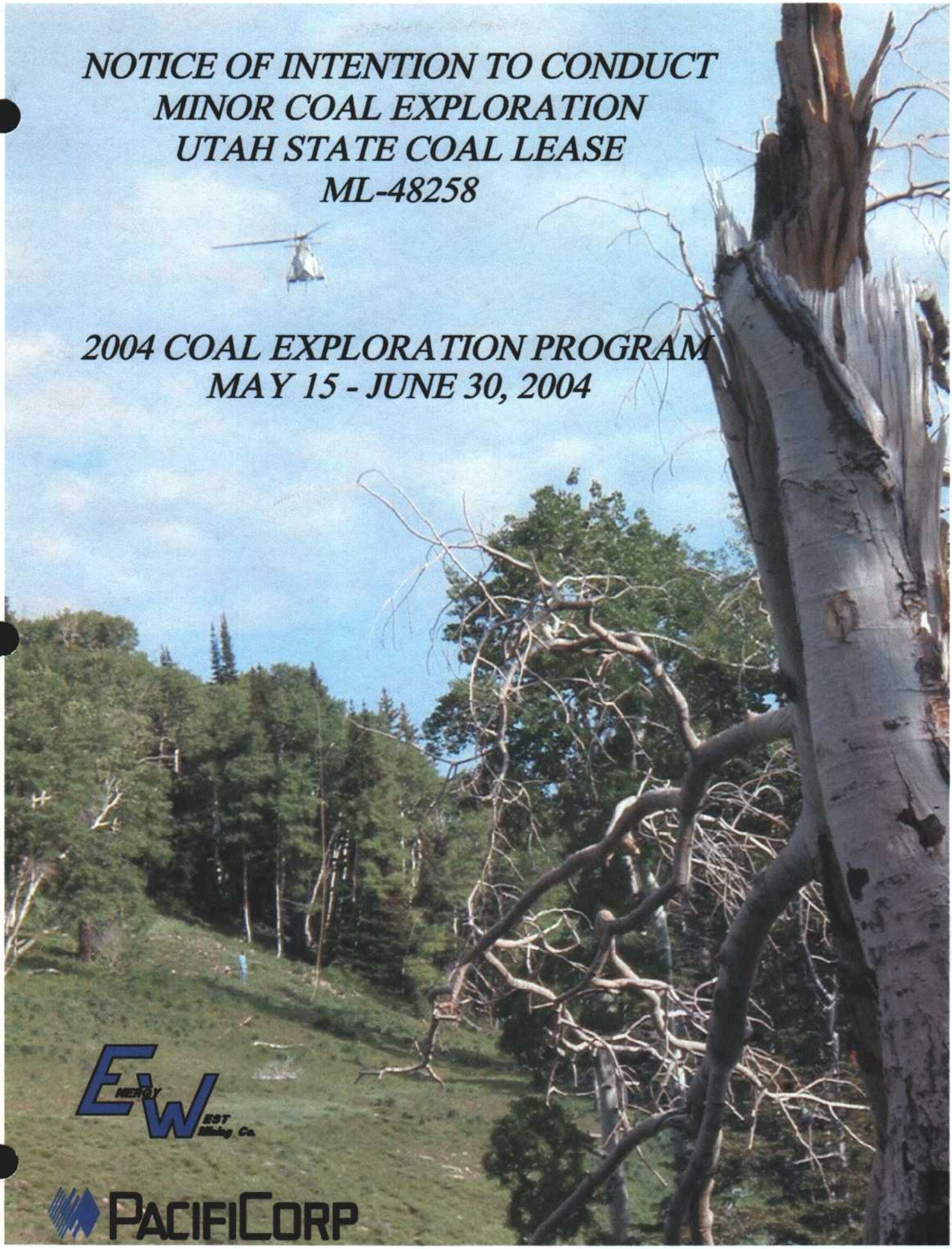
NOTICE OF INTENTION TO CONDUCT MINOR COAL EXPLORATION UTAH STATE COAL LEASE ML-48258

2004 COAL EXPLORATION PROGRAM MAY 15 - JUNE 30, 2004



ENERGY WEST Mining Co.

PACIFICORP

NOTICE OF INTENTION TO CONDUCT MINOR COAL EXPLORATION UTAH STATE COAL LEASE ML-48258

SEPTEMBER 2003

C/O Interwest Mining Company
(Managing Agent)

PACIFICORP

Energy West Mining Company
(Mine Operator)

EM-189 Proposed Site August 2003

EM-190 Proposed Site August 2003

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SEPTEMBER 2003

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R645-200. Coal Exploration: Introduction.

PacifiCorp proposes to drill up to a total of four (4) coal exploration holes within the Mill Fork Coal Lease ML-48258 in the year 2004. For ease of reference, this plan follows the format of the applicable portions of the Utah Division of Oil, Gas, and Mining (hereinafter referred to as "the Division") rules (R645-200 through R645-203) regarding Coal Exploration.

R645-200-100. Scope. (Minor Coal Exploration):

122. **Minor Coal Exploration.** PacifiCorp intends to drill four (4) 3" diameter core holes that will intercept 1 or more coal seams each. The exploration will occur on a designated Utah state coal lease (ML-48258). Less than 250 tons of coal will be removed. Pacificorp is hereby filing a Notice of Intention to Conduct Minor Coal Exploration under the requirements of R645-201-200.

R-645-200-200. Responsibilities.

210. **Responsibility to Comply with Regulations.** PacifiCorp will comply with the requirements of R645-200 through R645-303.

220. **Responsibility of the Division to Review and Reply.** The Division will receive and review this Notice of Intention to Conduct Minor Coal Exploration. The Division will review and reply within 15 days.

230. **Responsibility of the Division to Coordinate with Other Agencies.** The Division will coordinate review of this Notice with the other appropriate government agencies (SITLA, U.S.D.A. Forest Service, BLM, OSM, etc.). Pacificorp will provide enough copies of this notice to the Division for distribution to these agencies.

R645-201. Coal Exploration: Requirements for Exploration Approval.
R645-201-100. Responsibilities for Coal Exploration Plan Review.

110. **Coal Exploration Plan Review, Responsibility of Division.** The lands on which this exploration will be conducted, being a state coal lease issued to Pacificorp, are not subject to 43 CFR Parts 3480-3487. Therefore, exploration plan review will be the responsibility of the Division.

120. **Requirements of 43 CFR 3480-3487.** N.A.

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130. **Division Responsibility to Coordinate with Other Agencies.** This Notice of Intention to Conduct Minor Coal Exploration and Drilling Plan will be submitted to the Division as the lead agency for review and approval.

R645-201-200. Notices of Intention to Conduct Minor Coal Exploration.

210. **Division Review Requirement.** Notices of Intention to Conduct Minor Coal Exploration where 250 tons or less of coal will be removed require Division review prior to conducting exploration. Pacificorp is submitting this Notice to the Division in November of 2001, allowing the Division and other agencies time to review and approve the Notice before exploration activities begin on May 15, 2004.

220. **Required Applicant Information.** This Notice of Intention to Conduct Minor Coal Exploration is required to include the following pertinent information.

221. Name, Address, and Telephone Number of Applicant:

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

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222. Name, Address, and Telephone Number of the Applicant's Representatives:

RESPONSIBLE REPRESENTATIVE:

Chuck Semborski or Ken Fleck
Energy West Mining Company
15 North Main Street
P.O. Box 301
Huntington, Utah 84528
(435)687-4720
(435)687-6638

223. Description of Exploration Area. Narrative and map describing the exploration area and indicating where exploration will occur:

PROPOSED EXPLORATION AREA:

The proposed drill holes are located within the current Utah State Coal Lease ML-48258, in Sections 11, and 14, Township 16 South, Range 6 East, Salt Lake Base and Meridian. The drilling will occur on lands in which the surface is administered by the U.S.D.A. Forest Service (USFS) and the subsurface by the State of Utah (see accompanying maps entitled Mill Fork Coal Lease - Coal Exploration - General Location Maps, Aerial Photos, Surface Ownership Map, Coal Ownership Map).

The proposed holes will be drilled in Crandall Canyon (EM-191), tributary to Huntington Canyon, and un-named drainages (EM-188, EM-189 and EM-190) which report to Indian Creek, all in Emery County, Utah.

Holes EM-188, EM-189, and EM-190 will be located in Upper Joes Valley, on the west side of East Mountain. All three sites will be located above the Castlegate Sandstone near the bottoms of three unnamed drainages that run down the west side of East Mountain and drain into Upper Joes Valley. Access to these locations will be from Upper Joes Valley, via Cottonwood Canyon. The staging area for these holes will be in a clearing along the Forest Road #017.

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The proposed site EM-191 is situated on the south side of Crandall Canyon, above the Castlegate Sandstone, in the left fork of Crandall Canyon. Access to this location will be from Upper Joes Valley and/or Mill Fork. The staging area for this hole will be in Upper Joes Valley or in the lower end of Mill Fork Canyon (see Raptor Locations, Helicopter Flight Paths and Staging Areas map).

Table 1. Mill Fork Coal Lease Proposed Drilling for 2004:

HOLE NUMBER	LOCATION	ELEVATION (Feet)	DEPTH (Ft)	SURFACE OWNERSHIP	COAL OWNERSHIP
EM-188	2730' North, 1230' East of the SW Corner of Sec. 14, T. 16S., R. 6E.	9423'	1470'	USFS	State Coal Lease ML-48258
EM-189	295' North, 1680' East of the SW Corner of Sec. 11, T. 16S., R. 6E.	9657'	1720'	USFS	State Coal Lease ML-48258
EM-190	2425' North, 1610' East of the SW Corner of Sec. 11, T. 16S., R. 6E.	9512'	1570'	USFS	State Coal Lease ML-48258
EM-191	1815' South, 570' West of the NE Corner of Sec. 12, T. 16S., R. 6E.	9427'	1530'	USFS	State Coal Lease ML-48258

224. Period of Intended Exploration:

PROJECT STARTUP DATE: **May 15, 2004**

PROJECT COMPLETION DATE: **June 30, 2004**

It is anticipated that all drilling and reclamation activities associated with this project will be completed within 45 days following the date of implementation.

225. Method of Exploration. Method of exploration to be used, amount of coal to be removed, and practices to be used to protect the area from adverse impacts and reclaim the area in accordance with R645-202:

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The method of exploration to be used is helicopter-assisted drilling, in which the primary mode of transportation for drilling equipment and personnel is by helicopter, rather than by road. By using this method, drilling equipment can be transported into remote areas inaccessible by road to conventional drilling rigs, and environmental impact to the surface is minimized. All drills, drilling equipment, and personnel will be transported to the individual drilling sites by helicopter from staging areas located on existing roads (see Raptor Locations, Flight Paths and Staging Areas Map).

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.

Drill Methods & Procedures: Three inch maximum diameter holes will be core or rotary drilled the entire length to the approximate depths stated previously in the drill hole location and depth table. Drilling depth will be sufficient to accomplish penetration through both the Blind Canyon and Hiawatha coal seams, and to enter the Star Point Sandstone. The drilling will be done by a drilling contractor(s) experienced in helicopter supported drilling. The drills used are diesel powered rotary drill rigs mounted on 6' 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
1 Storage trailer to be stationed at the staging area

The drill rig components and associated materials, tools and equipment will be transported by truck to the helicopter staging areas indicated on the accompanying map. The tools and materials and personnel 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. The drill rig is made up of several components 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.

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 and helicopter via existing roads and on foot. The drill sites 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 (wood blocks, etc.) transported to the site by helicopter. All materials, tools and equipment will be removed immediately upon completion of drilling and reclamation activities.

A 1" diameter high-pressure hose will be laid overland from the pump stations to each 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 for water line placement. 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.

Amount of Coal to be Removed: 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. The core and/or cuttings will be examined to determine coal seam characteristics. This will result in approximately a maximum of 20 pounds of coal being removed per hole, with a total of about 80 pounds removed for study and analysis.

Practices to Protect from Adverse Impacts and to Reclaim the Area: During drilling, 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.

In order to minimize impacts to wildlife, particularly raptors, all non-essential helicopter flight paths will be 1,000 feet above terrain whenever possible between landing zones or drill sites.

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.

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 brattice, 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 or helicopter to Mill Fork Canyon and Indian Creek and by foot to the drill site. Therefore, no additional access facilities will be constructed.

Following completion of drilling and cementing of the hole, 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. The sites will be reclaimed by: 1. Removing all trash, cuttings, and contaminated soil. 2. Recontouring site to original contour, and 3. Re-seeding with the approved seed mix, and scattering deadfall over the site.

R645-202. Coal Exploration: Compliance Duties.
R645-202-100. Required Documents.

"Each person who conducts coal exploration which substantially disturbs the natural land surface will, while in the exploration area, have available a copy of the Notice of Intention to Conduct Minor Coal Exploration...for review by an authorized representative of the Division upon request."

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.

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 along U.S. Forest Service Road #245 in Section 21, 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): Prior to drilling, Energy West will obtain a permit from the U.S. Forest Service for the helicopter staging area located along the east side of U.S. Forest Service Road #221 in Section 15, Township 16 South, Range 6 East.

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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 0.16 acres.

Archeological Information:

The proposed location in Crandall Canyon (EM-191) is in a side canyon adjacent to the left fork of Crandall Canyon. In Upper Joes Valley, drill holes EM-188, EM-189 and EM-190 are located near canyon bottoms in un-named drainages which report to Indian Creek. As detailed in the previous section, no earthwork or excavation is necessary utilizing helicopter supported drilling techniques.

As required by the U.S.D.A. Forest Service for the 2003 drilling program, PacifiCorp contracted SENCO-PHENIX Archeological Services (Price, Utah) to conduct a file search and field survey for the proposed drilling activities. After the archeological field survey for the 2001 drilling program, SENCO-PHENIX recommended that PacifiCorp ask the U.S.D.A. Forest Service to waive the requirement for a field inspection of all drill sites due to the remoteness, small size, and minimal impact of the sites examined, and the limited probability of any future drill sites in the area impacting archaeological resources.

For the above referenced reasons, PacifiCorp hereby requests that the requirement for a field archeological survey of each drill site be waived for the 2003 proposed drilling program.

In the unlikely event that 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 as soon as possible of the discovery.

Pacificorp will make sufficient copies of all coal exploration permit documents, including the Notice of Intent, the Forest Service drilling stipulations, and all applicable road use, special use, and other permit documents at each drill site, and in each field vehicle used during the exploration program, for the duration of the program.

R645-202-200. Performance Standards.

210. Requirements of the State Program. All coal exploration and reclamation operations which substantially disturb the natural land surface...will be conducted in accordance with

the coal exploration requirements of the State Program, and any conditions on approval for exploration and reclamation imposed by the Division.

Pacificorp will comply with all coal exploration requirements of the State Program, and any conditions on approval of the exploration plan.

220. Inspection and Enforcement. Any person who conducts any coal exploration in violation of the State Program will be subject to the provisions of 40-10-20 of the Act and the applicable inspection and enforcement provisions of the R645 Rules.

Pacificorp will comply with all coal exploration requirements of the State Program, and any conditions on approval of the exploration plan. Pacificorp welcomes inspection of its exploration operations at any time during exploration.

230. Operational Standards.

231. Non-Disturbance of Habitats. Habitats of unique or unusually high value for fish, wildlife, and other related environmental values and critical habitats of endangered or threatened species identified pursuant to the Endangered Species Act of 1973 (16 U.S.C. 1531 et. seq.) will not be disturbed during coal exploration.

The vegetation in the area consists of a Cottonwood/Aspen/Fir/Dogwood community in the bottom of the canyons and Spruce-Fir Coniferous Forest intermixed 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):

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.

Energy West in corporation with the Division of Wildlife Resources, conducts annual raptor surveys in and adjacent to permit boundaries, including the Mill Fork State Lease ML-48258. The following table list the nest located, specie and potential conflicts based upon the 2003 raptor survey completed with DWR (May 23, 2003):

MILL FORK AREA *Raptor Locations and Status - 2003 Survey Data*				
Nest #	**Location**	**Specie**	**Status**	**Potential Conflict**
1207	Mill Fork	Red Tail Hawk	Not Surveyed	* Mill Fork staging area outside ½ mile buffer * Not in direct line of sight
80	Mill Fork	Golden Eagle	Tended	* Mill Fork staging area outside ½ mile buffer * Not in direct line of sight * Flight path adjusted to reduce potential conflict
81	Mill Fork	Golden Eagle	Tended	* Mill Fork staging area outside ½ mile buffer * Not in direct line of sight * Flight path adjusted to reduce potential conflict
79	Mill Fork	Golden Eagle	Tended	None
963	Mill Fork	Golden Eagle	Tended	None
78	Mill Fork	Golden Eagle	Inactive	None
1210	Crandall Canyon	Golden Eagle	Inactive	None
1211	Crandall Canyon	Golden Eagle	Tended	None
1208	Little Bear	Golden Eagle	Inactive	None
1206	Rilda Canyon	Red Tail Hawk	Inactive	None

Raptor activity in Mill Fork Area will be evaluated during the 2004 survey scheduled for May 2004. PacifiCorp proposes to commence drilling operations on May 15, 2004. Drilling activities will be initiated in Joes Valley (drill hole EM-190), and Crandall Canyon (drill hole EM-191) and then proceed to the remaining holes in Joes Valley. To further reduce potential raptor impacts, all non-essential flights will be conducted at 1000 feet above ground level. All

proposed drill sites are outside the ½ mile buffer zones of known nest. The secondary staging area located in Mill Fork is near nests 80 and 81. If either nest 80 or 81 are active, Energy West will re-frame utilizing the Mill Fork staging area or institute the special raptor monitoring protocol established during 2002:

Special Monitoring:

1. PacifiCorp will establish ground monitoring point(s) 3 days prior to drilling near the nest(s) determined to be active during the annual raptor flight or verified in consultation with the Division of Wildlife Resources biologist to observe raptor activity (refer to attached raptor monitoring map).
2. Data from the advanced monitoring will serve as baseline for raptor activity.
3. Monitoring will be conducted by PacifiCorp qualified staff biologist (Guy Davis - U.S.F.S. approved in 2002). A Biologist will be positioned to the monitoring location prior to initiation of daily drilling activity.
4. Observe active nest(s) during use of the Mill Fork staging area.
5. All helicopter flights associated with the use of the Mill Fork staging area will be conducted in a manner to minimize potential disturbance (see attached helicopter flight path map).
6. All non-essential helicopter flights will be least 1000 feet above ground elevation and exceed 30 miles/hour (USFW Guidelines).
7. Energy West will monitor raptor activity during the use of the Mill Fork staging area within ½ mile buffer zone of active nest based on raptor monitoring data for a minimum of three days. If no apparent impacts are observed, special raptor monitoring activities may be terminated based on consultation with USFS biologists.

   Apparent impacts include but not limited to; alteration to daily nest activity, feeding routines and general chick behavior.

   If apparent impacts are identified, PacifiCorp will mitigate impacts by altering flight paths, timing of flights not to disrupt feeding schedules and minimize the number of flights.
8. All raptor monitoring information will be reported to USFS, DOGM and DWR.

Canada Lynx habitat To alleviate concerns the potential impacts associated with Canada Lynx habitat, Energy West to extent possible has located the proposed holes away from the dense timber stands out into more open country. Enclosed are four (4) copies of the Upper Joes Valley Aerial Photos 1-3 and the Crandall Canyon - Left Fork Aerial Photo 4.

232. **Road Construction and Use.** All roads or other transportation facilities used for coal exploration will comply with the applicable provisions of R645-301-358...R645-301-762.

Pacificorp will use only existing roads for this project. No new roads will be constructed.

233. **Topsoil Removal and Storage.** Topsoil will be separately removed, stored, and redistributed on areas disturbed by coal exploration activities as necessary to assure successful revegetation or as required by the Division.

The method of drilling used by Pacificorp for these holes assures that topsoil is not disturbed except where small excavations are made necessary for leveling the rig and associated components. Brattice ground cover is used under the rig to protect the topsoil and surface vegetation; therefore the topsoil is not disturbed.

234. **Diversions of Overland Flows.** Diversions of overland flows and ephemeral, perennial, or intermittent streams will be made in accordance with R-645-301-742.3.

Pacificorp will obtained the necessary permissions and water rights actions to take water for drilling from local drainages in the vicinity of the proposed drill holes. Where water is taken from streams, this is done by laying an intake hose directly in the stream. No disturbance is made to the stream course.

Water for drilling will be pumped directly from Crandall Creek or its tributaries for drill hole EM-191. Water for the drill holes located in Indian Creek will be pumped directly from the un-named drainages located the 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 each 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 80,000 gallons (0.24 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.

235. **Minimizing Disturbance to Hydrologic Balance.** Coal exploration will be conducted in a manner which minimizes disturbance to the prevailing hydrologic balance in accordance with R645-301-356.300...and R645-301-763. The Division may specify additional measures which will be adopted by any person engaged in coal exploration.

During exploration, surface disturbance will consist only that which is necessary to level the rig and associated structures. No drill pad will be constructed, so there will be no additional runoff during precipitation events. No impoundments to contain runoff will be necessary. Overall impact on the hydrologic balance will be minimal, if any.

236. **Acid- or Toxic Forming Materials.** Acid- or toxic-forming materisls will be handled and disposed of in accordance with R645-301-731.110, 731.300, and 553.260.

No Acid- or Toxic earth materials or coal waste will be produced used, or handled during this drilling program.

240. **Reclamation Standards.**

241. **Excavations.** If excavations, artificially flat areas, or embankments are created during exploration, these areas will be returned to the approximate original contour promptly after such features are needed for coal exploration.

The only excavations that will be made will be small shovel cuts made for leveling the rig and associated equipment. These will be promptly filled in to original contour as soon as the drilling equipment is removed from each site.

242. **Re-Vegetation.** All Areas disturbed by coal exploration activities will be revegetated in a manner that encourages prompt revegetation and recovery of a diverse, effective, and permanent vegetative cover. Revegetation will be accomplished in accordance with the following :

242.1 **Re-Seeding.** All areas disturbed by coal exploration activities will be seeded or planted to the same seasonal variety native to the areas disturbed. If the land use of the exploration area is intensive

agriculture, planting of the crops normally grown will meet the requirements of R645-202-242.100.

All drilling areas will be promptly re-seeded upon completion of each hole, removal of equipment, and recontouring of the site, if necessary, with a seed mix approved by the surface management agency and the Division.

The following is the seed mix specified from previous years approved drilling permits, and will be used unless changes are indicated by the agencies.

Species	lbs/acre (PLS)
Basic Mix	
Columbia needle grass - *Stipa columbiana*	4.5
Slender wheatgrass - *Elymus trachycaulus*	4.5
Sandbergs bluegrass - *Poa secunda*	0.75
Pacific aster - *Aster chilensis*	0.2
Supplement*	
Sulfur flower - *Eriogonun umbellatum*	2.0
Rocky Mountain penstemon - *Penstemon strictus*	0.75

** Seed should be purchased in individual seed packets, not as mixture.*

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.

242.2 Soil Surface Stability. The vegetative cover will be capable of stabilizing the soil surface from erosion.

Since the soil and vegetative cover will not be removed, and the vegetation will spring back up as soon as the drilling equipment is removed, this requirement will be met.

No crops are raised in the project area. Crop replacement will not be necessary.

243. **Reclamation of Boreholes.** Each exploration hole, borehole, well, or other exposed opening created during exploration will be reclaimed in accordance with R645-301-529, R645-301-551, R645-301-631, R645-301-738, and R645-301-765.

No mine openings or exploration openings will be created, therefore R645-301-529 and R645-301-551 do not apply in this case. None of these holes will be turned into water monitoring wells, due to the lack of measurable groundwater in the area and the remote locations of the holes. Therefore, R645-301-738 and R645-301-765 do not apply.

Groundwater is not anticipated to be encountered; therefore, the proposed holes will not be retained as water monitoring wells. 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 possible modification of the drill hole to a monitoring well.

Upon completion of down-hole procedures, each drill hole will be completely sealed with cement/bentonite from the bottom of the hole to ground level. The cement slurry mixture used to plug and seal the hole will be mixed in compliance with standard cement mixing tables (e.g. Halliburton). Enough cement will be mixed and pumped into the hole to completely seal the coal horizon. The remainder of the hole will be filled with a bentonite slurry to within 5' of the surface and a cement surface plug will fill the top 5'. A brass monument marker will be placed in the top of the cement surface plug with the hole number and year. The Bureau of Land Management: Price Field Office will be contacted prior to completion to verify the abandonment procedures. Any variance from this procedure will be approved in advance by SITLA and DOGM.

244. **Removal of Equipment.** All facilities and equipment will be promptly removed from the exploration area when they are no longer needed for exploration, except for those facilities and equipment that the Division determines may remain to:

244.1 Provide additional environmental data;

244.2 Reduce or control the on-site and off-site effects of the exploration activities;

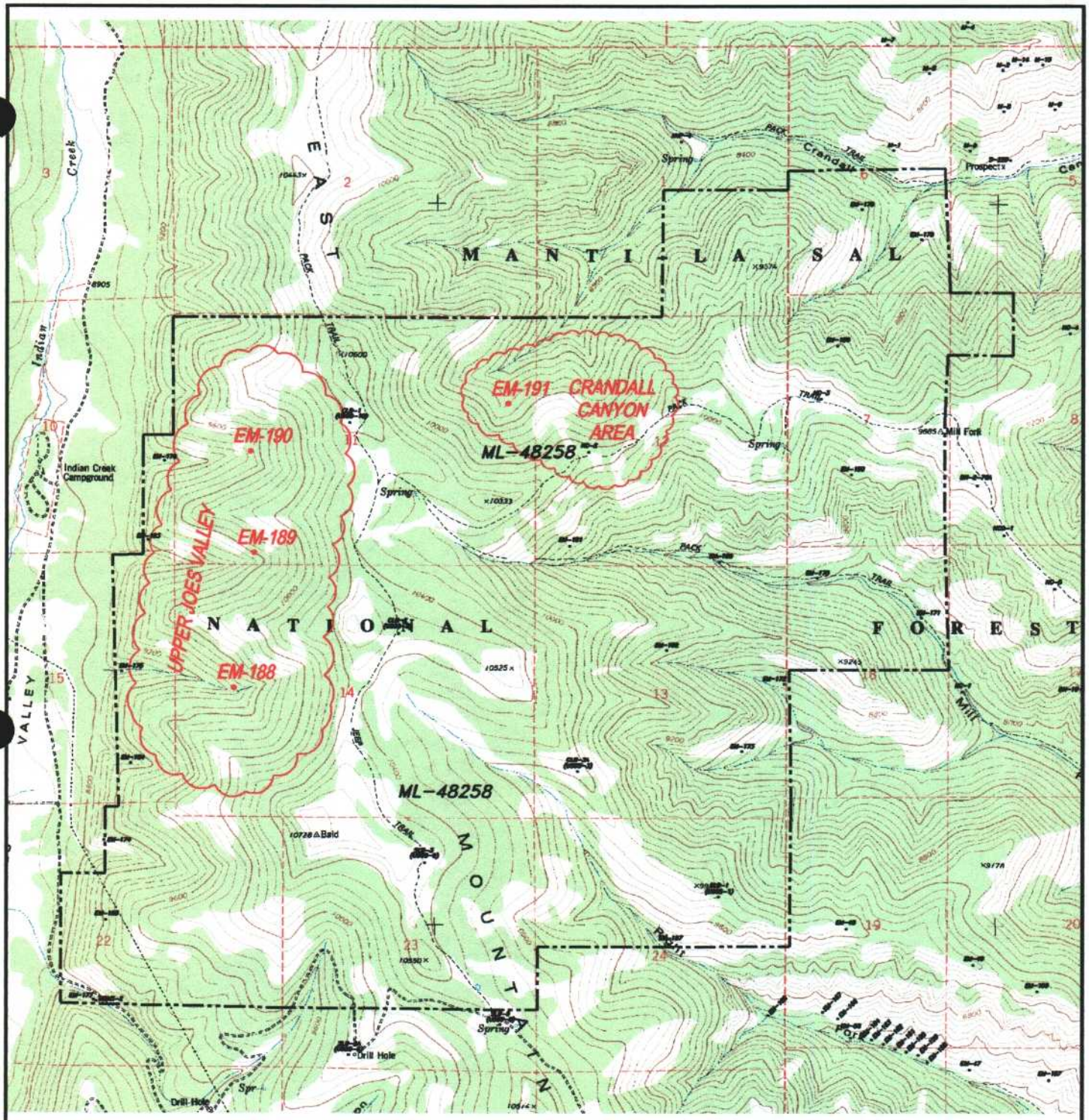
244.3 Facilitate future coal mining and reclamation operations by the person conducting the exploration.

When each drill rig setup is no longer needed for the project, the complete assemblage of equipment will be removed immediately from the area to facilitate reclamation work and free this equipment for use elsewhere by the contractor.

Pacificorp does not anticipate needing this equipment for any further use in the exploration area.

R645-203. Coal Exploration: Public Availability of Information.
R645-203-100. Public Records.

Except as provided in R645-203-200, all information submitted to the Division under R645-200 will be made available for public inspection and copying at the Division.



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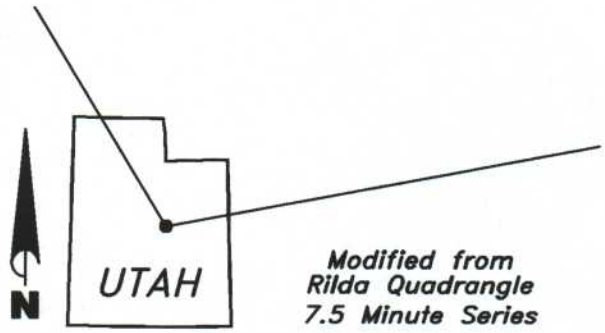

Modified from
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7.5 Minute Series

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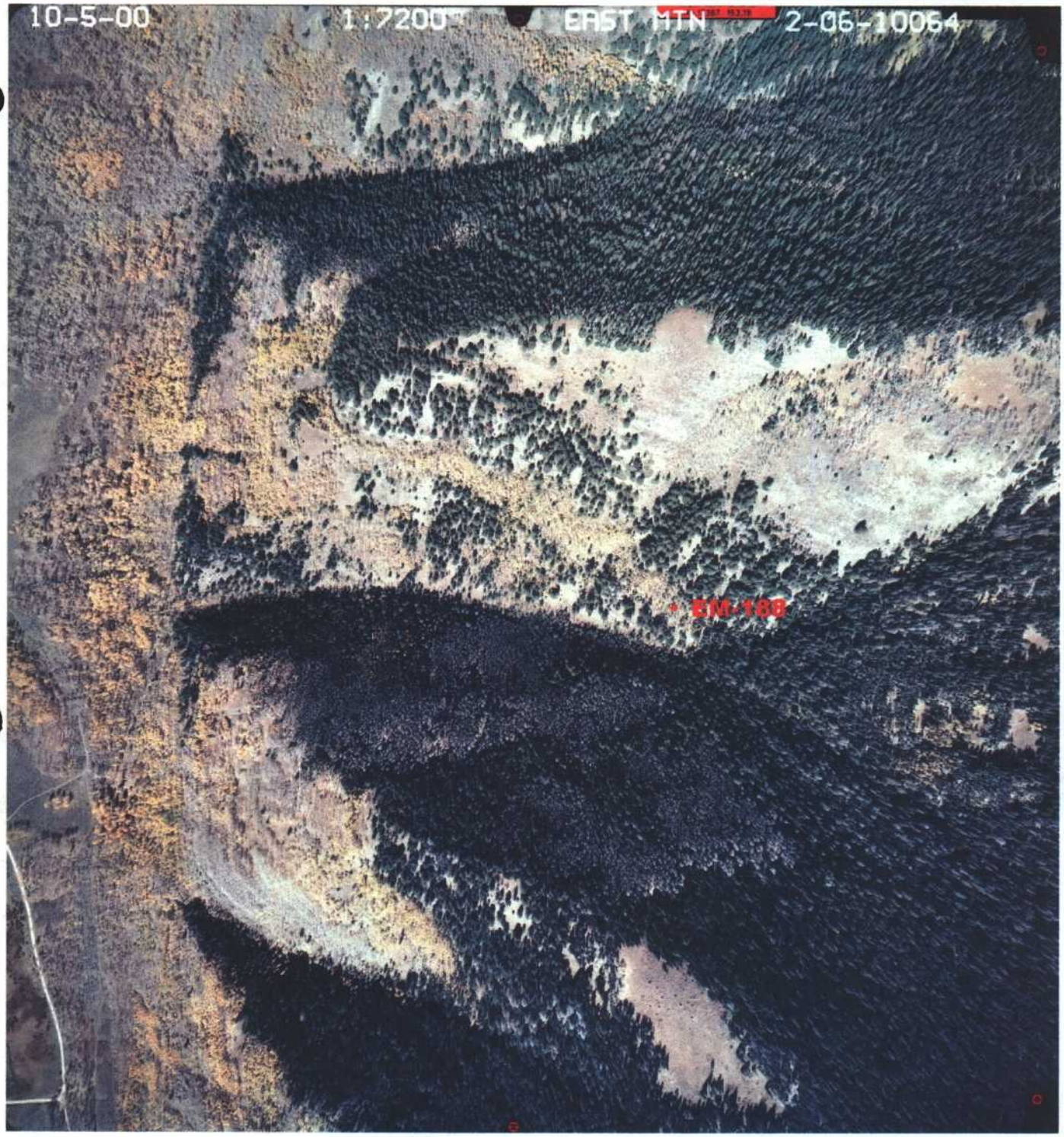
HUNTINGTON, UTAH 84528

2004 COAL EXPLORATION
UTAH STATE COAL LEASE ML-48258
GENERAL LOCATION MAP

DRAWN BY:	K. LARSEN	....	
SCALE:	1" =3000'	DRAWING #:	
DATE: SEPTEMBER 15, 2003		SHEET 1 OF 1	REV. ___



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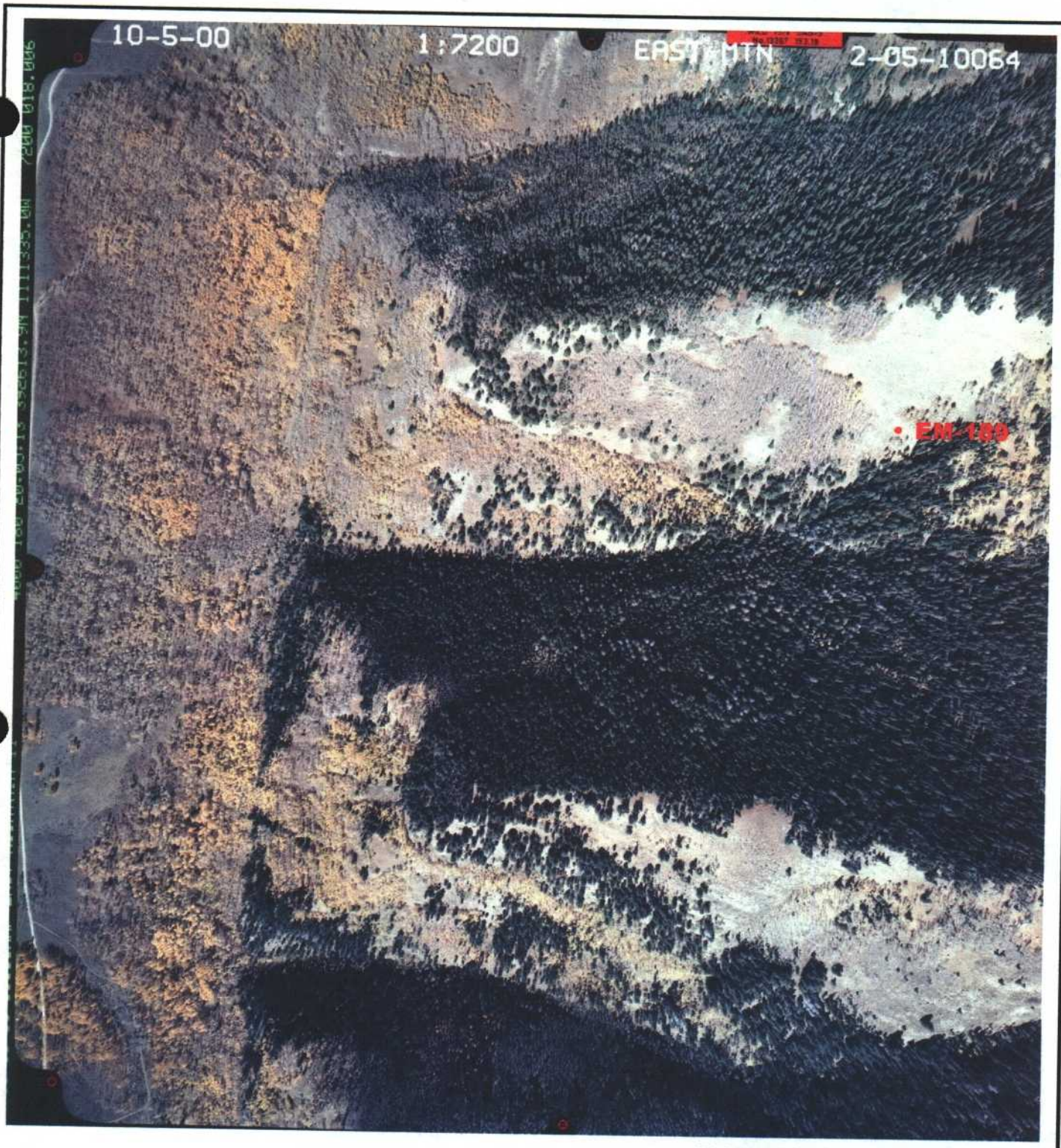
2004 COAL EXPLORATION PROGRAM
UTAH STATE COAL LEASE ML-48258
JOES VALLEY AERIAL PHOTO

DRAWN BY: *K. LARSEN*	*Photo #1*
SCALE: *NONE*	DRAWING #:
DATE: *SEPTEMBER 25, 2003*	SHEET 1 OF 1 REV.



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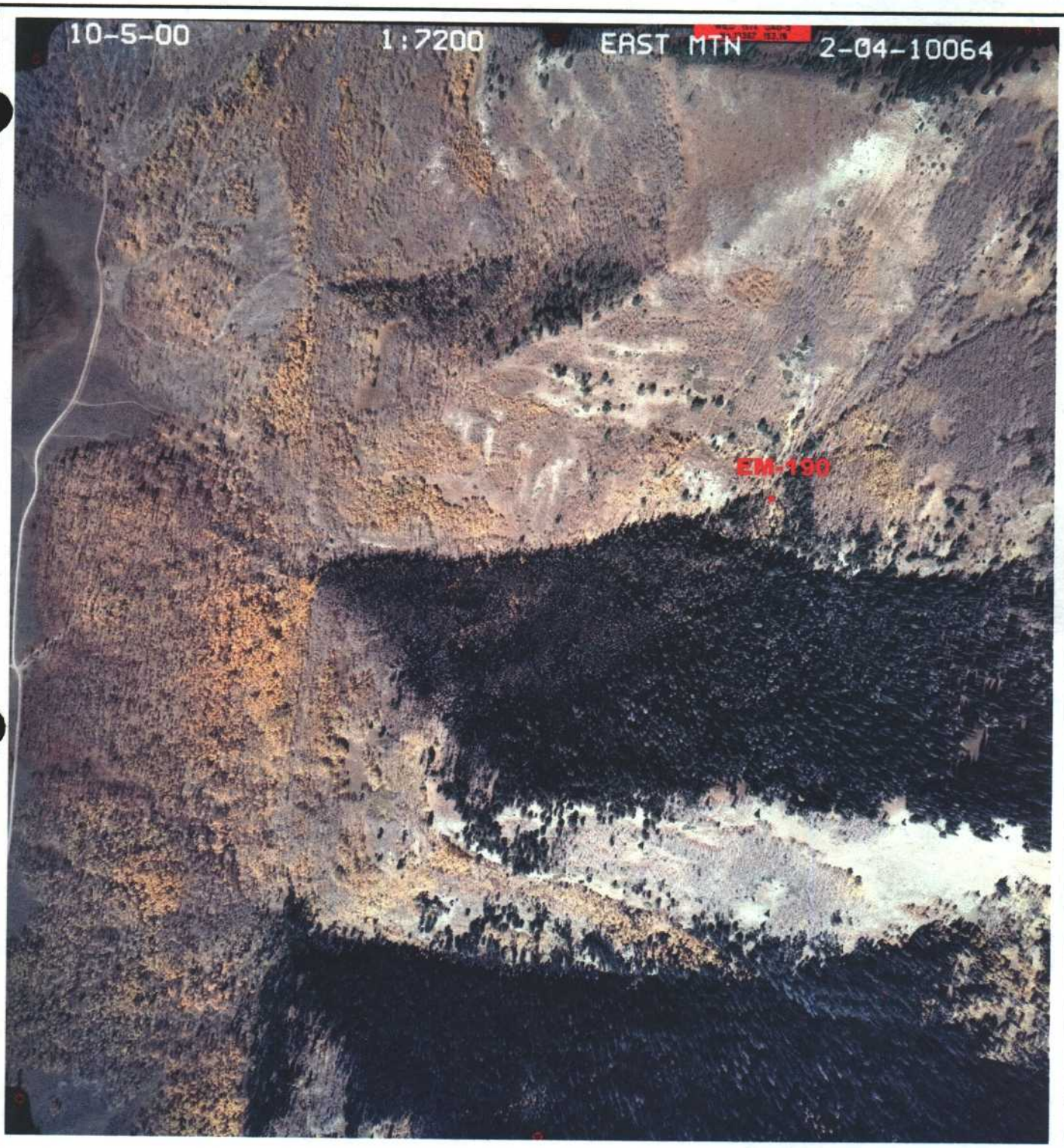
2004 COAL EXPLORATION PROGRAM
UTAH STATE COAL LEASE ML-48258
JOES VALLEY AERIAL PHOTO

DRAWN BY: *K. LARSEN*	*Photo #2*	
SCALE: *NONE*	DRAWING #:	
DATE: *SEPTEMBER 25, 2003*	SHEET 1 OF 1	REV.



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2004 COAL EXPLORATION PROGRAM
UTAH STATE COAL LEASE ML-48258
JOES VALLEY AERIAL PHOTO

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SCALE: *NONE*	DRAWING #:	
DATE: *SEPTEMBER 25, 2003*	SHEET 1 OF 1	REV.

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2004 COAL EXPLORATION PROGRAM
UTAH STATE COAL LEASE ML-48258
CRANDALL CANYON AERIAL PHOTO

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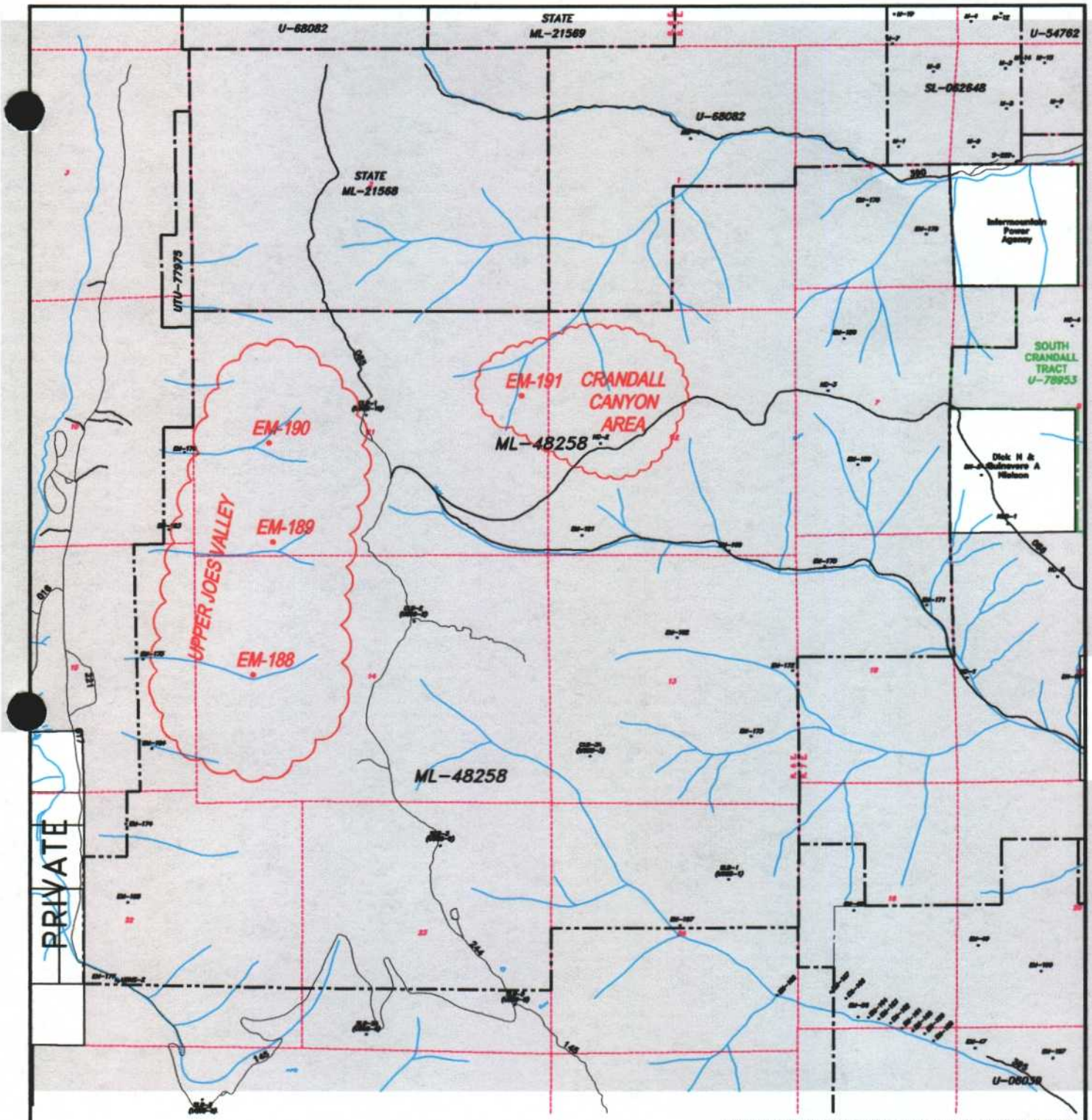
SCALE: *NONE*	DRAWING #:	
DATE: *SEPTEMBER 25, 2003*	SHEET 1 OF 1	REV.



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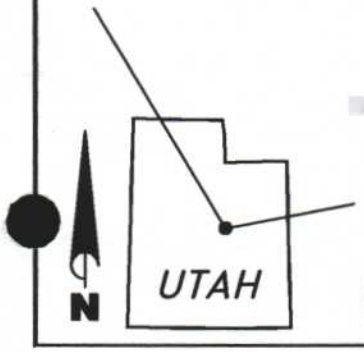

U.S. NATIONAL FOREST

· EXISTING HOLE

• PROPOSED HOLES

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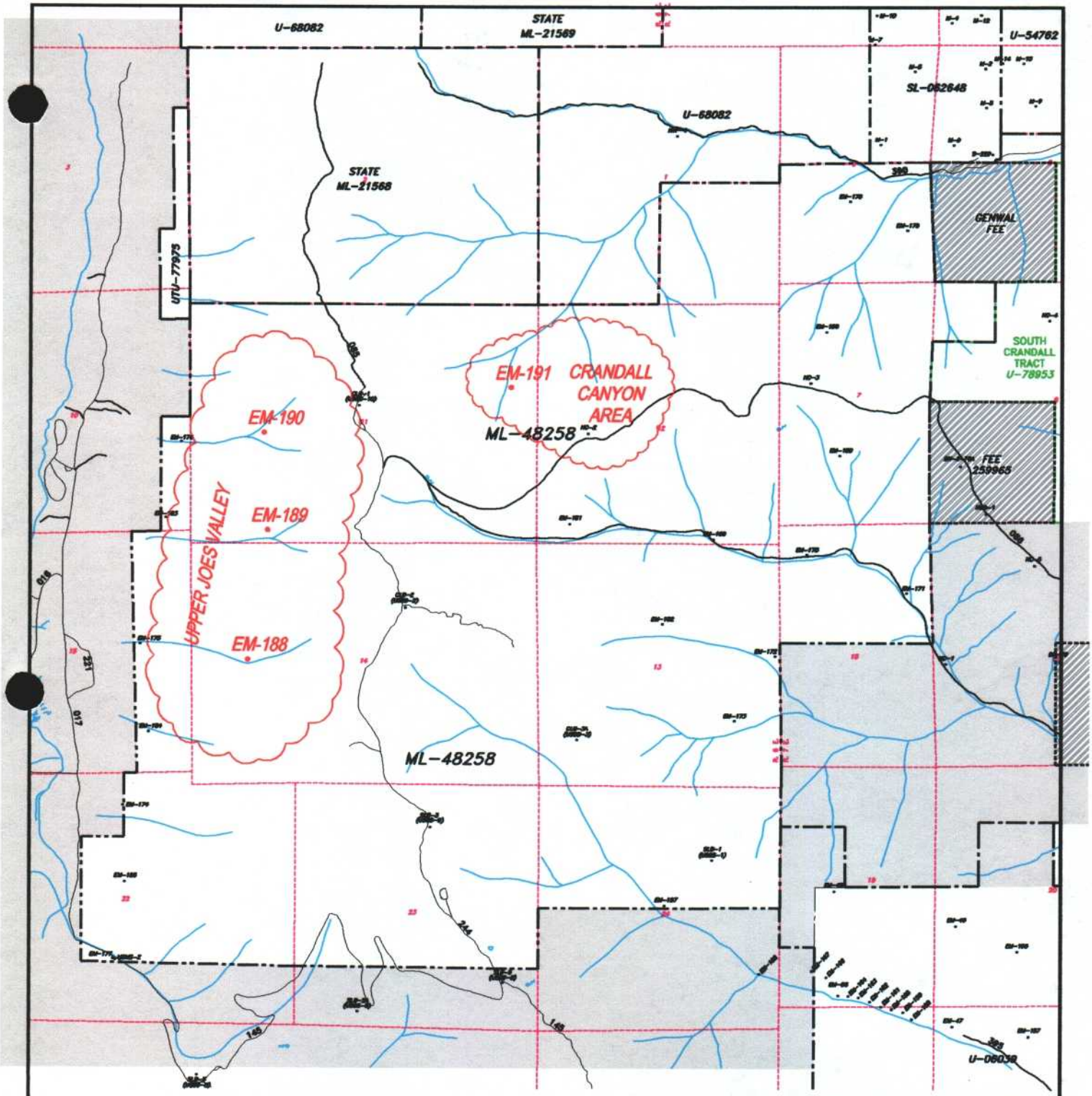
2004 COAL EXPLORATION
UTAH STATE COAL LEASE ML-48258
SURFACE OWNERSHIP MAP

DRAWN BY:	K. LARSEN	....	
SCALE:	1" =3000'	DRAWING #:	
DATE: SEPTEMBER 15, 2003		SHEET 1 OF 1	REV. ___



CAD FILE NAME/DISK#: MF-2003-DRILLING-BASE-MAP.DWG

UNLEASED FEDERAL COAL

FEE COAL

UTAH

N

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2004 COAL EXPLORATION
UTAH STATE COAL LEASE ML-48258
COAL OWNERSHIP MAP

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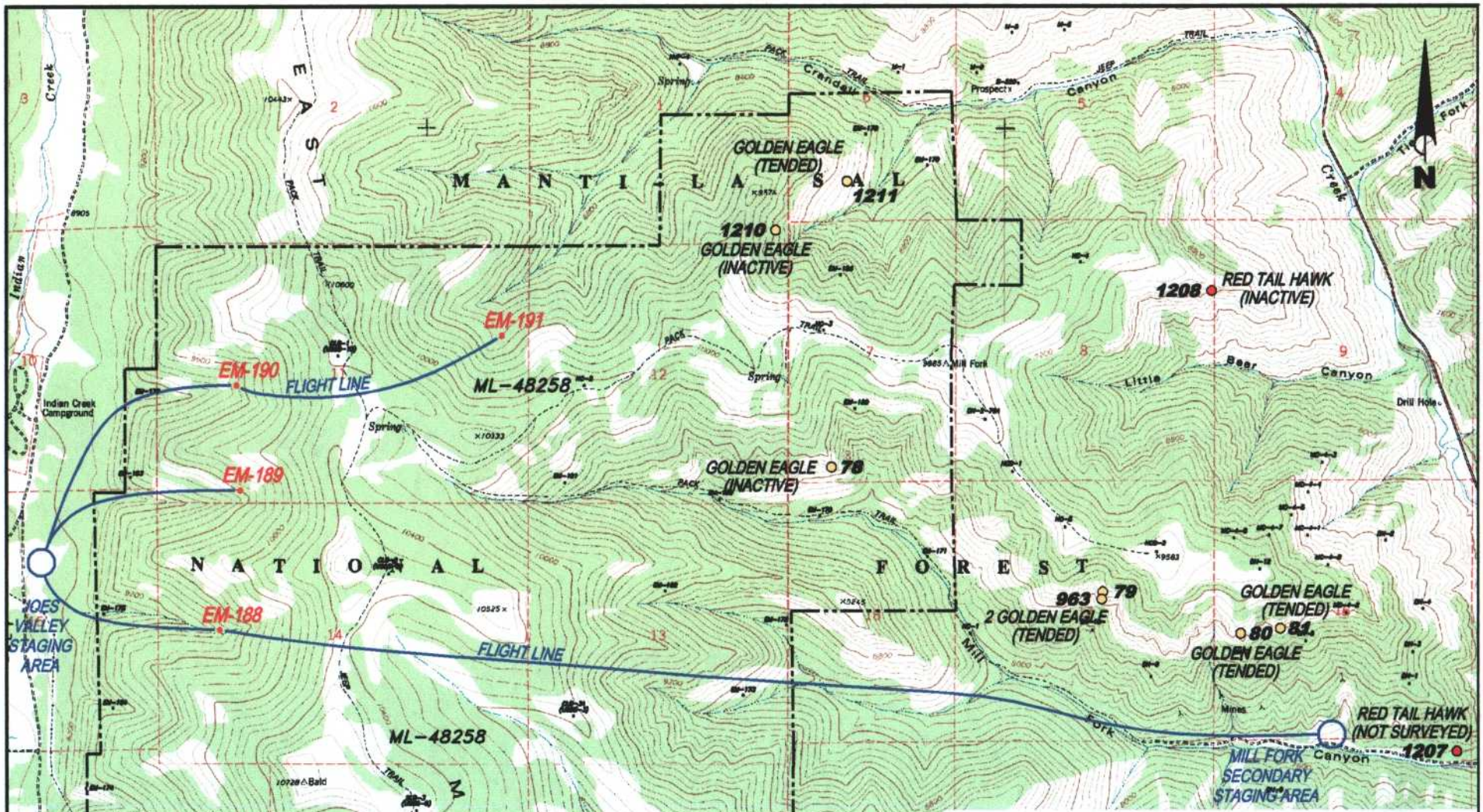
DATE: SEPTEMBER 15, 2003		SHEET 1 OF 1	REV. ___



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2004 COAL EXPLORATION
UTAH STATE COAL LEASE ML-48258
2003 RAPTOR LOCATIONS, FLIGHT PATH, STAGING AREA MAP

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SCALE:	1" =3000'	DRAWING #:	
DATE: SEPTEMBER 15, 2003		SHEET 1 OF 1	REV. ___