BISON
PETROLEUM
CORPORATION



OIL CONSERVATION DIVISION RECEIVED

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

New Mexico 8il 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 slavage 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 polyethlene line can be laid on surface to commingle the State BPA gas with Bison's original State No. I 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 IntBison	1.000	1.000
Net Revenue IntBison	0.875	0.755
State Roy.	0.125	0.16667
ORRIOthers	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.
- 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/15

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.
 - 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:

- 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.

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> </u>	tate Share-\$	
Gross Income-\$	S&A Taxes	Royalty	Total
1st Yr. \$ 32.900 2nd Yr.(1/2) 14,600	2830 1255	5485 2435	8.315 <u>3.690</u> 12.005

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

Proposed Goerations

State No. 1 Same data as above

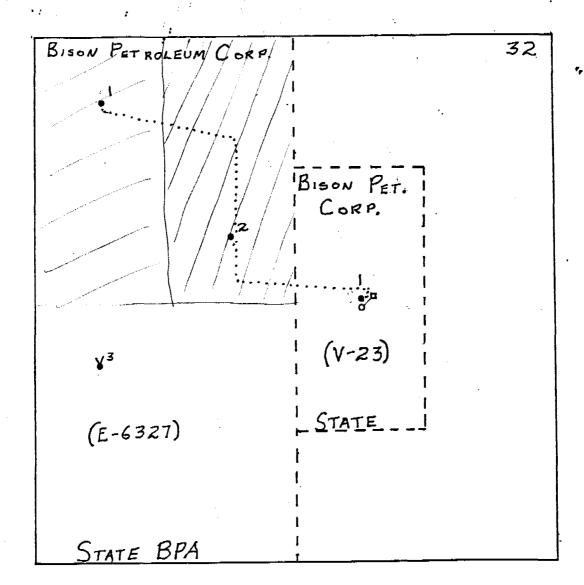
		St	ate Share-\$	
Gross In	come-\$	S&A Taxes	Royalty	Total
2nd Yr. 2 3rd Yr. 2	32,900 27,960 23,770 20,205 9,000	2830 2405 2045 1738 775	5485 4662 3963 3368 1500	8,315 7,067 6,008 5,106 2,275 28,771

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

	St	ate Share-\$	
Gross Income-\$	S&A Taxes	Royalty	Total
1st Yr. \$ 50,940 2nd Yr. 43,299 3rd Yr. 36,804 4th Yr. 31.284 5th Yr.(1/2) 10,000	4380 3723 3165 2690 860	6370 5415 4602 3912 1250	10,750 9,138 7,767 6,602 <u>2,110</u> 36,367

Estimated Added Income for State:

- \$- 12,005
- + 28,771
- + 36,367
- \$ 53,135



LECEND

- Oil Well
- Y P&A Well
- **☎** Compressor Station
- Common Storage
- ···· Surface Gas Gathering Line
- ____ Underground Liquid Line

Scale: 1"=1000'

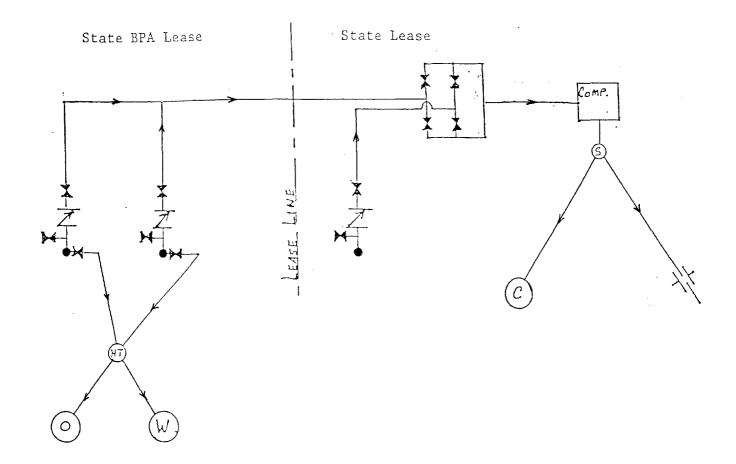
ATTACHMENT A -- 3-24-94

BISON PETROLEUM CORPORATION

Surface Gas Commingling Facility

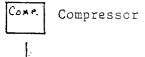
Sec. 32, T8S, R37E

Roosevelt County, NM



SYMBOLS

- Z Check Valve
- Y Block Valve
- Well
- (\$) Liquid Scrubber
- (H) Heater Treater
- Stock Tank (0-0il; W-Wtr.; C-Condensate)



Meter Run

BISON PETROLEUM CORPORATION

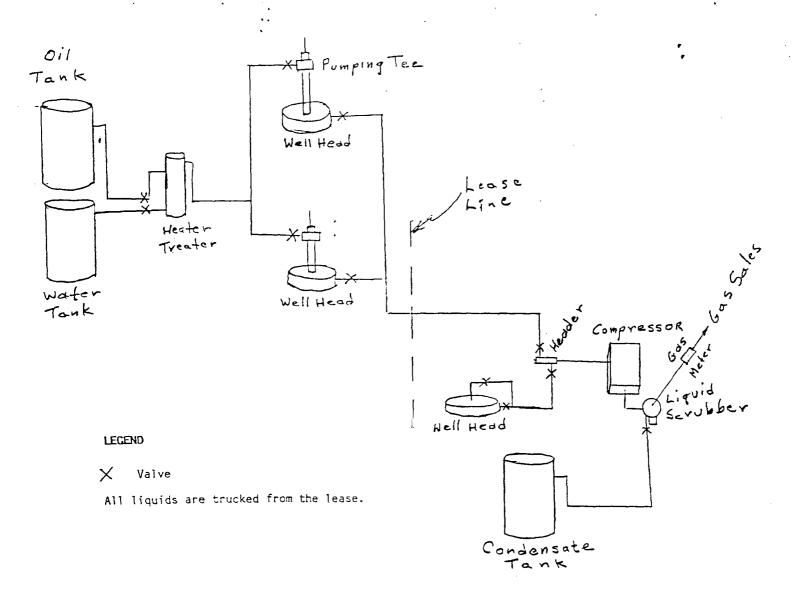
SCHEMATIC DIAGRAM

 ${\tt Gas} \ \& \ {\tt Condensate} \ {\tt Commingling} \ {\tt Facility}$

Sec. 32, T8S, R37E

Roosevelt County, New Mexico

BOB/ 4-26-94



ATTACHMENT C -- 3-24-94

BISON PETROLEUM CORPORATION

Schematic Diagram of Gas Commingling Facility
Sec. 32, T8S, R37E
Roosevelt County, NM

04-07-1994 SECTION 32 TOWNSHIP 08 South RANGE 37 East

1			
D	C	B	A
BISON PETRO	BISON PETRO	CLAJON PROD ',	CLAJON PROD
07 62	07 62	06 81	06 81
E6327-1	E6327-1	V23-1	V23-1
E	F	G	H
BISON PETRO	BISON PETRO	CLAJON PROD	CLAJON PROD
07 62	07 62	06 81	06 81
E6327-1	E6327-1	V23-1	V23-1
L BISON PETRO P&A	K BISON PETRO	J CLAJON PROD	I CLAJON PROD
07 62	07 62	06 81	06 81
E6327-1	E6327-1	V23-1	V23-1
M	N	O	P
BISON PETRO	BISON PETRO	CLAJON PROD	CLAJON PROD
07 62	07 62	06 81	06 81
E6327-1	E6327-1	V23-1	V23-1

REMARKS

BENE: CS



State of New Mexico Commissioner of Public Lands

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

310 OLD SANTA FE TRAIL P.O. BOX 1148 SANTA FE, NEW MEXICO 87504-1148 (505) 827-5760 FAX (505) 827-5766

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: Doyl to Man

FLOYD O. PRANDO, Director Oil/Gas and Minerals Division (505) 827-5744

RBP/FOP/pm

cc: Reader File

OCD - David Catanach, Ben Stone





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

Commissioner of Public Lands State Land Office P.O. Box 1148 Santa Fe. New Mexico 87504-1148 Attn: Mr. Pete Martinez'

March 30, 1994

RE: Commingle and Off Lease Storage

Gentlemen:

Bison Petroleum Corporation requests permission for Commingling and Off Lease Storage for its State V-23 and State E-6327, both in Sec. 32, T8S, R37E, Roosevelt County, NM. In support of this request we enclose the following:

- 1. Commingle Pre-Application
- 2. Commingle and Off Lease Storage Request

By separate letter we are requesting a short Right-of-Way.

We appreciate your early consideration of our request. If anything futher is needed please let us know. If it would help I would be available to meet with you in Santa Fe.

Yours very truly,

BISON PETROLEUM CORPORATION

Bruce O. Barthel

President

BOB/1s

Enclosure

Roy Proud

COMMISSIONER OF PUBLIC LANDS

COMMINGLE PRE-APPLICATION

STATE LAND OFFICE RULES 1.053-1.055 APPLY TO COMMINGLING OIL AND GAS PRODUCTION FROM NEW MEXICO STATE LANDS. PLEASE PROVIDE THE FOLLOWING INFORMATION SO THAT WE CAN DETERMINE WHETHER OR NOT A COMMINGLE APPLICATION PACKAGE SHOULD BE SUBMITTED.

1. BRIEFLY DESCRIBE WHAT YOU PROPOSE TO DO.
Bison Petroleum Corporation currently operates a gas compressor to sell gas from its State
Well No. 1 (State V-23). We recently purchased the offset Marathon State BPA lease (State E-6327)
which has its gas being vented and which is at the economic limit. We propose to bring the gas from
this offset lease, commingle it with the gas from our State No. 1, and compress and sell it thus
restoring the State BPA lease to economic production.
2. FILL IN THE FOLLOWING INFORMATION FOR EACH WELL.
WELL LEGAL LESSEE OF N.M. LEASE FORMATION NUMBER DESCRIPTION RECORD NUMBER
State #1 SW/4 NE/4 * Clayjon Production Corporation V-23 1/6 Aof Penn Bough "C"
State BPA #1 NW/4 NW/4 * Bison Petroleum Corporation E-6327 / 8 Penn Bough "C"
State 2PA #2 SE/4 NW/4 * /Bison Petroleum Corporation E-6327 8 Penn Bough "C"
* Section 32, T8S-R37E Roosevelt County, New Mexico
NAME: Bruce O. Barthal Brossidant
Bruce O. Barthel, President COMPANY: BISON PETROLEUM CORPORATION
PHONE NUMBER: (806) 358-0181

IF YOU HAVE ANY QUESTIONS, PLEASE CONTACT THE OIL, GAS AND MINERALS DIVISION AT (505) 827-5744.

COMMINGLING AND OFF LEASE STORAGE OF OIL AND GAS ON STATE TRUST LANDS

A. On March 4. 1994 we filed for a Business Lease to allow commingling of gas from two State leases and a Federal lease. At this time we'd like to change our application and request we be allowed to commingle the gas from two State leases at the compressor located on one of these State leases.

Bison currently compresses and sells gas from its State #1 well (State Lease V-23). It recently purchased Marathon's State BPA wells No. 1 & 2 (State Lease E-6327). The first is shut-in ready to be P&A'd, and the second operates at the economic limit. Gas production will not economically justify the installation of a compressor.

Bison's State #1 will not meet the gas sales line pressure of 15 psi and so it has to be produced by means of a gas compressor. This compressor has sufficient capacity to handle the gas from all three State wells mentioned above. The economics for us are somewhat marginal so we intend to transport the gas from the State BPA wells to the compressor by means of a small surface line. By keeping the installation costs to a minimum we can justify this gas commingling venture. We will also be able to recover this line readily at abandonment.

The well head pressures of all three wells is less than 15 psi. The line will be buried across the only lease road crossed. There is no appreciable safety concern with this proposed action above what already exists under current operations.

- B. See Attachment A

State Lease E-6327------320 acres being W/2 Sec. 32, (State Royalty 0.166666) TBS, R37E. Roosevelt County, NM

- D. All three wells produce from the Allison Penn (Bough "C") Pool
- E. See Attachment B
- F. See Attachment C
- G. None
- H. Gas will flow through lines attached to the casing heads of each well and be commingled at a header at the compressor site on the State lease (V-23). Gas will go from the compressor to the sales meter (as under current operations).