Jason Kellahin W. Thomas Kellahin Karen Aubrey

# KELLAHIN and KELLAHIN Attorneys at Law El Patio - 117 North Guadalupe Post Office Box 2265 Santa Fe, New Mexico 87504-2265

Telephone 982-4285 Area Code 505

September 24, 1984

RECEIVED

SEP 25 1984

Mr. Richard L. Stamets
Acting Director
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

OIL CONSERVATION DIVISION

"Hand Delivered"

Re: Anadarko Production Company

Expansion of the Ballard Grayburg-San Andres Unit Waterflood in the Loco Hills Pool, Eddy County,

New Mexico

(i) . 935/

Dear Mr. Stamets:

Please set the enclosed matter for the Examiner hearing now scheduled for October 17, 1984.

Very truly yours,

W. Thomas Kellahin

WTK:ca Enc.

cc: Mr. William D. Sullivan
Anadarko Production Company
P. O. Box 2497

Midland, Texas 79702

## STATE OF NEW MEXICO DEPARTMENT OF ENERGY AND MINERALS OIL CONSERVATION DIVISION

RECEIVED

SEP 9: 1984

IN THE MATTER OF THE APPLICATION
OF ANADARKO PRODUCTION COMPANY
FOR APPROVAL OF THE EXPANSION OF
ITS BALLARD GRAYBURGSAN ANDRES
UNIT WATERFLOOD PROJECT, LOCO
HILLS POOL, EDDY COUNTY, NEW MEXICO.

OIL CONSERVATION DIVISION

CASE: > 38/

#### APPLICATION

Comes now Anadarko Production Company, by and through its attorneys, Kellahin & Kellahin, and applies to the New Mexico Oil Conservation Division for an expansion of its Ballard Grayburg-San Andres Waterflood Unit, Loco Hills Pool, Eddy County, New Mexico, and in support thereof would show:

- 1. Applicant is the operator of the Ballard Grayburg-San Andres waterflood unit as approved by the New Mexico Oil Conservation Division in Order R-4493 entered March 16, 1973.
- 2. Applicant proposes to expand the waterflood project in T18S, R29E, as follows:
  - (a) Drill WIW No. 10-9 Unit E, Section 4
    Drill WIW No. 26-4 Unit M, Section 4
    Convert to WIW No. 5-9 Unit H, Section 8
    Convert to WIW No. 5-14 Unit P, Section 8
    Convert to WIW No. 8-4 Unit B, Section 5
    Convert to WIW No. 9-2 Unit F, Section 5
    Convert to WIW No. 10-1 Unit H, Section 5
    Convert to WIW No. 11-1 Unit H, Section 6
    Convert to WIW No. 13-2 Unit D, Section 5
    Convert to WIW No. 24-2 Unit P, Section 5

(b) Wells No. 10-9 and 26-4 are to be drilled at unorthodox locations, less than 25 feet from the unit boundary, shown specifically below:

Well No. 10-9 - 1980' FNL & 1310' FWL,
 Section 4
Well No. 26-4 - 800' FSL & 1310' FWL,
 Section 4

3. Applicant has prepared New Mexico Oil Conservation Division Form C-108 which is being filed separately from this application.

WHEREFORE, Applicant requests that this application be set for hearing and that after notice and hearing the application be granted as requested.

Kellahin & Kellahin

W. Thomas Rellahin

P. O. Box 22/65

Santa Fe, New Mexico 87501

Attorneys for Applicant

Jason Kellahin
W. Thomas Kellahin
Karen Aubrey
James B. Grant

# KELLAHIN and KELLAHIN Attorneys at Law El Patio - 117 North Guadalupe Post Office Box 2265 Santa Fe, New Mexico 87504-2265

Telephone 982-4285 Area Code 505

October 23, 1984

RECEIVED

OCT 2 1984

#### HAND-DELIVERED

OIL CONSERVATION DIVISION

Mr. Gilbert Quintana
Oil Conservation Division
Post Office Box 2088
Santa Fe, New Mexico 87501

Re: Application of Anadarko Production Company for a Waterflood Expansion, Eddy County, New Mexico,

Case NO. 8381

Dear Mr. Quintana:

Enclosed please find our corrected proposed Order of the Commission, for the October 17, 1984 hearing before the Oil Conservation Commission.

Thank you for your consideration of this matter.

Sincerely,

Karen Aubrey

KA:mh

Enc.

cc: Mr. Dan Kernaghan Mr. Mike Bridges



February 6, 1986

State of New Mexico Department of Energy and Minerals Oil Conservation Division P. O. Box 2088 Santa Fe, New Mexico 87501

Attn: Gilbert Quintana UIC Director

> Re: Ballard Grayburg-San Andres Unit Eddy County, New Mexico

Dear Sir:

Anadarko Petroleum Corporation, as operator of the Ballard Grayburg-San Andres Unit waterflood in Eddy County, New Mexico, requests administrative approval to increase the surface injection pressure limitation on ten water injection wells located in the Ballard (GSA) Unit. The ten Ballard (GSA) Unit injection wells (i.e., #'s 5-9, 5-14, 8-4, 9-2, 10-1, 10-9, 11-1, 13-2C, 24-2, & 26-4) are currently limited to a wellhead pressure of no more than 0.2 pounds per foot of depth, as per the original order rendered in Case No. 8381 on January 8, 1985 (Order #R-7773).

Enclosed please find copies of ten step rate tests conducted during January, 1986, on the subject wells. The requested injection pressure limitation increase for each well is based on the fracture pressures indicated by the step rate tests less a safety factor of approximately 50 psig. Table No. 1 lists both the current pressure limitation and the requested increased limitation for each of the ten subject wells. Should any additional information be necessary to process these requests, please contact me at (915) 682-1666.

Sincerely,

Tommy W. Thompson

Senior Production Engineer

TWT:gks

cc: Jerry Buckles Mike Bridges Well File

## BALLARD GSA UNIT EDDY COUNTY, NEW MEXICO

### TABLE 1

WELL NAME & NO.	CURRENT SURFACE PRESSURE LIMITATION (psig)	REQUESTED SURFACE PRESSURE LIMITATION (psig)
BGSAU #5-9	498	600
BGSAU #5-14	489	535
BGSAU #8-4	514	737
BGSAU #9-2	506	770
BGSAU #10-1	516	520
BGSAU #10-9	520	615
BGSAU #11-1	502	475
BGSAU #13-2C	505	750
BGSAU #24-2	502	655
BGSAU #26-4	517	1290