ATS-10-337

# OCD-ARTESIA

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND

**MANAGEMENT** SUNDRY NOTICES AND REPORTS ON WELLS

5. Lease Serial No

NM-108456 6 If Indian, Allottee or Tribe Name

FORM APPROVED

OMB No 1004-0137

Expires July 31, 2010

		o drill or to re-enter an PD) for such proposals			
SUBMIT	IN TRIPLICATE – Other in	nstructions on page 2.		7. If Unit of CA/Agreem	nent, Name and/or No.
1 Type of Well					
🖾 Oıl Well 🔲 Ga	s Well			8. Well Name and No. Kıawah BFQ Federal #1	
2. Name of Operator YATES PETROLEUM CORPORA				9. API Well No. 300 -	015-38095
3a. Address 105 South Fourth Street, Artesia, N		3b. Phone No. (include area cod (575) 748-1471 ext: 4372	le)	10 Field and Pool or Ex Undesignated Seven	ptoratory Area Rivers: Glorieta-Ye
4 Location of Well <i>(Footage, Sec., T.)</i> , SH. 2310'FSL & 400'FWL, SWNE LBH - 'FNL & 'FEL, NWNE				11. Country or Parish, St Eddy County, New Mex	tate COCLE
12 CHECK THE ADDRODDIAT	E DOV(EC) TO BIDICAT	ENIATURE OF MOTICE DI	CDODTO	D OTHER DATA	
12. CHECK THE APPROPRIAT	EBOX(ES) TO INDICAT		PE OF A		
TYPE OF SUBMISSION				luction (Start/Resume)	□Water Shut-Off
☑Notice of Intent	∐Acidize	□Deepen	□1100	luction (Starv Resume)	☐ Water Shint-Off
	☐Alter Casing	Fracture Treat	Recl	amation	☐Well Integrity
Subsequent Report	☐Casing Repair	New Construction	□Reco	omplete	⊠Other Change of Location
☐Final Abandonment Notice	☐Change Plans	Plug and Abandon	∏Tem	porarily Abandon	and drilling plan.
	☐Convert to Injection	☐Plug Back		er Disposal	
13. Describe Proposed or Completed If the proposal is to deepen directiona Attach the Bond under which the worlfollowing completion of the involved testing has been completed Final Ab determined that the site is ready for final and the site is ready for	lly or recomplete horizontally, k will be performed or provide operations If the operation re andonment Notices must be fil	tinent details, including estimate give subsurface locations and m the Bond No on file with BLM esults in a multiple completion or	easured and /BIA. Requ r recompleti	I true vertical depths of all aired subsequent reports m on in a new interval, a Fo	I pertinent markers and zones. nust be filed within 30 days rm 3160-4 must be filed once
Yates Petroleum Corporation h	as moved the well locat	ion for the Kiawah BFQ F	ederal #1	from 1830' FSL and	d 660' FWL to 2310' FSL

and 400' FWL.

Because of this move it was necessary to change the down hole drilling prognosis also.

Attached please find new surface information along with a new drilling prognosis and revised exhibits.

Please note this APD was originally submitted to and approved by the Carlsbad Field Office on August 19, 2010 for a period of two years. This application is still valid and will expire on August 19, 2012.

We would very much apprecite a prompt concurrence and approval from your office as we have a drilling rig on date of 5/31/12.

SEE ATTACHED FOR

Accepted for record NMOCD

CONDITIONS OF APPROVAL	10/25/0	MAY <b>2 4</b> 2012	
CONDITIONS OF THE TROUBLE	3/01	NMOCD ARTESIA	
14 I hereby certify that the foregoing is true and correct			
Name (Printed/Typed) Cy Cowan	Title Land Regulatory Agent		
Signature: ( ) ( ) ( )	Date: 5/4/12		
THIS SPACE FOR FEDE	ERAL OR STATE OFFICE USE		
Approved by.  Conditions of approval, if any, are attached. Approval of this notice does not warrant or	Title	Date: AY 18 2012	)
		MAI IO LOIC	•
that the applicant holds legal or equitable title to those rights in the subject lease which we entitle the applicant to conduct operations thereon.	CARLSBAD FIEL	D OFFICE	
T. 1. 10 11 C. C	1 1 1 10011 1 1 1	21 77 1 10	

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)

Thank You.

# CERTIFICATION YATES PETROLEUM CORPORATION Kiawah BFQ Federal #1

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; and an someone under employment of Yates Petroleum Corporation has full knowledge of state and federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Executed this 4+2 day of May 20/2
Signature Chara
Name Cy Cowan
Position Title Land Regulatory Agent
Address 105 South Fourth Street, Artesia, New Mexico 88210
Telephone(505) 748-4372
Field Representative (if not above signatory) Tim Bussell, Drilling Supervisor
Address (if different from above) Same as above.
Telephone (if different from above) (505) 748-4221
E-mail (optional)

DISTRICT I
625 N. French Dr., Hobbs, NM 88240
Phone (575) 393-4161 Fax: (575) 393-0720
DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210
Phone (575) 746-1293 Fax: (575) 748-9720
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone (505) 334-6170

DISTRICT IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone (505) 476-3460 Far (505) 476-3462 State of New Mexico Energy, Minerals and Natural Resources Department Form C-102 Revised August 1, 2011

Submit one copy to appropriate
District Office

## OIL CONSERVATION DIVISION

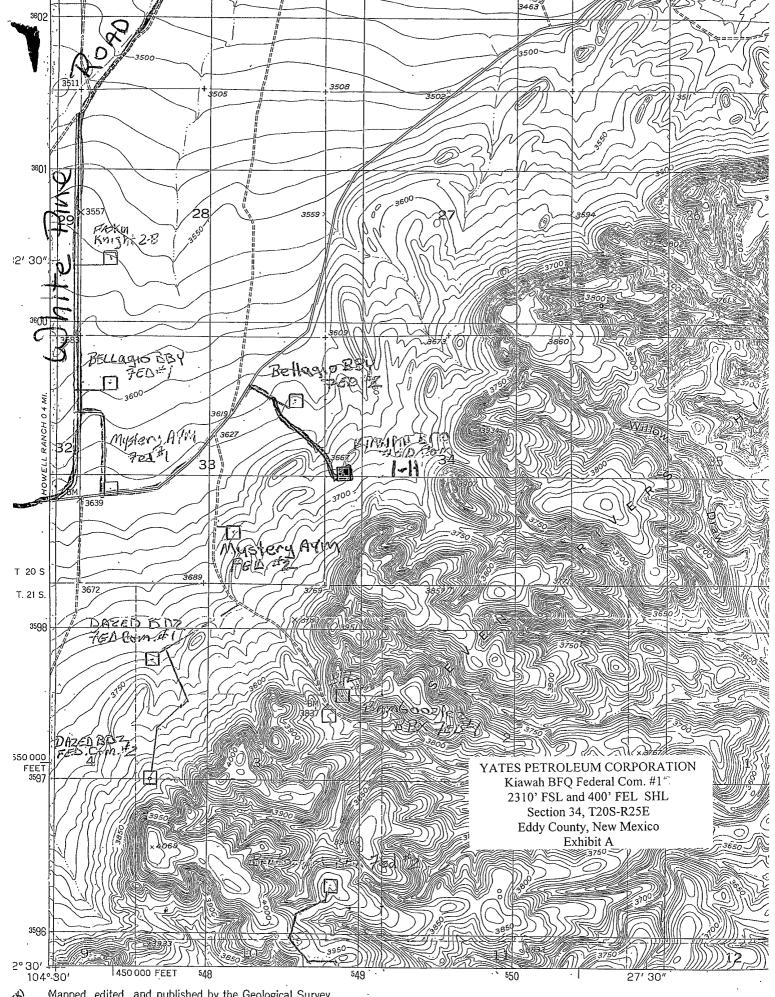
1220 South St. Francis Dr. Santa Fe, New Mexico 87505

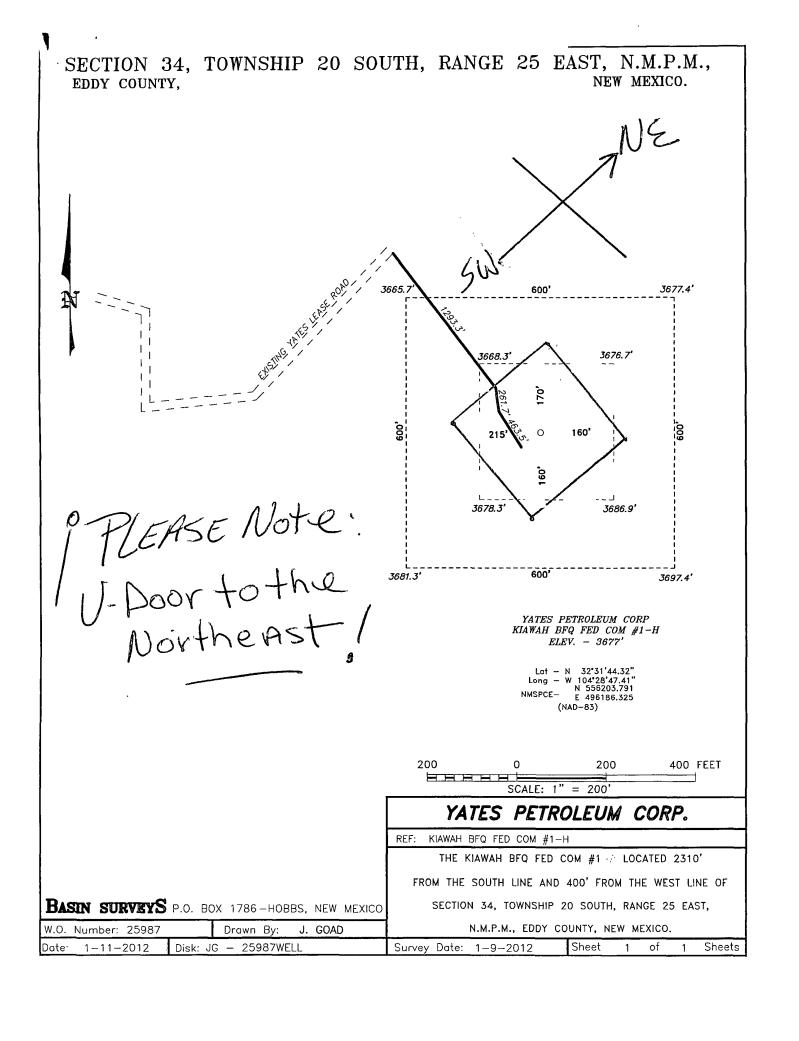
WELL LOCATION AND ACREAGE DEDICATION PLAT

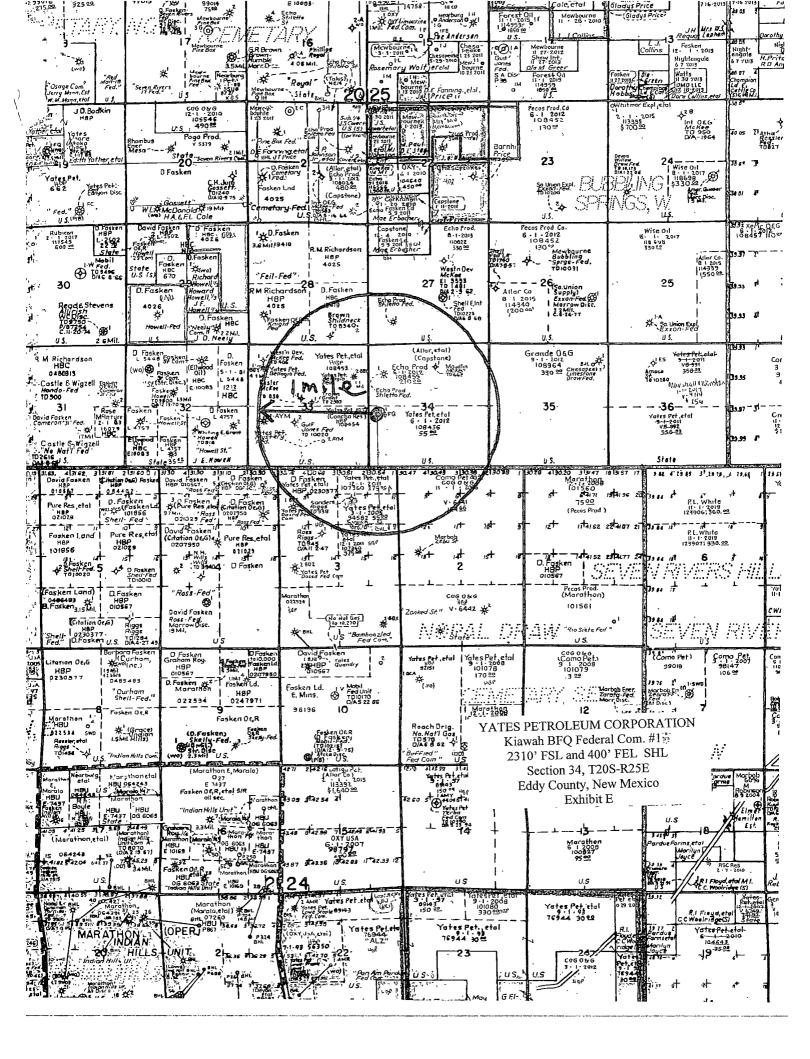
☐ AMENDED REPORT

<u> 30-01</u>	Number 3	3095	97	2565	- N	orth Seven	Pool Name esignated Ve	eso 1874-Your Nu	
Property 6	'le ode			KIA'	WAH BFQ FE	DERAL	MICORY, CHAR	1	imber
ogrid no 025575				YATES	Operator Nam S PETROLEU			Elevat 367	
			<del>-</del>		Surface Loca	ation			
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	34	20 S	25 E		2310	SOUTH	400	WEST	EDDY
			Bottom	Hole Loc	ation If Diffe	rent From Sur	face		
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	s Joint o	r Infill Co	nsolidation (	Code Ore	der No.				
NO ALLO	WABLE W					NTIL ALL INTER APPROVED BY		EEN CONSOLIDA	ATED
				 	]		OPERATO	R CERTIFICAT	TION

OPERATOR CERTIFICATION  I hareby certify that the information conditioned herein it frue and compiles to the best of my knowledge and belef, and that this organization either even a working inferest or interest in the location or has a right to drill this well at this location pursuant to a contract unit an owner of such a mareai or working interest, organization pairing interest, organization pairing interest, organization pairing organization produced by the divisor.  Surveyor certification  I hereby certify that the well location shown on this plat was plotted from field notes of activate surveys made by me or under my supervison and that the same is true and correct to the best of my belief  Date Stronger  Signature  Surveyor certification  I hereby certify that the well location shown on this plat was plotted from field notes of activate surveys made by me or under my supervison and that the same is true and correct to the best of pairing with the survey of the surveys of the	I hereby certify that the information conditional herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unlessed mineral interest in the location or has a right to drill this well at this location pursuant to a contract unth an owner of such a right contribution of the print of th	I hereby certify that the information confidence have in true and complete to the best of my knowledge and belief, and that this regardistance wither some a working undersor unlessed mineral interest or unlessed mineral	OPERA	
		Certificate No. Gary L. Jones 7977  BASIN SURVEYS 25987	SURFACE LOCATION Lot N 32'31'44.52' Long w 104'28'47.41' NMSPCE N 556203.791 NMSPCE E 496186.325 (NAD-83)  Date SA	g certify that the information terein is true and complete to my knowledge and belief, and that alton either owns a working unleased mineral interest in the ing the proposed bottom hole has a right to drill this well at a pursuant to a contract with an with a mineral or working interest, antifury pooling agreement or a pooling order heretofore entered by  Date  WAN  Teres  EYOR CERTIFICATION  Trify that the well location shown t was plotted from field notes of veys made by me or under my and that the same is true and the best of my belief  EYOR CERTIFICATION  To be the contract with an and the best of my belief  EYOR CERTIFICATION  The contract with an and the best of my belief  EYOR CERTIFICATION  The contract with an and the best of my belief  EYOR CERTIFICATION  The contract with an and the best of my belief  EYOR CERTIFICATION  The contract with an and the best of my belief  EYOR CERTIFICATION  The contract with an and the best of my belief  EYOR CERTIFICATION  The contract with an and the best of my belief  EYOR CERTIFICATION  The contract with an and the same is true and the best of my belief  EYOR CERTIFICATION  The contract with an and the contract with an and the same is true and the best of my belief  EYOR CERTIFICATION  The contract with an an and the contract with







# YATES PETROLEUM CORPORATION

Kiawah BFQ Federal #1

2310' FSL and 660' FWL Section 34,T20S-R25E Eddy County, New Mexico

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

> 925' San Andres 2650' Glorietta Yeso 2770' TD 3600'

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

Water:312'

Oil or Gas: San Andres, Glorietta, Yeso.

3. Pressure Control Equipment: 3000 PSI BOPE with a 13.625" opening will be installed on the 13 3/8" casing and the 9 5/8" casing. The BOP and related BOPE shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17. 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:**

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.

#### 4. THE PROPOSED CASING AND CEMENTING PROGRAM:

Casing Program: (All New) Α.

<u>Hole Size</u>	<u>Casing Size</u>	<u>Wt./</u>	<u>/Ft Grade</u>	<u>Thread</u>	<u>Interval</u>	<u>Length</u>
14 ¾"	9 5/8"	36#	J-55 or K-55	LT+C	0-800' '	800'
8 3/4"	7"	26#	J-55 or K-55	LT&C	0-3600'	3600'

#### **CEMENTING PROGRAM:** B.

Surface casing: Lead in with 410 sx 35:65:6 PzC (YLD 2.0 WT 12.5). Tail in with

200 sx Class C + 2% CaCl2 (YLD 1.34 WT 14.8). Excess cement

100%, TOC surface.

Production Casing: Lead in with 150 sx PozC 35:65:6 (YLD 2.0 WT 12.5). Tail in

with 300 sx of PecosViLt (YLD 1.41 WT 13.0) 30% CaCO. 3.2% Expansion Additive, Anti-foam, 0.8% Retarder, 15% Fluid

Loss. TOC is surface. Excess cement 30%.

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

# 5. Mud Program and Auxiliary Equipment:

Interval	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	Fluid Loss
Spud to 800'	FW/Spud Mud	8.6-92	28-32	N/C
800'-3600'	Fresh Water	8.6-9.2	28-32	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. Mud will be checked hourly by rig personnel.

#### 6. EVALUATION PROGRAM:

Samples: 10' out from under intermediate casing to TD.

Logging: Platform Express/CNL/LDT/NGT TD- Surface Casing.

CNL/GR TD-Surface.

DLL-MSFL TD-Surface.

Coring: None anticipated. DST's: No anticipated.

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

From: 0 TO 800' Anticipated Max. BHP: 383 PSI From: 800' TO 3600' Anticipated Max. BHP: 11722 PSI

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: None

H2S Zones Anticipated: Yes.

Maximum Bottom Hole Temperature: 189° F

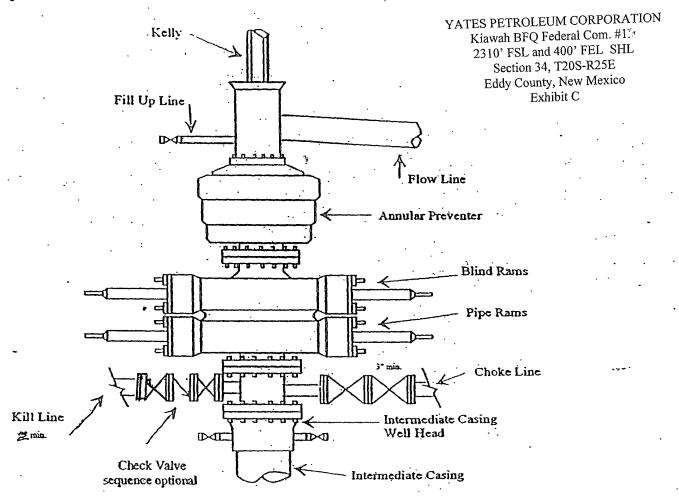
# 8. ANTICIPATED STARTING DATE:

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 15 days.

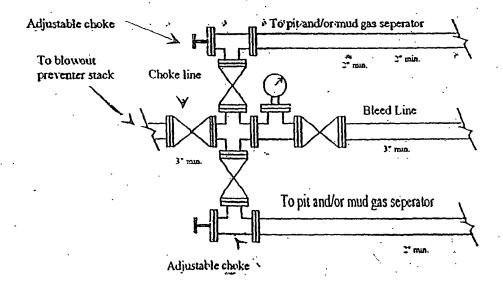


# Yates Petroleum Corporation

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



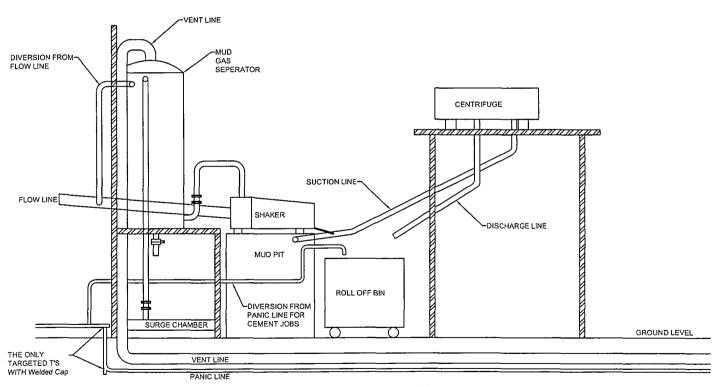
Typical 3,000 psi choke manifold assembly with at least these minimum features



YATES PETROLEUM CORPORATION
Kiawah BFQ Federal Com. #17:
2310' FSL and 400' FEL SHL
Section 34, T20S-R25E
Eddy County, New Mexico
Exhibit D

# 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 105 S. Fourth Street Artesia, NM 88210

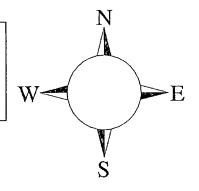
# Hydrogen Sulfide (H<sub>2</sub>S) Contingency Plan

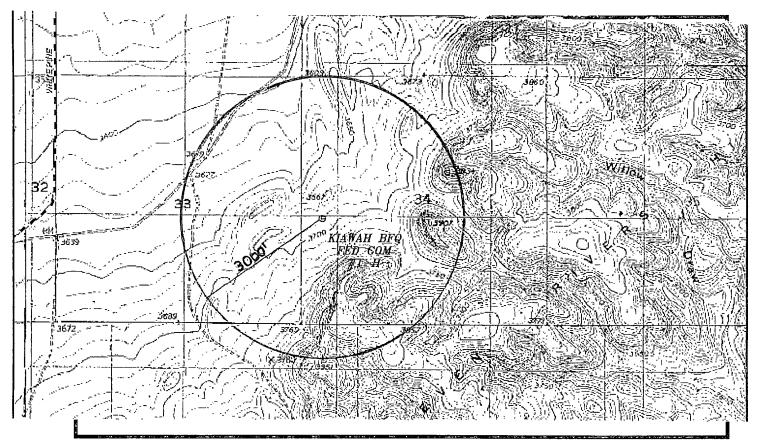
# For

Kiawah BFQ Federal Com #1 2310' FSL & 400' FWL Section 34, T20S-R25E Eddy County NM

# Kiawah BFQ Federal Com. #1

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.





Assumed 100 ppm ROE = 3000' 4 100 ppm H2S concentration shall trigger activation of this plan.

# **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  $H_2S$ , measures for protection against the gas, equipment used for protection and emergency response. Additionally, responders must be equipped with  $H_2S$  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	$ m H_2S$	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

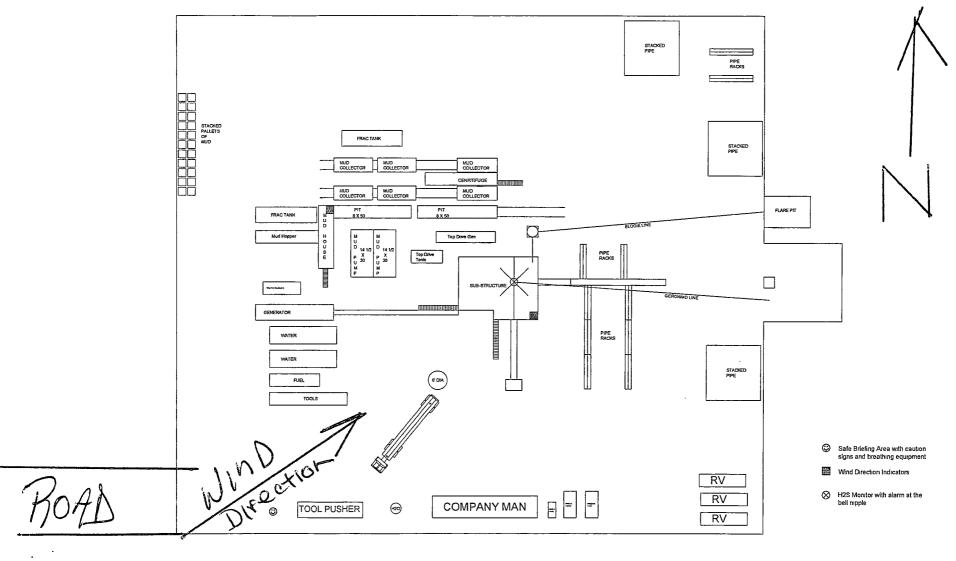
## **Contacting Authorities**

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

YPC Office	(575) 748-1471
Wade Bennett/Prod Superintendent	
LeeRoy Richards/Assistant Prod Superintendent	(575) 748-4228
Mike Larkin/Drilling	(575) 748-4222
Paul Hanes/Prod. Foreman/Roswell	
Tim Bussell/Drilling Superintendent	
Artesia Answering Service	
(During non-office hours)	,
,	
Agency Call List	
Eddy County (575)	
Artesia	
State Police	746 2702
City Police	
Sheriff's Office	
Ambulance	
Fire Department	
LEPC (Local Emergency Planning Committee)	
NMOCD	748-1283
Carlsbad	
State Police	005 2127
City Police	
Sheriff's Office	
Ambulance	
Fire Department	
LEPC (Local Emergency Planning Committee)	
US Bureau of Land Management	
New Mexico Emergency Response Commission (Santa Fe)	(505)476-9600
24 HR	(505) 827-9126
New Mexico State Emergency Operations Center	
National Emergency Response Center (Washington, DC)	
Other	
Boots & Coots IWC1-800-256-9688 or (281) 931-8884	
Cudd Pressure Control(915) 699-0139 or (915) 563-3356	
Halliburton(575) 746-2757	
B. J. Services(575) 746-3569	
D. J. Belivices(3/3) /40-3303	
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) 817-0323 (505) 817-1122
S B Air Med Svc 2505 Clark Carr Loop SE, Albuq, NM	
o b An Alou ove 2000 Clark Carl Loop ob, Aloud, My	JUJJ 042-4949

# YATES PETROLEUM CORPORATION



PAD LAYOUT

Scale: 1 inch = 60 feet

# 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 (H2S).
- 2. The proper use and maintenance of personal protective equipment and life support systems.
- 3. The proper use of H2S 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 H2S on metal components. If high tensile tubular are to be used, personnel well 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 H2S Drilling Operations Plan and H2S Contingency Plan.

There will be an initial training session just prior to encountering a known or probable H2S zone (within 3 days or 500 feet) and weekly H2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H2S Drilling Operation Plan and the H2S Contingency Plan. The location of this well does not require a Public Protection Plan.

H2S Plan Page 1

# 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.

H2S Plan

#### 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**

# DANGER POISONS GAS

# HYDROGEN SULFIDE



CAUTION POTENTIAL DANGER (YELLOW)



DANGER POISONS GAS ENCOUNTERED
AUTHORIZED PERSONAL ONLY

(RED) AUTHORIZED PERSONAL ONLY. LOCATION SECURED.

> 1-575-746-1096 1-877-879-8899

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

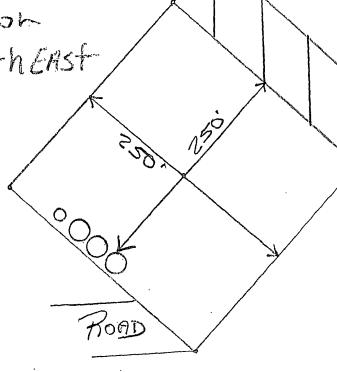
# YATES PETROLEUM CORPORATION

Kiawah BFQ Federal Com. #1!! 2310' FSL and 400' FEL SHL Section 34, T20S-R25E Eddy County, New Mexico RECLAIMATION PLAT

PLEASE Note:

V-Door for This Location

to The Morth East



Not To SCALE

FINAL BECLAIMATION
My not LOOK LIKE
This PLAT.

Possible Reclaimed AREA.

# PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Yates Petroleum Corporation
LEASE NO.:	NM
WELL NAME & NO.:	Kiawah BFQ Federal # 1
SURFACE HOLE FOOTAGE:	
BOTTOM HOLE FOOTAGE	None
LOCATION:	Section 34, T. 20 S., R. 25 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
<b>☐</b> Noxious Weeds
<b>⊠</b> Special Requirements
Cave/Karst
VRM
<b>⊠</b> Construction
Notification
Topsoil
Closed Loop System
Federal Mineral Material Pits
Well Pads
, Roads
<b>⊠</b> Road Section Diagram
<b>☑</b> Drilling
High Cave/Karst
Logging Requirements
Waste Material and Fluids
<b>◯</b> Production (Post Drilling)
Well Structures & Facilities
<b>☐</b> Final Abandonment & Reclamation