

KELLAHIN AND KELLAHIN

ATTORNEYS AT LAW

EL PATIO BUILDING

117 NORTH GUADALUPE

POST OFFICE BOX 2265

SANTA FE, NEW MEXICO 87504-2265

W. THOMAS KELLAHIN*

*NEW MEXICO BOARD OF LEGAL SPECIALIZATION
RECOGNIZED SPECIALIST IN THE AREA OF
NATURAL RESOURCES-OIL AND GAS LAW

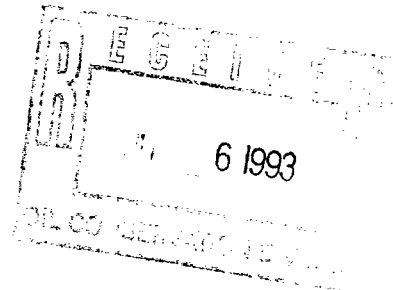
JASON KELLAHIN (RETIRED 1991)

TELEPHONE (505) 982-4285
TELEFAX (505) 982-2047

July 6, 1993

HAND DELIVERED

William J. LeMay
Oil Conservation Division
310 Old Santa Fe Trail
Santa Fe, New Mexico 87501



Re: Application of Phillips Petroleum Company
to Qualify Five Portions of its East Vacuum
Grayburg-San Andres Unit Pressure Maintenance
Project for the Recovered Oil Tax Rate Pursuant
to the "New Mexico Enhanced Oil Recovery Act,"
Lea County, New Mexico.

Dear Mr. LeMay:

On behalf of Phillips Petroleum Company, we are
filing the enclosed certified application in triplicate.

We request that this application be set for hearing
on the next available Examiner's Hearing Docket now
scheduled for July 29, 1993.

Also enclosed is our suggested notification-
advertisement for this case.

Very truly yours,

W. Thomas Kellahin

cc: Elizabeth Harris, Esq.
cc: Jerry Sexton (OCD-Hobbs)

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TELEPHONE (505) 982-4285
TELEFAX (505) 982-2047

JASON KELLAHIN (RETIRED 1991)

September 14, 1993

HAND DELIVERED

Mr. Michael E. Stogner
Chief Hearing Examiner
Oil Conservation Division
310 Old Santa Fe Trail
Santa Fe, New Mexico 87501

141

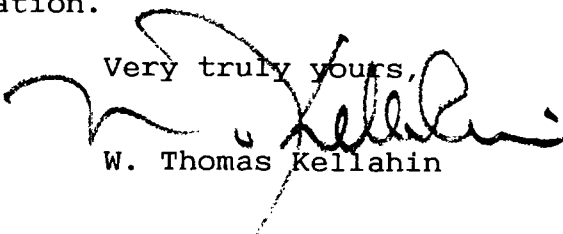
Re: NMOCD Case 10779
Application of Phillips Petroleum Company
to Qualify Five Portions of its East
Vacuum Grayburg-San Andres Unit Pressure
Maintenance Project for the Recovered Oil
Tax Rate, Lea County, New Mexico

Dear Mr. Stogner:

On behalf of Phillips Petroleum Company, please find enclosed our suggested order for entry in this case. To aid the Division, we have also enclosed a copy of this order on a floppy disk using Wordperfect.

Please call me if you have any questions or need further information.

Very truly yours,


W. Thomas Kellahin

cc: Phillips Petroleum Company
Attn: Elizabeth Harris, Esq.

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. 10779
Order No.R-_____

APPLICATION OF PHILLIPS PETROLEUM COMPANY
TO QUALIFY FIVE PORTIONS OF ITS EAST VACUUM
GRAYBURG-SAN ANDRES UNIT PRESSURE MAINTENANCE
PROJECT FOR THE RECOVERED OIL TAX RATE
PURSUANT TO THE "NEW MEXICO ENHANCED
OIL RECOVERY ACT," LEA COUNTY, NEW MEXICO

PHILLIPS PETROLEUM COMPANY'S
PROPOSED
ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 A.M. on July 29, 1993, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this ____ of September, 1993, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

Case No. 10779
Order No. R-
Page 2

FINDS THAT:

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

(2) Phillips Petroleum Company is the current operator of the East Vacuum Grayburg-San Andres Unit Pressure Maintenance Project, Vacuum Grayburg-San Andres Pool, Lea County, New Mexico ("Existing EOR Project") which originally was approved by Division Order R-5897 issued effective January 16, 1979.

(3) On November 16, 1981 the Division issued Order R-6856 which amended Order R-5897 and approved the Existing EOR Project to include the injection of carbon dioxide and for approval of a portion of the Project as a Qualified Tertiary Oil Recovery Project.

(4) The applicant, Phillips Petroleum Company ("Phillips") seeks an order pursuant to the Rules and Procedures for Qualification of Enhanced Oil Recovery Projects and Certification for the Recovered Oil Tax Rate, as promulgated by Division Order No. R-9708, qualifying five portions of its East Vacuum Grayburg-San Andres Unit Pressure Maintenance Project, Lea County, New Mexico, for the recovered oil tax rate pursuant to the "Enhanced Oil Recovery Act" (Laws 1992, Chapter 38, Sections 1 through 5).

(5) At the time of unitization on November 27, 1978, the Project comprised 169 wells encompassing 7025 acres. Waterflood operations were initiated during 1980 on 80-acre inverted nine-spot patterns.

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Order No. R- _____
Page 3

(6) Flood operations within the unit have thus far been conducted on 80-acre inverted nine-spot patterns.

(7) Primary oil recovery from the Project has been 78,000 Mbbls. As of January 1993, total oil production from the Unit was 117,099.1 Mbbls. Under the current 80-acre invert nine-spot patterns, ultimate secondary and tertiary oil recovery is estimated to be 66,548.8 Mbbls.

(8) The Project is currently producing at a rate of 7900 BOPD and 38,000 BWPD from 199 active producers with 100 currently active injection wells. Approximately 26,000.0 Mbbls. of recoverable reserves remain under the current mode of operations.

(9) Phillips seeks to expand portions of this Project by means of a significant change in the process used for the displacement of crude oil which will be a modification of well configurations in five selected areas of the unit which are described on Exhibit "A" attached.

(10) This proposed expansion will require that the applicant drill and equip 8 new producing wells, convert 4 producing wells to injection, reactivate 1 producing well, and upgrade tank batteries and injection facilities.

(11) The applicant now seeks to qualify each of these five areas for the recovered oil tax rate by means of a significant change in the process used for the displacement of crude oil or by the expansion, extension or increase in size of the geologic area that can reasonably be determined to represent a new or unique area of activity as follows:

Case No. _____
Order No. R- _____
Page 4

✓ AREA 1: A 60-acre area designated as Area 1 on Exhibit A. This area is not in the existing carbon dioxide injection project. The carbon dioxide project area will be geographically and geologically expanded into Area 1 by conversion of Well 0524-129 to water alternating carbon dioxide injection ("WAG") and the drilling of infill Well 0524-007. The entire area including Wells 0524-008, 0524-045, 0524-002, 0524-112, and 0524-003 will be affected by this change which will significantly change the process used for displacement of crude oil by the introduction of carbon dioxide into this area.

✓ AREA 2: A 90-acre area designated as Area 2 on Exhibit A. This area will include three additional infill Wells: 3202-020, 3202-021 and 3229-013. Well 3202-001 will be converted to WAG injection. The impact of these changes will significantly change the process used for displacement of crude oil by the introduction of carbon dioxide into this area, and increasing the size of the geologic area by changing the areal sweep to allow carbon dioxide to contact new geologic areas that are currently not being contacted with carbon dioxide. As a consequence, the following wells should experience an improvement in oil recovery through improved sweep efficiency: Wells 3202-004, 3202-006, 3202-012, 3202-015, 3229-003, 3229-004 and 3229-005.

AREA 3: A 160-acre area designated as Area 3 on Exhibit A. This area is being converted from two 80-acre nine-spot patterns to a 160-acre line drive pattern. Well 3333-002 will be converted to injection and Wells 3308-006, 3366-001 and 3373-002 will be drilled offset to the line drive injection. The combination of these changes will alter the displacement process significantly by increasing the size of the geologic area by changing the areal sweep to allow carbon dioxide to contact new geologic areas that are currently not being contacted with carbon dioxide. In addition to the new infill wells, Wells 3308-002, 3308-003, 3360-029, 3373-028,

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Page 5

3333-008, 3333-003, 3328-002, 3374-003, and 3374-001 should experience an improvement in oil recovery through improved sweep efficiency.

AREA 4: A 150-acre area designated as Area 4 on Exhibit A. This area is being converted from one 80-acre nine-spot pattern and one 70-acre seven spot pattern to a 150-acre line drive pattern. Well 3315-001 will be converted and Well 3340-007 will be drilled to accomplish these changes in operations. The combination of these changes will alter the oil displacement process significantly. by increasing the size of the geologic area by changing the areal sweep to allow carbon dioxide to contact new geologic areas that are currently not being contacted with carbon dioxide. In addition, the following wells should experience an improvement in oil recovery through improved sweep efficiency: Wells 3440-001, 3440-003, 3440-005, 3333-004, 3333-007, 3333-001, 3315-004, 3315-005 and 3315-002.

AREA 5: An 80-acre area designated as Area 5 on Exhibit A. The conversion of Well 3202-033 will alter this pattern from an 80-acre inverted nine-spot pattern to an 80-acre line drive pattern. This change will alter the oil displacement process significantly by increasing the size of the geologic area by changing the areal sweep to allow carbon dioxide to contact new geologic areas that are currently not being contacted with carbon dioxide. The following wells should experience an improvement in oil recovery through improved sweep efficiency: Wells 3202-003, 3202-019, 3202-016, 3236-007, 3236-003, 3236-004 and 3236-005.

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(12) The estimated amount of recoverable oil attributable to a Positive Production Response from the Expanded Use of enhanced oil recovery technology for this portion of this existing EOR Project is 1.056 million barrels of additional oil.

Further, the
(13) The geologic evidence presented by the applicant including structure maps, porosity maps and structural cross sections supports the conclusion that while the various pay sections in the ~~San Andres~~ *Pay* reservoir are generally present, the reservoir is generally heterogeneous with barriers in the reservoir resulting in lateral discontinuity of pay and great variations in thickness, uniformity, porosity and permeability. This results in a baffled reservoir that contains large geologic areas not connected to the current carbon dioxide flood.

(14) Carbon dioxide floods are different from waterflood projects in that the carbon dioxide must come into physical contact with the oil for the carbon dioxide flooding to be effective. Therefore, without the proposed geologic expansion of these five project areas, this 1.056 million barrels of additional oil is not recoverable under the existing project plan.

(15) Applicant's engineering evidence concludes that with a significant change or modification in the injection patterns with the drilling of additional producers and the conversion of existing wells to injection and production, an estimated additional 1.056 million barrels of oil will be recovered in the five Expanded Use Areas having a current undiscounted value of \$19,505,308.

(16) The costs of the required additional facilities is estimated to be \$3,958,825 and the total project costs is estimated to be \$5,976,249.

Exhibit 13
(17) The geologic evidence presented by Phillips demonstrated that the ~~San Andres~~ reservoir in the "Expanded Use Areas" contains distinct stringers each vertically isolated from the others with none continuous over the entire southern portion of the unit resulting in the existing 80-acre waterflood pattern being too large to overcome the areal discontinuities found in the ~~San Andres~~ formation. *Exhibit 13*

(18) The reduction in the carbon dioxide flood patterns from 80-acres to 40-acres will improve the sweep efficiency and ultimate recovery from each of the five Expanded Use Areas.

(19) Based on the testimony presented in this case, the Division finds that:

- (a) the expansion of the carbon dioxide flood pattern into Area 1 should result in a substantial increase in the amount of crude oil ultimately recovered therefrom;
- (b) the reduction in the size of the carbon dioxide flood pattern for Area 2 through Area 5 should result in a substantial increase in the amount of crude oil ultimately recovered from each said area;
- (c) the proposed enhanced oil recovery project is economically and technically feasible and has not been prematurely filed.

(20) Phillips' Exhibits 13, 16, 19, 22, and 25 are accurate and reliable engineering projections of the performance of the producing wells within each of the five Expanded Use Areas and should be utilized in

Case No. _____
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Page 8

determining the occurrence of a positive production response and for certification of that response by the Division.

(21) Each of the subject five Expanded Use Areas within the East Vacuum Grayburg-San Andres Unit should be qualified an "Enhanced Oil Recovery Project" (EOR) pursuant to the "Enhanced Oil Recovery Act" (Laws 1992, Chapter 38, Sections 1 through 5).

After an appropriate allocation for my...

(22) To be eligible for the EOR credit, the operator should advise the Division when the injection into each additional injection well commences and at such time, request the Division certify the project to the New Mexico Taxation and Revenue Department.

promulgate

(23) The application should be approved and the EOR Project should be governed by the provision of the "Rules and Procedures for Qualifications of Enhanced Oil Recovery Projects" and "Certification for Recovered Oil Tax Rate" as promulgated by Division Order No. R-9708.

(24) Each of the five "enhanced oil recovery project areas" should initially comprise ~~the proration units assigned to~~ producing wells to be affected by Injection which are the areas ~~identified on Exhibit "A"~~.

five listed

(25) At such time as a positive production response occurs and within five years from the date of the Certificate of Qualification, the applicant must apply to the Division for certification of positive production response, which application shall identify the area actually benefitting from enhanced recovery operations, and identify the specific wells which the operator believes are eligible for the credit. The Division may

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review the application administratively or set it for hearing. Based upon evidence presented, the Division will certify to the Department of Taxation and Revenue those lands and wells which are eligible for the credit.

IT IS THEREFORE ORDERED THAT:

(1) The application of Phillips Petroleum Company to qualify each of these five Expanded Use Areas within the southern portion of its East Vacuum Grayburg-San Andres Unit Pressure Maintenance Project as an "Enhanced Oil Recovery Project" pursuant to the "Enhanced Oil Recovery Act" (Laws 1992, Chapter 38, Sections 1 through 5), is hereby approved.

(2) Each of the five Project Areas shall be defined in terms of the unit wells which would actually qualify for the recovered oil tax rate, described as follows: The subject "enhanced oil recovery project area" shall initially comprise the following five described areas in Lea County, New Mexico:

See Exhibit "A"

(3) The subject "enhanced oil recovery project area" shall initially comprise the following wells in the above described areas in Lea County, New Mexico:

See Exhibit "B"

(4) The operator shall advise the Division when the additional injection phase of the project commences into any of the new injection wells.

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Page 10

(5) At such time as a positive production response occurs and within five years from the date of the Certificate of Qualification, the applicant must apply to the Division for certification of positive production response, which application shall identify the area actually benefitting from enhanced recovery operations, and identify the specific wells which the operator believes are eligible for the credit. The Division may review the application administratively or set it for hearing. Based upon evidence presented, the Division will certify to the Department of Taxation and Revenue those lands and wells which are eligible for the credit.

(6) Said EOR project shall be governed by the provisions of the "Rules and Procedures for Qualifications of Enhanced Oil Recovery Projects" and "Certification for Recovered Oil Tax Rate" as promulgated by Division Order No. R-9708.

(7) That Phillips' Hearing Exhibits 13, 16, 19, 22 and 25 shall be used by the Division as the "baseline" data from which to determine a positive production response to each of the respective areas.

(8) 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

SEAL

PROJECT AREA 1: SW/4 NW/4 NE/4 NW/4, NW/4 SW/4 NE/4 NW/4, S/2 SW/4 NE/4 NW/4, NW/4 SE/4 NW/4, N/2 SW/4 SE/4 NW/4, N/2 SE/4 SW/4 NW/4, N/2 SW/4 SW/4 NW/4, N/2 SW/4 NW/4, S/2 NW/4 NW/4, S/2 N/2 NW/4 NW/4 Section 5, T-18S, R-35E, N.M.P.M., Lea County, New Mexico, containing 95.00 acres, more or less.

PROJECT AREA 2: SW/4 NE/4 NE/4 SE/4, W/2 SE/4 NE/4 SE/4, SW/4 NE/4 SE/4, S/2 NW/4 NE/4 SE/4, W/2 NE/4 SE/4 SE/4, NW/4 SE/4 SE/4 SE/4, N/2 SW/4 SE/4 SE/4, NW/4 SE/4 SE/4, N/2 S/2 SW/4 SE/4, N/2 SW/4 SE/4, S/2 NW/4 SE/4, S/2 N/2 NW/4 SE/4, S/2 N/2 NE/4 SW/4, S/2 NE/4 SW/4, N/2 SE/4 SW/4, N/2 S/2 SE/4 SW/4, NE/4 SE/4 SW/4 SW/4, E/2 NE/4 SW/4 SW/4, E/2 SE/4 NW/4 SW/4, SE/4 NE/4 NW/4 SW/4 Section 32, T-17S, R-35E, N.M.P.M., Lea County, New Mexico, containing 180.00 acres, more or less.

PROJECT AREA 3: S/2 SW/4 NE/4 NE/4, N/2 NW/4 SE/4 NE/4, N/2 SE/4 SW/4 NE/4, W/2 W/2 NE/4, NE/4 SW/4 NE/4, SE/4 NW/4 NE/4, S/2 NE/4 NW/4 NE/4, N/2 NW/4 NW/4 SE/4, N/2 NE/4 SW/4, N/2 SE/4 NE/4 SW/4, SW/4 NE/4 SW/4, N/2 NW/4 SE/4 SW/4, N/2 NE/4 SW/4 SW/4, E/2 NW/4 SW/4, NE/4 SW/4 NW/4 SW/4, E/2 NW/4 NW/4 SW/4, NW/4 NW/4 NW/4 SW/4, E/2 E/2 NW/4, S/2 NW/4 NE/4 NW/4, SW/4 NE/4 NW/4, W/2 SE/4 NW/4, E/2 SW/4 NW/4, SW/4 SW/4 NW/4, S/2 NW/4 SW/4 NW/4, S/2 SE/4 NW/4 NW/4 Section 33, T-17S, R-35E, N.M.P.M., Lea County, New Mexico, containing 275.00 acres, more or less.

PROJECT AREA 4: S/2 SW/4 NE/4 NE/4, S/2 NE/4 SE/4 NE/4, S/2 S/2 NE/4, NW/4 SE/4 NE/4, NE/4 SW/4 NE/4, S/2 NW/4 SW/4 NE/4, S/2 SE/4 NW/4 NE/4, NE/4 SE/4, N/2 SE/4 SE/4, E/2 NE/4 SW/4 SE/4, N/2 NW/4 SE/4, SE/4 NW/4 SE/4, E/2 SW/4 NW/4 SE/4, E/2 NE/4 NE/4 SW/4, S/2 SE/4 SE/4 NW/4 Section 33; W/2 SW/4 NE/4 SW/4, N/2 NE/4 SW/4 SW/4, NW/4 SW/4 SW/4, S/2 NE/4 NW/4 SW/4, S/2 NW/4 SW/4, NW/4 NW/4 SW/4, S/2 SW/4 SW/4 NW/4 Section 34; T-17S, R-35E, N.M.P.M., Lea County, New Mexico, containing 250.00 acres, more or less.

PROJECT AREA 5: S/2 SW/4 NE/4 NE/4, N/2 NW/4 SE/4 NE/4, N/2 S/2 SW/4 NE/4, N/2 SW/4 NE/4, NW/4 NE/4, NE/4 NW/4, N/2 SE/4 NW/4, N/2 S/2 SE/4 NW/4, N/2 NE/4 SW/4 NW/4, S/2 SE/4 NW/4 NW/4 Section 32, T-17S, R-35E, N.M.P.M., Lea County, New Mexico, containing 160.00 acres, more or less.

(3) Total acres in Five Expanded Use Areas:

960.00 acres, more or less

Exhibit A to Order

List of Wells in Expanded Use Areas

✓ **AREA 1:**

Injectors:

0524-129

Producers:

0524-008 ✓

0524-045 ✓

0524-002 ✓

0524-003 ✓

0524-112 ✓

0524-007

✓ **AREA 2:**

Injectors:

3229-008

3202-001

Producers:

3202-004

3202-006

3202-012

3202-015

3202-020

3202-021

3229-003

3229-004

3229-005

3229-013

AREA 3:

Injectors:

3333-005

3333-002

3374-002

Exhibit
Page 2

Producers:

3308-002 ✓
3308-003 ✓
~~3308-005~~
3308-006 ✓
3328-002 ✓
~~3332-032~~
3333-003 ✓
~~3333-004~~
3333-008 ✓
3366-001 ✓
3366-029 ✓
3373-002 ✓
3373-028 ✓
3374-001 ✓
3374-003 ✓

AREA 4:

Injectors:

3315-001
3315-006
3315-008

Producers:

3333-001 ✓
* 3333-003
* 3333-004 ✓
3333-007 ✓
* 3333-008
3315-002 ✓
3315-004 ✓
3315-005 ✓
3440-001 ✓
3440-003 ✓
3440-005 ✓
3440-007 ✓✓

**Exhibit
Page 3**

AREA 5:

Injectors:

3236-006
3202-033

Producers:

3236-003
3236-004
3236-005
3236-007
3202-003
3202-016
3202-019

* Common to both Areas 3 & 4

PROJECT AREA 1: SW/4 NW/4 NE/4 NW/4, NW/4 SW/4 NE/4 NW/4, S/2 SW/4 NE/4 NW/4, NW/4 SE/4 NW/4, N/2 SW/4 SE/4 NW/4, N/2 SE/4 SW/4 NW/4, N/2 SW/4 SW/4 NW/4, N/2 SW/4 NW/4, S/2 NW/4 NW/4, S/2 N/2 NW/4 NW/4 Section 5, T-18S, R-35E, N.M.P.M., Lea County, New Mexico, containing 95.00 acres, more or less.

PROJECT AREA 2: SW/4 NE/4 NE/4 SE/4, W/2 SE/4 NE/4 SE/4, SW/4 NE/4 SE/4, S/2 NW/4 NE/4 SE/4, W/2 NE/4 SE/4 SE/4, NW/4 SE/4 SE/4 SE/4, N/2 SW/4 SE/4 SE/4, NW/4 SE/4 SE/4, N/2 S/2 SW/4 SE/4, N/2 SW/4 SE/4, S/2 NW/4 SE/4, S/2 N/2 NW/4 SE/4, S/2 N/2 NE/4 SW/4, S/2 NE/4 SW/4, N/2 SE/4 SW/4, N/2 S/2 SE/4 SW/4, NE/4 SE/4 SW/4 SW/4, E/2 NE/4 SW/4 SW/4, E/2 SE/4 NW/4 SW/4, SE/4 NE/4 NW/4 SW/4 Section 32, T-17S, R-35E, N.M.P.M., Lea County, New Mexico, containing 180.00 acres, more or less.

PROJECT AREA 3: S/2 SW/4 NE/4 NE/4, N/2 NW/4 SE/4 NE/4, N/2 SE/4 SW/4 NE/4, W/2 W/2 NE/4, NE/4 SW/4 NE/4, SE/4 NW/4 NE/4, S/2 NE/4 NW/4 NE/4, N/2 NW/4 NW/4 SE/4, N/2 NE/4 SW/4, N/2 SE/4 NE/4 SW/4, SW/4 NE/4 SW/4, N/2 NW/4 SE/4 SW/4, N/2 NE/4 SW/4 SW/4, E/2 NW/4 SW/4, NE/4 SW/4 NW/4 SW/4, E/2 NW/4 NW/4 SW/4, NW/4 NW/4 NW/4 SW/4, E/2 E/2 NW/4, S/2 NW/4 NE/4 NW/4, SW/4 NE/4 NW/4, W/2 SE/4 NW/4, E/2 SW/4 NW/4, SW/4 SW/4 NW/4, S/2 NW/4 SW/4 NW/4, S/2 SE/4 NW/4 NW/4 Section 33, T-17S, R-35E, N.M.P.M., Lea County, New Mexico, containing 275.00 acres, more or less.

PROJECT AREA 4: S/2 SW/4 NE/4 NE/4, S/2 NE/4 SE/4 NE/4, S/2 S/2 NE/4, NW/4 SE/4 NE/4, NE/4 SW/4 NE/4, S/2 NW/4 SW/4 NE/4, S/2 SE/4 NW/4 NE/4, NE/4 SE/4, N/2 SE/4 SE/4, E/2 NE/4 SW/4 SE/4, N/2 NW/4 SE/4, SE/4 NW/4 SE/4, E/2 SW/4 NW/4 SE/4, E/2 NE/4 NE/4 SW/4, S/2 SE/4 SE/4 NW/4 Section 33; W/2 SW/4 NE/4 SW/4, N/2 NE/4 SW/4 SW/4, NW/4 SW/4 SW/4, S/2 NE/4 NW/4 SW/4, S/2 NW/4 SW/4, NW/4 NW/4 SW/4, S/2 SW/4 SW/4 NW/4 Section 34; T-17S, R-35E, N.M.P.M., Lea County, New Mexico, containing 250.00 acres, more or less.

PROJECT AREA 5: S/2 SW/4 NE/4 NE/4, N/2 NW/4 SE/4 NE/4, N/2 S/2 SW/4 NE/4, N/2 SW/4 NE/4, NW/4 NE/4, NE/4 NW/4, N/2 SE/4 NW/4, N/2 S/2 SE/4 NW/4, N/2 NE/4 SW/4 NW/4, S/2 SE/4 NW/4 NW/4 Section 32, T-17S, R-35E, N.M.P.M., Lea County, New Mexico, containing 160.00 acres, more or less.

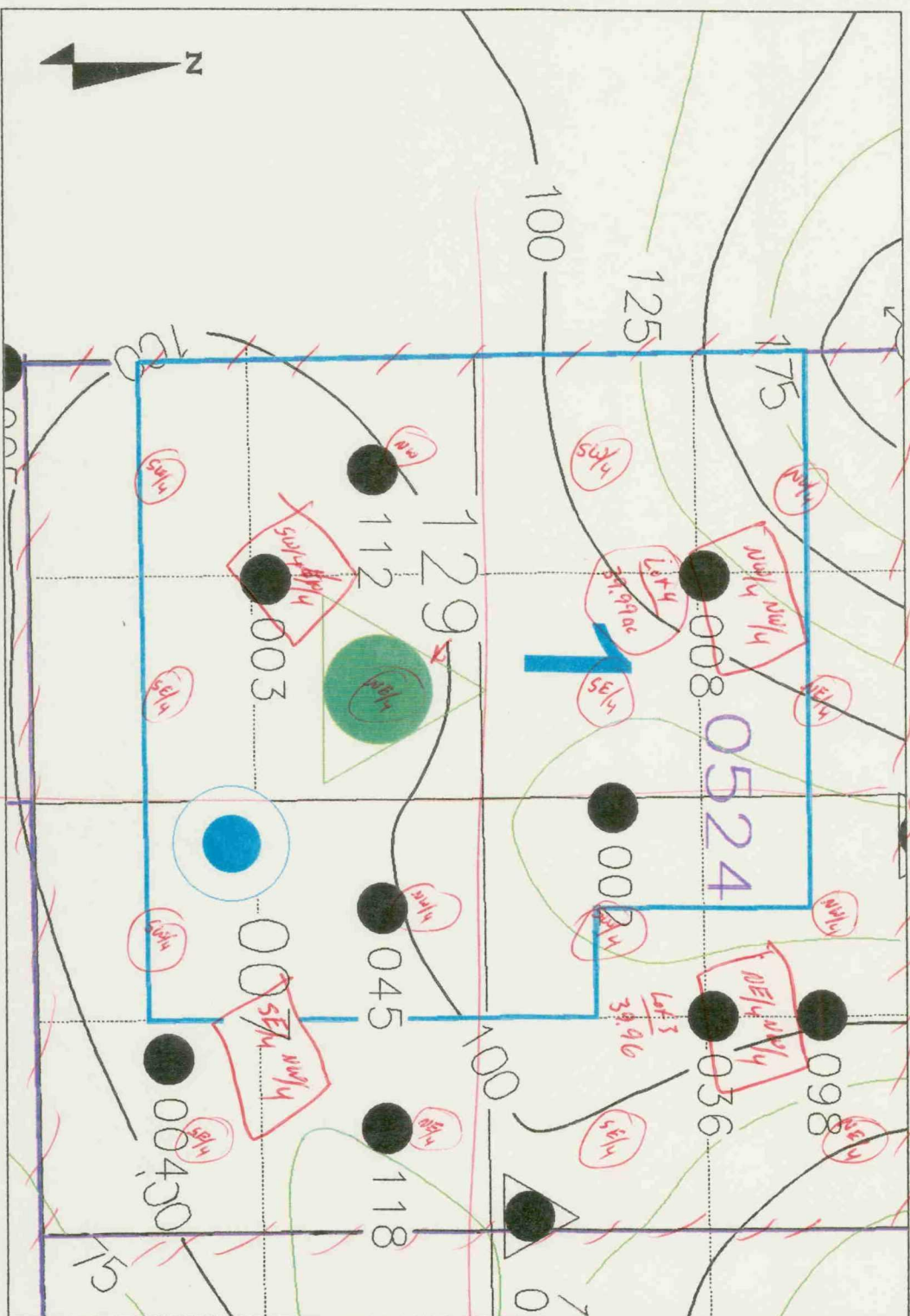
(3) Total acres in Five Expanded Use Areas:

960.00 acres, more or less

Area 1 Producers:

0524-002	0524-008
0524-003	0524-045

Code: 1-5000



mm/y

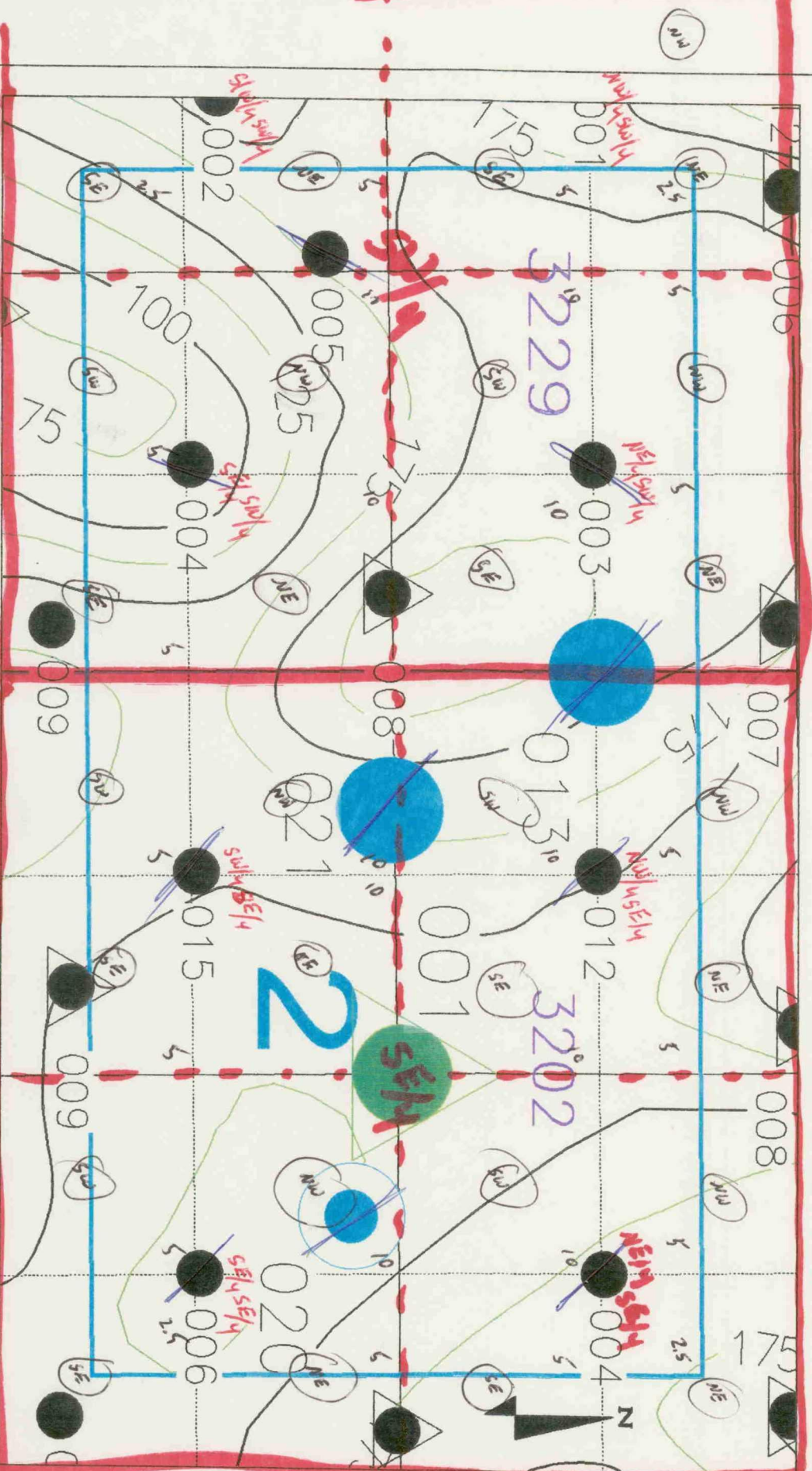
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$$\begin{array}{r} 1\frac{1}{2} \\ 12.5 \\ \hline 20 \\ 7.5 \\ \hline 30 \\ 15 \\ \hline 45.0 \end{array}$$
$$\begin{array}{r} 50 \\ 15 \\ \hline 65 \end{array}$$

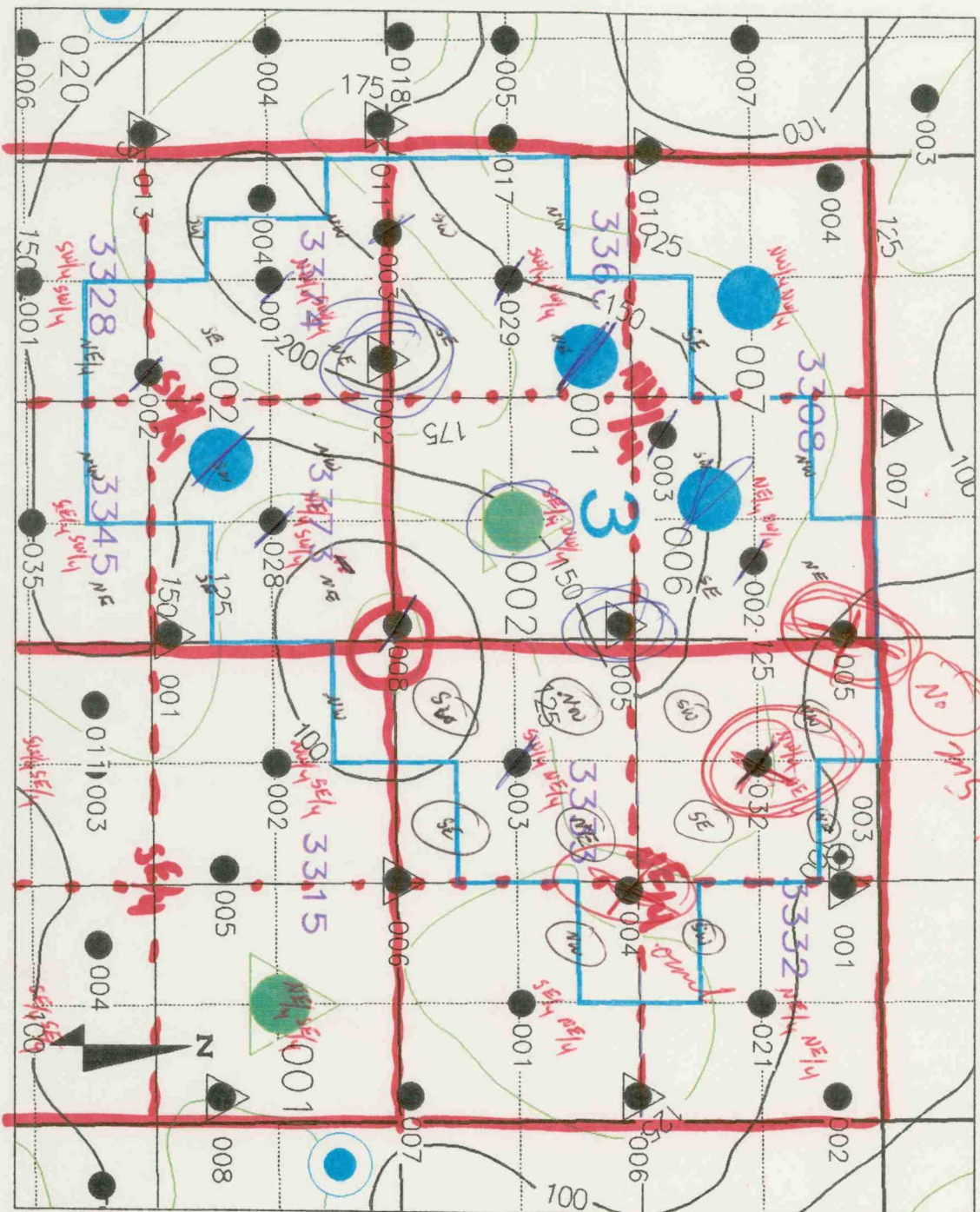
East Vacuum Grayburg San Andres Unit
Total San Andres Net Pay
Project Area 2

For: J.L. Stevens	Geol: RMcCullum	9/2/93
Grd: SMcCullum	Contour Int. = 25ft	Scale 1:6000.

Area 2 Producers:

3202-004	3202-021
3202-006	3229-003
3202-012	3229-004
3202-015	3229-005
3202-020	3229-013


$$\begin{array}{r} 22.5 \\ 30 \\ 30 \\ 7.5 \\ 30 \\ 7.5 \\ 30 \\ 30 \\ 30 \\ \hline 190.0 \end{array}$$



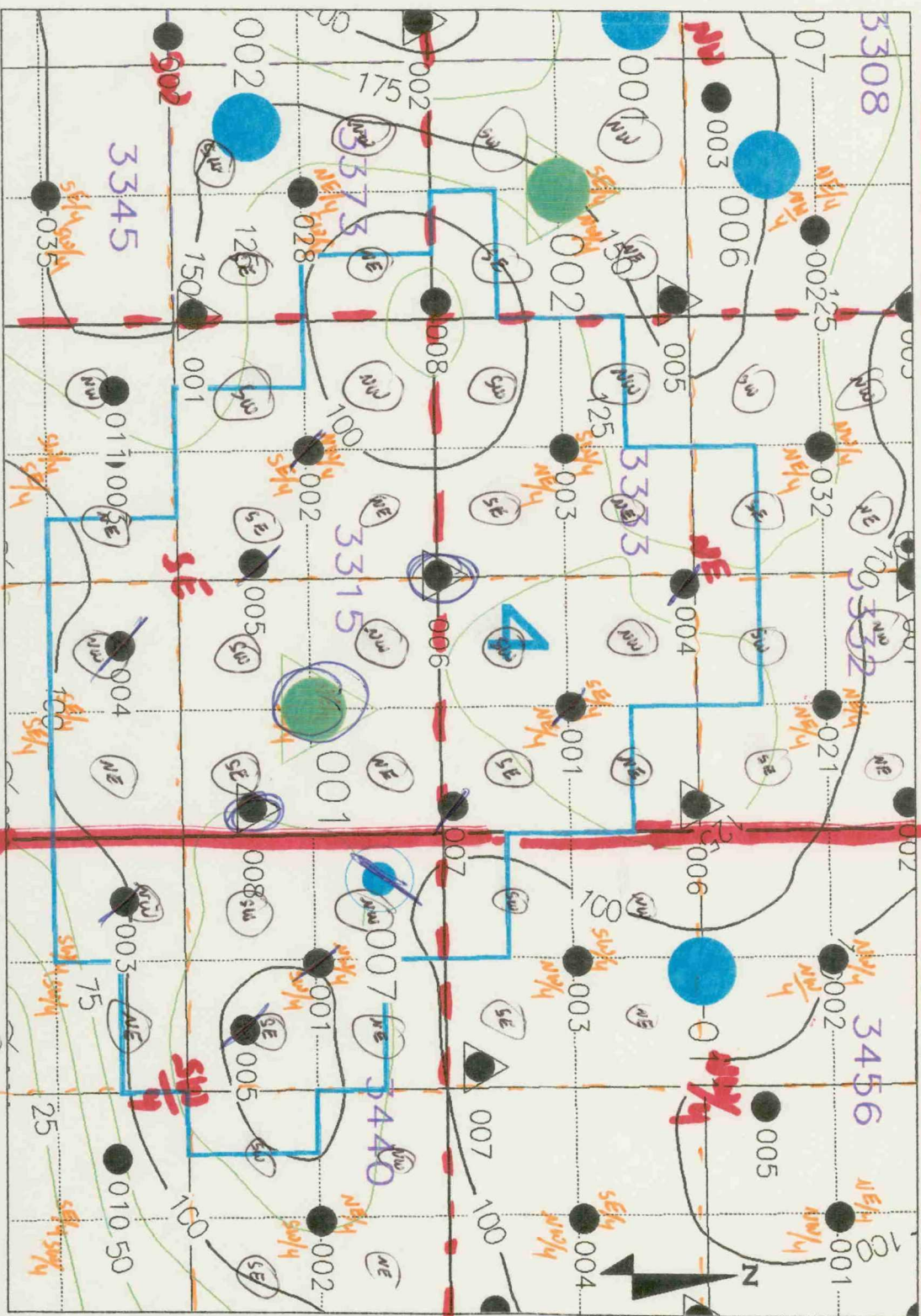
Area 3 Producers:

Phillips Petroleum Company			
East Vacuum Grayburg San Andres Unit			
Total San Andres Net Pay			
Project Area 3			
For: J.L. Stevens	Geol. Rick Colburn	9/2/93	
Draw: Rick Colburn	Contour Int. = 25ft	Scale 1" = 1000'	

3308-002	3332-032	3366-029
3308-003	3333-003	3373-002
3308-005	3333-004	3373-028
3308-006	3333-008	3374-001
3328-002	3366-001	3374-003

Section 33

Section 34



Phillips Petroleum Company

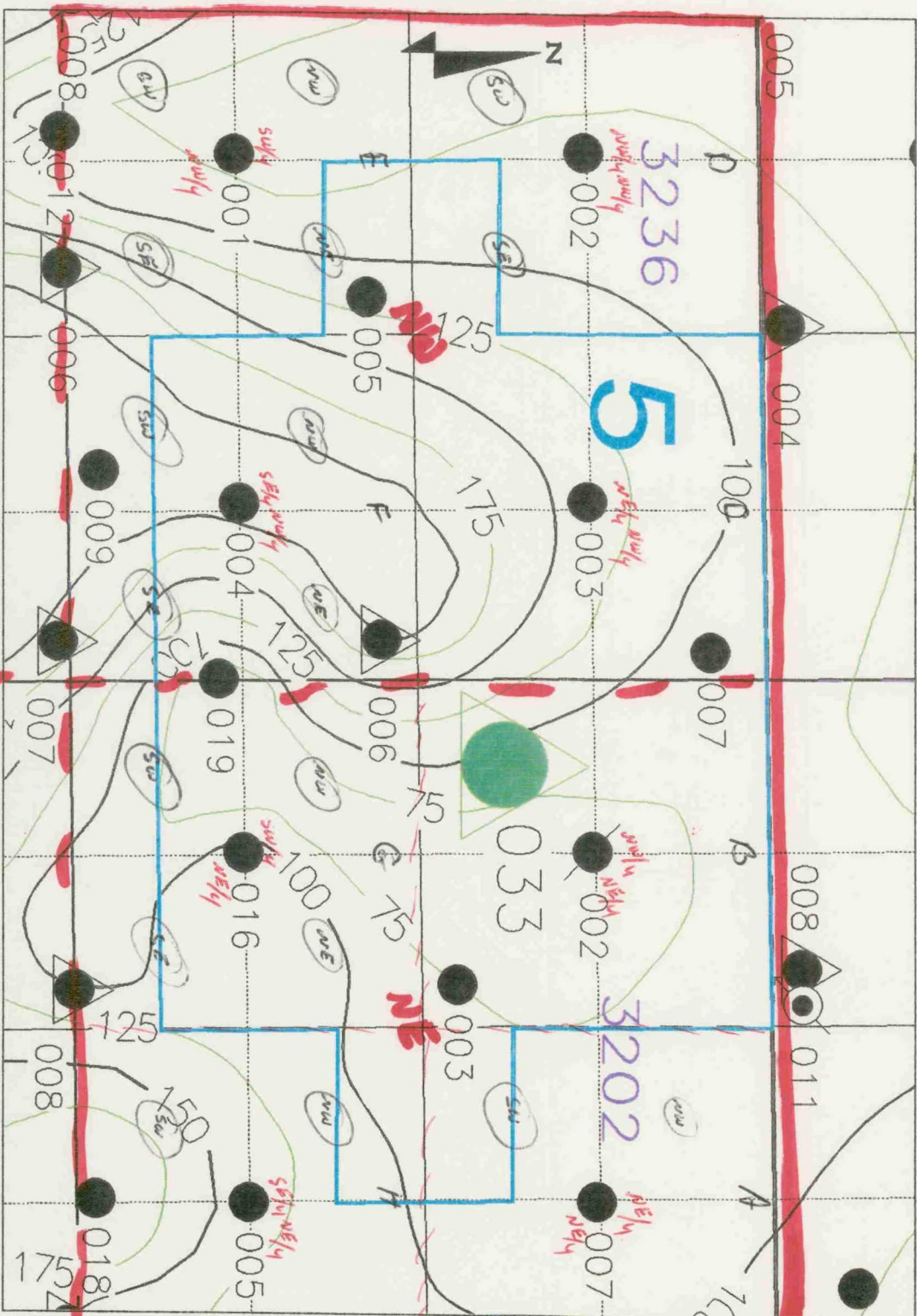
East Vacuum Grayburg San Andres Unit
Total San Andres Net Pay
Project Area 4

For: J.E. Stevens	Geot. RakColum	9/7/93
Geot. SAMColum	Contour Int. = 25ft	Scale 1:100000

Area 4 Producers:

3315-002	3333-007
3315-004	3333-008
3315-005	3440-001
3333-001	3440-003
3333-003	3440-005
3333-004	3440-007

Section 32



Phillips Petroleum

East Vacuum Groyburg San Andres Unit
Total San Andres Net Pay
Project Area 5

For: J.E. Steves	Geot. R. MacCallum	9/2/93
Geot. S. MacCallum	Geot. R. MacCallum	Scale 1:7500

Area 5 Producers:

3202-003	3236-003
3202-016	3236-004
3202-019	3236-005
3236-007	



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



BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

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November 15, 1993

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

RE: CASE NO. 10779
ORDER NO. R-6856-B

Dear Sir:

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

Sincerely,

A handwritten signature in cursive script that reads "Sally E. Martinez".

Sally E. Martinez
Administrative Secretary

cc: BLM - Carlsbad
David Abbey
Rick Brown - OCD