

THIS FILE LISTS SAMPLING DATA FROM THE FIVE MONITORING WELLS LOCATED AROUND LAKE KILLDEER. THESE WELLS WERE INSTALLED IN JUNE 1981.

WELL #	NH3-N (PPM)	NO3-N (PPM)	SO4 (PPM)	pH (SU)	WATER DEPTH (FT)	SURFACE ELEV (FT)	DATE
-----							
1	-	-	-	-	11.0	183.0	4/24/81
1	-	-	-	-	10.7	"	4/28/81
1	0.12	0.35	-	6.0	-	"	4/30/81
1	-	-	-	-	9.5	"	5/20/81
1	1.0	7.0	-	7.0	11.1	"	10/1/81
1	<1.0	3.1	398	5.9	8.3	"	2/2/83
-----							
2	-	-	-	-	1.3	153.5	4/24/81
2	-	-	-	-	1.3	"	4/28/81
2	6.8	38.0	-	5.2	-	"	4/30/81
2	-	-	-	-	0.9	"	5/20/81
2	0	27.0	-	6.8	4.7	"	10/1/81
2	<1.0	2.6	276	6.0	0.5	"	2/2/83
-----							
3	-	-	-	-	17.3	181.6	4/28/81
3	0.1	1.5	-	5.4	-	"	4/30/81
3	-	-	-	-	22.1	"	5/20/81
3	0	55.0	-	6.8	23.0	"	10/1/81
3	<1.0	0.83	6.2	6.9	17.5	"	2/2/83
-----							
4	-	-	-	-	3.3	162.3	4/28/81
4	0.1	1.9	-	5.4	-	"	4/30/81
4	-	-	-	-	0.6	"	5/20/81
4	0	6.0	-	6.7	3.9	"	10/1/81
4	<1.0	4.1	13.5	4.9	(0.6)	"	2/2/83
-----							
5	-	-	-	-	5.1	157.1	4/28/81
5	0.1	0.4	-	4.4	-	"	4/30/81
5	-	-	-	-	0.8	"	5/20/81
5	1.0	8.0	-	6.7	4.1	"	10/1/81
5	<1.0	11.3	45.1	4.9	0.7	"	2/2/83

DISTANCE FROM TOP OF WELL PIPE TO GROUND SURFACE:

WELL #	DISTANCE (FT)
1	2.4
2A	1.8
3	2.3
4	1.8
5	2.3

THIS LIST CONSOLIDATES ALL THE SAMPLING INFORMATION ASSOCIATED WITH THE FIVE SHALLOW GROUND-WATER MONITORING WELLS LOCATED AT THE TWO CLOSED LANDFILLS. THE DATA IS CURRENT AS OF THE DATE SHOWN. ALSO SHOWN ARE THE PRIMARY DRINKING WATER STANDARDS FOR REFERENCE.

PARAMETER	UNIT	WELLS					DATE	LAB
		A	B	C	D	E		
VANADIUM	PPM	<0.5	<0.5	<0.5	<0.5	N/A*	10/7/80	N
VANADIUM	PPM	<0.11	<0.11	<0.11	<0.11	N/A	3/17/81	E
VANADIUM	PPB	<9.0	<9.0	<9.0	<9.0	N/A	11/17/81	E
VANADIUM	PPB	<9.0	<9.0	<9.0	<9.0	N/A	11/17/81	E
VANADIUM	PPM	<0.04	<0.04	0.04	<0.04	<0.04	2/22/82	R
VANADIUM	PPM	0.05	0.04	0.98	0.04	0.04	6/19/82	R
VANADIUM	PPB			<9.0		17.6	12/10/82	E
VANADIUM	PPM	<0.04	<0.04	<0.04	<0.04	<0.04	12/14/82	R
SULFATE	MG/L	87.4	196	141	14	N/A	11/17/81	E
SULFATE	MG/L	89.5	190	152	15	N/A	11/17/81	E
SULFATE	MG/L	205.0	130.0	650.0	<2.0	245.0	2/22/82	R
SULFATE	MG/L	187.0	87.0	456.0	11	12.0	6/19/82	R
SULFATE	MG/L			658.0		159.0	12/10/82	M
SULFATE	MG/L			750.0		174.0	12/10/82	E
SULFATE	MG/L	187.0	142.0	580.0	24.0	108.0	12/14/82	R
PH	S.U.	7.0	7.5	7.2	7.1		11/17/81	E
PH	S.U.	7.0	6.7	7.1	7.1		11/17/81	E
PH	S.U.			4.3		6.2	12/10/82	M
ANTIMONY	MG/L		0.03			0.02	2/22/82	R
ARSENIC	MG/L		<0.01			<0.01	2/22/82	R
ARSENIC	MG/L			0.05		0.01	12/14/82	R
BARIUM	MG/L			0.04		0.04	12/14/82	R
BERYLLIUM	MG/L		<0.005			<0.005	2/22/82	R
CADMIUM	MG/L		<0.001			<0.001	2/22/82	R
CADMIUM	MG/L			<0.001		<0.001	12/14/82	R
CHROMIUM	MG/L		<0.003			<0.003	2/22/82	R
CHROMIUM	MG/L			<0.003		<0.003	12/14/82	R
COPPER	MG/L		0.039			0.059	2/22/82	R
FLOURIDE	MG/L			0.01		<0.01	12/14/82	R
LEAD	MG/L		<0.01			<0.01	2/22/82	R
LEAD	MG/L			<0.01		<0.01	12/14/82	R
MERCURY	MG/L		<0.002			<0.002	2/22/82	R
MERCURY	MG/L			<0.002		<0.002	12/14/82	R
NICKEL	MG/L		<0.005			<0.005	2/22/82	R

NITRATE	MG/L	[49.95]	3.00	12/14/82	R
SELENIUM	MG/L	[0.03]	[0.04]	2/22/82	R
SELENIUM	UG/L	[0.088]	[0.018]	12/10/82	E
SELENIUM	MG/L	[0.05]	<0.01	12/14/82	R
SILVER	MG/L	<0.002	<0.002	2/22/82	R
SILVER	MG/L	<0.002	<0.002	12/14/82	R
THALLIUM	MG/L	0.03	0.02	2/22/82	R

LAB CODES: N - NORTHRUP SERVICES, INC.; LITTLE ROCK, ARK.  
 E - ENSCO; EL DORADO, ARK.  
 R - ENVIRO-MED; RUSTON, LA.  
 M - PLANT LAB

\* - WELL "E" WAS DRILLED IN DECEMBER 1981; THE OTHERS IN AUGUST 1980  
 \* - [ ] INDICATES VALUES EXCEEDING THE PRIMARY DRINKING WATER STANDARDS

PRIMARY DRINKING WATER STANDARDS:

PARAMETER	VALUE	UNIT	SOURCE	DATE	N
ARSENIC	0.05	MG/L	40CFR 141.11	7/1/78	-
BARIUM	1.0	MG/L	40CFR 141.11	7/1/78	-
CADMIUM	0.010	MG/L	40CFR 141.11	7/1/78	-
CHROMIUM	0.05	MG/L	40CFR 141.11	7/1/78	-
LEAD	0.05	MG/L	40CFR 141.11	7/1/78	-
MERCURY	0.002	MG/L	40CFR 141.11	7/1/78	-
NITRATE (AS N)	10.0	MG/L	40CFR 141.11	7/1/78	C
SELENIUM	0.01	MG/L	40CFR 141.11	7/1/78	-
SILVER	0.05	MG/L	40CFR 141.11	7/1/78	-
FLOURIDE	2.4-1.4	MG/L	40CFR 141.11	7/1/78	A
ENDRIN	0.0002	MG/L	40CFR 141.12	7/1/78	-
LINDANE	0.004	MG/L	40CFR 141.12	7/1/78	-
METHOXYCHLOR	0.1	MG/L	40CFR 141.12	7/1/78	-
TOXAPHENE	0.005	MG/L	40CFR 141.12	7/1/78	-
2,4-D	0.1	MG/L	40CFR 141.12	7/1/78	-
2,4,5-TP SILVEX	0.01	MG/L	40CFR 141.12	7/1/78	-
TURBIDITY	1-5	TU	40CFR 141.13	7/1/78	B
COLIFORM BACTERIA	1-4	BAC	40CFR 141.14	7/1/78	D
COMBINED R-226 & R-228	5	PCI/1	40CFR 141.15	7/1/78	-
GROSS ALPHA PARTICLE	15	PCI/1	40CFR 141.15	7/1/78	E
BETA PARTICLE & PHOTONS	4	NOTE	40CFR 141.16	7/1/78	E

NOTES:

- A - ALLOWABLE DEPENDS ON THE ANNUAL AVERAGE OF MAXIMUM DAILY TEMPERATURES
- B - ALLOWABLE TU'S DEPEND ON TURBIDITY'S INFLUENCE ON DISINFECTION, MAIN. MICROBIOLOGICAL DETERMINATIONS.
- C - 45FR57343 MODIFIES 141.11 TO PROVIDE NITRATE CONCENTRATION UP TO 20 MG/L IN A NON-COMMUNITY SUPPLIER UNDER CERTAIN CONDITIONS LISTED IN

THIS FILE LISTS SAMPLING DATA FROM THE FIVE MONITORING WELLS LOCATED AROUND LAKE KILLDEER. THESE WELLS WERE INSTALLED IN JUNE 1981.

WELL #	NH3-N (PPM)	NO3-N (PPM)	SO4 (PPM)	pH (SU)	WATER DEPTH (FT)	SURFACE ELEV (FT)	DATE
1	-	-	-	-	11.0	183.0	4/24/81
1	-	-	-	-	10.7	"	4/28/81
1	0.12	0.35	-	6.0	-	"	1/30/81
1	-	-	-	-	9.5	"	5/20/81
1	1.0	7.0	-	7.0	11.1	"	10/1/81
1	<1.0	3.1	398	5.9	8.3	"	2/2/83
2	-	-	-	-	1.3	153.5	4/24/81
2	-	-	-	-	1.3	"	4/28/81
2	6.8	38.0	-	5.2	-	"	4/30/81
2	-	-	-	-	0.9	"	5/20/81
2	0	27.0	-	6.8	4.7	"	10/1/81
2	<1.0	2.6	276	6.0	0.5	"	2/2/83
3	-	-	-	-	17.3	181.6	4/28/81
3	0.1	1.5	-	5.4	-	"	4/30/81
3	-	-	-	-	22.1	"	5/20/81
3	0	55.0	-	6.8	23.0	"	10/1/81
3	<1.0	0.83	6.2	6.9	17.5	"	2/2/83
4	-	-	-	-	3.3	162.3	4/28/81
4	0.1	1.9	-	5.4	-	"	4/30/81
4	-	-	-	-	0.6	"	5/20/81
4	0	6.0	-	6.7	3.9	"	10/1/81
4	<1.0	4.1	13.5	4.9	(0.6)	"	2/2/83
5	-	-	-	-	5.1	157.1	4/28/81
5	0.1	0.4	-	4.4	-	"	4/30/81
5	-	-	-	-	0.8	"	5/20/81
5	1.0	8.0	-	6.7	4.1	"	10/1/81
5	<1.0	11.3	45.1	4.9	0.7	"	2/2/83

DISTANCE FROM TOP OF WELL PIPE TO GROUND SURFACE:

WELL #	DISTANCE (FT)
1	2.4
2A	1.8
3	2.3
4	1.8
5	2.3

KIUDDEEN  
Jan 1984

Leaching Well #	NH <sub>3</sub> -N	NO <sub>3</sub> -N	CO <sub>2</sub>	PH	Outage
#1	0	7.33	350	5.3	12' 5 1/2"
2	0	1.29	31	5.7	1"
2A	0	2.72	144	5.3	5' 5"
3	0	35.1	240	5.2	25' 4 1/2"
4	0	5.49	0	5.1	2' 11"
5	0	12.4	49	4.6	4' 4 1/2"

Lake Lee Monitoring Wells 3/15/85

No.	PH	NH <sub>3</sub> -N	NO <sub>3</sub> -N
up-grade L-1	4.80	2	10.20
L-2	6.70	2	5.11
L-3	5.44	1	1.79
L-4	6.25	5	3.55

date 10-12-83  
 to Jack Lee  
 from Len Brotherton  
 subject Lake Killdeer, Leaching Monitor wells.

date Samples	WELL NUMBER	DEPTH OF WELL	LEVEL BEFORE PUMPING FROM TOP OF PIPE	LEVEL AFTER 24 HRS FROM TOP OF PIPE	PH	NA <sub>3</sub> -N PPM	NO <sub>3</sub> -N PPM	SO <sub>4</sub> PPM
10-7	1	25'	14' 2"	13' 11"	5.8	-0-	8	106
10-12	2	60' 6"	0	4 1/2"	6.0	-0-	0.3	31
10-12	2A	18' 3"	6'	8' 6"	5.6	-0-	27	71
10-7	3	30'	29'	24' 7"	6.8	-0-	3	79
10-7	4	24'	5' 7"	6' 3"	5.5	-0-	3	38
10-12	5	19' 4"	5' 9"	5' 9"	5.0	-0-	11	79

xc: NO. Wright  
 Bill Jones

ENVIROMED LABORATORIES, INC.  
 414 WEST CALIFORNIA AVE.  
 RUSTON, LA 71270

DATE  
 10/29/92

EML # BATCH #  
 69660 29326

CUSTOMER:

EL\_DORADO\_CHEMICAL 000380  
 P.O. BOX 231  
 ATTN: RANDALL BURNSIDE  
 ELDORADO, AR. 71730  
 (501) 863-1400

SAMPLE--(G)rab/(C)omp :G: PRESERVED? :Y:  
 DATE COLLECTED :10/26/92: TIME COLLECTED :0820:  
 DATE RECEIVED :10/26/92: TIME RECEIVED :1021:  
 COLLECTED BY :CLIENT : BROUGHT IN BY--(E)ML/(C)lient :C:  
 LOGGED BY :DB :

SOURCE: MW B-A Upgradient

PARAMETER	CONC.	--BEGIN--		---END---		ANLST MTHD #	
		DATE	TIME	DATE	TIME		
CHLORIDE	48.0	1026	1030	1026	1050	KS	EPA325.3
COD	28.9	1028	0740	1028	1145	MB	EPA410.4
NITRATE-N	2.8	1026	1600	1026	2100	JP	EPA352.1
PH	4.8	1026	1100	1026	1115	KS	EPA150.1
SP.COND (UMHOS/CM)	528.0	1026	1130	1026	1230	KS	EPA120.1
SULFATE	161.0	1028	1930	1028	2330	BT	EPA375.4
T. VANADIUM	0.009	1026	1700	1026	1800	JA	6010SW
TDS	484.0	1026	1400	1028	0800	GL	EPA160.1
TOX	0.11	1026	1545	1026	1930	BT	EPA450.1

*[Signature]*  
 Certified by Laboratory Director

Analyses conducted in accordance with the list of Approved Test Procedures, published in 40 CFR--Parts 60, 136, and 261. Test procedures are from the 17th edition of Standard Methods for the Examination of Water and Wastewater(#), Methods for Chemical Analysis of Water and Wastes, 1979, (EPA), ASTM (Annual Book of Standards, part 31, Water, 1985), or Test Methods for Evaluating Solid Waste (SW-846).

The duplicate analyses and spiked samples for 10/26/92 indicate all methodologies are in control. Retain records for three years. Unless otherwise stated, all data are reported in units of mg/l for liquid samples and in units of mg/kg for solids.

BOD std. N/A

\* Indicates out of permit compliance (regulatory agencies should be notified within 5 days of non-compliance conditions).

\*\* Past Holding Time

# Monitoring Well Data Old Monsanto Landfill

Date	Well No.	Depth to Water Top of Casing	Vanadium	Sulfate	Ph
7/30/85	B-A	14' 7"	<.04	159	5.1
	B-B	11' 10 $\frac{1}{2}$ "	<.04	127	5.4
	B-C-1	15' 6"	<.04	878	4.5
	B-C-2	7' 6"	<.04	758	6.8
12/4/85	B-A	12' 10 $\frac{1}{2}$ "	<.04	142	5.0
	B-B	9' 0"	<.04	109	5.3
	B-C-1	14' 8"	<.04	544	4.2
	B-C-2	3' 6"	<.04	578	6.9
7/15/86	B-A	12' 7"	.30	177	4.8
	B-B	10' 2"	.01	124	5.2
	B-C-1	14' 6"	.01	1248	4.2
	B-C-2	5' 10"	.012	960	6.7
1/13/87	B-A	10' 11 $\frac{1}{2}$ "	<.04	141	5.1
	B-B	8' 4 $\frac{1}{2}$ "	<.04	98	5.4
	B-C-1	13' 6"	<.04	1060	4.5
	B-C-2	3' 4 $\frac{1}{2}$ "	<.04	590	6.8
7/24/87	B-A	13' $\frac{1}{2}$ "	.04	133	5.1
	B-B	10' 7 $\frac{1}{2}$ "	.04	77	5.7
	B-C-1	14' 6"	.12	1083	4.5
	B-C-2	7' 2"	.05	543	7.0
1/21/88	BA	10' 6 $\frac{1}{2}$ "	<.04	152	5.14
	BB	8' 8 $\frac{1}{2}$ "	<.04	226	5.45
	B-C-1	14' 1"	<.04	1040	4.48
	B-C-2	4' 2"	<.04	530	6.89



Date	Well No.	Depth to Water Top of Casing	Vanadium	Sulfate	pH
8/12/88	B-A	13' 3 $\frac{1}{2}$ "	<.02	148	5.3
	B-B	12' 5"	<.02	105	5.5
	B-C-1	15' 10"	<.02	940	4.6
	B-C-2	9' 1"	<.02	530	7.0
1/31/89	B-A	9' 8"	<.002	137	5.1
	B-B	8' 7"	<.002	99	5.4
	B-C-1	14' 1"	<.002	1139	4.8
	B-C-2	3' 4"	<.002	633	6.9
7/28/89	B-A	9' 4 $\frac{1}{2}$ "	<.002	129	5.5
	B-B	8' 9"	<.002	72	5.7
	B-C-1	13' 8"	<.002	1200	4.6
	B-C-2	3' 11 $\frac{1}{2}$ "	.003	618	6.9
1/23/90	B-A	12' 0"	<.002	192	5.4
	B-B	8' 11"	<.002	260	5.5
	B-C-1	14' 8 $\frac{1}{2}$ "	<.002	1273	4.6
	B-C-2	3' 9 $\frac{1}{2}$ "	<.002	821	7.2
7/17/90	B-A	12' 4"	<.02	149	5.29
	B-B	11' 2"	<.02	111	5.35
	B-C-1	14' 11"	<.02	1225	4.44
	B-C-2	8' 2 $\frac{1}{2}$ "	<.02	561	7.04
1/29/91	B-A	10' 2 $\frac{1}{2}$ "	<.002	152	4.90
	B-B	8' 9 $\frac{1}{2}$ "	<.002	130	5.18
	B-C-1	13' 10"	<.002	1188	4.02
	B-C-2	3' 10 $\frac{1}{2}$ "	<.002	421	6.72
7/8/91	B-A	11' 3"	<.002	99	5.40
	B-B	9' 8 $\frac{1}{2}$ "	<.002	85	5.15
	B-C-1	14' 2 $\frac{1}{2}$ "	<.002	1302	4.21
	B-C-2	4' 8 $\frac{1}{2}$ "	<.002	409	6.93

Date	Well No	Level	Vanadium	Sulfate	Ph
1/28/92	B-A	9' 8"	.01	112	4.92
	B-B	8' 0"	.003	137	5.24
	B-C-1	14' 0"	<.002	1175	4.44
	B-C-2	3' 5"	.002	778	6.73
7/9/92	B-A	11' 6 $\frac{1}{2}$ "	.003	152	4.93
	B-B	9' 9"	.003	159	5.30
	B-C-1	14' 2"	<.002	1150	5.00
	B-C-2	5' 11"	<.002	650	7.35
1/27/93	B-A	8' 8"	.006	150	5.00
	B-B	8' 7"	.004	127	5.22
	B-C1	14' 2"	.004	1268	4.80
	B-C2	3' 10"	.004	850	6.82