

OCD-HOBBS

Form 3160-3
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

606

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM-98831	
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 Chi Operating, Inc.		7. If Unit or CA Agreement, Name and No.	
3a. Address P.O. Box 1799 Midland, TX 79702		8. Lease Name and Well No. Salado Federal, Well No. 1	
3b. Phone No. (include area code) (432) 685-5001		9. API Well No. 30-025-38402	
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 2100' FSL & 1980' FWL At proposed prod. zone same 1350' Per SN Dated 4-26-07 Unit K		10. Field and Pool, or Exploratory Wildcat Delaware	
11. Sec., T. R. M. or Blk. and Survey or Area Sec. 8-T26S-R34E		12. County or Parish Lea	
13. State NM		14. Distance in miles and direction from nearest town or post office* 30 miles southwest of Jal, NM.	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1980' 660'		16. No. of acres in lease 880	
17. Spacing Unit dedicated to this well 40		18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1100'	
19. Proposed Depth 5550'		20. BLM/BIA Bond No. on file NM-1616	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3370' GL		22. Approximate date work will start* 05/10/2007	
23. Estimated duration 30 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:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification.
- Such other specific information and/or plans as may be required by the authorized officer.

25. Signature <i>George R. Smith</i>	Name (Printed Typed) George R. Smith	Date 03/19/07
Title Agent for Chi Operating, Inc.		

Approved by (Signature) <i>/s/ Don Peterson</i>	Name (Printed Typed) <i>/s/ Don Peterson</i>	Date MAY 03 2007
Title FOR 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 page 2)

Lease Responsibility Statement: Chi Operating, Inc. accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof.

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

George R. Smith, agent

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
OCD-HOBBSFORM APPROVED
OMB No. 1004-0135
Expires November 30, 2000**SUNDRY NOTICES AND REPORTS ON WELLS**
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No.

NM-98831

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.

Salado Federal, #1

9. API Well No.

10. Field and Pool, or Exploratory Area

Wildcat Delaware

11. County or Parish, State

Lea

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

Chi Operating, Inc.

3a. Address

P.O. Box 1799 Midland, TX 79702

3b. Phone No. (include area code)

432/685-5001

4. Location of Well (Footage, Sec., T. R., M., or Survey Description)

2310' FSL & 1850' FWL, Sec. 8-T26S-R34E (New location)

2100' FSL & 1980' FWL, Sec. 8-T26S-R34E (Previous location)

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other _____
	<input checked="" type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

3. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Chi Operating, Inc. requests that the Application for Permit to Drill, submitted March 19, 2007, be changed to reflect a move, as suggested by Todd Suter, BLM, to improve location site.. The access road will still come in the to the southwest corner of the location. The pits will remain on the north and "V" door to the east. This move was also required by the archaeology on the original site. Nothing else will be changed on the APD. New elevation will be 3365' GL. The pad will have a 1 - 1.5 foot cut on the south with fill to the north. There will be very little drainage problems since the surface is relatively very level and is located in deep sandy loam. A new archaeological survey was conducted by Southern New Mexico Archaeological Seervices, Inc. and their report was mailed to BLM, Carlsbad on April 23, 2007. See new survey plat and topo map Exhibit "A".

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

George R. Smith

Title Agent for Chi Operating, Inc.

Signature

George R. Smith

Date April 26, 2007

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by (Signature)

Name

Isidore Peterson

FOR

FIELD MANAGER

Office

CARLSBAD FIELD OFFICE

Date

MAY 03 2007

Conditions of approval, if any, are attached. Approval of this notice 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.

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 next page)

State of New Mexico

DISTRICT I

1625 N. FRENCH DR., BOBBS, NM 86240

Energy, Minerals and Natural Resources Department

Form C-102

DISTRICT II

1301 W. GRAND AVENUE, ARTESIA, NM 86210

OIL CONSERVATION DIVISION

1220 SOUTH ST. FRANCIS DR.

Santa Fe, New Mexico 87505

Revised October 12, 2005
Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-38402	Pool Code None <input checked="" type="checkbox"/>	Pool Name Delaware Wildcat
Property Code 36476	Property Name SALADO FEDERAL	Well Number 1
OGRID No. 4378	Operator Name CHI OPERATING, INC.	Elevation 3365'

Surface Location

UL of lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	8	26-S	34-E		2310	SOUTH	1850	WEST	LEA

Bottom Hole Location If Different From Surface

UL of 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.
40			

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

<p>GEODETIC COORDINATES NAD 27 NME</p> <p>Y=385443.8 N X=760028.0 E</p> <p>LAT.=32.056921° N LONG.=103.494013° W</p>	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>George R. Smith</i> 4/26/07 Signature Date</p> <p>George R. Smith, agent Printed Name</p>
	<p>SURVEYOR CERTIFICATION</p> <p>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 supervision, and that the same is true and correct to the best of my belief.</p> <p>APRIL 18, 2007</p> <p>Date Surveyed JR</p> <p>Signature & Seal of Professional Surveyor</p> <p><i>Gary A. Eidson</i> 4/24/07 07.11.0516</p> <p>Certificate No. GARY EIDSON 12641</p>

APPLICATION FOR DRILLING

CHI OPERATING, INC.
Salado Federal, Well No. 1
2100' FSL & 1980' FWL, Sec. 8-T26S-R34E
Lea County, New Mexico
Lease No.: NM-98831
(Exploratory Well)

In conjunction with Form 3160-3, Application for Permit to Drill subject well, Chi Operating, Inc. submits the following items of pertinent information in accordance with BLM requirements:

1. The geologic surface formation is recent Permian with quaternary alluvium and other surficial deposits.
2. The estimated tops of geologic markers are as follows:

Rustler	675'	Delaware Lime	5,250'
Top of salt	1,392'	Bell Canyon	5,319'
Castile	3,378'	T.D.	5,500'

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

Water: Surface water between 100' - 300'.
Oil: Possible in the Delaware.
Gas: Possible in the Delaware.

4. Proposed Casing Program:

HOLE SIZE	CASING SIZE	WEIGHT	GRADE	JOINT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24.0#	J-55	ST&C	900'	Circ. 500 sx "C" + add.
7 7/8"	5 1/2"	15.5#	J-55	ST&C	5,500'	700 sx "C" + add. TOC 3,000'

- see COA*
5. Proposed Control Equipment: A 10" 3000 psi wp Shaffer Type "E" double hydraulic ram BOP will be installed on the 8 5/8" casing and will be used as a 2,000 psi system. Casing and BOP will be tested before drilling out with 7 7/8" and will be tested weekly. See Exhibit "E". *see Edited Diagram*

MUD PROGRAM:	MUD WEIGHT	VIS.	W/L CONTROL
0' - 900': Fresh water mud:	8.4 - 8.5 ppg	32 - 34	No W/L control
900' - 4800': Brine mud:	10.0 ppg	32 - 34	No W/L control
4800' - 5500': Brine mud/starch	10.0 ppg	32 - 34	W/L control <12cc

7. Auxiliary Equipment: Blowout Preventer, gas detector, Kelly cock, pit level monitor, flow sensors and stabbing valve.

8. Testing, Logging, and Coring Program:

Drill Stem Tests: None.
Logging: T.D thru pay: GR-CAL-CNL-LDT-MSFL-MICRO
T.D. to Surface: GR-Neutron (CNL)
Coring: Rotary Sidewall: as dictated by logs.

Chi Operating, Inc.
Salado Federal, Well No. 1
Page 2

9. No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered the proposed mud program will be modified to increase the mud weight. Estimated evacuated BHP = 2420 with a temperature of 115°.
10. H₂S: None expected. None in previous area wells, but the Mud Log Unit will be cautioned to use a gas trap to detect H₂S and if any is detected the mud weight will be increased along with H₂S inhibitors sufficient to control the gas
11. Anticipated starting date: May 1., 2007
Anticipated completion of drilling operations: Approximately 30 days.

RIG #

BLOWOUT PREVENTOR ARRANGEMENT

2M SYSTEM

10" SHAFFER TYPE "E", 3000 psi WP

80 GALLON, 4 STATION KOOMEY ACCUMULATOR

3000 psi WP CHOKE MANIFOLD

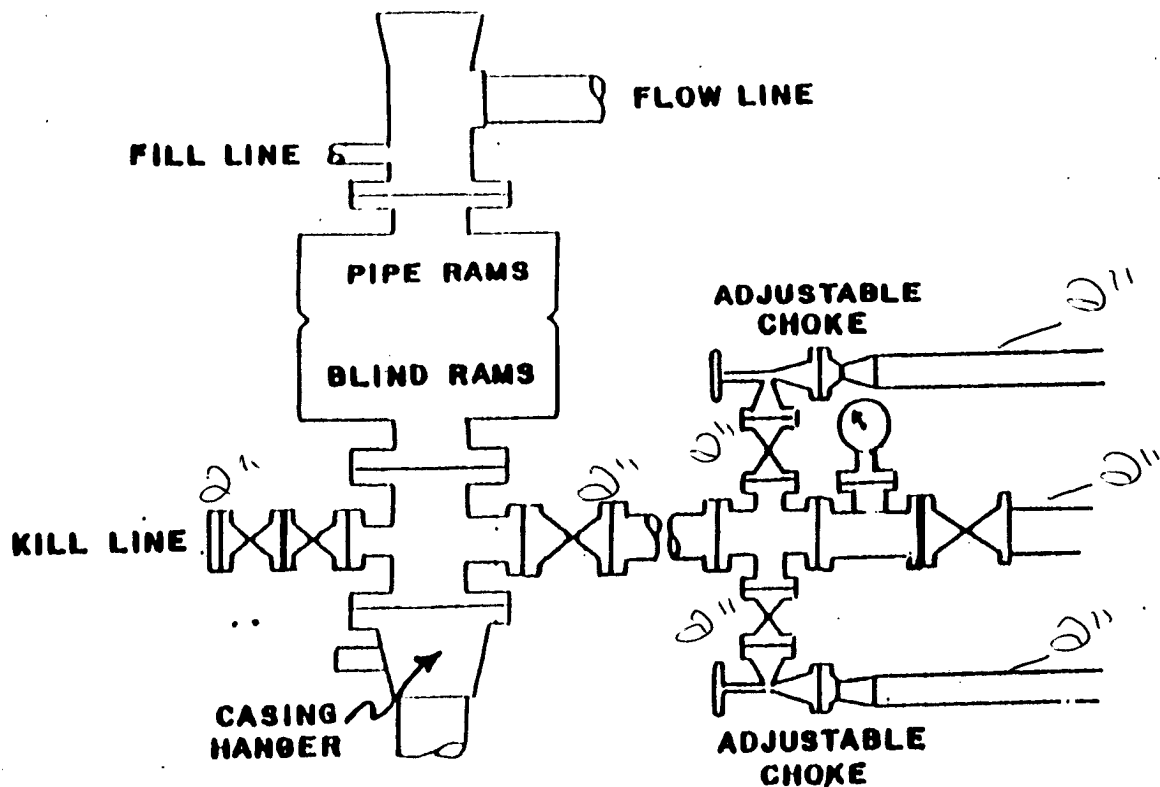


EXHIBIT "E"
CHI OPERATING, INC.
Salado Federal, Well No. 1
BOP Specifications

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: Chi Operating, Inc. Telephone: 1-432-685-5001 e-mail address:

Address: P.O. Box 1799 Midland, TX 79702

Facility or well name: Salado Federal., Well No 1 API 30-025-38402 U/L or Qtr/Qtr NESW Sec 8 T 26S R 34E

County: Lea Latitude N 32.056345 Longitude W 103.493592 NAD: 1927X 1983 Surface Owner Federal - State ☒ Private ☐ Indian ☐

Pit

Type: Drilling - Production ☒ Disposal ☐

Workover Emergency ☐

Lined ☒ Unlined ☐

Liner type: Synthetic ☒ Thickness current rule at time of drilling mil

Clay ☐ Volume 1,000 +/- bbl

Below-grade tank

Volume: bbl Type of fluid:

Construction material:

Double-walled, with leak detection? Yes ☐ If not, explain why not.

Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)

Less than 50 feet

(20 points)

50 feet or more, but less than 100 feet

(10 points)

100 feet or more

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

(20 points)

No

0 points

Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)

Less than 200 feet

(20 points)

200 feet or more, but less than 1000 feet

(10 points)

1000 feet or more

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 according to NMOCD guidelines X, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

Date: March 19, 2007

Printed Name/Title George R. Smith, agent for Chi Operating, Inc., (505) 623-4940 Signature *George R. Smith*

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: 5/9/07

Printed Name/Title *CARIS WILLIAMS/DIST. SUPERV.* Signature *Chris Williams*

CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Chi Operating, Inc.
Well Name & No. Salado Federal # 1
Location: 2310'FSL, 1850'FWL, SEC8, T26S, R34E, Lea County, NM
Lease: NM-98831

I. DRILLING OPERATIONS REQUIREMENTS:

A. The Bureau of Land Management (BLM) is to be notified a minimum of 4 hours in advance, at the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:

1. Spudding
2. Cementing casing: 8.625 inch 5.5 inch
3. BOP tests

B. A Hydrogen Sulfide (H₂S) Drilling Plan is N/A.

C. 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.

D. Gamma-Ray/Neutron logs shall be run from the base of the Salado Formation to the surface; cable speed not to exceed 30 feet per minute.

E. If floor controls are required, (3M or Greater) controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

II. CASING:

A. The 8.625 inch surface casing shall be set at 900 feet and cement circulated to the surface.

1. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
2. Wait on Cement (WOC) time for a primary cement job will be a minimum of 12 hours for a non-water basin, 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compression strength, which ever is greater. (This is to include the lead cement)
3. WOC time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds of compression strength, which ever is greater.
4. If cement falls back, Remedial cementing shall be completed prior to drilling out that string.

B. The minimum required fill of cement behind the 5.5 inch production casing is **cement shall extend upward a minimum of 200 feet above the base of the intermediate casing string.**

C. If hard band drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

III. PRESSURE CONTROL:

- A. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2.
- B. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling below the 8.625 inch casing shall be 2000 psi.
- C. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 1. The tests shall be done by an independent service company.
 2. The results of the test shall be reported to the appropriate BLM office.
 3. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of the independent service company test will be submitted to the appropriate BLM office.
 4. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi in accordance with API RP 53. The test will be held for a minimum of 10 minutes if the test is done with a test plug and 30 minutes without a test plug.
 5. A variance to test the _____ to the reduced pressure of ____psi with the rig pumps is approved the BOP/BOPE must be tested by an independent service company.

IV. Hazards:

1. Our geologist has indicated that there is potential for lost circulation in the shallow formations.

Engineering may be contacted at 505-706-2779 for variances if necessary.

FWright 4/2/07