



OGMCOAL DNR <ogmcoal@utah.gov>

Fwd: Sinkhole at Sufco Mine

Karl Houskeeper <karlhouskeeper@utah.gov>
To: OGMCOAL DNR <OGMCOAL@utah.gov>

Wed, Apr 6, 2016 at 3:09 PM

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From: **Wyatt Shakespear** <WShakespear@bowieresources.onmicrosoft.com>

Date: Wed, Apr 6, 2016 at 8:31 AM

Subject: Sinkhole at Sufco Mine

To: "DARONHADDOCK@utah.gov" <DARONHADDOCK@utah.gov>

Cc: Amanda Daniels <amandadaniels@utah.gov>, "karlhouskeeper@utah.gov" <karlhouskeeper@utah.gov>, Chris Hansen <chansen@bowieresources.com>, Jacob Smith <jsmith@bowieresources.com>

Daron,

The purpose of this email is to notify the Division that Sufco Mine has encountered an unusual sinkhole on the surface above our 2RWL panel within the Castlegate Sandstone. It is located near mid-panel in an area mined back in December 2016. The sinkhole measures roughly 40 ft. W X 50 ft. L X 40 ft. deep.

This is the first time we have ever observed such a feature during longwall mining. It is located along a fault zone we crossed in that area at depth. We suspect the fault zone may actually be exposed within the sinkhole at the surface but more mapping and observation will be required once the area is accessible by vehicles. Sink features are known to occur naturally in the Castlegate Sandstone along the Mud Springs Hollow fault zone nearby to the east. We suspect that mining-related subsidence has triggered this collapse into some sort of cavity within the fault zone. Exploration drilling over the years in this area has encountered voids on occasion but such voids have always been interpreted as limited zones of open fractures. In this case there may have been a large open fracture that allowed accommodation space for the sinkhole to develop.

Longwall mining height was in the 9 to 10.5 ft. range beneath the sinkhole while the sinkhole is approximately 40 ft. deep, definitely much deeper than could have been produced by subsidence alone. Overburden depth in the area is 890 ft. At that depth and at mid-panel, we would normally project subsidence of about 50-60% mine height, or about 5 to 6 ft.

We have notified Rob Hamilton with the Fishlake National Forest regarding this matter. Also, we are constructing a barbed wire fence surrounding the sinkhole area in the interest of public safety. If you need more information, please call me at (435) 286-4490 or Vicky at (435) 286-4481. I have attached photos as well as a map to this email, and coordinates of the sinkhole below:

- UTM WGS84 - 462,587 E 4,308,832 N
- ST PLN NAD 27 - 2,019,674.6 E 216,479.1 N

Thanks,

Wyatt

Wyatt Shakespear

Environmental Engineer

Canyon Fuel Company- Sufco Mine

(435) 286-4490

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—
Karl R. Houskeeper

Environmental Scientist III

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4 attachments



DSC01500.jpg
8096K



DSC01505.jpg
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8031K



Sinkhole Map to DOGM.pdf
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