



PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK

EXPLORATION AND PRODUCTION GROUP

May 10, 1982

Conversion to Water Injection Service--
East Vacuum Grayburg-San Andres Unit,
Lea County, New Mexico

New Mexico Dept. of Energy & Minerals (3)
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. Joe D. Ramey
Division Director

Gentlemen:

We respectfully request administrative approval of expansion of waterflood injection well pattern, as provided by Order No. R-5897, Rule No. 9, for the East Vacuum Unit pressure maintenance project, to convert the following well to water injection service:

| <u>TRACT</u> | <u>WELL NO.</u> |
|--------------|-----------------|
| 3440 | 004 |

The following data is submitted in support of this request:

1. Unit plat reflecting the respective injection well and its project area.
2. Diagrammatic sketch of the proposed well, injection tubing, packer, pressure control elements, and identifying the San Andres perforated injection interval.
3. The name of the injection formation is San Andres with injection to be into the interval 4270' thru 4498'. The maximum anticipated injection pressure will be no more than 0.2 psi per foot to the top of the perforations with a maximum daily volume anticipated at 2000 barrels water per day per well.
4. Certified copy of Public Notice by newspaper.
5. List of affected offset operators and surface tenants. (Surface ownership on all tracts is held by the State of New Mexico.)

Ready on
6-11-82

MAY 27 1982

SAN ANTONIO

*FROM [unclear] - about 460 well
most [unclear] [unclear]
6-11-82*

Conversion to Water Injection
East Vacuum Grayburg-San Andres Unit
May 6, 1982
Page 2

6. Notice has been given by certified mail to those entities in Item Five.
(Copies of certified receipts are attached.)

Interested parties must file objections or request for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501, within fifteen (15) days following newspaper publication.

Your consideration and early advice will be appreciated.

Very truly yours,



T. Harold McLemore
Regulation and Proration Supervisor

THM:AMW:mcf
Attachments

cc: Oil Conservation Division
Box 1980
Hobbs, New Mexico 88240

Office of Land Commissioner, State of New Mexico
Box 1148
Santa Fe, New Mexico 87501

Surface Tenant: R. D. Lee, Jr.
P. O. Box 465
West Star Route
Lovington, New Mexico 88260

Offset Operators: Atlantic Richfield Company
Box 1610
Midland, Texas 79702

Chevron U.S.A., Inc.
Box 1660
800 Wall Towers East Bldg.
Midland, Texas 79702

Marathon Oil Company
Box 552
C & K Petroleum Bldg.
Midland, Texas 79702

Attachments

PHILLIPS PETROLEUM COMPANY

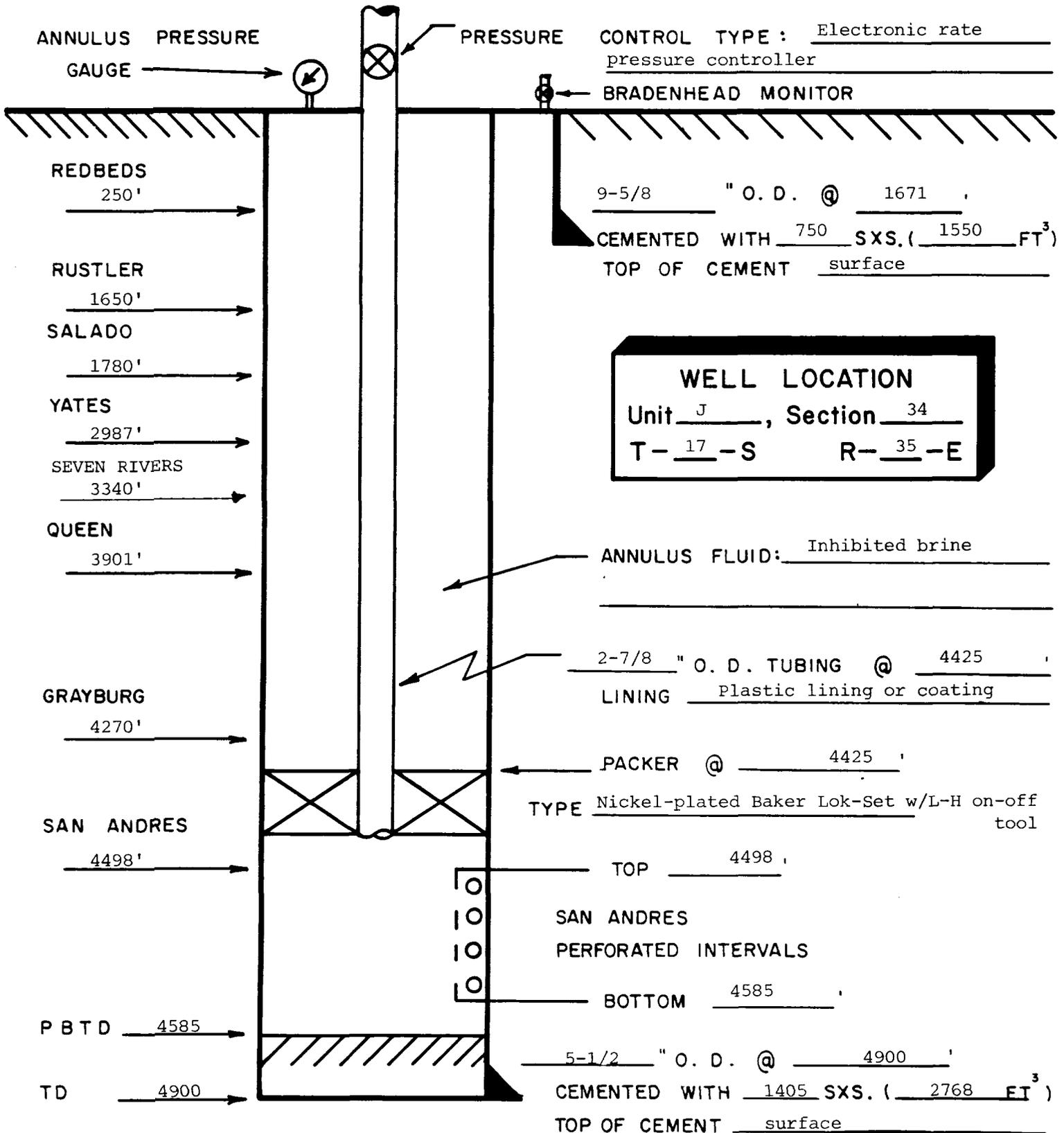
EAST VACUUM UNIT PRESSURE MAINTENANCE PROJECT

N. M. O. C. D. R-5897

VACUUM GRAYBURG - SAN ANDRES POOL, LEA COUNTY, NEW MEXICO

TRACT 3440 WELL 004

CONVERSION TO WATER INJECTION STATUS

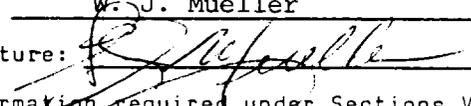


APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: Secondary Recovery Pressure Maintenance Disposal Storage
Application qualifies for administrative approval? yes no
- II. Operator: Phillips Petroleum Company
Address: Room 401, 4001 Penbrook, Odessa, TX 79762
Contact party: E. E. Clark Phone: 367-1290
- III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? yes no
If yes, give the Division order number authorizing the project R-5897
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- * VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
- Proposed average and maximum ⁵⁰⁰ ~~daily~~ ²⁰⁰⁰ rate and volume of fluids to be injected;
 - Whether the system is open or closed;
 - Proposed average and maximum injection pressure: 900
 - Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
 - If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- *VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- * X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.)
- * XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification

I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: W. J. Mueller Title Senior Engineering Specialist

Signature:  Date: May 10, 1982

- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal. Examiner Hearing, October 25, 1978

Case No. 6367, Order R-5897

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate Division district office

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

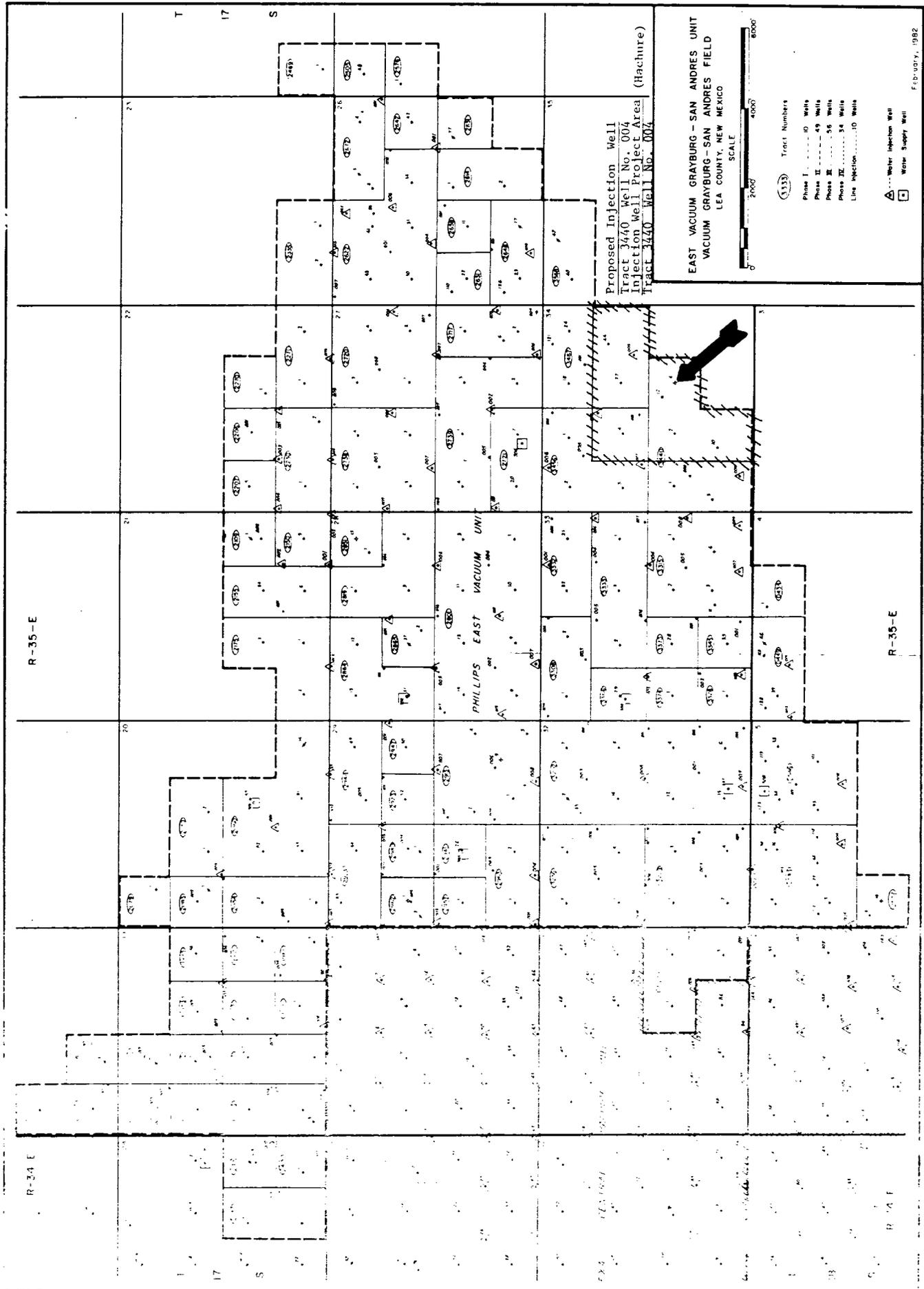
- (1) The name, address, phone number, and contact party for the applicant;
- (2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;
- (3) the formation name and depth with expected maximum injection rates and pressures; and
- (4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

The standard stimulation procedure will be applied in general, to all injection wells:

- (1) Acidize with approximately 200 bbls acid per foot of perforations.
- (2) Fracture with approximately 1500# sand for every foot of perforations.



Proposed Injection Well
 Tract 3440 Well No. 006
 Injection Well Protection Area
 Tract 3440 Well No. 004

EAST VACUUM GRAYBURG - SAN ANDRES UNIT
 VACUUM GRAYBURG - SAN ANDRES FIELD
 LEA COUNTY, NEW MEXICO



- Tract Numbers
- Phase I ID Wells
 - Phase II 49 Wells
 - Phase III 56 Wells
 - Phase IV 34 Wells
 - Line Injection ID Wells

- ▲ Water Injection Well
- Water Supply Well

February, 1982

LEGAL NOTICE

May 12, 1982

NOTICE is hereby given of the application of Phillips Petroleum Company, Attention: E. E. Clark, Manager of Operations, 4001 Penbrook Street, Odessa, Texas 79762 - telephone (915) 367-1290, to the Oil Conservation Division, New Mexico Energy & Minerals Department, for approval of the following injection well(s) for the purpose of _____
pressure maintenance and enhancement recovery.

Well(s) No(s): Tract 3440 No. 004

Lease/Unit Name: East Vacuum Grayburg/San Andres Unit

Location: Sec. 34, T-17-S, R-35-E

NMPM,

Lea County, New Mexico.

The injection formation is Grayburg-San Andres at a depth of 4498 feet below the surface of the ground. Expected maximum injection rate is 2000 barrels per day, and expected maximum injection pressure is 900 pounds per square inch. Interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501, within fifteen (15) days of this publication.

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

1, _____

ROBERT L. SUMMERS

of the Hobbs Daily News-Sun, a daily newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published once a week in the regular and entire issue of said paper, and not in a supplement thereof for a period

of _____

ONE _____ weeks.

Beginning with the issue dated

MAY 12, 1982

and ending with the issue dated

MAY 12, 1982

Robert L. Summers
Publisher.

Sworn and subscribed to before

me this 12TH day of

MAY, 1982

Notary Public.

My Commission expires _____

_____, 19____

(Seal)

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937, and payment of fees for said publication has been made.

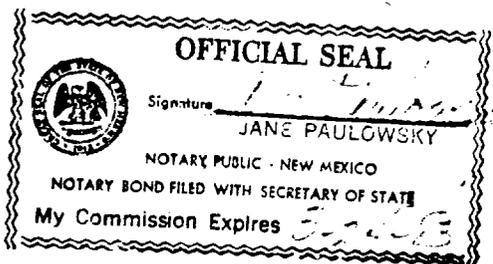
LEGAL NOTICE

May 12, 1982

NOTICE is hereby given of the application of Phillips Petroleum Company, Attention: E. E. Clark, Manager of Operations, 4001 Penbrook Street, Odessa, Texas 79762 - telephone (915) 367-1290, to the Oil Conservation Division, New Mexico Energy & Minerals Department, for approval of the following injection wells for the purpose of pressure maintenance and enhancement recovery.

Wells Nos.: Tract 3440 No. 004; Lease/Unit Name: East Vacuum Grayburg/San Andres Unit; Location: Sec. 34, T-17-S, R-35-E NMPM, Lea County, New Mexico.

The injection formation is Grayburg-San Andres at a depth of 4498 feet below the surface of the ground. Expected maximum injection rate is 2000 barrels per day, and expected maximum injection pressure is 900 pounds per square inch. Interested parties must file objections or requests for hearing with the Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico 87501, within fifteen (15) days of this publication.



207 511 934 207 511 935 207 511 937 207 511 935

J.P. Fawcett
115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000

Johnson U.S.M., Inc
Box 1160, 200 West Street
Midland, TX 79702

Marathon Oil Co.
Box 552, 4th Fl., 1004
Midland, TX 79702

Atlantic Refining Co.
Box 1610
Midland, TX 79702

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PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK

EXPLORATION AND PRODUCTION GROUP

May 6, 1982

In Re: Legal Publication
East Vacuum Gb/SA Unit
Lea County, New Mexico

Hobbs News-Sun
201 N. Thorp
Hobbs, New Mexico 88240

Gentlemen:

Please publish the attached legal notification on or after May 12, 1982 to run for one day only. In addition, we request that a certified copy of the published notification be sent for our records. All inquiries and billing should be addressed to Phillips Petroleum Company, Attention: T. Harold McLemore, 4001 Penbrook, Odessa, Texas 79762.

Your assistance in this matter is appreciated.

Very truly yours,

A handwritten signature in cursive script that reads "T. Harold McLemore".

T. Harold McLemore
Regulation and Proration Supervisor

THM:AMW
Attachment

OIL CONSERVATION DIVISION
DISTRICT I

Handwritten initials

JUN 9 1982

SANTA FE

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

DATE May 28, 1982

RE: Proposed MC _____
Proposed DHC _____
Proposed NSL _____
Proposed NSP _____
Proposed SWD _____
Proposed WFX _____
Proposed PMX X

Gentlemen:

I have examined the application for the:

Phillips Petroleum Co. E. Vacuum G/SA Tr. 3440 #4-J 34-17-35
Operator Lease and Well No. Unit, S - T - R

and my recommendations are as follows:

O.K.----J.S.

Yours very truly,

Handwritten signature

/mc