

Release  
August 21, 1986

By DDC

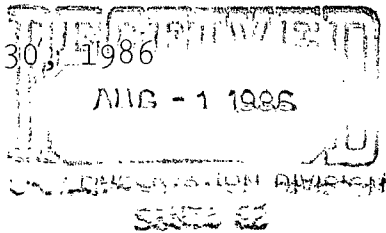
**MESA GRANDE RESOURCES, INC.**

POST OFFICE BOX 274

FARMINGTON, NEW MEXICO 87499-0274

(505) 326-9163

July 30, 1986



Mr. David Catanach  
New Mexico Department of Energy and Minerals  
Oil and Gas Division  
P. O. Box 2088  
Santa Fe, New Mexico 87501

NSL-2283  
RULE-104FE  
Cavilan Mancos Pool  
320 Acre deed  
W/2 Sect-16

RE: Application for Unorthodox Well Location  
Phantom Federal #1  
1035' FSL & 1125' FWL, Section 16, T25N, R2W  
Rio Arriba County, New Mexico

Dear Mr. Catanach:

Mesa Grande Resources, Inc., hereby requests administrative approval for an unorthodox well location for the above mentioned well. An archaeological survey prepared by Jicarilla Archaeological Services indicates that an orthodox location is not desireable due to a nearby prehistoric site with scattered artifacts along the proposed access route.

Additionally, existing disturbed areas, a drainage and stock tank, and the surface owner's desires prohibit the location of the well within the orthodox boundaries specified by the state regulations.

Attached please find copies of the well plat and of the archaeological survey for the subject well. Certified letters have been sent to all offset operators regarding this request, with receipts attached.

Please advise if further information is required.

Sincerely,

MESA GRANDE RESOURCES, INC.

David M. Blandford  
Petroleum Engineer

XC: NMOCD-Aztec, NM  
Mesa Grande Resources, Inc.-Tulsa, Okla.

## OIL CONSERVATION DIVISION

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088  
SANTA FE, NEW MEXICO 87501Form C-102  
Revised 10-1-72

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

Operator <b>MESA GRANDE RESOURCES</b>		Lease <b>Phantom Federal</b>		Well No. <b>1</b>
Unit Letter <b>M</b>	Section <b>16</b>	Township <b>25 North</b>	Range <b>2 West</b>	County <b>Rio Arriba</b>
Actual Footage Location of Well: (cardinal) <b>1035</b> feet from the <b>South</b> line and <b>1125</b> feet from the <b>West</b> line				
Ground Level Elev. <b>7245'</b>	Producing Formation <b>Gallup</b>	Pool <b>Gavilan Mancos</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 \_\_\_\_\_

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 Division.

S 89° 39' W 5280.46'

Mesa Grande, LTD 95%	Sent to Dugan McHugh	
Arriba Co., LTD 5%		
NM-01355		Sec.
Duer Wagner & R&B 1/3	16	
R. Gilliland & HKW, Inc. 1/3		
Mtn States & PC, LTD		
SF-081332B		
IBEX Part.		
Clark et al		
SF-081332		
1125'	#1	
1035'		
Mesa Grande, Ltd 95%		
Arriba Co., Ltd 5%		
NM-43755		

## CERTIFICATION

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

 Gregory R. Phillips  
Vice-President

Position

Mesa Grande Resources, Inc.

Company

Date

July 7, 1986

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

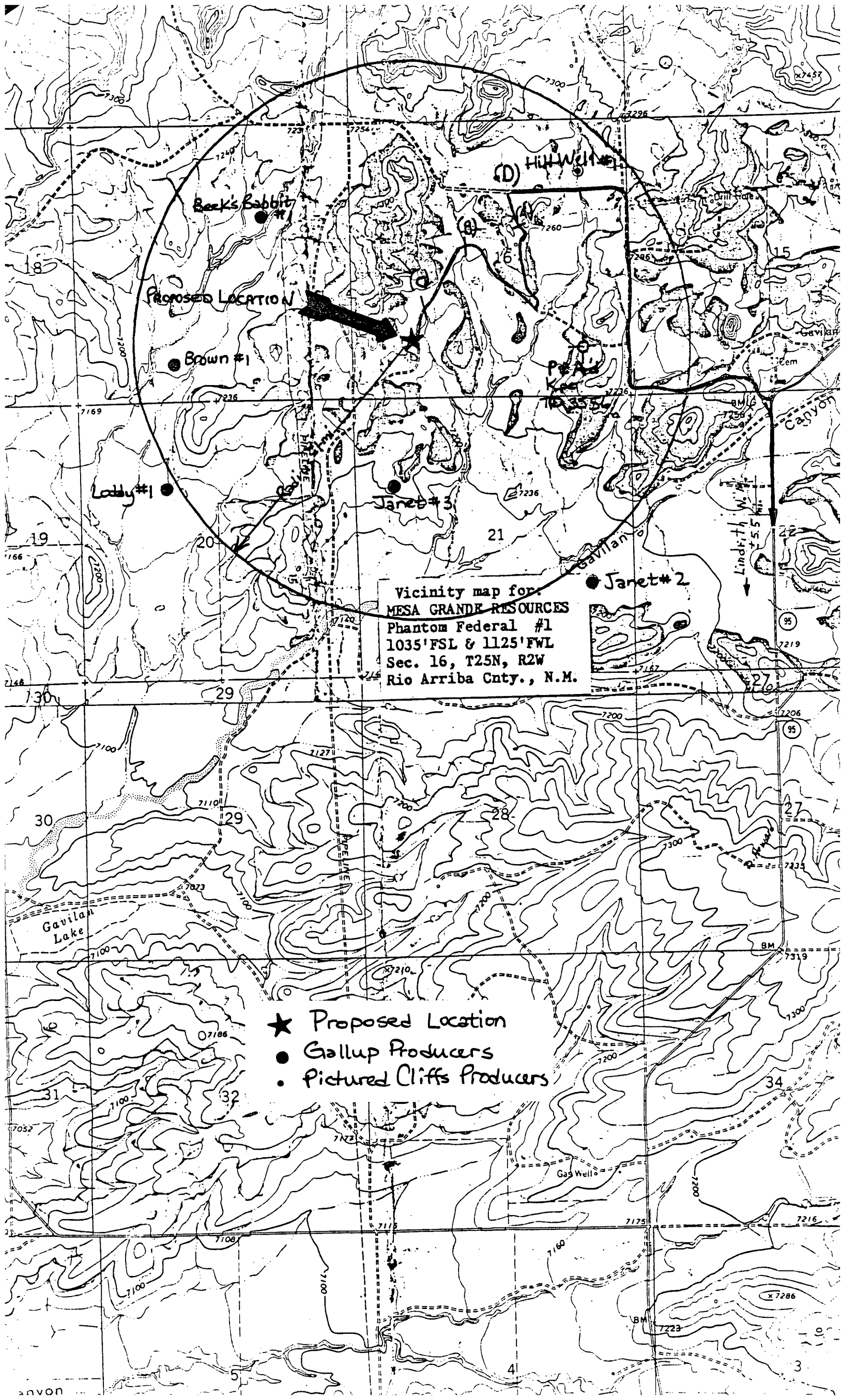
June 24, 1986

 Registered Professional Engineer  
and/or Land Surveyor

Certificate No.

8894

330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0



Vicinity map for:  
MESA GRANDE RESOURCES  
Phantom Federal #1  
1035' FSL & 1125' FWL  
Sec. 16, T25N, R2W  
Rio Arriba Cnty., N.M.

- ★ Proposed Location
- Gallup Producers
- Pictured Cliffs Producers

**JICARILLA  
ARCHAEOLOGICAL  
SERVICES**



CULTURAL RESOURCES SURVEY #86-35  
OF THE PROPOSED WELL LOCATION & ACCESS FOR  
MESA GRANDE RESOURCES  
PHANTOM FEDERAL #1

JICARILLA ARCHAEOLOGICAL SERVICES

REPORT #CR86-35  
JULY 18, 1986

TERRY L. KNIGHT & ANDREW R. GOMOLAK  
ARCHAEOLOGISTS

BUREAU OF LAND MANAGEMENT  
PERMIT #20-2920-86 D

**505-334-9777 - P.O. Box 430 Aztec, New Mexico 87410**

CULTURAL RESOURCES SURVEY #86-35  
OF THE PROPOSED WELL LOCATION & ACCESS FOR  
MESA GRANDE RESOURCES  
PHANTOM FEDERAL #1

ABSTRACT

The recent archaeological survey of 15.05 acres of Private Land about five miles north of Lindrith, New Mexico, recorded a prehistoric site, JAS-249, south, west and north of this proposed well; and a small historic camp, JAS 250, to the south. We also recorded five "isolated" finds along the proposed access route. The isolated finds are not considered significant by current definitions. The historic site is well out of the area of proposed affects. Considering the prehistoric site, existing disturbed areas, a drainage and stock tank, the Land Owner's desires, and legal and geological factors; the proposed well location was removed 142.3 feet East-northeast. Further, we recommend that the southwest corner of the location be slightly narrowed, to minimize affects to the dispersed artifact scatter of the prehistoric site. Some few artifacts remain in the area that will be affected. These are discussed herein, and we recommend that surface artifacts be collected prior to the construction of this location. We also recommend construction monitoring to assure that equipment movement and surface affects are limited to the specific area of the proposed location.

JICARILLA ARCHAEOLOGICAL SERVICES

REPORT #CR86-35  
JULY 18, 1986

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PERMIT #20-2920-86 D

## INTRODUCTION

On May 30, 1986, the archaeological survey of an access route, and a preliminary visit to the proposed location for Mesa Grande well Phantom Federal #1 provided knowledge of prehistoric features immediately south of the proposed location (which was staked at 990 feet from the South line and 990 feet from the West line of Section 16, T25N, R2W, NMPM). This was discussed with Loyd Ingram, the Land Owner, and Edgar Risenhoover, the surveyor who had staked this location, and Chris Phillips of Mesa Grande. It became apparent that relocation was appropriate, but time did not allow completion of the relocation on this date.

On June 24, 1986, Terry Knight and Andrew Gomolak of Jicarilla Archaeological Services began inspecting the area of the proposed relocation; while Sam Stegeman and Randy Speaker of Kerr Land Surveying laid out the new location. This location was discussed with the Land Owner, Loyd Ingram, who indicated a preference for this staking (at 1035 feet from the South line and 1125 feet from the West line of Section 16, T25N, R2W, NMPM). This survey was halted by heavy rains, after additional features had been recorded north, and noted west, of the relocation.

On July 3 & 5, 1986, Knight and Gomolak returned to the area, and completed the survey of the proposed relocation. This well is now slightly unorthodox by State of New Mexico rules; however, the New Mexico Oil and Gas Commission staff in Aztec anticipate no great problem with approving these footages. This location is preferred by the Land Owner, and should minimize affects to prehistoric site JAS 249.

This work was done at the request of Chris Phillips of Mesa Grande Resources. This is all located on the private lands of Mr. and Mrs. Loyd Ingram, of Lindrith, New Mexico.

## METHODOLOGY

The survey area was walked in down and back pedestrian transects spaced about twenty feet apart, covering the area within the proposed gas well location and its protectional buffer. The surveyor told us in the field that the pad would measure 300 feet by 175 feet, with an additional 100 by 100 foot pit area; thus making the pad dimensions 300 feet x 275 feet, with a laydown axis North 63 degrees West. The southwest "burn pit" corner of the location is staked at a 175 foot length; however, dirt work activities and the burn pit location should be limited to the existing plowed area, as discussed herein.

The application access road width is twenty feet, with this survey covering an additional 15 feet to each side; thus bringing the area of the access road survey to a width of fifty feet. The additional 15 feet to either side of the proposed access, together with an additional 100 feet to each side of the proposed well pad, is surveyed as a protectional "buffer". Mesa Grande has not applied to disturb this area. It is used as a safety zone, much as a shoulder on a highway; vehicles may be parked there, or push piles may overlap it, but no major ground altering disturbance is authorized to the sponsoring company within this area.

When artifacts were located within the survey area an effort was made to identify them in the field and to locate them on a topographic and/or site map. Prehistoric features were mapped by measuring or pacing compass oriented distances. Soil stains are subjected to tactile, olfactory and taste tests in order to differentiate charcoal, ash, decomposed organic and decomposed sandstone and/or shale outcrops.

Museum of New Mexico and Jicarilla Archaeological Services site location data were checked for cultural resources on record in the area to be affected by this well location and access.

#### SPONSOR

MESA GRANDE RESOURCES  
1200 Philtower Bldg.  
Tulsa, Oklahoma  
74103

This is a topographic map of the Gavilan area. The map features contour lines indicating elevation, with labels such as 7200, 7230, 7240, 7250, 7260, 7296, and 7300. A dashed line, likely representing a pipeline, runs from the top left towards the center. A solid line, possibly a road, is visible in the lower right. A shaded area is located near the center of the map. The map includes labels for 'PIPELINE', 'Gavilan', 'Rucker Lake', 'Drill Hole', and 'BM 7256'. A dashed line indicates a path or boundary, and a solid line shows a road. A shaded area is present near the center of the map.

USGS OJITO, NEW MEXICO  
7.5 MINUTE QUADRANGLE  
1963  
UTM ZONE 13

JAS 249



MESA GRANDE RESOURCES WELL PHANTOM FEDERAL #1

SURFACE LAND STATUS: Private, Loyd Ingram Ranch; with Federal Minerals administered by the Farmington Resource Area, Bureau of Land Management.

WELL LEGAL LOCATION: NE1/4, NE1/4, SW1/4, SW1/4 of Section 16, 1035 feet from the South line, and 1125 feet from the West line.

ACCESS: 3508.1 feet, along existing ranch roads on edges of plowed fields: from the east edge of the well location, 800 feet north across the NE1/4, SW1/4, SW1/4, and the SE1/4, NW1/4, SW1/4; turning northeast about 800 feet across the SW1/4, NE1/4, SW1/4, into the NW1/4, NE1/4, SW1/4; then turning generally north, across the SW1/4, SE1/4, NE1/4, and the NW1/4, SE1/4, NW1/4; to connect to the main road in the SE1/4, SW1/4, NE1/4, NW1/4 of Section 16.

Township 25 North, Range 2 West, NMPM,  
Rio Arriba County, New Mexico.

UTM COORDINATES Z13: WELL - 3,15,240mE: 40,29,390mN Stake  
ACCESS- 3,15,480mE: 40,30,290mN End

MAP REFERENCE, USGS: Ojito Quadrangle, New Mexico,  
7.5 Minute Series 1963, Figure 1

AREA OF DISTURBANCE: WELL - 300' x 275', 1.89 acres  
ACCESS- 20' x 3508', 1.61 acres

AREA OF THIS SURVEY: WELL - 600' x 800', 11.02 acres  
ACCESS- 50' x 3508', 4.03 acres

TOTAL AREA SURVEYED: 15.05 acres

**TOPOGRAPHY:** This location is in a gently rolling area; in the open, mildly south sloping, north reaches of the Gavilan Canyon valley. East of the location, the terrain opens to a wider valley, with a deep local arroyo and a dirt stock tank immediately across the existing ranch road. According to the Land Owner, this is his most reliable pond; and he does not want it damaged.

The majority of the well location is in a slight valley and on gentle south slopes of a low rise to the north. There are also low rises to the west and south (see figure 2). These low rises are the eroded remnants of sandstone and shale uplands, outcrops of the San Jose surface formation. The slight valley has been cleared of trees, and plowed and planted in wheatgrass.

The access runs from 7245' amsl at the well, north and northeast across an open plowed valley area, then generally north along the break in slope between an open valley on the east, and a low upland on the west. Much of this is near 7260' amsl, and joins the main road near 7270' amsl. Almost all the access runs along existing ranch roads in the edge of plowed fields.

**VEGETATION:** The valley portions of this survey area has been bulldozed and plowed, and is covered in wheatgrass (*Agropyron* sp.) with reemergent sage (*Artemisia tridentata*), ricegrass (*Oryzopsis hymenoides*), galleta (*Hilaria jamesii*), snakeweed (*Gutierrezia sarothrae*), and blue grama (*Bouteloua gracilis*). The low rises and slopes are fringed in rabbitbrush, (*Chrysothamnus nauseosus*) and canopied in pinon (*Pinus edulis*), and juniper (*Juniperous monosperma*), with sage, oak (*Quercus gambeli*), and grasses underneath. The margins of the plowed area retain some downed trees and brush from the clearing activities.

**SOIL/WATER:** The soils in this area are fine textured, sandy, Ustollic Haplargids loams. These belong to the Penistaja-Valent-Rockland soil association, and are composed of alluvial detritus and aeolian sediments. (Maker et al, 1973)

The well is located on generally southern slopes, in the northern reaches of Gavilan Canyon. Until entrenched by the cutting cycle of the last 100 years, Gavilan Canyon was probably a year round water source; and presently carries surface flow for much of the year.

## CULTURAL RESOURCES & DISCUSSION:

ON RECORD - No cultural resources were on record in this area prior to this survey.

THIS REPORT - Five "isolated finds", a small historic camp, and a large prehistoric site, were recorded in this survey area.

\*\*\*\*\*

JAS-IF-OJI-43 is 14 tiny sherds and small spalls (apparently) of one Gallina Plain Utility vessel. All assembled, these would not represent more than 7 or 8 square inches (about the size of two "normal" sherds); and thus, although there are more than "ten artifacts" present, this should not be considered a "site". These are on the north side of the existing road/access in a plowed area, near 3,15,395mE: 40,29,700mN.

JAS-IF-OJI-44 is two pieces of one Gallina Plain utility sherd, in the existing road/access near 3,15,390mE: 40,30,130mN.

JAS-IF-OJI-45 is one small sherd of Gallina Plain utility, on the west edge of the road at 3,15,400mE: 40,30,220mN.

JAS-IF-OJI-46 is a vegetable drawer from an early model refrigerator, west of the road at 3,15,440mE: 40,30,260mN.

JAS-IF-OJI-47 is one sherd of Gallina Plain Utility, west of the road at 3,15,420mE: 40,29,800mN.

\*\*\*\*\*

SITE JAS 250, an historic herding or hunting temporary camp is over a hundred feet south of the southeast corner of the well location, near 3,15,210mE: 40,29,320mN. This consists of ax cut poles, wired between three trees, probably to form -or support- a small shelter or windbreak of some type. Artifacts in association are: one 3 pound crimp-seal Coffee can; one "sardine" can; three scraps of milled lumber; a scatter of thin clear glass shards (lantern globe?); a metal facia; and a small hearth. The coffee can indicates a post 1950 occupation. This recording is appropriate to forestall future misinterpretation of the age of this feature.

## SITE JAS 249

Site JAS 249 is a Gallina habitation site, with structural features located south, north and west of the proposed well location (see Figure 2).

Area 1, on a low rise to the south, is a depression (possible pithouse), slightly over 100 feet from the edge of the well location. The artifact scatter associated with Area 1 is concentrated south of the pithouse, away from the well, and includes: hundreds of Gallina Plain Utility (some oxidized), over a hundred Gallina Black on Grey and Black on White, bowl and jar sherds; over a hundred chalcedonic Federnal (with black and red mossy inclusions) lithic debris; a few Polvadera Jemez obsidian debris and at least one marginally retouched secondary flake. The possible pithouse depression is about 5m in diameter, and fairly obscured by a fallen tree. About 4m east of the depression, there is a 1x2m, possibly patterned, array of sandstone cobbles, which may be a constructed site feature. About 3m southwest of the depression, there is a large natural outcrop of sandstone boulders, and immediately south of, and below these, is the artifact concentration and a linear set of sandstone cobbles that may represent the previous existence of a constructed feature. The dispersed artifact scatter of Area 1 is about 80m northwest/southeast by 60m northeast southwest, with the pithouse depression in the west center of the scatter.

Area 2 is a very dense artifact concentration, on the end of a slight ridge that descends from Area 3. This includes several thousand Gallina Plain Utility, hundreds of Gallina Black on Grey and Black on White, sherds; hundreds of chalcedonic Federnal (with red and black mossy inclusions) knapped stone debris; and flakes and other debris of Polvadera Jemez obsidian. These cover a relatively level area on top, and the slopes of, this low rise; concentrated in a 20m northeast/southwest by 30m northwest/southeast area centered on the rise. The dispersed artifact scatter of Area 2 overlaps the dispersed scatter of Area 3, and combined they cover an area about 100m northeast/southwest by 125m northwest/southeast. There is no clear evidence of structure(s) at Area 2, which is centered 77 feet from the present southwest corner stake of the location. The artifact concentration density tapers off about 44 feet west of the southwest corner stake, although a few sherds and lithic artifacts may be found over to the stake. For this reason, we recommend that the southwest corner be shortened, to not extend beyond the already bulldozed and plowed area of the slight valley (as in Figure 2).

Area 3 is a massive rectangular structure, on a low rise right at 200 feet west of the well location. The central depression (only) is 13m northwest/southeast by 17m northeast/southwest. The wall mounds surrounding this average 10m wide, and remain from 1 to 2m above the apparent natural contour, making the outside

dimensions of the collapsed structure approximately 25m northwest/southeast by 30m northeast/southwest. There are three areas of exposed wall: a 1.5 x 3m piece on the northeast corner of the depression; a 1.5 x 5m cobble pile on the north corner; and a 1 x 3m area in the center of the northwest mound. This wall was evenly set (for Gallina) in sandstone cobbles, at least 3 courses thick, with large quantities of mud mortar, as is common to Gallina structures. Structures this large, more common 20 to 30 miles north, have not been frequently recorded in the Lindrith area. The artifact scatter associable with Area 3 decreases with distance from the structure, to occasional sherds in the plowed area near the west edge of the well. As mentioned above, this overlaps the Area 2 artifact scatter, and extends about 100m northeast/southwest by 125m northwest/southeast. A brief search of the plowed valley between Areas 3 and 4 found quite a few "micro sherds", the logical result of the bulldozing and plowing activities.

Area 4 is the eroding remains of a possibly rectangular cobble structure, on the north slope of the low rise north of the well. This is an eroded "L" shaped scattered surface alignment of cobbles, 4 x 2m, with a 3m disarray of cobbles to the northeast. There are hundreds of Gallina Plain Utility (a few oxidized), and lesser quantities of Gallina Black on Grey, chalcedonic and quartzitic knapped stone debris, in the immediate vicinity. The surface of the low rise is essentially level, and there is no clear evidence of any subsurface structure (which, even if present, would be north of the buffer zone, and over a hundred feet from the northwest corner of the well). There are also large, natural sandstone outcrops in the immediate vicinity of this feature. The cobble structure is 170 feet north of the northwest corner of the well location, and the appreciable density of the artifact scatter ends about 60 feet north of the northwest corner. The dispersed artifact scatter covers an area about 60m north/south by 100m east/west, and extends out into the plowed fields to the north and west, and down to the plowed field on the east.

Artifacts associable with these prehistoric features were found in and near the proposed well location (refer to Figure 2 and Figure 3 for location coded observations). In light of the thousands of artifacts near the features, these are a minute, trivial percentage of the site assemblage; from which only minor, additive, typological and technological data can be recovered. No evidence whatsoever, of subsurface remains of potential archaeological significance was apparent in the actual area to be affected; nor, with the exception of Area 2, in the buffer zone.

SITE JAS 249 & WELL PHANTOM FEDERAL #1  
NE1/4, SW1/4, SW1/4 & the S1/2, SE1/4, NW1/4, SW1/4 of SECTION 16  
T25N, R2W, NMPM, RIO ARriba COUNTY, NEW MEXICO

FIGURE 2

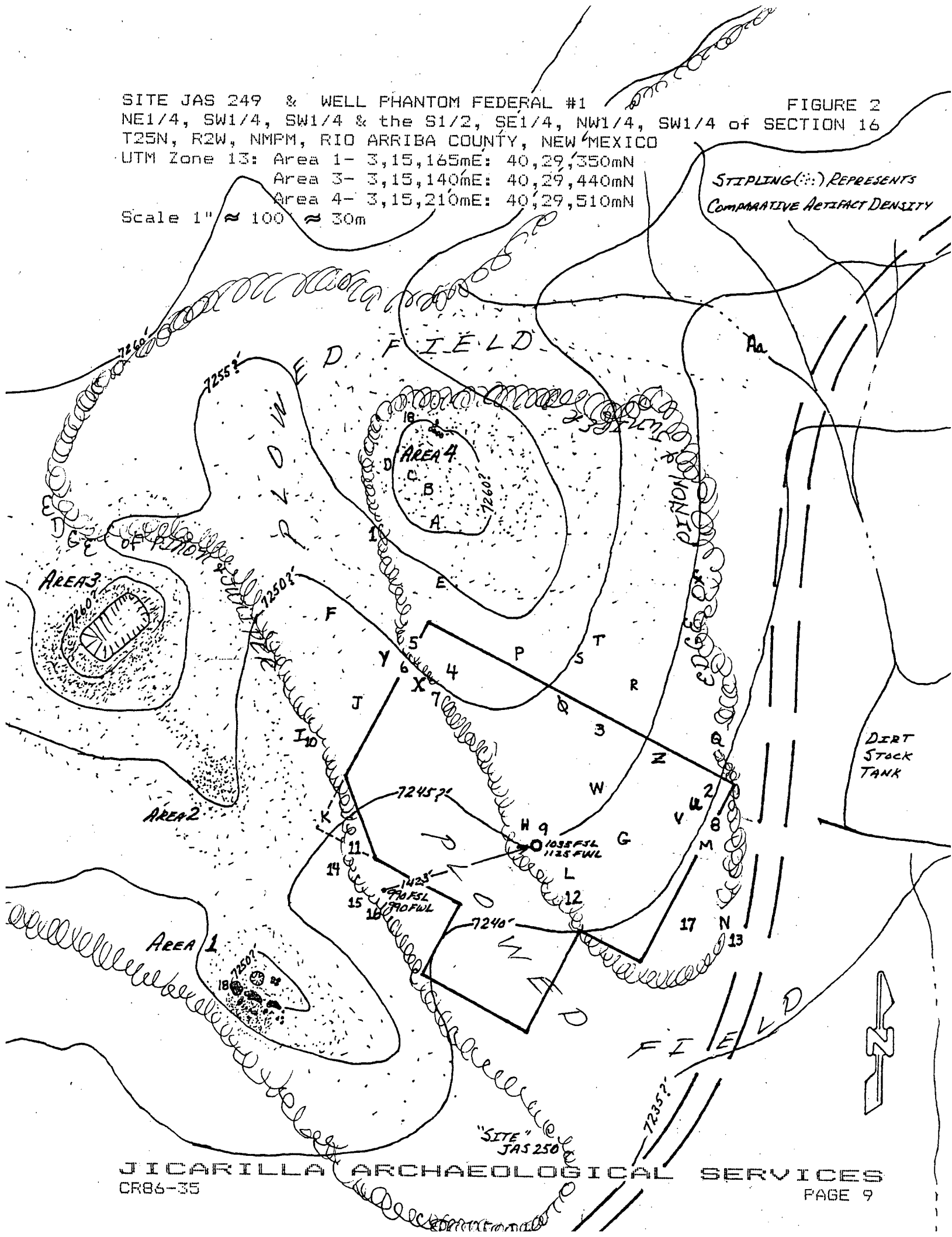
UTM Zone 13: Area 1- 3,15,165mE: 40,29,350mN

Area 3- 3,15,140mE: 40,29,440mN

Area 4- 3,15,210mE: 40,29,510mN

Scale 1"  $\approx$  100'  $\approx$  30m

STIPLING (:) REPRESENTS  
COMPARATIVE ARTIFACT DENSITY



JICARILLA ARCHAEOLOGICAL SERVICES

CR86-35

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SURVEY OBSERVATIONS  
ALPHANUMERIC & DESCRIPTION

FIGURE 3

1. Heavy pinon duff, and dead branches, surface covered over an area roughly 20m N/S x 10m E/W.
2. A fallen, lightening struck tree, with a scatter of solid chunks of recent appearing charcoal.
3. Several downed trees and decaying organic soil stains.
4. Standing large, old trees and heavy surface duff.
5. Heavy surface cover of decaying needles and branches (duff), 5m in diameter under a large old tree.
6. A rectangular, rusted metal, gallon "antifreeze" can.
7. Small clumps of recent appearing charcoal, and burnt pinon branches on the surface.
8. An aluminum 12 ounce Coors can.
9. A Velvet tobacco can, at the well stake.
10. A 1.5m x 3m scatter of recent charcoal and burnt branches, one large oxidized sandstone in the edge of the plowed area, and one sherd of Gallina Plain Utility (I below) in the plow berm.
11. Two scraps of sheet metal.
12. An unoxidized sandstone cobble, and a natural soil stain from a decaying, fallen pinon.
13. A 12 ounce aluminum Coors can.
14. A recently burnt pinon log.
15. Modern bone fragments and a fallen, burnt juniper.
16. Charcoal stain and surrounding dark soil; no clear modern or prehistoric association.
17. A clump of electric fence wire (heavy gauge, not barbed).
18. Naturally occurring sandstone outcrops.
- A. The edge of the denser artifact scatter of Area 4. About 68 feet north of the northwest corner of the well there are at least 30 Gallina Plain Utility sherds and eleven chalcedonic lithic debris within 15m.
- B. At least 17 Gallina Plain Utility, and 2 whiteware sherds within about 5m.
- C. Six chalcedony flakes, and seven Gallina Plain Utility and whiteware sherds, within about 4m.
- D. One quartzite flake.
- E. Five Gallina Plain Utility sherds along a minor drainage.
- F. A light scatter of "micro sherds" and spalls in plowed field.
- G. Two Gallina Plain Utility sherds and an axe cut juniper.
- H. One large neckbanded sherd of Gallina finger smeared Utility.
- I. One Gallina Plain Utility sherd with #10 (above).
- J. At least five Gallina Plain Utility sherds, one whiteware sherd, and several tiny bone fragments, within about 5m in the plowed area.
- K. Fallen trees, a badger hole, and seven sherds of Gallina Plain Utility (artifact concentration of Area 2 is about 40 feet west).

- L. Downed trees, bovine bone and 3 Gallina Plain Utility sherds.
- M. Four pieces of one Gallina Plain Utility sherd, in a cow track; heavy tree duff and evidence of bovine resting use.
- N. Three Gallina Plain Utility sherds in the edge of the road.
- O. One Gallina Plain Utility sherd.
- P. Two Gallina Plain Utility sherds.
- Q. One Gallina whiteware sherd.
- R. One Gallina whiteware sherd.
- S. One Gallina Plain Utility sherd.
- T. One Gallina Plain Utility sherd.
- U. One Gallina Plain Utility sherd.
- V. One Gallina Plain Utility sherd.
- W. Two Gallina Plain Utility sherds.
- X. Two Gallina Plain Utility sherds.
- Y. At least seven Gallina Plain Utility sherds scattered along the edge of the plowed area.
- Z. Two shoulder sherds of a Gallina Plain Utility jar.
- Aa. In the plowed area; at least 15 whitewares, and 31 Gallina Plain Utility sherds, and a few knapped stone debris, over several meters along an arroyo west of the access route. These are undoubtedly alluvially redeposited from Area 4. The number and location of these artifacts is expected to change with each rainfall/runoff episode, and each time the field is plowed. Further, this is essentially the east edge of the Area 4 dispersed artifact scatter. Artifacts may be found throughout the plowed area and along the minor drainages west from here, and undoubtedly, downstream to the southeast.

This list is not an absolute accounting of all the observations possible in or near the area of direct affects. As Judge (1981) so wisely states "...there is no such thing as "complete" survey, in which all manifestations of prehistoric behavior are located and recorded." It is a reasonable representation of the artifact density within the area of direct affects, as visible at the time of our visits. One must remain aware of the changes in surface appearance at any site, due to environmental factors such as wind, rain and alluvial action, livestock, freeze/thaw cycles, and modern human activities.



## DISCUSSION AND RECOMMENDATION:

The isolated finds do not appear in contexts, associations or morphologies that would argue for potential significance, thus this provenienced recording is sufficient mitigation of what minor affects might befall them; and no further management measures are required.

Site JAS 250 is a recent campsite, and although interesting for several reasons, does not meet current criteria for potential significance; as well as being out of the area of direct affects. Thus no further management measures are required.

Site JAS 249 is clearly a potentially significant cultural resource. However, only a truly trivial number of artifacts would be affected by the proposed well location. No intact site features, no evidence of subsurface structures, and no concentrations of artifacts are present in the area of direct affects from the proposed well location. Further, about half of the area of proposed affects, has been previously bulldozed, plowed and planted, and no deep cut slopes will be required.

Other considerations are that: the presently staked location meets the approval of the Land Owner, by avoiding the site, avoiding affects to his stock tank, and avoiding most of his planted field; this location is unorthodox, but not by a large enough distance to cause major difficulty in gaining an exception to New Mexico Oil & Gas Commission rule #104F (Banks, 1986); and that this well was relocated to the present staking in consideration of the archaeological remains, the Land Owner's preferences, and geologic and legal restrictions on the well location.

Thus we recommend that the proposed Mesa Grande Resources well, Phantom Federal #1 at 1035 feet from the South Line and 1125 feet from the West Line of Section 16, T25N, R2W, NMPM, be approved where presently staked; subject to alternative conditions selected from the following:

The southwest corner of the location (as discussed in the text and shown in Figure 2) should be narrowed/shortened, to not extend into the uncut trees and brush beyond the currently plowed area. (This will require only minor modification of the proposed construction area.)

The southern edge of the disturbance for the location should also be limited to the existing plowed field, not to extend into the uncut trees and brush on the north perimeter of site JAS 249 Area 1. (This will require no modification of the location as staked.)

This provenienced recording may be considered sufficient mitigation of the few direct affects to the few scattered artifacts in the actual area of direct affects.

If provenienced recording is not considered sufficient mitigation; the few scattered artifacts should be collected in a provenienced, catalogued fashion, analyzed and returned to the Land Owner, and a copy of the analysis report provided to the appropriate parties.

The construction should be monitored to assure that construction equipment maneuvering does not affect the discrete features of the site; and, in the unlikely event that subsurface remains, not previously apparent in the area of direct affects, are unearthed; such remains may be protected or dealt with as appropriate.

By so doing, the proposed well location construction could be considered, and/or kept, in compliance with EO 11593, the National Historic Preservation Act, the Archaeological Resources Protection Act, and New Mexico Cultural Properties legislation. The actual conditions of clearance are at the discretion of the Federal Lease Manager in concurrence with the State Historic Preservation Officer.

#### BIBLIOGRAPHY:

Banks, Ernie

1985 Personal communication, New Mexico Oil & Gas Commission, Aztec, New Mexico.

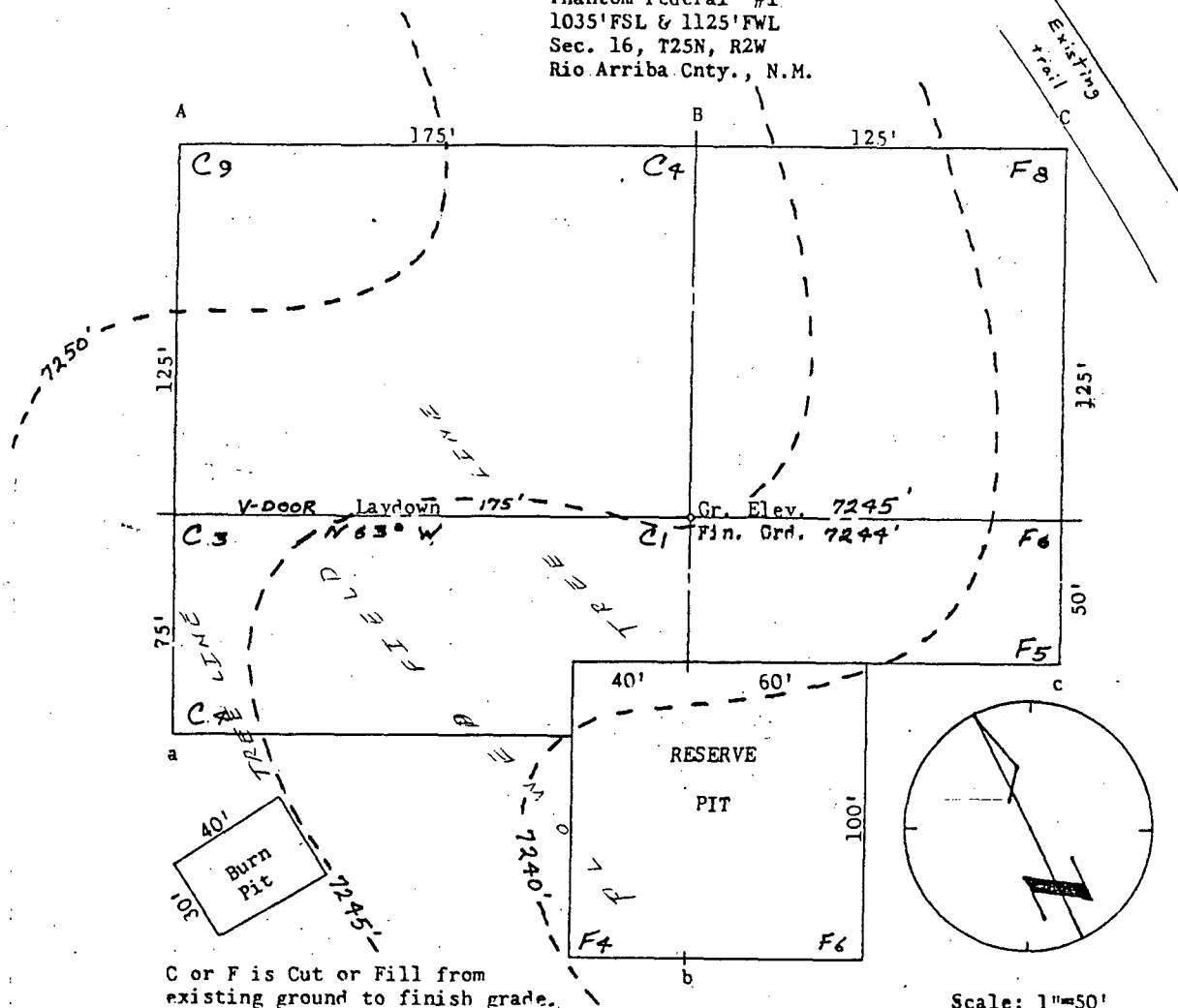
Judge, W.J., with A.C. Hayes and D.M. Brugge

1981 Archeological Surveys in Chaco Canyon; Publications in Archeology #18A, Chaco Canyon Studies, USDI, NPS, Washington D.C..

Maker, H.L., with J.J. Folks, J.U. Anderson, and V.G. Link

1973 Soils Associations and Land Classification for Irrigation, Rio Arriba County; NMSU Agricultural Experiment Station Research Report #254, Las Cruces, New Mexico.

Profile for: MESA GRANDE RESOURCES  
Phantom Federal #1  
1035'FSL & 1125'FWL  
Sec. 16, T25N, R2W  
Rio Arriba Cnty., N.M.



C or F is Cut or Fill from existing ground to finish grade.

Scale: 1"=50'

Existing Grnd.  
Proposed Finished Grd.

A—a Horiz: 1"=100' Vert: 1"=30' C/L

		C <sub>9</sub>	C <sub>3</sub>	C <sub>4</sub>	
7250'					
7240'		Excavate			
7230'					

B—b C/L

		C <sub>4</sub>	C <sub>1</sub>	F <sub>5</sub>	
7250'					
7240'		Excavate		Excavate	
7230'					

C—c C/L

		F <sub>8</sub>	F <sub>4</sub>	F <sub>5</sub>	
7250'					
7240'			Fill		

LABORATORY OF ANTHROPOLOGY, MUSEUM OF NEW MEXICO  
 ARCHEOLOGICAL SITE SURVEY FORM

LA No. \_\_\_\_\_ Site Name \_\_\_\_\_ Other Inst. JAS 249 I.O. \_\_\_\_\_

JAS Proj. 86-35 UTM: Zone 13 E 315140 N 4029440

Legal Desc. T 25 N 2 W Sec. 16

(Area 3)

NE 1/4 of the SW 1/4 of the SW 1/4 4 5 1/4, SE, NW, SW

Unplatted \_\_\_\_\_ Grant \_\_\_\_\_ Owner & Address Loyd Ingman, Lindvith, NM 87029

\*Map Reference USGS Ojito, NM, 7.5 Topo Date: 1963 Scale: 1:24000

County Pio Arriba State NM Nearest Named Drainage Gavilan Canyon

Locational Desc.: Recognized Landmarks in wide N side Gavilan Valley

Site Type: \_\_\_\_\_

Site Size: Length 250m Width 185m Elevation (# of Feet) 7250'

Topographic Setting (Location & Access): Turn W. off NM 95 at Gavilan  
(Howard Family Enclave), W 1/2 mi., N 3/4 mi., W 3/4 mi., Then S. on Ranch Road.  
(2 wheel access when dry - don't try when wet: Contact land owner first)

<input type="checkbox"/> arroyo/wash	<input type="checkbox"/> flood plain/	<input type="checkbox"/> plain/flat
<input type="checkbox"/> base of cliff	<input type="checkbox"/> valley bottom	<input type="checkbox"/> playa
<input type="checkbox"/> bench	<input type="checkbox"/> hill top	<input type="checkbox"/> ridge
<input type="checkbox"/> blowout	<input type="checkbox"/> hill slope	<input type="checkbox"/> saddle
<input type="checkbox"/> canyon rim	<input checked="" type="checkbox"/> low rises	<input type="checkbox"/> base talus slope
<input type="checkbox"/> cave	<input type="checkbox"/> mesa	<input type="checkbox"/> terrace
<input type="checkbox"/> cliff/scarp	<input type="checkbox"/> mountain	other (specify) _____
<input type="checkbox"/> constricted cyn	<input type="checkbox"/> mt. front/foothill	_____
<input type="checkbox"/> dune	<input type="checkbox"/> open canyon floor	_____

Local Vegetation PJ slopes, sage-grama valleys

Ecological Zone: forest \_\_\_\_\_ woodland ☒ scrubland \_\_\_\_\_ grassland \_\_\_\_\_

desertscrub \_\_\_\_\_ marshland \_\_\_\_\_ other (specify) \_\_\_\_\_

\*Form must be accompanied by photocopy portion of USGS map showing T., R., scale and quad name.

Soil Type: rocky\_\_\_ gravelly\_\_\_ sandy ☒ clayey ☒ other\_\_\_Local Outcrops: sandstone ☒ shale ☒ limestone\_\_\_ basalt\_\_\_ tuff\_\_\_  
other (specify) \_\_\_\_\_Nature and Depth of Fill: 2m in big house, less in othersArch. Status: Amount and Type of Work Past and Present Wall fall, alluvia & acolian  
None Other Known

## National and/or State Register Status:

- ☐ On State Register  
☐ On National and State Register  
☐ Recommended for National by State, on State Register  
☐ Recommended for National and State Register  
☐ In District, National and State  
☐ In District, National  
☐ In District, State  
☐ Recommended and rejected  
☐ Insufficiently evaluated, potential unknown  
☐ Not nominated

Probable Register QualityCondition of Site: intact ☒ grazed ☒ eroded ☒ mech. disturbance Some  
vandalized\_\_\_ other miscellaneous minor affectsMitigation: avoid ☒ monitor ☒ test\_\_\_ excavate\_\_\_ not required\_\_\_Surveyed for Mesa Grande ResourcesRecord Form: Surv. Forms ☒ Excav. Forms\_\_\_ Sketch Map ☒ Photos\_\_\_Loc. of Forms, Maps, Photos JASSurface and/or Subsurface Collections: yes\_\_\_ no ☒ Strategy\_\_\_Location of Collected Artifacts NAPrevious Collections? ? When Unknown, Probably localIs there another site close by Undoubtedly field Identif. # But Not onArtifact Density: 0, 10's, 100's, 1000's. Record YetTime Diagnostic Artifacts: Gallina Black on Grey & Black on White

Features One Very Large Masonry House, one probable pit house.  
Two cobble alignments (possible structures)

Culture Gallina Period P III Phase Late

Site Function Farm Home Best Date 1200 AD Mean Date \_\_\_\_\_

Method of Date Ceramics Rooms 4 Reliability 1 (2) 3

Units 3 Reliability (1) 2 3

(1-3 most reliable to least reliable)

Additional Temporal Components

Historic Bulldozing & Plowing Between Features, Recent dirt  
stock tank on East, Historic Camp JAS 250 on So. East

Published Reference:

Date 7-18-86

Institution JAS

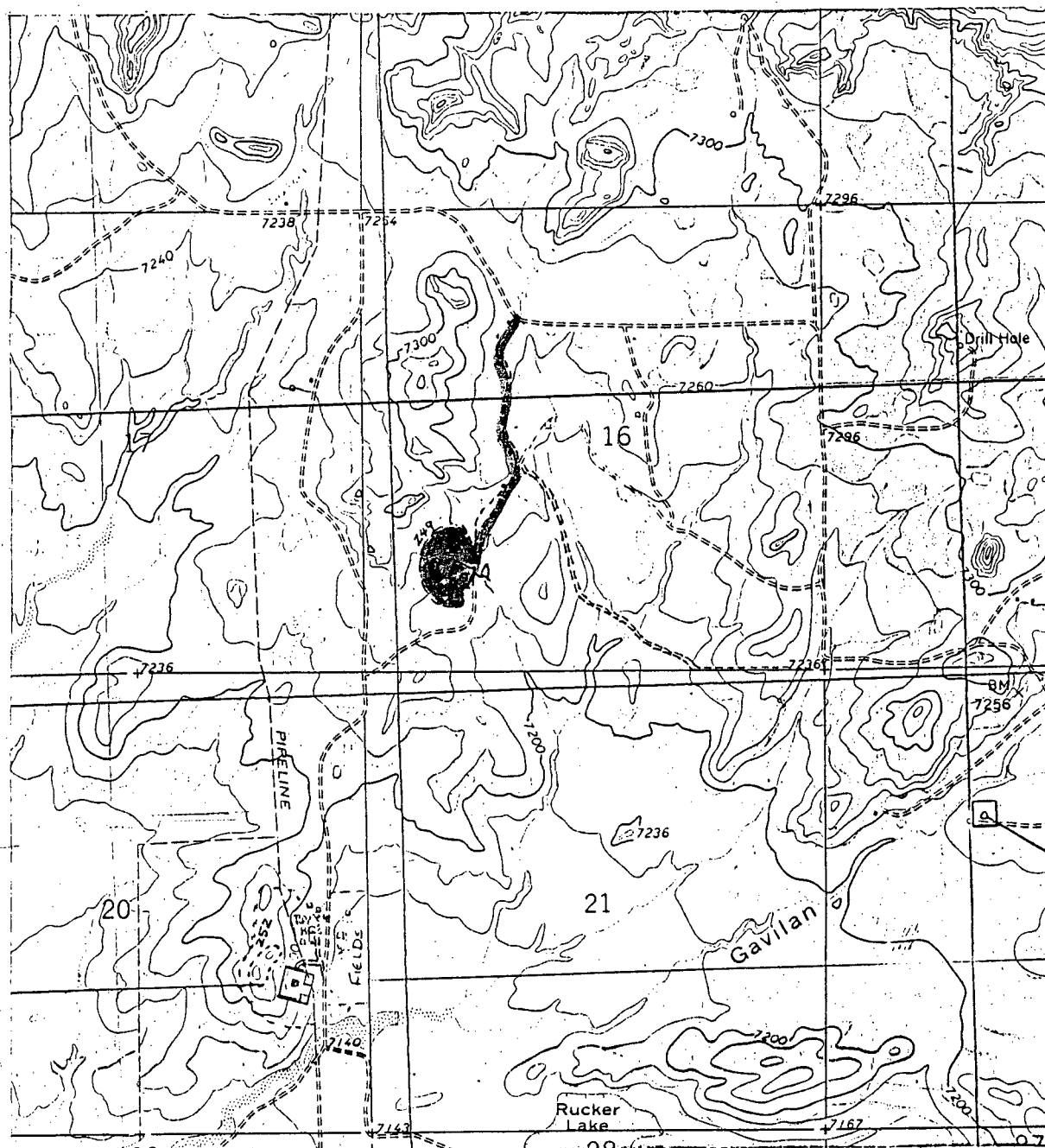
Author and Title Knight & Gomolak: CRS 86-35 Location & Access for  
Mesa Grande Resource Phantom Federal #1

Remarks: See Attached Description: Area 3 is an uncommonly  
large house - compared to other rectangular houses on  
record in this Lindrieth-Gavilan vicinity.

Field Recorder \_\_\_\_\_ Knight & Gomolak Date 5-30  
6-24  
7-5

Lab Recorder \_\_\_\_\_ Date \_\_\_\_\_

FIGURE 1  
R2W



MESA GRANDE RESOURCES  
WELL & ACCESS  
PHANTOM FEDERAL #1  
SCALE 1:24,000

JAS 249

USGS OJITO, NEW MEXICO  
7.5 MINUTE QUADRANGLE  
1963  
UTM ZONE 13

MUSEUM OF NEW MEXICO/LABORATORY OF ANTHROPOLOGY  
 ARCHEOLOGICAL RECORDS MANAGEMENT - SITE CODING FORM

IDENTIFICATION

LA Number \_\_\_\_\_ Other Number \_\_\_\_\_ Zone \_\_\_\_\_ Easting \_\_\_\_\_ UTM \_\_\_\_\_ Northing \_\_\_\_\_

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36

UTM

Area 3, See MAP

LEGAL DESCRIPTION

Township \_\_\_\_\_ Range \_\_\_\_\_ Section \_\_\_\_\_ USGS Quad \_\_\_\_\_ County \_\_\_\_\_ State \_\_\_\_\_

37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52

GEOGRAPHICAL

Loc. \_\_\_\_\_ Size \_\_\_\_\_ Elevation \_\_\_\_\_ Topog. \_\_\_\_\_ Ecol. \_\_\_\_\_ STATUS \_\_\_\_\_

Acc. \_\_\_\_\_ & IO \_\_\_\_\_ 53 54 55 56 57 58 59 60 61 62 63 64 65

INSTITUTIONAL

Surveyed Recorder's \_\_\_\_\_ Property Owner \_\_\_\_\_ Records \_\_\_\_\_ Housed \_\_\_\_\_ Curated \_\_\_\_\_ No. of \_\_\_\_\_

For \_\_\_\_\_ Inst. \_\_\_\_\_ Year \_\_\_\_\_ 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81

USGS Quad Name: Qito, NM, 7.5TPO 1963 COUNTY Rio Arriba STATE NM

Institution Surveyed For: Mesa Grande Resources

Recorder's Institution: JAS

Institution Where Curated: JAS

Property Owner: Loyd Ingraham, Lindcith, NM

Site Name: \_\_\_\_\_ Name of Person Completing Form: Gornak



Large!

Masonry

Feature 1: Structure Culture: And

Feature 2: Pen. Pithouse Period: P.III

Feature 3: Pen. Masonry Phase: Late Gal.

COMPONENT 1

Obsv. # of  
Feat 1 Feat 1

181 1 85

82 84 85

Obsv. # of  
Feat 2 Feat 2

168 1 88

86 87 88

Obsv. # of  
Feat 3 Feat 3

167 2 93

90 91 92

Culture

103

94 95 96

Period

112

97 98 99

Phase

10314

100 101 102

COMPONENT 2

Obsv. # of  
Feat 1 Feat 1

101 103 104

105 106 107

Obsv. # of  
Feat 2 Feat 2

109 110 111

112 113 114

Obsv. # of  
Feat 3 Feat 3

115 116 117

118 119 120

Culture

113

114 115 116

Period

117

118 119 120

Phase

117

118 119 120

COMPONENT 3

Obsv. # of  
Feat 1 Feat 1

120 122 123

124 125 126

Obsv. # of  
Feat 2 Feat 2

127 128 129

130 131 132

Obsv. # of  
Feat 3 Feat 3

133 134 135

136 137 138

Culture

132

133 134 135

Period

136

137 138 139

Phase

136

137 138 139

REFERENCE CODE

Date Publication

9/26/86 JAS

139 141 142

Author & Title

Gordon A. K. G. S. 86-35 MESA

148 149 150

BIBLIOGRAPHICAL DATA:

Author: T.L. Knight & A.R. Gornokak

Title: Cultural Resources Survey 86-35 of the Proposed Well Location & Access for

Journal/Publisher: JAS

Date of Publication: 7-18-86

LABORATORY OF ANTHROPOLOGY, MUSEUM OF NEW MEXICO.  
 ARCHEOLOGICAL SITE SURVEY FORM

LA No. \_\_\_\_\_ Site Name \_\_\_\_\_ Other Inst. # JAS 250 I.O. \_\_\_\_\_

~~NM~~ Proj. # 86-35 UTM: Zone 15 E \_\_\_\_\_ N \_\_\_\_\_

Legal Desc. T 25 N ~~N~~ R 2 ~~W~~ W Sec. 16

NE 1/4 of the SW 1/4 of the SW 1/4

Unplatted \_\_\_\_\_ Grant \_\_\_\_\_ Owner & Address Loyd Ingram, Lindrih, NM 87029

\*Map Reference U565 Ojito, NM, 7.5 Topo Date: 1963 Scale: 1:24000

County Rio Arriba State NM Nearest Named Drainage Gavilan Canyon

Locational Desc.: Recognized Landmarks in wide valley area in N side of  
Gavilan Canyon 1 1/2 mi W. of Gavilan

Site Type: Historic Herding or Hunting Camp

Site Size: Length 10m Width 10m Elevation (# of Feet) 7240'

Topographic Setting (Location & Access): on point of low rise just west of ranch  
road. Turn W. off NM 95 at Gavilan (Howard Family Enclave), W 1/2 mi., N 3/4 mi.,  
Then South on Ranch Road. (2 wheel access when dry, don't try when wet - Contact Landowner 1st)

<input type="checkbox"/> arroyo/wash	<input type="checkbox"/> flood plain/	<input type="checkbox"/> plain/flat
<input type="checkbox"/> base of cliff	<input type="checkbox"/> valley bottom	<input type="checkbox"/> playa
<input type="checkbox"/> bench	<input type="checkbox"/> hill top	<input type="checkbox"/> ridge
<input type="checkbox"/> blowout	<input type="checkbox"/> hill slope	<input type="checkbox"/> saddle
<input type="checkbox"/> canyon rim	<input checked="" type="checkbox"/> low rise	<input type="checkbox"/> base talus slope
<input type="checkbox"/> cave	<input type="checkbox"/> mesa	<input type="checkbox"/> terrace
<input type="checkbox"/> cliff/scarp	<input type="checkbox"/> mountain	other (specify) _____
<input type="checkbox"/> constricted cyn	<input type="checkbox"/> mt. front/foothill	_____
<input type="checkbox"/> dune	<input type="checkbox"/> open canyon floor	_____

Local Vegetation PT sage overlooking sage savanna valley  
(valley now plowed)

Ecological Zone: forest \_\_\_\_\_ woodland ☒ scrubland \_\_\_\_\_ grassland \_\_\_\_\_  
 desertscrub \_\_\_\_\_ marshland \_\_\_\_\_ other (specify) \_\_\_\_\_

Soil Type: rocky\_\_\_ gravelly\_\_\_ sandy ☒ clayey ☒ other\_\_\_Local Outcrops: sandstone ☒ shale ☒ limestone\_\_\_ basalt\_\_\_ tuff\_\_\_  
other (specify)\_\_\_Nature and Depth of Fill: Surface to .2m?Arch. Status: Amount and Type of Work Past and Present None Other

## National and/or State Register Status:

- ☐ On State Register
- ☐ On National and State Register
- ☐ Recommended for National by State, on State Register
- ☐ Recommended for National and State Register
- ☐ In District, National and State
- ☐ In District, National
- ☐ In District, State
- ☐ Recommended and rejected
- ☐ Insufficiently evaluated, potential unknown
- ☒ Not nominated

Condition of Site: intact ☒ grazed\_\_\_ eroded\_\_\_ mech. disturbance\_\_\_  
vandalized\_\_\_ other\_\_\_Mitigation: avoid\_\_\_ monitor\_\_\_ test\_\_\_ excavate\_\_\_ not required ☒Surveyed for Mesa Grande ResourcesRecord Form: Surv. Forms ☒ Excav. Forms\_\_\_ Sketch Map\_\_\_ Photos\_\_\_Loc. of Forms, Maps, Photos JASSurface and/or Subsurface Collections: yes\_\_\_ no ☒ Strategy\_\_\_Location of Collected Artifacts NAPrevious Collections? ? When\_\_\_ Repository\_\_\_Is there another site close by? JAS 249 LA or Field Identif.#\_\_\_Artifact Density: 0 (10's), 100's, 1000's.Time Diagnostic Artifacts: Crimp Seal Coffee can

Temporal Component (1)

JAS 250

One small vague hearth, metal & milled lumber scraps.

Features AX cut poles wired to trees to support or form a windbreak  
one 3 pound Crimp Seal Coffee Can (1950+), Lantern Globe shards, sardine can

Culture Euro American Period WWII Present Phase 1950s

Site Function (Hunting or Herding)  
Camp Best Date 1958+ Mean Date —

Method of Date Coffee Can Rooms 1 Reliability ① 2 3

Units 1 Reliability ① 2 3

(1-3 most reliable to least reliable)

Additional Temporal Components

Published Reference:

Date 7-18-86

Institution JAS #86-35

Author and Title Knight & Gomolak Cultural Resources Survey 86-35  
of the Proposed Well Location & Access for Mesa Grande Resources Phantom Federal #1.

Remarks: See also JAS 249 - Large Gallina Site immediately NW

Field Recorder Gomolak Date 5-30-86

Lab Recorder \_\_\_\_\_ Date \_\_\_\_\_



MUSEUM OF NEW MEXICO/LABORATORY OF ANTHROPOLOGY  
 ARCHEOLOGICAL RECORDS MANAGEMENT - SITE CODING FORM

IDENTIFICATION

LA Number 1 Other Number 250 Zone 13 Easting 315210 UTM Northing 4029320

LEGAL DESCRIPTION

Township 25 Range 40 Section 16 USGS Quad 10213 County 35 State 32

GEOGRAPHICAL

Loc. Size Elevation Topog. Ecol. STATUS Arch. Regis. Cond.  
 Acc. & IO Elevation Zones Status Status  
1 2 17240 13 2 1 4 14  
53 54 55 59 60 61 62 63 64 65

INSTITUTIONAL

Surveyed Recorder's Property Owner Records Housed Collect. Curated No. of  
 For Inst. Year Owner Records Loc. Collect. Loc. Compon.  
26 64 986 18 2 44 5 1  
66 67 68 69 70 72 73 74 75 76 77 78 79 80 81

USGS Quad Name: Q10 NM 7.5 Topo 1963 COUNTY Rio Arriba STATE: NM

Institution Surveyed For: Mesa Grande Ruins

Recorder's Institution: JAS

Institution Where Curated: JAS

Property Owner: Loyd Ingram, Lindrih, NM 87029

Site Name: \_\_\_\_\_ Name of Person Completing Form: Cornelia

COMPONENT 1

Obsv. Feat 1	# of Feat 1	Obsv. Feat 2	# of Feat 2	Obsv. Feat 3	# of Feat 3	Culture	Period	Phase	Feature 1: Culture	Feature 2: Period	Feature 3: Phase
179	85	141	85	134	93	1016	96	98	Windbreak	Small Heath	1950s

COMPONENT 2

Obsv. Feat 1	# of Feat 1	Obsv. Feat 2	# of Feat 2	Obsv. Feat 3	# of Feat 3	Culture	Period	Phase	Feature 1: Culture	Feature 2: Period	Feature 3: Phase
103	104	105	107	109	111	113	114	117			

COMPONENT 3

Obsv. Feat 1	# of Feat 1	Obsv. Feat 2	# of Feat 2	Obsv. Feat 3	# of Feat 3	Culture	Period	Phase	Feature 1: Culture	Feature 2: Period	Feature 3: Phase
122	123	124	126	128	130	132	133	136			

REFERENCE CODE

Date	Publication Code	Author & Title
9/8/6	JAS	KNIGHT, I. L. & GOSWOLD, A. R. Cultural Resources Survey 86-35 of the Proposed Well Location & Area for Main Grande Resource, Phantom Federal #1

BIOGRAPHICAL DATA:

Author: Knight I. L. & Goswold A. R. Cultural Resources Survey 86-35 of the Proposed Well Location & Area for Main Grande Resource, Phantom Federal #1

Editor/Publisher: JAS

Date of Publication: 7-18-86

**MESA GRANDE RESOURCES, INC.**

POST OFFICE BOX 274

FARMINGTON, NEW MEXICO 87499-0274

(505) 326-9163

AUG - 6 1986

AUGUST 5 1986  
OIL AND GAS DIVISION  
SALA 3

Mr. Mike Stogner  
New Mexico Department of Energy and Minerals  
Oil and Gas Division  
P. O. Box 2088  
Santa Fe, New Mexico 87501

RE: Unorthodox Well Application  
Phantom Federal #1  
SW/4, Section 16, T25N, R2W  
Rio Arriba County, New Mexico

Dear Mike:

Attached please find a lease map showing offset lease operators to the proposed unorthodox Phantom #1 well location. The Phantom #1 is shown on the attached map as a W/2 dedication.

Jerome P. McHugh is the offset operator to the south, southeast, east, west, and northwest. Dugan Production operates the leases to the north and northeast of the W/2 of Section 16 dedication.

As per my telephone conversation with David Catanach on August 1, 1986, this should complete your requirements for the unorthodox well location for this well. Please advise if further information is required.

Sincerely,

MESA GRANDE RESOURCES, INC.



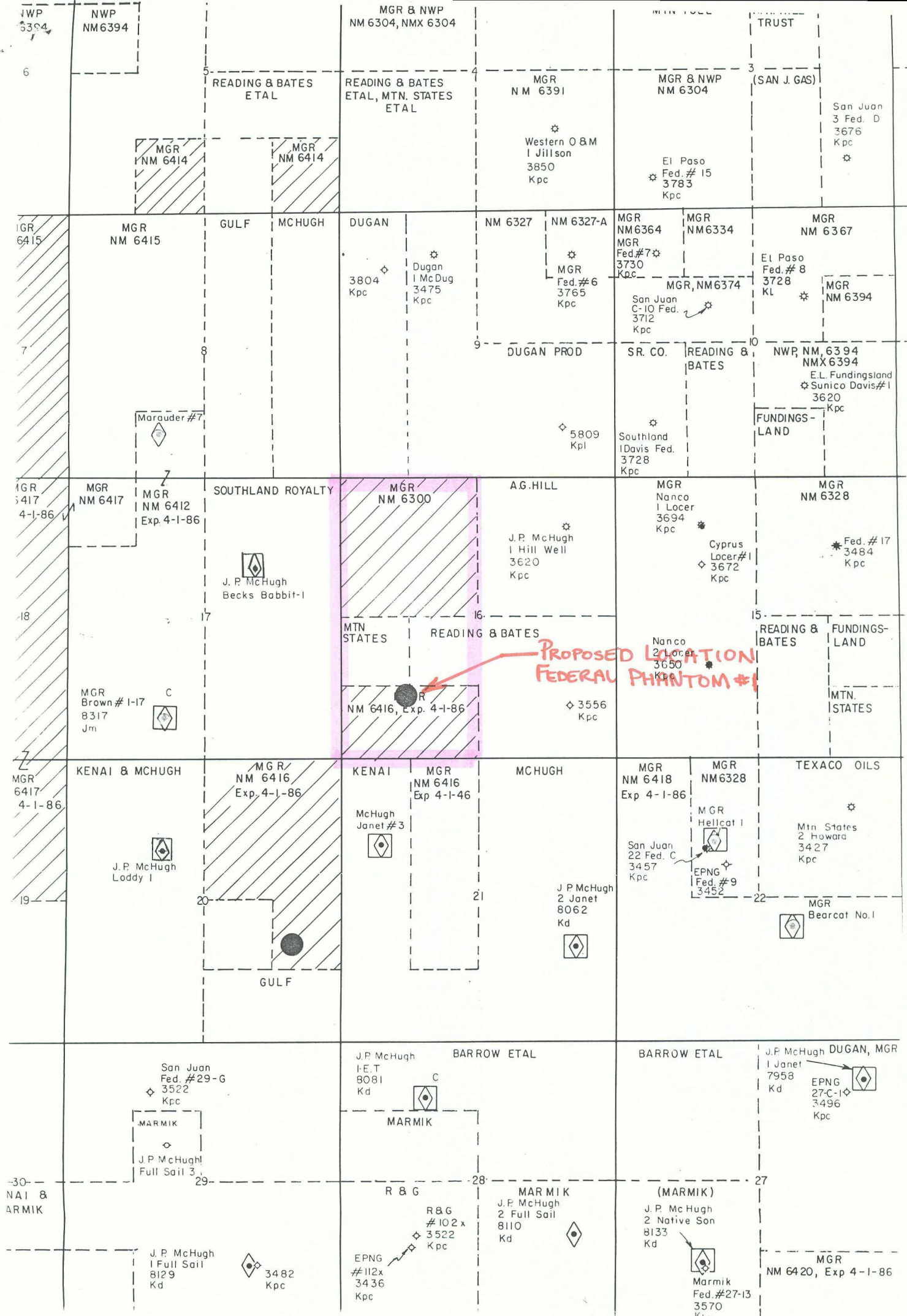
David M. Blandford  
Petroleum Engineer

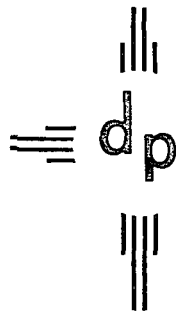
DMB/eg

Attachments

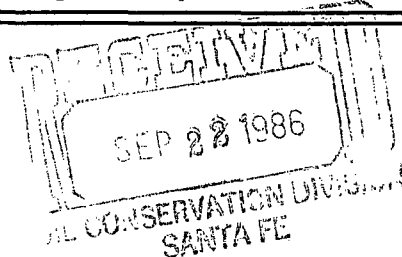
XC: Mesa Grande Resources, Inc.-Tulsa, Oklahoma







# dugan production corp.



August 18, 1986

New Mexico Oil Conservation Division  
Attn: Mr. Richard L. Stamets  
P.O. Box 2088  
Santa Fe, NM 87504-2088

*NSC - 22 83*

- ✓ New Mexico Oil Conservation Division  
1000 Rio Brazos Road  
Aztec, NM 87410

Gentlemen:

Attached is Dugan Production Corp's waiver regarding Mesa Grande's request for an unorthodox location for their Phantom Federal #1 at the proposed location of 1035' FSL and 1125' FWL, Section 16, T25N, R2W in Rio Arriba County, New Mexico.

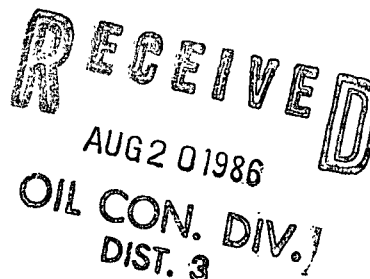
Sincerely,

*John D. Roe*

John D. Roe  
Petroleum Engineer

JDR/cg

attach.



Dugan Production Corporation  
Application for Unorthodox Well Location  
Page Two  
July 30, 1986

-----  
W A I V E R

DUGAN PRODUCTION CORPORATION hereby waives objection to Mesa Grande Resources, Inc.'s application for an unorthodox well location for their Phantom Federal #1 well as proposed above. \*

Date: 8-18-86

Signed: Thomas A. Huggs

*\*-proposed location for which waiver  
is signed: 1035' FSL & 1125' FWL  
Section 16, T-25N, R-2W  
Rio Arriba Co., NM*

RECEIVED  
AUG 20 1986  
OIL CON. DIV.  
DIST. 3