Form 9-531 C (May 193)	、 NIT	ED STATE	S			ons on	Form Appfroved. Budget Bureau No. 42-R1425. 30 - 0/5-23224
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b. TYPE CP WELL							Ross Draw Unit
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2. NAME OF OPERATOR	LORATION COMPANY						Ross Draw
3. ADDRESS OF OPERATOR	LUKATION COMPAN)	. V					0
Suite 900 -	Vaughn Bldg				ECEI	VE	9. 1. FIELD AND POOL, OR WILDCAT
4. LOCATION OF WELL (R At surface	eport location clearly and	in accordance wi	th any St	ate requiren			Undesignated A
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	AND DIRECTION FROM NEAR			• Af	rteşia, nev	v mexiç	2. COUNTY OF PARISH 13. STATE
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2998.5 GL							March 25, 1980
23.	PI	ROPOSED CASH	NG AND	CEMENTIN	NG PROGRAM	ſ	
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Mud Program	n - See Exhibit	G					
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(This space for Fede	ral or State office use)						
PERMIT NO.				APPBOVAL DAT	TE		<del>*</del> **
APPROVED BY CONDITIONS OF APPROV	AL, IF ANY :	TII	ГLE				DATE

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\*See Instructions On Reverse Side

## NEM MEXICO OL CONTERVATION COMMISSION WEL LOCATION AND ACREAGE DEDICATION PLAT

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Form Course Supervedes Course Effective 14-65

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## United States Department of the Interior

GEOLOGICAL SURVEY P. O. Drawer U Artesia, New Mexico 88210

성학 김 공연

March 14, 1980

Florida Exploration Company Suite 900 - Vaughr Bldg. Midland, Texas 79701 FLORIDA EXPLORATION COMPANY Ross Draw Unit No. 9 910 FNL 1980 FWL Sec. 34 T.26S R.30E Eddy County Lease No. NM 0554774

Gentlemen:

Above Data Required on Well Sign

Your APPLICATION FOR PERMIT TO DRILL the above-described well to a depth of 12,400 feet to test the Wolfcamp is hereby approved subject to compliance with the OIL AND GAS OPERATING REGULATIONS (30 CFR 221) and the following conditions:

- 1. Drilling operations authorized are subject to compliance with the attached General Requirements for Oil and Gas Operations on Federal Leases, dated July 1, 1978.
- 2. Prior to commencing construction of road, pad, or other associated developments, operator will provide the dirt contractor with a copy of the Surface Use Plan and these Conditions of Approval including the attached General Requirements.
- 3. All access roads will be limited to a 12 foot wide driving surface, excluding turnarounds. Surface disturbance associated with road construction will be limited to 20 feet in width.
- 4. Submit a Daily Report of Operations from spud date until the well is completed and the Well Completion Report (form 9-330) is filed. The report should not be less than 8" x 5" in size and each page should identify the well.
- 5. All permanent above-ground structures and equipment shall be painted in accordance with the attached Painting Guidelines. The color used should simulate Sandstone Brown (Federal Standard No. 595A, color 20318 or 30318).
- 6. Before drilling below the 9-5/8" casing, the blowout preventer assembly will consist of a minimum of one annular type and two ram type preventers.
- 7. A kelly cock will be installed and maintained in operable condition.

- 8. After setting the 9-5/8" casing string and before drilling into the Wolfcamp formation, the blowout preventers and related control equipment shall be pressure tested to rated working pressures by an independent service company. Any equipment failing to test satisfactorily shall be repaired or replaced. This office should be notified in sufficient time for a representative to witness the tests and shall be furnished a copy of the pressure test report.
- 9. Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be installed and operating before drilling into the Wolfcamp formation and used until production casing is run and cemented. Monitoring equipment shall consist of the following:
  - (1) A recording pit level indicator to determine pit volume gains and losses.
  - (2) A mud volume measuring device for accurately determining mud volume necessary to fill the hole on trips.
  - (3) A flow sensor on the flow-line to warn of any abnormal mud returns from the well.
- 10. Notify the Survey by telephone 24 hours prior to spudding well.
- 11. Cement behind the 13-3/8" casing must be circulated.
- 12. Special Stipulations: Turn pits to east, V-door south. Utilize caliche pit in NE4NE4 sec. 31, T. 26S., R. 31E.
- 13. Please have anyone contacting the Survey in regard to this well to identify the well with all of the information required above for the well sign.

Sincerely yours,

George H. Stewart Acting District Engineer

## MULTI-POINT SURFACE USE AND OPERATIONS PLAN

Florida Exploration Company Ross Draw #9 910' FNL and 1980' FWL Section 34, T-26-S, R-30-E Eddy County, New Mexico (Exploratory Well)

RECEIVED

FEB 2 5 1980

U.S. GEOLOGICAL SURVEY ARTESIA, NEW MEXICO

This plan is submitted with Form 9-331-C, Application for Permit to Drill, Cleaning 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:

A. Exhibit "A" is an up to date land plat showing existing access roads. Exhibit "B" is a portion of a USGS topographic map of the area on a scale of approximately 1 inch to 4000', showing the location of the proposed wellsite and roads in the vicinity. The proposed location is situated approximately 20 miles Southeast of Malaga, New Mexico, via the access route shown in green.

### DIRECTIONS:

- 1. Turn off of Orla-Jal cutoff at Marathon camp at Mason Field, proceed north northwest for three (3) miles
- 2. Turn left (west) along old pipeline row road for six (6) miles
- 3. Turn left (south) toward #2 well Location 910' south.
- 2. PLANNED ACCESS ROAD:
  - A. The proposed new access will be approximately 250' in length from point of origin to the edge of the drilling pad. The road will lie in a south to north direction.
  - B. The new road will be 12 feet in width (driving surface).
  - C. The new road will be covered with the necessary depth of caliche. The surface will be crowned, with drainage on both sides. No turnouts will be necessary.
  - D. The center line of the new road has been staked and flagged and the route of the road is clearly visible.

Ross Draw #9 Page 2

- 3. LOCATION OF EXISTING WELLS:
  - A. The well locations in the vicinity of the proposed well are shown in Exhibit "C".
- 4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:
  - A. There are six (6) wells which have produced or are capable of production on this lease at the present time.
  - B. In the event that the well is productive, the necessary production facilities will be installed on the drilling pad. If the well is productive of oil, a gas or diesel self-contained unit will be used to provide the necessary power. No power will be required if the well is productive of gas.
- 5. LOCATION AND TYPE OF WATER SUPPLY:
  - A. It is planned to drill the proposed well with a fresh water system, where possible (see Mud Program Exhibit "G"). The water will be obtained from commercial sources and will be hauled to the location by truck over the existing and proposed roads shown in Exhibit "A" and "B". All Brine water will be hauled by truck over these same roads.
- 6. SOURCES OF CONSTRUCTION MATERIALS:
  - A. Any caliche required for construction of the drilling pad and the new access road will obtained from an existing pit on federally owned surface shown on Exhibit "A".
- 7. METHODS OF HANDLING WASTE DISPOSAL:
  - A. Drill cuttings will be disposed of in the reserve pits.
  - B. Drilling fluids will be allowed to evaporate in the 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 USGS 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 25 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:

- A. None required.
- 9. WELLSITE LAYOUT:
  - A. Exhibit "D" shows the dimensions of the well pad and the location of major rig components.
  - B. The ground surface at the drilling location is generally flat. No cutting will be required to level the pad area, which will be covered with at least six (6) inches of compacted caliche.
  - C. The reserve pits will be plastic lined.
  - D. The pad and pit area has been staked and flagged.
- 10. PLANS FOR RESTORATION 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 until they have been filled.
  - C. If the proposed 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. TOPOGRAPHY:
  - A. The wellsite and access route are located in a rolling area.
  - B. The top soil at the wellsite is sandy.
  - C. The vegetation cover at the wellsite is moderately sparse, with prairie grasses, some yucca and miscellaneous weeds.
  - D. No wildlife was observed but it is likely that rabbits, lizards, insects and rodents traverse the area. The area is used for cattle grazing.
  - E. There are no ponds, lakes, streams or rivers within several miles of the wellsite, except the Red Bluff Reservoir, which is located four (4) miles to the south.
  - F. The wellsite is located on federal surface.
  - G. There is no evidence of any archaeological, historical or cultural sites in the vicinity of the location.

Florida Exploration Company Ross Draw #9 Page 4

## 12. OPERATOR'S REPRESENTATIVES:

A. The filed representatives responsible for assuring compliance with the approved surface use plan are:

District Engineer	District Geologist
Florida Exploration Company Carl Speight Suite 900, Vaughn Building Midland, Texas 79701 Phone: (915) 682-4363 (Office (915) 683-6912 (Home) (915) 683-1120 (Mobile)	Florida Exploration Company O. E. Groves Suite 900, Vaughn Building Midland, Texas 79701 Phone: (915) 682-4363 (Office) (915) 682-9278 (Home)

#### 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 the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Florida Exploration Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Oli E 2/21/80 DATE:

### APPLICATION FOR DRILLING

Florida Exploration Company Ross Draw #9 910' FNL and 1980' FWL Section 34, T-26-S, R-30-E Eddy County, New Mexico

In conjunction with Form 9-331-C, Application for Permit to Drill subject well, Florida Exploration Company submits the following ten items of pertinent information in accordance with U.S.G.S. requirements:

- (1) The geologic surface formation is <u>Dewey Lake of the Permian</u>
- (2) The estimated tops of geologic markers are as follows:

Delaware	Lime		3,430
Delaware	Sand		3,465
Bone Spri	ing		7,335
lst Bone	Spring :	Sand	8,265
2nd Bone	Spring :	Sand	8,895
Wolfcamp	Shale		11,105
Wolfcamp	Pay		12,120

(3) The estimated depths at which anticipated water, oil and gas formations are expected to be encountered:

Water: Approximately 240'

Oil or Gas:	
Delaware Sand	3,465
Cherry Canyon	5,525
Bone Spring Sand	8,290
Wolfcamp	12,120

(4) Proposed Casing Program

See Form 9-331-C and Exhibit "F"

(5) Pressure control equipment:

See Form 9-331-C and Exhibit "E"

(6) Mud Program:

See Exhibit "G"

(7) Auxillary Equipment:

See Exhibit "H"

Florida Exploration Company Ross Draw #9 Page 2

(8) Testing, Logging and Coring Pressure:

Possible Drill Stem Tests (all tests to be justified by a valid show of oil or gas)

Delaware Sand	3,465
Cherry Canyon	5,525
Bone Spring Sand	8,290
Wolfcamp	12,120

Logging (geological logging unit from 3,400', T/Delaware Sand to T.D.)

Electric Log Program:

Compensated Neutron-Density Porosity Log Laterolog Proximity-Microlog

- (9) No abnormal pressures of temperatures are anticipated above 9,200'.
- (10) Anticipated Starting Date: March 25, 1980





## EXHIBIT "F"

Florida Exploration Company Ross Draw #9 910' FNL and 1980' FWL Section 34, T-26-S, R-30-E Eddy County, New Mexico

## DRILLING, DRILL STEM TESTING, CASING AND CEMENTING PROGRAM

- (1) Drill  $17\frac{1}{2}$ " hole to  $330\frac{1}{2}$ . This is through all known fresh water sands.
- (2) Cement 330' of 13-3/8" casing with 350 sacks of Class "C" cement with 2% Calcium Chloride. Cement will be circulated. Run Texas pattern guide shoe with insert float at top of shoejoint. Use one wooden plug to displace cement.
- (3) Release pressure immediately, nipple up and install BOP's, test casing to 600 psi after 18 hours and drill out cement.
- (4) Drill 12½" hole to 3600'. Log hole with Gamma-Ray Neutron log pulled back to surface.
- (5) Cement 9-5/8" casing with 1,635 sacks of Halliburton Light cement with five lbs. per sack Gilsonite, ½ lb per sack Flocele and 200 sacks Class "C" cement. Run guide shoe and float collar on bottom joint with 3-6 centralizers. Weld first few joints of casing, use one rubber plug to displace cement.
- (6) Release pressure immediately, nipple up and install BOP's, test casing to 1500 psi for 30 minutes after WOC 18 hours and drill out cement after 24 hours.
- (7) Drill 8-3/4" hole to 11,700'. A geological logging trailer will be placed on the well at 3600'. A fresh water system will be used on this part of the hole (See Exhibit "G"). There should be oil and gas shows throughout the Delaware and Cherry Canyon sections (down to 9200'). Any significant show will be drill stem tested after evaluating samples and gas analysis results, especially at 3800' and 6500'. No extreme pressures should be encountered in this interval. DST flow periods and shut-in time will be determined on location. When 9200' is reached, this portion of the hole will be logged with Dual Induction Laterolog, Density-Compensated Neutron and Acoustic Velocity logs.
- (8) 7" casing will be set. Cement with 810 sacks. Cement will be Class "H" cement and .5% CFR-2 per sack and Trinity Lite-Wate. One differential fill float shoe and one differential fill float collar will used.
- (9) After cementing, the pressure will be released immediately. Then nipple up and install BOP's. Test casing to 5,000# for 30 minutes after WOC of 18 hours.
- (10) Perforations, acid job, frac job or additional stimulation will be determined after completion.

2215 W. 2ND STREET

915-332-7364 915-563-2426

## EXHIBIT "G"

Florida Exploration Company Ross Draw Unit #9 910' FNL and 1980' FWL Section 34, T-26-S, R-30-E Eddy County, New Mexico

Mr. Carl Speight Florida Exploration Company 900 Vaughn Building Midland, Texas 79701

Dear Mr. Speight:

February 2, 1980

The following is a suggested drilling fluid and casing program with estimated mud cost for your well to be drilled near your Ross Draw #8 in Eddy County, New Mexico.

SURFACE: 330' of 13 3/8"

Suggest spudding with a Fresh Water Gel and Lime type drilling fluid with a 40 to 45 sec/1000 cc viscosity. This type drilling fluid should be sufficient to drill to 330' and run casing.

FIRST INTERMEDIATE: 3,600' of 9 5/8"

Suggest drilling out from under 13 3/8" casing with Fresh Water, circulating the reserve pit using Lime for a pH of 10.0 to 10.5. This type fluid should be sufficient to drill to 3,600' where we recommend running a viscouse pill through the hole prior to coming out of the hole to run casing.

## COMMENTS:

l

1. Seepage may be expected in this interval, but it usually can be controlled by additions of Dick's Mud Seal.

2. If any D.S.T.'s are taken, we suggest running a Salt Water Gel pill prior to testing.

SECOND INTERMEDIATE: 11,700' of 7"

Suggest drilling out from under 9 5/8" casing with the same fluid used above and diluting with Fresh Water to a 9.0 to 9.2 p.p.g. weight using Lime for a pH of 10.0 to 10.5. At 10,500', we recommend converting from Lime to Caustic Soda for pH control. At 11,200', we recommend turning thru the steel pits and mudding up with a Salt Water Gel, Sea Mud and Drispac type drilling fluid with the following characteristics:

Weight:	9.0 to 9.3 p.p.g.
Viscosity:	34 to 36 sec/1000 cc
Water Loss:	30 cc or less
pH:	9.5 to 10.0

1-1

## COMMENTS:

1. Seepage to complete loss circulation may be a major problem in this interval, so we suggest, if possible, keep a pit of High Viscosity mud loaded with loss circulation material ready to pump in the event of loss circulation.

2. MF-1 may be added as a flocculant to keep the water clear prior to mud up.

3. We recommend one 1,000 sack Bulk Barite Hopper set and rigged up prior to 10,000'.

4. An Oxygen Scavenger will aid in corrosion control.

PRODUCTION: 11,500' to 12,700' of 5" liner

Suggest drilling out from under 7" casing with the same mud used above conditioned to the following characteristics:

Weight:	11.6 to 12.0 p.p.g.
Viscosity:	40 to 42 sec/1000 cc
Water Loss:	15 cc or less
Hq:	9.5 to 10.0
KCL:	3% by volumn

This type drilling fluid should be sufficient to drill to total depth with the exception of weight which may need altering if hole conditions dictate.

ESTIMATED MUD COST: \$65,000.00 to \$70,000.00

The above cost does not include brine water, severe loss circulation, extremly high gas pressure or down time due to fishing jobs.

Yours very truly,

MAVERICK MUD SERVICE, INC.

## ENGINEERS:

Buddy Jenkins Hobbs, New Mexico Phone: (505) 393-3575 Robert Whittemore

Hobbs, New Mexico Phone: (505) 397-3029

## WAREHOUSE

Hobbs, New Mexico Phone: (505) 393-8248

Pecos, Texas Phone: (915) 445-4907

## EXHIBIT "H"

Florida Exploration Company Ross Draw Unit #9 910' FNL and 1980' FWL Eddy County, New Mexico



ITEM	DESCRIPTION
DRAWWORKS	National 100M
COMPOUND	National 4 Engine
ENGINES	Waukesha LRZ (412 H.P.)
MAST	
SUBSTRUCTURE	
MUE PUMPS	Bethlehem G-85
MUE PITS TRAVELING EQUIPMENT	

ITEM ROTARY TABLE WATER TANKS BOP'S	4-500 BBL. )# and 10,000 # 3½", 4½", 5" 4¼"-9½" utomatic Driller illing Recorder
MISCELLANEOUS EQUIPMENT AI	utomatic Driller

# **Parker Drilling Company**



P. O. BOX 1889, MIDLAND, TEXAS 79702

J. R. (BUDDY) REDDEN, JR. Saies Manager Midland Division

February 12, 1980 2-15: 0-74

Procedure Analysis Cementing

For: Florida Exploration Corporation 900 Vaughn Building Midland, Texas 79701

Attn: Mr. Carl Speight

Re: Ross Draw No. 9 Sec. 34, 26S, 30E Eddy County, New Mexico

The purpose of this analysis is to determine the equipment and materials necessary to cement the following proposed casing strings in the referenced well.

Halliburton Services is pleased to have this opportunity to present this proposal for your consideration. Information provided includes: (1) Well Data, (2) Cement Recommendation, (3) Floating Equipment, and (4) Cost Estimate.

If you accept our proposal, all materials and equipment furnished and services performed will be under General Terms and Conditions and pursuant to our applicable Work Order Contract (whether or not executed by you). Copies of the General Terms and Conditions and applicable Work Order Contract will be furnished on request.

Mr. Speight, we earnestly solicit the service work to be performed on this well. Services will be coordinated by Mr. Joe Palmore, Assistant District Superintendent at Artesia, New Mexico. Mr. Palmore can be reached at area code 505/746-2757. We look forward to working with you to provide the very best cementing service available.

Respectfully prepared/

Customer Contact

RR:ms

cc: E. M. Stanley A. O. Stephens P. L. Browning J. E. Palmore D. S. Green L. P. Ragsdale Hobbs Sales

Respectfully submitted by:

R. L. "Pat" O'Bryan, Jr. Service Sales Engineer



Mr. Carl Speight

WELL DATA:

Hole Depth - 330+' Casing Size - 13 3/8" Casing Depth - 330+' Hole Size - 17 1/2" Fill-up Required - circulate

**RECOMMENDATION:** 

Install floating equipment, run casing to bottom and circulate required hours to cement.

Mix 350 sacks of the following cement blend:

Class "C" cement containing: 2% calcium chloride/sk.

Slurry Weight:	14.8 lbs./gal.
Slurry Volume:	1.32 cu.ft./sk.
Water Ratio:	6.3 gals./sk.

These cement blends were designed to circulate. The calculations incorporate 100% excess.

Cement volumes and thickening times for the slurries recommended are based on field experience in the area.

Floating equipment should consist of:

One (1) Guide Shoe One (1) Insert Float One (1) S-3 Centralizer Two (2) pounds Halliburton Weld "A" One (1) Top Rubber Plug

## COST ESTIMATE:

## Cement:

## Floating Equipment For: 13 3/8" casing

- 1 Guide Shoe
  1 Insert Float
  1 S-3 Centralizer
- 2 pounds Halliburton Weld "A"
- 1 Top Rubber Plug

## WELL DATA:

Hole Depth - 3,600<u>+</u>' Casing Size - 9 5/8" Casing Depth - 3,600<u>+</u>' Hole Size - 12 1/4" Fill-up Required - circulate

**RECOMMENDATION:** 

Install floating equipment, run casing to bottom and circulate required hours to cement.

Mix 1,635 sacks of the following cement blend:

Halliburton "Light" cement containing: 5 lbs. Gilsonite/sk. 1/4 lb. Flocele/sk.

Slurry Weight:	12.57 lbs./gal.
Slurry Volume:	1.91 cu.ft./sk.
Water Ratio:	9.9 gals./sk.

Tail-in with 200 sacks of the following cement blend:

Class "C" cement

Slurry Weight:	14.8 lbs./gal.
Slurry Volume:	1.32 cu.ft./sk.
Water Ratio:	6.30 gals./sk.

The calculations incorporate 200% excess.

Cement volumes and thickening times for the slurries recommended are based on field experience in the area. More exact cement volumes and pump times should be obtained from caliper logs.

Floating equipment should consist of:

One (1) Guide Shoe One (1) Float Collar with Automatic Fill-up Unit Four (4) S-3 Centralizers One (1) EZ Lok Limit Clamp Two (2) pounds Halliburton Weld "A" One (1) Rubber Top Plug

## COST ESTIMATE:

## Cement:

- 1,635 sacks Halliburton "Light" cement 5 lbs. Gilsonite/sk. 1/4 lb. Flocele/sk.
  - 200 sacks Class "C" cement

(including service charge)

ton-miles cement (60 miles)

## Service Equipment:

Pump Service (3,600') plus 60 miles Stand-by Pump

Floating Equipment For: 9 5/8" casing

Guide Shoe
 Float Collar with Automatic Fill-up Unit
 S-3 Centralizer
 EZ Lok Limit Clamp
 pounds Halliburton Weld "A"
 Top Rubber Plug

Mr. Carl Speight

WELL DATA: Hole Depth - 11,700+' Casing Size - 7" Casing Depth - 11,700+' Hole Size - 8 3/4" Fill-up Required - circulate First Stage - 11,700'-6,900' (4,800' fill; 30% excess Multiple Stage Cementer - 6,900+' Second Stage - 6,900'-3,200' (3,700' fill; 40% excess RECOMMENDATION: Install floating equipment, run casing to bottom and circulate required hours to cement. First Stage: Mix 732 sacks of the following cement blend: 50-50 Class "H" - Pozmix "A" containing: 2% gel/sk. 0.5% CFR-2/sk. 5 lbs. salt/sk. Slurry Weight: 14.4 lbs./gal. Slurry Volume: 1.28 cu.ft./sk. Water Ratio: 5.75 gals./sk. WOC four (4) hours. Second Stage: Mix 390 sacks of the following cement blend: Trinity Lite-Wate containing: 0.5% CFR-2/sk. 1/4 lb. Flocele/sk. Slurry Weight: 12.14 lbs./gal. Slurry Volume: 1.69 cu.ft./sk. Water Ratio: 5.75 gals./sk.

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Tail in with 100 sacks of the following cement blend:

Class "H" cement

Slurry Weight:	15.6 lbs./gal.
Slurry Volume:	1.18 cu.ft./sk.
Water Ratio:	5.2 gals./sk.

Cement volumes and thickening times for the slurries recommended are based on field experience in the area. More exact cement volumes and pump times should be obtained from caliper logs.

Floating equipment should consist of:

One (1) Multiple Stage Cementer One (1) Differential Fill Float Shoe One (1) Differential Fill Float Collar Twelve (12) S-3 Centralizers (one above and below stage tool) One (1) EZ Lok Limit Clamp Two (2) pounds Halliburton Weld "A"

## COST ESTIMATE:

## Cemerit:

- 390 sacks Trinity Lite-Wate (Second Stage)
   0.5% CFR-2/sk.
   1/4 lb. Flocele/sk.

100 sacks Class "H" cement
 (including service charge)
 ton-miles cement (60 miles)

## Service Equipment:

Pump Service (11,700') plus 60 miles Stand-by Pump Multiple Stage Pump Service

## Floating Equipment For: 7" casing

1 Multiple Stage Cementer (Free Fall Plugs)
1 Differential Fill Float Collar
1 Differential Fill Float Shoe

- 12 S-3 Centralizers
- 1 EZ Lok Limit Clamp
- 2 pounds Halliburton Weld "A"

Floating Equipment Total. . . . . . . . . . . . \$3,760.20

WELL DATA:

Hole Depth - 12,300<u>+</u>' Liner Size - 4 1/2" Flush Joint Liner Length - 800' plus 200' overlap Hole Size - 6 1/4" Fill-up Required - circulate

RECOMMENDATION:

Install floating equipment, run liner to bottom and circulate required hours to cement.

Precede cement with 500 gallons of Mud Flush.

Mix 130 sacks of the following cement blend:

Class "H" cement contai	ning: 0.6% Halad-22A/sk. 0.4% CFR-2/sk. 5 lbs. KCl/sk.
Slurry Weight:	15.6 lbs./gal.
Slurry Volume:	1.18 cu.ft./sk.
Water Ratio:	5.2 gals./sk.

These cement blends were designed to circulate. The calculations incorporate 50% excess.

Cement volumes and thickening times for the slurries recommended are based on field experience in the area. More exact cement volumes and pump times should be obtained from caliper logs. Caliper plus 35% excess.

## COST ESTIMATE:

## Cement:

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130	<pre>sacks Class "H" cement    0.6% Halad-22A/sk.    0.4% CFR-2/sk.    5 lbs. KCl/sk.</pre>
	(including service charge)
	ton-miles cement (60 miles)
500	gallons Mud Flush
	Cement Total

## Service Equipment:

Pump Service (12,300') plus 60 miles estimated Pneumatic Batch Mixer

The prices in this report are estimates only, are based on current published prices, do not include applicable taxes, and are subject to change due to field operations or other factors.

## STATE OF NEW MEXICO NERGY AND MINERALS DEPART NT OIL CONSERVATION DIVISION

RECEIVED

FEB 2 5 1980

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

O. C. D. ARTESIA, OFFICE

## CASE NO. 6792 Order No. R-6270

APPLICATION OF FLORIDA EXPLORATION COMPANY FOR A NON-STANDARD GAS PRORATION UNIT, EDDY COUNTY, NEW MEXICO.

## ORDER OF THE DIVISION

#### BY THE DIVISION:

This cause came on for hearing at 9 a.m. on January 16, 1980, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this <u>18th</u> day of February, 1980, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

## FINDS:

(1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Florida Exploration Company, seeks approval of a 324.25-acre non-standard gas proration unit comprising Lots 1 and 2 and N/2 NE/4 of Section 33 and Lots 2, 3, and 4 and NW/4 NE/4 and N/2 NW/4 of Section 34, all in Township 26 South, Range 30 East, NMPM, to be dedicated to a well to be drilled to the Wolfcamp formation and possibly to the Pennsylvanian formation at a standard location thereon.

(3) That due to the New Mexico-Texas state line traversing Township 26 South, Range 30 East, directly through Sections 31 through 36, said sections are not of standard size and contain only approximately 260 acres each.

(4) That a standard size unit for a gas well in the Wolfcamp and Pennsylvanian formations in the subject area is 320 acres.

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(5) That the applicant is the operator of the Ross Draw Unit Area, which comprises, among other lands, the E/2 of Section 33 and all of Sections 34 and 35, Township 26 South, Range 30 East, NMPM, containing ten 40-acre tracts and 10 lots along the state line of approximately 25 acres each.

(6) That the 324.25-acre unit proposed by the applicant in this case comprises five 40-acre tracts and 5 lots along the state line of approximately 25 acres each, and such a combination of tracts and lots more closely approximates a standard size unit than any other combination of tracts or lots practicably possible in this area.

(7) That the proposed dedication will leave the applicant with 5 other 40-acre tracts and 5 other lots of approximately 25 acres each along the New-Mexico-Texas state line and within the boundary of the Ross Draw Unit Area to form a similar nonstandard spacing and proration unit to be dedicated to a future . well yet to be drilled, if such well appears feasible.

(8) That the entire non-standard proration unit as proposed may reasonably be presumed productive of gas from the Wolfcamp or Pennsylvanian formations, or both, and that the entire non-standard gas proration unit can be efficiently and economically drained and developed by the aforesaid well.

(9) That approval of the subject application will afford the applicant the opportunity to produce its just and equitable share of the gas in the Ross Draw area, will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, and will otherwise prevent waste and protect correlative rights.

## IT IS THEREFORE ORDERED:

(1) That a 324.25-acre non-standard gas proration unit in the Ross Draw area comprising Lots 1 and 2 and N/2 NE/4 of Section 33 and Lots 2, 3, and 4 and NW/4 NE/4 and N/2 NW/4 of Section 34, all in Township 26 South, Range 30 East, NMPM, Eddy County, New Mexico, is hereby established and dedicated to a well to be drilled by the applicant, Florida Exploration Company, to the Wolfcamp formation and possibly to the Pennsylvanian formation at a standard location thereon.

(2) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.