

APPLICATION FOR DRILLING

CHI OPERATING, INC.

Carbon Valley 15 Federal, Well No. 1
660' FNL & 660' FEL, Sec. 15-T16S-R27E
Eddy County, New Mexico
Lease No.: NM-84851

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:

Seven Rivers	450'	Wolfcamp	7300'
Queen	730'	Strawn	8250'
Grayburg	1300'	Atoka-Morrow	8700'
San Andres	1625'	Miss.-Chester	9125'
Tubb	4350'	T.D.	9200'
Abo	5100'		

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 Premier Sands below 1482'.

Gas: Possible in the Atoka-Morrow below 8,700' and the Miss.-Chester below 9,125'.

4. Proposed Casing Program

HOLE SIZE	CASING SIZE	WEIGHT	GRADE	JOINT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	32.0#	J-55	LT&C	1,600'	Circ. 1000 sx "C" + add.
7 7/8"	5 1/2"	15.5#	J-55	LT&C	9,200'	600 sx of "C" + add.

WITNESS

5. Proposed Control Equipment:: A 12" ³⁰⁰⁰ 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 12 1/4" and will be tested daily. See Exhibit "E".

6. MUD PROGRAM:	MUD WEIGHT	VIS.	W/L CONTROL
0' - 1600': Fresh water mud:	8.4 - 8.6 ppg	29 - 32	No W/L control
1600' - 5800': Fresh water mud:	8.4 ppg	29 - 32	No W/L control
5800' - 8300': Brine water mud:	10.6 ppg	29 - 32	No W/L control
8300' - 9200': Cut Brine mud:	10.0 - 10.6 ppg	29 - 32	W/L control 8-10 +/-

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.' to 3200': GR/CNL.

3200' to T.D.: GR/CAL/CNL/LDT/DLL/MSFL

or: 0' to T.D.: GR/CAL/CNL/LDT/DLL/MSFL

Coring: As required.