FLOW MEASUREMENTS BELOW

Location: Deer Creek Below
Date: May 18, 1973

SECTION #1

STATION	DEPTH (FT)	REVOLUTIONS	SECONDS	VELOCITY	FT^3/SEC
2½	0	0	0	----	----
3	.35	40	61.2	.719	.126
4	.45	60	57.8	1.089	.490
5	.53	50	50	1.055	.559
6	.68	70	52.5	1.393	.947
7	.70	70	48.7	1.473	1.031
8	.80	90	49	1.871	1.497
9	.63	90	51.2	1.801	1.135
10	.70	60	50.2	1.250	.875
11	.60	50	48.6	1.075	.645
12	.43	20	48	.486	.209
13	.24	5	58.6	.163	.039
14	0	0	0	----	----
		GPM = 3,399			7.553

SECTION #2

STATION	DEPTH (FT)	REVOLUTIONS	SECONDS	VELOCITY	FT^3/SEC
0	0	0	0	----	----
1	.72	20	60	.405	.292
2	1.00	30	50.5	.665	.665
3	1.05	20	49.1	.478	.502
4	.85	50	57.8	.921	.783
5	1.00	60	63.8	.994	.994
6	.95	50	57	.936	.889
7	1.05	40	49.6	.860	.903
8	1.05	40	57.8	.752	.790
9	.80	40	60	.730	.584
10	.50	40	51	.845	.422
11	.30	15	56.2	.341	.102
11.2	0	0	0	----	----
		GPM = 3,117			6.926

LOCATION: Deer Creek Below
DATE: May 18, 1973

SECTION #3

STATION	DEPTH (FT)	REVOLUTIONS	SECONDS	VELOCITY	FT^3/SEC
0	0	0	0	----	----
1	.72	20	50	.470	.338
2	1.05	30	50.2	.665	.698
3	1.05	30	63.3	.544	.571
4	.90	40	50.3	.860	.774
5	1.00	50	57.8	.921	.921
6	1.00	50	56.2	.951	.951
7	1.05	40	49.4	.876	.920
8	1.05	40	56.2	.776	.815
9	.85	40	54	.802	.682
10	.56	40	48	.892	.500
11	.30	15	59.5	.373	.112
11.2	0	0	0	----	----
		GPM = 3,277			7.282

FLOW MEASUREMENTS

Avg GPM = 3,264

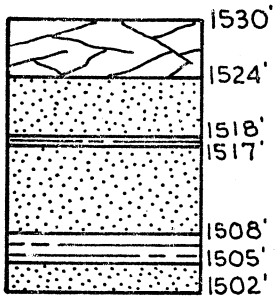
LOCATION: Deer Creek (Above)
DATE: May 17, 1973
CROSS SECTION: Number 1

STATION	DEPTH (FT)	REVOLUTIONS	SECONDS	VELOCITY	FT^3/SEC
0	0	0	0	---	---
1.0	.5	80	56	1.473	.737
2.0	.5	80	54	1.525	.763
3.0	.45	80	56	1.461	.658
4.0	.52	80	60	1.380	.718
5.0	.4	40	56	.776	.310
5.5	0	0	0	---	---
	Total:	GPM = 1,434			3.186

LOCATION: Deer Creek (Above)
DATE: May 17, 1973
CROSS SECTION: Number 2

STATION	DEPTH (FT)	REVOLUTIONS	SECONDS	VELOCITY	FT^3/SEC
0	0	0	0	---	---
.5	.4	80	56.5	1.461	.292
1.0	.5	80	51	1.610	.805
2.0	.5	80	57	1.449	.725
3.0	.48	80	51	1.610	.773
4.0	.5	80	52	1.566	.783
5.0	.35	50	59	.921	.161
5.5	0	0	0	---	---
	Total:	GPM = 1,592			3.539

Avg GPM = 1513



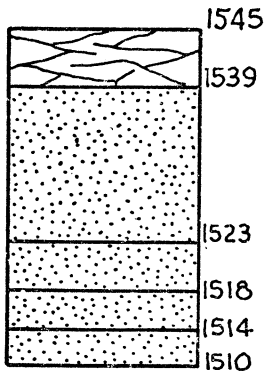
CLAY

SOFT BROWN SAND ROCK
SHALE
HARD GRAY SAND ROCK

SHALE
HARD GRAY SAND ROCK

DATE DRILLED : SEPT. 18, 1973
METHOD: AIR ROTARY
SCALE: 1"=20'

SL 193-1
DEER CREEK
DRILL HOLE NO. D-1



CLAY

HARD BROWN SAND ROCK

-21' WATER LEVEL 1-21-74

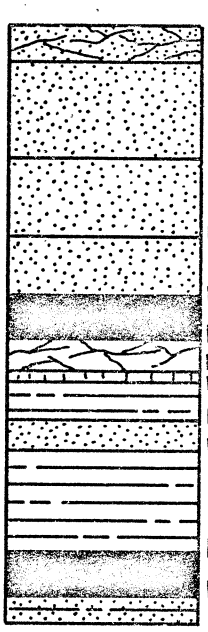
SOFT BROKEN BROWN SAND ROCK (DAMP)

HARD GRAY SAND ROCK

BROKEN BROWN SAND ROCK (WET)

DATE DRILLED: SEPT. 18, 1973
METHOD: AIR ROTARY
SCALE: 1" = 20'

SL 193-1
DEER CREEK
DRILL HOLE NO. D-2



SANDY CLAY

BROWN SAND ROCK

HARD BROWN SAND ROCK (DAMP)

BROKEN BROWN SAND ROCK

31' WATER LEVEL 1-21-74

UPPER CLARION COAL (DAMP & DIRTY)

CLAY

LIMESTONE

SHALE (WATER)

SOFT GRAY SAND ROCK

SHALE

LOWER CLARION COAL

HARD SANDY SHALE

DATE DRILLED: SEPT. 18, 1973
METHOD: AIR ROTARY
SCALE: 1" = 20'

SL 193-1
DEER CREEK
DRILL HOLE NO. D-3

GWIN, DOBSON & FOREMAN, INC.
Eighth Avenue and Twelfth Street
P.O. Box 1589
Altoona, Pa. 16603
Phone (814) 943-5214

	Date	Time
Sample received	11/5/73	
Sample Analyzed	11/8/73	

Case Name: Deer Creek Quick Start		Project No.: SL 193-1
Region	County: Clarion	Municipality
Source	Receiving Stream: Deer Creek	Tributary to: Clarion River
Collected Date: 11/2 Time:	Sample No.: Drill Hole #3 / Collected by: C.G. Walton	Chemist: M.A.

pH	6.9	
Acidity	0	mg/l
Alkalinity	100	mg/l
Iron (total)	0.1	mg/l
Iron (ferrous)	---	mg/l
Sulfates	41	mg/l
Other (specify)		

REMARKS:

SEND RESULTS TO:

- [ ] Planning & Dev. Research
- [ ] Ebensburg
- [ ] Reynoldsville
- [ ] Uniontown
- [ ] Pottsville
- [ ] Wilkes-Barre
- [x] Other (specify)

J. Ward
GDF

REPORT ON HYDRAULIC PRESSURE TESTING

Boring No. 3
Sheet No. 1 of 1
Date February 2, 1974

Project Location Deer Creek Quick Start — Project No. SL 193-1
Boring Location R. Obenrader Property — Elev. Top of Boring 1,615'
Driller W.F. Brown — No. of Meter

PART I — DATA ON FLOW TEST

Section of hole tested: Depth From	Depth To	Elevation From	Elevation To	Press. Gage Lbs./Sq.In.	Time Started	Time Stopped	Time Minutes	Meter Readings: At Start of Test gal.	At End of Test gal.	Total GAL. Water Used	GAL. Water Per Min.
30'	31'	1,585'	1,584'	20'			10	12,879	13,049	170	17.0
25'	20'	1,590'	1,585'	20'			10	13,049	13,244	195	19.5
19'	25'	1,596'	1,590'	15'			10	13,244	13,414	170	17.0

PART II — HOLDING TEST - MAXIMUM PRESSURE 50 p.s.i.

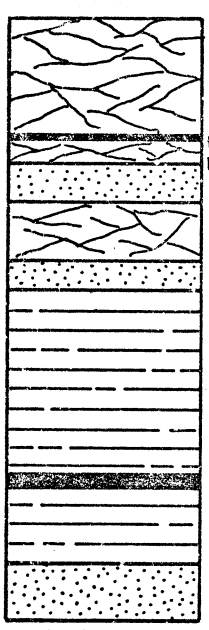
Data on Pressure: Section of hole tested Depth From	Depth To	Elevation From	Elevation To	Time on Each 10 lb. Drop: Gage pressure at test intervals from 50-40 lb.	40-30 lb.	30-20 lb.	20-10 lb.	10-0 lb.
				(or higher pressures if necessary)				
				20-0 psi				
30	31	1,585	1,584	10 sec.				
				20-0 psi				
25	30	1,590	1,585	9 sec.				
				20-0 psi				
19	25	1,596	1,590	5 sec.				

DESCRIPTION OF OPERATIONS AND GENERAL INFORMATION:
Elev. Top Rock -1,611'
Bottom Boring - 1,553'

C.G. Walton

REMARKS:

Inspector's Signature



CLAY

LOWER CLARION COAL
CLAY
HARD GRAY SAND ROCK

25' WATER LEVEL 1-21-74

BROWN CLAY

SOFT BROWN SAND ROCK

SHALE

BROOKVILLE COAL (DAMP)

SHALE

HARD GRAY SAND ROCK

DATE DRILLED: SEPT. 18, 1973
METHOD: AIR ROTARY
SCALE: 1"=20'

SL 193-1
DEER CREEK
DRILL HOLE NO. D-4

GWIN, DOBSON & FOREMAN, INC.
Eighth Avenue and Twelfth Street
P.O. Box 1589
Altoona, Pa. 16603
Phone (814) 943-5214

	Date	Time
Sample received	11/5/73	
Sample Analyzed	11/8/73	

Case Name	Project No.
Deer Creek Quick Start	SL 193-1

Region	County	Municipality
	Clarion	

Source	Receiving Stream	Tributary to
	Deer Creek	Clarion River

Collected	Sample No.	Chemist
Date: Time:	Collected by C.G. Walton	M.A.

Drill Hole #4

pH 5.5

Acidity 4 mg/l

Alkalinity 0 mg/l

Iron (total) 0.1 mg/l

Iron (ferrous) ----- mg/l

Sulfates 2 mg/l

Other (specify)

SEND RESULTS TO:

- [ ] Planning & Dev. Research
- [ ] Ebensburg
- [ ] Reynoldsville
- [ ] Uniontown
- [ ] Pottsville
- [ ] Wilkes-Barre
- [x] Other (specify)

REMARKS:

J. Ward
GDF

U. S. GEOLOGICAL SURVEY
Water Resources Division

Well Number: CR -272
Deer G.4 Fasenmyer

Measured by: O'Hara & Kaus

Date: 10-1-73

Static w/l: 25.35

Depth of Well: 56'

Depth of Intake: 50'

Meter Reading(before): 63485.6

Meter Reading(after): Meter clogged

Time Pump on: 1130

Time Pump off:

time (min)	w/l (ft)	d.d. (ft)	yield (gpm)	remarks	time (min)	w/l (ft)	d.d. (ft)	yield (gpm)	remarks
0'	5.67	0			45	30.08	24.41	1.38	Steady
15"	6.94	1.27		Sample Clear47					for W/L &
30"	7.49	1.82							Yield.
45"	7.92	2.25							
1'	8.21	2.54							1.38 -gpm is total
1'30"	8.83	3.16							capacity pH=7.6
2'	9.30	3.63							
2'30"	9.92	4.25							
3 ½	11.10	5.43							Colorimeter meter
4	11.55	5.88	2.10						not working
5	12.65	6.98		Hot Cloudy					No Fe determination
7	14.47	8.80							Possible.
10	16.96	11.29							
12	18.61	12.94							
15	20.79	15.12							
17	22.14	16.47							
20	24.11	18.44							
25 ½	27.26	21.59							
30 ½	29,82	24.15	K x 10	=60					
35	30.08	24.41	↓						
40	30.08	24.41	1/38						