

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

Form 3160-3  
(August 1999)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

RECEIVED

MAR 23 2006

JOD-ARTESIA

0  
OMB No. 1004-0136  
Expires November 30, 2000

5. Lease Serial No.

NM-103594

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.

9. API Well No.

30-015-35228

10. Field and Pool, or Exploratory

Undesignated Mc Iver Ranch Morrow

11. Sec., T., R., M., or Blk. and Survey or Area

Section 19, T22S-R25E

12. County or Parish

Eddy County

13. State

NM

1a. Type of Work: ☒ DRILL ☐ REENTER

b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone

2. Name of Operator  
Yates Petroleum Corporation

SUBJECT TO LIKE

APPROVAL BY STATE

25525

3A. Address  
105 South Fourth Street  
Artesia, New Mexico 88210

3b. Phone No. (include area code)  
(505) 748-1471

4. Location of Well (Report location clearly and in accordance with any State requirements.)\*

At surface  
1914' FNL and 940' FWL Surface Location

At proposed prod. Zone  
1980' FNL and 660' FWL Bottom Hole Location

14. Distance in miles and direction from nearest town or post office\*

Approximately 13 miles northwest of Carlsbad, New Mexico.

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

660'

16. No. of Acres in lease

639.72

17. Spacing Unit dedicated to this well

W/2

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

2300'

19. Proposed Depth

10750'

20. BLM/BIA Bond No. on file

NM-2811

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

3883' GL

22. Approximate date work will start\*

ASAP

23. Estimated duration

45 days

24. Attachments

CARLSBAD CONTROLLED WATER BASIN

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.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).

4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the authorized office.

25. Signature

Name (Printed/Typed)

Date

Cy Cowan

8/30/2005

Regulatory Agent

Regulatory Agent

Approved by (Signature)

Name (Printed/Typed)

Date

Joe G. Lara

10/4/05

Title

Office

CARLSBAD FIELD OFFICE

Acting FIELD MANAGER

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

APPROVAL FOR 1 YEAR

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)

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS  
AND SPECIAL STIPULATIONS  
ATTACHED

WITNESS:

13 3/8' Cement Job

DISTRICT I  
1400 N. Frank St., Santa Fe, NM 87504

DISTRICT II  
611 Santa Fe St., Santa Fe, NM 87501

DISTRICT III  
1000 N. Frank St., Santa Fe, NM 87501

DISTRICT IV  
2000 Santa Fe St., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources Department

FORM W-1000  
Revised March 17, 1999  
Instruction on back  
Submit to Appropriate District Office  
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 Undesignated Mc Iver Ranch Morrow	
Property Code	Property Name Koonunga Hill BGX Federal		Well Number 2
Owner No. 025575	Operator Name YATES PETROLEUM CORPORATION		Elevation 3883'

Surface Location									
TL or Lot No.	Section	Township	Range	Lot No.	Feet from the	North/South Line	Feet from the	East/West Line	County
E	19	22S	24E		1914'	North	940'	West	Eddy

Bottom Hole Location If Different From Surface									
TL or Lot No.	Section	Township	Range	Lot No.	Feet from the	North/South Line	Feet from the	East/West Line	County
L	19	22S	24E		1980'	South	660'	West	Eddy
Dedicated Acres 320		Initial or Initial		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**

	<p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>[Signature]</i> Signature Cy Cowan</p> <p>Printed Name Regulatory Agent</p> <p>Title April 20, 2006</p> <p>Date</p>
	<p><b>SURVEYOR CERTIFICATION</b></p> <p>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.</p> <p>REFER TO ORIGINAL PLAT.</p> <p>Date Surveyed</p> <p>Signature &amp; Seal of Professional Surveyor</p>
	<p>Certificate No. Herschel L. Jones RLS 3840</p>
	<p>GENERAL SURVEYING COMPANY</p>

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM 3160-5  
OMB No. 1004-0135  
Expires November 30, 2000

## SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. NM-103594
2. Name of Operator Yates Petroleum Corporation		6. If Indian, Allottee or Tribe Name
3a. Address 105 South Fourth Street, Artesia, NM 88210	3b. Phone No. (include area code) (505) 748-1471	7. If Unit or CA/Agreement, Name and/o
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 1914' FNL and 940' FWL Surface Hole Location 1980' FSL and 660' FWL Bottom Hole Location Section 19, T22S-R25E		8. Well Name and No. Koonunga Hill BGX Federal #2
		9. API Well No.
		10. Field and Pool, or Exploratory Area Undes. Mc Iver Ranch Morrow

## 12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other Amend
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Surface Use
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	Plan

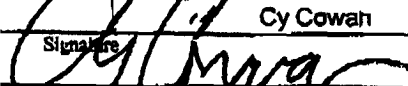
13. Describe Proposed or Completed Operations (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Yates Petroleum Corporation wishes to amend the surface use plan for the captioned to include the following:  
Change to bottom hole location from 1980' FNL and 660' FWL to 1980' FSL and 680' FWL. See attached C-102.  
The surface hole location will remain the same at 1914' FNL and 940' FWL.  
Please note attached directional drilling plan. Also note changes to casing, cement, and mud programs.

SUBJECT TO  
LIKE APPROVAL  
BY STATE

APPROVED

MAY - 1 2006

14. I hereby certify that the foregoing is true and correct		Title Regulatory Agent
Name (Printed/Typed) Cy Cowan	Date April 20, 2006	
Signature 		GARY GOURLEY PETROLEUM ENGINEER

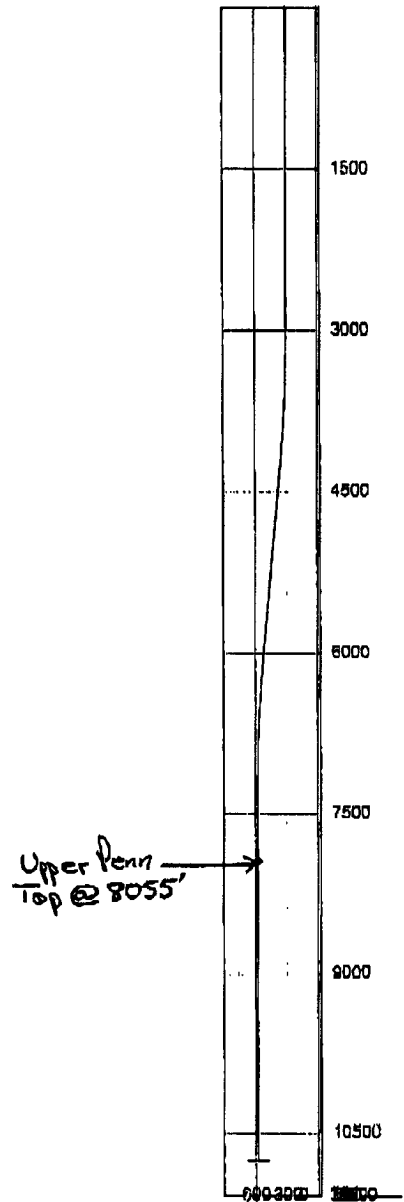
Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		Office

Title 18 U.S.C. Section 1001, 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)

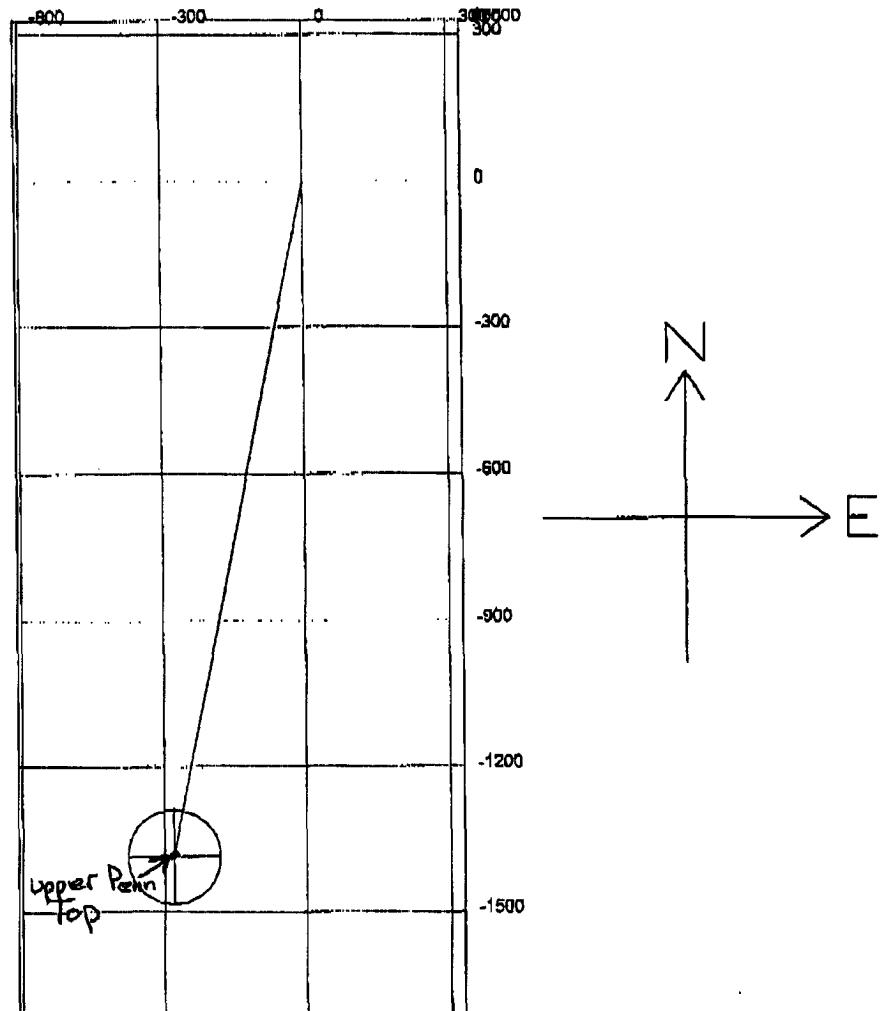
# 3D Directional Drilling Planner - 3D View

Company: Technical Toolboxes Inc.  
Well: Koonunga Hill BGX Federal #2



### 3D Directional Drilling Planner - 3D View

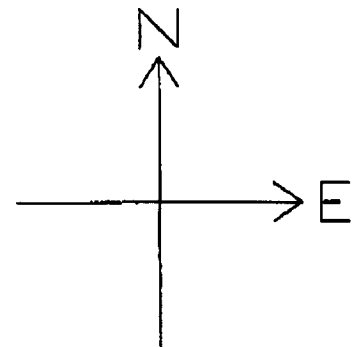
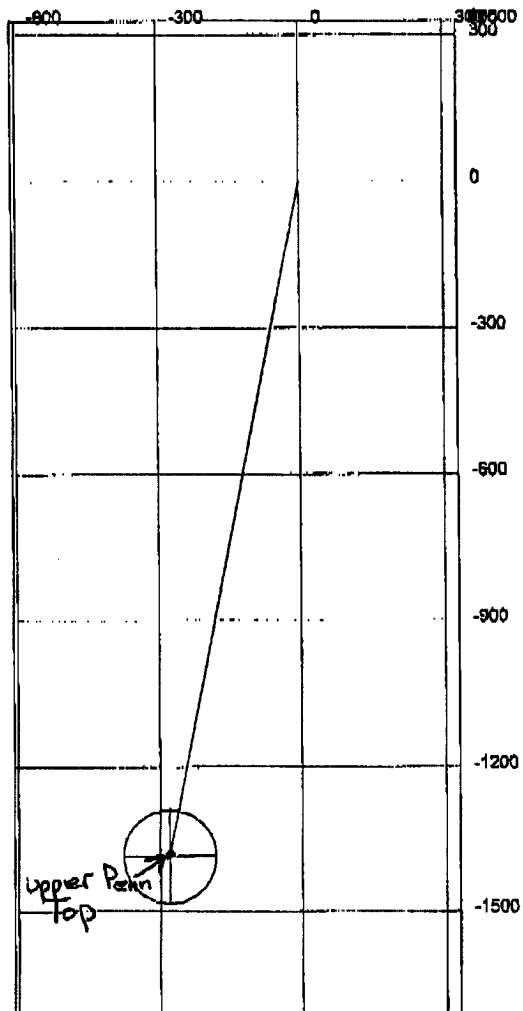
Company: Technical Toolboxes Inc.  
Well: Koonunga Hill BGX Federal #2





### 3D Directional Drilling Planner - 3D View

Company: Technical Toolboxes Inc.  
Well: Koonunga Hill BGX Federal #2



Simulated Survey - C:\Program Files\Drilling Toolbox 2001\Templates\Visual Wellbore\koornungahill2.wpp

	M.D. [m]	Inclination [°]	Azimuth [°]	T.V.D. [m]	N+S [m]	E+W [m]	D.L.S. [°/100m]	ToolFace [°]	T.F. Ref. [HS/GN]
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00		GN
2	3000.00	0.00	0.00	3000.00	0.00	0.00	2.00	181	HS
3	3025.00	0.50	191.42	3025.00	-0.11	-0.02	2.00	360	HS
4	3050.00	1.00	181.42	3050.00	-0.43	-0.09	2.00	360	HS
5	3075.00	1.50	181.42	3074.99	-0.96	-0.19	2.00	360	HS
6	3100.00	2.00	191.42	3099.98	-1.71	-0.35	2.00	0	HS
7	3125.00	2.50	191.42	3124.96	-2.87	-0.54	2.00	0	HS
8	3150.00	3.00	181.42	3149.93	-3.85	-0.78	2.00	0	HS
9	3175.00	3.50	181.42	3174.89	-5.24	-1.06	2.00	0	HS
10	3200.00	4.00	181.42	3199.84	-6.84	-1.38	2.00	360	HS
11	3225.00	4.50	181.42	3224.77	-8.66	-1.75	2.00	360	HS
12	3250.00	5.00	181.42	3249.68	-10.89	-2.16	2.00	360	HS
13	3275.00	5.50	181.42	3274.56	-12.93	-2.61	2.00	360	HS
14	3300.00	6.00	191.42	3299.45	-15.38	-3.11	2.00	360	HS
15	3325.00	6.50	191.42	3324.30	-18.06	-3.65	2.00	0	HS
16	3350.00	7.00	191.42	3349.13	-20.93	-4.23	2.00	0	HS
17	3375.00	7.50	191.42	3373.93	-24.02	-4.85	2.00	360	HS
18	3400.00	8.00	191.42	3398.70	-27.33	-5.52	2.00	0	HS
19	3425.00	8.50	191.42	3423.44	-30.84	-6.23	2.00	0	HS
20	3450.00	9.00	191.42	3448.15	-34.57	-6.98	2.00	0	HS
21	3475.00	9.50	191.42	3472.83	-38.51	-7.78	2.00	0	HS
22	3500.00	10.00	191.42	3497.47	-42.66	-8.62	2.00	0	HS
23	3525.00	10.50	191.42	3522.07	-47.02	-8.50	2.00	0	HS
24	3550.00	11.00	191.42	3546.63	-51.59	-10.42	2.00	0	HS
25	3575.00	11.50	191.42	3571.15	-56.37	-11.39	2.00	0	HS
26	3600.00	12.00	191.42	3595.62	-61.36	-12.40	2.00	360	HS
27	3625.00	12.50	191.42	3620.05	-66.56	-13.45	2.00	0	HS
28	3650.00	13.00	191.42	3644.44	-71.97	-14.54	2.00	0	HS
29	3675.00	13.50	191.42	3668.77	-77.59	-15.67	2.00	360	HS
30	3700.00	14.00	191.42	3693.06	-83.41	-16.85	2.00	0	HS
31	3725.00	14.50	191.42	3717.29	-89.44	-18.07	2.00	0	HS
32	3750.00	15.00	191.42	3741.46	-95.68	-19.33	2.00	360	HS
33	3775.00	15.50	191.42	3765.58	-102.13	-20.63	2.00	0	HS
34	3800.00	16.00	191.42	3789.64	-108.78	-21.98	2.00	360	HS
35	3825.00	16.50	191.42	3813.64	-115.64	-23.36	2.00	360	HS
36	3850.00	17.00	191.42	3837.58	-122.70	-24.78	2.00	360	HS



Simulated Survey - C:\Program Files\Drilling Toolbox 2001\Templates\Visual Wellbore\Koonungahill2.wpp

	M.D. [m]	Inclination [°]	Azimuth [°]	T.V.D. [m]	N+S. [m]	E+W. [m]	D.L.S. [°/100ft]	ToolFace [°]	T.F. Ref. [HS/GN]
37	3875.00	17.50	191.42	3861.46	-129.97	-26.26	2.00	360	HS
38	3900.00	18.00	191.42	3885.27	-137.44	-27.76	2.00	0	HS
39	3925.00	18.50	191.42	3909.01	-145.11	-29.32	2.00	0	HS
40	3950.00	19.00	191.42	3932.68	-152.99	-30.91	2.00	0	HS
41	3975.00	19.50	191.42	3956.28	-161.07	-32.54	2.00	0	HS
42	4000.00	20.00	191.42	3979.82	-169.35	-34.21	2.00	360	HS
43	4025.00	20.50	191.42	4003.27	-177.83	-35.92	2.00	0	HS
44	4050.00	21.00	191.42	4026.85	-186.51	-37.68	2.00	360	HS
45	4075.00	21.50	191.42	4049.95	-195.39	-39.47	2.00	360	HS
46	4100.00	22.00	191.42	4073.17	-204.47	-41.31	2.00	360	HS
47	4125.00	22.50	191.42	4096.31	-213.76	-43.18	2.00	360	HS
48	4150.00	23.00	191.42	4119.36	-223.23	-45.10	2.00	0	HS
49	4175.00	23.50	191.42	4142.33	-232.90	-47.05	2.00	0	HS
50	4200.00	24.00	191.42	4165.22	-242.77	-49.04	2.00	0	HS
51	4225.00	24.50	191.42	4188.01	-252.83	-51.08	2.00	360	HS
52	4250.00	25.00	191.42	4210.71	-263.08	-53.15	2.00	0	HS
53	4251.46	25.03	191.42	4212.04	-263.70	-53.27	0.00		
54	6321.79	25.03	191.42	6087.96	-1122.27	-226.72	0.00	180	HS
55	6325.00	24.97	191.42	6090.86	-1123.62	-226.99	2.00	180	HS
56	6350.00	24.47	191.42	6113.56	-1133.86	-229.06	2.00	180	HS
57	6375.00	23.97	191.42	6136.36	-1143.91	-231.09	2.00	180	HS
58	6400.00	23.47	191.42	6159.24	-1153.77	-233.06	2.00	180	HS
59	6425.00	22.97	191.42	6182.22	-1163.43	-235.04	2.00	180	HS
60	6450.00	22.46	191.42	6205.28	-1172.89	-236.95	2.00	180	HS
61	6475.00	21.96	191.42	6228.43	-1182.16	-238.82	2.00	180	HS
62	6500.00	21.46	191.42	6251.85	-1191.22	-240.65	2.00	180	HS
63	6525.00	20.96	191.42	6274.96	-1200.09	-242.44	2.00	180	HS
64	6550.00	20.46	191.42	6298.34	-1208.76	-244.19	2.00	180	HS
65	6575.00	19.96	191.42	6321.80	-1217.23	-245.80	2.00	180	HS
66	6600.00	19.46	191.42	6345.33	-1225.49	-247.57	2.00	180	HS
67	6625.00	18.96	191.42	6368.94	-1233.56	-249.20	2.00	180	HS
68	6650.00	18.46	191.42	6392.62	-1241.42	-250.79	2.00	180	HS
69	6675.00	17.96	191.42	6416.37	-1249.08	-252.34	2.00	180	HS
70	6700.00	17.46	191.42	6440.18	-1256.54	-253.85	2.00	180	HS
71	6725.00	16.96	191.42	6464.06	-1263.79	-255.31	2.00	180	HS
72	6750.00	16.46	191.42	6488.01	-1270.84	-256.73	2.00	180	HS

Simulated Survey - C:\Program Files\Drilling Toolbox 2001\Templates\Visual Wellborekoorungahill2.wpp

	M.D. [ft]	Inclination [°]	Azimuth [°]	T.V.D. [ft]	N+S [ft]	E+W [ft]	D.L.S. [ft/100ft]	ToolFace [°]	T.F. Ref. [HS/GN]
73	6775.00	15.98	191.42	6512.01	-1277.68	-258.12	2.00	180	HS
74	6800.00	15.46	191.42	6536.08	-1284.32	-259.46	2.00	180	HS
75	6825.00	14.96	191.42	6560.20	-1290.75	-260.76	2.00	180	HS
76	6850.00	14.46	191.42	6584.39	-1296.97	-262.01	2.00	180	HS
77	6875.00	13.96	191.42	6608.61	-1302.99	-263.23	2.00	180	HS
78	6900.00	13.46	191.42	6632.90	-1308.80	-264.40	2.00	180	HS
79	6925.00	12.98	191.42	6657.24	-1314.40	-265.54	2.00	180	HS
80	6950.00	12.46	191.42	6681.63	-1319.80	-266.63	2.00	180	HS
81	6975.00	11.96	191.42	6706.06	-1324.98	-267.67	2.00	180	HS
82	7000.00	11.46	191.42	6730.54	-1329.96	-268.68	2.00	180	HS
83	7025.00	10.96	191.42	6755.06	-1334.72	-269.64	2.00	180	HS
84	7050.00	10.46	191.42	6779.63	-1339.28	-270.56	2.00	180	HS
85	7075.00	9.96	191.42	6804.23	-1343.63	-271.44	2.00	180	HS
86	7100.00	9.46	191.42	6828.87	-1347.76	-272.27	2.00	180	HS
87	7125.00	8.96	191.42	6853.55	-1351.68	-273.07	2.00	180	HS
88	7150.00	8.46	191.42	6878.26	-1355.40	-273.82	2.00	180	HS
89	7175.00	7.96	191.42	6903.00	-1358.90	-274.53	2.00	180	HS
90	7200.00	7.46	191.42	6927.78	-1362.19	-275.19	2.00	180	HS
91	7225.00	6.96	191.42	6952.58	-1365.27	-275.81	2.00	180	HS
92	7250.00	6.46	191.42	6977.41	-1368.13	-276.39	2.00	180	HS
93	7275.00	5.96	191.42	7002.26	-1370.78	-276.93	2.00	180	HS
94	7300.00	5.46	191.42	7027.14	-1373.22	-277.42	2.00	180	HS
95	7325.00	4.96	191.42	7052.03	-1375.45	-277.87	2.00	180	HS
96	7350.00	4.46	191.42	7076.95	-1377.47	-278.28	2.00	180	HS
97	7375.00	3.96	191.42	7101.88	-1379.27	-278.64	2.00	180	HS
98	7400.00	3.46	191.42	7126.83	-1380.86	-278.96	2.00	180	HS
99	7425.00	2.96	191.42	7151.79	-1382.23	-279.24	2.00	180	HS
100	7450.00	2.46	191.42	7176.76	-1383.39	-279.47	2.00	180	HS
101	7475.00	1.96	191.42	7201.74	-1384.34	-279.66	2.00	180	HS
102	7500.00	1.46	191.42	7226.73	-1385.07	-279.81	2.00	180	HS
103	7525.00	0.95	191.42	7251.73	-1385.59	-279.92	2.00	180	HS
104	7550.00	0.44	191.42	7276.72	-1385.90	-279.98	2.00	180	HS
105	7573.28	0.00	11.31	7300.01	-1385.99	-280.00	2.00	11	GN
106	11023.28	0.00	180.00	10750.00	-1386.00	-280.00	0.00		

4/2/06

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

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 1000# 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.

9150'. Hole size will be reduced to 6 1/8" and 4 1/2" casing will be set to TD.

If lost circulation is encountered in the Canyon Formation 7" casing will be set to approximately 9150'. Hole size will be reduced to 6 1/8" and 4 1/2" casing will be set to TD.

Hole Size	Casing Size	Wt./Ft	Grade	Coupling	Interval	Length
17 1/2"	13 3/8"	48#	H-40	ST+C	0-1500'	1500'
12 1/4"	9 5/8"	36#	J-55	ST+C	0-2700'	2700'
8 3/4"	7"	26#	HCP	LT+C	0-1900'	1900'
8 3/4"	7"	26#	L-80	LT+C	1900'-9200'	7300'
8 3/4"	7"	26#	HCP	LT+C	9200'-11023' MVD	1823'

#### THE PROPOSED CASING AND CEMENTING PROGRAM:

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.

Pressure Control Equipment: BOP will be installed on the 9 5/8" casing and rated for 5000 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.

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

Capitan	585'	Base on Dolomite	9038'
Cherry Canyon	1605'	Strawn	9358'
Brushy Canyon	2335'	Atoka	10148'
Bone Spring Lime	4025'	Upper Morrow	10553'
1st Bone Spring Sand	4442'	Middle Morrow	10598'
2nd Bone Spring Sand	5502'	Lower Morrow	10798'
3rd Bone Spring Sand	7598'	Base of Morrow	10888'
Wolffcamp	7898'	MVD	11023'
Cisco-Canyon Dolomite	8328'		

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

YATES PETROLEUM CORPORATION  
Koonunga Hill BGX Federal #2  
1914' FNL and 940' FWL Surface Location  
1980' FSL and 660' FWL Bottom Hole Location  
Section 19-T22S-R25E  
Eddy County, New Mexico

**B. CEMENTING PROGRAM:**

Surface casing: Lead with 900 sx "C" Lite (YLD 2.0 WT 12.5) Tail in with 200 sx "C" + 2% CaCl<sub>2</sub> (YLD 1.34 WT 2.0).

Intermediate casing: Lead with 250 sx "H" + 1% CaCl<sub>2</sub> (YLD 1.50 WT 14.6). Lead with 550 sx "C" Lite + 1% CaCl<sub>2</sub> (YLD 1.96 WT 12.5). Tail with 200 sx "C" + 2% CaCl<sub>2</sub> (YLD 1.34 WT 14.8).

Production casing: Stage I: Lead with 600 sx Super "C" Modified (YLD 1.60 WT 13.0).

Production casing: Stage II: Lead with 1150 sx "C" Lite (YLD 1.95 WT 12.5). Tail with 100 sx "H" (YLD 1.18 WT 15.6).

**5. Mud Program and Auxiliary Equipment:**

Interval	Type	Weight	Viscosity	Fluid Loss
0-2700'	Air Mist	0	0	N/C
2700'-8328'	Fresh Water	8.4	28	N/C
8328'-9573'	Fresh Water	8.4-8.5	33-35	<20
9573'-10073'	Cut Brine	9.4-9.5	3.4-3.6	N/C
10073'-11023'	Salt Gel/Starch/4%-6% KCL	9.5-9.8	3.4-3.6	<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. Mud will be checked hourly by rig personnel.

**6. EVALUATION PROGRAM:**

Samples: 10' samples from intermediate casing to TD.

Logging: Platform Express HRLA/NGT/FMI

Coring: None anticipated.

DST's: Possible from Wolfcamp to TD.

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

Anticipated BHP:

From: 0	To: 400'	Anticipated Max. BHP	175 PSI.
From: 400'	To: 2700'	Anticipated Max. BHP	1180 PSI.
From: 2700'	To: 10750'	Anticipated Max. BHP	5475 PSI.

No abnormal pressures or temperatures are anticipated.

Lost Circulation Zones Anticipated: Possible Canyon.

H<sub>2</sub>S Zones Anticipated: Possible in Canyon.

Maximum Bottom Hole Temperature: 178 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.

4/20/06

## **MULTI-POINT SURFACE USE AND OPERATIONS PLAN**

**Yates Petroleum Corporation  
Koonunga Hill BGX Federal #2  
1914' FNL and 940' FWL Surface Location  
1980' FSL and 660' FWL Bottom Hole Location  
Section 19-T22S-R25E  
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 13 miles southwest of Carlsbad, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

### **DIRECTIONS:**

Go north of Carlsbad on Highway 285 for approximately 9.5 miles to Waterhole Road. Turn right on Waterhole Road and go approximately 9.2 miles. Turn left here and follow lease road for approximately .8 of a mile to Nearburg's McKittrick 24 Federal #1 well. Continue south past the #1 well going south to the McKittrick 24 Federal #2. From the northeast corner of the #2 well pad a new portion of road will be built going south for approximately 400 feet to an old two track road. Turn left here on the two track and go approximately .2 of a mile to a cattle guard. Cross cattleguard and follow two track road for approximately .1 of a mile. The new road will start here going southeast up the hill to the northwest corner of the proposed well pad.

### **2. PLANNED ACCESS ROAD**

The new access road will be approximately .1 of a mile in length from the point of origin to the northwest corner of the well pad.

### **3. LOCATION OF EXISTING WELL**

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

### **4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES**

- A. There are no production facilities on this lease at the present time.
- B. 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 self-contained 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.

4/20/06

**YATES PETROLEUM CORPORATION**  
**Koonunga Hill BGX Federal #2**  
 1914' FNL and 940' FWL Surface Location  
 1980' FNL and 660' FWL Bottom Hole Location  
 Section 19-T22S-R25E  
 Eddy County, New Mexico

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

San Andres	1145'	Strawn	9085'
1 <sup>st</sup> Bone Spring Sand	2625'	Atoka	9875'
Bone Spring Lime	3775'	Upper Morrow	10280'
2nd Bone Spring Sand	4995'	Middle Morrow	10325'
3 <sup>rd</sup> Bone Spring Sand	7325'	Lower Morrow	10525'
Wolfcamp	7625'	Base of Morrow Clastics	10615'
Cisco Canyon Dolomite	8055'	TD	10750'
Base of Domomite	8765'		

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

Water: 60'  
 Oil or Gas: All potential zones.

3. Pressure Control Equipment: BOPE will be installed on the 9 5/8" casing and rated for 5000 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	Grade	Coupling	Interval	Length
17 1/2"	13 5/8"	48#	H-40	ST+C	0-400' 1500'	400' 1500'
12 1/4"	9 5/8"	36#	J-55	ST+C	0-2700'	2700'
8 3/4"	7"	26#	L-80	LT+C	0-1700'	1700'
8 3/4"	7"	26#	J-55	LT+C	1700'-7000'	5200'
8 3/4"	7"	26#	L-80	LT+C	7000'-9200'	2200'
8 3/4"	7"	26#	HCP-110	LT+C	9200'-10750'	1550'

If lost circulation is encountered in the Canyon Formation 7" casing will be set to approximately 9150'. Hole size will be reduced to 6 1/8" and 4 1/2" casing will be set to TD.

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 1000# 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, Joint Strength 1.8

**B. CEMENTING PROGRAM:**

Surface casing: 400 sx Class "C" (YLD 1.32 WT 14.8).

Intermediate casing: 825 sx Lite "C" (YLD 2.06 WT 12.6). Tail in with 250 sx Class "C" + 2% CaCl<sub>2</sub> (YLD 1.32 WT 14.8).

Production casing: Stage I: 875 sx Super "C" Modified (YLD 1.63 WT 13.0). DV tool @6000'.

Production casing: Stage II: 550 sx Lite 'C' (YLD 2.05 WT 12.7).

**5. Mud Program and Auxiliary Equipment:**

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0-400'	Fresh Water	8.4	28	N/C
400'-2700'	Fresh Water	8.4	28	N/C
2700'-9150'	Fresh Water	8.4-8.5	28	<20
9150'-9850'	Cut Brine	9.4-9.7	3.4-3.6	<10
9850'-TD	Salt Gel/Starch/4%-6% KCL	9.4-9.8	3.4-3.6	<10

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' samples from intermediate casing to TD.

Logging: Platform Express HRLA/NGT/FMI

Coring: None anticipated.

DST's: Possible from Wolfcamp to TD.

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

Anticipated BHP:

From: 0	To: 400'	Anticipated Max. BHP	175 PSI.
From: 400'	To: 2700'	Anticipated Max. BHP	1180 PSI.
From: 2700'	To: 10750'	Anticipated Max. BHP	5475 PSI.

No abnormal pressures or temperatures are anticipated.

Lost Circulation Zones Anticipated: Possible Canyon.

H<sub>2</sub>S Zones Anticipated: Possible in Canyon.

Maximum Bottom Hole Temperature: 178 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.

# **MULTI-POINT SURFACE USE AND OPERATIONS PLAN**

**Yates Petroleum Corporation**

**Koonunga Hill BGX Federal #2**

**1914' FNL and 940' FWL Surface Location**

**1980' FNL and 660' FWL Bottom Hole Location**

**Sec. 19-T22S-R25E**

**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 13 miles southwest of Carlsbad, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

## **DIRECTIONS:**

Go north of Carlsbad on Highway 285 for approximately 9.5 miles to Waterhole Road. Turn right on Waterhole Road and go approximately 9.2 miles. Turn left here and follow lease road for approximately .8 of a mile to Nearburg's McKittrick 24 Federal #1 well. Continue south past the #1 well going south to the McKittrick 24 Federal #2. From the northeast corner of the #2 well pad a new portion of road will be built going south for approximately 400 feet to an old two track road. Turn left here on the two track and go approximately .2 of a mile to a cattle guard. Cross cattleguard and follow two track road for approximately .1 of a mile. The new road will start here going southeast up the hill to the northwest corner of the proposed well pad.

## **2. PLANNED ACCESS ROAD**

The new access road will be approximately .1 of a mile in length from the point of origin to the northwest corner of the well pad.

## **3. LOCATION OF EXISTING WELL**

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

## **4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES**

- A. There are no production facilities on this lease at the present time.
- B. 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 self-contained 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 locate closest pit and will obtain any permits and materials for needed for construction.

**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 land fill. 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 after they have evaporated and dried.

**11. SURFACE OWNERSHIP: Federal surface, Administered by the 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:

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

B. Through Drilling Operations,  
Completions and Production:

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

14. CERTIFICATION:

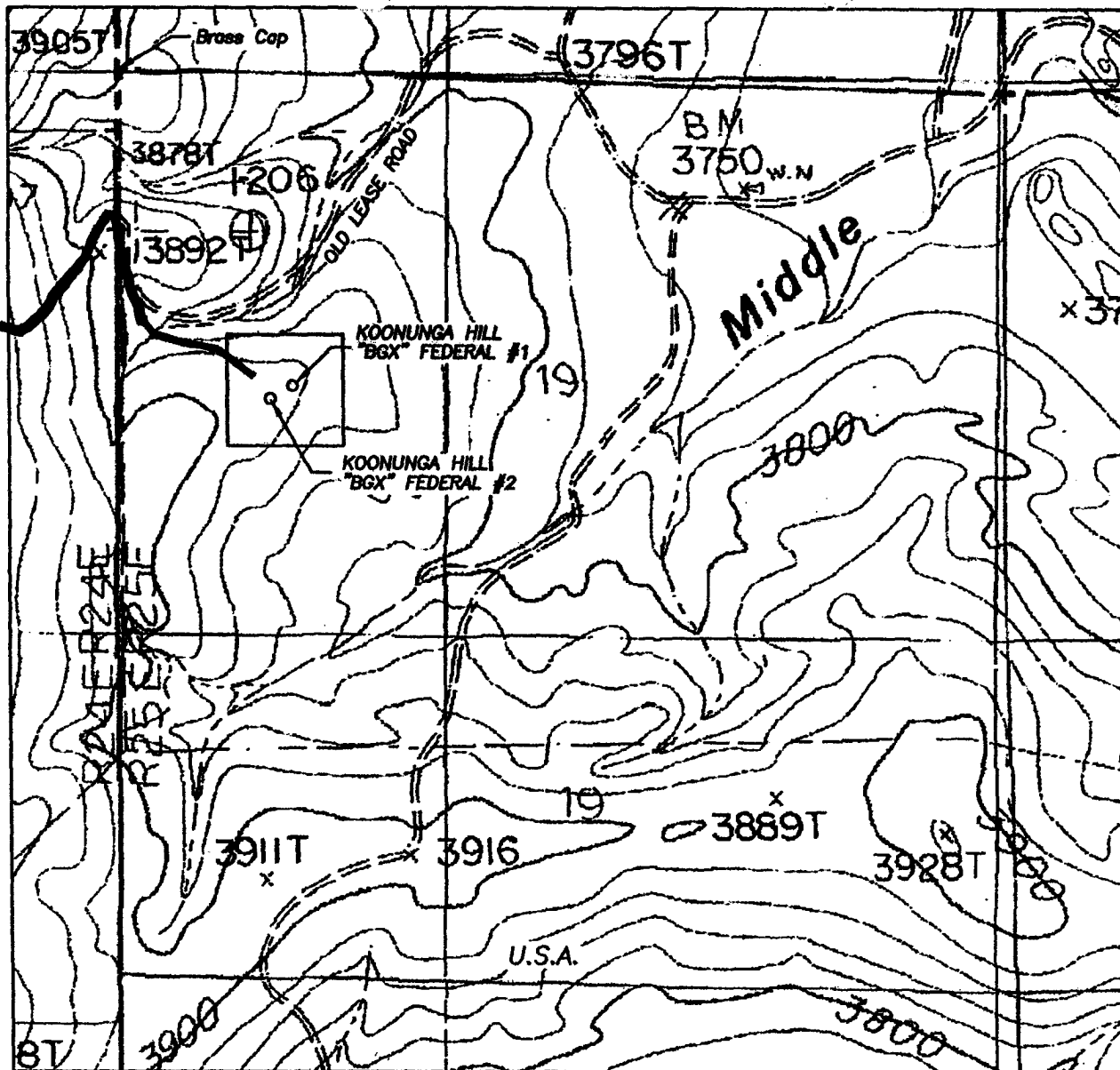
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions which presently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and, that the work associated 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.

8/30/05

  
Regulatory Agent



SECTION 19, TOWNSHIP 22 SOUTH, RANGE 25 EAST, NMPM, EDDY COUNTY, NEW MEXICO.



1000' 0 1000' 2000'  
Scale 1" = 1000'

THE PREPARATION OF THIS PLAT AND THE PERFORMANCE OF THE SURVEY UPON WHICH IT IS BASED WERE DONE UNDER MY DIRECTION AND THE PLAT ACCURATELY DEPICTS THE RESULTS OF SAID SURVEY AND MEET THE REQUIREMENTS OF THE STANDARDS FOR LAND SURVEYS IN NEW MEXICO AS ADOPTED BY THE NEW MEXICO STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS.

HERSCHEL L. JONES No. 3640

GENERAL SURVEYING COMPANY P.O. BOX 1928  
LOVINGTON, NEW MEXICO 88260

## YATES PETROLEUM CORP.

LEASE ROAD TO ACCESS THE YATES KOONUNGA HILL "BGX" FEDERAL #1 AND #2 WELLS, LOCATED IN SECTION 19, TOWNSHIP 22 SOUTH, RANGE 25 EAST, NMPM, EDDY COUNTY, NEW MEXICO.

Survey Date: 7/07/2005	Sheet 1 of 1 Sheets
Drawn By: Ed Blevins	W.O. Number
Date: 7/08/05	Scale 1" = 1000' KOONUNGA

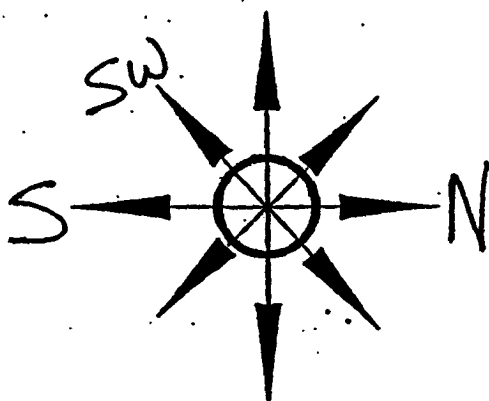
PB - L1

# Yates Petroleum Corporation

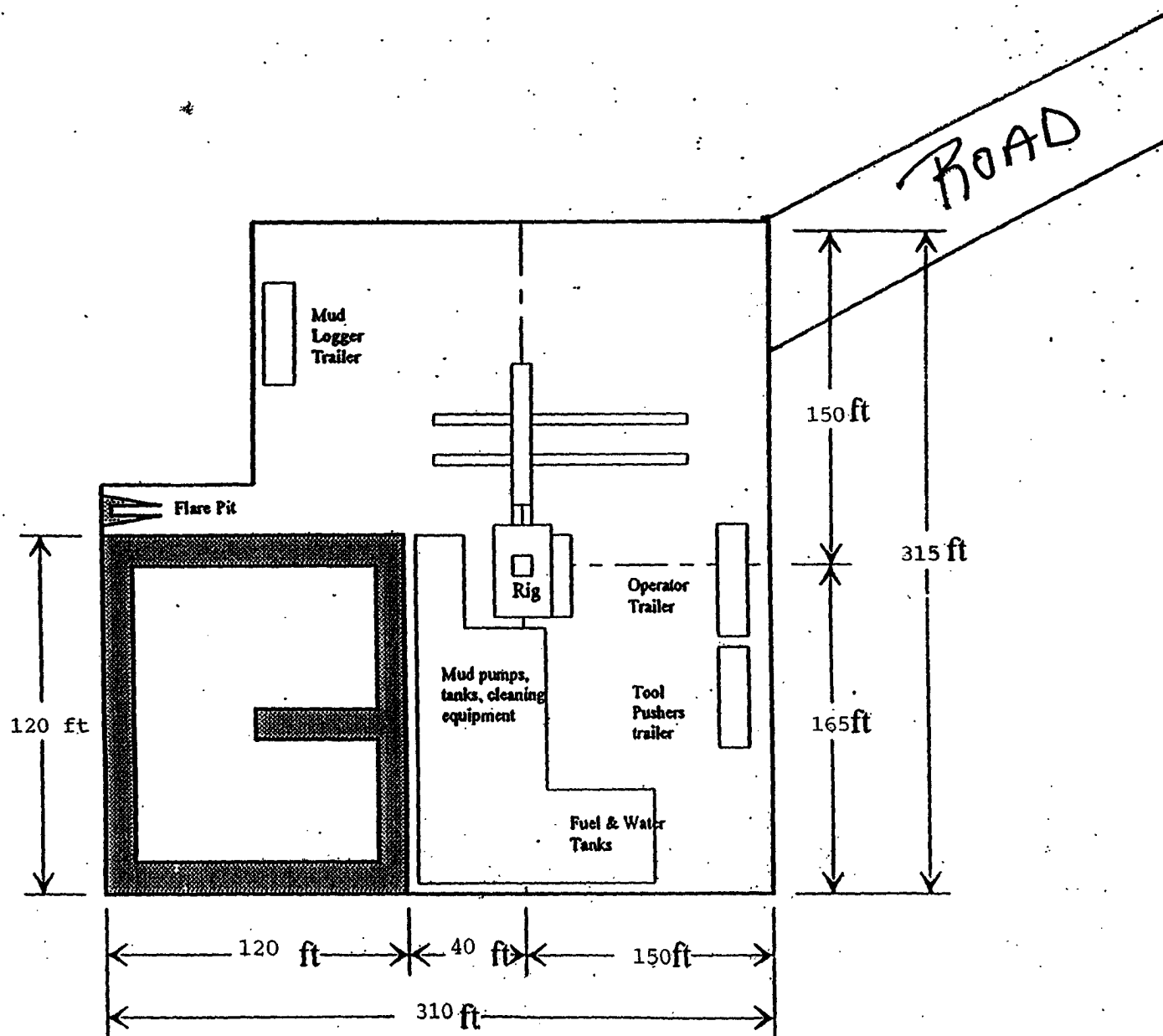
Location Layout for Permian Basin

Up to 12,000'

*Rts South/Southwest*



Yates Petroleum Corporation  
Koonunga Hill BGX Federal #2  
1914' FNL and 940' FWL SHL  
1980' FNL and 660' FWL BHL  
Section 19 T22S-R25E  
Eddy County, New Mexico



Distance from Well  
Head to Reserve Pit  
will vary between rigs

The above dimension  
should be a maximum

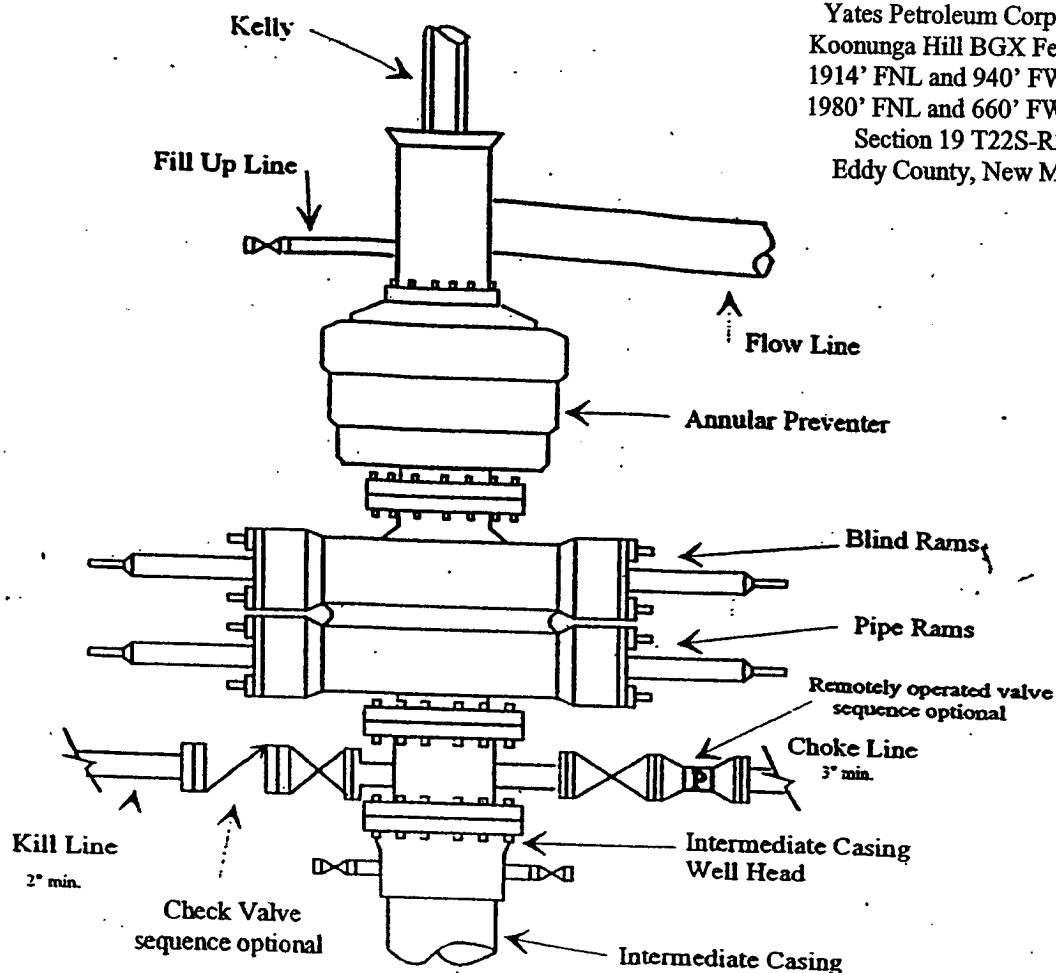


# Yates Petroleum Corporation

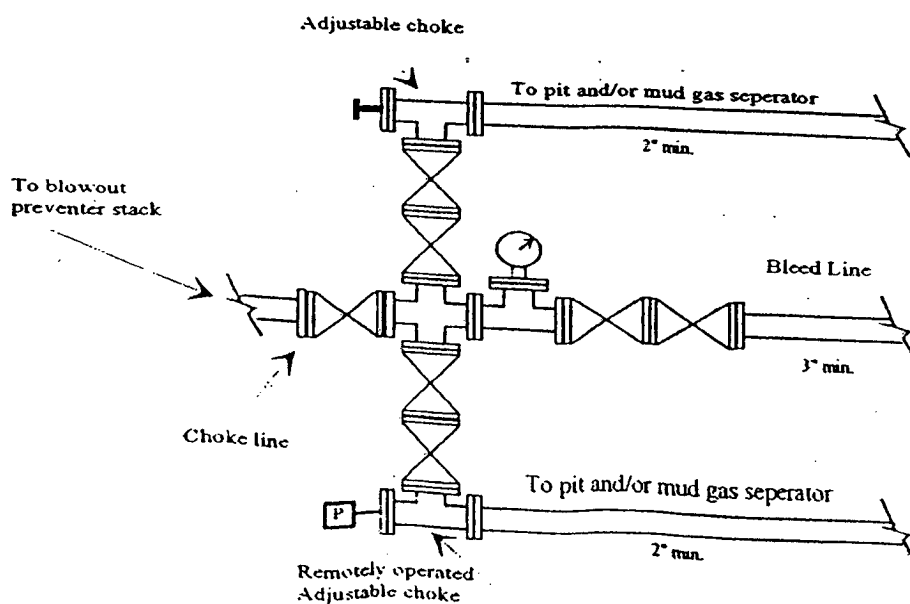
BOP-4

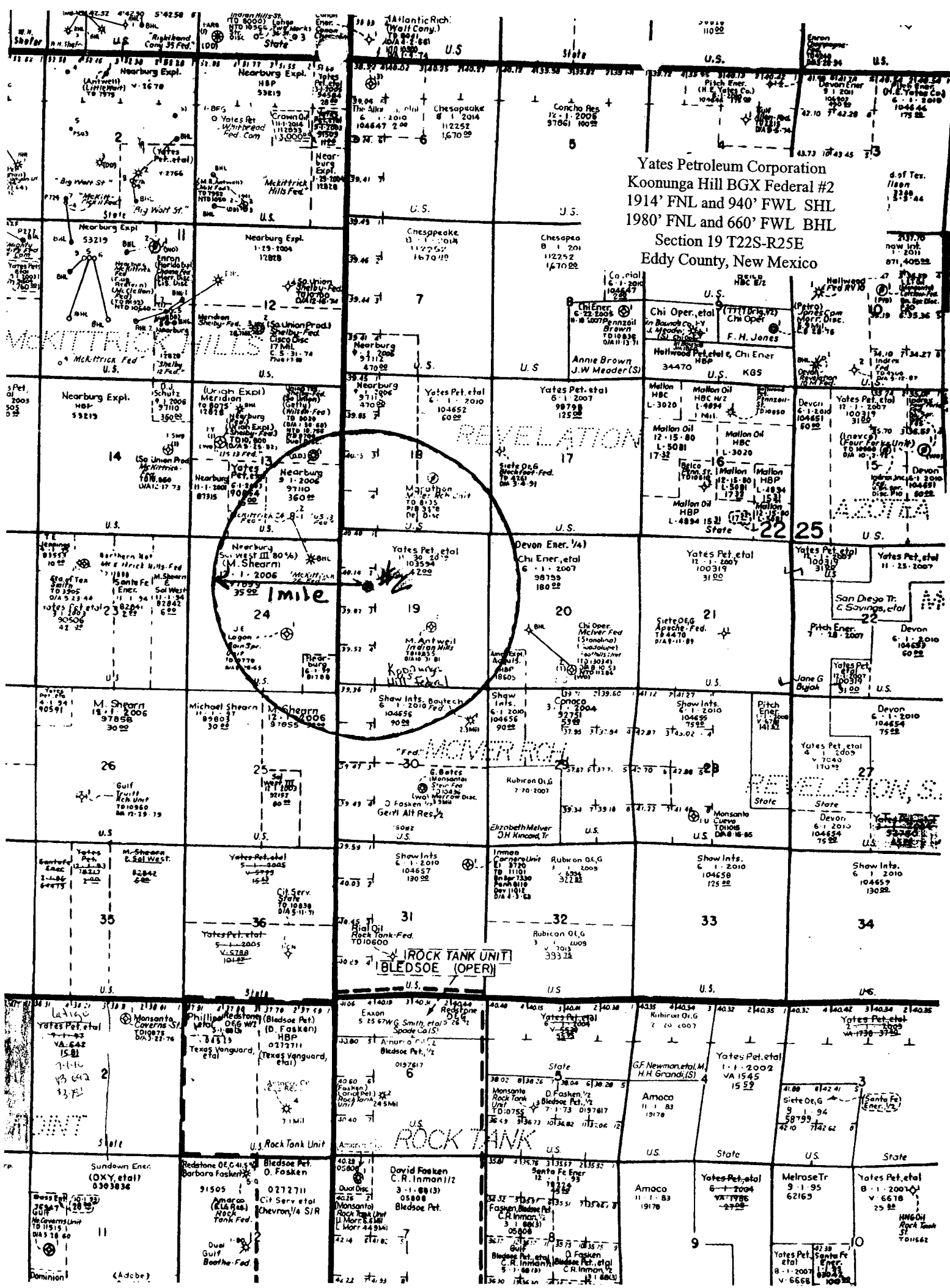
## Typical 5,000 psi Pressure System Schematic Annular with Double Ram Preventer Stack

Yates Petroleum Corporation  
Koonunga Hill BGX Federal #2  
1914' FNL and 940' FWL SHL  
1980' FNL and 660' FWL BHL  
Section 19 T22S-R25E  
Eddy County, New Mexico



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





District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 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

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

Form C-144  
March 12, 2004

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

**Pit or Below-Grade Tank Registration or Closure**

Is pit or below-grade tank covered by a "general plan"? Yes ☐ No ☐

Type of action: Registration of a pit or below-grade tank ☐ Closure of a pit or below-grade tank ☐

Operator: YATES PETROLEUM CORPORATION Telephone: (505) 748-1471

e-mail address: \_\_\_\_\_

Address: 105 South Fourth Street, Artesia, NM 88210

Facility or well name: Koonunga Hill BGX Federal #2 API #: \_\_\_\_\_ U/L or Qtr/Qtr E Sec 19 T 22S R 25E

County: Eddy Latitude 32°22'45.7" Longitude E.104°26'25.5" NAD: 1927 X 1983 ☐ Surface Owner Federal X State Private ☐ Indian ☐

**Pit**

Type: DrillingX Production ☐ Disposal ☐

Workover ☐ Emergency ☐

Lined X Unlined ☐

Liner type: Synthetic X Thickness 12 mil Clay ☐ Volume

20,000 bbl

**Below-grade tank**

Volume: \_\_\_\_\_ bbl Type of fluid: \_\_\_\_\_

Construction material: \_\_\_\_\_

Double-walled, with leak detection? Yes ☐ If not, explain why not.

Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	<u>Less than 50 feet</u>	(20 points)	
	50 feet or more, but less than 100 feet	(10 points)	10
	100 feet or more	( 0 points)	
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes	(20 points)	
	No	( 0 points)	0
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet	(20 points)	
	200 feet or more, but less than 1000 feet	(10 points)	10
	1000 feet or more	( 0 points)	0
	<b>Ranking Score (Total Points)</b>		<b>20</b>

**If this is a pit closure:** (1) attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location:

onsite ☐ offsite ☐ If offsite, name of facility \_\_\_\_\_. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface \_\_\_\_\_ ft. and attach sample 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 the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit X or an (attached) alternative OCD-approved plan ☐.

Date: 8/30/05

Printed Name/Title Cy Cowan, Regulatory Agent

Signature 

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:

Date: \_\_\_\_\_

Printed Name/Title \_\_\_\_\_ Signature \_\_\_\_\_



# **Yates Petroleum Corporation**

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

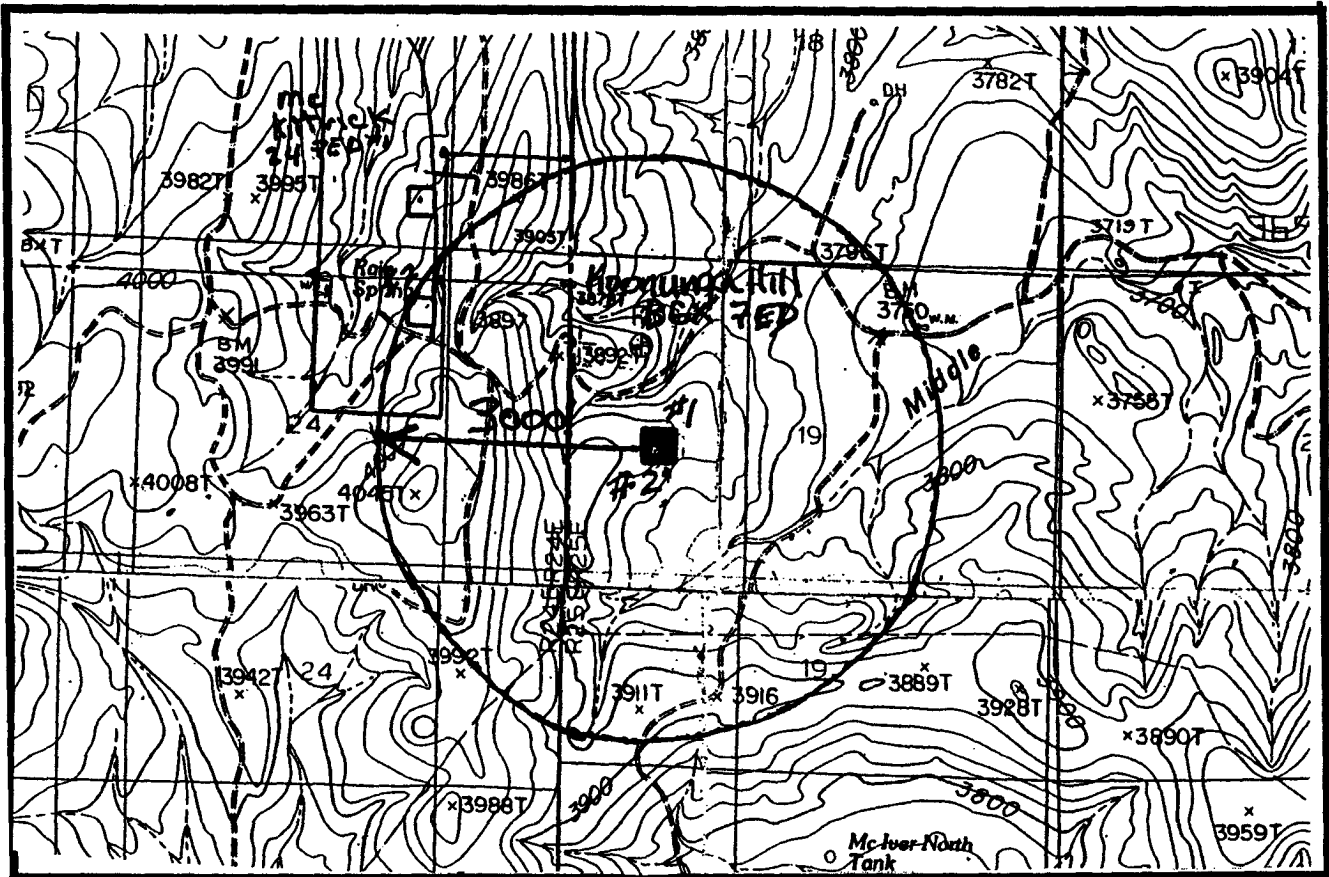
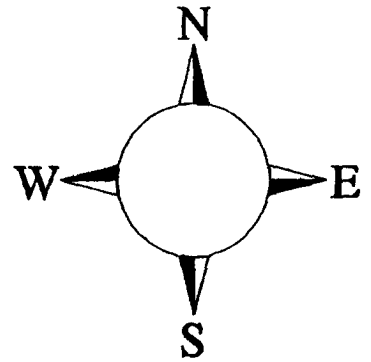
## **Hydrogen Sulfide (H<sub>2</sub>S) Contingency Plan**

**For**

**Koonunga Hill BGX Federal 2  
1914' FNL and 940' FWL Surface Location  
1980' FNL and 660' FWL Bottom Hole Location  
Section-19, T-22S, R-25E  
Eddy County NM**

## Koonunga Hill BGX Federal #2 Location

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 .....	(505) 748-1471
Pinson McWhorter/Operations Manager .....	(505) 748-4189
Darrel Atkins/Production Manager .....	(505) 748-4204
Ron Beasley/Prod Superintendent .....	(505) 748-4210
Al Springer/Drilling .....	(505) 748-4225
Paul Hanes/Prod. Foreman/Roswell .....	(505) 624-2805
Jim Krogman/Drilling Superintendent.....	(505) 748-4215
Artesia Answering Service .....	(505) 748-4302
(During non-office hours)	

### **Agency Call List**

#### **Eddy County (505)**

##### **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 .....	(505) 746-2757
B. J. Services.....	(505) 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

# SPECIAL DRILLING STIPULATIONS

## THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN

Operator's Name YATES PETROLEUM CORPORATION Well Name & No. 2-KOONUNGA HILL BGX FEDERAL  
 SHL: Location 1914 FN L & 940 FW L Sec. 19, T. 22 S, R. 25 E.  
 Lease No. NM-103594 County EDDY State New Mexico  
 BHL: LOCATION 1980 FNL & 660 FWL

The Special stipulations check marked below are applicable to the above described well and approval of this application to drill is conditioned upon compliance with such stipulations in addition to the General Requirements. The permittee should be familiar with the General Requirements, a copy of which is available from a Bureau of Land Management office. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE STIPULATIONS PURSUANT TO TITLE 43 CRF 3165.3 AND 3165.4.

This permit is valid for a period of one year from the date of approval or until lease expiration or termination whichever is shorter.

### I. SPECIAL ENVIRONMENT REQUIREMENTS

- ( ) Lesser Prairie Chicken (stips attached) ( ) Flood plain (stips attached)  
 ( ) San Simon Swale (stips attached) (x) Other See attached archaeological + Cave/Kerr stipulations

### II. ON LEASE - SURFACE REQUIREMENTS PRIOR TO DRILLING

(x) The BLM will monitor construction of this drill site. Notify the (x) Carlsbad Field Office at (505) 234-5972 ( ) Hobbs Office (505) 393-3612, at least 3 working days prior to commencing construction.

(x) Roads and the drill pad for this well must be surfaced with 4 inches of compacted caliche upon completion of well and it is determined to be a producer.

( ) All topsoil and vegetation encountered during the construction of the drill site area will be stockpiled and made available for resurfacing of the disturbed area after completion of the drilling operation. Topsoil on the subject location is approximately \_\_\_\_\_ inches in depth. Approximately \_\_\_\_\_ cubic yards of topsoil material will be stockpiled for reclamation.

( ) Other.

### III. WELL COMPLETION REQUIREMENTS

( ) A Communitization Agreement covering the acreage dedicated to the well must be filed for approval with the BLM. The effective date of the agreement must be prior to any sales.

(x) Surface Restoration: If the well is a producer, the cuttings ~~recovery~~ pit(s) will be backfilled when dry, and cut-and-fill slopes will be reduced to a slope of 3:1 or less. All areas of the pad not necessary for production must be re-contoured to resemble the original contours of the surrounding terrain, and topsoil must be re-distributed and re-seeded with a drill equipped with a depth indicator (set at depth of 1/2 inch) with the following seed mixture, in pounds of Pure Live Seed (PLS), per acre.

- |   |   |
|---|---|
| ( ) A. Seed Mixture 1 (Loamy Sites)                   | ( ) B. Seed Mixture 2 (Sandy Sites)                     |
| Side Oats Grama ( <i>Bouteloua curtipendula</i> ) 5.0 | Sand Dropseed ( <i>Sporobolus cryptandrus</i> ) 1.0     |
| Sand Dropseed ( <i>Sporobolus cryptandrus</i> ) 1.0   | Sand Lovegrass ( <i>Eragrostis trichodes</i> ) 1.0      |
|   | Plains Bristlegrass ( <i>Setaria magrostachya</i> ) 2.0 |
| (x) C. Seed Mixture 3 (Shallow Sites)                 | ( ) D. Seed Mixture 4 (Gypsum Sites)                    |
| Side oats Grama ( <i>Boute curtipendula</i> ) 1.0     | Alkali Sacaton ( <i>Sporobolus airoides</i> ) 1.0       |
|   | Four-Wing Saltbush ( <i>Atriplex canescens</i> ) 5.0    |

( ) OTHER SEE ATTACHED SEED MIXTURE

Seeding should be done either late in the fall (September 15 - November 15, before freeze up, or early as possible the following spring to take advantage of available ground moisture.

( ) Other.



EXHIBIT NO. 1

Bureau of Land Management, Carlsbad Field Office  
620 E. Greene Street Carlsbad, NM 88220

Cultural and Archaeological Resources

**NOTICE OF STIPULATIONS**

Date:

10/2/05

Lease Number:  
NM-103594

BLM Report No.  
05-NM-523-994

**Historic properties in the vicinity of this project are protected by federal law. In order to ensure that they are not damaged or destroyed by construction activities, the project proponent and construction supervisors shall ensure that the following stipulations are implemented.**

<b>Project Name:</b>	Koonunga Hill BGX Fed #1 & #2 locations and access road
<b>REQUIRED</b>	<b>1). A 3-day preconstruction call-in notification.</b> Contact BLM Inspection and Enforcement at (505) 234-5977, 5909, or 5995, to establish a construction start date.
<b>REQUIRED</b>	<b>2. Professional archaeological monitoring.</b> Contact your project archaeologist, or BLM's Cultural Resources Section at (505) 234-5980, 5917, or 5986, for assistance.  A. <input checked="" type="checkbox"/> These stipulations must be given to your monitor at least <b>5 days</b> prior to the start of construction. B. <input checked="" type="checkbox"/> No construction, including vegetation removal or other site prep may begin prior to the arrival of the monitor.
<b>NO</b>	<b>3. Cultural site barrier fencing.</b> (Your monitor will assist you).  A. <input type="checkbox"/> A temporary site protection barrier(s) shall be erected prior to all ground-disturbing activities. The minimum barrier(s) shall consist of upright wooden survey lath spaced no more than ten (10) feet apart and marked with blue ribbon flagging or blue paint. There shall be no construction activities or vehicular traffic past the barrier(s) at any time. B. <input type="checkbox"/> A permanent, 4-strand barbed wire fence strung on standard "T-posts" shall be erected prior to all ground-disturbing activities. No construction activities or vehicle traffic are allowed past the fence.
<b>REQUIRED</b>	<b>4. The archaeological monitor shall:</b>  A. <input type="checkbox"/> Ensure that all site protection barriers are located as indicated on the attached map(s). B. <input checked="" type="checkbox"/> Observe all ground-disturbing activities within 100 feet of cultural site <u>LA 148988</u> , as shown on the attached map. C. <input type="checkbox"/> Ensure that all reroutes are adhered to avoid cultural site no.(s) LA D. <input type="checkbox"/> Ensure the proposed _____ is/are located as shown on the attached map(s). E. <input checked="" type="checkbox"/> Submit a brief monitoring report within 30 days of completion of monitoring.
<b>Other:</b>	Monitor from station 303+03 to station 298+34 to ensure that LA 148988 is not impacted from the construction of the proposed access road.

**Site Protection and Employee Education:** It is the responsibility of the project proponent and his construction supervisor to inform all employees and subcontractors that cultural and archaeological sites are to be avoided by all personnel, vehicles, and equipment; and that it is illegal to collect, damage, or disturb cultural resources on Public Lands.

For assistance, contact  
BLM Cultural Resources:

Gary Navarre (505) 234-5980

Bruce Boeke (505) 234-5917

James Smith (505) 234-5986

# WELLBORE SCHEMATIC

## "CAVE PROTECTION"

### NO VOID

### VOID

1. Set conductor casing.

Conductor

2. Set surface casing, cement and circulate.

Surface

3. Drill inter hole. If no void, drill to depth and cement to surface.

4. If void encountered, ream hole for 13-3/8" casing. Place external packer above void. DV tool above pkr. Cement. Open DV tool, circ cement.

DV Tool  
External Packer  
Inter 13-3/8"

VOID  
2- cement column's

Initial Cement

5. Drill inter hole to depth, case, circ and cement

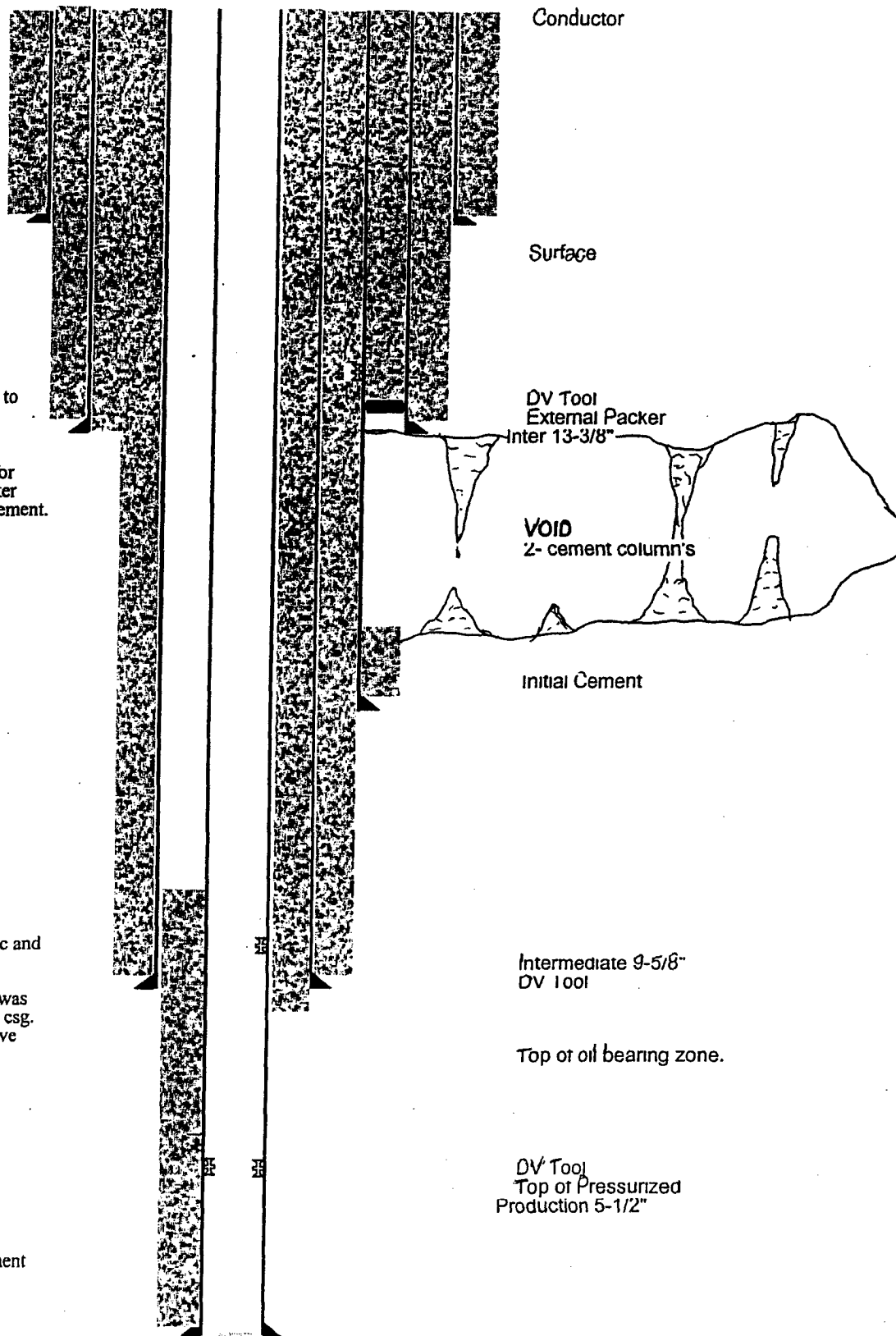
Intermediate 9-5/8"  
DV Tool

6. Drill prod hole to depth. If void was encountered during drilling 1st Inter csg. Cmt, circulate or tie-back 200 ft above DV tool on 1st Inter csg.

Top of oil bearing zone.

DV Tool  
Top of Pressurized  
Production 5-1/2"

7. If no void, prod csg to depth, cement and tie-back 200 ft into Inter csg.





CONDITIONS OF APPROVAL - DRILLING

Operator's Name: YATES PETROLEUM CORPORATION  
Well Name & No. 2 - KOONUNGA HILL BGX FEDERAL  
Location: 1914' FNL & 940' FWL - SEC 19 - T22S - R25E - EDDY COUNTY (SHL)  
1980' FNL & 660' FWL - SEC 19 - T22S - R25E - EDDY COUNTY (BHL)  
Lease: NM-103594

**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: <sup>3/8</sup>~~13-5/8~~ inch ~~9-5/8~~ inch 7 inch - Note: If lost circulation is encountered in the Canyon Formation 7" casing will be set at approximately 9150' - Hole size will be reduced to 6-1/8" and 4-1/2" casing will be set to TD.

C. BOP tests

2 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.

3. 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.

4. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

5. There is a possibility of encountering H<sub>2</sub>S gas in the Canyon Formation at approximately 8000 feet, although there are no reports of H<sub>2</sub>S gas in Sec 19, T22S, R25E. Yates will have an H<sub>2</sub>S plan in place. This plan is to be posted at the wellsite.

**II. CASING:**

1. The ~~13-5/8~~ inch surface casing shall be set at 1500 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 7 inch production casing is cement shall extend upward a minimum of 500 feet above the uppermost hydrocarbon bearing interval. <sup>circulate to surface.</sup>

(ORIG. SGD.) LES BABYAK

### III. PRESSURE CONTROL:

3/8 (5L)

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 13-5/8 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 2000 psi. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling below the 9-5/8 inch casing shall be 3000 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 on 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.