

APPENDIX E.

SOILS AND GEOTECH

APPENDIX E GEOTECHNICAL TEST PITS

The soils test pits are from a site visit by IDFG, DU, QRS and Kalispel Tribe on 11-19- 2024. A total of 14 sites were excavated mainly in the projected borrows. All excavations were overseen by an archaeologist.

TEST PIT LOCATIONS



TEST PIT 1

PACK RIVER PHASE 3

Project Number	US-ID-56-4	Method	
Engineer	BAH	Ground Elevation	2059.8 Feet
Date Drilled	11/19/2024	Total Depth of Borehole	5 Feet
Borehole Diameter	Inches	Depth to Water	3.5 Feet

Description	Graphic Log	Dept	Sample	Undefine	Blow	Completion
LIGHT BROWN SILT						
SAND-FINE						
		5				
		10				
		15				
		20				
		25				
		30				
		35				

TEST PIT 2

PACK RIVER PHASE 3

Project Number	US-ID-56-4	Method	
Engineer	BAH	Ground Elevation	2059.60 Feet
Date Drilled	11/19/2024	Total Depth of Borehole	6 Feet
Borehole Diameter	Inches	Depth to Water	3 Feet

Description	Graphic Log	Dept	Sample	Undefine	Blow	Completion
SILT						
SAND-FINE						
SAND-MED		5				
		10				
		15				
		20				
		25				
		30				
		35				

DUCKS UNLIMITED 56-4 PACK RIVER

TEST PIT 3

PACK RIVER PHASE 3

Project Number	US-ID-56-4	Method	
Engineer	BAH	Ground Elevation	2059.2 Feet
Date Drilled	11/19/2024	Total Depth of Borehole	6 Feet
Borehole Diameter	Inches	Depth to Water	4 Feet

Description		Dept	Sample	Undefine	Blow	Completion
Graphic Log						
CLAYEY SILT						
SILT						
SILTY FINE SAND		5				
		10				
		15				
		20				
		25				
		30				
		35				

TEST PIT 4

PACK RIVER PHASE 3

Project Number	US-ID-56-4	Method	
Engineer	BAH	Ground Elevation	2059.0 Feet
Date Drilled	11/19/2024	Total Depth of Borehole	6.5 Feet
Borehole Diameter	Inches	Depth to Water	4.3 Feet

Description	Graphical Log	Dept	Sample	Undefine	Blow	Completion
SILT- LIGHT TAN						
FINE SILTY SAND		5				
MEDIUM SAND						
		10				
		15				
		20				
		25				
		30				
		35				

PACK RIVER PHASE 3

TEST PIT 5

PACK RIVER PHASE 3

Project Number	US-ID-56-4	Method	
Engineer	BAH	Ground Elevation	2058.6 Feet
Date Drilled	11/19/2024	Total Depth of Borehole	5.5 Feet
Borehole Diameter	Inches	Depth to Water	4 Feet

Description	Depth	Sample	Undeformed	Blow	Completion
CLAYEY SILT					
FINE SILTY SAND	5				
	10				
	15				
	20				
	25				
	30				
	35				

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TEST PIT 6

PACK RIVER PHASE 3

Project Number	US-ID-56-4	Method	
Engineer	BAH	Ground Elevation	Feet
Date Drilled	11/19/2024	Total Depth of Borehole	5.6 Feet
Borehole Diameter	Inches	Depth to Water	3.3 Feet

Description	Graphic Log	Dept	Sample	Undefine	Blow	Completion
SILT LIGHT TAN						
SAND COARSE		5				
		10				
		15				
		20				
		25				
		30				
		35				

TEST PIT 7

PACK RIVER PHASE 3

Project Number	US-ID-56-4	Method	
Engineer	BAH	Ground Elevation	2059.5 Feet
Date Drilled	11/19/2024	Total Depth of Borehole	1 Feet
Borehole Diameter	Inches	Depth to Water	Feet

[illegible]

TEST PIT 7B

PACK RIVER PHASE 3

Project Number	US-ID-56-4	Method	
Engineer	BAH	Ground Elevation	2059.3 Feet
Date Drilled	11/19/2024	Total Depth of Borehole	5 Feet
Borehole Diameter	Inches	Depth to Water	Feet

Description	Depth	Sample	Undefine	Blow	Completion
SILT - LIGHT TAN					
SAND - COARSE	5				
	10				
	15				
	20				
	25				
	30				
	35				

DUCKS UNLIMITED 56-4 PACK RIVER

TEST PIT 8

PACK RIVER PHASE 3			
Project Number	US-ID-56-4	Method	
Engineer	BAH	Ground Elevation	2059.4 Feet
Date Drilled	11/19/2024	Total Depth of Borehole	4.7 Feet
Borehole Diameter	Inches	Depth to Water	3.5 Feet

Description	Graphical Log	Dept	Sample	Undefine	Blow	Completion
CLAYEY SILT						
SILT		5				
		10				
		15				
		20				
		25				
		30				
		35				

DUCKS UNLIMITED 56-4 PACK RIVER

TEST PIT 9

PACK RIVER PHASE 3

Project Number	US-ID-56-4	Method	
Engineer	BAH	Ground Elevation	2058.6 Feet
Date Drilled	11/19/2024	Total Depth of Borehole	2 Feet
Borehole Diameter	Inches	Depth to Water	Feet

[illegible]

TEST PIT 9B

PACK RIVER PHASE 3

Project Number	US-ID-56-4	Method	
Engineer	BAH	Ground Elevation	2058.9 Feet
Date Drilled	11/19/2024	Total Depth of Borehole	4.5 Feet
Borehole Diameter	Inches	Depth to Water	4 Feet

Description	Depth	Sample	Undefine	Blow	Completion
CLAYEY SILT-LIGHT GRAY					
SILTY SAND	5				
	10				
	15				
	20				
	25				
	30				
	35				

TEST PIT 10

PACK RIVER PHASE 3

Project Number	US-ID-56-4	Method	
Engineer	BAH	Ground Elevation	2059.1 Feet
Date Drilled	11/19/2024	Total Depth of Borehole	5.5 Feet
Borehole Diameter	Inches	Depth to Water	4 Feet

Description	Graphical Log	Dept	Sample	Undefine	Blow	Completion
SILT						
SAND - MEDIUM		5				
		10				
		15				
		20				
		25				
		30				
		35				

DUCKS UNLIMITED 56-4 PACK RIVER

TEST PIT 11

PACK RIVER PHASE 3

Project Number	US-ID-56-4
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Method

Engineer	BAH
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Ground Elevation	2060.0 Feet
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Date Drilled	11/19/2024
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Total Depth of Borehole	6 Feet
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Borehole Diameter	Inches
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Depth to Water	4 Feet
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Description	Depth	Sample	Undrained	Blow	Completion
SILT					
SAND - MED-COARSE	5				
	10				
	15				
	20				
	25				
	30				
	35				

TEST PIT 12

PACK RIVER PHASE 3

Project Number	US-ID-56-4	Method	
Engineer	BAH	Ground Elevation	2059.5 Feet
Date Drilled	11/19/2024	Total Depth of Borehole	4 Feet
Borehole Diameter	Inches	Depth to Water	3 Feet

Description	Graphic Log	Dept	Sample	Undefine	Blow	Completion
SILT SAND						
		5				
		10				
		15				
		20				
		25				
		30				
		35				

DUCKS UNLIMITED 56-4 PACK RIVER

TEST PIT 13

PACK RIVER PHASE 3

Project Number	US-ID-56-4	Method	
Engineer	BAH	Ground Elevation	2059.0 Feet
Date Drilled	11/19/2024	Total Depth of Borehole	4 Feet
Borehole Diameter	Inches	Depth to Water	2 Feet

[illegible]

TEST PIT 14

PACK RIVER PHASE 3

Project Number	US-ID-56-4	Method	
Engineer	BAH	Ground Elevation	2059.32 Feet
Date Drilled	11/19/2024	Total Depth of Borehole	5 Feet
Borehole Diameter	Inches	Depth to Water	3.5 Feet

Description	Graphical Log	Dept	Sample	Undefine	Blow	Completion
SILT						
SAND - COARSE		5				
		10				
		15				
		20				
		25				
		30				
		35				

D:\A\DL\A\Projects\ID-56-4\PACK RIVER

Ducks Unlimited Inc.