N.M. Oil Cons. DIV-Dist. 2
1301 W. Grand Avenue
Artesia, NM 88210

Form 3160-3
(September 2001) 0498

FORM APPROVED
OMB No. 1004-0136
Expires January 31, 2004

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.: NM 62171
6. If Indian, Allottee or Tribe Name: N/A
7. If Unit or CA Agreement, Name and No.: N/A
8. Lease Name and Well No.: High Hog 9 Federal #1
9. API Well No.: 30-015-33462
10. Field and Pool, or Exploratory: Wildcat
11. Sec., T., R., M., or Blk. and Survey or Area: Sec. 9 - T25S - R25E

1a. Type of Work: ☒ DRILL ☐ REENTER

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

2. Name of Operator: Cabal Energy Corporation

3a. Address: 415 W. Wall, Suite 1700, Midland, TX 79701

3b. Phone No. *(include area code)*: (432) 682-0440

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface: ~~660'~~ 460' FNL & 2450' FEL per BHunt & SN dated 6/2/04
At proposed prod. zone: 990' FNL & 1850' FWL

14. Distance in miles and direction from nearest town or post office*: 2.4 mi SW of White City, NM

SUBJECT TO LIKE APPROVAL BY STATE

12. County or Parish: Eddy
13. State: NM

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

16. No. of Acres in lease: 2,202.50

17. Spacing Unit dedicated to this well: 320 acres - W/2

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

19. Proposed Depth: 11,400'

20. BLM/BIA Bond No. on file: NM 2860

RECEIVED
JUN 09 2004
OCD-ARTESIA

21. Elevations (Show whether DF, KDB, RT, GL, etc.): 3565'

22. Approximate date work will start*

23. Estimated duration: 60 days

CARLSBAD CONTROLLED WATER BASIN

24. Attachments

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

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

25. Signature: Randell K. Ford — Name *(Printed/Typed)*: Randell K. Ford — Date: 3/25/04

Title: President

Approved by *(Signature)*: /s/ Leslie A. Theiss — Name *(Printed/Typed)*: /s/ Leslie A. Theiss — Date: 7 JUN 2004

Title: FIELD MANAGER — Office: CARLSBAD FIELD 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.
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

APPROVAL FOR 1 YEAR

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

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-144
March 12, 2004

For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes [X] No [ ]
Type of action: Registration of a pit or below-grade tank [X] Closure of a pit or below-grade tank [ ]

Operator: Cabal Energy Corporation Telephone: 432-682-0440 e-mail address: sandra@rkford.com
Address: 415 W. Wall, Suite 1700, Midland, Texas 79701
Facility or well name: High Hog 9 Fed #1 API #: _____ U/L or Qtr/Qtr B* Sec 9 T 25S R 25E
County: Eddy Latitude _____ Longitude _____ NAD: 1927 [ ] 1983 [ ] Surface Owner Federal [X] State [ ] Private [ ] Indian [ ]
* The surface location is in UL "B", the bottom hole location is in UL "C".

Pit	**Below-grade tank**	
Type: Drilling [X] Production [ ] Disposal [ ] Workover [ ] Emergency [ ] Lined [X] Unlined [ ] Liner type: Synthetic [X] Thickness 20 mil Clay [ ] Volume _____ bbl	Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes [ ] If not, explain why not.	
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.) 19' in Sec. 3 & 12 per Jerry (no last name given) with BLM	Less than 50 feet Yes 50 feet or more, but less than 100 feet 100 feet or more	(20 points) (10 points) (0 points)
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes No No	(20 points) (0 points)
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more Yes	(20 points) (10 points) (0 points)
	Ranking Score (Total Points)	20

RECEIVED
JUN 14 2004
OCD-ARTESIA

If this is a pit closure: (1) attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: onsite [ ] offsite [ ] If offsite, name of facility_____. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No [ ] Yes [ ] If yes, show depth below ground surface_____ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. **I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines [X], a general permit [ ], or an (attached) alternative OCD-approved plan [ ].**
Date: June 10, 2004
Printed Name/Title Randell K. Ford / President Signature Randell K Ford

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval
Date: 6/14/04
Printed Name/Title Mike Bratcher / Compliance Officer Signature Mike Bratcher

Form 3160-5
(September 2001)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0135
Expires January 31, 2004

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

5. Lease Serial No.: NM 62171
6. If Indian, Allottee or Tribe Name: NA
7. If Unit or CA/Agreement, Name and/or No.: NA
8. Well Name and No.: High Hog 9 Federal #1
9. API Well No.:
10. Field and Pool, or Exploratory Area: Wildcat
11. County or Parish, State: Eddy County, New Mexico

1. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other
2. Name of Operator: Cabal Energy Corporation
3a. Address: 415 W. Wall, Suite 1700, Midland, TX 79701
3b. Phone No. *(include area code)*: 432-682-0440
4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*:
460' FNL & 2450' FEL, Section 9, T25S, R25E (At surface)
990' FNL & 1850' FWL, Sec. 9, T25S, R25E (Proposed Bottom Hole)

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☒ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Move location
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Mr. Jim Goodbar, the Cave/Karst Specialist in the Carlsbad Office of the Bureau of Land Management, requested that we move the location 200' North of the previous staked location. The attached plats reflect that change.

Mr. Goodbar also requested that me move a portion of the road because he thought it went over a big sinkhole.

The surveyors met Mr. Goodbar on location and the plats and maps reflect the changes he requested.

14. I hereby certify that the foregoing is true and correct
Name *(Printed/Typed)*: Randell K. Ford
Title: President
Signature: Randell K Ford
Date: June 2, 2004

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by: /s/ Leslie A. Theiss
Title: FIELD MANAGER
Date: 7 JUN 2004
Conditions of approval, if any, are attached. Approval of this notice 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.
Office: CARLSBAD FIELD OFFICE

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)

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

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

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

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

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name

Property Code	Property Name	Well Number
	HIGH HOG 9 FEDERAL	1

OGRID No.	Operator Name	Elevation
194930	CABAL ENERGY CORPORATION	3567'

Surface Location

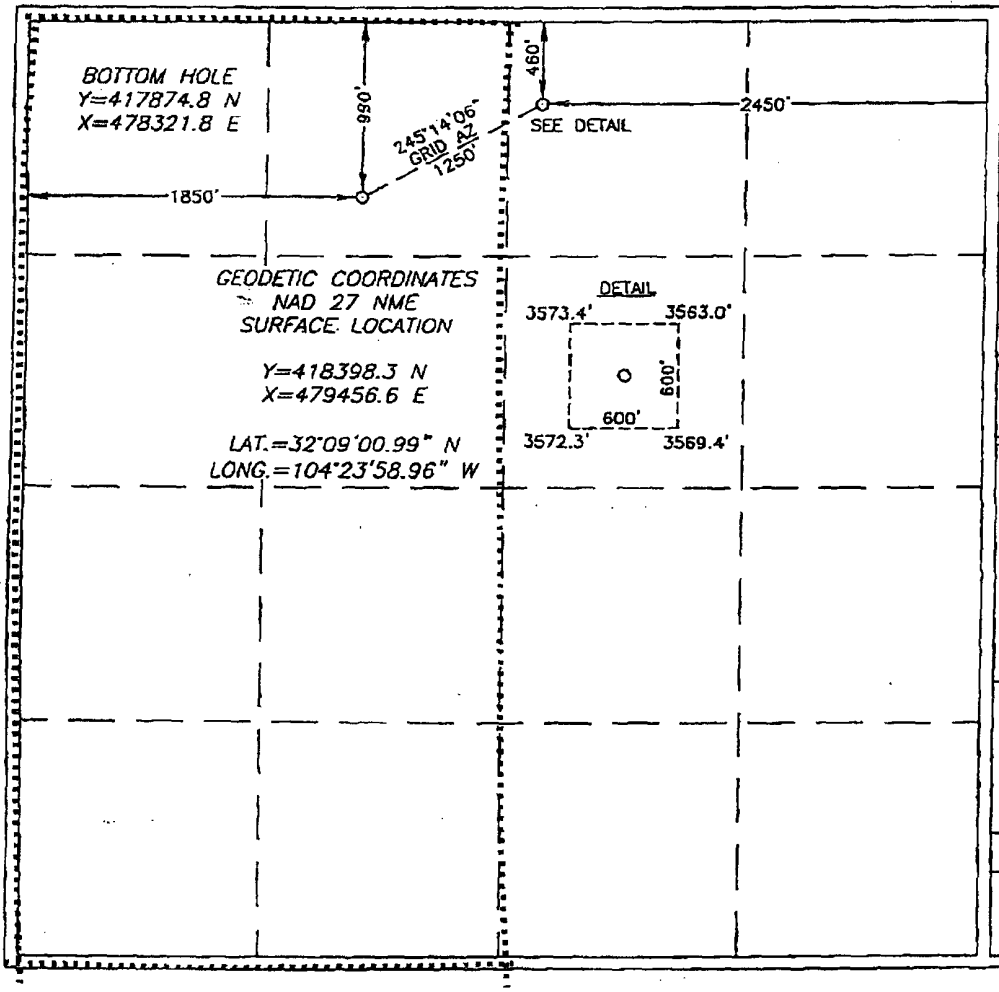
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	9	25-S	25-E		460'	NORTH	2450'	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	9	25-S	25-E		990'	NORTH	1850'	WEST	EDDY

Dedicated Acres	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



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

June 2, 2004
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.

MAY 27, 2004
Date Surveyed LA

Signature & Seal of Professional Surveyor

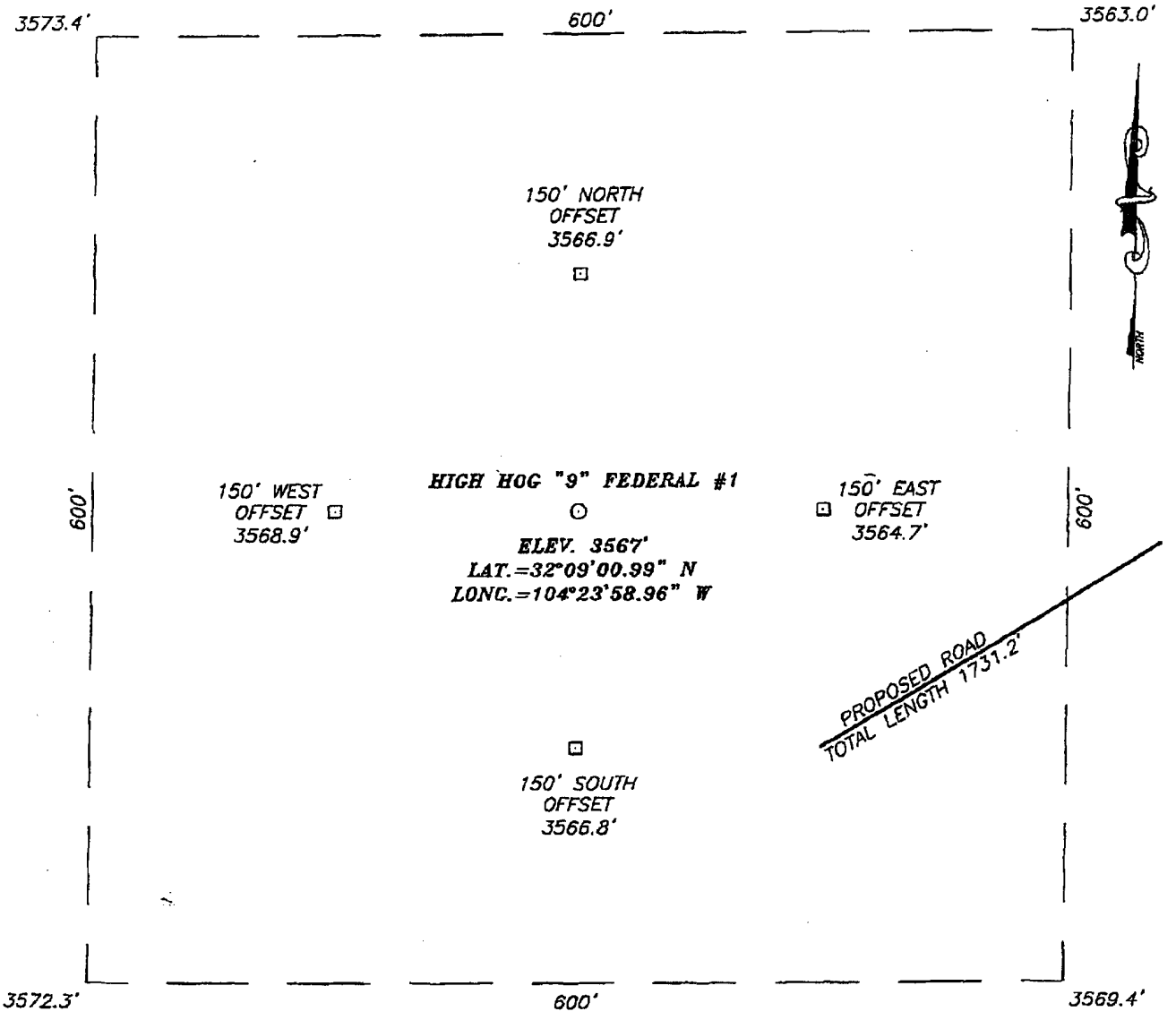
Gary L. Eidson 6/1/04

04.11.0634

Certificate No. GARY EIDSON 12641

SECTION 9, TOWNSHIP 25 SOUTH, RANGE 25 EAST, N.M.P.M.,

EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF U.S. HWY. #62-180 AND STATE ROAD #7 TRAVEL SOUTHWEST OUT OF WHITE CITY ON HWY. 62-180 TO A PROPOSED ROAD SURVEY 0.35 MILES SOUTHWEST OF MILE POST #14. FOLLOW ROAD SURVEY 1700'± TO LOCATION.

100 0 100 200 Feet

Scale: 1"=100'

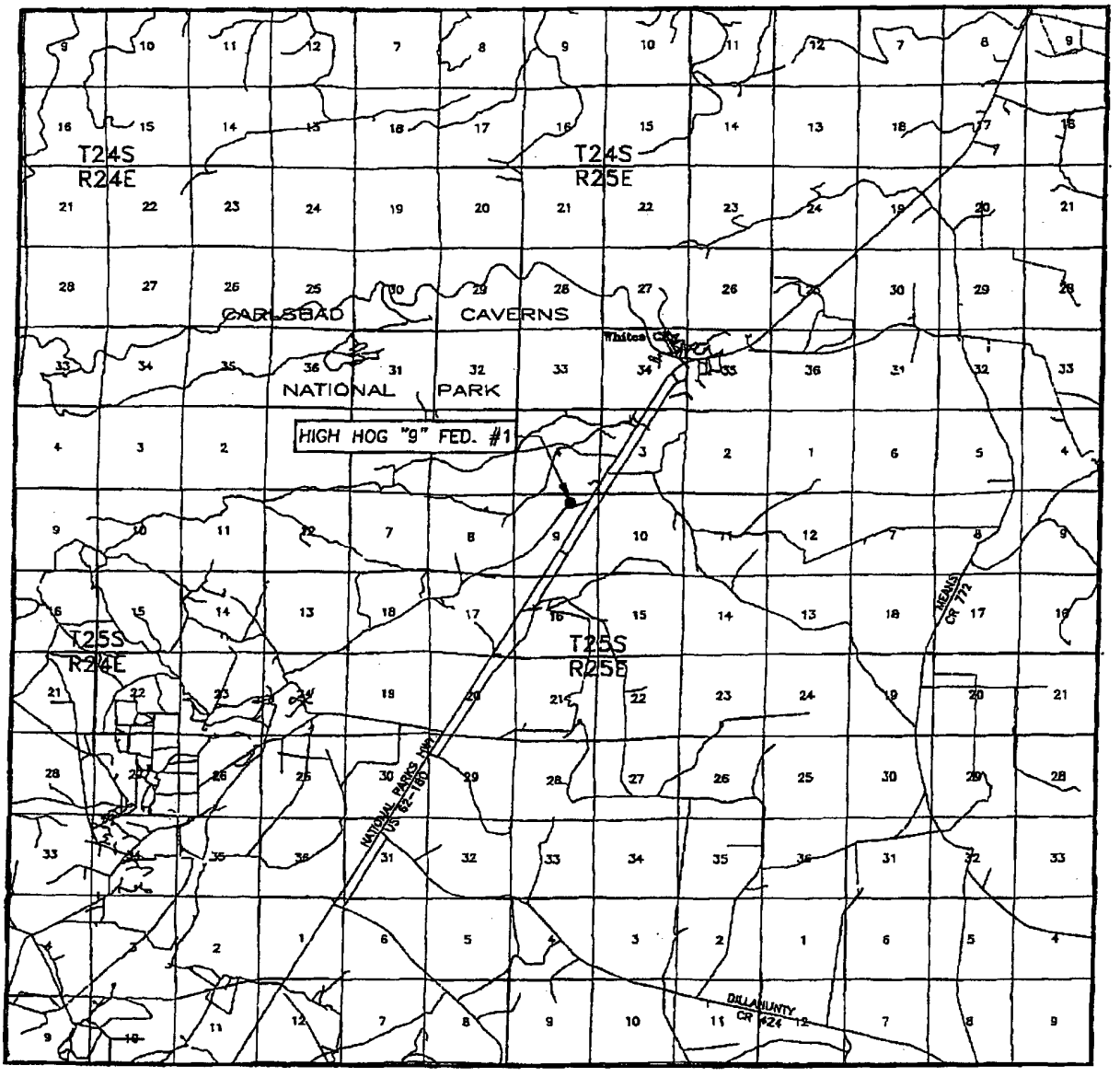
CABAL ENERGY CORPORATION

HIGH HOG "9" FEDERAL #1 WELL
LOCATED 460 FEET FROM THE NORTH LINE
AND 2450 FEET FROM THE EAST LINE OF SECTION 9,
TOWNSHIP 25 SOUTH, RANGE 25 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.

Survey Date: 5/27/04	Sheet 1 of 1 Sheets		
W.O. Number: 04.11.0634	Dr By: LA		
Date: 5/31/04	Disk: CD#10	04110634	Scale: 1"=100'

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

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 9 TWP. 25-S RGE. 25-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 460' FNL & 2450' FEL

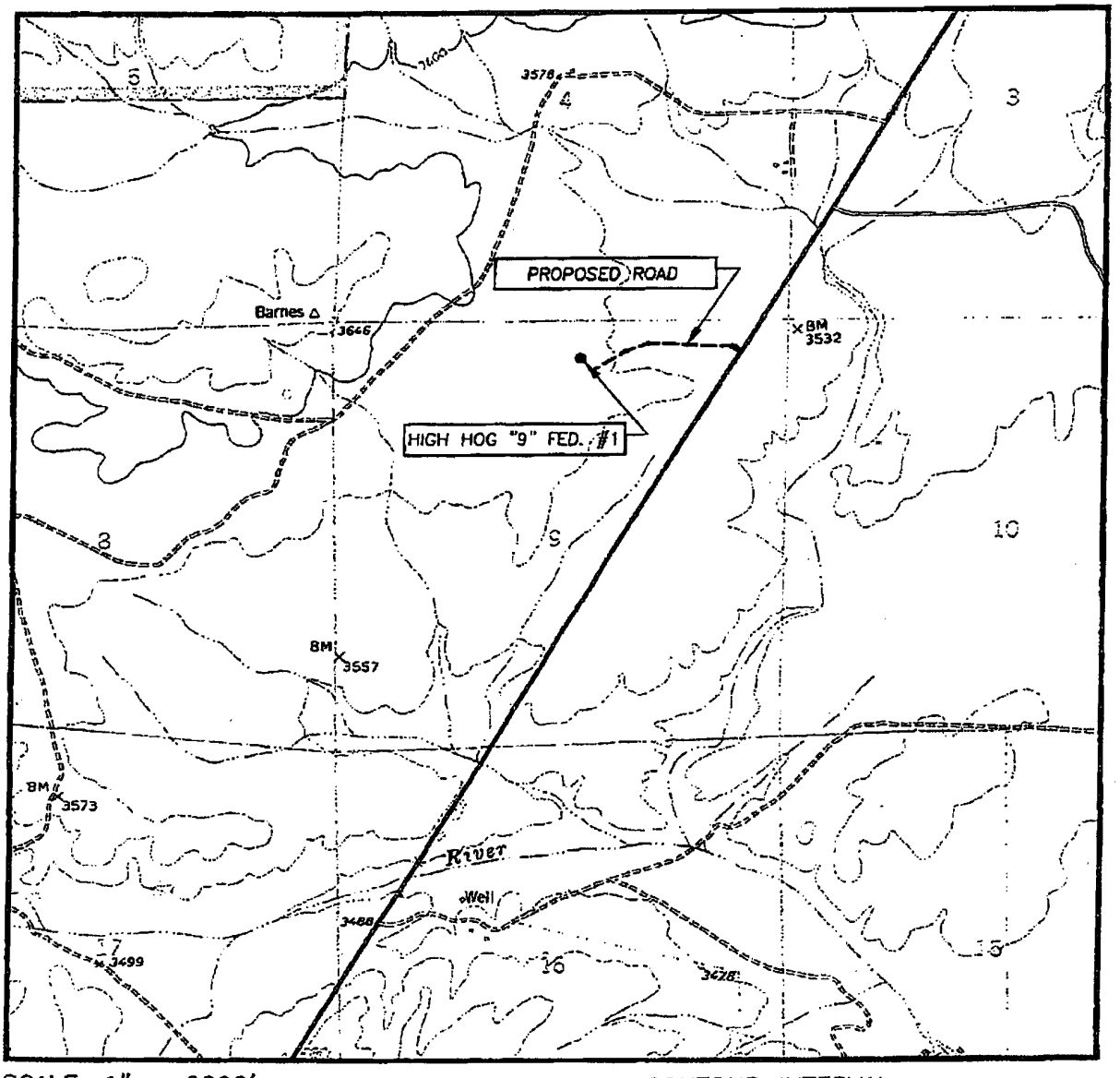
ELEVATION 3567'

OPERATOR CABAL ENERGY CORPORATION

LEASE HIGH HOG "9" FEDERAL

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

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
CARLSBAD CAVERNS, N.M. – 40'

SEC. 9 TWP. 25-S RGE. 25-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 460' FNL & 2450' FEL

ELEVATION 3567'

OPERATOR CABAL ENERGY CORPORATION

LEASE HIGH HOG "9" FEDERAL

U.S.G.S. TOPOGRAPHIC MAP
CARLSBAD CAVERNS, N.M.

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

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

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

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

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

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name

Property Code	Property Name	Well Number
	HIGH HOG 9 FEDERAL	1

OGRID No.	Operator Name	Elevation
194930	CABAL ENERGY CORPORATION	3565'

Surface Location

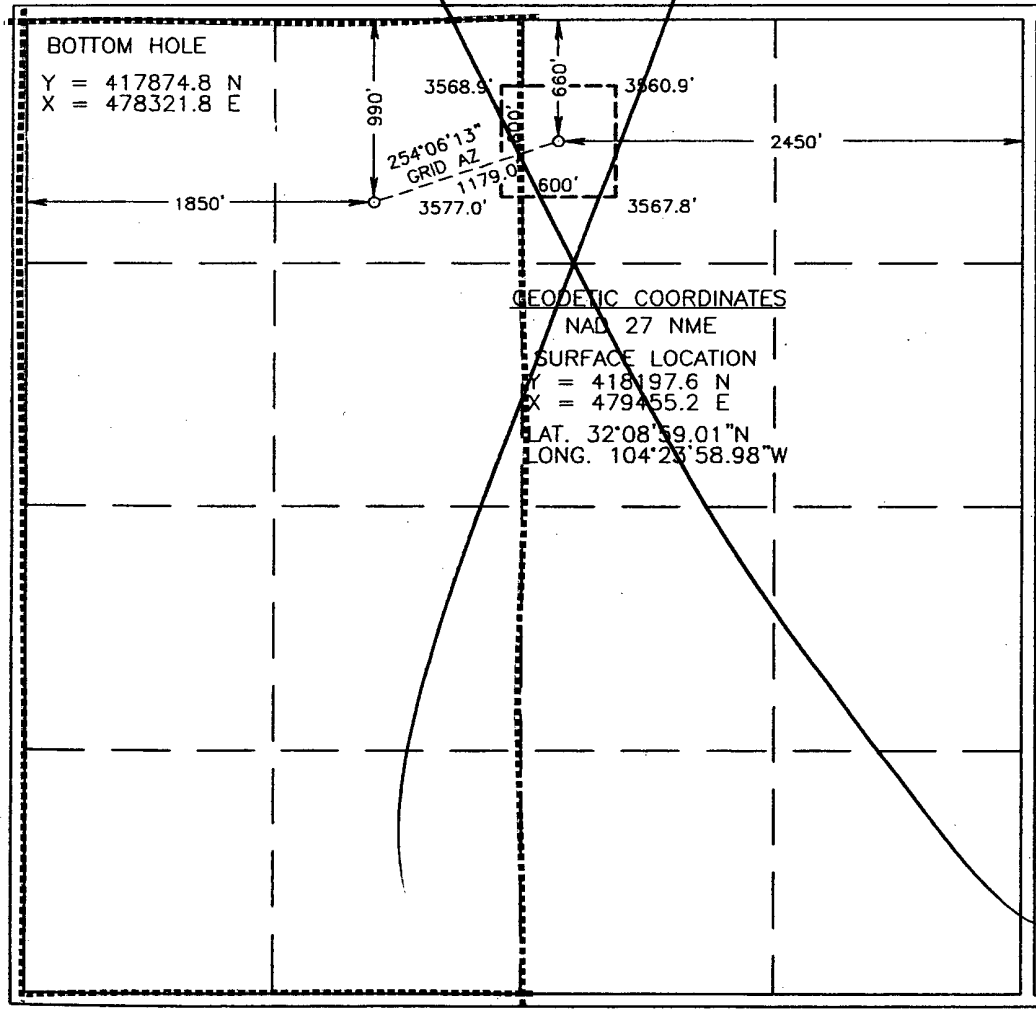
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	9	25-S	25-E		660	NORTH	2450	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	9	25-S	25-E		990	NORTH	1850	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			

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



OPERATOR CERTIFICATION

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

Signature

Randell K. Ford
Printed Name

President
Title

3/25/04
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.

January 15, 2004
Date Surveyed A.W.B.

Signature & Seal of Professional Surveyor REV. 03/02/04

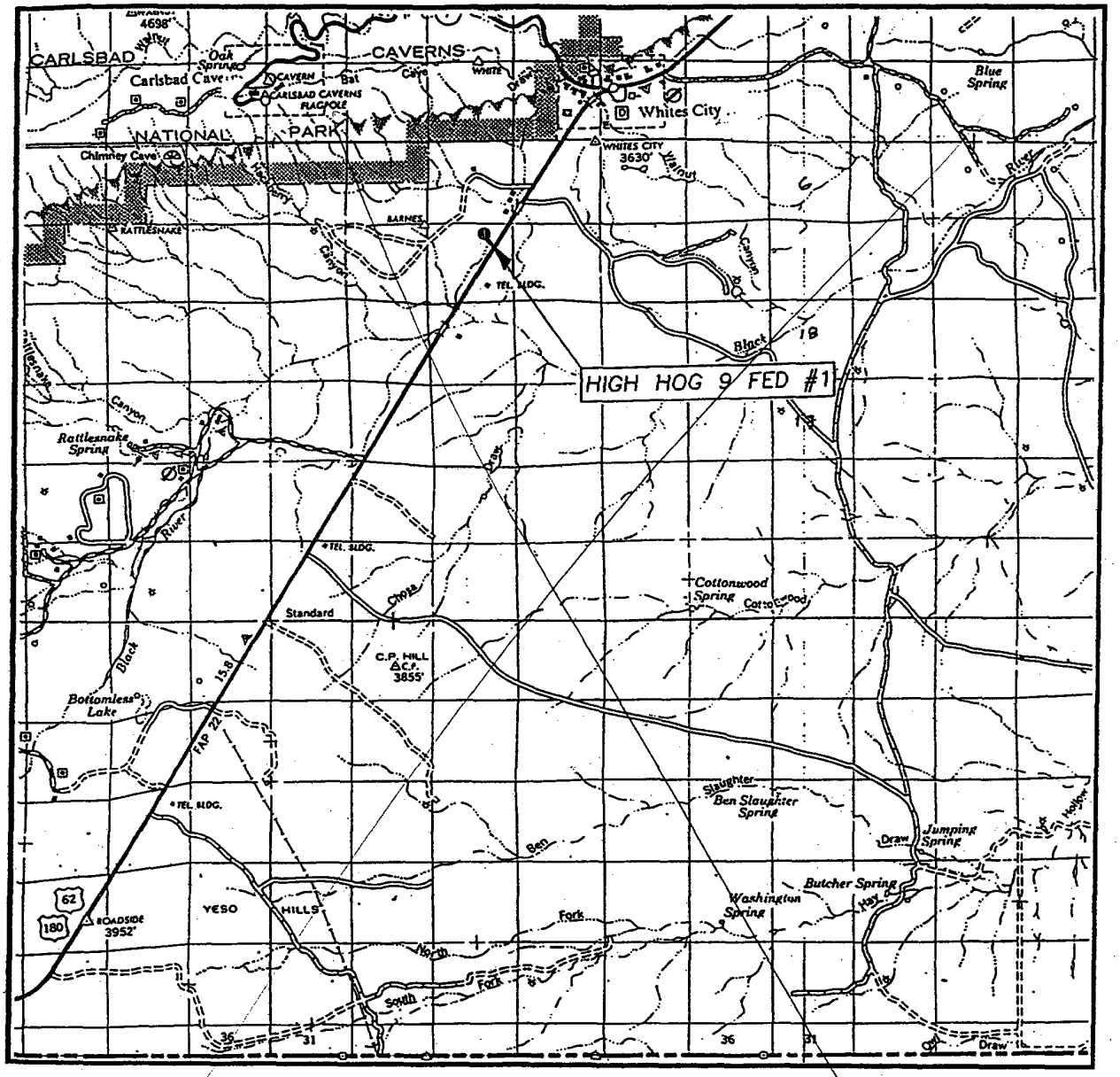
GARY L. EDSON
NEW MEXICO
12641
REGISTERED PROFESSIONAL SURVEYOR

Gary L. Edson 3/3/04

04.11.0025

Certificate No. GARY EDSON 12641

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 9 TWP. 25-S RGE. 25-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 660' FNL & 2450' FEL

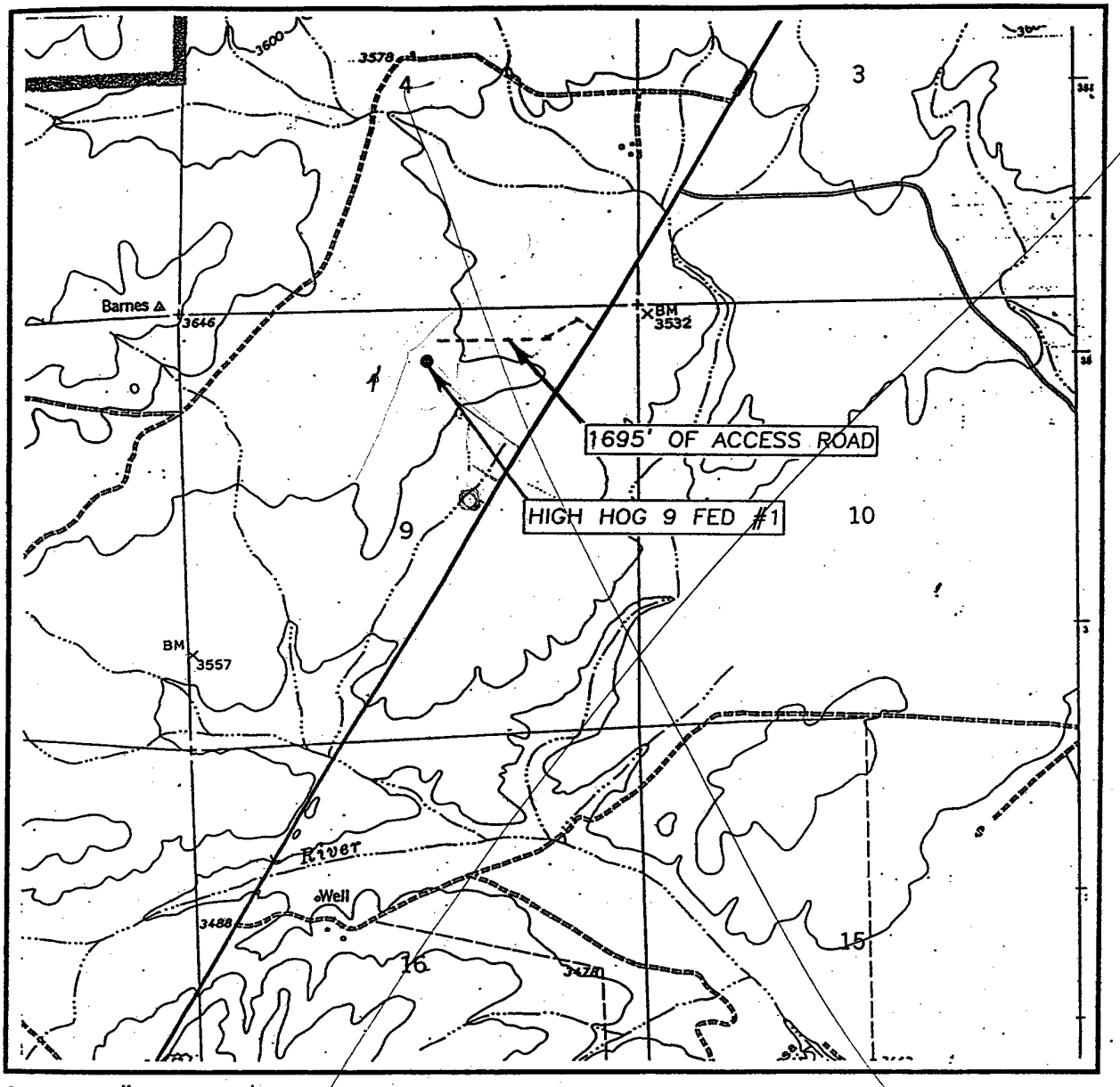
ELEVATION 3565'

OPERATOR CABAL ENERGY CORPORATION

LEASE HIGH HOG 9 FEDERAL

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

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 40'
CARLSBAD CAVERNS, N.M.

SEC. 9 TWP. 25-S RGE. 25-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 660' FNL & 2450' FEL

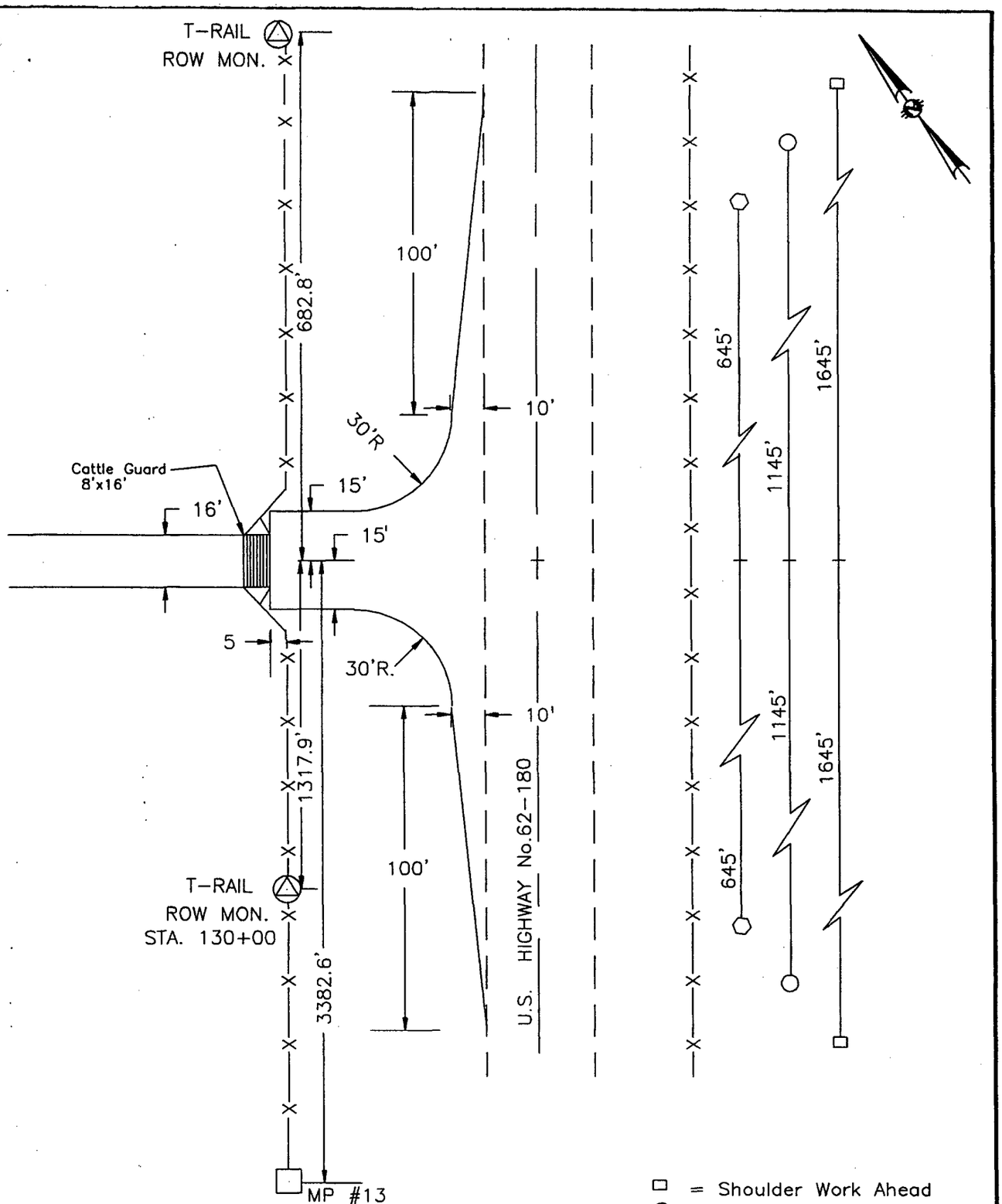
ELEVATION 3565'

OPERATOR CABAL ENERGY CORPORATION

LEASE HIGH HOG 9 FEDERAL

U.S.G.S. TOPOGRAPHIC MAP
CARLSBAD CAVERNS, N.M.

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



NOTE: "SHOULDER WORK AHEAD" and "BE PREPARED TO STOP" signs shell remain in place from the time the construction starts until it is completed.
"FLAGMAN AHEAD" signs will be in place during the hours construc-tion men and equment are working. A flagman will be on duty all the time that construction men and/or equipment are working.

Signs will be 48"x48" in size. Color will be black on orange and will meet the reflective quality specified in the New Mexico State Highway & Transportation Standard Specifications.

□ = Shoulder Work Ahead
○ = Be Prepared To Stop
⬡ = Flagman Ahead

NOTE: Warning Signs Will Be Placed 1500 Feet In Both Direction During Construction

HIGH HOG 9 FED #1 660' FNL & 2450' FEL

CABAL ENERGY CORPORATION

A PROPOSED ROAD TURN OUT ON U.S. HIGHWAY 62-180, LOCATED IN SECTION 9, TOWNSHIP 25 SOUTH, RANGE 25, EAST. N.M.P.M., EDDY COUNTY NEW MEXICO

I HEREBY CERTIFY THAT I DIRECTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.

GARY G. EIDSON, 12641, STATE OF NEW MEXICO, REGISTERED PROFESSIONAL SURVEYOR

Gary G. Eidson 1/20/04

GARY G. EIDSON N.M. P.S. No. 12641

JOHN WEST SURVEYING
412 N. DAL PASO - HOBBS, NEW MEXICO - 505-393-3117

Survey Date: 01/15/04		Drawn By: A.W.B
Approved By:		Sheet 1 of 1 Sheets
Project Number: 04.11.0025		File Name:
Date: 01/20/04	Disk: #10	Scale: NO SCALE

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 62171

Legal Description of Land:

Section 3: Lots 1, 4, S/2NE/4, S/2SW/4
Section 4: Lots 1, 2, 3, 4, S/2N/2, S/2
Section 9: All
Section 10: All
Section 17: NE/4NE/4
T-25-S, R-25-E
Eddy County, New Mexico (2,202.50 Acres)

Bond Coverage:

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

BLM Bond File No.: NM2860

Randell K. Ford
President
March 25, 2004

SURFACE USE AND OPERATIONS PLAN FOR
DRILLING, COMPLETION, AND PRODUCING

CABAL ENERGY CORPORATION
High Hog 9 Federal #1
660' FNL & 2450' FEL
Section 9, T-25-S, R-25-E
Eddy County, New Mexico

LOCATED:

2.4 Miles Southwest of White City

OIL & GAS LEASE:

NM 62171	Section 3:	Lots 1, 4, S/2NE/4, S/2SW/4
	Section 4:	Lots I, 2, 3, 4, S/2N/2, S/2
	Section 9:	All
	Section 10:	All
	Section 17:	NE/4NE/4

RECORD LESSEE:

Cabal Energy Corporation
201 W. Wall, Suite 600
Midland, Texas 79701

BOND COVERAGE:

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

ACRES IN LEASE:

2,202.50 Acres, 320 acre proration unit (See Exhibit E)

GRAZING LEASE:

Jimmy Foster
P. O. Box 105
White City, New Mexico 88268

POOL:

Wildcat

EXHIBITS:

A. Area Map

B. Drilling Rig Layout

C. Vicinity Oil & Gas Map & Area Road Map

D. Topographic & Location Verification Map

E. Well Location & Acreage Dedication Plat.

This well will be drilled to a depth of approximately ±12,200'

1. **EXISTING ROADS:**

   A. Exhibit "A" is a portion of a section map showing the location of the proposed well as staked.

   B. Exhibit "C" is a plat showing existing roads in the vicinity of the proposed well site.

2. **ACCESS ROADS:**

   A. Length and Width:

   1,695' x 12' of new road from the West

   B. Surface Material:

   Existing

   C. Maximum Grade:

   Less than two percent

   D. Turnouts:

   None necessary

   E. Drainage Design:

   Existing

   F. Culverts:

   None necessary

   G. Gates and Cattle Guards:

   None necessary

3. **LOCATION OF EXISTING WELLS:**

   Existing wells in the immediate area are shown on Exhibit "C".

4. **LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:**

Necessary production facilities for this well will be located on the well pad.

5. LOCATION AND TYPE OF WATER SUPPLY:

It is not contemplated that a water well will be drilled. Water necessary for drilling will be purchased and hauled to the site over existing roads shown on Exhibit "D".

6. METHODS OF HANDLING WASTE DISPOSAL:

A. Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry.

B. Water produced during tests will be disposed of in the drilling pits.

C. Oil Produced during tests will be stored in test tanks.

D. Trash will be contained in a trash trailer and removed from well site.

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

7. ANCILLARY FACILITIES:

None required.

8. WELL SITE LAYOUT:

Exhibit "B" shows the relative location and dimensions of the well pad, mud pits, reserve pit, and trash trailer and the location of major rig components. Reserve pit to be lined.

9. 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. After abandonment, all equipment, trash and debris will be removed and the site will be clean.

10. OTHER INFORMATION:

A. Topography

The land surface at the well site is rolling native grass with a regional slope to the southeast.

B. Soil:

Topsoil at the well site is loam with rock.

C. Flora and Faunal:

Vegetation is consistent with Chihuahuan Desert scrub, including creosote, catclaw acacia, horse crippler cacti, and various grasses.

D. Ponds and Streams:

There are no ponds, streams, or rivers in the area.

E. Residences and Other Structures:

There are no residences within a mile of the proposed well site.

F. Archaeological, Historical, and Cultural Sites:

None observed in this area.

G. Land Use:

Land is being used for cattle grazing.

H. Surface Ownership:

Bureau of Land Management

11. OPERATOR'S CONSULTANT:

R. K. Ford & Associates
201 West Wall, Suite 600
Midland, Texas 79701
915-682-0440 (Office)
915-682-0441 (Fax)
915-570-7216 (Home)

12. 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.

3/25/04
Date

Randell K. Ford
President

SUPPLEMENTAL DRILLING DATA

CABAL ENERGY CORPORATION
High Hog 9 FEDERAL #1

1. **SURFACE FORMATION:**

   Quaternary

2. **ESTIMATED TOPS OF GEOLOGIC MARKERS:** KB 3,565'

Base Anhydrite – Top Delaware	1,256'	(+2,300)
Wolfcamp Pay	7,760'	(-4,204')
"Reef" (White City – Carlsbad)	9,300'	(-5,744')
Strawn	9,424'	(-5,868')
Base Middle Morrow Shale	10,383'	(-6,827')
Top White City Main Pay	10,482'	(-6,926') Primary objective
Top Washington Ranch Main Pay	10,534'	(-6,978')
Lower Morrow Shale (Top)	10,578'	(-7,022')
Lower Morrow Shale (Base)	10,666'	(-7,112')

3. **ANTICIPATED POSSIBLE HYDROCARBON BEARING ZONES:**

   Morrow (middle and upper), Wolfcamp, Bone Springs, Delaware

4. **CASING AND CEMENTING PROGRAM:**

Casing Size	Setting Depth From	To	Weight	Grade	Joint
20"	0 – 90'		Structural		
13-3/8"	0 – 1,150'		48#	H-40	STC
9-5/8"	0 – 7,900'		43.5#	N-80	STC
7"	7,900' – 11,400'		26#	S-95	FJ

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.

Plan to drill a 24" hole to equal 90'.

WITNESS 20" conductor will be cemented with 120 sx or volume necessary to tie back to surface.

Plan to drill a 17-1/2" hole to about 1,150'.

13-3/8" casing will be cemented with 500 sx or volume necessary to tie back to surface.

Plan to drill a 12-1/4" hole to about 7,900'.

9-5/8" protection casing will be cemented with approximately 800 sx of Class "H".

Plan to drill a 8-1/2" hole to about 11,400'.

7" production casing liner will be cemented with 300 sx or volume necessary to the top of the liner from 7,900' – 11,400'.

5. PRESSURE CONTROL EQUIPMENT:

The BOP stack will consist of a 3,000 psi working pressure, dual ram type preventer and annular on the 12-1/4" hole portion and 5,000 psi working pressure after setting the 9-5/8" protective casing string.

A BOP sketch is attached.

6. CIRCULATING MEDIUM:

Surface to 11,400':

Spud and drill to 1,150' with brine water mud. Drill to 7,900' using fresh water and cut brine. Drill to 11,400' using brine/polymer system.

NOTE: Drill to 90' w/ Fresh water

7. AUXILIARY EQUIPMENT:

None required.

8. TESTING, LOGGING AND CORING PROGRAM:

Electric logging is planned. Drill stem tests and sidewall cores possible.

9. ABNORMAL PRESSURES, TEMPERATURES OR HYDROGEN SULFIDE GAS:

Possible abnormal pressure in the Wolfcamp & Atoka zones.

10. ANTICIPATED STARTING DATE:

It is planned that operations will commence on April 10, 2004, with drilling and completion operations lasting about 60 days.

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

CABAL ENERGY CORPORATION
High Hog 9 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 H_2S 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 H_2S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
2. 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 H_2S Drilling Operations Plan.

C. There will be an initial training session just prior to encountering a known or probable H_2S zone (within 3 days or 500 feet) and weekly H_2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H_2S 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. H_2S 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. H_2S Detection and Monitoring Equipment:

1. Two portable H_2S monitors positioned on location for best coverage and response. These units have warning lights and audible sirens when H_2S levels of 20 ppm are reached.
2. One portable SO_2 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 H_2S circulated to the surface. Proper mud weights, safe drilling practices and the use of H_2S scavengers will minimize hazards when penetrating H_2S 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 H_2S service.

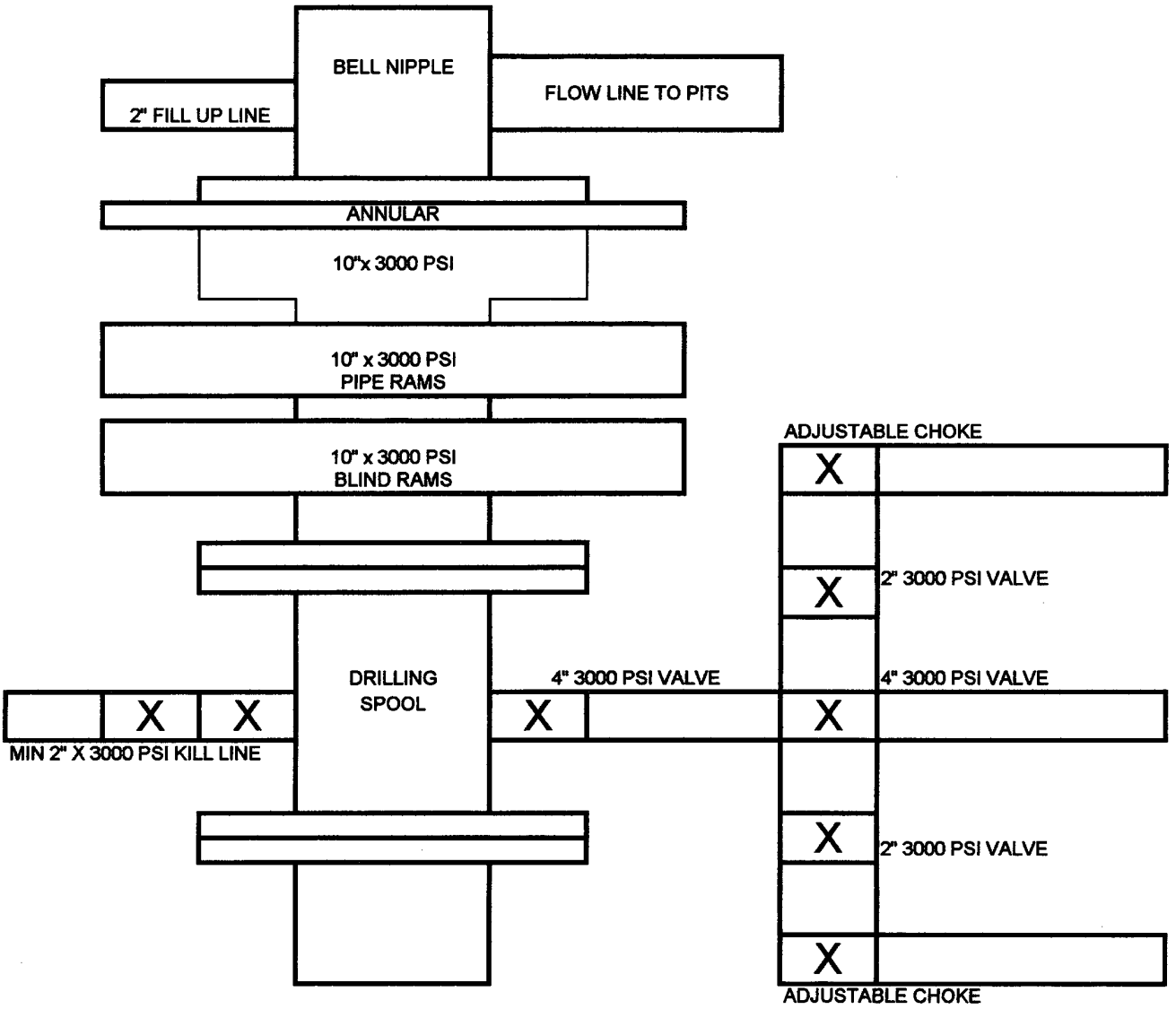
G. Communication:

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
High Hog 9 Federal #1
Eddy County, New Mexico

Exhibit 2

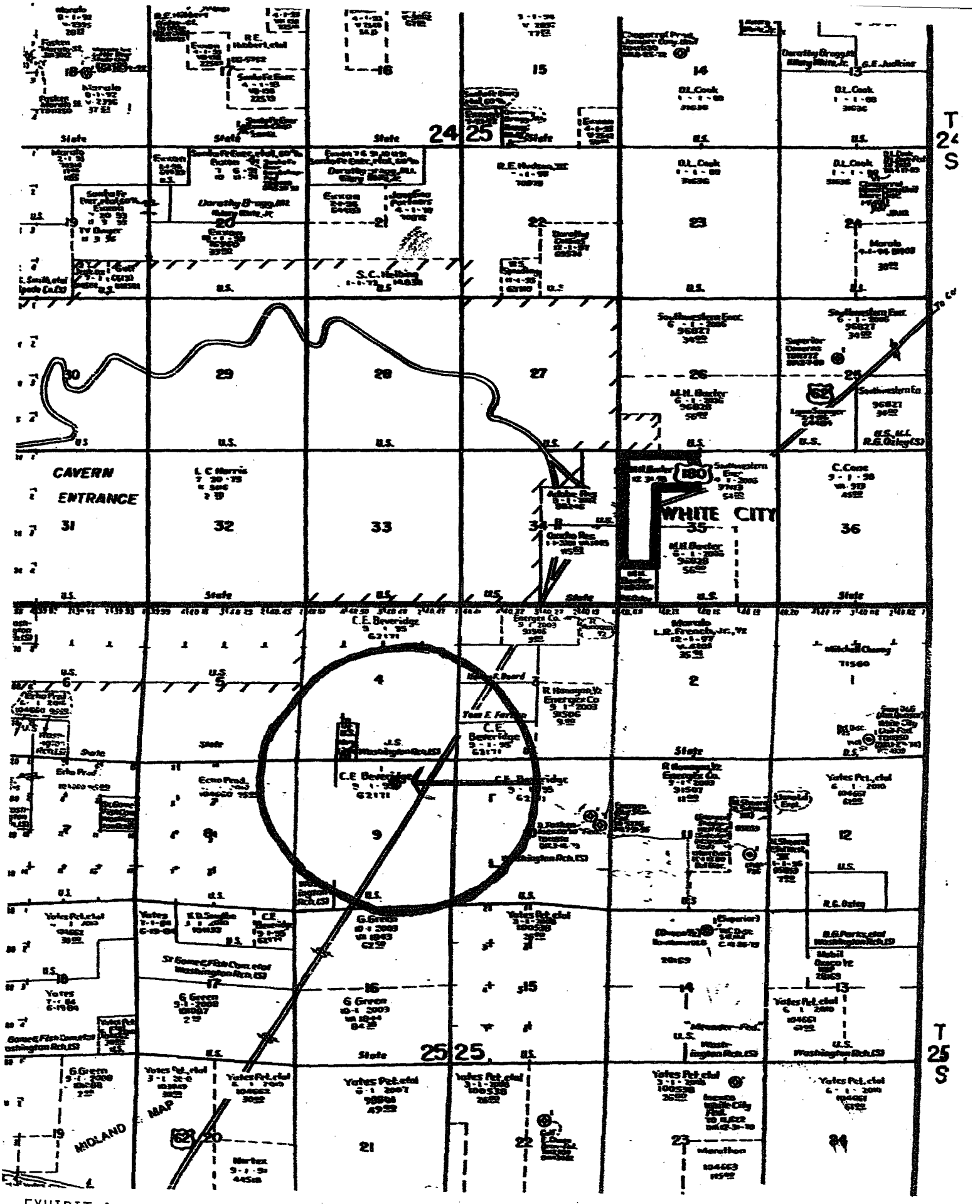


EXHIBIT A - HIGH HOG 9 FEDERAL #1

Scale 1" = 100'

N

DRILLING RIG LAYOUT
Cabal Energy Corporation
High Hog 9 Federal #1

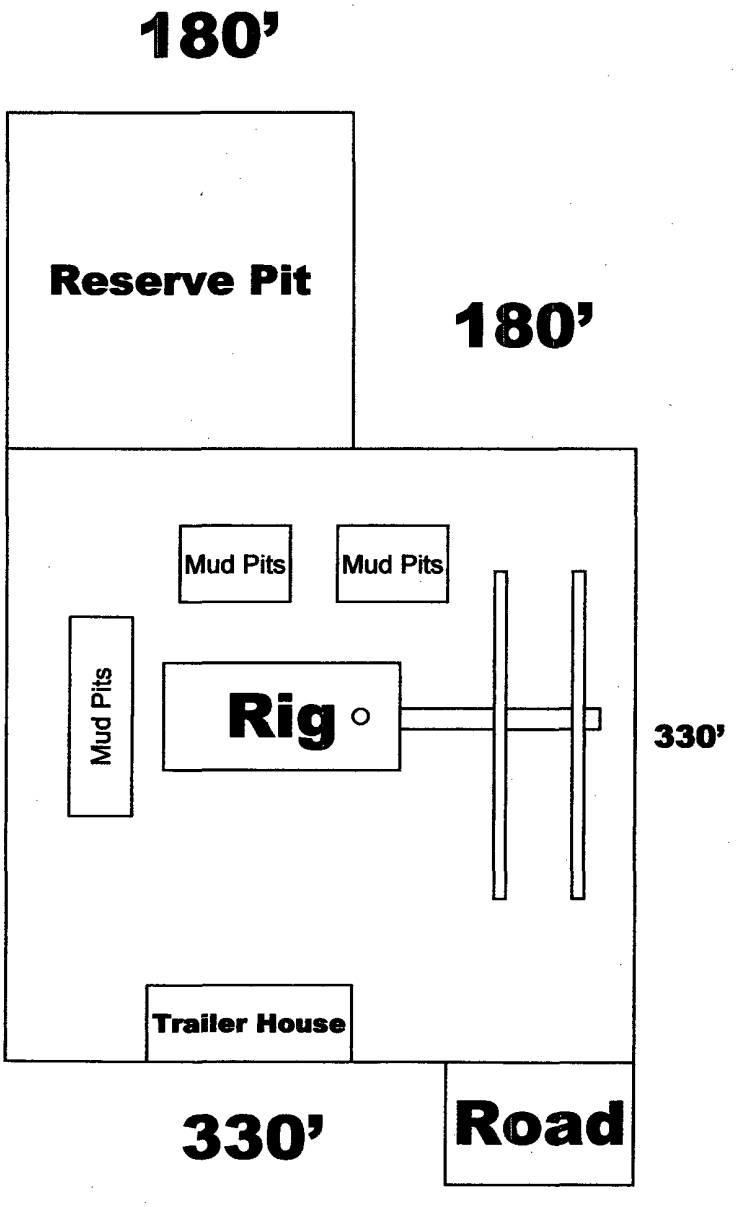


Exhibit B
Surface Use & Operations Plan

AGENDA
June 15, 2004
Bureau of Land Management
620 East Greene Street
Carlsbad, New Mexico
9:00 A.M.

ACTION/DISCUSSION ITEMS

1. Otero/Sierra County RMP Status and Supplement to RMP Amendment (E. Roberson).

2. T & E Species Issues:

   (a) LPC Shareholder Committee Progress Report and LPC Exception Policy (E. Roberson and S. Belinda).

   (b) Aplomado Falcons and Tiger Beetle and others.

3. ESA Amendment to Roswell and Carlsbad RMPs.

4. Proposed IM on Operations where surface is federally owned and minerals are state or privately owned (G. Stephens).

5. Problems with BLM Rangers stopping construction on Non-Federal Surface (D. Chumbly).

6. Reclamation Subcommittee Report (J. Amos and D. Girand).

UPDATES/INFORMATION ITEMS

1. Update on faster turnaround on ROWs and APDs in Roswell and Carlsbad and Roswell and Carlsbad Personnel issues (L. Bray and L. Theiss).

2. Other Items.

3. Set date for next meeting.

DRAFT

BUREAU OF LAND MANAGEMENT INTERIM GUIDE FOR OIL & GAS DRILLING AND OPERATIONS IN CAVE AND KARST AREAS

TABLE OF CONTENTS

BLM Guide for Oil & Gas Drilling and Operations in Cave and Karst Areas

ABSTRACT

The Bureau of Land Management (BLM) has the responsibility to ensure protection of cave/karst resources as well as provide for the leasing and development of oil and gas resources. In order to accomplish these goals, the BLM has developed this guide describing the cave/karst environment,defining the risks and hazards of drilling and production in cave/karst areas, and providing the operators with standardized procedures and techniques for conducting oil and gas activities. This guide specifies conditions of approval for operations in cave and karst areas. These protective measures include the detection of cave/karst resources prior to drilling, their avoidance, and the mitigation of impacts that cannot be avoided. The procedures also detail the monitoring and recording of these activities. Areas of high and low cave/ karst occurrence are identified on maps found in the appendix to designate where protective measures will be applied.

INTRODUCTION

This guide is a result of the BLM's Cave and Karst Task Force initiative. The Task Force was formed to develop the necessary techniques and procedures to minimize impacts to resources and industry from oil and gas drilling operations in cave and karst areas. Members of the Task Force are Mike Akins, Chevron USA, Inc.; Rick Bridges, petroleum geologist and President, Lechugilla Cave Project; Kim Cunningham, US Geological Survey and member, Lechugilla Cave Project; David Jagnow, geologist and member, Lechugilla Cave Project; Gene Kernal, Siete Oil and Gas; Fred Yates and Bill Baker, Jr., Yates Energy Corp.; Al Springer, Yates Petroleum Corp.; Art Carrasco, Halliburton; Doug Lunsford and Gregory Nibert, Hinkle, Cox, Eaton, Coffield and Hensley law firm; Dr. John Hawley and Dr. David Love, New Mexico Institute of Mining and Technology; Mike Williams and Michael Stogner, New Mexico Oil Conservation Division; Joe Sovick, National Park Service; Wallace Elms, Carlsbad Caverns National Park; Larry Sansom Lincoln National Forest; and Jim Goodbar, Shannon Shaw, Joe Chesser, Dick Manus and Dave Stout, Bureau of Land Management.

Purpose

The purpose of this guide is to establish interim BLM policy and provide guidance for oil and gas operators drilling in the cave/karst environments on public lands until the Carlsbad Resource Area Resource Management Plan (RMP) Amendment and Roswell Resource Area RMP are completed in late 1994. This guide defines potential conflicts associated with drilling and production operations in cave/karst areas. This guide lists the procedures and conditions of operation required by BLM in these areas to protect cave/karst resources including karst ground water recharge areas, cave biota, recreational, and scientific uses while developing their lease.

This guide is intended to be a "working" document, subject to revision as additional information becomes available and as techniques and methods become more refined. This guide will aid operators seeking permit approval as well as how to conduct operations on federal cave/karst lands, from exploration to development to production. Information is provided for the detection of cave/karst features, their avoidance and the mitigation of drilling and production actions in the event that those features are encountered.

Every operation authorized under a federal oil and gas lease should conform to Bureau of Land Management (BLM) standards and reflect the relevant site-specific conditions. Knowledge of the current BLM Resource Management Plans (RMP) as well as agency operational standards and procedures will help an operator in meeting these standards.

The BLM Mission

The BLM is entrusted with the management of more than 270 million acres of the nation's public lands. Management is based on the principle of multiple use and sustained yield of our nation's resources within a framework

of environmental responsibility and scientific technology. BLM recognizes that it must manage for future generations as well as for present needs.

To help accomplish this, BLM has developed partnerships with public, private, and industry groups to share responsibility and provide expertise and experience for sound management of natural resources. The development of this guide is the result of such a partnership, helping BLM attain its goal of protecting the unique cave and karst resources within the Roswell District while at the same time providing for the nation's oil and gas needs.

AUTHORITIES / POLICIES

The BLM draws its overall authority to manage public lands from the Federal Land Policy Management Act, PL 94-579.

Cave/Karst Management

BLM is required to manage cave resources on public lands by The Federal Cave Resources Protection Act of 1988, PL 100-691. This law states:

> " Congress finds and declares that - (1) significant caves on Federal lands are an invaluable and irreplaceable part of the nations's natural heritage ; and (2) in some instances, these significant caves are threatened due to improper use, increased recreational demand, urban spread, and a lack of specific statutory protection. It is the policy of the United States that federal lands be managed in a manner which protects and maintains, to the extent practical, significant caves."

BLM's cave management policy is found in BLM Manual 8380.06, which states it is BLM policy to:

(1) Identify, evaluate, manage, and protect cave resources on public lands for the purpose of maintaining their unique, nonrenewable, and fragile biological, geological, hydrological, cultural, paleontological, scientific, and recreational values for present and future uses.

(2) Encourage volunteer involvement of qualified and experienced individuals and caving organizations in cave management projects, through the use of volunteer and cooperative management agreements.

(3) Work closely with interested parties to identify and address cave management opportunities and issues.

(4) Integrate the identification and management of the caves and their associated resource values into resource management planning and management efforts, and avoid or minimize conflicts between management and other surface and subsurface resource management activities.

(5) Provide opportunities which are compatible and consistent with objectives set forth in Resource Management and Activity Plans. These might include: recreation, education, research, or commercial activities, when those activities can be adequately managed.

(6) Promote an awareness among users and managers of caves on public lands through development of informational and educational materials concerning conservation methods and potential hazards.

The Roswell District Cave Resources Management Plan states the expanse of cave occurrence and obvious complexity required to manage this resource necessitates special focus for managers in the district. The plan assures consistency in protection, information management, and opportunity development. It provides guidance for identifying specific workload responsibilities, priorities, and emergency actions inherent in providing stewardship of caves and the karst environment. The cave resources management program is designed to protect fragile cave values such as ecological and hydrological systems, geologic,scientific, recreational and cultural values from damage. Furthermore, the program ensures caves are maintained for the use of the public, both now and in the future.

The Carlsbad Resource Area Resource Management Plan was developed in 1988:

> "In order to protect caves, the existing oil and gas lease stipulation allowing no surface disturbance within 300 feet from known cave entrances or passages will now be applied at the Application for Permit to Drill (APD) stage in the oil and gas development process. Protection requirements for subsurface voids encountered during oil and gas

drilling operations are being developed by a joint BLM/Industry Work Group, and will be implemented when determined feasible."

Mineral Resources Management

The BLM draws its authority to manage federal oil and gas resources from the Mineral Leasing Act of February 25, 1920, 30 U.S.C. 181 et seq., as amended, and the Federal Land Policy & Management Act of October 21, 1976, 43 U.S.C. 1701 et seq.

Oil and gas leases are offered through competitive bidding and involve public land, acquired land, and split estate land where the mineral estate has been retained by the federal government. Generally, oil and gas leases are issued for a term of 10 years and as long thereafter as oil and gas are being produced. The lessee pays an annual rental for the area leased or a percentage of the value of production in the form of a royalty. Bonus bids may also be paid for competitively leased parcels. The lessee must provide a bond to protect the federal government from damage if any of the terms of the lease are violated. The lessee is entitiled to use as much of the surface lands as is reasonable in order to extract the oil and gas. An oil and gas lease includes the following clause: "Rights of Lessee - The lessee is granted the exclusive right to drill for, mine, extract, remove, and dispose of all the oil and gas deposits, except helium gas, in the lands leased, together with the right to construct and maintain thereupon, all works, buildings, plants, waterways, roads, telegraph or telephone lines, pipelines, reservoirs, tanks, pumping stations, or other structures necessary to the full enjoyment thereof."

BLM's Energy and Mineral Resources Management Policy, found in BLM Manual 3000-.06, states:

(1) Except for Congressional withdrawals, public lands shall remain open and available for mineral exploration and development unless withdrawal or other administrative action is clearly justified in the national interest.

(2) BLM actively encourages and facilitates the development by private industry of public land mineral resources in a manner that satisfies national and local needs and provides for economically and environmentally sound exploration, extraction, and reclamation practices.

(3) BLM will process mineral patent applications, permits, operating plans, mineral exchanges, leases, and other use authorizations for public lands in a timely and efficient manner.

(4) BLM's land use plans and multiple-use management decisions will recognize that mineral exploration and development can occur concurrently or sequentially with other resource uses. The BLM further recognizes that land use planning is a dynamic process and decisions will be updated as new data are evaluated.

(5) Land use plans will reflect geological, energy, and mineral values on public lands through more effective geology and energy and mineral resource data assessment.

(6) BLM will monitor salable and leasable mineral operations to ensure proper resource recovery and evaluation, production verification, diligence, and inspection and enforcement of the lease, sale, or permit terms. BLM will ensure receipt of fair market value for mineral commodities unless otherwise provided for by statute.

(7) The BLM will maintain effective professional, technical, and managerial personnel knowledgeable in mineral exploration and development.

Under current management practices in the Roswell District, a Lease Notice is attached to all new leases in high potential cave/karst occurrence zones. Lease Notices provide more detailed information concerning limitations that already exist in law, lease terms, regulations, or operational orders. A Lease Notice also addresses special items the lessee should consider when planning operations and informs of possible conditions of approval, but does not impose new or additional stipulations. This lease notice (R 46) reads as follows:

All or portions of the lease are located in a potential cave or karst occurrence area. Within this area, caves or karst features such as sinkholes, passages, and large rooms may be encountered from the surface to a depth of as much as 2,000 feet, within surface areas ranging from a few acres to hundreds of acres. Due to the sensitive nature of the cave or karst systems of this area, special protective measures may be developed during environmental analyses and be required as part of approvals for drilling or other operations on this lease.

These measures could include:

(1) changes in drilling operations;

(2) special casing and cementing programs; modifications in surface activities or;

(3) other reasonable measures to mitigate impacts to cave or karst values.

These measures may be imposed in accordance with 43 CFR 3101.1-2; 43 CFR 3162.5-1; Onshore Oil and Gas Order Nos. 1 and 2; and Section 6 of the lease terms.

EXISTING SITUATION

Description of Cave/Karst Environments

Karst terrain is characterized by vertical and underground drainage forming in areas where rock (usually limestone, dolomite, or gypsum) is highly soluble in naturally acidic surface waters. These landscapes usually contain few if any surface streams and tend to develop sinkholes and sinking streams. The karst process creating this terrain is predominantly one of soluble rock being dissolved by slightly acidic groundwater and removed to leave voids in the parent rock. The acid present is most commonly a mild carbonic acid produced by rain picking up carbon dioxide from the atmosphere and from decomposing organic material in the soil. As this naturally acidic water moves down through joints, cracks and cavities of the bedrock, it dissolves the rock along its path and widens the route. The rock, after being taken into solution and carried off, leaves voids underground.

Rock structure is a very important aspect of cave/karst development. The porosity and permeability of the rock, as well as the presence of joints, fissures, and planes of weakness, form the primary routes for the downward percolation of surface waters. Cave development occurs along these same routes.

Original cave passages often develop at the water table and then subsequently modified after the cave passage has been drained. Joints and fissures occur most often in regions that have been folded or arched due to uplift or local land movements. The determination of whether joints or bedding planes are the more important contributor to cave development is of regional significance.

The hydrology of karst regions is much different than that of other areas. Instead of "normal" laminar flow through pore spaces of rock and alluvium, karst hydrology can and often does contain free flowing underground rivers. The input points for the recharge of these underground drainage systems are the sinkholes and sinking streams. Sinkholes and their associated system of underground drainage conduits or cave passages are often interconnected with one another and can develop systems several miles long.

In the Guadalupe Mountain area of southeast New Mexico, a less common method of cavern development occurs. Here, the theory is that hydrogen sulphide waters have moved up along joints and fractures from deeper rock formations and mixed with the fresh groundwater and oxygen to create sulfuric acid. The sulfuric acid then reacts with the limestone, creating caves. Surface expressions of the caves that lie below are often absent or may appear as lineaments, the linear expression of joints and fractures, along which caves are formed. Entrances to these caves are formed where the erosion of the surface rock intersects the voids.

The typical surface ecosystem provides for a high degree of diversity and stability due to the large variety of animal species that live there and the highly complex set of interactions between them. It is the complexity of interaction between species that enables a surface ecosystem to compensate for environmental changes. In contrast, caves have a simple ecosystem with low stability. They provide habitat for a narrow range of species that spend all or part of their life cycle within the cave. Animal life within caves has adapted to the very constant set of environmental conditions which exist within caves. Thus, cave ecosystems are particularly vulnerable to environmental disturbance.

A description of the types of caves and karsts is found in the Glossary.

Current Drilling and Operating Practices

There are numerous practices currently being implemented by the oil & gas industry in southeast New Mexico in an effort to come to terms with ongoing lost circulation difficulties. Lost circulation problems can be subdivided into two primary occurrence categories:

(1) those experienced while drilling, or
(2) those experienced while cementing the casing.

Loss of circulation while drilling through cave/karst zones encountered anywhere from the surface down to about 2,500 feet is considered by many operators to be more of an operational nuisance than a safety hazard to the industry. This is because the well does not need to remain full of fluid to exert a hydrostatic pressure on hydrocarbon bearing formations so as to counteract fluid entry from these horizons into the wellbore. Conversely, loss of circulation

CABAL ENERGY CORPORATION

Mr. Bryan Arrant
Oil Conservation Division
1301 W. Grand Avenue
Artesia, New Mexico

VIA FAX 505-748-9720

Subject: High Hog 9 Federal #1
Section 9, T25S, R25E
Eddy County, New Mexico

Dear Bryan:

In accordance with our conversation this afternoon regarding the subject well, I am writing to inform you that we just finished drilling the Wild Hog 11 Federal #1 in Section 11, T25S, R25E and did not encounter any H_2S problems.

Also included with this fax is the directional plan.

I look forward to discussing the casing design with you in the morning.

Please let me know if you need any additional information.

Sincerely,

Randell K. Ford
President

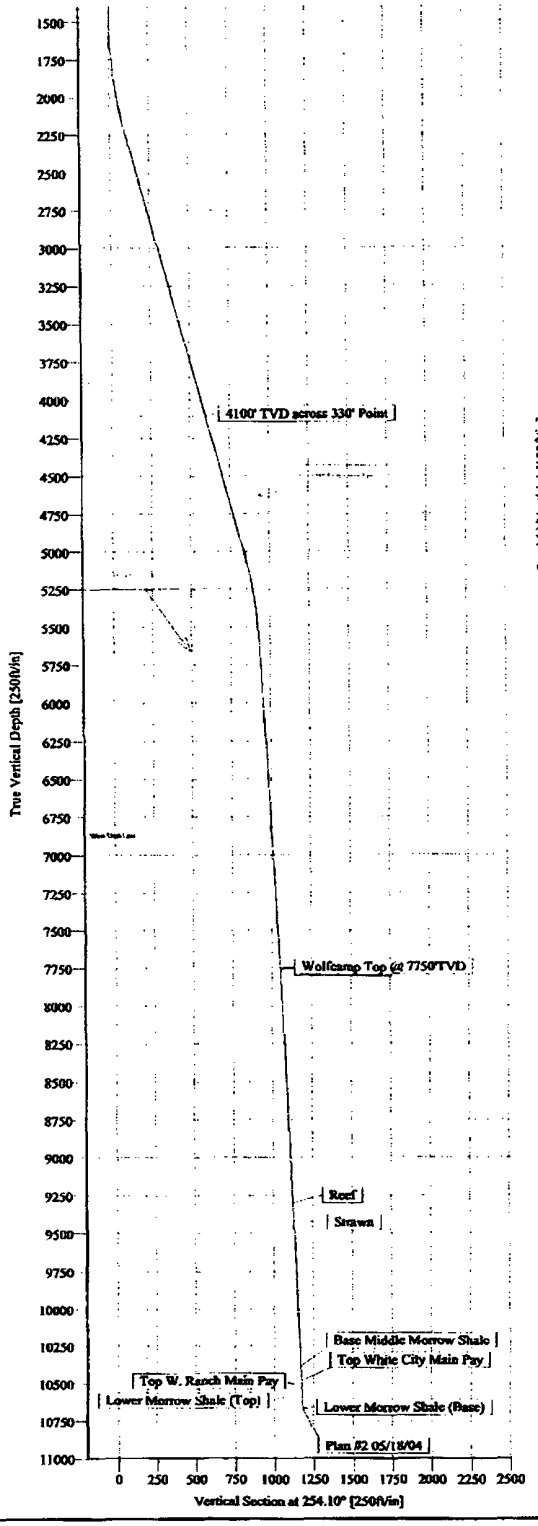
RKF/sn
Enclosures.

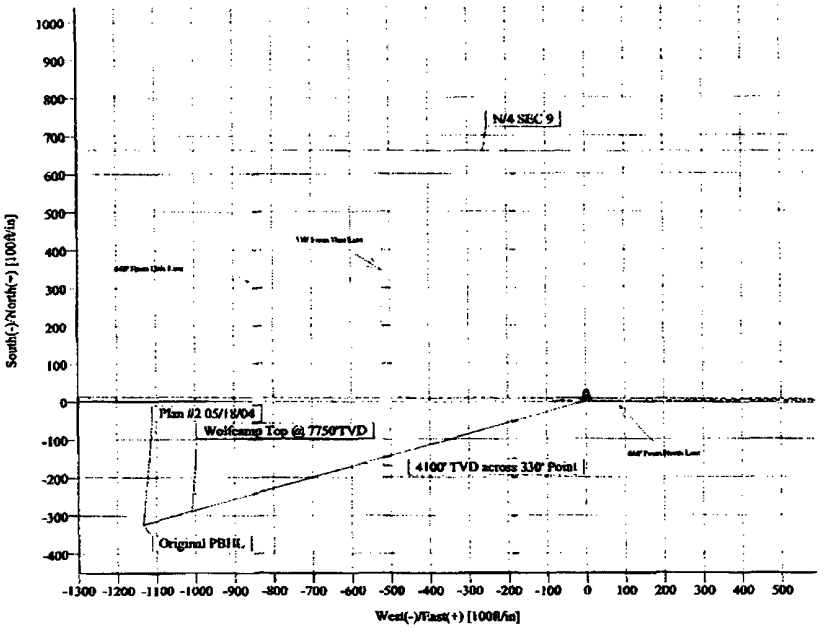
415 West Wall Street
Wilco Building • Suite 1700
Midland, Texas 79701

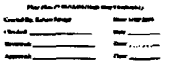
432-682-0440
432-682-0441 (Fax)
e-mail: randell@rkford.com

PATHFINDER
ENERGY SERVICES

CABAL Energy Corp.
High Hog #9 Federal #1
Eddy County, New Mexico
Plan #2 05/18/04







SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	1300.00	0.00	0.00	1300.00	0.00	0.00	0.00	0.00	0.00	
3	1500.00	0.00	0.00	1500.00	0.00	0.00	0.00	0.00	0.00	
4	2250.00	15.00	254.10	2241.46	-26.74	-93.88	2.00	254.10	97.62	
5	4174.10	15.00	254.10	4100.00	-163.17	-572.82	0.00	0.00	595.63	
6	5100.00	15.00	254.10	4994.35	-228.82	-803.29	0.00	0.00	835.25	
7	5675.00	3.50	254.10	5560.92	-254.10	-892.04	2.00	180.00	927.52	
8	10786.36	2.13	254.13	10666.00	-322.80	-1133.40	0.03	179.95	1178.47	Original PBHL

PathFinder
Planning Report

Company:	CABAL Energy Corporation	**Date:**	5/18/2004	**Time:** 16:09:08	**Page:** 1
Field:	High Hog	**Co-ordinate(NE) Reference:**	Site: High Hog 9 Federal, Grid North		
Site:	High Hog 9 Federal	**Vertical (TVD) Reference:**	System: Mean Sea Level		
Well:	High Hog 9 Federal	**Section (VS) Reference:**	Well (0.00N,0.00E,254.10Azi)		
Wellpath:	1	**Plan:**	Plan #2 05/18/04		

Field: High Hog

Map System:	US State Plane Coordinate System 1927	**Map Zone:**	New Mexico, Eastern Zone
Geo Datum:	NAD27 (Clarke 1866)	**Coordinate System:**	Site Centre
Sys Datum:	Mean Sea Level	**Geomagnetic Model:**	igrf2000

Site: High Hog 9 Federal

Site Position:		**Northing:**	418197.60 ft	**Latitude:**	32	8	59.008	N	
From:	Map	**Easting:**	479455.20 ft	**Longitude:**	104	23	58.978	W	
Position Uncertainty:	0.00 ft			**North Reference:**			Grid		
Ground Level:	0.00 ft			**Grid Convergence:**			-0.04	deg	

Well: High Hog 9 Federal **Slot Name:**

Well Position:	+N/-S	0.00 ft	**Northing:**	418197.60 ft	**Latitude:**	32	8	59.008	N
	+E/-W	0.00 ft	**Easting :**	479455.20 ft	**Longitude:**	104	23	58.978	W
Position Uncertainty:		0.00 ft							

Wellpath: 1 **Drilled From:** Surface

Tie-on Depth: 0.00 ft

Current Datum:	Mean Sea Level	**Height**	0.00 ft
Magnetic Data:	3/3/2004		
Field Strength:	49361 nT		
Vertical Section:	**Depth From (TVD)** ft	**+N/-S** ft	**+E/-W** ft
	0.00	0.00	0.00

Above System Datum:	Mean Sea Level
Declination:	8.99 deg
Mag Dip Angle:	60.21 deg
Direction deg	254.10

Plan: Plan #2 05/18/04 **Date Composed:** 5/18/2004

Version: 1

Principal: Yes **Tied-to:** From Surface

Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1300.00	0.00	0.00	1300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1500.00	0.00	0.00	1500.00	0.00	0.00	0.00	0.00	0.00	0.00	
2250.00	15.00	254.10	2241.46	-26.74	-93.88	2.00	2.00	0.00	254.10	
4174.10	15.00	254.10	4100.00	-163.17	-572.82	0.00	0.00	0.00	0.00	
5100.00	15.00	254.10	4994.35	-228.82	-803.29	0.00	0.00	0.00	0.00	
5675.00	3.50	254.10	5560.92	-254.10	-892.04	2.00	-2.00	0.00	180.00	
10786.36	2.13	254.13	10666.00	-322.80	-1133.40	0.03	-0.03	0.00	179.95	Original PBHL

Section 1 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1300.00	0.00	0.00	1300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Section 2 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
1400.00	0.00	0.00	1400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1500.00	0.00	0.00	1500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Section 3 : Start Build 2.00

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
1600.00	2.00	254.10	1599.98	-0.48	-1.68	1.75	2.00	2.00	0.00	0.00
1700.00	4.00	254.10	1699.84	-1.91	-6.71	6.98	2.00	2.00	0.00	0.00

2600.00	15.00	254.10	2579.54	-51.56	-181.00	188.20	0.00	0.00	0.00
2700.00	15.00	254.10	2676.13	-58.65	-205.89	214.08	0.00	0.00	0.00
2800.00	15.00	254.10	2772.72	-65.74	-230.79	239.97	0.00	0.00	0.00
2900.00	15.00	254.10	2869.31	-72.83	-255.68	265.85	0.00	0.00	0.00
3000.00	15.00	254.10	2965.91	-79.92	-280.57	291.73	0.00	0.00	0.00
3100.00	15.00	254.10	3062.50	-87.01	-305.46	317.61	0.00	0.00	0.00
3200.00	15.00	254.10	3159.09	-94.10	-330.35	343.49	0.00	0.00	0.00
3300.00	15.00	254.10	3255.68	-101.19	-355.24	369.38	0.00	0.00	0.00
3400.00	15.00	254.10	3352.28	-108.28	-380.14	395.26	0.00	0.00	0.00
3500.00	15.00	254.10	3448.87	-115.37	-405.03	421.14	0.00	0.00	0.00
3600.00	15.00	254.10	3545.46	-122.47	-429.92	447.02	0.00	0.00	0.00

PathFinder
Planning Report

Company:	CABAL Energy Corporation	**Date:**	5/18/2004	**Time:**	16:09:08	**Page:**	3
Field:	High Hog	**Co-ordinate(NE) Reference:**	Site: High Hog 9 Federal, Grid North				
Site:	High Hog 9 Federal	**Vertical (TVD) Reference:**	System: Mean Sea Level				
Well:	High Hog 9 Federal	**Section (VS) Reference:**	Well (0.00N,0.00E,254.10Azi)				
Wellpath:	1	**Plan:**	Plan #2 05/18/04				

Section 7 : Start DLS 0.03 TFO 179.95

PathFinder
Planning Report

Company:	CABAL Energy Corporation	**Date:**	5/18/2004	**Time:**	16:09:08	**Page:**	2
Field:	High Hog	**Co-ordinate(NE) Reference:**	Site: High Hog 9 Federal, Grid North				
Site:	High Hog 9 Federal	**Vertical (TVD) Reference:**	System: Mean Sea Level				
Well:	High Hog 9 Federal	**Section (VS) Reference:**	Well (0.00N,0.00E,254.10Azi)				
Wellpath:	1	**Plan:**	Plan #2 05/18/04				

Section 3 : Start Build 2.00

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
1800.00	6.00	254.10	1799.45	-4.30	-15.09	15.69	2.00	2.00	0.00	0.00
1900.00	8.00	254.10	1898.70	-7.64	-26.81	27.88	2.00	2.00	0.00	0.00
2000.00	10.00	254.10	1997.47	-11.92	-41.86	43.52	2.00	2.00	0.00	0.00
2100.00	12.00	254.10	2095.62	-17.15	-60.21	62.60	2.00	2.00	0.00	0.00
2200.00	14.00	254.10	2193.06	-23.31	-81.84	85.10	2.00	2.00	0.00	0.00
2250.00	15.00	254.10	2241.46	-26.74	-93.88	97.62	2.00	2.00	0.00	0.00

Section 4 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
2300.00	15.00	254.10	2289.76	-30.29	-106.33	110.56	0.00	0.00	0.00	0.00
2400.00	15.00	254.10	2386.35	-37.38	-131.22	136.44	0.00	0.00	0.00	0.00
2500.00	15.00	254.10	2482.94	-44.47	-156.11	162.32	0.00	0.00	0.00	0.00
2600.00	15.00	254.10	2579.54	-51.56	-181.00	188.20	0.00	0.00	0.00	0.00
2700.00	15.00	254.10	2676.13	-58.65	-205.89	214.08	0.00	0.00	0.00	0.00
2800.00	15.00	254.10	2772.72	-65.74	-230.79	239.97	0.00	0.00	0.00	0.00
2900.00	15.00	254.10	2869.31	-72.83	-255.68	265.85	0.00	0.00	0.00	0.00
3000.00	15.00	254.10	2965.91	-79.92	-280.57	291.73	0.00	0.00	0.00	0.00
3100.00	15.00	254.10	3062.50	-87.01	-305.46	317.61	0.00	0.00	0.00	0.00
3200.00	15.00	254.10	3159.09	-94.10	-330.35	343.49	0.00	0.00	0.00	0.00
3300.00	15.00	254.10	3255.68	-101.19	-355.24	369.38	0.00	0.00	0.00	0.00
3400.00	15.00	254.10	3352.28	-108.28	-380.14	395.26	0.00	0.00	0.00	0.00
3500.00	15.00	254.10	3448.87	-115.37	-405.03	421.14	0.00	0.00	0.00	0.00
3600.00	15.00	254.10	3545.46	-122.47	-429.92	447.02	0.00	0.00	0.00	0.00
3700.00	15.00	254.10	3642.05	-129.56	-454.81	472.90	0.00	0.00	0.00	0.00
3800.00	15.00	254.10	3738.65	-136.65	-479.70	498.78	0.00	0.00	0.00	0.00
3900.00	15.00	254.10	3835.24	-143.74	-504.59	524.67	0.00	0.00	0.00	0.00
4000.00	15.00	254.10	3931.83	-150.83	-529.49	550.55	0.00	0.00	0.00	0.00
4100.00	15.00	254.10	4028.42	-157.92	-554.38	576.43	0.00	0.00	0.00	0.00
4174.10	15.00	254.10	4100.00	-163.17	-572.82	595.61	0.00	0.00	0.00	0.00

Section 5 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
4200.00	15.00	254.10	4125.02	-165.01	-579.27	602.31	0.00	0.00	0.00	0.00
4300.00	15.00	254.10	4221.61	-172.10	-604.16	628.19	0.00	0.00	0.00	0.00
4400.00	15.00	254.10	4318.20	-179.19	-629.05	654.08	0.00	0.00	0.00	0.00
4500.00	15.00	254.10	4414.80	-186.28	-653.94	679.96	0.00	0.00	0.00	0.00
4600.00	15.00	254.10	4511.39	-193.37	-678.84	705.84	0.00	0.00	0.00	0.00
4700.00	15.00	254.10	4607.98	-200.46	-703.73	731.72	0.00	0.00	0.00	0.00
4800.00	15.00	254.10	4704.57	-207.55	-728.62	757.60	0.00	0.00	0.00	0.00
4900.00	15.00	254.10	4801.17	-214.64	-753.51	783.49	0.00	0.00	0.00	0.00
5000.00	15.00	254.10	4897.76	-221.73	-778.40	809.37	0.00	0.00	0.00	0.00
5100.00	15.00	254.10	4994.35	-228.82	-803.29	835.25	0.00	0.00	0.00	0.00

Section 6 : Start Drop -2.00

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
5105.85	14.88	254.10	5000.00	-229.24	-804.74	836.76	2.00	-2.00	0.00	180.00
5200.00	13.00	254.10	5091.38	-235.45	-826.56	859.44	2.00	-2.00	0.00	-180.00
5300.00	11.00	254.10	5189.18	-241.15	-846.55	880.23	2.00	-2.00	0.00	180.00
5400.00	9.00	254.10	5287.66	-245.90	-863.25	897.59	2.00	-2.00	0.00	180.00
5500.00	7.00	254.10	5386.68	-249.72	-876.64	911.51	2.00	-2.00	0.00	180.00
5600.00	5.00	254.10	5486.13	-252.58	-886.69	921.96	2.00	-2.00	0.00	180.00
5675.00	3.50	254.10	5560.92	-254.10	-892.04	927.52	2.00	-2.00	0.00	180.00