

N.M. Oil Cons. DIV-Dist. 2

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
1801 W. Grand Avenue
Alamosa, NM 88210

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	3b. Phone No. (include area code) (915) 685-5001	8. Lease Name and Well No. Munchkin Federal, No. 7
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 2475' FNL & 2310' FWL At proposed prod. zone 1980' FSL & 1980' FWL SUBJECT TO LIKE APPROVAL BY STATE		9. API Well No. 30-015-33933
14. Distance in miles and direction from nearest town or post office* 16 road miles South. of Loco Hills, NM		10. Field and Pool, or Exploratory Benson Delaware
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 2310'	16. No. of Acres in lease 2160.32	11. Sec., T., R., M., or Blk. and Survey or Area Sec. 12-T19S-R30E
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 842'	19. Proposed Depth 5,500'	12. County or Parish Eddy
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3433' GL	22. Approximate date work will start* 11/1/04	13. State NM
17. Spacing Unit dedicated to this well 40		20. BLM/BIA Bond No. on file NM-1616
23. Estimated duration 3-4 weeks		RECEIVED FEB 02 2005 QUARTERIA

24. Attachments **Capitan 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.
2. A Drilling Plan.
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).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
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 9/30/04
Title Agent for Chi Operating, Inc.		
Approved by (Signature) <i>RON DUNTON</i>	Name (Printed Typed) <i>RON DUNTON</i>	Date JAN 28 2005
Title <i>ACTING</i> STATE DIRECTOR	Office 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.

G.R.S.
George R. Smith, agent

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

District I
1825 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, 1998

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 97083	Pool Name Benson Delaware
Property Code	Property Name MUNCHKIN FEDERAL	Well Number 7
OCRD No. 4378	Operation Name CHI OPERATING, INC.	Elevation 3433

Surface Location

UL or Lot No. F	Section 12	Township 19-S	Range 30-E	Lot Idn.	Feet from the 2475	North/South line NORTH	Feet from the 2310	East/West line WEST	County EDDY
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Bottom Hole Location If Different From Surface

UL or Lot No. k	Section 12	Township 19-S	Range 30-E	Lot Idn.	Feet from the 1980	North/South line SOUTH	Feet from the 1980	East/West line WEST	County EDDY
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Dedicated Acres 1.0	Joint or Infill	Consolidation Code	Order No.
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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.
	<i>George R. Smith</i> Signature George R. Smith
	Printed Name agent
	Title 9/30/04 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.
	JUNE 24, 2004 Date of Survey
	Signature and Seal of Professional Surveyor
	Certificate Number

CHI OPERATING

Structure : Munchikin FED #7

Slot : slot #1

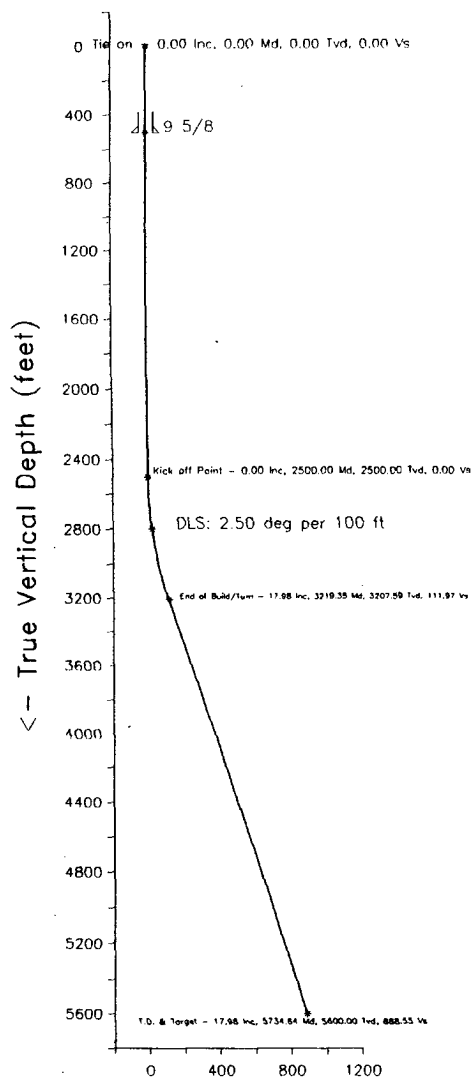
Field : UNKNOWN

Location : Eddy County New Mexico

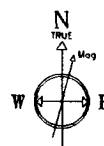
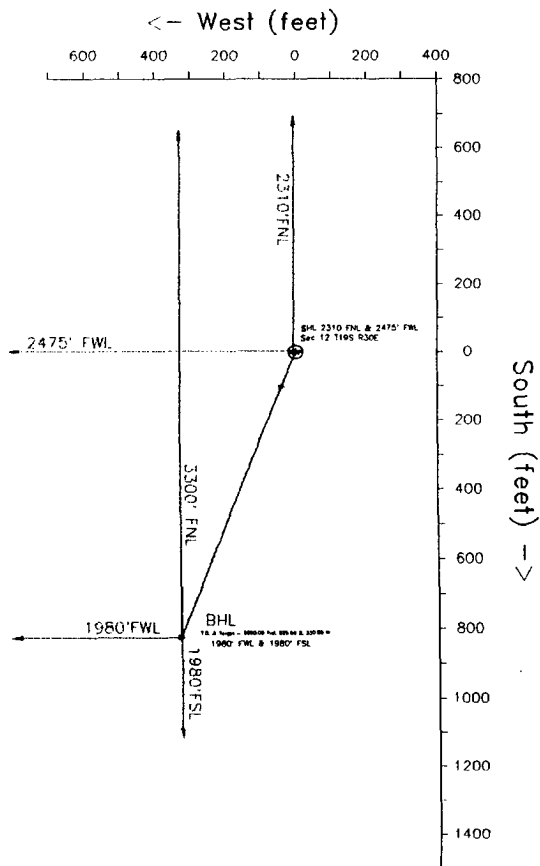
Created by: dant
Date plotted : 22-Sep-2004
Plot Reference is Pin 1.
Coordinates are in feet reference slot #1.
True Vertical Depths are reference rotary table.
fed7op
--- Baker Hughes INTEQ ---

WELL PROFILE DATA

Point	MD	Inc	Dir	TVD	North	East	V. Sect	Deg/100
Tie on	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
End of Hold	500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00
KOP	2500.00	0.00	0.00	2500.00	0.00	0.00	0.00	0.00
End of Build/Turn	3219.35	17.98	201.80	3207.59	-103.96	-41.58	111.97	2.50
T.D. & Target BHL	5734.64	17.98	201.80	5600.00	-825.00	-330.00	888.55	0.00



**BAKER
HUGHES**
INTEQ



22-Sep-2004 (source: BGM 2003)
Magnetic North is 8.58 degrees East of TRUE North
To correct azimuth from Magnetic to TRUE add 8.58 deg

Vertical Section (feet) -->

Azimuth 201.80 with reference 0.00 N, 0.00 E from slot #1

Measured Depth	Inclin. Degrees	Azimuth Degrees	True Vert Depth	R E C T A N G U L A R C O O R D I N A T E S		Dogleg Deg/100ft	Vert Sect
0.00	0.00	0.00	0.00	0.00 N	0.00 E	0.00	0.00
500.00	0.00	0.00	500.00	0.00 N	0.00 E	0.00	0.00
1000.00	0.00	0.00	1000.00	0.00 N	0.00 E	0.00	0.00
1500.00	0.00	0.00	1500.00	0.00 N	0.00 E	0.00	0.00
2000.00	0.00	0.00	2000.00	0.00 N	0.00 E	0.00	0.00
2500.00	0.00	0.00	2500.00	0.00 N	0.00 E	0.00	0.00
2600.00	2.50	201.80	2599.97	2.03 S	0.81 W	2.50	2.18
2700.00	5.00	201.80	2699.75	8.10 S	3.24 W	2.50	8.72
2800.00	7.50	201.80	2799.14	18.20 S	7.28 W	2.50	19.61
2900.00	10.00	201.80	2897.97	32.33 S	12.93 W	2.50	34.82
3000.00	12.50	201.80	2996.04	50.44 S	20.18 W	2.50	54.33
3100.00	15.00	201.80	3093.17	72.51 S	29.00 W	2.50	78.09
3200.00	17.50	201.80	3189.17	98.49 S	39.39 W	2.50	106.07
3219.35	17.98	201.80	3207.59	103.96 S	41.58 W	2.50	111.97
3500.00	17.98	201.80	3474.54	184.41 S	73.77 W	0.00	198.62
4000.00	17.98	201.80	3950.11	327.74 S	131.10 W	0.00	352.99
4500.00	17.98	201.80	4425.68	471.08 S	188.43 W	0.00	507.36
5000.00	17.98	201.80	4901.25	614.41 S	245.76 W	0.00	661.74
5500.00	17.98	201.80	5376.82	757.74 S	303.10 W	0.00	816.11
5734.64	17.98	201.80	5600.00	825.00 S	330.00 W	0.00	888.55 BHL

All data is in feet unless otherwise stated.
Coordinates from slot #1 and TVD from rotary table.
Bottom hole distance is 888.55 on azimuth 201.80 degrees from wellhead.
Vertical section is from N 0.00 : E 0.00 on azimuth 201.80 degrees.
Calculation uses the minimum curvature method.
Presented by Baker Hughes INTEQ

APPLICATION FOR DRILLING

CHI OPERATING, INC.

Munchkin Federal, Well No. 7

Surface Location: 2475' FNL & 2310' FWL, Sec. 12-T19S-R30E

Bottom Hole Location: 1980' FSL & 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'	Queen	3050'
Yates	2240'	Delaware	4170'
Seven Rivers	2430'	T.D.	5500'

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	WEIGHT	GRADE	JOINT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	9 5/8"	36.0#	J-55	ST&C	500'	Circ. 400 sx "C" + add.
8 3/4"	7"	23.0#	J-55	ST&C	3,200'	Circ. 450 sx "C" + add. *
Note: If 8 3/4" hole has no problems will reduce hole to 7 7/8" and set following:						
7 7/8"	5 1/2"	17.0#	J-55	LT&C	5,500'	Circ in 2 stages: 1200 sx of "C"
Note: If 7" casing is set will use following:						
6 1/4"	4 1/2"	11.6#	N-80	LT&C	5,500'	1 st stage +/- 500 sx "C" 2 nd stage +/- 700 sx as required

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. See Exhibit "E".

6. MUD PROGRAM:	MUD WEIGHT	VIS.	W/L CONTROL
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' - 5500': Brine mud:	10.0 ppg	29 - 32	W/L cont. <15 cc @ TD
Without Intermediate casing:			
0' - 500': Fresh water spud mud	8.4 - 8.7 ppg	32 - 34	No W/L control
500' - 5500': Brine mud/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: 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.

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 = 2420 psi with a temperature of 115°.
10. H₂S: None expected. None in previous drilling of well, but the Mud Log Unit will be cautioned to use a gas trap to detect H₂S and if any is detected the mud weight will be increased along with H₂S inhibitors sufficient to control the gas.
11. Anticipated starting date: November 1, 2004
Anticipated completion of drilling operations: Approximately 30 days.

MULTI POINT SURFACE USE AND OPERATIONS PLAN

CHI OPERATING, INC

Munchkin Federal, Well No. 7

Surface Location: 2475' FNL & 2310' FWL, Sec. 12 -T19S-R30E

Bottom Hole Location: 1980' FSL & 1980' 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 access road starts at the middle of the pad on the south side and runs southeast for 1000 feet to the northeast corner of the Munchkin Fed. #5 well pad. The proposed access road will start on the southeast corner of this well pad and run south for 800' to the southwest corner of the proposed well 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 800 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: None required.
- D. Culverts: None required.
- E. Cuts and Fills: There will be minor cuts and leveling across small dune areas.
- 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 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. Another 3" poly line, carrying liquids, will run parallel to the access road to the #5 tank battery

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 approved pit on the recent drill site for the Wizard Federal #3 in the NW $\frac{1}{4}$ SE $\frac{1}{4}$, Sec. 1-T19S-R30E. The archaeologist has cleared this pit. 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 a 1.5 foot cut on the northwest and fill to the southeast. There are undulating sand dunes 3 – 4 feet high that will need to be leveled.
- 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 has an overall .8% slope to the southeast from an elevation of 3433' GL.
- B. Soil: The topsoil at the well site is a brownish red colored sandy loam with some caliche scatter on the surface. The soil is of the Simona-Bippus complex 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, 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.

12. OPERATOR'S REPRESENTATIVE:

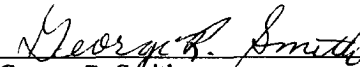
- A. The field representative for assuring compliance with the approved use and operations plan is as follows:

John Qualls
Chi Operating, Inc.
P. O. Box 1799
Midland, Texas 79701
Office Phone: (915) 685-5001
Home Phone: (915) 684-6847

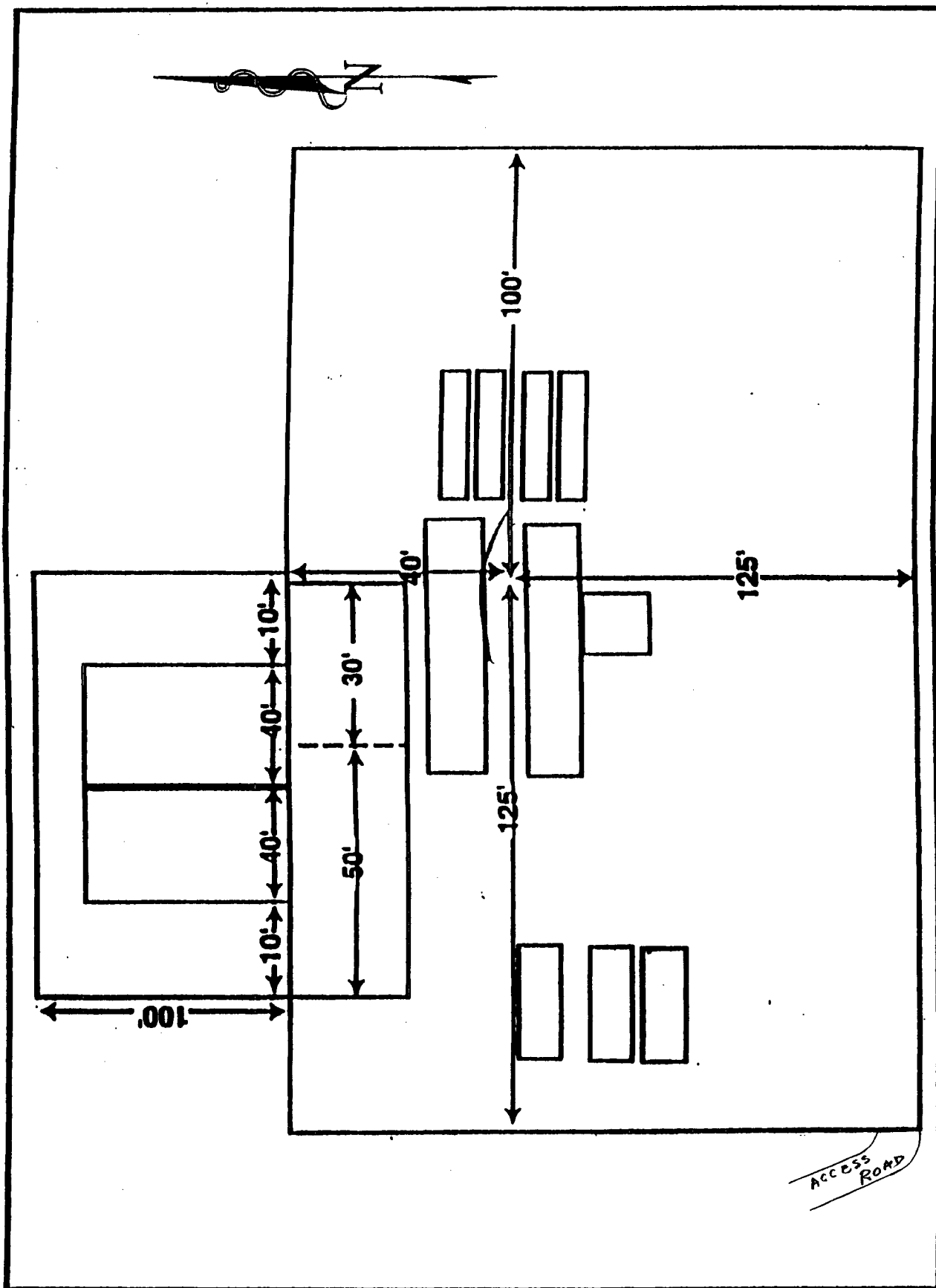
13. CERTIFICATION:

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.

September 29, 2004



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



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

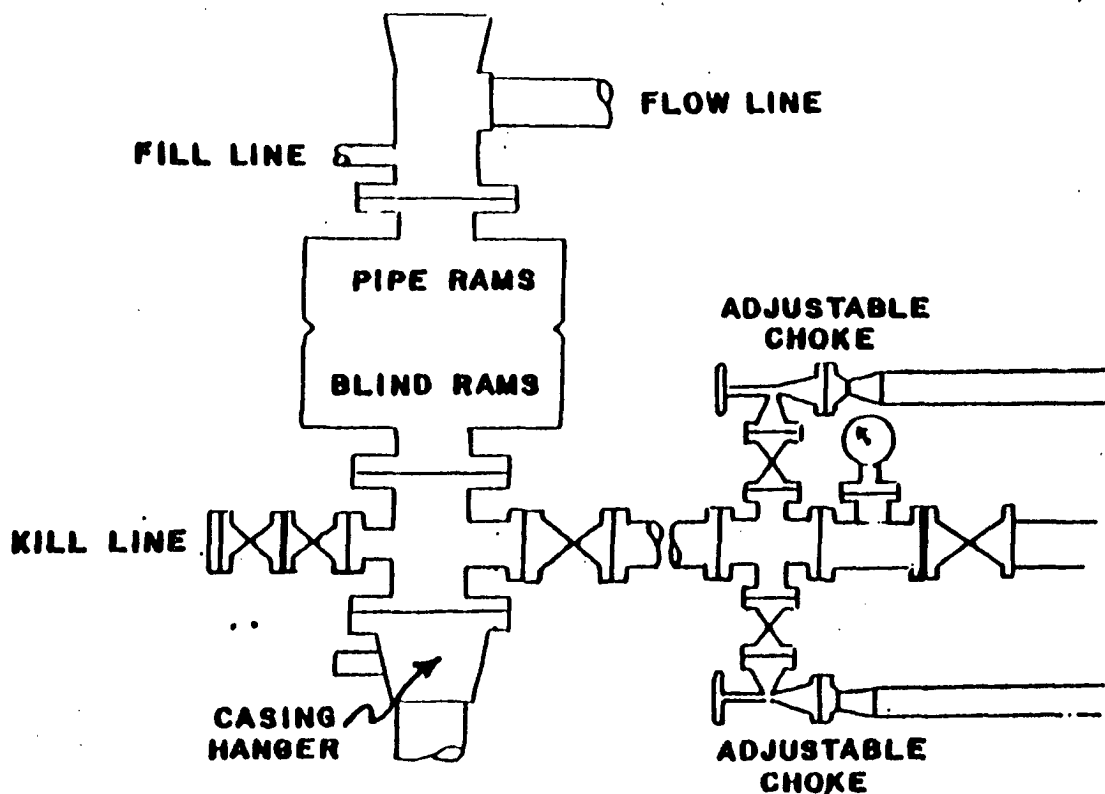


EXHIBIT "E"
CHI OPERATING, INC.
Munchkin Federal, Well No. 7
BOP Specifications