



United States  
Department of  
Agriculture

Forest  
Service

Manti-LaSal N.F.

Reply to

1590 Defense and Emergency Operations  
2880 Geologic Services

Date

June 21, 1983

Subject

Landslide Report

To:

William H. Boley, Forest Engineer  
Attention: Ted Fitzgerald

Attached are four "Mud and Flood" reports. The reports include information on land instability that Carter Reed and I observed in Twelve Mile Canyon and Manti Canyon.

*Maureen J. McBrien*

MAUREEN J. McBRIEN  
Geologist

Enclosures



## Mud and Flood Reporting Form

Maureen McBurn

Area Twelve Mile CanyonType of Disturbance (i.e. mud flow, slump, etc.) Twinklakee (South)Land Slide (bedrock landslide)Date First Observed June 8, 1983 — surveyed June 9

## Location:

Topography North facing slope - Paleo-landslideTopography.Legal Description S $\frac{1}{2}$ S $\frac{1}{2}$ SE $\frac{1}{4}$  sec 3, T19S R3E and  
NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec 5 T20S R3E.Impacts to Facilities and Resources

| <u>Date</u>  | <u>Impacts</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <u>Forest Service Actions</u> |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| June 9, 1983 | <p>Material is approx. 12 mile C. Creek at 4-6 feet per 24 hrs. directly across from the North slide which is depositing material at the same rate. Water is sufficient in the creek to erode the deposited landslide material maintaining a channel ~15 feet wide.</p> <p>The slide area is a series of parallel shear fissures with vertical displacement as great as 20 feet. Water is pooling being diverted by T... and shear cracks. ... the water is being ...</p> |                               |

Mud and Flood Reporting Form

Area Twelve Mile Canyon

Type of Disturbance (i.e. mud flow, slump, etc.) Twin Lakes (North)

Land Slide

Date ~~May~~ Observed June 6, 1983

Location:

Topography South Facing Slope - <sup>Paleo-</sup> ~~Old~~ Land Slide

topography summocky, step like topography.

Legal Description T19S/R & W 1/2, sec 32, T19SR3E

Impacts to Facilities and Resources

| <u>Date</u> | <u>Impacts</u>                                                                                                                                                                       | <u>Forest Service Actions</u>                                                                                                                                                                                                                                                                                               |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| June 6      | Material is approaching<br>12 mile C. Creek<br>at 4-6 feet per<br>24 hrs. <sup>water is</sup> <del>water is</del><br>sufficient to <del>rode</del><br>deposited land slide material. |                                                                                                                                                                                                                                                                                                                             |
| June 7-9    | Shear Cracks are<br>evident 1/4 mile<br>from Twin Lake<br>Catastrophic breaching<br>could result.                                                                                    | The F.S. breached the<br>Twin Lakes Reservoir<br>5 feet in depth. <del>the</del><br>Before breaching, <del>the</del><br>a channel had to<br>be built to divert<br>the <sup>breach</sup> water off of the slide<br>to prevent the possible<br>occurrence of a debris<br>flow.<br>Water flow was<br>25 cubic feet per second. |

Mud and Flood Reporting Form

Area Twelve Mile Canyon Area

Type of Disturbance (i.e. mud flow, slump, etc.) Landslides

Date First Observed 5/24/83

Location:

Topography Slopes of the North and South Forks of Twelve Mile Canyon

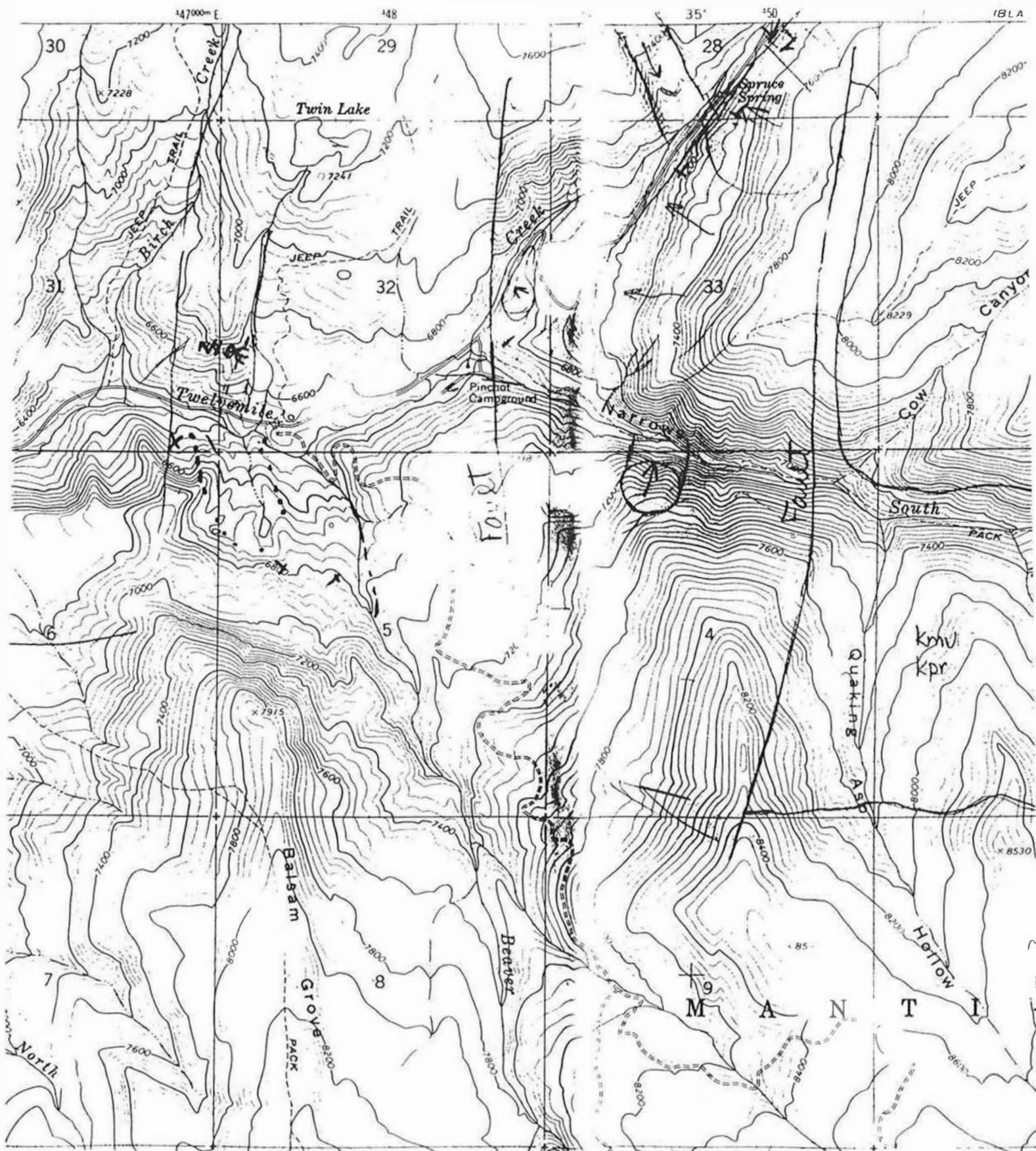
Legal Description Sec 32, 33, 28, 4, T19S, R 3E

See attached map - photos available

Impacts to Facilities and Resources

| <u>Date</u>                                              | <u>Impacts</u>                                                                                                                                                                                                                                                                                                                                                                                     | <u>Forest Service Actions</u>                                                                                                                                                                                                                              |
|----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>5/24/83</p> <p>Carter Reed</p> <p>Fred Fitzgerald</p> | <p>Landslides along the southeast slope of the North Fork has upheaved, cracked and in a few locations covered the road. The area observed was between the switchback in the road above Pinchot CG - Spruce Spring and the next switchback to the north-east (Snowline). Pinchot CG was flooded due to sliding and flushing of water in the south fork and log jams. Photographs are available</p> | <p>F.S. made an attempt to rescue a private vehicle and a F.S. trailer trapped in the campground. A backhoe cleared the campground access road of a log jam. They were unable to get the truck or trailer free.</p> <p><u>Photographs in 1590 file</u></p> |

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY



(est)

Mud and Flood Reporting Form

Area Manti Canyon

Type of Disturbance (i.e. mud flow, slump, etc.) landslide, - The North Slide area has been reactivated

Date First Observed June 2, 1983

Location:

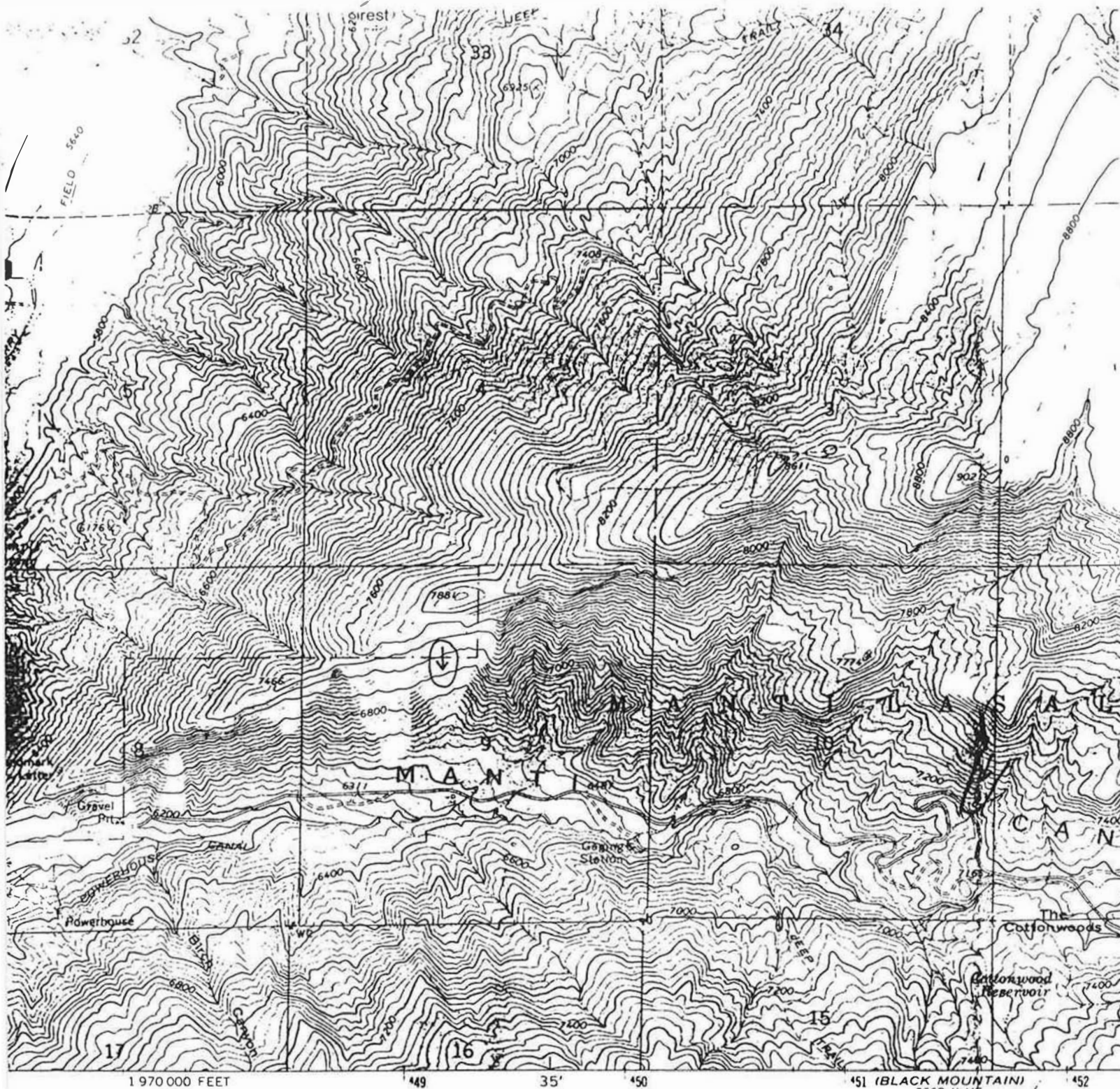
Topography North slope of Mantí Canyon

Legal Description NE 1/4 SE 1/4 Sec 10, T18S, R3E

Impacts to Facilities and Resources

| <u>Date</u>                         | <u>Impacts</u>                                                             | <u>Forest Service Actions</u>                                |
|-------------------------------------|----------------------------------------------------------------------------|--------------------------------------------------------------|
| 6/3/83<br>Cauler Reed<br>Ed Carlson | The slide has covered the road making the road impassable for approx. 100' | None - the Mantí Canyon road is already closed to the public |





by the Geological Survey

SCALE 1:24,000

Methods from aerial  
checked 1966

American datum  
ordinate system, central zone  
ercator grid ticks.

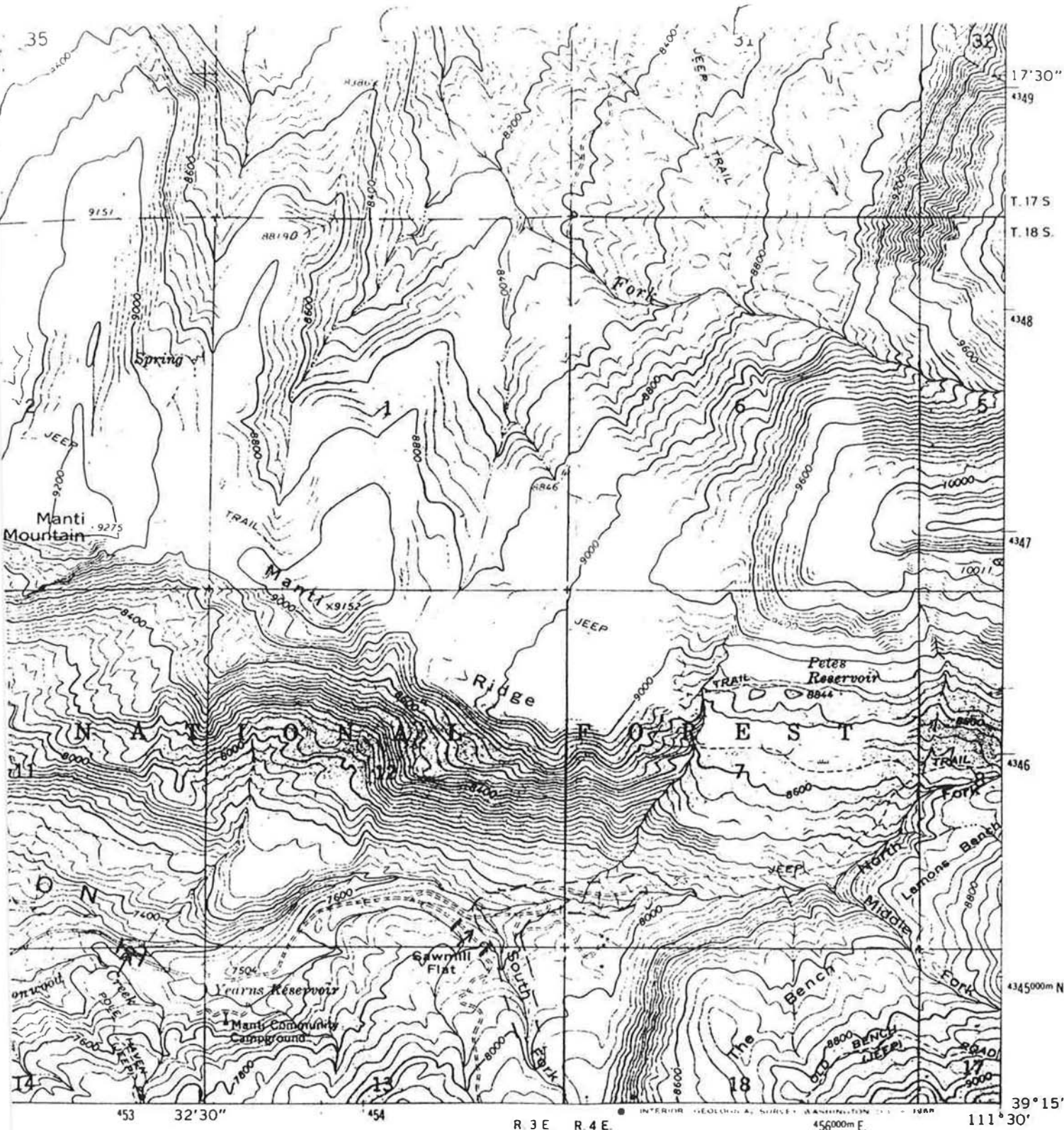
0°22' 16"  
6 MILS 284 MILS

CONTOUR INTERVAL 40 FEET  
DOTTED LINES REPRESENT 10-FOOT CONTOURS  
DATUM IS MEAN SEA LEVEL

by landmark buildings are shown  
ted fence lines

GRID AND 1966 MAGNETIC NORTH  
ELEVATION AT CENTER OF GRID

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS  
FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, O  
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE



ROAD CLASSIFICATION

Heavy-duty ——— Light-duty

Unimproved dirt

U S Route      State Route



EPHRAIM, UTAH

N3915—W11130/7.5

1966

AMS 3662 I SE—SERIES V897

IFERRON RESERV  
3762 III NW

Axtell I SE  
Manti Project