

GEOLOGICAL REPORT ON GLOBAL SURVEY UNIT
EDDY COUNTY, NEW MEXICO

by

A.F. FREDERICKSON, PRESIDENT

BEFORE EXAMINER STAMETS OIL CONSERVATION COMMISSION	
EXHIBIT NO.	1
CASE NO.	5758
Submitted by	Applicant
Hearing Date	9-15-76

1 September, 1976

GLOBAL SURVEY, INC.
500 Wichita No. 31
McAllen, Texas 78501

GEOLOGICAL REPORT ON GLOBAL SURVEY UNIT
EDDY COUNTY, NEW MEXICO

by A.F. FREDERICKSON

LOCATION OF PROPOSED UNIT

The proposed Unit is located in Eddy County, New Mexico, in Township 25 South, and includes Sections 1 and 1/2 of 12 in Range 26 East as well as the following six Sections in Range 27 East: 4, 5, 6, 7, 8 and 9. The location and land ownership is shown in Figure 1.

STRUCTURE OF THE PROPOSED UNIT

A detailed seismic map showing the structure on the top of the Devonian is shown in Figure 2. The black dots in the figure indicate the location of the shot points for which depth data are calculated.

The wavy lines indicate the position of lineaments or predicted faults based on a combined study of the regional geology and gravity maps. All of the lines of displacement recognized on the seismic profiles are included in Figure 2.

Construction of the Devonian Structure Map:

Only two good seismic reflectors exist in this portion of the Delaware Basin. The first represents the Lamar limestone or the top of the Delaware. The second, located deep in the section, often consists of three adjacent reflectors. The most consistent one--the middle one--is often taken as the top of the Devonian.

The time interval between the top of the Delaware and the deeper middle reflector is measured and combined with velocity data to give a distance or thickness calculation for the interval.

Because of low velocity and other control problems related to the evaporate section above the Delaware, the seismic depth to the top of the Delaware is unreliable. Since a large number

of Delaware wells have been drilled for Delaware oil, the log tops are picked and a manually-contoured map of the top of the Delaware is constructed. This depth interval is then added to the seismic thickness between the Delaware and the Devonian reflectors to produce a "Devonian Structure" map.

Evaluation:

The above procedures leave a great deal to be desired in terms of reliability because considerable subjectivity is involved in several steps of the map construction process. The "Devonian Structure" map should therefore be looked at in terms of pattern rather than for the precise evaluation of depths.

GEOLOGICAL INTERPRETATION

A good correlation exists between the seismic pattern and gravity profiles over the Prospect Area. This is taken to mean that fault movement has occurred periodically over long time intervals and that certain blocks are often elevated, eroded and elevated again. If this kind of relationship applies to the Devonian, it should also apply to the overlying Pennsylvanian and younger rocks.

The very pronounced erosional unconformity that followed the close of the Devonian prior to the deposition of the Woodford, represented one of the leveling periods. Subsidence followed and large areas were covered by the sea. The sea bottom, however, was disturbed at the end of Barnett (Shale) time and clastics began to develop in the Morrow followed by a lime section.

It is presumed that the faulting or movement in Morrowan time, as it did before and after, followed the old structural patterns and, consequently, had a similar effect on sediment distribution.

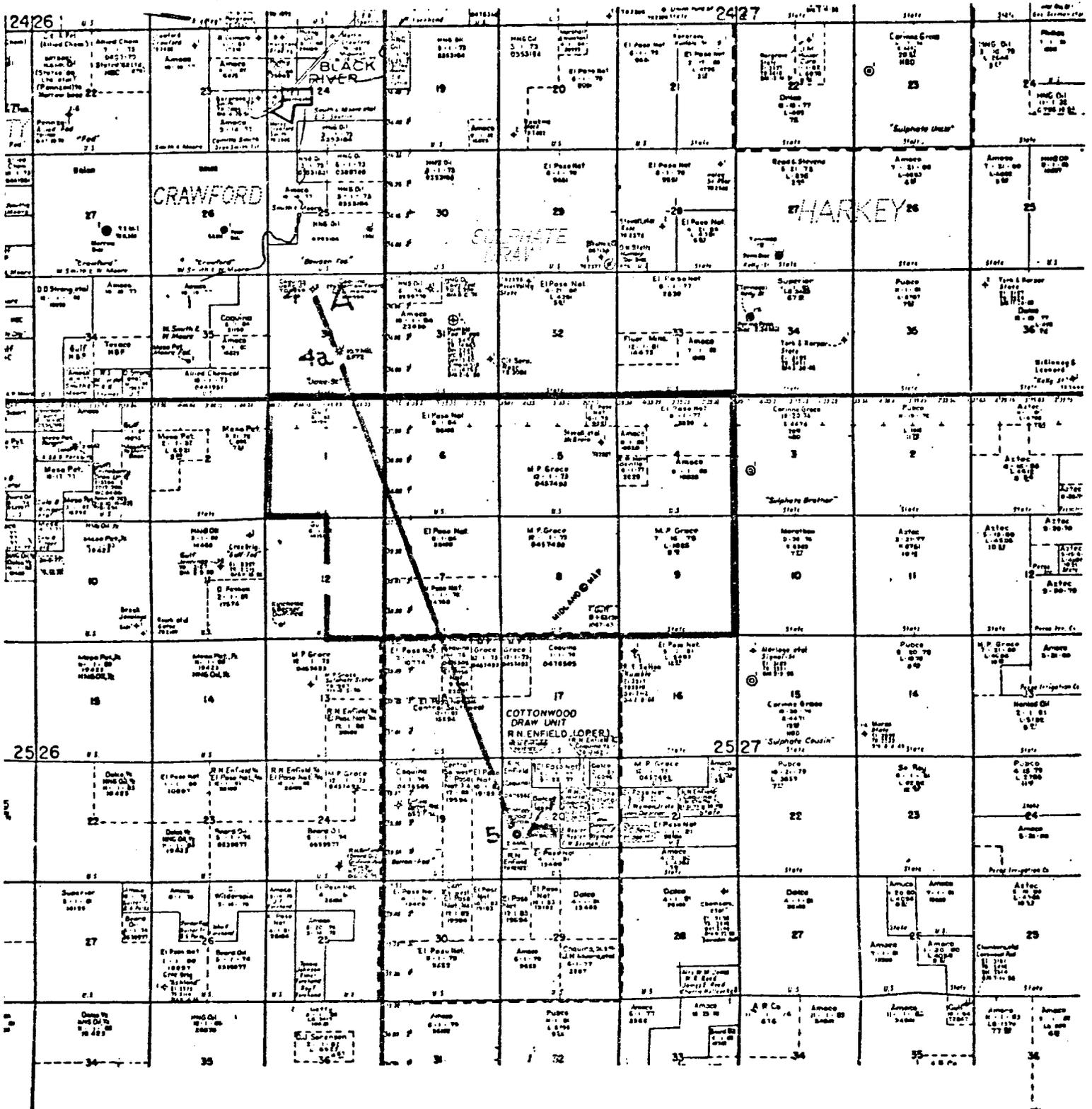
We do not expect to find good Morrow porosity on the top of structural highs (wells 4 and 4a are tight in the Morrow clastics), but will look to the lows for best porosity development as is found in well 5 (where more than 10,000 feet of formation water was recovered, indicating the excellent Morrowan porosity in that location).

As Figure 3 indicates, above the water in well 5 and below the pinchout in wells 4 and 4a should exist significant quantities of Morrowan gas.

In addition, Atoka production is found in well 4a but the same interval was tight in well 4, indicating that Atoka porosity is just beginning to develop in the area of the Unit. Since significant Atoka production is also found in well 5, it is reasonable to assume that some Atoka will also be found on the Prospect Area between these two producing wells.

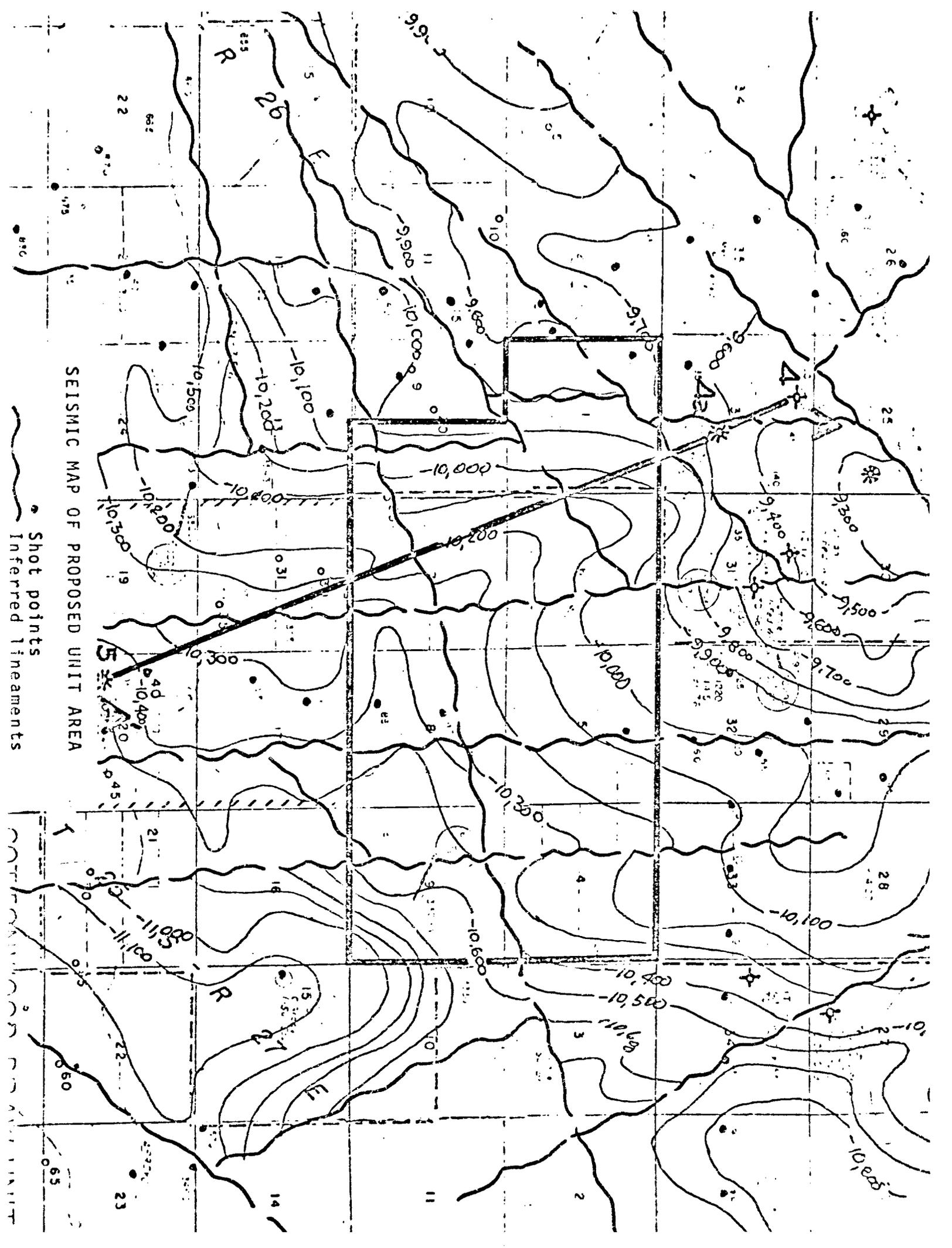
Controlling Structural Features:

A low on Figure 2 extends E-W through Sections 8 and 9 and turns northward through Sections 6 and 7. This low is believed to control the porosity trend in the Morrow. A similar geological pattern is expected to have prevailed during the time clastics were deposited in Morrowan time. Because the Morrow is tilted northward in this area, as is shown in Figure 3, gas is expected along the flanks of the surrounding high, making most of the Proposed Unit Area prospective and part of a consistent geological unit.



Up-to-date Land Ownership Map for Prospect 5

FIGURE 1



SEISMIC MAP OF PROPOSED UNIT AREA

- Shot points
- ~ Inferred lineaments

STRUCTURE ALONG SECTION A-A'

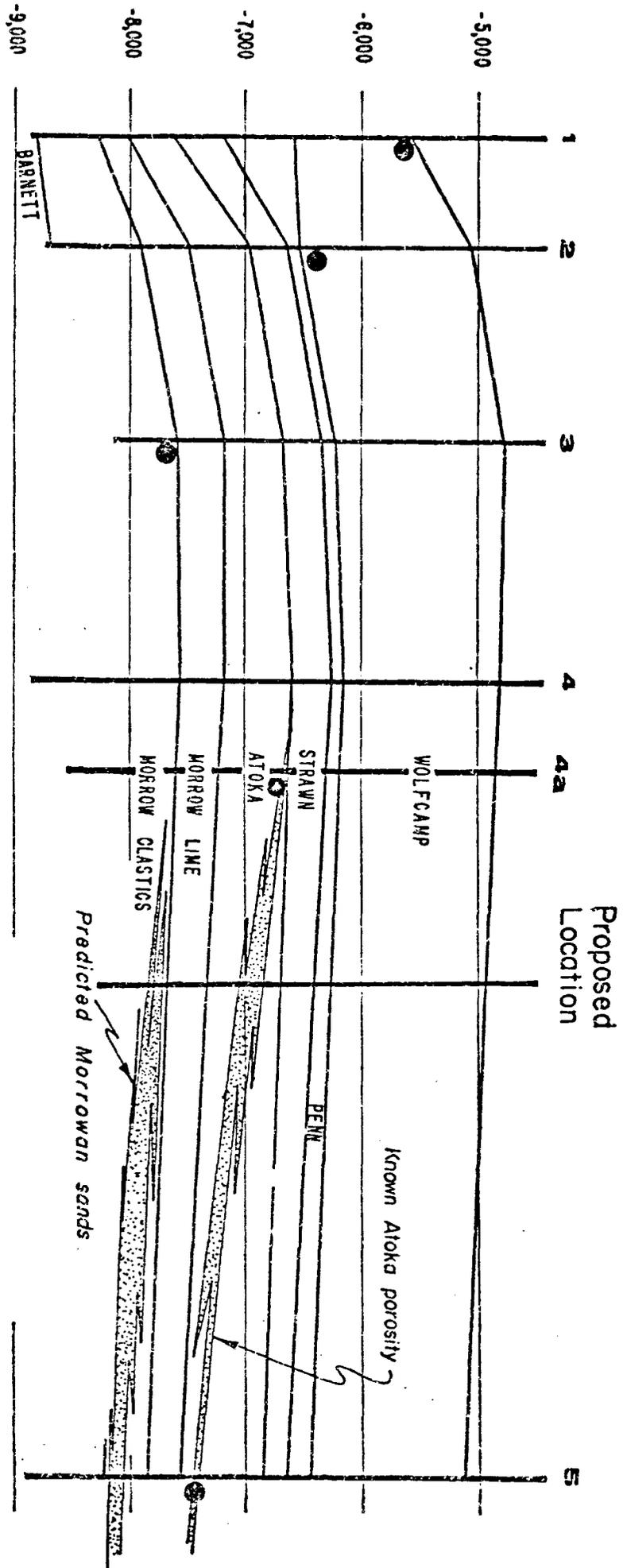


FIGURE 3

1 UNIT AGREEMENT 1

2 FOR THE DEVELOPMENT AND OPERATION 2

3 OF THE 3

4 GLOBAL SURVEY UNIT AREA 4

5 COUNTY OF EDDY 5

6 STATE OF NEW MEXICO 6

7 NO. _____ 7

8 THIS AGREEMENT, entered into as of the 1st day of September, 8
9 1976, by and between the parties subscribing, ratifying or 9
10 consenting hereto or herein referred to as the "parties hereto", 10

11 W I T N E S S E T H : 11

12 WHEREAS, the parties hereto are the owners of working, 12
13 royalty or other oil and gas interests in the Unit Area subject 13
14 to this Agreement; and 14

15 WHEREAS, the Mineral Leasing Act of February 25, 1920, 15
16 41 Stat. 437, as amended, 30 USC Secs. 181, et seq., 16
17 authorizes federal lessees and their representatives to unite 17
18 with each other, or jointly or separately with others, in 18
19 collectively adopting and operating a cooperative or unit plan 19
20 of development or operation of any oil or gas pool, field or 20
21 like area, or any part thereof for the purpose of more properly 21
22 conserving the natural resources thereof whenever determined 22
23 and certified by the Secretary of the Interior to be necessary 23
24 or advisable in the public interest; and 24

25 WHEREAS, the Commissioner of Public Lands of the State of 25
26 New Mexico is authorized by an Act of the Legislature (Sec. 7-11-39 26
27 N.M. Statutes 1953 Annotated) to consent to or approve this 27
28 Agreement on behalf of the State of New Mexico, insofar as it 28
29 covers and includes lands and mineral interests of the State of 29
30 New Mexico; and 30

1 WHEREAS, the Oil Conservation Commission of the State of 1
2 New Mexico is authorized by an Act of the Legislature (Chapter 72, 2
3 Laws of 1935, as amended by Chapter 193, Laws of 1937, Chapter 166, 3
4 Laws of 1941, and Chapter 168, Laws of 1949) to approve this 4
5 Agreement and the conservation provisions hereof; and, 5

6 WHEREAS, the parties hereto hold sufficient interests in the 6
7 Global Survey Unit Area covering the land hereinafter described 7
8 to give reasonably effective control of operations therein; and, 8

9 WHEREAS, it is the purpose of the parties hereto to conserve 9
10 natural resources, prevent waste, and secure other benefits 10
11 obtainable through development and operation of the area subject 11
12 to this Agreement under the terms, conditions and limitations 12
13 herein set forth; 13

14 NOW, THEREFORE, in consideration of the premises and the 14
15 promises herein contained, the parties hereto commit to this 15
16 Agreement their respective interests in the below-defined Unit 16
17 Area, and agree severally among themselves as follows: 17

18 1. ENABLING ACT AND REGULATIONS. The Mineral Leasing Act 18
19 of February 25, 1920, as amended, supra, and all valid pertinent 19
20 regulations, including operating and unit plan regulations, 20
21 heretofore issued thereunder or valid, pertinent and reasonable 21
22 regulations hereafter issued thereunder are accepted and made a 22
23 part of this Agreement as to Federal lands, provided such 23
24 regulations are not inconsistent with the terms of this Agreement; 24
25 and as to non-Federal lands, the oil and gas operating regulations 25
26 in effect as of the effective date hereof governing drilling and 26
27 producing operations, not inconsistent with the terms hereof or 27
28 the laws of the State in which the non-Federal land is located, 28
29 are hereby accepted and made a part of this Agreement. 29

30 2. UNIT AREA. The following described land is hereby 30
31 designated and recognized as constituting the Unit Area: 31

32 Township 25 South, Range 26 East, N.M.P.M. 32

33 Section 1: Lots 1,2,3,4, N $\frac{1}{2}$ N $\frac{1}{2}$, S $\frac{1}{2}$ 33

34 Section 12: It: 34

Township 25 South, Range 27 East, N.M.P.M.

Section 4: Lots 1,2,3,4, S $\frac{1}{2}$ N $\frac{1}{2}$, S $\frac{1}{2}$ (All)
Section 5: Lots 1,2,3,4, S $\frac{1}{2}$ N $\frac{1}{2}$, S $\frac{1}{2}$ (All)
Section 6: Lots 1,2,3,4,5,6,7, S $\frac{1}{2}$ NE $\frac{1}{4}$,
SE $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$
Section 7: Lots 1,2,3,4, E $\frac{1}{2}$ W $\frac{1}{2}$, E $\frac{1}{2}$
Section 8: All
Section 9: All;

containing 4,780.99 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 when requested by the Commissioner of Public Lands of the State of New Mexico, hereinafter referred to as "Land Commissioner", and not less than five (5) copies of the revised Exhibits shall be filed with the Supervisor and two (2) copies thereof shall be filed with the Land Commissioner, and one (1) copy with the New Mexico Oil Conservation Commission, hereinafter referred to as "State Commission".

1 The above-described unit area shall when practicable be ex- 1.
2 panded to include therein any additional lands or shall be con- 2
3 tracted to exclude lands whenever such expansion or contraction is 3
4 deemed to be necessary or advisable to conform with the purposes 4
5 of this agreement. Such expansion or contraction shall be effected 5
6 in the following manner: 6

7 (a) Unit Operator, on its own motion or on demand of the 7
8 Director of the Geological Survey, hereinafter referred to as 8
9 "Director", or on demand of the Land Commissioner, after preliminary 9
10 concurrence by the Director, shall prepare a notice of proposed 10
11 expansion or contraction describing the contemplated changes in the 11
12 boundaries of the unit area, the reasons therefor, and the proposed 12
13 effective date thereof, preferably, the first day of a month subse- 13
14 quent to the date of notice. 14

15 (b) Said notice shall be delivered to the Supervisor, the 15
16 Land Commissioner and the State Commission, and copies thereof mailed 16
17 to the last known address of each working interest owner, lessee, 17
18 and lessor whose interests are affected, advising that thirty (30) 18
19 days will be allowed for submission to the Unit Operator of any ob- 19
20 jections. 20

21 (c) Upon expiration of the 30-day period provided in the 21
22 preceding item (b) hereof, Unit Operator shall file with the Super- 22
23 visor, the Land Commissioner and the State Commission, evidence of 23
24 mailing of the notice of expansion or contraction and a copy of any 24
25 objections thereto which have been filed with the Unit Operator, to- 25
26 gether with an application in sufficient number, for approval of 26
27 such expansion or contraction and with appropriate joinders. 27

28 (d) After due consideration of all pertinent information, 28
29 the expansion or contraction shall, upon approval by the Supervisor, 29
30 the Land Commissioner, become effective as of the date prescribed in 30
31 the notice thereof. 31

1 (c) All legal subdivisions of lands (i.e., 40 acres by 1
2 Government survey or its nearest lot or tract equivalent; in instan- 2
3 ces of irregular surveys unusually large lots or tracts shall be 3
4 considered in multiples of 40 acres or the nearest aliquot equiva- 4
5 lent thereof), no parts of which are entitled to be in a partici- 5
6 pating area on or before the fifth anniversary of the effective date 6
7 of the first initial participating area established under this unit 7
8 agreement, shall be eliminated automatically from this agreement, 8
9 effective as of said fifth anniversary, and such lands shall no 9
10 longer be a part of the unit area and shall no longer be subject to 10
11 this agreement, unless diligent drilling operations are in progress 11
12 on unitized lands not entitled to participation on said fifth anni- 12
13 versary, in which event all such lands shall remain subject hereto 13
14 for so long as such drilling operations are continued diligently, 14
15 with not more than 90 days' time elapsing between the completion of 15
16 one such well and the commencement of the next such well. All legal 16
17 subdivisions of lands not entitled to be in a participating area 17
18 within 10 years after the effective date of the first initial par- 18
19 ticipating area approved under this agreement shall be automatically 19
20 eliminated from this agreement as of said tenth anniversary. All 20
21 lands proved productive by diligent drilling operations after the 21
22 aforesaid 5-year period shall become participating in the same 22
23 manner as during said 5-year period. However, when such diligent 23
24 drilling operations cease, all nonparticipating lands shall be auto- 24
25 matically eliminated effective as of the 91st day thereafter. The 25
26 unit operator shall within 90 days after the effective date of any 26
27 elimination hereunder, describe the area so eliminated to the satis- 27
28 faction of the Supervisor and the Land Commissioner and promptly 28
29 notify all parties in interest. 29

30 If conditions warrant extension of the 10-year period speci- 30
31 fied in this subsection 2(e), a single extension of not to exceed 2 31

1 years may be accomplished by consent of the owners of 90% of the 1
2 working interests in the current nonparticipating unitized lands 2
3 and the owners of 60% of the basic royalty interests (exclusive 3
4 of the basic royalty interests in the United States) in 4
5 nonparticipating unitized lands with approval of the Director 5
6 and the Land Commissioner, provided such extension application 6
7 is submitted to the Director and the Land Commissioner not later 7
8 than 60 days prior to the expiration of said 10-year period. 8

9 Any expansion of the Unit Area pursuant to this section 9
10 which embraces lands theretofore eliminated pursuant to this 10
11 Subsection 2(e) shall not be considered automatic commitment or 11
12 recommitment of such lands. 12

13 3. UNITIZED LAND AND UNITIZED SUBSTANCES. All land 13
14 committed to this Agreement shall constitute land referred to 14
15 herein as "unitized land" or "land subject to this Agreement". 15
16 All oil and gas in any and all formations of the unitized land 16
17 are unitized under the terms of this Agreement and herein are 17
18 called "unitized substances". 18

19 4. UNIT OPERATOR. Global Survey, Inc. is hereby designated 19
20 as Unit Operator and by signature hereto as Unit Operator, agrees 20
21 and consents to accept the duties and obligations of Unit Operator 21
22 for the discovery, development and production of unitized substances 22
23 as herein provided. Whenever reference is made herein to the Unit 23
24 Operator, such reference means the Unit Operator acting in that 24
25 capacity and not as an owner of interest in unitized substances, and 25
26 the term "working interest owner" when used herein shall include or 26

1 refer to Unit Operator as the owner of a working interest when such 1
2 an interest is owned by it. 2

3 5. RESIGNATION OR REMOVAL OF UNIT OPERATOR. Unit Operator 3
4 shall have the right to resign at any time prior to the establish- 4
5 ment of a participating area or areas hereunder, but such resigna- 5
6 tion shall not become effective so as to release Unit Operator from 6
7 the duties and obligations of Unit Operator and terminate Unit 7
8 Operator's rights as such for a period of 6 months after notice of 8
9 intention to resign has been served by Unit Operator on all working 9
10 interest owners and the Supervisor and the Land Commissioner, and 10
11 until all wells then drilled hereunder are placed in a satisfactory 11
12 condition for suspension or abandonment whichever is required by the 12
13 Supervisor as to Federal lands and the State Commission as to State 13
14 lands, unless a new Unit Operator shall have been selected and 14
15 approved and shall have taken over and assumed the duties and obli- 15
16 gations of Unit Operator prior to the expiration of said period. 16

17 Unit Operator shall have the right to resign in like manner 17
18 and subject to like limitations as above provided at any time a par- 18
19 ticipating area established hereunder is in existence, but, in all 19
20 instances of resignation or removal, until a successor unit operator 20
21 is selected and approved as hereinafter provided, the working inter- 21
22 est owners shall be jointly responsible for performance of the duties 22
23 of unit operator, and shall not later than 30 days before such resig- 23
24 nation or removal becomes effective appoint a common agent to repre- 24
25 sent them in any action to be taken hereunder. 25

26 The resignation of Unit Operator shall not release Unit Oper- 26
27 ator from any liability for any default by it hereunder occurring 27
28 prior to the effective date of its resignation. 28

29 The Unit Operator may, upon default or failure in the perfor- 29
30 mance of its duties or obligations hereunder, be subject to removal 30
31 by the same percentage vote of the owners of working interests as 31

1 herein provided for the selection of a new Unit Operator. Such re- 1
2 moval shall be effective upon notice thereof to the Supervisor and 2
3 the Land Commissioner. 3

4 The resignation or removal of Unit Operator under this agree- 4
5 ment shall not terminate its right, title, or interest as the owner 5
6 of a working interest or other interest in unitized substances, but 6
7 upon the resignation or removal of Unit Operator becoming effective, 7
8 such Unit Operator shall deliver possession of all wells, equipment, 8
9 materials, and appurtenances used in conducting the unit operations 9
10 to the new duly qualified successor Unit Operator or to the common 10
11 agent, if no such new Unit Operator is elected, to be used for the 11
12 purpose of conducting unit operations hereunder. Nothing herein 12
13 shall be construed as authorizing removal of any material, equip- 13
14 ment and appurtenances needed for the preservation of any wells. 14

15 6. SUCCESSOR UNIT OPERATOR. Whenever the Unit Operator shall 15
16 tender his or its resignation as Unit Operator or shall be removed 16
17 as hereinabove provided, or a change of Unit Operator is negotiated 17
18 by working interest owners, the owners of the working interests in 18
19 the participating area or areas according to their respective acre- 19
20 age interests in such participating area or areas, or, until a par- 20
21 ticipating area shall have been established, the owners of the 21
22 working interests according to their respective acreage interests 22
23 in all unitized land, shall by majority vote select a successor Unit 23
24 Operator: Provided, That, if a majority but less than 75 per cent 24
25 of the working interests qualified to vote are owned by one party 25
26 to this agreement, a concurring vote of one or more additional work- 26
27 ing interest owners shall be required to select a new operator. 27
28 Such selection shall not become effective until 28

29 (a) a Unit Operator so selected shall accept in writing the 29
30 duties and responsibilities of Unit Operator, and 30

31 (b) the selection shall have been approved by the Supervisor 31

1 and approved by the Land Commissioner. 1

2 If no successor Unit Operator is selected and qualified as 2
3 herein provided, the Director and the Land Commissioner, at their 3
4 election may declare this unit agreement terminated. 4

5 7. ACCOUNTING PROVISIONS AND UNIT OPERATING AGREEMENT. If 5
6 the Unit Operator is not the sole owner of working interests, costs 6
7 and expenses incurred by Unit Operator in conducting unit operations 7
8 hereunder shall be paid and apportioned among and borne by the 8
9 owners of working interests, all in accordance with the agreement 9
10 or agreements entered into by and between the Unit Operator and the 10
11 owners of working interests, whether one or more, separately or 11
12 collectively. Any agreement or agreements entered into between the 12
13 working interest owners and the Unit Operator as provided in this 13
14 section, whether one or more, are herein referred to as the "unit 14
15 operating agreement." Such unit operating agreement shall also 15
16 provide the manner in which the working interest owners shall be 16
17 entitled to receive their respective proportionate and allocated 17
18 share of the benefits accruing hereto in conformity with their 18
19 underlying operating agreements, leases, or other independent con- 19
20 tracts, and such other rights and obligations as between Unit 20
21 Operator and the working interest owners as may be agreed upon by 21
22 Unit Operator and the working interest owners; however, no such 22
23 unit operating agreement shall be deemed either to modify any of 23
24 the terms and conditions of this unit agreement or to relieve the 24
25 Unit Operator of any right or obligation established under this 25
26 unit agreement, and in case of any inconsistency or conflict be- 26
27 tween this unit agreement and the unit operating agreement, this 27
28 unit agreement shall govern. Three true copies of any unit opera- 28
29 ting agreement executed pursuant to this section should be filed 29
30 with the Supervisor and two true copies with the Land Commissioner, 30
31 prior to approval of this unit agreement. 31

8. RIGHTS AND OBLIGATIONS OF UNIT OPERATOR. Except as
otherwise specifically provided herein, the exclusive right,
privilege and duty of exercising any and all rights of the parties
hereto which are necessary or convenient for prospecting for,
producing, storing, allocating and distributing the unitized
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. Within six (6) months after the
effective date hereof, the Unit Operator shall begin to drill an
adequate test well at a location approved by the Supervisor, if on
Federal land, or by the Land Commissioner, if on State land, unless
on such effective date a well is being drilled conformably with the
terms hereof, and thereafter continue such drilling diligently to
a depth sufficient to penetrate the Upper Mississippian (Barnett
Shale) formation, or until a lesser depth unitized substances
shall be discovered which can be produced in paying quantities
(to-wit: quantities sufficient to repay the costs of drilling and
producing operations, with a reasonable profit) or the Unit
Operator shall at any time establish to the satisfaction of the
Supervisor if on Federal land, or the Land Commissioner if on
State land, that further drilling of said well would be unwarranted
or impracticable; provided, however, shall not in any event be
required to drill said well to a depth in excess of 12,500 feet.

Until the discovery of a deposit of unitized sub-

stances capable of being produced in paying quantities, the Unit Operator shall continue drilling diligently one well at a time, allowing not more than six (6) 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 it be on Federal land or of the Land Commissioner if on State land, or until it is reasonably proved that the unitized land is incapable of producing unitized substances in paying quantities in the formations 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 continue any drilling during the period pending such resignation becoming effective in order to comply with the requirements of this section. The Director and Land Commissioner may modify the drilling requirements of this section by granting reasonable extensions of time when, in their opinion, such action is warranted.

Upon failure to commence any well provided for in this section within the time allowed, including any extension of time granted by the Supervisor and the Land Commissioner, this agreement will automatically terminate; upon failure to continue drilling diligently any well commenced hereunder, the Supervisor and the Land Commissioner may, after 15-days notice to the Unit Operator, 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 and the Land Commissioner an acceptable plan of development and operation for the unitized land which, when approved by the Supervisor and the Land Commissioner, shall constitute the further drilling and operating obligations of the Unit

1 Operator under this agreement for the period specified therein. 1

2 Thereafter, from time to time before the expiration of any existing 2
3 plan, the Unit Operator shall submit for the approval of the Super- 3
4 visor and the Land Commissioner a plan for an additional specified 4
5 period for the development and operation of the unitized land. 5

6 Any plan submitted pursuant to this section shall provide for 6
7 the exploration of the unitized area and for the diligent drilling 7
8 necessary for determination of the area or areas thereof capable of 8
9 producing unitized substances in paying quantities in each and every 9
10 productive formation and shall be as complete and adequate as the 10
11 Supervisor and the Land Commissioner may determine to be necessary 11
12 for timely development and proper conservation of the oil and gas 12
13 resources of the unitized area and shall: 13

14 (a) specify the number and locations of any wells to be 14
15 drilled and the proposed order and time for such drilling; and 15

16 (b) to the extent practicable specify the operating practices 16
17 regarded as necessary and advisable for proper conservation of 17
18 natural resources. 18

19 Separate plans may be submitted for separate productive zones, sub- 19
20 ject to the approval of the Supervisor and the Land Commissioner. 20

21 Plans shall be modified or supplemented when necessary to meet 21
22 changed conditions or to protect the interests of all parties to 22
23 this agreement. Reasonable diligence shall be exercised in comply- 23
24 ing with the obligations of the approved plan of development. The 24
25 Supervisor and the Land Commissioner are authorized to grant a 25
26 reasonable extension of the 6-month period herein prescribed for 26
27 submission of an initial plan of development where such action is 27
28 justified because of unusual conditions or circumstances. After com- 28
29 pletion hereunder of a well capable of producing any unitized sub- 29
30 stance in paying quantities, no further wells, except such as may 30
31 be necessary to afford protection against operations not under this 31

1 agreement and such as may be specifically approved by the Supervisor 1
2 and the Land Commissioner, shall be drilled except in accordance 2
3 with a plan of development approved as herein provided. 3

4 11. PARTICIPATION AFTER DISCOVERY. Upon completion of a well 4
5 capable of producing unitized substances in paying quantities or as 5
6 soon thereafter as required by the Supervisor or the Land Commission- 6
7 er, the Unit Operator shall submit for approval by the Supervisor 7
8 and the Land Commissioner a schedule, based on subdivisions of the 8
9 public-land survey or aliquot parts thereof, of all land then re- 9
10 garded as reasonably proved to be productive in paying quantities; 10
11 all lands in said schedule on approval of the Supervisor and the Land 11
12 Commissioner to constitute a participating area, effective as of the 12
13 date of completion of such well or the effective date of this unit 13
14 agreement, whichever is later. The acreages of both Federal and non- 14
15 Federal lands shall be based upon appropriate computations from the 15
16 courses and distances shown on the last approved public-land survey 16
17 as of the effective date of each initial participating area. Said 17
18 schedule shall also set forth the percentage of unitized substances 18
19 to be allocated as herein provided to each tract in the participating 19
20 area so established, and shall govern the allocation of production 20
21 commencing with the effective date of the participating area. A 21
22 separate participating area shall be established for each separate 22
23 pool or deposit of unitized substances or for any group thereof which 23
24 is produced as a single pool or zone, and any two or more partici- 24
25 pating areas so established may be combined into one, on approval of 25
26 the Supervisor and the Land Commissioner. When production from two 26
27 or more participating areas, so established, is subsequently found 27
28 to be from a common pool or deposit said participating areas shall 28
29 be combined into one effective as of such appropriate date as may be 29
30 approved or prescribed by the Supervisor and the Land Commissioner. 30

31 The participating area or areas so established shall be revised from 31

1 time to time, subject to like approval, to include additional land 1
2 then regarded as reasonably proved to be productive in paying quan- 2
3 tities or necessary for unit operations, or to exclude land then 3
4 regarded as reasonably proved not to be productive in paying quan- 4
5 tities and the schedule of allocation percentages shall be revised 5
6 accordingly. The effective date of any revision shall be the first 6
7 of the month in which is obtained the knowledge or information on 7
8 which such revision is predicated, provided, however, that a more 8
9 appropriate effective date may be used if justified by the Unit 9
10 Operator and approved by the Supervisor and the Land Commissioner. 10
11 No land shall be excluded from a participating area on account of 11
12 depletion of the unitized substances, except that any participating 12
13 area established under the provisions of this unit agreement shall 13
14 terminate automatically whenever all completions in the formation on 14
15 which the participating area is based are abandoned. 15

16 It is the intent of this section that a participating area 16
17 shall represent the area known or reasonably estimated to be produc- 17
18 tive in paying quantities; but, regardless of any revision of the 18
19 participating area, nothing herein contained shall be construed as 19
20 requiring any retroactive adjustment for production obtained prior 20
21 to the effective date of the revision of the participating area. 21

22 In the absence of agreement at any time between the Unit 22
23 Operator and the Supervisor and the Land Commissioner as to the 23
24 proper definition or redefinition of a participating area, or until 24
25 a participating area has, or areas have, been established as pro- 25
26 vided herein, the portion of all payments affected thereby shall be 26
27 impounded in a manner mutually acceptable to the owners of working 27
28 interests and the Supervisor and the Land Commissioner. Royalties 28
29 due the United States shall be determined by the Supervisor for 29
30 Federal lands and the Land Commissioner for State lands and the 30
31 amount thereof shall be deposited, as directed by the Supervisor and 31

1 the Land Commissioner, to be held as unearned money until a 1
2 participating area is finally approved and then applied as earned 2
3 or returned in accordance with a determination of the sum due as 3
4 Federal and State royalty on the basis of such approved partici- 4
5 pating area. 5

6 Whenever it is determined, subject to the approval of the 6
7 Supervisor and the Land Commissioner, that a well drilled under 7
8 this agreement is not capable of production in paying quantities 8
9 and inclusion of the land on which it is situated in a participating 9
10 area is unwarranted, production from such well shall, for the 10
11 purposes of settlement among all parties other than working 11
12 interest owners, be allocated to the land on which the well is 12
13 located unless such land is already within the participating area 13
14 established for the pool or deposit from which such production is 14
15 obtained. Settlement for working interest benefits from such a 15
16 well shall be made as provided in the unit operating agreement. 16

17 12. ALLOCATION OF PRODUCTION. All unitized substances 17
18 produced from each participating area established under this 18
19 agreement, except any part thereof used in conformity with 19
20 good operating practices within the unitized area for drilling, 20
21 operating, camp and other production or development purposes, 21
22 for repressuring or recycling in accordance with a plan of 22
23 development approved by the Supervisor and Land Commissioner, 23
24 or unavoidably lost, shall be deemed to be produced equally on 24
25 an acreage basis from the several tracts of unitized land of 25
26 the participating area established for such production and, for 26
27 the purpose of determining any benefits accruing under this 27
28 agreement, each such tract of unitized land shall have allocated 28
29 to it such percentage of said production as the number of acres 29
30 of such tract included in said participating area bears to the 30
31 total acres of unitized land in said participating area, except 31
32 that allocation of production hereunder for purposes other than 32

1 for settlement of the royalty, shall be on the basis prescribed 1
2 in the unit operating agreement whether in conformity with the 2
3 basis of allocation herein set forth or otherwise. It is hereby 3
4 agreed that production of unitized substances from a participating 4
5 area shall be allocated as provided herein regardless of whether 5
6 any wells are drilled on any particular part or tract of said 6
7 participating area. If any gas produced from one participating 7
8 area is used for repressuring or recycling purposes in another 8
9 participating area, the first gas withdrawn from such last- 9
10 mentioned participating area for sale during the life of this 10
11 agreement shall be considered to be the gas so transferred until 11
12 an amount equal to that transferred shall be so produced for 12
13 sale and such gas shall be allocated to the participating area 13
14 from which initially produced as such area was last defined at 14
15 the time of such final production. 15

16 13. DEVELOPMENT OR OPERATION OF NON-PARTICIPATING LAND OR 16
17 FORMATIONS. Any party hereto owning or controlling the working 17
18 interest in any unitized land having thereon a regular well 18
19 location may with the approval of the Supervisor and the Land 19
20 Commissioner, at such party's sole risk, costs, and expense, drill 20
21 a well to test any formation for which a participating area has 21
22 not been established or to test any formation for which a parti- 22
23 cipating area has been established if such location is not within 23
24 said participating area, unless within 90 days of receipt of 24
25 notice from said party of his intention to drill the well the 25
26 Unit Operator elects and commences to drill such a well in like 26
27 manner as other wells are drilled by the Unit Operator under 27
28 this agreement. 28

29 If any well drilled as aforesaid by a working interest owner 29
30 results in production such that the land upon which it is situated 30
31 and properly be included in a participating area, such participating 31
32 area shall be established or enlarged as provided in this agreement. 32

1 and the well shall thereafter be operated by the Unit Operator in 1
2 accordance with the terms of this agreement and the unit operating 2
3 agreement. 3

4 If any well drilled as aforesaid by a working interest owner 4
5 obtains production in quantities insufficient to justify the in- 5
6 clusion of the land upon which such well is situated in a partici- 6
7 pating area, such well may be operated and produced by the party 7
8 drilling the same subject to the conservation requirements of this 8
9 agreement. The royalties in amount or value of production from any 9
10 such well shall be paid as specified in the underlying lease and 10
11 agreements affected. 11

12 14. ROYALTY SETTLEMENT. The United States and any State 12
13 and any royalty owner who, is entitled to take in kind a share of 13
14 the substances now unitized hereunder shall hereafter be entitled 14
15 to the right to take in kind its share of the unitized substances, 15
16 and Unit Operator, or the working interest owner in case of the 16
17 operation of a well by a working interest owner as herein provided 17
18 for in special cases, shall make deliveries of such royalty share 18
19 taken in kind in conformity with the applicable contracts, laws, 19
20 and regulations. Settlement for royalty interest not taken in kind 20
21 shall be made by working interest owners responsible therefor under 21
22 existing contracts, laws and regulations, or by the Unit Operator, 22
23 on or before the last day of each month for unitized substances 23
24 produced during the preceding calendar month; provided, however, 24
25 that nothing herein contained shall operate to relieve the lessees 25
26 of any land from their respective lease obligations for the pay- 26
27 ment of any royalties due under their leases. 27

28 If gas obtained from lands not subject to this agreement is 28
29 introduced into any participating area hereunder, for use in re- 29
30 pressuring, stimulation of production, or increasing ultimate re- 30
31 covery, in conformity with a plan of operations approved by the 31

1 Supervisor and the Land Commissioner, a like amount of gas, after
2 settlement as herein provided for any gas transferred from any other
3 participating area and with appropriate deduction for loss from any
4 cause, may be withdrawn from the formation into which the gas is
5 introduced, royalty free as to dry gas, but not as to any products
6 which may be extracted therefrom; provided that such withdrawal
7 shall be at such time as may be provided in the approved plan of
8 operations or as may otherwise be consented to by the Supervisor and
9 the Land Commissioner as conforming to good petroleum engineering
10 practice; and provided further, that such right of withdrawal shall
11 terminate on the termination of this unit agreement.

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

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

24 15. RENTAL SETTLEMENT. Rental or minimum royalties due
25 on leases committed hereto shall be paid by working interest owners
26 responsible therefor under existing contracts, laws, and regulations
27 provided that nothing herein contained shall operate to relieve the
28 lessees of any land from their respective lease obligations for the
29 payment of any rental or minimum royalty due under their leases.
30 Rental or minimum royalty for lands of the United States subject to
31 this agreement shall be paid at the rate specified in the respective

1 leases from the United States unless such rental or minimum royalty 1
2 is waived, suspended, or reduced by law or by approval of the Secre- 2
3 tary or his duly authorized representative. 3

4 Rentals on State of New Mexico lands subject to this agree- 4
5 ment shall be paid at the rates specified in the respective leases. 5

6 With respect to any lease on non-Federal land containing pro- 6
7 visions which would terminate such lease unless drilling operations 7
8 are commenced upon the land covered thereby within the time therein 8
9 specified or rentals are paid for the privilege of deferring such 9
10 drilling operations, the rentals required thereby shall, notwith- 10
11 standing any other provision of this agreement, be deemed to accrue 11
12 and become payable during the term thereof as extended by this agree- 12
13 ment and until the required drilling operations are commenced upon 13
14 the land covered thereby or until some portion of such land is in- 14
15 cluded within a participating area. 15

16 16. CONSERVATION. Operations hereunder and production of 16
17 unitized substances shall be conducted to provide for the most econ- 17
18 omical and efficient recovery of said substances without waste, as 18
19 defined by or pursuant to State or Federal law or regulation. 19

20 17. DRAINAGE. The Unit Operator shall take such measures 20
21 as the Supervisor and Land Commissioner deem appropriate and ade- 21
22 quate to prevent drainage of unitized substances from unitized land 22
23 by wells on land not subject to this agreement. 23

24 18. LEASES AND CONTRACTS CONFORMED AND EXTENDED. The terms, 24
25 conditions, and provisions of all leases, subleases, and other con- 25
26 tracts relating to exploration, drilling, development, or operation 26
27 for oil or gas on lands committed to this agreement are hereby ex- 27
28 pressly modified and amended to the extent necessary to make the 28
29 same conform to the provisions hereof, but otherwise to remain in 29
30 full force and effect; and the parties hereto hereby consent that 30
31 the Secretary, as to Federal leases and the Land Commissioner, as to 31

1 State leases, shall and each by his approval hereof, or by the 1
2 approval hereof by his duly authorized representative, does hereby 2
3 establish, alter, change, or revoke the drilling, producing, rental, 3
4 minimum royalty, and royalty requirements of Federal and State 4
5 leases committed hereto and the regulations in respect thereto to 5
6 conform said requirements to the provisions of this agreement, and, 6
7 without limiting the generality of the foregoing, all leases, sub- 7
8 leases, and contracts are particularly modified in accordance with 8
9 the following: 9

10 (a) The development and operation of lands subject to this 10
11 agreement under the terms hereof shall be deemed full performance of 11
12 all obligations for development and operation with respect to each 12
13 and every separately owned tract subject to this agreement, regard- 13
14 less of whether there is any development of any particular tract of 14
15 the unit area. 15

16 (b) Drilling and producing operations performed hereunder 16
17 upon any tract of unitized lands will be accepted and deemed to be 17
18 performed upon and for the benefit of each and every tract of uni- 18
19 tized land, and no lease shall be deemed to expire by reason of 19
20 failure to drill or produce wells situated on the land therein em- 20
21 braced. 21

22 (c) Suspension of drilling or producing operations on all 22
23 unitized lands pursuant to direction or consent of the Secretary and 23
24 the Land Commissioner, or his duly authorized representative, shall 24
25 be deemed to constitute such suspension pursuant to such direction 25
26 or consent as to each and every tract of unitized land. A suspension 26
27 of drilling or producing operations limited to specified lands shall 27
28 be applicable only to such lands. 28

29 (d) Each lease, sublease or contract relating to the ex- 29
30 ploration, drilling, development or operation for oil or gas of 30
31 lands other than those of the United States and State of New Mexico 31

1 committed to this agreement, which, by its terms might expire prior 1
2 to the termination of this agreement, is hereby extended beyond any 2
3 such terms so provided therein so that it shall be continued in full 3
4 force and effect for and during the term of this agreement. 4

5 (e) Any Federal lease for a fixed term of twenty (20) years 5
6 or any renewal thereof or any part of such lease which is made sub- 6
7 ject to this agreement shall continue in force beyond the term pro- 7
8 vided therein until the termination hereof. Any other Federal lease 8
9 committed hereto shall continue in force beyond the term so provided 9
10 therein or by law as to the land committed so long as such lease re- 10
11 mains subject hereto, provided that production is had in paying quan- 11
12 tities under this unit agreement prior to the expiration date of 12
13 the term of such lease, or in the event actual drilling operations 13
14 are commenced on unitized land, in accordance with the provisions 14
15 of this agreement, prior to the end of the primary term of such 15
16 lease and are being diligently prosecuted at that time, such lease 16
17 shall be extended for two years and so long thereafter as oil or gas 17
18 is produced in paying quantities in accordance with the provisions 18
19 of the Mineral Leasing Act Revision of 1960. 19

20 (f) Each sublease or contract relating to the operation 20
21 and development of unitized substances from lands of the United 21
22 States committed to this agreement, which by its terms would expire 22
23 prior to the time at which the underlying lease, as extended by the 23
24 immediately preceding paragraph, will expire, is hereby extended 24
25 beyond any such term so provided therein so that it shall be con- 25
26 tinued in full force and effect for and during the term of the under- 26
27 lying lease as such term is herein extended. 27

28 (g) The segregation of any Federal lease committed to this 28
29 agreement is governed by the following provision in the fourth para- 29
30 graph of Sec. 17(j) of the Mineral Leasing Act, as amended by the 30
31 Act of September 2, 1960 (74 Stat. 781-784): "Any (Federal) lease 31

1 heretofore or hereafter committed to any such (unit) plan embracing 1
2 lands that are in part within and in part outside of the area 2
3 covered by any such plan shall be segregated into separate leases 3
4 as to the lands committed and the lands not committed as of the 4
5 effective date of unitization: Provided, however, That any such 5
6 lease as to the nonunitized portion shall continue in force and 6
7 effect for the term thereof but for not less than two years from 7
8 the date of such segregation and so long thereafter as oil or gas is 8
9 produced in paying quantities." 9

10 (h) Any lease embracing lands of the State of New Mexico 10
11 which is made subject to this agreement, shall continue in force 11
12 beyond the term provided therein as to the lands committed hereto 12
13 until the termination hereof. 13

14 (i) Any lease embracing lands of the State of New Mexico 14
15 having only a portion of its lands committed hereto, shall be segre- 15
16 gated as to the portion committed and the portion not committed, 16
17 and the terms of such lease shall apply separately to such segre- 17
18 gated portions commencing as of the effective date hereof; provided, 18
19 however, notwithstanding any of the provisions of this agreement to 19
20 the contrary any lease embracing lands of the State of New Mexico 20
21 having only a portion of its lands committed hereto shall continue 21
22 in full force and effect beyond the term provided therein as to all 22
23 lands embraced in such lease, if oil or gas is discovered and is 23
24 capable of being produced in paying quantities from some part of 24
25 the lands embraced in such lease at the expiration of the secondary 25
26 term of such lease; or if, at the expiration of the secondary term, 26
27 the lessee or the Unit Operator is then engaged in bona fide drill- 27
28 ing or reworking operations on some part of the lands embraced in 28
29 such lease, the same, as to all lands embraced therein, shall re- 29
30 main in full force and effect so long as such operations are being 30
31 diligently prosecuted, and if they result in the production of oil 31

1 or gas, said lease shall continue in full force and effect as to all 1
2 of the lands embraced therein, so long thereafter as oil or gas in 2
3 paying quantities is being produced from any portion of said lands. 3

4 19. COVENANTS RUN WITH LAND. The covenants herein shall 4
5 be construed to be covenants running with the land with respect to 5
6 the interest of the parties hereto and their successors in interest 6
7 until this agreement terminates, and any grant, transfer, or convey- 7
8 ance, of interest in land or leases subject hereto shall be and here- 8
9 by is conditioned upon the assumption of all privileges and obli- 9
10 gations hereunder by the grantee, transferee, or other successor in 10
11 interest. No assignment or transfer of any working interest, roy- 11
12 alty, or other interest subject hereto shall be binding upon Unit 12
13 Operator until the first day of the calendar month after Unit Opera- 13
14 tor is furnished with the original, photostatic, or certified copy 14
15 of the instrument of transfer. 15

16 20. EFFECTIVE DATE AND TERM. This agreement shall become 16
17 effective upon approval by the Secretary and the Land Commissioner 17
18 or his duly authorized representative, and shall terminate five (5) 18
19 years from said effective date unless 19

20 (a) such date of expiration is extended by the Director 20
21 and the Land Commissioner, or 21

22 (b) it is reasonably determined prior to the expiration of 22
23 the fixed term or any extension thereof that the unitized land is 23
24 incapable of production of unitized substances in paying quantities 24
25 in the formations tested hereunder and after notice of intention to 25
26 terminate the agreement on such ground is given by the Unit Operator 26
27 to all parties in interest at their last known addresses, the agree- 27
28 ment is terminated with the approval of the Supervisor and the Land 28
29 Commissioner, or 29

30 (c) a valuable discovery of unitized substances has been 30
31 made or accepted on unitized land during said initial term or any 31

1 extension thereof, in which event the agreement shall remain in 1
2 effect for such term and so long as unitized substances can be pro- 2
3 duced in quantities sufficient to pay for the cost of producing 3
4 same from wells on unitized land within any participating area es- 4
5 tablished hereunder and, should production cease, so long thereafter 5
6 as diligent operations are in progress for the restoration of pro- 6
7 duction or discovery of new production and so long thereafter as 7
8 unitized substances so discovered can be produced as aforesaid, or 8

9 (d) it is terminated as heretofore provided in this agree- 9
10 ment. This agreement may be terminated at any time by not less than 10
11 75 per centum, on an acreage basis, of the working interest owners 11
12 signatory hereto, with the approval of the Supervisor and the Land 12
13 Commissioner; notice of any such approval to be given by the Unit 13
14 Operator to all parties hereto. 14

15 21. RATE OF PROSPECTING, DEVELOPMENT, AND PRODUCTION. The 15
16 Director is hereby vested with authority to alter or modify from 16
17 time to time in his discretion the quantity and rate of production 17
18 under this agreement when such quantity and rate is not fixed pur- 18
19 suant to Federal or State law or does not conform to any state-wide 19
20 voluntary conservation or allocation program, which is established, 20
21 recognized, and generally adhered to by the majority of operators 21
22 in such State, such authority being hereby limited to alteration or 22
23 modification in the public interest, the purpose thereof and the 23
24 public interest to be served thereby to be stated in the order of 24
25 alteration or modification. Without regard to the foregoing, the 25
26 Director is also hereby vested with authority to alter or modify 26
27 from time to time in his discretion the rate of prospecting and 27
28 development and the quantity and rate of production under this 28
29 agreement when such alteration or modification is in the interest 29
30 of attaining the conservation objectives stated in this agreement 30
31 and is not in violation of any applicable Federal or State law; 31

1 provided further, no such alteration or modification shall be effec- 1
2 tive as to any land of the State of New Mexico as to the rate of 2
3 prospecting and development in the absence of a specific written 3
4 approval thereof by the Commissioner. 4

5 Powers in this section vested in the Director shall only be 5
6 exercised after notice to Unit Operator and opportunity for hearing 6
7 to be held not less than 15 days from notice. 7

8 22. APPEARANCES. Unit Operator shall, after notice to 8
9 other parties affected, have the right to appear for and on behalf 9
10 of any and all interests affected hereby before the Department of 10
11 the Interior and the Commissioner of Public Lands and to appeal 11
12 from orders issued under the regulations of said Department or 12
13 Land Commissioner or to apply for relief from any of said regula- 13
14 tions or in any proceedings relative to operations before the De- 14
15 partment of the Interior or the Land Commissioner or any other 15
16 legally constituted authority; provided, however, that any other 16
17 interested party shall also have the right at his own expense to be 17
18 heard in any such proceeding. 18

19 23. NOTICES. All notices, demands or statements required 19
20 hereunder to be given or rendered to the parties hereto shall be 20
21 deemed fully given if given in writing and personally delivered to 21
22 the party or sent by postpaid registered or certified mail, ad- 22
23 dressed to such party or parties at their respective addresses set 23
24 forth in connection with the signatures hereto or to the ratifica- 24
25 tion or consent hereof or to such other address as any such party 25
26 may have furnished in writing to party sending the notice, demand 26
27 or statement. 27

28 24. NO WAIVER OF CERTAIN RIGHTS. Nothing in this agreement 28
29 contained shall be construed as a waiver by any party hereto of the 29
30 right to assert any legal or constitutional right or defense as to 30
31 the validity or invalidity of any law of the State wherein said unit 31

of lands are located, or of the United States, or regulations
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.

25. UNAVOIDABLE DELAY. All obligations under this Agree-
ment 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 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 accidents, 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.
No unit obligation which is suspended under this section shall
become due less than thirty (30) days after it has been determined
that the suspension is no longer applicable. Determination of
creditable "Unavoidable Delay" time shall be made by the Unit
Operator subject to approval of the Supervisor and the Land
Commissioner.

26. NONDISCRIMINATION. In connection with the performance
of work under this Agreement, the Operator agrees to comply with
all the provisions of Section 202 (1) to (7) inclusive, of
Executive Order 11246 (30 F.R. 12319) as amended, which are
hereby incorporated by reference in this Agreement.

27. LOSS OF TITLE. In the event title to any tract of
unitized land shall fail and the true owner cannot be induced to
join in this Unit Agreement, such tract shall be automatically re-
garded 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, pay-

1 ment or delivery on account thereof may be withheld without liabil- 1
2 ity for interest until the dispute is finally settled; provided, 2
3 that, as to Federal and State land or leases, no payments of funds 3
4 due the United States or the State of New Mexico should be withheld, 4
5 but such funds shall be deposited as directed by the Supervisor and 5
6 such funds of the State of New Mexico shall be deposited as directed 6
7 by the Land Commissioner, to be held as unearned money pending 7
8 final settlement of the title dispute, and then applied as earned 8
9 or returned in accordance with such final settlement. 9

10 Unit Operator as such is relieved from any responsibility 10
11 for any defect or failure of any title hereunder. 11

12 28. NON-JOINDER AND SUBSEQUENT JOINDER. If the owner of 12
13 any substantial interest in a tract within the unit area fails or 13
14 refuses to subscribe or consent to this agreement, the owner of the 14
15 working interest in that tract may withdraw said tract from this 15
16 agreement by written notice delivered to the Supervisor and the 16
17 Land Commissioner and the Unit Operator prior to the approval of 17
18 this agreement by the Supervisor and the Land Commissioner. Any 18
19 oil or gas interests in lands within the unit area not committed 19
20 hereto prior to submission of this agreement for final approval may 20
21 thereafter be committed hereto by the owner or owners thereof sub- 21
22 scribing or consenting to this agreement, and, if the interest is 22
23 a working interest, by the owner of such interest also subscribing 23
24 to the unit operating agreement. After operations are commenced 24
25 hereunder, the right of subsequent joinder, as provided in this 25
26 section, by a working interest owner is subject to such requirements 26
27 or approvals, if any, pertaining to such joinder, as may be pro- 27
28 vided for in the unit operating agreement. After final approval 28
29 hereof, joinder by a non-working interest owner must be consented 29
30 to in writing by the working interest owner committed hereto and 30
31 responsible for the payment of any benefits that may accrue here- 31

1 under in behalf of such non-working interest. A non-working inter- 1
2 est may not be committed to this unit unless the corresponding work- 2
3 ing interest is committed hereto. Joinder to the unit agreement by 3
4 a working-interest owner, at any time, must be accompanied by appro- 4
5 priate joinder to the unit operating agreement, if more than one 5
6 committed working-interest owner is involved, in order for the 6
7 interest to be regarded as committed to this unit agreement. Ex- 7
8 cept as may otherwise herein be provided, subsequent joinders to 8
9 this agreement shall be effective as of the first day of the month 9
10 following the filing with the Supervisor and the Land Commissioner 10
11 of duly executed counterparts of all or any papers necessary to 11
12 establish effective commitment of any tract to this agreement un- 12
13 less objection to such joinder is duly made within 60 days by the 13
14 Supervisor and the Land Commissioner. 14

15 29. COUNTERPARTS. This agreement may be executed in any 15
16 number of counterparts no one of which needs to be executed by all 16
17 parties or may be ratified or consented to by separate instrument in 17
18 writing specifically referring hereto and shall be binding upon all 18
19 those parties who have executed such a counterpart, ratification, 19
20 or consent hereto with the same force and effect as if all such 20
21 parties had signed the same document and regardless of whether or 21
22 not it is executed by all other parties owning or claiming an inter- 22
23 est in the lands within the above-described unit area. 23

24 30. SURRENDER. Nothing in this agreement shall prohibit 24
25 the exercise by any working interest owner of the right to surrender 25
26 vested in such party by any lease, sublease, or operating agreement 26
27 as to all or any part of the lands covered thereby, provided that 27
28 each party who will or might acquire such working interest by such 28
29 surrender or by forfeiture as hereafter set forth, is bound by the 29
30 terms of this agreement. 30

31 If as a result of any such surrender the working interest 31

1 rights as to such lands become vested in any party other than the 1
2 fee owner of the unitized substances, said party may forfeit such 2
3 rights and further benefits from operation hereunder as to said 3
4 land to the party next in the chain of title who shall be and be- 4
5 come the owner of such working interest. 5

6 If as the result of any such surrender or forfeiture working 6
7 interest rights become vested in the fee owner of the unitized sub- 7
8 stances, such owner may: 8

9 (1) Accept those working interest rights subject to this 9
10 agreement and the unit operating agreement; or 10

11 (2) Lease the portion of such land as is included in a 11
12 participating area established hereunder subject to this agreement 12
13 and the unit operating agreement. 13

14 (3) Provide for the independent operation of any part of 14
15 such land that are not then included within a participating area 15
16 established hereunder. 16

17 If the fee owner of the unitized substances does not accept 17
18 the working interest rights subject to this agreement and the unit 18
19 operating agreement or lease such lands as above provided within 19
20 six (6) months after the surrendered or forfeited working interest 20
21 rights become vested in the fee owner, the benefits and obligations 21
22 of operations accruing to such lands under this agreement and the 22
23 unit operating agreement shall be shared by the remaining owners of 23
24 unitized working interests in accordance with their respective 24
25 working interest ownerships, and such owners of working interests 25
26 shall compensate the fee owner of unitized substances in such lands 26
27 by paying sums equal to the rentals, minimum royalties, and royal- 27
28 ties applicable to such lands under the lease in effect when the 28
29 lands were unitized. 29

30 An appropriate accounting and settlement shall be made, for 30
31 all benefits accruing to or payments and expenditures made or in- 31

1 curred on behalf of such surrendered or forfeited working interest 1
2 subsequent to the date of surrender or forfeiture, and payment of 2
3 any moneys found to be owing by such an accounting shall be made as 3
4 between the parties within thirty (30) days. In the event no unit 4
5 operating agreement is in existence and a mutually acceptable agree- 5
6 ment between the proper parties thereto cannot be consummated, the 6
7 Supervisor and the Land Commissioner may prescribe such reasonable 7
8 and equitable agreement as he deems warranted under the circum- 8
9 stances. 9

10 The exercise of any right vested in a working interest owner 10
11 to reassign such working interest to the party from whom obtained 11
12 shall be subject to the same conditions as set forth in this section 12
13 in regard to the exercise of a right to surrender. 13

14 31. TAXES. The working interest owners shall render and 14
15 pay for their account and the account of the royalty owners all 15
16 valid taxes on or measured by the unitized substances in and under 16
17 or that may be produced, gathered and sold from the land subject to 17
18 this contract after the effective date of this agreement, or upon 18
19 the proceeds derived therefrom. The working interest owners on each 19
20 tract shall and may charge the proper proportion of said taxes to 20
21 the royalty owners having interests in said tract, and may currently 21
22 retain and deduct sufficient of the unitized substances or deriva- 22
23 tive products, or net proceeds thereof from the allocated share of 23
24 each royalty owner to secure reimbursement for the taxes so paid. 24
25 No such taxes shall be charged to the United States or the State of 25
26 New Mexico or to any lessor who has a contract with his lessee which 26
27 requires the lessee to pay such taxes. 27

28 32. NO PARTNERSHIP. It is expressly agreed that the re- 28
29 lation of the parties hereto is that of independent contractors and 29
30 nothing in this agreement contained, expressed or implied, nor any 30
31 operations conducted hereunder, shall create or be deemed to have 31

1. created by a partnership or association between the parties
2. hereto or any of them.

3. 33. CONFLICT OF SUPERVISION. Neither the Unit Operator nor
4. the working interest owners, nor any of them, shall be subject to
5. any forfeiture, termination or expiration of any right hereunder
6. or under any leases or contracts subject hereto, or to any
7. penalty or liability on account of delay or failure in whole or
8. in part to comply with any applicable provisions thereof to the
9. extent that the said Unit Operator or working interest owners,
10. or any of them, are hindered, delayed or prevented from complying
11. therewith by reason of failure of the Unit Operator to obtain, in
12. the exercise of due diligence, the concurrence of the proper
13. representatives of the United States and proper representatives
14. of the State of New Mexico in and about any matters or things
15. concerning which it is required herein that such concurrence be
16. obtained. The parties hereto, including the State Commission,
17. agree that all powers and authority vested in the State Commission
18. in and by any provisions of this Agreement are vested in the
19. State Commission and shall be exercised by it pursuant to the
20. provisions of the laws of the State of New Mexico and subject
21. in any case to appeal or judicial review as may now or hereafter
22. be provided by the laws of the State of New Mexico.

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

UNIT OPERATOR AND
WORKING INTEREST OWNER

GLOBAL SURVEY, INC.

Date: _____

By _____

ATTEST:

President
500 Wichita, #31
McAllen, Texas 78501

WORKING INTEREST OWNERS

Date: _____

EL PASO NATURAL GAS COMPANY

ATTEST:

By _____

Secretary

T.W. Bittick, Asst. Vice Pres.
P.O. Box 1492
El Paso, Texas 79978

Date: _____

AMOCO PRODUCTION COMPANY

ATTEST:

By _____

Secretary

Attorney-in-Fact
P.O. Box 3092
Houston, Texas 77001

Date: _____

GULF OIL CORPORATION

ATTEST:

By _____

Secretary

Vice President
P.O. Box 1150
Midland, Texas 79701

Date: _____

Date: _____

STATE OF)
) ss
COUNTY OF)

The foregoing instrument was acknowledged before me this
_____ day of _____, 1976, by _____
President of GLOBAL SURVEY, INC., a Texas corporation,
for and on behalf of said corporation.

My commission expires: _____
Notary Public

STATE OF TEXAS)
) ss
COUNTY OF EL PASO)

The foregoing instrument was acknowledged before me this
_____ day of _____, 1976, by T.W. Bittick, Asst. Vice
President of EL PASO NATURAL GAS COMPANY, a Delaware corporation,
for and on behalf of said corporation.

My commission expires: _____
Notary Public

STATE OF TEXAS)
) ss
COUNTY OF HARRIS)

The foregoing instrument was acknowledged before me this
_____ day of _____, 1976, by _____
Attorney-in-Fact for AMOCO PRODUCTION COMPANY, a Delaware
corporation, for and on behalf of said corporation.

My commission expires: _____
Notary Public

STATE OF)
) ss
COUNTY OF)

The foregoing instrument was acknowledged before me this
_____ day of _____, 1976, by _____
Vice President of GULF OIL COMPANY, a Delaware
corporation, for and on behalf of said corporation.

My commission expires: _____
Notary Public

STATE OF)
) ss
COUNTY OF)

The foregoing instrument was acknowledged before me this
_____ day of _____, 1976, by _____

My commission expires: _____
Notary Public

EXHIBIT "B"
GLOBAL SURVEY UNIT AREA

TRACTS 25 S., R26S., AND 27 E., HOOY COUNTY, NEW MEXICO

BASIC

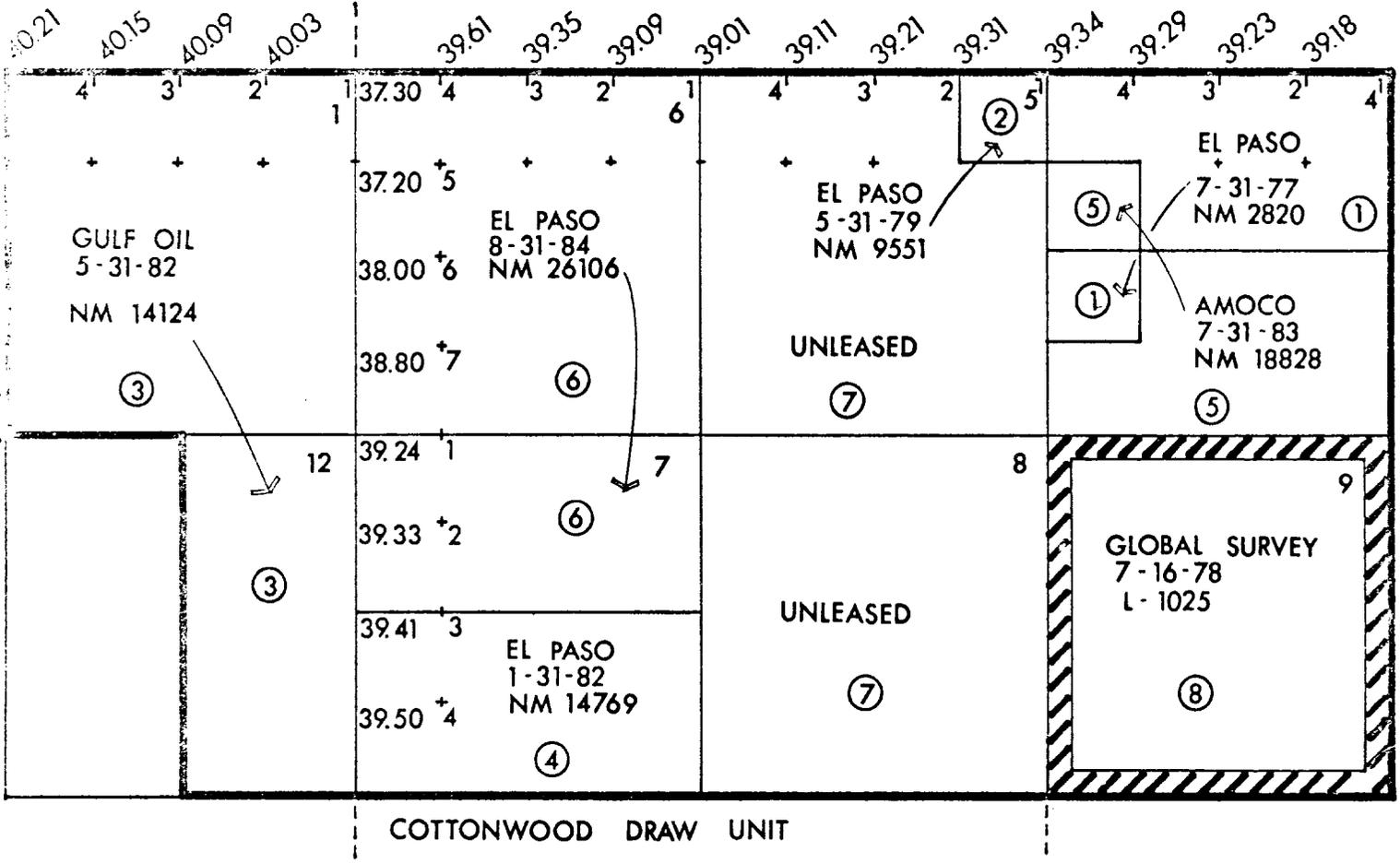
GENERAL NO. & ROYALTY
EXPIRY DATE & FORT
INTEREST OR INCORP

OPERATOR
PERCENTAGE OWNERSHIP
ACRES

TRACT NO.	SECTION	ACRES	GENERAL NO. & EXPIRY DATE	ROYALTY & FORT	INTEREST OR INCORP	OPERATOR	PERCENTAGE OWNERSHIP	ACRES
1	R. 27 E., NMPM: Lots 1, 2, 3, 4, SW $\frac{1}{4}$ SW $\frac{1}{4}$, S $\frac{1}{2}$ SW $\frac{1}{4}$, NW $\frac{1}{4}$ SW $\frac{1}{4}$	317.04	NM 2820 7-31-77	USA - All	EI Paso Natural Gas Co.	HERNANDEZ, R. MANUEL	3%	7.11
2	Sec. 5: Lot 1	39.31	NM 9551 5-31-79	USA - All	EI Paso Natural Gas Co.	DIANOR TORJOSAN	3%	11.11
3	R. 26 E., NMPM: Lots 1, 2, 3, 4, N $\frac{1}{2}$ N $\frac{1}{2}$, S $\frac{1}{2}$ E $\frac{1}{2}$	960.48	NM 14124 5-31-82	USA - All	Gulf Oil Corporation	ROBERT T. MARGUARDT, SR. - 4.5% WILLIAM A. STEVENSON - .5%		11.11
4	R. 27 E., NMPM: Lots 3, 4, E $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$	318.91	NM 14769 1-31-82	USA - All	EI Paso Natural Gas Co.	GEORGE GLOBE - 1.5% C.E. STRANGE - 1.5%		11.11
5	Sec. 4: SW $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$	320.00	NM 18828 7-31-83	USA - All	Amoco Production Co.	DUANE J. MAGEE - 3% CENTRAL SW OIL CORP. - 2%		11.11
6	Sec. 6: Lots 1-7, SE $\frac{1}{4}$ NW $\frac{1}{4}$, S $\frac{1}{2}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$	947.92	NM 26106 8-31-84	USA - All	EI Paso Natural Gas Co.	JAMES M. EDWARDS 6.25%		11.11
7	Sec. 5: Lots 2, 3, 4, S $\frac{1}{2}$ N $\frac{1}{2}$, S $\frac{1}{2}$	1237.33		USA				
TOTAL: UNIT AREAS (7 Tracts):		4140.99	acres = 86.61% of Unit Area					
Sec. 9: All		640.00	L-1025 7-16-78	State NM All	Global Survey, Inc.	MICHAEL P. GRACE 2%		11.11
TOTAL: UNIT AREA (1 Tract):		640.00	acres = 13.39% of Unit Area					
TOTAL: UNIT AREA:		4780.99	acres					

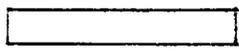
R. 26E.

R. 27E.



GLOBAL SURVEY UNIT

LEGEND

	FEDERAL	4140.99 ACRES	86.61 %
	STATE	640.00 ACRES	13.39 %
	TOTAL	4780.99	
	TRACT NO.		
	UNIT OUTLINE		

EDDY COUNTY, NEW MEXICO
 UNIT OPERATOR:
 GLOBAL SURVEYS, INC.

EXHIBIT "A"