

ATS-R-213

## OCD-ARTESIA

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

## APPLICATION FOR PERMIT TO DRILL OR REENTER

RECEIVED

JUN 05 2012

OCD-ARTESIA

## SECRETARY'S POTASH

FORM APPROVED

OMB NO 1004-0137

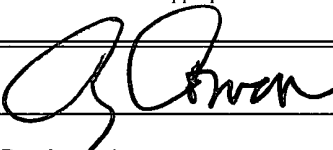
Expires: March 31, 2007

1a. Type of Work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. <b>BHL NM-81929 &amp; NM-55125</b> <i>SHL</i>
1b. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name N/A
2. Name of Operator <b>Yates Petroleum Corporation 025575</b>		7. If Unit or CA Agreement, Name and No. N/A
3a. Address <b>105 South Fourth Street, Artesia, NM 88210</b>	3b. Phone No (include area code) <b>505-748-1471</b>	8. Lease Name and Well No. <b>Zia AHZ Federal Com 2-H</b> <i>6129177</i>
4. Location of well (Report location clearly and in accordance with any State requirements. *) At surface <b>UNORTHODOX LOCATION</b> <b>990' FNL &amp; 2490' FWL, Section 13-T20S-29E, SHL</b> At proposed production zone <b>760' FNL &amp; 2310' FEL, Section 14-T20S-R29E, BHL</b>		9. API Well No. <b>30-015-40373</b>
14. Distance in miles and direction from the nearest town or post office* <b>Approximately 20 miles east of Carlsbad, NM.</b>		10. Field and Pool, or Exploratory <b>Goat Bone Spring</b> <i>27470</i>
15. Distance from proposed* location to nearest (Also to nearest drlg unit line, if any) <b>SHL 130' 330' BHL</b>	16. No. of acres in lease <b>NM81929 1160.01 Ac.</b> <b>NM55125 160 Ac.</b>	11. Sec, T, R, M, or Blk. And Survey or Area <b>Sec. 13-20S-29E SHL &amp; 14-20S-29E BHL</b>
17. Spacing Unit dedicated to this well <b>160</b>	18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft <b>Approx. 1200'</b>	12. County or Parish <b>Eddy</b>
19. Proposed Depth <b>8353' TVD</b>	20. BLM/ BIA Bond No. on file <b>NATIONWIDE BOND #NMB000434</b>	13. State <b>NM</b>
21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>3325' GL</b>	22. Approximate date work will start* <b>ASAP</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

- |  |  |
|--|--|
| 1 Well plat certified by a registered surveyor.  | 4 Bond to cover the operations unless covered by existing bond on file(see item 20 above). |
| 2 ap   | 5 Operator certification.  |
| 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). | 6 Such other site specific information and/ or plans as may be required by the BLM         |

25. Signature 	Name (Printed/ Typed) <b>Cy Cowan</b>	Date <b>1/4/2012</b>
Title <b>Land Regulatory Agent</b>		
Approved By (Signature) <b>/s/ Jesse J. Juen</b>	Name (Printed/ Typed) <b>/s/ Jesse J. Juen</b>	Date <b>MAY 25 2012</b>
Title <b>STATE DIRECTOR</b>		
Office <b>NM STATE OFFICE</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

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

CAPITAN CONTROLLED WATER BASIN  
SEE ATTACHED FOR  
CONDITIONS OF APPROVALAPPROVAL SUBJECT TO  
GENERAL REQUIREMENTS  
AND SPECIAL STIPULATIONS  
ATTACHED

DISTRICT I  
1026 N. French Dr., Hobbs, NM 88240

DISTRICT II  
1801 W. Grand Avenue, Artesia, NM 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

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

State of New Mexico  
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

Form C-102  
Revised July 18, 2010

Submit one copy to appropriate  
District Office

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number <b>30-015-40373</b>	Pool Code <b>27470</b>	Pool Name <b>GETTY</b> <b>Wildcat; Bone Spring</b>
Property Code <b>12917</b>	Property Name <b>ZIA "AHZ" FEDERAL COM</b>	Well Number <b>2H</b>
OGRID No. <b>025575</b>	Operator Name <b>YATES PETROLEUM CORP.</b>	Elevation <b>3325'</b>

Surface Location

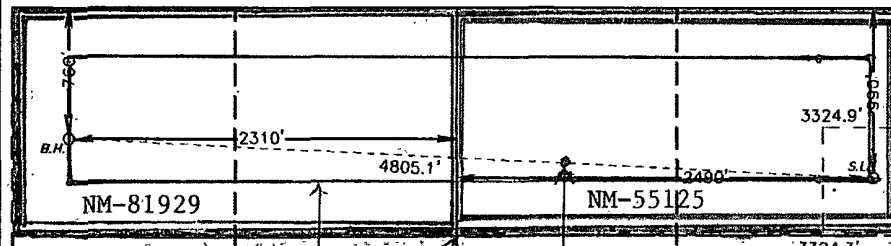
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	13	20 S	29 E		990	NORTH	2490	WEST	EDDY

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
B	14	20 S	29 E		760	NORTH	2310	EAST	EDDY

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

		<b>OPERATOR CERTIFICATION</b> 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 a working 329.0' east or unleased 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.  Signature: <i>Cy Cowan</i> Date: <i>6/7/12</i> Printed Name: <i>Cy Cowan</i> Email Address: <i>cy@yatespetroleum.com</i>	
<b>PROPOSED BOTTOM HOLE LOCATION</b> Lot - N 32°34'42.96" Long - W 104°02'40.62" NMSPCE - E 630270.00 (NAD-83)		<b>SURFACE LOCATION</b> Lot - N 32°34'40.54" Long - W 104°01'44.53" NMSPCE - E 635009.532 (NAD-83)	
<b>Producing Zone</b> <b>Project Area</b>		<b>Penetration Point</b> 967' FNL & 2002' FWL	
<b>RECEIVED</b> JUN 07 2012 NMOCD ARTESIA		<b>SURVEYOR CERTIFICATION</b> 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.  Date Surveyed: <i>DECEMBER 14, 2011</i> Signature & Seal of Professional Surveyor: <i>[Signature]</i> Certificate No.: <i>6097-L. Jones 7977</i> BASIN SURVEYS 25900	

# YATES PETROLEUM CORPORATION

Zia AHZ Federal Com #2-H

990' FNL and 2490' FWL, Section 13-20S-29E, Surface Hole Location

760' FNL & 2310' FEL, Section 14-20S-29E, Bottom Hole Location

Eddy County, New Mexico

- The estimated tops of geologic markers are as follows:

Rustler	269'	Bone Spring LM	6209'-Oil
Top of Salt	344'	Avalon Shale	6324'
Base of Salt	1254'	Middle Avalon	6504'-Oil
Tansill	1299'	Lower Avalon	6864'-Oil
Yates	1403'	Bone Spring 1 /SD/	7314'-Oil
Capitan Reef	1864'	Bone Spring 2 /SD/	8185'-Oil
Cherry Canyon	3434'-Oil	Target Sand	8636'-Oil
Brushy Canyon	4644'-Oil	TD Lateral	12955'

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

Water: 100'  
Oil or Gas: See above.

- Pressure Control Equipment: Yate Petroleum Corporation respectfully requests a ~~variance~~ to allow placement of a 2000 PSI annular system with a 17.5" opening to be installed on the 20" casing. The annular will be pressured up to 1000 PSI and held for 30 minute test period. 3000 PSI BOPE with a 13.625" opening will be installed on the 13.3/8" casing and also on the 9 5/8" 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. 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.

- 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

<u>Hole Size</u>	<u>Casing Size</u>	<u>Wt./Ft</u>	<u>Grade</u>	<u>Coupling</u>	<u>Interval</u>	<u>Length</u>
36"	30"		H-40		0-40	40'
26"	20"	94#	H-40	ST&C	0-300'	300'
17 1/2"	13 3/8"	54.5#	J-55	ST&C	0-100'	100'
17 1/2"	13 3/8"	48#	H-40	ST&C	100'-1100'	1000'
17 1/2"	13 3/8"	54.5#	J-55	ST&C	1100'-1400'	300' 400'
12 1/4"	9 5/8"	36#	K-55	LT&C	0-3500'	3500'
8 3/4"	5.1/2"	17#	HCP- 110	LT&C	0'-8636'	8636'
8 1/2"	5 1/2"	17#	L-80	LT&C	8636'-12955'	4319'

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

### B. CEMENTING PROGRAM:

Surface Casing: Lead with 675 sacks Class C with CaCl<sub>2</sub> (Wt. 14.80 Yld 1.34). Designed with 100% excess cement. TOC is surface.

Intermediate Casing: Lead with 835 sacks of 35:65:6PzC (Wt 12.50 Yld 2.00). Tail in with 200 sacks C with CaCl<sub>2</sub> (Wt. 14.80 Yld. 1.34). 100% excess designed. TOC surface.

Intermediate Casing 2: Lead with 970 sacks 35:65:6PzC (Wt. 12.50 Yld. 2.00). Tail in 200 sacks Class C with CaCl<sub>2</sub> (Wt. 14.80 Yld. 1.34) 100% excess designed. TOC surface.

Production Casing: cemented in three stages with stage tools at 7600' and 4000'.

Stage One: 1740 sacks Pecos Valley Lite (Wt. 13.00 Yld. 1.41) with D112, D151, D174, D177, D800 and D46. TOC 7600'. 30% excess designed.

Stage Two: 835 sacks 35:65:6PzC (Wt 12.50 Yld. 2.00). Tail in 100 sacks Pecos Valley Lite (Wt. 13.00 Yld. 1.41) with D112, D151, D174, D177, D800, and D46. TOC 4000'. 30% excess designed.

Stage Three: 950 sacks 35:65:6PzC (Wt. 12.50 Yld 2.00). Tail in 100 sacks Class C with CaCl<sub>2</sub> (Wt. 14.80 Yld 1.34). TOC surface. 30% excess designed.

Well will be drilled vertically to 7875' MD. At 7875' MD well will be kicked off at 12 degrees per 100' with a 8 3/4" hole to 8636' MD (8353' TVD). The hole size will be reduced to 8 1/2" and drilled to 12,955' MD (8254' TVD) 14-20S-29E where 5 1/2" casing will be set and cemented to surface. DV tools will be set at 7600' and at 4000'. Penetration point of producing zone will be encountered at 967' FNL & 2002' FWL, 13-20S-29E. Deepest TVD in the well is 8353' in the lateral.

#### 6. MUD PROGRAM AND AUXILIARY EQUIPMENT:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0-300'	Fresh Water	8.60-9.20	32-34	N/C
300'-1400'	Brine Water	10.00-10.00	28-29	N/C
1400'-3500'	Fresh Water	8.60-8.80	28-29	N/C
3500'-12955'	Cut Brine(Lateral Section)	8.80-9.20	28-32	<15

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:

Samples: 30' samples to 3000'. 10' samples from 3000' to TD. Mudloggers on at surface casing

Logging: Platform Hrla-CMR *See CBA*

Coring: None anticipated

DST's: None Anticipated

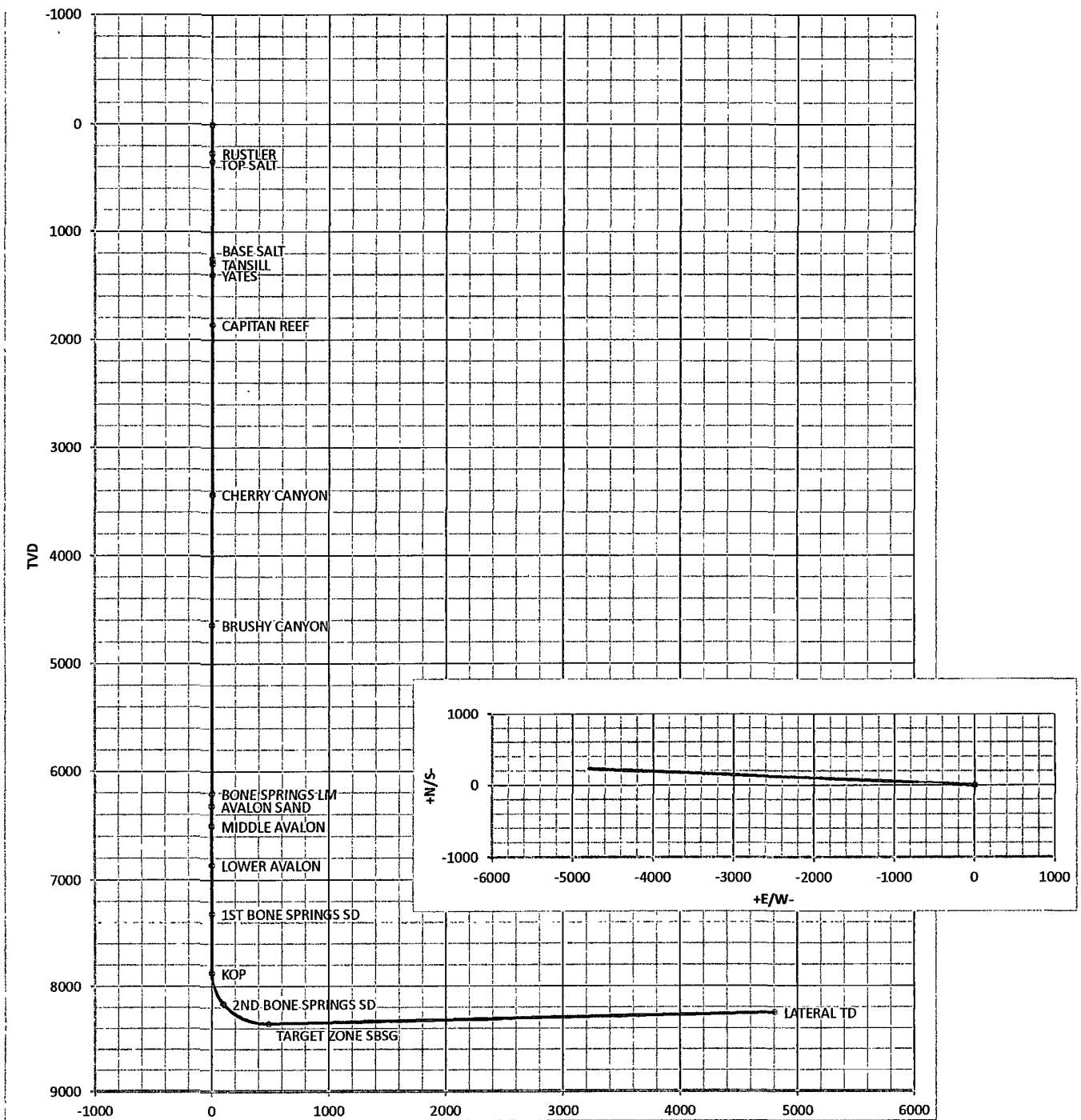
#### 8. ABNORMAL CONDITIONS, BOTTOM HOLE PRESSURE, AND POTENTIAL HAZARDS:

Maximum Anticipated BHP:

0'-300'	144 PSI
300'-1400'	728 PSI
1400'-3500'	1602 PSI
3500'-8353'	3996 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.

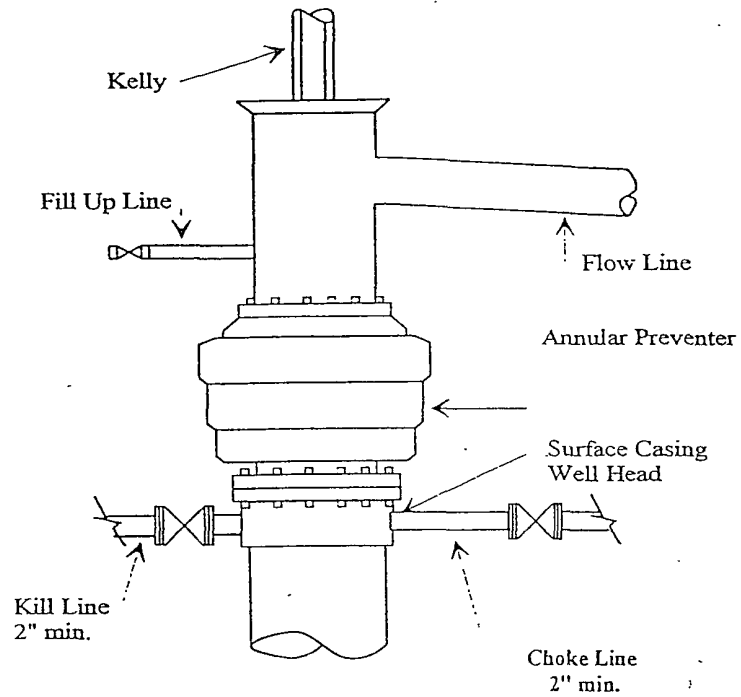
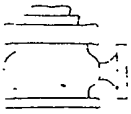


<b>Co:</b>	Yates Petroleum Corporation					<b>Units:</b>	Feet, °, 100ft			<b>VS Az:</b>	272.74		<b>Method:</b>	Minimum Curvature	
<b>Drillers:</b>	0					<b>Elevation:</b>				<b>Map System:</b>	NAD83, St. Plane, Wyoming West				
<b>Well Name:</b>	Zia AHZ Federal COM #2H					<b>Northing:</b>				<b>Latitude:</b>					
<b>Location:</b>	Sec. 13, 20S-29E					<b>Easting:</b>				<b>Longitude:</b>					
Yates Petroleum Corporation: ZIA AHZ FED. COM 2H															
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	269.00	269.00	0.00	360.00	269.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 RUSTLER			
2	344.00	75.00	0.00	360.00	344.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 TOP SALT			
3	1254.00	910.00	0.00	360.00	1254.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 BASE SALT			
4	1299.00	45.00	0.00	360.00	1299.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 TANSILL			
5	1403.00	104.00	0.00	360.00	1403.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 YATES			
6	1864.00	461.00	0.00	360.00	1864.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 CAPITAN REEF			
7	3434.00	1570.00	0.00	360.00	3434.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 CHERRY CANYON			
8	4644.00	1210.00	0.00	360.00	4644.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 BRUSHY CANYON			
9	6209.00	1565.00	0.00	360.00	6209.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00 BONE SPRINGS LM			
10	6324.00	115.00	0.00	360.00	6324.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00 AVALON SAND			
11	6504.00	180.00	0.00	360.00	6504.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00 MIDDLE AVALON			
12	6864.00	360.00	0.00	360.00	6864.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00 LOWER AVALON			
13	7314.00	450.00	0.00	360.00	7314.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00 1ST BONE SPRINGS SD			
14	7875.38	561.38	0.00	272.74	7875.38	0.00	0.01	0.00	0.00	0.00	1.11	0.00 KOP			
15	7900.00	24.62	2.95	272.74	7899.99	0.63	0.04	-0.63	12.00	0.00	12.00				
16	8000.00	100.00	14.95	272.74	7998.59	16.17	0.78	-16.15	12.00	0.00	12.00				
17	8100.00	100.00	26.95	272.74	8091.81	51.87	2.49	-51.81	12.00	0.00	12.00				
18	8185.31	85.31	37.19	272.74	8164.00	97.11	4.65	-96.99	12.00	0.00	12.00	0.00 2ND BONE SPRINGS SD			
19	8200.00	14.69	38.95	272.74	8175.56	106.16	5.09	-106.04	12.00	0.00	12.00				
20	8300.00	100.00	50.95	272.74	8246.20	176.69	8.46	-176.48	12.00	0.00	12.00				
21	8400.00	100.00	62.95	272.74	8300.64	260.36	12.47	-260.06	12.00	0.00	12.00				
22	8500.00	100.00	74.95	272.74	8336.48	353.51	16.93	-353.11	12.00	0.00	12.00				
23	8600.00	100.00	86.95	272.74	8352.18	452.09	21.65	-451.57	12.00	0.00	12.00				
24	8636.30	36.30	91.31	272.74	8352.72	488.38	23.38	-487.82	12.00	0.00	12.00	0.00 TARGET ZONE SBSG			
25	12954.56	4318.26	91.31	272.74	8254.01	4805.51	230.01	-4800.00	0.00	0.00		0.00 LATERAL TD			

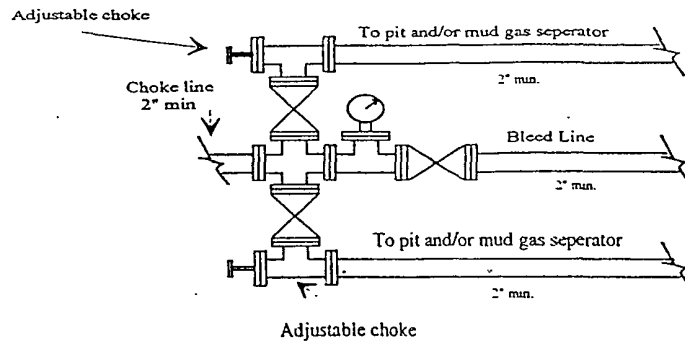
# Yates Petroleum Corporation

BOP-1

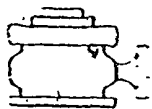
Typical low Pressure System  
Schematic  
Annular Preventer 2,000 psi



Typical 2,000 psi choke manifold assembly with at least these minimum features



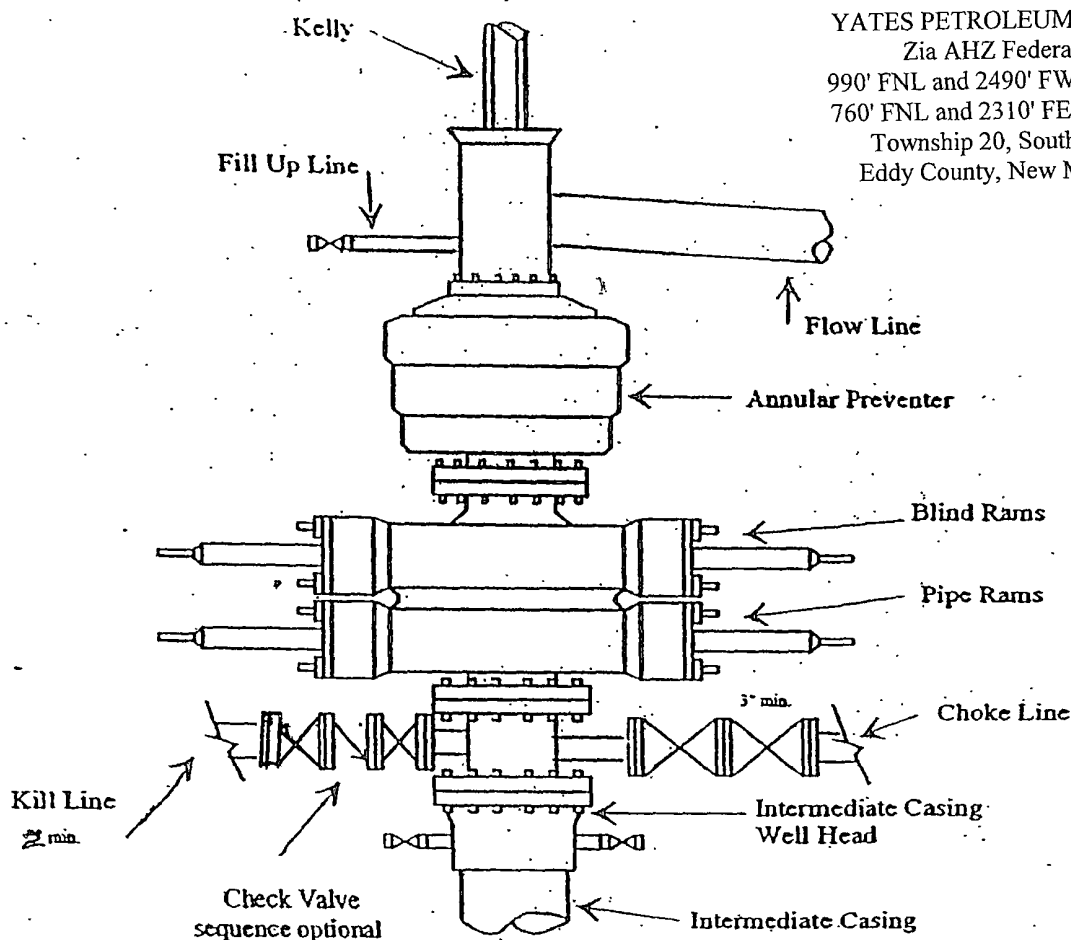




# Yates Petroleum Corporation

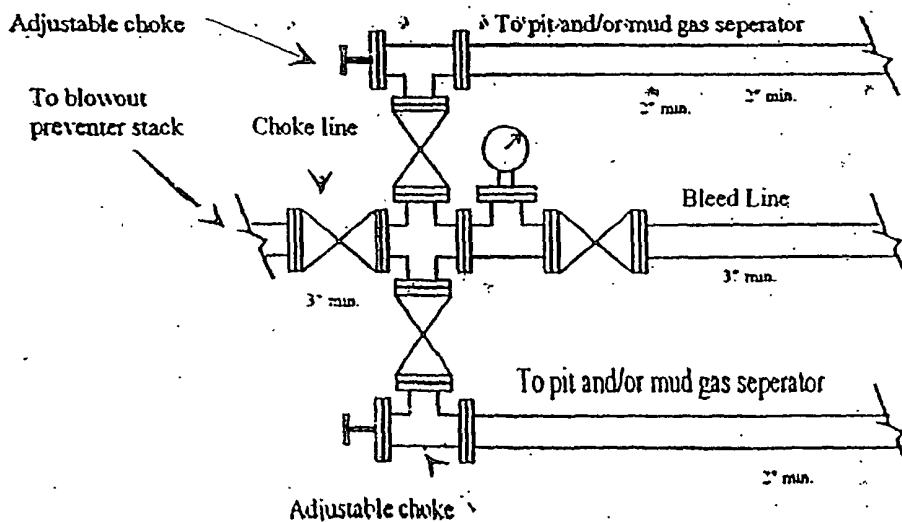
BOP-3

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

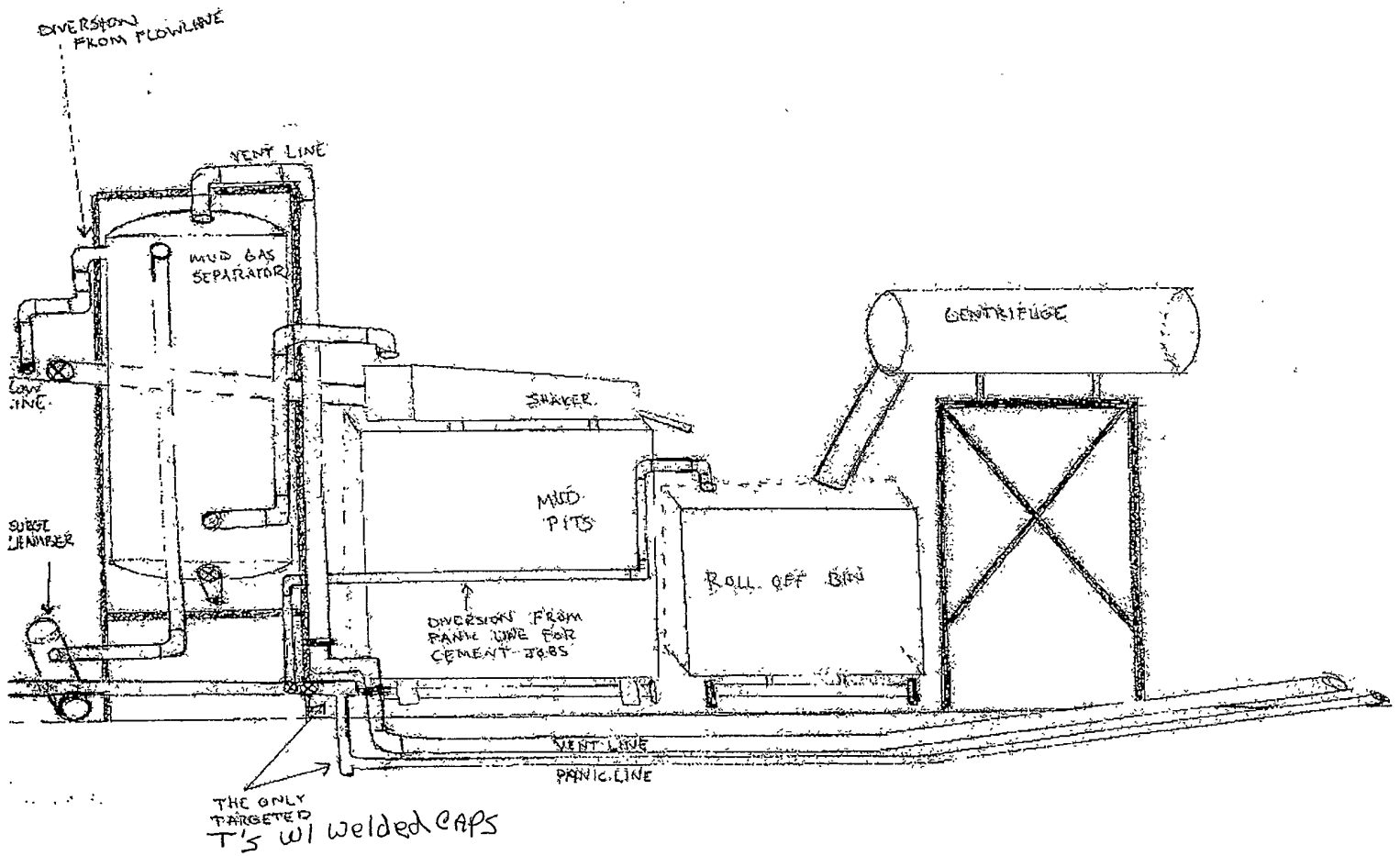


YATES PETROLEUM CORPORATION  
Zia AHZ Federal Com. #2H  
990' FNL and 2490' FWL Section 13, SHL  
760' FNL and 2310' FEL Section 14, BHL  
Township 20, South-Range 29 East  
Eddy County, New Mexico Exhibit C

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



YATES PETROLEUM CORPORATION  
Zia AHZ Federal Com. #2H  
990' FNL and 2490' FWL Section 13, SHL  
760' FNL and 2310' FEL Section 14, BHL  
Township 20, South-Range 29 East  
Eddy County, New Mexico Exhibit D



# **Yates Petroleum Corporation**

**105 S. Fourth Street  
Artesia, NM 88210**

## **Hydrogen Sulfide (H<sub>2</sub>S) Contingency Plan**

**For**

**Zia AHZ Federal Com #2H**

**990' FNL and 2490' FWL**

**Section 13, T20S-R29E**

**Eddy County, NM**

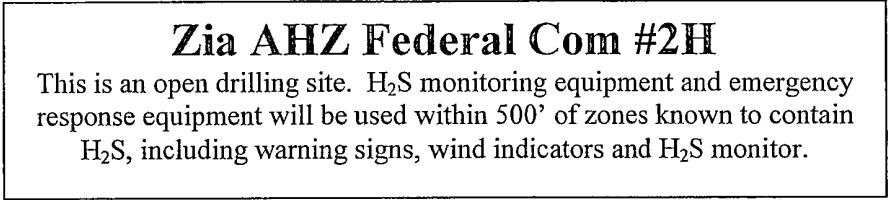
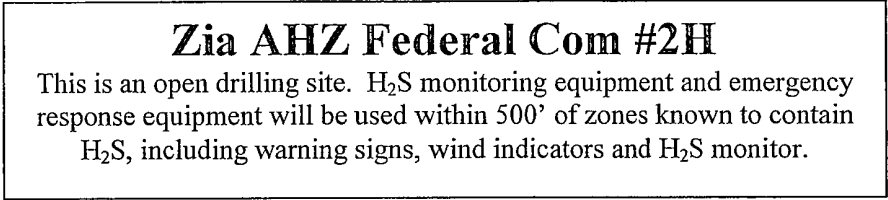
RECEIVED  
2012 APR 23 PM 3:57  
BUREAU OF LAND MGMT  
CARLSBAD FIELD OFFICE

**Zia AHZ Federal Com #2H**

This is an open drilling site. H<sub>2</sub>S monitoring equipment and emergency response equipment will be used within 500' of zones known to contain H<sub>2</sub>S, including warning signs, wind indicators and H<sub>2</sub>S monitor.

**Zia AHZ Federal Com #2H**

This is an open drilling site. H<sub>2</sub>S monitoring equipment and emergency response equipment will be used within 500' of zones known to contain H<sub>2</sub>S, including warning signs, wind indicators and H<sub>2</sub>S monitor.



**Zia AHZ Federal Com #2H**

This is an open drilling site. H<sub>2</sub>S monitoring equipment and emergency response equipment will be used within 500' of zones known to contain H<sub>2</sub>S, including warning signs, wind indicators and H<sub>2</sub>S monitor.

## Emergency Procedures

In the case of a release of gas containing H<sub>2</sub>S, the first responder(s) must isolate the area and prevent entry by other persons into the 100 ppm ROE. Additionally the first responder(s) must evacuate any public places encompassed by the 100 ppm ROE. First responder(s) must take care not to injure themselves during this operation. Company and/or local officials must be contacted to aid in this operation. Evacuation of the public should be beyond the 100 ppm ROE.

All responders must have training in the detection of H<sub>2</sub>S, measures for protection against the gas, equipment used for protection and emergency response. Additionally, responders must be equipped with H<sub>2</sub>S monitors and air packs in order to control the release. Use the “buddy system” to ensure no injuries during the response.

## Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO<sub>2</sub>). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas

## Characteristics of H<sub>2</sub>S and SO<sub>2</sub>

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H <sub>2</sub> S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO <sub>2</sub>	2.21 Air = 1	2 ppm	N/A	1000 ppm

## Contacting Authorities

YPC personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available. The following call list of essential and potential responders has been prepared for use during a release. YPC Company response must be in coordination with the State of New Mexico’s ‘Hazardous Materials Emergency Response Plan’ (HMER)

## ***Yates Petroleum Corporation Phone Numbers***

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YPC Office .....	(575) 748-1471
Pinson McWhorter/Operations Manager .....	(575) 748-4189
Wade Bennett/Prod Superintendent .....	(575) 748-4236
LeeRoy Richards/Assistant Prod Superintendent .....	(575) 748-4228
Mike Larkin/Drilling .....	(575) 748-4222
Paul Hanes/Prod. Foreman/Roswell .....	(575) 624-2805
Tim Bussell/Drilling Superintendent .....	(575) 748-4221
Artesia Answering Service .....	(575) 748-4302
(During non-office hours)	

### **Agency Call List**

#### **Eddy County (575)**

##### **Artesia**

State Police .....	746-2703
City Police.....	746-2703
Sheriff's Office .....	746-9888
Ambulance.....	911
Fire Department .....	746-2701
LEPC (Local Emergency Planning Committee) .....	746-2122
NMOCD.....	748-1283

##### **Carlsbad**

State Police .....	885-3137
City Police.....	885-2111
Sheriff's Office .....	887-7551
Ambulance.....	911
Fire Department .....	885-2111
LEPC (Local Emergency Planning Committee).....	887-3798
US Bureau of Land Management .....	887-6544
New Mexico Emergency Response Commission (Santa Fe) .....	(505) 476-9600
24 HR .....	(505) 827-9126
New Mexico State Emergency Operations Center.....	(505) 476-9635
National Emergency Response Center (Washington, DC) .....	...(800) 424-8802

##### **Other**

Boots & Coots IWC .....	1-800-256-9688 or (281) 931-8884
Cudd Pressure Control.....	(915) 699-0139 or (915) 563-3356
Halliburton .....	(575) 746-2757
B. J. Services.....	(575) 746-3569
Flight For Life -4000 24th St, Lubbock, TX .....	(806) 743-9911
Aerocare -Rr 3 Box 49f, Lubbock, TX .....	(806) 747-8923
Med Flight Air Amb 2301 Yale Blvd SE #D3, Albuq, NM .....	(505) 842-4433
S B Air Med Svc 2505 Clark Carr Loop SE, Albuq, NM .....	(505) 842-4949

## Yates Petroleum Corporation

### Hydrogen Sulfide Drilling Operation Plan

#### I. HYDROGEN SULFIDE TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

1. The hazards and characteristics of hydrogen sulfide (H<sub>2</sub>S).
2. The proper use and maintenance of personal protective equipment and life support systems.
3. The proper use of H<sub>2</sub>S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
4. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

1. The effects of H<sub>2</sub>S on metal components. If high tensile tubular are to be used, personnel will be trained in their special maintenance requirements.
2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
3. The contents and requirements of the H<sub>2</sub>S Drilling Operations Plan and H<sub>2</sub>S Contingency Plan.

There will be an initial training session just prior to encountering a known or probable H<sub>2</sub>S zone (within 3 days or 500 feet) and weekly H<sub>2</sub>S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H<sub>2</sub>S Drilling Operation Plan and the H<sub>2</sub>S Contingency Plan. **The location of this well does not require a Public Protection Plan.**

## II. H2S SAFETY EQUIPMENT AND SYSTEMS

NOTE: All H2S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonably expected to contain H2S.

### 1. Well Control Equipment:

- A. Flare line
- B. Choke manifold
- C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit
- D. Auxiliary equipment may include if applicable: annular preventer & rotating head.

### 2. Protective equipment for essential personnel:

- A. Mark II Survive Air (or equivalent) 30-minute units located in the doghouse and at briefing areas, as indicated on well site diagram.

### 3. H2S detection and monitoring equipment:

- A. 3 portable H2S monitors positioned at: Shale Shaker, Bell Nipple, and Rig Floor. These units have warning lights and audible sirens when H2S levels of 10 PPM are reached.

### 4. Visual warning systems:

- A. Wind direction indicators as shown on well site diagram (attached).
- B. Caution/Danger signs (attached) shall be posted on roads providing direct access to location. Signs will be painted with high visibility yellow with black lettering of a sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used, when appropriate. See example attached.

### 5. Mud program:

- A. The mud program has been designed to minimize the volume of H2S circulated to the surface. Proper mud weight, safe drilling practices and the use of H2S scavengers will minimize hazards when penetrating H2S bearing zones.

### 6. Metallurgy:

- A. All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.
- B. All elastomers used for packing and seals shall be H2S trim.

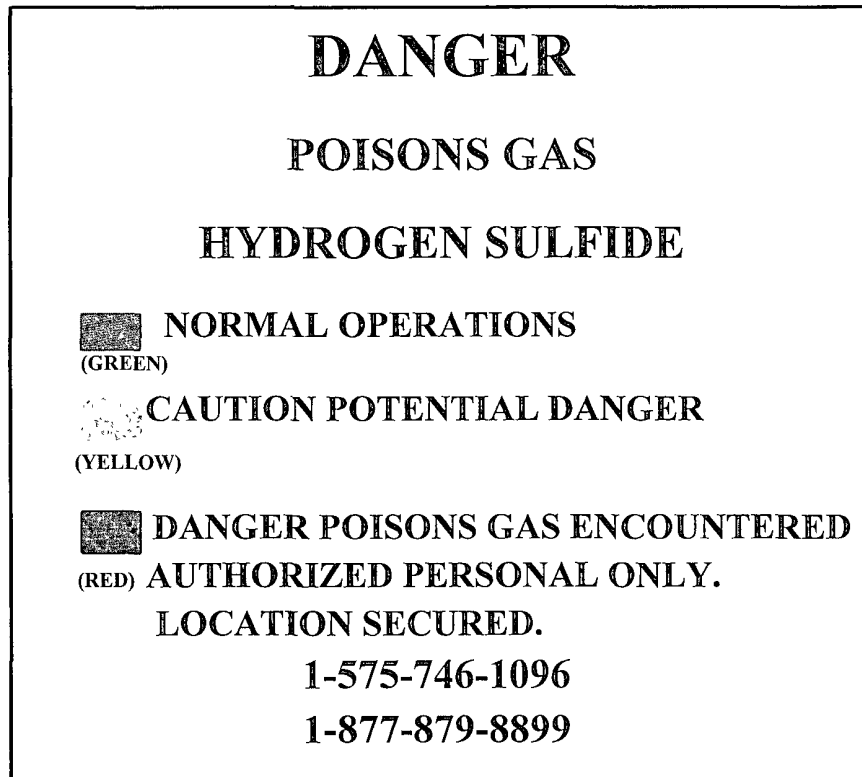


**7. Communication:**

- A. Cellular communications in company vehicles.
- B. Land line (telephone) communication at the Office.

**8. Well testing:**

- A. There will be no drill stem testing.

**EXHIBIT**EDDY COUNTY EMERGENCY NUMBERS

ARTESIA FIRE DEPT. 575-746-5050  
ARTESIA POLICE DEPT. 575-746-5000  
EDDY CO. SHERIFF DEPT. 575-746-9888

LEA COUNTY EMERGENCY NUMBERS

HOBBS FIRE DEPT. 575-397-9308  
HOBBS POLICE DEPT. 575-397-9285  
LEA CO. SHERIFF DEPT. 575-396-1196

# 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.

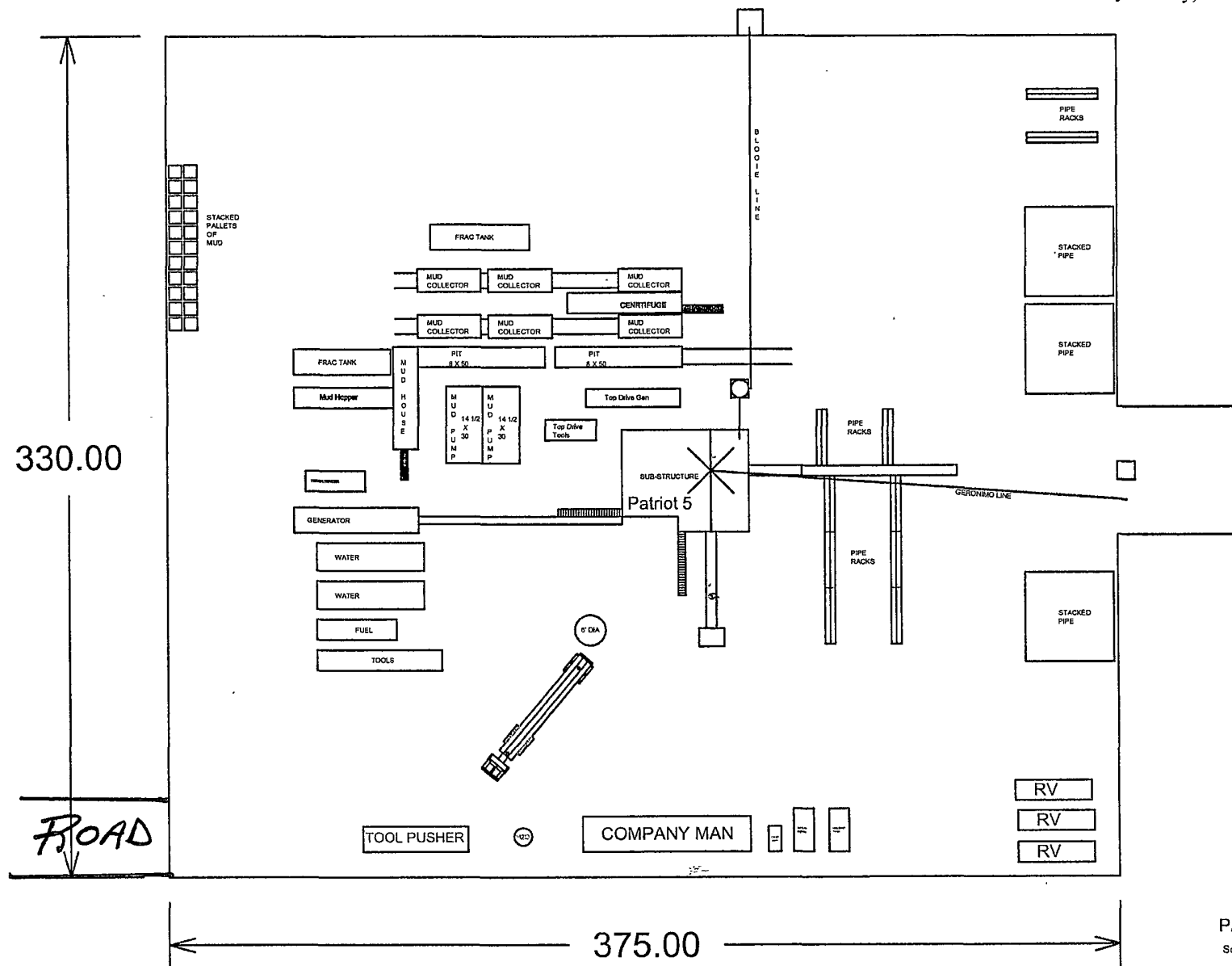
Any spills / leaks will be reported to YPC, NMOCD, and cleaned up without delay.

### Closure Plan

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

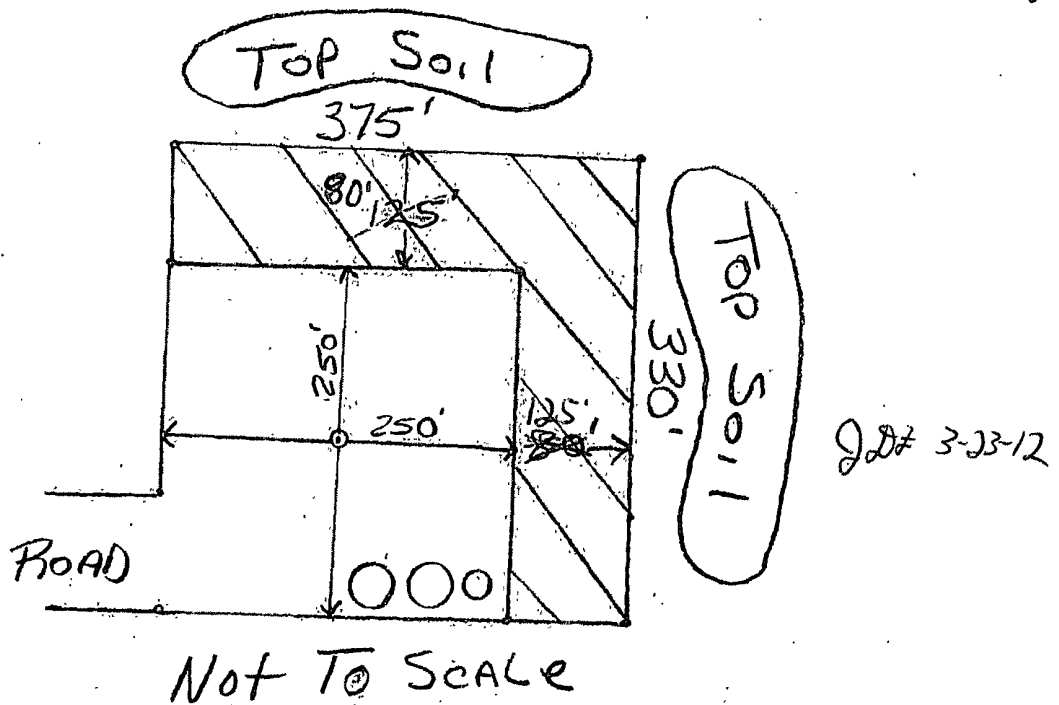
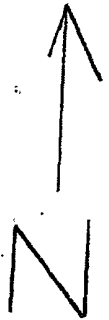
# YATES PETROLEUM CORPORATION

YATES PETROLEUM CORPORATION  
 Zia AHZ Federal Com. #2H  
 990' FNL and 2490' FWL Section 13, SHL  
 760' FNL and 2310' FEL Section 14, BHL  
 Township 20, South-Range 29 East  
 Eddy County, New Mexico Exhibit B

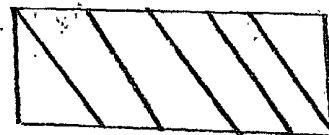


PAD LAYOUT  
 Scale, 1 inch = 60 feet

YATES PETROLEUM CORPORATION  
Zia AHZ Federal Com. #2H  
RECLAMATION PLAN



PLEASE Note  
Final Reclamation  
May not Be the  
Same As This Plat



Possible Reclaimed  
AREA

**PECOS DISTRICT  
CONDITIONS OF APPROVAL**

OPERATOR'S NAME:	YATES PETROLEUM CORPORATION
LEASE NO.:	NM-81929
WELL NAME & NO.:	ZIA AHZ FEDERAL COM #2H
SURFACE HOLE FOOTAGE:	990' FNL & 2490' FWL (sec. 13)
BOTTOM HOLE FOOTAGE:	760' FNL & 2310' FEL (sec. 14)
LOCATION:	Section 13, T.20 S., R.29 E., NMPM
COUNTY:	Eddy County, New Mexico

**TABLE OF CONTENTS**

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

- ☐ **General Provisions**
- ☐ **Permit Expiration**
- ☐ **Archaeology, Paleontology, and Historical Sites**
- ☐ **Noxious Weeds**
- ☒ **Special Requirements**
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    - Cave/Karst
    - Communitization Agreement
- ☐ **Construction**
  - Notification
  - Topsoil
  - Closed Loop System
  - Federal Mineral Material Pits
  - Well Pads
  - Roads
- ☐ **Road Section Diagram**
- ☒ **Drilling**
  - Secretary's Potash
  - High Cave/Karst
  - H2S – Onshore Order 6 Requirements
  - Logging Requirements
  - Waste Material and Fluids
- ☐ **Production (Post Drilling)**
  - Well Structures & Facilities
  - Pipelines
  - Electric Lines
- ☒ **Interim Reclamation**
- ☒ **Final Abandonment & Reclamation**