

0016



State of Utah

School and Institutional
TRUST LANDS ADMINISTRATION

675 East 500 South, Suite 500
Salt Lake City, Utah 84102-2818
801-538-5100
801-355-0922 (Fax)
<http://www.trustlands.com>

Michael O. Leavitt
Governor

David T. Terry
Director

U

Pam

COPY

February 6, 2001

Mary Ann Wright, Associate Director Mining
Division of Oil, Gas & Mining
1594 West North Temple, Suite 1210
Salt Lake City, UT 84114

RECEIVED
FEB 13 2001
DIVISION OF
OIL, GAS AND MINING

RE: Mill Fork Canyon/Indian Creek
Helicopter Assisted Drilling Permit Application, Year 2001
Mineral Lease ML 48258-Coal

FAX Steve
@ PFD

Coal Exploration
~~_____~~ x01B

Dear Ms. Wright,

The Trust Lands Administration has received notification from Pacificorp to drill up to seven coal exploration holes in the Mill Fork Canyon and Indian Creek areas, Emery County. I understand that Pacificorp has sent copies of the notification to the Division of Oil, Gas & Mining.

This letter will advise you that the State of Utah is owner of the coal in the lands proposed for drilling. The lands are currently under coal lease ML 48248 to Pacificorp and the lease is in good standing. The notification submitted by Pacificorp satisfies the notification requirements of the Trust Lands Administration.

The Trust Lands Administration supports the above application for a coal exploration permit and requests that the Division of Oil, Gas & Mining review and approve the application as soon as possible. Please contact me if you have any questions in this matter.

Sincerely,

John T. Blake
Mineral Resources Specialist

CC: Chuck Semborski

File in: 0150018.2001. Incoming
Refer to:
 Confidential
 Shelf
 Expandable
Date: 2/6/01 for additional information

MILL FORK CANYON/INDIAN CREEK HELICOPTER ASSISTED DRILLING APPLICATION UTAH STATE COAL LEASE ML-48258

JANUARY 2001

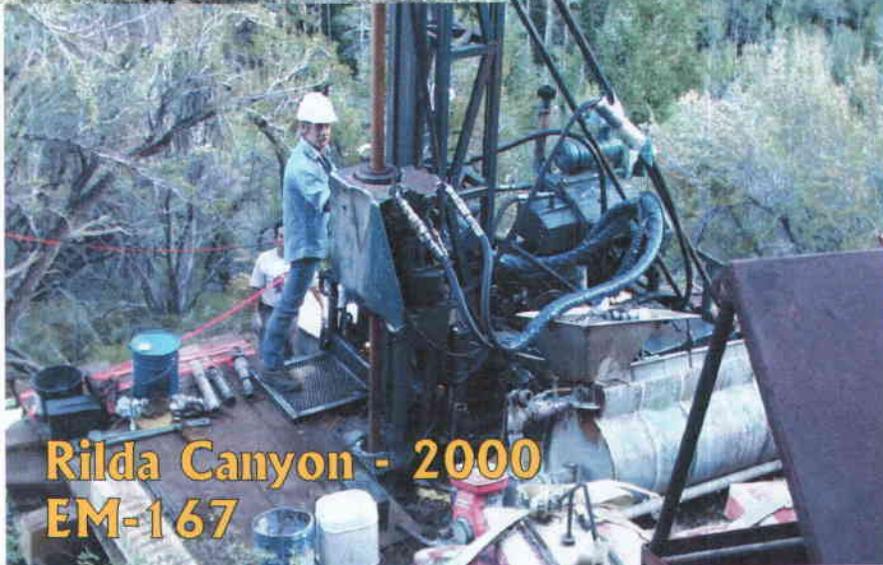
C/O Interwest Mining Company
(Managing Agent)



Energy West Mining Company
(Mine Operator)



Mill Fork Canyon - 2000
EM-169



Rilda Canyon - 2000
EM-167

**MILL FORK CANYON/INDIAN CREEK
HELICOPTER ASSISTED DRILLING APPLICATION
UTAH STATE COAL LEASE ML-482589**

JANUARY 2001

TABLE OF CONTENTS

<i>INTRODUCTION</i>	<i>1</i>
<i>LOCATION AND DEPTH OF PROPOSED DRILL HOLES</i>	<i>1</i>
<i>APPLICANT INFORMATION</i>	<i>2</i>
<i>PROJECT TIMING</i>	<i>3</i>
<i>PROPOSED EXPLORATION AREA</i>	<i>3</i>
<i>VEGETATION and WILDLIFE</i>	<i>3</i>
<i>ARCHEOLOGICAL INFORMATION</i>	<i>4</i>
<i>EXPLORATION METHODS</i>	<i>4</i>
<i>PRE-WORK MEETING</i>	
<i>ROAD USE PERMITS</i>	
<i>FIRE SUPPRESSION EQUIPMENT</i>	
<i>DRILL HOLE ACCESS and PAD CONSTRUCTION</i>	
<i>WATER REQUIREMENTS & RIGHTS</i>	
<i>DRILLING METHODS & PROCEDURES</i>	
<i>HOLE ABANDONMENT</i>	
<i>DRILL SITE and PUMP STATION RECLAMATION</i>	

LIST OF MAPS

- MILL FORK COAL LEASE - HELICOPTER DRILLING - GENERAL LOCATION (1"=4000' & 1"=2000')*
- MILL FORK COAL LEASE - HELICOPTER DRILLING - AERIAL PHOTO (Mill Fork & Upper Joes Valley)*
- MILL FORK COAL LEASE - HELICOPTER DRILLING - 2001 SURFACE OWNERSHIP*
- MILL FORK COAL LEASE - HELICOPTER DRILLING - 2001 COAL OWNERSHIP*
- MILL FORK COAL LEASE - HELICOPTER DRILLING - 2001 DETAILED SITE PLAN (Mill Fork & Upper Joes Valley)*
- MILL FORK COAL LEASE - HELICOPTER DRILLING - 2000 MILL FORK CANYON RAPTOR NESTS*

PACIFICORP
MILL FORK CANYON/JOES VALLEY
2001 HELICOPTER ASSISTED DRILLING PLAN

INTRODUCTION:

PacifiCorp proposes to drill up to a total of seven (7) coal exploration holes in the Mill Fork Coal Lease Tract: ML-48258. The purpose for drilling is to assess coal characteristics and seam thickness. The holes will be drilled using a helicopter transported drill rig in accordance with the following plan. Less than 250 tons of coal will be removed.

LOCATION AND DEPTH OF PROPOSED DRILL HOLE:

Seven (7) potential drill sites are indicated on the accompanying drawings. The approximate location, depth and elevation of the holes are as follows:

HOLE NUMBER	LOCATION	ELEVATION (Feet)	DEPTH (Feet)	SURFACE OWNERSHIP	COAL OWNERSHIP
EM-170	650' South, 620' East of the NW Corner of Sec. 18, T. 16S, R. 7E.	8420	510	USFS	State Coal Lease ML-48258
EM-171	1425' South, 670' West of the NE Corner of Sec. 18, T. 16S, R. 7E.	8240	340	USFS	State Coal Lease ML-48258
EM-172	2700' North, 250' West of the SE Corner of Sec. 13, T. 16S, R. 6E.	8560	620	USFS	State Coal Lease ML-48258
EM-173	1300' North, 500' West of the SE Corner of Sec. 13, T. 16S, R. 6E.	8560	555	USFS	State Coal Lease ML-48258
EM-174	800' South, 3800' West of the NW Corner of Sec. 22, T. 16S, R. 6E.	9050	965	USFS	State Coal Lease ML-48258

PACIFICORP
MILL FORK CANYON/JOES VALLEY
2001 HELICOPTER ASSISTED DRILLING PLAN

HOLE NUMBER	LOCATION	ELEVATION (Feet)	DEPTH (Feet)	SURFACE OWNERSHIP	COAL OWNERSHIP
EM-175	2200' South, 1070' West of the NE Corner of Sec. 15, T. 16S, R. 6E.	8960	980	USFS	State Coal Lease ML-48258
EM-176	1960' North, 410' West of the SE Corner of Sec. 10, T. 16S, R. 6E.	9130	1160	USFS	State Coal Lease ML-48258

In accordance with Federal Regulations 43 CFR 3482.1 (a), 30 CFR 772.11 and State of Utah R645 Coal Mining Rules, the following is submitted:

APPLICANT:

PacifiCorp
 One Utah Center
 201 South Main, Suite 2100
 Salt Lake City, Utah 84140-0021
 (801)220-4612

OPERATOR:

Energy West Mining Company
 15 North Main Street
 Huntington, Utah 84528
 (801)687-9821

RESPONSIBLE REPRESENTATIVE:

Chuck Semborski or Ken Fleck
 Energy West Mining Company
 15 North Main Street
 Huntington, Utah 84528
 (435)687-4720
 (435)687-2317

PACIFICORP
MILL FORK CANYON/JOES VALLEY
2001 HELICOPTER ASSISTED DRILLING PLAN

PROJECT STARTUP DATE: July 15, 2001

PROJECT COMPLETION DATE: September 15, 2001

PROPOSED EXPLORATION AREA:

The proposed drill holes are located within the current Utah State Coal Lease ML-48258, in Sections 11,13,15, 22, Township 16 South, Range 6 East, and Section 18, Township 16 South, Range 7 East Salt Lake Base and Meridian. The drilling will occur on lands in which the surface is administered by the United States Forest Service (USFS) and the subsurface by the State of Utah [The reviewer is referred to the accompanying maps titled Mill Fork Coal Lease - 2001 Helicopter Exploration Drilling, Surface Ownership Map, Coal Ownership Map].

The proposed holes will be drilled in Mill Fork Canyon (EM-170, EM-171, EM-172, EM-173), a tributary to Huntington Canyon, and un-named drainages (EM-174, EM-175, EM-176) which report to Indian Creek in Emery County, Utah. The proposed sites EM-170 and EM-171 are situated on the existing trail (U.S. Forest Service 391 - Mill Fork Canyon) located in the canyon bottom of Mill Fork. Proposed sites EM-172 and EM-173 are located in the right fork of Mill Fork near the canyon bottom. The proposed sites in Joes Valley Creek, EM-174, EM-175 and EM-176 are located near the canyon bottoms. Drill sites EM-170, EM-171, EM-172, and EM-173 are located in the Blackhawk Formation with an estimated elevation ranging from 8220 to 8560 feet. Proposed sites EM-174, EM-175, EM-176 are located in the Castlegate Sandstone with an estimated elevation ranging from 8960 to 9130 feet.

VEGETATION and WILDLIFE:

The vegetation in the area consists of a Cottonwood/Aspen/Fir/Dogwood community in the bottom of the canyons and Spruce-Fir Coniferous Forest inter-mixed with Salina Wildrye/Mountain Mahogany on the south side slopes and Salina Wildrye/Mountain Mahogany/Pinyon-Juniper on the north slopes. The primary land uses associated with the area are wildlife habitat, livestock grazing and recreation. The area is presently classified for the following wildlife uses by the Utah Division of Wildlife Resources (DWR):

PACIFICORP
MILL FORK CANYON/JOES VALLEY
2001 HELICOPTER ASSISTED DRILLING PLAN

Mule Deer	High Priority Summer Range
Elk	Critical Winter Range and High Priority Summer Range

The proposed drilling is not expected to have a detrimental impact on any of these species, their habitat or other land uses associated with the area.

Surveys for Threatened, Endangered and Sensitive (TES) plant and animal species have been conducted in connection with various projects in this area of Rilda Canyon (Surface Facilities, Permit Extension and Powerline) and the Mill Fork coal leasing process. Results of these surveys have been provided to the various regulatory agencies in the applications for the projects. No TES plants and animals have been found in the area of the proposed drill holes. Based upon the 2000 raptor survey completed with DWR, the proposed activity in Mill Fork Canyon (drill hole EM-170) is located within the ½ mile buffer zone of the nest 78. As documented in the 2000 survey, nest 78 was tended. Raptor activity in Mill Fork Canyon will be evaluated during the 2001 survey scheduled for May 2001. PacifiCorp proposes to commence drilling operations after the July 15 raptor nesting season deadline.

ARCHEOLOGICAL INFORMATION:

The proposed locations in Mill Fork Canyon are near the canyon bottoms, with drill holes EM-170 and EM-171 situated along the existing trail (U.S. Forest Service 391 - Mill Fork Canyon). Drill holes EM-174 - 176 located in Joes Valley are located near canyon bottoms in un-named drainages which report to Indian Creek. As detail in the following section, no construction or excavation is necessary utilizing helicopter supported drilling techniques. As recommended U.S. Forest Service, PacifiCorp contracted SENCO-PHENIX Archeological Services (Price, Utah) to conduct a file search for the proposed activity. In addition, PacifiCorp has retained SENCO-PHENIX to conducted a ground survey of for each of the proposed sites prior to commencement of drilling activities.

If cultural or paleontological resources are discovered during operations, all operations which may result in disturbance to the resources will cease and the Forest Service will be notified of the discovery.

EXPLORATION METHODS:

Road Use Permits:

The Forest Service will be notified 48 hours in advance that heavy equipment will be moved onto National Forest System lands and that surface disturbing activities will commence.

PACIFICORP
MILL FORK CANYON/JOES VALLEY
2001 HELICOPTER ASSISTED DRILLING PLAN

Mill Fork Canyon (U.S. Forest Development Road #245): Prior to drilling, Energy West will obtain a permit from the U.S. Forest Service for the helicopter staging area located at the end of U.S. Forest Service Road #245 in Section 17, Township 16 South, Range 7 East.

Cottonwood Creek (U.S. Forest Development Road #040): Prior to drilling, Energy West will obtain a permit from the U.S. Forest Service for use of U.S. Forest Service Road #040 in Sections 22, 27, 35, Township 16 South, Range 6 East and Sections 2,3, 10, 11, 14, 23, 24 and 25, Township 17 South, Range 6 East.

Indian Creek (U.S. Forest Development Road #017/221): Prior to drilling, Energy West will obtain a permit from the U.S. Forest Service for the helicopter staging area located at the end of U.S. Forest Service Road #221 in Section 15, Township 16 South, Range 6 East.

Special Use Permit

As required by the U.S. Forest Service, PacifiCorp will apply for a Special-Use Application (Form 2700-3) for the proposed exploration. Each drill site will occupy approximately 0.04 acre for a total area of use of approximately 0.28 acres.

Pre-Work Meeting:

A pre-work meeting including the responsible company representatives, contractors, State of Utah Institutional Trust Lands Administration, and the Forest Service will be conducted at the project location prior to commencement of operations.

Fire Suppression Equipment:

All gasoline and diesel powered equipment will be equipped with effective mufflers or spark arresters which meet applicable Forest Service specifications. Fire suppression equipment will be available to all personnel working at the project site. Equipment will include at least one hand tool per crew member consisting of shovels and pulaskis and one properly rated fire extinguisher per vehicle and/or combustion engine.

Drill Hole Access and Pad Construction:

No access road or pad construction will be necessary for the proposed project. Drilling equipment and materials will be transported to the drill site by helicopter. Personnel will access the site by vehicle via existing roads and on foot. The drill site are relatively level (20 percent or less slope); therefore, minimal site preparation will be necessary. Vegetation, in the form of trees, grasses, forbs and sparse, low shrubs, will not be removed. However, it may be necessary to remove dead-fall and some "taller" shrubs (mahogany, etc.)/aspen trees for safety reasons. This will be minimized and accomplished using hand tools. The dead-fall will be replaced upon completion of drilling. An area no larger than approximately 40' by 40' will be occupied at the drill site. Leveling of drilling equipment will be accomplished using hand tools and supports

PACIFICORP
MILL FORK CANYON/JOES VALLEY
2001 HELICOPTER ASSISTED DRILLING PLAN

(wood blocks, etc.) transported to the site by helicopter. All materials, tools and equipment will be removed upon completion of drilling and reclamation activities.

Water Requirements & Rights:

Water will be pumped directly from Mill Fork Creek for drill holes EM-170, EM-171, EM-172, EM-173. Water for the drill holes located in Indian Creek will be pumped directly from the unnamed drainages located near the drill holes or from a pump located near the Indian Creek canal. A gasoline/diesel powered water pump will be stationed near the creek/canal and water will be pumped to water tanks located at the drill site.

The amount of water required for the project is estimated at 20,000 gallons per hole. Therefore, the maximum total quantity of water to be used is estimated at approximately 140,000 gallons (0.43 acre feet). A *Temporary Exchange Application* will be filed and approved with the State of Utah, Division of Water Rights prior to commencement of operations.

Drill Methods & Procedures:

A three inch maximum diameter hole will be core or rotary drilled the entire length to the approximate depth stated previously. Drilling depth will be sufficient to accomplish penetration through both the Blind Canyon and Hiawatha coal seams. The drilling will be done by a drilling contractor(s) experienced in helicopter supported drilling. The drill is a diesel powered rotary drill rig mounted on 4' x 8' skids. Drilling will utilize water and, as necessary, a biodegradable polymer drilling "mud" such as MINEX 1330 (see attached MSDS).

The following support equipment will be required:

- 3 pickup trucks: stationed at the staging area
- 1 flatbed semi-trailer for mobilization/de-mobilization of the drill rig
- 1 Lama helicopter and support truck

The drill rig components and associated materials, tools and equipment will be transported by truck to the helicopter staging area indicated on the accompanying map. The tools and materials necessary for site preparation will be transported to the drill site by helicopter. Site preparation will include removal of dead-fall and brush as necessary. Minor digging, using hand tools, may be necessary at some locations to achieve effective placement of the leveling support materials (wood blocks, etc.). Brattice or other similar material will be placed on the ground beneath the drill rig which will be transported to the site by helicopter in several "lifts". The drill rig components will then be assembled at the drill site, the rig will be leveled and other necessary materials will be flown to the site.

PACIFICORP
MILL FORK CANYON/JOES VALLEY
2001 HELICOPTER ASSISTED DRILLING PLAN

A 1" diameter high-pressure hose will be laid overland from the pump stations to the drill site. This will be accomplished by hand and/or helicopter. No clearing of vegetation will be necessary for placement of the water hose. Existing openings among the trees will be utilized. Additionally, no vegetation clearing will occur at the water tank/pump sites or the helicopter staging areas. Activities will be confined to the existing roads in Mill Fork Canyon and Indian Creek. The necessary approvals will be obtained from the U.S. Forest Service for activities associated with the respective roads.

During the drilling operation, water and drilling fluids will be recirculated to the extent possible. Any returned cuttings and other materials will be captured in a container at the drill site. The cuttings will be transported from the drill site to the staging area by helicopter and then by vehicle to the Deer Creek or Cottonwood Waste Rock sites for disposal. Containment of possible fluid spills will be achieved through the use of brattice ground cover, silt fence, and if necessary, earthen berms. If spills occur, all affected materials will be removed from the site and disposed of at an approved location. If soil is removed during spill containment and clean-up, the site of removal will be recontoured and seeded with the approved seed mixture.

Fuel and/or lubricating oil containers not stored in a truck will be placed on brattice or other acceptable ground cover at a site located away from drainage channels and surrounded by silt fence, earthen berm or other acceptable containment structure. If spills occur, clean-up will be conducted as stated above.

Access by personnel associated with the drilling project will be via vehicle to Mill Fork Canyon and Indian Creek and by foot to the drill site. Therefore, no additional access facilities will be constructed.

As previously discussed, a 3" maximum diameter hole will be core or rotary drilled for the entire depth of the hole. The hole will penetrate through both the Blind Canyon and Hiawatha coal seams. This will result in approximately a maximum of 100 pounds of coal being removed. The core and/or cuttings will be examined to determine coal seam characteristics. The drill rig and all associated equipment and materials will be removed by helicopter.

Hole Abandonment:

Groundwater is not anticipated to be encountered; therefore, the proposed hole will not be retained as water monitoring well. However, if groundwater is present, it will be reported to the appropriate agencies (SITLA, USFS, DOGM) and a determination will be made regarding the transfer and modification of the drill hole to a monitoring well.

Upon completion of down-hole procedures, the drill hole will be completely sealed with cement from the bottom of the hole to ground level. The cement slurry mixture used to plug and seal the

PACIFICORP
MILL FORK CANYON/JOES VALLEY
2001 HELICOPTER ASSISTED DRILLING PLAN

hole will be mixed in compliance with standard cement mixing tables (e.g. Halliburton). Any variance from this procedure will be approved in advance by SITLA and DOGM.

Drill Site and Pump Station Reclamation:

Following completion of drilling and plugging activities and removal of all materials and equipment from the drill site, the site will be reclaimed. If soil disturbance has occurred, the areas will be repaired and recontoured using hand tools.

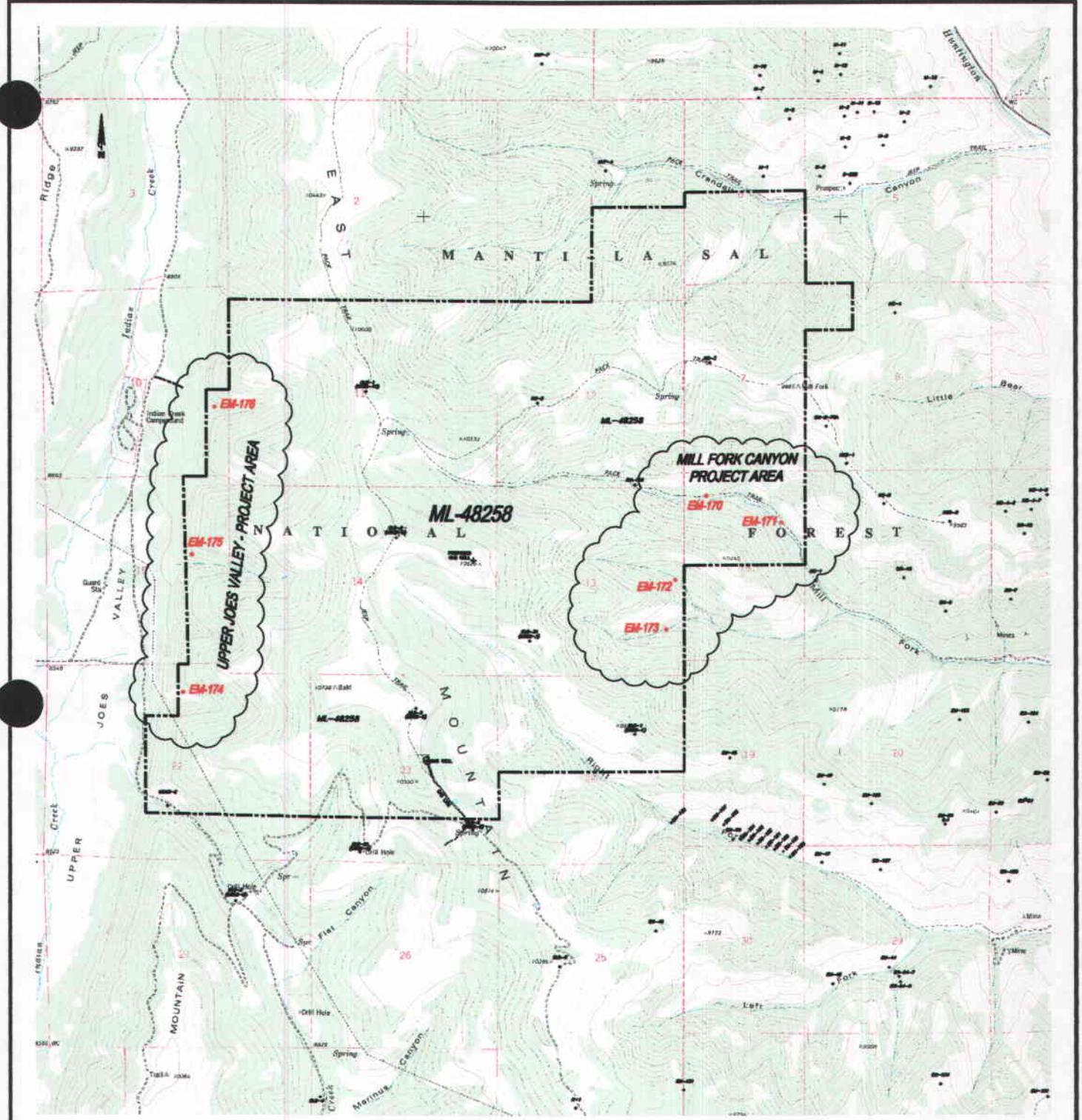
The areas will then be reseeded using the following certified seed mixture or a mixture stipulated by the Forest Service.

<u>Species</u>	<u>lbs/acre (PLS)</u>
Intermediate Wheatgrass - <i>Agropyron intermedium</i>	3
Slender Wheatgrass - <i>A. trachycaulum</i>	3
Orchard Grass - <i>Dactylis glomerata</i>	2
Western Wheat Grass - <i>A. smithii</i>	2
Smooth Brome - <i>Bromus inermus</i>	3
Ladak Alfalfa - <i>Medicago sativa ladak</i>	1
Yellow Sweet Clover - <i>Melilotus officinalis</i>	1
Small Burnett - <i>Sanguisorba minor</i>	1
Perennial Ryegrass - <i>Lolium perenne</i>	1

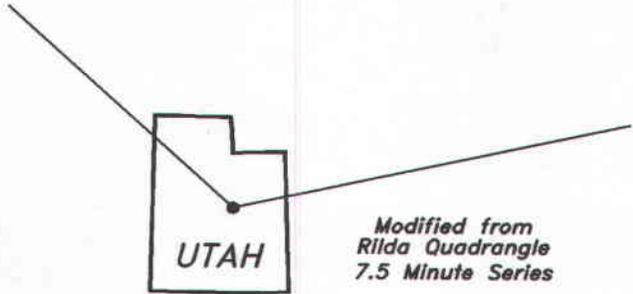
The seed mixture will be hand broadcast and the area will be hand raked following seeding to cover the seed. Following seeding, any dead-fall that was removed from the drill site will be replaced.

Following completion of drilling, the drill rig and all associated equipment and materials will be removed by helicopter to the helicopter staging areas and transported from the area by vehicle. The water hose, tanks and pumping station and all associated materials and equipment will be removed. All trash and extraneous materials will be removed from the US Forest Service property and disposed of at an approved location.

It is anticipated that all drilling and reclamation activities associated with this project will be completed within 60 days following the date of implementation.



CAD FILE NAME/DISK#: USERS\J.L\MILL-FORK\MILLFORK2001-DRILLING.DWG



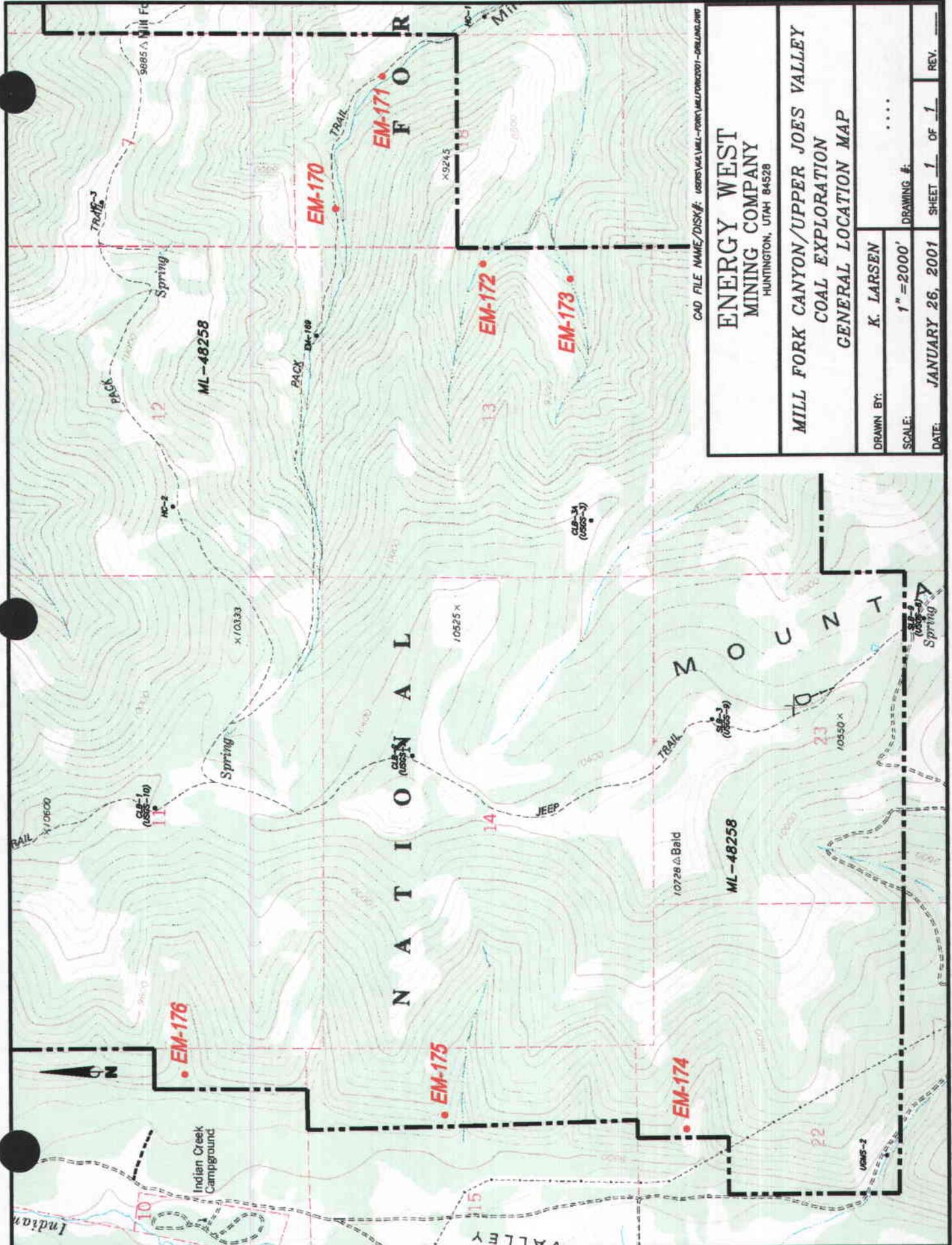
UTAH

Modified from
Rilda Quadrangle
7.5 Minute Series

**ENERGY WEST
MINING COMPANY**
HUNTINGTON, UTAH 84528

**MILL FORK CANYON/UPPER JOES VALLEY
COAL EXPLORATION
GENERAL LOCATION MAP**

DRAWN BY:	K. LARSEN	DRAWING #:	....
SCALE:	1" = 4000'	DATE:	JANUARY 26, 2001
DATE:	JANUARY 26, 2001	SHEET	1 OF 1 REV. _____



CAD FILE NAME/DISK #: USERS\KAL\MILL-FORK\MILL-FORK001-CORLIND.DWG

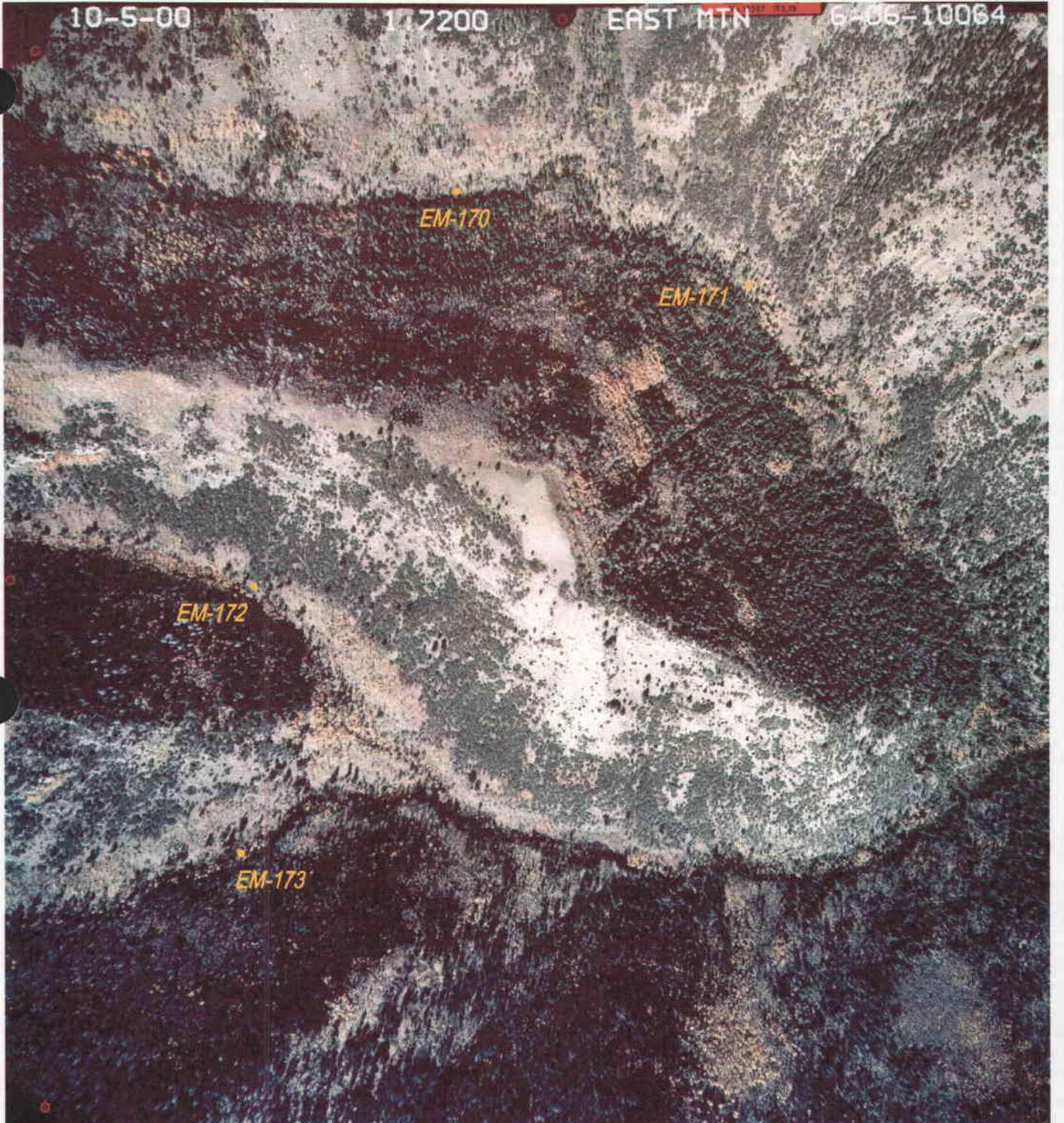
ENERGY WEST MINING COMPANY HUNTINGTON, UTAH 84528	
MILL FORK CANYON/UPPER JOES VALLEY COAL EXPLORATION GENERAL LOCATION MAP	
DRAWN BY: K. LARSEN	.....
SCALE: 1" = 2000'	DRAWING #:
DATE: JANUARY 26, 2001	SHEET 1 OF 1 REV.

10-5-00

17200

EAST MTN

6406-10064



CAD FILE NAME/DISK#: USERS\VAL\MILL-FORK\MILLFORK2001-DRILLING.DWG

ENERGY WEST
MINING COMPANY
 HUNTINGTON, UTAH 84528

MILL FORK CANYON/UPPER JOES VALLEY
COAL EXPLORATION
MILL FORK CANYON AERIAL PHOTO

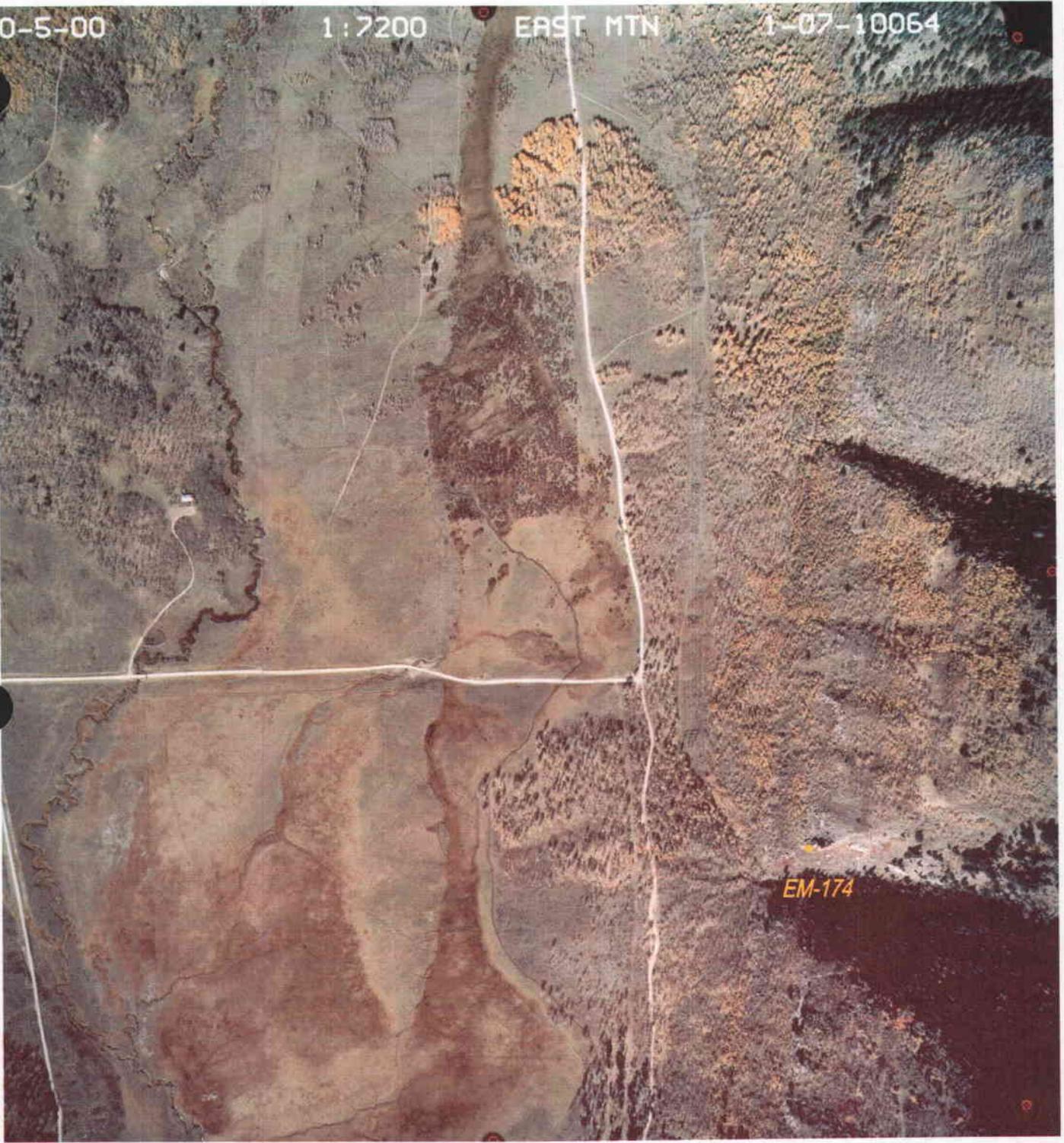
DRAWN BY:	K. LARSEN	.....
SCALE:	NONE	DRAWING #:	
DATE:	JANUARY 26, 2001	SHEET 1 OF 1	REV. ___

0-5-00

1:7200

EAST MTN

1-07-10064



CAD FILE NAME/DISK#: USERS\KAL\MILL-FORK\MILLFORK2001-DRILLING.DWG

ENERGY WEST
MINING COMPANY
 HUNTINGTON, UTAH 84528

MILL FORK CANYON/UPPER JOES VALLEY
COAL EXPLORATION
UPPER JOES VALLEY AERIAL PHOTO

DRAWN BY:	K. LARSEN	DRAWING #:	....
SCALE:	NONE	DATE:	JANUARY 26, 2001
		SHEET	1 OF 1 REV. ____

10-5-00

1:7200

EAST MTN

1-06-10064



EM-175

CAD FILE NAME/DISK#: USERS\KLR\MILL-FORK\MILLFORK2001-DRILLING.DWG

ENERGY WEST
MINING COMPANY
 HUNTINGTON, UTAH 84528

MILL FORK CANYON/UPPER JOES VALLEY
COAL EXPLORATION
UPPER JOES VALLEY AERIAL PHOTO

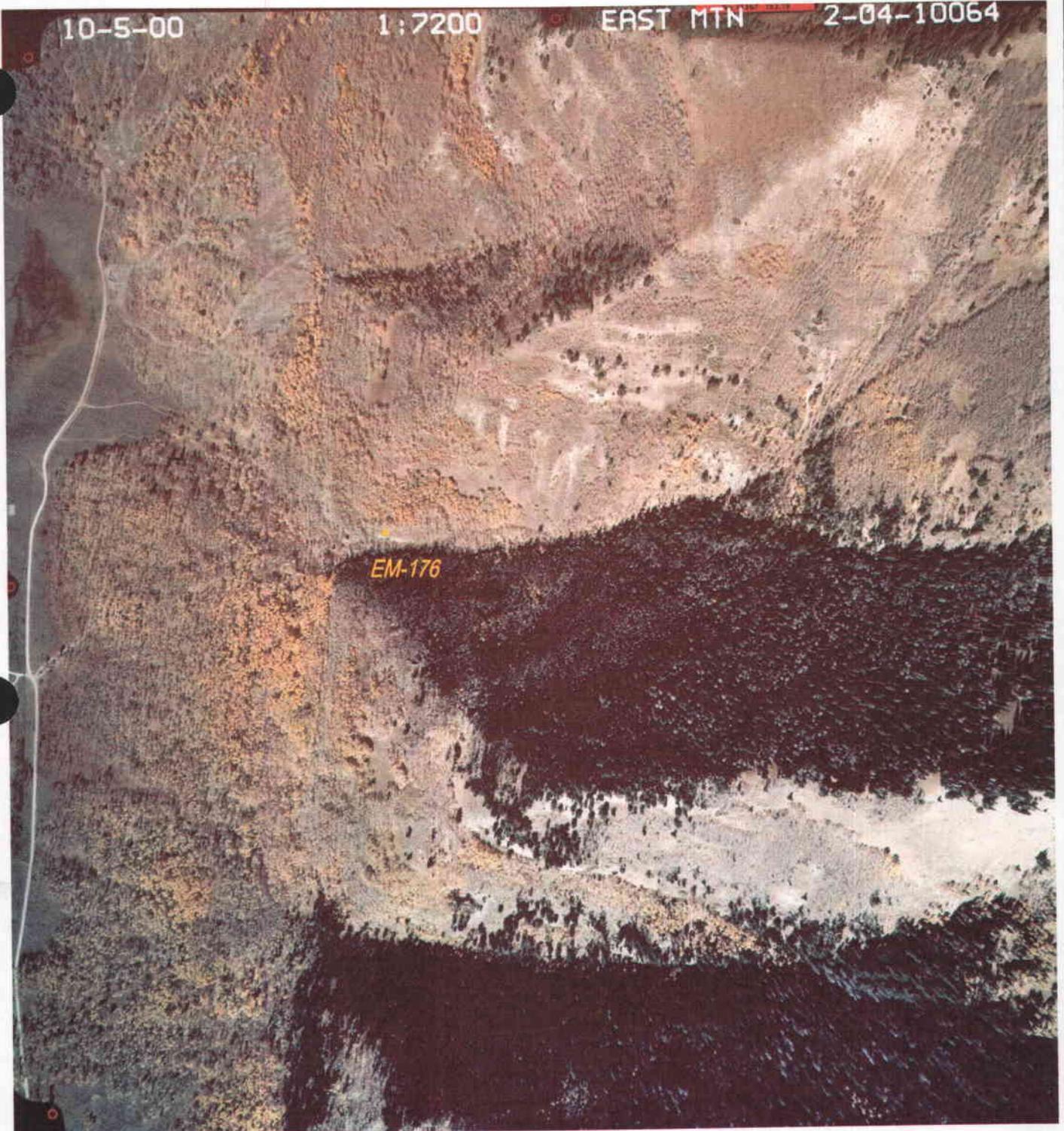
DRAWN BY:	K. LARSEN	DRAWING #:	.....
SCALE:	NONE		
DATE:	JANUARY 26, 2001	SHEET <u>1</u> OF <u>1</u>	REV. <u> </u>

10-5-00

1:7200

EAST MTN

2-04-10064

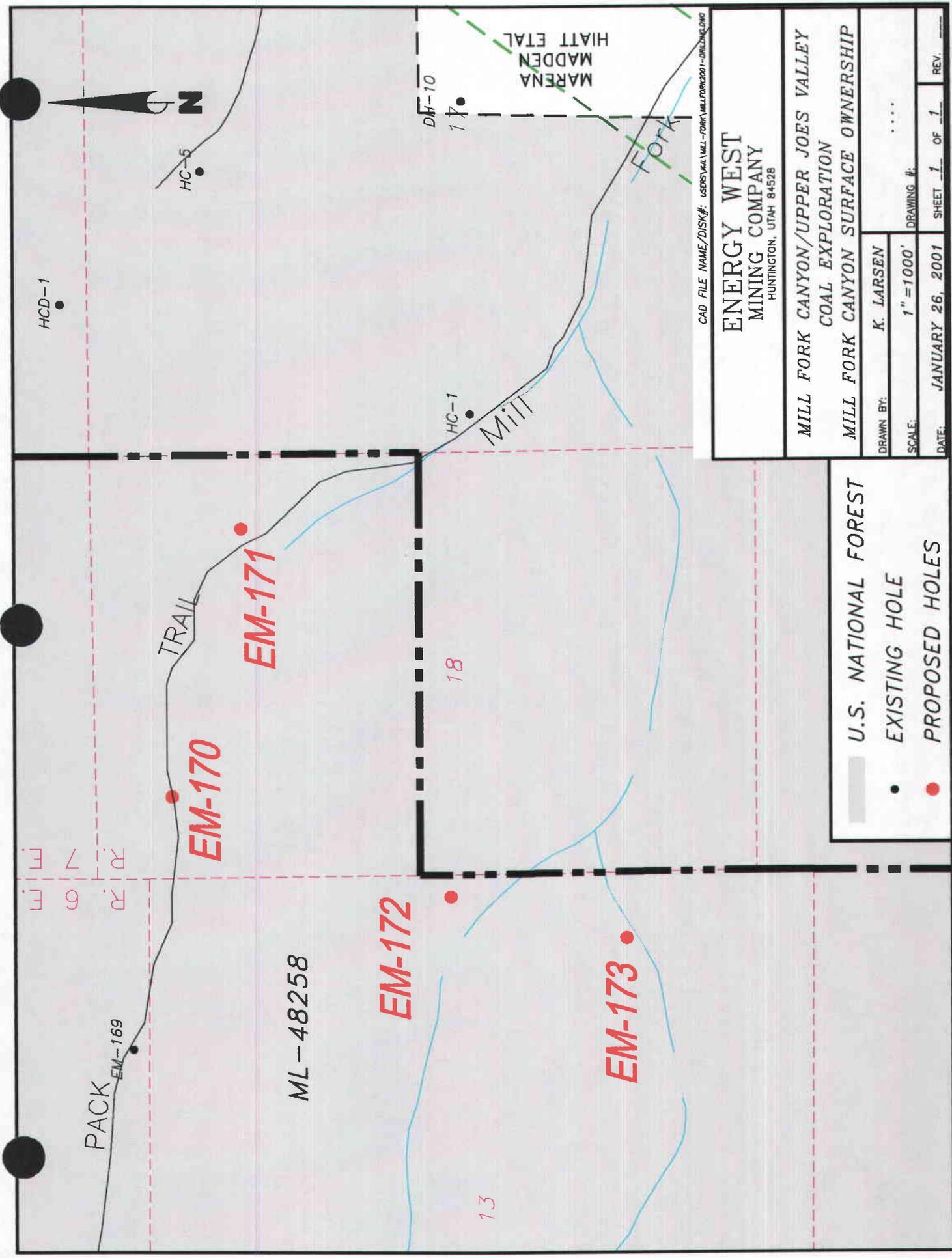


CAD FILE NAME/DISK#: USERS\KLA\MILL-FORK\MILLFORK2001-DRILLING.DWG

ENERGY WEST
MINING COMPANY
 HUNTINGTON, UTAH 84528

MILL FORK CANYON/UPPER JOES VALLEY
COAL EXPLORATION
UPPER JOES VALLEY AERIAL PHOTO

DRAWN BY:	K. LARSEN	.....
SCALE:	NONE	DRAWING #:	
DATE:	JANUARY 26, 2001	SHEET <u>1</u> OF <u>1</u>	REV. <u> </u>



CAD FILE NAME/DISK#: USERS\KA\ML-FORK\MLFORK201-DRAWING.DWG

**ENERGY WEST
MINING COMPANY**
HUNTINGTON, UTAH 84528

MILL FORK CANYON/UPPER JOES VALLEY
COAL EXPLORATION
MILL FORK CANYON SURFACE OWNERSHIP

DRAWN BY: K. LARSEN

SCALE: 1" = 1000'

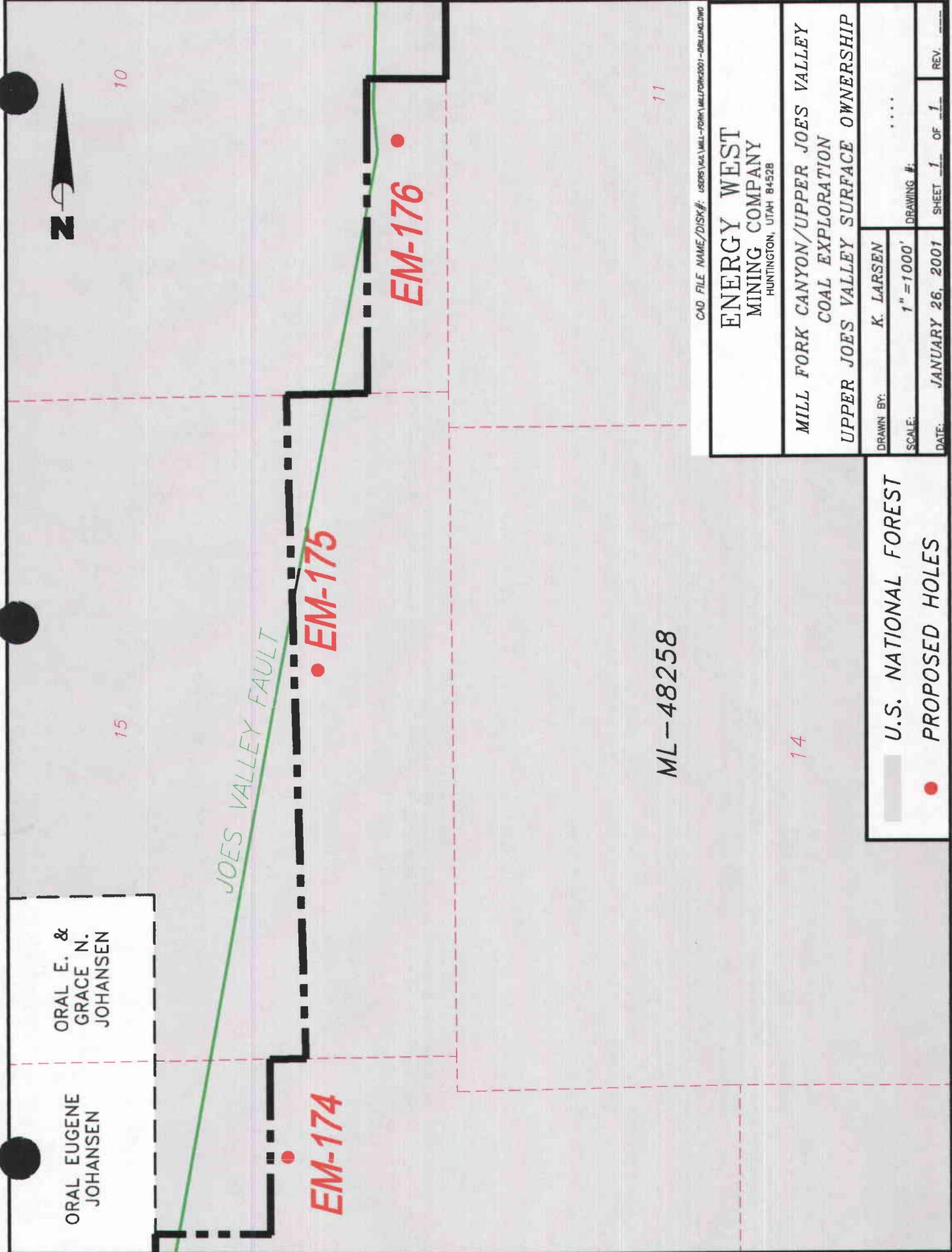
DATE: JANUARY 26, 2001

DRAWING #:

SHEET 1 OF 1 REV.

U.S. NATIONAL FOREST

- EXISTING HOLE
- PROPOSED HOLES



CAD FILE NAME/DISK#: J:\G051\K4\MILL-FORK\VAL-FORC001-DRELING.DWG

ENERGY WEST
MINING COMPANY
 HUNTINGTON, UTAH 84528

MILL FORK CANYON/UPPER JOES VALLEY
COAL EXPLORATION
UPPER JOES VALLEY SURFACE OWNERSHIP

DRAWN BY: **K. LARSEN**
 SCALE: **1" = 1000'**
 DATE: **JANUARY 26, 2001**

U.S. NATIONAL FOREST
 PROPOSED HOLES

DRAWING #:
 SHEET **1** OF **1** REV. _____

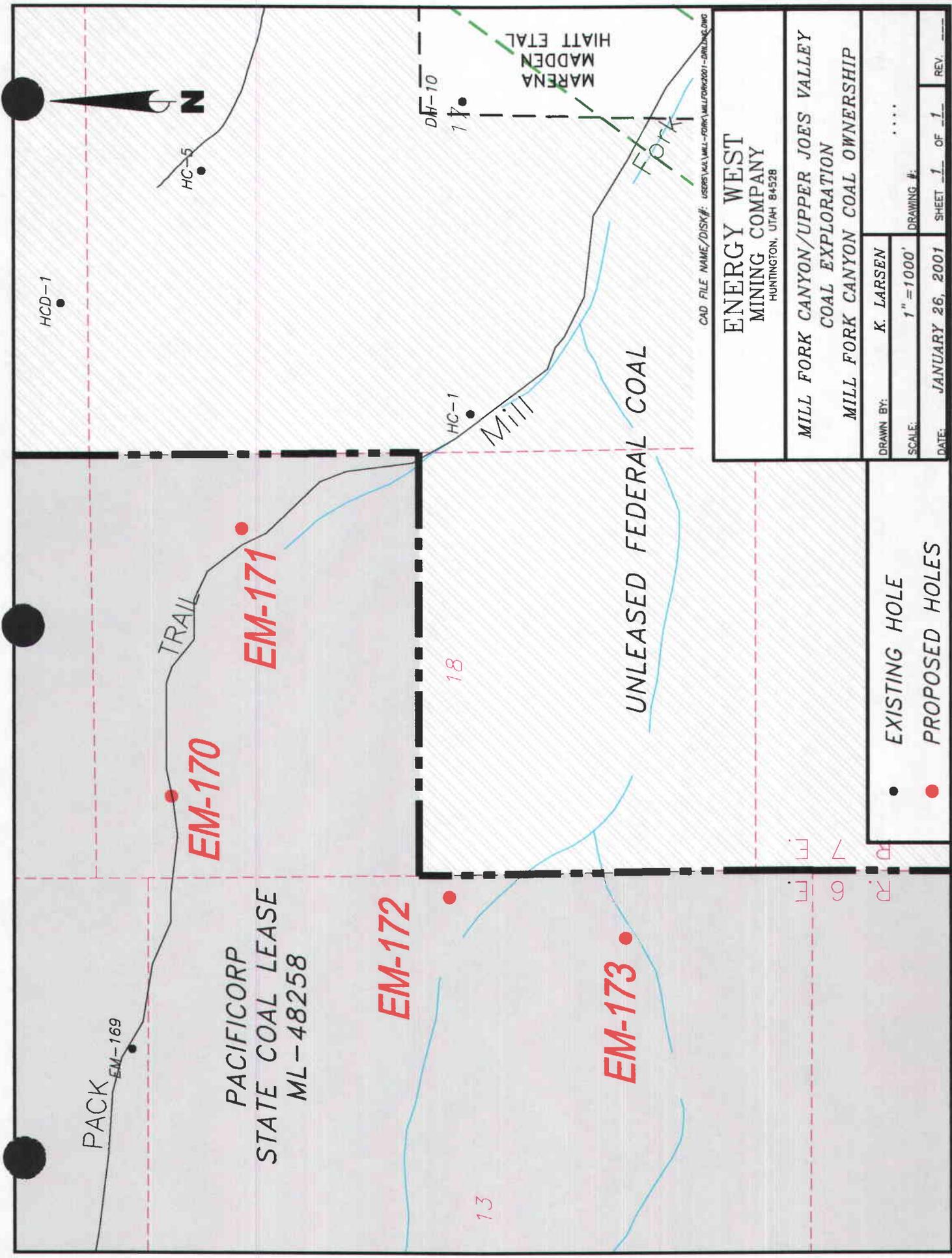
ML-48258

14

15

11

10



CAD FILE NAME/DISK#: US05RVA1.ML-FORK-MILL-FORK2001-DRAWING.DWG

**ENERGY WEST
MINING COMPANY**
HUNTINGTON, UTAH 84528

MILL FORK CANYON/UPPER JOES VALLEY
COAL EXPLORATION
MILL FORK CANYON COAL OWNERSHIP

DRAWN BY:	K. LARSEN	DRAWING #:	.....
SCALE:	1" = 1000'	SHEET	1 OF 1
DATE:	JANUARY 26, 2001	REV.	---

●	EXISTING HOLE
●	PROPOSED HOLES

PACK
EM-169

PACIFICORP
STATE COAL LEASE
ML-48258

TRAIL

MILL

UNLEASED FEDERAL COAL

Fork

EM-170

EM-171

EM-172

EM-173

HCD-1

HC-5

HC-1

DM-10

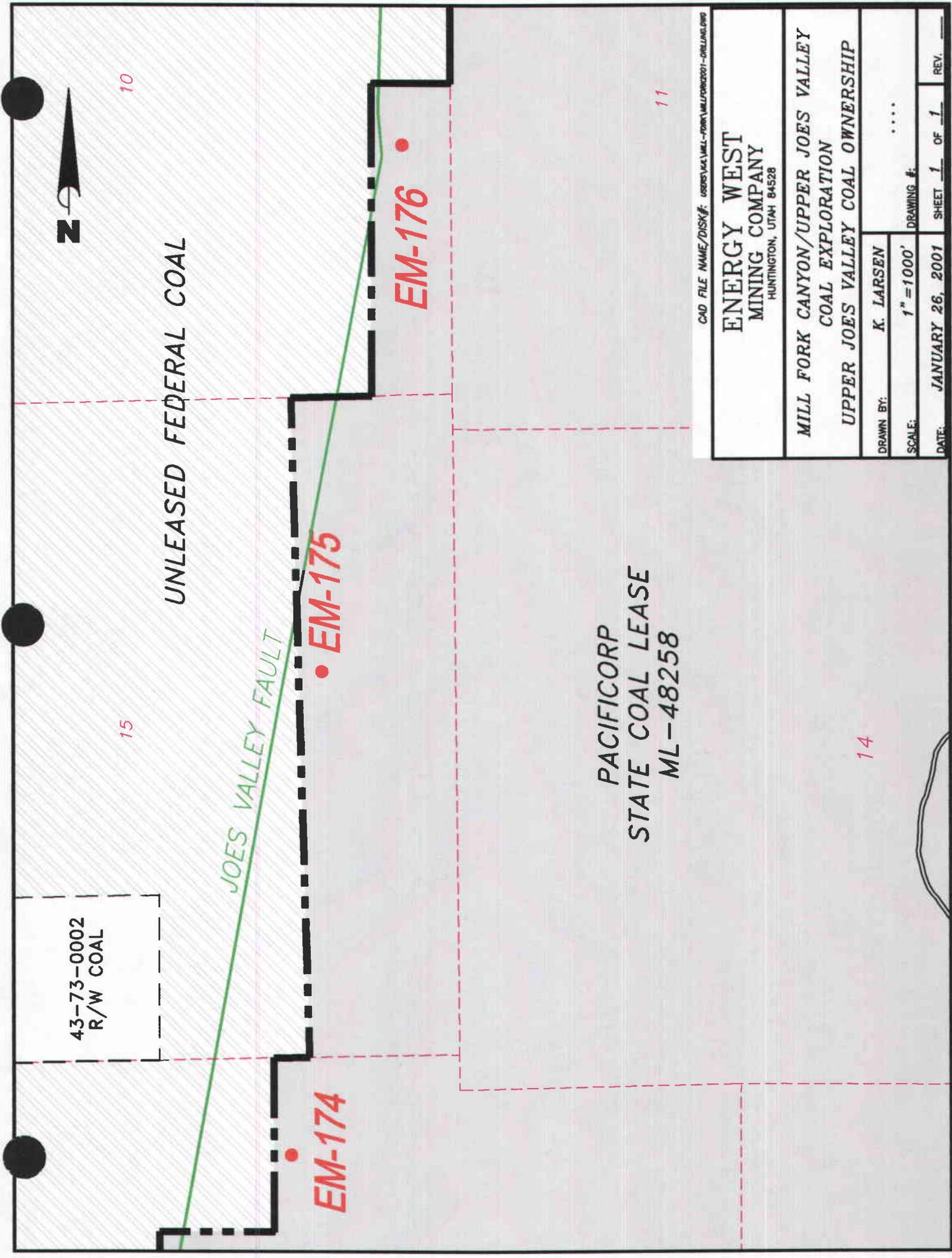
17

18

13

6
7
8

MARNA
MADDEN
HIATT ETAL



43-73-0002
R/W COAL

15

UNLEASED FEDERAL COAL

JOES VALLEY FAULT

EM-174

EM-175

EM-176

PACIFICORP
STATE COAL LEASE
ML-48258

11

14



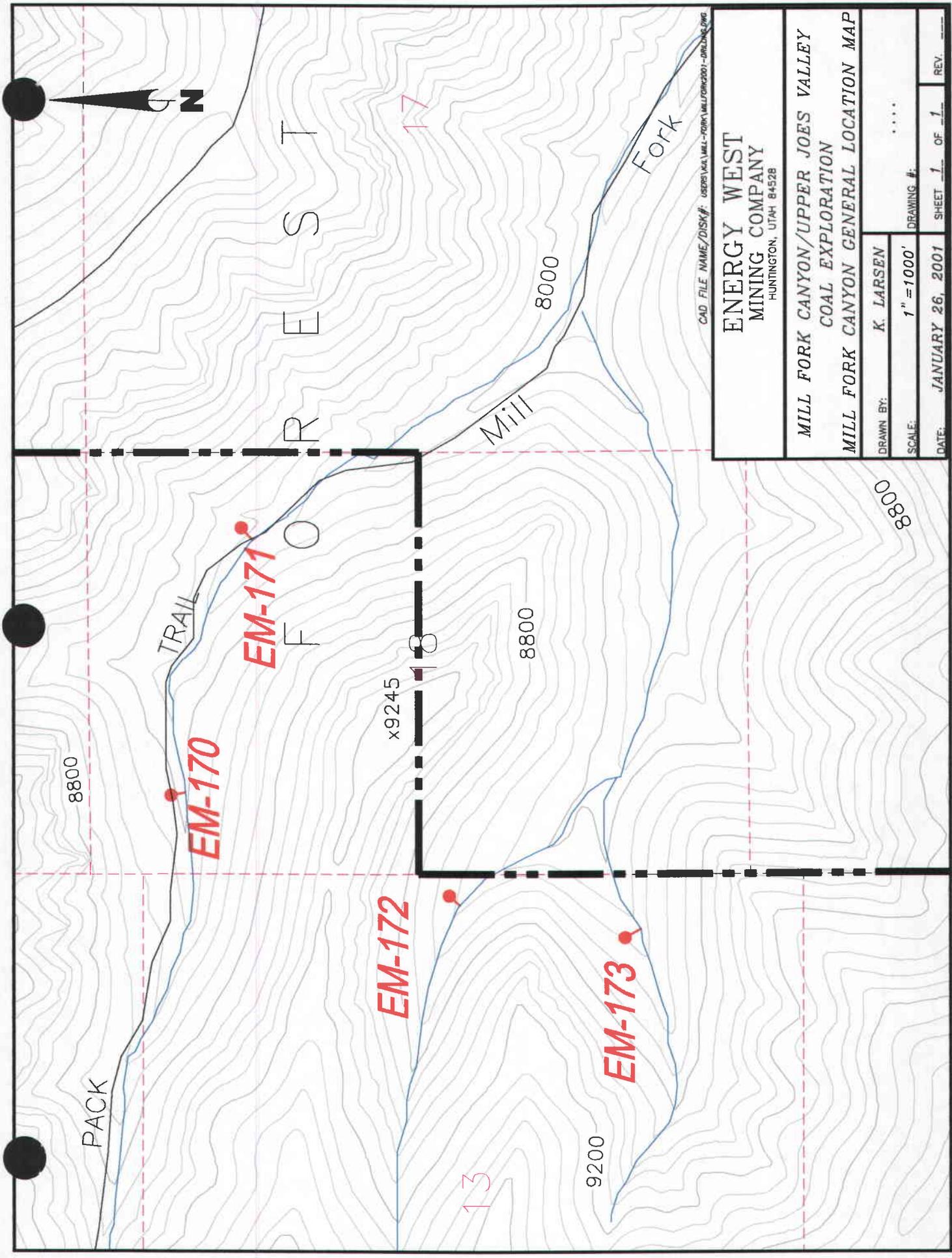
10

CAO FILE NAME/DISK#: US05142.VML-COBYVALUPR0201-DRLJAGLWP

**ENERGY WEST
MINING COMPANY**
HUNTINGTON, UTAH 84528

MILL FORK CANYON/UPPER JOES VALLEY
COAL EXPLORATION
UPPER JOES VALLEY COAL OWNERSHIP

DRAWN BY:	K. LARSEN	DRAWING #:	.....
SCALE:	1" = 1000'	DATE:	JANUARY 26, 2001
		SHEET	1 OF 1
		REV.	

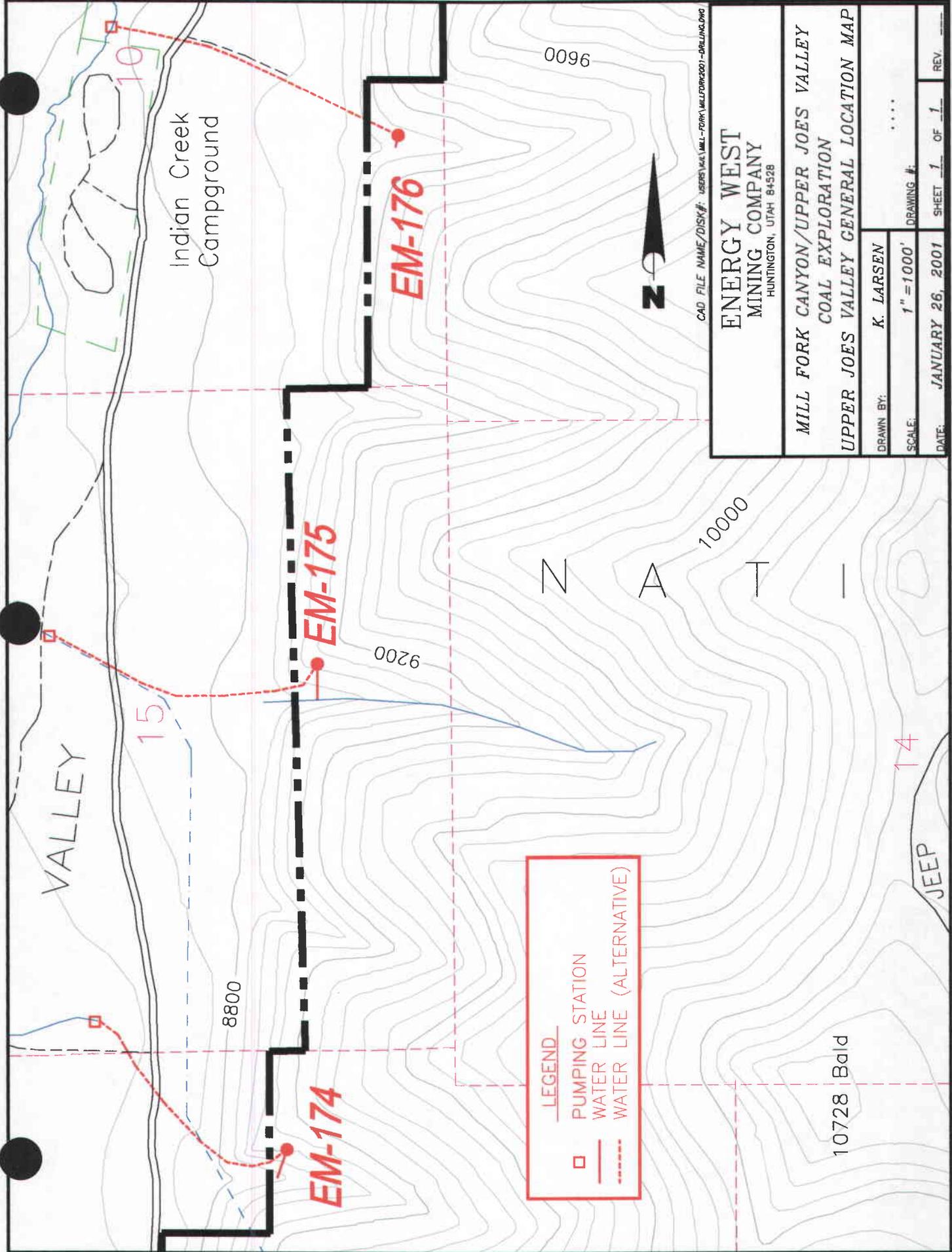


CAD FILE NAME/DISK#: US0501\KA\VAL-UPPER\VALUP02001-020200.DWG

**ENERGY WEST
MINING COMPANY**
HUNTINGTON, UTAH 84528

MILL FORK CANYON/UPPER JOES VALLEY
COAL EXPLORATION
MILL FORK CANYON GENERAL LOCATION MAP

DRAWN BY:	K. LARSEN	.....
SCALE:	1" = 1000'	DRAWING #:
DATE:	JANUARY 26, 2001	SHEET 1 OF 1
		REV. ---



LEGEND

- PUMPING STATION
- WATER LINE
- - - - WATER LINE (ALTERNATIVE)

CAD FILE NAME/DISK#: JSERSVKA.MLL - P00Y\VALF00001 - 00RLING.DWG

ENERGY WEST
MINING COMPANY
 HUNTINGTON, UTAH 84528

MILL FORK CANYON/UPPER JOES VALLEY
COAL EXPLORATION
UPPER JOES VALLEY GENERAL LOCATION MAP

DRAWN BY:	K. LARSEN	DRAWING #:	.....
SCALE:	1" = 1000'	DATE:	JANUARY 26, 2001
		SHEET	1 OF 1
		REV.	

0096

N A T I

9200

10000

8800

10728 Bald

VALLEY

Indian Creek
Campground

JEEP

15

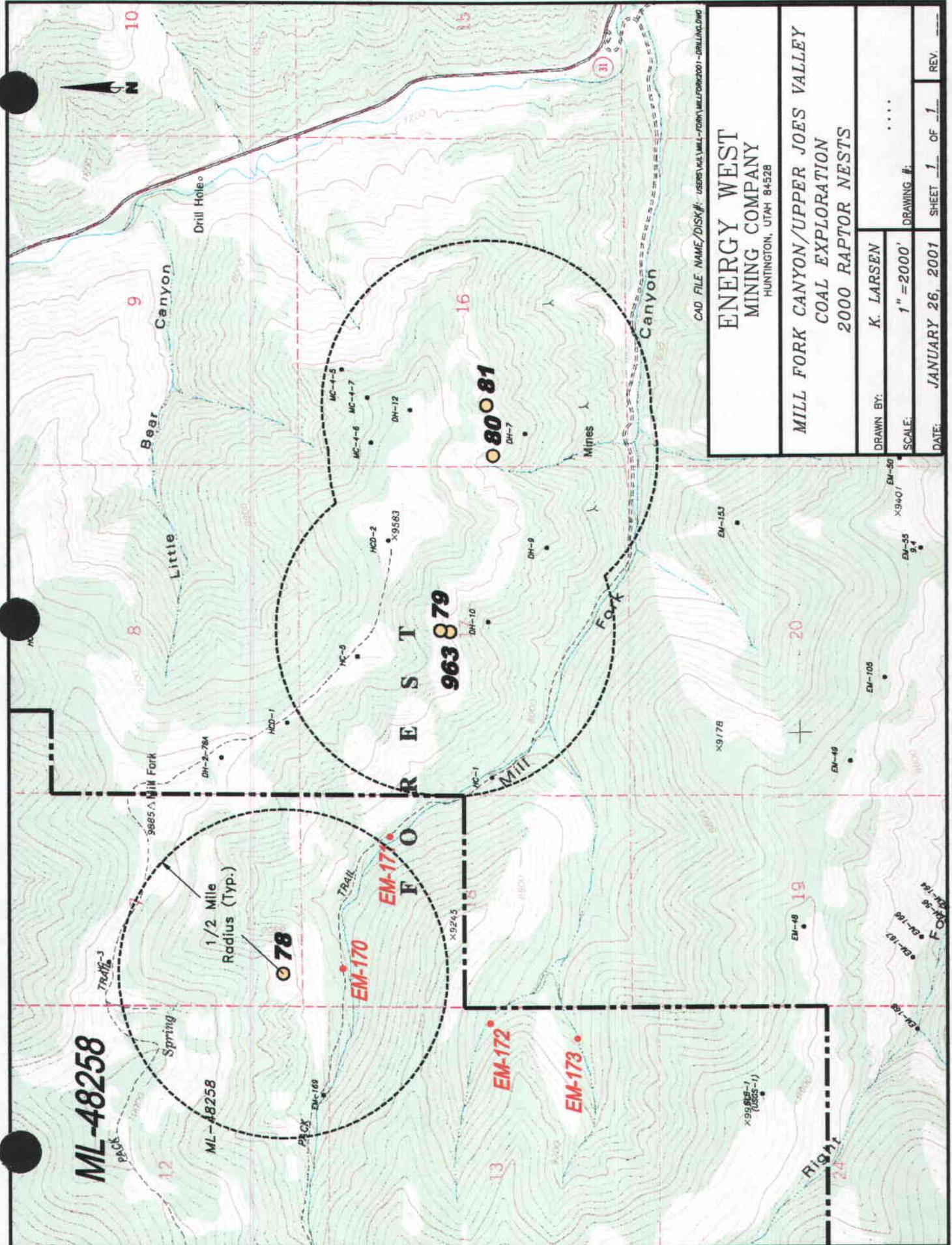
10

EM-174

EM-175

EM-176

14



CAD FILE NAME/DISK#: USER\VEA\MILL-FORK\MILLFOR2001-DRAWING.DWG

**ENERGY WEST
MINING COMPANY**
HUNTINGTON, UTAH 84528

**MILL FORK CANYON/UPPER JOES VALLEY
COAL EXPLORATION
2000 RAPTOR NESTS**

DRAWN BY: **K. LARSEN**

SCALE: **1" = 2000'**

DATE: **JANUARY 26, 2001**

.....

DRAWING #:

SHEET **1** OF **1**

REV. _____

ML-48258

ML-48258

78

1/2 Mile
Radius (Typ.)

EM-170

EM-171

963879

EM-172

EM-173

80

81

x99858-1
(JUES-1)

x9178

x9401

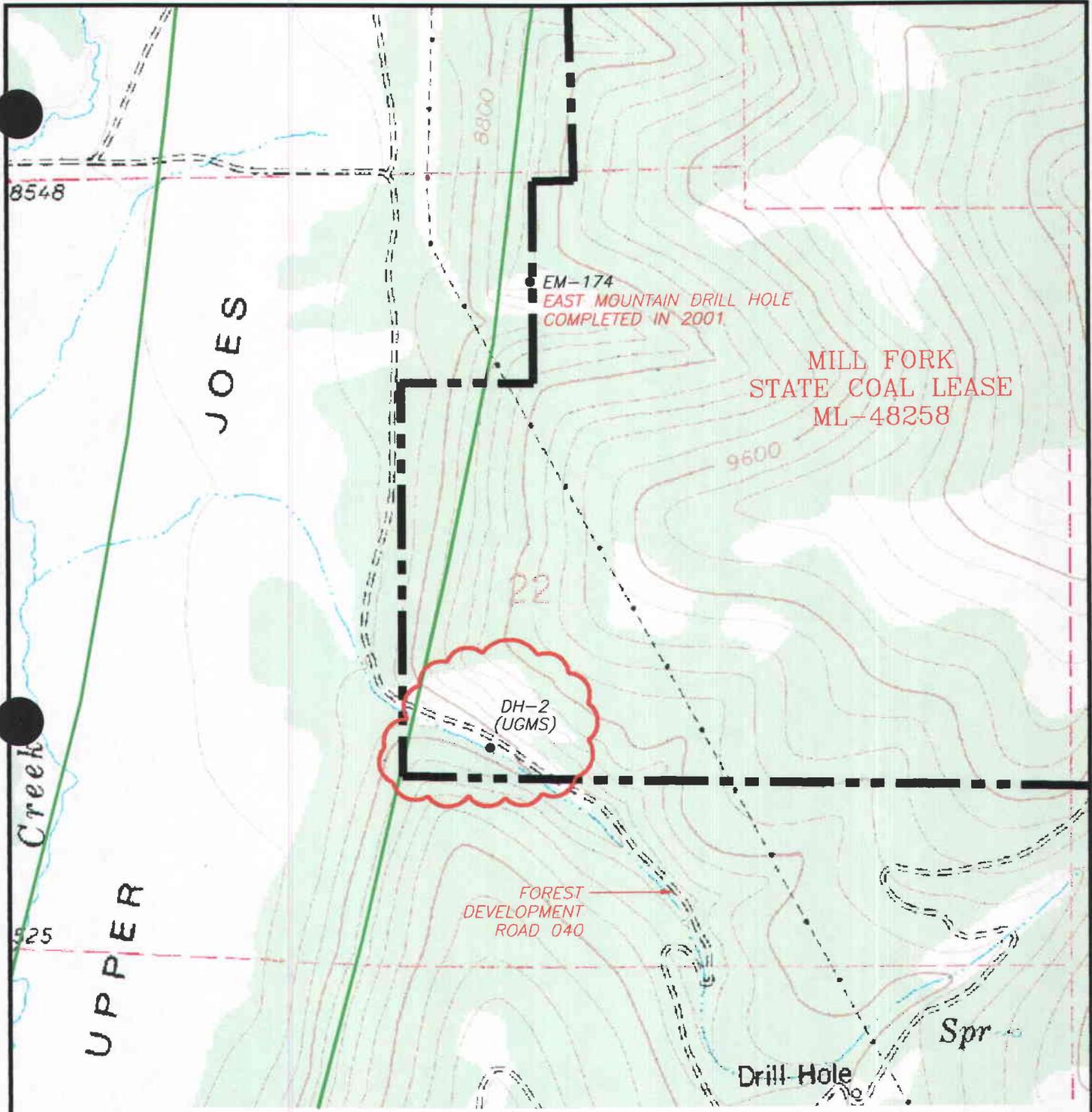
x9243

x9401

***Energy West Mining Company
2001 Drilling Plan Modification
Utah Geological & Mineral Survey
DH-2 Redrill***

General Location Map





DH-2 LEGAL DESCRIPTION
 LOT 7, SECTION 22
 T.16S., R.6E., SLB&M

CAD FILE NAME/DISK#: MFBASE.DWG

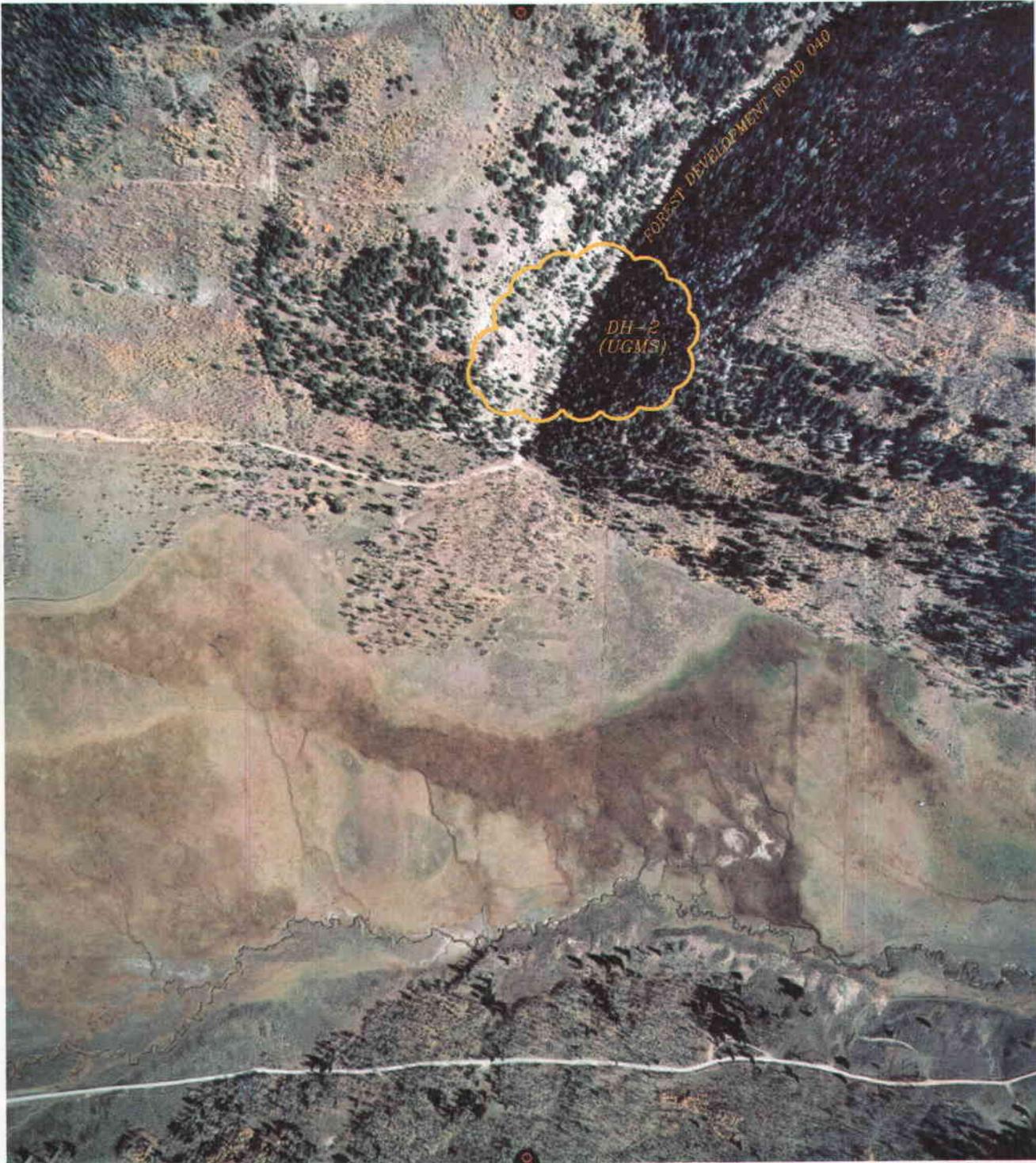
ENERGY WEST
MINING COMPANY
 HUNTINGTON, UTAH 84528

*2001 DRILLING PLAN MODIFICATION
 UTAH GEOLOGICAL & MINERAL SURVEY
 DH-2 REDRILL*

DRAWN BY:	K. LARSEN	...	
SCALE:	1" = 1000'	DRAWING #:	
DATE:	AUGUST 22, 2001	SHEET 1 OF 1	REV. _____

***Energy West Mining Company
2001 Drilling Plan Modification
Utah Geological & Mineral Survey
DH-2 Redrill***

Aerial Photograph



CAD FILE NAME/DISK#: MFBASE.DWG

ENERGY WEST
MINING COMPANY
 HUNTINGTON, UTAH 84528

2001 DRILLING PLAN MODIFICATION
UTAH GEOLOGICAL & MINERAL SURVEY
DH-2 REDRILL

DRAWN BY:	K. LARSEN	...	
SCALE:	NONE	DRAWING #:	
DATE:	AUGUST 22, 2001	SHEET 1 OF 1	REV. _____

***Energy West Mining Company
2001 Drilling Plan Modification
Utah Geological & Mineral Survey
DH-2 Redrill***

Site Photos

EW

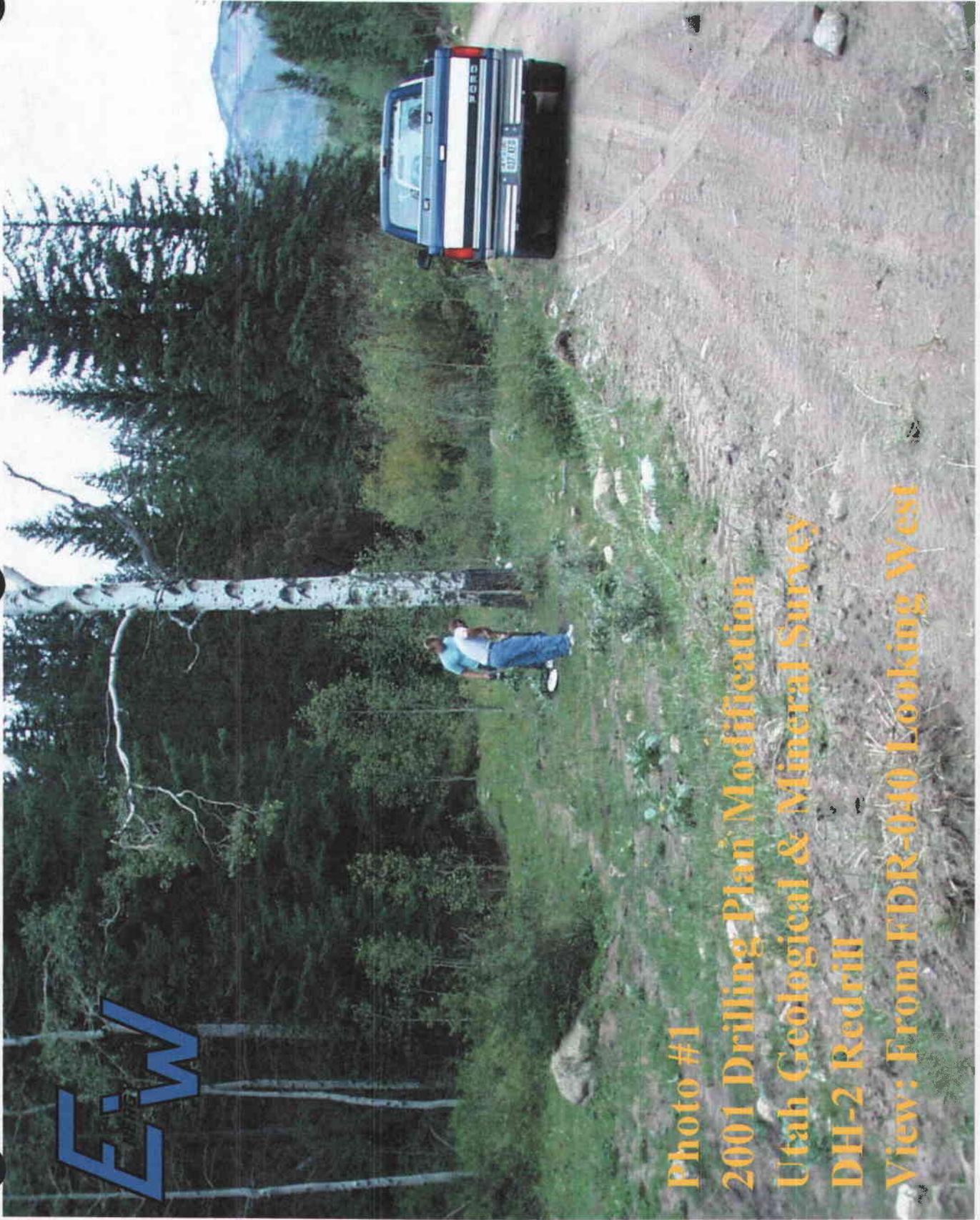


Photo #1
2001 Drilling Plan Modification
Utah Geological & Mineral Survey
DH-2 Redrill
View: From FDR-040 Looking West

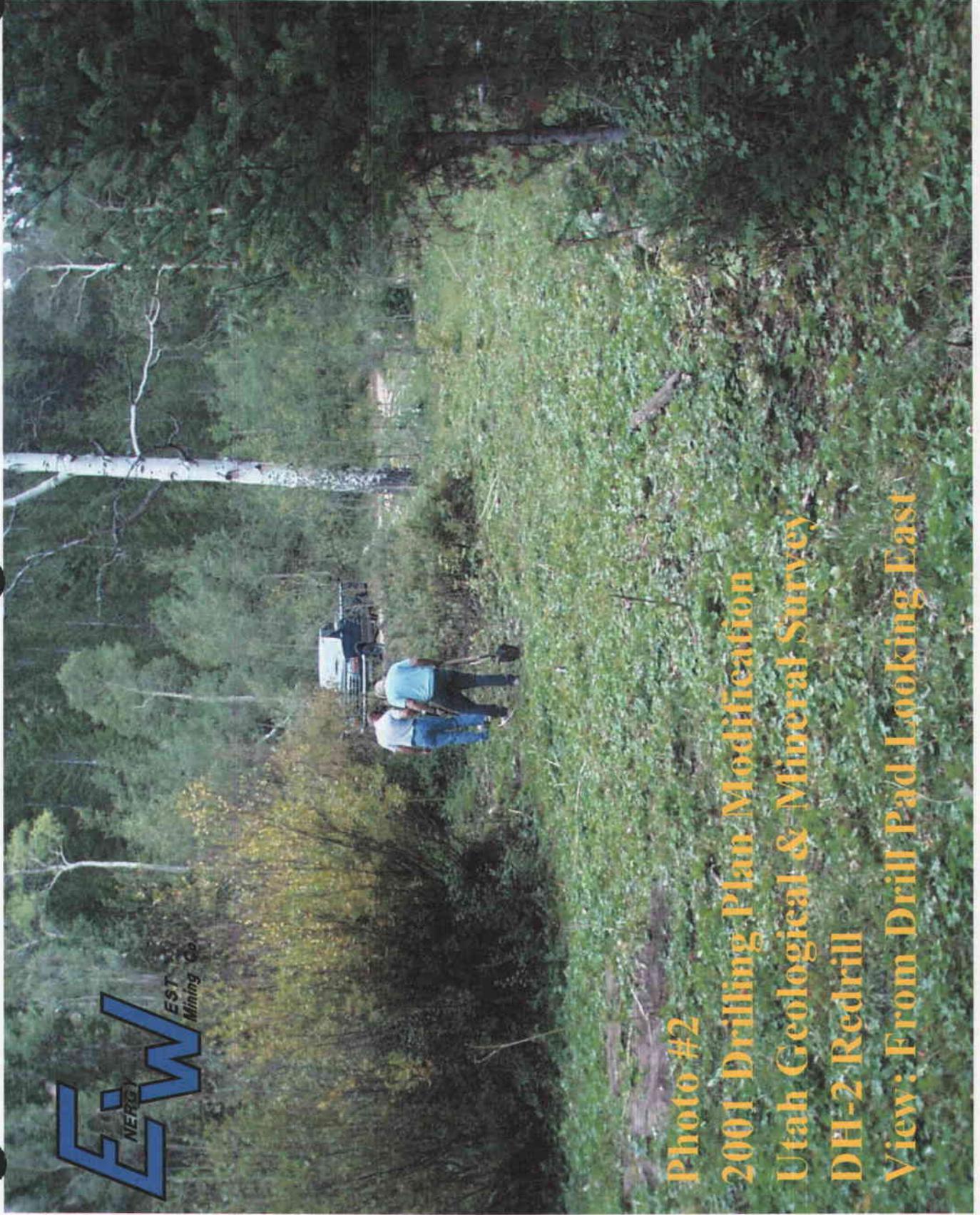


Photo #2
2001 Drilling Plan Modification
Utah Geological & Mineral Survey
DH-2 Redrill
View: From Drill Pad Looking East