

OIL CONSERVATION DIVISION
RECEIVED

BLACKWOOD & NICHOLS CO. LTD.

P.O. BOX 1237

DURANGO, COLORADO 81302-1237

(303) 247-0728

January 25, 1990

Northwest Pipeline Corp.
3539 E. 30th Street
Farmington, New Mexico 87401

Attention: Paul Thompson

Re: Unorthodox Gas Well Location
Northeast Blanco Unit Well No. 491
1756' FSL, 1442' FEL, Sec. 25, T31N, R7W
Rio Arriba County, New Mexico

Dear Paul:

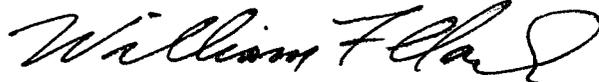
Enclosed are copies of a letter and application Blackwood & Nichols Co., Ltd. has sent to the New Mexico Oil Conservation Division requesting administrative approval of an unorthodox well location for the NEBU Well No. 491.

Please review this material and then sign the waiver of objection and return one copy to Mr. LeMay in Santa Fe and one copy to Blackwood & Nichols' office in Durango. The copy of the application is for your files.

Your cooperation in this matter is greatly appreciated.

Sincerely,

BLACKWOOD & NICHOLS CO., LTD.



William F. Clark
Operations Manager

Attachments

NORTHWEST PIPELINE
CORPORATION

JAN 29 1990

PRODUCTION AND DRILLING

BLACKWOOD & NICHOLS CO., LTD.

P.O. BOX 1237

DURANGO, COLORADO 81302-1237

(303) 247-0728

January 25, 1990

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

Re: Unorthodox Gas Well Location
Northeast Blanco Unit Well No. 491
1756' FSL, 1442' FEL, Sec. 25, T31N, R7W
Rio Arriba County, New Mexico

Dear Mr. LeMay:

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

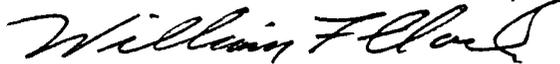
This request is for exception due to topography. A Vicinity Map, Area Map, and C-102 are attached for your reference. Blackwood & Nichols investigated the possibility of a location in the SE/SW but could not fit a location in this area due to an archaeological site (see attached report). An alternate site at a standard footage location was picked in the SW/SE quarter. This site was refused by the BLM due to its proximity to an archaeological site. The subject location was selected as the second alternative and should receive clearance from the regulatory agencies. This location is 2100' from the nearest Fruitland Coal well proposed by Blackwood & Nichols Co., Ltd. and is 2200' from the nearest offset operated property line.

The south half of Section 25, T31N, R7W, will be dedicated to this well. Northwest Pipeline operates the offset proration units and has been notified of this request by certified mail.

Your prompt consideration of this request is appreciated.

Sincerely,

BLACKWOOD & NICHOLS CO., LTD.



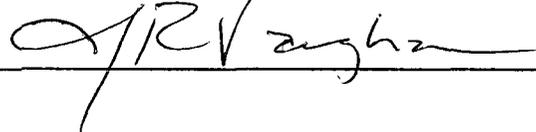
William F. Clark
Operations Manager

Attachments

cc: NMOCD, Aztec Office

WAIVER:

NORTHWEST PIPELINE hereby waives objection to Blackwood & Nichols Co., Ltd.'s application for an unorthodox location for their NEBU No. 489 as proposed above.

By: 

Date: 2-11-90

OIL CONSERVATION DIVISION
RECEIVED

'90 JAN 30 AM 10 16

BLACKWOOD & NICHOLS CO., LTD.

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

(303) 247-0728

January 25, 1990

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

Re: Unorthodox Gas Well Location
Northeast Blanco Unit Well No. 491
1756' FSL, 1442' FEL, Sec. 25, T31N, R7W
~~Rio Arriba~~ County, New Mexico

Dear Mr. LeMay:

San Juan

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William F. Clark

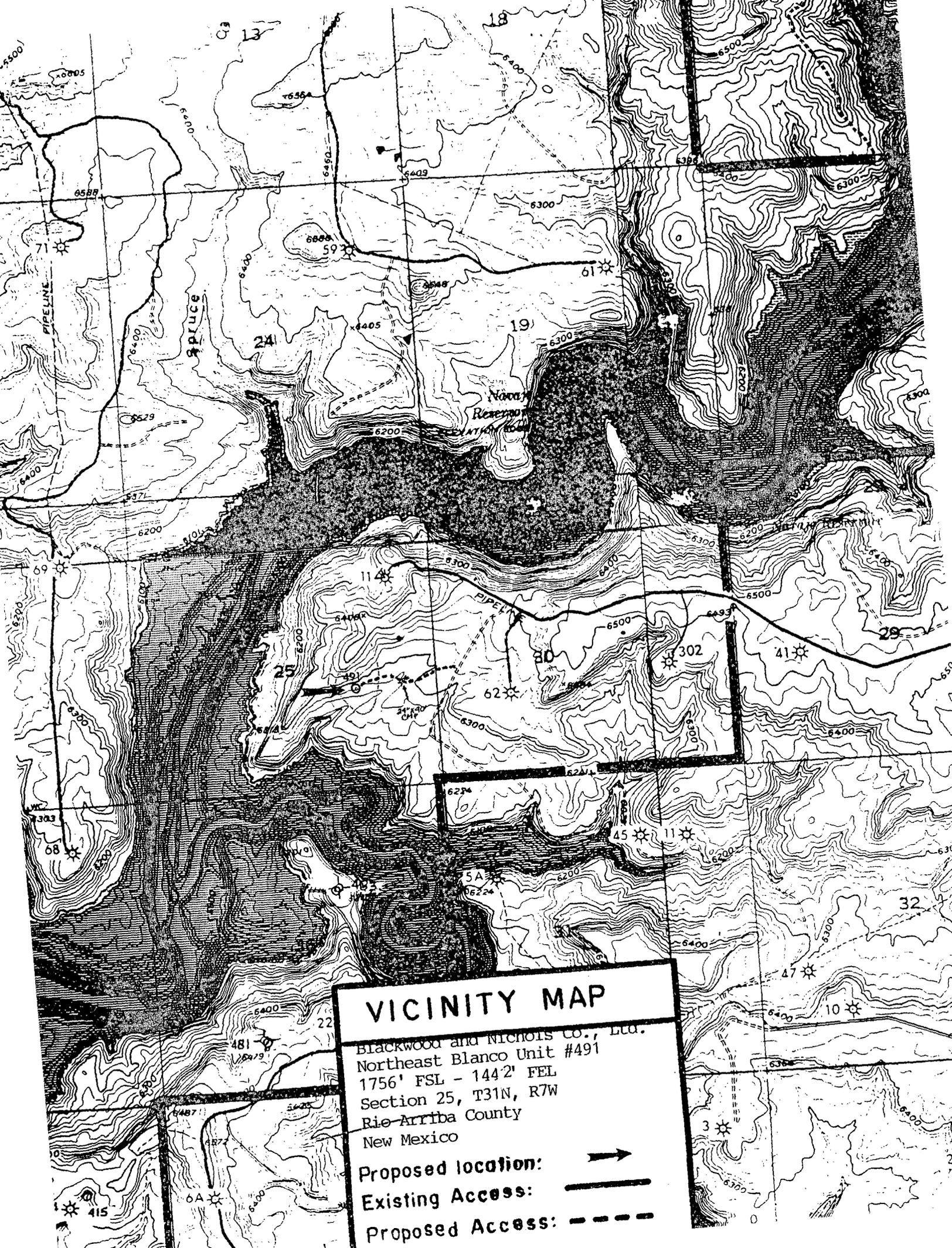
William F. Clark
Operations Manager

Attachments
cc: NMOCD, Aztec Office

WAIVER:

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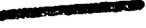
By: _____ Date: _____



VICINITY MAP

Blackwood and Nichols Co., Ltd.
Northeast Blanco Unit #491
1756' FSL - 1442' FEL
Section 25, T31N, R7W
Rio Arriba County
New Mexico

Proposed location: 

Existing Access: 

Proposed Access: 

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

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

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

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

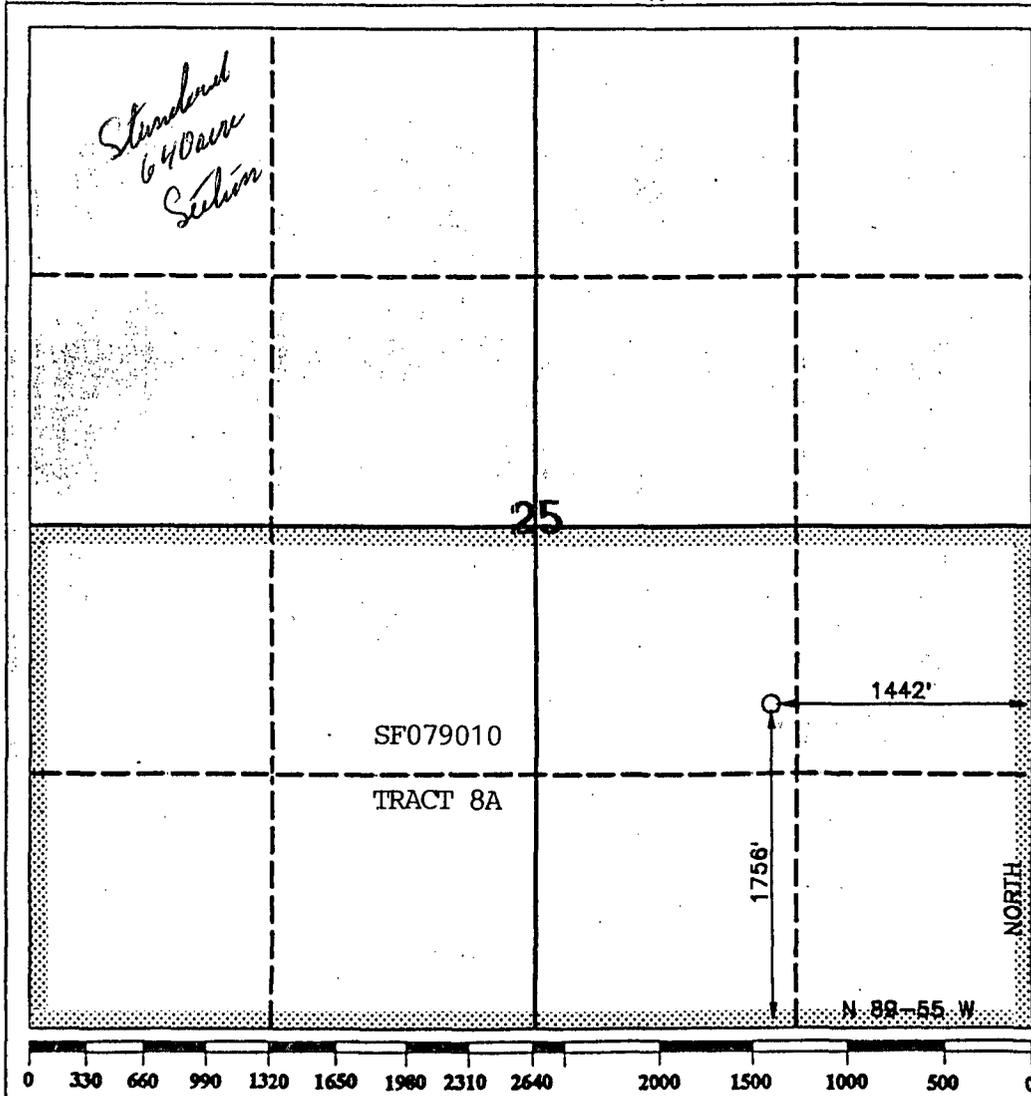
| | | | | |
|--------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|-------------------------------------|----------------------------------------|------------------------------------|
| Operator BLACKWOOD & NICHOLS CO. | | Lease N.E.B.U. | | Well No. 491 |
| Unit Letter J | Section 25 | Township T.31 N. | Range R.7 W. | County RIO ARRIBA COUNTY |
| Actual Footage Location of Well: 1756 feet from the SOUTH line and 1442 feet from the EAST line | | | | |
| Ground level Elev. 6268 | Producing Formation Fruitland Coal | Pool Basin Fruitland Coal | Dedicated Acreage: 320 Acres | |

- Outline the acreage dedicated to the subject well by colored pencil or hachure 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 NA

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.

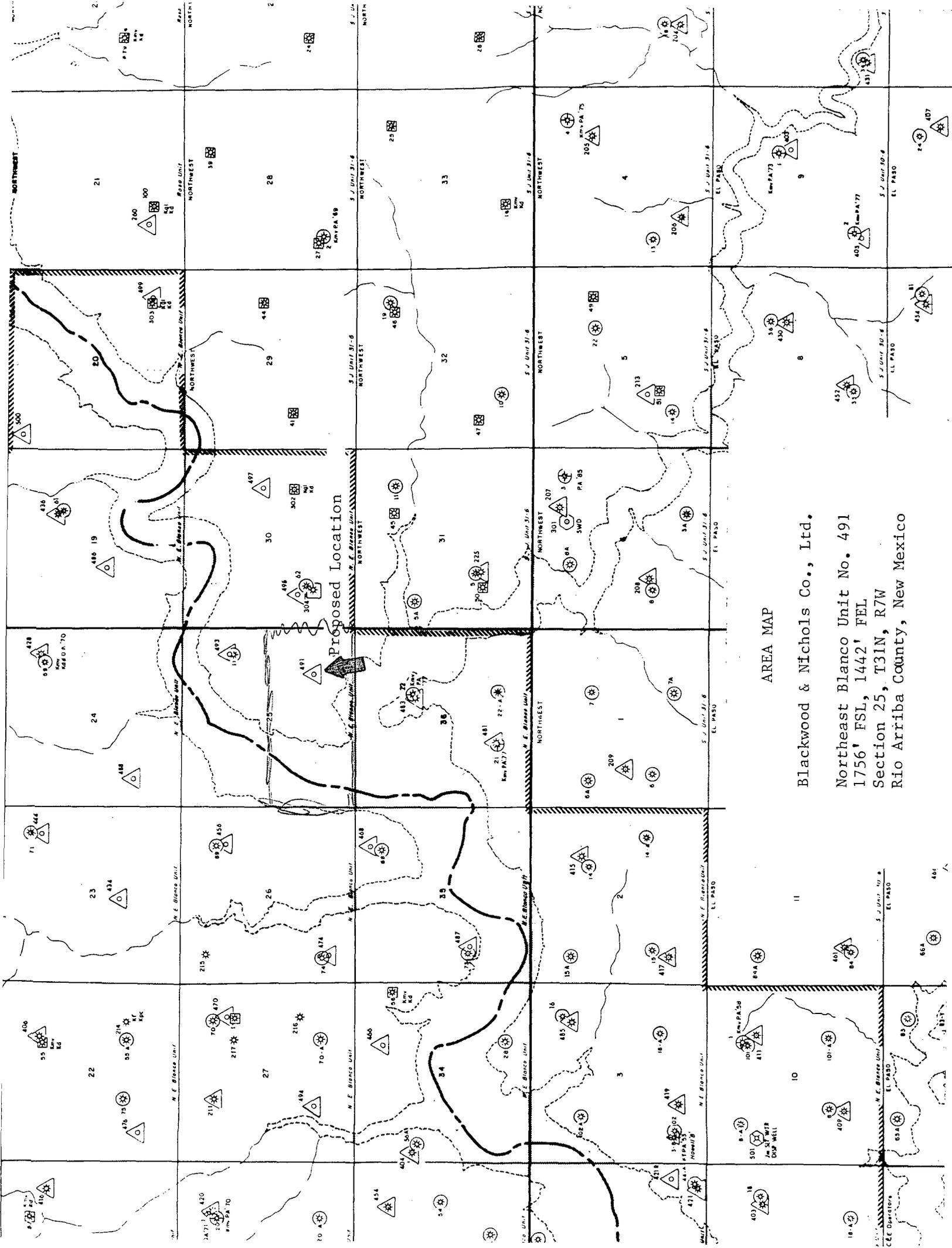


OPERATOR CERTIFICATION
 I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature: *William F. Clark*
 Printed Name: William F. Clark
 Position: Operations Manager
 Company: Blackwood & Nichols Co., Lt
 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.

Date Surveyed: JANUARY 10, 1998
 Signature & Seal of Professional Surveyor: *R. Edward Daggett*
 Certificate No. 9679
 Registered Professional Land Surveyor



Proposed Location

AREA MAP

Blackwood & Nichols Co., Ltd.

Northeast Blanco Unit No. 491

1756' FSL, 1442' FEL

Section 25, T31N, R7W

Rio Arriba County, New Mexico



STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION RECEIVED
AZTEC DISTRICT OFFICE

'90 FEB 5 AM 9 43

1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 87410
(505) 334-0178

GARREY CARRUTHERS
GOVERNOR

Date: 2-2-90

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

Re: Proposed MC _____
Proposed DHC _____
Proposed NSL A _____
Proposed SWD _____
Proposed WFX _____
Proposed PMX _____

Gentlemen:

I have examined the application dated 1-29-90

for the BLACKWOOD-NICHOLS N.E. Q.U. # 491
Operator Lease & Well No.

J-25-31N-7W and my recommendations are as follows:
Unit, S-T-R

Approve

Yours truly,

Eric Bush

Project No. 89-70A

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

An Archaeological Survey of
proposed well location Northeast
Blanco Unit 491 and its combined access road and pipeline
north of La Jara Creek, Rio Arriba County,
New Mexico.

for

Blackwood and Nichols Co., Ltd.

by

Susan K. Moore

Submitted by

Roger A. Moore, Jr.
Principal Investigator

November 8, 1989

Moore Anthropological Research

Technical Report No. 89-70A

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

ABSTRACT

On September 27, 1989 Moore Anthropological Research conducted a Class III archaeological survey of a proposed well location and combined access road and pipeline for Blackwood and Nichols Co., Ltd. The survey area is located on a bench overlooking the confluence of La Jara Creek and the Navajo Reservoir (T31N. R7W, Section 25) in Rio Arriba County, New Mexico and is under the jurisdiction of the Bureau of Land Management (Minerals) and the Bureau of Reclamation (Surface). A total of 11.89 acres (4.80 hectares) were inventoried.

Two archaeological sites and seven isolated loci were discovered during the survey.

The documentation of the isolates in the field has sufficiently exhausted their research potential for the purpose of this project. Archaeological clearance is recommended with the stipulations that site MAR-89-65 be fenced, and that construction of the well pad and the access road be monitored in the area of the site.

INTRODUCTION

On September 27, 1989 Moore Anthropological Research (M.A.R.) conducted a Class III archaeological survey for Blackwood and Nichols Co., Ltd. of Durango, Colorado. Robert Fielder, agent for Blackwood and Nichols requested the survey on September 26, 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 Resource Permit 77-2920-89-D.

Susan K. 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. Robert Fielder, and Charles Neally, surveyor, accompanied the archaeologists during the fieldwork.

METHODS

The project area was surveyed by walking parallel transects 10 meters apart across the well pad and the access right of way. A construction zone 30 ft. wide and a buffer zone 100 ft. wide around the well pad, and a 25 ft. right of way with a 50 ft. buffer on either side for the access road was included in the survey. The project area was marked with orange painted lath on the well pad and orange and yellow flagging tied to vegetation for the access right of way 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. Sites and isolates are defined according to BLM Manual Handbook H-8100-1: I-14 and BLM Special Conditions for Survey Permits (2920).

RECORDS SEARCH

A records search was conducted prior to field inspection at the B.L.M., Farmington Area office on September 26, 1989 to determine if any sites had been recorded within a one mile radius of the project area. Projects in this area for which previous cultural resource inspections have been conducted include oil and gas related development projects, and the Navajo Reservoir Project. The records search showed three previously recorded sites within one mile of the project. There are no sites within 1000 ft of the project area. The nearest previously recorded site is located over 1000 meters from the project area.

PROJECT AREA

Northeast Blanco Unit 491 and combined access road and pipeline

Legal Description: T.31 N. R. 6 W, Section 30, SW 1/4 NW 1/4 SW 1/4
T.31 N, R. 7 W, Section 25. S 1/2 NE 1/4 SE 1/4
SE 1/4 NW 1/4 SE 1/4
NE 1/4 SW 1/4 SE 1/4
Section 25, 1229' F/SL. 1438' F/EL

New Mexico Prime Meridian, San Juan County, New Mexico, 6260-6300' Elevation

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

Land Jurisdiction: Bureau of Land Management, Farmington Resource Area
(Minerals); Bureau of Reclamation (Surface)

Project Area: 250' x 350' (well pad)
280' x 380' (well pad with construction zone)
50' x 1600' (road)
Surveyed Area: 480' x 580' (well pad with construction and buffer zones)
150' x 1600' (road with buffer zone)
11.89 Acres

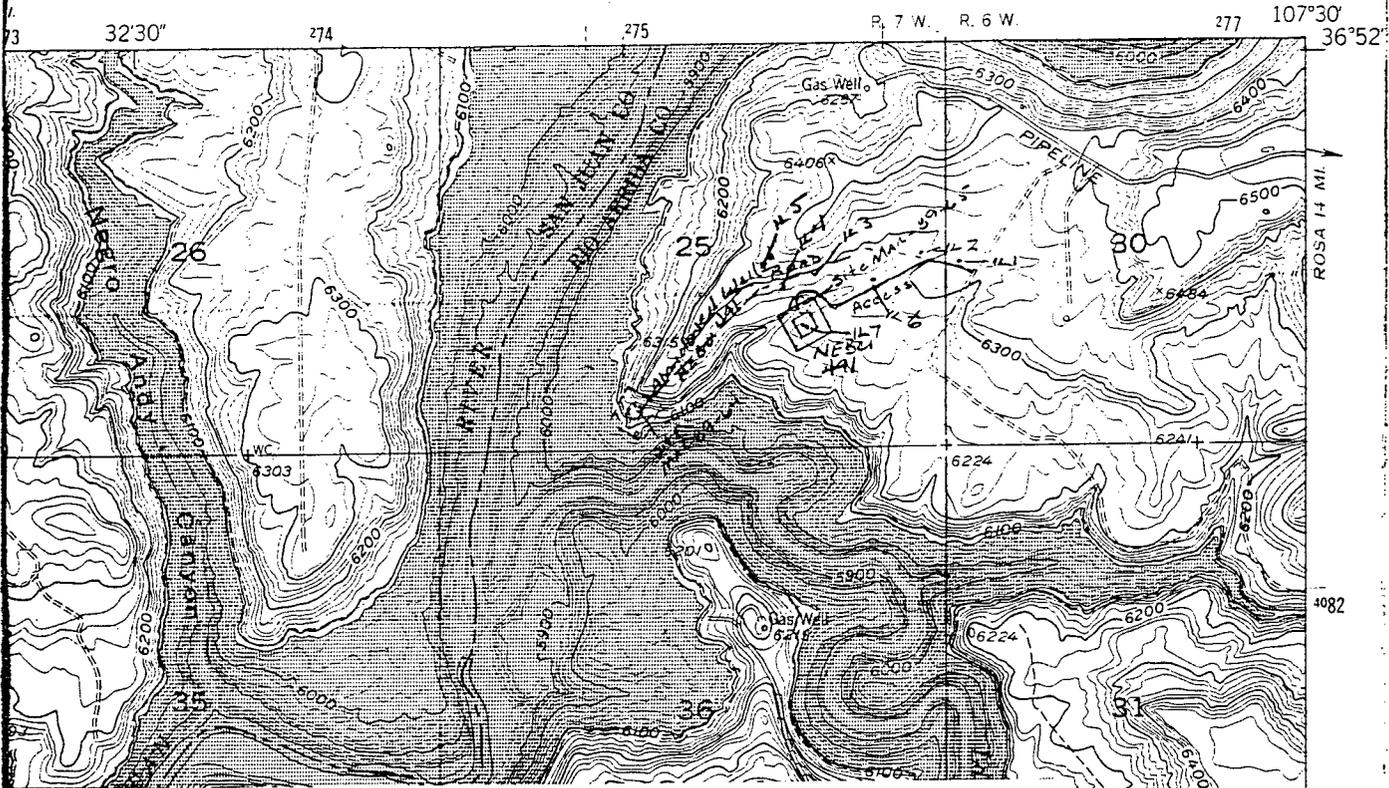
Environment: The project area is located on a mesa bench overlooking the confluence of La Jara Creek and Navajo Reservoir (Figure 1). The beginning of the access road and the site are in pinyon/juniper woodland environments with a 35% cover consisting of pinyon pine, juniper, sagebrush, grasses, forbs, gambel oak, narrow leaf yucca, and club cholla. The middle section of the access road runs through a scrubland environment with a 40% cover of sagebrush, grasses, rabbitbrush and forbs. The soil is sandy, and on the pad area there are numerous large sandstone outcrops especially in the buffer areas. There were signs of deer, rabbits, and pack rats in the area. The weather was clear and warm.

Project Description: This is a proposed gas well, access road and pipeline. The originally proposed location was further north, but was rejected due to engineering problems. The access road comes north from a bladed road following a two track around a wooded knoll and then goes westward across the sageflats to a wooded bench on the edge of the mesa.

Cultural Resources: Two archaeological sites and seven Isolated Loci (IL) were found during the survey. Site MAR-89-64 and IL's 3, 4 and 5 are in portions of the original location abandoned for engineering problems. Site MAR-89-65 and IL's 1, 2, 6 and 7 are in the final staked location for the access road and well pad. (IL's are listed in Table 1 and Figure 1).

FIGURE 1

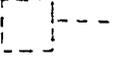
PINE RIVER QUADRANGLE
 NEW MEXICO
 7.5 MINUTE SERIES (TOPOGRAPHIC)
 SE 1/4 NAVAJO DAM 5 QUADRANGLE



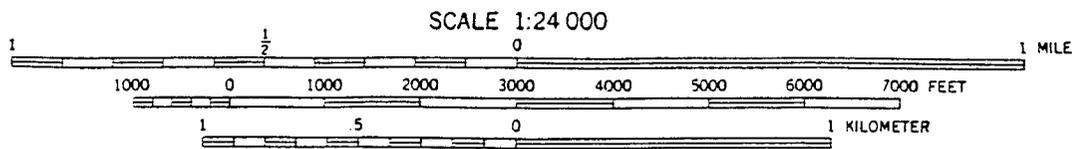
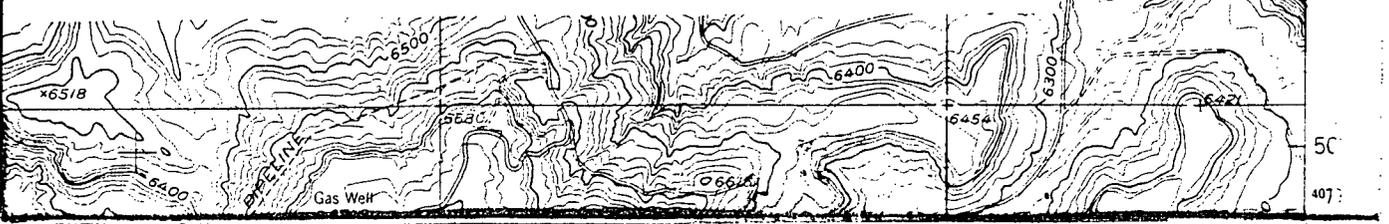
MAR Technical Report No. 70-A

NEBU 491 (T31N, R7W, Sections 25 and 30)
 San Juan County, New Mexico

KEY:

- Well Pad = 
- Abandoned Location and Access Road = 
- Access Road = 
- Site = 
- IL's = 

FOR OFFICIAL USE ONLY
DISCLOSURE OF SITE LOCATIONS IS PROHIBITED
 (36CFR296.18)



CONTOUR INTERVAL 40 FEET
 NATIONAL GEODETIC VERTICAL DATUM OF 1929

Site 89-64 (Figure 2) is a diffused lithic and ceramic scatter on a bench overlooking the reservoir at the base of a sandstone cliff. The site is scattered among the large sandstone boulders and in the beginning of a sandy wash area. On the north side of the cliff is an area that serves as a drainage during heavy rains, and the artifacts are in a fan shaped area downslope from this drainage for approximately 34 meters. There are only two lithic artifacts in the lower edges of the site in the sandy wash, the majority of the artifacts are within small, shallow, soil areas within the boulder scatter immediately below the cliff face. It appears the artifacts may have washed to their present position from the cliff top.

Artifacts include 4 Anasazi grayware ceramics from a possible pot bust; lithic artifacts include 20 flakes, 4 pieces of angular debris, and one possible core. The flakes represent all stages of core reduction. Materials include gray-green fine grained quartzite, gray fossiliferous chert, blue mottled orthoquartzite, white and green chert, and white chalcedony.

The cultural deposits on MAR-89-64 appear to be redeposited material from the cliff top, so there are probably no buried intact deposits on the site. The site does have research potential for studies of early Anasazi (BMIII-PII) lithic technology and ceramic technology. Reconnaissance of the ridge top above the high cliff would be necessary to provide information to help determine the National Register status of this site. However, the site should be considered eligible for nomination for purposes of Section 106 consultation.

Site MAR-89-65 (Figure 3) is a small diffuse lithic scatter on the top of a moderate north facing slope. The soil is sandy and there are numerous large junipers around and throughout the site with 100% pine duff cover underneath, giving the possibility that more artifacts are still hidden. No features were noted. Artifacts include 1 fine grained red quartzite tertiary core reduction flake; 1 piece of orthoquartzite angular debris; 1 piece of red chalcedony angular debris; 1 biface mid-section of white chalcedony; 1 red fine grained quartzite tool with flaking along both sides of one edge; 1 red chert secondary core reduction flake; 1 brown chert secondary core reduction flake; 1 large 5 cm x 3 cm red fine grained quartzite tool (possible scrapper) made from a large primary flake; 1 red/green chert secondary core reduction flake; 1 butterscotch chert primary core reduction flake; and 1 large chunk of quartzite angular debris.

Most of the artifacts were in drainage areas. The part of the site covered by the old junipers has stable accumulating soils and may contain intact buried cultural deposits.

MAR-89-65 has potential for intact buried deposits. Excavation and detailed lithic attribute analysis may provide a means of dating this site. The site has research potential for the period it represents for studies of lithic technologies and land use. It may therefore be eligible for nomination to the National Register under criterion D of 36CFR 60.4 and should be considered eligible for nomination for purposes of Section 106 consultation.

Recommendations: Because the north well pad boundary is within 30 ft. of site MAR-89-65, and the access road will circle to the north and west of the site, it is recommended that site MAR-89-65 be fenced prior to construction and that all construction in that area of the pads northeast corner and the portion of the access road around the site be monitored.

Site MAR-89-64

Abandoned NEBH 491
Location

M. PROPER
9-27-89

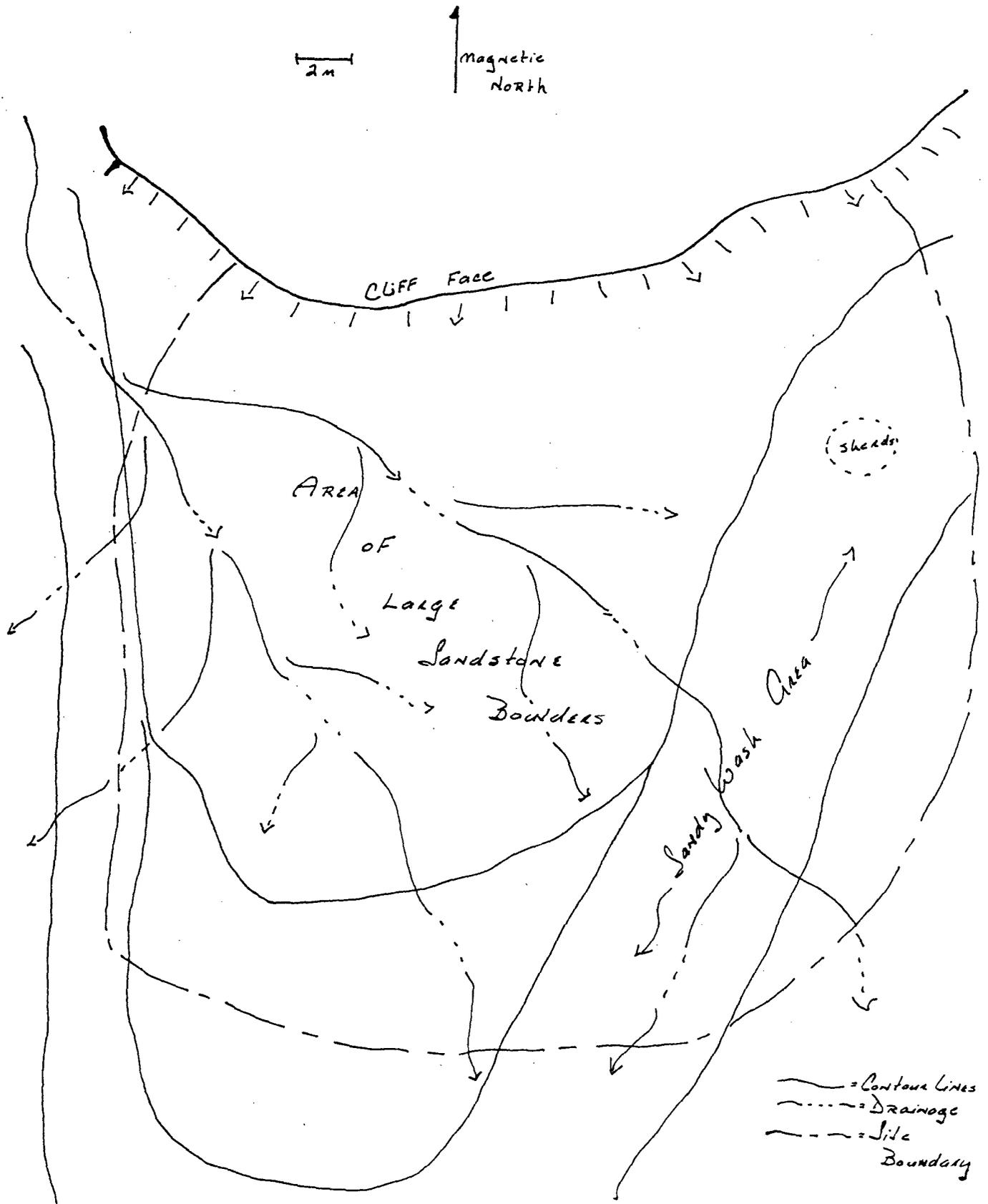


FIGURE 3

Site MAR-89-65
Well NEBU 491

M. Proper
9-27-89

- = Access Road
- = Contour Line
- = Site Boundary
- = Drainage
- = Chopper
- = Biface Frag.
- = Trees

10m

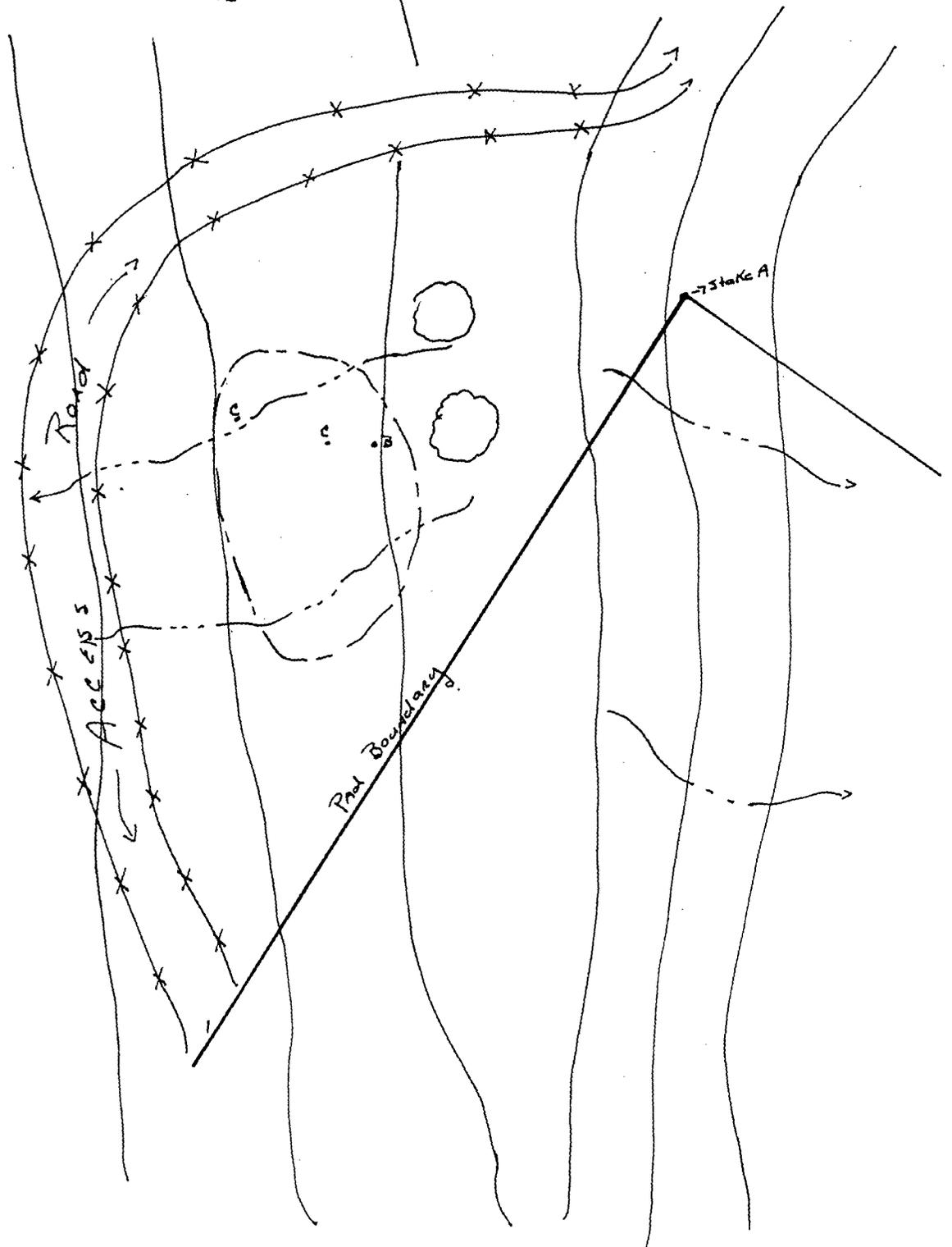


TABLE 1
ISOLATED LOCI DESCRIPTIONS

| IL# | Legal Description | | | UTM (Zone 13) | | Veg. Zone | Landform | Descriptions |
|-----|-------------------|-----|-----|---------------|--------|-----------|----------|--------------------------------------------------------------------------------------|
| | 1/4 | 1/4 | 1/4 | N | E | | | |
| 1 | SW | NW | SW | 4083080 | 276040 | SCLD | V | 1 dark grayish/brown tertiary core reduction flake. |
| 2 | NW | NE | SE | 4083105 | 275920 | WDL | V | Brown chalcedony scrapper made from a primary flake. |
| 3 | SE | NW | SE | 4083050 | 275580 | WDL | B | 2 pieces brown chalcedony angular debris. |
| 4 | SE | NW | SE | 4083300 | 275480 | WDL | B | 1 large (5 x 5cm) reddish brown fine-grained quartzite primary core reduction flake. |
| 5 | SE | NW | SE | 4083090 | 275410 | WDL | B | Middle section of Jemez obsidian biface. |
| 6 | SW | NE | SE | 4083015 | 275770 | SCLD | V | 1 secondary core reduction flake of brown chert. |
| 7 | NE | SW | SE | 4082870 | 275550 | WDL | B | 50+ pieces of Anasazi grayware from a pot bust. |

Note: All IL's are in T31N, R7W, Section 25; with the exception of IL 1 which is in R6W, Section 30; of the Pine River 7.5 Quad Map.

Key: Veg. Zone: SCLD=scrubland

WDL=woodland

Landform: V=valley

B=bench

BLACKWOOD & NICHOLS CO., LTD.

P.O. BOX 1237

DURANGO, COLORADO 81302-1237

(303) 247-0728

January 25, 1990

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3539 E. 30th Street
Farmington, New Mexico 87401

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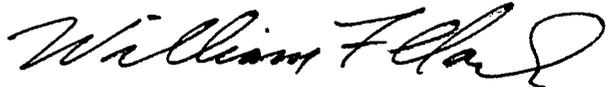
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Sincerely,

BLACKWOOD & NICHOLS CO., LTD.



William F. Clark
Operations Manager

Attachments