N60478.AR.000042
NWS EARLE
5090.3a

Ground Water Monitoring Study

Sampling Results

Round 3

Waste Oil Storage Tank
Building C-14
Naval Weapons Station Earle
Colts Neck, New Jersey

Contract Number N62472-86-C-1487

Project No. 5

June 1989

Gannett Fleming Environmental Engineers, Inc.

Harrisburg, PA

Ground Water Monitoring Study

Naval Weapons Station Earle

Contents

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Attachment A Laboratory Analysis Results

Attachment B Ground Water Analysis Forms (Nos. VWX-015 A and B)

Sampling Results

The third round of sampling for the Building C-14 waste oil storage tank area has been completed. A summary of the sampling results is presented in Table 1. The laboratory analysis report from QC, Inc., a New Jersey Certified Laboratory, can be found in Attachment A. The Ground Water Analysis Forms (Nos. VWX-015 A and B) are presented in Attachment B. The location of the monitoring wells is shown in Figure 1.

For this sampling round, the following parameters were measured: petroleum hydrocarbons, total dissolved solids (TDS), total organic carbon (TOC) and pH. The limitations set for these parameters (as found in Table 1 of contract number N62472-86-C-1487, Amendment 7) are:

Parameter	Limitation
Petroleum Hydrocarbons	10 ppm
TDS	500 ppm
TOC	---
pH	5-9

Petroleum hydrocarbons were undetected in samples from all four wells. The TDS concentrations in all samples were below the limitation levels. The TOC concentrations measured were less than 8 mg/L. The pH of the samples from wells C-14B, C-14C and C-29A was measured to be slightly less than the lower limit of 5.

TABLE 1

Groundwater Monitoring Study
Naval Weapons Station Earle
Summary of Results*

Parameter	Well No. C-14A	C-14B	C-14C	C-29A	Trip Blank	Field Blank
Elevation of top of monitor well casing above ground level	0	1 ft. 10 in.	2 ft. 2 in.	3 ft. 6 in.	-	-
Depth to Water Table from top of casing	7 ft. 11 in.	14 ft. 10 in.	15 ft.	11 ft. 5 in.	-	-
Depth to Water Table from ground level	7 ft. 11 in.	13 ft.	12 ft. 10 in.	8 ft. 1 in.	-	-
Base/Neutral Compounds by GC/MS plus 10	-	-	-	-	-	-
Lead and Compounds	-	-	-	-	-	-
Petroleum Hydrocarbons	<0.5 mg/L	<0.5 mg/L	<0.5 mg/L	<0.5 mg/L	<0.5 mg/L	<0.5 mg/L
pH	5.60	4.60	4.24	4.63	6.38	6.32
Total Dissolved Solids (TDS)	250 mg/L	120 mg/L	86 mg/L	170 mg/L	<2 mg/L	<2 mg/L
Total Organic Carbon	4.1 mg/L	3.4 mg/L	7.6 mg/L	4.5 mg/L	<1.0 mg/L	<1.0 mg/L
Total Volatile Organics by GC/MS plus 10	-	-	-	-	-	-

*Results given with a less than symbol were undetected and the value given is the detection limit.

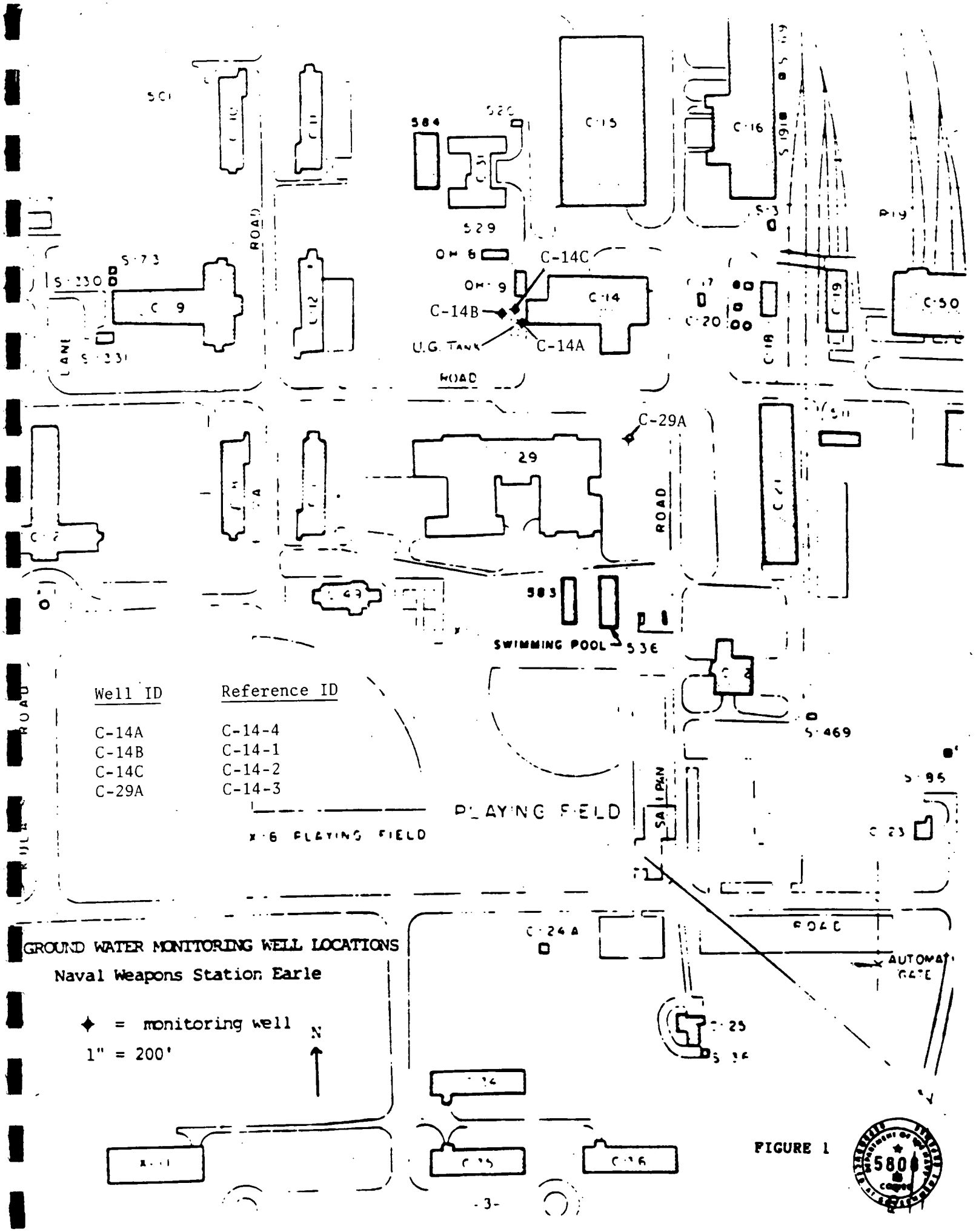
C-14C
C-14B
C-14A
U.G. TANK
C-29A
ROAD
SWIMMING POOL
PLAYING FIELD
Well ID
Reference ID
C-14A C-14-4
C-14B C-14-1
C-14C C-14-2
C-29A C-14-3
GROUND WATER MONITORING WELL LOCATIONS
Naval Weapons Station Earle
✦ = monitoring well
1" = 200'
N

FIGURE 1

ATTACHMENT A

Laboratory Analysis

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

ANALYTICAL DATA REPORT PACKAGE
FOR
GANNETT FLEMING ENVIRONMENTAL ENGINEERS INC.

Case Name	Field Sample #	Laboratory Sample #	Date of Collection
	C - 29A	848422	06/06/89
	C - 14A	848423	"
	C - 14B	848424	"
	C - 14C	848425	"
	TRIP BLANK	848426	"
	FIELD BLANK	848427	"

Laboratory Name QC Inc.

Certification No. PADER No. 09-131
NJDEP No. 77166

Supervisor/Manager Signature

Printed Name Allen D. Schopbach

Form QC G-1

QC Inc

1205 INDUSTRIAL HIGHWAY • P.O. BOX 514 • SOUTHAMPTON, PA 18966-0514 • (215) 355-3900

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QC G-6	Methodology Summary	3
QC GEN-1	General Analysis Data Reports:	
	(C-29A)	4
	(C-14A)	5
	(C-14B)	6
	(C-14C)	7
	(TRIP BLANK)	8
	(FIELD BLANK)	9
QC GEN-2	General MS/MSD Recovery	10
	Raw Data Reports:	
	(Petroleum Hydrocarbons)	11
	(Total Organic Carbon)	18
	(Total Dissolved Soilds)	25
	(pH)	27

Chain of Custody Without Shuttle

000001

QC Inc
1205 Industrial Highway
P.O. Box 514 • Southampton, Pennsylvania 18966-0514
(215) 355-3900

* TIER I *

I.D. NUMBER 848422-848427

NAME OF UNIT AND ADDRESS

GANNETT FLEMING ENVIRONMENTAL ENGINEERS INC.
207 SENATE AVENUE
CAMP HILL, PA 17011

SAMPLE NO.	NO. OF CONT.	DESCRIPTION OF SAMPLES
C-29A	3	1) Pet hyd, 2) TOC 3) pH, TDS
C-14A	3	"
C-14B	3	"
C-14C	3	"
Trip Blank	3	"
Field Blank	3	"

PERSON ASSUMING RESPONSIBILITY FOR SAMPLE

QC INC.

SAMPLE NUMBER	RELINQUISHED BY	RECEIVED BY	TIME	DATE	REASON FOR CHANGE OF CUSTODY
	Yasmin Snowberger	Donald [illegible]	5:55	6/6/89	Lab custody
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Lab
↓	J Natish	[illegible]	4:20 pm	6/12/89	wet chem

LAB COPY

QC Inc

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LABORATORY CHRONICLE

Lab Sample ID No.: 848422 - 848427

	I	DATE	II
Receipt/Refrigeration	06/07/89		
Organics Extraction			
1. Base/Neutral Extractables			
2. Acid Extractables			
3. Pesticides/PCB's			
4. Dioxin			
Analyses			
1. Volatiles			
2. Base/Neutral Extractables			
3. Acid Extractables			
4. Pesticides/PCB's			
5. Dioxin			
Inorganics			
1. Metals			
2. Cyanides			
3. Phenols			
Other Analytes			
1. Petroleum Hydrocarbons	06/12/89		
2. Total Organic Carbon	06/12/89		
3. Total Dissolved Soilds	06/12-13/89		
4. pH	06/12/89		

SECTION SUPERVISOR REVIEW & APPROVAL
(Signature) Raphael P. Fratti
(Printed Name) Raphael Fratti
(Date) 7/3/89

QC SUPERVISOR REVIEW & APPROVAL
(Signature) Patricia M. Zaworski
(Printed Name) Patricia M. Zaworski
(Date) 7/5/89

Form QC G-5

QC Inc

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METHODOLOGY SUMMARY

Petroleum Hydrocarbons:	USEPA Methods for Chemical Analysis of Water and Wastes, 1979 Method 418.1
Total Organic Carbon:	40 CFR Part 136, USEPA Methods for Analysis of Water and Wastes, 1979 Method 415.1
Total Dissolved Solids:	40 CFR Part 136, USEPA Methods for Analysis of Water and Wastes, 1979 Method 160.1
pH	40 CFR Part 136, USEPA Methods for Analysis of Water and Wastes, 1979 Method 150.1

QC Inc

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GENERAL ANALYSIS DATA REPORT

SAMPLE NO.

C-29A

Lab Name: QC Inc.

Lab Code: 77166 Contract/P.O. Gannet Fleming

Matrix (Soil/Water): Water

Lab Sample ID: 848422

Sample Wt/Vol: _____(g/ml)_____

Date Received: 6/06/89

% Moisture: not dec._X____ dec.____

Date Analyzed: 6/13/89

Dilution Factor:

RESULTS

Parameter	Sample Concentration Units	Method Blank Units
Total Petroleum Hydrocarbons	<0.5 mg/l	<0.5 mg/l
Total Organic Carbon	4.5 mg/l	<1.0 mg/l
pH	4.63	NA
Total Dissolved Solids	170 mg/l	<2 mg/l

QC Inc

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GENERAL ANALYSIS DATA REPORT

SAMPLE NO.

C-14A

Lab Name: QC Inc.

Lab Code: 77166 Contract/P.O. Gannet Fleming

Matrix (Soil/Water): Water

Lab Sample ID: 848423

Sample Wt/Vol: _____(g/ml)_____

Date Received: 6/06/89

% Moisture: not dec.__X___ dec.____

Date Analyzed: 6/13/89

Dilution Factor:

RESULTS

Parameter	Sample Concentration Units	Method Blank Units
Total Petroleum Hydrocarbons	<0.5 mg/l	<0.5 mg/l
Total Organic Carbon	4.1 mg/l	<1.0 mg/l
pH	5.60	NA
Total Dissolved Solids	250 mg/l	<2 mg/l

QC Inc

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GENERAL ANALYSIS DATA REPORT

SAMPLE NO.

C-14B

Lab Name: QC Inc.

Lab Code: 77166 Contract/P.O. Gannet Fleming

Matrix (Soil/Water): Water

Lab Sample ID: 848424

Sample Wt/Vol: _____(g/ml)_____

Date Received: 6/06/89

% Moisture: not dec.__X___ dec._____

Date Analyzed: 6/13/89

Dilution Factor:

RESULTS

Parameter	Sample Concentration Units	Method Blank Units
Total Petroleum Hydrocarbons	<0.5 mg/l	<0.5 mg/l
Total Organic Carbon	3.4 mg/l	<1.0 mg/l
pH	4.60	NA
Total Dissolved Solids	120 mg/l	<2 mg/l

QC Inc

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GENERAL ANALYSIS DATA REPORT

SAMPLE NO.

C-14C

Lab Name: QC Inc.

Lab Code: 77166 Contract/P.O. Gannet Fleming

Matrix (Soil/Water): Water

Lab Sample ID: 848425

Sample Wt/Vol: _____(g/ml)_____

Date Received: 6/06/89

% Moisture: not dec.__X___ dec.____

Date Analyzed: 6/13/89

Dilution Factor:

RESULTS

Parameter	Sample Concentration Units	Method Blank Units
Total Petroleum Hydrocarbons	<0.5 mg/l	<0.5 mg/l
Total Organic Carbon	7.6 mg/l	<1.0 mg/l
pH	4.24	NA
Total Dissolved Solids	86 mg/l	<2 mg/l

QC Inc

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GENERAL ANALYSIS DATA REPORT

SAMPLE NO.

Trip Blank

Lab Name: QC Inc.

Lab Code: 77166 Contract/P.O. Gannet Fleming

Matrix (Soil/Water): Water

Lab Sample ID: 848426

Sample Wt/Vol: _____(g/ml)_____

Date Received: 6/06/89

% Moisture: not dec.__X___ dec.____

Date Analyzed: 6/13/89

Dilution Factor:

RESULTS

Parameter	Sample Concentration Units	Method Blank Units
Total Petroleum Hydrocarbons	<0.5 mg/l	<0.5 mg/l
Total Organic Carbon	<1.0 mg/l	<1.0 mg/l
pH	6.38	NA
Total Dissolved Solids	<2. mg/l	<2 mg/l

QC Inc

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GENERAL ANALYSIS DATA REPORT

SAMPLE NO.

Field Blank

Lab Name: QC Inc.

Lab Code: 77166 Contract/P.O. Gannet Fleming

Matrix (Soil/Water): Water

Lab Sample ID: 848427

Sample Wt/Vol: _____(g/ml)_____

Date Received: 6/06/89

% Moisture: not dec.__X___ dec.____

Date Analyzed: 6/13/89

Dilution Factor:

RESULTS

Parameter	Sample Concentration Units	Method Blank Units
Total Petroleum Hydrocarbons	<0.5 mg/l	<0.5 mg/l
Total Organic Carbon	<1. mg/l	<1.0 mg/l
pH	6.32	NA
Total Dissolved Solids	<2. mg/l	<2 mg/l

QC Inc

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GENERAL MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: QC Inc.

Lab Code: 77166 Contract/P.O. No.: Gannet Fleming

Matrix Spike Sample #: 848423: PHC, 848424: TOC

Lab Sample ID #: 848422 thru 848427

COMPOUND	AMT ADDED (mg/l)	SAMPLE RESULT (mg/l)	CONC. MS (mg/l)	MS % REC #	QC LIMITS % REC	CONC. MSD (mg/l)	MS/MSD RPD #
PHC, 848423	20	<0.5	18.7	94	80-120	18.9	1.1 %
TOC, 848424	10	3.4	12.2	88	80-120	12.4	1.6

COLUMN TO BE USED TO FLAG RECOVERY AND RPD VALUES

* VALUES OUTSIDE OF QC LIMITS

RPD: __0__ out of __2__ outside limits

Spike Recovery: __0__ out of __2__ outside limits

COMMENTS: _____

_____

_____

Form QC GEN-2

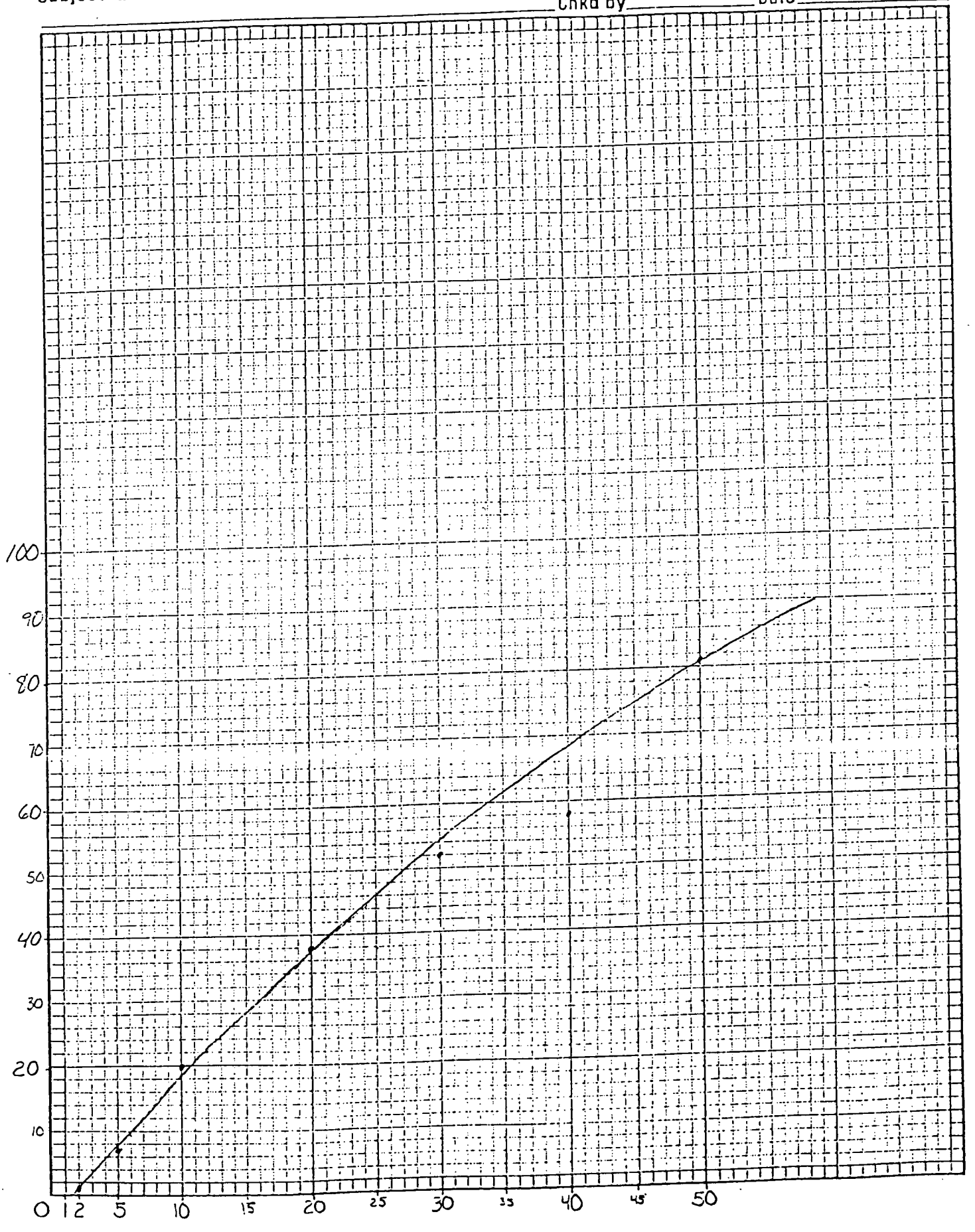
Environmental Resources Management, inc. West Chester, PA 19380 • (215) 696-9110

000011

Project PHC CURVE W.O. No. _____ Sheet _____ of _____

Subject _____ By [illegible] Date 5-31-87

Chkd by _____ Date _____



DDM PHC

QC Inc.

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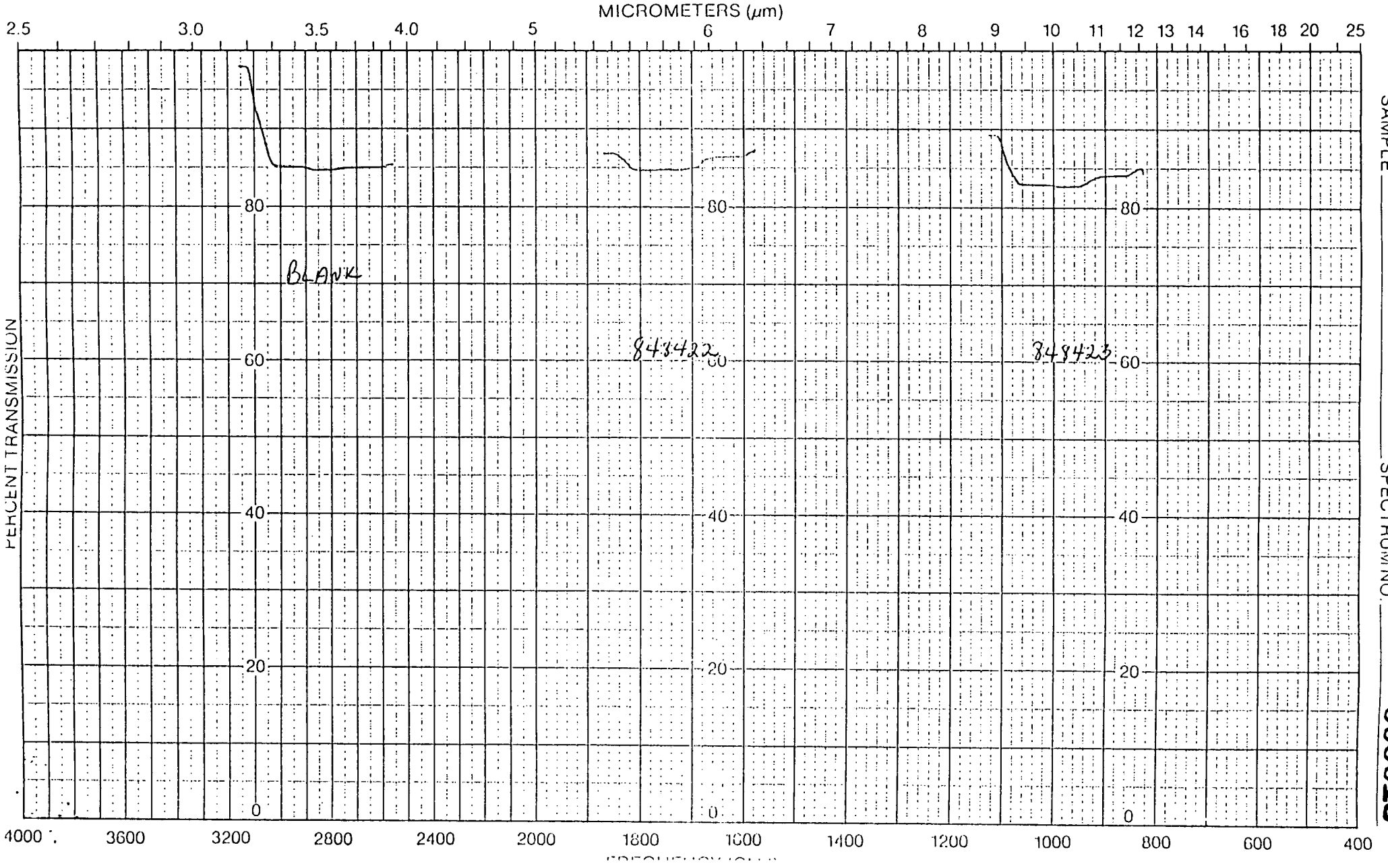
PETROLEUM HYDROCARBONS

DATE	I.D. #	amt.spl.	Final Vol.	Dil.	Peak Ht.	ppm PHC	Odor	Client
2-12-89	BLANK	100 ml	100 ml	–	N.D	–	–	–
	848422	500 ml	100 ml	X.2	N.D	<.5	NO	GANNETT Fleming
	848423	500 ml	100 ml	X.2	N.D.	<.5	NO	
	dup 848423	500 ml	100 ml	X.2	N.D	<.5	NO	
	Spike 848423	500 ml	Spike: 2ml of Sample (20ppm) 100 ml	5ml → 25ml X.2	34.8	18.7	NO	
	Spike 848423	500 ml	Spike: 2ml of Sample (20ppm) 100 ml	5ml → 25ml X.2	35	18.9	NO	
	848424	500 ml	100 ml	X.2	N.D	<.5	NO	
	848425	500 ml	100 ml	X.2	N.D	<.5	NO	
	848426	500 ml	100 ml	X.2	N.D	<.5	NO	
	848427	500 ml	100 ml	X.2	N.D	<.5	NO	

Chart No. WGPE-007-1493

WILMAD GLASS CO., INC.
U. S. Route 40 and Oak Road
BUENA, N. J. 08310 U.S.A.
Printed in U.S.A.

CONCENTRATION	SCAN MODE: ACCY. ☐ SURVEY ☐	SPECTRUM NO.
THICKNESS	HI ENERGY ☐ CAL. ☐	SAMPLE
PHASE	RESOLUTION ☐	
REMARKS	OPERATOR dlcm DATE 6-12-89	ORIGIN



SAMPLE

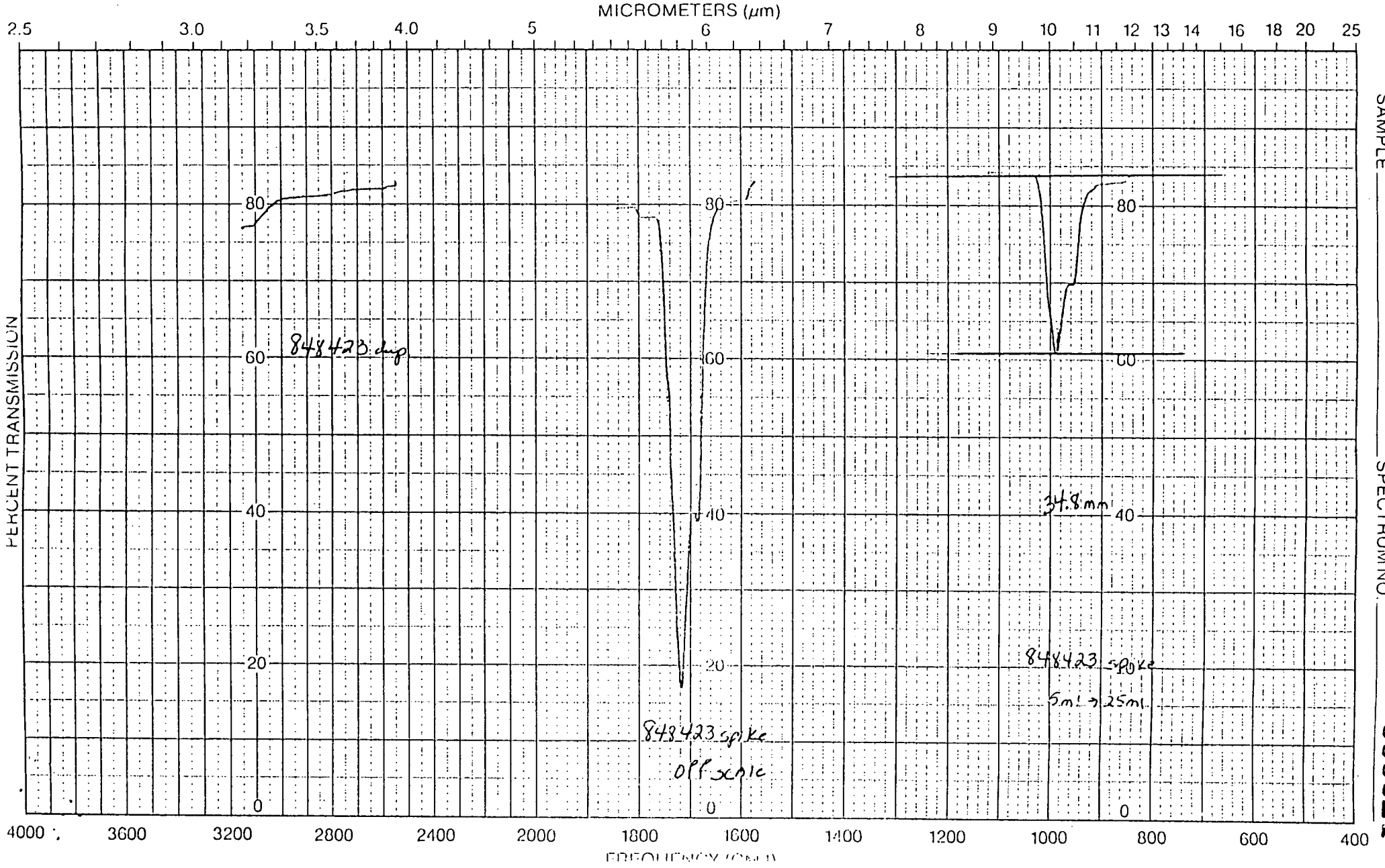
SPECTRUM NO.

000013

Chart No. WGPE-007-1493

W[redacted] GLASS [redacted] INC.
U. S. Route 40 and Oak Road
BUENA, N. J. 08310 U.S.A. Printed in U.S.A.

CONCENTRATION _____	SCAN MODE ACCY. ☐ SURVEY ☐	SPECTRUM NO. _____
THICKNESS _____	HI ENERGY ☐ CAL. ☐	SAMPLE _____
PHASE _____	RESOLUTION ☐	_____
REMARKS _____	OPERATOR _____ DATE _____	ORIGIN _____

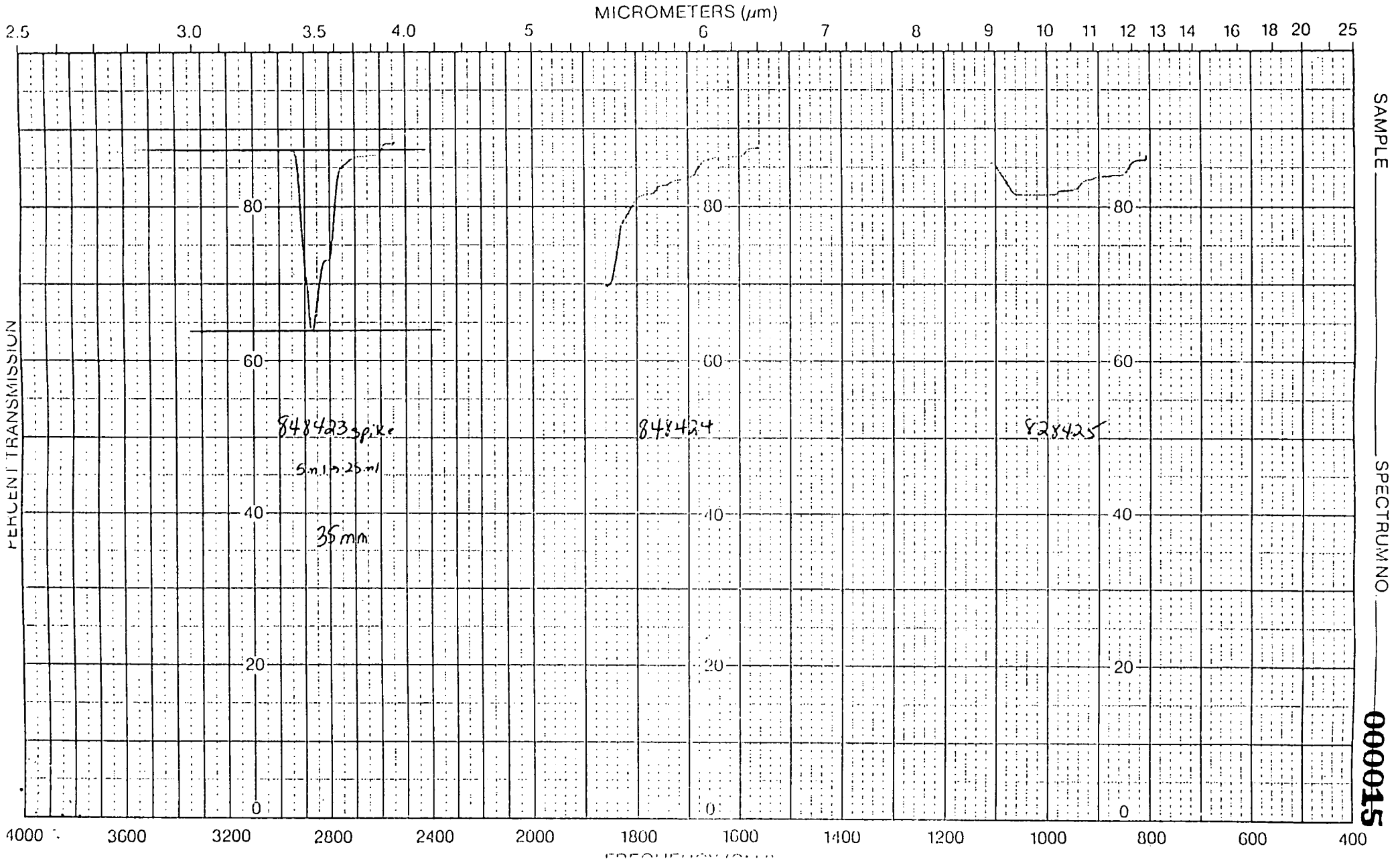


UUU14

Chart No. WGPE-007-1493

WI[redacted]GLASS[redacted]C.
U. S. Route 40 and Oak Road
BUENA, N. J. 08310 U.S.A.
Printed in U.S.A.

CONCENTRATION	SCAN MODE ACCY. ☐ SURVEY ☐	SPECTRUM NO.
THICKNESS	HI ENERGY ☐ CAL. ☐	SAMPLE
PHASE	RESOLUTION ☐	
REMARKS	OPERATOR dam DATE 6-12-89	ORIGIN

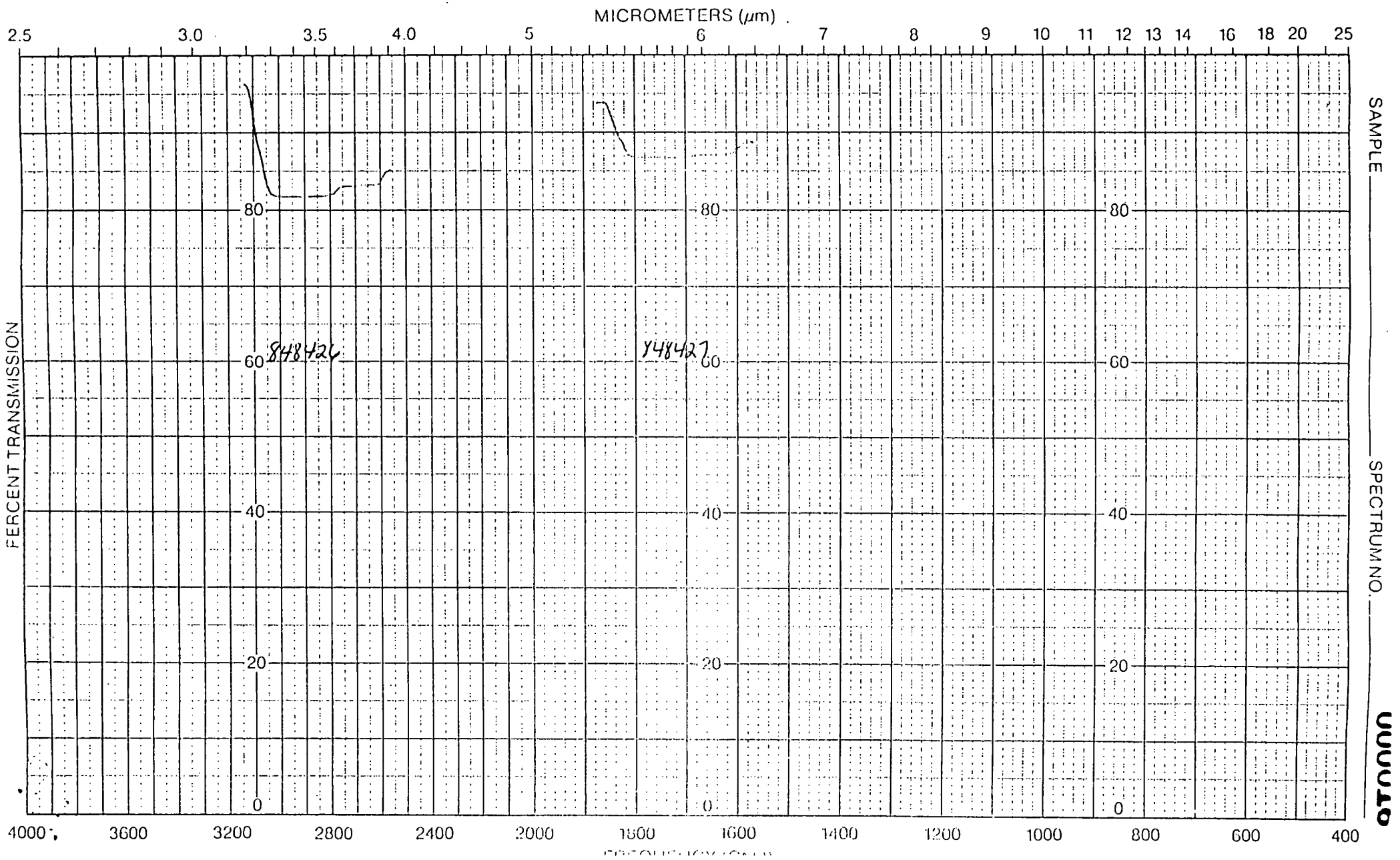


000015

Chart No. WGPE-007-1493

WILMAD GLASS CO., INC.
U. S. Route 40 and Oak Road
BUENA, N. J. 08310 U.S.A.
Printed in U.S.A.

CONCENTRATION	SCAN MODE ACCY. ☐ SURVEY ☐	SPECTRUM NO.
THICKNESS	HI ENERGY ☐ CAL. ☐	SAMPLE
PHASE	RESOLUTION ☐	
REMARKS	OPERATOR dcm DATE 6-12-89	ORIGIN



Tier II QA Report Sheet

Client Name: GANNETT FLEMING

Analysis Date: 6-12-89 Analyst Name: DIANE C. MAHER

Matrix: Solid Liquid (circle one)

Accession Numbers in This Set: (Max. 20)

848422 → 848427

Test Parameter:

Accession Number	Amt. Added (ppm)	Sample Result	Spike Result	Spike Rec. %	Spike Dup.	RPD MS/MSD
848423	20	<.5	18.7	94%	18.9	1.1%

TOC

6-12-89
DOW

*** MODEL 700 TOC ANALYZER ***

CALIBRATION FACTORS:

IC BLANK= 3.59000 mV OC BLANK= 9.96000 mV POC BLANK= 000000 mV
STD. MASS= 9.40000 ug STD. AVG.= 188.500 mV SCALING FACTOR= 0.04986 ug/mV

VOLUMES:

SPL. VOL.= 0.31800 ml ACID VOL.= 00002 x100ul OXID. VOL.= 00005 x100ul

LOW/HIGH ALARM SETPOINTS (ppm C):

TIC LO= 000000 TIC HI= 000000 TOC LO= 000000 TOC HI= 000000

TIME PRESETS:

EXTD. REACTION TIME 00:00:00 EXTD. PURGE TIME 00:00:00

LAST ANALYSIS RESULTS:

SPL# 00019	03:14:11	TIC =	000000	mV	000000	ug C	000000	ppm
SPL# 00019	03:14:13	POC =	1.86988	mV	0.10299	ug C	0.32388	ppm
SPL# 00019	03:14:15	TOC =	000000	mV	000000	ug C	000000	ppm
SPL# 00001	03:17:36	TIC =	5.12403	mV	0.25552	ug C	0.80352	ppm
SPL# 00001	03:22:36	TOC =	27.3648	mV	1.36461	ug C	4.29123	ppm
SPL# 00001	03:25:41	TIC =	31.6368	mV	1.57764	ug C	4.96114	ppm
SPL# 00001	03:30:41	TOC =	17.5479	mV	0.87506	ug C	2.75178	ppm
SPL# 00001	04:44:50	TIC =	-3.59000	mV	-0.17902	ug C	-0.56296	ppm
SPL# 00001	04:49:50	TOC =	5.03526	mV	0.25109	ug C	0.78960	ppm
SPL# 00001	04:52:55	TIC =	11.6927	mV	0.58308	ug C	1.83360	ppm

HIGH

SPL# 00002	05:09:33	TIC = -3.31138 mV	-0.16513 ug C	-0.51927 ppm
SPL# 00002	05:14:33	TOC = -7.44651 mV	-0.37133 ug C	-1.16773 ppm
SPL# 00002	05:17:38	TIC = 0.60658 mV	0.03024 ug C	0.09512 ppm
SPL# 00002	05:22:38	TOC = -9.96000 mV	-0.49667 ug C	-1.56188 ppm
SPL# 00003	05:26:48	TIC = -1.07651 mV	-0.05368 ug C	-0.16881 ppm
SPL# 00003	05:31:48	TOC = -9.68138 mV	-0.48278 ug C	-1.51819 ppm
SPL# 00004	05:39:38	TIC = -3.31138 mV	-0.16513 ug C	-0.51927 ppm
SPL# 00004	05:44:38	TOC = -9.96000 mV	-0.49667 ug C	-1.56188 ppm
SPL# 00005	05:47:43	TIC = -3.59000 mV	-0.17902 ug C	-0.56296 ppm
SPL# 00005	05:52:43	TOC = -9.96000 mV	-0.49667 ug C	-1.56188 ppm
SPL# 00006	05:59:32	TIC = -3.31138 mV	-0.16513 ug C	-0.51927 ppm
SPL# 00006	06:04:32	TOC = -9.96000 mV	-0.49667 ug C	-1.56188 ppm
SPL# 00006	06:07:37	TIC = -3.31138 mV	-0.16513 ug C	-0.51927 ppm

NEW NITROGEN BATTLE

6/12/89
WJ

SPL# 00007	06:30:29	TIC = 36.0827 mV	1.79935 ug C	5.65832 ppm
SPL# 00007	06:35:29	TOC = 16.2237 mV	0.80903 ug C	2.54413 ppm
SPL# 00007	06:38:34	TIC = 0.57848 mV	0.02884 ug C	0.09071 ppm
SPL# 00007	06:43:34	TOC = 10.5254 mV	0.52487 ug C	1.65055 ppm

SPL# 00008	06:56:48	TIC =	-0.46006 mV	-0.02294 ug C	-0.07214 ppm
SPL# 00008	07:01:48	TOC =	9.33555 mV	0.46554 ug C	1.46396 ppm
SPL# 00009	07:04:53	TIC =	-0.60023 mV	-0.02993 ug C	-0.09412 ppm
SPL# 00010	07:14:53	TIC =	13.9116 mV	0.69373 ug C	0.07020 ppm
SPL# 00010	07:19:53	TOC =	73.7468 mV	3.67756 ug C	0.37214 ppm
SPL# 00010	07:22:58	TIC =	7.74087 mV	0.38601 ug C	0.03906 ppm
SPL# 00010	07:27:58	TOC =	54.4090 mV	2.71323 ug C	0.27456 ppm
SPL# 00011	07:31:35	TIC =	8.02616 mV	0.40024 ug C	0.04050 ppm
SPL# 00011	07:36:35	TOC =	46.3831 mV	2.31300 ug C	0.23406 ppm

30ppm

SPL# 00012	08:07:31	TIC =	4.18883 mV	0.20888 ug C	0.02113 ppm
SPL# 00012	08:12:31	TOC =	190.170 mV	9.48325 ug C	0.95964 ppm
SPL# 00012	08:18:23	TIC =	2.38025 mV	0.11869 ug C	0.37326 ppm
SPL# 00012	08:23:23	TOC =	199.229 mV	9.93504 ug C	31.2423 ppm
SPL# 00012	08:26:28	TIC =	3.87749 mV	0.19336 ug C	0.60805 ppm
SPL# 00012	08:31:28	TOC =	187.057 mV	9.32807 ug C	29.3335 ppm

3% ÷ 100 Alphatrol

SPL# 00013	08:34:50	TIC =	1.78830 mV	0.08917 ug C	0.28043 ppm
SPL# 00013	08:39:50	TOC =	239.854 mV	11.9609 ug C	37.6128 ppm
SPL# 00013	08:42:55	TIC =	2.57773 mV	0.12854 ug C	0.40422 ppm
SPL# 00013	08:47:55	TOC =	249.890 mV	12.4613 ug C	39.1866 ppm

5% 100 Alphatrol

SPL# 00014	08:51:21	TIC =	3.05767 mV	0.15247 ug C	0.47949 ppm
SPL# 00014	08:56:21	TOC =	36.5141 mV	1.82086 ug C	5.72598 ppm
SPL# 00014	08:59:26	TIC =	3.56636 mV	0.17784 ug C	0.55926 ppm
SPL# 00014	09:04:26	TOC =	31.8287 mV	1.58721 ug C	4.99124 ppm
SPL# 00014	09:09:23	TIC =	2.18285 mV	0.10885 ug C	0.34230 ppm
SPL# 00014	09:14:23	TOC =	34.3792 mV	1.71440 ug C	5.39120 ppm
SPL# 00014	09:27:40	TIC =	0.01682 mV	0.00083 ug C	0.00263 ppm
SPL# 00014	09:32:40	TOC =	49.7234 mV	2.47958 ug C	7.79741 ppm

SPL# 00015	09:43:41	TIC =	9.94194 mV	0.48386 ug C	1.52157 ppm
SPL# 00015	09:48:41	TOC =	461.906 mV	22.4803 ug C	70.6928 ppm
SPL# 00015	09:51:46	TIC =	12.0378 mV	0.58586 ug C	1.84234 ppm
SPL# 00015	09:56:46	TOC =	467.685 mV	22.7616 ug C	71.5773 ppm

844545 x 25

SPL# 00016	10:07:41	TIC =	1.70380 mV	0.08292 ug C	0.26075 ppm
SPL# 00016	10:12:41	TOC =	102.047 mV	4.96651 ug C	15.6179 ppm
SPL# 00016	10:15:46	TIC =	1.28149 mV	0.06236 ug C	0.19612 ppm
SPL# 00016	10:20:46	TOC =	105.309 mV	5.12524 ug C	16.1171 ppm

848422

SPL# 00017	10:34:48	TOC =	29.8032 mV	1.45048 ug C	4.56125 ppm
SPL# 00017	10:54:49	TIC =	101.200 mV	4.92528 ug C	15.4883 ppm
SPL# 00017	10:59:49	TOC =	30.9813 mV	1.50781 ug C	4.74156 ppm
SPL# 00017	11:02:54	TIC =	101.099 mV	4.92034 ug C	15.4728 ppm
SPL# 00017	11:07:54	TOC =	27.1546 mV	1.32158 ug C	4.15590 ppm

848423

SPL# 00018	11:13:51	TIC =	154.809 mV	7.53436 ug C	23.6929 ppm
SPL# 00018	11:18:51	TOC =	26.6445 mV	1.29675 ug C	4.07784 ppm
SPL# 00018	11:21:56	TIC =	153.928 mV	7.49144 ug C	23.5580 ppm
SPL# 00018	11:26:56	TOC =	27.0045 mV	1.31427 ug C	4.13294 ppm

848424

SPL# 00019	11:42:10	TIC =	75.6906 mV	3.68376 ug C	11.5841 ppm
SPL# 00019	11:47:10	TOC =	23.6540 mV	1.15121 ug C	3.62015 ppm
SPL# 00019	11:50:15	TIC =	75.5934 mV	3.67902 ug C	11.5693 ppm
SPL# 00019	11:55:15	TOC =	20.8587 mV	1.01516 ug C	3.19234 ppm

848424 (MS) 10ppm

SPL# 00020	12:01:35	TIC =	62.8988 mV	3.06120 ug C	9.62641 ppm

SPL# 00020	12:09:40	TIC =	63.7236 mV	3.10134 ug C	9.75264 ppm
SPL# 00020	12:14:40	TOC =	79.8552 mV	3.88644 ug C	12.2215 ppm

848424 (MSD) 10ppm

SPL# 00021	12:48:51	TOC =	82.6015 mV	4.02010 ug C	12.6418 ppm
SPL# 00021	12:52:24	TIC =	64.8040 mV	3.15392 ug C	9.91799 ppm
SPL# 00021	12:57:24	TOC =	79.5911 mV	3.87359 ug C	12.1811 ppm
SPL# 00021	13:00:29	TIC =	64.2000 mV	3.12453 ug C	9.82555 ppm
SPL# 00021	13:05:29	TOC =	81.2433 mV	3.95400 ug C	12.4340 ppm
SPL# 00021	13:16:30	TIC =	58.7301 mV	2.85831 ug C	8.98840 ppm
SPL# 00021	13:21:30	TOC =	81.2764 mV	3.95561 ug C	12.4390 ppm
SPL# 00021	13:24:35	TIC =	61.0633 mV	2.97186 ug C	9.34548 ppm
SPL# 00021	13:29:35	TOC =	80.1193 mV	3.89930 ug C	12.2619 ppm

848425

SPL# 00022	13:35:39	TIC =	120.169 mV	5.84848 ug C	18.3914 ppm
SPL# 00022	13:40:39	TOC =	52.2971 mV	2.54523 ug C	8.00386 ppm
SPL# 00022	13:43:44	TIC =	120.553 mV	5.86716 ug C	18.4502 ppm
SPL# 00022	13:48:44	TOC =	50.9146 mV	2.47794 ug C	7.79228 ppm

DI H_2O

SPL# 00023	13:55:34	TIC =	1.08455 mV	0.05278 ug C	0.16598 ppm
SPL# 00023	14:00:34	TOC =	4.71927 mV	0.22968 ug C	0.72226 ppm
SPL# 00023	14:03:39	TIC =	0.12910 mV	0.00628 ug C	0.01975 ppm
SPL# 00023	14:08:39	TOC =	3.05651 mV	0.14875 ug C	0.46778 ppm

848426

SPL# 00024	14:33:01	TIC =	1.00016 mV	0.04867 ug C	0.15307 ppm
SPL# 00024	14:38:01	TOC =	5.86930 mV	0.28565 ug C	0.89827 ppm
SPL# 00024	14:41:06	TIC =	0.18525 mV	0.00901 ug C	0.02835 ppm
SPL# 00024	14:46:06	TOC =	4.51829 mV	0.21989 ug C	0.69150 ppm

848426 (MS 5ppm)

SPL# 00025	14:49:31	TIC =	0.57848 mV	0.02815 ug C	0.08853 ppm
SPL# 00025	14:54:31	TOC =	37.3092 mV	1.81579 ug C	5.71002 ppm

SPL# 00025	14:57:36	TIC =	0.40991 mV	0.01993 ug C	0.06273 ppm
SPL# 00025	15:02:36	TOC =	38.2281 mV	1.86051 ug C	5.85066 ppm

848426 (MSD 5ppm)

SPL# 00026	15:06:21	TIC =	0.07295 mV	0.00355 ug C	0.01116 ppm
SPL# 00026	15:11:21	TOC =	36.4835 mV	1.77560 ug C	5.58365 ppm
SPL# 00026	15:14:26	TIC =	0.29757 mV	0.01448 ug C	~~0.04554 ppm~~
SPL# 00026	15:19:26	TOC =	35.0492 mV	1.70580 ug C	~~5.36414 ppm~~

848427

SPL# 00027	15:30:38	TIC =	-0.12348 mV	-0.00600 ug C	-0.01889 ppm
SPL# 00027	15:35:38	TOC =	3.60059 mV	0.17523 ug C	0.55105 ppm
SPL# 00027	15:38:43	TIC =	0.32565 mV	0.01584 ug C	0.04984 ppm
SPL# 00027	15:43:43	TOC =	2.82761 mV	0.13761 ug C	0.43275 ppm

Tier II QA Report Sheet

Client Name: Gannett Fleming

Analysis Date: 6/12/89 Analyst Name: Wanda Jaworska

Matrix: Solid/Liquid (circle one)

Accession Numbers in This Set: (Max. 20) 848422-27

Test Parameter: TOC

Accession Number	Amt. Added (ppm)	Sample Result	Spike Result	Spike Rec. %	Spike Dup.	RPD MS/MSD
848426	5 ppm	.75	5.78	100.6%	5.58	3.5%

Known
TV 50.4
Range (44.4-56.1)

T.D.S.

LABORATORY REPORT

Plant Southampton Date June 12, 1989

TEST No.	Known 1	848424 2	848423 3	848425 4	~~848427 5~~ Contaminated	848422 6
DISH + FAT	3.1978	3.1958	3.1853	3.2406	~~3.2194~~	3.2630
DISH	3.1954	3.1895	3.1726	3.2363	~~3.2167~~	3.2544
FAT	0024	.0063	.0127	.0043	~~.0027~~	.0086
PIPETTES + SAMPLE						
PIPETTES						
SAMPLE	50 ml	50 ml	50 ml	50 ml	~~50 ml~~	50 ml
% FAT	48	120	250	86	~~54~~	170

	848426 7	848425 8 (D)				
DISH + SOLIDS	3.1520	3.2802				
DISH	3.1513	3.2759				
SOLIDS	.0007	.0043				
DISH or PIPETTE + SAMPLE						
DISH or PIPETTE						
SAMPLE	50 ml	50 ml				
% SOLIDS	14	86				

Operator

FORM NO. 87-10-2 LAB REPORT

Order New Pads from MEYER MOJONNIER

T.D.S.

LABORATORY REPORT

Plant Hatteras Date 6/13/89

Field Blank

TEST No.	849427 1					
DISH + FAT	3.1772					
DISH	3.1771					
FAT	0001					
PIPETTES + SAMPLE						
PIPETTES						
SAMPLE	50ml					
% FAT	<2					

DISH + SOLIDS						
DISH						
SOLIDS						
DISH or PIPETTE + SAMPLE						
DISH or PIPETTE						
SAMPLE						
% SOLIDS						

Operator

FORM NO. 87-10-2 LAB REPORT

Order New Pads from MEYER MOJONNIER

Southampton Garnett Fleming 6/12 K.7

000027

PK. Sample:	PK.
848425	4.24
848422	4.63
848427	6.32
848424	4.60
848426	6.38
848423	5.60
848423	5.60

ATTACHMENT B

Ground Water Analysis Forms

Forms VWX-015 (A,B)

26029.000
YMSPS003.000

DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: Naval Weapons Station Earle | SW ID NO.:

LAB NAME: QC Inc.

R	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
1	NJ 0023540 (2–8)	29-20668-5 (9–16)	890606 (17–22)	77166 (23–27)	(28)

77648

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 10 88 (MO. YR.) TO 10 89 (MO. YR.)

Owners Well No. C -14A

(C-14-4)

SUBMIT WITH SIGNED T-VWX-014

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
	x			x			x			x		Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		104.41	
	x			x			x			x		Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		104.41	
	x			x			x			x		Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	7.92	
	x			x			x			x		Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	7.92	
												Arsenic, Dissolved	UG/L as As	01000		
												Barium, Dissolved	UG/L as Ba	01005		
												Biochemical Oxygen Demand - 5 Day	MG/L	00310		
												Cadmium, Dissolved	UG/L as Cd	01025		
												Chloride, Dissolved	UG/L as Cl	82295		
												Chromium, Dissolved	UG/L as Cr	01030		
												Chromium, Dissolved, Hexavalent	UG/L as Cr	01220		
												Chemical Oxygen Demand (COD), Dissolved	MG/L	00341		
												Coliform Group	N/100 ML	74056		
												Color	Pt - Co	00080		
												Copper, Dissolved	UG/L as Cu	01040		
												Cyanide, Total	MG/L as CN	00720		
												Endrin, Total	UG/L	39390		
												Fluoride, Dissolved	MG/L as F	00950		
												Gross Alpha, Dissolved	Pc/L	01503		
												Gross Beta, Dissolved	Pc/L	03503		
												Hardness, Total as $CaCO_3$	MG/L	00900		
												Iron, Dissolved	UG/L as Fe	01046		
	x						x					Lead, Dissolved	UG/L as Pb	01049		
												Lindane, Total	UG/L	39782		
												Manganese, Dissolved	UG/L	01056		
												Mercury, Dissolved	UG/L	71890		

VALUE CODING RULES AND REMARK CODES ON REVERSE

29 42 55 68 | 33 34 46 47 59 60 72 73 | 40 41 53 54 66 67 79 80

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: Naval Weapons Station Earle

SW ID NO.:

LAB NAME: QC Inc.

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
S	NJ 0023540	29-20668-5	89 06 06	77166	

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 10 88 (MO. YR.) TO 10 89 (MO. YR.)

77648

Owner's Well No. C-14A

(C-14-4)

SUBMIT WITH SIGNED T-VWX-014

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
												Methoxychlor, Total	UG/L	39480		
												Methylene Blue Active Substances	MG/L	38260		
												Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608		
												Nitrogen, Nitrate Dissolved	MG/L as N	00618		
												Odor	T.O.N.	00085		
x			x				x			x		pH	Standard Units	00400	5.60	
												Phenols, Total Recoverable	UG/L	32730		
												Radium 226, Dissolved	Pc/L	09503		
												Radium 228, Dissolved	Pc/L	81366		
												Selenium, Dissolved	UG/L	01145		
												Silver, Dissolved	UG/L	01075		
												Sodium, Dissolved	MG/L	00930		
												Sulfate, Dissolved (as SO_4)	MG/L	00946		
x			x				x			x		Total Dissolved Solids (TDS)	PPM	70300	250.	
x			x				x			x		Total Organic Carbon (TOC)	PPM	00680	4.1	
												Total Organic Halogen (TOX)	UG/L	70353		
												Toxaphene	UG/L	39400		
												Turbidity	NTU	00076		
												Zinc, Dissolved	UG/L	01090		
												2, 4–D, Total	UG/L	39370		
												2, 4, 5–TP, Total	UG/L	39045		
x			x				x			x		Petroleum Hydrocarbons	PPM	45501	<0.5	K

29 32 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 78 80

VALUE CODING RULES AND REMARK CODES ON REVERSE

DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: Naval Weapons Station Earle | SW ID NO.:

LAB NAME: QC Inc.

R	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
1	NJ 0023540 (2–8)	29-20666-9 (9–16)	890606 (17–22)	77166 (23–27) 77648	28

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 1088 (MO. YR.) TO 1089 (MO. YR.)

Owners Well No. C-14B

SUBMIT WITH SIGNED T-VWX-014

(C-14-1)

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
	X			X			X			X		Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		110.71	
	X			X			X			X		Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		108.88	
	X			X			X			X		Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	14.83	
	X			X			X			X		Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	13.00	
												Arsenic, Dissolved	UG/L as As	01000		
												Barium, Dissolved	UG/L as Ba	01005		
												Biochemical Oxygen Demand - 5 Day	MG/L	00310		
												Cadmium, Dissolved	UG/L as Cd	01025		
												Chloride, Dissolved	UG/L as Cl	82295		
												Chromium, Dissolved	UG/L as Cr	01030		
												Chromium, Dissolved, Hexavalent	UG/L as Cr	01220		
												Chemical Oxygen Demand (COD), Dissolved	MG/L	00341		
												Coliform Group	N/100 ML	74056		
												Color	Pt - Co	00080		
												Copper, Dissolved	UG/L as Cu	01040		
												Cyanide, Total	MG/L as CN	00720		
												Endrin, Total	UG/L	39390		
												Fluoride, Dissolved	MG/L as F	00850		
												Gross Alpha, Dissolved	Pc/L	01503		
												Gross Beta, Dissolved	Pc/L	03503		
												Hardness, Total as $CaCO_3$	MG/L	00900		
												Iron, Dissolved	UG/L as Fe	01046		
	X						X					Lead, Dissolved	UG/L as Pb	01049		
												Lindane, Total	UG/L	39782		
												Manganese, Dissolved	UG/L	01056		
												Mercury, Dissolved	UG/L	71890		

VALUE CODING RULES AND REMARK CODES ON REVERSE

39 42 55 68 | 33 34 44 47 50 60 72 73 | 40 41 53 54 66 67 79 80

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: Naval Weapons Station Earle | SW ID NO.

LAB NAME: QC Inc.

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
S	NJ 0023540	29-20666-9	890606	77166	

77648

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 1088 (MO. YR.) TO 1089 (MO. YR.)

Owner's Well No. C-14B (C-14-1)

SUBMIT WITH SIGNED T-VWX-014

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
												Methoxychlor, Total	UG/L	39480		
												Methylene Blue Active Substances	MG/L	38260		
												Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608		
												Nitrogen, Nitrate Dissolved	MG/L as N	00618		
												Odor	T.O.N.	00085		
x			x				x			x		pH	Standard Units	00400	4.60	
												Phenols, Total Recoverable	UG/L	32730		
												Radium 226, Dissolved	Pc/L	09503		
												Radium 228, Dissolved	Pc/L	81366		
												Selenium, Dissolved	UG/L	01145		
												Silver, Dissolved	UG/L	01075		
												Sodium, Dissolved	MG/L	00930		
												Sulfate, Dissolved (as SO_4)	MG/L	00946		
x			x				x			x		Total Dissolved Solids (TDS)	PPM	70300	120.	
x			x				x			x		Total Organic Carbon (TOC)	PPM	00680	3.4	
												Total Organic Halogen (TOX)	UG/L	70353		
												Toxaphene	UG/L	39400		
												Turbidity	NTU	00076		
												Zinc, Dissolved	UG/L	01090		
												2, 4–D, Total	UG/L	39370		
												2, 4, 5–TP, Total	UG/L	39045		
x			x				x			x		Petroleum Hydrocarbons	PPM	45501	<0.5	K

29 32 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

VALUE CODING RULES AND REMARK CODES ON REVERSE

DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: Naval Weapons Station Earle | SW ID NO.:

LAB NAME: QC Inc.

R (1) | NJPDES NO.: NJ 0023540 (2–8) | WELL PERMIT NO.: 29-20669-3 (9–16) | SAMPLE DATE YR. MO. DAY: 890606 (17–22) | NJ LAB CERT. NO.: 77166 (23–27) | WQM USE (28)

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 1018 (MO. YR.) TO 1019 (MO. YR.)

77648

Owners Well No. C-14C

(C-14-2)

SUBMIT WITH SIGNED T-VWX-014

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
	x			x			x			x		Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		108.30	
	x			x			x			x		Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		106.13	
	x			x			x			x		Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	15.00	
	x			x			x			x		Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	12.83	
												Arsenic, Dissolved	UG/L as As	01000		
												Barium, Dissolved	UG/L as Ba	01005		
												Biochemical Oxygen Demand - 5 Day	MG/L	00310		
												Cadmium, Dissolved	UG/L as Cd	01025		
												Chloride, Dissolved	UG/L as Cl	82295		
												Chromium, Dissolved	UG/L as Cr	01030		
												Chromium, Dissolved, Hexavalent	UG/L as Cr	01220		
												Chemical Oxygen Demand (COD), Dissolved	MG/L	00341		
												Coliform Group	N/100 ML	74056		
												Color	Pt - Co	00080		
												Copper, Dissolved	UG/L as Cu	01040		
												Cyanide, Total	MG/L as CN	00720		
												Endrin, Total	UG/L	39390		
												Fluoride, Dissolved	MG/L as F	00950		
												Gross Alpha, Dissolved	Pc/L	01503		
												Gross Beta, Dissolved	Pc/L	03503		
												Hardness, Total as $CaCO_3$	MG/L	00900		
												Iron, Dissolved	UG/L as Fe	01046		
	x						x					Lead, Dissolved	UG/L as Pb	01049		
												Lindane, Total	UG/L	39782		
												Manganese, Dissolved	UG/L	01056		
												Mercury, Dissolved	UG/L	71890		

VALUE CODING RULES AND REMARK CODES ON REVERSE

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: Naval Weapons Station Earle

SW ID NO.:

LAB NAME: QC Inc.

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
S	NJ 0023540	29-20669-3	890606	77166	

77648

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 1088 (MO. YR.) TO 1089 (MO. YR.)

Owner's Well No. C-14C

SUBMIT WITH SIGNED T-VWX-014

(C-14-2)

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
												Methoxychlor, Total	UG/L	39480		
												Methylene Blue Active Substances	MG/L	38260		
												Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608		
												Nitrogen, Nitrate, Dissolved	MG/L as N	00618		
												Odor	T.O.N.	00085		
x			x				x				x	pH	Standard Units	00400	4.24	
												Phenols, Total Recoverable	UG/L	32730		
												Radium 226, Dissolved	Pc/L	09503		
												Radium 228, Dissolved	Pc/L	81366		
												Selenium, Dissolved	UG/L	01145		
												Silver, Dissolved	UG/L	01075		
												Sodium, Dissolved	MG/L	00930		
												Sulfate, Dissolved (as SO_4)	MG/L	00946		
x			x				x				x	Total Dissolved Solids (TDS)	PPM	70300	861.	
x			x				x				x	Total Organic Carbon (TOC)	PPM	00680	7.6	
												Total Organic Halogen (TOX)	UG/L	70353		
												Toxaphene	UG/L	39400		
												Turbidity	NTU	00076		
												Zinc, Dissolved	UG/L	01090		
												2, 4–D, Total	UG/L	39370		
												2, 4, 5–TP, Total	UG/L	39045		
x			x				x				x	Petroleum Hydrocarbons	PPM	45501	<0.5	K

29 33 34 40 41
42 46 47 53 54
55 59 60 66 67
68 72 73 79 80

VALUE CODING RULES AND REMARK CODES ON REVERSE

DIVISION OF WATER RESOURCES
WATER QUALITY MANAGEMENT ELEMENT

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: Naval Weapons Station Earle | SW ID NO.:

LAB NAME: QC Inc.

R (1) | NJPDES NO. NJ 0 0 2 3 5 4 0 (2–8) | WELL PERMIT NO. 2 9 - 2 0 6 6 7 - 7 (9–16) | SAMPLE DATE YR. MO. DAY 8 9 0 6 0 6 (17–22) | NJ LAB CERT. NO. 7 7 1 6 6 (23–27) | WQM USE (28)

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 1 0 8 8 (MO. YR.) TO 1 0 8 9 (MO. YR.)

77648

Owners Well No. C-29A

(C-14-3)

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS: Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
	x			x			x			x		Elevation of top of well casing with cap off (as specified in well completion report)	feet MSL: to nearest .01		108.23	
	x			x			x			x		Elevation of original ground level (as specified in well completion report)	feet MSL: to nearest .01		104.90	
	x			x			x			x		Depth to water table from top of casing prior to sampling with cap off	feet: to nearest .01	82546	11.42	
	x			x			x			x		Depth to water table from original ground level prior to sampling	feet: to nearest .01	72019	8.08	
												Arsenic, Dissolved	UG/L as As	01000		
												Barium, Dissolved	UG/L as Ba	01005		
												Biochemical Oxygen Demand - 5 Day	MG/L	00310		
												Cadmium, Dissolved	UG/L as Cd	01025		
												Chloride, Dissolved	UG/L as Cl	82295		
												Chromium, Dissolved	UG/L as Cr	01030		
												Chromium, Dissolved, Hexavalent	UG/L as Cr	01220		
												Chemical Oxygen Demand (COD), Dissolved	MG/L	00341		
												Coliform Group	N/100 ML	74056		
												Color	Pt - Co	00080		
												Copper, Dissolved	UG/L as Cu	01040		
												Cyanide, Total	MG/L as CN	00720		
												Endrin, Total	UG/L	39390		
												Fluoride, Dissolved	MG/L as F	00950		
												Gross Alpha, Dissolved	Pc/L	01503		
												Gross Beta, Dissolved	Pc/L	03503		
												Hardness, Total as $CaCO_3$	MG/L	00900		
												Iron, Dissolved	UG/L as Fe	01046		
	x						x					Lead, Dissolved	UG/L as Pb	01049		
												Lindane, Total	UG/L	39782		
												Manganese, Dissolved	UG/L	01056		
												Mercury, Dissolved	UG/L	71890		

VALUE CODING RULES AND REMARK CODES ON REVERSE

29 33 34 40 41
42 46 47 52 53
55 59 60 65 66
68 72 73 78 79

GROUND WATER ANALYSIS – MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

FACILITY NAME: Naval Weapons Station Earle

SW ID NO.:

LAB NAME: QC Inc.

	NJPDES NO.	WELL PERMIT NO.	SAMPLE DATE YR. MO. DAY	NJ LAB CERT. NO.	WQM USE
S	NJ 0023540	29-20667-7	890606	77166	

77648

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM 1088 (MO. YR.) TO 1089 (MO. YR.)

Owner's Well No. C-29A

SUBMIT WITH SIGNED T-VWX-014

(C-14-3)

SAMPLING MONTHS: Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	ANALYSIS	UNITS	PARAMETER	VALUE	REMARKS
												Methoxychlor, Total	UG/L	39480		
												Methylene Blue Active Substances	MG/L	38260		
												Nitrogen, Ammonia, Dissolved $NH_3 + NH_4$ as N	MG/L as N	00608		
												Nitrogen, Nitrate Dissolved	MG/L as N	00618		
												Odor	T.O.N.	00085		
x			x			x			x			pH	Standard Units	00400	4.63	
												Phenols, Total Recoverable	UG/L	32730		
												Radium 226, Dissolved	Pc/L	09503		
												Radium 228, Dissolved	Pc/L	81366		
												Selenium, Dissolved	UG/L	01145		
												Silver, Dissolved	UG/L	01075		
												Sodium, Dissolved	MG/L	00930		
												Sulfate, Dissolved (as SO_4)	MG/L	00946		
x			x			x			x			Total Dissolved Solids (TDS)	PPM	70300	170.	
x			x			x			x			Total Organic Carbon (TOC)	PPM	00680	4.5	
												Total Organic Halogen (TOX)	UG/L	70353		
												Toxaphene	UG/L	39400		
												Turbidity	NTU	00076		
												Zinc, Dissolved	UG/L	01090		
												2, 4–D, Total	UG/L	39370		
												2, 4, 5–TP, Total	UG/L	39045		
x			x			x			x			Petroleum Hydrocarbons	PPM	45501	<0.5	K

VALUE CODING RULES AND REMARK CODES ON REVERSE