

Taylor Mine Accident Documents
Taylor Mine
Taylor Coal Company
Beaver Dam, Ohio Co., KY
Accident date: May 6, 1913
Time range of materials: May 6-27, 1913
Number of items: 3

Material types: preliminary report, report and mine map
Important persons: H. D. Mason (Mine Foreman)
System is arranged chronologically, by date filed.

Historical note: The Taylor Mine was a drift mine owned and operated by the Taylor Coal Company, of Kentucky. At the time of the accident, the mine foreman (John Vellar), General Mine Superintendent Charles F. Fraser and President I. P. Bernard were at the scene. The former two were killed. The shaft in which the accident was located was formerly an intake air shaft, located four miles from Beaver Dam, KY. At the time of the accident, the shaft was abandoned. Five men were overcome by carbon dioxide and drowned in the water that had accumulated at the bottom of the shaft.

Scanned into computer date: June 21, 2010

Date	Type	Filed by	Subject	Size
5/6/1913	Preliminary report	US Bureau of Mines	Preliminary report of the May 6 th disaster at Beaver Dam, KY	1 page
5/26/1913	Report	H.D. Mason, Jr. (Foreman Miner)	Report on Shaft Accident at Taylor Mine of the Taylor Coal Company at Beaver Dam, KY	6 pages
5/27/1913	Map	US Bureau of Mines; drawn by H. D. Mason	Profile showing Old Air Shaft near Beaver Dam, KY. Taylor Mine of the Taylor Coal Co. Scene of Accident	1 page

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

MISCELLANEOUS MINE DISASTER

File No. D-184

Mine Taylor Location Beaver Dam, Ohio County, Ky

Company Taylor Coal Co Mailing address do

Date May 6, 1913 Time of day 11 a.m. ___ p.m. Mine working or idle Working

Total employment ___ Underground ___ Shifts worked ___ Daily production (tons) 1200

Number men killed 5 Trapped 0 Injured 0 In mine 5

Number men escaped unassisted 0 Rescued 0

Type of disaster: Fall of materials ___ Explosives ___

Flood ___ Machinery ___ Electricity ___

Cave-in ___ Bump ___ Other Suffocation (CO₂ from old works)

Cause of accident In attempting to drain water from old workings, water was lowered allowing CO₂ to pass from mine to shaft, mine foreman descended. Shaft was overcome by CO₂ and fell in water, Carl Supt attempted rescue and was overcome. Subsequently 3 other men met a similar fate.

Accident on surface ___ Underground Location of area involved Old shallow shaft

Mine openings Drifts Principal Drift

Coalbed No. 9 Thickness 48"-60" Roof hard black shale Floor hard fireclay

Mine opening elevations not stated Coal elevations at area involved not stated

Mining system Room & pillar Pillars extracted No

Roof support: Main entries ___ Intermediate ___ Section ___

Classification (gassy or nongassy) ___ Number main fans ___

Quantity air per minute ___ Ventilation (continuous or split) ___

Electricity (voltage ac or dc) ___ Face ___ Portable lights ___

Principal mining machinery (continuous miners, conventional, etc.) ___

Blasting and explosives: Coal ___ Grading or other use ___

Was Bureau report made Yes Author(s) HD Mason Jr.

If no Bureau report, what and by whom ___

Remarks This accident not connected to the main mine thus details omitted from report

REPORT
ON
SHAFT ACCIDENT
at
TAYLOR MINE
of the
TAYLOR COAL COMPANY,

at
BEAVER DAM, KY.

May 6, 1913.

by
H. D. Mason, Jr.
Foreman Miner.

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Pittsburgh, Pa.,
May 26, 1913.

The accident occurred at 11:00 a.m., May 6, 1913, at an old air shaft, 22 feet deep, in the abandoned workings of the Taylor Mine operated by the Taylor Coal Co., at Beaver Dam, Ohio County, Ky., in which five men lost their lives by being overcome by carbon dioxide and drowned at the bottom of the old shaft, which was filled with water.

Location: This abandoned shaft is located 4 miles from Beaver Dam, Ky., on the line of the Illinois Central R.R. and two miles from the tipple and power-plant of the Taylor Mine. It was formerly an intake air shaft.

Ownership: Taylor Mine is operated by the Taylor Coal Co., of Kentucky, mine address Beaver Dam, Ky., John Vellar, Mine Foreman, and Charles F. Fraser, General Mine Superintendent, were both killed in the accident, and President I. P. Barnard was on the ground at the time.

Geology and Character of Coal: The seam worked in the Taylor Mine is the #9 seam of the Kentucky Geological series, averaging from 4 to 5 feet in thickness. In the shaft where the accident occurred the seam is 4'8" in thickness, containing the usual persistent sulphur parting near the bottom.

The coal of the Taylor Mine is marketed under the trade name of #9 coal and is shipped south over the I. C R.R. to Memphis and New Orleans.

The immediate roof is a hard, tough, black slate, 4 to 8 inches thick, which does not weather nor break easily, constituting an exceptionally safe and permanent top.

The bottom is a hard, smooth fire-clay, generally about three feet thick, which becomes soft upon weathering.

Gas: The Taylor Mine is non-gaseous. Methane has never been detected in either the active or abandoned workings, but the abandoned workings are bratticed off with gob as is customary in the mines throughout Western Kentucky, and consequently carbon dioxide accumulates very strongly in these abandoned workings.

System of Mining: The Taylor Mine is a drift mine, electrically equipped, well kept up inside, with every precaution taken for the safety and welfare of the men. When the writer inspected this mine in company with K. H. Chisholm and mine foreman John Vellar in November, 1912, it appeared one of the safest coal mining operations imaginable; an exceptionally good roof; no methane generated; all haulageways neat and clean, and an excellent air current in all working places, and the mine managed with exceptional efficiency. The room and pillar, double entry system is used and no pillars have been drawn, the tough black slate top remaining intact for years and keeping the abandoned workings open, although filled with carbon dioxide as previously stated.

The Taylor Mine operates very steadily the year around and produces 1200 tons per diem.

General Mine Superintendent C. F. Fraser was a coal man of wide experience, a bright up-to-date, energetic manager of the finest type, and a firm believer in the practise of

"safety first" methods at his mines. Supt. Fraser and Mine Foreman Vellar both took the Bureau training course at Car #3 at McHenry, Ky., in November, 1912, bringing their men from Taylor mine a distance of 5 miles each evening after working hours.

Story of Accident:

The abandoned shaft 22 ft. 8 in. deep, had filled up with water to a depth of 6 feet from the old entry, 4 ft. 8 in. in height, and a drainage drift was being driven in from the hillside for the purpose of drawing off this water from the old workings. (see sketch). This drainage drift had been driven a distance of 24 feet and there remained a thickness of 28 feet of solid coal between the bottom of the old shaft and the face of the drainage entry. A six foot drill hole had also been bored in advance of the coal face.

The seepage of water through this intervening coal stratum gradually lowered the water level in the old entry, until a 6 inch air space separated the top from the level of the standing water. Through this air space was forced the carbon dioxide gas from the accumulation in the old workings, and this gas at least partially filled up the old shaft. Several days previous to the lowering of the water level in the shaft, Mining Engineer Carl D. Fraser, a son of C. F. Fraser, had descended this old shaft as far as the water permitted and had noticed no ill effects, nor indications of carbon dioxide.

At 11:00 a.m., May 6, 1913, Mine Foreman John Vellar,

who had charge of the four men driving the drainage entry, started to descend the old shaft, by means of the 2 x 4 timbers with which it was lined. Vellar fell into the water at the bottom of the shaft, the splash being heard by Genl. Supt. C. F. Fraser, who was standing on the surface about 100 feet distant, conversing with I. P. Barnard, President of the Taylor Coal Co.

Fraser thought Vellar had slipped and fallen into the water, so ran over at once and started down the shaft. When part way down Fraser felt that he was being overcome and called for help. Barnard, (an old man) called to the men working in the drainage entry and they at once responded. Labor Foreman Edward Burke at once started down the shaft but was overcome almost immediately and fell upon Fraser, who was still clinging to the timbers, and both fell into the water. J. E. Porter and J. P. Raymer, laborers, followed Burke with like results, both falling into the water at the bottom of the shaft.

Barnard and the other laborer from the drainage entry ran to the nearest farmhouse, $\frac{1}{2}$ mile distant, for aid, and brought several men back with them. Testing with an open light at the top of the shaft, the light was extinguished at a distance of one foot below the surface, and it was then seen how very poisonous the gas was. More help was then secured from the Taylor Mine, two miles distant, and a rope rigged up with a hook attachment, by which means the five bodies were drawn up from the bottom of the shaft.

Over an hour had elapsed since the men had been overcome and there was no sign of life in any of the bodies. All had apparently been drowned. At 2:00 p.m., Mine Inspector Sears arrived from Central City with two oxygen helmets and a pulmotor, but it was too late, although the pulmotor was tried on several of the bodies. The unexpectedness and rapidity with which the accident had occurred, combined with the remote situation of the shaft, rendered rescue impossible.

Lessons to be Learned: Undoubtedly the atmosphere in the shaft should have been tested with an open light, or preferably a safety lamp, and the extinguishing of the light would have warned Vellar against attempting the descent.

However, as Engineer Fraser had been down in the shaft several days previously, Vellar never thought of any danger. When Vellar fell into the water, Fraser, also a capable and experienced mining man, thought that Vellar had slipped and lost his hold on the timbers, and in his anxiety to rescue him from the shaft bottom did not think of his own safety but courageously started down the shaft. Likewise, the three others, heroes all of them, Burke, Porter and Raymer, followed their comrades to certain death.

It was a very sad accident, and peculiar as well, considering the narrow limits in which it occurred. It teaches that notwithstanding seemingly safe conditions, the ordinary safety precautions should invariably be observed.

I am indebted to George Wales, Mining Engineer, Central

City, Kentucky, for the details of this accident.

Respectfully submitted.

(signed) H. D. Mason, Jr.

Foreman Miner.

Pittsburgh, Pa.,
May 26, 1913.

PROFILE

SHOWING

OLD AIR SHAFT NEAR BEAVER DAM, KY.
TAYLOR MINE OF THE TAYLOR COAL CO.
SCENE OF ACCIDENT OF MAY 6, 1913.

