West Virginia Office of Miners' Health, Safety and Training

October 20, 2006

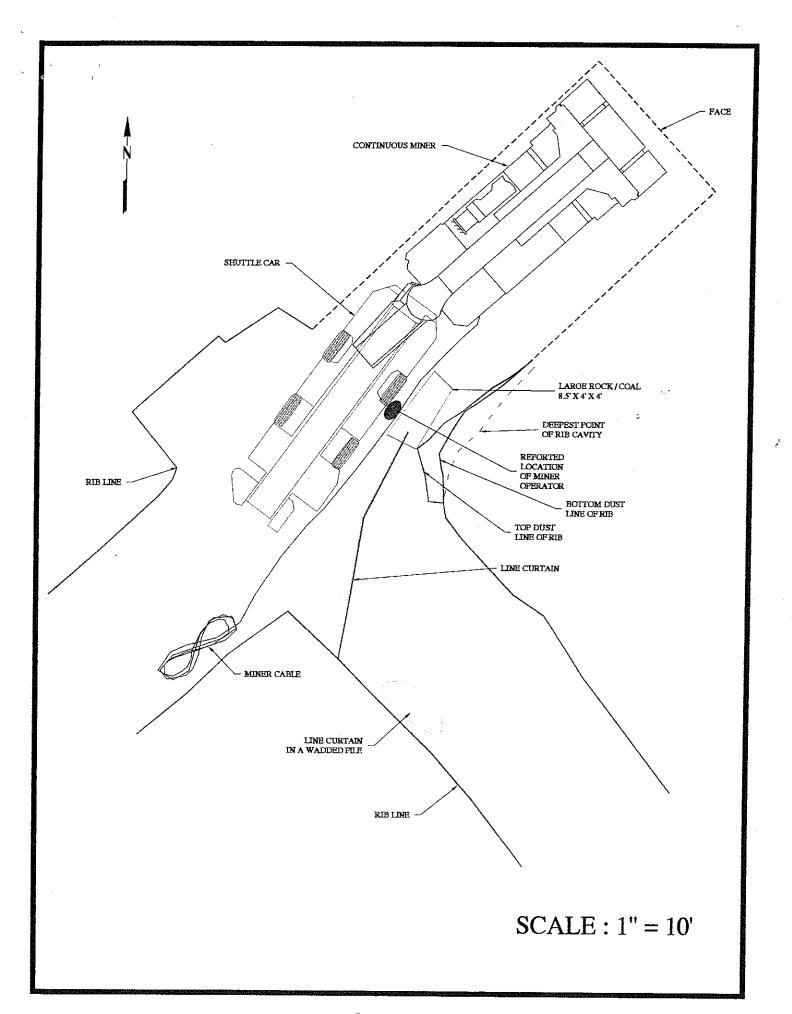
Report of Rib Fall Fatality Underground Coal Mine

Kingwood Mining Company, LLC Whitetail Kittanning Mine Permit No. U-1007-98A

Region One – Fairmont Office 205 Marion Square Fairmont, WV 26554 Brian Mills, Inspector-at-Large

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Fatal Rib Fall Accident Investigation Report Kingwood Mining Company, LLC Whitetail Kittanning Mine Permit No. U-1007-98A

GENERAL INFORMATION

A fatal rib fall accident occurred at approximately 2:20 p.m. on Friday, October 20, 2006 at the Kingwood Mining Company, LLC, Whitetail Kittanning Mine. The accident occurred on the East Section where advance mining was being conducted. Thomas Channell, age 49 was struck by a large section of falling rib and pinned against a shuttle car in the No. 5 to No. 6 crosscut that was being mined. Mr. Channell had a total of twenty-seven (27) years mining experience and eleven (11) years experience at this mine.

The Preston County 911 Center was notified at 2:22 p.m. The WV Mine Safety Hotline was notified at 2:45 p.m. Kingwood Mining Company, LLC's Safety Director, Joe Pervola notified the Office of Miners' Health, Safety and Training Fairmont office of the accident at approximately 2:50 p.m. A joint investigation with the Mine Safety and Health Administration and Kingwood Mining Company, LLC was started immediately.

A regular inspection was ongoing at the mine at the time of the accident.

DESCRIPTION

The Kingwood Mining Company, LLC, Whitetail Mine is a shaft and slope opening mine producing coal from the Lower Kittanning seam. The mine is located near Fellowsville on Route 26 in Preston County, West Virginia. The average mining height is approximately 78 inches and the coal is transported to the surface by conveyor belt. The company employs 245 people and 27 contractors on two (2) production shifts and one (1) maintenance shift. Continuous mining methods are currently being used on the four (4) sections that have two (2) continuous miner units each.

The East Section crews entered the mine under the direction of left side foreman, Art Wilt and right side foreman, Fred Watson at 7:00 a.m. on Friday, October 20, 2006. The men traveled by battery powered rail personnel carriers and arrived at the section at approximately 7:45 a.m. After a safety meeting the left side crew began production in the No. 4 Entry, mining continued without incident throughout the shift, in the following places #3-#2 crosscut, No. 3 Entry, #5-#6 crosscut, No. 4 Entry, #2-#1 crosscut, No. 3 Entry and the #5-#6 crosscut. After the #5-#6 crosscut was mined the first time it was then bolted by roof bolters, Brian J. Casteel and Jamie Blaney. Also apprentice miner Ryan Kilkenny put in one bolt on the corner. After the #5-#6 crosscut bolting was completed section mechanic, Mike Hardy obtained the scoop from the section utilityman, Max Burgoyne, Jr., who went to lunch. Mr. Hardy scooped the #5-#6 crosscut, when Mr. Burgoyne returned from lunch he took a bag of dust from the scoop and rockdusted the #5-#6 crosscut. Mr. Hardy took the scoop to get oil for the bolt machine. Mr.

Hardy came back with the scoop and proceeded to deliver the oil to the bolt machine. Mr. Burgoyne took the scoop to the No. 4 Entry where he began to clean that entry.

At approximately 1:50 p.m. Mr. Channell began operating the continuous mining machine in the #5-#6 crosscut. Mr. Wilt arrived at the #5-#6 crosscut at 2:10 p.m. to make his two (2) hour exam. After making his examination Mr. Wilt told Mr. Channell after mining was completed in the #5-#6 crosscut to move to the No. 4 Entry. Mr. Wilt then proceeded to the mine phone to meet Mr. Watson to prepare to call out the section pre-shift report to the surface.

Ben Belanger and Steve Chappell, both left side shuttle car operators started hauling out of the #5-#6 crosscut. Mr. Belanger stated that he pulled under the boom of the continuous miner to get the cleanup load. Mr. Channell started loading the shuttle car at that time. Mr. Belanger stated he looked down in the deck of the shuttle car and he heard something give way, he shut off the shuttle car and called out to Mr. Channell. Mr. Channell did not respond. Mr. Belanger got off the shuttle car, raised up the curtain and saw that a large piece of coal/rock had fell and Mr. Channell was pinned against the shuttle car. Mr. Belanger ran down the No. 5 Entry to summon help. Mr. Belanger first contacted Mr. Chappell, then on to Frank Keener, right side shuttle car operator, who telephoned outside. At this time Mr. Wilt and Mr. Belanger went back to the accident scene. Mr. Chappell notified Mr. Burgoyne, Mr. Casteel and Mr. Blaney, who all went to the accident scene. Mr. Hardy also came to the accident scene along with workers from the right side of the section. Lifting jacks were used to free Mr. Channell, the effort lasted 30 to 40 minutes. When notified outside E.M.T.'s from throughout the mine were sent to the accident scene. After Mr. Channell was freed he was transported to the track by rubber-tired vehicle and then onto the outside by rail. Once outside he was transported by ambulance to the Preston Memorial Hospital where he was pronounced dead by Preston County Coroner, Mrs. Pam Thomas.

An on-site investigation was started on October 20, 2006 and continued on October 21, 2006 with technical assistance provided by WV Miners' Health, Safety and Training Chief Engineer, Monte Hieb.

FINDINGS OF FACT

- 1. The victim was struck by a coal and rock rib fall pushing him into the shuttle car.
- 2. The piece of material that struck the victim was approximately 96" in length and 4' in width and 4' in height.
- 3. Prior to the accident the victim was standing approximately 12' outby the last row of roof bolts in the #5-#6 crosscut.
- 4. The shuttle car involved in the accident was a Joy Model 10SC32, serial # No. 40C018.
- 5. Mining started in #5-#6 crosscut at 1:50 p.m. and had proceeded 27' in depth.
- 6. Please see the excerpt of a draft report written by Chief Engineer, Monte Hieb.

CONCLUSION

While operating the continuous miner in the #5-#6 crosscut on the East Section, Mr. Thomas Channell was fatally injured when he was struck by a falling section of coal and rock rib that pushed him into a shuttle car.

ENFORCEMENT ACTIONS

A Non-Assessed Control Order was issued in accordance with Title 36, Series 19, Section 7.1 of the West Virginia Mining Laws, Rules and Regulations. To preserve the accident scene.

The WV Miners' Health, Safety and Training issued Four (4) Notice of Violations during this investigation. One (1) is considered to have contributed directly to the accident.

It reads as follows: West Virginia Code 22A-2-25(a)

It was revealed during the investigation of a fatal accident that the rib was not supported or controlled adequately to protect persons from a fall of the rib. Mr. Thomas Channell suffered fatal injuries when a large section of rib fell which pinned him against a shuttle car. The falling section of rib measured approximately 96" in length x 4' high and 4' in width.

RECOMMENDATIONS

The roof control plan shall be revised to address current mining conditions. Management shall train all employees on the revisions of the roof control plan. An addendum has been added to the roof control plan and is attached in the appendix.

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MINE INFORMATION

COMPANY NAME: King	wood Mining Company, LLC
MINE NAME: White	etail Kittanning
WV PERMIT: U-10	07-98A
ADDRESS: Route 1, Box 2	94C, Newburg, WV 26410
COUNTY: Preston	
	ber 23, 2003 WORKING STATUS: Active
LOCATION: Near Fellowvill	e, WV
UNION:	NON-UNION: X
DAILY PRODUCTION: 6,0	00 Ton
ANNUAL PRODUCTION TO DA	TE: 946,356 Ton
TOTAL EMPLOYEES: 245	NUMBER OF SHIFTS: 3
NAME OF COAL BED:Lowe	er Kittanning
SEAM THICKNESS: 78"	
ACCIDENT INCIDENT RATE: _	2.01 LOST TIME ACCIDENTS: 9
TYPE OF HAULAGE:	Shuttle Car – Belt Conveyor
WV OMHST INSPECTOR:	David Barlow
DATE OF LAST INSPECTION: _	On-Going
NOTIFIED BY:	Joe Pervola
TIME OF NOTIFICATION:	2:50 p.m.
CMSP – ANNIVERSARY DATE:	October 21, 2006
CMSP – CONTACT PERSON:	Frank Matras

INVESTIGATION

The following persons were present for the on-site investigation conducted on October 20, 2006:

KINGWOOD MINING COMPANY, LLC

Frank Matras Perry Ryan

Robert M. Beatty Joe Swerbinsky

Joe Pervola

President

Superintendent

Dinsmore & Shohl (Attorney)

Mine Engineer Safety Director

MINE SAFETY AND HEALTH ADMINISTRATION

Jerry Vance Jan B. Lyall Jeff Maxwell

MSHA Specialist/Training MSHA Inspector/Roof Bolter

MSHA Inspector

WV MINERS' HEALTH, SAFETY AND TRAINING

Terry Farley Mark Wilfong

David Barlow Barry Fletcher John Scott

Administrator

Assistant Inspector-at-Large District Mine Inspector Roof Control Inspector **Electrical Inspector**

ALLEGHENY SURVEYS, INC.

Dewayne A. Hall Timothy Brake

Steve Haskell

Senior Party Chief

Surveyor Surveyor

INVESTIGATION

The following persons were present during the on-site investigation conducted on October 21, 2006:

KINGWOOD MINING COMPANY, LLC

Frank Matras Perry Ryan Joe Pervola Earl Inscore

Robert Beatty

President

Superintendent Safety Director

Safety Attorney

MINE SAFETY AND HEALTH ADMINISTRATION

Nelson Blake Mike Gauna

Chief Roof Control Section
Mining Engineer/Tech Support/Roof Control

WV MINERS' HEATLH, SAFETY AND TRAINING

Mark Wilfong Barry Fletcher Monte Hieb Assistant Inspector-at-Large Roof Control Inspector

Chief Engineer

INTERVIEWS

The following persons were present during interviews conducted on October 23, 2006:

KINGWOOD MINING COMPANY, LLC

Frank Matras Perry Ryan Joe Pervola

Carol Ann Marinich Robert H. Beatty *Arthur Wilt

*Michael A. Hardy

*Max Burgoyne, Jr.

*Steve Chappell

*Benjamin Belanger

*Brian J. Casteel

*Jamie Blaney

President/General Manager

Superintendent Safety Director

Dinsmore & Shohl (Attorney) Dinsmore & Shohl (Attorney) Acting Section Foreman

Section Mechanic

Utilityman

Shuttle Car Operator Shuttle Car Operator Roof Bolter Operator Roof Bolter Operator

MINE SAFETY AND HEALTH ADMINISTRATION

Jan Lyall Jerry Vance MSHA Inspector/Roof Control MSHA Specialist. Training

WV MINERS' HEALTH, SAFETY AND TRAINING

Terry Farley Mark Wilfong David Barlow Administrator

Assistant Inspector-at-Large District Mine Inspector

^{*}Denotes Interviewed

The following is an excerpt of a draft report written by Chief Engineer, Monte Hieb:

Upon examination of the rib slab and the place from which it slipped it was apparent that it failed and fell out due to two intersecting, highly slickensided **intersecting angled slip planes** which bounded the top and bottom of the rib slab, creating a geometry whereby the slab was essentially a free-body which became dislodged when the slip planes were severed at the ends in the normal course of mining, first at the corner, then on the other end as the cross-cut was being driven.

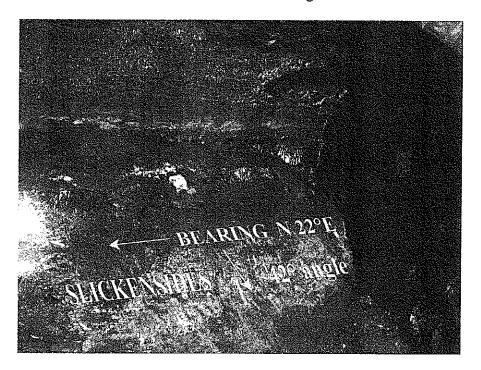


Photo 3: Looking at the bottom slip plane in rib from vantage point of where shuttle car was stationed.

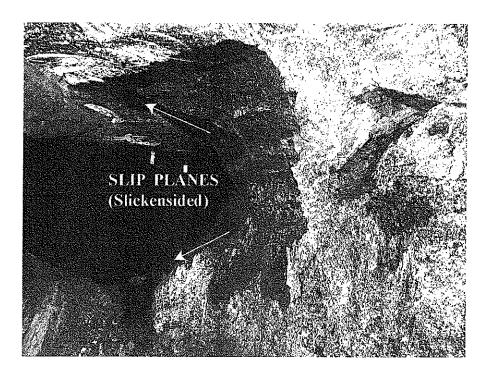


Photo 4: View of corner rib slips. Photo taken from the intersection of #5 Entry at #40 Cross-cut.. Fallen rib slab in lower left corner. Upper and lower slip planes bounded the rib slab that fell out.

Photo 3 is a front-facing view of the corner rib that failed. The bearing of the lower slickensided failure plane trends N 22°E and its slickensided surface dips toward the open cross-cut in a northwesterly direction. **Photo 4** is looking at 90° to the view shown in Photo 3 and is also the vantage for the illustrations of dimensions and angles shown in **Figures 2 and 3**.

The steep and highly slickensided surface of the lower failure plane is the primary reason for the sudden and unexpected failure of the rib slab. A slip plane angled at 42° poses a high degree of risk from horizontal forces trying to kick out a stationary rock mass due to its own weight. In conjunction the slickensided upper failure plane vertically intersects and is horizontally parallel to it, which allowed the rib block to break free.

After the intersecting slip planes were mined-through in both the entry and in the turned cross-cut the resisting forces holding the rib slab in place were reduced to only three things: 1) the tensile strength of the carbonaceous shale Parting (see **Figure 2**), 2) the cohesion forces of the top failure plane, 3) and the shear-resisting frictional forces along the lower slickensided failure plane. These forces were not sufficient to resist the free-body forces acting horizontally on the slab, which are estimated at 1/3 to 1/2 of the 5-ton estimated weight of the rib slab.

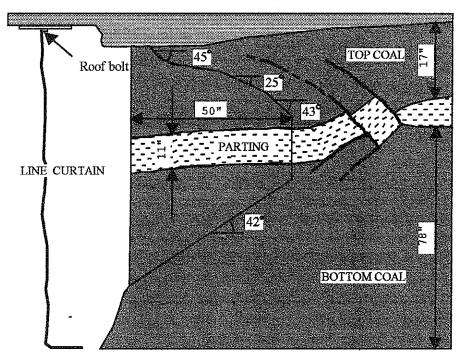


Figure 2: This is a schematic view (from the vantage point of Photo 4) that shows the dimensions and bounded by intersecting slip planes as it likely looked prior to failure.

Due to the steepness of the lower slip plane the slab failure probably gave little if any advance warning of what it was about to do. The direction of movement would have been essentially perpendicular to the strike of the lower slip plane surface—approximately in the direction of N 68°W, although one side may have given way slightly before the other. Based on the evidence, it appears the outby end probably gave way first, rotating slightly about a pivot point near the inby end. Although the single rib slab is approximately 8-ft. in length, the total rib failure involved a length of about 17-ft., comprised of material that is now broken into 5-7 moderate-sized rectangular pieces and additional smaller pieces.

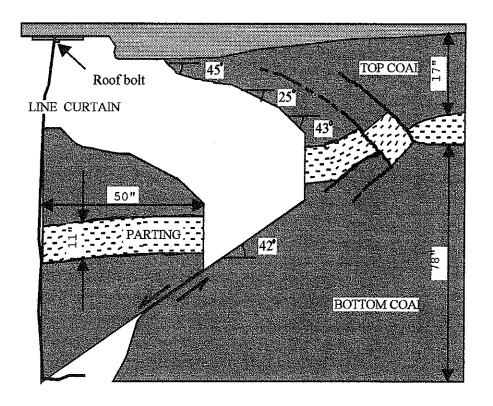


Figure 3: This is a schematic drawing showing the believed mode of failure of the rib slab. This view is standing in the intersection of #5 entry with # 40 crosscut looking down #40 crosscut in the direction of #6 entry (see Figure 2 for "before picture").

STATE OF WEST VIRGINIA OFFICE OF MINERS' HEALTH, SAFETY AND TRAINING BUREAU OF COMMERCE 205 MARION SQUARE FAIRMONT WV 26554

Region One

October 25, 2006

		· ·			
COMPANY:	Kingwood Mining Company, I	LC			
ADDRESS:	Route 1, Box 264C, Newburg,	WV 26410			
	This is to acknowledge receipt of your l	Roof Control Plan for:			
	Whitetail Kittanning Mine	<u>U-1007-98A</u> Permit No.			
	Your submitted change has bee	n:			
	X Accepted				
	Rejected				
REMARKS:	Your requested revision to your roof contr (Letter and Drawing dated Oct. 25, 2006)	ol plan has been reviewed and approved.			
RE: Revision to your roof control addendum dated Oct. 24, 2006.					
		David Barlow			
		District Inspector			
		Barry Fletcher			
		Roof Control Inspector			
		Mark Wilfones			
		Inspector-At/Large/			



Kingwood Mining Company, LLC Route 1 Box 294C, Newburg WV 26410 Phone: 304-568-2460 Fax: 304-568-2465

October 25, 2006

West Virginia Office of Miners' Health Safety and Training 205 Marion Square Fairmont, WV 26554

Attn: Mr. Brian Mills, Inspector at Large

For: Whitetail K-Mine - WV ID No. U-1007-98A

Subject: Intersecting Planes

Dear Sir:

Kingwood Mining Company LLC, requests this revision to our previously approved plan dated October 24, 2006 and hereby proposes the following measures be implemented in an attempt to prevent a reoccurrence of the events of October 20, 2006:

- 1. The #1 & #10 entry projections will be dropped for the remainder of the East Section Panel (approximately 800-1000 feet). This is being done to reduce, by twenty-one per cent, (21%), the exposure time of employees to unforeseen slips and clay veins and where intersecting angle shear planes are present in the roof and ribs.
- 2. During the mining cycle and thereafter, frequent visual examinations will be conducted, prior to rock dusting, emphasizing the recognition of unforeseen slips and clay veins where intersecting angle shear planes are present in the roof and ribs. A training and education PowerPoint presentation will be demonstrated to employees with an emphasis on conducting frequent visual examinations and the recognition of unforeseen slips and clay veins and where intersecting shear planes are present. These examinations will be reviewed with all Kingwood employees and incorporated into Kingwood's Comprehensive Safety Program.
- 3. If slips and clay veins where intersecting angle shear planes are present and identified, such conditions will either be scaled down or controlled. If the condition cannot be scaled down with a slate bar or the continuous miner, measures to control the condition will be as follows:

Slips and clay veins where intersection angle shear planes are present they will be scaled, controlled or supported by utilizing 60" rib/brow angle straps made of T-3 channel bent to an approximately 60° angle and installed as illustrated in Drawing #1A, attached. These supplemental roof and rib supports, as identified in Drawing #1A, are site specific and pertain only to the geological anomalies (slips and clay veins and where intersecting angle shear planes are present) existing in the East Section. When beginning projected crosscuts or cutting a crosscut through angle straps will not be installed. This area will be marked with red reflectors.

If intersecting angle shear planes are identified in other areas of the mine they will be scaled, controlled, or supported.

With the approval and subsequent implementation of hazard recognition training, changes in the current mining projections limiting employee exposure by twenty-one per cent (21%), and the proposed supplemental roof and rib support plan, Kingwood Mining, LLC., respectfully requests that the West Virginia Office of Miners' Health Safety and Training terminate the control order and permit normal mining operations to resume immediately.

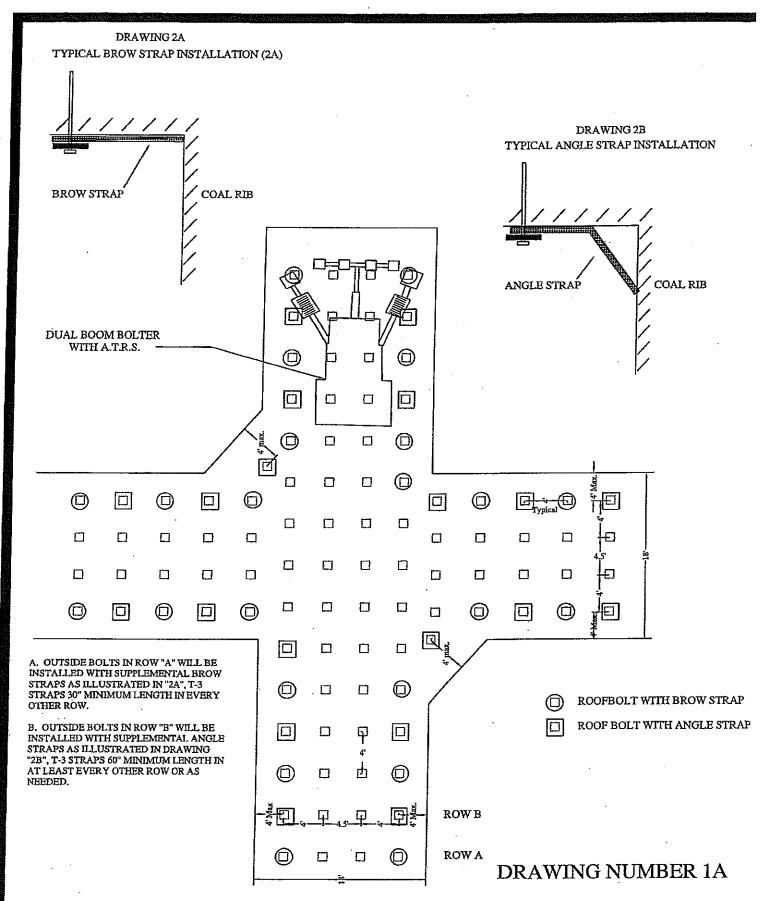
If you have any questions, or if further information is required, feel free to contact me at (304) 568 - 2460.

Sincerely;

Frank Matras

Inaul Matius

President and General Manager



SUPPLEMENTAL ROOF/RIB SUPPORT EAST SECTION

IF-C18 Revised 11-02

Violation No. 3

Region One

Case No. 150-0072-2006

STATE OF WEST VIRGINIA

OFFICE OF MINERS' HEALTH, SAFETY AND TRAINING

1615 Washington Street East Charleston, West Virginia 25311-2126

White- Company Blue -Inspector Green -Charleston Canary -Regional Office Pink- Post Goldenrod -Rep of Mines

CONTRIBUTING

NOTICE OF VIOLATION

Company / OperatorKingwood Mining	Company, LLC	Con	tractor: YesNo
Permit Number U-1007-98A	Mine Name Whitetail	Kittamina	10010
Date of Issue November /6	_, 20 <u>06</u> Time	2100	
Notice is hereby given that the under Safety and Training, upon making a Chapter 22%, Article 2 Title, Series,	ersigned authorized representa an inspection of this mine finds Section25a	ative of the Director of the that the violation referred and/or West Virginia A	Office of Miners' Health, to in West Virginia Code, dministrative Regulation
It was revealed during the invest	tication of a fatal acc	cident on the Rast !	Section in the
#5-46 crossout that the rib was a	ot suppried or centre	ot vietemate beli	The state of the s
from a fall of the rib. Mr. Thor	pad (hannell suffored t	atal inturies when	a large cookies
of rib fell which ninned him again	inet a chottle car 15	o folling continu	7531120 1000 1000
approximately 96" in length x 4"	high and di width	WE THE CONTENT OF T	Jan and 34 descriptions that described
			•
Type of Issuance: N.O.VX	Order	-	
Area or equipment (if order is issued):	Older		
The foregoing violation shall be totally abated	by a	m nm on	20
The foregoing violation was totally abated by_	- J	p.iii. oii	20
		=-	
Action taken to abate the violation: Miscuss	Don with mine manageme	nt, management has	retrained all
effected persons and submitted an	action to the roof	control plan to add	ress the condition
Company / Operator Agent Served:	JOF PERVOLA		
Authorized Representative:	& Wildong	Inspector No). 150
REVIEW: In accordance with Section 22A-1-17 of the Office of Miners' Health, Safety and Training	the Code, an operator or any re	epresentative of the miners	may apply to the Director
VIO	LATION ASSESSMENT EVAL	LUATION	
Recommend Special Assessment:			
	Doggonahly likely (40)	· · · · · · · · · · · · · · · · · · ·	
ikelihood of Occurrence: Unlikely: *(0) severity of Injury Expected: None: *(0)	No lost work dove *(6)	Occurred (20)	- J. J. (44)
Permanently disabling (15)	No lost work days (o)	Lost or restrict	ed days (11)
o. of Persons Potentially Affected: 0 (0)	1 (1) v 2 (2) 3 (4)	4.5 (6) 8.0 (9)	0. (40)
legligence: None (0) Low (10) X	Moderate (15) Hi	4-3 (0)0-9 (0) ah (20)	9+ (10)
nowing Violation: No 🐰 Yes	Repeat	3·· (20)	
iood Faith in Abatement: Lack of good faith (+15%)		
O COmpliance levienuation circumstances	(VoV) A		Page 22