



Abandoned Mine Reclamation Program PROJECT SUMMARY

WOLF DEN FIRE REMEDIATION PROJECT

Project Location and Background

The Wolf Den Fire Remediation Project site is located approximately fifty-one miles southeast of the city of Vernal, Utah. The Uintah Basin has been mined from 1886 through the present day for uintaite (Gilsonite) ore. Gilsonite forms vertical, nearly parallel veins of varying depth, width, and length. The mines in the Wolf Den Project area were developed initially by driving a haulage tunnel beginning at the Dragon Utah mine portal. Raises or vertical shafts were developed on 100 to 300-foot centers to the surface from the haulage level. Each raise consisted of a completely lagged manway and ore chute. The mines operated in a stope method whereby the ore was removed from the back (roof) dropped to a platform supported by stulls and pushed to an ore chute. The railed haulage tunnel likely did not extend to the project area. In the project area it is likely that the Gilsonite was bagged in the mine and then hoisted to the surface in the vertical shafts.

The AMRP first visited the Wolf Den Fire Remediation Project area during the summer of 2012. This fire was started by the Wolf Den Range fire. Reclamation at the mines took place between July 2015 and October 2015 and totaled \$146,335.87.

The photos to the right show the Black Dragon Gilsonite vein looking towards the southeast standing near the Rector shaft. The top photo shows the site before construction view. The bottom photo shows the initial closure of the first shaft southeast of the Rector shaft. The cleared area at the upper right of the bottom photo is the borrow area developed on BLM lands to complete the project. Note that initial fill appears to extinguish the fire. The unburned Rector shaft was filled with 676 CuYd (estimated quantity 660 CuYd) creating a fire stop.

The AMRP in the Division of Oil, Gas and Mining, Utah Department of Natural Resources, was created in 1983 to address physical safety hazards associated with abandoned mines as authorized by the Surface Mining Reclamation and Control Act (SMCRA) of 1977. The Program is funded by The Utah Coal Producers who pay an abandoned mine reclamation fee to the Office of Surface Mining (OSM) on each ton of coal mined in Utah.

Uintah County, Utah

AMR/047/907



Owners: American Gilsonite Company Inc.
Project Engineering: Spectrum
Project Construction: Harrison Oilfield Services
AMRP Project Manager: Mark Wright



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Wolf Den Fire Remediation , 2015 -- Construction Summary

Harrison Oilfield Services out of Moab, Utah was awarded the contract for the project. The Wolf Den Fire Remediation work included the excavation and placement of 14,262 cubic yards of backfill .

PROJECT HIGHLIGHTS:

- Project Cost:** Bid Amount \$ 176,119.00
Final Amount \$ 146,335.87
- Change Orders:** 1- (\$29,783.13)
Quantity adjustments (reductions)
due to reduced fill volumes.
- Project Dates:** Start: July 27, 2015
Finish: October 5, 2015
- Accomplishments:** Backfill placed: 14,262 CuYd
Approximately 700 lineal feet of
Features Closed.
Revegetation: ~ 7 ACRES

The flow of smoke increases after the initial shaft closure (top) , water placed to flow through fill into fire zone, slight flow of smoke (middle).



Final reclaimed condition of the Black Dragon Gilsonite Vein in the area of active fire (left) note that no smoke is visible, Rector shaft closure complete (right).



Wolf Den Fire Remediation Project
AMLIS Keys: UT239
Construction Cost: \$146,335.87