N62269.AR.000379
NAWC WARMINSTER
5090.3a

OHM Remediation Services Corp.
A Subsidiary of OHM Corporation

5 September 1996

Mr. Steve Lehman, PE, REP
Northern Division
Naval Facilities Engineering Command
10 Industrial Highway, Mail Stop #82
Lester, PA 19113

Re OHM Startup Report for Period July 17 - 31, 1996
Delivery Order No. 036
Contract No. N62470-93-D-3032

Twenty-four hour manned operation of the water treatment plant continued through July 21, 1996 Day shift monitoring of the treatment system began July 22, 1996 and continued seven days per week through July 31, 1996.

The water treatment system was in operation for the entire reporting period except six hours for pump maintenance and CMCS file upgrades.

Treatment plant water sampling events occurred July 17, 24 and 31, 1996 as per the sampling plan The air stripper offgas and emissions control system discharge were also sampled on July 31, 1996. Sample results are included for sampling events this period.

6.4 ppb of lead was detected on July 24, 1996 in the Equalization Tank effluent and 14 ppb detected in the treatment plant discharge. No lead was detected between the two points at the continuous backwash sand filter. The water treatment system discharge was within the effluent quality average monthly limitations for the reporting period.

2,077,660 gallons of treated water have been discharged as of 2400 hrs July 31, 1996. The average discharge flowrate for the period July 17, 1996 @ 1200 hrs. through July 31, 1996 @ 2400 hrs. was 53 gpm.

Calculations:
Period July 2-16, 1996 Pounds of PCE removed = 0.0813
Avg. PCE concentration = 10.2 ug/l
Pounds of PCE removed = (47.74 g/m)(60 min/hr)(334 hr)(10 2ul/l)(3.785l/g) (g/1,000,000) (lb/454g)

Period July 17-31, 1996 Pounds of PCE removed = 0.0786
Avg. PCE concentration = 8.52 ug/l
Pounds of PCE removed = (53g/m)(60 min/hr)(348hr)(8.52ul/l)(3.785l/g) (g/1,000,000) (lb/454g)

200 Horizon Center Boulevard ▫ Trenton, New Jersey 08691-1904 ▫ 609-584-8900

Please contact me at (609) 588-6348 if you have any questions.

Sincerely,

Gary R. Kowalski for P. Tully

Philip A. Tully, P.E.
Project Manager

Distribution List with Attachments:

Lonnie Monaco-NorthDiv
Nancy Crickman-PADEP
Tom Ames-NAWCAD Warminster
Frank Kurdziel-NAWCAD Warminster
Dave Fennimore-Earth Data Inc.
Mike Hunter-NAWCAD Warminster
Ernest Beatty-NAWCAD Warminster
Dave Kennedy-PADEP
Darius Ostrauskas-EPA
Al Wills-Bucks County Dept. of Health
Dave Leadenham-OHM
Gary R.Kowalski-OHM
OHM Project File 16292

	6-21-96	7-3-96	7-5-96	7-8-96	7-10-96	7-12-96	7-15-96	7-17-96	7-24-96	7-31-96
Ar a 'C' Influent										
Flow	n/a	50-72 gpm	31-60 gpm	28-62 gpm	0-37 gpm	0-63 gpm	0-42GPM	0-37 gpm	0-47 gpm	3 5-35 gpm
pH	7.46-7 48	7 44-7 46	7 16-7 18	7 24-7 26	7 15-7 16	7,05-7,07	7 24-7 25	4 52-4 51	7.61-7.65	7.72-7.74
Total Sus. Solids mg/l	31	23	bdl	bdl	55	43	141	14	157	13
Equalization Tank Effluent										
pH	7 56-7 58	7.46-7.50	7.20-7.22	7.38-7.41	7.01-7.04	7 22-7.25	7.53-7.55	7.26	7.81-7 83	7 48-7.49
TSS	44	8	bdl	bdl	36	7	10	18	125	bdl
Cadmium	bdl	bdl	bdl	empty	bdl	bdl	bdl	bdl	bdl	bdl
Copper	bdl	bdl	bdl	empty	bdl	bdl	bdl	bdl	bdl	bdl
Lead	bdl	bdl	9 9	empty	bdl	bdl	bdl	bdl	6 4	bdl
Zinc	630	270	300	empty	250	240	180	170	200	200
Arsenic	bdl	bdl	bdl	empty	bdl	bdl	bdl	bdl	bdl	bdl
Chromium+6	bdl	bdl	empty	bdl	bdl	bdl	bdl	bdl	bdl	bdl
Aluminum	600	400	610	empty	260	1300	210	250	310	490
Total Iron	2300	7400	5700	empty	470	2900	300	200	830	3000
Dissolved Iron	bdl	bdl	bdl	250	bdl	bdl	bdl	bdl	bdl	bdl
Total Maganese	35	23	31	empty	10	58	11	6.4	16	29
Mercury	bdl	bdl	bdl	empty	bdl	bdl	bdl	bdl	bdl	bdl
Carbon Tetrachloride	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl
Tetrachloroethene	8 09	11.1	9.75	9.96	11 6	10 5	10.4	8.88	8.06	8.62
Trichloroethene	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl
Vinyl Chloride	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl
1,1 Dichloroethylene	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl
Clarifier Effluent										
pH	7.54-7.57	not taken	7 04-7.08	not taken	not taken	not taken	not taken	not taken	not taken	not taken
Total Sus Solids mg/l	18	9	bdl	bdl	9	12	6	bdl	13	bdl
Sand Filter Effluent										
pH	7 82-7 84	7 85-7 88	7 03-7 06	7.23-7 25	not taken	7.34-7.36	7 19-7.20	7 34-7.32	7.74-7 76	7.80-7.82
Total Sus Solids mg/l	10	10	bdl	bdl	bdl	bdl	bdl	7	bdl	bdl
Cadmium	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl
Copper	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl
Lead	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl
Zinc	460	230	200	180	190	170	180	170	200	140
Arsenic	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl
Chromium+6	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl
Aluminum	170	150	110	110	bdl	180	140	120	bdl	140
Total Iron	350	290	bdl	bdl	450	370	bdl	bdl	3900	180
Dissolved Iron	bdl	bdl	broken	bdl	bdl	bdl	bdl	bdl	bdl	bdl
Total Maganese	27	8.9	5.5	bdl	7 5	13	6.0	7.5	bdl	7.6
Mercury	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl

	6-21-96	7-3-96	7-5-96	7-8-96	7-10-96	7-12-96	7-15-96	7-17-96	7-24-96	7-31-96
Air Stripper Efflu nt										
Carbon Tetrachloride	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl
Tetrachloroethene	bdl	0.42	0.271	0.446	bdl	1.96	2 2	1.33	0.984	bdl
Trichloroethene	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl
Vinyl Chloride	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl
1,1 Dichloroethylene	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl
Carbon Midfluent										
Carbon Tetrachloride	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl
Tetrachloroethene	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl
Trichloroethene	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl
Vinyl Chloride	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl
1,1 Dichloroethylene	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl
Plant Effluent										
Flow	n/a	43 gpm avg.	56 gpm avg.	79 gpm avg.	45 gpm avg.	50 gpm avg	50 gpm avg	48 gpm avg	54 gpm avg	49 gpm avg
pH	8.75-8 77	8.61-8.62	8 82-8.84	8.57-8.59	8.45-8.46	8.30-8.33	7.96-7.99	8.09-8.06	8.21-8.22	8 53-8 55
TSS	14	7	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl
Cadmium	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl
Copper	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl
Lead	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	14	bdl
Zinc	bdl	bdl	bdl	bdl	bdl	bdl	70	130	120	100
Arsenic	17	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl
Chromium+6	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl
Aluminum	170	160	130	170	130	bdl	bdl	140	bdl	190
Total Iron	150	bdl	bdl	bdl	bdl	bdl	350	bdl	bdl	bdl
Dissolved Iron	bdl	bdl	bdl	140	bdl	bdl	bdl	bdl	bdl	bdl
Total Maganese	6 9	5 3	bdl	bdl	bdl	bdl	6 8	bdl	bdl	bdl
Mercury	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl
Carbon Tetrachloride	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl
Tetrachloroethene	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl
Trichloroethene	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl
Vinyl Chloride	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl
1,1 Dichloroethylene	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl

ETC

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

DATE: 07/25/96
PAGE: 1

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	GHM REMEDIATION SERVICES CORP	NAWF	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Sample Points, Sampling Dates, and ETC Sample No.'s

Parameters	*Units*	AIRSTRPEFF 960717 BQX310	AREACINFL 960717 BQX300	EQULTANKEF 960717 BQX301	EQULTANKEF 960717 BQX302	INCPLATSEP 960717 BQX303	LEADCARBON 960717 BQX306	SANDFILTEF 960717 BQX304	SANDFILTEF 960717 BQX305
Priority Poll. Volatiles GC/MS									
Carbon tetrachloride	ug/l	< .4	-	< .4	-	-	< 4	-	-
1,1-Dichloroethylene	ug/l	< .4	-	< .4	-	-	< 4	-	-
Tetrachloroethylene	ug/l	1.33	-	8.88	-	-	< .2	-	-
Trichloroethylene	ug/l	< .2	-	< .2	-	-	< .2	-	-
Vinyl chloride	ug/l	< .2	-	< .2	-	-	< .2	-	-
Metals Analysis Data									
Aluminum	ug/l	-	-	250	-	-	-	120	-
Arsenic	ug/l	-	-	< 8.0	-	-	-	J 1.8	-
Cadmium	ug/l	-	-	J 1.0	-	-	-	J 1.6	-
Copper	ug/l	-	-	< 10	-	-	-	< 10	-
Iron	ug/l	-	-	200	< 100	-	-	J 99	< 100
Lead	ug/l	-	-	< 5.0	-	-	-	< 5.0	-
Manganese	ug/l	-	-	6.4	-	-	-	J 4.7	-
Mercury	ug/l	-	-	< .20	-	-	-	< .20	-
Zinc	ug/l	-	-	170	-	-	-	170	-
Groundwater Conventionals									
Total Organic Carbon	mg/l	-	-	1.5	-	-	3.8	-	-
Total Organic Carbon	mg/l	-	-	1.3	-	-	3.9	-	-
pH	std	-	4.52	7.26	3.01	-	-	7.34	-
pH	std	-	4.51	7.26	2.99	-	-	7.32	-
Miscellaneous Parameters									
Chromium, Hexavalent	ug/l	-	-	< 25	-	-	-	< 25	-
Solids, total suspended	mg/l	-	14	18	-	< 5	-	7	-

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested J=BMDL(Value Reported) <=ND(MDL Reported)

ETC

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

DATE: 07/25/96
PAGE: 2

Chain of Custody Data Required for ETC Data Management Summary Report

See Below			See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*
	DHM REMEDIATION SERVICES CORP	NAWF		

Parameters	*Units*	*Sample Points, Sampling Dates, and ETC Sample No.'s*							
		TRIPBLANK 960717 BQX309	TRIPLTEFF 960717 BQX307	TRIPLTEFF 960717 BQX308					
Priority Poll. Volatiles GC/MS									
Carbon tetrachloride	ug/l	< .4	< .4	-					
1,1-Dichloroethylene	ug/l	< .4	< .4	-					
Tetrachloroethylene	ug/l	< .2	< .2	-					
Trichloroethylene	ug/l	< .2	< .2	-					
Vinyl chloride	ug/l	< 2	< .2	-					
Metals Analysis Data									
Aluminum	ug/l	-	140	-					
Arsenic	ug/l	-	< 8.0	-					
Cadmium	ug/l	-	J 3.1	-					
Copper	ug/l	-	< 10	-					
Iron	ug/l	-	J 38	< 100					
Lead	ug/l	-	< 5.0	-					
Manganese	ug/l	-	J 3.3	-					
Mercury	ug/l	-	< .20	-					
Zinc	ug/l	-	130	-					
Groundwater Conventionals									
Total Organic Carbon	mg/l	-	1.9	-					
Total Organic Carbon	mg/l	-	1.8	-					
pH	std	-	8.09	-					
pH	std	-	8.06	-					
Miscellaneous Parameters									
Chromium, Hexavalent	ug/l	-	< 25	-					
Solids, total suspended	mg/l	-	< 5	-					

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested J=BMDL(Value Reported) <=ND(MDL Reported)

ETC

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

DATE: 08/02/96
PAGE: 1

Chain of Custody Data Required for ETC Data Management Summary Report

See Below			See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*
	D&M REMEDIATION SERVICES CORP.	NAWF		

Sample Points, Sampling Dates, and ETC Sample No.'s

Parameters	*Units*	AIRSTRPEFF 960724 BRB109	AREACINFL 960724 BRB100	EQULTANKEF 960724 BRB101	EQULTANKEF 960724 BRB102	INCPLATSEP 960724 BRB103	LEADCARBON 960724 BRB106	SANDFILTEF 960724 BRB104	SANDFILTEF 960724 BRB105
Priority Poll. Volatiles GC/MS									
Carbon tetrachloride	ug/l	< .4	-	< .4	-	-	< .4	-	-
1,1-Dichloroethylene	ug/l	< .4	-	< .4	-	-	< .4	-	-
Tetrachloroethylene	ug/l	.984	-	8.06	-	-	< .2	-	-
Trichloroethylene	ug/l	< .2	-	< 2	-	-	< .2	-	-
Vinyl chloride	ug/l	< .2	-	< .2	-	-	< .2	-	-
Groundwater Conventionals									
Total Organic Carbon	mg/l	-	-	< 1.0	-	-	< 1.0	-	-
Total Organic Carbon	mg/l	-	-	< 1.0	-	-	< 1.0	-	-
pH	std	-	7.65	7.81	-	-	-	7.76	-
pH	std	-	7.61	7.83	-	-	-	7.74	-
Metals Analysis Data									
Aluminum	ug/l	-	-	310	-	-	-	J 90	-
Arsenic	ug/l	-	-	J 2.0	-	-	-	< 8.0	-
Cadmium	ug/l	-	-	< 4.0	-	-	-	< 4.0	-
Copper	ug/l	-	-	J 2.3	-	-	-	< 10	-
Iron	ug/l	-	-	830	J 23	-	-	3900	< 100
Lead	ug/l	-	-	6.4	-	-	-	J 4.9	-
Manganese	ug/l	-	-	16	-	-	-	24	-
Mercury	ug/l	-	-	< .20	-	-	-	< .20	-
Zinc	ug/l	-	-	200	-	-	-	200	-
Miscellaneous Parameters									
Chromium, Hexavalent	ug/l	-	-	< 25	-	-	-	< 25	-
Solids, total suspended	mg/l	-	157	125	-	13	-	< 5	-

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested J=BMDL(Value Reported) <=ND(MDL Reported)

ETC

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

DATE: 08/02/96
PAGE: 2

Chain of Custody Data Required for ETC Data Management Summary Report

See Below ETC Sample No.	Company	Facility	Sample Point	Date
	OHM REMEDIATION SERVICES CORP	NAWF	See Below	

Parameters	Units	TRIPBLANK 960724 BRB110	TRIPLIEFF 960724 BRB107	TRIPLIEFF 960724 BRB108					
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Priority Poll. Volatiles GC/MS									
Carbon tetrachloride	ug/l	< .4	< .4	-					
1,1-Dichloroethylene	ug/l	< .4	< .4	-					
Tetrachloroethylene	ug/l	< .2	< .2	-					
Trichloroethylene	ug/l	< .2	< .2	-					
Vinyl chloride	ug/l	< .2	< .2	-					
Groundwater Conventionals									
Total Organic Carbon	mg/l	-	< 1.0	-					
Total Organic Carbon	mg/l	-	< 1.0	-					
pH	std	-	8.22	-					
pH	std	-	8.21	-					
Metals Analysis Data									
Aluminum	ug/l	-	J 54	-					
Arsenic	ug/l	-	J 3.4	-					
Cadmium	ug/l	-	< 4.0	-					
Copper	ug/l	-	< 10	-					
Iron	ug/l	-	< 100	< 100					
Lead	ug/l	-	14	-					
Manganese	ug/l	-	J 1.8	-					
Mercury	ug/l	-	< .20	-					
Zinc	ug/l	-	120	-					
Miscellaneous Parameters									
Chromium, Hexavalent	ug/l	-	< 25	-					
Solids, total suspended	mg/l	-	< 5	-					

Footnotes: BMCL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested J=BMCL(Value Reported) <=ND(MDL Reported)

CORELAB

CORE LABORATORIES, INC.

No. 64754

CHAIN OF CUSTODY RECORD

CUSTOMER INFORMATION

COMPANY: OHM Remediation Services
SEND REPORT TO: Gary Kowalski
ADDRESS: c/o NAWC
PHONE: (215) 441-4610
FAX: (215) 441-5403 x

PROJECT INFORMATION

PROJECT NAME/NUMBER: NAWC/16242

BILLING INFORMATION

BILL TO: OHM Remediation Services
ADDRESS: P.O. Box 4647
Trenton NJ 08650
PHONE:
FAX:
PO NO.: 1024996

LAB JOB NO. NAWC

SAMPLE NO.	SAMPLE DESCRIPTION	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER DESCRIPTION	NUMBER OF CONTAINERS	TSS	pH	Total Metals	Total Water	Dissolved Zn	TOC	Cr+6	REMARKS / PRECAUTIONS
BRB100	AREAC INFL	7/24/96	1350	Water	mix	1	X	X						Area C Influent
BRB101-102	EQUALTANKEF	7/24/96	1345			8	X	X	X	X	X	X	X	Equalization Tank
BRB103	INCPLATSEP	7/24/96	1335			1	X							Treatment Plant Separator
BRB104-105	SANDFILTEF	7/24/96	1325			4	X	X		X	X		X	Sand Filter Effluent
BRB106	LEADCARBON	7/24/96	1310			4			X			X		Lead Carbon Filter Effluent
BRB107-108	TRTPLTEFF	7/24/96	1300			7	X	X	X	X	X	X	X	Treatment Plant Effluent
BRB109	AIRSTRPEFF	7/24/96	1315			3			X					Air Stripper Effluent
BRB110	TRIPBLANK	7/24/96							X					Trip Blank

3/500 ml poly 1 ltr glass

These bottles came in w/ Core Unlabeled Chain 7/25/96

SAMPLER: Brian M. Flanagan
SHIPMENT METHOD: FedEx Courier
AIRBILL NO. 5676990362

REQUIRED TURNAROUND:* ☐ SAME DAY ☐ 24 HOURS ☐ 48 HOURS ☐ 72 HOURS ☒ 5 DAYS ☐ 10 DAYS ☐ ROUTINE OTHER Used in a Cooler Tag 6

1. RELINQUISHED BY:	DATE	2. RELINQUISHED BY:	DATE	3. RELINQUISHED BY:	DATE
SIGNATURE: Brian M. Flanagan	7/24/96	SIGNATURE:		SIGNATURE:	
PRINTED NAME/COMPANY: Brian M Flanagan OHM	TIME: 1800	PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME
1. RECEIVED BY:	DATE	**2. RECEIVED BY:**	DATE	**3. RECEIVED BY:**	DATE
SIGNATURE: [illegible]	7/24/96	SIGNATURE:		SIGNATURE:	
PRINTED NAME/COMPANY: D Wallace Core	TIME:	PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME

* RUSH TURNAROUND MAY REQUIRE SURCHARGE

☐ Anaheim, CA 250 E. Gene Autry Way Anaheim, CA 92805 (714) 937-1094 Fax (714) 937-1170
☐ Aurora, CO 10703 E. Bethany Drive Aurora, CO 80014 (303) 751-1780 Fax (303) 751-1784
☐ Casper, WY 420 W. First Street Casper, WY 82601 (307) 235-9741 Fax (307) 266-1676
☐ Corpus Christi, TX 1733 N. Padre Island Drive Corpus Christi, TX 78408 (512) 289-2673 Fax (512) 289-2471
☒ Edison, NJ 284 Raritan Center Parkway Edison, NJ 08837 (908) 225-6700 Fax (908) 225-6777
☐ Houston, TX (Env) 8310 Rothway Drive Houston, TX 77040 (713) 690-4444 Fax (713) 690-6846
☐ Houston, TX (Pet) 6210 Mosley Road Houston, TX 77075 (713) 943-9776 Fax (713) 943-3846
☐ Indianapolis, IN 7726 Moller Road Indianapolis, IN 46268 (317) 875-5894 Fax (317) 872-6169
☐ Lake Charles, LA 3945 Bagby Parkway Sulphur, LA 70663 (318) 583-4926 Fax (318) 583-4929
☐ Long Beach, CA 3700 Cherry Avenue Long Beach, CA 90807 (310) 595-8031 Fax (310) 427-5174
☐ Tampa, FL 5460 Beaumont Center Blvd. Tampa, FL 33634 (813) 884-9288 Fax (813) 885-4938
☐ Valparaiso, IN 2400 Cumberland Drive Valparaiso, IN 46383 (219) 464-2389 Fax (219) 462-2953

ETC

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Test d, Selected Samples

DATE. 08/08/96
PAGE. 1

Chain of Custody Data Required for ETC Data Management Summary Report

See Below			See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*
	DHM REMEDIATION SERVICES CORP.	NAWF		

Sample Points, Sampling Dates, and ETC Sample No.'s

Parameters	*Units*	AIRSTRPEFF 960731 BRC509	AREACINFL 960731 BRC500	EQULTANKEF 960731 BRC501	EQULTANKEF 960731 BRC502	INCPLATSEP 960731 BRC503	LEADCARBON 960731 BRC506	SANDFILTEF 960731 BRC504	SANDFILTEF 960731 BRC505
Priority Poll. Volatiles GC/MS									
Carbon tetrachloride	ug/l	< .4	-	< .4	-	-	< .4	-	-
1,1-Dichloroethylene	ug/l	< .4	-	< .4	-	-	< 4	-	-
Tetrachloroethylene	ug/l	< .2	-	8.62	-	-	< .2	-	-
Trichloroethylene	ug/l	< .2	-	< .2	-	-	< .2	-	-
Vinyl chloride	ug/l	< .2	-	< .2	-	-	< .2	-	-
Metals Analysis Data									
Aluminum	ug/l	-	-	490	-	-	-	140	-
Arsenic	ug/l	-	-	J 2.2	-	-	-	< 8.0	-
Cadmium	ug/l	-	-	J 1.6	-	-	-	< 4.0	-
Copper	ug/l	-	-	< 10	-	-	-	< 10	-
Iron	ug/l	-	-	3000	< 100	-	-	180	J 20
Lead	ug/l	-	-	J 4.8	-	-	-	J 2.7	-
Manganese	ug/l	-	-	29	-	-	-	7.6	-
Mercury	ug/l	-	-	< .2	-	-	-	< .2	-
Zinc	ug/l	-	-	200	-	-	-	140	-
Miscellaneous Parameters									
Chromium, Hexavalent	ug/l	-	-	< 25	-	-	-	< 25	-
Solids, total suspended	mg/l	-	13	< 5	-	< 5	-	< 5	-
Total Organic Carbon	mg/l	-	-	1.2	-	-	< 1.0	-	-
Total Organic Carbon	mg/l	-	-	1.2	-	-	< 1.0	-	-
pH	std	-	7.72	7.48	-	-	-	7.82	-
pH	std	-	7.74	7.49	-	-	-	7.80	-

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested J=BMDL(Value Reported) <=ND(MDL Reported)

ETC

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

DATE: 08/08/96
PAGE: 2

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	OHM REMEDIATION SERVICES CORP.	NAME	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	*Units*	*Sample Points, Sampling Dates, and ETC Sample No.'s*							
		TRIPBLANK 960731 BRC510	TRIPLEFF 960731 BRC507	TRIPLEFF 960731 BRC508					
Priority Poll. Volatiles GC/MS									
Carbon tetrachloride	ug/l	< .4	< .4	-					
1,1-Dichloroethylene	ug/l	< .4	< .4	-					
Tetrachloroethylene	ug/l	< .2	< .2	-					
Trichloroethylene	ug/l	< .2	< .2	-					
Vinyl chloride	ug/l	< .2	< .2	-					
Metals Analysis Data									
Aluminum	ug/l	-	190	-					
Arsenic	ug/l	-	< 8.0	-					
Cadmium	ug/l	-	< 4.0	-					
Copper	ug/l	-	< 10	-					
Iron	ug/l	-	J 47	< 100					
Lead	ug/l	-	< 5.0	-					
Manganese	ug/l	-	J 1.9	-					
Mercury	ug/l	-	< .2	-					
Zinc	ug/l	-	100	-					
Miscellaneous Parameters									
Chromium, Hexavalent	ug/l	-	< 25	-					
Solids, total suspended	mg/l	-	< 5	-					
Total Organic Carbon	mg/l	-	13.5	-					
Total Organic Carbon	mg/l	-	14.0	-					
pH	std	-	8.55	-					
pH	std	-	8.53	-					

Footnotes: .BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested J=BMDL(Value Reported) . <=ND(MDL Reported)

ETC

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Param ters T sted, Selected Samples

DATE: 08/09/96
PAGE: 1

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	O&M REMEDIATION SERVICES CORP.	NAWF	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	*Units*	*Sample Points, Sampling Dates, and ETC Sample No.'s*							
		POSTCARBON 960731 BRC512	PRECARBON 960731 BRC511						
Miscellaneous Parameters									
1,1-Dichloroethylene	ppb	< .3	< .3						
Carbon tetrachloride	ppb	< .3	< .3						
Tetrachloroethylene	ppb	< .2	< .2						
Trichloroethylene	ppb	< .3	< .3						
Vinyl chloride	ppb	< .9	< .9						

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested J=BMDL(Value Reported) <=ND(MDL Reported)

CORELAB

CORE LABORATORIES, INC.

No. 54003

CHAIN OF CUSTODY RECORD

CLIENT INFORMATION		PROJECT INFORMATION	
COMPANY:	OHM Remediation Services	PROJECT NAME/NUMBER:	NAWC/116292
SEND REPORT TO:	Gary Kowalski	BILLING INFORMATION	
ADDRESS:	c/o NAWF	BILL TO:	OHM Remediation Services
		ADDRESS:	P.O. Box 4647
			Trenton, NJ 08650
PHONE:	215 441 4610	PHONE:	
FAX:	215 441 5403	FAX:	PO NO.: 1024996

LAB JOB NO.: NAWF

SAMPLE NO.	SAMPLE DESCRIPTION	DATE	TIME	MATRIX	PRESERVATIVE		BENZINATORS	TSS	pH	Halogenated VOCs	Total Metals	Dissolved Iron Filter Inlet	TOC	Cr6	REMARKS / PRECAUTIONS
BRC500	AREACINFL	7/31/96	0955	Water	mixed		1	X	X						X Area C Influent
BRC501-502	EQULTANKEF	7/31/96	0950	↓	↓		7	X	X	X	X	X	X	X	X Equalization Tank
BRC503	INCPLATSEP	7/31/96	0945				1	X							X Inclined Plate Sep.
BRC504-505	SANDFILTEF	7/31/96	0930			TOC Not Rec'd	4	X	X		X	X	X	X	Sand Filter Effluent
BRC506	LEADCARBON	7/31/96	0910				4			X			X		X Lead Carbon (cl)
BRC507-508	TRTPLTEFF	7/31/96	0900			TSS/pH Not Rec'd	7	X	X	X	X	X	X	X	Treatment Plant Eff.
BRC509	AIRSTRPEFF	7/31/96	0920				3			X					X Air Stripper Effl.
BRC510	TRIPBLANK			↓	↓					X					X Tripblank
BRC505	SandFilter Bags of Air Pre-Post Carbon Cells. (Filled when Delivered)	7/31/96			VOA		2								Filled at Lab (*)

SAMPLER: Brian M. Flanagan

SHIPMENT METHOD: FedEx Courier

AIRBILL NO. 5676 990362

REQUIRED TURNAROUND:* ☐ SAME DAY ☐ 24 HOURS ☐ 48 HOURS ☐ 72 HOURS ☒ 5 DAYS ☐ 10 DAYS ☐ ROUTINE OTHER

RELINQUISHED BY	DATE	RELINQUISHED BY	DATE	RELINQUISHED BY	DATE
SIGNATURE: Brian M. Flanagan	7/31/96	SIGNATURE:		SIGNATURE:	
PRINTED NAME/COMPANY: Brian M. Flanagan	TIME	PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME
RECEIVED BY	DATE	RECEIVED BY	DATE	RECEIVED BY	DATE
SIGNATURE:		SIGNATURE:		SIGNATURE:	
PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY	TIME

* RUSH TURNAROUND MAY REQUIRE SURCHARGE

☐ Anaheim, California
3250 E. Gene Autry Way
Anaheim, California 92805
(714) 937-1094
(800) 404-2673

☐ Aurora (Denver), Colorado
10753 E. Bethany Drive
Aurora, Colorado 80014
(303) 751-1760
(800) 972-2673

☐ Casper, Wyoming
420 West 1st Street
Casper, Wyoming 82601
(307) 235-5741
(800) 666-0306

☐ Corpus Christi, Texas
1733 North Padre Island Drive
Corpus Christi, Texas 78408
(512) 289-2673
(800) 548-2278

☐ Houston, Texas
8210 Mesler Road
Houston, Texas 77075
(713) 943-9776
(800) 739-2673

☐ Lake Charles, Louisiana
3545 Hwy 14 Parkway
Sulphur, Louisiana 70663
(318) 583-4826
(800) 259-4826

☐ Long Beach California
3700 Cherry Avenue
Long Beach, California 90807
(310) 595-8401
(800) 814-3933