N.M. Oil Cons. Division 1625 N. French Dr. Hobbs, NM 88240



and Wicker Books

Form 3160-3 (August 1999)

OMB No. 1004-0136 Expires November 30, 2000 UNITED STATES 5. Lease Serial No. DEPARTMENT OF THE INTERIOR NM - 01135BUREAU OF LAND MANAGEMENT 6. If Indian, Allottee or Tribe Name APPLICATION FOR PERMIT TO DRILL OR REENTER 7. If Unit or CA Agreement, Name and No. 1a. Type of Work: DRILL □ REENTER 8. Lease Name and Well No. 1b. Type of Well: Oil Well Gas Well Other ☐ Single Zone ☐ Multiple Zone South Lusk 33 Federal #1 9. API Well No. Name of Operator 0-025 Cabal Energy Corporation 3a. Address 415 W. Wall, Suite 1700 3b. Phone No. (include area code) 10, Field and Pool, or Exploratory Dusta Morrow Midland, TX 79701 (432) 682-0440 11. Sec., T., R., M., or Blk. and Survey or Area 4. Location of Well (Report location clearly and in accordance with any State requirements.*) At surface 1545 FNL & 1980 FWL Section 33 At proposed prod. zone 1545 FNL & 1980 T - 19S R - 32E 12. County or Parish 13. State 14. Distance in miles and direction from nearest town or post office* 17 miles south of Maljamar Lea County New Mexico 15. Distance from proposed* 17. Spacing Unit dedicated to this well 16. No. of Acres in lease location to neares property or lease line, ft. (Also to nearest drig. unit line, if any) 1545' 639.12 320 acres (W/2) Section 33 20. BLM/BIA Bond No. on file Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 19. Proposed Depth 400' S.(P&A) 12,800' NM2860 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start* 23. Estimated duration 3539' GL June 15, 2003 45 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. Operator certification 3. A Surface Use Plan (if the location is on National Forest System Lands, the Such other site specific information and/or plans as may be required by the SUPO shall be filed with the appropriate Forest Service Office). authorized officer. 25. Signature Name (Printed/Typed) Randell K. Ford 5-6-03 Title President Approved by (Signey RICHARD A. WHITLEY Name (Printed/Typed) JUN 2 U 2003 ISI RICHARD A. WHITLEY Title NM STATE OFFICE

Application approval does not warrant or certify the the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. APPROVAL FOR 1 YEAR Conditions of approval, if any, are attached.

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

*(Instructions on reverse)

APPROVAL SUBJECT TO General requirements and SPECIAL STIPULATIONS ATTACHED

OPER. OGRID NO. <u>194930</u> PROPERTY NO. 3251 POOL CODE 8075 EFF. DATE 6-25-0

DISTRICT I P.O. Box 1980, Hobbs, NM 88241-1980

State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102 Revised February 10, 1994

Submit to Appropriate District Office

DISTRICT II P.O. Drawer DD, Artesia, NM 88211-0719

OIL CONSERVATION DIVISION P.O. Box 2088

State Lease — 4 Copies Fee Lease — 3 Copies

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410 Santa Fe, New Mexico 87504-2088

DISTRICT IV P.O. BOX 2088, SANTA FE, N.M. 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
30-025-363	3/2 80759 Lusk. Morro	ω
Property Code	Property Name	Well Number
32512	SOUTH LUSK "33" FEDERAL	1
OGRID No.	Operator Name	Elevation
194930	CABAL ENERGY CORPORATION	3539'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	33	19-S	32-E		1545	NORTH	1980	WEST	LEA

Bottom Hole Location If Different From Surface

			2000011	22010 200					
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint o	or Infill Co	nsolidation	Code Or	der No.				<u> </u>

$\mathcal{I} \mathcal{L} \mathcal{U}$	
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL A OR A NON-STANDARD UNIT HAS BEEN APPROVE	
3538.6' 3542.9' 1980' 3534.5' 3535.9'	OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief. Signature Randell K. Ford Printed Name President Title 4-24-03 Date SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervison and that the same is true and correct to the best of my belief.
	Date Surveyed J. E. LMP Signature & Seat of Professional Stiveyor 03.11.0418 Certificate No: Royald J. Edson 3239 GARY Edson 12841

DRILLING PROGRAM

CABAL ENERGY CORPORATION SOUTH LUSK "33" FEDERAL #1

Section 33, T-19-S, R-32-E Lea County, New Mexico

The following items supplement Form 3160-3 in accordance with instructions contained in Onshore Oil and Gas Orders #1 and #2, and all other applicable federal and state regulations.

1. <u>ESTIMATED TOPS OF GEOLOGIC MARKERS:</u>

Anhydrite	890'
Yates	2,695'
Capitan	3,062'
Delaware	4,760'
Wolfcamp Carbonate	10,605'
Strawn	11,335'
Atoka Clastic	11,790'
Atoka Sand	11,885'
Morrow Lime	12,020'
Middle Morrow	12,275'
Lower Morrow	12,550'
Total Depth	12,800'
i otai Deptii	12,000

2. ESTIMATED DEPTHS TO WATER, OIL, OR GAS FORMATIONS:

Fresh Water Above 200'
Oil and Gas Delaware, Atoka Sand, Middle Morrow, Lower Morrow

3. Pressure control equipment: The blow out preventer equipment (BOP) shown in Exhibit #1 will consist of a 3000 psi double ram type preventer for drilling the intermediate hole. The blowout preventer stack for the production hole will consist of at least a double-ram blowout preventer and annular preventer rated to 5000 psi working pressure. A diagram of the BOPs and choke manifold is attached. All BOPs and accessory equipment will be tested according to Onshore Order #2 before drilling out.

4. PROPOSED CASING PROGRAM:

Hole Size	Interval	Casing Size	Weight	Grade, Joint
17-1/2" 12-1/4"	0 - 800' 0 - 4,500'	13-3/8" 9-5/8"	48# 40#	H-40 ST&C K-55 LT&C
8-1/2"	0 – 12,800'	5-1/2"	17-1/2#	N-80 LT&C

Equivalent or adequate grades and weights of casing may be substituted at time casing is run, depending on availability. Changes will be relayed to BLM prior to running.

5. PROPOSED CEMENTING PROGRAM

20" conductor

cemented with ready mix to surface

13-3/8" surface

600 sxs Premium Plus cement, 2% calcium chloride

9-5/8" intermediate 900 sxs Interfill "C" cement, 1/4# per sx Flocele

250 sxs Premium Plus cement

5-1/2" production

400 sxs Light Cement

480 sxs Super "H" cement .5% Halad, .4% CFR-3, 3# per sx

Gilsonite

6. PROPOSED MUD SYSTEM:

DEPTH	DESCRIPTION	MUD WEIGHT	VISCOSITY	WATER LOSS
0 – 800'	fresh water	8.6 – 8.8 ppg	28 – 30	NC
800 – 4,500'	brine water	10.0 – 10.2 pp	g 28 – 34	NC
4,500 – 12,800'	fresh/brine/mud	8.4 - 10.4 ppg	28 – 40	6-8 cc

7. TESTING, LOGGING AND CORING PROGRAM:

Samples

10' Samples from 5,200'

DST's

Possible Cisco, Strawn & Atoka

Logging

Density, Lateral, Resistivity

Coring

Possible sidewall core

8. **ABNORMAL PRESSURES AND TEMPERATURES:**

None anticipated. Maximum bottom hole pressure should not exceed 5,200 psi.

This area has a potential H₂S hazard. An H₂S drilling plan is attached.

ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:

It is planned that operations will commence on June 15, 2003. Drilling should be completed within 45 days followed by completion operations.

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

CABAL ENERGY CORPORATION

South Lusk "33" Federal #1

I. HYDROGEN SULFIDE TRAINING

- A. All regularly assigned personnel, contracted or employed by Cabal Energy Corporation, will receive training from a qualified instructor in the following areas prior to commencing drilling potential hydrogen sulfide bearing formations in this well:
 - 1. The hazards and characteristics of hydrogen sulfide (H_2S) .
 - 2. The proper use and maintenance of personal protective equipment and life support systems.
 - 3. The proper use of H₂S detectors, alarms, warning systems, briefing areas, evacuation procedures and prevailing winds.
 - **4.** The proper techniques for first aid and rescue procedures.
- **B.** In addition, supervisory personnel will be trained in the following areas:
 - 1. The effects of H₂S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
 - Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
 - 3. The contents and requirements of the H₂S Drilling Operations Plan.
- C. There will be an initial training session just prior to encountering a known or probable H₂S zone (within 3 days or 500 feet) and weekly H₂S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H₂S Drilling Operations Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

II. H₂S SAFETY EQUIPMENT AND SYSTEMS

Note: All H_2S safety equipment and systems will be installed, tested and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonably expected to contain H_2S .

A. Well Control Equipment.

- 1. Flare line with continuous pilot.
- 2. Choke manifold with a minimum of one remote choke.
- 3. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
- **4.** Auxiliary equipment to include: annular preventer, mud-gas separator, rotating head and flare.

B. Protective Equipment for Essential Personnel:

Mark II Surviveair 30-minute units located in the dog house and at briefing areas, as indicated on well site diagram.

C. H₂S Detection and Monitoring Equipment:

- 1. Two portable H₂S monitors positioned on location for best coverage and response. These units have warning lights and audible sirens when H₂S levels of 20 ppm are reached.
- 2. One portable SO₂ monitor positioned near flare line.

D. Visual Warning Systems

- 1. Wind direction indicators are shown on well site diagram.
- 2. Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance form the immediate location. Bilingual signs will be used when appropriate. See example attached.

E. Mud Program

1. The Mud Program has been designed to minimize the volume of H₂S circulated to the surface. Proper mud weights, safe drilling practices and the use of H₂S scavengers will minimize hazards when penetrating H₂S bearing zones.

2. A mud-gas separator will be utilized as needed.

F. Metallurgy:

All drill strings, casing, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and line and valves shall be suitable for H₂S service.

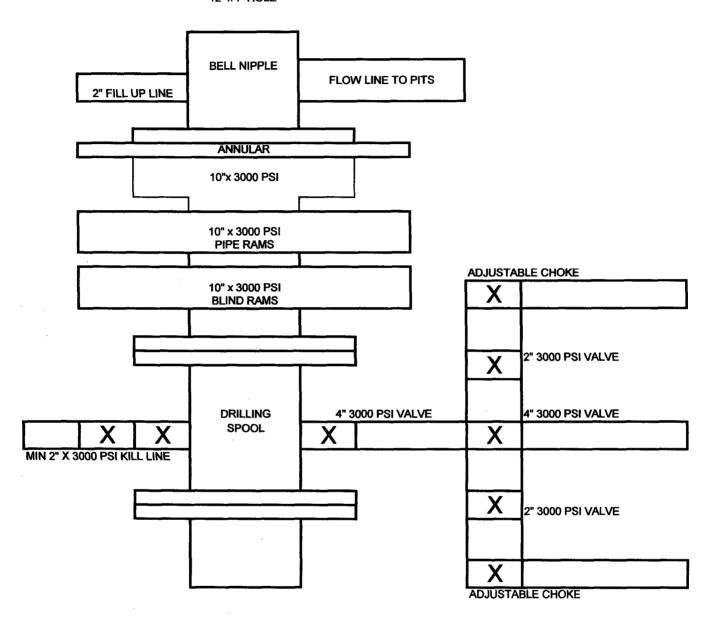
G. Communication:

Cellular telephone communications in company vehicles, rig floor and mud logging trailer.

H. Well Testing:

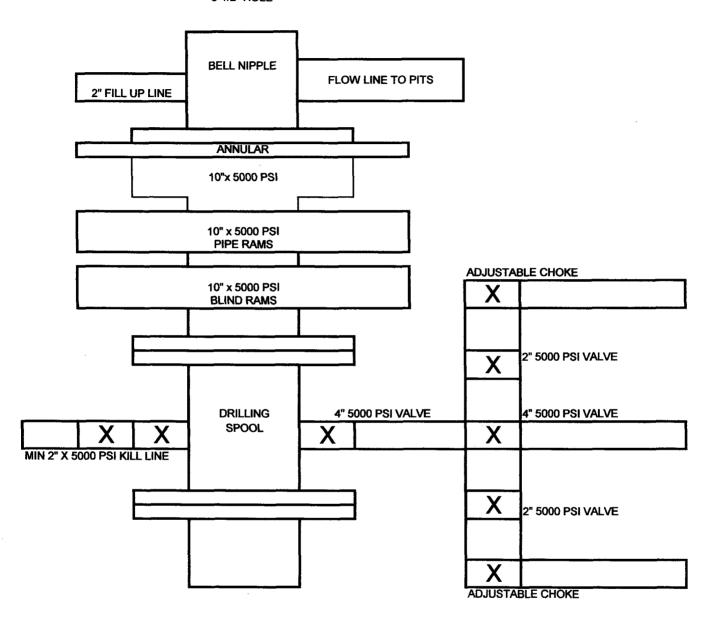
Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity, which are necessary to safely and adequately conduct the test. The drill stem testing and an H_2S environment will be conducted during the daylight hours.

BOP SCHEMATIC FOR 12-1/4" HOLE



Cabal Energy Corporation South Lusk 33 Federal #1 Lea County, New Mexico

BOP SCHEMATIC FOR 8-1/2" HOLE



Cabal Energy Corporation South Lusk 33 Federal #1 Lea County, New Mexico

MULTI POINT SURFACE USE AND OPERATIONS PLAN FOR

CABAL ENERGY CORPORATION South Lusk "33" Federal #1

1545' FNL & 1980' FWL Section 33, T-19-S, R-32-E Lea County, New Mexico Lease No.: NM 01135

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 and environmental effects associated with the operation.

1. **EXISTING ROADS**:

- A. Exhibit "A" is a location verification map showing the location of the proposed well as staked. The well site location is approximately 17 road miles South of Maljamar, New Mexico.
- B. Directions: Traveling West out of Hobbs on Hwy 62 / 180 drive approximately 32 miles then turn right (North) onto 176. Go 4.2 miles, and then turn right (North) onto CR-126. Go 4 miles; turn right (East) onto a caliche road. Go 1.3 miles to location.

2. PLANNED ACCESS ROAD:

- A. Length and Width: The proposed access road will be approximately 250' long and 12' wide and run East to the SW corner of the location.
- B. Construction: The proposed access road will be constructed by grading and topping with compacted caliche. The surface will be properly drained.
- C. Turnouts: None required.
- D. Culverts: None necessary.
- E. Cuts and Fills: None required.
- F. Gates and Cattle Guards: None necessary.
- G. Off lease right of way: None required.

3. LOCATION OF EXISTING WELLS:

Existing wells in the immediate area are shown on the Vicinity Map, Exhibit "B".

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

- A. Cabal Energy Corporation has no production facilities on the lease at this time.
- B. If the well proves to be commercial, the necessary production facilities, gas separation-process equipment and tank battery, if required, will be installed on the drilling pad.

5. LOCATION AND TYPE OF WATER SUPPLY:

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 MATERIAL:

Caliche for surfacing the proposed access road and well site pad will be obtained from the location, if available, or from an approved Federal pit. No surface materials will be disturbed except those necessary for actual grading and leveling of the drill site and access road.

7. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drill cuttings will be disposed of in the reserve pits.
- B. Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry.
- C. All pits will be fenced with normal fencing materials to prevent livestock from entering the area.
- D. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or a separate disposal application will be submitted to the BLM for approval.
- E. Oil Produced during tests will be stored in test tanks.
- F. Current laws and regulations pertaining to the disposal of human waste will be complied with.

G. All trash and debris will be removed from the well site within 30 days after finishing drilling and/or completion operations.

8. ANCILLARY FACILITIES:

None required.

9. WELL SITE LAYOUT:

- A. Exhibit "C" shows the relative location and dimensions of the well pad, reserve pits, and major rig components. The pad and pit area has been staked and flagged 500' x 500'.
- B. Mat Size: 225' x 300', plus 150' x 150' reserve pit on the north.
- C. Cut & Fill: The location will require a 6-inch cut on the north with fill to the south.
- D. The surface will be topped with compacted caliche and the reserve pits will be plastic lined.

10. PLANS FOR RESTORATION OF THE SURFACE:

- A. After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. The well site will be cleaned of trash leaving the site aesthetically pleasing to the extent possible.
- B. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible. All pits will be filled and leveled as soon as they are dry enough to be worked.

11. OTHER INFORMATION:

- A. Surface Ownership Bureau of Land Management
- B. Mesa Field Services, P. O. BOX 3072, CARLSBAD, NEW MEXICO 88221, conducted an archaeological survey. No significant archaeological resources were found in the area of the planned access road or of the proposed well site.
- C. Oil & Gas Lease:

NM 01135 (Based on LC-063536)

Township 19 South, Range 32 East Section 33 – All

D. RECORD LESSEE:

Pure Energy Group

50%

Chisos

50%

E. BOND COVERAGE:

\$25,000 Statewide Oil & Gas Surety Bond BLM Bond #: NM2860

12. OPERATOR'S REPRESENTATIVE:

The field representative for assuring compliance with the approved use and operations plan is as follows:

R. K. Ford & Associates
415 West Wall, Suite 1700
Midland, Texas 79701
432-682-0440 (Office)
432-682-0441 (Fax)
432-570-7216 (Home)
432-559-2222 (Cell)
Randell@rkford.com (E-mail)

13. CERTIFICATION:

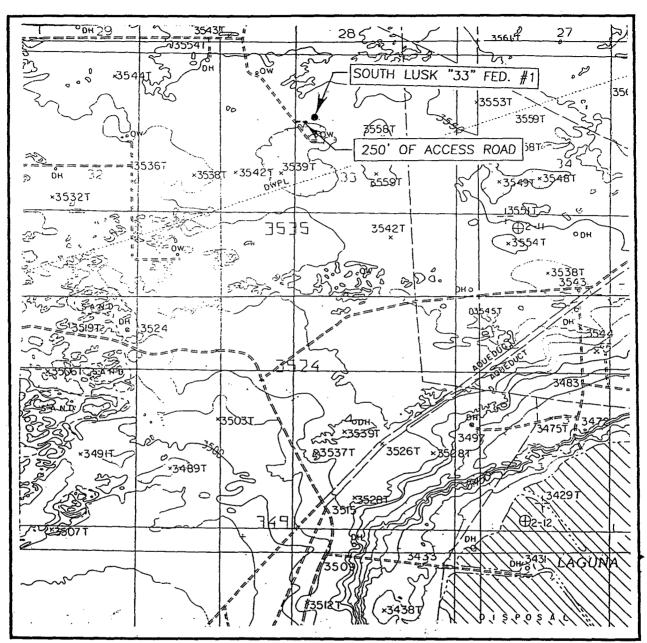
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Cabal Energy Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

May 6, 2003

Randell K. Ford

President

LOCATION VERIFICATION MAP



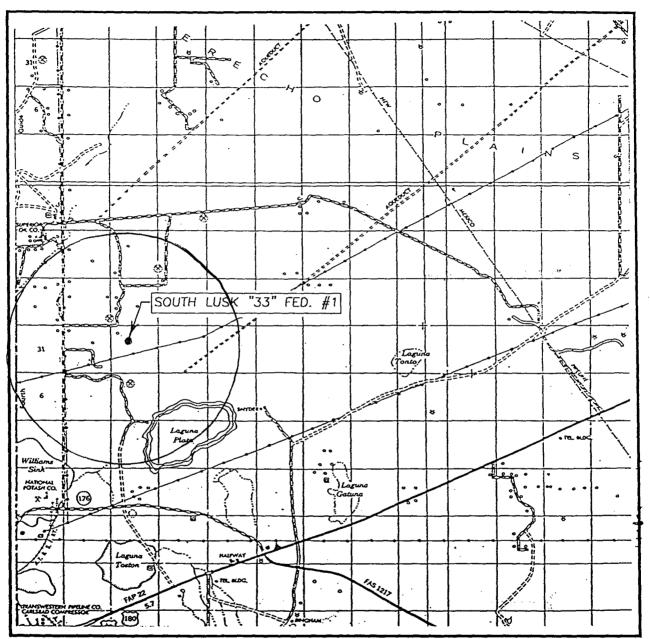
SCALE: 1" = 2000'

CONTOUR INTERVAL: 10' WILLIAMS SINK, N.M.

JOHN WEST SURVEYING HOBBS, NEW MEXICO (505) 393-3117

Exhibit A
Cabal Energy Corporation
South Lusk "33" Fed #1
Surface Use & Operations Plan

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 33 TWP. 19-S RGE. 32-E
SURVEY N.M.P.M.
COUNTYLEA
DESCRIPTION 1545' FNL & 1980' FWL
ELEVATION3539'
OPERATOR CABAL ENERGY CORPORATION
LEASE SOUTH LUSK "33" FEDERAL

JOHN WEST SURVEYING HOBBS, NEW MEXICO (505) 393-3117

Exhibit B
Cabal Energy Corporation
South Lusk "33" Fed #1
Surface Use & Operations Plan

Road

150' 150' **DRILLING RIG LAYOUT Cabal Energy Corporation Reserve Pit** South Lusk "33" Fed #1 Mud Pits Mud Pits Rig Mud Pits 0 200'

Trailer House

300'

Exhibit C Surface Use & Operations Plan

United States Department of the Interior Bureau of Land Management Roswell Field Office 2909 Second Street Roswell, New Mexico 88201-1287

Statement Accepting Responsibility for Operations

Operator Name:

Cabal Energy Corporation

Street or Box:

415 W. Wall. Suite 1700

City, State:

Midland, Texas

Zip Code:

79701

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof, as described below:

Lease No:

NM 01135

Legal Description of Land:

Township 19 South, Range 32 East, Lea County, New Mexico

Section 33 All

Bond Coverage:

Statewide Oil and Gas Surety Bond, Cabal Energy Corporation (Principal)

BLM Bond File No.:

NM2860

Randell K. Ford

President

May 6, 2003