State of New Mexico

W.R. HUMPHRIES
COMMISSIONER

Commissioner of Public Lands

P.O. BOX 1148
SANTA FE, NEW MEXICO 87504-1148

September 25, 1989

Case 318

Blackwood & Nichols Co., Ltd.
3130 Liberty Tower
100 North Broadway
Oklahoma City, OK 73102

ATTN: J. M. Lacey

RE: Northeast Blanco Unit
San Juan and Rio Arriba Counties, New Mexico
Supplement to 1989 Plan of Development

Gentlemen:

The Commissioner of Public Lands has this date approved the Supplemental to your 1989 Plan of Development. Our approval is subject to like approval by all other appropriate agencies.

Enclosed is an approved copy for your files. If we may be of further help, please do not hesitate to contact Susan Howarth at (505) 827-5791.

Very truly yours,

W.R. HUMPHRIES
COMMISSIONER OF PUBLIC LANDS

BY: FLOYD O. PRANDO, Director
Oil and Gas Division
(505) 827-5749

cc: OCD - Santa Fe, New Mexico
BLM
Unit Correspondence File
Unit P.O.D. File

WRH/FOP/SMH

#318

BLACKWOOD & NICHOLS CO., LTD.
3130 LIBERTY TOWER
100 NORTH BROADWAY
OKLAHOMA CITY, OKLAHOMA 73102

405 235-8505

September 22, 1989

Commissioner of Public Lands
State of New Mexico
P. O. Box 1148
Santa Fe, New Mexico 87501

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

United States Department of the Interior
Bureau of Land Management
Farmington Resource Area
1235 La Plata Highway
Farmington, New Mexico 87401
Attn: Mr. Ken Townsend

Supplement to the 1989
Plan of Development
Northeast Blanco Unit
Agreement I - Section 929
San Juan and Rio Arriba
Counties, New Mexico

Gentlemen:

Blackwood & Nichols Co., Ltd., as unit operator, on behalf of itself and all owners of oil and gas leases within the Northeast Blanco Unit, hereby submits a supplement to the 1989 Plan of Development for such unit.

We propose to drill eleven additional wells before the end of calendar year 1989 to further develop the Fruitland Coal in the Northeast Blanco Unit. Attached is a list of these well numbers and locations.

Your expediency in approving this supplement to the Plan of Development is greatly appreciated as it will hopefully allow us to escape the inclement weather.

Thank you for your cooperation in this matter.

Sincerely,

J. M. Lacey

J. M. Lacey
General Manager

JML:jl

enclosures

Supplement to the 1989
Plan of Development
Northeast Blanco Unit Agreement I

September 22, 1989

Approved_____ Date_____

Commissioner of Public Lands
State of New Mexico
P. O. Box 1148
Santa Fe, New Mexico 87501

Approved Roy E. Johnson Date 9-28-89

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

Approved_____ Date_____

United States Department of the Interior
Bureau of Land Management
Farmington Resource Area
1235 La Plata Highway
Farmington, New Mexico 87401
Attn: Mr. Ken Townsend

Subject to like approval by the Bureau of Land Management and the Commissioner of Public Lands.

The above approvals are for the Northeast Blanco Unit Agreement No. 1, Section 929, San Juan and Rio Arriba Counties, New Mexico, 1989 Plan of Development, supplement dated June 30, 1989.

Supplement to the 1989
Plan of Development
Northeast Blanco Unit Agreement I

September 22, 1989

BLACKWOOD & NICHOLS CO., LTD.

Proposed Wells
1989 Supplemental Plan of Development
San Juan County, New Mexico

Well #	Location
NEBU #410	NE/SW Section 9-31N-7W
NEBU #426	NW/SW Section 6-31N-6W
NEBU #428	NE/NE Section 24-31N-7W
NEBU #434	NE/SW Section 23-31N-7W
NEBU #436	SW/NE Section 19-31N-6W
NEBU #440	NW/NE Section 11-31N-7W
NEBU #452	NE/NE Section 15-31N-7W
NEBU #456	NE/NE Section 26-31N-7W
NEBU #458	NE/NE Section 13-31N-7W
NEBU #460	NE/NE Section 7-31N-6W
NEBU #462	SE/SW Section 1-31N-7W

Northeast Blanco (PA)
3180 (019)

MAY 08 1989

Blackwood & Nichols Company, Ltd.
Attn: William F. Clark
P. O. Box 1237
Durango, CO 81302

Gentlemen:

We have received your letter of March 13, 1989, requesting the approval of the Second Expanded Participating Area, Fruitland-Pictured Cliffs Formation, Northeast Blanco Unit, San Juan County, New Mexico.

The application for approval of the Second Expanded Participating Area seeks to add 320 acres described as NE/4 section 12 and NW/4 section 26, T. 30 N., R. 7 W., to the Fruitland-Pictured Cliffs Participating Area. Contributing to this area is the completion of the Northeast Blanco Unit well No. 213 and the Northeast Blanco Unit well No. 215. The Second Expanded Participating Area was approved on this date and is effective January 1, 1986.

If you have any questions, please contact Gail Keller at the above address or telephone (505) 327-5344.

Sincerely,

/s/ John L. Keller

John Keller
Chief, Branch of Minerals

Enclosure

cc: Minerals Management Service, RMP, P. O. Box 25165, Denver, CO 80225
Commissioner of Public Lands, State of New Mexico, P. O. Box 1148,
Santa Fe, NM 87501
New Mexico Oil Conservation Division, State Land Office Building,
P. O. Box 2088, Santa Fe, NM 87504

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

April 6, 1989

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

Blackwood & Nichols Co. Ltd.
P. O. Box 1237
Durango, Colorado 81302-1237

Attention: William F. Clark

Re: Application for Approval of
Initial Participating Area
for the Basin Fruitland Coal
Pool, San Juan and Rio Arriba
County, New Mexico

Gentlemen:

The above-referenced submittal has been approved by the New Mexico Oil Conservation Division effective this date. Such approval is contingent upon like approval by the New Mexico Commissioner of Public Lands and the Bureau of Land Management.

Sincerely,

ROY E. JOHNSON,
Senior Petroleum Geologist

REJ/dr

cc: Commissioner of Public Lands - Santa Fe
Bureau of Land Management - Albuquerque

BLACKWOOD & NICHOLS CO., LTD.
P.O. BOX 1237
DURANGO, COLORADO 81302-1237

(303) 247-0728

March 31, 1989

United States Department of the Interior
Bureau of Land Management
435 Montano Road NE
Albuquerque, NM 87107

Commissioner of Public Lands
State of New Mexico
P. O. Box 1148
Santa Fe, NM 87504-1148

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

Re: Northeast Blanco Unit #1,
Sec. No. 929,
San Juan and Rio Arriba
Counties, New Mexico

Application for Approval
of Initial Participating
Area for the Basin
Fruitland Coal Pool
Effective Date of First
Production

Gentlemen:

Blackwood & Nichols Co., Ltd., as Unit Operator, on behalf of itself and all owners of oil and gas leases within the Northeast Blanco Unit, submits for approval an application for formation of an Initial Participating Area for the Basin Fruitland Coal. The proposed Initial Participating Area consists of 8179.82 acres in San Juan County, New Mexico, more accurately described in Exhibit B.

The proposed Initial Participating Area is based upon the drilling and completion of eleven Basin Fruitland Coal wells and one water disposal well within the Area. These eleven wells are in the process of short term well testing and have exhibited gas and water rates indicative of permeability that on sustained production will be commercial.

An additional fourteen wells are proposed in 1989. Full development would consist of twenty-five production wells and one water disposal well. Construction of a water and gas gathering system is under way for the proposed Initial Participating Area. Due to the economy of scale required for the water disposal system, a large number of wells is required for cost effectiveness. The cost effectiveness is also controlled by the topography of the Area as it effects water crossings such as Francis Creek. Additional water crossings of the San Juan River and Navajo Lake are neither practical nor environmentally acceptable.

Blackwood & Nichols therefore requests that the Initial Participating Area be approved as defined in Exhibit B, subject to future contraction should any particular well prove non-commercial.

In support of this application, the following exhibits are enclosed and made a part hereof:

1) Exhibit A - a map showing the Unit boundary and the proposed Sims Mesa Initial Participating Area.

2) Exhibit B - a schedule showing lands entitled to participation in the unitized substances produced from the Basin Fruitland Coal with the percentage of participation of each lease or tract on a revenue base.

3) Exhibit C, 1 through 5 - five geologic maps and cross sections showing structure and stratigraphy.

4) Exhibit D - an offset production map.

5) Exhibit E - a geologic and engineering discussion.

This proposed Initial Participating Area is based upon the knowledge presented in Exhibits C, D, and E showing the geologic similarities of the Area as well as the commercial offset production in the Meridian "400" Field. Prior activity in the Northeast Blanco Unit several miles north of the proposed Participating Area is inconclusive at this time. In 1985 three wells were drilled which ultimately were completed in Fruitland coals. These wells are the Number 212, Number 218, and the Number 211.

The Number 212 was completed open hole in the Upper and a portion of the Middle Fruitland. Significant hole problems have been encountered and the well is currently being considered for deepening to the rest of the Fruitland or for plugging. The Number 218 was completed in the Upper and a portion of the Middle

Fruitland Coals. Currently the well is being evaluated for deepening to the rest of the Fruitland Coals. The Number 211 well was recently recompleted in the Fruitland Coals and is currently testing 125 MCFD and 20 BWPD. This well screened out on frac and is being considered for restimulation to determine productivity. In summary, two of the 1985 wells are completed in different coals than the proposed Participating Area. The third well will require additional testing time and possible restimulation.

The proposed Initial Participating Area is of a common supply in the Basal and Middle Fruitland Coals as shown on the geologic exhibits. Common structural style across the area is believed to be the cause of the increased coal permeability which ultimately will determine producibility. Gas and water saturations are high, leading to significant early production of gas and water.

Test rates of gas and water can be seen in Table I of Exhibit 5 for the eleven wells drilled in 1988 and 1989. The proposed additional fourteen wells in 1989 offset these wells and would be expected to produce comparably. Gas and water gathering systems are currently under construction for the proposed Area to handle the Area when fully developed with twenty-five wells.

Blackwood & Nichols has recommended the entire Sims Mesa Area for the Initial Participating Area to minimize costs by streamlining the necessary accounting functions and utilize economies of scale in the gas gathering and water disposal systems. If any existing or future wells prove to be non-commercial, then the Participating Area would be contracted by the well's dedicated acreage.

Copies of this letter and exhibits are being sent to the Working Interest Owners as shown on Exhibit B. Please review this request and respond as soon as possible. Thank you for your cooperation.

Sincerely,

BLACKWOOD & NICHOLS CO., LTD.

William F. Clark

William F. Clark
Operations Manager

TH:WFC:ew

Attachments

BLACKWOOD & NICHOLS CO., LTD.
P.O. BOX 1237
DURANGO, COLORADO 81302-1237

(303) 247-0728

March 27, 1989

EXHIBIT E

FRUITLAND COAL SIMS MESA PARTICIPATING AREA

Summary

Eleven Fruitland coal wells and one disposal well have been drilled and completed within the proposed Participating Area. Of the eleven production wells, eight are cased completions and three are open hole completions. All wells are completed in both the basal and middle coals of the Fruitland formation. Testing is still ongoing, but all of the wells appear to exhibit commercial production capabilities, given the final installation of water and gas gathering systems. Offset production in the same zones to the west, south, and north would appear to be commercial, although no commercial determinations have been applied for. Offset production of sixteen wells to the south and west averages 1,400 MCFD with water.

Depending upon well problems and spacing, gas production on a field basis continues to incline in the offset production with declining water production.

Conclusions

Based upon the geologic similarities between the eleven completed wells there is no reason to believe that additional wells drilled in the Participating Area would be non-commercial. Coal thicknesses are similar throughout the area, as are the believed gas in place values. Structurally, the proposed Participating Area is up plunge on the east flank of the basin synclinal axis. The Area is generally flattening and is crossed by a series of gentle noses most likely the result of basin compression. These noses plunge to the north and have associated with them a significant degree of open fracturing and possible faulting. No major anticlinal or synclinal features are present.

In combination with structure the stratigraphic rise of the tongue of the Pictured Cliffs or Upper Pictured Cliffs provides a reservoir edge for the basal Fruitland coal. That is, at or near the proposed northern boundary of the Participating Area the basal coal pinches out into sandstone. This provides a pressure boundary, a reservoir boundary, and the additional possibility of fracturing due to differential compaction.

It is believed that where both middle and basal coals are present and act as a broad aquifer, Fruitland coal wells will generally behave similarly. Differences in gas and water rates may reflect different degrees of fracturing, and the different completion styles. Permeability is believed to be sufficient to cause all wells to be commercial given the installation of gas and water gathering systems.

Discussion

Coal Geology

The proposed Sims Mesa Participating Area for the Fruitland Coal is an area of thick basal coal and thick middle coal. The basal Fruitland coal is an average thickness of 15-20 feet over the proposed Area. The stratigraphic pinchout of the basal coal unit into the Lower Pictured Cliffs is the proposed northern boundary of the Participating Area. The southern edge of the basal coal is several miles to the south of the Northeast Blanco Unit boundary. Within the basal coal it would appear that minor fluvial sands intertongue and partially remove the upper bench of the basal coal. The basal coal is low ash and very consistent over the proposed Participating Area in thickness and quality. This zone is a broad regional aquifer of a confined nature.

The middle Fruitland coal is an average 50 feet thickness with two splits over the proposed Participating Area. The northern and southern edges of the middle Fruitland coals are several miles outside of the boundaries of the Northeast Blanco Unit. Within the proposed Participating Area the splits of the coal are relatively consistent in thickness with a general thickening of the south and southwest. Unlike the basal coal the middle Fruitland appears to have had recharge and discharge to the north in the geologic past. To the south discharge into the equivalent siltstone and shale facies does not appear to have occurred. The middle Fruitland coal is a broad regional aquifer that now appears to be confined.

Coal Stratigraphy

The basal Fruitland coal was deposited in part over the silts and sandstones of the lower Pictured Cliffs marine unit. Along the northern boundary of the proposed participating area the basal coal is thinned, removed, and ultimately pinches out into the lower Pictured Cliffs sandstone. From the edge of the pinchout to approximately the southern third of the proposed Participating Area the basal coal is overlaid by the upper Pictured Cliffs sandstone (sometimes called Fruitland). This sandstone is approximately 90 feet thick and feathers out into siltstones and shales of a fluvial origin to the south and ultimately

disappears. The middle Fruitland coal is deposited on top of the basal coal with minor fluvial silts in between and then on top of the upper Pictured Cliffs sandstone.

The inter-tonguing of sandstone and coal creates opportunities for differential compaction at the boundaries of channel sandstones and siltstones. Stratigraphically it is unlikely that communication exists between coals and sands in the pinchouts and facies changes. The upper and lower Fruitland coals are therefore believed to be confined across the proposed Participating Area. By this concept two separate stratigraphic type traps in the two coal zones are set up in the Participating Area with boundaries consisting of their respective pinchouts.

Structure

All of the proposed Participating Area is in the basin axis synclinal feature. The general area has been subjected to east-west compression causing gentle folding, flexuring, and nosing. The proposed Participating Area is a flattening portion on the east side of the basin axis. It is distinct from the Middle Mesa and La Jara portions of the Northeast Blanco Unit in that both of these areas are large anticlinal features with attendant synclines and structural noses and faults. The Pump Mesa portion of the Northeast Blanco Unit consists of tightly compressed and folded beds in a largely synclinal position on the western side of the basin axis.

It is believed that extensive permeability is associated with the gentle nosing in the Sims Area. The overall north plunge of these minor features into the major anticlinal features should provide a style of open fractures and potential cross-faulting on the noses that is unique to the proposed Participating Area. In addition to the structural enhancement of permeability, differential compaction of the type associated with inter-tonguing sands and coals should also increase open fracturing in this area.

Permeability related to structural style and stratigraphy affects production of coal gas in the proposed Participating Area, In addition the presence of one or two stratigraphic traps in the coal affects the overall similarity of wells in the given area. Wells completed in zones of the same reservoir in the same structural setting should perform comparably. The commerciality of the existing wells remains to be proven on the absence of pipeline tie-ins and water disposal. However, assuming gathering for gas and water and reasonable spot market gas prices all wells to date would appear to capable of commercial gas rates.

Offset Production

Offsetting Fruitland Coal production from the same two coal zones occurs in the Meridian "400" field as shown on Attachment ?. Sixteen wells are examined as of approximately June, 1988. At that time all wells were showing declining water rates with eleven wells showing increasing gas rates. Average gas production of the sixteen wells was 1.4 MMCFD. The high rate was 4.8 MMCFD and the low rate was 100 MCFD. Given the regional dewatering and ultimate pressure interference, it would seem that the entire "400" field area is economic given water disposal. It is believed based on geologic and engineering parameters, as well as early test data, that the proposed Sims Mesa Participating Area will behave comparably to the "400" field which it offsets. That is, the same coals and structural styles appear to exist in both areas.

Fruitland Coals. Currently the well is being evaluated for deepening to the rest of the Fruitland Coals. The Number 211 well was recently recompleted in the Fruitland Coals and is currently testing 125 MCFD and 20 BWPD. This well screened out on frac and is being considered for restimulation to determine productivity. In summary, two of the 1985 wells are completed in different coals than the proposed Participating Area. The third well will require additional testing time and possible restimulation.

The proposed Initial Participating Area is of a common supply in the Basal and Middle Fruitland Coals as shown on the geologic exhibits. Common structural style across the area is believed to be the cause of the increased coal permeability which ultimately will determine producibility. Gas and water saturations are high, leading to significant early production of gas and water.

Test rates of gas and water can be seen in Table I of Exhibit 5 for the eleven wells drilled in 1988 and 1989. The proposed additional fourteen wells in 1989 offset these wells and would be expected to produce comparably. Gas and water gathering systems are currently under construction for the proposed Area to handle the Area when fully developed with twenty-five wells.

Blackwood & Nichols has recommended the entire Sims Mesa Area for the Initial Participating Area to minimize costs by streamlining the necessary accounting functions and utilize economies of scale in the gas gathering and water disposal systems. If any existing or future wells prove to be non-commercial, then the Participating Area would be contracted by the well's dedicated acreage.

Copies of this letter and exhibits are being sent to the Working Interest Owners as shown on Exhibit B. Please review this request and respond as soon as possible. Thank you for your cooperation.

Sincerely,

BLACKWOOD & NICHOLS CO., LTD.

William F. Clark

William F. Clark
Operations Manager

TH:WFC:ew

Attachments

BLACKWOOD & NICHOLS CO., LTD.
P.O. BOX 1237
DURANGO, COLORADO 81302-1237

(303) 247-0728

March 13, 1989

United States Department of the Interior
Bureau of Land Management
435 Montano Road, N.E.
Albuquerque, New Mexico 87107

Commissioner of Public Lands
State of New Mexico
P. O. Box 1148
Santa Fe, New Mexico 87504-1148

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

Re: Northeast Blanco Unit No. 213
D, Sec. 01, T31N, R7W
San Juan County, New Mexico

Northeast Blanco Unit No. 215
D, Sec. 26, T31N, R7W
San Juan County, New Mexico

Gentlemen:

Blackwood & Nichols Co., Ltd, as Unit Operator, on behalf of itself and all owners of oil and gas leases within the Northeast Blanco Unit hereby submits the referenced wells for commercial determination. If approved commercial then the 320 acres, the NE/4 Section 12, and the NW/4 Section 26, dedicated to the Nos. 213 and 215 wells respectively, would become the second extension of the existing Fruitland/Pictured Cliffs Participating Area. The Participating Area currently consists of the Nos. 202, 204, and 217 wells which were completed both in the Lower PIctured Cliffs and the Upper Pictured Cliffs (Fruitland Sand).

The following is a brief discussion of the additional well histories and production. Drilled and completed in 1985, the No. 215 was first delivered in January, 1986. This well was perforated in the Lower Pictured Cliffs only, and then hydraulically fractured.

Initial production was good and averaged 538 MCFD during the first month. Water production was spotty to non-existent averaging 1 BWPD. January 1989 average production was 298 MCFD and 13 BWPD. In addition the well had produced approximately 500 barrels of 52 API gravity oil.

The No. 213 well was drilled and completed in 1985 and first delivered in January 1986. This well was perforated in the Lower Pictured Cliff Sandstone, the tongue of the Pictured Cliffs Sandstone (Fruitland Sand) and the Middle Fruitland Coal. The well was then stimulated using slickwater and sand in the sandstone zones and nitrogen in the coal zone. Post-frac cleanup showed no gas from the Middle Fruitland coal, 100 MCFD rate from the tongue of the Pictured Cliffs, and 10,000 MCFD from the Lower Pictured Cliffs.

Initial production was good and averaged 597 MCFD during the first month. January, 1989, average production was 500 MCFD and 8 BWPD. In addition the well has produced approximately 500 barrels of 58 API gravity oil.

Both wells have experienced normal production declines associated with Pictured Cliffs sandstones. The following economic summaries serve to indicate the degree of present commerciality. Given the present uncertainty of spot market prices for gas, it is not possible to guarantee the future commerciality of the wells, but at current spot prices the wells exceed operating expenses and provide a return that is acceptable.

NEBU NO. 213

Expenses:

Drill and Complete		$268,359.17
Operating Costs		
1986	2,608.24	
1987	4,247.83	
to 6/15/88	1,867.19	
		8,723.26
Total:		$277,082.43

Income:	Gross	Rylty & Txs	Net Income
1/86-12/86	$546,447.48	$72,843.49	$473,603.99
1/87-12/87	58,131.28	12,543.39	45,587.89
1/88-05/88	5,809.38	1,211.91	4.597.47
Total:	$610,388.14	$86,598.79	$523,789.35

NEBU NO. 215

Expenses:

Drill and Complete		$217,045.89
Operating Costs		
1986	2,608.24	
1987	3,660.43	
to 6/15/88	1,775.98	
		8,044.65
Total:		$225,090.54

Income:	Gross	Rylty & Txs	Net Income
1/86-12/86	$232,404.84	$43,570.12	$188,834.72
1/87-12/87	32,456.10	8,848.12	23,607.47
1/88-05/88	2,911.18	762.56	2,148.62
Total:	$267,772.12	$53,181.31	$214,590.81

Exhibit A is a partial map of the Northeast Blanco Unit showing the existing Participating Area and the requested expansion. Exhibit B is a reiteration of the working interest owners for the 2nd enlarged Participating Area - Fruitland/Pictured Cliffs.

If any additional information is required for this extension, please advise.

Sincerely,

BLACKWOOD & NICHOLS CO., LTD.

William F. Clark

William F. Clark
Operations Manager

WFC:lkl

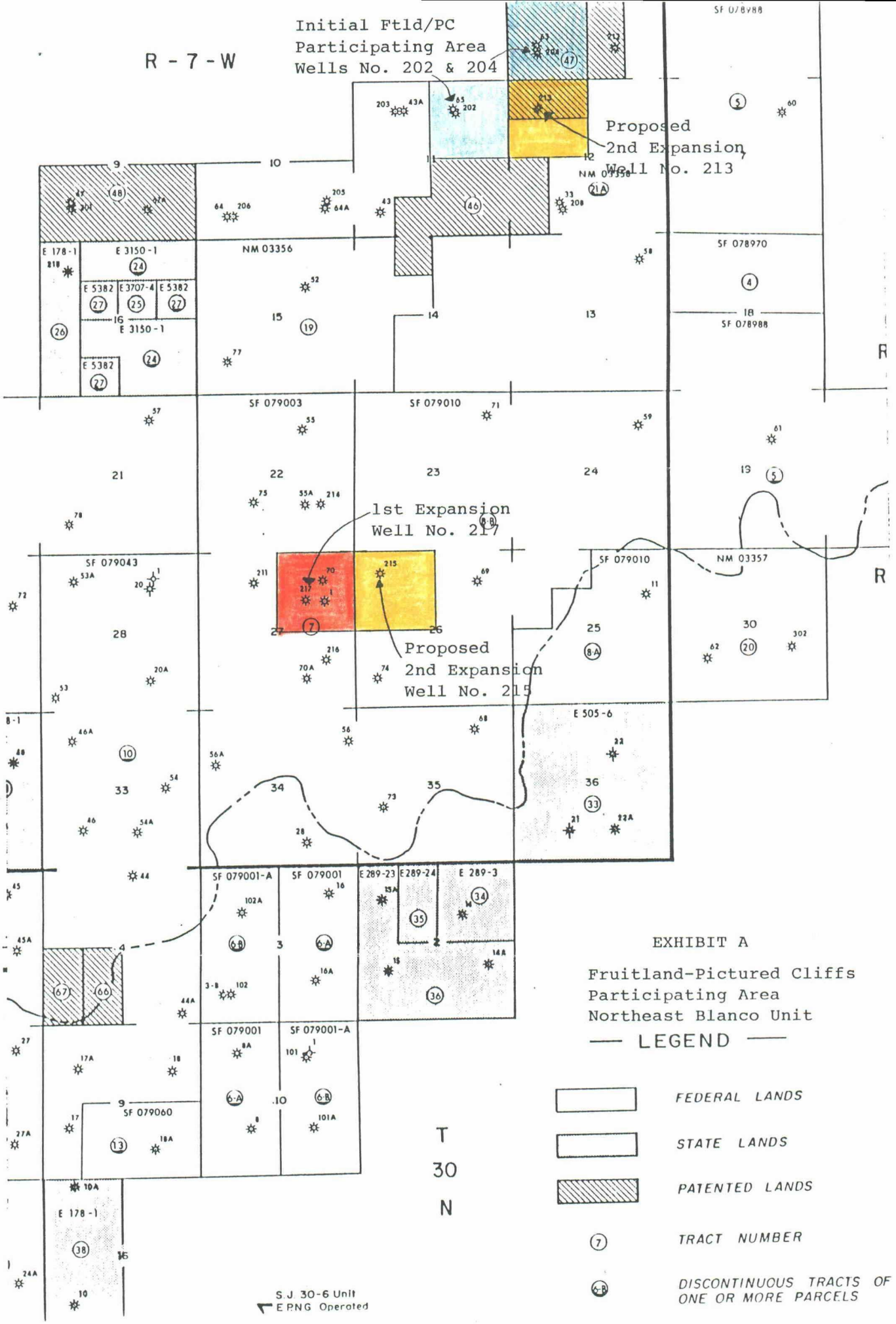
Attachments

TABLE I

BASIN FRUITLAND PARTICIPATING AREA DATA

Re: 400 Series Wells, Gas/Water Rates

WELL NO.	TYPE TEST	DAILY RATE GAS (MCF/D)	DAILY RATE WATER (BW/D)
413	Cased/pumping	220	35
403	Cased/pumping	1,500	600
427	Cased/flowing/ 12 hr. (avg.)	424	564
441	Cased/flowing	800	1,368
429	Cased	No test	No test
423	Cased/flowing	130	120
421	Cased	621	200
407	Open hole/flowing/ prod. test 9/5/88	1,676	255
401	Open hole/flowing/ last gauge	2,617	est. 500
409	Open/flowing/ last gauge	8,185	est. 600
425	Cased/flowing/ 12 hr. - stabilized	260	480


R - 7 - W
Initial Ftld/PC
Participating Area
Wells No. 202 & 204
Proposed
2nd Expansion
Well No. 213
1st Expansion
Well No. 217
Proposed
2nd Expansion
Well No. 215
SF 078988
NM 03356
SF 078970
SF 079003
SF 079010
NM 03357
SF 079043
E 505-6
SF 079001-A
SF 079001
E 289-23
E 289-24
E 289-3
SF 079060
E 178-1
E 3150-1
E 5382
E 3707-4
T
30
N
S.J. 30-6 Unit
E.P.N.G. Operated
EXHIBIT A
Fruitland-Pictured Cliffs
Participating Area
Northeast Blanco Unit
— LEGEND —
FEDERAL LANDS
STATE LANDS
PATENTED LANDS
TRACT NUMBER
DISCONTINUOUS TRACTS OF ONE OR MORE PARCELS

NORTHEAST BLANCO UNIT WELL NO. 213
FRUITLAND/PICTURED CLIFFS FORMATIONS
TRACTS 21-A & 47

21-A = 50%
47 = 50%

LIST OF WORKING INTEREST OWNERSHIP WITH BURDENS INCLUDED

Amoco Production Company P.O. Drawer A Denver, CO 80291	.2500000
Blackwood & Nichols Co., Ltd. 1310 First National Center West Oklahoma City, OK 73102	.4310095
Devon Energy Corporation 1500 Mid-America Tower Oklahoma City, OK 73102	.0048125
OGP (Delaware) Inc. The First Interstate Tower South 621 17th Street, Suite 1140 Denver, CO 80293	.0914373
Westland Oil Development Corporation P.O. Box 900 Montgomery, TX 77356	.0678648
Thayer H. Laurie C/O National Bank of Detroit Trust Dept., Box 222A Detroit, MI 48232	.0070538
Thayer H. Laurie & David N. Mills, Trustees C/O National Bank of Detroit Trust Dept., Box 222A Detroit, MI 48232	.0042680
Burk, Bakwin & Henry Three NorthPark, Suite 915 8800 North Central Expressway Dallas, TX 75231	.1435547
	1.0000000

State of New Mexico

W.R. HUMPHRIES
COMMISSIONER

Commissioner of Public Lands

P.O. BOX 1148
SANTA FE, NEW MEXICO 87504-1148

SLO REF NO. OG-1049

March 27, 1989

Blackwood & Nichols Co., LTD.
Attn: William F. Clark
P.O. Box 1237
Durango, Colorado 81302-1237

Re: 1989 Plan of Development
Northeast Blanco Unit
San Juan and Rio Arriba Counties, New Mexico

Gentlemen:

The Commissioner of Public Lands has this date approved the above captioned Plan of Development.

Our approval is subject to like approval by all other appropriate agencies.

Enclosed is an approved copy for your files.

If we may be of further help please do not hesitate to call on us.

Very truly yours,

W. R. HUMPHRIES
COMMISSIONER OF PUBLIC LANDS

BY: Floyd O. Prando
FLOYD O. PRANDO, Director
Oil and Gas Division
(505) 827-5744

cc: OCD
BLM