

BLACKWOOD & NICHOLS CO., LTD.

P. O. BOX 1237

DURANGO, COLORADO 81301

(303) 247-0728

April 18, 1980

Mr. Joe D. Ramey, Secretary-Director  
New Mexico Energy Resources Board  
c/o New Mexico Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Re: Administrative Order  
NSL - 1176

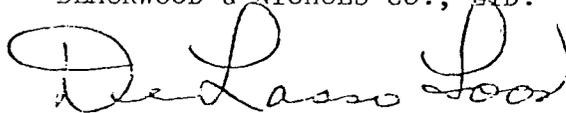
Dear Mr. Ramey:

Due to an archaeological site (DCA-80-18) being found near the original well site of Northeast Blanco Unit Well No. 37A, and in order for an archaeological clearance, it had to be resurveyed.

We are requesting administrative order NSL - 1176 be amended to move the old well site to Northeast Blanco Unit Well No. 37A, located 940' F/SL - 540' F/EL, P-6-30N-7W, San Juan County, New Mexico.

Very truly yours,

BLACKWOOD & NICHOLS CO., LTD.

  
DeLasso Loos, District Manager

Enclosures  
DL:st

cc: New Mexico Oil Conservation Commission  
Aztec, New Mexico



**BLACKWOOD & NICHOLS Co., LTD.**

P. O. BOX 1237

DURANGO, COLORADO 81301

(303) 247-0728

April 18, 1980

*Amendment OK  
No waiting*

Mr. Joe D. Ramey, Secretary-Director  
New Mexico Energy Resources Board  
c/o New Mexico Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Re: Administrative Order  
NSL - 1176

Dear Mr. Ramey:

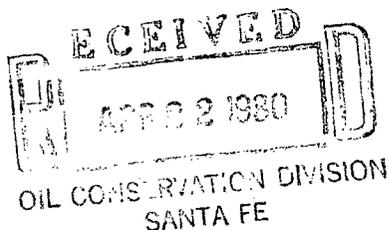
Due to an archaeological site (DCA-80-18) being found near the original well site of Northeast Blanco Unit Well No. 37A, and in order for an archaeological clearance, it had to be resurveyed.

We are requesting administrative order NSL - 1176 be amended to move the old well site to Northeast Blanco Unit Well No. 37A, located 940' F/SL - 540' F/EL, P-6-30N-7W, San Juan County, New Mexico.

Very truly yours,

BLACKWOOD & NICHOLS CO., LTD.

*DeLasso Loos*  
DeLasso Loos, District Manager



Enclosures  
DL:st

cc: New Mexico Oil Conservation Commission  
Aztec, New Mexico

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102  
Supersedes C-128  
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

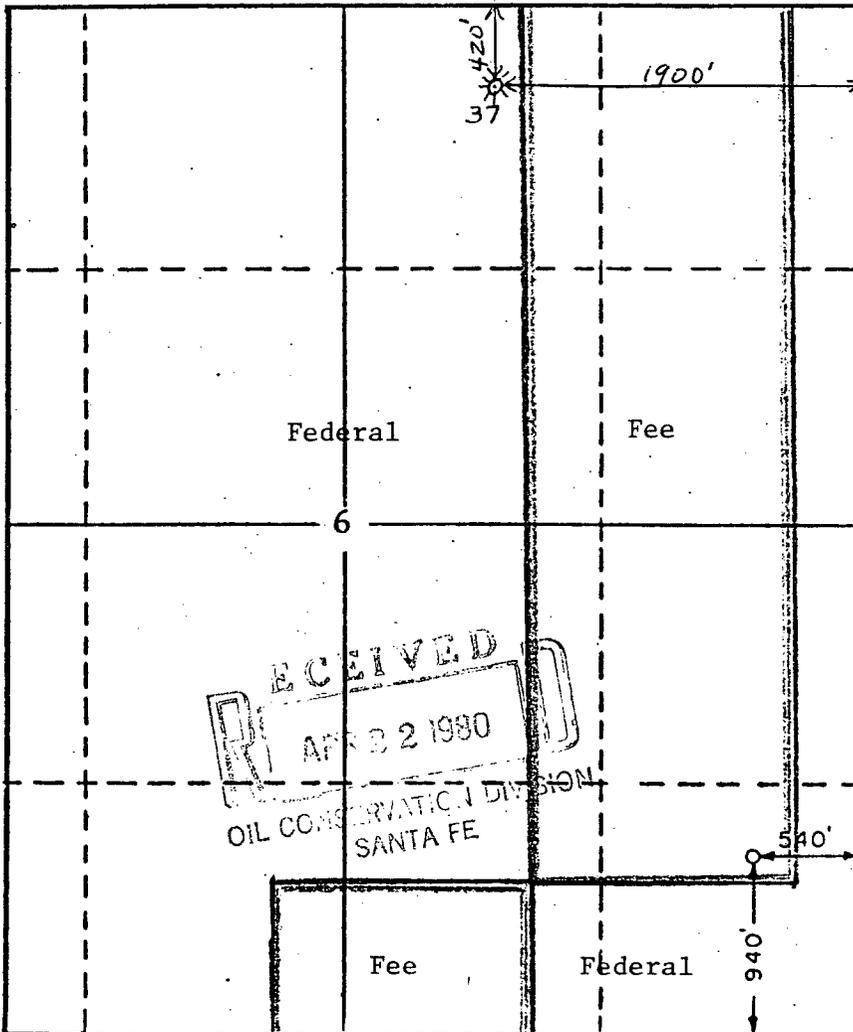
Operator <b>BLACKWOOD &amp; NICHOLS</b>			Lease <b>NORTHEAST BLANCO UNIT</b>			Well No. <b>37-A</b>		
Unit Letter <b>P</b>	Section <b>6</b>	Township <b>30 N.</b>	Range <b>7 W., N.M.P</b>	County <b>M. SAN JUAN</b>				
Actual Footage Location of Well: <b>940</b> feet from the <b>south</b> line and <b>540</b> feet from the <b>east</b> line								
Ground Level Elev. <b>6313 U.G.</b>	Producing Formation <b>Mesaverde</b>		Pool <b>Blanco-Mesaverde</b>			Dedicated Acreage: <b>320</b> Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hachure 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 interests 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 interests, has been approved by the Commission.



CERTIFICATION

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

*DeLasso Loos*

Name  
**DeLasso Loos**

Position  
**District Manager**

Company  
**Blackwood & Nichols Co., Inc.**

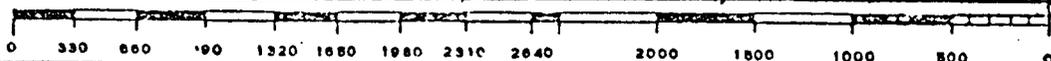
Date  
**4-9-80**

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.

Date Surveyed  
**April 9, 1980**

Registered Professional Engineer and/or Land Surveyor  
*John A. Kroeger*  
**John A. Kroeger, RLS**

Certificate No.  
**1941**



Project No. 16-80-MK

Permit No. 79-NM-183

Archaeological Clearance Survey  
for Three Proposed Well Pads  
and Access Roads in San Juan  
County, New Mexico

for

Blackwood Nichols, Ltd.

Locations

Northeast Blanco Unit 31A  
Northeast Blanco Unit 37A  
Northeast Blanco Unit 45A

by

Donald Clifton  
Assistant Director

Submitted by

Meade F. Kemrer, Ph.D.  
Principal Investigator

DIVISION OF CONSERVATION ARCHAEOLOGY

Contributions to Anthropology Series No. 254

San Juan County Archaeological Research Center and Library

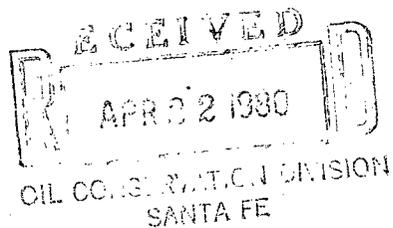
RECEIVED  
APR 22 1980  
OIL CONSERVATION DIVISION  
SANTA FE

April 15, 1980

Abstract

On April 8, 1980 the Division of Conservation Archaeology of the San Juan County Archaeological Research Center and Library at Salmon Ruins conducted an archaeological clearance survey of three proposed well pads and associated access roads for Blackwood Nichols Ltd. The survey area is located on Federal (Bureau of Land Management and Bureau of Reclamation ) administered lands, and New Mexico State Parks and Recreation lands in San Juan County, New Mexico.

One archaeological site DCA-80-18 was recorded. The well stake of Northeast Blanco Unit 37A was moved 150 feet north to avoid the site. The site was flagged. Archaeological clearance is recommended for all three proposed well pads and access roads.



## Introduction

On April 8, 1980 Donald Clifton, Assistant Director with the Division of Conservation Archaeology of the San Juan County Archaeological Research Center and Library at Salmon Ruins, surveyed three well locations and associated access roads for Blackwood Nichols Ltd. of Durango, Colorado.

The survey was requested by Mr. De Lasso Loos, President, of Blackwood Nichols Ltd. on March 27, 1980. Mr. Loos administered the project for Blackwood Nichols Ltd. and Dr. Meade F. Kemrer, Principal Investigator, administered the project for the Division of Conservation Archaeology. The survey was conducted in San Juan County, New Mexico, on lands under the jointly administered jurisdiction of the Bureau of Reclamation, the Bureau of Land Management and the New Mexico State Parks and Recreation Department.

In recognition of the limited, nonrenewable nature of archaeological remains, federal and state governments have enacted legislation that is designed to conserve and protect these resources. The principal federal legislation includes the Antiquities Act of 1906 (PL52-209), the Historic Preservation Act of 1966 (PL89-665), the National Environmental Policy Act of 1969 (PL91-852), the 1971 Executive Order No. 11593, the Archaeological and Historical Conservation Act of 1974 (PL93-291), and the Archaeological Resources Protection Act of 1979 (PL96-95).

In addition, the states of Arizona, New Mexico, Colorado and Utah have enacted laws to ensure compliance with federal legislation and to protect archaeological resources within their jurisdiction. Work undertaken in the course of this project is for purposes of compliance with these statutes.

The survey was conducted under the provisions of Antiquities Act Permit No. 79-NM-183. Mr. Rex Edwards and Mr. Dave Mutz of the Bureau of Reclamation, Durango Office; Mr. Steve Shafran of the U. S. Geological Survey, Farmington Office; and Mr. De Lasso Loos of Blackwood Nichols Ltd. were present during the survey of Northeast Blanco Units 45A and 37A. During the survey of Northeast Blanco Unit 31A Mr. Loos, Mr. Shafran and Mr. Richard Brooks of the New Mexico State Parks and Recreation Department were present.

## Field Procedures

The proposed areas of impact were surveyed on foot. The well locations were investigated using a series of parallel transects spaced 15 meters apart and the access roads were surveyed by walking a single linear transect. All evidence of cultural resources were recorded as well as environmental information.

## General Description

The proposed impacted area is one of high mesas and deep canyons formed by the San Juan and Pine Rivers. All three of the

proposed well locations are situated on the edge of Navajo Reservoir. The entire area is underlain by the San Jose Formation sandstone. Along the drainages, the San Jose Formation is overlain by gravel and cobble terraces of Pleistocene origin. Soils are mainly shallow and vary from sandy to clayey loams.

The vegetation of the area includes juniper (Juniperus sp.), pinyon (Pinus edulis), sagebrush (Artemisia tridentata), rabbit-bush (Chrysothamnus nauseosus), Mormon tea (Ephedra viridis), prickly pear cactus (Opuntia sp.) and various grasses.

#### Northeast Blanco Unit 31A

Legal Description: 1770' F/NL, 10' F/WL, Section 7, T30N, R7W, NMPM, San Juan County, New Mexico

UTM: Zone 13, 4078945N, 267440E at center of stake

Map Source: USGS 7.5' Pine River Quadrangle

Land Jurisdiction: Bureau of Reclamation, Bureau of Land Management, and New Mexico State Parks and Recreation Department

Area Surveyed: 300' x 250' (well pad), no road 1.72 acres

Description: The proposed construction site for Northeast Blanco Unit 31A is located within the confines of a camp ground operated by the New Mexico State Parks and Recreation Department at Navajo Lake. The proposed well pad is situated on the south side of a gravel and cobble river terrace. There is a deep arroyo immediately to the south. Navajo Reservoir is approximately  $\frac{1}{2}$  mile to the southeast of the proposed location. Upslope to the north is a flat area which contains the campground.

The sparse shallow soil is a sandy loam. Vegetation is composed of a heavy cover of juniper and pinyon with rabbitbush and sagebrush also present.

Cultural Resources: None were observed.

Recommendations: Archaeological clearance is recommended.

#### Northeast Blanco Unit 45A

Legal Description: 2550' F/SL, 875' F/EL, Section 5, T30N, R7W, NMPM, San Juan County, New Mexico.

UTM: Zone 13, 408200N, 270700E at center of stake

Map Source: USGS 7.5' Pine River Quadrangle

Land Jurisdiction: Bureau of Reclamation and Bureau of Land Management

Areas Surveyed: 300' x 250' (well pad), 20' x 400' (access road A), and 20' x 1800' (access road B) Total acreage: 2.73 acres

Description: Northeast Blanco Unit 45A is located on a mesa formed by the junction of the San Juan and Pine Rivers. The proposed well location and access road (A) are situated on a narrow exposed sandstone ridge which terminates in a gravel knoll overlooking Navajo Reservoir to the south. To the east and west are wide shallow arroyos which drain into the lake. Proposed access road A follows the ridge and connects to an existing road. A second access road (B) was surveyed because high water in the lake will destroy an existing road. The proposed new road parallels the high water line of the reservoir to connect with an existing road on the low ridge.

The principal vegetation is juniper with pinyon, Mormon tea, sagebrush and various grasses.

Cultural Resources: None were observed.

Recommendations: Archaeological clearance is recommended.

Northeast Blanco Unit 37A

Legal Description: 940' F/SL; 540' F/EL, Section 6, T30N, R7W, NMPM, San Juan County, New Mexico

UTM: Zone 13, 4079760N, 268300 at center of stake

Map Source: USGS 7.5' Pine River Quadrangle

Land Jurisdiction: Bureau of Reclamation and Bureau of Land Management

Area Surveyed: 300' x 250' (well pad), 20' x 200' (access road)  
1.81 acres

Description: Proposed Northeast Blanco Unit 37A is situated on the edge of a high mesa overlooking the Pine River to the west. The proposed well pad is located in a slight depression with a shallow arroyo dissecting the well pad. To the north and south are low ridges. To the east an existing road and a pipeline parallel the proposed well location.

The soil is a sandy loam with areas of exposed gravels and cobbles. Vegetation includes pinyon, juniper, sagebrush, and sparse grasses.

Cultural Resources: A site, DCA-80-18, was recorded within the proposed well pad confines. The site consists of the remains of at least two hearths with associated lithic and ceramic debris. Hearth area #1 contains a concentration of large cobbles with a

basalt hammerstone fragment, several chalcedony secondary and tertiary flakes, a chalcedony core fragment, a large quartzite primary flake, an obsidian biface thinning flake (soft hammer), a basalt core, and a broken mano. Ceramics observed are a brownware paste with crushed rock temper. Small flecks of charcoal and fire cracked rock are eroding out of the hearth. Hearth area #2 contained a few cobbles, an obsidian flake (shatter), a large secondary quartzite flake and several basalt flakes. There are several brownware sherds (a portion of a small jar), a redware sherd, and one plain white slipped sherd. The attached site report gives explicit details of site composition.

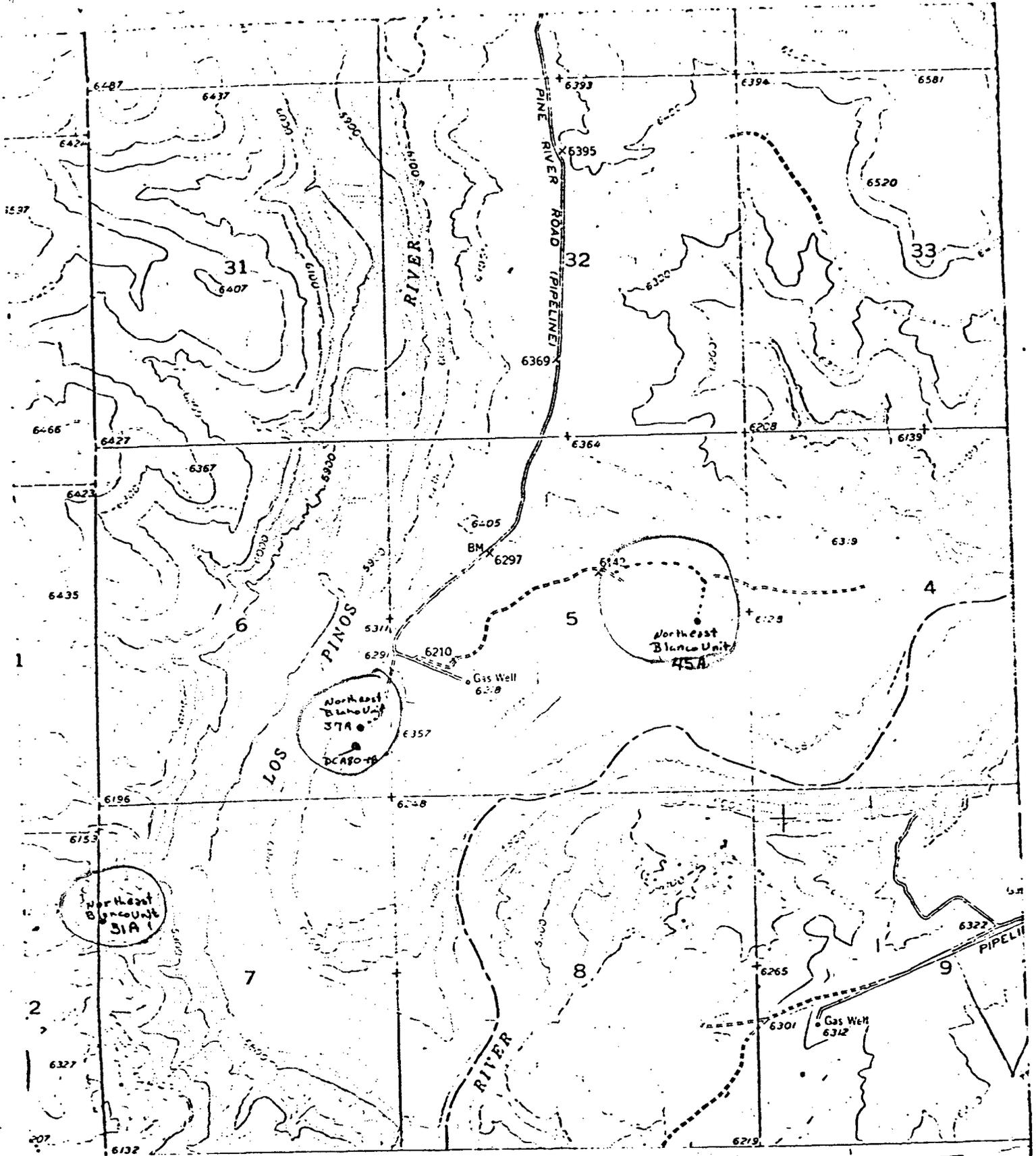
Evaluation of Cultural Resources: DCA-80-18 is a limited activity site of the Rosa Phase, A.D. 700-850. There are several sites attributed to the same period in the immediate vicinity of DCA-80-18 that were recorded and investigated by Dittert et al. (1961). One of the hearths might yield macrobotanical information, and there is a possibility that uneroded cultural deposits are present.

Recommendation: The well stake was moved 150' north to avoid the site. The alternate proposed well pad was thoroughly inspected to ensure that no additional resources would be adversely affected by this relocation. The site was flagged for avoidance.

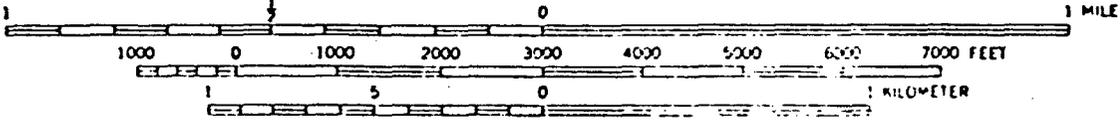
Archaeological clearance is recommended with the stipulation that DCA-80-18 be avoided.

Reference:

Dittert, Alfred E., Jim J. Hester and Frank W. Eddy  
1961 An archaeological survey of the Navajo Reservoir District,  
Northwestern New Mexico. Monographs of the School of  
American Research, No. 23.



SCALE 1:24 000



CONTOUR INTERVAL 40 FEET  
 DATUM IS MEAN SEA LEVEL





File HSL-1176

OIL CONSERVATION COMMISSION  
Cyber DISTRICT

OIL CONSERVATION COMMISSION  
BOX 2088  
SANTA FE, NEW MEXICO

DATE March 31, 1980

RE: Proposed MC \_\_\_\_\_  
Proposed DHC \_\_\_\_\_  
Proposed NSL α \_\_\_\_\_  
Proposed SWD \_\_\_\_\_  
Proposed WFX \_\_\_\_\_  
Proposed PMX \_\_\_\_\_

Gentlemen:

I have examined the application dated March 28, 1980  
for the Blackwood + Michol Co. Ltd. NEBU #37A B-6-30N-7w  
Operator Lease and Well No. Unit, S-T-R

and my recommendations are as follows:

Approve  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Yours very truly,

Frank E. Chang

RECEIVED  
OIL CONSERVATION COMMISSION  
SANTA FE

**BLACKWOOD & NICHOLS CO. LTD.**

P. O. BOX 1237  
DURANGO, COLORADO 81301

(303) 247-0728

March 28, 1980

RECEIVED  
MARCH 31 1980  
OIL CONSERVATION DIVISION  
SANTA FE

*NSL - 1176  
Rule 104 F  
No offset  
Immediate  
Blanco Mesaverde Gas*

Mr. Joe D. Ramey, Secretary-Director  
New Mexico Energy Resources Board  
c/o New Mexico Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Re: Application for non-standard  
location, Northeast Blanco  
Unit No. 37A

Dear Mr. Ramey:

As operator of the Northeast Blanco Unit, we are requesting administrative approval of a non-standard well location to be completed in the Mesaverde Formation.

We intend to drill the Northeast Blanco Unit Well No. 37A, an infill well, located 790' F/SL - 570' F/EL, P-6-30N-7W, San Juan County, New Mexico.

The surface is owned by the United States Bureau of Reclamation; the royalty is fee owned. Due to extreme topographical conditions and proximity to the Navajo Lake, we believe we have surveyed this well site in the most logical location.

All offset properties, are within the bounds of the Northeast Blanco Unit and will present no drainage problem to any offset operator.

Very truly yours,

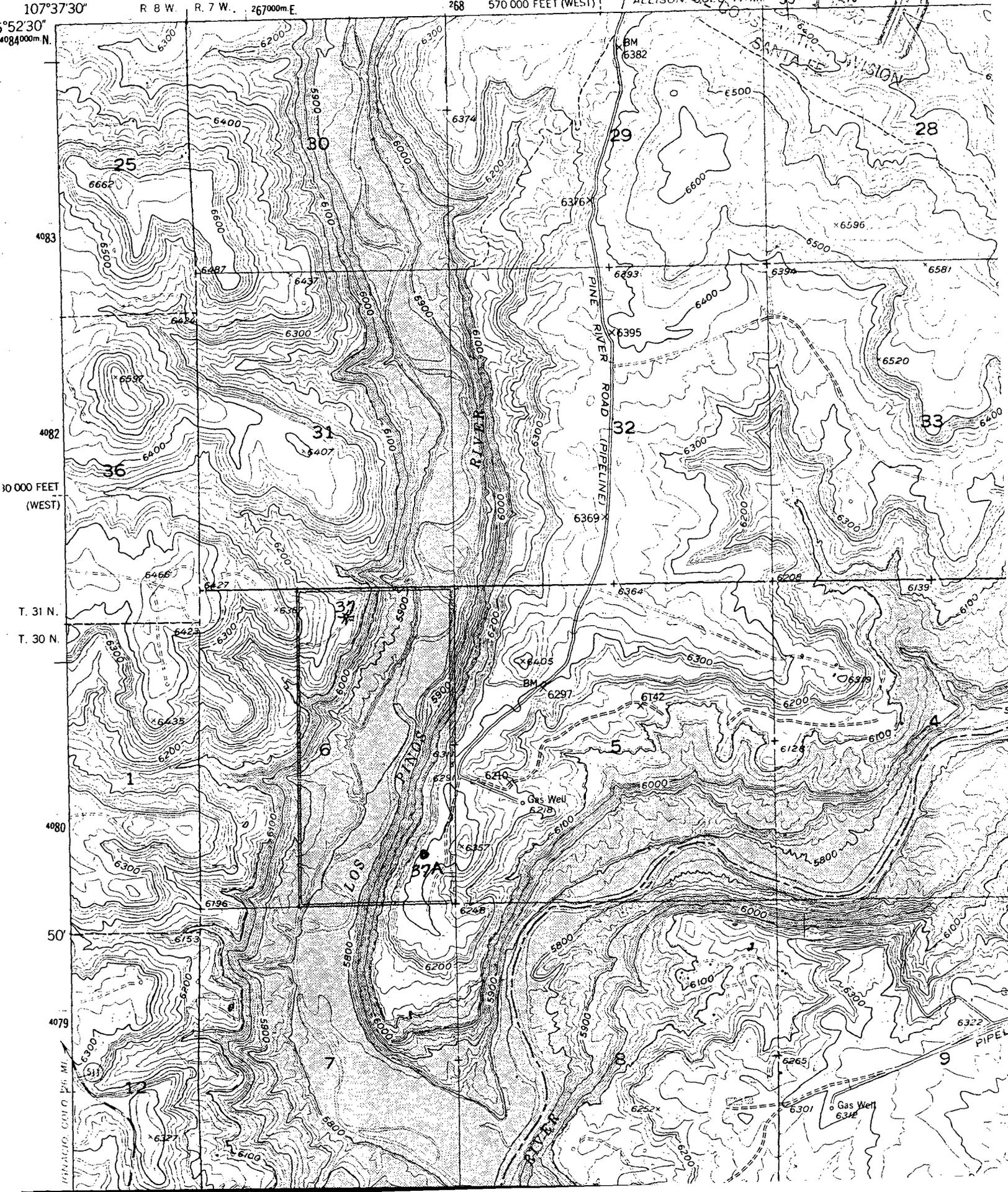
BLACKWOOD & NICHOLS CO., LTD.

*De Lasso Loos*  
DeLasso Loos, District Manager

Attachments  
DL:ew

cc: New Mexico Oil Conservation Commission  
Aztec, New Mexico

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY



IGNACIO, COLO. 27 MI. ALLISON, COLO. 14 MI. 270

107°37'30" R. 8 W. R. 7 W. 267000m E. 268 570 000 FEET (WEST)

38°52'30" 4084000m N.

4083

4082

10 000 FEET (WEST)

T. 31 N.

T. 30 N.

4080

50'

4079

IGNACIO, COLO. 27 MI.

28

25

30

29

33

31

36

32

31A

5

7

8

9

57A

Gas Well 6312

Gas Well 6278

BM 6382

6376

6293

6395

6369

6364

6297

6240

6245

6252

6500

6596

6394

6400

6300

6208

6300

6124

6124

6000

6000

6265

6322

6301

6312

6500

6500

6600

6500

6520

6400

6300

6100

6139

6375

6200

6100

6000

6200

6300

6300

6382

6376

6293

6395

6369

6364

6297

6240

6245

6252

6500

6596

6394

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6208

6300

6124

6124

6000

6000

6265

6322

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6375

6200

6100

6000

6200

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6376

6293

6395

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6364

6297

6240

6245

6252

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6596

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6208

6300

6124

6124

6000

6000

6265

6322

6301

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6500

6500

6600

6500

6520

6400

6300

6100

6139

6375

6200

6100

6000

6200

6300

6300

**NEW MEXICO OIL CONSERVATION COMMISSION**  
**WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102  
 Supersedes C-128  
 Effective 1-1-65

All distances must be from the outer boundaries of the Section.

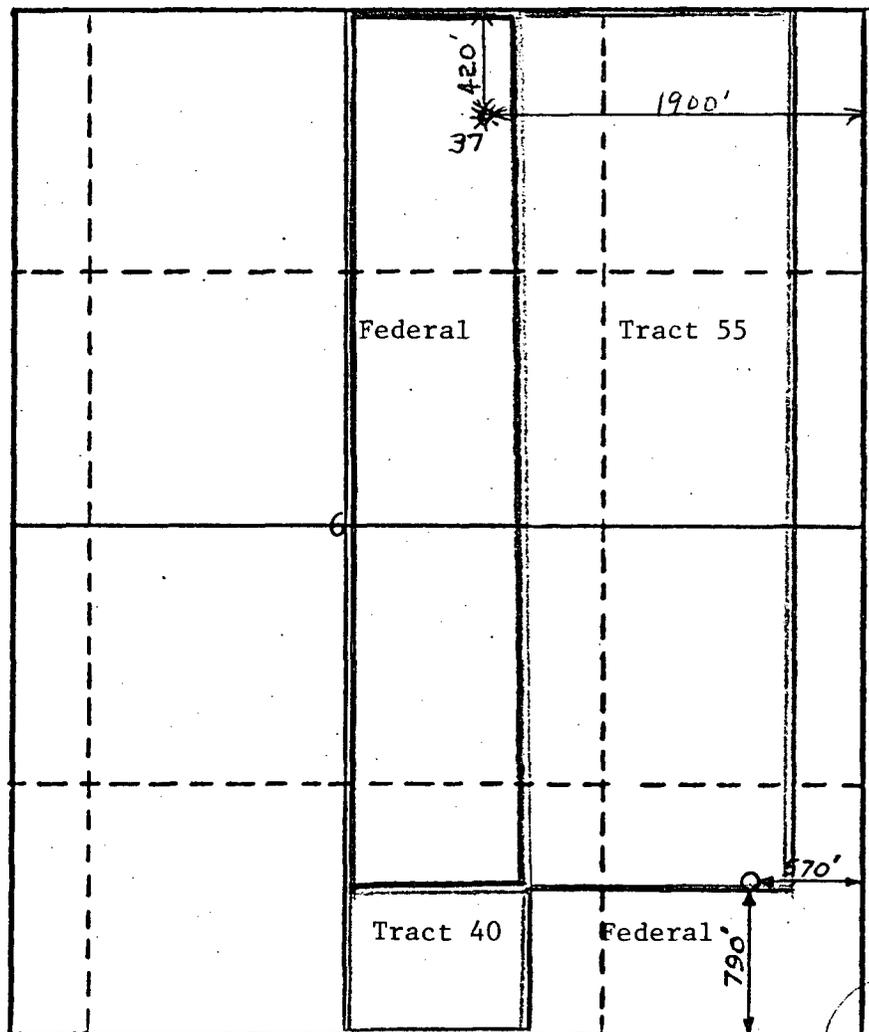
Operator <b>BLACKWOOD &amp; NICHOLS</b>		Lease <b>NORTHEAST BLANCO UNIT</b>		Well No. <b>37-A</b>
Unit Letter <b>P</b>	Section <b>6</b>	Township <b>30 N.</b>	Range <b>7W.N.M.P.M.</b>	County <b>SAN JUAN</b>
Actual Footage Location of Well: <b>790</b> feet from the <b>south</b> line and <b>570</b> feet from the <b>east</b> line				
Ground Level Elev. <b>6313 U.G.</b>	Producing Formation <b>Mesaverde</b>	Pool <b>Blanco-Mesaverde</b>	Dedicated Acreage: <b>320</b> Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure 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 interests 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 interests, has been approved by the Commission.



**CERTIFICATION**

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

DeLasso Loos

Name  
*DeLasso Loos*

Position  
District Manager

Company  
Blackwood & Nichols Co., Ltd.

Date  
January 21, 1980

*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.*

Date Surveyed  
Dec. 6, 1979

Registered Professional Engineer and/or Land Surveyor  
*John A. Kroeger*  
John A. Kroeger, RLS

Certificate No. 1941

