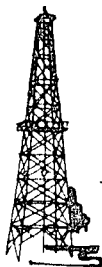


HEYCO

PETROLEUM PRODUCERS



HARVEY E. YATES COMPANY

P. O. BOX 1933

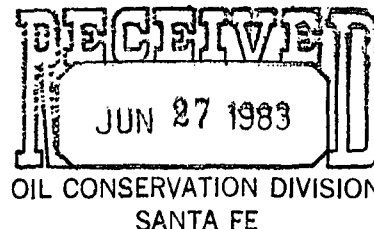
SUITE 300, SECURITY NATIONAL BANK BUILDING

505/623-6601

ROSWELL, NEW MEXICO 88201

June 24, 1983

Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501



Attention: Mr. Joe Ramey
Division Director & State Petroleum Engineer

Re: Additional Information for Case 7875 (Travis Penn Unit Tertiary
Recovery Exhibits)

Dear Mr. Ramey:

Please find attached three copies of information describing volumetrics and economics comparisons for the Travis Upper Penn Pool. Please note that expenses for economics on the attached exhibits indicate current project area operating expenses and correct for estimated operating expenses for the entire reservoir area to allow for the additional operating cost. This is also reflected in the expense for the polymer augmented flood for the entire reservoir.

I hope this information is helpful in evaluating the Travis Penn Unit. If I can help in any additional way, please let me know by contacting my office at 1-505-623-6601.

Sincerely yours,

Ray F. Nokes
Reservoir Engineer

RFN:mlb

Attachments

TRAVIS UPPER PENN POOL

DESCRIPTION	AREA ACRES	AVERAGE THICKNESS (Feet)	RESERVOIR VOLUME (AC FT)	VOLUMETRICS (STB)
Unit Area	1505	27.75	41,774	10,694,100 (11,909,300 by Material Balance)
*Project Area:	480	46.50	22,320	5,713,920
(S/2 SE/4 Sec. 12)	80	61	4,880	1,249,280
(N/2 NE/4 Sec. 13)	80	55	4,400	1,126,400
(S/2 NE/4 Sec. 13)	80	49	3,920	1,003,520
(S/2 NW/4 Sec. 13)	80	38	3,040	778,240
(N/2 SW/4 Sec. 13)	80	54	4,320	1,105,920
(N/2 NW/4 Sec. 13)	80	22	1,760	450,560

*Additional information requested by Oil Conservation Division

Volumetric estimate of oil in place in Barrels/Acre Foot
 $q = \frac{(0.0639)(1-.24)(7758)}{1.4725} = 256 \text{ Barrel/Acre Foot.}$

Economic Evaluation of Travis Upper Penn Pool

<u>Description</u>	<u>Reservoir</u>	<u>Project Area</u>
Operating Expense (\$/Mo)	*5,813.00	**3,106.00
Monthly Production:		
Oil (BO)	---	1980
Gas (MCFG)	---	2982
Estimated Life of Unit Production:	---	12 years
A) Estimated Recovery to ELC w/Present Waterflood Conditions:	129,627 BO 195,226 MCF	69,260 BO 104,310 MCF
B) Estimated Recovery to ELC w/K-Trol Treatment and Polymer Augmented Flooding (1 cps Vis):	924,345 BO 1,392,119 MCF	493,883 BO 743,817 MCF
Estimated Life Time Expense vs. Income During 12 Year Life:		
A) 12 Year Operating Expense:	\$837,093.00	\$447,264.00
12 Year Income w/Present Waterflood Condition:	<u>\$4,864,940.00</u>	<u>\$2,599,350.00</u>
Gross Profit:	\$4,027,847.00	\$2,152,086.00
B) 12 Year Operating Expense:	\$837,093.00	\$447,264.00
Plus K-Trol Treatment (Initial)	\$21,491.00	\$21,491.00
Plus Polymer Flooding (1 CPS Vis)	\$12,289,586.00	\$6,566,400.00
***Total Expenses:	\$13,148,170.00	\$7,035,155.00
12 Year Income with Polymer Augmented Flood	<u>\$34,690,945.00</u>	<u>\$18,535,575.00</u>
Gross Profit:	\$21,542,775.00	\$11,500,420.00

*Estimated Cost of Operating Total Reservoir Area/month

**Current Operating Cost of Project Area/month

***Adjusted expenses for Area Acres and Project Acres

Economics Based on Current Income of \$30.00/BO and \$5.00/MCF (March 1983)

Ray F. Nokes
Reservoir Engineer
Harvey E. Yates Company
P. O. Box 1933
Roswell, NM 88201