Form 3160-3 RECEIVED (August 1999)  SEP 3 0 2004  UNITED STATES BUREAU OF LAND MANAGE APPLICATION FOR PERMIT TO DR  Ia. Type of Work: DRILL  DRILL  Gas Well  Other	FORM APPROVED OMB No. 1004-0136 Expires November 30, 2000  5. Lease Serial No. NM0560353  6. If Indian, Allottee or Tribe Name  7. If Unit or CA Agreement, Name and No.  8. Lease Name and Well No. Munchkin Federal, No. 5					
2. Name of Operator				9. API Well No.		
Chi Operating, Inc.					33725	
		o. (include area code)		10. Field and Pool, or Exploratory		
	(915) 685-			Benson Delaware	and Survey or Area	
4. Location of Well (Report location clearly and in accordance with a At surface 1700' FNL & 1980' FWL  At proposed prod. zone same	ny State real	Callana Page		Sec. 12-T19S-R30E	and outvoy of thou	
14. Distance in miles and direction from nearest town or post office*				12. County or Parish	13. State	
16 road miles South. of Loco Hills, NM	·		<del></del>	Eddy	NM	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1700'		Acres in lease	17. Spacin	g Unit dedicated to this well 40		
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.  1370'	19. Proposed Depth 20. BLM/I			BIA Bond No. on file M-1616		
21. Elevations (Show whether DF, KDB, RT, GL, etc.)		cimate date work will	start*	23. Estimated duration		
3439' GL	08	/2/04		3-4 weeks		
	chments	CAPITA	CAPITAN CONTROLLED WATER BASIN			
The following, completed in accordance with the requirements of Onshor	e Oil and Ga	s Order No.1, shall be	attached to thi	s form:		
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office).</li> </ol>	Lands, the	Item 20 above 5. Operator certif	). ication. e specific infe	is unless covered by an exis		
25. Signature		e (Printed/Typed)		Da		
Title Deorget Smith	Geo	ge R. Smith		71	11/04	
Agent for Chi Operating, Inc.						
Approved by (Signatures / Jesse J. Juen	Nam	e (Printed/Typed)/S/	Jesse J.	Juen Da	SEP 2 7 2004	
Title DIRECTOR STATE DIRECTOR	Offic		NM ST	TATE OFFICE		
Application approval does not warrant or certify that the applicant holds loperations thereon.  Conditions of approval, if any, are attached.	egal or equit	able title to those rights	s in the subject	l lease which would entitle th APPROVAL F	e applicant to conduct OR TYEAR	
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it States any false, fictitious or fraudulent statements or representations as to	t a crime for o any matter	any person knowingly within its jurisdiction.	and willfully	to make to any department of	or agency of the United	
*(Instructions on reverse)			<del></del>			
Lease Responsibility Statement: Chi Operating, concerning operations conducted on the leased lease leased l	, Inc. accep and or por	ots all applicable to tion thereof.		tions, stipulations, and	restrictions	

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

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 For drilling and production facilities, submit to appropriate NMOCD District Office. For downstream facilities, submit to Santa Fe office

· Form C-144

June 1, 2004

Pit or Below-Grade Tank Registration or Closure
Is pit or below-grade tank covered by a "general plan"? Yes \( \subseteq \) No \( \subseteq \)

Type of action: Registration of a pit or below-grade tank 🗵 Closure of a pit or below-grade tank 🗌								
Operator: CHI OPERATING, INC		ddress:						
Address: P.O. BOX 1799 MIDLAND, TX, 79702								
Facility or well name: Munchkin Fed. #5 API #:								
County: Eddy Latitude Longitude NAD: 1927 1983 Surface Owner Federal State Private Indian								
	Data-real-dayle							
Pit	i ————————————————————————————————————	Below-grade tank						
Type: Drilling ☑ Production ☐ Disposal ☐  Workover ☐ Emergency ☐	Volume:bbl Type of fluid:  Construction material:							
Lined Unlined U		uble-walled, with leak detection? Yes If not, explain why not. RECEIVED						
Liner type: Synthetic Marchaess AS PER REQUIREMENT @	Double-walled, with leak detection: Tes [] If no	c, explain why noc.						
TIME mil Clay		OCT 0 7 2004						
Pit Volumebbl		OUL-ARTESIA						
TR Votatio	Less than 50 feet	(20 points)						
Depth to ground water (vertical distance from bottom of pit to seasonal	50 feet or more, but less than 100 feet	(10 points)						
high water elevation of ground water.) Not Availabe. Est. 200-300'	100 feet or more	(O points)						
Wellhead protection area: (Less than 200 feet from a private domestic	Yes	(20 points)						
water source, or less than 1000 feet from all other water sources.)	No	( 0 points)						
Dictarge to graft as proton (Assistantal distance to all scales de glaves	Less than 200 feet	(20 points)						
Distance to surface water: (horizontal distance to all wetlands, playas,	200 feet or more, but less than 1000 feet	(10 points)						
irrigation canals, ditches, and perennial and ephemeral watercourses.)	1000 feet or more	( 0 points)						
	Ranking Score (Total Points)	0						
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: (check the onsite box if your are burying in place) onsite of offsite. If offsite, name of facility								
remediation start date and end date. (4) Groundwater encountered: No [		tt. and attach sample results. (5)						
Attach soil sample results and a diagram of sample locations and excavation	ns.							
Additional Comments:								
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 or closed according to NMOCD guidelines , general permit , or an (attached) alternative OCD-approved plan .								
Date: 10/05/04								
Printed Name/Title John W. Wolf Signature WWW								
Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the sontents 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.								
	200							
Approval:	/'00	OCT 8 2001						
Printed Name/Title	Signature	OGT: 8 2004						

<u>District 1</u> 1625 N. French Dr. Hobbs, NM 88240

District || 811 South First, Artesia, NW 88210

District III 1000 No Bruzos Rd., Aztac NM 87410

<u>District N</u> 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 Coptes

Fee Lease - 3 Copies

AMENDED REPORT

# WELL LOCATION AND ACREAGE DEDICATION PLAT

API	Number		Pool Code Pool Name Benson Delaware									
Property Co.	de	Property Name						Well Number				
OCEID N-		MUNCHKIN FEDERAL					Elevati	<u>5</u>				
OGRID No. 4378		Operation Name  CHI OPERATING, INC.					343					
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#### APPLICATION FOR DRILLING

#### CHI OPERATING, INC.

Munchkin Federal, Well No. 5 1700' FNL & 1980' FWL, Sec. 12-T19S-R30E

> Eddy County, New Mexico Lease No.: NM-0560353 (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:

Anhydrite	400'	Delaware	4170'
Yates	2240'	T.D.	6175'
Seven Rivers	2430'		
Queen	3050'		

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 Queen, Delaware.

Gas: Possible in the Delaware

4. Proposed Casing Program:

HOLE SIZE	CASING	SIZE WEIG	GHT GRAD	E JOINT	SETTING DEPTH	QUANTITY OF CEMENT	WITNESS	
12 1/4'	9 5/8"	36.0#	J-55	ST&C	500'	Circ. 400 sx "C" + add.	WITNESS	
8 3/4"	7"	23.0#	J-55	ST&C	3,200'	Circ 450 sx "C" to surface	WIINE22	
Note: If 8 3/4" hole has no problems will reduce hole to 7 7/8" and set following:								
		•			6,175'	Circ. in 2 stages: 1200 sx of	"C"	
Note: If 7" casing is set will use following:								
6 ¼"	_			LT&C	6,175'	Circ. in 2 stages: 1200 sx of	"C"	
7 7/8" Note: If 7'	5 1/2" casing is:	17.0# set will us	J-55 e following	LT&C g:	6,175'	llowing: Circ. in 2 stages: 1200 sx of		

5. Proposed Control Equipment: A 10" 3000 psi wp Shaffer Type "E" double hydraulic ram BOP will be installed on the 9 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".

6. MUD PROGRAM:		MUD WEIGHT	VIS.	W/L CONTROL
With intermediate ca	sing:			
0' - 500':	Fresh water mud:	8.4 - 8.7 ppg	32 - 34	No W/L control
500' - 3200'	Brine mud	10.0 ppg	29 - 30	No W/L control
3200' - 6175':	Brine mud	10.0 ppg	29 - 32	W/L cont. < 15 cc @ TD
Without intermediate	e casing:			
0' - 500':	Fresh water/Spud	8.4 - 8.7 ppg	32 - 34	No W/L control
500' - 6175':	Brine/starch	10.0 ppg	29 – 32	W/L cont. <15 cc @ TD

- 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: T.D thru pay: GR-CAL-CNL-LDT-DLL-MICRO

T.D. to Surface: GR-Neutron

Coring: Rotary Sidewall: as dictated by logs.

Chi Operating, Inc. Munchkin Federal, Well No. 5 Page 2

- 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 = 2746 psi with a temperature of 122°.
- 10. H.S: None expected.
- 11. Anticipated starting date: August 2, 2004
  Anticipated completion of drilling operations: Approximately 30 days.

### MULTI POINT SURFACE USE AND OPERATIONS PLAN

#### CHI OPERATING, INC

Munchkin Federal, Well No. 5
330' FNL & 2200' FWL, Sec. 12 -T19S-R30E
Eddy County, New Mexico
Lease No.: NM-0560353
(Development Well)

This plan is submitted with the Application for Permit to Drill the above described well. The purpose of the plan is to describe the location of the proposed well, the proposed construction activities and operations plan, to be followed in rehabilitating the surface environmental effects associated with the operations.

#### 1. EXISTING ROADS:

- A. Exhibit "A" is a portion of a BLM Hackberry Lake Topo map showing the location of the proposed well as staked. The well site location is approximately 36 road miles southeast of Artesia, NM.

  Traveling east of Artesia on U.S. Highway 82, NM Hwy 360 and county roads No. 250 and 251, there will be 33 miles of paved highway, plus 3 miles of existing gravel oilfield roads.
- B. Directions: Travel east from U. S. Highway #285 in Artesia, NM on U. S. Highway 82 for approximately 14 miles, turn southeast on NM Hwy 360 for approximately 13 miles to paved County Rd #251. Turn north on #251 for 1.8 mile to County Rd. #250, then turn right on #250 for 3.8 miles to top of Nimenim Ridge. Turn south onto a gravel oilfield road just west of a cattle guard with a pipeline buried near the road. Continue south for .8 mile to a large tank battery and water injection pump house; turn right (west) for .25 mile to a pump jack, then south (left) for .63 mile to a P/A well site with a gas line tap. Turn right (west) for .3 mile, then south .25 mile to the Munchkin Fed. #1 well site. Turn west, north of the #1, for .2 mile to the access road on the left (south) side. Follow this road southeast then south to the southwest corner of the Munchkin Fed. #4 well pad. The proposed access road will start at this point and run southeast for 1000 feet to the northeast corner of the proposed pad.

### 2. PLANNED ACCESS ROAD:

- A. Length and Width: The proposed access road will be constructed to a width of 12 feet (24' Max.) and approximately 1000 feet in length. The proposed and existing roads are color coded on Exhibit "A".
- B. Construction: The new access road will be constructed by grading and topping with compacted caliche.
- C. Turnouts: One turnout may be required increasing the width to 20 feet for passing.
- D. Culverts: None required.
- E. Cuts and Fills: No cuts or fills required.
- F. Gates, Cattle guards: None required.
- G. Off Lease ROW: An off lease ROW No. NM-102279 was issued with a previous APD covering the existing access road in the E2 of Sec. 1-T19S-R30E.

#### 3. LOCATION OF EXISTING WELLS:

A. Existing wells within a two-mile radius are shown on Exhibit "C".

#### 4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

- A. Chi Operating, Inc. has production facilities on the lease at this time.
- B. If the well proves to be commercial, the necessary production facilities, gas production-process equipment and tank battery will be installed on the drilling pad. A 3" poly gas flow line will run north, parallel to the proposed access road, to a gas line hook-up at the Munchkin Fed. #4 well pad.

### 5. LOCATION AND TYPE OF WATER SUPPLY:

A. It is planned to drill the proposed well with fresh water that will be obtained from private or commercial sources and will be transported over the existing and proposed access roads

#### 6. SOURCE OF CONSTRUCTION MATERIALS:

A. Caliche for surfacing the proposed access road and well site pad will be obtained from a pit on the location, if available, or from an open pit on the recent drill site for the Wizard Federal #3 in the NW'4SE'4, Sec. 1-T19S-R30E. No surface materials will be disturbed except those necessary for actual grading and leveling of the drill site and access roads.

### 7. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drill cuttings will be disposed of in the reserve pits.
- B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.
- C. All pits will be fenced with normal fencing materials to prevent livestock from entering the area.
- D. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or a separate disposal application will be submitted to the BLM for approval.
- E. Oil produced during operations will be stored in tanks until sold.
- F. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- G. Trash, waste paper, garbage and junk will be contained in trash bins to prevent scattering by the wind and will be removed for deposit in an approved sanitary landfill within 30 days after finishing drilling and/or completion operations.

#### 8. ANCILLARY FACILITIES:

A. None required.

#### 9. WELL SITE LAYOUT:

- A. Exhibit "D" shows the relative location and dimensions of the well pad, reserve pits, and major rig components. The pad and pit area has been staked and flagged, 500' X 500'.
- B. Mat Size: 225' X 165', plus 100' X 100' reserve pits on the north.
- C Cut & Fill: The location will require very little leveling.
- D. The surface will be topped with compacted caliche and the reserve pits will be plastic lined.

#### 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 access road is located in a area on top of and east of the Niminem Ridge. The location is relatively level with an overall .7% slope to the south/southeast from an elevation of 3439' GL.
- B. Soil: The topsoil at the well site is a yellowish red colored sandy loam with some caliche scatter on the surface. The soil is of the Berino loamy fine sand series.
- C. Flora and Fauna: The vegetation cover is a sparse grass cover of threeawn, dropseed, fluff grass, along with plants of mesquite, creosote bush, broomweed, sage, yucca, cacti and miscellaneous weeds and wildflowers. The wildlife consists of rabbits, coyotes, antelope, rattlesnakes, lizards, dove, quail and other wildlife typical of the semi-arid desert land.
- D. Ponds and Streams: None in the area.
- E. Residences and Other Structures: None in the area except oil field equipment and tank batteries.
- F. Land Use: Cattle grazing.
- G. Surface Ownership: The proposed well site and access road is on Federal surface and minerals.
- H. There is some evidence of archaeological, historical or cultural sites in the area. Archaeological Survey Consultants, P. O. Box D, Roswell, NM 88202 are conducting an archaeological survey, and their report will be submitted to the appropriate government agencies.

Chi Operating, Inc. Munchkin Federal, Well No. 5 Page 4

#### 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: (915) 685-5001 Home Phone: (915) 684-6847

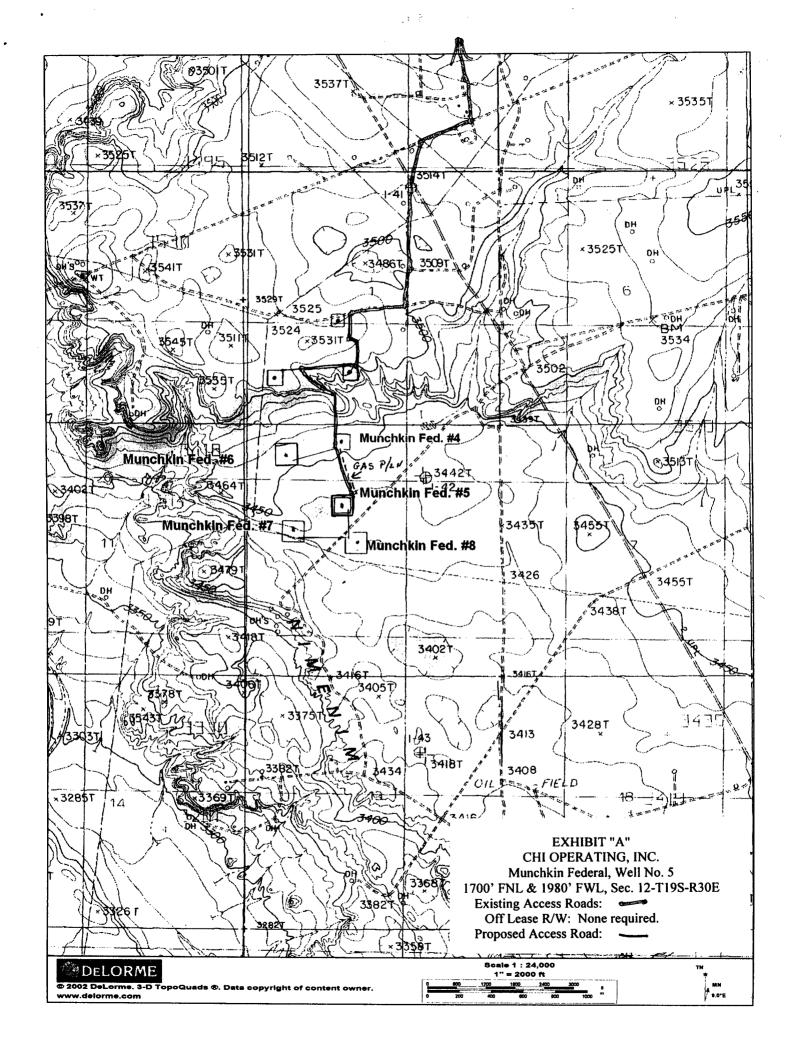
#### 13. CERTIFICATION:

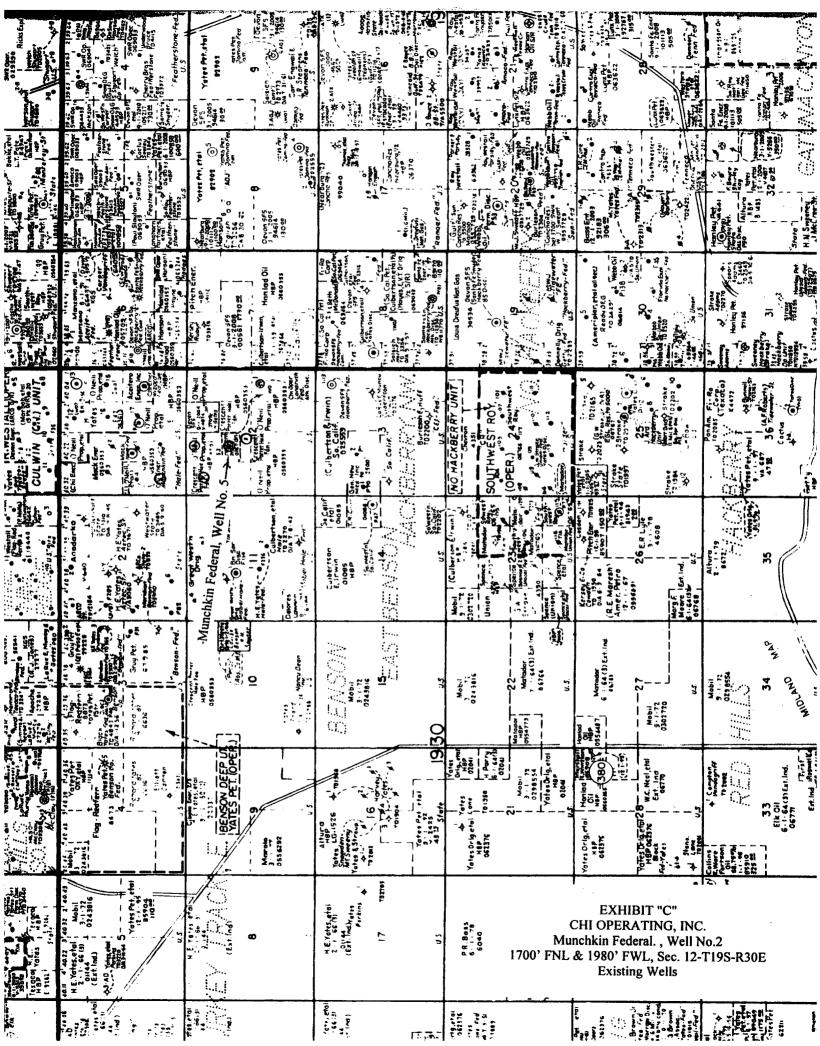
I hereby certify that I have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in the plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will 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 30, 2004

George R. Smith

Agent for: Chi Operating, Inc.





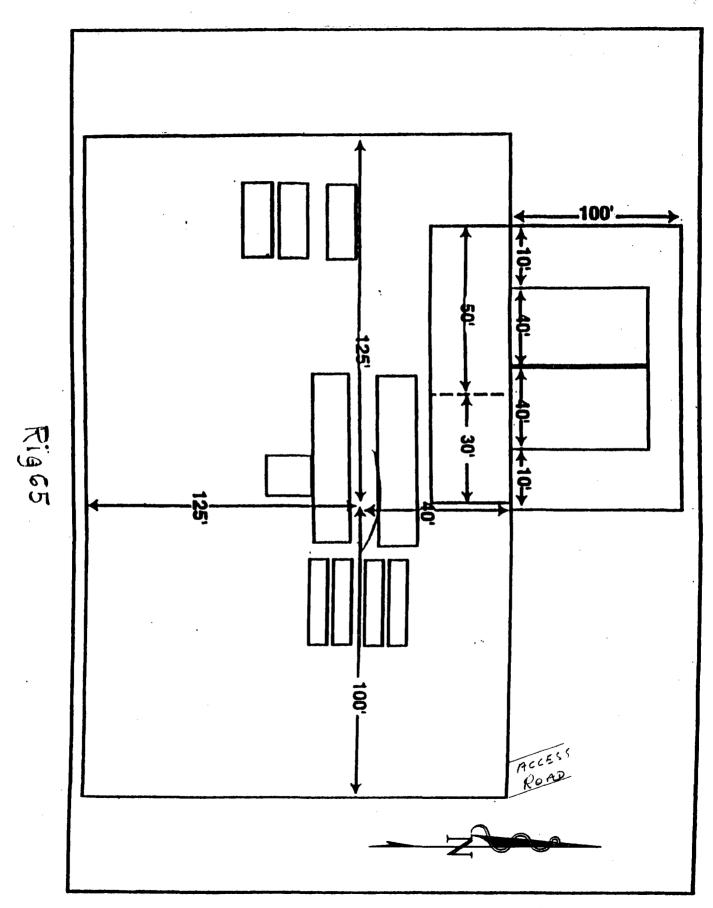


EXHIBIT "D"
CHI OPERATING, INC.
Munchkin Federal, Well No. 5
Pad & Pit Layout

## RIG #

# BLOWOUT PREVENTOR ARRANGEMENT

2M SYSTEM

10" SHAFFER TYPE "E", 3000 pel WP 80 GALLON, 4 STATION KOOMEY ACCUMULATOR 3000 pel WP CHOKE MANIFOLD

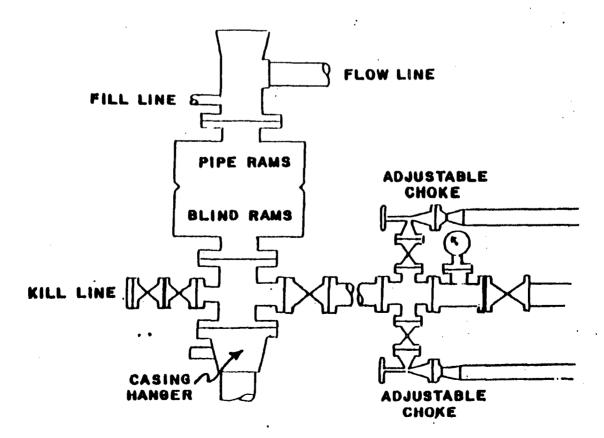


EXHIBIT "E"
CHI OPERATING, INC.
Munchkin Federal, Well No. 5
BOP Specifications