OGMCOAL DNR <ogmcoal@utah.gov>

Fwd: PacifiCorp Trail Mountain Wildfire Third Party Inference Issues

1 message

Steve Christensen <stevechristensen@utah.gov> Mon, Apr 8, 2019 at 10:06 AM
To: Christine Belka <cbelka@osmre.gov>, Alexis Long <along1@osmre.gov>, Thomas Medlin <tmedlin@osmre.gov>, Karl Houskeeper <karlhouskeeper@utah.gov>, Dana Dean <danadean@utah.gov>, Keenan Storrar <kstorrar@utah.gov>, Justin Eatchel <jeatchel@utah.gov>, Todd Miller <toddmiller@utah.gov>, Steve Fluke <stevefluke@utah.gov>, Katie Potter <kepotter@utah.gov>, Tom Nicolaysen <tnicolaysen@utah.gov>, Jan Morse <janmorse@utah.gov>, Jeff Salow <jsalow@fs.fed.us>, darren olsen <dgolsen@fs.fed.us>, OGMCOAL DNR <ogmcoal@utah.gov>, Chuck Semborski <Charles.Semborski@pacificorp.com>, Dennis Oakley <dennis.oakley@pacificorp.com>, "Fleck, Ken" <Kenneth.Fleck@pacificorp.com>

Good morning,

Chuck Semborski (PacifiCorp) has compiled a comprehensive, chronological history of mining in Rilda Canyon as well as the events that have occured since the Trail Mountain fire last summer (see e-mail below and attachment). The information will be very helpful in facilitating upcoming conversations as we sort through the issues associated with this summers construction projects.

Regards,
Steve

---------- Forwarded message ---------
From: **Semborski, Chuck** <Charles.Semborski@pacificorp.com>
Date: Fri, Apr 5, 2019 at 8:59 AM
Subject: PacifiCorp Trail Mountain Wildfire Third Party Inference Issues
To: Steve Christensen (stevechristensen@utah.gov) <stevechristensen@utah.gov>

Steve,

The attached file outlines the mining history of Rilda Canyon with emphasis on third party interference issues as the result of the 2018 Trial Mountain Wildfire. PacifiCorp looks forward to discussing these issues with the Division and the Office of Surface Mining on April 17, 2019.

The wildfire, started as a prescribed burn on Trail Mountain in early June, quickly became a significant issue that dramatically impacted the Emery County community and PacifiCorp's reclamation activities at the Deer Creek Mine. For safety concerns, the Forest Service restricted access to PacifiCorp's on-going operations in Deer Creek and Rilda canyons. PacifiCorp was forced to delay reclamation/demolition activities at the Deer Creek mine site and Rilda Canyon (Left Fork and 1st Right). The aftermath of the fire was devastating in Rilda Canyon, completely altering the landscape and hydrology for years to come. The Forest Service quickly initiated drainage stabilization projects including; installing cross-drainage log structures, building sediment basins/dams at each of the side drainages and removing drainage obstructions to control flooding and debris flows. The main emphasis of hydrologic stabilization projects in Rilda Canyon has been the protection of the North Emery Water Users Special Service District (NEWUSSD) Rilda Canyon spring development. The Rilda Canyon springs are an alluvial-based French drain system located in the main channel of Rilda Canyon that provide approximately 60% - 70% of the total needs for NEWUSSD. PacifiCorp has worked cooperatively with NEWUSSD for over 25 years on hydrologic projects related to the spring development in Rilda Canyon. These efforts were instrumental in the protection of an important source of culinary water and this collaborative effort allowed PacifiCorp access to coal reserves in the northern portion of East Mountain. All of PacifiCorp's mining operations in Rilda Canyon were designed around the protection of the Rilda Canyon springs.

The Trail Mountain Wildfire had direct third party mine permit impacts in 2018:

- Forest Service crews accessed the Rilda drainage, crossing/impacting PacifiCorp's disturbed area adjacent to Emery County Road #306 (access road to PacifiCorp's operations, Left Fork and 1st Right portal facilities)
- Forest Service built a sediment basin structure on the Left Fork portal pad
- Debris flows impacted the 1st Right portal pad depositing sediment from storm events
- Forest Service built a dam in the Helco side drainage and diverted the flow to prevent debris flows from impacting the Rilda springs
    - Diversion of the Helco drainage directly impacted PacifiCorp's topsoil storage pile within the mine permitted area. Debris flows impacted the perimeter fencing and scoured soils along the southern boundary.

The Trail Mountain Wildfire has led to projected third party mine permit impacts for 2019:

- Emery County, with funding from the National Resource Conservation Service, is proposing several projects in Rilda Canyon in 2019 to protect Rilda Springs and mitigate flooding and debris flows to Huntington Canyon:
    - Left Fork – reconstruct and improve the sediment basin and structure installed in 2018
    - Install a trash rack in the main drainage up-stream of the Rilda Springs
    - Improve the main channel overflow diversion channel
    - Install a concrete drainage in the main channel to bypass sediment and debris flow from impacting Rilda springs
    - Improving the Helco Canyon dam and diversion structure
    - Constructing an earthen dike and rip rap structure through PacifiCorp's' topsoil storage site
- Another issue could impact PacifiCorp's operations (topsoil storage mine permit disturbed area – the Helco Waste Coal Fire:
    - Waste coal from the historic Helco Mine (operation from 1930's – 1960's) located adjacent to PacifiCorp's topsoil pile was ignited by the Trail Mountain Wildfire
        - Waste coal continues to burn, affecting the air quality and creates the new potential of igniting additional fires
        - Utah Abandoned Mines is currently developing plans to address the coal waste fires (5 to 6 hotspots)

Timing of the 2019 Emery County watershed projects will allow PacifiCorp to remove and relocate the topsoil from the storage site to the 1st Right Portal Facility as scheduled this spring. However, existing and proposed third party mine permit interference issues will have to be resolved to benefit the Rilda Canyon watershed and particularly NEWUSSD Rilda spring collection system.

Charles A. Semborski

Charles A. Semborski, P.G.

Manager of Geology and Exploration

INTERWEST MINING COMPANY
A SUBSIDIARY OF PACIFICORP

PacifiCorp – Interwest Mining Company

Huntington Office

15 North Main Street

P.O. Box 310 Huntington, Utah 84528

E Mail chuck.semborski@pacificorp.com

Work 435-687-4720

Mobile 435-650-5355

--

Steve Christensen
Utah Division of Oil, Gas and Mining
1594 W North Temple, Suite 1210
Salt Lake City, Utah 84116
(801) 538-5350
stevechristensen@utah.gov

Helco Mine History.pdf
10766K

Rilda Canyon Mining History

- Helco (aka Black Magic) Mine History 1930's – 1969 (Doelling)
- PacifiCorp's Deer Creek Mine Northern Development – Rilda Canyon 2006 -2008
- Trail Mountain Wildfire June - August 2018
- Third Party Mine Permit Interference Impacts (hydrologic stabilization) 2018 - 2019

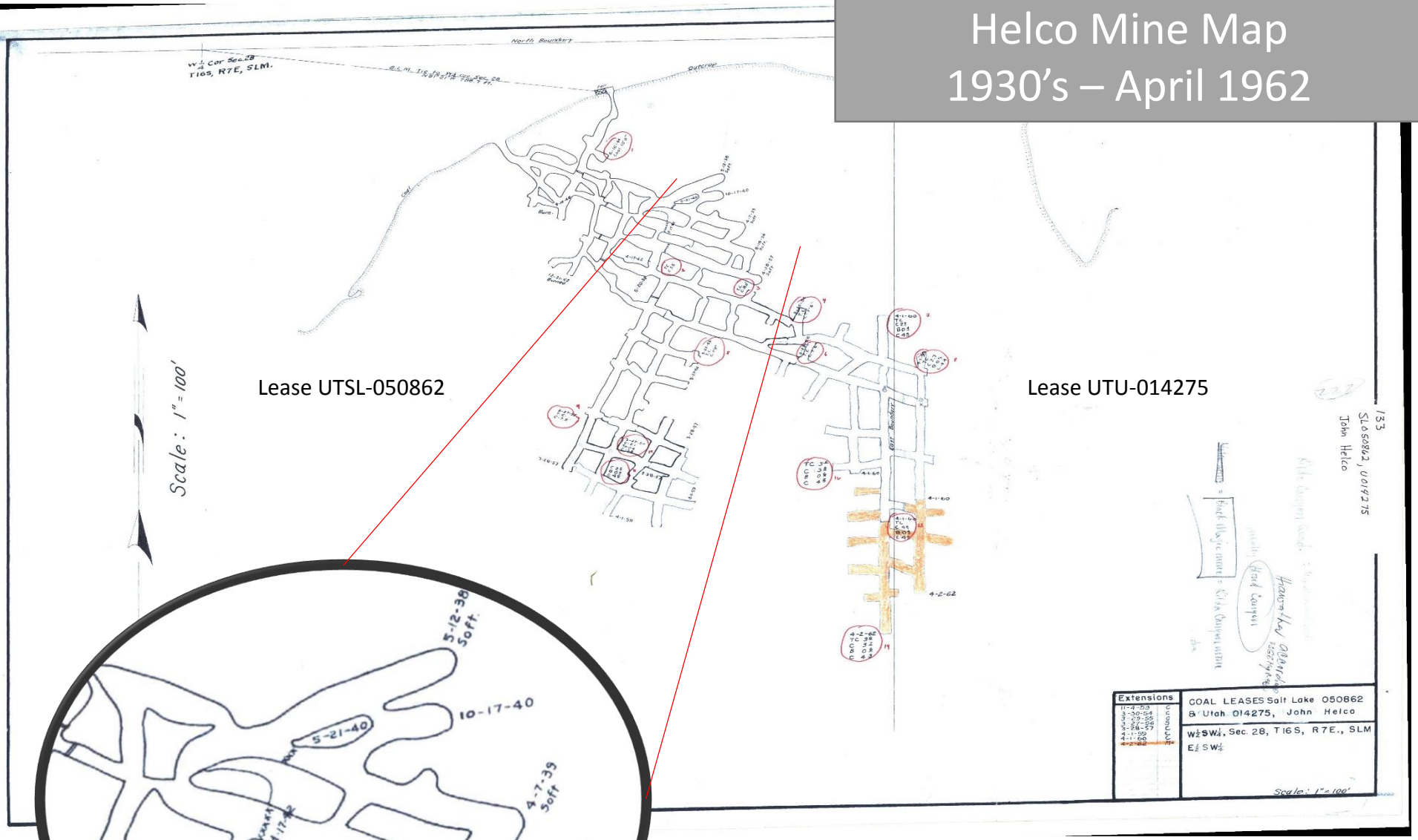
Photo: November 2004 Helco Mine Area (Topsoil Storage Area Pre-Development of 1st Right Portals)

Helco Mine

History of Federal Coal Leasing In Rilda Canyon

- Located on Federal Leases
  - UTSL-050862
  - Portals and Coal Pile/Loadout
    - 280 acres
      - Issued 08/05/1937 JB Johnson
        - Assigned:
          - 09/01/1946 Addison Cain
          - 05/01/1952 WL Bennett
          - 09/01/1956 GW & GC Morris
          - 12/23/1960 John Helco
          - 07/01/1967 URA Swisher
          - 01/01/1973 Peabody Coal Co.
          - 11/01/1973 Malcolm N. McLinnon (McKinnon?)
          - 06/01/1983 W. A. Land Co.
          - 07/01/1986 Utah Power & Light (PacifiCorp)
  - UTU-014275
    - 80 acres
      - Issued 10/01/1955 John Helco
        - Assigned:
          - 07/01/1967 URA Swisher
          - 10/31/1972 Peabody Coal Co.
          - 05/25/1979 Utah Power & Light (PacifiCorp)

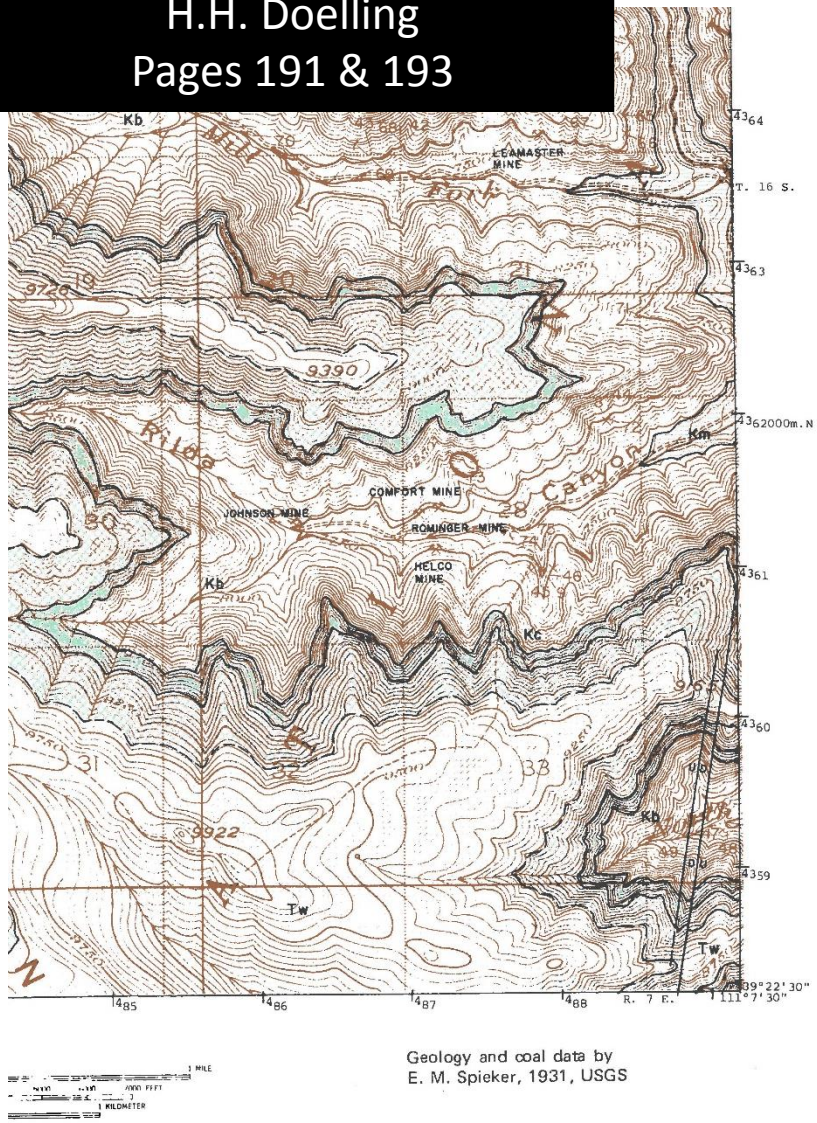
Helco Mine Map
1930's – April 1962



Enlarged to detail mining history

Downloaded from Utah Geologic Survey

Central Utah Coal Fields
Monograph Series No. 3, 1972
H.H. Doelling
Pages 191 & 193



Geology and coal data by
E. M. Spieker, 1931, USGS

adrangle (explanation pages 136-137).

H. H. Doelling–Central Utah Coal Fields: Wasatch Plateau

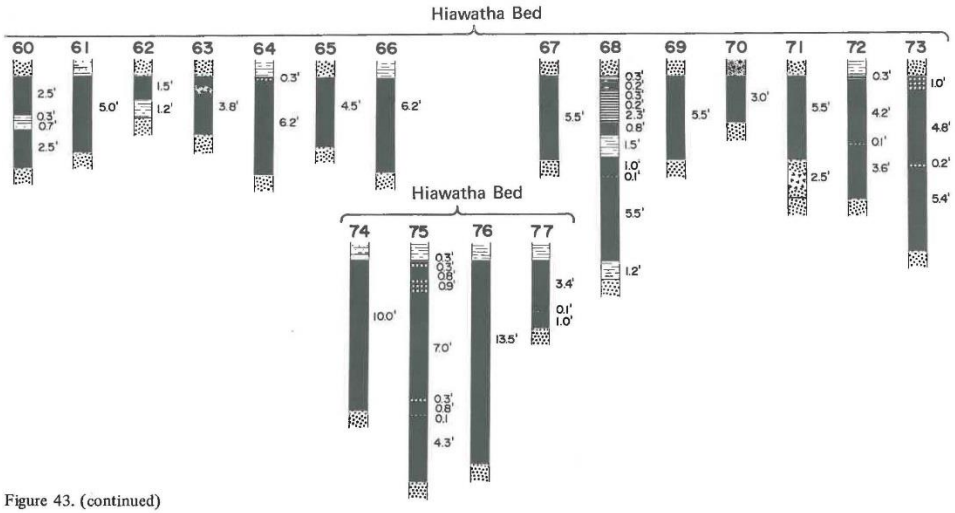


Figure 43. (continued)

Quality of Coal

Forty-one available analyses represent the Blind Canyon and Hiawatha seam (table 39). They are summarized together because the components making up the proximate analyses are similar. Table 40 lists sulfur-type determinations for the coal.

Table 39. Average coal analyses, Hiawatha NW quadrangle.

	No. Analyses	As-received (percent) Average	Range
Moisture	41	4.9	3.1 - 6.8
Volatile matter	35	43.4	40.4 -46.0
Fixed carbon	35	45.7	43.5 -51.1
Ash	41	6.0	2.8 -10.7
Sulfur	40	0.55	0.23- 0.80
Btu/lb	35	13,080	12,290-13,690

Table 40. Sulfur-type determinations, Hiawatha NW quadrangle (Walker and Hartner, 1966).

Mine	Bed	Percent Total Sulfur	Sulfate	Pyritic	Organic
Leamaster	Hiawatha	0.49	0.02	0.11	0.36
Rilda Canyon	Blind Canyon (?)	0.47	0.02	0.06	0.39
Comfort	Hiawatha	0.49	0.01	0.11	0.37
Rominger	Hiawatha	0.77	0.01	0.10	0.66
Tip Top	Hiawatha	0.50	0.01	0.07	0.42
Johnson	Hiawatha	0.38	0.01	0.05	0.32

Table 5 gives coal analyses by mines and prospects for the quadrangle.

Gomez, Landers and Boyd (1967, p. 9) calculated carbonization product yields for several mines on the quadrangle (table 41; end carbonization temperature 500° C).

Mines and Development

Several mines have been opened on the quadrangle mostly in the Hiawatha bed; a few have opened on the Blind Canyon (table 42).

Table 41. Carbonization product yields, Hiawatha NW quadrangle.

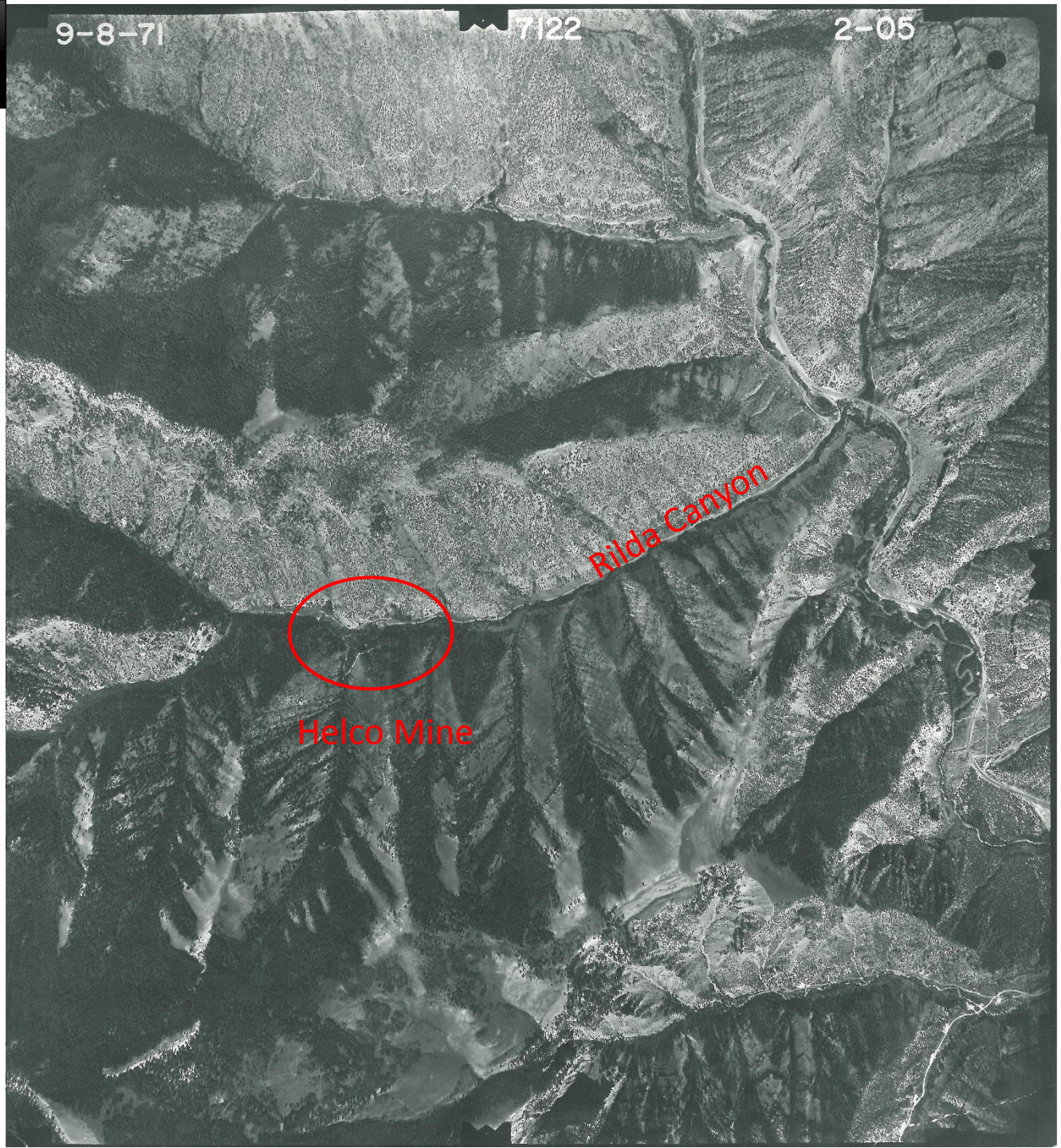
Mine	Carbonization yields wt. percent of maf coal: Char	Water of decomposition	Tar plus light oil	Gas	Gas volume scf/lb maf coal	Heating value of gas Btu/scf
Comfort	70.4	4.9	19.2	4.6	.906	812
Helco	70.6	4.6	20.8	3.7	.819	854
Johnson	70.2	4.8	20.0	4.2	.868	829
Leamaster	69.9	4.5	21.2	3.8	.820	851
Rominger	69.5	5.0	20.0	4.8	.911	806
Tip Top	69.6	4.7	21.0	4.0	.846	838

Table 42. Mines and their locations, Hiawatha NW quadrangle.

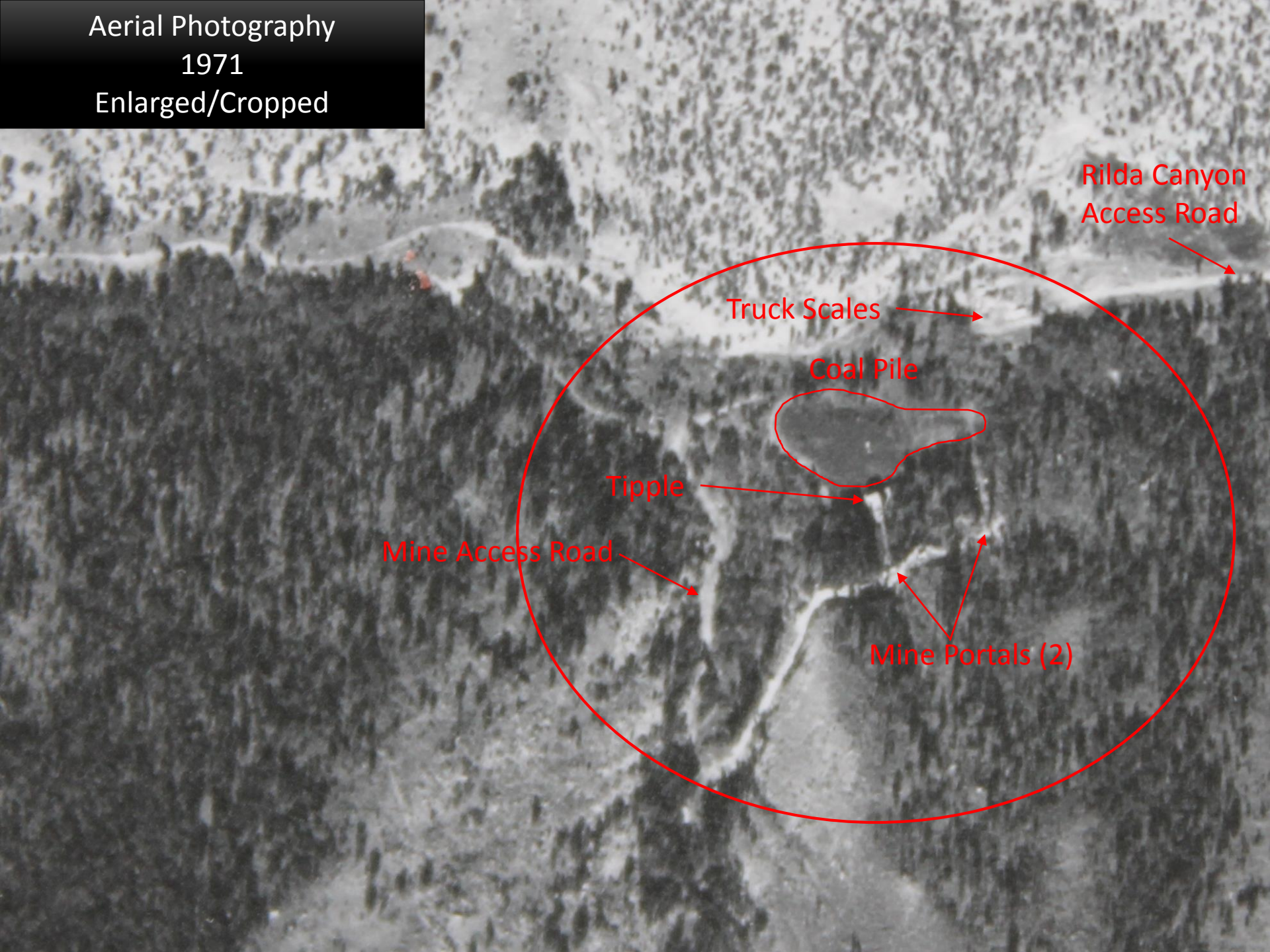
Mine	Location	Remarks
Comfort mine (Smith) adit 1 adit 2	W.SE.SE.NW.28-16S-7E 4,361,400m.N. 487,190m.E. 4,361,490m.N. 487,480m.E.	Active 1936-1954
Helco mine (Black Magic, Rilda Canyon)	S.NW.NW.SW.28-16S-7E 4,361,050m.N. 487,100m.E.	Active 1938-1969
Tip Top mine (Sam and Jim's, Jim Peterson)	SW.NW.SE.NE.5-16S-7E 4,367,760m.N. 386,800m.E.	Active 1939-1956
Johnson mine	29-16S-7E 4,361,250m.N. 486,250m.E.	Active 1943-195?
Leamaster mine (Mill Fork)	SE.SW.16-16S-7E 4,363,830m.N. 487,910m.E.	Active 1943-1964
Rominger mine	SE.SW.SW.NW.28-16S-7E 4,361,380m.N. 487,080m.E.	Intermittently active 1938-1954

The Comfort mine is believed opened on the Hiawatha bed in Rilda Canyon. The coal bed was reported 11 to 13 feet thick with an estimated production of almost 44,000 tons in 19 years. The Black Magic or Helco mine operates intermittently across the canyon from the Comfort mine. Its production has amounted to 32,000 tons.

Aerial Photography
September 1971

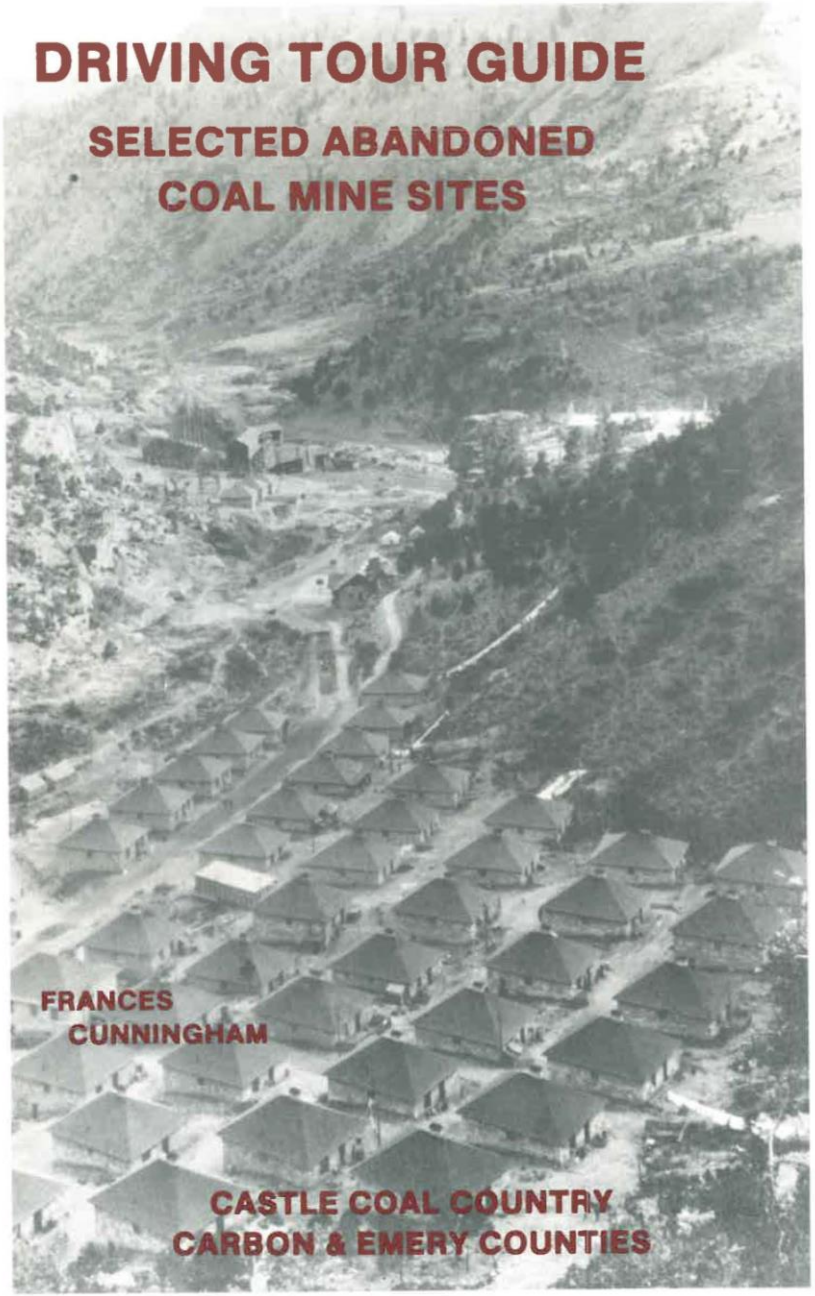


Aerial Photography
1971
Enlarged/Cropped



DRIVING TOUR GUIDE

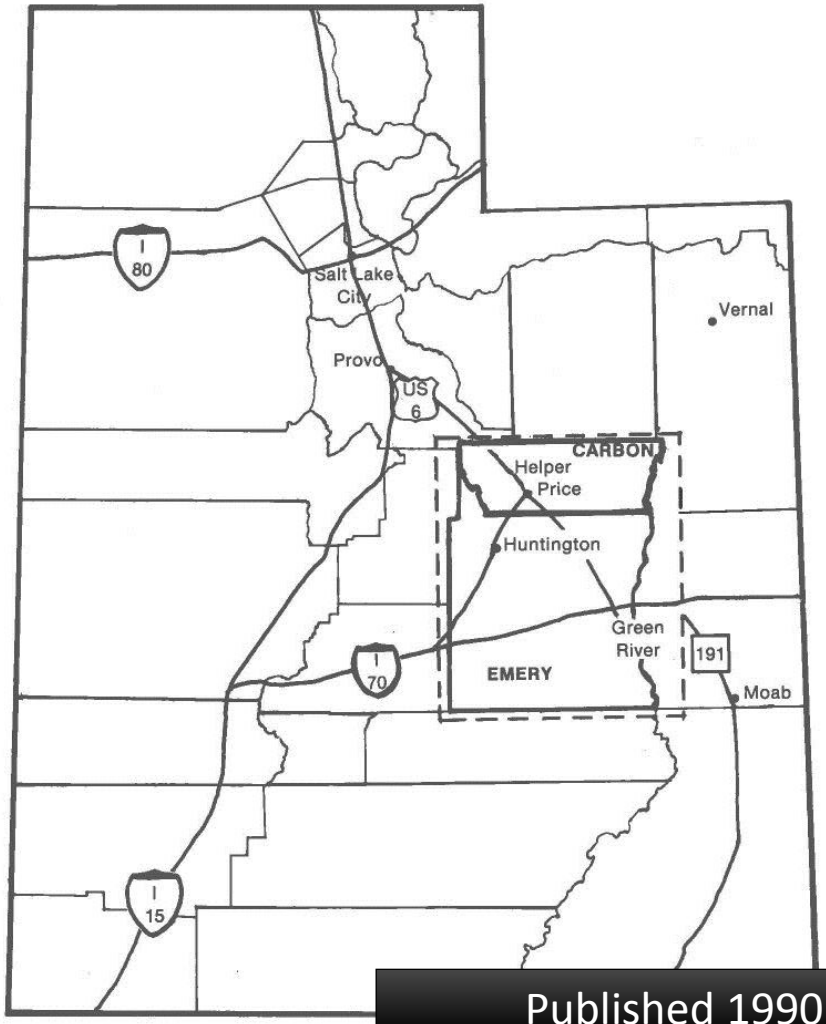
SELECTED ABANDONED COAL MINE SITES



FRANCES CUNNINGHAM

CASTLE COAL COUNTRY
CARBON & EMERY COUNTIES

UTAH CASTLE COUNTRY: CARBON & EMERY COUNTIES



Published 1990
Project funded by AMRP

Driving Tour Guide
Selected Abandoned Coal Mine Sites
of
Castle Coal Country
Carbon & Emery Counties

MEMORIAL

This tour guide is dedicated to the memory of the rugged, individual coal miner, past and present. The mines were their handiwork. The coal camps welded memories to the lives of the coal miner and his family.

ABOUT THE PUBLICATION

From 1983 through 1990 the Utah Abandoned Mine Reclamation program (AMRP) undertook reclamation of hundreds of hazardous abandoned mine sites in Carbon and Emery Counties. Portals were sealed, unsafe structures were demolished or stabilized, land was contoured and replanted for productive use by livestock or wildlife. Remnants of town sites and portal face-ups at mines were preserved. This guide allows the uninitiated to visualize and recapture the atmosphere and memories of coal mining development and coal camp life through the maps, photographs and information.

Reclamation was funded from a federal tax on coal produced in the region. This publication is a small part of cultural resource mitigation performed for reclamation work. Development of this guide was funded by the AMRP, Mary Ann Wright, administrator, Division of Oil, Gas and Mining, Dianne Nielson, Director. The federal grantor agency is the Department of the Interior, Office of Surface Mining Reclamation and Enforcement.

Special Acknowledgement

Special thanks to Helper City for funding the publication printing, and to the Western Mining & Railroad Museum at Helper for the use of their photographs.

Cover: The town of Spring Canyon.

CONTENTS

Introduction 1
Castle Coal Country:
Carbon and Emery Counties Highway Map 2
Mileage Starting Point:
Western Mining Museum Map 3
Tour 1: Pleasant Valley/Scofield Map 5
Pleasant Valley/Scofield 6
Blue Seal/Kinney/Columbine/Jones Mine 7
Winter Quarters/Pleasant Valley Coal Company 8
Union Pacific Mine 9
Clear Creek/Pleasant Valley Coal Company 10
Tour 2: Castle Gate Map 11
Heiner/U.S. Fuel Company 12
Castle Gate/Utah Fuel Company 13
Royal/Royal Coal Company 15
New Peerless Mine 16
Tour 3: Spring Canyon Map ..... 18 & 19
Peerless/Peerless Coal Company 17
Spring Canyon/Spring Canyon Coal Company 20
Standardville/Stardard Coal Company 21
Maple Creek Mine 22
Latuda/Liberty Fuel Company 23
Rains/Carbon Fuel Company 24
Little Standard, Vulcan, Day and Western
Mines in Mutual Area 25
Mutual/Mutual Coal Company 26
Tour 4: Kenilworth Map 27
Kenilworth/Independent Coal & Coke Company 28
Tour 5: Gordon Creek Map 29
Gordon Creek 30
National/Consumers/Sweets 31
Tour 6: Hiawatha/Morhland Map 32
Hiawatha/U.S. Fuel Company 33
Morhland/Castle Valley Fuel Company 34
Tour 7: Columbia Map 35
Columbia/Columbia Steel Corporation 36
Tour 8: Huntington Canyon Map 37
Huntington Canyon/Meetinghouse Canyon 38
Rilda Canyon/Coal Canyon 39
Tour 9: Straight Canyon Map 40
Straight Canyon/Black Diamond Mine 41
Oliphant Mine 42

TOUR 7: COLUMBIA/COLUMBIA STEEL CORPORATION

Columbia (Tour 7, Site 1), located 28 miles east of Price, had its beginning in 1922 when the Columbia Steel Corporation, needed coking coal for its' Ironton Steel Plant in Provo, Utah. On January 1, 1943 the Columbia Steel Corporation was purchased by the U.S. Steel Corporation and became known as Columbia Steel. It retained that name until October 1, 1946 when it became Geneva Steel Company. The mine closed in May, 1967.

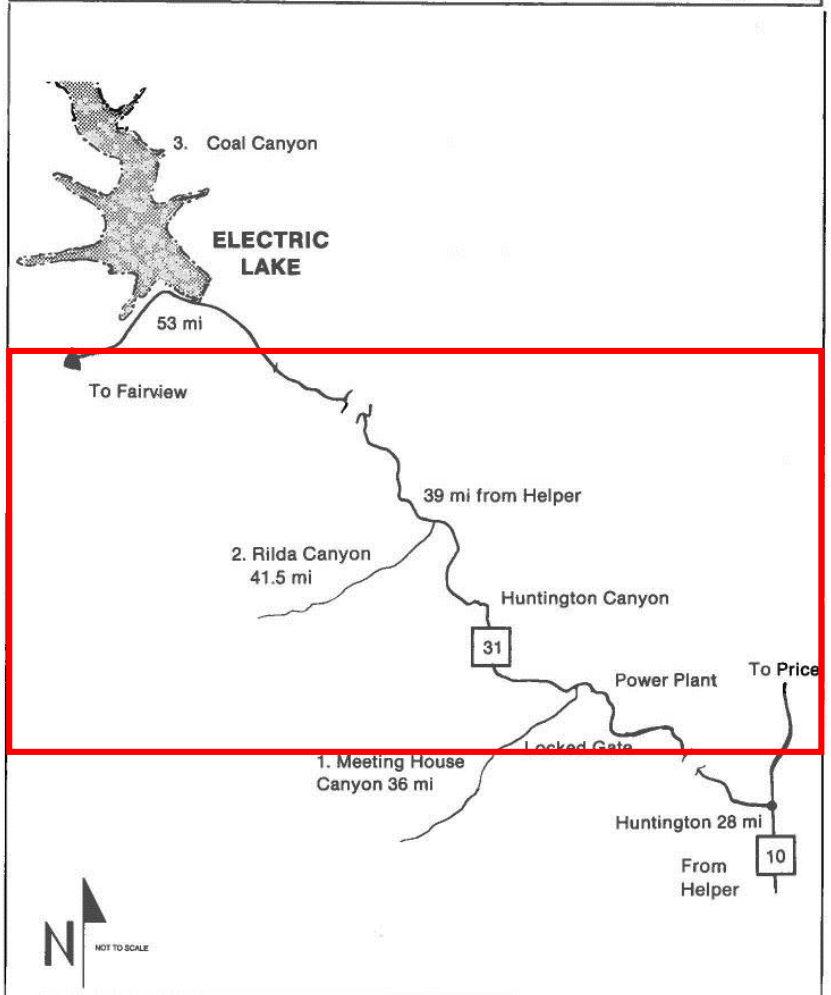
The coal was mined from a high seam and hoisted by cars down a long tramway. Part of the trestle is still standing, as are some coke ovens that were built in 1942 as part of the World War II effort.

As the mine was being developed, the miners and their families lived in tents. When school started, September 7, 1923, it was held in a tent. When the tent became too hot, classes were held under the cedar trees. A new brick school house was built in 1926. Other improvements included a water and sewer system, 52 four-room houses and a native stone boarding house for the single men. The latter was heated by steam from the central steam plant, as was the Japanese boarding house, the post office and the big houses in the "Circle", the upper part of town where the superintendent and other bosses lived. The post office was overseen by the company's chief clerk, Clyde Roberts, assisted by Rose Poglagen, who also ran a small library. A swimming pool was another special feature of the camp. The store, F. Anselmo and Company, was privately owned by Fortunato Anselmo, the Italian consulate for Utah. His son-in-law, Louis Veltri, later operated the store which remained open until 1946.

Columbia, like most of the coal camps, had a mixture of many nationalities, each with their own ethnic customs, but bonded together by the mine, the school, and social life of the coal camp.

In 1973 the people of the towns of Columbia and Dragerton purchased their homes and incorporated together as East Carbon City. The subdivision of Columbia has approximately 85 people living there. The only public service in the town is home mail delivery.

TOUR 8: HUNTINGTON CANYON



TOUR 8: HUNTINGTON CANYON SITE NAME	DISTANCE FROM HELPER
Huntington Canyon turnoff	28.0 miles
1. Meetinghouse Mine	35.0 miles
2. Rilda Canyon Mines	41.05 miles
3. Coal Canyon vicinity	53.0 miles

TOUR 8:
HUNTINGTON CANYON LOOP

Huntington Canyon, part of the Wasatch Plateau, is one of the most scenic and historical areas in Utah. It is a long and continuous mountain canyon, running about 30 miles from top to bottom just west of the town of Huntington. It is flanked on the north by Gentry Mountains, named for Bill Gentry, the first cattleman in the region, and on the south East Mountain or Huntington Mountain, just west of town. The canyon is rich in timber and coal. Huntington Creek follows down the canyon and meets the desert lands to the south. There are some 40 drainages with intriguing names.

Abandoned mine sites in Huntington Canyon are located in Meetinghouse, Rilda and Coal Canyons. Most of the other mines in the area were less ambitious "wagon mines". They got this name because local farmers would back their wagons up the face, load on some coal, and haul it home. Sometimes these small mines were also called "country banks."

Today, coal is still mined in other Huntington Canyon sites. Coal mining and the use of coal by two large power plants are the economic basis for Emery County.

TOUR 8:
MEETINGHOUSE CANYON

Meetinghouse Canyon (Tour 8, Site 1), one of the first branches on the south side, starting from Huntington, was so named because the early settlers of Huntington got timber there for building the first church house and other structures in the early 1880's. Some time around 1900 or later, a huge chunk of solid rock broke off from the high cliff on the north side of the canyon, slid down to the center of the canyon. This 60 foot high rock is visible from the Huntington Canyon highway a mile away. The canyon is on private property and is inaccessible.

Mines in the canyon were Huntington, Meetinghouse, Harrison, Leonard and Community. The Huntington Mine was opened in 1921 and closed in 1952. In the early 1920's a Community Coal Mine was operated by members belonging to a chamber of commerce. Coal at cost was provided to Huntington and other towns of Emery County. A permit obtained from the Bureau of Mines of the U.S. Interior Department was the first of only two such permits to ever be granted. No mines are operating in the canyon at the present time.

TOUR 8: RILDA CANYON

Rilda Canyon (Tour 8, Site 2), was named from Urilda McBride, commonly called Rilda. She was one of the first women to locate in Huntington, first settling with her family in the canyon given her name. From the canyon they cut timber for building dugouts and houses in the new Castle Valley settlements.

Mines that were located in the canyon were the Comfort Mine, active from 1936 to 1954, Helco or Black Magic Mine, active from 1938 to 1969, Johnson Mine active from 1943 to early 1950's, Rominger Mine, intermittenly active from 1938 to 1954.

TOUR 8: COAL CANYON

Coal Canyon (Tour 8, Site 3), is approximately 26 miles from the mouth of Huntington Canyon. At one time it was easy to see and visit this historical mine site. But today, it is partly under water, covered by Electric Lake, a man-made reservoir.

In 1874 coal was discovered in this canyon. The site was named Connellsville after Connellsville, Pennsylvania, a famous coking center. The Fairview Coal Mining and Coke Company erected coke ovens and attempted to set up a western center for the manufacture of coking coal. After three years of hard work, the effort was considered a failure. Other early mines in the vicinity were Loucks and Bently, both active from 1874 to 1877.

Mines in the canyon site were also known as Fairview, Bell, New York, Bear Gulch, Christensen, New York and Howell, and Tompkins. The site was active intermittently from 1875 to 1940's.

PacifiCorp – Rilda Canyon 1st Right Portal Facility

- Construction period 2006 – 2008
  - Construction of facilities minimized surface disturbance by using previously disturbed – historic mining areas:
    - Topsoil stored at Helco Mine coal pile
    - Sediment pond developed at Leroy Mine area
    - Access road utilized existing County Road
- Active from 2008 – 2017
- Portals sealed December 2017
- Demolition activities February – August 2018
- Trail Mountain Wildfire June – August 2018
- Reclamation Earthwork Phase October 2018
  - Postponed due to weather November 2018, resume/finalize spring of 2019

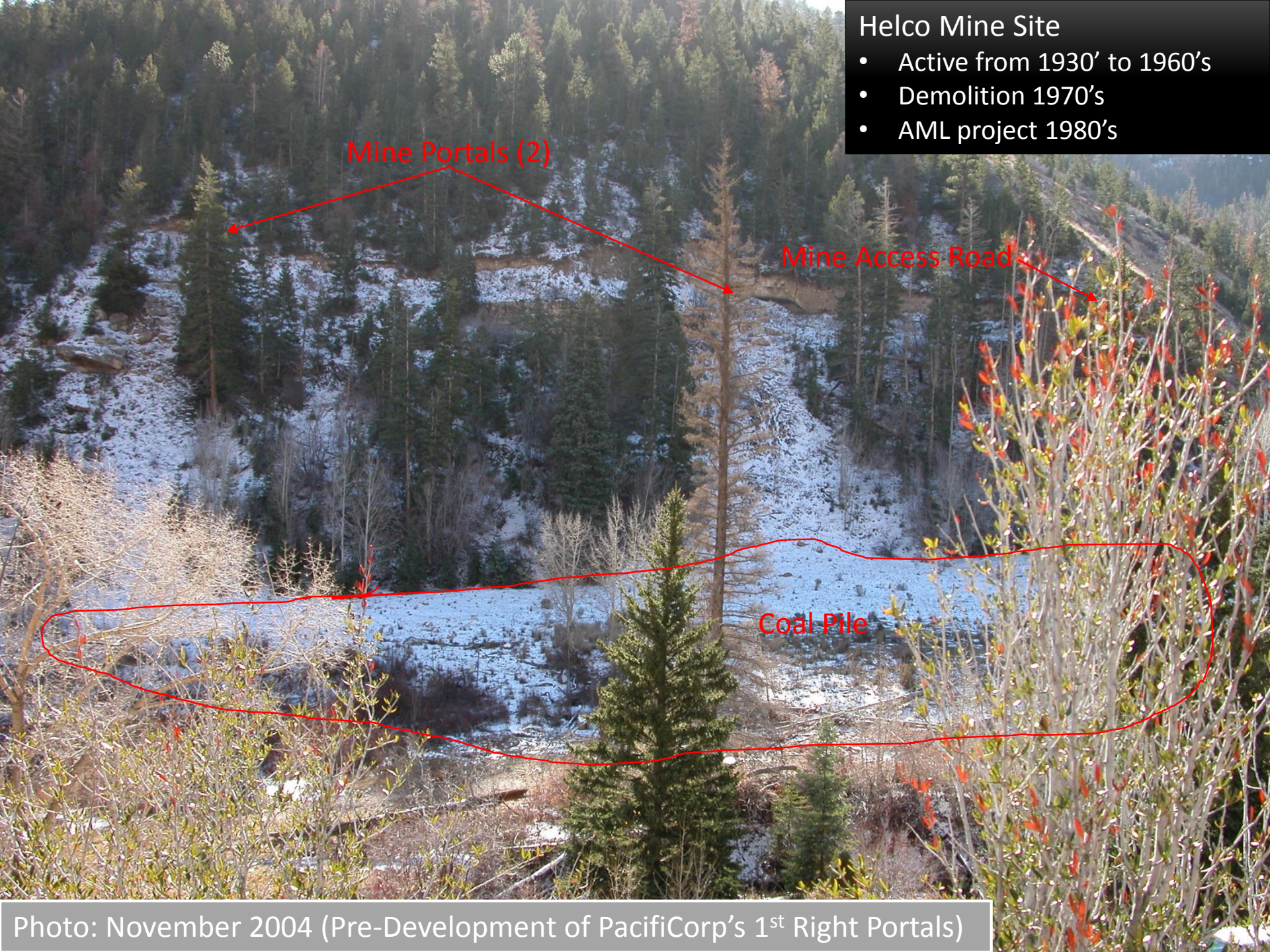


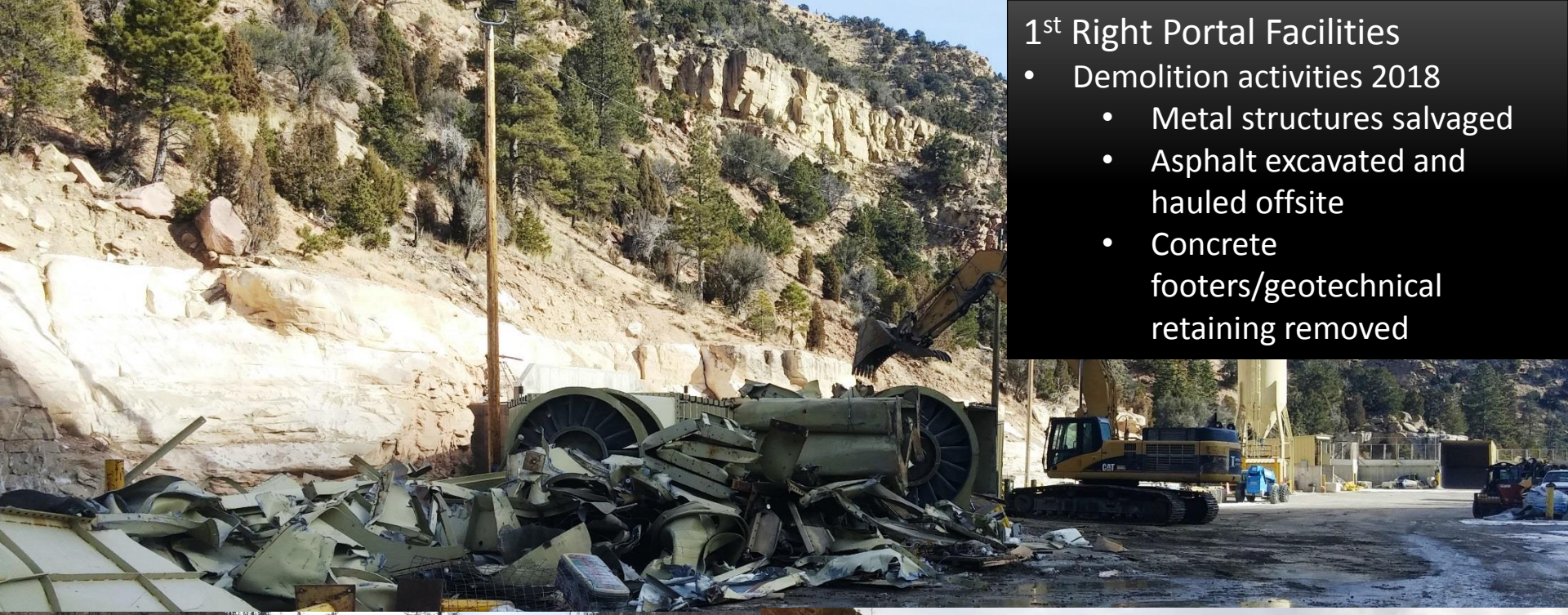
Photo: November 2004 (Pre-Development of PacifiCorp's 1st Right Portals)

PacifiCorp's 1st Right Portal Construction Phase 2006 - 2008

- Helco Mine Site Area
  - Topsoil site selection (0.51 acres)
    - Previously historic mine site (coal pile)
  - Soil survey
    - Minimal soil/mixed with coal
    - Marginal growth potential
    - Within NEWUSSD spring protection zone
  - Topsoil storage
    - Indicator marker installed to prevent disturbance of coal waste during reclamation phase
    - Area fenced/signed
  - DOGM approved final reclamation plan
    - Remove soil to indicator marker
    - Roughen area without impacting coal waste
    - Seed area

1st Right Portal Facilities

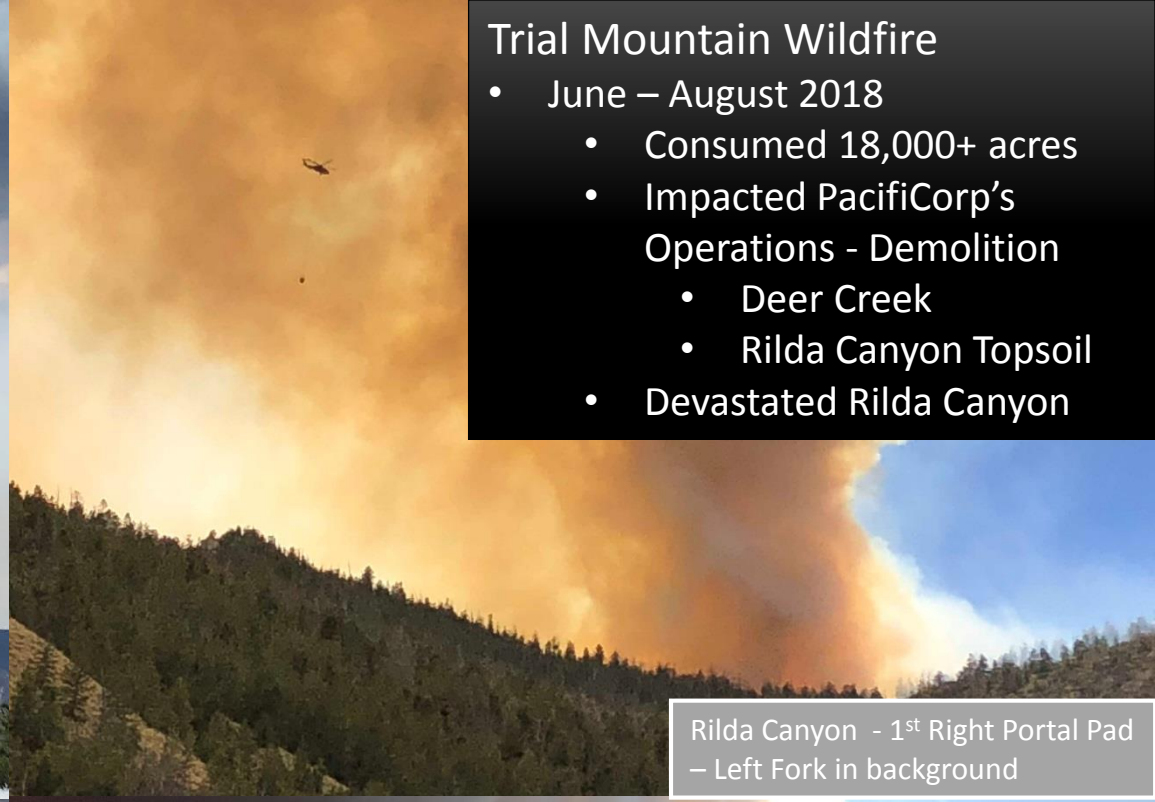
- Demolition activities 2018
  - Metal structures salvaged
  - Asphalt excavated and hauled offsite
  - Concrete footers/geotechnical retaining removed



Trial Mountain Wildfire

- June – August 2018
  - Consumed 18,000+ acres
  - Impacted PacifiCorp's Operations - Demolition
    - Deer Creek
    - Rilda Canyon Topsoil
  - Devastated Rilda Canyon

Huntington City – view looking west - East Mountain in background



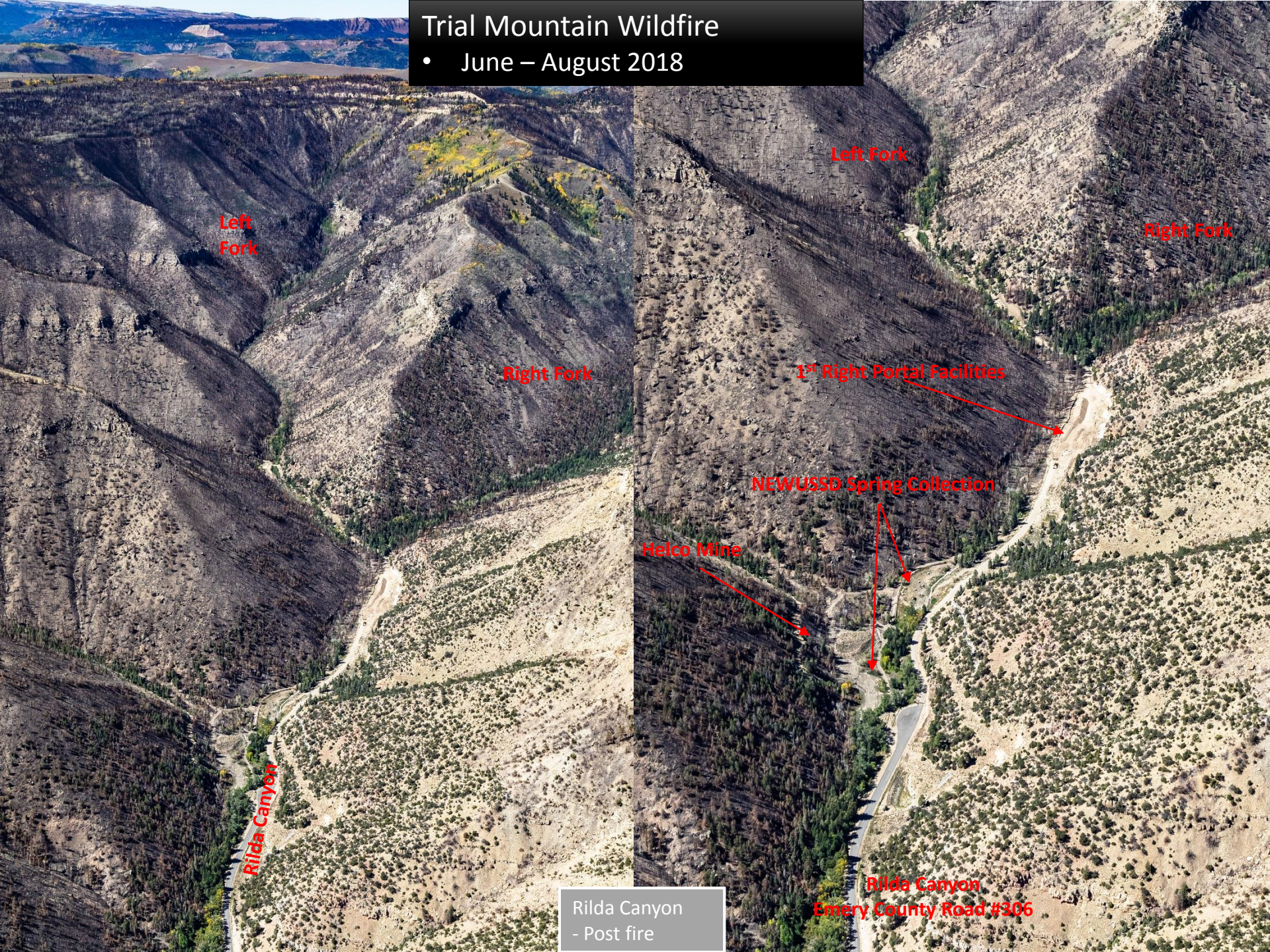
Rilda Canyon - 1st Right Portal Pad – Left Fork in background

Rilda Canyon - 1st Right Portal Pad

Rilda Canyon - 1st Right Portal Pad – Left Fork in background

Trial Mountain Wildfire

- June – August 2018



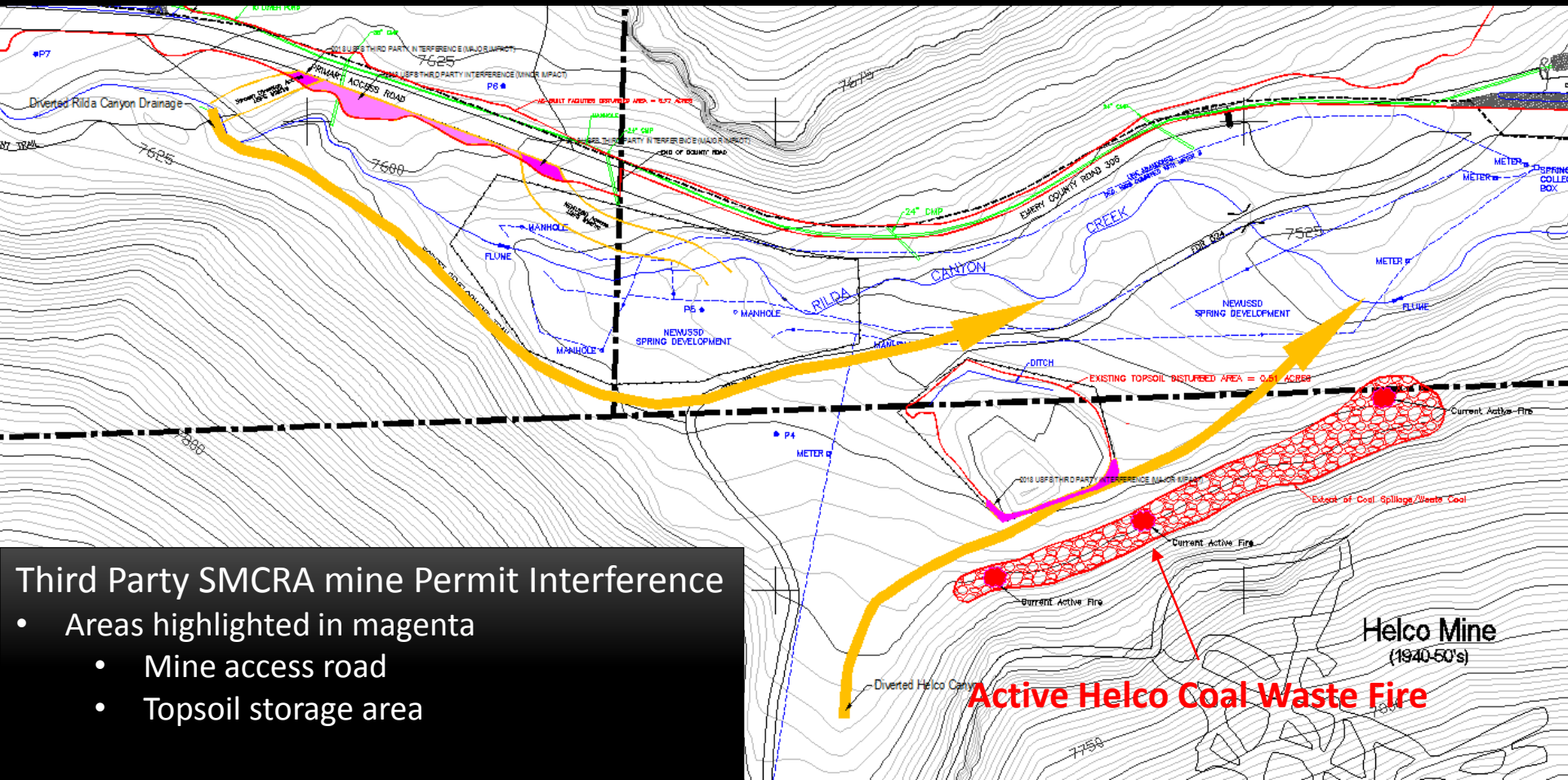
Rilda Canyon
- Post fire

Helco Mine – active coal waste fire

- Activated by the Trail Mountain Wildfire 2018
- AML pursuing plans to extinguish fire in 2019

2018 Trail Mountain Wildfire – Third Party SMCRA Mine Permit Interference

- Deer Creek Mine permit area – 1st Right Rilda Canyon disturbed boundary (red line on map below)
- United States Forest Service hydrologic mitigation projects
  - Project scope priority
    - Protection of culinary water source (NEWUSSD Rilda Canyon Springs)
      - Diverted Rilda Canyon drainage above Rilda Canyon Springs
      - Diverted Helco Canyon drainage above Rilda Canyon Springs
    - Control sediment production - protect downstream users
    - Safety – removed affected trees

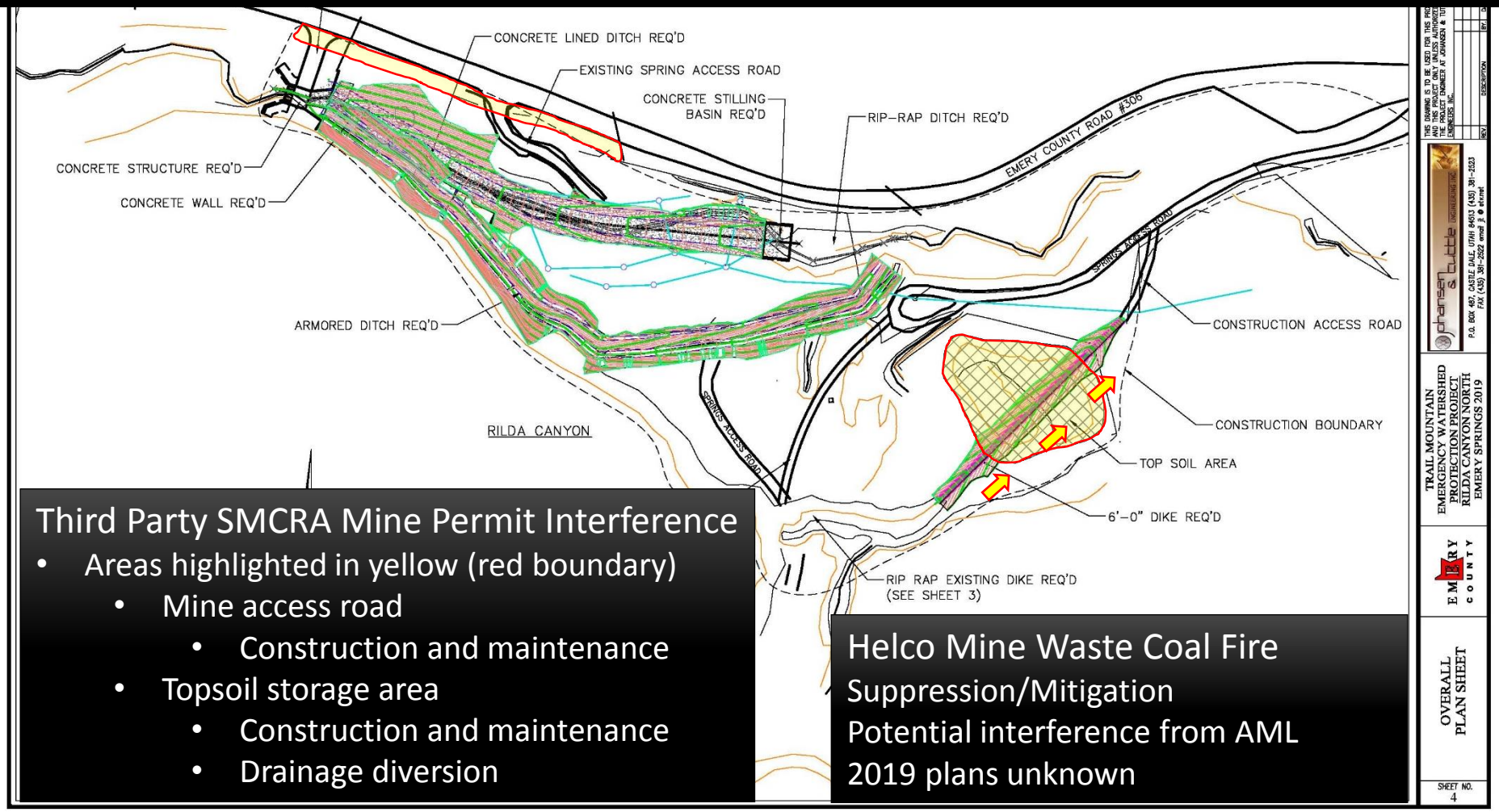


Third Party SMCRA mine Permit Interference

- Areas highlighted in magenta
  - Mine access road
  - Topsoil storage area

2019 Trail Mountain Wildfire – Planned Third Party SMCRA Mine Permit Interference

- Deer Creek Mine permit area – 1st Right Rilda Canyon disturbed boundary (red line on map below)
- Emery County hydrologic mitigation projects
  - Project scope priority
    - Protection of culinary water source (NEWUSSD Rilda Canyon Springs)
      - Diverted Rilda Canyon drainage above Rilda Canyon Springs
      - Diverted Helco Canyon drainage above Rilda Canyon Springs
    - Control sediment production - protect downstream users
    - * Helco Mine coal waste fire extinguishment not included in scope – AML project*



Third Party SMCRA Mine Permit Interference

- Areas highlighted in yellow (red boundary)
  - Mine access road
    - Construction and maintenance
  - Topsoil storage area
    - Construction and maintenance
    - Drainage diversion

Helco Mine Waste Coal Fire

Suppression/Mitigation

Potential interference from AML

2019 plans unknown