Kellahin, Kellahin and Aubrey

W. THOMAS KELLAHIN KAREN AUBREY

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JASON KELLAHIN OF COUNSEL

April 9, 1991

Mr. William J. LeMay Oil Conservation Division Post Office Box 2088 Santa Fe, New Mexico 87504

HAND DELIVERED

RECEIVED

AL- 1931

Re: Application of Santa Fe Energy Operatifier CONSERVATION DIVISION Partners, L.P. for Compulsory Pooling, Lea County, New Mexico NMOCD Case No. 10211 Order No. R-9480

Application of Hanley Petroleum Inc. for Compulsory Pooling, Lea County, New Mexico NMOCD Case No. 10219 Order No. R-9480

Dear Mr. LeMay:

On behalf of Hanley Petroleum Inc., please find enclosed our Application for a Stay of Division Order R-9480.

The DeNovo hearing on the Commission Hearing Docket is now scheduled for May 9, 1990.

Attorneys for Santa Fe Energy and for Heyco have each informed me they are not opposed to the entry of the Stay Order. A proposed Stay Order is enclosed.

ery truly W. Thomas Kellahin

WTK/tic Enclosure Mr. William J. LeMay April 9, 1991 Page 2

cc: Robert G. Stovall, Esq. (Hand Delivered)
William F. Carr, Esq. (Hand Delivered)
James G. Bruce, Esq. (Fax)
James Rogers (Fax)

1987/ltrt409.215

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

RECEIVED

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

OIL CONSERVATION DIVISION

CASE NOS. 10211 AND 10219 ORDER NO. R-9480

APPLICATION OF SANTA FE ENERGY OPERATING CASE NO. 10211 PARTNERS, L.P. FOR COMPULSORY POOLING, LEA COUNTY, NEW MEXICO.

APPLICATION OF HANLEY PETROLEUM INC. CASE NO. 10219 FOR COMPULSORY POOLING, LEA COUNTY, NEW MEXICO.

> ORDER OF THE DIVISION STAYING ORDER R-9480

BY THE DIVISION:

This matter having come before the Division upon the request of Hanley Petroleum Inc. for a Stay of Division Order 9480 and the Division Director having considered the Request and being fully advised in the premises,

NOW, on this _____ day of April, 1991, the Division Director:

FINDS:

(1) That Division Order R-9480 was entered on March 29, 1991, upon the application of Santa Fe Energy Operating Partners, L.P. for a compulsory pooling order of the Hanley Petroleum Inc. interests.

(2) That on April 8, 1991, Hanley Petroleum Inc. filed with the Division a request for a DeNovo Hearing in this

case which will be set for hearing by the Commission on May 9, 1991.

(3) That pursuant to the terms of the Division Order R-9480 Santa Fe Energy Operating Partners, L.P. has sent to Hanley Petroleum Inc. a notice by which it must make an election to participate in the subject well on or before May 4, 1991.

(4) That unless Division Order R-9480 is stayed, Hanley Petroleum Inc. will be denied a reasonable opportunity to make an election following the entry of an order by the Commission.

(5) That unless Division Order R-9480 is stayed the matters in dispute at the DeNovo Hearing before the Commission will be moot.

(6) That the entry of this order will not adversely affect the correlative rights of any party.

(7) That Hanley has complied with the provision of Division Memorandum 3-85 and has filed its request for a stay on April 10, 1991.

IT IS THEREFORE ORDERED:

(1) That Division Order R-9480 is hereby stayed in its entirety.

(2) That Santa Fe Energy Partners, L.P.'s notification on April 4, 1991 to Hanley Petroleum Inc. of its thirty day election period pursuant to Order 9480 is void and of no effect.

(3) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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

OIL CONSERVATION DIVISION WILLIAM J. LeMAX. Director 1987/ordt409.21

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

RECEIVED

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING: APP 1931 OIL CONSERVATION DIVISION

CASE NOS. 10211 AND 10219 ORDER NO. R-9480

i.

APPLICATION OF SANTA FE ENERGY CASE NO. 10211 OPERATING PARTNERS, L.P. FOR COMPULSORY POOLING, LEA COUNTY, NEW MEXICO.

APPLICATION OF HANLEY PETROLEUM CASE No. 10219 INC. FOR COMPULSORY POOLING, LEA COUNTY, NEW MEXICO.

APPLICATION BY HANLEY <u>PETROLEUM INC. REQUEST</u> FOR A STAY OF DIVISION ORDER R-9480

COMES NOW HANLEY PETROLEUM INC. and in accordance with New Mexico Oil Conservation Division Memorandum No. 3-85 (attached as Exhibit "A") requests the Division to Stay Division Order-9480 which has been appealed DeNovo to the Commission and in support thereof states:

BACKGROUND:

1. On March 7, 1991, the Division held a consolidated hearing of the Hanley pooling case (10219) and the Santa Fe Energy pooling case (10211) before Examiner Jim Morrow.

2. Santa Fe Energy, with a 25% working interest, sought to be operator of a standup 80-acre spacing unit for Wolfcamp oil production with and based upon its geologic evidence proposed the well be located in the south 40-acres at an estimated cost of \$721,942.

3. Hanley Petroleum, with a 50% working interest, sought to the named the operator of the same spacing unit, but based upon its geologic evidence, proposed the well be located in the north 40-acres with the total well estimated to cost \$667,782 and also proposing a split cost allocation between the shallow 40-acre potential production and the deeper 80-acre potential oil production.

4. On March 29, 1991, the Division entered Order R-9480 granting the Santa Fe Energy application and denying the Hanley Petroleum application, a copy of which is attached as Exhibit "B."

5. On April 4, 1991, Santa Fe Energy notified Hanley that it must make an election within 30-days in order to participate in the well to be drilled pursuant to Order R-9480. See Exhibit "C."

6. On April 8, 1991, Hanley, a party adversely affected by Order R-9480, filed its DeNovo Application with the Division. See Exhibit "D."

ARGUMENTS

POINT I

A DENOVO APPLICATION WHEN FILED AUTOMATICALLY MAKES THE EXAMINER ORDER INVALID AND UNENFORCEABLE

<u>DE NOVO</u> means trying the matter anew, the same as if it had not been heard before. See <u>Mason v. World War II</u> <u>Service Compensation Board</u>, 51 N.W. 2d 432. When hearing <u>de novo</u> is granted, it furthermore is as if no decision had previously been rendered. In <u>Horton v. Liberty</u> <u>Mutual Insurance Company</u>, 367 U.S. 348, 6 L.Ed.2d 980, the United States Supreme Court in reviewing a dispute involving a worker's compensation award stated that the lower court was not making an appellate review of the action of the Texas Industrial Accident Board, but that

the proceeding before the lower court had been a trial <u>denovo</u> and as such, the proceeding was to be conducted wholly without reference to what the Board may have decided.

When the Oil Conservation Commission reviews the decision of the Division, it does so without statutory limitations and therefore makes an entirely independent review as if the new hearing was an original proceeding. Section 70-2-13, N.M.S.A. 1978, provides in part:

> ...any party of record adversely affected shall have the right to have the matter heard de novo before the Commission upon application filed with the Division within thirty days from the time any such decision is rendered.

There are no other provisions in statute or Oil Conservation Division Rules which relate to or impose restrictions upon denovo hearings before the Commission.

Therefore, there is nothing which would modify, restrict or give the concept of hearings <u>denovo</u> a unique or unusual meaning as it applies to the hearings before the Oil Conservation Commission.

Since <u>denovo</u> means "anew" and "<u>denovo</u>" proceedings are to be conducted without reference to the previous decision, the filing of an Application for DeNovo automatically makes the examiner order invalid and unenforceable.

POINT II

DIVISION SHOULD GRANT A STAY OF ORDER R-9480 IN ORDER TO PROTECT CORRELATIVE RIGHTS AND TO INSURE DUE PROCESS

Section 70-2-11, N.M.S.A. 1978, empowers the Division "... to do whatever may be reasonably necessary to carry out the purposes of this act, whether or not indicated or specified in any section hereof." Section 70-2-6, N.M.S.A. 1978, defines the Division's powers and duties to include "... authority and control of and over all persons, matters or things necessary or proper to enforce effectively the provisions of this act or any other law of this state relating to the conservation of oil or gas ..."

A court entering an order may stay its execution pending further proceedings in the case. See Rule 62 of the New Mexico Rules of Civil Procedure. In this case, Hanley Petroleum is asking the Division Director, the Hanley's share of Wolfcamp hydrocarbons than the south location granted in the Order.

(3) The Examiner's order failed to make essential finds of ultimate facts concerning dispute over which party's AFE was reasonable and failed to adopt either AFE whether reasonable or not.

(4) The Examiner's Order incorrectly pooled all mineral interests from the surface to the base of the Wolfcamp in direct conflict with both parties stated purposes which was to pool only those interest for 80acre spaced oil production, including the Wolfcamp pool. That mistake results in 40-acre spaced mineral production being pooled into an 80-acre spacing unit in violation of Section 70-2-17(C) N.M.S.A. 1978.

(5) The Examiner's Order failed to make findings of ultimate facts from which to understand the reasoning of the Division on the cost allocation issue raised by Hanley Petroleum. The Examiner, having determined that the well would be located in the south 40-acres in which Hanley had no interest above the top of the Wolfcamp, failed to allocate costs between the shallow versus the deep oil zones thereby requiring Hanley to pay a disproportionately higher share of the

individual who entered the order, to stay its effect pending <u>denovo</u> review for reasons which include, but not by way of limitation, the following:

(1) The Examiner's Order was issued in violation of Section 70-2-13 N.M.S.A. 1978 because it was entered prior to receipt of the transcript in the case. An Examiner does not have the authority to enter an order in a case he hears but must provide to the Division Director his recommended order based "upon the transcript of testimony and record made by or under the supervision of the examiner..." There was no transcript available and therefore the order was entered prematurely.

(2) The Examiner's order failed to decide the case on the merits of each party's geologic evidence but instead ignored that dispute and resolved the case in favor of Santa Fe Energy based upon a theoretical 80-acre diagonal offset well pattern which was certainly not mandatory or even preferred in the Special Field Rules for the South Corbin Wolfcamp Pool (Reference Order No. R-8181-B 5-20-86). The Examiner also ignored the undisputed fact that Santa Fe Energy's Kachine 8 #1 well is closer to Hanley's lease line and more like to drain

costs of the well than is allowed under COPAS Bulletin #2. This oversight by the Examiner is contrary to the requirements set forth for the Division by the New Mexico Supreme Court in <u>Fasken v. Oil Conservation Commission</u>, 87 N.M. 588 (1978).

(6) The Examiner's order failed to take into proper consideration that Hanley Petroleum is the largest single working interest owner in the spacing unit.

(7) The Examiner's Order ignored the undisputed evidence that the Santa Fe location was estimated to recover only 130,000 barrels of oil while the Hanley location was estimated to recover 260,000 barrels of oil.

(8) On April 4, 1991 Hanley received Santa Fe Energy's notification pursuant to the pooling order demanding it to pay its share of the well costs within 30 days (see Exhibit "C").

(9) Hanley's election period under the order will expire on May 4th, five days prior to the DeNovo hearing before the Commission.

(10) Unless the Division Order is stayed, Hanley Petroleum will be denied a reasonable period of

time in which to make an election following the Commission hearing.

(11) Santa Fe Energy has attempted to enforce against Hanley the terms of the Division Order that Hanley has appealed. Such action for all practical purposes will force Hanley Petroleum to make an election to participate under the terms of a pooling order which is still being contested and will make a DeNovo hearing meaningless.

(12) Neither Hanley nor Santa Fe has any expiring contractual or leasehold interest which will be jeopardized if this stay is approved. However, no drilling or other continuous operations can be commenced before June 1, 1991 due to the Lesser Prarie Chicken mating season.

(13) Attorneys for both Santa Fe Energy and Heyco have been notified of this request and neither is opposed to entry of a Stay Order.

WHEREFORE, in order to the protect the correlative rights of Hanley Petroleum and to prevent possible waste of hydrocarbons by the drilling of a well at an unfavorable geologic location, we request that the

Division Order R-9480 be stayed in its entirety pending entry of the Commission order in this case.

Respectfully submitted,

KELLAHIN, KELLAHIN & AUBREY

By:

W. Thomas Kellahin Post Office Box 2265 Santa Fe, New Mexico 87504 (505) 982-4285

CERTIFICATE OF SERVICE

I hereby certify that on <u><u></u><u></u><u>A</u> day of April, 1991, I had a true copy of the foregoing Application of Hanley Petroleum Inc. Request for a Stay of Division Order served by personal delivery to Robert G. Stovall, Esq., Oil Conservation Division, Post Office Box 2088, Santa Fe, New Mexico 87504-2088 and William F. Carr, Esq. Campbell & Black, P.A., Post Office Box 2208, Santa Fe, New Mexico 87504-2208; and by facsimile to James G. Bruce, Esq., Hinkle, Cox, Eaton, Coffield & Hensley, 500 Marquette, N.W., Suite 740, Albuquerque, New Mexico</u>

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GOVERNOR

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STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION



POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE. NEW MEXICO 87501 (505) 827-5800

No. 3-85

MEMORANDUM

TO: ALL ATTORNEYS PRACTICING BEFORE THE DIVISION

FROM: R. L. STAMETS, DIRECTOR

SUBJECT: APPLICATION FOR HEARING DE NOVO AND GUIDELINES FOR REQUESTS FOR STAYS OF ORDERS

The Division has recently been receiving requests for stays of orders appealed De Novo to the Commission. To assure a fair opportunity for all participants to comment on any proposed stay, The Division intends to follow the quidelines listed below:

- Requests for stays must be filed with the Division at least seven day prior to the last day a De Novo hearing may be sought.
- (2) A copy of the request for stay must concurrently be furnished the attorney(s) for the other party(ies) in the case.
- (3) The request shall be accompanied by a draft stay order.

Notwithstanding these guidelines, the Director of the Division may grant stays under other circumstances should it prove necessary to prevent waste, to protect correlative rights, to protect fresh water, or to prevent gross negative consequences to any affected party.

September 23, 1985

Exhibit A

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

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

CASES NOS. 10211 AND 10219 Order No. R-9480

APPLICATION OF SANTA FE ENERGY OPERATING PARTNERS, L.P. FOR COMPULSORY POOLING, LEA COUNTY, NEW MEXICO

APPLICATION OF HANLEY PETROLEUM INC. FOR COMPULSORY POOLING, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on March 7, 1991, at Santa Fe, New Mexico, before Examiner Jim Morrow.

NOW, on this <u>29th</u> day of March, 1991, the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

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

(2) The applicant in Case 10211, Santa Fe Energy Operating Partners, L.P., (Santa Fe), seeks an order pooling all mineral interests from the surface to the base of the Wolfcamp formation underlying the following described acreage in Section 8, Township 18 South, Range 33 East, NMPM, Lea County, New Mexico, in the following manner:

> (a) The W/2 NW/4 to form a standard 80-acre oil spacing and proration unit for any and all formations and/or pools developed on 80-acre spacing within said vertical extent, which presently includes but is not necessarily limited to the Undesignated South Corbin-Wclfcamp Pool;

Exhibit B

(...

(b) The SW/4 NW/4 to form a standard 40-acre oil spacing and proration unit for any and all formations and/or pools developed on 40-acre spacing within said vertical extent, which presently includes but is not necessarily limited to the Undesignated West Corbin-Delaware, Undesignated Central Corbin-Queen, Undesignated West Corbin-San Andres and Undesignated Corbin-Bone Spring Pools.

Both units are to be dedicated to a single well to be drilled at a standard oil well location 1980 feet from the North line and 660 feet from the West line (Unit E) of said Section 8.

(3) The applicant in Case 10219, Hanley Petroleum Inc. (Hanley), originally sought an order pooling all mineral interests from the surface to the base of the Wolfcamp formation underlying the following described acreage in Section 8, Township 18 South, Range 33 East, NMPM, Lea County, New Mexico, in the following manner:

- (a) The W/2 NW/4 to form a standard 80-acre oil spacing and proration unit for any and all formations and/or pools developed on 80-acre spacing within said vertical extent, which presently includes but is not necessarily limited to the Undesignated South Corbin-Wolfcamp Pool;
- (b) The SW/4 NW/4 to form a standard 40-acre oil spacing and proration unit for any and all formations and/or pools developed on 40-acre spacing within said vertical extent, which presently includes but is not necessarily limited to the Undesignated West Corbin-Delaware, Undesignated Central Corbin-Queen, Undesignated West Corbin-San Andres, and Undesignated Corbin-Bone Spring Pools.

Both units would have been dedicated to a single well to be drilled at a standard oil well location 1980 feet from the North line and 660 feet from the West line (Unit E) of said Section 8.

(4) Hanley amended its application in Case 10219 and at the hearing requested approval for an 80-acre oil spacing and proration unit as described in Finding No. (3)(a) above with said unit to be dedicated to a well to be drilled at a standard oil well location 660 feet from the North and West lines (Unit D) of said Section 8. A 40-acre oil spacing and proration unit in Unit D would not require compulsory pooling since Hanley's working interest in the NW/4 NW/4 of said Section 8 is 100%.

(5) Each applicant (Santa Fe and Hanley) has the right to drill and each proposes to drill a well on their respective units, as described above in Findings (2) and (4), to a depth sufficient to test the Wolfcamp formation.

(6) Cases Nos. 10211 and 10219 were consolidated for the purpose of hearing and should be consolidated for purpose of issuing an order since the cases involve common acreage and the granting of one application would require the denial of the other.

(7) This matter has been the subject of previous Oil Conservation Division and Oil Conservation Commission actions involving Hanley's subpoena request for certain Santa Fe records.

(8) A representative of the Harvey E. Yates Company appeared at the hearing in support of Santa Fe's application.

(9) There are interest owners in the proposed units who have not agreed to pool their interests.

(10) The primary objective of either proposed well would be a Wolfcamp completion in the Undesignated South Corbin-Wolfcamp Pool to offset Santa Fe's recently completed Kachina "8" Federal Well No. 1 in the NE/4 NW/4 of said Section 8. It flowed 411 barrels of oil, 59 barrels of water and 577 MCF of gas per day on initial potential on January 13, 1991. Santa Fe's Form C-115 production report shows that the well produced 8143 barrels of oil, 213 barrels of water and 9374 MCF of gas during January, 1991.

(11) Pool rules for the South Corbin-Wolfcamp pool provide for 80acre standard spacing and proration units with wells to be located within 150 feet of the center of a governmental quarter-quarter section or lot.

(12) In support of its application in Case No. 10211, Santa Fe submitted the following information through its exhibits and the testimony of its witnesses:

- (a) Santa Fe's proposed location for its Kachina 8 Federal Well No. 2 in the SW/4 NW/4 of said Section 8 would conform to an 80-acre diagonal spacing pattern. Santa Fe believes this would provide better recovery than Hanley's location which would be a direct West offset to Santa Fe's Kachina 8 Federal Well No. 1.
- (b) Cross-sections, structure maps and isopach maps were submitted to show the favorable conditions at the Santa Fe location. Their geology shows that the proposed location would be approximately 20 feet lower on the Wolfcamp structure than their kachina 8 Well No. 1 and would have about the same thickness of clean Wolfcamp carbonate. The Santa Fe location is 50 feet lower structurally than

> the Hanley location but would encounter a great thickness of clean carbonate in the Wolfcamp according to Santa Fe's testimony.

- (c) Santa Fe's witnesses testified that lower structural position would not necessarily result in increased water production from the Wolfcamp.
- (d) Santa Fe's engineering witness estimated that a well at the Santa Fe location would recover 50,000 to 60,000 barrels more oil than one at the Hanley location.
- (e) Cross-sections, structure maps and porosity maps submitted by Santa Fe indicate that the Bone Spring formation would be productive at the Hanley location but would be water productive at the Santa Fe location. Santa Fe recommended allocation of well costs between the Wolfcamp and the Bone Spring if the Hanley location is approved.
- (f) Santa Fe's estimated well cost is \$721,942. They expect to recover 100,000 barrels of oil from the Wolfcamp. Monthly overhead rates of \$6,260 while drilling and \$626 while producing were requested along with a 200% risk penalty.
- (g) Santa Fe and the Harvey E. Yates Company each have 50% working interest in the SW/4 NW/4 of said Section 8.

(13) To support its application in Case No. 10219, Hanley presented the following information through its exhibits and the testimony of its witnesses:

- (a) Structure and isopach maps and cross-sections were submitted to show that their proposed location is the better choice. Their geology shows that the Hanley location would be approximately 25 feet higher on the Wolfcamp structure than Santa Fe's location and would encounter approximately the same thickness of net clean Lower Wolfcamp limestone.
- (b) Decline curves to estimate the reserves for Wolfcamp completions in the area were submitted. This data along with an estimate of the reserves for Santa Fe's Kachina "8" Federal Well No. 1 was used to construct an "Iso-Production" map for use in estimating ultimate recovery. Hanley's Wolfcamp recovery estimates are 260,000 barrels

for their location and 130,000 barrels for the Santa Fe location.

- (c) Water production data from Wolfcamp completions in the Corbin area was used by Hanley to support their testimony that wells lower on the Wolfcamp structure produce more water.
- (d) Hanley submitted a Bone Spring structure map indicating their proposed location would be approximately 100 feet higher on the Bone Spring structure than the Santa Fe location.
- (e) Hanley's estimated cost for a Wolfcamp well is \$667,782. They proposed a method for allocating and amortizing well costs in the event the well is eventually plugged back for a completion attempt in the Bone Spring or other zone in which the ownership differs from that in the Wolfcamp. Monthly overhead rates of \$5,184 while drilling and \$485 while producing were suggested based on the mean rates in the Ernst and Young 1990 survey. A risk penalty of 150% was recommended at the Hanley location. Hanley's witnesses testified that the risk would be higher at the Santa Fe location.
- (f) Payout calculations prepared by Hanley show that a Wolfcamp well will payout in four months at their location and in eight months at the Santa Fe location.

(14) Santa Fe's compulsory pooling application was received by OCD on December 12, 1990, Hanley's initial application was received by OCD on January 2, 1991, and their amended application was received on February 12, 1991. Hanley began efforts to develop their acreage after Santa Fe filed its application.

(15) Based on the evidence and testimony received in these cases, either the Santa Fe or the Hanley location should result in a successful Wolfcamp completion. Evidence shows that Santa Fe's is the more appropriate location since it conforms to an 80-acre diagonal spacing pattern and should therefore result in better recovery of reserves. Santa Fe's application should be approved and they should be designated as operator. Overhead charges for supervision should be set at \$5,184 while drilling and \$485 while producing. Since risk of an unsuccessful completion is low, the risk penalty should be set at 100%. The 40-acre spacing unit applied for in Santa Fe's application is not required since all of the working interests in

the SW/4 NW/4 of said Section 8 have reached voluntary agreement concerning the pooling of their interests.

(16) Approval as set out in Finding (15) above and in the following order will avoid the drilling of unnecessary wells, protect correlative rights, prevent waste and afford the owner of each interest in said unit the opportunity to recover or receive without unnecessary expense his just and fair share of the production in any pool resulting from this order.

IT IS THEREFORE ORDERED THAT:

(1) The application of Hanley Petroleum Inc. in Case No. 10219 as described in Findings (3) and (4) of this order is hereby denied.

(2) All mineral interests, whatever they may be, from the surface to the base of the Wolfcamp, underlying the W/2 NW/4 of Section 8, Township 18 South, Range 33 East, NMPM, Lea County, New Mexico, are hereby pooled to form an 80-acre oil spacing and proration unit to be dedicated to a well to be drilled at a standard oil well location 1980 feet from the North line and 660 feet from the West line (Unit E) of said Section 8.

<u>PROVIDED HOWEVER THAT</u>, the operator of said unit shall commence the drilling of said well on or before the 15th day of June, 1991, and shall thereafter continue the drilling of said well with due diligence to a depth sufficient to test the Wolfcamp formation.

<u>PROVIDED FURTHER THAT</u>, in the event said operator does not commence the drilling of said well on or before the 15th day of June, 1991, Decretory Paragraph No. (2) of this order shall be null and void and of no effect whatsoever, unless said operator obtains a time extension from the Division for good cause shown.

<u>PROVIDED FURTHER THAT</u>, should said well not be drilled to completion, or abandonment, within 120 days after commencement thereof, said operator shall appear before the Division Director and show cause why Decretory Paragraph No. (2) of this order should not be rescinded.

(3) Santa Fe Energy Operating Partners, L.P. is hereby designated the operator of the subject well and unit.

(4) After the effective date of this order and prior to commencing said well, the operator shall furnish the Division and each known working interest owner in the subject unit an itemized schedule of estimated well costs.

(5) Within 30 days from the date the schedule of estimated well costs is furnished to him, any non-consenting working interest owner shall have the right to pay his share of estimated well costs to the operator in lieu of paying his share of reasonable well costs out of production, and any such owner who pays his share of estimated well costs as provided above shall remain liable for operating costs but shall not be liable for risk charges.

(6) The operator shall furnish the Division and each known working interest owner an itemized schedule of actual well costs within 90 days following completion of the well; if no objection to the actual well costs is received by the Division and the Division has not objected within 45 days following receipt of said schedule, the actual well costs shall be the reasonable well costs; provided however, if there is an objection to actual well costs within said 45-day period the Division will determine reasonable well costs after public notice and hearing.

(7) Within 60 days following determination of reasonable well costs, any non-consenting working interest owner who has paid his share of estimated costs in advance as provided above shall pay to the operator his pro rata share of the amount that reasonable well costs exceed estimated well costs and shall receive from the operator his pro rata share of the amount that estimated well costs exceed reasonable well costs.

(8) The operator is hereby authorized to withhold the following costs and charges from production:

- A. The pro rata share of reasonable well costs attributable to each non-consenting working interest owner who has not paid his share of estimated well costs within 30 days from the date the schedule of estimated well costs is furnished to him; and
- B. As a charge for the risk involved in the drilling of the well, 100 percent of the pro rata share of reasonable well costs attributable to each nonconsenting working interest owner who has not paid his share of estimated well costs within 30 days from the date the schedule of estimated well costs is furnished to him.

(9) The operator shall distribute said costs and charges withheld from production to the parties who advanced the well costs.

(10) \$5,184 per month while drilling and \$485 per month while producing are hereby fixed as reasonable charges for supervision (combined

fixed rates); the operator is hereby authorized to withhold from production the proportionate share of such supervision charges attributable to each non-consenting working interest, and in addition thereto, the operator is hereby authorized to withhold from production the proportionate share of actual expenditures required for operating such well, not in excess of what are reasonable, attributable to each non-consenting working interest.

(11) Any unleased mineral interest shall be considered a seveneighths (7/8) working interest and a one-eighth (1/8) royalty interest for the purpose of allocating costs and charges under the terms of this order.

(12) Any well costs or charges which are to be paid out of production shall be withheld only from the working interest's share of production, and no costs or charges shall be withheld from production attributable to royalty interests.

(13) All proceeds from production from the subject well which are not disbursed for any reason shall be placed in escrow in Lea County, New Mexico, to be paid to the true owner thereof upon demand and proof of ownership; the operator shall notify the Division of the name and address of said escrow agent within 30 days from the date of first deposit with said escrow agent.

(14) Should all the parties to this force-pooling reach voluntary agreement subsequent to entry of this order, this order shall thereafter be of no further effect.

(15) The operator of the subject well and unit shall notify the Director of the Division in writing of the subsequent voluntary agreement of all parties subject to the force-pooling provisions of this order.

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

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

STATE OF NEW MEXICO OIL CONSERVATION DIVISION WILLIAM J. LEMAY, Director

dr/

Santa Fe Energy Operating Partners, L.P.



Santa Fe Pacific Exploration Company Managing General Partner

CERTIFIED MAIL - RETURN RECEIPT

Hanley Petroleum Inc.

April 3, 1991

Hanley Petroleum, Inc. 415 West Wall, Suite 1500 Midland, Texas 79701-4473

ATTN: James W. Rogers

Re:

: SFEOP Cont. #NM-4257 Kachina "8" Fed Com #2 Wolfcamp Tost - 11,500' W/2NW/4 Section 8 T-18-S, R~33-E Lea County, New Mexico

Gentlemen:

Please find enclosed a copy of the Order No. R-9480 in the matter of the Hearing for Compulsory Pooling the above described acreage.

In accordance with the order, please find enclosed Santa Fe Energy Operating Partners, L.P.'s Well Cost Estimate for the drilling of the above captioned well. Please note, that Hanley has 30 days from receipt of the Well Cost Estimate to make its election to join or being carried non-consent under the order.

If you wish to discuss these options, or if you have any questions concerning this matter, please do not hesitate to contact the undersigned.

Thank you in advance for your cooperation in this matter.

Sincerely yours,

SANTA FE ENERGY OPERATING PARTNERS, L.P. By: Santa Fe Pacific Exploration Company Managing General Partner

Senior Landman

1M/efw 2 Encls a/s

EFW1830

Permian Basin District

550 W. Texas, Suite 1330

cc: Harvey E. Yates Company P.O. Box 1933 Roswell, New Mexico 88202 ATTN: Melissa Randle

Exhibit C

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

RECEIVED

APR

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

* 1991 OIL CONSERVATION DIVISION

CASE NOS. 10211 AND 10219 ORDER NO. R-9480

APPLICATION OF SANTA FE ENERGY OPERATING CASE NO. 10211 PARTNERS, L.P. FOR COMPULSORY POOLING, LEA COUNTY, NEW MEXICO.

APPLICATION OF HANLEY PETROLEUM INC. CASE 10219 FOR COMPULSORY POOLING, LEA COUNTY, NEW MEXICO.

APPLICATION BY HANLEY PETROLEUM INC. FOR DE NOVO HEARING

COMES NOW HANLEY PETROLEUM INC. and in accordance with New Mexico Oil Conservation Division Rule 1220 applies to the Division for a DeNovo hearing of the referenced cases which resulted in the issuance of Division Order R-9480 and request that the hearing be held at the next available Commission Hearing Docket now scheduled for May 9, 1990.

Respectfully submitted:

KELLAHIN, KELLAHIN & AUBREY

By: W. Thomas Kell

Post Office Box 2265 Santa Fe, New Mexico 87504 (505) 982-4285

Exhibit D

TELEPHONE (505) 982-4285

TELEFAX (505) 982-2047

KELLAHIN, KELLAHIN AND AUBREY

ATTORNEYS AT LAW EL PATIO BUILDING 17 NORTH GUADALUPE POST OFFICE BOX 2265 SANTA FE, NEW MEXICO 87504-2265

JASON KELLAHIN OF COUNSEL

April 26, 1991

141050650

ALL CONSERVATION DIVISION

0.11

William J. LeMay Oil Conservation Division New Mexico Department of Energy, Minerals and Natural Resources State Land Office Building 310 Oil Santa Fe Trail Santa Fe, New Mexico 87501

> Case Nos. 10211 and (10219) DeNovo Re: Application of Hanley Petroleum Inc. for an Emergency Order

Dear Mr. LeMay

HAND DELIVERED

On behalf of Hanley Petroleum Inc., I request that the Oil Conservation Division issue the enclosed Emergency Order to Santa Fe Energy Operating Partners, L.P. to shut in the Kachina "8" Federal No. 1 well.

Hanley Petroleum Inc. is a working interest owner in the acreage immediately adjacent to the Santa Fe Energy Kachina "8" Federal No. 1 and is suffering drainage.

This DeNovo case is currently scheduled for hearing on May 9, 1991 before the Commission. We seek an Emergency Shut-in Order pending further decision by the Commission.

Your attention to this request is appreciated.

Very truly yours Thomas Kellahin W.

W. THOMAS KELLAHIN KAREN AUBREY

CANDACE HAMANN CALLAHAN

Mr. William J. LeMay April 26, 1991 Page 2

WTK/tic Enclosure

cc: Mr. Jim Rogers Hanley Petroleum Inc. 415 West Wall, Suite 1500 Midland, Texas 79701

> James Bruce, Esq. Hinkle, Cox, Eaton, Coffield & Hensley 500 Marquette, N.W. Albuquerque, New Mexico 87102

William F. Carr, Esq. Campbell & Black, P.A. 110 North Guadalupe Santa Fe, New Mexico 87501

1987/ltrt425a.215

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

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

APPLICATION OF SANTA FE ENERGY OPERATING PARTNERS, L.P. FOR COMPULSORY POOLING, LEA COUNTY, NEW MEXICO CASE NO. 10211 ORDER NO. R-9480

APPLICATION OF HANLEY PETROLEUM INC. FOR COMPULSORY POOLING OR, IN THE ALTERNATIVE, FOR A NON-STANDARD PRORATION AND SPACING UNIT, LEA COUNTY, NEW MEXICO. COUNTY, NEW MEXICO.

APPLICATION OF HANLEY PETROLEUM INC. FOR AN EMERGENCY ORDER

COMES NOW HANLEY PETROLEUM INC., by and through its attorneys, Kellahin, Kellahin & Aubrey, and in accordance with New Mexico Oil Conservation Division Rule 1202, requests the Division to issue an Emergency Order shutting in the Santa Fe Energy Operating Partners, L.P. Kachina "8" Federal No. 1 well, located in NE/4NW/4 of Section 8, T18S, R33E, Lea County, New Mexico pending the completion of a well to test the Corbin Wolfcamp Oil Pool in the NW/4NW/4 of said Section 8 and in support thereof states: (1) Hanley Petroleum Inc. ("Hanley") is the 100% working interest owner of the federal lease consisting of the NW/4NW/4 (40 acres) of Section 8, T18S, R33E, Lea County, New Mexico.

(2) Santa Fe Energy Operating Partners, L.P. ("Santa Fe") is the operator of the Kachina "8" Federal No. 1 well located in NE/4NW/4 of said Section 8 immediately east of the Hanley tract.

(3) The Kachina "8" Federal No. 1 well is currently completed in and producing from the Undesignated Corbin Wolfcamp Oil Pool, and on March 5, 1991 Santa Fe reported flowing rates during production testing of the Wolfcamp zone in this well reaching 768 barrels of oil and 680,000 cubic feet of gas per day through a 16-64 inch choke.

(4) At the Division Examiner hearing of the subject cases held on March 7, 1991, Santa Fe's petroleum engineer testified that the Kachina "8" Federal No. 1 well would drain the Hanley tract.

(5) Santa Fe is seeking to pool the Hanley tract and to consolidate the Hanley tract with the SW/4NW/4 in which Santa Fe has a 25% interest to form an 80-acre spacing unit but then proposes that the well be drilled in the south 40 acres rather than on the Hanley tract. (6) In reply, Hanley has unsuccessfully attempted to have the subject well drilled on the Hanley tract so that the Hanley reserves could be protected from being produced by the Santa Fe operated Kachina "8" Federal No. 1 well in which Hanley has no interest and now seeks to have the Commission resolve this matter.

(7) In the interim, pending resolution of this dispute, Santa Fe continues to produce the offsetting Kachina "8" Federal No. 1 well draining the Hanley tract and Hanley is helpless to avoid the drainage.

(8) An emergency exists pursuant to Division Rule 1202 requiring the Division to issue an Emergency Order to shut in the Kachina "8" Federal No. 1 well to minimize the uncompensated drainage that is occurring and to prevent the impairment of Hanley's correlative rights.

Therefore, Hanley requests the issuance of an Emergency Order of the Division.

Respectfully submitted.

KELLAHIN KELLAHLN & AUBREY By:

W. Thomas Kellahin Post Office Box 2265 Santa Fe, New Mexico 87504 (505) 982-4285

1987/appt425.215

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

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

> CASES NOS. 10211 AND 10219 ORDER NO. R-9480-A

APPLICATION OF SANTA FE ENERGY OPERATING PARTNERS, L.P. FOR COMPULSORY POOLING, LEA COUNTY, NEW MEXICO

APPLICATION OF HANLEY PETROLEUM INC. FOR COMPULSORY POOLING OR, IN THE ALTERNATIVE, FOR A NON-STANDARD PRORATION AND SPACING UNIT, LEA COUNTY, NEW MEXICO.

EMERGENCY ORDER OF THE DIVISION

BY THE DIVISION

This matter having come before the Division upon the Application of Hanley Petroleum Inc. for an Emergency Order and the Division Director having considered the request and being fully advised in the premises,

NOW, on this _____ day of April, 1991, the Division Director:

FINDS THAT:

(1) Division Order No. R-9480 was entered on March 29, 1991, upon the application of Santa Fe Energy Operating Partners, L.P. for a compulsory pooling order of the Hanley Petroleum Inc. interests. (2) On April 8, 1991 Hanley Petroleum Inc. filed with the Division a request for <u>De Novo</u> Hearing in this matter which will be set for hearing before the New Mexico Oil Conservation Commission on May 9, 1991.

(3) Hanley Petroleum Inc. ("Hanley") is the 100% working interest owner of the federal lease consisting of the NW/4NW/4 (40 acres) of Section 8, T18S, R33E, Lea County, New Mexico.

(4) Santa Fe Energy Operating Partners, L.P. ("Santa Fe") is the operator of the Kachina "8" Federal No. 1 well located in NE/4NW/4 of said Section 8 immediately east of the Hanley tract.

(5) The Kachina "8" Federal No. 1 well is currently completed in and producing from the Undesignated Corbin-Wolfcamp Oil Pool, and on March 5, 1991 Santa Fe reported flowing rates during production testing of the Wolfcamp zone in this well reaching 768 barrels of oil and 680,000 cubic feet of gas per day through a 16/64 inch choke.

(6) At the Division Examiner hearing of the subject cases held on March 7, 1991, Santa Fe's petroleum engineer testified that the Kachina "8" Federal No. 1 well would drain the Hanley tract.

(7) Santa Fe is seeking to pool the Hanley tract and to consolidate the Hanley tract with the SW/4NW/4 in which Santa Fe has a 25% interest to form an 80-acre spacing unit but then proposes that the well be drilled in the south 40 acres rather than on the Hanley tract.

(8) In reply, Hanley has unsuccessfully attempted to have the subject well drilled on the Hanley tract so that the Hanley reserves could be protected from being produced by the Santa Fe operated Kachina "8" Federal No. 1 well in which Hanley has no interest and now seeks to have the Commission resolve this matter.

(9) In the interim, pending resolution of this dispute, Santa Fe continues to produce the offsetting Kachina "8" Federal No. 1 well draining the Hanley tract and Hanley is helpless to avoid the drainage.

(10) An emergency exists pursuant to Division Rule 1202 requiring the Division to issue an Emergency Order to shut in the Kachina "8" Federal No. 1 well to minimize the uncompensated drainage that is occurring and to prevent the impairment of Hanley's correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) Santa Fe Energy Operating Partners, L.P. as operator of the Kachina "8" Federal No. 1 well located in NE/4NW/4 of Section 8, T18S, R33E, Lea County, New Mexico is hereby ordered to immediately shut in the subject well and cease its production pending further order of this Division.

(2) Santa Fe Energy Operating Partners, L.P. and Hanley Petroleum Inc. shall both appear at the Commission's DeNovo Hearing of Cases Nos. 10211 and 10219 and show cause why this Emergency Order should not be made permanent pending the drilling and completion of a well in the W/2NW/4 of said Section 8.

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

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

OIL CONSERVATION DIVISION

WILLIAM J. LEMAY, Director

1987/ordt426.215

BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION

APPLICATION OF SANTA FE ENERGY OPERATING PARTNERS, L.P. FOR COMPULSORY POOLING, LEA COUNTY, NEW MEXICO.

CASE NO. 10211 (De Novo)

RECEIVED

APPLICATION OF HANLEY PETROLEUM, INC. FOR COMPULSORY POOLING, LEA COUNTY, NEW MEXICO.

(N. 1927) CASE NO. 10219 OIL CONSERVATION DIVISION (De Novo)

RESPONSE OF SANTA FE ENERGY OPERATING PARTNERS, L.P. IN OPPOSITION TO THE APPLICATION OF HANLEY PETROLEUM INC. FOR AN EMERGENCY ORDER

Santa Fe Energy Operating Partners, L.P. ("Santa Fe") files this response in opposition to the Application of Hanley Petroleum Inc. ("Hanley") for an emergency order shutting in the Kachina 8 No. 1 Well, and in support thereof states:

1. The above two cases are counter-applications to compulsory pool the $W_2^1NW_4^1$ of Section 8, Township 18 South, Range 33 East, Lea County, New Mexico. The primary target of the proposed well (for both applications) is the Wolfcamp formation.

2. Santa Fe is the operator of the Kachina 8 No. 1 Well, which has the $E_{2}^{1}NW_{4}^{1}$ of Section 8 dedicated to it. This well is completed in and is producing from <u>one</u> of the five Wolfcamp zones which comprise the South Corbin-Wolfcamp Pool. (Testimony of John Thoma (geologist) at March 7, 1991 Examiner hearing.)

3. The South Corbin-Wolfcamp Pool is spaced on 80 acres pursuant to Order No. R-8181-B, which established that wells completed in said Pool are capable of draining 80 acres. 4. <u>The Kachina 8 No. 1 Well is located at a legal location</u> under the South Corbin-Wolfcamp Pool rules, and thus there is no basis for shutting in the well.

5. Hanley has presented no evidence that its correlative rights will be harmed by allowing the Kachina 8 No. 1 Well to continue producing. In fact, because the Division has determined that 80-acre spacing is proper for the South Corbin-Wolfcamp Pool, Hanley's reserves will presumptively be protected from drainage by a well completed at any standard location (or approved non-standard location) on the W½NW¼ of Section 8. Furthermore, because there are five Wolfcamp zones, it is not certain that a well completed in the W½NW¼ of Section 8 will be productive from the same zone as the Kachina 8 No. 1 Well. Finally, because the Kachina 8 No. 1 Well is located at a standard location, Hanley's sole remedy is to drill a well (or participate in the drilling of a well) at any approved location in the W½NW¼ of Section 8.

6. Hanley has owned the NW\nW\ of Section 8 since January 1986, whereas Santa Fe and Harvey E. Yates Company ("HEYCO") have owned the remainder of the N\ of Section 8 only since August 1990. Since August 1990, Santa Fe and HEYCO have drilled the Kachina 8 No. 1 Well and proposed the well at issue in these cases. Hanley only began efforts to develop its acreage after Santa Fe proposed its well. (Finding No. 14 of Order No. R-9480). Hanley could have avoided the alleged harm complained of in its Application by developing its acreage prior to Santa Fe/HEYCO's development.

7. A well successfully completed at Hanley's proposed location could conceivably drain the offsetting acreage in the $E_2^{1}NE_3^{1}$ of Section 7 and the $S_2^{1}SW_3^{1}$ of Section 6. Following Hanley's "logic," a well completed at Hanley's location must be shut in until the owners of said offsetting acreage are allowed an opportunity to drill wells thereon. This defies common sense.

WHEREFORE, Santa Fe requests that Hanley's Application be summarily denied.

Respectfully submitted,

HINKLE, COX, EATON, COFFIELD & HENSLEY

Ву

Que un Jamés Bruce

James Bruce 500 Marquette, N.W. Suite 800 Albuquerque, New Mexico 87102 (\$05) 768-1500

Attorneys for Santa Fe Energy Operating Partners, L.P.

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing pleading was telecopied and mailed this 24th day of April, 1991, to W. Thomas Kellahin, Post Office Box 2265, Santa Fe, New Mexico 87504, and William F. Carr, Post Office Box 2208, Santa Fe, New Mexico 87504.

mes mue By James Bruce

BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION

APPLICATION OF HANLEY PETROLEUM INC. FOR COMPULSORY POOLING, LEA COUNTY, NEW MEXICO. RECEIVED

AP - Not

CASE NO. 10219 (De Novo)

OIL CONSERVATION DIVISION

MOTION OF SANTA FE ENERGY OPERATING PARTNERS, L.P. TO DISMISS SUPPLEMENTAL APPLICATION OF HANLEY PETROLEUM, INC.

Santa Fe Energy Operating Partners, L.P. ("Santa Fe"), an interested person in the above case, hereby moves to dismiss the Supplemental Application of Hanley Petroleum Inc. ("Hanley") requesting a non-standard 40-acre spacing and proration unit, and in support thereof states:

1. Santa Fe is the Applicant in Case No. 10,211 (De Novo), requesting the compulsory pooling of the $W_{2}^{1}NW_{4}^{1}$ of Section 8, Township 18 South, Range 33 East, Lea County, New Mexico.

2. Hanley is the Applicant in Case No. 10,219 (De Novo), also seeking the compulsory pooling of the $W_2^1NW_3^1$ of Section 8.

3. Both of the cases are being heard De Novo before the Commission at the request of Hanley.

4. Subsequent to the request for the De Novo hearing of the above two cases, Hanley filed a Supplemental Application requesting approval of the NW¼NW¼ of Section 8 as a non-standard 40-acre spacing and proration unit for all formations or pools space on 80 acres, including the undesignated South Corbin-Wolfcamp Pool.

5. Santa Fe requests that Hanley's Supplemental Application be dismissed from the proceedings before the Commission set for May 9, 1991, for the following reasons: a. The Application for a 40-acre non-standard unit is not within the scope of the Examiner hearings in Case Nos. 10,211 and 10,219;

b. As a result of the foregoing, a 40-acre non-standard spacing and proration unit is not within the scope of the requested De Novo hearings;

c. Said request for a non-standard unit has not been properly noticed and advertised for the May 9, 1991 hearing; and

d. Hanley's Supplemental Application will cause waste and impair correlative rights.

6. Santa Fe hereby formally objects to the requested nonstandard unit.

WHEREFORE, Santa Fe requests that Hanley's Supplemental Application be dismissed and that it not be heard at the Commission Hearing set for May 9, 1991.

Respectfully submitted,

HINKLE, COX, EATON, COFFIELD & HENSLEY

Ву

James Bruce 500 Marquette, N.W. Spite 800

Albuquerque, New Mexico 87102 (505) 768-1500

Attorneys for Santa Fe Energy Operating Partners, L.P.

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing pleading was telecopied and mailed this 297 day of April, 1991, to W. Thomas Kellahin, Post Office Box 2265, Santa Fe, New Mexico 87504, and William F. Carr, Post Office Box 2208, Santa Fe, New Mexico 87504.

James Bruce

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING GOVERNOR

April 30, 1991

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87504 (505) 827-5800

W. Thomas Kellahin, Esq. Kellahin, Kellahin and Aubrey P. O. Box 2265 Santa Fe, New Mexico 87504-2265

Re: Cases Nos. 10211 and 10219 De Novo

Dear Mr. Kellahin:

I will attempt to respond to your numerous concerns and questions raised in your April 26, 1991 letter.

I acknowledge seeing your application on behalf of Hanley for a non-standard 40-acre proration unit for Hanley's 40-acre tract. I also acknowledge that application does not appear on the docket along with the <u>De Novo</u> cases. When that application was received there was some discussion among staff as to whether that should be docketed for hearing by the Commission or, because it was a new application, placed on an examiner docket for hearing. It is not clear whether the decision was definitively made not to include it on the Commission docket or whether it was an error or oversight. Nonetheless the problem does exist that that application is not on the docket and it does concern the same properties as are involved in the <u>De Novo</u> hearings.

I will recommend to the Commission that evidence which would support an application for 40-acre non-standard proration unit is relevant in the Commission case as an alternative remedy and if the Commission believes that it is an appropriate remedy, it can deny both applications for compulsory pooling and a non-standard proration unit case can be docketed for an examiner hearing with guidance from the Commission.

Although you complain that the transcript is not available, Examiner Morrow has had the transcript since April 25, 1991. Apparently you did not order your own copy of the transcript and if you need to borrow the Commission's copy, please make arrangements through Florene and Mr. Morrow.

I believe a pre-hearing meeting would be appropriate to discuss how to conduct this case. Given the time-frame, I suggest that perhaps the best time for such a conference is Friday morning at 9:00 a.m. in the OCD Conference Room. I will schedule that time and reserve the conference room unless I hear otherwise from counsel. By copy of this letter I am also notifying Mr. Carr and Mr. Bruce of that scheduled conference. It will be the purpose of that meeting to iron out all procedural and evidentiary questions which may arise at the Commission hearing. I request that all parties bring a pre-hearing statement to that conference to be the basis for discussion. W. Thomas Kellahin, Esq. April 30, 1991 Page 2

Mr. LeMay has addressed your request for an emergency order in a separate response. If you have any further questions, please feel free to contact me.

Sincerely,

Abert 6. Stord

ROBERT G. STOVALL, General Counsel

cc: William F. Carr, Esq. James Bruce, Esq.

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING GOVERNOR

April 30, 1991

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87504 (505) 827-5800

W. Thomas Kellahin, Esq. Kellahin, Kellahin and Aubrey P. O. Box 2265 Santa Fe, New Mexico 87504-2265

Re: Cases Nos. 10211 and 10219 De Novo

Dear Mr. Kellahin:

Hanley Petroleum Inc.'s request for an emergency order to shut in the Santa Fe Energy Operating Partners Kachina "8" Federal No. 1 well is hereby denied. There is no showing of emergency or any other basis to justify the shutting in of a well.

The Kachina "8" Federal No. 1 Well is drilled at a standard location in a standard spacing unit and is producing in accordance with the Division Rules and Regulations. The Division entered Order No. R-9480 on March 29, 1991, pooling the interests of Hanley Petroleum into a well to be drilled by Santa Fe Energy Operating Partners in the SW/4 NW/4 of Section 8, Township 18 South, Range 33 East, NMPM, Lea County, New Mexico to test the Corbin-Wolfcamp Pool. This well would protect Hanley's acreage in the NW/4 NW/4 from drainage.

Hanley Petroleum Inc. filed a request for <u>De Novo</u> Hearing in Cases 10211 and 10219 from which Order No. R-9480 was entered, and upon Hanley Petroleum's application, without opposition from the other parties in the case, said order was stayed pending hearing of the <u>De Novo</u> cases.

The fact that Hanley is dissatisfied with a Division order and has sought a hearing before the Commission does not constitute an emergency which would justify the Division shutting in a well producing from a legal location on a legal proration unit in accordance with Division Rules and Regulations.

Sincerely, WILLIAM J. LEMAY. Director

cc: William F. Carr, Esq. James Bruce, Esq.

A prehearing conference concerning Cases Nos. 10211 and 10219 was held at 9 o'clock a.m. on May 3, 1991, in the Oil Conservation Division Conference Room, State Land Office Building, Santa Fe, New Mexico. Case 10211, the application of Santa Fe Energy Operating Partners, L.P. for compulsory pooling, Lea County, New Mexico, and Case 10219, the application of Hanley Petroleum Inc. for compulsory pooling, Lea County, New Mexico, are scheduled to be heard before the Oil Conservation Commission on May 9, 1991.

The following counsel were present at the conference: Robert G. Stovall representing the Oil Conservation Commission Thomas Kellahin representing Hanley Petroleum Inc. James Bruce representing Santa Fe Energy Operating Partners, L.P. William F. Carr representing Harvey E. Yates Company

It was determined by all present that the main issues of both cases are: which application, if any, will be granted; drilling at different locations; operatorship; and the difference in AFE's. It was pointed out that the Division does not approve an AFE in the course of an application but it does determine if the AFE is fair and reasonable. Mr. Bruce said that the main difference in AFE's is that Santa Fe maintains there is no Bone Spring potential and, therefore, no need to allocate costs to the Bone Spring.

Mr. Stovall stated that the application filed by Hanley for a 40-acre non-standard proration unit was not advertised for hearing, but evidence concerning the non-standard proration unit should be admitted by the Commission because a denial of both compulsory pooling applications would make a non-standard proration unit a viable alternative. It was determined that an order could not be issued on said non-standard proration unit from this hearing but if both pooling applications should be denied, the findings of the order should show that a non-standard proration unit is the proper solution.

A discussion regarding the incorporation of the examiner record into the Commission hearing was held. Mr. Stovall explained that incorporating the record means only that there is prefiled testimony in a case and does not violate the statute on De Novo hearings. Mr. Carr agreed to the incorporation but does not want that to preclude him from being able to bring up anything that may have been presented at the examiner hearing.

It was agreed by all counsel that the testimony regarding the following issues should be conducted in the following manner:

Land Issues - All counsel will submit a joint chronology of the land issues with supporting documents to the Commission a day before the De Novo hearing.

Geologic and Engineering Issues - Counsel will have their geologic and engineering witnesses summarize the testimony given at the examiner hearing using the Division order, be able to point out pages in the transcript where certain testimony was discussed in detail, and supplement the record with additional testimony if necessary. All counsel agreed to utilize their engineering and geological witnesses in a rebuttal presentation and not spend so much time on cross-examination. It was decided that Mr. Kellahin's presentation would go first, then Mr. Bruce, and finally Mr. Carr. Mr. Stovall suggested that all reservoir engineering testimony be presented before the AFE testimony.

There was a discussion of the subpoena for well data requested by Hanley and the motion to quash requested by Santa Fe. Mr. Stovall agreed to discuss both documents with Mr. LeMay on May 6.

The conference was adjourned at 10:10 a.m.

HINKLE, COX, EATON, COFFIELD & HENSLEY

LEWIS C. COX PAUL W. EATON CONRAD E. COFFIELD HAROLD L. HENSLEY, JR STUART D. SHANOR ERIC D. LANPHERE C. D. MARTIN PAUL J. KELLY, JR MARSHALL G. MARTIN OWEN M. LOPEZ DOUGLAS L. LUNSFORD JOHN J. KELLY T. CALDER EZZELL, JR WILJIAM B. BURFORD RICHARD E. OLSON STEVEN D. ARNOLD JAMES J. WECHSLER NANCY S. CUSACK JEFFREY L. FORNACIARI JEFFREY D. HOWETT JAMES BRUCE JERNY F. SHACKELFORD JERFYF SHACKELFORD JEFYFYF J. ACHAGERS

*NOT LICENSED IN NEW MEXICO

THOMAS D. HAINES, J.R. FRANKLIN H MCCALLUM" GREGORY J. NIBERT DAVID T MARKETTE" MARK C DOW MAREN M RICHARDSON" FRED W SCHWENDIMANN J.MES M HUDSON J.EFFREY S. BAIRD" PATRICIA A MORRIS MACDONNELL GORDON REBECCA NICHOLS JOHNSON WILLIAM P JOHNSON STANLEY K. KOTOVSKY, J.R. BETTY H. LITLE" RUTH S. MUSGRAVE HOWARD R. THOMAS ELLEN S CASEY S BARRY PAISNER MARGARET CARTER LUDEWIG GARY W LARSON STEPHANIE LANDRY JOHN R KULSETH, JR. LISA K SMITH JAMES K SCHUSTER* ATTORNEYS AT LAW

218 MONTEZUMA POST OFFICE BOX 2068

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(505) 982-4554

FAX (505) 982-8623

OF COUNSEL O M CALHOUN* MACK EASLEY JOE W WOOD RICHARD S. MORRIS

CLARENCE E HINKLE (1901-1985) W. E. BONDURANT, J.R. (1913-1973) ROY C. SNODGRASS, J.R. (1914-1987)

May 8, 1991

<u>Hand-Delivered</u>

700 UNITED BANK PLAZA POST OFFICE BOX IO ROSWELL, NEW MEXICO 88202 (505) 622-6510 FAX (505) 623-9332

2800 CLAYDESTA NATIONAL BANK BUILDING POST OFFICE BOX 3580 MIDLAND, TEXAS 79702 (915) 683-4691 FAX (915) 683-6518

> I700 TEAM BANK BUILDING POST OFFICE BOX 9238 AMARILLO, TEXAS 79105 (806) 372-5569 FAX (806) 372-9761

500 MARQUETTE N.W., SUITE 800 ALBUQUERQUE, NEW MEXICO 87102-2121 (505) 768-1500 FAX (505) 768-1529

Robert Stovall Oil Conservation Division Santa Fe, New Mexico 87501

Dear Bob:

Enclosed for submission to the Commissioners are the testimony outlines for Santa Fe's geologist, Reservoir Engineer, and Drilling Engineer.

Very truly yours, 1 Jámes Bruce

JGB/mh

Enclosures

cc: W. Thomas Kellahin, w/enc. (hand-delivered)

Commission Case Nos. 10,211 and 10,219

TESTIMONY OUTLINE AND INDEX

for

Darrell Roberts, Drilling Engineer Santa Fe Energy Operating Partners, L.P.

I. Experience in Area.

Mr. Roberts has been the responsible engineer for 28 wells located in 18 South - 32 East and 18 South - 33 East, including 16 Wolfcamp wells. He has worked in this area since 1981, for Southland Royalty, Meridian Oil, and Santa Fe. Santa Fe operates 17 wells and has an interest in an additional 19 wells in this area. (Tr. at 178-179 and new testimony.)

II. Additional Wells Drilled in Pool Since Examiner Hearing.

Since the Examiner hearing, Santa Fe has drilled the Kachina 5-1, has staked the Kachina 5-2 in the NE $\frac{1}{3}$ SE $\frac{1}{3}$ § 5, and has participated in the Corbin #28 in the NE $\frac{1}{3}$ NE $\frac{1}{3}$ § 17, drilled by Meridian. (New testimony.)

III. Comparison of AFE's.

Santa Fe's AFE has a completed well cost of \$722,000. Adding a tank battery, to make it comparable to Hanley's AFE, raises the cost to \$757,000. Dry hole costs are approximately the same for both companies; the difference is in producing costs. The difference is as follows:

- (a) \$3000: conductor casing.
- (b) \$15,000: lease facility labor costs.
- (c) \$4200: fencing costs
- (d) \$5000: inspection of intangibles

- (e) \$3000: drilling equipment rental
- (f) \$4000: completion tool rental
- (g) \$9200: administrative overhead
- (h) \$5000: testing

Santa Fe thinks these are essential items. Santa Fe's AFE gives a liberal estimate, in order that our partners have an outside limit of cost obligations. We expect final well costs to be lower. (Tr. at 180-184.)

Santa Fe's proposed costs compare favorably with other recent completions in the pool by Santa Fe and Meridian. (Tr. at 184-185; Santa Fe Exhibit 9.) Meridian operates most of the wells in the pool and thus has the most experience with costs in the pool. (New testimony.)

IV. Santa Fe's Recognized Capabilities.

Santa Fe is an exemplary operator and has received the Environmental Initiative Award from the BLM. (Tr. at 186-187.)

V. <u>Reason for Time Gap Between Completion of Kachina 8-1 and</u> <u>Commencement of Production</u>.

The Kachina 8-1 rig was released 10/31/90; completion rig moved in 11/7/90; initial potential test done 11/15/90; well hooked up to gas line on 1/12/9;, and production commenced 1/13/91. (New testimony.)

Commission Case Nos. 10,211 and 10,219

TESTIMONY OUTLINE AND INDEX

for

John Thoma, Geologist Santa Fe Energy Operating Partners, L.P.

I. Wolfcamp Geology.

The Wolfcamp formation consists of five carbonate intervals with reservoir quality conditions. (Referred to by Santa Fe as the AC, AD, AE, AF, and AG zones, with the AG zone being the deepest.) It is difficult to predict accurately what type of reservoir performance will occur at a particular location. (Tr. at 99-103.)

EXAMPLES: The Kachina 8-1 well is producing in the AG zone and is prospective in the AF and AE zones. (Tr. at 99.)

The Kachina 5-1 is productive in the AF zone and is prospective in the AE and AC zones. (New testimony.)

The W. Corbin Fed. No. 26 is productive primarily in the AC zone. (New testimony.)

Fieldwide, the productive zones vary from location to location.

Two factors contribute to the productivity of a Wolfcamp interval: (1) clean carbonate thickness; and (2) matrix fracturing. There is no reliable method of predicting fracturing at a particular location. However, production to date is confined within clean carbonate thicks. Fracturing frequently enhances production within the clean carbonate thicks. If no clean carbonate, there will be no production. (Tr. at 101-103 and 124-125.) To predict carbonate thickness accurately, you must map each interval separately. Each interval varies considerably in thickness pool-wide. While mapping gross lower Wolfcamp carbonate thickness allows for a generalized understanding of lower Wolfcamp morphology, a specific understanding of the complexities of the South Corbin Wolfcamp pool can only be achieved by segregating and defining distinct reservoirs within the interval as has been done by Santa Fe.

Santa Fe believes the depositional stike is Northeast-Southwest. Hanley Petroleum asserts that the Wolfcamp is deposited in a North-South direction, and claims that the entire Permo-Penn shelf break maintains a constant strike and rate of dip or slope through time (pp. 196-198). In fact, the Wolfcampian shelf break is entirely different than the Leonardian or Bone Spring shelf break. The Wolfcampian break has a much flatter structural profile and consequently the associated fore-reef slope assumes a ramp profile. In contrast, the Bone Spring shelf break displays a much more significant vertifical component and consequently a much steeper fore-reef slope. (Tr. at 102-103, 119-122; New testimony.)

The net result of these morphological differences is manifested in the distribution and morphology of detrital deposits shed from the respective shelf breaks. Wolfcampian detritus, being shed basinward down a comparatively flat fore-reef ramp would travel at a much lower velocity and would as a result be subject, to a much larger degree, to marine reworking by ocean bottom currents, referred to as contourites. Such mechanisms are well documented in

current day submarine depositional settings such as the La Jolla and Navy submmarine deposits offshore California. (New testimony)

The conclusion from this pattern of thought is that Wolfcampian detritus, because of the nature of the depositional settings, is not necessarily deposited perpendicular to the Wolfcamp shelf edge. Further evidence which supports Santa Fe's depositional model came with the results of the Kachina 8-1, the Kachina 5-1 and the West Corbin Federal #26. Each of these wells provided subsurface data which confirmed both Northeast-Southwest Wolfcamp depositional strike as well as the productivity of distinct Wolfcamp reservoirs along this line of strike. (Tr. at 119-122; new testimony.)

In contrast, integration of the Kachina 5-1 data into the Hanley Wolfcamp Isopachs, submitted as Exhibit 2 at the previous hearing, substantially alters the interpretation as presented. It is evident that, even when lumping each of the separate Wolfcamp reservoirs together as Hanley has elected to do, the depositional thick is still clearly developing along a northeast to southwest trend, with the thick axis located to the east of the Kachina 8-1 location. (New testimony.)

Santa Fe's proposed location is downdip about 10 feet from Hanley's location. Hanley claimed at the Examiner hearing that being downdip would result in a greater risk of a well at Santa Fe's location watering out. We believe this assertion is totally without merit. This pool has a solution gas drive, not water

drive. Most wells in the pool do produce some conate water. (Tr. at 118-119, 329-331; new testimony.)

A table of water cuts of wells in the pool shows that water cuts <u>decrease</u> with a well's age, and that a well must be approximately 200 feet downdip to exhpibit high water cuts. Furthermore, Hanley's own exhibit 6 shows that downdip wells can have lower water cuts than updip wells. As a result, structural position does not determine water cut, and thus Santa Fe's proposed location is not adversely affected by being downdip. (New testimony.)

Conclusion: Santa Fe's location is superior geologically in the Wolfcamp.

A cross-section of the W. Corbin #1 and #5 wells in the NE $\frac{1}{4}$ of Section 18 and the NW $\frac{1}{4}$ of Section 17 shows that these two wells are producing from the equivalent to the AC, AE, and AF zones. The significance of this will be discussed by our reservoir engineer.

II. Bone Springs Geology.

The Bone Springs has two producing dolomite zones, the Sniper zone (upper) and Young Deep zone (lower). The Young Deep zone is wet at both Santa Fe's location and at Hanley's location. (Tr. at 103-108.)

As to the Sniper zone, Santa Fe's proposed location for the Kachina 8-2 well, in the SW\NW\, is definitely wet. As a result, Santa Fe's proposed location is prospective only in the Wolfcamp formation. (Id.)

The Kachina 8-1 well, in the NE $\frac{1}{4}$ NW $\frac{1}{4}$, is prospective in the Bone Springs Sniper zone. At the time of the Examiner hearing, we

believed Hanley's zone was prospective in the Sniper zone. However, the Kachina 5-1 well, which is updip from the Kachina 8-1 well and from Hanley's location in the NW\nW\, is wet. We believe the reason for this anomaly is that the Kachina 8-1 well encountered a thin shingle on top of the main Bone Springs Sniper pay. This shingle is limited in extent, and is not present in the Kachina 5-1. It may not be present at Hanley's location. Therefore, Hanley's location will also be wet in the Bone Springs. (New testimony.)

As a result, there should be no apportionment of well costs. III. <u>Risk Penalty</u>.

Santa Fe requests a 200% penalty if a party goes non-consent. Based on the wells in the SW\SE\ Section 7 and NW\NE\ Section 18, the Wolfcamp is very risky from location to location. In addition, this is an 11,450 foot test, and mechanical problems are always possible.

The geological risk of Hanley's location is greater because Hanley's location is moving toward thinner carbonate thicknesses in each of the four prospective Wolfcamp reservoirs, those being the AG, AF, AE and AC. This interpretation was again confirmed by the recently completed Santa Fe Kachina #5-1 and Meridian West Corbin Federal #26 wells. Based on this analysis the Santa Fe Kachina #8-2 is clearly the preferred location for encountering thick, productive lower Wolfcamp reservoirs.

Commission Case Nos. 10,211 and 10,219 TESTIMONY OUTLINE AND INDEX for Randy Offenberger, Reservoir Engineer Santa Fe Energy Operating Partners, L.P.

I. Spacing

Spacing in the South Corbin-Wolfcamp Pool is 80 acres/well per Orders R-8181-B and R-8181-C. There has been a voluntary pattern of development in the Pool in a diagonal 80 acre Northeast-Southwest oriented pattern. (Tr. at 146-147; 153-154, 158; new testimony.)

II. <u>Recovery/Drainage</u>.

Based on decline curve analysis, an average well in this Pool will recover 106,000 barrels of oil, and will drain about 70 acres. We expect the Kachina 8-1 well to be an average, or slightly better than average, well. (Tra. at 147-148, 164-165; new testimony.)

Assuming radial drainage, drilling at Hanley's location results in a loss of about 60,000 barrels, primarily in the SW $\frac{1}{4}$ NW $\frac{1}{4}$. These reserves may not be ultimately recovered without drilling a well in the SW $\frac{1}{4}$ NW $\frac{1}{4}$. (Tr. at 149-154; new testimony.)

III. Pressure Draw - Down in S. Corbin Pool.

Another prime reason for drilling in the SW $\frac{1}{4}$ NW $\frac{1}{4}$ is the demonstrated potential of pressure drawdown if the Hanley location is permitted as a direct offset to the Kachina 8-1 well. This is demonstrated by the W. Corbin #1 well in the SE $\frac{1}{4}$ NE $\frac{1}{4}$ § 18, and the W. Corbin #5 in the SW $\frac{1}{4}$ NW $\frac{1}{4}$ § 17. Pressure data on the #1 well showed an initial BHP of 4000 lbs in the AF zone which decreased to 1000 lbs in 3 $\frac{1}{4}$ years after 106,000 barrels of oil produced. The AF

zone appears depleted as of 2/88. The significance is shown in the #5 well production curve, which is the only direct 40 acre offset in the pool. The #5 well was completed in 9/85 in the AC zone (not competing with the #1 well) at a BHP of 4,265 lbs. In 3/87, the AE and AF (competive) zones were added in the #5 well. (The AF is the original completion zone in the #1 well.) At that point, there was a 10 BOPD increase in production realized from adding the AF. Conclusion: The AF zone had been drained by the 40 acre offsetting #1 well. The #5 well showed a 78% pressure drop in 1½ years (AC zone). (New testimony.)

IV. Pressure Draw-down in Young Wolfcamp.

The pressure drawdown realized by 40 acre direct offset development in the Wolfcamp is further supported by the Mitchell wells in the Young Wolfcamp Field,4 miles to the west of the S. Corbin Pool. The producing interval is the equivalent interval to the Kachina 8-1 well, as stated by Mr. Thoma. The Mitchell wells are spaced on statewide 40 acre units.

The Mitchell 16-1 in SEXNEX § 16 is the discovery well, and had an initial BHP of 4030 lbs. when completed in 2/90. The 40 acre offsetting well, the Mitchell 16-2 in the NEXNEX, was completed in 6/90, and had a BHP of 2906, which is an 1100 lb drop in reservoir pressure in 4 months. This indicates communication and interference when Wolfcamp wells are spaced on 40 acres. The production curves also indicate interference by their rapid decline. (Tr. at 148-149; new testimony.)

An Iso-Production Map, which was utilized in previous testimony by Hanley, to predict recovery on 40 acres is not an effective tool. The morphology, which is constructed on decline curve anlaysis on the South Corbin Wolfcamp wells (80 acres/well), cannot be used to estimate 40 acre recovery. The Iso-Production Map does not take into account the production interference caused by 40 acre development. Furthermore, there is no evidence to support the assertion that the Kachina 8-1 well will recover 250,000 barrels. (New testimony.)

V. Economics/Opposition to Non-Standard Unit.

Estimated recovery on 40 acres is approximately 55,000 barrels. Based on a well cost of \$722,000, a well on a 40 acre non-standard unit will be marginally profitable. However, it will take 2 wells to recover essentially the same reserves which will be recovered by one well on an 80 acre unit. Therefore, we believe it is unwise to drill on non-standard units. In addition, this will accelerate pressure draw-down. (New testimony.)

The Examiner's finding (15) under Order R-9480 determined the 80-acre diagonal spacing was most appropriate and results in better recovery of reserves. (New testimony.)

CIL DOMSER - W DIVISION REF - JD

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

IN THE MATTER OF THE HEARING DENOVO CALLED BY THE OIL CONSERVATION COMMISSION FOR PURPOSES OF CONSIDERING:

> CASE NOS. 10211 AND 10219 ORDER NO. R-9480

APPLICATION OF SANTA FE ENERGY OPERATING PARTNERS, L.P. FOR COMPULSORY POOLING, LEA COUNTY, N.M.

CASE NO. 10211

APPLICATION OF HANLEY PETROLEUM INC. FOR COMPULSORY POOLING, LEA COUNTY, N.M.

CASE NO. 10219

JOINT STIPULATION SUMMARY OF CHRONOLOGY AND LAND TESTIMONY

Comes now HANLEY PETROLEUM INC. ("HANLEY"), SANTA FE ENERGY OPERATING PARTNERS, L.P. ("SANTA FE") and HARVEY E. YATES COMPANY ("HEYCO"), in accordance with the stipulation of the parties at the pre-hearing conference of this case held on May 3, 1991, and present to the Commission the following summary of the chronology of activity related to efforts to obtain voluntary participation among and between the parties concerning the referenced cases: This summary of chronology and land testimony is based upon the Division/Commission case files for these cases. All references are to the Examiner transcript and exhibits or the OCD case file.

1. The 80-acre spacing unit in dispute is the W/2NW/4 of Section 8, T18S, R33E, Lea County, New Mexico. (page 66, lines 17-23)

2. The primary target for production by both HANLEY and SANTA FE is the Wolfcamp formation which is subject to the South Corbin-Wolfcamp Pool Rules which provide:

> Rule 2. Each well shall be located on a standard unit containing 80 acres, more or less, consisting of the N/2, S/2, E/2 or W/2 of a governmental quarter section; provided, however, that nothing contained herein shall be construed as prohibiting the drilling of a well on each of the quarter-quarter sections in the unit.

3. In addition, the Pool Rules provide for a procedure for obtaining a 40-acre non-standard proration and spacing unit. (See Pool Rule 3, Han. Ex. 11)

4. With the exception of the HANLEY 40-acre tract, SANTA FE and HEYCO control all of the working interest in the Wolfcamp in the N/2 of Section 8 and all of Section 5, and SANTA FE has working interests in over 3000 acres in this area, including all of the spacing units surrounding the HANLEY tract. (SF Ex. 2)

5. HANLEY owns 100% of the working interest in all depths in its 40-acre tract but has no other acreage in the immediate area. (p. 298) (SF Ex. 2)

6. HEYCO owns no interest in the S/2 of Section 8. (page 72, lines 21-24)

7. In 1986, HANLEY acquired its 40-acre federal oil & gas lease with a sliding scale royalty on oil production varying from 1/8th on daily production not over 50 barrels to 1/4th royalty for daily production over 400 barrels and then attempted to acquire other unleased acreage in Section 8 before commencing drilling. (p. 298)

8. In August, 1990, by successfully outbidding HANLEY, SANTA FE acquired its federal 1/8th royalty lease in N/2 of Section 8, the working interest of which is divided 50% to SANTA FE and 50% to HEYCO (page 72, lines 6-19)

9. On September 29, 1990, SANTA FE spudded the Kachina 8-1 well in the E/2NW/4 of Section 8 with the well located at a standard location 510 feet immediately to the east of the HANLEY tract. (Han. Ex. C)

10. On October 30, 1990 SANTA FE releases the Kachina 8-1 rig. (Stipulated)

11. On November 12, 1990, SANTA FE writes HANLEY and proposes a well in the subject 80-acre tract. No data on the Kachina 8-1 well was provided to HANLEY. (Han. Ex. 19, p. 4)

12. On November 13, 1990 SANTA FE ran its first production test on the Kachina 8-1 well for 411 barrels of oil a day and 577 mcf of gas with 59 barrels of water. (Han. Ex. C)

13. On November 26, 1990, HANLEY replied to SANTA FE with a request for data and information by which to evaluate the SANTA FE proposal. (Han. Ex. 19, p. 7)

14. On December 3, 1991, SANTA FE writes HANLEY refusing to provide HANLEY with the requested data and proposing to take a farmout from HANLEY. (page 69, lines 20-25)

15. By Application dated December 11, 1990, SANTA FE files its compulsory pooling application as to all depths against HANLEY seeking approval for the well in the south 40 acres of an 80-acre spacing unit. The case is docketed for an Examiner's Hearing on January 10, 1991. (OCD case file)

16. On December 17, 1990, SANTA FE writes to HANLEY advising HANLEY that SANTA FE has docketed a compulsory pooling case for January 10, 1991 hearing and offering a farmout or participation in the well. (Han. Ex. 19, p. 12-13)

17. On December 17, 1990, SANTA FE also writes HANLEY offering to show HANLEY data on the Kachina 8-1 well if HANLEY will commit to either joining in the well or farming out its interest. HANLEY rejects the offer. (page 69, lines 20-25; page 70, lines 1-13)

18. On December 19, 1990, HANLEY writes SANTA FE and renews its request for data from SANTA FE. (Han. Ex. 19, p. 19)

19. On December 20, 1990, SANTA FE sends a proposed operating agreement to HANLEY and HANLEY acknowledges receipt. (SF Ex. 3) On January 2, 1991, HANLEY subsequently proposes modifications to the agreement, including substituting HANLEY as operator, but terms have not yet been reached. (page 70, lines 14-21; page 86, lines 8-19) (Han. Ex. 19, p. 65-69)

20. On January Z, 1991, HANLEY proposes to SANTA FE (B that HANLEY operate the subject well, (Han. Ex. 19, p. (65)

21. On January 2, 1991, in response to the SANTA FE application, HANLEY files its own compulsory pooling application requesting approval of a well at a standard location and pooling from the surface to total depth of the well. (OCD case file) 22. On January 3, 1991, HANLEY obtains an OCD subpoena for data and serves SANTA FE for production at the January 10, 1991 Examiner hearing. On January 9, 1991, SANTA FE moves to Quash the Subpoena. (OCD case file)

23. On January 4, 1991, HANLEY writes HEYCO sending an AFE and requests HANLEY be operator. (Han. Ex. 19, p. 70)

24. On January 7, 1991, HANLEY sends SANTA FE and HEYCO HANLEY'S proposed AFE for the subject well. (Han. Ex. 19, p. 71-73)

25. On January 8, 1991, SANTA FE writes HANLEY requesting HANLEY to join in the SANTA FE well. (Han. Ex 19 p.118) On January 8, 1991, HEYCO writes HANLEY advising HEYCO has joined SANTA FE. (Han. Ex. 19, p. 119).

26. On January 10, 1991, Examiner Catanach modifies the subpoena and requires SANTA FE to surrender production/test data and logs on Kachina 8-1 well. The SANTA FE case is continued to January 24, 1991. (OCD case file)

27. On January 16, 1991, 64 days after the first production test; SANTA FE files its completion report on the Kachina 8-1 well. (Han. Ex. C)

28. On January 14, 1991, SANTA FE appeals the Examiner subpoena order to the Commission which hears the subpoena appeal on January 17, 1991. (OCD case file)

29. On January 21, 1991, SANTA FE writes HANLEY for clarification of HANLEY'S proposed AFE. (Han. Ex. 19, p. 120).

30. On January 30, 1991, SANTA FE unilaterally turns over certain data to HANLEY. (Han. Ex. 19, p. 122)

31. On February 4, 1991, HANLEY again proposes to SANTA FE and HEYCO that HANLEY operate the well and it be located on the HANLEY tract. (Han. Ex. 19, p. 123-124)

32. On February 5, 1991, HANLEY notifies the OCD and SANTA FE/HEYCO of its amended location to the north 40-acre tract. (OCD case file)

33. On February 6, 1991, Examiner Stogner decides HANLEY's amendments can be addressed at the Examiner hearing and orders both pooling cases continued to the February 21, 1991 Examiner's docket. (OCD case file)

34. On February 12, 1991, HANLEY files a first amended compulsory pooling application requesting pooling only from top of Wolfcamp to total depth with the well being located in the North 40 acres of the spacing unit. (OCD case file)

35. On February 14, 1991, Examiner Stogner again confirms that moving of the HANLEY well location does not require re-advertisement of the case. (OCD case file)

36. On February 15, 1991, Commission enters its Ruling on HANLEY's subpoena of SANTA FE data and confirms Examiner Catanach's order with the exception of production of the mud log for the Kachina 8-1 well. (OCD case file)

37. By agreement of the parties the two pooling cases are continued from February 21, 1991 Examiner docket to Examiner docket of March 7, 1991. (OCD case file)

STIPULATED BY AND AMONG COUNSEL OF RECORD FOR AND ON BEHALF OF THEIR RESPECTIVE CLIENTS

KELLAHIN, KELLAHIN & AUBREY

W Thomas Kellahin

for Hanley Petroleum Inc.

HINKLE, COX, EATON, COFFIELD & HENSLEY

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James Bruce Attorney for Santa Fe Energy Operating Partners, L.P.

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William F Carr

Attorney for HEYCO

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STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION COMMISSION

RECEIVED

IN THE MATTER OF THE HEARING DENOVO CALLED BY THE OIL CONSERVATION COMMISSION FOR PURPOSES OF CONSIDERING: MAY 0 1991

DIL CONSERVATION DIVISION

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CASE NOS. 10211 AND 10219 ORDER NO. R-9480

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APPLICATION OF HANLEY PETROLEUM INC. FOR COMPULSORY POOLING, LEA COUNTY, NEW MEXICO

CASE NO. 10219

CASE NO. 10211

HANLEY PETROLEUM INC.'S SUMMARY OF EXAMINER HEARING

COMES NOW HANLEY PETROLEUM INC. ("HANLEY") and in accordance with the stipulation of the parties at the pre-hearing conference of this case held on May 3, 1991, presents to the Commission its summary of the Examiner Transcript, Exhibits and Order.

BACKGROUND

1. On March 7, 1991, the Division held a consolidated hearing of the HANLEY compulsory pooling application (Case No. 10219) and the SANTA FE Energy Operating Partners, L.P. ("SANTA FE") compulsory pooling application (Case No. 10211), in which each sought to pool the other.

2. HANLEY, with a 50% working interest, sought to be named the operator of a stand-up 80-acre spacing unit for Wolfcamp oil production and based upon its geologic evidence proposed the well be located in the north 40acres on the HANLEY tract at an estimated cost of \$667,782. HANLEY further proposed a split cost allocation between the shallow 40-acre oil potential in the Bone Springs formation and the deeper 80-acre oil potential in the Wolfcamp formation.

3. SANTA FE, with a 25% working interest, sought to be named operator of the same spacing unit but proposed the well be located in the south 40 acres on a tract owned 25% by SANTA FE and 25% by HEYCO for a well at an estimated cost of \$721,942. HEYCO has agreed to participate with SANTA FE. (pages 66-67) (SF Ex. 4 & 5) SANTA FE also agreed they would participate if the well

were drilled at the location proposed by HANLEY. (p. 95, lines 10-24)

4. On March 29, 1991, the Division entered Order R-9480 granting the SANTA FE application and denying the HANLEY application based upon the Examiner's conclusion that while either location would result in a successful Wolfcamp completion, the SANTA FE location is more appropriate because it conforms to an 80-acre diagonal spacing pattern and therefore SANTA FE's application should be approved with a risk factor penalty of 100%. The order named SANTA FE operator and pooled all horizons contrary to SANTA FE's testimony that they were seeking only force pooling for 80-acre spacing oil zones. (p. 81, lines 3-13)

5. On April 8, 1991, HANLEY filed its application for a DeNovo hearing before the Commission.

6. On April 11, 1991, HANLEY filed a Supplemental Application in Case 10219 (DeNovo) requesting the alternative remedy of a 40-acre non-standard proration and spacing unit (being the HANLEY tract) for the Wolfcamp in accordance with Rule 3 of the South Corbin-Wolfcamp Pool Rules.

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29. On January 21, 1991, SANTA FE writes HANLEY for clarification of HANLEY'S proposed AFE. (Han. Ex. 19, p. 120).

30. On January 30, 1991, SANTA FE unilaterally turns over certain data to HANLEY. (Han. Ex. 19, p. 122)

31. On February 4; 1991, HANLEY again proposes to SANTA FE and HEYCO that HANLEY operate the well and it be located on the HANLEY tract. (Han. Ex. 19, p. 123-124)

32. On February 5, 1991, HANLEY notifies the OCD and SANTA FE/HEYCO of its amended location to the north 40-acre tract. (OCD case file)

33. On February 6, 1991, Examiner Stogner decides HANLEY's amendments can be addressed at the Examiner hearing and orders both pooling cases continued to the February 21, 1991 Examiner's docket. (OCD case file)

34. On February 12, 1991, HANLEY files a first amended compulsory pooling application requesting pooling only from top of Wolfcamp to total depth with the well being located in the North 40 acres of the spacing unit. (OCD case file)

35. On February 14, 1991, Examiner Stogner again confirms that moving of the HANLEY well location does not require re-advertisement of the case. (OCD case file)

36. On February 15, 1991, Commission enters its Ruling on HANLEY's subpoena of SANTA FE data and confirms Examiner Catanach's order with the exception of production of the mud log for the Kachina 8-1 well. (OCD case file)

37. By agreement of the parties the two pooling cases are continued from February 21, 1991 Examiner

docket to Examiner docket of March 7, 1991. (OCD case file)

SUMMARY OF GEOLOGY

HANLEY showed the distribution of producing wells in the area as well as what horizons produced in each well. The subject unit is between established Bone Springs production to the east and west and Wolfcamp production to the south. SANTA FE operates only the Kachina 5-1 well and the 8-1 well. (p. 138, lines 15-18) The most prolific production is from the Bone Springs (carmine red) and the Wolfcamp limestones (yellow). (Han. Ex. 4)

Both the Bone Springs and Wolfcamp horizons produce from stratigraphic traps which are interpreted as being carbonate detritus deposited in the basin which flowed down slope from east-west trending updip reef fronts to the north. This carbonate detritus was deposited as channelized and discontinuous piles perpendicular to the reef front and therefore have a north-south direction. (Han. Ex. 1 & 3)

The first geologic issue of importance is the construction of an accurate structure map for both the Bone Springs and Wolfcamp. While both geologists

prepared structure maps which are in substantial agreement (p. 235 lines 18-22). HANLEY's geologist, Brett Bracken, concluded that down-structure water was a risk . in both the Bone Springs and Wolfcamp. (p. 196, line 19-22; p. 211, lines 14-18) Although the SANTA FE geologist, John Thoma, conceded that the SANTA FE location in the Bone Springs would be wet and nonproductive, he contended that water in the Wolfcamp was not a concern and therefore HANLEY's up-structure position in the Wolfcamp would not matter. Mr. Bracken and (p. 211-212) Mr. Huck (p. 276, lines 13-23) disputed that contention.

The HANLEY structure map is contoured on base of the lower Wolfcamp with a contour interval of 50 feet. (Han. Ex. 1; p. 209-210) It is important to note the steep dip to the south along the reef face which is trending eastwest consistent with regional geology. (p. 197). Thus, any debris that was deposited down this steep slope will be perpendicular to it and will have a north-south orientation. (p. 198 lines-14). A location in the north 40-acres as proposed by HANLEY will be approximately 20-30 feet higher than the SANTA FE proposed location in the south 40-acres. The SANTA FE location has a down

structure water risk to it. The HANLEY location can have 20-30 feet more oil column in the Wolfcamp due to the potential hazard of water production at the SANTA FE location. The HANLEY location also has an improved structural advantage over the SANTA FE Kachina 8-1 well to the east (p. 130, lines 6-10) which has at least two Wolfcamp zones listed as containing oil and water on SANTA FE's completion report. (Han. Ex. C)

When it came to the Bone Springs potential, there was substantial agreement between the geologic witnesses. SANTA FE contoured the Bone Springs thicks trending north-south as did HANLEY. HANLEY's Exhibit 3 is a structure map contoured on top of the second Bone Spring carbonate Zone "B" pay which is the pay that produces in the North Young Bone Spring pool to the northwest of the subject unit. (p. 208 lines 4-8). It is important to note that the HANLEY location will be 100 feet high to the SANTA FE location. This is very critical because wells which are located at or south of the -4600' subsea contour, as seen in the North Young Bone Spring Pool produce large amounts of water. The -4600' subsea contour borders the south lease line of the HANLEY tract. Also, the south dip off the reef fronts will make the

HANLEY location higher than the SANTA FE location at all formations. The HANLEY location is also higher than the SANTA FE Kachina 8-1 well location to the east.

SANTA FE's geologist agreed with the HANLEY geology in that the proposed SANTA FE location will be approximately 100 feet down-structure from the HANLEY location (p. 111 lines 11-15) (Han. Ex 1). and wet in the Bone Springs and thus the Bone Springs is not a viable target at the SANTA FE well location. (SF Ex. 8) (p.106 lines 4-23).

It is interesting to note that like HANLEY, Mr. Thoma oriented the Bone Springs reservoir north-south in relation to his east-west orientation of the Bone Springs structure map. (SF Ex. 8; p. 113-114) He also stated that the Bone Springs and Wolfcamp structure would have the same general structure (p. 237; p. 115, lines 22-24), but he then applied a different orientation when he attempted to map the Wolfcamp reservoir. (SF Ex. 7; p. 114) The northeast-southwest orientation he imposed is discordant to his stated depositional model and different than the north-south orientation used in the Bone Springs.

That shift in orientation then became the second major geologic issue of importance to this case. The issue was how the Wolfcamp reservoir should be mapped and related to the structure. Over this issue, there was substantial dispute and significant disagreement in the proper orientation of the isopach to the structure map. (p. 202, lines 4-25; p. 237, lines 19-24).

The HANLEY map is an isopach of the net clean lime within the total lower Wolfcamp interval. (p. 198-199; Han. Ex. 1) It shows two north-south thicken sections. As expected from the structure map, the isopach shows elongated, lobed shaped Wolfcamp deposits oriented northsouth and perpendicular to the steep dipoff of the reef front to the north. (p. 200-201) The lower Wolfcamp limestone reservoir thickness at the HANLEY location is going to be equal to or greater than the thickness of the SANTA FE location. (p. 199 lines, 22-25)

HANLEY agrees with Mr. Thoma when in describing SANTA FE's Wolfcamp isopachs he stated "it appears that there is a general relationship between carbonate thickness and the probability of encountering producible reservoir conditions in the Wolfcamp. (p. 101, lines 7-10) Mr. Thoma has described the Kachina 8-1 well as

having some 50-60 feet of good matrix porosity ranging from 4 to 12 percent in the so called "AG" carbonate which is only one of three potential wolfcamp zones in this well. (p. 101, lines 14-25)

However, unlike the HANLEY Wolfcamp isopach, Mr. Thoma did not construct his isopach to be perpendicular to the reef front. (p. 119, lines 4-19). Instead he arbitrarily placed the orientation in a northeastsouthwest direction which is oblique to the reef face. This is in spite of the fact that he acknowledged (p. 100, lines 14-17) that the Wolfcamp is carbonate debris and that he contours the Bone Springs (also carbonate debris) with a north-south orientation. By shifting the angle of orientation, Mr. Thoma has made the Wolfcamp reservoir thicker across the SANTA FE tract than it is across the HANLEY tract. (p. 103, lines 1-7). Mr. Thoma then argues that while his Wolfcamp location is structurally inferior to the HANLEY location (approximately 45 feet, p. 118, lines 13-17), the SANTA FE location is thicker and that thicker is better. (p. 116, lines 19-24; p. 125, lines 12-17). Mr. Thoma dismisses the fact that down-structure wells in the Wolfcamp also produce water. (p. 118, lines 18-15; p.

143, lines 13-20). Mr. Thoma also admitted that the Kachina 8-1 well log showed the so called "AF" carbonate to be productive of water as well as oil. (p. 118, lines . 1-7).

Unfortunately, the shift in orientation of Mr. Thoma's three Wolfcamp isopachs makes the isopachs inconsistent with the production data from the Wolfcamp wells. In addition, it is simply not a useful geologic tool from which any conclusions about potential locations can be drawn. (p. 206-207). For example, using his "AG" carbonate isopach map which is the Wolfcamp zone productive in the Kachina 8-1 well with a thickness of 31 feet, Mr. Thoma argues that the SANTA FE location will have similar thickness to the Kachina 8-1 well while the HANLEY location will be only 10 feet thick. Mr. Thoma ignores the fact that this same map also shows the well in Unit H of Section 8 to have 30 feet of net thickness but was drill stem tested and abandoned in that zone. (p. 123, lines 19-22).

The HANLEY cross section (Han. Ex. 2) shows the Kachina 8-1 well log which is the immediate east offset well to the HANLEY tract. (p. 204) Geologically, because of its proximity to the Kachina 8-1, HANLEY concludes the

subject well must be located in the north 40-acre tract to mitigate drainage of the HANLEY tract by the Kachina 8-1 well. (p. 303, lines 12-25). A well in the SANTA FE location will be in a less favorable location and cannot protect the HANLEY tract from drainage.

SANTA FE reports that the Kachina 8-1 well has both oil and water productive in shallower Wolfcamp pays and estimated that the HANLEY location would be approximately 19 feet structurally higher than the Kachina 8-1 well. (p. 130, lines 6-10). HANLEY also concludes that its location which is structurally higher than Kachina 8-1 location is the more prudent location to drill than the SANTA FE proposed location which is down structure to both the HANLEY location and the Kachina 8-1 location. (Han. Ex. 2, p. 201)

Finally, while Mr. Thoma continued to argue his contention for the south 40-acre location, he admitted that his justification for the 330 foot unorthodox location for the Kachina 5-1 well in Unit O of Section 5 was simply one of "closeology" to the Kachina 8-1 well. (p. 133, lines 22-25). And in closing his discussion, Mr. Thoma admitted to Mr. Stovall that both well locations should be drilled. (p. 142, lines 11-13).

SUMMARY OF ENGINEERING

Mr. Huck, HANLEY's petroleum engineer, prepared a cumulative production map through 9/90 for all Wolfcamp producers. (Han. Ex. 5, p. 241-242) It also shows the average daily production from the last month available. A star indicates that the well is no longer producing from the Wolfcamp. There is a marked variability in production. Therefore HANLEY concurred with the SANTA FE geologic witness who concluded that it reduces the Wolfcamp risk to drill in close proximity to a good well.

Based upon decline curve analysis of all Wolfcamp wells in the field, Mr. Huck prepared an ISO production map to show the estimated ultimate recoveries in the area. (Han. Ex. 6, p. 244; Han. Ex. 7, p. 253) Mr. Huck confirmed that the ISO production map conformed to the HANLEY geologic interpretation with the north-south trend in production conforming to the isopach of HANLEY. (p. 245-246). These contour lines connecting points of equal recoveries delineate three major areas or pods that are highly productive and contain 40% of the field's reserves. They tend to orientate somewhat east-west and have high water cuts on their south side. (p. 276, lines 13-19) It was noted as you move from these pods

productivity rapidly decreases. Mr. Huck also commented that the SANTA FE isopach map was inconsistent with the HANLEY ISO production map. (p. 245-146; p. 286-288). Mr. Huck further confirmed that contrary to the contentions of Mr. Thoma, there was a definite water risk in the Wolfcamp on the south side or down structure side of the major oil accumulations. (p. 244, lines 10-23)

By comparing the initial producing rate of the Kachina 8-1 well with the initial producing rates of the rest of the wells in the Wolfcamp pool, HANLEY estimated that the subject well drilled on the HANLEY tract should produce 260,000 barrels of oil while the SANTA FE location should only produce 130,000 barrels of oil. (p. 246-247; Han. Ex. 7)

SANTA FE's engineer did not present any decline curve analysis, reserve calculations or volumetric analysis but simply assumed a recovery of 100,000 barrels of oil for the 80-acre spacing unit and declared that 40-60% would go unrecovered if the HANLEY location was approved. (p. 150, lines 16-25) Mr. Offenberger further stated that 100,000 barrels of oil "typical for a Wolfcamp recovery number" (p. 148, lines 5-6), and that the Kachina 8-1 would be a "typical well." (p. 148,

lines 10-15) However, Mr. Thoma testified that he expected high rates of production from other zones in the well and that very few wells in the field had the kind of porosity that was developed in the Kachina 8-1. (p. 139, But under cross-examination, lines 11 - 18) Mr. Offenberger admits that the Wolfcamp oil under the HANLEY tract will be drained by the Kachina 8-1 well. (p. 167-168) And further admitted that he had not done any volumetric calculation of recoverable oil under the SANTA FE 40-acre tract. (p. 169, lines 5-12) Mr. Huck disputed the SANTA FE reserves assumptions and concluded that volumetric calculations would not be accurate for this reservoir because of the variability of reservoir quality rock. (p. 250-256)

While Mr. Offenberger, SANTA FE's engineer, contended hypothetically that the SANTA FE location would conform to a theoretical 80-acre diagonal spacing pattern and hypothetically provide better recovery than the HANLEY location. (p. 148) He admitted on crossexamination that such a pattern was neither mandated nor preferred by the rules for the South Corbin-Wolfcamp Pool. He further conceded there were already examples of exceptions to his pattern between the Wolfcamp wells in

this pool. (See SF Ex. 8 production montage: Unit H of Section 18; Unit E of Section 17; and Unit E, Unit F, Unit I, Unit K, Unit L of Section 18 are essentially 40acre offsets) Finally, Mr. Offenberger admitted that he was not aware of either Rule 2 or Rule 3 of the South Corbin-Wolfcamp Pool Rules. (p. 158-159).

Mr. Huck compared the costs between the SANTA FE location and the HANLEY location. (p. 259-272; Han Ex. 12). He concluded that HANLEY's estimated costs were some \$54,000 less than SANTA FE's estimated costs.

Part of his conclusion was that because the SANTA FE location had no potential for Bone Springs, then HANLEY would be forced to pay 50% of SANTA FE'S AFE or the sum of \$360,971. (p. 73, lines 16-21; Han. Ex. 17; p. 107-108) However, if the HANLEY location was approved because it is the only location with both Bone Springs and Wolfcamp potential the cost allocation could result in substantial savings to the party pooled. For example, using the same AFE and then allocating the costs between the Bone Springs and Wolfcamp potential at the HANLEY location, then SANTA FE/HEYCO would only have to pay \$226,673. as their proportionate share of the Wolfcamp

costs. (Han. Ex. 17) This cost allocation would apply after depletion of the Wolfcamp.

Mr. Huck concluded that the approval of the HANLEY location would result in the difference of an additional \$1 million to HANLEY (p. 248, lines 20-25), and an additional \$250,000 to the U.S. Government, HANLEY's royalty owner. (p. 249, lines 14-18)

Mr. Huck concluded that the SANTA FE proposed well location could not protect the HANLEY tract from drainage by the Kachina 8-1 well. (p. 288; p. 257-258) Both the HANLEY and SANTA FE engineers agreed that unless the well was drilled on the HANLEY tract the Kachina 8-1 well would drain the HANLEY tract. (p. 162, lines 6-8; p. 258).

Finally, SANTA FE sought a 200% penalty because of the risk involved in its location (p. 108, line 13) while HANLEY sought 150% penalty for the risk involved at its location. (p. 256, line 14). The Examiner Order applied a 100% to the SANTA FE location and denied the HANLEY location.

SUMMARY

SANTA FE'S first proposal to HANLEY about participation in the subject well was by letter dated November 12, 1990. HANLEY responded to that proposal by letter dated November 19, 1990 advising SANTA FE that HANLEY was considering drilling a Bone Springs well on its own acreage and requested data from SANTA FE so HANLEY could properly evaluate the SANTA FE proposal for a Wolfcamp test. (Han. Ex. 19, p. 7-8)

HANLEY strongly believes that SANTA FE's actions have been an attempt to use the compulsory pooling act to keep HANLEY from offsetting the SANTA FE Kachina 8-1 well in which SANTA FE has a 50% working interest and to require the HANLEY tract to be dedicated to a well (Kachina "8" Fed #2 well) in south 40 acres of the W/2NW/4 of Section in which SANTA FE only has a 25% working interest. (p. 89-91; Han Ex. 19, p.19-20)

This is evidenced by the fact that, among other things, SANTA FE drilled the Kachina 8-1 well, released the rig and potentialed the well some 64 days later. Prior to potentialing the well they attempted to compulsory pool HANLEY's interest while refusing to

provide data to HANLEY so HANLEY could make an informed decision. (Han. Ex, 19; Han. Ex. C)

As a result of having the data subpoenaed, HANLEY for the first time, had logs and test information from which to evaluate the Kachina 8-1 well.

Once HANLEY had reviewed the geologic data obtained by subpoena from SANTA FE on the Kachina 8-1 well, HANLEY concluded that:

(1) The optimum location for the well was on the HANLEY tract and not on the SANTA FE tract to the south.

(2) A structure map of the Wolfcamp shows the HANLEY location to be up structure to the Kachina 8-1 well and to be approximately 25 feet up structure to the SANTA FE proposed location. (Han. Ex. 1)

(3) A structure in this Wolfcamp was important because down structure Wolfcamp wells produced substantial volumes of water and could be too wet to be productive of oil. (p. 276-278)

(4) Both HANLEY and SANTA FE agreed that HANLEY had a superior Bone Springs location and that the SANTA FE location would be wet and non-productive in the Bone Springs.

(5) HANLEY rejected the SANTA FE isopach interpretation because it was contrary to the perpendicular orientation of the carbonate to the reef face and erroneously inferred Wolfcamp production were drilling had proved none existed.

(6) The HANLEY reserve calculations based upon decline curve analysis showed the HANLEY tract to potentially recover 130,000 barrels of oil more than the SANTA FE location. HANLEY rejected the SANTA FE estimates of recovery as being nothing more than arbitrary guesses.

(7) Unless the well is drilled on the HANLEY tract,Wolfcamp oil reserves would be drained by the Kachina 8-1well.

(8) That the pool was being effectively developed on 40-acre locations.

DEFECTS IN EXAMINER ORDER

In this case, HANLEY is asking the Commission to disregard the Examiner order for reasons which include, but not by way of limitation, the following:

1. The Examiner's Order was issued in violation of Section 70-2-13 N.M.S.A. 1978 because it was entered

prior to receipt of the transcript in the case. An Examiner does not have the authority to enter an order in a case he hears but must provide to the Division Director his recommended order based "upon the transcript of testimony and record made by or under the supervision of the examiner..." There was no transcript available and therefore the order was entered prematurely.

2. The Examiner's order failed to decide the case on the merits of each party's geologic evidence but instead ignored that dispute and resolved the case in favor of SANTA FE based upon a theoretical 80-acre diagonal offset well pattern which was certainly not mandatory or even preferred in the Special Field Rules for the South Corbin-Wolfcamp Pool (Reference Order No. R-8181-B 5-20-86). The Examiner also ignored the undisputed fact that SANTA FE's Kachina 8-1 well is closer to HANLEY's lease line and more like to drain HANLEY's share of Wolfcamp hydrocarbons than the south location granted in the Order.

3. The Examiner's order failed to make essential finds of ultimate facts concerning dispute over which party's AFE was reasonable and failed to adopt either AFE whether reasonable or not.

4. The Examiner's order incorrectly pooled all mineral interests from the surface to the base of the Wolfcamp in direct conflict with both parties stated purposes which was to pool only those interest for 80acre spaced oil production, including the Wolfcamp pool. That mistake results in 40-acre spaced mineral production being pooled into an 80-acre spacing unit in violation of Section 70-2-17(C) N.M.S.A. 1978.

5. The Examiner's order failed to make findings of ultimate facts from which to understand the reasoning of the Division on the cost allocation issue raised by The Examiner, having determined that the well HANLEY. would be located in the south 40-acres in which HANLEY had no interest above the top of the Wolfcamp, failed to allocate costs between the shallow versus the deep oil zones thereby requiring HANLEY to pay а disproportionately higher share of the costs of the well than is allowed under COPAS Bulletin #2. This oversight by the Examiner is contrary to the requirements set forth for the Division by the New Mexico Supreme Court in Fasken v. Oil Conservation Commission, 87 N.M. 588 (1978).

6. The Examiner's order failed to take into proper consideration that HANLEY is the largest single working interest owner in the spacing unit.

7. The Examiner's Order ignored the undisputed evidence that the SANTA FE location was estimated to recover only 130,000 barrels of oil while the HANLEY location was estimated to recover 260,000 barrels of oil.

CONCLUSION

The HANLEY 40-acre tract cannot be protected from drainage by the Kachina 8-1 well if the Commission approves the SANTA FE compulsory pooling application.

The Special Rules and Regulations adopted by the Division for the South Corbin-Wolfcamp Pool (Order R-8181-B) specifically provide for the drilling of pool wells on each of the quarter-quarter sections in a spacing unit and further provides for the approval of a 40-acre non-standard proration and spacing unit for the pool.

The HANLEY tract has sufficient oil potential to economically support the drilling of the well at a standard location in its tract as a non-standard

proration and spacing unit and HANLEY will drill that well if approved by the Commission.

Approval of the HANLEY application will afford to HANLEY and its royalty owner the opportunity to timely recover their share of the pool hydrocarbons underlying its tract without having its interest diluted with the inclusion of SANTA FE's south 40-acre tract which is down structure, potentially wet and non-productive and will not contribute reserves to the HANLEY tract.

HANLEY requests that its compulsory pooling application be granted, or in the alternative, that both compulsory pooling applications be denied and HANLEY's application for approval of a 40-acre non-standard proration and spacing unit be approved.

Respectfully submitted

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

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

CASES NOS. 10211 AND 10219 Order No. R-9480

APPLICATION OF SANTA FE ENERGY OPERATING PARTNERS, L.P. FOR COMPULSORY POOLING, LEA COUNTY, NEW MEXICO

APPLICATION OF HANLEY PETROLEUM INC. FOR COMPULSORY POOLING, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on March 7, 1991, at Santa Fe, New Mexico, before Examiner Jim Morrow.

NOW, on this <u>29th</u> day of March, 1991, the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

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

(2) The applicant in Case 10211, Santa Fe Energy Operating Partners, L.P., (Santa Fe), seeks an order pooling all mineral interests from the surface to the base of the Wolfcamp formation underlying the following described acreage in Section 8, Township 18 South, Range 33 East, NMPM, Lea County, New Mexico, in the following manner:

> (a) The W/2 NW/4 to form a standard 80-acre oil spacing and proration unit for any and all formations and/or pools developed on 80-acre spacing within said vertical extent, which presently includes but is not necessarily limited to the Undesignated South Corbin-Wolfcamp Pool;

> (b) The SW/4 NW/4 to form a standard 40-acre oil spacing and proration unit for any and all formations and/or pools developed on 40-acre spacing within said vertical extent, which presently includes but is not necessarily limited to the Undesignated West Corbin-Delaware, Undesignated Central Corbin-Queen, Undesignated West Corbin-San Andres and Undesignated Corbin-Bone Spring Pools.

Both units are to be dedicated to a single well to be drilled at a standard oil well location 1980 feet from the North line and 660 feet from the West line (Unit E) of said Section 8.

(3) The applicant in Case 10219, Hanley Petroleum Inc. (Hanley), originally sought an order pooling all mineral interests from the surface to the base of the Wolfcamp formation underlying the following described acreage in Section 8, Township 18 South, Range 33 East, NMPM, Lea County, New Mexico, in the following manner:

- (a) The W/2 NW/4 to form a standard 80-acre oil spacing and proration unit for any and all formations and/or pools developed on 80-acre spacing within said vertical extent, which presently includes but is not necessarily limited to the Undesignated South Corbin-Wolfcamp Pool;
- (b) The SW/4 NW/4 to form a standard 40-acre oil spacing and proration unit for any and all formations and/or pools developed on 40-acre spacing within said vertical extent, which presently includes but is not necessarily limited to the Undesignated West Corbin-Delaware, Undesignated Central Corbin-Queen, Undesignated West Corbin-San Andres, and Undesignated Corbin-Bone Spring Pools.

Both units would have been dedicated to a single well to be drilled at a standard oil well location 1980 feet from the North line and 660 feet from the West line (Unit E) of said Section 8.

(4) Hanley amended its application in Case 10219 and at the hearing requested approval for an 80-acre oil spacing and proration unit as described in Finding No. (3)(a) above with said unit to be dedicated to a well to be drilled at a standard oil well location 660 feet from the North and West lines (Unit D) of said Section 8. A 40-acre oil spacing and proration unit in Unit D would not require compulsory pooling since Hanley's working interest in the NW/4 NW/4 of said Section 8 is 100%.

(5) Each applicant (Santa Fe and Hanley) has the right to drill and each proposes to dril a well on their respective units, as described above in Findings (2) and (4), to a depth sufficient to test the Wolfcamp formation.

(6) Cases Nos. 10211 and 10219 were consolidated for the purpose of hearing and should be consolidated for purpose of issuing an order since the cases involve common acreage and the granting of one application would require the denial of the other.

(7) This matter has been the subject of previous Oil Conservation Division and Oil Conservation Commission actions involving Hanley's subpoena request for certain Santa Fe records.

(8) A representative of the Harvey E. Yates Company appeared at the hearing in support of Santa Fe's application.

(9) There are interest owners in the proposed units who have not agreed to pool their interests.

(10) The primary objective of either proposed well would be a Wolfcamp completion in the Undesignated South Corbin-Wolfcamp Pool to offset Santa Fe's recently completed Kachina "8" Federal Well No. 1 in the NE/4 NW/4 of said Section 8. It flowed 411 barrels of oil, 59 barrels of water and 577 MCF of gas per day on initial potential on January 13, 1991. Santa Fe's Form C-115 production report shows that the well produced 8143 barrels of oil, 213 barrels of water and 9374 MCF of gas during January, 1991.

(11) Pool rules for the South Corbin-Wolfcamp pool provide for 80acre standard spacing and proration units with wells to be located within 150 feet of the center of a governmental quarter-quarter section or lot.

(12) In support of its application in Case No. 10211, Santa Fe submitted the following information through its exhibits and the testimony of its witnesses:

- (a) Santa Fe's proposed location for its Kachina 8 Federal Well No. 2 in the SW/4 NW/4 of said Section 8 would conform to an 80-acre diagonal spacing pattern. Santa Fe believes this would provide better recovery than Hanley's location which would be a direct West offset to Santa Fe's Kachina 8 Federal Well No. 1.
- (b) Cross-sections, structure maps and isopach maps were submitted to show the favorable conditions at the Santa Fe location. Their geology shows that the proposed location would be approximately 20 feet lower on the Wolfcamp structure than their kachina 8 Well No. 1 and would have about the same thickness of clean Wolfcamp carbonate. The Santa Fe location is 50 feet lower structurally than

> the Hanley location but would encounter a great thickness of clean carbonate in the Wolfcamp according to Santa Fe's testimony.

- (c) Santa Fe's witnesses testified that lower structural position would not necessarily result in increased water production from the Wolfcamp.
- (d) Santa Fe's engineering witness estimated that a well at the Santa Fe location would recover 50,000 to 60,000 barrels more oil than one at the Hanley location.
- (e) Cross-sections, structure maps and porosity maps submitted by Santa Fe indicate that the Bone Spring formation would be productive at the Hanley location but would be water productive at the Santa Fe location. Santa Fe recommended allocation of well costs between the Wolfcamp and the Bone Spring if the Hanley location is approved.
- (f) Santa Fe's estimated well cost is \$721,942. They expect to recover 100,000 barrels of oil from the Wolfcamp. Monthly overhead rates of \$6,260 while drilling and \$626 while producing were requested along with a 200% risk penalty.
- (g) Santa Fe and the Harvey E. Yates Company each have 50% working interest in the SW/4 NW/4 of said Section 8.

(13) To support its application in Case No. 10219, Hanley presented the following information through its exhibits and the testimony of its witnesses:

- (a) Structure and isopach maps and cross-sections were submitted to show that their proposed location is the better choice. Their geology shows that the Hanley location would be approximately 25 feet higher on the Wolfcamp structure than Santa Fe's location and would encounter approximately the same thickness of net clean Lower Wolfcamp limestone.
- (b) Decline curves to estimate the reserves for Wolfcamp completions in the area were submitted. This data along with an estimate of the reserves for Santa Fe's Kachina "8" Federal Well No. 1 was used to construct an "Iso-Production" map for use in estimating ultimate recovery. Hanley's Wolfcamp recovery estimates are 260,000 barrels

for their location and 130,000 barrels for the Santa Fe location.

- (c) Water production data from Wolfcamp completions in the Corbin area was used by Hanley to support their testimony that wells lower on the Wolfcamp structure produce more water.
- (d) Hanley submitted a Bone Spring structure map indicating their proposed location would be approximately 100 feet higher on the Bone Spring structure than the Santa Fe location.
- (e) Hanley's estimated cost for a Wolfcamp well is \$667,782. They proposed a method for allocating and amortizing well costs in the event the well is eventually plugged back for a completion attempt in the Bone Spring or other zone in which the ownership differs from that in the Wolfcamp. Monthly overhead rates of \$5,184 while drilling and \$485 while producing were suggested based on the mean rates in the Ernst and Young 1990 survey. A risk penalty of 150% was recommended at the Hanley location. Hanley's witnesses testified that the risk would be higher at the Santa Fe location.
- (f) Payout calculations prepared by Hanley show that a Wolfcamp well will payout in four months at their location and in eight months at the Santa Fe location.

(14) Santa Fe's compulsory pooling application was received by OCD on December 12, 1990, Hanley's initial application was received by OCD on January 2, 1991, and their amended application was received on February 12, 1991. Hanley began efforts to develop their acreage after Santa Fe filed its application.

(15) Based on the evidence and testimony received in these cases, either the Santa Fe or the Hanley location should result in a successful Wolfcamp completion. Evidence shows that Santa Fe's is the more appropriate location since it conforms to an 80-acre diagonal spacing pattern and should therefore result in better recovery of reserves. Santa Fe's application should be approved and they should be designated as operator. Overhead charges for supervision should be set at \$5,184 while drilling and \$485 while producing. Since risk of an unsuccessful completion is low, the risk penalty should be set at 100%. The 40-acre spacing unit applied for in Santa Fe's application is not required since all of the working interests in

the SW/4 NW/4 of said Section 8 have reached voluntary agreement . concerning the pooling of their interests.

(16) Approval as set out in Finding (15) above and in the following order will avoid the drilling of unnecessary wells, protect correlative rights, prevent waste and afford the owner of each interest in said unit the opportunity to recover or receive without unnecessary expense his just and fair share of the production in any pool resulting from this order.

IT IS THEREFORE ORDERED THAT:

(1) The application of Hanley Petroleum Inc. in Case No. 10219 as described in Findings (3) and (4) of this order is hereby denied.

(2) All mineral interests, whatever they may be, from the surface to the base of the Wolfcamp, underlying the W/2 NW/4 of Section 8, Township 18 South, Range 33 East, NMPM, Lea County, New Mexico, are hereby pooled to form an 80-acre oil spacing and proration unit to be dedicated to a well to be drilled at a standard oil well location 1980 feet from the North line and 660 feet from the West line (Unit E) of said Section 8.

<u>PROVIDED HOWEVER THAT</u>, the operator of said unit shall commence the drilling of said well on or before the 15th day of June, 1991, and shall thereafter continue the drilling of said well with due diligence to a depth sufficient to test the Wolfcamp formation.

<u>PROVIDED FURTHER THAT</u>, in the event said operator does not commence the drilling of said well on or before the 15th day of June, 1991, Decretory Paragraph No. (2) of this order shall be null and void and of no effect whatsoever, unless said operator obtains a time extension from the Division for good cause shown.

<u>PROVIDED FURTHER THAT</u>, should said well not be drilled to completion, or abandonment, within 120 days after commencement thereof, said operator shall appear before the Division Director and show cause why Decretory Paragraph No. (2) of this order should not be rescinded.

(3) Santa Fe Energy Operating Partners, L.P. is hereby designated the operator of the subject well and unit.

(4) After the effective date of this order and prior to commencing said well, the operator shall furnish the Division and each known working interest owner in the subject unit an itemized schedule of estimated well costs.

(5) Within 30 days from the date the schedule of estimated well costs is furnished to him, any non-consenting working interest owner shall have the right to pay his share of estimated well costs to the operator in lieu of paying his share of reasonable well costs out of production, and any such owner who pays his share of estimated well costs as provided above shall remain liable for operating costs but shall not be liable for risk charges.

(6) The operator shall furnish the Division and each known working interest owner an itemized schedule of actual well costs within 90 days following completion of the well; if no objection to the actual well costs is received by the Division and the Division has not objected within 45 days following receipt of said schedule, the actual well costs shall be the reasonable well costs; provided however, if there is an objection to actual well costs within said 45-day period the Division will determine reasonable well costs after public notice and hearing.

(7) Within 60 days following determination of reasonable well costs, any non-consenting working interest owner who has paid his share of estimated costs in advance as provided above shall pay to the operator his pro rata share of the amount that reasonable well costs exceed estimated well costs and shall receive from the operator his pro rata share of the amount that estimated well costs exceed reasonable well costs.

(8) The operator is hereby authorized to withhold the following costs and charges from production:

- A. The pro rata share of reasonable well costs attributable to each non-consenting working interest owner who has not paid his share of estimated well costs within 30 days from the date the schedule of estimated well costs is furnished to him; and
- B. As a charge for the risk involved in the drilling of the well, 100 percent of the pro rata share of reasonable well costs attributable to each nonconsenting working interest owner who has not paid his share of estimated well costs within 30 days from the date the schedule of estimated well costs is furnished to him.

(9) The operator shall distribute said costs and charges withheld from production to the parties who advanced the well costs.

(10) \$5,184 per month while drilling and \$485 per month while producing are hereby fixed as reasonable charges for supervision (combined

fixed rates); the operator is hereby authorized to withhold from production the proportionate share of such supervision charges attributable to each non-consenting working interest, and in addition thereto, the operator is hereby authorized to withhold from production the proportionate share of actual expenditures required for operating such well, not in excess of what are reasonable, attributable to each non-consenting working interest.

(11) Any unleased mineral interest shall be considered a seveneighths (7/8) working interest and a one-eighth (1/8) royalty interest for the purpose of allocating costs and charges under the terms of this order.

(12) Any well costs or charges which are to be paid out of production shall be withheld only from the working interest's share of production, and no costs or charges shall be withheld from production attributable to royalty interests.

(13) All proceeds from production from the subject well which are not disbursed for any reason shall be placed in escrow in Lea County, New Mexico, to be paid to the true owner thereof upon demand and proof of ownership; the operator shall notify the Division of the name and address of said escrow agent within 30 days from the date of first deposit with said escrow agent.

(14) Should all the parties to this force-pooling reach voluntary agreement subsequent to entry of this order, this order shall thereafter be of no further effect.

(15) The operator of the subject well and unit shall notify the Director of the Division in writing of the subsequent voluntary agreement of all parties subject to the force-pooling provisions of this order.

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

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

STATE OF NEW MEXICO OIL CONSERVATION DIVISION WILLIAM J. LEMAY, Director

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STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

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

> CASE NO. 8802 Order No. R-8181

APPLICATION OF SOUTHLAND ROYALTY COMPANY FOR SPECIAL POOL RULES, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on January 9 and 22, 1986, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this <u>7th</u> day of March, 1986, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

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

(2) The applicant, Southland Royalty Company, seeks the promulgation of special pool rules for the South Corbin-Wolfcamp Pool, Lea County, New Mexico, including a provision for 80-acre spacing and proration units.

(3) The applicant is the operator of approximately sixty-two percent of the active wells in said pool.

(4) The South Corbin-Wolfcamp Pool was discovered in August, 1967 by the Aztec Oil & Gas Company Federal "MA" Well No. 2 located in Unit I of Section 21, Township 18 South, Range 33 East, NMPM, Lea County, New Mexico.

(5) Although said pool has been voluntarily spaced on 80 acres or more, it has remained since its creation governed by general statewide 40-acre spacing and proration units. -2-Case No. 8802 Order No. R-8181

(6) The applicant recently drilled and completed the West Corbin Unit Well No. 5 located 2080 feet from the North line and 560 feet from the West line of Section 17, Township 18 South, Range 33 East, NMPM, and the Huber 17 Federal Well No. 1 located 660 feet from the South line and 660 feet from the West line of said Section 17.

(7) The West Corbin Unit Well No. 5 is located 2540 feet North of the Huber 17 Federal Well No. 1.

(8) Testimony by the applicant at the time of the hearing indicated that there was a difference of approximately 400 psi between the original bottomhole pressures in the West Corbin Unit Well No. 5 and the Huber 17 Federal Well No. 1, which could possibly indicate drainage by the West Corbin Unit Well No. 5 in excess of 40 acres.

(9) The applicant is also the operator of the West Corbin Unit Well No. 1 drilled in 1982 and located 1980 feet from the North line and 660 feet from the East line of Section 18, Township 18 South, Range 33 East, NMPM.

(10) The West Corbin Unit Well No. 1 is located 1220 feet West of the West Corbin Unit Well No. 5 and is also 1320 feet closer to the West Corbin Unit Well No. 5 as is the Huber I7 Federal Well No. 1.

(11) The West Corbin Unit Well No. 5 was drilled as a 40-acre offset to the West Corbin Unit Well No. 1.

(12) The possible drainage of 80 acres by the West Corbin Unit Well No. 1 should have had an affect on the bottomhole pressure or the producing capability, or both, on the West Corbin Unit Well No. 5.

(13) Evidence presented at the hearing indicates that the West Corbin Unit Well No. 5 had a considerably higher initial potential than did the No. 1 well, which may indicate that drainage by the No. 1 well may not have occurred.

(14) Geologic and engineering evidence presented at the hearing was insufficient to indicate that one well in the South Corbin-Wolfcamp Pool is capable of draining 80 acres.

(15) The application of Southland Royalty Company for special pool rules for the South Corbin-Wolfcamp Pool, including a provision for 80-acre spacing, should be <u>denied</u>. -3-Case No. 8802 Order No. R-8181

IT IS THEREFORE ORDERED THAT:

(1) The application of Southland Royalty Company for special pool rules for the South Corbin-Wolfcamp Pool, Lea County, New Mexico, including a provision for 80-acre well spacing and proration units, is hereby denied.

(2) The South Corbin-Wolfcamp Pool shall remain on General Statewide Rules and Regulations including 40-acre spacing.

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

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

STATE OF NEW MEXICO OIL CONSERVATION DIVISION lun v R. L. STAMETS Director

SEAL

STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

CASE NO. 8802 Order No. R-8181-A

APPLICATION OF SOUTHLAND ROYALTY COMPANY FOR SPECIAL POOL RULES, LEA COUNTY, NEW MEXICO.

NUNC PRO TUNC ORDER

BY THE DIVISION:

It appearing to the Division that Order No. 'R-8181, dated March 7, 1986, does not correctly state the intended order of the Division,

IT IS THEREFORE ORDERED THAT:

(1) The first paragraph of the introductory section on page 1 of Order No. R-8181, dated March 7, 1986, be and the same is hereby amended to read in its entirety as follows:

"This cause came on for hearing at 8:15 a.m. on January 9, 1986, at Santa Fe, New Mexico, before Examiner David R. Catanach."

(2) The corrections set forth in this order be entered nunc pro tunc as of March 7, 1986.

DONE at Santa Fe, New Mexico, on this <u>26th</u> day of March, 1986.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

A te last. R. L. STAMETS Director

SEAL

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STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

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

> CASE NO. 8802 <u>DE NOVO</u> Order No. R-8181-B

> > 57

APPLICATION OF SOUTHLAND ROYALTY COMPANY FOR SPECIAL POOL RULES, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. at Santa Fe, New Mexico, on April 9, 1986, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this <u>20th</u> day of May, 1986, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS THAT:

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

(2) The applicant, Southland Royalty Company, seeks the promulgation of special pool rules for the South Corbin-Wolfcamp Pool, Lea County, New Mexico, including a provision for 80-acre spacing units.

(3) By Order No. R-3342, effective December 1, 1967, the Commission created the South Corbin-Wolfcamp Pool as a result of the completion of the Aztec Oil and Gas Company Federal "MA" Well No. 2 located in Unit I of Section 21, Township 18 South, Range 33 East, NMPM, Lea County, New Mexico.

(4) Although the development of said pool has resulted in wells being drilled on what constitutes an 80-acre spacing pattern, it has remained since its creation governed by general statewide 40-acre spacing units. -2-Case No. 8802 Order No. R-8181-B

(5) Geologic and engineering evidence presented at the hearing showed that wells in the South Corbin-Wolfcamp Pool may be capable of draining 80-acre spacing units.

(6) Evidence and testimony at the hearing demonstrated that drilling wells in the South Corbin-Wolfcamp Pool on 40acre spacing is uneconomical at the present time and may result in the drilling of unnecessary wells.

(7) Adoption of temporary special pool rules including provisions for 80-acre spacing would encourage continued drilling of South Corbin-Wolfcamp Pool wells, thereby producing oil which might not otherwise be produced, thereby preventing waste.

(8) In order to prevent the economic loss caused by the drilling of unnecessary wells, to avoid the augmentation of risk arising from the drilling of an excessive number of wells, to prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, temporary special rules and regulations providing for 80-acre spacing units should be promulgated for the South Corbin-Wolfcamp Pool as previously defined and described.

(9) The temporary special rules and regulations should provide for limited well locations in order to assure orderly development of the pool and protect correlative rights.

(10) The temporary special rules and regulations should be established for an 18-month period in order to allow the operators in the subject pool to gather reservoir information to establish the area that can be efficiently and economically drained and developed by one well.

(11) Unless called earlier, this case should be reopened at an Oil Conservation Division examiner hearing in October, 1987, at which time the operators in the subject pool should be prepared to appear and show cause why the South Corbin-Wolfcamp Pool should not be developed on 40-acre spacing units.

IT IS THEREFORE ORDERED THAT:

(1) Temporary Special Rules and Regulations for the South Corbin-Wolfcamp Pool, Lea County, New Mexico, as previously defined and described, are hereby promulgated as follows: -3-Case No. 8802 Order No. R-8181-B

TEMPORARY SPECIAL RULES AND REGULATIONS FOR THE SOUTH CORBIN-WOLFCAMP POOL

<u>RULE 1</u>. Each well completed or recompleted in the South Corbin-Wolfcamp Pool or in the Wolfcamp formation within one mile thereof, and not nearer to or within the limits of another designated Wolfcamp oil pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.

<u>RULE 2</u>. Each well shall be located on a standard unit containing 80 acres, more or less, consisting of the N/2, S/2, E/2 or W/2 of a governmental quarter section; provided, however, that nothing contained herein shall be construed as prohibiting the drilling of a well on each of the quarter-quarter sections in the unit.

<u>RULE 3</u>. The Director of the Oil Conservation Division, hereinafter referred to as the "Division", may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a nonstandard unit comprising a governmental quarter-quarter section or lot, or the unorthodox size or shape of the tract is due to a variation in the legal subdivision of the United States Public Land Surveys. All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the formation of the non-standard unit within 30 days after the Director has received the application.

<u>RULE 4.</u> Each well shall be located within 150 feet of the center of a governmental quarter-quarter section or lot.

<u>RULE 5</u>. The Division Director may grant an exception to the requirements of Rule 4 without hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon. All operators offsetting the proposed location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished.

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-4-Case No. 8802 Order No. R-8181-B

The Director may approve the application upon receipt of written waivers from all operators offsetting the proposed location or if no objection to the unorthodox location has been entered within 20 days after the Director has received the application.

<u>RULE 6</u>. A standard proration unit (79 through 81 acres) shall be subject to an 80-acre depth bracket allowable of 445 barrels of oil per day. The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 80 acres.

IT IS FURTHER ORDERED THAT:

(1) The locations of all wells presently drilling to or completed in the South Corbin-Wolfcamp Pool or in the Wolfcamp formation within one mile thereof are hereby approved; the operator of any well having an unorthodox location shall notify the Hobbs District Office of the Division in writing of the name and location of the well on or before July 1, 1986.

(2) Pursuant to Paragraph A. of Section 70-2-18, NMSA (1978), contained in Chapter 271, Laws of 1969, existing wells in the South Corbin-Wolfcamp Pool shall have dedicated thereto 80 acres in accordance with the foregoing pool rules; or, pursuant to Paragraph C. of said Section 70-2-18, existing wells may have non-standard spacing or proration units established by the Division and dedicated thereto.

Failure to file new Forms C-102 with the Division dedicating 80 acres to a well or to obtain a non-standard unit approved by the Division within 60 days from the date of this order shall subject the well to cancellation of allowable. Until said Form C-102 has been filed or until a non-standard unit has been approved, and subject to said 60-day limitation, each well presently drilling to or completed in the South Corbin-Wolfcamp Pool or in the Wolfcamp formation within one mile thereof shall receive no more than one-half of a standard allowable for the pool.

(3) Unless called earlier upon the motion of the Division, this case shall be reopened at an examiner hearing in October, 1987, at which time the operators in the subject pool should be prepared to appear and show cause why the South Corbin-Wolfcamp Pool should not be developed on 40acre spacing units. -5-Case No. 8802 Order No. R-8181-B

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

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

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

JIM BACA, Member

Ed Kelling ED KELLEY, Member (*d*.", L. STAMETS, Chairman and Ŕ. Secretary

SEAL

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

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

CASE NO. 8802 (Reopened) ORDER NO. R-8181-C

IN THE MATTER OF CASE NO. 8802 BEING REOPENED PURSUANT TO THE PROVISIONS OF DIVISION ORDER NO. R-8181-B, WHICH ORDER PROMULGATED TEMPORARY SPECIAL RULES AND REGULATIONS FOR THE SOUTH CORBIN-WOLFCAMP POOL IN LEA COUNTY, NEW MEXICO, INCLUDING A PROVISION FOR 80-ACRE SPACING UNITS.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on October 7, 1987 at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this <u>28th</u> day of October, 1987, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

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

(2) By Order No. R-8181-B, dated May 20, 1986, issued in Case No. 8802 heard De Novo before the New Mexico Oil Conservation Commission on April 9, 1986, temporary special rules and regulations were promulgated for the South Corbin-Wolfcamp Pool, Lea County, New Mexico, establishing temporary 80-acre spacing and proration units.

(3) Pursuant to the provisions of Order No. R-8181-B, this case was reopened to allow the operators in the subject pool to appear and show cause why the South Corbin-Wolfcamp Pool should not be developed on 40-acre spacing units.

(4) The evidence establishes that one well in the South Corbin-Wolfcamp Pool can efficiently and economically drain and develop 80 acres. -2-CASE NO. 8802 (Reopened) CRDER NO. R-8181-C

(5) The Special Rules and Regulations promulgated by said Order No. R-8181-B have afforded and will afford to the owner of each property in the pool the opportunity to produce his just and equitable share of the oil and gas in the pool.

(6) In order to prevent the economic loss caused by the drilling of unnecessary wells, to avoid the augmentation of risk arising from the drilling of an excessive number of wells, to prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, the Special Rules and Regulations promulgated by Order No. R-8181-B should be continued in full force and effect until further order of the Division.

IT IS THEREFORE ORDERED THAT:

(1) The Special Rules and Regulations governing the South Corbin-Wolfcamp Pool, Lea County, New Mexico, promulgated by Order No. R-8181-B, are hereby continued in full force and effect until further order of the Division.

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

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

STATE OF NEW MEXICO OIL CONSERVATION DIVISION WILLIAM J. LELLAY Director

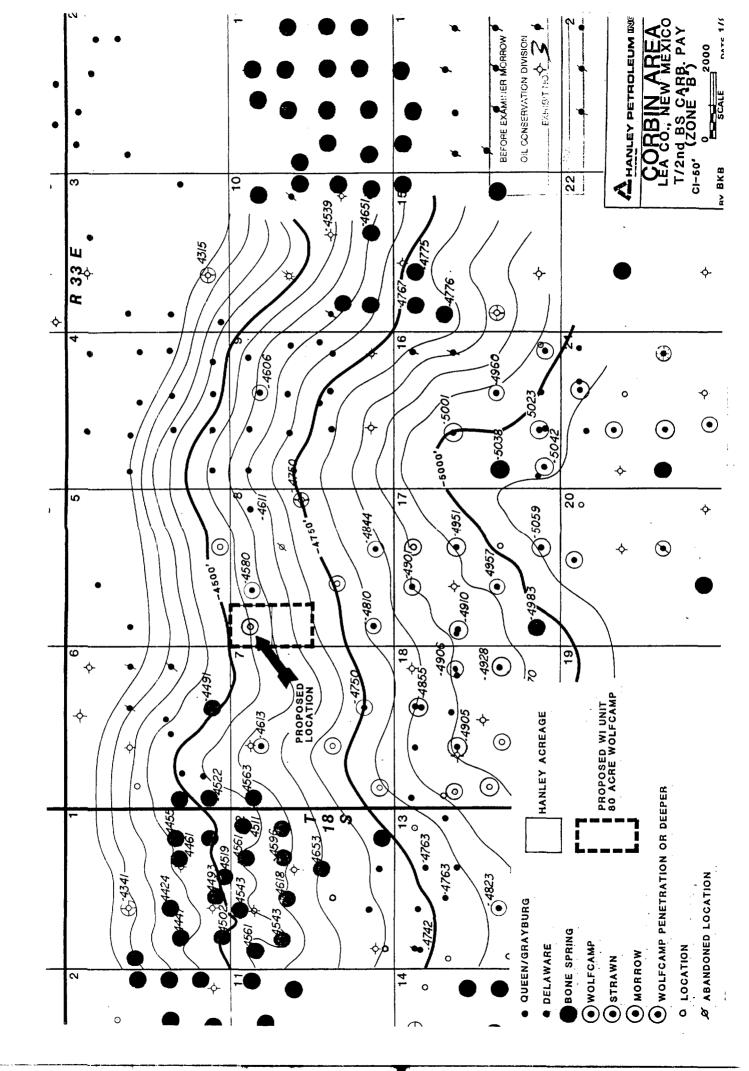
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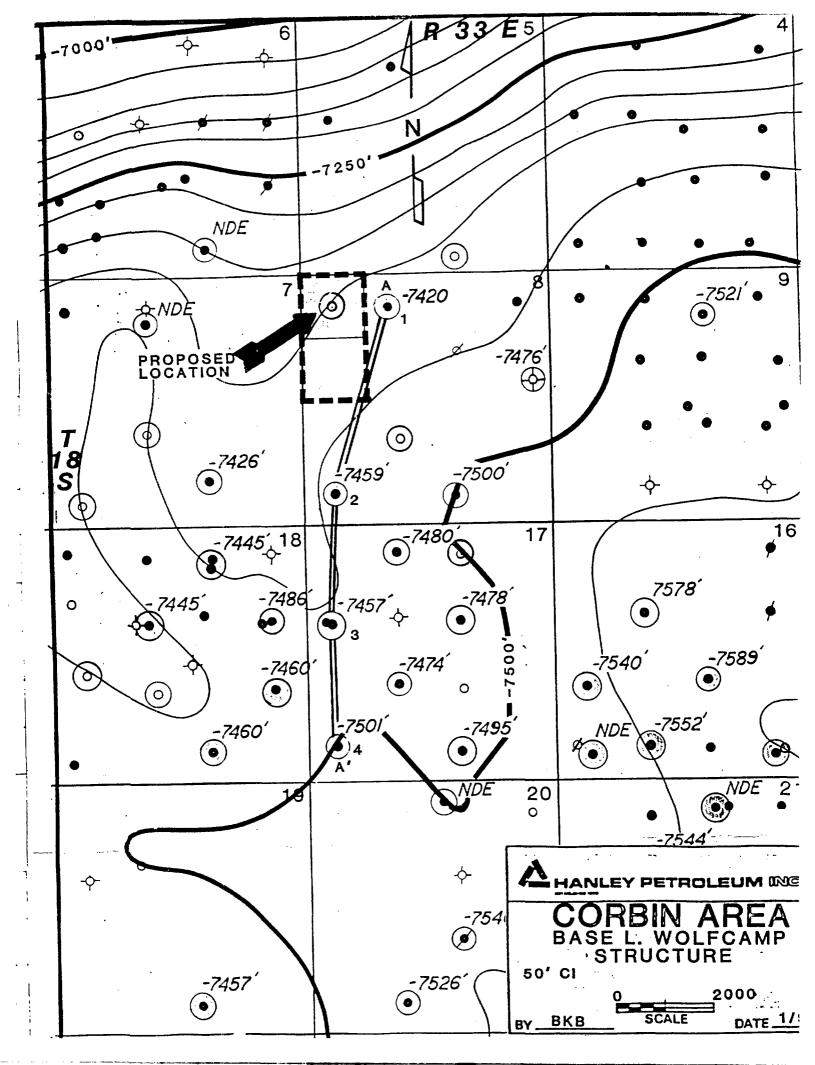
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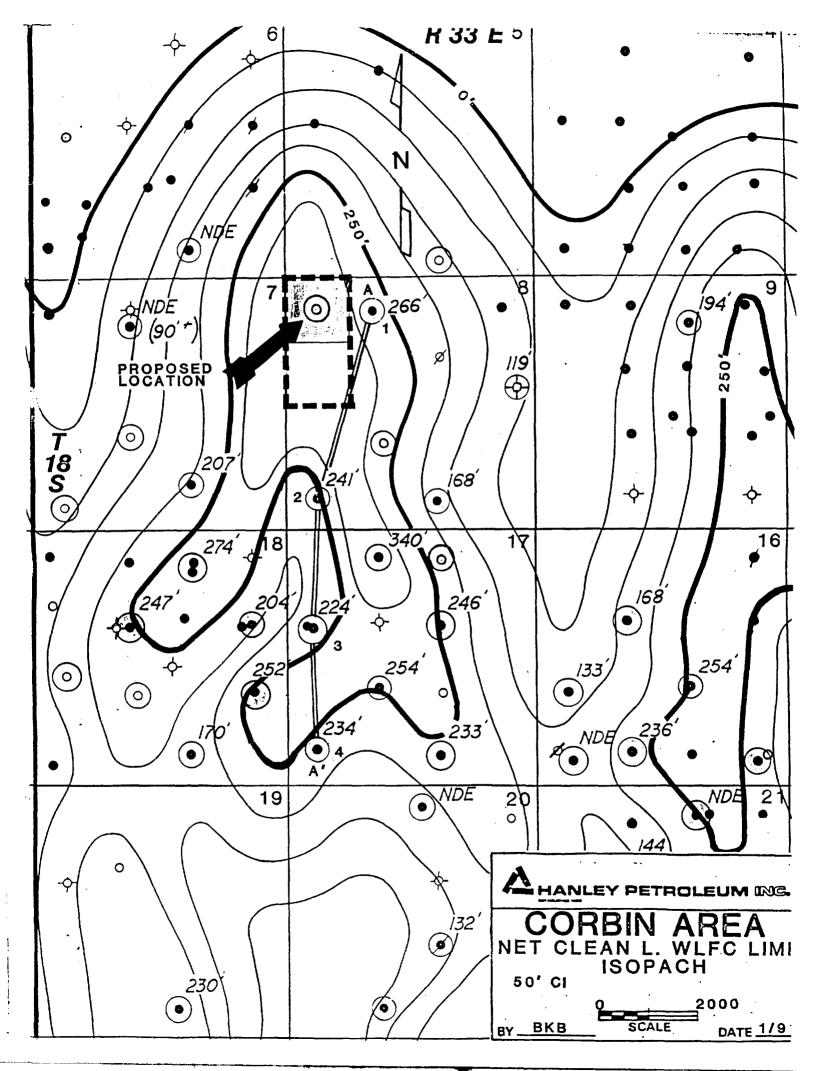
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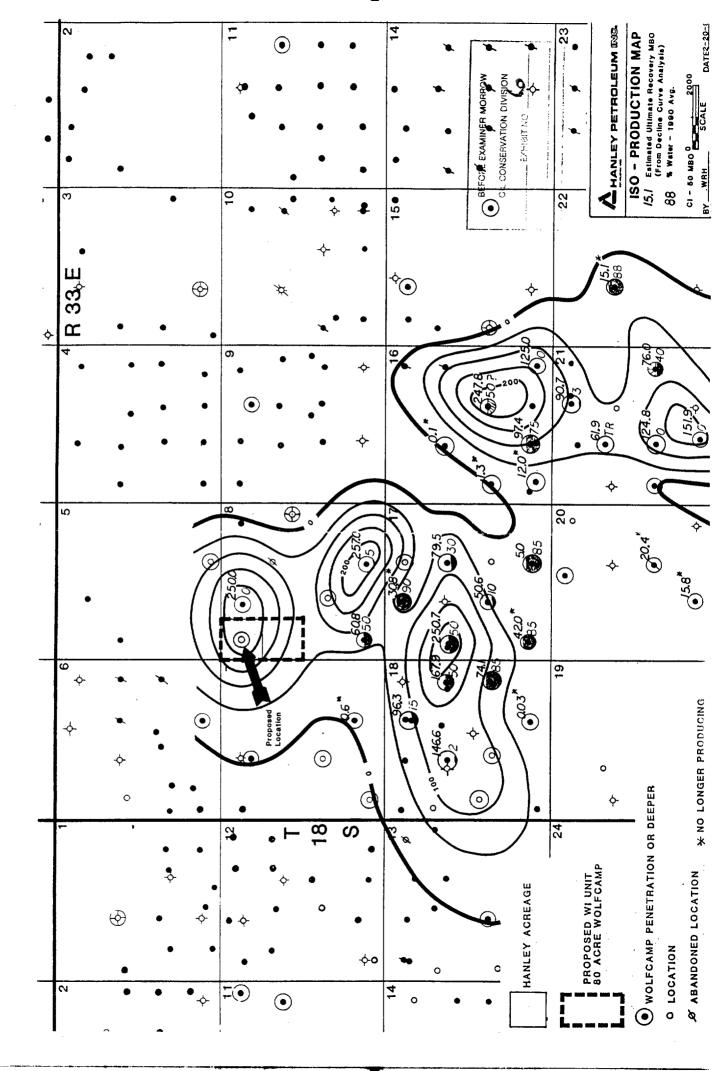
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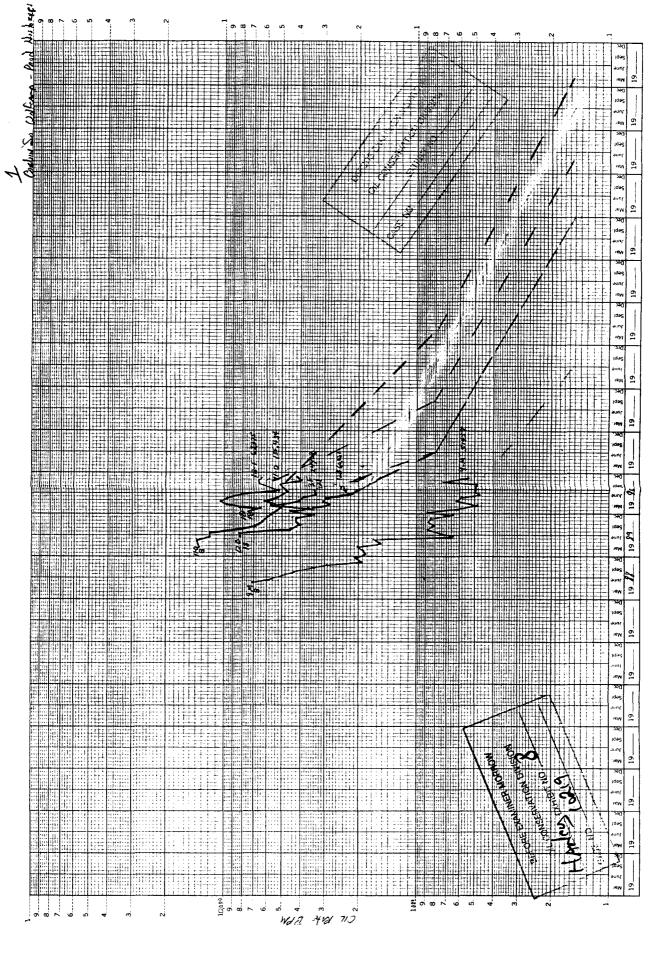
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SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all	hion used, time tool open, flowing and shut-in pressures, and	DESCRIPTION, CONTENTS, ETC.		011 and Water 011	Ware	A는 Oil and Water AF Oil and Water	011					r k		1			
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OUS ZONES: (Sh	cluding depth int	TOP		4218 8524 8706	0/00 9324	10972 11150	11306										
37. SUMMARY OF POR	drill-stem, tests, in recoveries):	FORMATION	<	yueen Bone Spring		Wolfcamp					}		yan		199: 		









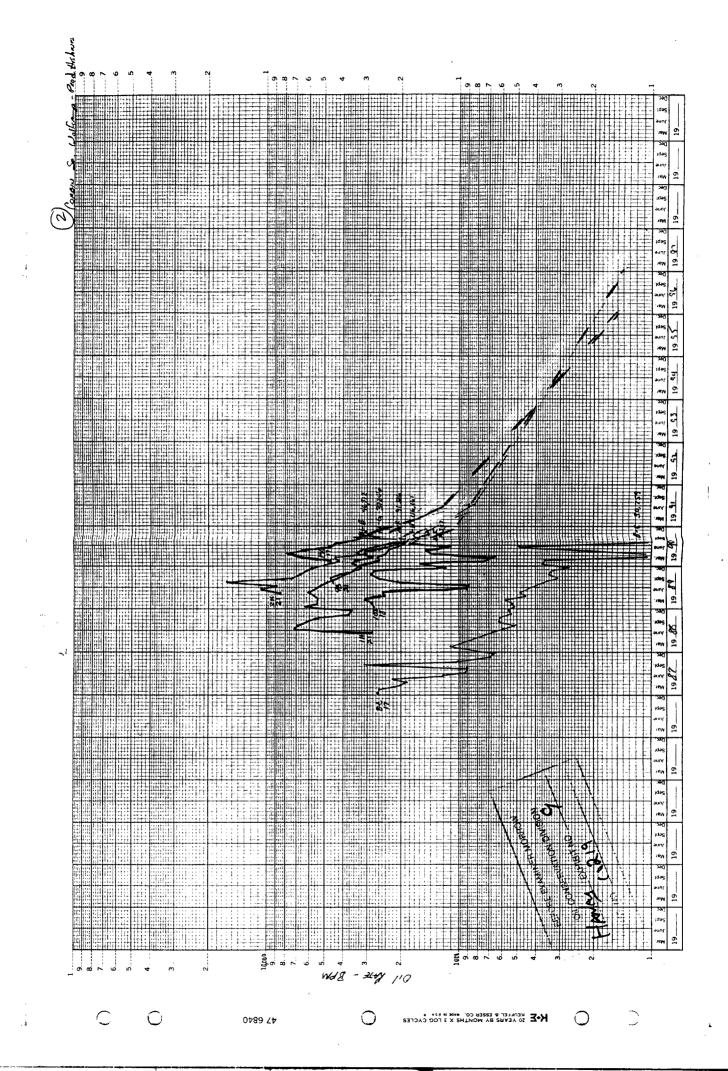


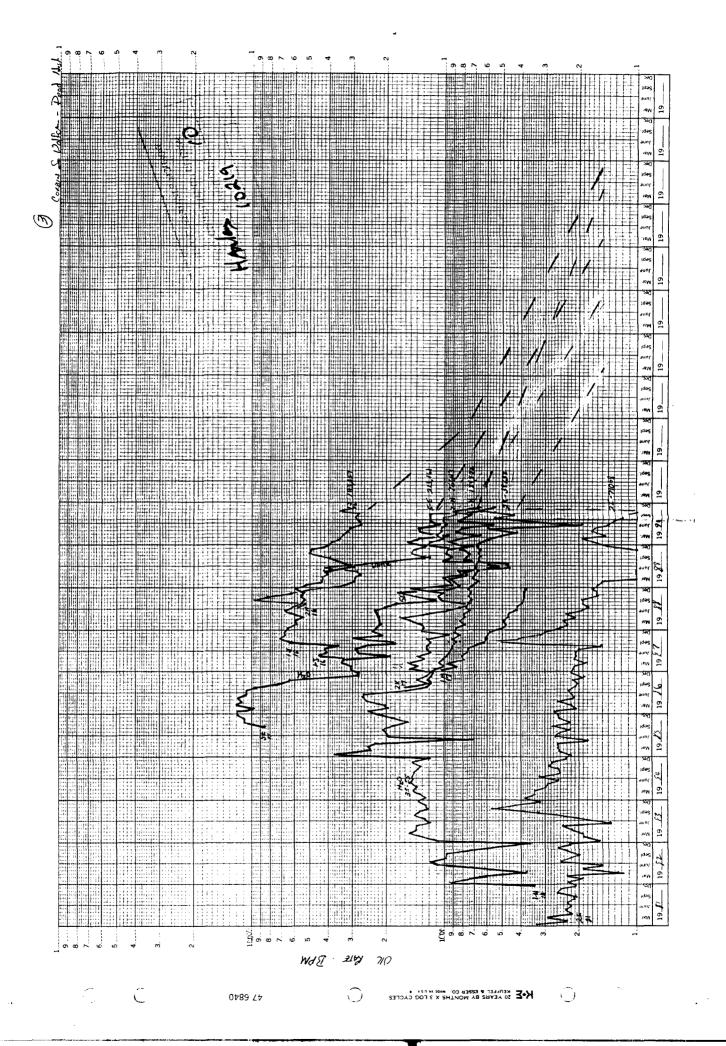
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K-E KERELET & ESSER CO. MARIN N ...

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COMPARISON OF

RESERVES AND ECONOMICS

Hanley 8 Federal No. 1 (Wolfcamp)

LOCATION	NW/4 NW/4, Sec. 8	SW/4 NW/4, Sec. 8
ULTIMATE RECOVERY (Gross Barrels)	260,000	130,000
HPI - NET INVESTMENT	\$333,500	\$333,500
PAYOUT - Months Barrels	4 ±46,000	8 ±44,000
HPI-CUM PRETAX CASH FLOW (Net of Investment)	\$1,576,360	\$598,804
HPI-NET PRESENT VALUE (Discounted 10%)	\$1,235,230	\$457,750
ROYALTY INTEREST: CUM PRETAX CASH FLOW	\$514,913	\$222,092
NET PRESENT VALUE	\$432,162	\$185,508
R	ISK ANALYSIS	
RESERVES	# WELLS	<u>% TOTAL</u>
0 - 45 MBO	13	40.5
45 - 90 MBO	7	22.0
90 - 250 MBO	12	
	32	100.0

BEFORE EXAMINER MORROW	••••••
	,
DIL CONSERVATION DIVISION	
HAN AS EXHIBIT NO. 2	
CASE NO. 10219	
	:

WRH 2-21-91

EXAMPLE COST ALLOCATION

9000' Bone Spring vs. 11,500' Wolfcamp

1. Costs shown are from Hanley	Petroleum	Inc. AFE fu	rnished 1-	7-91.						
 Drilling day ratio is based on the drilling curve of the Santa Fe - Kachina 8 Federal No. 1. 										
Ratio ⇒ Drilling days to 9000' (incl. logs, run csg.) Drilling days to 11,500' " " "										
$= \frac{17}{20} = .5666$										
50	····· ································	BONE SPRIN								
DRY HOLE TANGIBLE	WOLFCAMP	Wolfcamp d	ry wolfcam	p Produ	ctive					
Casing & Tubingheads	\$14,500	\$14,500	え of the deprecia		r of					
Surface casing	9,800	9,800	salvaged							
Intermediate casing	30,820	30,820	п	и и						
INTANGIBLE										
Drilling Contractor	221,400	125,445	Amortized	cost x	.5666					
Road/Location/Damages	16,000	9,066	17	и						
Mud/Cemicals/Water	18,000	10,198	"	u	11					
Mud Logging	8,750	4,957	п		н					
Electric Logs	33,500	18,981	84		Uf					
Cementing surface & Intermed.	23,500	23,500	81	64	"					
Supervision	11,200	6,346	11	11	"					
DST's	22,000	-0-		-0-						
Transportation/Supplies	5,000	2,833	Amortized	cost x	.5666					
Contingencies		22,027	11	11	18					
TOTAL	\$453,347									
COMPLETION TANGIBLE										
5½" casing	\$90,885	\$71,126	Proportio	n to 90	00',					
2-7/8" tubing	46,750	36,587	then same	as dry "	hole. "					
Battery	22,500	22,500	11	11	*1					
INTANGIBLE										
Cement long string	24,000	13,598	Amortized	cost x	.5666					
Transportation/Supplies	7,500		ed by comp	letion						
Completion Rig/Rentals		interva								
Stimulation/Perforating	22,800	"		18						
Overhead	J.O.A.	x .5666	Amortized	cost x	.5666					
			BEFORE EXAMI	NER MORR	ow					
WRH 2-20-91		1	OIL CONSERVAT							

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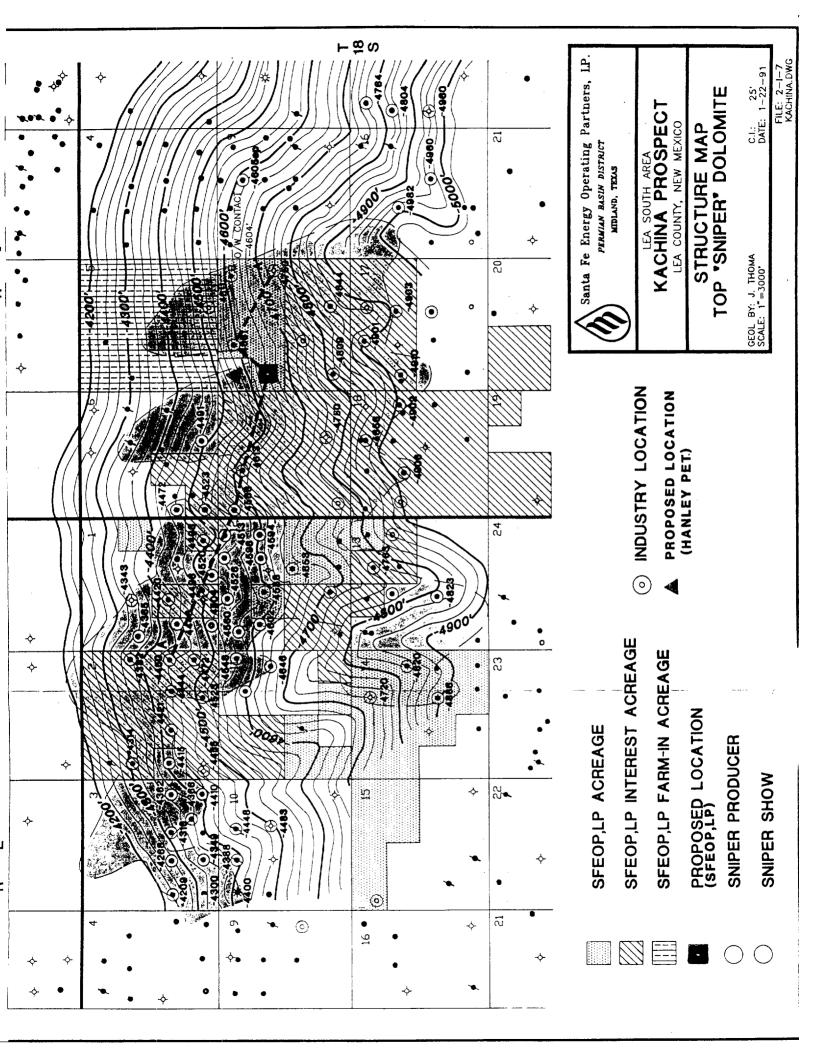
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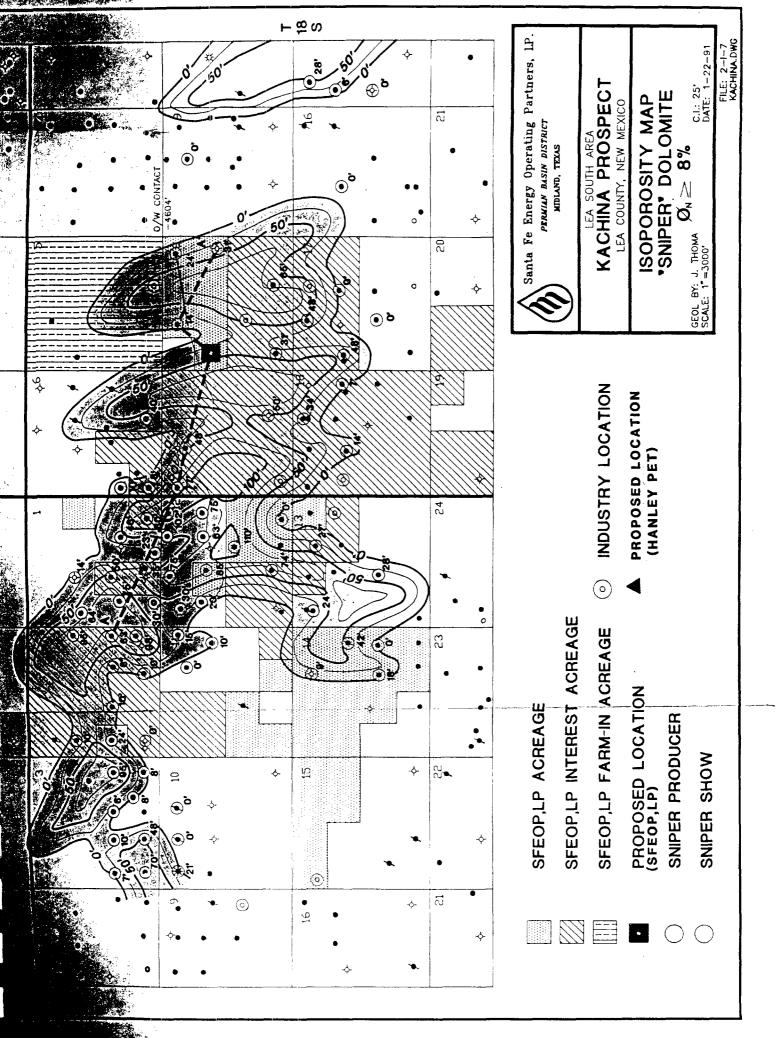
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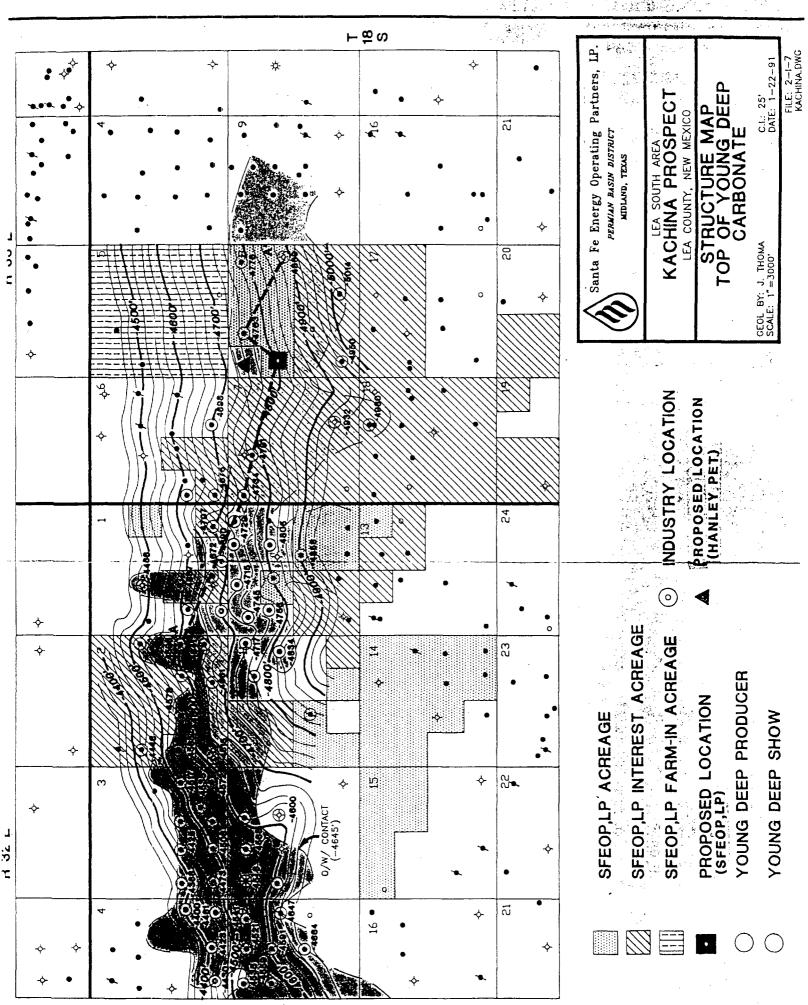
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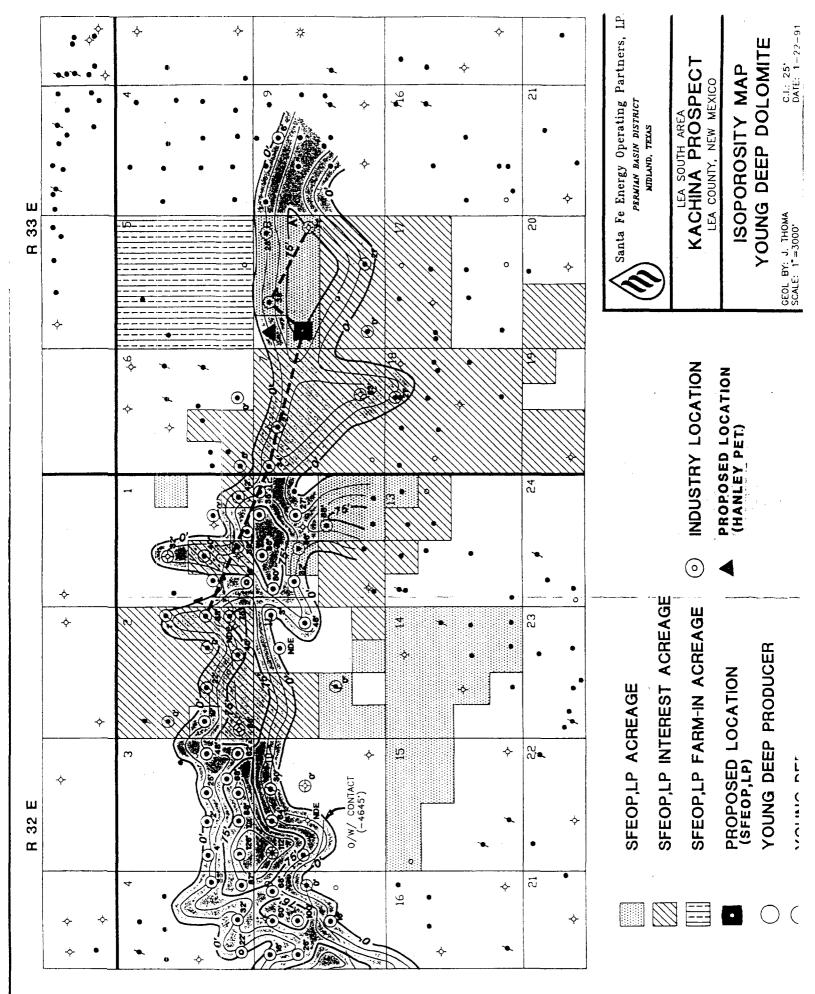
CASE NO.

WRH 2-20-91

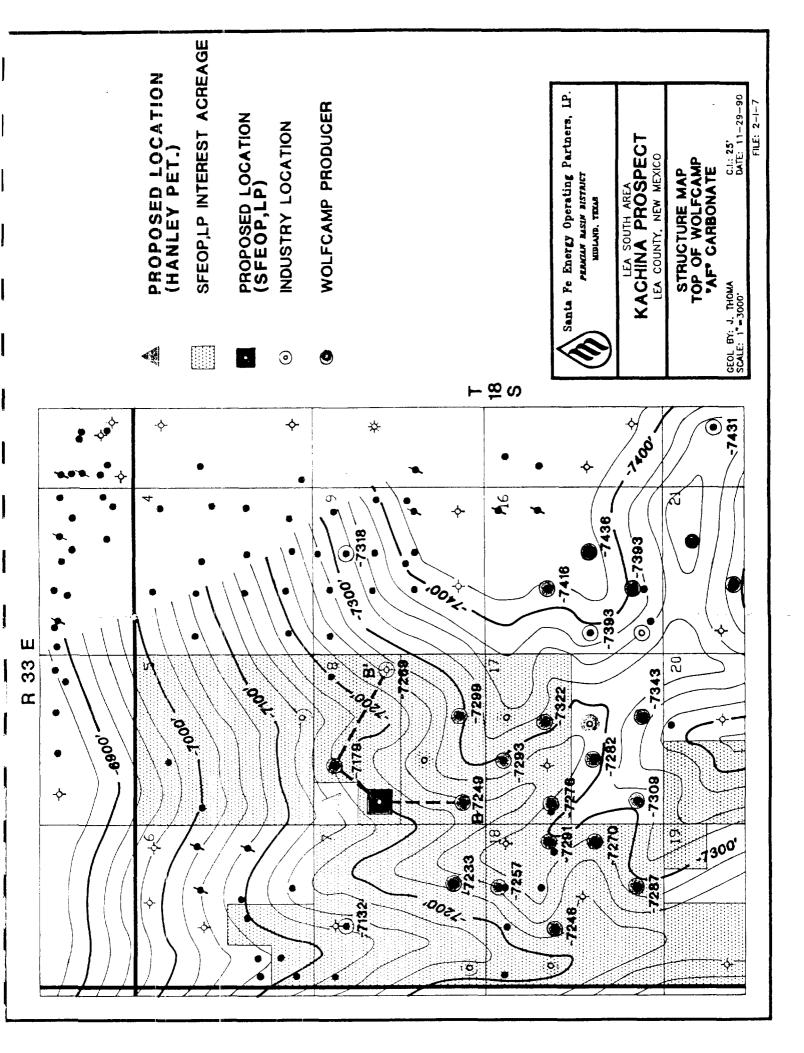


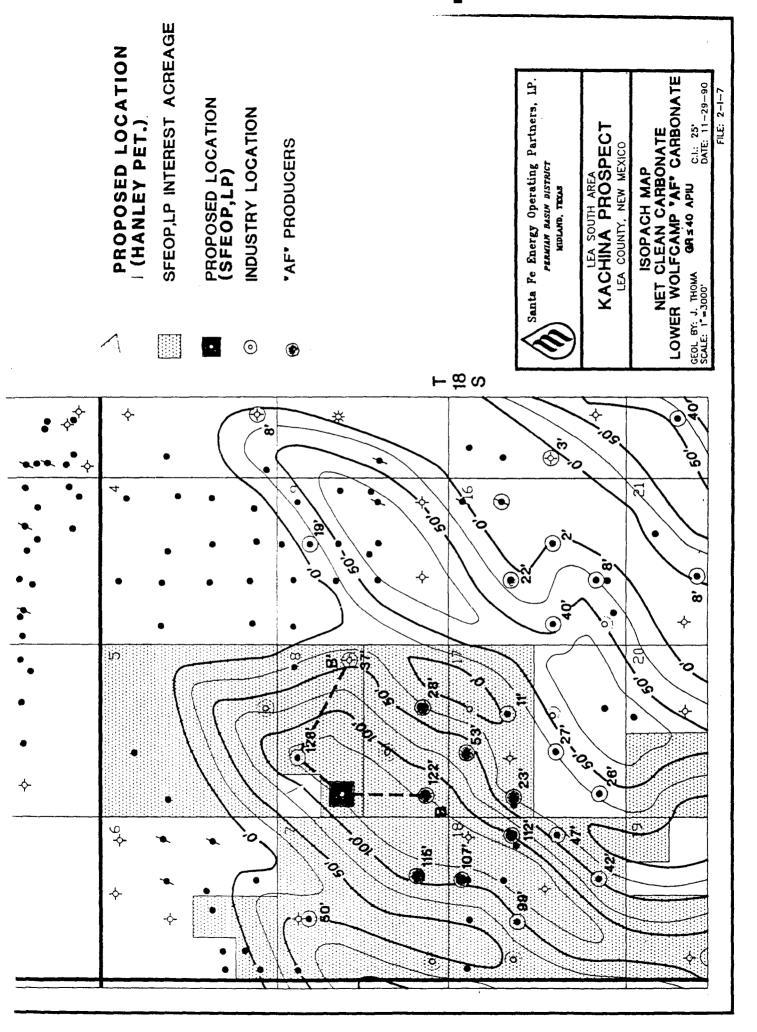


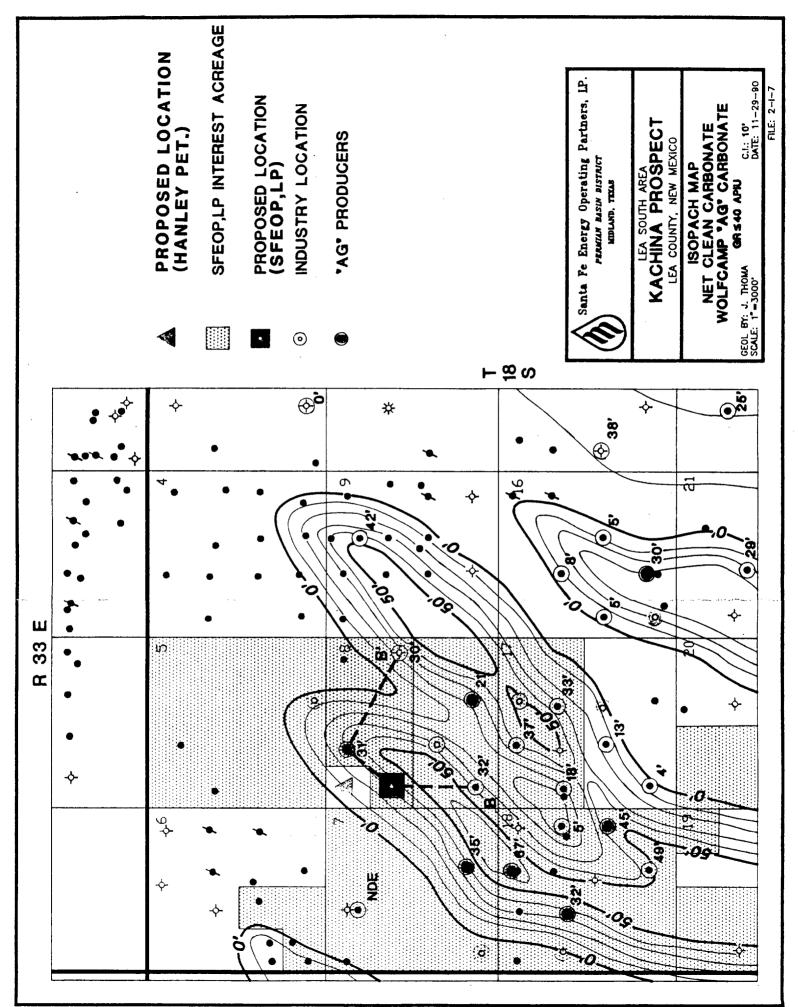




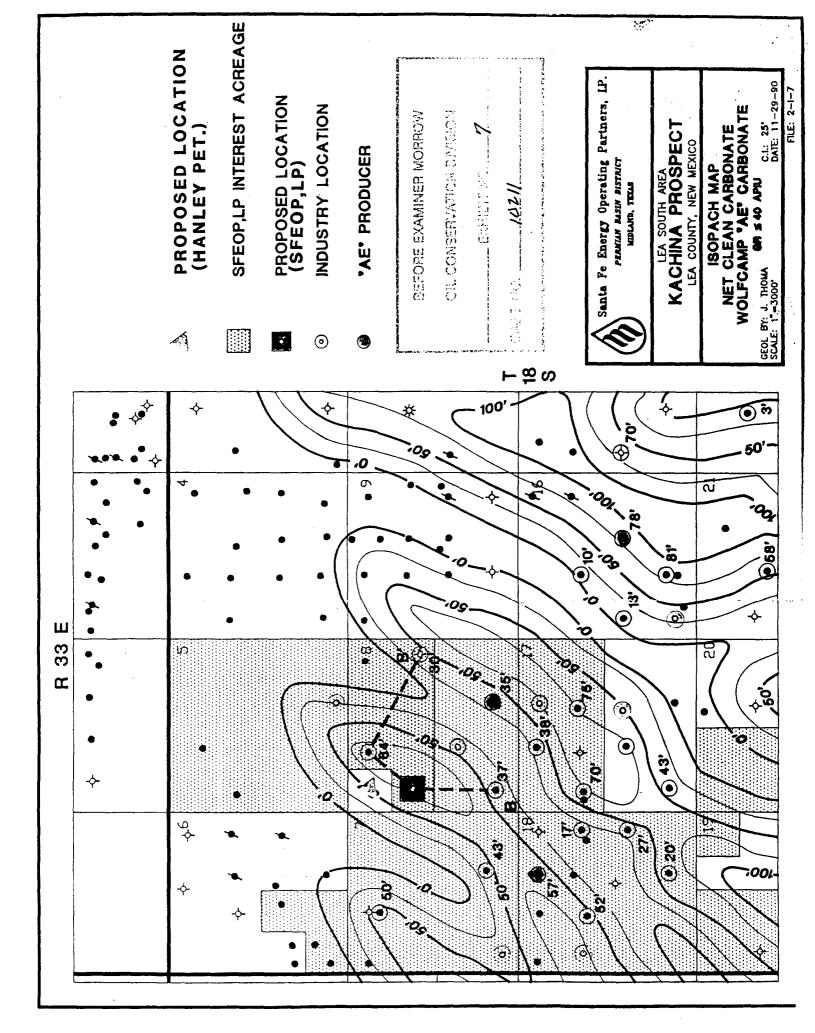
			PROPOSED LOCATION (HANLEY PET.)	PROPOSED LOCATION (SFEOP,LP)		BONE SPRING	WOLFCAMP	B-89DATE OF COMPLETION39MBOCUM OIL34MMCUM GAS34MMCUM GASB9BO + 89MCFCURRENT DAILY OIL + CASIPP 316BO + 392MCFINITIAL PRODUCING RATES	· ·		Santa Re Energy Operating Partners, LP. PERMIN BASIN DISTRUCT MIDLAND, TEXAS	LEA SOUTH AREA KACHINA PROSPECT LEA COUNTY, NEW MEXICO	PRODUCTION MAP THROUGH 7-1-90 GEOL BY: J. THOMA SCALE: Y = 3000'
			4		0	0	•	. 80 848 99 99 99 99 99	μά	2 W			SCAL SCAL
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	•••	•	•	•	•	•	•	• -	¢-	13480 196 1580	12-68 31440 31444		8-98 NDPR NDPR NDPR 1999 1940
R 33 E	•	വ	•	Ø		ω •		0 1 265MCF 12080 + 500MCF 10BW	17			+ 65MCF	20 8-89 NDF 10248 NDF 10248 NDF 10248 10249 21.489 21.489 10249 10049 10049 10049 10049 10049 10049 10049 10049 10049 10049 10049 10049 10049 10049 10049 10049 10049 10049 10049 10000000000
	•	ŧ		Q	Q	25 HRS. TEST 65880 1648W		2-89 156MB0 156MB0 154B0 + 26: 05: PP 112080 75MCF + 10BW			132MCF 90 + 1658W 1658W	16 1580 16 1780 14 15MCF	€ • • • • • • • • • • • • • • • • • • •
	÷	10	•		0			4-88 50MB0 78WM 16B0 + 751 1PP 39B0 +		SBO H+	211 MBO 350 UM 350 UM 310 UM 218 UM 42 MBO 42 MBO 43 MBO 44 MBO 4		
		4 46	*	•	3-85 23MBO BOWW	A 11-85 BMB0		1-90 14MBO 14MBO 14MB 61BO + 37MCF 67BO + 37MCF 67BO + 157BW		57680 + 500MCF	153480 153480 1990 + 1044 1990 + 1218 450405 - 1219 8980 + 1218 450405 - 1218 - 1318 5084 + 23405	1100 + 22 1-90 (11-89) 2580 Tetal 36MM	19
			1	0	11-89 19MB0 14MH			1-90 1480 1480 1480 1480 199 8780	() 8-9	• 55480 7280 +	1-00 51480 51480 28590 + 292MCF PF 25090 + 450MCF		







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415 WEST WALL, SUITE 1500/MIDLAND, TEXAS 79701-4473/915-684-8051 FAX: 915-685-1104

HANLEY PETROLEUM INC. CORBIN AREA

LEA COUNTY, NEW MEXICO

Copies Of Correspondence Concerning The Drilling Of A Proposed 11,500' Wolfcamp Test Well To Be Located On An 80 Acre Working Interest Unit Comprising The W2NW2 Section 8, T-18-S, R-33-E, Lea County, New Mexico

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	BEFORE EXAMINER MORROWS
	CIL CONSERVATION DIVID/OUT
H	Andon EXHIBIT NO. 19
CA	SE NO. 10219
	المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة ومراجعة معرفين مراجع المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة ومراجعة معرفين مراجع المراجعة المراجعة المراجعة المراجعة ا

Date: 2-5-91 **TOOO**9

Santa Fe Energy Operating Partners, L.P.

Santa Fe Pacific Exploration CompanYERTIFIED MAIL - RETURN RECEIPT Managing General Partner

November 12, 1990

Hanley Petroleum, Inc. 415 West Wall Suite 1500 Midland, Texas 79701 NECELVED Nov 14 1990

ATTN: James Rogers

Hanley Petroleum Inc.

Re: Well Proposal
Kachina "8" Fed. Com. #2
1980' FNL & 660' FWL
(W/2NW/4) Sec. 8, T-18-S, R-33-E,
Lea County, New Mexico

Gentlemen:

Santa Fe Energy Operating Partners, L.P. herein proposes to drill an 11,500' Wolfcamp test at the above captioned location.

Please find enclosed two (2) Well Cost Estimates (AFES) covering the cost of drilling said well. If you elect to participate, please execute the enclosed AFES and return one copy to the undersigned. The Operating Agreement covering the W/2NW/4 is presently being prepared and will be furnished to you for your signature.

If you elect not to join in the drilling of this well, Santa Fe Energy Operating Partners, L.P. respectfully requests a farmout of your interest in the NW/4NW/4 of Section 8, T-18-S, R-33-E, based on the following terms:

- 1. Hanley will deliver an 80% NRI Lease to Santa Fe, while retaining an ORRI equal to the difference between existing burdens and 20%.
- 2. Upon payout of said well, Hanley will have the option to convert your ORRI to a 25% Working Interest, proportionately reduced.
- 3. Upon execution of a formal Agreement, Santa Fe will have 180 days to drill or cause to be drilled a well at the above captioned location.
- 4. Santa Fe will earn rights from the surface down to 100' below total depth drilled.

If these terms are acceptable, please prepare your agreement for Santa Fe Energy Operating Partners, L.P.'s approval and signature.

Please advise the undersigned of your election, so the necessary paper work can be prepared for signatures.

Permian Basin District 550 W. Texas, Suite 1330 Midland, Texas 79701 915/687-3551

An Affiliate of Santa Fe Pacific Corporation

Page 2 Hanley Petroleum, Inc. November 12, 1990

If you have any questions, please do not hesitate to contact the undersigned. Thank you in advance for your cooperation and prompt reply to this proposal.

Sincerely yours,

SANTA FE ENERGY OPERATING PARTNERS, L.P. By: Santa Fe Pacific Exploration Company Managing General Partner

By: urphy, Senfor Landman

LM/efw Encls a/s HANLEY PETROLEUM ING.

415 WEST WALL, SUITE 1500/MIDLAND, TEXAS 79701-4473/915-684-8051 FAX: 915-685-1104

November 26, 1990

Santa Fe Energy Operating Partners, L.P. 550 West Texas, Suite 1330 Midland, Texas 79701

Attn: Mr. Larry Murphy Senior Landman

RE: Well Proposal W1 NW1 Sec. 8, T-18-S, R-33-E Eddy County, New Mexico (HPI NM-43)

Gentlemen:

We have received your letter dated November 12, 1990 concerning the drilling of a Wolfcamp test 1980 feet FNL and 660 feet of FWL of Section 8, T-18-S, R-33-E to be dedicated to the W2 NW/4 of said section. Unfortunately, you have failed to supply us with sufficient information from which to evaluate your request.

First; we are currently evaluating the drilling of a Bone Spring test in the NW/4NW/4 for 40-acre spaced oil production. Your acreage in the SW/4NW/4 may have some potential for Bone Spring production but your proposal fails to address how you propose to allocate costs between the Bone Spring and the Wolfcamp so that we do not have to help you pay for exploration for production in zones in which we would have no interest. Please submit to us your revised AFE addressing this issue.

Second; we are unable to completely evaluate your proposed well location and its opportunity to success in the Wolfcamp unless you also submit to us relevant data available to your from the Kachina "8" Federal #1 well which you have recently drilled and on which you have run production casing. If your proposal is intended to be a good faith effort to obtain our voluntary participation, then we will need the following information:

- (1) Daily Drilling and Completion Reports,
- (2) Mechanical Logs and Mud Logs if any,
- (3) Geologic interpretations by which you justify the well and evaluate its risk.

Third; we are unable to evaluate your farmout terms without further information from you including why you have offered us only a 20% ORRI subject to payment of outstanding burdens against production. The sliding scale royalty provision in our lease should be taken into consideration.

Fourth; we recommend to you that we operate the subject well. You have failed to supply us with any information from which to determine why we would allow you to be the operator when we believe our company structure and experience will result in more efficient operations of the well than you can obtain.

In summary, we consider your well proposal premature pending obtaining and disclosing to us the results of the Kachina "8" Federal #1 well. In the alternative, please consider this letter our offer to you that you join with us under the same terms you have offered to us and we will operate the well.

Yours very truly,

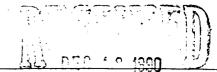
HANLEY PETROLEUM INC.

James 🕅 Rogers Vice President Land

/pjm

Certified Mail - Return Receipt

Santa Fe Energy Operating Partners, L.P.



Santa Fe Pacific Exploration Company Managing General Partner

_ERTIFIED MAIL - RETURN RECEIPT

Hanley Petroleum Inc.

December 17, 1990

Hanley Petroleum, Inc. 415 West Wall, Suite 1500 Midland, Texas 79701-4473

ATTN: James W. Rogers

Re: Well Proposal W/2NW/4 Sec. 8 T-18-S, R-33-E Eddy County, New Mexico Kachina "8" Fed. Com. #2

Dear Mr. Rogers:

Reference is made to our phone conversation of December 13, 1990 wherein we discussed the drilling of the above captioned well.

Santa Fe Energy Operating Partners, L.P. herein is willing to allow Representatives of Hanley Petroleum, Inc. to review the logs and drilling reports from spud date until 11/12/90 of the Kachina "8" Fed. #1 during normal business hours at Santa Fe's offices located at 550 West Texas, Suite 1330, Midland, Texas.

The viewing of this information is based on a commitment from Hanley Petroleum, Inc. to join in the drilling of this well or enter into a Farmout Agreement with Santa Fe Energy Operating Partners, L.P., and the information shown to Hanley will be kept Confidential.

If Hanley agrees to participate in the well, the contract area will cover the W/2NW/4 of Section 8, T-18-S, R-33-E from the surface to the base of the Wolfcamp Formation. The ownership of this area will be as follows:

Hanley Petroleum	50%
Santa Fe Energy	50%
Operating Partners, L.P.	

If Hanley elects to Farmout, the Agreement will cover the NW/4NW/4 Section 8 from the surface to the base of the Wolfcamp Formation.

- Hanley will deliver an 80% NRI lease to Santa Fe, retaining an ORRI equal to the difference between existing burdens and 20%, but in no event will Hanley's ORRI be less than 2.50%.
- 2) Upon payout of said well, Hanley will have the option to convert its ORRI to a 25% Working Interest, proportionately reduced.

Permian Basin District 550 W. Texas, Suite 1330 Midland, Texas 79701 915/687-3551 Page 2 Hanley Petroleum December 17, 1990

- 3) Upon execution of a formal Agreement, Santa Fe will have 150 days to drill or cause to be drilled a well at a legal location in the W/2NW/4 of Section 8, T-18-S, R-33-E.
- 4) Santa Fe will earn rights from the surface down to 100' below total depth drilled, but in no event below the Wolfcamp Formation.

Hanley will have 5 days upon receipt of this letter to commit its interest to the options stated above and will have 10 days after reviewing the information above to make its election on these options.

In addition, Santa Fe is requesting to be placed on the January 10, 1991 docket for compulsory pooling, so a prompt reply is appreciated.

If you agree with the above captioned terms, please acknowledge your approval, by signing in the space provided below.

If you have any questions, please contact the undersigned.

Sincerely yours,

SANTA FE ENERGY OPERATING PARTNERS, L.P. By: Santa Fe Pacific Exploration Company Managing General Partner

By: Jarry Murphy, Septior Landman

LM/efw

HANLEY PETROLEUM, INC. herein agrees this _____ day of December, 1990 to commit its interest in the NW/4NW/4 of Sec. 8 to an Operating Agreement or Farmout Agreement before the logs and drilling report (from spud date until 11/12/90) have been reviewed. In addition, Hanley agrees to make an election 10 days after the information stated above has been reviewed. The viewing of this information will be done no later than December 28, 1990 at Santa Fe's offices during normal business hours.

HANLEY PETROLEUM, INC.

By:			
-	 	 	

Type Name:_____

Title:_____

Date:_____

EFW1549

RETURN THIS COLL TO SANTA FE ENERGY OPERATING PARTNERS, L.P. 415 WEST WALL, SUITE 1500/MIDLAND, TEXAS 79701-4473/915-684-8051 FAX: 915-685-1104 December 19, 1990

Y PETROLEUM ING.

Santa Fe Energy Operating Partners, LP Permian Basin District 550 West Texas, Suite 1330 Midland, Texas 79701

Attn: Larry Murphy Senior Landman

RE: Well Proposal W1NW1 Section 8, T-18-S, R-33-E, Lea County, New Mexico Kachina "8" Fed. #2

Gentlemen:

Reference is here made to your correspondence of November 12, 1990 and following. In the November 12 letter you stated that an Operating Agreement was being prepared and was to be furnished to us. As of this date we have not received a proposed form of Operating Agreement for our inspection and approval. Further, the data included in your application for compulsory pooling under Paragraph 3 & 4 are false in that your acts have been to withhold information vital to a reasonable decision to drill the proposed well from a 50% owner in the proposed venture. You have failed to make these data available under reasonable conditions including not providing the proposed form of Operating Agreement as above discussed. Due to the timing of your proposal, with week-ends and holidays it is unreasonable to expect our response to your proposed timetable. Please call us at your earliest and propose a reasonable arrangement and we will respond. In addition, your December 3rd reply to my November 26th letter was neither responsive nor constructive in our efforts to properly develop the minerals in the subject spacing unit. I request that you review our November 26th letter and provide us with a detailed meaningful response to each of the items we raised in that letter.

Santa Fe Energy Page 2

. . . <u>.</u> .

The fact remains that Hanley does own a valid and subsisting Federal Oil and Gas lease covering the NW1NW1 Section 8, and if necessary we will employ all legal means to receive our just and fair share of the reservoir applicable thereto. In the alternative we stand ready to work with you toward an amenable resolution, but the basis of any such resolution is not enhanced by such demands as your are attempting to place on Hanley with your paper trail of correspondence.

Yours very truly,

HANLEY PETROLEUM INC.

James W. Rogers Vice President Land

/pjm

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING GOVERNOR

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87504 (505) 827-5800

June 14, 1991

KELLAHIN, KELLAHIN & AUBREY Attorneys at Law P. O. Drawer 2265 Santa Fe, New Mexico 87504

RE: CASE NO. 10211 and CASE NO. 10219 ORDER NO. R-9480-B

Dear Madam:

Enclosed herewith are two copies of the each of the above-referenced Division order recently entered in the subject case.

3

Sincerely,

Florene

Florene Davidson OC Staff Specialist

FD/sl

cc: BLM - Carlsbad James Bruce William Carr

State of New Mexico ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT Santa Fe. New Mexico 87505



BRUCE KING GOVERNOR January 14, 1992

ANITA LOCKWOOD CABINET SECRETARY

MATTHEW BACA DEPUTY SECRETARY

Mr. James Bruce Hinkle, Cox, Eaton, Coffield & Hensley Attorneys at Law 500 Marquette Northwest Suite 800 Albuquerque, New Mexico 87102-2121

Dear Mr. Bruce:

Based upon your letter of January 10, 1992, and in accordance with provisions of Division Order No. R-9480-B, Santa Fe Energy is hereby granted an extension of time in which to complete the well on the unit pooled by said order until February 13, 1992.

Sincerely,

William J. LeMay Director WJL/sl

cc: Case Nos. 10211 and 10219 OCD - Hobbs District Office

VILLAGRA BUILDING - 408 Galisteo Forestry and Resources Conservation Division P.O. Box 1948 87504-1948 827-5830 Park and Recreation Division P.O. Box 1147 87504-1147

827-7465

2040 South Pacheco Office of the Secretary 827-5950 Administrative Services 827-5925

Energy Conservation & Management 827-5900 Using and Minerals 877-0000