N.M. Oil Cons. DIV-Dist. 2 1301 W. Grand Avenue

Artesia, NM 88210

Form 3160-3

FORM APPROVED OMB No. 1004-0137

INITED OTAT	r.c		Expires March 3	1, 2007
UNITED STATI DEPARTMENT OF THE BUREAU OF LAND MA	5. Lease Serial No. NM 07306			
APPLICATION FOR PERMIT TO	6. If Indian, Allotee or Tribe Name N/A			
la. Type of work: DRILL REEN	7 If Unit or CA Agreement N/A	, Name and No.		
lb. Type of Well: ☐Oil Well ☐Gas Well ☐Other	Single Zone Multi	ple Zone	8. Lease Name and Well N Aztec 35 Federal #1	
2 Name of Operator Cabal Energy Corporation	9. API Well No. 30-005-637/1			
3a. Address 415 W. Wall Ste 1700 Midland, Texas 79701	3b. Phone No. (include area code) 432-682-0440		10. Field and Pool, or Explor Pecos Slope Abo	atory
4. Location of Well (Report location clearly and in accordance with At surface 660' FNL & 660' FEL	any State requirements.*)		11. Sec., T. R. M. or Blk. and Sec 35, T 10S, R 25	·
At proposed prod. zone 4. Distance in miles and direction from nearest town or post office* 7 miles East of Roswell, New Mexico			12. County or Parish Chaves	13. State
5. Distance from proposed* location to nearest property or lease line, ft.	16. No. of acres in lease	1 .	g Unit dedicated to this well	
(Also to nearest drig. unit line, if any) 8. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 2,640'	19. Proposed Depth 5,000		BIA Bond No. on file	
1. Elevations (Show whether DF, KDB, RT, GL, etc.) 3,715'	22 Approximate date work will sta 12/05/2004	l art*	23. Estimated duration 20 Days	
he following, completed in accordance with the requirements of Ons	24. Attachments	attached to th	is form:	
Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest Syste SUPO shall be filed with the appropriate Forest Service Office).	4. Bond to cover ltem 20 above). cm Lands, the 5. Operator certifi	the operation	ns unless covered by an existi ormation and/or plans as may	
5. Signature Paul CK D	Name (Printed Typed) Randell K. Ford		Date	11/12/2004
President				,
pproved by (Signature)	Name (Printed Typed 1)	SGD.) AI	mando a. lopez RC	DV 3 0 20
Assistant Field Manage	**************************************	ELD OF	FICE	
application approval does not warrant or certify that the applicant honduct operations thereon. Conditions of approval, if any, are attached.	olds legal or equitable title to those righ	nts in the sub	ject lease which would entitle	the applicant to
itle 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a tates any false, fictitious or fraudulent statements or representations	a crime for any person knowingly and as to any matter within its jurisdiction.	willfully to n	nake to any department or age	ncy of the United

*(Instructions on page 2)

RECEIVED

DEC .. 1 2004

9CD-ARTESIA

APPROVED FOR I YEAR

CEMENT TO COVER ALL OIL, GAS AND WATER BEARING ZONES I.e.; Gloriera

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

Form C-144

June 1, 2004

Pit or Below-Grade Tank Registration or Closure

Type of action: Registration of a pit or	c covered by a "general plan"? Yes XI N below-grade tank Closure of a pit or below-g	grade tank 🔲
Operator:Cabal Energy CorporationTelephone: 432-6		m
Address:415 W. Wall St. Ste 1700 Midland, Texas 79701		D 447
Facility or well name: Aztec 35 Federal # 1_API #:		
County: ChavesLatitude_33°24'26.10" N Longitude 104°21'55.44	4"W NAD: 1927 ☐ 1983 ☐ Surface Owner Fed	leral 💹 State 🗌 Private 🗍 Indian 📗
<u>Pit</u>	Below-grade tank	
Type: Drilling Production Disposal	Volume:bbl Type of fluid:	
Workover	Construction material:	- RECEIVED
Lined 🛛 Unlined 🗌	Construction material: Double-walled, with leak detection? Yes If	not, explain why not.
Liner type: Synthetic Thickness 12 mil Clay		001 2 2 2004
Pit Volumebbl		OCD-ARTESIA
rit voluneou	Less than 50 feet	(20 points)
Depth to ground water (vertical distance from bottom of pit to seasonal high	50 feet or more, but less than 100 feet	(10 points)
water elevation of ground water.)	100 feet or more	(0 points) 0
Wellhead protection area: (Less than 200 feet from a private domestic	Yes	(20 points)
water source, or less than 1000 feet from all other water sources.)	No	(0 points) 0
Distance to surface water: (horizontal distance to all wetlands, playas,	Less than 200 feet	(20 points)
irrigation canals, ditches, and perennial and ephemeral watercourses.)	200 feet or more, but less than 1000 feet	(10 points)
irrigation canais, ditches, and percrina and epitemeral watercourses.)	1000 feet or more	(0 points) 0
	Ranking Score (Total Points)	0
If this is a pit closure: (1) attach a diagram of the facility showing the pit's your are burying in place) onsite offsite foffsite, name of facility remediation start date and end date. (4) Groundwater encountered: No Yattach soil sample results and a diagram of sample locations and excavations Additional Comments:	es I f yes, show depth below ground surface_	al description of remedial action taken including
I hereby certify that the information above is true and complete to the best of been/will be constructed or closed according to NMOCD guidelines , Date: October 21, 2004 Printed Name/Title Bobbi Molina – Consultant Signature Your certification and NMOCD approval of this application/closure does not otherwise endanger public health or the environment. Nor does it relieve the	a general permit , or an (attached) alternative build the content relieve the operator of liability should the content	e OCD-approved plan
Approval: Printed Name/Title	Signature	OCT 25 2004

State of New Mexico

DISTRICT I 1625 M. FRINCH DR., BOBBB, NM 58240

Energy, Minerals and Natural Resources Department

DISTRICT II

1301 V. CRAIGO AVENUR, ARTESIA, XX 68210

Form C-102 Revised JUNE 10, 2003 Submit to Appropriate District Office State Lease - 4 Copies Pee Lease - 3 Copies

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

OIL CONSERVATION DIVISION 1220 SOUTH ST. FRANCIS DR. Santa Fe, New Mexico 87505

DISTRICT IV WELL LOCATION AND ACREAGE DEDICATION PLAT AMENDED REPORT 1220 S. ST. FRANCIS SS., SANTA PR. NO. 87505 API Number Pool Code Pool Name Well Number Property Code Property Name AZTEC "35" FEDERAL 1 Elevation OCRID No. Operator Name CABAL ENERGY CORPORATION 3715 194930

Surface Location

UL or lot No.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
Α	35	10-S	25-E		660	NORTH	660	EAST	CHAVES

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	foint o	r Infill Co	nsolidation (Code Or	der No.				

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED

OPERATOR CERTIFICATION 3727.7'
GEODETIC COORDINATES NAD 27 NME Y=875683.1 N X=490214.5 E December 6, 2004 Bate SURVEYOR CERTIFICATION I have by certify that the well location shown on this pict was plotted from field notes of actual environments by me a under my supervision and that the same is true and correct to the beat of my belief. SEPTEMBER 17, 2004 Date Surregarding is Surveyed. LA Signature & Gent fits Professional Surveyed. LA Signature &

DRILLING PROGRAM

Cabal Energy Corporation Aztec 35 Federal # 1 Section 35, T-10-S, R-25-E Chaves 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. ESTIMATED TOPS OF GEOLOGIC MARKERS:

		KB GL = 3,715' Estimated = 3,724'
San Andres	+701' MD	(+3,023')
San Andres Porosity	+1,242' MD	(+2,482')
Glorietta	+2,338' MD	(+1,386')
Glorietta Sand	+2,508' MD	(+1,216')
Yeso	+2,694' MD	(+7,030')
Abo Clastic	4,087' MD	(-363')
Zu Upper Abo Sd	4,216' MD	(-492')
Zu Massive Abo Sd	4,344' MD	(-620')
Lower Abo Sd #2	4,444' MD	(-720')
Lower Abo Sd #1	4,494' MD	(-770')
Total Depth	11,800'	¥

2. <u>ESTIMATED DEPTHS TO WATER, OIL OR GAS FORMATIONS:</u>

Fresh Water Above 200' Gas ABO

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 3000 psi working pressure. All BOPs and accessory equipment will be tested according to Onshore Order #2 before drilling out.

4. PROPOSED CASING PROGRAM:

Hole Size	<u>Interval</u>	Casing Size	Weight	Grade, Joint
12-1/4"	0 – 850'	8-5/8"	24#	K-55 ST&C
7-7/8"	0 - 5,000	5-1/2"	15.5#	J-55 ST&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

14" conductor ceme

cemented with ready mix to surface

8-5/8" surface

300 sxs Premium Plus cement, 2% calcium chloride

5-1/2" production

150 sxs Light Cement

150 sxs Super "H" cement .5% Halad, .4% CFR-3,

3# per sx Gilsonite

6. PROPOSED MUD SYSTEM:

<u>DEPTH</u>	DESCRIPTION	MUD WEIGHT	VISCOSITY	WATER LOSS
0 - 850°	fresh water	8.6 - 8.8 ppg	28 - 30 $28 - 34$	NC
850 - 5,000°	brine/mud	10.0 - 10.2 ppg		12 cc

7. TESTING, LOGGING AND CORING PROGRAM:

Samples From 850'

DST's N/A

Logging Dual Lateral, Gamma Ray, Caliper, Density Neutron,

PE Factor

Coring Possible sidewall core: San Andres, Glorietta, Yeso, Abo Sd

8. ABNORMAL PRESSURES, TEMPERATURES AND Hydrogen Sulfide:

None anticipated. Maximum bottom hole pressure should not exceed 1,800psi. Although we do not anticipate encountering H_2S in amounts significant enough to require an H_2S contingency plan in accordance with Rule 118 of the OCD, we have prepared an H_2S drilling plan, which follows.

ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:

It is planned that operations will commence on December 5, 2004. Drilling should be completed within 20 days followed by completion operations.

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

Cabal Energy Corporation

Aztec 35 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 H₂S 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 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 H₂S 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 H₂S.

- 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.

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.

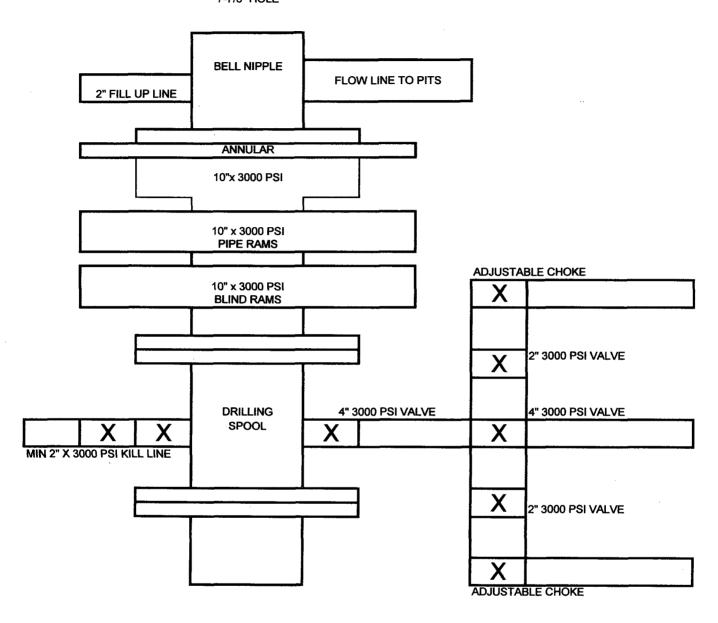
G. Communication:

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 H₂S environment will be conducted during the daylight hours.

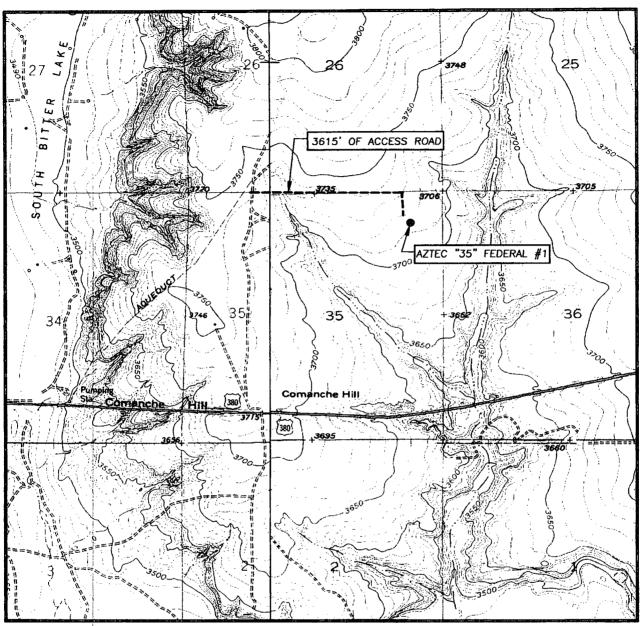
BOP SCHEMATIC FOR 7-7/8" HOLE



Cabal Energy Corporation Aztec 35 Federal #1 Chaves County, New Mexico

Exhibit 1

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

SEC. <u>35</u> TWP. <u>10-S</u> RGE. <u>25-E</u>

SURVEY N.M.P.M.

COUNTY CHAVES

DESCRIPTION 660' FNL & 660' FEL

ELEVATION 3715'

CABAL ENERGY
OPERATOR CORPORATION

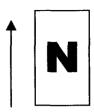
LEASE AZTEC "35" FEDERAL

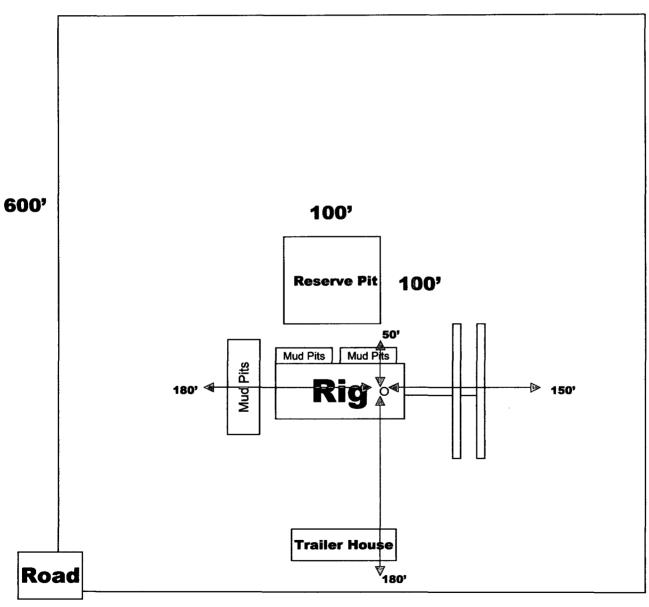
U.S.G.S. TOPOGRAPHIC MAP BITTER LAKE, COMANCHE SPRING, N.M. CONTOUR INTERVAL: 10' BITTER LAKE, N.M. COMANCHE SPRING, N.M.



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

DRILLING RIG LAYOUT Cabal Energy Corporation Aztec 35 Federal #1





600'

Exhibit D
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 St. Ste 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 07306

Legal Description of Land:

960 Acres

Section 26: S/2 SW/4 and NW/4 SW/4

Section 27: S/2 NE/4, NW/4 NE/4 and E/2 SE/4

Section 34: E/2 E/2

Section 35: E/2 and W/2 W/2

Township 10 South, Range 25 East, Chaves, New Mexico

Bond Coverage:

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

BLM Bond File No.: NM 2860

Randell K. Ford

President

November 12, 2004