

United States Department of the Interior



BUREAU OF LAND MANAGEMENT ALBUQUERQUE DISTRICT OFFICE 435 MONTANO N.E. ALBUQUERQUE, NEW MEXICO 87107

> Northeast Blanco (POD) 3180 (015)

MAR 1 7 1989



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

Gentlemen:

An approved copy of your 1989 Plan of Development for the Northeast Blanco Unit Area, San Juan and Rio Arriba Counties, New Mexico is enclosed. Such plan, proposing to carry over fifteen Fruitland coal wells from the 1988 Plan of Development, drill thirty-three additional Fruitland coal wells and two Morrison-Entrada wells for possible water disposal, was approved on this date subject to like approval by the appropriate officals of the State of New Mexico.

If you have any questions, please contact Robert Kent at the above address or telephone (505) 761-4503.

Sincerely,

[s] Gary A. Stephens

Assistant District Manager Mineral Resources

Enclosure

√ NMOCD, Santa Fe

#318

BLACKWOOD & NICHOLS CO., LTD.

P.O. BOX 1237 DURANGO, COLORADO 81302-1237

(303) 247-0728

February 28, 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 87501

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

Re: Northeast Blanco Unit
Agreement No. 1, 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 Plan of Development for the calendar year 1989.

Summary of Operations - 1988

Blackwood & Nichols' initial Plan of Development did not project any wells to be drilled during 1988. However, you were advised by a supplement and two amendments of twenty-nine (29) proposed Fruitland Coal development wells and one (1) proposed Entrada wildcat well. Fourteen (14) Fruitland Coal wells which are capable of hydrocarbon production were drilled and one (1) Entrada well which was not capable of hydrocarbon production was drilled and will be used for water disposal.

On December 31, 1988, the status of Fruitland Coal wells was: eleven (11) wells drilled and completed, three (3) wells drilled and waiting to be completed, and fifteen (15) proposed wells were waiting for owner approval. Attached is Exhibit A which lists all these wells.

Also during 1988, the Northeast Blanco Unit Well No. 211 was recompleted; the non-commercial Pictured Cliffs completion from 1985 was abandoned by squeeze cementing and the Basin Fruitland Coal zones were completed in May, 1988. This well was first delivered during December, 1988.



Finally, the Northeast Blanco Unit No. 304 Pictured Cliffs-Dakota dual well was first delivered on December 8, 1988. This well was drilled and completed in October, 1987, in response to a Bureau of Land Management request for drainage protection. For over one year Blackwood & Nichols has worked diligently to secure pipeline connection for this well.

Drilled and completed in 1988, the No. 501 well was an Entrada wildcat. No hydrocarbon shows were realized so this well was completed in the Morrison and Entrada formations. The New Mexico Oil Conservation Division approved this well for water disposal from Unit Fruitland Coal wells.

Participating Area Review

All Northeast Blanco Unit lands are included in the Mesaverde Participating Area.

Three wells make up the Fruitland Sands-Pictured Cliffs Participating Area: Nos. 202, 204, and 217, each with approximately 160 acres dedicated.

During 1989, Blackwood & Nichols will be proposing the following: 1) second expansion of the Fruitland Sands-Pictured Cliffs Participating Area; 2) an initial participating area for the Basin Dakota to include wells No. 302 and 303; and 3) an initial participating area for the Basin Fruitland Coal.

Unit Well Status Summary

Exhibit B is a list of all Northeast Blanco Unit wells drilled and each well's current status. Following is a summary by formation:

Mesaverde

135 - Total Wells Drilled

<u>7</u> - Plugged & Abandoned

128 - Producing Wells

Dakota

8 - Producing Wells

<u>Gallup</u>

2 - Producing Wells

Fruitland Sands-Pictured Cliffs

- 13 Total Wells Drilled
- 1 Plugged & Recompleted (#211)
- 1 Waiting on Connection (#216)
- 11 Producing Wells

Basin Fruitland Coal

- 2 Wells Drilled Prior to 1988 (#211, #218)
- 1 Well Recompleted (#211)
- 14 Wells Drilled in 1988
- 17 Total Wells Drilled
- 14 Waiting on Connection
 - $\overline{3}$ Producing Wells

Morrison-Entrada

1 - Injection Well Drilled

Unit Production

Exhibit C is a graph of monthly gas production for the Northeast Blanco Unit. Significant decreases in the production rates during 1986, 1987, and 1988 are due to poor market demand and contractual problems.

1989 Development Plan

Blackwood & Nichols proposes to drill the following wells in the Northeast Blanco Unit during 1989: First we anticipate drilling the fifteen (15) Fruitland coal wells proposed in 1988 that are pending approval; these wells are listed in Exhibit A, I-C. Second, we plan to drill thirty-three (33) additional Fruitland coal wells which are listed on Exhibit D. Finally, we plan to drill two (2) Morrison-Entrada test wells which we anticipate will be used for water disposal; they are also listed on Exhibit D.

Blackwood & Nichols has evaluated the potential of Unit lands being drained by offsetting activity and has concluded: 1) for all formations except the Fruitland coal there is no drainage threat; and 2) for the Fruitland coal formation, the wells proposed above will more than adequately protect the Unit.

No enhanced recovery projects are in progress or anticipated at this time within the Northeast Blanco Unit.

February 28, 1989

Please approve this Plan of Development as soon as possible because several wells' APDs are in progress. If you have any questions, please advise.

Sincerely,

BLACKWOOD & NICHOLS CO., LTD.

William F. Clark Operations Manager

Enclosures

Exhibit A - 1988 Summary Exhibit B - Well Status Exhibit C - Production

Exhibit D - 1989 Plans

Unit Map with Participating Areas

Approved:	Date:
	United States Department of the Interior Bureau of Land Management 435 Montano Road, N.E. Albuquerque, New Mexico 87107
	Subject to like approval by the Commissioner of Public Lands and Oil Conservation Division.
Approved:	Date:
	Commissioner of Public Lands State of New Mexico P. O. Box 1148 Santa Fe, New Mexico 87501
	Subject to like approval by the Bureau of Land Management and the Oil Conservation Division.
Approved:	State of New Mexico Energy and Minerals Department Oil Conservation Division P. O. Box 2088 State Land Office Building Santa Fe, New Mexico 87501
	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.

EXHIBIT A

NORTHEAST BLANCO UNIT WELL DRILLING SUMMARY - 1988

I. Fruitland Coal Formation A. Wells Drilled & Completed

	Name	Location	County
1 2 3 4 5 6 7 8 9 10	No. 400 No. 401 No. 402 No. 403 No. 404 No. 406 No. 407 No. 413 No. 427 No. 441 No. 425	M Sec. 18, T30N, L Sec. 9, T30N, A Sec. 5, T30N, H Sec. 9, T30N, E Sec. 34, T31N, G Sec. 22, T31N, A Sec. 21, T30N, B Sec. 20, T30N, W Sec. 16, T30N, G Sec. 24, T30N, K Sec. 8, T30N,	R7W Rio Arriba County, New Mexico R7W San Juan County, New Mexico R7W Rio Arriba County, New Mexico R7W San Juan County, New Mexico R7W San Juan County, New Mexico R7W Rio Arriba County, New Mexico R8W Rio Arriba County, New Mexico
B. W	ells Drille	d - Waiting For C	ompletion
12 13 14	No. 421 No. 429 No. 423	P Sec. 4, T30N, B Sec. 17, T30N, A Sec. 8, T30N,	R7W Rio Arriba County, New Mexico
C. We	lls Propose	d - Not Drilled	
1 2 3 4 5 6	No. 405 No. 408 No. 409 No. 411 No. 415 No. 417	M Sec. 21, T30N, A Sec. 20, T31N, N Sec. 10, T30N, G Sec. 10, T30N, G Sec. 2, T30N, M Sec. 2, T30N,	R7W San Juan County, New Mexico R7W Rio Arriba County, New Mexico R7W Rio Arriba County, New Mexico R7W Rio Arriba County, New Mexico
7 8 9 10	No. 419 No. 431 No. 433 No. 435	M Sec. 3, T30N, O Sec. 17, T30N, M Sec. 19, T30N, M Sec. 1, T30N,	R7W Rio Arriba County, New Mexico R7W Rio Arriba County, New Mexico R7W Rio Arriba County, New Mexico
11 12 13 14 15	No. 437 No. 439 No. 443 No. 445 No. 449	N Sec. 12, T30N, M Sec. 13, T30N, N Sec. 24, T30N, M Sec. 25, T31N, N Sec. 19, T31N,	R8W San Juan County, New Mexico R8W San Juan County, New Mexico R8W San Juan County, New Mexico R8W San Juan County, New Mexico

EXHIBIT B NORTHEAST BLANCO UNIT WELL STATUS SUMMARY

	Name	Location	County	Lease No.	Status
Ι.	MESAVERDE FOR	MATION			
1	NEBU 2	N-20-31N-7W	SJ Co., N.M.	SF 079045	Prod.
2	NEBU 3X	L-05-30N-7W	SJ Co., N.M.	SF 079042	P & A
3	NEBU 3A	E-05-30N-7W	SJ Co., N.M.	SF 079042	Prod.
4	NEBU 3R	K-05-30N-7W	SJ Co., N.M.	SF 079042	Prod.
5	NEBU 4	M-21-30N-7W	RA Co., N.M.	SF 078970	Prod.
6	NEBU 4A	D-21-30N-7W	RA Co., N.M.	SF 079060	Prod.
7	NEBU 5X	M-13-30N-8W	SJ Co., N.M.	SF 079511	P & A
8	NEBU 5R	N-13-30N-8W	SJ Co., N.M.	SF 079511	Prod.
9	NEBU 5A	E-13-30N-8W	SJ Co., N.M.	SF 079511	Prod.
10	NEBU 6	H-29-30N-7W	RA Co., N.M.	SF 079060	Prod.
11	NEBU 6A	F-29-30N-7W	RA Co., N.M.	SF 079060	Prod.
12	NEBU 7	A-21-30N-7W	RA Co., N.M.	SF 079060	P & A
13	NEBU 7A	I-21-30N-7W	RA Co., N.M.	SF 079060	Prod.
14	NEBU 7R	B-21-30N-7W	RA Co., N.M.	SF 079060	Prod.
15	NEBU 8	K-10-30N-7W	RA Co., N.M.	SF 079001	Prod.
16	NEBU 8A	D-10-30N-7W	RA Co., N.M.	SF 079001	Prod.
17	NEBU 9	N-12-30N-8W	SJ Co., N.M.	SF 078581 A	Prod.
18	NEBU 9A	C-12-30N-8W	SJ Co., N.M.	SF 078581 A	Prod.
19	NEBU 10	M-16-30N-7W	RA Co., N.M.	E 178-1	Prod.
20	NEBU 10A	D-16-30N-7W	RA Co., N.M.	E 178-1 SF 079010	Prod. Prod.
21	NEBU 11	H-25-31N-7W	RA Co., N.M.	SF 079082	Prod.
22	NEBU 12	G-18-30N-7W	SJ Co., N.M. RA Co., N.M.	SF 079060	Prod.
23	NEBU 13 NEBU 13A	K-20-30N-7W C-20-30N-7W	RA Co., N.M.	SF 079060	Prod.
24 25	NEBU 13A NEBU 14	G-02-30N-7W	RA Co., N.M.	E 289-3	Prod.
26	NEBU 14A	I-02-30N-7W	RA Co., N.M.	E 289-23	Prod.
27	NEBU 15	L-02-30N-7W	RA Co., N.M.	E 289-23	Prod.
28	NEBU 15A	D-02-30N-7W	RA Co., N.M.	E 289-9	Prod.
29	NEBU 16	A-03-30N-7W	RA Co., N.M.	SF 079001	Prod.
30	NEBU 16A	J-03-30N-7W	RA Co., N.M.	SF 079001	Prod.
31	NEBU 17	L-09-30N-7W	RA Co., N.M.	SF 079043	Prod.
32	NEBU 17A	E-09-30N-7W	RA Co., N.M.	SF 079043	Prod.
33	NEBU 18	H-09-30N-7W	RA Co., N.M.	SF 079043	Prod.
34	NEBU 18A	0-09-30N-7W	RA Co., N.M.	SF 079060	Prod.
35	NEBU 19	B-20-30N-7W	RA Co., N.M.	SF 079060	Prod.
36	NEBU 19A	P-20-30N-7W	RA Co., N.M.	SF 079060	Prod.
37	NEBU 20	B-28-31N-7W	SJ Co., N.M.	SF 079043	P & A
38	NEBU 20A	0-28-31N-7W	SJ Co., N.M.	SF 079043	Prod.
39	NEBU 21	N-36-31N-7W	RA Co., N.M.	E 505-6	P & A
40	NEBU 22	G-36-31N-7W	RA Co., N.M.	E 505-6	P & A
41	NEBU 22A	0-36-31N-7W	RA Co., N.M.	E 505-6	Prod.
42	NEBU 23	N-06-30N-7W	SJ Co., N.M.	SF 079042	Prod.

EXHIBIT B NORTHEAST BLANCO UNIT WELL STATUS SUMMARY

	Name	Location	County	Lease No.	Status
43	NEBU 23A	F-06-30N-7W	SJ Co., N.M.	SF 079042	Prod.
44	NEBU 24	0-17-30N-7W	RA Co., N.M.	SF 079060	P & A
45	NEBU 24A	I-17-30N-7W	RA Co., N.M.	SF 079060	Prod.
46	NEBU 24R	0-17-30N-7W	RA Co., N.M.	NM 013706 A	Prod.
47	NEBU 25	B-17-30N-7W	RA Co., N.M.	SF 079060	Prod.
48	NEBU 26	N-08-30N-7W	RA Co., N.M.	Fee	Prod.
49	NEBU 26A	D-08-30N-7W	SJ Co., N.M.	SF 079042	Prod.
50	NEBU 27	A - 08 - 30N - 7W	RA Co., N.M.	SF 079042	Prod.
51	NEBU 27A	P-08-30N-7W	RA Co., N.M.	SF 079042	Prod.
52	NEBU 28	0-34-31N-7W	RA Co., N.M.	SF 079003	Prod.
53	NEBU 29	A-13-30N-8W	SJ Co., N.M.	Fee	Prod.
54	NEBU 30	A-12-30N-8W	SJ Co., N.M.	SF 078581	Prod.
55	NEBU 30A	I-12-30N-8W	SJ Co., N.M.	SF 078581	Prod.
56	NEBU 31	N-07-30N-7W	SJ Co., N.M.	SF 079042	Prod.
57	NEBU 31A	E-07-30N-7W	SJ Co., N.M.	SF 079042	Prod.
58	NEBU 32	A-07-30N-7W	SJ Co., N.M.	SF 079042	Prod.
59	NEBU 32A	I-07-30N-7W	SJ Co., N.M.	Fee	Prod.
60	NEBU 33	N-12-31N-7W	SJ Co., N.M.	NM 03358	Prod.
61	NEBU 34	N-19-30N-7W	RA Co., N.M.	SF 079053	Prod.
62	NEBU 34A	K-18-30N-7W	SJ Co., N.M.	SF 079053	Prod.
63	NEBU 35	J-19-30N-7W	RA Co., N.M.	SF 079060	Prod.
64	NEBU 36	A-01-30N-8W	SJ Co., N.M.	SF 078581	Prod.
65	NEBU 36A	0-01-30N-8W	SJ Co., N.M.	SF 078581	Prod.
66	NEBU 37	B-06-30N-7W	SJ Co., N.M.	SF 079042	Prod.
67	NEBU 37A	P-06-30N-7W	SJ Co., N.M.	Fee	Prod.
68	NEBU 38	B-31-31N-7W	SJ Co., N.M.	SF 079043	Prod.
69	NEBU 39	K-36-31N-8W	SJ Co., N.M.	E 3150-1	Prod.
70	NEBU 39A	D-36-31N-8W	SJ Co., N.M.	E 5382	Prod.
71	NEBU 40	G-36-31N-8W	SJ Co., N.M.	E 3150-1	Prod.
72	NEBU 40A	P-36-31N-8W	SJ Co., N.M.	E 292-9	Prod.
73	NEBU 41	B-25-31N-8W	SJ Co., N.M.	SF 079082	Prod.
74	NEBU 42	N-19-31N-7W	SJ Co., N.M.	SF 080557	Prod.
75	NEBU 43	M-11-31N-7W	SJ Co., N.M.	NM 03358	Prod.
76	NEBU 43A	C-11-31N-7W	SJ Co., N.M.	NM 03358	Prod.
77	NEBU 44	B-04-30N-7W	SJ Co., N.M.	SF 079043	Prod.
78	NEBU 44A	P-04-30N-7W	RA Co., N.M.	SF 079043	Prod.
79	NEBU 45	A-05-30N-7W	SJ Co., N.M.	SF 079042	Prod.
80	NEBU 45A	I-05-30N-7W	SJ Co., N.M.	SF 079042	Prod. Prod.
81	NEBU 46	N-33-31N-7W	SJ Co., N.M.	SF 079043 SF 079043	Prod.
82	NEBU 46A	D-33-31N-7W	SJ Co., N.M.	E 292-9	Prod.
83	NEBU 47	K-32-31N-7W	SJ Co., N.M.	E 292-9	Prod.
84	NEBU 47A	F-32-31N-7W	SJ Co., N.M. SJ Co., N.M.	E 178-1	Prod.
85 ac	NEBU 48	H-32-31N-7W Q-32-31N-7W	aj Co., N.M.	E 178-1	Prod:
86	NEBU 48A	M1-M+E-9E-A	ea sail High	29 2° 1 5	c r 9 td 1

EXHIBIT B
NORTHEAST BLANCO UNIT
WELL STATUS SUMMARY

	Name	Location	County	Lease No.	Status
87	NEBU 49	H-30-31N-7W	SJ Co., N.M.	SF 079045	Prod.
88	NEBU 50	M-25-31N-8W	SJ Co., N.M.	SF 079082	Prod.
89	NEBU 51	N-29-31N-7W	SJ Co., N.M.	SF 079045	Prod.
90	NEBU 51A	C-29-31N-7W	SJ Co., N.M.	SF 079045	Prod.
91	NEBU 52	G-15-31N-7W	SJ Co., N.M.	NM 03356	Prod.
92	NEBU 53	M-28-31N-7W	SJ Co., N.M.	SF 079043	Prod.
93	NEBU 53A	D-28-31N-7W	SJ Co., N.M.	SF 079043	Prod.
94	NEBU 54	H-33-31N-7W	SJ Co., N.M.	SF 079043	Prod.
95	NEBU 54A	0-33-31N-7W	SJ Co., N.M.	SF 079043	Prod.
96	NEBU 55	B-22-31N-7W	SJ Co., N.M.	SF 079003	Prod.
97	NEBU 55A	J-22-31N-7W	SJ Co., N.M.	SF 079003	Prod.
98	NEBU 56	A-34-31N-7W	SJ Co., N.M.	SF 079003	Prod.
99	NEBU 56A	E-34-31N-7W	SJ Co., N.M.	SF 079003	Prod.
100	NEBU 57	B-21-31N-7W	SJ Co., N.M.	SF 079045	Prod.
101	NEBU 58	A-13-31N-7W	SJ Co., N.M.	NM 03358	Prod.
102	NEBU 59	A-24-31N-7W	SJ Co., N.M.	SF 079010 A	Prod.
103	NEBU 60	A-07-31N-6W	SJ Co., N.M.	SF 078988	Prod.
104	NEBU 61	G-19-31N-6W	SJ Co., N.M.	SF 078988	Prod.
105	NEBU 62	L-30-31N-6W	RA Co., N.M.	NM 03357	Prod.
106	NEBU 63	M-01-31N-7W	SJ Co., N.M.	Fee	Prod.
107	NEBU 64	M-10-31N-7W	SJ Co., N.M.	NM 03358	Prod.
108	NEBU 64A	P-10-31N-7W	SJ Co., N.M.	NM 03358	Prod.
109	NEBU 65	B-11-31N-7W	SJ Co., N.M.	NM 03358	Prod.
110	NEBU 66	F-30-31N-7W	SJ Co., N.M.	SF 079082	Prod.
111	NEBU 66A	E-31-31N-7W	SJ Co., N.M.	SF 079082	Prod.
112	NEBU 67	M-09-31N-7W	SJ Co., N.M.	Fee	Prod.
113	NEBU 67A	0-09-31N-7W	SJ Co., N.M.	Fee	Prod.
114	NEBU 68	A-35-31N-7W	SJ Co., N.M.	SF 079003	Prod.
115	NEBU 69	A-26-31N-7W	SJ Co., N.M.	SF 079010 A	Prod.
116	NEBU 70	A-27-31N-7W	SJ Co., N.M.	SF 079003	Prod.
117	NEBU 70A	0-27-31N-7W	SJ Co., N.M.	SF 079003	Prod.
118	NEBU 71	A-23-31N-7W	SJ Co., N.M.	SF 079010 A	Prod.
119	NEBU 72	H-29-31N-7W	SJ Co., N.M.	SF 079045	Prod.
120	NEBU 72A	0-29-31N-7W	SJ Co., N.M.	SF 079045	Prod.
121	NEBU 73	L-35-31N-7W	SJ Co., N.M.	SF 079003	Prod.
122	NEBU 74	M-26-31N-7W	SJ Co., N.M.	SF 079010 A	Prod.
123	NEBU 75	K-22-31N-7W	SJ Co., N.M.	SF 079003	Prod.
124	NEBU 77	M-15-31N-7W	SJ Co., N.M.	NM 03356	Prod.
125	NEBU 78	M-21-31N-7W	SJ Co., N.M.	SF 079045	Prod.
126	NEBU 101	B-10-30N-7W	RA Co., N.M.	SF 079001 A	Prod.
127	NEBU 101A	J-10-30N-7W	RA Co., N.M.	SF 079001 A	Prod.
128	NEBU 102	M-03-30N-7W	RA Co., N.M.	SF 079001 A	Prod.
129	NEBU 102A	F-03-30N-7W	RA Co., N.M.	SF 079001 A	Prod.
130	NEBU 103	N-24-30N-8W	SJ Co., N.M.	SF 078615	Prod.

EXHIBIT B
NORTHEAST BLANCO UNIT
WELL STATUS SUMMARY

	Name	Location	County	Lease No.	Status
131 132 133 134 135	NEBU 103A NEBU 104 NEBU 104A NEBU 105 NEBU 105A	M-01-30N-8W D-01-30N-8W G-24-30N-8W	SJ Co., N.M. SJ Co., N.M. SJ Co., N.M.		Prod. Prod. Prod. Prod. Prod.
II.	DAKOTA FORM	ATION			
1 2 3 4 5 6 7 8	NEBU 55D NEBU 56D NEBU 57D	B-21-31N-7W A-13-31N-7W I-30-31N-6W P-20-31N-6W	SJ Co., N.M. SJ Co., N.M. SJ Co., N.M. SJ Co., N.M. RA Co., N.M. RA Co., N.M. RA Co., N.M.		Prod. Prod. Prod. Prod. Prod. Prod. Prod. Prod.
III.	GALLUP FOR	MATION			
1 2	NEBU 302G NEBU 303G	I-30-31N-6W P-20-31N-6W	RA Co., N.M. RA Co., N.M.		Prod. Prod.

EXHIBIT B NORTHEAST BLANCO UNIT WELL STATUS SUMMARY

	Name	Location	County	Lease No.	Status
IV.	FRUITLAND SA	ANDS-PICTURED CLI	FFS FORMATION		
1	NEBU 201	M-09-31N-7W	SJ Co., N.M.	Fee	Prod.
2	NEBU 202		SJ Co., N.M.	NM 03358	Prod.
3	NEBU 203	C-11-31N-7W	SJ Co., N.M.	NM 03358	Prod.
4	NEBU 204	M-01-31N-7W	SJ Co., N.M.	Fee	Prod.
5	NEBU 205	P-10-31N-7W	SJ Co., N.M.	NM 03358	Prod.
6	NEBU 206	M-10-31N-7W	SJ Co., N.M.	NM 03358	P & A
7	NEBU 208		SJ Co., N.M.	NM 03358	Prod.
8	NEBU 211		SJ Co., N.M.	SF 079003	P & A
9	NEBU 213		SJ Co., N.M.	Fee	Prod.
10	NEBU 214	I-22-31N-7W	SJ Co., N.M.	SF 079003	Prod.
11	NEBU 215	D-26-31N-7W	SJ Co., N.M.	SF 079010	Prod.
12	NEBU 216	I-27-31N-7W	SJ Co., N.M.	SF 079003	WOC
13	NEBU 217	G-27-31N-7W	SJ Co., N.M.	SF 079003	Prod.
٧.	BASIN FRUITLA	ND COM			
٧.	DAJIN PROTIDA	MD COAL			
1	NEBU 211	C-27-31N-7W	SJ Co., N.M.	SF 079003	Prod.
2	NEBU 212		SJ Co., N.M.	NM 03358	Prod.
3	NEBU 218	D-16-31N-7W	SJ Co., N.M.	E 178-1	Prod.
4	NEBU 400	M-07-31N-6W	SJ Co., N.M.	SF 078988	WOC
5	NEBU 401	L-09-30N-7W	RA Co., N.M.	SF 079043	WOC
6	NEBU 402	A-05-30N-7W	SJ Co., N.M.	SF 079042	WOC
7	NEBU 403	H-09-30N-7W	RA Co., N.M.	SF 079043	WOC
8	NEBU 404	E-34-31N-7W	SJ Co., N.M.	SF 079003	WOC
9	NEBU 406	G-22-31N-7W	SJ Co., N.M.	SF 079003	WOC
10	NEBU 407	A-21-30N-7W	RA Co., N.M.	SF 079060	WOC
11	NEBU 413	B-20-30N-7W	RA Co., N.M.	SF 079060	WOC
12	NEBU 421	P-04-30N-7W	RA Co., N.M.	SF 079043	WOC
13	NEBU 423	A - 08 - 30N - 7W	RA Co., N.M.	SF 079042	WOC
14	NEBU 425	K-08-30N-7W	RA Co., N.M.	Fee	WOC
15	NEBU 427	W-16-30N-7W	RA Co., N.M.	E 178-1	WOC
16	NEBU 429	B-17-30N-7W	RA Co., N.M.	SF 079060	MOC
17	NEBU 441	G-24-30N-8W	SJ Co., N.M.	SF 078615 A	WOC
VI.	MORRISON/ENT	RADA INJECTION W	ELL		
1	NEBU 501	E-10-30N-7W	RA Co., N.M.	SF 079001	SWD

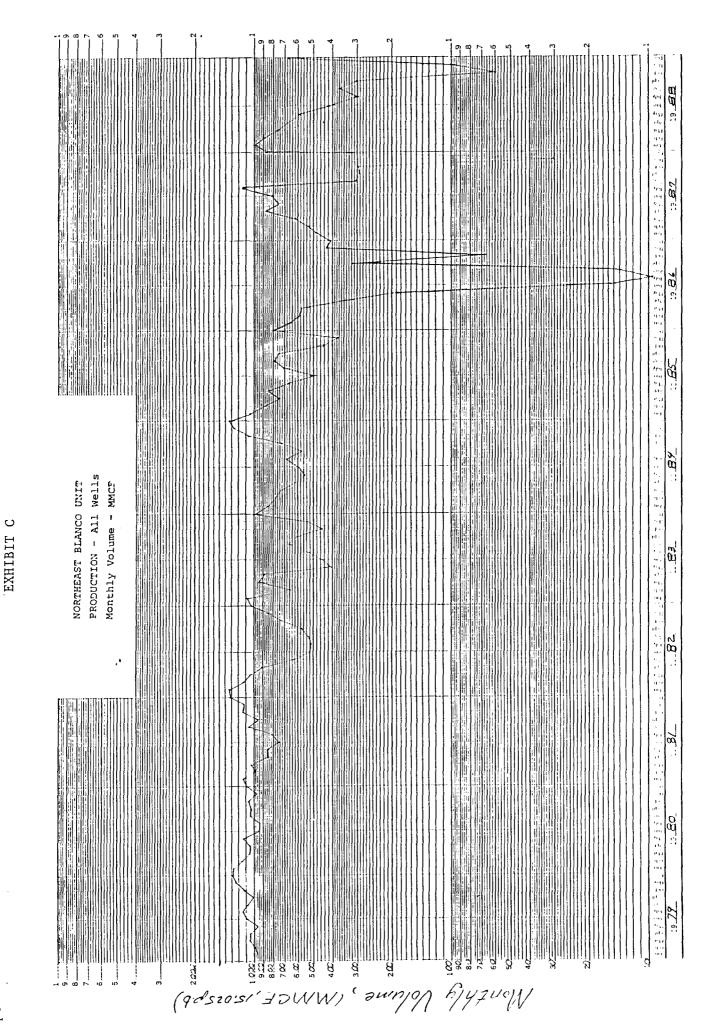


EXHIBIT D

NORTHEAST BLANCO UNIT 1989 PROPOSED FRUITLAND COAL WELLS

	Name	Location	County
1	No. 412	SW, Sec. 29,	T31N, R7W San Juan County, New Mexico
2	No. 414	NE, Sec. 30,	T31N. R7W San Juan County, New Mexico
3	No. 416	NE, Sec. 21,	T31N, R7W San Juan County, New Mexico
4	No. 418	SW, Sec. 28,	T31N, R7W San Juan County, New Mexico
5	No. 420	NE, Sec. 28,	
6	No. 422	SW, Sec. 20,	
7	No. 424	NW, Sec. 4,	T30N, R7W San Juan County, New Mexico
8	No. 430	SE, Sec. 5,	
9	No. 432	NE, Sec. 7,	
10	No. 446	SW, Sec. 33,	
11	No. 448	NE, Sec. 32,	T31N, R7W San Juan County, New Mexico
12	No. 450	SW, Sec. 32,	
13	No. 451	NE, Sec. 6,	
14	No. 453	SW, Sec. 6,	
15	No. 454	NE, Sec. 33,	
16	No. 455	NE, Sec. 31,	
17	No. 457	SW, Sec. 31,	
18	No. 459	NE, Sec. 19,	
19	No. 472	NE, Sec. 29,	T31N, R7W San Juan County, New Mexico
20	No. 478	SE, Sec. 21,	T31N, R7W San Juan County, New Mexico
21	No. 461	SW, Sec. 7,	T30N, R7W San Juan County, New Mexico
22	No. 463	NE, Sec. 18,	T30N, R7W San Juan County, New Mexico
23	No. 465	NE, Sec. 1,	T30N, R8W San Juan County, New Mexico
24	No. 467	NE, Sec. 12,	
25	No. 469	NE, Sec. 13,	
26	No. 471	NE, Sec. 25,	
27	No. 473	NE, Sec. 36,	T31N, R8W San Juan County, New Mexico
28	No. 475	SE, Sec. 19,	
29	No. 477	NE, Sec. 29,	
30	No. 479	SW, Sec. 20,	
31	No. 481	SW, Sec. 36,	
32	No. 483	NE, Sec. 36,	
33	No. 485	NE, Sec. 3,	T30N, R7W Rio Arriba County, New Mexico
		1989 PROP	OSED MORRISON-ENTRADA WELLS
34	No. 502	NE, Sec. 32,	T31N, R7W San Juan County, New Mexico
35	No. 503	SW, Sec. 36,	
		•	4.7



United States Department of the Interior



BUREAU OF LAND MANAGEMENT ALBUQUERQUE DISTRICT OFFICE 435 MONTANO N.E. ALBUQUERQUE, NEW MEXICO 87107

NOV 0 4 1988

Northeast Blanco (POD) 3180 (O15)

#310

Blackwood & Nichols Co. ATTN: William F. Clark P.O. Box 1237 Durango, CO 81302

Gentlemen:

One approved copy of your amendment to the 1988 Plan of Development for the Northeast Blanco Unit area, San Juan and Rio Arriba County, New Mexico is enclosed. Such plan, proposing the drilling of 19 Fruitland Coal wells (Northeast Blanco well No. 415, 417, 419, 421, 423, 425, 427, 429, 431, 433, 435, 437, 439, 441, 443, 445, 447, 449 and 408), is approved this date subject to like approval by the appropriate officials of the State of New Mexico.

Starting with the 1989 Plan of Development, please provide the following information in your annual Plan of Development.

- 1. A summary of operations for the past year which should include up-to-date maps showing the latest geologic interpretations, all wells and participating area boundaries. Should there be no changes from one year to another, reference may be made to the most recent map submitted.
- 2. A list showing the status of all wells.
- 3. Performance curves covering the productive life of each horizon under a participating area, including injectivity curves.
- 4. Your plans for development within the unit area for the next year.
- 5. Pertinent data as to the effectiveness of the enhanced recovery project (if applicable). This information should include data on current and cumulative water injection rates, current and cumulative water, gas, and oil production and current water-oil ratios. A short discussion as to the general progress of the flood and any significant changes in any phase of the project should also be included.

All plans of development are to be filed in triplicate.

If you have any questions, please contact Gail Keller at the above address or telephone (505) 761--4503.

Sincerely,

7s7 Gary A. Stephens

Assistant District Manager Mineral Resources

Enclosure

 $\scriptstyle \it \nu$ NMOCD, Santa Fe

State of New Mexico





Commissioner of Public Lands

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

SLO REF NO. 917

October 17, 1988

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

Re: 2nd amdment to 1988 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: I Copy O War FLOYD O. PRANDO, Director Oil and Gas Division (505) 827-5744

cc: OCD

BLACKWOOD & NICHOLS CO., LTD.

P.O. BOX 1237 DURANGO, COLORADO 81302-1237

(303) 247-0728

October 13, 1988

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 87501

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

Re: Northeast Blanco Unit No. 1, Sec. 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 second amendment to the Plan of Development for the calendar year 1988.

Blackwood & Nichols proposes to drill the wells listed on Exhibit A during late 1988 to further develop the Fruitland Coal Formation in the Northeast Blanco Unit.

Please approve this amendment to the Plan of Development as soon as possible. Thank you for your cooperation in this matter.

Sincerely,

BLACKWOOD & NICHOLS CO., LTD.

William F. Clark

ew

William F. Clark

Operations Manager

WFC:ew

Attachment

Amendment to Plan of Development October 13, 1988 Page 2

Approved:	Date:
	United States Department of the Interior Bureau of Land Management 435 Montano Road, NE Albuquerque, New Mexico 87107
	Subject to like approval by the Commissioner of Public Lands and Oil Conservation Disision.
Approved:	Date:
	Commissioner of Public Lands
	State of New Mexico
	P. O. Box 1148
	Santa Fe, New Mexico 87501
	Subject to like appraoval by the Minerals Management Service and
	the OII Conservation Division.
	/ /a ///
Approved (Ty Chilliam Date: 10-20-88
	State of New Mexico
	Energy and Minerals Department
	Oil Conservation Division
	P. O. Box 2088

Subject to like approval by the Minerals Management Service and Commissioner of Public Lands.

The above approvals for the Northeast Blanco Unit Agreement No. 1, Section 929, San Juan and Rio Arriba Counties, New Mexico, October 13, 1988 Supplement to the 1988 Plan of Development

State Land Office Building Santa Fe, New Mexico 87501

United States Department of the Interior October 13, 1988

EXHIBIT A

Plan of Development - Second Amendment

1988 Proposed Fruitland Coal Formation

Northeast Blanco Unit

				Lease	Surface
Number	Location	<u>L</u>	Number	Type	Type
1	NE, 2, 30,	7	415	State	State
2	SW, 2, 30,	7	417	State	State
3	SW, 3, 30,	7	419	Federal	State
4	SE, 4, 30,	7	421	Federal	B of R
5	NE, 8, 30,	7	423	Federa1	B of R
6	SW, 8, 30,	7	425	Fee	B of R
7	SW, 16, 30,	7,	427	State	State
8	NE, 17, 30,	7	429	Federal	B of R
9	SE, 17, 30,	7	431	Federal	B of R
10	SW, 19, 30,	7	433	Federal	State
11	SW, 1, 30,	8	435	Federal	BLM
12	SW, 12, 30,	8	437	Federal	B of R
13	SW, 13, 30,	8	439	Federal	B of R
14	NE, 24, 30,	8	441	Federal	\mathtt{BLM}
15	SW, 24, 30,	8	443	Federal	BLM
16	SW, 25, 31,	8	445	Federal	Fee
17	SW, 36, 31,	8	447	State	State
18	SW, 19, 31,	8	449	Federal	State
19	NE, 20, 31,	7	408	Federal	Fee

State of New Mexico





Commissioner of Public Lands

SLO REF NO OG-781

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

May 9, 1988

Blackwood & Nichols Co., Ltd. Attn: Mr. William F. Clark F. O. Box 1237 Durando, Colorado 81302-1237

> Re: Amended 1988 Plan of Development Northeast Blanco Unit

> > San Juan & Rio Arriba Counties, NM

Gentlemen:

The Commissioner of Public Lands has this date approved your 1988 Plan of Development for the above captioned unit area.

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, Director Oil and Gas Division (505) 827-5744

Dogeo Man

WRH/FOP/pm encls. cc: OCD BLM

Wortheast Blance Unit(POD) 3180 (015)

Blackwood sacharphole Co. LTD ATTR: William F. Clark P.J. Sox 1237 Derango, CO 81302

Jentlemen:

One approved copy of your 1988 Plan of Development and supplement Plan of Development for the Northeast Blanco Unit area, San Juan and Rio Arriba County, New Mexico is enclosed. Such plan, proposing no new wells for the 1988 Plan od Development and to drill 10 Fruitiand Coal wells in the 1988 supplement Plan of Pevelopment was approved on this date subject to like approval by the appropriate officials of the State of New Mexico.

The possibility might exist of drainage by wells outside of the unit toundary. You will be contacted at a later date about this possibility.

Starting with the 1989 Plan of Development, please provide the following information in your annual Plac of Development.

- 1. A summary of operations for the past year which should include up-to-date maps showing the latest geologic interpretations, all wells and participating area boundaries. Should there be no changes from one year to another, reference may be made to the most recent map submitted.
- 2. A list showing the status of all wells.
- 3. Performance curves covering the productive life of each horizon under a participating area, including injectivity curves.
- .. Your plans for devleopment within the unit area for the next year.
- 5. Pertinent data as to the effectiveness of the enhanced recovery project (if applicable). This information should include data on current and cumulative water injection rates, current and cumulative water, gas, and oil production and current water-oil ratios. A short discussion as to the general progress of the flood and any significant changes in any phase of the project should also be included.

All plans of development are to be filed in triplicate.

If you have any questions, please contact Cail Keller at the above address or telephone (305) 761-4303.

Sincerely,

(Orto. Signed) - GARY A. STEVERYS

cc:NM-019***MOCD, Santa Fe Comm of Pub. Lands, Santa Fe***015:GKeller:ja:4/13/88:4072M Blackwood & Michols Co. aTTS: William F. Clark P.O. Box 1237 Durango, CO 81032

Gentlemen:

One approved copy of your 1788 second amended Flan of Development for the Sortheast Slanco Unit area, San Juan & Rio Arriba Courty, New Mexico is enclosed. Such plan, proposing the deletion of well No. 405 (SWE section 21, T. 30 N., R. 7 N.), and the addition of well No. 501 (NUE section 10, T. 30 N., R. 7 N.) in the Forrison-Entrada Formation, and well No. 413 (NEL section 20, T. 30 N., R. 7 N.) in the Pruitland Coal Formation, was approved on this date subject to like approval by the appropriate officials of the State of New Mexico.

Starting with the 1989 Plan of Development, please provide the following information in your annual Plan of Development.

- 1. A summary of operations for the past year which should include up-to-date maps showing the latest geologic interpretations, all wells and participating area boundaries. Should there be no changes from one year to another, reference may be made to the most recent map submitted.
- 2. A list showing the status of all wells.
- Performance curves covering the productive life of each horizon under a participating area, including injectivity curves.
- 4. Your plans for development within the unit area for the next year.
- 5. Pertirent data as to the effectiveness of the enhanced recovery project (if applicable). This information should include data on current and cumulative water injection rates, current and cumulative water, gas, and oil production and current water-oil ratios. A short discussion as to the general progress of the flood and any significant changes in any phase of the project should also be included.

All plans of development are to be filed in triplicate.

The possibility of drainage by wells outside of the unit boundary may exist. You will be contacted at a later date about this possibility.

If you have any questions, please contact Gail Reller at the above address or telephone (305) 761-4503.

Sincerely,

(Orig. Signed) - Sid Vogelpohl

Assistant District Manager Mineral Resources

Inclosure

cc:
NM-019
NMOCD, Santa Fe
Comm. of Pub. Lands, Santa Fe
015:GKeller:ag:4/25/88:4115M

#318

BLACKWOOD & NICHOLS CO., LTD.

P.O. BOX 1237 DURANGO, COLORADO 81302-1237

(303) 247-0728

April 21, 1988

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 87501

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

Re: Northeast Blanco Unit No. 1, Sec. 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 an amendment to the Plan of Development for the calendar year 1988.

By letter of March 10, 1988, Blackwood & Nichols Co., Ltd. identified ten Fruitland Coal wells to be drilled in 1988. This amendment has two purposes: First, to delete the Northeast Blanco Unit No. 405 well, SW 1/4, Section 21, T30N, R7W, which will be replaced by the Northeast Blanco Unit No. 413, NE 1/4, Section 21, T30N, R7W, also a Fruitland Coal well. The second item is to identify a new well for the 1988 Plan of Development.

Morrison-Entrada Formations

Northeast Blanco Unit Well No. 501, NW 1/4, Section 10, T30N, R7W

This well will test these formations for hydrocarbon potential and if they are dry, this well will be used for salt water disposal.

Amendment To Plan of Development April 21, 1988 Page 2

Please approve this amendment to the Plan of Development as soon as possible. Thank you for your cooperation in this matter.

Sincerely,

BLACKWOOD & NICHOLS CO., LTD.

William F. Clark

Operations Manager

WFC:ew

Attachment

United States Department of the Interior March 10, 1988
Page 3

Revised April 21, 1988

1988 Proposed Fruitland Coal Drilling Program

Northeast Blanco Unit

Well No.	Location
1) 400	SW 1/4, Section 7, T31N, R6W
2) 402	NE 1/4, Section 5, T30N, R7W
3) 404	W 1/2, Section 34, T31N, R7W
4) 406	NE 1/4, Section 22, T31N, R7W
5) 401	SW 1/4, Section 9, T30N, R7W
6) 403	NE 1/4, Section 9, T30N, R7W
-7·) -40 5	SW 1/4, Section 21, T30N, R7W
8) 407	NE 1/4, Section 21, T30N, R7W
9) 409	SW 1/4, Section 10, T30N, R7W
10) 411	NE 1/4, Section 10, T30N, R7W
7) 413	NE 1/4, Sec. 20, T30N, R7W
-	Morrison-Entrada Test
501	NW 1/4, Sec. 10, T30N, R7W

Amendment to Plan of Development April 21, 1988
Page 4

Approved:	Date:
	United States Department of the Interior Bureau of Land Management 435 Montano Road, NE Albuquerque, New Mexico 87107
	Subject to like approval by the Commissioner of Public Lands and Oil Conservation Disision.
Approved:	Date:
Approved:	Commissioner of Public Lands State of New Mexico P. O. Box 1148 Santa Fe, New Mexico 87501 Subject to like appraoval by the Minerals Management Service and the Oil Conservation Division. Date: 4-27-88
Approved:	State of New Mexico Energy and Minerals Department Oil Conservation Division P. O. Box 2088 State Land Office Building Santa Fe, New Mexico 87501

Subject to like approval by the Minerals Management Service and Commissioner of Public Lands.

The above approvals for the Northeast Blanco Unit Agreement No. 1, Section 929, San Juan and Rio Arriba Counties, New Mexico, April 21, 1988 Supplement to the 1988 Plan of Development