

**BISON
PETROLEUM
CORPORATION**



5809 South Western, Suite 200
Amarillo, Texas 79110-3607
Phone: (806) 358-0181

New Mexico Oil Conservation Commission
PO Box 2088
Santa Fe, New Mexico 87501
Attn: Mr. William J. LeMay
Chairman & State Petroleum Engr.

RE: Commingling on State E-6327 and V-23

April 28, 1994

Gentlemen:

Bison Petroleum Corporation operates two State leases in Section 32, T8S, R37E, Roosevelt County, New Mexico. It is requested that Administrative Approval be given to commingle the gas from these two leases and have off lease storage for the condensate production resulting from the compression of the gas for sale.

Bison has operated the State No. 1 well on State Lease V-23 for over 5 years by means of a gas compressor to feed in to the sales line with a pressure of 15 psi. The well produces no oil. Marathon Oil Company operated the adjacent State BPA Well No. 1 & 2 on the State E-6327 lease. These two wells produce oil and permission was obtained to vent the gas.

Recently Marathon sold it's State BPA lease to Bison for salvage when production declined to the economic limit. Both of the wells on the State BPA lease as well as Bison's original State No. 1 produce from the Bough "C" zone in the Allison Penn Field. This field is in the latter stages of depletion with shut-in well head pressures of less than 15 psi.

The State BPA lease has no economic reserves without gas sales, unfortunately gas sales won't justify a compressor installation. However, a polyethylene line can be laid on surface to commingle the State BPA gas with Bison's original State No. 1 gas going to the compressor. The compressor can readily handle the extra gas with little extra cost. It is anticipated that this proposed action will also extend the life of our original State lease because at least half of the compressor expense will be charged to the State BPA lease. The gas is sweet and the maximum line pressure will be less than 15 psi.

BISON PETROLEUM CORPORATION

Oil is produced only from the State BPA wells. It will be handled, stored and sold without commingling or off lease storage. However, during cooler months an estimated 50 barrels of condensate per month will be recovered from the scrubber used in conjunction with the compressor. This will go to a storage tank and sold. Off lease storage approval is necessary for that condensate production attributed to the State BPA lease.

The interests in these two leases are as follows:

State BPA (E-6327) State (V-23)

Working Int--Bison	1.000	1.000
Net Revenue Int--Bison	0.875	0.755
State Roy.	0.125	0.16667
ORRI--Others	0.000	0.07833

In support of our request we enclose the following:

1. Basis for allocating production.
2. Copy of letter to ORRI Owners.
3. Copy of letter of provisional approval from Commissioner of Public Lands.
4. Estimated State Economic Analysis.
5. Map of Surface Gas Commingling Facility.
6. Schematic Diagram of Facility.

Bison's State BPA lease is at the economic limit. The only action we can justify to extend the life of this lease is to commingle the gas with our State lease which is produced by means of a gas compressor. We have received approval of the Public Land Commissioner and verbal approval of ROW pending on-site inspection. We respectfully request gas commingling and off-lease storage approval.

If you have any questions or if we need to submit additional information please let me know.

Yours very truly,

BISON PETROLEUM CORPORATION



Bruce O. Barthel
President

BOB/lis

Enclosures

cc: Oil Conservation Division
Attn: Jerry Sexton

PRODUCTION ALLOCATION
COMMINGLING GAS FACILITY
ROOSEVELT COUNTY, NEW MEXICO

During the winter months several barrels of liquid will condense in the compressor's gas scrubber each day. This vessel emptys automatically into a 500 barrel storage tank for subsequent sale.

I. Other pertinent data

1. Allocation of gas to each well
 - a. The producing gas rate of each well will be determined semi-annually. Gas will be allocated to each well based on its share of the total test rate. Gas sales will then be adjusted based on each well's BTU content.
2. Allocation of condensate to each well
 - a. Condensate and condensate sales will be allocated to each well based on its share of total BTU's passing through the sales meter during the time of tank fill.
3. Allocations of oil to each well
 - a. Only the State BPA wells produce oil.
Oil production will be allocated to each well based on monthly well test, just as is done currently.

ROOSEVELT COUNTY GATHERING FACILITY

(State, State BPA & Federal A Leases)

(Subsequently deleted)

INSTALLATION AND OPERATION:

The Federal A #1 will be piped directly from the well head through a 2-inch plastic line to the compressor at the State Battery site. The State #1 will remain tied directly from the well head to the compressor. The wells on the State BPA lease will continue to produce through a flow line going from the pumping tees to the heater treater at their tank battery. The gas will be piped from the casing head through a 3-inch plastic line to the compressor at the State battery.

During operations, the only oil produced will be from the State BPA wells and will be gauged and stored at the State BPA tank battery site. The gas from all three leases will be gathered at the compressor station, compressed and sold through Warren Petroleum's Barton total flow meter. Any condensate from this activity will be removed and stored at the State tank battery.

TESTING:

There has been no oil production from the State #1 and no oil or condensate from the Federal A #1. This simplifies the necessary testing procedure. Semi-annually, or oftener if needed, the wells will be tested to determine the gas production rate and BTU content. Testing will be done by flowing each well individually to the compressor and then through the Barton total flow meter into the sales line. The gas will also be tested for BTU content by a commercial tester. The multiplication of these values will give a BTU flow rate per day per well.

ALLOCATION:

1. All oil production will be credited to the State BPA lease since there is no fluid in the other wells.
2. Condensate and condensate sales will be allocated to each of the three State wells based on its share of the total BTU's passing through the sales meter during the time of tank fill.

3. Monthly gas production will be allocated to each well based on its share of the total tested gas rate. Monthly gas sales will be allocated to each well based on its share of the total BTU's passing through the sales meter during that month.

RECORDS:

To assure proper allocation of the various production and income streams the following records will be maintained.

1. Individual oil production well tests of the State BPA Nos. 1 & 2 as usual.
2. Semi-annual gas production tests by well.
3. Semi-annual BTU tests by well.
4. Gas sales meter reading at the time of condensate sales.



APR 12 1994

RAY POWELL, M.S., D.V.M.
COMMISSIONER

State of New Mexico
Commissioner of Public Lands

310 OLD SANTA FE TRAIL P.O. BOX 1148

(505) 827-5760
FAX (505) 827-5766

SANTA FE, NEW MEXICO 87504-1148

April 8, 1994

Bison Petroleum Corporation
5809 South Western, Suite 200
Amarillo, Texas 79110-3607

Attention: Mr. Bruce O. Barthel

Re: Surface Commingling and Off-Lease Storage Application
State #1 and State BPA well Nos. 1 and 2
State Lease Nos. V-23 and E-6327
Section 32-8S-37E
Roosevelt County, New Mexico

Dear Mr. Barthel:

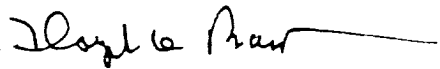
This office is in receipt of your application for surface commingling and off lease storage of production for the above captioned wells. According to your application the gas production from the State BPA Well Nos. 1 and 2 (E-6327) will be commingled at the State No. 1 (V-23) compressor site. It is our understanding that the commingled production will be allocated by semi-annual wells tests and that all wells are currently producing from the Penn Bough "C" formation.

Since ownership is common throughout, and there will be no loss of revenue to the State of New Mexico's beneficiaries from your proposed operation, the Commissioner of Public Lands, this date approves your request. Our approval is given with the understanding that the Commissioner of Public Lands reserves the right to amend or withdraw his approval should this operation prove to be unprofitable to the State at any time in the future. Our approval is subject to like approval by the New Mexico Oil Conservation Division.

If you have any questions, or if we may be of further help, please contact Pete Martinez at (505) 827-5791.

Very truly yours,

RAY B. POWELL, M.S., D.V.M.
COMMISSIONER OF PUBLIC LANDS

BY: 
FLOYD O. PRANDO, Director
Oil/Gas and Minerals Division
(505) 827-5744
RBP/FOP/pm
cc: Reader File
OCD - David Catanach, Ben Stone

ECONOMIC ANALYSIS
GAS COMMINGLING FACILITY
SEC. 32, T8S, R37E
ROOSEVELT COUNTY, NEW MEXICO

Current Operations

State No. 1 Monthly Prod. Rate 900 Mcf 30BF declining @ 15%/yr.
Sales Price \$2.85/Mcf gas \$12/Bbl liquid

<u>State Share-\$</u>			
Gross Income-\$	S&A Taxes	Royalty	Total
1st Yr. \$ 32,900	2830	5485	8,315
2nd Yr. (1/2) 14,600	1255	2435	<u>3,690</u>
			12,005

State BPA No. 1 & 2--No economic reserves

Proposed Operations

State No. 1 Same data as above

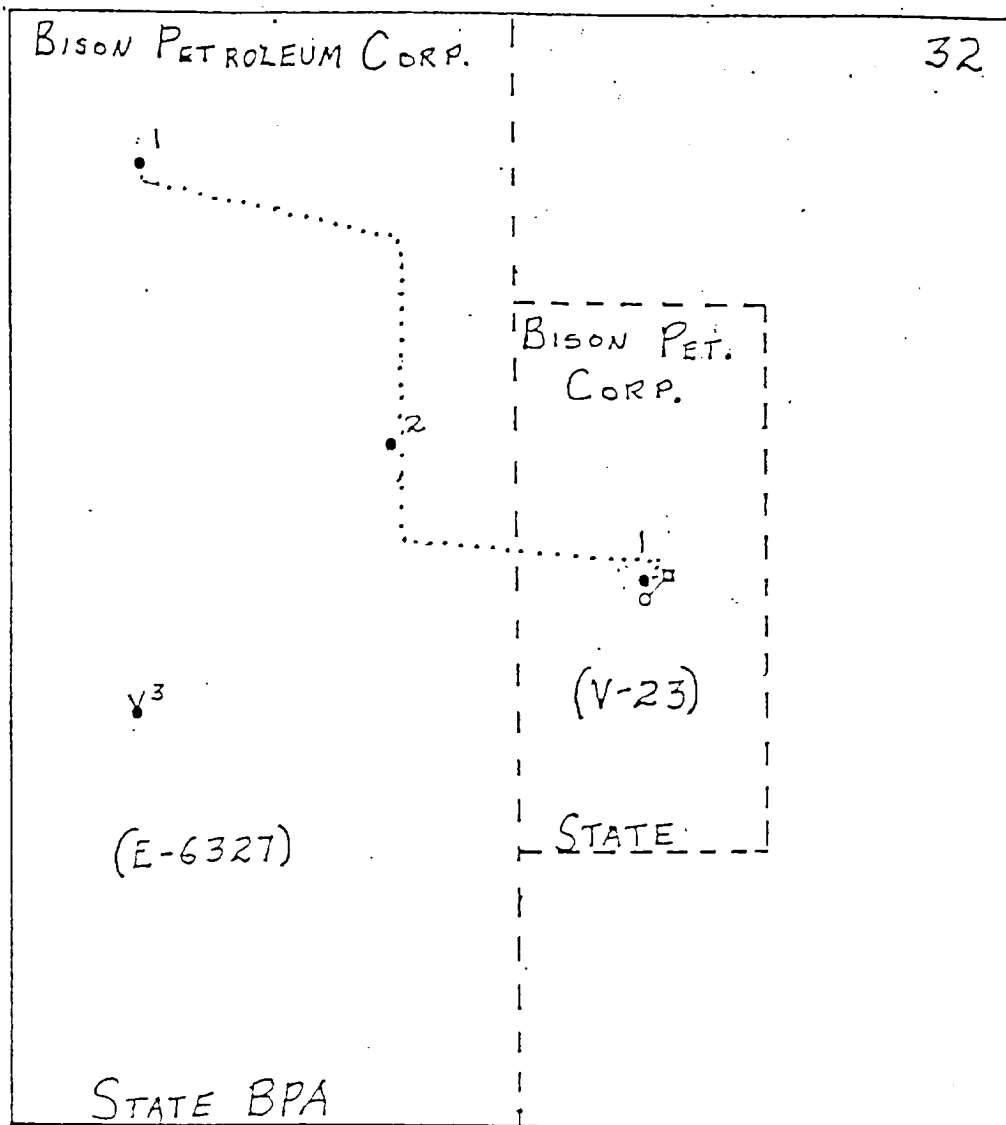
<u>State Share-\$</u>			
Gross Income-\$	S&A Taxes	Royalty	Total
1st Yr. \$ 32,900	2830	5485	8,315
2nd Yr. 27,960	2405	4662	7,067
3rd Yr. 23,770	2045	3963	6,008
4th Yr. 20,205	1738	3368	5,106
5th Yr. (1/2) 9,000	775	1500	<u>2,275</u>
			28,771

State BPA No. 1 & 2 Monthly Prod. Rate 900 Mcf 120 BF declining @ 15%/yr
Gas sales 2.85/Mcf Oil sales \$14/Bbl.

<u>State Share-\$</u>			
Gross Income-\$	S&A Taxes	Royalty	Total
1st Yr. \$ 50,940	4380	6370	10,750
2nd Yr. 43,299	3723	5415	9,138
3rd Yr. 36,604	3165	4602	7,767
4th Yr. 31,284	2690	3912	6,602
5th Yr. (1/2) 10,000	860	1250	<u>2,110</u>
			36,367

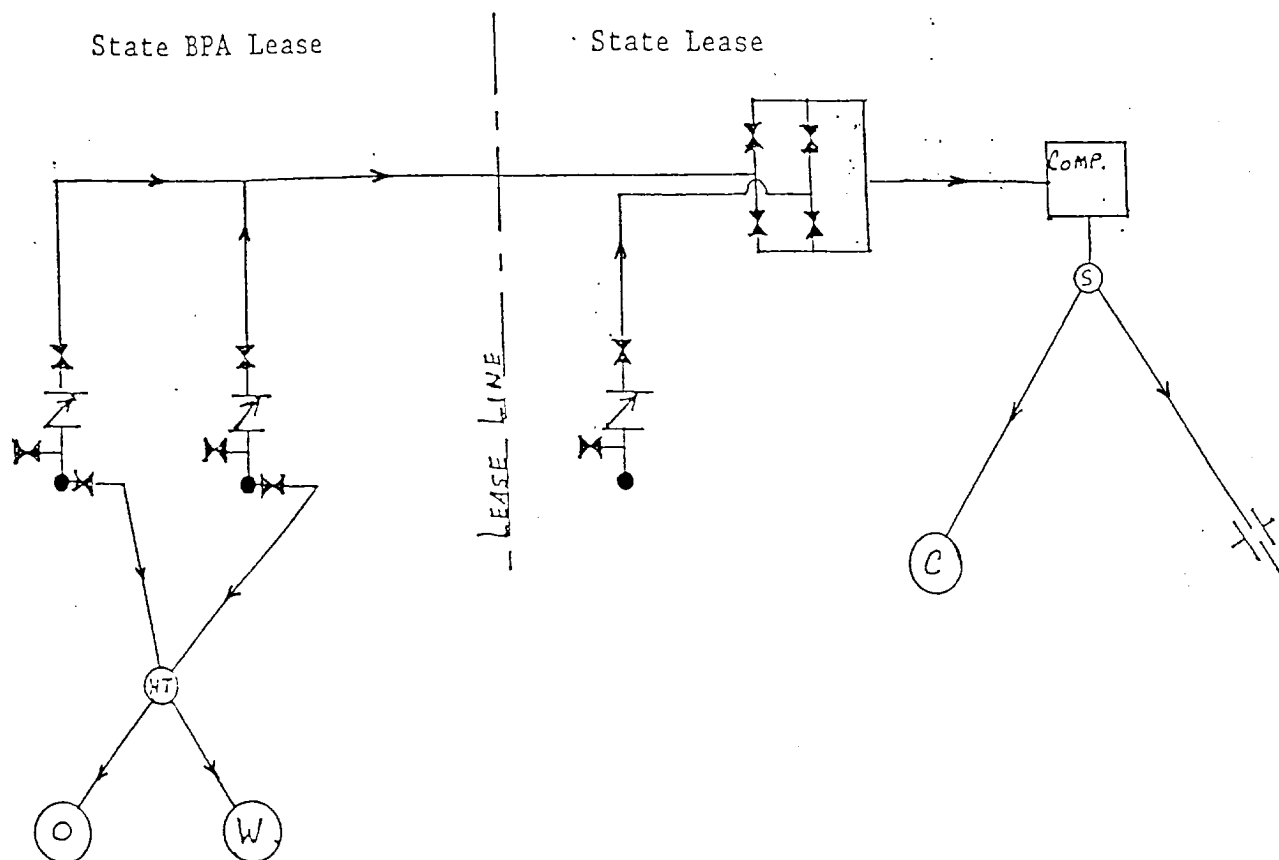
Estimated Added Income for State:

\$-	12,005
+	28,771
+	36,367
	<u>53,135</u>



Scale: 1"=1000'

1
N



SYMBOLS

Z Check Valve

X Block Valve

● Well

Ⓢ Liquid Scrubber

ⓂⓉ Heater Treater

○ Stock Tank (O-Oil; W-Wtr.; C-Condensate)

Comp. Compressor

⊥ Meter Run

BISON PETROLEUM CORPORATION

SCHEMATIC DIAGRAM

Gas & Condensate Commingling Facility

Sec. 32, T8S, R37E

Roosevelt County, New Mexico

BOB/ 4-26-94