

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -

ADMINISTRATIVE APPLICATION COVERSHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

Application Acronyms:

[NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location]
[DD-Directional Drilling] [SD-Simultaneous Dedication]
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Directional Drilling
☐ NSL ☐ NSP ☐ DD ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☐ SWD ☐ IPI ☒ EOR ☐ PPR

[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or ☒ Does Not Apply

- [A] ☐ Working, Royalty or Overriding Royalty Interest Owners
- [B] ☐ Offset Operators, Leaseholders or Surface Owner
- [C] ☐ Application is One Which Requires Published Legal Notice
- [D] ☐ Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F] ☐ Waivers are Attached

[3] INFORMATION / DATA SUBMITTED IS COMPLETE - Statement of Understanding

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I further verify that all applicable API Numbers are included. I understand that any omission of data, information or notification is cause to have the application package returned with no action taken.

JAMES BRUCE
P.O. BOX 1056
SANTA FE, NM 87504

Note: Statement must be completed by an individual with supervisory capacity.

Print or Type Name

Signature

Title

Date

James Bruce *Attorney for Applicant* *10/6/98*

BEFORE THE NEW MEXICO OIL CONSERVATION DIVISION

ADMINISTRATIVE APPLICATION OF
THE WISER OIL COMPANY
TO QUALIFY A WATERFLOOD EXPANSION
PROJECT FOR THE RECOVERED OIL
TAX RATE, EDDY COUNTY, NEW MEXICO.

APPLICATION

The Wiser Oil Company files this application pursuant to the Enhanced Oil Recovery Act (L. 1992, Ch. 38) and Division Order No. R-9708. In support thereof, applicant states:

1. The name of the operator is The Wiser Oil Company, whose address is Suite 400, 8115 Preston Road, Dallas, Texas 75225.

2. The waterflood project is referred to as the Skelly Area Waterflood Project, and includes the Skelly Unit, the Lea 'D' lease and the State 'AZ' lease.

The project area for the expansion is as follows:

Township 17 South, Range 31 East, N.M.P.M.

Sections 14, 15, SW/4 SW/4 16, 21, 22, 23, 26, N/2 27, N/2 and N/2 S/2 28

A plat outlining the project area for the Skelly Area Waterflood Project is attached hereto as

Exhibit A. The subject pool is the Grayburg-Jackson Pool.

3. The Skelly Unit and Lea 'D' lease are entirely on federal land. The State 'AZ' lease is on state land.

4. Secondary recovery shall be by a waterflood project. The injection formations are the Seven Rivers, Grayburg and San Andres of the Grayburg-Jackson Pool, with the injected water consisting of produced water from the Grayburg-Jackson Pool, and makeup water (if necessary) from the Conoco water system. The Skelly Unit waterflood project was approved by Division Order Nos. R-2900, R-3214, and R-4419. The Lea "D" waterflood project was approved by Division Order No. R-3952.

5. Pursuant to Order No. R-9708, project data is summarized on Exhibit B attached hereto, and includes:

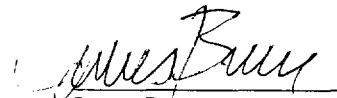
- (a) Number of producing wells;
- (b) Number of injection wells;
- (c) Capital cost of additional facilities;
- (d) Estimated net value of incremental production recovered from the project;
- (e) Anticipated injection commencement date; and
- (f) Anticipated injection volumes.

This project qualifies as an expansion which is entitled to the recovered oil tax rate because the number of injection and producing wells is being significantly increased, greatly expanding the waterflood pattern. In addition, additional intervals in the Grayburg-Jackson Pool are being perforated. Also, fracture stimulation and completion technology has improved significantly since the waterflood project was instituted, which will allow greater recovery of oil within the project area.

6. The projected primary plus secondary production from the project expansion is shown on Exhibit C attached hereto.

WHEREFORE, Applicant requests that the Division administratively qualify the expansion of the Grayburg-Jackson Skelly Unit Waterflood Project as an Enhanced Oil Recovery Project, and certify the project for the Recovered Oil Tax Rate.

Respectfully submitted,



James Bruce
P.O. Box 1056
Santa Fe, New Mexico 87504
(505) 982-2043

Attorneys for The Wiser Oil
Company

cc: Artesia District Office

VERIFICATION

STATE OF TEXAS)
)
COUNTY OF DALLAS)

Matt Eagleston, being duly sworn upon his oath, deposes and states that : he is a petroleum engineer and an employee of applicant; he is familiar with the matters set forth in the foregoing application; and the statements therein are true and correct to the best of his knowledge.

Matt Eagleston
Project Engineer

SUBSCRIBED AND SWORN TO before me this 13th day of August, 1998 by Matt Eagleston



Temple Dockery
Notary Public

My Commission expires:

February 7, 1999

LARGE FORMAT
EXHIBIT HAS
BEEN REMOVED
AND IS LOCATED
IN THE NEXT FILE

THE WISER OIL COMPANY

Skelly Area Waterflood Projects

Skelly Unit

Production was established in the Skelly Unit in 1926 with the completion of the Lynch 'A' #1 (now Skelly Unit #41). Development proceeded on 40-acre spacing from the 1930's through the early 1960's with peak oil production occurring in late 1960.

In 1965, a pilot waterflood utilizing 80-acre five spots was installed to test waterflood potential in the unit. Results were good and the waterflood was expanded throughout the unit in 1968. Active waterflooding continued until 1988 when injection of make-up water effectively ceased.

Wiser acquired the property from Texaco in 1995. Production at that time was approximately 250 BOPD and 650 BWPD from 66 active producing wells (there were 18 injection wells recycling the produced water.) Shortly after assuming operations Wiser began a major development program to increase oil recovery from the unit. The program included drilling infill producers on 20-acre spacing, converting existing wells to injection and greatly expanding surface production and injection facilities.

Production peaked at 2,333 BOPD in early 1997 followed by a very sharp decline. Additional development work stabilized production in late 1997 before a more moderate decline was established in 1998. Injection work began in 1997 with full injection reached by mid-1998.

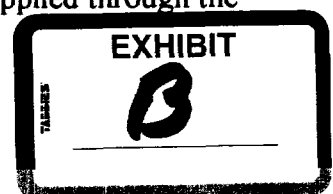
May 1998 production averaged 1,101 BOPD and 4,998 BWPD from 108 active producing wells. Injection averaged 12,471 BWPD into 76 active injection wells with make-up water supplied through Conoco's fresh water system. Some isolated response to injection has been observed but unit-wide response is not expected to occur until late 1998.

Lea 'D' Lease

The Lea 'D' lease was developed somewhat later than most of the Skelly Unit and is of generally poorer quality. However, the 1968 waterflood expansion at Skelly included the Lea 'D' lease and injection operations were similar.

Wiser acquired the property from Apache in 1997 with production at 5 BOPD and 1 BWPD from 1 active producing well (there was no injection). In late 1997 Wiser initiated a development program similar to that already underway at Skelly. The program was completed in early 1998.

May 1998 production averaged 161 BOPD and 495 BWPD from 6 active producing wells. Injection averaged 1263 BWPD into 7 active injection wells with all water supplied through the



Skelly injection system. Response is expected to occur in 1999.

State 'AZ' Lease

The State 'AZ' lease is a 40-acre tract offsetting the Skelly Unit. It was not part of the early Skelly waterflood system.

Wiser acquired the property from Apache in 1997 with production at 7 BOPD and 3 BWPD from 2 active producing wells. As part of the Skelly development program, two offset wells have been converted to injection. A 20-acre infill producer was drilled in early 1998.

May 1998 production averaged 126 BOPD and 67 BWPD from 3 active producing wells. Offset injection averages 298 BWPD (one of the offsets is operated by Devon). Response is expected to occur in 1999.

THE WISER OIL COMPANY

Skelly Area Waterflood Projects

May 1998 Status

Active Producing Wells

Skelly Unit	108
Lea 'D'	6
State 'AZ'	<u>3</u>
TOTAL	117

Active Injection Wells

Skelly Unit	76 *
Lea 'D'	7
State 'AZ'	<u>0</u> *
TOTAL	83

Injection Volumes (bbls)

Skelly Unit	386,612 *
Lea 'D'	39,158
State 'AZ'	<u>0</u> *
TOTAL	425,770

Project Commencement Date

Infill Drilling	February, 1995
Injection System Expansion	February, 1997

Development Capital (M\$)

Skelly Unit	\$25,240
Lea 'D'	\$2,066
State 'AZ'	<u>\$325</u>
TOTAL	\$27,631

Estimated Net Value (M\$)

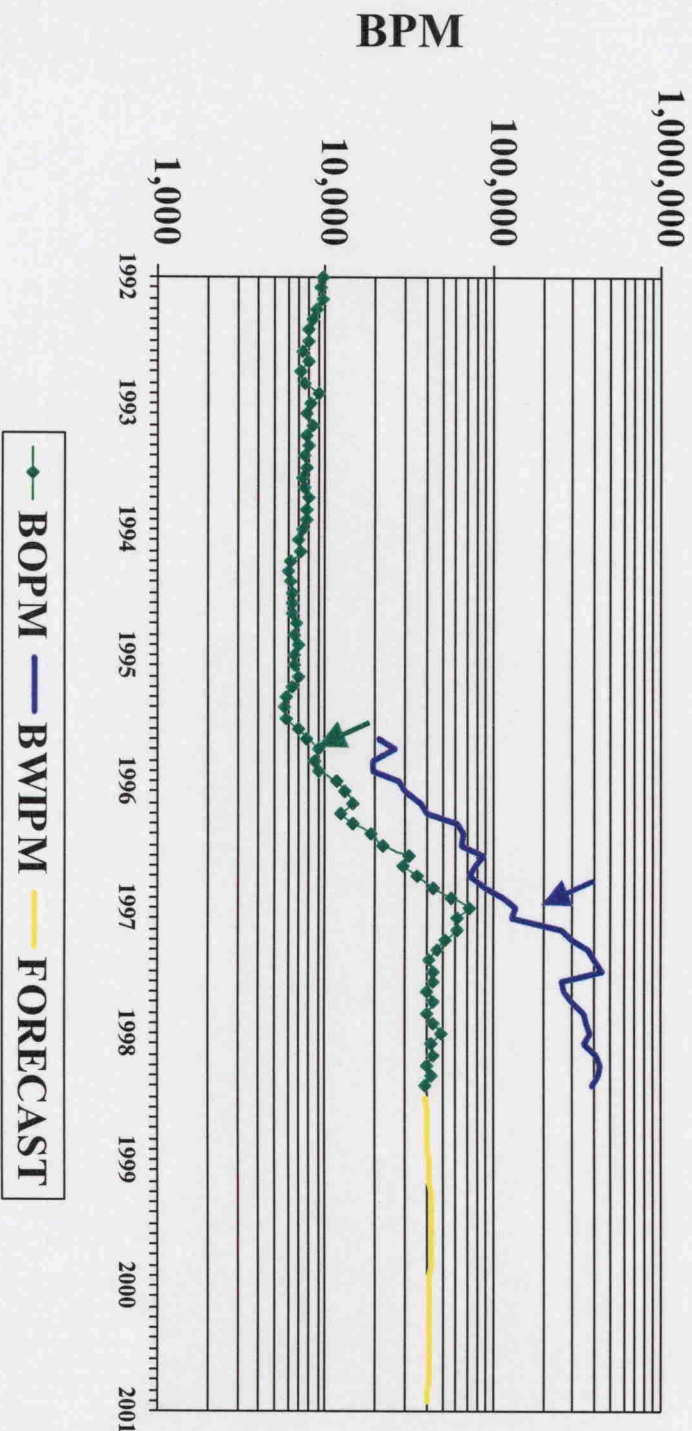
Incremental Cash Flow	\$78,000 **
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* Excluding offset injection

** Using Year-End 1997 reserve projection



Skelly Area Decline Curve

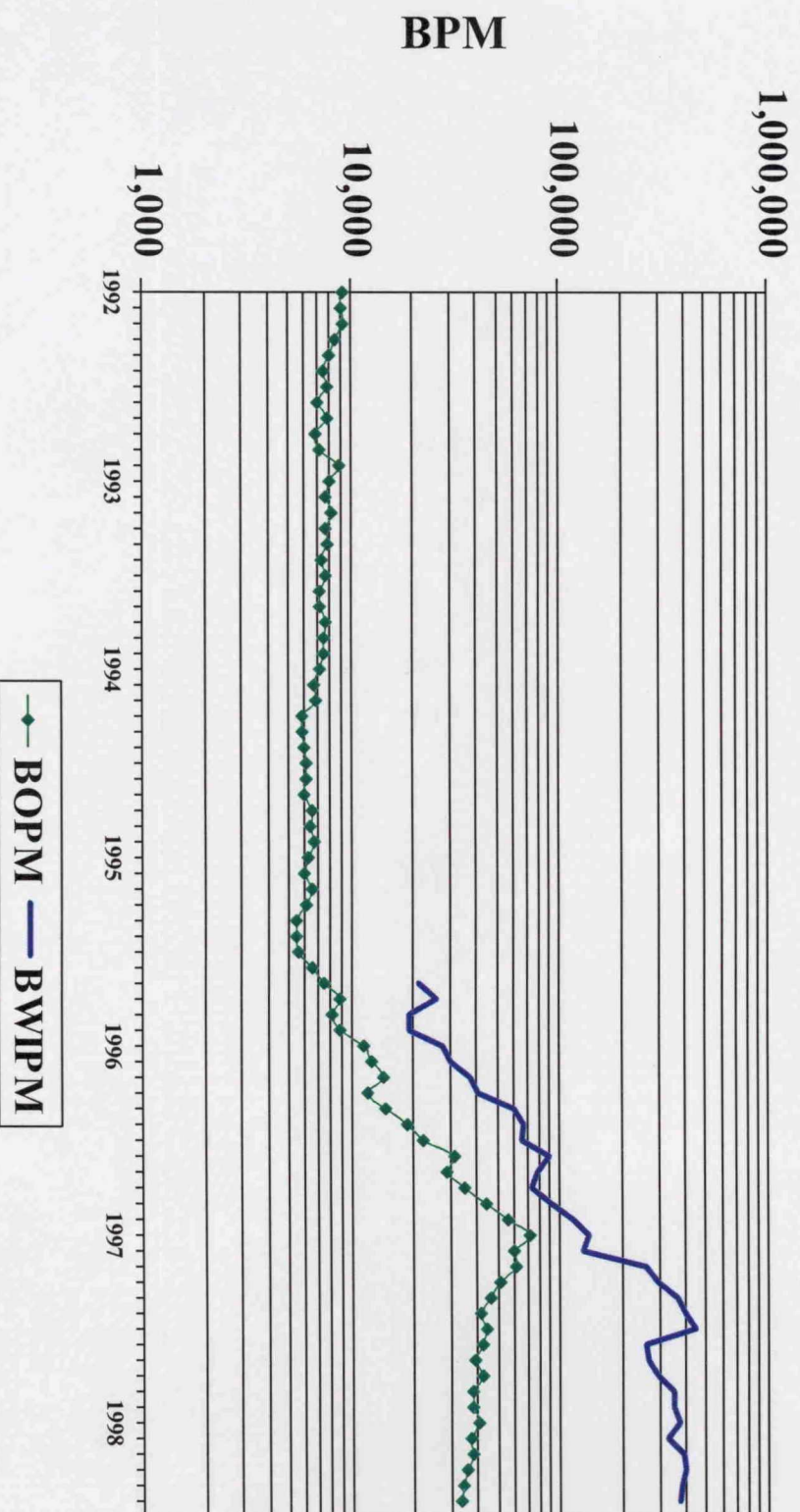


Begin infill drilling

Begin waterflood expansion



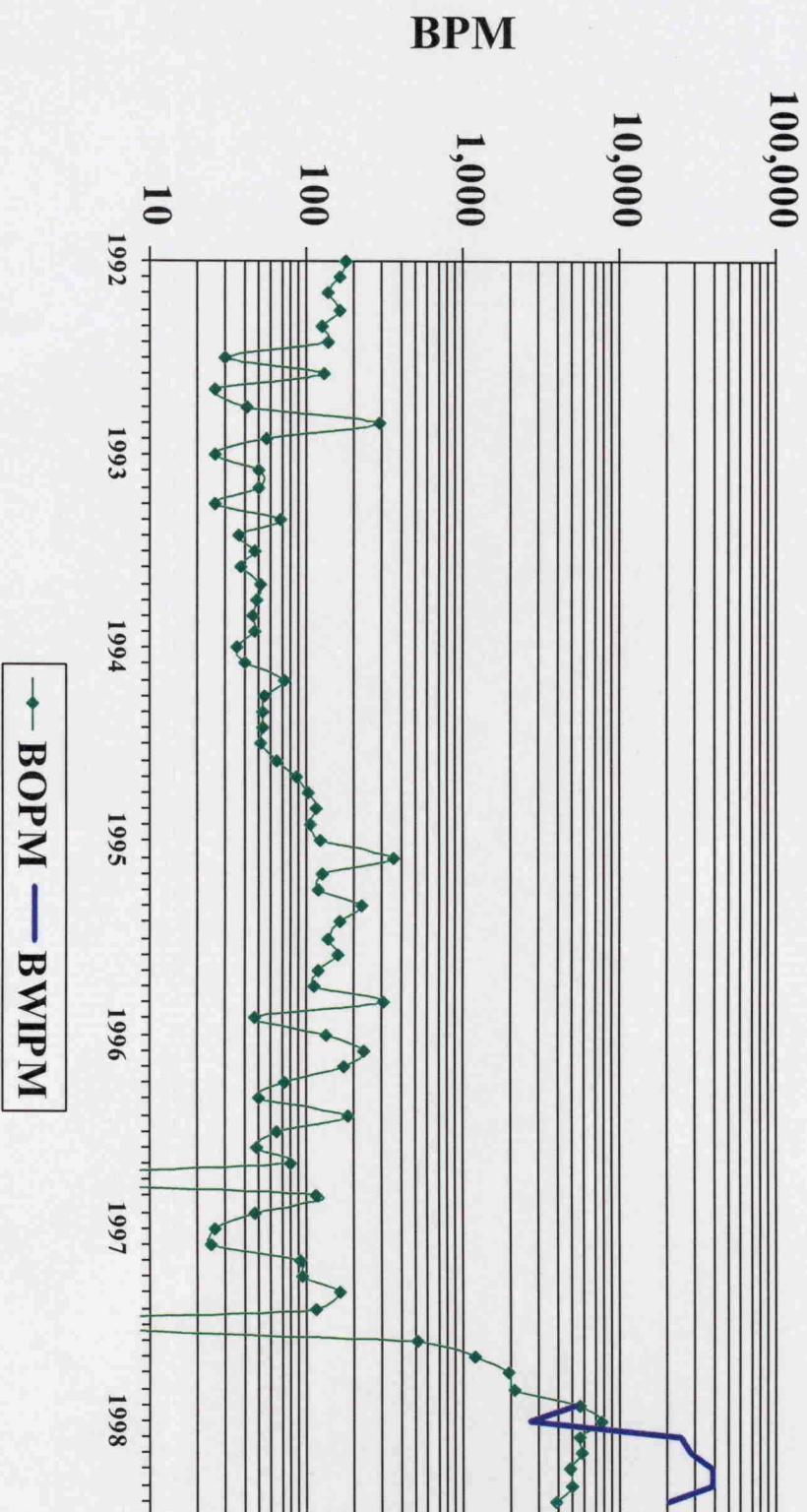
Skelly Unit Decline Curve





Lea D

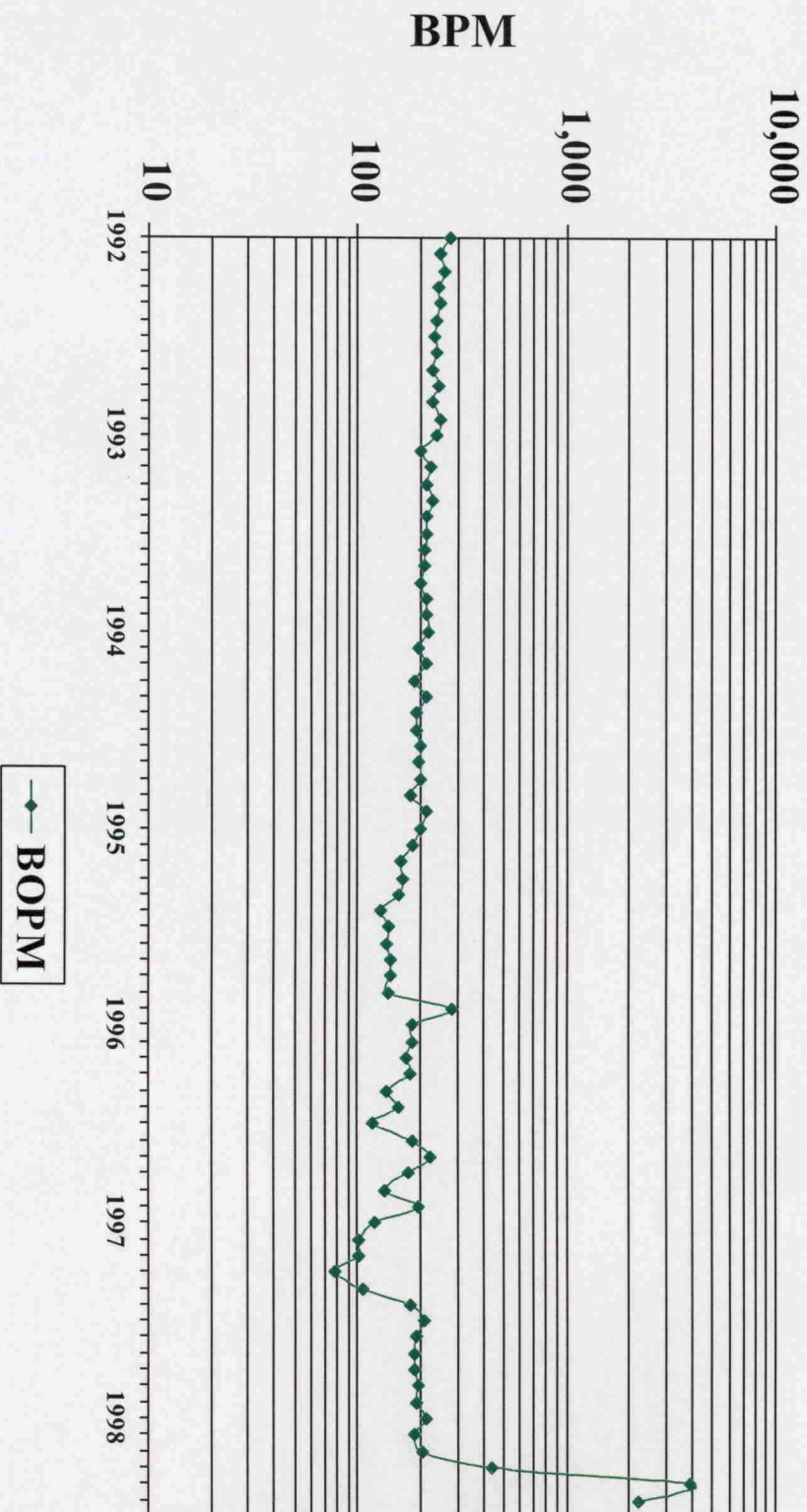
Decline Curve





State AZ

Decline Curve



SKELLY AREA OIL PRODUCTON

	SKELLY BOPM	LEA D BOPM	STATE AZ BOPM	TOTAL BOPM
1992	9,312	177	278	9,767
	9,037	166	247	9,450
	9,203	139	262	9,604
	8,551	166	243	8,960
	8,011	127	251	8,389
	7,480	138	236	7,854
	7,729	30	233	7,992
	7,006	129	239	7,374
	7,705	26	226	7,957
	6,836	42	241	7,119
	7,058	291	230	7,579
	8,755	56	248	9,059
1993	7,877	26	238	8,141
	7,558	50	199	7,807
	8,072	49	224	8,345
	7,566	26	212	7,804
	7,698	69	227	7,994
	7,235	37	212	7,484
	7,507	47	213	7,767
	7,164	38	208	7,410
	7,185	51	209	7,445
	7,644	48	201	7,893
	7,375	45	214	7,634
	7,462	47	212	7,721
1994	7,063	36	219	7,318
	6,591	41	197	6,829
	6,779	73	215	7,067
	5,870	55	189	6,114
	5,830	53	213	6,096
	5,946	53	191	6,190
	6,047	51	191	6,289
	6,096	64	200	6,360
	6,006	86	194	6,286
	6,514	104	200	6,818
	6,340	115	181	6,636
	6,674	105	212	6,991
1995	6,189	124	199	6,512
	5,964	357	182	6,503
	6,563	127	159	6,849
	6,066	118	164	6,348
	5,514	223	156	5,893
	5,438	162	130	5,730
	5,550	138	140	5,828
	6,560	158	139	6,857
	7,369	120	143	7,632
	8,828	111	144	9,083
	8,135	309	141	8,585
	8,794	47	286	9,127
1996	11,533	135	183	11,851
	12,662	232	183	13,077
	14,288	173	173	14,634
	12,113	72	179	12,364
	14,439	50	138	14,627
	18,386	185	157	18,728
	21,852	65	118	22,035
	31,209	48	185	31,442
	28,842	79	223	29,144
	34,684	0	176	34,860
	43,977	117	135	44,229
	56,102	47	197	56,346
1997	72,333	26	120	72,479
	60,781	25	102	60,908
	61,530	91	101	61,722
	51,861	95	78	52,034
	46,254	162	105	46,521
	41,216	116	180	41,512
	43,877	0	210	44,087
	42,821	515	192	43,528
	39,147	1,205	188	40,540
	42,354	1,980	187	44,521
	38,336	2,163	196	40,695
	37,817	5,549	191	43,557
1998	40,728	7,792	214	48,734
	37,247	5,597	186	43,030
	38,386	5,717	206	44,309
	35,574	4,814	442	40,830
	34,131	4,991	3,915	43,037
	33,427	3,922	2,197	39,546