

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE NO. 365
ORDER NO. R-152

THE MATTER OF THE APPLICATION
OF RICHARDSON & BASS, A CO-PARTNER-
SHIP, FOR APPROVAL OF THE BIG EDDY
UNIT AGREEMENT, EMBRACING 133,444.29
ACRES IN EDDY AND LEA COUNTIES, NEW
MEXICO, WITHIN TOWNSHIPS 19, 20, 21, 22
AND 23 S., RANGES 28, 29, 30, 31 AND 32 E.,
NMPM.

BEFORE EXAMINER CATAPOACH

OIL CONSERVATION DIVISION

EXHIBIT NO. 18

CASE NO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a. m. on April 28, 1952, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 1st day of May, 1952, the Commission, a quorum being present, having considered said application and the evidence introduced in support thereof, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the proposed unit plan will in principle tend to promote the conservation of oil and gas and the prevention of waste.

IT IS THEREFORE ORDERED:

SECTION 1. That this order shall be known as the

BIG EDDY UNIT AGREEMENT ORDER

SECTION 2. (a) That the project herein referred to shall be known as the Big Eddy Unit Agreement, and shall hereafter be referred to as the "Project".

(b) That the plan which the Project shall be known as the Big Eddy Unit Agreement for the development of the lands referred to in the Petitioner's application shall be known as the

SECTION 3. That the Big Eddy Unit Agreement Plan shall be, and hereby is, approved in principle as a proper conservation measure; provided, however, that notwithstanding any of the provisions contained in said unit agreement this approval shall not be considered as waiving or relinquishing in any manner any right, duties or obligations which are now, or may hereafter, be vested in the New Mexico Oil Conservation Commission by law relative to the supervision and control of operations for exploration and development of any lands committed to said Big Eddy Unit

Agreement, or relative to the production of oil or gas therefrom.

SECTION 4. (a) That the Unit Area shall be:

NEW MEXICO PRINCIPAL MERIDIAN

Twp. 19 S., Rge. 31 E.

Sec. 27: S 1/2

Sec. 33: E 1/2

Sec. 34: All

Sec. 35: All

Twp. 20 S., Rge. 30 E.

Secs. 25 to 27, both inclusive: All

Secs. 34 to 36, both inclusive: All

Twp. 20 S., Rge. 31 E.

Secs. 2 to 36, both inclusive: All

Twp. 20 S., Rge. 32 E.

Sec. 7: All

Sec. 8: W 1/2 W 1/2

Secs. 17 to 21, both inclusive: All

Sec. 27: S 1/2 S 1/2

Secs. 28 to 34, both inclusive: All

Twp. 21 S., Rge. 28 E.

Secs. 3 to 36, both inclusive: All

Twp. 21 S., Rge. 29 E.

Secs. 1 to 3, both inclusive: All

Secs. 7 to 36, both inclusive: All

Twp. 21 S., Rge. 30 E.

Secs. 1 to 12, both inclusive: All

Secs. 14 to 22, both inclusive: All

Sec. 23: All

Sec. 27: N 1/2

Secs. 28 to 30, both inclusive: All

Twp. 21 S., Rge. 31 E.

Sec. 3: Lots 1 to 16, inclusive.

Secs. 4 to 6, both inclusive: All

Secs. 7 to 9, both inclusive: All

Twp. 22 S., Rge. 28 E.

Secs. 1 to 5, both inclusive: All

Sec. 6: Lots 1, 2, 3, 4, 5, SE 1/4 NW 1/4, S1/2 NE 1/4, SE 1/4

Sec. 8: E 1/2, E 1/2 W 1/2

Secs. 9 to 14, both inclusive: All

Sec. 15: NE 1/4, E 1/2 SE 1/4

Sec. 17: N 1/2 N 1/2

Sec. 22: E 1/2 NE 1/4

Secs. 23 to 25, both inclusive: All

Case No. 365
Order No. R-152

Twp. 22 S., Rge. 29 E.

Secs. 2 to 10, both inclusive: All
Secs. 15 to 22, both inclusive: All
Secs. 27 to 30, both inclusive: All
Sec. 31: E 1/2
Secs. 32 to 34, both inclusive: All
Sec. 35: W 1/2, W 1/2 SE 1/4

Twp. 23 S., Rge. 29 E.

Sec. 2: All
Sec. 3: Lots 1, 2, 3, 4, S 1/2 N 1/2, N 1/2 S 1/2, S 1/2 SE 1/4
SE 1/4 SW 1/4
Sec. 4: Lots 1, 2, 3, 4, S 1/2 N 1/2, N 1/2 SE 1/4

Total unit area: 133,444.29 acres, more or less.

(b) The unit area may be enlarged or contracted as provided in said Plan.

SECTION 5. That the unit operator shall file with the Commission an executed original or executed counterpart of the Big Eddy Unit Agreement within 30 days after the effective date thereof.

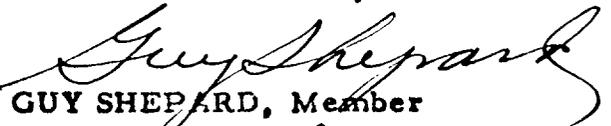
SECTION 6. That any party owning rights in the unitized substances who does not commit such rights to said unit agreement before the effective date thereof may thereafter become a party thereto by subscribing to such agreement or counterpart thereof, or by ratifying the same. The unit operator shall file with the Commission within 30 days an original of any such counterpart or ratification.

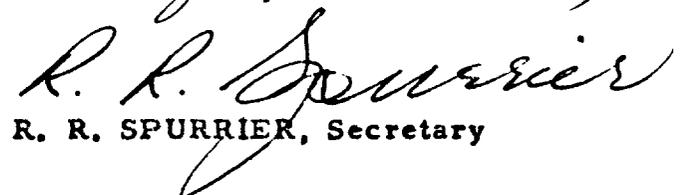
SECTION 7. That this order shall become effective upon approval of said unit agreement by the Commissioner of Public Lands of the State of New Mexico and the Director of the United States Geological Survey, and shall terminate ipso facto upon the termination of said unit agreement. The last unit operator shall immediately notify the Commissioner in writing of such termination.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


EDWIN L. MECHEM, Chairman


GUY SHEPARD, Member


R. R. SPURRIER, Secretary

S E A L

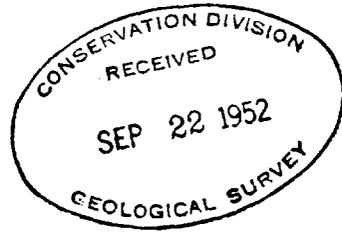
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U. S. GEOLOGICAL SURVEY
RESERVE, NEW MEXICO

UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF
THE BIG EDDY UNIT AREA
LEA & EDDY COUNTIES, STATE OF NEW MEXICO

I-Sec. No. _____



THIS AGREEMENT, entered into as of the 10th day of April, 1952, by and between the parties subscribing, ratifying, or consenting hereto, and herein referred to as the "parties hereto",

W I T N E S S E T H:

WHEREAS, the parties hereto are the owners of working, royalty or other oil or gas interests in the unit area subject to this agreement; and

WHEREAS, the Act of February 25, 1920, 41 Stat. 437, as amended by the Act of August 8, 1946, 60 Stat. 950, 30 U.S.C. Secs. 181 et seq., authorizes Federal lessees and their representatives to unite with each other, or jointly or separately with others, in collectively adopting and operating under a cooperative or unit plan of development or operation of any oil or gas pool, field, or like area, or any part thereof, for the purpose of more properly conserving the natural resources thereof whenever determined and certified by the Secretary of the Interior to be necessary or advisable in the public interest; and

WHEREAS, the Commissioner of Public Lands of the State of New Mexico is authorized by an Act of the Legislature (Chap. 88, Laws 1943) to consent to or approve this agreement on behalf of the State of New Mexico, insofar as it covers and includes lands and mineral interests of the State of New Mexico; and

WHEREAS, the Oil Conservation Commission of the State of New Mexico is authorized by law (Chap. 72, Laws of 1935, as amended by Chap. 193, Laws of 1937, Chap. 166, Laws of 1941, and Chap. 168, Laws of 1949) to approve this agreement and the conservation provisions hereof; and

WHEREAS, the parties hereto hold sufficient interests in the Big Eddy Unit Area covering the land hereinafter described to give reasonably effective control of operations therein; and

WHEREAS, it is the purpose of the parties hereto to conserve natural resources, prevent waste, and secure other benefits obtainable through development and operation of the area subject to this agreement under the terms, conditions, and limitations herein set forth;

NOW, THEREFORE, in consideration of the premises and the promises herein contained, the parties hereto commit to this agreement their respective interests in the below defined unit area, and agree severally among themselves as follows:

1. ENABLING ACT AND REGULATIONS. The act of February 25, 1920, as amended, supra, and all valid pertinent regulations, including operating and unit plan regulations, heretofore issued thereunder or valid pertinent and reasonable regulations hereafter issued thereunder are accepted and made a part of this agreement as to Federal lands, provided such regulations are not inconsistent with the terms of this agreement; and as to non-Federal lands, the oil and gas operating regulations in effect as of the effective date hereof governing drilling and producing operations, not inconsistent with the terms hereof or the laws of the State in which the non-Federal land is located, are hereby accepted and made a part of this agreement.

2. UNIT AREA: The following described land is hereby designated and recognized as constituting the unit area:

NEW MEXICO PRINCIPAL MERIDIAN, NEW MEXICO

T. 19 S., R. 31 E.

Sec. 27: $S\frac{1}{2}$
Sec. 33: $E\frac{1}{2}$
Sec. 34: All
Sec. 35: All

T. 20 S., R. 30 E.

Secs. 25--27 (incl.): All
Secs. 34--36 (incl.): All

T. 20 S., R. 31 E.
Secs. 2--36 (incl.); All

T. 20 S., R. 32 E.
Sec. 7: All
Sec. 8: $W\frac{1}{2}W\frac{1}{2}$
Secs. 17--21 (incl.): All
Sec. 27: $S\frac{1}{2}S\frac{1}{2}$
Secs. 28--34 (incl.): All

T. 21 S., R. 28 E.
Secs. 3--36 (incl.): All

T. 21 S., R. 29 E.
Secs. 1--3 (incl.): All
Secs. 7--36 (incl.): All

T. 21 S., R. 30 E.
Secs. 1--12 (incl.): All
Secs. 14--22 (incl.): All
Sec. 23: All
Sec. 27: $N\frac{1}{2}$
Secs. 28--30 (incl.): All

T. 21 S., R. 31 E.
Sec. 3: Lots 1 to 16, incl.
Secs. 4--6 (incl.): All
Sec. 7--9 (incl.): All

T. 22 S., R. 28 E.
Secs. 1--5 (incl.): All
Sec. 6: Lots 1,2,3,4,5, $SE\frac{1}{4}NW\frac{1}{4}$, $S\frac{1}{2}NE\frac{1}{4}$, $SE\frac{1}{4}$
Sec. 8: $E\frac{1}{2}$, $E\frac{1}{2}W\frac{1}{2}$
Secs. 9--14 (incl.): All
Sec. 15: $NE\frac{1}{4}$, $E\frac{1}{2}SE\frac{1}{4}$
Sec. 17: $N\frac{1}{2}W\frac{1}{2}$
Sec. 22: $E\frac{1}{2}NE\frac{1}{4}$
Secs. 23--25 (incl.): All

T. 22 S., R. 29 E.
Secs. 2--10 (incl.): All
Secs. 15--22 (incl.): All
Secs. 27--30 (incl.): All
Sec. 31: $E\frac{1}{2}$
Secs. 32--34 (incl.): All
Sec. 35: $W\frac{1}{2}$, $W\frac{1}{2}SE\frac{1}{4}$

T. 23 S., R. 29 E.
Sec. 2: All
Sec. 3: Lots 1,2,3,4, $S\frac{1}{2}N\frac{1}{2}$, $N\frac{1}{2}S\frac{1}{2}$, $S\frac{1}{2}SE\frac{1}{4}$, $SE\frac{1}{4}SW\frac{1}{4}$
Sec. 4: Lots 1,2,3,4, $S\frac{1}{2}N\frac{1}{2}$, $N\frac{1}{2}SE\frac{1}{4}$

Situated in Eddy and Lea Counties, containing 133,444.29 acres,
more or less.

Exhibit "A" attached hereto is a map showing the unit area and the boundaries and identity of tracts and leases in said area to the extent known to the Unit Operator. Exhibit "B" attached hereto is a schedule showing to the extent known to the Unit Operator the acreage, percentage, and kind of ownership of oil and gas interests in all land in the unit area. However, nothing herein or in said schedule or map shall be construed as a representation by any party hereto as to the ownership of any interest other than such interest or interests as are shown in said map or schedule as owned by such party. Exhibits "A" and "B" shall be revised by the Unit Operator whenever changes in the unit area render such revision necessary, or when requested by the Oil and Gas Supervisor, hereinafter referred to as "Supervisor", or the Commissioner of Public Lands, hereinafter referred to as "Commissioner", and not less than six copies of the revised exhibits shall be filed with the Supervisor, and at least one copy shall be filed with the Commissioner and one copy with the New Mexico Oil Conservation Commission, hereinafter referred to as "Commission".

The above described unit area shall when practicable be expanded to include therein any additional tract or tracts regarded as reasonably necessary or advisable for the purpose of this agreement, or shall be contracted to exclude lands not within any participating area whenever such expansion or contraction is necessary or advisable to conform with the purposes of this agreement. Such expansion or contraction shall be effected in the following manner:

(a) Unit Operator, on its own motion or on demand of the Director of the Geological Survey, hereinafter referred to as "Director", or on demand of the Commissioner shall prepare a notice of proposed expansion or contraction describing the contemplated changes in the boundaries of the unit area, the reasons therefor, and the proposed effective date thereof.

(b) Said notice shall be delivered to the Supervisor and Commissioner and copies thereof mailed to the last known address of each working

interest owner, lessee, and lessor whose interests are affected, advising that 30 days will be allowed for submission to the Unit Operator of any objections.

(c) Upon expiration of the 30-day period provided in the preceding item (b) hereof, Unit Operator shall file with the Supervisor and Commissioner evidence of mailing of the notice of expansion or contraction and a copy of any objections thereto which have been filed with the Unit Operator.

(d) After due consideration of all pertinent information, the expansion or contraction shall, upon approval by the Director, and Commissioner, become effective as of the date prescribed in the notice thereof.

In the event any operating rights are surrendered by the Unit Operator to lands embraced in the unit area the Unit Operator may contract the unit area to conform to the conditions then known, by application submitted to and approved by the Director and the Commissioner. After ten years from the date of discovery of unitized substances in paying quantities, the Director and Commissioner shall have the right to determine the acreage believed to be proved productive in formations subject to this agreement and may declare acreage not believed to be productive as no longer subject to this agreement by appropriate notice to the Unit Operator provided, however, no elimination of acreage shall be made so long as Unit Operator is actually and diligently engaged in expanding the productive limits within the unit area.

All land committed to this agreement shall constitute land referred to herein as "unitized land" or "land subject to this agreement."

3. UNITIZED SUBSTANCES. All oil and gas in any and all formations below the base of the Delaware sand or below a depth of 5,000 feet, whichever is the lesser, underlying the unitized land are unitized under the terms of this agreement and herein are called "unitized substances."

4. UNIT OPERATOR. Richardson & Bass, a co-partnership, Ft. Worth National Bank Bldg., Ft. Worth, Texas, is hereby designated as Unit Operator and by signature hereto as Unit Operator agrees and consents to accept the duties and obligations of Unit Operator for the discovery, development, and production of unitized substances as herein provided. Whenever reference is

made herein to the Unit Operator, such reference means the Unit Operator acting in that capacity and not as an owner of interests in unitized substances, and the term "working interest owner" when used herein shall include or refer to Unit Operator as the owner of a working interest when such an interest is owned by it.

5. RESIGNATION OR REMOVAL OF UNIT OPERATOR. Unit Operator shall have the right to resign at any time prior to the establishment of a participating area or areas hereunder, but such resignation shall not become effective so as to release Unit Operator from the duties and obligations of Unit Operator and terminate Unit Operator's rights as such for a period of 6 months after notice of intention to resign has been served by Unit Operator on all working interest owners, the Director, and Commissioner, and until all wells then drilled hereunder are placed in a satisfactory condition for suspension or abandonment whichever is required by the Supervisor as to Federal lands and the Commission as to State and privately-owned lands, unless a new Unit Operator shall have been selected and approved and shall have taken over and assumed the duties and obligations of Unit Operator prior to the expiration of said period. Unit Operator shall have the right to resign in like manner and subject to like limitations as above provided at any time a participating area established hereunder is in existence, but until a successor Unit Operator is selected and approved as hereinafter provided, the working interest owners shall be jointly responsible for performance of the duties of Unit Operator, and shall not later than 30 days before such resignation becomes effective appoint a common agent to represent them in any action to be taken hereunder.

The resignation of Unit Operator shall not release Unit Operator from any liability for any default by it hereunder occurring prior to the effective date of its resignation.

The Unit Operator may, upon default or failure in the performance of its duties or obligations hereunder, be subject to removal by the same percentage vote of the owners of working interests determined in like

manner as herein provided for the selection of a new Unit Operator. Such removal shall be effective upon notice thereof to the Director and Commissioner.

The resignation or removal of Unit Operator under this agreement shall not terminate its right, title, or interest as the owner of a working interest or other interest in unitized substances, but upon the resignation or removal of Unit Operator becoming effective, such Unit Operator shall deliver possession of all equipment, materials, and appurtenances used in conducting the unit operations and owned by the working interest owners to the new duly qualified successor Unit Operator or to the owners thereof if no such new Unit Operator is elected, to be used for the purpose of conducting unit operations hereunder. Nothing herein shall be construed as authorizing removal of any material, equipment and appurtenances needed for the preservation of any wells.

6. SUCCESSOR UNIT OPERATOR. Whenever the Unit Operator shall tender his or its resignation as Unit Operator or shall be removed as hereinabove provided, the owners of the working interests in the participating area or areas according to their respective acreage interests in such participating area or areas, or, until a participating area shall have been established, the owners of the working interests according to their respective acreage interests in all unitized land, shall by majority vote select a successor Unit Operator; Provided, That, if a majority but less than 75 percent of the working interest qualified to vote are owned by one party to this agreement, a concurring vote of one or more additional working interest owners shall be required to select a new operator. Such selection shall not become effective until (a) a Unit Operator so selected shall accept in writing the duties and responsibilities of Unit Operator, and (b) the selection shall have been approved by the Director and Commissioner. If no successor Unit Operator is selected and qualified as herein provided, the Director and Commissioner at their election may declare this unit agreement terminated.

7. ACCOUNTING PROVISIONS AND UNIT OPERATING AGREEMENT. If the Unit Operator is not the sole owner of working interests, costs and expenses incurred by Unit Operator in conducting unit operations hereunder shall be paid and apportioned among and borne by the owners of working interests, all in accordance with the agreement or agreements entered into by and between the Unit Operator and the owners of working interests, whether one or more, separately or collectively. Any agreement or agreements entered into between the working interest owners and the Unit Operator as provided in this section, whether one or more, are herein referred to as the "unit operating agreement." Such unit operating agreement shall also provide the manner in which the working interest owners shall be entitled to receive their respective proportionate and allocated share of the benefits accruing hereto in conformity with their underlying operating agreements, leases, or other independent contracts and such other rights and obligations as between Unit Operator and the working interest owners as may be agreed upon by Unit Operator and the working interest owners; however, no such unit operating agreement shall be deemed either to modify any of the terms and conditions of this unit agreement or to relieve the Unit Operator of any right or obligation established under this unit agreement, and in case of any inconsistency or conflict between the unit agreement and the unit operating agreement this unit agreement shall prevail. Three true copies of any unit operating agreement executed pursuant to this section shall be filed with the Supervisor, and one true copy with the Commissioner.

8. RIGHTS AND OBLIGATIONS OF UNIT OPERATOR. Except as otherwise provided herein, the exclusive right, privilege, and duty of the parties hereto which are necessary and proper respecting for, producing, storing, allocating, and disposing of hydrocarbon substances are hereby delegated to and shall be exercised by the Unit Operator as herein provided. Acceptable evidence of title to said rights shall be deposited with said Unit Operator

and, together with this agreement, shall constitute and define the rights, privileges, and obligations of Unit Operator. Nothing herein, however, shall be construed to transfer title to any land or to any lease or operating agreement, it being understood that under this agreement the Unit Operator, in its capacity as Unit Operator, shall exercise the rights of possession and use vested in the parties hereto only for the purposes herein specified.

9. DRILLING TO DISCOVERY. Unit Operator shall drill three exploratory test wells within the unit area, one each in the eastern, central and western sectors thereof and for the purpose of locating said wells, the boundaries of said sectors shall be agreed upon by the Unit Operator and the Supervisor. Accordingly, within six months after the effective date hereof, the Unit Operator shall begin to drill the first of said test wells at a location approved by the Supervisor if such location is upon lands of the United States, and if upon State or privately owned lands, such location shall be approved by the Commission or Commissioner whichever is appropriate, unless on such effective date a well commenced subsequent to February 1, 1952, is being drilled or has been drilled conformably with the terms hereof, and thereafter continues such drilling diligently until the Ellenberger formation has been tested, or until at a lesser depth unitized substances shall be discovered which can be produced in paying quantities, (to-wit: quantities sufficient to repay the cost of drilling and producing operations with a reasonable profit) or the Unit Operator shall at any time establish to the satisfaction of the Supervisor that further drilling of said well would be unwarranted or impracticable, provided, however, that Unit Operator shall not in any event be required to drill said well to a depth in excess of 14,500 feet. Until the discovery of a deposit of unitized substances capable of being produced in paying quantities, the Unit Operator shall continue drilling diligently one well at a time, allowing not more than six months between the completion of one well and the beginning of the next well, until a well capable of producing unitized substances in paying quantities is completed to the satisfaction of said Supervisor if on Federal

land, or the Commissioner if on State land or the Commission if on privately owned land, or until it is reasonably proved that the unitized land is incapable of producing unitized substances in paying quantities in the formation drilled hereunder. Nothing in this Section shall be deemed to limit the right of the Unit Operator to resign as provided in Section 5 hereof, or as requiring Unit Operator to commence or to continue any drilling during the period pending such resignation becoming effective in order to comply with the requirements of this Section. The Director and the Commissioner may modify the drilling requirements of this Section by granting reasonable extensions of time when, in their opinion, such action is warranted.

Notwithstanding the foregoing, the Unit Operator shall commence the last of the three test wells above provided for within five years from the effective date of this agreement subject to the rights contained in this unit agreement pertaining to surrender of leases and operating rights and contraction of the unit agreement.

No well shall be drilled for oil and gas at a location which, in the opinion of the Supervisor, would result in undue waste of potash deposits or constitute a hazard to or unduly interfere with mining operations being conducted for the extraction of potash deposits.

The drilling or the abandonment of any well within the unit area shall be done in accordance with applicable oil and gas operating regulations including such requirements as the Supervisor may prescribe as necessary to prevent the infiltration of oil, gas, or water into formations containing potash deposits or into mines or workings being utilized in the extraction of such deposits. Upon failure to comply with the drilling provisions of this Section, the Director and the Commissioner may, after reasonable notice to the Unit Operator and each working interest owner, lessee, and lessor at their last known addresses declare this unit agreement terminated.

10. PLAN OF FURTHER DEVELOPMENT AND OPERATION. Within 6 months after completion of a well capable of producing unitized substances in paying quantities, the unit operator shall submit for the approval of the Supervisor, the Commissioner, and the Commission, an acceptable plan of development and

operation for the unitized land which, when approved by the Supervisor, the Commissioner, and the Commission, shall constitute the further drilling and operating obligations of the Unit Operator under this agreement for the period specified therein. Thereafter, from time to time before the expiration of any existing plan, the Unit Operator shall submit for the approval of the Supervisor, the Commissioner, and the Commission, a plan for an additional specified period for the development and operation of the unitized land. Any plan submitted pursuant to this section shall provide for the exploration of the unitized area and for the determination of the area or areas thereof capable of producing unitized substances in paying quantities in each and every productive formation and shall be as complete and adequate as the Supervisor, the Commissioner and the Commission may determine to be necessary for timely development and proper conservation of the oil and gas resources of the unitized area and shall (a) specify the number and locations of any wells to be drilled and the proposed order and time for such drilling; and (b) to the extent practicable specify the operating practices regarded as necessary and advisable for proper conservation of natural resources. Separate plans may be submitted for separate productive zones, subject to the approval of the Supervisor, the Commissioner and the Commission. Said plan or plans shall be modified or supplemented when necessary to meet changed conditions or to protect the interests of all parties to this agreement. Reasonable diligence shall be exercised in complying with the obligations of this approved plan of development. The Supervisor and Commissioner are authorized to grant a reasonable extension of the 6-month period herein prescribed for submission of an initial plan of development where such action is justified because of unusual conditions or circumstances. After completion hereunder of a well capable of producing any unitized substances in paying quantities no further wells, except such as may be necessary to afford protection against operations not under this agreement or such as may be specifically approved by the Supervisor and Commission shall be drilled except in accordance with a plan of development approved as herein provided.

11. PARTICIPATION AFTER DISCOVERY. Upon completion of a well capable of producing unitized substances in paying quantities or as soon thereafter

as required by the Supervisor or the Commissioner, the Unit Operator shall submit for approval by the Director, the Commissioner and the Commission a schedule, based on sub-divisions of the public-land survey or aliquot parts thereof, of all unitized land then regarded as reasonably proved to be productive of unitized substances in paying quantities; all land in said schedule on approval of the Director, the Commissioner and the Commission to constitute a participating area, effective as of the date of first production. Said schedule also shall set forth the percentage of unitized substances to be allocated as herein provided to each unitized tract in the participating area so established, and shall govern the allocation of production from and after the date the participating area becomes effective. A separate participating area shall be established in like manner for each separate pool or deposit of unitized substances or for any group thereof produced as a single pool or zone, and any two or more participating areas so established may be combined into one with the consent of the owners of all working interests in the lands within the participating areas so to be combined, on approval of the Director, the Commissioner and the Commission. The participating area or areas so established shall be revised from time to time, subject to like approval, whenever such action appears proper as a result of further drilling operations or otherwise, to include additional land then regarded as reasonably proved to be productive in paying quantities, and the percentage of allocation shall also be revised accordingly. The effective date of any revision shall be the first of the month in which is obtained the knowledge or information on which such revision is predicated, unless a more appropriate effective date is specified in the schedule. No land shall be excluded from a participating area on account of depletion of the unitized substances.

It is the intent of this section that a participating area shall represent the area known or reasonably estimated to be productive in paying quantities; but, regardless of any revision of the participating area, nothing herein contained shall be construed as requiring any retroactive adjustment for production obtained prior to the effective date or revision of the participating area.

In the absence of agreement at any time between the Unit Operator

and the Director, the Commissioner and the Commission as to the proper definition or redefinition of a participating area, or until a participating area has, or areas have, been established as provided herein, the portion of all payments affected thereby may be impounded in a manner mutually acceptable to the owners of working interests, except royalties due the United States and the State of New Mexico, which shall be determined by the Supervisor and the Commissioner, respectively, and the amount thereof deposited, as directed by the Supervisor and Commissioner, to be held as unearned money until a participating area is finally approved and then applied as earned or returned in accordance with a determination of the sum due as Federal and State royalty on the basis of such approved participating area.

Whenever it is determined, subject to the approval of the Supervisor, as to wells on Federal land, and Commissioner as to wells on State land, and the Commission as to wells on privately-owned land, that a well drilled under this agreement is not capable of production in paying quantities and inclusion of the land on which it is situated in a participating area is unwarranted, production from such well shall, for the purposes of settlement among all parties other than working interest owners, be allocated to the land on which the well is located so long as such land is not within a participating area established for the pool or deposit from which such production is obtained. Settlement for working interest benefits from such a well shall be made as provided in the unit operating agreement.

12. ALLOCATION OF PRODUCTION. All unitized substances produced from each participating area established under this agreement, except any part thereof used in conformity with good operating practices within the unitized area for drilling, operating, camp and other production or development purposes, for repressuring or recycling in accordance with a plan of development approved by the Supervisor, Commissioner and the Commission, or unavoidably lost, shall be deemed to be produced equally on an acreage basis from the several tracts of unitized land of the participating area established for such production, and, for the purpose of determining any benefits accruing under this agreement each such tract of unitized land shall have allocated to it such percentage of said production as the number of acres of such tract included in said participating area bears to

the total number of acres of unitized land in said participating area except that allocation of production hereunder for purposes other than for settlement of the royalty, overriding royalty, or payment out of production obligations of the respective working interest owners, shall be on the basis prescribed in the unit operating agreement whether in conformity with the basis of allocation herein set forth or otherwise. It is hereby agreed that production of unitized substances from a participating area shall be allocated as provided herein regardless of whether any wells are drilled on any particular part or tract of said participating area. If any gas produced from one participating area is used for repressuring or recycling purposes in another participating area, the first gas withdrawn from such last mentioned participating area for sale during the life of this agreement shall be considered to be the gas so transferred until an amount equal to that transferred shall be so produced for sale and such gas shall be allocated to the participating area from which initially produced as constituted at the time of such final production.

13. DEVELOPMENT OR OPERATION OF NON-PARTICIPATING LAND OR FORMATIONS. Any party hereto owning or controlling the working interest in any unitized land having thereon a regular well location may with the approval of the Supervisor as to Federal land, the Commissioner as to State land, and the Commission as to privately owned land, at such party's sole risk, cost and expense, drill a well to test any formation for which a participating area has not been established or to test any formation for which a participating area has been established if such location is not within said participating area, unless within 90 days of receipt of notice from said party of his intention to drill the well the Unit Operator elects and commences to drill such well in like manner as other wells are drilled by the Unit Operator under this agreement.

If any well drilled as aforesaid by a Working Interest Owner results in production such that the land upon which it is situated may properly be included in a participating area, such participating area shall be established or enlarged as provided in this agreement and the well shall thereafter be operated by Unit Operator in accordance with the terms of this

agreement and the unit operating agreement.

If any well drilled as aforesaid by a working interest owner obtains production in quantities insufficient to justify the inclusion in a participating area of the land upon which such well is situated, such well may be operated and produced by the party drilling the same subject to the conservation requirements of this agreement. The royalties in amount or value of production from any such well shall be paid as specified in the underlying lease and agreements affected.

14. ROYALTY SETTLEMENT. The United States and the State of New Mexico and all royalty owners who, under existing contract, are entitled to take in kind a share of the substances now unitized hereunder produced from any tract, shall hereafter be entitled to the right to take in kind their share of the unitized substances allocated to such tract, and Unit Operator, or in case of the operation of a well by a working interest owner as herein in special cases provided for, such working interest owner shall make deliveries of such royalty share taken in kind in conformity with the applicable contracts, laws and regulations. Settlement for royalty interests not taken in kind shall be made by working interest owners responsible therefor under existing contracts, laws, and regulations, on or before the last day of each month for unitized substances produced during the preceding calendar month; provided, however, that nothing herein contained shall operate to relieve the lessees of any land from their respective lease obligations for the payment of any royalties due under their leases.

If gas obtained from lands not subject to this agreement is introduced into any participating area hereunder, for use in repressuring, stimulation of production, or increasing ultimate recovery, which shall be in conformity with a plan first approved by the Supervisor, the Commissioner and the Commission, a like amount of gas, after settlement as herein provided for any gas transferred from any other participating area, and with due allowance for loss or depletion from any cause, may be withdrawn from the formation into which the gas was introduced, royalty free as to dry gas, but not as to the products extracted therefrom; provided that such withdrawal

shall be at such time as may be provided in the plan of operations or as may otherwise be consented to by the Supervisor, the Commissioner, and the Commission as conforming to good petroleum engineering practice, and provided further, that such right of withdrawal shall terminate on the termination of this unit agreement.

Royalty due the United States shall be computed as provided in the operating regulations and paid in value or delivered in kind as to all unitized substances on the basis of the amounts thereof allocated to unitized Federal land as provided herein at the rates specified in the respective Federal leases, or at such lower rate or rates as may be authorized by law or regulation; provided, that for leases on which the royalty rate depends on the daily average production per well, said average production shall be determined in accordance with the operating regulations as though each participating area were a single consolidated lease.

Royalty due on account of State and privately-owned lands shall be computed and paid on the basis of all unitized substances allocated to such lands.

15. RENTAL SETTLEMENT. Rentals or minimum royalties due on leases committed hereto shall be paid by working interest owners responsible therefor under existing contracts, laws, and regulations, provided that nothing herein contained shall operate to relieve the lessees of any land from their respective lease obligations for the payment of any rental or minimum royalty in lieu thereof due under their leases. Rental or minimum royalty for lands of the United States subject to this agreement shall be paid at the rate specified in the respective leases from the United States, unless such rental or minimum royalty is waived, suspended, or reduced by law or by approval of the Secretary or his duly authorized representative.

With respect to any lease on non-Federal land containing provisions which would terminate such lease unless drilling operations were within the time therein specified commenced upon the land covered thereby or rentals paid for the privilege of deferring such drilling operations,

the rentals required thereby shall, notwithstanding any other provision of this agreement, be deemed to accrue and become payable during the term thereof as extended by this agreement, and until the required drilling operations are commenced upon the land covered thereby or some portion of such land is included within a participating area.

16. RIGHTS OF WORKING INTEREST OWNERS IN UNITIZED SUBSTANCES.

Notwithstanding any provision contained herein to the contrary, each working interest owner shall have the right to take such owner's proportionate share of the unitized substances in kind or to personally sell or dispose of the same, and nothing herein contained shall be construed as giving or granting to the Unit Operator the right to sell or otherwise dispose of the proportionate share of any working interest owner without specific authorization from time to time so to do.

Any working interest owner who takes its share of the unitized substances in kind shall pay or secure the payment of the royalty on its interest and furnish at its own expense all tankage and other equipment necessary for taking said unitized substances in kind and shall also pay any other additional expenses of Unit Operator occasioned thereby. Likewise, any royalty owners who under existing contracts are entitled to take their share of the unitized substances in kind shall furnish at their own expense all equipment necessary in connection therewith, and shall reimburse Unit Operator for all expenses incurred on account thereof; provided, that as to Federal lands such expense, equipment and storage of royalty oil taken in kind shall be assumed and furnished pursuant to the provisions of the Federal leases involved.

17. CONSERVATION. Operations hereunder and production of unitized substances shall be conducted to provide for the most economical and efficient recovery of said substances without waste, as defined by or pursuant to State or Federal law or regulations.

18. DRAINAGE. The Unit Operator shall take appropriate and adequate measures to prevent drainage of unitized substances from unitized land by wells on land not subject to this agreement or pursuant to applicable regulations pay a fair and reasonable compensatory royalty as determined by the Supervisor for Federal land, or as approved by the Commissioner as to State land, or as determined by agreement between the Unit Operator and the royalty owner as to fee land.

19. LEASES AND CONTRACTS CONFORMED AND EXTENDED. The terms, conditions and provisions of all leases, subleases, and other contracts relating to exploration, drilling, development or operation for oil or gas of lands committed to this agreement are hereby expressly modified and amended to the extent necessary to make the same conform to the provisions hereof, but otherwise to remain in full force and effect, and the parties hereto hereby consent that the Secretary and the Commissioner, respectively, shall and by their approval hereof, or by the approval hereof by their duly authorized representatives do hereby establish, alter, change or revoke the drilling, producing, rental, minimum royalty, and royalty requirements of Federal and State leases committed hereto and the regulations in respect thereto to conform said requirements to the provisions of this agreement, and, without limiting the generality of the foregoing, all leases, subleases and contracts are particularly modified in accordance with the following:

(a) The development and operation of lands subject to this agreement under the terms hereof shall be deemed full performance of all obligations for development and operation with respect to each and every part or separately owned tract subject to this agreement, regardless of whether there is any development of any particular part or tract of the unit area, notwithstanding anything to the contrary in any lease, operating agreement or other contract by and between the parties hereto, or their respective predecessors in interest, or any of them.

(b) Drilling and producing operations performed hereunder upon any tract of unitized lands will be accepted and deemed to be performed upon and for the benefit of each and every tract of unitized land, and no Federal or State lease shall be deemed to expire by reason of failure to drill or produce wells situated on land therein embraced.

(c) Suspension of drilling or producing operations on all unitized lands pursuant to direction or consent of the Secretary and Commissioner, or their duly authorized representatives shall be deemed to constitute such suspension pursuant to such direction or consent as to each and every tract of unitized lands.

(d) Each lease, sublease or contract relating to the exploration, drilling, development or operation for oil or gas of lands other than those of the United States and the State of New Mexico committed to this agreement which by its terms might expire prior to the termination of this agreement is hereby extended beyond any such term so provided therein, so that it shall be continued in full force and effect for and during the term of this agreement, provided, however, each such lease, sublease or contract shall only be extended in the event unitized substances are capable of being produced from some part of the lands committed to this agreement prior to the expiration of the primary term of such lease, sublease or contract. Termination of this agreement shall not affect any lease which pursuant to the terms thereof or applicable law shall continue in full force and effect thereafter.

(e) Any Federal lease for a fixed term of twenty (20) years or any renewal thereof or any part of such lease which is made subject to this agreement shall continue in force beyond the term provided therein until the termination hereof. Any other Federal lease committed hereto shall continue in force beyond the term so provided therein or by law as to the committed land so long as such land remains committed hereto, provided unitized substances are discovered in paying quantities within the unit area prior to the expiration date of the primary term of such lease.

(f) Each sublease or contract relating to the operation and development of unitized substances from lands of the United States committed to this agreement, which by its terms would expire prior to the time at which the underlying lease, as extended by the immediately preceding paragraph, will expire, is hereby extended beyond any such term so provided therein so that it shall be continued in full force and effect for and during the term of the underlying lease as such term is herein extended.

(g) Any lease having only a portion of its lands committed hereto shall be segregated as to the portion committed and the portion not committed, and the terms of such lease shall apply separately to such segregated portions commencing as of the effective date hereof. In the event any such lease provides for a lump-sum rental payment, such payment shall be prorated between the portions so segregated in proportion to the acreage of the respective tracts.

20. MAPS AND SURVEYS. Well records and survey plats that an oil and gas lessee or Unit Operator must file, pursuant to applicable operating regulations, shall be available for inspection at the office of the Supervisor as to all lands of the United States and at the office of the Commissioner and Commission as to State and privately owned lands, to any party holding a potash permit or lease on the land upon which the well is situated insofar as such records are pertinent to the mining and protection of potash deposits.

21. COVENANTS RUN WITH LAND. The covenants herein shall be construed to be covenants running with the land with respect to the interest of the parties hereto and their successors in interest until this agreement terminates, and any grant, transfer, or conveyance of interest in land or leases subject hereto shall be and hereby is conditioned upon the assumption of all privileges and obligations hereunder by the grantee, transferee, or other successor in interest. No assignment or transfer of any working interest, royalty, or other interest subject hereto shall be binding upon

Unit Operator until the first day of the calendar month after Unit Operator is furnished with the original, photostatic, or certified copy of the instrument of transfer.

22. EFFECTIVE DATE AND TERM. This agreement shall become effective upon approval by the Secretary or his duly authorized representative and shall terminate five years after such date unless (a) such date of expiration is extended by the Director and Commissioner, or (b) it is reasonably determined prior to the expiration of the fixed term or any extension thereof that the unitized land is incapable of production of unitized substances in paying quantities in the formation tested hereunder and after notice of intention to terminate the agreement on such ground is given by the Unit Operator to all parties in interest at their last known addresses, the agreement is terminated with the approval of the Director and Commissioner, or (c) a valuable discovery of unitized substances has been made on unitized land during said initial term or any extension thereof, in which event the agreement shall remain in effect for such term and so long as unitized substances can be produced in paying quantities, i.e., in this particular instance in quantities sufficient to pay for the cost of producing the same from wells on unitized land within any participating area established hereunder, and should production cease, so long thereafter as diligent operations are in progress for the restoration of production or discovery of new production and so long thereafter as the unitized substances so discovered can be produced as aforesaid, or (d) it is terminated as heretofore provided in this agreement.

This agreement may be terminated at any time by not less than 75 per centum, on an acreage basis, of the owners of working interests signatory hereto, with the approval of the Director; notice of any such approval to be given by the Unit Operator to all parties hereto.

23. RATE OF PROSPECTING, DEVELOPMENT, AND PRODUCTION. The Director is hereby vested with authority to alter or modify from time to

time, in his discretion, the quantity and rate of production under this agreement, when such quantity and rate is not fixed pursuant to Federal or State law or does not conform to any state-wide voluntary conservation or allocation program, which is established, recognized, and generally adhered to by the majority of operators in such State, such authority being hereby limited to alteration or modification in the public interest, the purpose thereof and the public interest to be served thereby to be stated in the order of alteration or modification. Without regard to the foregoing, the Director is also hereby vested with authority to alter or modify from time to time in his discretion the rate of prospecting and development and the quantity and rate of production under this agreement when such alteration or modification is in the interest of attaining the conservation objectives stated in this agreement and is not in violation of any applicable Federal or State law; provided, however, that no such alteration or modification shall be effective as to any land of the State of New Mexico as to the rate of prospecting and development in the absence of the specific written approval thereof by the Commissioner and as to any lands of the State of New Mexico or privately-owned lands subject to this agreement as to the quantity and rate of production in the absence of specific written approval thereof by the Commission.

Powers in this section vested in the Director shall only be exercised after notice to Unit Operator and opportunity for hearing to be held not less than 15 days from notice.

24. CONFLICT OF SUPERVISION. Neither the Unit Operator nor the working interest owners nor any of them shall be subject to any forfeiture, termination, or expiration of any rights hereunder or under any leases or contracts subject hereto, or to any penalty or liability on account of delay or failure in whole or in part to comply with any applicable provision thereof to the extent that the said Unit Operator, working interest owners or any of them are hindered, delayed, or prevented

from complying therewith by reason of failure of the Unit Operator to obtain, in the exercise of due diligence, the concurrence of proper representatives of the United States and proper representatives of the State of New Mexico in and about any matters or thing concerning which it is required herein that such concurrence be obtained.

25. APPEARANCES. Unit Operator shall, after notice to other parties affected, have the right to appear for or on behalf of any and all interests affected hereby before the Department of the Interior, the Commissioner of Public Lands and the New Mexico Oil Conservation Commission and to appeal from orders issued under the regulations of said Department, the Commissioner or Commission, or to apply for relief from any of said regulations or in any proceedings relative to operations before the Department of the Interior, the Commissioner or Commission, or any other legally constituted authority; provided, however, that any other interested party shall also have the right at his own expense to be heard in any such proceeding.

26. NOTICES. All notices, demands or statements required hereunder to be given or rendered to the parties hereto shall be deemed fully given if given in writing and personally delivered to the party or sent by postpaid registered mail, addressed to such party or parties at their respective addresses set forth in connection with the signatures hereto or to the ratification or consent hereof or to such other address as any such party may have furnished in writing to party sending the notice, demand or statement.

27. NO WAIVER OF CERTAIN RIGHTS. Nothing in this agreement contained shall be construed as a waiver by any party hereto of the right to assert any legal or constitutional right or defense as to the validity or invalidity of any law of the State wherein said unitized lands are located, or of the United States, or regulations issued thereunder in any way affecting such party, or as a waiver by any such party of any right beyond his or its authority to waive.

28. UNAVOIDABLE DELAY. All obligations under this agreement requiring the Unit Operator to commence or continue drilling or to operate on or produce unitized substances from any of the lands covered by this agreement shall be suspended while, but only so long as the Unit Operator despite the exercise of due care and diligence is prevented from complying with such obligations, in whole or in part, by strikes, acts of God, Federal, State, or municipal law or agencies, unavoidable accident, uncontrollable delays in transportation, inability to obtain necessary materials in open market, or other matters beyond the reasonable control of the Unit Operator whether similar to matters herein enumerated or not.

29. FAIR EMPLOYMENT. The Unit Operator shall not discriminate against any employee or applicant for employment because of race, creed, color, or national origin, and an identical provision shall be incorporated in all sub-contracts.

30. LOSS OF TITLE. In the event title to any tract of unitized land shall fail and the true owner cannot be induced to join this unit agreement, such tract shall be automatically regarded as not committed hereto and there shall be such readjustment of future costs and benefits as may be required on account of the loss of such title. In the event of a dispute as to title as to any royalty, working interest, or other interests subject thereto, payment or delivery on account thereof may be withheld without liability for interest until the dispute is finally settled; provided, that as to Federal and State land or leases, no payments of funds due the United States or the State of New Mexico should be withheld, but such funds shall be deposited as directed by the Supervisor, and with the Commissioner of Public Lands of the State of New Mexico, to be held as unearned money pending final settlement of the title dispute, and then applied as earned or returned in accordance with such final settlement.

Unit Operator as such is relieved from any responsibility for any defect or failure of any title hereunder.

31. NON-JOINDER AND SUBSEQUENT JOINDER. If the owner of any substantial interest in a tract within the unit area fails or refuses to subscribe or consent to this agreement, the owner of the working interest in that tract may withdraw said tract from this agreement by written notice to the Director, Commissioner and the Unit Operator prior to the approval of this agreement by the Director. Any oil or gas interests in lands within the unit area not committed hereto prior to submission of this agreement for final approval may thereafter be committed hereto by the owner or owners thereof subscribing or consenting to this agreement, and if the interest is a working interest, by the owner of such interest also subscribing to the Unit Operating Agreement. After operations are commenced hereunder, the right of subsequent joinder, as provided in this section, by a working interest owner is subject to such requirements or approvals, if any, pertaining to such joinder, as may be provided for in the Unit Operating Agreement. After final approval hereof joinder by a non-working interest owner must be consented to in writing by the working interest owner committed hereto and responsible for the payment of any benefits that may accrue hereunder in behalf of such non-working interest. Prior to final approval hereof, joinder by any owner of a non-working interest must be accompanied by appropriate joinder by the owner of the corresponding working interest in order for the interest to be regarded as effectively committed hereto. Except as may otherwise herein be provided, subsequent joinders to this Agreement shall be effective as of the first day of the month following the filing with the Supervisor, the Commissioner and the Commission of duly executed counterparts of all or any papers necessary to establish effective commitment of any tract to this agreement unless objection to such joinder is duly made within 60 days by the Director, Commissioner or Commission.

32. COUNTERPARTS. This agreement may be executed in any number of counterparts no one of which needs to be executed by all parties or may be ratified or consented to by separate instrument in writing specifically referring hereto and shall be binding upon all those parties who have executed such a counterpart, ratification, or consent hereto with the same force and effect as if all such parties had signed the same document and regardless of whether or not it is executed by all other parties owning or claiming an interest in the lands within the above described unit area.

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be executed and have set opposite their respective names the date of execution.

Date 10/1/52

RICHARDSON & BASS, a Co-partnership
 By [Signature]
[Signature]
 Address _____

ATTEST:
[Signature]
 Secretary

UNIT OPERATOR AND
 WORKING INTEREST OWNER
 UNITED STATES POTASH COMPANY
 BY [Signature]
 President

ATTEST:
[Signature]
 Assistant Secretary

WORKING AND ROYALTY INTEREST OWNER
 MARCOLIA PETROLEUM COMPANY
[Signature]
 Vice President

ATTEST:
[Signature]
 Assistant Secretary

ATTEST:
[Signature]
 Assistant Secretary

ATTEST:
[Signature]
 Assistant Secretary

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

5. LEASE DESIGNATION AND SERIAL NO.
LC-059365

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME
BIG EDDY UNIT

8. FARM OR LEASE NAME
BIG EDDY UNIT

9. WELL NO.
102

10. FIELD AND POOL, OR WILDCAT
EAST CARLSBAD MORROW GAS

11. SEC., T., R., M., OR BLK.
AND SURVEY OR AREA
S30, T21S, R28E

12. COUNTY OR PARISH
EDDY

13. STATE
NEW MEXICO

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
DRILL DEEPEN PLUG BACK

b. TYPE OF WELL
OIL WELL GAS WELL OTHER
SINGLE ZONE MULTIPLE ZONE

2. NAME OF OPERATOR
BASS ENTERPRISES PRODUCTION CO.

3. ADDRESS OF OPERATOR
P.O. BOX 2760 MIDLAND, TEXAS 79702

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
At surface: 1980' FSL & 1980' FWL SEC 30 T21S R28E (Unit letter K)
Eddy Co. NM
At proposed prod. zone: Same as above

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
Two miles East of Carlsbad New Mexico

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any)
1980

16. NO. OF ACRES IN LEASE
2553.61

17. NO. OF ACRES ASSIGNED TO THIS WELL
316.44

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
± 4,620

19. PROPOSED DEPTH
12,100

20. ROTARY OR CABLE TOOLS
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
Ungraded GR 3166.4'

22. APPROX. DATE WORK WILL START*
Undetermined

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLES	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
15"	11 3/4"	42	540	340 SX CIRCULATE
10 5/8"	8 5/8"	24.828	2835	850 SX CIRCULATE
7 7/8"	5 1/2"	17.820	12100	700 SX

RECEIVED
MAR 23 11 03 AM '88
CARLSBAD AREA

BEFORE EXAMINER CATANACH
OIL CONSERVATION DIVISION
BASS EXHIBIT NO. 19
CASE NO. _____

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED Ray J. Bowers TITLE Engineering Assistant DATE March 22, 1988

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____
APPROVED BY Edwin J. Gato TITLE Acting Chief Engineer DATE 4-21-88
CONDITIONS OF APPROVAL, IF ANY:

MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

REVISED EXHIBIT A

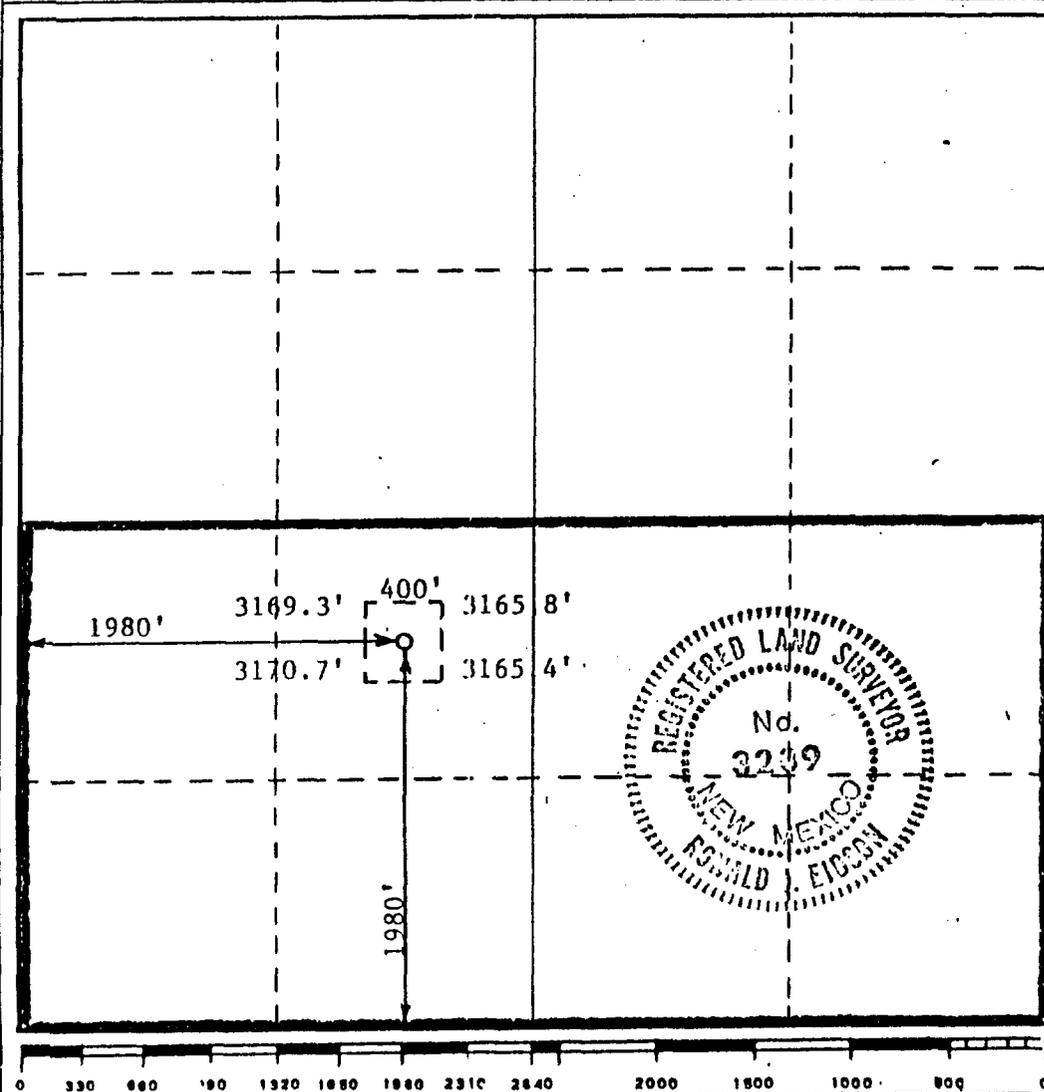
Operator BASS ENTERPRISES PRODUCTION CO.		Lease BIG EDDY UNIT			Well No. 102
Unit Letter K	Section 30	Township 21 SOUTH	Range 28 EAST	County EDDY	
Actual Footage Location of Well: 1980 feet from the SOUTH line and 1980 feet from the WEST line					
Ground Level Elev. 3166.4'	Producing Formation MORROW	Pool EAST CARLSBAD GAS	Dedicated Acreage: 316.44 Acres		

- Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) SE/4, E 1/2, SW 1/4, and NW/4 of SW/4; Bass Companies

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name Troy L. Bevers
Position Engineering Assistant
Company Bass Enterprises Production Co.
Date April 26, 1988

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.

Date Surveyed 3-19-88
Registered Professional Engineer and/or Land Surveyor Ronald J. Eidson
Certificate No. JOHN W. WEST, 676 RONALD J. EIDSON, 3239

91746

MULTI-POINT SURFACE USE PLAN

OPERATOR: BASS ENTERPRISES PRODUCTION CO.
ADDRESS: P. O. BOX 2760, MIDLAND, TX 79702

WELL NAME: Big Eddy Unit No. 102

LEGAL DESCRIPTION: 1980' FSL & 1980' FWL, Sec 30, T21S, R28E, Eddy County, NM

POINT 1: EXISTING ROADS

A. Proposed Well Site Location:

The proposed wellsite was staked under the direction of a registered land surveyor. Ungraded elevation at ground level of the proposed well site is 3166.4 feet, see Exhibit A.

B. Planned Access Route:

See Exhibit B. The planned access route begins approximately 2-1/2 miles northeast of Carlsbad, NM, halfway between mile markers 42 and 43. Turn southeast at this point and go $\pm 4/10$ of a mile and turn right and go to the southwest $\pm 1-3/10$ miles and turn left. Location is $\pm 400'$ southeast from this point.

C. Access Roads Labeled:

See Exhibit B.

D. Existing Roads:

Access will be on an existing caliche road and trail road, except for $\pm 400'$ of new road which will have to be built to get to the location. See Exhibit B.

E. Existing Road Maintenance or Improvement Plan:

The existing roads will be improved and maintained to accommodate the drilling and completion of this well.

POINT 2: PLANNED NEW ACCESS ROUTE

A. Route Location:

See Exhibit B: The planned new access route was selected to provide the most favorable economic means to the well.

B. Width

The average width of the new road surface shall be 12'.

C. Maximum Grade:

Essentially flat.

D. Turnouts:

None planned.

E. Culverts, Cattle Guards, and Surfacing Equipment:

The road will be constructed of watered and compacted caliche with no culverts and one cattle guard.

POINT 3: LOCATION OF EXISTING WELLS

Exhibit C indicates existing wells within the surrounding area.

POINT 4: LOCATION OF EXISTING OR PROPOSED FACILITIES

A. Existing Facilities Within One Mile Owned or Controlled by Lessee/Operator:

Big Eddy Unit #65 (Strawn gas well 2,640' due south)

B. New Facilities in the Event of Production:

In the event that the well is productive, the necessary production facilities will be installed on the drilling pad. If the well is productive of oil, an electric prime mover may be installed to provide necessary power. No power should be required if this is a gas well.

C. Rehabilitation of Disturbed Areas Unnecessary for Production:

Following the construction of production facilities, those areas required for continued production will be graded to provide drainage and minimize erosion. The areas unnecessary for use will be graded to blend with the surrounding topography - See Point 10.

POINT 5: LOCATION AND TYPE OF WATER SUPPLY

A. Location and Type of Water Supply

Fresh water and brine will be used in the drilling of this well. Water used for drilling purposes will be obtained from commercial water haulers and possibly a rig water supply well.

B. Water Transportation System

Water hauling to the location will be over the existing and proposed roads. Well water will be transported via a temporary rolled plastic line.

C. Water Wells:

Currently, it is not anticipated that a rig fresh water supply well will be utilized. This item may be amended nearer to the commencement of actual drilling operations.

POINT 6: SOURCE OF CONSTRUCTION MATERIALS

A. Materials

Caliche required for construction will be obtained from an existing pit as outlined by the Bureau of Land Management before the commencement of construction activities.

B. Land Ownership

Federally owned.

C. Materials Foreign to the Site:

No construction materials foreign to this area are anticipated for this drill site.

D. Access Roads:

No additional access roads are required.

POINT 7: METHODS FOR HANDLING WASTE MATERIAL

A. Cuttings:

Cuttings will be contained in the reserve pit.

B. Drilling Fluids:

Drilling fluids will be contained in the reserve pit.

C. Produced Fluids:

No substantial production of water is expected during drilling. Hydrocarbon fluid or other fluids that may be produced during testing will be retained in test tanks. Prior to cleanup operations, any hydrocarbon material in the reserve pit will be removed by skimming or burning as the situation would dictate.

D. Sewage:

Current laws and regulations pertaining to the disposal of human waste will be complied with.

E. Garbage:

A burn pit will be constructed as shown on the well site layout. The pit will be fenced with small mesh wire. The small volume of refuse in the pit shall be burned. That portion which does not burn shall be buried during restoration operations.

F. Cleanup of Well Site:

Upon release of the drilling rig, the surface of the drilling pad will be graded to accommodate a completion rig if testing indicates potential productive zones. In any case, the "mouse" hole and "rat" hole will be covered. The reserve pit will be fenced and the fence maintained until the pit is backfilled. Reasonable cleanup will be performed prior to final restoration of the site.

POINT 8: ANCILLARY FACILITIES

None required.

POINT 9: WELL SITE LAYOUT

A. Rig Orientation and Layout:

Exhibit D shows the dimensions of the well pad and reserve pits, and the location of major rig components. Only minor levelling of the well site will be required. No significant cuts or fills will be necessary.

B. Locations of Pits and Access Road:

See Exhibits B and D.

C. Lining of the Pits:

The reserve pit will be lined with plastic.

POINT 10: PLANS FOR RESTORATION OF THE SURFACE

A. Reserve Pit Cleanup:

The pit will be fenced prior to rig release and shall be maintained until the pit is backfilled. Previous to backfill operations, any hydrocarbon material on the pit surface shall be removed. The fluids and solids contained in the pit shall be backfilled with soil excavated from the site and soil adjacent to the reserve pit. The restored surface of the pit shall be contoured to prevent impoundment of surface water flow. Waterbars will be constructed as needed to prevent excessive erosion. Topsoil, as available, shall be placed over the restored surface in a uniform layer. The area will be seeded according to BLM stipulations during the appropriate season following restoration.

B. Restoration Plans - Production Developed:

The reserve pit will be backfilled and restored as described above under Item A. In addition, those areas not required for production will be graded to blend with the surrounding topography. Topsoil, as available, will be placed upon those areas and seeded. The portion of the site required for production will be graded to minimize erosion and provide access during inclement conditions. Following depletion and abandonment of the site, restoration procedures will be those that follow under Item C.

C. Restoration Plans - No Production Developed:

The reserve pit will be restored as described above. With no production developed, the entire surface disturbed by construction of the well site will be restored. The site will be contoured to blend with the surrounding topography and provide drainage of surface water. The topsoil, as available, shall be replaced in a uniform layer and seeded according to BLM stipulations.

D. Rehabilitations Timetable:

Upon completion of drilling operations, the initial cleanup of the site will be performed as soon as weather and site conditions allow economic execution of the work.

POINT 11: OTHER INFORMATION

A. Terrain:

Essentially flat.

B. Soil:

Caliche and sand.

C. Vegetation:

Sparse, primarily grasses and mesquite.

D. Surface Use:

Primarily grazing.

E. Surface Water:

There are no ponds, lakes, streams or rivers within several miles of the wellsite.

F. Water Wells:

There are livestock water wells within one mile of wellsite.

G. Residences and Buildings:

None within one mile of proposed location.

H. Historical Sites:

None observed.

I. Archeological Resources:

Presently, an archeological survey has not been obtained for this area. Before any construction begins, a full and complete archeological survey will be submitted. Any location or construction conflicts will be resolved before construction begins.

J. Surface Ownership:

The well site and new access road is on Federally owned land.

K. Well signs will be posted at the drilling site.

L. Open pits:

All pits containing liquid or mud will be fenced.

POINT 12: OPERATOR'S FIELD REPRESENTATIVE

(Field personnel responsible for compliance with development plan for surface use).

DRILLING
John Smitherman
Box 2760
Midland, Texas 79702
915-688-3300

PRODUCTION
Al Gallas
Box 1043
Kermit, Texas 79745
915-563-0656

John Smitherman
Box 2760
Midland, Texas 79702
915-688-3300

POINT 13: CERTIFICATION

I hereby certify that I, or persons under my direct supervision have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in the plan are, to the best of my knowledge, true and correct; and that the work associated with operations proposed herein will be performed by Bass Enterprises Production Co. 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.

March 22, 1988
Date

Troy L. Bevers
Troy L. Bevers

TLB/la

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

EXHIBIT A

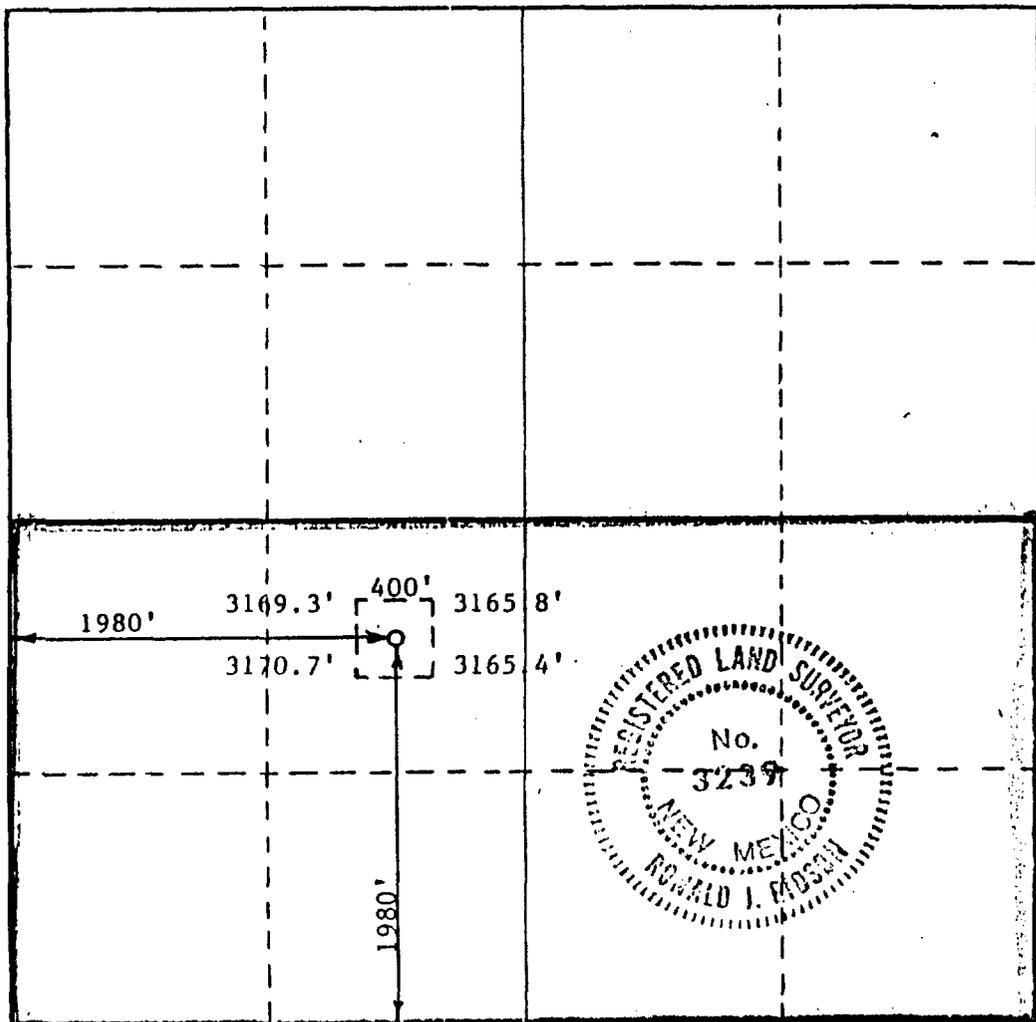
Operator BASS ENTERPRISES PRODUCTION CO.		Lease BIG EDDY UNIT			Well No. 102
Unit Letter K	Section 30	Township 21 SOUTH	Range 28 EAST	County EDDY	
Actual Footage Location of Well:					
1980 feet from the SOUTH line and		1980 feet from the WEST line			
Ground Level Elev. 3166.4'	Producing Formation MORROW	Pool EAST CARLSBAD GAS	Dedicated Acreage: 316.44 Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes No If answer is "yes," type of consolidation UNITIZATION

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Troy L. Bevers

Name
Troy L. Bevers

Position
Engineering Assistant

Company
Bass Enterprises Prod. Co.

Date
March 22, 1988

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.

Date Surveyed
3-19-88

Registered Professional Engineer and/or Land Surveyor
Ronald J. Eidson

Certificate No. **JOHN W. WEST, 676**
RONALD J. EIDSON, 3239

EXHIBIT B

1971 Map Revision

Access routes

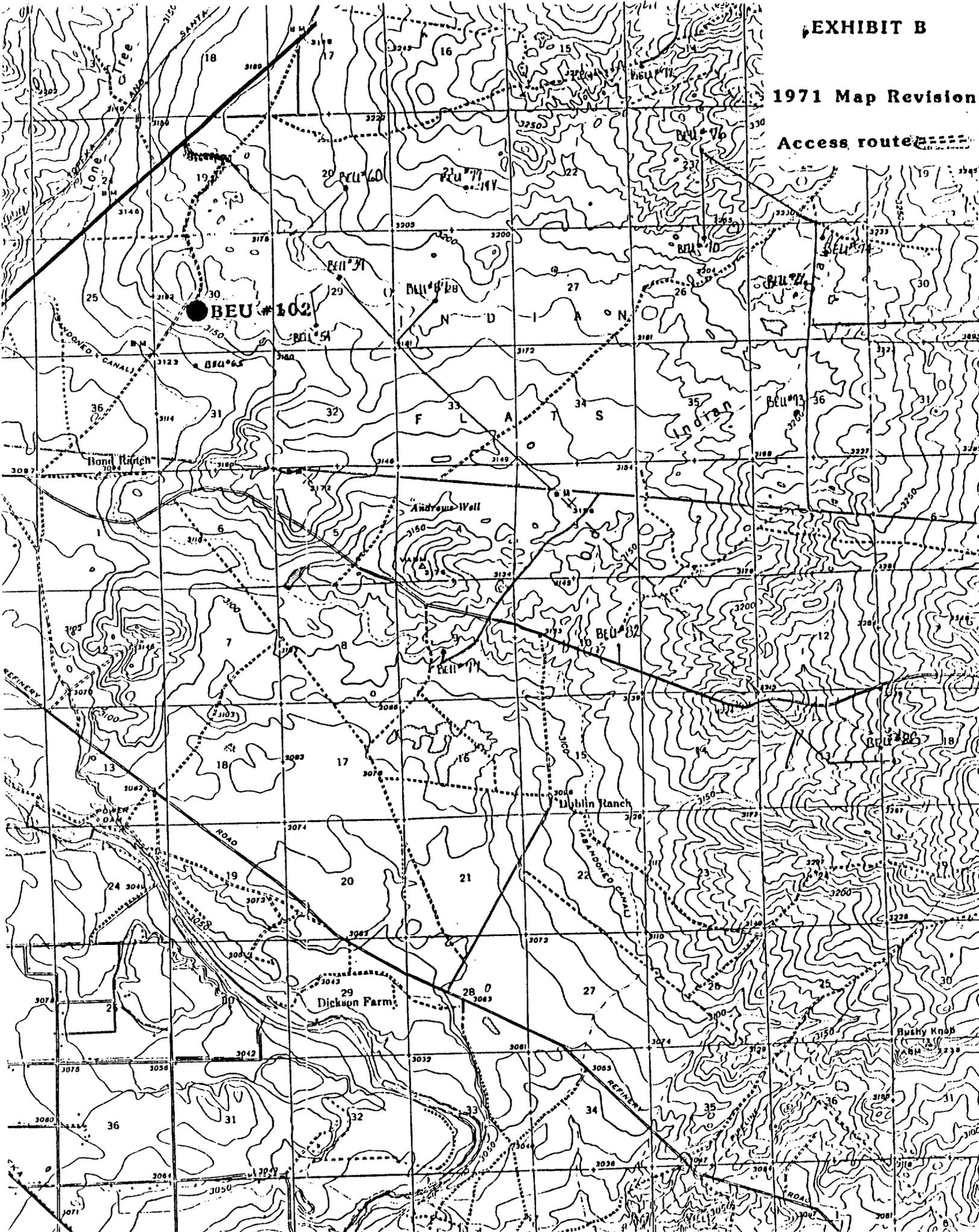
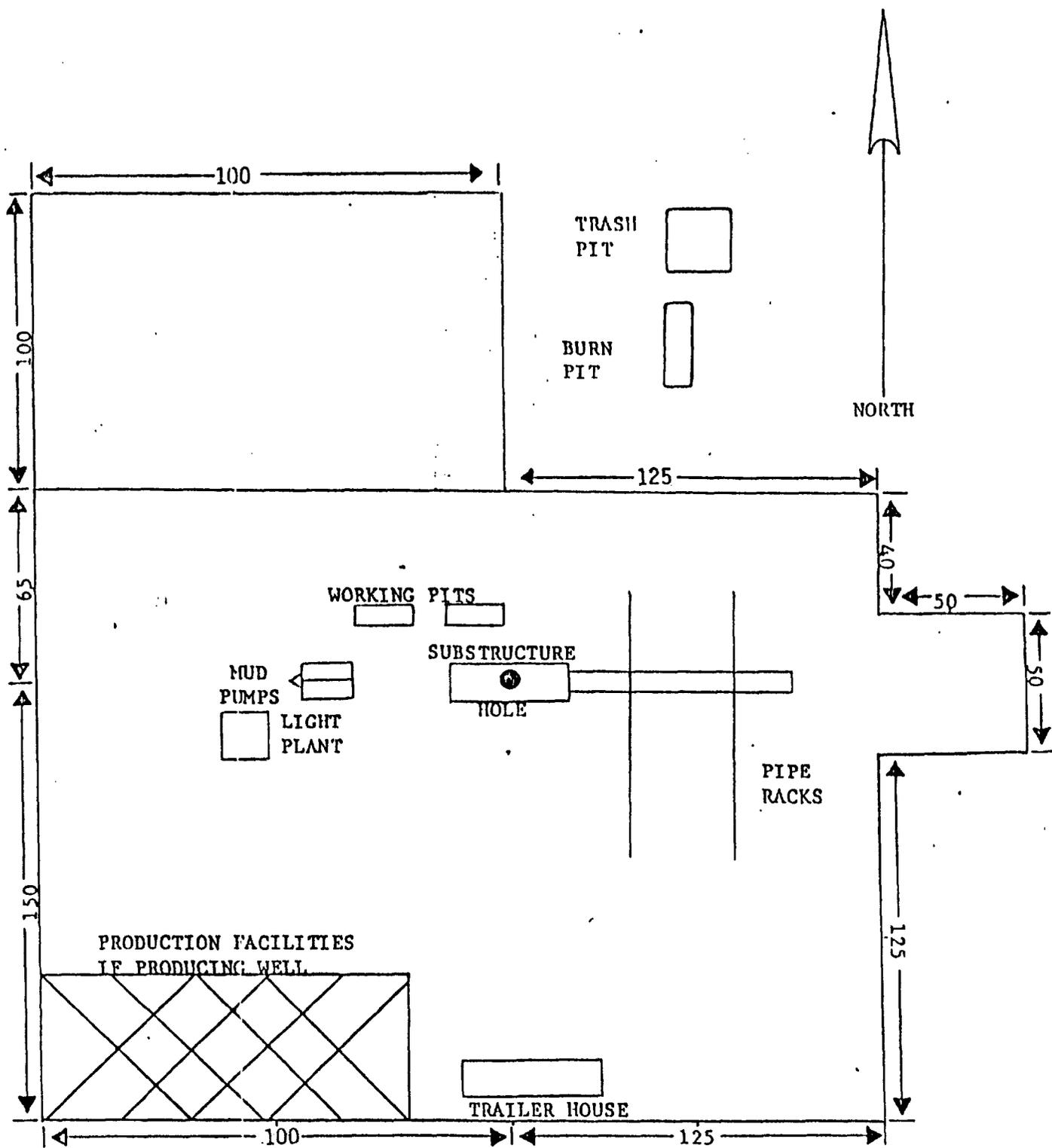


EXHIBIT D



EIGHT POINT PROGRAM

NAME OF WELL: Big Eddy Unit No. 102

LOCATION: 1980' FSL & 1980' FWL, Sec 30, T21S, R28E, Eddy County, NM

POINT 1: ESTIMATED FORMATION TOPS (SEE NO. 2 BELOW)

(See No. 2 below)

POINT 2: WATER, OIL, GAS AND/OR MINERAL BEARING FORMATIONS

Anticipated formation tops: Estimated KB 3185'
Estimated Graded GL 3165'

<u>FORMATION</u>	<u>ESTIMATED TOP FROM KB</u>	<u>ESTIMATED SUBSEA TOP</u>	<u>BEARING</u>
B/Rustler	540'	+2645	Water
T/Capitan Reef	935'	+2250	Water
B/Capitan Reef and			
T/Delaware Mtn Group	2835'	+350	Oil/Gas/Wtr
T/Bone Spring Formation	5660'	-2475	Oil/Gas
T/Wolfcamp Formation	9160'	-5975	Oil/Gas
T/Strawn Formation	10356'	-7171	Oil/Gas
T/Strawn "C" Reservoir	10618'	-7433	Oil/Gas
T/Atoka Formation	10748'	-7563	Oil/Gas
T/Morrow Formation	11328'	-8143	Oil/Gas
T/Me Morrow	11597'	-8412	Oil/Gas
T/Lr Morrow	11828'	-8643	Oil/Gas
TD Morrow Formation	12100'	-8915	Oil/Gas

POINT 3: CASING PROGRAM

<u>TYPE</u>	<u>INTERVALS</u>	<u>PURPOSE</u>	<u>CONDITION</u>
20"	0' - 40'	Conductor	Contr Discretion
11-3/4" 42#/ft H-40 ST&C	0' - 540'	Surface	New and/or Used
8-5/8" 24#/ft K-55 ST&C	0' - 2500'	Intermediate	New and/or Used
8-5/8" 28#/ft S-80 ST&C	2500' - 2835'	Intermediate	New and/or Used
5-1/2" 17#/ft N-80	0' - 6000'	Production	New
5-1/2" 20#/ft N-80	6000' - 12100'	Production	New

POINT 4: PRESSURE CONTROL EQUIPMENT (SEE ATTACHED EXHIBIT A)

A BOP equivalent to a BEPCo II (copy attached), furnished by the contractor will be nipped up on the surface casinghead. A BOP equivalent to a BEPCo IV, furnished by the contractor will be nipped up on the intermediate casinghead. Each entire BOP stack, choke, kill lines, kelly cock, kelly safety valve, inside blowout preventer, etc. will be tested to the rated working pressure of the preventer or casinghead, whichever is less. Both a low pressure (200 psi) and a working pressure test will be required:

- a) Upon initial installation
- b) After any component changes

A function test to insure that the preventers are operating correctly will be performed on each trip, but not more than once per day.

POINT 5: MUD PROGRAM

<u>DEPTH</u>	<u>WT</u>	<u>FUNNEL SEC VISCOSITY</u>	<u>PV</u>	<u>YP</u>	<u>API FLUID LOSS</u>	<u>Ph</u>
0'-540'	8.4-8.8	34-38	NC	NC	NC	NC

Drill the surface hole with a 15" bit using FW spud mud. Maintain a funnel viscosity of 34-38 sec. for adequate hole cleaning. Use ground paper to prevent seepage and filter cake buildup through FW sands. If circulation is lost, well can be drilled blind to casing point.

540'-2835'	8.4-9.0	28-30	NC	NC	NC	9.5
------------	---------	-------	----	----	----	-----

Drill out surface casing with FW. Maintain a funnel viscosity of 28-30 sec. for adequate hole cleaning. Circulation problems are possible in the Capitan Reef. Circulation problems should be combatted by mixing a viscous mud pill of 200-250 bbls with 18-25 ppb of ground paper, cedar fiber and cellophane (kwik-seal) fiber. The paper and cedar fiber should provide a fibrous matrix and the kwik-seal should fill in the gaps and re-establish returns. If returns cannot be re-established after two or three mud pills, dry drill to casing depth with FW.

2835'-12100'	9.2-11.5	34-44	5-11	3-8	NC-10	10
--------------	----------	-------	------	-----	-------	----

After intermediate pipe is set, jet & clean the working pits and drill out with cut BW while circulating the steel pits. This cut brine system should be used to drill to +200' above the T/Wolfcamp @ +9160'. At +8860', the drilling mud should be a 10# brine system with 2% KCl and a Ph of 10. Before drilling the T/Wolfcamp, the mud-gas separator and rotating head should be fully operational. Mud density should gradually be brought up to at least a 10.5 ppg before drilling the Strawn. Bring the API fluid loss down to 10 cc before drilling the T/Strawn (1st objective) at 10356'. This water loss control should be maintained to TD. Additional objectives are the Atoka (T/Atoka 10748') and Morrow formations (T/Morrow 11328'). Mud wt should be steadily increased to +10.8 ppg system for the Atoka and a +11.5 ppg system for the Morrow. A small gas flare could be possible from the Atoka to TD. Lost circulation in the Delaware Mtn Group is not expected, but should be anticipated. From 5550' to TD, sack and mark drill cuttings. The FV PV and YP should be varied to provide good formation samples for the company geologist and/or mud logger.

POINT 6: TECHNICAL STAGES OF OPERATION

A: Testing

As drilling shows merit within the Strawn and Atoka

B: Logging

<u>Run No.</u>	<u>Tool</u>	<u>Interval</u>	<u>Status</u>
1 @ 12100'	GR-DLL-MSFL (Caliper & Tension)	TD to intermediate csg	Definite
2 @ 12100'	GR-Neu-Lithodensity (Cal & Tension)	TD to intermediate csg	Definite

C: Coring

No cores are anticipated on this well

D: Cement

<u>Interval</u>	<u>Amount</u> sxs	<u>Ft of</u> <u>Fill</u>	<u>Type</u>	<u>Gal/sx</u>	<u>ppg</u>	<u>Ft³/sx</u>
Surface	*340 (75% excess)	540	Class "C" Neat w/ 2% CaCl ₂ & 1/4 ppg flocele	6.3	14.8	1.32
Intermediate						
Stage 1						
Lead	150	1085	Lite cmt w/ 1/4 #/sx LCM	9.9	12.7	1.84
Tail	100	520	Class "C" Neat w/ 1/4 sx LCM	6.3	14.8	1.32
DV Tool set @ 1100'						
Stage 2						
Lead	**200 (100% excess)	725	Lite cmt w/ 1/4 #/sx LCM	9.9	12.7	1.84
Tail	**150 (100% excess)	390	Class "C" Neat w/ 1/4 sx LCM	6.3	14.8	1.32
Production						
Lead	***200 (20% excess)	1700	Lite w/ 3% KCl & additives	9.9	12.7	1.84
Tail	***500 (20% excess)	3050	Class "H" w/ 3% KCl & additives	5.18	15.7	1.19

* Cmt must circulate or be topped off. If circulation is lost before cmt job, use 200% excess.

** Cmt must circulate on second stage or be topped off.

*** Volume should be verified from caliper log TOC (Class "H") should be brought back to above T/Wolfcamp @ 9160'.

POINT 7: ANTICIPATED RESERVOIR CONDITIONS

No abnormal pressures or temperatures are anticipated.

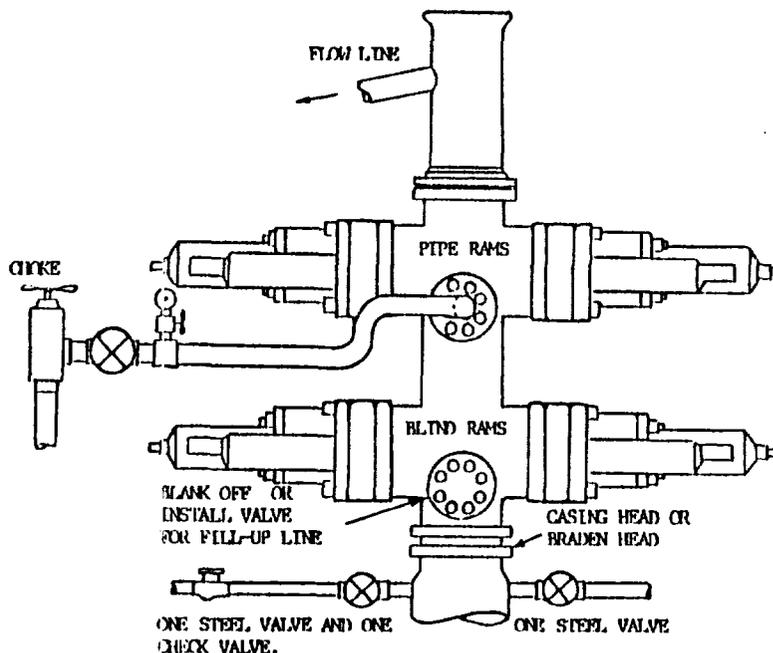
POINT 8: OTHER PERTINENT INFORMATION:

A: Auxiliary Equipment

A kelly cock will be utilized and a full opening stab in valve will be on the rig floor.

B: Anticipated Starting Date

As yet undetermined.

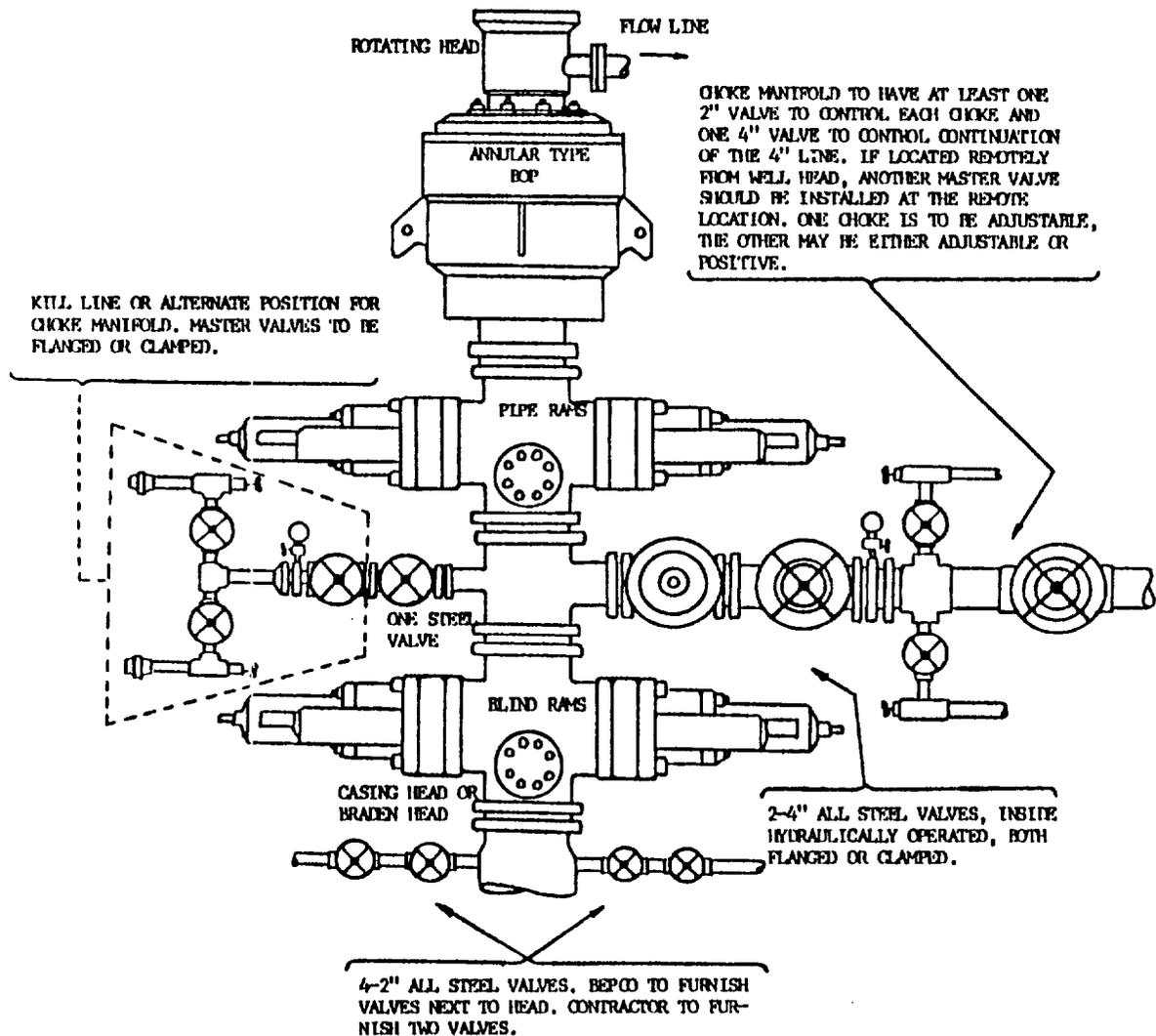


THE FOLLOWING CONSTITUTE MINIMUM BLOWOUT PREVENTER REQUIREMENTS

- A. One double gate blowout preventer with lower rams blind and upper rams for pipe, all hydraulically controlled.
- B. Opening on preventers between rams to be flanged, studded or clamped and at least two inches diameter.
- C. All connections from operating manifold to preventers to be all steel hose or tube a minimum of one inch in diameter.
- D. The available closing pressure shall be at least 15% in excess of that required with sufficient volume to operate (close, open, and re-close) the preventers.
- E. All connections to and from preventers to have a pressure rating equivalent to that of the TOP's.
- F. Manual controls to be installed before drilling cement plug.
- G. Valve to control flow through drill pipe to be located on rig floor.
- H. Choke may be either positive or adjustable. Choke spool may be used between rams.

BEPOD II .

ONE HYDRAULIC DUAL BLOWOUT PREVENTER

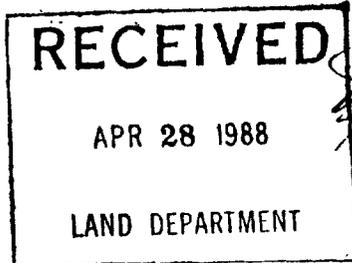


THE FOLLOWING CONSTITUTE MINIMUM BLOWOUT PREVENTER REQUIREMENTS

- A. Conditions may be met with an annular type blowout preventer and pipe ram type blowout preventer above a choke spool, and a blind ram below the choke spool.
- B. Opening on choke spool to be flanged, studded or clamped.
- C. All connections from operating manifolds to preventers to be all steel hose or tube a minimum of one inch in diameter.
- D. The available closing pressure shall be at least 15% in excess of that required with sufficient volume to operate (close, open, and re-close) the preventers.
- E. All connections to and from preventer to have a pressure rating equivalent to that of the BOP's.
- F. Manual controls to be installed before drilling cement plug.
- G. Kelly cock to be installed on kelly.
- H. Inside blowout preventer to be available on rig floor.
- I. Dual operating controls: one located by drillers position and the other located a safe distance from the rig floor.

BEPOD IV

THREE CLOSURE HYDRAULIC BLOWOUT PREVENTERS



SPECIAL DRILLING STIPULATIONS

THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN

OPERATORS NAME BASS ENTERPRISES PRODUCTION CO WELL NO. & NAME Big Eddy Unit No. 102
LOCATION 1980 F S L & 1980 F W L SEC. 30, T. 21 S., R. 28 E.
LEASE NO. LC-059365 COUNTY Eddy

The special stipulations check marked below are applicable to the above described well and approval of this application to drill is conditioned upon compliance with such stipulations in addition to the General Requirements. The permittee should be familiar with the General Requirements, a copy of which is available from a Bureau of Land Management office. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE STIPULATIONS PURSUANT TO TITLE 43 CFR 3165.3 and 3165.4.

I. SPECIAL ENVIRONMENT REQUIREMENTS

- () Lesser Prairie Chicken (Stips attached) () Floodplain (Stips attached)
- () San Simon Swale (Stips attached) () Other _____

II. ON LEASE - SURFACE REQUIREMENTS PRIOR TO DRILLING

(✓) The BLM will monitor construction of this drill site. Notify the Carlsbad Resource Area Office, BLM at least 2 working days prior to commencing construction at (505) 887-6544.

(✓) Roads and the drill pad for this well must be surfaced with 6 inches of compacted caliche.

() All topsoil and vegetation encountered during the construction of the drill site area will be stockpiled and made available for resurfacing of the disturbed area after completion of the drilling operation. Topsoil on the subject location is approximately _____ inches in depth. Approximately _____ cubic yards of topsoil material will be stockpiled for reclamation.

() Other

III. DRILLING OPERATIONS REQUIREMENTS [CAPITAN CONTROLLED WATER BASIN]

The Bureau of Land Management office is to be notified at (505) 887-6544, in sufficient time for a representative to witness:

- (✓) 1. Spudding (✓) 2. Cement casing 1 3/4 inch 8 5/8 inch 5 1/2 inch
- (✓) 3. BOP tests () Other

IV. CASING

(✓) 1 3/4" surface casing should be set @ ±1540' in the Rustler Anhydrite and cement circulated to the surface. If cement does not circulate to the surface, this BLM office will be notified and a temperature survey or cement bond log will be run to verify the top of the cement. Remedial cementing will be done prior to drilling out of that string.

(✓) Minimum required fill of cement behind the 8 5/8" intermediate casing is to circulate to the surface.

(✓) Minimum required fill of cement behind the 5 1/2" production casing is to tie back past top of Wolfcamp @ ±9160'.

Lease
BLM ~~Serial~~ Number 2C-059365
Company Reference Bass Enterprises
Big Eddy Unit #102

STANDARD STIPULATIONS FOR PERMANENT RESOURCE ROADS IN THE ROSWELL DISTRICT, BLM

The holder/grantee/permittee shall hereafter be identified as the holder in these stipulations. The Authorized Officer is the person who approves the Application for Permit to Drill (APD) and/or Right-of-Way (ROW).

GENERAL REQUIREMENTS

The holder shall minimize disturbance to existing fences and other improvements on public domain surface. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will make a documented good-faith effort to contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence.

Holder agrees to comply with the following stipulations:

1. ROAD WIDTH AND GRADE

The road will have a driving surface of 14 feet (all roads shall have a minimum driving surface of 12 feet, unless local conditions dictate a different width). The maximum grade is 10 percent unless the box below is checked. Maximum width of surface disturbance from construction will be 30 feet.

Those segments of road where grade is in excess of 10% for more than 300 feet shall be designed by a professional engineer.

2. CROWNING AND DITCHING

Crowning with materials on site and ditching on one side of the road on the uphill side will be required. The road cross-section will conform to the cross section diagrams in figure 1. If conditions dictate, ditching may be required for both sides of the road; if local conditions permit, a flat-bladed road may be considered (if these conditions exist, check the appropriate box below). The crown shall have a grade of approximately 2% (i.e., 1" crown on a 12' wide road).

Ditching will be required on both sides of the roadway as shown on the attached map or as staked in the field.

Flatblading is authorized on segment(s) delineated on the attached map.

3. DRAINAGE

Drainage control shall be ensured over the entire road through the use of borrow ditches, outsloping, insloping, natural rolling topography, turn-out (lead-off) ditches, culverts, and/or drainage dips.

A. All turnout ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval for turnout ditches shall be determined according to the following table, but may be amended depending upon existing soil types and centerline road slope (in %):

SPACING INTERVAL FOR TURNOUT DITCHES

Percent slope	Spacing interval
0 - 4%	150' - 350'
4 - 6%	125' - 250'
6 - 8%	100' - 200'
8 - 10%	75' - 150'

TYPICAL TURNOUT DITCH

1' MINIMUM DEPTH

NATURAL GROUND SURFACE

BERM

For this road the spacing interval for turnout ditches shall be:

At locations staked in the field.

At locations delineated on the attached map.

At every 300 feet.

B. Culvert pipes shall be used for cross drains where drainage dips or low water crossings are not feasible. The minimum culvert diameter must be 18 inches. Any culvert pipe installed shall be of sufficient diameter to pass the anticipated flow of water. Culvert location and required diameter are shown on the attached map. (Further details can be obtained from the Roswell District office or the appropriate Resource Area office.)

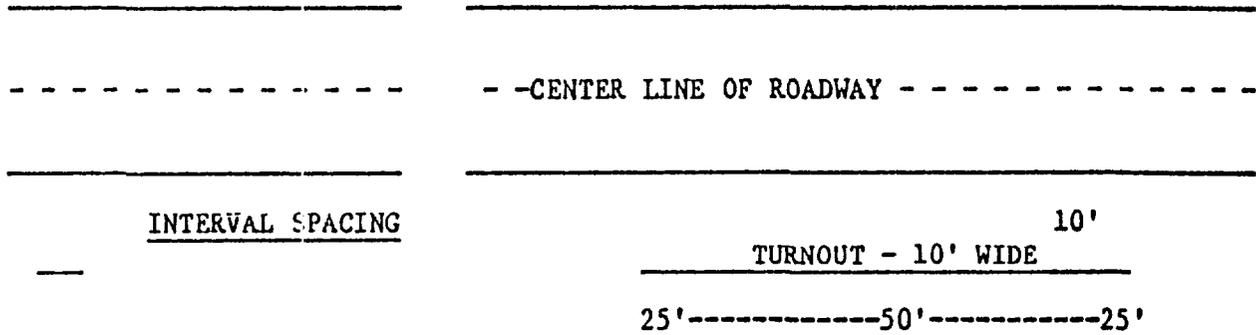
C. On road slopes exceeding 2%, drainage dips shall drain water into an adjacent turnout ditch. Drainage dip location and spacing shall be determined by the formula:

$$\text{spacing interval} = \frac{400'}{\text{road slope in \%}} + 100'$$

Ex. 4% slope: spacing interval = $\frac{400}{4} + 100 = 200$ feet

4. TURNOUTS

Unless otherwise approved by the Authorized Officer, vehicle turnouts will be required. Turnouts will be located at 2000-foot intervals, or the turnouts will be intervisible, whichever is less. Turnouts will conform to the following diagram.



5. SURFACING

Surfacing of the road or those portions identified on the attached map may, at the direction of the authorized officer, be required if necessary to maintain traffic within the right-of-way with caliche, gravel or other surfacing material which shall be approved by the authorized officer. When surfacing is required, surfacing material will be compacted to a minimum thickness of 6 inches with Caliche material. The width of surfacing shall be no less than the driving surface. Prior to using any mineral materials from an existing or proposed Federal source, authorization must be obtained from the Authorized Officer.

6. CATTLEGUARDS

Where used, all cattleguard grids and foundation designs and construction shall meet the American Association of State Highway and Transportation Officials (AASHTO) Load Rating H-20, although AASHTO U-80 rated grids shall be required where heavy loads, (exceeding H-20 loading,) are anticipated. (See BLM standard drawings for cattleguards). Cattleguard grid length shall not be less than 8 feet and width of not less than 14 feet. A wire gate (16-foot minimum width) will be provided on one side of the cattleguard unless requested otherwise by the surface user.

7. MAINTENANCE

The holder shall maintain the road in a safe, usable condition. A maintenance program shall include, but not be limited to blading, ditching, culvert installation, culvert cleaning, drainage installation, cattleguard maintenance, and surfacing.

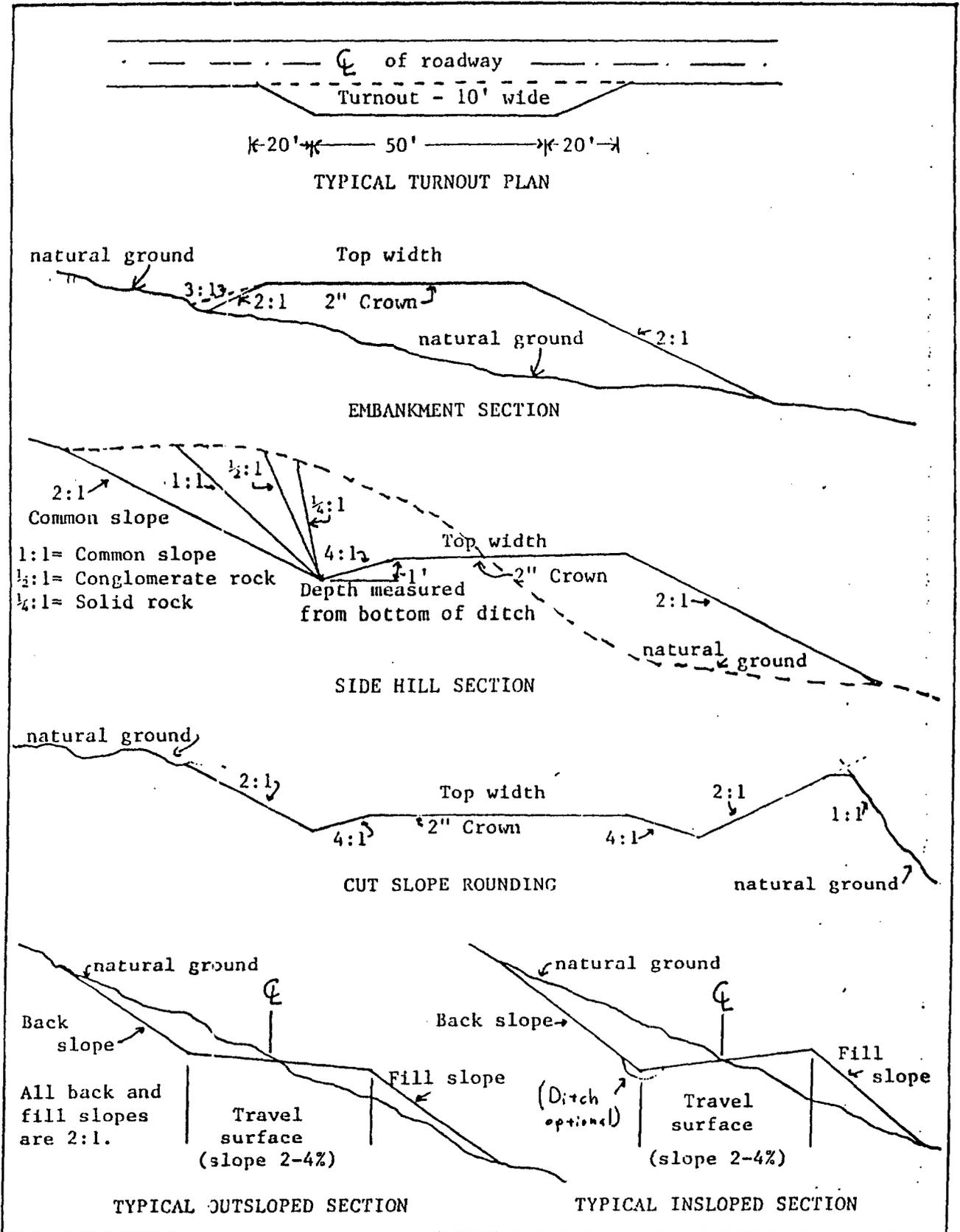
8. PUBLIC ACCESS

Public access along this road will not be restricted by the holder without specific written approval being granted by the Authorized Officer. Gates or cattleguards on public lands will not be locked or closed to public use unless closure is specifically determined to be necessary and is authorized in writing by the Authorized Officer.

9. SPECIAL STIPULATIONS: *where road reconstruction ~~goes~~ of 2-track enters rancher gate - Set cattleguard east of gate area.*

FIGURE 1: CROSS-SECTIONS AND PLANS FOR TYPICAL ROAD CONSTRUCTION REPRESENTATIVE OF BLM RESOURCE, AND HIGHER CLASS, ROADS.

(Travel way, top width, driving surface, and travel surface are synonymous.)



BASS ENTERPRISES PRODUCTION CO.

FIRST CITY BANK TOWER

201 MAIN ST.

FORT WORTH, TEXAS 76102

817/390 8400

April 21, 1988

BUREAU OF LAND MANAGEMENT

P. O. Box 1397

Roswell, New Mexico 88201

Attention: Mr. Joe Lara

COMMISSIONER OF PUBLIC LANDS

State of New Mexico

P. O. Box 1148

Santa Fe, New Mexico 87504-1148

Attention: Mr. Floyd Prando

NEW MEXICO OIL CONSERVATION DIVISION

P. O. Box 2088

Santa Fe, New Mexico 87501

Attention: Mr. Bill LeMay

BEFORE EXAMINER CATANACH	
OIL CONSERVATION DIVISION	
<u>BASS</u>	EXHIBIT NO. <u>20</u>
CASE NO.	<u>9374</u>

**RE: First Amendment to the 1988 Plan of Development
Big Eddy Unit
Eddy and Lea Counties, New Mexico**

Gentlemen:

In accordance with the terms and provisions of Section 10 of the Big Eddy Unit Agreement, dated April 10, 1952, which provides that the Plan of Development may be modified, from time to time, when necessary to meet changing conditions, we propose the following amendment to the 1988 Plan of Development:

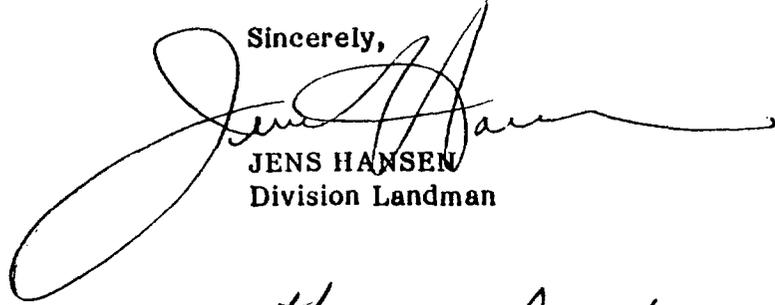
Big Eddy Unit Well No. 102 - Our Plan of Development listed this as a Delaware test to be drilled at an unspecified location. Drilling plans have now been made to drill this well to a depth of 12,100' as a Morrow test at a location 1980' FW&SL in Section 30, T21S-R28E, Eddy County, New Mexico.

Notwithstanding the continuing problems of marketing gas from wells within the Big Eddy Unit, the Big Eddy Unit Well No. 102 will be drilled to primarily test gas bearing formations. The reason the Big Eddy Unit Well No. 102 is being drilled to the Morrow formation is to protect unitized lands within Section 30, T21S-R28E, from being drilled and produced under a plan proposed by the operator of the lands in the SW/4 SW/4 of said Section 30. The SW/4 SW/4 of Section 30 is not dedicated to the Big Eddy Unit, and the lessee under an oil and gas lease covering these lands has proposed the drilling of a well on federal lands at a location in the NW/4 of Section 30 that the unit operator deems imprudent and injurious in (1) the development of unitized lands, and (2) the ultimate recovery of unitized substances. The lands west of and contiguous to Section 30 are not unit lands inasmuch as the west section line of Section 30 is the west boundary of the Big Eddy Unit. The unit operator is scheduled to appear before the New Mexico Oil Conservation Division in order to establish its rights to conduct the necessary operations to protect unitized lands and prevent economic waste.

Bureau of Land Management
Commissioner of Public Lands
New Mexico Oil Conservation Division
April 21, 1988
Page 2

If this First Amendment to the 1988 Plan of Development for the Big Eddy Unit meets with your approval, please so indicate by signing in the appropriate space provided below and return one (1) original signed letter to Bass for its records.

Sincerely,



JENS HANSEN
Division Landman

JH:jh

AGREED TO AND ACCEPTED this 27th day of April, 1988.

BUREAU OF LAND MANAGEMENT

By _____

COMMISSIONER OF PUBLIC LANDS

By _____

NEW MEXICO OIL CONSERVATION DIVISION

By 