ATS-07-695

10:00 1288 OCD-ARTESIA

Form 3160-3
(February 2005)

RESUBMITTAL

DEC 26 2007
OCD-ARTESIA

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.: NM-103594

6. If Indian, Allottee or Tribe Name: n/a

7. If Unit or CA Agreement, Name and No.: n/a

1a. Type of Work: [X] DRILL [ ] REENTER

1b. Type of Well: [ ] Oil Well [X] Gas Well [ ] Other [ ] Single Zone [ ] Multiple Zone

8. Lease Name and Well No. 35161: Koonunga Hill BGX Federal #2

2. Name of Operator: Yates Petroleum Corporation 025575

9. API Well No.: 30-015-36014

3a. Address: 105 South Fourth Street, Artesia, NM 88210

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

10. Field and Pool, or Exploratory: Undes. McIver Ranch Morrow

4. Location of well *(Report location clearly and In accordance with any State requirements.*)*
At surface: Carlsbad Controlled Water Basin
1914' FNL and 940' FWL Surface Location
At proposed prod. zone: S- per operator 9-5-07 DM
1980' FNL and 660' FWL Bottom Hole Location

11. Sec., T., R., M., or Blk. And Survey or Area: Section 19, T 22 S- R 25 E

14. Distance in miles and direction from the nearest town or post office*: Approximately 13 miles! northwest of Carlsbad, NM

12. County or Parish: Eddy County

13. State: NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. unit line, if any): 660'

16. No. of acres in lease: 639.72

17. Spacing Unit dedicated to this well: 320 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: NATIONWIDE BOND #NMB000434

21. Elevations (Show whether DF, KDB, RT, GL, etc): 3883 GL

22. Aproximate date work will start*: ASAP

23. Estimated duration: 45 days

24 Attachments

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

1. Well plat certified by a registered surveyor.
2. A Drilling Plan
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office)
4. Bond to cover the operations unless covered by 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 BLM

25. Signature: Cy Cowan — Name *(Printed/ Typed)*: Cy Cowan — Date: 9/4/2007

Title: Regulatory Agent

Approved By *(Signature)*: /s/ Don Peterson — Name *(Printed/ Typed)*: /s/ Don Peterson — Date: DEC 19 2007

Title: FIELD MANAGER — Office: CARLSBAD FIELD OFFICE

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

Conditions of approval, if any, are attached. APPROVAL FOR TWO YEARS

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and wilfully to make to any department or agency of the Unitec States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

* *(Instructions on page 2)*

SEE ATTACHED FOR CONDITIONS OF APPROVAL

NSL attached C-144 attached

APPROVAL SUBJECT TO previously approved GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
	81070	Undesignated Mc Iver Ranch Morrow

[4] Property Code	[5] Property Name	[6] Well Number
	Koonunga Hill BGX Federal	2

[7] OGRID No.	[8] Operator Name	[9] Elevation
025575	YATES PETROLEUM CORPORATION	3883'

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	19	22S	25E		1914'	North	940'	West	Eddy

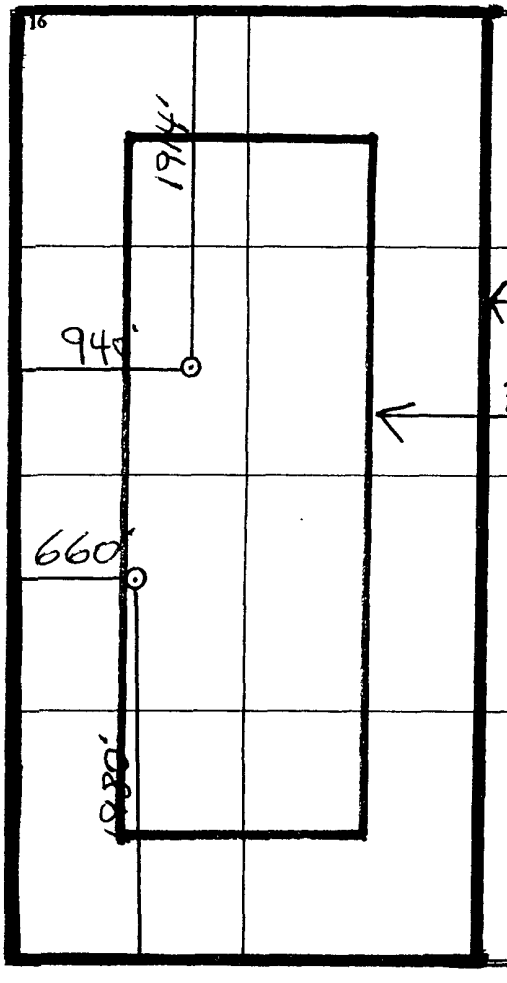
[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	19	22S	25E		1980'	South	660'	West	Eddy

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
320			

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.

[16]



[17] OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Cy Cowan 12/18/06
Signature Date

Cy Cowan, Regulatory Agent
Printed Name

[18] SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

REFER TO ORIGINAL PLAT.
Date of Survey

Signature and Seal of Professional Surveyor:

Certificate Number

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
DISTRICT II
811 South First, Artesia, NM 88210
DISTRICT III
1000 Rio Brazos Rd., Aztec, 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
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	Well Number
	KOONUNGA HILL "BGX" FEDERAL	2

OGRID No.	Operator Name	Elevation
025575	YATES PETROLEUM CORPORATION	3883

Surface Location

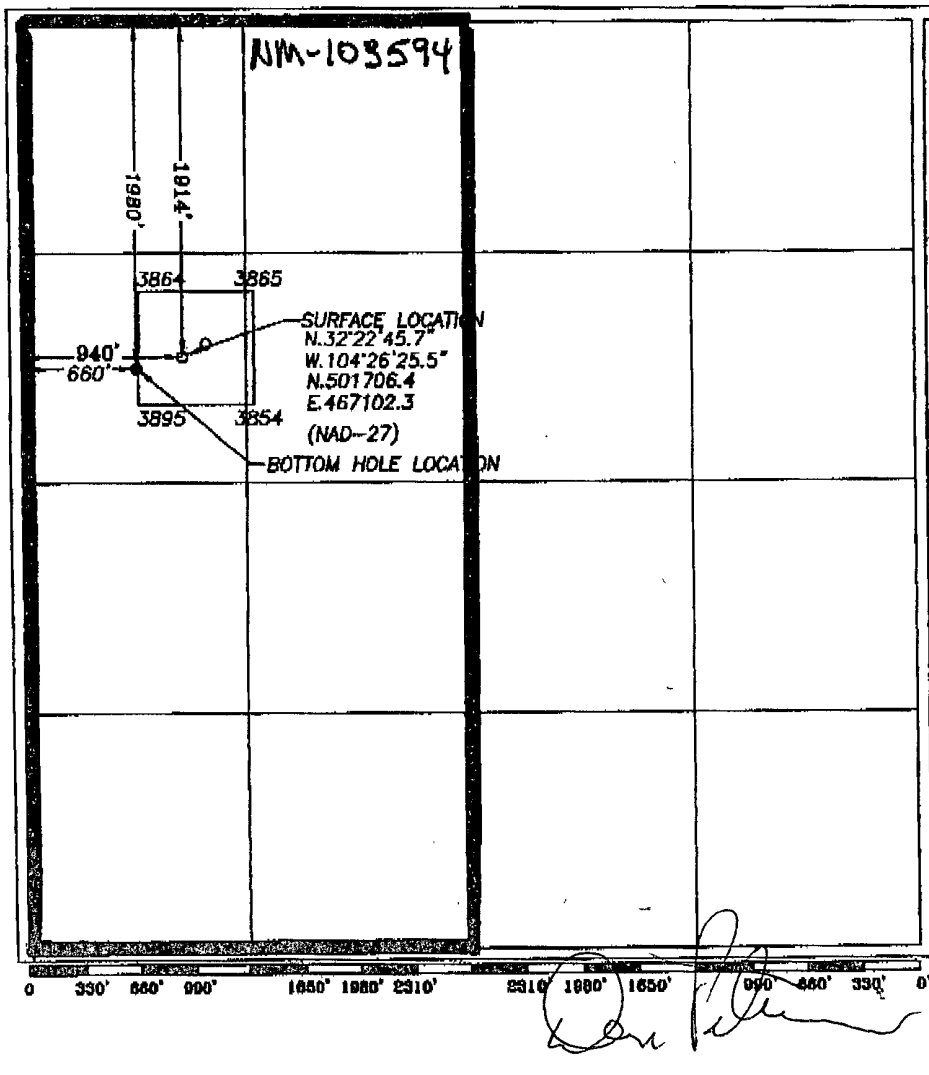
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	19	22S	25E		1914	NORTH	940	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	19	22S	25E		1980	~~NORTH~~ South	660	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



OPERATOR CERTIFICATION

I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.

Signature

Cy Cowan
Printed Name

Regulatory Agent
Title

July 18, 2005
Date

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

7/07/2005
Date Surveyed

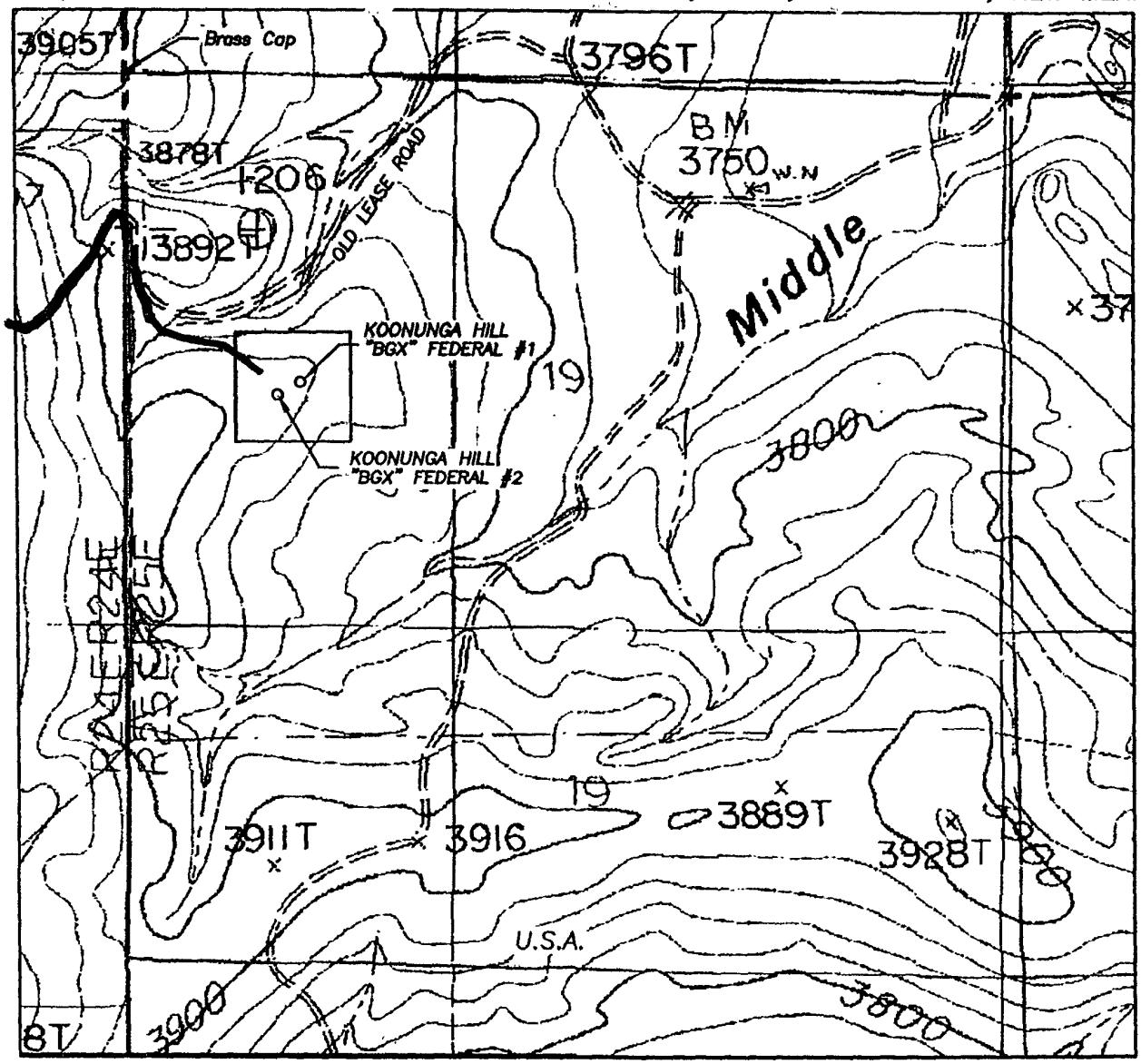
Signature & Seal of Professional Surveyor

HERSCHEL L. JONES
NEW MEXICO
3640
REGISTERED PROFESSIONAL SURVEYOR
GENERAL SURVEYING COMPANY

Certificate No. Herschel L. Jones RLS 3640

KOONUNGA HILL 2

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 R.L.S. 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

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

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

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

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 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-110	LT+C	0-1900'	1900'
8 3/4"	7"	26#	L-80	LT+C	1900'-9200'	7300'
8 3/4"	7"	26#	HCP-110	LT+C	9200'-11023' MVD	1823'

   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: Lead with 900 sx "C" Lite (YLD 2.0 WT 12.5) Tail in with 200 sx "C" + 2% CaCl2 (YLD 1.34 WT 2.0). Surface

Intermediate casing: Lead with 250 sx "H" + 1% CaCl2 (YLD 1.50 WT 14.6). Lead with 550 sx "C" Lite + 1% CaCl2 (YLD 1.96 WT 12.5). Tail with 200 sx "C" + 2% CaCl2 (YLD 1.34 WT 14.8). Surface

see COA

Production casing: Stage I: Lead with 600 sx Super "C" Modified (YLD 1.60 WT 13.0). TOC 7800'

Production casing: Stage II: Lead with 1150 sx "C" Lite (YLD 1.95 WT12.5). Tail with 100 sx "H" (YLD 1.18 WT 15.6). TOC ~~7800'~~ 2900' per operator 11-13-07

5. Mud Program and Auxiliary Equipment: per operator 10-31-07

see COA

Interval	Type	Weight	Viscosity	Fluid Loss
0-2700'	Air Mist / FW	~~8~~ 8.4	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.

H2S 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.

Yates Petroleum Corporation

Jeremiah Mullen (jmullen@ypcnm com)
(505)748-4378
105 S. Fourth Street
Artesia, N M 88210

The following is the contingency casing design and cement program for the Koonunga Hill BGX Federal #2:

	Size	Wt. (#/ft.)	Grade	Depth	T&C
•	9 5/8"	36#	J-55	0'-2700'	ST&C

Lead with 250sx H (Yld 1.5 Wt. 14.6) and 550sx C-lite (Yld 1.96 Wt. 12.5#), tail with 225sx class C (Yld 1.33 Wt. 14.8). TOC= Circulated

•	7"	26#	L-80	0'-4700'	LT&C
	7"	26#	J-55	4700'-8700'	LT&C
	7"	26#	L-80	8700'-9150'	LT&C

Packer stage tool set @ 8300'. Stage 1: Cement with 175sx C (Yld 1.64 Wt. 13.2) Stage 2: Lead with 750sx C Lite (Yld 2.0 Wt. 12.5), tail with 225sx class C (Yld 1.67 Wt. 13.2). TOC= 2200'

•	4 ½" liner	11.6#	HCP-110	8850'-11,023'	LT&C

Cement with 275sx Super C (Yld 1.6 Wt. 13). TOC=8850'

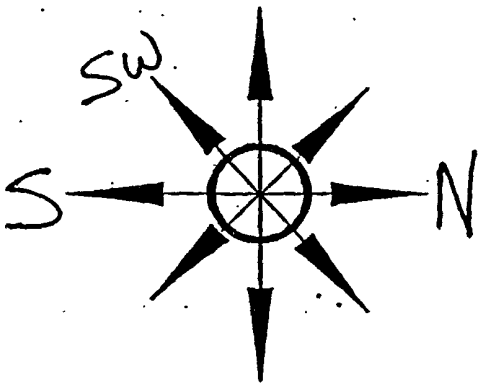
PB - L1

Yates Petroleum Corporation

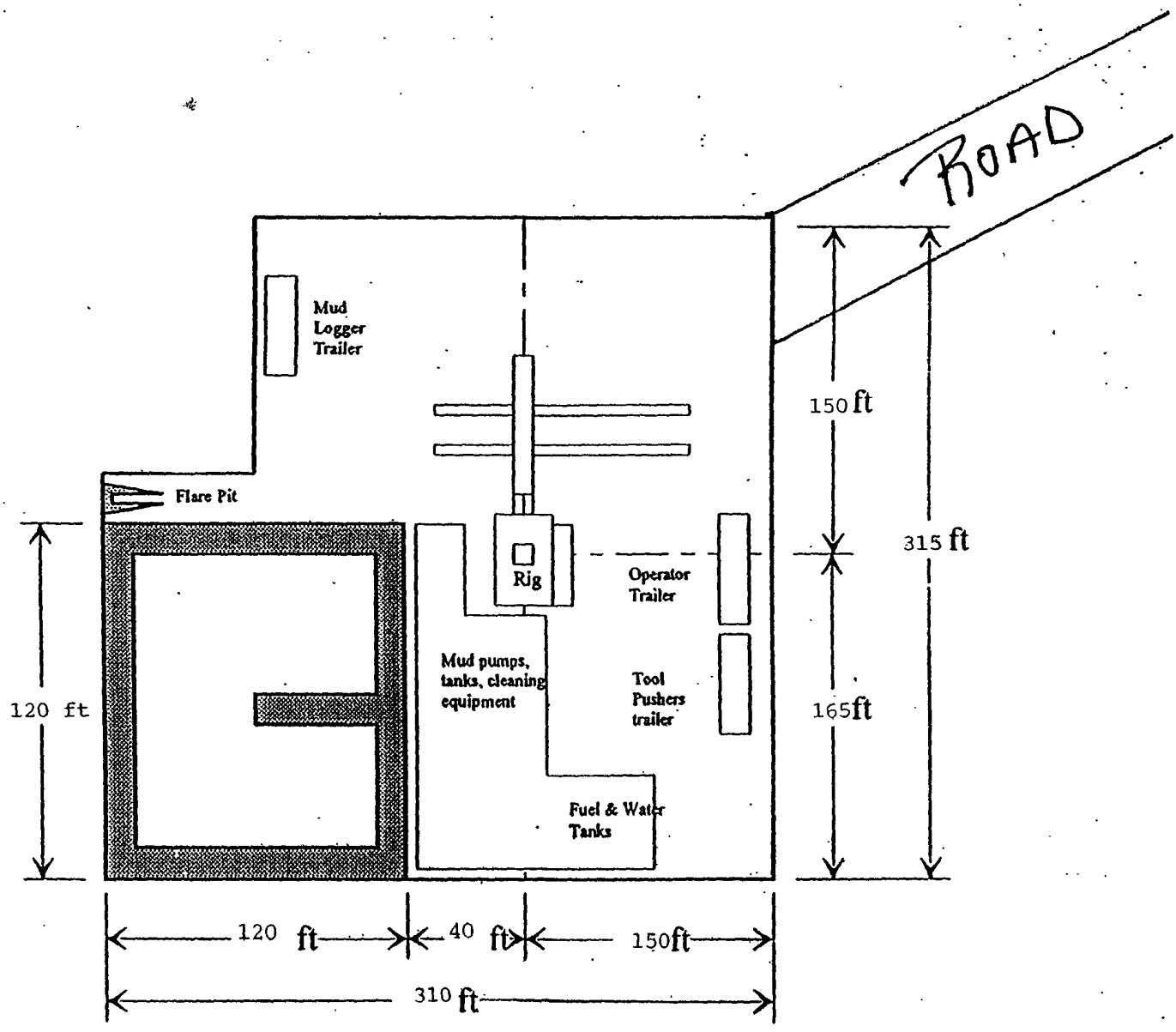
Location Layout for Permian Basin

Up to 12,000'

Pits South/Southwest



Yates Petroleum Corporation
Koonunga Hill BGX Federal #2
1914' FNL and 940' FWL SHL
1980' FNL and 660' FWL BHL
per operator 9-5-07 ons Section 19 T22S-R25E
Eddy County, New Mexico

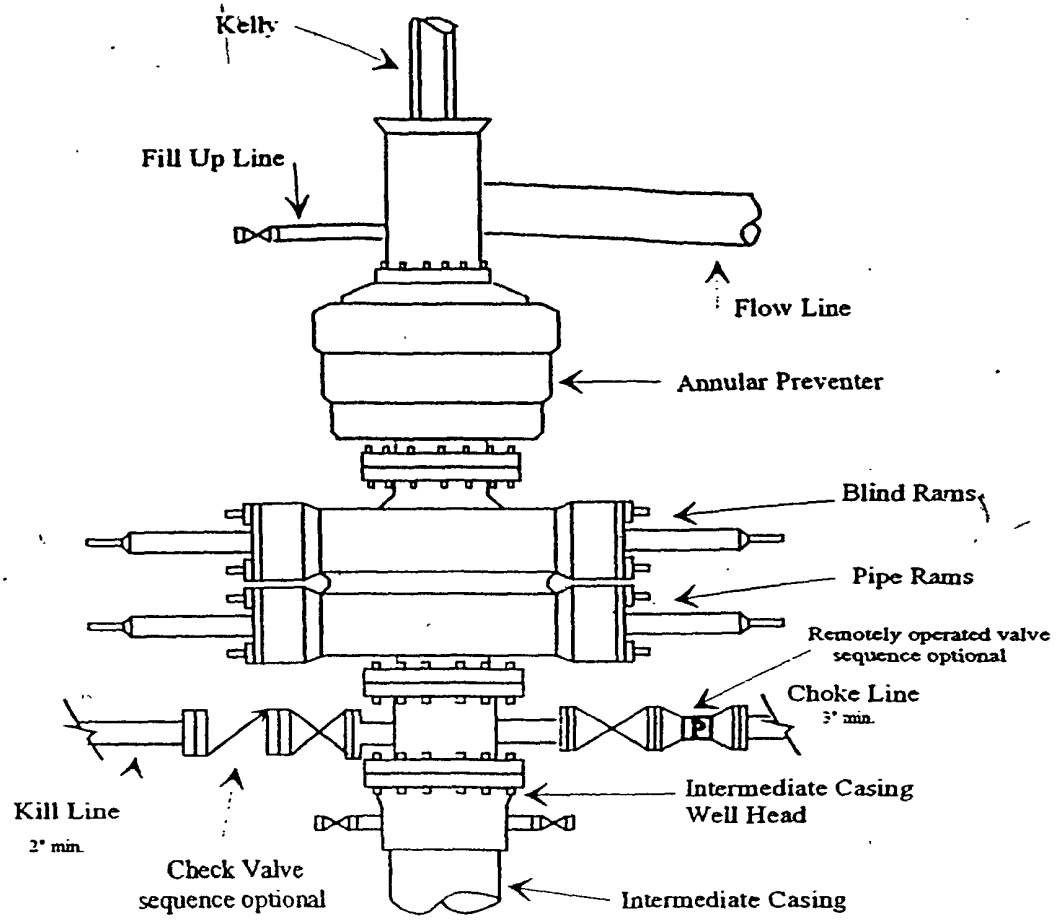


Distance from Well Head to Reserve Pit will vary between rigs

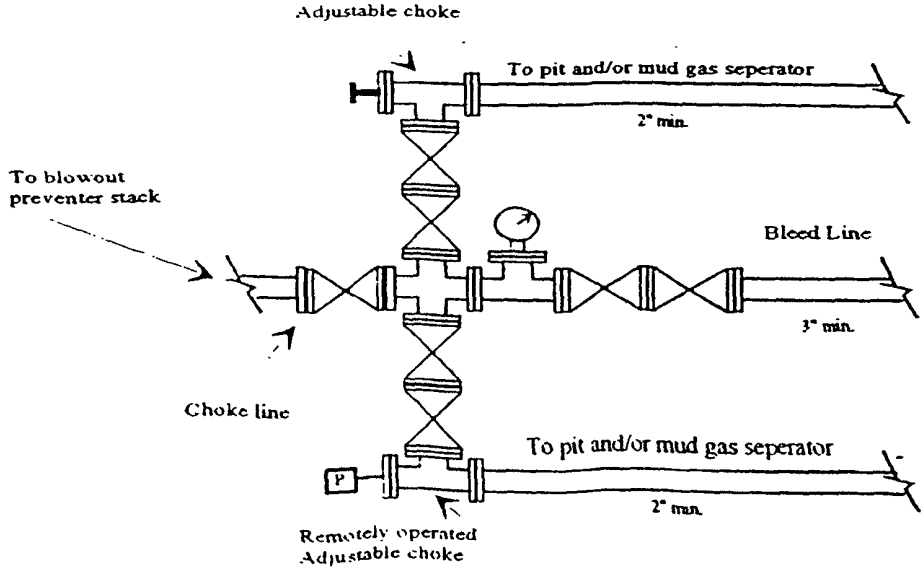
The above dimension should be a maximum

Yates Petroleum Corporation

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

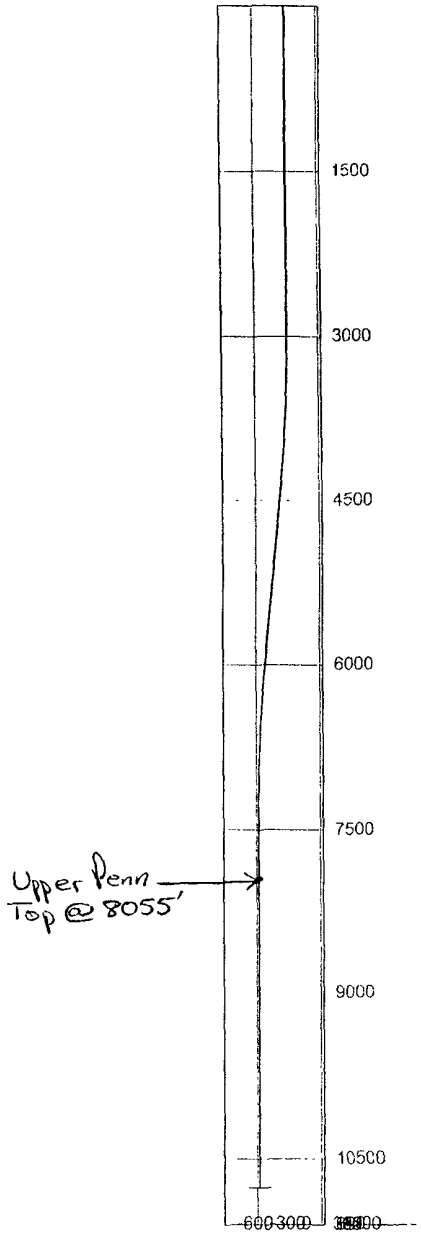


Typical 5,000 psi choke manifold assembly with at least these minimun features



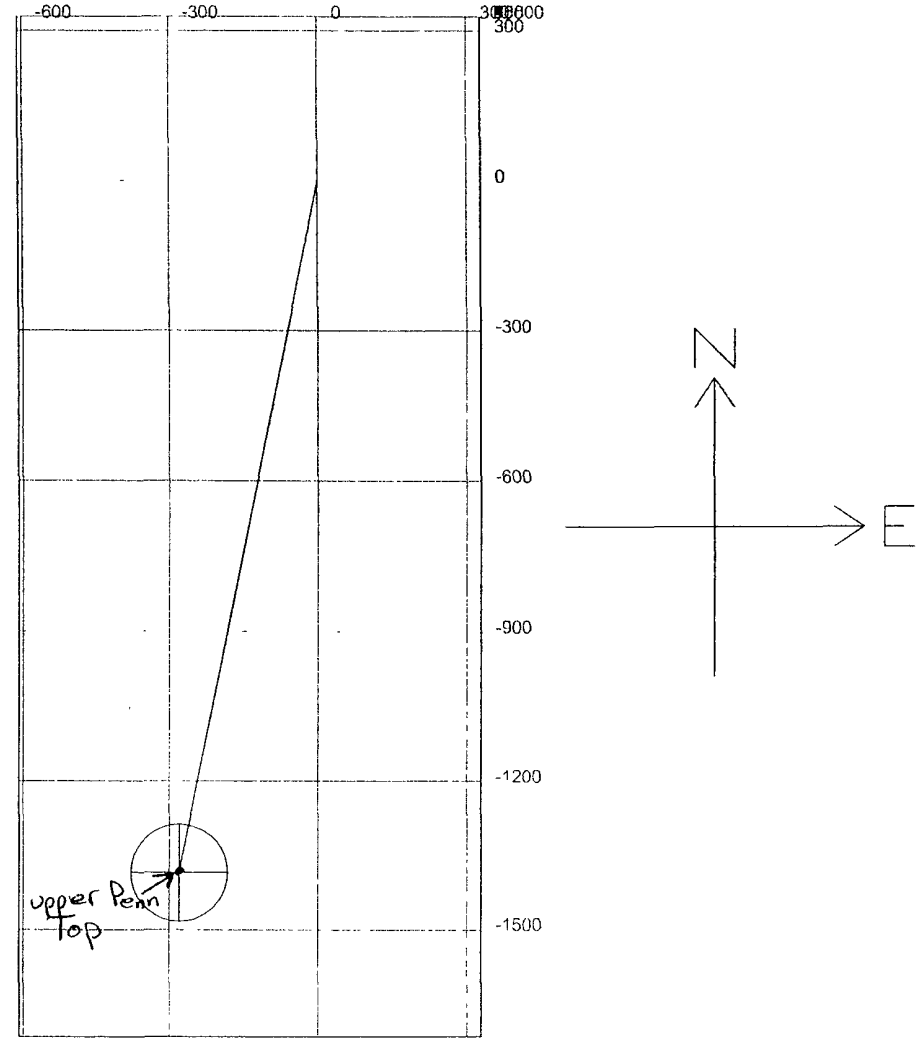
3D _ .rectional Drilling Planner - 3D V...

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**



File: C:\Program Files\Drilling Toolbox 2001\Templates\Visual Wellbore\koonungahill2.wpp

Simulated Survey - C:\Program Files\Drilling Toolbox 2001\Templates\Visual Wellbore\koonungahill2.wpp

	M.D. [ft]	Inclination [°]	Azimuth [°]	T.V.D. [ft]	N+/S- [ft]	E+/W- [ft]	D.L.S. [°/100ft]	ToolFace [°]	T.F. Ref. [HS/GN]
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
2	3000.00	0.00	0.00	3000.00	0.00	0.00	2.00	191	GN
3	3025.00	0.50	191.42	3025.00	-0.11	-0.02	2.00	360	HS
4	3050.00	1.00	191.42	3050.00	-0.43	-0.09	2.00	360	HS
5	3075.00	1.50	191.42	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	360	HS
7	3125.00	2.50	191.42	3124.96	-2.67	-0.54	2.00	0	HS
8	3150.00	3.00	191.42	3149.93	-3.85	-0.78	2.00	0	HS
9	3175.00	3.50	191.42	3174.89	-5.24	-1.06	2.00	0	HS
10	3200.00	4.00	191.42	3199.84	-6.84	-1.38	2.00	360	HS
11	3225.00	4.50	191.42	3224.77	-8.66	-1.75	2.00	360	HS
12	3250.00	5.00	191.42	3249.68	-10.69	-2.16	2.00	360	HS
13	3275.00	5.50	191.42	3274.58	-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	-18.05	-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	-9.50	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	-24.79	2.00	360	HS

	M.D. [ft]	Inclination [°]	Azimuth [°]	T.V.D. [ft]	N+/S- [ft]	E+/W- [ft]	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	3956.29	-161.07	-32.54	2.00	0	HS
42	4000.00	20.00	191.42	3979.82	-169.35	-34.21	2.00	0	HS
43	4025.00	20.50	191.42	4003.27	-177.83	-35.92	2.00	360	HS
44	4050.00	21.00	191.42	4026.65	-186.51	-37.68	2.00	0	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	-213.75	-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	-263.09	-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	6087.95	-1122.27	-226.72	0.00		
55	6325.00	24.97	191.42	6090.85	-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	-233.08	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	6251.65	-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	-245.90	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

	M.D. [ft]	Inclination [°]	Azimuth [°]	T.V.D. [ft]	N+/S- [ft]	E+/W- [ft]	D.L.S. [°/100ft]	ToolFace [°]	T.F. Ref. [HS/GN]
73	6775.00	15.96	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	6584.38	-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	12.96	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		

Yates Petroleum Corporation

105 S. Fourth Street
Artesia, NM 88210

Hydrogen Sulfide (H_2S) Contingency Plan

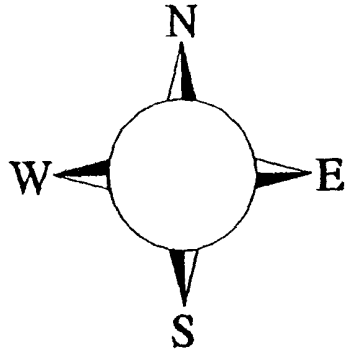
For

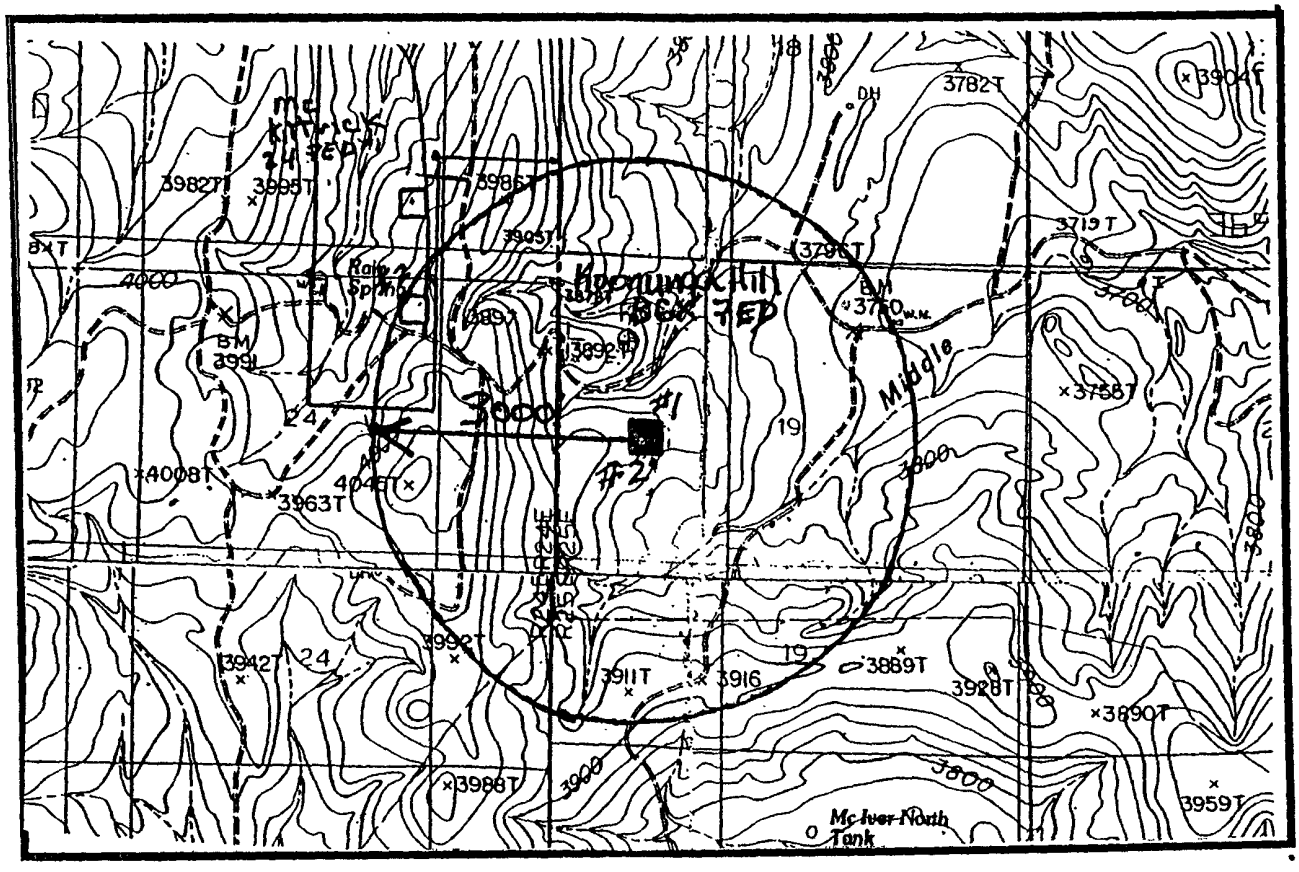
Koonunga Hill BGX Federal 2

1914' FNL and 940' FWL Surface Location
1980' FNL and 660' FWL Bottom Hole Location
per operator 9-5-07 pm Section-19, T-22S, R-25E
Eddy County NM

Koonunga Hill BGX Federal #2 Location

This is an open drilling site. H_2S monitoring equipment and emergency response equipment will be used within 500' of zones known to contain H_2S, including warning signs, wind indicators and H_2S monitor.





[redacted]

Emergency Procedures

In the case of a release of gas containing H_2S, 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_2). 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_2S and SO_2

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentr-ation
Hydrogen Sulfide	H_2S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO_2	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 ..... (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

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.

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

CERTIFICATION
YATES PETROLEUM CORPORATION
Koonunga Hill BGX Federal #2

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; that I have 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 29th day of August, 2007

Printed Name Cy Cowan

Signature

Position Title Regulatory Agent

Address 105 South Fourth Street, Artesia, NM 88210

Telephone (505) 748-4372

Field Representative (if not above signatory) Jim Krogman

Address (if different from above) Same

Telephone (if different from above) 505-748-4215

E-mail (optional) cy@ypcnm.com

V. SPECIAL REQUIREMENT(S)

Cave & Karst

Cave/Karst Surface Mitigation
The following stipulations will be applied to minimize impacts during construction, drilling and production.

Berming:
Any tank batteries will be constructed and bermed large enough to contain any spills that may occur.

Bermed areas will be lined with rip-stop padding to prevent tears or punctures in liners and lined with a permanent 20 mil plastic liner.

Closed Mud System with a Drying Area or Buried Cuttings Pit:
All fluids will be in steel tanks and hauled off. A 70X100 foot cuttings pit or a 150X100 foot drying area will be utilized for this location. The cuttings pit or drying area will be lined with 4 oz. felt and a layer of 20 mil. plastic. Upon completion of the well all excess fluids will be vacuumed off the cuttings pit and allowed to dry. The liner could then be folded over washed cuttings, covered with a 20 mil plastic cover and then covered with at least three feet of top soil.

Cave/Karst Subsurface Mitigation
The following stipulations will be applied to protect cave/karst and ground water concerns:

Rotary Drilling with Fresh Water:
Rotary drilling techniques in cave or karst areas will include the use of fresh water as a circulating medium in zones where caves or karst features are expected. Use depth to the deepest expected fresh water as listed in the geologist report.

Directional Drilling:
Kick off for directional drilling will occur at least 100 feet below the bottom of the cave occurrence zone as identified in the geologic report.

Casing:
All casing will meet or exceed National Association of Corrosion Engineers specifications pertaining to the geology of the location and be run to American Petroleum Institute and BLM standards.

Lost Circulation:
ALL lost circulation zones from the surface to the base of the cave occurrence zone will be logged and reported.

Regardless of the type of drilling machinery used, if a void (bit drops) of four feet or more and circulation losses greater then 75 percent occur simultaneously while drilling in any cave-bearing zone, drilling operations will immediately stop and the BLM will be notified by the operator. The BLM will assess the consequences of the situation and work with operator on corrective actions to resolve the problem.

Delayed Blasting:
Any blasting will be a phased and time delayed.

Abandonment Cementing:
Upon well abandonment the well bore will be cemented completely from 100 feet below the bottom of the cave bearing zone to the surface.

Record Keeping:
The Operator will track customary drilling activities, including the rate of penetration, pump pressure, weight on bit, bit drops, percent of mud returns, and presence of absence of cuttings returning to the surface. As part of customary record keeping, each detectable void or sudden increase in the rate of penetration not attributable to a change in the formation type should be documented and evaluated as it is encountered.

VII. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 2 hours in advance for a representative to witness:

a. Spudding well
b. Setting and/or Cementing of all casing strings
c. BOPE tests

☒ **Eddy County**
Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
(575) 361-2822

1. **Although Hydrogen Sulfide has not been reported in this section, it is always a potential hazard especially in the Canyon formation.**

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. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

B. CASING

1. The **13-3/8** inch surface casing shall be set at **approximately 1500** feet and cemented to the surface.

   a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.

   b. Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement).

c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.

d. If cement falls back, remedial action will be done prior to drilling out that string.

High cave/karst.
Possible lost circulation in the Capitan Reef, Delaware and Bone Spring formations. Possible high pressure gas bursts in the Wolfcamp and over pressure in the Pennsylvanian section, especially the lower sand of the Atoka formation.

Approved for fresh water mud/air mist, but not air drilling.

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:

   ☒ Cement to surface. If cement does not circulate see B.1.a-d above.

3. The minimum required fill of cement behind the **7** inch production casing is:

   ☒ Cement to surface **due to cave concerns**. If cement does not circulate, contact the appropriate BLM office.

4. The minimum required fill of cement behind the **4-1/2** inch production liner **(contingency casing)** is:

   ☒ Cement to top of liner. Operator shall provide method of verification.

5. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

C. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M)** psi.

3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **9-5/8"** intermediate casing shoe shall be **5000 (5M)** psi.

4. The appropriate BLM office shall be notified a minimum of 2 hours in advance for a representative to witness the tests.

    a. The tests shall be done by an independent service company.

    b. The results of the test shall be reported to the appropriate BLM office.

    c. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.

    d. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.

    e. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the **Wolfcamp** formation **if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days**. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

    f. A variance to test the surface casing and BOP/BOPE to the reduced pressure of **1000** psi with the rig pumps is approved.

D. 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.

E. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

Engineer on call phone (after hours): Carlsbad: (575) 706-2779

WWI 111307