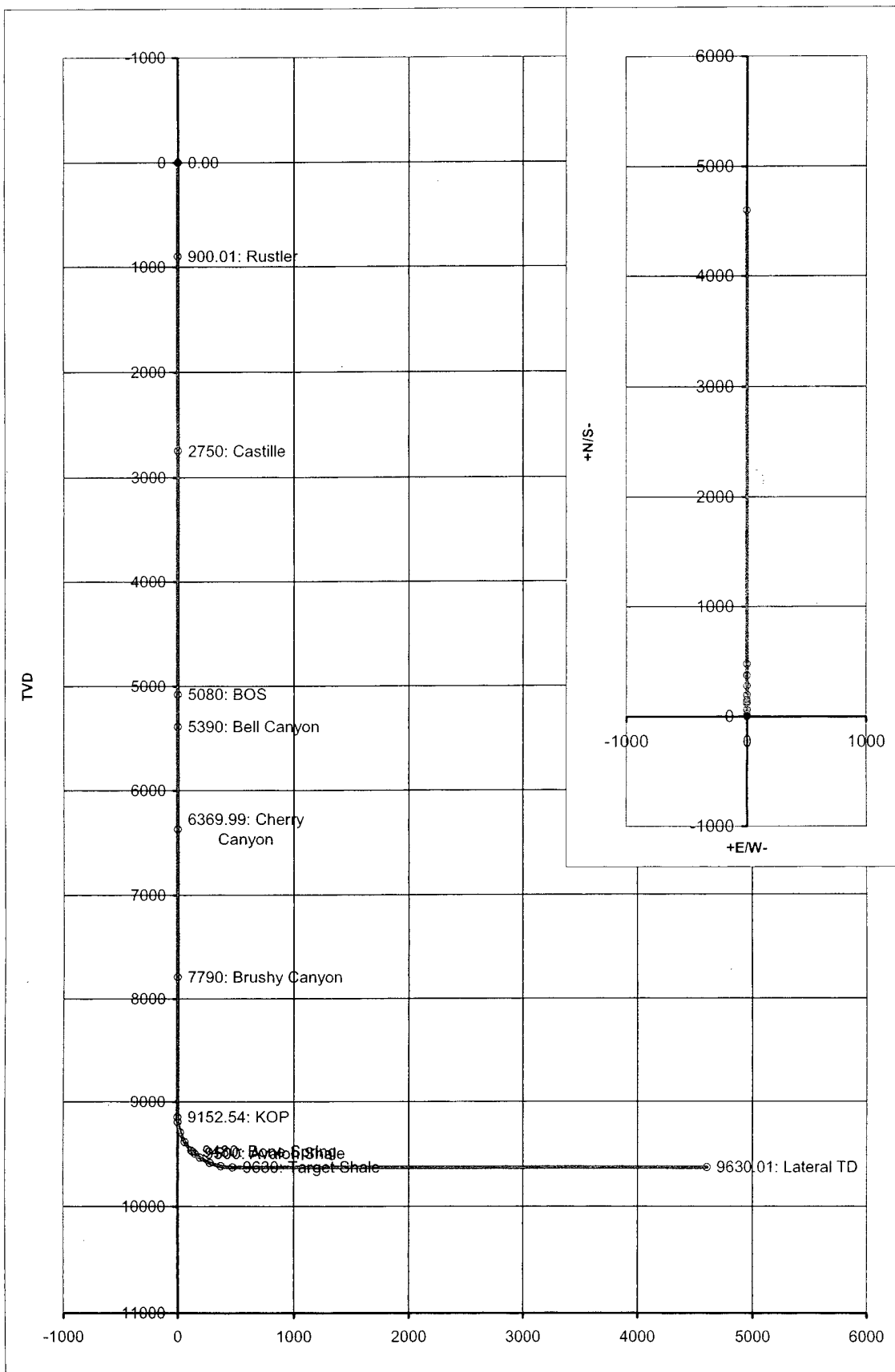
Abnormal Pressures Anticipated: None  
Lost Circulation Zones Anticipated: None.  
H2S Zones Anticipated: None Anticipated  
Maximum Bottom Hole Temperature: 150 F

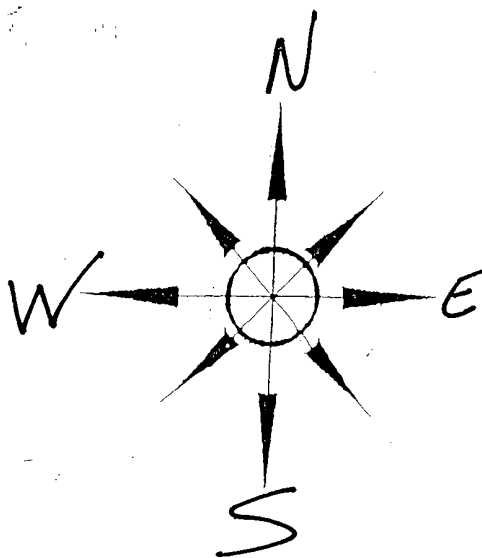
9. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 60 days to drill the well with completion taking another 20 days.

Co: 0	Units: Feet, °, 7100ft	VS Az: 0.00	Tgt TVD: 9630.00
Drillers: 0	Elevation:	Tgt Radius: 0.00	Tgt MD: 0.00
Well Name: Dean APQ Federal 2H	Northing:	Tgt N/S: 4602.00	Tgt Displ.: 0.00
Location: 0	Easting:	Tgt E/W: 0.00	Method: Minimum Curvature

No.	MD	CL	Inc	Azi	TVD	VS	+N/S-	+E/W-	BR	WR	DLS	Comments
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
1	900.01	900.01	0.00	0.00	900.01	0.00	0.00	0.00	0.00	0.00	0.00	Rustler
2	2750.00	1850.00	0.00	0.00	2750.00	0.00	0.00	0.00	0.00	0.00	0.00	Castille
3	5080.00	2329.99	0.00	0.00	5080.00	0.00	0.00	0.00	0.00	0.00	0.00	BOS
4	5390.00	310.00	0.00	0.00	5390.00	0.00	0.00	0.00	0.00	0.00	0.00	Bell Canyon
5	6369.99	979.99	0.00	0.00	6369.99	0.01	0.01	0.00	0.00	0.00	0.00	Cherry Canyon
6	7790.00	1420.01	0.00	0.00	7790.00	0.01	0.01	0.00	0.00	0.00	0.00	Brushy Canyon
7	9152.54	1362.54	0.00	0.00	9152.54	0.01	0.01	0.00	0.00	0.00	0.00	KOP
8	9200.00	47.46	5.70	0.00	9199.92	2.37	2.37	0.00	12.00	0.00	12.00	
9	9300.00	100.00	17.70	0.00	9297.67	22.60	22.60	0.00	12.00	0.00	12.00	
10	9400.00	100.00	29.70	0.00	9389.07	62.71	62.71	0.00	12.00	0.00	12.00	
11	9500.00	100.00	41.70	0.00	9470.13	120.95	120.95	0.00	12.00	0.00	12.00	
12	9513.38	13.38	43.30	0.00	9480.00	130.00	130.00	0.00	12.00	0.00	12.00	Bone Spring
13	9541.67	28.29	46.70	0.00	9500.00	150.00	150.00	0.00	12.00	0.00	12.00	Avalon Shale
14	9600.00	58.33	53.70	0.00	9537.32	194.78	194.78	0.00	12.00	0.00	12.00	
15	9700.00	100.00	65.70	0.00	9587.69	280.95	280.95	0.00	12.00	0.00	12.00	
16	9800.00	100.00	77.70	0.00	9619.04	375.72	375.72	0.00	12.00	0.00	12.00	
17	9902.53	102.53	90.00	0.00	9630.00	477.47	477.47	0.00	12.00	0.00	12.00	Target Shale
18	14027.07	4124.54	90.00	0.00	9630.01	4602.01	4602.01	0.00	0.00	0.00	0.00	Lateral TD





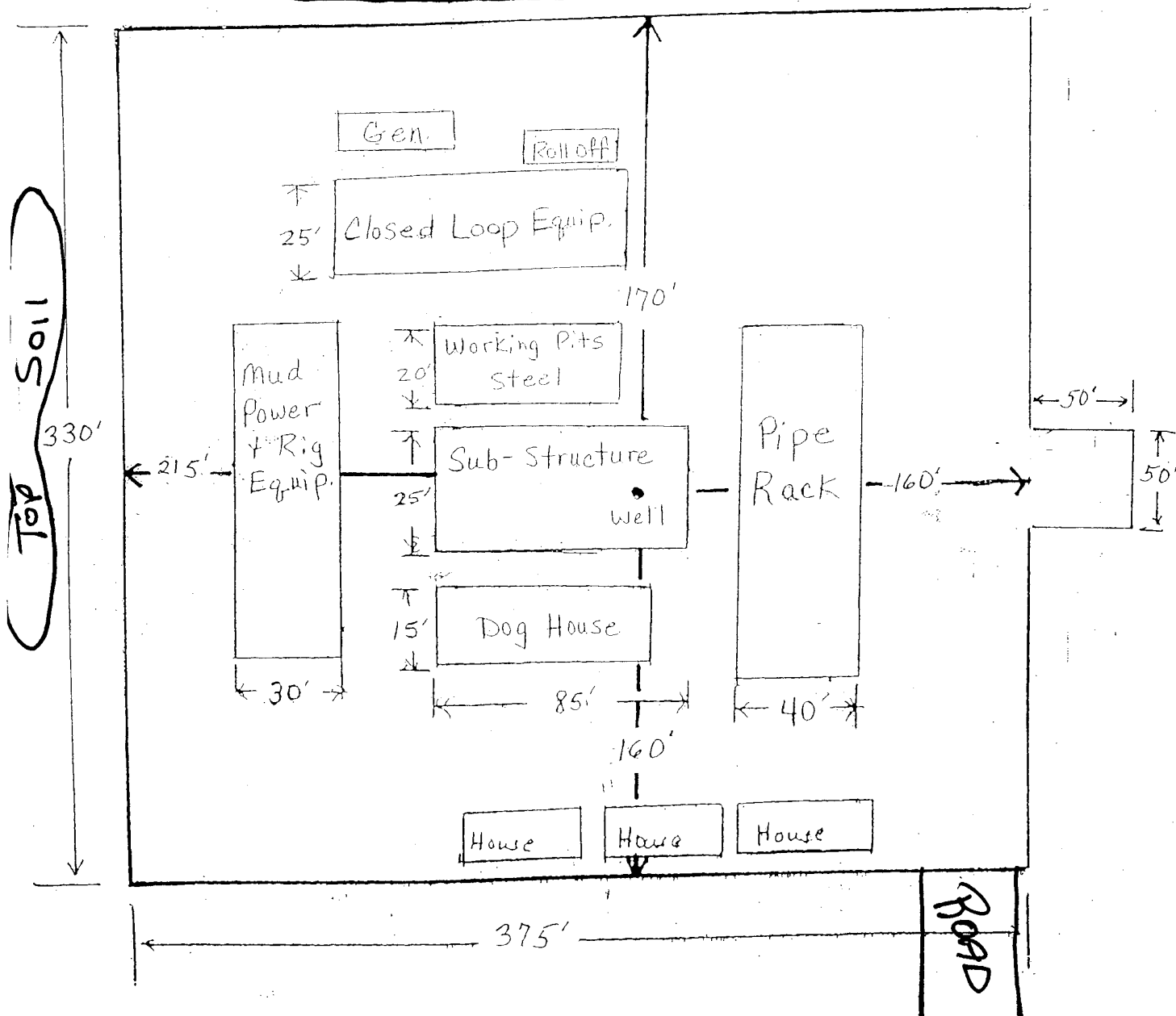
# Yates Petroleum Corporation

Location Layout for Permian Basin

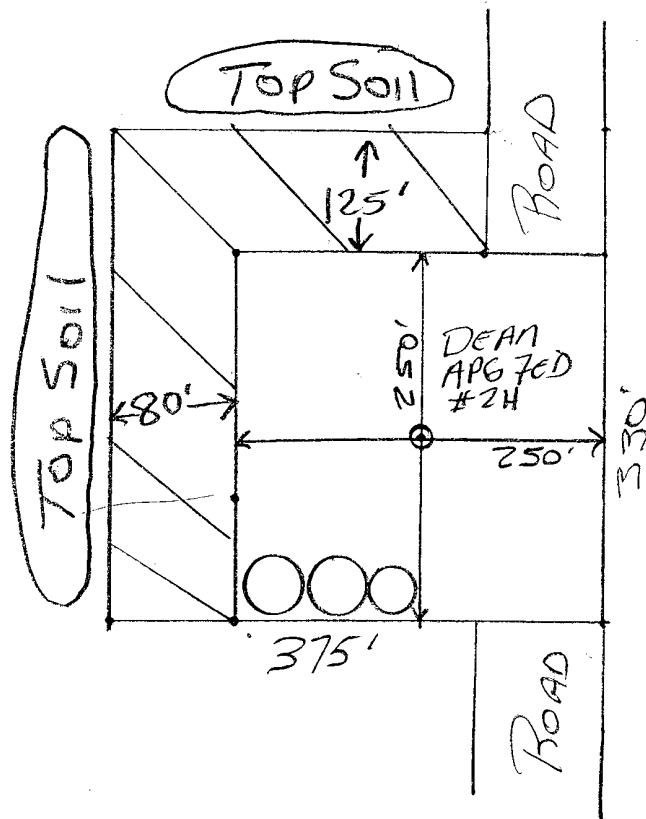
## Closed Loop Design Plan

*Top Soil*  
\*NOT TO SCALE

YATES PETROLEUM CORPORATION  
Dean APQ Federal #2H  
330' FSL and 1980' FWL SHL  
330' FNL and 1980' FWL BHL  
Section 3, T26S-R34E  
Eddy County, New Mexico Exhibit B



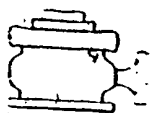
YATES PETROLEUM CORPORATION  
Dean APQ Federal #2H  
Plan for Surface Interim Reclamation  
Exhibit F



Not To Scale  
This PLAT may  
be different  
After Final  
Reclamation

Possible  
Reclaimed  
Area



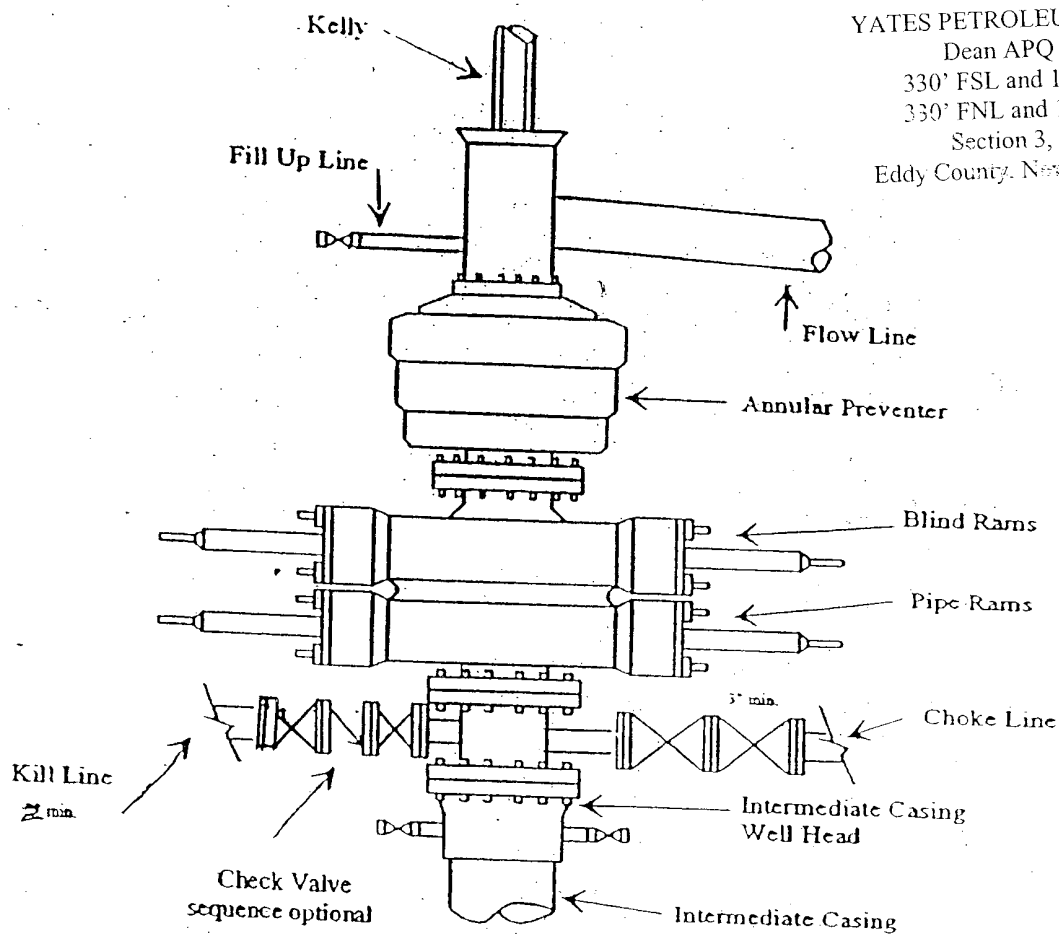


# Yates Petroleum Corporation

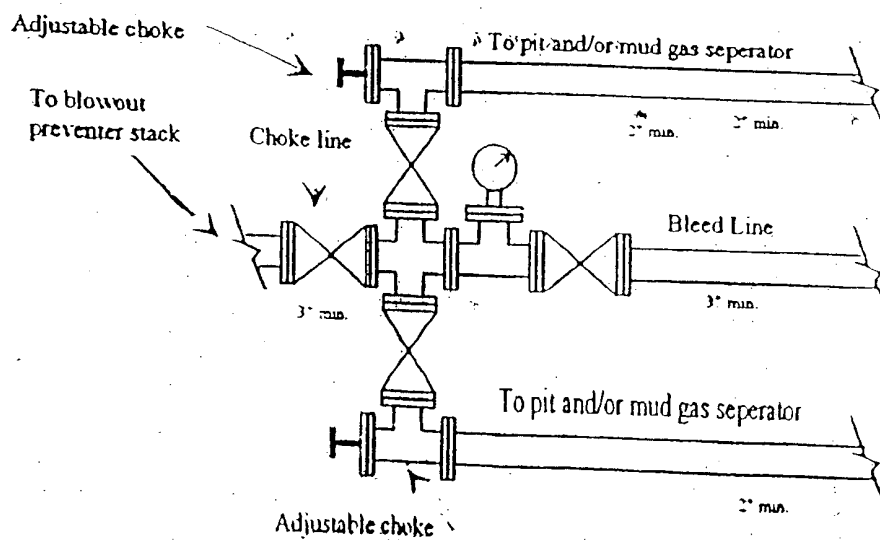
BOP-3

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

YATES PETROLEUM CORPORATION  
Dean APQ Federal #2H  
330' FSL and 1980' FWL SHL  
330' FNL and 1980' FWL BHL  
Section 3, T26S-R34E  
Eddy County, New Mexico Exhibit C

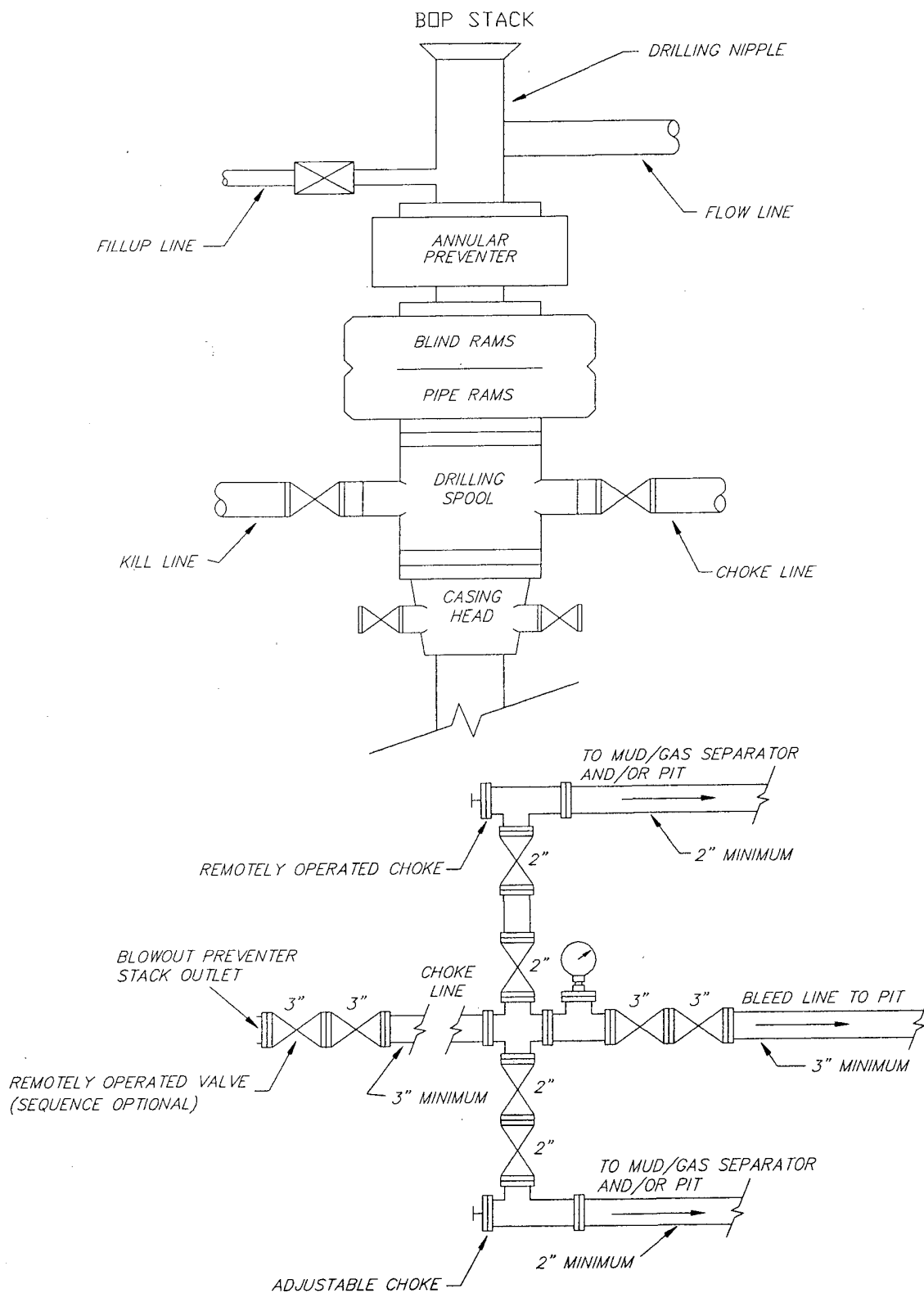


Typical 3,000 psi choke manifold assembly with at least these minimum features



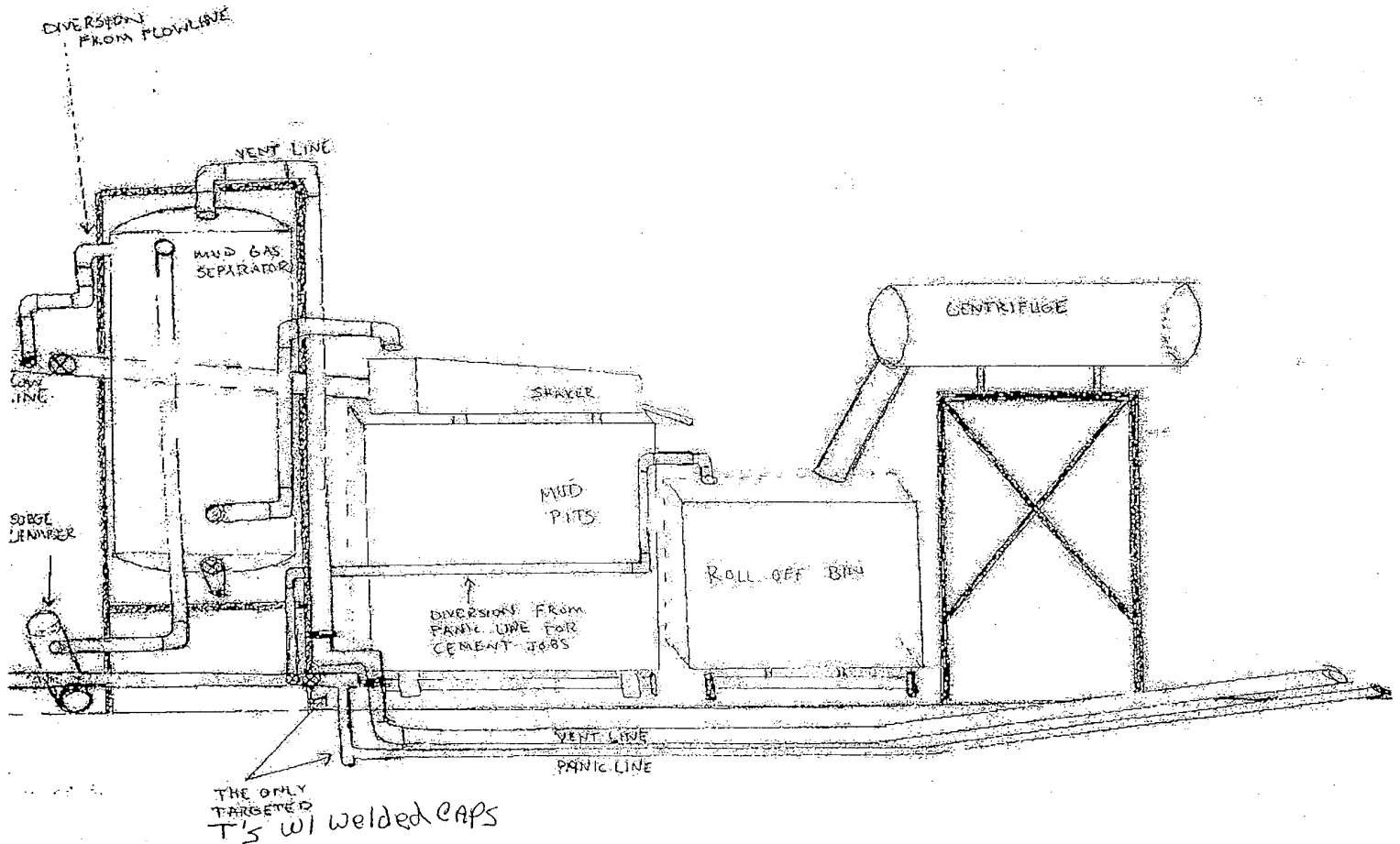
# YATES PETROLEUM CORPORATION

## TYPICAL 5,000 p.s.i. BLOWOUT PREVENTER & CHOKE MANIFOLD SCHEMATIC



YATES PETROLEUM CORPORATION  
Piping from Choke Manifold  
to the Closed-Loop Drilling Mud System

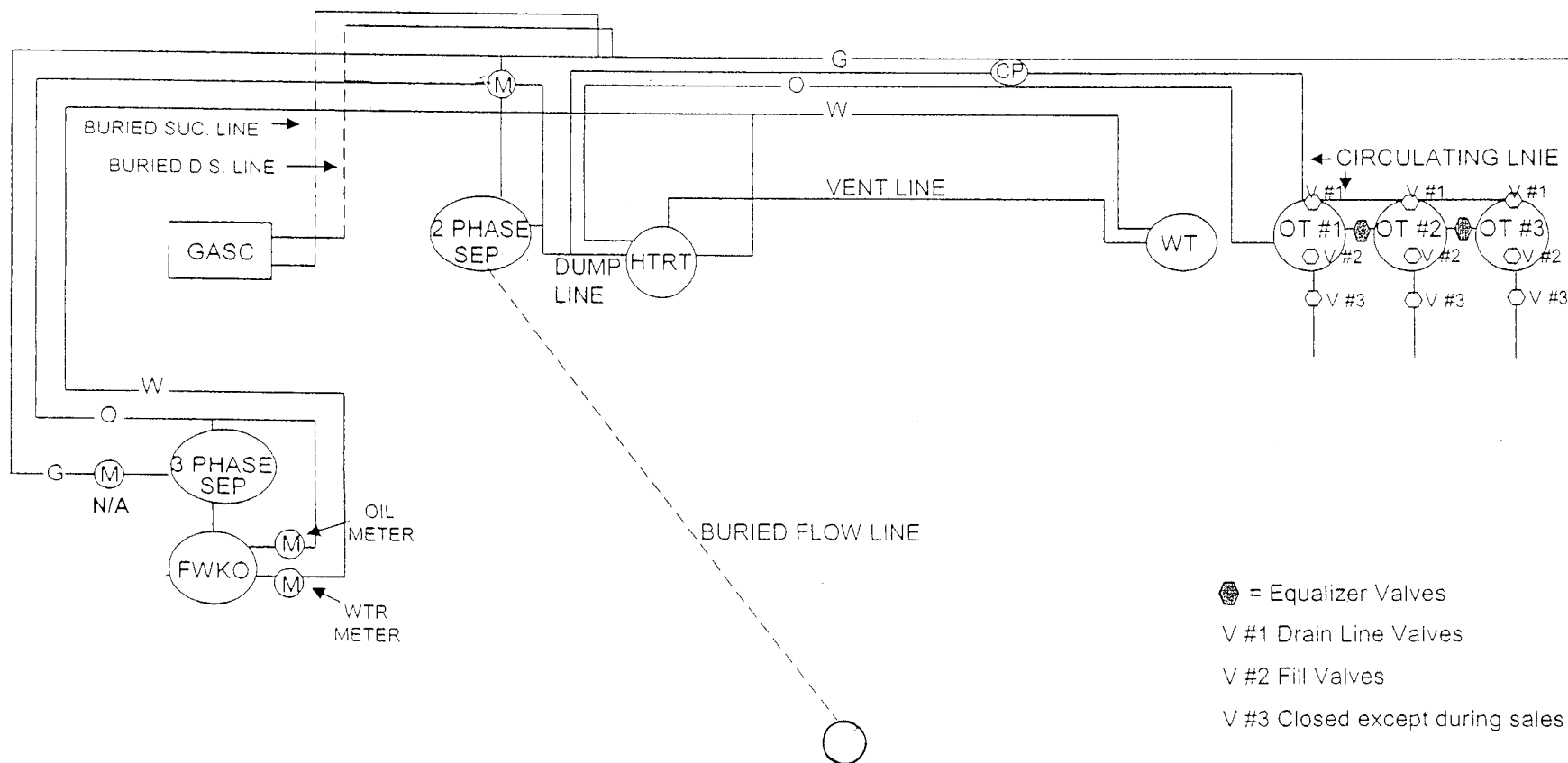
YATES PETROLEUM CORPORATION  
Dean APQ Federal #2H  
330' FSL and 1980' FWL SHL  
330' TNL and 1980' FWL BHL  
Section 3, T26S-R34E  
Eddy County, New Mexico Exhibit E





105 South 4<sup>th</sup> Street \* Artesia, NM 88210  
(575)-748-1471

-Danny Matthews  
June, 2010



This diagram is subject to the Yates Petroleum Corporation August 1983 Security Plan  
which is on file at 105 South 4th Street, Artesia, NM