Form 3160-3
(September 2001)

1900 Barry

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

5-05-16

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: ☑ DRILL ☐ REENTER	5. Lease Serial No. LC-029415-B
	6. If Indian, Allottee or Tribe Name
	7. If Unit or CA Agreement, Name and No.
1b. Type of Well: ☐ Oil Well ☑ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone	8. Lease Name and Well No. 35172 Francotte Federal #1
2. Name of Operator Hudson Oil Company of Texas 25111	9. API Well No. 30-015-34388
3a. Address 616 Texas Street, Fort Worth, TX 76102	3b. Phone No. *(include area code)* 817-336-7109
	10. Field and Pool, or Exploratory Undesignated Fren; Morrow 96663
4. Location of Well *(Report location clearly and in accordance with any State requirements.* * At surface 660' FNL & 660' FWL	RECEIVED OCT 17 2005 OCD-ARTESIA
At proposed prod. zone	11. Sec., T., R., M., or Blk. and Survey or Area Section 12, T17S, R31E
14. Distance in miles and direction from nearest town or post office*	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	17. Spacing Unit dedicated to this well
		320
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 12700'	20. BLM/BIA Bond No. on file 585716
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3983' GL	22. Approximate date work will start* August 6, 2005	23. Estimated duration 21 Days

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	Name *(Printed/Typed)*	Date
	Amy Reid	7/6/2005

Title
Land Department

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
/s/ Joe G. Lara	/s/ Joe G. Lara	OCT 13 2005
Title ACTING FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

Application approval 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.
Conditions of approval, if any, are attached.

APPROVAL FOR 1 YEAR

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)

5-12
9.5

Roswell Controlled Water Basin

Witness Surface Casing

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240

DISTRICT II
1301 W. GRAND AVENUE, ARTESIA, NM 88210

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

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

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

Form C-102
Revised JUNE 10, 2003
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
	96663	FREN; MORROW (GAS)

Property Code	Property Name	Well Number
	FRANCOTTE FEDERAL	1

OGRID No.	Operator Name	Elevation
~~14049~~ 25111	HUDSON OIL COMPANY OF TEXAS	3983'

Surface Location

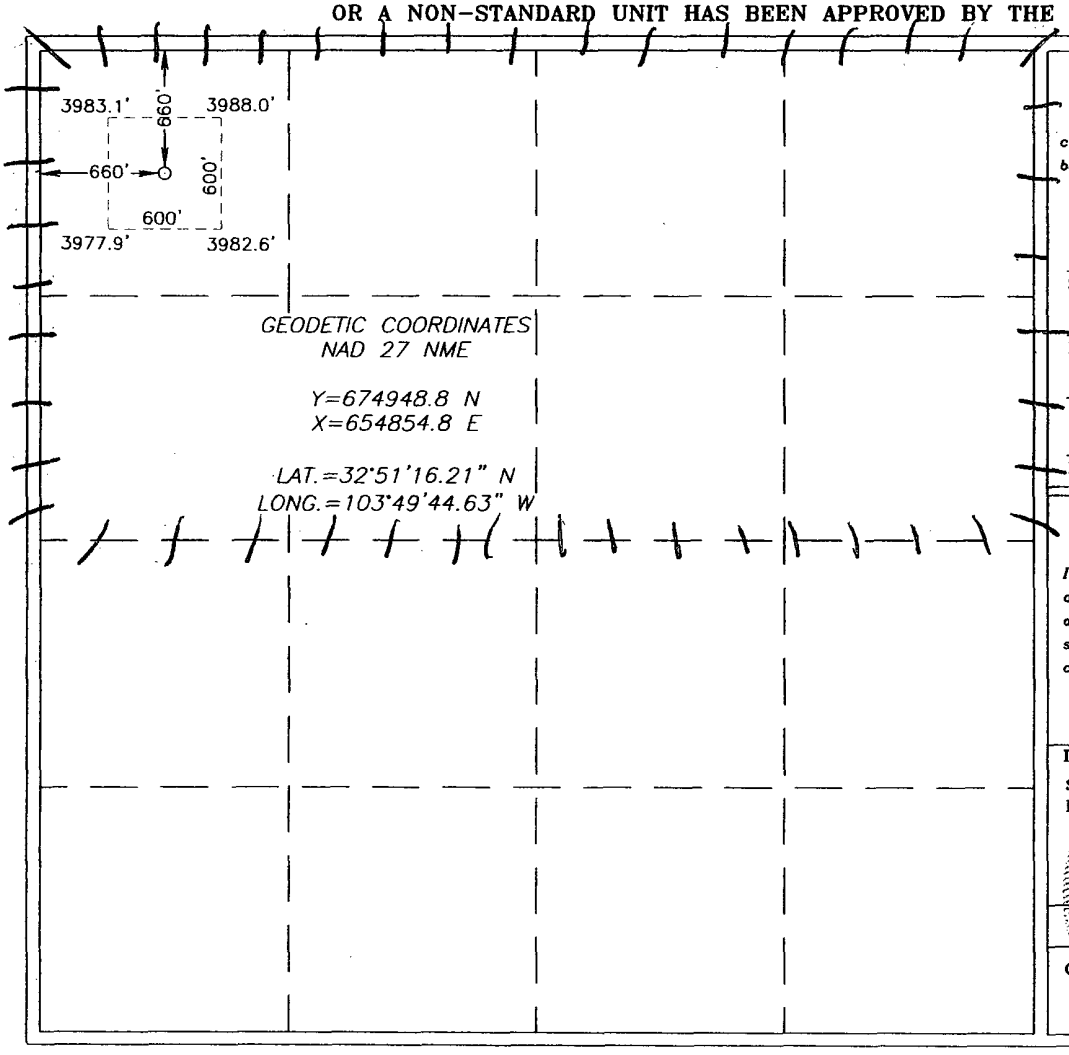
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	12	17-S	31-E		660	NORTH	660	WEST	EDDY

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

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

AMY REID
Printed Name

LAND DEPARTMENT
Title

JULY 6, 2005
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 9, 2005
Date Surveyed LA

Signature & Seal of Professional Surveyor

STATE OF NEW MEXICO
REGISTERED PROFESSIONAL SURVEYOR

5/17/05

05.11.0713

Certificate No. GARY EIDSON 12641

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 ☒ No ☐
Type of action: Registration of a pit or below-grade tank ☒ Closure of a pit or below-grade tank ☐

Operator: **Hudson Oil Company of Texas** Telephone: **505-748-3303** e-mail address: **land2@marbob.com**

Address: **616 Texas Street, Fort Worth, TX 76102**

Facility or well name: **Francotte Federal No. 1** API #: 30-015-34388 U/L or Qtr/Qtr **NW/4NW/4** **Sec 12** **T 17S** **R 31E**

County: **Eddy** Latitude_____ Longitude_____ NAD: 1927 ☐ 1983 ☐ Surface Owner Federal ☒ State ☐ Private ☐ Indian ☐

Pit
Type: Drilling ☒ Production ☐ Disposal ☐
Workover ☐ Emergency ☐
Lined ☒ Unlined ☐
Liner type: Synthetic ☒ Thickness **12** mil Clay ☐ Volume _____bbl

Below-grade tank
Volume: _____bbl Type of fluid: _____
Construction material: _____
Double-walled, with leak detection? Yes ☐ If not, explain why not. _____

RECEIVED
OCT 31 2005
OCD-ARTESIA

Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more	(20 points) (10 points) (0 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	(20 points) (0 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	(20 points) (10 points) (0 points)	**0 points**
	Ranking Score (Total Points)		**0 points**

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 ☐, a general permit ☒, or an (attached) alternative OCD-approved plan ☐.**
Date: **October 28, 2005**

Printed Name/Title: **Melanie J. Parker, Agent** (MarbobEnergyCorp) Signature Melanie J. Parker

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: NOV 1 2005
Printed Name/Title Field Supervisor Signature

HUDSON OIL COMPANY OF TEXAS
DRILLING AND OPERATIONS PROGRAM

Francotte Federal #1
660' FNL & 660' FWL, Unit D
Section 12, T17S, R31E
Eddy County, New Mexico

In conjunction with Form 3160-3, Application for Permit to Drill subject well, Hudson Oil Company of Texas submits the following ten items of pertinent information in accordance with BLM requirements.

1. The geological surface formation is Permian.

2. The estimated tops of geologic markers are as follows:

Top of Salt	585'	Cisco	9560'
Base of Salt	1790'	Strawn	10850'
San Andres	3680'	Atoka	11900'
Wolfcamp	8290'	Morrow	12350'

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

Wolfcamp	8290'	Oil
Cisco	9560'	Oil
Strawn	10850'	Gas
Atoka	11900'	Gas
Morrow	12350'	Gas

No other formations are expected to give up oil, gas, or fresh water in measurable quantities. The surface fresh water sands will be protected by setting 13 3/8" casing at 600' and circulating cement back to surface. Any shallower zones above TD which contain commercial quantities of oil and/or gas will have cement circulated across them by inserting a float shoe joint into the 5 1/2" production casing which will be run at TD to sufficiently cover 500' above all known oil and gas horizons.

4. Proposed Casing Program: See COA

Hole Size	Interval	OD Casing	Wt	Grade
17 1/2"	0 – ~~600'~~	13 3/8"	48#	H-40
12 1/4"	0 – 4000'	8 5/8"	32#	Buttress
7 7/8"	0 – 12700'	5 1/2"	17#	S95/P-110

WITNESS

Proposed Cement Program:

13 3/8" Surface Casing: Cement w/ 700 sx P+. Circulate to surface.

8 5/8" Intermediate Casing: Cement w/ 1600 sx Class C. Attempt to tie in to 13 3/8" csg.

5 1/2" Production Casing: Cement w/ 850 sx Class C. Will bring TOC to 500' above any oil and/or gas bearing zones.

5. Pressure Control Equipment: See Exhibit 1. Marbob proposes to nipple up on the 13 3/8" casing with a 2M system, testing it to 1000# with rig pumps, then nipple up on the 8 5/8" casing with a 5M system, tested to 5000# before drilling out.

6. Mud Program: The applicable depths and properties of this system are as follows:

Depth See COA	Type	Weight (ppg)	Viscosity (sec)	Waterloss (cc)
0 – ~~600'~~	Fresh Wtr	8.4 – 9.2	32 – 36	N.C.
~~600~~ – 4000'	Brine	9.9 – 10.2	28 – 32	N.C.
4000 – 12700'	Cut Brine	8.7 – 9.5	28 – 34	N.C.

7. Auxiliary Equipment: Kelly Cock; Sub with full opening valve on floor; and drill pipe connections.

8. Testing, Logging and Coring Program:

   No drillstem tests are anticipated.
   The electric logging program will consist of Dual Laterolog Micro SFL, Spectral Density Dual Spaced Neutron Csng Log, and Depth Control Log.
   No conventional coring is anticipated.

9. No abnormal pressures or temperatures are anticipated.

10. Anticipated starting date: As soon as possible after approval.

HUDSON OIL COMPANY OF TEXAS
MULTI-POINT SURFACE USE AND OPERATIONS PLAN

Francotte Federal #1
660' FNL & 660' FWL, Unit D
Section 12, T17S, R31E
Eddy County, New Mexico

This plan is submitted with Form 3160-3, Application for Permit to Drill, 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 the 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 effect associated with the operations.

1. EXISTING ROADS:

Exhibit 2 is a portion of a topo map showing the well and roads in the vicinity of the proposed location. The proposed wellsite and the access route to the location are indicated in red on Exhibit 2.

DIRECTIONS:

On US Hwy 82 at mile marker 140.5, turn northwest on caliche road (at Wiser Oil Co. sign) and go 0.3 miles to good caliche road on right, turn right (north) and follow meandering main caliche road approximately 1.5 miles to a caliche road on right. Turn right (east) and go 0.4 miles to where the road turns north and continue appox. 2450' to road survey stake on the right. Follow road survey approximately 1172' to location.

2. PLANNED ACCESS ROAD:

A new access road of 1172' will be necessary. The new road will be constructed as follows:

A. The maximum width of the running surface will be 10'. The road will be crowned and ditched and constructed of 6" of rolled and compacted caliche. Ditches will be at 3:1 slope and 4 feet wide. Water will be diverted where necessary to avoid ponding, prevent erosion, maintain good drainage, and to be consistent with local drainage patterns. BLM may specify any additions or changes during the onsite inspection.

B. The average grade will be less than 1%.

C. No turnouts are planned.

D. No culverts, cattleguard, gates, low-water crossings, or fence cuts are necessary.

HUDSON OIL COMPANY OF TEXAS
HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

I. HYDROGEN SULFIDE TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

A. The hazards and characteristics of hydrogen sulfide (H_2S).

B. The proper use and maintenance of personal protective equipment and life support systems.

C. The proper use of H_2S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.

D. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

A. 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.

B. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.

C. The contents and requirements of the H_2S Drilling Operations Plan and the Public Protection Plan.

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 and the Public Protection 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:

Flare line.

Choke manifold.

Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.

Auxiliary equipment to include: annular preventer, mud-gas separator, rotating head.

B. Protective equipment for essential personnel:

Mark II Surviveair 30-minute units located in the dog house and at briefing areas.

C. H_2S detection and monitoring equipment:

2 - portable H_2S monitor 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.

D. Visual warning systems:

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 from the immediate location. Bilingual signs will be used, when appropriate. See example attached.

E. Mud Program:

The mud program has been designed to minimize the volume of H_2S circulated to the surface.

A mud-gas separator will be utilized.

F. Metallurgy:

All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H_2S service.

G. Communication:

Company vehicles equipped with cellular telephone and 2-way radio.

WARNING

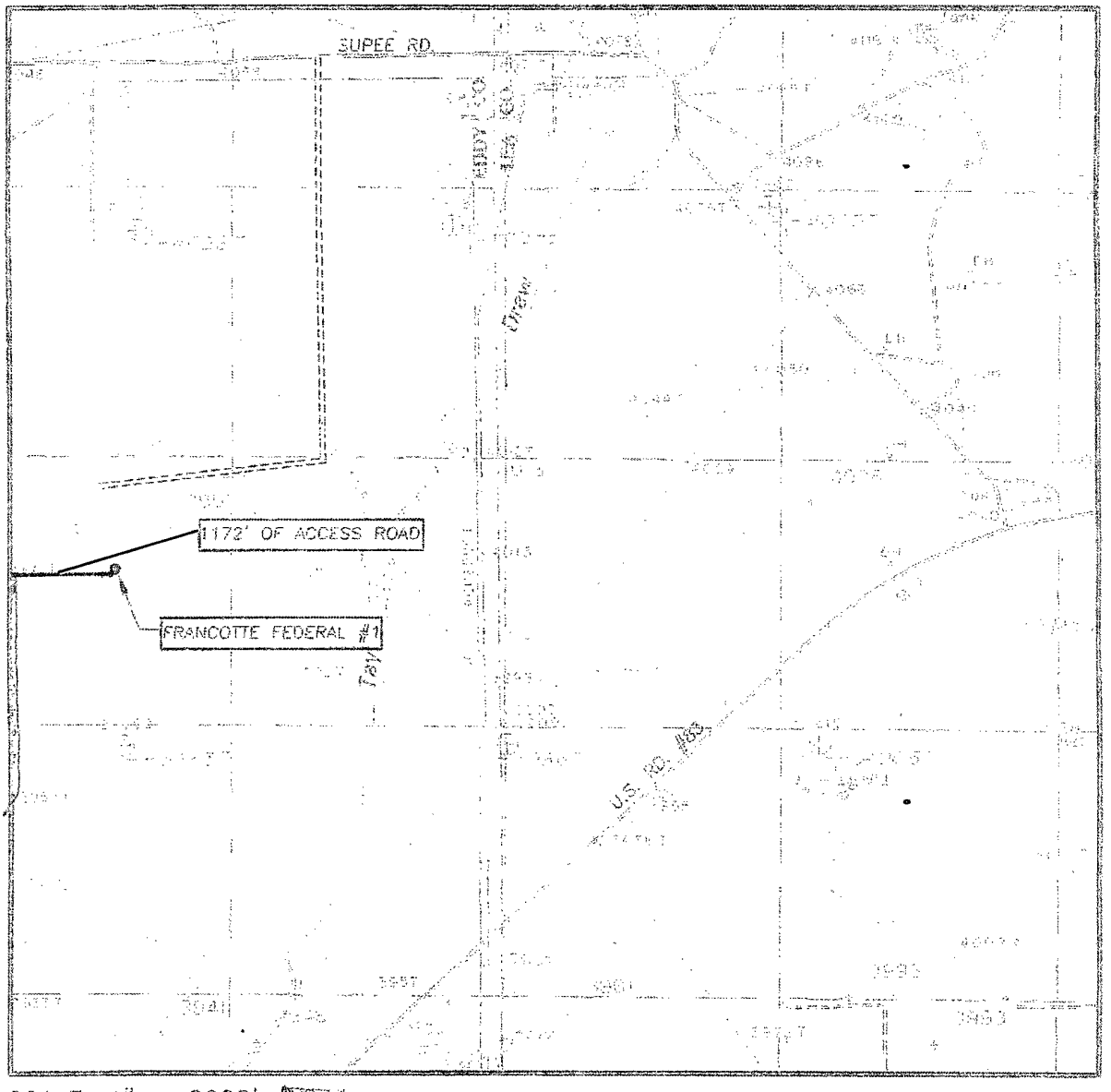
YOU ARE ENTERING AN H_2S AREA
AUTHORIZED PERSONNEL ONLY

1. ***BEARDS OR CONTACT LENSES NOT ALLOWED***
2. ***HARD HATS REQUIRED***
3. ***SMOKING IN DESIGNATED AREAS ONLY***
4. ***BE WIND CONSCIOUS AT ALL TIMES***
5. ***CK WITH MARBOB FOREMAN AT MAIN OFFICE***

HUDSON OIL COMPANY OF TEXAS

1-505-748-3303

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

RED - EXISTING ROAD
BLUE - ACCESS ROAD

CONTOUR INTERVAL:
MALJAMAR, N.M. - 10'

SEC. 12 TWP. 17-S RGE. 31-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 660' FNL & 660' FWL

ELEVATION 3983'

OPERATOR HUDSON OIL COMPANY OF TEXAS

LEASE FRANCOTTE FEDERAL

U.S.G.S. TOPOGRAPHIC MAP
MALJAMAR, N.M.

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

CONDITIONS OF APPROVAL - DRILLING

Operator's Name:	**Hudson Oil Company of Texas**
Well Name & No.	**Francotte Federal #1**
Location:	**660' FNL, 660' FWL, Section 12, T. 17 S., R. 31 E., Eddy County, New Mexico**
Lease:	**LC-029415-B**

I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 for wells in Eddy County in sufficient time for a representative to witness:

   A. Well spud

   B. Cementing casing: **13-3/8** inch **8-5/8** inch **5-1/2** inch

   C. BOP tests

2. A Hydrogen Sulfide (H2S) Drilling Operation Contingency Plan shall be activated prior to drilling into the **Queen** formation. A copy of the plan shall be posted at the drilling site.

3. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

4. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.

5. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

II. CASING:

1. The **13-3/8** inch surface casing shall be set at **approximately 710 feet or 25 feet into the top of the Rustler Anhydrite and cement circulated to the surface**. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.

2. The minimum required fill of cement behind the **8-5/8** inch first intermediate casing is **to be circulated to the surface.**

3. The minimum required fill of cement behind the **5-1/2** inch production casing is **to be sufficient to reach at least 500 feet above the uppermost hydrocarbon productive interval.**

III. PRESSURE CONTROL:

1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the **13-3/8** inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

2. Minimum working pressure of the blowout preventer and related equipment (BOPE) from base of surface casing to 4000 feet shall be **2000** psi. Test to 1000 psi with rig pumps is ok.

3. Minimum working pressure of the blowout preventer and related equipment (BOPE) from base of intermediate

casing shall be **5000** psi.

4. *The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.*

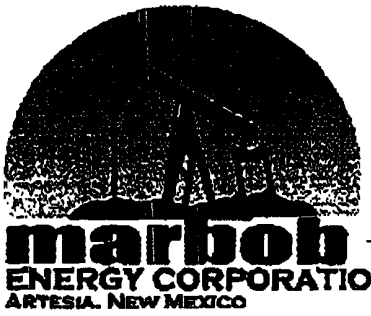
- The tests shall be done by an independent service company.
- The results of the test shall be reported to the appropriate BLM office.
- Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
- Testing must be done in a safe workman-like manner. Hard line connections shall be required.

IV. DRILLING MUD:

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** formation, and shall be used until production casing is run and cemented. Monitoring equipment shall consist of the following:

- Recording pit level indicator to indicate volume gains and losses.
- Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.
- Flow-sensor on the flow-line to warn of abnormal mud returns from the well.

7/13/2005
acs



marbob
ENERGY CORPORATION
ARTESIA, NEW MEXICO

October 18, 2005

Oil Conservation Division
1301 W. Grand Ave.
Artesia, NM 88210

Attention: Bryan Arrant

Re: Francotte Federal #1
660' FNL & 660' FWL
Section 12, T17S, R31E
Eddy County, New Mexico
30-015-34388

Dear Bryan:

We plan to complete this well in the Morrow which is sweet and we don't anticipate cutting any formations that contain H2S gas during the drilling of the above referenced well. Therefore, we do not believe that an H2S contingency plan is necessary.

If you have questions or need further information, please call.

Sincerely,

Amy Johnson

Amy Johnson
Land Department

/aj