

# WATER QUALITY LABORATORY

C&C of Honolulu, Department of Environmental Services, Division of Environmental Quality

1350 Sand Island Parkway, Bldg #9 Honolulu, Hawaii 96819 (808) 847-8360

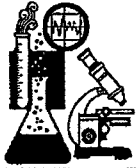
Login Date is: Friday, May 04, 2007

PRIORITY POLLUTANT SAMPLING SAMPLER: OKOTTENMEIER

SAMPLE NUMBER	SAMPLE DESCRIPTION	START DATE		START TIME		UNIT ANALYSES	
		END DATE	END DATE	END TIME	END TIME	TYPE	PRESERVATIVE
5142T01	Sand Island Effluent	5/4/07	5/4/07	0930		Grab	T Dieldrin Chlordane Temp. = 13.4°C #18 05/04/07
5142T03	Sand Island Effluent	5/4/07				Grab	T Dieldrin Chlordane
5142Z01	Sand Island Effluent	5/4/07				Grab	Z Pesticides
5142Z02	Sand Island Effluent	5/4/07				Grab	Z Pesticides
Relinquished by: <u>OKOTTENMEIER</u>		Received by Sample Custodian: <u>[Signature]</u>				Date/Time: 5/4/07 0940	
Relinquished by: <u>[Signature]</u>		Received for: Toxics <u>VIA ROOM</u> <u>310 SAMPLE REFRIGERATOR</u>				Date/Time: 5/10/07 0944	

Comp = Composite Sample Unit Codes: B = Aquatic Biology, C = General Chemistry, M = Microbiology, P = Pretreatment, T = Toxics, Z = Control Out





# WATER QUALITY LABORATORY

C&C of Honolulu, Department of Environmental Services, Division of Environmental Quality

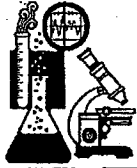
1350 Sand Island Parkway, Bld #9 Honolulu, Hawaii 96819 (808) 847-8360

Login Date is: Wednesday, May 02, 2007

PRIORITY POLLUTANT SAMPLING SAMPLER: Reginald Gao

SAMPLE NUMBER	SAMPLE DESCRIPTION	START DATE		START TIME		UNIT ANALYSES	
		END DATE	END DATE	END TIME	END TIME		
5139T01	Honouliuli Effluent	5/2/07		7:32		Grab T Dieldrin Chlordane	
5139T03	Honouliuli Effluent	5/2/07				Grab T Dieldrin Chlordane	
5139Z01	Honouliuli Effluent	5/2/07				Grab Z Pesticides	
5139Z02	Honouliuli Effluent	5/2/07				Grab Z Pesticides Temp = 0°C By: oclor 07	
Relinquished by: <u>Reginald Gao</u>		Received by Sample Custodian: <u>My My</u>				Date/Time: 05/02/07 0958	
Relinquished by: <u>My My</u>		Received for: Toxic: <u>VIA ROOM 310</u> <u>SAMPLE REPRESENTATIVE</u>				Date/Time: 05/02/07 0900	

Comp = Composite Sample Unit Codes: B = Aquatic Biology, C = General Chemistry, M = Microbiology, P = Pretreatment, T = Toxics, Z = Contracted Out



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C&C of Honolulu, Department of Environmental Services, Division of Environmental Quality

1350 Sand Island Parkway, Bld #9 Honolulu, Hawaii 96819 (808) 847-8360

Login Date is: Wednesday, May 02, 2007

PRIORITY POLLUTANT SAMPLING SAMPLER: Reynoldson / L. SAUZAK - FAULTA

SAMPLE NUMBER	SAMPLE DESCRIPTION	START DATE	START TIME	UNIT ANALYSES	
		END DATE	END TIME	TYPE	PRESERVATIVE
5143T01	Sand Island Influent	5/1/07 5/2/07	11:18 1103	Comp	T Dieldrin Chlordane
5144T01	Sand Island Effluent	5/1/07 5/2/07	10:54 1039	Comp	T Dieldrin Chlordane TEMP. = 0°C
5144T02	Sand Island Effluent	5/1/07 5/2/07	↓	Comp	T Dieldrin Chlordane

Relinquished by: <i>[Signature]</i>	Received by Sample Custodian: <i>[Signature]</i>	Date/Time 5/2/07 1142
Relinquished by: <i>[Signature]</i>	Received for: Toxics <i>[Signature]</i>	Date/Time 05/02/07 1143

Comp = Composite Sample Unit Codes: B = Aquatic Biology, C = General Chemistry, M = Microbiology, P = Pretreatment, T = Toxics, Z = Contracted Out

**CH2M Hill Applied Sciences Lab**  
**CHAIN OF CUSTODY RECORD**  
**AND AGREEMENT TO PERFORM SERVICES**

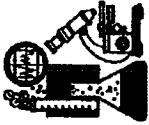
CVO 2300 NW Walnut Boulevard  
 Corvallis, OR 97330-3638  
 (541) 752-4271 FAX (541) 752-0276

COC #

Project # <b>334222.0112</b>		Purchase Order #		THIS AREA FOR LAB USE ONLY	
Project Name <b>CCH Special Study</b>		Requested Analytical Method #		Lab #	Page of
Company Name <b>City &amp; County of Honolulu</b>		Preservative		EPA Tier QC Level	
Project Manager or Contact & Phone # <b>Dennis Shelton/CVO</b>		Report Copy to:		1 (Screening) 2 3 4	Lab ID
Requested Completion Date: Site ID		Sample Disposit:		Alternate Description	
		Discose <input type="checkbox"/> Return <input type="checkbox"/>			
TOTAL # OF CONTAINERS		CLIENT SAMPLE ID (9 CHARACTERS)		LAB QC	
2		Sand Island WTP			
5/2/07 8:55		5140Z01			
5/2/07 8:55		5140Z02			
5/2/07 7:32		Handwritten WTP			
5/2/07 7:32		5139Z01			
5/2/07 7:32		5139Z02			
Requested By <b>W. C. P. Burges</b>		Date/Time <b>5/2/07 2:07</b>		Received By <b>Mr. Wu</b>	
Sampled By <b>See Attached Chain of Custody</b>		Date/Time <b>5/2/07 9:00</b>		Relinquished By <b>REINWAD 600</b>	
Received By		Date/Time		Date/Time <b>5/2/07 9:32</b>	
Received By		Date/Time		Shipping #	
Special Instructions:		Shipped Via		Fed-Ex Other	

DISTRIBUTION: Original - LAB, Yellow - LAB, Pink - Client  
 REV 09/2006 LAB FORM 340

Instructions and Agreement Provisions on Reverse Side



# WATER QUALITY LABORATORY

C&C of Honolulu, Department of Environmental Services, Division of Environmental Quality  
1350 Sand Island Parkway, Bld #9 Honolulu, Hawaii 96819 (808) 847-3360

## EPA 608 Organochlorine Pesticides/PCBs Analytical Report

Sampling Site: Honouliuli (H) & Sand Island (S)  
Sampling Dates: 5/2/2007 for H5 & S5  
5/4/2007 for H6 & S6  
Extraction Date: 5/4/2007  
Completion Date: 5/8/2007

Toxics Log Numbers:

Equipment: HP 6890GC  
5139TD1 5140T01 5141T01 5142T01 5139T01

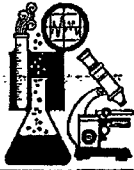
Analyte	MDL ug/L	ML ug/L	5139TD1		5140T01		5141T01		5142T01		Blank ug/L	Effluent MS %R	LCS %R	Method %R Range
			Effluent (H5) ug/L	Effluent (S5) ug/L	Effluent (H6) ug/L	Effluent (S6) ug/L	Effluent (H6) ug/L	Effluent (S6) ug/L						
Chlordane	0.020	0.100	0.034 J	0.033 J	0.039 J	0.033 J	ND	64%	76%	45% - 119%	ND	96%	89%	36% - 146%
Dieldrin	0.004	0.008	0.009	0.019	0.012	0.026	ND	79%	78%	60% - 150%*	75%	85%	77%	60% - 180%*
Surrogates														
TMX %R			71%	74%	71%	76%	79%	76%	78%	60% - 150%*				
DCB %R			60%	65%	47%	68%	75%	65%	77%	60% - 180%*				

\*Advisory QC %R Range

J - qualifier flag for estimate—result is between the MDL and ML  
ND - not detected at or above the MDL

*Pauline S. Delaney 5/18/07*  
Analyst

*Reginald (Ray) Sp/07*  
Supervisor



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C&C of Honolulu, Department of Environmental Services, Division of Environmental Quality

1350 Sand Island Parkway, Bld #9 Honolulu, Hawaii 96819 (808) 847-8360

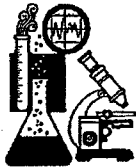
Login Date is: Monday, April 30, 2007

PRIORITY POLLUTANT SAMPLING

SAMPLER: Reginald Pau

SAMPLE NUMBER	SAMPLE DESCRIPTION	START DATE	START TIME	TYPE	UNIT ANALYSES		
		END DATE	END TIME		PRESERVATIVE		
5137T01	Honouliuli Effluent	4/30/07	7:39	Grab	T	Dieldrin Chlordane	
5137T03	Honouliuli Effluent	4/30/07		Grab	T	Dieldrin Chlordane	Temp: 1.6°C ht 04/30/07
5137Z01	Honouliuli Effluent	4/30/07		Grab	Z	Pesticides	
5137Z02	Honouliuli Effluent	4/30/07		Grab	Z	Pesticides	
Relinquished by: <u>Reginald Pau</u>		Received by Sample Custodian: <u>huy huy</u>		Date/Time: <u>08 04/30/07</u> <u>0843</u>			
Relinquished by: <u>huy huy</u>		Received for: Toxics: <u>VIA ROOM 3.0</u> <u>SAMPLE REFRIGERATOR</u>		Date/Time: <u>04/30/07</u> <u>0926</u>			

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C&C of Honolulu, Department of Environmental Services, Division of Environmental Quality

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Login Date is: Monday, April 30, 2007

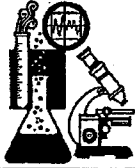
PRIORITY POLLUTANT SAMPLING SAMPLER: F Yamamoto

SAMPLE NUMBER	SAMPLE DESCRIPTION	START DATE	START TIME	TYPE	UNIT ANALYSES		
		END DATE	END TIME		PRESERVATIVE		
5138T01	Sand Island Effluent	4/30/07	0852	Grab	T	Dieldrin Chlordane	
5138T03	Sand Island Effluent	4/30/07		Grab	T	Dieldrin Chlordane	TEMP = 13.4°C MS 04/30/07
5138Z01	Sand Island Effluent	4/30/07		Grab	Z	Pesticides	
5138Z02	Sand Island Effluent	4/30/07		Grab	Z	Pesticides	
Relinquished by: <u>F. Yamamoto</u>		Received by Sample Custodian: <u>My My</u>		Date/Time: <u>04/30/07</u> <u>0900</u>			
Relinquished by: <u>My My</u>		Received for: Toxics: <u>VIA ROOM 310</u> <u>SAMPLE REFRIGERATOR</u>		Date/Time: <u>04/30/07</u> <u>0924</u>			

Comp = Composite Sample Unit Codes: B = Aquatic Biology, C = General Chemistry, M = Microbiology, P = Pretreatment, T = Toxics, Z = Contracted Out







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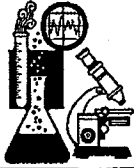
1350 Sand Island Parkway, Bldg 9 Honolulu, Hawaii 96819 (808) 847-5360

Login Date is: Saturday, April 28, 2007

PRIORITY POLLUTANT SAMPLING SAMPLER: Reginald Bow

SAMPLE NUMBER	SAMPLE DESCRIPTION	START DATE	START TIME	UNIT ANALYSES	
		END DATE	END TIME	TYPE	PRESERVATIVE
5135T01	Honouliuli Effluent	4/28/2007	7:38	Grab	T Dieldrin Chlordane
5135Z01	Honouliuli Effluent	4/28/2007	↓	Grab	Z Pesticides
5135Z02	Honouliuli Effluent	4/28/2007		Grab	Z Pesticides
Relinquished by: <i>Reginald Bow</i>		Received by Sample Custodian: <i>Locked in Room 310 Refrigerator</i>		Date/Time <i>4/28/07 8:30 AM</i>	
Relinquished by:		Received for: Toxic:		Date/Time	

Comp = Composite Sample Unit Codes: B = Aquatic Biology, C = General Chemistry, M = Microbiology, P = Pretreatment, T = Toxics, Z = Contracted Out



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C&C of Honolulu, Department of Environmental Services, Division of Environmental Quality

1350 Sand Island Parkway, Bldg #9 Honolulu, Hawaii 96819 (808) 847-8360

Login Date is: Saturday, April 28, 2007

PRIORITY POLLUTANT SAMPLING SAMPLER: *W. Kottmeyer*

SAMPLE NUMBER	SAMPLE DESCRIPTION	START DATE	START TIME	UNIT ANALYSES	
		END DATE	END TIME	TYPE	PRESERVATIVE
5136T01	Sand Island Effluent	4/28/2007	0910	Grab	T Dieldrin Chlordane
5136Z01	Sand Island Effluent	4/28/2007		Grab	Z Pesticides
5136Z02	Sand Island Effluent	4/28/2007		Grab	Z Pesticides
Relinquished by: <i>W. Kottmeyer</i>		Received by Sample Custodian: <i>Room Fridge in 310</i>		Date/Time: <i>4/28/07 0920</i>	
Relinquished by:		Received for: Toxics:		Date/Time:	

Comp = Composite Sample Unit Codes: B = Aquatic Biology, C = General Chemistry, M = Microbiology, P = Pretreatment, T = Toxics, Z = Contracted Out

**CH2M HILL Applied Sciences Lab**  
**CHAIN OF CUSTODY RECORD**  
**AND AGREEMENT TO PERFORM SERVICES**

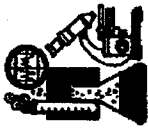
C/O 2300 NW Walnut Boulevard  
 Corvallis, OR 97330-3638  
 (541) 762-4271 FAX (541) 762-0276

COC #

Project # <b>334-222-01.12</b>		Purchase Order #		THIS AREA FOR LAB USE ONLY									
Project Name <b>CCH Special Study</b>		Company Name <b>City &amp; County of Honolulu</b>		Lab #									
Project Manager or Contact & Phone # <b>Dennis Shelton / CVO</b>		Report Copy to:		Page of									
Requested Completion Date: _____		Site ID		Requested Analytical Method #									
Sample Disposal: Dispose <input type="checkbox"/> Return <input type="checkbox"/>		LAB QC		Preservative									
Type Matrix		CLIENT SAMPLE ID (9 CHARACTERS) <b>SAND Island WWT</b>		EPA Tier QC Level									
C R O M P		S A T A		1 (Screening) 2 3 4									
W A T E R		S O I L		Alternate Description									
Date		Time		Lab ID									
4/28/07 9:10		✓		2									
4/28/07 9:10		✓		2									
4/28/07 7:38		✓		2									
4/28/07 7:38		✓		2									
Relinquished By <b>Reginald Jr</b>		Date/Time <b>4/28/07 7:38</b>		Received By									
Sampled By and This <b>See Attached Chain of Custody</b>		Date/Time <b>4/28/07 7:38</b>		Relinquished By (Please sign and print name)									
Received By		Date/Time		Relinquished By (Please sign and print name)									
Received By		Date/Time		Shipped Via UPS Fed-Ex Other									
Special Instructions:				Shipping #									

Instructions and Agreement Provisions on Reverse Side

DISTRIBUTION: Original - LAB, Yellow - LAB, Pink - Client  
 REV 09/2006 LAB FORM 340



# WATER QUALITY LABORATORY

C&C of Honolulu, Department of Environmental Services, Division of Environmental Quality  
 1350 Sand Island Parkway, Bld #9 Honolulu, Hawaii 96819 (808) 847-8360

## EPA 608 Organochlorine Pesticides/PCBs Analytical Report

Sampling Site: Honolulu (H) & Sand Island (S)  
 Sampling Dates: 4/28/2007 for H3 & S3  
 4/30/2007 for H4 & S4  
 Extraction Date: 4/30/2007  
 Completion Date: 5/3/2007

Toxics Log Numbers:

Equipment: HP 6890GC

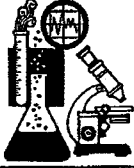
Analyte	5135T01		5137T01		5138T01		5138T01		5138T01		Method %R Range
	MDL ug/L	ML ug/L	Effluent (H3) ug/L	Effluent (H4) ug/L	Effluent (S3) ug/L	Effluent (S4) ug/L	Blank ug/L	Effluent MS %R	LCS %R		
Chlordane	0.020	0.100	ND	ND	0.033 J	0.042 J	ND	64%	74%	45% - 116%	
Dieldrin	0.004	0.009	0.008 J	0.011	0.019	0.022	ND	94%	86%	36% - 146%	
<b>Surrogates</b>											
TMX %R			74%	83%	80%	76%	85%	76%	78%	60% - 150%*	
DCB %R			69%	81%	66%	74%	94%	69%	63%	60% - 150%*	

\*Advisory QC %R Range

J - qualifier flag for estimate--result is between the MDL and ML  
 ND - not detected at or above the MDL

*Richard S. Takayama 5/24/07*  
 Analyst

*Reginald Brown 5/24/07*  
 Supervisor



# WATER QUALITY LABORATORY

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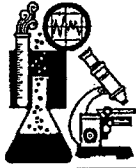
1350 Sand Island Parkway, Bld #9 Honolulu, Hawaii 96819 (808) 847-8360

Login Date is: Thursday, April 26, 2007

PRIORITY POLLUTANT SAMPLING SAMPLER: LIELA SAUZAR - FLAUTA

SAMPLE NUMBER	SAMPLE DESCRIPTION	START DATE	START TIME	UNIT ANALYSES	
		END DATE	END TIME	TYPE	PRESERVATIVE
5133T01	Honouliuli Effluent	4/26/2007	0825	Grab	T Dieldrin Chlordane
5133Z01	Honouliuli Effluent	4/26/2007	↓	Grab	Z Pesticides
5133Z02	Honouliuli Effluent	4/26/2007	↓	Grab	Z Pesticides
Relinquished by: <i>[Signature]</i>		Received by Sample Custodian: <i>[Signature]</i>		Date/Time: 4/26/07 0925 AM	
Relinquished by: <i>[Signature]</i>		Received for: Toxics: <i>[Signature]</i>		Date/Time: 4/26/07 0930 AM	

Comp = Composite Sample Unit Codes: B = Aquatic Biology, C = General Chemistry, M = Microbiology, P = Pretreatment, T = Toxics, Z = Contracted Out



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C&C of Honolulu, Department of Environmental Services, Division of Environmental Quality

1350 Sand Island Parkway, Bld #9, Honolulu, Hawaii 96819 (808) 847-8360

Login Date is: Thursday, April 26, 2007

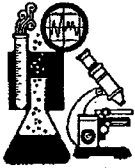
PRIORITY POLLUTANT SAMPLING SAMPLER: W. Kottumier

SAMPLE NUMBER	SAMPLE DESCRIPTION	START DATE	START TIME	UNIT ANALYSES
		END DATE	END TIME	
5134T01	Sand Island Effluent	4/26/2007	0930	Grab T Dieldrin Chlordane
5134Z01	Sand Island Effluent	4/26/2007		Grab Z Pesticides
5134Z02	Sand Island Effluent	4/26/2007		Grab Z Pesticides
Relinquished by: <u>W. Kottumier</u>		Received by Sample Custodian: <u>[Signature]</u>		Date/Time: 4/26/07 0914
Relinquished by: <u>[Signature]</u>		Received for: <u>[Signature]</u>		Date/Time: 04/26/07 0919

Comp = Composite Sample Unit Codes: B = Aquatic Biology, C = General Chemistry, M = Microbiology, P = Pretreatment, T = Toxics, Z = Contracted Out







# WATER QUALITY LABORATORY

C&C of Honolulu, Department of Environmental Services, Division of Environmental Quality

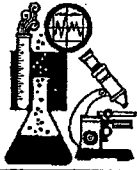
350 Sand Island Parkway, Bldg #9 Honolulu, Hawaii 96819 (808) 847-8360

Login Date is: Tuesday, April 24, 2007

PRIORITY POLLUTANT SAMPLING SAMPLER: Reginald Gao

SAMPLE NUMBER	SAMPLE DESCRIPTION	START DATE	START TIME	UNIT ANALYSES	
		END DATE	END TIME	TYPE	PRESERVATIVE
5131T01	Honouliuli Effluent	4/24/2007	7:30	Grab	T Dieldrin Chlordane
5131Z01	Honouliuli Effluent	4/24/2007		Grab	Z Pesticides
5131Z02	Honouliuli Effluent	4/24/2007		Grab	Z Pesticides
Relinquished by: <u>Reginald Gao</u>		Received by Sample Custodian: <u>Mary May</u>		Date/Time: 04/24/07 0840	
Relinquished by: <u>Mary May</u>		Received for: Toxics <u>Reginald Gao</u>		Date/Time: 04/24/07 0850	

Comp = Composite Sample Unit Codes: B = Aquatic Biology, C = General Chemistry, M = Microbiology, P = Pretreatment, T = Toxics, Z = Contracted Out



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1350 Sand Island Parkway Bld #9 Honolulu, Hawaii 96819 (808) 847-8360

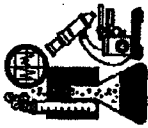
Login Date is: Tuesday, April 24, 2007

PRIORITY POLLUTANT SAMPLING SAMPLER: L VAZQUEZ

SAMPLE NUMBER	SAMPLE DESCRIPTION	START DATE	START TIME	TYPE	PRESERVATIVE	UNIT ANALYSES
		END DATE	END TIME			
5132T01	Sand Island Effluent	0725 4/24/2007		Grab	T	Dieldrin Chlordane
5132Z01	Sand Island Effluent	0725 4/24/2007	↓	Grab	Z	Pesticides
5132Z02	Sand Island Effluent	0725 4/24/2007	↓	Grab	Z	Pesticides
Relinquished by: <i>S. Vazquez</i>		Received by Sample Custodian: <i>Mary Mary</i>		Date/Time: 04/24/07 0742		
Relinquished by: <i>Mary Mary</i>		Received for: Toxics: <i>Reginald</i>		Date/Time: 04/24/07 0850		

Comp = Composite Sample Unit Codes: A = Aquatic Biology, C = General Chemistry, M = Microbiology, P = Pretreatment, T = Toxics, Z = Contracted Out





# WATER QUALITY LABORATORY

C&C of Honolulu, Department of Environmental Services, Division of Environmental Quality  
1330 Sand Island Parkway, Bid #9 Honolulu, Hawaii 96819 (808) 847-8360

## EPA 608 Organochlorine Pesticides/PCBs Analytical Report

Sampling Site: Honouliuli (H) & Sand Island (S)  
Sampling Dates: 4/24/2007 for H1 & S1  
4/28/2007 for H2 & S2  
Extraction Date: 4/28/2007  
Completion Date: 4/29/2007

Toxics Log Numbers:

Equipment: HP 6890GC  
5131T01 5132T01 5134T01  
5133T01

Analyte	MDL ug/L	ML ug/L	5131T01		5132T01		5134T01		Effluent (S2) ug/L	Blank ug/L	Effluent MS %R	LCS %R	Method %R Range
			Effluent (H1) ug/L	Effluent (H2) ug/L	Effluent (S1) ug/L	Effluent (J) ug/L							
Chlordane	0.020	0.100	ND	0.047 J	0.039 J	0.050 J	ND	89%	84%	84%	84%	45% - 118%	
Dieldrin	0.004	0.009	0.014	0.022	0.017	0.028	ND	88%	84%	88%	84%	38% - 146%	
Surrogates													
TMX %R			74%	79%	71%	80%	89%	73%	83%	73%	83%	60% - 150%*	
DCB %R			76%	72%	78%	86%	103%	77%	93%	77%	93%	60% - 150%*	

\*Advisory QC %R Range

J - qualifier flag for estimate--result is between the MDL and ML  
ND - not detected at or above the MDL

Richard S. Taberger 5/15/07

Analyst

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Supervisor