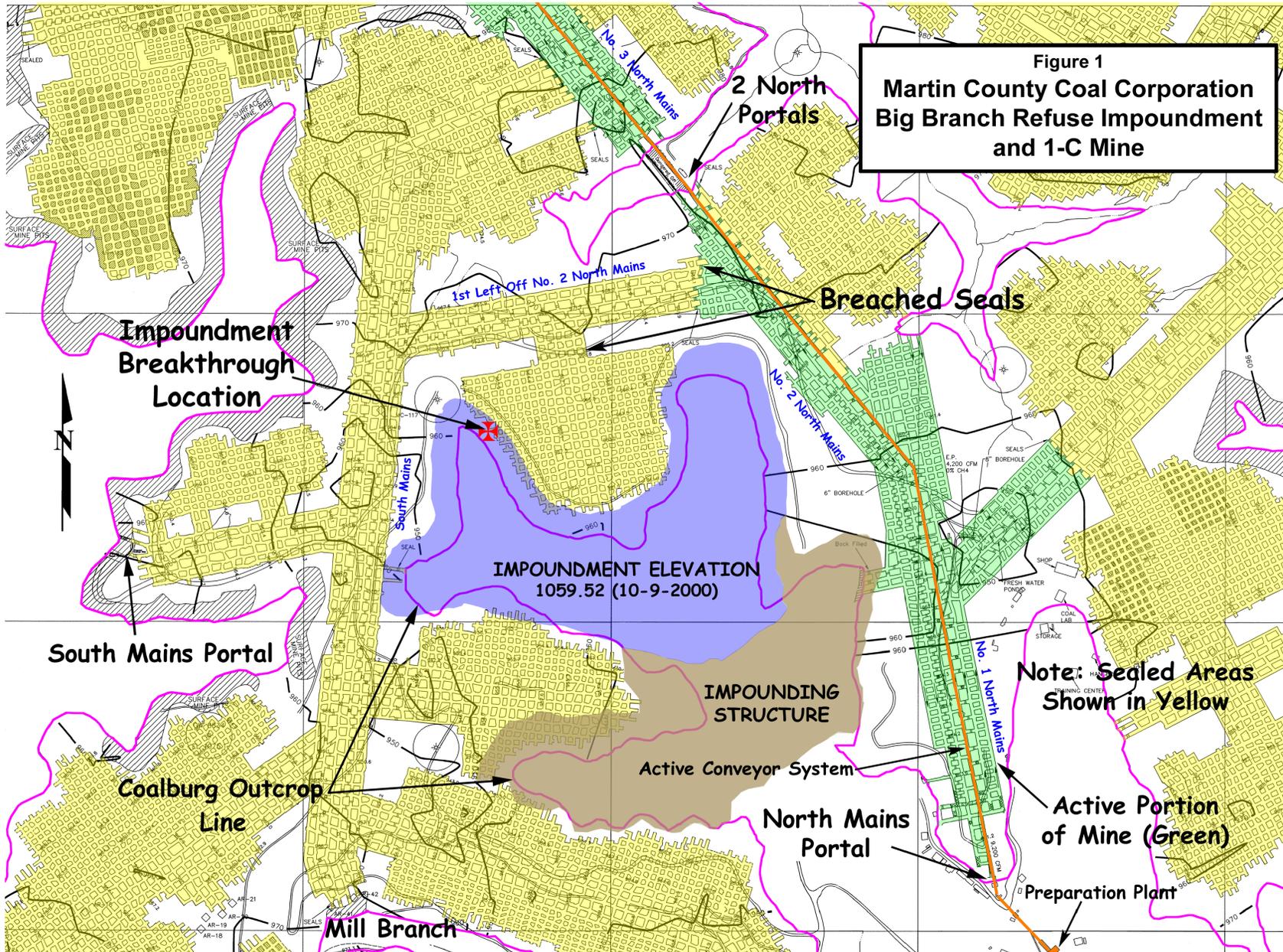


Figure 1
Martin County Coal Corporation
Big Branch Refuse Impoundment
and 1-C Mine



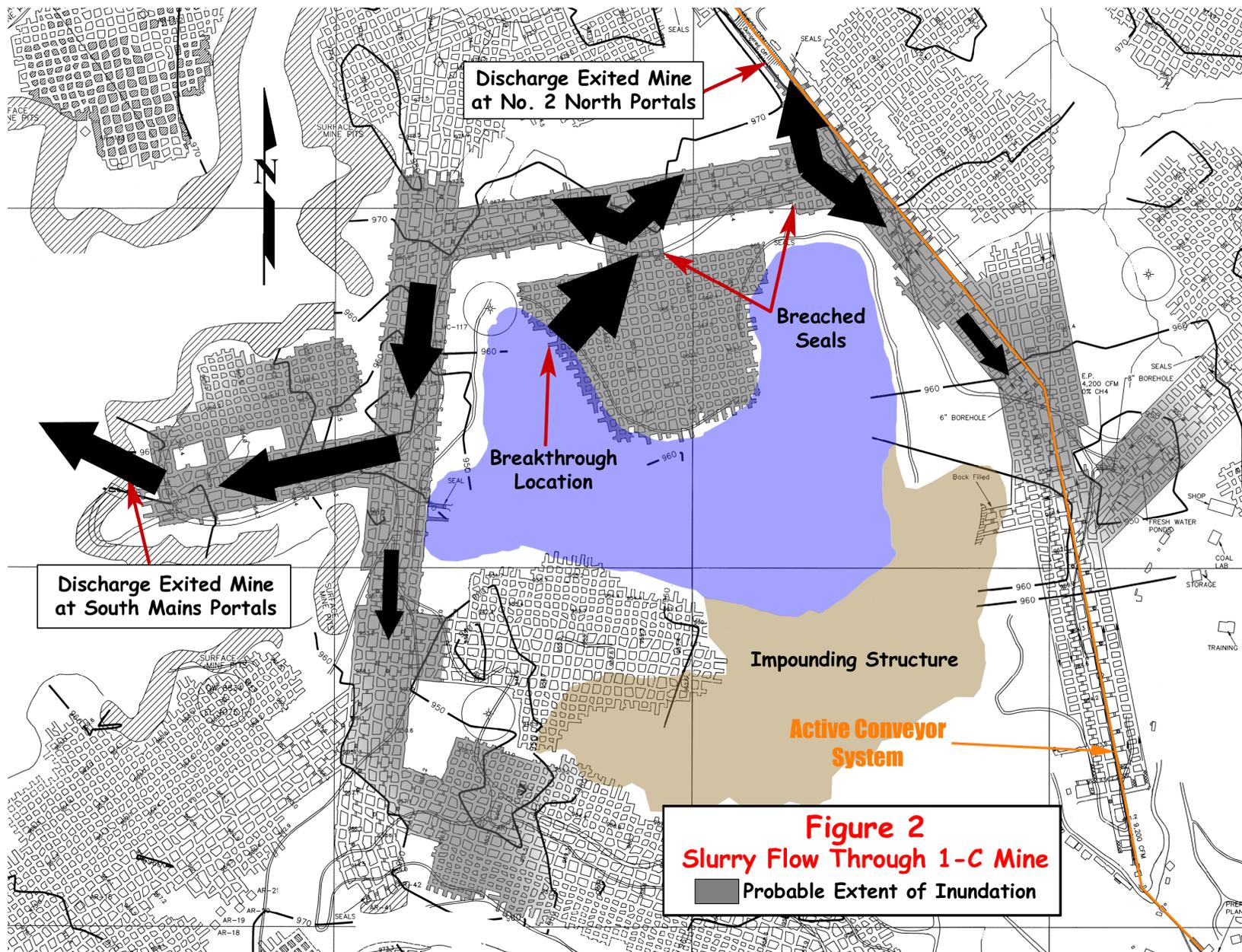


Figure 2
Slurry Flow Through 1-C Mine
 Probable Extent of Inundation

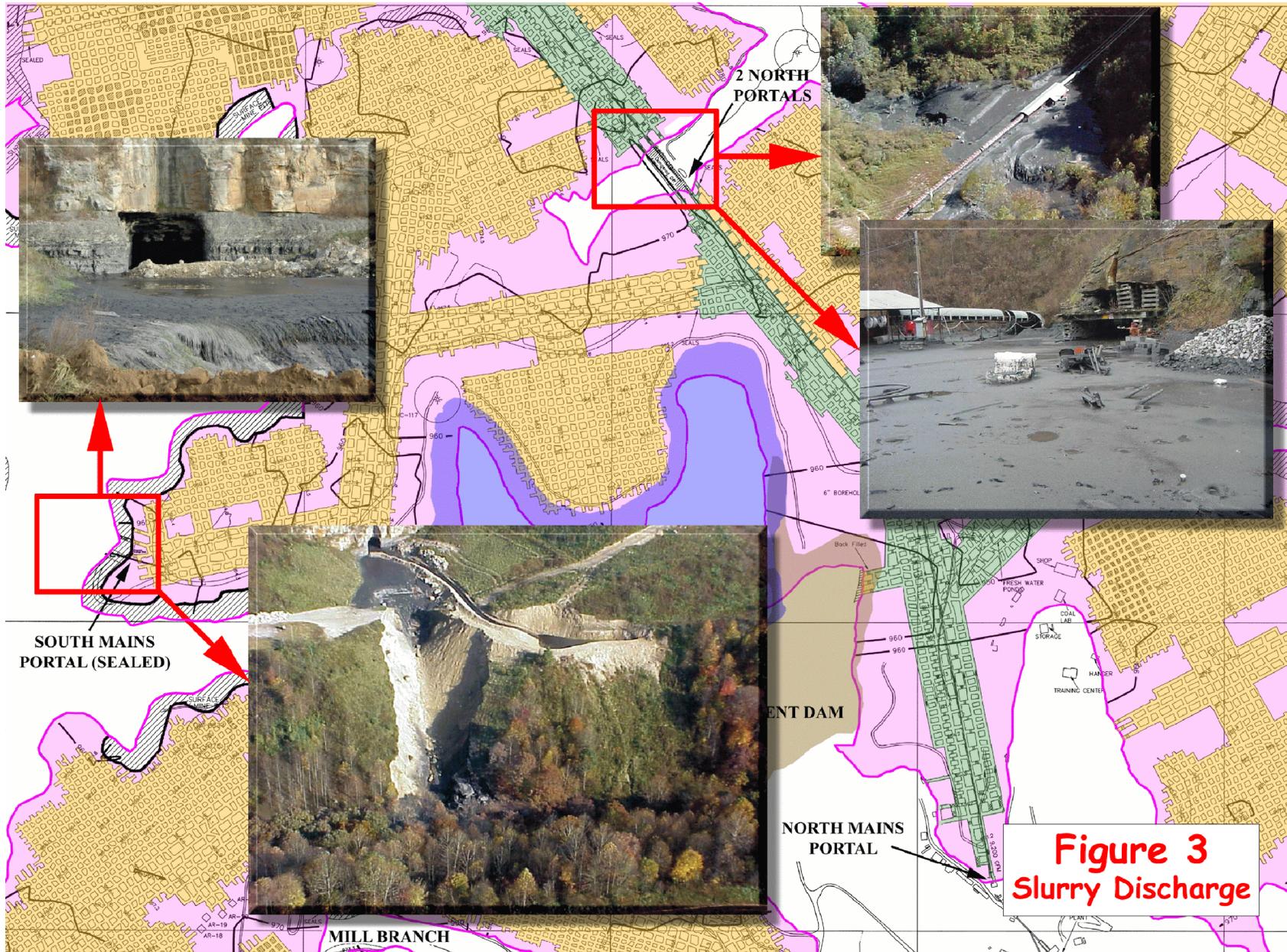




Figure 4
Wolf Creek

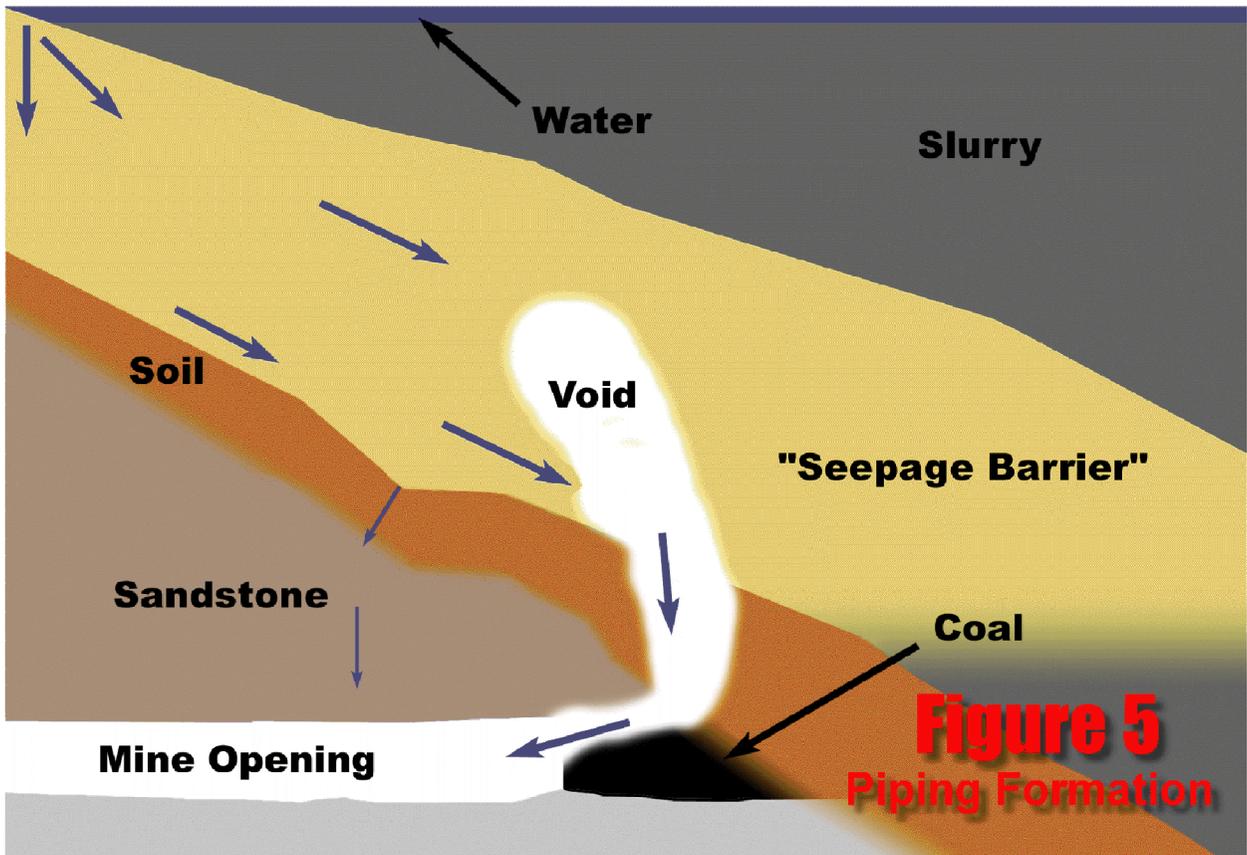
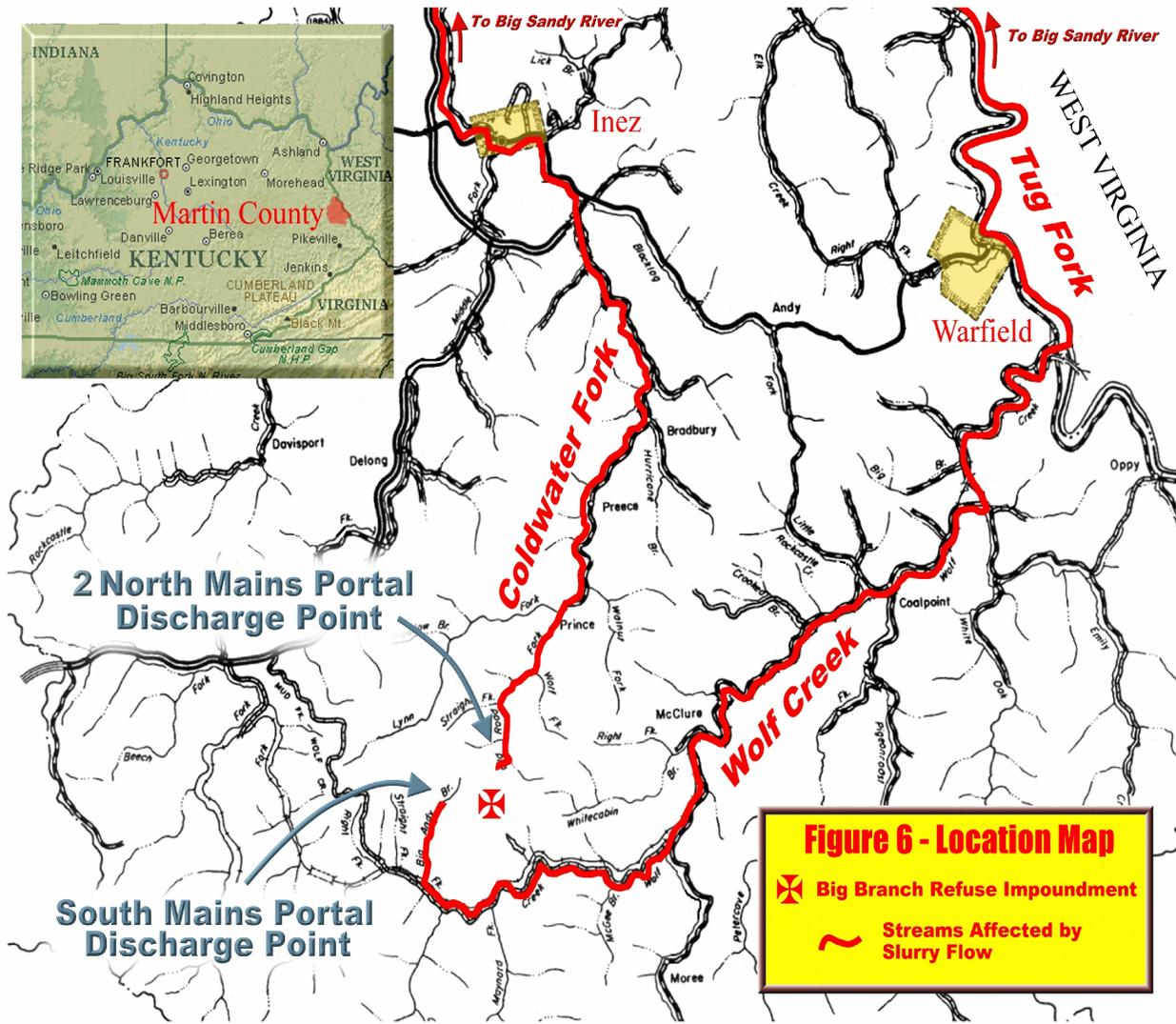
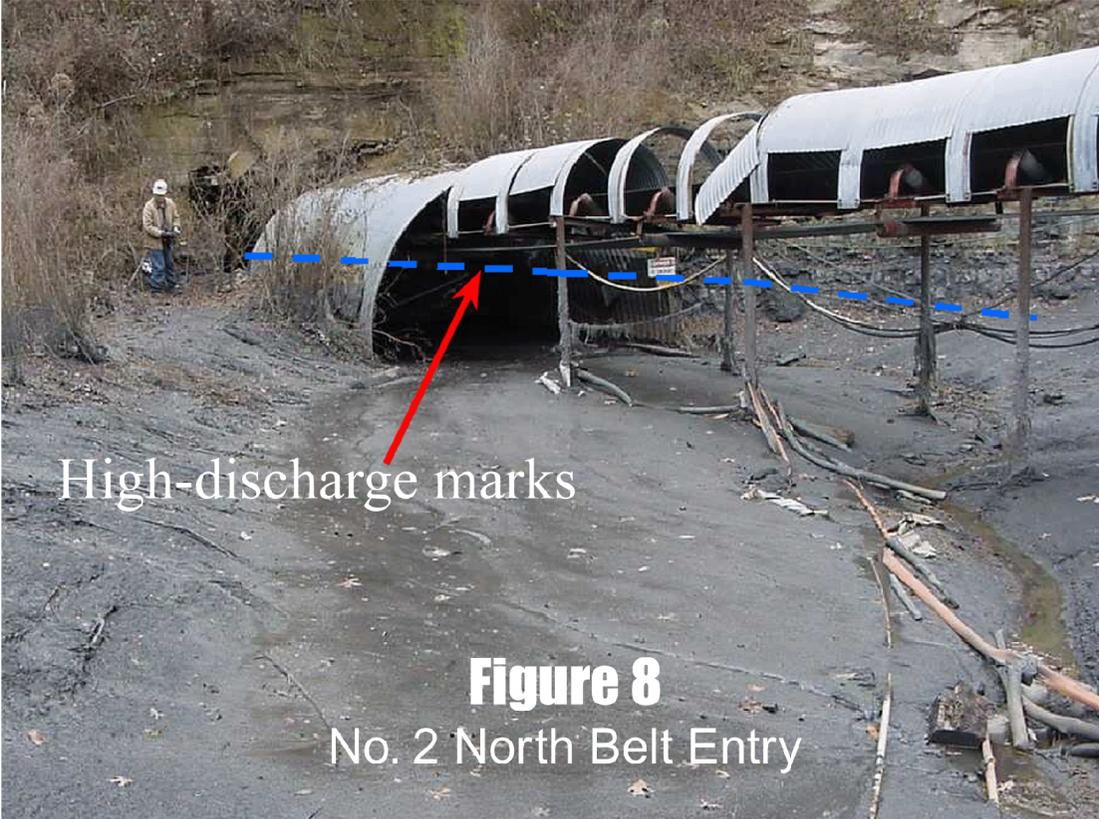


Figure 5
Piping Formation





High-discharge marks

Figure 8
No. 2 North Belt Entry



Figure 9
South Mains Portal



Figure 10
House on Coldwater Fork



Figure 11
Confluence of The Big Sandy & Ohio Rivers



Figure 12
Construction of Drill Pad

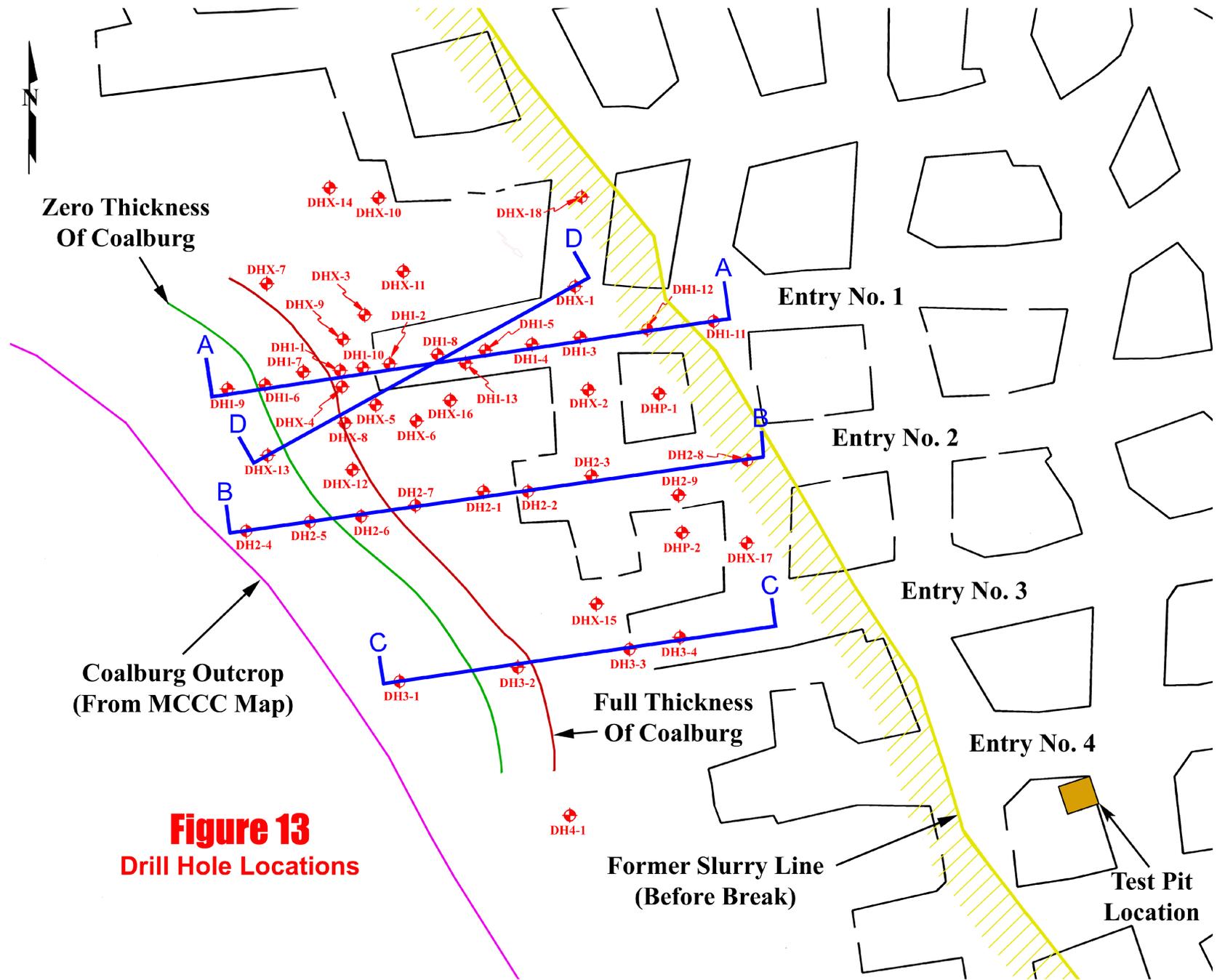


Figure 13
Drill Hole Locations

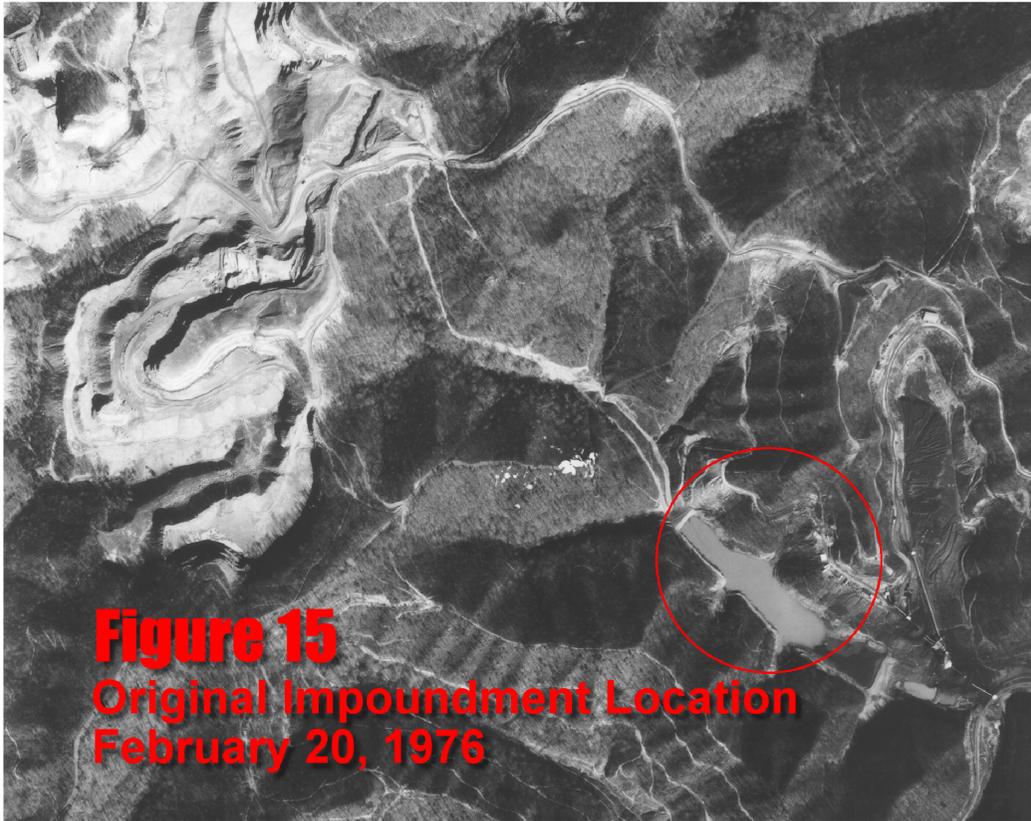


Figure 16
Cross Section of Impoundment

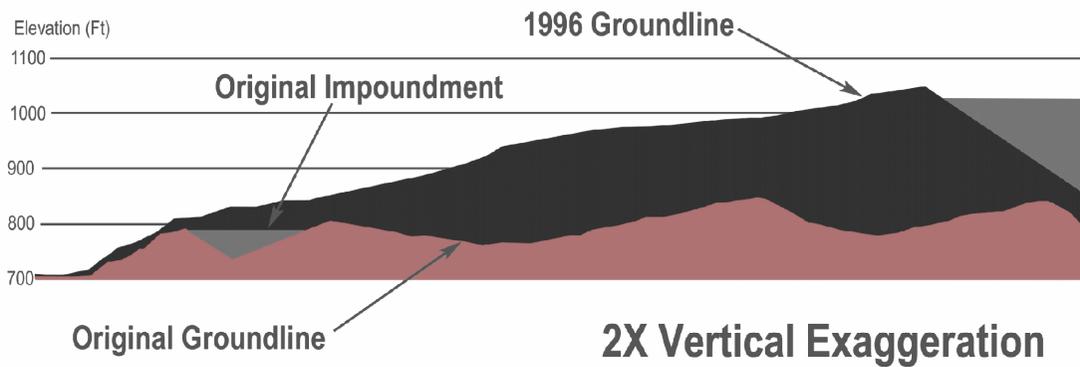
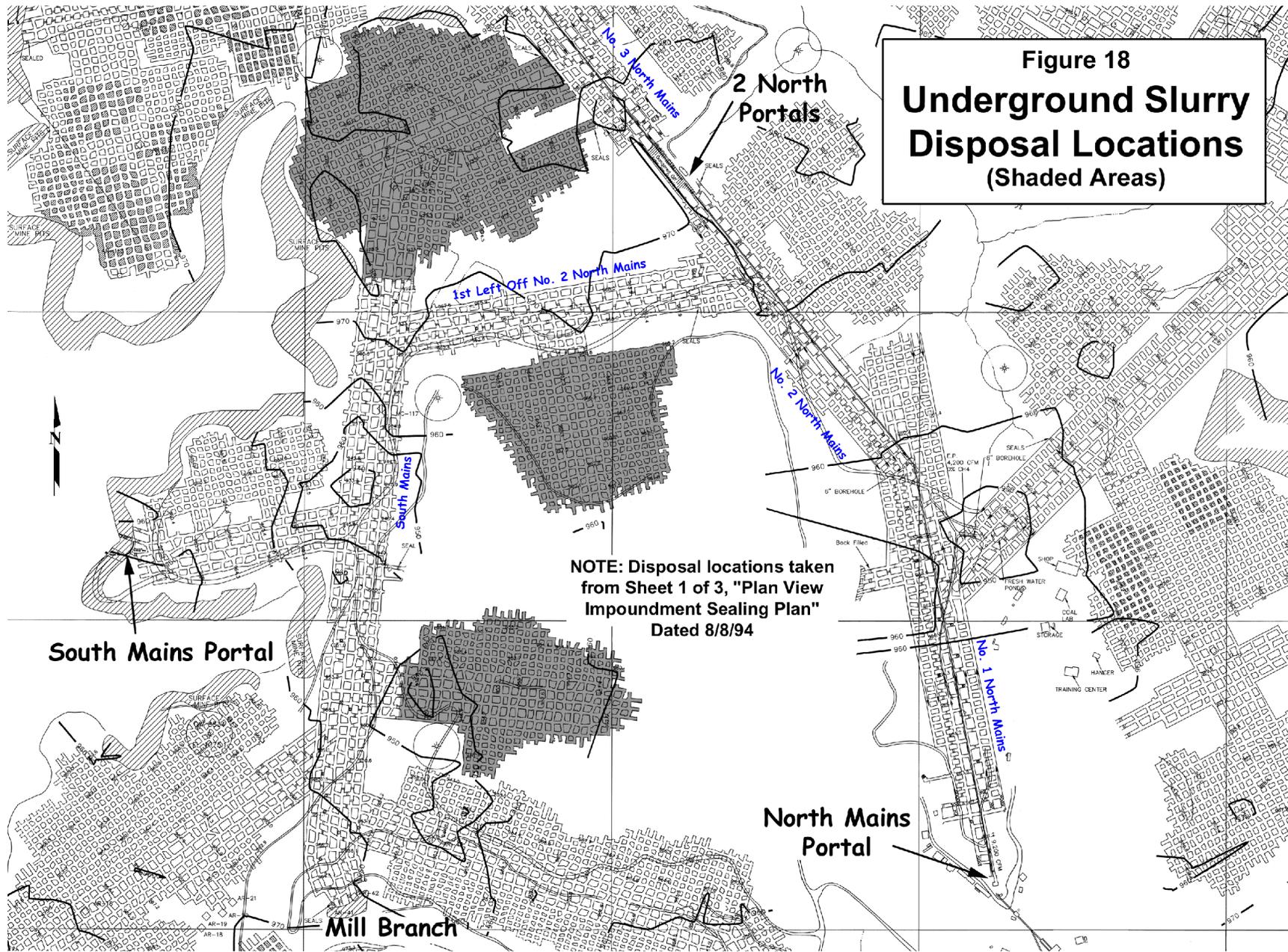
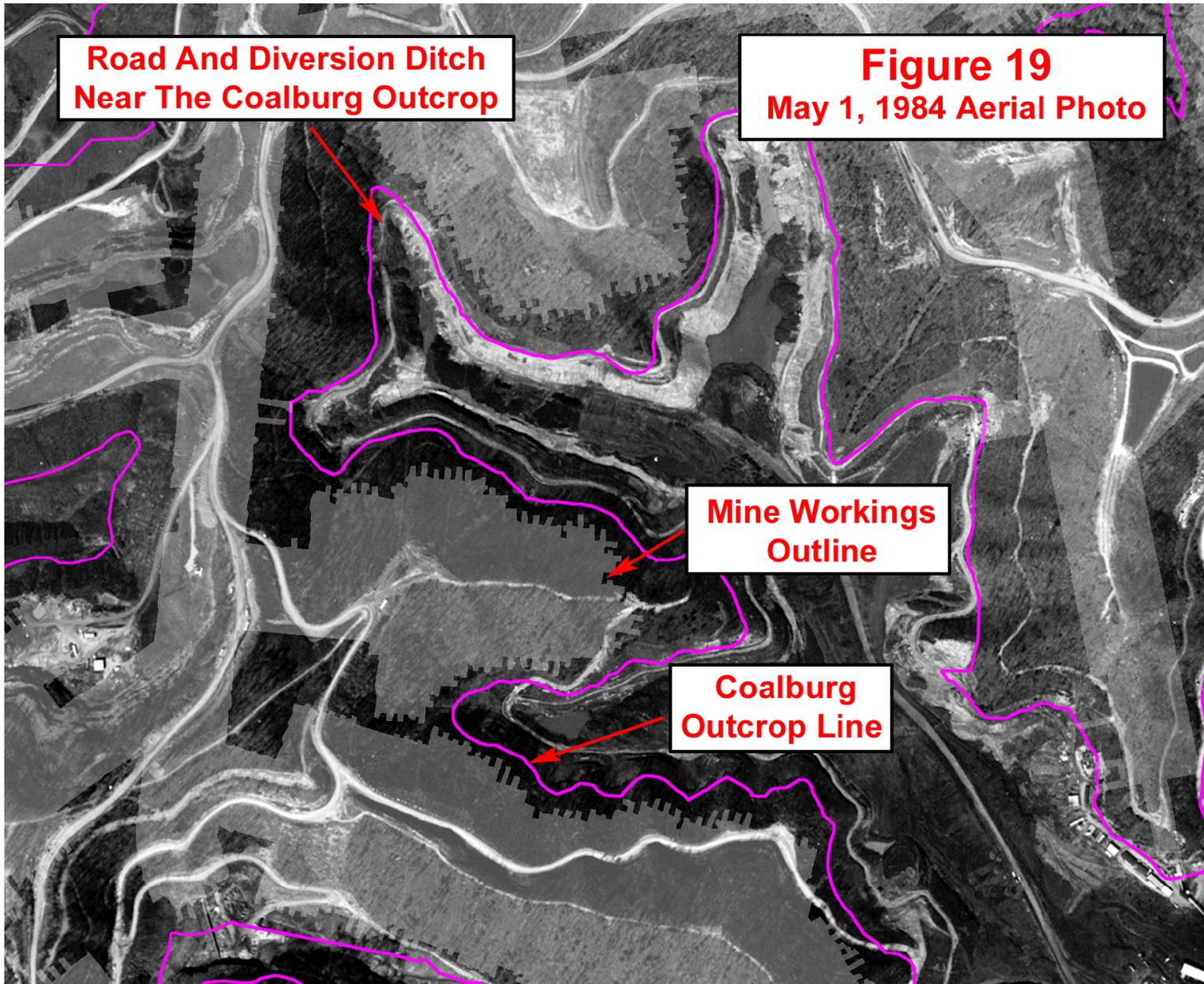


Figure 18
**Underground Slurry
Disposal Locations
(Shaded Areas)**





**Road And Diversion Ditch
Near The Coalburg Outcrop**

Figure 19
May 1, 1984 Aerial Photo

**Mine Workings
Outline**

**Coalburg
Outcrop Line**

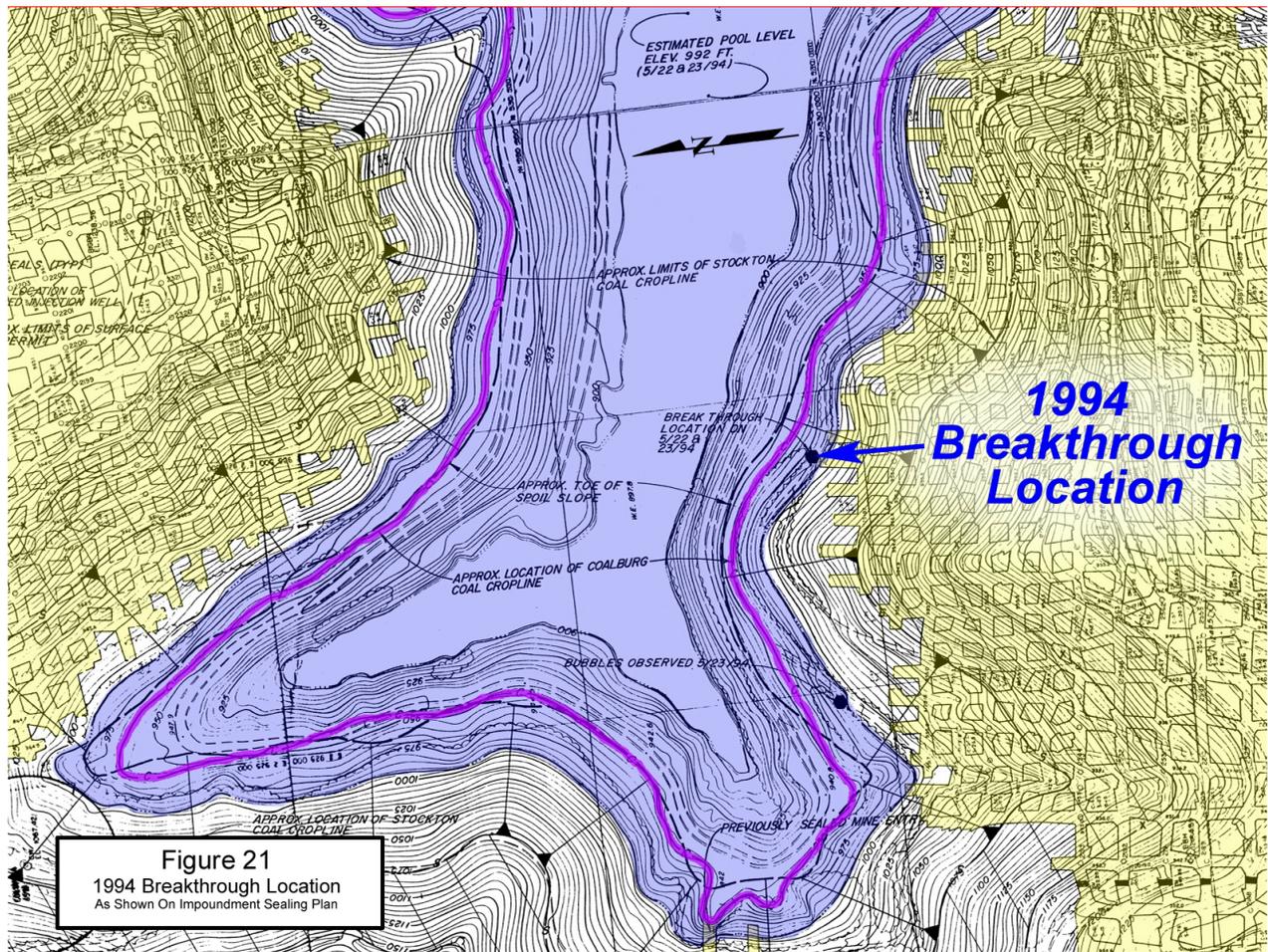


Figure 21
 1994 Breakthrough Location
 As Shown On Impoundment Sealing Plan

Lower and Middle Pennsylvanian Series	Breathitt Formation	Richardson Broas (Stockton, Hazard No. 9) Peach Orchard (Coalburg, Hazard No. 8) Hazard No. 6 Taylor Fire clay Whitesburg Williamson Upper Elkhorn No. 3 (Darby) Upper Elkhorn No. 2 (Kellioka) Upper Elkhorn No. 1 Lower Elkhorn (Pond Creek, No. 2 Gas, Harlan)
	Lee and Breathitt	Clintwood Glamorgan Splash Dam (Banner)

Figure 22
 Not to scale

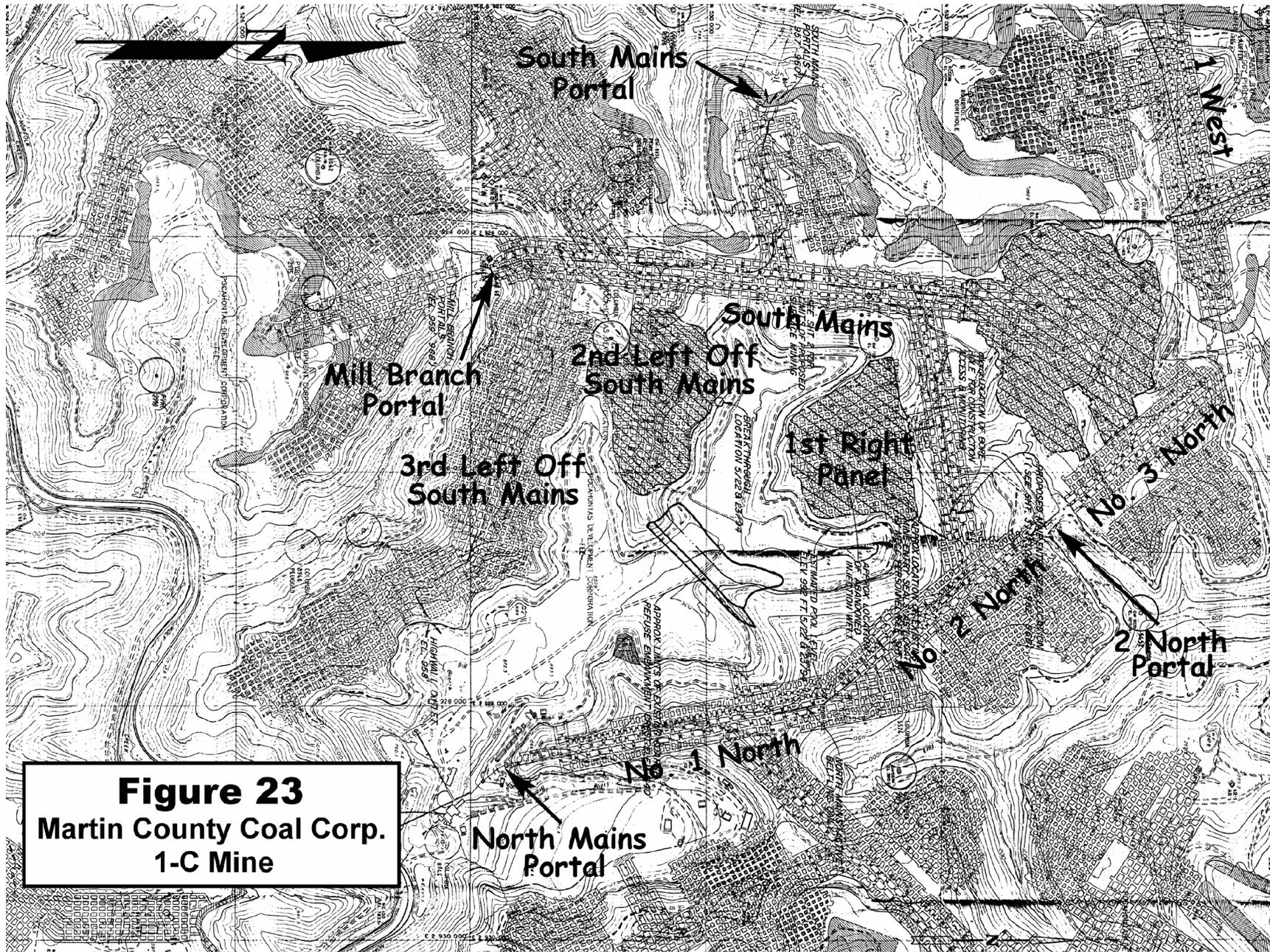


Figure 23
Martin County Coal Corp.
1-C Mine

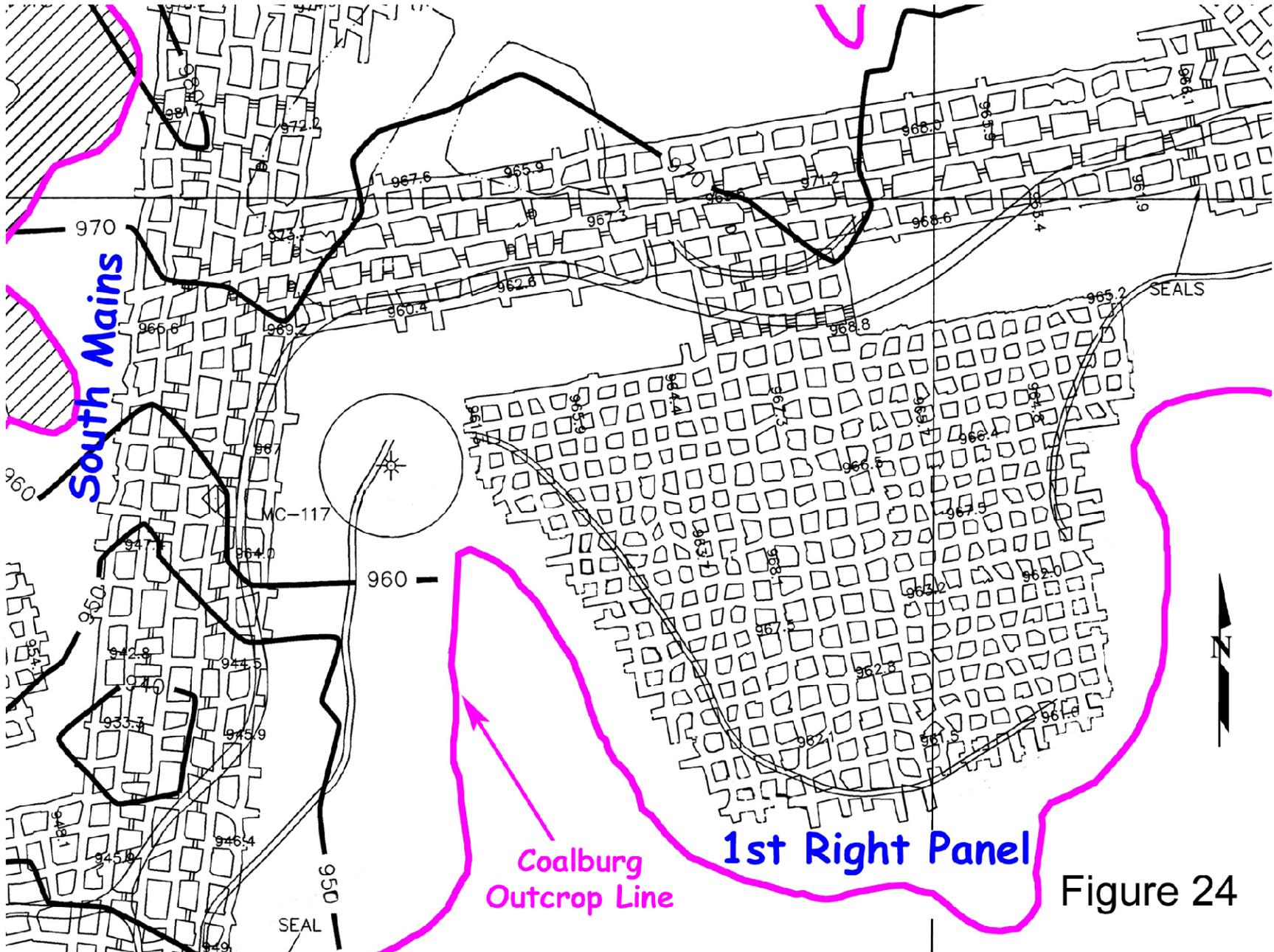


Figure 24

Figure 26

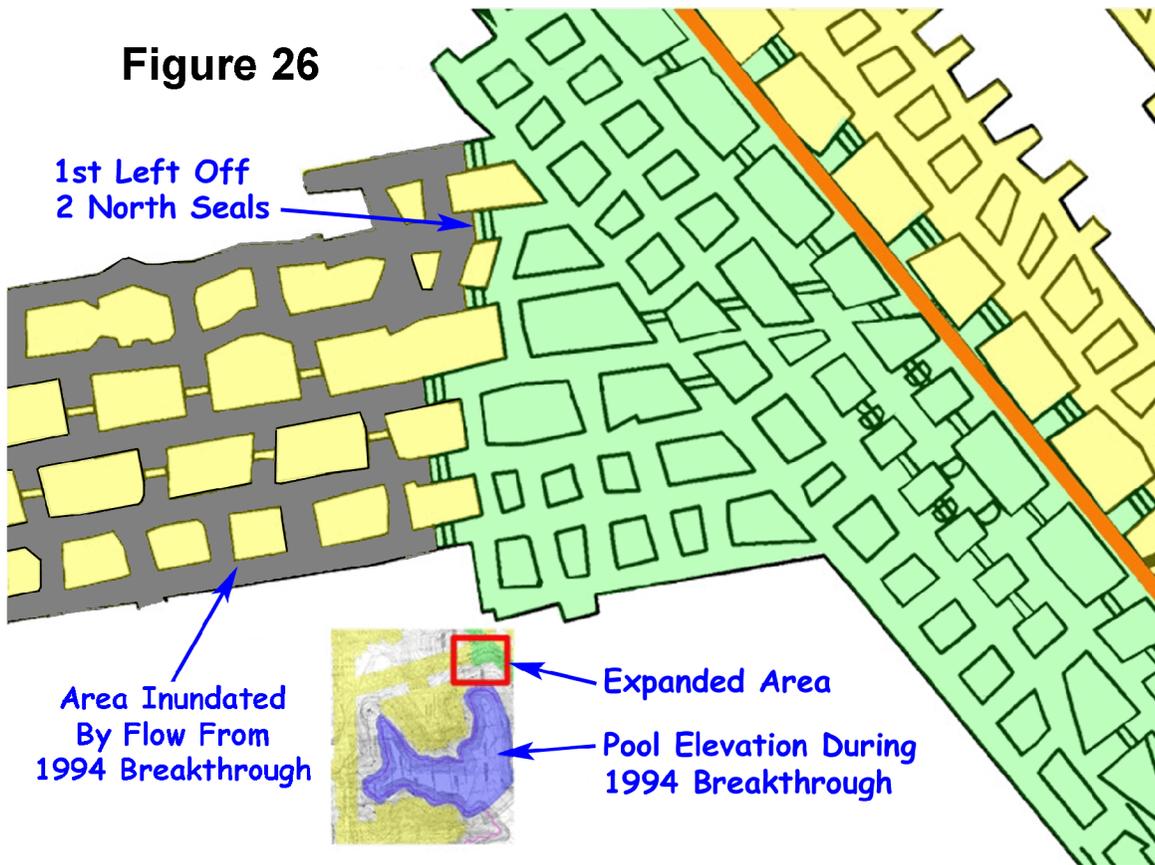


Figure 27

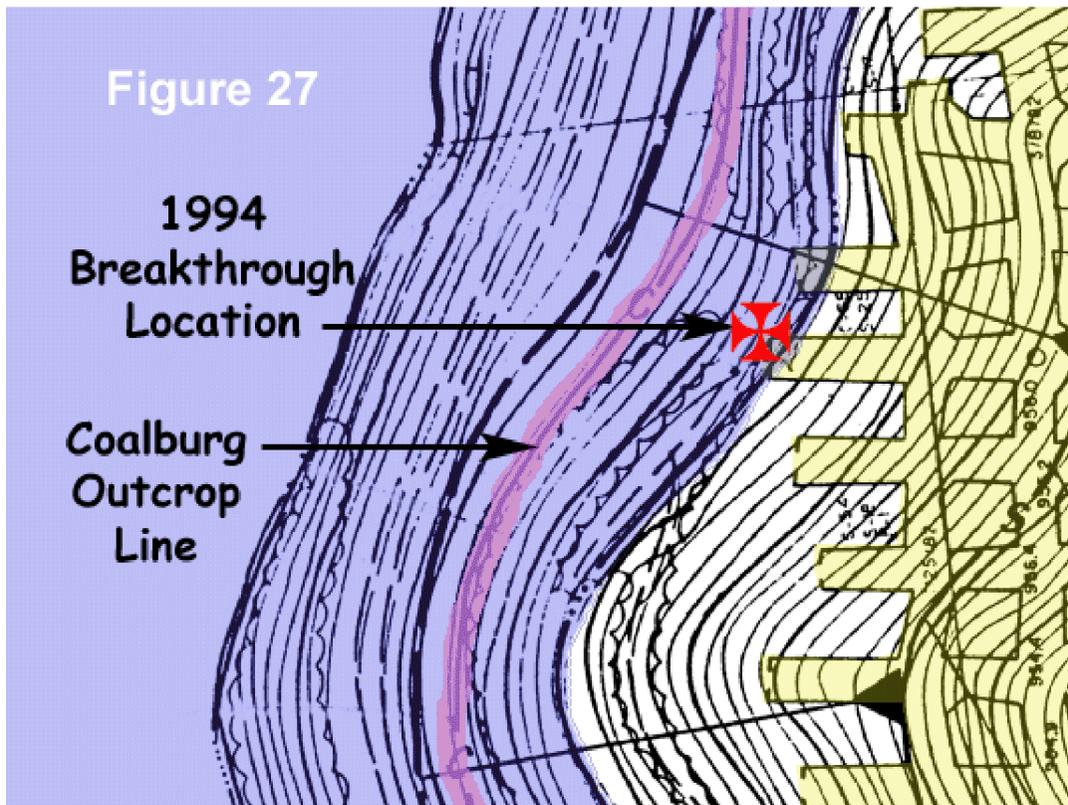
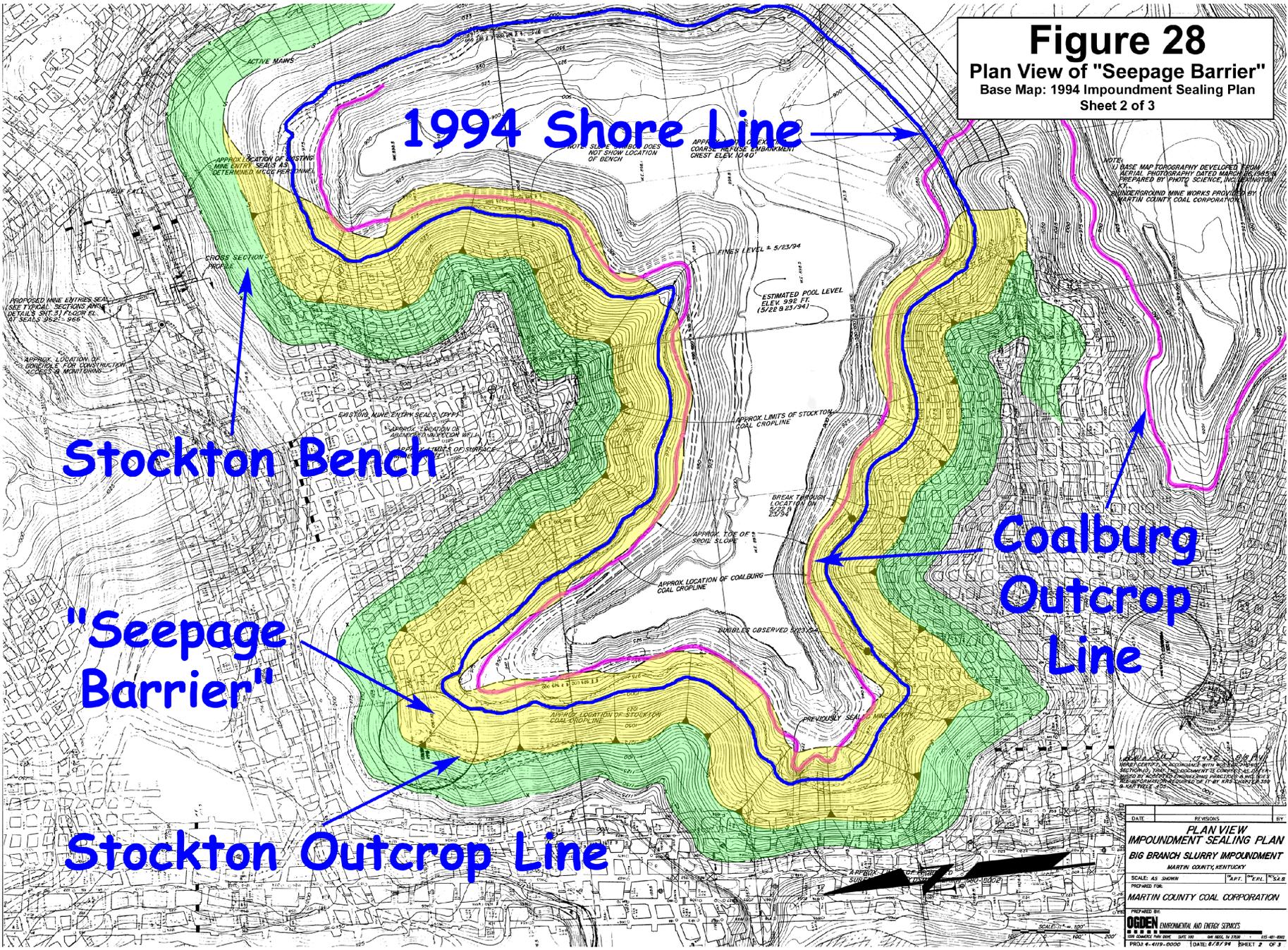


Figure 28
Plan View of "Seepage Barrier"
 Base Map: 1994 Impoundment Sealing Plan
 Sheet 2 of 3



Stockton Bench

"Seepage Barrier"

Stockton Outcrop Line

1994 Shore Line

Coalburg Outcrop Line

DATE	REVISIONS	BY
PLAN VIEW IMPOUNDMENT SEALING PLAN		
BIG BRANCH SLURRY IMPONDMENT		
MARTIN COUNTY, KENTUCKY		
SCALE: AS SHOWN	"A" "E" "S" & "E"	
PREPARED FOR: MARTIN COUNTY COAL CORPORATION		
PREPARED BY: OGDEN ENVIRONMENTAL AND ENERGY SERVICES		
PROJECT: 4119-0000 DATE: 6/27/94 SHEET 2 OF 3		

Figure 29 Typical "Seepage Barrier"

Base Map: 1994 Impoundment Sealing Plan
Sheet 3 of 3

Note: The portion of this drawing which details mine seal specifications has been removed for clarity.

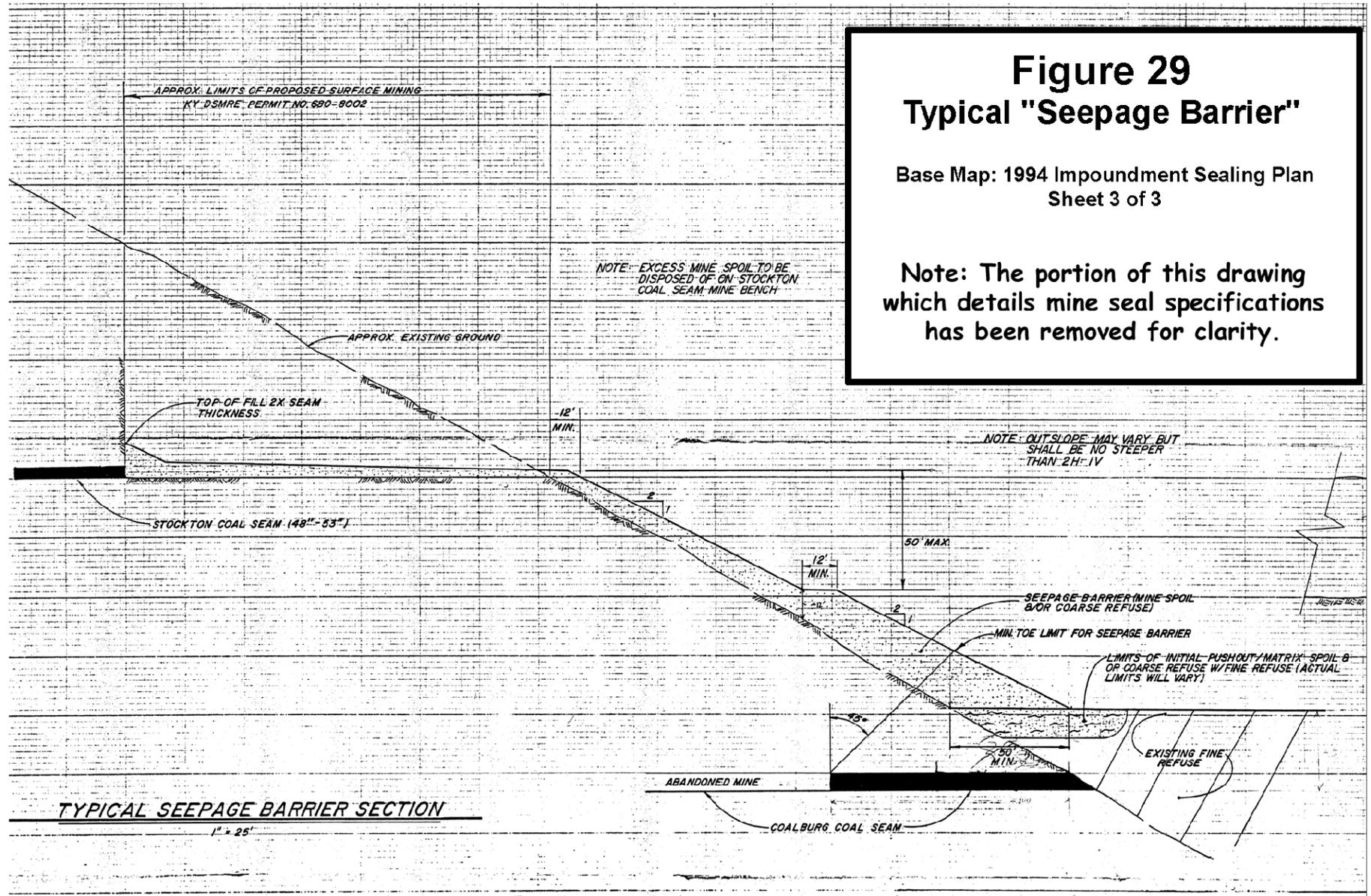
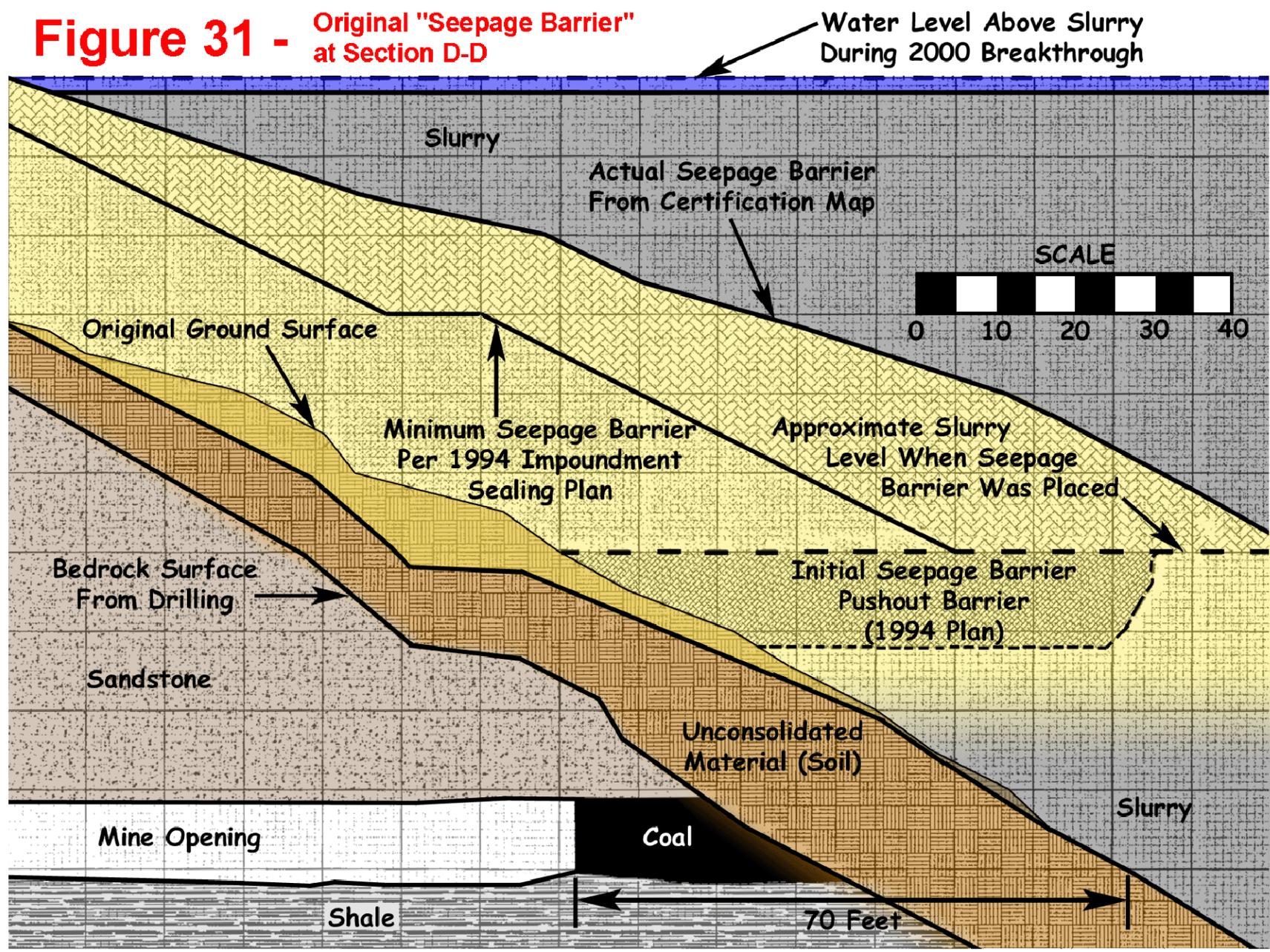




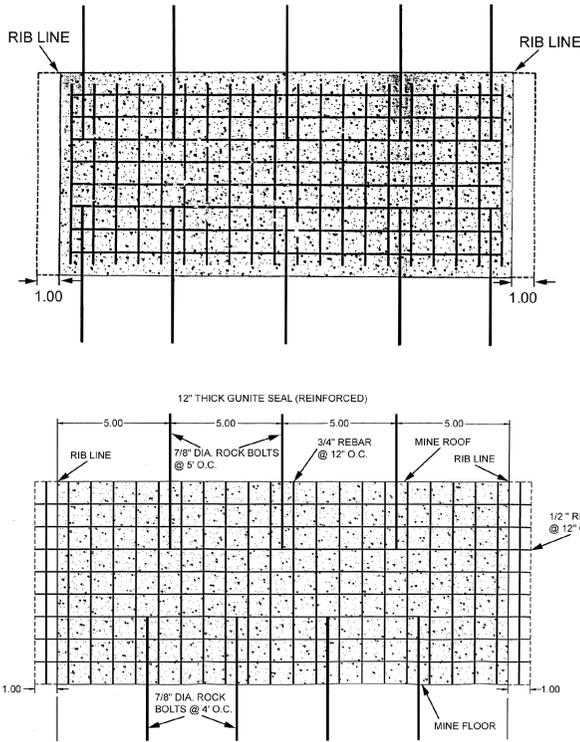
Figure 30
Construction of
"Seepage Barrier"

Figure 31 - Original "Seepage Barrier" at Section D-D

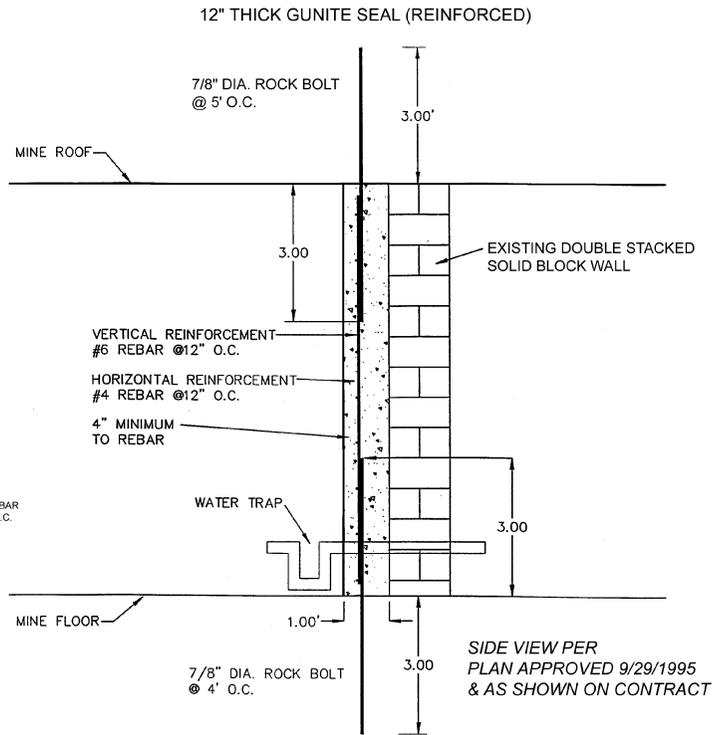


SEAL DESIGN PER PLAN APPROVED 9/29/1995

Design Specifications for
1st Left off the No. 2 North Mains Seals
Approved vs Contract Specifications



SEAL DESIGN PER CONTRACT WITH H & B ENTERPRISES, INC.



SIDE VIEW PER
PLAN APPROVED 9/29/1995
& AS SHOWN ON CONTRACT

Figure 32

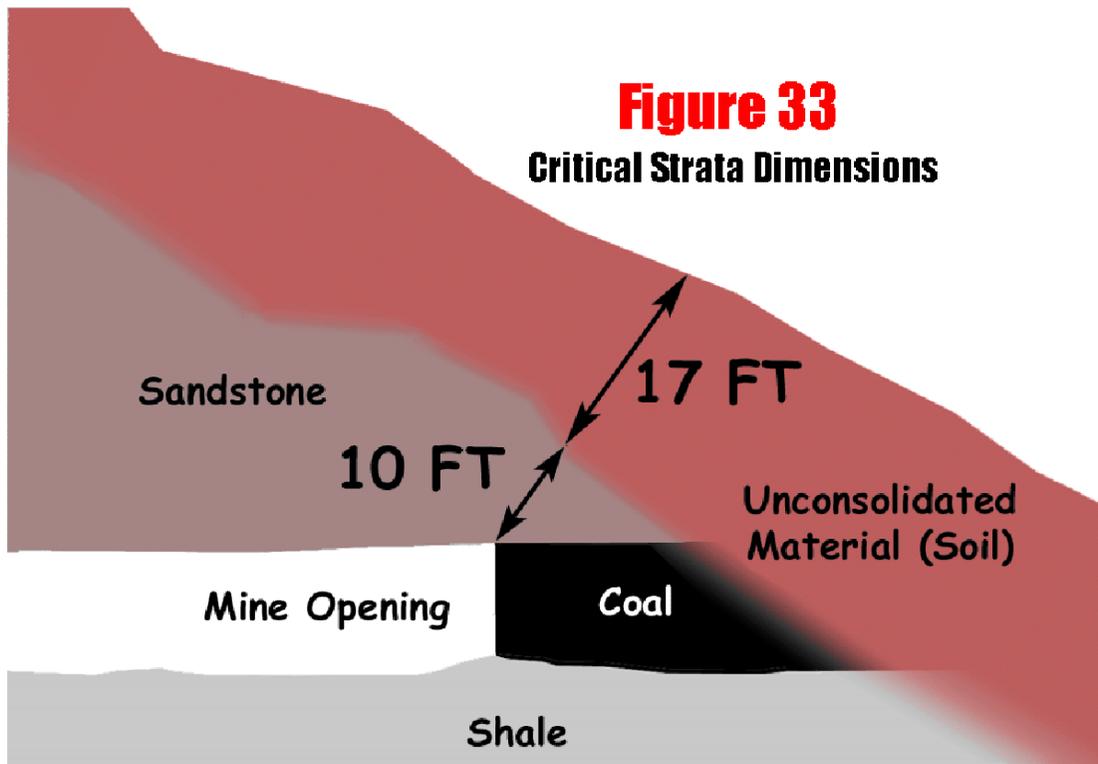


Figure 33

Critical Strata Dimensions

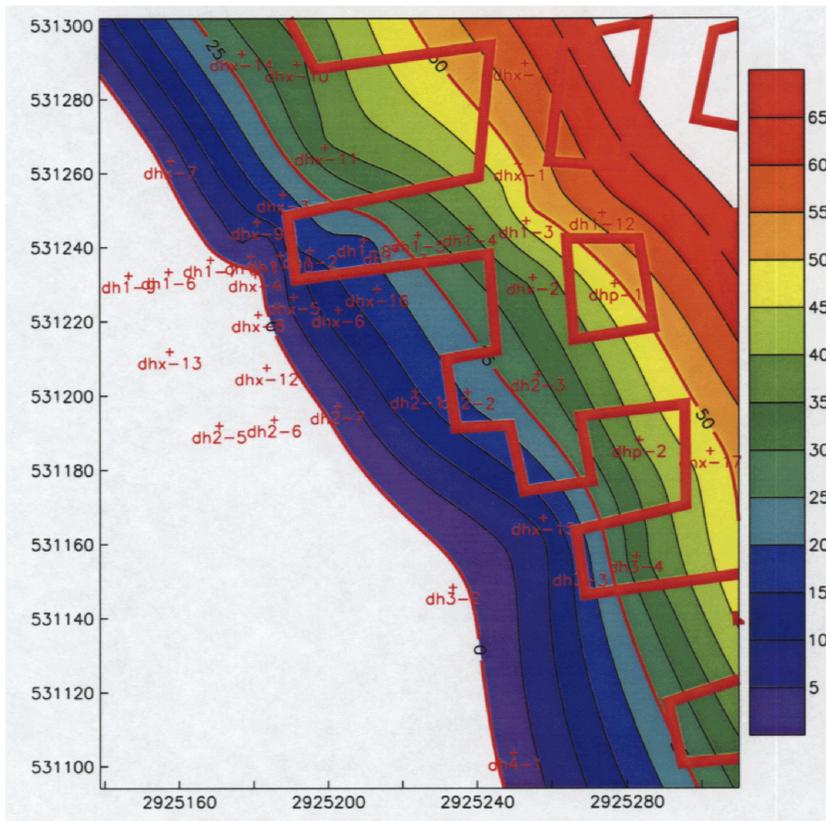
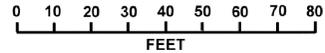


Figure 34
Sandstone Isopach Map



This figure was prepared by the Office of Surface Mining using Earthvision Version 5.1 for Unix. The data was taken from the Field Test Borings prepared by Triad Engineering, Inc.

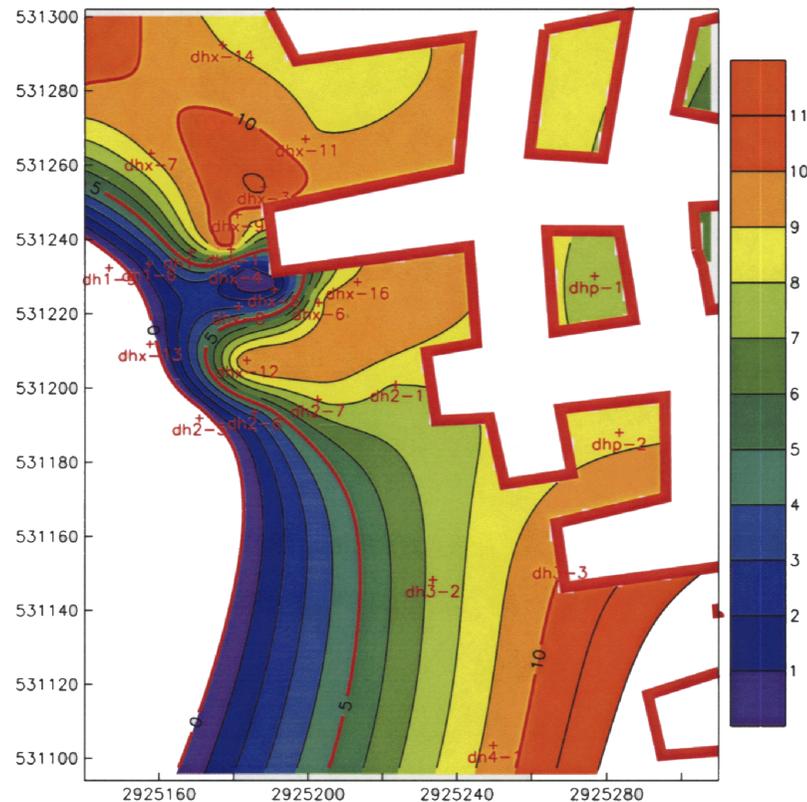
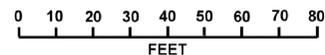
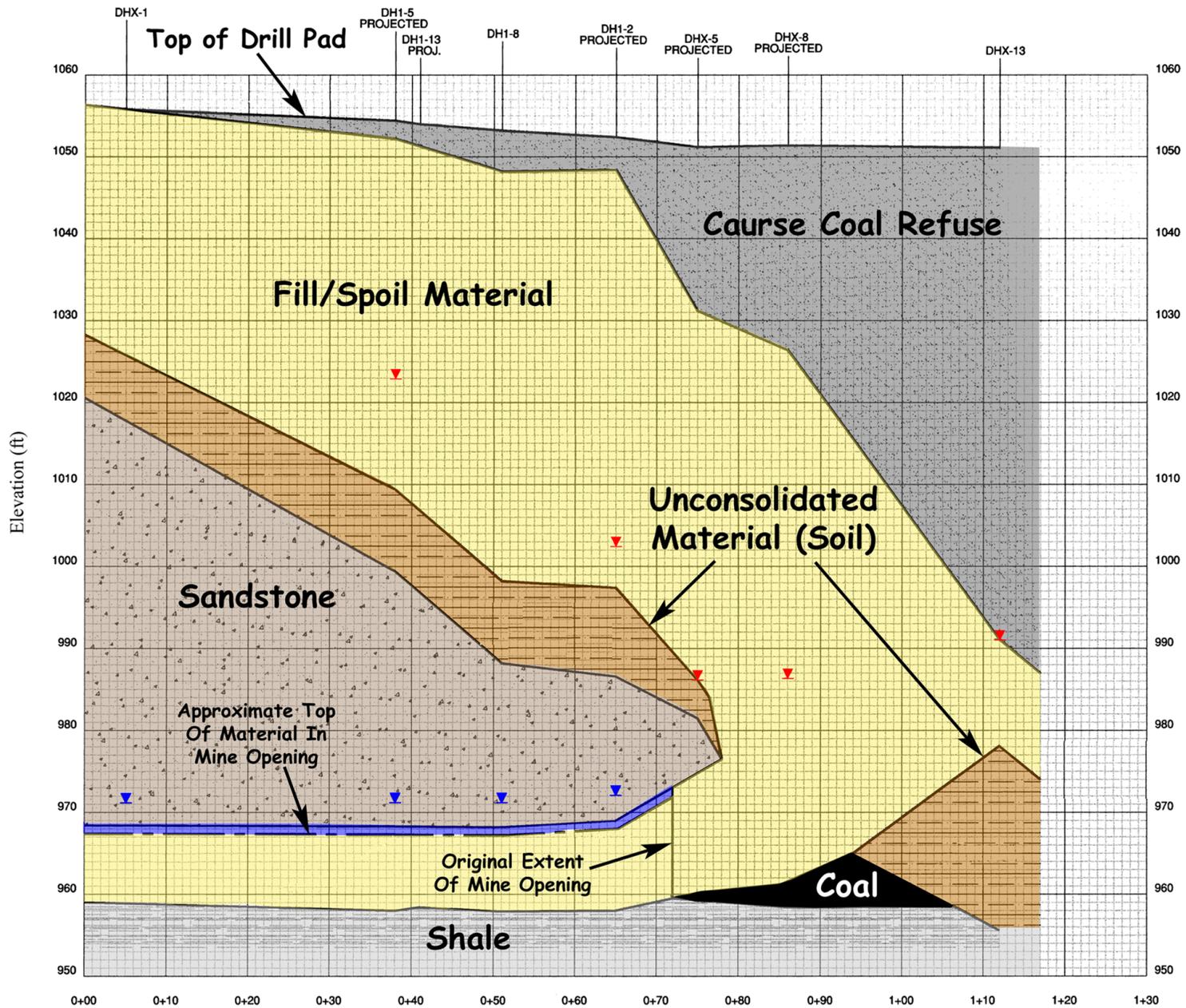


Figure 35
Coal Isopach Map



This figure was prepared by the Office of Surface Mining using Earthvision Version 5.1 for Unix. The data was taken from the Field Test Borings prepared by Triad Engineering, Inc.



- - - - - APPROX. TOP OF MATERIAL PRESENT IN MINE
 ▼ WATER LEVEL DURING DRILLING
 ▼ WATER LEVEL FOLLOWING DRILLING

Distance (ft)

Figure 36 Section D-D

Figure 37

Mise a la Masse Survey Data

Big Branch Slurry Impoundment
Martin County Coal Corporation
Martin Co., KY



Legend:

- + Mise a la Masse Survey Station
- ◇ Drill Hole (by others)

Notes:

Coordinates in KY North State Plane Grid,
NAD-83 geodetic datum.

Survey stations and drill hole locations
from GPS survey by Enviroscan, Inc.

Mine plan and coal outcrop lines digitized
from portions of "MSHA Drilling Program"
map provided by MSHA.

Enviroscan, Inc.
Project No. 120015
Rev. 01/03/01

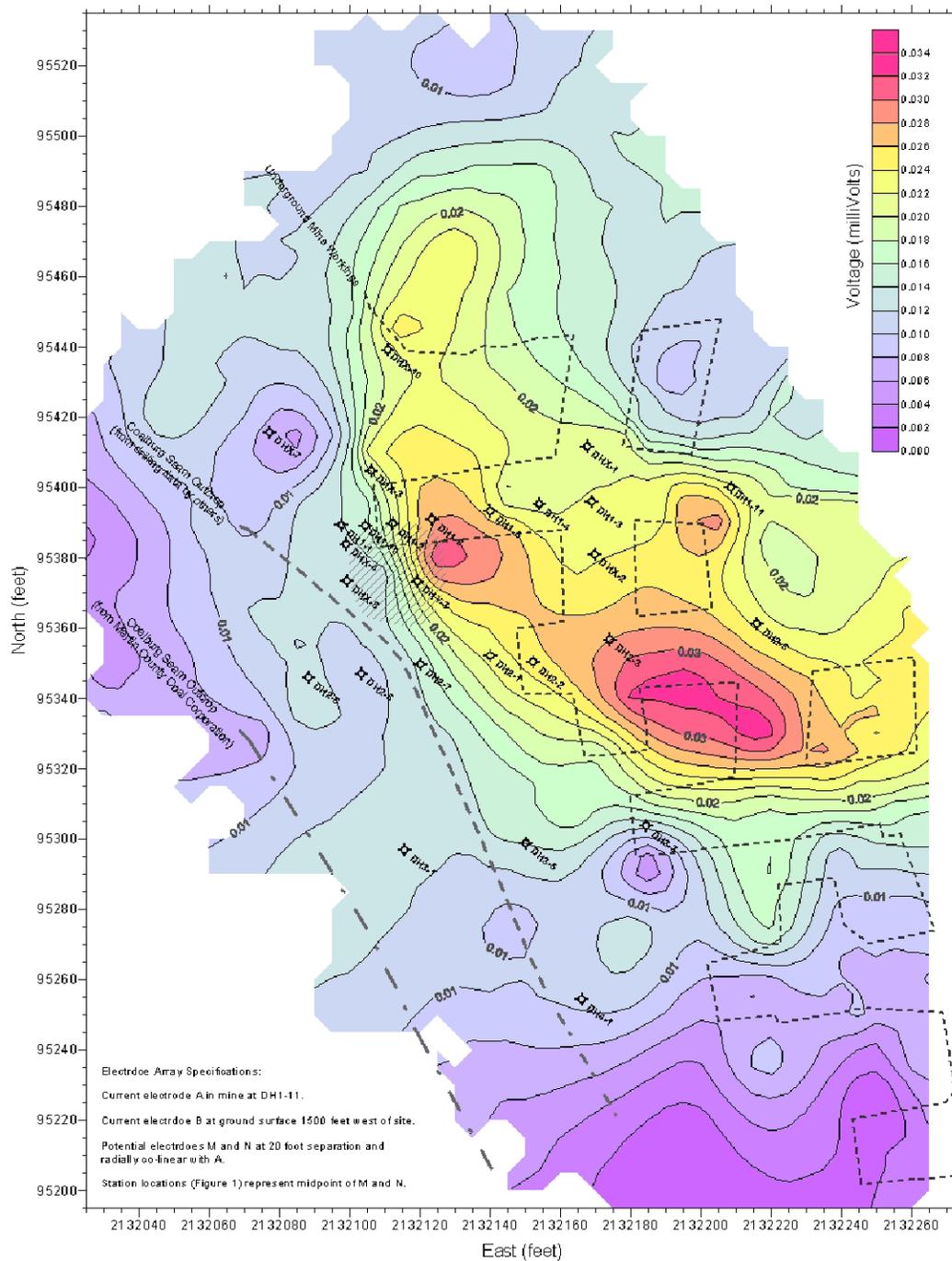


Figure 38
South Mains Portal Outflow vs Water Sources

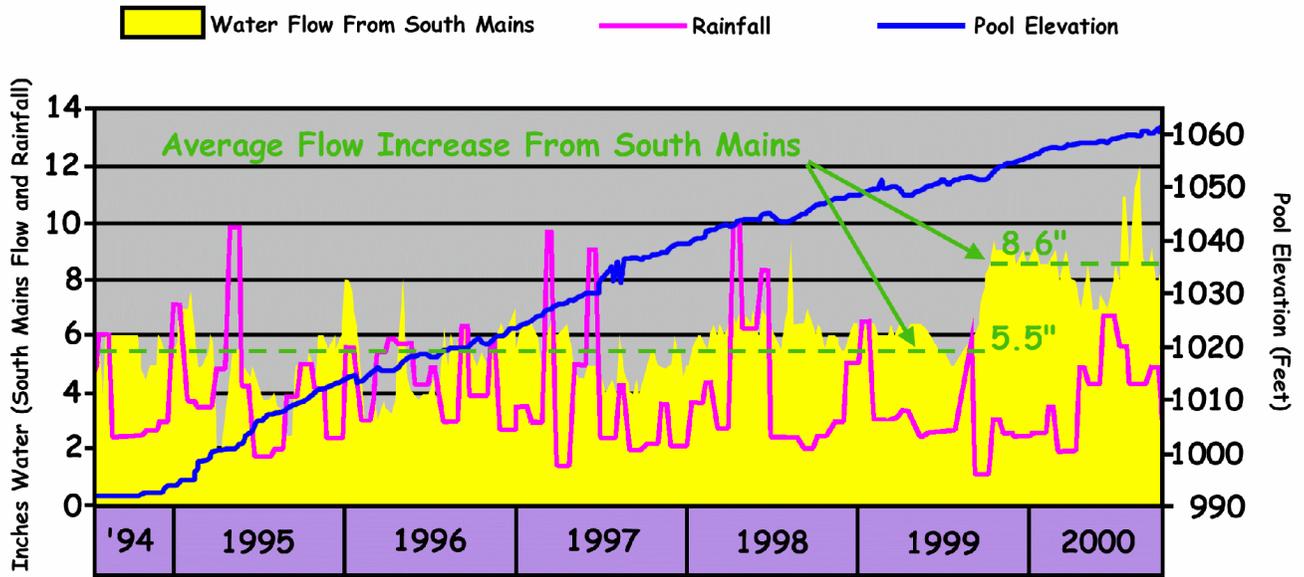


Figure 39
Refuse Slip In Southwest Fork Of Impoundment

APPENDIX A - Investigation Participants

List of Persons Participating in the Investigation or Providing Information

Mine Safety and Health Administration

John W. Fredland, Regional Accident Coordinator, Technical Support
Michael A. Evanto, Geologist, District 3
Harold L. Owens, Supv. Civil Engineer, District 4
Tony Oppegard, Advisor to the Assistant Secretary
Theodore P. Betoney, Jr., Civil Engineer, District 3
Steven L. Sorke, Supv. Mining Engr., District 7
Ronnie L. Brock, Special Investigator, District 7
Jack Spadaro, Supt., National Mine Health and Safety Academy
Carl E. Boone, II, District Manager, District 6
Billy G. Foutch, District Manager
Gerald W. McMasters, Acting Ass't District Manager, District 6
Hank R. Bellamy, Mining Engineer, District 6
Garett Robinson, Mining Engineer, District 6
Stevie Justice, Acting Supv., Martin Field Office, District 6
James H. Osborne, CMI, Martin Office, District 6
Jimmy D. Brown, CMI, Martin Office, District 6
Timothy J. Thompson, District Manager, District 3
Debra Howell, CMI, Pikeville Field Office, District 6
Philip Little, Industrial Hygienist, District 6
Tommy Caudill, CMI, Martin F.O., District 6
Michael J. Lawless, Deputy Administrator for Field Operations, Arlington, Virginia
Clifford F. Lindsay, Instructor, National Mine Academy
William A. Dupree, Jr., Assistant District Manager, District 6
Virgil F. Brown, Mine Emergency Unit, Beckley, WV
Chris A. Weaver, Mining Engineer, District 3

U.S. Department of Labor, Office of the Solicitor

James Crawford, Attorney
Herman J. Narcho, Attorney

Kentucky Department of Mines and Minerals

Tracy Stumbo, Chief Accident Investigator, Martin, KY
Hershell Tackett, Supervisor, Martin Field Office, KY

Martin County Coal Corporation

Robert R. Johnson, Chief Engineer
David M. Hensley, Manager, Underground Mines
Zack Harman, Assistant Manager of Safety
Bill Linkenhoker, Assistant Manager of Safety
Marco Rajkovich, Legal Counsel
Larry Muncie, Preparation Plant Superintendent
Shaney Harvey, Attorney, A. T. Massey
Robert Jordan, Chief of Security
Deloris Hopkins, Safety Department
Mark Meadows, Surveyor
Steve Gosslin, Prep. Plant Foreman
Billy W. Sluss, Day Shift Plant Supervisor
Dewey Webb, Prep. Plant Swing Shift Supervisor

P&A Engineering and Consultants

Larry Rollins, Engineering/Construction Technican
Mark Workman, Geologist (PG)
Ryan Ward, Geologist (MS)

Geo/Environmental Associates, Inc

Mohamed Nodfal, Engineer
Mitch Halsey, Project Engineer
Carol Ford, Geologist
Roger Cecil, Geologist

Office of Surface Mining, Department of Interior

Rick Rice, Lexington Field Office, KY
Kenneth E. Powers, Pikeville Area Office, KY
Robert S. Evans, Technical Support, Pittsburgh, PA
Gail A. Smith, Lexington Field Office, KY
Joseph L. Blackburn, Program Manager, Lexington F.O.
Ralph Blumer, Engineer, Lexington, KY
Dennis Clark, Civil Engineer
William Kovoric, Field Office Director, Lexington, KY

TRIAD Engineering, Inc.

Larry Nottingham, President
John Nottingham, Vice President
Chuck Montgomery, Geologist
Jason Smithson, Geologist
Stephen A. Clark, Chief of Surveying
Randy W. Moss, Survey Party Crew Chief
Herbie Chancellor, Survey Party Member
Roger Miller, Survey Party Member
Roy A. Lupardes, Drilling Crew (Driller)
Richard Newhouse, Drilling Crew (Helper)
Chad Haynes, Drilling Crew (Helper)
Randy Skeen, Drilling Crew (Driller)
Mark Lupardes, Drilling Crew (Helper)
Robert Chapman, Drilling Crew (Helper)
Ben Collins, Engineering Technican

Kentucky Department for Surface Mining Reclamation Enforcement

Allan Luttrell, Deputy Commissioner, Frankfort, KY
David Johnson, Geologist, Frankfort, KY
Jackie Hampton, Regional Engineer, Pikeville, KY
Todd Alfrey, Geologist
Christina Brand, Geologist
Clyde Derossett, Engineer, Prestonsburg Regional Office
Billy Ratcliff, Geologist
Sonny Vance, Supervisor, Prestonsburg Regional Office
Jeff Benton, Environmental Inspector

Natural Resources Conservation Service, U.S. Department of Agriculture

Bob Blanton, District Conservationist, Inez, KY
David Moore, Conservation Technician, Inez, KY
Bruce Waters, Resource Soil Scientist, Lexington, KY
Steve Blanford, Soil Survey Party Leader, Shelbyville, KY

Pocahontas Land Corporation

John W. Payne, General Manager Operations

Enviroscan, Inc.

Tim Bechtel, Principal Geophysicist (Ph.D., P.G.)

West Virginia Department Environmental Protection

Ava C. King, Chief, Division Of Environmental Protection

APPENDIX B - List of Persons Interviewed

Name / Occupation / Date Interviewed

Raymond Bradbury, President (Retired), Martin County Coal Corporation, 1/18/01
Howard Branham, President, H&B Enterprises, Inc., 1/31/01
Sammy Branham, Security, 12/21/00
Otis H. Cooley, Surveyor, 1/3/01
Bobby Copley, Dozer Operator, Martin County Coal Corporation, 12/20/00
Charles Cox, Plant Supt. (Retired), Martin County Coal Corporation, 1/5/01
Phillip Dalton, Security, 12/20/00
Donnie Goble, Truck Driver, 1/4/01
David Hensley, General Mine Foreman, Martin County Coal Corporation, 1/18/01
Robert Johnson, Chief Engineer, Martin County Coal Corporation, 1/25/01
Robert Jordan, Chief of Security, Martin County Coal Corporation, 12/20/00
Edward Maynard, Security, 12/20/00
Denny Ray Moore, Shuttle Car (Retired), Martin County Coal Corporation, 1/4/01
Larry Muncie, Supt. Prep Plant, Martin County Coal Corporation, 12/7/00
Jerry Norris, Belt man, Martin County Coal Corporation, 12/14/00
Greg Preece, Property Owner, 12/6/00
Bill Sluss, Plant Supv., Martin County Coal Corporation, 1/3/01
John Stepp, Mgr. Surface Mines, Martin County Coal Corporation, 12/14/00
Roy Tiller, Security, 12/20/00
Mike Whitt, Miner Oper. (Retired), Martin County Coal Corporation, 1/5/01
Paul Williamson, Dozer Operator, Martin County Coal Corporation, 12/14/00

APPENDIX C - MSHA MEU Members Present During Exploration

Jerry Bellamy, Mining Engineer, District 6 - Pikeville, KY

Virgil Brown, Mine Safety and Health Specialist, Mine Emergency Unit-Beckley Office - Beaver, WV

Robert Clay, CMS&H Inspector, District 7 - Harlan, KY

Jerry Cook, CMS&H Inspector, District 4 - Pineville, WV

Ron Costlow, CMS&H Inspector, District 2 - Johnstown, PA

Allen Dupree, Assistant District Manager, District 6 - Pikeville, KY

Kenny Murray, Supervisory, CMS&H Inspector, District 6 - Pikeville, KY

Stanley Sampsel, CMS&H Inspector, District 7 - Jacksboro, TN

Tim Watkins, Mining Engineer, District 6 - Pikeville, KY

Jeff Kravitz, Chief, Special Projects, Pittsburgh Safety & Health Technology Center, Pittsburgh, PA