NM OIL CONSERVATION
ARTESIA DISTRICT
MAY 18 2015 RESUBMITTAL

ATS-13-979

Form 3160-3
(March 2012)

RECEIVED OCD Artesia

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: ☑ DRILL ☐ REENTER	5. Lease Serial No. NM-105213
	6. If Indian, Allotee or Tribe Name N/A
	7. If Unit or CA Agreement, Name and No. N/A
1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other ☑ Single Zone ☐ Multiple Zone	8. Lease Name and Well No. Jester BFJ Federal #5-H
2. Name of Operator YATES PETROLEUM CORPORATION	9. API Well No. 30-015-43138
3a. Address 105 South Fourth Street, Artesia, New Mexico 88210 — 3b. Phone No. (include area code) 575-748-4347	10. Field and Pool, or Exploratory Undesignated Bone Spring
4. Location of Well (Report location clearly and in accordance with any State requirements.*) At surface 330' FNL & 2310' FWL, Unit Ltr C Sec. 12-T24S-R29E; At proposed prod. zone 330' FSL & 1980' FWL, Unit Ltr M Sec. 12-T24S-R29E, BHL	11. Sec., T. R. M. or Blk. and Survey or Area Section 12-T24S-R29E
14. Distance in miles and direction from nearest town or post office* Approximately 37 miles east of Malaga, 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 drig. unit line, if any) 330' — 16. No. of acres in lease 320 acres — 17. Spacing Unit dedicated to this well W2W2, Sec. 12-T24S-R29E	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. Approximately 1650' — 19. Proposed Depth TVD-8170' MD-12597' — 20. BLM/BIA Bond No. on file Nationwide Bond #NM-B000434 NMB000920	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3120' GL — 22. Approximate date work will start* 09/09/2013 — 23. Estimated duration 60 days	

API SUPERSEDES 30-015-37173

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must 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 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 BLM.

25. Signature Cy Cowan	Name (Printed/Typed) Cy Cowan	Date 1/15/13
Title Land Regulatory Agent		
Approved by (Signature) Steve Caffey	Name (Printed/Typed)	Date MAY 12 2015
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 conduct 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 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.

(Continued on page 2)

Previously Approved

*(Instructions on page 2)

Carlsbad Controlled Water Basin

Approval Subject to General Requirements & Special Stipulations Attached

SEE ATTACHED FOR CONDITIONS OF APPROVAL

5/27/15

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 and Natural Resources Department

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 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

API Number	Pool Code	Pool Name
30-015-43138	47545	NASH DRAW: Delaware/BSC (Avalon Sands) ~~Undesignated Bone Springs~~

Property Code	Property Name	Well Number
35031	JESTER "BFJ" FEDERAL	5h

OGRID No.	Operator Name	Elevation
025575	YATES PETROLEUM CORP.	3120'

Surface Location

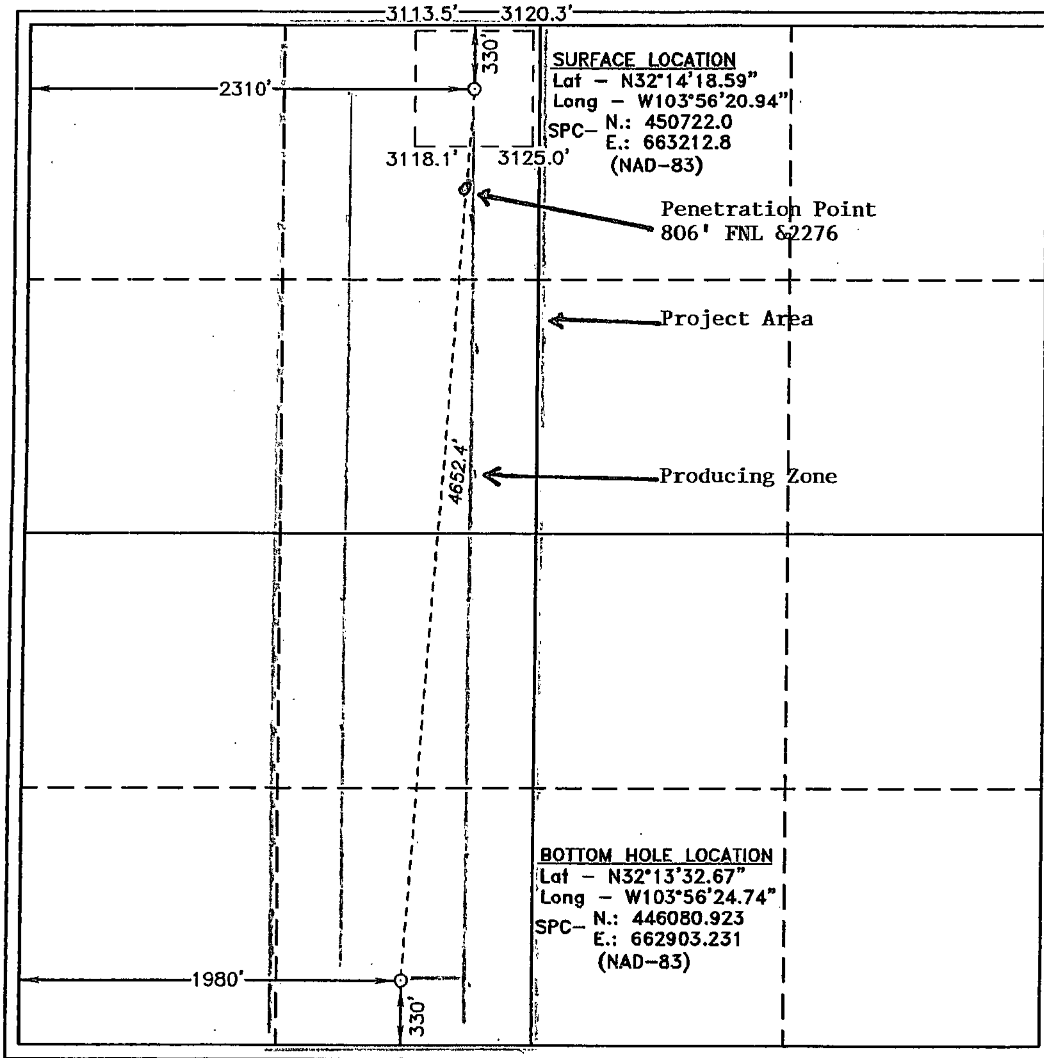
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	12	24 S	29 E		330	NORTH	2310	WEST	EDDY

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
N	12	24 S	29 E		330	SOUTH	1980	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			

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



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 pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature: [signature] Date: 7/15/13

Cy Cowan
Printed Name

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 supervison, and that the same is true and correct to the best of my belief.

FEBRUARY 24, 2009
Date Surveyed

Signature & Seal of Professional Surveyor

W.O. 21154

Certificate No. Gary L. Jones 7977

BASIN SURVEYS

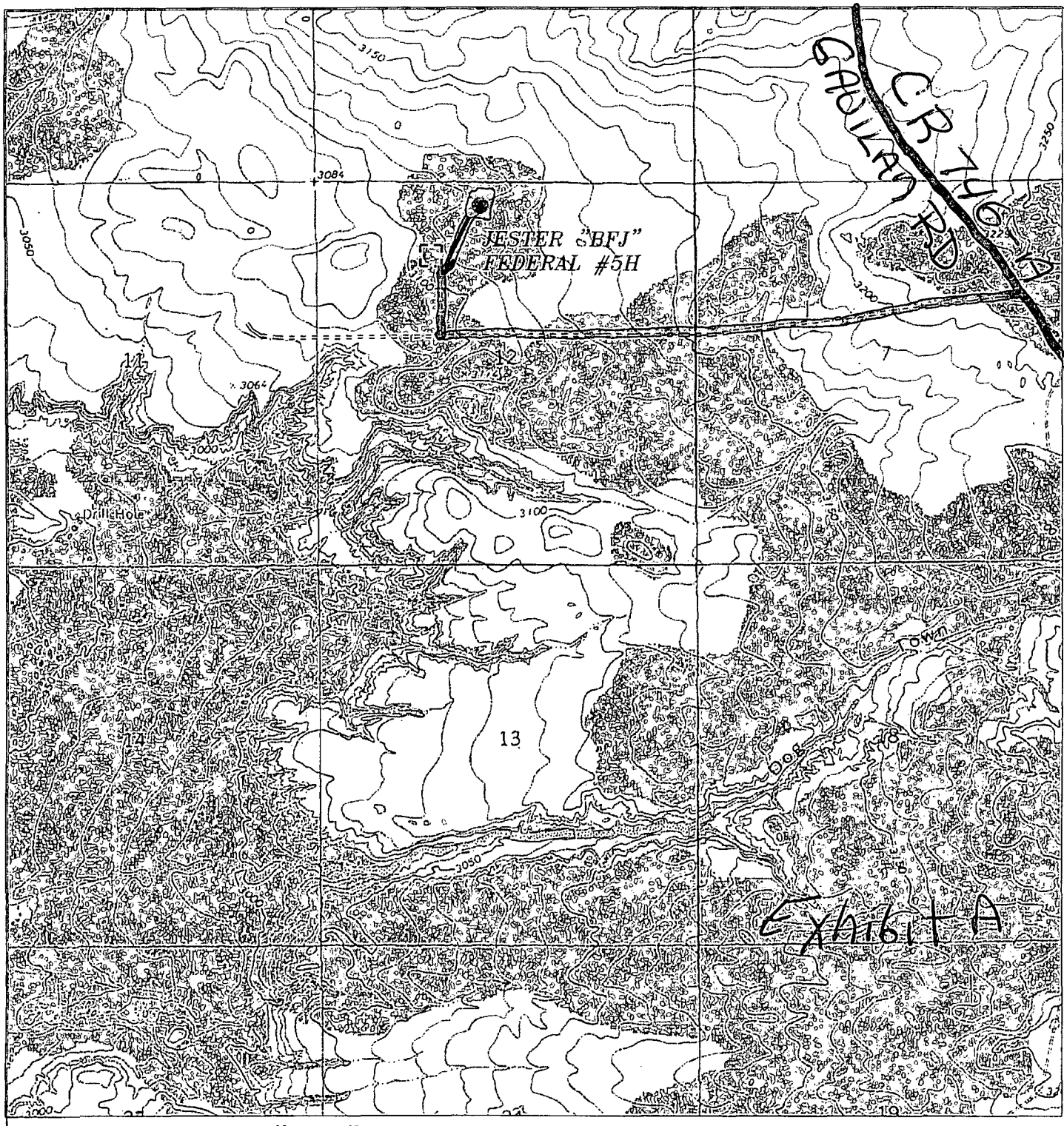


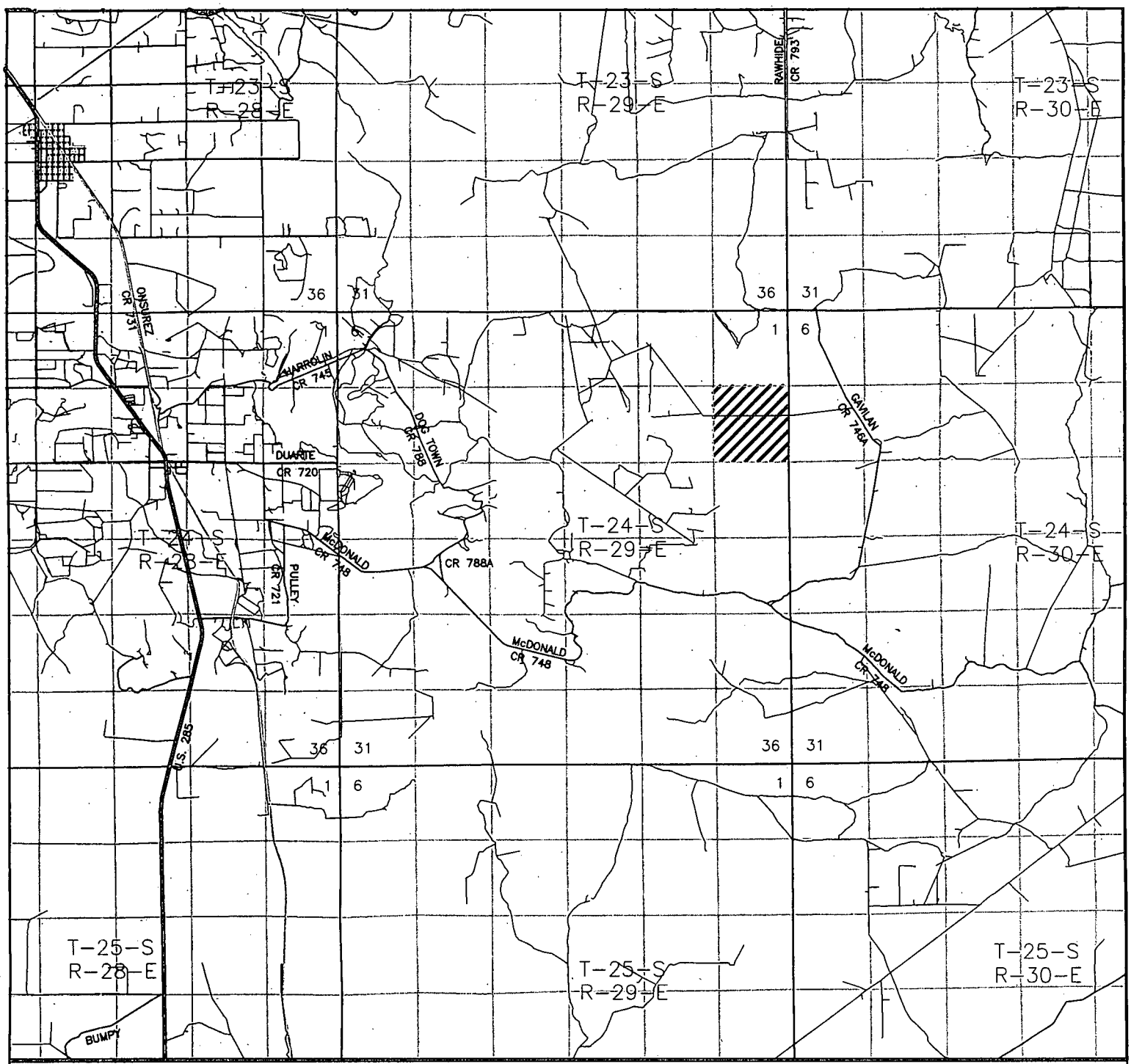
Exhibit A

JESTER "BFJ" FEDERAL #5H
Located at 330' FNL AND 2310' FWL
Section 12, Township 24 South, Range 29 East,
N.M.P.M., Eddy County, New Mexico.

Basin Surveys
focused on excellence in the oilfield
P.O. Box 1786
1120 N. West County Rd.
Hobbs, New Mexico 88241
(575) 393-7316 - Office
(575) 392-2206 - Fax
basinsurveys.com

W.O. Number:	21164
Survey Date:	02-24-2009
Scale:	1" = 2000'
Date:	02-25-2009

YATES PETROLEUM CORP.



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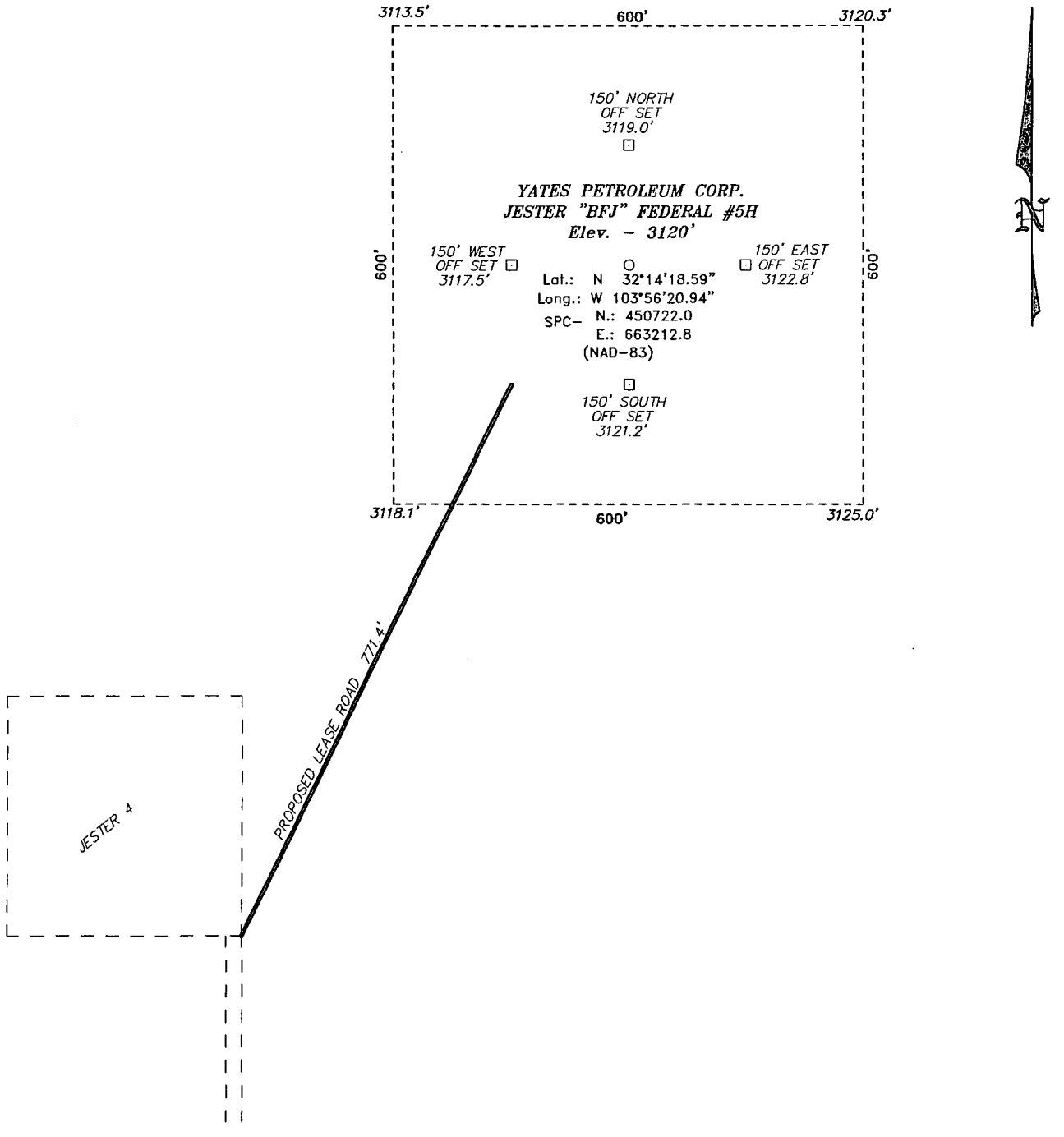
YATES PETROLEUM CORP.

SECTION 12, TOWNSHIP 24 SOUTH, RANGE 29 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



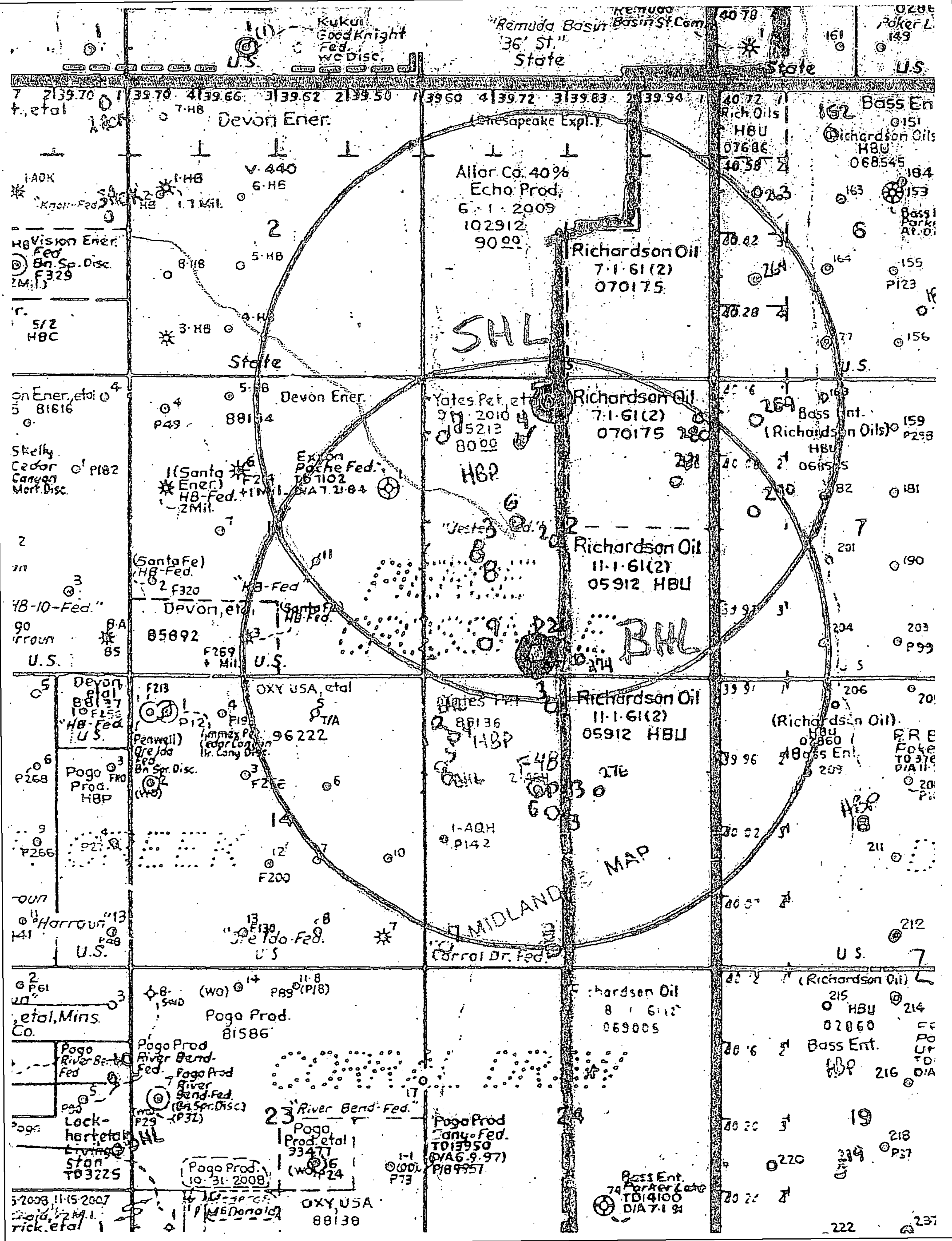
YATES PETROLEUM CORP.

REF: JESTER "BFJ" FEDERAL #5H / WELL PAD TOPO

THE JESTER "BFJ" FEDERAL #5H LOCATED 330' FROM THE NORTH LINE AND 2310' FROM THE WEST LINE OF SECTION 12, TOWNSHIP 24 SOUTH, RANGE 29 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.

BASIN SURVEYS P.O. BOX 1786 – HOBBS, NEW MEXICO

W.O. Number: 21164	Drawn By: J. M. SMALL		
Date: 02-25-2009	Disk: 21164 JMS	Survey Date: 02-24-2009	Sheet 1 of 1 Sheets



Remuda Basin
"36" St."
State
Kukui
Good Knight Fed.
U.S.
Devon Ener.
(Chesapeake Expl.)
Allar Co. 40%
Echo Prod.
6 · 1 · 2009
102912
90.00
Richardson Oil
7·1·61(2)
070175
Rich. Oils
HBU
Bass Ent.
Richardson Oils
HBU
068545
SHL
State
Devon Ener.
88134
Yates Pet. etal
Exxon
Pache Fed.
HBP
Richardson Oil
11·1·61(2)
05912 HBU
(Santa Fe)
HB-Fed.
"HB-Fed"
Devon, etal
85892
BHL
U.S.
OXY USA, etal
96222
Richardson Oil
11·1·61(2)
05912 HBU
(Richardson Oil)
Bass Ent.
Pogo Prod.
HBP
MIDLAND MAP
"Harroun"
"Ore Ido-Fed."
Carrol Dr. Fed.
(Richardson Oil)
HBU
Bass Ent.
Pogo Prod.
81586
Pogo Prod
River Bend-Fed.
"River Bend-Fed."
Pogo Prod. etal
93477
Pogo Prod
Cany-Fed.
Pogo Prod.
10 · 31 · 2008
OXY USA
88138
Bass Ent.
Parker Lake
TD14100
D/A7·1·91
McDonald

YATES PETROLEUM CORPORATION
Jester BFJ Federal #5H
330' FNL & 2310' FWL
330' FSL & 1980' FWL
Section 12-T24S-R29E
Eddy County, New Mexico

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

Rustler	330'		Brushy Canyon Marker	6700'	
Top of Salt	450'		Bone Spring	6970'	OIL
Base of Salt	3015'		1st Bone Springs Sand	8097'	OIL
Bell Canyon	3220'	OIL	Target Zone	8443'	OIL
Cherry Canyon	4090'	OIL	TVD	8170'	
Brushy Canyon	5360'	OIL	MD	12597'	

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

Water: Approx 35'

Oil or Gas: See above.

See COA - low pressure test first

3. **Pressure Control Equipment:** BOPE will be installed on the 11 3/4" and 8 5/8" casing and rated for 3000 BOP systems with a minimum opening of 13 5/8" and will be consistent with API RP 53. Blind rams and pipe rams will be tested to 3000 PSI. Test will be conducted by an independent Tester, utilizing a test plug in the well head. Test will be held for 10 minutes on each segment of the system tested. Any leaks will be repaired at the time of the test. Annular preventer will be tested to 50% of rated working pressure. Tests will be conducted before drilling out from under all casing strings, which are set and cemented in place. Blowout Preventer controls will be installed prior to drilling the surface plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily to insure good mechanical working order, and this inspection recorded on the daily drilling report. See Exhibit.

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:** See COA

A. Casing Program: (All New)

Hole Size	Casing Size	Wt./Ft	Grade	Coupling	Interval	Length
14 3/4"	11 3/4"	42#	H-40	ST&C	0-450'	450'
11"	8 5/8"	32#	J-55	ST&C	0-100'	100'
11"	8 5/8"	24#	J-55	ST&C	100'-2200'	2100'
11"	8 5/8"	32#	J-55	ST&C	2200'-3150'	950'
7 7/8"	5 1/2"	17#	HCP-110	LT&C	0-12597'	2597'

see COA

This well will be drilled vertically to 7693'. At 7693' the well will be kicked off and directionally drilled at 12 degrees per 100' with a 7 7/8" hole to 12597 MD (8170' TVD) where 5 1/2" casing will be set and of section 12-24S-39E. The deepest TVD in well is 8170" in the lateral.

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

B. CEMENTING PROGRAM: See COA

Surface casing from 0' to 450': TOC surface; 300 sx Class "C" with CaCl2 2% (WT 14.80 YLD 1.34);

Intermediate Casing 0' to 3150': TOC surface. 675 sx Lite "C" with Gilsonite 3lbs/bbl, Poly-E-Flake 0.125 lb/bbl, CaCl2 2% (WT 12.60 YLD 2.00); Tail in w/ 200sx Class "C" + 2% CaCl2 (Wt. 14.80 Yld.1.34)'

Production Casing : DV Tool at 6400'. Stage I 12597' t0 6400': TOC 6400', 1525 sx Pecos Valley Lite with D112 fluid loss 0.4%, D151-Calcium Carbonate 22.5 lbs/sack, D174-Extender 2.5 lb/sack, D177-Retarder 0.01 lb/sack, D800-Retarder 0.6 lb/sack, D046-antifoam agent 0.15 lb/sack (Wt 13.00 Yld. 1.41). Cement designed with 35% excess.

See COA

Stage II: 6400' to 2700'. TOC 2700'. Lead with 425 sx Lite Crete with D177 retarder0.03 gal/sack, D046-antifoam 0.2%, D065-dispersant 0.1%, D124-extender 39lb/sack (Wt. 9.90 Yld. 2.78). Tail in with 100 sacks of Pecos Valley Lite with D112 fluid loss 0.4%, D151-Calcium Carbonate 22.5 lbs/sack, D174-Extender 2.5 lb/sack, D177-Retarder 0.01 lb/sack, D800-Retarder 0.6 lb/sack, D046-antifoam agent 0.15 lb/sack (Wt 13.00 Yld. 1.41). Cement designed with 35% excess.

5. Mud Program and Auxiliary Equipment:

See COA

Interval	Type	Weight	Viscosity	Fluid Loss
0-450'	Fresh Water	8.60-9.20	29-32	N/C
450'-3150'	Brine Water	10.00-10.20	28-28	N/C
3150'-7693'	Cut Brine	8.90-9.10	28-29	N/C
7693'-12597'	Cut Brine(lateral section)	8.90-9.10	28-32	<15

Sufficient mud material(s) to maintain mud properties, control lost circulation and contain a blow out will be available at the well site during drilling operations. ~~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~~. The slow pump speed will be recorded on the daily drilling report after mudding uo. A mud test will be performed every 24 hours after mudding up to determine, as applicable, viscosity, gel strength, filtration and pH. After surface casing is set an electronic PVT system will be installed as our primary mud level monitoring system. A secondary system will also be implemented as to insure the PVT system is functioning properly. The secondary system will be comprised of the derrick hand visually checking the fluid level in the pits periodically using a nut on the end of a rope hanging just above the fluid level in the pit.

6. EVALUATION PROGRAM:

Samples: 30' samples to 3000'; 10' samples 3000'-TD.
Logging: Platform HALS; CMR. See CoA
Coring: None Anticipated.
DST's: As warranted.
Mudlogger on from surface casing to TD.

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

Anticipated BHP:

From:	O	TO:	450'	Anticipated Max.	BHP:	215	PSI
From:	450'	TO:	3150'	Anticipated Max.	BHP:	1670	PSI
From:	3150'	TO:	8500'	Anticipated Max.	BHP:	3865	PSI

No abnormal pressures or temperatures are anticipated. See COA
Lost Circulation Zones Anticipated: None.
H2S Zones Anticipated: None
Maximum Bottom Hole Temperature: 160 F

8. ANTICIPATED STARTING DATE:

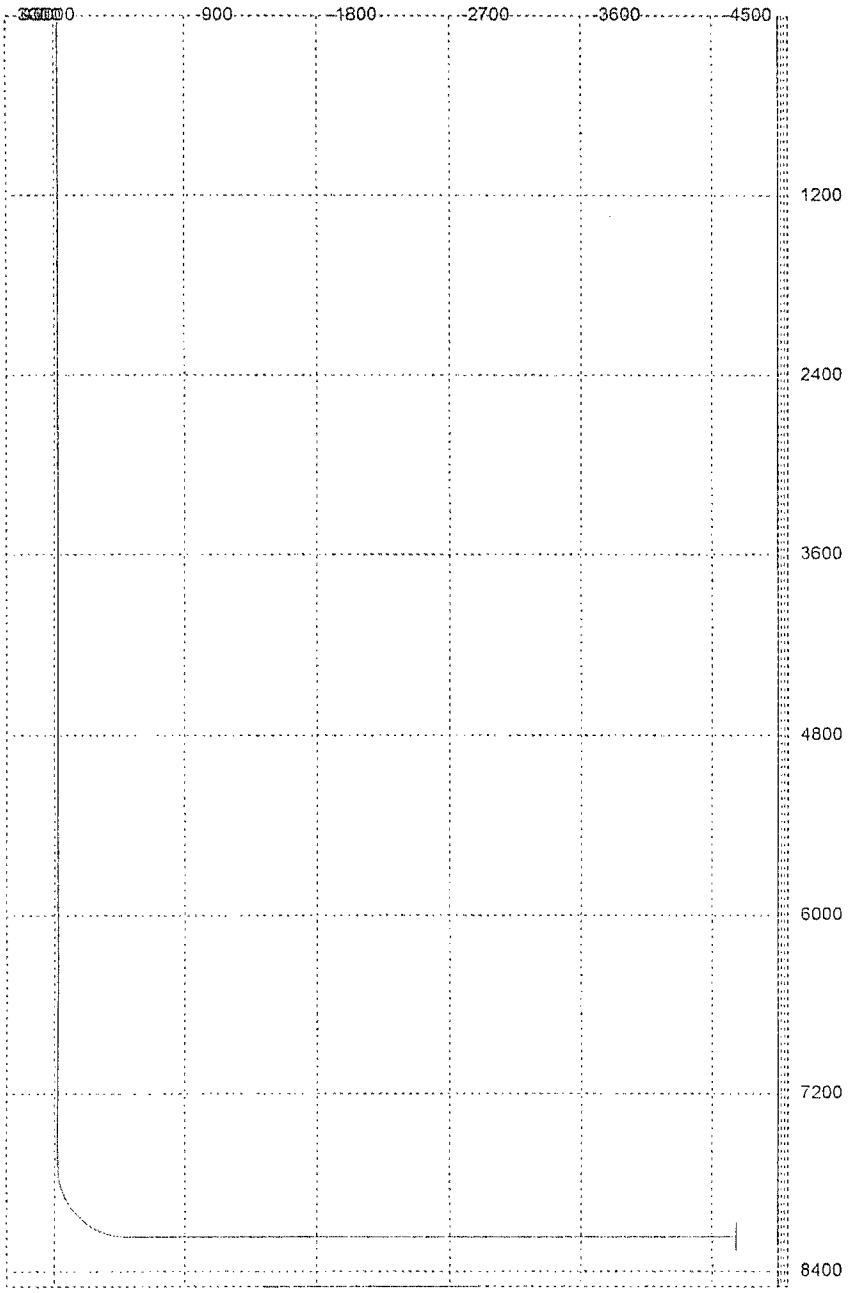
Plans are to drill this well as soon as possible after receiving approval. It should take approximately 60 days to drill the well with completion taking another 30 days.

M.D.	Inclination	Azimuth	T.V.D.	N+/S-	E+/W-	D.L.S.	ToolFace	T.F. Ref. [HS/GN]	
0	0	0	0	0	0	0			
330	0	0	330	0	0	0			RUSTLER
450	0	0	450	0	0	0			TOP OF SALT
3,015	0	0	3,015	0	0	0			BASE OF SALT
3,220	0	0	3,220	0	0	0			BELL CANYON
4,090	0	0	4,090	0	0	0			CHERRY CANYON
5,360	0	0	5,360	0	0	0			BRUSHY CANYON
6,700	0	0	6,700	0	0	0			BRUSHY CANYON MARKER
6,970	0	0	6,970	0	0	0			BONE SPRINGS
7693	0	0	7693	0	0	12	184	GN	KOP
7700	0.84	184.09	7700	-0.05	0	12	360	HS	
7725	3.84	184.09	7724.98	-1.07	-0.08	12	360	HS	
7750	6.84	184.09	7749.86	-3.39	-0.24	12	0	HS	
7775	9.84	184.09	7774.6	-7.01	-0.5	12	360	HS	
7800	12.84	184.09	7799.11	-11.91	-0.85	12	0	HS	
7825	15.84	184.09	7823.33	-18.08	-1.29	12	0	HS	
7850	18.84	184.09	7847.19	-25.52	-1.82	12	360	HS	
7875	21.84	184.09	7870.63	-34.18	-2.44	12	0	HS	
7900	24.84	184.09	7893.58	-44.06	-3.15	12	0	HS	
7925	27.84	184.09	7915.98	-55.12	-3.94	12	360	HS	
7950	30.84	184.09	7937.77	-67.34	-4.81	12	0	HS	
7975	33.84	184.09	7958.89	-80.68	-5.76	12	0	HS	
8000	36.84	184.09	7979.28	-95.1	-6.79	12	0	HS	
8025	39.84	184.09	7998.89	-110.57	-7.9	12	360	HS	
8050	42.84	184.09	8017.65	-127.04	-9.07	12	360	HS	
8075	45.84	184.09	8035.53	-144.46	-10.32	12	0	HS	
8097	48.48	184.09	8050.49	-160.55	-11.47	12	360	HS	1ST BONE SPRINGS
8100	48.84	184.09	8052.47	-162.8	-11.63	12	0	HS	
8125	51.84	184.09	8068.43	-181.99	-13	12	0	HS	
8150	54.84	184.09	8083.35	-202	-14.43	12	360	HS	
8175	57.84	184.09	8097.21	-222.75	-15.91	12	0	HS	
8200	60.84	184.09	8109.95	-244.2	-17.44	12	0	HS	
8225	63.84	184.09	8121.56	-266.28	-19.02	12	0	HS	
8250	66.84	184.09	8131.99	-288.94	-20.64	12	0	HS	
8275	69.84	184.09	8141.21	-312.11	-22.29	12	360	HS	
8300	72.84	184.09	8149.21	-335.74	-23.98	12	360	HS	
8325	75.84	184.09	8155.96	-359.75	-25.7	12	360	HS	
8350	78.84	184.09	8161.44	-384.07	-27.43	12	360	HS	
8375	81.84	184.09	8165.63	-408.65	-29.19	12	0	HS	
8400	84.84	184.09	8168.53	-433.42	-30.96	12	0	HS	
8425	87.84	184.09	8170.13	-458.3	-32.74	12	0	HS	
8443.05	90.01	184.09	8170.47	-476.31	-34.02	0			1ST BONE SPRINGS PAY
12597.31	90.01	184.09	8170	-4620	330	0			LATERAL TD

Well will be drilled vertically to 7693'. At 7693' well will be kicked off and directionally drilled at 12 degrees per 100' with a 7 7/8" hole to 12,597' MD (8,170' TVD) where 5 1/2" casing will be set and cemented. Penetration point of producing zone will be encountered at 806' FNL and 2,276' FWL Section 4-24S-29E. Deepest TVD in the well is 8170' in the lateral.

3D³ Directional Drilling Planner - 3D View

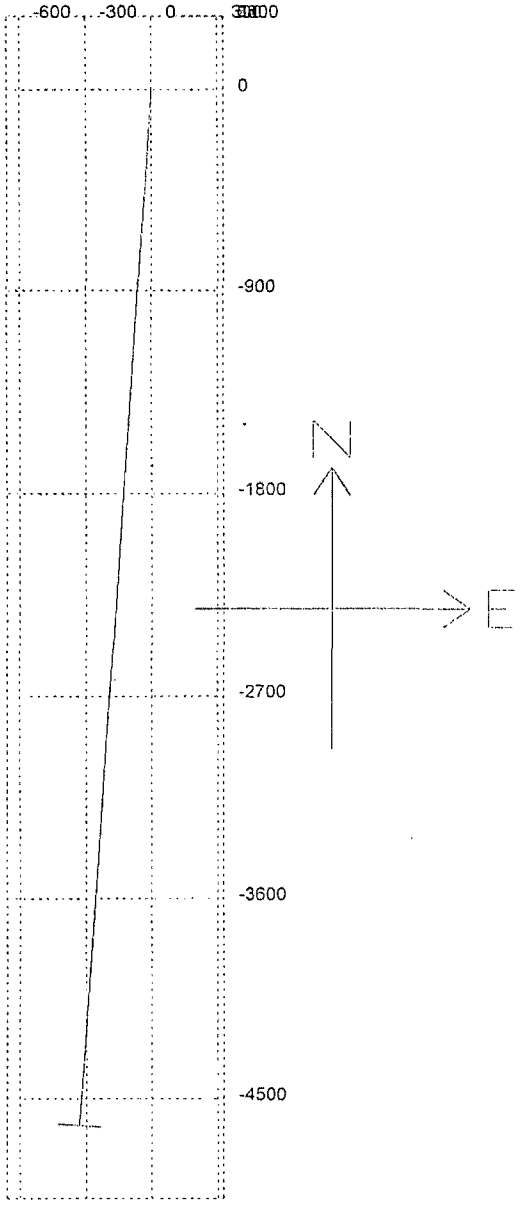
Company: **Yates Petroleum Corporation**
Well: **Jester BFJ Federal #5H**



File: G:\drilling toolbox wellplans\Horizontal\jester5h.wpp

3D³ Directional Drilling Planner - 3D View

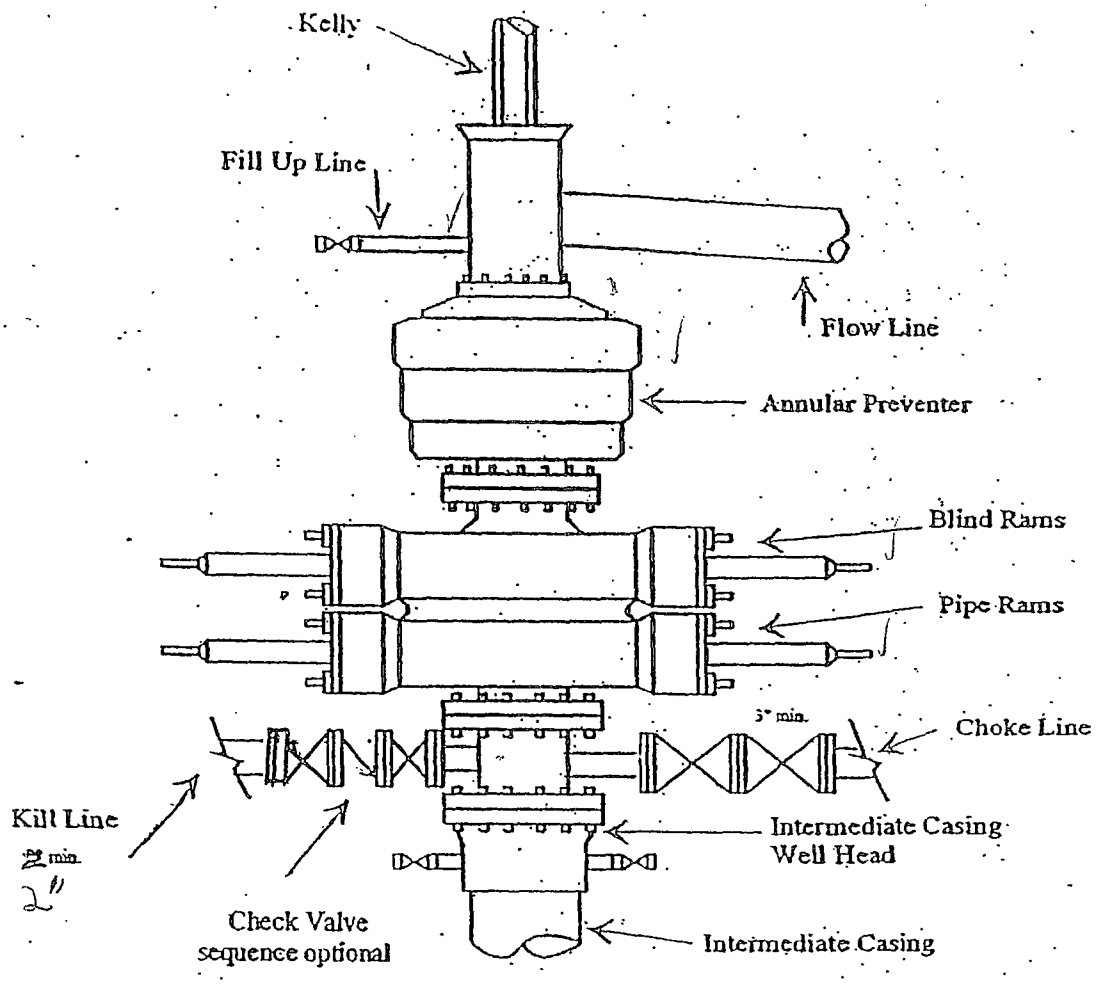
Company: **Yates Petroleum Corporation**
Well: **Jester BFJ Federal #5H**



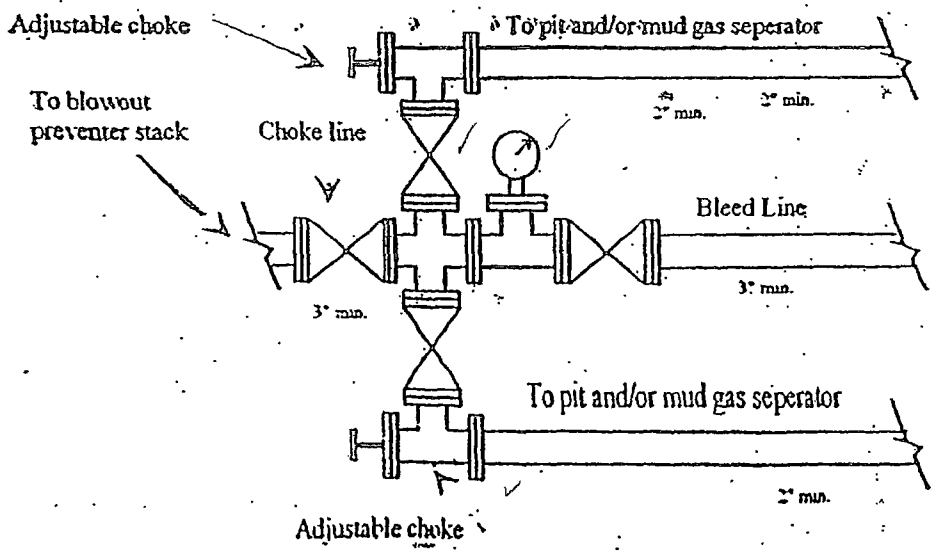
File: G:\drilling toolbox wellplans\Horizontal\jester5h.wpp

Yates Petroleum Corporation

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

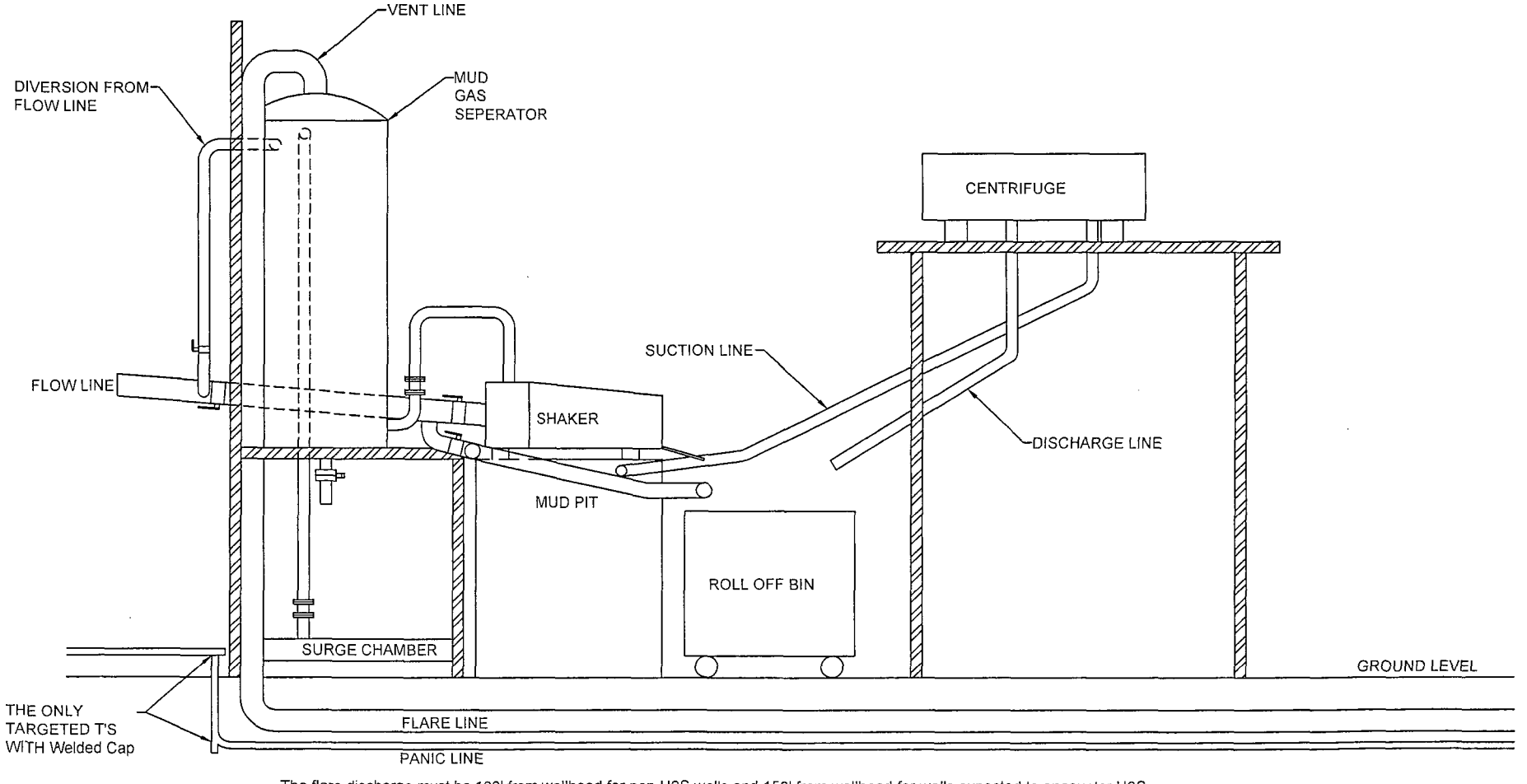


Typical 3,000 psi choke manifold assembly with at least these minimun features



YATES PETROLEUM CORPORATION

Piping from Choke Manifold
to the Closed Loop Drilling Mud System



The flare discharge must be 100' from wellhead for non H2S wells and 150' from wellhead for wells expected to encounter H2S.

Yates Petroleum Corporation
Closed Loop System

Equipment Design Plan

Closed Loop System will consist of:
1 – double panel shale shaker
1 – (minimum) Centrifuge, certain wells and flow rates may require 2 centrifuges
On certain wells, the Centrifuge will be replaced by a Clackco Settling Tank System
1 – minimum centrifugal pump to transfer fluids
2- 500 bbl. FW Tanks
1 – 500 bbl. BW Tank
1 – half round frac tank – 250 bbl. capacity as necessary to catch cement / excess mud returns generated during a cement job.
1 Set of rail cars / catch bins
Certain wells will use an ASC Auger Tank

Operation Plan

All equipment will be inspected at least hourly by rig personnel and daily by contractors' personnel.
Any spills / leaks will be reported to YPC, NMOCD, and cleaned up without delay.

Closure Plan

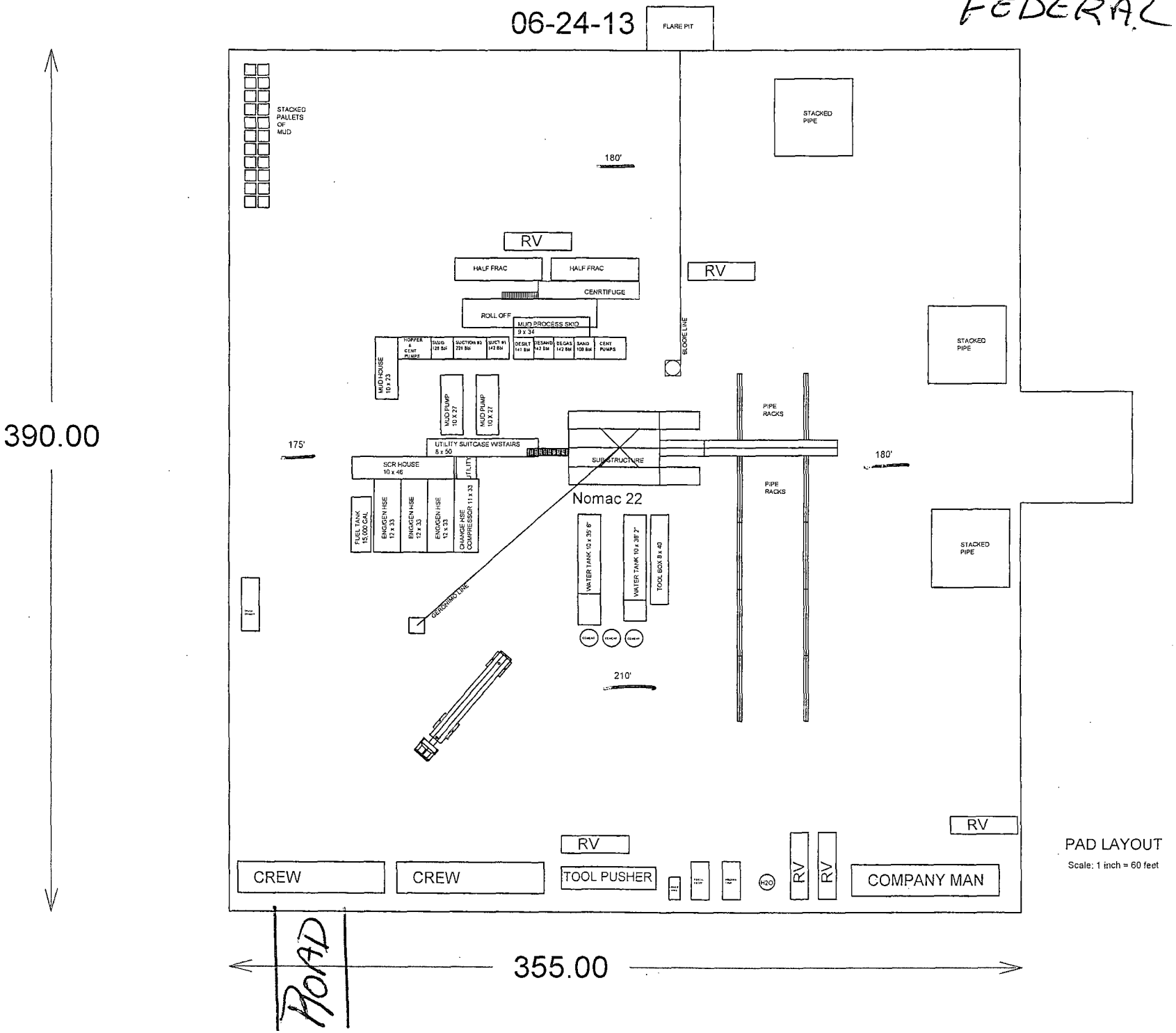
Drilling with Closed Loop System, haul off bins will be taken to Gandy Marley, Lea Land Farm, CRI or Sundance Services Inc.

YATES PETROLEUM CORPORATION

Nomac 22

06-24-13

Jester BFJ Federal #5H

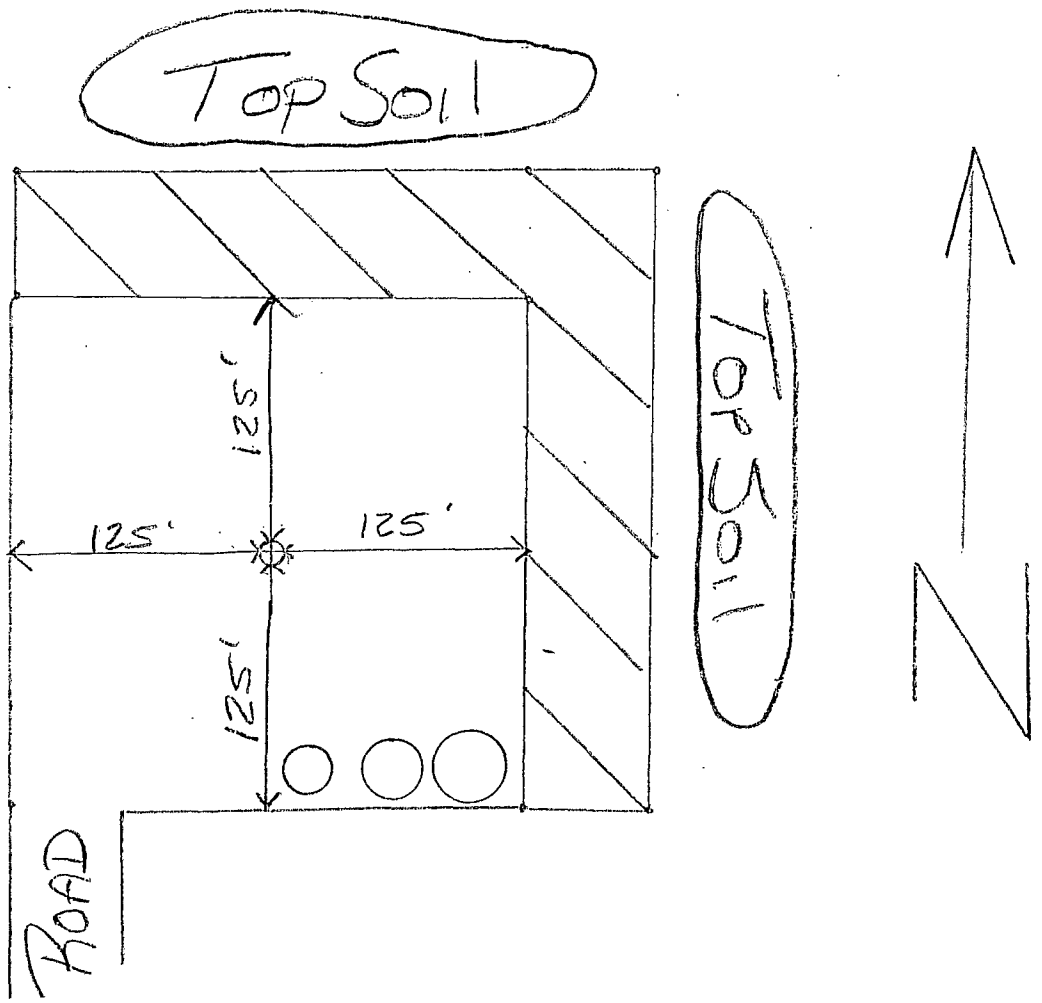


PAD LAYOUT

Scale: 1 inch = 60 feet

Reclaimation Plat

Jester BFS
Federal 5H



Possible Reclaimed Area

MULTI-POINT SURFACE USE AND OPERATIONS PLAN
Yates Petroleum Corporation
Jester BFJ Federal #5H
330' FNL and 2310' FWL (Surface Hole Location)
330' FSL and 1980' FWL, (Bottom Hole Location)
Section 12, T24S-R29E
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 well site is located approximately 37 miles east of Malaga, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

DIRECTIONS:

Go east of Carlsbad on Highway 62-180 to State Road 31. Turn south on 31 and go to Highway 128 (Jal Highway). Turn left on HWY 128 and go approximately 4 miles to Rawhide Road (CR-793) Mississippi Potash Mine Shaft #5 is here. Turn south here on CR-793 and go approx. 3.4 miles. Follow County road to the left and go east for approximately 0.2 of a mile. Turn south on county road and follow it for approx. 3.5 miles. At this point there will be a tank on the left and a lease road with powerlines going west. Turn west on this lease road and go approx. 1.2 miles. Turn right here on lease road going north and go approximately 0.2 of a mile to the southeast corner of the Jester SWD #4. The new road will start from the northeast corner of the Jester SWD #4 going to the northeast for approximately 0.1 of a mile to the southwest corner of the well location.

2. PLANNED ACCESS ROAD:

A. The proposed new access road will start here going in a northeasterly direction for approximately 0.1 of a mile to the southwest corner of the proposed well location.
B. The new road will be 14' in width (driving surface) and will be adequately drained to control runoff and soil erosion.
C. The new road will be bladed with drainage on one side. Traffic turnouts may be built as needed.
D. The route of the road is visible.
E. Existing roads will be maintained in the same or better condition.

3. LOCATION OF EXISTING WELL

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

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

A. There are production facilities on this lease at the present time. However, if production facilities are needed for this well they will be placed on the location as determined by Yates' Production Department. Placement has not been determined at this 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 until an electric power line can be built if needed.

C. Should off location facilities be needed for power line, flow line right-of-ways, etc. they will be filed under a separate application by Yates or a third party if applicable. The route and placement will be determined at that time.

5. LOCATION AND TYPE OF WATER SUPPLY:

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

6. SOURCE OF CONSTRUCTION MATERIALS:

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

7. METHODS OF HANDLING WASTE DISPOSAL:

A. A closed loop system will be used to drill this well.
B. The closed loop system will be constructed, maintained, and closed in compliance with the State of New Mexico, Energy and Natural Resources Department, Oil Conservation Division – the "Pit Rule" 19.15.17 NMAC.
C. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or separate disposal application will be submitted.
D. Oil produced during operations will be stored in tanks until sold.
E. Current laws and regulations pertaining to the disposal of human waste will be complied with.
F. All trash, junk, and other waste materials will be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not approved.

8. ANCILLARY FACILITIES: None

9. WELLSITE LAYOUT:

A. An exhibit shows the relative location and dimensions of the well pad, the closed loop mud system, location of the drilling equipment, rig orientation and access road approach. All of the location will be constructed within the 600' x. 600' staked area.
B. The closed loop system will be constructed, maintained and closed in compliance with the State of New Mexico, Energy and Natural Resources Department, Oil Conservation Division—the "Pit Rule" 19.15.17 NMAC.

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 well site in as aesthetically pleasing a condition as possible. The location will be reduced to a 250' x 250' after completion operations have been conducted. Please note attached Reclamation Plat.

B. If the proposed well is plugged and abandoned, the caliche surfacing material will be removed, The topsoil will then be redistributed and the location will be reseeded. These actions will be be completed and accomplished as expeditiously as possible.

C. Unguarded pits, if any, containing fluids will be fenced until they have dried and been leveled.

11. SURFACE OWNERSHIP:

Surface Estate: Managed by the Bureau of Land Management, 620 East Greene Street, Carlsbad, NM 88201
Mineral Estate: Bureau of Land Management, 620 East Greene Street, Carlsbad, NM 88201

12. OTHER INFORMATION:

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

CERTIFICATION
YATES PETROLEUM CORPORATION
Jester BFJ Federal #5H

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 the company I represent, is 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 15th day of July, 2013.

Printed Name Cy Cowan

Signature Cy Cowan

Position Title Land Regulatory Agent

Address 105 South Fourth Street, Artesia, NM 88210

Telephone 575-748-4372

E-mail (optional) cy@ypcnm.com

Field Representative (if not above signatory) Tim Bussell

Address (if different from above) Same

Telephone (if different from above) 575-748-4221

PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	YATES PETROLEUM CORP.
LEASE NO.:	NM105213
WELL NAME & NO.:	5H JESTER BFJ FEDERAL
SURFACE HOLE FOOTAGE:	339' FNL & 2310' FWL
BOTTOM HOLE FOOTAGE	330' FSL & 1980' FWL
LOCATION:	Section 12, T. 24 S., R 29 E., NMPM
COUNTY:	Eddy County, New Mexico

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

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I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5909 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL

The operator shall stockpile the topsoil in a low profile manner in order to prevent wind/water erosion of the topsoil. The topsoil to be stripped is approximately 6 inches in depth. The topsoil will be used for interim and final reclamation.

C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

D. FEDERAL MINERAL MATERIALS PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation.

The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

F. EXCLOSURE FENCING (CELLARS & PITS)

Exclosure Fencing
The operator will install and maintain exclosure fencing for all open well cellars to prevent access to public, livestock, and large forms of wildlife before and after drilling operations until the pit is free of fluids and the operator initiates backfilling. (For

examples of exclosure fencing design, refer to BLM's Oil and Gas Gold Book, Exclosure Fence Illustrations, Figure 1, Page 18.)

G. ON LEASE ACCESS ROADS

Road Width
The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty-five (25) feet.

Surfacing
Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

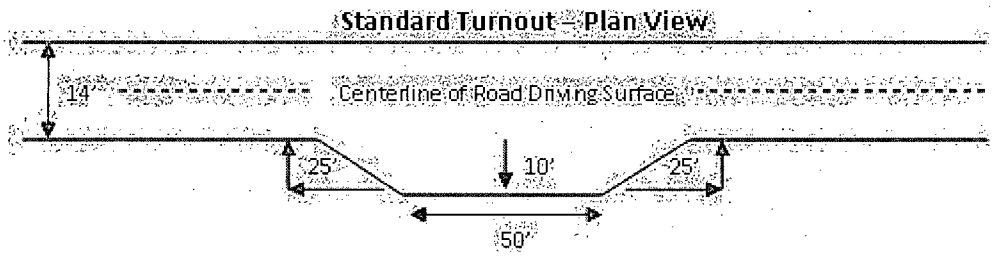
Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

Crowning
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

Ditching
Ditching shall be required on both sides of the road.

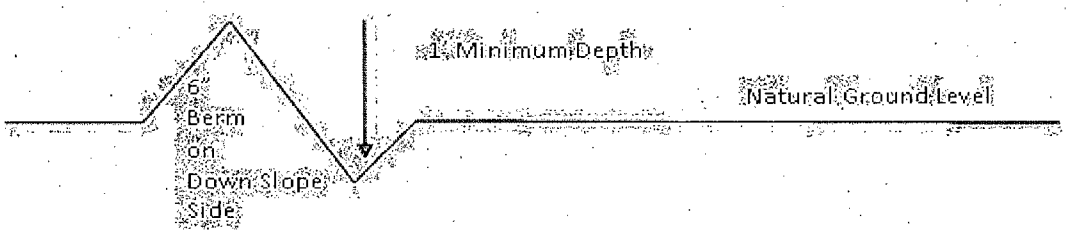
Turnouts
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:



Drainage
Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

$$\text{400 foot road with 4\% road slope: } \frac{400'}{4\%} + 100' = 200' \text{ lead-off ditch interval}$$

Culvert Installations
Appropriately sized culvert(s) shall be installed at the deep waterway channel flow crossing.

Cattleguards
An appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s).

Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations.

A gate shall be constructed and fastened securely to H-braces.

Fence Requirement

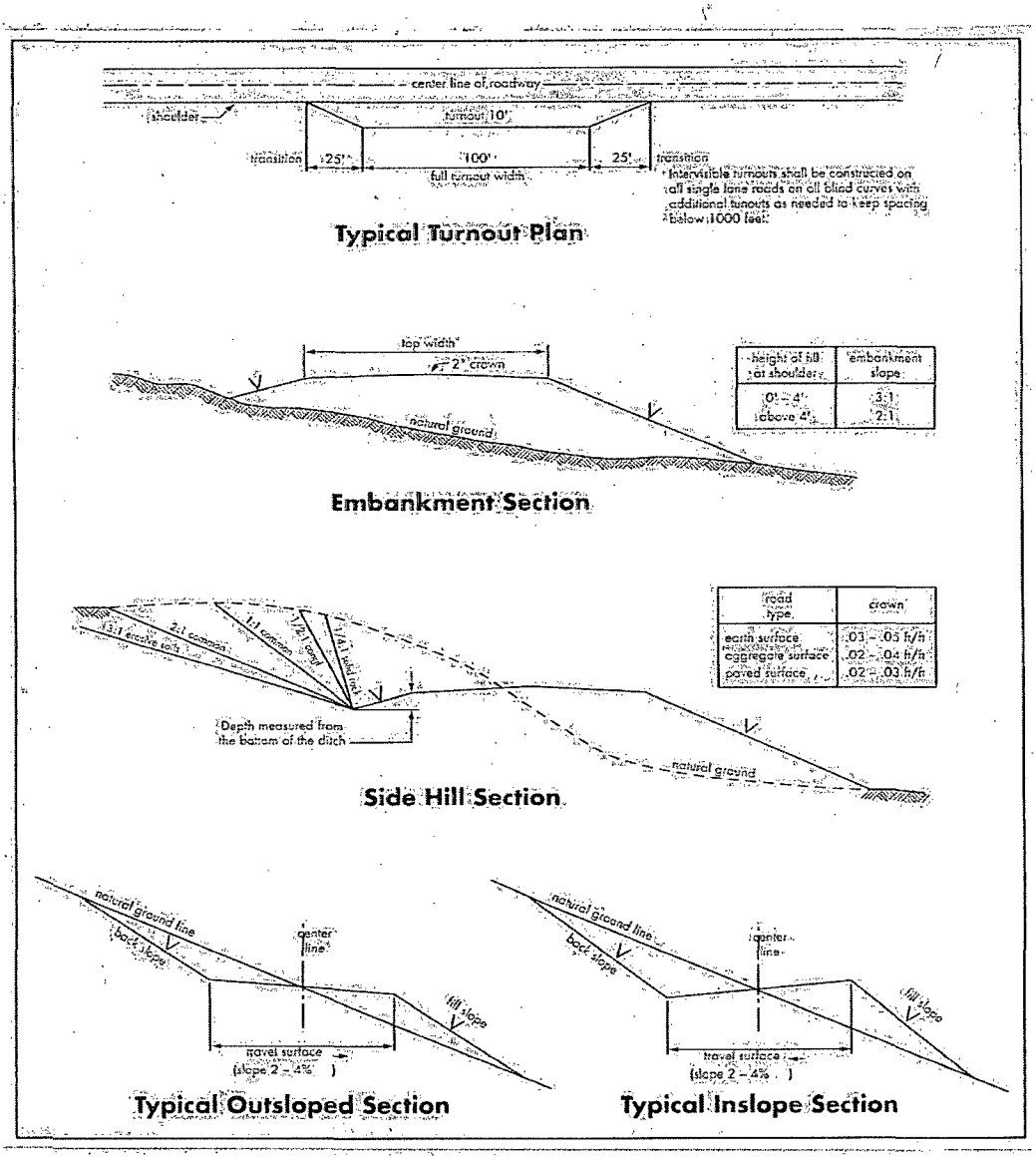
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

Public Access

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Figure 1 – Cross Sections and Plans For Typical Road Sections



VII. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

a. Spudding well (minimum of 24 hours)
b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
c. BOPE tests (minimum of 4 hours)

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

1. **Hydrogen Sulfide has been reported as a hazard, but no measurements have been recorded. It is recommended that monitoring equipment be onsite for potential Hydrogen Sulfide. If Hydrogen Sulfide is encountered, report measurements and formations to the BLM.**

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. **If the drilling rig is removed without approval – an Incident of Non-Compliance will be written and will be a "Major" violation.**

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 is located, this does not include the dog house or stairway area.

4. **The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.**

B. CASING

Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.).

The initial wellhead installed on the well will remain on the well with spools used as needed.

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) for Potash Areas:
After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log.

Wait on cement (WOC) for Water Basin:
After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements.

Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

Possibility of water flows in the Salado, and Castile.
Possibility of lost circulation in the Rustler, Red Beds, and Delaware.

1. The **11-3/4** inch surface casing shall be set at approximately **450** feet (**in a competent bed below the Magenta Dolomite, which is a Member of the Rustler, and if salt is encountered, set casing at least 25 feet above the salt**) 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 surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

    b. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.

    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 cementing will be done prior to drilling out that string.

2. The minimum required fill of cement behind the **8-5/8** inch intermediate casing, which shall be set at approximately **3350** feet in the basal anhydrite of the Castile at the top of the Lamar Limestone, is:

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

Centralizers required on horizontal leg, must be type for horizontal service and a minimum of one every other joint.

3. The minimum required fill of cement behind the **5-1/2** inch production casing is:

Operator has proposed DV tool at depth of 6400'. Operator is to submit sundry if DV tool depth varies by more than 100' from approved depth.

a. First stage to DV tool:

☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve approved top of cement on the next stage.

b. Second stage above DV tool:

☒ Cement should tie-back at least 600 feet into previous casing string. Operator shall provide method of verification.

4. 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 **3000 (3M)** psi.

a. **For surface casing only:** If the BOP/BOPE is to be tested against casing, the wait on cement (WOC) time for that casing is to be met (see WOC statement at start of casing section). Independent service company required.

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 **3000 (3M)** psi.

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

   a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

   b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (18 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

   c. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock.

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

   e. 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.**

   f. 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. This test shall be performed prior to

the test at full stack pressure.

D. DRILL STEM TEST

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

E. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

EGF 051115

VIII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities
Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

Exclosure Netting (Open-top Tanks)
Immediately following active drilling or completion operations, the operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks until the operator removes the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1 ½ inches. The netting must not be in contact with fluids and must not have holes or gaps.

Chemical and Fuel Secondary Containment and Exclosure Screening
The operator will prevent all hazardous, poisonous, flammable, and toxic substances from coming into contact with soil and water. At a minimum, the operator will install and maintain an impervious secondary containment system for any tank or barrel containing hazardous, poisonous, flammable, or toxic substances sufficient to contain the contents of the tank or barrel and any drips, leaks, and anticipated precipitation. The operator will dispose of fluids within the containment system that do not meet applicable state or U. S. Environmental Protection Agency livestock water standards in accordance with state law; the operator must not drain the fluids to the soil or ground. The operator will design, construct, and maintain all secondary containment systems to prevent wildlife and livestock exposure to harmful substances. At a minimum, the operator will install effective wildlife and livestock exclosure systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1 ½ inches.

Open-Vent Exhaust Stack Exclosures
The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. (*Recommended exclosure structures on open-vent exhaust stacks are in the shape of a cone.*) Production equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, in-line units, and compressor mufflers.

Containment Structures
Proposed production facilities such as storage tanks and other vessels will have a secondary containment structure that is constructed to hold the capacity of 1.5 times the largest tank, plus freeboard to account for precipitation, unless more stringent protective requirements are deemed necessary.

Painting Requirement
All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color, **Shale Green** from the BLM Standard Environmental Color Chart (CC-001: June 2008).

B. PIPELINES (Not applied for in APD)

C. ELECTRIC LINES (Not applied for in APD)

IX. INTERIM RECLAMATION

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce

the size of the location. Interim reclamation should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

X. FINAL ABANDONMENT & RECLAMATION

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

BLM SERIAL #: NM105213
COMPANY REFERENCE: Yates Petroleum Corporation
WELL # & NAME: Jester BFJ Federal #5H

Seed Mixture 2, for Sandy Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law (s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

Species	lb/acre
Sand dropseed (Sporobolus cryptandrus)	1.0
Sand love grass (Eragrostis trichodes)	1.0
Plains bristlegrass (Setaria macrostachya)	2.0

*Pounds of pure live seed:

Pounds of seed **x** percent purity **x** percent germination = pounds pure live seed