



Drill Hole	Surface Elevation	Overburden	Strata Thickness	Strata Name	Bottom Elevation	Static Water Level
DH-1-OB	1145.1'	60'	12"	Wbg	1084.1'	---
DH-2-OB	1120.8'	41'	36"	Wbg	1079.8'	---
DH-3-OB	1137.7'	71'	72"	Wbg	1065.7'	1089.7'
DH-4-OB	1152.66'	69'	36"	Wbg	1083.66'	1084.66'
DH-5-OB	1138.14'	53'	48"	Wbg	1084.14'	1088.14'

Drill Hole	Surface Elevation	Overburden	Strata Thickness	Strata Name	Bottom Elevation	Static Water Level
Y-1	1145.9'	26'	24"	Wbg	1119.9'	---
Y-2	1181.6'	69'	36"	Wbg	1112.6'	---
Y-3	1167.9'	49'	36"	Wbg	1118.9'	---
Y-4	1182.3'	47'	24"	Wbg	1135.3'	---
Y-5	1134'	8'	6"	Wbg	1126'	---
Y-6	1170'	42'	36"	Wbg	1128'	---
Y-7	1221.5'	29'	36"	Wbg	1192.5'	---
Y-8	1180.7'	59'	24"	Wbg	1121.7'	---
Y-9	1167.1'	48'	84"	Wbg	1119.1'	---
Y-10	1167.1'	61'	12"	LWbg	1106.1'	---

Drill Hole	Surface Elevation	Overburden	Strata Thickness	Strata Name	Bottom Elevation	Static Water Level
BH-1	915.67'	32.9'	43.5'	Benwood Limestone	882.77'	862.87'
BH-2	931.75'	51.5'	46.5'	Benwood Limestone	880.25'	845.90'
BH-3	939.75'	101.1'	1.1'	Sewickley coal	838.65'	845.75'
DH-1	922.66'	109.3'	0.8'	Sewickley coal	813.36'	907'
DH-2	920.76'	35'	44'	Benwood Limestone	885.76'	901'
DH-3	911.56'	29'	48'	Benwood Limestone	882.56'	901'
DH-4	925.08'	27'	31'	Benwood Limestone	898.08'	904'
DH-5	934.06'	82'	52'	Sewickley coal	852.06'	923'
DH-6	871.5'	19'	29'	Benwood Limestone	852.5'	845'
JL-50	820'	114.1'	12.1'	Pittsburgh (R) (1)	705.9'	---
		118.1'	7.1'	Pittsburgh	687.9'	---

Legend

- Permit Boundary - 359.1 acres
- Surface Site Boundary - 110.1 acres
- Underground Mining Boundary - 256.6 acres
- 100' Perimeter
- Property Ownership (keyed to table and module 5)
- Municipal Boundary
- Structure Contour Line - Base of the Benwood Limestone
- Inferred Structure Contour Line - Base of the Benwood Limestone
- Utility (overhead) - E-Electric (West Penn Power)
- Utility (underground) - T-Telephone (Marlanna-Scenery Hill Telephone Co.)
- Buildings (occupied/unoccupied)
- Existing Public Roads
- Existing Private Roads
- Existing Gas Well
- Test Hole
- Overburden Analysis Test Hole
- Variance Area - Surface Mining Allowed
- Restricted - No Surface Mining Without a Variance
- Wetlands - Delineated, Flagged and Surveyed
- Wetlands - Field Identified and Mapped
- Woods
- Bottom of Benwood Limestone Cropline
- Formation Contact Line - Top of Benwood Limestone
- Waynesburg A Coal Cropline
- Waynesburg B Coal Cropline
- Deep Mined Areas and Portal
- Previously Surface Mined Areas
- Existing Culverts - size and type or Key to Module 12 page 12-1
- RCP-Reinforced Concrete Pipe
- CPP-Corrugated Plastic Pipe
- CMP-Corrugated Metal Pipe
- SP-Steel Pipe
- Cemetery
- Ground Slope
- Geologic Cross Section
- Strike and Dip
- Geologic Faults - N/A
- Joint Measurement
- Ground Water Flow (Local)
- Ground Water Flow (Regional)
- Spring
- Private Water Supply
- Water Sampling Point (Background)
- Water Sampling Point (Monitoring)
- Flow Measuring Only - Flow Measuring Only
- S-Spring P-Pond T-Tributary S-Stream SE-Seep W-Well DM-Deep Mine Discharge WL-Wetland I-Impoundment C-Clean DW-Dug Well
- Perennial Stream
- Intermittent Stream
- Ephemeral Stream
- Relocated / Reconstructed "UT" E"
- Overhead Utility Pole
- Existing Pond / Impoundment
- Monitoring Well (Background Sample)
- 100' Cover Line Above Top of Benwood Limestone
- Geologic Cross Section Location From SMP No. 6310041
- NPDES Point
- Indicates dwelling is served by public water
- Haul Road
- No underground mining until PennDOT approval is secured
- Overhead Utility Pole
- Earthen Berm
- Collection Ditch
- Division Ditch
- Sedimentation Pond
- Roadside Sediment Trap

Dip 1.6%
Dip 1.2%
Dip 1.2%
Dip 1.2%

N40° 00' 42.0"
W80° 01' 48.0"

Property Ownership

- John Kosky Contracting Inc.
- Clyde Holding, Inc.
- John Kosky Contracting Inc.
- John Kosky Contracting Inc.
- John Alan & Stacy A. Kosky
- Peoples Natural Gas Company LLC
- Peoples Natural Gas Company LLC
- Kathleen Martinick & Dan B. Derber
- Cathy H. & John P. Lozicky
- Dolores Thompson & Leslie A. Hutchins, Jr.
- 10A. Edgar C. Sweeney, Jr. & Carol Hupp
- 10B. Raymond R. & Tammy M. Schmitt
11. Frank & Mary Jane Elaw
12. Travis D. & Shannon R. Rhodes
13. William & Dana Mickle
14. Willard A. & Pearlise Buel
15. John L., Jr. & Kim Chodick
16. Paul A. & Deanne Hein
17. Robert E. & Patricia L. Kiefer
18. David K. & Robert C. Sloan
19. Brian L. Lancaster
20. Virginia A. Crawford Roy, Trust
21. Christopher J. & Brittany N. Coffield
22. Christopher J. & Brittany N. Coffield
23. East Bethlehem Church
24. Kenneth & Kathleen Harasty
25. Michael J. & Sylvia A. Burke
26. Alyssa M. Ford
27. David A. Webeck & James C. Webeck
28. Joshua A. Zupkowski
29. James C. & Marjorie Webeck
30. Robert J. Sweeney
- 30A. Robert J. & Marla L. Sweeney
31. Southwestern PA Water Authority
32. Renee E. Simpson
33. William L. Beck
34. Buckingham Cemetery Assn
35. Mark A. York
36. John Alan & Stacy A. Kosky
37. John Alan & Stacy A. Kosky
38. Frank G. & Margaret J. Startare & Joseph J. Startare
39. Joseph J. & Nina M. Startare
40. Jason White
41. Freddie D. Ervin
42. Deborah J. & Joseph C. Shiner
43. Deborah J. & Joseph C. Shiner
44. Robin L. Doman & Susan G. Genschuck
45. Joseph A. & Shirley S. Yabonski and Joseph M. Yabonski
46. Harold & Kathleen Rice
47. Harold & Kathleen Rice
48. Margaret A. Furnan & Katherine M. Kasula
49. Margaret A. Furnan & Katherine M. Kasula
50. Bethanne L. Morgan
51. Caribon Farms LTD Partnership
52. David A. Smerczek
53. Joanna L. Dragan

Flow Monitoring Chart

Sample Point	Surface Elevation	Description
A	901.4'	Spring - Monthly Flow Only
15	891.9'	Unnamed Tributary "E" downstream above welland - Monthly Flow Only
B	908'	Unnamed Tributary "E" downstream of confluence with Eastern Branch - Monthly Flow Only
D	914.3'	Unnamed Tributary "E" Eastern Branch downstream - Monthly Flow Only
E	962'	Unnamed Tributary "E" Western Branch downstream of sample point 22 at confluence with stream from pond 17 - Monthly Flow Only
F	968'	Unnamed Tributary "E" Western Branch downstream of sample point 17 at confluence with flow measuring point E - Monthly Flow Only
G	937.9'	Unnamed Tributary "E" Eastern Branch downstream of sample point 5 and upstream of flow measuring point D - Monthly Flow Only
H	995.8'	Unnamed Tributary "E" Eastern Branch downstream of sample point 5 and upstream of flow measuring point G - Monthly Flow Only
17	1037.84'	Pond - Monthly Flow Only
21	1062.13'	Iron slanted seep zone - Monthly Flow Only

Mine Summary Chart

Key	Operator	Permit No.	Mine Name	Status	Coal Seams
I	Neiswonger Construction, Inc.	63100401	Maggie Lynn Quarry	Active	Benwood Limestone
II	Neiswonger Construction, Inc.	63110101	Bugger #1	Completed	Wbg
III	PA Coal Reclamation, Inc.	63813210	Hawkins	Active	Coal Refuse Reprocessing
IV	Tygart Industries, Division of U.S. Natural Resources, Inc.	324775843	LOS	Completed	Wbg
V	Boyle Land & Fuel Co.	63801106	Fitzwater	Completed	Wbg
VI	Boyle Land & Fuel Co.	63829306	Huffman	Completed	Wbg
VIII	Narick Contracting Co., Inc.	32755830	Fitzwater	Completed	Wbg
IX	BCNR Mining Corp.	63743703	Clyde Mine-Black Dog Hollow	Abandoned	Coal Refuse Disposal
X	Westmont Coal Company, Inc.	6376144	Deemston	Completed	Wbg
XI	TRAR Resources, Inc.	32475386	Fargo	Completed	Wbg
	B.L.F. Corp.	32676586	Busha	Completed	Wbg
	Dragan & Son	32876582	Belle No. 11	Completed	Wbg
XX	MonValley Steel Company, Inc.	63891301	Clyde	Completed	Pittsburgh
	Unknown	Unknown	County Jail	Abandoned	Wbg

Location shown on Exhibit 6.1
The Clyde underground mine underlies the entire permit boundary and the 100' perimeter around it.

Water Monitoring Chart

Point	Surface Elevation	Description
1	1064'	Ten Mile Creek - intermediate point
2	1064'	Small underground mine discharge and headwaters of eastern branch Unnamed Tributary "E" to Ten Mile Creek & Monthly Flow
3	1085'	Headwaters of Unnamed Tributary "D" eastern branch
4	1122'	Unnamed Tributary "D" - upstream
5	1020'	Unnamed Tributary "D" to Ten Mile Creek - intermediate point
6	1044'	Welland discharge
7	817.1'	Spring which occurs from the local flow system within the Benwood Limestone
8	826.9'	Spring which occurs from the local flow system near the base of the Benwood Limestone
9	817.4'	Spring which occurs from the local flow system within the Benwood Limestone
10	808.6'	Unnamed Tributary "D" to Ten Mile Creek - downstream
11	804'	Ten Mile Creek - downstream
12	820'	Unnamed Tributary "G" to Ten Mile Creek - downstream
13	820'	Ten Mile Creek - upstream
14	1166.9'	Unnamed Ephemeral Tributary "A" to Black Dog Hollow - upstream
15	1131.4'	Headwaters of Unnamed Tributary "A" to Black Dog Hollow
16	948.8'	Unnamed Tributary "G" to Ten Mile Creek - intermediate location
17	812'	Reconstructed stream - downstream
18	824'	Unnamed Tributary "G" to Ten Mile Creek - downstream
19	1044'	Unnamed Tributary "G" - upstream
20	1142'	Headwaters of Unnamed Ephemeral Tributary "A" to Black Dog Hollow
21	1060'	Unnamed Tributary "A" to Black Dog Hollow - downstream
22	1055.5'	Unnamed Tributary "B" to Black Dog Hollow - downstream
23	819.4'	Spring which occurs from the local flow system within the Benwood Limestone
24	805'	Ten Mile Creek - downstream
25	820'	Hawkins Permit sub-surface point
26	840'	Unnamed Tributary "E" Westem Branch to Ten Mile Creek - upstream & Monthly Flow
27	1108.6'	Upgradient Monitoring Well - SWL only
28	1136.9'	Intermediate Monitoring Well - SWL only
29	1204.9'	Downgradient Monitoring Well - Static Water Level Only
30	870'	Pittsburgh Mine Pool Monitoring Well - Static Water Level Only
31	001	Sedimentation Pond P-1

Drill Hole	Surface Elevation	Overburden	Strata Thickness	Strata Name	Bottom Elevation	Static Water Level
TH-1	1127.7'	57'	53.6'	Waynesburg coal	1074.1'	1078.7'
		272.8'	0.8'	Sewickley horizon	801.3'	---
		24'	24'	Waynesburg coal	1054.6'	---
		190.7'	53.3'	Benwood Limestone	864.6'	1038.3'
		245.6'	0'	Sewickley horizon	862.6'	---
		19'	3'	Wbg (TS)	1143.1'	---
		82'	3'	Wbg (TS)	1076.1'	---
		86'	2'	Wbg (TS)	1074.1'	---
		75'	2'	Wbg (TS)	1057.9'	---
		250'	48'	Benwood Limestone	1053.9'	1066.8'
		302'	3'	Sewickley	830.9'	---
		55'	5'	Wbg	1038.6'	Plugged
		180'	3'	Wbg A	1056.6'	---
		156'	1'	Wbg (TS)	1045.6'	1048.9'
		380'	---	Sewickley (Top of Coal)	828.6'	---
		67'	7'	Wbg (TS)	1101.3'	---
		235'	54'	Wbg (BS)	1095.3'	---
		291'	---	Sewickley (Top of Coal)	874.3'	---

TS - Top Split; BS - Bottom Split; Wbg A - Waynesburg "A" Seam; Wbg - Waynesburg Rider; LWbg - Lower Waynesburg; BOV - Bottom of Void

Boreholes remain open to monitor static water levels

Scale 1" = 200'

Scale 1" = 400'

Notes

- The base map is a composite of topography (E/C1) developed from LIDAR 2 contour data obtained from the PADESA website. The locations of roads, buildings, surface water features and other cultural data were obtained from the Elsworth & Maher, PA 1/2" USGS Quadrangle maps and supplemented/updated by field and aerial data photography.
- The property lines and property ownership shown on this map were obtained from Washington County and from Greene County tax assessment maps and records. This map does not represent an actual field survey of the properties shown and should not be used for any surface and mineral ownership information that is verified by the permittee.
- All overburden and test hole elevations and locations were determined by field survey. Water sample points were located by hand-dug wells with surface elevations determined from LIDAR surface elevation models.
- The location and extent of abandoned surface and deep mine workings depicted on this map are based on available data without the benefit of a final certified mine map. Accordingly, neither Geotech Engineering, Inc. nor the professional engineer/industrial geologist signing the map outlines, warranties or guarantees the precise location or extent of abandoned, unoccupied or active workings depicted hereon. Unknown or untrapped mines may extend beyond the depicted boundaries and may contain abandoned mine pools as well as other safety hazards.
- The gas well locations are from Farm Line Maps and other historic mapping, and therefore approximate locations.
- This map is georeferenced to the Pennsylvania State Plane South, North American Datum 1983 (NAD 83) coordinate system.
- All units are in feet.

Neiswonger Construction, Inc.
17592 Route 322, Strattonville, PA 16258
Phone: (814) 764-3455

Maggie Lynn Underground Mine
Permit No. 63192001
Exhibit 6.2: Environmental Resources Map

Washington County

Prepared By: **GEI**
Geotech Engineering, Inc.
3231 Airport Court
Murrysville, PA 15869
Phone: (814) 342-7000
Fax: (814) 342-7000

Date: December 2021
Revision: June 2023
December 2023

MAX PERMIT NO. 63192001
3231 Airport Court
Murrysville, PA 15869
Phone: (814) 342-7000
Fax: (814) 342-7000