



# MOORE ANTHROPOLOGICAL RESEARCH

P.O. Box 1156, Aztec, New Mexico 87410

An Archaeological Survey of  
proposed well location Northeast  
Blanco Unit 426 on Burnt Mesa, San Juan  
County, New Mexico

for

Blackwood and Nichols Co., Ltd.

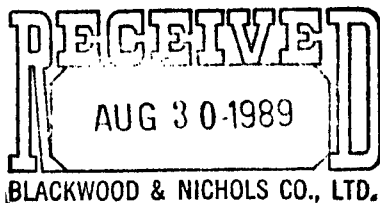
by

Susan K. Moore

Submitted by

Roger A. Moore, Jr.  
Principal Investigator

August 11, 1989



Moore Anthropological Research...

Technical Report No. 89-41B

M.A.R., P.O. Box 1156, Aztec, New Mexico 87410

Project No. 89-41B

Cultural Resource Use Permit  
No. 77-2920-89-A

An Archaeological Survey of  
proposed well location Northeast  
Blanco Unit 426 on Burnt Mesa, San Juan  
County, New Mexico

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Moore Anthropological Research

Technical Report No. 89-41B

M.A.R., P.O. Box 1156, Aztec, New Mexico 87410

# ABSTRACT

On July 26, 1989 Moore Anthropological Research conducted a Class III archaeological survey of a proposed gas well location for Blackwood and Nichols Co. Ltd. The survey area is located on Burnt Mesa, San Juan County, New Mexico (T31N, R6W, Sec. 6) and is under the jurisdiction of the Bureau of Land Management, Farmington Resource Area. A total of 14.90 acres (6.01 hectares) were inventoried.

One previously recorded archaeological site but no isolated loci were discovered during the survey.

Archaeological clearance is recommended with the stipulations that construction near DCA-89-75 be monitored.

## INTRODUCTION

On July 26, 1989 Moore Anthropological Research (M.A.R.) conducted a Class III archaeological survey for Blackwood and Nichols Co., Ltd. of Durango, Colorado. Jim Abbey of Blackwood and Nichols Co., Ltd. requested the survey on July 19, 1989 and administered the project. Roger A. Moore administered the project for M.A.R.

Over the years the people of the United States have become more aware of the nonrenewable nature of their archaeological resources and their cultural heritage. As a result of this growing concern federal, state and local governments have passed laws and enacted ordinances designed to protect and conserve archaeological, historical, and anthropological resources. The principal legislation affecting federal lands, federally administered projects, or federally funded projects includes the Federal Antiquities Act of 1906 (P.L.52-209), the Reservoir Salvage Act of 1960 as amended (16 U.S.C. 469), the National Historic Preservation Act of 1966 (P.L.89-665) as amended in 1980 (P.L.96-515), the National Environmental Policy Act of 1969 (P.L.91-852), Executive Order No. 11593 of 1971 (36 F.R.8921, 16 U.S.C. 470), the Archaeological Resource Protection Act of 1979 (P.L.96-95; P.L.100-555), and the American Indian Religious Freedom Act of 1979 (P.L.95-341). The principal legislation affecting non-federal lands in New Mexico is the Cultural Properties Act. Work conducted in the course of this project is intended to comply with the above-mentioned laws and is governed by the stipulations of Cultural Permit 77-2920-89-A.

Susan K. Moore, Roger A. Moore, and Michael J. Proper, M.A.R. archaeologists, surveyed the project area for cultural remains. The Bureau of Land Management (B.L.M.) Farmington Resource Area was notified of the proposed survey prior to beginning fieldwork. Jim Abbey, Shawn Edwards surveyor and crew accompanied the archaeologist during the fieldwork.

## METHODS

The project area was surveyed by walking parallel transects across the proposed well location and parallel to the proposed access/pipeline route. A construction zone 40 ft. wide and a buffer zone 100 ft. wide was included in the well survey and a 50 ft. buffer zone was included on both sides of the access/pipeline right of way (ROW). The project area was marked with orange painted lath and orange flagged vegetation prior to conducting the survey. All cultural remains were recorded relative to known points within the project area. Archaeological sites were recorded on the appropriate state site forms, photographed, and a sketch map prepared. Isolated Loci were recorded according to the permitting agency guidelines. Pertinent environmental data were also recorded. Locational information presented in this report is derived from plats or vicinity maps provided by the client.

## PROJECT AREA

### Northeast Blanco Unit 426

Legal Description: T.31 N. R. 6 W, Section 6, S 1/2 NW 1/4 SW 1/4  
 T.31 N. R. 7 W, Section 1, S 1/2 NE 1/4 SE 1/4  
 NE1/4 SW 1/4 SE 1/4  
 Section 6, 1850' F/SL, 790' F/WL

New Mexico Prime Meridian, San Juan County, New Mexico, 6425' Elevation

Map Source: U.S.G.S. 7.5' Burnt Mesa, New Mexico 1954 (Photorevised 1971)

Land Jurisdiction: Bureau of Land Management, Farmington Resource Area

Project Area: 300' X 250' (well pad)  
 380' X 340' (well pad with construction zone)  
 40' x 2400' (access/pipeline ROW)  
 Surveyed Area: 580' x 540' (well pad with construction and buffer zones)  
 140' x 2400' (access/pipeline ROW with buffer)  
 14.90 Acres

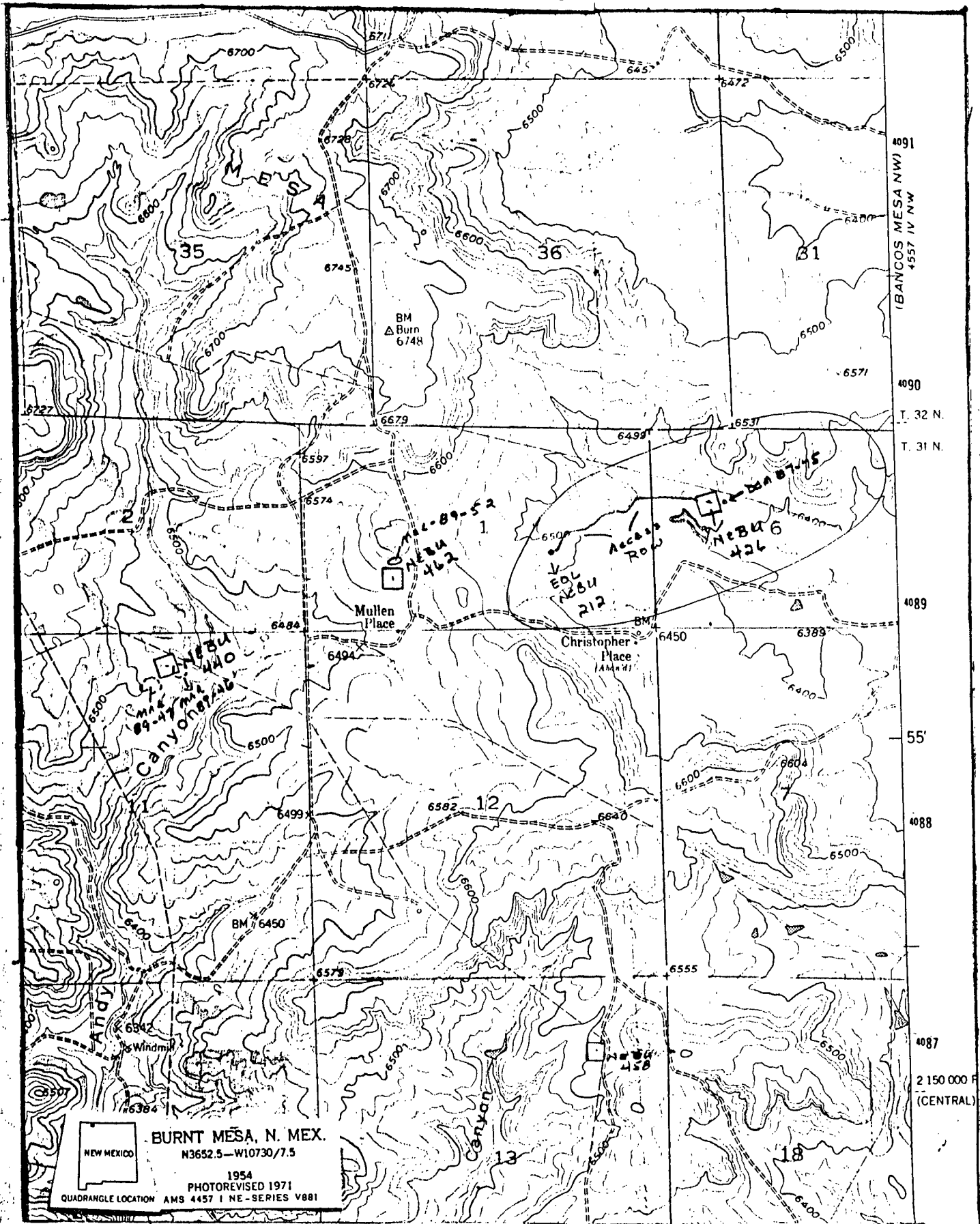
Environment: The proposed well is on a gentle south-facing slope on the north side of a broad gently sloping upland valley (Figure 1). This valley drains eastward into Cottonwood Canyon. An earthen dam has been constructed across the valley a short distance south-southeast of the proposed well pad. The area has a 30% scrubland/woodland mix cover consisting of sagebrush, grassed, snakeweed, annuals, Prickly Pear and Barrel Cactus, juniper and pinyon pine. The woodland is mainly in the north buffer area upslope of the center stake.

Project Description: This is a third staking of a proposed gas well location. The original NEBU 209 was staked at these same footages in 1980 and surveyed by Whitten and Reed (1980), however, the well was never built. In 1987 the area was resurveyed by Moore (1987) again as the NEBU 209 at 1739' F/SL, 749' F/WL and an access road/pipeline right of way was added. At this time site LA64837 (DCA-89-75) was found 125 ft. from the east side of the stake location. This well was also not built. This survey area is at the same footages as Whitten and Reeds survey area for the NEBU 209 but is the well is now called the NEBU 426.

From the west side of the well location the combined access road/pipeline ROW goes west and southwestward across three arroyos. The ROW follows an old two-track road parallel to the south side of the last arroyo to the west for about 200 ft. The route then starts to ascend the north slope of a long east-west ridge. At the top of the ridge the ROW parallels the north side of a fence line as it continues west along the ridge top to a fence corner. The ROW goes south-southwest about 175 ft. to well Northeast Blanco Unit 212 (T31N, R7W, Sec.1, 990' F/SL, 1650' F/EL).

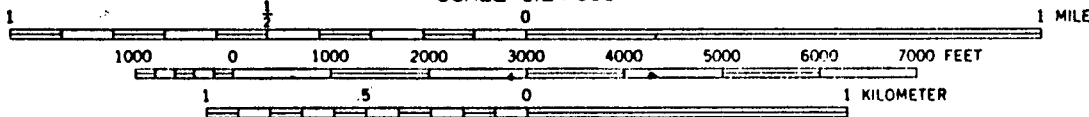
FIGURE 1

5



NEW MEXICO  
BURNT MESA, N. MEX.  
N3652.5-W10730/7.5  
1954  
PHOTOREVISED 1971  
QUADRANGLE LOCATION AMS 4457 I NE-SERIES V881

SCALE 1:24 000



CONTOUR INTERVAL 20 FEET

NATIONAL GEODETIC VERTICAL DATUM OF 1929

Cultural Resources: No new sites or isolated loci were found during this survey. LA64837 (NM-01-34755; DCA-87-75) is now within 50 ft. of the northeast corner stake of the proposed location.

Site LA64837 is on the west slope of a low north-south ridge. The site is a ceramic/lithic scatter. There are at least 35 Anasazi plain gray ware sherds and two flakes. The larger sherds are on the upper northeast side of the site. It appears that the lower 10-20 ft. of the site (to the west-southwest) has probably washed downslope. The two flakes are green/gray silty chert tertiary core reduction flakes.

An old logging road goes through the northwest edge of the site and four pieces of purple bottle glass were found on the site.

This site has research potential for early Anasazi (EMIII-PI) land use studies and ceramic analysis. It is therefore eligible for nomination to the National Register.

Recommendations: Archaeological clearance is recommended with the stipulation that all well construction and reclamation near site LA64837 be monitored.

#### REFERENCES

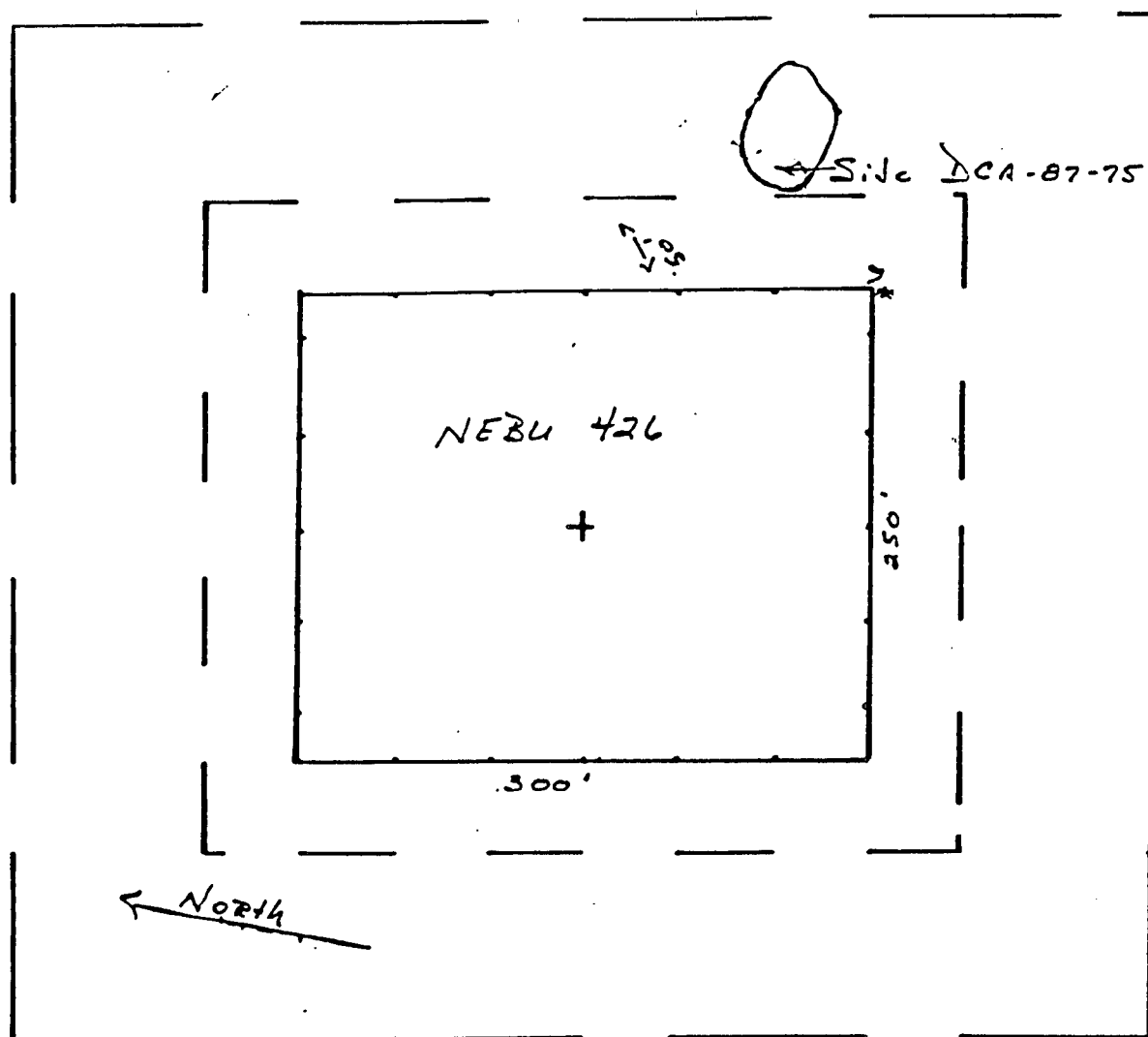
Moore, Roger A.

- 1987 "An archaeological survey of seven well locations and combined access road/pipeline right of ways around Navajo Reservoir in San Juan and Rio Arriba Counties, New Mexico." Division of Conservation Archaeology Technical Report No. 1211

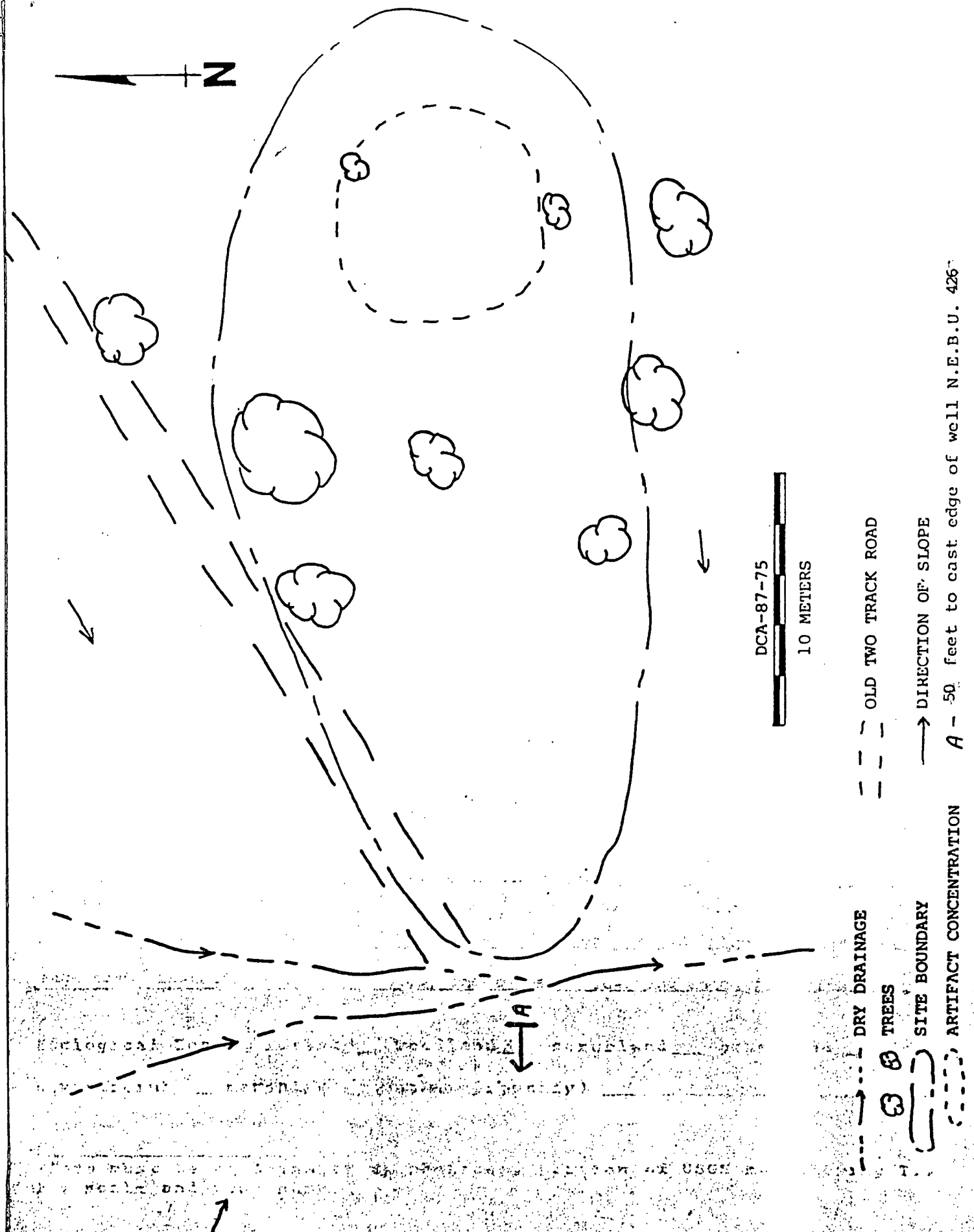
Whitten, Penelope and Alan C. Reed

- 1980 "An archaeological survey of 14 proposed well locations and associated access roads in San Juan County, New Mexico. San Juan County Archaeological Research Center and Library, Division of Conservation Archaeology, Contributions to Anthropology Series No. 313. DCA Project No. 79-80-C.

## Relationship of Site to well NEBU 426









# MOORE ANTHROPOLOGICAL RESEARCH

P.O. Box 1156, Aztec, New Mexico 87410

(505) 334-6675

Peggy Gaudy  
Bureau of Land Management  
1235 La Plata Highway  
Farmington, New Mexico 87401

October 2, 1989

Dear Ms. Gaudy:

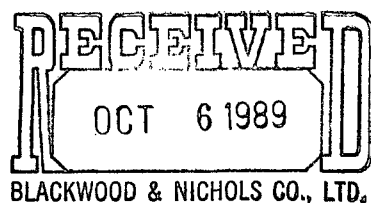
This letter serves as an addendum to Moore Anthropological Report 89-41B, regarding well Northeast Blanco Unit 426. This well has been restaked for the 4th time at the footages 1740' F/SL, 740' F/WL, T31N, R6W, Sec. 6. These are the same footages as the second staking of the proposed location which was then named the Northeast Blanco Unit 209 (D.C.A. Technical Report No. 1211, Roger A. Moore, August 1987). (Please note that these footages as mentioned in M.A.R. Technical Report No. 89-41B were listed incorrectly as 1739' F/SL, 749' F/WL due to a typo.) As this area has now been surveyed twice and site LA64837 (NM-01-34755; DCA-87-75) will be 125 ft. from the newly staked location, archaeological clearance is recommended.

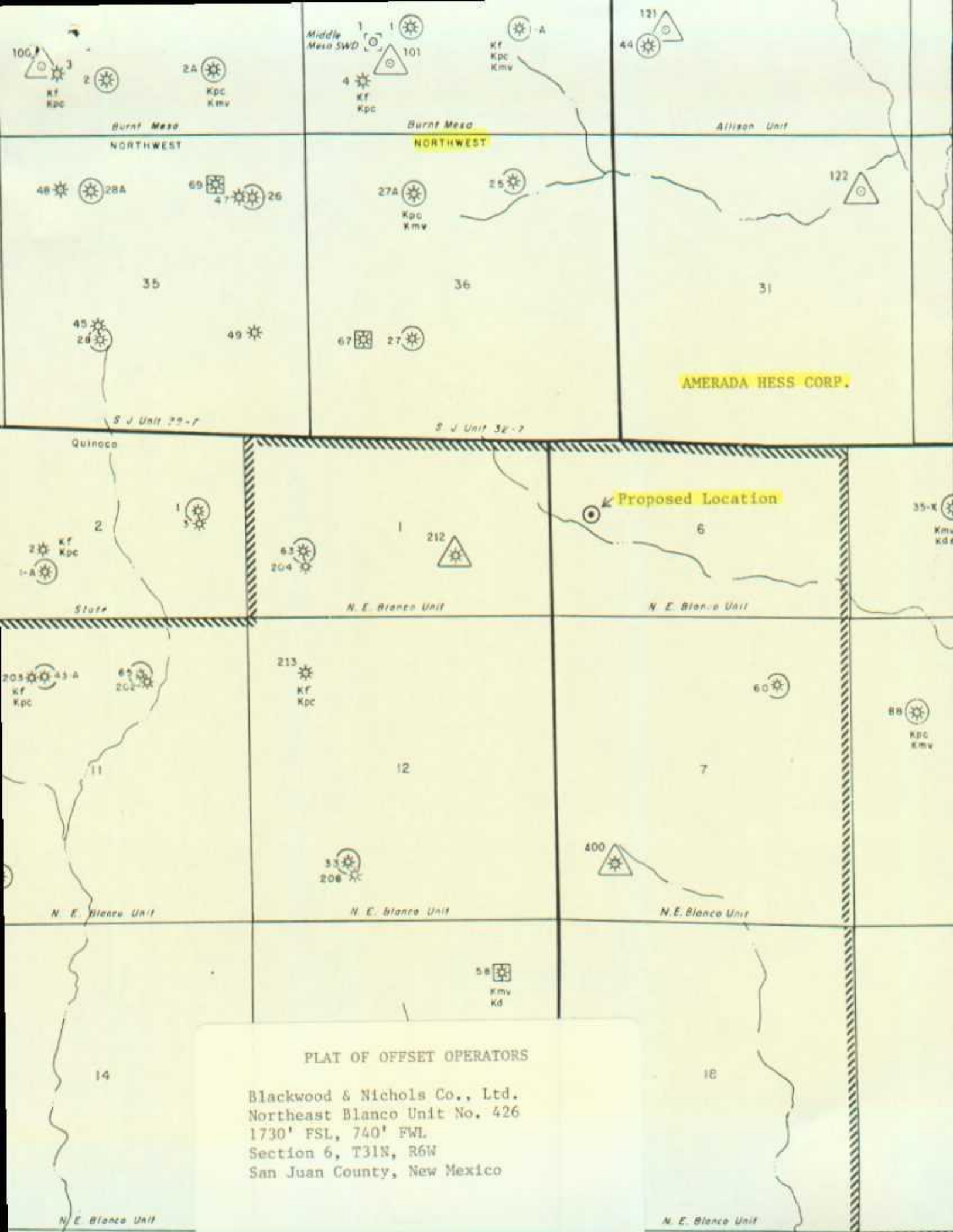
If you have any further questions regarding this well or the reports please feel free to contact us and we will do our best to be of service.

Sincerely,

Susan K. Moore

CC: Jim Abbey, Blackwood and Nichols Co., Ltd.





BLACKWOOD & NICHOLS CO., LTD.  
P.O. BOX 1237  
DURANGO, COLORADO 81302-1237  
(303) 247-0728

RECEIVED  
OCT 10 1989  
OIL CONSERVATION DIV.  
SANTA FE

October 4, 1989

Mr. William LeMay  
New Mexico Oil Conservation Division  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Re: Nonstandard Gas Well Location  
Northeast Blanco Unit Well No. 426  
1730' FSL, 740' FWL  
Section 6, T31N, R6W  
San Juan County, New Mexico

Dear Mr. LeMay:

Blackwood & Nichols Co., Ltd. requests administrative approval of an exception to the footage requirements of Rule 7, R-8768, for the subject well located in the Basin Fruitland Coal pool.

This is the third staking of a gas well in this quarter section as explained below. The requested exception for the No. 426 well is 1730' FSL and 740' FWL, Section 6, T31N, R7W, for a nonstandard location. It is necessary to avoid archaeological sites and topography concerns.

In 1980 the Northeast Blanco Unit No. 209, a Fruitland-Pictured Cliffs well, was proposed and staked at 1850' FSL and 790' FWL. This well was not drilled and then in 1987 was restaked at 1730' FSL and 740' FWL to avoid archaeological sites at the original footages. The APD for the No. 209 well was approved by the Bureau of Land Management on September 22, 1987, but then rescinded on November 6, 1987.

Recently the well location was restaked and named the No. 426, a Basin Fruitland Coal well. Attached are copies of C-102, Vicinity map, the archaeological survey, and plat of offset Operators for your review.

A copy of this application is being submitted to the offset Operators by certified mail with a request that they furnish your Santa Fe office with a Waiver of Objection and return one copy to Blackwood & Nichols.

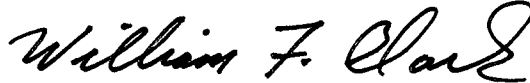
NMOCD, NEBU #426  
October 4, 1989

p. 2

Please process this application as soon as possible. Thank you for your cooperation in this matter.

Sincerely,

BLACKWOOD & NICHOLS CO., LTD.



William F. Clark  
Operations Manager

Attachments

cc: NMOCD, Aztec Office  
Northwest Pipeline Corp. - Farmington, NM  
Amerada Hess - Tulsa, OK

WAIVER:

\_\_\_\_\_ hereby waives objection to  
Blackwood & Nichols Co., Ltd.'s application for an unorthodox  
location for their NEBU No. 426 as proposed above.

By: \_\_\_\_\_ Date: \_\_\_\_\_

BLACKWOOD & NICHOLS CO., LTD.

P.O. BOX 1237

DURANGO, COLORADO 81302-1237

(303) 247-0728

October 4, 1989

Amerada Hess Corporation  
P. O. Box 2040  
Tulsa, Oklahoma 74102

Northwest Pipeline Company  
P. O. Box 4289  
Farmington, New Mexico 87499-4289

Re: Unorthodox Gas Well Location  
Northeast Blanco Unit Well No. 426  
1730' FSL, 740' FWL  
Section 6, T31N, R6W  
San Juan County, New Mexico


Gentlemen:

Enclosed is a copy of the referenced request submitted to New Mexico Oil Conservation Division. Please review this material and advise if you have any questions. If the proposed location is of no concern to you, please sign and mail the objection waiver to the Conservation Division and to Blackwood & Nichols' office.

We hope to drill this well in 1989 so your prompt cooperation is greatly appreciated.

Sincerely,

BLACKWOOD & NICHOLS CO., LTD.



William F. Clark  
Operations Manager

CERTIFIED - RETURN RECEIPT REQUESTED

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

PLUG BACK ☐

b. TYPE OF WELL

OIL  
WELL ☐

GAS  
WELL ☒

OTHER

SINGLE  
ZONE ☒

MULTIPLE  
ZONE ☐

2. NAME OF OPERATOR

Blackwood & Nichols Co., Ltd.

3. ADDRESS OF OPERATOR

P. O. Box 1237, Durango, CO 81302

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*

At surface

1730' FSL, 740' FWL

At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

18 miles SE of Ignacio, Colorado

16. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any)

910'

18. NO. OF ACRES IN LEASE

2591.89

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

351.89

18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

N/A

19. PROPOSED DEPTH

3300

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

6419' GL

22. APPROX. DATE WORK WILL START\*

November 30, 1989

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	9-5/8"	36#	300'	207 cf/circulate to surface
8-3/4"	7"	23#	3160'	744 cf/circulate to surface
6-1/4"	5-1/2" or 4-1/2"	17# or 11.6#	3060' - 3300'	30 cf/circulate to liner top

Formerly the NEBU #209 location and access road were cleared in August, 1987.

Propose to spud in the San Jose formation. Will drill a 12-1/4" surface hole to a TD of 300'. Surface casing will be run and cemented with cement returns to surface. WOC 12 hours. Test to 600 psi/30 minutes. Drill an 8-3/4" hole to a TD of 3160' using fresh water mud. No poisonous gasses or abnormal pressures are anticipated. Run intermediate casing and cement with cement returns to surface. WOC 12 hours. Test to 1500 psi/30 minutes. Drill a 6-1/4" hole to a TD of 3300', using water and air. Run a mudlogging unit while drilling this interval. Run the production liner. A 4-1/2" liner will be cemented if the well's natural flow capacity indicates the need for fracture stimulation.

Surface ownership is Bureau of Land Management.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

William F. Clark

TITLE Operations Manager

DATE September 26, 1989

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions On Reverse Side

Submit to Appropriate  
District Office  
State Lease - 4 copies  
Fee Lease - 3 copies

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

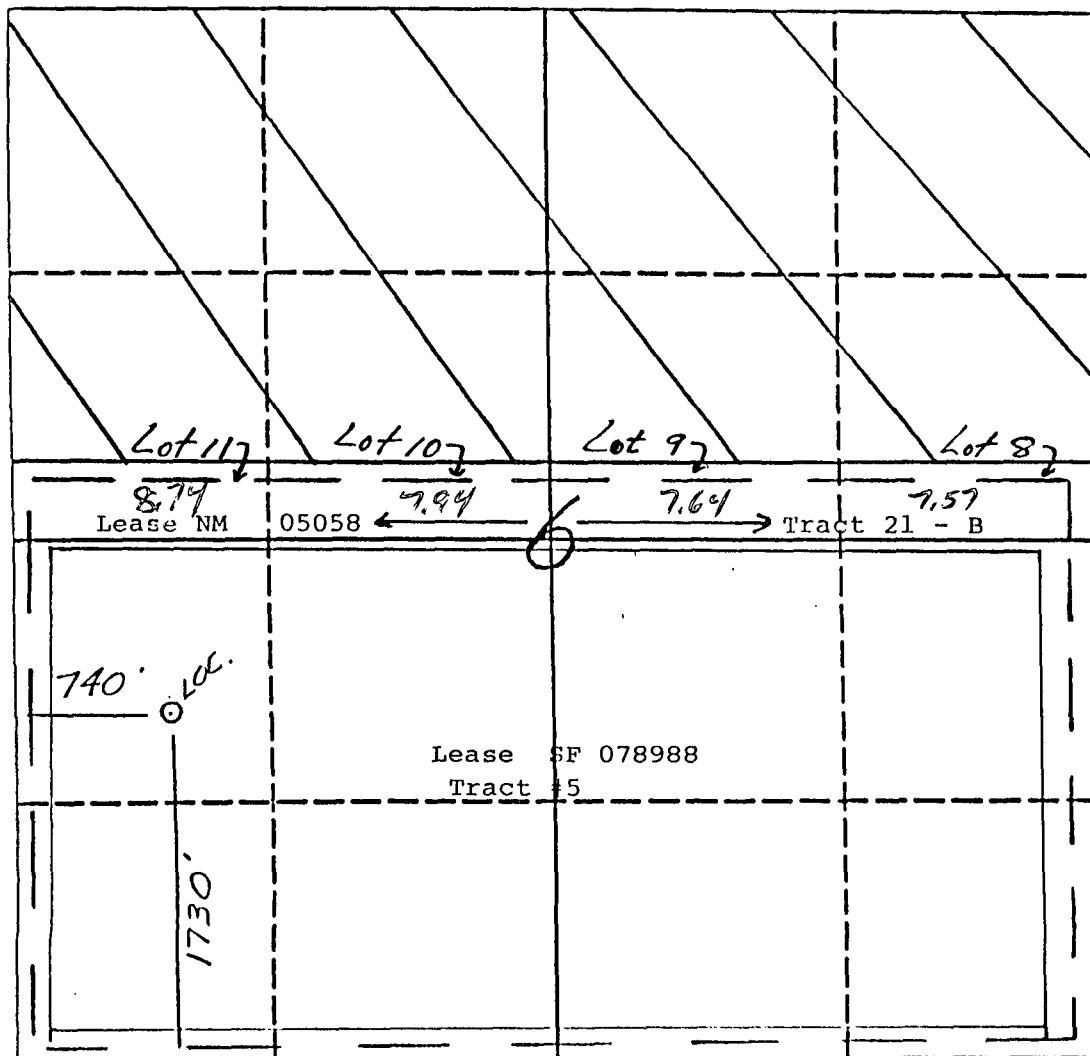
DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator Blackwood & Nichols Co., LTD.			Lease Northeast Blanco Unit		Well No. 426
Unit Letter L	Section 6	Township 31 North	Range 6 West	County San Juan	
Actual Footage Location of Well: 1730 feet from the South line and 740 feet from the West line					
Ground level Elev. 6419'	Producing Formation Fruitland Coal		Pool Basin Fruitland Coal	Dedicated Acreage: 351.89 Acres	
<p>1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.</p> <p>2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).</p> <p>3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If answer is "yes" type of consolidation Unitization</p> <p>If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)</p> <p>No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.</p>					



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

*William F. Clark*  
Signature

William F. Clark  
Printed Name

Operations Manager  
Position

Blackwood & Nichols  
Company

August 9, 1989  
Date

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

*Neale C. Edwards*  
Date Surveyed  
Signature and Seal of Professional Surveyor

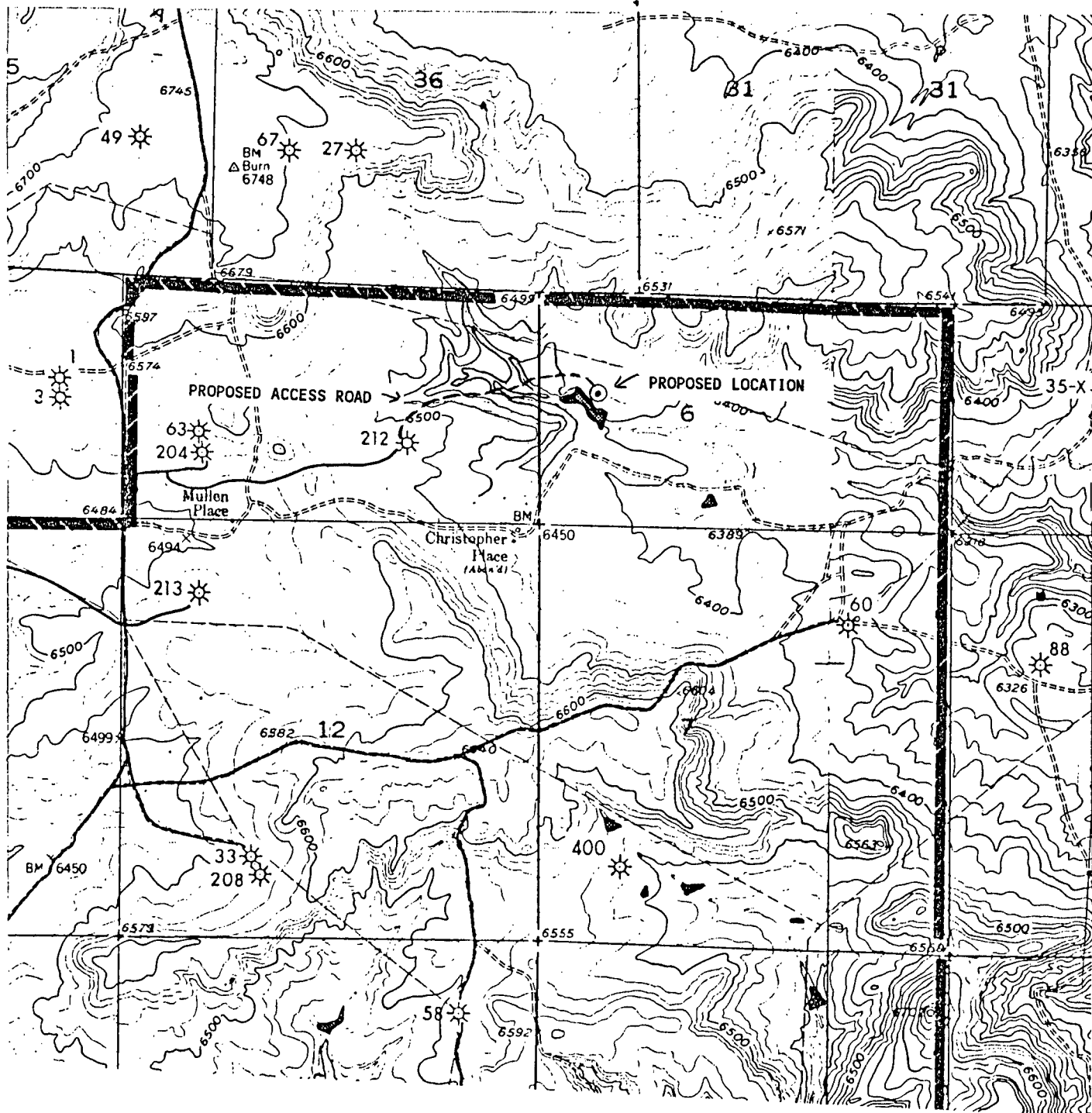
8-7-89  
Professional Surveyor

Certificate No.

6857



R6W



### VICINITY MAP

Blackwood & Nichols Co., Ltd.  
Northeast Blanco Unit No. 426  
1730' FSL, 740' FWL  
Section 6, T31N, R6W  
San Juan County, New Mexico

*30 day waiting period*

**BLACKWOOD & NICHOLS CO., LTD.**

P.O. BOX 1237

DURANGO, COLORADO 81302-1237

(303) 247-0728

December 11, 1989

Mr. William LeMay  
New Mexico Oil Conservation Division  
P. O. Box 2088  
Santa Fe, New Mexico 87501

*Received 12/14/89  
Mfr from 1/15/90*

Re: Non-Standard Proration Unit  
Northeast Blanco Unit Well No. 426  
1730' FSL, 740' FWL  
Section 6, T31N, R6W, San Juan County, NM  
Dedicated Acreage: 351.89 Acres (S/2)

Dear Mr. LeMay:

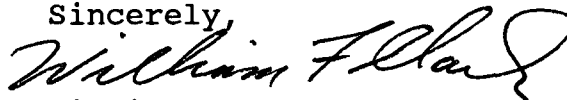
Blackwood & Nichols Co., Ltd. requests administrative approval to produce the above referenced well as a non-standard proration unit. The dedicated acreage includes the south half of Section 6 and Lots 8, 9, 10, and 11 (approximately 31.89 acres) as shown on the attached C-102.

Special Rule for the Basin Fruitland Coal Gas Pool, number 4, allows the spacing unit to be made up of two quarter sections. The referenced well, to insure complete and reasonable acreage utilization, includes the four lots which make up the North 1/2 of Section 6. Currently there are no wells in Section 6, T31N, R6W. However, in April, 1981, the Oil Conservation Division issued Order R-6635 which approved the SW and SE of Section 6 as non-standard units for the Fruitland-Pictured Cliff Pool, see attached. Hopefully this matter can be handled administratively.

Our records show Northwest Pipeline Corp. and Amerada Hess to be offset operators. A copy of this application is being submitted to the them by certified mail with a request that they furnish your Santa Fe office with a Waiver of Objection and return one copy to Blackwood & Nichols within thirty days.

Please process this application as soon as possible. Thank you for your cooperation in this matter.

Sincerely,



William F. Clark  
Operations Manager

Attachments

cc: NMOCD, Aztec Office  
Northwest Pipeline Corp. - Farmington, NM  
Amerada Hess - Tulsa, OK

WAIVER:

\_\_\_\_\_ hereby waives objection to Blackwood & Nichols Co., Ltd.'s application for a non-standard proration unit for the Northeast Blanco Unit #426 as proposed above.

By: \_\_\_\_\_

Date: \_\_\_\_\_

Unit to Appropriate  
District Office  
State Lease - 4 copies  
Fee Lease - 3 copies

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised 1-1-89

OIL CONSERVATION DIVISION  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

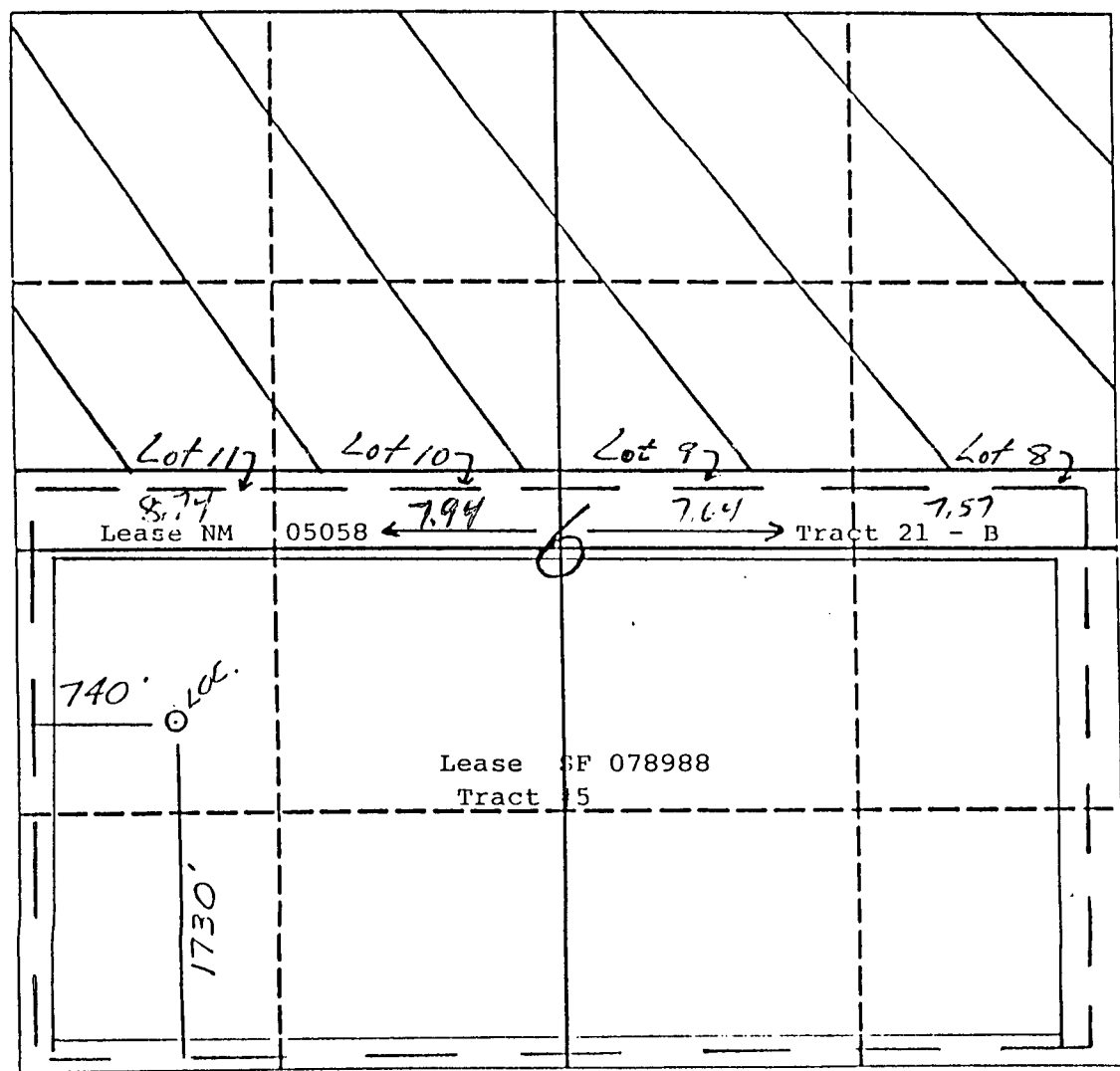
DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT  
All Distances must be from the outer boundaries of the section

Operator Blackwood & Nichols Co., LTD.		Lease Northeast Blanco Unit		Well No. 426
Unit Letter L	Section 6	Township 31 North	Range 6 West NMPM	County San Juan
Actual Footage Location of Well: 1730 feet from the South line and 740 feet from the West line				
Ground level Elev. 6419'	Producing Formation Fruitland Coal	Pool Basin Fruitland Coal	Dedicated Acreage: 351.89 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?  
☒ Yes ☐ No If answer is "yes" type of consolidation Unitization  
If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)  
No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

*William F. Clark*  
Signature

William F. Clark  
Printed Name

Operations Manager  
Position

Blackwood & Nichols  
Company

August 9, 1989  
Date

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes, actual surveys made by me or under supervision, and that the same is true correct to the best of my knowledge and belief.

8-7-89  
Date Surveyed

Neale C. Edwards  
Signature & Seal of Professional Surveyor

6857  
Certificate No.

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
DIVISION FOR THE PURPOSE OF  
CONSIDERING:

CASE NO. 7187  
Order No. R-6635

APPLICATION OF BLACKWOOD & NICHOLS  
CO., LTD. FOR FOUR NON-STANDARD  
PRORATION UNITS, SAN JUAN COUNTY,  
NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on March 11, 1981, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 7th day of April, 1981, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Blackwood & Nichols Co., Ltd., seeks approval of the following four Fruitland and Pictured Cliffs non-standard gas proration units:

a 185.68-acre unit comprising the SW/4 of Section 1, Township 31 North, Range 7 West; a 181.4-acre unit comprising the SE/4 of said Section 1; a 176.68-acre unit comprising the SW/4 of Section 6, Township 31 North, Range 6 West; and a 175.21-acre unit comprising the SE/4 of said Section 6, all of said units to be dedicated to wells to be drilled at standard locations thereon.

(3) That the entire non-standard proration units may reasonably be presumed productive of gas from the Fruitland and Pictured Cliffs formations and that each non-standard gas

proration unit can be efficiently and economically drained and developed by the aforesaid wells.

(4) That approval of the subject application will afford the applicant the opportunity to produce his just and equitable share of the gas in the Fruitland and Pictured Cliffs formations under each of the proposed non-standard proration units, will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, and will otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

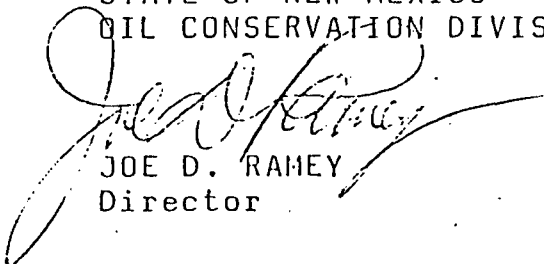
(1) That four Fruitland and Pictured Cliffs non-standard gas proration units in San Juan County, New Mexico, are hereby established and dedicated for the applicant, Blackwood & Nichols Co., Ltd., as follows:

a 185.68-acre unit comprising the SW/4 of Section 1, Township 31 North, Range 7 West; a 181.4-acre unit comprising the SE/4 of said Section 1; a 176.68-acre unit comprising the SW/4 of Section 6, Township 31 North, Range 6 West; and a 175.21-acre unit comprising the SE/4 of said Section 6, all of said units to be dedicated to wells to be drilled at standard locations thereon.

(2) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION



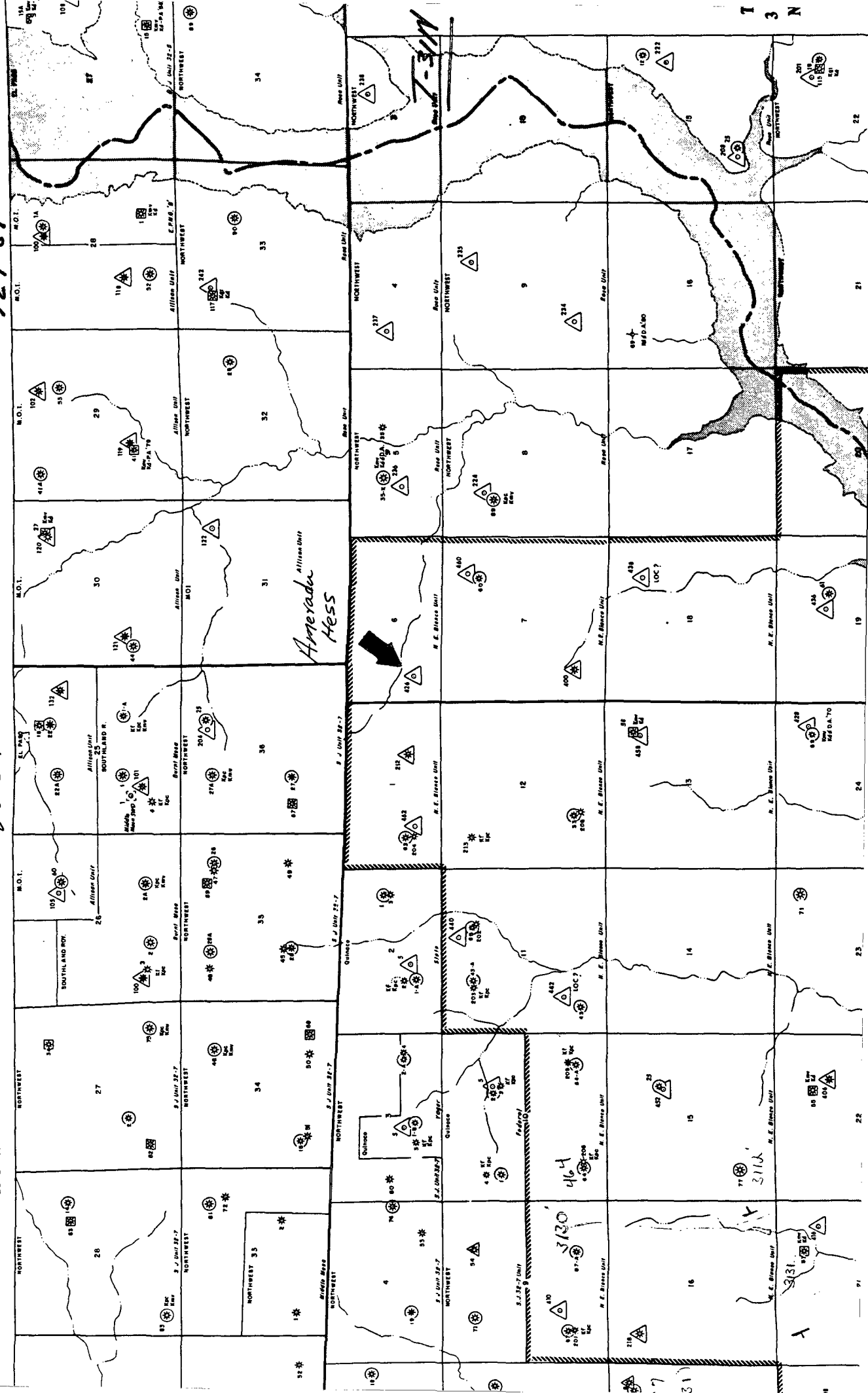
JOE D. RAMEY  
Director

S E A L  
fd/

Well No 426

**R 7 W**

12-1-89 R 6 W





STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION  
AZTEC DISTRICT OFFICE  
RECEIVED

GARREY CARRUTHERS  
GOVERNOR

'89 DEC 15 AM 8 31

11000 MID HAZOS ROAD  
AZTEC, NEW MEXICO 87410  
(505) 334-0170

Date: 12-13-89

ATTN:  
Mike Stagner

Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87504-2088

Re: Proposed MC \_\_\_\_\_  
Proposed DHC \_\_\_\_\_  
Proposed NSL \_\_\_\_\_  
Proposed SWD \_\_\_\_\_  
Proposed WFX \_\_\_\_\_  
Proposed PMX \_\_\_\_\_

Gentlemen:

*NSP*

I have examined the application dated 12-13-89

for the Blackwood & Nichols Co., Ltd. N.E.B.U. #426  
Operator Lease & Well No.

L-6-31N-641 and my recommendations are as follows:  
Unit, S-T-R

Approve administratively if possible

Yours truly,

Ernie Bosch

OIL CONSERVATION DIVISION  
RECEIVED

'89 DEC 21 AM 10 28

BLACKWOOD & NICHOLS CO., LTD.

P.O. BOX 1237

DURANGO, COLORADO 81302-1237

(303) 247-0728

December 11, 1989

Mr. William LeMay  
New Mexico Oil Conservation Division  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Re: Non-Standard Proration Unit  
Northeast Blanco Unit Well No. 426  
1730' FSL, 740' FWL  
Section 6, T31N, R6W, San Juan County, NM  
Dedicated Acreage: 351.89 Acres (S/2)

Dear Mr. LeMay:

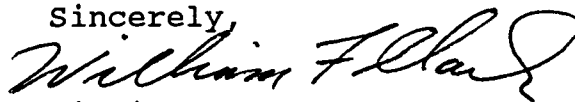
Blackwood & Nichols Co., Ltd. requests administrative approval to produce the above referenced well as a non-standard proration unit. The dedicated acreage includes the south half of Section 6 and Lots 8, 9, 10, and 11 (approximately 31.89 acres) as shown on the attached C-102.

Special Rule for the Basin Fruitland Coal Gas Pool, number 4, allows the spacing unit to be made up of two quarter sections. The referenced well, to insure complete and reasonable acreage utilization, includes the four lots which make up the North 1/2 of Section 6. Currently there are no wells in Section 6, T31N, R6W. However, in April, 1981, the Oil Conservation Division issued Order R-6635 which approved the SW and SE of Section 6 as non-standard units for the Fruitland-Pictured Cliff Pool, see attached. Hopefully this matter can be handled administratively.

Our records show Northwest Pipeline Corp. and Amerada Hess to be offset operators. A copy of this application is being submitted to the them by certified mail with a request that they furnish your Santa Fe office with a Waiver of Objection and return one copy to Blackwood & Nichols within thirty days.

Please process this application as soon as possible. Thank you for your cooperation in this matter.

Sincerely,



William F. Clark  
Operations Manager

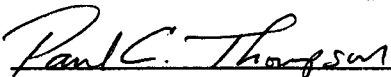
Attachments

cc: NMOCD, Aztec Office  
Northwest Pipeline Corp. - Farmington, NM  
Amerada Hess - Tulsa, OK

WAIVER:

NORTHWEST PIPELINE hereby waives objection to Blackwood & Nichols Co., Ltd.'s application for a non-standard proration unit for the Northeast Blanco Unit #426 as proposed above.

By:



Date: 12/19/89



*Paul*  
*NSP-1590(4)*

**BLACKWOOD & NICHOLS CO., LTD.**

P.O. BOX 1237

DURANGO, COLORADO 81302-1237

(303) 247-0728

November 22, 1989

Mr. Michael E. Stogner  
Oil Conservation Division  
State of New Mexico  
P. O. Box 2088  
Santa Fe, New Mexico 87504

Re: Unorthodox Coal Gas Well Location  
Northeast Blanco Unit No. 426  
1730' FNL, 740' FWL  
L, Section 6, T31N, R6W  
Basin Fruitland Coal Pool  
San Juan County, New Mexico

Dear Mr. Stogner:

The discrepancy you noted between the requested footages and the archaeological report had been addressed by the report provider in an addendum letter to the Bureau of Land Management archaeologist. A copy is attached.

If you have any additional question, please advise.

Sincerely,

BLACKWOOD & NICHOLS CO., LTD.



William F. Clark  
Operations Manager

WFC:1kl

Attachment



# MOORE ANTHROPOLOGICAL RESEARCH

P.O. Box 1156, Aztec, New Mexico 87410

(505) 334-6675

Peggy Gaudy  
Bureau of Land Management  
1235 La Plata Highway  
Farmington, New Mexico 87401

October 2, 1989

Dear Ms. Gaudy:

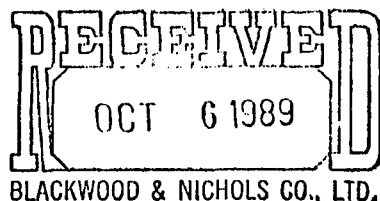
This letter serves as an addendum to Moore Anthropological Report 89-41B, regarding well Northeast Blanco Unit 426. This well has been restaked for the 4th time at the footages 1740' F/SL, 740' F/WL, T31N, R6W, Sec. 6. These are the same footages as the second staking of the proposed location which was then named the Northeast Blanco Unit 209 (D.C.A. Technical Report No. 1211, Roger A. Moore, August 1987). (Please note that these footages as mentioned in M.A.R. Technical Report No. 89-41B were listed incorrectly as 1739' F/SL, 749' F/WL due to a typo.) As this area has now been surveyed twice and site LA64837 (NM-01-34755; DCA-87-75) will be 125 ft. from the newly staked location, archaeological clearance is recommended.

If you have any further questions regarding this well or the reports please feel free to contact us and we will do our best to be of service.

Sincerely,

Susan K. Moore

CC: Jim Abbey, Blackwood and Nichols Co., Ltd.





STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

GARREY CARRUTHERS  
GOVERNOR

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

December 8, 1989

Blackwood & Nichols Co.  
P.O. Box 1237  
Durango, CO 81302

Attention: Al Rector

*RE: Application for an Unorthodox Coal  
Gas Well Location, N.E. Blanco Unit  
Well No. 426; 1730' FSL - 740' FWL,  
L-6-T31N-R6W, Basin Fruitland  
Coal Gas Pool, San Juan County,  
New Mexico.*

Dear Mr. Rector:

Per your letter dated November 22, 1989 with attachments which were faxed to me on December 7, 1989, it appears that there is adequate information to support the unorthodox coal gas well location. However, further review of this filing shows that pursuant to Rules 4, 5, and 6 of Division Order No. R-8768, the proposed dedicated acreage for this well is non-standard and will require authorization as such. Please supplement this filing with a proper application for a non-standard proration unit pursuant to Rule 6 of said Division Order R-8768.

Thank you for your cooperation in this matter.

Sincerely,

A handwritten signature in dark ink, appearing to read "Michael E. Stogner", written over a horizontal line.

Michael E. Stogner  
Petroleum Engineer

MES/ag

cc: Oil Conservation Division - Aztec  
US Bureau of Land Management - Farmington

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

State Lease - 4 copies  
Fee Lease - 3 copies

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

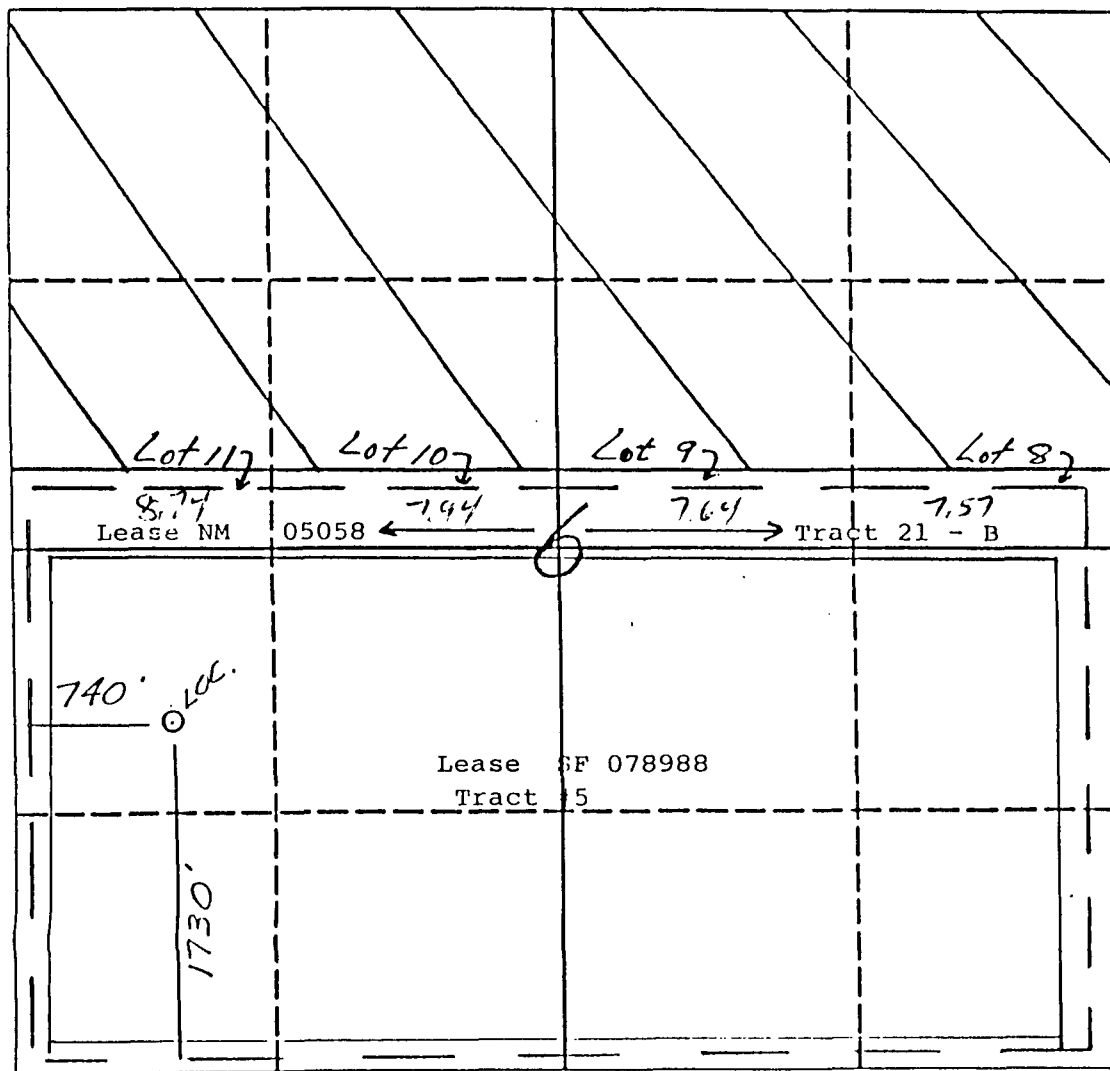
DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator Blackwood & Nichols Co., LTD.		Lease Northeast Blanco Unit		Well No. 426
Unit Letter L	Section 6	Township 31 North	Range 6 West	County San Juan
Actual Footage Location of Well: 1730 feet from the South line and 740 feet from the West line				
Ground level Elev. 6419'	Producing Formation Fruitland Coal	Pool Basin Fruitland Coal	Dedicated Acreage: 351.89 Acres	

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?  
☒ Yes ☐ No If answer is "yes" type of consolidation Unitization  
If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)  
No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

*William F. Clark*  
Signature

William F. Clark  
Printed Name

Operations Manager

Position

Blackwood & Nichols

Company

August 9, 1989

Date

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes, actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

*Neale C. Edwards*  
Date Surveyed  
Neale C. Edwards

Signature & Seal of Professional Surveyor

*Neale C. Edwards*  
Certificate No. 6857



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

GARREY CARRUTHERS  
GOVERNOR

November 14, 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, CO 81302-1237

Attention: William F. Clark,  
Operation Manager

RE: *Application of an Unorthodox Coal  
Gas Well Location; N.E. Blanco Unit  
Well No. 426; 1730' FSL - 740' FWL,  
L-6-T31N-R6W, Basin Fruitland Coal  
Gas Pool, San Juan County, New  
Mexico.*

Dear Mr. Clark:

It appears that the information in the archeological survey does not correspond to your application's cover letter dated October 4, 1989. On page 4 of the archeological survey, the legal description of the subject well for this report shows to be 1850' FSL - 790' FWL of Section 6. The second to last paragraph on that same page indicates that the original well site for the No. 209 well in 1980 was at the same aforementioned location; in 1987 a second location was surveyed at 1739' FSL - 749' FWL. The last sentence in that paragraph shows that this survey is for the same location as the original. On page 6 of the archeological report it is recommended that the 1850' FSL - 790' FWL site be cleared.

Therefore, I am somewhat confused with your application for an unorthodox 1730' FSL - 740' FWL. Please submit any additional information that you feel would serve to help me understand this filing.

Sincerely,

Michael E. Stogner  
Chief Hearing Officer/Engineer

cc: Oil Conservation Division - Aztec  
US Bureau of Land Management - Farmington  
William J. LeMay

4

## PROJECT AREA

### Northeast Blanco Unit 426

Legal Description: T.31 N. R. 6 W, Section 6, S 1/2 NW 1/4 SW 1/4  
T.31 N. R. 7 W, Section 1, S 1/2 NE 1/4 SE 1/4  
NE1/4 SW 1/4 SE 1/4  
Section 6, 1850' F/SL, 790' F/WL

New Mexico Prime Meridian, San Juan County, New Mexico, 6425' Elevation

Map Source: U.S.G.S. 7.5' Burnt Mesa, New Mexico 1954 (Photorevised 1971)

Land Jurisdiction: Bureau of Land Management, Farmington Resource Area

Project Area: 300' X 250' (well pad)  
380' X 340' (well pad with construction zone)  
40' x 2400' (access/pipeline ROW)  
Surveyed Area: 580' x 540' (well pad with construction and buffer zones)  
140' x 2400' (access/pipeline ROW with buffer)  
14.90 Acres

Environment: The proposed well is on a gentle south-facing slope on the north side of a broad gently sloping upland valley (Figure 1). This valley drains eastward into Cottonwood Canyon. An earthen dam has been constructed across the valley a short distance south-southeast of the proposed well pad. The area has a 30% scrubland/woodland mix cover consisting of sagebrush, grassed, snakeweed, annuals, Prickly Pear and Barrel Cactus, juniper and pinyon pine. The woodland is mainly in the north buffer area upslope of the center stake.

Project Description: This is a third staking of a proposed gas well location. The original NEBU 209 was staked at these same footages in 1980 and surveyed by Whitten and Reed (1980), however, the well was never built. In 1987 the area was resurveyed by Moore (1987) again as the NEBU 209 at 1739' F/SL, 749' F/WL and an access road/pipeline right of way was added. At this time site LA64837 (DCA-89-75) was found 125 ft. from the east side of the stake location. This well was also not built. This survey area is at the same footages as Whitten and Reeds survey area for the NEBU 209 but the well is now called the NEBU 426.

From the west side of the well location the combined access road/pipeline ROW goes west and southwestward across three arroyos. The ROW follows an old two-track road parallel to the south side of the last arroyo to the west for about 200 ft. The route then starts to ascend the north slope of a long east-west ridge. At the top of the ridge the ROW parallels the north side of a fence line as it continues west along the ridge top to a fence corner. The ROW goes south-southwest about 175 ft. to well Northeast Blanco Unit 212 (T31N, R7W, Sec.1, 990' F/SL, 1650' F/EL).

**BLACKWOOD & NICHOLS CO., LTD.**  
P.O. BOX 1237  
DURANGO, COLORADO 81302-1237  
(303) 247-0728

**RECEIVED**  
OCT 10 1989  
OIL CONSERVATION DIV.  
SANTA FE

October 4, 1989

Mr. William LeMay  
New Mexico Oil Conservation Division  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Re: Nonstandard Gas Well Location  
Northeast Blanco Unit Well No. 426  
1730' FSL, 740' FWL  
Section 6, T31N, R6W  
San Juan County, New Mexico

Dear Mr. LeMay:

Blackwood & Nichols Co., Ltd. requests administrative approval of an exception to the footage requirements of Rule 7, R-8768, for the subject well located in the Basin Fruitland Coal pool.

This is the third staking of a gas well in this quarter section as explained below. The requested exception for the No. 426 well is 1730' FSL and 740' FWL, Section 6, T31N, R7W, for a nonstandard location. It is necessary to avoid archaeological sites and topography concerns.

In 1980 the Northeast Blanco Unit No. 209, a Fruitland-Pictured Cliffs well, was proposed and staked at 1850' FSL and 790' FWL. This well was not drilled and then in 1987 was restaked at 1730' FSL and 740' FWL to avoid archaeological sites at the original footages. The APD for the No. 209 well was approved by the Bureau of Land Management on September 22, 1987, but then rescinded on November 6, 1987.

Recently the well location was restaked and named the No. 426, a Basin Fruitland Coal well. Attached are copies of C-102, Vicinity map, the archaeological survey, and plat of offset Operators for your review.

A copy of this application is being submitted to the offset Operators by certified mail with a request that they furnish your Santa Fe office with a Waiver of Objection and return one copy to Blackwood & Nichols.