

BEFORE EXAMINER CATANACH
OIL CONSERVATION DIVISION

_____ EXHIBIT NO. 9

CASE NO. 10930

Waterflood Redevelopment Study
Wiser Oil Company
Pennzoil-Maljamar Project
Lea County, New Mexico

T. SCOTT HICKMAN & ASSOCIATES, INC.
P E T R O L E U M E N G I N E E R S

December 31, 1992

The Wiser Oil Company
8115 Preston Road, Suite 400
Dallas, Texas 75225

Attention: Mr. Marlan R. Thompson

Gentlemen:

Re: Pennzoil-Maljamar Project
Lea County, New Mexico

In accordance with Mr. Thompson's request, we have prepared a waterflood redevelopment study for a group of five properties, referred to as the Pennzoil-Maljamar Project, in Lea County, New Mexico. Infill drilling on 20 acre well spacing and injection expansion on 5-spot patterns is recommended. This plan will require the drilling of 59 producers and 11 injection wells, conversion of 40 wells to injection, return of 35 injectors to active status and the construction of various associated facilities. Economic projections indicate that a capital investment of \$23,085M, exclusive of acquisition costs, will generate a 46 % annualized rate of return and a 3.7 year payout for the working interest participants. The results of this study are discussed in the attached report as outlined in the Table of Contents.

Net oil and gas reserves are estimated quantities of crude oil, natural gas and natural gas liquid attributed to the composite revenue interests being evaluated after deduction of royalty and/or overriding royalty interests. Future net revenue was adjusted for capital expenditures, operating costs, interest reversions, ad valorem taxes and wellhead taxes, but no consideration was given to Federal income taxes or any encumbrances that might exist against the evaluated interests. Present worth future net revenue shows the time value of money at certain discount rates, but does not represent our estimate of fair market value.

The classification of non-producing reserves as Proved Undeveloped is dependent upon implementation of the plan as recommended by this report. The Proved Undeveloped classification is also contingent upon representation by Wiser that the project

will receive financing and proceed ahead in a timely manner. Any prolonged delays in execution of this project in the manner prescribed by this report could lead to a reclassification of these reserves.

Reserves were determined using industry-accepted methods including extrapolation of established performance trends, volumetric calculations, and analogy to similar producing zones. The basis for the reserve determinations are presented in the attached report. Where applicable, the evaluator's own experience was used to check the reasonableness of the results.

In the preparation of this report, we have reviewed for reasonableness, but accepted without independent verification information furnished by Wiser Oil Company with respect to interest factors, current prices, operating costs, and various other data. Production and injection data were obtained from commercial sources and public record. The pricing and discount rate were applied at the direction of the client. The use of assumed rather than existing economic parameters affects both the cash flow projections by the difference in prices and expenses and also the reserve volumes by changing the economic limit at which production is terminated. The assumed pricing also has a major effect on the economic viability of non-developed potential and hence the volume of reserves that can be assigned to the non-producing categories.

We are qualified to perform engineering evaluations and do not claim any expertise in accounting, legal or environmental matters. As is customary in the profession, no field inspection was made of the properties nor have we verified that all operations are in compliance with any states and/or Federal conservation, pricing and environmental regulations that apply to them.

This study was performed using industry-accepted principles of engineering and evaluation that are predicated on established scientific concepts. However, the application of such principles involves extensive judgment and assumptions and is subject to changes in performance data, existing technical knowledge, economic conditions and/or statutory provisions. Consequently, our reserve estimates are furnished with the understanding that some revisions will probably be required in the future, particularly on new wells with little production history and for reserve categories other than Proved Developed Producing. Unless otherwise noted, we have based our reserve projections on current operating methods and well densities.

This report is solely for the information of and the assistance to Wiser Oil Company and their investors in evaluating the secondary potential for the Pennzoil-Maljamar project and is not to be used, circulated, quoted or otherwise referred to for any

other purpose without the express written consent of the undersigned except as required by law. Persons other than those to whom this report is addressed shall not be entitled to rely upon the report unless it is accompanied by such consent. Data utilized in this report will be maintained in our files and are available for your use.

Yours very truly,

T. SCOTT HICKMAN & ASSOC., INC.

A handwritten signature in black ink, appearing to read "C. Don Hunter". The signature is fluid and cursive, with the first name "C." and last name "Hunter" clearly distinguishable.

C. Don Hunter, P. E.

gbh

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DISCUSSION

INTRODUCTION

The Wiser Oil Company Pennzoil-Maljamar Project is a proposed unit to be comprised of five separate entities: the Mal-Gra Unit, Zapata Western state, Pennzoil-Maljamar project, Murphy Baxter and Johns "A" & "B" leases. These properties were acquired by Wiser Oil Company (Wiser) for the purpose of waterflood development through 20-acre infill drilling and reestablishing of injection. Quality Production Corporation (QPC) will operate these properties for Wiser. These leases are active waterflood projects in the Maljamar (Grayburg-San Andres) Field, Lea County, New Mexico approximately 21 miles southwest of Lovington and 35 miles northwest of Hobbs, New Mexico. For purposes of this report, this proposed project will be referred to as the Pennzoil-Maljamar Unit (PMU). The PMU produces from the Permian age Grayburg and San Andres formations at a depth of approximately 4300'. Forty-acre development began in 1942 but the major portion of the PMU area was drilled during the late 1950's and early 1960's.

Ultimate primary recovery has totaled 4,601 MB from 109 wells. Out of a total of 63 producers and 46 injectors in the PMU, 39 producers and 16 injectors are still active. June 1992 oil rate was 289 BOPD or 7.4 BOPD/well. Cumulative oil production as of July 1, 1992 was 10,180 MB. Remaining reserves under current mode of operations are estimated at 636 MB giving an ultimate recovery of 10,879 MB, which is 21 % of the estimated original oil-in-place. Ultimate secondary to primary ratio is 1.36.

While response to injection has been satisfactory in isolated areas, overall project performance is generally characterized by inefficient injection and inadequate coverage on 40-acre spacing due to completion practices and reservoir heterogeneity.

The objectives of this study were to (1) estimate original-oil-in-place (OOIP), (2) analyze primary and secondary performance, (3) estimate remaining reserves and potential and (4) conduct a feasibility study for redevelopment through 20-acre infill drilling and waterflood expansion.

CONCLUSIONS

1. The PMU produces from a highly cyclic sequence of dolomitic sands with productive limits controlled primarily by stratigraphic factors.
2. The preliminary estimate of OOIP is 52 MMB.
3. Ultimate primary recovery is estimated at 4,601 MB or 8.9% of OOIP.

4. Water injection on 80-acre 5-spot patterns has generally proved to be inefficient. Ultimate recovery under current operations is projected to be only 21% of OOIP.
5. An estimated 6,824 MB of additional reserves are projected for an infill drilling and waterflood redevelopment project, increasing total recovery to 34%.
6. An investment of \$23,085M, exclusive of acquisition cost, is projected to generate a 46% annualized rate of return and a 3.7 year payout.

RECOMMENDATIONS

1. Proceed with 20-acre infill drilling and re-establishment of water injection on 40-acre, 5-spot patterns in a phased procedure as outlined in this report.
2. Refine the development plans as additional petrophysical, technical and performance data becomes available through infill drilling.
3. Set up a program to monitor waterflood performance on an ongoing basis.

GEOLOGY

The Maljamar (Grayburg-San Andres) Field is located in the south central portion of the Northwest Shelf in northwestern Lea County, New Mexico. The discovery well for the field, the Maljamar Baish No. 1 in Sec. 21, T17S, R32E, was drilled during 1926 and was the first discovery of oil in Lea County, New Mexico. Figure 1 is a location plat showing the location of the proposed Wiser Pennzoil-Maljamar Waterflood Unit (PMU) within the field. The PMU is situated approximately 21 miles southwest of Lovington and 35 miles northwest of Hobbs, New Mexico. Production is from Grayburg dolomitic sands and Vacuum and Lovington members of the San Andres formation from a gross unitized interval of approximately 500' at a depth of 4300'. Figure 2 is a type log for the field which was prepared for this study by Edward J. Matchus, consulting geologist for Wiser.

The project area lies along the eastern edge of an east-west trending anticlinal feature. Figure 3 is a structure map contoured on top of the San Andres formation that shows low relief throughout most of the project area but considerable relief along the basinward south portion of the Maljamar Unit in sections 28 and 33, T17S-R33E. The area of greatest gross deposition thickness is primarily along this southeastern edge of the project area but other areas of relatively thick depositional thickness occur randomly throughout the project area. Structure is considered to have a bearing on the trapping mechanism, however, stratigraphy is the dominant factor in defining productive limits. The determination of depositional environment was beyond the scope of this study. The PMU area wells produced very little water during primary depletion. There is no evidence of an oil-water contact. Solution gas drive was the primary recovery mechanism.

VOLUMETRIC DETERMINATIONS

Core data and well logs were utilized for determination of reservoir parameters, but the quantitative data coverage is limited and may not be fully representative of the total project area. Core analyses from 22 wells were available for analysis. Quantitative porosity logs, either acoustic or compensated neutron-formation density logs, were available for five wells within the PMU area.

Lithologic description from cored wells indicate that the Grayburg and San Andres formations consists predominately of alternating beds of silty to sandy dolomite and fine to very fine grained, well sorted sandstones with fair to good porosity. Core permeability is highly variable, generally ranging from 0.1 to 20 md. Samples with permeability as high as 1088 md. in several Vacuum cored intervals were reported to be fractured. Core porosities ranged from 6 to 25 % with an average of 11.4 %. Figures 4 and 5 are East-West and North-South log cross-sections, respectively, across the project showing the multizone nature of the reservoir. A number of project wells have not penetrated either the Vacuum or Lovington sands, which are significant contributors to production. The Vacuum zone is a dolomite interval within the upper portion of the San Andres formation which is generally productive where completed in the study area. The Vacuum zone may not have the area extent of the Premier. The Vacuum is not a major waterflood candidate due to apparent fracturing, but could significantly contribute to overall production. Wiser has recently completed the Mal-Gra Unit Well No. B-7 in the Vacuum zone and, according to QPC, has resulted in increased production rate of 60 BOPD.

Net pay criteria was based on a porosity cutoff of 6%. Figure 6 is the estimated net pay thickness isopach which should be considered a preliminary interpretation, subject to revision from quantitative well logs and additional cores to be secured from the planned development program. Water saturations were determined from log analyses and an average irreducible water saturation of 35% was utilized for volumetric calculations. A residual oil saturation of 30%, as reported for the adjoining Conoco MCA Unit, was utilized in mobile oil calculations. An initial formation volume factor of 1.24 was derived from PVT correlations for stock tank crude of 35° API, estimated solution gas-oil ratio of 500 SCF/BBL and estimated initial bottom-hole pressure of 1900 psig. The OOIP was calculated to be 51,898 MB (Tables 1 and 2).

PRIMARY PERFORMANCE

The Maljamar Grayburg-San Andres Field was discovered in 1926 and development was extended to the PMU area during 1942. The major portion of the PMU area was developed during the late 1950's and early 1960's. Ultimate primary oil recovery was determined from individual well decline curve analyses to be 4,601 MB or an average of 42 MB/well for 109 wells. Primary recovery for the total Unit is 8.9% of the calculated OOIP. Figure 7 is the iso-primary recovery map which shows general agreement with the net pay isopach.

Gas production data is incomplete during early field history. Initial potential tests suggests original GOR's on the order of 400-600 SCF/BBL. Pressure data was not available, and with gas production data incomplete, the determination of OOIP from material balance calculations was not possible.

The effects of reservoir heterogeneity have probably been compounded by inefficient completion procedures. An overview of well logs and completion methods have indicated that not all of the net pay was opened or adequately treated in every well. As a result, the reservoir was not being efficiently drained on 40-acre spacing in many areas and this contributed to the relatively low primary recoveries.

SECONDARY PERFORMANCE

The Wiser Oil Company Pennzoil-Maljamar Project is a proposed unit to be comprised of five separate entities: the Mal-Gra Unit, Zapata Western state, Pennzoil Maljamar, Murphy Baxter and Johns "A" & "B" leases. Figure 1 is a plat showing the relative location of these properties. These properties were acquired by Wiser Oil Company (Wiser) for the purpose of waterflood redevelopment and pattern realignment through 20-acre infill drilling and reestablishing of injection. Waterflooding was initiated on the five subject properties during the early 1960's as 80-acre 5-spot waterfloods. However, the Murphy-Baxter lease has not been fully developed on 80-acre 5-spot patterns. During peak operation, the composite projects contained 63 producers and 46 injectors of which 39 producers and 16 injectors are still active. Figure 8 is a current well status map which shows producing and injection rates for each of the project and perimeter offset wells as of July 1, 1992. Initial water injection commenced during the early 1960's. By 1980 most of the projects had reduced injection by shutting in injectors. As shown by Table 1, current injection is limited primarily to produced water reinjection with minimal makeup water injection.

The reason for the premature shut-in of injection in the PMU area wells is probably due in part to injectivity problems. Makeup water source for the PMU is the Ogallala aquifer, which is the source for most of the waterflood projects in this field. Accepted field practice is to maintain a deoxygenated makeup water system and/or periodically stimulate injectors with Calcium Sulfate-Calcium Carbonate scale converter acid treatments. Injectivity may not have been maintained in the PMU properties.

Production performance was adversely affected in each of the individual waterflood projects comprising the PMU project by the reduced injection volumes after 1980. However, in spite of overall under injection and inefficient patterns, waterflood response has been good within certain areas of the Project leases. Figure 9 is the cumulative oil production map which shows relatively high oil recoveries for some of the patterns. Table 1 shows a wide variation of Secondary:Primary ratios for each of the leases, which implies reservoir rock heterogeneity and/or operational differences under each of the respective operators. The adverse affect of reduced injection is evidenced by decline in oil rates on the rate-time performance curves, Figures 10 through 14. Figure 15 is a map which shows pertinent waterflood performance parameters for the PMU 80-acre

patterns. The patterns with the most efficient waterflood performance are evident by relatively high Secondary:Primary ratios and Injection:Withdrawals in the 1.5 to 2.0 range. The patterns with relatively high remaining mobile oil saturation generally coincide with relatively high primary oil recoveries and net pay thickness. The PMU overall injection-withdrawals ratio of 1.17 (Table 1) is significantly lower than is normal for mature waterfloods and is indicative of under injection. The negative effects of reservoir heterogeneity have been compounded by failure to maintain productivity/injectivity due to minimal workovers during the past 10 to 15 years of operation. This workover history was confirmed for the Mal-Gra, Zapata-Western, and Pennzoil-Maljamar projects by detailed review of operator's well files. Well files were not available to the evaluator for review of the Murphy-Baxter and Johns "A" and "B" projects.

Tables 3 through 7 are waterflood performance summaries for each of the five projects. Declining Net Injection vs. Withdrawals for most of these projects since the mid-1980's was generally accompanied by significant oil rate declines. The Johns project has maintained relatively high injection, but at low oil rates, implying that injection may not be confined to primary pay zones. The Murphy Baxter waterflood is not fully developed on 5-spot patterns and has a history of low injection volumes, with significant reserve potential for redevelopment.

Five 20-acre infill producers, Murphy-Baxter State 9 and B-9, Johns A-6 and B-13, and Zapata Western Well No. 17 have been drilled in the PMU. Although no additional wells were converted to injection to provide injection support, several of these infill wells have been strong producers. The Zapata Western State Well No. 17 has produced 88 MB and should have significant reserves under the proposed plan. In contrast, the Conoco MCA Unit has drilled 100 20-acre infill wells, eight of which were drilled in Section 25 bordering the Johns leases. These eight MCA wells have recovered an average of 167 MB/well as injection supported producers. The significantly higher recoveries for the MCA Unit wells stresses the importance of injection support from confined patterns on 20-acre well spacing.

A cumulative total of 10,180 MB have been produced from the PMU wells as of July 1, 1992. During June 1992, the PMU produced at a rate of 289 BOPD and 97 MCFD from 39 producers. (Table 1). Proved Developed Producing oil reserves as of December 1, 1992 are estimated at 636 MB.

REDEVELOPMENT PERFORMANCE PREDICTION

The incremental oil reserves calculated for redevelopment with 20-acre infill drilling and 40-acre 5-spot waterflood pattern realignment is estimated at 6,824 MB (Table 2), or 116 MB per producer. Only those producer well locations estimated to recover in excess of 35 MB/well were considered in this plan. Remaining mobile oil in place for the total PMU area is estimated to be 15,400 MB as of December 1, 1992, (Table 2-item II). Estimated recoverable oil was determined for each of the 40-acre 5-spot patterns by application of volumetric sweep efficiency factors, or conformance factors, to the remaining mobile oil. Conformance factors ranged from 0.4 to 0.7, and

were based on historical pattern performance and apparent rock quality. The performance projections for redevelopment were developed on a phase redevelopment basis utilizing analytical prediction techniques. Producing rate projections were also influenced by results in analogous projects.

The Conoco MCA Unit, which adjoins the southwest boundary of the PMU, is a major Grayburg-San Andres waterflood and CO₂ project with cumulative oil production in excess of 101 MB. The MCA Unit is productive in Grayburg dolomitic sands and San Andres dolomites equivalent to that of the PMU. However, the MCA Unit differs from the PMU not only by being significantly larger, with an OOIP of 268 MMB, but also in its development history. During early primary depletion in 1942, gas injection was initiated which was successful in improving performance. Ultimate primary recovery aided by gas injection, was projected by Conoco to be 56 MMB or 21% of OOIP. Water injection was initiated in 1963 and expanded to full 80-acre, 5-spot patterns by 1969. During 1970-73, 100 twenty acre infill producers were drilled and the injection scheme was changed to inverted 9-spot patterns. Conoco established a CO₂ pilot during 1981-85 and expanded to full CO₂ development during 1988-89. Ultimate primary and improved recovery were projected by Conoco to be 119 MMB or 44% OOIP. Infill drilling occurred during active waterflood operations so incremental reserves attributed solely to infill drilling are difficult to determine. Best estimates of initial average rate for the 100 infill producers is in excess of 50 BOPD/well. Performance of the MCA Unit, through published technical engineering and geological reports, provided a basis for conformance factors and end-point saturation values used in PMU redevelopment prediction.

The Avon Turner "B" project is a depleted 80-acre 5-spot pattern waterflood which was redeveloped with the drilling of 22 infill producing wells on 20-acre spacing during 1990-91. Production is from Grayburg and San Andres dolomitic sands between 3000' to 3600'. The net pay appears to be thicker than the PMU and the average primary recovery is higher (Table 8). However, core data indicates that pay quality is similar. The 20-acre infill drilling project was designed to create 80-acre 5-spot patterns but the planned injection well conversions had not occurred at time of this evaluation. Initial oil rates for the 22 infill producers averaged 95 BOPD/well. However, the deferral in injection well conversions caused inadequate injection support resulting in relatively sharp production declines. Ultimate oil recovery from the 22 infill wells is projected to average 55 MBBL/well under current reduced injection support, but four of the infill wells will achieve ultimate recoveries ranging from 100 to 150 MB/well. It is understood that the current operator plans to initiate the injection well conversions as originally planned.

The Cross-Timbers S.E. Maljamar Waterflood Project (SMGSAU) is an adjoining active waterflood project which was infill drilled on 20-acre spacing and redeveloped on 40-acre 5-spot patterns. Details on infill well performance is shown by Table 9. This successful infill program should recover incremental oil averaging 106 MB/well from the 16 producers. However, seven wells drilled within the corridor of highest net pay and primary oil recoveries are projected to produce an ultimate of 202 MB per well. This recovery advantage emphasizes the importance of optimizing the selection of drilling locations through detail engineering and geological review prior to drilling. The higher

recoveries being experienced by the SMGSAU in comparison to the Avon Turner "B" is due in part to the early 5-spot injection pattern support. Normalized well rate vs. time performance comparisons of the SMGSAU and the Avon projects are shown by Figure 16.

A feasibility study was conducted for redeveloping the PMU with 20 acre infill drilling and reestablishing closed pattern water injection, with scheduling that emphasized full injection support early in the program. To minimize the risk and make maximum use of the information obtained, a three-phase redevelopment plan was derived. Phase I exploits the higher mobile oil segments in those areas with active current injection, which should result in high initial oil rates and incremental recoveries, therefore optimizing investment costs per reserve barrel. This 10 well program is considered to be the minimum number of producing wells sufficient to provide a valid test of the redevelopment plan in this project. Phases II and III will take advantage of pattern injection established from the prior phase. The proposed patterns for each phase and the well utilization scheme is shown on Figure 17.

The completed project will have 59 producers and 86 injectors. Producing rate forecasts were based upon normalized infill well performance curves for analogous projects (Figure 16). Total project recoverable oil is 6,824 MB, or 116 MB/pattern for the current plan. Successful development of the project will depend upon the judicious utilization of information from the initial infill drilling. As additional geological and reservoir data become available, the reservoir characteristics and saturation distribution will be better defined. Therefore plans for subsequent development will require revision and refinement.

REDEVELOPMENT PLAN AND ECONOMICS

The infill drilling and redevelopment plan and preliminary investment schedules are set forth on Tables 10 through 13. Investment and operating costs estimates were furnished by Wiser and QPC and supplemented by the evaluator's experience for similar projects. Investment costs do not include acquisition costs or costs of financing.

Initial water injection requirements of 3800, 8500 and 6000 BWPD are estimated for Phases I, II and III, respectively. The most likely water source will be the Ogallala aquifer. According to QPC the surface owner for the Maljamar project currently owns Ogallala water rights plus water wells and equipment on Sections 27, 28, and 33, secured from the previous Maljamar Project operator. Negotiations are currently underway by QPC to place these water rights under contract for the PMU. The assumption was made that this aquifer would provide adequate capacity for projected requirements and that an agreement could be reached to secure source water within the PMU area of interest at a reasonable contract rate. Investment costs were included for distribution lines to connect to this system. For purposes of this evaluation, the cost to the PMU was projected by Wiser to be \$.10/BBL.

The price and escalation scheme were applied at the direction of Wiser. An initial oil price of \$18.50/BBL, which has been adjusted for gravity and grade, was escalated starting at December 1, 1992 at 5% per annum to a maximum of \$35/BBL. A starting gas price of \$1.00/MCF was escalated starting at December 1, 1992 at 5% per annum until the oil price reached the maximum price.

Lease operating expenses of \$1200/month per producer and \$600/month per injector were estimated by Wiser based on anticipated operating conditions and include overhead. Expenses were escalated starting December 1, 1992 at 5% per annum until the primary product reached the maximum price. No equipment salvage value or costs were included for the property. Investments were not escalated at client request.

Incremental economics for the total project indicate that a capital investment of \$23,085M will generate a 10% discounted future net revenue of \$34,041M, resulting in a 46 % rate of return and a 3.7 year payout. A summary of reserves and economics is shown by Table 14. Tables 15 through 17 are the reserves and cash flow projections for Total Proved, Proved Developed Producing and Proved Undeveloped, respectively. Table 18 is the Proved Developed Producing One-Line Listing. Tables 19 through 23 are the individual property Proved Developed Producing cash flow projections for the individual entities. Table 24 is the one-line listing for the Proved Undeveloped category. Tables 25, 26 and 27 are the summaries for Phases I, II, and III Proved Undeveloped categories, respectively. Figure 18 is the rate vs. time composite oil production forecast for the PMU. Figure 19 is the projection for the Total Proved Undeveloped forecast. Figures 20, 21 and 22 are the rate vs. time projections for Phases I, II, and III, respectively.

The classification of non-producing reserves as Proved Undeveloped is dependent not only on the infill drilling program, but also upon establishing full scale injection according to the plan recommended by this report. The Proved Undeveloped classifications in this report are based upon representations by Wiser as to their interest and financial capability to carry out the recommended program in a timely manner. Any prolonged delays in execution of this project in the manner prescribed by this report could lead to a reclassification of these reserves.

Table 1

Project Performance Summary
Wiser Maljamar Waterflood Project
Maljamar (Grayburg-San Andres) Field
Lea County, New Mexico

	Mal-Gra Unit	Zapata Western State	Pennzoil Maljamar Project	Composite Mal-Gra Zapata Maljamar	Murphy Baxter Waterflood	Johns A & B	Grand Total
Initial Completion Date	6/29/54	7/31/52	9/5/52		8/31/57	4/26/42	
Initial Water Injection Date	6/12/65	7/3/62	4/19/67		9/1/62	3/3/66	
Total Well Completions:							
Producers	9	18	8	35	17	11	63
Injectors	6	14	9	29	9	8	46
Total	15	32	17	64	26	19	109
Active Well Completions @ 7-1-92							
Producers	5	11	6	22	13	4	39
Injectors	2	5	4	11	3	2	16
Total	7	16	10	33	16	6	55
Project Area (Acres)	590	1240	680	2510	960	640	4110
Average Spacing (Acres/Well)	39	39	40	39	37	34	38
OOIP, (MBBL)	4597	17806	6268	28670	13484	9744	51898
OOIP, (BBL/Acre)	7792	14359	9217	11422	14045	15225	12627
Cumulative Oil Production @ 7-1-92 (MBBL)	1090	3835	1138	6064	2622	1495	10180
Cumulative Oil Production @ 7-1-92 (BBL/acre)	1848	3093	1674	2416	2731	2335	2477
Cumulative Recovery Factor, %	24	22	18	21	19	15	20
Average Oil Cumulative Per Well (MBBL)	73	120	67	95	101	79	93
June 92 Oil Rate- Total Unit (BOPD)	19	99	86	204	62	22	289
June 92 Oil Rate- Per Well (BOPD)	3.87	8.96	14.36	9.27	4.80	5.61	7.41
Ultimate Primary Oil Recovery (MBBL)	527	1683	401	2611	1037	952	4601
Ultimate Primary Oil Recovery (BBL/Acre)	894	1357	590	1040	1081	1488	1119
Ultimate Primary Recovery Factor (%)	11.47	9.45	6.40	9.11	7.69	9.77	8.87
Average Oil Recovery Per Well (MBBL/Well)	35	53	24	41	40	50	42
Cumulative Secondary Oil Recovery @ 7-1-92 (MBBL)	563	2153	737	3453	1585	542	5579
Ultimate Secondary Oil Under Current Mode (MBBL)	592	2410	930	3932	1747	598	6277
Average Ultimate Secondary Per Well (MBBL)	66	134	116	112	103	54	100
Secondary : Primary Ratio	1.12	1.43	2.32	1.51	1.68	0.63	1.36
Rem. Oil (Current Mode) @ 12 -1-92 (MBBL)	26	243	180	449	135	52	636
Ultimate Oil Recovery Under Current Mode (MBBL)	1120	4092	1331	6543	2785	1550	10879
Ultimate Oil Recovery Factor (%)	24	23	21	23	21	16	21
*Cumulative Gas Production @ 7-1-92 (MMCF)	726	3460	719	4905	2572	1882	9359
*Cumulative GOR (SCF/STB)	666	902	632	809	981	1259	919
June 92 Gas Rate (MCFPD)	11	52	30	93	3	0	97
June 92 GOR (SCF/BBL)	583	528	349	458	53	0	335

Table 1

Project Performance Summary

	Mal-Gra Unit	Zapata Western State	Pennzoil Maljamar Project	Composite Mal-Gra Zapata Maljamar	Murphy Baxter Waterflood	Johns A & B	Grand Total
Cumulative Water Production @ 7-1-92 (MBBL)	1636	7739	1838	11214	5167	1843	18223
Cumulative WOR (Volume/Volume)	1.50	2.02	1.62	1.85	1.97	1.23	1.79
Cumulative Watercut (%)	60	67	62	65	66	55	64
June 92 Water Rate (BWPD)	52	693	216	961	113	15	1089
June 92 WOR (Volume/Volume)	2.71	7.03	2.50	4.71	1.82	0.65	3.77
June 92 Watercut (%)	73	88	71	82	65	39	79
Cumulative Water Injection @ 7-1-92 (MBBL)	6755	25837	10230	42822	8985	14546	66353
Cumulative Inj.-Secondary Oil Ratio (STB/STB)	12.00	12.00	13.88	12.40	5.67	26.83	11.89
Cum. Net Injection. vs. Withdrawal (RBBL/RBBL)	1.74	0.88	1.81	1.16	0.30	3.92	1.17
June 92 Injection Rate- Total Unit (BWPD)	52	1250	66	1368	201	206	1775
June 92 Injection Rate- Per Well (BWPD)	26	250	16	124	67	103	111

*Incomplete Gas Production Data

TABLE 2

RECOVERY CALCULATION SUMMARY
WISER PENNZOIL-MALJAMAR WATERFLOOD PROJECT
Lea County, New Mexico

I. Ultimate Recoveries Under Current Mode of Operations

Effective Date:	1-Dec-92
Total Well Completions:	
Producers	63
Injectors	46
Total	109
Project Area (acres)	4110
Original Oil-In-Place, (MBBL)	51898
Cumulative Oil Production (MBBL)	10242
Cumulative Recovery Factor (%)	19.74
Ultimate Primary Recovery (MBBL)	4601
Primary Recovery Factor (%)	8.87
Cumulative Secondary Recovery (MBBL)	5641
Ultimate Secondary Recovery (MBBL)	6277
Secondary : Primary Ratio	1.36
Combined Ultimate Primary plus Secondary Recovery (MBBL)	10879
Recovery Factor (%)	20.96

II. Redevelopment Potential Under Phases I,II, and III

Effective Date: 1-Dec-92

Nm, remaining mobile oil at 12-1-92

where:

Sor=Residual oil saturation, dec. = 0.30

So=Current oil saturation, dec.= ranges from 0.41 to 0.55
(varies from pattern to pattern)

Bo=est. 1.12

Nm, summation of five projects= $7758 \times Ah \times Porosity \times (So - Sor) / Bo$
=15,400 MBBL

Estimated Recoverable oil,(Npv) from 59 20-acre infill drilled producers supported by 5-spot injection patterns. Recoverable oil was based on estimates of volumetric sweep efficiency, Ev, assigned on pattern basis.

where:

$Npv = Nm \times Ev$

Npv, Incremental Oil Reserves from Infill drilling (MBBL) 6824

Average Oil Recovery per well, (MBBL/well) 116

TABLE 2 (Continued)

III. Ultimate Recovery Under Proposed Redevelopment

Plan: 59 20-acre producers supported by 5-spot pattern injection

Effective Date:	1-Dec-92
Cumulative Oil Production (MBBL)	10242
Proved Developed Producing Reserves (MBBL)	636
Incremental Oil Reserves from Infill drilling, PUD (MBBL)	6824
Remaining Proved Reserves (MBBL)	7460
Ultimate Secondary Recovery (MBBL)	13101
Ultimate Secondary : Primary Ratio	2.85
Combined Ultimate Primary plus Secondary Recovery (MBBL)	17703
Recovery Factor (%)	34.11

WATERFLOOD PERFORMANCE
WISER MAL-GRA UNIT
Start of Injection at 6-12-65

Time Mo-Yr	Number Wells	Production					Daily Production					Cumulative Withdrawals (MRBBL)	Cum. Inj. (MBBL)	Net Cum. Inj. (MBBL)	Fillup (%)	Cum. Net IWR (ratio)	Oil PV	Inj. PV
		P	Inj	Water			Injection (BBL)	Oil		Water (BWPD)								
				Oil (BBL)	Gas (MCF)	Water (BBL)		(BOPD)	(MCFD)									
(7 mo)65	7	8	3681	9538	869	480225	17	45	4	2257	27	480	453	38.86	16.83	0.0005	0.0548	
1966	7	8	31349	11592	7540	894707	86	32	21	2451	96	1375	1279	109.63	13.29	0.0045	0.1568	
1967	7	8	71150	19492	31748	444206	195	53	87	1217	253	1819	1567	134.32	6.20	0.0136	0.2074	
1968	7	8	63831	16168	55281	422953	175	44	151	1159	416	2242	1826	156.52	4.38	0.0217	0.2557	
1969	7	8	50784	5826	49752	407780	139	16	136	1117	536	2650	2113	181.19	3.94	0.0282	0.3022	
1970	7	8	54331	6791	95304	379256	149	19	261	1039	708	3029	2321	198.98	3.28	0.0351	0.3454	
1971	7	8	42930	5421	123857	332942	118	15	339	912	893	3362	2469	211.72	2.77	0.0406	0.3834	
1972	7	8	28239	2685	147183	268012	77	7	403	734	1078	3630	2552	218.84	2.37	0.0442	0.4139	
1973	7	8	24133	0	131747	289998	66	0	361	795	1236	3920	2684	230.09	2.17	0.0473	0.447	
1974	7	8	20948	0	99467	330221	57	0	273	905	1359	4250	2891	247.86	2.13	0.0524	0.532	
1975	6	8	19077	0	91786	415254	52	0	251	1138	1473	4666	3193	273.76	2.17	0.0546	0.5809	
1976	6	8	17100	0	88471	429099	47	0	242	1176	1580	5095	3515	301.32	2.22	0.0566	0.6162	
1977	6	8	15731	0	63986	309569	43	0	175	848	1662	5404	3742	320.87	2.25	0.0584	0.6562	
1978	5	8	13952	0	75586	349982	38	0	207	959	1753	5754	4001	343.05	2.28	0.0584	0.6562	
1979	5	7	11115	0	76573	335012	30	0	210	918	1842	6089	4247	364.14	2.31	0.0598	0.6944	
1980	7	7	11475	0	65951	200347	31	0	181	549	1921	6290	4369	374.56	2.27	0.0613	0.7172	
1981	7	7	9719	0	43782	83239	27	0	120	228	1975	6373	4397	377.01	2.23	0.0625	0.7267	
1982	7	7	8045	0	37779	69925	22	0	104	192	2022	6443	4420	379.00	2.19	0.0635	0.7347	
1983	7	7	6605	0	31313	14400	18	0	86	39	2061	6457	4396	376.91	2.13	0.0644	0.7363	
1984	7	7	5756	0	26780	9481	16	0	73	26	2094	6467	4372	374.88	2.09	0.0651	0.7374	
1985	7	7	5264	0	9367	8237	14	0	26	23	2109	6475	4365	374.28	2.07	0.0658	0.7383	
1986	6	7	4849	0	6503	14072	13	0	18	39	2121	6489	4368	374.46	2.06	0.0664	0.7399	
1987	6	5	11319	0	64208	64913	31	0	176	178	2198	6554	4356	373.43	1.98	0.0679	0.7473	
1988	5	5	18294	0	97610	97610	50	0	267	267	2316	6651	4335	371.68	1.87	0.0702	0.7585	
1989	5	5	10952	0	36732	36732	30	0	101	101	2365	6688	4323	370.62	1.83	0.0716	0.7627	
1990	5	3	9706	0	31312	31313	27	0	86	86	2408	6719	4312	369.69	1.79	0.0728	0.7662	
1991	5	4	9043	3584	29334	29334	25	10	80	80	2455	6749	4294	368.12	1.75	0.074	0.7696	
Jan-92	5	6	647	338	1458	3741	21	11	47	121	2458	6753	4294	368.18	1.75	0.0741	0.77	
Feb-92	5	6	743	338	1444	6398	27	12	52	229	2461	6759	4298	368.47	1.75	0.0742	0.7707	
Mar-92	5	6	608	338	1495	3385	20	11	48	109	2464	6762	4298	368.51	1.74	0.0742	0.7711	
Apr-92	5	2	736	338	1670	1670	25	11	56	56	2467	6764	4297	368.37	1.74	0.0743	0.7713	
May-92	5	2	519	338	1010	1010	17	11	33	33	2470	6765	4295	368.25	1.74	0.0744	0.7714	
Jun-92	5	2	580	338	1570	1570	19	11	52	52	2473	6767	4294	368.13	1.74	0.0745	0.7716	
Cum.			583211	83125	1628468	6766593												

WATERFLOOD PERFORMANCE
WISER ZAPATA WESTERN STATE WATERFLOOD
Start of Injection at 7-3-62

Time Mo-Yr	Number Wells		Production										Daily Production				Daily Inj. (BWPD)	Cumulative Withdrawals (MRBBL)	Cum. Inj. (MBBL)	Net Cum. Inj. (MBBL)	Fillup (%)	Cum. Net IWR (ratio)	Oil PV	Inj. pV	
	P	Inj	Oil					Gas					Water												
			(BBL)	(MCF)	(BBL)	(BBL)	(BBL)	(BOPD)	(MCFD)	(BWPD)	(BOPD)	(MCFD)	(BWPD)	(BOPD)	(MCFD)	(BWPD)									
(6-mo 62)	25	5	49793	161405	0	319824	273	885	0	1753	427	320	-107	-2.37	-0.25	0.0016	0.0094								
1963 22	9	101023	304313	2695	922456	277	834	7	2527	1243	1242	1242	0	-0.01	0.00	0.005	0.0366								
1964 19	11	183058	193864	21953	1286127	502	531	60	3524	1916	2528	2528	613	13.56	0.32	0.011	0.0744								
1965 17	15	226243	107867	124932	1662049	620	296	342	4554	2542	4190	4190	1648	36.49	0.65	0.0185	0.1234								
1966 16	15	190629	62671	225311	1665504	522	172	617	4563	3125	5856	5856	2731	60.45	0.87	0.0248	0.1724								
1967 16	15	137287	41751	279254	1487652	376	114	765	4076	3654	7344	7344	3690	81.67	1.01	0.0293	0.2162								
1968 15	15	106237	34017	181371	1153296	291	93	497	3160	4033	8497	8497	4464	98.82	1.11	0.0328	0.2501								
1969 15	15	105876	35733	203203	1263288	290	98	557	3461	4437	9760	9760	5324	117.84	1.20	0.0363	0.2873								
1970 15	15	102757	32262	230188	1261428	282	88	631	3456	4856	11022	11022	6166	136.48	1.27	0.0397	0.3245								
1971 15	15	90405	27456	229082	1172160	248	75	628	3211	5250	12194	12194	6944	153.71	1.32	0.0426	0.359								
1972 15	15	85760	21237	222950	1429260	235	58	611	3916	5617	13623	13623	8006	177.21	1.43	0.0455	0.4011								
1973 15	15	86103	21752	209738	1053744	236	60	575	2887	5974	14677	14677	8703	192.65	1.46	0.0483	0.4321								
1974 15	15	86599	24305	390731	810156	237	67	1070	2220	6517	15487	15487	8970	198.55	1.38	0.0512	0.4559								
1975 15	15	79724	21596	426461	672828	218	59	1168	1843	7083	16160	16160	9077	200.92	1.28	0.0538	0.4757								
1976 15	15	77064	27357	388475	733344	211	75	1064	2009	7620	16893	16893	9273	205.25	1.22	0.0563	0.4973								
1977 15	15	77316	21059	360228	725724	212	58	987	1988	8116	17619	17619	9503	210.36	1.17	0.0589	0.5187								
1978 15	15	75941	10619	356563	674052	208	29	977	1847	8582	18293	18293	9711	214.96	1.13	0.0614	0.5385								
1979 15	15	67971	10329	322533	576060	186	28	884	1578	9004	18869	18869	9865	218.36	1.10	0.0636	0.5555								
1980 15	15	67810	12582	315073	562440	186	34	863	1541	9424	19431	19431	10007	221.51	1.06	0.0659	0.5721								
1981 15	15	62029	20326	338778	562440	170	56	928	1541	9879	19994	19994	10115	223.89	1.02	0.0679	0.5886								
1982 15	15	58517	18080	312874	762408	160	50	857	2089	10299	20756	20756	10457	231.47	1.02	0.0698	0.6111								
1983 15	15	60194	10482	334731	791064	165	29	917	2167	10725	21547	21547	10822	239.55	1.01	0.0718	0.6343								
1984 15	15	67739	17004	393186	804036	186	47	1077	2203	11233	22351	22351	11118	246.10	0.99	0.0741	0.658								
1985 15	15	71256	20532	410188	1145289	195	56	1124	3138	11771	23497	23497	11726	259.56	1.00	0.0764	0.6917								
1986 15	13	59527	17996	355268	727450	163	49	973	1993	12234	24224	24224	11990	265.40	0.98	0.0784	0.7132								
1987 12	12	45424	16420	253505	566914	124	45	695	1553	12576	25249	25249	12215	270.38	0.97	0.0799	0.7298								
1988 10	10	43324	16177	240478	458066	119	44	659	1255	12902	25494	25494	12347	273.30	0.96	0.0813	0.7433								
1989 9	6	34218	14835	177263	155052	94	41	486	425	13152	25404	25404	12252	271.20	0.93	0.0824	0.7479								
1990 9	6	31957	15882	178697	146946	88	44	490	403	13403	25551	25551	12148	268.90	0.91	0.0835	0.7522								
1991 9	6	28725	14822	150037	157014	79	41	411	430	13619	25708	25708	12089	267.59	0.89	0.0844	0.7568								
Jan-92 8	5	2311	1639	10216	36203	75	53	330	1168	13636	25744	25744	12108	268.02	0.89	0.0845	0.7579								
Feb-92 8	5	2799	1526	12220	33085	100	55	436	1182	13655	25777	25777	12123	268.33	0.89	0.0846	0.7589								
Mar-92 11	5	2422	1870	14007	29372	78	60	452	947	13676	25807	25807	12131	268.52	0.89	0.0847	0.7597								
Apr-92 11	5	2937	2019	20672	30530	97	67	689	1018	13704	25837	25837	12133	268.56	0.89	0.0848	0.7606								
May-92 11	5	2936	1644	20322	32490	95	53	656	1048	13732	25870	25870	12138	268.68	0.88	0.0849	0.7616								
Jun-92 11	5	2956	1398	20940	37489	99	47	698	1250	13759	25907	25907	12148	268.90	0.88	0.085	0.7627								
Cum			2576827	1364827	7734123	25907240																			

Table 5

WATERFLOOD PERFORMANCE
WISER PENNZOIL MALJAMAR WATERFLOOD
Start of Injection at 4-19-67

Time Mo-Yr	Number Wells	Production					Daily Production				Daily Inj. (BWPD)	Cumulative Withdrawals (MRBBL)	Cum. Inj. (MBBL)	Net Cum. Inj. (MBBL)	Fillup (%)	Cum. Net IWR (ratio)	Oil pV	Inj. pV	
		Oil (BBL)	Gas (MCF)	Water (BBL)	Injection (BBL)	Oil (BOPD)	Gas (MCFD)	Water (BWPD)											
(9-mo 67)	8	6256	7922	2219	393652	23	29	8	1439	27	394	366	23.03	13.34	0.0006	0.0329			
1968	7	9693	7503	4768	524707	27	21	13	1438	60	918	858	53.96	14.22	0.0015	0.0768			
1969	7	15174	13602	10453	471841	42	37	29	1293	119	1390	1271	79.93	10.68	0.0029	0.1163			
1970	6	20359	10973	13477	448019	56	30	37	1227	181	1838	1658	104.24	9.18	0.0048	0.1537			
1971	6	24655	10351	22238	309055	68	28	61	847	254	2147	1893	119.04	7.45	0.0071	0.1796			
1972	6	25401	7456	25620	472800	70	20	70	1295	325	2620	2295	144.29	7.05	0.0095	0.2191			
1973	6	24703	25675	23370	472800	68	70	64	1295	436	3093	2657	167.10	6.10	0.0118	0.2587			
1974	6	25187	11131	36811	382103	69	30	101	1047	526	3475	2949	185.43	5.60	0.0142	0.2906			
1975	6	25238	7878	42442	308372	69	22	116	845	615	3783	3168	199.24	5.15	0.0165	0.3164			
1976	6	25007	10896	44764	332818	69	30	123	912	713	4116	3403	214.02	4.77	0.0189	0.3443			
1977	6	23238	6910	40762	367630	64	19	112	1007	796	4484	3688	231.93	4.64	0.0211	0.375			
1978	7	34176	11883	100578	414795	94	33	276	1136	962	4899	3937	247.57	4.09	0.0243	0.4097			
1979	7	36959	13748	110801	360864	101	38	304	989	1146	5259	4114	258.70	3.59	0.0277	0.4399			
1980	6	40481	20112	53816	359664	111	55	147	985	1291	5619	4328	272.17	3.35	0.0315	0.47			
1981	6	44052	24015	94905	359676	121	66	260	985	1490	5979	4488	282.25	3.01	0.0356	0.5			
1982	6	38562	27454	89534	332247	106	75	245	910	1686	6311	4625	290.82	2.74	0.0393	0.5278			
1983	6	48914	24738	106924	396376	134	68	293	1086	1905	6707	4803	302.00	2.52	0.0438	0.561			
1984	6	45027	26382	87151	412705	123	72	239	1131	2103	7120	5017	315.49	2.39	0.0481	0.5955			
1985	6	35586	21980	127537	897158	97	60	349	2458	2321	8017	5696	338.20	2.45	0.0514	0.6705			
1986	6	46988	25873	144152	866713	129	71	395	2375	2577	8884	6307	396.59	2.45	0.0558	0.743			
1987	6	43169	23270	118515	646378	118	64	325	1771	2798	9530	6733	423.37	2.41	0.0598	0.7971			
1988	6	42671	22623	119072	515413	117	62	326	1412	3017	10046	7029	442.02	2.33	0.0638	0.8402			
1989	6	38207	23005	93834	64250	105	63	257	176	3206	10110	6904	434.14	2.15	0.0674	0.8456			
1990	6	33084	24899	90878	65336	91	68	249	179	3391	10175	6784	426.60	2.00	0.0705	0.851			
1991	6	32323	24794	85249	39788	89	68	234	109	3570	10215	6645	417.88	1.86	0.0735	0.8544			
Jan-92	6	2431	1295	6134	3699	78	42	198	119	3582	10219	6637	417.37	1.85	0.0738	0.8547			
Feb-92	6	2919	1476	7482	3996	104	53	267	143	3596	10223	6627	416.73	1.84	0.074	0.855			
Mar-92	6	2306	1691	6048	3790	74	55	195	122	3608	10227	6618	416.18	1.83	0.0743	0.8553			
Apr-92	6	2629	1569	6691	3320	88	52	223	111	3622	10230	6608	415.56	1.82	0.0745	0.8556			
May-92	6	2812	991	7244	3110	91	32	234	100	3634	10233	6599	414.96	1.82	0.0748	0.8558			
Jun-92	6	2585	901	6474	1979	86	30	216	66	3646	10235	6589	414.36	1.81	0.075	0.856			
Cum		800792	442996	1729943	10235054														

WATERFLOOD PERFORMANCE
JOHNS A & B SEC 24 WATERFLOOD
Start of Injection at 3-3-66

Time Mo-Yr	Number Wells		Production										Daily Production					Daily Inj. (BWPD)	Cumulative Withdrawals (MRBBL)	Cum. Inj. (MBBL)	Net Cum. Inj. (MBBL)	Fillup (%)	Cum. Net IWR (ratio)	Oil PV	Inj. PV
	P	Inj	Gas			Injection (BBL.)	Oil			Gas (MCFD)	Water (BWPD)														
			Oil (BBL)	Gas (MCF)	Water (BBL)		Oil (BOPD)	Gas (MCFD)	Water (BWPD)																
(110-Mo)	66	8	8	23233	57356	11318	904220	76	189	37	2974	169	904	735	29.73	-4.34	0.0014	0.0486							
1967	8	8	8	74696	42810	64216	1255685	205	117	176	3440	416	2160	1744	70.56	4.20	0.0059	0.1162							
1968	8	8	8	60709	22038	120359	1142637	166	60	330	3131	655	3303	2648	107.11	4.04	0.0096	0.1777							
1969	8	8	8	53938	15878	162028	1139433	148	44	444	3122	914	4442	3528	142.72	3.86	0.0128	0.239							
1970	8	8	8	43946	9539	244758	1144711	120	26	671	3136	1230	5587	4357	176.24	3.54	0.0155	0.3006							
1971	7	8	8	29034	7980	194305	1116224	80	22	532	3058	1475	6703	5228	211.48	3.55	0.0172	0.3606							
1972	6	8	8	25849	1854	166952	821337	71	5	457	2250	1675	7524	5849	236.60	3.49	0.0188	0.4048							
1973	5	8	8	25091	1055	47532	490582	69	3	130	1344	1753	8015	6262	253.29	3.57	0.0203	0.4312							
1974	6	8	8	26643	1219	60552	546183	73	3	166	1496	1846	8561	6715	271.61	3.64	0.0219	0.4606							
1975	6	8	8	26983	5798	49209	776292	74	16	135	2127	1939	9337	7398	299.26	3.82	0.0235	0.5023							
1976	6	8	8	23337	4481	41106	761056	64	12	113	2085	2016	10098	8082	326.91	4.01	0.0249	0.5433							
1977	6	8	8	21978	3576	40282	717096	60	10	110	1965	2090	10815	8726	352.96	4.18	0.0262	0.5818							
1978	5	5	5	17090	2260	30531	463959	47	6	84	1271	2144	11279	9135	369.50	4.26	0.0273	0.6068							
1979	4	5	5	13930	2135	39836	398775	38	6	109	1093	2205	11678	9473	383.19	4.30	0.0281	0.6283							
1980	5	5	5	19181	4226	67058	386887	53	12	184	1060	2303	12065	9762	394.87	4.24	0.0293	0.6491							
1981	5	5	5	17841	958	43571	345035	49	3	119	945	2369	12410	10041	406.17	4.24	0.0303	0.6676							
1982	5	5	5	16153	641	54707	376470	44	2	150	1031	2443	12787	10344	418.39	4.23	0.0313	0.6879							
1983	5	5	5	14680	766	62184	490482	40	2	170	1344	2523	13277	10754	434.98	4.26	0.0322	0.7143							
1984	5	5	5	12997	712	56549	407865	36	2	155	1117	2596	13685	11089	448.53	4.27	0.033	0.7362							
1985	5	5	5	13321	619	53662	469061	36	2	147	1285	2666	14154	11488	464.67	4.31	0.0338	0.7615							
1986	5	2	2	13375	563	44358	171366	37	2	122	469	2727	14325	11599	469.15	4.25	0.0346	0.7707							
1987	4	2	2	10895	381	5754	10276	30	1	16	28	2746	14336	11590	468.81	4.22	0.0352	0.7712							
1988	5	2	2	11149	0	63054	61849	31	0	173	169	2821	14397	11576	468.25	4.10	0.0359	0.7746							
1989	5	2	2	10290	0	36382	36382	28	0	100	100	2869	14434	11565	467.79	4.03	0.0365	0.7765							
1990	5	1	1	8914	0	46909	46909	24	0	129	129	2926	14481	11555	467.38	3.95	0.0371	0.779							
1991	4	1	1	8270	0	16847	31557	23	0	46	86	2952	14512	11560	467.60	3.92	0.0376	0.7807							
Jan-92	4	2	2	699	0	834	10815	23	0	27	349	2954	14523	11569	467.98	3.92	0.0376	0.7813							
Feb-92	4	2	2	688	0	924	9966	25	0	33	356	2955	14533	11578	468.31	3.92	0.0377	0.7818							
Mar-92	4	2	2	752	0	570	10023	24	0	18	323	2957	14543	11586	468.66	3.92	0.0377	0.7824							
Apr-92	4	2	2	710	0	694	7761	24	0	23	259	2958	14551	11593	468.91	3.92	0.0377	0.7828							
May-92	4	2	2	714	0	615	7063	23	0	20	228	2960	14558	11598	469.14	3.92	0.0378	0.7832							
Jun-92	4	2	2	673	0	437	6191	22	0	15	206	2961	14564	11603	469.34	3.92	0.0378	0.7835							
Cum.				627759	186845	1828093	14564148																		

TABLE 8

Comparison of Similar Reservoirs
Pre-Infill Drilling Waterflood Performance
Maljamar (Grayburg-San Andres) Field

	Wiser Pennzoi-Maljamar Project	Analogy		
		Cross Timbers SMGSAU	Avon Turner-B	Conoco MCA
Effective Date:	7/1/92	7/1/92	1/1/90	1/1/91
Total Well Completions (pre-infill):				
Producers	63	18	33	150 est
Injectors	46	10	16	51 est
Total	109	28	49	201
Injector-Producer Ratio	0.73	0.56	0.49	0.34
Project Area (Acres)	4110	1120	1320	8040
Average Spacing (Acres/Well)	38	40	40	40
OOIP (MSTB)	51898	22618	*NA	268000
Cumulative Oil Production, pre-infill wells (MBBL)	10,180	3126	4,103	91780
Cumulative Oil Production (BBL/acre)	2477	2791	3109	11415
Average Oil Cumulative Per Well (MBBL)	93	112	84	457
Ultimate Primary Oil Recovery (MBBL)	4601	2468	2059	56400
Ultimate Primary Oil Recovery (BBL/acre)	1119	2203	1560	7015
Ultimate Primary Recovery Factor (%)	8.87	10.91	*NA	21.04
Average Oil Recovery Per Well (MBBL)	42	88	42	281
Cum. Secondary Oil, pre-infill wells (MBBL)	5579	658	2044	35380
Ultimate Secondary Oil Recovery (MBBL)	6277	783	2044	62600
Average Ultimate Secondary Per Well (MBBL)	100	44	62	417
Secondary:Primary Ratio	1.36	0.32 **	1.00	1.11
Ultimate Oil Recovery, pre-fill wells (MBBL)	10879	3251	4103	119000
Estimated Recovery Factor (%)	20.96	14.37	-	44.40
Cumulative Water Production (MBBL)	66353	912	4747	122000
Cumulative WOR	6.52	0.29 **	1.16	1.33
Cumulative Watercut (%)	86.70	22.59 **	53.6	57.07
Cumulative Water Injection (MBBL)	66353	5709	24482	*NA
Cumulative Injection-Secondary Oil Ratio (STB/STB)	11.89	8.68	11.9	
Cumulative Injection-Withdrawals (RBBL/RBBL)	1.17	0.63 **	2.67	
20-acre/well Infill Drilling Performance				
No. Producers Drilled	59 (Proposed)	16 **	22 ***	100
Ultimate Secondary Oil Recovery (MBBL)	6824	1704 **	1200 ***	*NA
Average Ultimate Secondary Per Well (MBBL)	116	106 **	55 ***	*NA

*NA= data not available

**Infill drilling initiated early in life of waterflood with full injection support on 40-acre 5-spot patterns

***20-acre Infill wells, partial injection support on planned 5-spot 40-acre patterns

TABLE 9

CROSS-TIMBERS S. E. MALJAMAR WATERFLOOD PROJECT (SMGSAU)
Beg. Injection: Dec. 1967

	Ultimate Primary	Cum. 7-1-92			Cum.Oil Secondary at 7-1-92	Oil Rem. at 7/1/92	EUR	Cum. Injection (7-1-92)
	Oil (BBL)	Oil (BBL)	Gas (MCF)	Water (BBL)	(BBL)	(BBL)	(BBL)	(BBL)
Summary of Pre-Infill Drilling (Beg. Injection: Dec. 1967)								
16-Producers	1817624	1835550	1E+06	178016	17926	453578	2289128	
Per well average	113602	114722	71853	11126	1120	28349	143071	
11-Injectors	856823	856823	636047	78260			856823	2510000
Per well average	77893	77893	57822	7115			77893	228182
27-well Total	2674447	2681764	2E+06	256276	7317	464187	3145951	
Per well average	99054	99325	66137	9492			112355	

Performance Summary of Infill Well Performance

Lease	Well No.	Loc	Initial Date Production	Cum. 7-1-92			Rem. Oil 7/1/92	EUR
				Oil (BBL)	Gas (MCF)	Water (BBL)	(BBL)	(BBL)
(A) Wells drilled within corridor of highest net pay and ultimate primary recoveries (Net Pay = 42 to 62')								
SMGSAU-Tr 7	5	29-J	12/13/71	350643	158357	179766	19657	370300
SMGSAU-Tr 7	6	29-O	9/12/72	153482	28863	294598	40625	194107
SMGSAU-Tr 6	6	29-M	2/5/73	242376	68437	263242	66254	308630
SMGSAU-Tr 7	8	29-O	4/11/73	87826	27088	621114	0	87826
SMGSAU-Tr 1	4	30-I	1/20/77	241690	73640	96777	28074	269764
SMGSAU-Tr 6	7	29-K	10/9/80	75051	24801	67609	17794	92845
SMGSAU-Tr 6	8	29-N	1/4/92	6887	2915	45398	84221	91108
7-wells								
Total				1157955	384101	1568504	256625	1414580
Per Well Average				165422	54872	224072	36661	202083

(B) Other Infill Drilled Wells (Net Pay = 10 to 45')

SMGSAU-Tr 4	9	29-E	10/14/78	13475	8830	19423	0	13475
SMGSAU-Tr 4	10	29-F	10/24/78	47146	24957	20189	0	47146
SMGSAU-Tr 5	7	29-G	3/4/80	36764	28556	13441	0	36764
SMGSAU-Tr 1	5	30-J	4/17/80	20645	18147	71351	2189	22834
SMGSAU-Tr 7	9	29-I	12/9/81	17874	14180	30536	0	17874
SMGSAU-Tr 4	13	29-F	2/2/82	6178	10250	42868	0	6178
SMGSAU-Tr 4	12	29-D	2/3/82	78908	50216	91858	12563	91471
SMGSAU-Tr 4	11	29-E	2/20/82	23893	0	892029	0	23893
SMGSAU-Tr 9	6	32-A	1/5/92	2403	1343	31416	27126	29529
SMGSAU-Tr 9	7	32-H I	1/9/92	996	1567	2578	0	996
SMGSAU-Tr 6	9	29-L I	1/15/92	211	204	1696	0	211
11-wells								
Total				248493	158250	1217385	41878	290371
Per Well Average				22590	14386	110671	3807	26397

(C) Total Infill Well Program

18-wells (16 Prod, 2 Injectors)				1406448	542351	2785889	298503	1704951
16- Producers				1405241	540580	2781615	298503	1703744
Avg. Per Well	(18 wells)			78136	30131	154772	16584	94720
	(16- Producers)			87828	33786	173851	18656	106484

TABLE 10

PROPOSED INVESTMENT SCHEDULE
WISER PENNZOIL- MALJAMAR WATERFLOOD PROJECT
LEA COUNTY, NEW MEXICO

Phase I

Inv. Date	Producer Well Work Drill				** Workover		Injection Well Work						Facility Inv. (\$M)	Period Total Inv. (\$M)	Cum. Total Inv. (\$M)
	Well No.	Loc S-Gd	Oil (MBBL)	Inv. (\$M)	Well No.	Inv. (\$M)	Drill Well No.	Inv. (\$M)	Convert Well No.	Inv. (\$M)	Workover Well No.	Inv. (\$M)			
Apr-93	1	19-H	179	260							3(19-H)	15		275	275
Apr-93											5(19-B)	15		15	290
Apr-93								6 (19-G)	35				20	55	345
Apr-93								4 (19-A)	35				20	55	400
May-93	2	20-C	202	330 *							5(20-B)	15		345	745
May-93											8(17-N)	15	150	165	910
May-93								2(20-C)	80				20	100	1010
May-93								7(17-O)	35				20	55	1065
Jun-93	3	20-G	161	260							3 (20-F)	15	50	325	1390
Jun-93								1 (20-G)	35				20	55	1445
Jul-93	4	20-D	97	260				11(17-M)	80				20	360	1805
Jul-93											6(20-D)	15	100	115	1920
Jul-93	5	20-B	107	260				9(20-A)	35				20	315	2235
Jul-93											10(17-P)	15		15	2250
Aug-93	6	20-H	124	260				4(20-H)	35				20	315	2565
Aug-93													75	75	2640
Sep-93	7	17-O	111	260				14(17-K)	35	13(17-J)	80			375	3015
Oct-93	8	17-N	116	260						15(17-L)	15	125		400	3415
Oct-93	9	20-E	141	260				16(20-E)	80				20	360	3775
Oct-93	10	20-L	165	260				7(20-L)	80				20	360	4135
Oct-93								2(19-I)	80				20	100	4235
Wells	10				0		0		12		9				
									21-Total	Injectors					
Reserves			1403												
Reserves/well			140												
Investment				2670		0		0		645		200	720	4235	
														424 MS/pattern	
														3.02 \$/BBL	

*Investment takes into account 400' core. Specific well to be cored is contingent upon detail geological review.

**Investment provision for deepening of well as producer prior to conversion to injection. Specific well contingent upon detail review.

TABLE 11

PROPOSED INVESTMENT SCHEDULE
WISER PENNZOIL- MALJAMAR WATERFLOOD PROJECT
LEA COUNTY, NEW MEXICO

Phase II

Inv. Date	Producer Well Work				** Workover		Injection Well Work						Facility Inv. (\$M)	Period Total Inv. (\$M)	Cum. Total Inv. (\$M)
	Well No.	Loc S-Gd	Oil (MBBL)	Inv. (\$M)			Drill Well No.	Inv. (\$M)	Convert Well No.	Inv. (\$M)	Workover Well No.	Inv. (\$M)			
Oct-93	11	19-G	106	260							10(19-F)	15		275	275
Oct-93					17(20-E)	50			11(19-C)	35			20	105	380
Oct-93	12	17-K	95	260							6(17-F)	15		275	655
Oct-93									7(17-G)	35			20	55	710
Nov-93	13	17-L	104	260	1(20-I)	50			5(17-E)	35			20	365	1075
Nov-93	14	18-I	119	260							2(18-H)	15		275	1350
Nov-93							3-X(18-I)	200					20	220	1570
Nov-93	15	24-H	174	330 *					9(24-G)	35	5(24-H)	15	20	400	1970
Nov-93									7(24-A)	100	8(24-B)	15	20	135	2105
Nov-93	16	19-A	113	260			4-X(18-P)	200					20	480	2585
Dec-93	17	17-M	88	260										260	2845
Dec-93	18	17-E	157	260					4(17-D)	35			20	315	3160
Dec-93									1(18-A)	35			20	55	3215
Dec-93	19	18-H	192	260					7(18-G)	35	8(18-B)	15	20	330	3545
Dec-93	20	18-J	176	260							6(18-J)	15	100	375	3920
Jan-94	21	18-O	107	260			5-X(18-O)	200	1(18-K)	100	8(18-N)	15	140	715	4635
Jan-94	22	17-F	95	260					3(17-C)	35			20	315	4950
Jan-94	23	17-G	109	260					2(17-B)	35			20	315	5265
Feb-94	24	20-K	118	260					5(20-K)	35			20	315	5580
Feb-94	25	17-H	103	260					1(17-A)	35	8(17-H)	65	70	430	6010
Feb-94	26	17J	81	260					12(17-I)	35			20	315	6325
Mar-94	27	19-I	134	260							7(19-J)	15	50	325	6650
Mar-94	28	19-F	95	260					13(19-E)	35	12(19-D)	15	70	380	7030
Mar-94	29	19-B	111	260									100	360	7390
Apr-94	30	19-C	114	260									50	310	7700
Apr-94	31	19-D	95	260			7-X(18-M)	200					20	480	8180
Apr-94	32	24-A	153	260							6(13-P)	80		340	8520
Apr-94	33	20-M	107	260					6(20-M)	35	1(19-P)	15	20	330	8850
Apr-94	34	20-I	84	260					1(20-I)	35	1(20-J)	15	20	330	9180
Apr-94	35	17-P	97	260									50	310	9490
May-94	36	20-J	79	260										260	9750
May-94	37	24-B	183	260			5-X(13-O)	200					70	530	10280
May-94	38	18-M	144	260					2(18-L)	100			20	380	10660
May-94									3(13-I)	35			20	55	10715
														0	10715
Wells	28				2		5		19		14				
									38-Total Injectors						
Reserves			3333												
Reserves/well			119												
Investment				7350		100		1000		860		325	1080	10715	
														383 MS/pattern	
														3.21 \$/BBL	

*Investment takes into account 400' core. Specific well to be cored is contingent upon detail geological review.

**Investment provision for deepening of well as producer prior to conversion to injection. Specific well contingent upon detail review.

TABLE 12

PROPOSED INVESTMENT SCHEDULE
WISER PENNZOIL- MALJAMAR WATERFLOOD PROJECT
LEA COUNTY, NEW MEXICO

Phase III

Inv. Date	Producer Well Work Drill				** Workover		Injection Well Work						Facility Inv. (\$M)	Period Total Inv. (\$M)	Cum. Total Inv. (\$M)
	Well No.	Loc S-Gd	Oil (MBBL)	Inv. (\$M)	Well No.	Inv. (\$M)	Drill Well No.	Inv. (\$M)	Convert Well No.	Inv. (\$M)	Workover Well No.	Inv. (\$M)			
Jun-94	39	28-K	146	330 *					7(28-J)	80	2(28-L)	20	20	450	450
Jun-94											8(28-N)	15	100	115	565
Jun-94	40	19-O	86	260					8(19-O)	100			20	380	945
Jun-94	41	24-G	153	260			4-X(24-F)	200					20	480	1425
Jul-94							11-X(24-C)	200					20	220	1645
Jul-94	42	24-F	139	260			12-X(24-D)	200					20	480	2125
Jul-94							1(24-E)	200					20	220	2345
Jul-94	43	24-K	168	260	7(28-K)	50					2(24-L)	20	20	350	2695
Aug-94							3-X(24-K)	200						200	2895
Aug-94	44	13-P	174	260			4-X(13-J)	200					20	480	3375
Aug-94													100	100	3475
Aug-94	45	28-J	108	260							10(28-J)	15		275	3750
Aug-94									9(28-O)	80			20	100	3850
Aug-94	46	24-J	120	260							10(24-J)	15		275	4125
Sep-94	47	21-D	65	260							4(21-D)	15		275	4400
Sep-94									2(21-E)	35			20	55	4455
Sep-94	48	19-K	83	260							15(19-L)	35		295	4750
Sep-94									9(19-K)	25			20	45	4795
Sep-94	49	19-J	80	260										260	5055
Sep-94	50	28-P	87	260							2(33-B)	15		275	5330
Sep-94											13(28-P)	15		15	5345
Sep-94	51	19-E	150	260									100	360	5705
Oct-94	52	24-P	83	260							5(24-P)	15		275	5980
Oct-94									6(24-I)	35			20	55	6035
Oct-94									3(24-O)	35			20	55	6090
Oct-94	53	28-II	61	260										260	6350
Oct-94	54	24-I	73	260										260	6610
Oct-94	55	20-P	64	260							3(20-P)	50		310	6920
Oct-94	56	20-N	59	260					4(20-N)	80		25		365	7285
Nov-94	57	18-K	69	260										260	7545
Nov-94	58	24-M	50	260							2(24-N)	15		275	7820
Nov-94									1(24-M)	35			20	55	7875
Dec-94	59	24-C	70	260										260	8135
Wells	21				1		6		9		12				
							27-Total Injectors								
Reserves			2088												
Reserves/well			99												
Investment				5530		50		1200		505		270	580	8135	
														387 MS/pattern	
														3.90 \$/BBL	

*Investment takes into account 400' core. Specific well to be cored is contingent upon detail geological review.

**Investment provision for deepening of well as producer prior to conversion to injection. Specific well contingent upon detail review.

TABLE 13

PROPOSED INVESTMENT SCHEDULE
WISER PENNZOIL- MALJAMAR WATERFLOOD PROJECT
LEA COUNTY, NEW MEXICO

Composite: Three Phase Program

Inv. Date	Producer Well Work				Workover		Injection Well Work								Facility Inv. (\$M)	Cum. Total Inv. (\$M)
	Drill		Oil (MBBL)	Inv. (\$M)	Well No.	Inv. (\$M)	Drill		Convert		Workover					
	Well No.	Loc S-Gd					Well No.	Inv. (\$M)	Well No.	Inv. (\$M)	Well No.	Inv. (\$M)				
Wells	59				3		11		40		35					
								86-Total	Injectors							
Total Reserves			6824													
Reserves Per Well			116													
Investment			15550		150		2200		2010		795	2380		23085		
													391 MS/pattern 3.38 \$/BBL			

Table 14

Summary of Economics: Escalated Case
 Redevelopment Project
 Pennzoil-Maljamar Project
 Lea County, New Mexico

	Proved Developed Producing	Proved Undeveloped	Total Proved
Effective Date:	December 1, 1992		
Interest:			
Working, %		100.00	
Net Revenue, %		82.00	
Gross Reserves:			
Oil, MBBL	636	6824	7460
Gas, MMCF	189	4301	4490
Net Reserves:			
Oil, MBBL	522	5596	6117
Gas, MMCF	155	3527	3681
Net Operating Revenue, M\$	12161	155289	167450
Expenses:			
Wellhead Taxes, M\$	807	10307	11115
Operating Costs, M\$	6195	36354	42549
Total, M\$	7002	46662	53664
*Investments, M\$		23085	23085
Future Net Revenue:			
Undiscounted, M\$	5160	85542	90702
Discounted, M\$	3667	34041	37708
**Payout, Years		3.74	
Annualized Rate of Return, %		46.00	
Income/Investment Ratio:			
Undiscounted		4.71	
Discounted @ 10%		2.66	

*Investments do not include lease acquisition costs

**Payout calculated from Effective Date

TOTAL PROVED

DATE: 12/16/92

TIME: 11:03.15

FILE: MALMAR

GET#: 0

RESERVES AND ECONOMICS

WISER OIL CO. - ESCALATED
PENNZOIL-MALJAMAR WFLD PROJECT

AS OF DECEMBER 1, 1992

T. SCOTT HICKMAN & ASSOC
PETROLEUM ENGINEERS

-END- MO-YR	---GROSS PRODUCTION---		---NET PRODUCTION---		--PRICES--		-----OPERATIONS, M\$-----			CAPITAL COSTS, M\$	CASH FLOW BTAX, M\$	10.00 PCT CUM. DISC BTAX, M\$	
	OIL, MMBL	GAS, MMCF	OIL, MMBL	GAS, MMCF	OIL \$/B	GAS \$/M	NET OPER REVENUES	SEV+ADV+ WF TAXES	NET OPER EXPENSES				
12-92	8.381	2.479	6.873	2.032	18.57	1.00	129.670	8.606	56.605	.000	64.459	64.204	
12-93	141.987	72.976	116.428	59.840	19.04	1.03	2279.008	151.270	723.509	5805.000	-4400.771	-4059.698	
12-94	465.700	371.591	381.875	304.705	20.01	1.08	7969.533	528.979	2055.791	17280.000	-11895.237	-14463.033	
12-95	806.216	625.187	661.097	512.654	21.01	1.14	14472.136	960.590	2691.072	.000	10820.474	-6000.907	
12-96	870.115	619.662	713.495	508.123	22.06	1.19	16343.781	1094.819	2736.097	.000	12522.875	2902.262	
12-97	757.528	499.194	621.173	409.338	23.15	1.25	14893.705	988.569	2751.984	.000	11153.152	10110.771	
12-98	631.056	384.504	517.467	315.293	24.30	1.32	12987.570	862.052	2814.734	.000	9310.784	15581.452	
12-99	524.987	293.152	430.488	240.385	25.50	1.38	11308.264	750.585	2627.611	.000	7930.068	19817.292	
12- 0	452.343	232.731	370.921	190.840	26.76	1.45	10201.670	677.136	2756.111	.000	6768.423	23103.972	
12- 1	398.041	194.251	326.395	159.286	28.08	1.52	9407.930	624.450	2891.037	.000	5892.443	25705.164	
12- 2	353.282	171.623	289.691	140.732	29.59	1.60	8797.386	583.926	2975.109	.000	5238.351	27807.388	
12- 3	315.105	156.347	258.386	128.205	31.07	1.68	8243.550	547.164	2454.750	.000	5241.636	29719.700	
12- 4	288.615	143.285	236.664	117.494	32.62	1.76	7928.174	526.233	2221.974	.000	5179.967	31437.712	
12- 5	254.118	126.191	208.376	103.477	34.25	1.85	7329.149	496.472	1859.793	.000	4982.884	32940.118	
12- 6	229.217	114.608	187.959	93.978	35.00	1.89	6756.497	448.462	1792.608	.000	4515.427	34177.811	
\$ TOT	6496.691	4007.781	5327.268	3286.382	25.28	1.33	139048.023	9229.313	33408.775	23085.000	73324.935	34177.811	
REM.	963.563	481.781	790.124	395.062	35.00	1.89	28402.325	1885.205	9140.262	.000	17376.858	37707.899	
TOTAL	7460.254	4489.562	6117.412	3681.444	26.53	1.39	167450.348	11114.518	42549.037	23085.000	90701.793	37707.899	
CUM.	10242.290	9378.363					NET OIL REVENUES (M\$)	162322.762		-----PRESENT WORTH PROFILE-----			
							NET GAS REVENUES (M\$)	5127.586		DISC	PW OF NET	DISC	PW OF NET
ULT.	17702.544	13867.925					TOTAL REVENUES (M\$)	167450.348		RATE	BTAX, M\$	RATE	BTAX, M\$
										----	-----	----	-----
BTAX RATE OF RETURN (PCT)			54.68				PROJECT LIFE (YEARS)	22.032		.0	90701.793	30.0	8589.444
BTAX PAYOUT YEARS			3.52				DISCOUNT RATE (PCT)	10.000		2.0	74856.191	35.0	5776.795
BTAX PAYOUT YEARS (DISC)			3.76				GROSS OIL WELLS	98.000		5.0	57160.307	40.0	3669.633
BTAX NET INCOME/INVEST			4.93				GROSS GAS WELLS	.000		8.0	44309.914	45.0	2061.841
BTAX NET INCOME/INVEST (DISC)			2.84				GROSS WELLS	98.000		10.0	37707.899	50.0	816.949
										12.0	32251.351	60.0	-929.454
										15.0	25701.010	70.0	-2035.427
										18.0	20611.742	80.0	-2749.088
										20.0	17830.615	90.0	-3212.161
										25.0	12430.872	100.0	-3510.029

TABLE 15

TOTAL PROVED DEVELOPED PRODUCING

DATE: 12/16/92

TIME: 11:03.15

FILE: MALMAR

GET#: 0

RESERVES AND ECONOMICS

WISER OIL CO. - ESCALATED
PENNZOIL-MALJAMAR WFLD PROJECT

AS OF DECEMBER 1, 1992

T. SCOTT HICKMAN & ASSOC
PETROLEUM ENGINEERS

-END- MO-YR	---GROSS PRODUCTION---		---NET PRODUCTION---		--PRICES--		-----OPERATIONS, M\$-----			CAPITAL COSTS, M\$	CASH FLOW BTAX, M\$	10.00 PCT CUM. DISC BTAX, M\$	
	OIL, MMBL	GAS, MMCF	OIL, MMBL	GAS, MMCF	DIL \$/B	GAS \$/M	NET OPER REVENUES	SEV+ADV+ WF TAXES	NET OPER EXPENSES				
12-92	8.381	2.479	6.873	2.032	18.57	1.00	129.670	8.606	56.605	.000	64.459	64.204	
12-93	96.249	28.364	78.923	23.258	19.03	1.03	1525.894	101.281	569.386	.000	855.227	873.486	
12-94	87.555	25.634	71.796	21.020	19.91	1.08	1432.012	96.379	563.077	.000	792.556	1555.284	
12-95	78.516	22.861	64.383	18.746	20.82	1.14	1361.872	90.395	579.446	.000	692.031	2096.484	
12-96	69.839	20.405	57.268	16.732	21.77	1.19	1266.881	84.089	604.818	.000	577.974	2507.396	
12-97	57.070	15.724	46.798	12.893	22.73	1.25	1079.726	71.666	514.152	.000	493.908	2826.618	
12-98	50.679	14.022	41.557	11.498	23.75	1.32	1001.913	66.504	465.010	.000	470.399	3103.007	
12-99	45.047	12.516	36.938	10.263	24.80	1.38	930.401	61.755	485.383	.000	383.263	3307.727	
12- 0	40.080	11.181	32.866	9.169	25.90	1.45	864.695	57.395	506.772	.000	300.528	3453.661	
12- 1	35.696	10.000	29.272	8.200	27.05	1.52	804.245	53.381	529.230	.000	221.634	3551.500	
12- 2	27.934	8.949	22.906	7.339	29.59	1.60	689.553	45.768	495.212	.000	148.573	3611.125	
12- 3	18.441	8.015	15.122	6.572	31.07	1.68	480.889	31.918	350.679	.000	98.292	3646.985	
12- 4	16.419	7.187	13.463	5.894	32.62	1.76	449.614	29.844	368.213	.000	51.557	3664.085	
12- 5	4.348	1.305	3.565	1.070	34.25	1.85	124.094	8.236	106.655	.000	9.203	3666.860	
12- 6													
\$ TOT	636.254	188.642	521.730	154.686	22.93	1.27	12161.459	807.217	6194.638	.000	5159.604	3666.860	
REM.	.000	.000	.000	.000	.00	.00	.000	.000	.000	.000	.000	3666.860	
TOTAL	636.254	188.642	521.730	154.686	22.93	1.27	12161.459	807.217	6194.638	.000	5159.604	3666.860	
CUM.	10242.250	9378.363					NET OIL REVENUES (M\$)	11964.987		-----PRESENT WORTH PROFILE-----			
							NET GAS REVENUES (M\$)	196.472		DISC	PW OF NET	DISC	PW OF NET
ULT.	10878.544	9567.005					TOTAL REVENUES (M\$)	12161.459		RATE	BTAX, M\$	RATE	BTAX, M\$
BTAX RATE OF RETURN (PCT)			100.00				PROJECT LIFE (YEARS)	13.083		.0	5159.604	30.0	2314.921
BTAX PAYOUT YEARS			.00				DISCOUNT RATE (PCT)	10.000		2.0	4778.887	35.0	2126.019
BTAX PAYOUT YEARS (DISC)			.00				GROSS OIL WELLS	39.000		5.0	4295.495	40.0	1968.819
BTAX NET INCOME/INVEST			.00				GROSS GAS WELLS	.000		8.0	3895.919	45.0	1836.190
BTAX NET INCOME/INVEST (DISC)			.00				GROSS WELLS	39.000		10.0	3666.860	50.0	1722.935
										12.0	3462.623	60.0	1539.970
										15.0	3195.304	70.0	1398.748
										18.0	2966.635	80.0	1286.508
										20.0	2832.000	90.0	1195.139
										25.0	2545.499	100.0	1119.291

TABLE 16

TOTAL PROVED UNDEVELOPED

DATE: 12/16/92

TIME: 11:03.15

FILE: MALMAR

GET#: 0

RESERVES AND ECONOMICS

WISER OIL CO. - ESCALATED
PENNZOIL-MALJAMAR WFLD PROJECT

AS OF DECEMBER 1, 1992

T. SCOTT HICKMAN & ASSOC
PETROLEUM ENGINEERS

-END- MO-YR	---GROSS PRODUCTION---		---NET PRODUCTION---		--PRICES--		-----OPERATIONS, M\$-----			10.00 PCT		
	OIL, MMBL	GAS, MMCF	OIL, MMBL	GAS, MMCF	DIL \$/B	GAS \$/M	NET OPER REVENUES	SEV+ADV+ WF TAXES	NET OPER EXPENSES	CAPITAL COSTS, M\$	CASH FLOW BTAX, M\$	CUM. DISC BTAX, M\$
12-92	.000	.000	.000	.000	.00	.00	.000	.000	.000	.000	.000	.000
12-93	45.738	44.612	37.505	36.582	19.07	1.03	753.114	49.989	154.123	5805.060	-5255.998	-4933.174
12-94	378.145	345.957	310.079	283.685	20.03	1.08	6517.521	432.600	1492.714	17280.630	-12687.793	-16018.317
12-95	727.700	602.326	596.714	493.908	21.03	1.14	13110.264	870.195	2111.626	.000	10128.443	-8097.391
12-96	800.276	599.257	656.227	491.391	22.08	1.19	15076.900	1000.730	2131.269	.000	11944.901	394.866
12-97	700.458	483.470	574.375	396.445	23.19	1.25	13813.979	916.903	2237.832	.000	10659.244	7284.153
12-98	580.377	370.482	475.910	303.795	24.34	1.32	11985.657	795.543	2349.724	.000	8840.385	12478.445
12-99	479.940	280.636	393.550	230.122	25.56	1.38	10377.863	688.830	2142.228	.000	7546.805	16509.565
12- 0	412.263	221.550	338.055	181.671	26.84	1.45	9336.975	619.741	2249.339	.000	6467.895	19650.311
12- 1	362.345	184.251	297.123	151.086	28.18	1.52	8603.685	571.069	2361.807	.000	5670.809	22153.664
12- 2	325.348	162.674	266.785	133.393	29.59	1.60	8107.833	538.158	2479.897	.000	5089.778	24196.263
12- 3	296.664	148.332	243.264	121.633	31.07	1.68	7762.661	515.246	2104.071	.000	5143.344	26072.715
12- 4	272.196	136.098	223.201	111.600	32.62	1.76	7478.560	496.389	1853.761	.000	5128.410	27773.627
12- 5	249.770	124.886	204.811	102.407	34.25	1.85	7205.055	478.236	1753.138	.000	4973.681	29273.258
12- 6	229.217	114.608	187.959	93.978	35.00	1.89	6756.497	448.462	1792.608	.000	4515.427	30510.951
\$ TOT	5860.437	3819.139	4805.558	3131.696	25.53	1.34	126886.564	8422.096	27214.137	23085.000	68165.331	30510.951
REM.	963.563	481.781	790.124	395.062	35.00	1.89	28402.325	1885.205	9140.262	.000	17376.858	34041.039
TOTAL	6824.000	4300.920	5595.682	3526.758	26.87	1.40	155288.889	10307.301	36354.399	23085.000	85542.189	34041.039
CUM.	.000	.000					NET OIL REVENUES (M\$)	150357.775	-----PRESENT WORTH PROFILE-----			
							NET GAS REVENUES (M\$)	4931.114	DISC	PW OF NET	DISC	PW OF NET
ULT.	6824.000	4300.920					TOTAL REVENUES (M\$)	155288.889	RATE	BTAX, M\$	RATE	BTAX, M\$
BTAX RATE OF RETURN (PCT)			46.00	PROJECT LIFE (YEARS)			22.032	.0	85542.189	30.0	6274.523	
BTAX PAYOUT YEARS			3.74	DISCOUNT RATE (PCT)			10.000	2.0	70077.304	35.0	3650.776	
BTAX PAYOUT YEARS (DISC)			4.04	GROSS OIL WELLS			59.000	5.0	52804.812	40.0	1700.814	
BTAX NET INCOME/INVEST			4.71	GROSS GAS WELLS			.000	8.0	40413.995	45.0	225.651	
BTAX NET INCOME/INVEST (DISC)			2.66	GROSS WELLS			59.000	10.0	34041.039	50.0	-905.986	
								12.0	28783.728	60.0	-2469.424	
								15.0	22505.706	70.0	-3434.175	
								18.0	17645.107	80.0	-4035.596	
								20.0	14998.615	90.0	-4407.300	
								25.0	9885.373	100.0	-4629.320	

TABLE 17

TOTAL PROVED DEVELOPED PRODUCING

DATE: 12/16/92

TIME: 11:03.15

FILE: MALMAR

GET#: 0

RESERVES AND ECONOMICS

WISER OIL CO. - ESCALATED
PENNZOIL-MALJAMAR WFLD PROJECT

AS OF DECEMBER 1, 1992

T. SCOTT HICKMAN & ASSOC
PETROLEUM ENGINEERS

---GROSS PRODUCTION---		---NET PRODUCTION---		-----OPERATIONS, M\$-----			CAPITAL COSTS, M\$	CASH FLOW BTAX, M\$	10.00 PCT CUM. DISC BTAX, M\$	
LEASE	OIL, MMBL GAS, MMCF	OIL, MMBL GAS, MMCF		NET OPER REVENUES	SEV+ADV+ WF TAXES	NET OPER EXPENSES				
***** FILE: MALMAR										
(3)MAL GRA UNIT (PDP)	26.165	13.083	21.455	10.727	449.294	29.823	359.197	.000	60.274	53.597
(1)ZAPATA WESTERN STATE (PDP)	242.928	121.464	199.200	99.602	4890.122	324.583	2561.693	.000	2003.846	1393.880
(2)PENNZOIL MALJAMAR WF (PDP)	180.315	54.095	147.859	44.357	3506.860	232.765	1173.338	.000	2100.757	1479.661
(11)MURPHY BAXTER WATERFLOOD (PDP)	135.023	.000	110.720	.090	2529.004	167.864	1504.010	.000	857.130	633.867
(13)JOHNS A & JOHNS B (PDP)	51.823	.000	42.496	.000	786.179	52.182	596.400	.000	137.597	105.855
(0)SUMMARY: TOTAL PROVED DEVELOPED PRODUCING	636.254	188.642	521.730	154.686	12161.459	807.217	6194.638	.000	5159.604	3666.860

MAL GRA UNIT (PDP)
MALJAMAR GRAYBURG SAN ANDRES
LEA, NM
OPR: WISER OIL CO.

DATE: 12/16/92
TIME: 11:03.15
FILE: MALMAR
GET# 3

RESERVES AND ECONOMICS

WISER OIL CO. - ESCALATED
PENNZOIL-MALJAMAR WFLD PROJECT

AS OF DECEMBER 1, 1992

T. SCOTT HICKMAN & ASSOC
PETROLEUM ENGINEERS

-END- MO-YR	---GROSS PRODUCTION---		---NET PRODUCTION---		---PRICES---		-----OPERATIONS, M\$-----			CAPITAL COSTS, M\$	CASH FLOW BTAX, M\$	10.00 PCT CUM. DISC BTAX, M\$
	OIL, MMBL	GAS, MMCF	OIL, MMBL	GAS, MMCF	OIL \$/B	GAS \$/M	NET OPER REVENUES	SEV+ADV+ WF TAXES	NET OPER EXPENSES			
12-92	.641	.321	.526	.263	18.58	1.00	10.035	.666	7.229	.000	2.140	2.132
12-93	7.310	3.655	5.994	2.997	19.07	1.03	117.424	7.795	81.661	.000	27.968	28.597
12-94	6.652	3.326	5.455	2.727	20.03	1.08	112.207	7.448	85.744	.000	19.015	44.955
12-95	6.053	3.027	4.963	2.482	21.03	1.14	107.192	7.115	90.031	.000	10.046	52.811
12-96	5.509	2.754	4.517	2.258	22.08	1.19	102.436	6.799	94.532	.000	1.105	53.597
12-97												
12-98												
12-99												
12- 0												
12- 1												
12- 2												
12- 3												
12- 4												
12- 5												
12- 6												
S TOT	26.165	13.083	21.455	10.727	20.39	1.10	449.294	29.823	359.197	.000	60.274	53.597
REM.	.000	.000	.000	.000	.00	.00	.000	.000	.000	.000	.000	53.597
TOTAL	26.165	13.083	21.455	10.727	20.39	1.10	449.294	29.823	359.197	.000	60.274	53.597
CUM.	1093.692	727.640										
ULT.	1119.857	740.723										
							NET OIL REVENUES (M\$)	437.472		-----PRESENT WORTH PROFILE-----		
							NET GAS REVENUES (M\$)	11.822	DISC	PW OF NET	DISC	PW OF NET
							TOTAL REVENUES (M\$)	449.294	RATE	BTAX, M\$	RATE	BTAX, M\$
BTAX RATE OF RETURN (PCT)		100.00	PROJECT LIFE (YEARS)					4.083	.0	60.274	30.0	44.320
BTAX PAYOUT YEARS		.00	DISCOUNT RATE (PCT)					10.000	2.0	58.787	35.0	42.568
BTAX PAYOUT YEARS (DISC)		.00	GROSS OIL WELLS					5.000	5.0	56.710	40.0	40.980
BTAX NET INCOME/INVEST		.00	GROSS GAS WELLS					.000	8.0	54.794	45.0	39.537
BTAX NET INCOME/INVEST (DISC)		.00	GROSS WELLS					5.000	10.0	53.597	50.0	38.217
									12.0	52.460	60.0	35.893
INITIAL W.I. FRACTION		1.000000	INITIAL NET OIL FRACTION					.820000	15.0	50.857	70.0	33.909
FINAL W.I. FRACTION		1.000000	FINAL NET OIL FRACTION					.820000	18.0	49.365	80.0	32.199
PRODUCTION START DATE		7- 1-92	INITIAL NET GAS FRACTION					.820000	20.0	48.429	90.0	30.710
MONTHS IN FIRST LINE		1.00	FINAL NET GAS FRACTION					.820000	25.0	46.262	100.0	29.398

TABLE 19

ZAPATA WESTERN STATE (PDP)
MALJAMAR GRAYBURG SAN ANDRES
LEA, NM
OPR: WISER OIL CO. 17S-33E

DATE: 12/16/92
TIME: 11:03.15
FILE: MALMAR
GET#: 1

RESERVES AND ECONOMICS

WISER OIL CO. - ESCALATED
PERMZDIL-MALJAMAR WFLD PROJECT

AS OF DECEMBER 1, 1992

T. SCOTT HICKMAN & ASSOC
PETROLEUM ENGINEERS

-END- MO-YR	---GROSS PRODUCTION---		---NET PRODUCTION---		--PRICES--		-----OPERATIONS, M\$-----			CAPITAL COSTS, M\$	CASH FLOW BTAX, M\$	10.00 FCT CUM. DISC BTAX, M\$	
	OIL, MBBL	GAS, MMCF	OIL, MBBL	GAS, MMCF	DIL \$/B	GAS \$/M	NET OPER REVENUES	SEV+ADV+ WF TAXES	NET OPER EXPENSES				
12-92	2.796	1.399	2.293	1.147	18.58	1.00	43.745	2.903	16.266	.000	24.576	24.479	
12-93	31.899	15.949	26.157	13.078	19.07	1.03	512.421	34.012	170.744	.000	307.665	315.616	
12-94	29.027	14.513	23.802	11.901	20.03	1.08	489.601	32.497	179.281	.000	277.823	554.614	
12-95	26.415	13.208	21.660	10.831	21.03	1.14	467.819	31.052	188.246	.000	248.521	748.969	
12-96	24.037	12.019	19.710	9.856	22.08	1.19	446.988	29.669	197.658	.000	219.661	905.138	
12-97	21.875	10.937	17.938	8.968	23.19	1.25	427.159	28.351	189.494	.000	209.294	1040.409	
12-98	19.905	9.953	16.322	8.161	24.34	1.32	408.093	27.089	198.968	.000	182.037	1147.367	
12-99	18.114	9.057	14.853	7.427	25.56	1.38	389.933	25.882	208.917	.000	155.134	1230.232	
12- 0	16.484	8.241	13.517	6.758	26.84	1.45	372.602	24.732	219.363	.000	128.507	1292.634	
12- 1	15.000	7.501	12.300	6.151	28.18	1.52	356.009	23.630	230.331	.000	102.048	1337.693	
12- 2	13.650	6.825	11.193	5.597	29.59	1.60	340.166	22.578	241.848	.000	75.740	1368.079	
12- 3	12.422	6.210	10.186	5.092	31.07	1.68	325.038	21.574	253.940	.000	49.524	1386.147	
12- 4	11.304	5.652	9.269	4.635	32.62	1.76	310.568	20.615	266.637	.000	23.316	1393.890	
12- 5													
12- 6													
S TOT	242.928	121.464	199.200	99.602	23.90	1.29	4890.122	324.583	2561.693	.000	2003.846	1393.880	
REM.	.000	.000	.000	.000	.00	.00	.000	.000	.000	.000	.000	1393.880	
TOTAL	242.928	121.464	199.200	99.602	23.90	1.29	4890.122	324.583	2561.693	.000	2003.846	1393.880	
CUM.	3849.338	3467.158					NET OIL REVENUES (M\$)	4761.432		-----PRESENT WORTH PROFILE-----			
							NET GAS REVENUES (M\$)	128.690		DISC	PW OF NET	DISC	PW OF NET
ULT.	4092.266	3588.622					TOTAL REVENUES (M\$)	4890.122		RATE	BTAX, M\$	RATE	BTAX, M\$
BTAX RATE OF RETURN (PCT)			100.00				PROJECT LIFE (YEARS)	12.083		.0	2003.846	30.0	857.225
BTAX PAYOUT YEARS			.00				DISCOUNT RATE (PCT)	10.000		2.0	1847.026	35.0	784.024
BTAX PAYOUT YEARS (DISC)			.00				GROSS OIL WELLS	11.000		5.0	1649.053	40.0	723.534
BTAX NET INCOME/INVEST			.00				GROSS GAS WELLS	.000		8.0	1486.525	45.0	672.818
BTAX NET INCOME/INVEST (DISC)			.00				GROSS WELLS	11.000		10.0	1393.880	50.0	629.758
										12.0	1311.624	60.0	560.699
INITIAL W.I. FRACTION			1.000000				INITIAL NET OIL FRACTION	.820000		15.0	1204.523	70.0	507.843
FINAL W.I. FRACTION			1.000000				FINAL NET OIL FRACTION	.820000		18.0	1113.460	80.0	466.124
PRODUCTION START DATE			7- 1-92				INITIAL NET GAS FRACTION	.820000		20.0	1060.103	90.0	432.358
MONTHS IN FIRST LINE			1.00				FINAL NET GAS FRACTION	.820000		25.0	947.268	100.0	404.459

TABLE 20

PENNZOIL MALJAMAR WF (PDP)
MALJAMAR GRAYBURG SAN ANDRES
LEA, NM
DPR: WISER OIL CO. 17S-33E

DATE: 12/16/92
TIME: 11:03.15
FILE: MALMAR
GET#: 2

RESERVES AND ECONOMICS

WISER OIL CO. - ESCALATED
PENNZOIL-MALJAMAR WFLD PROJECT

AS OF DECEMBER 1, 1992

T. SCOTT HICKMAN & ASSOC
PETROLEUM ENGINEERS

-END- MO-YR	---GROSS PRODUCTION---		---NET PRODUCTION---		---PRICES---		-----OPERATIONS, M\$-----			CAPITAL COSTS, M\$	CASH FLOW BTAX, M\$	10.00 FCT CUM. DISC BTAX, M\$
	OIL, MMBL	GAS, MMCF	OIL, MMBL	GAS, MMCF	\$/B	\$/M	NET OPER REVENUES	SEV+ADV+ WF TAXES	NET OPER EXPENSES			
12-92	2.531	.759	2.075	.622	18.58	1.00	39.169	2.599	9.639	.000	26.931	26.824
12-93	29.199	8.760	23.943	7.183	19.07	1.03	464.112	30.805	103.931	.000	329.376	338.505
12-94	25.984	7.795	21.307	6.392	20.03	1.08	433.666	28.785	77.949	.000	326.932	619.749
12-95	22.086	6.626	18.111	5.433	21.03	1.14	387.048	25.691	81.846	.000	279.511	838.340
12-96	18.773	5.632	15.394	4.618	22.08	1.19	345.432	22.928	85.939	.000	236.565	1006.526
12-97	15.957	4.787	13.085	3.925	23.19	1.25	308.300	20.463	90.235	.000	197.602	1134.240
12-98	13.564	4.069	11.122	3.337	24.34	1.32	275.153	18.264	75.797	.000	181.092	1240.643
12-99	11.529	3.459	9.454	2.836	25.56	1.38	245.581	16.300	79.588	.000	149.693	1320.601
12- 0	9.800	2.940	8.036	2.411	26.84	1.45	219.184	14.548	83.567	.000	121.069	1379.391
12- 1	8.330	2.499	6.831	2.049	28.18	1.52	195.632	12.985	87.745	.000	94.902	1421.285
12- 2	7.080	2.124	5.806	1.742	29.59	1.60	174.592	11.588	92.132	.000	70.872	1449.727
12- 3	6.019	1.805	4.936	1.480	31.07	1.68	155.851	10.344	96.739	.000	48.768	1467.519
12- 4	5.115	1.535	4.194	1.259	32.62	1.76	139.046	9.229	101.576	.000	28.241	1476.886
12- 5	4.348	1.305	3.565	1.070	34.25	1.85	124.094	8.236	106.655	.000	9.203	1479.661
12- 6												
S TOT	180.315	54.095	147.859	44.357	23.34	1.26	3506.860	232.765	1173.338	.000	2100.757	1479.661
REM.	.000	.000	.000	.000	.00	.00	.000	.000	.000	.000	.000	1479.661
TOTAL	180.315	54.095	147.859	44.357	23.34	1.26	3506.860	232.765	1173.338	.000	2100.757	1479.661
CUM.	1150.932	722.565										
ULT.	1331.247	776.660										
							NET OIL REVENUES (M\$)	3450.900				
							NET GAS REVENUES (M\$)	55.960				
							TOTAL REVENUES (M\$)	3506.860				
									-----PRESENT WORTH PROFILE-----			
									DISC	PW OF NET	DISC	PW OF NET
									RATE	BTAX, M\$	RATE	BTAX, M\$
BTAX RATE OF RETURN (PCT)		100.00	PROJECT LIFE (YEARS)				13.083	.0	2100.757	30.0	926.796	
BTAX PAYOUT YEARS		.00	DISCOUNT RATE (PCT)				10.000	2.0	1941.345	35.0	850.253	
BTAX PAYOUT YEARS (DISC)		.00	GROSS OIL WELLS				6.000	5.0	1739.910	40.0	786.666	
BTAX NET INCOME/INVEST		.00	GROSS GAS WELLS				.000	8.0	1574.261	45.0	733.039	
BTAX NET INCOME/INVEST (DISC)		.00	GROSS WELLS				6.000	10.0	1479.661	50.0	687.385	
								12.0	1395.541	60.0	613.623	
INITIAL W.I. FRACTION		1.000000	INITIAL NET OIL FRACTION				.820000	15.0	1285.764	70.0	556.751	
FINAL W.I. FRACTION		1.000000	FINAL NET OIL FRACTION				.820000	18.0	1192.152	80.0	511.576	
PRODUCTION START DATE		7- 1-92	INITIAL NET GAS FRACTION				.820000	20.0	1137.159	90.0	474.823	
MONTHS IN FIRST LINE		1.00	FINAL NET GAS FRACTION				.820000	25.0	1020.444	100.0	444.323	

TABLE 21

MURPHY BAXTER WATERFLOOD (FOP)
MALJAMAR GRAYBURG SAN ANDRES
LEA, NM
DPR: WISER OIL CO.

DATE: 12/16/92
TIME: 11:03.15
FILE: MALMAR
GET#: 11

RESERVES AND ECONOMICS

WISER OIL CO. - ESCALATED
PENNZOIL-MALJAMAR WFLD PROJECT

AS OF DECEMBER 1, 1992

T. SCOTT HICKMAN & ASSOC
PETROLEUM ENGINEERS

-END- MO-YR	---GROSS PRODUCTION---		---NET PRODUCTION---		---PRICES---		-----OPERATIONS, M\$-----			CAPITAL COSTS, M\$	CASH FLOW BTAX, M\$	10.00 PCT CUM. DISC BTAX, M\$
	OIL, MMBL	GAS, MMCF	OIL, MMBL	GAS, MMCF	OIL \$/B	GAS \$/M	NET OPER REVENUES	SEV+ADV+ WF TAXES	NET OPER EXPENSES			
12-92	1.766	.000	1.448	.000	18.58	1.00	26.897	1.786	17.471	.000	7.640	7.610
12-93	20.371	.000	16.704	.000	19.07	1.03	318.624	21.148	141.050	.000	156.426	155.632
12-94	18.946	.000	15.536	.000	20.03	1.08	311.162	20.654	148.103	.000	142.495	278.136
12-95	17.501	.000	14.351	.000	21.03	1.14	301.800	20.032	147.323	.000	134.445	383.278
12-96	15.512	.000	12.720	.000	22.08	1.19	280.875	18.643	154.689	.000	107.543	459.736
12-97	13.651	.000	11.194	.000	23.19	1.25	259.538	17.227	162.423	.000	79.888	511.369
12-98	12.013	.000	9.851	.000	24.34	1.32	239.820	15.918	132.645	.000	91.257	564.988
12-99	10.571	.000	8.668	.000	25.56	1.38	221.571	14.707	139.278	.000	67.586	601.089
12- 0	9.302	.000	7.628	.000	26.84	1.45	204.736	13.590	146.242	.000	44.904	622.894
12- 1	8.186	.000	6.713	.000	28.18	1.52	189.186	12.557	153.554	.000	23.075	633.080
12- 2	7.204	.000	5.907	.000	29.59	1.60	174.795	11.602	161.232	.000	1.961	633.867
12- 3												
12- 4												
12- 5												
12- 6												
\$ TOT	135.023	.000	110.720	.000	22.84	.00	2529.004	167.864	1504.010	.000	857.130	633.867
REM.	.000	.000	.000	.000	.00	.00	.000	.000	.000	.000	.000	633.867
TOTAL	135.023	.000	110.720	.000	22.84	.00	2529.004	167.864	1504.010	.000	857.130	633.867
CUM.	2649.762	2576.000			NET OIL REVENUES (M\$)		2529.004	-----PRESENT WORTH PROFILE-----				
					NET GAS REVENUES (M\$)		.000	DISC	PW OF NET	DISC	PW OF NET	
ULT.	2784.785	2576.000			TOTAL REVENUES (M\$)		2529.004	RATE	BTAX, M\$	RATE	BTAX, M\$	
BTAX RATE OF RETURN (PCT)			100.00		PROJECT LIFE (YEARS)		10.083	.0	857.130	30.0	413.044	
BTAX PAYOUT YEARS			.00		DISCOUNT RATE (PCT)		10.000	2.0	801.921	35.0	383.526	
BTAX PAYOUT YEARS (DISC)			.00		GROSS OIL WELLS		13.000	5.0	730.187	40.0	353.148	
BTAX NET INCOME/INVEST			.00		GROSS GAS WELLS		.000	8.0	669.336	45.0	329.830	
BTAX NET INCOME/INVEST (DISC)			.00		GROSS WELLS		13.000	10.0	633.867	50.0	309.763	
								12.0	601.763	60.0	277.064	
INITIAL W.I. FRACTION			1.000000		INITIAL NET OIL FRACTION		.820000	15.0	559.110	70.0	251.611	
FINAL W.I. FRACTION			1.000000		FINAL NET OIL FRACTION		.820000	18.0	522.016	80.0	231.268	
PRODUCTION START DATE			7- 1-92		INITIAL NET GAS FRACTION		.820000	20.0	499.904	90.0	214.642	
MONTHS IN FIRST LINE			1.00		FINAL NET GAS FRACTION		.820000	25.0	452.163	100.0	200.809	

TABLE 22

JOHNS A & JOHNS B (PDP)
MALJAMAR GRAYBURG SAN ANDRES
LEA, NM
OPR: WISER OIL CO.

DATE: 12/16/92
TIME: 11:03.15
FILE: MALMAR
GET#: 13

RESERVES AND ECONOMICS

WISER OIL CO. - ESCALATED
PENNZOIL-MALJAMAR WFLD PROJECT

AS OF DECEMBER 1, 1992

T. SCOTT HICKMAN & ASSOC
PETROLEUM ENGINEERS

-END- MO-YR	---GROSS PRODUCTION---		---NET PRODUCTION---		--PRICES--		-----OPERATIONS, M\$-----			CAPITAL COSTS, M\$	CASH FLOW BTAX, M\$	10.00 PCT CUM. DISC BTAX, M\$
	OIL, MMBL	GAS, MMCF	OIL, MMBL	GAS, MMCF	OIL \$/B	GAS \$/M	NET OPER REVENUES	SEV+ADV+ WF TAXES	NET OPER EXPENSES			
12-92	.647	.000	.531	.000	18.50	1.00	9.824	.652	6.000	.000	3.172	3.159
12-93	7.470	.000	6.125	.000	18.50	1.00	113.313	7.521	72.000	.000	33.792	35.136
12-94	6.946	.000	5.696	.000	18.50	1.00	105.376	6.995	72.000	.000	26.381	57.830
12-95	6.461	.000	5.298	.000	18.50	1.00	98.013	6.505	72.000	.000	19.508	73.036
12-96	6.008	.000	4.927	.000	18.50	1.00	91.150	6.050	72.000	.000	13.100	82.399
12-97	5.587	.000	4.581	.000	18.50	1.00	84.749	5.625	72.000	.000	7.124	87.003
12-98	5.197	.000	4.262	.000	18.50	1.00	78.847	5.234	57.600	.000	16.013	96.412
12-99	4.833	.000	3.963	.000	18.50	1.00	73.316	4.866	57.600	.000	10.850	102.208
12- 0	4.474	.000	3.685	.000	18.50	1.00	69.173	4.525	57.600	.000	6.048	105.145
12- 1	4.180	.000	3.428	.000	18.50	1.00	63.418	4.209	57.600	.000	1.609	105.855
12- 2												
12- 3												
12- 4												
12- 5												
12- 6												
S TOT	51.823	.000	42.496	.000	18.50	.00	786.179	52.182	596.400	.000	137.597	105.855
REM.	.000	.000	.000	.000	.00	.00	.000	.000	.000	.000	.000	105.855
TOTAL	51.823	.000	42.496	.000	18.50	.00	786.179	52.182	596.400	.000	137.597	105.855
CUM.	1498.566	1895.000			NET OIL REVENUES (M\$)			786.179	-----PRESENT WORTH PROFILE-----			
					NET GAS REVENUES (M\$)			.000	DISC	PW OF NET	DISC	PW OF NET
ULT.	1550.389	1885.000			TOTAL REVENUES (M\$)			786.179	RATE	BTAX, M\$	RATE	BTAX, M\$
BTAX RATE OF RETURN (PCT)			100.00		PROJECT LIFE (YEARS)			9.083	.0	137.597	30.0	73.536
BTAX PAYOUT YEARS			.00		DISCOUNT RATE (PCT)			10.000	2.0	129.808	35.0	69.648
BTAX PAYOUT YEARS (DISC)			.00		GROSS OIL WELLS			4.000	5.0	119.635	40.0	64.491
BTAX NET INCOME/INVEST			.00		GROSS GAS WELLS			.000	8.0	110.953	45.0	60.916
BTAX NET INCOME/INVEST (DISC)			.00		GROSS WELLS			4.000	10.0	105.855	50.0	57.812
									12.0	101.230	60.0	52.691
INITIAL W.I. FRACTION			1.000000		INITIAL NET OIL FRACTION			.820000	15.0	95.050	70.0	48.634
FINAL W.I. FRACTION			1.000000		FINAL NET OIL FRACTION			.820000	18.0	89.642	80.0	45.341
PRODUCTION START DATE			7- 1-92		INITIAL NET GAS FRACTION			.820000	20.0	86.405	90.0	42.606
MONTHS IN FIRST LINE			1.00		FINAL NET GAS FRACTION			.820000	25.0	79.362	100.0	40.302

TABLE 23

TOTAL PROVED UNDEVELOPED

DATE: 12/16/92
TIME: 11:03.15
FILE: MALMAR
GET#: 0

RESERVES AND ECONOMICS

WISER OIL CO. - ESCALATED
PENNZOIL-MALJAMAR WFLD PROJECT

AS OF DECEMBER 1, 1992

T. SCOTT HICKMAN & ASSOC
PETROLEUM ENGINEERS

---GROSS PRODUCTION---				---NET PRODUCTION---		-----OPERATIONS, M\$-----				10.00 PCT	
LEASE	OIL, MMBL	GAS, MMCF		OIL, MMBL	GAS, MMCF	NET OPER REVENUES	SEV+ADV+ WF TAXES	NET OPER EXPENSES	CAPITAL COSTS, M\$	CASH FLOW BTAX, M\$	CUM. DISC BTAX, M\$
***** FILE: MALMAR											
(4)PENNZOIL-MALJAMAR PHASE I (PUD)											
	1463.000	882.306		1150.459	723.491	31268.314	2075.436	7330.867	4235.000	17627.011	7634.953
(5)PENNZOIL-MALJAMAR PHASE II (PUD)											
	3333.000	2079.624		2733.062	1705.293	76084.936	5050.137	16973.487	10715.000	43346.312	17058.974
(10)PENNZOIL-MALJAMAR PHASE III (PUD)											
	2088.000	1338.990		1712.161	1097.974	47935.639	3181.728	12050.045	8135.000	24568.866	9347.112
(0)SUMMARY: TOTAL PROVED UNDEVELOPED											
	6824.000	4300.920		5595.682	3526.758	155288.889	10307.301	36354.399	23085.000	85542.189	34941.039

PENNZOIL-MALJAMAR PHASE I (PUD)
MALJAMAR GRAYBURG SAN ANDRES
LEA, NM
OPR: WISER OIL CO.

DATE: 12/16/92
TIME: 11:03.15
FILE: MALMAR
GET#: 4

RESERVES AND ECONOMICS

WISER OIL CO. - ESCALATED
PENNZOIL-MALJAMAR WFLD PROJECT

AS OF DECEMBER 1, 1992

T. SCOTT HICKMAN & ASSOC
PETROLEUM ENGINEERS

-END- MO-YR	---GROSS PRODUCTION---		---NET PRODUCTION---		--PRICES--		-----OPERATIONS, M\$-----			CAPITAL COSTS, M\$	CASH FLOW BTAX, M\$	10.00 PCT CUM. DISC BTAX, M\$
	OIL, MMBL	GAS, MMCF	OIL, MMBL	GAS, MMCF	OIL \$/B	GAS \$/M	NET OPER REVENUES	SEU+ADV+ WF TAXES	NET OPER EXPENSES			
12-92	.000	.000	.000	.000	18.58	1.00	.000	.000	.000	.000	.000	.000
12-93	31.709	30.718	26.001	25.189	19.07	1.03	521.932	34.644	140.802	4235.000	-3688.514	-3672.902
12-94	139.080	123.868	114.046	101.572	20.03	1.08	2394.127	158.910	426.717	.000	1806.500	-2118.856
12-95	171.183	136.412	140.370	111.858	21.03	1.14	3079.117	204.377	381.948	.000	2492.792	-169.374
12-96	140.962	101.316	115.589	83.079	22.08	1.19	2651.524	175.996	401.045	.000	2074.483	1305.485
12-97	114.214	74.953	93.655	61.461	23.19	1.25	2248.458	149.242	421.097	.000	1678.119	2390.088
12-98	98.683	58.593	80.920	48.046	24.34	1.32	2033.198	134.954	442.152	.000	1456.092	3245.635
12-99	91.565	48.644	75.083	39.888	25.56	1.38	1974.360	131.049	464.260	.000	1379.071	3982.265
12- 0	85.415	42.708	70.040	35.021	26.84	1.45	1930.684	128.149	487.473	.000	1315.062	4620.846
12- 1	79.680	39.839	65.338	32.668	28.18	1.52	1891.122	125.523	511.847	.000	1253.752	5174.309
12- 2	74.329	37.165	60.950	30.475	29.59	1.60	1852.324	122.948	537.439	.000	1191.937	5652.650
12- 3	69.337	34.668	56.856	28.428	31.07	1.68	1814.300	120.424	564.310	.000	1129.566	6064.751
12- 4	64.681	32.341	53.038	26.520	32.62	1.76	1777.090	117.954	592.526	.000	1066.610	6418.508
12- 5	60.337	30.169	49.476	24.739	34.25	1.85	1740.520	115.528	628.841	.000	1196.151	6779.163
12- 6	56.286	28.142	46.155	23.076	35.00	1.89	1659.116	110.123	638.496	.000	1110.497	7083.554
S TOT	1277.461	819.536	1047.517	672.020	25.47	1.33	27567.892	1829.821	6240.953	4235.000	15262.118	7083.554
REM.	125.539	62.770	102.942	51.471	35.60	1.89	3700.422	245.615	1089.914	.000	2364.893	7634.953
TOTAL	1403.000	882.306	1150.459	723.491	26.32	1.37	31268.314	2075.436	7330.867	4235.000	17627.011	7634.953
CUM.	.000	.000					NET OIL REVENUES (M\$)	30279.914	-----PRESENT WORTH PROFILE-----			
							NET GAS REVENUES (M\$)	988.400	DISC	PW OF NET	DISC	PW OF NET
ULT.	1403.000	882.306					TOTAL REVENUES (M\$)	31268.314	RATE	BTAX, M\$	RATE	BTAX, M\$
									----	-----	----	-----
BTAX RATE OF RETURN (PCT)			49.16				PROJECT LIFE (YEARS)	16.601	.0	17627.011	30.0	1692.111
BTAX PAYOUT YEARS			2.92				DISCOUNT RATE (PCT)	10.000	2.0	14723.062	35.0	1080.534
BTAX PAYOUT YEARS (DISC)			3.20				GROSS OIL WELLS	10.000	5.0	11388.768	40.0	611.257
BTAX NET INCOME/INVEST			5.16				GROSS GAS WELLS	.000	8.0	8927.371	45.0	243.684
BTAX NET INCOME/INVEST (DISC)			2.91				GROSS WELLS	10.000	10.0	7634.953	50.0	-49.190
									12.0	6554.345	60.0	-479.393
INITIAL W.I. FRACTION		1.000000					INITIAL NET OIL FRACTION	.820000	15.0	5240.701	70.0	-772.276
FINAL W.I. FRACTION		1.000000					FINAL NET OIL FRACTION	.820000	18.0	4205.954	80.0	-977.902
PRODUCTION START DATE		5- 1-93					INITIAL NET GAS FRACTION	.820000	20.0	3634.384	90.0	-1125.346
MONTHS IN FIRST LINE		1.00					FINAL NET GAS FRACTION	.820000	25.0	2509.245	100.0	-1232.553

TABLE 25

PENNZOIL-MALJAMAR PHASE II (PUD)
MALJAMAR GRAYBURG SAN ANDRES
LEA, NM
OPR: WISER OIL CO.

DATE: 12/16/92
TIME: 11:03.15
FILE: MALMAR
GET#: 5

RESERVES AND ECONOMICS

WISER OIL CO. - ESCALATED
PENNZOIL-MALJAMAR WFLD PROJECT

AS OF DECEMBER 1, 1992

T. SCOTT HICKMAN & ASSOC
PETROLEUM ENGINEERS

-END- MO-YR	---GROSS PRODUCTION---		---NET PRODUCTION---		--PRICES--		-----OPERATIONS, M\$-----			CAPITAL COSTS, M\$	CASH FLOW BTAX, M\$	10.00 PCT CUM. DISC BTAX, M\$
	OIL, MMBL	GAS, MMCF	OIL, MMBL	GAS, MMCF	\$/B	\$/M	NET OPER REVENUES	SEV+ADV+ WF TAXES	NET OPER EXPENSES			
12-92	.000	.000	.000	.000	18.58	1.00	.000	.000	.000	.000	.000	.000
12-93	14.029	13.894	11.504	11.393	19.07	1.03	231.182	15.345	13.321	1570.000	-1367.484	-1260.272
12-94	211.851	195.555	173.718	160.355	20.03	1.08	3652.903	242.462	930.186	9145.000	-6664.745	-7261.566
12-95	378.639	305.824	310.484	250.776	21.03	1.14	6814.505	452.313	976.695	.000	5385.497	-3049.850
12-96	393.457	285.256	322.635	233.910	22.08	1.19	7403.410	491.401	1025.530	.000	5886.479	1135.157
12-97	330.193	222.880	270.758	182.762	23.19	1.25	6506.688	431.881	1076.806	.000	4998.001	4365.467
12-98	265.119	165.700	217.398	135.874	24.34	1.32	5471.289	363.156	1130.647	.000	3977.486	6702.495
12-99	214.814	123.517	176.147	101.284	25.56	1.38	4642.604	308.153	921.888	.000	3412.563	8525.313
12- 0	181.934	95.516	149.186	78.323	26.84	1.45	4117.788	273.318	967.981	.000	2876.489	9922.108
12- 1	159.487	79.744	130.779	65.390	28.18	1.52	3785.229	251.244	1016.381	.000	2517.604	11033.493
12- 2	146.116	73.057	119.815	59.907	29.59	1.60	3641.283	241.690	1067.200	.000	2332.393	11969.515
12- 3	133.901	66.951	109.799	54.900	31.07	1.68	3503.734	232.560	620.741	.000	2650.433	12936.475
12- 4	122.708	61.354	100.621	50.310	32.62	1.76	3371.401	223.777	651.779	.000	2495.845	13764.258
12- 5	112.450	56.225	92.209	46.105	34.25	1.85	3243.824	215.309	684.368	.000	2344.148	14471.050
12- 6	103.051	51.526	84.502	42.251	35.00	1.89	3037.565	201.619	699.776	.000	2136.170	15056.581
S TOT	2767.749	1796.999	2269.555	1473.540	25.32	1.33	59423.405	3944.227	11783.299	10715.000	32980.879	15056.581
REM.	565.251	282.625	463.507	231.753	35.00	1.89	16661.531	1105.910	5190.188	.000	10365.433	17058.974
TOTAL	3333.000	2079.624	2733.062	1705.293	26.96	1.40	76084.936	5050.137	16973.487	10715.000	43346.312	17058.974
CUM.	.000	.000					NET OIL REVENUES (M\$)	73693.387	-----PRESENT WORTH PROFILE-----			
							NET GAS REVENUES (M\$)	2391.549	DISC	PW OF NET	DISC	PW OF NET
ULT.	3333.000	2079.624					TOTAL REVENUES (M\$)	76084.936	RATE	BTAX, M\$	RATE	BTAX, M\$
									----	-----	----	-----
BTAX RATE OF RETURN (PCT)			49.81				PROJECT LIFE (YEARS)	22.032	.0	43346.312	30.0	3410.973
BTAX PAYOUT YEARS			3.53				DISCOUNT RATE (PCT)	10.000	2.0	35315.859	35.0	2123.453
BTAX PAYOUT YEARS (DISC)			3.81				GROSS OIL WELLS	28.000	5.0	26481.337	40.0	1162.113
BTAX NET INCOME/INVEST			5.05				GROSS GAS WELLS	.000	8.0	20238.213	45.0	430.716
BTAX NET INCOME/INVEST (DISC)			2.78				GROSS WELLS	28.000	10.0	17058.974	50.0	-133.935
									12.0	14454.719	60.0	-921.967
INITIAL W.I. FRACTION			1.000000				INITIAL NET OIL FRACTION	.820000	15.0	11357.109	70.0	-1415.891
FINAL W.I. FRACTION			1.000000				FINAL NET OIL FRACTION	.820000	18.0	8972.191	80.0	-1729.416
PRODUCTION START DATE			11- 1-93				INITIAL NET GAS FRACTION	.820000	20.0	7676.856	90.0	-1927.577
MONTHS IN FIRST LINE			1.00				FINAL NET GAS FRACTION	.820000	25.0	5177.366	100.0	-2049.650

TABLE 26

PENNZOIL-MALJAMAR PHASE III (PUD)
MALJAMAR GRAYBURG SAN ANDRES
LEA, NM
DPR: WISER OIL CO.

DATE: 12/16/92
TIME: 11:03.15
FILE: MALMAR
GET#: 10

RESERVES AND ECONOMICS

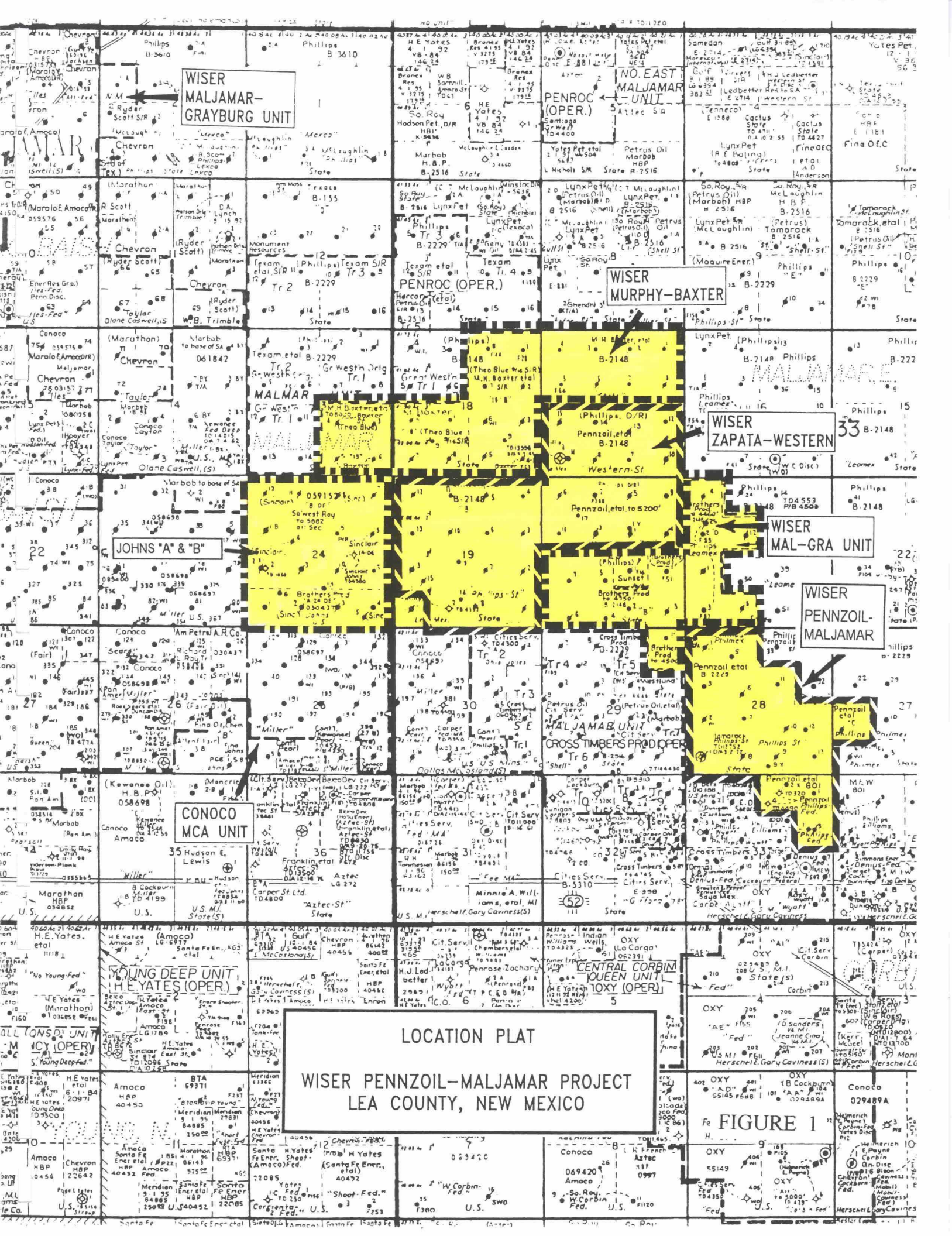
WISER OIL CO. - ESCALATED
PENNZOIL-MALJAMAR WFLD PROJECT

AS OF DECEMBER 1, 1992

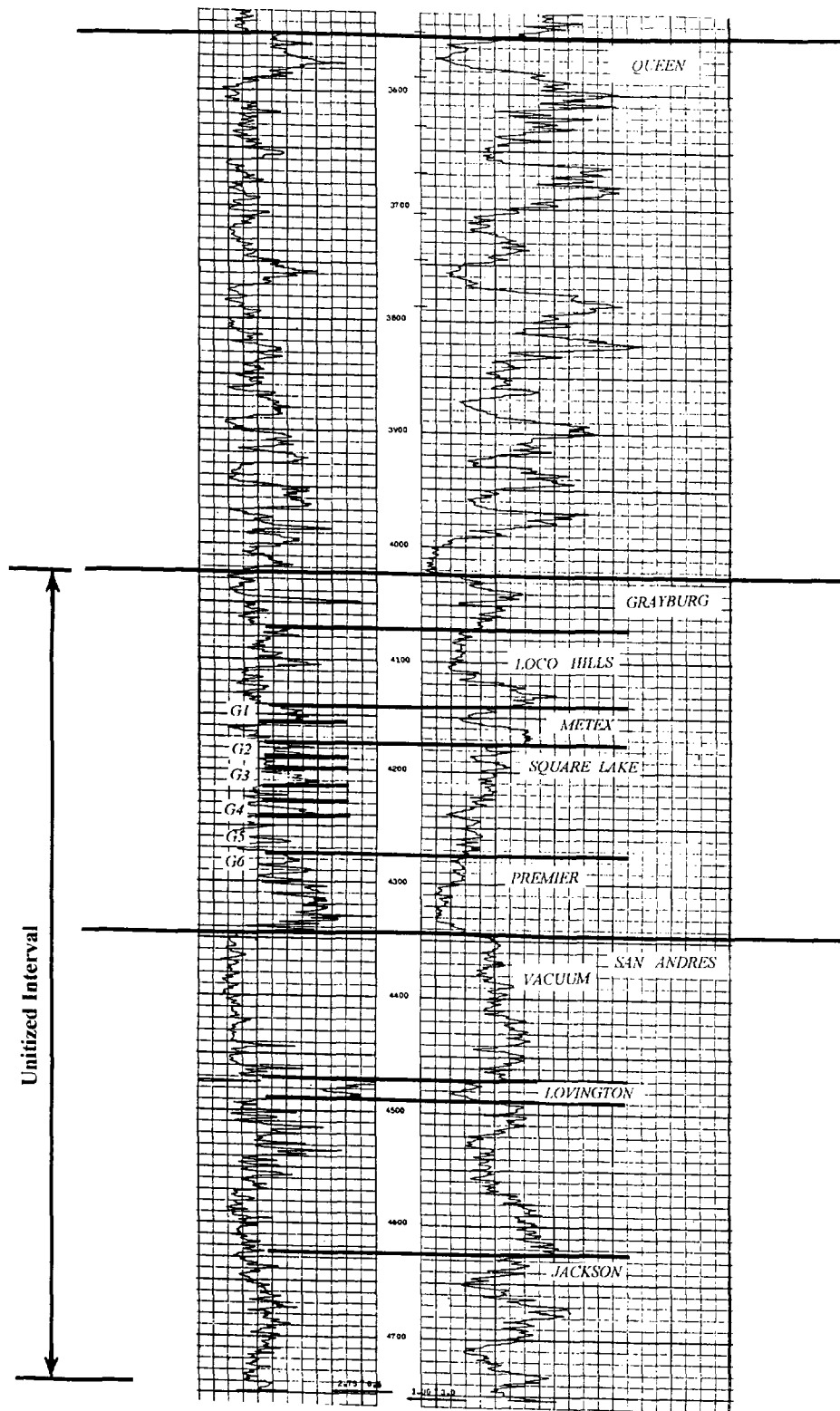
T. SCOTT HICKMAN & ASSOC
PETROLEUM ENGINEERS

-END- MO-YR	---GROSS PRODUCTION---		---NET PRODUCTION---		--PRICES--		-----OPERATIONS, M\$-----				CAPITAL COSTS, M\$	CASH FLOW BTAX, M\$	10.00 FCT CUM. DISC BTAX, M\$
	OIL, MBBL	GAS, MMCF	OIL, MBBL	GAS, MMCF	DIL \$/B	GAS \$/M	NET OPER REVENUES	SEV+ADV+ MF TAXES	NET OPER EXPENSES				
12-92	.000	.000	.000	.000	18.58	1.00	.000	.000	.000	.000	.000	.000	
12-93	.000	.000	.000	.000	19.07	1.03	.000	.000	.000	.000	.000	.000	
12-94	27.214	26.534	22.315	21.758	20.03	1.08	470.491	31.228	133.811	8135.000	-7829.548	-6637.895	
12-95	177.878	160.090	145.860	131.274	21.03	1.14	3216.642	213.505	752.983	.000	2250.154	-4878.167	
12-96	265.857	212.685	218.003	174.402	22.08	1.19	5021.966	333.333	704.694	.000	3983.939	-2045.776	
12-97	256.051	185.637	209.962	152.222	23.19	1.25	5058.833	335.780	739.929	.000	3983.124	528.598	
12-98	216.575	146.189	177.592	119.875	24.34	1.32	4481.170	297.438	776.925	.000	3406.807	2530.315	
12-99	173.561	108.475	142.320	88.950	25.56	1.38	3760.879	249.628	756.080	.000	2755.171	4001.987	
12- 0	144.914	83.326	118.829	68.327	26.84	1.45	3288.503	218.274	793.885	.000	2276.344	5107.357	
12- 1	123.178	64.668	101.006	53.028	28.18	1.52	2927.334	194.302	833.579	.000	1899.453	5945.862	
12- 2	104.903	52.452	86.020	43.011	29.59	1.60	2614.226	173.520	875.258	.000	1565.448	6574.098	
12- 3	93.426	46.713	76.609	38.305	31.07	1.68	2444.627	162.262	919.020	.000	1363.345	7071.489	
12- 4	84.807	42.403	69.542	34.770	32.62	1.76	2330.069	154.658	609.456	.000	1565.955	7590.861	
12- 5	76.983	38.492	63.126	31.563	34.25	1.85	2220.711	147.400	639.929	.000	1433.382	8023.045	
12- 6	69.880	34.940	57.302	28.651	35.00	1.89	2059.816	136.720	654.336	.000	1268.760	8370.816	
S TOT	1815.227	1202.604	1488.486	986.136	25.90	1.36	39895.267	2648.048	9189.895	8135.000	19922.334	8370.816	
REM.	272.773	136.386	223.675	111.838	35.00	1.89	8040.372	533.680	2860.160	.000	4646.532	9347.112	
TOTAL	2088.000	1338.990	1712.161	1097.974	27.09	1.41	47935.639	3181.728	12050.045	8135.000	24568.866	9347.112	
CUM.	.000	.000					NET OIL REVENUES (M\$)		46384.474	-----PRESENT WORTH PROFILE-----			
							NET GAS REVENUES (M\$)		1551.165	DISC	PW OF NET	DISC	PW OF NET
ULT.	2088.000	1338.990					TOTAL REVENUES (M\$)		47935.639	RATE	BTAX, M\$	RATE	BTAX, M\$
										----	-----	----	-----
							PROJECT LIFE (YEARS)		19.304	.0	24568.866	30.0	1171.439
							DISCOUNT RATE (PCT)		10.000	2.0	20038.383	35.0	446.789
							GROSS OIL WELLS		21.060	5.0	14934.707	40.0	-72.556
							GROSS GAS WELLS		.000	8.0	11248.411	45.0	-448.749
							GROSS WELLS		21.000	10.0	9347.112	50.0	-722.851
										12.0	7779.664	60.0	-1068.064
							INITIAL NET OIL FRACTION		.820000	15.0	5907.896	70.0	-1246.008
							FINAL NET OIL FRACTION		.820000	18.0	4466.962	80.0	-1328.278
							INITIAL NET GAS FRACTION		.820000	20.0	3687.375	90.0	-1354.377
							FINAL NET GAS FRACTION		.820000	25.0	2198.762	100.0	-1347.117

TABLE 27



Santiago Oil & Gas Co.
 Phillips Sprague No. 4
 660' FSL & 1980' FEL
 Sec 12 TWP 17-S RGE 32-E
 Lea County, New Mexico



TYPE LOG
 MALJAMAR (GRAYBURG-SAN ANDRES) FIELD
 LEA COUNTY, NEW MEXICO



T. SCOTT HICKMAN & ASSOCIATES,

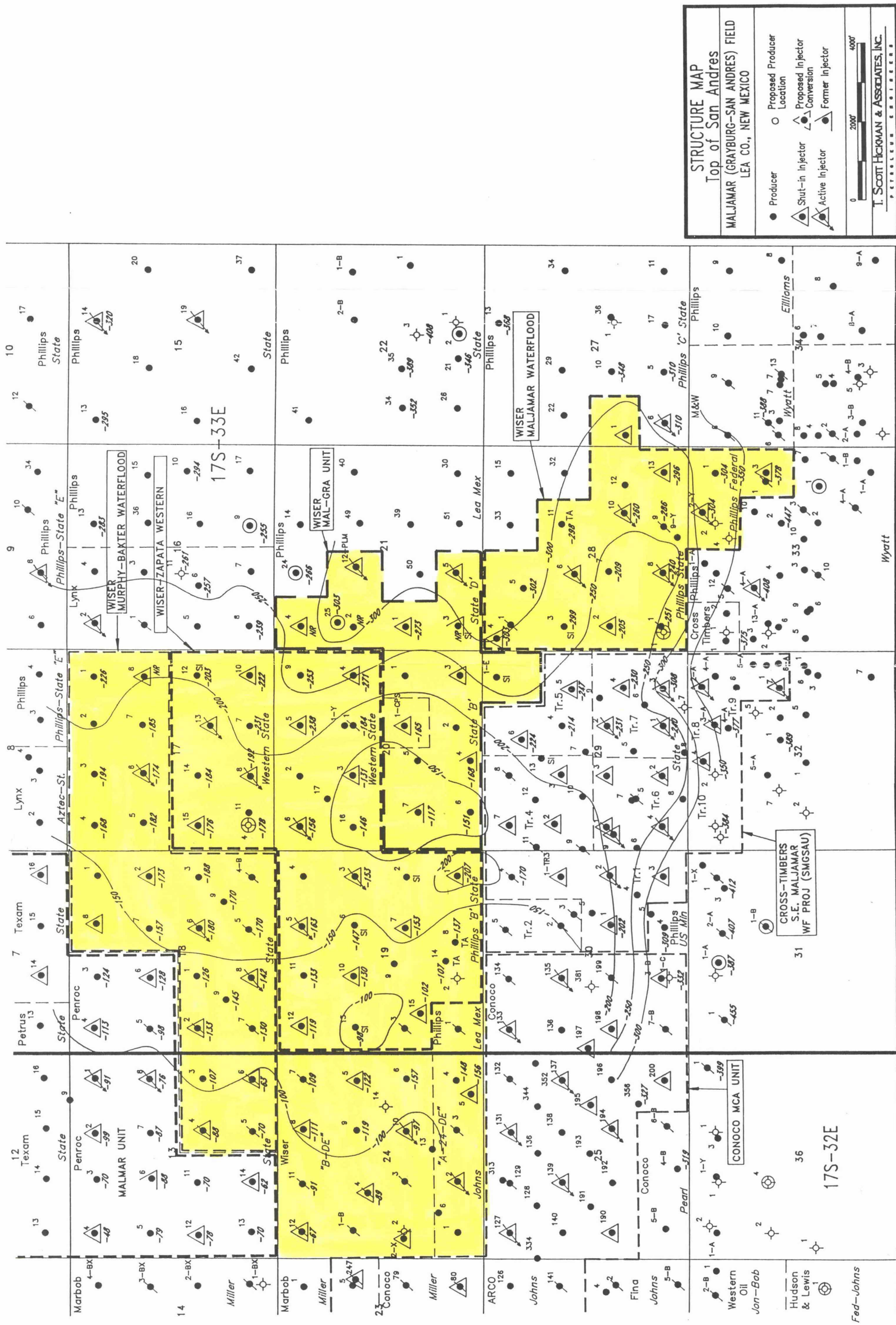


FIGURE 3