

7018

API issued 12/30/04

I-27

Oil Cons. - Barry  
UNITED STATES N.M. DIV-Dist. 2  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
11801 W. Grand Avenue  
Artesia, NM 88210  
APPLICATION FOR PERMIT TO DRILL OR REENTERFORM APPROVED  
OMB No. 1004-0136  
Expires November 30, 2000

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM-0375257A	
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" 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. Federal Com., Well # 2	
3b. Phone No. (include area code) (432) 685-5001		9. API Well No. 30-015-33782	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 1190' FNL & 990' FWL At proposed prod. zone same Let S		10. Field and Pool, or Exploratory Burton Flats Morrow	
14. Distance in miles and direction from nearest town or post office* 4.5 road miles N. of Carlsbad, NM		11. Sec., T., R., M., or Blk. and Survey or Area Sec. 6 -T21S-R27E	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 990'	16. No. of Acres in lease 335.73 <del>388.36</del>	17. Spacing Unit dedicated to this well 276.32 <del>920</del>	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. N/A	19. Proposed Depth 11,450'	20. BLM/BIA Bond No. on file NM-1616	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3221' GL	22. Approximate date work will start* 7/12/04	23. Estimated duration 4-6 weeks	

## CARLSBAD CONTROLLED WATER BASIN 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>George R. Smith</i>	Name (Printed/Typed) George R. Smith	Date 06/12/04
Title Agent for Chi Operating, Inc.		
Approved by (Signature) /s/ Joe G. Lara	Name (Printed/Typed) /s/ Joe G. Lara	Date 28 JUL 2004
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)

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

*George R. Smith*  
George R. Smith, agentAPPROVAL SUBJECT TO  
GENERAL REQUIREMENTS  
AND SPECIAL STIPULATIONS  
ATTACHEDHold production for other operator  
in NE 1/4 B6A w OGD

District I  
1625 N. French Dr. Hobbs, NM 88240

District II  
811 South First, Artesia, NM 88210

District III  
1000 Rio Brazos Rd., Aztec NM 87410

District IV  
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources

OIL CONSERVATION DIVISION

2040 South Pacheco  
Santa Fe, N M 87505

Form C-102  
Revised March 17, 1999  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 73280	Pool Name Burton Flats Morrow
Property Code	Property Name FEDERAL COM	Well Number 2
OGRID No. 4378	Operation Name CHI OPERATING, INC.	Elevation 3221

Surface Location

UL or Lot No. 5	Section 6	Township 21-S	Range 27-E	Lot Idn.	Feet from the 1190	North/South line NORTH	Feet from the 990	East/West line WEST	County 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 276.32	Joint or Infill	Consolidation Code	Order No.						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTEREST HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	OPERATOR CERTIFICATION I HEREBY CERTIFY THAT THE INFORMATION HEREIN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.	
	Signature	George R. Smith
	Printed Name	George R. Smith
	Title	agent

# APPLICATION FOR DRILLING

**CHI OPERATING, INC.**  
Federal Com., Well No. 2  
1190' FNL & 990' FWL, Sec. 6-T21S-R27E  
Eddy County, New Mexico  
Lease No.: NM-0375257  
(Development 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:

Yates	440'	3 <sup>rd</sup> SD	8,257'
Capitan Reef	880'	Wolfcamp	8,670'
Cherry Canyon	2,400'	Strawn	9,970'
Brushy Canyon	3,320'	Atoka	10,400'
1 <sup>st</sup> B. Spring Carb.	4,395'	Morrow Lime	10,840'
1st SD	6,220'	Lower Morrow	10,150'
2 <sup>nd</sup> SD	6,925'	Mississippian	11,285'
		T.D	11,450'

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

Water: Surface water between 100' - 300'. Capitan Reef below 880'.

Oil: Possible in the Queen, Delaware and Bone Spring

Gas: Possible in the Atoka below 10,400' and the Morrow below 10,840'.

## 4. Proposed Casing Program:

HOLE SIZE	CASING SIZE	WEIGHT	GRADE	JOINT	SETTING DEPTH	QUANTITY OF CEMENT	WITNESS
17 1/2"	13 3/8"	48.5#	J-55	ST&C	0' - 350' 600'	Circ. 275 sx "C" + add.	
11"	8 5/8"	32.0#	J-55	ST&C	0' - 4,350' 2500'	Circ. 1200 sx 65/35 sx "C" + POZ.	
7 7/8"	5 1/2"	20.0#	N-80	LT&C	0' - 400'		
7 7/8"	5 1/2"	17.0#	N-80	LT&C	400' - 8,450'		
7 7/8"	5 1/2"	20.0#	N-80	LT&C	8,450' - 11,450'	1500 sx of "H" + add.	

## 5. Minimum Specifications for Pressure Control Equipment:

A 12" 5000 psi WP Shaffer, LWS Double Gate BOP will be installed on the 13 3/8" casing and tested per order #2.

Request waiver to operate as a 3,000 psi WP system and test to the maximum expected surface pressure of 2,500 psi WP Casing and BOP will be tested before drilling out with the 11" and will be tested before drilling into the Wolfcamp.

6. MUD PROGRAM:	MUD WEIGHT	VIS.	W/L CONTROL
0' - 350': Fresh water/spud:	8.4 - 8.5 ppg	32 - 36	No W/L control
350' - 4,350': Brine mud: Fresh	10.0 - 10.1 ppg	29	No W/L control
4350' - 8,500': Fresh water mud:	8.4 - 8.5 ppg	28	No W/L control
8500' - 10,300': Brine mud:	10.0 - 10.1 ppg	29	No W/L control
10,300' - 10,840': Brine/C.Braine(starch):	9.5 - 10+ ppg	32 - 34	W/L control 12-15 cc +/-
10,840' - 11,450': XCD-LSRV-40000	9.5 - 10+ ppg	42 - 45	W/L control 8 cc +/-
(XCD subject to change)			

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: As deemed necessary.

Logging: Intermediate, Pending mud log shows: 350' - 4350': (GR-CAL-CNL-LDT)(GR-CAL-DLL-MICRO)  
T.D. - 4350: (GR-CAL-CNL-LDT)(GR-CAL-DLL-MICRO)  
4350: - Surface: GR/CNL.

Coring: As dictated by logs.

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 = 5038 psi and surface pressure of 2519 psi with a BH temperature of 175°.

10.  $H_2S$ : None expected. The Mud Log Unit will be cautioned to use a gas trap to detect  $H_2S$  and if any is detected the mud weight will be increased along with  $H_2S$  inhibitors sufficient to control the gas.

11. Anticipated starting date: July 12, 2004.

Anticipated completion of drilling operations: Approximately 30 - 40days.

**10. PLANS FOR RESTORATION OF THE SURFACE:**

- A. After completion of drilling and/or completion operations, all equipment and other material not required for operations will be removed. Pits will be filled and the location cleaned of all trash and junk to leave the well site in an aesthetically pleasing a condition as possible.
- B. Any unguarded pits containing fluids will be fenced until they are filled.
- C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible. All pits will be filled and leveled as soon as they are dry enough to be worked.

**11. OTHER INFORMATION:**

- A. Topography: The proposed well site and access road are located on an overall 2.5% slope to the southeast from an elevation of 3221'.
- B. Soil: The topsoil at the well site is a dark sandy loam soil of the Simona Gravelly fine Sandy Loam. land complex. There is fractured, platy, indurated caliche at a depth of approximately 20 inches.
- C. Flora and Fauna: The vegetation consists of a sparse grass cover of dropseed, three awn, and bush muhly along with plants of yucca, broomweed, mesquite, creosote, yucca, cacti and miscellaneous weeds and wildflowers. The wildlife consists of rabbits, coyotes, rattlesnakes, lizards, dove, quail and other wildlife typical of the semi-arid desert land.
- D. Ponds and Streams: Lake Avalon is approximately 1 mile southwest of the location.
- E. Residences and Other Structures: None in the immediate vicinity except oilfield equipment on well locations.
- F. Land Use: Cattle grazing.
- G. Surface Ownership: The proposed well site and access road is on Federal (Bureau of Reclamation) surface and Federal minerals.
- H. There is no evidence of archaeological, historical or cultural sites in the staked area. An archaeological survey is being conducted by Archaeological Survey Consultants, P.O. Box 2285, Roswell, NM 88202, and their report will be submitted to the appropriate government agencies.

**12. OPERATOR'S REPRESENTATIVE:**

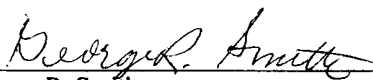
- A. The field representative for assuring compliance with the approved use and operations plan is as follows:

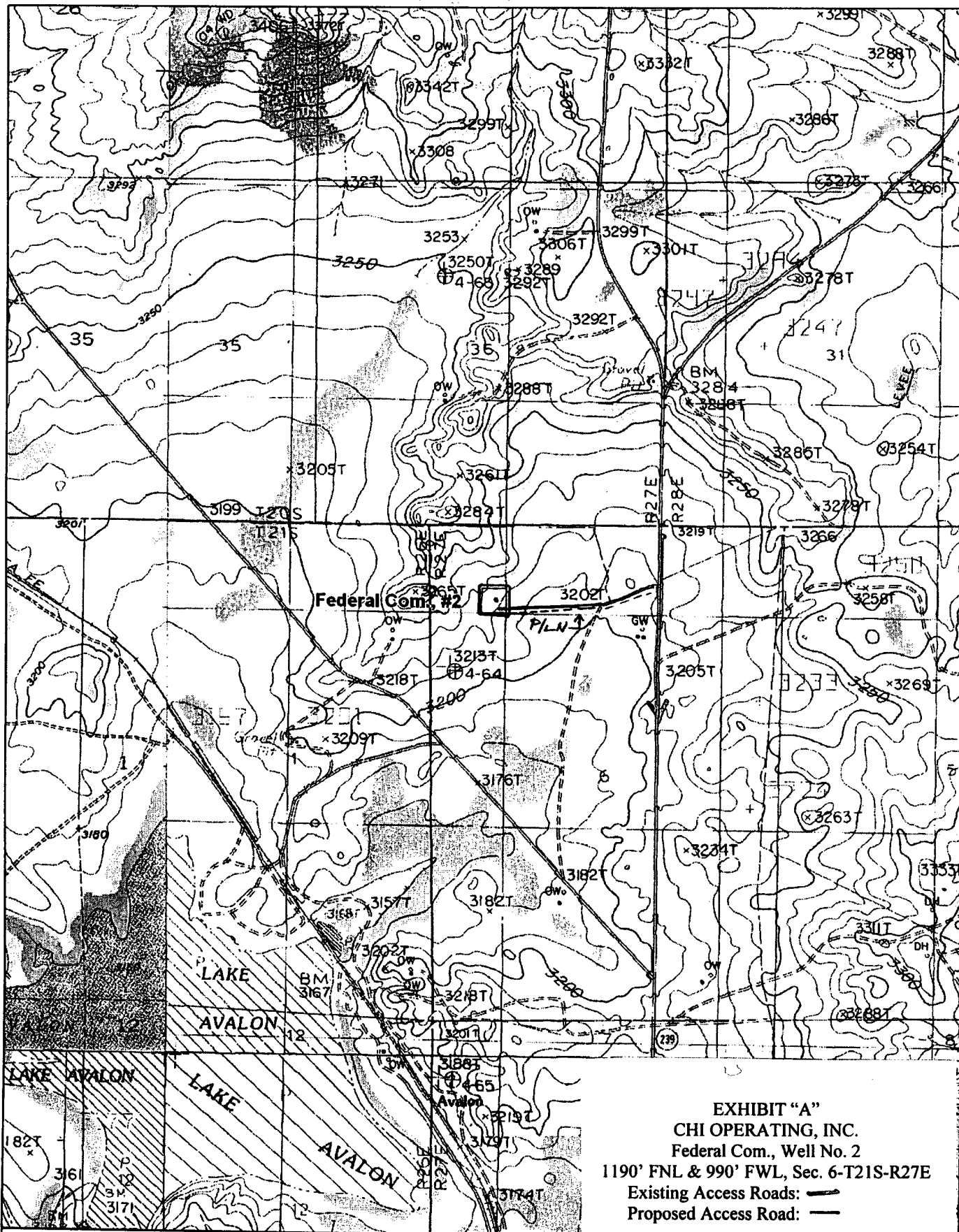
John Qualls  
Chi Operating, Inc.  
P. O. Box 1799  
Midland, Texas 79701  
Office Phone: (432) 685-5001  
Home Phone: (432) 684-8825

**13. CERTIFICATION:**

I hereby certify that I have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in the plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Chi Operating, Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

June 11, 2004

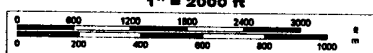
  
\_\_\_\_\_  
George R. Smith  
Agent for: Chi Operating, Inc.



DeLORME

© 2002 DeLorme, 3-D TopoQuads ©. Data copyright of content owner.  
[www.delorme.com](http://www.delorme.com)

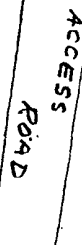
Scale 1 : 24,000  
 1" = 2000 ft







10' →



REV 2/7/95

# TIMBER//SHARP DRILLING

B.O.P. Equipment Intended for use on Rig # 24<sup>d</sup><sub>22</sub>  
Well To Be drilled for IM32/Sharp

\* All B.O.P equipment is H2S Trim  
 \* All Accumulators are Kookey Type-80 : Dual Power Electric/Air  
 \* Choke Manifold : \* See sheet 2  
 4" Valves : Cameron F/C, Shaffer DB Hydraulic  
 2" Check Valve : Cameron Type R  
 2" Valves : Cameron or Shaffer

**Annular Shafter Type:** Spherical  
**Annular PSI:** 3000

( If Shaffer: Spherical , If Hydrill: Type GK )

**BOP Type** Shaffer LWS

( If Shaffer: LWS or SL, If Cameron: Type U )

**BOP Size:** 13<sup>5</sup>/<sub>8</sub> " - 5000 PSI

### Rotating Head Type Smith

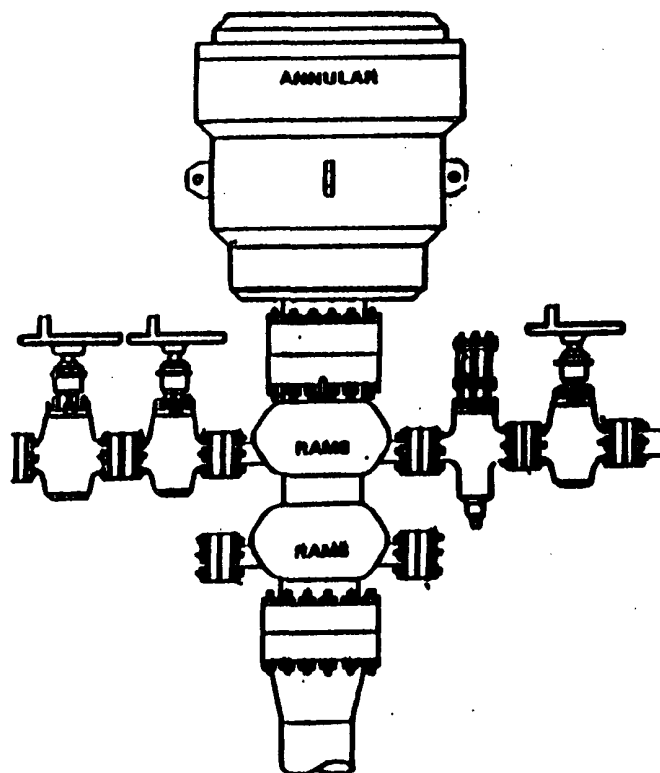
Rot-Head Furnished By Imse

Rams in top gate: 4 1/2 pipe

Rams in bottom: Blinds

Side Outlets used:  
Bottom X Top     

### 4" Valves on Tee



B.O.P. Equipment Intended for use on Rig # 24922  
Well To Be drilled for Thurs / Sharp

**'All Valves (H28)'**

### Choke Manifold:

**Pressure Rating 3,000 or 5,000 (as Req.)**

## 1 - 4" Valves

## 2 - 2" Valves

**2 - 2" Adjustable Chokes**

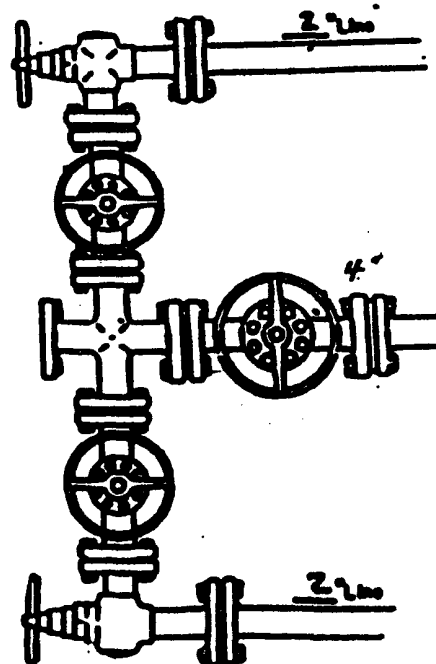
### Valve Types Used:

**Cameron - F or FC**

## Shaffer - B Floseal

**WKM - type 2**

**Chokes - Cameron H2 or TC unibolt**



**EXHIBIT "E"**  
**CHI OPERATING, INC.**  
**Federal Com., Well No. 2**  
**BOP Specifications**

SELF-CERTIFICATION STATEMENT  
FROM LESSEE/OPERATOR

SURFACE OWNER IDENTIFICATION

Federal or Indian Lease No. NM-0375257

I hereby certify to the Authorized Officer of the Bureau of Land Management that I have reached one of the following agreements with the Surface Owner; or after failure of my good-faith effort to come to an agreement of any kind with the Surface Owner, have provided a bond and will provide evidence of service of such bond to the Surface Owner:

- 1) ✓ I have a signed access agreement to enter the leased lands;
- 2) \_\_\_\_\_ I have a signed waiver from the surface owner;
- 3) \_\_\_\_\_ I have entered into an agreement regarding compensation to the surface owner for damages for loss of crops and tangible improvements.
- 4) \_\_\_\_\_ because I have been unable to reach either 1), 2), or 3) with the surface owner, I have obtained a bond to cover loss of crops and damages to tangible improvements and served the surface owner with a copy of the bond.

Surface owner information: (if available after diligent effort)

Surface Owner Name: Theodore Allen

Surface Owner Address: 4800 N. Stanton #39, El Paso, TX 79902

Surface Owner Phone Number: 915-533-451

Signed this 1st -- day of June -, 2004

Chi Operating, Inc

(Name of lessee/operator)

[Signature] Agent

I (Surface Owner) accept ✓ do not accept \_\_\_\_\_ the lessee or operator's Surface Owner Agreement under 1, 2, or 3 above.

Signed this 1st -- day of June -, 2004

Theodore Allen

(Signature of Surface Owner if an agreement has been reached)

Attachment 1-1



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

**Joanna Prukop**

Cabinet Secretary

**Mark E. Fesmire, P.E.**

Director

**Oil Conservation Division**

January 3, 2005

Chi Operating, Inc.  
P.O. Box 1799  
Midland, TX 79702  
Attn: Mr. John Wolf

**RE: CHI OPERATING, INC., FEDERAL COM. #2, LOCATED IN SECTION 6,  
OF TOWNSHIP 21 SOUTH, RANGE 27 EAST, EDDY COUNTY, NEW MEXICO  
API # 30-015-33782**

Dear Mr. Wolf,

In regards to the above, I need to inform you that whether of not an application to drill (APD) is located on Federal, State or Private minerals in southeastern New Mexico, the drilling application must have an approved API # assigned to it before drilling is to commence.

As we talked about over the phone last week, I had not assigned an API # until you informed me that said well was set to run logs. I have been holding this application since our office received it on July 30<sup>th</sup>, 2004. At some point in time shortly after receiving your application, I called your office informing reason(s) we could not assign an API #.

My primary reason is due was due to the fact that another operator is currently producing from the Morrow formation in the NE/4 of the section.

As noted on your APD the drilling application is a projected Morrow test.

In my initial review, I find that Chi Operating is in violation with the following rules:

Please refer to NMOCD Rules: 19.15.12; 19.15.3.102.A and specifically NMOCD Rule 19.15.3.104.C(2).

As we discussed, said well cannot produce in part until conditions of the above NMOCD rules are resolved.

Please call if you have any questions.

Bryan G. Arrant  
PES

E-Mail: Tim Gum, District Supervisor, Artesia  
Brenda Coffman, Chesapeake Operating, Inc.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
1500 N. Grand Avenue  
Alamogordo, NM 88210

FORM 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-0375257 A

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.  
Federal Com., #2

9. API Well No.

10. Field and Pool, or Exploratory Area  
Burton Flats Morrow

11. County or Parish, State  
Eddy

**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)  
1190' FNL & 990' FWL  
Sec 6-T21S-R27E

RECEIVED

DEC 15 2004

QUARTERS

**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. is changing the casing program shown in the APD as follows:

	Hole Size	Casing Size	Weight	Grade	Joint	Setting Depth	Quantity of cement
Change the intermediate casing from:	11"	8 5/8"	32#	J-55	ST&C	0' - 2,500'	Circ. 1200 sx 65/35 "C"
To New Casing Program:	12 1/4"	9 5/8"	36#	J-55	ST&C	0' - 2500'	Circ. 1200 sx 65/35 "C"

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 December 9, 2004

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by (Signature)

(ORIG. SGD.) ALEXIS C. SWOBODA

Name  
(Printed/Typed)

PETROLEUM ENGINEER

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.

Office

RFO

Date

DEC 18 2004

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)