

## APPLICATION FOR DRILLING

### CHI OPERATING, INC.

McIver Federal Com., Well No. 2

Surface location for Re-entry: 687' FSL & 2240' FEL, Sec. 20-T22S-R25E

Production location: 1980' FSL & 1400' FWL, Sec. 20-T22S-R25E

Eddy County, New Mexico

Lease No.: NM-98799

(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:

Delaware	2060'	Strawn	9270'
Bone Spring	4443'	Atoka	9472'
3rd sand	7695'	Morrow Clastic	9770' TVD (total vertical depth)
Wolfcamp	7833'	Lower Morrow	10,080' TVD
Cisco	8220'	Total drilling length at T.D.	10,800'

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

Water: Surface water between 100' - 1400'. Behind casing and cement in P/A well.

Oil: None expected in well.

Gas: Possible in the Wolfcamp, Upper Penn, Strawn below 9270' and the Morrow below 9,770'.

4. Proposed Casing Program:

HOLE SIZE	CASING SIZE	WEIGHT	GRADE	JOINT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8"	36 & 48#	Armco	Armco	938'	Circ. 575 sx cement & 575 cu. ft Perlite to surface. Casing & cement existing in hole.
12 1/4"	9 5/8"	36 & 40#	J-55	8 RT	4,499'	Two stage cement-Circ. 550 sx cement. w/Perlite to surface. Csg & Cmt in hole.
7 7/8"	5 1/2"	20.0#	N-80	LT&C	1,000'	
7 7/8"	5 1/2"	17.0#	N-80	LT&C	1000' - 7800'	
7 7/8"	5 1/2"	20.0#	N-80	LT&C	7800' - 10,800' csg. length	500 +/- sx of Super"C"

5. Proposed Control Equipment: A 12" 5000 psi wp Shaffer Type LWS Double Gate BOP will be installed on the 13 3/8" casing. Casing and BOP will be tested before drilling out with 7 7/8" and will be tested daily. See Exhibit "E".

MUD PROGRAM:	MUD WEIGHT	VIS.	W/L CONTROL
400' - 7800': Fresh water mud:	8.5 - 8.8 ppg	28	No W/L control
7800' - 9770'TVD: Cut Brine mud:	9.2 - 9.5 ppg	32 - 36	W/L control 15 cc +/-
9770' - 10,080'TVD: Cut Brine mud:	9.5 - 10.0 ppg	42 - 48	W/L control 8 cc +/-

7. Auxiliary Equipment: Blowout Preventer, gas detector, Kelly cock, and stabbing valve.

8. Testing, Logging, and Coring Program:

Drill Stem Tests: As deemed necessary.

Logging: T.D.to 6000': GR-CAL-CNL-LDT-DLL-MICRO

Coring: As dictated for the Morrow.