

EXPLANATION

MINING GEOLOGY

- UPPER FREEPORT OR E SEAM
- LOWER FREEPORT OR D SEAM
- UPPER KITTANNING OR C SEAM
- MIDDLE KITTANNING OR C SEAM
- LOWER KITTANNING OR B SEAM
- SCRUBGRASS SEAM
- CLARION OR A SEAM
- BROOKVILLE OR A SEAM

AFFECTED BY OTHER COMPANIES AND FIRE CLAY MINING AREAS

DATE	AFFECTED AREA INCREMENT CUMULATIVE	BACKFILL AREA INCREMENT CUMULATIVE	RESIDUAL AREA
JULY 1952	221.78	17.40	204.38
MAY 16, 1955	23.05	3.17	197.24
MAY 16, 1956	23.05	3.17	197.24
JUNE 25, 1957	5.29	3.17	197.24
SEPT 11, 1957	—	3.17	197.24
FEB 4, 1958	822.10	30.98	166.06
JUNE 16, 1958	4.98	30.98	166.06
MAY 27, 1959	7.01	30.98	166.06
MAY 28, 1960	19.69	30.98	166.06
MAY 27, 1961	11.95	30.98	166.06
MAY 22, 1962	5.66	30.98	166.06
MAY 21, 1963	23.93	30.98	166.06
OCT 5, 1963	—	30.98	166.06
JAN 23, 1964	8.65	30.98	166.06
AUG 10, 1964	3.03	30.98	166.06
JUN 4, 1965	5.33	30.98	166.06
JULY 8, 1965	3.19	30.98	166.06
SEPT 16, 1965	—	30.98	166.06
JAN 6, 1966	6.45	30.98	166.06
JULY 12, 1966	4.20	30.98	166.06
DEC 28, 1966	12.23	30.98	166.06
APR 3, 1967	—	30.98	166.06

© INCLUDES 4.15 ACRES BACKFILLED BY PA. DEPT. OF MINES

17.40 ACRES BACKFILLED FOR APPROVAL

GLEN WHITE COAL AND LUMBER CO.

BETHLEHEM MINES CORP.

R. HANNUM

J. DILWORTH

WILLIAM HORNER

JOHN SMITH

OPERATION MAP
CAVALIER COAL CO., INC.

SITUATE IN
LOGAN TWP., BLAIR CO. & GALLITZIN TWP., CAMBRIA CO., PA.

SCALE: 1 IN. = 400 FT.

LEWIS L. GWIN—CONSULTING ENGINEERS
JOHN W. FOREMAN—MINING ENGINEER
ALTOONA, PENNSYLVANIA

