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# EUREKA ENERGY COMPANY

A SUBSIDIARY OF PACIFIC GAS AND ELECTRIC COMPANY

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October

**RECEIVED**

**OCT 16 1981**

Ms. Susan Linner  
Division of Oil, Gas and Mining  
1588 West North Temple  
Salt Lake City, Utah 84116

DIVISION OF  
OIL, GAS & MINING

RE: Sage Point-Dugout Canyon  
Project Raptor Study

Dear Susan:

Eureka Energy Company (Eureka) decided to conduct a field examination to evaluate the potential impact of the proposed mine development upon golden eagle, prairie falcon and Cooper's hawk nests within the Eureka permit area and within 1 km of the permit boundary. We believe that the results of this survey (enclosed are 4 copies of the report) will help in the development of meaningful mitigation strategies. Eureka is anxious to cooperate with federal and state agencies committed to resolving conflicts between resource development and raptor populations; however, we are concerned about restrictive, across-the-board application of buffer zones which may negatively impact mining operations.

As of August 13, 1981, the U. S. Fish and Wildlife Service has identified 22 golden eagle nests and prairie falcon scrapes or suspected scrapes within the Eureka permit area or within 1 km of the perimeter. In addition, two Cooper's hawk nest sites have been located in Dugout Canyon. In our estimation, some impact to golden eagle activity in Fish Creek Canyon may occur due to disturbances caused in the development stage of the proposed Fish Creek mine portal. However, these disturbances should not affect the use of the nests. No other "active" raptor nests should be negatively impacted by disturbances caused by the construction and blasting activities related to our proposed Sage Point-Dugout Canyon mine development or operation.

Eureka is interested in pursuing measures to offset any potential problems for the permitting and construction of the mines. It seems to me that the next step is to request U. S. Fish and Wildlife to perform an official field investigation of these nests and to determine mitigation strategies. If you concur, please let me know if you intend to schedule such a meeting before Christmastime. If I can be of any further assistance, please contact me.

Sincerely,

*Nicolas Temnikov*

NICOLAS K. TEMNIKOV  
Regulatory Coordinator

NKT:dmh

Enclosure

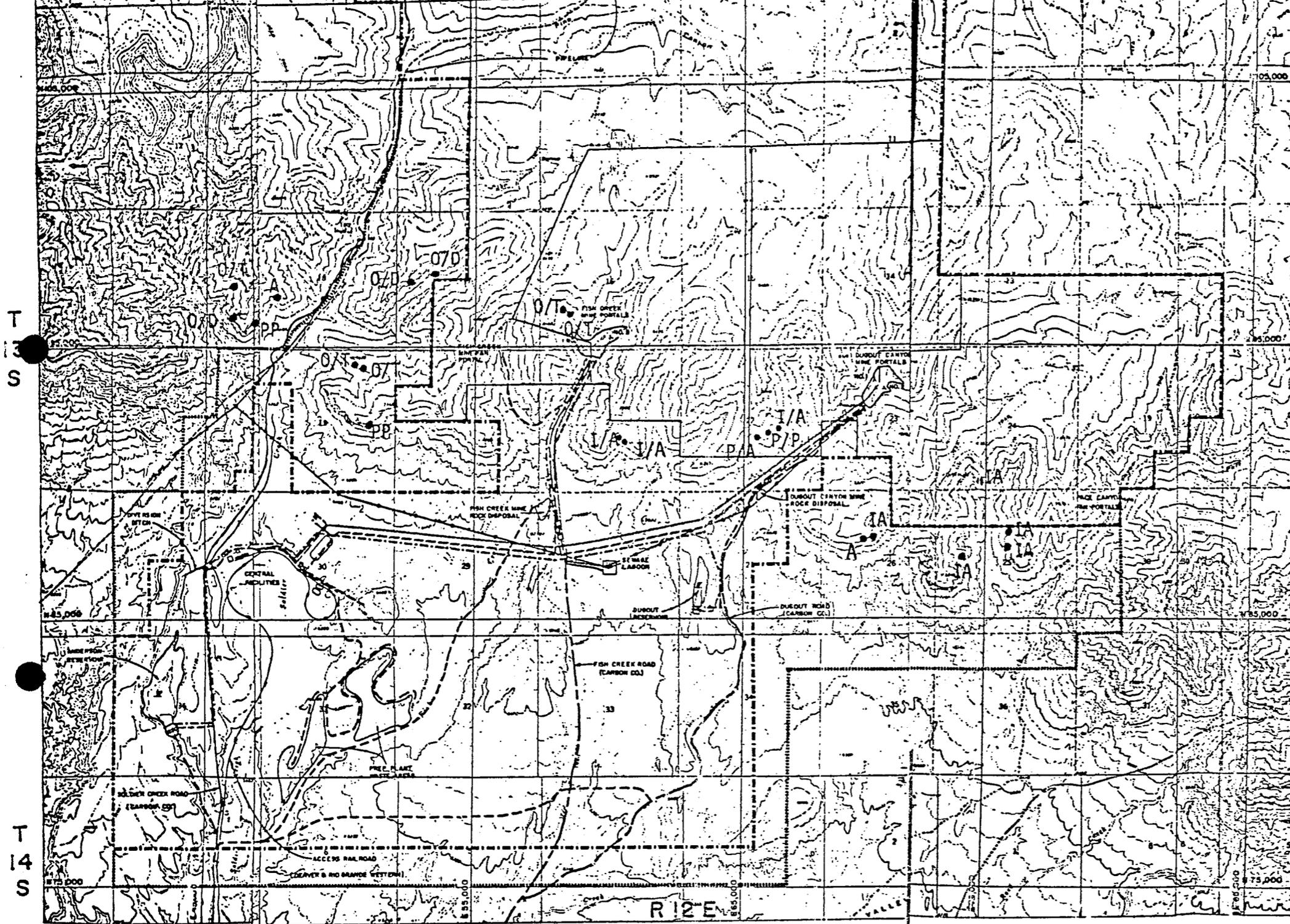
POTENTIAL IMPACT OF SAGE POINT-DUGOUT CANYON  
MINE DEVELOPMENT ON RAPTORS

Eureka Energy Company  
September 1981

INTRODUCTION

As of August 13, 1981, the U. S. Fish and Wildlife Service have identified 22 golden eagles nests and prairie falcon scrapes or suspected scrapes within the Eureka permit area or within 1 km of the permit boundary (see Map No. 1). In addition, two Cooper's hawk nest sites have been located in Dugout Canyon (see Map No. 2).

The Service feels that only the nests in sections 16 and 22 (T13S, R12E) have "a high potential to be impacted." Their evaluation is based upon only examination of topographic maps and the nature and location of the proposed mine development. The two nests in Fish Creek (Nest #2 and Alternate No. 1 Map No. 4) have been designated "occupied/tended." USFWS biologists feel that the Fish Creek nests are not alternative nests for eagles nesting elsewhere (Soldier Creek and Dugout Canyon) and therefore should be considered viable and given



NEST SITES (22)

Golden Eagle

- A - 1981 Nest Attempt
- O/T - Occupied/Tended
- O/D - Old/Delapidated
- IA - Inactive

Prairie Falcon

- PA - Active Prairie Falcon
- PP - Possible Scrape

Map No. 1

"Location of 22 golden eagle nests and prairie falcon scrapes."

T  
13  
S

T  
13  
S

T  
14  
S

T  
14  
S

- Proposed Permit Area
- Proposed Adjacent Area
- Scrape Line
- County Roads
- Improved/New Roads
- Railroad

1	10/14	ISSUED FOR USE	WJS	JED	JAD	JLJ
2	1/2	RESUB FOR IMPROVEMENT	WJS	JED	JAD	JLJ

Scale 0 20 4000  
 Drawn By: W. SEARANT  
 Checked By: J. A. DAVIS  
 Date: 7-11-80

**PROPOSED PERMIT**

KUREKA ENR  
 NORTH CAROLINA  
 Carbon

full protective consideration under Unsuitability Criterion 14. In their opinion, the spatial and visual separation between Soldier Creek, Fish Creek, and Dugout Canyon nests is more than adequate for three pairs of eagles. Mr. Charles Greenwood (Utah Division of Wildlife Resources Biologist (UDWR)), believes that three pairs of golden eagles inhabit this area during nesting season (personal communication, September 1981). In section 22, two prairie falcon scrapes (one is active and the other is a possible scrape) and one inactive golden eagle nest have been spotted in the steep cliffs overlooking Dugout Road.

Eureka decided to conduct a field examination to evaluate the probability of these nests being impacted by the proposed mine development. Hopefully, the results of this survey will help in the development of meaningful mitigation strategies. Since some raptors are sensitive to disturbances during the nesting season, we are interested in finding practicable and reasonable mitigation measures to curb negative mining effects. Eureka is very willing to cooperate with federal and state agencies committed to resolving conflicts between resource development and raptor populations. However, we are concerned about restrictive, across-the-board application of buffer zones which may negatively impact mining operations.

The USFWS recommends implementation of the following measures to reduce negative impacts of mine related activities on golden eagles, prairie falcons, and Cooper's hawks:

Golden Eagles: Blasting and other surface disturbance should not be permitted within 1 km of a nest. (Buffer zones may be relocated after further field examination of the nest sites.) Mining activities should not be permitted between February 15 and May 1.

Prairie Falcons: No blasting or other surface disturbance should be permitted within .50 km of any prairie aerie. Construction activities should not be permitted between March 15 and June 15.

Cooper's Hawks: Major construction activities and blasting should be avoided within 1 km of active nest sites.

## RESULTS AND DISCUSSION

In our estimation, only the golden eagles nesting in section 16, Township 13 South, Range 12 East (Fish Creek mine portal area) are potentially vulnerable to disturbances caused by construction and blasting activities related to our proposed Sage Point-Dugout Canyon mine development. No other "active" nests (designated as A, O/T, or P/A in Map No. 1) should be negatively impacted by the proposed surface facilities.

### Cooper's Hawks

Two Cooper's hawk nests have been observed in Dugout Canyon (see Map No. 2). On September 10, 1981, Mr. Greenwood assisted Eureka in locating these nests. Active in 1980 and 1981, one nest is situated approximately 50 meters from Dugout Road (an existing county road). The second nest, not active since 1978, is located about 75 meters up the creek and about 150 meters from the same road. The construction and use of Dugout Road should not affect the use of the active nest site. Both nests, situated in a riparian area that shows some signs of degradation due to overgrazing, are well away from the road and are not in line-of-sight.

The Bureau of Land Management (BLM) is not concerned with these nests as long as our construction activities will be restricted to the opposite side of the riparian bank (personal communication, May 1981). BLM feels that this riparian zone is in poor condition and will definitely improve after construction of the road and the implementation of good reclamation measures.

### Prairie Falcons

On September 10, 1981, Mr. Greenwood pointed out the location of the active prairie falcon scrape and other possible scrapes situated in the high cliffs west of Dugout Creek (see Map No. 3 and Photo No. 1). The term "possible scrape" according to DWR, means nesting areas which have been used by prairie falcons in the past. While the possible scrape is only over .40 km (.25 mile) from Dugout Road, the active scrape is just over .53 km (.33 mile) from the road. Nesting over 600 feet above the road, the prairie falcons utilizing these scrapes have an unobstructed view of this area. These scrapes are not in very close proximity to the proposed Dugout mine portal and are not in line-of-sight. In our opinion the construction and operation of Dugout Road and the proposed Dugout Canyon mine portal should not affect the use of these scrapes.

Golden Eagles

We believe that only the golden eagles nesting in section 16 (T13S, R12E) could potentially be impacted by blasting and construction activities at the proposed Fish Creek mine portal. The only other active eagle aerie within the Eureka permit area (section 26, T13S, R12E) is situated on a south facing cliff well away from the proposed Dugout Canyon mine portal and Dugout Road. The nesting eagles should not be disturbed by the vehicular traffic.

The active Soldier Creek nest (see Photo No. 2) is located outside the permit area in section 18 (T13S, R12E). Situated about .3 km (.20 mile) west of Soldier Creek road, it can be spotted easily with binoculars from the paved road. The existing Soldier Creek mine portal is just up the road. Soldier Creek road is the primary haul road from Soldier Creek Mine to its storage pile and load out facilities, which are located southwest of Wellington. The road is 30 feet wide and is paved. This nest is of critical interest because it can provide valuable insight and assist in proposing practical mitigation measures to ameliorate any significant impacts upon other golden eagle nests. It seems that this pair of nesting golden eagles is oblivious to the coal trucks rumbling past this stick nest (see Photos Nos. 3 and 4).

We observed three golden eagle nests in Fish Creek Canyon (see Map No. 4 and Photos 5 through 12)). In addition to the two nests found by the Fish and Wildlife Service and the Division of Wildlife Resources, an old/delapidated stick nest was discovered a short distance from Alternate No. 1 (see Photo No. 9).

-All three nests are in close proximity to the proposed Fish Creek mine portal. Nesting some 300 feet above the portal area, the eagles in Nest No. 2 would be able to observe a portion of the proposed portal (parking lot, emergency stockpile, and facilities driven into the Rock Canyon and Gilson seams). This nest is over .4 km (.25 mile) from the parking lot. A much smaller portion of the portal facilities would be visible from the alternate nests.

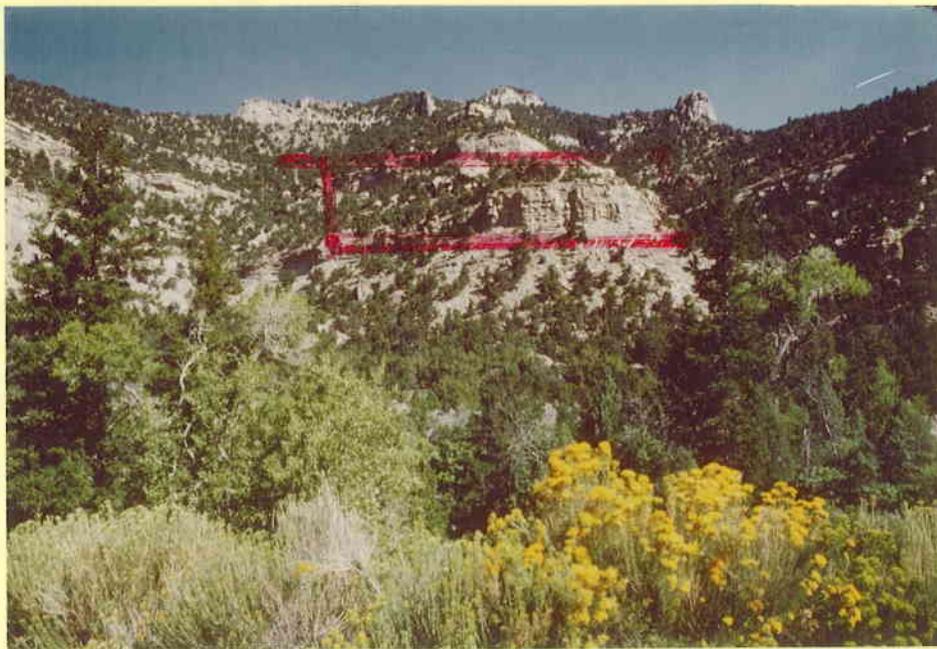
In our opinion the construction and operation of the Fish Creek mine portal will not affect the use of the nests. Some impact to golden eagle nesting activity may occur. However, we cannot predict the magnitude of the impact or the chances of site abandonment.

CONCLUSION

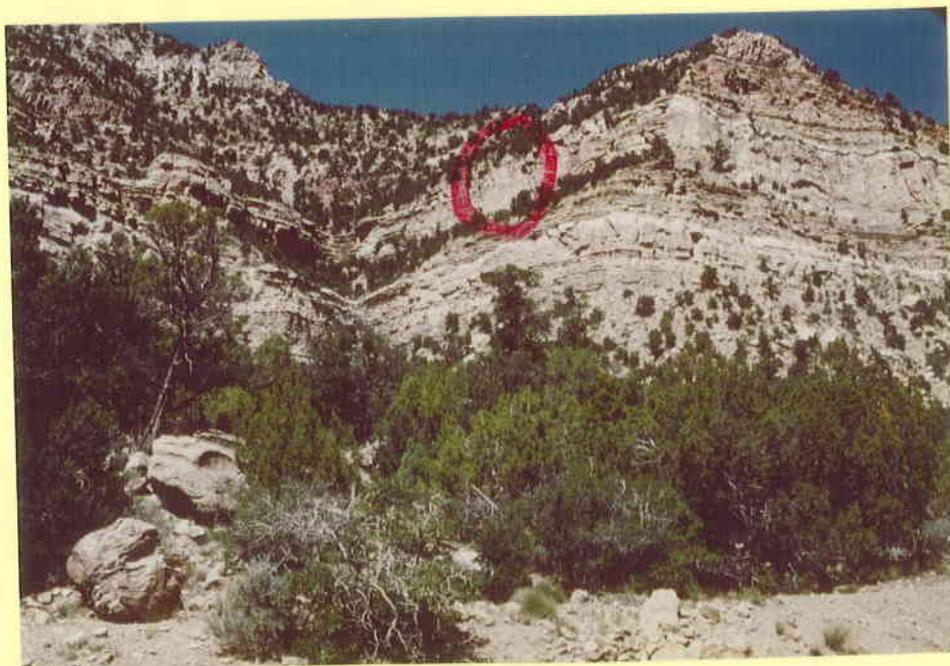
In our estimation, some impact to golden eagle activity in Fish Creek Canyon may occur due to disturbances caused by the development of the proposed Fish Creek mine portal. However, these disturbances should not affect the use of the nests. No other "active" raptor nests (designated as A, O/T, or P/A in Map No. 1) should be negatively impacted due to disturbances caused by the construction and blasting activities related to our proposed Sage Point-Dugout Canyon mine development.

LIST OF PHOTOGRAPHS

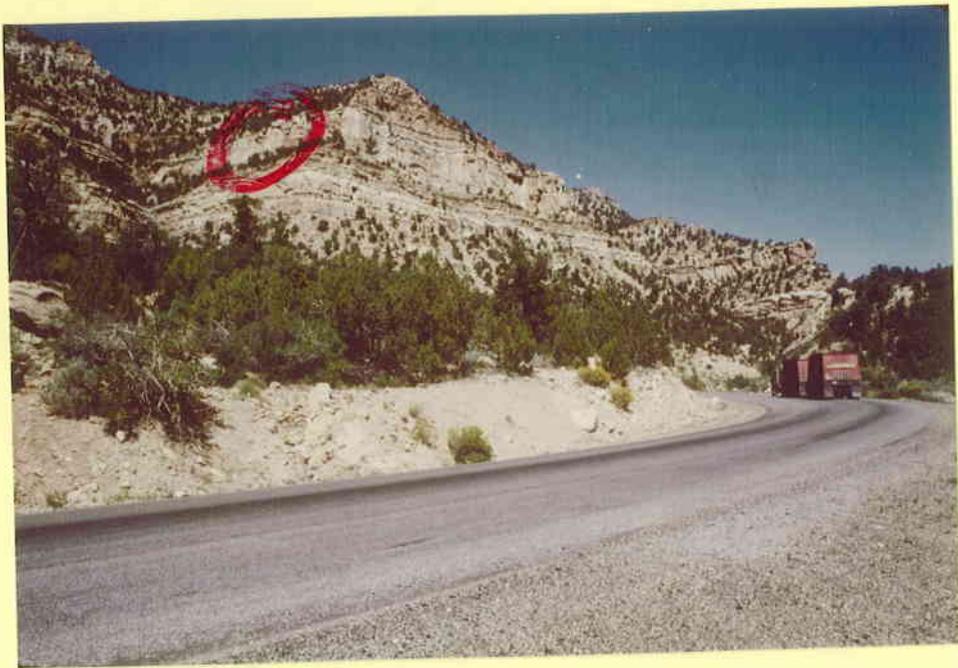
- #1. View from Dugout road towards prairie falcon scrapes and one inactive golden eagle nest. (28 mm lens)
- #2. View from Soldier Creek road of active golden eagle nest. It is located outside the permit area in section 18 (T13S, R12E). (normal lens)
- #3. Coal truck bouncing towards the existing Soldier Creek mine.
- #4. Ibid
- #5. Looking up from Gilson seam (Fish Creek Canyon) at golden eagle nesting area. (28 mm lens)
- #6. Three golden eagle nests located above upper drill road (Fish Creek Canyon).
- #7. Fish Creek Nest No. 2. (200 mm lens)
- #8. Alternate nests (Fish Creek Canyon).
- #9. Alternate nests (Fish Creek Canyon). An old/dilapidated stick nest (No. 2) is located just to the right of No. 1.
- #10. Looking down at Fish Creek Fork Crest (approximately 50 feet above Nest No. 2).
- #11. View of Fish Creek facility area (40 feet below Nest No. 2).
- #12. View of Fish Creek facility area (on upper drill road 120 feet below Nest No. 2).



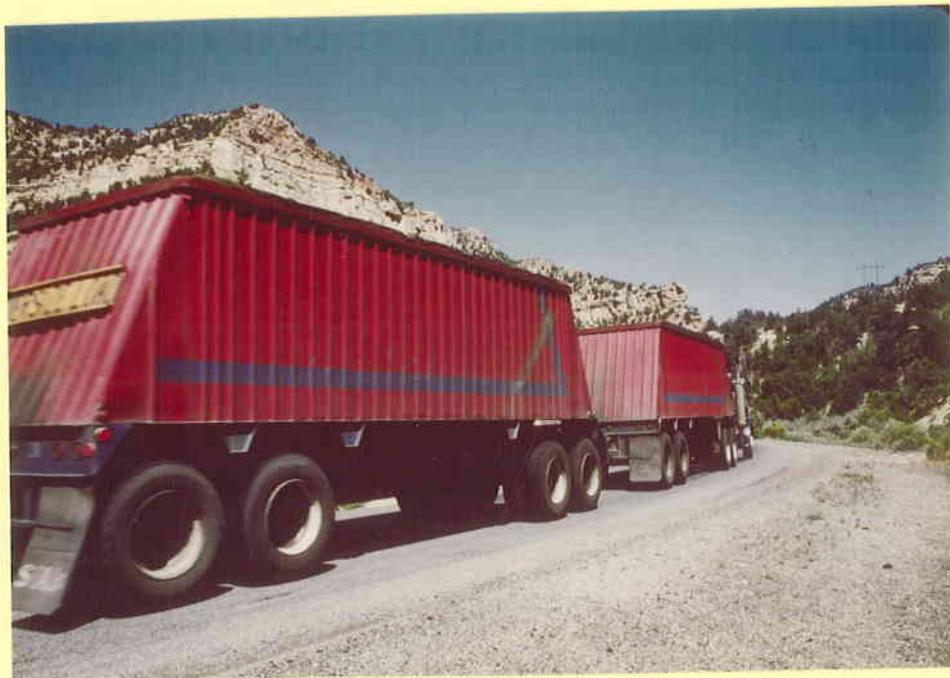
#1. View from Dugout road towards prairie falcon scrapes and one inactive golden eagle nest. (28 mm lens)



#2. View from Soldier Creek road of active golden eagle nest. It is located outside the permit area in section 18 (T13S, R12E). (normal lens)



#3. Coal truck bouncing towards the existing Soldier Creek mine.



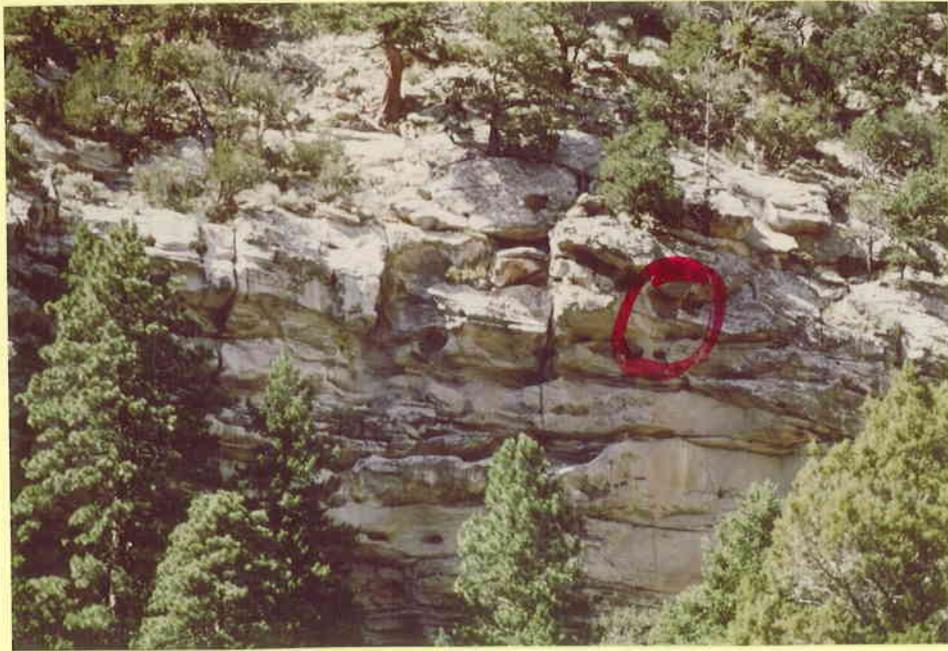
#4. Ibid



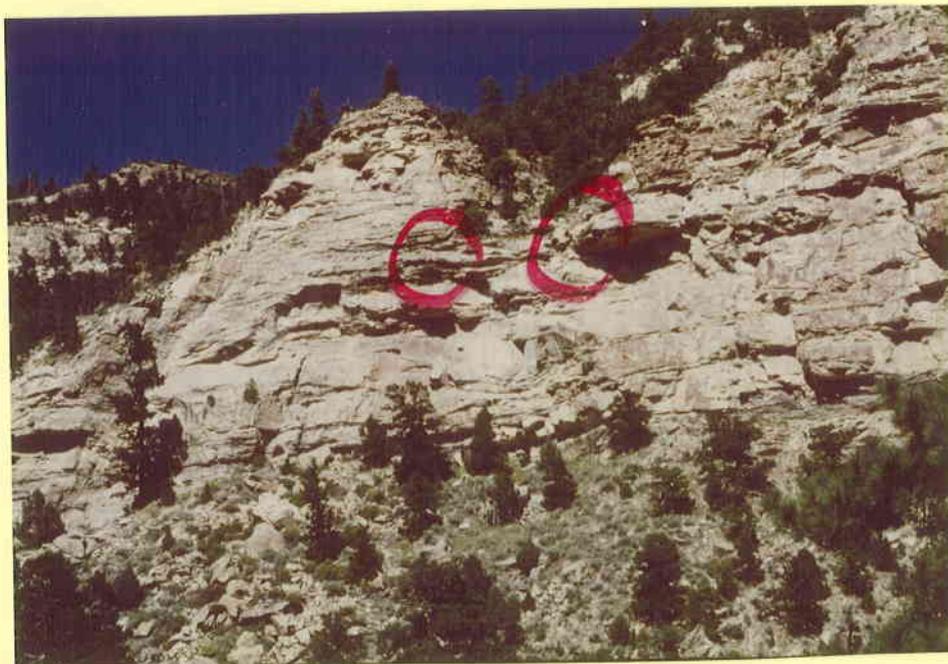
#5. Looking up from Gilson seam (Fish Creek Canyon) at golden eagle nesting area. (28 mm lens)



#6. Three golden eagle nests located above upper drill road (Fish Creek Canyon).



#7. Fish Creek Nest No. 2. (200 mm lens)



#8. Alternate nests (Fish Creek Canyon).

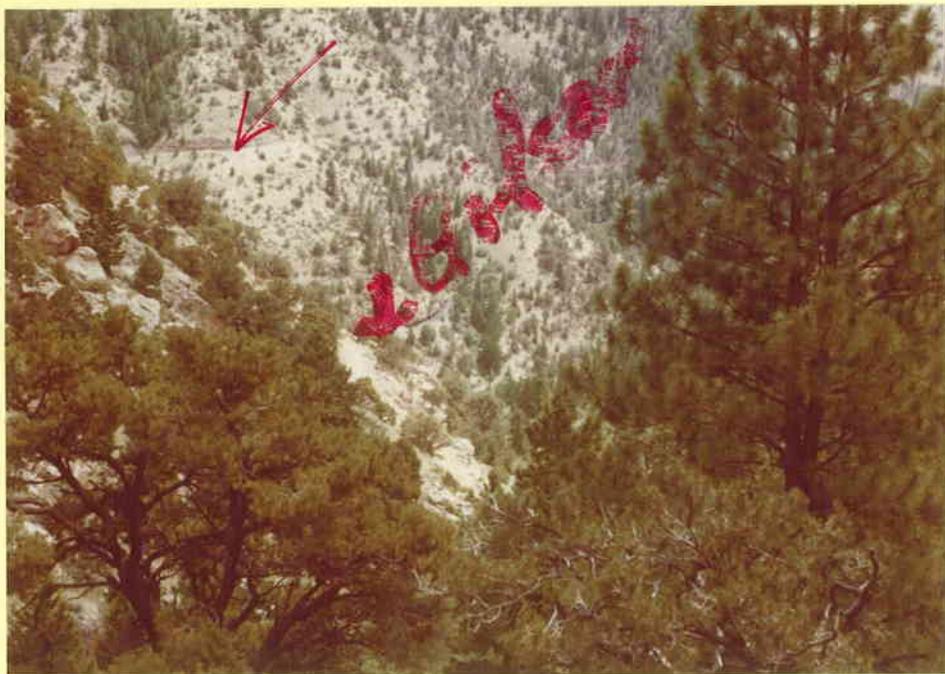


#9. Alternate nests (Fish Creek Canyon). An old/dilapidated stick nest (No. 2) is located just to the right of No. 1.



#10. Looking down at Fish Creek Fork Crest (approximately 50 feet above Nest No. 2)

Rock Canyon outcrop



#11. View of Fish Creek facility area (40 feet below Nest No. 2).



#12. View of Fish Creek facility area (on upper drill road 120 feet below Nest No. 2).