



WATER
AT YOUR SERVICE

Vanport Township Municipal Authority

285 RIVER AVENUE

VANPORT, PENNSYLVANIA 15009

(412) 774-2091

(412) 775-1038

November 28, 1990

Westinghouse Corporation
One Tuscarawas Road
Beaver, PA 15009

ATTN: E.F. FARLAND

Dear Mr. Farland:

Enclosed you will find information concerning the dilemma of black water arising from the change in water characteristics due to the air stripping operation provided by Westinghouse Corporation.

The primary concern in these water characteristics are the PH and dissolved Oxygen levels which have been elevated due to the TCE removal method.

Subsequently, the Authority has endeavored to alleviate this problem by the possibility of sequestering of the water prior to the air stripping procedure, thus providing not only an end to this black water problem but also a substantial benefit in the reduction of the possibility of filing the media, therefore, reducing the need for tri-pack rejuvenation or replacement.

A meeting will be hosted by the Authority and involved parties to discuss methods and costs for this proposed operation in which you and Westinghouse Corporation are a vital part.

Further information in regards to the time and date will be forwarded to you as soon as it is available.

Respectfully,

David P. Brooks
Superintendent

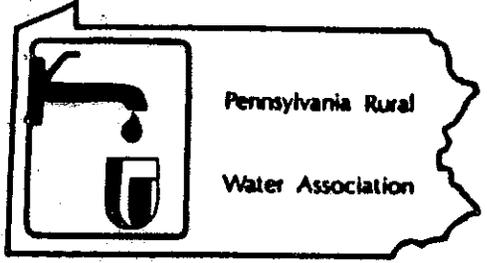
DPB/djl

Enc.

CC: WESTINGHOUSE CORPORATION
Paul E. Lego
CHAIRMAN/CEO

cc Beth
Hess / SOA

Received 10/4/90



Pennsylvania Rural Water Association

Saltsburg Plaza, P.O. Box 90, Saltsburg, Pennsylvania 15681

412-639-3246

October 2, 1990

Vanport Municipal Authority
285 River Avenue
Vanport, PA 15009

Dear Mr. Brooks,

I would like to thank you and your board of directors for the cooperation and hospitality on our visit to the Vanport water system on August 20, 1990.

After our visit and the submission of requested test results from the Vanport water system, I discussed our findings with other water quality people at the National Rural Water Association Conference in Salt Lake City, Utah.

Listed below are the combined conclusions that I have reached:

1. The water quality of the Vanport Water System is completely SAFE for human consumption.
2. The monitoring of the water in the Vanport System is one of the most comprehensive in the state. This monitoring assures the water quality to the Vanport customers.
3. The Vanport Water System is being operated by very professional people.
4. The people that are served by the Vanport Water System should be proud that they are served by such dedicated public servants.

The only recommendation or suggestion that I would make to the Vanport System is that they might consider sequestering of the water or lowering the PH level. This would be done to protect the distribution system from the oxygenated water.

If you have any questions in regards to this matter, please call me at 412-639-3246.

Sincerely yours,
[Signature]
Herb Pizer
Program Manager, PRWA

HP/blj

Specimen 11/5/90



TELEPHONE: 1-800-356-0422
In Wis: 1-608-755-0422
Lab ext: 26

PO BOX 834
Beloit, WI. 53511
Fax #: 1-608-755-0538

Client: VANPORT TURP AUTHORITY
Address: 285 RIVER AVE
City: VANPORT
State: PA Zip: 15009

Lab #: 063458
Date Printed: 10/30/90
Date Received: 10/25/90
Date Tested: 10/30/90

Attention: DAVID BROOKS
Phone: (412) 774-2091

Distributor: 21-A THE CHLORAMONE COMPANY
HERB SPENCER
723 CHESTNUT ST PO BOX 779
EMMAUS, PA 18049

Region: 6

Sample Site: INFL TOWER #1

Date Sampled: 10/17/90

Analysis	Units	Concentration	Sample Site
Hardness.....	mg/l as CaCO3	248	
Calcium.....	mg/l as CaCO3	199	
Magnesium.....	mg/l as CaCO3	49	
O-Phosphate.....	mg/l as PO4	0.39	
Iron.....	mg/l	0	
Manganese.....	mg/l	0.275	
Copper.....	mg/l	0.01	
Lead.....	ug/l	0	
Silica.....	mg/l		
Zinc.....	mg/l		
Sulfate.....	mg/l	71	
pH.....			
T.D.S.....			
Alkalinity.....	mg/l as CaCO3		
Nitrate.....	mg/l		
Turbidity.....	N.T.U.		

H. H. Hellen
Herbert H. Hellen
Director of Laboratory Services
THE KJELL CORPORATION

Debbie Marrero
Laboratory Technician

Wisconsin Department of Natural Resources
ID #154064680

Spencer 11/5/90

THE KJELL CORPORATION
LAB REPORT

TELEPHONE: 1-800-356-0422
In Wis: 1-608-755-0422
Lab ext: 26

PO BOX 834
Beloit, Wi. 53511
Fax #: 1-608-755-0538

Client: VANPORT TURP AUTHORITY
Address: 285 RIVER AVE
City: VANPORT
State: PA Zip: 15009

Lab #: 063459
Date Printed : 10/30/90
Date Received: 10/25/90
Date Tested: 10/30/90

Attention: DAVID BROOKS
Phone: (412) 774-2091

Distributor: 21-A THE CHLORAMONE COMPANY
HERB SPENCER
723 CHESTNUT ST PO BOX 779
EMMAUS, PA 18049

Region: 6

Sample Site: INFL TOWER #2

Date Sampled: 10/17/90

Analysis	Units	Concentration Sample Site
Hardness.....	mg/l as CaCO3	224
Calcium.....	mg/l as CaCO3	185
Magnesium.....	mg/l as CaCO3	39
O-Phosphate.....	mg/l as PO4	0.34
Iron.....	mg/l	0
Manganese.....	mg/l	0.092
Copper.....	mg/l	0.02
Lead.....	ug/l	0
Silica.....	mg/l	
Zinc.....	mg/l	
Sulfate.....	mg/l	86
pH.....		
T.D.S.....		
Alkalinity.....	mg/l as CaCO3	
Nitrate.....	mg/l	
Turbidity.....	N.T.U.	

H. H. Hellen
Herbert H. Hellen
Director of Laboratory Services
THE KJELL CORPORATION

Debbie Marrero
Laboratory Technician

Wisconsin Department of Natural Resources
ID #154064680

THE KJELL CORPORATION
LAB REPORT

TELEPHONE: 1-800-356 0422
In Wis: 1-608-755-0422
Lab ext: 26

PO BOX 834
Beloit, Wi. 53511
Fax #: 1 608-755-0538

Client: VANPORT TURP AUTHORITY
Address: 285 RIVER AVE
City: VANPORT
State: PA Zip: 15009

Lab #: 063460
Date Printed : 10/30/90
Date Received: 10/25/90
Date Tested: 10/30/90

Attention: DAVID BROOKS
Phone: (412)-774-2091

Distributor: 21-A THE CHLORAMONE COMPANY
HERB SPENCER
723 CHESTNUT ST PO BOX 779
EMMAUS, PA 18049

Region: 6

Sample Site: EFFLUENT FINISHED

Date Sampled: 10/17/90

Analysis	Units	Concentration Sample Site
Hardness.....	mg/l as CaCO3	288
Calcium.....	mg/l as CaCO3	242
Magnesium.....	mg/l as CaCO3	46
O-Phosphate.....	mg/l as PO4	0.21
Iron.....	mg/l	0
Manganese.....	mg/l	0
Copper.....	mg/l	0.09
Lead.....	ug/l	0
Silica.....	mg/l	
Zinc.....	mg/l	
Sulfate.....	mg/l	78
pH.....		
T.D.S.....		
Alkalinity.....	mg/l as CaCO3	
Nitrate.....	mg/l	
Turbidity.....	N.T.U.	


Herbert H. Hellen
Director of Laboratory Services
THE KJELL CORPORATION

Debbie Marrero
Laboratory Technician

Wisconsin Department of Natural Resources
ID #154064680

THE KJELL CORPORATION
LAB REPORT

TELEPHONE: 1-800-356-0422
In Wis: 1-608-755-0422
Lab ext: 26

PO BOX 834
Beloit, Wi. 53511
Fax #: 1-608-755-0538

Client: VANPORT TURP AUTHORITY
Address: 285 RIVER AVE
City: VANPORT
State: PA Zip: 15009

Lab #: 063462
Date Printed : 10/30/90
Date Received: 10/25/90
Date Tested: 10/30/90

Attention: DAVID BROOKS
Phone: (412)-774-2091

Distributor: 21-A THE CHLORAMONE COMPANY
HERB SPENCER
723 CHESTNUT ST PO BOX 779
EMMAUS, PA 18049

Region: 6

Sample Site: 5975 TUSCARORA HOT

Date Sampled: 10/17/90

Analysis	Units	Concentration Sample Site
Hardness.....	mg/l as CaCO3	289
Calcium.....	mg/l as CaCO3	241
Magnesium.....	mg/l as CaCO3	48
O-Phosphate.....	mg/l as P04	0.59
Iron.....	mg/l	0.109
Manganese.....	mg/l	0
Copper.....	mg/l	0.19
Lead.....	ug/l	5
Silica.....	mg/l	
Zinc.....	mg/l	
Sulfate.....	mg/l	101
pH.....		
T.D.S.....		
Alkalinity.....	mg/l as CaCO3	
Nitrate.....	mg/l	
Turbidity.....	N.T.U.	


Herbert H. Hellen
Director of Laboratory Services
THE KJELL CORPORATION

Debbie Marrero
Laboratory Technician

Wisconsin Department of Natural Resources
ID #154064680

11/3/90

THE KJELL CORPORATION
LAB REPORT

TELEPHONE: 1-800-356-0422
In Wis: 1-808-755-0422
Lab ext: 26

PO BOX 834
Beloit, Wi. 53511
Fax #: 1-608-755-0538

Client: VANPORT TURP AUTHORITY
Address: 285 RIVER AVE
City: VANPORT
State: PA Zip: 15009

Lab #: 063461
Date Printed : 10/30/90
Date Received: 10/25/90
Date Tested: 10/30/90

Attention: DAVID BROOKS
Phone: (412)-774-2091

Distributor: 21-A THE CHLORAMONE COMPANY
HERB SPENCER
723 CHESTNUT ST PO BOX 779
EMMAUS, PA 18049

Region: 6

Sample Site: 5975 TUSCARORA COLD

Date Sampled: 10/17/90

Analysis	Units	Concentration Sample Site
Hardness.....	mg/l as CaCO3	263
Calcium.....	mg/l as CaCO3	220
Magnesium.....	mg/l as CaCO3	43
O-Phosphate.....	mg/l as PO4	0.41
Iron.....	mg/l	0
Manganese.....	mg/l	0
Copper.....	mg/l	0.07
Lead.....	ug/l	3
Silica.....	mg/l	
Zinc.....	mg/l	
Sulfate.....	mg/l	84
pH.....		
T.D.S.....		
Alkalinity.....	mg/l as CaCO3	
Nitrate.....	mg/l	
Turbidity.....	N.T.U.	


Herbert H. Hallen
Director of Laboratory Services
THE KJELL CORPORATION

Debbie Marrero
Laboratory Technician

Wisconsin Department of Natural Resources
ID #154064680

THE KJELL CORPORATION
LAB REPORT

TELEPHONE: 1-800-356-0422
In Wis: 1-608-755-0422
Lab ext: 26

PO BOX 834
Beloit, Wi. 53511
Fax #: 1-608-755-0538

Client: VANPORT TURP AUTHORITY
Address: 285 RIVER AVE
City: VANPORT
State: PA Zip: 15009

Lab #: 063463
Date Printed : 10/30/90
Date Received: 10/25/90
Date Tested: 10/30/90

Attention: DAVID BROOKS
Phone: (412)-774-2091

Distributor: 21-A THE CHLORAMONE COMPANY
HERB SPENCER
723 CHESTNUT ST PO BOX 779
EMMAUS, PA 18049

Region: 6

Sample Site: 135 BEACH

Date Sampled: 10/17/90

Analysis	Units	Concentration Sample Site
Hardness.....	mg/l as CaCO3	296
Calcium.....	mg/l as CaCO3	250
Magnesium.....	mg/l as CaCO3	46
O-Phosphate.....	mg/l as PO4	0.21
Iron.....	mg/l	0
Manganese.....	mg/l	0
Copper.....	mg/l	0.01
Lead.....	ug/l	3
Silica.....	mg/l	
Zinc.....	mg/l	
Sulfate.....	mg/l	40
pH.....		
T.D.S.....		
Alkalinity.....	mg/l as CaCO3	
Nitrate.....	mg/l	
Turbidity.....	N.T.U.	


Herbert H. Hellen
Director of Laboratory Services
THE KJELL CORPORATION

Debbie Marrero
Laboratory Technician

Wisconsin Department of Natural Resources
ID #154064680

THE KJELL CORPORATION
LAB REPORT

TELEPHONE: 1-800-356-0422
In Wis: 1-608-755-0422
Lab ext: 26

PO BOX 834
Deloit, Wi. 53511
Fax #: 1 608-755-0538

Client: VANPORT TURP AUTHORITY
Address: 285 RIVER AVE
City: VANPORT
State: PA Zip: 15009

Lab #: 063464
Date Printed: 10/30/90
Date Received: 10/25/90
Date Tested: 10/30/90

Attention: DAVID BROOKS
Phone: (412)-774-2091

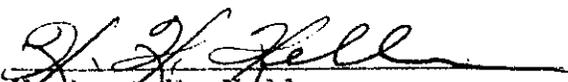
Distributor: 21-A THE CHLORAMONE COMPANY
HERB SPENCER
723 CHESTNUT ST PO BOX 779
EMMAUS, PA 18049

Region: 6

Sample Site: BRIGHTON TWP CENTER INF

Date Sampled: 10/17/90

Analysis	Units	Concentration Sample Site
Hardness.....	mg/l as CaCO ₃	280
Calcium.....	mg/l as CaCO ₃	234
Magnesium.....	mg/l as CaCO ₃	46
O-Phosphate.....	mg/l as PO ₄	0.13
Iron.....	mg/l	0
Manganese.....	mg/l	0.015
Copper.....	mg/l	0.01
Lead.....	ug/l	3
Silica.....	mg/l	
Zinc.....	mg/l	
Sulfate.....	mg/l	100
pH.....		
T.D.S.....		
Alkalinity.....	mg/l as CaCO ₃	
Nitrate.....	mg/l	
Turbidity.....	N.T.U.	


Herbert H. Hollen
Director of Laboratory Services
THE KJELL CORPORATION

Debbie Marrero
Laboratory Technician

Wisconsin Department of Natural Resources
ID #154064680

THE KJELL CORPORATION
LAB REPORT

TELEPHONE: 1-800-356-0422
In Wis: 1-608-755-0422
Lab ext: 26

PO BOX 834
Beloit, Wi. 53511
Fax #: 1-608-755-0538

Client: VANPORT TURF AUTHORITY
Address: 285 RIVER AVE
City: VANPORT
State: PA Zip: 15009

Lab #: 063465
Date Printed : 10/30/90
Date Received: 10/25/90
Date Tested: 10/30/90

Attention: DAVID BROOKS
Phone: (412)-774-2091

Distributor: 21-A THE CHLORAMONE COMPANY
HERB SPENCER
723 CHESTNUT ST PO BOX 779
EMMAUS, PA 18049

Region: 6

Sample Site: BRIGHTON TWP CENTER EFF

Date Sampled: 10/17/90

Analysis	Units	Concentration Sample Site
Hardness.....	mg/l as CaCO3	254
Calcium.....	mg/l as CaCO3	219
Magnesium.....	mg/l as CaCO3	35
O-Phosphate.....	mg/l as PO4	0.13
Iron.....	mg/l	0
Manganese.....	mg/l	0.015
Copper.....	mg/l	0.02
Lead.....	ug/l	2
Silica.....	mg/l	
Zinc.....	mg/l	
Sulfate.....	mg/l	110
pH.....		
T.D.S.....		
Alkalinity.....	mg/l as CaCO3	
Nitrate.....	mg/l	
Turbidity.....	N.T.U.	


Herbert H. Heinen
Director of Laboratory Services
THE KJELL CORPORATION

Debbie Marrero
Laboratory Technician

Wisconsin Department of Natural Resources
ID #154064680

THE KJELL CORPORATION
LAB REPORT

TELEPHONE: 1-800-356-0422
In Wis: 1-608-755-0422
Lab ext: 26

PO BOX 834
Beloit, WI. 53511
Fax #: 1-608-755-0538

Client: VANPORT TURP AUTHORITY
Address: 285 RIVER AVE
City: VANPORT
State: PA Zip: 15009

Lab #: 063466
Date Printed : 10/30/90
Date Received: 10/25/90
Date Tested: 10/30/90

Attention: DAVID BROOKS
Phone: (412)-774-2091

Distributor: 21-A THE CHLORAMONE COMPANY
HERB SPENCER
723 CHESTNUT ST PO BOX 779
EMMAUS, PA 18049

Region: 6

Sample Site: BRIGHTON TWP BEAVER INN

Date Sampled: 10/17/90

Analysis	Units	Concentration Sample Site
Hardness.....	mg/l as CaCO3	320
Calcium.....	mg/l as CaCO3	281
Magnesium.....	mg/l as CaCO3	59
0-Phosphate.....	mg/l as PO4	0.3
Iron.....	mg/l	0.073
Manganese.....	mg/l	0
Copper.....	mg/l	0.02
Lead.....	ug/l	0
Silica.....	mg/l	
Zinc.....	mg/l	
Sulfate.....	mg/l	100
pH.....		
F.D.S.....		
Alkalinity.....	mg/l as CaCO3	
Nitrate.....	mg/l	
Turbidity.....	N.T.U.	


Herbert H. Hellen
Director of Laboratory Services
THE KJELL CORPORATION

Debbie Marrero
Laboratory Technician

Wisconsin Department of Natural Resources
ID #154064680

THE KJELL CORPORATION
LAB REPORT

TELEPHONE: 1-800-358-0422
In Wis: 1-608-755-0422
Lab ext: 26

PO BOX 894
Beloit, WI. 53511
Fax #: 1-608-755-0538

Client: VANPORT TURP AUTHORITY
Address: 285 RIVER AVE
City: VANPORT
State: PA Zip: 15009

Lab #: 063467
Date Printed : 10/30/90
Date Received: 10/25/90
Date Tested: 10/30/90

Attention: DAVID BROOKS
Phone: (412)-774-2091

Distributor: 21-A THE CHLORAMONE COMPANY
HERB SPENCER
723 CHESTNUT ST PO BOX 779
EMMAUS, PA 18049

Region: 6

Sample Site: BRIGHTON TWP BEAVER EFF

Date Sampled: 10/17/90

Analysis	Units	Concentration Sample Site
Hardness.....	mg/l as CaCO3	304
Calcium.....	mg/l as CaCO3	262
Magnesium.....	mg/l as CaCO3	42
O-Phosphate.....	mg/l as PO4	0.33
Iron.....	mg/l	0
Manganese.....	mg/l	0.008
Copper.....	mg/l	0.01
Lead.....	ug/l	0
Silica.....	mg/l	
Zinc.....	mg/l	
Sulfate.....	mg/l	100
pH.....		
T.D.S.....		
Alkalinity.....	mg/l as CaCO3	
Nitrate.....	mg/l	
Turbidity.....	N.T.U.	


Herbert H. Hojlen
Director of Laboratory Services
THE KJELL CORPORATION

Debbie Marrero
Laboratory Technician

THE KJELL CORPORATION
LAB REPORT

TELEPHONE: 1-800-356-0422
In Wis: 1-608-755-0422
Lab ext: 26

PO BOX 834
Beloit, WI. 53511
Fax #: 1 608-755-0538

Client: VANPORT TURP AUTHORITY
Address: 285 RIVER AVE
City: VANPORT
State: PA Zip: 15009

Lab #: 063468
Date Printed : 10/30/90
Date Received: 10/25/90
Date Tested: 10/30/90

Attention: DAVID BROOKS
Phone: (412)-774-2091

Distributor: 21-A THE CHLORAMONE COMPANY
HERB SPENCER
723 CHESTNUT ST PO BOX 779
EMMAUS, PA 18049

Region: 6

Sample Site: LUCY'S COLD

Date Sampled: 10/17/90

Analysis	Units	Concentration Sample Site
Hardness.....	mg/l as CaCO3	266
Calcium.....	mg/l as CaCO3	219
Magnesium.....	mg/l as CaCO3	47
O-Phosphate.....	mg/l as PO4	0.62
Iron.....	mg/l	0
Manganese.....	mg/l	0
Copper.....	mg/l	0.02
Lead.....	ug/l	0
Silica.....	mg/l	
Zinc.....	mg/l	
Sulfate.....	mg/l	100
pH.....		
T.D.S.....		
Alkalinity.....	mg/l as CaCO3	
Nitrate.....	mg/l	
Turbidity.....	N.T.U.	


Herbert R. Hellen
Director of Laboratory Services
THE KJELL CORPORATION

Debbie Marrero
Laboratory Technician

Wisconsin Department of Natural Resources

ID #154964689

THE KJELL CORPORATION
LAB REPORT

TELEPHONE: 1-800-956-0422
In Wis: 1-608-755-0422
Lab ext: 26

PO BOX 834
Beloit, WI. 53511
Fax #: 1-608-755-0538

Client: VANPORT TURP AUTHORITY
Address: 285 RIVER AVE
City: VANPORT
State: PA Zip: 15009

Lab #: 063469
Date Printed : 10/30/90
Date Received: 10/25/90
Date Tested: 10/30/90

Attention: DAVID BROOKS
Phone: (412)-774-2091

Distributor: 21-A THE CHLORAMONE COMPANY
HERB SPENCER
723 CHESTNUT ST PO BOX 779
EMMAUS, PA 18049

Region: 6

Sample Site: INFL TOWER #1

Date Sampled: 10/17/90

Analysis	Units	Concentration Sample Site
Hardness.....	mg/l as CaCO3	
Calcium.....	mg/l as CaCO3	
Magnesium.....	mg/l as CaCO3	
O-Phosphate.....	mg/l as PO4	
Iron.....	mg/l	
Manganese.....	mg/l	
Copper.....	mg/l	
Lead.....	ug/l	
Silica.....	mg/l	
Zinc.....	mg/l	
Sulfate.....	mg/l	
pH.....		7.73
T.D.S.....		310
Alkalinity.....	mg/l as CaCO3	149
Nitrate.....	mg/l	
Turbidity.....	N.T.U.	


Herbert H. Hellen
Director of Laboratory Services
THE KJELL CORPORATION

Debbie Marrero
Laboratory Technician

Wisconsin Department of Natural Resources
ID #154064680

THE KJELL CORPORATION
LAB REPORT

TELEPHONE: 1-800-356-0422
In Wis: 1-608-755-0422
Lab ext: 26

PO BOX 834
Beloit, Wi. 53511
Fax #: 1-608-755-0538

Client: VANPORT TURF AUTHORITY
Address: 285 RIVER AVE
City: VANPORT
State: PA Zip: 15009

Lab #: 063470
Date Printed : 10/30/90
Date Received: 10/25/90
Date Tested: 10/30/90

Attention: DAVID BROOKS
Phone: (412)-774-2091

Distributor: 21-A THE CHLORAMONE COMPANY
HERB SPENCER
723 CHESTNUT ST PO BOX 779
EMMAUS, PA 18049

Region: 6

Sample Site: INFL TOWER #2

Date Sampled: 10/17/90

Analysis	Units	Concentration	Sample Site
Hardness.....	mg/l as CaCO3		
Calcium.....	mg/l as CaCO3		
Magnesium.....	mg/l as CaCO3		
Orthophosphate.....	mg/l as PO4		
Iron.....	mg/l		
Manganese.....	mg/l		
Copper.....	mg/l		
Lead.....	ug/l		
Silica.....	mg/l		
Zinc.....	mg/l		
Sulfate.....	mg/l		
pH.....		8.12	
T.D.S.....		320	
Alkalinity.....	mg/l as CaCO3	148	
Nitrate.....	mg/l		
Turbidity.....	N.T.U.		


Herbert H. Hellen
Director of Laboratory Services
THE KJELL CORPORATION

Debbie Marrero
Laboratory Technician

Wisconsin Department of Natural Resources
ID #154064680

THE KJELL CORPORATION
LAB REPORT

TELEPHONE: 1-800-356 0422
In Wis: 1 608 755 0422
Lab ext: 26

PO BOX 874
Beloit, WI. 53511
Fax #: 1 608 755 0508

Client: VANPORT TURP AUTHORITY
Address: 285 RIVER AVE
City: VANPORT
State: PA Zip: 15009

LAB #: Q63171
Date Printed: 10/30/90
Date Received: 10/25/90
Date Tested: 10/30/90

Attention: DAVID BROOKS
Phone: (412)-774-2091

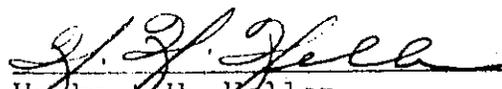
Distributor: 21-A THE CHLORAMONE COMPANY
HERB SPENCER
723 CHESTNUT ST PO BOX 779
EMMAUS, PA 18049

Region: 6

Sample Site: EFF FINISHED

Date Sampled: 10/17/90

Analysis	Units	Concentration Sample Site
Hardness.....	mg/l as CaCO3	
Calcium.....	mg/l as CaCO3	
Magnesium.....	mg/l as CaCO3	
O Phosphate.....	mg/l as PO4	
Iron.....	mg/l	
Manganese.....	mg/l	
Copper.....	mg/l	
Lead.....	ug/l	
Silica.....	mg/l	
Zinc.....	mg/l	
Sulfate.....	mg/l	
pH.....		8.15
T.D.S.....		360
Alkalinity.....	mg/l as CaCO3	166
Nitrate.....	mg/l	
Turbidity.....	N.T.U.	


Herbert H. Hellen
Director of Laboratory Services
THE KJELL CORPORATION

Debbie Marrero
Laboratory Technician

Wisconsin Department of Natural Resources
ID #154084680

THE KJELL CORPORATION
LAB REPORT

TELEPHONE: 1-800-356-0422
In Wis: 1-808-755-0422
Lab ext: 26

PO BOX 834
Beloit, Wi. 53511
Fax #: 1-608-755-0538

Client: VANPORT TURP AUTHORITY
Address: 285 RIVER AVE
City: VANPORT
State: PA Zip: 15009

Lab #: 063472
Date Printed : 10/30/90
Date Received: 10/25/90
Date Tested: 10/30/90

Attention: DAVID BROOKS
Phone: (412)-774-2091

Distributor: 21-A THE CHLORAMONE COMPANY
HERB SPENCER
723 CHESTNUT ST PO BOX 779
EMMAUS, PA 18049

Region: 6

Sample Site: 135 BEACH

Date Sampled: 10/17/90

Analysis	Units	Concentration Sample Site
Hardness.....	mg/l as CaCO3	
Calcium.....	mg/l as CaCO3	
Magnesium.....	mg/l as CaCO3	
O-Phosphate.....	mg/l as PO4	
Iron.....	mg/l	
Manganese.....	mg/l	
Copper.....	mg/l	
Lead.....	ug/l	
Silica.....	mg/l	
Zinc.....	mg/l	
Sulfate.....	mg/l	
pH.....		7.88
T.D.S.....		360
Alkalinity.....	mg/l as CaCO3	142
Nitrate.....	mg/l	
Turbidity.....	N.T.U.	


Herbert D. Hellen
Director of Laboratory Services
THE KJELL CORPORATION

Debbie Marrero
Laboratory Technician

Wisconsin Department of Natural Resources
ID #154064680

THE KJELL CORPORATION
LAB REPORT

TELEPHONE: 1-800-356-0422
In Wis: 1-608-755-0422
Lab ext: 26

PO BOX 834
Beloit, Wi. 53511
Fax #: 1-608 755 0538

Client: VANPORT TURP AUTHORITY
Address: 285 RIVER AVE
City: VANPORT
State: PA Zip: 15009

Lab #: 063473
Date Printed : 10/30/90
Date Received: 10/25/90
Date Tested: 10/30/90

Attention: DAVID BROOKS
Phone: (412)-774-2091

Distributor: 21-A THE CHLORAMONE COMPANY
HERB SPENCER
723 CHESTNUT ST PO BOX 779
EMMAUS, PA 18049

Region: 6

Sample Site: BRIGHTON TWP CENTER INFL

Date Sampled: 10/17/90

Analysis	Units	Concentration Sample Site
Hardness.....	mg/l as CaCO3	
Calcium.....	mg/l as CaCO3	
Magnesium.....	mg/l as CaCO3	
Orthophosphate.....	mg/l as PO4	
Iron.....	mg/l	
Manganese.....	mg/l	
Copper.....	mg/l	
Lead.....	ug/l	
Silica.....	mg/l	
Zinc.....	mg/l	
Sulfate.....	mg/l	
pH.....		8.17
T.D.S.....		370
Alkalinity.....	mg/l as CaCO3	164
Nitrate.....	mg/l	
Turbidity.....	N.T.U.	


Herbert M. Hellen
Director of Laboratory Services
THE KJELL CORPORATION

Debbie Marrero
Laboratory Technician

Wisconsin Department of Natural Resources
ID #154064680

THE KJELL CORPORATION
LAB REPORT

TELEPHONE: 1-800-356-0422
In Wis: 1-608-755-0422
Lab ext: 26

PO BOX 834
Beloit, WI. 53511
Fax #: 1-608 755 0538

Client: VANPORT TURP AUTHORITY
Address: 285 RIVER AVE
City: VANPORT
State: PA Zip: 15009

Lab #: 063474
Date Printed : 10/30/90
Date Received: 10/25/90
Date Tested: 10/30/90

Attention: DAVID BROOKS
Phone: (412)-774-2091

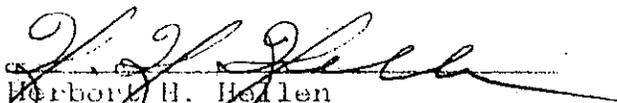
Distributor: 21-A THE CHLORAMONE COMPANY
HERB SPENCER
733 CHESTNUT ST PO BOX 779
EMMAUS, PA 18049

Region: C

Sample Site: BRIGHTON TWP CENTER EFF

Date Sampled: 10/17/90

Analysis	Units	Concentration Sample Site
Hardness.....	mg/l as CaCO3	
Calcium.....	mg/l as CaCO3	
Magnesium.....	mg/l as CaCO3	
O Phosphate.....	mg/l as PO4	
Iron.....	mg/l	
Manganese.....	mg/l	
Copper.....	mg/l	
Lead.....	ug/l	
Silica.....	mg/l	
Zinc.....	mg/l	
Sulfate.....	mg/l	
ph.....		8.18
T.D.S.....		370
Alkalinity.....	mg/l as CaCO3	172
Nitrate.....	mg/l	
Turbidity.....	N.T.U.	


Herbert H. Hellen
Director of Laboratory Services
THE KJELL CORPORATION

Debbie Marrero
Laboratory Technician

Wisconsin Department of Natural Resources
ID #154064680

THE KJELL CORPORATION
LAB REPORT

TELEPHONE: 1 800-356-0422
In Wis: 1-608-755-0422
Lab ext: 26

PO BOX 834
Beloit, WI. 53511
Fax #: 1 608 755-0538

Client: VANPORT TURF AUTHORITY
Address: 285 RIVER AVE
City: VANPORT
State: PA Zip: 15009

Lab #: 063475
Date Printed: 10/30/90
Date Received: 10/25/90
Date Tested: 10/30/90

Attention: DAVID BROOKS
Phone: (412)-774-2091

Distributor: 21-A THE CHLORAMONE COMPANY
HERB SPENCER
723 CHESTNUT ST PO BOX 779
EMMAUS, PA 18049

Region: 6

Sample Site: BRIGHTON TWP BEAVER INFL

Date Sampled: 10/17/90

Analysis	Units	Concentration Sample Site
Hardness.....	mg/l as CaCO3	
Calcium.....	mg/l as CaCO3	
Magnesium.....	mg/l as CaCO3	
O Phosphate.....	mg/l as PO4	
Iron.....	mg/l	
Manganese.....	mg/l	
Copper.....	mg/l	
Lead.....	ug/l	
Silica.....	mg/l	
Zinc.....	mg/l	
Sulfate.....	mg/l	
pH.....		8.25
T.D.S.....		366
Alkalinity.....	mg/l as CaCO3	144
Nitrate.....	mg/l	
Turbidity.....	N.T.U.	


Herbert H. Hellen
Director, of Laboratory Services
THE KJELL CORPORATION

Debbie Marrero
Laboratory Technician

Wisconsin Department of Natural Resources
ID #154064680

THE KJELL CORPORATION
LAB REPORT

TELEPHONE: 1-800-356-0422
In Wis: 1-608-755-0422
Lab ext: 26

PO BOX 834
Beloit, Wi. 53511
Fax #: 1-608-755-0538

Client: VANPORT TURP AUTHORITY
Address: 285 RIVER AVE
City: VANPORT
State: PA Zip: 15009

Lab #: 063476
Date Printed : 10/30/90
Date Received: 10/25/90
Date Tested: 10/30/90

Attention: DAVID BROOKS
Phone: (412)-774-2091

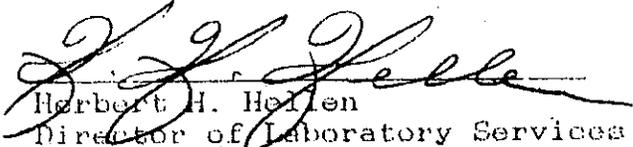
Distributor: 21-A THE CHLORAMONE COMPANY
HERB SPENCER
723 CHESTNUT ST PO BOX 779
EMMAUS, PA 18049

Region: 6

Sample Site: BRIGHTON TWP BEAVER EFF

Date Sampled: 10/17/90

Analysis	Units	Concentration Sample Site
Hardness.....	mg/l as CaCO3	
Calcium.....	mg/l as CaCO3	
Magnesium.....	mg/l as CaCO3	
O-Phosphate.....	mg/l as PO4	
Iron.....	mg/l	
Manganese.....	mg/l	
Copper.....	mg/l	
Lead.....	ug/l	
Silica.....	mg/l	
Zinc.....	mg/l	
Sulfate.....	mg/l	
pH.....		8.25
T.D.S.....		370
Alkalinity.....	mg/l as CaCO3	148
Nitrate.....	mg/l	
Turbidity.....	N.T.U.	


Herbert H. Hellen
Director of Laboratory Services
THE KJELL CORPORATION

Debbie Marrero
Laboratory Technician

Wisconsin Department of Natural Resources
ID #154064680



Paul C. Rizzo Associates, Inc.
CONSULTANTS

January 7, 1991

Project No. 90-700

Mr. David Brooks
Vanport Township Municipal Authority
285 River Avenue
Vanport, PA 15009

Transmittal

Dear Mr. Brooks:

Thank you for apprising us last week of your dissatisfaction with the regrading performed by Pennsylvania Drilling at the VTMA well field. Paul C. Rizzo Associates, Inc. (Rizzo Associates) has spoken with Mr. Jim Dravenstott, of Pennsylvania Drilling, who has assured us that the rutted areas inside and outside the fence will be regraded to your satisfaction in the spring of this year, following the thaw. Rizzo Associates will also be sure to remind Pennsylvania Drilling of this agreement in early April. If you have any questions, please contact me at (412) 856-9700.

Sincerely,

David M. Brown
Senior Project Engineer

DMB/lb