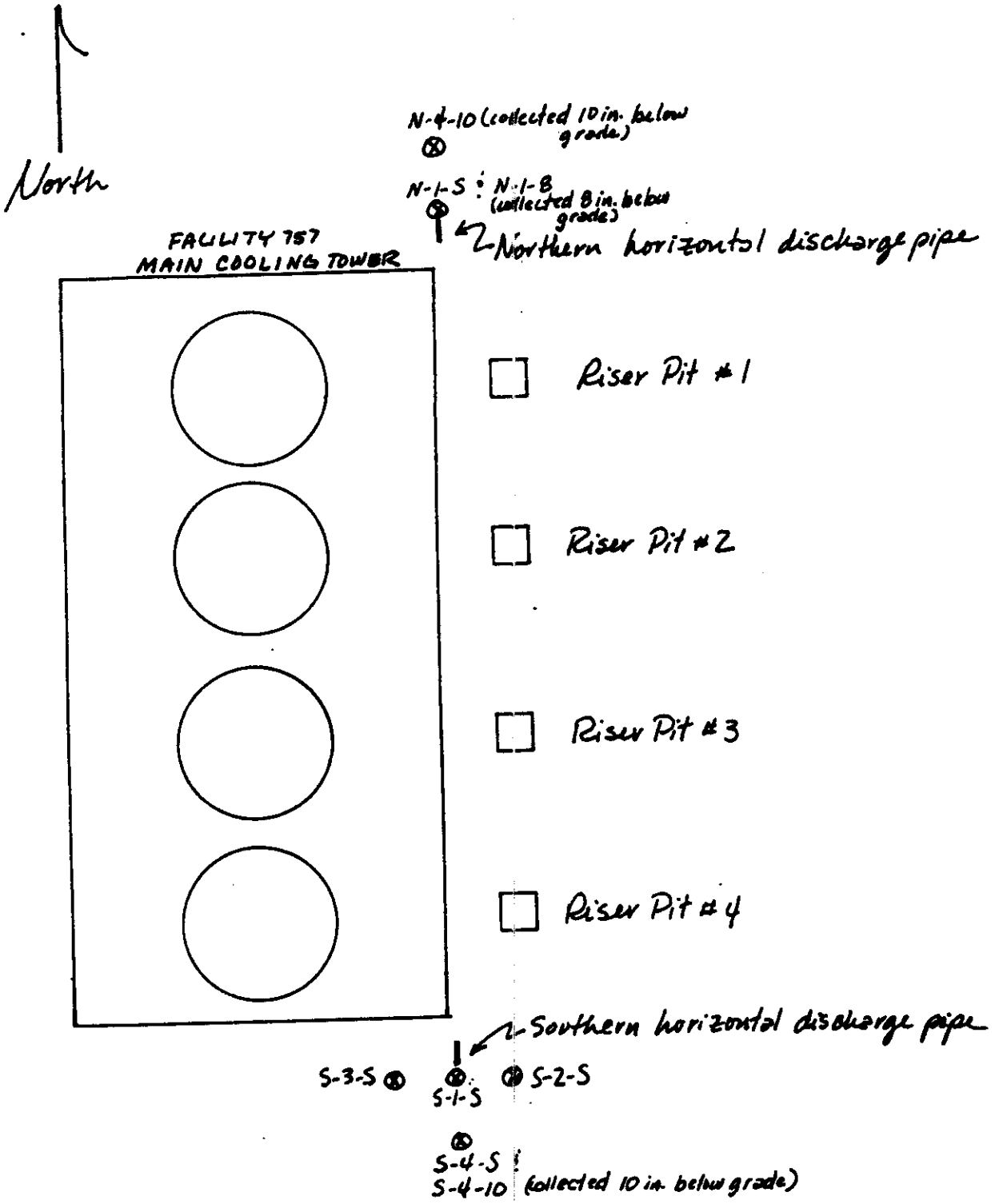
Plan Map

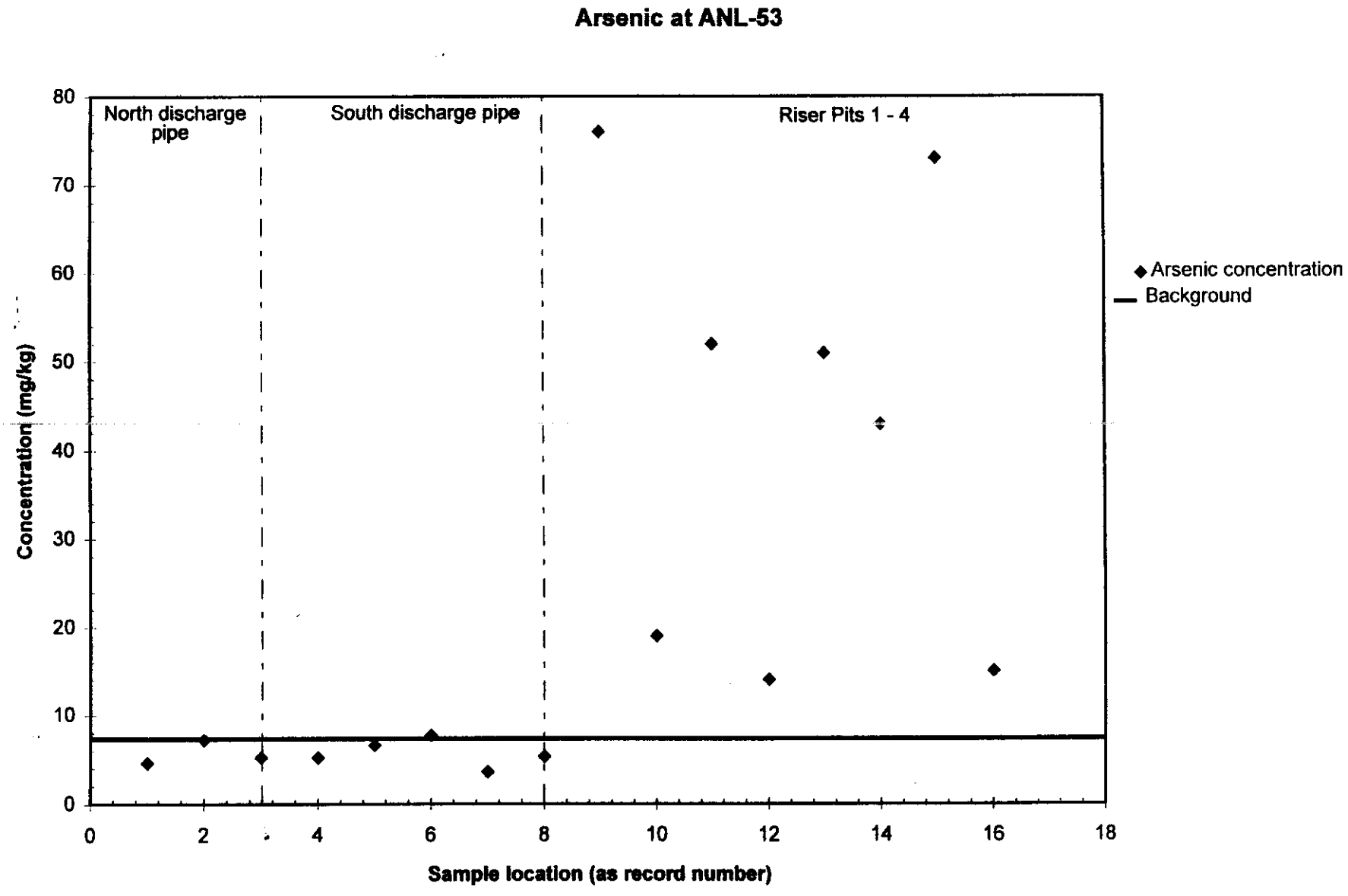


Plan View of Main Cooling Tower and Riser Pits

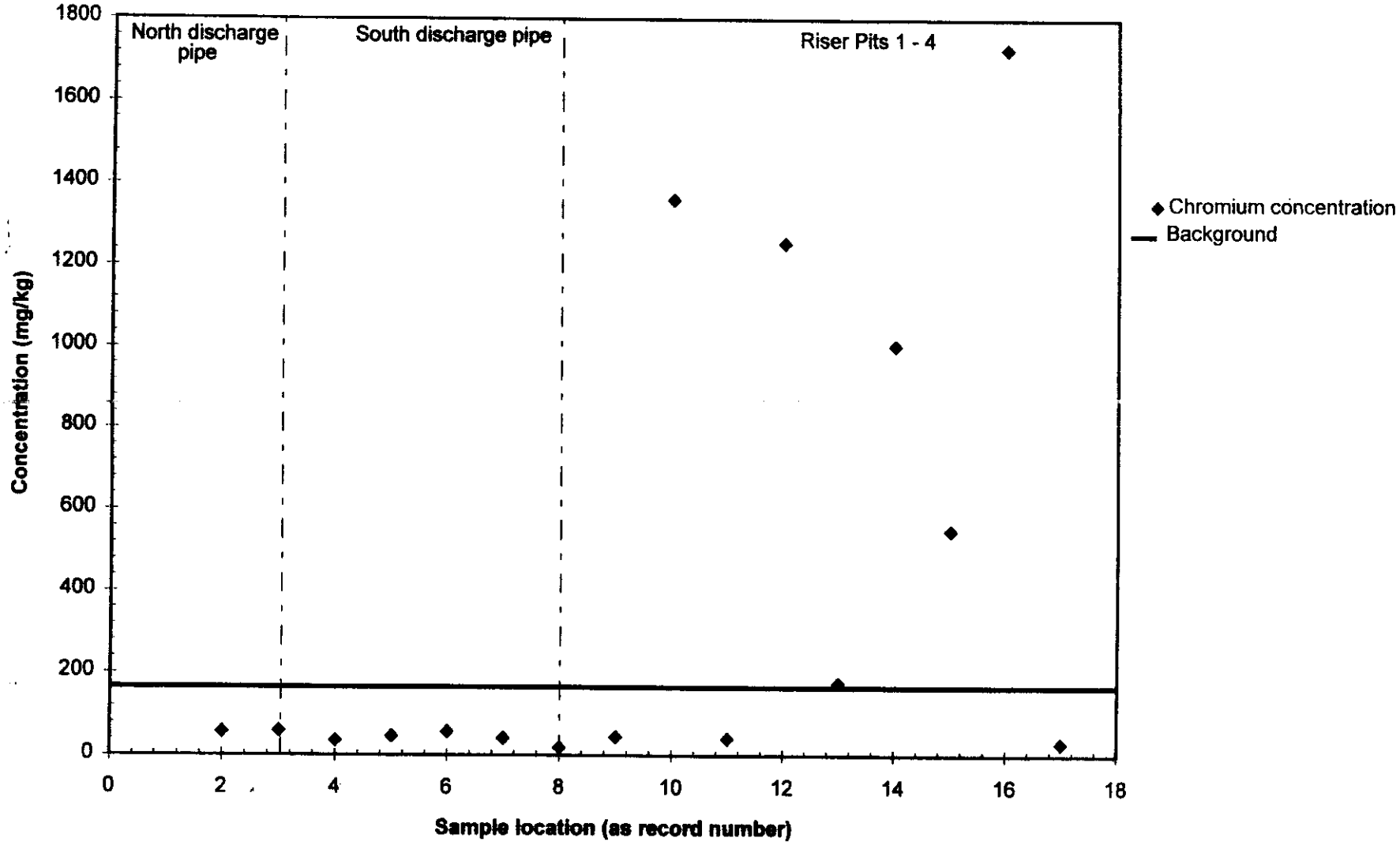
⊗ Surface soil sampling point

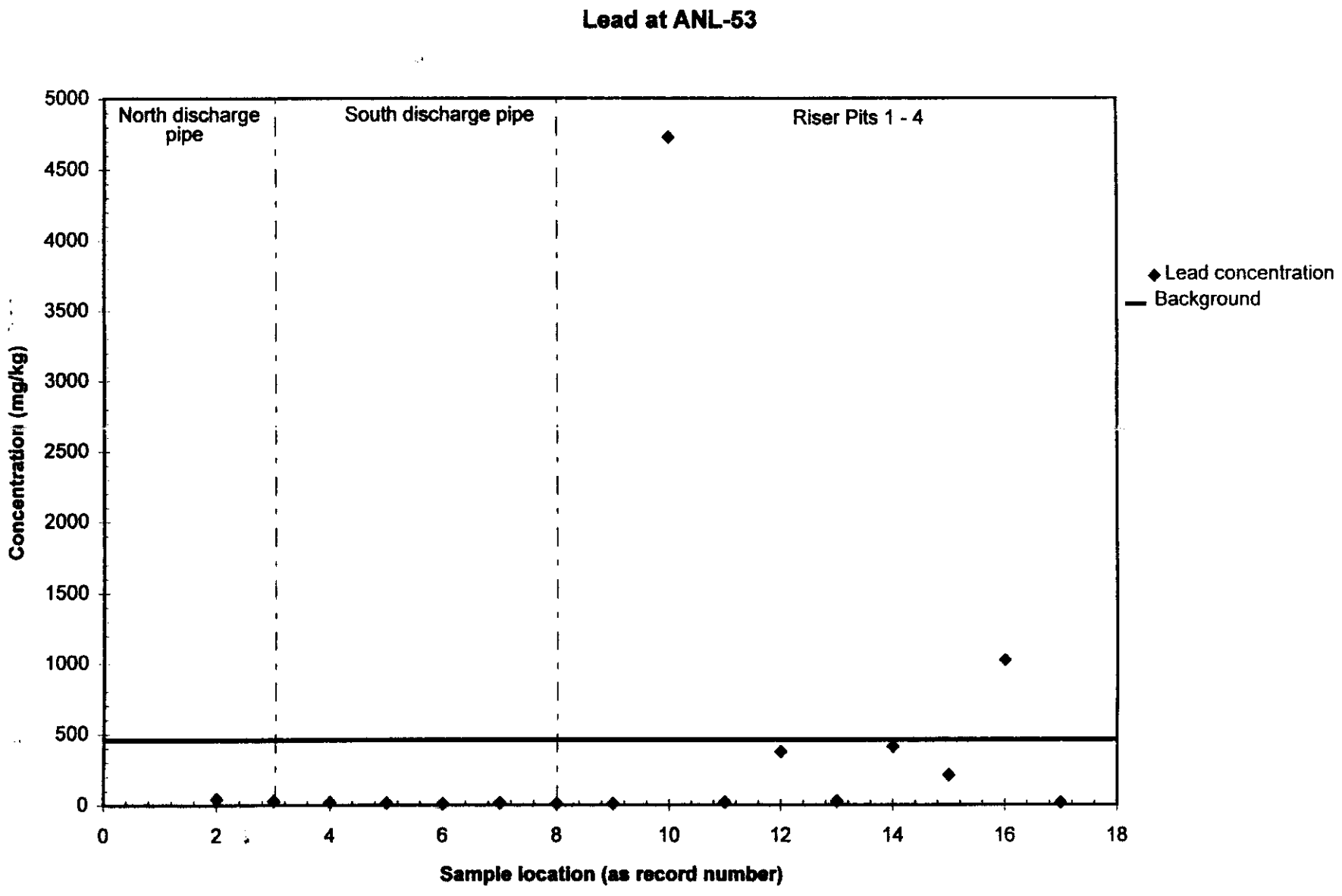
1 sq = 5'

Scatter Plots of All Data

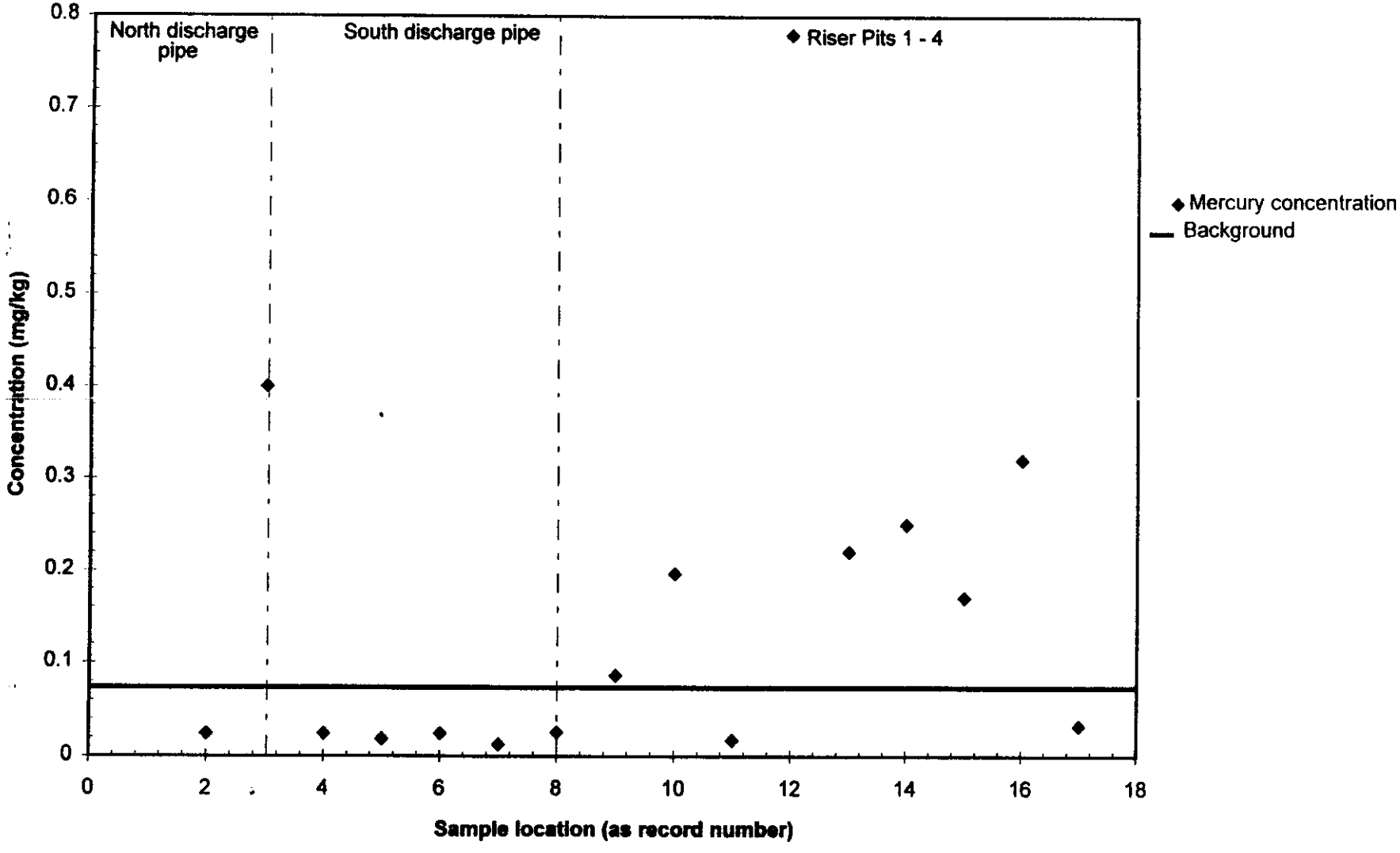

Arsenic at ANL-53
North discharge pipe
South discharge pipe
Riser Pits 1 - 4
Arsenic concentration
Background
Concentration (mg/kg)
Sample location (as record number)
0
10
20
30
40
50
60
70
80
0
2
4
6
8
10
12
14
16
18

Chromium at ANL-53




Lead at ANL-53
North discharge pipe
South discharge pipe
Riser Pits 1 - 4
Lead concentration
Background
Concentration (mg/kg)
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
0
2
4
6
8
10
12
14
16
18
Sample location (as record number)

Mercury at ANL-53



Screening Tables

Type Loc	Compound	Units	Max Concent	Background	Det/Samp Above Bkg	Pct Above Backgrnd	Detects/ Samples	Pct of Total
ANL-53 PITS	Arsenic	MG/KG	76	7.4	7/8	87.50	7/8	87.50
ANL-53 PITS	Chromium	MG/KG	1727	50	6/8	75.00	8/8	100.00
ANL-53 PITS	Hexavalent Chromium	MG/KG	0		0/8	.00	0/8	.00
ANL-53 PITS	Lead	MG/KG	4725	23	6/8	75.00	8/8	100.00
ANL-53 PITS	Mercury	MG/KG	.78	.074	6/8	75.00	8/8	100.00

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Statistics for COC by Pathway

RISER PITS COMBINED DATA SET (GROUNDWATER) mg/kg or pci/g						
Compound	**UCL**	**Average**	**Max**	**Number of Samples**	**INEL[a] 95%/95%**	**Value Used in Risk Assessment[b]**
Arsenic	126.95	32.45	76	8	7.4	76
Chromium	35569	365.04	1717	8	50	1717
Lead	227026	181.27	4725	8	23	4725
Mercury	4.31	.15	.78	8	.074	.78

a INEL-94/0250 Revision 1, August 1996, Rood S. M., Harris G. A., White G. J.
b Smallest concentration of UCL or Max value from data set.
Eliminated Contaminant eliminated because UCL or Max value is less than 95%/95% value.

Combined Data Set

Sample No.	Lab Samp ID	Analysis	Compound	Concentration	Rad Uncert.	Units	Q Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
YW-1-15	YW-1-15	INORG	Arsenic	19		mg/kg		SOIL	ANL-53 PITS	RISER PITS	12.75	31-JUL-89
YW-1-S	YW-1-S	INORG	Arsenic	76		mg/kg		SOIL	ANL-53 PITS	RISER PITS	11.5	31-JUL-89
YW-2-S	YW-2-S	INORG	Arsenic	52		mg/kg		SOIL	ANL-53 PITS	RISER PITS	11.5	31-JUL-89
YW-3-S	YW-3-S	INORG	Arsenic	51		mg/kg		SOIL	ANL-53 PITS	RISER PITS	11.5	31-JUL-89
YW-4-9	YW-4-9	INORG	Arsenic	15		mg/kg		SOIL	ANL-53 PITS	RISER PITS	12.25	31-JUL-89
YW-4-S	YW-4-S	INORG	Arsenic	73		mg/kg		SOIL	ANL-53 PITS	RISER PITS	11.5	31-JUL-89
YW-3-9	YW-3-9	INORG	Arsenic	43		mg/kg		SOIL	ANL-53 PITS	RISER PITS	12.25	31-JUL-89
YW-2-9	YW-2-9	INORG	Arsenic	14		mg/kg	U	SOIL	ANL-53 PITS	RISER PITS	12.25	31-JUL-89
YW-1-15	YW-1-15	INORG	Chromium	40		mg/kg		SOIL	ANL-53 PITS	RISER PITS	12.75	31-JUL-89
YW-1-S	YW-1-S	INORG	Chromium	1359		mg/kg		SOIL	ANL-53 PITS	RISER PITS	11.5	31-JUL-89
YW-2-9	YW-2-9	INORG	Chromium	175		mg/kg		SOIL	ANL-53 PITS	RISER PITS	12.25	31-JUL-89
YW-3-S	YW-3-S	INORG	Chromium	1004		mg/kg		SOIL	ANL-53 PITS	RISER PITS	11.5	31-JUL-89
YW-4-9	YW-4-9	INORG	Chromium	29		mg/kg		SOIL	ANL-53 PITS	RISER PITS	12.25	31-JUL-89
YW-4-S	YW-4-S	INORG	Chromium	1727		mg/kg		SOIL	ANL-53 PITS	RISER PITS	11.5	31-JUL-89
YW-3-9	YW-3-9	INORG	Chromium	548		mg/kg		SOIL	ANL-53 PITS	RISER PITS	12.25	31-JUL-89
YW-2-S	YW-2-S	INORG	Chromium	1254		mg/kg		SOIL	ANL-53 PITS	RISER PITS	11.5	31-JUL-89
YW-1-15	YW-1-15	INORG	Hexavalent Chromium	.2		mg/kg	U	SOIL	ANL-53 PITS	RISER PITS	12.75	31-JUL-89
YW-2-S	YW-2-S	INORG	Hexavalent Chromium	.2		mg/kg	U	SOIL	ANL-53 PITS	RISER PITS	11.5	31-JUL-89
YW-3-9	YW-3-9	INORG	Hexavalent Chromium	.2		mg/kg	U	SOIL	ANL-53 PITS	RISER PITS	12.25	31-JUL-89
YW-3-S	YW-3-S	INORG	Hexavalent Chromium	.2		mg/kg	U	SOIL	ANL-53 PITS	RISER PITS	11.5	31-JUL-89
YW-4-9	YW-4-9	INORG	Hexavalent Chromium	.2		mg/kg	U	SOIL	ANL-53 PITS	RISER PITS	12.25	31-JUL-89
YW-4-S	YW-4-S	INORG	Hexavalent Chromium	.2		mg/kg	U	SOIL	ANL-53 PITS	RISER PITS	11.5	31-JUL-89
YW-2-9	YW-2-9	INORG	Hexavalent Chromium	.2		mg/kg	U	SOIL	ANL-53 PITS	RISER PITS	12.25	31-JUL-89
YW-1-S	YW-1-S	INORG	Hexavalent Chromium	.2		mg/kg	U	SOIL	ANL-53 PITS	RISER PITS	11.5	31-JUL-89
YW-1-15	YW-1-15	INORG	Lead	19		mg/kg		SOIL	ANL-53 PITS	RISER PITS	12.75	31-JUL-89
YW-1-9	YW-1-9	INORG	Lead	16		mg/kg		SOIL	ANL-53 PITS	RISER PITS	12.25	31-JUL-89
YW-4-S	YW-4-S	INORG	Lead	1020		mg/kg		SOIL	ANL-53 PITS	RISER PITS	11.5	31-JUL-89
YW-3-S	YW-3-S	INORG	Lead	409		mg/kg		SOIL	ANL-53 PITS	RISER PITS	11.5	31-JUL-89
YW-3-9	YW-3-9	INORG	Lead	208		mg/kg		SOIL	ANL-53 PITS	RISER PITS	12.25	31-JUL-89
YW-1-S	YW-1-S	INORG	Lead	4725		mg/kg		SOIL	ANL-53 PITS	RISER PITS	11.5	31-JUL-89
YW-2-S	YW-2-S	INORG	Lead	372		mg/kg		SOIL	ANL-53 PITS	RISER PITS	11.5	31-JUL-89
YW-2-9	YW-2-9	INORG	Lead	26		mg/kg		SOIL	ANL-53 PITS	RISER PITS	12.25	31-JUL-89
YW-1-15	YW-1-15	INORG	Mercury	.017		mg/kg		SOIL	ANL-53 PITS	RISER PITS	12.75	31-JUL-89
YW-1-S	YW-1-S	INORG	Mercury	.196		mg/kg		SOIL	ANL-53 PITS	RISER PITS	11.5	31-JUL-89
YW-2-S	YW-2-S	INORG	Mercury	.78		mg/kg		SOIL	ANL-53 PITS	RISER PITS	11.5	31-JUL-89
YW-3-S	YW-3-S	INORG	Mercury	.25		mg/kg		SOIL	ANL-53 PITS	RISER PITS	11.5	31-JUL-89
YW-4-9	YW-4-9	INORG	Mercury	.032		mg/kg		SOIL	ANL-53 PITS	RISER PITS	12.25	31-JUL-89
YW-4-S	YW-4-S	INORG	Mercury	.32		mg/kg		SOIL	ANL-53 PITS	RISER PITS	11.5	31-JUL-89
YW-3-9	YW-3-9	INORG	Mercury	.17		mg/kg		SOIL	ANL-53 PITS	RISER PITS	12.25	31-JUL-89
YW-2-9	YW-2-9	INORG	Mercury	.22		mg/kg		SOIL	ANL-53 PITS	RISER PITS	12.25	31-JUL-89

40 rows selected.

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