

1666

Drawer 1857
Roswell, New Mexico 88201

November 6, 1963

Sunray Oil Company
101 University Boulevard
Denver 6, Colorado

Attention: Mr. A. E. Meissner

Gentlemen:

Your third amendment of the original plan of development for the Central Bisti Lower Gallup Sand unit, San Juan County, New Mexico, proposing the conversion of seven producing wells to water injection status and thirteen gas-water injection wells to producing status, has been approved on this date subject to like approval by the appropriate State officials.

One approved copy of the plan is enclosed.

Sincerely yours,

(CHIEF SEC.) JOHN A. ANDERSON

JOHN A. ANDERSON
Regional Oil and Gas Supervisor

cc:

Washington (w/cy of plan)

Farmington (w/cy of plan)

→ NMCC - Santa Fe (ltr. only)

Com. of Pub. Lands - Santa Fe (ltr. only)

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

1666

September 25, 1963

**Sunray DX Oil Company
101 University Boulevard
Denver 6, Colorado**

Attention: Mr. A. E. Meissner

**Re: Plan of Development
(Fifth Year)
Central Bisti Lower
Gallup San Juan Unit,
San Juan County, New Mexico**

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Plan of Operation for the fifth year (Second Modification of Plan of Development and Operation) for the Central Bisti Lower Gallup Sand Unit, San Juan County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

Three approved copies of the plan is returned herewith.

Very truly yours,

**A. L. PORTER, Jr.,
Secretary-Director**

ALP/JEK/og

**cc: Commissioner of Public Lands - Santa Fe
U. S. Geological Survey - Roswell, New Mexico**

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Drawer 1857
Roswell, New Mexico 88201

September 3, 1963

Sunray DX Oil Company
101 University Boulevard
Denver 6, Colorado

Attention: Mr. A. E. Meissner

Gentlemen:

Your fourth supplemental plan of development and operation dated August 8, 1963, for the Central Bisti unit area, San Juan County, New Mexico, which proposes that the second supplemental plan of development be continued for the fifth year of unitized operations, has been approved on this date.

One approved copy of the plan is enclosed.

Sincerely yours,

(Orig.Sgd.) CARL C. TRAYWICK

JOHN A. ANDERSON
Regional Oil and Gas Supervisor

cc:

Washington (w/cy of plan)

Farmington (w/cy of plan)

MEMOCC-Santa Fe (ltr. only) ✓

Com. of Pub. Lands - Santa Fe (ltr. only)

100 100 100
August 14, 1963

Sunray DX Oil Company
101 University Boulevard
Denver 6, Colorado

Re: Central Bisti Lower Gallup
Sand Unit, San Juan County,
New Mexico. Fifth Year Plan
of Development

Attention: Mr. A. L. Meissner

Gentlemen:

The Commissioner of Public Lands approves the adoption of the Second Plan of Development and Operation as the Plan of Operation for the Fifth year of the Unit subject to being modified as authorized by Section 10 of the Unit Agreement. Our approval is subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

We are returning two approved copies of your August 8, 1963 application.

Very truly yours,

E. S. JOHNNY WALKER
COMMISSIONER OF PUBLIC LANDS

BY:
(Mrs.) Marian M. Rhea, Supervisor
Unit Division

ESJW/mmr/m
Enclosures
cc: Oil Conservation Commission

United States Geological Survey

100

Sunray DX Oil Company

101 University Boulevard Denver 6, Colorado



Western Division

A. E. Meissner
Production Manager

August 8, 1963

The Oil and Gas Supervisor
U. S. Geological Survey
Roswell, New Mexico

Commissioner of Public Lands
State Land Office
Santa Fe, New Mexico

The New Mexico Oil Conservation Commission
State Land Office
Santa Fe, New Mexico

Gentlemen:

Re: Central Bisti Lower Gallup Sand Unit Area
San Juan County, New Mexico
PLAN OF DEVELOPMENT - (Fifth Year)

The operation of the Central Bisti Unit Area, San Juan County, New Mexico, is being conducted in accordance with the Second Modification of Plan of Development and Operation submitted as of March 7, 1962, which was duly approved by the Regional Oil and Gas Supervisor, U. S. Geological Survey, the Commissioner of Public Lands of the State of New Mexico, and the New Mexico Oil Conservation Commission. Sunray DX Oil Company (formerly named Sunray Mid-Continent Oil Company) as Unit Operator is requesting that the Second Modification of Plan of Development and Operation be approved for the fifth year of the Unit, subject to being modified as authorized by Section 10 of the Unit Agreement.

Accordingly, it is respectfully requested that the adoption of the Second Modification of Plan of Development and Operation be approved as the Plan of Operation for the fifth year of the Unit pursuant to Section 10 of the Unit Agreement, subject to being modified from time to time with the approval of the Regional Oil and Gas Supervisor, U. S. Geological Survey, the Commissioner of Public Lands of the State of New Mexico, and the New Mexico Oil Conservation Commission.

Approved

Sept 25, 1963
A. L. Porter, Jr.
Secretary-Director

Respectfully submitted,

SUNRAY DX OIL COMPANY

By

A. E. Meissner

A. E. Meissner

Division Production Mgr.

NEW MEXICO OIL CONSERVATION COMMISSION

UNIT OPERATOR

OPERATORS COMMITTEE
CENTRAL BISTI LOWER GALLUP SAND UNIT
SAN JUAN COUNTY, NEW MEXICO

- | | |
|-------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| (2) Mr. J. C. Blackwood Amerada Petroleum Corporation P. O. Box 2040 Tulsa 2, Oklahoma | (1) Mr. H. Arthur Nedom (Alternate) Amerada Petroleum Corporation P. O. Box 2040 Tulsa 2, Oklahoma |
| (2) Mr. M. L. Ayers El Paso Natural Gas Products Co. P. O. Box 1161 El Paso, Texas | (1) Mr. James C. Vandiver (Alternate) El Paso Natural Gas Products Co. P. O. Box 1560 Farmington, New Mexico |
| (2) Mr. A. M. Wiederkehr Southern Union Gas Company 1001 Burt Building Dallas, Texas | (1) Mr. Paul J. Clote (Alternate) Southern Union Gas Company 1001 Burt Building Dallas, Texas |
| (3) Mr. Jack Tarner Phillips Petroleum Co. Phillips Building Bartlesville, Oklahoma | (1) Mr. C. M. Boles (Alternate) Phillips Petroleum Co. P. O. Box 548 Cortez, Colorado |
| (2) Mr. T. M. Curtis Pan American Petroleum Corporation P. O. Box 480 Farmington, New Mexico | (1) Mr. L. O. Speer (Alternate) Pan American Petroleum Corporation P. O. Box 480 Farmington, New Mexico |
| (3) Mr. R. R. Robison Shell Oil Company 705 West Municipal Drive Farmington, New Mexico | (1) Mr. Laurence C. Kelly 309 Bank of America Building Beverly Hills, California |
| (1) Mr. R. L. Hamblin El Paso Natural Gas Products Company P. O. Box 1161 El Paso, Texas | |

OIL CONSERVATION COMMISSION
P. O. BOX 871
SANTA FE, NEW MEXICO

1666

January 7, 1963

C
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Sunray DX Oil Company
101 University Boulevard
Denver 6, Colorado

Attention: Mr. A. E. Meissner

Re: Plan of Development
(Fifth Year Revised)
Central Bisti Lower
Gallup Sand Unit, San
Juan County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Plan of Development (Fifth Year Revised), Third Modification of Original Plan of Development and Operation, for the Central Bisti Lower Gallup Sand Unit, San Juan County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

Three approved copies of the plan are returned herewith.

Very truly yours,

A. L. PORTER, Jr.,
Secretary-Director

ALP/JEK/og

cc: Commissioner of Public Lands - Santa Fe
United States Geological Survey - Roswell

MAIN OFFICE OCC

1963 OCT 28 AM 9 25

October 28, 1963

Sunray DX Oil Company
101 University Blvd
Denver 6, Colorado

Re: Central Bisti Lower Gallup
Sand Unit Area
San Juan County, New Mexico
Plan of Development
(Fifth Year Revised)

Attention: Mr. A. E. Meissner

Gentlemen:

This office acknowledges receipt of your Plan of Development (Fifth Year Revised) and Third Modification of original Plan of Development and Operation, dated October 4, 1963.

This Plan of Operation changes the water injection pattern to transverse line drive. It discontinues gas injection immediately. The application sets forth the wells which are presently producing which will be converted to water injection wells and lists the Gas-Water injection wells to be converted to producing wells.

We return two approved copies of this application.

Very truly yours,

E. S. JOHNNY WALKER
COMMISSIONER OF PUBLIC LANDS

BY:
(Mrs.) Marian M. Rhea, Supervisor
Unit Division

ESW/mmrv

cc: Oil Conservation Commission

United States Geological Survey

Sunray Oil

MAIN OFFICE OCC

1963 OCT 15 PM 1 55



October 4, 1963

The Oil and Gas Supervisor
U. S. Geological Survey
Roswell, New Mexico

Commissioner of Public Lands
State Land Office
Santa Fe, New Mexico

The New Mexico Oil Conservation Commission
State Land Office
Santa Fe, New Mexico

Gentlemen:

Re: Central Bisti Lower Gallup Sand Unit Area
San Juan County, New Mexico
PLAN OF DEVELOPMENT - (Fifth Year Revised)
THIRD MODIFICATION OF ORIGINAL PLAN OF
DEVELOPMENT AND OPERATION

The operation of the Central Bisti Unit Area, San Juan County, New Mexico is being conducted in accordance with the Second Modification of Plan of Development and Operation submitted as of March 7, 1962 which was duly approved by the Regional Oil and Gas Supervisor, U. S. Geological Survey; the Commissioner of Public Lands of the State of New Mexico; and the New Mexico Oil Conservation Commission and the Plan of Operation for the fifth year of the Unit submitted as of August 8, 1963, which was duly approved.

In compliance with Section 10 of the Unit Agreement for the development and operation of the Central Bisti Lower Gallup Sand Unit, Sunray DX Oil Company as Unit Operator requests approval of the Third Modification of Original Plan of Development and Operation.

Central Bisti Lower Gallup Sand Unit Area
San Juan County, New Mexico
PLAN OF DEVELOPMENT - (Fifth Year Revised)
October 4, 1963 - page 2

I SUMMARY OF THIRD MODIFICATION OF ORIGINAL
PLAN OF DEVELOPMENT AND OPERATION

Change the water injection pattern to transverse line drive utilizing three lines of injection wells with approximately three rows of producing wells separating them.

Convert seven producing wells to water injection service. The seven wells are CBU #3, #6, #10, #17, #31, #25 and #39.

Discontinue gas injection.

Convert thirteen water and gas injection wells to producing wells. The thirteen wells are: GI-1, GI-2, GI-3, GI-5, GI-6, GI-7, GI-9, GI-10, GI-11, GI-12, GI-13, GI-15 and GI-16.

The attached plats indicate the present injection pattern and the proposed injection pattern after completing the Third Modification of the Plan of Development and Operation.

II PROPOSED DEVELOPMENT PROGRAM FOR THE THIRD MODIFICATION
OF THE ORIGINAL PLAN OF DEVELOPMENT AND OPERATION

In order to put into effect the Third Modification of the Original Plan of Development and Operation outlined above, the following plan of development will be undertaken commencing with approval of the Oil and Gas Supervisor, Commissioner of Public Lands, and Oil Conservation Commission:

1. Present producing wells to be converted to water injection wells -

| | | |
|-----|---------|------------------------------|
| (a) | CBU #3 | NE NE Section 6, T25N, R12W |
| (b) | CBU #6 | NE SW Section 6, T25N, R12W |
| (c) | CBU #10 | NE SW Section 4, T25N, R12W |
| (d) | CBU #17 | NE NE Section 8, T25N, R12W |
| (e) | CBU #31 | NE SW Section 8, T25N, R12W |
| (f) | CBU #25 | NW SW Section 10, T25N, R12W |
| (g) | CBU #39 | NW NE Section 16, T25N, R12W |

Central Bisti Lower Gallup Sand Unit Area
San Juan County, New Mexico
PLAN OF DEVELOPMENT - (Fifth Year Revised)
October 4, 1963 - page 3

2. Present combination Gas-Water Injection Wells to be converted to producing wells -

| | | |
|-----|-------|------------------------------|
| (a) | GI- 1 | SW SE Section 31, T25N, R12W |
| (b) | GI- 2 | SW NE Section 5, T25N, R12W |
| (c) | GI- 3 | SW NW Section 5, T25N, R12W |
| (d) | GI- 5 | SW SE Section 6, T25N, R12W |
| (e) | GI- 6 | SW SW Section 5, T25N, R12W |
| (f) | GI- 7 | SW SE Section 5, T25N, R12W |
| (g) | GI- 9 | SW SE Section 4, T25N, R12W |
| (h) | GI-10 | SW SW Section 3, T25N, R12W |
| (i) | GI-11 | SW NW Section 10, T25N, R12W |
| (j) | GI-12 | SW NE Section 9, T25N, R12W |
| (k) | GI-13 | SW NW Section 9, T25N, R12W |
| (l) | GI-15 | SW NW Section 8, T25N, R12W |
| (m) | GI-16 | SW NE Section 7, T25N, R12W |

3. Discontinue gas injection immediately. The performance of the offset producing wells suggests that sufficient gas has been injected into the reservoir.

The changes in producing and injection well patterns have been proposed as a means to improve formation sweep efficiency and to increase the ultimate recovery of Unit hydrocarbon reserves.

III MODIFICATIONS

Although this Third Modification and Plan of Operation will permit upgrading the Central Bisti Unit operation, additional modifications may be necessary before depletion of the hydrocarbon reserves. Accordingly, it is respectfully requested that the adoption of this Third Modification of Original Plan of Development and Operation be approved as the Revised Plan of Operation for the Fifth Year of the Unit pursuant to Section 10 of the Unit Agreement, subject to being modified from time to time if needed, with the approval of the Regional Oil and Gas Supervisor, the United States Geological Survey; the Commissioner of Public Lands of the State of New Mexico; and the New Mexico Oil Conservation Commission.

Central Bisti Lower Gallup Sand Unit Area
San Juan County, New Mexico
PLAN OF DEVELOPMENT - (Fifth Year Revised)
October 4, 1963 - page 4

Submitted this 14th day of October, 1963.

SUNRAY DX OIL COMPANY

By A. E. Meissner
A. E. Meissner
Division Production Manager

UNIT OPERATOR

Attachments (2)

Copies without attachments -
Addressee List attached

Approved Jan 9 1964
W. H. Carter
Secretary-Director

NEW MEXICO OIL CONSERVATION COMMISSION

OPERATORS COMMITTEE
CENTRAL BISTI LOWER GALLUP SAND UNIT
SAN JUAN COUNTY, NEW MEXICO

- | | |
|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| (2) Mr. J. C. Blackwood Amerada Petroleum Corporation P. O. Box 2040 Tulsa 2, Oklahoma | (1) Mr. H. Arthur Nedom (Alternate) Amerada Petroleum Corporation P. O. Box 2040 Tulsa 2, Oklahoma |
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