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# Lawrence Livermore National Laboratory Rotenone Project Data Summary

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Prepared for: California Department of Fish and Game

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### Location IDs

CDBE	approx. 3 ft depth
CDBF	approx. 6 ft depth
CDBK	approx. 3 ft depth
CDBL	approx. 6 ft depth
CDBN	approx. 3 ft depth
CDBP	approx. 6 ft depth
Q1	QA sample Lake water
Q2	QA sample DI water

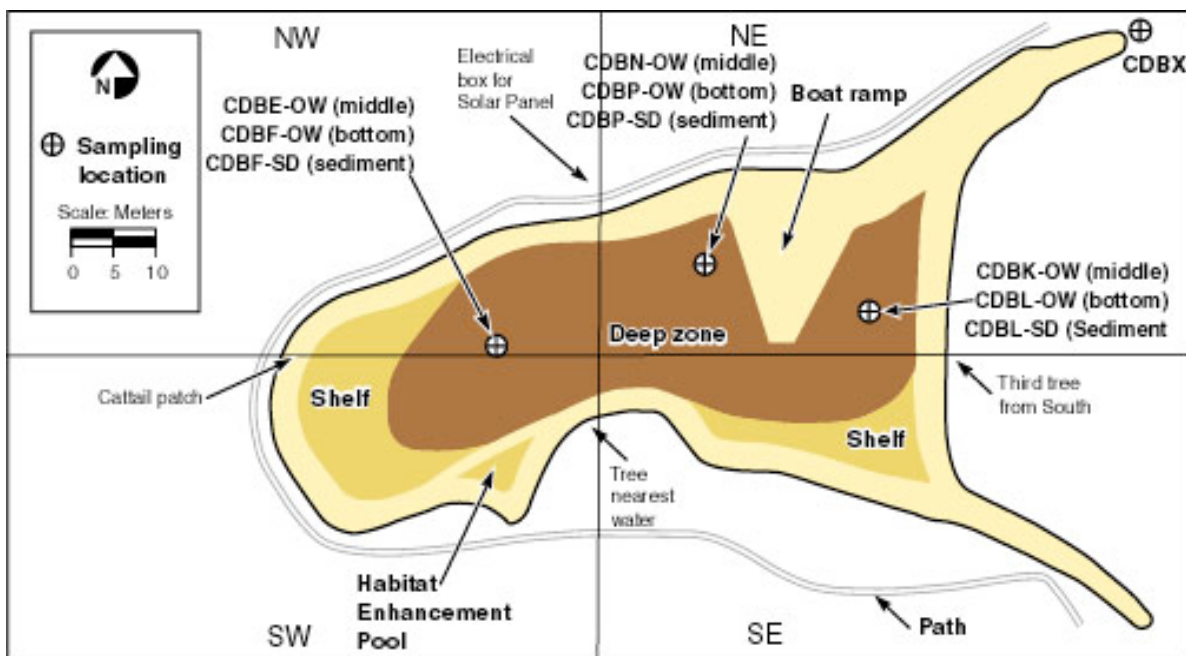


Figure 1. LLNL Lake Haussmann, formerly known as Drainage Retention Basin (DRB).

<b>Rotenone and Organic data</b>								
<b>rotenone</b>								
sample date	CDBE	CDBF						
9/25/06	<1ug/l	<1ug/l						
sample date	CDBE	CDBF	CDBK	CDBL	CDBN	CDBP	Q1	Q2
10/6/06	45.6	76.5	48	42	35.1	<1ug/l	19.1	203
10/9/06	8.22	11	5.13	5.9	6.4	6.85		
10/11/06	<1ug/l	<1ug/l	<1ug/l	<1ug/l	<1ug/l	<1ug/l		
10/23/06	nd	nd	nd	nd	nd	nd		
10/30/06	nd	nd	nd	nd	nd	nd		
<b>sediment rotenone</b>		location						
sample date	CDBF	CDBL	CDBP	MRL=50ppb				
9/25/06	<50ppb							
10/6/06	100	<50	<50					
10/9/06	100	150	170					
10/11/06	180	220	90					
10/23/06	nd	nd	nd					
10/30/06	nd	nd	nd					
<b>rotenolone+rotenone</b>			location					
sample date	CDBE	CDBF	CDBK	CDBL	CDBN	CDBP	Q1	Q2
10/6/06	150	287	198	171	168	<1ug/l	175	224
10/9/06	193	223	136	128	152	136		
10/11/06	113	129	103	106	110	114		
10/23/06	nd	nd	nd	nd	nd	nd		
10/30/06	nd	nd	nd	nd	nd	nd		
<b>rotenolone</b>			location					
sample date	CDBE	CDBF	CDBK	CDBL	CDBN	CDBP	Q1	Q2
10/6/06	104.4	210.5	150	129	132.9	<1ug/l	156	21
10/9/06	185	212	131	122	146	129		
10/11/06	113	129	103	106	110	114		
10/23/06	nd	nd	nd	nd	nd	nd		
10/30/06	nd	nd	nd	nd	nd	nd		
<b>E625 naphthalene</b>		location						
sample date	CDBE	CDBK	CDBN	RL=5ppb				
10/6/06	1.8	2.1	2					
10/9/06	1.3	0.88	1					
10/11/06	0.87	<.83	<.83					
10/23/06	<.83	<.83	<.83					
10/30/06	<.84	<.83	<.83					
<b>diethylene glycol ethyl ether 111-90-0 (Ethanol,2-(2-ethoxyethoxy)-ethanol</b>								
sample date	CDBE	CDBK	CDBN	RL=5ppb				
10/6/06	200	240	250					
10/9/06	210	150	160					
10/11/06	160	120	130					
10/23/06	<5	<5	<5					
10/30/06	<4.9	<4.8	<4.9					

<b>Rotenone and Organic data</b>				
<b>Methyl pyrrolidone 872-50-4 (1-Methyl-2-pyrrolidone)</b>				
		location		
sample date	CDBE	CDBK	CDBN	RL=5ppb
10/6/06	120	130	140	
10/9/06	130	92	100	
10/11/06	110	85	97	
10/23/06	<5	<5	<5	
10/30/06	<4.9	<4.8	<4.9	
<b>E8260 ethylbenzene</b>				
		location		
sample date	CDBE	CDBK	CDBN	PQL=0.5ug/l
10/6/06	nd	0.8	0.7	
10/9/06	nd	nd	nd	
10/11/06	nd	nd	nd	
10/23/06	nd	nd	nd	
10/30/06	nd	nd	nd	
<b>E8260 Methylene chloride</b>				
		location		
sample date	CDBE	CDBK	CDBN	PQL=1ug/l
10/6/06	1.8	2.2	2.4	
10/9/06	1.3	nd	1.2	
10/11/06	1.2	nd	nd	
10/23/06	nd	nd	nd	
10/30/06	nd	nd	nd	
<b>E8260 Toluene</b>				
		location		
sample date	CDBE	CDBK	CDBN	PQL=0.5ug/l
10/6/06	1.6	3.8	3.2	
10/9/06	0.81	nd	0.56	
10/11/06	nd	nd	nd	
10/23/06	nd	nd	nd	
10/30/06	nd	nd	nd	
<b>E8260 total xylenes</b>				
		location		
sample date	CDBE	CDBK	CDBN	PQL=0.5ug/l
10/6/06	1.6	4.3	3.7	
10/9/06	1.2	0.93	1.1	
10/11/06	nd	nd	nd	
10/23/06	nd	nd	nd	
10/30/06	nd	nd	nd	

<b>Field data collected every 2 hrs 10/6/06 to 10/13/06</b>								
From the YSI 6600								
	Temp	SpCond	Cond	TDS	DOsat	pH	Turbid+	Chl
	C	uS/cm	uS/cm	g/L	%		NTU	ug/L
	-----	-----	-----	-----	-----	-----	-----	-----
Mean	19.04	837.94	742.52	0.54	146.14	9.77	4.83	-1.62
Median	19.00	838.00	742.00	0.55	146.00	9.77	4.80	-1.80
Stdev	0.61	0.84	9.96	0.00	18.25	0.06	0.43	1.07
Min	17.78	835.00	722.00	0.54	108.50	9.64	4.20	-3.50
Max	20.37	840.00	766.00	0.55	187.50	9.88	5.60	4.50
N	81	81	81	81	81	81	81	81
<b>From the HydroLab MS5 HACH Co</b>								
	Temp	pH	cond	turb	turb	turb		
	°C	Units	µS/cm	meters	mg/l-N	NTU		
	-----	-----	-----	-----	-----	-----		
Mean	18.68	9.92	790.51	2.49	3.43	11.41		
Median	18.64	9.94	791.00	2.49	3.46	11.10		
Stdev	0.38	0.06	0.82	0.03	0.49	2.57		
Min	17.73	9.80	788.00	2.44	2.59	10.30		
Max	19.81	10.03	792.00	2.55	4.36	33.70		
N	81	81	81	81	81	81		
<b>Additional Field Data Collected using a UV-Spec device - Inspectra</b>								
	TSS	COD	BOD	TOC	Nitrate (NO3)			
	mg/L	mg/L	mg/L	mg/L	mg/L			
	-----	-----	-----	-----	-----			
Mean	<2.5	8.32	0.68	2.51	0.85			
Median	na	8.70	0.50	2.60	0.85			
Stdev	na	1.59	0.40	0.46	0.49			
Min	na	6.00	0.30	1.80	<0.50			
Max	na	10.20	1.50	3.00	1.2			
N	11	11	11	11	11			

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