

PANEL PLAN OF MINING

— 95% MACHINE COAL —

50' CENTER BUTTS, 220' APART.

WITH
ROOMS ON 35' CENTERS.

H. C. FRICK COKE CO.
SOUTHERN DIVISION,
UNIONTOWN OFFICE
NOVEMBER, 1931.

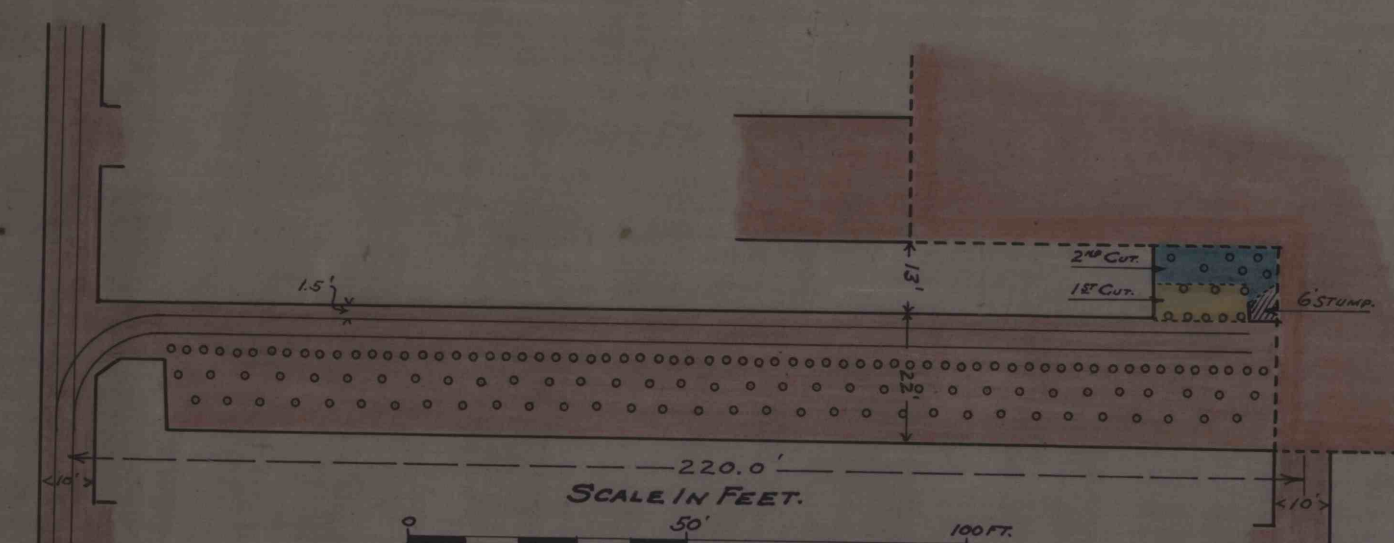
ESTIMATED OPERATING DATA AND SPECIFICATIONS.

The Flats & Butts, With Necessary Chutes For Ventilation Constitute The Development.
The Extraction Of The Resultant Pillar Or Panel Of Coal Constitutes The Rib Work.

Size Of Panel Of Coal	210' x 840'
Width Of Flats, Butts And Chutes	10'
" " Rooms	22'
" " Open End Cutovers	22'
Length Of Cutter Bar For Development (Track Machine)	9'
" " " Rib Extraction (Shortwall Machine)	7'
Depth Of Cut In Development	8'
" " " Rib Extraction	6'
Rate Of Rib Extraction On Face Course, Per Shift	11'
Angle Of Rib Line With Face Course	41°
Rib Coal That Can Be Undercut	95%
Estimated Coal Recovery For Mineable Height	96 1/2%
Development	9%
Rib Extraction	91%
Total Shifts To Extract One Panel	1320
Panel Extracted Every	1088 Shifts.
Over Lap	232 "
Weight Of Rail On Butts	40 LB.
" " In Rooms	25 LB.
Tons Of Coal In One Face Room & One Rib Pillar (99% Rec.)	1892
Total Posts Set	272
" " Required	155
" " Lost	140
Timber Cost Per Ton	\$0.014
Tons Per Post	13 1/2
Tons Produced Per Panel Or Butt Per Shift	553
Mining Height Of Coal Used	6 1/2 Ft.
Recovery On Development And Face Rooms Used	100%
" " Rib Between Rooms Used	90%

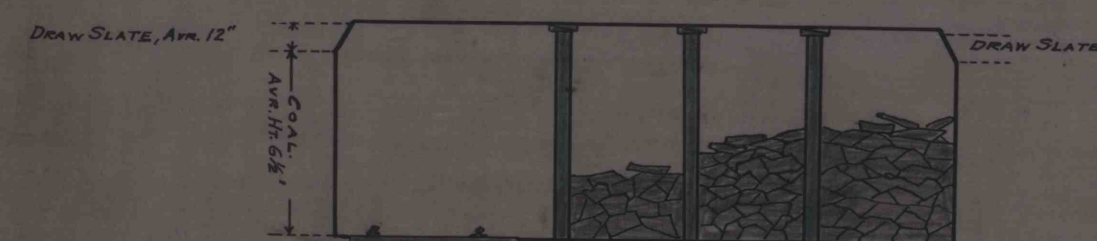
The Key To Starting 35' Center Face Rooms Is A Four Day Interval.

Miners Track For Driving Room Serves For Bringing Back The Rib. — No Additional Switches Or Curves Required.



TYPICAL ROOM.

SLATE TAKEN DOWN AND LOADED OUT IN HEADINGS & ROOM NECKS.
" " " STORED ON WIDE SIDE IN ROOMS.
" " " " ROOM IN 14" CUT IN OPEN END CUTOVER.
" IN 2nd CUT IN OPEN END CUTOVER NOT HANDLED.
1st ROW OF POSTS 3' FROM RAIL, ON 3' CENTERS.
2nd " " ON 6' CENTERS—STAGGERED.
3rd " " 6' " "
AVERAGE OF 14 POSTS IN CUTOVER.
2nd & 3rd ROWS OF POSTS USUALLY LOST, BEING IN STORED DRAW SLATE.
6' STUMP LEFT IN 14" CUT IN OPEN END CUTOVER.
2nd CUT GRIPS THRU TO GOB.
STUMP USUALLY RECOVERED BY PICK WORK.
RT. RAIL CONFORMS WITH CENTER LINE.
USE ADDITIONAL POSTS AND CROSSBARS TO MEET ROOF CONDITIONS.
CROSS CUTS FOR VENTILATION ARE DRIVEN 6' TO 8' WIDE.



TYPICAL CROSS SECTION IN ROOM.

GROOVE BOTTOM COAL OR USE STEEL TIES FOR 25" TRACK.
USE PREPARED WEDGE SHAPED CAP PIECES.
TWO CUTS ARE TAKEN OUT OF ROOM BEFORE ROOM IS WIDENED.



SCALE IN FEET.
0 50' 100' 200' 300' 400 FT.