152709

CS-A 7-27-90

CERRO COPPER SEDIMENT SAMPLING - JULY 12-13, 1990

STATION	FEET FROM TRACK CL	SAMPLE NUMBER	PCBs ppm	FLASH POINT deg F	Arsenic	Barium	Cadmium	Chromium	TCLP METALS Lead
South END			50	140	5	100	1	5	5
17+00	97	CSA2-SD-0025-01	19	>158	0.023*	2.390	0.054	0.007	0.164
16+50	108	CSA2-SD-0075-01	41	>158	0.023*	1.570	0.052	0.006	0.273
16+00	93	CSA2-SD-0125-01	180 +	>158	0.023*	4.180	0.564	0.005*	2.390
15+50	98	CSA2-SD-0175-01	110 +	125*	0.389	2.420	0.417	0.192	3.560
15+50	98	CSA2-SD-0175-01		150*	0.073	4.000	0.041	0.005*	0.814
15+50	98	CSA2-SD-0175-01		>158	0.420	2.130	0.209	0.127	2.670
15+00	98	CSA2-SD-0225-01	30	>158	0.023*	2.800	1.480 +	0.005*	1.620
14+50	95	CSA2-SD-0275-01	17	>158	0.171	1.170	2.970 +	0.074	48.700 +
14+00	88	CSA2-SD-0325-01	81 +	>158	0.023*	1.890	1.510 +	0.005*	10.600 +
13+50	89	CSA1-SD-0025-01	10	>158	0.023*	0.398	0.112	0.005*	0.149
12+50	76	CSA1-SD-0075-01	81 +	140*	0.042	2.640	2.170 +	0.124	45.000 +
12+00	75	CSA1-SD-0125-01	230 +	>158	0.296	0.756	5.740 +	0.087	77.900 +
11+50	66	CSA1-SD-0175-01	190 +	>158	0.219	0.989	2.460 +	0.070	34.500 +
11+00	69	CSA1-SD-0225-01	31	>158	0.056	0.793	4.550 +	0.028	8.660 +
10+50	77	CSA1-SD-0275-01	110 +	>158	0.034	0.784	1.520 +	0.023	8.350 +
10+00	72	CSA1-SD-0325-01	30	92 +	0.047	1.390	2.760 +	0.005*	16.800 +
9+50	80	CSA1-SD-0375-01	62 +	>158	0.057	1.410	0.981	0.011	4.850
9+00	82	CSA1-SD-0425-01	47	>158	0.023*	1.860	1.690 +	0.005*	9.010 +
8+50	72	CSA1-SD-0475-01	42	>158	0.078	2.230	0.479	0.006	1.450
8+00	73	CSA1-SD-0525-01	4	>158	0.023*	2.460	1.810 +	0.005*	10.400 +
8+00	73	CSA1-SD-0525-01	36	>158	0.023*	3.990	1.520 +	0.053	26.700 +
8+00	73	CSA1-SD-0525-01			0.023*	2.800	2.010 +	0.005*	9.870 +
7+50	73	CSA1-SD-0575-01	7	>158	0.023*	2.800	2.940 +	0.005*	24.800 +
7+00	85	CSA1-SD-0625-01	150 +	>158	0.023*	3.280	1.130 +	1.110	5.110 +
6+50	90	CSA1-SD-0675-01	60 +	105*	0.023*	2.330	2.200 +	0.005*	5.730 +
6+00	98	CSA1-SD-0725-01	130 +	130*	0.023*	1.920	0.477	0.005*	0.997
5+50	102	CSA1-SD-0725-01	220 +	>158	0.023*	2.570	0.832	0.005*	1.650
5+00	108	CSA1-SD-0825-01	13	110 +	0.023*	3.180	2.020 +	0.259	23.700 +
4+50	113	CSA1-SD-0875-01	13	130 +	0.023*	1.480	1.880 +	0.611	13.900 +
4+00	112	CSA1-SD-0925-01	81 +	125 +	0.023*	1.720	0.999	0.331	6.700 +
3+50	120	CSA1-SD-0975-01	270 +	>158	0.023*	2.440	0.171	0.134	4.760
3+00	124	CSA1-SD-1025-01	920 +	>158	0.023*	1.170	1.150 +	0.550	28.300 +
3+00	124	CSA1-SD-1025-01	1400 +	>158	0.023*	1.090	1.370 +	0.562	28.100 +
3+00	124	CSA1-SD-1025-01			0.023*	1.080	1.430 +	0.483	40.200 +
2+50	129	CSA1-SD-1075-01	17	105 +	0.025	1.040	1.100 +	0.049	80.500 +
2+00	121	CSA1-SD-1125-01	980 +	80*	0.023*	1.090	0.860	0.429	17.000 +

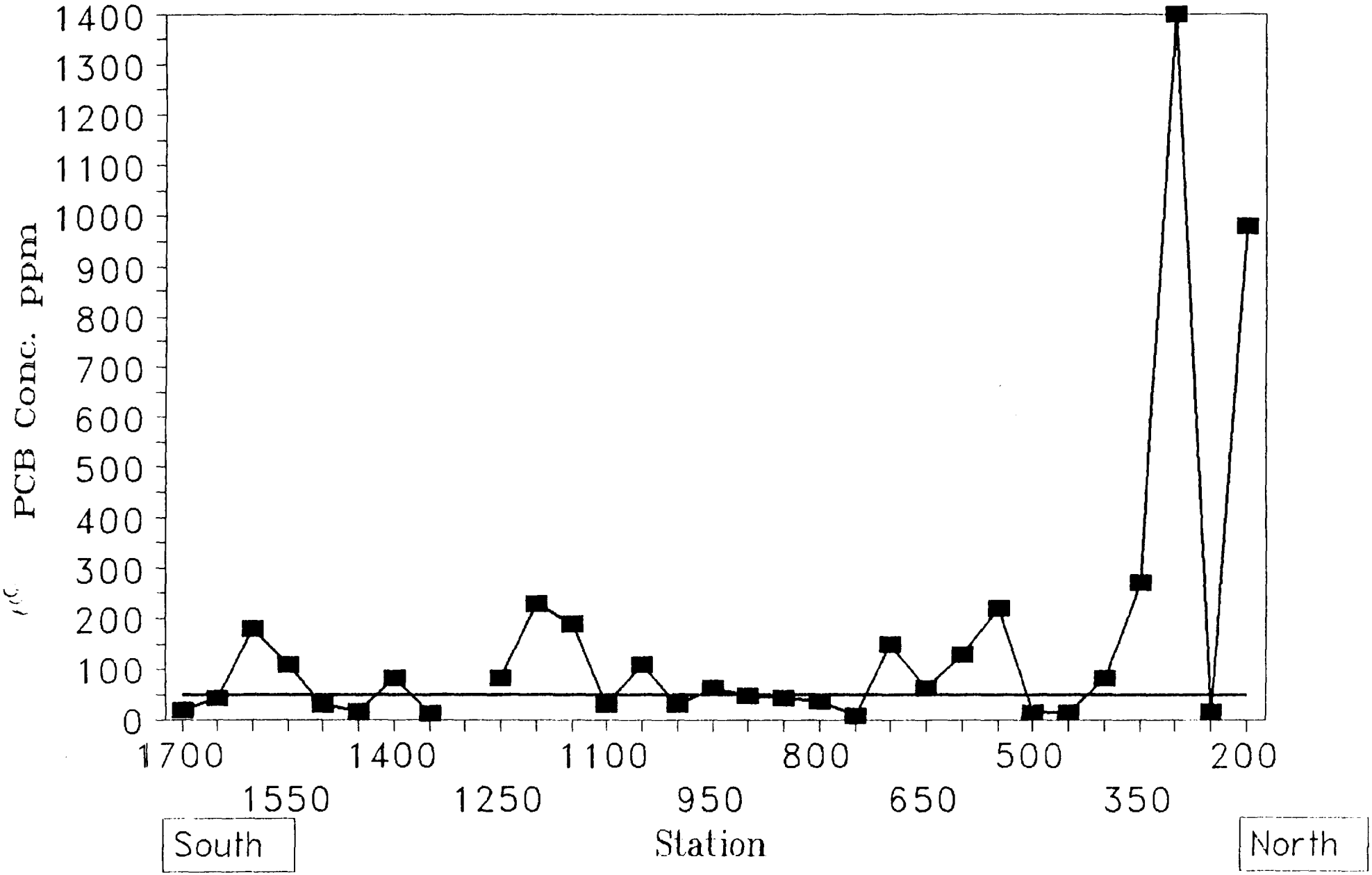
North END

CERRO COPPER SEDIMENT SAMPLING - JULY

STATION	FEET FROM TRACK CL	SAMPLE NUMBER	(milligrams/liter) Mercury	Selenium	Silver
			0.2	1	5
17+00	97	CSA2-SD-0025-01	0.0002*	0.003*	0.002*
16+50	108	CSA2-SD-0075-01	0.0002*	0.003*	0.002*
16+00	93	CSA2-SD-0125-01	0.0002*	0.015*	0.002*
15+50	98	CSA2-SD-0175-01	0.0002*	0.030*	0.002*
15+50	98	CSA2-SD-0175-01	0.0002*	0.030*	0.002*
15+50	98	CSA2-SD-0175-01	0.0002*	0.030*	0.002*
15+00	98	CSA2-SD-0225-01	0.0002*	0.015*	0.002*
14+50	95	CSA2-SD-0275-01	0.0002*	0.030*	0.002*
14+00	88	CSA2-SD-0325-01	0.0002*	0.030*	0.002*
13+50	89	CSA1-SD-0025-01	0.0002*	0.015*	0.002*
12+50	76	CSA1-SD-0075-01	0.0002*	0.030*	0.002*
12+00	75	CSA1-SD-0125-01	0.0002*	0.030*	0.002*
11+50	66	CSA1-SD-0175-01	0.0002*	0.030*	0.002*
11+00	69	CSA1-SD-0225-01	0.0002*	0.030*	0.002*
10+50	77	CSA1-SD-0275-01	0.0002*	0.030*	0.002*
10+00	72	CSA1-SD-0325-01	0.0002*	0.030*	0.002*
9+50	80	CSA1-SD-0375-01	0.0002*	0.030*	0.002*
9+00	82	CSA1-SD-0425-01	0.0002*	0.003*	0.002*
8+50	72	CSA1-SD-0475-01	0.0002*	0.030*	0.002*
8+00	73	CSA1-SD-0525-01	0.0002*	0.003*	0.002*
8+00	73	CSA1-SD-0525-01	0.0002*	0.006*	0.002*
8+00	73	CSA1-SD-0525-01	0.0002*	0.003*	0.002*
7+50	75	CSA1-SD-0575-01	0.0002*	0.003*	0.002*
7+00	85	CSA1-SD-0625-01	0.0002*	0.003*	0.002*
6+50	90	CSA1-SD-0675-01	0.0002*	0.015*	0.002*
6+00	98	CSA1-SD-0725-01	0.0002*	0.006*	0.002*
5+50	102	CSA1-SD-0725-01	0.0002*	0.030*	0.002*
5+00	108	CSA1-SD-0825-01	0.0002*	0.030*	0.002*
4+50	113	CSA1-SD-0875-01	0.0002*	0.015*	0.002*
4+00	112	CSA1-SD-0925-01	0.0002*	0.030*	0.002*
3+50	120	CSA1-SD-0975-01	0.0002*	0.015*	0.002*
3+00	124	CSA1-SD-1025-01	0.0002*	0.030*	0.002*
3+00	124	CSA1-SD-1025-01	0.00024	0.030*	0.002*
3+00	124	CSA1-SD-1025-01	0.0002*	0.030*	0.002*
2+50	129	CSA1-SD-1075-01	0.0002*	0.030*	0.002*
2+00	121	CSA1-SD-1125-01	0.0002*	0.015*	0.002*

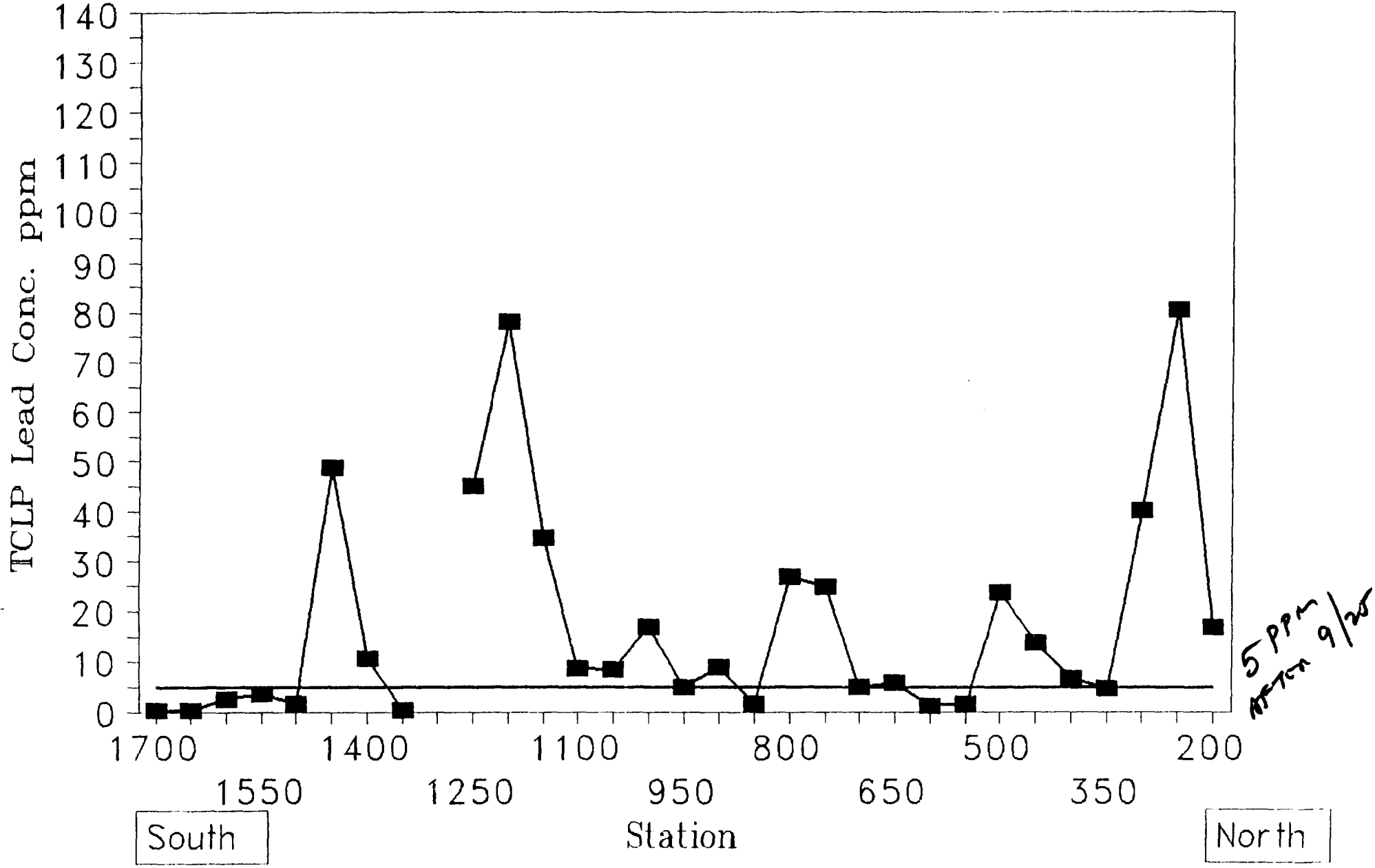
Dead Creek PCB Analysis

Perland–July 12 & 13, 1990



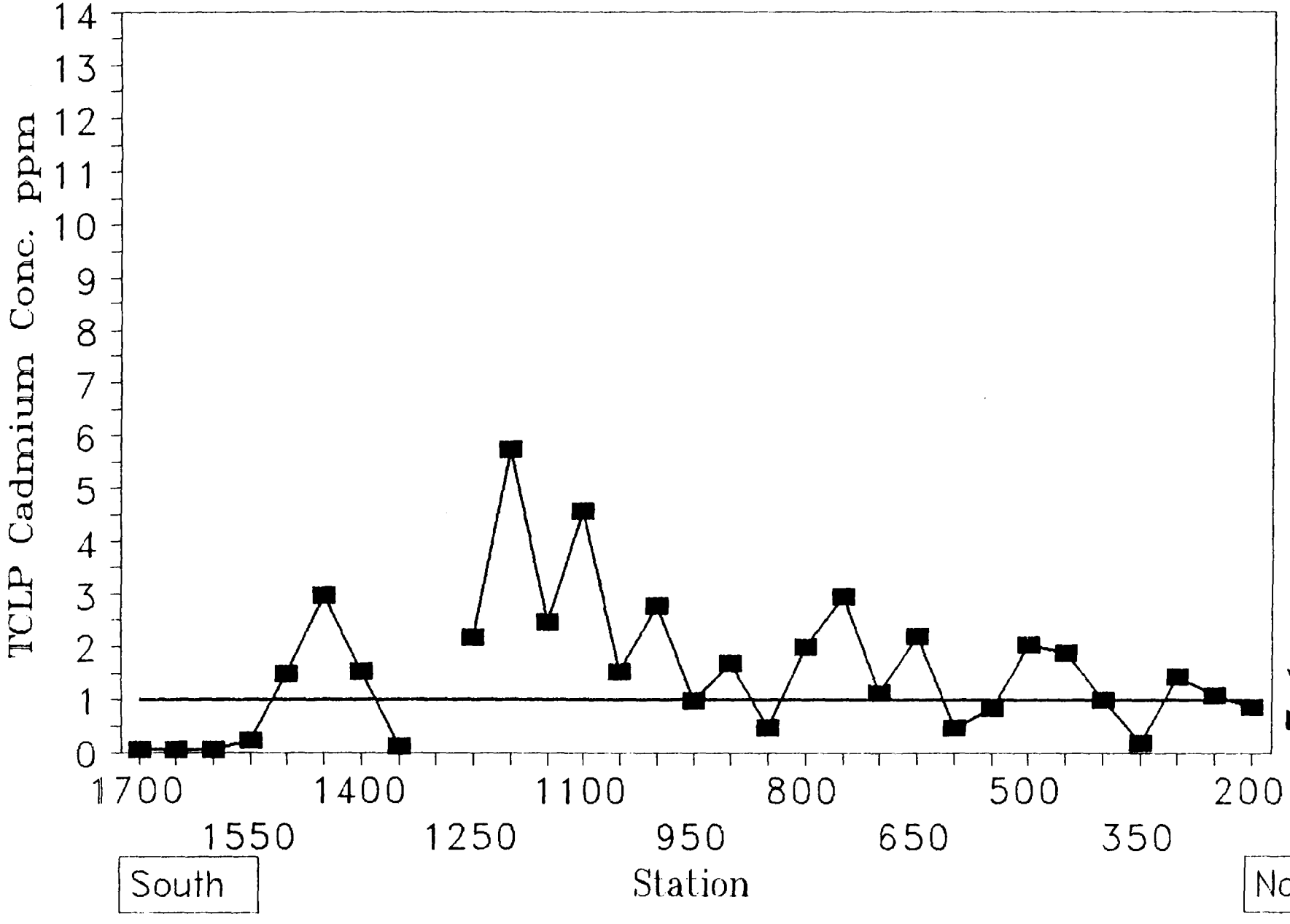
Dead Creek TCLP Lead Analysis

Perland–July 12 & 13, 1990



Dead Creek TCLP Cadmium Analysis

Perland–July 12 & 13, 1990



1 ppm
9/25/90

File 1104

Deep Well #6 - 1000 GPM

Data	Layne-Western	Alt. Layne-Western	Luhr Bros
Test Pilot Hole	5¼"Ø x 105	5¼"Ø x 105'	4"Ø x 105'
Gravel Pack Dia	Yes - 48"	Yes - 36"	Yes - 37"
Cemented Casing	Yes - 42" x 15'	Yes 30" x 15'	Yes - 34' x 20'
Steel Casing	20"	20"	20" x .312
Stainless Stl. Screen	Shutter Type 20" x 20' welded	20" x 20' ?	Wound Wire Type 18¼ x 20' H.D - Swa
Column	8" Ø x 70'		8"Ø x 60'
Shaft	1 3/16" - water ~~cooled~~ lube.		1 3/16" - water lub
Discharge	8"	Same	8"
Bowl Unit	3 Stage - 12" Dia	only difference	4 Stage - 11½" Di
Pump Mfg	Layne & Bowler	is in diameter	Pearless
Tail Pipe	10'	of gravel pack	10'
Gravel	Acid Resist	and cemented	Acid Resist
Test Pump + Applic. State Water Survey	Yes	casing	Yes
	$19,865	$11,991	$11,173

Luther - V.P. of Layne Western stated that both wells would deliver the gallonage at test but that the life of the larger diameter gravel pack well would be substantially greater

J.W.G.
6/10/70

C03346