

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## 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

John E. Schalk

## 3. ADDRESS OF OPERATOR

P. O. Box 25825, Albuquerque, N. M. 87125

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

At surface

M 1170' FSL, 950' FWL, Section 25, Township  
At proposed prod. zone 29 North, Range 4 West

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

55 Miles East of Blanco, New Mexico

## 15. DISTANCE FROM PROPOSED\*

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

950'

## 16. NO. OF ACRES IN LEASE

640

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

160

## 18. DISTANCE FROM PROPOSED LOCATION\*

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

3637'

## 19. PROPOSED DEPTH

4500'

## 20. ROTARY OR CABLE TOOLS

Rotary

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

7347' GR

## 22. APPROX. DATE WORK WILL START\*

February 13, 1978

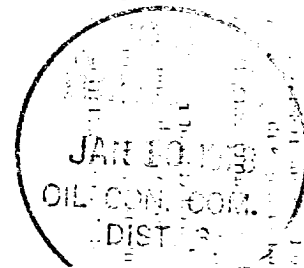
## 23.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
11"	8-5/8"	23#	250'	200 sacks
7-7/8"	4-1/2"	10.5#	4500'	350 sacks

## FORMATION TOPS

Kirtland	3795'
Fruitland	3900'
Pic. Cliffs	4050'
TD	4500'



Gas is dedicated

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 prevention program, if any.

## 24.

SIGNED

TITLE

Operator

DATE

1-13-78

(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

# NEW MEXICO OIL CONSERVATION COMMISSION

## WELL LOCATION AND ACERAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section

Operator <b>JOHN SCHALK</b>		Lease <b>SCHALK 29-4</b>		Well No. <b>6</b>
Unit Owner <b>M</b>	Section <b>25</b>	Township <b>29 NORTH</b>	Range <b>4 WEST</b>	County <b>RIO ARriba</b>
Approx. Elevation of Well: <b>1170</b> feet from the <b>SOUTH</b> line and <b>950</b> feet from the <b>WEST</b> line				
Perforated Elev. <b>7347</b>	Producing Formation <b>Pic. Cliffs</b>		Foot <b>Choya Mesa</b>	Dedicated Acreage: <b>160</b> 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 interests of all owners been consolidated by communitization, unitization, force-pooling, etc?
 

( ) Yes ( ) No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually 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.

*John E. Schalk*

Name  
**John E. Schalk**

Position  
**Operator**

Company  
**John E. Schalk**

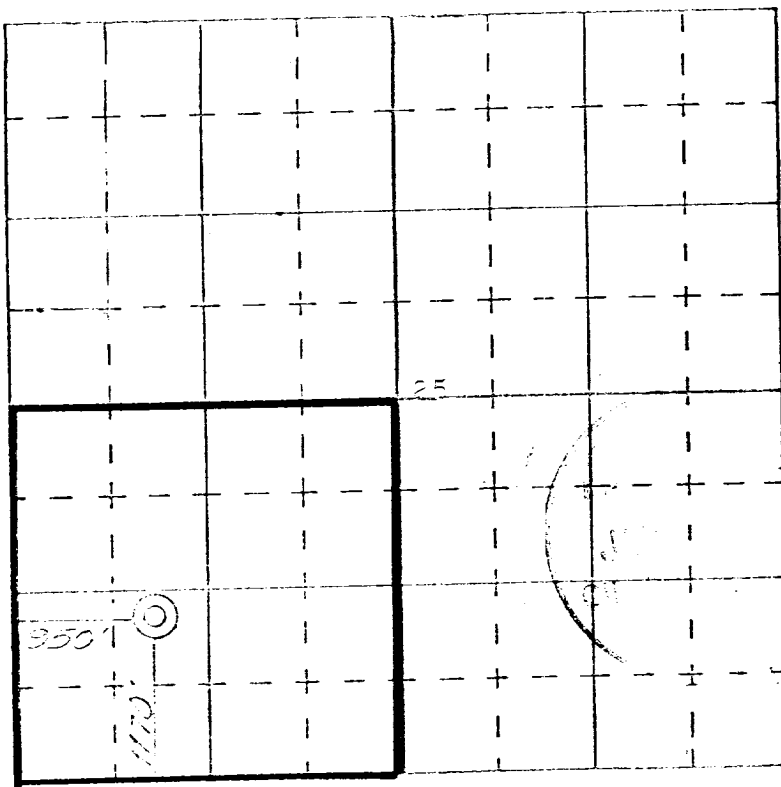
Date  
**1-13-78**

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.

**1 December 1977**

Date Surveyed  
*James P. Lease*

Registered Professional Engineer  
and/or Land Surveyor **James P. Lease**



SCALE: 4 INCHES EQUALS 1 MILE



NO NEW ROAD PROPOSED

Sec 25, T29N, R4W

950' FWL ; 1170' FSL

United States Department of Agriculture  
Forest Service

SPECIAL USE  
APPLICATION AND REPORT

Ref: FSM 2712

FOREST SERVICE USE ONLY	a. Record no. (1-2)	b. Region (3-4)	c. Forest (5-6)
	70	--	--
	d. District (7-8)	e. User number (9-12)	f. Kind of use (13-15)
	--	----	----
	g. State (16-17)	h. County (18-20)	k. Card No. (21)
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**PART I - APPLICATION** *(To be completed by applicant)*

Application is hereby made for a permit to use National Forest land as indicated below:

## 1. Description of land: (Attach M.A.' or PLAT)

A one acre plot in the SW/4 of Section 25, Township 29 North,  
Range 4 West

2. Purpose of use.

Construction and drilling of the Schalk 29-4 Well No. 6 gas well located 1170' From the South Line, 950' From the West Line of Section 25, Township 29 North, Range 4 West, Rio Arriba County, New Mexico.

3. Land Area applied for (For Rights-of-Way show length and width and convert to acres; for other uses show acres):

$$\text{Length in: } \frac{\text{(Miles) or}}{\text{(Feet)}} \times \text{Width } \frac{\text{(Feet)}}{\text{(Feet)}} = \frac{\text{(Acres)}}{\text{(Feet)}}$$

#### 4. Improvements

a. Description

Improvements will consist of a one acre gas well location, an access road, collection pits, and other paraphernalia necessary for the drilling maintenance and production of natural gas.

b. Plans attached ☐ Yes ☒ No. If "NO" show date plans will be furnished

c. Estimated cost

\$ 5,000.00

d. Construction will begin within

1

(Months)

e. Construction will be completed within

2

(Months)

Date of Application

Applicants name and signature

Applicant's address

P. O. Box 25825  
Albuquerque, New Mexico

87125

(ZIP Code)

John E. Schalk

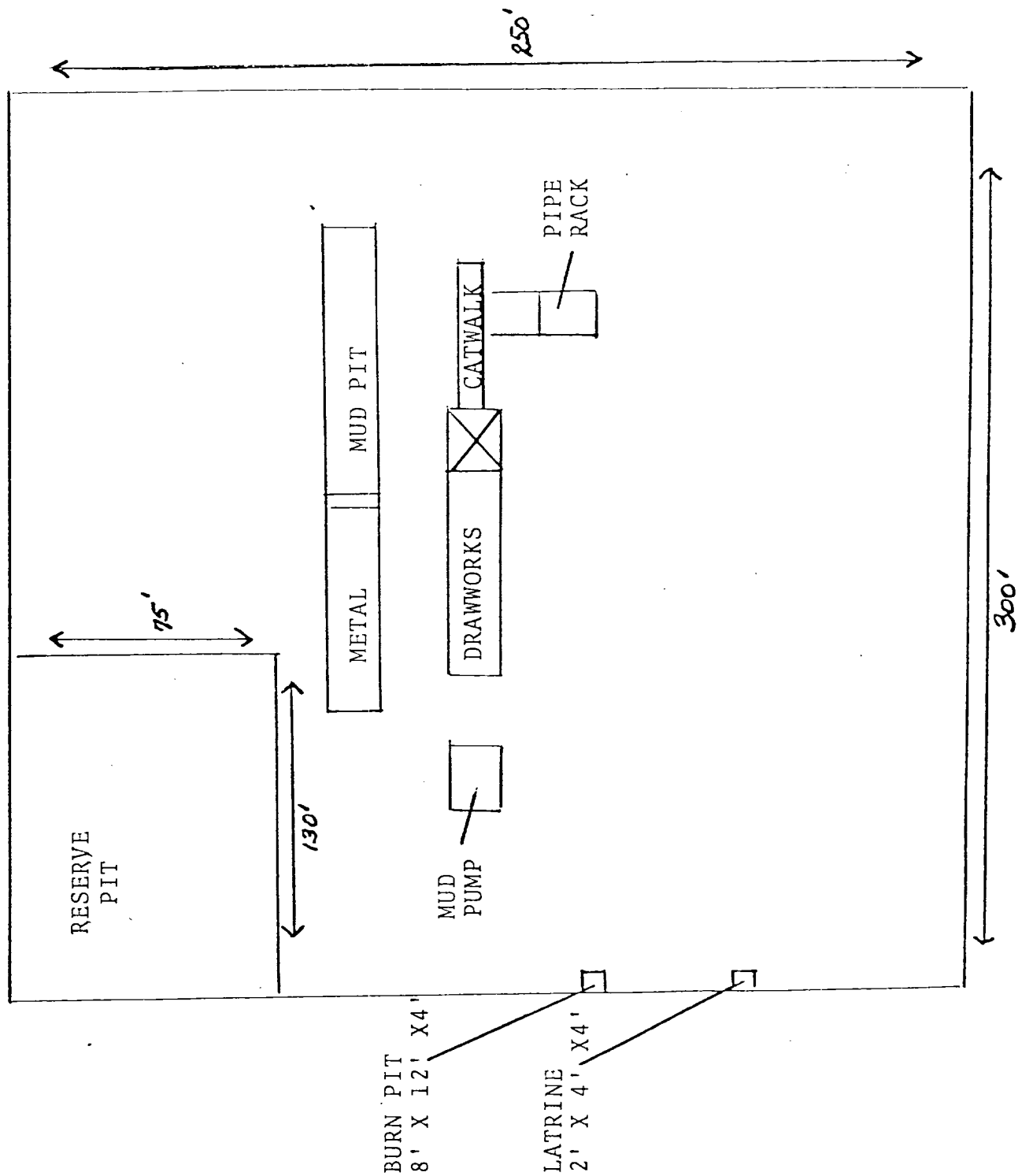
Operator

(OVER)

2700-3 (7/71)

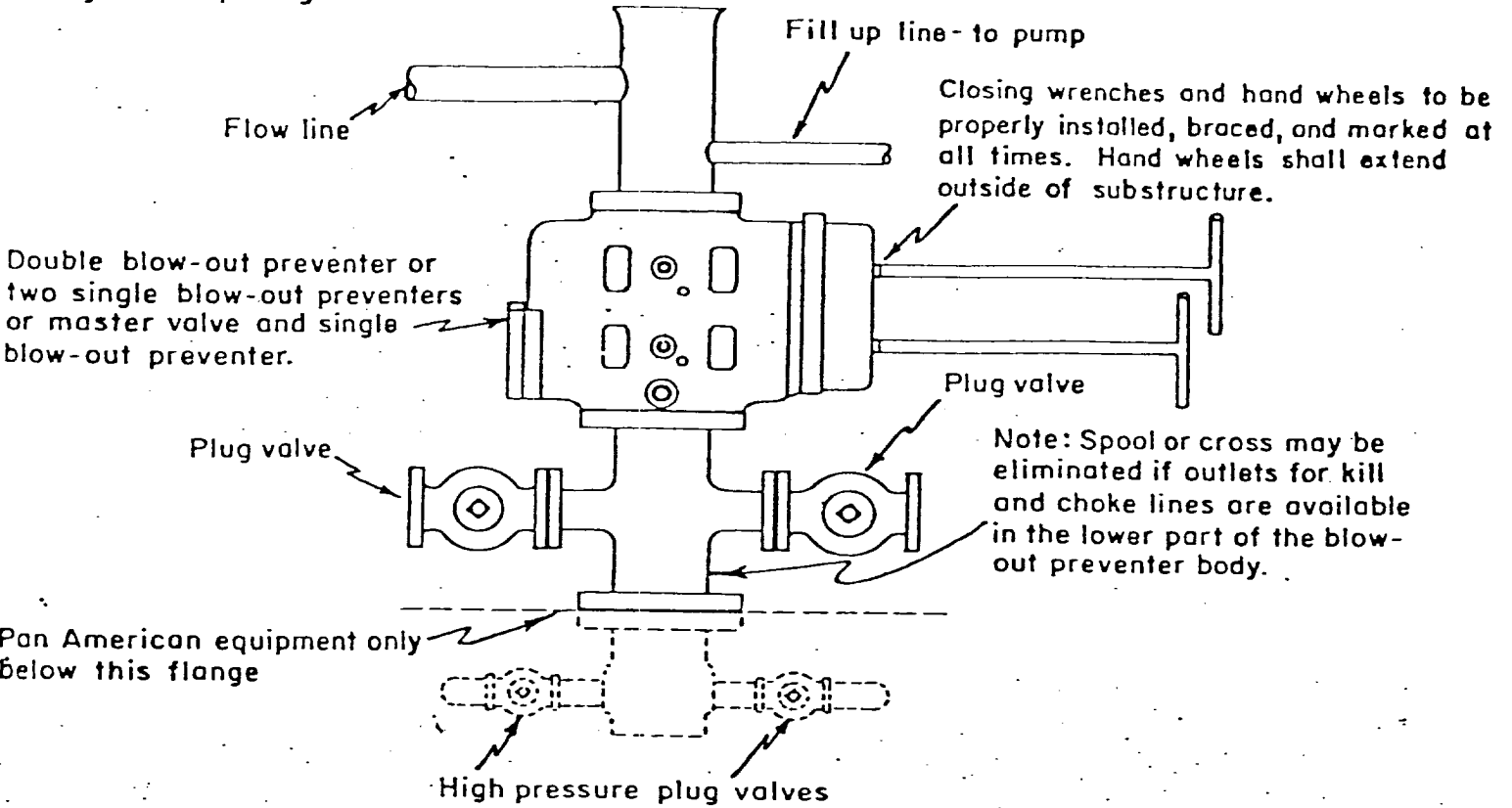
## Multi-Point Surface Use and Operations Plan

1. Existing roads: Attached map shows existing road entering Section 25 approximately 1200' from the Southwest corner and running North and West, adjacent to the proposed location.
2. Planned Access road: None.
3. Location of Existing wells: El Paso Natural Gas Company, San Juan 29-4, 15-25, Section 25, Township 29 North, Range 4 West, Rio Arriba County, New Mexico.
4. Location of existing and/or proposed facilities: None.
5. Location and type of water supply: Water will be taken from a water hole 15 miles away and transported by truck to location.
6. Source of construction materials: None.
7. Methods for handling waste disposal: Cuttings to be disposed of in a reserve pit; a burn pit to be used for disposal of trash, garbage, etc.; and covered on clean-up of location.
8. Ancillary facilities: None.
9. Well site layout: Per attached drawing.
10. Restoration of surface: Upon completion of drilling operations, the disturbed surface area will be restored as near as practical to its original contours. If sufficient top soil is encountered, it will be stockpiled for restoration of surface. Restoration will be to the satisfaction of the United States Geological Survey.
11. This location slopes at an increase of 10' per 200' to the West. There will be approximately a five foot cut on the East side of the proposed location. Vegetation is sage, pinon and Juniper trees. The surrounding area is comparable and any disturbances to the wildlife will be only temporary. With the restoration of surface, surface damage will be minimal.
12. Lessee's or Operator's Representative: John E. Schalk, P. O. Box 25825, Albuquerque, New Mexico, 87125; or J. C. Christesson, 2301 Southside River Road, Farmington, New Mexico, 87401.



# BLOW-OUT PREVENTER HOOK-UP

Drilling nipple to be so constructed that it can be removed, without use of a welder, through rotary table opening



## CERTIFICATION

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Arapahoe Drilling Company and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

Date 1-13-78

  
John E. Schalk  
Operator







Report 77-SJC-204  
Permit - New Mexico Forest  
Service

An Archaeological Clearance Survey of  
Five Proposed Well Locations & One Access  
Road Conducted for Schalk Production Company

Submitted by  
Dabney Ford  
Cultural Resource  
Management Program  
San Juan College  
N.M. State University  
8 December 1977

An Archaeological Clearance Survey of  
Five Proposed Well Locations & One Access  
Road Conducted for Schalk Production Company

On December 2, 1977, Dabney Ford of the Cultural Resource Management Program, NMSU, San Juan Campus, conducted an archaeological clearance survey at the request of Mr. J. E. Schalk, Schalk Production Company. Mr. John Ahlm, Schalk representative, was present during the survey. All of the well locations and the access road are on Carson National Forest land and were surveyed under a New Mexico Forest Service permit.

The most recent listings of the National Register of Historic Places have been consulted and no sites which appear on the Register and no sites which have been nominated to the Register occur on the project area. This proposal complies with the provisions of the Historic Preservation Act of 1966 and with Executive Order 11593. It is recommended that archaeological clearance be given.

#### METHODOLOGY

The well locations were surveyed by walking transects, 75 feet wide, over the entire easement. The access route was inspected by walking down the centerline the length of the road.

#### GENERAL RECOMMENDATIONS

No cultural resources warranting relocation of well locations or road were found and full archaeological clearance is recommended.

SCHALK 29-4 #6

Carson National Forest

The proposed well location, 300 X 300 feet, is in the NE $\frac{1}{4}$  of the SW $\frac{1}{4}$  of the SW $\frac{1}{4}$  of Section 25, Township 29 North, Range 4 West, N.M.P.M., in Rio Arriba County, New Mexico (Figure 1). The north boundry of the location borders on an existing access road thus no additional construction is necessary.

Pin<sup>o</sup>on, juniper, Yucca baccata, mullen, sagebrush, indian rice-grass, blue grama, Gambel's oak, and snakeweed are growing in the sandy clay loam. The well, on the north edge of La Jara Mesa, is in broken terrain. Drainage is both northerly and southerly with alluvial and talus surface deposits. Local outcrops of sandstone are abundant.

No cultural resources were found and clearance is recommended.

SCHALK 29-4 #7

Carson National Forest

The proposed well location, 300 X 300 feet, is in the SW $\frac{1}{4}$  of the NE $\frac{1}{4}$  of the SW $\frac{1}{4}$  of Section 26, Township 29 North, Range 4 West, N.M.P.M., in Rio Arriba County, New Mexico (Figure 1). The access road, 20 feet wide and approximately 4,000 feet long, takes off from the Leandro -Dry Lake Ca<sup>n</sup>on road in Section 35. It traverses the North  $\frac{1}{2}$  of the North  $\frac{1}{2}$  of Section 35, enters the West  $\frac{1}{2}$  of the East  $\frac{1}{2}$  of the SW $\frac{1}{4}$  of Section 25, and approaches the location from the southwest.

Vegetation includes juniper, pin<sup>o</sup>on, sagebrush, snakeweed, blue

grama, alkali sacaton, and Gambel's oak growing in a sandy loam. The valley bottom is level with a northeasterly slope into La Jara Cañon. Alluvium is the dominant surface deposit and sandstone outcrops are abundant.

No cultural resources were found on the well location and archaeological clearance is recommended.

Three to five Rosa gray sherds and less than five lithics were found along the access road. Extensive examination of the surrounding area revealed a PII - PIII occupation site, SJC-153, on a bench directly above the area in question (see map 1 and accompanying site description and survey report). The sherds and lithics found in the road right-of-way have washed off the sandstone bench and are not in original context. There is no evidence (concentration of artifacts, soil stain, depressions, or hearth area) that the site extends down off the bench into the road easement. The site is not visible from the road and is in no danger of being disturbed during construction. Therefore, full archaeological clearance of the access road right-of-way is recommended.

SCHALK 29-4 #8

Carson National Forest

The proposed well location, 300 X 300 feet, is in the SE $\frac{1}{4}$  of the NW $\frac{1}{4}$  of the SW $\frac{1}{4}$  of Section 27, Township 29 North, Range 9 West, N.M.P.M., in Rio Arriba County, New Mexico (Figure 1). The well is adjacent to an existing access road and no additional construction is necessary.

Piñon, juniper, blue grama, galleta, sagebrush, and buckbrush

are growing in the sandy clay loam. The terrace ridge top is level with a southerly drainage. Surface deposits are alluvium and sandstone outcrops locally.

No cultural resources were found and clearance is recommended.

SCHALK 29-4 #9

Carson National Forest

The proposed well location, 300 X 300 feet, is in the SE $\frac{1}{4}$  of the NW $\frac{1}{4}$  of the SW $\frac{1}{4}$  of Section 22, Township 29 North, Range 4 West, N.M.P.M., in Rio Arriba County, New Mexico (Figure 1). The western boundry of the location borders on an existing location and will utilize the existing access.

Vegetation includes piñon, juniper, sagebrush, Gambel's oak, indian ricegrass, blue grama, Eriogonum, tumbleweed, and seeded grasses growing in the sandy clay loam. The terrace slope is broken with a west southwesterly drainage. Sandstone outcrops are abundant and alluvium is the dominant surface deposit.

No cultural resources were found and clearance is recommended.

SCHALK 29-4 #10

Carson National Forest

The proposed well location, 300 X 300 feet, is in the NW $\frac{1}{4}$  of the SW $\frac{1}{4}$  of the SW $\frac{1}{4}$  of Section 23, Township 29 North, Range 4 West, N.M.P.M., in Rio Arriba County, New Mexico (Figure 1). The north edge of the location borders on an existing road thus no additional access is required.

Vegetation includes juniper, piñon, sagebrush, Yucca baccata, blue grama, indian ricegrass, seeded grasses, Eriogonum, rabbitbrush, and snakeweed growing in the sandy clay loam. La Jara mesa top is level with a southerly drainage. Alluvium is the dominant surface deposit and sandstone outcrops are abundant.

No cultural resources were found and archaeological clearance is recommended.



SITE SJC-153

The site consists of an extensive sherd and lithic scatter covering an area approximately 30m X 100m. It is located atop a low sandstone bench extending in a southerly direction into Leandro Canon. The sherds have a maximum density of 10 - 15 sherds per square meter over a 10 X 20 meter square area. The majority are Gallena gray wares with less than 5% corrugated gray wares. One sherd of red ware was found but is probably an oxidized Gallena and a carbon painted black on gray, probably Rosa or Gallena black on white. The lithics, 98% chert 2% obsidian were in the form of flakes, debitage, one core, and one projectile point. Maximum density of the flaked rock is 3 - 5 lithics per square meter over a 10 X 20 meter square area.

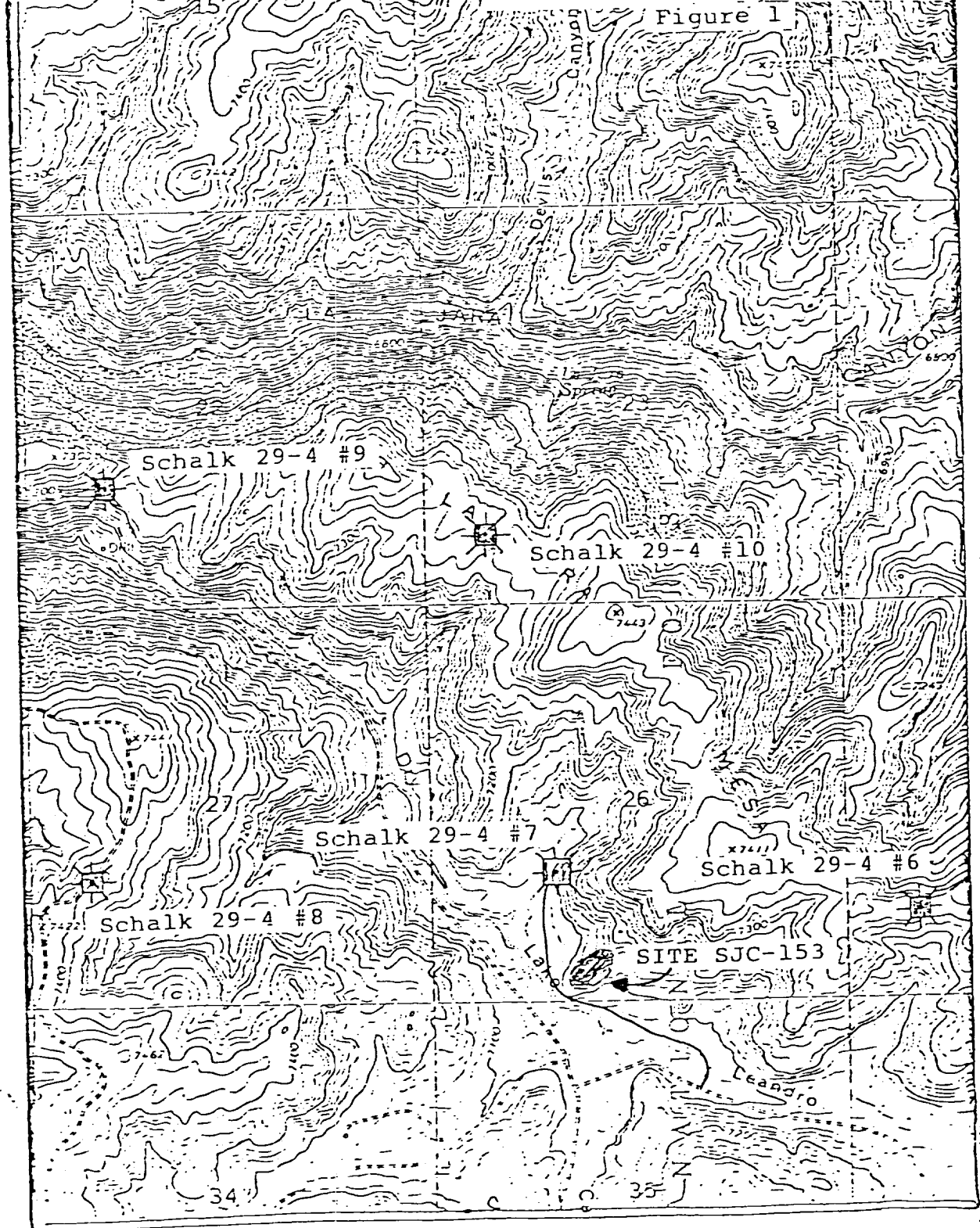
Although no readily definable structures can be seen on the surface, the possibility of pithouses is strong. There are two subtle depressions on the south side of the bench. The grass and sagebrush in these depressions are slightly more lush than the surrounding vegetation. There are no artifact concentrations or soil stains to provide a more conclusive statement.

It appears that the site continues along the entire southern edge of the bench which forms the southern limit of La Jara mesa. The canon bottom of the Leandro Dry Lake drainage is broad and flat, offering ample potential crop land, and the alluvial fans at the base of the bench would provide excellent farming soil.

The site has had considerable alluvial deposition thus the cultural fill should be protected and relatively deep. Potential is high for recovering pollen, flotation, and carbon samples in good context. There is an existing road on the flood plain below the site which will be utilized as a well access road (to Schalk 29-4 #7). The site is not visible from this road and the road will not endanger the site.

LEANDRO CANYON QUADRANGLE  
NEW MEXICO-RIO ARriba CO.  
7.5 MINUTE SERIES (TOPOGRAPHIC)

Figure 1



San Juan Campus Archeological Survey Schalk Project SITE NO.: L.A.

Site name SJC-153 Field number same

SE 1/4 of the SE 1/4 of the SW 1/4, Sec. 26, T. 29 N, R. 4 E, County Rio Arriba State NM

Map source USGS 7.5 min. Leandro Canyon, New Mexico Elevation 7100

Drainage: primary Leandro Canyon secondary La Jara Canyon

Location on a low sandstone bench jutting out (in a southerly direction) into Leandro Canyon

Nearest town Gobernador Nearest highway 17 Accessibility: foot X sedan X 4-w. dr. backhoe

Ownership Carson National Forest

Informant

Stake location

SITUATION (check ✓): Valley bottom Bench X Slope Ridge Mesa top Cliff edge Overhang Cave Dune Area of site 300m X 100m

Other

FEATURES (Indicate number): Pit houses X Kivas Surface rooms: Slab Masonry Adobe Other

Refuse area (direction) S&E Hearths Burials Sherd/Chipping area N, S, E Grids/Dams/Terraces Pictographs/Petroglyphs

Trails/Steps Other

PLAN: 1-room Linear Arc L-shaped C-shaped F-shaped E-shaped ( )-shaped Enclosed plaza: by a wall

by rooms Scattered X Indeterminate Other

Single-tier Double-tier -tiers Part double-tier Part tier Orientation Exposure S SE

Nature & depth of fill alluvial deposition - 1-2.5m Est. Wall height 2m Stratified?

Condition: Undisturbed X Eroded Pot-hunted Pottery/Artifact abundance: 10's, 100's, 1000's, 50-75 Modern structure

Surface: Level Uneven Slopes to (direction) S Surface deposits: Alluvium X Colluvium Acolian Talus

Residual Sandstone Soil: Rocky Gravelly Sandy X Clayey Other silty loam

Local rock outcrops: Sandstone X Limestone Shale Caliche Basalt Tuff Other

Farm floodplain and alluvial fan 50m W, S, and E

Arable land (type, distance & direction) 75m Confluence Spring Seeps

Water (distance & direction): River Arroyo pinon, juniper, blue grama,

Bedrock pool Permanent? Local vegetation patterns sagebrush, alkali sacaton, snakeweed, gambel's oak

Other resources within 1.5 miles of La Jara Cañon with springs & seeps and less

than 1/2 mile from spring in Dry Lake Canyon. Few pit-houses construction

Field remarks Excellent location for habitation site. Alluvium deep for

pit-house construction. Flood plain and especially alluvial fans optimal

for non-arable agriculture.

References Mera '35, Hall '44, Dick '76, Hawley Ellis '36 Report 77-SJC-204

#### FOR INFORMATION ONLY

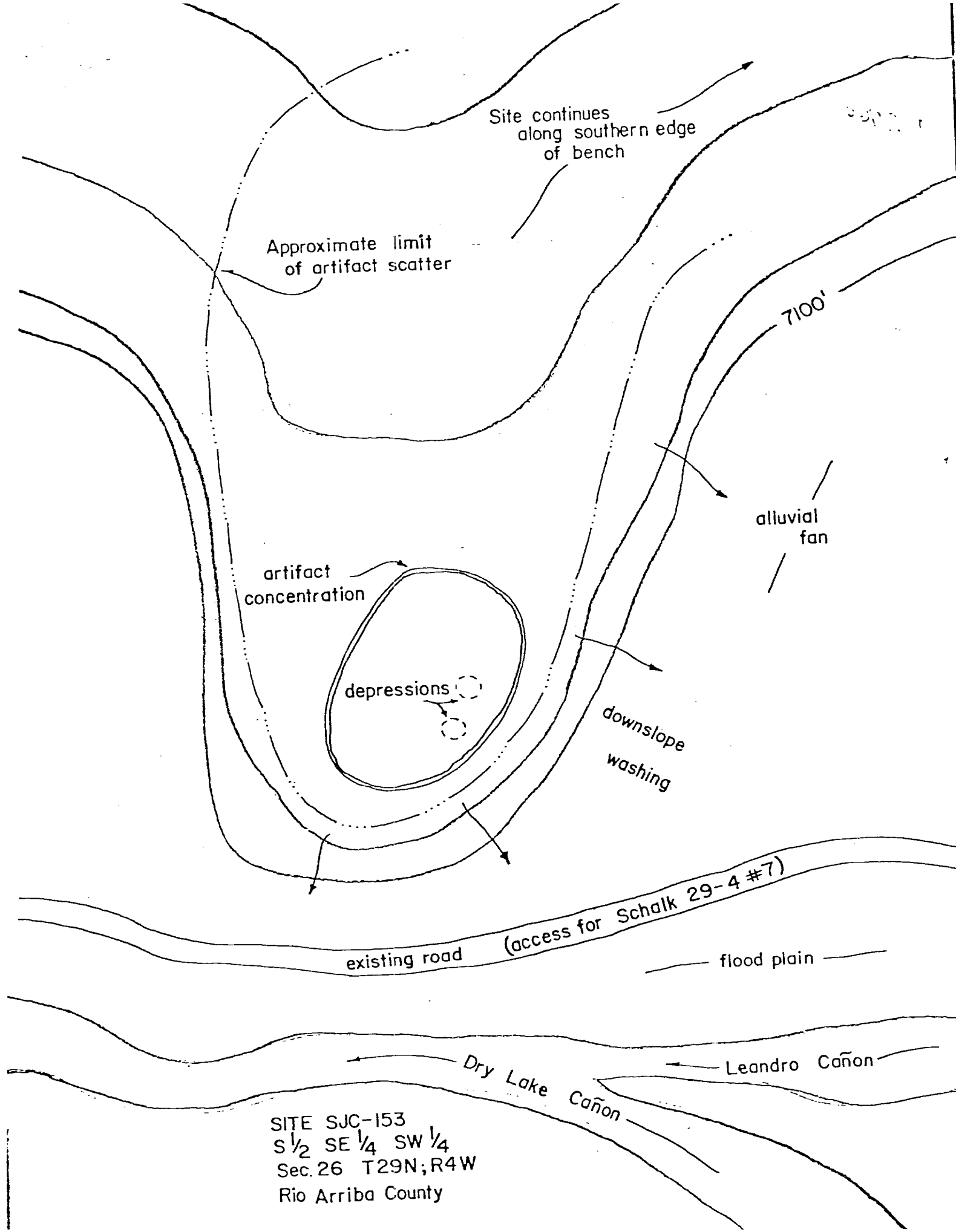
Excavation requirements: Labor 5 person crew Time 10 days Equipment

CULTURE Largo Gallina / Anasazi Phase/Date PII - PIII / 1150 - 1250 AD

Zone Locality Lab. class 1 2 3 4 5 6 7 8 9 10

Lab. remarks

Field recorder Dabney Ford Date 12/2/77 Collections Catalogue Nos.



SITE SJC-153  
S  $\frac{1}{2}$  SE  $\frac{1}{4}$  SW  $\frac{1}{4}$   
Sec. 26 T29N; R4W  
Rio Arriba County