

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

Form C-101
June 16, 2008

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit to appropriate District Office

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address Blue Dolphin Production LLC, C/O Walsh Engineering & Production Corp 7415 E. Main St., Farmington, NM 87402		² OGRID Number 226829	
³ Property Code		⁴ API Number 30 - 039 - 31012	
⁵ Property Name Theis Greenhorn Test		⁶ Well No. #1	
⁹ Proposed Pool 1 66685 Undesignated Mancos		¹⁰ Proposed Pool 2 66675 Undesignated Greenhorn	

⁷ Surface Location

UL or lot no. G	Section 27	Township 30N	Range 1E	Lot Idn	Feet from the 1643	North/South line North	Feet from the 1575	East/West line East	County Rio Arriba
--------------------	---------------	-----------------	-------------	---------	-----------------------	---------------------------	-----------------------	------------------------	----------------------

⁸ Proposed 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
---------------	---------	----------	-------	---------	---------------	------------------	---------------	----------------	--------

Additional Well Information

¹¹ Work Type Code N	¹² Well Type Code O	¹³ Cable/Rotary R	¹⁴ Lease Type Code P	¹⁵ Ground Level Elevation 7676
¹⁶ Multiple N	¹⁷ Proposed Depth 2,400'	¹⁸ Formation Dakota	¹⁹ Contractor TBD	²⁰ Spud Date 04-15-2011

²¹ Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
8 3/4 "	7"	20#/J-55	200'	45	0
6 1/4 "	4 1/2 "	10.5#/J-55	2400'	175 Lead/100 Tail	0

²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

See attached drilling program

RCVD MAR 4 '11
OIL CONS. DIV.
DIST. 3

Notify Aztec OCD 24 hours before Spud

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature:

S. Max Libby

Printed name:

S. Max Libby

Title:

Agent for Blue Dolphin Production LLC

E-mail Address:

maxlibby@donellis-associates.com

Date:

03-04-2011

Phone:

505-326-1730

Approved by:

OIL CONSERVATION DIVISION
Charles Perri 3-8-11

Title:

SUPERVISOR DISTRICT # 3

Approval Date:

MAR 08 2011

Expiration Date:

MAR 08 2012

Conditions of Approval Attached ☐

A COMPLETE C-144 MUST BE SUBMITTED TO AND APPROVED BY THE NMOCD FOR: A PIT, CLOSED LOOP SYSTEM, BELOW GRADE TANK, OR PROPOSED ALTERNATIVE METHOD, PURSUANT TO NMOCD PART 19.15.17, PRIOR TO THE USE OR CONSTRUCTION OF THE ABOVE APPLICATIONS.

DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240

DISTRICT II
1301 W. Grand Avenue, Artesia, N.M. 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, N.M. 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, N.M. 87505

Form C-102

Revised July 16, 2010

Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-31012	² Pool Code 66685	³ Pool Name UNDESIGNATED MANCOS
⁴ Property Code 38455	⁵ Property Name THEIS GREENHORN TEST	⁶ Well Number #1
⁷ OGRIID No. 226829	⁸ Operator Name BLUE DOLPHIN PRODUCTION, LLC	⁹ Elevation 7676

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	27	30 N	1 E		1643	NORTH	1575	EAST	RIO ARriba

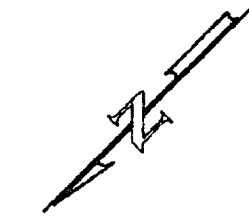
¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acres 21		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No. R-13326			

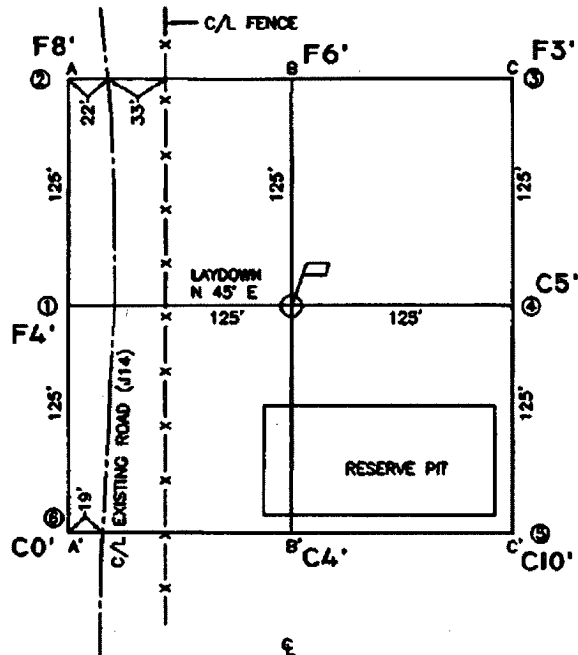
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION.

16 S 89°38' E 5170.44' (R)	2630.1' (R)	290.4' (R)	EAST	2362.82' (R)	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature: <i>S. M. LIBBY</i> Date: 03-04-2011 Printed Name: S. M. LIBBY E-mail Address: _____
	S 25°27' E-1061.94'				
SECTION 27					18 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 belief. 06/03/10 Date of Survey Signature and Seal of Professional Surveyor: <i>Marshall W. Lindeen</i> 17078 Certificate Number
NOTES: 1. BEARINGS & DISTANCES SHOWN ARE RECORD, BASED UPON "TRUE NORTH" AND SURFACE DISTANCES. 2. THIS PLAT REPRESENTS SECTION LINES PROJECTED INTO THE TIERRA AMARILLA GRANT FOR MAPPING PURPOSES.					
N 0°15' W	N 88°56' W	2653.2' (R)	721.07'	WEST	1918.02'

BEFORE DIGGING
CALL FOR UTILITY
LINE LOCATION



0 50 100
SCALE: 1"=100'



A-A' E

7690				
7680				
7670				
7660				
7650				

B-B' E

7690				
7680				
7670				
7660				
7650				

C-C' E

7690				
7680				
7670				
7660				
7650				

CROSS SECTIONS
HORIZONTAL: 1"=100'
VERTICAL: 1"=50'

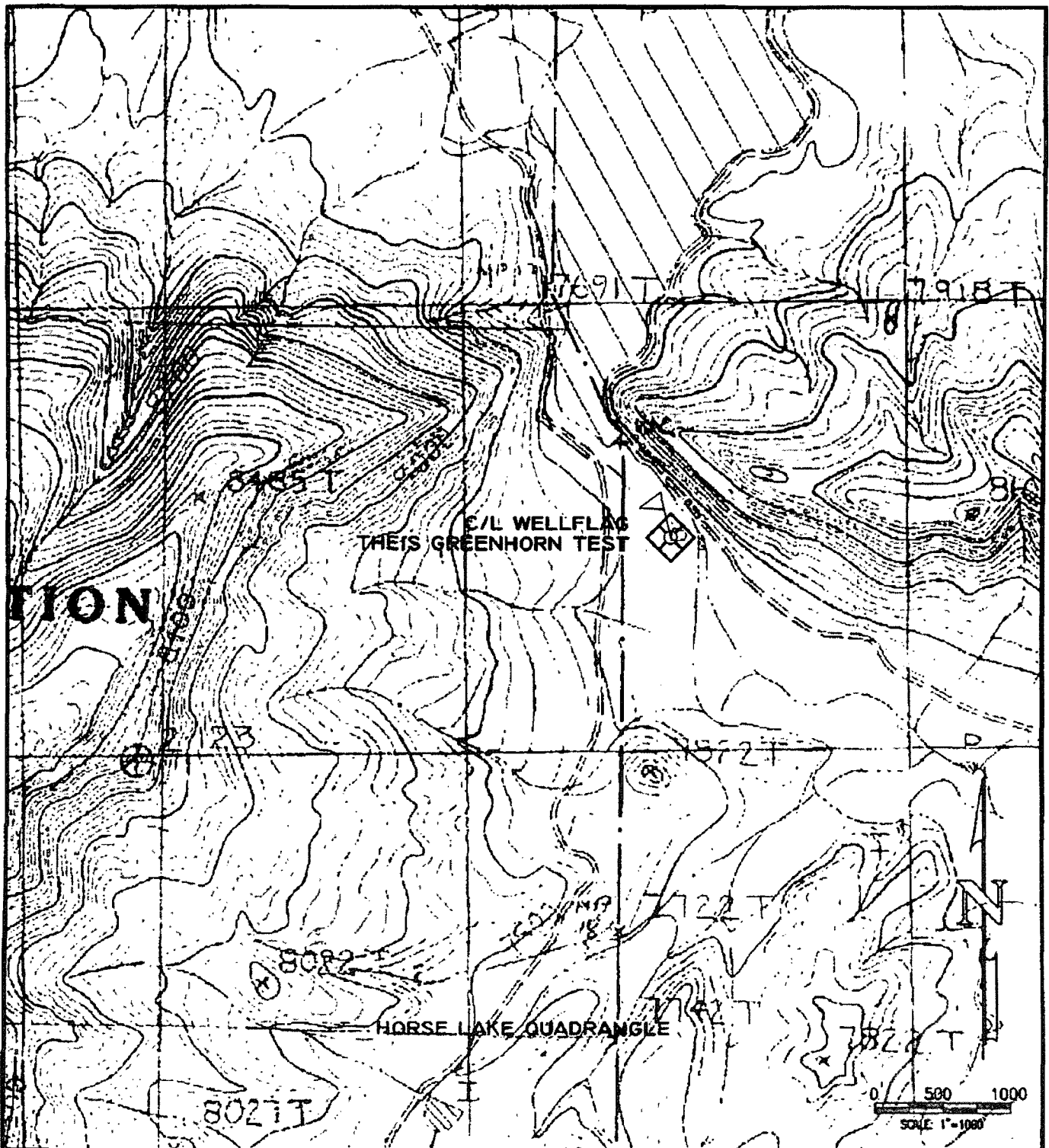
LEASE: THEIS GREENHORN TEST
FOOTAGE: 1643' FNL, 1575' FEL
SEC. 27 TWN. 30 N RNG. 1 E N.M.P.M.
LAT: N 36.7861946° LONG: W 106.8109160° (NAD 83)
ELEVATION: 7676

BLUE DOLPHIN PRODUCTION, LLC
FARMINGTON, NEW MEXICO

SURVEYED: 06/03/10	REV. DATE:	APP. BY: M.W.L.
DRAWN BY: C.B.	DATE DRAWN: 06/04/10	FILE NAME: 8933C03

UNITED
FIELD SERVICES INC.

P.O. BOX 3851
FARMINGTON, NM 87499
OFFICE: (505) 334-0408



LEASE: THEIS GREENHORN TEST

FOOTAGE: 1643' FNL, 1575' FEL

SEC. 27 TWN. 30 N RNG. 1 E N.M.P.M.

LAT: N 36.7861946° LONG: W 106.8109160° (NAD 83)

ELEVATION: 7676

BLUE DOLPHIN PRODUCTION, LLC
FARMINGTON, NEW MEXICO

SURVEYED: 06/03/10

REV. DATE:

APP. BY M.W.L.

DRAWN BY: C.B.

DATE DRAWN: 06/04/10

FILE NAME: 8933T04



P.O. BOX 3851
FARMINGTON, NM 87499
OFFICE: (505) 334-0408

**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:**

**CASE NO. 14548
ORDER NO. R-13326**

**APPLICATION OF BLUE DOLPHIN
PRODUCTION LLC FOR AN UNORTHODOX
WELL LOCATION AND NON-STANDARD
OIL SPACING AND PRORATION UNIT, RIO
ARRIBA COUNTY, NEW MEXICO.**

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on September 30, 2010, at Santa Fe, New Mexico, before Examiner David K. Brooks.

NOW, on this 20th day of October, 2010, the Division Director, having considered the testimony, the record and the recommendations of the Examiner,

FINDS THAT:

(1) Due notice has been given, and the Division has jurisdiction of the subject matter of this case.

(2) In this application, Blue Dolphin Production LLC ("Applicant") seeks approval of (a) a non-standard oil well location in the Mancos and Greenhorn formations for its proposed Theis Greenhorn Test Well No. 1 (the well), to be located 1643 feet from the North line and 1575 feet from the East line (Unit G) of Projected Section 27, Township 30 North, Range 1 East, NMPM, in Rio Arriba County, New Mexico, and (b) a non-standard 21-acre, more or less, oil spacing and proration unit for the said well in the Mancos and Greenhorn formations, consisting of that portion of the SW/4 NE/4 of Projected Section 27 lying east of the eastern boundary of the Jicarilla Apache Reservation (being approximately the E/2 of the said quarter-quarter section).

(3) Applicant appeared at the hearing through counsel and presented testimony and exhibits to the effect that:

(a) Applicant proposes to drill the well at the above-described non-standard location in order to test the Mancos and Greenhorn formations. It expects the well to produce oil.

(b) This is a wildcat area, and spacing is governed by statewide rules which provide for 40-acre units, with wells to be located at least 330 feet from unit boundaries.

(c) Applicant selected the site for the well on the basis of proprietary seismic and proprietary geo-chem data, as well as topography within the proposed non-standard unit.

(d) The proposed non-standard unit is necessary because the western portion of the SW/4 SE/4 of Projected Section 27 is owned by the Jicarilla Apache Tribe, which has declined to lease this acreage. The only lands within the quarter-quarter section that will not be included in the proposed non-standard unit are those lands within the Jicarilla Apache Reservation.

(e) The proposed non-standard location is more than 330 feet from the eastern boundary of the Jicarilla Apache Reservation, but less than 330 feet from the eastern and northern boundaries of the SW/4 SE/4 of Projected Section 27. There are no oil or gas wells located on any of the offsetting units. Working interest and mineral ownership in the offsetting lands to the north, east and northeast is identical with ownership of the proposed unit.

(f) The Jicarilla Apache Tribe and all mineral owners in other adjoining tracts were duly notified of this application and of the hearing. Applicant's representatives have conferred with officials of the Jicarilla Apache Tribe who have specifically advised them that the Tribe does not oppose formation of the proposed non-standard unit.

(4) No other party appeared at the hearing or otherwise indicated opposition to the granting of this Application.

The Division concludes that:

(5) In view of the decision of the Jicarilla Apache Tribe not to lease its lands within the subject quarter-quarter section, approval of this non-standard unit is necessary to facilitate the drilling of the proposed well, thereby preventing waste.

(6) The exhibits offered in evidence indicate that any location within the proposed non-standard unit more than 330 feet from the boundary of the Jicarilla Apache Reservation would be non-standard to the east. While a location could have been selected that would be more than 330 feet from the northern unit boundary, in view of the identity of ownership, no one's correlative rights will be affected by location of the well less than 330 feet from the northern boundary of the unit.

(7) Accordingly, the proposed non-standard 21-acre, more or less, oil spacing and proration unit, and the proposed non-standard location for the well, should be approved.

IT IS THEREFORE ORDERED THAT:

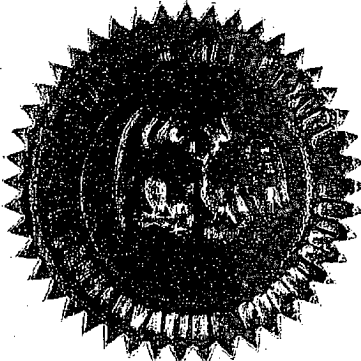
(1) Pursuant to the Application of Blue Dolphin Production LLC ("Applicant"), a non-standard 21-acre, more or less, wildcat oil spacing and proration unit is hereby established in the Mancos and Greenhorn formations, consisting of all of the SW/4 NE/4 of Projected Section 27, Township 30 North, Range 1 East, NMPM, in Rio Arriba County, New Mexico, lying east of the eastern boundary of the Jicarilla Apache Reservation.

(2) The unit described in Ordering Paragraph (1) shall be dedicated to Applicant's proposed Theis Greenhorn Test Well No. 1 (the well), to be located 1643 feet from the North line and 1575 feet from the East line (Unit G) of Projected Section 27.

(3) The unorthodox location of the well, as described in Ordering Paragraph (2), in the Mancos and Greenhorn formations, is hereby approved.

(4) Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.



SEAL

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

A handwritten signature in dark ink, appearing to read "M. E. F.", is written over the printed name and title.

MARK E. FESMIRE, P.E.
Acting Director

BLUE DOLPHIN PRODUCTION, LLC
OPERATIONS PLAN
THEIS GREENHORN TEST #1

I. Location: Date: January 3, 2010
1643' FNL & 1575' FEL
G Section 31, T30N, R1E
Rio Arriba, County, NM

Field: Undesignated Mancos Shale Elev: 7676' GL
Surface: Jicarilla Apache Trust
Minerals: Fee
API:

II. Geology: Surface formation _ Mancos Shale

A. Formation Tops	Depth
Mancos A	1411'
Sanostee	1919'
Greenhorn	2219'
Graneros	2267'
Dakota	2390'
Total Depth	2400'

Estimated depths of anticipated water, oil, gas, and other mineral bearing formations which are expected to be encountered:

Water, oil, and gas - 1411, 2219, 2390'.

B. Logging Program: Neutron/Density & Induction/GR at TD

C. No over pressured zones are expected in this well. No H₂S zones will be penetrated in this well.

III. Drilling

- A. Contractor:
- B. Mud Program:

The surface and production holes will be drilled with a fresh water mud.

C. Minimum Blowout Control Specifications:

Double ram type 2000 psi working pressure BOP with a rotating head. See the attached Exhibit #1 for details on the BOP equipment. All ram type preventers and related equipment will be hydraulically tested at nipple-up and after any use under pressure to 1000 psi.

The blind rams will be hydraulically activated and checked for operational readiness each time pipe is pulled out of the hole. All checks of the BOP stack and equipment will be noted on the daily drilling

report. The BOP equipment will include a kelly cock, floor safety valve, and choke manifold all rated to 2000 psi.

IV. Materials

A. Casing Program:

Hole Size	Depth	Casing Size	Wt. & Grade
8-3/4"	200'	7"	20# J-55
6-1/4"	2400'	4-1/2"	10.5# J-55

B. Float Equipment:

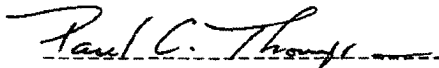
a) Surface Casing: One centralizers on each collar.

b) Production Casing: 4-1/2" cement guide shoe and self fill insert float collar. Place float one joint above shoe. Five centralizers spaced every other joint above shoe.

V. Cementing:

Surface casing: 7" - Use 45 sx (61 cu. ft.) of Type III with 2% CaCl_2 and 1/4 #/sk celloflake (Yield = 1.35 cu. ft./sk; slurry weight = 14.8 PPG). 100% excess to circulate cement to surface. WOC 12 hours. Pressure test surface casing to 1000 psi for 30 min.

Production Casing: 4-1/2" - Before cementing circulate hole with at least 1-1/2 hole volumes of mud. Precede cement with 20 bbls of fresh water. Lead with 175 sx (361 cu.ft) of Type III with 2% sodium metasilicate, 5 #/sk gilsonite, and 1/4 #/sk. celloflake. (Yield = 2.06 cu.ft./sk; slurry weight = 12.5 PPG). Tail with 100 sx (135 cu.ft.) of Type III with 1/4 #/sk. celloflake. (Yield = 1.35 cu. ft./sk; slurry weight = 14.8 PPG). Total cement volume is 496 cu.ft. (100% excess to circulate cement to surface).



Paul C. Thompson, P.E.

Chihuahua or Scorpion Rig BOP Testing Procedure.

Refer to the attached diagram for the bradenhead and BOP configuration. No mud cross will be utilized. The choke manifold will be connected to one side of the bradenhead. Connect the third-party testing company's test truck to the opposite side of the bradenhead.

Blind Rams:

Close the blind rams and open the bradenhead valve to the choke manifold. Have all three of the choke manifold valves closed. Pressure test the blind rams, casing, bradenhead, and choke manifold to 250 psig low and 1,000 psig high. Test each pressure for 30 minutes. A successful test will not have more than a 10% drop during the 30 minute test period.

If the test is successful proceed with the pipe ram test.

If the test is not successful, open the blind rams and install the test plug at the bottom of the bradenhead. Close the bradenhead valve. Pressure test the blind rams and bradenhead to 250 psig low and 1,000 psig high. Open the bradenhead valve to the choke manifold and repeat the test.

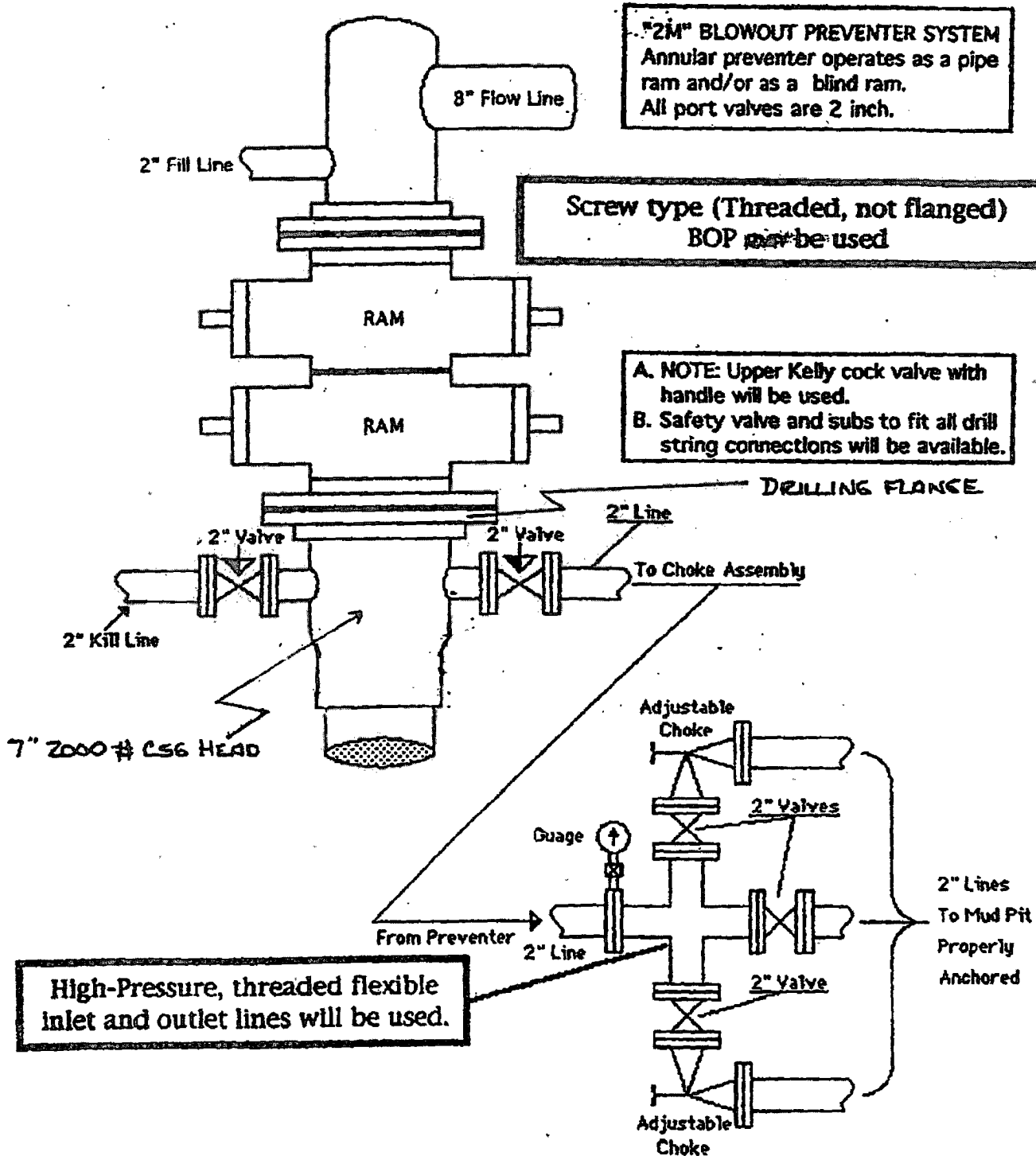
Pipe Rams:

Install the TIW valve on the bottom of one joint of drill pipe. Run the one joint into the well and close the pipe rams. Chain down the joint of drill pipe but leave the top of the pipe open. With the bradenhead valve open and the test truck still connected to the other side of the bradenhead, test the pipe rams to 250 psig low and 1,000 psig high. Hold each pressure for 30 min with no more than a 10% drop during the test period.

Upper Kelly Cock:

Install the TIW valve to the bottom of the Kelly. Install the test truck to the TIW Valve. With the TIW valve open and the upper Kelly cock closed, pressure test the Kelly and upper Kelly cock to 250 psig low and 1,000 psig high. Hold each pressure for 10 minutes with no more than a 10% drop during the test.

"2M" BLOWOUT PREVENTER SYSTEM



MULTI-POINT SURFACE USE PLAN
Theis Greenhorn Test #1

1. Existing Roads:

All existing roads used to access the proposed location are shown on attached Plat #1 and shall be maintained in the same or better condition than presently found.

2. Planned Access Roads:

No new access road will be built for this well (J14 passes through the location). The existing access road will be maintained in at least the current condition and will be upgraded where necessary to provide uninterrupted access to the proposed well.

3. Location of Existing Wells:

Attached map (Plat #1) shows that there are no existing wells within a one mile radius of the proposed well.

4. Location of Production Facilities:

In the event of production, production facilities will be located on the drill pad. The actual placement of this equipment will be determined when the well's production characteristics can be evaluated after completion.

To protect livestock and wildlife, the reserve pit will be fenced. Any tanks will be enclosed by a dike.

Upon completion of drilling, the location and surrounding area will be cleared of all debris.

5. Water Supply:

Water for drilling and completion operations will be hauled by truck from the City of Dulce.

6. Source of Construction Materials:

No additional construction materials will be required to build the proposed location.

7. Methods for Handling Waste Disposal:

a. The drill cuttings, fluids and completion fluids will be placed in the reserve pit. The reserve pit will be fenced prior to drilling. The reserve pit will be allowed to dry, and materials remaining in the reserve pit buried. The reserve pit will be backfilled, leveled and contoured so as to prevent any materials being carried into the watershed. Upon completion, the pad will be leveled, contoured and reseeded with the appropriate seed mixture.

b. All garbage and trash will be placed in a metal trash basket. It will be hauled off and dumped in an approved land fill upon completion of operations.

c. Portable toilets will be provided and maintained during drilling operations. See Plat 3 for location.

8. Ancillary Facilities:

Ancillary facilities are to be based on well productivity.

9. Well Site Layout:

A cross section of the drill pad with approximate cuts, fills, and pad orientation is attached as Plat #2. Location of drilling equipment, rig orientation, and access road approach is also attached as Plat #3.