

ATS-11-446

OCD-ARTESIA

Form 3160-3
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. LC-029415-B
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name -----
2. Name of Operator HUDSON OIL COMPANY OF TEXAS (JON SMITH 575-676-2266)		7. If Unit or CA Agreement, Name and No. -----
3a. Address 616 TEXAS STREET FORT WORTH, TEXAS 76102-4612		8. Lease Name and Well No. PUCKETT NORTH # 13
3b. Phone No. (include area code) 817-336-7109		9. API Well No. 30-015-39193
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface 1980' FNL & 460' FWL SECTION 12 T17S-R31E EDDY CO. NM At proposed prod. zone SAME		10. Field and Pool, or Exploratory MALJAMAR-GRAYBURG SAN ANDRES
14. Distance in miles and direction from nearest town or post office* Approximately 6 miles Northwest of Maljamar, New Mexico		11. Sec., T. R. M. or Blk. and Survey or Area SECTION 12 T17S-R31E
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 460'	16. No. of acres in lease 1920	12. County or Parish EDDY CO.
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1320'	19. Proposed Depth 4300'	13. State NM
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3968' GL	22. Approximate date work will start* WHEN APPROVED	17. Spacing Unit dedicated to this well... 40
		20. BLM/BIA Bond No. on file BLM NM-1055 STATEWIDE
		23. Estimated duration 15 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. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 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). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature <i>Joe T. Janice</i>	Name (Printed/Typed) Joe T. Janice	Date 04/11/11
Title Permit Eng.	<div style="border: 2px solid black; padding: 5px; text-align: center;"> RECEIVED JUN 13 2011 NMOCD ARTESIA </div>	
Approved by (Signature) <i>/s/ James A. Amos</i>		
Title FIELD MANAGER	Name (Printed/Typed)	Date JUN - 9 2011
	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 TWO YEARS

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 page 2)

Roswell Controlled Water Basin

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

Approval Subject to General Requirements
& Special Stipulations Attached

APPLICATION TO DRILL

HUDSON OIL COMPANY OF TEXAS
PUCKETT NORTH # 13
UNIT "E" SECTION 13
T17S-R31E EDDY CO. NM

In response to questions asked under Section II of Bulletin NTL-6, the following information on the above well will be provided.

1. LOCATION: 1980' FNL & 460' FWL SECTION 12 T17S-R31E EDDY CO. NM
2. ELEVATION ABOVE SEA LEVEL: 3968' GL
3. GEOLOGICAL NAME OF SURFACE FORMATION: Quaternary Aeolian Deposits;
4. DRILLING TOOLS AND ASSOCIATED EQUIPMENT: Conventional rotary drilling rig using drilling mud as a circulating medium for the removal of solids from the hole.
5. PROPOSED DRILLING DEPTH: 4300'
6. ESTIMATED TOPS OF GEOLOGICAL FORMATIONS:

Rustler Anhydrite	685'	Base of Yates/7 Rivers	2980'
Top Salt	850'	Queen	3135'
Base of Salt	1850'	Grayburg	3640'
Top Yates/7 Rivers	<div style="border: 1px solid black; border-radius: 50%; width: 80px; height: 30px; display: flex; align-items: center; justify-content: center;">no depth</div>	San Andres	3950'
		Possible Water	250'
7. POSSIBLE MINERAL BEARING FORMATIONS:

Queen	Oil, Gas, Water
Grayburg	Oil, Gas, Water
San Andres	Oil, Gas, Water
8. CASING PROGRAM:

HOLE SIZE	INTERVAL	CASING OD	WEIGHT	THREAD	COLLAR	GRADE	CONDITION
26"	0-40	20"	NA	NA	NA	Conductor	New
12 1/4"	0-125' 755	8 5/8"	24#	8-R	ST&C	J-55	New
7 7/8"	0-4300'	5 1/2"	17#	8-R	ST&C	J-55	New

Casing Design Factors:

Collapse	1.25	Burst	1.0	Body Yield	1.5	Joint Strength 8-R	1.8
						Buttress	1.6

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HUDSON OIL COMPANY OF TEXAS
 PUCKETT NORTH # 13
 UNIT "E" SECTION 13
 T17S-R31E EDDY CO. NM

9. CASING CEMENTING & SETTING DEPTHS:

20"	Conductor	Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
8 5/8"	Surface	Run and set ²⁴ 725' of 8 5/8" 25# J-55 ST&C casing. Cement with 200 Sx. of Premium Plus cement + 2% CaCl ₂ + 4% Bentonite, + 0.125#/Sx Polyflakes, Yield 1.75, tail in with 250 Sx. of Premium Plus cement + 2% CaCl ₂ , Yield 1.35, circulate cement. 100% Excess
5 1/2"	Production	Run and set 4300' of 5 1/2" 17# J-55 ST&C casing. Cement with 600 Sx. of Halliburton Light Premium Plus cement + 0.125#/? Sx. Yield 1.87, tail in with 350 Sx. of Premium Plus 50/50 POZ, + 0.4% LAP-1 + 0.4% CFR-3, + 50.25 LBMD-AIR 3000, + 1 LBM Salt, Yield 1.4, circulate cement to surface. 100% Exce

Exhibit "E" shows a 2000 PSI working pressure B.O.P. with an annular bag type preventor, with 2" inlets and 2" outlets to the choke manifold. This B.O.P. will be nipped up on the 8 5/8" casing. The B.O.P. will be tested to the pressures acceptable to the BLM. Exhibit "E-1" shows a 2-3M PSI choke manifold with two adjustable chokes and a 3" blow down line to the pit. No abnormal pressures or abnormal temperatures are expected while drilling this well. Other wells drilled in this section and area have not encountered any problems while drilling. BOP will be a 13 5/8" and will be tested according to Onshore Order #2 and API Specs.

11. PROPOSED MUD CIRCULATING SYSTEM:

DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE MUD SYSTEM
40-725' 755	8.4-8.7	29-32	NC	Fresh water Spud Mud use paper to control seepage.
725-TD	10.1-10.2	29-38		Brine water add Salt Water Gel if native mud does not have the desired viscosity. Use paper to control seepage. If water loss control is needed use starch to accomplish these needs.

Sufficient mud materials will be kept on location at all times in order to combat lost circulation or unexpected kicks. In order to run logs and casing the mud system may have to be altered to meet these needs,

- 13A. If H₂S is encountered in concentrations of less than 10 PPM, fans will be placed in work areas to prevent the accumulations of hazardous amounts of poisonous gas. If higher concentrations of H₂S are detected the well will be shut in and a rotating head, Mud/Gas separator, and flare line with igniter will be installed in accordance with Onshore Order # 6.
- 13B. If the concentration of H₂S meets the requirement of Onshore Order # 6 a Mud/Gas separator and other necessary equipment will be rented and installed.

APPLICATION TO DRILL

HUDSON OIL COMPANY OF TEXAS
PUCKETT NORTH # 13
UNIT "E" SECTION 13
T17S-R31E . . . EDDY CO. NM

12. LOGGING, CORING, AND TESTING PROGRAM:

See COR

- A. Open hole logs: Dual Laterolog, SNP, MSFL, LDT, Caliper and Gamma Ray log from TD back to the 8 5/8" casing shoe.
- B. Cased hole log: Gamma RAY, Neutron from the 8 5/8" casing shoe to the surface.
- C. No DST's, Cores, or Mud Logger is planned at this time.

13. POTENTIAL HAZARDS:

No abnormal pressures or temperatures are expected. There is no known presence of H²S in this area. If H²S is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 2150± PSI, and Estimated BHT 135°.

14. ANTICIPATED STARTING DATE AND DURATION OF OPERATION:

Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operation and drilling is expected to take 15 days days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flowlines in order to place well on production.

15. OTHER FACETS OF OPERATIONS:

After running casing, cased hole Gamma Ray, Neutron Collar logs will be run from TD back to all possible productive zones. The GRBG-SAN ANDRES formation will be perforated and stimulated in order to establish production. The well will be swab tested and potentialized as an oil well.

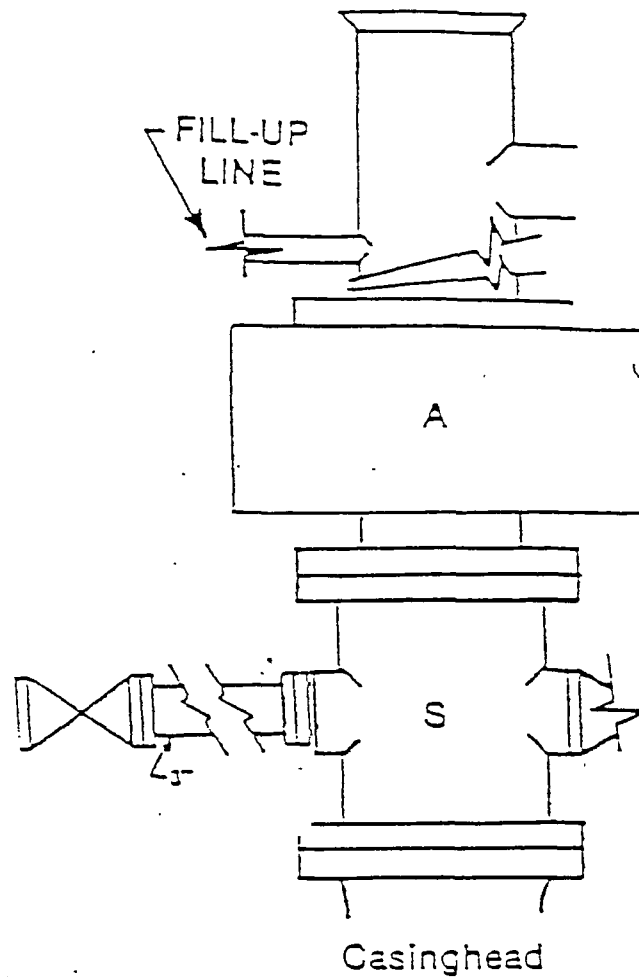


FIGURE K1-1. Recommended LADC Class 2 BOP stack, 2000 psi WP.
Either SRd (left) or SA (right) arrangement is acceptable and drilling
spool is optional

EXHIBIT "E"
SKETCH OF B.O.P. TO BE USED ON

HUDSON OIL COMPANY OF TEXAS
PUCKETT NORTH # 13
UNIT "E" SECTION 12
T17S-R31E EDDY CO. NM

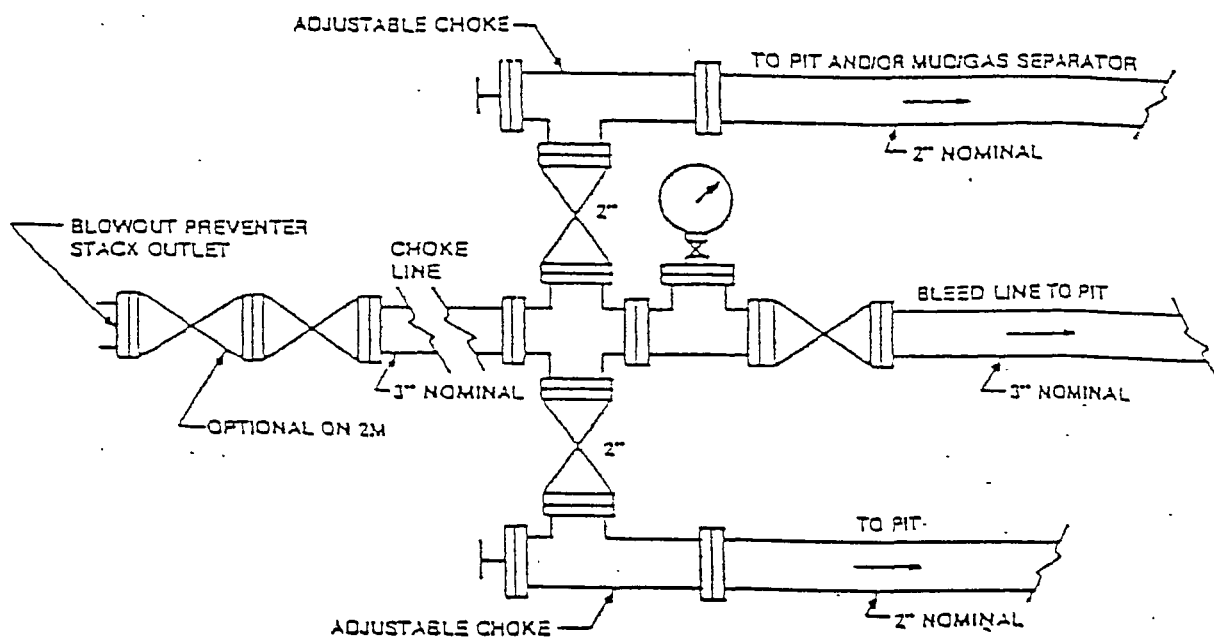


FIGURE K-1. Typical choke manifold assembly for 2M and 3M rated working pressure service — surface installation.

EXHIBIT "E-1"
SKETCH OF CHOKE MANIFOLD

HUDSON OIL COMPANY OF TEXAS
PUCKETT NORTH #13
UNIT "E" SECTION 12
T17S-R31E EDDY CO. NM

300

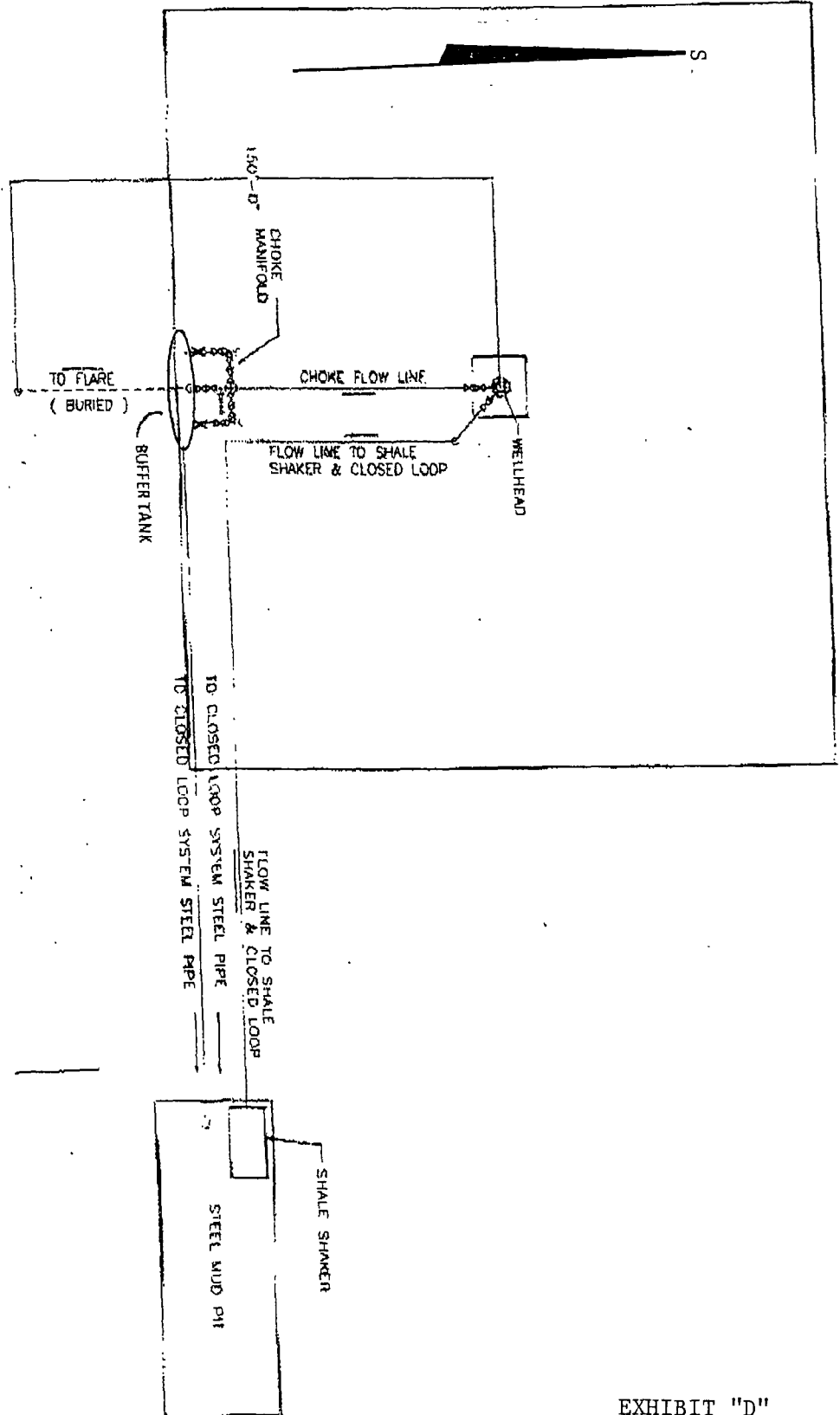
ACCESS ROAD

DRAMATIC S# AS C:\DRAWINGS\2010\000\10-DZE\10-028-02.dwg

DRILLING OPERATIONS WELL PAD PLAN LAYOUT

NOT TO SCALE

EPS PROJECT NUMBER - 10-028
DATE: JANUARY 28, 2010



TOP SOIL AREA
300'

EXHIBIT "D"
RIG LAY OUT PLAT

HUDSON OIL COMPANY OF TEXAS
PUCKETT NORTH # 13
UNIT "E" SECTION 12
T17S-R31E EDDY CO. NM

DISTRICT I --- CHECKLIST FOR INTENTS TO DRILL

Operator HUDSON OIL COMPANY OF TEXAS OGRID # 25111
35554 Well Name & # PUCKETT NORTH # 13 Surface Type (F) (S) (P)
 Location: UL B Sect 12 Township 17 s, RNG 3 e, Sub-surface Type (F) (S) (P)

A. Date C101 rec'd / / C101 reviewed / /

B. 1. Check mark, Information is OK on Forms:

OGRID X BONDING PA PROP CODE X WELL # 8 SIGNATURE X

2. Inactive Well list as of: 7/6/11 # wells 91 # Inactive wells 0

a. District Grant APD but see number of inactive wells:

No letter required X; Sent Letter to Operator , to Santa Fe

3. Additional Bonding as of: 7/6/11

a. District Denial because operator needs addition bonding:

No Letter required X; Sent Letter to Operator , To Santa Fe

b. District Denial because of Inactive well list and Financial Assurance:

No Letter required X; Sent Letter to Operator , To Santa Fe

C. C102 YES , NO , Signature

1. Pool MACJAMAL; GA-SA, Code 43329

a. Dedicated acreage 40, What Units E

b. SUR. Location Standard X; Non-Standard Location

c. Well shares acres: Yes , No X, # of wells plus this well #

2. 2nd. Operator in same acreage, Yes , No

Agreement Letter , Disagreement letter

3. Intent to Directional Drill Yes , No X

a. Dedicated acreage , What Units

b. Bottomhole Location Standard , Non-Standard Bottomhole

4. Downhole Commingle: Yes , No X

a. Pool #2 , Code , Acres

Pool #3 , Code , Acres

Pool #4 , Code , Acres

5. POTASH Area Yes , No X

D. Blowout Preventer Yes X No

E. H2S Yes X No

F. C144 Pit Registration Yes , No , mal

G. Does APD require Santa Fe Approval:

1. Non-Standard Location: Yes , No X, NSL #

2. Non-Standard Proration: Yes , No X, NSP #

3. Simultaneous Dedication: Yes , No X, SD #

Number of wells Plus #

4. Injection order Yes , No X; PMX # or WFX #

5. SWD order Yes , NO X; SWD #

6. DHC from SF ; DHC-HOB ; Holding

7. OCD Approval Date / /

API # 30-015-39193

8. Reviewers