

BH-1

Continental Drilling—U.S.

DRILLING LOG

OSM 40(807-83)101.5

PROJECT 4-149		DATE: 20 August 1985	SHEET OF 2 SHEETS
CONTRACTOR:		SHIFT: LOCATION: Pittston/Duryea (Curry & Main)	
BID ITEM NO.:		DEPTH DRILLED (END OF SHIFT) FT.	
HOLE NO.: 1		DEPTH DRILLED (START OF SHIFT) FT.	
FIELD BOOK NO.:		TOTAL DRILLED (DURING SHIFT) FT.	
PAGE:			

DRILLING RUNS (FT.)		% CORE RECOVERY	BOX OR SAMPLE NO.	CLASSIFICATION OF MATERIALS (DESCRIPTION)	ROCK TYPE (FT.)	
FROM	TO				FROM	TO
0	20.5			Sandy gravel & Boulders	0	20.5
20.5	24.0	3.5		Gray med. hard sandstone	20.5	24.0
24.0	33.0	9.0		Gray hard quartz sandstone	24.0	33.0
33.0	40.4	6.4		Gray hard quartz sandstone	33.0	40.4
40.4	44.0	3.6		Gray med. hard sandstone w/hard quartz streaks	40.4	51.9
44.0	54.0	9.1		Void	51.9	52.8
				Gray med. hard sandstone	52.8	54.0
54.0	64.0	7.4		Gray med. hard sandstone w/broke sandstone streaks	54.0	61.0
			513	Void	61.0	63.6
				Dark gray shale w/coal	63.6	64.0
64.0	74.0	8.2		Gray badly broken shale	64.0	66.0
			503	Coal	66.0	66.9
				Wood	66.9	67.1
				Void	67.1	69.9
				Gray sandy shale	69.9	74.0
74.0	84.0	10.0		Gray sandy shale w/sandstone streaks	74.0	83.2
			493	Coal	83.2	84.0
84.0	94.0	10.0		Gray sandy shale w/sandstone streaks	84.0	94.0
94.0	104.0	10.0		Gray sandy shale	94.0	100.5
				Dark gray shale	100.5	102.3
				Gray sandy shale	102.3	104.0
104.0	114.0	10.0		Gray sandy shale w/shale streaks	104.0	111.0

Lost water 22.5
 Top of rock 20.5
 Bottom of hole 124.5
 Water level 35.8

DRILLER'S SIGNATURE

Continental Drilling—U.S.
DRILLING LOG

OSM 40(807-83)101.5

Surface Elevation 577.34

PROJECT 4-149	DATE: 20 August 1985	SHEET <u>2</u> OF <u>2</u> SHEETS
CONTRACTOR:	SHIFT: LOCATION: <u>Pittston/Durvea (Curry & Main)</u>	
BID ITEM NO.:	DEPTH DRILLED (END OF SHIFT) FT.	
HOLE NO.:	DEPTH DRILLED (START OF SHIFT) FT.	
FIELD BOOK NO.:	TOTAL DRILLED (DURING SHIFT) FT.	
PAGE:		

DRILLING RUNS (FT)		% CORE RECOVERY	BOX OR SAMPLE NO.	CLASSIFICATION OF MATERIALS (DESCRIPTION)	ROCK TYPE (FT.)	
FROM	TO				FROM	TO
				Gray med. hard sandstone	111.0	114.0
114.0	121.0	6.2		Gray sandy shale	114.0	114.8
			456	Coal	114.8	117.1
				Gray shale	117.1	117.6
				Coal	117.6	118.3
				Gray shale	118.3	118.6
				Coal	118.6	121.5
121.0	124.5	3.5		Gray sandy shale	121.5	124.5

Bottom of hole 124.5

DRILLER'S SIGNATURE _____

BH-2

Continental Drilling—U.S.
DRILLING LOG

OSM 40(807-83)101.5

Surface Elevation 575.56

PROJECT: 4-149		DATE: 5 August 1985	SHEET OF 1 SHEETS
CONTRACTOR:		SHIFT: LOCATION: Pittston/Duryea (Curry & Main)	
BID ITEM NO.:		DEPTH DRILLED (END OF SHIFT) FT.	
HOLE NO.: 2		DEPTH DRILLED (START OF SHIFT) FT.	
FIELD BOOK NO.:		TOTAL DRILLED (DURING SHIFT) FT.	
PAGE:			

DRILLING RUNS (FT.)		% CORE RECOVERY	BOX OR SAMPLE NO.	CLASSIFICATION OF MATERIALS (DESCRIPTION)	ROCK TYPE (FT.)	
FROM	TO				FROM	TO
0	40.6			Overburden Sand, Gravel & boulders start coring	0	40.6
40.6	44.0	3.4		Gray sandstone w/clay seams, gray	40.6	42.0
44.0	54.0	10.0		Gray med. hard sandstone	42.0	57.3
54.0	57.3	3.3				
57.3	64.0	6.7		Gray med. hard sandstone (broken)	57.3	64.0
64.0	70.8	6.8		Gray hard sandstone	64.0	90.8
70.8	80.8	10.0				
80.8	90.8	10.0				

Water level 27.3
 Bottom of hole 90.8
 Top of rock 40.6
 Lost water 46.5

DRILLER'S SIGNATURE

Continental Drilling—U.S.

DRILLING LOG

OSM 40(807-83)101.5 Surface Elevation 575.70

BH-3

PROJECT: 4-149	DATE: 12 August 1985	SHEET OF 1 SHEETS
CONTRACTOR:	SHIFT: LOCATION: Pittston/Duryea (Curry & Main)	
BID ITEM NO.:	DEPTH DRILLED (END OF SHIFT) 102.0 FT.	
HOLE NO.: 3	DEPTH DRILLED (START OF SHIFT) FT.	
FIELD BOOK NO.:	TOTAL DRILLED (DURING SHIFT) 102.0 FT.	
PAGE:		

DRILLING RUNS (FT.)		% CORE RECOVERY	BOX OR SAMPLE NO.	CLASSIFICATION OF MATERIALS (DESCRIPTION)	ROCK TYPE (FT.)	
FROM	TO				FROM	TO
0	36.2			Overburden, sand, gravel & boulders	0	36.2
36.2	44.0	7.8		Gray hard sandstone	36.2	44.0
44.0	54.0	10.0		Gray hard sandstone w/quartz	44.0	48.4
				Gray med. hard sandstone	48.4	50.2
54.0	64.0	9.9		Gray hard sandstone w/quartz	50.2	56.7
64.0	74.0	10.0		Gray med. hard sandstone	56.7	78.6
74.0	84.0	9.7		Gray med. hard sandstone broken	78.6	84.0
84.0	94.0	6.3		Gray med. hard sandstone broken w/coal streaks	84.0	87.5
				Void	87.5	88.4
				Gray med. hard sandstone	88.4	91.2
				Void	91.2	92.3
				Gray med hard sandstone	92.3	93.2
				Void	93.2	93.7
				Gray shale	93.7	94.0
94.0	102.0	8.0		Dark gray shale w/coal	94.0	94.9
				Dark gray shale broken	94.9	97.0
				Gray sandy shale	97.0	102.0

Lost water 37.6
 Top of Rock 36.2
 Bottom of hole 102.0
 Water level 32.6
 Cemented hole 46.2 to 36.2

DRILLER'S SIGNATURE

Continental Drilling—U.S.

DRILLING LOG

OSM 40(807-83)101.5 Surface Elevation 575.82

BH-4

PROJECT: 4-149	DATE: 13 August 1985	SHEET OF 1 SHEETS
CONTRACTOR:	SHIFT: LOCATION: Pittston/Duryea (Curry & Main)	
BID ITEM NO.:	DEPTH DRILLED (END OF SHIFT)	130.0 FT.
HOLE NO.: 4	DEPTH DRILLED (START OF SHIFT)	FT.
FIELD BOOK NO.:	TOTAL DRILLED (DURING SHIFT)	
PAGE:	130.0 FT.	

DRILLING RUNS (FT.)		% CORE RECOVERY	BOX OR SAMPLE NO.	CLASSIFICATION OF MATERIALS (DESCRIPTION)	ROCK TYPE (FT.)	
FROM	TO				FROM	TO
0	29.5			Sand, gravel & boulders	0	29.5
29.5	34.0	4.0		Gray med. hard sandstone w/quartz streaks	29.5	34.0
34.0	38.0	4.0		Gray med. hard sandstone	34.0	49.4
38.0	44.0	6.0		Gray hard sandstone w/quartz	49.4	55.8
44.0	54.0	10.0		Gray hard sandstone	55.8	72.8
54.0	64.0	10.0		Gray hard sandstone w/quartz	72.8	74.0
64.0	74.0	10.0		Gray med. hard sandstone w/quartz	74.0	84.0
74.0	84.0	10.0		Gray hard sandstone w/quartz	84.0	84.4
84.0	93.0	6.4		Boney coal	84.4	86.4
93.0	103.0	9.0		Dark gray badly broke shale w/ coal streaks	86.4	93.0
				Dark gray shale	93.0	94.0
103.0	110.0	7.0		Gray sandy shale w/sandstone streaks	94.0	104.1
				Gray shale	104.1	104.6
				Coal	104.6	105.6
				Gray sandy shale w/sandstone streaks	105.6	109.1
				Gray shale	109.1	110.0
110.0	120.0	9.6		Gray sandy shale w/sandstone & shale broke	110.0	120.0
120.0	130.0	7.0		Coal, dark gray badly broken shale streaks	120.0	128.0
				Gray sandy shale	128.0	130.0

Lost water 41.1
 Top of rock 29.5
 Bottom of hole 130.0
 Water level 42.0
 Cement hole 39.5 to 29.5

DRILLER'S SIGNATURE

Continental Drilling—U.S.

BH-5

DRILLING LOG

OSM 40(807-83)101.5 Surface Elevation 576.50

PROJECT: 4-149	DATE: 14 August 1985	SHEET OF <u>1</u> SHEETS
CONTRACTOR:	SHIFT: LOCATION: Pittston/Duryea (Curry & Main)	
BID ITEM NO.:	DEPTH DRILLED (END OF SHIFT) 84.0 FT.	
HOLE NO.: 5	DEPTH DRILLED (START OF SHIFT) FT.	
FIELD BOOK NO.:	TOTAL DRILLED (DURING SHIFT) FT.	
PAGE:		

DRILLING RUNS (FT.)		% CORE RECOVERY	BOX OR SAMPLE NO.	CLASSIFICATION OF MATERIALS (DESCRIPTION)	ROCK TYPE (FT.)	
FROM	TO				FROM	TO
0	29.0			Sand, gravel, boulders	0	29.0
29.0	34.0	3.0		Gray hard sandstone w/quartz	29.0	34.0
34.0	43.0	3.5		Gray hard sandstone quartz w/broke seams	34.0	43.0
43.0	53.0	8.5		Gray hard sandstone w/broken seams	43.0	53.0
53.0	60.0	7.0		Gray med. hard sandstone	53.0	73.0
60.0	64.0	4.0		Gray hard sandstone w/quartz	73.0	79.1
64.0	73.0	8.3		Void	79.1	80.6
73.0	83.0	8.5		Gray hard sandstone	80.6	81.2
				Coal	81.2	82.6
83.0	84.0	1.0		Gray sandy shale	82.6	84.0

Lost Water 31.2
 Top of Rock 29.0
 Bottom of hole 84.0
 Water Level 37.9

DRILLER'S SIGNATURE _____