



Weston Solutions, Inc.
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750 East Bunker Court
Vernon Hills, IL 60061-1450
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www.westonsolutions.com



Mr. James Innes
Michigan Department of Environmental Quality
Shiawassee District Headquarters
10650 Bennett Drive
Morrice, Michigan 48857-9792

Re: Additional Groundwater testing of Monitoring Well MW-3S
Linden Road Landfill Site

Dear Mr. Innes:

As proposed in Weston Solutions, Inc. (formerly Roy F. Weston, Inc.) (Weston) letter to the Michigan Department of Environmental Quality (MDEQ) dated 11 January 2002, additional ground water samples were collected and analyzed on a quarterly basis from Monitoring Well MW-3S at the above-referenced site. This additional sampling was performed to monitor and address an apparent low-level exceedance of vinyl chloride in Well MW-3S during the annual groundwater sampling at the subject site in October 2001. The results of the sampling conducted on February 20, 2002 were submitted to the MDEQ in a letter report dated March 25, 2002. The following letter report presents the results of the sampling conducted on June 21, 2002.

On June 21 2002, a Weston geologist collected a single groundwater sample from Monitoring Well MW-3S. The attached figure shows the location of this monitoring well. The sample was submitted for volatile organic analysis (VOC) by Merit Laboratories, Inc. of East Lansing, Michigan. A field duplicate and trip blank were also analyzed for quality assurance/quality control (QA/QC) purposes. All sampling and shipping procedures were consistent with those performed previously.

Analytical results indicated that five VOCs were detected in the investigative sample. Vinyl chloride was detected at a trace concentration of 0.023 mg/L, which is above the MDEQ Generic Drinking Water Criteria of 0.002 mg/L for residential and industrial/commercial categories. The other VOCs detected include 1,1-Dichloroethane (0.014 mg/L), cis-1,2-Dichloroethene (0.021 mg/L), trans-1,2-Dichloroethene (0.001 mg/L), and 1,2-Dichloropropane (0.001 mg/L) at concentrations well below the above-referenced criteria. The duplicate sample from Well MW-3S also contained the same VOCs at comparable levels. No VOCs were detected in the trip blank. Laboratory analytical data including the chain-of-custody documentation are included as Attachment A.

Weston, on behalf of General Motors will continue to sample and analyze groundwater from Monitoring Well MW-3S on a quarterly basis. The next sampling event will occur as part of the Third Annual Groundwater Sampling and Methane Monitoring as required by the Operation and





Mr. James Innes
Michigan Department of Environmental Quality

-2-

13 August 2002

Maintenance Plan for the entire site. This sampling event is planned for the first week in October 2002. Analytical results will be forwarded to the MDEQ as soon as they become available.

If you have any questions or require additional information, please call me at (847) 918-4018.

Very truly yours,

WESTON SOLUTIONS, INC.

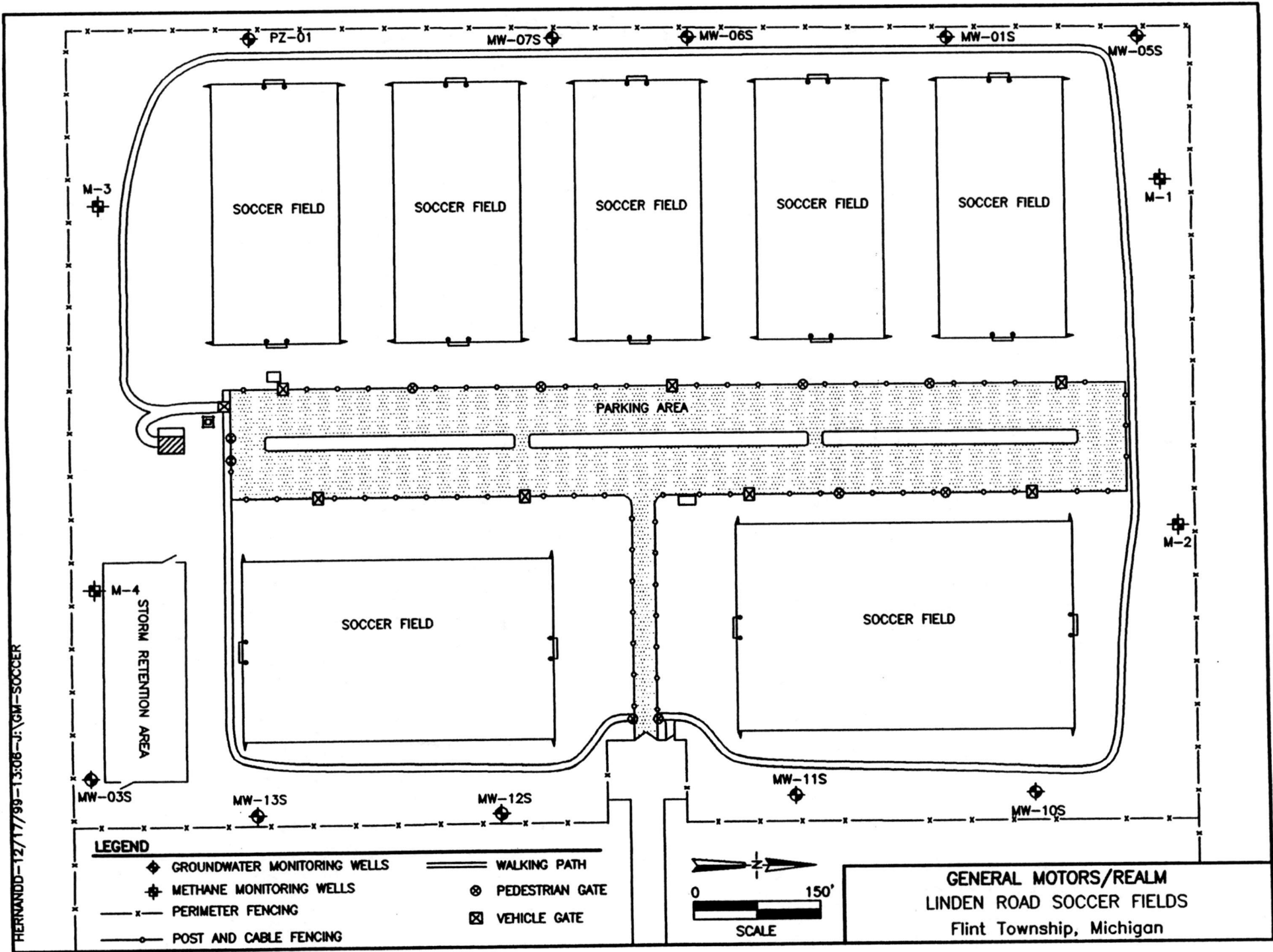
A handwritten signature in black ink, appearing to read "S. Babusukumar". The signature is stylized and cursive.

S. Babusukumar, P.G.
Project Manager

cc: R. Metcalf, GM

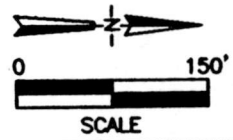
Attachment

HERNAND-12/17/99-13:08-J:\GM-SOCCER



LEGEND

- ◆ GROUNDWATER MONITORING WELLS
- ⊕ METHANE MONITORING WELLS
- x- PERIMETER FENCING
- o- POST AND CABLE FENCING
- ══ WALKING PATH
- ⊙ PEDESTRIAN GATE
- ⊠ VEHICLE GATE



GENERAL MOTORS/REALM
LINDEN ROAD SOCCER FIELDS
 Flint Township, Michigan

Attachment A

Laboratory Analytical Results



Analytical Laboratory Report

Report ID: S09567.01(01)
Generated on 06/28/2002

Report to

Attention: Mr. Babusukumar
Roy F. Weston, Inc.
750 East Bunker Court Ste 500
Vernon Hills, IL 60061

Phone: 847-918-4000 FAX: 847-918-4055

Report produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Report Summary

Lab Sample ID(s): S09567.01-S09567.03
Project: GM Linden Rd. Site
Submitted Date/Time: 06/21/2002 13:15
Sampled by: K. Lapham
P.O. #:

Report Notes

Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
Results relate only to items tested.
Report shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc.

Violetta F. Murshak
Laboratory Director



Lab Sample ID: S09567.01
Sample Tag: MW03S
Collected Date/Time: 06/21/2002 11:25
Matrix: Groundwater
COC Reference: 014869

Sample Containers

Table with 6 columns: #, Type, Preservative(s), Refrigerated?, Arrival Temp. (C), Thermometer #. Row 1: 2, 40 ml Glass, HCL, Yes, 4, 4025

Table with 10 columns: Analysis, Results, Units, RDL, Method, Date Run, Analyst, CAS #, Flags

Organics

Volatile Organics

Main data table listing various organic compounds (Benzene, Bromodichloromethane, etc.) with their respective results, units, RDLs, methods, dates, analysts, and CAS numbers.



Lab Sample ID: S09567.01 (continued)

Sample Tag: MW03S

Analysis	Results	Units	RDL	Method	Date Run	Analyst	CAS #	Flags
Organics (continued)								
Volatile Organics (continued)								
Acetone	Not detected	mg/L	0.05	8260	06/27/02	JGH	67-64-1	
2-Butanone (MEK)	Not detected	mg/L	0.05	8260	06/27/02	JGH	78-93-3	
Carbon disulfide	Not detected	mg/L	0.05	8260	06/27/02	JGH	75-15-0	
2-Hexanone	Not detected	mg/L	0.05	8260	06/27/02	JGH	591-78-6	
4-Methyl-2-pentanone (MIBK)	Not detected	mg/L	0.05	8260	06/27/02	JGH	108-10-1	



Lab Sample ID: S09567.02
Sample Tag: MW03S Dup
Collected Date/Time: 06/21/2002 11:25
Matrix: Groundwater
COC Reference: 014869

Sample Containers

Table with 6 columns: #, Type, Preservative(s), Refrigerated?, Arrival Temp. (C), Thermometer #. Row 1: 2, 40 ml Glass, HCL, Yes, 4, 4025

Table with 10 columns: Analysis, Results, Units, RDL, Method, Date Run, Analyst, CAS #, Flags

Organics

Volatile Organics

Main data table listing various organic compounds (Benzene, Bromodichloromethane, etc.) with their results, units, RDLs, methods, dates, analysts, and CAS numbers.



Analytical Laboratory Report

Lab Sample ID: S09567.02 (continued)

Sample Tag: MWV03S Dup

Analysis	Results	Units	RDL	Method	Date Run	Analyst	CAS #	Flags
Organics (continued)								
Volatile Organics (continued)								
Acetone	Not detected	mg/L	0.05	8260	06/27/02	JGH	67-64-1	
2-Butanone (MEK)	Not detected	mg/L	0.05	8260	06/27/02	JGH	78-93-3	
Carbon disulfide	Not detected	mg/L	0.05	8260	06/27/02	JGH	75-15-0	
2-Hexanone	Not detected	mg/L	0.05	8260	06/27/02	JGH	591-78-6	
4-Methyl-2-pentanone (MIBK)	Not detected	mg/L	0.05	8260	06/27/02	JGH	108-10-1	



Analytical Laboratory Report

Lab Sample ID: S09567.03
 Sample Tag: Trip Blank
 Collected Date/Time: 06/21/2002 :
 Matrix: Groundwater
 COC Reference: 014869

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40 ml Glass	HCL	Yes	4	4025

Analysis	Results	Units	RDL	Method	Date Run	Analyst	CAS #	Flags
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Organics								
Volatile Organics								
Benzene	Not detected	mg/L	0.001	8260	06/26/02	JGH	71-43-2	
Bromodichloromethane	Not detected	mg/L	0.001	8260	06/26/02	JGH	75-27-4	
Bromoform	Not detected	mg/L	0.001	8260	06/26/02	JGH	75-25-2	
Bromomethane	Not detected	mg/L	0.005	8260	06/26/02	JGH	74-83-9	
n-Butylbenzene	Not detected	mg/L	0.001	8260	06/26/02	JGH	104-51-8	
sec-Butylbenzene	Not detected	mg/L	0.001	8260	06/26/02	JGH	135-98-8	
tert-Butylbenzene	Not detected	mg/L	0.001	8260	06/26/02	JGH	98-06-6	
Carbon tetrachloride	Not detected	mg/L	0.001	8260	06/26/02	JGH	56-23-5	
Chlorobenzene	Not detected	mg/L	0.001	8260	06/26/02	JGH	108-90-7	
Chloroethane	Not detected	mg/L	0.001	8260	06/26/02	JGH	75-00-3	
Chloroform	Not detected	mg/L	0.001	8260	06/26/02	JGH	67-66-3	
Chloromethane	Not detected	mg/L	0.001	8260	06/26/02	JGH	74-87-3	
Dibromochloromethane	Not detected	mg/L	0.001	8260	06/26/02	JGH	124-48-1	
1,2-Dichlorobenzene	Not detected	mg/L	0.001	8260	06/26/02	JGH	95-50-1	
1,3-Dichlorobenzene	Not detected	mg/L	0.001	8260	06/26/02	JGH	541-73-1	
1,4-Dichlorobenzene	Not detected	mg/L	0.001	8260	06/26/02	JGH	106-46-7	
1,1-Dichloroethane	Not detected	mg/L	0.001	8260	06/26/02	JGH	75-34-3	
1,2-Dichloroethane	Not detected	mg/L	0.001	8260	06/26/02	JGH	107-06-2	
1,1-Dichloroethene	Not detected	mg/L	0.001	8260	06/26/02	JGH	75-35-4	
cis-1,2-Dichloroethene	Not detected	mg/L	0.001	8260	06/26/02	JGH	156-59-2	
trans-1,2-Dichloroethene	Not detected	mg/L	0.001	8260	06/26/02	JGH	156-60-5	
1,2-Dichloropropane	Not detected	mg/L	0.001	8260	06/26/02	JGH	78-87-5	
cis-1,3-Dichloropropene	Not detected	mg/L	0.001	8260	06/26/02	JGH	10061-01-5	
trans-1,3-Dichloropropene	Not detected	mg/L	0.001	8260	06/26/02	JGH	10061-02-6	
Ethylbenzene	Not detected	mg/L	0.001	8260	06/26/02	JGH	100-41-4	
Isopropylbenzene	Not detected	mg/L	0.001	8260	06/26/02	JGH	98-82-8	
p-Isopropyltoluene	Not detected	mg/L	0.001	8260	06/26/02	JGH	99-87-6	
Methylene chloride	Not detected	mg/L	0.005	8260	06/26/02	JGH	75-09-2	
Naphthalene	Not detected	mg/L	0.001	8260	06/26/02	JGH	91-20-3	
n-Propylbenzene	Not detected	mg/L	0.001	8260	06/26/02	JGH	103-65-1	
Styrene	Not detected	mg/L	0.001	8260	06/26/02	JGH	100-42-5	
1,1,1,2-Tetrachloroethane	Not detected	mg/L	0.001	8260	06/26/02	JGH	79-34-5	
Tetrachloroethene	Not detected	mg/L	0.001	8260	06/26/02	JGH	127-18-4	
Toluene	Not detected	mg/L	0.001	8260	06/26/02	JGH	108-88-3	
1,1,1-Trichloroethane	Not detected	mg/L	0.001	8260	06/26/02	JGH	71-55-6	
1,1,2-Trichloroethane	Not detected	mg/L	0.001	8260	06/26/02	JGH	79-00-5	
Trichloroethene	Not detected	mg/L	0.001	8260	06/26/02	JGH	79-01-6	
1,2,4-Trimethylbenzene	Not detected	mg/L	0.001	8260	06/26/02	JGH	95-63-6	
1,3,5-Trimethylbenzene	Not detected	mg/L	0.001	8260	06/26/02	JGH	108-67-8	
Vinyl chloride	Not detected	mg/L	0.001	8260	06/26/02	JGH	75-01-4	
o-Xylene	Not detected	mg/L	0.001	8260	06/26/02	JGH	95-47-6	
p,m-Xylene	Not detected	mg/L	0.001	8260	06/26/02	JGH	106-42-3	



Lab Sample ID: S09567.03 (continued)

Sample Tag: Trip Blank

Analysis	Results	Units	RDL	Method	Date Run	Analyst	CAS #	Flags
Organics (continued)								
Volatile Organics (continued)								
Acetone	Not detected	mg/L	0.05	8260	06/26/02	JGH	67-64-1	
2-Butanone (MEK)	Not detected	mg/L	0.05	8260	06/26/02	JGH	78-93-3	
Carbon disulfide	Not detected	mg/L	0.05	8260	06/26/02	JGH	75-15-0	
2-Hexanone	Not detected	mg/L	0.05	8260	06/26/02	JGH	591-78-6	
4-Methyl-2-pentanone (MIBK)	Not detected	mg/L	0.05	8260	06/26/02	JGH	108-10-1	



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 Phone (517) 332-0167 Fax (517) 332-6333

C.O.C. PAGE # 1 OF 1

014869

REPORT TO

CHAIN OF CUSTODY RECORD

INVOICE TO

CONTACT NAME Babusukumar
 COMPANY Weston Solutions Inc.
 ADDRESS 3 Hawthorn Parkway, Suite 400
 CITY Vernon Hills STATE IL ZIP CODE 60061
 PHONE NO. 847-918-4000 FAX NO. _____ P.O. NO. _____
 E-MAIL ADDRESS _____ QUOTE NO. _____

CONTACT NAME _____ SAME
 COMPANY _____
 ADDRESS SAME
 CITY _____ STATE _____ ZIP CODE _____
 PHONE NO. _____ FAX NO. _____ P.O. NO. _____

PROJECT NO./NAME GM Linden Rd Site
 SAMPLER(S) - PLEASE PRINT NAME Kirk Lapham

PRESERVATIVE CODE E SAMPLE TYPE
 REFRIGERATE (Y/N) _____ GW WW OIL SOIL
 PRODUCT SLUDGE OTHER _____
 BOTTLE TYPE _____ RUSH ANALYSES DUE DATE _____
 RUSH PICK-UP APPROVED BY: _____
 ANALYSES

MERIT LAB NO.	SAMPLE COLLECTION YEAR:		SAMPLE TAG IDENTIFICATION-DESCRIPTION	# OF BOTTLES
	DATE	TIME		
<u>9567-01</u>	<u>6/21/02</u>	<u>11:25</u>	<u>MW 035</u>	<u>2</u>
<u>02</u>	<u>6/21/02</u>	<u>11:25</u>	<u>MW 035 Dup</u>	<u>2</u>
<u>03</u>	<u>6/21/02</u>	<u>11:30</u>	<u>KL Trip Blank</u>	<u>1</u>
	<u>6/21/02</u>	<u>11:30</u>	<u>KL</u>	

REFRIGERATE (Y/N)	BOTTLE TYPE	ANALYSES
<u>X</u>		<u>VOCs</u>
<u>X</u>		<u>VOCs</u>
<u>X</u>		<u>VOCs</u>

RELINQUISHED BY: SIGNATURE [Signature] DATE 6/21/02 TIME 13:15
 RECEIVED BY: SIGNATURE _____ DATE _____ TIME _____
 RELINQUISHED BY: SIGNATURE _____ DATE _____ TIME _____
 RECEIVED BY: SIGNATURE _____ DATE _____ TIME _____

RELINQUISHED BY: SIGNATURE [Signature] DATE 6/21/02 TIME 13:15
 RECEIVED AT MERIT BY: SIGNATURE [Signature] DATE 6/21/02 TIME 13:15
 SEAL NO. _____ SEAL INTACT YES NO INITIALS _____ NOTES: _____ TEMP. ON ARRIVAL _____
 SEAL NO. _____ SEAL INTACT YES NO INITIALS _____