Form 3160-3
(July 1939)
(formerly 9-331C)

NM OIL CONS. COMMISSION
Drawer DD
Artesia, NM 88210

CONTACT RE[illegible]NG OFFICE FOR [illegible]R OF COPIES RE[illegible]RED

30-015-26488

BLM Roswell District
Modified Form No.
NM060-3160-2

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
OCT 1 AM '90

APPLICATION FOR PERMIT TO DRILL, DEEPEN OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: NM-0540294-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] OTHER — SINGLE ZONE [X] MULTIPLE ZONE [ ]

8. FARM OR LEASE NAME: Philly Federal

2. NAME OF OPERATOR: Coquina Oil Corporation

3a. Area Code & Phone No.: (713) 961-1770

9. WELL NO.: 2

3. ADDRESS OF OPERATOR: P.O. Box 27725 Houston, TX 77227-7725

10. FIELD AND POOL, OR WILDCAT: Frontier Hills Strawn

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1980' FNL & 1980' FEL
At proposed prod. zone: 1980' FNL & 1980' FEL

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec 21, T23S, R26E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 9 Miles Southwest of Carlsbad

12. COUNTY OR PARISH: Eddy

13. STATE: NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL
1980'	480	320
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. ROTARY OR CABLE TOOLS**
1320'	10,800'	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3338' GR

22. APPROX. DATE WORK WILL START*: 10/17/90

23. PROPOSED CASING AND CEMENTING PROGRAM

HOLE SIZE	CASING SIZE	WEIGHT/FOOT	GRADE	THREAD TYPE	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8"	48	H-40	STC	350'	Circulate *
12 1/4"	9 5/8"	40	K-55	STC	2750'	Circulate **
8 3/4"	5 1/2"	15.5-20.0	K-55, N-80	LTC	10,800'	To be determined.

It is proposed to drill a 17 1/2" hole to 350', set & cement the 13 3/8" casing with sufficient volume to circulate the cement to surface. A 12 1/4" hole will be drilled to approximately 2750' and the 9 5/8" casing will be run and cemented with sufficient volume to circulate to surface or approximately 973 sx of cement. After WOC a minimum of 18 hours, the casing will be tested to 1000 psi. A double ram blowout preventer plus a Hydril will be nipped up and tested to 3000 psi. A 8 3/4" hole will be drilled to total depth and pending results of DST, if positive, 5 1/2: production casing will be run. A ~~brine~~ EW 339 drilling fluid will be used to 2750'. Below 2750', a salt water gel mud with adequate density and viscosity to control the well shall be maitained. Pit volume totalizers and flow sensor will be installed prior to reaching the Strawn, anticipated at approximately 10,800'.

Post ID-1
10-6-90

*Circulate vol= 243cu ft; w/ 50% excess and 1.4 cu ft/sk, requirement is for 260 sx cmt New Loc
**Circulate vol= 883cu ft; w/ 30% excess and 1.18 cu ft/sk, requirement is cor 973 sx cmt & API

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED Sandra D. Yee TITLE Production Clerk DATE 8/17/90

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY David Stewart TITLE AREA MANAGER CARLSBAD RESOURCE AREA DATE 9-25-90

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the

INSTRUCTIONS

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

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

ITEM 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

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

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

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

NOTICE

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

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

PRINCIPAL PURPOSE: The information is to be used to process and evaluate your application for permit to drill, deepen, or plug back an oil or gas well.

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

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

The Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq) requires us to inform you that:

This information is being collected to allow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases.

This information will be used to analyze and approve applications.

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

Submit to Appropriate
District Office
State Lease - 4 copies
Fee Lease - 3 copies

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

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

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

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 1-1-89

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WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator	Lease	Well No.
COQUINA OIL CORP.	Philly Federal	2

Unit Letter	Section	Township	Range	County
G	21	23 South	26 East NMPM	Eddy

Actual Footage Location of Well:
1980 feet from the North line and 1980 feet from the East line

Ground level Elev.	Producing Formation	Pool	Dedicated Acreage:
3338.0	Strawn	Frontier Hills	320 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

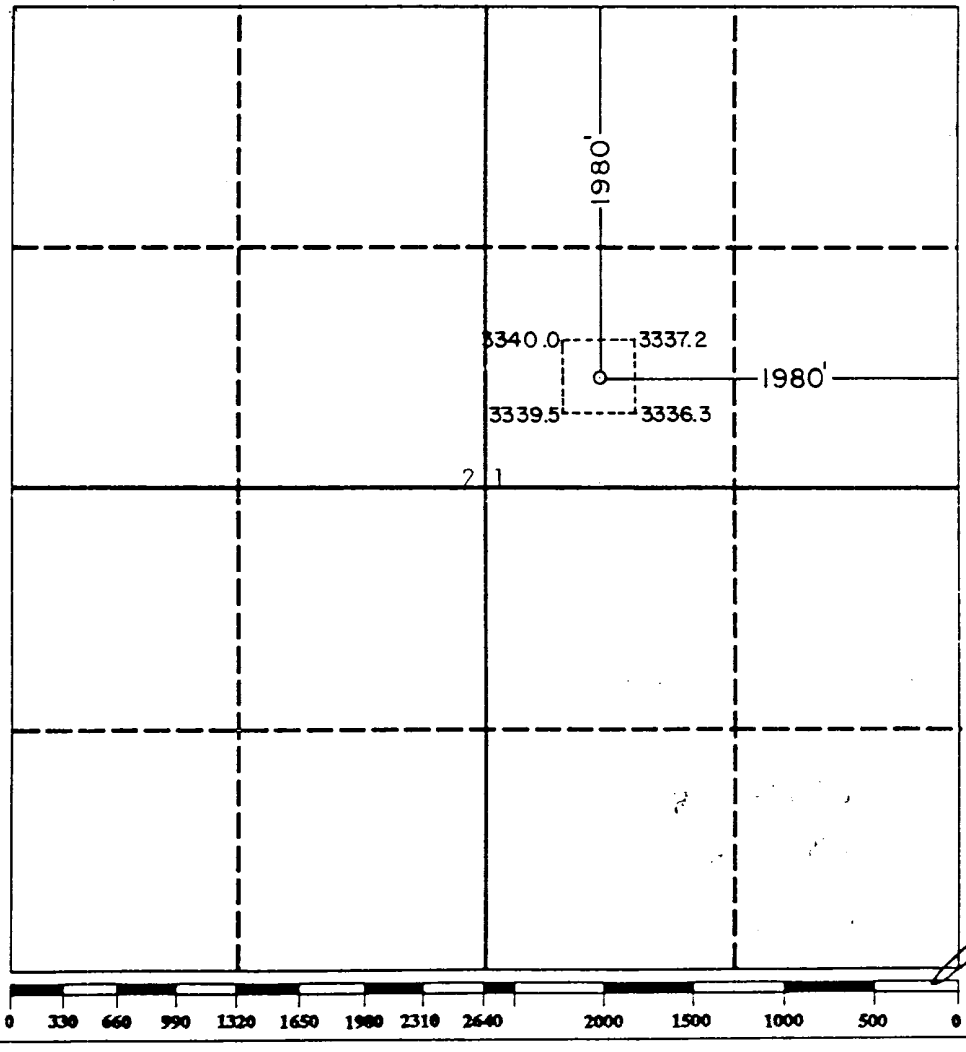
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?

☐ Yes ☒ No If answer is "yes" type of consolidation N/A

If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary. N/A (Not applicable)

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



OPERATOR CERTIFICATION

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

Signature: Sheryl L. Jonas

Printed Name: Sheryl L. Jonas

Position: Agent

Company: Coquina Oil Corp.

Date: 9/12/90

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 knowledge and belief.

Date Surveyed: August 13,1990

Signature & Seal of Professional Surveyor

Certificate No. JOHN W. WEST, 676
RONALD J. EIDSON, 3239

125030

APPLICATION FOR DRILLING

COQUINA OIL CORPORATION

PHILLY FEDERAL NO. 2
1980' FNL AND 1980' FEL
SECTION 21, T-23-S, R-26-E
EDDY COUNTY, NEW MEXICO

In conjunction with form 3160-3, Application for Permit to Drill subject well, Coquina Oil Corporation submits the following items of pertinent information in accordance with USGS requirements.

1. The geological surface formation is on a gently sloping landform with surficial deposits uniformly fine grained, and made up of compacted silty loams, silty clay loams, and clay loams.

2. The estimated top(s) of geological markers are as follows:

Capitan	495'	Wolfcamp	8845'
Lamar	1745'	Strawn	10,435'
Delaware Sand	1885'	Atoka	10,725'
Bone Springs	5345'	Total Depth	11,000'

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

Water	Surface water between 100' and 350'
Oil	Bone Springs below 5345' oil and/or gas
	Wolfcamp below 8845'
Gas	Strawn below 10,435'

4. Proposed casing program: See attached form 3160-3.

5. Pressure control equipment: See Exhibit "4".

6. Mud Program: See attached form 3160-3, and Exhibit "5".

7. Auxiliary equipment: Kelly cock and drill pipe/collar safety valve with appropriate connections for each.

8. Testing and logging programs:

Possible DST(s).	Bone Springs, Wolfcamp, and the Strawn if justified by valid show of oil and/or gas.
Open hole logs:	GR-CN-LDT, DLL w/MSFL and/or others as required to evaluate formation and productivity.

9. No abnormal pressures or temperatures are anticipated.

10. Anticipated spud date: On or before September 20, 1990.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

COQUINA OIL CORPORATION

PHILLY FEDERAL COM. NO. 2
1980' FNL & 1980' FEL
SECTION 21, T-23-S, R-26-E
EDDY COUNTY, NEW MEXICO

This plan is submitted with Form 3160-3 covering the above described well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of necessary surface disturbance involved, and the procedures to be followed in rehabilitating the surface after completion of the operations so that a complete appraisal can be made of the environmental effects associated with the operation.

1. EXISTING ROADS.

Exhibit 1 is a vicinity map.

Exhibit 2 is a portion of a U.S.G.S. topographic map of the area showing the location of the proposed wellsite and roads in the vicinity. The location is situated approximately eight miles south-south-west of Carlsbad, New Mexico.

Directions:
Proceed from south "Y" in Carlsbad, go south on U.S. Highway No. 62-180 for 8.0 miles.

Turn west (right) on Eddy County Road No. 408 (Dark Canyon Road), go approximately 10 miles.

Turn north (right) on Coquina Lease Road, go approximately 1.0 miles to the Philly Federal No. 1 location. Turn west and go to the proposed well location.

2 PLANNED ACCESS ROAD

A.) The proposed access road will utilize 1 mile of existing lease road into the Philly Federal No. 1 location.

B.) There will be 1100' of new road built from the Philly Federal No. 1 location west to the Philly Federal No. 2 location.

C.) The road will be a caliche road approximately 20 feet in width.

3. LOCATION OF EXISTING WELLS.

A.) The well locations in the vicinity of the proposed well are shown on Exhibit 2.

B.) There are no producing wells on this lease at present.

4 LOCATION OF PROPOSED FACILITIES:

In the event that the well is productive, the necessary production facilities will be installed on the drilling pad.

5. LOCATION AND TYPE OF WATER SUPPLY:

It is planned to drill the well with fresh water and brine water as presented in Exhibit 5. All drilling fluids will be obtained from commercial sources and will be hauled to the location by truck over existing and proposed roads shown in Exhibits A & B.

6. SOURCES OF CONSTRUCTION MATERIALS:

Any caliche required for construction of the drilling pad and the access road will be obtained, with permission, from the BLM.

7. METHODS OF HANDLING WASTE DISPOSAL:

A. Drill cuttings will be disposed of in the reserve pit.

B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.

C. 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 U.S.G.S. for appropriate approval.

D. Oil produced during operations will be stored in tanks until sold.

E. Current laws and regulations pertaining to the disposal of human waste will be complied with.

F. Trash, waste paper, garbage and junk will be buried in a separate trash pit and covered with a minimum of 24 inches of dirt. All waste material will be contained to prevent scattering by the wind.

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

8. ANCILLARY FACILITIES:

None required.

9. WELLSITE LAYOUT

A. Exhibit 3 shows the dimensions of the well pad and reserve pits and the location of major rig components.

B. The reserve pits will be plastic lined.

C. The pad and pit area has been staked and flagged.

10. PLANS FOR RESTC ON OF THE SURFACE:

A After finishing drilling and/or completion operations, all equipment and other material not needed for further operations will be removed. The location will be cleared of all trash and junk to leave the wellsite in as aesthetically pleasing a condition as possible.

B. Unguarded pits, if any, containing fluids will be fenced

C. If the propcsed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management and the United States Geological Survey will be complied with and will be accomplished as expeditiously as possible. All pits will be filled and leveled within 90 days after abandonment.

11. OTHER INFORMATION

A. Topography: The proposed location will be situated on a gently sloping landform due east of the Cueva Escarpment and Dark Canyon.

B. Soil: The topsoil at the well site is composed of compacted silty loams, silty clay loams, and clay loams. Rock is limited to a light, broken scree of highly weathered, limestone gravels and cobbles.

C. Flora and Fauna: The plant cover is composed of the mixed, grassland/desert scrub formation is made up of American tarbush, soaptree yucca, lotebush condalia, nodding onion, desert holly, Indian rush-pea, range ratang, silver leaf night shade, tobosas, burrograss and poverty threeawn.

D. Ponds and streams: Water is available at Yellow Jacket Spring.

E. Residence and other structures: None in the immediate area.

12. OPERATOR'S REPRESENTATIVES:

The field representatives responsible for assuring compliance with the approved surface use plan are:

Drilling Superintendent:

Bill Baker	Mobile: 505-887-9503-01124
James F. O'Briant	Office: 915-683-5511

Vice President, Operations:

Dan L. Stephens	713-961-1770

Geologist:

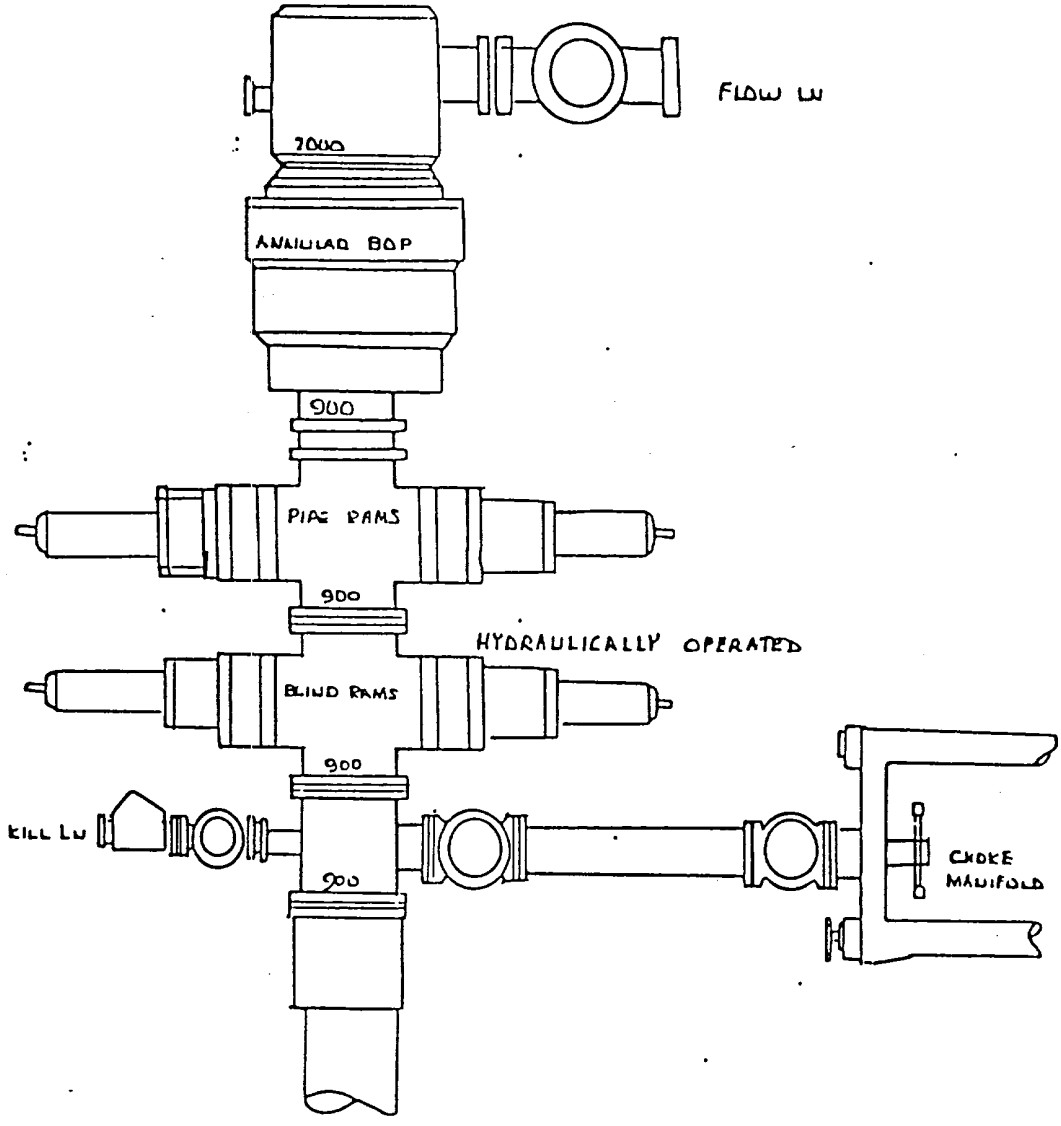
Scott Gutterman	713-961-1770

13 CERTIFICATION:

I hereby certify that I, or persons under my direct supervision have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently 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 Coquina Oil Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

September 13, 1990
Date

Sheryl A. Jones
Agent



BOP

COQUINA OIL CORPORATION
PHILLY FEDERAL NO. 2
SEC. 21, T-23-S, R-26-E
EDDY COUNTY, NEW MEXICO
BOP SCHEMATIC
EXHIBIT "4"

COQUINA OIL AND GAS COMPANY
PHILLY FEDERAL #2

SECTION 21, T-23S, R-26E
EDDY COUNTY, NEW MEXICO

CASING:

CONDUCTOR:	40'	of	20"
SURFACE:	350'	of	13 3/8"
INTERMEDIATE:	3,000'	of	9 5/8"
PRODUCTION:	10,800'	of	7"

DEPTH	MUD WEIGHT	VISCOSITY	WATER LOSS	SOLIDS	COMMENTS
0 to 40'	(optional)				Rathole Machine
0 to 350'	8.7 to 9.0	35 to 40	No Control	<4	Spud Mud
350 to 3,000'	8.4 to 10.2	26 to 28	No Control	<1	Brine Water
3,000 to 9,500'	8.4 to (10.0)	26 to 28	No Control	<1	Fresh Water/Brine
9,500 to 10,000'	10.0 to 10.2	26 to 28	No Control	<1	Brine
10,000 to 10,800'	10.0 to 10.6	36 to 40	15cc or less		PolyPac, Salt Gel, My-Lo-Jel
(10,800'	10.6 to 10.8	36 to 40			Possible Weight)

COQUINA OIL CORPORATION
PHILLY FEDERAL NO. 2
SEC. 21, T-23-S, R-26-E
EDDY COUNTY, NEW MEXICO
PROPOSED MUD PROGRAM
EXHIBIT "5"

CONDUCTOR: 40' of 20" (Optional)

Pre-set Rathole Machine

SURFACE: 350' of 13 3/8"

We suggest a M-I Gel and Lime type drilling fluid having a viscosity in the 33 to 35 sec/qt. range be used to spud surface hole.

This type drilling fluid should be sufficient to drill to 350' and run 13 3/8" casing.

COMMENTS:

1. The Gravel Beds in this general area are not usually troublesome. A 35 ± sec/qt. viscosity should be sufficient to drill surface.

2. There is a possibility you may encounter seepage to total loss while drilling surface. Normally, a few sacks of Paper added to the drilling fluid system is sufficient to control seepage.

   For complete loss, we suggest adding Cedar Fiber and Cottonseed Hulls to the system.

[redacted]

NOTE: [illegible] gas may be encountered (Bone Spring). We suggest raising weight with [illegible], if needed.

This type drilling fluid should be sufficient to drill to 9,5[illegible] or near the top of the Penn.

NOTE: In the event fill-up occurs, we suggest a 50 to 100 barrel sweep through the hole every 12 to 24 hours.

At 9,500', or near the top of the Penn, (earlier should hole conditions dictate); we suggest displacing the fresh or controlled brine system with a 10.0 lbs/gal. Brine water.

NOTE: Sweeps with LCM added will be needed to help control loss zone prior to mud up.

This type drilling fluid should be sufficient to drill to 10,000', or near the top of the Strawn.

At 10,000', or prior to the top of the Strawn, we suggest mudding up with a Salt Gel, PolyPac, and My-Lo-Jel type drilling fluid having the following characteristics:

Weight	10.0 to 10.2 lbs/gal.
Viscosity	36 to 40 sec/qt.
Plastic Viscosity	6 to 10 CPS
Yield Point	7 to 12 lbs/100 ft^2
Initial Gel	0 to 2
10 Minute Gel	2 to 5
Water Loss	15.0 cc or less
pH	9.5 to 10.0
LCM	3 to 5 lbs/bbl.

NOTE: We suggest increasing mud weight to 10.4 lbs/gal at 10,200'. Further increases in mud to the 10.6 to 10.8 lbs/gal range may be needed.

This type drilling fluid should be sufficient to drill to 10,800', with the exception of weight an viscosity which may need altering (increased) as hole conditions dictate.

COMMENTS:

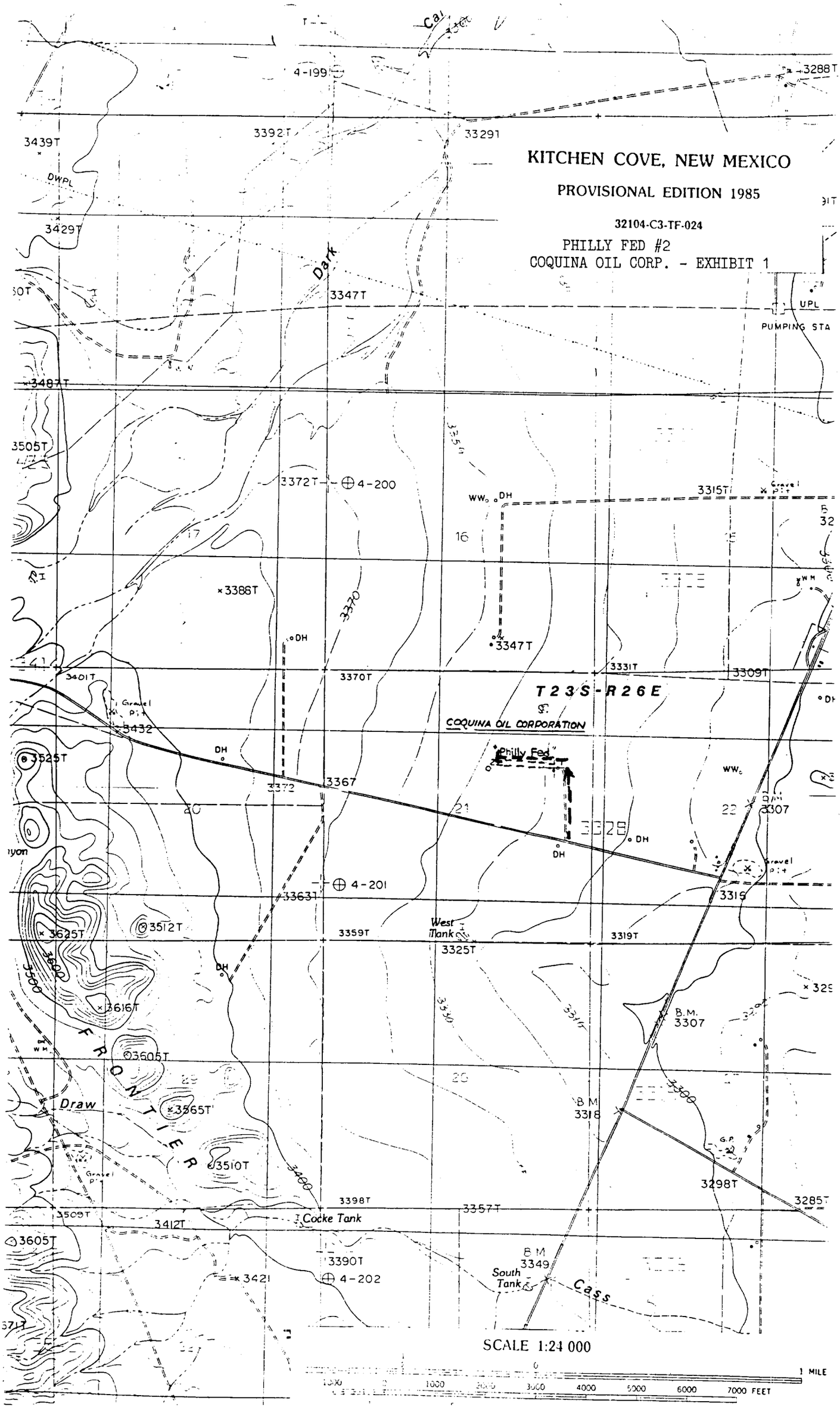
1. We suggest circulating a portion of the reserve pit, returning to steel pits before mud up depth.

2. It is possible (in this area) to drill and DST the Wolfcamp, and Cisco Canyon with Brine water. However, should a water loss control of the drilling fluid be desired prior to running DST, we suggest mudding up with My-Lo-Jel and PolyPac type drilling fluid as stated above.

3. There is a possibility the Lower Wolfcamp or Penn Sections will have pressures that could require a drilling fluid weight in excess of 10.5 lbs/gal. to control.

   We suggest installing a drilling head, Swaco Choke and

gas separator prior to drilling below the top to the Penn.


KITCHEN COVE, NEW MEXICO
PROVISIONAL EDITION 1985
32104-C3-TF-024
PHILLY FED #2
COQUINA OIL CORP. - EXHIBIT 1
T23S-R26E
COQUINA OIL CORPORATION
"Philly Fed"
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South Tank
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B.M. 3318
B.M. 3349
Cocke Tank
Draw
FRONTIER
Cass
Gravel pit
PUMPING STA
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