

TEST NUMBER TU 1 East Wall

Project C080212.00, Task 003

SOIL DESCRIPTION BY: D.L. Cremeens

DATE: April 23, 2008

LOCATION: Site 7 18Cv480 Calvert Cliffs NPP

<u>HORIZON</u> DEPTH (ft)	<u>SOIL COLOR</u> MATRIX AND MOTTLING	<u>TEXTURE</u>		STRUCTURE	CONSISTENCE	BOUNDARY	COMMENTS
		FINE EARTH	ROCK FRAGMENTS				
CA 0-0.6	Dark grayish brown (10YR 4/2)	Loam	20% to 30% bricks, shell, metal	Moderate, coarse granular	Friable	Abrupt, wavy	
Ab(CA2) 0.6-0.9	Dark brown (7.5YR 3/2)	Silt loam, loam		Moderate, medium granular	Friable	Abrupt, irregular	Feature 4a
Bt 0.9-2.5	Reddish brown (5YR 4/4)	Sandy clay loam		Moderate, medium subangular blocky	Firm	Gradual	Common, distinct brown (7.5 4/4)clay films
BC 2.5-3.5	Brown (7.5YR 4/4)	Sandy loam		Structureless, massive	Firm	-	

PARENT MATERIAL/REGOLITH: Fillover coastal plains sediments

LANDFORM: Disturbed ridge top

ADDITIONAL NOTES: Augered from 1.4 ft to 3.5 ft

**GAI CONSULTANTS, INC.
ENGINEERS, GEOLOGISTS,
PLANNERS AND ENVIRONMENTAL SPECIALISTS
385 EAST WATERFRONT DRIVE, HOMESTEAD, PA 15120-5005**

TEST NUMBER TU 2 South Wall

Project C080212.00, Task 003

SOIL DESCRIPTION BY: D. L. Cremeens

DATE: April 23, 2008

LOCATION: Site 7 18Cv480Calvert Cliffs NPP

HORIZON DEPTH (ft)	SOIL COLOR MATRIX AND MOTTLING	TEXTURE		STRUCTURE	CONSISTENCE	BOUNDARY	COMMENTS
		FINE EARTH	ROCK FRAGMENTS				
CA/A 0-0.6	Dark brown (7.5YR 3/2)	Loam	20% to 30% rock fragments	Weak, medium granular	Friable	Abrupt, wavy	
E 0.6-1.0	Brown (7.5YR 5/3) with common, distinct very dark grayish brown (10YR 3/2) worm tubes	Sandy loam	20% to 30% rock fragments	Weak, medium subangular blocky	Friable	Clear, wavy	
BE 1.0-1.5	Brown (7.5YR 4/4) and Brown (7.5YR 5/4)	Sandy loam		Weak, medium subangular blocky	Firm	Clear, smooth	
Bt1 1.5-1.9	Reddish brown (5YR 4/4)	Sandy clay loam		Moderate, medium subangular blocky	Firm	Gradual	Common, distinct brown (7.5 YR 4/4) clay films
Bt2 1.9-3.5+	Reddish brown (2.5YR 4/4)	Sandy clay loam		Moderate, medium subangular blocky	Firm	—	

PARENT MATERIAL/REGOLITH: Full over coastal plains sediments

LANDFORM: Shoulder slope

ADDITIONAL NOTES: Augered from 1.9 ft to 3.5 ft

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TEST NUMBER TU 3 North Wall

Project C080212.00, Task 003

SOIL DESCRIPTION BY: D.L. Cremeens

DATE: April 24, 2008

LOCATION: Site 1 18CV474 Calvert Cliffs NPP

<u>HORIZON DEPTH (ft)</u>	<u>SOIL COLOR MATRIX AND MOTTLING</u>	<u>TEXTURE</u>	<u>STRUCTURE</u>	<u>CONSISTENCE</u>	<u>BOUNDARY</u>	<u>COMMENTS</u>
A 0-0.3	Dark grayish brown (10YR 4/2)	Silt loam	Moderate, medium granular	Friable	Abrupt, wavy	
Bt 0.3-1.5	Reddish brown (5YR 4/4)	Silt loam	Moderate, medium subangular blocky	Friable	Clear	Common, distinct Brown (7.5YR 4/4) clay films
2Bt 1.5-2.1	Brown (7.5YR 4/4)	loam	Weak, medium subangular blocky	Friable	Diffuse	
2BC 2.1-2.5+	Brown (7.5YR 5/4)	Fine sandy loam	Structureless, massive	Friable	—	

PARENT MATERIAL/REGOLITH: Loess over coastal plains sediments

LANDFORM: Ridge top

ADDITIONAL NOTES: Augered from 0.9 ft to 2.5 ft

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TEST NUMBER TU 4 – South Wall

Project C080212.00, Task 003

SOIL DESCRIPTION BY: D. L. Cremeens

DATE: April 23, 2008

LOCATION: Site 7 18Cv480Calvert Cliffs NPP

<u>HORIZON DEPTH (ft)</u>	<u>SOIL COLOR MATRIX AND MOTTLING</u>	<u>TEXTURE</u>		<u>STRUCTURE</u>	<u>CONSISTENCE</u>	<u>BOUNDARY</u>	<u>COMMENTS</u>
		<u>FINE EARTH</u>	<u>ROCK FRAGMENTS</u>				
CA 0-0.7	Dark gray (10YR 4/1)	Silt loam, loam	20% to 30% rock fragments	Weak, coarse granular	Very Friable	Clear, smooth	0-0.4 Modern sod
Ab (CA2) 0.7-1.1	Very dark grayish brown (10YR 3/2) and very dark gray (10YR 3/1) with common, distinct dark yellowish brown (10YR 4/4) fragments	loam	10% to 20% brick, shell fragments	Weak, medium granular	Very Friable	Clear, irregular	Feature 4a, shell midden
BEb 1.1-1.5	Brown (7.5YR 4/4) with many, distinct dark brown (7.5YR 3/2) worm tubes	loam		Weak, medium subangular blocky	Friable	Clear, irregular	
Btb 1.5-2.5	Reddish brown (5YR 4/4) and reddish brown (5YR 4/3)	Sandy clay loam		Moderate, medium subangular blocky	Firm	Gradual	
BCb 2.5-4.0	Reddish brown (5YR 4/4)	Sandy loam		Weak, medium subangular blocky	Firm	Diffuse	
C 4.0-4.3	Brown (7.5YR 5/4)	Medium sand		Structureless, massive	loose	–	

PARENT MATERIAL/REGOLITH: Fill over coastal plains sediments

LANDFORM: Ridge top, former house site

ADDITIONAL NOTES: Augered from 1.9 ft to 4.3 ft

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TEST NUMBER TU 5 – North Wall

Project C080212.00, Task 003

SOIL DESCRIPTION BY: D.L. Cremeens

DATE: April 24, 2008

LOCATION: Site 1 18CV474 Calvert Cliffs NPP

HORIZON DEPTH (ft)	SOIL COLOR MATRIX AND MOTTLING	TEXTURE		STRUCTURE	CONSISTENCE	BOUNDARY	COMMENTS
		FINE EARTH	ROCK FRAGMENTS				
A 0-0.5	Dark grayish brown (10YR 4/2) and very dark grayish brown (10YR 3/2)	Silt loam	Trace of brick fragments	Weak, medium granular	Friable	Abrupt, irregular	Common, distinct brown (7.5YR 4/4) clay films
Bt1 0.5-1.5	Reddish brown (5YR 4/4)	Silty clay loam	Trace	Moderate, medium subangular blocky	Firm	Clear	Few, distinct brown (7.5YR 4/4) clay films
2Bt2 1.5-2.0	Brown (7.5YR 4/4)	Loam		Weak, medium subangular blocky	Firm	Gradual	
2BC 2.0-2.3+	Brown (7.5YR 5/4)	Sandy loam		Structureless, massive	Friable	—	

PARENT MATERIAL/REGOLITH: Loess over coastal plains sediments

LANDFORM: Ridge top

ADDITIONAL NOTES: Augered from 0.8 ft to 2.3 ft

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TEST NUMBER TU 8/TU 1 – East Wall

Project C080212.00, Task 003

SOIL DESCRIPTION BY: D. L. Cremeens

DATE: April 24, 2008

LOCATION: Site 9 18CV482 Calvert Cliffs NPP

<u>HORIZON DEPTH (ft)</u>	<u>SOIL COLOR MATRIX AND MOTTLING</u>	<u>TEXTURE</u>	<u>STRUCTURE</u>	<u>CONSISTENCE</u>	<u>BOUNDARY</u>	<u>COMMENTS</u>
Ap 0-0.6	Dark grayish brown (10YR 4/2) and very dark grayish brown (10YR 3/2)	Silt loam	Moderate, medium granular	Friable	Abrupt, wavy	
BE 0.6-0.9	Brown (7.5YR 5/3)	Silt loam	Weak, medium subangular blocky	Friable	Abrupt, broken	Only present in small areas
Bt 0.9-1.5	Brown (7.5YR 4/4)	Silty clay loam, loam	Moderate, medium subangular blocky	–		Common, distinct dark yellowish brown (10YR 4/4) clay films

PARENT MATERIAL/REGOLITH: Loess over coastal plains
sediments

LANDFORM: Ridge top

ADDITIONAL NOTES: At feature 5

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TEST NUMBER TU 9 – South Wall

Project C080212.00, Task 003

SOIL DESCRIPTION BY: D.L. Cremeens

DATE: April 23, 2008

LOCATION: Site 7 18Cv480 Calvert Cliffs NPP

<u>HORIZON DEPTH (ft)</u>	<u>SOIL COLOR MATRIX AND MOTTLING</u>	<u>TEXTURE</u>	<u>STRUCTURE</u>	<u>CONSISTENCE</u>	<u>BOUNDARY</u>	<u>COMMENTS</u>
A 0-0.4	Dark grayish brown (10YR 4/2) and Very dark grayish brown (10YR 3/2)	Sandy loams	Moderate, medium granular	Very Friable	Abrupt, wavy	
BE 0.4-0.9	Brown (7.5YR 5/4) with common, distinct dark brown (7.5YR 3/2) worm tubes	Sandy loams	Weak, medium subangular blocky	firm	Clear, wavy	
Bt 0.9-2.4	Reddish brown (5YR 4/4)	Sandy loams, sandy clay loams	Moderate, medium subangular blocky	Firm	Gradual	
BC 2.4-3.0+	Reddish brown (5YR 4/4)	Sandy loams	Structureless, massive	Very Friable	—	

PARENT MATERIAL/REGOLITH: Coastal plains sediments

LANDFORM: Ridge top, near former house site

ADDITIONAL NOTES:

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