

ON SITE  
TECHNOLOGIES, LTD.

RECEIVED  
ON DIVISION  
FEB 17 1994

March 14, 1994

Mr. Mike Stogner  
New Mexico Oil & Gas Conservation Division  
P.O. Box 2088  
Sante Fe, New Mexico 87504-2088

Re: Merit Energy  
Jicarilla K #10-E  
Section 1, Township 25 North, Range 5 West  
1440' FWL & 1370' FSL  
Rio Arriba County, New Mexico

Dear Mr. Stogner:

On Site Technologies, Ltd. represents Merit Energy as their agent for permitting and on site drilling operations. During a regular permitting procedure for the above-referenced subject, it was called to our attention by the Bureau of Land Management ("BLM") that the Jicarilla K 10E was in an unorthodox location and that the New Mexico Oil and Conservation Division ("NMOCD") required administrative approval prior to the commencement of drilling operations.

In reference to memorandum dated March 21, 1990, from William J. LeMay, Director, the following information is required for administrative approval for unorthodox locations:


- The proposed well location is located on BLM land on the Jicarilla Apache Reservation. An on site inspection has been conducted and a copy of the Notice of Staking and the Application for Permit to Drill are attached as Exhibit A and B respectively.
- A copy of the C-102 showing the well location is attached as Exhibit C.
- A land plat is also attached as Exhibit D showing the offset operators.
- A 7.5 minute quad topographic map is attached as Exhibit E showing the proposed well location, terrain features, access roads, the location of the archeological sites identified in the archeologist survey, the surface conditions highlighted in green showing that the surface location, and the orthodox drilling windows.

Mike Stogner  
NMOCD Sante Fe  
Merit Energy-Unorthodox Location Request  
Page 2

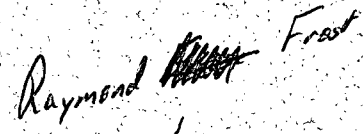
- The reason for the request is due to archeological findings in the original location staked (highlited in pink), to minimize surface disturbance and due to terrain as indicated on the topo map. See attached letter from Gifford Vellarde, Archeologist (Exhibit F).
- Attached are the letters informing the offset operators of the unorthodox location and the signed waivers including a copy of return receipt cards indicating date of receipt of notice.

If you have any questions regarding the required information, please feel free to contact either myself or Tora Baldwin at your earliest convenience.

On Site Technologies, Ltd. hereby certifies that the information is true and correct and that the offset operators have been notified.

  
\_\_\_\_\_  
Joe A. Wilbanks  
Engineering Manager  
On Site Technologies, Ltd.  
Agent for Merit Energy

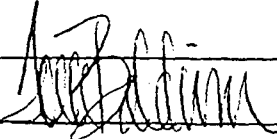
cc: -Bureau of Land Management  
Rio Puerco Resource Area  
-Bureau of Indian Affairs - Dulce, New Mexico  
-Ernie Busch - NMOCD Aztec, New Mexico  
-Merit Energy- Robert Matejek

  
Raymond Frost

# EXHIBIT "A"

NOS Format

NOTICE OF STAKING (Not to be used in place of Application for Permit to Drill Form 3160-3)		6. Lease Number  	
1. Oil well <input checked="" type="checkbox"/> Gas well <input type="checkbox"/> Other <input type="checkbox"/> (Specify)		7. If Indian, Allottee or Tribe Name  	
2. Name of Operator  MERIT ENERGY		8. Unit Agreement Name  	
3. Name of Specific Contact Person  DAN MORRISON		9. Farm or Lease Name  JICARILLA "K"	
4. Address & Phone No. of Operator or Agent P.O. BOX 2606 FARMINGTON, NM 87499		10. Well No.  #10E	
5. Surface Location of Well  Attach: a) Sketch showing road entry onto pad, pad dimensions, and reserve pit. b) Topographical or other accept- able map showing location, access road, and lease boundaries.  TO BE FAXED		11. Field or Wildcat Name  <del>Wildcat</del> Gallup Dakota	
15. Formation Objective(s)  DAKOTA		16. Estimated Well Depth  7600'	
17. Additional Information (as appropriate; must include surface owner's name, address, and telephone number)		12. Sec., T., R., M., or Blk and Survey or Area  940' FSL & 1,650' FWL SECTION 1, T25N, R5W	
13. County, Parish or Borough  RIO ARRIBA COUNTY		14. State  NEW MEXICO	

18. Signed  Title ENGINEERING TECH Date 9-9-93  
                     TORA BALDWIN

Note: Upon receipt of this Notice, the Bureau of Land Management (BLM) will schedule the date of the onsite predrill inspection and notify you accordingly. The location must be staked and access road must be flagged prior to the onsite.

Operators must consider the following prior to the onsite:

- a) H<sub>2</sub>S Potential
- b) Cultural Resources (Archeology)
- c) Federal Right of Way or Special Use Permit

# EXHIBIT "B"

Form 3160-3  
(December 1990)

SUBMIT IN TRIPL  
(Other instructions on  
reverse side)

Form approved.  
Budget Bureau No. 1004-0136  
Expires: December 31, 1991

## UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

### APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

OIL  
WELL ☐

GAS  
WELL ☒

OTHER

SINGLE  
ZONE ☐

MULTIPLE  
ZONE ☐

2. NAME OF OPERATOR

MERIT ENERGY

12221 MERIT DRIVE

(214) 325-8377

Dallas, Texas 75251

3. ADDRESS AND TELEPHONE NO.

ON SITE TECHNOLOGIES, LTD P.O. BOX 2606

(505) 325-8786

FARMINGTON, NM

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

At surface

1440 FWL AND 1370 FSL

At proposed prod. zone

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

APPROXIMATELY 40 MILES NORTH OF COUNSELORS, NM

10. DISTANCE FROM PROPOSED\*

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

1370'

16. NO. OF ACRES IN LEASE

2558.4

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

319.6

18. DISTANCE FROM PROPOSED LOCATION\*

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

850'

19. PROPOSED DEPTH

7465'

20. ROTARY OR CABLE TOOLS

ROTARY

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

6930' GR

22. APPROX. DATE WORK WILL START\*

UPON APPROVAL

#### 23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	K55	24#	350'	450 sx Class B
7-7/8"	K55	15.5#	7465'	LEAD 230 sx 50/50 Pozmix TAIL 120 sx Class B SECOND STAGE: Lead: 450 sx Pozmix, Tail: 50 sx Class B

SEE ATTACHED DRILLING PROGRAM.

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

24.

SIGNED

*Joe A. Wilbanks*  
JOE A. WILBANKS

TITLE

Agent for:  
MERIT ENERGY COMPANY

DATE

10/8/93

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY

TITLE

DATE

\*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

### SELF CERTIFICATION STATEMENT

Be advised that Merit Energy Company is considered to be the operator of Well No. Jicarilla "K" 10E, NESW 1/4, Sec. 1, T25N, R5W, Lease No. NM 1073, Rio Arriba County, New Mexico and is responsible under the terms and conditions of the lease for the operations conducted on the leased lands.

Bond Coverage for this well is provided by Irrevocable Letter of Credit No. LASB-21843 by Bank of America, Los Angeles, California. (Principal Merit Energy Company) via surety consent as provided for in 42CFR 3104.2.

This office will hold the aforementioned operator and bond liable until the provision of 42CFR 3106.7-2 continuing responsibility are met.

Application for Permit to Drill  
Merit Energy Company  
Jicarilla "K" #10E  
Section 1, T-25N, R-5W  
Rio Arriba County, New Mexico  
Page 1

A. Drilling Program

1. Surface Formation and Estimated Formation Tops:

Nacimiento	550'
Pictured Cliffs	3,264'
Chacra	4,164'
Cliffhouse	4,950'
Gallup	6,570'
Sanastee	7,080'
Greenhorn	7,380'
Graneros	7,440'
Dakota	7,465'

2. Estimated Depth at which Oil, Gas, Water or Other Mineral-Bearing Zones are Expected to be Encountered:

	<u>Formation</u>	<u>Depth</u>
Expected Oil Zones:	N/A	
Expected Gas Zones:	Picture Cliffs	3,264'
	Chacra	4,164'
	Gallup	6,570'
	Dakota	7,465'
Expected Water Zones:	Nacimiento	550'
Expected Mineral Zones:	N/A	

All fresh water and prospective valuable minerals encountered during drilling will be recorded by depth, cased and cemented. All oil and gas shows will be tested to determine commercial potential.

3. Pressure Control Equipment:

BOP's to be used are detailed in the attached diagram labeled Exhibit "A". Merit Energy Companies minimum specifications for pressure control equipment are as follows:

- A. Below 8-5/8" surface casing - 10" 3000 psi wp double gate BOP.

Testing of BOP - All Blow Out prevention equipment will be tested upon installation. This will include casing, casing head and all related equipment and connections associated with blow out prevention and/or control.

Testing will be to the lesser of the following:

- (1) Full manufacturer's working pressure rating of equipment;
- (2) 70% of minimum internal yield pressure of casing; or
- (3) 1 psi/ft. of last casing string depth.

All BOP's will be checked each trip for physical operation. Morning tower driller will also check operation components of BOP, test operation of BOP and record on Driller's Log.

4. Casing Program and Auxiliary Equipment:

<u>Purpose</u>	<u>Depth</u>	<u>Hole Size</u>	<u>O.D</u>	<u>Weight</u>	<u>Grade</u>	<u>Type</u>
Surface	0-350'	12-1/4"	8-5/8"	24#	K55	ST&C
Production	0-7465'	7-7/8"	5-1/2"	15.5#	K55	LTC

Proposed Cementing Program:

Surface casing will be cemented to surface as follows:

<u>Surface</u>	<u>Type and Amount</u>
0-350'	450 sx of Class B with 2% CaCl mixed at 15.6 ppg, 1.2 yield, with 100% excess or sufficient to circulate to surface.

<u>Production</u>	<u>Type and Amount</u>
0-7465'	<p><u>Stage 1. Lead</u> - 230 sx 50/50 pozmix with .25 lb/sk cellophane and 6.25 lb/sk gilsonite and 6% halad 322 and 6% gel mixed at 11.3 ppg, 2.63 yield.</p> <p><u>Stage 1-Tail</u> 120 sx Class B with 8% Halad 322 mixed at 15.8 ppg with 1.15 yield. DV Tool at +/- 4800.</p> <p><u>Stage 2 Lead</u> - 450 sx Class B 50/50 pozmix with 25 lb/sk and 6% Gel mixed at 11.3 ppg yield 263 cubic ft/sk.</p> <p><u>Stage 2 Tail</u> - 50 sx Class B mixed at 15.8 ppg, yield 1.14 cubic ft/sk.</p>

After cementing but before commencing any test, the casing string shall stand cemented until the cement has reached a compressive strength of at least 500 psi at the shoe, except that in no case shall test be initiated until the cement has been in place at least 12 hours. WOC time shall be recorded in the driller's log.

5. Mud Program and Circulating Medium:

<u>Depth</u>	<u>Mud Type</u>	<u>Mud Wt</u>	<u>Vis</u>	<u>Fluid Loss</u>
0-350'	Gel/lime	8.4-8.6	28-45	N/C
350-3000'	Gel/lime	8.4-8.6	28-32	N/C
3000-TD	Gel/lime	8.4-8.5	35-40	6-10

6. Coring, Logging and Testing program: This well will be evaluated on the basis of induction Electric Survey, Gamma Ray, Compensation Density, Neutron, Sonic and Caliper surveys. Cased hole logs will consist of CCL and Cement Bond Logs and Gamma Ray.

7. Abnormal Conditions, Bottom Hole Pressures and potential hazards:

Bottom hole pressure gradient is 8.45#/gal - .440 psi/ft. We will prepare for drilling problems by controlling solids and mud weight.

8. **Anticipated Starting Dates and notifications of Operations:**

As soon as permitted.

B. **THIRTEEN-POINT SURFACE USE PLAN**

1. **Existing Roads**

- a. **Existing Roads - The proposed location is situated within an existing road system which is accessed from State Road 262. Roads will be maintained in the same or better condition than presently exists.**

**Travel to 27 mile marker on Highway 537 from Highway 44. Cross Tapocito Creek , take 1 left. travel 6 miles on J64, turn 1 left on dirt road. Go past Gas Co. of New Mexico Compressor Station. 2.4 miles to proposed location.**

- b. **Plans for improvement and/or maintenance of existing roads: roads will be maintained in the same or better condition than presently exists.**

2. **Planned Access Roads:**

- a. **Access to the location will be along an existing unimproved road. There will be no turn outs, culverts, bridges or foreign surface materials required.**

**The access (including any existing non-county) road will be rehabilitated or brought to Resource (Class III) Road Standards by meeting the following minimum design requirements within sixty (60) days of completion of drilling operations:**

**Surface disturbance and vehicular travel will be limited to the approved location and access road. Any additional area needed will be approved by the Area Manager in advance.**

The topsoil from the access road will be reserved in place. Trees and brush removed from building of the road will be stacked next to road to be used in rehabilitation.

3. Location of Existing Wells:

All wells within a one mile radius are shown on the attached map "B".

4. All permanent above-ground facilities (6 months or longer) will be painted a non-reflective (Juniper Green) color to blend into the surrounding area. The exception being that Occupation Health and Safety Act Rules and Regulations are to be complied with where special safety colors are required.

If a tank battery is constructed on this location it will be surrounded by a dike of sufficient capacity to contain 1-1/2 times the storage capacity of the largest tank; all load lines and valves will be placed inside dike surrounding the tank battery.

All site security guidelines identified in 43 CFR 3162.7-5 and ONSHORE OIL AND GAS ORDER NO. 3 - SITE SECURITY will be adhered to.

Gas measurements will be conducted in accordance with the ONSHORE OIL AND GAS ORDER NO. 5 - GAS MEASUREMENT and 43 CFR 3162.7-3.

Gas meter runs for each well will be located within five hundred (500) feet of the well head. The gas flowline will be buried from the well head to the meter and downstream for the remainder of the pad. meter runs will be housed and/or fenced.

Oil measurement will be conducted in accordance with ONSHORE OIL AND GAS ORDER NO. 4; OIL MEASUREMENT as of the effective of August 23, 1989 and 43 CFR 3162.7-2.

5. Location and type of Water Supply:

All water needed for drilling purposes will be obtained from: water well site located at Section 28, T25N, R4W; Conoco #1 & 2 which will be hauled by private trucking from the site.

Water obtained on private land, or land administered by another agency, will require approval from the owner or agency for use of that water.

6. Source of Construction Material:

Pad construction material will be obtained from on site and in place materials. Twelve (12) inches of top soil will be reserved for future rehabilitation and will be stock piled along the north edge of location. Brush and trees that are removed in order to build the proposed location will be stockpiled on the east end of the location.

The use of materials under BLM jurisdiction will conform to 43 CFR 3610.

7. Methods of Handling Waste Disposal:

The reserve pit will be constructed with at least 1/2 of the capacity in cut material.

Three sides of the reserve pit will be fenced within 24 hours after completion of construction and the fourth side within 24 hours after drilling operations cease with four (4) strands of barbed wire, or woven wire topped with barbed wire to a height of not less than four (4) feet. The fence will be kept in good repair while the pit is drying.

No liquid hydrocarbons (i.e. fuels, lubricants, formation) will be discharged to the reserve pit.

No chrome compounds will be on location.

All garbage will be placed in a garbage receptacle and hauled to a county refuge facility. There will be no burning on location.

Produced waste water will be confined to the reserve pit for a period not to exceed ninety (90) days after initial production. During the ninety (90) day period, an application for approval of a permanent disposal method and location, along with the required water analysis, will be submitted for the District Manager's approval pursuant to NTL-2B.

8. Ancillary Facilities:

Chemical toilets will be provided and maintained during drilling operations.

9. Well Site Layout:

The reserve pit will be located: In the Northeast corner of pad. (See attached wellsite layout plat Map "C")

10. Plans for Restoration of Surface:

- a. Within 24 hours of completion of drilling, the location and surrounding area will be cleared of all debris, materials, and junk not required for production.
- b. As soon as the reserve pit has dried or within eighteen months (18 months.) whichever is least, all areas not needed for production. (including access road) will be filled in, re contoured to approximately natural contours and as much top soil as was removed) replaced leaving enough for future restoration. The remaining top soil ( if any) will be stabilized and seeded in place. If the well is a dry hole, the location and access road will be rehabilitated in total.
- c. The area will be seeded between December 1, 1993 and April 4, 1994 with the recommended mixture by the BIA.

- d. Seed will be broadcast followed by a light harrowing. If the seed is drilled, the seeding rate can be reduced by 25% and harrowing can be eliminated.

After seeding the trees and brush will be scattered over the sight.

Scarefire, riping, water bars or other soil treatments may be required by the authorized officer at the time, depending on the soil and water conditions at the time of rehabilitation.

11. Surface and Mineral Ownership:

Surface Disposition- Jicarilla Apache Tribe  
Mineral Ownership- Jicarilla Apache Tribe

12. Other Information:

There will be no deviation from the proposed drilling and/or work over program without prior approval from the District Manager. Safe drilling and operation practices must be observed. All wells, whether drilling, producing, suspended or abandoned and/or separate facilities, will be identified in accordance with 43 CFR 3162.6.

"Sundry Notice and Report on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3162.6.

The dirt contractor will be provided with an approved copy of the surface use plan.

The operator is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly distributing historic or archaeological sites, or for collecting artifacts. If historical or archaeological materials are uncovered during construction, the operator is to immediately stop work that might further disturb such materials, and contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

Whether the materials appear eligible for the National Register of Historic Places; the mitigation measures the operator will likely have to undertake before the site can be used (assuming instu preservation is not necessary); and a time frame for the AO to complete and expedited review under 36 CFR 800.11 to confirm, through the State Historic

Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expenses of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may required. Otherwise, the operator will be responsible for mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

This permit will be valid for a period of one (1) year from the date of approval. After permit termination, a new application will be filed for approval for any future operations. If at any time the facilities located on public lands authorized by the terms of the lease are no longer included in the lease (due to a contraction in the unit or other lease or unit boundary change) the BLM will process a change in authorization to the appropriate statute. The authorization will be subject to appropriate rental, or other financial obligation determined by the authorized officer.

13. Lessee's or Operator's Representative and Certification:

Representative/Agent:

Joe Wilbanks  
On Site Technologies, Limited  
3005 Northridge, Suite F  
Farmington, New Mexico 87401  
(505) 325-8786 Office  
(303) 247-9210 Home

Application for Permit to Drill  
Merit Energy Company  
Jicarilla "K" #10E  
Section 1, T25N, R5W  
Rio Arriba County, New Mexico  
Page 10

**CERTIFICATION**

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions that exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with operations proposed herein will be performed by Merit Energy Company and its contractors in conformity with this plan, and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

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

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

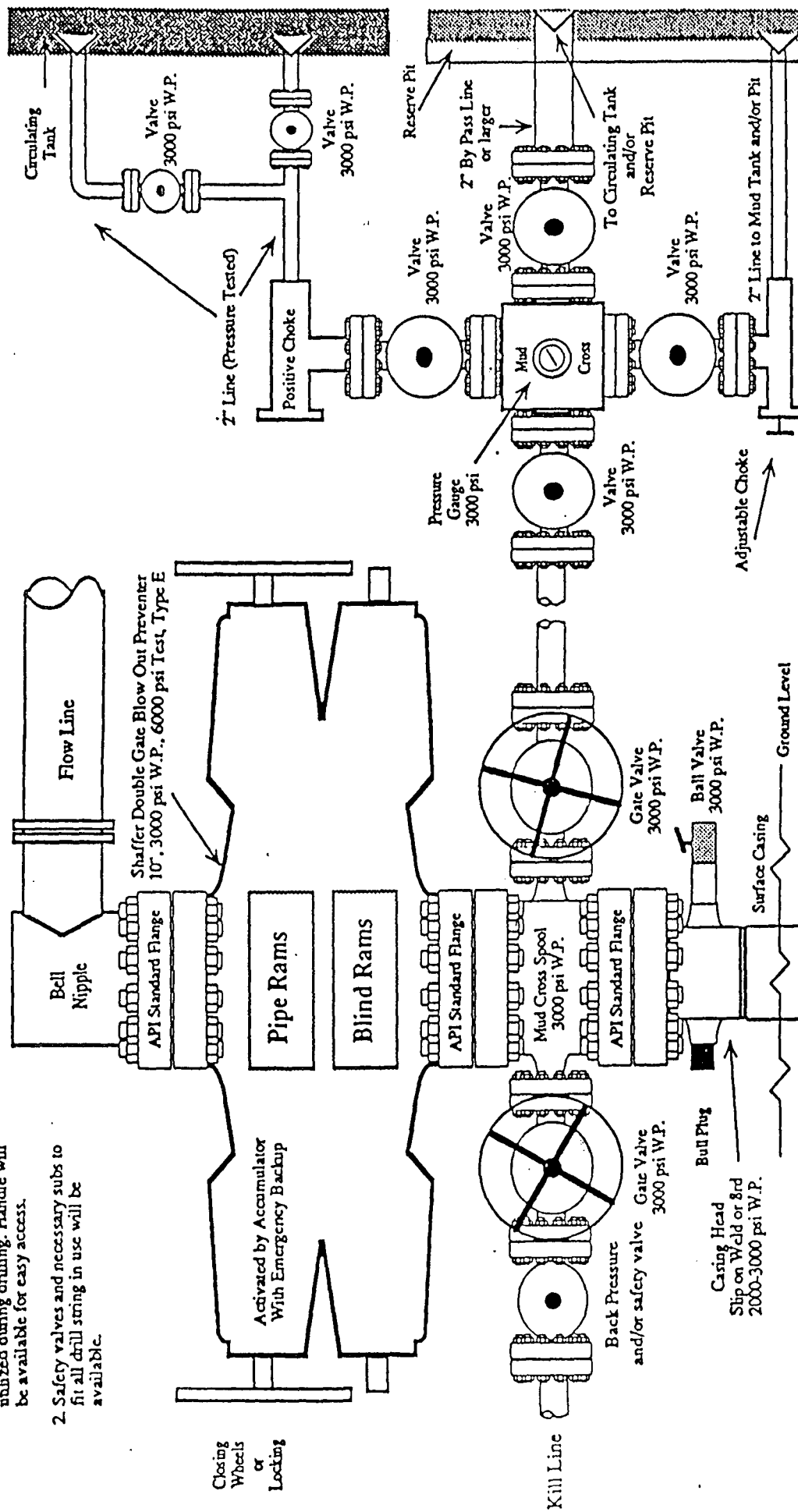
Representative/Agent for  
Merit Energy Company  
Joe Wilbanks  
On Site Technologies, Ltd.  
3005 Northridge, Suite F  
Farmington, New Mexico 87401

(505) 325-8786 Office

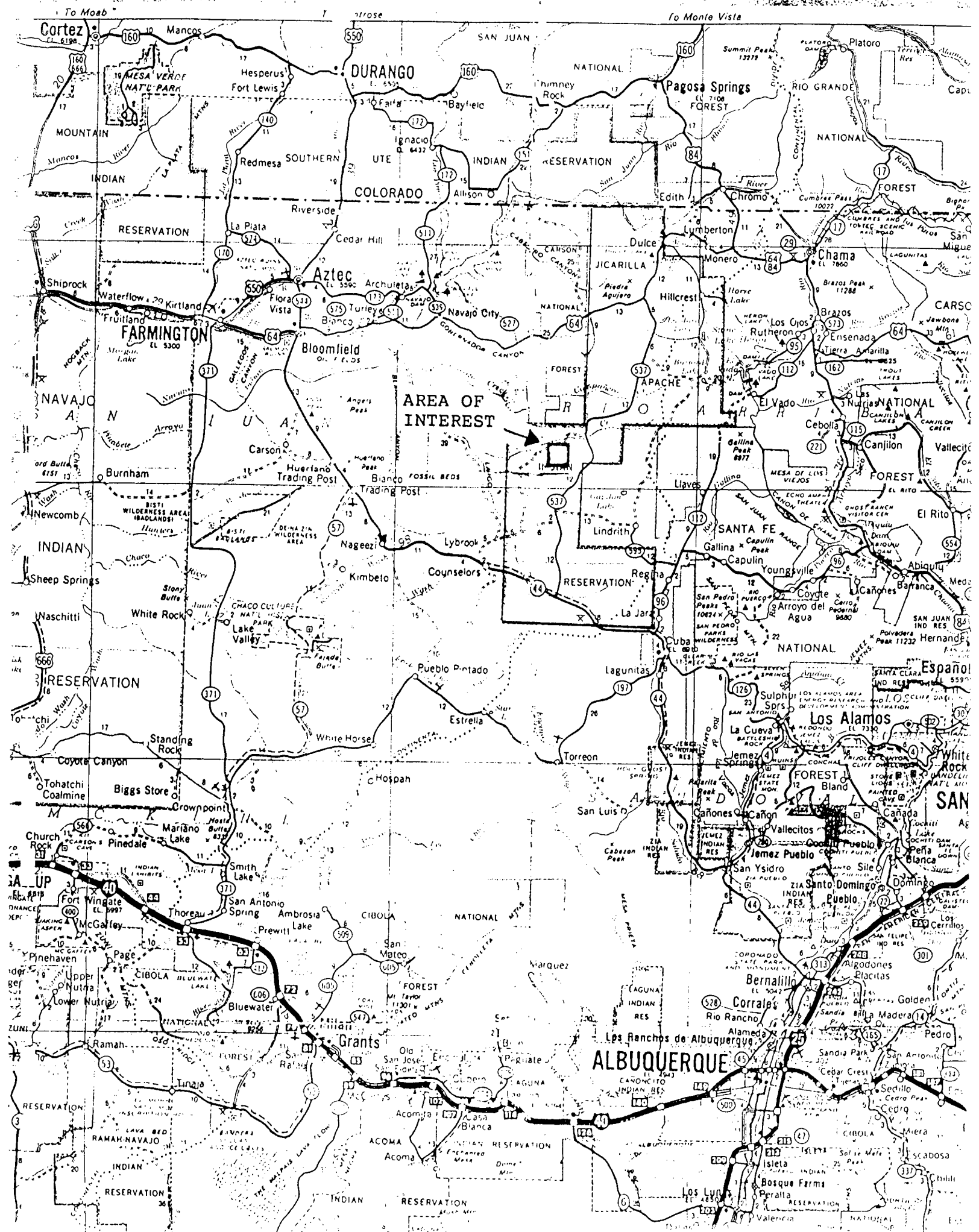
(303) 247-9210 Home

Note: 1. An upper Kelly cock valve will be utilized during drilling. Handle will be available for easy access.

2. Safety valves and necessary subs to fit all drill string in use will be available.



Note: This equipment is designed to meet requirements for a 2-M rating standard per 43 CFR part 3160 (amended). Proper operation and testing of equipment will be carried out per standard. 2,000 psi equipment can be substituted in the



# **JICARILLA APACHE ARCHAEOLOGICAL SERVICES**

**AN ARCHAEOLOGICAL SURVEY OF TWO WELL  
LOCATIONS IN RIO ARriba COUNTY,  
NEW MEXICO, CONDUCTED FOR  
MERIT ENERGY COMPANY**

**REPORT CR-93-402**

**JICARILLA APACHE TRIBAL RESOLUTION  
#83-581**

**SEPTEMBER 27, 1993**

**DULCE, NEW MEXICO 87528**

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**K-10-E**

**K-11-E**

## ABSTRACT

This report details the findings of a Class III Pedestrian Survey of two well locations conducted for Merit Energy Company. Approximately 2.40 acres of land were surveyed for cultural resources. No significant cultural resources were located during archaeological investigation.

Archaeological clearance is recommended.

The survey was conducted by:

Jicarilla Apache Archaeological Services  
P.O. Box 919  
Dulce, NM 87528  
Phone: (505)759-3396

The survey was conducted under:

Jicarilla Apache Tribal Resolution #83-581

The survey was conducted for:

Joe A. Wilbanks  
On Site Technologies, LTD.  
P.O. Box 2606  
Farmington, NM 87499

and

Dan Morrison  
Merit Energy Company  
1221 Merit Drive, Suite 500  
Dallas, Texas 75251

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## LIST OF FIGURES

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Figure 1: Vicinity Map of K-11-E	5

## INTRODUCTION

On September 27, 1993, Gifford Velarde, from the Jicarilla Apache Archaeological Services, conducted a Class III Pedestrian Survey of two well locations for Merit Energy Company.

Mr. Joe A. Wilbanks, Engineering Manager for On Site Technologies, LTD, was present for the inspection. Mr Brian Wood, environmental specialist, was also available for the day's activities. Mr. Gerald Huddleston, surveyor, was on hand to change any legal measurement.

The proposed projects are located north of Lapis Point on the southern half of the Jicarilla Apache Reservation.

## METHODOLOGY

A 5-10 meter zig-zag pattern was used to survey the area. A record search of previously recorded sites on or near the proposed projects was completed.

## RECORDS SEARCH

LANO 16489

A ceramic scatter representing a Navaho tradition in the 1693-1753 period.

## PROJECT LOCATIONS

Merit Energy Company - K-10-E

Land Jurisdiction: Jicarilla Apache Tribe

Legal Description: The proposed project is in the SW 1/4 of the NE 1/4 of the SW 1/4 of Section 1, Township 25 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico. The well is 1370'FSL & 1440'FWL.

Elevation: 6920'

UTM Coordinates: Zone 13; 293,520 mE; 4,033,390 mN (well stake)

Actual Project Area: 300' x 175'  
TOTAL: 1.20 acres

Actual Survey Area: 300' x 175'  
TOTAL: 1.20 acres

Access: No access required.

Physiography & Environmental Setting:

The proposed project is found on a northern lower mesa bench. The many small washes on the bench direct water to the north. The soil is rocky. A sandy loam is also present. Vegetation on this northern bench consists of sage mountain muhly, bitterbrush, mountain mahogany, juniper, and pinon.

Cultural Resources:

Broken brown bottles located alongside a modern hearth were the only cultural resources.

Recommendations:

Archaeological clearance is recommended.

Merit Energy Company - K-11-E

Land Jurisdiction: Jicarilla Apache Tribe

Legal Description: The proposed project is in the SE 1/4 of the NW 1/4 of the NE 1/4 of Section 2, Township 25 North, Range 2 West, N.M.P.M., Rio Arriba County, New Mexico. The well is 850'FNL & 1800'FEL.

Elevation: 6640'

UTM Coordinates: Zone 13; 291,585 mE; 4,034,370 mN (well stake)

Actual Project Area: 300' x 175'  
TOTAL: 1.20 acres

Actual Survey Area: 300' x 175'  
TOTAL: 1.20 acres

Access: No access required.

Physiography & Environmental Setting:

The proposed project is found at the base of the mesa. This hill slope drains water towards the northwest. The soil is mostly disturb being adjacent to an existing well. The vegetation consists of sage, rabbitbrush, Indian ricegrass, mountain muhly, and four-wing saltbush.

Cultural Resources:

Modern trash from a recent drilling operation were encountered during archaeological survey.

Recommendations:

Archaeological clearance is recommended.

## SUMMARY

The archaeological clearance for Merit Energy Comany's two well locations uncovered no significant cultural resources. Access roads to both proposed wells are existing. Archaeological clearance is recommended. Final clearance is the prerogative of the Area Archaeologist.

## BIBLIOGRAPHY

Museum of New Mexico

1986

Archaeological Records Management System. Laboratory of Anthropology, Santa Fe, New Mexico.

J I C A R T L I A P A C H E

LAPIS POINT, N. MEX.

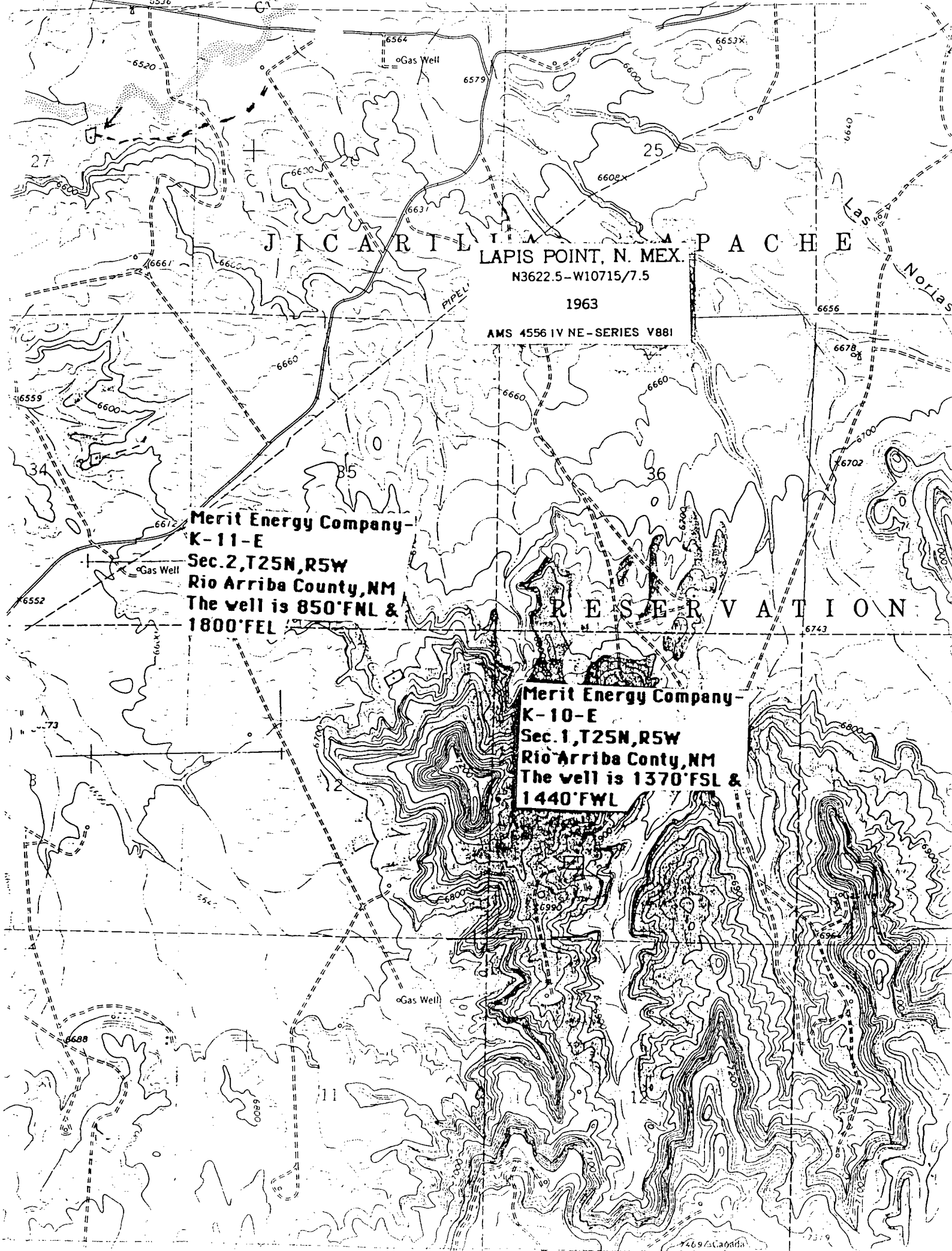
N3622.5-W10715/7.5

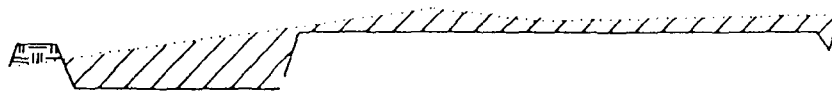
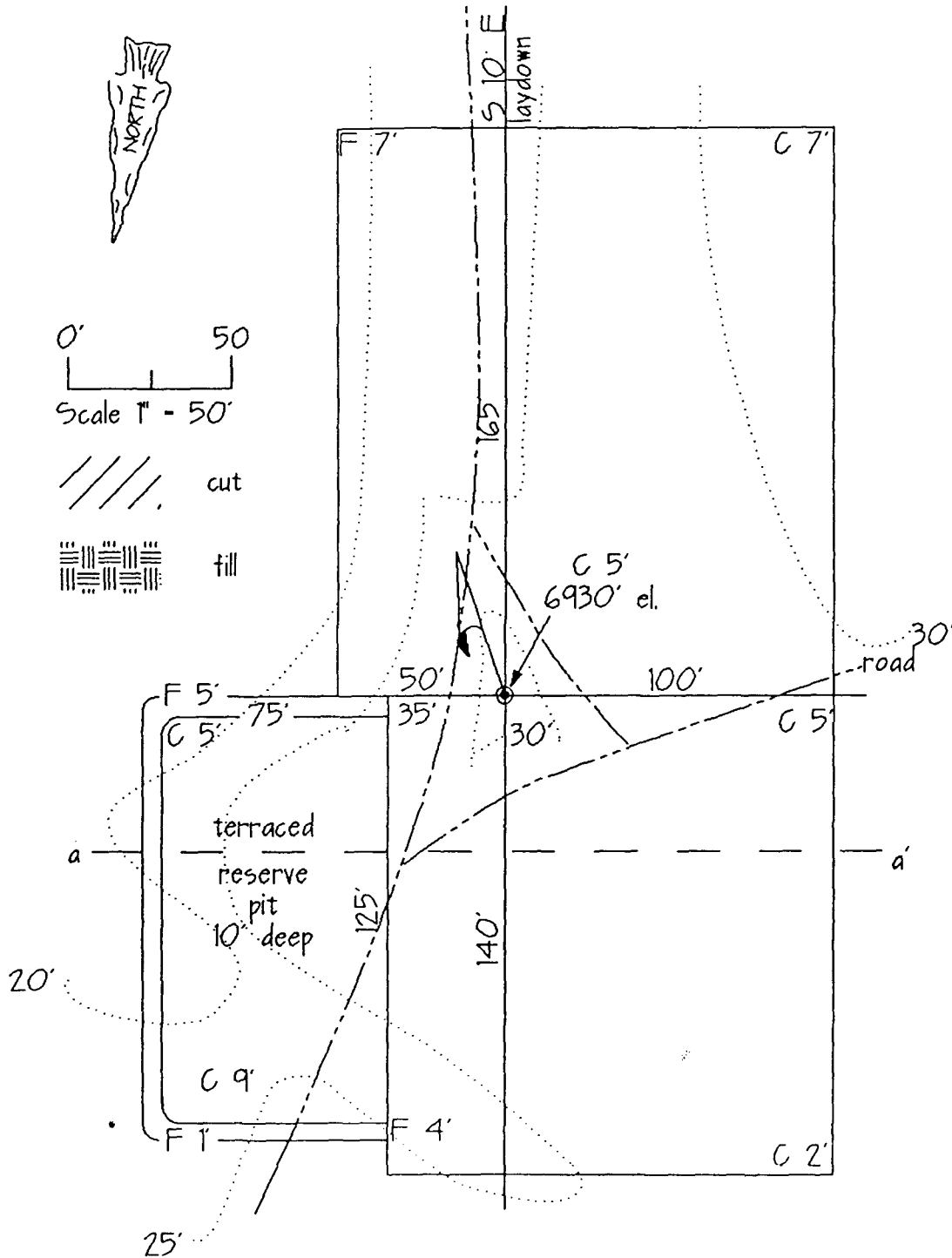
1963

AMS 4556 IV NE-SERIES V881

Merit Energy Company-  
K-11-E  
Sec. 2, T25N, R5W  
Rio Arriba County, NM  
The well is 850' FNL &  
1800' FWL

RESERVATION  
Merit Energy Company-  
K-10-E  
Sec. 1, T25N, R5W  
Rio Arriba County, NM  
The well is 1370' FSL &  
1440' FWL





Cross section

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

# EXHIBIT "C"

State of New Mexico  
Reg. Minerals and Natural Resources Department

Form C-102  
Revised 1-1-89

## OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT I

P.O. Box 1920, Hobbs, NM 88240

DISTRICT II

P.O. Drawer DD, Artesia, NM 88210

DISTRICT III

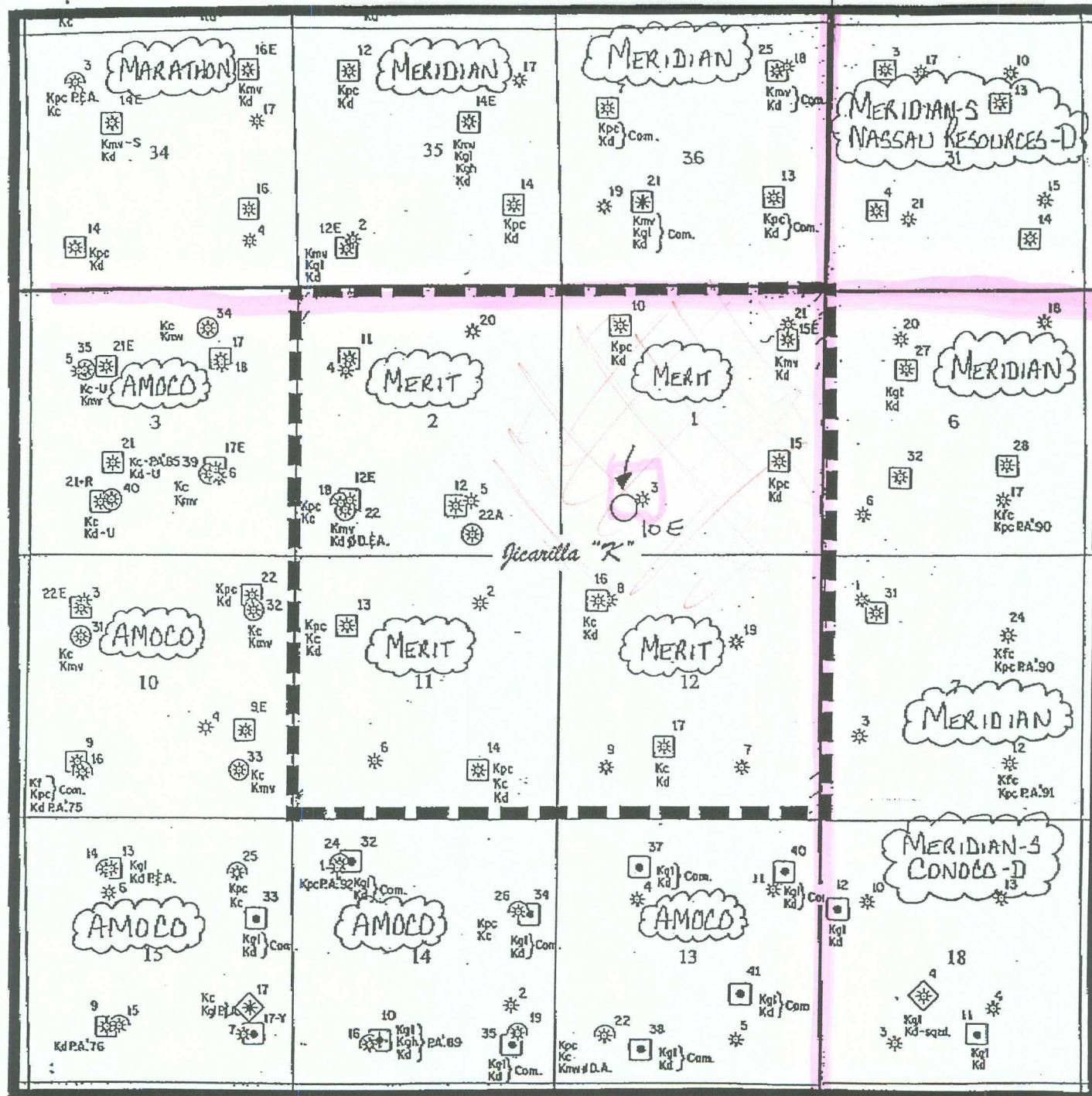
1000 Rio Brazos Rd., Aztec, NM 87410

### WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator <b>MERIT ENERGY COMPANY</b>		Lease <b>JICARILLA</b>		Well <b>K-10-E</b>	
Unit Letter <b>K</b>	Section <b>1</b>	Township <b>25 N.</b>	Range <b>5 W.</b>	County <b>RIO ARriba</b>	
Actual Footage Location of Well: <b>1370</b> feet from the <b>SOUTH</b> line and <b>1440</b> feet from the <b>WEST</b> line and					
Ground level Elev. <b>6930'</b>	Producing Formation		Pool		Dedicated Acreage:  Acres
<p>1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.</p> <p>2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).</p> <p>3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.? <input type="checkbox"/> Yes <input type="checkbox"/> No If answer is "yes" type of consolidation _____</p> <p>If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____</p> <p>No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.</p>					
				<b>OPERATOR CERTIFICATION</b> I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  Signature <b>JOE A. WILBANKS</b> Printed Name agent Position <b>ON SITE TECHNOLOGIES</b> Company <b>10-8-93</b> Date	
				<b>SURVEYOR CERTIFICATION</b> 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 <b>10-8-93</b> Signature and Seal of Professional Surveyor Certificate No. <b>6844</b>	

## 25N

**MERIT ENERGY COMPANY**

12222 MEAT DRIVE, SUITE 1800

DALLAS, TEXAS 75251

## OWNERSHIP MAP.

PICARILLA "K" LEASE

Rio Arriba County, NM

G.A. Jenner (1/94)

**EXHIBIT "E"**

INDIAN RESERVATION

Gar. Well

11 12

6800 6900 6990 6700 6702 6743 6800 6950

**Merit Energy**  
**Jicarilla K #10E**  
**Sec. 1, T25N, R5W**  
**Rio Arriba County, NM**

**Proposed Location** [Red Circle]  
**Archeological**  
**Artifacts Discovered** [Orange Circle]  
**Access Roads** [Yellow Dashed Line]

Proposed Location  
Archeological  
Artifacts Discovered  
Access Roads

# EXHIBIT "F"

Jicarilla Apache Archaeological Services  
P. O. Box 919  
Dulce, NM 87528  
(505) 759-3398

December 21, 1993

Joe Wilbanks  
On Site Technologies, LTD.  
P.O. Box 2606  
Farmington, NM 87499

Dear Mr. Wilbanks,


On September 27, 1993, during the archaeological inspection of K-10-E for Merit Energy Company, a site of importance was identified. The site was within the project limits. The proposed project (K-10-E) was moved east to avoid all cultural resources. This moved is in conflict with the state's policy for legal locations.

The site was approximately 80 x 60 meters (80m x 60m). It consists of a structure, chipped stone and ceramics. The site is from the Refugee Period (A.D. 1680-1750). The site has been disturb by drilling activity due to it's proximity to an existing well.

Additional information about the site would have to wait due to snow cover.

I hope this information will expedite your permit to drill.

Sincerely,

  
Gifford Velarde,  
C.E.O., J.A.A.S.



We tried to deliver  
something to you!  
We can bring it back!

Article No. P 309 774 374  
Today's Date FEB 19 1997 Sender's Name 87498

It is a:  
(See reverse)

- ☒ Letter ☐ Magazine/Catalog/  
Large Envelope ☐ Article with  
Delivery Restricted  
to Addressee ☐ Article Requiring  
Signature at Time  
of Delivery  
☐ Parcel ☐ Perishable Item ☐ at the Post Office  
(See below)

It is Located:

For  
Redelivery:

- (1) check all that apply;  
(2) sign below; AND  
(3) LEAVE THIS  
NOTICE OUT WHERE  
CARRIER CAN SEE IT

☐ Redeliver (Check one):  
(When using this  
option, allow 2 delivery  
days for redelivery)

- ☐ Mon ☐ Tue  
☐ Wed ☐ Thur  
☐ Fri ☐ Sat

☐ Leave at my house  
(Specify where):

- ☐ Deliver to (Enter  
name & address):  
☐ Let this person sign for  
my article (Enter name):  
☐ Refused

Your Signature & Date

X

Delivery Notice/Reminder/Receipt  
PS Form 3849, July 1992

Or, You Can:

- (1) call for redelivery;  
(2) pick up article at  
post office after  
date \_\_\_\_\_ time \_\_\_\_\_  
(Bring this notice & ID)

Addressed to:

Nassau

Street and Number

809

Your mail is:

- ☐ Express Mail: (Automatic redelivery  
next delivery day  
unless you call to  
hold at post office)  
☐ Insured  
☒ Certified  
☐ Registered  
☐ Return Receipt for Merchandise  
☐ Recorded Delivery (International)  
☐ Special Delivery

☐ Article Requiring Payment

- ☐ Postage Due ☐ Amount Due  
☐ COD  
☐ Customs

☐ This Is Your Final Notice

Your article will be RETURNED TO SENDER  
on:

Forwarding or Return Address (USPS use only)

Received by (Signature)

X Cindy Holder  
CUSTOMER: Describe any Visible Damage  
(For Registered, Insured, or Express Mail)

- ☐ Unclaimed ☐ Refused ☐ Returned  
☐ Unknown ☐ Forwarded ☐ Other (Specify)

Delivered/Forwarded/Returned by

Date

RB

2.22.97

PS Form 3849, July 1992

★ U.S.G.P.O. 1992 330-558



We tried to deliver  
something to you!  
We can bring it back!

Article No. 309 774 374  
Today's Date FEB 19 1992 Sender's Name 87498

It is a:  
(See reverse)

- ☒ Letter ☐ Magazine/Catalog/  
Large Envelope ☐ Article with  
☐ Parcel ☐ Perishable Item ☐ Delivery Restricted  
to Addressee ☐ Article Requiring  
Signature at Time  
of Delivery  
☐ at the Post Office  
(See below)

It is Located:

For  
Redelivery:

(1) check all that apply;  
(2) sign below; AND  
(3) LEAVE THIS  
NOTICE OUT WHERE  
CARRIER CAN SEE IT

☐ Redeliver (Check one):  
(When using this  
option, allow 2 delivery  
days for redelivery)

- ☐ Mon ☐ Tue  
☐ Wed ☐ Thur  
☐ Fri ☐ Sat

☐ Leave at my house  
(Specify where):

☐ Deliver to (Enter  
name & address):

☐ Let this person sign for  
my article (Enter name):

☐ Refused

Your Signature & Date

X

Delivery Notice/Reminder/Receipt  
PS Form 3849, July 1992

Or, You Can:

(1) call for redelivery;  
(2) pick up article at  
post office after  
date time  
(Bring this notice & D)

Addressed to:

Alcassan

Street and Number

809

Your mail is:

☐ Express Mail: (Automatic redelivery  
next delivery day  
unless you call to  
hold at post office)

☐ Insured

☒ Certified

☐ Registered

☐ Return Receipt for Merchandise

☐ Recorded Delivery (International)

☐ Special Delivery

☐ Article Requiring Payment

☐ Postage Due

☐ COD

☐ Customs

Amount Due

☐ This Is Your Final Notice

Your article will be RETURNED TO SENDER  
on:

Forwarding or Return Address (USPS use only)

Received by (Signature)

X Cindy Hodel

CUSTOMER: Describe any Visible Damage  
(For Registered, Insured, or Express Mail)

☐ Unclaimed ☐ Refused ☐ Returned

☐ Unknown ☐ Forwarded ☐ Other (Specify)

Delivered/Forwarded/Returned by

Date

RB

2.22.92

PS Form 3849, July 1992

☆ U.S.G.P.O. 1992 330-558

Bill No. ☐ Insured ☐ Registered ☐ Certified ☐ Returned COD's ☐ Return Receipt for Merchandise Mail for Mexican C.O.

No. of Article	Code	Office of Origin Use ONLY for International	No. of Article	Code	Office of Origin Use ONLY for International
1		<u>Guatemala</u>	11		
2		<u>Guatemala</u>	12		
3		<u>Guatemala</u>	13		
4		<u>Guatemala</u>	14		
5		<u>Guatemala</u>	15		
6		<u>Guatemala</u>	16		
7		<u>Guatemala</u>	17		
8			18		
9			19		
10			20		

\*CODE: R = Return Receipt Requested, OS = Officially Sealed, RE = Re-enveloped, SD = Special Delivery.  
 RW = Returned to Writer, DC = Received in damaged condition.

Date of Delivery 2-22-94 Received the Addresssee  
 Delivered by (Clerk or Carrier) RB Pieces Described Above Agent

2-22-94

Bill No.		<input type="checkbox"/> Insured	<input type="checkbox"/> Registered	<input type="checkbox"/> Certified	<input type="checkbox"/> Returned COD's	<input type="checkbox"/> Return Receipt for Merchandise	Mail for <i>Mexican C.O.</i>
No. of Article	* Code	Office of Origin Use ONLY for International			No. of Article	* Code	Office of Origin Use ONLY for International
1					11		
2					12		
3					13		
4					14		
5					15		
6					16		
7					17		
8					18		
9					19		
10					20		

\* CODE: R = Return Receipt Requested. OS = Officially Sealed. RE = Re-enveloped. SD = Special Delivery.  
 RW = Returned to Writer. DC = Received in damaged condition.

Date of Delivery *2-22-94*

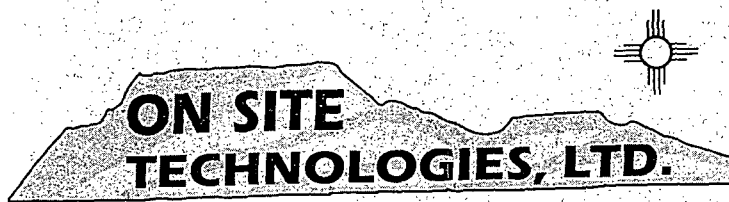
Received the *2-22-94*

Delivered by (Clerk or Carrier) *KB*

Pieces Described Above

Addresssee Agent *Pat Carroll*

Postmark - Delivery Office *2-22-94*



March 03, 1994

Mr. Van Goebel  
Meridian Oil & Gas  
P.O. Box 4289  
Farmington, New Mexico 87499

Re: Merit Energy  
Jicarilla #10E  
Section 1, T25N, R5W  
Rio Arriba County, New Mexico

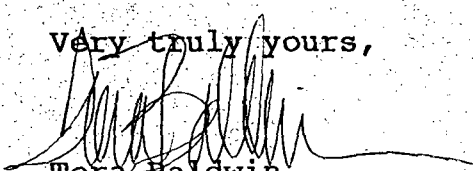
Dear Mr. Goebel:

The following is additional information you requested regarding the unorthodox location Merit Energy is applying for:

- The well is located in Section 1, Township 25 North, Range 5 West in Rio Arriba County, New Mexico on the Jicarilla Apache Reservation.
- The proposed depth is 7465'.
- The application for the unorthodox location is due to the finding of archeological artifacts at the original location.
- The Jicarilla 10E is a Dakota development well.

I apologize for the lack of information in the original letter, if for some reason you need additional time to review the information, please contact me and I will handle the situation. Thank you for your assistance.

Very truly yours,

  
Tora Baldwin  
Engineering Technician  
On Site Technologies, Ltd.  
Agent for Merit Energy

cc: Mike Stogner - OCD Sante Fe  
Nassau Resources, Inc.  
Merit Energy



Via Certified Mail  
PP309774374  
Return Receipt Requested

February 14, 1994

Ms. Fran Perrin  
Nassau Resources, Inc.  
P.O. Box 809  
Farmington, New Mexico 87499

Re: Merit Energy  
1440 FWL, 1370 FSL  
Sec. 1, T25N, R5W  
Rio Arriba County, New Mexico

Dear Ms. Perrin:

Merit Energy is applying for administrative approval for an unorthodox location at the above mentioned site. If you as an offset operator have no objections to the proposed location, please sign the waiver at the bottom of this page and return one copy of the signed document to the NMOCD office in Sante Fe, New Mexico and the original to On Site Technologies, Ltd. For your convenience, I have enclosed self-addressed stamped envelopes.

If you have any questions or comments regarding the proposed, please feel free to contact either Joe A. Wilbanks, or myself at your earliest convenience.

Very truly yours,

Tora Baldwin  
On Site Technologies, Ltd.  
Agent for Merit Energy

enclosures

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**WAIVER**

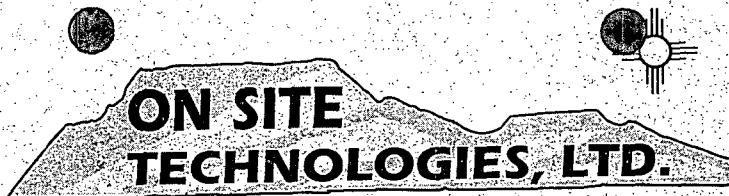
*Nassau Resources*

~~MERIT ENERGY~~ **HEREBY WAIVES ANY OBJECTION TO MERIT ENERGY'S PROPOSAL TO DRILL AT A LOCATION DECLARED TO BE AT AN UNORTHODOX LOCATION.**

**NAME:** \_\_\_\_\_

**TITLE:** \_\_\_\_\_

**DATE:** \_\_\_\_\_



Via Certified Mail  
PP309774373  
Return Receipt Requested

February 14, 1994

Mr. Mark Ellis  
Meridian Oil & Gas  
P.O. Box 4289  
Farmington, New Mexico 87499

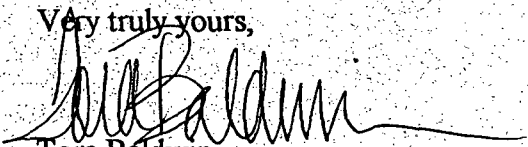
Re: Merit Energy  
1440 FWL, 1370 FSL  
Sec. 1, T25N, R5W  
Rio Arriba County, New Mexico

Dear Mr. Ellis:

Merit Energy is applying for administrative approval for an unorthodox location at the above mentioned site. If you as an offset operator have no objections to the proposed location, please sign the waiver at the bottom of this page and return one copy of the signed document to the NMOCD office in Sante Fe, New Mexico and the original to On Site Technologies, Ltd. For your convenience, I have enclosed self-addressed stamped envelopes.

If you have any questions or comments regarding the proposed, please feel free to contact either Joe A. Wilbanks, or myself at your earliest convenience.

Very truly yours,

  
Tora Baldwin  
On Site Technologies, Ltd.  
Agent for Merit Energy

enclosures

---

**WAIVER**

**MERIDIAN OIL HEREBY WAIVES ANY OBJECTION TO MERIT ENERGY'S PROPOSAL TO DRILL AT A LOCATION DECLARED TO BE AT AN UNORTHODOX LOCATION.**

**NAME:** \_\_\_\_\_

**TITLE:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

CMD :  
OE5SECT

ONGARD  
INQUIRE LAND BY SECTION

04/07/94 16:28:19  
OGOMES -EMDP  
PAGE NO: 1

Sec : 01 Twp : 25N Rng : 05W Section Type : NORMAL

4 39.82  Federal owned A	3 39.87  Federal owned	2 39.93  Federal owned	1 39.98  Federal owned A A
E 40.00  Federal owned	F 40.00  Federal owned	G 40.00  Federal owned	H 40.00  Federal owned

D0501:Undefined Error

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06
PF07 BKWD	PF08 FWD	PF09 PRINT	PF10 SDIV	PF11	PF12

CMD :  
OG5SECT

ONGARD  
INQUIRE LAND BY SECTION

04/07/94 16:30:21  
OGOMES -EMDP  
PAGE NO: 2

Sec : 01 Twp : 25N Rng : 05W Section Type : NORMAL

L 40.00  Federal owned	K 40.00  Federal owned	J 40.00  Federal owned	I 40.00  Federal owned A
M 40.00  Federal owned	N 40.00  Federal owned A	O 40.00  Federal owned	P 40.00  Federal owned

PF01 HELP  
PF07 BKWD

PF02  
PF08 FWD

PF03 EXIT  
PF09 PRINT

PF04 GoTo  
PF10 SDIV

PF05  
PF11

PF06  
PF12

