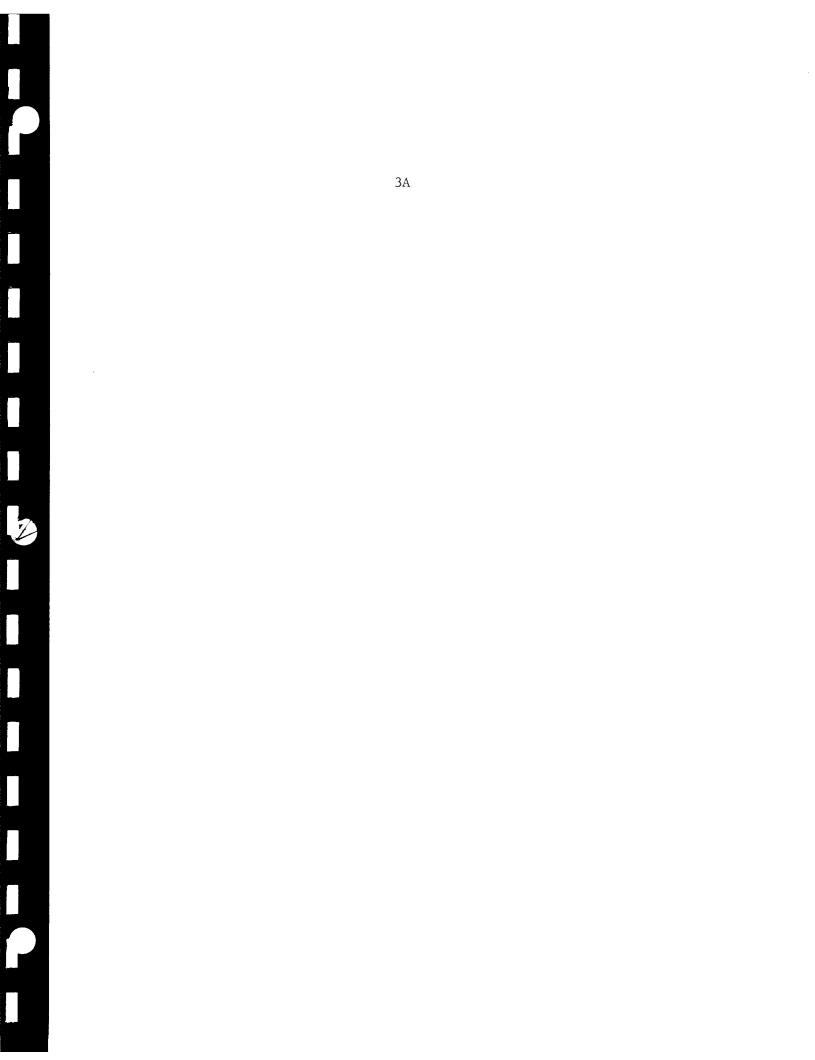
BEFORE THE OIL CONSERVATION DIVISION Santa Fe, New Mexico

Case Nos. <u>11297 and 11298</u> Exhibit No. <u>7</u>

Submitted by: Yates Petroleum Corporation

Hearing Date: June 29, 1995



April 8, 1994

Meeting Notice

Avalon Field Owners:

The Avalon Field "Report of the Technical Committee for the Working Interest Owners", dated August, 1992 has been approved.

On April 26 we will host a meeting to distribute and review the proposed Avalon Field Unit Agreement (UA) and Unit Operating Agreement (UOA). It is important that you attend in that we will review the field unitization plans which include:

- Participation Formula & Percentages
- Current Development Plan
- UOA/UA

An agenda is provided as Attachment I. A subsequent meeting will be held 4 to 6 weeks later for you to review your written comments/suggested changes with the same group.

Please RSVP your plans to attend the April 26 meeting by returning Attachment II. A map to the meeting location is included as Attachment III. I look forward to meeting those of you who can attend. Should you have questions prior to meeting, feel free to call me at (915) 688-7841 or Gil Beuhler (915) 688-7849.

Sincerely,

Conald E. nayrew

Ronald E. Mayhew Avalon Project Manager

REM/nh Attachments

### Attachment II: RSVP for Avalon Meeting

Mail to:

Ron Mayhew, EOR Projects Manager Exxon Co., USA, ML#4 P.O. Box 3116 Midland, Tx 79702-3116

or Express Mail to:

Building CDA #245 23 Desta Drive Midland, Tx 79705

or Fax to: (915) 688-7847

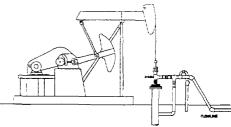
### Check one box below and return to Ron Mayhew:

- □ We will have \_\_\_\_\_ persons attending. Provide any dietary concerns we need to address:
- We will not have anyone attending the April meeting, but plan to attend the subsequent meeting.
- We will not attend either meeting.
- Please mail me a copy of the <u>2 volume Technical Report</u>, Avalon Field "*Report of the Technical Committee for the Working Interest Owners*", dated August, 1992

| Contact Person: |  |
|-----------------|--|
| phone:          |  |
| fax:            |  |

Company Name & Address:

Attachment I: Meeting Agenda



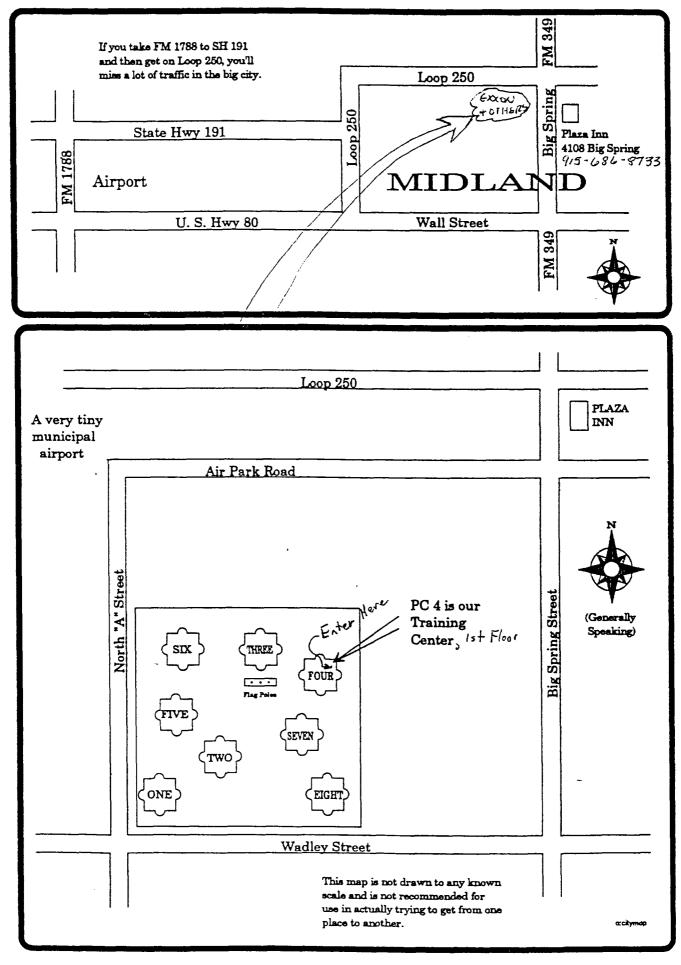
| <u>Topic</u> : | Proposed Avalon Field   |
|----------------|---|
| Unit           |   |
| Date:          | Tuesday, April 26, 1994                                       |
| Location:      | Exxon Building PC #4 Training Room, 3300 N. A St. Midland, Tx |

<u>Purpose:</u> Provide potential Working Interest Owners of the Avalon Unit with a recommended Unit Agreement and Unit Operating Agreement

|    |   |                         | De          | sired O | utcomes    |        |     |     |      |        |     |
|----|---|-------------------------|-------------|---------|------------|--------|-----|-----|------|--------|-----|
| 1. | Attendees<br>proposed a   | understand<br>greements | significant | aspects | of propose | d Unit | and | how | they | affect | the |
| 2. | 2. Attendees understand what they will & will not be bound to by approving UA/UOA |                         |             |         |            |        |     |     |      |        |     |

| Steps   | Methods/Presenter  | Min. | Time        |
|---|--|------|-------------|
| Introduction  | Welcome/ Ron Mayhew opens &<br>Attendees introduce selves              | 5    | 10:00<br>am |
| Agenda Review   | Ron Mayhew   | 5    | 10:05<br>am |
| Exxon Role & Interest                                     | Ron Mayhew presents, group asks for clarifications                     | 10   | 10:10<br>am |
| Overview of Proposed Project and<br>Participation Formula | Gil Beuhler presents, group asks<br>questions at end of each section   | 45   | 10:20<br>am |
| Unit Agreement  | Joe Thomas presents, clarifying questions asked at end of each article | 45   | 11:05<br>am |
| Lunch   | Provided onsite  | 30   | 11:50<br>am |
| Unit Operating Agreement                                  | Joe Thomas presents, clarifying questions asked at end of each article | 90   | 12:20<br>pm |
| Current Development Plan/Ongoing<br>Optimization          |  | 20   | 1:50<br>pm  |
| Next Steps/Meeting; Exxon Contacts                        | Ron Mayhew presents  | 15   | 2:10<br>pm  |
| Adjourn   |  |      | 2:25<br>pm  |

ATTACHMENT III



## 1 .

3B

### Meeting Purpose

### Provide potential Working Interest Owners of the Avalon (New Mexico) Unit with a recommended Unit Agreement and Unit Operating Agreement

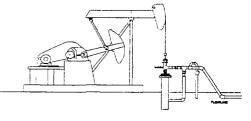
### Attendees The following persons attended this WIO Meeting.

|   | Person              | Company                               | Position                  | phone/fax                                    |
|---|---------------------|---------------------------------------|---------------------------|--|
| ŀ | Ron Mayhew          | Exxon                                 | Project Mgr.              | 915-688-7841/7847                            |
| • | Gil Beuhler         | Exxon                                 | Reservoir Engr.           | 915-688-7849/7847                            |
|   | Joe Thomas          | Exxon                                 | Landman                   | 915-688-7162                                 |
|   | Tom Kane            | Exxon                                 | Geologist                 |  |
| · | Scott<br>Lansdown   | Exxon                                 | Law                       | 915-688-4982/6 <del>199</del><br><b>4989</b> |
|   | Larry Long          | Exxon                                 | Reservoir Engr.           |  |
|   | Bill Duncan         | Exxon                                 | Regulatory Affairs        |  |
| • | Donna Bauer         | Exxon                                 | <b>Regulatory</b> Affairs |  |
|   | Greg Fisher         | Exxon                                 | Accounting Supr.          |  |
|   | Dave Boneau         | Yates Petroleum                       | Reservoir Supr.           | 505-748-1471/4585                            |
|   | Bob Fant            | Yates Petroleum                       | Reservoir Engr.           | 505-748-4185/4816                            |
| • | Janet<br>Richardson | Yates Petroleum                       | Landman                   | 505-748-1471                                 |
|   | Rosalie Jones       | Premier                               | Owner                     | 505-748-2093                                 |
|   | Ken Jones           | Premier                               | Owner                     | 214-386-6200                                 |
|   | Paul White          | Premier                               | Consultant                | 505-746-9507                                 |
| ŀ | Barbara<br>Lalicker | Penzoil                               | Reservoir Engr.           | 713-546-4240/4261                            |
|   | Bob Hodge           | MWJ Producing                         | Land Mgr.                 | 915-682-5216                                 |
| · | Bill Hayworth       | American National<br>Petroleum (ANPC) |                           | 713-780-9494                                 |

.doc/26-Apr-94

Avalon April 26 (Potential) WIO Meeting Name Compuny Position Phone/Fa VATES PETROLEUM DAVE BONEAU 505-748-1471 4585 RESERVOIR SUPERVISOR Yato Petroteum Janet Richardsm Landoran 505-748-1471 Yutes Pet Dob Fant Res. Engineer 505 748 4185 / 481E Barbara Lalicker Pennzoil Resur. Engr. 713-546-4240 / 426 Larry Long 915-688-7932\_ Reservoir Engr Exxon Exxon 5 co H Lansdown AHY. 915-688-4982 FAX-6199 < Engr - Reg. Attains 915-688-6174/-Bill Duncan 11. REGULATORY AFFAIRS EXXON DONNA BAUER 915.688.6172 Accountant Greg Fisher 915-688-6651 EXXON BOB HODGE LAND (1) HANHGER MIUJ PRODUCINIO 915-692-5216 JOEB. THOMAS Etton Lmus 915-688-7162 Tom Kane 6××0N 6EOLOGIST 915-688-7965 356-6200 Premier Gremor Consulting Engineer Kew Jones OWNER Paul G. white (505) 776-9507 Tosalie Jones Premier (505) 748-2093 owner BILL HAYWORTH 713 - 780 - 9494 AMERICAN National Eng Mange

Attachment I: Meeting Agenda



| <u>Topic</u> :   | Proposed Avalon Field Unit                                    |
|------------------|---|
| Date:            | Tuesday, April 26, 1994                                       |
| <u>Location:</u> | Exxon Building PC #4 Training Room, 3300 N. A St. Midland, Tx |

Purpose:Provide potential Working Interest Owners of the<br/>Avalon Unit with a recommended Unit Agreement and<br/>Unit Operating Agreement

|    | 1          |              | De           | sired (   | )ut | comes:   |         |       |      |      |        |     |
|----|------------|--------------|--------------|-----------|-----|----------|---------|-------|------|------|--------|-----|
| 1. | Attendees  | understand   | significant  | aspects   | of  | proposed | Unit    | and   | how  | they | affect | the |
|    | proposed a | agreements   |              |           | _   |          |         |       |      |      |        |     |
| 2. | Attendees  | understand v | vhat they wi | ll & will | not | be bound | to by a | appro | ving | UA/U | DA     |     |

| Steps   | Methods/Presenter  | Min. | Time        |
|---|--|------|-------------|
| Introduction  | Welcome/ Ron Mayhew opens &<br>Attendees introduce selves              | 5    | 10:00<br>am |
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| Unit Operating Agreement                                  | Joe Thomas presents, clarifying questions asked at end of each article | 90   | 12:20<br>pm |
| Current Development Plan/Ongoing<br>Optimization          | Gil Beuhler presents, group asks questions                             | 20   | 1:50<br>pm  |
| Next Steps/Meeting; Exxon Contacts                        | Ron Mayhew presents  | 15   | 2:10<br>pm  |
| Adjourn   |  |      | 2:25<br>pm  |

KENJONES- PREMIER

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### Purpose

Provide potential W I Os with recommended Unit Agreement (UA) and Unit Operating Agreement (UOA)

## Desired Outcomes

- Understand significant aspects of proposed Unit and how they affect the agreements
- Understand what will & will not be bound to by approving UA/UOA I





# **Avalon Field Unitization**

### Exxon Role

- Reservoir Management & Profitability
- Technical Analysis (Exxon & WIOs)
- -- Understand & Address WIO Needs

# Project Manager Role

- Coordinate Unitization Activities
- Focal Point for Water Injection & CO<sub>2</sub> Phases of Project
  - Project Profitability
- Endorse Project Design Basis (test need vs. traditional) I

2

# **Avalon Field Unitization**

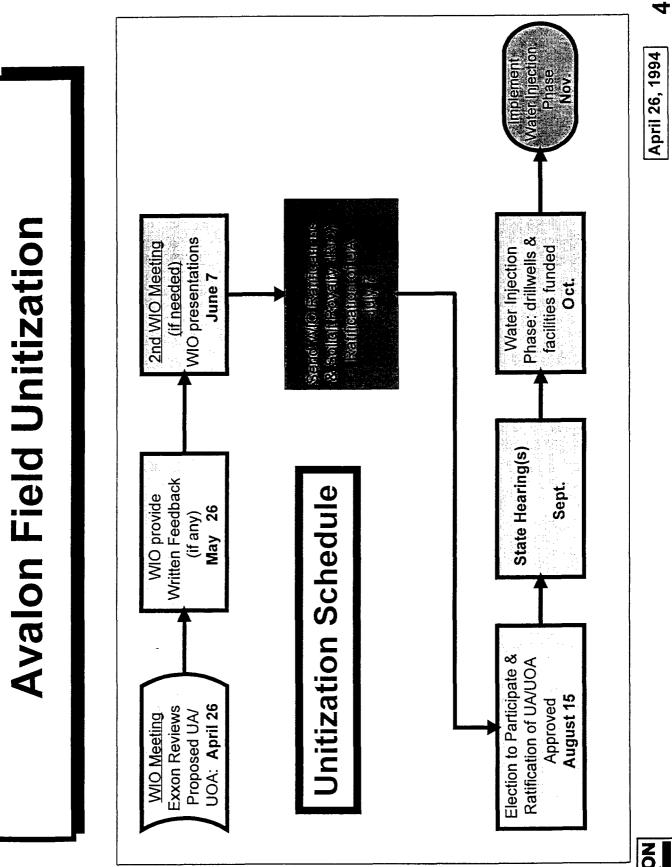
## Exxon Commitment

- Prize is CO<sub>2</sub> Project
- » CO<sub>2</sub> Recoverable Reserves
- » Water Injection Phase Carries Itself
- Manpower & Funds Expended

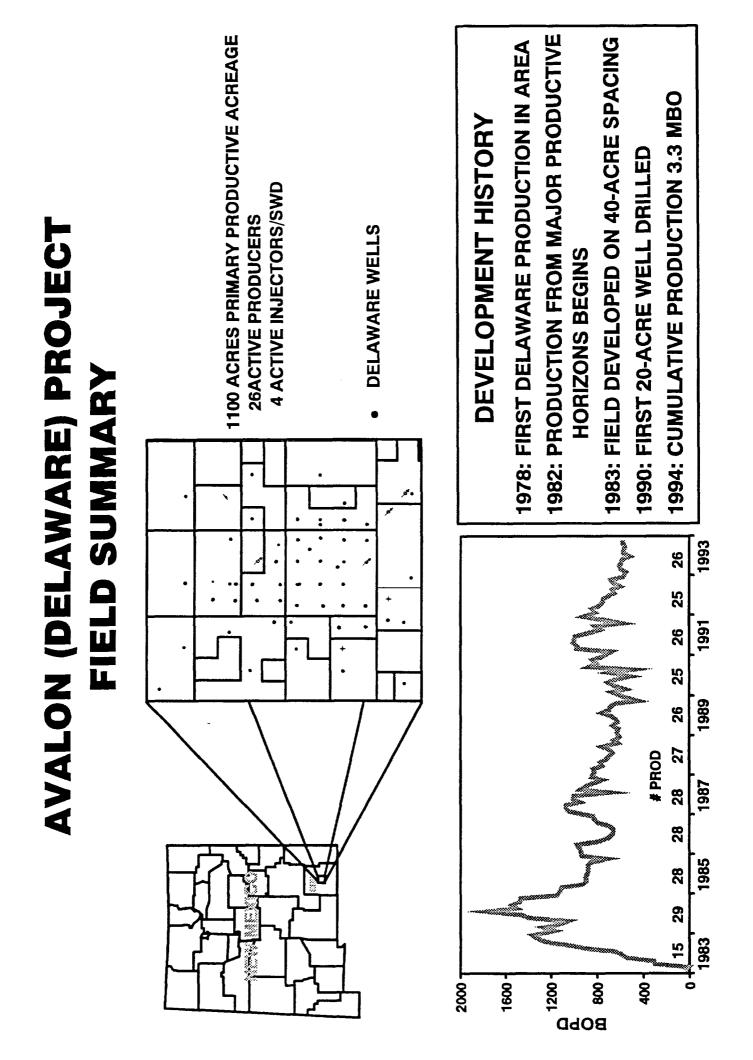
# Exxon Funding & Implementation Ability

- 1994 \$ available
- Future years pace depends on attractiveness and Water **Injection Phase performance**

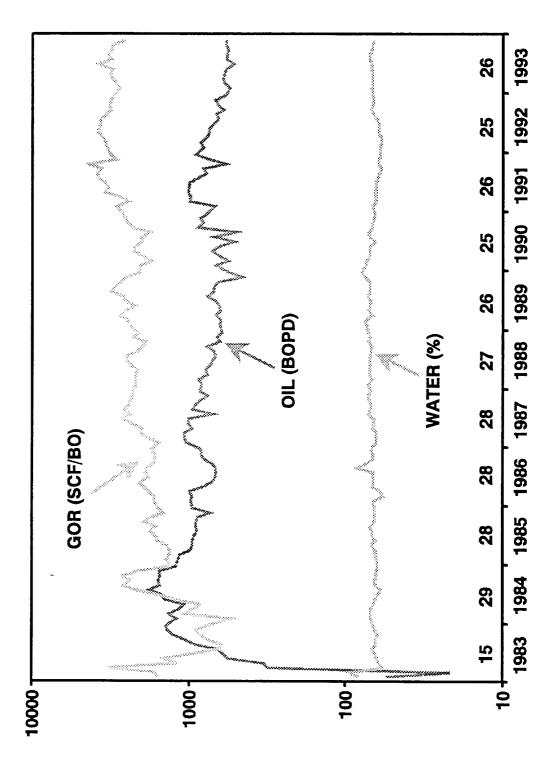




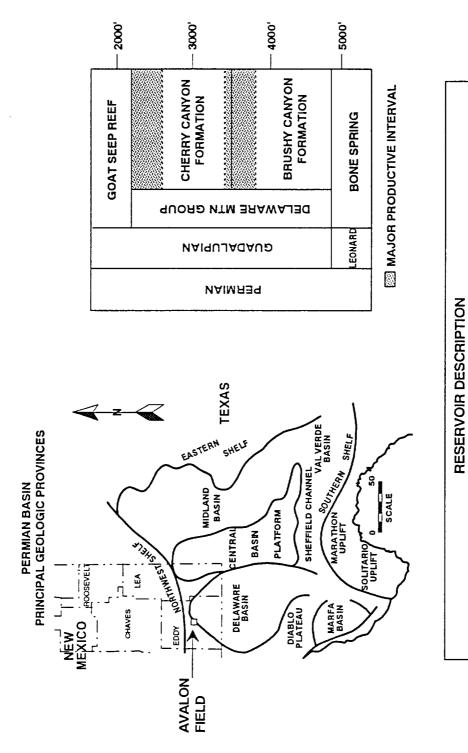
EXON



## AVALON (DELAWARE) FIELD PAST PRODUCTION



## AVALON EOR PROJECT GEOLOGIC OVERVIEW



| PRODUCING FORMATION   | UPPER CHERRY CANYON | UPPER BRUSHY CANYON |
|-----------------------|---------------------|---------------------|
| DEPTH                 | 2600 FT             | 3500 FT             |
| RESERVOIR LITHOLOGIES | SAND                | SAND & SILTSTONE    |
| NET THICKNESS (PAY)   | 132 FT              | 158 FT              |
| AVERAGE Ø             | 14.4%               | 14.8%               |
| AVERAGE K             | 2.3 md              | 1.1 md              |
|                       |                     |                     |

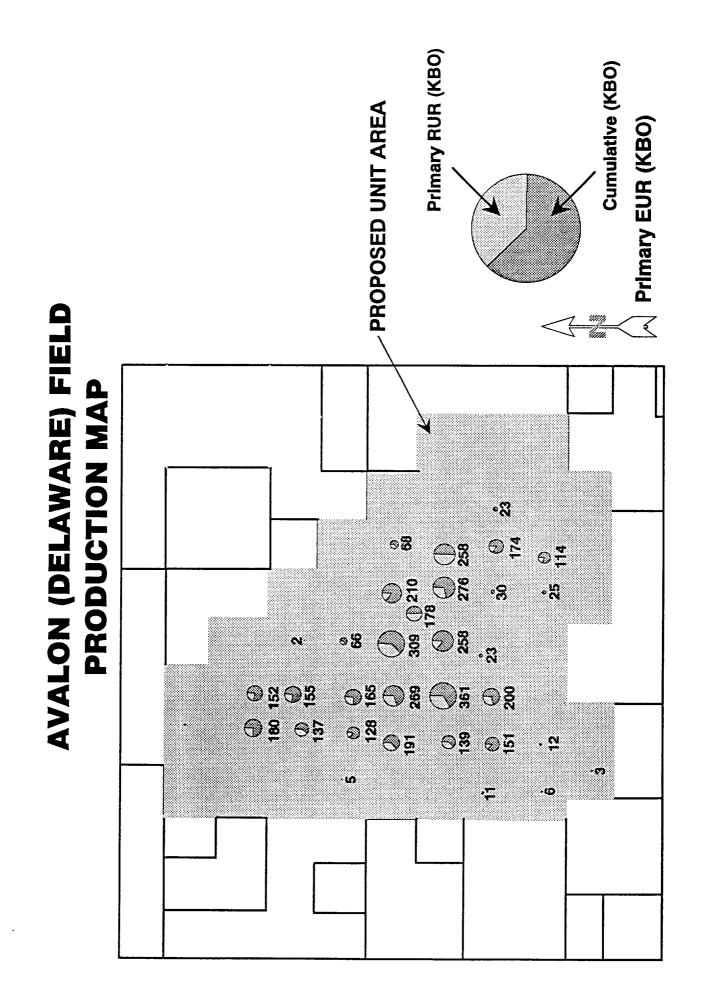
### **AVALON (DELAWARE) FIELD COMPLETION ZONES**

|     |   |   |                 | ø |             |        | 0 | T        | <u> </u> |            |          |
|-----|---|---|-----------------|---|-------------|--------|---|----------|----------|------------|----------|
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|     |   |   | ø               | ø | •           |        |   |          |          |            |          |
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|     | o |   | ÷               | Г | •<br>I      | ð<br>Þ |   |          |          |            | ¢<br>    |
| ¢   |   |   |                 | 0 |             |        |   |          |          |            | 9        |

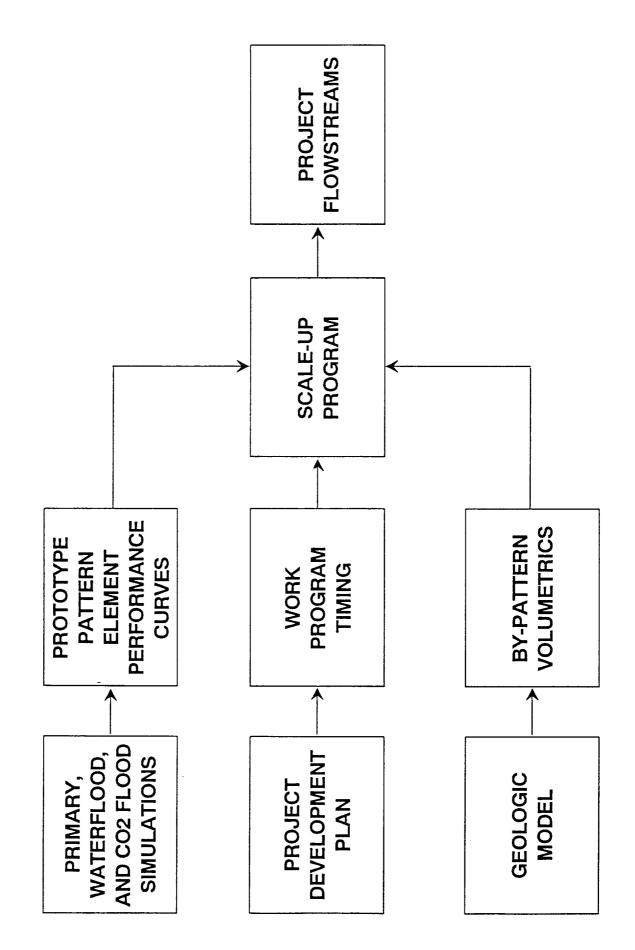


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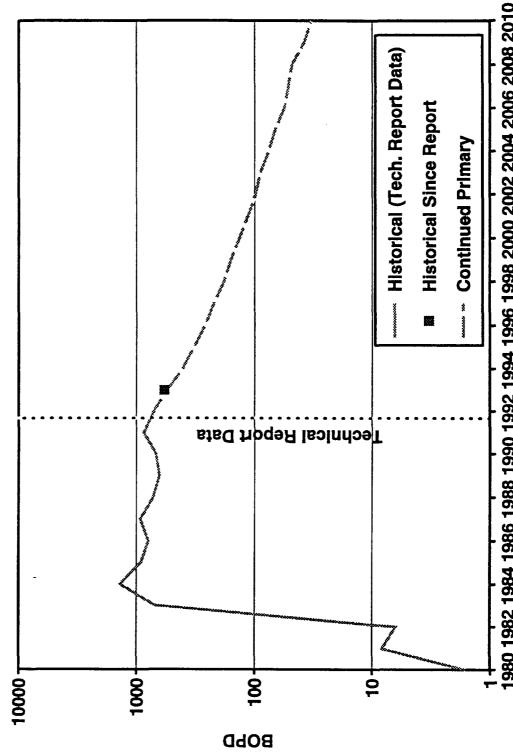
**Upper Brushy Canyon** Lower Brushy Canyon **Middle Cherry Canyon Upper Cherry Canyon** 

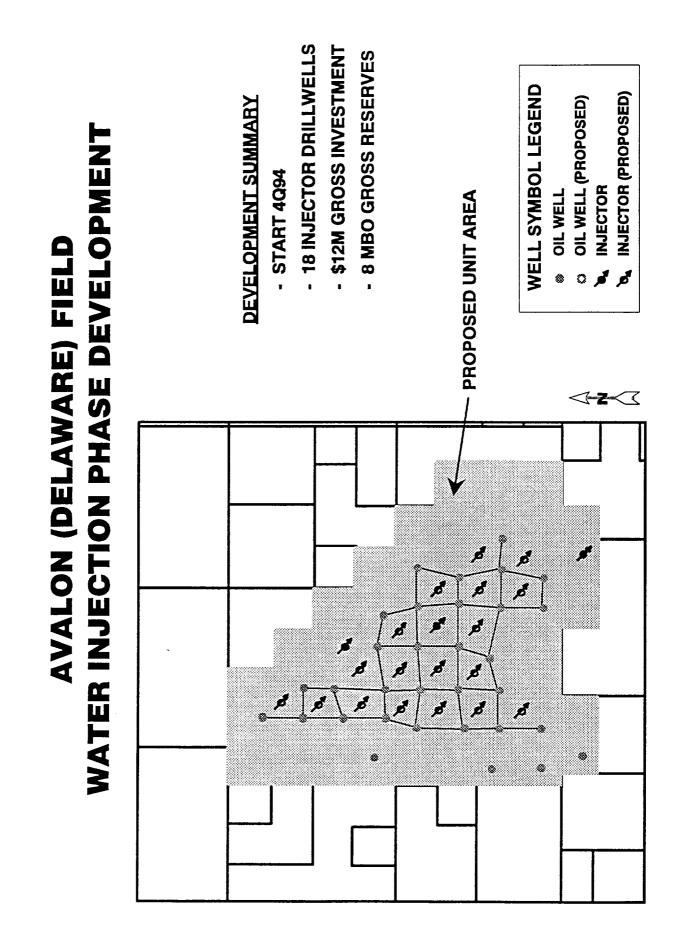


PROJECT FLOWSTREAM METHODOLOGY

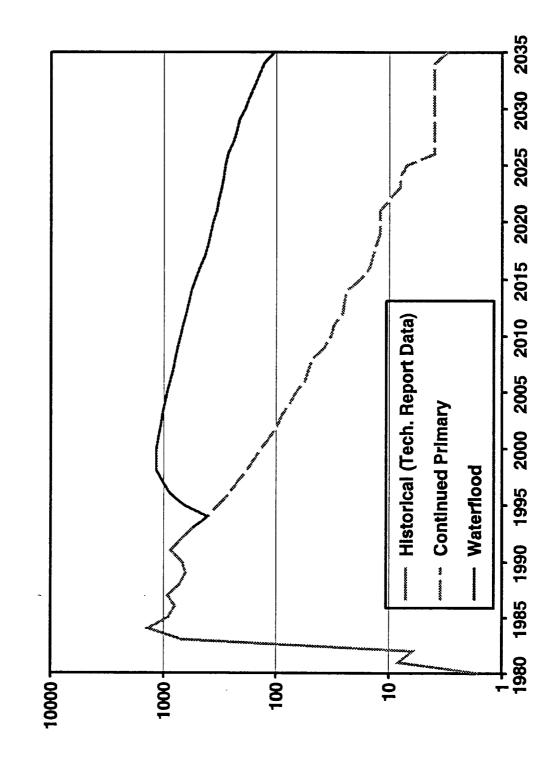


## **AVALON (DELAWARE) FIELD CONTINUED OPERATIONS**





## WATERFLOOD vs CONTINUED PRIMARY **AVALON (DELAWARE) FIELD**

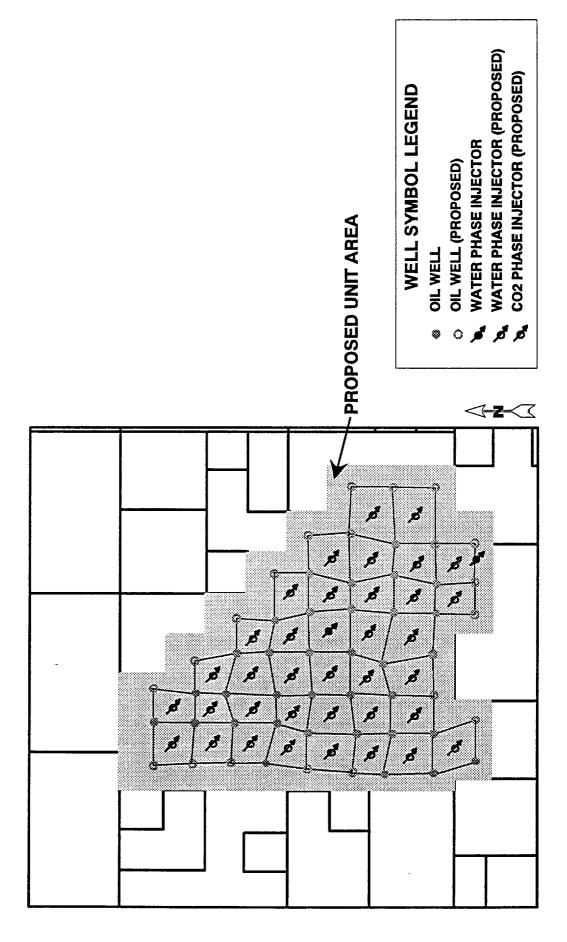


## AVALON PROJECT RESERVES SUMMARY

| EUR                  | MBO) (% 00IP)     | 4.9                  | 10.3                   | 23.3      |  |
|----------------------|-------------------|----------------------|------------------------|-----------|--|
| $\bigtriangleup$ Eur | (MBO)             | 4.2                  | 8.2                    | 39.9      |  |
| UR                   | (% 00IP) (% 00IP) | 4.9                  | 15.5                   | 30.6      |  |
| Ĩ                    | (MBO)             | 4.2                  | <sup>(3)</sup><br>12.4 | 52.3      |  |
| EFFECTIVE<br>00IP    | (MBO)             | 86 <sup>(1)</sup>    | 80 <sup>(2)</sup>      | 171       |  |
|                      | CASE              | CONTINUED<br>PRIMARY | WATERFLOOD             | CO2 FLOOD |  |

- HISTORY MATCH OOIP
   FLOOD-AFFECTED AREAS
   INCLUDES WORKOVER RESERVES

## **CO2 INJECTION PHASE DEVELOPMENT AVALON (DELAWARE) FIELD**



## AVALON (DELAWARE) FIELD TRACT MAP

|   |              | 0              |            | 5               |                     |
|---|--------------|----------------|------------|-----------------|---------------------|
| 9 | ×            |                |            | *               | j3 <sup>8</sup> 0   |
|   |              | ° –            | * 5        | 2 * *           | <sup>م</sup> تر<br> |
|   | ٥            | 22<br>23<br>23 | * *        | <b>&amp; \$</b> |                     |
| - |              | <b>.</b>       | <b>8 8</b> | *               |                     |
| * | چ <b>ب</b>   |                | C# #       | *               | Ċ                   |
|   | * *<br>33. % | * *            | <b>* *</b> | * *             | <br>                |
|   | •            | ¢              | •          | * 00 **         | *   •               |
| o |              |                | a          | +               |                     |
|   |              | •              |            | *               |                     |
| 9 |              | • •            | 1          |                 | Q                   |





### EXHIBIT "D" RESERVES BY TRACT

| Γ     | REMAINING |            |           |
|-------|-----------|------------|-----------|
|       | PRIMARY   | WATERFLOOD | TERTIARY  |
| TRACT | RESERVES  | RESERVES   | RESERVES  |
| 1     | 0.00      | 0.00       | 203.90    |
| 2     | 741.80    | 4,368.20   | 18,995.00 |
| 3-A   | 0.00      | 345.10     | 530.60    |
| 3-B   | 43.40     | 403.60     | 1,693.00  |
| 3-C   | 0.00      | 0.80       | 446.70    |
| 3-D   | 33.40     | 373.30     | 1,045.90  |
| 3-E   | 0.00      | 0.00       | 362.50    |
| 4-A   | 0.00      | 0.00       | 852.50    |
| 4-B   | 0.00      | 0.00       | 247.40    |
| 5-A   | 53.40     | 368.10     | 1,425.90  |
| 5-B   | 19.30     | 174.50     | 1,189.70  |
| 5-C   | 33.80     | 741.50     | 2,177.20  |
| 5-D   | 40.30     | 698.40     | 2,009.30  |
| 5-E   | 20.20     | 157.50     | 966.20    |
| 5-F   | 0.00      | 69.30      | 481.00    |
| 6     | 0.00      | 0.00       | 1,626.00  |
| 7     | 0.00      | 0.00       | 427.60    |
| 8     | 0.70      | 0.00       | 165.80    |
| 9     | 0.00      | 0.00       | 444.30    |
| 10    | 202.80    | 499.40     | 3,350.90  |
| 11    | 3.10      | 69.70      | 1,050.50  |
| 12    | 0.00      | 0.00       | 191.10    |
|       |           |            |           |
| TOTAL | 1,192.20  | 8,269.40   | 39,883.00 |
| Ľ     |           |            |           |

### RESERVE DATA UNITS ARE THOUSAND OF BARRELS

It is understood and agreed that the above numbers are estimates that were utilized in determining Tract Participation for the Unit; they do not constitute any representation as to the amount of oil that may actually be recovered by each tract or by the unit as a whole.

# PARTICIPATION CONCERNS/SOLUTIONS

Summary:

- 1
- 8
- Two Phase Phase Change by Vote Participation Based on Weighted Reserves .

| ITEM                    | TYPICAL<br>CONDITIONS                         | CONDITIONS AT<br>AVALON  | CONCERN  | SOLUTION   |
|-------------------------|---|--|--|--|
| Economic<br>Uncertainty | Project approved<br>& implemented<br>up front | Project approved Future implementation Oil prices have major Use two phases & implemented of tertiary project impact on viability of future tertiary project | Oil prices have major<br>impact on viability of<br>future tertiary project | Use two phases   |
| Project Life            | 10-40 Years                                   | 40-60 Years  | Present worth of<br>future production<br>less than near term<br>production | Use reserve<br>weighting factors<br>that incorporate<br>timing of production |
| Production<br>Costs     | WF costs only                                 | Tertiary & WF costs  | Tertiary<br>expense/BOPD<br>higher than for<br>waterflood                  | Use reserve<br>weighting factors<br>that incorporate<br>production costs     |

# AVALON (DELAWARE) FIELD TRACT PARTICIPATION FORMULA

PARTICIPATION = C\*A/B + F\*D/E + I\*G/H(Tert) (Sec) (Pri)

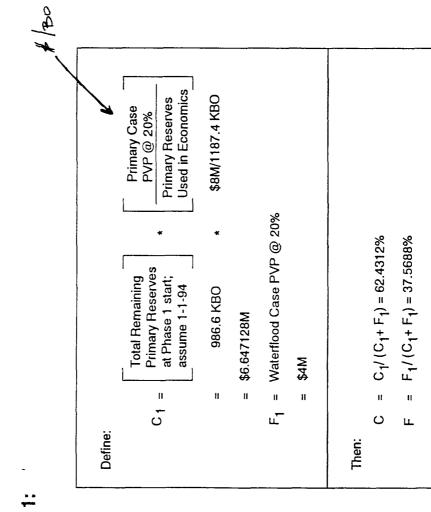
Where:

- Tract's remaining primary reserves as of 1/1/93; see Exhibit D
- = Total remaining primary reserves as of 1/1/93 = 1192.2 MBO
  - = Primary reserve weighting factor; see table below
- Tract's waterflood reserves; see Exhibit D .
  - Total waterflood reserves = 8269.4 MBO 11
- Waterflood reserve weighting factor; see table below Tract's tertiary reserves; see Exhibit D 11
  - II
- = Total tertiary reserves = 39883.0 MBO
- = Tertiary reserve weighting factor; see table below

### Where:

| Phase 2 | 23.4552% | 20.6375% | 55.9073% |
|---------|----------|----------|----------|
| Phase 1 | 62.4312% | 37.5688% | 0        |
|         | o        | Ľ.       | -        |

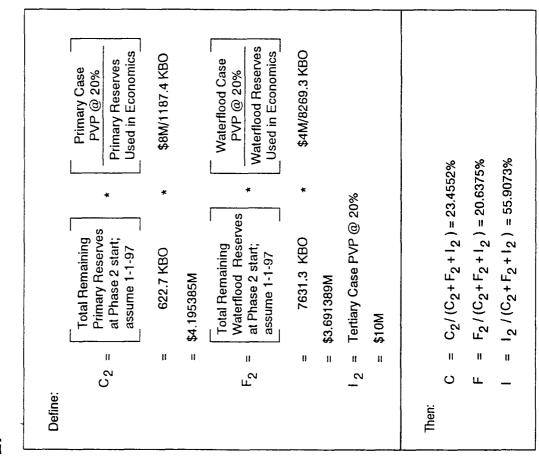
# WEIGHTING FACTORS FOR TRACT PARTICIPATION FORMULA **AVALON (DELAWARE) FIELD**



Phase 1:

# WEIGHTING FACTORS FOR TRACT PARTICIPATION FORMULA **AVALON (DELAWARE) FIELD**

Phase 2:



### EXHIBIT "C" SCHEDULE OF TRACT PARTICIPATION

|       | PHASE 1       | PHASE 2       |
|-------|---------------|---------------|
| TRACT | PARTICIPATION | PARTICIPATION |
| 1     | 0.000000      | 0.285823      |
| 2     | 58.690598     | 52.122430     |
| 3-A   | 1.567828      | 1.605034      |
| 3-B   | 4.106300      | 4.234308      |
| 3-C   | 0.003634      | 0.628173      |
| 3-D   | 3.444980      | 3.054857      |
| 3-E   | 0.000000      | 0.508146      |
| 4-A   | 0.000000      | 1.195020      |
| 4-B   | 0.000000      | 0.346801      |
| 5-A   | 4.468684      | 3.968035      |
| 5-B   | 1.803444      | 2.482897      |
| 5-C   | 5.138700      | 5.567460      |
| 5-D   | 5.283274      | 5.352419      |
| 5-E   | 1.773341      | 2.144879      |
| 5-F   | 0.314838      | 0.847206      |
| 6     | 0.00000       | 2.279299      |
| 7     | 0.00000       | 0.599402      |
| 8     | 0.036656      | 0.246187      |
| 9     | 0.00000       | 0.622812      |
| 10    | 12.888732     | 9.933423      |
| 11    | 0.478991      | 1.707508      |
| 12    | 0.00000       | 0.267881      |
| TOTAL | 100.000000    | 100.000000    |

### PHASE PARTICIPATIONS BY WIO GROUP

\_

| WIO<br>GROUP*      | PHASE 1<br>PERCENTAGE | PHASE 2<br>PERCENTAGE |
|--------------------|-----------------------|-----------------------|
|                    |                       |                       |
| ANPC               | 4.833638              | 5.481625              |
| Chevron (PENNZOUL) | 0.522045              | 1.260513              |
| Claremont          | 0.211755              | 0.239281              |
| Devon              | 0.635433              | 0.720320              |
| Exxon              | 79.718394             | 72.529551             |
| Hayes              | 0.000000              | 0.023017              |
| Hudson             | 3.388077              | 3.828488              |
| Kerr-McGee         | 0.204154              | 0.230691              |
| McCall             | 0.000000              | 0.000194              |
| Merit              | 0.000000              | 0.622812              |
| Moore              | 0.000000              | 0.000078              |
| MWJ                | 0.451003              | 0.663202              |
| Oliver             | 0.000000              | 0.000048              |
| Оху                | 0.000000              | 0.339883              |
| Premier            | 0.000000              | 2.279299              |
| Redfern            | 0.099094              | 0.111975              |
| Redfern, John      | 0.099094              | 0.111975              |
| SSC                | 0.000000              | 0.004465              |
| TROII              | 0.000000              | 0.002333              |
| Yates              | 9.837315              | 11.550251             |
|                    |                       |                       |
|                    | 100.000000            | 100.000000            |

\*Individual owner participation given in Exhibit "E"

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AVALON ECONOMIC SUMMARY (EXHIBIT H-5)

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WORKING INTEREST = 100% NET INTEREST = 87.5%

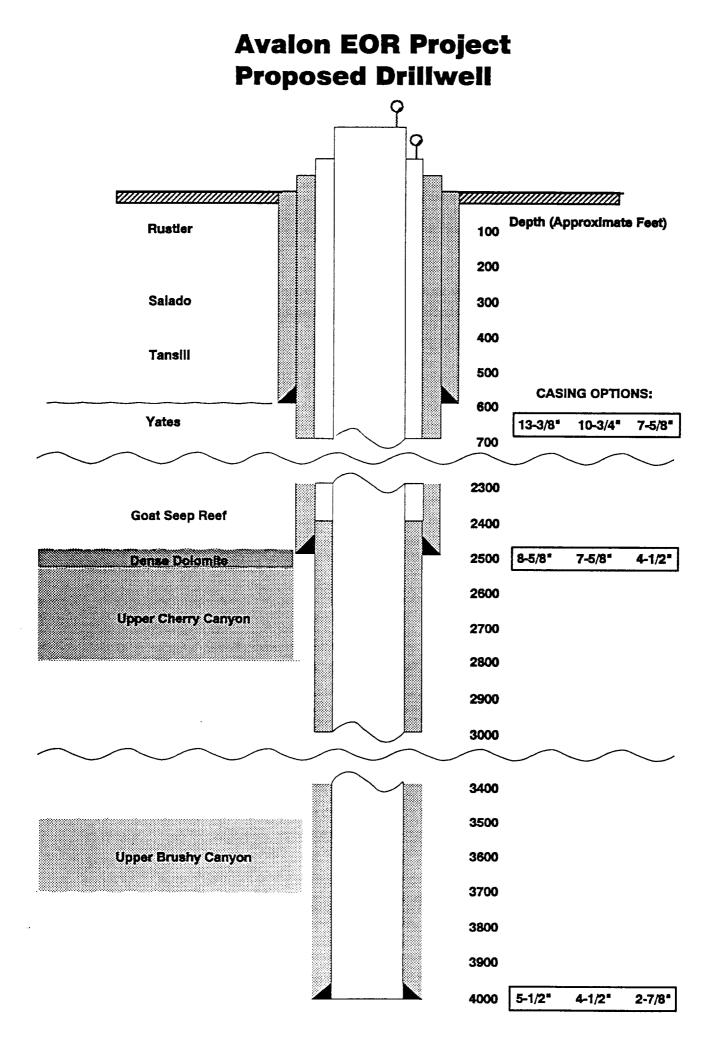
|                  | -                                  | GROSS INV | GROSS INVESTMENT (M\$)          | NET   |                     |                  | PRESEN | T VALU      | PRESENT VALUE PROFIT (M\$) | W) 11. | (\$       |       |     |
|------------------|------------------------------------|-----------|---------------------------------|---|---------------------|------------------|--------|-------------|----------------------------|--------|-----------|-------|-----|
| CASE#            | CASE DESCRIPTION (1)               | 1992\$    | AS SPENT \$                     | (MBO)   | кок<br>( <b>*</b> ) | (YRS)            | *0     | 5*          | 10%                        | 15%    | 20\$      | CASE# | #39 |
| 1<br>5<br>6<br>6 |                                    | 1         | 5<br>1<br>1<br>2<br>7<br>8<br>8 | 1<br>8<br>8<br>8<br>8<br>8<br>8<br>8<br>8<br>8<br>8<br>8<br>8 |                     | 1<br>6<br>7<br>1 |        | 1<br>1<br>1 | <br> <br> <br>             | 1      | :         | -     | 1   |
|                  | BASE CASES:                        |           |                                 |   |                     |                  |        |             |                            |        |           |       |     |
| 1                | EOR PROJECT                        | 84.2      | 102.7                           | 42.2  | 25\$                | 9.6              | 2,157  | 434         | 134                        | 47     | 14        |       | +   |
| 7                | EOR PROJECT (INCREMENTAL OVER WF)  | 61.0      | 9.77                            | 34.9  | 25\$                | ,                | 1,927  | 364         | 106                        | 35     | 10        |       | 2   |
|                  |                                    |           |                                 |   |                     |                  |        |             |                            |        |           |       |     |
|                  | PRICING SENSITIVITIES:             |           |                                 |   |                     |                  |        |             |                            |        |           |       |     |
| 'n               | OIL PRICE UP \$2 (\$23/BO)         | 84.2      | 102.7                           | 42.2  | 278                 | ٤.9              | 2,457  |             | 155                        |        | 20        |       | m   |
| 4                | OIL PRICE DOWN \$2 (\$19/BO)       | 84.2      | 102.7                           | 42.2  | 23\$                | 10.0             | 1,857  |             | 113                        |        | 80        |       | 4   |
| ŝ                | FLAT PRICING (NO REAL GROWTH)      | 84.2      | 102.7                           | 42.2  | 23\$                | 6.6              | 1,177  |             | 66                         |        | <b>60</b> |       | ы   |
| e                | CO2 PRICE UP \$0.25 (\$1.25/KCF)   | 84.2      | 102.7                           | 42.2  | 24\$                | 9.9              | 2,135  |             | 128                        |        | 11        |       | ø   |
| ٢                | CO2 PRICE DOWN \$0.25 (\$0.75/KCF) | 84.2      | 102.7                           | 42.2  | 26\$                | 9.4              | 2,179  |             | 140                        |        | 17        |       | ٢   |
| 80               | INVESTMENTS UP 10%                 | 92.7      | 113.0                           | 42.2  | 23\$                | 9.9              | 2,151  |             | 130                        |        | 11        |       | 8   |
| σ                | INVESTMENTS DOWN 10%               | 75.8      | 92.4                            | 42.2  | 26%                 | 9.4              | 2,163  |             | 139                        |        | 18        |       | 5   |
|                  |                                    |           |                                 |   |                     |                  |        |             |                            |        |           |       |     |
|                  | PRODUCTION SENSITIVITIES:          |           | _                               |   |                     |                  | _      |             |                            |        |           | _     |     |
| 10               | PRIMARY ONLY                       | 0.2       | 0.2                             | 0   | \$100 <b>\$</b>     | 1                |        | -           | :                          | c      | c         | •     |     |
| 11               | WATERFLOOD                         | 23.3      | 24.7                            | 7.2   | 24\$                | 5.9              | 230    | 70          | 28                         | 12     | 0 4       |       | 11  |
| 12               | HIGHER OIL SATURATION (+3% So)     | 84.2      | 102.7                           | 50.6  | 30\$                | 8.7              | 2,805  |             | 182                        |        | 30        |       | 12  |
| 13               | LOWER OIL SATURATION (-6% So)      | 84.2      | 102.7                           | 25.8  | 178                 | 11.5             | 906    |             | 58                         |        | (6)       |       | 13  |
| 14               | HIGHER INJECTIVITY (+40%)          | 91.0      | 111.1                           | 43.7  | 29\$                | 8.6              | 1,527  |             | 159                        |        | 28        |       | 14  |
| 15               | LOWER INJECTIVITY (-30%)           | 79.2      | 96.4                            | 39.4  | 21\$                | 10.8             | 2,667  |             | 107                        |        | m         |       | 15  |
| 16               | HIGHER SLUG SIZE (.6 HCPV)         | 84.2      | 102.7                           | 42.2  | 25\$                | 9.6              | 2,200  |             | 131                        |        | 13        | -     | 16  |
| 17               | LOWER SLUG SIZE (.4 HCPV)          | 84.2      | 102.7                           | 38.3  | 241                 | 9.6              | 1,812  |             | 122                        |        | 13        |       | 17  |

(1) UNLESS NOTED, ECONOMICS ARE INCREMENTAL OVER PRIMARY

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|                       | INVESTMENTS (M\$) | ENTS (M\$) |  |
|-----------------------|-------------------|------------|--|
| CATEGORY              | TECH.<br>REPORT   | CURRENT    | COMMENTS   |
| Drilling              | 0.6               | 6.3        | 4-1/2" casing (vs. 5-1/2"); 19 wells<br>(vs. 20); no CRA |
| Production Facilities | 7.4               | 0.2        | No CPF   |
| Injection Facilities  | 5.8               | 4.0        | Using mostly surplus equipment                           |
| Workover              | 0.9               | 1.0        | 13 add pays; 1 conversion                                |
| Artificial Lift       | 0.3               | 0.3        | 5 upgrades   |
| Other                 | 0.2               | 0.1        | Formulation evaluation                                   |
| Total                 | 23.6              | 11.9       |  |



**ECONOMIC OPTIMIZATION IN PROGRESS** 

| CASE                  | ROR | CHANGE   |
|-----------------------|-----|--|
| Technical Report (WF) | 24% |  |
| New Pricing           | 13% | \$21/BO @ 6% Escal> \$15/BO @ 4% Escal. (@<br>Startup) |
| Investments           | 24% | \$24M> \$12M   |
| Updated Timing        | 24% | 10/92 Startup> 10/94 Startup (Unit Approval)           |
| CO2                   | 18% | Not completely optimized for new pricing               |

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# Next Meeting Proposed Agenda

- Significant issues (if any) provided Exxon in writing 1 week in advance of meeting
- Review UA/UOA significant issues (if any)
- » WIOs Present Suggested UA & UOA changes that have significant financial impact
- » Group discusses, comments, & offers solutions
- Provide any legal input on wording if time permits. Lawyers can coordinate in future.
- Next Meeting Date ( June 7 ; ?? )
- WIO presentations on UA/UOA revisions if needed
- Critique







3C



### **Facsimile Cover Sheet**

| From:                            | Ron Mayhew       |
|----------------------------------|------------------|
| Company:                         | Exon SW Division |
| Phone:                           | 915-688-7841     |
| Fax:                             | 915-688-7847     |
| Date:                            | 5/4              |
| Pages including this cover page: | 2                |

### **Distribution:**

| Ŋ   | Meeting    | dn   | 5/13/94    | Reservoir Technology<br>Building: Claydesta A |
|-----|------------|------|------------|---|
| Ke; | Conference | Room | , 10:00 am | Building: Claydesta A                         |

| Names                   | Location    | phone        | fax          |
|-------------------------|-------------|--------------|--------------|
| Ken Jones               | Premier Pet | 214-386-6200 | 214-387-0551 |
| Bill Hayworth           | Patrick Pat | 713-780-9494 | 713-780-9254 |
| Pave Baneau             | Yates Pet   | 505-748-1471 | 505-748-4585 |
|                         |             |              |              |
|                         |             |              |              |
| Copy: Tom Kune, Dave Co | atre/       |              |              |

Gil Beuhler, Rob Stuart

Comments: Attached is an agoada for meeting to discuss Geology pick a base of Upper Chevry. I will not likely be in attendance as meatinged earlier. The meeting will be limited to this topic; however should you have suggestions contact Tom Kane, to get visitors pass & have receptionist coll Tom, Dave, (915) 688 - 7965.

RES TECH

Proposed Avalon (Delaware) Unit Technical Report Discussions

Date: Friday, May 13, 1994

Location: Exxon Building Claydesta A, RTG Conference Room 238, Midland, Tx

.

| Agen | da  | Presenters               | Duration  | Time              |
|------|---|--------------------------|-----------|-------------------|
| I.   | Overview<br>A. Purpose<br>B. Expected Outcomes  | Tom Kane                 | 5 Min     | 10:00-10:05       |
| II.  | Geologic Pick on Base of Upper<br>Cherry Canyon Reservoir as<br>Interpreted by Premier Production               | Ken Jones,<br>Paul White | 45 Min    | 10:05-10:50       |
| III. | Stratigraphic Mapping Surface<br>Methodology<br>-Base of Upper Cherry Canyon<br>Reservoir from Technical Report | Tom Kane                 | 45 Min    | 10:50-11:35       |
|      | * Lunch *   |                          | 70 Min    | 11:35-12:45       |
| IV.  | Itemize Key Points from<br>Presented Interpretations  | All                      | 30 Min    | 12:45-1:15        |
| V.   | Discussion  | <b>A</b> 11              | 60 Min    | 1:15-2:15         |
| VI.  | Wrap Up<br>-Conclusions<br>-Next Step<br>-Meeting Feedback  | . 411                    | 30 Min    | 2:15 <b>-2:45</b> |
| TOTA | L:  |                          | 4.75 Hour | S                 |

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### **Facsimile Cover Sheet**

| From:                            | Ron Mayhew       |  |
|----------------------------------|------------------|--|
| Company:                         | Exon SW Division |  |
| Phone:                           | 915-688-7841     |  |
| Fax:                             | 915-688-7847     |  |
| Date:                            | 5/#6/94          |  |
| Pages including this cover page: | 2                |  |

### Distribution:

| Re: Meeting on 5     | 5/13/94; Reservoir Technology |
|----------------------|-------------------------------|
| Ke: Conference Room, | 8:00am Building: Cluyderfa A  |

| Names                       | Location    | phone        | fax          |
|-----------------------------|-------------|--------------|--------------|
| Ken Jones                   | Premier Pet | 214-386-6200 | 214-387-0551 |
| Bill Hayworth               | Patrick Pet | 713-780-9494 | 713-780-9254 |
| Pave Bareau                 | Yates Pet   | 505-748-1471 | 505-748-4585 |
|                             |             |              |              |
|                             |             |              |              |
| Copy: Tom Kune, Dave Contro | ·Y/         |              |              |

Un Bauhler, Rob Stuart

Comments: Attucked is an agenda for meeting to discuss Geology pick a base of Upper Cherry. I will not likely be in attendance as mentioned earlier. The meeting will be limited to this topics houser should you have suggestions contact Tom Kane, (915) 688-7965. to get Visitors poss & have receptionist coll Tom, Dave, or Gil.

RES TECH

Proposed Avalon (Delaware) Unit Technical Report Discussions Date: Friday, May 13, 1994 Location: Exxon Building Claydesta A, RTG Conference Room 238, Midland, Tx Agenda Presenters Duration Time \_\_\_\_ -------\_ \_ \_ \_ \_ I. Overview Tom Kane 5 Min 8:00-8:05 A. Purpose B. Expected Outcomes 45 Min II. Geologic Pick on Base of Upper Ken Jones, 8:05-8:50 Cherry Canyon Reservoir as Paul White Interpreted by Premier Production III. Stratigraphic Mapping Surface Tom Kane 45 Min 8:50-9:35 Methodology -Base of Upper Cherry Canyon Reservoir from Technical Report \* Break \* 10 Min 9:35-9:45 All 30 Min IV. Itemize Key Points from 9:45-10:15 Presented Interpretations V. Discussion A11 60 Min 10:15-11:15 VI. Wrap Up A11 30 Min 11:15-11:45 -Conclusions -Next Step -Meeting Feedback . . . . . . . . . 3.75 Hours TOTAL:

### P

3D

Proposed Avalon (Delaware) Unit Technical Report Discussions

Date: Friday, May 13, 1994 Location: Exxon Building Claydesta A, RTG Conference Room 238, Midland, Tx

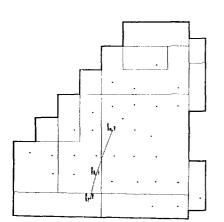
| Agen | da  | Presenters               | Duration   | Time        |
|------|---|--------------------------|------------|-------------|
| I.   | Overview<br>A. Purpose<br>B. Expected Outcomes  | Tom Kane                 | 5 Min      | 8:00-8:05   |
| II.  | Geologic Pick on Base of Upper<br>Cherry Canyon Reservoir as<br>Interpreted by Premier Production               | Ken Jones,<br>Paul White | 45 Min     | 8:05-8:50   |
| III. | Itemize Key Points from<br>Presentation   | A11                      | 15 Min     | 8:50-9:05   |
| IV.  | Stratigraphic Mapping Surface<br>Methodology<br>-Base of Upper Cherry Canyon<br>Reservoir from Technical Report | Tom Kane                 | 45 Min     | 9:05-9:50   |
|      | ∻ Break *   |                          | 10 Min     | 9:50-10:00  |
| ۷.   | Itemize Key Points from<br>Presentation   | A11                      | 15 Min     | 10:00-10:15 |
| VI.  | Discussion  | A11                      | 60 Min     | 10:15-11:15 |
| VII. | Wrap Up<br>-Conclusions<br>-Next Step<br>-Meeting Feedback  | A11                      | 30 Min     | 11:15-11:45 |
| TOTA | L:  |                          | 3.75 Hours | 5           |

## AVALON (DELAWARE) TECHNICAL REPORT DISCUSSIONS MAY 13, 1994

- OVERVIEW
- Technical report has been approved by >90% of potential Working Interest Owners.
- Today's discussion is in response to a technical issue raised by Premier Production at the April 26, 1994 Working Interest Owner meeting.
- The technical issue for today's discussion is the geologic pick at the base of Upper Cherry Canyon Reservoir. ŧ

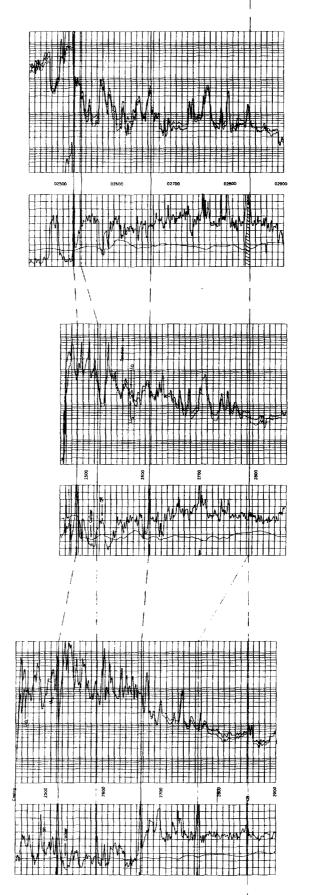
## **AVALON (DELAWARE) TECHNICAL REPORT DISCUSSIONS** MAY 13, 1994

- PURPOSE
- Information Exchange
- Provide attendees an opportunity to review Premier Production's different interpretation of geologic pick at the base of Upper Cherry Canyon Reservoir (UCHB) in certain wells. ī
  - Provide attendees an additional review of the stratigraphic methodology and the UCHB from the Technical Committee Report. ī
- EXPECTED OUTCOME
- Attendees have clear understanding of Premier's interpretation of the UCHB.
- Attendees have clear understanding for the UCHB from the Technical Report. .
- Discussion about action item (if any) for next step regarding this issue.



Datum: Cherry Canyon Base

Premier Exxon Common



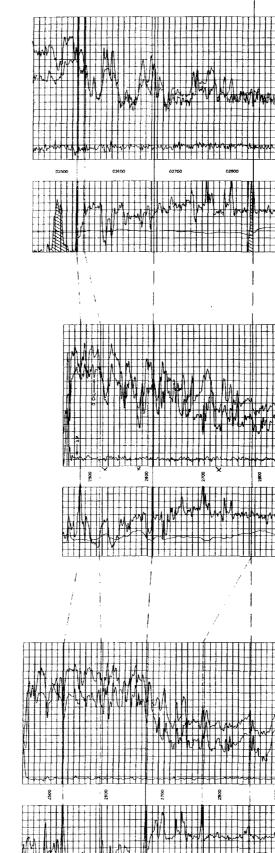
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Gamma Ray Neutron Datum: Cherry Canyon Base

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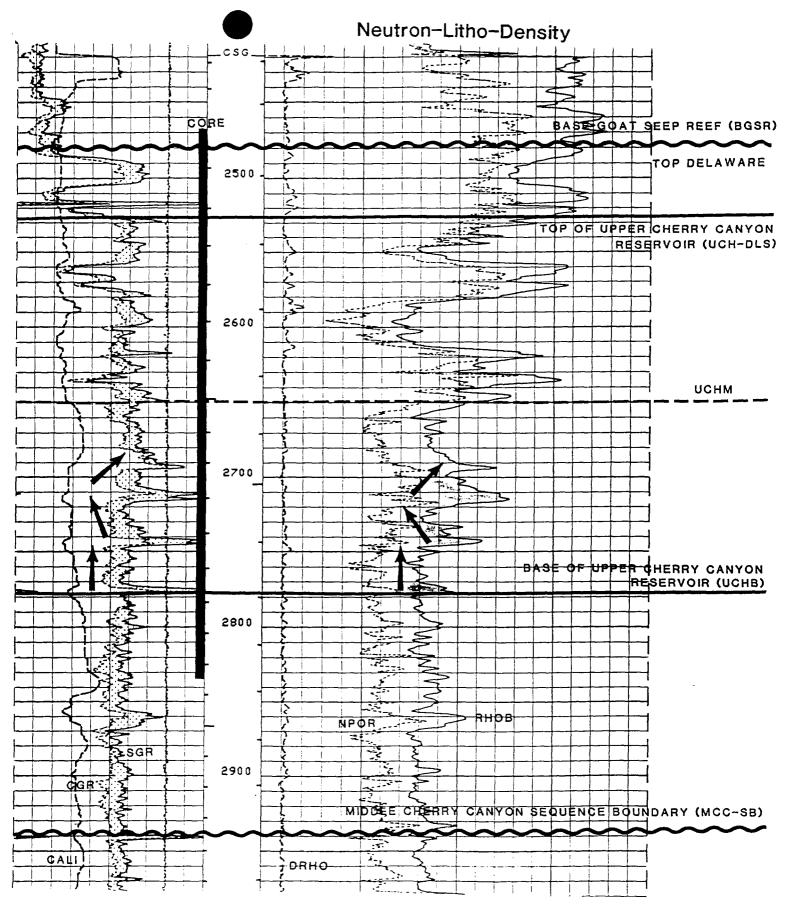
FV3

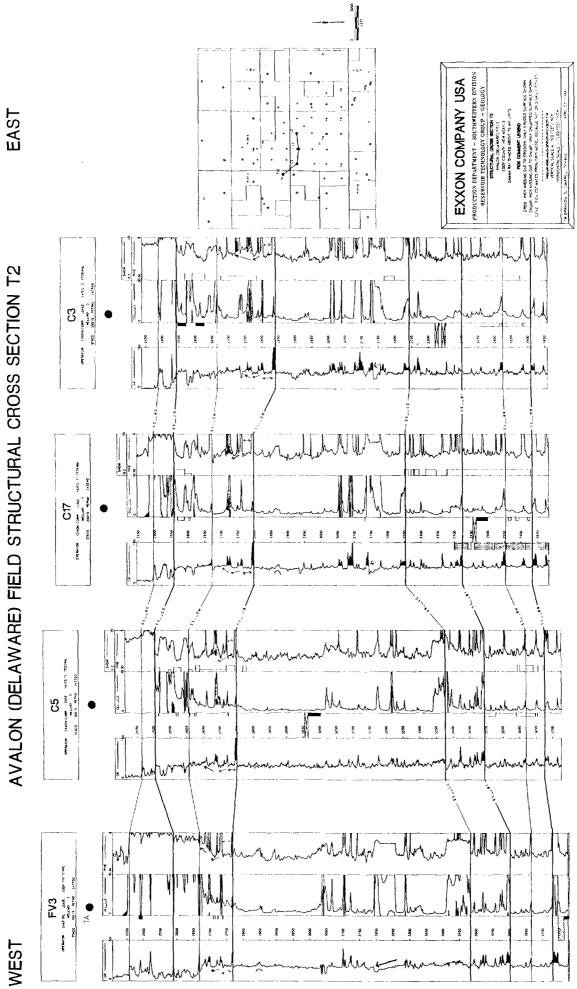
- Sequence stratigraphic framework developed from regional outcrop and seismic.
- Stratigraphic surfaces were defined in cores and well logs. •
- Cross section grid was 'loop tied' to determine areally extensive surfaces.
- Multiple correlation markers were carried on well logs to constrain mapping surfaces.
- Mud log show data and current perforations confirmed reservoir intervals. •
- Structure and gross interval isopach maps provided geologic validity of mapping surfaces.

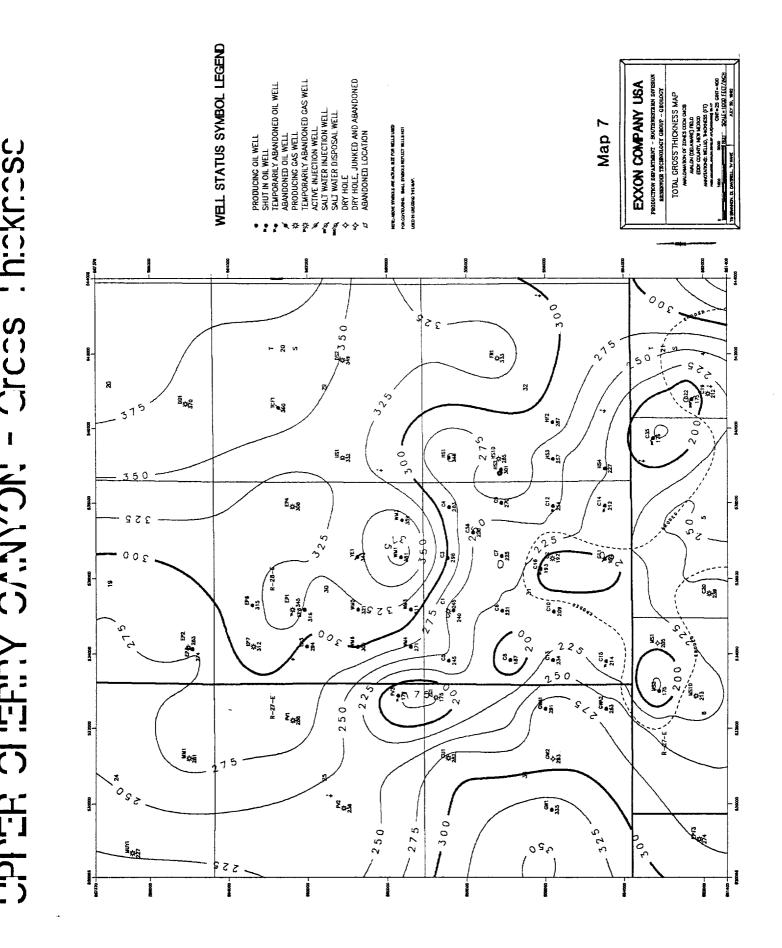
BONEAU 5-13-94

### TYPE LOG UPPER CHERRY CANYON RESERVOIR

EXXON Yates "C" Federal #36



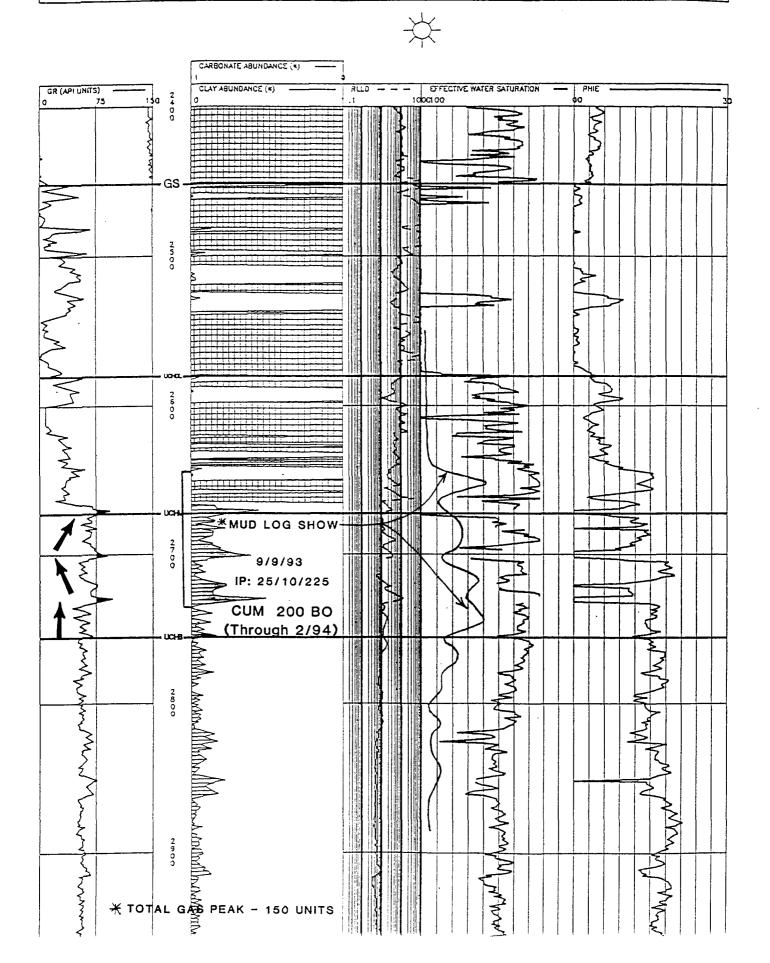




### YATES PET

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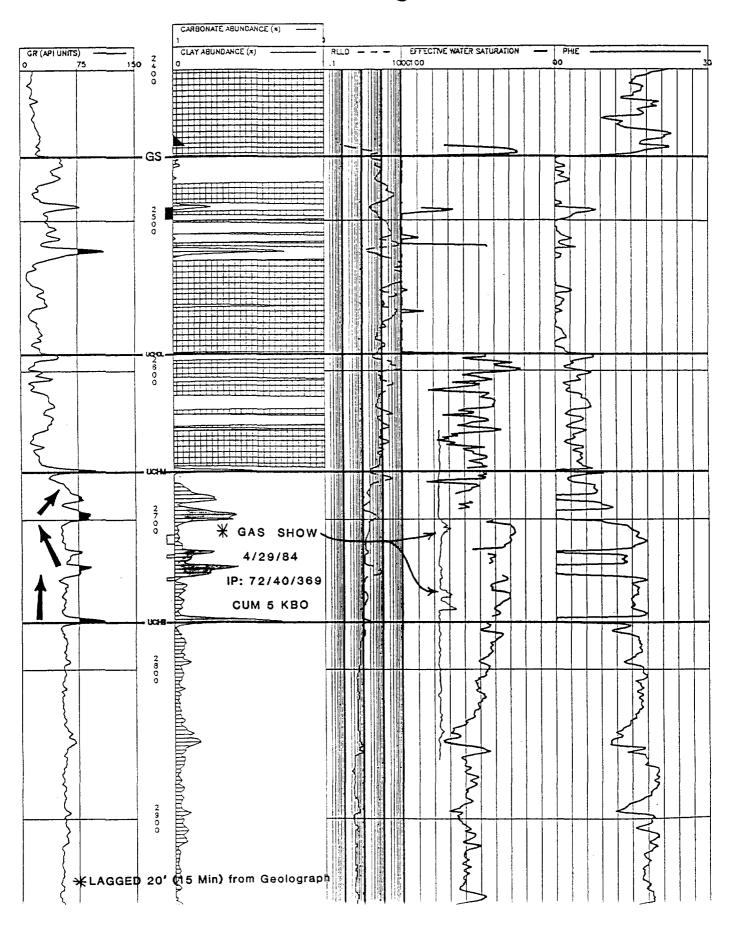


### GULF OIL

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STACO: 30015 REFNO: 247700

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May 18, 1994

Exxon Company, U.S.A. P. O. Box 1600 Midland, Texas 79702-1600

Attention: Mr. Ronald E. Mayhew Avalon Project Manager

Re: Avalon Delaware Unitization

Dear Ron:

Thank you for the courtesy of allowing Premier to present its geological interpretation at the May 13 meeting. Premier still maintains that its interpretation of the UCC Reservoir is correct (i.e. the lower basinal sands between CM-CB markers are consistent and extend across the south half of Section 25, 20S-27E. Our view differs significantly with Exxon's interpretation of a pinch-out of the UCC at the east section line of the property).

Because of our disagreements involving the geological picks of the unit outline, the basis for Exxon's report is not a viable means of establishing a fair and reasonable equity for Premier's tract. Henceforth, we are withdrawing our tract from the proposed unit.

Thank you once again for your time and consideration.

Respectfully,

Ken Jones

Letters Responding to Proposed UA/UOA

MARTIN YATES, III 1912 - 1985 FRANK W. YATES 1936 - 1986



S. P. YATES CHAIRMAN OF THE BOARD JOHN A. YATES PRESIDENT PEYTON YATES EXECUTIVE VICE PRESIDENT RANDY G. PATTERSON SECRETARY DENNIS G. KINSEY TREASURER

105 SOUTH FOURTH STREET ARTESIA, NEW MEXICO 88210 TELEPHONE (505) 748-1471

June 9, 1994

Ron Mayhew Exxon P. O. Box 1600 Midland, Texas 79702-1600

RE: Avalon Delaware

Dear Sir:

This note responds in a general way to the proposed agreements for the Avalon Delaware Unit. I will try to outline what I think are important issues and leave issues of wording, syntax and so forth for later. Major issues include:

### 1) Two-Phases

In earlier discussions and correspondence, Yates expressed reluctance to accept the idea that the  $CO_2$  project in the developed primary area and the  $CO_2$  project in the undeveloped "ring" area should be initiated at the same time under the same huge AFE. I thought Exxon eventually understood the Yates reluctance to a degree. But now, the proposed Exxon agreements return to the idea that  $CO_2$  injection throughout the area is all part of a single grand Phase II. I fear that Exxon has not listened to anything Yates has said for the last two or three years. If you want multiple phases, there should be a phase break between  $CO_2$  in the primary area and  $CO_2$  in the ring area. I think the real answer is a single-phase formula for the unit.

2) Participation Formula

The components of the formula proposed by Exxon are extremely arbitrary. Exxon calculated present values for the primary, waterflood and  $CO_2$  portions of the project. The results of the calculations are sensitive to the discount rate used. For no explained reason, Exxon used a discount rate of 20 percent per year. Exxon also omitted the large reduction in capital costs now expected and did not include these reductions in present value calculations. Both of these factors make the proposed formula favorable to Exxon.

3) Voting Percentage

Exxon proposed that an affirmative vote of 75 percent of the ownership be required to approve expenditures. In reality, this proposal means that Exxon totally controls each vote. This seems wrong to

Ron Mayhew June 6, 1994 -2-

me. I think some combination of the second, third and fourth largest owners should be able to veto an expenditure. Thus, the affirmative vote must be set in the 85 to 90 percent range.

4) APO Interests

Exxon proposed that interests be calculated as if all wells have reached payout. This seems like an unnecessary breach of earlier agreements. I think the issue does not affect Exxon's ownership interest one way or the other. Exxon is willing to do the accounting work for multiple phases, but not the accounting to maintain agreements now in force. Yates operates units with well reversions, and it's no big deal. Exxon keeps track of reversions at Fogarty Creek Unit. I just don't see a reason why payouts can't be handled correctly.

I appreciate the fact that Exxon has prepared a first draft of the necessary agreements. Hopefully, the four concerns described above can help to focus our discussions on the major points of contention so that the group can progress toward consensus.

Sincerely,

ave Boneau

David F. Boneau Reservoir Engineering Supervisor

DFB/cvg

xc: Bob Fant Janet Ricardson Mike Slater Peyton Yates Randy Patterson

### W. A. & E. R. HUDSON INC.

616 TEXAS STREET

### Fort Worth, Texas 78102-4612

EDWARD R. HUDSON JR E.RANDALL HUDSON III

. .

817-336-7109

FAX 817-334-0442

WILLIAM A. HUDSON II LINDY HUDSON

May 18, 1994

Exxon Company, U. S. A. P. O. Box 1600 Midland, Tx 79702-1600

RE: Proposed Unit Agreement and Unit Operating Agreement Avalon Field Eddy County, New Mexico

Gentlemen:

We have reviewed the proposed Unit and Unit Operating Agreement and have the following comments:

### UNIT OPERATING AGREEMENT

Article 4, Section 4.3.2—We feel the required affirmative vote of 75% is too low given the large interest of Exxon. The addition of the one additional vote does not seem to provide a safeguard. We propose the percentage required be 90% to 95% for approval.

Article 20, Section 20.2 Restriction of Disposition and Withdrawal—The provision here makes it impossible for a working interest owner to withdraw without the consent of the other working interest owners if the burdens on his lease exceed 18.75%. Reviewing the schedule of interests, in most cases the burdens on the leases already exceed 18.75%.

When the Hudsons joined the Stonewall Unit, the basis for their interests in the proposed Avalon Unit, they put in a clean federal lease without any overrides. Overriding royalties have since been put on this lease, as well as the other leases that the Hudsons' acquired under the terms of the Unit, by parties other than the Hudsons. The requirement of Section 20.2 would either make withdrawal impossible or perhaps result in a withdrawing party giving up all of his interest in the Unit, but still being required to pay any excess override over 6.25%. We feel that the provision should be changed to "grandfather" any overrides existing at the time of the execution of the Unit and Unit Operating Agreement, not to exceed total burdens of 25%.

### EXHIBIT F ACCOUNTING PROCEDURE

III. OVERHEAD—We feel the fixed rate basis of \$7292 for a drilling well and \$719 for producing and injection wells is too high. The figures that we have received from Ernst & Young for their overhead survey for the West Texas and Eastern New Mexico area (copy attached), show the mean and median rates for wells of this depth are \$3000 - \$3100 for a drilling well and \$300-\$323 for producing and injection wells. The difference of monthly fees on producing and injections wells from \$300 to \$719 is about \$400. This would result in an excess charge, in our opinion, to the joint account for the 129 wells of some \$51,600 a month or \$619,200 a year, which projected over the thirty plus years for the life of the project would total about \$19,000,000. These estimates do not include any escalation provisions

We appreciate Exxon's efforts on behalf of the Unit and hope we can settle these differences. I will be unavailable on June 2, but my brother, Bill Hudson, and my son, Randall Hudson, will attend the meeting.

With best wishes,

Yours truly, as al-

Edward R. Hudson, Jr.

ERHJr/vc

### Ernst & Young Contacts in Oil and Gas Producing Areas

National Director of Energy Services Charles O. Buckner 1221 McKinney, Suite 2400 Houston, Texas 77010

### Alabama Birmingham Lucien P. Mistrot, Jr.

(205) 251-2000

California Los Angeles Barry Schehr (213) 977-3330 San Francisco Timothy R. Crichfield (415) 951-3207

Colorado Denver Robert C. Caller (303) 628-4378

Kansas Wichita Robert R. Crawford (316) 265-9537

Kentucky Louisville Thomas E. Schoenbaechler (502) 585-1400

Louisiana **New Orleans** Philip J. Gunn (504) 581-4200

Ohio

Cleveland Phillip A. Peters (216) 861-8803 Canton Ronald J. Manse (216) 455-5555

Oklahoma **Oklahoma** City Richard D. Corn (405) 278-6802 Tulsa Porter R. Shults (918) 560-3610

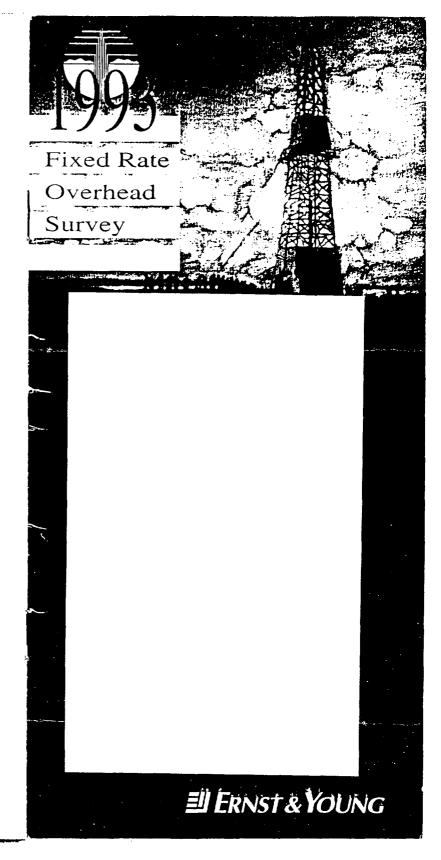
Pennsylvania Pittsburgh Albert J. D'Alo (412) 644-0402

Texas Dallas Jack Morris (214) 969-8421 Fort Worth J. Turner Almond (817) 878-7112 Houston Terry Klebe (713) 750-8160 San Antonio Paul Mangum (512) 554-0306

Utah Salt Lake City Ronald M. Aoki (801) 350-3360

Virginia Fairfax Michael F. Prendergast (703) 846-5990

West Virginia Charleston Paul E. Arbogast (304) 343-8971



SCORE Retrieval File No. 100008

West Texas and Eastern New Mexico

**Oil Wells** 

IJ

|      |           |                 | Mon     | Monthly Drilling Well Rates | ng Well Ra | ites    | Month             | IJy Produc | Monthly Producing Well Rates | ates   |
|------|-----------|-----------------|---------|-----------------------------|------------|---------|-------------------|------------|------------------------------|--------|
|      |           |                 | 1993    | 93                          | 1992       | 92      | 1993              | 3          | 1992                         |        |
| Resp | Responses |                 | Mean    | Mean Median                 | Mean       | Median  | Mean              | Median     | Mean                         | Median |
| 1993 | 1992      | Depth in Feet   |         | ·                           |            |         |                   | ••••       |                              |        |
| 141  | 173       | 0 - 5,000       | \$3,093 | \$3,000                     | \$3,271    | \$3,000 | \$323             | \$300      | \$326                        | \$300  |
| 114  | 142       |                 | 4,136   | 4,000                       | 4,311      | 4,000   | 450               | 425        | 550                          | 400    |
| 42   | 35        | 10,001 - 15,000 | 5,146   | 5,000                       | 5,185      | 5,000   | 502               | 500        | 501                          | 500    |
| S    | 9         | 15,001 - 20,000 | 5,590   | 5,000                       | 6,529      | 7,618   | 538               | 450        | 623                          | 668    |
| 1    | 1         | 20,001 -        | 4,500   | 4,500                       | 8,500      | 8,500   | 400               | 400        | 850                          | 850    |
| ×    | L         | No Depth Limit  | 4,018   | 4,000                       | 3,405      | 3,650   | 476               | 476        | 372                          | 330    |
|      |           |                 |         | ere erestiteter.            |            |         | t<br>Later Alatin |            |                              |        |
|      |           |                 |         |                             |            |         |                   |            |                              |        |

Gas Wells West Texas and Eastern New Mexico

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| Rates                       |      | Median    |   | \$300   | 400     | 500      | 575      | 600      | 389      |
|-----------------------------|------|-----------|---|---------|---------|----------|----------|----------|----------|
| ·***                        | 1992 | Mean      |   | \$351   | 447     | 514      | 544      | 600      | 430      |
| roducing                    |      | dian      |   | \$310   | 425     | 500      | 537      | 425      | 475      |
| Monthly Producing Well      | 1993 | Mean Mei  |   |         |         |          |          | 425      |          |
| tes                         | 5    | Median    |   | \$3,000 | 4,141   | 5,000    | 5,000    | 8,500    | 3,816    |
| Monthly Drilling Well Rates | 3    | Mean      |   | \$3,138 | 4,325   | 5,388    | 5,209    | 8,500    | 4,408    |
|                             |      | Median    |   | \$3,000 | 4,000   | 5,000    | 5,500    | 6,000    | 4,000    |
| Month                       | 1993 | Mean      | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1 | \$3,138 | 4,270   | 5,462    | 6,259    | 6,000    | 4,199    |
| * ~****                     |      |           | n Feet  | 5,000   | 10,000  | 15,000   | 20,000   |          | Limit    |
|                             |      |           | Depth i   | - 0     | 5,001 - | - 100'01 | 15,001 - | 20,001 - | No Depth |
|                             |      | Responses | 1992  | 06      | 73      | 26       | 10       | 7        | 5        |
|                             |      | Resp      | 1993  | 72      | 09      | 32       | 4        | 2        | ×        |

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May 5, 1994

Mr. Ronald E. Mayhem EXXON COMPANY, USA P. O. Box 1600 Midland, Texas 79702-1600

> RE: Avalon Field Unit Eddy County, New Mexico

Dear Ron:

Whiting Petroleum Corporation has reviewed the proposed unit and unit operating agreement. The following are my comments and objections.

### Comments:

Your proposed Exhibit "B" does not reflect Whiting's interest in tracts 3c, 3d, 3e, 5a, 5b, 5d and 5f. The enclosed recorded assignment covers the lands in each tract. It was an oversight that the well names were left off.

### **Objections:**

Page 5 of the COPAS accounting procedure. Your drilling and producing well rates are excessive. Recommended rates for wells of this depth should be \$4,730 drilling and \$473 for producing and well overhead.

Please make these corrections to the proposed agreement and exhibits.

Very truly yours,

WHITING PETROLEUM CORPORATION

fin R Haglett

John R. Hazlett Vice President - Land Department

JRH:glv:EXXON.LO3/JRH01

cc: D. Sherwin Artus

WHITING PETROLEUM CORPORATION MILE HIGH CENTER, 1700 BROADWAY, SUITE 2300, DENVER, COLORADO 80290-2301 (303) 837-1661 FAX (303) 861-4023 4604 REPUBLIC TOWERS II, 325 N. ST. PAUL ST., DALLAS, TX 75201 (214) 741-1650 FAX (214) 220-3940



American National Petroleum Company 5847 San Felipe, Sta. 700 Houston, Texas 77057 P.O. Box 27725 (77227-7725) (713) 780-9494 Fax: (713) 780-9254

June 15, 1994

RE: Land and Engineering Comments for Proposed Avalon Unit, Eddy Co. New Mexico

Dear Ron:

R. E. Mayhew

23 Desta Drive

Midland, Texas 79705

CO2 Projects Coordinator Exxon Company, U.S.A. SW Division CDA #245

Please find attached comments and concerns pertaining to the proposed unit in general, the unit participation formula, the proposed Unit Agreement and proposed Unit Operating Agreement. After your review, please call if you want to discuss any issue. Mike Englert and I should be available to offer further clarification.

Again, I do apologize for the tardiness in returning our comments to you. As you and I have discussed, Patrick Petroleum Company i.e. ANPC, is for sale. The preparation of the data room has taken a significant amount of time away from day to day work.

> Sincerely, AMERICAN NATIONAL PETROLEUM CO.

Hayonth

W. F. Hayworth Engineering Manager

Attachments

cc: M. W. Englert

7137809254 ANPC/PPC

### Engineering Problems & Comments

### 1) <u>Economic Viability</u>

Utilizing an economic study (results presented on H-5 and H-6) with a minimum value of \$19.00 per escalated at 6% is not practical. Prior to moving forward we need to view more realistic pricing combined with the new estimated investment to verify the project viability.

Specific Problems:

- a) Pricing and escalation factor are out of line from reality
- b) Hudson Inc.'s comments indicate that some of their leases are burdened much heavier than the 87.5% estimated in Exxon's economics. This could significantly affect the economics.
- c) Base charges for LEES are double of other operators need to specifically address in <u>Unit Operating Agreement</u> what fixed costs administrative/lease overhead costs will be included.
- e) Comparison of <u>Net</u> Forecasts (using 87.5%)

|       | Model Prin | mary       | Model  | Waterflood | Incr | emental |
|-------|------------|------------|--------|------------|------|---------|
|       | BOPD       | BOPY       | BOPD   | BOPY       | BOPD | BOPY    |
| 1993  | 550        | 200750     | 889    | *324485    | 339  | 123735  |
| 1994  | 408        | 148920     | 1021   | 372665     | 613  | 223745  |
| 1995  | 325        | 118625     | 1121   | 409165     | 796  | 290540  |
| * н-б | economics  | match this | number |            |      |         |

| Estimated | remaining | primary           | as | of | 1/1/93 | - | 1192.2 BO              |
|-----------|-----------|-------------------|----|----|--------|---|------------------------|
| Estimated | remaining | primary<br>DIFFEN |    |    | 1/1/94 | - | 986.6 BO<br>205,600 BO |

Economics should have been run on incremental oil production

- 2) Participation Formula
- a) Formula has little or no basis when you review economic run
- b) PV of 20% is arbitrary and immaterial. Keeping all other values the same, but utilizing PV of 10%, C = 24.61% and F = 75.39% (compared to PV 20% values where C = 62.43% & F = 37.5688).
- c) Phase 1 formula uses a 1/1/93 remaining reserves denominator (1192.2) while weighting factors use a 1/1/94 remaining reserves (986.6).
- d) Using output (Present worth values) data from economic runs which have inappropriate oil prices, incorrect investments and some of the other problems identified in 1 above yields

nothing but FUNNY numbers.

e) ANPC believes that the participants in the proposed unit need to move toward more traditional methods to determine tract factors and unit participation.

### 3) <u>Waterflood Response Time</u>

Although Exxon's model seems to predict the primary performance of the reservoir, I question the 60% increase in dayrate production for 1993 in comparison to 1992. Particularly as it relates to the start of the economic run in October 1992. It seems that the Ford Geraldine Unit response was closer to a year before significant response production was observed. What is the estimated time of fillup and response given that the reservoir has had two additional years . of depletion?

### 4) Linking CO2 Injection with Waterfooding

If it is economically feasible, ANPC is interested in unitizing the Avalon Field for the purpose of waterflooding. Although Exxon sees great merit in initiating a CO2 Flood in the short term, ANPC is more interested in implementing a successful waterflood and based on an early response, verifying its economic viability. At that time, proceed forward in the setup a CO2 flood, if oil prices appear stable and the project is economically feasible.

ANPC prefers to drop all references to a Phase II "CO2 Flood" in the current documents. ANPC is not against the concept but believes that each phase should be managed individually. Exxon's has partially taken this approach by not equipping the wells with CO2 resistant tubulars. Given that there are a limited number of working interest owners in the proposed unit and that the reservoir responds to waterflooding as predicted by the model, it should be relatively easy to move from a secondary unit to a tertiary unit.



Mr. Ron Mayhew Exxon Company, U.S.A. Southwest Division P.O. Box 1600 Midland, Texas 79702-1600 American National Petroleum Company 5847 San Felipe, Ste. 700 Houston, Texas 77057 P.O. Box 27725 (77227-7725) (713) 780-9494 Fax: (713) 780-9254

June 15, 1994

Re: Unit and Unit Operating Agreements Avalon (Delaware) Unit Eddy County, New Mexico

Dear Ron:

Pursuant to your request, ANPC has reviewed the subject documents and have the following comments:

### A. UNIT AGREEMENT:

- 1. Section 2., UNIT AREA AND DEFINITIONS.
  - a. We ask that the location of the Exxon Yates "C" Federal #36 be verified as set forth in 2.(h).
  - b. Phase 1 and Phase 2 should be defined.
- 2. Section 3., EXHIBITS.
  - a. ANPC'S working interest needs an in-depth review and verification as ANPC's interest should now include the interest of Mrs. Francis B. Bunn as a result of a recent acquisition. We will contact your Land Department and discuss any necessary changes.
- 3. Section 4., EXPANSION AND CONTRACTION.
  - a. "Contraction" of the unit is not specifically addressed even though the term is used.
  - b. Since there are 53 separate Working Interest Owners, many of whom are grouped together, and Exxon owns 79.72% interest, we believe that voting rights and the overall approval process is critical. It is proposed that at least 50% of the Working Interest Owners owning not less than 85% should be required to approve expansions and/or contractions as well as certain other operational matters.
  - c. It is proposed that no less than 50% of the Working Interest Owners owning not less than 85% interest be required to approve operational matters, including whether or not to approve or *not* approve of a Phase 2.
- 4. Section 11., PLAN OF OPERATIONS.
  - a. Eighteen (18) months is an excessive amount of time to either commence operations or make a unilateral decision to terminate the project and agreement. It is proposed that this time frame be

Exxon Company U.S.A. Avalon (Delaware) Unit

shortened to six (6) months.

- 5. Section 13., TRACT PARTICIPATION.
  - a. ANPC's Engineering Department has not yet approved the Tract Participation formula and addresses this issue in its attached comments.
- 6. Section 15.B., EXCESS IMPUTED NEWLY DISCOVERED CRUDE OIL.
  - a. This provision needs discussion.
- 7. Section 15.C., EXCESS IMPUTED STRIPPER CRUDE OIL
  - a. This provision needs discussion.
- 8. Section 15.D., TAKING UNITIZED SUBSTANCES IN KIND.
- **HPORTANT a.** It is proposed that the "Prevailing Market Price" in the area include a bid process.
  - 9. Section 24., EFFECTIVE DATE AND TERM.
    - a. It is proposed that no less than 50% of the Working Interest Owners owning not less than 85% interest be required to terminate the unit and project.
  - 10. Section 32., NONJOINDER AND SUBSEQUENT JOINDER.
    - a. Approval to set guidelines for joinder under this provision should be agreed upon by Working Interest Owners owning no less than 85% interest.
  - 11. Section 39., STATUTORY UNITIZATION.
    - a. This provision should be changed to read not less than 85%.
- 75% retly state

) what is this ? State Forme

### **B. UNIT OPERATING AGREEMENT:**

- 1. Article 3.2.4 Expenditures. It is proposed that at such time as project expenditures exceed AFE's by greater than 10%, except in an emergency situation, the working interest owners shall again have an option to proceed or go non-consent.
- Article 4.3.1 Voting Interest., describes a 'vote to proceed to Phase 2" while the Unit Agreement describes a voting procedure "not to proceed to Phase 2". The agreement is unclear as to the exact intent of the plan and procedure to move from Phase 1 to Phase 2. This agreement also fails to define Phase 1 and Phase 2.
   Would reliase RING forever Good IDEA of 2 Phase
- 3. Article 4.3.2 Voting Required-Generally., It is proposed that 50% of the remaining owners with not less than 10% working interest be required under this provision.

Exxon Company U.S.A. Avalon (Delaware) Unit

- 4. Article 4.3.3 Vote Required to Amend Unit Operating Agreement., It is suggested that 50% of the owners be required to support an amendment of the Operating Agreement in the event one (1) party owns ninety percent (90).
- 5. Article 5.4 Failure to Take Production in Kind., It is recommended that a bid process be established for oil sales.
- Article 7.11 Expenditures. It is suggested that once a project has exceeded the AFE by 10%, each
  working interest owner shall have the option to again make an election to proceed or go non-consent, except
  in the case of an emergency situation.
- 7. Article 10.4 Inventory and Valuations., it is recommended that an affirmative vote of 85% be binding, except where one (1) party owns or exceeds 85%, then it will require an affirmative vote of 50% of the remaining parties.

ORR

- 8. Article 13.8 Carved-Out Interest., should be modified to provide that carved-out payments shall cease at such time as the party creating such interest ceases to be a working interest owner by virtue of a non-consent election or otherwise or that such payment is the sole resonsibility of the party creating such interest.
- Article 20.2 Restriction of Disposition and Withdrawal. The files indicate that the burdens on ANPC leases exceed 18.75%. At this point, the working interest owners need to be prepared to accept the burdens of record of all parties.
- Exhibit "F", COPAS Accounting Procedure, Section III, 1. A. Overhead Fixed Rate Basis should have the rates reduced to be more in line with industry standards i.e. Drilling Well Rate of \$4,500 and Producing Well Rate of \$450.

We would appreciate Exxon's consideration to our suggested changes and/or comments regarding our interpretation of the agreements.

Yours very truly,

Michael W. Englert Land Manager

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### Yates Petroleum Concerns

### 1) Formula

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- a. One Phase
- b. Exxon Present Value Method
  - i. 20% Discount Too High
  - ii. 1-1-95 More Likely Start Date
  - iii. These Effects are Important

| Method                    | <u>%</u> | <u>Exxon</u>                  | Yates  |
|---------------------------|----------|-------------------------------|--|
| <exxon><br/>Yates</exxon> | 20<br>20 | 0.756<br>0.726 <b>(0.133)</b> | 0.108<br>0.113 (0.11) 2 1-1-94 START<br>DATE |
|                           |          |                               |  |
| Yates                     | 15       | 0.696                         | 0.123  |
| Yates                     | 10       | 0.683                         | 0.125  |

### c. Traditional Formulas

i. Parameters

| l in Place            |  |  |  |  |  |  |
|-----------------------|--|--|--|--|--|--|
| Remaining Primary Oil |  |  |  |  |  |  |
| + Workover Oil        |  |  |  |  |  |  |
|                       |  |  |  |  |  |  |
| ombinations give      |  |  |  |  |  |  |
| 0.704 to 0.739        |  |  |  |  |  |  |
| 0.116 to 0.126        |  |  |  |  |  |  |
|                       |  |  |  |  |  |  |

- 2) Voting Percentage for Approval
  - a. 75% too low Big Minority Owners need voice

### 3) After Payout Interests

- a. Exxon thinks \$250,000 wellbore adjustment will help
- b. Yates rechecking nonconsent status 5 wells
- c. At least three wells will not payout through inventory
- 4) Overhead Rate
- 5) Non-Consent in Unit
  - a. Really talking about collecting bills?
  - b. Complicated with interest.

| AVALON DELAW      | ARE UNIT |             |          |           | <br>                 |          |
|-------------------|----------|-------------|----------|-----------|----------------------|----------|
| Weighting Factors | ;<br>;   |             |          | 3         | <br>                 |          |
| OOIP              | 0.00     |             |          |           |                      |          |
| Rem Primary       | 0.43     |             |          |           |                      |          |
| WF & WO           | 0.29     |             |          |           |                      |          |
| CO2 Delta         | 0.28     |             |          |           |                      |          |
|                   | 1.00     |             |          |           |                      |          |
|                   |          |             |          |           | <br>                 |          |
| OWNER             | OOIP     | Rem Primary | WF&WO    | CO2 Delta | <br>OWNER            | INTEREST |
| Cities            | 0.011368 | 0.000000    | 0.000000 | 0.005383  | Cities               | 0.001507 |
| Exxon             | 0.602341 | 0.850937    | 0.702359 | 0.664458  | Exxon                | 0.755635 |
| GWA Others        | 0.001387 | 0.000041    | 0.000000 | 0.000306  | GWA Others           | 0.000103 |
| Hudson Brothers   | 0.033232 | 0.016519    | 0.033246 | 0.030441  | Hudson Brothers      | 0.025268 |
| JJ Redfren Jr     | 0.009943 | 0.007247    | 0.014585 | 0.011578  | JJ Redfren Jr        | 0.010588 |
| Keystone Others   | 0.036358 | 0.000000    | 0.000000 | 0.004971  | Keystone Others      | 0.001392 |
| Mary Ard          | 0.016616 | 0.008259    | 0.016623 | 0.015220  | Mary Ard             | 0.012634 |
| Merit             | 0.023220 | 0.000000    | 0.000000 | 0.011230  | Merit                | 0.003144 |
| MWJ               | 0.017660 | 0.003496    | 0.006234 | 0.007904  | MWJ                  | 0.005524 |
| Pennzoil          | 0.021073 | 0.004236    | 0.007341 | 0.015545  | Pennzoil             | 0.008303 |
| Premier           | 0.055592 | 0.000000    | 0.000000 | 0.051463  | Premier              | 0.014410 |
| Stonewall Others  | 0.047720 | 0.037202    | 0.075049 | 0.057011  | <br>Stonewall Others | 0.053724 |
| Yates et al       | 0.123490 | 0.072063    | 0.144563 | 0.124490  | Yates et al          | 0.107768 |
|                   | 1.000000 | 1.000000    | 1.000000 | 1.000000  |                      | 1.000000 |

AVERAGE EXXON 20% DISCOUNT CASE

| AVALON DELAW      | ARE UNIT |             |          |           |   |          |
|-------------------|----------|-------------|----------|-----------|---|----------|
|                   |          |             |          |           |   |          |
| Weighting Factors |          |             |          |           |   |          |
| OOIP              | 0.00     |             |          |           |   |          |
| Rem Primary       | 0.29     |             |          |           |   |          |
| WF & WO           | 0.20     |             |          |           |   |          |
| CO2 Delta         | 0.51     |             |          |           |   |          |
|                   | 1.00     |             |          |           |   |          |
|                   |          |             |          |           | <br>· · · · · · · · · · · · · · · · · · · |          |
| OWNER             | OOIP     | Rem Primary | WF&WO    | CO2 Delta | <br>OWNER                                 | INTEREST |
| Cities            | 0.011368 | 0.000000    | 0.000000 | 0.005383  | Cities                                    | 0.002745 |
| Exxon             | 0.602341 | 0.850937    | 0.702359 | 0.664458  | Exxon                                     | 0.726117 |
| GWA Others        | 0.001387 | 0.000041    | 0.000000 | 0.000306  | GWA Others                                | 0.000168 |
| Hudson Brothers   | 0.033232 | 0.016519    | 0.033246 | 0.030441  | Hudson Brothers                           | 0.026965 |
| JJ Redfren Jr     | 0.009943 | 0.007247    | 0.014585 | 0.011578  | JJ Redfren Jr                             | 0.010923 |
| Keystone Others   | 0.036358 | 0.000000    | 0.000000 | 0.004971  | Keystone Others                           | 0.002535 |
| Mary Ard          | 0.016616 | 0.008259    | 0.016623 | 0.015220  | Mary Ard                                  | 0.013482 |
| Merit             | 0.023220 | 0.000000    | 0.000000 | 0.011230  | Merit                                     | 0.005727 |
| MWJ               | 0.017660 | 0.003496    | 0.006234 | 0.007904  | MWJ                                       | 0.006292 |
| Pennzoil          | 0.021073 | 0.004236    | 0.007341 | 0.015545  | Pennzoil                                  | 0.010625 |
| Premier           | 0.055592 | 0.000000    | 0.000000 | 0.051463  | Premier                                   | 0.026246 |
| Stonewall Others  | 0.047720 | 0.037202    | 0.075049 | 0.057011  | Stonewall Others                          | 0.054874 |
| Yates et al       | 0.123490 | 0.072063    | 0.144563 | 0.124490  | Yates et al                               | 0.113301 |
|                   | 1.000000 | 1.000000    | 1.000000 | 1.000000  |   | 1.000000 |

YATES 20% DISCOUNT CASE

| AVALON DELAW      | ARE UNIT                              |             |          |           | <br>······································ |          |
|-------------------|---------------------------------------|-------------|----------|-----------|--|----------|
| Weighting Factors | <u>.</u>                              |             |          |           |  |          |
| OOIP              | 0.00                                  |             |          |           |  |          |
| Rem Primary       | 0.12                                  |             |          |           |  |          |
| WF & WO           | 0.23                                  |             |          |           |  |          |
| CO2 Delta         | 0.65                                  |             |          |           |  |          |
|                   | 1.00                                  |             |          |           |  |          |
|                   | · · · · · · · · · · · · · · · · · · · |             |          |           | <br>                                       |          |
| OWNER             | OOIP                                  | Rem Primary | WF&WO    | CO2 Delta | <br>OWNER                                  | INTEREST |
| Cities            | 0.011368                              | 0.000000    | 0.000000 | 0.005383  | Cities                                     | 0.003499 |
| Exxon             | 0.602341                              | 0.850937    | 0.702359 | 0.664458  | Exxon                                      | 0.695553 |
| GWA Others        | 0.001387                              | 0.000041    | 0.000000 | 0.000306  | GWA Others                                 | 0.000204 |
| Hudson Brothers   | 0.033232                              | 0.016519    | 0.033246 | 0.030441  | Hudson Brothers                            | 0.029416 |
| JJ Redfren Jr     | 0.009943                              | 0.007247    | 0.014585 | 0.011578  | JJ Redfren Jr                              | 0.011750 |
| Keystone Others   | 0.036358                              | 0.000000    | 0.000000 | 0.004971  | Keystone Others                            | 0.003231 |
| Mary Ard          | 0.016616                              | 0.008259    | 0.016623 | 0.015220  | Mary Ard                                   | 0.014707 |
| Merit             | 0.023220                              | 0.000000    | 0.000000 | 0.011230  | Merit                                      | 0.007300 |
| MWJ               | 0.017660                              | 0.003496    | 0.006234 | 0.007904  | MWJ  | 0.006991 |
| Pennzoil          | 0.021073                              | 0.004236    | 0.007341 | 0.015545  | Pennzoil                                   | 0.012301 |
| Premier           | 0.055592                              | 0.000000    | 0.000000 | 0.051463  | Premier                                    | 0.033451 |
| Stonewall Others  | 0.047720                              | 0.037202    | 0.075049 | 0.057011  | Stonewall Others                           | 0.058783 |
| Yates et al       | 0.123490                              | 0.072063    | 0.144563 | 0.124490  | Yates et al                                | 0.122816 |
|                   | 1.000000                              | 1.000000    | 1.000000 | 1.000000  |  | 1.000000 |

VATES 15 % DISCOUNT CASE

| AVALON DELAW      | ARE UNIT |             |          |           |                      |          |
|-------------------|----------|-------------|----------|-----------|----------------------|----------|
|                   |          |             |          |           |                      |          |
| Weighting Factors |          |             |          |           |                      |          |
| OOIP              | 0.00     |             |          |           |                      |          |
| Rem Primary       | 0.06     |             |          |           |                      |          |
| WF & WO           | 0.19     |             |          |           |                      |          |
| CO2 Delta         | 0.75     |             |          |           |                      |          |
|                   | 1.00     |             |          |           |                      |          |
|                   |          |             | <u> </u> |           | <br>                 |          |
| OWNER             | OOIP     | Rem Primary | WF&WO    | CO2 Delta | <br>OWNER            | INTEREST |
| Cities            | 0.011368 | 0.000000    | 0.000000 | 0.005383  | Cities               | 0.004037 |
| Exxon             | 0.602341 | 0.850937    | 0.702359 | 0.664458  | Exxon                | 0.682848 |
| GWA Others        | 0.001387 | 0.000041    | 0.000000 | 0.000306  | GWA Others           | 0.000232 |
| Hudson Brothers   | 0.033232 | 0.016519    | 0.033246 | 0.030441  | Hudson Brothers      | 0.030139 |
| JJ Redfren Jr     | 0.009943 | 0.007247    | 0.014585 | 0.011578  | JJ Redfren Jr        | 0.011889 |
| Keystone Others   | 0.036358 | 0.000000    | 0.000000 | 0.004971  | Keystone Others      | 0.003728 |
| Mary Ard          | 0.016616 | 0.008259    | 0.016623 | 0.015220  | Mary Ard             | 0.015069 |
| Merit             | 0.023220 | 0.000000    | 0.000000 | 0.011230  | Merit                | 0.008423 |
| MWJ               | 0.017660 | 0.003496    | 0.006234 | 0.007904  | <br>MWJ              | 0.007322 |
| Pennzoil          | 0.021073 | 0.004236    | 0.007341 | 0.015545  | Pennzoil             | 0.013308 |
| Premier           | 0.055592 | 0.000000    | 0.000000 | 0.051463  | Premier              | 0.038597 |
| Stonewall Others  | 0.047720 | 0.037202    | 0.075049 | 0.057011  | <br>Stonewall Others | 0.059250 |
| Yates et al       | 0.123490 | 0.072063    | 0.144563 | 0.124490  | Yates et al          | 0.125158 |
|                   | 1.000000 | 1.000000    | 1.000000 | 1.000000  |                      | 1.000000 |

VATES 10 % DISCOUNT CASE

| Parameter      | Weight  | Company        | WI Partic  | NRI Partici |
|----------------|---------|----------------|------------|-------------|
| New Rem Res    | 11.90%  | ABO            | 1.136421%  | 0.861423%   |
| Cum Prod       |         | BLM            | 0.000000%  | 6.207346%   |
| Primary RUR    |         | Cities         | 0.353206%  | 0.309055%   |
| Primary EUR    |         | ZZZOthers      | 7.263136%  | 7.506554%   |
| Workover EUR   |         | Exxon          | 69.558184% | 59.398970%  |
| Workover Deita |         | Fee Other      | 0.000000%  | 0.279366%   |
| WF EUR         |         | GWA Others     | 0.000000%  | 0.000000%   |
| WF+WO          | 22.49%  | JJ Redfern Jr  | 0.117208%  | 0.099298%   |
| CO2 EUR        |         | Mary Hudson A  | 1.468714%  | 1.247991%   |
| CO2 Delta      | 65.61%  | Merit          | 0.736803%  | 0.644703%   |
| Factor         | Use     | MWJ            | 0.695783%  | 0.594885%   |
| YPC et al WI   | 12.26%  | MYCO           | 3.353718%  | 2.489191%   |
| YPC et al NRI  | 10.71%  | Penzoil        | 1.235639%  | 1.537023%   |
| YPC NRI-ORRI   | 9.25%   | Premier        | 3.376482%  | 2.954421%   |
| Total NRI/WI   | 87.38%  | SLO            | 0.000000%  | 6.013288%   |
| (NRI-ORRI)/WI  | 75.44%  | W.A. Hudson, I | 2.937429%  | 2.495985%   |
|                |         | Yates Accnt 4  | 0.738291%  | 0.636320%   |
| Checks         | 0.00    | Yates Else     | 0.353206%  | 0.309055%   |
| 100.00%        | 100.00% | Yates ORRI     | 0.000000%  | 1.464441%   |
| 100.00%        | 100.00% | YDC            | 3.353718%  | 2.489191%   |
| 129796         | 129796  | YPC            | 3.322062%  | 2.461492%   |
|                |         | YPC et al WI   | 12.257417% | 10.711114%  |

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ONE PHASE  
START 1-1-95  
15 % DISCOUNT FACTOR  

$$C_1 = 837.7 \text{ HBO} \times \frac{4}{9} / 1187.4 \text{ HBO} = \frac{8}{6}.3494 \text{ Hellim}$$
  
 $F_1 = 12$   
 $T_1 = 35$   
 $C_1 = 4.3494 \text{ (3.3494)}$ 

$$C = \frac{6.3444}{6.3444+12+35} = \frac{6.3444}{53.3444} = 0.1190$$
  

$$F = \frac{12}{53.3444} = 0.2249$$
  

$$T = \frac{35}{53.3444} = 0.6561$$

| Parameter      | Weight  | Company        | WI Partic  | NRI Partici |
|----------------|---------|----------------|------------|-------------|
| New Rem Res    | 5.47%   |                | 1.162133%  |             |
| Cum Prod       | 5.4776  | BLM            | 0.000000%  |             |
| Primary RUR    |         | Citics         | 0.402572%  |             |
| Primary EUR    |         | ZZZOthers      | 7.412897%  |             |
| Workover EUR   |         | Exxon          | 68.233127% | 58.279148%  |
| Workover Delta |         | Fee Other      | 0.000000%  | 0.307685%   |
| WFEUR          |         | GWA Others     | 0.000000%  | 0.000000%   |
| WF+WO          | 19.75%  | JJ Redfern Jr  | 0.119265%  | 0.101182%   |
| CO2 EUR        |         | Mary Hudson A  | 1.510730%  | 1.285709%   |
| CO2 Delta      | 74.78%  | Merit          | 0.839783%  | 0.734810%   |
| Factor         | Use     | MWJ            | 0.731196%  | 0.626228%   |
| YPC et al WI   | 12.55%  | MYCO           | 3.423240%  | 2.539088%   |
| YPC et al NRI  | 10.89%  | Penzoil        | 1.330711%  | 1.642835%   |
| YPC NRI-ORRI   | 9.46%   | Premier        | 3.848396%  | 3.367347%   |
| Total NRI/WI   | 86.77%  | SLO            | 0.000000%  | 6.135233%   |
| (NRI-ORRI)/WI  | 75.42%  | W.A. Hudson, I | 3.021461%  | 2.571421%   |
|                |         | Yates Accnt 4  | 0.751442%  | 0.646473%   |
| Checks         | 0.00    | Yates Else     | 0.402572%  | 0.352250%   |
| 100.00%        | 100.00% | Yates ORRI     | 0.000000%  | 1.424838%   |
| 100.00%        | 100.00% | YDC            | 3.423240%  | 2.539088%   |
| 129796         | 129796  | YPC            | 3.387235%  | 2.507583%   |
|                |         | YPC et al WI   | 12.549862% | 10.889750%  |

ONE PHASE START 1-1-95 10 % DISCOUNT FACTOR

$$C_1 = 837.7 \text{ HBO x}$$
 IIN/1187.4 MBO  
 $F_1 = 28$   
 $T_1 = 106$ 

$$C = \frac{C_{1}}{C_{1} + F_{1} + T_{1}} = 0.0547$$

$$F = \frac{F_{1}}{C_{1} + F_{1} + T_{1}} = 0.1975$$

$$T = \frac{T_{1}}{C_{1} + F_{1} + T_{1}} = 0.7478$$

| D              | 111.1.1.1.1 | 6              | M/T Dentie | NTID        |
|----------------|-------------|----------------|------------|-------------|
| Parameter      | Weight      | Company        |            | NRI Partici |
| New Rem Res    | 28.77%      | ABO            | 1.049685%  | 0.796260%   |
| Cum Prod       |             | BLM            | 0.000000%  | 6.545503%   |
| Primary RUR    |             | Cities         | 0.273908%  | 0.239669%   |
| Primary EUR    |             | ZZZOthers      | 6.725925%  | 6.965178%   |
| Workover EUR   |             | Exxon          | 72.681068% | 62.044651%  |
| Workover Delta |             | Fee Other      | 0.000000%  | 0.224759%   |
| WF EUR         |             | GWA Others     | 0.000000%  | 0.000000%   |
| WF+WO          | 20.35%      | JJ Redfern Jr  | 0.109006%  | 0.092183%   |
| CO2 EUR        |             | Mary Hudson A  | 1.345396%  | 1.140795%   |
| CO2 Delta      | 50.88%      | Merit          | 0.571385%  | 0.499962%   |
| Factor         | Use         | MWJ            | 0.618458%  | 0.527491%   |
| YPC et al WI   | 11.30%      | MYCO           | 3.105617%  | 2.307131%   |
| YPC et al NRI  | 10.08%      | Penzoil        | 1.062737%  | 1.336610%   |
| YPC NRI-ORRI   | 8.53%       | Premier        | 2.618433%  | 2.291129%   |
| Total NRI/WI   | 89.19%      | SLO            | 0.000000%  | 5.729738%   |
| (NRI-ORRI)/WI  | 75.46%      | W.A. Hudson, I | 2.690791%  | 2.281593%   |
|                |             | Yates Accent 4 | 0.687179%  | 0.593771%   |
| Checks         | 0.00        | Yates Else     | 0.273908%  | 0.239669%   |
| 100.00%        | 100.00%     | Yates ORRI     | 0.000000%  | 1.551284%   |
| 100.00%        | 100.00%     | YDC            | 3.105617%  | 2.307131%   |
| 129796         | 129796      | YPC            | 3.080887%  | 2.285493%   |
|                |             | YPC et al WI   | 11.302893% | 10.080740%  |

ONE PHASE START 1-1-64 START 1-1-95 20 % DISCOUNT C1 = 837.7 HBO × 8H/1187.4 HBO = 5.6539 Hellen 6.6431  $F_{1} = 4$  $T_{1} = 10$  $C = \frac{C_1}{C_1 + F_1 + I_1} = \frac{5.6539}{19.6539} = 0.2877$ 0.3218 F= 0.2035 0.1938 T = 0.5088 0.4844

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EXXON 73.2919 Vatu 11.0992

| AVALON DELAW      | ARE UNIT |             |          |           |   |                  |          |
|-------------------|----------|-------------|----------|-----------|---|------------------|----------|
|                   |          |             |          |           |   |                  |          |
| Weighting Factors |          |             |          |           |   |                  |          |
| OOIP              | 0.00     |             |          |           |   |                  |          |
| Rem Primary       | 0.20     |             |          |           |   |                  |          |
| WF & WO           | 0.60     |             |          |           |   |                  |          |
| CO2 Delta         | 0.20     |             | _        |           |   |                  |          |
|                   | 1.00     |             |          |           |   |                  |          |
|                   |          |             |          |           | · |                  |          |
| OWNER             | OOIP     | Rem Primary | WF&WO    | CO2 Delta |   | OWNER            | INTEREST |
| Cities            | 0.011368 | 0.000000    | 0.000000 | 0.005383  |   | Cities           | 0.001077 |
| Exxon             | 0.602341 | 0.850937    | 0.702359 | 0.664458  |   | Exxon            | 0.724494 |
| GWA Others        | 0.001387 | 0.000041    | 0.000000 | 0.000306  |   | GWA Others       | 0.000069 |
| Hudson Brothers   | 0.033232 | 0.016519    | 0.033246 | 0.030441  |   | Hudson Brothers  | 0.029340 |
| JJ Redfren Jr     | 0.009943 | 0.007247    | 0.014585 | 0.011578  |   | JJ Redfren Jr    | 0.012516 |
| Keystone Others   | 0.036358 | 0.000000    | 0.000000 | 0.004971  |   | Keystone Others  | 0.000994 |
| Mary Ard          | 0.016616 | 0.008259    | 0.016623 | 0.015220  |   | Mary Ard         | 0.014670 |
| Merit             | 0.023220 | 0.000000    | 0.000000 | 0.011230  |   | Merit            | 0.002246 |
| MWJ               | 0.017660 | 0.003496    | 0.006234 | 0.007904  |   | MWJ              | 0.006020 |
| Pennzoil          | 0.021073 | 0.004236    | 0.007341 | 0.015545  |   | Pennzoil         | 0.008361 |
| Premier           | 0.055592 | 0.000000    | 0.000000 | 0.051463  |   | Premier          | 0.010293 |
| Stonewall Others  | 0.047720 | 0.037202    | 0.075049 | 0.057011  |   | Stonewall Others | 0.063872 |
| Yates et al       | 0.123490 | 0.072063    | 0.144563 | 0.124490  |   | Yates et al      | 0.126048 |
|                   | 1.000000 | 1.000000    | 1.000000 | 1.000000  |   |                  | 1.000000 |

| AVALON DELAW      | ARE UNIT |             |          |           |  |                  |          |
|-------------------|----------|-------------|----------|-----------|--|------------------|----------|
|                   |          |             |          |           |  |                  |          |
| Weighting Factors | \$       |             |          |           |  |                  |          |
| OOIP              | 0.20     |             |          |           |  |                  |          |
| Rem Primary       | 0.20     |             | í        |           |  |                  |          |
| WF & WO           | 0.40     |             |          |           |  |                  |          |
| CO2 Delta         | 0.20     |             |          |           |  |                  |          |
|                   | 1.00     |             |          |           |  |                  |          |
|                   |          |             |          |           |  |                  |          |
| OWNER             | OOIP     | Rem Primary | WF&WO    | CO2 Delta |  | OWNER            | INTEREST |
| Cities            | 0.011368 | 0.000000    | 0.000000 | 0.005383  |  | Cities           | 0.003350 |
| Exxon             | 0.602341 | 0.850937    | 0.702359 | 0.664458  |  | Exxon            | 0.704491 |
| GWA Others        | 0.001387 | 0.000041    | 0.000000 | 0.000306  |  | GWA Others       | 0.000347 |
| Hudson Brothers   | 0.033232 | 0.016519    | 0.033246 | 0.030441  |  | Hudson Brothers  | 0.029337 |
| JJ Redfren Jr     | 0.009943 | 0.007247    | 0.014585 | 0.011578  |  | JJ Redfren Jr    | 0.011588 |
| Keystone Others   | 0.036358 | 0.000000    | 0.000000 | 0.004971  |  | Keystone Others  | 0.008266 |
| Mary Ard          | 0.016616 | 0.008259    | 0.016623 | 0.015220  |  | Mary Ard         | 0.014668 |
| Merit             | 0.023220 | 0.000000    | 0.000000 | 0.011230  |  | Merit            | 0.006890 |
| MWJ               | 0.017660 | 0.003496    | 0.006234 | 0.007904  |  | MWJ              | 0.008306 |
| Pennzoil          | 0.021073 | 0.004236    | 0.007341 | 0.015545  |  | Pennzoil         | 0.011107 |
| Premier           | 0.055592 | 0.000000    | 0.000000 | 0.051463  |  | Premier          | 0.021411 |
| Stonewall Others  | 0.047720 | 0.037202    | 0.075049 | 0.057011  |  | Stonewall Others | 0.058406 |
| Yates et al       | 0.123490 | 0.072063    | 0.144563 | 0.124490  |  | Yates et al      | 0.121834 |
|                   | 1.000000 | 1.000000    | 1.000000 | 1.000000  |  |                  | 1.000000 |

| AVALON DELAW      | ARE UNIT |             |          |           |                   |          |
|-------------------|----------|-------------|----------|-----------|-------------------|----------|
|                   |          |             |          |           |                   |          |
| Weighting Factors |          |             |          |           |                   |          |
| OOIP              | 0.10     |             |          |           |                   |          |
| Rem Primary       | 0.25     |             |          |           |                   |          |
| WF & WO           | 0.40     |             |          |           |                   |          |
| CO2 Delta         | 0.25     |             |          |           |                   |          |
|                   | 1.00     |             |          |           |                   |          |
|                   |          |             |          |           | <br>              |          |
| OWNER             | OOIP     | Rem Primary | WF&WO    | CO2 Delta | <br>OWNER         | INTEREST |
| Cities            | 0.011368 | 0.000000    | 0.000000 | 0.005383  | Cities            | 0.002483 |
| Exxon             | 0.602341 | 0.850937    | 0.702359 | 0.664458  | Exxon             | 0.720026 |
| GWA Others        | 0.001387 | 0.000041    | 0.000000 | 0.000306  | <br>GWA Others    | 0.000225 |
| Hudson Brothers   | 0.033232 | 0.016519    | 0.033246 | 0.030441  | Hudson Brothers   | 0.028362 |
| JJ Redfren Jr     | 0.009943 | 0.007247    | 0.014585 | 0.011578  | <br>JJ Redfren Jr | 0.011535 |
| Keystone Others   | 0.036358 | 0.000000    | 0.000000 | 0.004971  | Keystone Others   | 0.004879 |
| Mary Ard          | 0.016616 | 0.008259    | 0.016623 | 0.015220  | Mary Ard          | 0.014181 |
| Merit             | 0.023220 | 0.000000    | 0.000000 | 0.011230  | Merit             | 0.005130 |
| MWJ               | 0.017660 | 0.003496    | 0.006234 | 0.007904  | MWJ               | 0.007110 |
| Pennzoil          | 0.021073 | 0.004236    | 0.007341 | 0.015545  | <br>Pennzoil      | 0.009989 |
| Premier           | 0.055592 | 0.000000    | 0.000000 | 0.051463  | <br>Premier       | 0.018425 |
| Stonewall Others  | 0.047720 | 0.037202    | 0.075049 | 0.057011  | Stonewall Others  | 0.058345 |
| Yates et al       | 0.123490 | 0.072063    | 0.144563 | 0.124490  | Yates et al       | 0.119312 |
|                   | 1.000000 | 1.000000    | 1.000000 | 1.000000  |                   | 1.000000 |

| AVALON DELAW      | ARE UNIT |             |          |           |    |                  |          |
|-------------------|----------|-------------|----------|-----------|----|------------------|----------|
| Weighting Factors |          |             |          |           |    |                  |          |
|                   |          |             |          |           |    |                  |          |
| OOIP              | 0.10     |             | ·        |           |    |                  |          |
| Rem Primary       | 0.30     |             |          |           |    |                  |          |
| WF & WO           | 0.40     |             |          |           |    |                  |          |
| CO2 Delta         | 0.20     |             |          |           |    |                  |          |
|                   | 1.00     |             |          |           |    |                  |          |
|                   |          |             |          |           |    |                  |          |
| OWNER             | OOIP     | Rem Primary | WF&WO    | CO2 Delta |    | OWNER            | INTEREST |
| Cities            | 0.011368 | 0.000000    | 0.000000 | 0.005383  | C  | Cities           | 0.002213 |
| Exxon             | 0.602341 | 0.850937    | 0.702359 | 0.664458  | E  | Exxon            | 0.729350 |
| GWA Others        | 0.001387 | 0.000041    | 0.000000 | 0.000306  | (  | GWA Others       | 0.000212 |
| Hudson Brothers   | 0.033232 | 0.016519    | 0.033246 | 0.030441  | F  | Hudson Brothers  | 0.027666 |
| JJ Redfren Jr     | 0.009943 | 0.007247    | 0.014585 | 0.011578  | J  | IJ Redfren Jr    | 0.011318 |
| Keystone Others   | 0.036358 | 0.000000    | 0.000000 | 0.004971  | ۲. | Keystone Others  | 0.004630 |
| Mary Ard          | 0.016616 | 0.008259    | 0.016623 | 0.015220  | N  | Mary Ard         | 0.013833 |
| Merit             | 0.023220 | 0.000000    | 0.000000 | 0.011230  | N  | <i>M</i> erit    | 0.004568 |
| MWJ               | 0.017660 | 0.003496    | 0.006234 | 0.007904  | Ν  | <b>NWJ</b>       | 0.006889 |
| Pennzoil          | 0.021073 | 0.004236    | 0.007341 | 0.015545  | F  | Pennzoil         | 0.009424 |
| Premier           | 0.055592 | 0.000000    | 0.000000 | 0.051463  | F  | Premier          | 0.015852 |
| Stonewall Others  | 0.047720 | 0.037202    | 0.075049 | 0.057011  | S  | Stonewall Others | 0.057354 |
| Yates et al       | 0.123490 | 0.072063    | 0.144563 | 0.124490  | Y  | ates et al       | 0.116691 |
|                   | 1.000000 | 1.000000    | 1.000000 | 1.000000  |    |                  | 1.000000 |

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| AVALON DELAW      | ARE UNIT |             |          |           |   |                  |          |
|-------------------|----------|-------------|----------|-----------|---|------------------|----------|
|                   | <u> </u> |             |          |           |   |                  |          |
| Weighting Factors |          |             |          |           |   |                  |          |
| OOIP              | 0.00     |             |          |           |   |                  |          |
| Rem Primary       | 0.30     |             |          |           |   |                  |          |
| WF & WO           | 0.50     |             |          |           |   |                  |          |
| CO2 Delta         | 0.20     |             |          |           | _ |                  |          |
|                   | 1.00     |             |          |           |   |                  |          |
|                   |          |             |          |           |   |                  |          |
| OWNER             | OOIP     | Rem Primary | WF&WO    | CO2 Delta |   | OWNER            | INTEREST |
| Cities            | 0.011368 | 0.000000    | 0.000000 | 0.005383  |   | Cities           | 0.001077 |
| Exxon             | 0.602341 | 0.850937    | 0.702359 | 0.664458  |   | Exxon            | 0.739352 |
| GWA Others        | 0.001387 | 0.000041    | 0.000000 | 0.000306  |   | GWA Others       | 0.000074 |
| Hudson Brothers   | 0.033232 | 0.016519    | 0.033246 | 0.030441  |   | Hudson Brothers  | 0.027667 |
| JJ Redfren Jr     | 0.009943 | 0.007247    | 0.014585 | 0.011578  |   | JJ Redfren Jr    | 0.011782 |
| Keystone Others   | 0.036358 | 0.000000    | 0.000000 | 0.004971  |   | Keystone Others  | 0.000994 |
| Mary Ard          | 0.016616 | 0.008259    | 0.016623 | 0.015220  |   | Mary Ard         | 0.013833 |
| Merit             | 0.023220 | 0.000000    | 0.000000 | 0.011230  |   | Merit            | 0.002246 |
| MWJ               | 0.017660 | 0.003496    | 0.006234 | 0.007904  |   | MWJ              | 0.005747 |
| Pennzoil          | 0.021073 | 0.004236    | 0.007341 | 0.015545  |   | Pennzoil         | 0.008050 |
| Premier           | 0.055592 | 0.000000    | 0.000000 | 0.051463  |   | Premier          | 0.010293 |
| Stonewall Others  | 0.047720 | 0.037202    | 0.075049 | 0.057011  |   | Stonewall Others | 0.060087 |
| Yates et al       | 0.123490 | 0.072063    | 0.144563 | 0.124490  |   | Yates et al      | 0.118798 |
|                   | 1.000000 | 1.000000    | 1.000000 | 1.000000  |   |                  | 1.000000 |

| AVALON DELAW      | ARE UNIT |             |          |           | <br>             |          |
|-------------------|----------|-------------|----------|-----------|------------------|----------|
|                   |          |             |          |           | <br>             |          |
| Weighting Factors |          |             |          |           |                  |          |
| OOIP              | 0.25     |             |          |           |                  |          |
| Rem Primary       | 0.25     |             |          |           |                  |          |
| WF & WO           | 0.25     |             |          |           |                  |          |
| CO2 Delta         | 0.25     |             |          |           |                  |          |
|                   | 1.00     |             |          |           | <br>             |          |
|                   |          |             |          |           |                  |          |
| OWNER             | OOIP     | Rem Primary | WF&WO    | CO2 Delta | OWNER            | INTEREST |
| Cities            | 0.011368 | 0.000000    | 0.000000 | 0.005383  | Cities           | 0.004188 |
| Exxon             | 0.602341 | 0.850937    | 0.702359 | 0.664458  | <br>Exxon        | 0.705024 |
| GWA Others        | 0.001387 | 0.000041    | 0.000000 | 0.000306  | GWA Others       | 0.000434 |
| Hudson Brothers   | 0.033232 | 0.016519    | 0.033246 | 0.030441  | Hudson Brothers  | 0.028360 |
| JJ Redfren Jr     | 0.009943 | 0.007247    | 0.014585 | 0.011578  | JJ Redfren Jr    | 0.010838 |
| Keystone Others   | 0.036358 | 0.000000    | 0.000000 | 0.004971  | Keystone Others  | 0.010332 |
| Mary Ard          | 0.016616 | 0.008259    | 0.016623 | 0.015220  | Mary Ard         | 0.014180 |
| Merit             | 0.023220 | 0.000000    | 0.000000 | 0.011230  | <br>Merit        | 0.008613 |
| MWJ               | 0.017660 | 0.003496    | 0.006234 | 0.007904  | <br>MWJ          | 0.008824 |
| Pennzoil          | 0.021073 | 0.004236    | 0.007341 | 0.015545  | Pennzoil         | 0.012049 |
| Premier           | 0.055592 | 0.000000    | 0.000000 | 0.051463  | Premier          | 0.026764 |
| Stonewall Others  | 0.047720 | 0.037202    | 0.075049 | 0.057011  | Stonewall Others | 0.054246 |
| Yates et al       | 0.123490 | 0.072063    | 0.144563 | 0.124490  | Yates et al      | 0.116152 |
|                   | 1.000000 | 1.000000    | 1.000000 | 1.000000  |                  | 1.000000 |

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June 20, 1994

PRODUCTION DEPARTMENT SOUTHWESTERN DIVISION

June 17 Meeting Notes Avalon Field, Eddy Co., N. M.

Avalon Field Owners:

On June 17 meeting attendees provided feedback on the proposed Unit Agreement (UA) and Unit Operating Agreement (UOA) for the Avalon Field. The following companies were represented:

- Exxon
- American National Petroleum
- Pennzoil
- Yates Petroleum
- MWJ Producing

The attached table, <u>Avalon Working Interest Owners Meeting Summary, June 17, 1994</u>, provides an overview of the issues discussed, the rationale behind positions, and plans for resolution. Additionally, letters commenting on the UA and UOA are enclosed. The issues identified to be high priority were:

| Issue                          | Action   |
|--------------------------------|--|
| 1. Participation Formula       | Yates will propose a single phase formula prior to a future meeting. |
| 2. Voting Percent              | Exxon will entertain higher voting percentage requirements after     |
|                                | equities are established.  |
| 3. Bidding Oil/CO <sub>2</sub> | Exxon will look into adding to agreements.                           |

It is anticipated that a **Single Phase Formula** being developed by Yates Petroleum will be mailed to Working Interest Owners in mid-July. If you did not attend the June 17 meeting, but are interested in attending the next Working Interest Owner meeting please notify me (915) 688-7841 so I can inform you of the date and location.

We anticipate the ballots to ratify the UA/UOA and the election to participate in the unit will be mailed to you thereafter.

Sincerely,

Ronald E. Dafen

Ronald E. Mayhew Avalon Project Manager

Avalon Working Interest Owners Meeting Summary, June 17, 1994

| Issue                               | Companies   | Company   | Exxon Rationale   | Solutions and  |
|-------------------------------------|---|---|---|--|
|                                     | Originating Issue   | Rationale   |   | Next Steps   |
| Withdrawal from<br>Unit             | Premier   | Disagree with other<br>WIO reservoir<br>interpretations   |   | <ul> <li>Remap unit boundaries to exclude Premicr<br/>acreage [all agree]</li> </ul>   |
| Participation<br>Formula            | <ul> <li>Yates Petroleum</li> <li>Company</li> <li>American</li> </ul>                                      |   | 20% is based on risks associated with<br>CO2 Project. Capital cost reduction is<br>water injection phase related and much   | Yates: Will propose single phase formula<br>and possibly 2 phase formula acceptable to<br>Yates  |
|                                     | National<br>Petroleum<br>(ANPC)   |   | is a result of minimizing preinvestment<br>in CO <sub>2</sub> phase.  | <ul> <li>ANPC: Prefer single phase formula, but<br/>don't need to include outer ring now (can<br/>live with including it)</li> <li>Yates: Suggest using Discount Factor lower<br/>than 20% and start date of 1/1/95</li> </ul>   |
| Voting Percentage                   | <ul> <li>Yates Petroleum</li> <li>Company</li> <li>American</li> <li>National</li> <li>Petroleum</li> </ul> | 75% too low. Large<br>Exxon interest.<br>Should be in 85-90%<br>range, or have some                 | 75% plus one gave others control during CO <sub>2</sub> phase and Exxon control during water injection phase.   | <ul> <li>Yates: Large minority interests should be<br/>able to preclude projects they don't like,<br/>suggest combination of 2nd-4th largest<br/>owners for approvals</li> <li>ANPC: Would prefer 90% approval</li> </ul>  |
|                                     | (ANPC)  | combination of 2nd, 3rd,<br>or 4th largest owners.  |   | <ul> <li>requirement</li> <li>Exxon: Would prefer to focus on %<br/>requirements rather than number of WIO's</li> <li>All Agree: Wait until participation is<br/>finalized to review percentage requirements</li> </ul>  |
| After Payout (APO)                  | Yates Petroleum<br>Company  | Yates won't have 3 of 5<br>wells paid out with<br>intangible portion of<br>investment equalization. | Necessary to determine voting<br>percentage and disposition of funds.<br>Exxon perceived administrative burden<br>to be large; therefore, unfair to impose<br>on other WIO's. | <ul> <li>Yates: Wishes to maintain status of non-<br/>consent parties that have not paid out</li> <li>Yates: If assume status, consider using bpo<br/>rather than apo ownership</li> <li>Exxon: Status of non-consent interests must<br/>be resolved among parties</li> <li>Yates will research payout status further</li> </ul> |
| Withdrawal from<br>Unit / Overrides | W.A. & E.R. Hudson  | Makes withdrawal<br>subject to other WIO.<br>Withdrawing party loses<br>interest.                   | Exxon has experienced unfair cost<br>burdens elsewhere from high override<br>percentages. Offers other WIO's some<br>protection.  | <ul> <li>Pennzoil: Appears that Hudson not affected,<br/>only other interests in tract</li> <li>Exxon: No action planned unless needs are<br/>defined further</li> </ul>   |

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Avalon Working Interest Owners Meeting Summary, June 17, 1994 (cont.)

|                     |                          | Company                           | <b>Exxon Kationale</b>                         | Solutions and   |
|---------------------|--------------------------|-----------------------------------|--|---|
|                     | <b>Originating Issue</b> | Rationale                         |  | Next Steps  |
| Overhead •          | W.A. & E.R.              | Median rates \$3000-              | Rates paid Exxon in Eddy/Lea                   | <ul> <li>Various parties: Overhead rates too high</li> </ul>      |
|                     | Hudson                   | \$3100 drilling, \$300-           | counties in \$700-\$800 range.                 | <ul> <li>Exxon: Ernst &amp; Young rates quoted are not</li> </ul> |
| •                   | Whiting                  | \$323 for producing, See          | Hartzog Draw Unit (waterflood                  | really comparable. Exxon's rates are                              |
|                     | Petroleum                | Ernst & Young rates.              | with potential CO2): >\$700/well.              | comparable for similar operations.                                |
|                     |                          |                                   | Ernst & Young not representative of            | <ul> <li>Yates/ANPC will try to locate comparable</li> </ul>      |
|                     |                          |                                   | water nor CO <sub>2</sub> floods. See basis of | overhead data   |
|                     |                          |                                   | Ernst & Young rates.                           |   |
| Define Phase 1/2    | American National        | Clarify                           |  | ANPC: Provide definitions if multiple                             |
|                     | Petroleum (ANPC)         |                                   |  | phases retained   |
| Maximize amount     | American National        | Process to receive                |  | ANPC: Include bid process for selling oil                         |
|                     | Petroleum (ANPC)         | competitive oil price             |  | Exxon and ANPC will work together to                              |
|                     |                          |                                   |  | resolve   |
| Minimize price paid | American National        | Process to receive                |  | <ul> <li>ANPC Modify Section 7.13 to require</li> </ul>           |
|                     | Petroleum (ANPC)         | competitive CO <sub>2</sub> price |  | Operator bid CO <sub>2</sub>                                      |
|                     |                          |                                   |  | Exxon and ANPC will work together to                              |
|                     |                          |                                   |  | resolve   |
| Operating Costs     | American National        | General Concern of                |  | <ul> <li>ANPC believes Exxon's operating costs are</li> </ul>     |
|                     | Petroleum (ANPC)         | major oil companies               |  | too high  |
|                     |                          |                                   |  | Exxon believes its costs are prudent and                          |
|                     |                          |                                   |  | will work w/ANPC to resolve                                       |

### Avalon Delaware Unit June 17, 1994

### Yates Petroleum Concerns

### 1) Formula

- a. One Phase
- b. Exxon Present Value Method
  - i. 20% Discount Too High
  - ii. 1-1-95 More Likely Start Date
  - iii. These Effects are Important

| Method          | <u>%</u> | <u>Exxon</u> | Yates |
|-----------------|----------|--------------|-------|
| <exxon></exxon> | 20       | 0.756        | 0.108 |
| Yates           | 20       | 0,726        | 0.113 |
| Yates           | 15       | 0.696        | 0.123 |
| Yates           | 10       | 0.683        | 0.125 |

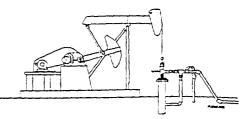
- c. Traditional Formulas
  - i. Parameters
  - Original Oil in Place Remaining Primary Oil Waterflood + Workover Oil CO<sub>2</sub> Oil ii. "Reasonable" Combinations give

| Exxon | 0.704 to 0.739 |
|-------|----------------|
| Yates | 0.116 to 0.126 |

- 2) Voting Percentage for Approval
  - a. 75% too low
  - b. Big Minority Owners need voice

### 3) After Payout Interests

- a. Exxon thinks \$250,000 wellbore adjustment will help
- b. Yates rechecking nonconsent status 5 wells
- c. At least three wells will not payout through inventory
- 4) Overhead Rate
- 5) Non-Consent in Unit
  - a. Really talking about collecting bills?
  - b. Complicated with interest.



| Topic:    | Proposed Avalon Field Unit                                    |
|-----------|---|
| Date:     | Friday, June 17, 1994   |
| Location: | Exxon Building PC #4 Training Room, 3300 N. A St. Midland, Tx |

<u>Purpose:</u> Potential Working Interest Owners of the Avalon Unit provide suggested changes to Exxon's recommended Unit Agreement and Unit Operating Agreement

Desired Outcomes: 1. Attendees understand issues presented by other companies and contribute ideas toward resolution.

2. Agree on next step(s) to progress Unitization.

| Steps                                   | Methods/Presenter   | Min. | Time        |
|---|---|------|-------------|
| Introduction                            | Welcome/ Ron Mayhew   | 5    | 10:00<br>am |
| Agenda Review                           | Ron Mayhew  | 5    | 10:05<br>am |
| Working Interest Owner Comments         | <ul> <li>Each company presents issues in their<br/>letters. Priority issues clearly<br/>distinguished. WIO's offer/discuss<br/>resolutions to each issue after presented.</li> <li>Ron Mayhew presents issues from<br/>owners not present.</li> <li>Break where convenient</li> </ul> | 110  | 10:10<br>am |
| Lunch                                   | Provided onsite   | 30   | 12:00pm     |
| Working Interest Owner Comments         | Continue as in above.   | 30   | 12:30<br>pm |
| List Next Steps to Progress Unitization | <ul> <li>List Priority Items</li> <li>Group offers suggestions on how to work<br/>them. Attempt to reach consensus. Vote<br/>if necessary.</li> </ul>   | 40   | 1:00 pm     |
| Review notes                            | <ul> <li>Scott scrolls through; group clarifies as<br/>necessary</li> </ul>   | 15   | 1:40pm      |
| Next Steps/Meeting; Exxon Contacts      | Ron Mayhew presents   | 5    | 1:55pm      |
| Adjourn                                 |   |      | 2:00 pm     |

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289--DFB--94

August 1, 1994

| TO:      | Janet Richardson        |
|----------|-------------------------|
| FROM:    | Dave Boneau Dave Borlan |
| SUBJECT: | Avalon Delaware Unit    |

You recall I told Exxon that Yates would propose a participation formula for the proposed Avalon Delaware Unit. I talked to Peyton who said we should get 12% interest, but less was all right for an initial period.

I present the participation formula below for your consideration within Yates Petroleum:

1. From unitization until 4-1-97, the (Phase I) formula will be

65% Remaining Primary 25% WF and WO Delta 10% CO<sub>2</sub> Delta

2. After 4-1-97, the formula will be

20% Remaining Primary 30% WF and WO Delta 50% CO<sub>2</sub> Delta

- 3. Operating Expenses will be charged according to the Phase I formula until 4-1-97 and according to the Phase II formula after 4-1-97.
- 4. Capital Expenses will be charged according to the Phase II formula at all times after unitization.

• The proposed formula gives Yates and Exxon the interests shown below:

|       | <u>Phase I</u> | <u>Phase II</u> |
|-------|----------------|-----------------|
| Exxon | 0.795145       | 0.713124        |
| Yates | 0.095431       | 0.120027        |

The date 4-1-97 is the time when remaining primary of 1190 MBO will be produced via continued operations plus a waterflood with a start date of 7-1-95. The numbers below came from Exhibits G-11 and G-14 in the Exxon Technical Report:

Janet Richardson August 1, 1994 -2-

| Year | (G-11)<br><u>Primary (MBO)</u> | (G-14)<br><u>WF (MBO)</u> | Cum MBO |
|------|--------------------------------|---------------------------|---------|
| 1993 | 201                            | 0                         | 201     |
| 1994 | 149                            | 0,                        | 350     |
| 1995 | 119                            | 162                       | 631     |
| 1996 | 96                             | 348                       | 1075    |
| 1997 | 81                             | 391                       | 1547    |

The cumulative reaches 1190 MBO about 4-1-97.

Attachments 1 and 2 show the interests for all the owners in Bob Fant's database. Note that Patrick Petroleum is included in "Stonewall Others".

Let's talk.

DFB/cvg

Attachment

xc: Mike Slater Bob Fant Randy Patterson Kathy Porter Peyton Yates

| AVALON DELAW      | ARE UNIT |             |          |           |   |                                       |          |
|-------------------|----------|-------------|----------|-----------|---|---------------------------------------|----------|
|                   |          |             |          |           |   |                                       |          |
| Weighting Factors |          |             |          |           |   | · · · · · · · · · · · · · · · · · · · |          |
| OOIP              | 0.00     |             |          |           |   |                                       |          |
| Rem Primary       | 0.65     |             |          |           |   |                                       |          |
| WF & WO           | 0.25     |             |          |           |   |                                       |          |
| CO2 Delta         | 0.10     |             |          |           |   |                                       |          |
|                   | 1.00     |             |          |           |   |                                       |          |
|                   |          |             |          |           |   |                                       |          |
| OWNER             | OOIP     | Rem Primary | WF&WO    | CO2 Delta |   | OWNER                                 | INTEREST |
| Cities            | 0.011368 | 0.000000    | 0.000000 | 0.005383  | C | ities                                 | 0.000538 |
| Exxon             | 0.602341 | 0.850937    | 0.702359 | 0.664458  | E | xxon                                  | 0.795145 |
| GWA Others        | 0.001387 | 0.000041    | 0.000000 | 0.000306  | G | WA Others                             | 0.000057 |
| Hudson Brothers   | 0.033232 | 0.016519    | 0.033246 | 0.030441  | Н | udson Brothers                        | 0.022093 |
| JJ Redfren Jr     | 0.009943 | 0.007247    | 0.014585 | 0.011578  | J | J Redfren Jr                          | 0.009515 |
| Keystone Others   | 0.036358 | 0.000000    | 0.000000 | 0.004971  | K | eystone Others                        | 0.000497 |
| Mary Ard          | 0.016616 | 0.008259    | 0.016623 | 0.015220  | M | lary Ard                              | 0.011046 |
| Merit             | 0.023220 | 0.000000    | 0.000000 | 0.011230  | M | lerit                                 | 0.001123 |
| MWJ               | 0.017660 | 0.003496    | 0.006234 | 0.007904  | M | IWJ                                   | 0.004621 |
| Pennzoil          | 0.021073 | 0.004236    | 0.007341 | 0.015545  | P | ennzoil                               | 0.006143 |
| Premier           | 0.055592 | 0.000000    | 0.000000 | 0.051463  | P | remier                                | 0.005146 |
| Stonewall Others  | 0.047720 | 0.037202    | 0.075049 | 0.057011  | S | tonewall Others                       | 0.048645 |
| Yates et al       | 0.123490 | 0.072063    | 0.144563 | 0.124490  | Y | ates et al                            | 0.095431 |
|                   | 1.000000 | 1.000000    | 1.000000 | 1.000000  |   |                                       | 1.000000 |

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| AVALON DELAWARE UNIT |          |             |          |           |   |          |
|----------------------|----------|-------------|----------|-----------|---|----------|
|                      |          |             |          |           |   |          |
| Weighting Factors    |          |             |          |           |   |          |
| OOIP                 | 0.00     |             |          |           |   |          |
| Rem Primary          | 0.20     |             |          |           |   |          |
| WF & WO              | 0.30     |             |          |           |   |          |
| CO2 Delta            | 0.50     |             |          |           |   |          |
|                      | 1.00     |             |          |           | <br>                                      |          |
|                      |          |             |          |           | <br>· · · · · · · · · · · · · · · · · · · |          |
| OWNER                | OOIP     | Rem Primary | WF&WO    | CO2 Delta | <br>OWNER                                 | INTEREST |
| Cities               | 0.011368 | 0.000000    | 0.000000 | 0.005383  | <br>Cities                                | 0.002692 |
| Exxon                | 0.602341 | 0.850937    | 0.702359 | 0.664458  | Exxon                                     | 0.713124 |
| GWA Others           | 0.001387 | 0.000041    | 0.000000 | 0.000306  | GWA Others                                | 0.000161 |
| Hudson Brothers      | 0.033232 | 0.016519    | 0.033246 | 0.030441  | Hudson Brothers                           | 0.028498 |
| JJ Redfren Jr        | 0.009943 | 0.007247    | 0.014585 | 0.011578  | JJ Redfren Jr                             | 0.011614 |
| Keystone Others      | 0.036358 | 0.000000    | 0.000000 | 0.004971  | Keystone Others                           | 0.002486 |
| Mary Ard             | 0.016616 | 0.008259    | 0.016623 | 0.015220  | Mary Ard                                  | 0.014249 |
| Merit                | 0.023220 | 0.000000    | 0.000000 | 0.011230  | Merit                                     | 0.005615 |
| MWJ                  | 0.017660 | 0.003496    | 0.006234 | 0.007904  | MWJ                                       | 0.006521 |
| Pennzoil             | 0.021073 | 0.004236    | 0.007341 | 0.015545  | Pennzoil                                  | 0.010822 |
| Premier              | 0.055592 | 0.000000    | 0.000000 | 0.051463  | Premier                                   | 0.025732 |
| Stonewall Others     | 0.047720 | 0.037202    | 0.075049 | 0.057011  | Stonewall Others                          | 0.058461 |
| Yates et al          | 0.123490 | 0.072063    | 0.144563 | 0.124490  | Yates et al                               | 0.120027 |
|                      | 1.000000 | 1.000000    | 1.000000 | 1.000000  |   | 1.000000 |

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August 18, 1994

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| TO:      | Janet Richardson        |
|----------|-------------------------|
| FROM:    | Dave Boneau Dave Boneau |
| SUBJECT: | Avalon Delaware Unit    |

This is my second internal note concerning a participation formula for the proposed Avalon Delaware Unit. Bob Fant now agrees with Exxon upon the Tract ownership of the 50+ parties involved. You recall that I said that Peyton thought Yates et al should own 12 % of the proposed unit, but that a lesser ownership was acceptable for an initial period.

I present the participation formula below for your consideration within Yates Petroleum:

1. From unitization until 4-1-97, the (Phase I) formula will be

65 % Remaining Primary25 % Tract Waterflood Reserves10 % Tract CO2 Reserves

2. After 4-1-97, the (Phase II) formula will be

20 % Remaining Primary40 % Tract Waterflood Reserves40 % Tract CO2 Reserves

- 3. Operating Expenses will be charged according to the Phase I formula until 4-1-97 and according to the Phase II formula after 4-1-97.
- 4. Capital Expenses will be charged according to the Phase II formula at all times after unitization.

The proposed formula gives Yates and Exxon the interests shown below:

|       | Phase I  | Phase II |
|-------|----------|----------|
|       |          |          |
| Exxon | 0.797976 | 0.724939 |
| Yates | 0.094800 | 0.120907 |

These numbers increase slightly if the Premier acreage is eliminated from the unit.

The date 4-1-97 is the time when remaining primary reserves of 1190 MBO will be produced via continued operations plus a waterflood with a start date of 7-1-95. The numbers below came from Exhibits G-11 and G-14 in the Exxon Technical Report:

|      | G-11          | G-14     |                |
|------|---------------|----------|----------------|
| Year | Primary (MBO) | WF (MBO) | Cum MBO        |
|      |               |          | ************** |
| 1993 | 201           | 0        | 201            |
| 1994 | 149           | 0        | 350            |
| 1995 | 119           | 162      | 631            |
| 1996 | 96            | 348      | 1075           |
| 1997 | 81            | 391      | 1547           |

The cumulative reaches 1190 MBO about 4-1-97.

Attachment 1 shows the interests for all owners under the assumption that Premier remains in the Unit. The numbers in Attachment 2 apply if the Premier acreage is deleted.

My hope is that you and Bob Fant and I can reach a decision so Yates can send a proposed formula to Exxon and the other owners.

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Attachments

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copies: Mike Slater Bob Fant Randy Patterson Kathy Porter Peyton Yates

|   | With Premier Acreage            |   |  |                                       |  |
|---|---------------------------------|---|--|---------------------------------------|--|
|   | G-24 Tract 20 % Primary 65 % Pr |   |  | 65 % Primary                          |  |
|   | G-24 1/1/93                     | Waterflood                              | G-24 Tract   | +40 % WF +                            |  |
|   | Rem Primary                     | Reserves                                | CO2 Reserves   |                                       | +10 % CO2  |
| Abo Petroleum Corporation               | 0.6731%                         |   |  |                                       |  |
| American National Petroleum Corp.       | 2.8177%                         |   | 4,7210%  |                                       | · · · · · · · · · · · · · · · · · · ·  |
| Ard, Mary H.                            | 0.8259%                         |   | 1,3331%  |                                       |  |
| Bello, Ernie                            | 0.0046%                         | 0.0088%                                 | 0.0075%  | 0.0074%                               |  |
| Bunn, Mrs. Francis B.                   | 0.0046%                         |   | 0,0075%  | 0,0074%                               |  |
| Chevron PBC, Inc.                       | 0.4236%                         | · · · · · · · · · · · · · · · · · · ·   | 1.8238%  | 1.0885%                               |  |
| Claremont Corporation                   | 0,1549%                         |   | 0.2500%  |                                       |  |
| Devon Energy Corporation (NV)           | 0.0691%                         |   | 0.1117%  |                                       |  |
| Devon Energy Partners L.P.              | 0.3916%                         |   | 0.6331%  |                                       |  |
| Exxon Corporation                       | 85.0937%                        |   | 67.9021%   |                                       |  |
| Fox, Fred A. & D. Marjean Living        |                                 |   |  |                                       |  |
| Trust                                   | 0.0005%                         | 0.0000%                                 | 0.0038%  | 0.0016%                               | 0.0007%  |
| Gendron Family Revocable Tr             | 0.0069%                         | · · · · ·                               |  |                                       | · · · · · · · · · · · · · · · · · · ·  |
| Goodnow, David                          | 0.0046%                         |   |  |                                       | second and second secon |
| Hayes Partners I                        | 0.0000%                         |   |  | +                                     |  |
| Hodge, Joseph R.                        | 0.0008%                         | · · · · · · · · · · · · · · · · · · ·   |  |                                       |  |
| Hodge, Sanford J. III                   | 0.0008%                         |   |  |                                       |  |
| Holden, E. G. Testmentary Tr            | 0.0023%                         |   |  |                                       |  |
| Hudson, Edward R. Jr.                   | 0.8259%                         |   | A many sets and an an anti-  | 1                                     | 1  |
| Hudson, William A. II                   | 0.8259%                         | •                                       | +  |                                       | +  |
| Kawasaki, Isaac A.                      | 0.0046%                         | · · · · · · · · · · · · · · · · · · ·   | · · · · · · · · · · · · · · · · · · ·  |                                       |  |
| Keller, Betsy H.                        | 0.004076                        | ····-                                   |  |                                       | · · · · · · · · · · · · · · · · · · ·  |
| Kerr-McGee Corporation                  | 0.1493%                         |   | · · · · · · · · · · · · · · · · · · ·  | · · · · · · · · · · · · · · · · · · · |  |
| LAJ Corporation                         | 0.0010%                         |   |  |                                       |  |
| Los Chicos                              | 0.0010%                         |   |  |                                       |  |
| Martin, James L. Jr., Trust             | 0.0005%                         |   |  |                                       |  |
| Martin, Williams, & Judson              | 0.3496%                         |   |  | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · ·  |
| McCall, Jack O. Estate of               | 0.0000%                         |   | · · · · · · · · · · · · · · · · · · ·  |                                       |  |
|   | 0.0000%                         | · · · · · · · · · · · · · · · · · · ·   | and the second s |                                       |  |
| Merit Energy Partners, II, L.P.         |                                 |   |  |                                       |  |
| Merit Energy Partners, III, L.P.        | 0.0000%                         |   | ·  |                                       |  |
| Merit Energy Partners, L.P.             | 0.0000%                         |   |  | · · · · · · · · · · · · · · · · · · · |  |
| Moore, Charles Cline                    | 0.0115%                         |   |  |                                       |  |
| Munroe, Vernon                          | 0.0046%                         |   |  |                                       |  |
| Myco Industries, Inc.                   | 2.0241%                         |   | · · · · · · · · · · · · · · · · · · ·  |                                       |  |
| Napeco                                  | 0.0000%                         |   |  |                                       |  |
| Oliver, Angus Cluthe Tr                 | 0.0046%                         |   |  |                                       |  |
| Oliver, William B. Tr                   | 0.0046%                         |   |  |                                       |  |
| Oxy U.S.A., Inc.                        | 0.0000%                         |   |  |                                       |  |
| Premier Oil & Gas, Inc.                 | 0.0000%                         | 0.0000%                                 | 4.0769%  | 1.6308%                               | 0.4077%  |
| Redfern, John J. III, Indep Exec of Est | 0.05050                         |   |  |                                       |  |
| of John J. Redfern,                     | 0.0725%                         |   |  |                                       |  |
| Redfern, Rosalind                       | 0.0725%                         |   |  |                                       |  |
| Schlagal, John L.                       | 0.0005%                         |   |  |                                       |  |
| Martl, Adolph P. Schuman Tr             | 0.0046%                         | · • · · · · · · · · · · · · · · · · · · |  |                                       |  |
| Seventy-Seven Corporation               | 0.0000%                         |   |  |                                       |  |
| Sigmar, Inc.                            | 0.0016%                         |   |  |                                       |  |
| Space Building Corp.                    | 0.0115%                         |   |  |                                       |  |
| Tipperary Oil Corporation               | 0.3199%                         |   |  |                                       |  |
| TR Oil Corporation                      | 0.0000%                         |   |  |                                       |  |
| Van Vranken, J. F. Jr.                  | 0.0046%                         | -+                                      |  |                                       |  |
| Whiting Petroleum Corporation           | 0.3199%                         |   |  |                                       |  |
| Yates Drilling Company                  | 2.0192%                         |   |  |                                       | 2.6496%  |
| Yates Petroleum Corporation             | 2.4800%                         | 4.9051%                                 | 4.3094%  | 4.1818%                               | 3.2692%  |
| Yates, John A.                          | 0.0049%                         | 0,0000%                                 | 0.0446%  | 0.0188%                               | 0.0076%  |
| Yates, S. P.                            | 0.0049%                         | 0.0000%                                 | 0.0346%  | 0.0148%                               | 0.0066%  |
|   | 100.0000%                       | 6 100,0000%                             |  |                                       |  |
|   |                                 |   |  |                                       |  |
| YPC Et al                               | 7.2063%                         | 6 14.2240%                              | 12.3996%   | 12.0907%                              | 9.4800%  |

ATTACHMENT 1

|   | 1           | With        | out Premier Ac   | reage                                   |  |
|---|-------------|-------------|--|---|--|
|   |             | G-24 Tract  |  |   | 65 % Primary   |
|   | G-24 1/1/93 | Waterflood  | G-24 Tract   | + 40 % WF +                             |  |
| ×                                       | Rem Primary | Reserves    |  | 40 % CO2                                | +10 % CO2  |
| Abo Petroleum Corporation               | 0.6731%     | 1.3313%     | 1.2443%  |   | 0.8948%  |
| American National Petroleum Corp.       | 2.8177%     |             | 4.9217%  |   | 3.7066%  |
| Ard, Mary H.                            | 0.8259%     | t           | 1.3898%  |   | 1.0842%  |
| Bello, Ernie                            | 0.0046%     |             | 0.0078%  |   |  |
| Bunn, Mrs. Francis B.                   | 0.0046%     |             | 0.0078%  |   |  |
| Chevron PBC, Inc.                       | 0.4236%     |             |  | · · · · · · · · · · · · · · · · · · ·   |  |
| Claremont Corporation                   | 0.1549%     |             |  |   | And and a second s |
| Devon Energy Corporation (NV)           | 0.0691%     |             |  |   |  |
| Devon Energy Partners L.P.              | 0.3916%     |             |  | + · · · · · · · · · · · · · · · · · · · |  |
| Exxon Corporation                       | 85.0937%    |             |  |   |  |
| Fox, Fred A. & D. Marjean Living        | 65.075776   | 10.785770   | /0./881/6  | 75,048570                               | 00.080270  |
| Trust                                   | 0.0005%     | 0.0000%     | 0.0040%  | 0.0017%                                 | 0.0007%  |
|   | 0.0069%     |             |  |   |  |
| Gendron Family Revocable Tr             |             |             | · · · ·  |   |  |
| Goodnow, David                          | 0.0046%     | 4-          |  |   |  |
| Hayes Partners I                        | 0.0000%     |             | ·  |   |  |
| Hodge, Joseph R.                        | 0.0008%     |             |  |   |  |
| Hodge, Sanford J. III                   | 0.0008%     |             |  |   |  |
| Holden, E. G. Testmentary Tr            | 0.0023%     |             |  |   |  |
| Hudson, Edward R. Jr.                   | 0.8259%     | 1.6336%     | 1.3898%  | 1.3745%                                 | 1.0842%  |
| Hudson, William A. II                   | 0.8259%     |             |  | 1.3745%                                 | 1.0842%  |
| Kawasaki, Isaac A.                      | 0.0046%     | 0.0088%     | 0.0078%  | 0.0076%                                 | 0.0060%  |
| Keller, Betsy H.                        | 0.0023%     | 0.0044%     | 0.0039%  | 0,0038%                                 | 0.0030%  |
| Kerr-McGee Corporation                  | 0.1493%     | 0.2953%     | 0.2512%  |   |  |
| LAJ Corporation                         | 0.0010%     | 0.0000%     | 0.0076%  | 0.0033%                                 | 0.0014%  |
| Los Chicos                              | 0.0000%     | 0,0000%     | 0.0104%  | 0.0042%                                 | 0.0010%  |
| Martin, James L. Jr., Trust             | 0.0005%     | 0,0000%     | 0.0040%  | 0.0017%                                 | 0.0007%  |
| Martin, Williams, & Judson              | 0.3496%     | 0.6126%     | 0.8157%  | 0.6413%                                 | 0.4620%  |
| McCall, Jack O. Estate of               | 0.0000%     | 0.0000%     | 0,0004%  | 0.0001%                                 | 0.0000%  |
| Merit Energy Partners, II, L.P.         | 0.0000%     | 0.0000%     | 0.3871%  | 0.1548%                                 | 0.0387%  |
| Merit Energy Partners, III, L.P.        | 0.0000%     | 0.0000%     | 0.3871%  | 0.1548%                                 | 0.0387%  |
| Merit Energy Partners, L.P.             | 0.0000%     | 0.0000%     | 0.3871%  | 0.1548%                                 | 0.0387%  |
| Moore, Charles Cline                    | 0.0115%     | 0.0219%     | 0.0197%  | 0.0189%                                 | 0.0149%  |
| Munroe, Vernon                          | 0.0046%     | 0.0088%     | 0.0078%  | 0.0076%                                 | 0.0060%  |
| Myco Industries, Inc.                   | 2.0241%     | 3.9938%     | 3.5664%  |   |  |
| Napeco                                  | 0.0000%     | ~           | · · · · · · · · · · · · · · · · · · ·  |   |  |
| Oliver, Angus Cluthe Tr                 | 0.0046%     |             |  |   |  |
| Oliver, William B. Tr                   | 0,0046%     |             |  |   |  |
| Oxy U.S.A., Inc.                        | 0.0000%     |             | C A THE ADDRESS OF TH |   |  |
| Premier Oil & Gas, Inc.                 | 0.0000%     |             | · · · · · · · · · · · · · · · · · · ·  | · · · · · · · · · · · · · · · · · · ·   |  |
| Redfern, John J. III, Indep Exec of Est |             |             | 0.0000   | 0.00007                                 | 0.00007  |
| of John J. Redfern,                     | 0.0725%     | 0.1433%     | 0.1219%  | 0.1206%                                 | 0.0951%  |
| Redfern, Rosalind                       | 0.0725%     |             |  |   |  |
| Schlagal, John L.                       | 0.0005%     |             | · · · · · · · · · · · · · · · · · · ·  |   |  |
| Martl, Adolph P. Schuman Tr             | 0.0046%     |             |  |   |  |
| Seventy-Seven Corporation               | 0.0000%     |             |  |   |  |
| Sigmar, Inc.                            | 0.0016%     |             |  |   | · · · · · · · · · · · · · · · · · · ·  |
| Space Building Corp.                    | 0.0018%     |             |  |   |  |
| Tipperary Oil Corporation               | 0.3199%     |             |  |   |  |
| TR Oil Corporation                      |             |             |  |   |  |
|   | 0.0000%     |             |  |   |  |
| Van Vranken, J. F. Jr.                  |             |             |  |   |  |
| Whiting Petroleum Corporation           | 0.3199%     |             |  |   |  |
| Yates Drilling Company                  | 2.0192%     |             |  |   |  |
| Yates Petroleum Corporation             | 2.4800%     |             | ·····  |   |  |
| Yates, John A.                          | 0.0049%     |             |  |   |  |
| Yates, S. P.                            | 0.0049%     |             |  |   |  |
|   | 100.0000%   | 6 100.0000% | 6 100.0000%  | 6 100.0000%                             | 6 100.0000%  |
| YPC Et al                               | 7.2063%     | 6 14.2240%  | 6 12.9266%   | 6 12.30159                              | <u>9.53279</u>   |

ATTACHMENT Z



3I

21,



S. P. YATES PRESIDENT JOHN A. YATES VICE PRESIDENT B. W. HARPER SEC. - TREAS.

105 SOUTH FOURTH STREET ARTESIA, NEW MEXICO 88210 TELEPHONE (505) 748-1471

September 6, 1994

Exxon Company, USA P. O. Box 1600 Midland, Texas 79702-1600

ATTN: Ronald E. Mayhew

RE: Avalon Delaware Unit

Dear Sir:

Yates Petroleum proposes the following participation formula for the Avalon Delaware Unit:

1. The Phase I formula will be

60% Remaining Primary 30% Tract Waterflood Reserves 10% Tract CO<sub>2</sub>

2. The Phase II formula will be

20% Remaining Primary 40% Tract Waterflood Reserves 40% Tract CO<sub>2</sub> Reserves

- 3. Phase I will end and Phase II will begin on 4-1-97 or when oil production from the Unit area (after 1-1-93) reaches 1190 KBO, whichever occurs earlier in time.
- 4. Operating Expenses during Phase I will be charged according to the Phase I formula and Operating Expenses during Phase II will be charged according to the Phase II formula.
- 5. Capital Expenses will be charged according to the Phase II formula at all times after unitization.

Ronald Mayhew September 6, 1994 -2-

The proposed formula gives Exxon and Yates the interests shown below:

|       | <u>Phase I</u> | <u>Phase II</u> |
|-------|----------------|-----------------|
| Exxon | 0.790822       | 0.724939        |
| Yates | 0.098309       | 0.120907        |

These interests increase slightly if the Premier acreage is eliminated from the Unit.

The date 4-1-97 is the time when remaining primary reserves of 1190 KBO will be produced via continued operations plus a waterflood with a start date of 7-1-95. The numbers below come from Exhibits G-11 and G-14 in the Avalon Technical Report:

| Year | G-11<br><u>Primary (KBO)</u> | G-14<br><u>WF (KBO)</u> | <u>Cum KBO</u> |
|------|------------------------------|-------------------------|----------------|
| 1993 | 201                          | 0                       | 201            |
| 1994 | 149                          | 0                       | 350            |
| 1995 | 119                          | 162                     | 631            |
| 1996 | 96                           | 348                     | 1075           |
| 1997 | 81                           | 391                     | 1547           |

The cumulative reaches 1190 KBO about 4-1-97.

Attachment 1 shows the interests for all owners under the assumption that Premier remains in the Unit. The numbers in Attachment 2 apply if the Premier acreage is deleted.

£

I ask that you forward this proposal to the Working Interest Owners and that all owners reply with questions and comments as appropriate.

Sincerely,

ave Boreau

David F. Boneau Reservoir Engineering Supervisor

DFB/cvg

Attachments

|   | With Premier Acreage               |   |                                       |                                       |           |
|---|------------------------------------|---|---------------------------------------|---------------------------------------|-----------|
|   | G-24 Tract 20 % Primary 60 % Prima |   |                                       | 60 % Primary                          |           |
|   | G-24 1/1/93                        | Waterflood  | G-24 Tract                            | + 40 % WF +                           | + 30 % WF |
|   | Rem Primary                        | Reserves  | CO2 Reserves                          | 40 % CO2                              | +10 % CO2 |
| Abo Petroleum Corporation               | 0.6731%                            | 1,3313%   | 1.1936%                               | 1.1446%                               | 0.9226%   |
| American National Petroleum Corp.       | 2.8177%                            | 5.5317%   | 4.7210%                               | 4.6647%                               | 3.8222%   |
| Ard, Mary H.                            | 0.8259%                            | 1.6336%   | 1.3331%                               | 1.3519%                               | 1.1189%   |
| Bello, Ernie                            | 0.0046%                            | 0.0088%   | 0.0075%                               | 0.0074%                               | 0.0061%   |
| Bunn, Mrs. Francis B.                   | 0.0046%                            | 0.0088%   | 0.0075%                               | 0.0074%                               | 0.0061%   |
| Chevron PBC, Inc.                       | 0.4236%                            | 0.6857%   | 1.8238%                               | 1.0885%                               | 0.6422%   |
| Claremont Corporation                   | 0.1549%                            | 0.3063%   | 0.2500%                               | 0.2535%                               | 0.2098%   |
| Devon Energy Corporation (NV)           | 0.0691%                            | 0.1367%   | 0.1117%                               | 0.1132%                               | 0.0937%   |
| Devon Energy Partners L.P.              | 0.3916%                            | 0.7746%   | 0.6331%                               | 0.6414%                               | 0.5307%   |
| Exxon Corporation                       | 85.0937%                           | 70.7857%  | 67.9021%                              | 72.4939%                              | 79.0822%  |
| Fox, Fred A. & D. Marjcan Living        |                                    |   |                                       |                                       |           |
| Trust                                   | 0.0005%                            | 0.0000%   | 0.0038%                               | 0.0016%                               | 0.0007%   |
| Gendron Family Revocable Tr             | 0.0069%                            | 0.0132%   | 0.0112%                               | 0.0111%                               | 0.0092%   |
| Goodnow, David                          | 0.0046%                            | 0.0088%   | 0.0075%                               | 0.0074%                               | 0.0061%   |
| Hayes Partners I                        | 0.0000%                            |   |                                       |                                       |           |
| Hodge, Joseph R.                        | 0.0008%                            |   |                                       |                                       | 0.0010%   |
| Hodge, Sanford J. III                   | 0,0008%                            |   |                                       | 0.0012%                               |           |
| Holden, E. G. Testmentary Tr            | 0.0023%                            |   |                                       | 0.0037%                               |           |
| Hudson, Edward R. Jr.                   | 0.8259%                            |   |                                       | 1.3519%                               |           |
| Hudson, William A. II                   | 0.8259%                            |   | A A A A A A A A A A A A A A A A A A A | 1.3519%                               |           |
| Kawasaki, Isaac A.                      | 0.0046%                            |   |                                       |                                       |           |
| Keller, Betsy H.                        | 0.0023%                            | ···· - ··· · · · · · · · · · · · · · ·  |                                       |                                       |           |
| Kerr-McGee Corporation                  | 0.1493%                            |   |                                       | 0.2444%                               |           |
| LAJ Corporation                         | 0.0010%                            |   | · · · · · · · · · · · · · · · · · · · |                                       |           |
| Los Chicos                              | 0,0000%                            |   |                                       |                                       |           |
| Martin, James L. Jr., Trust             | 0.0005%                            | 0.0000%   | 0.0038%                               | 0.0016%                               | 0.0007%   |
| Martin, Williams, & Judson              | 0.3496%                            | · · · · · · · · · · · · · · · · · · ·   |                                       |                                       |           |
| McCall, Jack O. Estate of               | 0.0000%                            | 0.0000%   | 0.0003%                               | 0.0001%                               | 0.0000%   |
| Merit Energy Partners, II, L.P.         | 0.0000%                            | 0.0000%   | 0.3713%                               | 0.1485%                               | 0.0371%   |
| Merit Energy Partners, III, L.P.        | 0.0000%                            | 0,0000%   | 0.3713%                               | 0.1485%                               | 0.0371%   |
| Merit Energy Partners, L.P.             | 0.0000%                            | 0.0000%   | 0.3713%                               | 0.1485%                               | 0.0371%   |
| Moore, Charles Cline                    | 0.0115%                            | 0.0219%   | 0.0189%                               | 0.0186%                               | 0.0154%   |
| Munroe, Vernon                          | 0.0046%                            | 0.0088%   | 0.0075%                               | 0.0074%                               | 0.0061%   |
| Myco Industries, Inc.                   | 2.0241%                            | 3.9938%   | 3.4210%                               | 3.3708%                               | 2.7547%   |
| Napeco                                  | 0.000%                             | 0.000%  | 0.0719%                               | 0.0287%                               | 0.0072%   |
| Oliver, Angus Cluthe Tr                 | 0.0046%                            | 0.0088%   | 0.0075%                               | 0.0074%                               | 0.0062%   |
| Oliver, William B. Tr                   | 0.0046%                            | 0.0088%   | 0.0075%                               | 0.0074%                               | 0.0062%   |
| Oxy U.S.A., Inc.                        | 0.0000%                            | 0.0000%   | 0.5361%                               | 0.2144%                               | 0.0536%   |
| Premier Oil & Gas, Inc.                 | 0.0000%                            | 0.0000%   | 4.0769%                               | 1.6308%                               | 0.4077%   |
| Redfern, John J. III, Indep Exec of Est |                                    |   |                                       |                                       |           |
| of John J. Redfern,                     | 0.0725%                            | 0.1433%   | 0.1170%                               | 0.1186%                               | 0.0982%   |
| Redfern, Rosalind                       | 0.0725%                            | 0.1433%   | 0.1170%                               | 0.1186%                               | 0.0982%   |
| Schlagal, John L.                       | 0.0005%                            | 0.0000%   | 0.0032%                               | 0.0014%                               | 0.0006%   |
| Martl, Adolph P. Schuman Tr             | 0.0046%                            | 0.0088%   | 0.0075%                               | 0.0074%                               | 0,0061%   |
| Seventy-Seven Corporation               | 0.0000%                            | 0.0000%   | 0.0080%                               | 0.0032%                               | 0.0008%   |
| Sigmar, Inc.                            | 0.0016%                            | 0.0000%   | 0.0111%                               | 0.0048%                               | 0.0021%   |
| Space Building Corp.                    | 0.0115%                            | a second s |                                       |                                       |           |
| Tipperary Oil Corporation               | 0.3199%                            | 0.6561%   | 0.4468%                               |                                       | ·····     |
| TR Oil Corporation                      | 0.0000%                            |   |                                       |                                       |           |
| Van Vranken, J. F. Jr.                  | 0.0046%                            |   |                                       |                                       |           |
| Whiting Petroleum Corporation           | 0.3199%                            | 0.6561%   | 0.4468%                               | · · · · · · · · · · · · · · · · · · · |           |
| Yates Drilling Company                  | 2.0192%                            | 1   |                                       | 3.3559%                               | 2.7483%   |
| Yates Petroleum Corporation             | 2.4800%                            |   |                                       | · · · · · · · · · · · · · · · · · · · | 3.3905%   |
| Yates, John A.                          | 0.0049%                            |   |                                       | ····                                  | 0.0074%   |
| Yates, S. P.                            | 0.0049%                            |   |                                       |                                       |           |
|   | 100.0000%                          | 100.0000%   | 100.0000%                             | 100.0000%                             | 100.0000% |
| YPC Et al                               | 7.2063%                            | 14.2240%  | 12.3996%                              | 12.0907%                              | 9.8309%   |

|   | Without Premier Acreage      |                                       |   |                                       |                                       |
|---|------------------------------|---------------------------------------|---|---------------------------------------|---------------------------------------|
|   |                              | G-24 Tract                            |   | 20 % Primary                          | 60 % Primary                          |
|   | G-24 1/1/93                  | Waterflood                            | G-24 Tract  | + 40 % WF +                           |                                       |
|   | Rem Primary                  | Reserves                              | CO2 Reserves  | 40 % CO2                              | +10 % CO2                             |
| Abo Petroleum Corporation               | 0.6731%                      |                                       | 1.2443%   | 1.1649%                               | 0.9277%                               |
| American National Petroleum Corp.       | 2.8177%                      |                                       | 4.9217%   | 4.7449%                               | 3.8423%                               |
| Ard, Mary H.                            | 0.8259%                      |                                       | · · · · · · · · · · · · · · · · · · ·   | 1.3745%                               | 1.1246%                               |
| Bello, Ernie                            | 0.0046%                      | 0.0088%                               | 0.0078%   | 0.0076%                               | 0.0062%                               |
| Bunn, Mrs. Francis B.                   | 0.0046%                      | 0.0088%                               | 0.0078%   | 0.0076%                               | 0.0062%                               |
| Chevron PBC, Inc.                       | 0.4236%                      | 0.6857%                               | 1.9014%   | 1.1195%                               | 0.6500%                               |
| Claremont Corporation                   | 0.1549%                      | 0.3063%                               | 0.2606%   | 0.2577%                               | 0.2109%                               |
| Devon Energy Corporation (NV)           | 0.0691%                      |                                       | 0.1165%   | 0.1151%                               | 0.0941%                               |
| Devon Energy Partners L.P.              | 0.3916%                      | 0.7746%                               | 0.6600%   | 0.6522%                               | 0.5334%                               |
| Exxon Corporation                       | 85.0937%                     | 70.7857%                              | 70.7881%  | 73.6483%                              | 79.3708%                              |
| Fox, Fred A. & D. Marjean Living        |                              |                                       |   |                                       |                                       |
| Trust                                   | 0.0005%                      | 0,0000%                               | 0.0040%   | 0.0017%                               | 0.0007%                               |
| Gendron Family Revocable Tr             | 0.0069%                      | 0.0132%                               | 0.0117%   | 0.0113%                               | 0.0093%                               |
| Goodnow, David                          | 0.0046%                      | 0.0088%                               | 0.0078%   | 0.0076%                               | 0.0062%                               |
| Hayes Partners I                        | 0.0000%                      | 0.0000%                               | 0.0429%   | 0.0172%                               | 0.0043%                               |
| Hodge, Joseph R.                        | 0.0008%                      | 0.0015%                               | 0.0013%   |                                       | 0.0010%                               |
| Hodge, Sanford J. III                   | 0.0008%                      | 0.0015%                               | 0.0013%   | 0.0013%                               | 0.0010%                               |
| Holden, E. G. Testmentary Tr            | 0.0023%                      | 0.0044%                               |   |                                       |                                       |
| Hudson, Edward R. Jr.                   | 0.8259%                      |                                       |   |                                       |                                       |
| Hudson, William A. II                   | 0.8259%                      |                                       |   | · · · · · · · · · · · · · · · · · · · |                                       |
| Kawasaki, Isaac A.                      | 0.0046%                      |                                       |   | 1                                     | 0.0062%                               |
| Keller, Betsy H.                        | 0.0023%                      |                                       |   |                                       | 0.0031%                               |
| Kerr-McGee Corporation                  | 0.1493%                      |                                       |   | ·                                     |                                       |
| LAJ Corporation                         | 0.0010%                      |                                       | • · · · · · · · · · · · · · · · · · · ·   | 4                                     |                                       |
| Los Chicos                              | 0 0000%                      | A                                     | · · · · · · · · · · · · · · · · · · ·   |                                       |                                       |
| Martin, James L. Jr., Trust             | 0.0005%                      |                                       | · · · · · · · · · · · · · · · · · · ·   |                                       | · · · · · · · · · · · · · · · · · · · |
| Martin, Williams, & Judson              | 0.3496%                      |                                       | A community of a community of a set of the community of the set of the community of the set of the |                                       |                                       |
| McCall, Jack O. Estate of               | 0.0000%                      | · · · · · · · · · · · · · · · · · · · |   |                                       |                                       |
| Merit Energy Partners, II, L.P.         | 0.0000%                      |                                       |   |                                       |                                       |
| Merit Energy Partners, III, L.P.        | 0.0000%                      |                                       |   |                                       |                                       |
| Merit Energy Partners, L.P.             | 0.0000%                      | 4                                     |   |                                       |                                       |
| Moore, Charles Cline                    | $-\frac{0.0115\%}{0.0016\%}$ | and the second states and the         |   | · · · · · · · · · · · · · · · · · · · | • • • • • • • • • • • • • • • • • • • |
| Munroe, Vernon                          | 0.0046%                      |                                       |   | A                                     |                                       |
| Myco Industries, Inc.                   | 2.0241%                      |                                       |   |                                       |                                       |
| Napeco<br>Oliver, Angus Cluthe Tr       | 0.0000%                      |                                       |   | · · · · · · · · · · · · · · · · · · · |                                       |
| Oliver, William B. Tr                   | 0.0046%                      |                                       | 1   |                                       |                                       |
| Orver, witham B. 11<br>Oxy U.S.A., Inc. | 0.0000%                      | · · · · · · · · · · · · · · · · · · · |   |                                       |                                       |
| Premier Oil & Gas, Inc.                 | 0.0000%                      | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · ·   |                                       |                                       |
| Redfern, John J. III, Indep Exec of Est | 0.0007                       | 0.0007                                | 0.00070   | 0.00076                               | 0.00076                               |
| of John J. Redfern,                     | 0.0725%                      | 0.1433%                               | 0.1219%   | 0.1206%                               | 0.0987%                               |
| Redfern, Rosalind                       | 0.0725%                      | · · · · · · · · · · · · · · · · · · · |   |                                       | 1                                     |
| Schlagal, John L.                       | 0.0005%                      |                                       |   |                                       |                                       |
| Martl, Adolph P. Schuman Tr             | 0.0046%                      |                                       |   |                                       |                                       |
| Seventy-Seven Corporation               | 0.0000%                      |                                       |   |                                       |                                       |
| Sigmar, Inc.                            | 0.0016%                      |                                       |   |                                       |                                       |
| Space Building Corp.                    | 0.0115%                      |                                       |   |                                       |                                       |
| Tipperary Oil Corporation               | 0.3199%                      | 0.6561%                               | 0.4658%   | 0.5128%                               | 0.4353%                               |
| TR Oil Corporation                      | 0.0000%                      | 0.0000%                               | 0.0044%   | 0.0017%                               | 0.0004%                               |
| Van Vranken, J. F. Jr.                  | 0.0046%                      | 0.0088%                               | 0.0078%   | 0.0076%                               | 0.0062%                               |
| Whiting Petroleum Corporation           | 0.3199%                      | 0.6561%                               |   |                                       | 0.4353%                               |
| Yates Drilling Company                  | 2.0192%                      | 3.9938%                               | 3.5303%   | 3.4135%                               | 2.7627%                               |
| Yates Petroleum Corporation             | 2.4800%                      | 4.9051%                               | · · · · · · · · · · · · · · · · · · ·   |                                       |                                       |
| Yates, John A.                          | 0.0049%                      |                                       |   |                                       |                                       |
| Yates, S. P.                            | 0.0049%                      |                                       | · · · · · · · · · · · · · · · · · · ·   |                                       |                                       |
|   | 100.0000%                    | 100.0000%                             | 100.0000%   | 100.0000%                             | 100.0000%                             |
|   |                              |                                       |   |                                       |                                       |
| YPC Et al                               | 7.2063%                      | 14.2240%                              | 12.9266%  | 12.3015%                              | 9.8836%                               |

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POST OFFICE BOX 1600 · MIDLAND, TEXAS 79702-1600

PRODUCTION DEPARTMENT SOUTHWESTERN DIVISION

October 10, 1994

Re: Yates Letter: Sept. 6, 1994 Avalon (Delaware) Field, Eddy Co., N.M.

David Boneau, Reservoir Engineering Supervisor Yates Petroleum Corporation 105 S. Fourth Street Artesia, N. M. 88210

Dear Mr. Boneau:

One of the action items from our 6/17/94 Working Interest Owners' Meeting was for you to provide an alternative Equity Formula.

We have reviewed your proposal dated September 6, 1994. Instead of immediately circulating your letter, followed by our response, to the Working Interest Owners (WIO's) we believe it would be simpler if Yates and Exxon attempt to reach agreement on these matters, or at least clarify our positions as much as possible, prior to transmitting to WIOs. Our fundamental difference lies in equity resulting from how Phase 1 and 2 are defined.

-> The waterflood is the reason the Unit has value to all of us and your representation of Phase 1 would be acceptable to us for the waterflood. The CO<sub>2</sub> flood has some probability of happening/not happening and your representation of Phase 2 is acceptable if a  $CO_2$  flood is in the future at Avalon.

If your proposal is modified as follows we could support it:

- Reference Item 4, your letter: We prefer to vote for a Phase change coincident with WIO's agreeing to proceed with a CO<sub>2</sub> flood. However, if this is a problem, a compromise we would offer is to revise the automatic phase change date closer to an risked  $CO_2$  injection date, such as the earlier of 12/31/2004 or the actual date of CO<sub>2</sub> injection.
- Clarification. Item 5: Investment equalization is not covered. It would seem consistent to treat it similar to Capital Expenditures, basing it on Phase 2 participation.
- <u>Clarification if Premier Acreage not in Unit</u>: Attachment 2 in your letter assumes a similar • development plan if Premier acreage is not in the Unit. If Premier is not in the unit the 20 acre swath adjoining their 4 tracts could not be flooded; therefore, those reserves in those tracts would not be included in the calculation.

Our response to other areas of interest to you and other owners from our Working Interest Owners meeting are summarized in Attachment I. If these counterproposals are acceptable to you we will circulate the correspondence to all owners and request a vote under the pre-unit voting agreement.

Sincerely,

fauld E. Theyper

Ronald E. Mayhew Avalon Project Manager

rem/unitcoun.doc ATTACHMENT OF EXXON CORPORATION



# Attachment I: Other areas of interest, Avalon Unitization

| Topic                           | WIO Issue  | Exxon Proposal   |
|---------------------------------|--|--|
| Voting Percentage               | 75% approval level would<br>give Exxon control of<br>vote during Phase 1                     | Agree with WIO issue in concept; will<br>work out exact details and numbers when<br>participation determined   |
| After Payout (APO)              | requires a change in<br>previous agreements  | Unclear what Exxon as operator would<br>need to do. Willing to consider if clear<br>understanding of how to administer can be<br>obtained.   |
| Overhead                        | seems high compared to<br>Ernst & Young data   | <ul> <li><u>As discussed in WIO Meeting</u>:</li> <li>Ernst &amp; Young not comparable</li> <li>no change unless comparable data for<br/>Avalon is submitted for discussion</li> </ul> |
| Bidding Crude & CO <sub>2</sub> | would like UOA to<br>incorporate bidding of<br>$CO_2$ and crude oil by<br>operator for WIO's | Done: Wording submitted to ANPC<br>8/25/94, who made this request  |

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#### **Topics/Issues for Discussion**

#### 11-21-94

#### **First Topics**

#### Affect of Premier on Yates recoverable reserves:

#### **Methodology for Reserve Calculation:**

- Exxon Tech. Report
- Yates: recoverable gas reserves added

#### Charging Investments during Yates Phase I at Phase II WI:

- How to explain as fair to owners who have 4 times Phase II interest as Phase I (Premier, Napeco, Merit, TR Oil, Hayes Partners, 77 Corp.)
- Likelihood of state approval with some of above contesting

#### Exxon Equity Methodology & Needs

- look at waterflood economics (keep CO<sub>2</sub> as upside)
- Equity approach recognizes relative <u>timing</u> and <u>cost</u> to produce primary, secondary, and tertiary barrels (present value)

#### Yates Equity Methodology & Needs

#### **Second Topics**

#### **Voting Needs:**

- Using Yates Phase 2 numbers: 2nd: Yates=12.1 3rd: ANPC=4.7 4th: Hudson =2.8
  - 5th: Premier=1.6
  - 6th Ard=1.4
  - 7th: Pennzoil=1.1
  - 8th: Tipperary=0.5
  - 9th: Whiting=0.5

#### **Overhead:**

APO:

Bidding of CO2 and Crude: Done, language proposed to ANPC 8/94

-> VOTING PROCEDURE -

11-21-94

# Equity Methodology, Unitizing Remaining Primary & Waterflood

|                                 | 4. Exxon modified<br>to Yates with<br>1/2000 for phase<br>change, 10/94 | 3. Yates 9/94                        | <b>2. Exxon 4/94</b> (start 7/1/95)      | <b>1. Exxon 4/94</b> (start 1/1/94)      | Case                     |
|---------------------------------|---|--------------------------------------|--|--|--------------------------|
| The A                           | 3.98  | 3.55                                 | 3.98                                     | 4.08                                     | PVP<br>@20%<br>\$million |
|                                 | 79.1/72.<br>5 after<br>1/2000   | 79.1/72.<br>5 after<br>4/97          | 78.9                                     | 79.7                                     | Exxon<br>Wl              |
|                                 | .098/.121<br>after 1/2000   | .098/.121<br>after 4/97              | .103                                     | .098                                     | Yates WI                 |
| PL TO T                         | Phase I Investment<br>at Phase II WI                                    | Phase I Investment<br>at Phase II WI | investment &<br>revenue same             | investment &<br>revenue same             | Investment<br>Basis      |
| Phile T & Phare II = 200,000 to | changes date to<br>recover some PVP                                     |                                      | Vote to change WI<br>for CO <sub>2</sub> | Vote to change WI<br>for CO <sub>2</sub> | Other<br>features        |

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MARTIN YATES, III 1912 - 1985 FRANK W. YATES 1936 - 1986



105 SOUTH FOURTH STREET ARTESIA, NEW MEXICO 88210 TELEPHONE (505) 748-1471 S. P. YATES CHAIRMAN OF THE BOARD JOHN A. YATES PRESIDENT PEYTON YATES EXECUTIVE VICE PRESIDENT RANDY G. PATTERSON SECRETARY DENNIS G. KINSEY TREASURER

December 5, 1994

Exxon Company, USA P. O. Box 1600 Midland, Texas 79702-1600

ATTN: Ronald E. Mayhew

RE: Avalon Delaware Unit

Dear Sir:

Yates Petroleum proposes two additional participation formulas (Yates Proposal B and Yates Proposal C) for the Avalon Delaware Unit:

- I. Yates Proposal B
  - 1. The Phase I formula will be

70% Remaining Primary 20% Tract Waterflood Reserves 10% Tract CO<sub>2</sub> Reserves

2. The Phase II formula will be

20% Remaining primary 40% Tract Waterflood Reserves 40% Tract CO<sub>2</sub> Reserves

- 3. Phase I will end and Phase II will begin on 1-1-98 or when oil production from the Unit area (after 1-1-93) reaches 1190 KBO, whichever occurs earlier in time.
- 4. Capital Expenses during Phase I will be charged according to the Phase I formula and Capital Expenses during Phase II will be charged according to the Phase II formula. These will be a reequalization of monies when the phase change occurs so that all Capital Expenses will ultimately be paid according to the Phase II formula.

Ron Mayhew December 5, 1994 -2-

- 5. The initial overhead rate will be \$550 per producing well per month. The overhead rate will increase by 27 percent when CO<sub>2</sub> injection begins and shall continue at the elevated rate as long as CO<sub>2</sub> is injected into any Unit wells. When CO<sub>2</sub> injection ceases, the overhead rate will decrease by 22 percent.
- II. Yates Proposal C
  - 1. The Phase I formula will be

60% Remaining Primary 30% Tract Waterflood Reserves 10% Tract CO<sub>2</sub> Reserves

- 2. Phase II formula as above
- 3. Phase change as above
- 4. Capital Expenses will be charged according to the Phase II formula at all times after unitization with the exception described in the next few sentences. "Special Phase II Owners" are those owners with non-zero Tract CO<sub>2</sub> Reserves, but with zero Remaining Primary and zero Tract Waterflood Reserves. Capital Expenses to these "Special Phase II Owners" will be charged according to the Phase I formula during Phase I, and there will be a reequalization of monies when the phase change occurs. The result will be "unbilled" Capital Expenses of about \$180,000 during Phase I. These "unbilled" Capital Expenses will be charged 8/9 to Exxon and 1/9 to Yates Petroleum. The effect is an interest-free loan from Exxon and Yates to the "Special Phase II Owners."
- 5. Overhead as above

On the subject of APO interests, Yates agrees that the Stonewall YE #1, WM #1, WM #2, EP #6 and EP #7 should all enter the Unit on an APO basis. The wellbore and equipment at Stonewall YE #1 is owned on a different basis (shown in Attachment 1). To repeat, Yates agrees that the participation formula should be based on APO interests for all wells; and Yates asks that the inventory adjustment for Stonewall YE #1 use the actual equipment owners as shown in Attachment 1.

Ron Mayhew <sup>-</sup> December 5, 1994 -3-

The rest of this note explains that the Yates proposals do not meet the Exxon presentvalue target, but do meet the present-value target defined by Exxon's share of the primary oil reserves plus Exxon's share of the secondary oil reserves. As you have heard before, I believe the Exxon present-value target has been set unreasonably high by Exxon. You will see that the Yates proposals calculate to be fair on a present-value basis.

On November 21, 1994, you told Bob Fant and me that the Exxon proposal of April (adjusted to a WF start date of 7-1-95) has a present value of \$3.98 million at a discount rate of 20 percent per year. We at Yates adjusted and normalized our economic calculations to give a present value at a discount rate of 20% per year equal to the same \$3.98 million with the same production flow streams and ownership assumed by Exxon. The present values calculated by Yates at 10% and 15% discount rates are shown in Line 1 of Attachment 2. I believe that Line 1 represents a reasonable description of the present-value target selected by Exxon.

Next Yates calculated present values for a) primary production with Exxon WI = 0.851 and b) secondary production with Exxon WI = 0.708 and a waterflood start date of 1-1-96. The Capital and Operating Expenses were the same as were used in "duplicating" the Exxon present-value of \$3.98 million. These two results are shown in Lines 2 and 3 of Attachment 2 with the two cases summed in Line 4. My contention is that Line 4 represents a fair present-value target for Exxon in these discussions and Yates should try to meet the collective target in Line 4. Obviously, this target is lower than the target selected by Exxon, the target displayed in Line 1.

Line 5 of Attachment 2 shows the present value of Exxon interest under Yates Proposal A that you received in September of 1994. My comparison of Line 4 and Line 5 says that our original proposal was "fair" as defined by Yates.

Line 6 shows the present value of the Exxon interest under Yates Proposal B outlined at the start of this note. Again, the present values in Lines 4 and 6 are very similar. From another point of view, Yates has taken away the benefit to Exxon of capital costs being billed at Phase II during Phase I. In our "pseudo Exxon framework", we calculate that this change decreases Exxon's present value at 15 percent discount by \$147K.

Ron Mayhew December 5, 1994 -4-

Yates has given Exxon a later date for the automatic phase change which is worth \$50K. Yates has also given Exxon a higher interest in Phase I which is work \$63K. The result is that Proposal B gives Exxon a present value about \$30K less than provided by Proposal A.

Line 7 of Attachment 2 shows the present value calculated by Yates for the Exxon interest under Proposal C. Compared to Proposal A, Exxon loses about \$30K to cover interest on the loan to the "Special Phase II Owners" and Exxon gains about \$50K by moving back the date of the automatic phase change. The result is that Proposal C gives Exxon a present value about \$20K more than provided by Proposal A.

In conclusion, all three Yates proposals give present values clustered very near what Exxon would get from its absolute share of the Remaining Primary and from its absolute share of the Tract Waterflood Reserves. I have tried to make it clear to Exxon why Yates thinks its proposals are fair and how much room Yates has to balance the various components. We are in trouble if the Exxon target remains far from the Yates target, but we can reach agreement if we can see both targets from the same firing position.

Sincerely,

Have Bonean

David F. Boneau Reservoir Engineering Supervisor

DFB/cvg

Attachments

xc: Mike Slater Janet Richardson Bob Fant

#### Attachment 1

#### Stonewall YE #1 SWD System

| Working Interest Owners     | <u>WI</u>  |
|-----------------------------|------------|
| Abo Petroleum Corporation   | 0.04305167 |
| Claremont Corporation       | 0.00990534 |
| Coquina Oil Corporation     | 0.21972916 |
| Flag-Redfern Oil Company    | 0.00954979 |
| Edward R. Heidson, Jr.      | 0.15848528 |
| MWJ                         | 0.01981069 |
| Mobil Producing TX NM       | 0.11326129 |
| MYCO Industrices, Inc.      | 0.12915504 |
| Rosalind Redfern            | 0.00927066 |
| Yates Drilling Company      | 0.12915504 |
| Yates Petroleum Corporation | 0.12915502 |
| YPC, Account 4              | 0.02947102 |
|                             | 1.00000000 |

Attachment 2

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# Avalon Delaware - Comparison of Present Values for Exxon/Yates Proposals

Present Value in Million of Dollars

| Line        | Case                         | Exxon PV<br>at 10% | Exxon PV<br>at 15% | Exxon PV<br>at 20% | Exxon WI<br>Phase I | Exxon WI<br>Phase II | Date of<br>Phase Change   | Phase Modeled<br>in Economics | Capital WI<br>in Phase 1 |
|-------------|------------------------------|--------------------|--------------------|--------------------|---------------------|----------------------|---|-------------------------------|--------------------------|
| <del></del> | Exxon 4/94                   | 9.33               | 6.09               | 3.98*              | 0.789               | NA                   | Vote to change<br>WI for CO <sub>2</sub>  | Primary & Secondary           | Phase I                  |
| 5           | Exxon Primary                | 2.64               | 2.27               | 2.00               | 0.851               | -                    |   | Primary only                  |                          |
| ю           | Exxon Secondary              | 6.65               | 3.57               | 1.88               | -                   | 0.708                | Start WF 1-1-96   | Secondary only                |                          |
| 4           | Exxon Primary &<br>Secondary | 9.29               | 5.85               | 3.88               | 0.851               | 0.708                | Start WF 1-1-96   | Primary & Secondary           |                          |
| ç           | Yates Proposal A<br>(9/94)   | 9.33               | 5.85               | 3.85               | 0.791               | 0.725                | 4-1-97  | Primary & Secondary           | Phase II                 |
| Q           | Yates Proposal B<br>(12/94)  | 9.35               | 5.82               | 3.80               | 0.805               | 0.725                | 1-1-98  | Primary & Secondary           | Phase I                  |
| 7           | Yates Proposal C<br>(12/94)  | 9.38               | 5.87               | 3.87               | 0.791               | 0.725                | 1-1-98  | Primary & Secondary           | Phase II**               |
|             | * Coloridated by Ex          | data and match     | od by Votoc oc     | the IN animore     | nor DV/ number      | Corne from Vato      | Calculated by Evven and matched by Vates scenemics - All other DV numbers came from Vates according dations | 200                           |                          |

Catculated by Exxon and matched by Yates economics. All other PV numbers came from Yates economic calculations.
 \*\* Exception for "Special Phase II Owners" as explained in cover letter.

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To:Janet RichardsonFrom:Dave BoneauΔDate:December 30, 1994

Subject: Proposed Avalon Delaware Unit

Yesterday, Exxon responded by telephone to my letter of December 5, which outlined two participation formulas which Yates could support (Yates B and Yates C proposals). The good news is that Exxon made a concrete counterproposal. The bad news is that Exxon wants every crumb we've ever talked about plus more.

In detail, the Exxon proposal goes as follows:

 Phase I participation is based upon 70% Remaining Primary 20% Tract Waterflood Reserves 10% Tract CO<sub>2</sub> Reserves

This gives Exxon WI = 0.805129 and Yates WI = 0.091292 as in Yates Proposal B

 Phase II participation is based upon 20% Remaining Primary 40% Tract Waterflood Reserves 40% Tract CO<sub>2</sub> Reserves

This gives Exxon WI = 0.724939 and Yates WI = 0.120907 just as Yates has consistently proposed from the start.

3) Phase I will end and Phase II will begin on 1-1-99 or when oil production from the Unit area (after 1-1-93) reaches 1190 MBO, whichever occurs earlier in time.

I have proposed changeover dates from 4-1-97 to 1-1-98. At the start of the telephone conversation, Ron Mayhew of Exxon wanted to eliminate the mandatory changeover date. I said we couldn't do that and Exxon settled on 1-1-99. Over the months, Exxon has gone from 2005 AD to 2000 AD to 1999.

4) Capital Expenses will be changed according to the Phase II formula at all times. The exception is for those owners (mainly Premier) who have only  $CO_2$  Reserves so their Phase II interest is about four times their Phase I interest. These people will be charged according to Phase I during Phase I. Exxon and Yates Petroleum will "lend" these people the difference at zero interest until Phase II begins, with Exxon providing 8/9 and Yates 1/9.

It was our idea to charge Capital costs at the Phase II formula during Phase I. The modification for Premier et al is a cheap change (< \$5000 to YPC) to keep some small owners from being hurt.

5) Exxon wants overhead charged at \$729 per month per producing well. Exxon will accept my proposal of \$700 per month during actual injection of  $CO_2$  and \$550 per month otherwise if the other owners agree that Exxon can ballot for approval of an AFE to pay Exxon for specified pre- $CO_2$  Engineering work.

Exxon knows it must lower the \$729 per month number, but Exxon wants to lower it very little. Yates must decide which of the suggested approaches makes sense.

The Attachment compares the Exxon and Yates proposals. Pretty much, Exxon wants the best we have offered in each area plus a later changeover date and an Engineering AFE. My two main concerns are 1) that Yates has 12+ percent of Phase II, and 2) that Phase II not be delayed unreasonably. Exxon agrees that Yates can have 12.1 percent of Phase II, while Yates and Exxon are one year apart on the changeover date. I don't want more that a two-year delay from the time Yates pays for 12% of the waterflood to the time Yates receives waterflood income based on 12%. I don't think we should give Exxon everything it wants; and I especially want to roll the changeover date back into 1998.

Exxon expects some reaction from Yates by the evening of January 4 so I hope we can talk to Peyton early next week.

cc Mike Slater Bob Fant Randy Patterson Peyton Yates

DFB/mjr

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| 0% Primary         60% Primary         70% Primary           20% WF         30% WF         20% WF           20% WF         30% WF         20% WF           10% CO2         10% CO2         10% CO2           10% CO2         10% CO2         10% CO2           0% Primary         20% Primary         20% Primary           0% Primary         20% Primary         20% Primary           0% WF         40% WF         40% WF           40% WF         40% WF         40% WF           0% D02         0.790822         0.805129           0% CO2         40% CO2         40% CO2           0.805129         0.724939         0.724939           0.724939         0.724939         0.724939           0.724939         0.724939         0.724939           0.724939         0.724939         0.724939           0.724939         0.724939         0.724939           0.724939         0.724939         0.724939           0.724939         0.724939         0.724939           0.724939         0.724939         0.724939           0.724939         0.120907         0.120907           0.120907         0.120907         0.120907 <td< th=""><th>Item</th><th>Item Issue</th><th>Exxon Wants</th><th>Yates A</th><th>Yates B</th><th>Yates C</th></td<>  | Item | Item Issue                     | Exxon Wants         | Yates A     | Yates B              | Yates C              |
|--|------|--------------------------------|---------------------|-------------|----------------------|----------------------|
| 20% WF         30% WF         20% WF         20% WF           10% CO2         10% CO2         10% CO2         10% CO2           Phase II Formula         20% Primary         20% Primary         20% Primary           Phase II Formula         20% Primary         20% Primary         20% Primary           Phase II Formula         20% Primary         20% WF         40% WF           A0% WF         40% WF         40% WF         40% WF           A0% WF         40% CO2         40% CO2         40% CO2           Exxon WI Phase I         0.724939         0.724939         0.724939           Exxon WI Phase I         0.091292         0.805129         0.724939           Yates WI Phase I         0.724939         0.724939         0.724939           Yates WI Phase II         0.724939         0.724939         0.724939           Yates WI Phase II         0.724939         0.724939         0.724939           Yates WI Phase II         0.724939         0.729907         0.120907<  | ~    |                                | 70% Primary         | 60% Primary | 70% Primary          | 60% Primary          |
| 10% CO2         10% CO2         10% CO2         10% CO2           Phase II Formula         20% Primary         20% Primary         20% Primary           Phase II Formula         20% Primary         20% Primary         20% Primary           Phase II Formula         20% Primary         20% Primary         20% Primary           Phase II         0,005 129         0,008 20         40% WF         40% WF           Exxon WI Phase I         0,805 129         0,74939         0,74939         0,724339           Exxon WI Phase II         0,01292         0,098 209         0,091 292         0,091 292           Yates WI Phase II         0,120907         0,120907         0,120907         0,120907           Yates WI Phase II         0,120907         0,120907         0,120907         0,120907           Yates WI Phase II         0,120907         0,120907         0,120907         0,120907           Phase Change Date         1190 MBO or         1,190 MBO or         1,190 MBO or         1,190 MBO or           Phase Change Date         1,190 MBO or         1,190 MBO or         1,190 MBO or         1,190 MBO or           Who Pays Phase I Capital Costs         Modified Phase II         Phase I WI         Phase I WI         Phase I WI           Overhead Charge  |      |                                | 20% WF              | 30% WF      | 20% WF               | 30% WF               |
| Phase II Formula         20% Primary         20% Primary |      |                                | 10% CO2             | 10% CO2     | 10% CO2              | 10% CO2              |
| Phase II Formula         20% Primary         20% Primary         20% Primary         20% Primary         20% Primary         20% WF         40% WF  |      |                                |                     |             |                      |                      |
| 40% WF         40% WF         40% WF         40% WF           5         40% CO2         40% CO2         40% CO2           6         40% CO2         40% CO2         40% CO2           6         0.805129         0.805129         0.805129           7         0.724939         0.724939         0.724939           7         0.724939         0.724939         0.724939           7         0.724939         0.724939         0.724939           7         0.724939         0.724939         0.724939           7         0.724939         0.724939         0.724939           7         0.724939         0.724939         0.724939           7         0.720907         0.120907         0.120907           7         0.120907         0.120907         0.120907           7         1.190 MBO or         1.190 MBO or         1.190 MBO or           7         1.190 MBO or         1.190 MBO or         1.190 MBO or           7         1.190 MBO or         1.190 MBO or         1.190 MBO or           7         1.190 MBO or         1.190 MBO or         1.190 MBO or           7         1.190 MBO or         1.4pr-97         1.4pr-97           7  | (N   | Phase II Formula               | 20% Primary         | 20% Primary | 20% Primary          | 20% Primary          |
| 40% CO2     40% CO2     40% CO2       Exxon Wi Phase I     0.805129     0.790822     0.805129       Exxon Wi Phase II     0.724939     0.724939     0.724939       Yates Wi Phase II     0.724939     0.724939     0.724939       Yates Wi Phase II     0.091292     0.098309     0.091292       Yates Wi Phase II     0.120907     0.120907     0.120907       Phase Change Date     1190 MBO or     1190 MBO or     1190 MBO or       Phase Change Date     1190 MBO or     1190 MBO or     1190 MBO or       Who Pays Phase I Capital Costs     Modified Phase II     Phase I WI     Phase I WI       Overhead Charges     \$729/Prod Well or     NA     \$550 WF + \$700 CO2       Abread Charges     \$729/Prod Well or     NA     \$550 WF + \$700 CO2   |      |                                | 40% WF              | 40% WF      | 40% WF               | 40% WF               |
| Exxon WI Phase I       0.805129       0.790822       0.805129         Exxon WI Phase I       0.790822       0.805129       0.805129         Exxon WI Phase II       0.724939       0.724939       0.724939         Yates WI Phase II       0.724939       0.724939       0.724939         Yates WI Phase II       0.091292       0.098309       0.091292         Yates WI Phase II       0.120907       0.120907       0.120907         Phase Change Date       1190 MBO or       1190 MBO or       1190 MBO or         Phase Change Date       1190 MBO or       1190 MBO or       1190 MBO or         Who Pays Phase I Capital Costs       Modified Phase II       Phase II WI       Phase I WI         Overhead Charges       \$729/Prod Well or       NA       \$550 WF + \$700 CO2         Aprine Date       Mith Consultant AFF       Mith Consultant AFF       Mith Consultant AFF  |      |                                | 40% CO2             | 40% CO2     | 40% CO2              | 40% CO2              |
| Exxon WI Phase I         0.805129         0.790822         0.805129           Exxon WI Phase II         0.724939         0.724939         0.724939           Yates WI Phase II         0.724939         0.724939         0.724939           Yates WI Phase I         0.091292         0.091292         0.091292           Yates WI Phase I         0.091292         0.091292         0.091292           Yates WI Phase II         0.120907         0.120907         0.120907           Phase Change Date         1190 MBO or         1190 MBO or         1190 MBO or           Phase Change Date         1190 MBO or         1190 MBO or         1.400 MBO or           Who Pays Phase I Capital Costs         Modified Phase II         Phase II WI         Phase I WI           Who Pays Phase I Capital Costs         Modified Phase II         Phase I WI         Phase I WI           Overhead Charges         \$729/Prod Well or         NA         \$550 WF + \$700 CO2           Mith Consultant AFF         with Consultant AFF         Mith Consultant AFF         Mith Consultant AFF   |      |                                |                     |             |                      |                      |
| Exxon WI Phase I         0.724939         0.724939         0.724939           Yates WI Phase I         0.091292         0.091292         0.091292           Yates WI Phase I         0.120907         0.091292         0.091292           Yates WI Phase II         0.120907         0.120907         0.120907           Phase Change Date         1190 MBO or         1190 MBO or         1190 MBO or           Phase Change Date         1190 MBO or         1190 MBO or         1190 MBO or           Who Pays Phase I Capital Costs         Modified Phase II         Phase II WI         Phase I WI           Who Pays Phase I Capital Costs         \$550 WF + \$700 CO2         NA         \$550 WF + \$700 CO2           With Consultant AFF         Mith Consultant AFF         Mith Consultant AFF         Mith Consultant AFF   |      | Exxon WI Phase I               | 0.805129            | 0.790822    | 0.805129             | 0.790822             |
| Yates WI Phase I       0.091292       0.098309       0.091292         Yates WI Phase II       0.120907       0.120907       0.120907         Phase Change Date       1190 MBO or       1190 MBO or       1190 MBO or         Phase Change Date       1190 MBO or       1190 MBO or       1190 MBO or         Who Pays Phase I Capital Costs       Modified Phase II       Phase II WI       Phase I WI         Who Pays Phase I Capital Costs       Modified Phase II       Phase II WI       Phase I WI         Overhead Charges       \$729/Prod Well or       NA       \$550 WF + \$700 CO2         with Consultant AFF       with Consultant AFF       NA       \$550 WF + \$700 CO2   |      | Exxon WI Phase II              | 0.724939            | 0.724939    | 0.724939             | 0.724939             |
| Yates WI Phase II       0.120907       0.120907       0.120907         Phase Change Date       1190 MBO or       1190 MBO or       1190 MBO or         Phase Change Date       1-Jan-99       1-Apr-97       1-Jan-98         Who Pays Phase I Capital Costs       Modified Phase II       Phase II WI       Phase I WI         Who Pays Phase I Capital Costs       Modified Phase II       Phase II WI       Phase I WI         Overhead Charges       \$729/Prod Well or       NA       \$550 WF + \$700 CO2         with Consultant AFE       with Consultant AFE       NA       \$550 WF + \$700 CO2  |      | Yates WI Phase I               | 0.091292            | 0.098309    | 0.091292             | 0.098309             |
| Phase Change Date     1190 MBO or     1190 MBO or     1190 MBO or       Phase Change Date     1-Jan-99     1-Apr-97     1-Jan-98       Phase I Capital Costs     Modified Phase II     Phase II WI     Phase I WI       Who Pays Phase I Capital Costs     Modified Phase II     Phase II WI     Phase I WI       Overhead Charges     \$729/Prod Well or     NA     \$550 WF + \$700 CO2       S550 WF + \$700 CO2     with Consultant AFF     MA     MA  |      | Yates WI Phase II              | 0.120907            | 0.120907    | 0.120907             | 0.120907             |
| Phase Change Date     1190 MBO or     1190 MBO or       1-Jan-99     1-Jan-99     1-Apr-97     1-Jan-98       Who Pays Phase I Capital Costs     Modified Phase II     Phase II WI     Phase I WI       Who Pays Phase I Capital Costs     Modified Phase II     Phase II WI     Phase I WI       Who Pays Phase I Capital Costs     \$550 WF + \$700 CO2     \$550 WF + \$700 CO2       Who With Consultant AFF     with Consultant AFF     \$550 WF + \$700 CO2  |      |                                |                     |             |                      |                      |
| 1-Jan-99     1-Apr-97     1-Jan-98       Who Pays Phase I Capital Costs     Modified Phase II     Phase II WI     Phase I WI       Who Pays Phase I Capital Costs     Modified Phase II     Phase II WI     Phase I WI       Overhead Charges     \$729/Prod Well or     NA     \$550 WF + \$700 CO2       S550 WF + \$700 CO2     with Consultant AFF     MA     \$550 WF + \$700 CO2   | ()   |                                | 1190 MBO or         | 1190 MBO or | 1190 MBO or          | 1190 MBO or          |
| Who Pays Phase I Capital Costs     Modified Phase II     Phase II WI     Phase I WI       Overhead Charges     \$729/Prod Well or     NA     \$550 WF + \$700 CO2       S550 WF + \$700 CO2     with Consultant AFF     with Consultant AFF  |      |                                | 1-Jan-99            | 1-Apr-97    | 1-Jan-98             | 1-Jan-98             |
| Who Pays Phase I Capital Costs       Modified Phase II       Phase II WI       Phase I WI         Overhead Charges       \$729/Prod Well or       NA       \$550 WF + \$700 CO2         S550 WF + \$700 CO2       with Consultant AFF       with Consultant AFF  |      |                                |                     |             |                      |                      |
| Overhead Charges     \$729/Prod Well or     NA     \$550 WF + \$700 CO2       \$550 WF + \$700 CO2     with Consultant AFF   | N.   | Who Pays Phase I Capital Costs | Modified Phase II   | Phase II WI | Phase I WI           | Modified Phase II    |
| Overhead Charges     \$729/Prod Well or     NA     \$550 WF + \$700 CO2       \$550 WF + \$700 CO2     \$550 WF + \$700 CO2     with Consultant AFF  |      |                                |                     |             |                      |                      |
|  | 4)   | Overhead Charges               | \$729/Prod Well or  | NA          | \$550 WF + \$700 CO2 | \$550 WF + \$700 CO2 |
| with Consultant AFF  |      |                                |                     |             |                      |                      |
|  |      |                                | with Consultant AFE |             |                      |                      |

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MARTIN YATES, III 1912 - 1985 FRANK W. YATES 1936 - 1986



105 SOUTH FOURTH STREET ARTESIA, NEW MEXICO 88210 TELEPHONE (505) 748-1471 S. P. YATES CHAIRMAN OF THE BOARD JOHN A. YATES PRESIDENT PEYTON YATES EXECUTIVE VICE PRESIDENT RANDY G. PATTERSON SECRETARY DENNIS G. KINSEY TREASURER

January 5, 1995

Exxon Company, USA P. O .Box 1600 Midland, Texas 79702-1600

ATTN: Ronald E. Mayhew

RE: Avalon Delaware Unit

Dear Sir:

Attached is the internal Yates memo you and I discussed on the telephone on January 4, 1995. The memo sets out our position concerning the five areas where Yates and Exxon are trying to reach agreement.

Sincerely,

Dave Bonean

David F. Boneau Reservoir Engineering Supervisor

DFB/cvg

Attachment

January 4, 1995

TO: Janet Richardson

FROM: Dave Boneau (Dave Bour and

SUBJECT: Proposed Avalon Delaware Unit

This note attempts to outline the Yates response to Exxon after our discussion with Peyton Yates this morning.

1. Phase I Formula

Yates will accept a Phase I formula based upon

70% Remaining Primary20% Tract Waterflood Reserves10% Tract CO<sub>2</sub> Reserves.

This gives Exxon WI = 0.805129 and Yates WI = 0.091292.

2. Phase II Formula

Yates will accept a Phase II formula based upon

20% Remaining Primary 40% Tract Waterflood Reserves 40% Tract CO<sub>2</sub> Reserves

This gives Exxon WI = 0.724939 and Yates WI = 0.120907.

3. Phase Change Date

Phase I will end and Phase II will begin on 5-1-98 or when oil production from the Unit area (after 1-1-93) reaches 1190 MBO, whichever occurs earlier in time.

Peyton says that, if Exxon wants to move the date into the future past May 1, 1998, that Yates must have a Phase II formula that gives Yates greater than 12.1 percent in order to compensate Yates for the added risk taken by Yates during Phase I.

Janet Richardson January 4, 1995 -2-

#### 4. Who Pays Phase I Capital Costs

Yates will accept that Capital Costs during Phase I are charged to Phase II owners (modified for the "Special Phase II Owners") as long as the following thoughts are considered and discussed:

- a) No AFE for CO<sub>2</sub> installations may be submitted during Phase I. Yates believes we should eliminate any remote chance that Phase II owners pay for a CO<sub>2</sub> flood during Phase I.
- b) Yates believes we should think about the scenario where the waterflood is marginal and the "Special Phase II Owners" have little incentive to repay the loan from Exxon and Yates. In general, Yates thinks the Special Phase II Owners must pay the loan debt on time or take some penalty. Ideas for the penalty include i) Exxon and Yates absorb unpaid ownership, ii) we get access to some other collateral such as deep rights, iii) some imputed interest is added to the loan so the tax write-off is greater. Probably Exxon has some better ideas and Yates surely encourages those. Yates realizes we may have entered an area where a Side Agreement might be necessary.

#### 5. Overhead Charges

Yates would prefer to forget the Exxon idea of paying Exxon for  $CO_2$  Engineering work via a special Engineering AFE. However, Yates would go along if the idea is subjected to safeguards such as i) a one-time event with a dollar limit equal to something like six months of overhead charges and/or ii) a bidding process where Exxon and two or more outsiders submit written bids to do the work as specified by a Unit Technical Committee.

DFB/cvg

#### Attachment

xc: Peyton Yates Bob Fant Mike Slater Avalon Delaware Unit -- Comparison of Exxon and Yates Proposals for Participation

|  | rimary     |             |                      | 0.0010-              |
|--|------------|-------------|----------------------|----------------------|
|  |            | 60% Primary | 70% Primary          | 60% Primary          |
|  | , WF       | 30% WF      | 20% WF               | 30% WF               |
|  | C02        | 10% CO2     | 10% CO2              | 10% CO2              |
|  |            |             |                      |                      |
|  | himary     | 20% Primary | 20% Primary          | 20% Primary          |
|  | WF         | 40% WF      | 40% WF               | 40% WF               |
|  | c02        | 40% CO2     | 40% CO2              | 40% CO2              |
|  |            |             |                      |                      |
|  | 5129       | 0.790822    | 0.805129             | 0.790822             |
|  | 4939       | 0.724939    | 0.724939             | 0.724939             |
|  | 1292       | 0.098309    | 0.091292             | 0.098309             |
| Yates WI Phase II 0.120907                         | 0907       | 0.120907    | 0.120907             | 0.120907             |
|  |            |             |                      |                      |
| 3 Phase Change Date 1190 MB                        | 90 MBO or  | 1190 MBO or | 1190 MBO or          | 1190 MBO or          |
| 1-Jan-99   | n-99       | 1-Apr-97    | 1-Jan-98             | 1-Jan-98             |
|  |            |             |                      |                      |
| 4 Who Pays Phase I Capital Costs Modified Phase II | Phase II   | Phase II WI | Phase I WI           | Modified Phase II    |
|  | ,          |             |                      |                      |
| 5 Overhead Charges \$729/Prod Well or              | d Well or  | NA          | \$550 WF + \$700 CO2 | \$550 WF + \$700 CO2 |
| \$550 WF + \$700 CO2                               | \$700 CO2  |             |                      |                      |
| with Consultant AFE                                | ultant AFE |             |                      |                      |

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January 18, 1995

TO: Janet Richardson

FROM: Dave Boneau Dave Boneau

SUBJECT: Avalon Delaware Unit

You recall that Peyton Yates told us yesterday that Yates needs 12+ percent working interest in a single-phase formula for the proposed Avalon Delaware Unit. I believe Exxon numbers say the minimum Exxon interest is 73.2 percent. An acceptable formula seems to be:

23% Primary Reserves

47% Tract Waterflood Reserves

30% Tract CO<sub>2</sub> Reserves.

This formula gives Exxon 73.21 percent and Yates 12.06 percent. It attributes a significant fraction (30%) to the  $CO_2$  target and splits the remainder 1/3 to primary and 2/3 to waterflood. The interests of all owners under this formula are shown in the Attachment.

My intention is to submit the formula above as a proposal to Exxon.

DFB/cvg

Attachment

xc: Mike Slater Peyton Yates Bob Fant

1-18-95

| [·····································     | 1           |   |  |  |
|--|-------------|---|--|--|
|  | G-24 1/1/93 | G-24 Tract  | G-24 Tract   | 23 % Primary + 47 %  |
|  | Rem Primary | Waterflood Reserves   | CO2 Reserves   | WF + 30 % CO2  |
| Abo Petroleum Corporation                  | 0.6731%     | 1.3313%   | 1.1936%  | 1.1386%  |
| American National Petroleum Corp.          | 2.8177%     | 5.5317%   | 4.7210%  | 4.6643%  |
| Ard, Mary H.                               | 0.8259%     |   | 1.3331%  | 1.3577%  |
| Bello, Ernie                               | 0.0046%     | 0.0088%   | 0.0075%  | 0.0074%  |
| Bunn, Mrs. Francis B.                      | 0.0046%     | 0.0088%   | 0.0075%  | 0.0074%  |
| Chevron PBC, Inc.                          | 0.4236%     | 0.6857%   | 1.8238%  | 0.9668%  |
| Claremont Corporation                      | 0.1549%     | 0.3063%   | 0.2500%  | 0,2546%  |
| Devon Energy Corporation (NV)              | 0.0691%     | 0.1367%   | 0.1117%  | 0,1137%  |
| Devon Enc gy Partners L.P.                 | 0.3916%     | 0.7746%   | 0.6331%  | 0.6441%  |
| Exxon Corporation                          | 85.0937%    | 70.7857%  | 67.9021%   | 73.2115%   |
| Fox, Fred A & D Marjean Living Trust       | 0.0005%     | 0.000%  | 0.0038%  | 0.0013%  |
| Gendion Family Revocable Tr                | 0.0069%     | 0.0132%   | 0.0112%  | 0,0111%  |
| Goodnow, David                             | 0,0046%     | 1   |  | 0,0074%  |
| Hayes Partners 1                           | 0.0090%     |   | 0.00757%   | 0.0124%  |
|  | 0.0008%     | 0.0015%   | 0.041276   | 0.0012476  |
| Hodge, Joseph R.                           |             | 0.0015%   | 0.0012%  | 0.0012%  |
| Hodge, Sanford J. III                      | 0,0008%     |   |  | · · · · · · · · · · · · · · · · · · ·  |
| Holden, E. G. Testmentary Tr               | 0,0023%     |   | 0.0037%  | 0.0037%  |
| Hudson, Edward R. Jr.                      | 0,8259%     | 1,6336%   | 1.3331%  | 1.3577%  |
| Hudson, William A. II                      | 0.8259%     | 1.6336%   | 1.3331%  | 1.3577%  |
| Kawasaki, Isaac A.                         | 0.0046%     |   | 0.0075%  | 0.0074%  |
| Keller, Betsy H.                           | 0.0023%     |   | 0.0037%  | 0.0037%  |
| Kerr-McGee Corporation                     | 0,1493%     |   | 0.2410%  | 0.2454%  |
| LAJ Corporation                            | 0.0010%     | 1 .   | 0.0073%  | 0.0024%  |
| Los Chicos                                 | 0,0000%     |   | 0.0100%  | 0.0030%  |
| Martin, James L. Jr., Trust                | 0.0005%     | A state of the    | 0.0038%  | 0.0013%  |
| Martin, Williams, & Judson                 | 0.3496%     | A second seco   | 0 7825%  | 0.6031%  |
| McCall, Jack O. Estate of                  | 0.0000%     |   | 0.0003%  | 0.0001%  |
| Merit Energy Partners, 11, L.P.            | 0.0000%     | 0.0000%   |  | 0,1114%  |
| Merit Energy Partners, III, L.P.           | 0.0000%     | · · · · · · · · · · · · · · · · · · ·   | 0.3713%  | $\frac{0.1114\%}{0.1114\%}$  |
| Merit Energy Partners, L.P.                | 0,0000%     | 0.0000%   |  |  |
| Moore, Charles Cline                       | 0.0115%     |   | 0.0189%  |  |
| Munroe, Vernon<br>Myco Industries, Inc.    | 0.0046%     |   | 0.0075%  |  |
| Napeco                                     | 0,0000%     |   |  |  |
| Oliver, Angus Cluthe Tr                    | 0.000676    | · · · · · · · · · ·   |  | 0.02107  |
| Oliver, William B. Tr                      | 0,0046%     | 0,0088%   |  | 0.0074%  |
| Oxy U.S.A., Inc.                           | 0,0000%     | 0.0000%   |  | a company and an and a second se |
| Premier Oil & Gas, Inc.                    | 0,0000%     | · · · · · · · · · · · · · · · · · · ·   |  |  |
| Redfern, John J. III, Indep Exec of Est of | 0.0725%     | 0.1433%   | 0.1170%  |  |
| Redfern, Rosalind                          | 0.0725%     | 0,1433%   | 0.1170%  |  |
| Schlagal, John L.                          | 0.0005%     | A second se  |  | 0.0011%  |
| Marth, Adolph P. Schuman Tr                | 0,0046%     | · · · · · · · · · · · · · · · · · · ·   |  | · · · · · · · · · · · · · · · · · · ·  |
| Seventy-Seven Corporation                  | 0.0040%     |   | Press and a comparison of the second se | 0.0024%  |
| Sigmar, Inc.                               | 0,0016%     | 0,0000%   | 0.0111%  | 0.0037%  |
| Space Building Corp.                       | 0.0115%     | 0.0219%   | 0.0187%  |  |
| Tipperary Oil Corporation                  | 0,3199%     | a contract of the state of the | 0.4468%  | 0.5160%  |
| TR Oil Corporation                         | 0.0000%     | 0.0001%   | 0.0042%  |  |
| Van Vranken, J. F. Jr.                     | 0.0046%     | 0,0088%   | 0.0075%  |  |
| Whiting Petroleum Corporation              | 0.3199%     | 0.6561%   | 0.4468%  | 0.5160%  |
| Yates Drilling Company                     | 2.0192%     | 3.9938%   | 3.3864%  | 3.3574%  |
| Yates Petroleum Corporation                | 2.4800%     | 4,9051%   | 4.3094%  | 4.1686%  |
| Yates, John A.                             | 0.0049%     |   | 0.0446%  |  |
| Yates, S. P.                               | 0.0049%     |   | 0.0346%  | 0.0115%  |
|  | 100.0000%   |   | 100.0000%  | 100.0000%  |
|  |             |   |  |  |
| YPC Et al                                  | 7.2063%     | 14,2240%  | 12.3996%   | 12.0626%   |

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Letterhead

DRAFT Single Phase

Date

Avalon (Delaware) Field Unitization Eddy Co., N. M.

#### Working Interest Owners:

The last correspondence you received was my letter dated June 20, 1994, which summarized the June 17 Working Interest Owners (WIO) meeting. Several WIO's expressed a strong interest for a single phase formula. An action item of the meeting was for Yates Petroleum to develop an alternative participation formula from the one we proposed.

Letters that summarize the Yates formula and our suggested modifications are attached, dated September 6, October 10 and December 5, 1994. Our single phase proposal, along with modifications to the previously transmitted (April 1994) Unit and Unit Operating Agreements is described in Attachment II and resulting participation in Attachment III of this letter.

This single phase proposal is a significant concession of equity for Exxon compared to our original 2 phase proposal with a vote required for Phase 2. If the single phase proposal is not acceptable, we would prefer to return to a 2 phase formula similar to our original recommendation.

At this time we are requesting either 1.) your concurrence with provisions that are now acceptable to both Exxon and Yates Petroleum or 2.) your suggested changes (return Attachment I). Should you have questions feel free to call me at (915) 688 - 7841. We appreciate your continued support.

Sincerely,

Ronald E. Mayhew Avalon Project Manager

Attachments I-III

renv/wio195.doc

1/31/95

#### Attachment I: Response to Exxon on Revised Unitization Proposal

#### Responses requested by February 24, 1995

Mail to:

R. E. Mayhew, Avalon Response Exxon USA P.O. Box 1600 Midland, TX 79702-1600 or fax to (9

or fax to (915) 688-6258

## Please provide your response by <u>checking one box</u> and completing the information below:

Company Name (s): \_\_\_\_\_

We agree with the unitization proposal as described in this letter (Attachment II). Exxon should proceed with incorporating these modifications into revised Unit and Unit Operating Agreements.
 By (typed or written): \_\_\_\_\_\_\_ Title: \_\_\_\_\_\_\_
 Signature: \_\_\_\_\_\_\_ Phone: \_\_\_\_\_\_\_
 We agree with the unitization proposal as described in this letter (Attachment II), but would like consideration of the issue(s) in our attached letter.
 By (typed or written): \_\_\_\_\_\_\_\_ Title: \_\_\_\_\_\_\_\_
 Signature: \_\_\_\_\_\_\_\_\_ Phone: \_\_\_\_\_\_\_\_\_\_
 Signature: \_\_\_\_\_\_\_\_\_\_
 Signature: \_\_\_\_\_\_\_\_\_\_\_

We disagree with the unitization proposal as described in this letter (Attachment II). Our proposal for changes along with our rationale is provided in the attached letter.
 By (typed or written): \_\_\_\_\_\_ Title: \_\_\_\_\_\_

| Signature: Phone: |  |
|-------------------|--|
|-------------------|--|

#### Attachment II: Summary Description of Proposed Modifications to Avalon Field Unit and Unit Operating Agreements

#### **Abbreviations**

The following abbreviations are used:

WI working interest

- WIO working interest owners
- AFE Authority For Expenditure

Equity

The table below describes proposed revisions to equity participation in the Avalon (Delaware Field) Unit from what Exxon proposed in the previously provided Unit and Unit Operating Agreements.

| Feature                  | Description   |
|--------------------------|---|
| Phases                   | Participation will be in a single phase only; which was requested by several attendees at the June 94 WIO meeting.  |
| Reserve                  | Participation will be based on tract reserves with the following  |
| Factors                  | <ul> <li>Reserve Factors:</li> <li>25 % Remaining Primary</li> <li>50 % Waterflood</li> <li>25 % CO<sub>2</sub></li> </ul>  |
|                          | Note: These percentages are multiplied by each owners tract reserves percentage (by Primary, waterflood, and $CO_2$ ), then summed to obtain a Unit Equity (percentage) as shown on Attachment III.   |
| Rationale                | The rationale used in developing the reserve factors was based  |
| behind                   | on several items listed below:  |
| Reserve                  | <ul> <li>Primary reserves have a higher value/barrel by orders of magnitude (i.e.</li> </ul>  |
| Factors                  | <ul> <li>investments have been made and production is indicator of future potential)</li> <li>the Unit is being put together to repressure the reservoir, implement a waterflood and gather data for evaluating CO2 potential</li> <li>CO<sub>2</sub> reserves are high, but have a relatively low value due to risks because of unknowns associated with the reservoir and of doing a CO<sub>2</sub> project</li> <li>CO<sub>2</sub> reserves have substantially lower discounted profit per barrel</li> <li>Note: see Technical Report Vol. 1, Exhibit H5 for more information</li> </ul> |
| Why include              | About $2/3$ of the CO <sub>2</sub> reserves are within the area to be unitized for  |
| CO <sub>2</sub> reserves | water injection. A $CO_2$ flood would likely be initiated in this portion<br>of the field and if successful expanded to the outer ring (tracts outside<br>the waterflood area) that was not waterflooded. As potential operator<br>we see some planning and development advantages of including the<br>outside ring in the unit. This outer ring has no commercial primary<br>and/or waterflood potential.  |
| Owner                    | A summary of owner participation is provided in Attachment III.   |
| participation            |   |

Continued on next page

#### Attachment II: Summary Description of Proposed Modifications to Avalon Field Unit and Unit Operating Agreements, Continued

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| Capital<br>Expenditures &<br>Contributed<br>Investments | All expenditures (capital and operating expense), along with existing investments of use to the Unit would be at the Single Phase participation percentage shown on Attachment $\Pi$ .   |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|
|   | <ul> <li>Examples:</li> <li><u>Capital Expenditure</u>: \$13M waterflood and/or future AFEs/ballots: Each owner pays WI% times \$13M and/or ballot amounts</li> <li><u>Operating Expense</u>: Each owner pays WI% times monthly operating cost</li> <li><u>Investment Equalization</u>: If a well or portion of surface facility equipment can be utilized in waterflood or CO<sub>2</sub> operations each owner will be credited with the determined value. Then each owner will be debited with an amount equal to their WI% times (Sum of the values of all wells/equipment brought into the Unit).</li> <li>Note: Under a single phase formula an owner cannot go non-consent on investment equalization and participate in the unit development or vice versa.</li> </ul> |  |  |  |  |  |  |
| Overhead  | <ul> <li>Overhead rate will be charged as follows:</li> <li>initial overhead rate will be \$550/producing well</li> <li>overhead will increase 27% when a CO<sub>2</sub> project is approved by Unit Owners</li> <li>overhead will decrease 22% when CO<sub>2</sub> injection ceases</li> </ul> Exception: Exxon may submit AFE's prior to approval of a CO <sub>2</sub> Project to Working Interest Owners to conduct CO <sub>2</sub> Project studies that will be considered as an operating expense outside the   |  |  |  |  |  |  |
| /   | Owners to conduct $CO_2$ Project studies that will be considered as an operating expense outside the overhead category. Approval must be voted in similar to other AFEs.<br>Examples: These studies could include computer modeling, injectivity test planning & analysis, cost/production estimates, etc.   |  |  |  |  |  |  |
| Voting  | Ballots submitted for approval to Working Interest Owners will be considered approved if either of the following conditions are met:   |  |  |  |  |  |  |
|   | <ul> <li>80% of the WIO participation approves the ballot</li> <li>If one owner has interest &gt; 70%, that owners interest plus 10% of the remaining interest.</li> </ul>   |  |  |  |  |  |  |
|   | Approval = largest owner W[{if > 70%}+0.10 (100% - Largest Owners WI)  |  |  |  |  |  |  |
|   |  |  |  |  |  |  |  |

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|                       |   | -      |                       |

#### Attachment III: Avalon (Delaware) Participation (25,50,25)

|  | 1                          |  |  |   | 1      |            |         |
|--|----------------------------|--|--|---|--------|------------|---------|
|  |                            |  |  | Single Phase Formula  | 1      |            |         |
|  |                            | C  |  | Participation: 25%  |        |            |         |
|  |                            | G-24 Tract   | C 34 Tar   | Primary 50%   |        |            |         |
|  | G-24 1/1/93<br>Rem Primary | Waterflood<br>Reserves   | G-24 Tract<br>CO2 Reserves   | Waterfload, and 25% CO2   | .[     |            |         |
| Abo Petroleum Carporation                  | 0.6731%                    | 1.3313%  |  |   | 4      |            |         |
| American National Pet, Corp.               | 2.8177%                    | 5.5317%  |  |   | 1      |            |         |
| Ard, Mary H.                               | 0,8259%                    | 1.6336%  |  |   | 1.3566 |            |         |
| Bello, Ernie                               | 0.0046%                    | 0,0088%  | the second s | 0.0074%   | 1      |            |         |
| Bunn, Mrs. Francis B                       | 0.0046%                    | 0.0088%  | 0 0075%  | 0.0074%   |        |            |         |
| Chevron PBC, Inc.                          | 0.4236%                    | 0.6857%  | 1.\$238%   | 0681250   | 0.9019 |            |         |
| Claremont Corporation                      | 0.1549%                    | 0.3063%  | 0.2500%  | 0.2544%   | 1.     |            |         |
| Devon Energy Corporation (NV)              | 0.0691%                    | 0,1367%  | 0.1117%  | 0   | 0.1136 |            |         |
| Devon Energy Partners L.P.                 | 0.3916%                    | 0,7746%  | 0.6331%  |   | 0.6435 |            |         |
| Exxen Corporation                          | 85.0939%                   | 70.7855%   | 67.9026%   |   | 7      |            |         |
| Fox, Fred A. & D. Marjean Living Trust     | 0.0005%                    | 0.0000%  | 0.0031%  | 0.0011%   | 1      |            |         |
| Gendron Family Revocable Trust             | 0.0069%                    | 0.0132%  | 0.0112%  | 0.0111%   | 1      |            |         |
| Goodnow David                              | 0.0046%                    | 0.0088%  |  | 0.0074%   | 1      |            |         |
| Haves Parmers 1                            | 0.0000%                    | 0.000%   |  | 0.0103%   | 1      |            |         |
| Hodge, Joseph R.                           | 0.0008%                    | 0.0015%  |  |   | 1      |            |         |
| Hodge, Sanford I. III                      | 0.0008%                    | 0.0015%  |  | 0.0013%   | 1      |            |         |
| Holden, E. G. Testmentary Tr               | 0.0023%                    | 0.0044%  |  | 0.0037%   | 7      |            |         |
| Hudson, Edward R. Jr.                      | 0.8259%                    | 1.6336%  | 1.3331%  | 1.3566% 14  | 1      |            |         |
| Hudson, William A. II                      | 0,8259%                    | 1.6336%  | 1.3331%  |   | 1      |            |         |
| Kawasaki, Isaac A.                         | 0,0046%                    | 0.0088%  | 0.0075%  | 0.0074%   | ]      |            |         |
| Keller, Betsy H.                           | 0.0023%                    | 0.0044%  | 0,0037%  | 0.0037%   | ]      |            |         |
| Kerr-McGee Corporation                     | 0.1493%                    | 0.2953%  | 0.2410%  | 0 2452%   |        |            |         |
| LAJ Corporation                            | 0.0010%                    | 0.0000%  | 0.0073%  | 0.0021%   | ]      |            |         |
| Los Chicos                                 | 0.000%                     | 0.0000%  | 0.0100%  | 0,0025%   | ]      |            |         |
| Martin, James L. Jr., Trust                | 0,0005%                    | 0,0000%  | 0.0038%  | 0.0011%   | ]      |            |         |
| Martin, Williams, & Judson                 | 0.3496%                    | 0.6125%  | 0.782.5%   |   | 0.5893 | INVESTRENT | 2 GA 14 |
| McCall, Jack O. Estate of                  | 0.0000%                    | 0.0000%  | 0,0003%  | 0.0001%   | ]      |            |         |
| Merit Energy Parmers, II, L.P.             | 0.0000%                    | 0,0000%  | 0.3713%  | 0 0928%   | 1      |            |         |
| Merit Energy Parmers, III, L.P.            | 0.0000%.                   | 0.0000%  | 0.3713%  | 0.0928%   | 1      |            |         |
| Merit Energy Parmers, L.P.                 | 0,0000%,                   | 0,0000%  | 0,3713%  | 0,0928%   | 1      |            |         |
| Moore, Charles Cline                       | 0.0115%                    | 0.0219%  | 0.0189%  | 0.0186%   | 7      |            |         |
| Munroe, Vernen                             | 0.0046%                    | 0.0088%  | 0.0075%  | 0.0074%   | 7      |            |         |
| Myco Industries, Inc.                      | 2.0241%                    | 3.9938%  | 3.4210%  | 3.3582%   | 1      |            |         |
| Napeco                                     | 0.0000%                    | 0,0000%  | 0.0719%  | 0.0180%   | 1      |            |         |
| Oliver, Angus Cluthe Tr                    | 0.0046%(                   | 0.0088%  | 0.0075%  | 0.0074%   | 7      |            |         |
| Oliver, William B. Tr                      | 0.0046%                    | 0.0088%  | 0.0075%  | 0,0074%   | 7      |            |         |
| Oxy U.S.A., Inc.                           | 0.0000%                    | 0,0000%  | 0,53619  | 0.1340%   |        |            |         |
| Permier Oil & Gas, Inc.                    | 0.0000%                    | 0.0000%  | 4.0769%  |   | 1.0197 |            |         |
| Redfern, John J. III, Indep Exec of Est of | 0 0725%                    | 0.1433%  | 0 1170%  | 0.1190%   | 7      |            |         |
| Redfern, Rosalind                          | 0.0725%                    | 0.1433%  | 0.1170%  | 0.1190%   | 7      |            |         |
| Schlagal, John L.                          | 0.0005%                    | 0.0000%  | 0.0032%  | 0.0009%   | -1     |            |         |
| Marti, Adolph P. Schuman Tr                | 0.0046%                    |  |  |   | 1      |            |         |
| Seventy-Seven Corporation                  | 0.0000%                    | 0.0000%  | 0.00809  | 1.0020%   | 1      |            |         |
| Sigmar, Inc.                               | 0.0016%                    | 0.0000%  | 0.01[19  | 0.0032%   | 1      |            |         |
| Space Building Corp.                       | 0 0115%                    | 0,0219%  | 0.0187%  | 0.0185%   | ]      |            |         |
| Tipperary Oil Corporation                  | 0.3199%                    | 0,6561%  | 0.44639  |   | 0.5197 |            |         |
| TR Oil Corporation                         | 0.0000%                    | 0.0000%  | 0 0042%  | 0.0011%   |        |            |         |
| Van Vranken, J. F. Jr.                     | 0 0046%                    | 0.0088%  | 0.0075%  | 0.0074%   |        |            |         |
| Whiting Petroleum Corporation              | 0 3199%                    | 0 6561%  | 0,4468%  |   | 0.5197 |            |         |
| Yates Drilling Company                     | 2.0192%                    | 3,9938%  | 3.3864*  | the second se | 4      |            |         |
| Yates Petroleum Corporation                | 2.4800%                    | 4.9051%  | 4.3094%  | a 4.1499%   | _      |            |         |
| Yates, John A.                             | 0.0049%                    | 0.0000%  | 0.04469  | 0.0124%   |        |            |         |
| Yates, S. P                                | 0.0049%                    | 0.0000%  | the second s |   | _      |            |         |
|  | 100.0000%                  | 100,0000%  | 100.0000   | 100 0000 %  | 1      |            |         |
|  |                            |  |  |   |        | •          |         |
| YPC Et al                                  | 7.2062%                    | the second s | the second s | 12.0135%  |        |            |         |
| Exxon with Merit                           | 85 0939%                   | 70,7855%   | 69 01 659  | 6 73 9204%  | 1      |            |         |

1/31/95

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February 1, 1995

FROM:

| TO: Janet Richard |
|-------------------|
|                   |

son we Boreau Dave Boneau

SUBJECT: Proposed Avalon Delaware Unit

Attached is Exxon's response to the various proposals Yates has submitted in the past few months. The Exxon communication has the form of a letter to the Working Interest Owners that lays out changes to the original Exxon proposals that are agreeable to both Exxon and Yates. So the question is whether the position outlined in the letter is agreeable to Yates. You will see that I do not like the voting procedure devised by Exxon.

The main points are:

- 1. The participation formula for the life of the unit is:
  - a) 25 Percent Remaining Primary Reserves
  - b) 50 Percent Tract Waterflood Reserves
  - c) 25 Percent Tract CO<sub>2</sub> Reserves.

The result gives 12.01 % to Yates and 73.92 % to Exxon (including Exxon's purchase of the Merit interests).

- The overhead rate will be \$550 per producing well. The overhead rate will increase by 27% (to \$700 escalated) when a CO<sub>2</sub> project is approved by the owners and will decrease back to \$550 (escalated) when CO<sub>2</sub> injection ends. The agreement will allow AFE's to pay Exxon for CO<sub>2</sub> Project Studies.
- 3. Since Exxon will own over 70 percent, the voting procedure allows approval with the affirmative vote of Exxon plus owners of 2.6 percent additional.

The participation formula meets our needs. The voting procedure stinks, and the voting procedure is doubly important since it is linked to AFE's for Exxon  $CO_2$  Project Studies. Last night I told Ron Mayhew of Exxon that I did not see how we could accept the voting procedure. I have told Exxon all along that the big minority owners should be able to veto an AFE if they all vote against it. Exxon feels that small owners will be bought out or will go non-consent or simply never return ballots so that Exxon will be

Janet Richardson February 1, 1995 -2-

pressed to get 2.6 percent without Yates and the few "major" people left. An alternative I have considered is that an Exxon AFE is approved unless we get 18 or 20 percent to vote negative.

So, the summary is that we have the voting procedure as a remaining major hurdle. I ask that you review the treatment of non-consents and investment equalization since they impact our discussion of the voting procedure. Exxon expects an immediate response from Yates so we will meet this week if possible.

DFB/cvg

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Attachments

xc: Mike Slater Randy Patterson Pinson McWhorter Bob Fant Peyton Yates

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Letterhead

DRAFT Single Phase

Date

Avalon (Delaware) Field Unitization Eddy Co., N. M.

#### Working Interest Owners:

The last correspondence you received was my letter dated June 20, 1994, which summarized the June 17 Working Interest Owners (WIO) meeting. Several WIO's expressed a strong interest for a single phase formula. An action item of the meeting was for Yates Petroleum to develop an alternative participation formula from the one we proposed.

Letters that summarize the Yates formula and our suggested modifications are attached, dated September 6, October 10 and December 5, 1994. Our single phase proposal, along with modifications to the previously transmitted (April 1994) Unit and Unit Operating Agreements is described in Attachment II and resulting participation in Attachment III of this letter.

This single phase proposal is a significant concession of equity for Exxon compared to our original 2 phase proposal with a vote required for Phase 2. If the single phase proposal is not acceptable, we would prefer to return to a 2 phase formula similar to our original recommendation.

At this time we are requesting either 1.) your concurrence with provisions that are now acceptable to both Exxon and Yates Petroleum or 2.) your suggested changes (return Attachment I). Should you have questions feel free to call me at (915) 688 - 7841. We appreciate your continued support.

Sincerely,

Ronald E. Mayhew Avalon Project Manager

Attachments I-III

1/31/95

#### Attachment I: Response to Exxon on Revised Unitization Proposal

#### Responses requested by February 24, 1995

Mail to: R. E. Mayhew, Avalon Response Exxon USA P.O. Box 1600 Midland, TX 79702-1600 or fax to (915) 688-6258

### Please provide your response by <u>checking one box</u> and completing the information below:

Company Name (s): \_\_\_\_\_

We agree with the unitization proposal as described in this letter (Attachment II). Exxon should proceed with incorporating these modifications into revised Unit and Unit Operating Agreements.

| By (typed or written): | Title: |
|------------------------|--------|
| Signature:             | Phone: |

| Signature: | Phone: |  |
|------------|--------|--|
| Signature. | rnone. |  |
|            | -      |  |

We disagree with the unitization proposal as described in this letter (Attachment II). Our proposal for changes along with our rationale is provided in the attached letter.
 By (typed or written): \_\_\_\_\_\_ Title: \_\_\_\_\_\_

| Signature: | Phone: |
|------------|--------|
|------------|--------|

#### Attachment II: Summary Description of Proposed Modifications to Avalon Field Unit and Unit Operating Agreements

| Ab | bre | viatio | ns |
|----|-----|--------|----|
|    |     |        |    |

The following abbreviations are used:

WI working interest

WIO working interest owners

AFE Authority For Expenditure

Equity

The table below describes proposed revisions to equity participation in the Avalon (Delaware Field) Unit from what Exxon proposed in the previously provided Unit and Unit Operating Agreements.

| Participation will be in a single phase only; which was requested by several attendees at the June 94 WIO meeting.  |
|---|
| Participation will be based on tract reserves with the following  |
| Reserve Factors:  |
| <ul> <li>25 % Remaining Primary</li> </ul>  |
| <ul> <li>50 % Waterflood</li> </ul>   |
| • 25 % CO <sub>2</sub>  |
| Note: These percentages are multiplied by each owners tract reserves  |
| percentage (by Primary, waterflood, and $CO_2$ ), then summed to obtain a   |
| Unit Equity (percentage) as shown on Attachment III.  |
| The rationale used in developing the reserve factors was based  |
| on several items listed below:  |
| • Primary reserves have a higher value/barrel by orders of magnitude (i.e.  |
| investments have been made and production is indicator of future potential)   |
| <ul> <li>the Unit is being put together to repressure the reservoir, implement a</li> </ul>   |
| waterflood and gather data for evaluating CO2 potential   |
| • CO <sub>2</sub> reserves are high, but have a relatively low value due to risks   |
| because of unknowns associated with the reservoir and of doing a $CO_1$   |
| project   |
| • CO <sub>2</sub> reserves have substantially lower discounted profit per barrel  |
| Note: see Technical Report Vol. 1, Exhibit H5 for more information  |
| About $2/3$ of the CO <sub>2</sub> reserves are within the area to be unitized for water injection. A CO <sub>2</sub> flood would likely be initiated in this portion |
| of the field and if successful expanded to the outer ring (tracts outside   |
| the waterflood area) that was not waterflooded. As potential operator   |
| we see some planning and development advantages of including the  |
| outside ring in the unit. This outer ring has no commercial primary   |
| and/or waterflood potential.  |
| A summary of owner participation is provided in Attachment III.   |
| • • •   |
|   |

Continued on next page

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#### Attachment II: Summary Description of Proposed Modifications to Avalon Field Unit and Unit Operating Agreements, Continued

| Capital<br>Expenditures &<br>Contributed<br>Investments | All expenditures (capital and operating expense), along with existing investments of use to the Unit would be at the Single Phase participation percentage shown on Attachment III.  |  |  |  |
|---|--|--|--|--|
|   | <ul> <li>Examples:</li> <li><u>Capital Expenditure</u>: \$13M waterflood and/or future AFEs/ballots: Each owner pays WI% times \$13M and/or ballot amounts</li> <li><u>Operating Expense</u>: Each owner pays WI% times monthly operating cost</li> <li><u>Investment Equalization</u>: If a well or portion of surface facility equipment can be utilized in waterflood or CO<sub>2</sub> operations each owner will be credited with the determined value. Then each owner will be debited with an amount equal to their WI% times (Sum of the values of all wells/equipment brought into the Unit).</li> <li>Note: Under a single phase formula an owner cannot go non-consent on investment equalization and participate in the unit development or vice versa.</li> </ul> |  |  |  |
| Overhead  | <ul> <li>Overhead rate will be charged as follows:</li> <li>initial overhead rate will be \$550/producing well</li> <li>overhead will increase 27% when a CO<sub>2</sub> project is approved by Unit Owners</li> <li>overhead will decrease 22% when CO<sub>2</sub> injection ceases</li> </ul>  |  |  |  |
| 1   | Exception: Exxon may submit AFE's prior to approval of a $CO_2$ Project to Working Interest<br>Owners to conduct $CO_2$ Project studies that will be considered as an operating expense outside the<br>overhead category. Approval must be voted in similar to other AFEs.<br>Examples: These studies could include computer modeling, injectivity test planning & analysis,<br>cost/production estimates, etc.  |  |  |  |
| Voting  | Ballots submitted for approval to Working Interest Owners will be considered approved if either of the following conditions are met:   |  |  |  |
|   | <ul> <li>80% of the WIO participation approves the ballot</li> <li>If one owner has interest &gt; 70%, that owners interest plus 10% of the remaining interest.</li> </ul>   |  |  |  |
|   | Approval = largest owner WI{if > 70%}+0.10 (100% - Largest Owners WI)  |  |  |  |

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Aba Perroleum Corporation

Arg. Mary H.

Bunn, Mrs. Francis B.

Claremont Corporation

Chevron PBC, Inc.

Exxon Corporation

Goodnow, David

Hayes Parmers I

Bello, Ernie

American National Pet. Corp.

Devon Energy Corporation (NV)

Gendron Family Revocable Trust

Devon Energy Parmers L.P.

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> 2.570 2 beyond Yutes, ANPL 3 beyond Yutes, ANPL, Hundsing Attachment III: Avalon (Delaware) Participation (25,50,25) Sincie Phase Farmula Farticipation: 25% G-24 Tract 50% Primary. G-24 Tract Watertlood, and 25% CO2 G-24 1/1/93 Waterflood Reserves CO2 Reserves flood Rem Primary 0.6731% 1.3313% 1.1936% 1.1323% 4 7210% 4.6505% 2.3177% 5.5317% 1.3566 0.8259%6; 1,3331% 1.633674 0.0046% 0.0088% 0.0075% 0.0074% 0 0075% 0.0074% 0.0046% 0 0083% 0.9019 0.4236% 0.6857% 1.3238% OCHIEF 0.1549% 3.3063% 0.2500% 0.2544% 0.1136 0.1117% 0 0.0691% 0.1367% 0.6435 0.3916% 0.77-6% 0.6331% 00000 85.0939% 70,7855% 67.9026% 73.6419% Fox, Fred A. & D. Marjean Living Trust 0.0005% 3.0000% 0.0038% 0.0011% 0.0132<del>%</del> 0.0112% 0.0069%5. 0.0111% 0.0046% 0.0088% 0 0075% 0.0074% 0.0412% 0.0103% 0.0000% 0.0000%5 0.0008% 0.001535 0.0012% 0.0013% ESTRENT = GAIN

| cankes t maters t                          | 0.0000731 | 0.0000.5  | 3.001270  | 0.0103/8                |             |
|--|-----------|-----------|-----------|-------------------------|-------------|
| Hodge, Joseph R.                           | 0.0008%   | 0.001535  | 0.0012%   | 0.0013%                 |             |
| Hodge, Sanford J. III                      | 0.0008%   | 0.0015%   | 0.0012%   | 0.0013%                 |             |
| Holden, E. G. Testmentary Tr               | 0.0023%   | 0.00      | 0.0037%   | 0.0037%                 | ]           |
| Hudson, Edward R. Jr.                      | 0.3259%   | 1.6330%   | 1.3331%   | 1.3566% 14              |             |
| Hudson, William A. II                      | 0.3259%   | 1.6336%   | 1.3331%   | 1.3566% 🦉               | · _         |
| Kawasaki, Isaac A.                         | 0.0046%   | 0.0088%   | 0.0075%   | 0,0074%                 |             |
| Keller, Betsy H.                           | 0.0023%.  | 0.0044%   | 0.0037%   | 0.0037%                 |             |
| Kerr-McGee Corporation                     | 0.1493%   | 0.2953%i  | 0_2410%   | 0 2452%                 | ]           |
| LAJ Corporation                            | 0.0010%   | 0.0000%   | 0.0073%   | 0.0021%                 |             |
| Los Chicos                                 | 0 000%    | 0.0000%   | 0.0100%   | 0.0025%                 |             |
| Martin, James L. Jr., Trust                | 0,0005%   | 0.000%    | 0.0038%   | 0.0011%                 |             |
| Martin, Williams, & Judson                 | 0.3496%   | 0.6125%   | 0.7825%   | No. of Concession, Name | 0.5893 INVE |
| McCail, Jack O Estate of                   | 0.0000%   | 0,0000%)  | 0,0003%   | 0,0001%                 | ]           |
| Merit Energy Partners, II. L.P.            | 0,0000%   | 3,0000?5  | 0.3713%   | 0 0928%                 | 7           |
| Merit Energy Parmers, III, L.P             | 0.0000%5. | 0.0000%   | 0.3713%   | 0.092.5%                | 1           |
| Merit Energy Partners, L.P.                | 0,000085. | 0,0000%   | 0.3713%   | 0,0928%                 | 1           |
| Moore, Charles Cline                       | 0.0115%   | 0.0219%   | 0.0139%   | 0.0186%                 |             |
| Милгос, Устал                              | 0.0046%   | 2.0083%   | 0.0075%   | 0.0074%                 | 7           |
| Myco Industries, Inc.                      | 2.024[%]  | 3.9938%   | 3.4210%   | 3.3582%                 |             |
| Napeco                                     | 0 0000551 | 0.0000%   | 0.0719%   | 0.0180%                 | 7           |
| Oliver, Angus Cluche Tr                    | 0.0046441 | 0,0088%   | 0.0075%   | 0.0074%                 |             |
| Oliver, William B. Tr                      | 0.0046%   | 0.0083%J  | 0.0075%   | 0.0074%                 |             |
| Oxy U.S.A., Inc.                           | 0,0000%i  | 0 0000%   | 0.5361%   | 0,1340%                 |             |
| Permier Oil & Gas, Inc.                    | 0.0000%5  | 0.0000%   | 4.0769%   |                         | 1.0192      |
| Redfern, John J. III, Indep Exec of Est of | 0 0725%   | 0.1433%4  | 01170%    | 0.1190%                 | ]           |
| Redfern, Rosalind                          | 0.0725%   | 0,1433%   | 0.1170%   | 0.1190%                 | ]           |
| Schlagal, John L.                          | 0.0005%   | 0.0000%   | 0.0032%   | 0.0009%                 | -           |
| Marti, Adolph P. Schuman Tr                | 0.0046%   | 0 0088%4  | 0 0075%   | 0.0074%                 | 1           |
| Seventy-Seven Corporation                  | 0.0000%   | 3 2000%   | 0.0080%   | 1.0020%                 | 7           |
| Sigmar, Inc.                               | 0.0015%   | 3 0000%   | 0.0111%   | 0.0032%                 | ]           |
| Space Building Corp.                       | 0.0115%   | 0,0219%   | 0.0187%   | 0.0185%                 |             |
| Tipperary Oil Corporation                  | 0.3199%   | 0.5551%   | 0.4468%   |                         | 0.5197      |
| TR Oil Corporation                         | 0.0000%   | 0.0000094 | 0 0042%   | 0.0011%                 |             |
|  | 0 004655  | 0.0033%   | 0,0075%   | 0 0074%                 |             |
| Whiting Petroleum Carporation              | 03199%    | 0.5551%   | 0.4468%   |                         | 0.5197      |
| Yates Drilling Company                     | 2.0192:5  | 3,9938%   | 3 3864:4  | 3 3483%                 | _           |
| Yates Petroleum Corporation                | 2.480C%i  | 4 905175  | 4.3094%   | 4.1499%                 | _           |
| Yates, John A.                             | 0.0049%   | 0.0000%   | 0.0446%   | 0.0124%                 |             |
| Yales, S. P                                | 0.0049%   | 0.0000%1  | 0.0346%   | 0.0099%                 |             |
|  | 100 0000% | 100.000%  | 100.0000% | 100.0000%               | _           |
|  |           |           |           |                         | 4           |
| YPC Et al                                  | 7 206274  | 14 2240%4 | 12.3996%  | 12 0135%                | 4           |
| Exxon with Merit                           | 85 0939%4 | 70 7855%  | 69 0165%  | 73 9204%                | 1           |

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**Avalon Voting Approaches** 

Nave Bonem, 14TE Vet 505 - 748 - 4585

| Philosophy                  | <ul> <li>Exxon agrees that some significant level of WI should agree with ballots for them to be approved.</li> <li>Yates Petroleum agrees that they should not have veto power under current</li> </ul> |
|-----------------------------|--|
|                             | ownership or the future (with considerations of acquisitions and potential for<br>WIO's to go non-consent)   |
| Recommended<br>Procedure    | The following voting procedure is recommended to meet the philosophy above.  |
| •                           | Approval = Largest Owner + 20% of (Unit WI less Yates & Exxon), unless   |
| •                           | there are < 6 non-Yates, non-Exxon owners; then largest owner can approve<br>Note: Approval = Exxon plus 2.81% under current ownership (76.73%)  |
| Alternate<br>Procedure      | The following voting procedure can also meet the philosophy above.   |
| •                           | Approval = 76.7 %, unless  |
| •                           | Exxon > 76.7 % or Yates > 19%; then largest owner plus 3 consenting WIOs approve, unless   |
| •                           | there are $< 6$ non-Yates, non-Exxon owners; then largest owner can approve  |
| Procedure<br>Clarifications | The following clarifications are provided to clarify the 2 above procedures.   |
| •                           | Yates: The WI of the 7 companies with Avalon WI affiliated with Yates Petroleum Company  |
| •                           | If 1 or more of the Yates 7 companies and/or another Yates Petroleum affiliate   |
|                             | acquires additional WI, then this WI is added to Yates WI  |
|                             | Non-consent WI will be added to the voting WI of the WIOs who carry them   |

Continued on next page

### Avalon Voting Approach, Continued

Largest WIOs The largest WIO voting groups are listed below in Columns 1 & 2.

Column 3 shows Cumulative WIO (excluding Yates, ANPC, and 2 Hudsons); where Ard, Premier, and Chevron/PBC with Exxon would exceed 76.5%.

Column 4 shows Cumulative WIO (excluding Yates, ANPC, and 2 Hudsons); where Tipperary, Whiting, MWJ, Devons, and Chevron/PBC would exceed 76.5%.

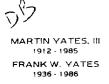
| 1. WIO          | 2. %  | 3. Cumulative w/o<br>Yates, ANPC,<br>Hudson<br>(large to small) | 4. Cumulative w/o<br>Yates, ANPC,<br>Hudson<br>(small to large) |
|-----------------|-------|---|---|
| Exxon           | 73.92 | 73.92   | 73.92   |
| Yates et al     | 12.01 |   |   |
| ANPC            | 4.65  |   |   |
| Hudsons(2)      | 2.71  |   |   |
| 1. Ard          | 1.36  | 75.28   | 79.59   |
| 2. Premier      | 1.02  | 76,30   | 78.23   |
| 3. Chevron/ PBC | 0.90  | 77.20   | 77.21   |
| 4. Devon(2)     | 0.76  | 77.96   | 76,31   |
| 5. MWJ          | 0.59  | 78.55   | 75,55   |
| 6. Whiting      | 0.52  | 79.07   | 74,96   |
| 7. Tipperary    | 0.52  | 79.59   | 74.44   |
| 30 others       | 1.04  |   |   |

The table below shows WIO needed for various approval %. The rationale for needing 76.5% is that 3 of 7 largest OR 5 of 7 smallest are needed to make 76.5%.

| Approval % | WIO needed<br>large to small | WIO needed  |  |
|------------|------------------------------|-------------|--|
| 75         | 1                            | 5,6,7       |  |
| 75.5       | 1,2                          | 5,6,7       |  |
| 76         | 1,2                          | 4,5,6,7     |  |
| 76.5       | 1,2,3                        | 3,4,5,6,7   |  |
| 77         | 1,2,3                        | 3,4,5,6,7   |  |
| 77.5       | 1,2,3,4                      | 2,3,4,5,6,7 |  |
| 78         | 1,2,3,4,5                    | 2,3,4,5,6,7 |  |

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4D





S. P. YATES CHAIRMAN OF THE BOARD JOHN A. YATES PRESIDENT PEYTON YATES EXECUTIVE VICE PRESIDENT RANDY G. PATTERSON SECRETARY DENNIS G. KINSEY TREASURER

105 SOUTH FOURTH STREET ARTESIA, NEW MEXICO 88210 TELEPHONE (505) 748-1471

February 9, 1995

Ron Mayhew Exxon Company USA P. O. Box 1600 Midland, Texas 79702-1600

RE: Avalon Delaware Voting

Dear Ron,

As you did in your fax dated February 8, I wish to clarify the philosophy related to Avalon voting. Also, this note tries to bring you up to date on relevant activities here at Yates.

Bob Fant and I met with Peyton Yates for an hour or more Monday evening. I met with Randy Patterson, Land Manager, for a long time on Tuesday morning and Randy met with Peyton yesterday before he left for the Dallas Federal Reserve meeting. It is now clearer to me where Exxon and Yates agree and disagree on the approach to the problem.

These are three philosophical areas where clarity might help:

- <u>Veto</u> I told you and Yates Management agrees that a minority owner of 15 percent or less should not be able to veto action. Yates Management believes that a minority owners of 20 percent should be able to veto action since the Avalon project is expensive in our eyes. I think Exxon believes that no minority owner should ever have a veto, so we have a clear problem to address.
- <u>Buyouts</u> Yates has purchased no interests in the Avalon Delaware area whereas Exxon has purchased Mesa wells plus interests in wells operated by Yates plus interests in non-producing acreage. Recently, Exxon bought the Merit interests. It is true that Yates has made offers to a few owners. These have been rejected. Yates is simply not going to seek aggressively to increase its ownership in a project that is risky and expensive.

Ron Mayhew February 9, 1995 -2-

3. <u>Non Consents</u> - Our reading of the Proposed Agreements leads me to believe that the Yates interest can not increase significantly via the non-consent procedures. If Yates chooses to pick up non-consents to the maximum extent, we gain 0.1 percent while Exxon gains 0.6 so that the Exxon ownership grows rapidly. If everyone else goes non-consent, the final tally is Exxon 86 percent and Yates 14 percent. You need to explain better what Exxon fears in this area.

At this point, Peyton Yates has said Yates would accept the following variation of your earlier proposal:

Ballots submitted for approval to Working Interest Owners will be considered approved if <u>both</u> of the two conditions below are met:

- 1. 80% of the WIO participation approves the ballot, and
- 2. the largest owner plus <u>15%</u> of the remaining interest approve the ballot.

I think you can see that this proposal reflects the philosophy outlined above.

Sincerely,

we Barlan

David F. Boneau Manager of Non-Op Properties

DFB/cvg

Attachment

xc: Peyton Yates Randy Patterson Janet Richardson Bob Fant

| Philosophy                  | <ul> <li>Exxon agrees that some significant level of WI should agree with ballots for them to be approved.</li> <li>Yates Petroleum agrees that they should not have veto power under current ownership or the future (with considerations of acquisitions and potential for WIO's to go non-consent)</li> </ul>      |
|-----------------------------|---|
| Recommended<br>Procedure    | The following voting procedure is recommended to meet the philosophy above.   |
| •                           | Approval = Largest Owner + 20% of (Unit WI less Yates & Exxon), unless<br>there are < 6 non-Yates, non-Exxon owners; then largest owner can approve<br>Note: Approval = Exxon plus 2.81% under current ownership (76.73%)   |
| Alternate<br>Procedure      | The following voting procedure can also meet the philosophy above.  |
| •                           | Approval = 76.7 %, unless<br>Exxon > 76.7 % or Yates > 19%; then largest owner plus 3 consenting WIOs<br>approve, unless<br>there are < 6 non-Yates, non-Exxon owners; then largest owner can approve   |
| Procedure<br>Clarifications | The following clarifications are provided to clarify the 2 above procedures.  |
| •                           | Yates: The WI of the 7 companies with Avalon WI affiliated with Yates Petroleum<br>Company<br>If 1 or more of the Yates 7 companies and/or another Yates Petroleum affiliate<br>acquires additional WI, then this WI is added to Yates WI<br>Non-consent WI will be added to the voting WI of the WIOs who carry them |

**Avalon Voting Approaches** 

Continued on next page

505 - 748 - 4585

1

## Avalon Voting Approach, Continued

Largest WIOs The largest WIO voting groups are listed below in Columns 1 & 2.

Column 3 shows Cumulative WIO (excluding Yates, ANPC, and 2 Hudsons); where Ard, Premier, and Chevron/PBC with Exxon would exceed 76.5%.

Column 4 shows Cumulative WIO (excluding Yates, ANPC, and 2 Hudsons); where Tipperary, Whiting, MWJ, Devons, and Chevron/PBC would exceed 76.5%.

| 1. WIO         | 2. %  | 3. Cumulative w/o<br>Ystes, ANPC,<br>Hudson<br>(large to small) | 4. Cumulative w/o<br>Ysten, ANPC,<br>Hudson<br>(mail to large) |
|----------------|-------|---|--|
| Exxon          | 73.92 | 73.92   | 73.92  |
| Yates et al    | 12.01 |   |  |
| ANPC           | 4.65  |   |  |
| Hudsons(2)     | 2.71  |   |  |
| 1. Ard         | 1.36  | 75.28   | 79.59  |
| 2. Premier     | 1.02  | 76,30   | 78.23  |
| 3. Chevron/PBC | 0.90  | 77.20   | 77.21  |
| 4. Devon(2)    | 0.76  | 77.96   | 76.31  |
| 5. MWJ         | 0.59  | 78.55   | 75,55  |
| 6. Whiting     | 0.52  | 79.07   | 74,96  |
| 7. Tipperary   | 0.52  | 79.59   | 74,44  |
| 30 others      | 1.04  |   |  |

The table below shows WIO needed for various approval %. The rationale for needing 76.5% is that 3 of 7 largest OR 5 of 7 smallest are needed to make 76.5%.

| Approval % | WIO needed<br>large to small | WIO needed<br>small to large |  |
|------------|------------------------------|------------------------------|--|
| 75         | 1                            | 5,6,7                        |  |
| 75,5       | 1,2                          | 5,6,7                        |  |
| 76         | 1,2                          | 4,5,6,7                      |  |
| 76.5       | 1,2,3                        | 3,4,5,6,7                    |  |
| 77         | 1,2,3                        | 3,4,5,6,7                    |  |
| 77.5       | 1,2,3,4                      | 2,3,4,5,6,7                  |  |
| 78         | 1,2,3,4,5                    | 2,3,4,5,6,7                  |  |

4E

### Fax: Dave Boneau, Yates Petroleum 505-748-4585

### Avalon Proposed Voting: draft for discussion purposes only

- 1. Expenditures requiring ballot approval change from \$50,000 to \$100,000.
- 2. Waterflood AFE (approximately \$13M): Unit cannot not be effective until AFE approved.
- 3. AFE's under \$5M done during normal operations: Approval to be largest owner WI (includes non-consent WI carried at time of Unitization) plus 10% of difference between 100% and largest owner WI
- CO<sub>2</sub> Project AFE and CO<sub>2</sub> (Overhead) Studies prior to Project: <u>Choice 1</u>; Largest 2 owners must approve. Yates Petroleum 7 affiliates defined as a single owner for this purpose. Should these interests be sold a new 2nd largest owner could occur.

<u>Choice 2:</u> 85% approve <u>or</u> Largest owner plus 10% <u>and</u> at least 80%, similar to your previous letter except using 10% instead of 15%.

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| 02/21/95 | 16:10 | 2505    | 748  | 4585 |
|----------|-------|---------|------|------|
| 02/22/95 | 12:13 | FAX 688 | 6258 |      |

Avalon Proposed Voting: Yates draft 2/21/95

1 1. Expenditures greater than \$100,000 require ballot approval.

- 1, Waterflood AFE (approximately \$13M): Unit cannot be effective until AFE approved as provided in the existing Pre-Unitization Agreement.
- AFE's under \$1M: Approval to be largest owner WI (includes non-consent WI .3 وجہ carried at time of Unitization) plus #% of difference between 100% and largest



Expenditures of \$1MM or greater: Approval of 85% of WI ownership.

5, Special Exception : For Tertiary (overhead) Studies property Secondary sconfusily -and Tertiary Projects, Pilots for and expansions of such projects, both in the 

Largest 2 owners must approve. Yates Petroleum 7 affiliates defined as a single owner for this purpose. Should these Yates interests be sold a new 2nd largest owner could occur.

Large Owner Exception: If any single owner controls greater than 85% WI:

Alteration of any Flood Pattern and Centralization of Production Facilities will be added to the operations requiring approval under 5. Special Exception above.

Teuchic Teuchic What are concornes here? What are concornes here? Is this conversions, add purts, charging Art Lift?

### Avalon Proposed Voting: Yates draft 2/21/95

- 1. Expenditures greater than \$100,000 require ballot approval.
- 2. Waterflood AFE (approximately \$13M): Unit cannot be effective until AFE approved as provided in the existing Pre-Unitization Agreement.
- 3. AFE's under \$1M: Approval to be largest owner WI (includes non-consent WI carried at time of Unitization) plus 15% of difference between 100% and largest owner WI.
- 4. Expenditures of \$1MM or greater: Approval of 85% of WI ownership.
- 5. Special Exception : For Tertiary (overhead) Studies prior to Project, Secondary and Tertiary Projects, Pilots for and expansions of such projects, both in the Primary Area and in the Ring Area, and drilling of one or more wells:

Largest 2 owners must approve. Yates Petroleum 7 affiliates defined as a single owner for this purpose. Should these Yates interests be sold a new 2nd largest owner could occur.

6. Large Owner Exception: If any single owner controls greater than 85% WI:

Alteration of any Flood Pattern and Centralization of Production Facilities will be added to the operations requiring approval under 5. Special Exception above.

4G

# FAX Exxon USA

Courier: Midland Production ML 71, 23 Desta Drive, Midland, TX 79705

Mail: P.O. Box 1600, 79702-1600

Date: 3 Number of pages including cover sheet: To: Fax /phone: From: Ron Mayhew Dave Bonena 505.748-4585 915 - 688 - 7841 Phone: Vates Petroleun phane/ 4172 Fax: 915 - 688 - 6258 C. Gil Benkler 656-1495 Backup: Call Nancee 688 - 7930 **REMARKS:** Urgent For your review Reply ASAP D. Please comment Dave, Attached is letter I plan to send to WID's 2 3 pm tomorrow, I'm at my limit on voting so if we are for apart I'll need to talk with Peyton direct to resolve his concerns. Thanks for your continued concerns. Thanks for your convita pattence, but its time to get on with the Project if we want a Unit. Rom 2/22 c: Gil Bechko



PRODUCTION DEPARTMENT MIDLAND PRODUCTION ORGANIZATION

February 22, 1995

Avalon (Delaware) Field Unitization Eddy Co., N. M.

### Working Interest Owners:

We are in the process of preparing revised Unit and Unit Operating Agreements (UA/UOA) for your approval to form the Avalon (Delaware) Field Unit with modifications that address all of the issues raised at the June 17, 1994 Working Interest Owner (WIO) Meeting (summarized in my letter of June 20, 1994). We appreciate the feedback provided by WIO's to develop these revisions, which are summarized in Attachment II.

The primary issue at the WIO Meeting was the framework for the equity formula. At that meeting, several WIO's expressed a strong interest for a single phase formula. An action item of the meeting was for Yates Petroleum to develop an alternative participation formula to the two-phase formula proposed by Exxon.

Letters that cover various formulas are attached for your information, dated September 6, October 10 and December 5, 1994. The resulting formula agreeable to both Yates and Exxon is summarized in Attachment II with WIO participation shown on Attachment III.

At this time we are requesting either 1.) your concurrence with provisions that are now acceptable to both Exxon and Yates Petroleum or 2.) your proposed changes/rationale (return Attachment I by March 17, 1995). This is not considered to be approval of the Unit/Unit Operating Agreements, but an endorsement to modify provisions in them; therefore is non-binding. Should you have questions feel free to call me at (915) 688-7841. We appreciate your continued support.

Sincerely,

Rovald E. Marfen

Ronald E. Mayhew Avalon Project Manager

Attachments I-III

1

# Attachment I: Response to Exxon on Revised Unitization Proposal

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w. . . . . . . . . . . .

|            |  | Responses requested by March 17, 1995                    |
|------------|--|--|
| Mail to:   | R. E. Mayhew, Avalon Resp                      | onse   |
|            | Exxon USA                                      |  |
|            | P.O. Box 1600                                  |  |
|            | Midland, TX 79702-1600                         | or fax to (915) 688-6258                                 |
|            |  |  |
|            | ovide your response by <u>ch</u><br>ion below: | ecking one box and completing the                        |
| Company    | y Name (s):                                    |  |
| <b>W</b> e | agree with the unitization propos              | sal as described in this letter (and Attachments). Exxon |

should proceed with modifying the Unit and Unit Operating Agreements.
By (typed or written): \_\_\_\_\_\_ Title: \_\_\_\_\_\_
Signature: \_\_\_\_\_ Phone: \_\_\_\_\_\_

We disagree with the unitization proposal as described in this letter (and Attachments). Our proposal for changes along with our rationale is provided in the attached letter.
 By (typed or written): \_\_\_\_\_\_ Title: \_\_\_\_\_\_

Signature: \_\_\_\_\_ Phone: \_\_\_\_\_

Note: This is not considered to be approval of the Unit/Unit Operating Agreements, but an endorsement to modify provisions in them; therefore is non-binding.

2

### Attachment II: Summary Description of Proposed Modifications to Avalon Field Unit and Unit Operating Agreements

Abbreviations

The following abbreviations are used:

WI working interest

WIO working interest owners

AFE Authority For Expenditure

Equity

The table below describes proposed revisions to equity participation in the Avalon (Delaware Field) Unit from what Exxon proposed in the previously provided Unit and Unit Operating Agreements.

-----

| Feature                         |   | Description  |  |  |
|---------------------------------|---|--|--|--|
| Phases                          | Participation will be in a single phase only; which was requested by several attendees at the June 94 WIO meeting.  |  |  |  |
| Reserve<br>Weighting<br>Factors | Participation will be based on<br>Reserve Weighting Factors:  | tract reserves with the following  |  |  |
|                                 | <b>Reserve Weighting</b><br>25 % Remaining Primary  | Rationale<br>low risk<br>near term production<br>highest value                         |  |  |
|                                 | 50 % Waterflood<br>25 % CO <sub>2</sub>   | main purpose of unitization<br>highest technical, economic, and<br>implementation risk |  |  |
|                                 | Note: These percentages are multiplied by each owners tract reserves percentage (by Primary, Waterflood, and $CO_2$ ), then summed to obtain a Unit Equity (percentage) as shown on Attachment III. |  |  |  |
| Owner<br>participation          |   | ipation is provided in Attachment III.   |  |  |

**Bidding of CO<sub>2</sub>** The bidding of crude oil sales and CO<sub>2</sub> supply have been incorporated into the agreements. Contact Scott Lansdown (915) 688-4982 if you would like to review wording.

Continued on next page

# Attachment II: Summary Description of Proposed Modifications to Avalon Field Unit and Unit Operating Agreements, Continued

| Capital<br>Expenditures &<br>Contributed<br>Investments | All expenditures (capital and operating expense), along with existing<br>investments of use to the Unit would be at the Single Phase participation<br>percentage shown on Attachment III.  |
|---|--|
|   | <ul> <li>Examples:</li> <li>Capital Expenditure: \$14M waterflood and/or future AFEs/ballots: Each owner pays WI fraction times \$14M and/or ballot amounts</li> <li>Operating Expense: Each owner pays WI fraction times monthly operating cost</li> <li>Investment Equalization: If a well or portion of surface facility equipment can be utilized in waterflood or CO<sub>2</sub> operations each owner will be credited with the determined value. Then each owner will be debited with an amount equal to their WI fraction times the sum of the values of all wells/equipment brought into the Unit.</li> </ul>   |
| Overhead  | <ul> <li>Overhead rate will be charged as follows:</li> <li>initial overhead rate will be \$550/ producing and injection well</li> <li>overhead will increase 27% when a CO<sub>2</sub> project is approved by Unit Owners</li> <li>overhead will decrease 22% when CO<sub>2</sub> injection ceases</li> </ul> Exception: Exxon may submit AFE's prior to approval of a CO <sub>1</sub> Project to WIOs to conduct CO <sub>2</sub> Project Studies that will be considered as an operating expense outside the overhead category for the purpose of recovering costs for company and consulting personnel. Examples: These studies could include computer modeling, injectivity test planning & analysis, cost/production estimates, etc. Note: for approval requirements see Voting below |
| Voting  | <ul> <li>Ballots/AFE's to WIOs will be considered approved if:<br/>Note: AFE's under \$100k do not require WIO approval</li> <li>CO<sub>2</sub> Study AFE's (see Overhead above) and CO<sub>2</sub> Project AFE's (both pilot ant full scale): Largest 2 owners must approve in addition to \$ requirement.<br/>Note: Yates Petroleum's 7 affiliates are defined as a single owner for this purpose. Should these Yates interests be sold a new 2nd largest owner could occur.</li> <li>AFE's &lt; \$ 1M (to be escalated 3%/year): Largest Owner + 10% remaining WI</li> <li>AFE's ≥ \$1M (to be escalated 3%/year): 84 % of the WIO participation</li> </ul>   |

### Attachment III: Avalon (Delaware) Participation (25,50,25)

|   |                            |                        |                            | Single Phase Formula<br>Participation: 25% |
|---|----------------------------|------------------------|----------------------------|--|
|   |                            | G-24 Tract             |                            | Primary, 50%                               |
|   | G-24 1/1/93<br>Rem Primary | Waterflood<br>Reserves | G-24 Tract<br>CO2 Reserves | Waterfload, and 25% CO2                    |
| Abo Petroleum Corporation                     | 0.6731%                    | 1.3313%                | 1.1936%                    |  |
| American National Pet. Corp.                  | 2.8177%                    | 5,5317%                |                            | 4.6505%                                    |
| Ard, Mary H.                                  | 0.8259%                    | 1,5336%                | 1.3331%                    |  |
| Bello, Emic                                   | 0.0046%                    | 0.0088%                | 0.0075%                    | 0.0074%                                    |
| Buon, Mrs. Francis B.                         | 0.0046%                    | 0.0088%                | 0.0075%                    | 0.0074%                                    |
| Chevron PBC, Inc.                             | 0.4236%                    | 0.6857%                | 1.8238%                    | 0,9047%                                    |
| Claremont Corporation                         | 0,1549%                    | 0.3063%                | 0.2500%                    | 0.2544%                                    |
| Devon Energy Corporation (NV)                 | 0.0691%                    | 0,136735               | 0.1117%                    | 0.1136%                                    |
| Devon Energy Partners L.P.                    | 0.3916%                    | 0.7746%                | 0.6331%                    | 0.6435%                                    |
| Exxon Corporation                             | 85.0939%                   | 70.7855%               | 67.9026%                   | 73.6419%                                   |
| Fox, Fred A. & D. Marjean Living Trust        | 0.0005%                    | 0,0000%                | 0.0038%                    | 0,0011%                                    |
| Gendron Family Revocable Trust                | 0.0069%                    | 0.0132%                | 0.0112%                    |  |
| Goodnow, David                                | 0.0046%                    | 0,0088%                | 0.0075%                    | 0.0074%                                    |
|   | 0.0000%                    | 0,0000%                | 0.0412%                    |  |
| Hayes Partners I<br>Hodgo, Joseph R.          | 0.0008%                    | 0.0015%                | 0.0412%                    | 0.0103%                                    |
| Hodge, Joseph K.<br>Hodge, Sanford J. III     | 0.0008%                    | 0.0015%                |                            |  |
|   |                            |                        | 0.0012%                    | 0.0013%                                    |
| Halden, E. G. Testmentary Tr                  | 0.0023%                    | 0,0044%                | 0.0037%                    | 0.0037%                                    |
| Hudson, Edward R. Jr.                         | 0.8259%                    | 1.6336%                | 1,3331%                    | 1.3566%                                    |
| Hudzon, William A. II                         | 0.8259%                    | 1.6336%                | 1.3331%                    | 1.3566%                                    |
| Kawasaki, Isaac A.                            | 0.0046%                    | 0.0088%                | 0.0075%                    | 0.0074%                                    |
| Koller, Betsy H.                              | 0.0023%                    | 0.0044%                | 0.0037%                    | 0.0037%                                    |
| Kerr-McGeo Corporation                        | 0,1493%                    | 0.2953%                | 0.2410%                    | 0.2452%                                    |
| LAJ Corporation                               | 0.0010%                    | 0.0000%                | 0,0073%                    | 0.0021%                                    |
| Los Chicos                                    | 0.0000%                    | 0.0000%                | 0.0100%                    | 0.0025%                                    |
| Martin, James L. Jr., Trust                   | 0,0005%                    | 0.0000%                | 0.0018%                    | 0.0011%                                    |
| Martin, Williams, & Judson                    | 0.3496%                    | 0.6126%                | 0.7825%                    | 0.5893%                                    |
| McCall, Jack O. Betate of                     | 0.0000%                    | 0.0000%                | 0.0003%                    | 0.0001%                                    |
| Merit Energy Partners, II, L.P.*              | 0.0000%                    | 0.0000%                | 0.3713%                    | 0.0928%                                    |
| Merit Energy Partners, III, L.P. *            | 0.0000%                    | 0.0000%                | 0.3713%                    | 0.0928%                                    |
| Merit Energy Pariners, L.P. *                 | 0.0000%                    | 0.0000%                | 0.3713%                    | 0.0928%                                    |
| Moore, Charles Cline                          | 0.0115%                    | 0.0219%                | 0.0189%                    | 0.0186%                                    |
| Munroe, Vernon                                | 0.0046%                    | 0.0088%                | 0,0075%                    | 0.0074%                                    |
| Myco Industries, Inc.                         | 2.0241%                    | 1,9938%                | 3.4210%                    | 3.3582%                                    |
| Napeco  | 0.0000%                    | 0.0000%                | 0.0719%                    | 0.0180%                                    |
| Oliver, Angus Cluthe Tr                       | 0.0046%                    | 0.0068%                | 0.0075%                    | 0.0074%                                    |
| Oliver, William B. Tr                         | 0.0046%                    | 0,0088%                | 0.0075%                    | 0.0074%                                    |
| Day U.S.A., Inc.                              | 0.0000%                    | 0.0000%                | 0.5361%                    | 0.1340%                                    |
| Premier Oil & Gas, Inc.                       | 0.0000%                    | 0.0000%                | 4.0769%                    | 1.0192%                                    |
| Redfern, John J. III, indep Exec of Est of    |                            | 0,1433%                |                            |  |
|   | 0.0725%                    |                        | 0.1170%                    | 0.1190%                                    |
| Redforn, Rosalind                             | 0.0721%                    | 0.1433%                | 0.1170%                    | 0.1190%                                    |
| Schlagal, John L.                             | 0.0005%                    | 0.0000%                | 0.0032%                    | 0.0009%                                    |
| Maril, Adolph P. Schuman Tr                   | 0.0046%                    | 0,0088%                | 0.0075%                    | 0.0074%                                    |
| Seventy-Scuen Corporation                     | 0.0000%                    | 0.0000%                | 0.0080%                    | 0.0020%                                    |
| Sigmar, Inc.                                  | 0.0016%                    | 0,0000%                | 0,0111%                    | 0,0032%                                    |
| Space Bullding Corp.                          | 0.0115%                    | 0.0219%                | 0.0187%                    | 0.0185%                                    |
| Tippernry Oil Corporation                     | 0.3199%                    | 0.6561%                | 0.4468%                    | 0.5197%                                    |
| IR Oil Corporation                            | 0.0000%                    | 0.0000%                | 0.0042%                    | 0.0011%                                    |
| Van Vranken, J. F. Jr.                        | 0.0046%                    | 0.0088%                | 0.0075%                    | 0.0074%                                    |
| Whiting Petroleum Corporation                 | 0.3199%                    | 0.6561%                | 0.4468%                    | 0.5197%                                    |
| Tates Drilling Company                        | 2.0192%                    | 1.9938%                | 3.3864%                    | 3.3483%                                    |
| fates Petroleum Corporation                   | 2.4800%                    | 4.9051%                | 4.3094%                    | 4.1499%                                    |
| fates, John A.                                | 0,0049%                    | 0.0000%                | 0.0446%                    | 0.0124%                                    |
| Yales, S. P.                                  | 0.0049%                    | 0,0000%                | 0.0346%                    | 0.0099%                                    |
|   | 100.0000%                  | 100.0000%              | 100.0000%                  | 100,0000%                                  |
| Note: Erron purchased Marth Interest in 1/05  | ╇╾┈──┤                     |                        |                            |  |
| "Note: Exxon purchased Marit Interest in 1/95 | ╁────┼                     |                        |                            |  |
|   | <b>┼──</b> ──┤             |                        |                            |  |
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|   | 1                          |                        |                            |  |

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PRODUCTION DEPARTMENT MIDLAND PRODUCTION ORGANIZATION

February 23, 1995

Avalon (Delaware) Field Unitization Eddy Co., N. M.

David F. Boneau, Manager Non-Op Properties Yates Petroleum Corporation 105 S. Fourth St. Artesia, NM 88210

### **Dear Dave:**

We will agree with the 4 requests in your fax dated today, to foster a spirit of cooperation and to progress the project. This is with the assumption that these are the final changes. The wording that I will pass on to our Unit Agreement Drafting Committee is provided below:

| Voting | Ballots/AFE's to WIOs will be considered approved if:<br>Note: AFE's under \$100k do not require WIO approval  |
|--------|--|
|        | • CO <sub>2</sub> Study AFE's (see Overhead above) and Tertiary Project AFE's (both pilot  |
|        | ant full scale, both primary and ring areas): Largest 2 owners must approve in addition to \$ requirement.   |
|        | Note: Yates Petroleum's 7 affiliates are defined as a single owner for this purpose. Should these Yates interests be sold a new 2nd largest owner could occur. |
|        | • AFE's < \$ 1M: Largest Owner + 10% remaining WI; Minimum of 75%  |
|        | • AFE's $\geq$ \$1M and drilling of one or more wells: 85 % of the WIO participation   |

I look forward to continuing our work in forming the Avalon Unit and in implementing the project.

Sincerely,

Ronald E. Morylaw

Ronald E. Mayhew Avalon Project Manager

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#### Voting

Ballots/AFE's to WIOs will be considered approved if: Note: AFE's under \$100k do not require WIO approval

CO<sub>2</sub> Study AFE's (see Overhead above) and Tertiary Project AFE's (both pilot and full scale, both primary area and ring area): Largest 2 owners must approve in addition to \$ requirement.

Note: Yates Petroleum's 7 affiliates are defined as a single owner for this purpose. Should these Yates interests be sold a new 2nd largest owner could occur.

- AFE's < \$1M: Largest Owner + 10% remaining WI; Minimum of 77.5%</li>
- AFE's ≥\$1M and drilling of one or more wells: 85% of the WIO participation

2-23-95 RON This is an far as Peyton Vates well go. 1 (O2 -> Tertiony (2) Include drilling with >" Hillion ③ 84 → 85 ( 3% Gonte

It you rend letter with Exxon version of voting, please change cover letter so others do not get idea that Vates agrees to voting procedure. Also, Vates would rend letter to other owners explaining where Vates and Exxon differ and why. Dave Borean.

