

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OPERATOR'S COPY

FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000

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-0560353	
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. Munchkin Federal, No. 4	
3b. Phone No. (include area code) (915) 685-5001		9. API Well No. 30-015-33380	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 330' FNL & 2200' FET 1980' W per BH Hunt & SN dated 9/15/03 At proposed prod. zone same		10. Field and Pool, or Exploratory Benson Bone Spring	
14. Distance in miles and direction from nearest town or post office* 16 road miles South. of Loco Hills, NM		11. Sec., T., R., M., or Blk. and Survey or Area Sec. 12-T19S-R30E	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 330'	16. No. of Acres in lease 2160.32	17. Spacing Unit dedicated to this well 40	RECEIVED APR 09 2004 OED-ARTESIA
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1390'	19. Proposed Depth 6,700'	20. BLM/BIA Bond No. on file NM-1616	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3457' GL	22. Approximate date work will start* 09/15/03	23. Estimated duration 3-4 weeks	
24. Attachments CAPTAN CONTROLLED WATER BASIN			

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 8/7/03
Title Agent for Chi Operating, Inc.		
Approved by (Signature) <i>Linda S.C. Rundell</i>	Name (Printed/Typed) Linda S.C. Rundell	Date DEC 11 2003
Title STATE DIRECTOR NM STATE 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.

**APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED**

George R. Smith
George R. Smith, agent

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM 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-0560353

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.

Munchkin Federal, Well #4

9. API Well No.

10. Field and Pool, or Exploratory Area

Benson Bone Spring

11. County or Parish, State

Eddy

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input 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 recompleate 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 recompleation 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 APD for the above captioned well be changed to show a required move due an archaeology problem. The location was moved 220' to the west. The access road also had an archaeology problem, so it was moved to come off the hill at an old road cut that comes out at the NW corner of the 500' X 500' and makes the road shorter and better. The pits will be changed to the north side of the pad. See Exhibit "D".

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 September 5, 2003

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by (Signature)

*Linda S.C. Rundell*Name Linda S.C. Rundell
(Printed/Typed)

Title STATE DIRECTOR

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.

NM STATE OFFICE

Date DEC 11 2003

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)

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	Pool Name
		Benson Bone Spring
Property Code	Property Name	Well Number
	MUNCHKIN FEDERAL	4
OGRID No.	Operation Name	Elevation
	CHI OPERATING, INC.	3457

Surface Location

UL or Lot No.	Section	Township	Range	Lot Idn.	Feet from the	North/South line	Feet from the	East/West line	County
C	12	19-S	30-E		330	NORTH	1980	WEST	EDDY

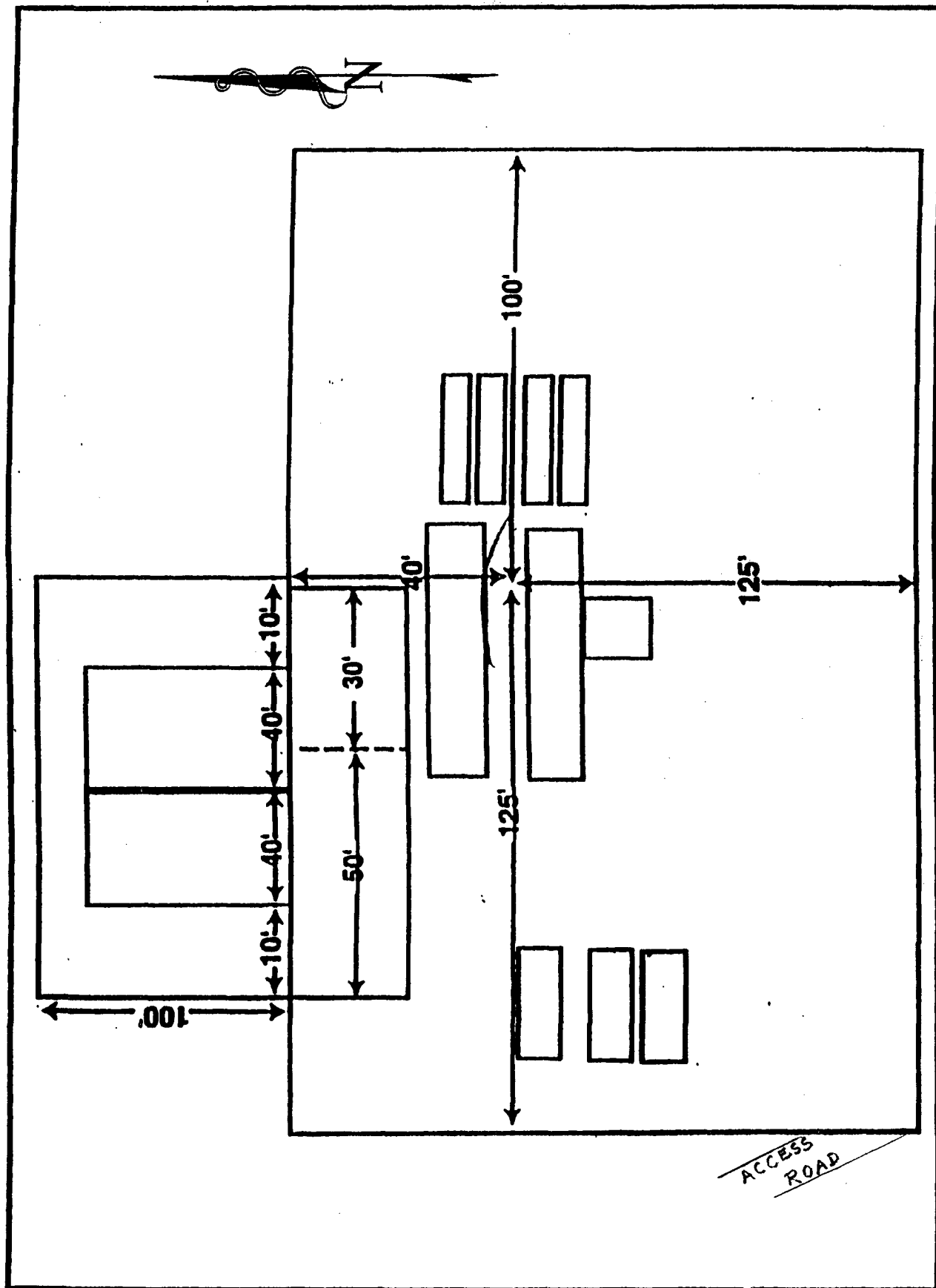
Bottom Hole Location If Different From Surface

UL or Lot No.	Section	Township	Range	Lot Idn.	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint or Infill	Consolidation Code	Order No.						
40									

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 <i>George R. Smith</i>
	Printed Name George R. Smith
	Title agent
	Date September 5, 2003
	SURVEYOR CERTIFICATION 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 KNOWLEDGE AND BELIEF.
	AUGUST 30, 2003
	Date of Survey R. REDDY
	Signature and Seal of Professional Surveyor

NM PE&PS 08412
Certificate Number



Rig 65

EXHIBIT "D"
 CHI OPERATING, INC.
 Munchkin Federal, Well No. 4
 Pad & Pit Layout

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
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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	Pool Name Benson Bone Spring
Property Code	Property Name MUNCHKIN FEDERAL	Well Number 4
OGRID No.	Operation Name CHI OPERATING, INC.	Elevation 3457

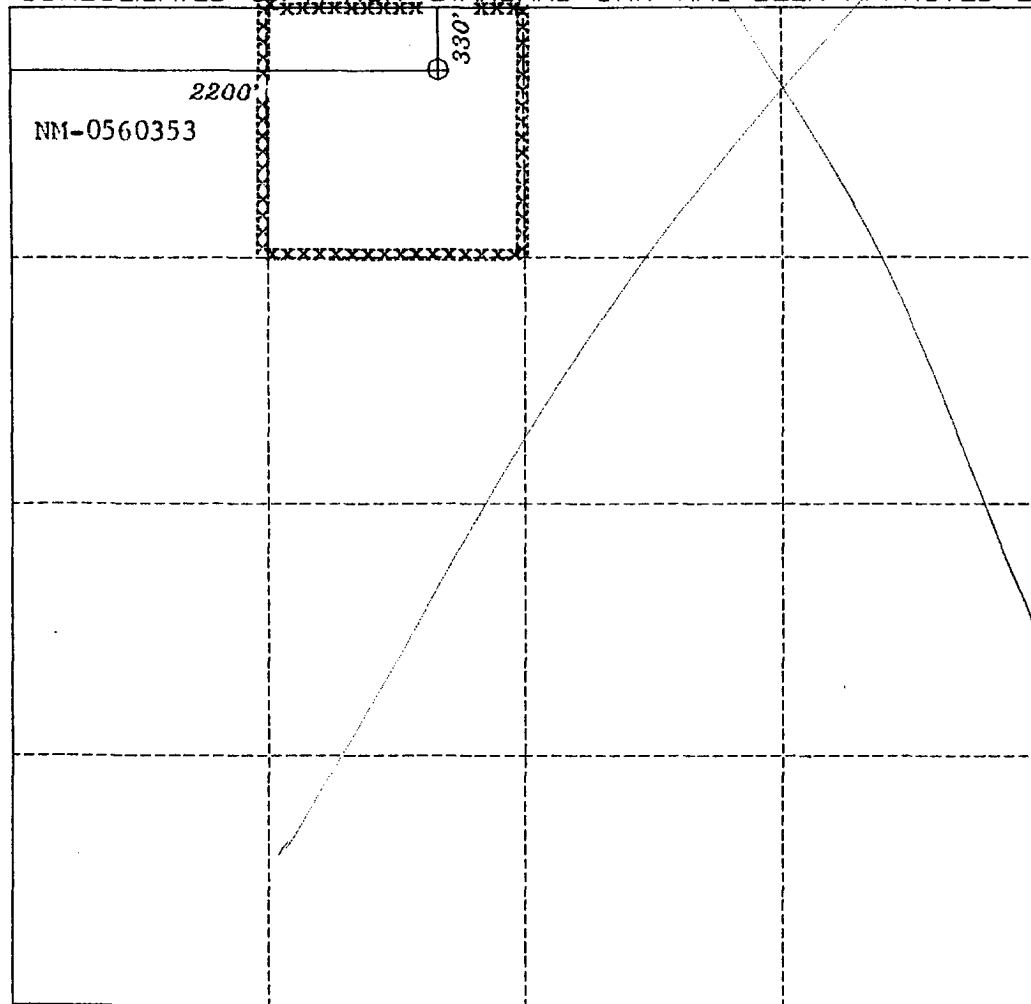
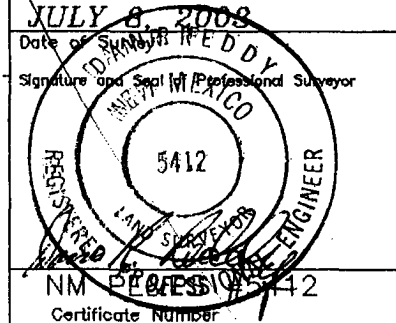
Surface Location

UL or Lot No. C	Section 12	Township 19-S	Range 30-E	Lot Idn.	Feet from the 330	North/South line NORTH	Feet from the 2200	East/West line WEST	County EDDY
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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 40	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 <i>George R. Smith</i> Printed Name for Samson Resources
	Title August 7, 2003 Date
	SURVEYOR CERTIFICATION 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 KNOWLEDGE AND BELIEF.
	JULY 8, 2008 Date of Survey Signature and Seal of Professional Surveyor  NM PROFESSIONAL SURVEYOR Certificate Number

APPLICATION FOR DRILLING

CHI OPERATING, INC.
Munchkin Federal, Well No. 4
330' FNL & 2200' 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	4050'
Yates	2200'	Bone Spring	6250'
Seven Rivers	2450'	B/S Avalon Sand	6500'
Queen	3100'	T. D.	6700'

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 and Bone Spring.

Gas: Possible in the Bone Spring.

4. Proposed Casing Program:

HOLE SIZE	CASING SIZE	WEIGHT	GRADE	JOINT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	9 5/8"	36.0#	J-55	ST&C	475' 510'	Circ. 400 sx "C" + add. WITNESS
8 3/4"	7"	23.0#	J-55	LT&C	3,200'	Circ. 450 sx "C" + add. WITNESS
6 1/4"	4 1/2"	11.6#	N-80	LT&C	6,700'	1 st stage +/- 500 sx "C"
						2 nd stage +/- 700 sx "C"

* NOTE: If severe lost circulation is NOT encountered, the 8 3/4" hole will be reduced at 3200' to 7 7/8" and drill ahead WITHOUT setting the 7" casing. See following casing program.

7 7/8"	5 1/2"	17.0#	J-55	LT&C	6,700'	Circ in 2 stages: 1200 sx of "C"
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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 8 3/4" and will be tested weekly. See Exhibit "E".

MUD PROGRAM:	MUD WEIGHT	VIS.	W/L CONTROL
0' - 475' 510' Fresh water mud:	8.4 - 8.7 ppg	32 - 34	No W/L control
510' 475' - 3200': Brine mud:	10.0 ppg	29 - 30	No W/L control
3200' - 6700': Brine mud:	10.0 ppg	29 - 32	No W/L control
Without Intermediate casing:			
0' - 475': Fresh water spud mud	8.4 - 8.7 ppg	32 - 34	No W/L control
475' - 6700': Brine mud	10.0 ppg	29 - 30	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: None.

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. 4
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 = 2680 with a temperature of 127°.
10. H₂S: None expected.
11. Anticipated starting date: September 15, 2003
Anticipated completion of drilling operations: Approximately 30 days.

MULTI POINT SURFACE USE AND OPERATIONS PLAN

CHI OPERATING, INC
Munchkin Federal, Well No. 4
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 start of the proposed access road on the left (south) side. The proposed access road will start at this point and run southeast for 1900 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 1900 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 will 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 and gas production-process equipment will be installed on the drilling pad. Three inch poly oil and water flow lines will be run parallel to access road to the Munchkin Fed. #1 tank battery. A 3" poly gas flow line will run north, parallel to the proposed access road, to a gas hook up point in the NW4SE4 Sec. 1-T19S-R30E.

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 NW¼SE¼, 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.

12. OPERATOR'S REPRESENTATION:

- A. The field representation follows:

13. CERTIFICATION:

I hereby certify that I have reviewed the information which presently exists, that the work associated with the proposed well and its access road by the contractors and subcontractors is subject to the following conditions:

August 7, 2003

9. WELL SITE LAYOUT:

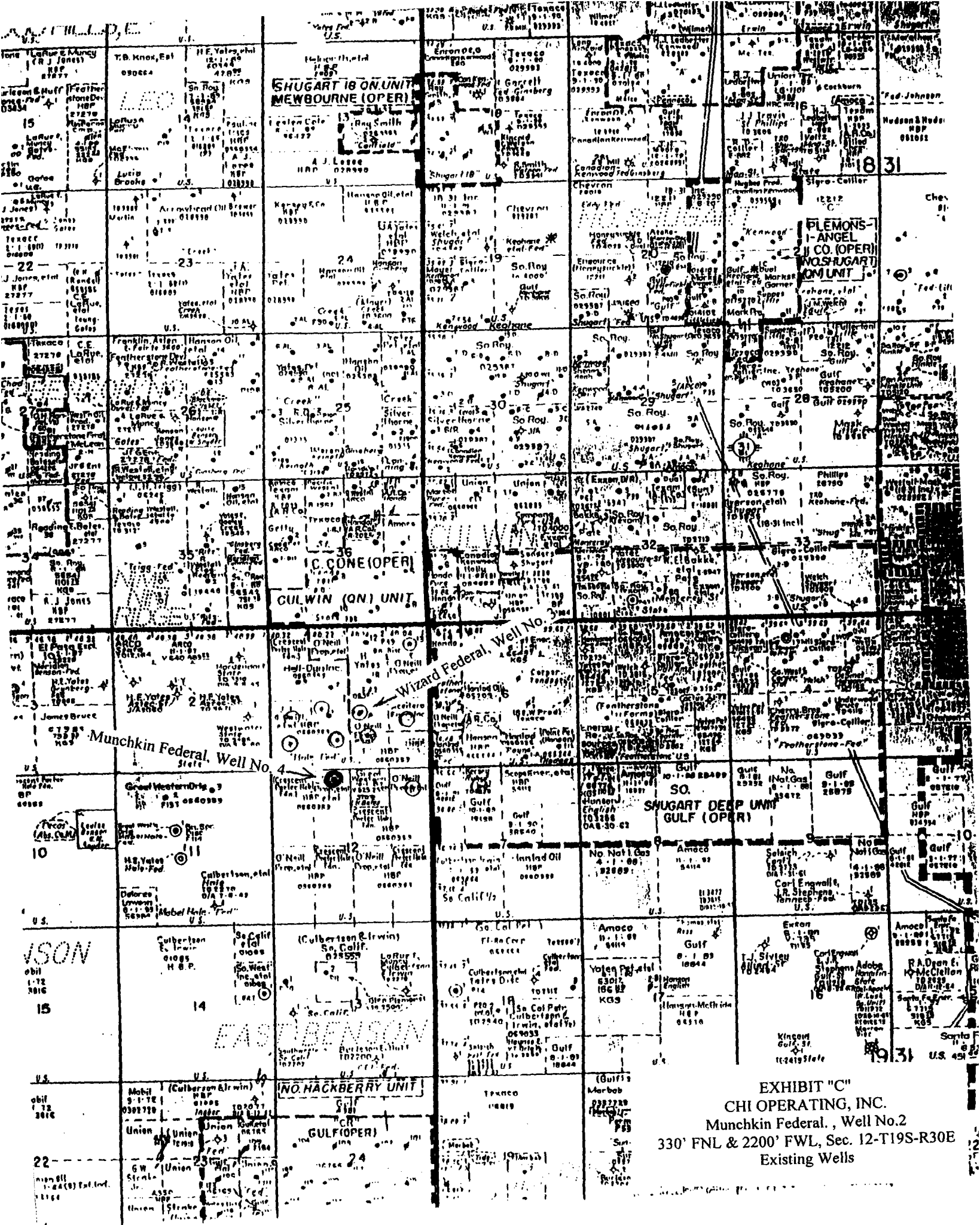
- A. Exhibit "D" shows the relative location and dimensions of the well pad, reserve pits and other components. The pad and pit area has been staked and flagged, 400' X 400'.
- B. Mat Size: 225' X 165', plus 100' X 100' reserve pits on the west.
- C. Cut & Fill: The location will require leveling 3-4 foot sand dunes.
- D. The surface will be topped with compacted caliche and the reserve pits will be filled with topsoil.

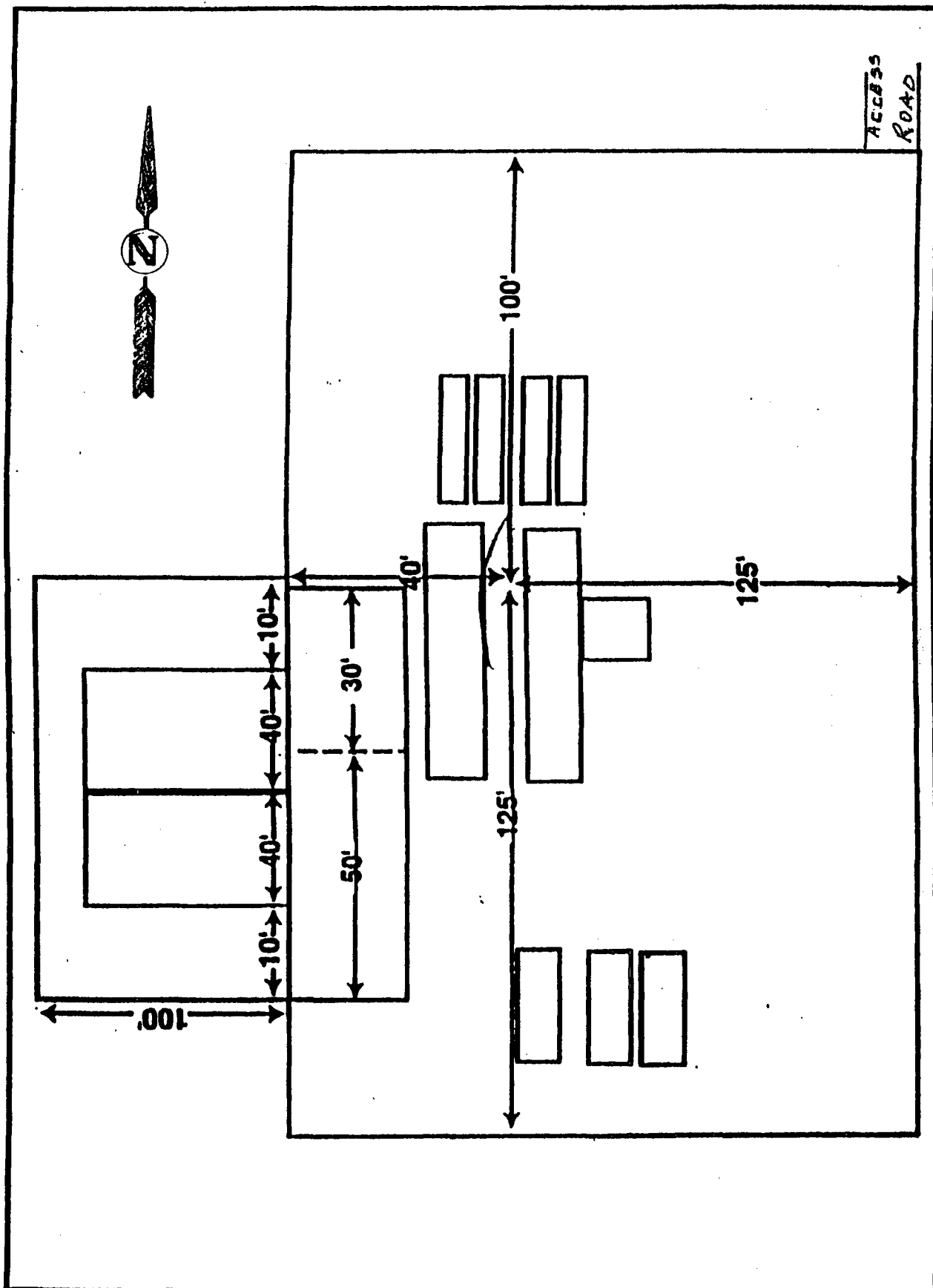
10. PLANS FOR RESTORATION OF THE SURFACE:

- A. After completion of drilling and/or completion operations, all equipment and materials required for operations will be removed. Pits will be filled and the location of junk to leave the well site in an aesthetically pleasing 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 removal and/or Land Management will be complied with and will be accomplished as required. All pits will be filled and leveled as soon as they are dry enough to be worked.

11. OTHER INFORMATION:

- A. Topography: The access road is located in an area on top of the Neminem Ridge and drops off to the southeast and south between 2.7 - 5% slope level with an overall .7% slope to the south/southeast from an elevation of 5,000 feet.
- B. Soil: The topsoil at the well site is a yellowish red colored sandy loam with a clayey texture. The soil is of the Berino loamy fine sand series.
- C. Flora and Fauna: The vegetation cover is a sparse grass cover of threeawn, along with plants of mesquite, creosote bush, broomweed, sage, yucca, cactus and wildflowers. The wildlife consists of rabbits, coyotes, antelope, rattlesnakes 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.
- F. Land Use: Cattle grazing.
- G. Surface Ownership: The proposed well site and access road is on Federal land.
- H. There is no evidence of any significant archaeological, historical or cultural resources. Archaeological Survey Consultants, P. O. Box D, Roswell, NM 88202 are conducting an archaeological survey, and their report will be submitted to the appropriate agency.





Rig 65

RIG #

BLOWOUT PREVENTOR ARRANGEMENT

2M SYSTEM

10" SHAFFER TYPE "E", 3000 psi WP

80 GALLON, 4 STATION KOOMEY ACCUMULATOR

3000 psi WP CHOKE MANIFOLD

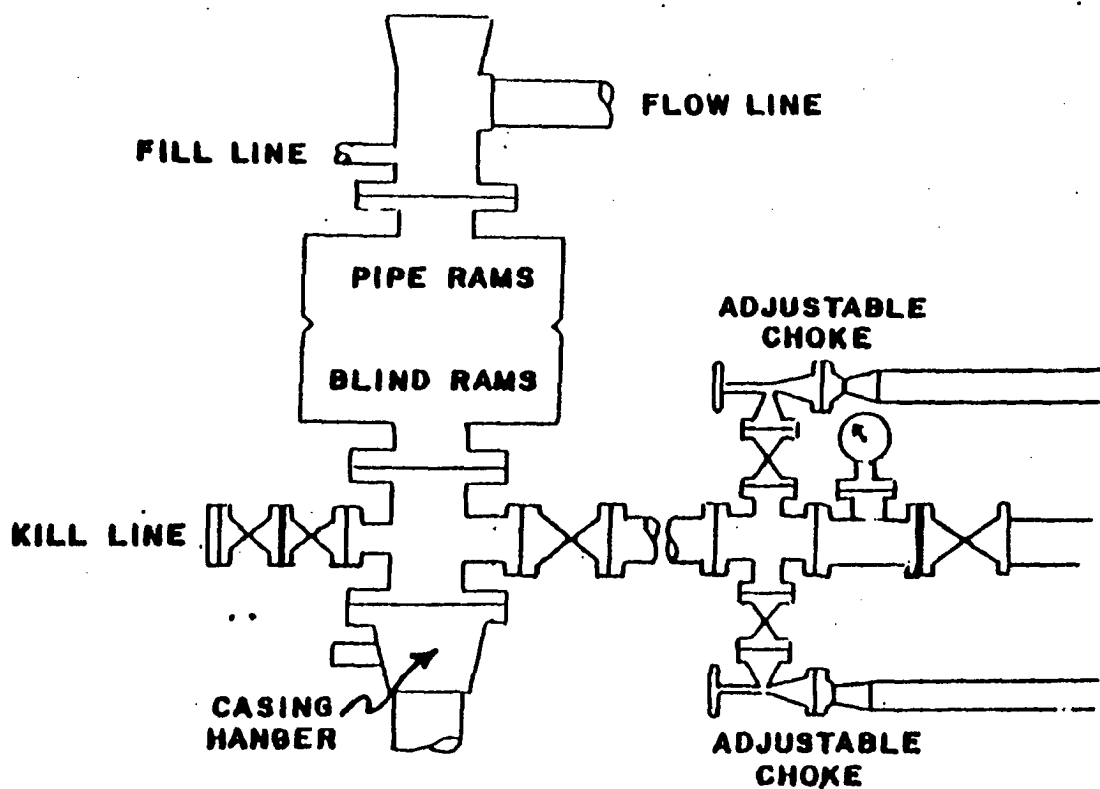


EXHIBIT "E"
CHI OPERATING, INC.
Munchkin Federal, Well No. 4
BOP Specifications