

OCD Artesia

Form 3160-3
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

AUG 29 2009

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No 1004-0137
Expires March 31, 2007

5 Lease Serial No.
~~LC-0249420-B~~ LC029420B

6. If Indian, Allottee or Tribe Name

1a. Type of work: ☐ DRILL ☒ REENTER

7 If Unit or CA Agreement, Name and No.
Old name: Dow "B" 33 Fed. #1

1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone

8. Lease Name and Well No.
Panther Federal, Well #2

2. Name of Operator
V-F Petroleum

24010

9 API Well No.
30-015-2706800

3a. Address P.O. Box 1889
Midland, TX 79702

3b Phone No. (include area code)
432-683-3344

10 Field and Pool, or Exploratory
Shugart Bone Springs N. 56405

4. Location of Well (Report location clearly and in accordance with any State requirements *)
At surface 2180' FSL & 1980' FEL
At proposed prod. zone same

11 Sec., T. R. M. or Blk. and Survey or Area
Sec. 33-T17S-R31E

14 Distance in miles and direction from nearest town or post office*
Approximately 7 miles SE of Loco Hills, NM

12 County or Parish
Eddy

13. State
NM

15 Distance from proposed*
location to nearest
property or lease line, ft. 1980'
(Also to nearest drig. unit line, if any) 660'

16. No. of acres in lease
640

17. Spacing Unit dedicated to this well
40 acres

18 Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft 1321'

19 Proposed Depth
8675'

20 BLM/BIA Bond No. on file
NM-2246

21 Elevations (Show whether DF, KDB, RT, GL, etc.)
3760' GL

22. Approximate date work will start*
08/10/2009

23. Estimated duration
3-4 weeks

24. Attachments

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

- | | |
|--|--|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office) | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature
George R. Smith
Title
POA agent for V-F Petroleum

Name (Printed/Typed)
George R. Smith

Date
07/06/2009

Approved by (Signature) */s/ Don Peterson*

Name (Printed/Typed)

Date
AUG 25 2009

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.

*(Instructions on page 2)

Approval Subject to General Requirements
& Special Stipulations Attached

Roswell Controlled Water Basin

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

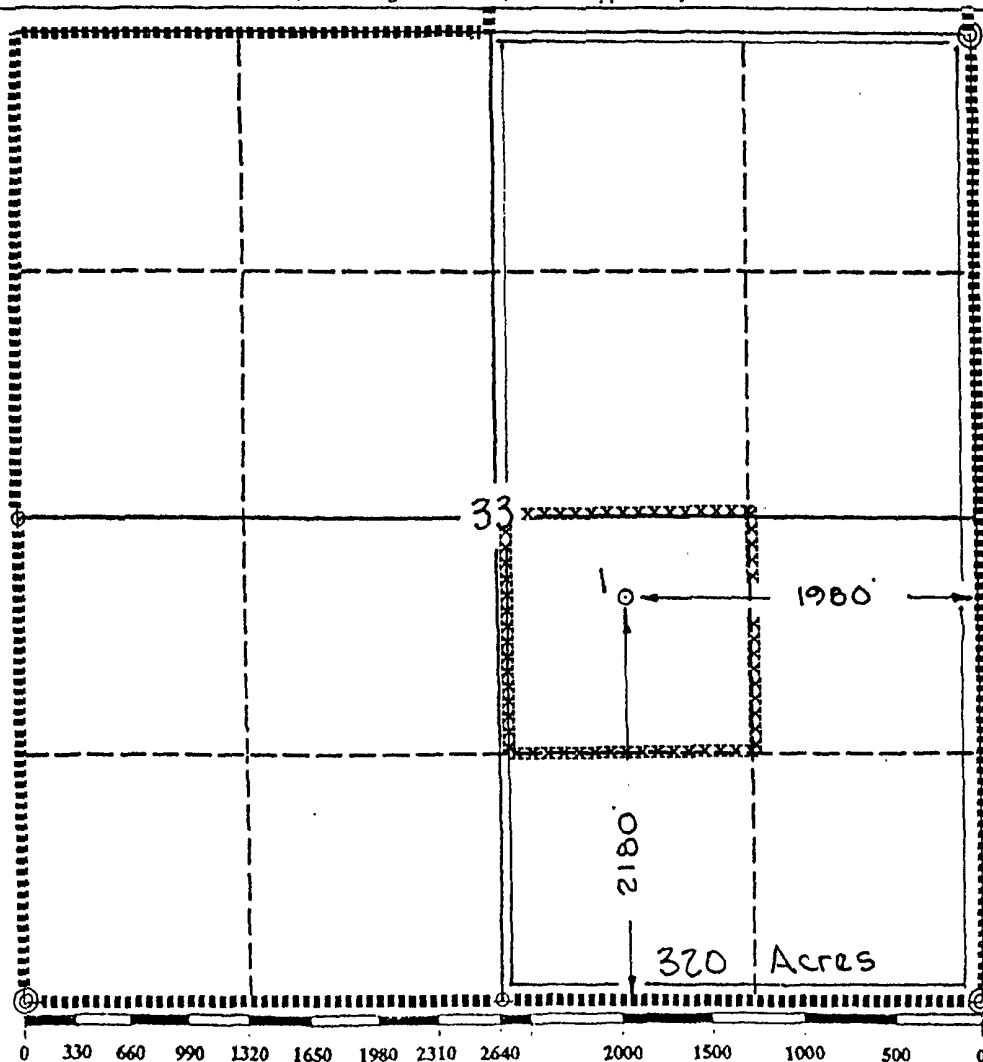
WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

prop 24794

Operator V-F Petroleum, Inc.			Lease Panther Federal		Well No.
TEXACO EXPLORATION AND PRODUCTION INC.			- DOW "B" - 32 - FEDERAL		- 1 - 2
Unit Letter	Section	Township	Range	County	
J	33	17-South	31-East	NMPM	EDDY
Actual Footage Location of Well:					
2180 feet from the South line and		1980 feet from the East line			
Ground level Elev.	Producing Formation		Pool	Dedicated Acreage:	
3760	Morrow Atoka Bone Spring		Widreat Shugart Bone Spring N.	320 40 Acres	

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?
☐ Yes ☐ No If answer is "yes" type of consolidation _____
If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____
No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, 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.

Signature

Printed Name

Royce D. Mariott

Position

Division Surveyor

Company

Texaco Expl. & Prod. Inc.

Date

June 17, 1992

SURVEYOR CERTIFICATION

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

Date Surveyed

June 16, 1992

Signature & Seal of
Professional Surveyor

John S. Piper

Certificate No.

7254 John S. Piper

Sheet **8** of **9**

0 = Found 1" Iron Pipe with GLO Brass Cap

⊙ = Found 2 or 3" Iron Pipe with GLO Brass Cap

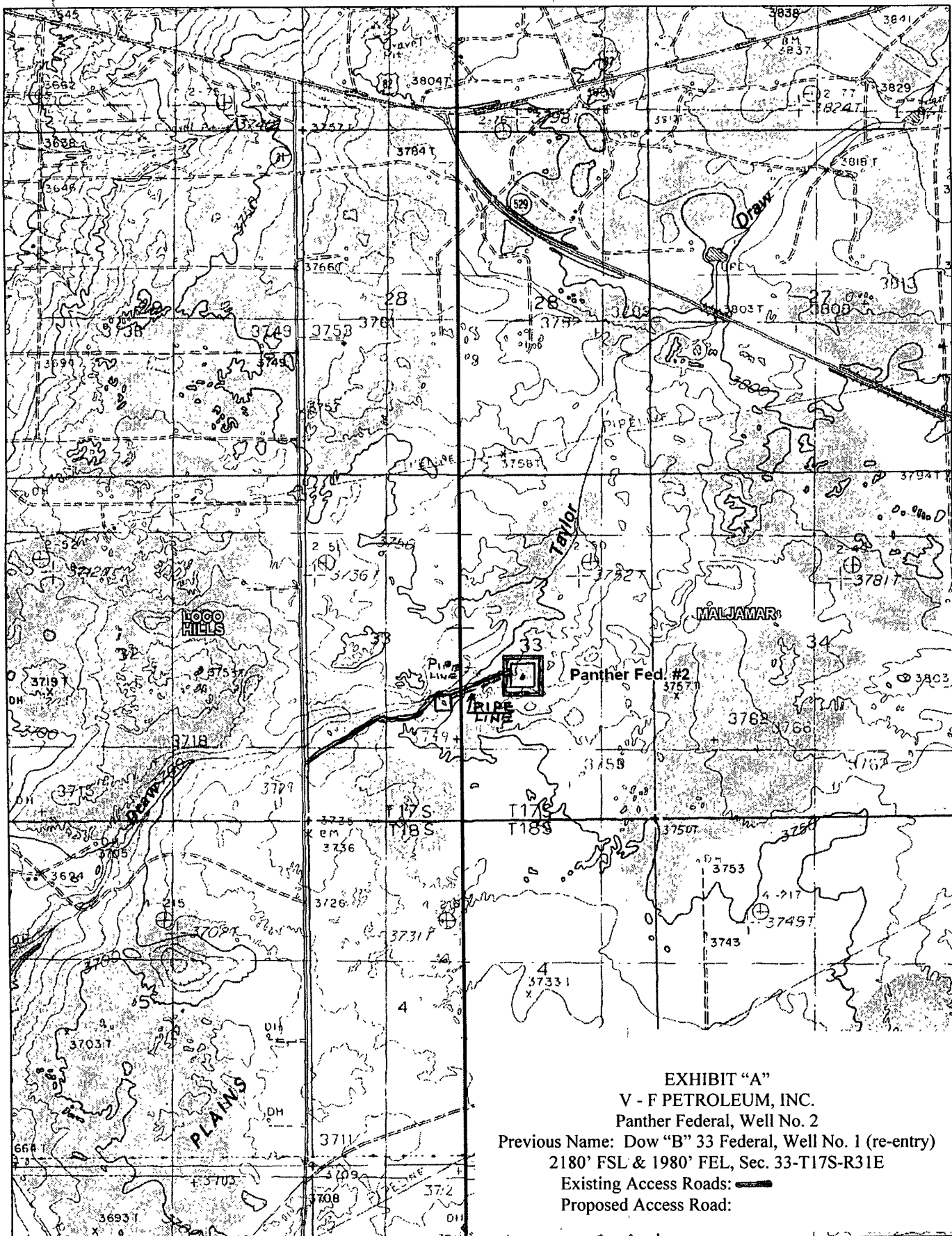
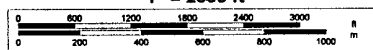


EXHIBIT "A"
 V - F PETROLEUM, INC.
 Panther Federal, Well No. 2
 Previous Name: Dow "B" 33 Federal, Well No. 1 (re-entry)
 2180' FSL & 1980' FEL, Sec. 33-T17S-R31E
 Existing Access Roads:
 Proposed Access Road:

DELORME

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 www.delorme.com

Scale 1 : 24,000
 1" = 2000 ft



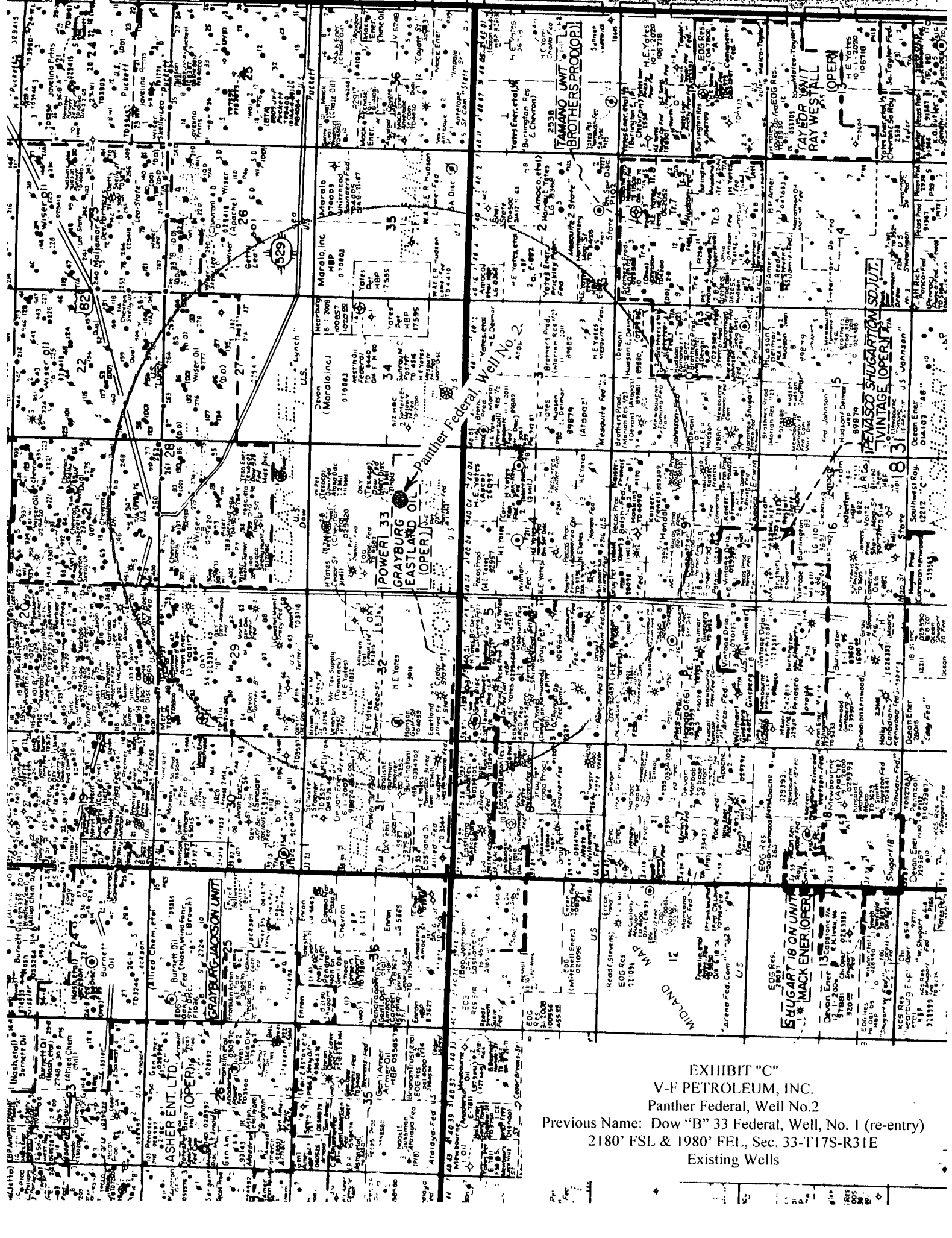


EXHIBIT "C"
V-F PETROLEUM, INC.
Panther Federal, Well No.2
Previous Name: Dow "B" 33 Federal, Well, No. 1 (re-entry)
2180' FSL & 1980' FEL, Sec. 33-T17S-R31E
Existing Wells

APPLICATION FOR DRILLING

V-F PETROLEUM, INC.

Panther Federal, Well No. 2
Re-entry of Dow "B" 33 Federal, Well No. 1
2180' FSL & 1980' FEL, Sec. 33-T17S-R31E
Eddy County, New Mexico
Lease No.: LC-029420-B
(Development Well)

In conjunction with Form 3160-3, Application for Permit to Drill subject well, Chi Operating, Inc. submits the following items of pertinent information in accordance with BLM requirements:

1. The geologic surface formation is recent Permian with quaternary alluvium and other surficial deposits.
2. The estimated tops of geologic markers are as follows:

Rustler	627'	Top Bone Spring	5,235'
Salado	810'	Third Bone Spring	8,465'
Base of Salado	1,880'	Wolfcamp	8,650'
Yates	2,145'	T.D.	8,675'
Grayburg	3,410'		
San Andres	3,885'		

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

Water: Surface water between 100' - 300'. (Behind casing)

Oil: Possible in the Third Bone Spring below 8,465'.

Gas: Some possible in the Bone Spring formation.

4. Existing Casing Program (In hole):

HOLE SIZE	CASING SIZE	WEIGHT	GRADE	JOINT	SETTING DEPTH	QUANTITY OF CEMENT
20"	16"	65.0#	H-40	ST&C	40'	Ready mix to surface. <u>In Hole</u>
15 1/2"	11 3/4"	42.0#	J-55	ST&C	653'	590 sx to surface. " "
11"	8 5/8"	32.0#	N-80	ST&C	5,000'	Circ. 1770 sx to surface " "
7 7/8"	5 1/2"	17.0#	N-80	LT&C	12,100'	2,300 sx TOC @ approx. 4,000' <u>In Hole</u>

5. Proposed Control Equipment: A 7 1/16" 3000 psi wp Shaffer Type LWS Double Gate BOP, and a BIW Stripper Head will be installed on the 11 3/4", 8 5/8", 5 1/2" casing. Casing and BOP will be tested according to Onshore Oil & Gas Order #2, not to exceed maximum surface estimated pressures of 2330 psi, before drilling out the cement plugs. The pipe rams will be operated and checked daily, plus each time drill pipe is out of hole. This will be documented on the drillers log. See Exhibit "E".

MUD PROGRAM:	MUD WEIGHT	VIS.	W/L CONTROL
0' - 8,675': Fresh water mud:	9.4 - 9.5 ppg	28 - 30	No W/L control

7. Auxiliary Equipment: Blowout Preventer, gas detector, Kelly cock, and stabbing valve.

8. Testing, Logging, and Coring Program:

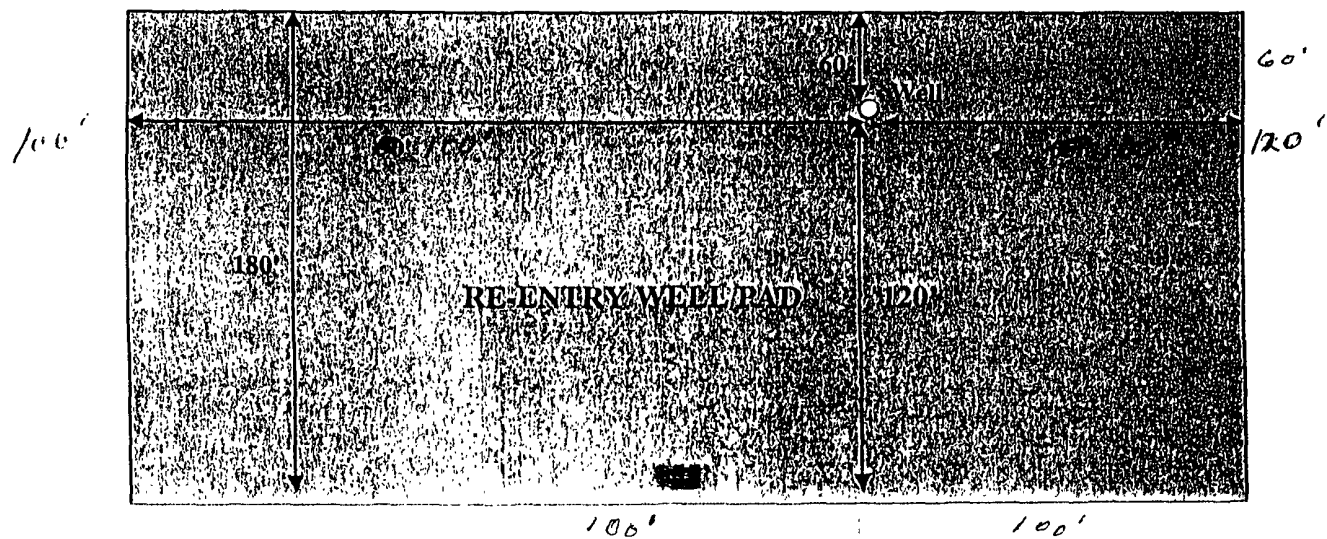
Drill Stem Tests: None.

Logging: Cement Bond Log on 5 1/2" casing then compare with original open hole logs.

Coring: None planned

9. No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered the proposed mud program will be modified to increase the mud weight. Estimated maximum BHP = 4,240 psi and Surface Pressure = 2,331 psi with a temperature of 147°.
10. H₂S: None expected since this well still has the 5 ½" casing in place. None in this well or the two adjoining wells drilled in Sec. 33-T20S-R30E. The offsetting Panther Fed. #1 well was recently re-entered and completed in the Bone Spring and there was no H₂S in this well.
11. Anticipated starting date: August 10, 2009.
Anticipated completion of drilling operations: Approximately 3-4 weeks.

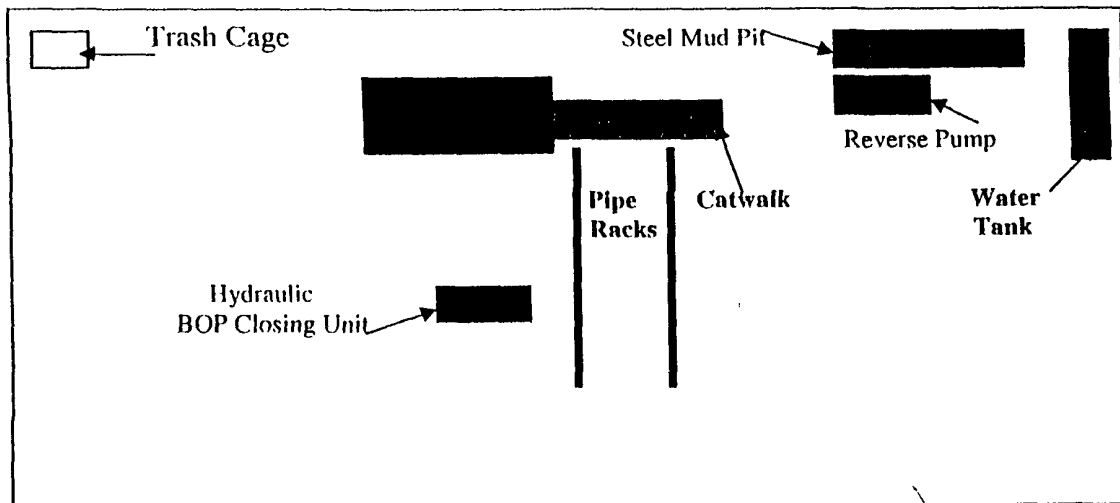
Proposed Re-entry Well Pad for V-F Petroleum, Inc.



Anticipated Re-Entry Pulling Unit Layout for V-F Petroleum, Inc.

PANTHER FEDERAL, Well No. 2

N ↑



S ↓

EXHIBIT "D"
V-F PETROLEUM, INC.
Panther Federal, Well No. 2
Pad & Pit Layout

Panther Fed #2

(DOW B 33 Fed #1)

Cement Plug inside 5 1/2" 0-150'

Cement Plug inside 5 1/2" 523'-776'

Squeeze holes @ 903'
Line to surface?

11 3/4" 653' TOC surface

Squeeze holes @ 1950'
Sqd 50 SK 1-10-78

Cement Plug inside 5 1/2" 1805'-2058'

Cement Plug inside 5 1/2" 3809'-3856'

Grabbing Perts 3688'-3726'
Sqd 100 SK 1-10-78

TOC 5 1/2" 4000'?

Cement Plug inside 5 1/2" 4844'-5097'

8 5/8" 5000' TOC surface

Cement Plug inside 5 1/2" 7154'-7380'

Cement Plug inside 5 1/2" 8675'-8901'

DI Tool 8900'?

Liner Hanger

Cement Plug inside liner 9315'-11,300'

2 7/8" Liner 9495'-11,391'
TOC 10,000'

Morrow Perts 11,614'-11,777' Morrow
5 1/2" 12,100'

3000 psi System

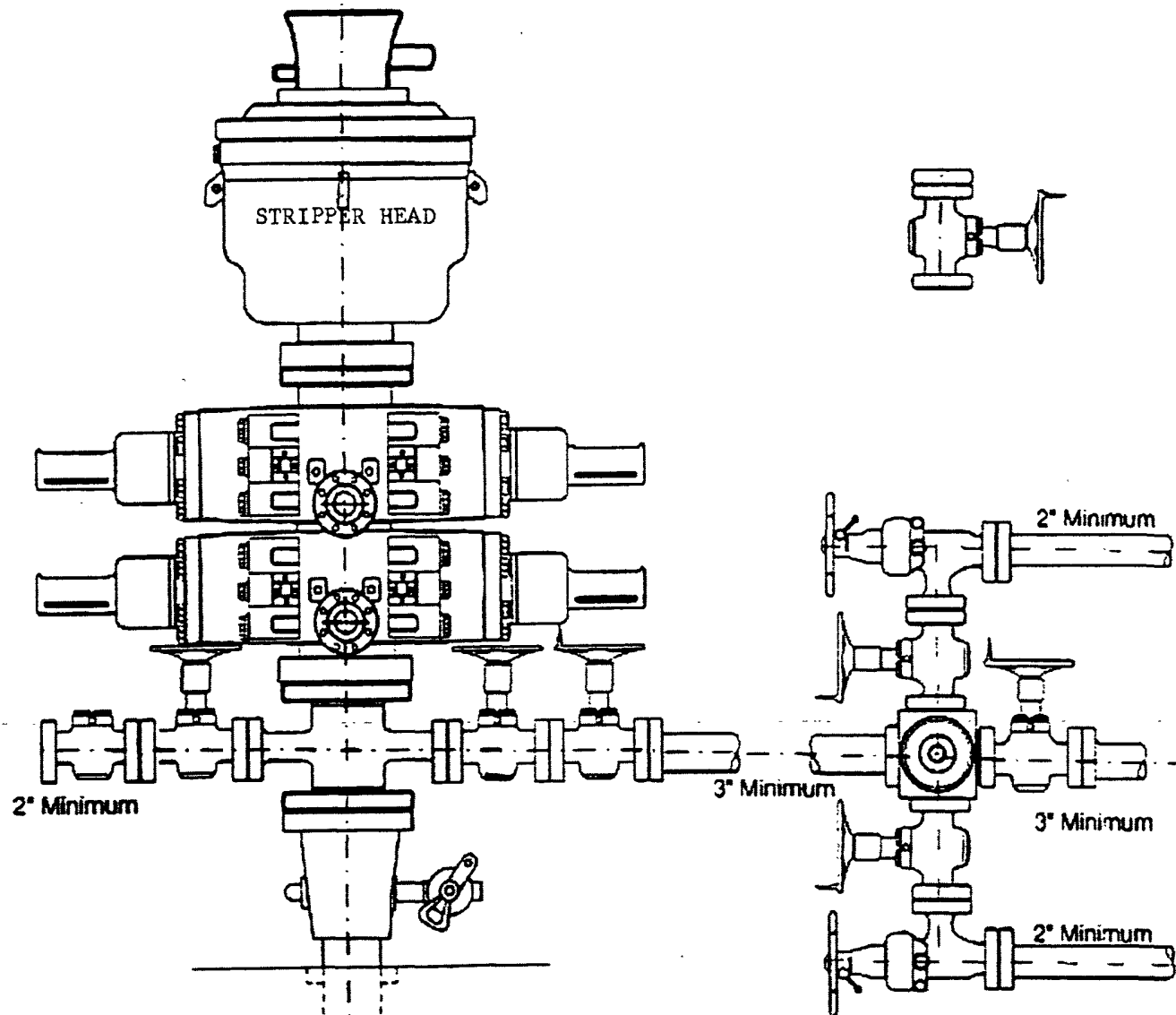


Figure 3-2

EXHIBIT "E"
V-F PETROLEUM, INC.
Panther Federal, Well No. 2
BOP Specifications

V-F PETROLEUM, INC. –PANTHER FEDERAL, WELL No. 2
API: 30-015-2706800 (Previous Name: Dow B “33” Fed., Well No. 1)

A- Sec. 33, T17S R31E: 2180’ FSL & 1980’ FEL, EDDY COUNTY, NM

DESIGN: Closed System with steel pits for Work-Over Rig for Re-entry

Contact: Wayne Luna, Field Superintendent for V-F Petroleum, Inc.
Cell #: 432-557-2688 Office # 432-683-3344

Monitoring: 24 hour service during time.

Equipment:

- 500 bbl steel tank for fresh water
- 250 bbl steel pit for working pit
- 250 bbl “½ tank” steel pt for cuttings

Cuttings and associated liquids will be hauled to a State regulated third party disposal site: Controlled Recovery, Inc. facility Permit # NMI-6/R-9166

I & W, Inc. will be responsible for hauling cuttings to CRI and clean fluid to T-Bone water disposal operated by Judah Oil Co., on Eddy County Rd. 222.

This re-entry work-over is in existing 5 ½” casing with cement.

OPERATIONS:

Closed Bin equipment will be inspected daily by each tour and any necessary maintenance performed.

Any leak in system will be repaired and or/contained immediately.

OCD will be notified within 48 hours of the spill.

Remediation process started immediately.

CLOSURE:

During drilling and closing operations all liquids, drilling fluids and cuttings will be hauled off via I & W, Inc. to the above stated disposal facilities.

MULTI POINT SURFACE USE AND OPERATIONS PLAN

V-F PETROLEUM INC.

Panther Federal, Well No. 2

Re-entry of Dow "B" 33 Federal, Well No. 1

2180' FSL & 1980' FEL, Sec. 33-T17S-R31E

Eddy County, New Mexico

Lease No.: LC-029420-B

(Development Well)

This plan is submitted with the Application for Permit to Drill the above described well. The purpose of the plan is to describe the location of the proposed well, the proposed construction activities and operations plan, to be followed in rehabilitating the surface environmental effects associated with the operations.

1. EXISTING ROADS:

- A. Exhibit "A" is a portion of a USGS/BLM Topo map showing the location of the proposed well as staked. The well site location is approximately 7 road miles southeast of Loco Hills, New Mexico. Traveling east from Loco Hills on U.S. Highway 82 there will be approximately 7 miles of paved highway and .6 mile of gravel oilfield road.
- B. Directions: Travel east from Loco Hills, NM on U.S. Highway 82 for approximately 5 miles to the Eddy Road 222 turnoff. Turn south on CR 222 for 2.0 miles to an oil field road on the east side of highway. Turn east for .7 mile. The existing location dry hole marker is staked as the Dow "B" 33 Federal, Well No. 1. The existing road will access the pad on the northwest corner of the existing well site.

2. PLANNED ACCESS ROAD:

- A. Length and Width: The existing access road will be 12' wide and approximately 1000' in length from the NE corner of the Panther Federal, Well No. 1 well pad to the NW corner of the existing well pad.
- B. Construction: The existing access road will be upgraded by grading and topping with compacted caliche.
- C. Turnouts. One turnout will be required increasing the width to 20 feet for passing
- D. Culverts: None required.
- E. Cuts and Fills: None required.
- F. Gates, Cattle guards: None required.
- G. Off Lease R/W: None required.

3. LOCATION OF EXISTING WELLS:

- A. Existing wells within a two-mile radius are shown on Exhibit "C".

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES;

- A. There are production facilities on the lease at this time.
- B. If the well proves to be commercial, the necessary production facilities, and a surface 2 7/8" steel flow line will be run parallel to the access road to the Panther Federal, Well #1 tank battery. The gas separated at the No. 1 well will be sent back to the Panther Fed., Well #2 through a 1" poly line SDR 11, 160 psi to be used as fuel for the production-process.

5. LOCATION AND TYPE OF WATER SUPPLY:

- A. It is planned to drill the proposed well with fresh water that will be obtained from private or commercial sources and will be transported over the existing and proposed access roads.

6. SOURCE OF CONSTRUCTION MATERIALS:

- A. Caliche for surfacing the proposed access road and well site pad will be obtained on location from the existing pad and road. If additional caliche is required, it will be obtained from the nearest available caliche pit. No surface materials will be disturbed except those necessary for actual grading, leveling and repair of the drill site and access road.

7. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drilling fluids and cuttings will be stored in the work over drilling rig tanks with disposal of viscous fluids at the CRI disposal plant and clean fluids hauled to T-Bone water disposal on Eddy CR 222.
- B. Water produced during operations will be collected in tanks until hauled to an approved disposal system.
- C. Oil produced during operations will be stored in tanks until sold.
- D. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- E. Trash, waste paper, garbage and junk will be contained in trash bins to prevent scattering and will be removed for deposit in an approved sanitary landfill within 30 days after finishing drilling and/or completion operations.

8. ANCILLARY FACILITIES:

- A. None required.

9. WELL SITE LAYOUT:

- A. Exhibit "D" shows the relative location and dimensions of the well pad, steel water and mud tanks and associated components.
- B. Mat Size: 200' X 180'.
- C. Cut & Fill: The existing pad will not require any cuts and fills except for clearing vegetation growth and reducing the size of the pad for the extra caliche needed on the road and pad repair.
- D. The surface will be repaired, as needed, by toping with compacted caliche from the existing pad.

10. PLANS FOR RESTORATION OF THE SURFACE:

- A. After completion of drilling and/or completion operations, all equipment and other material not required for operations will be removed. The location will be cleaned of all trash and junk to leave the well site in an aesthetically pleasing a condition as possible
- B. Any steel tanks containing viscous fluids will be taken to CRI for disposal. Clean fluid will be hauled by I & W, Inc. to the T-Bone water disposal on Eddy CR 222.

V-F Petroleum Inc.

Panther Federal, Well No. 2 (Re-entry)

Page 3

- C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible.

11. OTHER INFORMATION:

- A. Topography: The existing well site and access road is located east of Taylor Draw in the Querecho Plains area. The location has a northwesterly slope of 3% from an elevation of 3760'.
- B. Soil: The topsoil at the well site is a moderately dark brown colored, non-calcareous clay soil with underlying caliche. The soil is fairly shallow over indurated caliche about 3-4 feet below surface. The soil is of the Kimbrough-Stegal Loam complex.
- C. Flora and Fauna: The vegetation cover is a sparse with grass cover of three-awn, grama, dropseed and other miscellaneous native grasses along with plants of mesquite, yucca, oak-brush, sage, broomweed, cacti and miscellaneous weeds and wildflowers. The wildlife consists of rabbits, coyotes, rattlesnakes, lizards, dove, quail and other wildlife typical of the semi-arid desert land.
- D. Ponds and Streams: None in the immediate vicinity.
- E. Residences and Other Structures: None, but existing oil field facilities
- F. Land Use: Cattle grazing.
- G. Surface Ownership: The proposed well site and access road are on Federal surface.
- H. There is no evidence of archaeological, historical or cultural sites on the proposed existing well site or road. An archaeological survey was conducted for the original well in June of 1992 and their report was submitted to the appropriate government agencies.

12. OPERATOR'S REPRESENTATIVE:

- A. The field representative responsible for assuring compliance with the approved surface use and operations plan is as follows:

Jerry Gahr
V-F Petroleum Inc.
P.O. Box 1889
Midland, TX 79702
Office Phone: (432) 683-3344


Tom Beall
V-F Petroleum, Inc.
P.O. Box 1889
Midland, TX 79702
Office Phone: (432) 687-0008

V-F Petroleum Inc.
Panther Federal, Well No. 2 (Re-entry)

CERTIFICATION:

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

July 7, 2009


George R. Smith
Agent for V-F Petroleum

POWER OF ATTORNEY**DESIGNATION OF AGENT**

V-F Petroleum Inc., hereby names the following person as its agent

Name of Agent: George R. Smith d/b/a Energy Administrative Services Company

Agents Address: P.O. Box 458, Roswell, NM 88202

Agent's Telephone Number: (575) 623-4940

GRANT OF SPECIAL AUTHORITY

V-F Petroleum Inc., grants its agent the authority to act for it with respect to the following only:

1. Executing forms required to be filed with the Bureau of Land Management of the Department of Interior of the United States of America.
2. Executing forms required to be filed with the Oil Conservation Division of the New Mexico Energy, Minerals and Natural Resources Department.

EFFECTIVE DATE

This power of attorney is effective immediately.

RELIANCE ON THE POWER OF ATTORNEY

Any person, including the agent, may rely upon the validity of this power of attorney or a copy of it unless that person knows it has terminated or is invalid.

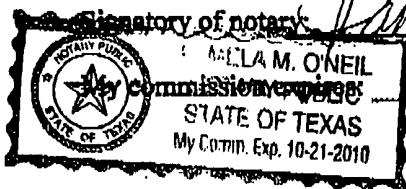
SIGNATURE AND ACKNOWLEDGMENT

V-F Petroleum Inc.By: Sandra K. LawlisTitle: Vice PresidentDate: 1/28/09Address: P.O. Box 1889, Midland, TX 79702Telephone: 432-683-3344

STATE OF

COUNTY OF

This instrument was acknowledged before me on January 28, 2009 by
Sandra K. Lawlis, Vice President of V-F Petroleum Inc.
, acting on behalf of said corporation.



PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	V-F PETROLEUM
LEASE NO.:	LC029420B
WELL NAME & NO.:	PANTHER FEDERAL WELL #2
SURFACE HOLE FOOTAGE:	2180' FSL & 1980' FEL
BOTTOM HOLE FOOTAGE:	2180' FSL & 1980' FEL
LOCATION:	Section 33, T. 17 S., R 31 E., NMPM
COUNTY:	Eddy County, New Mexico

TABLE OF CONTENTS

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.

- ☐ **General Provisions**
- ☐ **Permit Expiration**
- ☐ **Archaeology, Paleontology, and Historical Sites**
- ☐ **Noxious Weeds**
- ☒ **Special Requirements**
 - Lesser Prairie Chicken

- ☒ **Construction**
 - Notification
 - Topsoil
 - Closed Loop System
 - Federal Mineral Material Pits
 - Well Pads
 - Roads

- ☒ **Road Section Diagram**

- ☒ **Drilling**
 - Reentry

- ☒ **Production (Post Drilling)**
 - Well Structures & Facilities
 - Pipelines
 - Electric Lines

- ☒ **Closed Loop System/Interim Reclamation**
- ☐ **Final Abandonment/Reclamation**

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.

V. SPECIAL REQUIREMENT(S)

Timing Limitation Stipulation/Condition of Approval for Lesser Prairie-Chicken: Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 ft. from the source of the noise.

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well. For more installation details, contact the Carlsbad Field Office at 575-234-5972

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) 234-5972 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 of the well pad. The topsoil to be stripped is approximately 6 inches in depth. The topsoil shall not be used to backfill the reserve pit and will be used for interim and final reclamation.

C. CLOSED LOOP SYSTEM

Closed Loop System: v-door east

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

If the operator elects to surface the access road and/or well pad, mineral materials extracted during construction of the reserve pit may be used for surfacing the well pad and access road and other facilities on the lease.

Payment shall be made to the BLM prior to removal of any additional federal mineral materials from any site other than the reserve pit. 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. 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 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

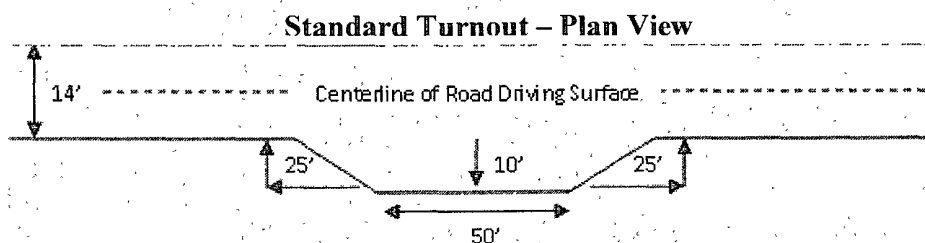
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

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:

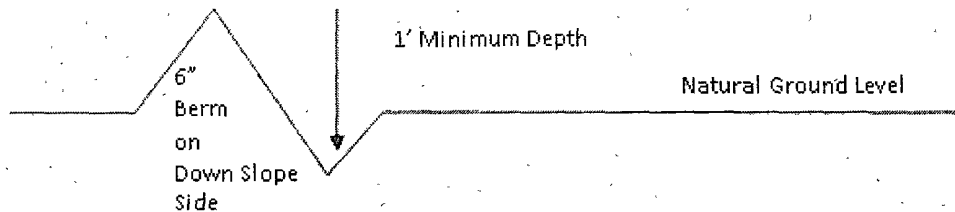


Drainage

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

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

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.

Typical Turnout Plan

Diagram showing the plan view of a turnout. The center line of the roadway is indicated. The turnout width is 160 feet. The shoulders are 25 feet wide. The transition zones are 25 feet wide. The total width of the turnout is 200 feet (160 feet + 2 x 20 feet). The maximum width of the turnout is 170 feet. The transition zones are 25 feet wide. The total width of the turnout is 200 feet (160 feet + 2 x 20 feet). The maximum width of the turnout is 170 feet.

Irreversible turnouts shall be constructed on all single lane roads on all blind curves with additional lights as needed to keep spacing below 1000 feet.

Embankment Section

Diagram showing the cross-section of an embankment. The top width is 21 feet. The crown is 2 feet. The natural ground is shown. The height of fill at the shoulder is 0' - 4' and above 4'.

height of fill at shoulder	embankment slope
0' - 4'	3:1
above 4'	2:1

Side Hill Section

Diagram showing the cross-section of a side hill. The road type is shown. The crown is 2 feet. The natural ground is shown. The depth is measured from the bottom of the ditch.

road type	crown
earth surface	.03 - .05 ft/ft
aggregate surface	.02 - .04 ft/ft
paved surface	.02 - .03 ft/ft

Typical Outsloped Section

Diagram showing the cross-section of a typical outsloped section. The natural ground line is shown. The back slope is 2:1. The center line is shown. The travel surface is shown. The slope is 2 - 4%.

Typical Insloped Section

Diagram showing the cross-section of a typical insloped section. The natural ground line is shown. The back slope is 2:1. The center line is shown. The travel surface is shown. The slope is 2 - 4%.

VII. DRILLING – RE-ENTRY (Formerly the Dow B 33 Federal #1)

A. DRILLING OPERATIONS REQUIREMENTS

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

- a. BOPE test
- b. CIT test

☒ **Eddy County**

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-282

1. **Although Hydrogen Sulfide has not been reported in this section, it is always a potential hazard. If Hydrogen Sulfide is encountered, please report measured amounts and formations to the BLM.**
2. 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.

B. CASING – Re-entry

A CIT is to be performed on the 5-1/2" casing per Onshore Oil and Gas Order 2.III.B.1.h after drilling out the first six plugs to +/- 8675 feet. Tag the plug at +/- 8675 feet and perform CIT.

1. **The 11-3/4" surface casing is set at 653 feet with cement circulated to surface.**
2. **The 8-5/8" intermediate casing is set at 5000 feet with cement circulated to surface.**
3. **The 5-1/2" production casing is set at 12100 feet (PBTD 11900') with TOC reported at 4000' and plugs from 11770', 8901-8675', 7380-7140', 5047-4844', 3809-3556, 2058-1805', 776-523' and from 150' to surface. A CBL shall be run from 8000 feet to surface by the operator to verify TOC. This will also add to information that will be required when the well is plugged.**
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. Operator is installing a Double Gate BOP with a BIW Stripper Head – approved, test required after drilling out the first cement plug.**
3. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. The tests shall be done by an independent service company.
 - b. The results of the test shall be reported to the appropriate BLM office.
 - c. All tests are required to be recorded on a calibrated test chart. **A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.**
 - d. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.

RGH 082509

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.

Containment Structures

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.

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, Munsell Soil Color Chart # 5Y 4/2

B. PIPELINES

STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES

A copy of the grant and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
3. The holder agrees to indemnify the United States against any liability arising from the

release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to activity of the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. The holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. The holder shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the right-of-way or permit area:

- a. Activities of the holder including, but not limited to construction, operation, maintenance, and termination of the facility.
- b. Activities of other parties including, but not limited to:
 - (1) Land clearing.
 - (2) Earth-disturbing and earth-moving work.
 - (3) Blasting.
 - (4) Vandalism and sabotage.
- c. Acts of God.

The maximum limitation for such strict liability damages shall not exceed one million dollars (\$1,000,000) for any one event, and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred.

This section shall not impose strict liability for damage or injury resulting primarily from an act of war or from the negligent acts or omissions of the United States.

5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve the holder of any responsibility as provided herein.

6. All construction and maintenance activity will be confined to the authorized right-of-way width of 25 feet.
7. No blading or clearing of any vegetation will be allowed unless approved in writing by the Authorized Officer.
8. The holder shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain. In hummocky or dune areas, the pipeline will be "snaked" around hummocks and dunes rather than suspended across these features.
9. The pipeline shall be buried with a minimum of 24 inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.
10. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.
11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.
12. Excluding the pipe, all above-ground structures not subject to safety requirement shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2; designated by the Rocky Mountain Five State Interagency Committee.
13. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. Signs will be maintained in a legible condition for the life of the pipeline.
14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.

15. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder 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 will be made by the authorized officer to determine appropriate cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

(March 1989)

C. ELECTRIC LINES

IX. INTERIM RECLAMATION & RESERVE PIT CLOSURE

A. INTERIM RECLAMATION

If the well is a producer, interim reclamation shall be conducted on the well site in accordance with the orders of the Authorized Officer. 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.

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well.

The operators should 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.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche 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.

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:

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

*Pounds of pure live seed:

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

X. 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.

On private surface/federal mineral estate land the reclamation procedures on the road and well pad shall be accomplished in accordance with the private surface land owner agreement.