

(August 1999)

If earthen pits are used in association with the drilling of this well, an OCD pit permit must be obtained prior to pit construction.

RTESIA

RECEIVED

MAR 2 7 2006

OMB No. 1004-0136

Expires November 30, 2000 5. Lease Serial No.

SHLNM-2346 6. If Indian, Allottee or Tribe Name

ADDITION FOR DEDMIT TO DRILL OR REENTER

UNITED STATES

DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

ALLEGATION ON ENIMITY			_					
la. Type of Work: X DRILL R	EENTER	2 10115	7. If Unit or CA Agreemen	t, Name and No.				
		35542	8. Lease Name and Well N					
b. Type of Well: Oil Well Gas Other	Single	Multiple Zone	Robinson HW Fede					
Well 2. Name of Operator	Zone		9. API Well No.					
Yates Petroleum Corporation 255	75		30-015-3	4778				
3A. Address 105 South Fourth Street	3b. Phone No. (include of	rea code)	10. Field and Pool, or Expl					
Artesia, New Mexico 88210	(505) 74	18-1471 Company	and Cast Wolfcan	np West				
4. Location of Well (Record Acaton elearly and in accordance with a		75240	11. Sec., T., R., M., or Blk	, and Survey or Area				
At surface 660' FSL and 60	60' FWL Pilot Hole	13000	Section 24, T1	6S-R24E				
	60' FWL Bottom Ho	e						
14. Distance in miles and direction from nearest town or post office*			12. County or Parish	13. State				
Approximately 8 miles northwest of Artesia, Nev	v Mexico.		Eddy County	NM				
15. Distance from proposed* location to nearest	16. No. of Acres in leas	e 17. Spacing U	nit dedicated to this well					
property or lease line, ft. (Also to nearest drig, unit line, if any)	480		W/2					
18. Distance from proposed location* to nearest well, drilling, completed,	19. Proposed Depth	20 BLM/BIA	IA Bond No. on file					
to nearest well, drilling, completed, applied for, on this lease, ft.	5000'	30. 52.0.52.	NM-2811					
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date v	ork will start*	23. Estimated duration					
3589' GL	AS	AP	45 days					
	24. Attachments	1						
The following, completed in accordance with the requirements of Onsl	nore Oil and Gas Order No.	, shall be attached to thi	s form:					
1. Well plat certified by a registered surveyor.	4. Bon	d to cover the operation	s unless covered by an existing	g bond on file (see				
2. A Drilling Plan.		20 above).		·				
3. A Surface Use Plan (if the location is on National Forest System La	ands, the 5. Open	ator certification.						
SUPO shall be filed with the appropriate Forest Service Office. Supo shall be filed with the appropriate Forest Service Office. Such other site specific information and/or plans as may be required by the authorized office.								
25. Signature Name (Printed/Typed) Date								
(I (I WW	Cy Cowan	Typeuj	12/1/2005					
Regulatory Agent	joy comun			12,112000				
Regulatory Agent			e e e e e e e e e e e e e e e e e e e					
Approved by (Signature) /S/ Russell E. Sorensen	Name (Printed	Typed) Russell E. So	rensen	MAR 2 2 200				
Title ACTIMATELD MANAGER	10.00		IELD OFFICE					
Application approval does not warrant or certify that the applicant hol operations thereon.	ds legal or equitable title to t	hose rights in the subject	lease which would entitle the	applicant to conduct				
Conditions of approval, if any, are attached.								

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 reverse)

C-144 attached

Roswell Controlled Water Basin
WITNESS: 133/8" CMT US6

APPROVAL SUBJECT TO Gemeral requirements and Special stipulations attached

DISTRICT, I 1685 M. Prenct. Dr., Hobbs, NM 88240 DISTRICT II 811 South First, Artesia, NM 88210 DISTRICT III 1000 Rio Brazos Rd., Astec, NM 87410

DISTRICT IV 2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102 Revised March 17, 1999 Instruction on back Submit to Appropriate District Office

WEST

660

State Lease - 4 Copies Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

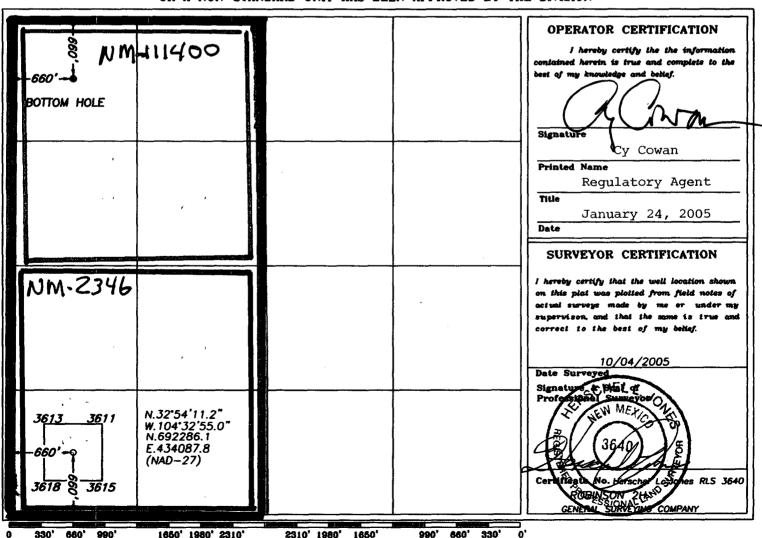
API Number	Pool Code	Pool Name						
	75260	Cettonuced Creek, Wolfe	camp , West					
Property Code	Prop	erty Name	Well Number					
ROBINSON "HW" FEDERAL COM. 2H								
OGRID No.	RID No. Operator Name E							
025575 YATES PETROLEUM CORPORATION 3614								
025575		EUM CORPORATION ce Location	361					
ot No. Section Townsh		om the North/South line Feet from the	East/West line Cour					

24 16S 24E 660 SOUTH

		<u> </u>	L	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>L </u>	l
			Bottom	Hole Loc	eation 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
D	24	165	24E		660 NORTH 660		660	WEST	EDDY

Dedicated Acres | Joint or Infill | Consolidation Code | Order No.

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



.nch Dr., Hobbs, NM 88240 .V. Grand Avenue, Artesia, NM 88210 o Rio Brazos Road, Aztec, NM 87410
District IV

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

State of New Mexico Energy Minerals and Natural Resources

For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe

Form C-144

March 12, 2004

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

office

Pit or Below-Gra	<u>de Tank Registration or Clost</u>	RECEIVED
Is pit or below-grade tank	k covered by a "general plan"? Yes No r below-grade tank Closure of a pit or below-gr	o L
Type of action: Registration of a pit of	r below-grade tank V Closure of a pit or below-gr	MAR 2.7 2006
Operator: YATES PETROLEUM CORPORATION Telephone: (505) 748-147	71 e-mail address:	OCU-AHTESIA
Address: 105 South Fourth Street, Artesia, NM 88210		·
Facility or well name: Robinson HW Federal Com. 2H API #:		T 16S R 24E
County: Eddy Latitude N.32' 54'11.2" Longitude W.104'32'55.0"		
Pit	Below-grade tank	
<u>Type:</u> Drilling <u>X</u> Production Disposal	Volume:bbl Type of fluid:	
Workover Emergency	Construction material:	_
Lined X Unlined	Double-walled, with leak detection? Yes 🔲 If n	ot, explain why not.
Liner type: Synthetic X Thickness 12 mil Clay Volume 20,000 bbl		
	Less than 50 feet	(20 points)
Depth to ground water (vertical distance from bottom of pit to seasonal high	50 feet or more, but less than 100 feet	(10 points)
water elevation of ground water.)	100 feet or more	(0 points) 0
Wellhead protection area: (Less than 200 feet from a private domestic	Yes	(20 points)
water source, or less than 1000 feet from all other water sources.)	No	(0 points) 20
	Less than 200 feet	(20 points)
Distance to surface water: (horizontal distance to all wetlands, playas,	200 feet or more, but less than 1000 feet	(10 points)
irrigation canals, ditches, and perennial and ephemeral watercourses.)	1000 feet or more	(0 points) 10
	1000 Iou of more	(c penia)
	Ranking Score (Total Points)	0
	, ,	
If this is a pit closure: (1) attach a diagram of the facility showing the pit's	• • • • • • • • • • • • • • • • • • • •	•
onsite offsite from If offsite, name of facility		
date. (4) Groundwater encountered: No 🗌 Yes 🔲 If yes, show depth belo	w ground surfaceft. and attach sam	ple results. (5) Attach soil sample results and a
diagram of sample locations and excavations.		
I hereby certify that the information above is true and complete to the best of	my knowledge and belief I further certify that th	e above-described pit or below-grade tank has
been/will be constructed or closed according to NMOCD guidelines □, a Date: 12/1/05	general permit X or an (attached) alternative O	CD-approved plan 🔲.
Printed Name/Title Cy Cowan, Regulatory Agent	Signature Signature	1
Your certification and NMOCD approval of this application/closure does not		of the pit or tank contaminate ground water or
otherwise endanger public health or the environment. Nor does it relieve the regulations.	operator of its responsibility for compliance with an	y other federal, state, or local laws and/or
Approval:	200	
Date: <u>MAR 2 8 2006</u>	/'\\\	
Printed Name/Title	Signature	}
a minor Field	O'DIMUITO	

YATES PETROLEUM CORPORATION Robinson HW Federal Com. #2H

660' FSL and 660' FWL (Pilot Hole) 660' FNL and 660' FWL (Bottom Hole) Section 24,T16S-R24E Eddy County, New Mexico

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

San Andres	490'	Abo	3730'
Glorietta	2240'	Wolfcamp	4170'
Upper Yeso	2340'	Wolfcamp Shale	4790'
Tubb	3060'	TD (Pilot Hole)	5000'
Lower Yeso	3170'	TD (Lateral) ´	8600'

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

Water:

128'

Oil or Gas:

All potential zones

3. Pressure Control Equipment: BOPE will be installed on the 9 5/8" casing and rated for 3000 BOP systems will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout Preventor controls will be installed prior to drilling the surface plug and will remain in use until the well is completed or abandoned. Preventors 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:

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.

4. THE PROPOSED CASING AND CEMENTING PROGRAM:

A. Casing Program: (All New)

Hole Size	Casing Size	Wt./Ft	<u>Grade</u>	<u>Thread</u>	<u>Interval</u>	<u>Length</u>
17 1/2"	13 3/8"	48#	H-40	ST&C	0-350'	350'
12 1/4"	9 5/8"	36#	J-55	ST&C	0-1100'	1100'
8 3/4"	Open Hole				0-5000' TVD	5000'
* 8 3/4"	7"	23# +26#	J-55	ST&C	0-4830' MD	4830'
7 7/8"	5 1/2"	17#	HP-110	LT&C	0-8600' MD	8600'

^{* 7&}quot; will only be set if hole conditions dictate.

Yates Petroleum Corporation requests a variance to install a rotating head on the surface casing strings when intermediate casing will be set. If a BOP system is required then we wish to install a 2M system and receive a variance to test the system to 500# using the rig pumps. The test will be held for 30 minutes on each system component. Components to be tested include pipe rams, blind rams, and annular preventer.

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

Robinson HW Federal Com. #2H Page 2

B. CEMENTING PROGRAM:

Surface Casing: 250 sx Lite "C" (YLD 2.1 WT 12.6) tail in w/ 200 sx "C" w/ 2% CaCl2 (YLD 1.32 WT 14.8).

Intermediate Casing: 325 sx Lite "C" (YLD 2.10 WT 12.6) Tail in w/200 sx Class "C" +2% CaCl2 (YLD 1.32 WT 14.8).

Production Casing: TOC 600', Lead w/ 775 sx Lite "C" (YLD 2.05 WT 12.5) Tail in w/ 1220 sx Magne Plus (YLD 1.05 WT 13.0).

5. Mud Program and Auxiliary Equipment:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	Fluid Loss
Spud to 350'	FW/Spud Mud	8.4-8.9	32-36	N/C
350'-1100'	F/WGel/Air Mist	8.4-8.9	28-34	N/C
1100'-8600'	Cut Brine	8.8-9.2	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.

6. EVALUATION PROGRAM:

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

Logging: Platform Express/HALS/FMI.

Coring: Rotary Sidewall Cores.

DST's: Non anticipated.

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

Anticipated BHP: From: 0 TO

From: 350' TVD TO Anticipated Max. BHP: PSI 0 162 From: 350' TO 1100' Anticipated Max. BHP: **PSI** 510 From: 1100' TO 5000' TVD **PSI** Anticipated Max. BHP: 2950

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: None

H2S Zones Anticipated: None

Maximum Bottom Hole Temperature: 168° F

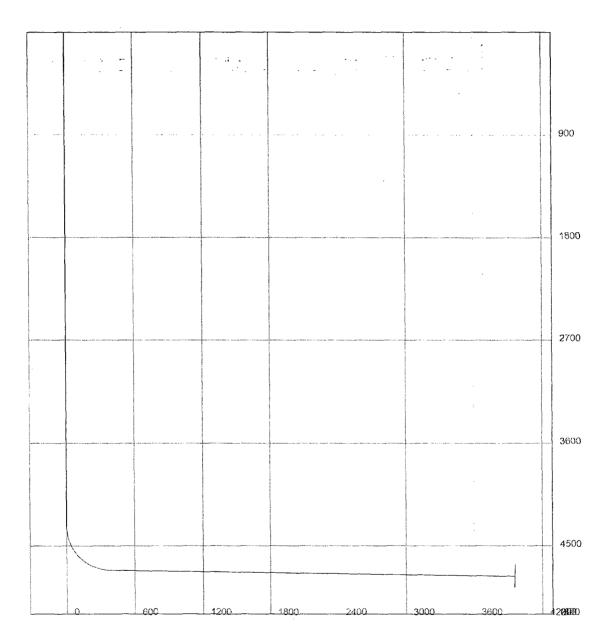
8. ANTICIPATED STARTING DATE:

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.

			-	Т			\neg			- 1				- 1		т		_		т	-	Г	-		_		_
T.F. Ref. [HS/GN]		NO ON	HS	HS	HS	HS	HS	HS	НS	HS	HS	HS	HS	HS	НS	HS	НS	HS	HS	HS	HS	НS	HS	HS	HS	HS	
ToolFace [°]		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
D.L.S. [°/100ft]	0.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	0.00
E+/W- [ft]	00.00	00.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00.0	00.0	0.00	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	0.00
N+/S- [ft]	00.0	00.0	0.52	2.65	6.40	11.75	18.69	27.19	37.21	48.70	61.62	75.92	91.52	108.36	126.38	145.50	165.62	186.67	208.56	231.19	254.47	278.29	302.56	327.16	352.00	376.32	3960.00
T.V.D. [ft]	00.0	4330.00	4349.99	4374.90	4399.61	4424.02	4448.04	4471.54	4494.44	4516.64	4538.04	4558.54	4578.07	4596.54	4613.86	4629.97	4644.79	4658.27	4670.34	4680.95	4690.06	4697.63	4703.63	4708.02	4710.79	4711.93	4765.00
Azimuth [°]	00.00	00.00	00.0	0.00	00.00	0.00	00.00	00.00	00.00	00.0	00.00	00.00	00.0	0.00	0.00	00.0	0.00	0.00	0.00	00.0	00.0	0.00	00.0	00.0	00.0	0.00	0.00
Inclination [°]	0.00	0.00	3.00	6.75	10.50	14.25	18.00	21.75	25.50	29.25	33.00	36.75	40.50	44.25	48.00	51.75	55.50	59.25	63.00	66.75	70.50	74.25	78.00	81.75	85.50	89.15	89.15
M.D. [ft]	0.00	4330.00	4350.00	4375.00	4400.00	4425.00	4450.00	4475.00	4500.00	4525.00	4550.00	4575.00	4600.00	4625.00	4650.00	4675.00	4700.00	4725.00	4750.00	4775.00	4800.00	4825.00	4850.00	4875.00	4900.00	4924.35	8508.42
	-	2	6	4	5	9	7	∞	6	ę	=	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27

3D³ Directional Drilling Planner - 3D View

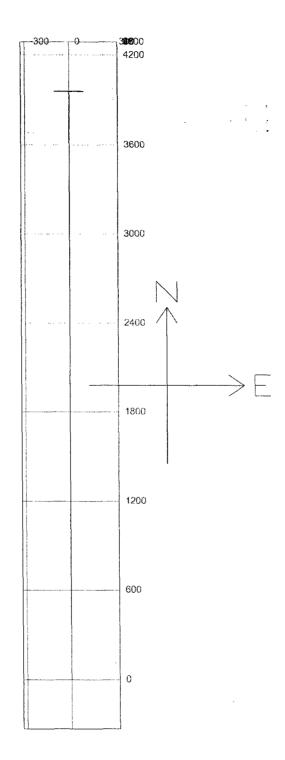
Company: Technical Toolboxes Inc. Well: Robinson HW Fed. Com. #2H



File: C:\Program Files\Drilling Toolbox 2001\Templates\Visual Wellbore\robinson2H.wpp

3D³ Directional Drilling Planner - 3D View

Company: Technical Toolboxes Inc. Well: Robinson HW Fed. Com. #2H



File: C:\Program Files\Drilling Toolbox 2001\Templates\Visual Wellbore\robinson2H.wpp

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

Yates Petroleum Corporation Robinson HW Federal Com. #2H

660' FSL and 660' FWL (Pilot Hole) 660' FNL and 660' FWL (BHL) Section 24.T16S-R24E Eddy County, New Mexico

This plan is submitted with Form 3160-3, Application for Permit to Drill, covering the above described well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of the surface disturbance involved and the procedures to be followed in rehabilitating the surface after completion of the operations, so that a complete appraisal can be made of the environmental effect associated with the operations.

1. **EXISTING ROADS:**

Exhibit A is a portion of the BLM map showing the well and roads in the vicinity of the proposed location. The proposed wellsite is located approximately 8 miles northwest of Artesia, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

DIRECTIONS:

Go west of Artesia on Highway 82 for approximately 10 miles to Joy Road. Turn right on Joy Road and go approximately 3.9 miles. Turn right here and on an existing lease road for approx. 1.5 miles to the start of a two track road. Follow the two track road east for .2 of a mile to a fence with a wire gate. Go through gate and immediately cross a pipeline. Turn left here on east side of the pipeline. The new road will start here going north for approx. 2 of a mile. Turn right here and go approx. 1 of a mile to the southwest corner of the proposed location.

2. **PLANNED ACCESS ROAD:**

- The proposed new access will be approximately .3 of a mile in length from the point of origin being the southwest corner of the well location. The road will lie in a north then easterly direction.
- B. The new road will be 14 feet in width (driving surface) and will be adequately drained to control runoff and soil erosion.
- The new road will be bladed with drainage on one side. Traffic turnouts may be built. C.
- D. The route of the road is visible.
- E. Existing roads will be maintained in the same or better condition.

LOCATION OF EXISTING WELL 3.

- There is drilling activity within a one-mile radius of the wellsite. Α.
- B. Exhibit D shows existing wells within a one-mile radius of the proposed wellsite.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

- Α. There are production facilities on this lease at the present time.
- В. In the event that the well is productive, the necessary production facilities will be installed on the drilling pad. If the well is productive oil, a gas or diesel selfcontained unit will be used to provide the necessary power. No power will be required if the well is productive of gas.

5. LOCATION AND TYPE OF WATER SUPPLY:

A. It is planned to drill the proposed well with a fresh water system. The water will be obtained from commercial sources and will be hauled to the location by truck over the existing and proposed roads shown in Exhibit A.

6. SOURCE OF CONSTRUCTION MATERIALS:

The dirt contractor will acquire any materials from the closest source at the time of construction of the well pad.

7. METHODS OF HANDLING WASTE DISPOSAL:

A. Drill cuttings will be disposed of in the reserve pits.

B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.

C. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or separate disposal application will be submitted.

D. Oil produced during operations will be stored in tanks until sold.

E. Current laws and regulations pertaining to the disposal of human waste will be complied with.

F. All trash, junk, and other waste materials will be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not approved.

8. ANCILLARY FACILITIES: None

9. WELLSITE LAYOUT:

A. Exhibit C shows the relative location and dimensions of the well pad, the reserve pits, the location of the drilling equipment, rig orientation and access road approach.

B. The reserve pits will be plastic lined. Yates Petroleum Corporation is in full compliance with the OCD General Plan for Drilling Pits approved on April 15, 2004.

C. A 600' x 600' area has been staked and flagged.

10. PLANS FOR RESTORATION

- A. After finishing drilling and/or completion operations, all equipment and other material not needed for further operations will be removed. The location will be cleaned of all trash and junk to leave the wellsite in as aesthetically pleasing a condition as possible.
- B. Unguarded pits, if any, containing fluids will be fenced until they have dried and been leveled.
- C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible. All pits will be filled level within 90 days after abandonment.
- 11. SURFACE OWNERSHIP: Bureau of Land Management, Carlsbad, New Mexico.

12. OTHER INFORMATION:

- A. Topography: Refer to the existing archaeological report for a description of the topography, flora, fauna, soil characteristics, dwellings, historical and cultural sites.
- B. The primary surface use is for grazing.

13. OPERATOR'S REPRESENTATIVE

A. Through A.P.D. Approval:

B. Through Drilling Operations, Completions and Production:

Cy Cowan, Regulatory Agent Yates Petroleum Corporation 105 South Fourth Street Artesia, New Mexico 88210 Phone (505) 748-1471

Pinson McWhorter, Operations Manager Yates Petroleum Corporation 105 South Fourth Street Artesia, New Mexico 88210 Phone (505) 748-1471

14. CERTIFICATION:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions which presently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Yates Petroleum Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

12/1/05

Regulatory Agent

MARTIN YATES, III 1912 - 1985 FRANK W. YATES 1936 - 1986



105 SOUTH FOURTH STREET ARTESIA, NEW MEXICO 88210-2118

TELEPHONE (505) 748-1471

S. P. YATES
CHAIRMAN OF THE BOARD
JOHN A. YATES
PRESIDENT
PEYTON YATES
EXECUTIVE VICE PRESIDENT
RANDY G. PATTERSON
SECRETARY
DENNIS G. KINSEY
TREASURER

STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof, as described below:

Lease No.: NM-111400	Bond Coverage: <u>Individually Bonded</u>
Legal Description of Land:	BLM Bond File No.:NM 2811
NW/4	
Section 24, T16S-R24E	
Eddy County, New Mexico	
Formation (s) – (if applicable):	
	YATES PETROLEUM CORPORATION
Date: November 30, 2005	a Coman
	Cy Cowar, Regulatory Agent

Yates Petroleum Corporation

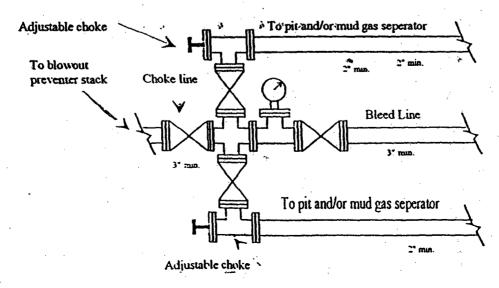
Typical 3,000 psi Pressure System
Schematic
Annular with Double Ram Preventer Stack

Yates Petroleum Corporation Robinson HW Federal Com. #2H Kelly 660' FSL and 660' FWL Pilot Hole 660' FNL and 660' FWL BHL Section 24, T16S-R24E Eddy County, New Mexico Fill Up Line DO Flow Line Annular Preventer **Blind Rams** Pipe Rams Choke Line Kill Line Intermediate Casing Well Head 2º min ID≪II Check Valve

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

sequence optional

Intermediate Casing



CONDITIONS OF APPROVAL - DRILLING

Operator's Name:

YATES PETROLEUM CORPORATION 2H - ROBINSON HW FEDERAL COM

Well Name & No. Location:

660' FSL & 660' FWL - SEC 24 - T16S - R24E - EDDY COUNTY (SHL) 660' FNL & 660' FWL - SEC 24 - T16S - R24E - EDDY COUNTY (BHL)

Lease:

NM-2346 /11400

I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Roswell Field Office, 2909 West Second St., Roswell NM 88201, (505) 627-0272 for wells in Chaves and Roosevelt Counties; the Carlsbad Field Office. 620 East Greene St., Carlsbad, NM 88220, (505) 234-5909 or (505) 361-2822 (After hours) - for wells in Eddy County; and the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:

A. Spudding

- B. Cementing casing: 13-3/8 inch 9-5/8 inch 5-1/2 inch (Note: 7" casing will be set @ approximately 4830 feet prior to running the 5-1/2" production lateral should hole conditions dictate.)
- C. BOP tests
- 2. No H2S gas has been encountered in Sec 24 T16S R24E.
- 3 Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
- 4. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.
 - 5. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.
 - 6. A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.

II. CASING:

- 1. The 13-3/8 inch surface casing shall be set at 350 feet, below usable water and cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.
- 2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is circulate cement to the surface.
- 3. The minimum required fill of cement behind the 5-1/2 inch production casing is cement shall extend upward a minimum of 500 feet above the uppermost hydrocarbon bearing interval.

III. PRESSURE CONTROL:

- 1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the <u>9-5/8</u> inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.
- 2. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling the surface and intermediate casing shall be <u>2000</u> psi. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling below the <u>9-5/8</u> inch casing shall be <u>3000</u> psi.
- 3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.
- A variance to test the **BOP and surface casing** to the reduced pressure of **1000** psi with the rig pumps is approved.
- The tests shall be done by an independent service company.
- The results of the test shall be reported to the appropriate BLM office.
- Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
- Testing must be done in a safe workman-like manner. Hard line connections shall be required.
- BOPE must be tested prior to drilling into the Wolfcamp Formation by an independent service company.

IV. DRILLING MUD:

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** Formation, and shall be used until production casing is run and cemented. Monitoring equipment shall consist of the following:

- 1. Recording pit level indicator to indicate volume gains and losses.
- 2. Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.
- 3. Flow-sensor on the flow line to warn of abnormal mud returns from the well.