

INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated, on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

ITEM 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on this reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective production zone.

ITEM 22: Consult applicable Federal or State regulations, or appropriate officials, concerning approval of the proposal before operations are started.

BLM would like you to know that you do not have to respond to this or any other Federal agency- sponsored information collection unless it displays a currently valid OMB control number.

NOTICE

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR Part 3160.

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service well or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

ROUTINE USE: (1) The analysis of the applicant's proposal to discover and extract the Federal or Indian resources encountered. (2) The review of procedures and equipment and the projected impact on the land involved. (3) The evaluation of the effects of proposed operation on surface and subsurface water and other environmental impacts. (4)(5) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions, as well as routine regulatory responsibility.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if the operator elects to initiate drilling operation on an oil and gas lease.

BURDEN HOURS STATEMENT

Public reporting burden for this form is estimated to average 30 minutes per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management, (Alternate) Bureau Clearance Officer, (WO-771), 1849 C Street, N.W., Washington, D.C. 20240, and the Office of Management and Budget, Paperwork Reduction Project (1004-0136), Washington, D.C. 20503.

The Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq) requires us to inform you that: This information is being collected to allow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases.

This information will be used to analyze and approve applications.

Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease.

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30.005.64083	Pool Code 85360	Shugart; Siluro Devonian
Property Code 37544	Property Name KILAUEA "BMZ" FEDERAL COM	Well Number 1
OGRID No. 025575	Operator Name YATES PETROLEUM CORPORATION	Elevation 3681'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	35	12-S	27-E		1550	SOUTH	860	EAST	CHAVES

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
Dedicated Acres E/2 320	Joint or Infill	Consolidation Code			Order No.				

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

<div data-bbox="71 961 547 1211"></div>	<div data-bbox="618 1056 763 1081">NM-101098</div>	<div data-bbox="1092 980 1424 1001"> <h3>OPERATOR CERTIFICATION</h3> </div> <div data-bbox="1071 1016 1459 1215"> <p><i>I hereby certify that the information 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i></p> </div> <div data-bbox="1065 1222 1459 1310"> <p><i>Debbie Caffall</i> 9/22/08 Signature Date</p> </div> <div data-bbox="1078 1320 1373 1371"> <p>Debbie L. Caffall Printed Name</p> </div>
<div data-bbox="431 1472 698 1522"> <p>GEODETIC COORDINATES NAD 83 NME</p> </div> <div data-bbox="474 1541 647 1591"> <p>Y=81192.5 N X=54010.6 E</p> </div> <div data-bbox="431 1617 690 1671"> <p>LAT.=33°31'03.1" N LONG.=104°20'08.51" W</p> </div>	<div data-bbox="633 1270 776 1302">NM-120348</div> <div data-bbox="784 1577 1000 1827"> </div>	<div data-bbox="1092 1421 1424 1440"> <h3>SURVEYOR CERTIFICATION</h3> </div> <div data-bbox="1071 1472 1459 1556"> <p><i>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.</i></p> </div> <div data-bbox="1065 1562 1459 1852"> <p>RONALD J. EIDSON SEPTEMBER 24, 2008 Date Surveyed JC Signature & Seal of Professional Surveyor <i>Ronald J. Eidson</i> 10/01/08 12641</p> </div> <div data-bbox="1071 1862 1468 1911"> <p>Certificate No. GARY EIDSON 12641 RONALD J. EIDSON 3239</p> </div>

YATES PETROLEUM CORPORATION
Kilauea BMZ Federal Com #1
 1550' FSL and 860' FEL, Unit I (NESE)
 Section 35, T12S-R27E
 Chaves County, New Mexico

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

Yates	15'	Basal Abo/Wolfcamp	5585'
Seven Rivers	145'	Wolfcamp Lime	5755'
Queen	665'	Wolfcamp B	5790'
Penrose	800'	Spear	6070'
Grayburg	1015'	Cisco	6245'
San Andres	1295'	Canyon	6440'
Glorieta	2500'	Strawn	6735'
Yeso	2620'	Atoka	6945'
Tubb	3960'	Mississippian	7040'
Abo	4770'	Silurian-Devonian	7620'
Abo Carbonate	5120'	TD	7850'

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

Water: 150'			
Oil or Gas: Below		Basal Abo/Wolfcamp	5585' Gas
Queen	665' Gas or Oil	Wolfcamp Lime	5755' Gas
Penrose	800' Gas or Oil	WC B Zone	5790' Gas
Grayburg	1015' Gas or Oil	Spear Zone	6070' Gas
San Andres	1295' Gas or Oil	Cisco	6245' Gas
Abo	4770' Gas	Canyon	6440' Gas
Abo Carbonate	5120' Gas	Strawn	6735' Gas
		Atoka	6945' Gas
		Miss	7040' Gas
		Siluro-Devonian	7620' Gas or Oil
		TD	7850'

3. Pressure Control Equipment: BOPE will be installed on the 8 5/8" casing and rated for 3000# BOP System. 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 ensure good mechanical working order, and this inspection recorded on the daily drilling report. See Exhibit B.
4. 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.
5. THE PROPOSED CASING AND CEMENTING PROGRAM:

A. Casing Program: All new casing to be used

<u>Hole Size</u>	<u>Casing Size</u>	<u>Wt./Ft</u>	<u>Grade</u>	<u>Coupling</u>	<u>Interval</u>	<u>Length</u>
12 1/4"	8 5/8"	24 #	J-55	ST&C	0'-1400'	1400'
7 7/8"	5.5"	15.5 #	J-55	LT&C	0'-7850'	7850'

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

2. A 3000 psi system nipped up and tested on 8 5/8" casing.

B. CEMENTING PROGRAM:

Surface Casing: 450 sacks C Lite (WT 12.50 YLD 2.00). Tail in with 200 sacks C + 2% CaCl₂ (WT 14.80 YLD 1.32). TOC surface.

Production Casing: 425 sacks LiteCrete (WT 9.80 YLD 2.92). Tail in with 850 sacks of Pecos VILt (WT 13.00 YLD 1.41). Top of Cement approx. 900'.

6. MUD PROGRAM AND AUXILIARY EQUIPMENT:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0-1400	Fresh Water Gel	8.40-8.60	32-36	N/C
1400-4700	Cut Brine	9.40-9.60	28-28	N/C
4700-7850	Starch/Salt Gel/4-6% KCL	9.60-10.00	45-55	4.0 - 6.0

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. Rig personnel will check mud hourly.

7. EVALUATION PROGRAM:

Samples: 10' samples from under surface casing to TD

Logging: Platform Express; CNL/LDT/NGT TD to surf csg; CNL/GR TD to surf.; DLL/MSFL TD to surf csg; BHC Sonic TD to surf csg.

Coring: None anticipated

DST's: None Anticipated

Mudlogging: Yes, start from under surface casing

8. ABNORMAL CONDITIONS, BOTTOM HOLE PRESSURE, AND POTENTIAL HAZARDS:

Maximum Anticipated BHP:

0'-1400' 625 PSI

1400'-7850' 4080 PSI

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: None.

H₂S Zones Anticipated: None Anticipated

Maximum Bottom Hole Temperature: 150 F

9. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 45 days to drill the well with completion taking another 20 days.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN
YATES PETROLEUM CORPORATION
Kilauea BMZ Federal Com #1
1550' FSL and 860' FEL, Unit I (NESE)
Section 35, T12S-R27E
Chaves 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 – A1 is a portion of the map showing the well and roads in the vicinity of the proposed location. The existing two-track road being impacted by the pad will be rerouted as necessary, as not to impede travel. The proposed well site is located approximately 10 miles east of Dexter, New Mexico and the access route to the location is indicated in pink and red on Exhibit A – A1.

DIRECTIONS: EAST OF DEXTER, NEW MEXICO FROM THE INTERSECTION OF MERLINDA ROAD AND WICHITA ROAD TRAVEL EAST ON MERLINDA ROAD FOR APPROXIMATELY 8.0 MILES TO A LEASE ROAD ON THE RIGHT (SOUTH) FOR APPROXIMATELY .8 OF A MILE TO A TWO TRACK ON THE RIGHT (WEST) AND TRAVEL FOR APPROXIMATELY .55 OF A MILE AND TURN TO THE RIGHT (North) AND TRAVEL ON TWO TRACK FOR APPROXIMATELY 0.1 MILES TO THE SOUTHEAST CORNER OF PAD.

2. PLANNED ACCESS ROAD:

- A. The proposed new access will be approximately 0.55 of a mile and turn to the right (north) and travel on two track for approximately 0.1 miles to the southeast corner of pad.
- B. The new road will be 30 feet in width with 16 feet 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 both sides if needed. Traffic turnouts if warranted.
- 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 currently no drilling activity within a one-mile radius of the well site.
- B. Exhibit D shows existing wells within a one-mile radius of the proposed well site.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

- A. There are no production facilities on this lease at the present time. Production facilities will not be located on the rim of location; preferably located in a easterly direction.
- B. If the well is productive oil, a gas or diesel self-contained unit will be used to provide the necessary power until an electric line can be built, if needed. Power should not be required if the well is productive of gas.
- C. Should a Pipeline Right-Of-Way be required it will be filed under a separate application and/or by 3rd party if applicable.

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-A1.

6. SOURCE OF CONSTRUCTION MATERIALS:

The dirt contractor will be responsible for finding a source of material for construction of road and pad and will obtain any permits that may be required.

7. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drill cuttings will be collected in tanks until hauled to an approved disposal system.
- B. A 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. Form C-144 attached – Exhibit E.
- C. Drilling fluids will be removed after drilling and completions are finalized.
- D. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or separate disposal application will be submitted.
- E. Oil produced during operations will be stored in tanks until sold.
- F. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- G. All trash, junk, and other waste materials will be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not approved.

8. ANCILLARY FACILITIES: NONE

9. WELLSITE LAYOUT:

- A. Exhibit C – C1 shows the relative location and dimensions of the well pad, the closed loop design plan, the location of the drilling equipment, orientation and access road approach. The northeast corner will be approximately 190’ from the center hole. A berm will be constructed around the pad. (Approximately 4.5 acres)
- 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. Form C-144 is attached – Exhibit E.
- 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 well site in as aesthetically pleasing a condition as possible.
- B. If the proposed well is plugged and abandoned, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible.

11. SURFACE OWNERSHIP: Federal Surface
Administered by: Bureau of Land Management
Roswell Field Office
2909 West Second
Roswell, NM 88201
Phone: (575) 627-0276 **Fax** (575) 627-0276

#65069 Calumet Ranch, allottee is Billy G. Hill c/o Conejo Cattle Company Inc., P.O.
Drawer 280, 1184 Merlinda Rd., Dexter, NM 88230;

Minerals: NM-120348
Federal - Administered by Bureau of Land Management, Roswell Field Office,
2909 W. Second Street, Roswell, NM 88201-2019
Phone: 575-627-0272 **FAX:** 575-627-0276

12. OTHER INFORMATION:

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

Exhibits Attached
Exhibit A – A1 Topo/Vicinity Map
Exhibit B – Pressure System
Exhibit C – C1 Location Layout
Exhibit D – One Mile Radius
Exhibit E - Form C-144

CERTIFICATION
YATES PETROLEUM CORPORATION
Kilauea BMZ Federal Com #1
1550' FSL and 860' FEL, Unit I (NESE)
Section 35, T12S-R27E
Chaves County, New Mexico

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 or other company representatives 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 6th day of October, 2008.

Name Debbie L. Caffall

Signature 

Position Title Regulatory Agent/Land Department

Address 105 South Fourth Street 88210

E-mail (optional) debbiec@ypcnm.com


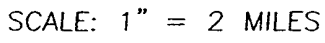
Telephone 575-748-4376 or 365-5022

Field Representative (if not above signatory) Tim Bussell

Address (if different from above) Same

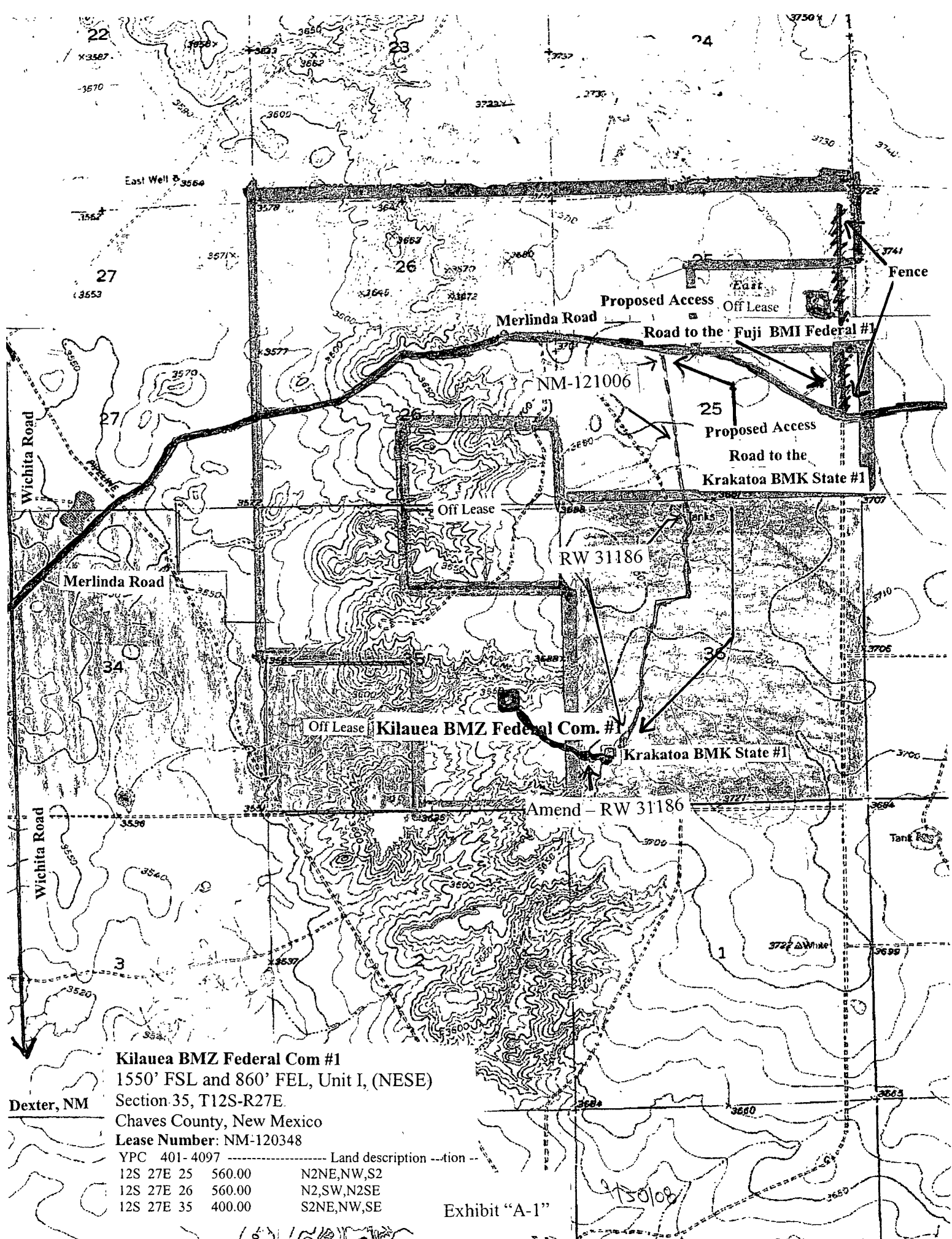
Telephone (if different from above) 575-748-4221

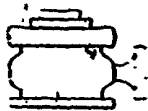
E-mail (optional) _____



PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

Kilauea BMZ Federal Com #1
1550' FSL and 860' FEL, Unit I
Section 35, T12S-R27E
Chaves County, New Mexico
Exhibit "A"

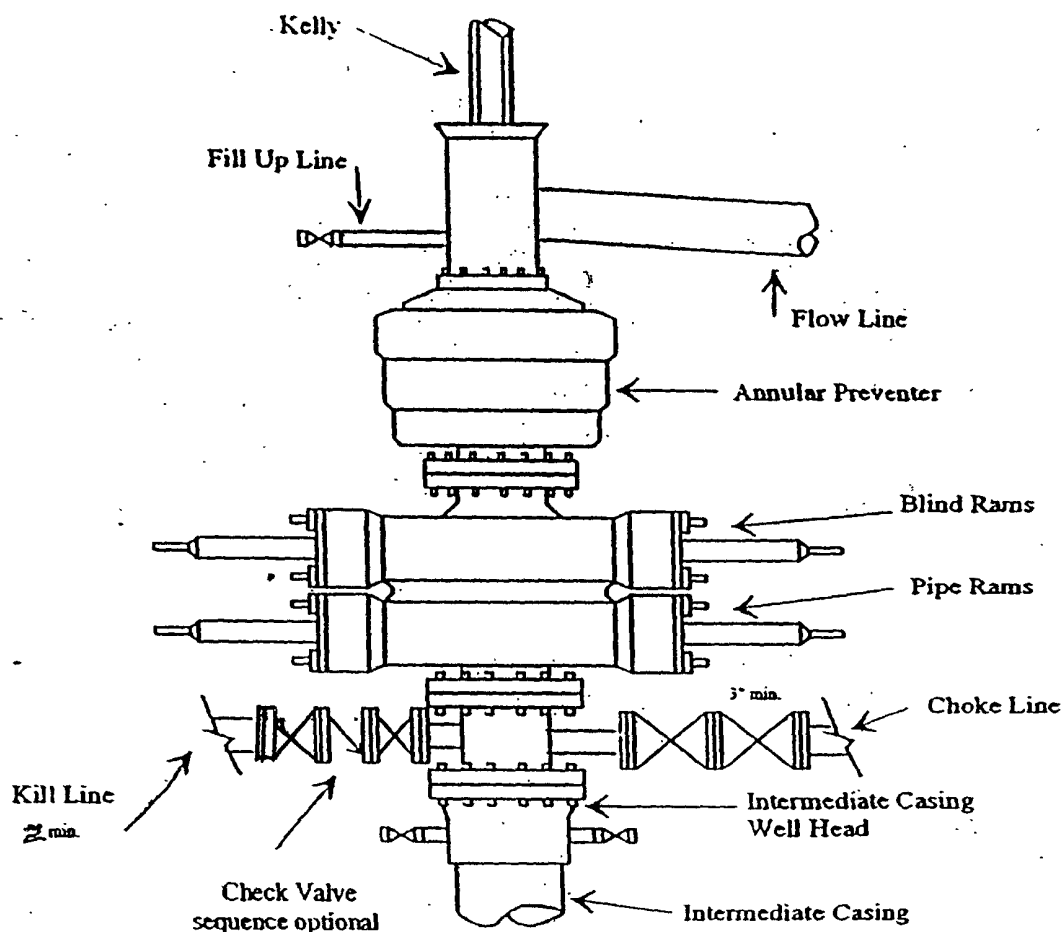




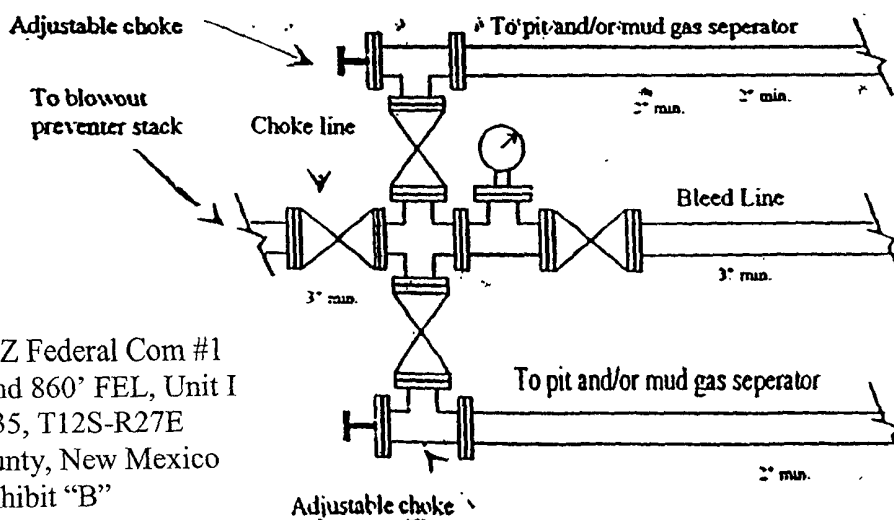
Yates Petroleum Corporation

BOP-3

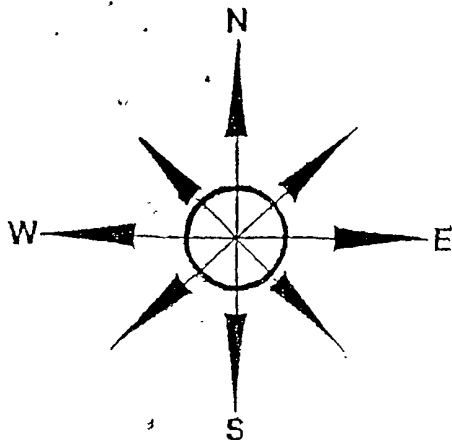
Typical 3,000 psi Pressure System Schematic Annular with Double Ram Preventer Stack



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



Kilauea BMZ Federal Com #1
1550' FSL and 860' FEL, Unit I
Section 35, T12S-R27E
Chaves County, New Mexico
Exhibit "B"



Yates Petroleum Corporation

Location Layout for Permian Basin

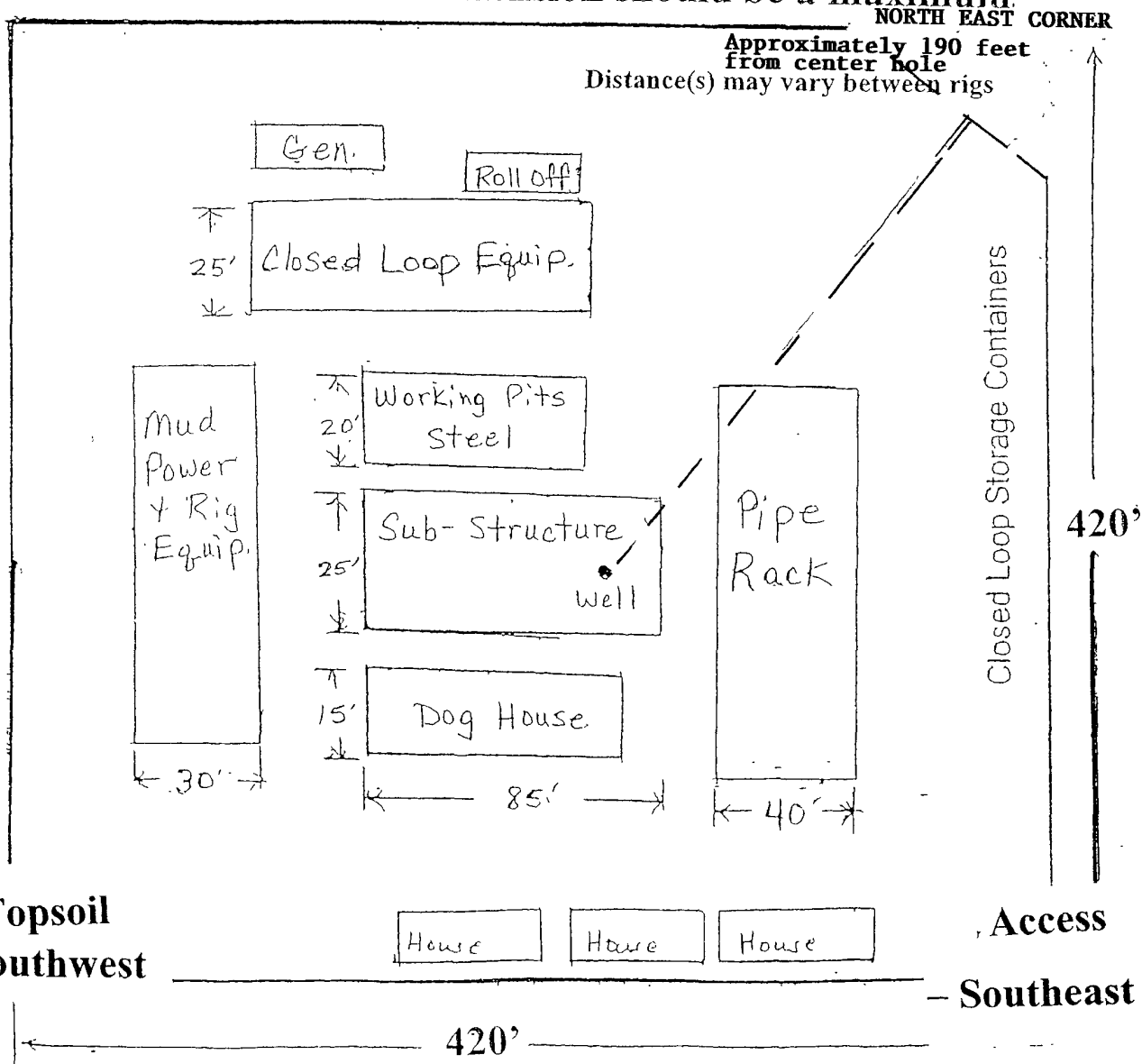
Up to 12,000'

PB - L1

Closed Loop Design Plan North

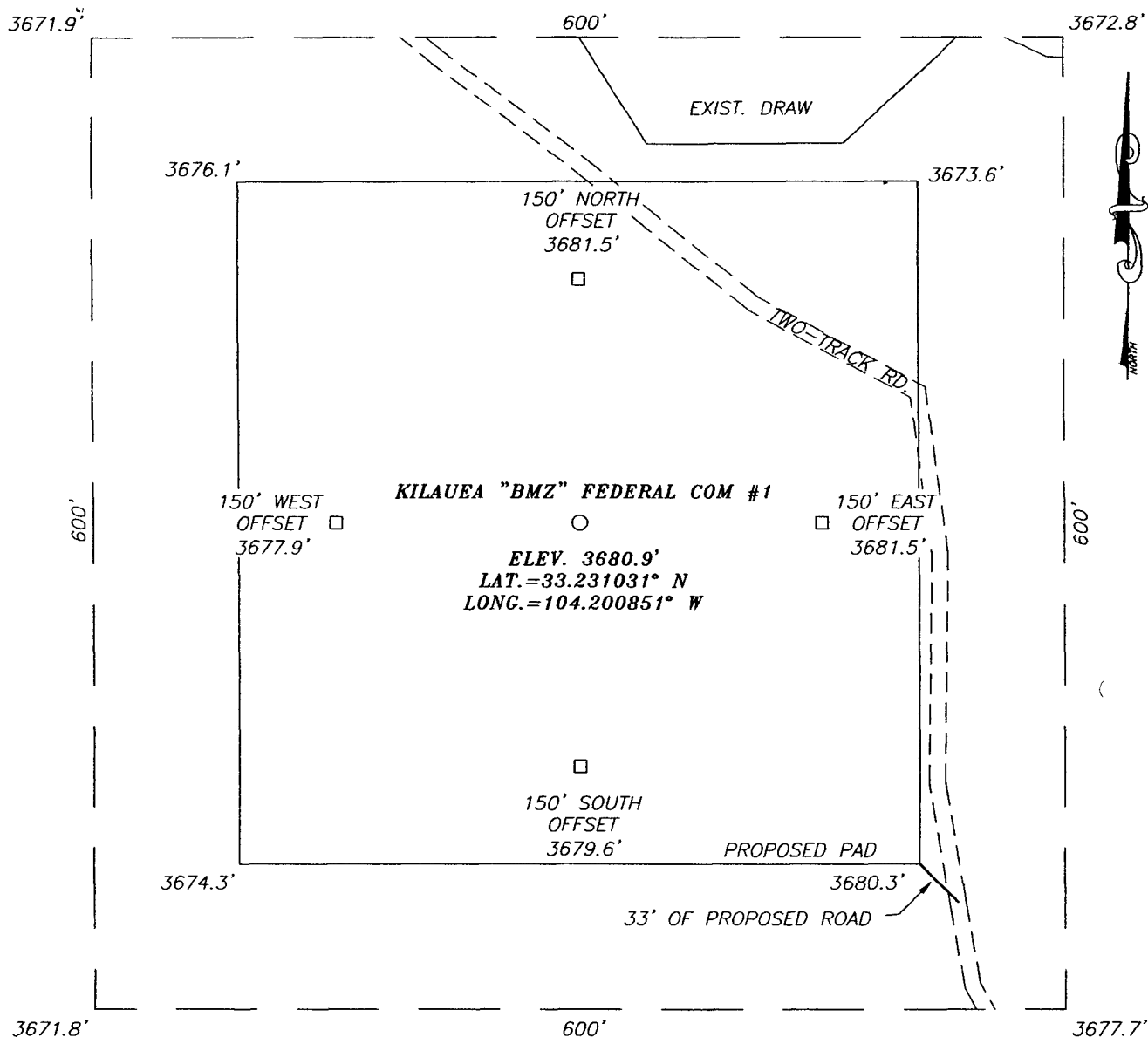
Not - To - Scale

The 420' x 420' dimension should be a maximum.



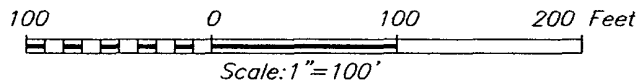
Kilauea BMZ Federal Com #1
1550' FSL and 860' FEL, Unit I
Section 35, T12S-R27E
Chaves County, New Mexico
Exhibit "C"

SECTION 35, TOWNSHIP 12 SOUTH, RANGE 27 EAST, N.M.P.M.,
 CHAVES COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF HWY. #190 AND CO. RD. MERLINDA (CALICHE), GO EAST THEN NORTHEAST APPROX. 8.7 MILES. TURN RIGHT ON CALICHE ROAD AND GO SOUTH APPROX. 0.8 MILES; TURN RIGHT ON TWO TRACK ROAD AND GO WEST APPROX. 0.15 MILES; TURN LEFT AND GO SOUTH APPROX. 0.55 MILES; TURN RIGHT AND GO WEST APPROX. 0.25 MILES; TURN RIGHT AND GO NORTH APPROX. 0.1 MILE TO THIS LOCATION.



YATES PETROLEUM CORPORATION

KILAUEA BMZ FEDERAL COM #1
 LOCATED 1550 FEET FROM THE SOUTH LINE
 AND 860 FEET FROM THE EAST LINE OF SECTION 35,
 TOWNSHIP 12 SOUTH, RANGE 27 EAST, N.M.P.M.,
 CHAVES COUNTY, NEW MEXICO.

Survey Date: 9/24/08	Sheet 1 of 1 Sheets
W.O. Number: 08.11.1532	Dr By: JC
Date: 9/29/08	08111532
	Scale: 1"=100'



PROVIDING SURVEYING SERVICES
 SINCE 1946
JOHN WEST SURVEYING COMPANY
 412 N. DAL PASO
 HOBBS, N.M. 88240
 (505) 303-3117

Kilauea BMZ Federal Com #1
 1550' FSL and 860' FEL, Unit I
 Section 35, T12S-R27E
 Chaves County, New Mexico
 Exhibit "C-1"

MARTIN YATES, III
1912-1985

FRANK W. YATES
1936-1986



105 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88210-2118
TELEPHONE (575) 748-1471

S.P. YATES
CHAIRMAN EMERITUS

JOHN A. YATES
CHAIRMAN OF THE BOARD

FRANK YATES, JR.
PRESIDENT

PEYTON YATES
DIRECTOR

JOHN A. YATES, JR.
DIRECTOR

As per BLM instructions, Yates Petroleum Corporation is tendering the \$4,000.00 APD Processing Fee for the Kilauea BMZ Federal Com #1, APD date submitted: October 6, 2008, Section 35, Township 12 South, Range 27 East, Chaves County, New Mexico.

Please be advised we are tendering this fee under protest as we believe it contradicts language in the Energy Policy Act of 2005 signed by President Bush.

RANDY G. PATTERSON
SECRETARY

DAVID LANNING
CHIEF OPERATING OFFICER

DENNIS G. KINSEY
TREASURER

First National Bank
ARTESIA, NEW MEXICO

95-43
1122



YATES BUILDING • ARTESIA, N.M. 88210

No. 155877

OCT 06, 2008

PAY*****4000*DOLLARS*AND*00*CENTS

\$*****4,000.00

134200 BUREAU OF LAND MANAGEMENT -
ROSWELL
TO THE ORDER OF 2909 WEST SECOND STREET
ROSWELL, NM 88201-2019

[Signature]
Dennis G. Kinsey

⑈155877⑈ ⑆112200439⑆

⑈69408810⑈

DETACH BEFORE DEPOSITING CHECK

YATES PETROLEUM CORPORATION
105 SOUTH 4TH STREET ARTESIA, N.M. 88210

No. 155877

\$4,000.00

DLC/MS
RECORDING/FILING FEES
FILING FEE FOR APPLICATION FOR PERMIT TO DRILL
KILAUEA BMZ FEDERAL COM #1
SECTION 35, T12S-R27E
CHAVES COUNTY, NEW MEXICO

EXHIBIT A

PECOS DISTRICT - RFO CONDITIONS OF APPROVAL

December, 2008

OPERATORS NAME: Yates Petroleum Corporation
LEASE NO.: NMNM-120348
WELL NAME & NO: Kilauea "BMZ" Federal Com. #1
SURFACE HOLE FOOTAGE: 1550' FSL & 860' FEL
LOCATION: Section 35, T. 12 S., R. 27 E., NMPM
COUNTY: Chaves County, New Mexico

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.

I. 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).

II. 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.

III. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations (access road and/or well pad). 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.

IV. CONSTRUCTION

A. NOTIFICATION:

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Roswell Field Office at (505) 627-0247 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 Application for Permit to Drill and Conditions of Approval on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL:

The topsoil will be stripped to approximately 6 inches in depth within the area designated for construction of the well pad. The topsoil will be used for interim and final reclamation of the surface disturbance created by the construction of the well pad. The topsoil shall be stockpiled on the southwest corner of the well pad.

C. CLOSED LOOP SYSTEM: No reserve pit shall be used.

The operator shall use a **Closed Loop System** instead of a reserve pit. The operator shall properly dispose of drilling contents at an authorized disposal site.

D. FEDERAL MINERAL MATERIALS PIT:

If the operator elects to surface the access road and/or well pad, payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Roswell Field Office at (505) 627-0236.

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.

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

F. ON LEASE ACCESS ROADS:

Road Egress and Ingress

The on-lease access road shall be constructed to access the southeast corner of the well pad.

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 thirty (30) 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.

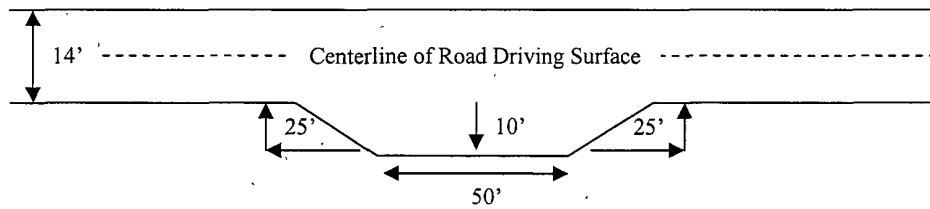
Crowning

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.

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:

Standard Turnout – Plan View

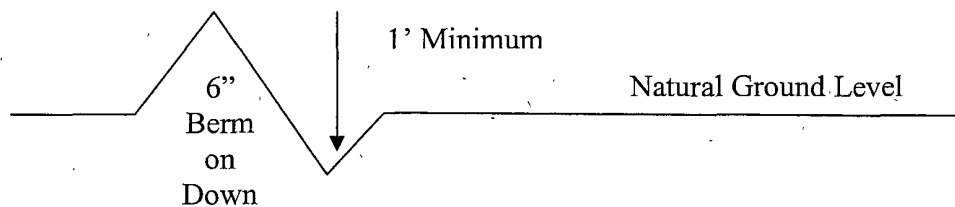


Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outslowing 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 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

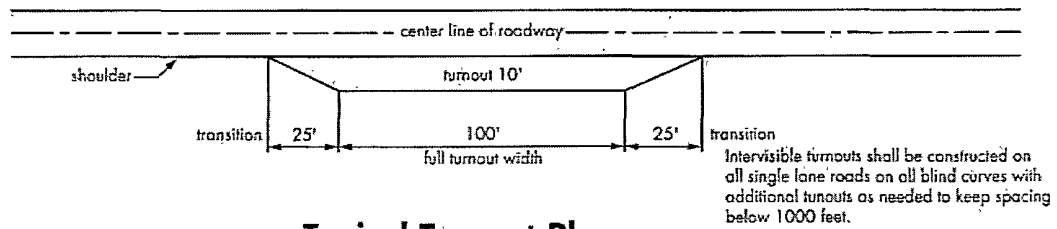
Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

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

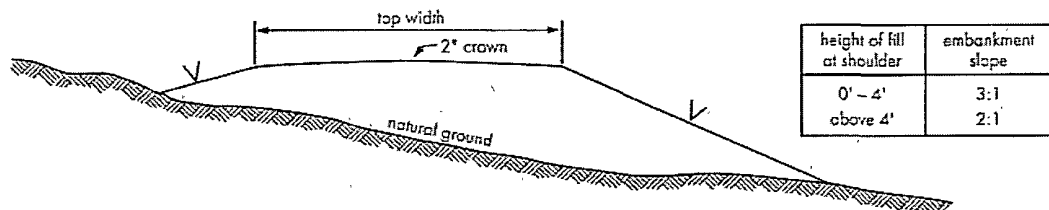
Public Access

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

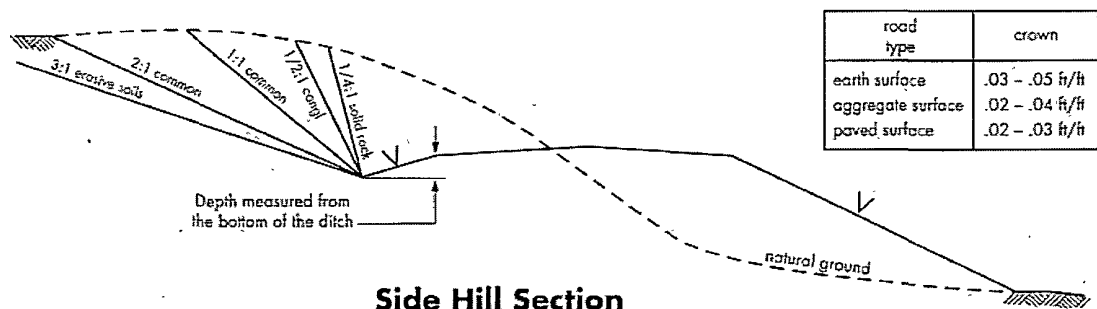
Figure 1 – Cross Sections and Plans For Typical Road Sections



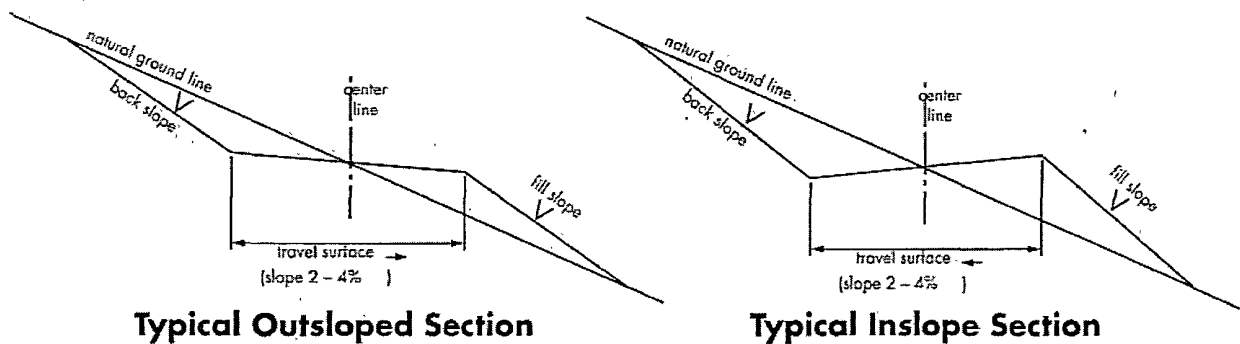
Typical Turnout Plan



Embankment Section



Side Hill Section



V. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

1. Call the Roswell Field Office, 2909 West Second St., Roswell, NM 88201. During office hours call (575) 627-0205 or after office hours call (575) 910-6024. Engineer on call during office hours call (575) 627-0275 or after office hours call (575) 626-5749.
2. The BLM is to be notified a minimum of 24 hours in advance for a representative to witness:
 - a. Spudding well
 - b. Setting and/or Cementing of all casing strings

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

BOPE Tests

3. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
4. Include the API Number assigned to well by NMOCD on the subsequent report of setting the first casing string.
5. The operator will accurately measure the drilling rate in ft/min to set the base of the usable water protection casing string(s) opposite competent rock. The record of the drilling rate along with the caliper-gamma ray-neutron well log run to surface will be submitted to this office as well as all other logs run on the borehole 30 days from completion
6. Air, air-mist or fresh water and non toxic drilling mud shall be used to drill to the base of the usable water protection casing string(s). Any polymers used will be water based and non-toxic.

B. CASING

1. The 8-5/8 inch usable water protection casing string shall be set at approximately 1000 ft. in competent bedrock.

If not the operator is required to set usable water protecting casing in the next thick competent bedding (i.e. 15 to 25 ft or greater) encountered and cemented to the surface.

- a. If cement does not circulate to the surface, the Roswell Field 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 or 500 pounds compression 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 compression strength, whichever is greater.

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

2. The minimum required fill of cement behind the 5-1/2 inch production casing is **sufficient to tie back 500 feet above the uppermost perforation in the pay zone**. If cement does not circulate, 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.

3. 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.

4. All casing shall be new or reconditioned and tested casing and meet API standards for new casing. The use of reconditioned and tested casing shall be subject to approval by the authorized officer. Approval will be contingent upon the wall thickness of any casing being verified to be at least 87-1/2 per cent of the nominal wall thickness of new casing.

C. PRESSURE CONTROL:

1. Before drilling below the 8-5/8 inch surface casing shoe, the blowout preventer assembly shall consist of a minimum of One Annular Preventer or Two Ram-Type Preventers and a Kelly Cock/Stabbing Valve.

2. Before drilling below the 8-5/8 inch surface casing shoe, minimum working pressure of the blowout preventer and related equipment (BOPE) shall be **3000** psi.

3. The BOPE shall be installed before drilling below the 8-5/8 inch surface casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

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

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

c. 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.

d. 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 BLM Roswell Field Office at 2909 West Second Street, Roswell, New Mexico 88201.

e. Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.

f. Testing must be done in a safe workman like manner. Hard line connections shall be required.

VI. PRODUCTION

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.

Containment Structures

1. The containment structure shall be constructed to hold the capacity of the entire contents of the largest tank, plus 24 hour production, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

2. A containment structure or earthen dike shall be constructed and maintained on the north, west, and south sides of the outside boundary of the well pad in order to protect nearby intermittent drainages. The containment structure or earthen dike shall be constructed two (2) feet high (the containment structure or earthen dike can be constructed higher than the two (2) feet high minimum). The topsoil shall not be used for the construction of the containment structure or earthen dike.

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, Juniper Green, from the Standard Environmental Color Chart.

VII. INTERIM RECLAMATION & RESERVE PIT CLOSURE

A. INTERIM RECLAMATION

If the well is a producer, interim reclamation shall be conducted on the well site within 6 months of well completion in accordance with Onshore Order Number 1, XII. B. Reclamation. The operator shall submit a Sundry Notices and Reports on Wells (Notice of Intent), Form 3160-5, prior to conducting 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.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche may be used in road repairs, fire walls or for building other roads and locations. In addition, 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.

B. SEED MIXTURE

The operator shall work with BLM surface management specialists to devise the best strategies to reduce the size of the location. Any reductions should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

The reclamation shall include recontoured, all trash removed, and reseeded as follows:

Loamy, SD-3 Ecological Site, Loamy CP-2 , Gyp Upland CP-2

Common Name Pounds of Pure and Preferred Variety Scientific Name Live Seed Per Acre

Blue grama, (<i>Bouteloua gracilis</i>)	4.00 LBS.
Sideoats grama, (<i>Bouteloua curtipendula</i>)	1.00 LB.
Sand dropseed (<i>Sporobolus cryptandrus</i>)	0.50 LB.
Vine mesquite (<i>Panicum obtusum</i>)	1.00 LB.
Plains bristlegrass (<i>Setaria macrostachya</i>)	1.00 LB.
Indian blanketflower (<i>Gaillardia aristata</i>)	0.50 LB.
Desert or Scarlet (<i>Sphaeralcea ambigua</i>)	1.00 LB.
Globemallow or (<i>S. coccinea</i>)	
Annual sunflower (<i>Helianthus annuus</i>)	<u>0.75 LB.</u>
TOTAL POUNDS PURE LIVE SEED (pls) PER ACRE	9.75 LBS.

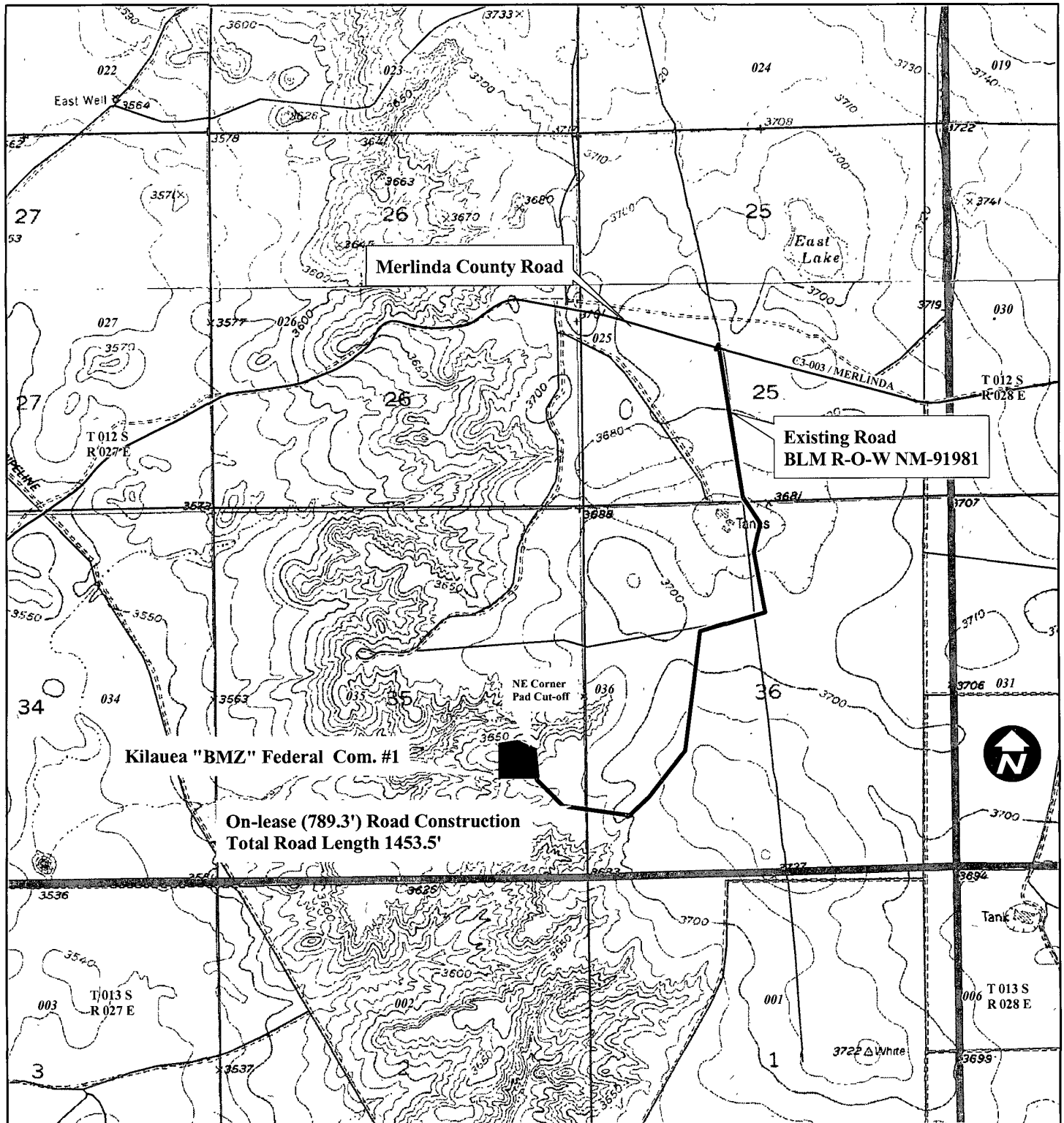
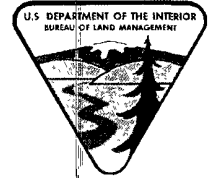
Certified Weed Free Seed. If one species is not available, increase ALL others proportionately. Use No Less than 4 species, including one forb. No less than 9.75 pounds (pls) per acre shall be applied

VIII. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS

Upon abandonment of the well and/or when the access road is no longer in service the Authorized Officer shall issue instructions and/or orders for surface reclamation and restoration of all disturbed areas.



EXHIBIT B
Kilauea "BMZ" Federal Com. #1
Section 35, T. 12 S., R. 27 E.,
1550' FSL & 860' FEL
Chaves County, New Mexico



No Warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data, or for purposes not intended by the BLM. Spatial information may not meet National Map Accuracy Standards. This information is subject to change without notification.

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