INTERVAL SHEET

Page 1	of 1	VDMR Well No: 1822
De rec'd:	3/23/61	Sample Interval: from 24.6to: 82.0
PROP:	Skeet Rock Dam Site, hole #2	Number of samples: 14
COMP:	U. S. Corps of Engineers (Adams and Henry)	Total Depth: 82.0 feet
COUNTY:	Dickenson	Oil or Gas: Water: Exploratory: X

From-To	From-To	From-To	From-To
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24.6 _ 31.1	-	-	-
31.1 _ 32.1	-	-	·
32.1 - 36.7	-	-	-
36.7 - 41.6	-	-	-
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41 6 - 44 6			-
41.0 44.0	-		_:
40.0 - 54.3	_	-	_
48.9 54.5	-	-	-
54.3 57.4	-	-	-
57.4 62.4		- -	
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62.4 67.0	-	_	_
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County: Dickenson VDMR Well No. 1822

Well: Skeet Rock Dam Site, hole 2 Farm: Driller: Adams and Henry (U. S. Corps of Engr., contractor) Location: Haysi quadrangle - approximate UTM, 378650 m. E and 4119870 m. N; about 2.5 miles southeast of Skeetrock and 4.5 miles northeast of Haysi; also just east of the mouth of Lower Twin Branch along the Pound River Elevation: 1281.60 feet Total depth: 82.00 feet

Started drilling: 12/10/38

Completed drilling: 12/19/28

36. 7'.

Sample description by: R. S. Good, Virginia Division of Mineral Resources, 2/28/67

References: U. S. Engineers Office, Huntington, W. Va., Report of Core Boring, 12/19/38, and map of proposed Skeetrock dam site, preliminary site survey.

GEOLOGIC SUMMARY

Depth (feet)	Thickness (feet)	Formation (and remarks)
0.0-20.5	20.5	Overburden
20.5-24.6	4.1	No core
24.6-82.0	57.4	Norton Formation: composed of sandstones and siltstones that contain some carbonaceous laminae and partings. A mud- stone occurs between 32. 1' and

GEOLOGIC LOG

Depth (feet)	Thickness (feet)	Description
0,0-20,5	20.5	Overburden
20.5-24.6	4.1	No core
24.6-31.1	6.5	Siltstone: dark gray, fissile, with disseminated fine-grained pyrite (up to 2 percent)
31.1-32.1	1.0	Siltstone: black, pyrite (up to 2 percent) with traces of white, powdery jarosite
32.1-32.5	0.4	Mudstone: dark gray, with some minor fissility
32.5-36.7	4.2	Mudstone: gray, with some minor fissility
36.7-41.6	4.9	Sandstone: gray, fine grained, massive, micaceous, subgraywacke grading into harder more quartzitic subgraywacke, subangular quartz (70-80 percent), feldspar, illite, and chlorite
41,6-48.9	7.3	Sandstone: gray, slightly micaceous, with dark gray to black, sinuous, silty and carbonaceous laminae, some of which are crossbedded; Coal detritus occurs as thin (< 1mm) discontinuous, subparallel partings conformable to the bedding
48.9-54.3	5.4	Siltstone: dark gray to black, thinly laminated, with fractures; Carbonaceous slickenslides along a larger fracture surface
54.3-57.4	3.1	Sandstone: light gray, massive subgraywacke with dark gray, silty, micaceous partings
57.4-65.6	8.2	Siltstone: dark gray to black, fissile, micaceous
65.6-66.0	0.4	No core
66.0-67.0	1.0	Siltstone: black, fissile
67.0-76.1	9.1	Sandstone interlayered with siltstone: light gray subgraywacke and dark gray carbonaceous siltstone with irregular undulatory laminae

Depth (feet)	Thickness (feet)	Description
76.1-77.0	0.9	Siltstone: black, fissile, micaceous
77.0-82.0	5.0	Sandstone: light gray subgraywacke with detitral carbonaceous laminae about 1 mm thick

GEOLOGIC LOG

Depth (feet)	Thickness (feet)	Description
0.0-20.5	20.5	Overburden
20.5-24.6	4.1	No core
24.6-31.1	6.5	Siltstone: dark-gray, fissile, with disseminated fine-grained pyrite (up to 2 percent)
31.1-32.1	1.0	Siltstone: black, pyrite (up to 2 percent) with traces of white, powdery jarosite
32.1-32.5	0.4	Mudstone: dark-gray, with some minor fissility
32.5-36.7	4.2	Mudstone: gray, with some minor fissility
36.7-41.6	4.9	Sandstone: gray, fine-grained, massive, micaceous, subgraywacke grading into harder more-quartzitic subgraywacke, subangular quartz (70-80 percent), feldspar, illite, and chlorite
41,6-48.9	7.3	Sandstone: gray, slightly micaceous, with dark-gray-to black, sinuous, silty and carbonaceous laminae, some of which are crossbedded; coal detritus occurs as thin ($<$ lmm), discontinuous, subparallel partings conformable to the bedding.
48.9-54.3	5.4	Siltstone: dark-gray-to black, thinly laminated, with fractures; Carbonaceous slickens ides along a larger fracture surface.
54.3-57.4	3. 1	Sandstone: light-gray, massive subgraywacke with dark-gray, silty, micaceous partings
57.4-65.6	8.2	Siltstone: dark-gray-to black, fissile, micaceous
65.6-66.0	0.4	No core
66.0-67.0	1.0	Siltstone: black, fissile
67.0-76.1	9.1	Sandstone interlayered with siltstone: light- gray subgraywacke and dark-gray carbonaceous siltstone with irregular, undulatory laminae

GEOLOGIC LOG

Depth (feet)	Thickness (feet)	Description
0,0-20.5	20.5	Overburden
20.5-24.6	4.1	No core
24. 6-31. 1	6.5	Siltstone: dark-gray, fissile, with disseminated fine-grained pyrite (up to 2 percent)
31.1-32.1	1.0	Siltstone: black, pyrite (up to 2 percent) with traces of white, powdery jarosite
32.1-32.5	0.4	Mudstone: dark-gray, with some minor fissility
32.5-36.7	4.2	Mudstone: gray, with some minor fissility
36.7-41.6	4.9	Sandstone: gray, fine-grained, massive, micaceous, subgraywacke grading into harder more-quartzitic subgraywacke, subangular quartz (70-80 percent), feldspar, illite, and chlorite
41,6-48.9	7.3	Sandstone: gray, slightly micaceous, with dark-gray-to black, sinuous, silty and carbonaceous laminae, some of which are crossbedded; Coal detritus occurs as thin (< 1mm), discontinuous, subparallel partings conformable to the bedding.
48.9-54.3	5.4	Siltstone: dark-gray-to black, thinly laminated, with fractures; Carbonaceous slickens ides along a larger fracture surface.
54. 3-57. 4	3.1	Sandstone: light-gray, massive subgraywacke with dark-gray, silty, micaceous partings
57.4-65.6	8.2	Siltstone: dark-gray-to black, fissile, micaceous
65.6-66.0	0.4	No core
66.0-67.0	1.0	Siltstone: black, fissile
67.0-76.1	9.1	Sandstone interlayered with siltstone: light- gray subgraywacke and dark-gray carbonaceous siltstone with irregular, undulatory laminae

UNITED STATES ENGINEER OFFICE HUNTINGTON, VI: VA. OPERATION DIVISION SURVEYS SECTION

REPORT OF CORE BORING

Date 12 - 19 - 38

Sheet 1 of 4

- 100

Project	Skeet Rock Dam Sites Pour	d River, Virginia.	UDMR Well No. 1822
Hole No.	2 Dia. 2 1/8" Locatio	n Genter line Sta. 2+1	9340
Date started	7:00 A. M. 12 - 10 - 38	Completed 12:40 P. M.	12 # 19 - 38
Driller	Idams and Henry	Inspector Hobart G.	Warren
Type of dril:	ling equipment used U.S.	. Government Core Drill.	
From Elev.	1281.60 To Elev. 126	6.00 on this page.	
Elev. of top Elev. of top	of Hole 1281.60 1 of rock 1261.10	Plan depth of Hole Total overburden drilled	81.60 d 20,50
Elev. bottom Elev. of grou	of hole 1199,60	Total rock drilled Total rock recovered	61.50
Elev. of wat	er lost 1243.20	Total depth of Hole	82.00

Elev. water regained _____ Deviation from plan depth //0.49

	DETAIL OF LOG							
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10.00	1271.60			Grey silt and sand.			Sample #2 Chg.	
		-					1	
12.00	1269.60			Grey sand, silt and gravel.			Sample #3	
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Engineer

Approved

UNITED STATES ENGINEER OFFICE HUNTINGTON, W. VA. OPERATION DIVISION SURVEYS SECTION

Date 12 - 19 - 38

Sheet 2 of 4

REPORT OF CORE BORING

on this page.

Hole No. 2 From El. 1266.00 To El. 1235.00

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Major, Corps of Engineers, Chief, Operation Division.

Engineer.

UNITED STATES ENGINEER OFFICE HUNTINGTON, W. VA. OPERATION DIVISION SURVEYS SECTION

Date 12 - 19 - 38 Sheet 3 of 4

REPORT OF CORE BORING

Hole No. 2 From El. 1237.00 To El. 1209.00 on this page.

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UNITED STATES ENGINEER OFFICE HUNT INGTON, W. VA. OPERATION DIVISION SURVEYS SECTION

Date 12 - 19 - 38

REPORT OF CORE BORING

Sheet 4 of 4

From El. 1209.00 To El. 1199.60 on this page. Hole No.

DETAIL OF LOG

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County: Dickenson VDMR Well No. 1822 Well: Skeet Rock Dam Site, hole 2 Farm: Driller: Adams and Henry (U.S. Corps of Engr., contractor) Location: Itaysi quadrangle - approximate UTM, 379350m. Earl 4119870 m. N; about 2.5 miles southeest of Skeetrock and 4.5 miles northeast of Idaysi; also just east of the month of Lower Twin Branch along the Pound River. no space -Elevation: 1281.60 feet Total depth: 82.00 Seet Started drilling: 12/10/38 Completed drilling: 12/19/38 Sample description by: R.S. Good, Virginia Division of Mineral Resources, 2/28/67. Hundington, W.No.) References: US Engineers Office, Report of Core Boring, 12/19/38, and map of proposed Skeetrock dam site, pretiminary site survey. GEOLOGIC SUMMARY Formation (and remarks) Thickness (Seet) Depth (Seet) 0.0-20.5 20,5 Overburden. 20.5-24.6 4.1 No core. Norton Formation: composed 24.6-82.0 57.4 of sandstones and siltstones that contain some carbonaceous laminae and partings. A mudstone occurs between 32.1 and 36.7.

A

Site, Hole 2 Well No. : Skeet Rock Dam, Pound River County : Dickenson VDMR Well No. : 1822 tole No.2 Farm: John T. Flannagam Dam Driller: U.S. Corps of Engineers (Adams and Henry) Inclination: vertical Elevation: 1281.6 Total Depth: 82.0 Date Started: 12/10/38 Date Completed: 12/19/38 February 28, 1967 Sample Description: R.S. Good Log GEOLOGIC Thickness Description Sect Overburden Jepth & USE percent instant of to 0.0-20.5 Overburden No tore 20.5-24.6 4.1 Siltstone: dark gray, fissile, with finety disseminated pyrite (12%). not visible without magnification 6.5 24.6-31.1 Siltstone: black, pyrite (#2%), with traces of white, powdery jarosite. 31.1-32.1 1.0

2. VDMR 1822 Mudstone: dark gray, with little or no fissility 32.1-32.5 0.4 Mudstone: gray, with title or no fissility. 32.5-36.7 4.2 Sandstone: gray, fine grained, massive stightly micaccous, subgraywacke grading into harder more quartzitic Subgraywacke, subangularquartz V. Feldspar, Illite, and chlorite. 36.7-41.6 4,9 Sandstone: gray, slightly micaceous with dark gray to black, sin vous sitty and carbonaceous laminae, which are accasionally 41.6-48.9 7.3 crossbedded. Coaly detritus occurs as thin (< 1mm) discontinuous, subparallel partings conformable to the bedding. Siltstone: dark gray to black, thinly laminated, with mitro authing, Carbon access slickenslides along alarger fort surface. 5.4 48.9-54.3 Sandstone: light gray, massive subgray wacke with dark gray, silty, micaceous partings. Same 54.3-57.4 3.1

VOMR 1822 3, Siltstone: dark gray to black, Fissile, 57.4-65.6 8.2 micaceous. tost core. 65.6-66.0 0.4 66.0-67.0 1.0 Siltstone: black, fissile. Sandstone intervented with siltstone: 67.0-76.1 9.1 light gray subgraywacke and dark gray carbonaceous siltstone varied as irregular undulatory laminae. Siltstone : black, fissile, stightly 0.9 76.1-77.0 micaceous. Sand stone: light gray Subgraywack with to the the detitual carbonaccous laminae, Same as 36.7-91.6 77.0-82.0 510