

U. S. Department of Labor

Mine Safety and Health Administration  
100 Bluestone Road  
Mount Hope, WV 25880-1000



DEC 18 2009

*Face sketch  
+ route CM return*

Mr. Chris Blanchard  
President  
Performance Coal Company  
P. O. Box 69  
Naoma, WV 25140

Dear Mine Operator:

Subject: Mine Ventilation Plan, Section 75.370, 30 CFR 75, Upper  
Big Branch Mine - South, I.D. No. 46-08436, Performance  
Coal Company, Montcoal, Raleigh County, West Virginia

This will acknowledge receipt of a revision to the ventilation plan, dated December 14, 2009, and submitted to this office December 16, 2009.

The ventilation revision requests to route a travelable return air course from the active MMU-029 into a common entry with MMU-040; make the #3 headgate entry a common intake air course with the existing primary escapeway; add a regulator to the overcast at the #1 Crossover on Headgate 1 North to allow the belt air to be reversed away from the longwall face; provide dewatering information; and project a future gateroad. A face sketch depicting mining Headgate 2 North with the belt line in #1 entry being ventilated with neutral air is included in the ventilation revision. In addition a face sketch is included depicting the typical longwall face ventilation for the No. 1 North Panel.

This revision is hereby approved and will be made a part of the approved plan for this mine. This approval is limited to the requested change as described in the submittal letter and shown on the attached map of the subject mine. **All ventilation changes will be made in accordance with 30 CFR 75.324.**

Please note, a second longwall panel will not be possible if the condition of the third entry of the #1 headgate cannot be maintained in adequate condition to comply with the requirements of 30 CFR 75.384. 30 CFR 75.384 requires a travelable tailgate entry for both current and future longwall panels. Additionally, the currently approved ventilation base plan and this revision require isolation of the tailgate entry to

SUPERVISORY ACKNOWLEDGEMENT

*RK 12/18/09*  
\_\_\_\_\_  
Initials *jm 12/18* Date

prevent the longwall tailgate travelway from being ventilated with air from the worked out area.

Should you have any questions concerning this matter, please contact the Ventilation Department at (304) 877-3900/Ext. 142.

Sincerely,

**/s/ Richard J. Kline**

Robert G. Hardman  
District Manager  
Coal Mine Safety and Health, District 4

Cc: Mt. Hope Field Office (3 incl.)/ Files/nlc



DEC 18 2009

Mr. Chris Blanchard  
President  
Performance Coal Company  
P. O. Box 69  
Naoma, WV 25140

Dear Mine Operator:

Subject: Mine Ventilation Plan, Section 75.370, 30 CFR 75, Upper  
Big Branch Mine - South, I.D. No. 46-08436, Performance  
Coal Company, Montcoal, Raleigh County, West Virginia

This will acknowledge receipt of a revision to the ventilation plan, dated December 14, 2009, and submitted to this office December 16, 2009.

The ventilation revision requests to route a travelable return air course from the active MMU-029 into a common entry with MMU-040; make the #3 headgate entry a common intake air course with the existing primary escapeway; add a regulator to the overcast at the #1 Crossover on Headgate 1 North to allow the belt air to be reversed away from the longwall face; provide dewatering information; and project a future gateroad. A face sketch depicting mining Headgate 2 North with the belt line in #1 entry being ventilated with neutral air is included in the ventilation revision. In addition a face sketch is included depicting the typical longwall face ventilation for the No. 1 North Panel.

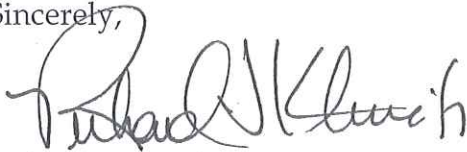
This revision is hereby approved and will be made a part of the approved plan for this mine. This approval is limited to the requested change as described in the submittal letter and shown on the attached map of the subject mine. **All ventilation changes will be made in accordance with 30 CFR 75.324.**

Please note, a second longwall panel will not be possible if the condition of the third entry of the #1 headgate cannot be maintained in adequate condition to comply with the requirements of 30 CFR 75.384. 30 CFR 75.384 requires a travelable tailgate entry for both current and future longwall panels. Additionally, the currently approved ventilation base plan and this revision require isolation of the tailgate entry to

prevent the longwall tailgate travelway from being ventilated with air from the worked out area.

Should you have any questions concerning this matter, please contact the Ventilation Department at (304) 877-3900/Ext. 142.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert G. Hardman". The signature is written in a cursive style with a large initial "R".

Robert G. Hardman  
District Manager  
Coal Mine Safety and Health, District 4

Cc: Mt. Hope Field Office (3 incl.)/ Files/nlc



# Performance Coal Company

P.O. Box 69

Naoma, WV

25140

December 14, 2009

Mr. Robert G. Hardman  
Mine Safety and Health Administration  
100 Bluestone Road  
Mount Hope, WV 25880

Re: Performance Coal Company  
Upper Big Branch Mine  
MSHA ID: 46-08436  
State ID: U-3042-92  
Ventilation Revision

Dear Sir:

Please find attached a ventilation revision to route the travelable return from the active MMU 029-0 into a common entry with MMU 040-0. This revision will also make the #3 entry of the longwall headgate common with the bleeder air of the longwall. Prior to activation of the longwall section in the second Northern longwall panel, this future tailgate entry will be maintained travelable as required by 75.215 and isolated to comply with 75.334, 75.364(a)(2), and 75.384.

A drawing is attached showing the controls to be removed and installed for this revision. The return off of MMU 029-0 will be routed down the left side of North Glory Mains where it will cross overcasts on Headgate 1 North and be sent up Tailgate 1 North to the return shaft. The previous return entry will be made common with the belt along the #2 Crossover and with the longwall intake along Headgate 1 North. EP-LW1, MP A, and MP@X-Cut36 will now include the #3 entry. A regulator will be added in the overcast at the #1 Crossover on Headgate 1 North. This will allow the belt air to be reversed away from the longwall face. A typical longwall face sketch is included showing this change.

A face sketch is also included showing mining with the #1 entry containing the belt. This scheme will be used to mine Headgate 2 North. Please also find as a part of this revision, the bottom contour elevations in the bleeders of the active longwall. This will also show the dewatering system in place to handle future inflows of water and to keep ventilation uninterrupted.

This revision is limited to the changes shown. All previously approved plan contents will be adhered to. There is currently no miner's representative at the Upper Big Branch Mine. This plan will be posted at the mine office.

Respectfully Submitted,

Matthew Walker  
Mine Engineer  
Performance Coal Company

MSHA  
MOUNT HOPE WV

DEC 14 2009

RECEIVED  
VENTILATION

DEC 14 2009

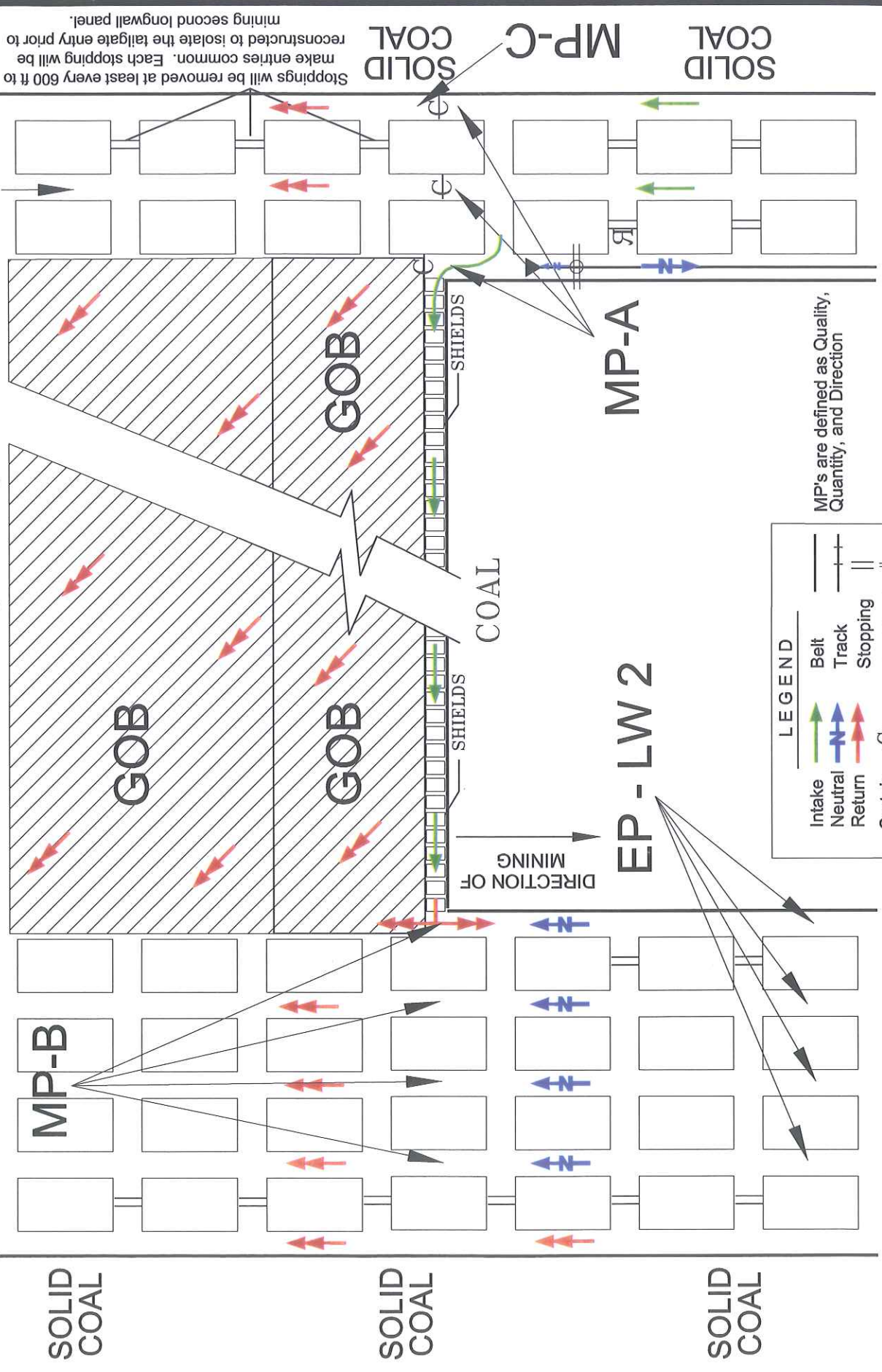
RECEIVED  
VENTILATION

# TYPICAL LONGWALL FACE VENTILATION

## Performance Coal Company

### Upper Big Branch Mine 46-08436 (U-3042-92)

#### No. 1 North Panel (Belt Air)

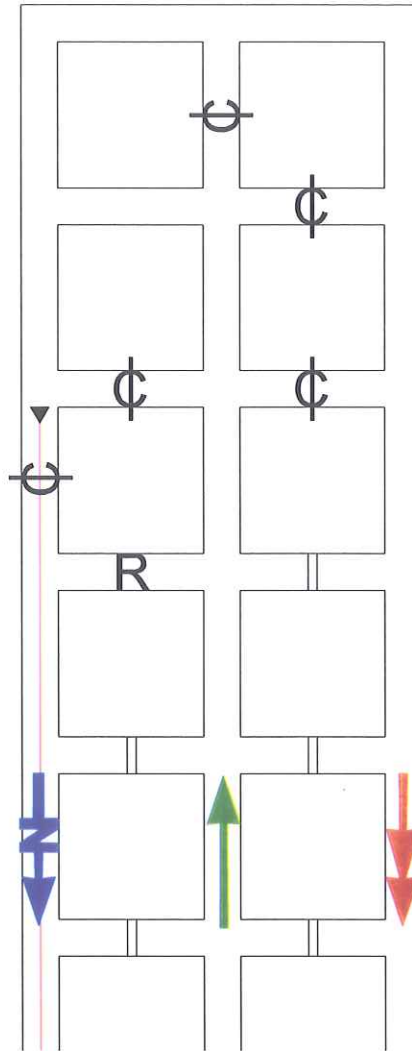


Not to Scale

MSHA  
MOUNT HOPE, WV

DEC 14 2009

RECEIVED  
VENTILATION



- Intake Air
- Return Air
- Secondary Intake Air
- Permanent Stopping
- Belt Tailpiece
- Regulator
- Curtain
- Box Check

\* Where any equipment will run through ventilation controls, they shall be substantially constructed as follows:  
Fly boards shall be installed rib to rib and fly pads will be installed overlapping so that a double thickness of ventilation material is achieved.

\* No shuttle cars will travel through line curtain that is ventilating the face.



PREPARED BY



PERFORMANCE COAL COMPANY, INC.  
P.O. BOX 69, NAOMA, WV 25140

UPPER BIG BRANCH MINE

M.S.H.A. ID No. 46-09436

WV ID No. U-3042-92

Date: 11/30/09

DWG No. 1 of 1

DRAWN BY: RL 3 Staff

SCALE: NA

CHECKED BY:

Face Ventilation Typical  
Gateroad Development

VENTILATION PLAN

Upper Big Branch Mine  
46-08436

Mine Segment	Distance	# Entries	Area	R, 1000 ft	Total R	Q beginning	Q end	Gain or Losses	Average Q	Q squared	Segment H	Total H
Headgate:												
Intake	10600	1	140	0.06	0.636	150000	30000	120000	90000	0.81	0.51516	0.51516
Neutral	10600	1	140	0.15	1.59	30000	10000	20000	20000	0.04	0.06360	0.57876
Return	10600	1	140	0.12	1.272	120000	20000	100000	70000	0.49	0.52328	1.20204
Across Face						---Measured---					0.10000	1.30204
											<b>Additional Head Loss:</b>	<b>1.30204</b> inches water

Existing Return:	Distance	# Entries	Area	R, 1000 ft	Total R	Q beginning	Q end	Gain or Losses	Average Q	Q squared	Segment H	Total H
Return	6935	2	140	0.03	0.20805	120000	20000	100000	70000	0.49	0.10194	0.10194
Return	6433	1	140	0.12	0.77196	120000	20000	100000	70000	0.49	0.37826	0.48020
Return	4439	4	140	0.0075	0.03329	120000	20000	100000	70000	0.49	0.01631	0.49652
Overcasts							7 Overcasts				0.02675	0.52327
											<b>Existing Return Loss:</b>	<b>0.52327</b> inches water
											<b>Total Head Loss:</b>	<b>1.82531</b> inches water

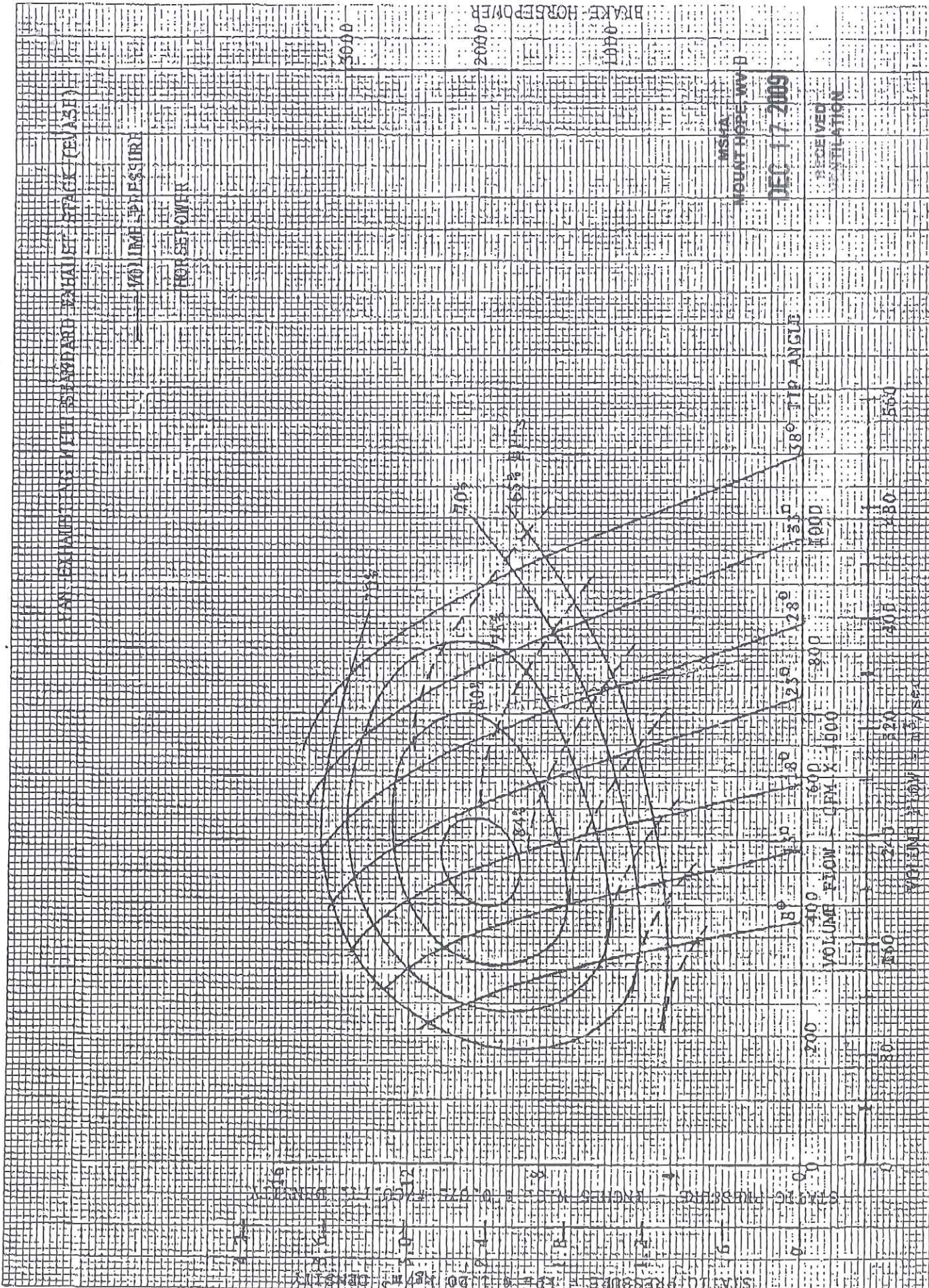
The above tables show the additional head loss resulting from the mining of the #2 Headgate at Upper Big Branch Mine. The top portion shows the additional head required to maintain necessary quantities of air to operate. After further consultation with Paul's Repair Shop (who designed and manufactured the exhausting fan), it is evident that the exhausting fan in a stand-alone system would have a reserve of approximately 1.0 times the capacity of current operation. With the current push-pull ventilation scheme, this reserve would be nearly doubled. Therefore, the 1.3 inches of water is minimal in comparison to the capacity of the ventilation system. The bottom portion shows the head loss through the existing return path, including shock loss from overcasts. The current operating pressure of the blowing fan is 5.5" and the exhausting fan is 4.0". Fan curves for both fans are attached.

MSHA  
MOUNT HOPE, WV

DEC 17 2009

RECEIVED  
VENTILATION





APRIL 1, 1982  
C 8727  
JOY AXIVANE MINE FAN

DEC 17 2009

Date: 8/23/2007

Quote Number: C51957-01 RECEIVED  
VENTILATION

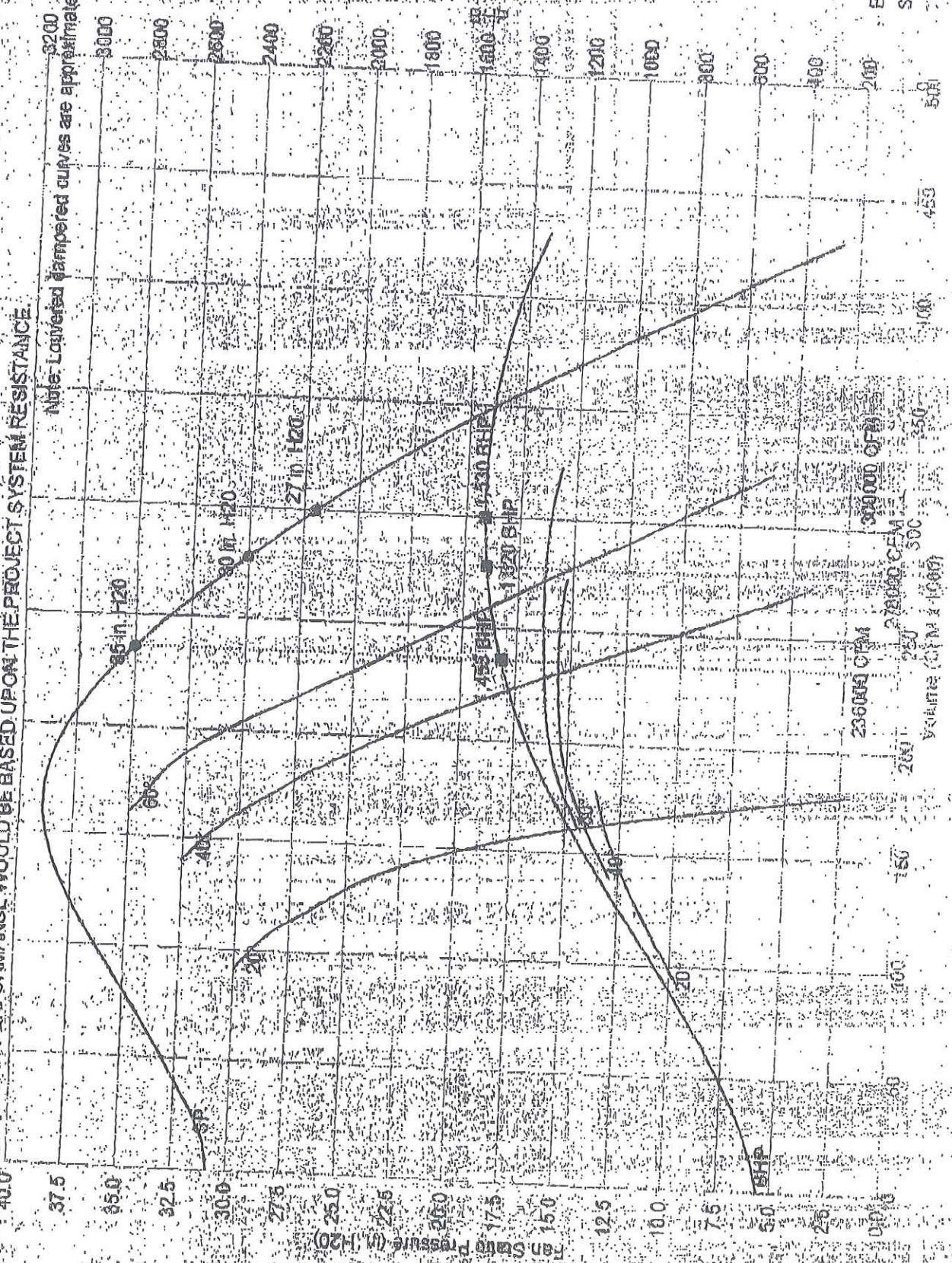
Fan Speed: 880 RPM  
Temperature: 65 °F  
Density: 0.0709 LB/FT<sup>3</sup>

Robinson Industries, Inc.

Fan: 99.25" x 24.313" AF1029 with 90 deg bid kicker SWSI  
For: PAULS REPAIR SHOP

ACTUAL FAN PERFORMANCE WOULD BE BASED UPON THE PROJECT SYSTEM RESISTANCE.

Note: Lowered dampered curves are approximate



23600 CFM  
28000 CFM  
30000 CFM  
350  
400  
450  
500

EF-1  
SE-59  
7F-05