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4-3-73	394.8	16.9	1105.4	18.4	0.6	32.4	221.8	26.4	369.6	13.0	8.4	28.8	50.4	7.1	70.6	15.1	0.02	36.7
5-7-73	171.4	10.2	318.2	3.8	0.01	6.7	108.0	10.8	172.8	10.7	0.5	33.1	46.1	1.2	72.0	1.01	0.0	21.6
6-4-73	427.7	24.6	868.3	15.0	0.06	19.4	132.5	12.4	187.2	14.6	96.0	40.3	103.7	اد	165.0	21.6	0.03	43.2
7.3-73	126.0	22.6	840.0	3.6	O.6	6.5	49.0	5.5	79.2	6.5	0.02	20.9	48.2	2.0	100.9	2.2	0.04	7.9
8-7-13	167.28	11.62	387.6	DRY	ı	1	9.36	0.708	14.4	6.72	0.0	16.32	22.08	0.48	38.4	DRY	ı	1
9-5-73	224.4	12.65	399.6	DRY	-	1	24.0	1.13	28.8	6.72	0.01	16.32	79.20	1.58	115.2	ORY		,
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4-3-73	34.1	0.1	67.2	45.4	0.5	118.8	224.4	28.6	428.4	3.5	9.0	12.5	9.01	0.04	48.0	37.4	6.7	72.0
5-7-73	15.8	0.5	31.2	37.4	0.15	79.2	369.6	50.5	686.4	6.1	0.00	6.5	17.3	0.02	79.2	27.4	6.2	67.2
6.4-73	15.4	0.4	28.8	24.5	1.06	52.8	583.2	55.7	907.2	2.6	0.00	7.2	43.2	0.12	158.4	19.7	2.6	31.2
7-3-73	11.5	<u>ن</u> ن	33.7	8.6	0.67	26.4	67.2	1.0	139.2	DRY	1	,	DRY	1	,	16.8	5.5	31.2
8-7-13	9.24	0.28	19.2	6.84	0.08	16.8	24	2.28	39.6	DRY	ı	١	DRY	,	,	DRY	5	,
9-5-73	DRY	1	١	DRY	1	1	259.21	23.04	489.6	DRY	ı	ı	DRY	,		DRY	ı	ı
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5-7-73	52.9	-3	129.6	0.7	0.00	1.4	13.7	0.12	19.2									
6-4-13	49.7	8.0	93.9	5.6	0.01	12.1	13.7	0.5	18.0									
7-3-73	40.0	0.10	130.0	DRY	1	ţ	17.5	0.3	21.0			,		•	٢			***************************************
8-T-73	15.84	0.52	38.4	DRY	1	1	7.92	<u>o</u>	11.28									•
9-5-73	26.4	2.45	129.6	DRY	3	į	8,54	0.18	11.52			en en en en en en						-
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6-4-73	1472.7	101.45	2636.0	29%	24%	33%	%6	12%	7%	40%	55%	34%						
7-3-73	397.1	47.73	1436.9	32%	41%	58%	12%	% -	0,8	17%	212	10%					•	
8-7-73	269.28	16.14	583	62%	72%	67%	3%	4 %	2%	26	14%	7%						
9-5-73	G28.57	41.64	1190.64	36%	30%	34%	4%	4%	2%	41%	55%	41%			*****			arillian kalijais
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INCHES PRECIPITATION

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TOTAL	•	4.98	4.97	-	5.22	,	4.16	. •	5.73		
YEAR TO	DATE	13.62	18.59		24.11		28.27		34.00		

Information obtained from Pennsylvania Electric Company; Piney Dam Gauging Station (located approximately 7 miles south of study area).

INCHES

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WATER SUPPLY SYSTEMS

An investigation of present water supply locations in the immediate area was conducted. Individual water supplies were sampled and analyzed in our laboratory.

The following individuals were contacted and samples of their water were taken: (See page 51 for location map).

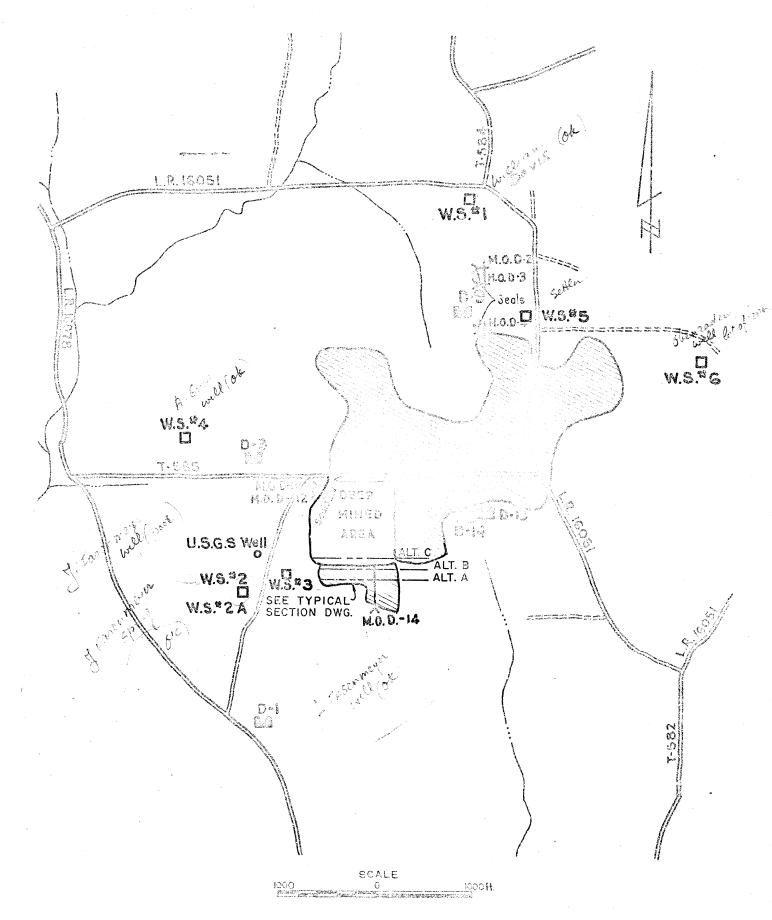
Approximate Surface Elevation

31 101 10	ocation map).	Approximate Surface Elevation
1.	William Davis (House) Well 20' Dug	1550'
2.	Jacob Fasenmyer (House) Well 15' Dug	1510'
2A.	Jacob Fasenmyer (Spring)	1505'
3.	Lawerence Fasenmyer (House) Well 50' Drilled	1543'
4.	Alfred Guth (Two Houses) Spring	1460'
5.	James F. Schettler Cistern, no sample	
6.	James Obenrader Cistern and Wells 45' Surface of	eased. 1555'

All the above are located on the same hill with only one water supply (W.S. #3) outletting (L. Fasenmyer) above the coal measure. All other sources are below the coal measure where the abatement construction work is contemplated. We do not expect any adverse effects from the proposed construction. It should be noted that the quality of the water sampled is not good. We also wish to call to your attention that the United States Geological Survey drilled a well (See page 51) in this area. This well is located approximately 100 yards south of Test Hole #4; the total depth was 235 feet. The coal measure was cased and cemented. The water encountered below the coal interval was also acidic.

It is our determination that the anticipated inundations will not adversely affect any of the water supplies within the proposed project area based on available information at this time.

This opinion is based on conditions as they exist at this time. The quality and the quantity of water can change with the season. Our opinion was drawn from a limited amount of information (one (1) water sample per site). Other factors, unknown to us at this time can and will influence changes in ground water conditions



WATER SUPPLY LOCATIONS

DEER CREEK WATERSHED KNOX TOWNSHIP, CLARION CO.

GWIN, DOBSON & FORE	EMAN, INC.			4-19
Eighth Avenue and	Twelfth Street			Date Time
P.O. Box 1589		Sam	ple received	4/19/74
Altoona, Pa. 1660	03	Dan	pre received	
Phone (814) 943-52	214	San	ple Analyzed	•
			•	
Case Name William	Davis		Project 1	No.
Region	County	Ми	nicipality	
ource	Receiving Stream	House (WELL)	Tributary t	to
Collected	Sample No.		· e	Chemist
Date: Time:	Collected by	•		
На	4.2		SEND RESULTS	ro:
Acidity	88 mg/1		Planning &	& Dev. Research
Alkalinity	0 mg/1		Ebensburg	
Iron (total)	0.2 mg/1		Reynoldsvi	ille
Iron (ferrous)	mg/l		Uniontown	· ·
Sulfates	380 mg/l		Pottsville	9
Other (specify)	erousered manage with asserting inventors also also an au-Change		Wilkes-Bar	rre
223	•		Other (spe	ecify)
1.2				
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GWIN, DOBSON & FORM	EMAN, INC.			1-20
Eighth Avenue and	Twelfth Street			Date Time
P.O. Box 1589	•		Sample received	
Altoona, Pa. 1660	03		bampic received	
Phone (814) 943-52	214		Sample Analyzed	
	•••			
Case Name Jake Fasen	ımyer		Project N	0.
Region	County		Municipality	
Jource	Receiving Stream	House (WELL)	Tributary t	0
Sollected	Sample No.		· .	Chemist
Date: Time:	Collected by	· ·		
рН	3.5		SEND RESULTS T	•
Acidity	50 mg/l	•	Ebensburg	Dev. Research
Alkalinity Iron (total)	0 mg/1 1.1 mg/1		Reynoldsvi	lle
Iron (ferrous)	mg/l		Uniontown Pottsville	
Sulfates	300 mg/1		Wilkes-Bar	•
Other (specify)			Other (spe	cify)
<u>.</u>			•	

GWIN, DOBSON & FOR	EMAN. INC.			•
Eighth Avenue and				4-22
P.O. Box 1589	11102.2 111			Date Time
Altoona, Pa. 1660	0 0		Sample received	
•			.	
Phone (814) 943-53	214 .		Sample Analyzed	
``			•	
Case Name Jake Fa	asenmyer		Project 1	lo.
.egion	County		Municipality	
ource	Receiving Stream Spring in Front of	f House	Tributary t	;o ;
Collected	Sample No.			Chemist
Date: Time:	Collected by	4		1
#15 1 1			SEND RESULTS T	⁷ ∩•
11	5.3		DENE RESOURCE	
pH .			Planning &	: Dev. Research
Acidity	2 mg/1		1 1 1 1 1 1 1 1 1	Dov. Rebear on
9	·	·	Ebensburg	
Alkalinity	0 mg/1		<u></u>	
Iron (total)	<0.1 mg/1		Reynoldsvi	.lle
TATION TO SERVICE THE PROPERTY OF THE PROPERTY	Communication of the State of t		Uniontown	•.
Iron (ferrous)	mg/l		gament.	
		•	Pottsville	:
Sulfates	14 mg/1		Wilkes-Bar	mo
Other (specify)		\$	LITTES-DOI	16
rd -			Other (spe	cify)
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GWIN, DOBSON & FORE	EMAN, INC.		4-21	
Eighth Avenue and	Twelfth Street	• *		Date Time
P.O. Box 1589	•		Sample received	Dave Time
Altoona, Pa. 1660)3		bumple received	
Phone (814) 943-52	214		Sample Analyzed	
ere de la companya d La companya de la co				
Case Name Lawrence F	asenmyer		Project No	• • · · · · · · · · · · · · · · · · · ·
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ource	Receiving Stream House before W		Tributary to	
Mollected	Sample No.			Chemist
Date: Time:	Collected by	4	ti Chia da ta	
era Se			SEND RESULTS TO) •
рН	5.7	:		•
Acidity	0 mg/l		Planning &	Dev. Research
	_		Ebensburg	•
Alkalinity			Reynoldsvil	le
Iron (total)	0.2 mg/1		Uniontown	
Iron (ferrous)	mg/1	•	branch	•
Sulfates	91 mg/1		Pottsville	•
Other (specify)		:	Wilkes-Barr	е
Other (specify)	. , ,	• • • • • • • • • • • • • • • • • • •	Other (spec	ify)
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GWIN, DOBSON & FORE	MAN, INC.				4-23	
Eighth Avenue and	Twelfth Stre	et			Date	Time
P.O. Box 1589				G	Dave	Time
Altoona, Pa. 1660	93			Sample received		<u></u>
Phone (814) 943-52	. 14		. *	Sample Analyzed		
		•		•		
Case Name Alfred G	uth			Project 1	No.	
negion	County		The state of the s	Municipality		
ource	Receivin Spring	g Stream in Field		Tributary 1	to	antoqualis ortalis or grow digit
Tollected	Sample No.			er termination than to 2 common repair man an announce and the pro-security	Chemist	
Date: Time:	Collected b	У	4			
рН	. 5.0	•		SEND RESULTS	ro:	
Acidity	4	mg/1	• • • • • • • • • • • • • • • • • • •	Planning &	k Dev. Rese	arch
Alkalinity	0	mg/1		Ebensburg		
Iron (total)	<0.1	mg/l	•	Reynoldsvi	ille	
Iron (ferrous)		mg/l	•	Uniontown		
Sulfates	23	mg/l		Pottsville		
Other (specify)		- torro-communications	:	Wilkes-Bar		
· 7		Note West region on a few remainings		Other (spe	ecify)	•
3.3 •	TANA PARAMETER PERSONAL AND PROPERTY OF THE PERSONAL PROPERTY OF THE PE				_	*

P.O. Box 1589		•	S a	mple received	5-23-74	9:00
Altoona, Pa. 166 Phone (814) 943-5			. Sa	mple Analyzed	5-23-74	1:45
	•	•				
Case Name Jame	es Obenrader Wel	1		Project I	No. 193-1	
Re ion .	County	Clarion	14	unicipality		
Sc ree	Receiving	Stream		Tributary	to	
Collected 5-16-74	Sample No.	Water Supply	45'	-	Chemist	
Dave: Time:	Collected by	J. Ward				
Acidity Alkalinity Iron (total) Iron (ferrous) Sulfates Other (specify)	5.4 30 0 12 12 4	mg/l mg/l mg/l mg/l		Planning Planning Ebensburg Reynoldsv Uniontown Pottsvill Wilkes-Ba Other (sp	& Dev. Resea	rch
			_	. Ward GDF urface cased	•	

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Date

Time

GWIN, DOBSON & FOREMAN, INC.

REMARKS:

Sighth Avenue and Twelfth Street

REFERENCES AND ACKNOWLEDGEMENTS

- 1. Geologic and Coal-Bed Map of Clarion County, Pennsylvania by Elmer D. Patterson and J.A. Van Lieu, U.S. Geological Survey Map 1-715, 1972
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