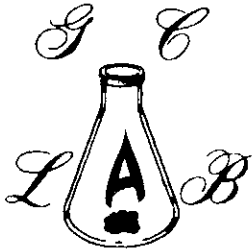


Soil Pit Descriptions. Locations of the soils pits shown on Sheet 2.

Pit	Depth to water	Depth of Hole	Description
Pit #1	4.0'	6.0'	10" brown loam topsoil like material high in organic content followed by 5' of brown clay size fraction loam with silt. Subsoil reddish brown in color. Roots down to about 5'
Pit #2	4.5'	83"	12" brown loam topsoil like material high in organic content followed by 8' of brown clay size fraction loam with some silt sized grains mixed. A couple of cobbles found. Subsoil reddish brown in color. Roots evident down to about 6'.
Pit #3	4.5'	108"	12" brown loam topsoil like material high in organic content followed by 8' of very fine clay sized fraction of loam with some silt size grains mixed. Subsoil reddish brown in color. Roots down to about 6'.
Pit #4	7.0'	126"	12" brown loam topsoil like material high in organic content followed by 8' of very fine clay sized fraction of loam with some silt size grains mixed. A couple of cobbles. Subsoil reddish brown in color. Roots down to about 6'. At 9' 6" of orange silt/sand lens followed by 1' gray sand, cobbles and gravel at bottom of hole.
Pit #5	7.0	120"	24" brown loam topsoil like material high in organic content followed by 8' of very fine clay sized fraction of loam with some silt size grains mixed. Subsoil reddish brown in color. Roots down to about 6'. Side of holes does not subside as quickly as other holes.
Pit #6	6.0	96"	10" brown loam topsoil like material high in organic content followed by 5' of very fine clay sized fraction of loam with some silt size grains mixed. Subsoil reddish brown in color. Roots down to about 6'. Last two feet was reddish brown sand with water.

Analysis of soil samples collected from the Latrobe site during soil pit excavation. Lab sheets are attached.

pit	type	sand	silt	clay	pH	Lime	SMP pH	N	P	K
						requirement				
		%	%	%		ton/acre		lb/acre	lb/acre	lb/acre
Pit 1	subsoil	19	32	48						
Pit 3	subsoil	19	29	52						
Pit 5	subsoil	29	7	64						
Pit 6	subsoil	23	21	56	6.0	7.5	6.2	<10	60	216
Pit 5	topsoil	23	27	50	5.6	7.5	6.2	<10	65	312
average		23	23	54	5.8	7.5	6.2	<10	63	264



G and C Coal Analysis Lab., Inc.

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814-849-2559

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HEDIN ENVIRONMENTAL SERVICES
195 CASTLE-SHANNON BLVD.
PITTSBURGH, PA 15228

Date Collected 02/27/09
Date Received 03/06/09
Date Reported 03/23/09

Sample ID

Loyalhanna Watershed Assoc

Pit #3/ ~~Soil / 12" depth - Passive Treatment~~
TOP SOIL (0-12")

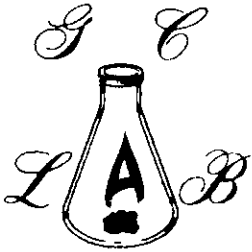
Collected by
G&C ID#

Hedin Env.
124188

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
% Sand	19.33	%
% Silt	29.11	%
% Clay	51.56	%
Nitrogen	<10	lbs/acre
Potash	216	lbs/acre
Phosphorus	60	lbs/acre
SMP Buffer pH	6.17	
Lime Requirement (to pH 7.0)	7.50	tons/acre
Soil pH	5.01	

Our laboratory used A.C.S certified chemicals following Standard Methods and EPA Procedures

Approved by: _____



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Date Collected 02/27/09
Date Received 03/06/09
Date Reported 03/23/09

Sample ID

Loyalhanna Watershed Assoc

Pit #5/ ~~Sub Soil 24" +~~

Collected by
G&C ID#

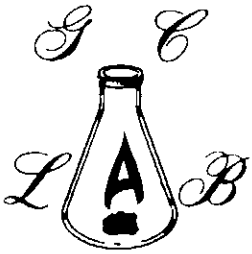
Hedin Env.
124189

Sub soil 24" +

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
% Sand	22.55	%
% Silt	27.51	%
% Clay	49.94	%
Nitrogen	<10	lbs/acre
Potash	312	lbs/acre
Phosphorus	65	lbs/acre
SMP Buffer pH	6.20	
Lime Requirement (to pH 7.0)	7.50	tons/acre
Soil pH	5.57	

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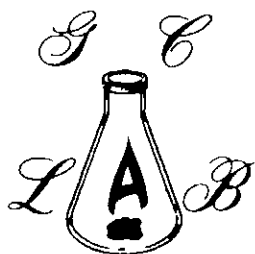
Sample ID Loyalhanna Watershed Assoc
Pit #5/ Soil / 12" Latrobe Passive Treatment

Collected by Hed in Env.
G&C ID# 124190

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
% Sand	28.99	%
% Silt	6.57	%
% Clay	64.44	%

Our laboratory used A C S certified chemicals following Standard Methods and EPA Procedures

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Date Collected 02/27/09
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Date Reported 03/23/09

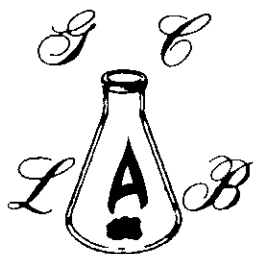
Sample ID Loyalhanna Watershed Assoc
Pit #1/  Soil / 12" Latrobe Passive Treatment

Collected by Hed in Env.
G&C ID# 124187

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
% Sand	19.34	%
% Silt	32.32	%
% Clay	48.34	%

Our laboratory used A.C.S certified chemicals following Standard Methods and EPA Procedures

Approved by: _____



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Date Collected 02/27/09
Date Received 03/06/09
Date Reported 03/23/09

Sample ID Loyalhanna Watershed Assoc
Pit #6/  Soil / 10" Latrobe Passive Treatment

Collected by Hedini Env.
G&C ID# 124191

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
% Sand	22.56	%
% Silt	21.04	%
% Clay	56.40	%

Our laboratory used A.C.S certified chemicals following Standard Methods and EPA Procedures

Approved by

