

OCD-ARTESIA

Form 3160-3
(August 2007)FORM APPROVED
OMB No. 1004-0137
Expires July 31, 2010UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT


APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5 Lease Serial No. NMNM-106718
1b. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2 Name of Operator Nadel and Gussman HEYCO, LLC [258462]		7 If Unit or CA Agreement, Name and No
3a Address P O Box 1936 Roswell N.M 88202		8 Lease Name and Well No. Taylor 12 Federal #10 [38849]
3b Phone No. (include area code) (575) 623-6601		9 API Well No. 30-015-39468
4. Location of Well (Report location clearly and in accordance with any State requirements *) At surface 400' FNL & 380' FEL At proposed prod zone Same		10 Field and Pool, or Exploration Delaware - Young North [65355]
14 Distance in miles and direction from nearest town or post office* 10 miles South of Maljamar N M		11 Sec, T, R, M. or Blk and Survey or Area Sec 12, T18S, R31E
15 Distance from proposed* location to nearest property or lease line, ft (Also to nearest drg unit line, if any) 380'	16 No of acres in lease 600 06	12 County or Parish Eddy
18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft 130'	19 Proposed Depth 5500' ✓	13 State NM
20 BLM/BIA Bond No on file NMB000520	17 Spacing Unit dedicated to this well 40	
21 Elevations (Show whether DF, KDB, RT, GL, etc.) 3796' GL ✓	22 Approximate date work will start* 12/01/2011	23 Estimated duration 30 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No 1, must 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 must be filed with the appropriate Forest Service Office) | 6. Such other site specific information and/or plans as may be required by the BLM. |

25 Signature 	Name (Printed/Typed) Keith Cannon	Date 08/10/2011
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Title
Drilling Superintendent

Approved by (Signature) Is/ Don Peterson

Name (Printed/Typed)

Date

SEP 22 2011

Title
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 lands 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

(Continued on page 2)

*(Instructions on page 2)

Capitan Controlled Water Basin

SEE ATTACHED FOR
CONDITIONS OF APPROVALApproval Subject to General Requirements
& Special Stipulations Attached

Application
Nadel and Gussman Heyco, LLC
Taylor 12 Federal #10
Unit A, Sec 12, T18S, R31E
400' FNL & 380' FEL
Eddy County, New Mexico

In conjunction with Form 3160-3, Application For Permit To Drill Or Deepen subject well, Nadel and Gussman Heyco, LLC submits the following ten items of pertinent information in accordance with Onshore Oil & Gas Order No. 10.

1. Geologic Name of Surface Formation:
PERMIAN

2. Estimated Tops of Significant Geologic Markers:

Formation	Depth	
Rustler	960'	Water
Top Salt	1,140'	
BX (BASE OF SALT)	2,220'	
Yates	2,380'	Oil
Seven Rivers	2,850'	Oil
Bowers	3,310'	Oil
Queen	3,555'	Oil
Penrose	3,780'	Oil
Grayburg	4,070'	Oil
Loco Hills	4,180'	Oil
Metex	4,360'	Oil
Premier Sand	4,440'	Oil
Upper San Andres	4,500'	Oil
Cherry Canyon Tounge	4,620'	Oil
Brushy Canyon	4,970'	Oil
PTD	5,500'	

No other formations are expected to yield oil, gas, or fresh water in measurable volumes.
The surface fresh water sands will be protected by setting 8 5/8" casing at 1005' and circulating Cement back to surface. All other intervals will be isolation by setting 5 1/2" Casing to total depth and circulating cement up into the 8 5/8" casing. * See COA

3. Proposed Casing Program:

Hole size	Depth	OD Csg.	Weight	Collar	Grade	New/Used
11"	0' - 1005'	8 5/8"	32#	ST&C	J-55	NEW
7 7/8"	0' - 5500'	5 1/2"	17#	ST&C	J-55	NEW

Safety Factors: Burst 1.0 Collapse 1.125 Tension 1.8
All casing is new and API approved

4. Cement Program: (Note yields; and DV tool depths if multiple stages)

- a. 8 5/8" Surface

Cement to surface with:

Lead - 150 sx 35:65 Poz C, 5% Salt, 0.25% Celloflake, 6% Bentonite, 12.8ppg, and 0.25% defoamer, 1.89cu.ft/sk yield, TOC @ Surface

Tail - 200 sx C, 0.25% Dfoamer, 14.8ppg, 1.32cu.ft/sk Yield, TOC @ 550'. w/100% excess

- b. 5 1/2" Production

Cement to 695' with:

Lead - 280 sx 50:50 Poz C, 5% Salt, 10% Bentonite and 0.2% AntiFoamer, 11.9 ppg, 2.37 cu.ft./sk yield, TOC @ 670' w/ 30% excess.

Tail - 340 sx C, 1% CaCl, 14.8 ppg, 1.33 cu.ft./sk yield, TOC @ 3570'. w/ 30% excess.

* See COA
Top of Cement

* See COA

The above volumes, additives and depths may be revised based on open hole logs, conditions encountered while drilling and on cement field blend tests. The top of cement for the production string is designed to reach approximately 200' above the 8 5/8" casing shoe.

5. Pressure Control Equipment:

The blowout preventor equipment (BOPE) shown in Exhibit #1 will consist of a (3m system) Double ram type (3000psi WP) preventor and a bag type (hydril) preventor (3000psi WP) Both unit will be hydraulically operated and the ram type preventor will be equipped with blind rams on top 4 1/2" drill pipe rams on bottom. See COA

The BOP's and Hydrill will be tested as per BLM Drilling Operations Order #2. Pipe rams will be Operated and checked each 24hr period and each time drill pipe is out of the hole. These functional Test will be documented on the daily driller log. A 2" kill line and 3" choke line will be incorporated In the drilling spool below the ram-type BOP. Other accessory BOP equipment will include a Kelly Cock, floor safety valve, choke line and choke manifold having a 3000psi wp rating.

6. Drilling Fluid Program:

Depth	Mud Wt.	Visc	Fluid Loss	Type System
0' - 1005'	8.4 - 8.8	80 - 55	NC	Fresh Water
1005' - 5500'	8.8 - 10.0	28 - 30	NC	Brine / Cut Brine

The necessary mud products for weight addition and fluid loss control will be on Location at all times. Mud Program Subject to change due to hole conditions.

7. Auxiliary Equipment:

- a. A Kelly Cock will be in the drill string at all times.
- b. A full opening drill pipe stabbing valve having the appropriate Connections will be on the rig floor at all times.
- * c. Hydrogen Sulfide detection equipment will be in operation after drilling Out the 8 5/8" casing shoe unit the 5 1/2" casing is cemented. Breathing Equipment will be on location upon drilling the 8 5/8" shoe unit total Depth is reached. * See COA

8. Testing, Logging, & Coring Program: * See COA

- a. Mud logging unit from 2250' to depth
10' samples will be caught by loggers
- b. Possible rotary sidewall cores
- c. Drill stem test None Planned
- e. Platform express (GR / LDT - CNL - PE / DLL - MCFL / NGT)

9. Abnormal Conditions, Pressures, Temperature, or Potential Hazards:

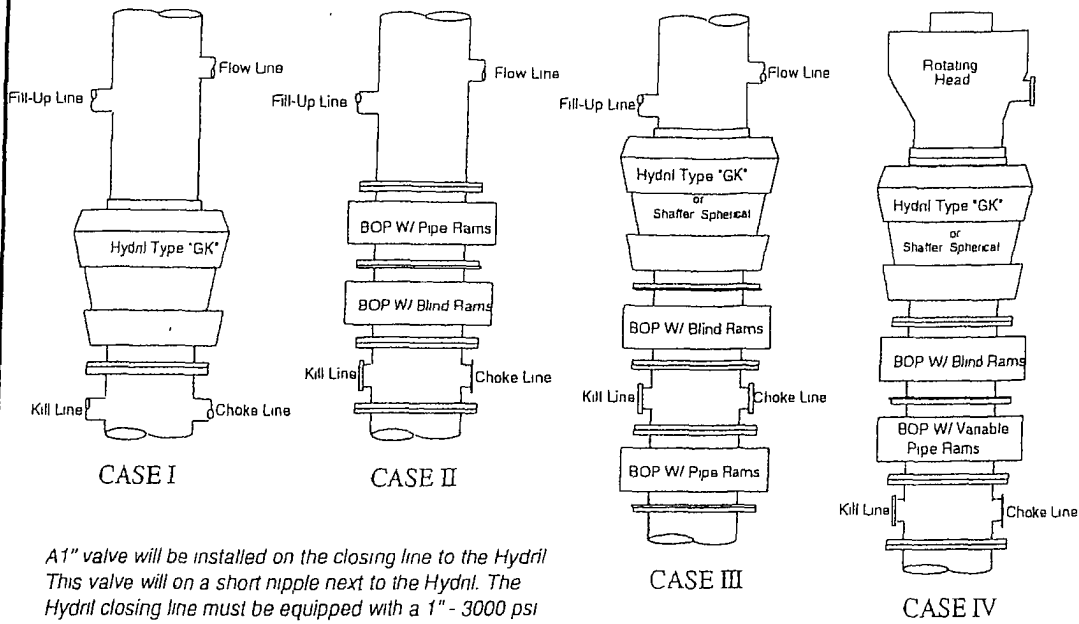
No abnormal conditions are expected. There is no known presence of H2S in this area. If H2S is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No 6. Lost circulation might occur in the Capitan Reef. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 2100 psi and estimated BHT 110 F. No H2S is anticipated to be encountered.

9. Anticipated Starting Date & Duration of Operation:

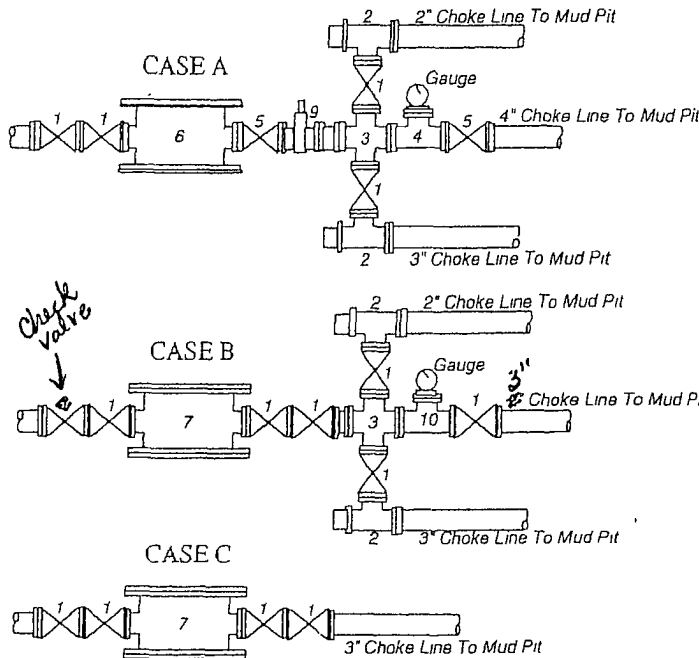
Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon as possible after BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 15 days. If production casing is run then an additional 15 days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

Nadel and Gussman Heyco, LLC

MINIMUM BLOWOUT PREVENTER REQUIREMENTS



A 1" valve will be installed on the closing line to the Hydril. This valve will be on a short nipple next to the Hydril. The Hydril closing line must be equipped with a 1" - 3000 psi WP plug valve on the nipple into the Hydril



BOP SIZE	BOP CASE	WORKING PRESSURE	CHOKE CASE
13-5/B"	II	2000 psi	B
9"	III	3000 psi	B

**Rotating head required*

Bradenhead	
Mfr. _____	Size: _____ Type _____

Legend

- 1 3" flanged all steel valve must be either Cameron "F", Halliburton Low Torque or Shafter Flo-Seal.
- 2 3" flanged adjustable chokes, min. 1" full opening & equipped with hard trim
- 3 4" x 2" flanged steel cross.
- 4 4" flanged steel tee
- 5 4" flanged all steel valve (Type as in no 1)
- 6 Drilling Spool with 2" x 4" flanged outlet
- 7 Drilling Spool with 2" x 2" flanged outlet.
- 8 2" x 2" flanged steel cross
- 9 4" pressure operated gate valve.
- 10 2" flanged steel tee

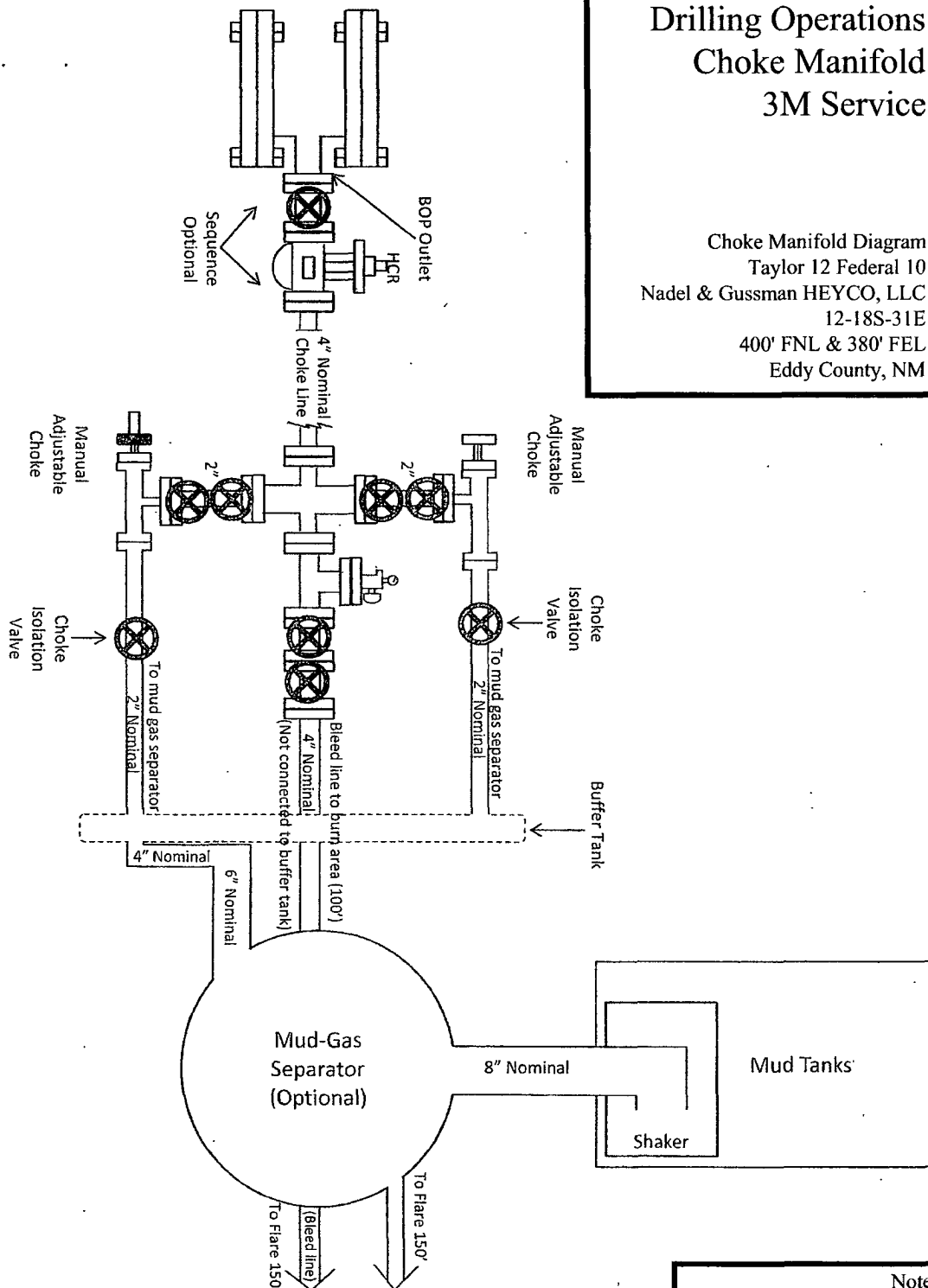
Notes

Choke manifold may be located in any convenient position. Use all steel fittings throughout. Make 90° turns with bull plugged tees only. No field welding will be permitted on any of the components of the choke manifold and related equipment upstream of the chokes. The choke spool and all lines and fittings must be at least equivalent to the test pressure of the preventers required. Independent closing control unit with clearly marked controls to be located on deck floor near driller's position.

(10-31-96) WTXBOPS PPT

Drilling Operations Choke Manifold 3M Service

Choke Manifold Diagram
Taylor 12 Federal 10
Nadel & Gussman HEYCO, LLC
12-18S-31E
400' FNL & 380' FEL
Eddy County, NM



Note:
If H₂S is encountered, mud
gas separator, and all
necessarry equipment will be
placed into service including
H₂S scavengers

DISTRICT I --- CHECKLIST FOR INTENTS TO DRILL

Operator NADAL and GUSMAN H&W CO, LLC OGRID # 258462
 Well Name & # TAYLOR 12 FEDERAL Surface Type (F) (S) (P)
 Location: UL A, Sect 12, Township 18 s, Rng 31 e, Sub-surface Type (F) (S) (P)

A. Date C101 rec'd 9/26/2011 C101 reviewed 10/3/2011

- B. 1. Check mark, Information is OK on Forms:
 OGRID ☒, BONDING ☐, PROP CODE CHANG⁵, WELL # 10, SIGNATURE _____
 2. Inactive Well list as of: 10/3/2011 # wells 191, # Inactive wells 27
 a. District Grant APD but see number of inactive wells:
 No letter required ☒; Sent Letter to Operator _____, to Santa Fe _____
 3. Additional Bonding as of: 10/3/2011
 a. District Denial because operator needs addition bonding:
 No Letter required ☒; Sent Letter to Operator _____, To Santa Fe _____
 b. District Denial because of Inactive well list and Financial Assurance:
 No Letter required ☒; Sent Letter to Operator _____, To Santa Fe _____

- C. C102 YES ☒, NO ☐, Signature _____
 1. Pool Young, Delaware North, Code 65355
 a. Dedicated acreage 40, What Units A
 b. SUR. Location Standard ☒; Non-Standard Location _____
 c. Well shares acres: Yes _____, No ☒, # of wells _____ plus this well # _____
 2. 2nd. Operator in same acreage, Yes _____, No ☒
 Agreement Letter _____, Disagreement letter _____
 3. Intent to Directional Drill Yes _____, No ☒
 a. Dedicated acreage _____, What Units _____
 b. Bottomhole Location Standard _____, Non-Standard Bottomhole _____
 4. Downhole Commingle: Yes _____, No _____
 a. Pool #2 _____, Code _____, Acres _____
 Pool #3 _____, Code _____, Acres _____
 Pool #4 _____, Code _____, Acres _____

5. POTASH Area Yes _____, No ☒

D. Blowout Preventer Yes ☒, No _____

E. H2S Yes ☒, No _____

F. C144 Pit Registration Yes _____, No _____

G. Does APD require Santa Fe Approval:

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

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

3. Simultaneous Dedication: Yes _____, No ☒, SD # _____

Number of wells _____ Plus # _____

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

5. SWD order Yes _____, NO ☒; SWD # _____

6. DHC from SF _____; DHC-HOB _____; Holding _____

7. OCD Approval Date 10/3/2011

API # 30-015-39468

8. Reviewers JCS